## DAILY MY 2019

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**OPERATOR'S MANUAL** 

Safety	5
Driving compartment	15
Controls and devices	197
Start-up and driving	287
On-board equipment	463
Operator roadside repairs	
Ordinary maintenance	561
Scheduled maintenance	583
Technical specifications	603
Plates	65 I
Electric onboard panels	657

Safety
Table of acronyms
Safety warnings symbols
Installation of electric/electronic devices
Environmental information

Safety

## Table of acronyms

ACRONYM	DESCRIPTION	
ABS	"Anti-lock Braking System". Anti-lock braking system.	
A/C	"Air conditioning System". Air conditioning system.	
ACC	"Adaptive Cruise Control". Automatic distance control system.	
ADAS	"Advanced Driver Assistance Systems". Electronic driver assistance systems.	
AdBlue®	Commercial name of the mixture of water and urea.	
AEBS	"Advanced Emergency Braking System". Advanced emergency braking system.	
АНВС	"Automatic High Beam Check". Automatic high beam light check.	
ASIS	"Adaptive Shift Strategy". System for adapting the shift changing strategy for the "Hi-Matic" gearbox.	
ASR	"ASR". Anti-skid regulator.	
ВСМ	"Body Computer Module". Electronic control unit responsible for monitoring and checking the various electronic accessories on the vehicle.	
CAN	"Controller Area Network". Communication network between the electronic control units.	
СС	"Cruise Control". Electronic system which allows automatic adjustment of the vehicle speed.	
CCDPF	"Close Coupled Diesel Particulate Filter". Closed diesel particulate filter.	
DAB	"Digital Audio Broadcasting". Digital audio broadcasting, standard digital radio broadcasting which allows the transmission of radio programs comparable to that of a compact disc.	

ACRONYM	DESCRIPTION
DPF	"Diesel Particulate Filter". Particulate filter.
DRL	"Day Running Light". Daytime running lights.
EBD	"Electronic Brake force Distribution". Electronic brake force distribution system.
ECAS	"Electronically Controlled Air Suspension". Electronically controlled air suspension system.
ECM	"Engine Control Module". Engine control unit.
ECO	"ECONOMIC". For the "Hi-Matic" gearbox, the optimised operating mode to ensure better fuel savings.
EDC	"Electronic Diesel Control". Engine supply control unit.
EGR	"Exhaust Gas Recirculation". Anti-pollution device which puts some of the exhaust gas back into circulation with the aim of reducing the production of nitrogen oxides.
ESC	"Enhanced Stability Control". System for controlling the stability of the vehicle.
EOBD – EOBD II	"European On Board Diagnosis". European on-board diagnostics. Vehicle pollutant emission control system.
EPB	"Electronic Parking Brake". Electronic parking brake.
ESP	"Enhanced Stability Program". System for controlling the stability of the vehicle.
ESS	"Emergency Stop Signalling". Function for simultaneous activation of the rear turn indicators in the event of hard braking in an emergency.
EUC	"Enhanced Under-Steering Control". Function that reduces understeering of the vehicle.

Safety

ACRONYM	DESCRIPTION
GPS	"Global Positioning System". Geo-radiolocalisation and navigation system which uses an artificial satellite network in orbit and on the ground.
GSI	"Gear Shift Indicator". System that indicates when to change gear, to make best use of the engine.
GVW	"Gross Vehicle Weight". Total weight of the vehicle.
НВ	"High Beam". High beam lights.
НВА	"Hydraulic Brake Assist". System that increases braking pressure in the event of an emergency brake.
HDC	"Hill Descent". Controls the cruising speed when driving downhill.
HFC	"Hydraulic Fading Compensation". System that recognises and compensates for the loss of braking performance due to the brakes overheating.
HRB	"Hydraulic Rear Wheel Boost". System that increases braking force on the rear axle in the event of an emergency brake.
LAC	"Load adaptive control". adaptive braking control based on load distribution.
LB	"Low Beam". Low beam lights.
LCD	"Liquid Crystal Display". Liquid crystal display.
LDWS	"Lane Departure Warning System". Lane change warning system.
LED	"Light Emitting Diode". Light emitting diode.
MIL	"Malfunction Indicator Lamp". Warning light that indicates a malfunction in the emission control system.
M+S	"Mud and Snow". "Mud and Snow" abbreviation to identify the tyres suitable for handling routes with mud and snow.

ACRONYM	DESCRIPTION	
NOx	"NOx". The generic abbreviation which collectively identifies all nitrogen oxides.	
OBW	"On Board Weight". System able to estimate vehicle weight (tonnage).	
PIC	"Product Identification Code". Product Identification Code.	
PLKA	"Proactive Lane Keeping Assist" Proactive assistance system for maintaining lane.	
PTO	"Power Take Off". Power take-off.	
PTT	"PESO TOTALE a TERRA" see "GVW".	
PWR	"POWER". For the "Hi-Matic" gearbox, the operating mode in which the gear changes occur at higher engine speeds in order to exploit the torque developed by the engine.	
RMI & ROM	"Roll Movement Intervention". System that controls vehicle rolling in case of emergency steering.	
SBR	"Seat Belt Reminder". System which notifies the driver and front-seat passengers that they need to fasten their seatbelts.	
SCR	"Selective Catalyst Reduction". Selective catalytic reduction system, the chemical process to eliminate NOx in the exhaust gas.	
SOC	''State of Charge. Battery state of charge.	
ТС	"Traction control". Traction control system that improves the capacity of the vehicle to grip the road in poor conditions.	
TFT	"Thin Film Transistor" technology applied to the liquid crystal flat panel displays (LCD) which are identified as active matrix display.	
TPMS	"Tire Pressure Monitoring System": Low tyre pressure warning system (Tyre Pressure Monitoring System).	

ACRONYM	DESCRIPTION
TSM	"Trailer Sway Mitigation". System which cancels out the oscillations which could cause instability of the vehicle-trailer assembly.
UDT	"Universal Diagnostic Tool". Diagnostic software used by the Service Network and workshops.
USB	"Universal Serial Bus". Standard serial communication interface to standardise communication and the power supply between the computer and electronic peripheral devices into a single protocol .
VGT	"Variable Geometry Turbocharger". Variable geometry turbocharger.

## Safety warnings symbols

You will often find these symbols on the following pages; follow the instructions to which they refer, for your own safety and the safety of your vehicle.

## **Risk of injury**

Failure to observe these indications, partially or fully, may lead to serious risk of injury.

## Risk of serious damage to the vehicle

Failure to observe these indications, partially or fully, will cause serious damage to the vehicle and may invalidate the warranty

## General risk

Combines the risks of both the signs described above.

## Safeguarding the environment

This refers to the correct behaviour to adopt in order for vehicle use to be as environmentally friendly as possible.



#### Installation of electric/electronic devices

Installation of accessories, additions and any modifications to the vehicle are to be executed in compliance with the "Directives for converting and fitting out vehicles", available from the Service Network workshops.

Remember that, particularly for the electrical system, various electrical sockets are provided as standard (or available as an option) in order to simplify and standardise the bodybuilders' work on the electrical system.

IVECO authorisation is required for any exception to the "Directives for converting and fitting out vehicles". Failure to comply with the above requirements will invalidate the warranty, and in certain cases, the possible loss of vehicle type approval.

## INSTALLATION OF ELECTRIC/ELECTRONIC DEVICES

Any electric/electronic devices installed after purchasing the vehicle in the after-sales market must carry the following mark:

IVECO authorises the installation of transceiver equipment provided it is installed by the IVECO Service Network in compliance with the manufacturer's instructions.

No modifications or connections to the wiring of the electric control units are allowed. In particular changes to the data connection line between control units (CAN line) are strictly prohibited.



### Risk of damage

The installation of devices that modify the vehicle's characteristics may lead to the vehicle being considered unroadworthy by the relevant authorities and may also lead to invalidation of the warranty, within the limits of defects caused by the aforementioned modifications.

Partial or complete non observance of these prescriptions can lead to serious damages to the vehicle

## Safety 13

#### **Environmental information**

#### Directive 2000/53: Information on withdrawing end-of-life vehicles

The European Union has issued Directive 2000/53/EC with the aim of reducing the impact of end-of-life vehicles on the environment, promoting the prevention of waste production and contributing to the protection, preservation and improvement of the quality of the environment.

The regulations require both the implementation of preventive measures, during the phase of vehicle design and construction, and the implementation of systems to collect and process, recover and recycle them once they have finished their life cycle.

## What has $\ensuremath{\mathsf{IVECO}}$ done, and what is it doing to protect and care for the environment?

The environmental performance of a vehicle goes beyond its cycle of use and covers its entire life cycle. For years, IVECO has been demonstrating its global commitment to protecting and caring for the environment, by continuously improving its production processes and by creating products which are increasingly environmentally friendly.

In fact, together with ongoing research in environmentally friendly and high energy efficiency product and process technologies, which are already in the design and production phase on its products, IVECO has developed solutions using recoverable and recyclable materials and components with minimal environmental impact.

In compliance with current European standards, and to ensure all our customers receive the best service when dealing with their end-of-life vehicles, IVECO has developed a system which enables customers to hand over their end-of-life vehicle to a certified network of demolition centres, at no extra cost **(1)**.

Customers can contact the IVECO dealer network for information concerning the nearest authorised demolition centre. These demolition centres have been carefully selected by IVECO to guarantee the highest standards of service in the collection, processing and recycling of end-of-life vehicles.

In addition it is possible to obtain information about the authorised demolition centres by visiting the website www.iveco.com.

(1) Freight and passenger transport vehicles up to a gross weight of **3,5 t**, containing all the essential components (in particular, the engine and bodywork) and which are free from additional waste.

14	Safety	

Driving compartment	
Description of the chassis	17
Vehicle access step	19
Compartments in the upper part of the dashboard	20
Removing the protective cover from reduced cowl vehicles	21
Load advice	23
Opening doors and external compartments	24
Instrument panel	25
Instrument panel	32
Instrument panel	38
Instrument lighting adjustment	43
Central dashboard	44
Gear Shift Indicator (GSI)	47
List of warning lights	48
Generic hazard indicator light	63
Generic hazard indicator light	64
List of warning lights	65
List of warning lights	79
List of warning lights	97
Inducement	115
Inducement warning light	117
DPF (Diesel Particulate Filter)	125
Airbag failure warning light	128
Smart alternator	129
Controls at the steering wheel	130
List of symbols on buttons and switches	135
Dashboard commands	138

Driving compartment

Retarder	141
Central door locking / unlocking from inside the vehicle	146
ASR	147
Inducement and EOBD II (MIL) warning light operation	148
Setup Menu	149
Setup Menu	151
Menu items	152
Display	161
Display	164
Trip computer	166
Navi repetition	169
Fuel Economy	170
Indicators on the instrument panel	171
Setup Menu	172
Menu items	173
Trip computer	187
Interior equipment	190
Central compartments / Compartment with inductive charge function	191
Tablet holder	193
USB port modules	195
Sun visors / Storage tray	196

## Description of the chassis

The chassis consists of all the mechanical components and accessories provided to the body builder that create a vehicle that is suitable for transporting people or other types of loads. Iveco provides all the parts required so that the outfitter is able to manufacture the vehicle in regards to bodywork and any additional electric/electronic parts. This publication describes the operation of those component installed on the chassis based on the version.

For safety reasons, some components, such as the light assembly, may not be fitted.

This handbook describes all the accessories and features that may be installed, though these are not features for the chassis version (called cowl version). The operating logic of each component on the vehicle with bodywork is described. Cowl fitted vehicles do not have road approval and, therefore, may not be used on city and extra-urban roads. It may be used for manoeuvres inside the bodybuilder's shipping and acceptance facility.

Certain types of cowl fitted vehicles have a protective covering in order to provide part integrity during transport. The components which are not fitted in the plant are enclosed in a container which is secured to the chassis.

I. Protective sheet

2. Watertight container used to transport components which are not fitted but are supplied.

**NOTE** The figure is valid for left-hand drive vehicles and right-hand drive vehicles.





The versions addressed in this publication are simply "Cowl vehicles" and "Reduced Cowl vehicles".

They differ from one another in terms of the level of finish and different location of certain components.

- I. "Stripped Chassis Cowl" version, namely "Reduced cowl".
- 2. "Chassis Cowl" version, namely "Cowl".

**NOTE** The figure is valid for left-hand drive vehicles and right-hand drive vehicles.

## Vehicle access step



#### Risk of injury:

Indications for accessing the cab: - Never jump down from the cab. - Keep the access steps clean.

Failure to comply with these prescriptions can result in the risk of serious injury



### Risk of injury:

Close the doors properly to avoid risks to the driver and passengers: - Travel only with the doors properly closed.

Failure to comply with these prescriptions can result in the risk of serious injury





## Compartments in the upper part of the dashboard

The top part of the dashboard may have a different configuration depending on the version and optionals requested by the Customer.

Open storage compartment **(I)**. Open storage compartment with mobile phone inductive charge (optional).

"Cradle" (2) support system for mobile phone / tablet (optional).



# Removing the protective cover from reduced cowl vehicles

## (Stripped Chassis Cowl)

Proceed as follows to remove the protective cover (1) that safeguards the chassis during transport:

• Undo the zipper (2).

**NOTE** The figure is valid for left-hand drive vehicles and right-hand drive vehicles.

 ${\boldsymbol \cdot}$  Release the cables  ${\mbox{(3)}}$  by acting on the carabiners securing them to the chassis.

**NOTE** The figure is valid for left-hand drive vehicles and right-hand drive vehicles.







• Remove the elastic rope (4).

Once freed from the restraints as described above, the cover can be removed by folding it.

**NOTE** The figure is valid for left-hand drive vehicles and right-hand drive vehicles.

• The wooden planks **(5)** used to support the cover must also be removed in order to outfit the chassis.

**NOTE** The figure is valid for left-hand drive vehicles and right-hand drive vehicles.

#### Load advice

The vehicle is approved on the basis of specific maximum weights such as: kerb weight, useful weight, total weight, maximum weight on front axle, maximum weight on rear axle, towable weight. These weights are indicated in the vehicle registration document. Each of these must be adhered to and never exceeded. In particular, it is prohibited to exceed the maximum weight allowed on the front axle and the rear axle when stowing the load (especially if the vehicle has a particular outfitting). With regard to this point, it is recommended that:

- the load is evenly distributed on the floor: if it is necessary for it to be concentrated in just one area, choose the area between the two axles;
- note that loads positioned at lower points result in lower vehicle centre of gravity, thus improving vehicle handling: therefore, always put the heaviest goods at the bottom;
- Finally, remember that the dynamic behaviour of the vehicle is influenced by the weight carried: in particular, the braking distances are greater, especially at high speeds.

**ATTENTION** After having loaded the vehicle, use the U-bolts and the eyelets to secure the load so that it is stable (using suitable metal cables, ropes, belts). While travelling, accelerating, brusque braking actions, abrupt changes in direction, road inclines, etc. the packages could move with the subsequent risk of injury to the vehicle occupants.

## **Opening doors and external compartments**

Depending on configuration, it is possible that the chassis is equipped with the following doors on the driver's side on the right:

• Fuel filler cap door for diesel.

Left side opposite the driver's seat for vehicles with right-hand drive:

- AdBlue® filler flap.
- Engine bonnet.

#### Instrument panel

#### 'Matrix' version

The systems fitted to your vehicle enable you to check and easily use the main function controls, if necessary. To avoid creating potentially dangerous situations for yourself and also for other road users, please carefully comply with the following precautions:

**ATTENTION** The system must be used while always maintaining full control of the vehicle; if there is any doubt, stop and carry out the various operations.



#### Risk of injury:

Lack of attention and/or loss of view of the road by the driver can be a source of serious accidents. Before starting out, become familiar with the vehicle's systems and other controls.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle



#### General prescriptions

Drivers are responsible for ensuring that they are in the best possible position to ensure both their own safety and the safety of others using the road. Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

The seat and steering wheel adjustment controls can be used to obtain the most comfortable driving position. When driving, the driver's comfort depends on many external factors, such as the road surface, speed, vehicle load, etc.

The driver must respond to these external factors in order to maintain comfort and often, especially when the road surface is in poor condition or on dirt roads, the only factor he can control is the vehicle's speed. In these conditions drivers must maintain a speed which ensures their own comfort while respecting the Highway Code.



## Instruments

The instrument panel includes the following instruments:

- I. Speedometer with warning lights.
- 2. Warning light module for external lights.
- 3. Fuel level gauge with reserve warning light.
- 4. Turning indicator warning light module.
- 5. Engine coolant temperature indicator with high-temperature warning light.
- 6. Warning light module for external lights.
- 7. Rev. counter with warning lights.
- 8. Multi-function digital display.

#### Speedometer

The instrument **(I)** indicates the vehicle speed. The scale is in km/h and in mph where required by the market.

The instrument also has a series of warning lights. Please refer to the tables in this chapter.

## Warning light module

The warning light module (2) contains some of the warning lights relating to external lights. For further details, see the table in this chapter and the chapter regarding light operation.





## Fuel level indicator

Instrument (3) indicates the quantity of fuel in the tank.

When the pointer indicates:

0. The tank is empty.

1/2. The tank is half full.

I. The tank is full.

The yellow warning light **(A)** indicates that the fuel in the tank has reached a minimum level and the vehicle will only continue to run for a limited distance.

## Turning indicator warning light module

The warning light module **(4)** contains the turn indicator engaged warning light. For further details, see the table in this chapter.



## Engine coolant temperature indicator

Instrument **(5)** indicates the temperature of the coolant in the engine cooling circuit. The thermometer starts to display the coolant temperature when the temperature exceeds approximately **50** °C, and the pointer moves above "50".

- Lower position (50): low coolant temperature.
- Upper position (130): high coolant temperature.
- The average operating temperature is between 80 °C and 95 °C.

**ATTENTION** High engine coolant temperature is indicated: when the engine coolant temperature pointer falls near the red notch; with activation of the red warning light (A) together with the message on the multifunctional digital display.



General risk, general prescriptions

If the engine coolant temperature rises excessively, the driver must pull over immediately, switch off the engine and contact the Service Network. Partial or complete non observance of these prescriptions can lead to serious damages to the vehicle



## Warning light module

The warning light module **(6)** contains some of the warning lights relating to external lights. For further details, see the table in this chapter and the chapter regarding light operation.

## **Revolutions counter**

The rev counter (7) provides information about engine rpm.

With the engine idling, the revolutions counter may show a gradual or sudden change in engine rpm.

This is normal behaviour and can occur, for example, when the climate control unit or fan is switched on. In these cases a small increase in the idle speed protects the battery charge level. The instrument also has a series of warning lights.

Please refer to the table in this chapter.

## Multi-function digital display

The display **(8)** indicates the vehicle state (detailed description follows in the corresponding paragraph of this chapter).

Dashboard brightness sensor. The sensor (9) adjusts dashboard instrument panel brightness on the basis of ambient lighting conditions.



#### Instrument panel

#### "Comfort" version

The systems fitted to your vehicle enable you to check and easily use the main function controls, if necessary. To avoid creating potentially dangerous situations for yourself and also for other road users, please carefully comply with the following precautions.

**ATTENTION** The system must be used while always maintaining full control of the vehicle; if there is any doubt, stop and carry out the various operations.



#### Risk of injury:

Lack of attention and/or loss of view of the road by the driver can be a source of serious accidents. Before starting out, become familiar with the vehicle's systems and other controls.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle



#### General prescriptions

Drivers are responsible for ensuring that they are in the best possible position to ensure both their own safety and the safety of others using the road. Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle



## Instruments

The instrument panel includes the following instruments:

- I. Speedometer with warning lights.
- 2. Warning light module for external lights.
- 3. Fuel level gauge with reserve warning light.
- 4. Turning indicator warning light module.
- 5. Engine coolant temperature indicator with high-temperature warning light.
- 6. Warning light module for external lights.
- 7. Rev. counter with warning lights.
- 8. Multi-function digital display.

## Speedometer

The instrument (1) indicates the vehicle speed. The scale is in km/h and in mph where required by the market.

The instrument also has a series of warning lights. Please refer to the tables in this chapter.



## Warning light module

The warning light module (2) contains some of the warning lights relating to external lights. For further details, see the table in this chapter and the chapter regarding light operation.



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## Fuel level indicator

Instrument **(3)** indicates the quantity of fuel in the tank. When the pointer indicates: 0. The tank is empty. ½. The tank is half full. 1. The tank is full. The yellow warning light **(A)** indicates that the fuel in the tank has reached a minimum level and the vehicle will only continue to run for a limited distance.

## Turning indicator warning light module

The warning light module **(4)** contains the turn indicator engaged warning light. For further details, see the table in this chapter.







## Engine coolant temperature indicator

Instrument **(5)** indicates the temperature of the coolant in the engine cooling circuit. The thermometer starts to display the coolant temperature when the temperature exceeds approximately **50** °**C**, and the pointer moves above "50".

- Lower position (50): low coolant temperature.
- Upper position (130): high coolant temperature.
- The average operating temperature is between 80 °C and 95 °C.

**ATTENTION** An excessive engine coolant temperature is signalled when the engine coolant temperature pointer falls near the red notch; with activation of the red warning light (A) together with the message on the multifunctional digital display.



General risk, general prescriptions

If the engine coolant temperature rises excessively, the driver must pull over immediately, switch off the engine and contact the Service Network. Partial or complete non observance of these prescriptions can lead to serious damages to the vehicle
37

#### Warning light module

The warning light module **(6)** contains some of the warning lights relating to external lights. For further details, see the table in this chapter and the chapter regarding light operation.

#### **Revolutions counter**

The rev counter (7) provides information about engine rpm.

With the engine idling, the revolutions counter may show a gradual or sudden change in engine rpm.

This is normal behaviour and can occur, for example, when the climate control unit or fan is switched on. In these cases a small increase in the idle speed protects the battery charge level. The instrument also has a series of warning lights.

Please refer to the table in this chapter.

#### Multi-function digital display

The display **(8)** indicates the vehicle state (detailed description follows in the corresponding paragraph of this chapter).



#### Instrument panel

## "TFT" version

The systems fitted to your vehicle enable you to check and easily use the main function controls, if necessary. To avoid creating potentially dangerous situations for yourself and also for other road users, please carefully comply with the following precautions.

**ATTENTION** The system must be used while always maintaining full control of the vehicle; if there is any doubt, stop and carry out the various operations.



#### Risk of injury:

Lack of attention and/or loss of view of the road by the driver can be a source of serious accidents. Before starting out, become familiar with the vehicle's systems and other controls.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle



#### General prescriptions

Drivers are responsible for ensuring that they are in the best possible position to ensure both their own safety and the safety of others using the road. Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle





#### Instruments

The TFT version instrument panel includes the following instruments:

- I. Speedometer with warning lights.
- 2. Fuel level gauge with reserve warning light.
- 3. Multi-function digital display.
- 4. Engine coolant temperature indicator with high-temperature warning light.
- 5. Rev. counter with warning lights.

#### Speedometer

The instrument indicates the vehicle speed. The scale is in km/h, mph is used where required by the market.

The instrument also has a series of warning lights.

Please refer to the tables in this chapter.

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## **Fuel level indicator**

The instrument **(2)** with markings illuminated on the left of the display indicates the amount of fuel present.

The yellow warning light **(3)** indicates that the fuel in the tank has reached a minimum level and the vehicle will only continue to run for a limited distance.

## **Turning indicator warning lights**

The warning light module **(1)** and **(5)** contains the turn indicator engaged warning lights. For further details, see the table in this chapter.

41

#### Engine coolant temperature indicator

The instrument **(4)** with markings illuminated on the right side of the display indicates the temperature of the coolant in the engine cooling circuit.

- Lower position (50): low coolant temperature.
- Upper position (130): high coolant temperature.
- The average operating temperature is between 80 °C and 95 °C.

**ATTENTION** The engine coolant indicator is near the red notch. If the red warning light activates, together with the multifunctional digital display, this indicates an excessive increase in the coolant temperature.



General risk, general prescriptions

If the engine coolant temperature rises excessively, the driver must pull over immediately, switch off the engine and contact the Service Network. Partial or complete non observance of these prescriptions can lead to serious damages to the vehicle

## Warning lights

The warning light (6) indicates external lights.

For further details, see the table in this chapter and the chapter regarding light operation.







#### **Revolutions counter**

The rev counter provides information about engine rpm.

With the engine idling, the revolutions counter may show a gradual or sudden change in engine rpm.

This is normal behaviour and can occur, for example, when the climate control unit or fan is switched on. In these cases a small increase in the idle speed protects the battery charge level. The instrument also has a series of warning lights.

Please refer to the tables in this chapter.



## Multi-function digital display

The display **(3)** indicates the vehicle state (detailed description follows in the corresponding paragraph of this chapter).

### Dashboard brightness sensor.

The sensor **(10)** adjusts dashboard instrument panel brightness on the basis of ambient lighting conditions.



43

## Instrument lighting adjustment

## "COMFORT" panel

This procedure allows the driver to adjust the brightness of the instrument panel lighting buttons on the central dashboard when the side lights are on.

To adjust, proceed as follows:

- Access the menu by pressing the SET (2) button.
- Once you are on the right page, use buttons (1) and (3) to scroll through the pages of the menu.
- Use the buttons  $\mathbb{D} \land (3)$  and  $\mathbb{P} \lor (1)$  to adjust the brightness level from minimum to maximum.
- When you have found your preferred level of brightness, confirm using the SET (2) button.
- Press and hold SET (2) button to exit the menu.

The back-lighting of the buttons cannot be deactivated.

# "TFT" panel

This procedure allows the driver to adjust the brightness of the instrument panel lighting buttons on the central dashboard when the side lights are on.

To adjust, proceed as follows:

• Access the menu by pressing the **(5)** button and enter the page dedicated to instrument lighting.

- Use the ▲ (2) and ▼ (4) buttons to move to the "backlight" selection page
- You can then adjust the brightness level from minimum to maximum.

• When you have found your preferred level of brightness, confirm using the **(OK) (5)** button to save your selection.

The back-lighting of the buttons cannot be deactivated.







## Central dashboard

#### (button layout)

The figure shows the button layout on the plate. The layout and presence of buttons varies depending on the different versions/markets.

## Instrument panel (TFT version)

- I. Ecoswitch function (if present).
- 2. City Control.
- 3. ASR disabling / button for controlling traction.
- 4. HDC (Hill Descent) control of cruising speed when driving downhill.
- 5. Hazard lights.
- 6. Fog lights and rear fog lights.
- 7. Headlight adjuster up .
- 8. Headlight adjuster down.
- 9. Vehicle door lock/unlock control.

## Instrument cluster (Comfort version)

- I. Ecoswitch function (if present).
- 2. City Control.
- 3. ASR exclusion.
- 4. Fog lights Rear fog lights.
- 5. Hazard lights.
- 6. Headlight adjuster up .
- 7. 'SET' button for navigating the dashboard display menu.
- 8. Headlight adjuster down.
- 9. Vehicle door lock/unlock control.

#### Instrument cluster (Comfort / TFT version)

10. Start & Stop (if fitted) / Outswinging door ('Vendor' version) / footboard warning light (optional).

II. Rear spotlight / Interior lights (bus version) / ramp button (optional).

12. PTO engagement/ Interior lights (bus version) / additional light button.

 $\ensuremath{\mathsf{I3}}$  . Defrosting of the heated mirrors, windscreen and rear window.

14. LDWS (Lane Departure Warning System) - Lane change warning system (if fitted).

15. Passenger side Air-bag deactivation.

- I 6. Spare  $\check{/}$  Blue interior lights / light signaller available / white interior lights.
- 17. Unit heater (if fitted).

18. Differential lock engagement.

19. Spare / Ecoroll.

20. Spare / Run Lock.

21. Spare.

22. Spare.

23. Battery cut-off 'OFF' - Emergency switch.

- 24. Cigarette lighter (if fitted).
- 25. 12 V socket.

**NOTE** Some buttons may have a built-in indicator light.







## Upper part of dashboard

The Retarder controls (if fitted) are located at the top of the dashboard to the right of the steering wheel. Specifically:

I. Four position control lever (shown in the figure as: (a); (b); (c) (d);

2. Button for Retarder decoupling from the brake pedal.

**NOTE** For Retarder operation, see the chapter "Start-up and driving".

## Left part of the dashboard

The following buttons are to the left of the steering wheel:

- I. Lowering button (air suspensions)
- 2. Self-levelling button (air suspensions)

3. Lifting button (air suspensions)

There is also the control unit (4) for the additional independent heater.

## Gear Shift Indicator (GSI)

The Gear Shift Indicator indicates when a gear change needs to be made in order to make the best use of the vehicle engine, for example, by engaging a higher gear to allow a reduction in fuel consumption or by downshifting to exploit the available torque.

By following its indications, benefits can be obtained with regard to economic savings, the reduction of harmful emissions and driving comfort.

The Gear Shift Indicator suggests a gear change by indicating the gear to be engaged on the dashboard together with the higher or lower gear symbol.

Depending on the type of multifunctional display, the pictogram GSI may change.

When the display shows the icon SHIFT UP **(A)** the system is suggesting shifting to a higher gear (gear shift allowing reduction in fuel consumption), whereas when it shows the icon SHIFT DOWN **(B)** it is suggesting shifting to a lower gear.

**NOTE** The indication remains lit until the driver makes the suggested gear change or until the driving conditions change to match a mission profile where the gear change suggested is no longer necessary to optimise fuel consumption.



# List of warning lights

#### List of indicator lights for Matrix instrument panel



POSI TION	sym Bol	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO
I	¢	Doors not completely closed	Not available	_
2	red	Speed Limiter engaged	Activation of the 'Speed Limiter' device using the dashboard button. When the button is pressed, the current speed becomes the maximum speed.	_
3	<b>₽!</b> ≢ red	Not used		—
4	Amber	EOBD / MIL	When the key is turned to the 'MAR-1' position, the warning light comes on but should go off after starting the engine. The functionality of this warning light can be checked by traffic police using special equipment. Always follow the Highway Code. If the warning light stays on or comes on while driving, it is indicating imperfect operation of one or more engine components or sub-systems; in particular, if the warning light remains permanently on, this indicates a malfunction in the fuel supply/ignition/air circulation system that could cause excessive exhaust emissions, a possible loss of performance, poor handling and high consumption. On some versions the display shows a dedicated message. The warning light goes off if the fault disappears, but the system will store the warning issued.	In these conditions it is possible to continue driving, providing heavy demands are not made on the engine or high driving speeds attempted. Prolonged use of the vehicle with the warning light on may cause damage. If a fault is found, contact a Service Network workshop as soon as possible.
5	<b>A</b> mber	<b>(*)</b> External emergency handle locked with key	(Minibus vehicles) The external handle is locked with a key.	For safety reasons, only drive with the handle unlocked.

POSI TION	SYM BOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO
6	green	(*) Cruise control engaged	(If fitted). The indicator light on the dashboard will come on when the control on the steering wheel lever is operated.	_
		(*)Brake failure	Activation of the warning light indicates a fault in the braking system.	Driving carefully, immediately go to a Service Network workshop.
		<b>(*)</b> EBD system fault	Simultaneous activation of the 🗐 and 🕏 warning lights indicates a fault in the EBD system.	Driving carefully, immediately go to a Service Network workshop.
7	(D) red	<b>(*)</b> Low brake fluid	Activation of the warning light indicates a low level of brake fluid in the reservoir.	Top up the brake fluid level, then check that the warning light goes off. If the warning light comes on while driving, stop immediately and contact a Service Network workshop.
		<b>(*)</b> Parking brake engaged	The warning light comes on when the parking brake is engaged.	Release the parking brake and check that the light goes off. If the light remains on, contact a Service Network workshop.
8	(ABS) Amber	<b>(*)</b> ABS system fault	The warning light comes on when the system is not functioning efficiently. In this situation the braking system maintains its efficiency but without the aid of the ABS system. The display may show a dedicated message.	Drive carefully to a Service Network workshop as soon as possible.
	Amber	<b>(*)</b> EBD system fault	Simultaneous activation of the 🕏 warning light indicates a fault in the EBD system.	Driving carefully, immediately go to a Service Network workshop.
9	<b>T</b> Amber	(*) ESC / ESP engaged	NOT AVAILABLE	—

POSI TION	SYM BOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO
10	<b>}-≫-</b> Amber	Differential lock engaged	Activation of this warning light indicates that the device is engaged.	_
		(*) Inducement	Diesel emissions control process.	_
11	Amber	<b>(*)</b> AdBlue® low level/quality	The warning light may appear in flashing mode (first warning) or in a fixed mode (indicating the next level of restriction ('severity') and start of inducement) with subsequent de-rating of engine performance (Euro VI) or warning of future disabling of engine start (Euro 6).	If the warning light comes on in conjunction with a low level of AdBlue® top-up the tank as soon as possible by going to an AdBlue® distributor. The warning light may also come on in the event of low additive quality (in this case check the contents of the tank) or faults in the SCR system/NOx sensors. In the latter case, contact a Service Network workshop.
12	() Amber	Not used	_	_
13	Amber	"Diesel Particulate Filter" warning light	When it remains on it means that the particulate filter must be regenerated or that "on demand" automatic regeneration is taking place. When flashing, it indicates that regeneration of the filter is in progress ("on-demand" procedure).	Warning light on fixed: with an FIA engine, you are recommended to drive the vehicle on a motorway. With an FIC engine, carry out an "on- demand" regeneration. Flashing indicator light, "on-demand" regeneration is in progress. Follow the procedure/instructions in the use and maintenance manual.

POSI TION	SYM BOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO
14	<b>OO</b> Amber	Glow plug preheating/glow plug preheating fault	When the key is turned to the 'MAR -1' position, the warning light comes on: The warning light goes off when the glow plugs have reached the preset temperature. At high ambient temperatures, activation of the warning light may be almost imperceptible.	When the warning light goes off, start the engine immediately by turning the key to the 'AVV-2' position.
15	red k	Safety belts not fastened	When the ignition key is set to MAR-1, the red indicator light comes on for a few seconds (to check the correct operation of the indicator light itself) after which, if there are no faults, it goes out. The indicator light comes on and stays on when the vehicle is stationary and the driver's seat belt or passenger side seat belt is not fastened (when there is a passenger present). The indicator light flashes and a buzzer sounds when the vehicle is moving and the seat belts of the front seats are not correctly fastened. In this case, fasten the seat belt.	To permanently deactivate the acoustic indicator, contact the IVECO Service Network. The acoustic indicator can be reactivated at any time from the set-up menu of the display.

POSI TION	SYM BOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO
16	red	<b>(*)</b> Low coolant level	Activation of the warning light indicates a low level of brake fluid in the reservoir.	Normal operation: stop the vehicle, turn off the engine and check that the fluid level in the reservoir is not below the 'MIN' mark. If it is, proceed as described in the paragraph 'Checks to be carried out by the user'. Perform a visual check for coolant leaks. If, when restarting, the warning light lights up again, contact the Service Network. Heavy use of the vehicle: slow down and, if the warning light stays on, stop the vehicle. Stop for 2/ 3 minutes with the engine running at slightly accelerated speed to boost circulation of the coolant, then switch off the engine. Check that the level of coolant is correct. Very demanding journeys: Keep the engine on and slightly accelerated for a few minutes before switching off.
17	<b>x</b> red	<b>(*)</b> Airbag failure	If this warning light stays on it indicates that there is a fault in the airbag system.	Contact a Service Network workshop as soon as possible. See the corresponding chapter.
18	yellow	<b>(*)</b> * Passenger airbag deactivated	Not available	—
19	-+ red	Battery not charging	Activation of the warning light indicates an alternator malfunction.	Contact a Service Network workshop immediately.

POSI TION	SYM BOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO	
20	ľ,	NOT AVAILABLE		—	
(*) operation of the warning lights marked with an asterisk is checked automatically each time the ignition key is set to MAR-1 (see chapter "Start-up and driving) and lasts for a few seconds.					



POSI TION	SYMBOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO
21	-Ö- Amber	Tractor external lights failure	The warning light comes on when a fault in one of the following lights is detected: - turn indicators; - rear fog light - stop lights; - side lights; - daytime running lights; - licence plate lights; - reversing lights	The fault could be due to: the burning out of one or more bulbs, blowing of the relative protective fuse or interruption of an electrical connection.
22	<b>p</b> green	Front fog lights on	The warning light comes on when the front fog lights are switched on.	_
22	EDE	External lights on	The warning light comes on when the front fog lights are switched on.	—
23	23 green	Follow me home	The warning light comes on when this device is used (see the relevant paragraph).	—
24	ረነ	Left turn indicator (arrows)	The indicator light is activated when the control lever on the steering wheel is moved downwards.	_
24	<b>v</b> green	Hazard lights	The warning light comes on together with the right side turn indicator when the hazard warning light button is pressed.	_
25	<b>Ç</b> ⟩ <sub>green</sub>	Right turn indicator (arrows)	The indicator light is activated when the control lever on the steering wheel is moved upwards.	—
25		Hazard lights	The warning light comes on together with the left side turn indicator when the hazard warning light button is pressed.	_
26	ED Light blue	High beam	The warning light comes on when the high beam lights are switched on.	_

POSI TION	SYMBOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO
27	<b>()≓</b> Amber	Rear fog lights	The warning light comes on when the rear fog lights are switched on.	
		Tractor external lights failure	Simultaneous activation of the '	The fault could be due to: the burning out of one or more bulbs, blowing of the relative protective fuse or interruption of an electrical connection. Airbag fault warning light
28	Amber	Simultaneous activation of the warning light indicates a fault in the airbag system.	In this case, the warning light might not signal any faults in the retaining systems. Before continuing, contact a Service Network workshop.	
		General engine fault	The warning light comes on permanently or flashing, indicating a possible fault detected by the engine control unit	If there is a fault, contact a Service Network workshop as soon as possible.

POSI TION	SYMBOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO
	Amber	Presence of water in fuel filter	The symbol lights up permanently when driving (together with display of a message on the display) to indicate the presence of water in the diesel filter.	The presence of water in the fuel supply circuit may cause serious damage to the injection system and cause irregular engine operation. If the symbol lights up (on some versions together with a message on the display) contact a Service Network workshop as soon as possible to have the system drained. If the same message appears immediately after refuelling, it is possible that water has got into the tank: In this case, stop the engine immediately and contact a Service Network workshop.
	<b>Å</b> mber	Headlight alignment positioning	The symbol indicates the angle of headlights on the road	Adjust the alignment of the headlights according to the load so as not dazzle other road users
_	Amber	Possible presence of ice on the road	When the outside temperature reaches or falls below <b>3</b> °C the outside temperature display flashes to indicate the possible presence of ice on the road. The display saves a dedicated message (only for versions with reconfigurable Matrix display)	_
_	Amber	Gear Shift Indicator. Shift up (higher gear)	Indicates changing the gearbox to a higher gear	_

POSI TION	SYMBOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO
	C) red	Doors not completely closed	The warning light comes on when one or more doors or the loading compartment access are not fully closed. On some versions the display shows the dedicated message indicating the open status of the left/right front door or rear doors/loading compartment. If the doors are open with the vehicle in motion, an acoustic warning is emitted.	Close the door(s)
_	<b>▼</b> Amber	Gear Shift Indicator: Shift down (lower gear)	Indicates changing the gearbox to a lower gear	_
_	Amber	Gear Shift Indicator. Shift up (higher gear)	Indicates changing the gearbox to a higher gear	_
_	Amber	Gear Shift Indicator: Shift down (lower gear)	Indicates changing to a lower gear (only for versions with reconfigurable Matrix display).	_
_	<b>km</b> Amber	Unit of measurement in kilometres	_	—
	mi	Unit of measurement in miles	_	—
	انحيه	NOT AVAILA	BLE	—

POSI TION	SYMBOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO
_	Amber	Immobilizer system fault	Activation of the symbol indicates a fault in the Immobiliser system (only for versions with reconfigurable Matrix display).	If a fault is found, contact a Service Network workshop as soon as possible.
_	(T) Amber	Tachograph fault (if fitted)	The symbol lights up when a fault occurs in the tachograph (only for versions with reconfigurable Matrix display).	If a fault is found, contact a Service Network workshop as soon as possible.
_	<b>()</b> Amber	Brake pads wear	The symbol lights up if there is excessive wear of the brake pad material (only for versions with reconfigurable Matrix display).	Drive carefully to a Service Network workshop as soon as possible.
_	<b>Amber</b>	Power take- off (P.T.O.) engaged	The symbol lights up when the P.T.O. is engaged (only for versions with reconfigurable Matrix display).	—
_	Amber	Trailer fault/ failure	The symbol lights up if there is a fault in the trailer electrical system (only for versions with reconfigurable Matrix display).	If a fault is found, contact a Service Network workshop as soon as possible.
_	(PTO) Amber	Power take- off, mode 1	The symbol lights up when the P.T.O. is in operation (only for versions with reconfigurable Matrix) display.	—
_	(PTO) 2 Amber	Power take- off, mode 2	The symbol lights up when the P.T.O. is in operation (only for versions with reconfigurable Matrix) display.	_
_	(PT0 3 Amber	Power take- off, mode 3	The symbol lights up when the P.T.O. is in operation (only for versions with reconfigurable Matrix) display.	_

POSI TION	SYMBOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO
	<b>O</b> red	Gearbox fault/failure	The symbol lights up if there is a gearbox fault (only for versions with reconfigurable Matrix display).	If a fault is found, contact a Service Network workshop immediately.
	<b>ŀ≫I</b> Amber	Differential fault/failure	The symbol lights up if a differential fault is found (only for versions with reconfigurable Matrix display).	If a fault is found, contact a Service Network workshop immediately.
_	Amber	Service (scheduled maintenance)	This display appears automatically when the key is set to 'MAR-I'depending on the mileage and the maintenance plans defined by IVECO. Before reaching the mileage established in the maintenance plans, a temporary warning message will appear together with the symbol. Once the mileage limit stated in the maintenance plan has been exceeded, a temporary warning message will be displayed and the symbol will stay lit.	Contact the Service Network where staff will carry out the maintenance interventions as indicated in the "Scheduled maintenance plan" and reset this display.
<b>NOTE</b> The diagnostics function from the dashboard menu can be used to display a series of diagnostic codes that could be requested by the Service Network in order to facilitate some stages of assistance. The presence of codes in this list does not indicate vehicle malfunction – maintenance work is not required and there is no need to cancel them. Attention need only be paid to the warning lights or messages on the display for any work or assistance required.				

## Generic hazard indicator light

## Vehicles with Matrix instrument cluster

For vehicles equipped with 'MATRIX' instrument cluster, the generic hazard indicator (yellow) is connected to operation of the AEBS system.



64

## Generic hazard indicator light

Vehicles with COMFORT instrument cluster

SYMBOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO
Amber	Inertia safety switch activated	The warning light comes on with the <section-header> symbol when the inertial safety switch is activated.</section-header>	The warning light can be switched off by resetting the switch.
	Tractor external lights failure	Simultaneous activation of the '\$\vec{P}' warning light indicates a fault in the following lights: - turn indicators; - rear fog lights; - stop lights; - side lights; - daytime running lights; - licence plate lights; - reversing lights.	The fault could be due to: the burning out of one or more bulbs, blowing of the relative protective fuse or interruption of an electrical connection.
	Airbag fault warning light	Simultaneous activation of the X warning light indicates a fault in the airbag system. <b>128</b>	In this case, the warning light might not signal any faults in the retaining systems. Before continuing, contact a Service Network workshop.
	Door failureVendor	The warning light comes on in the presence of a door operation fault.	If a fault is found, contact a Service Network workshop as soon as possible.
	General engine fault	The warning light comes on permanently or flashing, indicating a possible fault detected by the engine control unit.	If a fault is found, contact a Service Network workshop as soon as possible.
	Emergency start-up	The warning light activates and flashes to indicate the immobilizer start code.	_

# List of warning lights

#### **COMFORT** instrument cluster



Vehicles with COMFORT instrument cluster

POSI TION	SYM BOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO
I	red	Doors not completely closed	The warning light comes on when one or more doors or the loading compartment access are not fully closed. On some versions the display shows the dedicated message indicating the open status of the left/right front door or rear doors/loading compartment. If the doors are open with the vehicle in motion, an acoustic warning is emitted.	Close the doors and/or loading compartment.
2	Green	Speed Limiter engaged	Engaging the 'Speed Limiter' device using the designated key on the steering wheel. When the button is pressed, the current speed becomes the maximum speed.	_
3	<b>₽!</b> red	<b>(*)</b> Air suspensions not in running condition	(If fitted). When the key is set to 'MAR-1', the warning light activates but should turn off after a few seconds. The warning light comes when there is a malfunction of the self-levelling suspension system.	If there is a fault, immediately contact a Service Network workshop.

POSI TION	SYM BOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO
4	<b>لرتی</b> Amber	EOBD / MIL	When the key is turned to the 'MAR-1' position, the warning light comes on but should go off after starting the engine. The functionality of this warning light can be checked by traffic police using special equipment. Always follow the Highway Code. If the warning light stays on or comes on while driving, it is indicating imperfect operation of one or more engine components or sub-systems; in particular, if the warning light remains permanently on, this indicates a malfunction in the fuel supply/ignition/air circulation system that could cause excessive exhaust emissions, a possible loss of performance, poor handling and high consumption. On some versions the display shows a dedicated message. The warning light goes off if the fault disappears, but the system will store the warning issued.	In these conditions it is possible to continue driving, providing heavy demands are not made on the engine or high driving speeds attempted. Prolonged use of the vehicle with the warning light on may cause damage. If there is a fault, contact a Service Network workshop as soon as possible.
5	<b>A</b> mber	<b>(*)</b> External emergency handle locked with key	(Minibus vehicles) The external handle is locked with a key.	For safety reasons, only drive with the handle unlocked.
6	green	<b>(*)</b> Cruise control engaged	(If fitted). The indicator light on the dashboard will come on when the control on the steering wheel lever is operated.	_

POSI TION	SYM BOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO
7	() red	<b>(*)</b> Brake failure	Activation of the warning light indicates a fault in the braking system.	Driving carefully, immediately go to a Service Network workshop.
		<b>(*)</b> EBD system fault	Simultaneous activation of the 🝘 and 🕏 warning lights indicates a fault in the EBD system.	Driving carefully, immediately go to a Service Network workshop.
		<b>(*)</b> Low brake fluid	Activation of the warning light indicates a low level of brake fluid in the reservoir.	Top up the brake fluid level, then check that the warning light goes off. If the warning light comes on while driving, stop immediately and contact a Service Network workshop.
		<b>(*)</b> Parking brake engaged	The warning light comes on when the parking brake is engaged.	Release the parking brake and check that the light goes off. If the light remains on, contact a Service Network workshop.
8	(ABS)	<b>(*)</b> ABS system fault	The warning light comes on when the system is not functioning efficiently. In this case, the braking system maintains its efficiency but without the aid of the ABS system. The display may show a dedicated message.	Drive carefully to a Service Network workshop as soon as possible.
	Amber	<b>(*)</b> EBD system fault	Simultaneous activation of the 🕏 warning light indicates a fault in the EBD system.	Driving carefully, immediately go to a Service Network workshop.
9	<b>R</b> Amber	(*) ESC / ESP engaged	Activation of this warning light indicates that the system is in operation.	—
10	<b>H</b> Amber	Differential lock engaged	Activation of this warning light indicates that the device is engaged.	—

POSI TION	SYM BOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO
		<b>(*)</b> Inducement	Diesel emission control process	—
11	Amber	<b>(*)</b> AdBlue®low level/quality	The warning light may flash (first 'warning') or activate (steady on) (indicating the next level of 'severity' and the start of inducement) with subsequent derating of engine performance (Euro VI) or warning of future disabling of engine start- up (Euro 6).	Refill the tank as soon as possible by going to an AdBlue® distributor if the warning light comes on in conjunction with a low level of AdBlue®. The warning light may also come on in the event of low additive quality (in this case check the contents of the tank) or faults in the SCR system/ NOx sensors. In the latter case, contact a Service Network workshop
12	Amber	Retarder engaged	The warning light remains on permanently. The Retarder is engaged and supplies a braking torque defined on the basis of the position of the lever or the pressed brake pedal position or due to a request from the Cruise Control. The warning light flashes continuously: The Retarder is preselected but not active because an inhibition condition is present (e.g. accelerator pedal pressed, overtemperature, etc.). In all other cases, it is a condition of temporary unavailability; therefore, completely release the accelerator pedal and use the service brake while you wait for the Retarder to become available again (this is signalled by the warning light activating and staying on).	

POSI TION	SYM BOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO
13	Amber	"Diesel Particulate Filter" warning light	When it remains on it means that the particulate filter must be regenerated or that "on demand" automatic regeneration is taking place. When flashing, it indicates that regeneration of the filter is in progress ("on-demand" procedure).	Warning light on fixed: with an FIA engine, you are recommended to drive the vehicle on a motorway. With an FIC engine, carry out an "on-demand" regeneration. Flashing indicator light, "on-demand" regeneration is in progress. Follow the procedure/ instructions in the use and maintenance manual.
14	<b>M</b> mber	Glow plug preheating/ glow plug preheating fault	When the key is turned to the 'MAR - I' position, the warning light comes on: The warning light goes off when the glow plugs have reached the preset temperature. At high ambient temperatures, activation of the warning light may be almost imperceptible.	When the warning light goes off, start the engine immediately by turning the key to the 'AVV-2' position.
15	<b>k</b> red	Safety belts not fastened	When the ignition key is set to 'MAR–I', the red indicator light comes on for a few seconds (to check the correct operation of the indicator light itself) after which, if there are no faults, it goes out. The indicator light comes on and stays on when the vehicle is stationary and the driver's seat belt or passenger side seat belt is not fastened (when there is a passenger present). The indicator light flashes and a buzzer sounds when the vehicle is moving and the seat belts of the front seats are not correctly fastened. In this case, fasten the seat belt.	To permanently deactivate the acoustic indicator, contact the IVECO Service Network. The acoustic indicator can be reactivated at any time from the set-up menu of the display.

POSI TION	SYM BOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO				
16	red	<b>(*)</b> Low coolant level	Activation of the warning light indicates a low level of brake fluid in the reservoir.	In the case of normal driving: stop the vehicle, turn off the engine and check that the fluid level in the reservoir is not below the MIN mark. If it is, proceed as described in 'Checks to be carried out by the user'. Perform a visual check for coolant leaks. If, when restarting, the warning light comes on again, contact a Service Network workshop. In the case of demanding vehicle use: slow down and, if the warning light stays on, stop the vehicle. Stop for 2/3 minutes with the engine running at slightly accelerated speed to boost circulation of the coolant, then switch off the engine. Check that the level of coolant is correct. On very demanding journeys, keep the engine on and slightly accelerated for a few minutes before switching off.				
17	red	<b>(*)</b> airbag system fault	If this warning light stays on, this indicates that there is a fault in the airbag system.	Contact a Service Network workshop as soon as possible. See the corresponding chapter.				
18	<b>ب</b> ed	<b>(*)</b> Electric power steering fault	When the key is set to the MAR- I position, the warning light activates but should turn off after a few seconds. If the warning light stays on, the effect of the electric power steering may not be detectable and the effort on the steering wheel could increase considerably, even if the possibility of steering the vehicle is maintained.	Contact the Service Network as soon as possible.				
19	-+ red	Battery not charging	Activation of the warning light indicates an alternator malfunction.	Contact a Service Network workshop immediately.				
POSI TION	SYM BOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO				
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		<b>(*)</b> Low engine oil pressure	When the key is turned to the 'MAR - I' position, the warning light comes on but should go off after starting the engine. The warning light comes on (steady on) together with the message shown on the display when the system detects insufficient engine oil pressure.	Immediately stop the engine and consult a Service Network workshop.				
20	20 red /flashing red	<b>(*)</b> Engine oil change request	When the key is turned to the 'MAR - I' position, the warning light comes on but should go off after starting the engine. However, if the warning light begins to flash, a message will appear on the display indicating the need for an engine oil change.	In order to protect the engine, contact a Service Network workshop as soon as possible for an oil change.				
							(*) Low oil level	When the key is turned to the 'MAR - I' position, the warning light comes on but should go off after starting the engine. The warning light activates (steady on) together with the message on the display indicating that the engine oil level is too low.
<b>(*)</b> oper "Start-up	(*) operation of the warning lights marked with an asterisk is checked automatically each time the ignition key is set to MAR-1 (see chapter "Start-up and driving) and lasts for a few seconds.							



74

Vehicles with COMFORT instrument cluster

POSI TION	SYMBOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO
21	-Ö Amber	Tractor external lights failure	The warning light comes on when a fault in one of the following lights is detected: - turn indicators; - rear fog light - stop lights; - side lights; - daytime running lights; - licence plate lights; - reversing lights.	The fault could be due to: the burning out of one or more bulbs, blowing of the relative protective fuse or interruption of an electrical connection.
22	<b>‡D</b> green	Front fog lights on	The warning light comes on when the front fog lights are switched on.	_
22	EDOE	External lights on	The warning light comes on when the front fog lights are switched on.	—
23	green	Follow me home	The warning light comes on when this device is used (see the relevant paragraph).	—
	green	Left turn indicator (arrows)	The indicator light is activated when the control lever on the steering wheel is moved downwards.	_
24		Hazard lights	The warning light comes on together with the right side turn indicator when the hazard warning light button is pressed.	_
0.5	<b>₽</b> green	Right turn indicator (arrows)	The indicator light is activated when the control lever on the steering wheel is moved upwards.	_
25		Hazard lights	The warning light comes on together with the left side turn indicator when the hazard warning light button is pressed.	_

POSI TION	SYMBOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO
26	ED Light blue	High beam	The warning light comes on when the high beam lights are switched on.	—
27	<b>()∔</b> Amber	Rear fog lights	The warning light comes on when the rear fog lights are switched on.	—
		Inertia safety switch activated	The warning light comes on with the 🛣 symbol when the inertial safety switch is activated.	The warning light can be switched off by resetting the switch.
		Tractor external lights failure	Simultaneous activation of the '\$\' warning light indicates a fault in the following lights: - turn indicators; - rear fog lights; - stop lights; - side lights; - daytime running lights; - licence plate lights; - reversing lights.	The fault could be due to: the burning out of one or more bulbs, blowing of the relative protective fuse or interruption of an electrical connection.
28	Amber	airbag warning light fault	Simultaneous activation of the 🕅 warning light indicates a fault in the airbag system .	In this case, the warning light might not signal any faults in the retaining systems. Before continuing, contact a Service Network workshop.
		"Vendor" door fault	The warning light comes on in the presence of a door operation fault.	If there is a fault, contact a Service Network workshop as soon as possible.
		General engine fault	The warning light comes on permanently or flashing, indicating a possible fault detected by the engine control unit.	If there is a fault, contact a Service Network workshop as soon as possible.
		Emergency start-up	The warning light activates and flashes to indicate the immobilizer start code.	—

POSI TION	SYMBOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO
	Amber	Presence of water in fuel filter	The symbol lights up (steady on) when driving (together with a message on the display) to indicate the presence of water in the diesel filter.	The presence of water in the fuel supply circuit may cause serious damage to the injection system and cause irregular engine operation. If the symbol lights up (on some versions together with a message on the display), contact a Service Network workshop as soon as possible to have the system drained. If the same message appears immediately after refuelling, it is possible that water has got into the tank: In this case, stop the engine immediately and contact a Service Network workshop.
	<b>ÉD</b> Amber	Headlight alignment positioning	The symbol indicates the angle of headlights on the road.	Adjust the alignment of the headlights according to the load so as not dazzle other road users.
	Amber	Possible presence of ice on the road	When the outside temperature reaches or falls below <b>3</b> ° <b>C</b> , the outside temperature display flashes to indicate the possible presence of ice on the road.	_
	(A) white	Automatic engine stop(Stop & Start)	This symbol appears indicating that the (Start & Stop) system is in operation .	_
	white	Gear Shift Indicator. Shift up (higher gear)	Indicates changing the gearbox to a higher gear.	_
_	▼ white	Gear Shift Indicator: Shift down (lower gear)	Indicates changing the gearbox to a lower gear.	_

posi Tion	SYMBOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO
	<b>km</b> Amber	Unit of measurement in kilometres	_	
	mi	Unit of measurement in miles	_	
	Amber	lmmobilizer system fault	Simultaneous activation of the symbol $\Delta$ indicates a fault in the Immobilizer system.	If there is a fault, contact a Service Network workshop as soon as possible.
	Amber	Service (Scheduled maintenance)	This display appears automatically when the key is set to 'MAR-1' depending on the mileage and the maintenance plans defined by IVECO. Before reaching the mileage established in the maintenance plans, a temporary warning message will appear together with the symbol. Once the mileage limit stated in the maintenance plan has been exceeded, a temporary warning message will be displayed and the symbol will stay lit.	Contact the Service Network where staff will carry out the arranged "Scheduled maintenance plan" and reset this display (reset).
<b>NOTE</b> The diagnostics function from the dashboard menu can be used to display a series of diagnostic codes that could be requested by the Service Network in order to facilitate some stages of assistance. The presence of codes in this list does not indicate vehicle malfunction – maintenance work is not required and there is no need to cancel them. Only refer to the warning lights or messages on the display for any work or assistance required.				

## List of warning lights

#### TFT dashboard



Vehicles with TFT dashboard

POSI TION	SYMBOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO
I	green	Left turn indicator (arrows)	The indicator light is activated when the control lever on the steering wheel is moved downwards.	_
2	3005	External lights on	The warning light activates when the side and front side lights are switched on.	_
2	green	Follow me home	The warning light comes on when this device is used (see the relevant paragraph).	_
3	Amber	Fuel reserve	The yellow warning light indicates that the fuel in the tank has reached a minimum level and the vehicle will only continue to run for a limited distance.	Top-up the fuel tank
4	red red	Safety belts not fastened	When the ignition key is set to 'MAR-1', the red indicator light comes on for a few seconds (to check the correct operation of the indicator light itself) after which, if there are no faults, it goes out. The indicator light comes on and stays on when the vehicle is stationary and the driver's seat belt or passenger side seat belt is not fastened (when there is a passenger present). The indicator light flashes and a buzzer sounds when the vehicle is moving and the seat belts of the front seats are not correctly fastened. In this case, fasten the seat belt.	To permanently deactivate the acoustic indicator, contact the IVECO Service Network. The acoustic indicator can be reactivated at any time from the set-up menu of the display.

POSI TION	SYMBOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO
F	ſ	Right turn indicator (arrows)	The indicator light is activated when the control lever on the steering wheel is moved upwards.	_
5	<b>√</b> green	Hazard lights	The warning light comes on together with the left side turn indicator when the hazard warning light button is pressed.	_
6	red	High coolant temperature	The warning light activates when the engine coolant reaches a high temperature.	If the engine coolant temperature increases to an excessive level, pull over immediately and contact the Service Network.
	() red	<b>(*)</b> Brake failure	Activation of the warning light indicates a fault in the braking system.	Driving carefully, immediately go to a Service Network workshop.
7		<b>(*)</b> EBD system fault	Simultaneous activation of the 🝘 and 🕏 warning lights indicates a fault in the EBD system.	Driving carefully, immediately go to a Service Network workshop.
7		<b>(*)</b> Low brake fluid	Activation of the warning light indicates a low level of brake fluid in the reservoir.	Top up the brake fluid level, then check that the warning light goes off. If the warning light comes on while driving, stop immediately and contact a Service Network workshop.
8	Amber	Collision alarm	Front collision warning system fault.	Contact the Service Network as soon as possible.

POSI TION	SYMBOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO
9	ED Light blue	High beam	The warning light comes on when the high beam lights are switched on.	_
		AUTO	Automatic control of the AHBC high beam lights activated (if fitted).	
10		_	Dashboard brightness sensor. The sensor adjusts dashboard instrument panel brightness on the basis of ambient lighting conditions.	
11	(P) red	Parking brake engaged	Activation of this warning light indicates that the device is engaged.	_
12	<b>₽!</b> ≇ red	<b>(*)</b> Air suspensions not in running condition	When the key is set to the MAR- I position, the warning light activates but should turn off after a few seconds. The warning light activates when there is a malfunction of the self-levelling suspension system (if fitted).	If a fault is found, contact a Service Network workshop immediately.
13	Red red	Power steering fault	When the key is set to the MAR- I position, the warning light activates but should turn off after a few seconds. If the warning light stays on, the effect of the electric power steering may not be detectable and the effort on the steering wheel could increase considerably, even if the possibility of steering the vehicle is maintained.	Contact the Service Network as soon as possible.

POSI TION	SYMBOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO
14	(ABS) Amber	(*) ABS fault	The warning light comes on when the system is not functioning efficiently. In this situation the braking system maintains its efficiency but without the aid of the ABS system. The display may show a dedicated message.	Drive carefully to a Service Network workshop as soon as possible.
	, triber	<b>(*)</b> EBD fault	Simultaneous activation of the 🕏 warning light indicates a fault in the EBD system.	Drive carefully to a Service Network workshop as soon as possible.
15	<b>∫≓</b> Amber	Rear fog lights	The warning light comes on when the rear fog lights are switched on.	
16	<b>‡D</b> green	Front fog lights on	The warning light comes on when the front fog lights are switched on.	_
17	Amber	lmmobilizer system fault	Activation of the symbol indicates a fault in the Immobilizer system.	If there is a fault, contact a Service Network workshop as soon as possible.

POSI TION	SYMBOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO
		Inertia safety switch activated	The warning light comes on with the <section-header> symbol when the overrun safety switch is activated (FIA engine with Start &amp; Stop).</section-header>	The warning light can be switched off by resetting the switch.
		Tractor external lights failure	Simultaneous activation of the 👾 warning light indicates a fault in the following lights: - turn indicators; - rear fog lights; - stop lights; - side lights; - daytime running lights; - licence plate lights; - reversing lights.	The fault could be due to: the burning out of one or more bulbs, blowing of the relative protective fuse or interruption of an electrical connection.
18	Amber	airbag warning light fault	Simultaneous activation of the 🎀 warning light indicates a fault in the airbag system.	In this case, the warning light might not signal any faults in the retaining systems. Before continuing, contact a Service Network workshop.
		Vendor door fault	The warning light comes on in the presence of a door operation fault.	If a fault is found, contact a Service Network workshop as soon as possible.
		General engine fault	The warning light comes on permanently or flashing, indicating a possible fault detected by the engine control unit.	If a fault is found, contact a Service Network workshop as soon as possible.
		Emergency start-up	The warning light activates and flashes to indicate the immobilizer start code.	—
19	Amber	Lane Departure Warning System engaged	The warning light activates when the Lane Departure Warning System is activated.	_
20	<b>X</b> red	<b>(*)</b> Airbag failure	If this warning light stays on, this indicates that there is a fault in the airbag system.	Contact a Service Network workshop as soon as possible. See the corresponding chapter.

POSI TION	SYMBOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO
21	<b>▶≫↓</b> red / Amber	Differential fault/failure	The warning light activates when there is a fault / failure in the differential.	If a fault is found, contact a Service Network workshop immediately.
22	- +	Battery not charging	Activation of the warning light indicates an alternator malfunction.	Contact a Service Network workshop immediately.
		<b>(*)</b> Low engine oil pressure	When the key is turned to the 'MAR - I' position, the warning light comes on but should go off after starting the engine. The warning light comes on permanently together with the message shown on the display when the system detects insufficient engine oil pressure.	Immediately stop the engine and contact a Service Network workshop.
23	red	<b>(*)</b> Engine oil change request	When the key is turned to the 'MAR - I' position, the warning light comes on but should go off after starting the engine. But if the warning light begins to flash, a message will appear on the display indicating the need for an engine oil change.	In order to protect the engine, contact a Service Network workshop as soon as possible for an oil change.
		<b>(*)</b> Low engine oil level	When the key is set to 'MAR - I' the warning light activates but it should deactivate as soon as the engine has started. The warning light activates (steady on) together with the message on the display indicating that the engine oil level is too low.	Top-up with the designated oil until the level indicated in the "Refilling" paragraph is reached, or contact a Service Network workshop.

POSI TION	SYMBOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO
		<b>(*)</b> Inducement	Diesel emissions control process.	Refill the tank as soon as possible by going to an AdBlue® distributor if the
24	Amber	<b>(*)</b> AdBlue® low level/ quality	The warning light may appear in flashing mode (first warning) or steady on (indicating the next level of restriction (severity) and start of inducement) with subsequent derating of engine performance or warning of future disabling of engine start	warning light comes on in conjunction with a low level of AdBlue® . The warning light may also come on in the event of low additive quality (in this case check the contents of the tank) or faults in the SCR system/NOx sensors. In the latter case, contact a Service Network workshop.
25	<b>لی۔</b> Amber	EOBD / MIL	When the key is turned to the 'MAR-1' position, the warning light comes on but should go off after starting the engine. The functionality of this warning light can be checked by traffic police using special equipment. Always follow the Highway Code. If the warning light stays on or comes on while driving, it is indicating imperfect operation of one or more engine components or sub-systems; in particular, if the warning light remains permanently on, this indicates a malfunction in the fuel supply/ignition/air circulation system that could cause excessive exhaust emissions, a possible loss of performance, poor handling and high consumption. On some versions the display shows a dedicated message. The warning light goes off if the fault disappears, but the system will store the warning issued.	In these conditions it is possible to continue driving, providing heavy demands are not made on the engine or high driving speeds attempted. Prolonged use of the vehicle with the warning light on may cause damage. If a fault is found, contact a Service Network workshop as soon as possible.

POSI TION	SYMBOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO
	<b>T</b> Amber	<b>(*)</b> ESP / ASR engaged	Activation of this warning light indicates that the system is in operation.	
26	<b>OFF</b> Amber	ASR OFF	ASR system disengaged.	
27	<b>OO</b> Amber	Glow plug preheating/ glow plug preheating fault	When the key is turned to the 'MAR - I' position, the warning light comes on: The warning light goes off when the glow plugs have reached the preset temperature. At high ambient temperatures, activation of the warning light may be almost imperceptible.	When the warning light goes off, start the engine immediately by turning the key to the 'AVV-2' position.
28	Amber	"Diesel Particulate Filter" warning light	When it remains on it means that the particulate filter must be regenerated or that "on demand" automatic regeneration is taking place. When flashing, it indicates that regeneration of the filter is in progress ("on-demand" procedure).	Warning light on fixed: with an F1A engine, you are recommended to drive the vehicle on a motorway. With an F1C engine, carry out an "on- demand" regeneration. Flashing indicator light, "on-demand" regeneration is in progress. Follow the procedure/instructions in the use and maintenance manual.

Driving compartment

POSI TION	SYMBOL	WARNING LIGHTS	WHAT IT MEANS	WHAT TO DO	
29	<b>()</b> Amber	Retarder engaged	The warning light remains on permanently. The Retarder is engaged and delivering a level of braking torque based on the position of the control lever, the pressure applied to the brake pedal or a request from the Cruise Control system. The warning light flashes continuously: The Retarder is preselected but not active because an inhibition condition is present (for example: accelerator pedal pressed, overtemperature, etc.). In all other cases, it is a condition of temporary unavailability; therefore, completely release the accelerator pedal and use the service brake while you wait for the Retarder to become available again (this is signalled by the warning light activating and staying on).		
(*) operation of the warning lights marked with an asterisk is checked automatically each time the ignition key is set to MAR-I (see chapter "Start-up and driving) and lasts for a few seconds. <b>NOTE</b> The diagnostics function from the dashboard menu can be used to display a series of diagnostic codes that could be requested by the Service Network in order to facilitate some stages of assistance. The presence of codes in this list does not indicate vehicle malfunction – maintenance work is not required and there is no need to cancel them. Attention need only be paid to the warning lights or messages on the display for any work or assistance required.					

List of symbols on central display of dashboard

IDEOGRAM	FUNCTION	COLOUR
	Fuel system fault / error.	Yellow
<b>X</b>	The symbol activates when the overrun switch intervenes.	Yellow
	Engine coolant level too low.	Red
ŧD	Headlight angle adjustment.	White
<u>مح</u> دا	Engine oil sensor fault.	Red
-`@_`-	External bulb fault.	Yellow
	Door(s) open.	Yellow
$\bigcirc$	Brake linings worn.	Yellow
*	Risk of ice.	
SHIFT	Indicates changing the gearbox to a higher gear. (Automatic gearbox).	White
SHIFT	Indicates changing the gearbox to a lower gear. (Automatic gearbox).	White
	(Minibus vehicles) The external emergency handle of the outswinging door is locked with a key.	Yellow

IDEOGRAM	FUNCTION	COLOUR
ļ⊷ <b>⊣</b>	Differential lock fault.	Yellow
ļ⊷ <b>⊣</b>	Differential lock serious error.	Red
	Trailer fault (If fitted).	Yellow
Ĭ	Service (Scheduled maintenance).	Yellow
	Brake fluid temperature.	Yellow
(Č)	AEBS function deactivated by the driver (If fitted).	
Ŵ	Performance of the AEBS function restricted (If fitted).	
Ŷ	Radar serious fault (If fitted).	
(@)!	AEBS system fault (if fitted).	
0	Radar dirty (If fitted).	
	Water in fuel filter.	
۲. ۲	Warning light steady on signalling malfunction of the fuel system / ignition / air circulation.	Yellow

92

IDEOGRAM	FUNCTION	COLOUR
⋽⋕⋳	Front collision warning system fault.	Yellow
<b>(</b> •)	CC (Cruise Control) function activated.	Green
100	CC (Cruise Control) function enabled.	White
100	QA (Queue Assist) function enabled.	White
100	QA (Queue Assist) function active.	Green
100	QA (Queue Assist) function enabled but without target acquisition.	Machine and bars grey, cruise and speed green
100	QA (Queue Assist) function in Brake only mode active.	Green flashing
100	QA (Queue Assist) function in Brake only mode active but without target acquisition.	Machine and bars grey, cruise and speed flashing green
100	SL (Speed Limiter) function active.	Green
100	ACC (Adaptive Cruise Control) function enabled.	White
100	ACC (Adaptive Cruise Control) function active	Green

IDEOGRAM	FUNCTION	COLOUR
100	ACC (Adaptive Cruise Control) function enabled but without target acquisition.	Machine and bars grey, cruise and speed green
100	ACC (Adaptive Cruise Control) function in Brake only mode active	Green flashing
100	ACC (Adaptive Cruise Control) function in Brake only mode active but without target acquisition	Machine and bars grey, cruise and speed flashing green
	PLKA (Proactive Lane Keeping Assist) function selected.	White
	PLKA (Proactive Lane Keeping Assist) function active.	Green
<b>R</b> !	ACC (Adaptive Cruise Control) function fault.	Amber
(!)	TPMS. (Tire Pressure Monitoring System). fault / Pressure of one or more than one tyre below the specified value. / High temperature of the tyre.	
× 2	Passenger airbag disengagement.	
<b>₩</b> !	Rain sensor fault (If fitted).	Amber
I	Electric steering fault.	
≣Ø!	Automatic high beam light system fault.	
	Generic brake system serious error.	Red

IDEOGRAM	FUNCTION	COLOUR
(ABS)	ABS fault.	Amber
Į.	ESP / ASR intervention.	Amber
<b>X</b>	ASR system disengaged.	Amber
P	Parking sensors fault.	Amber
<u>ا</u> ھ	Electric steering serious fault.	Red
C.C.	HDC Hill Descent Control function selected.	White
(C)	HDC Hill Descent Control function active.	Green
E C	HDC Hill Descent Control system fault.	Amber
×	airbag system serious fault.	Red
A	Stop & Start activated.	white
A)!	Stop & Start fault.	Amber
	Fault: gearbox oil high temperature.	Amber

IDEOGRAM	FUNCTION	COLOUR
$\bigcirc$	Gearbox fault.	Amber
0	Serious gearbox error.	Red
	Gear engagement fault.	Amber
	LDWS Lane Departure Warning active.	Amber
1	LDWS Lane Departure Warning fault.	Amber
<i>/</i> ⊖∖!	PLKA (Proactive Lane Keeping Assist) system fault.	Amber
T	Tachograph fault.	Amber
<b>ि</b> र्भ	Power take-off activated.	Amber
	Retarder engaged.	Amber
	Retarder serious error.	Red
	Power take-off, mode 0.	Amber
	Power take-off, mode 1.	Amber

IDEOGRAM	FUNCTION	COLOUR
PT0 2	Power take-off, mode 2.	Amber
PT0 3	Prio Power take-off, mode 3.	
Ð	Warning: keep your hands on the steering wheel.	
Ramp occupied / Operator on ramp.		Amber
Ramp safety device.		Amber
	Braking system overheating. Continue to drive with caution at least until the ideogram goes out. Then contact a Service Network workshop as soon as possible to check the efficiency of the braking system.	Amber

## List of warning lights

#### TFT dashboard



Vehicles with TFT dashboard

PO SI TIO N	sym Bol	WARN ING LIGHTS	WHAT IT MEANS	WHAT TO DO
Ι	green	Left turn indicator (arrows)	The indicator light is activated when the control lever on the steering wheel is moved downwards.	_
2	3005	External lights on	The warning light activates when the side and front side lights are switched on.	—
2	green	Follow me home	The warning light comes on when this device is used (see the relevant paragraph).	—
3	Am ber	Fuel reserve	The yellow warning light indicates that the fuel in the tank has reached a minimum level and the vehicle will only continue to run for a limited distance.	Top-up the fuel tank
4	red	Safety belts not fastened	When the ignition key is set to 'MAR–I', the red indicator light comes on for a few seconds (to check the correct operation of the indicator light itself) after which, if there are no faults, it goes out. The indicator light comes on and stays on when the vehicle is stationary and the driver's seat belt or passenger side seat belt is not fastened (when there is a passenger present). The indicator light flashes and a buzzer sounds when the vehicle is moving and the seat belts of the front seats are not correctly fastened. In this case, fasten the seat belt.	Contact the Service Network to permanently deactivate the acoustic indicator. The acoustic indicator can be reactivated at any time from the set-up menu of the display.

PO SI TIO N	SYM BOL	WARN ING LIGHTS	WHAT IT MEANS	WHAT TO DO
E	ſ〉	Right turn indicator (arrows)	The indicator light is activated when the control lever on the steering wheel is moved upwards.	_
5	<b>₽</b> green	Hazard lights	The warning light comes on together with the left side turn indicator when the hazard warning light button is pressed.	_
6	red	High coolant tempera ture	The warning light activates when the engine coolant reaches a high temperature.	If the engine coolant temperature increases to an excessive level, pull over immediately and contact the Service Network.
	(*)Brake failureActivat brakingred(*)EBD system faultSimulta indicate(*) Low brake fluidActivat brake fluid	<b>(*)</b> Brake failure	Activation of the warning light indicates a fault in the braking system.	Driving carefully, immediately go to a Service Network workshop.
7		Simultaneous activation of the 🝘 and 🕏 warning lights indicates a fault in the EBD system.	Driving carefully, immediately go to a Service Network workshop.	
		red	<b>(*)</b> Low brake fluid	Activation of the warning light indicates a low level of brake fluid in the reservoir.
8	Am ber	Collision alarm	Front collision warning system fault	Contact the Service Network as soon as possible.

PO SI TIO N	SYM BOL	WARN ING LIGHTS	WHAT IT MEANS	WHAT TO DO
9	Light blue	High beam	The warning light comes on when the high beam lights are switched on.	_
		AUTO	Automatic control of the AHBC high beam lights activated (if fitted).	
10	_		Dashboard brightness sensor. The sensor adjusts dashboard instrument panel brightness on the basis of ambient lighting conditions.	_
	(P) red	Parking brake engaged	Activation of this warning light indicates that the device is engaged.	—
12	red	(*)Air suspen sions not in running condition	When the key is set to the MAR- I position, the warning light activates but should turn off after a few seconds. The warning light activates when there is a malfunction of the self-levelling suspension system (if fitted).	If a fault is found, contact a Service Network workshop immediately.
13	ed red	Electric power steering fault	When the key is set to the MAR- I position, the warning light activates but should turn off after a few seconds. If the warning light stays on, the effect of the electric power steering may not be detectable and the effort on the steering wheel could increase considerably, even if the possibility of steering the vehicle is maintained.	Contact the Service Network as soon as possible.

101

PO SI TIO N	SYM BOL	WARN ING LIGHTS	WHAT IT MEANS	WHAT TO DO	
14	Am ber	<b>(*)</b> ABS fault	The warning light comes on when the system is not functioning efficiently. In this case, the braking system maintains its efficiency but without the aid of the ABS system. The display may show a dedicated message.	Drive carefully to a Service Network workshop as soon as possible.	
		<b>(*)</b> EBD fault	Simultaneous activation of the 🕏 warning light indicates a fault in the EBD system.	Drive carefully to a Service Network workshop as soon as possible.	
15	<b>A</b> m ber	Rear fog lights	The warning light comes on when the rear fog lights are switched on.	_	
16	<b>≢D</b> green	Front fog lights on	The warning light comes on when the front fog lights are switched on.	_	
17	Am ber	lmmobiliz er system fault	Activation of the symbol indicates a fault in the Immobilizer system.	If there is a fault, contact a Service Network workshop as soon as possible.	

PO SI TIO N	SYM BOL	WARN ING LIGHTS	WHAT IT MEANS	WHAT TO DO	
	Am ber	Inertia safety switch activated	The warning light comes on with the 🖬 symbol when the overrun safety switch is activated (FIA engine with Start & Stop).	The warning light can be switched off by resetting the switch.	
		Tractor external lights failure	Simultaneous activation of the 说 warning light indicates a fault in the following lights: - turn indicators; - rear fog lights; - stop lights; - side lights; - daytime running lights; - licence plate lights; - reversing lights.	The fault could be due to: the burning out of one or more bulbs, blowing of the relative protective fuse or interruption of an electrical connection.	
18		airbag warning light fault	Simultaneous activation of the 🛠 warning light indicates a fault in the airbag system.	In this case, the warning light might not signal any faults in the retaining systems. Before continuing, contact a Service Network workshop.	
		Door fault 'Vendor'	The warning light comes on in the presence of a door operation fault.	If a fault is found, contact a Service Network workshop as soon as possible.	
		General engine fault	The warning light comes on permanently or flashing, indicating a possible fault detected by the engine control unit.	If a fault is found, contact a Service Network workshop as soon as possible.	
		Emergen cy start-up	The warning light activates and flashes to indicate the immobilizer start code.	_	
19	Am ber	Lane Departure Warning System engaged	The warning light activates when the Lane Departure Warning System is activated.	_	
20	R red	<b>(*)</b> Airbag failure	If this warning light stays on, this indicates that there is a fault in the airbag system.	Contact a Service Network workshop as soon as possible. See the corresponding chapter.	

PO SI TIO N	SYM BOL	WARN ING LIGHTS	WHAT IT MEANS	WHAT TO DO	
21	red / Am ber	Differen tial fault/ failure	The warning light activates when there is a fault / failure in the differential.	If a fault is found, contact a Service Network workshop immediately. Contact a Service Network workshop immediately.	
22	-+ red	Battery not charging	Activation of the warning light indicates an alternator malfunction.		
23	red /flash ing red	<b>(*)</b> Low engine oil pressure	When the key is turned to the 'MAR - I' position, the warning light comes on but should go off after starting the engine. The warning light comes on (steady on) together with the message shown on the display when the system detects insufficient engine oil pressure.	Immediately stop the engine and contact a Service Network workshop.	
		<b>(*)</b> Engine oil change request	When the key is turned to the 'MAR - I' position, the warning light comes on but should go off after starting the engine. However, if the warning light begins to flash, a message will appear on the display indicating the need for an engine oil change.	In order to protect the engine, contact a Service Network workshop as soon as possible for an oil change.	
		<b>(*)</b> Low engine oil level	When the key is turned to the 'MAR -1' position, the warning light comes on but should go off after starting the engine. The warning light activates (steady on) together with the message on the display indicating that the engine oil level is too low.	Top-up with the designated oil until the level indicated in the "Refilling" paragraph is reached, or contact a Service Network workshop.	

PO SI TIO N	SYM BOL	WARN ING LIGHTS	WHAT IT MEANS	WHAT TO DO	
24	Am ber	<b>(*)</b> Induce ment	Diesel emissions control process.	Refill the tank as soon as possible by going to an AdBlue® distributor if the warning light comes on in conjunction with a low level of AdBlue®. The warning light may also come on in the event of low additive quality (in this case check the contents of the tank) or faults in the SCR system/NOx sensors. In the latter case, contact a Service Network workshop.	
		<b>(*)</b> AdBlue® low level/ quality	The warning light may appear in flashing mode (first warning) or steady on (indicating the next level of restriction (severity) and start of inducement) with subsequent derating of engine performance or warning of future disabling of engine start		
25	Am ber	EOBD / MIL	When the key is turned to the 'MAR-I' position, the warning light comes on but should go off after starting the engine. The functionality of this warning light can be checked by traffic police using special equipment. Always follow the Highway Code. If the warning light stays on or comes on while driving, it is indicating imperfect operation of one or more engine components or sub-systems; in particular, if the warning light remains permanently on, this indicates a malfunction in the fuel supply/ignition/air circulation system that could cause excessive exhaust emissions, a possible loss of performance, poor handling and high consumption. On some versions the display shows a dedicated message. The warning light goes off if the fault disappears, but the system will store the warning issued.	In these conditions it is possible to continue driving, providing heavy demands are not made on the engine or high driving speeds attempted. Prolonged use of the vehicle with the warning light on may cause damage. If a fault is found, contact a Service Network workshop as soon as possible.	

PO SI TIO N	SYM BOL	WARN ING LIGHTS	WHAT IT MEANS	WHAT TO DO	
26	Am ber	<b>(*)</b> ESP / ASR engaged	Activation of this warning light indicates that the system is in operation.	_	
	Am ber	ASR OFF	ASR system disengaged.	_	
27	Am ber	Glow plug preheat ing/glow plug preheating fault	When the key is turned to the 'MAR -1' position, the warning light comes on: The warning light goes off when the glow plugs have reached the preset temperature. At high ambient temperatures, activation of the warning light may be almost imperceptible.	When the warning light goes off, start the engine immediately by turning the key to the 'AVV-2' position.	
28	Am ber	"Diesel Particulate Filter" warning light	When it remains on it means that the particulate filter must be regenerated or that "on demand" automatic regeneration is taking place. When flashing, it indicates that regeneration of the filter is in progress ("on-demand" procedure).	Warning light on fixed: with an FIA engine, you are recommended to drive the vehicle on a motorway. With an FIC engine, carry out an "on-demand" regeneration. Flashing indicator light, "on-demand" regeneration is in progress. Follow the procedure/instructions in the use and maintenance manual.	

PO SI TIO N	SYM BOL	WARN ING LIGHTS	WHAT IT MEANS	WHAT TO DO	
29	Am ber	Retarder engaged	The warning light remains on permanently. The Retarder is engaged and supplies a braking torque defined on the basis of the position of the lever or the pressed brake pedal position or due to a request from the Cruise Control. The warning light flashes continuously: The Retarder is preselected but not active because an inhibition condition is present (for example: accelerator pedal pressed, overtemperature, etc.). In all other cases, it is a condition of temporary unavailability; therefore, completely release the accelerator pedal and use the service brake while you wait for the Retarder to become available again (this is signalled by the warning light activating and staying on).	_	
(*) operation of the warning lights marked with an asterisk is checked automatically each time the ignition key is set to MAR-I (see chapter "Start-up and driving) and lasts for a few seconds. <b>NOTE</b> The diagnostics function from the dashboard menu can be used to display a series of diagnostic codes that could be requested by the Service Network in order to facilitate some stages of assistance. The presence of codes in this list does not indicate vehicle malfunction – maintenance work is not					

List of symbols on central display of dashboard

IDEOGRAM	FUNCTION	COLOUR
	Fuel system fault / error.	Yellow
<b>X</b>	The symbol activates when the overrun switch intervenes.	
	Engine coolant level too low.	Red
ŧD	Headlight angle adjustment.	White
<del>يد</del> دا	Engine oil sensor fault.	Red
-@-	External bulb fault.	Yellow
	Door(s) open.	Yellow
$\bigcirc$	Brake linings worn.	Yellow
*	Risk of ice.	White
SHIFT	Indicates changing the gearbox to a higher gear.	White
SHIFT	Indicates changing the gearbox to a lower gear.	White
	(Minibus vehicles) The external emergency handle of the outswinging door is locked with a key.	Yellow
IDEOGRAM	FUNCTION	COLOUR
--------------	---	--------
ļ⊷•I	Differential lock fault.	Yellow
ļ⊷•I	Differential lock serious error.	Red
	Trailer fault. (if provided).	Yellow
Ĭ	Service (Scheduled maintenance).	Yellow
	Brake fluid temperature.	Yellow
(Č)	AEBS function deactivated by the driver. (if provided).	Yellow
<i>i</i>	Performance of the AEBS function restricted. (if provided).	Yellow
Ŷ	Radar serious fault. (if provided).	Red
<b>(@</b> )!	AEBS system fault. (if provided).	Yellow
0	Radar dirty. (if provided).	Yellow
	Water in fuel filter.	Yellow
۲Ţ)	Warning light steady on signalling malfunction of the fuel system / ignition / air circulation.	Yellow

IDEOGRAM	FUNCTION	COLOUR
	Front collision warning system fault.	Yellow
<b>Č</b> • • • •	CC (Cruise Control) function activated.	Green
100	CC (Cruise Control) function enabled.	White
100	QA (Queue Assist) function enabled.	White
100	QA (Queue Assist) function active.	Green
100	QA (Queue Assist) function enabled but without target acquisition.	Machine and bars grey, cruise and speed green
100	QA (Queue Assist) function in Brake only mode active.	Green flashing
100	QA (Queue Assist) function in Brake only mode active but without target acquisition.	Machine and bars grey, cruise and speed flashing green
100	SL (Speed Limiter) function active.	Green
100	ACC (Adaptive Cruise Control) function enabled.	White
100	ACC (Adaptive Cruise Control) function active.	Green

IDEOGRAM	FUNCTION	COLOUR
100	ACC (Adaptive Cruise Control) function enabled but without target acquisition.	Machine and bars grey, cruise and speed green
100	ACC (Adaptive Cruise Control) function in Brake only mode active	Green flashing
100	ACC (Adaptive Cruise Control) function in Brake only mode active but without target acquisition	Machine and bars grey, cruise and speed flashing green
	PLKA (Proactive Lane Keeping Assist) function selected.	White
	PLKA (Proactive Lane Keeping Assist) function active.	Green
<b>R</b> !	ACC (Adaptive Cruise Control) function fault.	Amber
(!)	TPMS. (Tire Pressure Monitoring System). fault / Pressure of one or more than one tyre below the specified value. / High temperature of the tyre.	Amber
×. 2	Passenger airbag disengagement.	Amber
<u>₩</u> !	Rain sensor fault. (if provided)	Amber
اھ ا	Electric steering fault.	Amber
≣Ø!	Automatic high beam light system fault.	Amber
	Generic brake system serious error.	Red

IDEOGRAM	FUNCTION	COLOUR
(ABS)	ABS fault.	Amber
Į,	ESP / ASR intervention.	Amber
) N	ASR system disengaged.	Amber
P	Parking sensors fault.	Amber
I	Electric steering serious fault.	Red
	HDC Hill Descent Control function selected.	White
() ()	HDC Hill Descent Control function active.	Green
E.C.	HDC Hill Descent Control system fault.	Amber
×	airbag system serious fault.	Red
A	Stop & Start activated.	white
A]	Stop & Start fault.	Amber
	Fault: gearbox oil high temperature	Amber

IDEOGRAM	FUNCTION	COLOUR
$\bigcirc$	Gearbox fault	Amber
$\bigcirc$	Serious gearbox error.	Red
	Gear engagement fault.	Amber
L.	LDWS Lane Departure Warning System active.	Amber
<u> </u>	LDWS Lane Departure Warning System fault.	Amber
/≏\!	PLKA (Proactive Lane Keeping Assist) system fault.	Amber
T	Tachograph fault.	Amber
1.21	Power take-off activated.	Amber
	Retarder engaged.	Amber
	Retarder serious error.	Red
	Power take-off, mode 0.	Amber
	Power take-off, mode 1.	Amber

IDEOGRAM	FUNCTION	COLOUR
PTO 2	Power take-off, mode 2.	Amber
PTO 3	Power take-off, mode 3.	Amber
<b>(</b>	Warning: keep your hands on the steering wheel.	Red
Ci	Ramp occupied / Operator on ramp.	Amber
C¥	Ramp safety device.	Amber
	Braking system overheating. Continue to drive with caution at least until the ideogram goes out. Then contact a Service Network workshop as soon as possible to check the efficiency of the braking system.	Amber

#### Inducement

The anti-pollution regulations in force require manufacturers of industrial vehicles to provide for engine derating if, during vehicle use, NOx emissions do not meet type-approval requirements.

Therefore, if you travel with an empty or almost empty AdBlue® tank (AdBlue® level below the minimum threshold of **10%**, **5%** or the minimum quantity for metering device operation), or if other reasons do not allow the vehicle to meet the NOx emissions required by the standards, the performance of the engine will be limited ("derating"). This will be signalled by the "inducement" warning light on the dashboard coming on.

Derating activates the first time the vehicle is at zero speed and continues until normal operating conditions of the anti-pollution devices enable the vehicle to meet the NOx emission standards again. It has no effect on vehicle reliability.

If the AdBlue® tank is empty and there are "inducement" warnings, refill the tank and wait up to 20 minutes (until after-run is complete) before starting the engine.

The "inducement" warning light will provide the following indications:

- "Driver warning system": activation of the flashing "inducement" warning light with no reduction in engine performance.
- "Low level inducement": the "inducement" warning light comes on and stays on and the message "Limited engine power" appears. This "inducement" level causes reduced vehicle performance and is actuated from the first start-up or the first time the engine is stopped (if the engine is not stopped or restarted for 8 consecutive hours).
- "Severe inducement": the "Inducement" warning light comes on and stays on and the message "Limited vehicle speed" appears. This "inducement" level causes reduced vehicle performance (vehicle speed reduced to **20 km/h**, from the first time the engine is restarted or from the first stop, (if the engine is not stopped or restarted for 8 consecutive hours).

Remember that the on-board control unit records these events so that they are available for checks by the traffic police.

Contact the Service Network in the case of any malfunction.

**ATTENTION** After restoring proper operating conditions, wait up to 20 minutes with the engine off (switch in the 'STOP-0' position so that all control units have completed their after-run cycle).

#### Inducement warning light

#### Inducement for vehicles with Euro VI type-approved engine

(To find out the type-approval of your vehicle, refer to the vehicle registration certificate) Warning light operating logic. The light flashes or comes on and stays on if there is a low level of **AdBlue®**, faults are detected in the quality or consumption of **AdBlue®** or if the system has been tampered with.

There are three Inducement levels of importance which are described in the following table:



710262

# II8 Driving compartment

CONDITION	RESULT	INDICATION FOR DRIVER
<ul> <li>Urea level &lt; 10%.</li> <li>Fault detected in AdBlue® quality/ consumption</li> <li>attempt to tamper with the system.</li> </ul>	Warning for the driver (flashing warning light).	Warning for the driver (flashing warning light).
<ul> <li>Urea level &lt; 5%.</li> <li>Fault detected in AdBlue® consumption/ quality for more than 10 h consecutive hours.</li> <li>attempted tampering of the system for more than 36 h consecutive hours.</li> </ul>	Reduced engine performance ( <b>25%</b> reduction in engine torque, actuated from the first vehicle stop).	Activation of the <b>AdBlue®</b> indicator light and the message <b>"AdBlue®</b> low level <b>"</b>
<ul> <li>AdBlue® tank empty.</li> <li>Fault detected in AdBlue® consumption/ quality for more than 20 h consecutive hours.</li> <li>attempted tampering of the system for more than 100 h consecutive hours.</li> </ul>	Vehicle speed reduced to <b>20 km/h</b> (actuated from the first time the engine is restarted or from the first stop after 8 consecutive hours of operation).	<b>AdBlue®</b> warning light comes on and the message "Limited vehicle speed" appears.

# Warning light operating logic

Intermittent:

• regeneration "on demand", the message "Cleaning DPF start engine and keep vehicle stationary" appears.

Fixed:

• regeneration has not completed successfully, the message "Regeneration not completed, see manual" appears.

The warning light will stay on until regeneration is completed successfully. A steady light can also indicate that automatic regeneration is in progress.

**NOTE** During normal use, the vehicle regenerates the filter automatically without informing the user.

INDUCEMENT FOR VEHICLES WITH EURO 6 ENGINE TYPE-APPROVAL			
UREA LEVEL	RESULT	INDICATION TO THE DRIVER	
Urea level range less than <b>2400 km</b> .	Warning for the driver.	Warning for the driver: <b>"AdBlue®</b> range <b>2400 km</b> ".	
Urea level range less than <b>500 km</b> .	Warning for the driver.	Warning for the driver: <b>AdBlue®</b> warning light flashing " <b>AdBlue®</b> range <b>500 km</b> ".	
Urea level range less than <b>50 km</b> .	Vehicle speed limit gradually decreasing to <b>50 km/h</b> .	Warning for the driver: <b>"AdBlue®</b> warning light steady on <b>"low AdBlue®</b> ; limited speed warning".	
Urea level range equals zero.	Ignition key not set to ''STOP-0'' but set to ''MAR-1'': next engine start disabled Engine ignition key set to ''STOP-0'' shifting to ''MAR-1'': starting disabled.	With the engine running, the <b>AdBlue®</b> warning light is permanently on. Warning for the driver: "Next engine start disabled". With the engine running, the <b>AdBlue®</b> warning light is permanently on. Warning for the driver: "Start-up disabled". When the <b>AdBlue®</b> level is zero, the MIL warning light activates and is steady on.	
To find out the type-approval of your vehicle, refer to the vehicle registration certificate.			

INDUCEMENT FOR VEHICLES WITH EURO 6 ENGINE TYPE-APPROVAL			
UREA QUALITY	RESULT	INDICATION TO THE DRIVER	
After detection of low urea quality, the vehicle can travel <b>300 km</b> with this fault active.	Warning for the driver.	Warning for the driver: <b>"AdBlue®</b> quality incorrect" The MIL warning light will remain steady on after three start-up cycles with the fault active.	
After detection of low urea quality, the vehicle can travel <b>250 km</b> with this fault active.	Warning for the driver.	Warning for the driver: <b>AdBlue®</b> warning light flashing " <b>AdBlue®</b> quality Range <b>250 km</b> ". The MIL warning light will remain steady on after three start-up cycles with the fault active.	
With <b>50 km</b> of permitted driving remaining with this fault active.	Maximum speed gradually decreasing to <b>50 km/h</b> .	Warning for the driver: <b>AdBlue®</b> warning light steady on " <b>AdBlue®</b> incorrect, speed limited" The MIL warning light will remain steady on after three start-up cycles with the fault active.	
At the end of the permitted mileage with this fault active.	Next engine start disabled.	With the engine running, the <b>AdBlue®</b> warning light is steady on. Warning for the driver: <b>"AdBlue®</b> quality incorrect". Next engine start disabled''. With the engine off, <b>AdBlue®</b> warning light is permanently on <b>"AdBlue®</b> quality incorrect. Start-up disabled". The MIL warning light will remain steady on after three start-up cycles with the fault active.	
To find out the type-approval of your vehicle, r	refer to the vehicle registration certificate.		

122

INDUCEMENT FOR VEHICLES WITH EURO 6 ENGINE TYPE-APPROVAL			
ABNORMAL CONSUMPTION OF ADBLUE® OR ADBLUE® SYSTEM MALFUNCTION	RESULT	INDICATION TO THE DRIVER	
After detection of a <b>AdBlue®</b> system malfunction <b>300 km</b> of driving is permitted with this fault active.	Warning for the driver.	Warning for the driver: " <b>AdBlue®</b> system fault" The "MIL" warning light could come on and stay on if the emission limits are almost reached. The MIL warning light will remain steady on after three start-up cycles with the fault active.	
After detection of a <b>AdBlue®</b> system malfunction <b>250 km</b> of driving is permitted with this fault active.	Warning for the driver.	Warning for the driver: <b>AdBlue®</b> warning light flashing " <b>AdBlue®</b> fault Range <b>250 km</b> ". The "MIL" warning light could come on and stay on if the emission limits are almost reached.	
With <b>50 km</b> of permitted driving remaining with this fault active.	Maximum speed gradually decreasing to <b>50 km/h</b> .	Warning for the driver: <b>AdBlue®</b> warning light permanently on " <b>AdBlue®</b> fault, speed limited" The "MIL" warning light could come on and stay on if the emission limits are almost reached.	

INDUCEMENT FOR VEHICLES WITH EURO 6 ENGINE TYPE-APPROVAL			
ABNORMAL CONSUMPTION OF ADBLUE® OR ADBLUE® SYSTEM MALFUNCTION	RESULT	INDICATION TO THE DRIVER	
At the end of the permitted mileage with this fault active.	Next engine start disabled.	With engine running: <b>AdBlue®</b> warning light steady on: " <b>AdBlue®</b> fault. Next engine start disabled". With engine off: <b>AdBlue®</b> warning light stays ON <b>"AdBlue®</b> fault". Start-up disabled" The <b>"MIL"</b> warning light could come on and stay on if the emission limits are almost reached.	
To find out the type-approval of your vehicle, refer to the vehicle registration certificate.			

**NOTE** The management of the limitations described in the preceding pages has been introduced to comply with the approval regulations. These limitations can be avoided by correct management of **AdBlue®** additive refilling. It is important to top up the **AdBlue®** levels, and to check both its quality and the efficiency of the system as soon as possible to avoid running into severe limitations on vehicle performance which could make it difficult to reach the nearest refilling station. If it is not possible to start or move the vehicle, contact a Service Network workshop as soon as possible.

**NOTE** If a **2400 km** or **500 km** range warning appears, the actual range remaining may vary significantly depending on the driving style. In this situation it is advisable therefore to frequently check the **AdBlue®** level reading and to top up with this liquid additive as soon as possible to avoid running into the operating limitations described in the tables above.

#### Vehicles with special type-approvals

**ATTENTION** In the case of vehicles with special type-approvals such as emergency service vehicles, there will be no indications to the driver, and to avoid reducing vehicle serviceability during a rescue situation, the consequences will not affect the normal behaviour of the vehicle. Nevertheless, it is still essential to go to a Service Network workshop as soon as possible when one of the above conditions appears, to restore correct operation of the system.

# **DPF** (Diesel Particulate Filter)

DPF (Diesel Particulate Filter) is a particulate filtering device that does not require any maintenance by the user. This is done automatically by the vehicle through combustion of the particulate accumulated inside the DPF (spontaneous regeneration).

However, there are some uses of the vehicle (e.g. urban with frequent stops) where the conditions for spontaneous regeneration are not possible and therefore the vehicle tries to force filter cleaning by increasing the exhaust gas temperature in a controlled manner (controlled regeneration).

It is very important not to interrupt controlled regeneration signalled by activation of the DPF indicator light (for example by turning off the engine or parking the vehicle) but it may be necessary to keep the engine at high and constant rpms (independently of the gear engaged) by continuing to drive normally.

# Warning light operating logic

Intermittent:

• "on demand" regeneration, the message "Clean DPF start engine and keep vehicle stationary" appears on the instrument panel.

#### Fixed:

• regeneration has not completed successfully, the message "Regeneration not completed, see manual" appears on the instrument panel.

The warning light will stay on until regeneration is completed successfully. A steady light can also indicate that automatic regeneration is in progress.

**NOTE** During normal use, the vehicle regenerates the filter automatically without informing the user.

**NOTE** After 10 minutes with the DPF light steady on, the vehicle has a drop in performance (FIC engines only) and it is necessary to perform the "on demand" regeneration described below.





# Regeneration "on demand"

The regeneration function of the particulate filter is especially critical in urban "door-to-door" missions, in which the stops are frequent and short, therefore spontaneous regeneration is likely to be frequently interrupted by the switching off of the engine; to avoid this, a strategy has been optimized so that the system can automatically resume regeneration which has been interrupted.

If this solution is not sufficient, meaning that the DPF "" warning light would stay on for a long time, a "Regeneration on demand" function has been made available allowing the driver to activate the regeneration at his discretion, without the need to contact the Service Network.

When the DPF warning light is activated and the engine is sufficiently warm, the driver can activate regeneration "on-demand" with the following procedure:

- Stop the vehicle in an open flat space so as not to obstruct traffic, away from pedestrians and animals and away from flammable material (paper, dry leaves, dry grass, etc..).
- Shift to neutral and engage the parking brake.
- Turn the engine off and put the ignition switch to STOP-0. Then turn on the Instrument Panel and put the ignition switch to MAR-1.
- Fully depress the <u>brake</u> pedal and the accelerator pedal at the same time and wait for the

warning light DPF  $\stackrel{\sim}{\cong}$  to start flashing and the message "Cleaning DPF start the engine and keep the vehicle stationary" is displayed on the instrument panel display.

• Completely release the pedals (brake, accelerator and, if present, clutch).

• Start the engine bringing the ignition switch from MAR-1 to AVV-2, without depressing the accelerator pedal. If engine start-up should fail, repeat the procedure from the beginning as described

• At this point, the "Regeneration on demand" procedure will start automatically and the

warning light DPF will begin to flash intermittently.

Remember that there are some vehicle safety conditions which cause the "Regeneration on demand" procedure to stop automatically :

- The vehicle begins to move.
- The driver has pressed any one of the pedals (brake/accelerator/clutch if present) or has engaged a gear other than neutral or has released the parking brake.

- The driver has turned the engine off by setting the ignition switch to STOP-0.
- The engine temperature does not fall within the permitted limits.
- Battery voltage is too low.
- the atmospheric pressure is too low (for example, because of altitude).

Furthermore, the "Regeneration on demand" may automatically stop if there are system malfunctions or malfunctions of the on-board vehicle sensors which are required for the regeneration.

Regeneration is completed when the warning light DPF stops flashing:

- if it goes off, this means that the procedure has been completed successfully.
- if the warning light remains on, this means that the procedure has not completed successfully and has to be repeated removing the causes which led it to stop.

# Airbag failure warning light

When the key is turned to the MAR-I position, the red warning light **X** lights up, but should turn off after a few seconds. If this warning light stays on, this indicates that there is a fault in the airbag system.

A specific message will appear on the display.

If the warning light  $\Re$  does not come on when setting the ignition key to MAR-I or if it stays on while driving (together with the message on the display), it is possible that there is a fault in the retaining system; in this case the airbag or pretensioners might not activate in the event of an accident or, in a more limited number of cases, they may activate incorrectly.

Before proceeding, contact the Service Network to have the system immediately checked.

## Smart alternator

With regard to battery recharging (warning light  $\frown$ ), it has been noted that on vehicles equipped with a 'Smart alternator', the charging logic varies depending on the logic of certain parameters such as: consumption, etc. This is because the battery charge status is detected on the telematic interface.

An SOC (State of Charge) of between **60%** and **100%** is to be considered normal for correct operation.



# Controls at the steering wheel

If fitted, the controls for interacting with the dashboard display can be seen on the steering wheel. These controls are used for the phone, to actuate the ADAS device, Cruise Control and the Adaptive Cruise Control - ACC. On the rear side of the spokes the driver can feel the radio controls (if fitted).

# Left side controls

**NOTE** The descriptions refer to the steering wheel with the most complete set of buttons, therefore refer only to what is actually present on your vehicle.

I. Press and release this control to access the information screens or submenu of an item on the main menu. The control is also used to exit the main menu.

2. Press and release this control to scroll up the main menu and sub-menus.

3. Press and release this control to access the information screens or the sub-menus of the main menu.

4. Press and release this control to scroll down the main menu and sub-menus.

5. Use this control to confirm the menu selection.

6. Return / Answer a phone call: Press and release to make call / answer a call. Press and hold to end a call.

7. Hands-free phone / Allows activation of the voice recognition function.

8. Scroll through the ADAS pages of the menu.

#### **Right-hand side controls**

**NOTE** The descriptions refer to the steering wheel with the most complete set of buttons, therefore refer only to what is actually present on your vehicle.

- I. CANC control for ACC / CC function.
- 2. SET+ control for ACC / CC function.
- 3. RESUME control for ACC / CC function.
- 4. SET- control for ACC / CC function.
- 5. ON/OFF Cruise Control control.
- 6. ON/OFF control for ACC function.
- 7. Control for setting the distance between vehicles for ACC and QA.
- 8. ON/OFF control for SL function.





# 132 Driving compartment



#### **Rear left control**

Radio scan control:

• Press (1) to scan for radio stations. During playback of tracks from USB devices or devices connected via Bluetooth, a short press takes you to the previous/next track, a long press allows you to go forward or back rapidly. In radio mode, briefly press to move to the previous/next frequency, press and hold to activate the autoscan function.

### **Rear right control**

Radio volume adjustment control:

• A short press of **(2)** allows you to increase/decrease the audio volume. A long press allows you to quickly increase/decrease the audio volume.

**NOTE** Please refer to the radio manual for information on correct operation.



#### **Central rear buttons**

Right side - Mute Function (on/off):

• Press the central button **(3)** to silence/restore the volume or pause/resume playback from USB devices or devices connected via Bluetooth.

Left side - To change source:

• Press the central button (4) briefly to change source.



2

Horn Press the central part **(I)** of the steering wheel.



### Pre-fitting of steering wheel controls (upon request)

As well as the radio connections (A) and (B), there are 4 isolated cables that allow connection of an "after-market" radio to the steering wheel controls.

#### **Description of connections:**

- White wire (code 2213): rear and left steering wheel control signals (standard LIN).
- Brown wire: steering wheel control signal ground.
- White wire (code 2268): reverse gear engaged signal (battery voltage supplied when reverse gear is engaged, engage decoupling relay, max. current supply 100 mA).

• Violet wire: parking brake engaged signal (connected to ground when parking brake not fully released, engage decoupling relay, maximum current supply 100 mA).

The steering wheel controls observe the LIN 2.1 standard.

Only signal READING is permitted on this line. Sending commands on the vehicle LIN line is not permitted.

Reading of the signals can take place using a node configured as the slave node, observing the hardware and software requirements in the LIN 2.1 standard.

Contact the Service Network for details on the message, identification and correspondence map with the buttons.

The available reading functions are:

- Volume up/down/mute.
- Scan up/down Source.
- Telephone ON/OFF (one button toggle mode).
- Voice activation.

After having removed the insulation that encases the cables, make the connection by adding terminals and connectors suitable to the device being installed.

# List of symbols on buttons and switches

IDEOGRAM	FUNCTION	INTEGRATED ACTIVATION INDICATOR LIGHT COLOUR (IF FITTED)
E	Ecoswitch function.	_
•	Button located on the steering wheel and used for navigating the dashboard display menu.	_
ĨD⊾	Headlight alignment adjustment (lowers the headlights).	_
SET D	Dashboard display menu navigation.	_
▲	Button located on the steering wheel and used for navigating the dashboard display menu.	_
<b>≜</b> ≧D	Headlight alignment adjustment (raises the headlights).	_
	Hazard lights.	Red
ŧ00ŧ	Fog lights / Rear fog lights.	_
	ASR off.	Orange
	LDWS Lane Departure Warning System.	Orange

# 136 Driving compartment

IDEOGRAM	FUNCTION	INTEGRATED ACTIVATION INDICATOR LIGHT COLOUR (IF FITTED)
lth	Heated mirrors - Heated rear window.	Orange
l×1	Differential lock.	_
0N [- +]	Battery cut-off 'ON' - Emergency switch.	_
0FF - +	Battery cut-off 'OFF' - Emergency switch.	_
	Outswinging door.	_
<b>1</b>	Vehicle door lock/unlock control.	Orange
<u>م</u>	White interior lights.	_
Î.	Light blue interior lights.	_
<b>\$</b>	Unit heater.	_
	Ramp key (tail lift pre-installation).	Orange
<b>.</b>	Ramp operating status indicator light (tail lift pre-installation).	Red

Driving compartment 137

IDEOGRAM	FUNCTION	INTEGRATED ACTIVATION INDICATOR LIGHT COLOUR (IF FITTED)
R	Stop & Start.	Orange
<u>ب</u>	Run Lock.	Orange
ы	Power take-off engagement.	Orange
<u>Au</u>	Rear working light.	_
ୡୖ	Additional light for ramp operating area (tail lift pre-installation).	Orange
<b>ମି</b> :	Air suspensions lifting.	_
\$ <b>₽</b>	Air suspensions levelling.	_
\$ <del>*</del>	Air suspensions lowering.	_
<b>公</b>	Body lifting.	Orange
<b>心</b>	Body lowering.	Orange
×	Retarder off.	Orange
	Generic key available.	Orange
The table shows the symbols which could appear on the buttons, switches and keys (if fitted). For the operation of the devices which they control, please refer to the description of these devices.		

# Dashboard commands



I. Steering wheel.

2. Radio controls Bluetooth® (if fitted).

3. Driver's Airbag and horn control.

4. Left steering wheel lever (control for external lights / turn indicators).

5. Right steering wheel lever (control for wipers / window cleaning / headlight washers / "'TRIP'".

6. Speed programmer control lever (Cruise Control if fitted).

7. Steering adjustment lever (the lever is located on the steering column).

8. Engine start-up key.

9. Storage compartment / ECAS air suspension controls (if fitted) / Fuse compartment / "EOBD" socket.

10. Engine bonnet release lever (in the lower section of the dashboard).

II. Cup holder.

12. Adjustable air vent.

13. Dashboard.

14. Storage compartment.

15. Compartments in the top section of the dashboard. Depending on the outfitting and the options requested by the customer, the top section of the dashboard may have the following configurations: – open storage compartment; - open storage compartment with mobile phone inductive charger (optional); – "cradle" support system for mobile phone / tablet (optional). The figure shows the version with the cradle system. For the detailed description, see the following chapters.

16. Storage compartment.

17. Passenger Airbag (if present).

18. Adjustable air vent.

19. Cup holder.

20. Storage compartment.

21. Closed storage compartment with a door.

22. Adjustable air vent.

23. Button plate.

24. Infotainment. Depending on the outfitting and the optional requested by the customer, there may be: – DAB radio; – Bluetooth® radio; – Hi-connect system; – compartment available for After Market radio; – storage compartment. The figure shows the version with the DAB radio.

25. Air conditioning controls.

26. Button plate.

27. Storage compartment.

28. Cup holder.

29. Document compartment.

30. Storage compartment, (with the telematic box, the storage compartment is not present).

31. Gearbox lever (the figure shows a mechanical gearbox lever).

32. Pedal assembly (the figure shows the pedal assembly for vehicles with a mechanical gearbox).

33. Webasto additional heater control button plate.

34. USB port: (The left-hand USB port permits data management and mobile phone and smartphone charging; the right-hand port can be used for charging tablet but not data management).

35. AUX socket.

36. Button plate.

37. Electric parking brake engagement button.

38. Control lever with four position for Retarder (if fitted).

39. Button for Retarder decoupling from the brake pedal.

40. Driver's seat or operations seat.

**NOTE** The presence and the layout of the controls, the instruments and the indicators may vary depending on the versions/outfitting.

#### Retarder

#### (if provided)

The use of the Retarder is particularly appropriate when the vehicle has to go down a long downhill stretch; best performance is obtained with the vehicle at medium/high speeds. It is possible to activate the Retarder by actioning the small lever (1) in one of four positions (shown in the figure as: (a); (b); (c); (d)): each position of the lever corresponds to an increase in braking power, up to a braking power of 100%.

Furthermore, the Retarder automatically activates when the service brake pedal is pressed. On the dashboard, below the lever **(1)**, there is the Retarder decoupling button **(2)** which is used to inhibit the automatic activation of the Retarder after the brake pedal has been pressed.

**NOTE** Above **50 km/h** complete system operation is reactivated automatically.





## Operating logic of the Retarder decoupling button

Button (2) released (warning light on button deactivated):

Complete Retarder functionality (with automatic activation of the Retarder below the brake pedal).

Button (2) pressed (warning light on button activated):

Automatic activation of the Retarder below the service brake pedal inhibited.

**NOTE** The position of the button does not exclude the Retarder when it has been activated using the lever **(I)** on the dashboard.

The braking action of the Retarder is temporarily suspended each time the ABS anti-lock braking system or the ESP electronic stability programme intervenes. If Cruise Control (where available) is engaged, the Retarder may automatically activate to

ensure that the set vehicle speed is maintained.

**ATTENTION** Retarder Use. The Retarder is not able to guarantee maximum braking torque in all operating conditions, above all in the event of prolonged activation (for example: to slow down the vehicle during long downhill stretches). Warning! In the following cases, the braking performance is gradually reduced for safety purposes to the highest degree of braking still permissible:

- In the event of a breakdown or fault in an electrical component.
- In the event that the Retarder overheats.

- It is necessary to take into account the lower braking power by adapting driving style accordingly (choice of gear, service brake).

# ATTENTION High operating temperature. Danger!

An electro-magnetic Retarder is installed on the vehicle: the temperature of the magnets and rotors could reach high values during activation and immediately afterwards. Warning! Even when the vehicle is stationary, avoid any contact with the Retarder components for a few minutes after switching off the engine due to the high temperatures reached during operation.





#### Contamination, fire

Do not park the vehicle on flammable material such as paper, grass or dried leaves. Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle



#### General risk, general prescriptions

- On muddy or slippery road surfaces, do not let the wheels turn freely for long periods of time. - Vehicle driveability is decreased with the differential lock engaged. Partial or complete non observance of these prescriptions can lead to serious damages to the vehicle



# Warning light (1) indication in normal operation

The warning light is not turned ON:

• The retarder is not engaged.

# The warning light remains ON permanently:

• The Retarder is engaged and is supplying a braking torque defined on the basis of the position of the lever or the pressed brake pedal position or due to a request from the Cruise Control.
#### The warning light flashes continuously:

• The Retarder is preselected but not active because an inhibition condition is present (e.g. accelerator pedal pressed, overtemperature, etc.). The inhibition condition may be due to a system malfunction only in the case of the simultaneous signalling of a Retarder fault; in this case, go to the nearest Service Network workshop. In all other cases, it is a condition of temporary unavailability; therefore, completely release the accelerator pedal and use the service brake while you wait for the Retarder to become available again (this is signalled by the warning light activating and staying on).





#### Central door locking / unlocking from inside the vehicle

To lock and unlock all the doors, press the button **(I)** located on the dashboard. The locking / unlocking actions are centralized (front and rear).

When the doors are locked, the led (2) on the button is on. When the button (1) is pressed again, it centrally unlocks all the doors and the led goes off.

When the doors are unlocked, the led on the button is off. When the button is pressed again, it centrally locks all the doors. The door lock is only activated if all the doors are closed correctly.

Following door lock via:

- Remote control;
- door pawl;

it will not be possible to unlock the doors using the button **(I)** on the dashboard. The door can be unlocked using the remote control or the door pawl.

#### **Autoclose Function**

There is the Autoclose function which allows automatic closing of all the doors when the vehicle is running and after exceeding a speed of **20 km/h**.

To activate this function, see the paragraph in this chapter related to the description of the instrument panel display.

With the central locking engaged, an individual door will be unlocked by pulling the internal opening lever of a front or rear door upwards.

**NOTE** On contacting the Service Network, it is possible to enable the logic alignment function on the front doors. This allows the central locking to be disengaged by pulling the opening lever of one of the front doors upwards.

**NOTE** In the event of a power failure (blown fuse, disconnected battery etc), manual actioning of the door lock is still possible.

#### ASR

ASR-Acceleration Slip Control (if provided)

The system takes fast action on the engine and brakes, preventing the drive wheels from slipping; it permits safe and fast starting even on a slippery surface or when a drive wheel skids. Lastly, it reduces the risk of oversteering when accelerating too hard in a curve. On the front keypad, there is a button to disable the system. This engages in any case, above **60 km/h**. Turning off ASR is also recommended when driving with snow chains fitted or when the wheels are sunk in the ground (sand, gravel, etc.).

The functioning of the two systems is indicated by the yellow indicator light **(1)** shown in the figure: flashing when in operation, steady if there is a fault with the ASR / ESP systems.

#### **ASR/ESP** exclusion button

Button in the centre of the dashboard with the Symbol activated (LED off). Complete functionality, maximum brake operation and reduction of engine torque.

Button in the centre of the dashboard with the symbol deactivated (LED on and indicator light (1) on the dashboard on).

Reduced functionality, brake control is maintained but the delivered engine torque is not limited. Engine torque control automatically re-engages on reaching approximately **60 km/h**.





### Inducement and EOBD II (MIL) warning light operation

By turning the ignition switch to the 'MAR - I' position, without starting the engine, the warning light **(I)** will flash with a variable frequency. This flashing indicates the operating status of the vehicle systems.

If the warning light **(I)** turns on while the engine is running, this indicates a system failure. In this case, go to the Service Network to have the system checked.

#### Setup Menu

#### (Vehicles with Matrix instrument panel)

The menu consists of a series of items which, if selected by pressing the buttons  $D \land$  and  $P \lor$ , allow access to the various selections and settings (setup) provided below. For some items, there is a submenu.

The menu can be activated by briefly pressing the button  $\stackrel{\text{SET}}{\to}$  and consists of the following items:

I. MENU

2. ADVANCED EMERGENCY BRAKING SYSTEM: AEBS

3. AUTOMATIC LIGHT CHECK: AHBC this driving assistance function helps the driver when driving at night, automatically switching the high beam lights to low beam lights, with the help of a camera installed at the top of the windscreen. This camera detects light sources nearby, such as headlights or rear lights assemblies of vehicles ahead, as well as light sources in built-up areas. If other vehicles are close by or are passed on the road, the system automatically switches to low beam lights to prevent glare affecting the drivers of the on-coming traffic.

4. SPEED LIMITER
5. AUTOCLOSE
6. PASSENGER AIRBAG
7. SEAT BELT BUZZER
8. CORNERING LIGHTS
9. TRIP B
10. SET TIME
11. SET DATE
12. UNITS
13. LANGUAGE
14. BUZZER VOLUME
15. SERVICE
16. EXIT MENU

#### Selecting an item from the main menu without a submenu

To select one of these items:

- briefly press the button <sup>set</sup> to select the settings of the main menu that is to be modified;
- pressing the buttons  $D \triangleq$  or  $P \blacksquare$  (pressing them once) it is possible to select the new setting;

• by briefly pressing the button  $\frac{1}{2}$  you can save the setting and at the same time go back to the same item of the main menu selected beforehand.

#### Selecting an item from the main menu with a submenu

Selection can be made in the following ways:

- by briefly pressing the button <sup>SET</sup>, the first item of the submenu will be displayed;
- by pressing the buttons  $D \triangleq$  or  $P \blacksquare$  (pressing them once), you can scroll through all the items of the submenu;
- by briefly pressing the button <sup>SET</sup>, the submenu item displayed can be selected and the user goes into the relative setting menu;
- by pressing the buttons  $i tilde{D} \triangleq$  or  $i tilde{D} = tilde{D} = tilde{D}$  (pressing them once), it is possible to select the new setting of this submenu item;
- by briefly pressing the button  $\stackrel{\textbf{SJ}}{=}$ , you can save the setting and at the same time go back to the same item of the submenu selected beforehand.

#### Setup Menu

#### "Comfort" version instrument panel

The menu consists of a series of items which, if selected by pressing the buttons  $D \triangleq$  and D = V, allow access to the various selections and settings (setup) provided below. For some items, there is a submenu.

The menu can be activated be pressing and releasing the button <sup>SET</sup>.

#### Selecting an item from the main menu without a submenu

To select one of these items:

• briefly press the button <sup>SET</sup> to select the settings of the main menu that is to be modified;

• pressing the buttons i abla or i abla (pressing them once) it is possible to select the new setting;

• by briefly pressing the button <sup>SET</sup> you can save the setting and at the same time go back to the same item of the main menu selected beforehand.

#### Selecting an item from the main menu with a submenu

Selection can be made in the following ways:

- by briefly pressing the button <sup>SET</sup>, the first item of the submenu will be displayed;
- by pressing the buttons  $D \triangleq$  or  $P \blacksquare$  (pressing them once), you can scroll through all the items of the submenu;

• by briefly pressing the button <sup>SET</sup>, the submenu item displayed can be selected and the user goes into the relative setting menu;

• by pressing the buttons  $D \triangleq$  or  $P \blacksquare$  (pressing them once), it is possible to select the new setting of this submenu item;

• by briefly pressing the button  $\stackrel{\textbf{ST}}{\overset{}{\overset{}}}$ , you can save the setting and at the same time go back to the same item of the submenu selected beforehand.

#### Menu items

#### Menu for "Comfort" version instrument cluster

This item allows the user to access the Setup Menu.

To select the various items in the menu, press the button  $i D \blacktriangle$  or i t and t and the various items in the menu, press the button <math>i t and tTo go back to the standard screen, press and hold down button  $\frac{SE}{2}$ .



#### Speed BEEP (Speed limit)

This function allows the user to set the vehicle speed limit (in km/h or in mph), if this limit is exceeded the driver will be warned. To set the required speed limit, proceed as follows:

• press the button <sup>set</sup> briefly, the message on display (Speed Beep) will appear

• press the button  $i D \triangleq$  or i V = V to select activation (On) or deactivation (Off) of the speed limit:

• if the function has been activated (On), press the buttons  $\mathbb{D} \blacktriangle$  or  $\mathbb{P} \nabla$  to select the required speed limit and press <sup>SET</sup> to confirm.

**NOTE** It can be set at between **30 km/h** up to the maximum speed limit set on the vehicle or 20 mph up to the maximum speed limit set on the vehicle depending on the unit selected previously, see the paragraph "Units - Setting units" described below.

Every time the button  $i D \blacktriangle = i V$  is pressed, there is an increase/decrease of 5 units. Holding the button  $\mathbb{D} \bigtriangleup - \mathbb{P} \nabla$  down automatically increases or decreases the speed. When it nears the required value, set by pressing the buttons once.

• briefly press the button <sup>SET</sup> to go back to the menu screen or press and hold the button for a few seconds to go back to the standard screen without saving.

Proceed as follows to cancel the setting:

- press the button <sup>set</sup> briefly, the display will flash (On);
- press the button <sup>SET</sup>, the display will flash (Off);
- briefly press the button <sup>SE</sup> to go back to the menu screen or press and hold the button for a few seconds to go back to the standard screen without saving.

#### Autoclose (Automatic central locking with vehicle in motion)

This function, once activated (On), activates the automatic locking of the doors when the vehicle speed exceeds **20 km/h**.

To activate or deactivate this function, proceed as follows:

• press the button <sup>set</sup> briefly to display the submenu;

• press button <sup>SET</sup> briefly, the display flashes ON or OFF depending on what has been set previously;

• press button  $D \triangleq$  or  $V \equiv$  to make a selection;

• briefly press the button <sup>55</sup> to go back to the submenu screen or press and hold the button for a few seconds to go back to the standard screen without saving;

• press and hold down the button  $\mathfrak{S}$  again for a few seconds to go back to the standard screen or to the main menu depending on where the user is in the menu.

#### Air Bag/Passenger Bag

(Activation/Deactivation of front passenger side Air Bag)

This function allows the user to activate/deactivate the passenger side airbag. Proceed as follows:

• press the button <sup>§</sup> and, after the message on display (Pass Bag: Off) (to deactivate) or the message (Bag pass: On) (to activate) appears on the display via buttons <sup>§</sup> and <sup>§</sup> ▼, press the button <sup>§</sup> once again;

• the message requesting confirmation appears on the display;

• press buttons  $D \triangleq \text{ or } P \blacksquare$  to select (YES) (to confirm activation/deactivation) or (NO) (to cancel);

• press the button <sup>ST</sup> briefly, a message confirming the selection appears and the user goes back to the menu screen or press and hold the button for a few seconds to go back to the standard screen without saving.

## Beep/Buzz. Seat belt (Buzzer reactivation for S.B.R. alert - Seat Belt Reminder)

(for versions/markets where required)

The function can only be displayed after deactivation of the S.B.R. system at the Service Network.

#### **C**ornering lights

This function allows the user to activate/deactivate the cornering lights function. To activate or deactivate this function, proceed as follows:

- press the button <sup>s</sup> briefly to display the submenu;
- press button <sup>SEI</sup> briefly, the display flashes ON or OFF depending on what has been set previously;
- press button  $\mathbf{D} \mathbf{A}$  or  $\mathbf{P} \mathbf{\nabla}$  to make a selection;
- briefly press the button <sup>55</sup> to go back to the submenu screen or press and hold the button for a few seconds to go back to the standard screen without saving;
- press and hold down the button standard again for a few seconds to go back to the standard screen or to the main menu depending on where the user is in the menu.

### TripB Data/Activation (Enabling Trip B)

This function allows the user to activate (On) or deactivate (Off) the Trip B display (partial trip). For further information, please see the paragraph "Trip Computer". Proceed as follows to activate/deactivate:

 $\bullet$  press button  $\overset{\text{set}}{\rightharpoondown}$  briefly, the display flashes ON or OFF depending on what has been set previously;

• press button  $D \triangleq$  or  $P \blacksquare$  to make a selection;

• briefly press the button <sup>SET</sup> to go back to the menu screen or press and hold the button for a few seconds to go back to the standard screen without saving.

#### Set date (Setting the date)

This function allows the user to update the date (day – month – year).

**NOTE** It is not possible to modify the date on vehicles fitted with a digital chronotachograph.

Proceed as follows to update:

- press the button <sup>\$</sup>U briefly, "year" will flash;
  press the button <sup>\$</sup>D ▲ or <sup>\$</sup>D ▼ to make the adjustment;
- press the button <sup>SET</sup> briefly, "month" will flash;
- press the button  $i D \land or i v$  to make the adjustment;
- press the button <sup>s</sup> briefly, "day" will flash;
- press the button  $i D \land or i V$  to make the adjustment.

**NOTE** Every time buttons  $\mathbf{D} \mathbf{A}$  or  $\mathbf{P} \mathbf{\nabla}$  are pressed, a unit will increase or decrease. By keeping the button pressed, the speed increase or decreases automatically.

When it nears the required value, set by pressing the buttons once.

• briefly press the button <sup>SET</sup> to go back to the menu screen or press and hold the button for a few seconds to go back to the standard screen without saving.

#### Set time (Setting the clock)

This function allows the user to set the time via two submenus: "Time" and "Format".

**NOTE** It is not possible to modify the time on vehicles fitted with a digital chrono-tachograph.

To set the time, proceed as follows:

- briefly press the button <sup>SE</sup> and the display will show two submenus "Time" and "Format";
- press the button D  $\blacktriangle$  or P  $\blacksquare$  to move between the two submenus;
- once the submenu which is to be modified has been selected, press the button <sup>set</sup> briefly;
- if you go into the "Time" submenu: press the button briefly, "hour" will flash on the display;
- press the button  $i \supset A$  or  $i \bigtriangledown V$  to make the adjustment;
- briefly press the button <sup>SET</sup>, "minutes" will flash on the display;
- press button or to set the minutes.

**NOTE** Every time buttons  $\textcircled{D} \land$  or  $\textcircled{P} \lor$  are pressed, a unit will increase or decrease. By keeping the button pressed, the speed increase or decreases automatically.

- if you go into the "Format" submenu: press the button <sup>SET</sup> briefly, the display mode will flash;
- press the button أ€ ▲ or ₽ ▼ to select "24h" format of "12h" format.

Once the adjustment has been made, press the button very briefly to go back to the submenu screen or press and hold the button for a few seconds to go back to the main menu screen without saving.

• Press and hold down the button  $\stackrel{{}_{\scriptstyle \ensuremath{\mathfrak{S}}}}{=}$  again for a few seconds to go back to the standard screen or to the main menu depending on where the user is in the menu.

#### Language

Proceed as follows to set the required language:

press button <sup>5</sup> briefly, the previously set "language" will flash;
press button <sup>1</sup> ▲ or <sup>1</sup> ♥ to make a selection;
briefly press the button <sup>5</sup> to go back to the menu screen or press and hold the button for a few seconds to go back to the standard screen without saving.

The languages available to the driver are set on the basis of the Country in which the vehicle was registered.

#### Units (Setting the units)

This function allows the user to set the measurement units via three submenus: "Distances", "Consumption" and "Temperature".

Proceed as follows to set the required unit:

- briefly press the button <sup>SET</sup> to display the three submenus;
- press the button  $\mathbb{D}$   $\blacktriangle$  or  $\mathbb{P}$   $\nabla$  to move between the three submenus;
- once the submenu which is to be modified has been selected, press the button <sup>set</sup> briefly;
- if you go into the "Distances" submenu: press the button <sup>st</sup> briefly, "km" or "mi" will flash on the display depending on what has been set previously;
- press button  $\textcircled{D} \land \textcircled{O} = \textcircled{V}$  to make a selection;

• if you go into the "Fuel consumption" submenu: press the button <sup>§5</sup> briefly, "km/l", "I/100km" or "mpg" will flash on the display depending on what has been set previously;

If "km" has been set as the unit, the display will allow the unit to be set (km/l or l/100km) with reference to the amount of fuel consumed.

If "mi" has been set as the unit, the display will show the amount of fuel consumed in "mpg".

• press button  $\textcircled{D} \blacktriangle$  or  $\textcircled{P} \blacksquare$  to make a selection;

• if you go into the "Temperature" submenu: press the button  $\mathfrak{S}$  briefly, "°C" or "°F" will flash on the display depending on what has been set previously;

• press button  $\textcircled{D} \blacktriangle$  or  $\textcircled{P} \blacksquare$  to make a selection;

Once the adjustment has been made, press the button very briefly to go back to the submenu screen or press and hold the button for a few seconds to go back to the main menu screen without saving.

• Press and hold down the button again for a few seconds to go back to the standard screen or to the main menu depending on where the user is in the menu.



#### Buzzer volume (Setting the volume of fault/warning buzzers

This function allows the user to set (choosing one of eight levels) the volume of the buzzers which accompany the visual display of a fault/malfunction.

Proceed as follows to set the required volume:

- Press the button <sup>SEI</sup> briefly, the "level" of the volume previously set will flash on the display;
- press the button  $i \supset A$  or  $i \bigtriangledown \nabla$  to make the adjustment;

• briefly press the button 55 to go back to the menu screen or press and hold the button for a few seconds to go back to the standard screen without saving.

#### Service (Scheduled maintenance)

This function allows the user to view when service is due according to the mileage done. Using the Service function, it is also possible to view when an oil change is due according to the mileage (in miles or kilometres) done. Remember that in addition to the information provided on the dashboard, it is always necessary to respect the scheduled maintenance plan as provided in the chapter "Scheduled maintenance" in this manual. Proceed as follows to see this information:

• briefly press the button <sup>SE</sup>, the display will show and flash the km or mi of the next service due depending on what has been set previously (see the paragraph "Units - distances");

• briefly press the button <sup>SE</sup> to go back to the menu screen or press and hold the button for a few seconds to go back to the standard screen.

This display appears automatically, with the key set to (MAR-1) starting from **20000 km** (or the equivalent in miles) before the service is due and is repeated every 200 km (or the equivalent in miles). With less than **200 km** before the service is due, more frequent reminders are given.

Contact the Service Network where staff will carry out the maintenance interventions as indicated in the "Scheduled maintenance plan" and reset this display.

#### Exit menu

This is the last function which closes the setting cycle listed in the menu screen. Press the button  $\stackrel{\text{st}}{=}$  briefly, the display  $\stackrel{\text{sp}}{=} \mathbf{\nabla}$  goes back to the standard screen without saving. Press the button the display goes back to the first item of the menu.

#### Display

#### Matrix Display

This display is able to provide information which is useful for the driver on the basis of its settings.

With the engine ignition key removed from the ignition switch, when the door is opened or closed the display activates and for a few seconds it will show the time and the total kilometres (or miles) travelled.

### **Matrix Display**

The display is divided into three theme-related areas which allow the following information to be displayed:

- Clock.
- External temperature.
- Headlight positioning.
- The journey computer data
- The configuration menu
- Messages relating to: Activation / deactivation functions; Service information; Failures; Warnings.
- Icon area, risk of ice.
- Total odometer count.
- Data.
- AdBlue level.

#### Driving compartment 163

Specifically:

• A: External temperature with an indication of the unit of measurement.

• C: Clock, date and total odometer count with unit of measurement. Message display/settings/ journey values (Trip)/ information area. When messages are to be displayed, the clock, date and odometer are hidden to allow the new message to be shown.

- D: AdBlue level
- F: Icon area (for example: risk of ice).
- G: Clock.
- H: Headlight positioning.
- I: GSI area.



#### Display

The vehicle can be equipped with two types of display:

• multifunctional (Comfort);

• multifunctional (TFT). This last one is able to provide information which is useful for the driver on the basis of its settings (see the relevant chapter).

With the engine ignition key removed from the ignition switch, when the door is opened or closed the display activates and for a few seconds it will show the time and the total kilometres (or miles) travelled.

#### **Comfort Display**

The display consists of three rows:

- The first row at the top with 14 full-dot matrix characters.
- The second lower row segmented.
- The third lower row segmented.

The first row is used to show:

- Data.
- The journey computer data.
- Configuration menu.
- Messages relating to: activation / deactivation functions / service information / faults / warnings.

The second and the third row are used to show:

- Headlight positioning.
- Start & Stop.
- Total odometer count.
- AdBlue® level.
- Risk of ice.
- Clock.
- Gear Shift Indicator.
- Automatic gearbox.

Specifically:

- A: Data.
- B: Headlight positioning.
- C: Start & Stop symbol area.
- D: Total odometer count with unit of measurement.



- E: Icon area (for example: risk of ice).F: Clock.
- G: GSI area (Gear Shift Indicator).



#### **Trip computer**

#### "Comfort" version instrument panel

When the ignition key is set to (MAR-1), the "Trip computer" allows the values corresponding to the vehicle operating status to be displayed. This function consists of two separate 'trips' called "Trip A" and "Trip B" able to monitor the "completed mission" of the vehicle (journey) independently from each other.

Both functions can be reset (reset - beginning of a new mission).

"Trip A" allows the following values to be displayed:

- Range
- Distance travelled
- Average consumption
- Instantaneous consumption
- Journey time (driving time).
- Average speed.

"Trip B" allows the following values to be displayed:

- Distance travelled B
- Average consumption B
- Average speed B
- Journey time B (driving time).

"Trip B"can be excluded (see paragraph "Enabling Trip B"). The values "Range" and "Instantaneous consumption" cannot be reset.

## Values displayed

#### Range

This indicates the approximate distance which can still be travelled with the fuel in the tank. The display will show the indication "- - - -" when the following events occur:

- range less than 50 km (or 30 mi)
- if the vehicle is stationary with the engine running for a long period of time.

**NOTE** Changes in the range value may be influenced by various factors: driving style, type of road (motorway, urban, mountains etc.), vehicle operating conditions (type of load, tyre pressure etc.).

**NOTE** When planning a journey, these factors must all be considered.

#### Distance travelled

Indicates the distance travelled from the beginning of the new mission.

#### Average consumption

It represents the approximate average consumption from the beginning of the new mission.

#### Instantaneous consumption

It express changes in fuel consumption, constantly updated. If the vehicle is stationary with the engine running, the display will show "----".

#### Average speed

It represents the average speed of the vehicle on the basis of the total time from the beginning of the new mission.

#### Journey time

Time passed from the beginning of the new mission.

#### Navi repetition

When selecting the page with the navigation system in operation, the driving instructions are repeated on the instrument panel. When the navigation system is not in operation, this is indicated by 'OFF' on the instrument panel.





#### **Fuel Economy**

The following information will appear on this page:

• instantaneous consumption (the unit of measurement adjusts to that chosen by the driver).

• Histogram. The instantaneous consumption value is replicated in the bar (1). The minute by minute consumption relating to the last **5 min** is displayed in the other bars.

• Inertia. The bar fills up when the vehicle is moving, with no power request, travelling through inertia. The indication is active with Cruise Control - CC and all of its other functions deactivated. The accelerator, brake and clutch pedals must not be pressed.

#### Indicators on the instrument panel

#### "TFT" version instrument cluster

When the instrument panel activates with the key set to MARI, the instrument panel display shows two bar charts representing the fuel level in the tank and the engine coolant temperature.

#### **Fuel level indicator**

Fuel level digital indicator (1), located on the left with 12 back-lit bars. Reference (E) indicates an empty tank and reference (F) indicates a full tank. Both have white back-lighting. The first two bars are back-lit with two colours, white in normal mode and red when in reserve.

All the notches are white (above reserve), when reserve is reached, the last two notches

become red and the reserve warning light **D** changes from white to yellow. With zero range, the last red notch flashes. As the amount of fuel decreases, the notches deactivate.

#### Engine coolant temperature indicator

Engine coolant temperature digital indicator (2), located on the right, with 12 back-lit bars. Reference (C) indicates the minimum water temperature and reference (H) indicates the maximum water temperature. The first nine bars have white back-lighting, the last three bars have red back-lighting.

As the temperature increases, the white notches will activate until a high temperature is reached, indicated by the last three red notches. At the same time, the temperature warning

light swill activate changing from white to red.





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#### Setup Menu

#### "TFT" version instrument cluster

The vehicle is equipped with a display that provides the driver with useful information when driving. With the start-up device in the STOP 0 position and the key removed, if a door is opened/closed the display activates and for a few seconds it will show the time and total kilometres (or miles) travelled.

#### Main menu

The menu is composed of the following items:

- TRIP.
- GSI.
- VEHICLE INFO.
- DRIVER ASSIST.
- AUDIO (if fitted).
- TELEPHÒNE (if fitted).
- NAVIGATION (if fitted).
- WARNINGS.
- VEHICLE SETTINGS.

#### **C**ontrol buttons

These are located on the left-hand side of the steering wheel.

- Allow you to select and interact with items from the "Main menu" of the display.
- /•: Press and release buttons (2) and (4) to access the main menu and to scroll items in the menu and submenus up and down.
- </: Press and release buttons (1) and (3) to access the information displays or the submenus of an item from the main menu.

**(OK)**: Press button **(5)** to access/select information displays or the submenu of a item from the main menu. Press and hold the button for **I s** to reset the functions displayed/selected.

#### Menu items

The menu is composed of the following items:

- TRIP.
- GSI.
- VEHICLE INFO.
- DRIVER ASSIST.
- AUDIO (if fitted).
- TELEPHONE (if fitted).
- NAVIGATION (if fitted).
- WARNINGS.
- VEHICLE SETTINGS.

#### TFT reconfigurable multifunction display

The TFT display is composed of the following display zones:

### Zone (I):

• External temperature and risk of ice warning.

Zone Gear number / Gear shift indicator / automatic gearbox (2):

• Zone for the gear shift suggestion for the manual gearbox indicated by the symbols: SHIFT:

Increase the gear,  $\checkmark$ : Change gear. / automatic gear shift indication (with Hi-Matic automatic gearbox), the number of the engaged gear is shown when semi-automatic mode "SEMI" is used.

Zone **(3)** is a reconfigurable zone and overlap zone with options that can be configured by the user:

- Time.
- Data.
- range.
- Average consumption.
- Instantaneous consumption.
- Trip A.
- Trip B.
- No item.



#### **Driving compartment** 174



Elements in overlapping view:

- Seat belt log.
- Headlight level.

Zone **(4)** (4a+4b): • Navigation arrows + Page name.

# Zone **(5)**: • Main area.

### Zone **(5b)**:

• POP UP message zone to warn the driver.

# Zone **(6)** (6a + 6b): • AdBlue® level.

- Secondary fuel level.
- Total odometer count

Trip À distanceCruise Control speed settings.

Zone (7) (7a + 7b + 7c):

- ACC (Adaptive Cruise Control) adaptive speed control.
- SL (Speed Limiter)Speed limiter
- QA (Queue assist) (traffic jam).
- PLKA (Proactive Lane Keeping Assist) Driving lane detection system (skid control).
- HDC (Hill Descent Control) Cruising speed control system for driving downhill at low speed.
- Stop & Start Automatic engine stop and start system.

Zone Serious errors (8):

• Red-coloured warning icon.

Zone Faults (9):

• Yellow-coloured warning icon.

**NOTE** As well as zone **(5b)**, POP UP driver warning messages appear in zones **(4a)** - **(4b)** - **(5)**.



#### 176 **Driving compartment**



#### **VEHICLE SETTINGS**

Submenu focus:

I. Vehicle settings page.

2. Page selection

- 3. Status/selection button.
- 4. For example, instructions for confirming the selection made.

E.g. instructions for confirming selection output.
 Sub-menu navigation arrows.

177

#### Navigation tree for TFT reconfigurable multifunction display

The figures below show the navigation screen of the pages which make up the navigation menu and which are accessed using the steering controls indicated in the figure.

**NOTE** The descriptions refer to the steering wheel with the most complete set of buttons, therefore refer only to what is actually present on your vehicle.

I. Press and release this control to access the information screens or submenu of an item on the main menu. The control is also used to exit the main menu.

2. Press and release this control to scroll up the main menu and sub-menus.

3. Press and release this control to access the information screens or the sub-menus of the main menu.

4. Press and release this control to scroll down the main menu and sub-menus.

5. Use this control to confirm the menu selection.

6. Return / Answer a phone call: Press and release to make call / answer a call. Press and hold to end a call.

7. Hands-free phone / Allows activation of the voice recognition function.

8. Scroll through the ADAS pages of the menu.













**NOTE** On the page: "TripA or TripB" press the key twice to reset TripA or TripB. If Queue Assist (TJA) is not present, the TRIP button is a short cut for TRIP page 1. Therefore, press the TRIP button and move to the right using the TRIP pages.

NOTE On the page: "Phone call log" press the key to display the list. If displayed, send a request to call. : Bottom. : At the top - If displayed, use it to scroll through the items on the list.

: Left / Back If displayed, on the previous scree.


#### Figure 3/4 DISPLAY SETTINGS





**NOTE** Setting the time: only visible with the digital tachograph and LTM missing.

**NOTE** AM / PM option only visible with "**12 h**" mode.

**NOTE** Setting the date: only visible with the digital tachograph and LTM missing.

**NOTE** Unit - "Metric" for km / h, km, L / 100 km , degrees Celsius and Bar - "Imperial" for mph, mi, mpg, Farenheit and Psi.

#### Figure 4/4 ADAS QUICK MENU AND POP-UP



#### Driving compartment 186



Lane assistance configuration pop-up The pop-up relating to lane assistance information: LDW or LDW+PLKA is shown in the figure.

#### **Trip computer**

#### Instrument panel, "TFT" version

When the ignition key is set to (MAR-1), the "Trip computer" allows the values corresponding to the vehicle operating status to be displayed. This function consists of two separate 'trips' called "Trip A" and "Trip B" able to monitor the "completed mission" of the vehicle (journey) independently from each other.

Both functions can be reset (reset - beginning of a new mission).

"Trip A" and "Trip B" allow the following values to be displayed:

- Range
- Instantaneous consumption
- Distance (distance travelled)
- Average consumption
- Average speed
- Journey time (driving time)

To reset the values, press and hold the "OK" button **(5)** on the left hand side of the steering wheel controls. The values "Range" and "Instantaneous consumption" cannot be reset.



## Values displayed

#### Range

This indicates the approximate distance which can still be travelled with the fuel in the tank. The display will show the indication "- - - -" when the following events occur:

- range less than 50 km (or 30 mi)
- if the vehicle is stationary with the engine running for a long period of time.

**NOTE** Changes in the range value may be influenced by various factors: driving style, type of road (motorway, urban, mountains etc.), vehicle operating conditions (type of load, tyre pressure etc.).

**NOTE** When planning a journey, these factors must all be considered.

#### Instantaneous consumption

It express changes in fuel consumption, constantly updated. If the vehicle is stationary with the engine running, the display will show "- - - -".

#### Distance travelled

Indicates the distance travelled from the beginning of the new mission.

## Average consumption

It represents the approximate average consumption from the beginning of the new mission.

## Average speed

It represents the average speed of the vehicle on the basis of the total time from the beginning of the new mission.

## Journey time

Time passed from the beginning of the new mission.



#### **Interior equipment**

## Storage compartment - Top part of the dashboard

The top part of the dashboard has the following compartments:

• Driver's side compartment with a door (1).

The **(2)** GPS aerial can be put inside this compartment if the optional exists on the vehicle. If this aerial is present, take care when placing objects inside so as not to damage it and make sure no metal objects are placed on top of it.

• Open central compartment.

Based on the options requested, this compartment has the following configurations: (A): Open compartment with the "inductive mobile phone recharger" (3).

**NOTE** The mobile phone inductive recharge system is a function which can only be activated if the telephone is compatible with this application.

(B): Mobile phone or tablet holder ('cradle') (4).

#### Central compartments / Compartment with inductive charge function

As described above, depending on the versions, the top part of the dashboard may have: Open central compartment (1).

The compartment is open and can hold small objects and an A4 folder.

Open central compartment with "smartphone inductive charger" (2) The compartment has a mat for the inductive charging of mobile phones. Remember that the following are present on the side:

(3) USB port. (the left-hand USB port permits data management and mobile phone and smartphone charging; the right-hand port can be used for charging tablets but not data management).

(4) AUX socket.

#### Correct use of the smartphone inductive charging device

to correctly use the inductive charging map, follow the indications:

• do not place metal objects on the mat (for example: coins, clips, other similar objects) as metals heat up during inductive charging and could cause discomfort if touched. Users will be reminded of this by a symbol on the mat.

- A diamond shape on the mat highlights the charging area.
- Make sure that no liquids spill on the charging area.
- Charging takes place a few seconds after the smartphone has been placed on the mat.



• The system only works with WPC "Qi" protocol compatible smartphones (as indicated by the symbol on the mat) and equipped with a rear cover pre-installed for this function. Some devices, even if compatible with this standard, are not sold with the rear cover pre-installed for the function and therefore users need to contact the device supplier to activate the function.

2

710335

## **Tablet holder**

To open the tablet holder (the tablet support also called 'Cradle') located in the middle of the dashboard, proceed as follows.

While the vehicle is stationary (this is a mandatory requirement), release the tablet holder pressing the back part (namely, the part towards the driver) with the palm of your hand. The pressure exerted automatically releases the writing surface at the front (near the document holder clip) bringing the tablet holder to the open position.

Release and lower the side release lever (1) of the specific retainers (2) to anchor the mobile phone and/or tablet



194



Once the side release lever has been released (1), the opening of the specific anchor retainers (2) can be adjusted based on the size of the device.

Reattach by lifting the side release lever **(I)** of the specific retainers (this operation blocks the device in position).

To release the device, carry out the operations described above but in the reverse order. To close the tablet holder, hold it in the attached position on the dashboard.

**ATTENTION** Do not use the multifunction mount in a vertical position while the vehicle is moving. Remember to keep it closed when the vehicle is travelling as it reduces visibility.

## **Card function**

710337

Documents can be held by the clip **(I)** located on the front part of the table holder.

**ATTENTION** Do not use the multifunction mount in a vertical position while the vehicle is moving. Remember to keep it closed when the vehicle is travelling as it reduces visibility.



#### **USB** port modules

The features of the USB modules on the vehicle are indicated below.

## Charging USB

• (1) 2,5 A port. The charge continues for 20 minutes after the engine has been switched off

## USB data + AUX:

• (2) AUX: jack **3,5 mm** connection. A minimal level of charge is also possible from this USB port (not from the AUX connection).

#### Attention

- Do not insert metal objects inside the modules.
- Never connect anything which is not USB standard.
- Make sure that no liquid enters the ports.
- Observe the connecting polarity when inserting the USB port.

#### Door console with bottle holder and storage pocket

Storage box

The console located to the side of the driver's seat is suitable for storing: bottles, cans, mobile phones and small items.

**ATTENTION** the maximum permitted load in the front storage compartment is **2,5 kg**.



716553



## Sun visors / Storage tray

The sun visors (1) can be tilted and adjusted sideways, and include document pockets and a mirror on the passenger side. If there is a storage tray (2) above the windscreen, place items on it correctly so they do not come off when driving.



General risk, general prescriptions Do not leave objects in the vehicle while it is moving that could strike the occupants and/or damage the vehicle . - Use the storage/glove compartments that have been expressly provided for stowing objects safely away when driving. Failure to comply with these prescriptions can result in

the risk of serious injury and serious damages to the vehicle

## ATTENTION is 20 kg.

The maximum load permitted on the tray

Controls and devices	
Seat for cowl vehicle manoeuvres	19
Seats	20
Heated seat	202
Head rest	20
Arm rests	20
Airbag	20
Driver's side front airbag	20
Front airbag passenger side	20
Warnings relating to the use of airbags	21
SBR system (Seat Belt Reminder)	21
Seat belts	21
Steering wheel adjustment	22
External lights	22.
Steering column switch (multifunction steering wheel lever)	23
TRIP button	23
Power take-off	24
Rear differential lock engagement	24
ECAS - Electronic control air suspensions	24
Diagram of air distribution	24
Side air vents	24
Central air vents	24
Heating and ventilation	24
Independent additional heater	26
Radio and multimedia navigation system	26
Disclaimer	27
Quick installation guide for the "DAILY Business Up" application	27

Introduction of telematics (optional Telematics Box)	276
Remote Assistance - IVECO OVER THE AIR UPDATE	281
Accessories fitted by the user	283

## Seat for cowl vehicle manoeuvres

The standard or manoeuvring seats are available in function of version type. The 'Stripped Chassis Cowl', "Reduced cowl" versions feature manoeuvring seats **(1)**.

**NOTE** The backrest of the manoeuvring seat **(I)** contains a sticker that indicates maximum speed allowed for the chassis during manoeuvres and transfer inside the bodybuilder workshops.

**NOTE** The figure is valid for left-hand drive vehicles and right-hand drive vehicles.





#### Seats

#### Seats with two degrees of freedom Seat longitudinal position adjustment

Pull lever (1) up to release the seat in order to move it forwards or backwards; when releasing the lever, the seat locks in the desired position.



General prescriptions Adjust the seat only when the vehicle is a

Adjust the seat only when the vehicle is stationary and check that the seat is fixed into the position selected.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

After releasing the lever **(1)**, always check that the seat is blocked on the rails by attempting to move it forwards and backwards. If it is not, it can move unexpectedly and cause the driver to lose control of the vehicle.

## Adjustment of backrest tilt

By turning the knob (2) forwards, the inclination of the backrest decreases with respect to the cushion.

#### Seats with four degrees of freedom Seat longitudinal position adjustment

Pull lever (1) up to release the seat in order to move it forwards or backwards; when releasing the lever, the seat locks in the desired position.



#### Adjustment of backrest tilt

By turning the knob (2) the user can adjust the backrest.

## Adjusting cushion inclination

By turning the lower side knob (4) the inclination of the cushion can be adjusted

## Adjustment of the vertical position and the cushion position

Using the side lever (3) adjusts the height of the seat (direct "ratchet" control): moving the lever downwards lowers the seat, while moving it upwards raises the seat.



#### General prescriptions

Adjust the seat only when the vehicle is stationary and check that the seat is fixed into the position selected.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle  $% \left( {{{\rm{T}}_{\rm{T}}}} \right)$ 

After releasing the lever **(1)**, always check that the seat is blocked on the rails by attempting to move it forwards and backwards. If it is not, it can move unexpectedly and cause the driver to lose control of the vehicle.

## Suspension adjustment (if provided)

Before entering the vehicle the driver must calibrate the seat suspension by turning the knob **(5)** (positioned at the front of the seat, in front /below the cushion) clockwise or counterclockwise until the gauge coincides with the numeric indication of his body weight. Then while driving, the optimal calibration of the suspension is obtained at the driver's discretion by slightly turning the wheel.





## Heated seat

(If applicable to your version)

The heating function of the seat and seatback of the driver's seat can be activated and deactivated using the switch located on the seat's side panel.

Press the button (6) to turn on the heating, the switching on of the LED on the button confirms that the heating has started.

Press the button (6) again turn off seat heating, the LED on the button will turn off.

## Head rest

The head rests can be adjusted in height and are automatically locked in the required position. Proceed as follows to adjust:

- Adjusting upwards: lift the head rest until you can hear the locking mechanism catch.
- Adjusting downwards: press the button (I) and lower the head rest.

To remove the head rests, press buttons (1) and (2) at the sides of the two supports at the same time and pull the head rest upwards.

**ATTENTION** After having removed the head rest remember to put it back into position before starting a journey.

**ATTENTION** The adjustments are to be made while the vehicle is stationary and the engine is off. The head rests are to be adjusted so that the head, not the neck, rests against them. They only have a protective action in this way.

To benefit from the protective action of the head rest, adjust the backrest so that the top part of the body is upright and your head is as close as possible to the head rest.





#### Arm rests

The seats can be equipped with arm rests **(1)**. Turn the small wheel **(2)** to adjust the height.

**NOTE** make sure that the arm rests are vertical before fastening the front seat belts.

## Airbag

#### **General information**

The front airbags (driver and passenger) protect the occupants in the event of a frontal collision of medium-high severity by placing a cushion of air between the occupant and the steering wheel or instrument panel.

The system is triggered when reaching a minimum deceleration that is potentially dangerous for passengers in case of head-on or side collision.

**NOTE** The values provided are approximate and are dependant on a number of factors including the weight of the vehicle etc. .

If the airbag fails to activate in other types of collisions (side,rear, vehicle over turning, other), this is not an indication of the system malfunctioning.

When the electronic control unit detects a deceleration exceeding the prestablished curve, it triggers the reaction of the chemical compound via electrical detonators. Gas inflates the cushions and activates the pretensioners which rewind and lock the seat belt roller mechanisms.

Deceleration is detected by two accelerometer sensors. Each time the ignition switch is set to a MAR-I, self-diagnostics check of the system is carried out and the dashboard airbag indicators come on for a few seconds. During this phase the system is unable to activate the airbags and pre-tensioners in the event of a collision.

The airbags are not to intended to replace the use of the seat belts but are designed to complement them. Occupants should always wear seat belts and furthermore, should remember that their use could be mandatory as per provisions of the different Highway Codes. In the event of a collision, a passenger who is not wearing a seat belt would move forwards and could come into contact with the air bag while it is opening.

In this case, the protection offered by the cushion is reduced. Front airbags may not activate in the following cases:

• frontal collisions against extremely deformable objects which do not involve the front surface of the vehicle (for example, if the bumper hits the guard-rail);



• rapping under other vehicles or protective barriers (for example: under articulated vehicles or guard rails); as they do not offer any protection beyond that afforded by the seat belts and therefore inflation is not appropriate. Their failure to activate in these circumstances is not an indication of system malfunction.

**NOTE** The front and/or side airbag (if fitted) could activate if the vehicle is subjected to heavy impacts or accidents involving the underbody, for example violently knocking steps, pavements or raised fixed areas of the road surface, driving over large potholes or uneven road surfaces.

## Controls and devices 207

## Diagram of airbag system

- I. Airbag and pre-tensioner control unit.
- 2. Multiplex/ body computer node.
- 3. Airbag.
- 4. Key switch.
- 5. Prétensioners.
- 6. Dashboard.
- 7. Passenger airbag.
- 8. Side collision airbag sensors.





## Driver's side front airbag

#### (if fitted)

The airbag is located in a specific compartment in the middle of the steering wheel. Keep your hands on the steering wheel when driving so that should the airbag activate, it does not encounter any obstacles.

**NOTE** The figure is valid for left-hand drive vehicles and right-hand drive vehicles.

Furthermore, do not drive with your body bent forwards, but keep the backrest in an upright position so that the spine is well supported.

Do not travel with objects in your lap, in front of your chest and never holding a pipe, pencil or other items in your mouth. In the event of a collision, if the airbag activates, it could cause serious damage.

**NOTE** The figure is valid for left-hand drive vehicles and right-hand drive vehicles.

## Front airbag passenger side

(if provided) It is located in a specific compartment in the instrument panel.



#### General risk, general prescriptions

Do not travel with objects in your lap, in front of your chest and never holding a pipe, pencil or other items in your mouth. In the event of a collision, if the airbag activates, it could cause serious damage.

Failure to comply with these prescriptions can result in the risk of serious injury

Passenger airbag deactivation:

To deactivate the airbag, act on the dashboard (see chapter 'The driver's seat'). When the airbag is deactivated the warning light 💑 comes on.

If the passenger side airbag is deactivated, even if not compulsory by law, it should be immediately reactivated for the occupants' protection.

Airbag warning light passenger side deactivated:

The yellow warning light  $\cancel{k_2}$  comes on by deactivating the passenger side front airbag. When the passenger side front airbag is activated and the ignition key is set to MAR-1, the warning light  $\cancel{k_2}$  comes on and stays on for a few seconds and then goes out.

A fault in the warning light 3 is signalled by the warning 3 light coming on. Furthermore, the air bag system will deactivate the passenger side airbags .

Before proceeding, contact the Service Network to have the system immediately checked.







Vehicles with a front passenger side airbag have a sticker on the sun visor giving instructions not to fit a rear facing child's seat if there is an active passenger airbag. Users are reminded that the vehicle is not type-approved for transporting children in travel seats. It is mandatory for the vehicle manufacturer to ensure this plate is present on the sunvisor regardless of the type of vehicle approval.

#### Warnings relating to the use of airbags

• Do not apply stickers or other objects on the steering wheel,on the passenger side airbag cover or on the roof side trim. Do not put any objects on the passenger side dashboard which could stop the airbag from opening correctly and cause injury to the vehicle occupants.

• If the warning light **X** does not come on when setting the ignition key to (MAR-1) or if it stays on while driving (together with the message on the display on some versions), there may be a fault in the retaining system. In this case the airbags or pretensioners might not activate in the event of an accident or, in a more limited number of cases, they may activate incorrectly. In this case, before continuing, contact the Service Network to have the system immediately checked

• If the vehicle has been stolen, or broken into, been vandalised or flooded, have the airbag system inspected by the Service Network.





• Vehicle users are reminded that the vehicle is not designed for transporting children even with child seats.

• With the ignition key inserted and set to (MAR-1), even if the engine is not running, the airbag may also activate if the vehicle is stationary and is hit by another vehicle. For this reason, as mentioned in the previous point, even if the vehicle is stationary children must not under any circumstances be allowed to sit on the front seats.

• Remember that if the key is set to (STOP-0), no safety device will activate in the event of a collision (airbag or pretensioners); failed activation of the airbags in these cases cannot be considered however an indication of system malfunction.By turning the key and setting it to (MAR-1) the warning light (with passenger side front airbag active) comes on to remind the passenger that the airbag will activate in the event of a collision. The light will then go off.

• When the airbag activates, a small amount of dust is released: this dust is not a health risk nor a fire hazard.

- The dust could irritate the skin or eyes: if this happens, rinse with water and a neutral soap.
- All checks, repairs and replacements regarding the airbags must be carried out by the Service Network.

• The system does not require any checks or maintenance but users must remember that after any intervention on the system the warning lights on the dashboard will stay on due to the control unit and therefore the entire system has to be replaced.

• Contact the Service Network to have the airbag system deactivated before scrapping the vehicle.

• Activation of the front and lateral airbags depends on the type of collision. The failure of one or the other to activate is therefore not an indication of system malfunction.

## SBR system (Seat Belt Reminder)

The SBR system warns the driver if their seat belt, those for the front passenger seats (for the versions/markets where required) and those for the rear passenger seats (for the versions/ markets where required) are not fastened. The system signals failure to fasten the seat belts through visual signals (warning lights on the instrument panel and icons on the display) and through an acoustic signal.

**NOTE** To permanently deactivate the acoustic indicator, contact the IVECO Service Network. The acoustic indicator can be reactivated at any time through the set-up menu of the display.

#### Behaviour of the seat belt warning light for the front seats

When the ignition device is moved to the "MAR-I" position, the warning light 🖾 turns on for several seconds, regardless of the condition of the front seat belts.

#### Driver

If only the driver is present in the vehicle and their seat belt is unfastened, a cycle of intermittent acoustic signals and indicator light flashing begins with the vehicle moving, lasting about **90 s**.

Once the cycle has terminated, the indicator light remains steady on until the engine is switched off.

The acoustic and visual indicator ceases immediately when the driver's seat belt is fastened.

#### Passenger

If there are also passengers in the front seats, the warning notification is the same as that for the driver's seat. The acoustic and visual indicator ceases immediately when the passenger seat belt is fastened.

#### Behaviour of the icon for the seat belts for the rear seats

The icons on the display (figure "A") are activated a few seconds after the ignition device is moved to the "MAR-I" position.

- The icons turn off around **90 s** after they are turned on.
- The icons shown on the display indicate (depending on the various records):
- A. Seat belt for the rear left-hand side seat;
- B. Seat belt for the rear middle seat;
- C. Second seat belt for the rear middle seat (if present);
- D. Seat belt for the rear right-hand seat.

The icons are displayed when at least one of the seat belts is fastened or unfastened and when one of the rear doors is closed.

If the seat belt is fastened, the corresponding white icon will appear as shown in figure "B"; If the seat belt is unfastened, the corresponding red icon will appear as shown in figure "C". If the seat belt is unfastened when the vehicle is moving, a cycle of intermittent acoustic signals and indicator light flashing begins, lasting around **90 s**.

**ATTENTION** As regards the rear seats, the "SBR" system only indicates when the seat belts have been unfastened (red icon) or fastened (white icon), but it does not indicate that any passengers are present. For the rear seats, the icons are activated a few seconds after the ignition device is set to the "MAR-I" position, regardless of the state of the seat belts (even if all seat belts are fastened).

# **Controls and devices**


#### Seat belts

(supplied in the container secured to the chassis)

The chassis are supplied with seat belts which are not installed but are present and located in the designated container secured to the chassis. The vehicles are equipped with airbags and seat belts with pre-tensioner and a height-adjustable belt.

The vehicle is equipped with a seat belt with a roller mechanism which automatically rewinds the seat belts allowing maximum free movement when worn.

The seat belts have load limiter and electronically controlled pretensioners. Furthermore, the anchoring points are connected to the seats in such a way as to guarantee the correct protection regardless of the seat position.

To fasten the seat belt, grip the tongue **(A)** and insert it into the buckle **(B)**until hearing the catch engage. To release the belt, press the button **(C)** located on the top end of buckle. Hold the belt as it rewinds to prevent it from twisting.

The belt does not require manual adjustment: the belt adjusts automatically to the length most suitable for the driver, allowing full freedom of movement, provided that none of these movements are sudden. The mechanism is sensitive to changes in the vehicle position and so the belt may lock in the following circumstances: braking or sudden acceleration, vehicle on a slope or in a curve.

**NOTE** Do not press the button **(C)** while driving.

**NOTE** If the seat belt should lock following one of the cases mentioned above, allow a short section to rewind so as to deactivate the locking mechanism.





Warnings:

• On entering the vehicle, especially the first time, always adjust the height of the front seat belts making sure that they are at the correct height for both the driver and the passengers. This precaution may reduce the risk of injury in the event of a collision. Adjust its height only when the vehicle is stationary, by moving the slide **(1)**. The seat belt is correctly adjusted when it passes between the neck and the shoulder joint. The cursor **(1)** allows the user to secure the upper connection of the seat belt on the four positions (see the figure). After having adjusted the seat belt, always check that the position of the cursor **(1)** is locked and stable. If this is not the case, push the cursor **(1)** downwards to allow the device to lock itself into one of the positions.

• The drive must respect and make the other vehicle occupants aware of all legal requirements of the Highway Code regarding the use of seat belts. Always fasten seat belts before starting a journey.

• The seat belt must be wound up. The upper part must pass over the shoulder and go diagonally across the chest. The lower part must rest on the pelvis and not the abdomen of the passenger. Do not use other devices (clips, retainers etc.) which stop the belts from resting on the body.

• For maximum protection, keep the backrest in the upright position, rest the back against the back rest and keep the seat belt on the chest and pelvis. Always fasten seat belts! Travelling without a seat belt fastened increases the risk of injury or even death in the event of a collision.

• Do not fasten the seat belt into the buckle of another seat. The lower part of the seat belt could press against the upper part of the abdomen rather than the pelvic area and, in the event of an accident, could cause internal injuries.

• Do not travel with the seat belt under the arm. In the event of an accident, the occupant would be thrown forwards and would probably suffer injury to the head and neck. Furthermore, the seat belt could cause serious internal injuries by pressing on the chest.





• Each seat belt must only be used by one person at a time. Also, remember that this vehicle is not designed for transporting children.

- In general, do not attach any objects between the belt and the passenger.
- Move the backrest in nearly vertical position; seat positions that compromise the performance of the seatbelt are a hazard and must be avoided.

**NOTE** The seats fitted on your vehicle are not suitable for transporting children: the belt was designed for use by adult occupants.

- The belt must not be twisted and must fit comfortably on the lap but not over the abdomen, to avoid the risk of slipping forward.
- From time to time, check that the anchoring screws are fully tightened and that the belt is not cut or frayed.
- In the event of a significant accident, replace the belt, even if it does not appear to be damaged: also replace it when it has cuts or signs of wear (have the belts fitted by the Service Network).

• Do not undertake modifications that could reduce seat belt functionality.

• The seat belts can be easily cleaned without removing them from the vehicle. Read the paragraph "Caring for the vehicle" for information on cleaning methods. In any case, do not let the roller mechanisms get wet: their correct operation is guaranteed only if water does not enter them. Seat belts should only be removed by the Service Network.



General risk, general prescriptions

- Always fasten the seat belts: travelling without a seat belt fastened increases the risk of injury in the event of a collision. - Do not press the release push button while driving.

Failure to comply with these prescriptions can result in the risk of serious injury

#### **Pregnant women**

Pregnant women must also use the seat belt: the risk of injury to them and to their unborn child is reduced if wearing a seat belt. Pregnant women should position the lower part of the belt very low, so that it passes over the pelvis but below the bump.



#### Pretensioners

To ensure the effectiveness of the airbag, the vehicle is equipped with front seat belts with pyrotechnic pretensioners. In the event of a violent frontal collision, they retract the seat belts by a few centimetres and ensure that the seat belt properly adheres to the occupant's body before its restraining action starts.

The intervention of these devices is controlled by the airbag control unit which, when a certain deceleration of the vehicle is detected, sends a signal activating the pyrotechnic charge.

**NOTE** To help ensure the best protection from the pretensioners, wear the belt in such a way that it fits snugly against your chest and pelvis: In this way they ensure that the belts fit snugly to the occupants' bodies before the restraining action starts.

The seatbelt lock indicates activation of the device; a small amount of smoke may be evident. This smoke is not noxious and does not indicate the start of a fire.

After a pretensioner activation, the seat belt can be unfastened as usual, by pressing the button on the buckle.

If the seat belt warning light comes on, immediately contact the Service Network.

Warnings:

• The pretensioners can be used once only, and all of them deploy even if the seatbelts are not fastened. So, once they have deployed, have them replaced by the Service Network.

• Operations on the vehicle which involve blows, vibrations or localised heating in the area of the pretensioners may damage or activate them; vibrations due to uneven road surfaces or mounting the pavement unintentionally, for instance, do not affect the units. In the event of operations on the vehicle, contact the Service Network.

• The pretensioners do not require internal greasing or maintenance: any modifications made to the original conditions of the will affect efficiency. If the units are contaminated by water and mud they must be replaced.

Never under any circumstances tamper with the pretensioners devices. Tampering could adversely affect their operation. If necessary, consult the Service Network.

# Load limiter

(if present)

In vehicles equipped with airbags and with belts with pretensioners, for increased protection in the event of an accident, the roller mechanism of the front seat belts are equipped, on the inside, with a device allowing the force acting on the chest and shoulders during the belt restraining action in the event of a frontal impact to be controlled.

**ATTENTION** Operations on the vehicle which involve blows, vibrations or localised heating (over 100°C for a few hours max.) in the area of the pretensioners may damage or activate them; these conditions do not include the vibrations caused by uneven road surface or the accidental mounting of minor obstacles such as pavements, etc. In the event of operations on these devices, contact the Service Network.



# Steering wheel adjustment

#### (if provided)

The position of the steering wheel can be changed by adjusting its height so that it is appropriate to the driver's height.

These adjustments are carried out as follows:

- Engage the parking brake.
- Release lever (1).
- old the steering wheel with two hands, lift it or lower it by pulling it towards you until the required position is reached.
- Lock lever (1) in the position required in the steering column.



General risk, general prescriptions

This operation must be carried out only when the vehicle has come to a complete stop, with the parking brake engaged, ensuring proper locking of the steering wheel. Check vehicle manoeuvrability.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

In the exceptional circumstance where the power steering mechanism should fail, remember that the effort required for steering is considerably higher, even if the mechanical connection between the steering wheel and wheels still functions. Contact the Service Network if there is any steering wheel fault.

# **External lights**

External lighting is turned on only when the ignition key is in the MAR-1 position. When the low beam lights are turned on, the instrument panel and dashboard controls light up.

#### Low beam lights LH lever

To turn on the low beam lights, turn the rotary switch (A). The symbol D must correspond to the reference –.

The side markers also come on when the low beam lights are turned on.

The warning light <sup>50</sup> on the dashboard comes on when the low beam lights turn on.

To turn off the low beam lights, turn rotary switch (A) again. The symbol O must correspond to the reference -.



#### General risk, general prescriptions

The vehicle must always be visible. If by opening the rear tailgate/doors the lights are covered, the vehicle must be made visible by the driver appropriately positioning a hazard warning triangle or some other device which complies with the highway code of the country where the vehicle is located.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle



226



# 'Follow me home' function

This function allows the low beam lights to operate for a specific time period after having set the ignition switch to STOP-0, or after having removed it. The command is inhibited if the high beam lights are switched on using the steering wheel lever.

The function is active if it is switched on within the maximum time of two minutes from turning the key to the STOP-Oposition or taking it out.

Each time the lever is pulled (towards the steering wheel), the lights stay on for another **30 s**, up to a maximum of **210 s**.

To switch off the function, keep the lever  $(\mathbf{A})$  pulled towards the steering wheel for more than two seconds.

# High beam

With the low beam lights on, pull the lever **(A)** towards the steering wheel (2nd unstable position). The warning light  $\mathbb{E}$  lights up on the dashboard.

To switch off the high beam lights and return to low beam, pull lever **(A)** towards the steering wheel (unstable position).

**NOTE** Do not use high beam lights in residential areas or near other vehicles.

# Flashing the headlights

Pull the lever towards the steering wheel (1st unstable position) independently of the position of the rotary switch. The warning light <sup>■</sup>D lights up on the dashboard.

# Automatic control of the high beam lights "AHBC"

This function is activated from the designated page in the multifunctional digital display menu of the dashboard, navigating using the  $\blacktriangle$  and  $\checkmark$  keys.

Once AHBC has been selected, the system activation page is accessed:

- ON: system active.
- OFF: system not active.

# System active

When the high beam lights engage and whenever a light source in front is detected, the camera on the windscreen notifies the system which will then automatically switch off these lights. Once the vehicle or obstacle has been passed, the system switches the high beam lights on again.

The system operates at speeds exceeding **40 km/h**. Each time vehicle speed exceeds **40 km/h**, the system is able to intervene until vehicle speed falls below **25 km/h** again. When the function is selected, it will automatically check the high beam lights as soon as the driver switches from low beam lights to high beam lights via the lever.



#### General risk, general prescriptions

The presence of safety systems (ABS, ESP, ecc. ) on board the vehicle does not relieve the driver of the responsibility of driving carefully. The driver is the only one responsible for the way the vehicle is driven.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle



Indication that the system is engaged is shown on the dashboard by the  $\ensuremath{\text{AUTO}}$  symbol lighting up.

The blue <sup>■</sup>D symbol on the display indicates the status of the high beam headlights.

HB (High Beam):

High beam lights.

LB (Low Beam): Low beam lights.



#### Automatic high beam check (AHBC) without twilight sensor

The user can (de)activate these functions via the menu on the instrument panel, which is always available no matter what speed the vehicle is travelling.

The status AHBC ON is indicated by a pop-up on the display. This means that the function has been selected.

The user sets "HB on" using the lever on the steering column switch (variable control).

The blue HB symbol on the instrument panel is lit:

• if AHBC è ON from the menu and there are no faults in the camera, the AHBC symbol lights up too.

 $\Bar{\bullet}$  if, while HB is active, the conditions for activating AHBC are met, the system will switch from HB to LB.

• When these conditions are no longer met, it will switch from LB to HB. During this transition, the symbol relating to the AHBC function remains lit, while the blue HB indicator light is switched off and on depending on the current status of the lights. This means that HB (de)activation is being controlled by the AHBC function, as intended.

If the user wishes to ignore the function, they can do so using the lever on the steering column switch. In particular:

• if AHBC is ON and HB has been switched off automatically, the user has to use the lever if they want to force HB; this will reactivate HB. The AHBC function will remain active; this means that, if the conditions are met again (e.g. vehicle detected in front), the system switches HB off again, returning to normal control of AHBC.

• If the driver wants to switch HB off during AHBC control, the AHBC symbol will switch off too together with the blue HB symbol.

• The next time HB switches on (switched on by the driver, since AHBC is suspended when HB is off), the HB symbol and the AHBC symbol will be switched on again.

• The AHBC function can also be enabled/disabled from the instrument panel when the vehicle is in motion.

#### Automatic high beam check (AHBC) with twilight sensor

The user can (de)activate these functions via the instrument panel menu, which is always available no matter what speed the vehicle is travelling.

The status AHBC ON is indicated by a pop-up on the display. This means that the function has been selected.

The user has to switch the lights on the left-hand lever of the steering switch to "AUTO".

The user sets "HB on" using the lever on the steering column switch (variable control):

• the blue HB symbol on the instrument panel is lit.

 $\bullet\,$  If AHBC is ON from the menu and there are no faults in the camera, the AHBC symbol also activates.

 $\bullet$  if, while HB is active, the conditions for activating AHBC are met, the system will switch from HB to LB.

• When these conditions are no longer met, it will switch from LB to HB. During this transition, the symbol relating to the AHBC function remains lit, while the blue HB indicator light is switched off and on depending on the current status of the lights. This means that HB (de)activation is being controlled by the AHBC function, as intended.

If the user wishes to ignore the function, they can do so using the lever on the steering column switch. In particular:

• if AHBC is ON and HB has been switched off automatically, the user has to use the lever if they want to force HB; this will reactivate HB. The AHBC function will remain active; this means that, if the conditions are met again (e.g. vehicle detected in front), the system switches HB off again, returning to normal control of AHBC.

• If the driver wants to switch off HB during control of AHBC, however, the AHBC will switch off too together with the blue HB key.

• The next time HB switches on (switched on by the driver, since AHBC is suspended when HB is off), the HB symbol and the AHBC symbol will be switched on again.

• The AHBC function can also be enabled/disabled from the instrument panel when the vehicle is in motion.

 $\bullet$  If the user switches the ''AUTO'' function off at any time, AHBC will be switched off even if HB is lit.

### System fault / sensor blocked

In the event of a fault or if the system is blocked, the driver will be notified by a message on the dashboard together with the designated symbol.



# High beam indicator light

The high beam indicator lights indicate that these lights are on.

# Day lights (D.R.L - Day Running Light)

With the ignition key set to MAR-I and the low beam lights off (the symbol on rotary switch **(A)** must be in line with the reference —), the DRL lights will automatically turn on; the other external and internal lights remain OFF.

**NOTE** The DRL lights cannot be switched OFF. When rotary switch **(A)** is set to a position other than **O**, the DRL lights are off.

Stressing that the use of daytime running lights is regulated by the Highway Code in the country where the vehicle is operated, we remind you that:

- the daytime running lights are an alternative to the low beam lights during daytime driving where this is required by law. They are permissible even when this is not required by law in the particular country.
- The daytime running lights do not replace the low beam lights during night-time driving or inside tunnels.

#### **AUTO** function

To activate the automatic function: turn rotary switch (A) to "AUTO".

# A) Fog lights / rear fog lights (versions with TFT display)

The fog lights / rear fog lights can be activated with the external lights on. The fog lights activate when the button **(1)** on the central dashboard is pressed once. Press the button **(1)** a second time to activate the rear fog lights. Press the button **(1)** a third time to deactivate the fog lights and the rear fog lights.

**NOTE** Each time the key switch is turned to STOP-0, the fog lights will turn off. When the switch is set once again to MAR-1, the button **(1)** must be pressed again.

# A) Fog lights / rear fog lights (versions with COMFORT display)

The fog lights / rear fog lights can be activated with the external lights on. The fog lights activate when the button **(2)** on the central dashboard is pressed once. Press the button **(2)** a second time to activate the rear fog lights. Press the button **(2)** a third time to deactivate the fog lights and the rear fog lights.

**NOTE** Each time the key switch is turned to STOP-0, the fog lights will turn off. When the switch is set once again to MAR-1, the button **(2)** must be pressed again.







# Fog lights with 'cornering' function (if fitted)

This function, regardless of normal use of the fog light, is activated from the designated page in the menu of the multifunctional digital display of the dashboard using the keys  $D \triangleq for$  "COMFORT" display or  $\blacktriangle$  for versions with the display "TFT" and  $D \blacksquare for$  the "COMFORT" display or  $\checkmark$  for versions with the display "TFT".

When the 'cornering' function is engaged, each time a bend is approached with a significant steering angle, or the relative turn indicator is engaged, the fog lights activate automatically on the side corresponding to the inside of the bend.

To function, the following conditions must be fulfilled:

- Ignition switch set to MAR-1.
- Reverse gear not engaged.
- low beam lights on.
- vehicle speed below 10 km/h.

If at least one of these conditions is not present, the 'cornering' function cannot be activated even if it is selected on the dashboard.

If there is a conflict between the steering angle conditions and activation of the turn indicator light, the value of the steering angle determines the activation of the light.

# **Turn indicators**

Move the lever to the stable position:

• up (R): RH turn indicator turns on, the warning light 🕈 flashes on the dashboard;

 $\bullet$  Down ('L' position): activation of left turn indicator, the warning light  $\blacklozenge$  flashes on the dashboard.

The turn indicators automatically turn off when the vehicle is once again driving in a straight line.

### Lane change function

If the driver wishes to signal his intention to change lanes, he has to bring the left lever to the unstable position for less than half a second.

The turn indicator of the side selected will activate and flashing briefly and will then go off automatically.

**NOTE** This function is useful when overtaking on the motorway.





# **Emergency Stop Signalling (ESS)**

This function makes it possible to activate the rear turn indicators at the same time in flashing mode in the case of sudden braking in emergency conditions. This function is activated under the following conditions:

- ignition switch set to MAR-1;
- hazard lights button not pressed;
- brake pedal pressed;
- speed at which braking occurs over **50 km/h**.
- Fire Inertial Switch Emergency Comand (not available on all vehicles) not activated.

If these conditions are not met, the ESS is immediately disabled.

# Steering column switch (multifunction steering wheel lever)

# LH lever

There are two versions of the left lever (1), (A) or (B) depending on the vehicle, and including the following controls:

• Lever (A) External lights: low beam lights, high beam lights / light flash / AUTO function.

• Lever **(B)** External lights: low beam lights, high beam lights / light flash.

• Both levers: Turn indicators.

# **RH** lever

There are two versions of the right lever (2), (A) or (B)

depending on the vehicle, and including the following controls: • Lever (A) Windscreen wiper control. Windscreen cleaning with the "AUTO" function for automatic windscreen wiping. Headlight washer (if fitted) / activation of the "QA" Queue Assist function.

• Lever **(B)** Windscreen wiper control. Window cleaning. Headlight washer (if fitted) / TRIP button.



# Controls and devices



#### Windscreen washer

This operation is performed only with the ignition switch set to MAR-1.

To operate the windscreen washer, push the lever down as indicated by the arrow stamped on it.

To operate the windscreen washer, push the steering wheel lever (3) down as indicated by the arrow stamped on it.

# Windscreen wiper

This operation is performed only with the ignition key set to MAR-1.

The rotating control B on the right hand lever can be in one of four different positions:

O windscreen wiper stopped.

**D** intermittent operation.

slow continuous operation.

fast continuous operation.

Move the lever fully up (unstable position) to operate the wipers for fast continuous operation. The duration of this operation is limited to the time the lever is held in position. When released, the lever returns to its position and automatically stops the windscreen wipers.



General risk, general prescriptions

Do not use the windscreen wipers to remove snow or ice from the windscreen. This overloads the wiper.

Partial or complete non observance of these prescriptions can lead to serious damages to the vehicle

# "AUTO" function

Enable the main "AUTO" function from the cluster and then use the lever to choose whether or not to use it. To activate the automatic function: set the wiper switch to **(AUTO)**.

Owindscreen wiper stopped. (AUTO) automatic operation slow continuous operation. fast continuous operation.





# **TRIP** button

The **(1)** TRIP button is located on the right lever **(A)** and when the ignition key is set to MAR-1, allows the previously described values to be displayed as well as resetting them for a new mission:

- press briefly: values are displayed;
- press and hold: zeroing (reset) values and the beginning of a new mission.

### **New mission**

It begins when the resetting has been carried out:

- "manual" by the user, by pressing the relative button;
- "automatic" when the "distance travelled" reaches 99999.9 km or when the "total time travelled" reaches 999.59 (999 hours and 59 minutes);
- after the battery has been disconnected and reconnected.

**NOTE** The resetting operation carried out while displaying "Trip A" only carries out the reset of the values related to that function.

**NOTE** The resetting operation carried out while displaying "Trip B" only carries out the of the values related to that function.

# Procedure for starting a journey

With the ignition key set to 'MAR-I', reset by pressing and holding the 'TRIP' button for more than 2 seconds.

# Trip outlet with "Comfort" version display

The user automatically exits the 'TRIP' function once all the values have been displayed or by pressing the 'SET' (2) button for more than I second and scrolling through with the buttons (3) and (4).





# Trip outlet with "TFT" version display

The user automatically exits the 'TRIP' function once all the values have been displayed or by pressing the button **(5)** for more than I second and scrolling through with buttons **(2)** and **(4)**.

#### Power take-off

#### Electromagnetic power take-off (if fitted OPTIONAL 72815 or 72816)

Alternatively the vehicle may be equipped with the following power take-offs (PTO): If fitted by the bodybuilder, the vehicle may be equipped with up to two additional PTOs. To engage the PTO, follow the procedure below:

- With the vehicle stationary put the gearbox in neutral.
- Engage the parking brake.
- Press the clutch pedal to the floor.

• Press the PTO activation button (1). With the PTO activated, a confirmation symbol appears on the display. With the PTO activated the warning light on the button remains permanently on.

• When the clutch pedal is released, the PTO activates.

• If it does not engage, the warning light will flash and then deactivate. If it disengages automatically, the warning light on the button deactivates and the PTO returns to the rest position.

• To reactivate the PTO place the button in the OFF position and then press it to the ON position again.

• To disengage the PTO move the button (1) to the OFF position.







#### **Rear differential lock engagement**

#### (if provided)

The lock must only be used on muddy and slippery terrains.

Engage the lock by pressing the switch **(I)** with built-in warning light on the push-button panel, only with the vehicle stationary or at a very low speed.

As soon as the vehicle is in normal driving conditions, move the switch back into the rest position, which causes the lock to disengage and the built-in indicator to switch off.

# Differential unlocking procedure.

Once the negative road conditions have been passed, proceed as follows:

- Pass to the unlocking position maintaining the speed of the vehicle.
- Release the accelerator pedal momentarily.
- Resume the safe speed.

• If the unlocking mechanism fails to disengage immediately, changes must be made in the driving direction to clear possible stress.

#### Warnings:

• If the relevant warning light on the panel flashes it means that too high a speed has been reached: disengage the lock or reduce the speed. If the unlocking mechanism fails to disengage immediately, changes must be made in the driving direction to clear possible stress.

• Using the rear differential lock on a vehicle also equipped with the anti-lock braking system (ABS), the ABS system may not function sufficiently: refer to the indications provided below in ABS and ESP - VEHICLES WITH REAR DIFFERENTIAL LOCK'



#### General risk, general prescriptions

- In conditions with a muddy and slippery terrain do not let the wheels slip when the differential lock is not engaged, since it would cause damage (a few seconds are sufficient). - Vehicle driveability is decreased with the differential lock engaged. Partial or complete non observance of these prescriptions can lead to serious damages to the vehicle



General risk, general prescriptions

- Do not activate the differential lock while a wheel is slipping, do not drive on pavement or on cobbled roads with the differential lock engaged; it could lead to serious damage to the gears.

Partial or complete non observance of these prescriptions can lead to serious damages to the vehicle

#### **ECAS - Electronic control air suspensions**

#### (if provided)

Any operation for lifting, lowering and levelling the vehicle shall be carried out before loading and unloading the vehicle using a set of buttons on the dashboard. The system can be used to aid operations of loading/unloading goods, driving with snow chains fitted and going over ramps and rises.

To aid loading operations it is possible to lower the vehicle by pressing button **(3)** (on the side panel). Pressing button **(1)** (on the side panel) raises the back of the vehicle.

**NOTE** After performing the loading/unloading operations, before driving off it is advisable to bring the suspensions back into the levelling position with button **(2)** (on the side dashboard).

If you set off and the vehicle is not in the right position, the system will try and level the vehicle automatically at a speed of **10 km/h**.



# Diagram of air distribution



I. Fixed side air vent.

- Adjustable side vent.
  Upper fixed air vent.
  Adjustable central air vents.
  Adjustable side vent.
  Lower fixed air vents.

#### **Controls and devices** 246



# Side air vents

- I. Fixed side air vet (air flow towards door window).
- 2. Adjustable side vent.
- Cursor to adjust air flow to the right / left / upwards / downwards.
  Air vent opening and closing.

# Central air vents

I. Adjustable side vent.

2. Cursor to adjust air flow to the right / left / upwards / downwards.

3. Air vent opening and closing.





# Heating and ventilation

# Manual air conditioning system (basic system)

I. Air temperature control knob (warm/cold air mix).

2. Knob for activating the fan at the relevant operating speed.

3. Button to turn on the recirculation function: prevents the entry of external air.

4. Air distribution control as follows:

- → air towards the face;
- → air towards the head and the feet;
- → air towards the feet;
- $\mathbf{F}$  air towards the feet and the windscreen;
- $\widehat{W}$  air towards the windscreen;

5. Button to engage air conditioning system (if provided).

The system is equipped with a pollen filter to clean the intake air.

Replace at the interval indicated in the vehicle maintenance schedule.

# Controls and devices 249

# Automatic air conditioning system (if fitted)

I. Button to turn on the recirculation function. To prevent outside air from entering.

- 2. Ring nut for air temperature adjustment.
- 3. Display showing the air temperature.

4. Button for turning on air conditioner compressor. The system is equipped with a pollen filter to clean the intake air. Replace at the interval indicated in the vehicle maintenance schedule.

- 5. Switch for turning system on and off.
- 6. Button for air distribution, upper level.
- 7. Button for air distribution, face level.
- 8. Button for air distribution, foot level.
- 9. Switch for quick defrosting/demisting function. The system

is prearranged for defrosting/demisting operations.

- 10. Solenoid valve ring nut for adjusting fan speed.
- II. Display of electro-fan speed.

12. 'AUTÓ' button.



### Description

The automatic climate control unit adjusts the temperature of the air in the interior compartment. The system keeps the interior compartment comfortable and compensates for any variations in the outside air temperature.

The parameters and functions which are automatically controlled are:

- Air temperature at the air vents on the driver's side/front passenger side.
- Air distribution at the air vents on the driver's side/front passenger side.
- Fan speed (continuous change of air flow).
- Compressor engagement (to cool/dehumidify the air).
- air recirculation.

Setting a function manually does not influence the control of other automatically controlled functions.

The amount of air introduced into the interior compartment is independent of the vehicle speed since it is adjusted by the electronically controlled fan.

The temperature of the air introduced is always controlled automatically on the basis of the temperature set on the display (apart from when the system is off or in some conditions when the compressor is not engaged).

The system allows the following to be manually set or modified:

- Air temperature.
- Electro-fan speed (continuous variation).
- Air distribution.
- Enable compressor.
- Quick defrosting/demisting function.

- Air recirculation.
- switch system off.

All these functions can be modified manually, i.e. by intervening on the system and selecting one or more than one function and modifying the parameters.

This way, the automatic control is deactivated of the functions modified manually and on which the system will only intervene for safety reasons.

Manual selections always take priority over automated ones and are stored until the AUTO button is pressed, unless the system intervenes for particular safety reasons.

**ATTENTION** The climate control unit system detects the temperature inside the interior compartment via an average radiating temperature sensor fitted inside the cover located in the roof near the rear-view mirror. Obstructing the view cone of this sensor with any type of object could stop the climate control unit from working correctly.

The climate control unit is able to recognize extremely cold conditions in the interior compartment (or extremely hot conditions) and as a result, is better able to manage the system potential.

#### **NOTE** For optimal comfort, the reference temperature is **22** °C.

252



### Switching on the climate control unit

The system can be switched on in a number of different ways:

- press button (1) to activate ventilation.
- Act on the ring nut (2) to adjust the speed of the electro-fan.
- Press one of the buttons (3), (4) or (5) to choose where to direct the air as it comes out of the system.
- press the AUTO (6) button and turn the knob to set the required temperature.

This way the system will begin to operate in a completely automatic mode adjusting the temperature, amount and direction of the air introduced into the interior compartment and managing the recirculation function and engagement of the air conditioner compressor. While operating in automatic, it is possible to change the set temperature at any time: the system will automatically modify the settings and adapt to the new requests.

This way the climate control unit will continue to automatically manage all functions except for those which have been modified manually.

While operating in a completely automatic mode (AUTO), changing the distribution and/or flow of the air (which is not displayed) the AUTO function LED deactivates and the system operates in MANUAL mode (displaying both the required flow and distribution).

When the compressor is deactivated, the AUTO operation only stays active if the system is able to guarantee the comfort temperature in the vehicle, otherwise the system passes to MANUAL mode (the set temperature will start to flash on the display).

The fan speed is the same for the whole of the interior compartment.
Turn the ring nut **(7)** to the left or the right to adjust the output temperature. Turn the knob **(7)** all the way to the left to engage the 'LO' function (cooling max.). Turn the knob all the way to the right to engage the 'HI' function (heating max). To disengage these functions, turn the ring nut to the left or the right.

**NOTE** the minimum set temperature is **I6** °C while the maximum is **32** °C.

## Selecting the air distribution

By pressing buttons (8), (9) and (10)it is possible to manually set one of the six possible air distribution settings:

• air flow towards the windscreen vents and front side windows to demist/defrost the windows.

• Air flow towards the central and side vents of the dashboard to send air towards the chest and face during the summer months.

• Air flow towards the feet. This type of air distribution is the quickest way to warm the interior compartment giving an immediate sensation of warmth.

• Dividing the air flow between the area around the feet (hot air) and the central and side vents of the dashboard (cooler air). Distributing the air this way is useful in spring and summer, when there is direct sunlight.



254



• Dividing the air flow between the area around the feet and the vents to demist/defrost the windscreen and front side windows. Distributing the air this way warms the interior compartment without misting up the windows.

• Dividing the air flow between the demisting/defrosting area of the windscreen and the central and side vents on the dashboard. Distributing the air this way sends air towards the windscreen when there is direct sunlight.

**NOTE** These types of air distribution can be combined.

**NOTE** Air always comes out of the side vents on the dashboard: it is still possible to interrupt the air flow with the selector near the relative vent.

In 'AUTO' mode, the climate control unit automatically manages the air distribution (the LED on the buttons **(8)**, **(9)**, **(10)** are deactivated).

The air distribution, when set manually, is displayed by LED activating on the selected buttons. In the combined function, pressing a button will activate that function at the same time as the functions already set.

If however, a button is pressed of a function which is already active, that function will be cancelled and the corresponding LED will deactivate.

To restore automatic control of the air distribution after a manual selection, press the AUTO button.

### Fan speed adjustment

Turn the knob (10) to increase/decrease the fan speed.

The set speed is displayed:

- Maximum fan speed: all corresponding bars are white.
- Minimum fan speed: one white bar.

The fan can only be disabled if the air conditioner compressor has been deactivated by pressing the button **(4)**.

**NOTE** To restore automatic control of the fan speed after a manual adjustment, press the 'AUTO' button.

## **AUTO** button

Pressing the AUTO button (LED activated on the button), the climate control unit automatically adjusts in the respective areas:

- Amount and direction of the air introduced into the interior compartment.
- Air conditioner compressor.
- Air recirculation.

cancelling all previous manual adjustments. This condition is indicated by the LED activating on the 'AUTO' button.





By pressing the 'AUTO' button when the 'AUTO' LED is activated, operation goes into completely manual mode; the system displays the current air flow and distribution which will no longer be managed automatically.

By intervening manually on at least the air distribution or the fan speed, the LED deactivates to signal that the system is no longer automatically controlling the functions.

The deactivation of the compressor stops the automatic system from operating only if the system is no longer able to guarantee the comfort conditions (which depend on the temperature set).

If the system is no longer able to guarantee reaching/maintaining the required temperature in the various areas of the interior compartment, the set temperature will flash for a few seconds on the display.

To restore automatic control of the system after one or more than one manual selections, press the 'AUTO' button.

#### **Recirculation function**

This function is particularly useful in heavy pollution conditions (in a traffic queue, inside a tunnel, etc.), and when faster heating is required for the cab.

It is not recommended to use it for long periods, especially when not alone in the vehicle.

**NOTE** Do not use recirculation with rainy/cold weather to prevent the windows from becoming misted inside.

The air recirculation is controlled according to the following operating logic:

• forced activation (air recirculation always engaged): signalled by the LED on the button **(I)** activating.

• forced deactivation (air recirculation is always deactivated, external air intake): signalled by the LED on the button **(I)** deactivating.

The forced activation/deactivation can be selected by acting on the button **(1)**. By pressing the on/off button, the climate control unit automatically activates internal air recirculation (LED on the button **(1)** is on).

By pressing the button (1) it is however possible to activate recirculation of external air (LED on the button is off) and vice versa.

When operating automatically, the recirculation is automatically managed by the system on the basis of the external climate.

**ATTENTION** With low external temperatures, the recirculation is deactivated (with external air intake) to prevent the windows from misting up.

258



### Climate control unit compressor

Press the button (4) to engage/disengage the compressor (when it is engaged, the LED on the button activates).

Compressor disengagement is stored even after the engine has been switched off.

When the compressor is disengaged the system deactivates recirculation to prevent the windows from misting up.

In this case, if the system is able to maintain the required temperature, the 'AUTO' LED does not deactivate.

If however, it is not able to maintain the required temperature, the temperature will flash for a few seconds and the AUTO LED will deactivate.

To restore automatic control of compressor engagement, press button **(4)** again or press the AUTO button.

With the compressor deactivated:

• If the outside temperature is greater than the one set, the climate control unit is not able to satisfy the request. This will be signalled by the temperature set on the display flashing for a few seconds.

• it is possible to manually reset the fan speed.

When the compressor is enabled and the engine is running, manual ventilation cannot go below the minimum speed.

**NOTE** With the compressor deactivated, it is not possible to introduce air into the interior compartment at a temperature below the outside temperature. Furthermore, in particular environmental conditions, the windows could mist up quickly as the air cannot be dehumidified.

259

## Quick defrosting/demisting of the windows

Press the button  $\widehat{\Psi}$  to activate (LED on the button is activated) demisting/defrosting of the windscreen and side windows.

The climate control unit carries out the following operations:

- Engage the air conditioner compressor when the climatic conditions permit.
- Deactivate the air recirculation.
- Set the maximum temperature.
- Activate a fan speed on the basis of the engine coolant temperature.
- Direct the air flow towards the windscreen vents and the front side window vents.
- Fan speed display.

**NOTE** The quick demisting/defrosting function remains active for approximately 3 minutes when the engine coolant reaches a suitable temperature.

When the function is active, the LED on the 'AUTO' button deactivates.

By pressing buttons (1), (4), (6), (7), (8) or 'AUTO', the climate control unit deactivates the quick window demisting/defrosting function.

By selecting the air distribution to the feet/windscreen or just to the windscreen, the A/C compressor activates (LED on the A/C button activates) and the air recirculation is set to "external air" (LED on the button **(1)** is deactivated).

This logic ensures the best possible visibility.

It is however possible to manually control the air recirculation and the air conditioner compressor.



#### Additional heater located inside the automatic climate control assembly (PTC)

It allows the interior compartment to be heated more quickly in cold climatic conditions. The heater is automatically switched off when the comfort conditions are reached. The additional heater automatically activates on the basis of the environmental conditions and with the engine running.

**NOTE** The heater only operates with low external temperatures and a low engine coolant temperature. The heater does not activate if the battery voltage is insufficient.

## Controls and devices 2

## 261

## Switching off the climate control unit

Press the button (5).

With the climate control unit off:

- The air recirculation is engaged, isolating the interior compartment form the outside.
- The compressor is deactivated.
- The fan is off.

**NOTE** The climate control unit control unit stores the temperature set before being switched off and restores that temperature when any button of the system is pressed (with the exception of the button  $\widehat{W}$ ).

To switch the climate control unit back on in fully automatic mode, press the AUTO button.





#### Independent additional heater

(if provided)

**NOTE** Before turning on the heater and to obtain maximum efficiency and comfort, with the ignition key set to MAR-1, set the fan controls to 'MAX DEF' (automatic climate control unit) or direct the air to the feet and centrally setting the fan speed to position (1) (manual climate control unit) and engage recirculation by pressing the button **(1)**. Do not position the fan control to (2), (3) or (4) as this would lead to excessive current draw and could drain the battery.

### **General information**

The vehicle can have an additional heater, which can be set from with a precision from I minute to 24 hours. It is possible to program three different turning on times, of which however only one can be activated each time.

The duration of operation can be selected from between 10 and 60 minutes.

# Using the independent additional heater Control

When using the clock controls, remember that when the symbols are flashing fast your are in adjustment mode.

If no button is pressed for five seconds the displayed time is saved. If buttons (8) or (3) are pressed for longer than two seconds, fast back/forward mode is on.

# Activation

Manual: by operating the immediate heating button (6). The display will show the duration and the symbol for the heating mode (9).

The duration stops being displayed after 10 seconds.

Automatic: at the time of activation of programmed heating or ventilation (if provided). The display shows the program number and the symbol for the heating **(9)** or ventilation **(2)** mode (if provided).

# Disengagement

Manual: by operating the immediate heating button (6).

Automatic: with the programmed limitation of operational duration. At the end of the duration, the display will turn off.





## Setting the time

This function is not available with heating mode on.

Keep button (4) pressed: at the same time press button (3) (Forwards) or (8) (Back). Release button (4). the time is displayed and the clock symbol (7) flashes.

Set the time with button (3) (Forwards) or (8) (Back).

The set time is saved with the display turning off or by pressing button (4).

# Querying the set time

Press the button (3) (Forwards) or (8) (Back). With the heating mode on, the remaining operating time is displayed.

# Mode change (if provided on the version)

Operate button (4).

Operate button (4) a second time and keep it pressed. The last mode selected (heating (9) or ventilation (2) - if provided) is displayed.

## **Programming start of heating**

Operate button (4). Within ten seconds operate button (3) (Forward) or (8) (Back), until the required time for starting heating is shown on the display. If you want another program number, press button (4) within ten seconds. Factory settings:

- Pre-selected time 1: 06:00
- Pre-selected time 2: 16:00
- Pre-selected time 3: 22:00

Warning: The factory settings are cancelled with a new entry. The pre-selected times remain in the memory until the next change.

If the clock is disconnected (e.g.: when disconnecting the battery), the factory settings will be restored.

## Turning off the pre-selected time

Briefly press button (4).



266



## Selecting and activating the pre-selected time

Press button (4) within 10 seconds, until the program number with the required pre-selected time is displayed. The pre-selected time you have chosen to set is automatically activated after approximately 10 seconds, with no need for additional confirmation by pressing another button.

The mode activates (heating (9)) and the program number flashes until the heater starts working.

Warning: Activate the pre-selected time taking account of the safety rules for heating with the vehicle parked that are stated in the specific box. Heating when parked anyhow comes on at the activated pre-selected time, whether the vehicle is parked or running.

## Setting the duration

Keep button (4) pressed. At the same time press button (3) (Forwards) or (8) (Back). Release button (4): the time and the clock symbol (7) are displayed. Keep button (4) pressed again. At the same time press button (3) (Forwards) or (8) (Back). Release button (4): the set duration is displayed and the heating symbol (9) flashes. Set the duration with button (3) (Forwards) or (8) (Back). The set duration is saved with the display turning off or by pressing button (4).

## Setting the remaining operating time

In heating mode the remaining operating time can be modified for a variable duration of between 10 and 60 minutes with buttons **(3)** (Forwards) or **(8)** (Back).



#### Risk of intoxication or poisoning

To prevent the risk of poisoning or suffocation, the additional heater must never be left on in closed environments such as garages or workshops, not even for brief periods, unless there are exhaust gas extraction devices, also with remote delayed pre-selection systems.

Failure to comply with these prescriptions can result in the risk of serious injury



#### General risk, general prescriptions

Switch off the additional heater, where present, before refuelling. Partial or complete non observance of these prescriptions can lead to serious damages to the vehicle



#### Contamination, fire

It is prohibited to use the heating device in closed areas or in areas where there is an accumulation of flammable or explosive dust

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle



#### Contamination, fire

Do not park the vehicle on flammable material such as paper, grass or dried leaves. Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

Pay attention to the summer/standard time setting.

**ATTENTION** The temperature near the heater must not exceed **120** °C (for example, during painting operations in a furnace of a bodyshop). Higher temperatures could damage the electronic control unit components.



**ATTENTION** During operation with the engine off, the heater draws electrical energy from the battery; it should therefore be operated for a sufficient period with the engine running, in order to restore the battery's correct state of charge.

**NOTE** For maintenance and repair work, contact only the Service Network and use only original spare parts.

**NOTE** Additional heater priming. To prevent the vehicle running out of fuel, priming of the additional heater is inhibited when the fuel level is close to the reserve.

#### Radio and multimedia navigation system

The vehicle can be equipped with:

- a radio with Bluetooth® function.
- A DAB radio with Bluetooth® function.

• "Hi-connect" infotainment multimedia system with Touchscreen 7.0", equipped with navigator, hands-free functions and Bluetooth®.

**NOTE** For further information on using this device, please refer to the manual provided.

**NOTE** The USB and AUX functions are provided by the ports **(I)** and **(2)** located in the top part of the dashboard. The left-hand USB port **(I)** permits data management and mobile phone and smartphone charging; the right-hand USB port **(I)** can be used for charging tablets but not data management.



#### Disclaimer

Permitted conditions of use

• The device is only to be used when driving and traffic conditions allow.Before using the device, make sure that the operation does not hinder or put the driver, other occupants in the vehicle or other road users in danger. Always observe the Highway Code.

• From inside the vehicle you must always be able to hear, in good time, any sirens from police, ambulance or fire service vehicles. For this reason, when using the device, ensure that the volume is at a level which is suitable for the road and traffic conditions.

• Only the use of connecting cables and other external devices are permitted when suitable from a perspective of safety, electromagnetic compatibility and the level of protection on the radio.Compliance with current regulations can no longer be guaranteed in case of modification of the device without prior written authorization from the manufacturer of the radio.

• Do not put foreign bodies into the device openings or compartments; they could cause personal injury or damage to the device.

• Do not bring the device into contact with hot or incandescent objects (for example, cigarettes).

• For device cleaning, please refer to the paragraph 'Caring for the vehicle'.

• Only for devices without a touch screen: do not exert any pressure (with your finger or other objects) on the LCD display.

# Quick installation guide for the "DAILY Business Up" application Download and register

• Scanning the "QR" code in the figure will redirect you to the "store" selection.

• Download the DAILY Business UP<sup>TM</sup> application from your store (Google Play for Android devices and App Store for Apple iOS devices).

- Carry out the registration by completing the fields shown in the figure and clicking "Register".
- You will then receive an e-mail containing the password required for the first login (login).

**NOTE** the password you receive is a temporary password and will be valid for 24 hours. If you do not login within 24 hours, you will need to request a new one.



# Bluetooth supported devices

Bluetooth devices supported by the radio must use one of operating systems listed below:

- Android 5.0 or later.
- iOS 10.0.2 or later.
- Windows 10 Mobile.

#### Controls and devices

## 273

#### **Connect to your vehicle**

To connect to your vehicle:

- Switch on the DAILY DAB RADIO.
- From the menu page, select "Connectivity".
- From the "Connectivity" menu, select "Pair a device".
- Activate the Bluetooth™ from your mobile device and select .DAILY DAB RADIO
- Check that the code on the radio display corresponds to the one on your device and confirm.
- Select the connection mode on the radio display.

**ATTENTION** In order to constantly improve connected services, Connectivity Box may be subject to automatic updates. The driver is notified of the availability of these updates on the radio-navigation device and/or Business UP<sup>TM</sup> application (if present and active), and they are applied automatically when the vehicle is turned off for the first time. While these updates are being applied, the services could be temporarily suspended, thereby making radio transmissions to and from the ground, communications with the Business UP<sup>TM</sup> application and with the onboard radio navigation system display unavailable for a few minutes.

## I. Handsfree & Audio & App: option recommended for most cases

This option allows all the functions to be used on a single device: use the 'Business  $UP^{TM}$  application, make handsfree phone calls, listen to the radio and media devices.

• Wait for the device to connect.

#### 2. Handsfree:

only select this option if you wish to use this device exclusively for making and receiving handsfree phone calls, and another device for using the "Business-Up" application.

**ATTENTION** This mode does NOT allow the "Business  $\mathsf{UP}^\mathsf{TM}$ " application to be used with this device.

#### 3. Audio & App:





only select this option if you wish to use this device EXCLUSIVELY for using the "Business UP™" application and listening to media sources and the radio, and another device for making handsfree phone calls.

**NOTE** This option is only recommended if pairing two devices.

#### **Customisation of the application**

TO make full use of "DAILY Business UP™", the following configurations need to be made:

• Professional "GPS" navigator: this can be obtained by clicking on the navigator button and installing the "Sygic GPS Navigator" application. The first year's subscription to the maps is free of charge.

• Fleet management system: this can be obtained by installing the "Sygic Fleetwork" application and then going to www.fleetwork.com. The first year's subscription to "Fleetwork" is free of charge.

**NOTE** To use the "Sygic" services free of charge, enter the same email address used when registering for "Business Up ".

**NOTE** Given the size of the "Sygic" app and the relative maps, it is recommended that a "Wi-Fi" connection is used for the download.

### Controls and devices 275

• 24/7 assistance can be obtained by clicking on the assistance button and installing the 'lveco Assistance Non Stop' application.

**NOTE** For help with installation, please contact telematics@iveco.com. The DAILY Business UP™ requires "DAILY DAB RADIO" with the option of connectivity to work (OPT. 79246). An updated version of your device software may be required.



#### Introduction of telematics (optional Telematics Box)

#### **Connected Vehicle and Data Protection**

Your vehicle is equipped with electronic control units. The control units indicated above process data (this may also be personal data) which they receive from vehicle sensors, generate themselves or exchange with other control units, for example: some control units are required for the safe operation of your vehicle, others support you when driving (driver assistance systems).

Below you will find some general information on what telematics data is collected, by which systems and how IVECO handles it. Other information on this topic can be found in the Privacy Notice which was delivered at the time of the subscription to the service. Privacy Notices are also available in electronic form within the mobile application that you might use to interact with the vehicle.

#### **Telematic Data flow**

Data collected from your vehicle is processed in different ways and therefore the flow could change depending on the purposes of the service.

Below some example possible data flows:

- "IN > IN": In this case data may be collected through products and devices inside the vehicle and interchanged between one control unit and another. No data is transmitted externally.
- "IN > OUT": In this case data is collected through the vehicle and transmitted externally to IVECO or its business partners to provide a specific service.
- "IN > OUT > IN": In this case data is collected through the vehicle and transmitted externally to IVECO in order to trigger an automatic action in the vehicle.

#### Data gathered by the vehicle

Electronic control units process data which could be part of the following categories:

- Vehicle data and vehicle status information (e.g. speed, position, movement, engine speed, acceleration, diagnostic data and vehicle sub-systems data).
- ambient conditions (e.g. temperature, rain sensor, distance sensor).

#### **Online Services**

If your vehicle is equipped with a network connection, this enables the exchange of data between your vehicle and other systems. The network connection is made possible by the vehicle's own transmitter and receiver unit (e.g. telematics box or black box or terminal) or by a mobile terminal device (e.g. smartphone) installed by you. online functions can be used via this network connection. These include online services and applications/apps provided to you by IVECO or other providers.

## Legal Basis of Processing activities

IVECO collects and processes data to perform the contract with its customers. In some other circumstances, data is processed for dealing with legal obligations as well as to pursue legitimate IVECO interests.

## **Data Security**

IVECO is committed to collect, process data as well as personal data under strictly security measures and to exchange it via a protected connections.

# **NOTE** See Business UP

IVECO Daily is able to provide telematic services, i.e. the transmission of vehicle-to-ground data regarding vehicle behaviour and dynamics (speed, consumption, error lamp, etc.) and other data such as driving style indicators (DSE - Driving Style Evaluation) to allow optimisation of consumption.

To allow the transfer of this data, IVECO Daily has modular solutions with Mobile Applications (Business UP) or through the installation of a Telematics control unit which integrates with the electronic system of the vehicle allowing the acquisition and optimal transfer of all of this data. Below is a short list of the functions and services which can be used depending on vehicle equipment, followed by details on the functionality.

		RADIO DAB	HI-CONNECT	TELEMATICS
Services	Daily Business up	•	•	•
	Driving Style Evaluation - DSE live	•	•	•
	Portale Web MYDAILY with Driving Style Evaluation, Warning light monitoring, other services developed to improve vehicle productivity and reduce TCO - www.mydaily.iveco.com			•
	Fleet Management - FM	•	•	•
	Remote Fleet Management System (rFMS Standard)	•	•	•
	Remote diagnostic services	•	•	•

## **NOTE** TCO: Total Cost of Ownership

## **DSE Driving Style Evaluation**

This function allows the use of real time indications aimed at optimising driving style, in order to improve consumptions and optimise use of the vehicle sub-systems.

Depending on the configuration of the vehicle, these indicators can be displayed in real time together with suggestions for improving the Hi-Connect appliance (if available) integrated into the vehicle dashboard or your smartphone (using the official IVECO app: Business Up) dedicated, upon subscription.

This information can also be consulted using the web MyDaily portal which can be accessed upon subscription.

## Warning Lamps transfer

This function allows the error warning lights to be transferred telematically (displayed on the vehicle instrument panel) so they can be referred to using the web MYDAILY portal. The service is available via the website or smartphone using the official Daily Business Up app, but only on designated vehicles.

## **Remote diagnostic services**

This service allows you to use the same remote services as those available to the Service network workshops, for example: diagnostics, Software update and configuration.

## Fleet Management

The availability of a telematic control unit integrated into the vehicle also allows you to use the Fleet Management services, namely:

- Access to the fleet vehicle data through a webportal; mobile applications and/or integrations with ERP management software of the fleet.
- Positioning and geo-fence.
- Notifications on events regarding the vehicles.
- Reports on driver and vehicle activities.
- Logistic and management services for the downloading of digital chrono-tachograph data.

For further information on these services available via the telematic control unit, please contact the IVECO Service Network or go to our website: web https://mydaily.iveco.com **NOTE** When driving for long periods in tunnels or areas that are not covered by the network, vehicle data may be missing or incomplete. Nonetheless, the telematics control unit will still able to collect data which it then forwards as soon as the network permits. Transmission of vehicle-to-ground data is only and exclusively active if the customer consents to the data transmission by signing the designated forms/consent forms, i.e. after having subscribed to a specific subscription.

# Remote Assistance - IVECO OVER THE AIR UPDATE

Allows the driver/fleet manager to check whether software updates for the control units have been released for their vehicle and to install them without having to go to an lveco Service Network workshop.

In order to use the 'SMART UPDATE' service, the vehicle must be registered on 'IVECO-ON':

#### www.iveco-on.com

This function can be reached by scrolling through the functions of the 'Infotainment' device (Daily HI-Connect, if present on the vehicle) or through the "Easy Way App" available from your app store (Google Play for Android devices and App Store for Apple iOS).

# Check for software updates via the Infotainment device (Daily HI-Connect)

The update can be carried out using one of the following procedures:

A. Easy way App.B. Infotainment device on the vehicle (Daily HI-Connect).

# Steps required to carry out the update A): Easy Way app

Download the latest updated Easy Way mobile app. IVECO ON Easy Way - Google Play Store IVECO ON Easy Way - App Store

Access or register with an email address (master fleet manager)

Follow the wizard to connect to your vehicle. Follow the instructions in the figure.

**NOTE** Strictly observe the requirements of the procedure.





## Steps required to carry out the update B. Infotainment device on the vehicle (Daily HI-Connect)

(Alternative procedure to procedure A: Easy way App) Before carrying out the update, obtain the PIN code from the IVECO ON app or from the IVECO ON web portal to authorise the software update.

# Generating the PIN code using the IVECO ON app

Download the latest lveco ON mobile app The account to access the IVECO ON app is the same one used to access the IVECO ON web portal and the Easy Way app.

Follow the instructions in the figure:

**NOTE** If you have any queries regarding the software update for your vehicle, don't hesitate to contact your IVECO Service Network who will be happy to help you.

### Accessories fitted by the user

While reminding you that lveco shops offer high-quality products, we recommend that you follow the advice provided below:

• In the event of additional drilling (for example, a hole for radio aerial connection) on the cab panelling, protect the relevant part appropriately to prevent the formation of any early oxidation on external or internal surfaces.

 $\bullet$  Take care when fitting (knocks by screwdriver, interference, etc.), to avoid permanent damage to the paint.

**ATTENTION** disconnect the battery negative pole and then the positive pole before carrying out any work on the vehicle.



General prescriptions

- Installation of accessories, additions and modifications to the vehicle must be carried out in compliance with the manufacturer assembly directives (the specific publication "Directives for conversion and setups" is available from the Service Network workshops').

Partial or complete non observance of these prescriptions can lead to serious damages to the vehicle

**NOTE** You are reminded that, particularly for the electrical system, various electrical sockets are provided as standard (or available as an option) in order to simplify and standardise the bodybuilder' work on the electrical system.

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General prescriptions

- Manufacturer authorisation is required for any exception to the assembly directives. Failure to comply with the above prescriptions will invalidate the warranty. Partial or complete non observance of these prescriptions can lead to serious damages to the vehicle INSTALLATION OF ELECTRIC/ELECTRONIC DEVICES. Any electric/electronic devices installed after purchasing the vehicle in an after-sales situation must carry the following mark:

VECO authorises the installation of transceiver equipment provided it is installed by the VECO Service Network in compliance with the manufacturer's instructions. In the Camper 35C versions, wheelbase 3750 mm or 4100 mm, lightened chassis, no modifications or additions to the suspensions are permitted if they modify the configuration which existed at the time the vehicle was registered, unless authorization from the manufacturer (IVECO) has been given. In the case of rear pneumatic bellows installed by the manufacturer of the passenger cell or added additionally, the inflation pressure of these devices must be as indicated in the accompanying documentation. Failure to observe these pressures could make the vehicle excessively rigid, reduce comfort and driveability.

**ATTENTION** The installation of devices that modify the characteristics of the vehicle may lead to the vehicle being considered unroadworthy by the relevant authorities and may also lead to invalidation of the warranty, within the limits of defects caused by the aforementioned modifications or defects directly or indirectly traceable to them.

#### Self-adhesive decals

The removal or application of self-adhesive decals must not be done with sharp tools (e.g. blades, knives, etc.) as they could cause deep scratches on the paintwork, resulting in premature corrosion of the underlying material.

#### Radio transmitters and mobile phones

Mobile phones and other radio-transmitter devices (e.g. CBs) cannot be used inside the vehicle unless a separate aerial is fitted on the outside of the vehicle.

The use of mobile phones, CB transmitters or similar devices inside the driver's cab (without an external aerial) produces radiofrequency electromagnetic fields which, when amplified by the resonance effects inside the driving area, may cause potential health hazards as well as malfunctions. These may affect the electronic systems fitted in the vehicle, such as the various engine control units, ABS, etc. which may compromise vehicle safety and your own safety. In addition, the transmission and reception efficiency of these devices may be degraded by the shielding effect of the body.

Start-up and driving	
Safe driving	289
Economical and ecological driving	296
Vehicle keys	299
Replacing the remote control battery	301
Steering lock	302
Central locking	303
Centralised locking + electronic alarm	304
Immobilizer	306
Key switch positions	310
Starting the engine	314
Indication of engine oil level	316
Indication of engine oil level	323
Stopping the engine	333
Inertia safety switch	334
Start & Stop	335
Run lock	344
OBW – On Board Weight	345
Electric power-assisted steering	346
Anti-Lock Braking System "ABS"	348
ESP	352
CWA System (Crosswind)	354
HDC SYSTEM (Hill Descent Control)	355
Lane Departure Warning System (LDWS)	358
PLKA (proactive assistance system for maintaining lane)	365
Speed limiter (SPEED LIMITER-SL)	373
Speed programmer (Cruise Control-CC)	375

Start-up and driving

Working Engine Speed Demand	381	
ACC speed programmer - Adaptive Cruise Control (Automatic speed regulation system)		
Queue Assist	394	
AEBS system	411	
Dusk sensor and rain sensor	422	
traction plus	427	
Hill Holder	428	
Rear parking sensors	429	
Service brake	433	
EUC - TSM - HRB - HFC - RMI -HBA	434	
Using the parking brake	436	
Position of the parking brake lever for right-hand drive vehicles.	437	
Electric parking brake (EPB)	438	
Pedals	445	
"ECOSWITCH PRO" function	446	
"ECOSWITCH PRO FLEET" function	448	
"Locked ECOSWITCH PRO" function	449	
"ECOSWITCH PRO" function for vehicles equipped with "Hi-Matic" gearbox	450	
"ECOSWITCH PRO FLEET" function for vehicles equipped with "Hi-Matic" gearbox	451	
"ECOSWITCH PRO Locked" function for vehicles equipped with "Hi-Matic" gearbox	452	
Mechanical gearbox	453	
HI-MATIC automatic gearbox	454	
Automatic gearbox states	456	

288
### Safe driving

### Before starting to drive

- Adjust the seat, wheel and rear view mirrors to the optimum position for driving.
- Check that nothing is obstructing the movement of the pedals (the brake pedal in particular).
- Check horn operation.
- Check the external lighting and, if necessary, clean the light assemblies.
- Check that light beam alignment is set correctly, particularly for night driving.
- Check that there are no leaks of oil or other fluids under the vehicle.
- Check that any load is correctly stowed.



General risk, general prescriptions

Never leave objects which could move and obstruct the controls, or in the event of a collision, could hit the occupants.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

• Finally, check that the parking brake is released and that the indicators and warning lights on the dashboard are not indicating any faults. In order to avoid accidental movements of the vehicle, disengage the parking brake while pressing the pedal brake.

• Fasten the seat belts correctly.

### Driving

- Long journeys should be undertaken only when the driver is in perfect shape.
- A light meal, based on easily digestible food, will help keep reflexes ready and ensure the concentration necessary for safe driving.
- Abuse of alcohol, drugs and/or certain medicines is very dangerous. Never drive under the influence of alcohol or the effect of drugs or narcotics.
- Careful driving also means being in a position to predict the careless or incorrect behaviour of others, maintaining the speed limits and using the correct lane when on the motorway.
- Always comply with the stopping and driving times indicated by the chrono-tachograph (if fitted).
- Use the indicators when changing direction.
- Keep a safe distance from the vehicle in front; this distance varies depending on speed, weather conditions and traffic and road conditions.
- Do not drive with one hand resting on the gear shift lever; the unintentional force (if even light) applied will cause unnecessary wear on the elements inside the gearbox.
- Do not drive with the gearbox in neutral.

• Do not drive with a foot on the clutch pedal; this habit can cause early wear of the clutch components.

• Do not drive for too long without a break; stop at regular intervals to stretch legs and freshen up.

• Use the numerous settings of the heating and ventilation system or the air conditioning system to ensure a constant exchange of air.

• Do not drive downhill with the engine OFF: under these conditions, there is no braking effect from the engine and therefore a larger force is required on the brake pedal: use the engine brake with low gears to avoid overheating the brakes.

• If you break down, park the vehicle off the road, switch ON the hazard warning lights and position the warning triangle to signal the presence of the vehicle. Always comply with the current Highway Code.

• Do not apply decals or other stickers on the windows: they may distract or obstruct vision.



#### Contamination, fire

- Throwing burning objects such as cigarette butts out of the windows when the vehicle is moving could be dangerous for persons, for other vehicles, for the surrounding environment and for the goods being carried. It could also be hazardous for the vehicle itself.

Correct behavior will ensure that vehicle is used as environmentally friendly as possible

### Parking

If it is necessary to leave the vehicle stationary, proceed as follows:

- Switch off the engine
- Engage the parking brake.

• Engage 1 st gear if the vehicle is on an upwards incline or reverse if the vehicle is facing downward (only for vehicles with manual gearbox).

• With the engine off, do not leave the ignition key in the MAR position to avoid wasting power and the battery.

Driving at night

• Drive with particular care, where necessary reducing vehicle speed, particularly on unlit roads.

• Keep a safe driving distance, greater than when driving in daytime: in fact it is more difficult to estimate the speed of a vehicle when you can only see the lights.

• Stop and take a break at the first signs of drowsiness: continuing would be dangerous for you and for others.

• Use the high beam lights only away from built-up areas and only when doing so will not create any difficulty for other motorists.

• Switch from the high beams to the low beams when encountering other vehicles.

#### Driving in rain, fog and snow

If the road is wet, the friction between the wheels and the road surface is greatly diminished and this increases braking distances and reduces adhesion in bends: reduce vehicle speed and keep a greater distance from the vehicles in front.

Heavy rain and fog reduce visibility; to make the vehicle more visible, switch on the low beams during the day as well, in accordance with current local regulations.

Do not drive through large puddles or sections of flooded road at high speed; so-called aquaplaning may occur causing you to lose control of the vehicle: primarily use the engine brake and avoid sudden braking.

If outside visibility is poor, position the ventilation controls as shown in the appropriate paragraph, to demist the windows more efficiently

Before starting to drive, check the condition of the windscreen wipers; if the temperature drops below **0** °**C**, or if it has snowed, check that the wipers are not stuck to the windscreen.

Lift the windscreen wipers when the vehicle is parked to avoid sticking.

In case of fog, drive very carefully, limiting vehicle speed and not overtaking unless it is strictly necessary.

Make sure that the cleaning fluid contained in the windscreen / headlight washer reservoir has anti-freeze and scale-inhibiting properties.

During winter periods, even apparently dry roads may have icy sections: particularly sections shaded from the sun or lined with trees or rocks.

### Tyres

The tyres fitted on the vehicle are "tubeless" type.

You are advised to comply with the following requirements in order to achieve maximum driving comfort, safety and long tyre life:

- With new tyres, do not proceed at maximum speed in the first 100 km.
- Before driving in tight curves, reduce vehicle speed even if vehicle performance allows otherwise.
- Avoid sudden acceleration or over-enthusiastic braking.
- Do not drive for long periods at sustained and constant speed, particularly on uneven terrain.
- Check that the wheels are correctly balanced and aligned.
- Avoid knocking the sides of the tyres (for example, when parking).
- Never tamper with the inflation valve, under any circumstances.
- Do not insert any type of tool between the rim and the tyre.
- Replace the rim if it is distorted in any way.
- In case of an abnormal drop in the pressure, replace the wheel and have it checked.
- Prolonged vehicle stoppage causes deformity in the tyres.

• Tyre pressure, including the spare wheel, must match the values specified in the specific paragraph of this booklet.

- Never use tyres that are second-hand, of unknown origin or more than 6 years old.
- With tubeless tyres, inner tubes must never be used.

• Avoid leaving the vehicle parked for long periods on the edge of a step or other irregular road surfaces.

• Check tyre tread depth regularly, ensuring that it meets the minimum requirements required by law. Some types of tyres have wear indicators and must be replaced as soon as they become visible on the tread. Tread wear increases the risk of aquaplaning.

• Regularly check that the tyres do not show any sign of irregular tread wear; if this is the case, contact the Service Network for assistance.

#### Snow chains

- The use of snow chains is subject to the current legislation applicable in each country.
- The chains must be fitted to the drive wheels only.
- Make sure that the snow chains do not damage the suspensions.
- Deactivate the ASR if necessary when driving on snowy roads.

• To prevent tyre damage, do not drive on roads that are not covered with snow with the chains fitted. In extreme circumstances (for example, in tunnels), proceed very slowly and remove the chains as soon as possible.

• With the chains fitted, keep to a moderate speed, avoid potholes and do not drive over steps or pavements.

• For some types of chains, the tension has to be re-checked after travelling a few dozen metres.

• Before buying or using snow chains, consult the Service Network, who may be able to provide you with more information on how to choose and use the products available on the market for driving in snow.

#### Economical and ecological driving



General risk, general prescriptions

The conditions of use and driving behaviour have a direct effect on fuel consumption and environmental impact. By following a few simple rules, without forgoing "lively" driving, the driver can avoid damage to the environment, and at the same time reduce fuel consumption.

Correct behavior will ensure that vehicle is used as environmentally friendly as possible

- Do not attempt to obtain peak performance from the vehicle when the engine is cold.
- Do not accelerate needlessly while stationary.

• Wherever possible, do not drive with the side windows down; it is better to use the ventilation and air conditioning system sensibly to achieve the best environmental conditions inside the vehicle.

• When traffic and road conditions allow, use a fast gear.

• In slow-moving city traffic or when travelling in a queue at low speed, it is advisable to reduce the use of devices with a high energy consumption (interior ventilation at high speed) to a minimum.

• Racing the accelerator while shifting or before shutting down the engine is pointless and can damage the turbocharger.

• The best fuel consumption to performance ratio will be achieved by keeping the engine speed within the green sector stamped on the rev counter. The red (over-revving) sector must never be used.

• Follow the schedule and carry out all operation and fine tuning operations indicated by IVECO; this is an essential condition to guarantee better service life of the mechanical parts and substantial fuel savings.

### Maintenance of emission reducing devices

Proper functioning of the anti-pollution device ensures respect for the environment and best vehicle performance.

Keep these devices in good condition to ensure ecological and economic driving conditions.

#### **Particulate filter**

• The DPF (Diesel Particulate Filter) is a filter for tiny particles emitted by the fuel. The engine control unit periodically "controls" the combustion process of the particles to clean it (regeneration) by increasing the diesel emission. During the particle combustion process in the filter, the gas reaches a temperature of **650** °C, overheating the filter. Brief natural "regeneration" also occurs during normal operation that results in exhaust line overheating. Therefore, we recommend that the vehicle is not parked on easily flammable materials (dry grass or foliage, paper, flammable fluids, etc.).

• Follow the Plan of Scheduled Maintenance scrupulously: regular maintenance is the best guarantee for safe operation and for keeping operating costs as low as possible. These operations are obligatory during the warranty period and failure to carry them out will invalidate the warranty.

#### Vehicle keys

#### I. Key without remote control

Fitted with metal insert (A) like the key with the remote control (2). Operates:

the engine starter switch
 the door lock;
 opening/closing of the fuel tank.

When the door is unlocked, the front ceiling light comes on. The ceiling light switches off when the door is locked.

#### 2. Key with remote control

Metal insert (A) disappears into the body and operates:

- The ignition device;
- The door locks;
- The opening/closing of the fuel filler cap.

Press button (B) to extract the metal insert.

**ATTENTION** Press button **(B)** only with the key held away from the body, the eyes in particular, and from items liable to be damaged (such as clothing). Never leave the key unattended, to prevent anyone, particularly children, from tampering with it and inadvertently pressing the button.

**ATTENTION** Do not use the key inserted in the lock as a handle to open and close the sliding side doors.



300



To reinsert it, proceed as follows:

- Move the metal insert (A) while pressing button (B);
- Release button (B) and rotate the metal key insert (A) until it clicks closed.

#### In addition:

- Button **(C)** unlocks the front doors. When the doors are unlocked, the front ceiling light comes on for 10 seconds.
- Button (D) unlocks all doors. When the doors are locked, the ceiling lights go off.
- Button (E) unlocks the loading compartment doors. When the doors are unlocked, the ceiling light in the loading compartment comes on for 10 seconds.

Some versions are supplied with a key fitted with two remote control buttons to lock and unlock all doors.

### Replacing the remote control battery

To replace the battery, proceed as follows:

- Press button (A) and move the metallic insert (B) to the open position.
- Turn screw (C) the lock open symbol using a fine-tipped screwdriver.
- Remove the battery box (D) and replace the battery (E) respecting correct polarity.
- Fit the battery box **(D)** back into the key and lock it by turning the screw **(C)** to the lock closed symbol.

# ATTENTION

 $^{\prime\prime}$  do not swallow the battery of the remote control

The central locking remote control contains a coin battery.

If the remote control battery is replaced, it can cause serious internal burns in just  ${\bf 2}$   ${\bf h}$  and can even be fatal.

Keep new and used batteries away from children.

If the battery compartment does not close firmly, stop using the product and keep it away from children.

If you think batteries may have been swallowed or placed inside any part of the body, seek medical advice immediately.



#### General risk, general prescriptions

A flat key remote control battery is harmful for the environment. It must be disposed of in specific containers, as required by law. Or it can be delivered to the Service Network, which will dispose of it properly.

Correct behavior will ensure that vehicle is used as environmentally friendly as possible





# Steering lock

### Activation

With the device in the STOP-0 position, remove the key and turn the steering wheel until it locks.

# Disengagement

Move the steering wheel slightly while turning the key to the MAR-1.

### **Central locking**

#### (if provided)

Briefly press button (2) in the key, pointing it in the direction of the vehicle: the turn indicators will flash once to signal that all the doors have been locked.

To unlock the doors, press button **(I)**, pointing the remote control in the direction of the vehicle; the turn indicators will flash twice to signal that all the doors have unlocked.

I. Unlock front doors.

2. Lock all doors.

3. Unlock loading compartment doors.

• The central locking can be activated via remote control or via a pawl on the driver's side door.

• Unlocking or locking the doors with a key does not bring the central locking into operation.

• Van versions can have a button on the central panel that, after climbing on board, permits simultaneously locking the rear, side, driver and passenger doors. This push-button can be activated both for the door locking and unlocking function.

• The repeated and frequent use of the remote control will inhibit its operation for another **30 s** to prevent the system from overheating.





### Centralised locking + electronic alarm

#### (if provided)

In combination with central locking, the vehicle can be equipped with an electronic alarm performing the following functions:

- Remote operation of central door locking/unlocking (see the "Central locking" description).
- Perimeter surveillance, signalling any opening of doors, side or rear doors and engine bonnet.

When the system is turned on, the electronic alarm triggers if:

I. One of the doors or the engine bonnet is opened.

2. The battery is disconnected or the alarm power supply cables are cut.

The system is composed of:

- A system control unit (located in the area of the heater controls under the dashboard).
- A microswitch on each door of the vehicle and on the engine bonnet to signal opening.
- A self-powered siren located in the engine compartment.

To turn on the alarm, briefly press the **(I)** button in the key, pointing it in the direction of the vehicle: the turn indicators will flash once to signal that all the doors have locked and the alarm system has been turned on.

To switch off the alarm, press the **(2)** button, always pointing the key towards the vehicle; the turn indicators will flash twice to signal that the locks have been released and the alarm system has been deactivated.

• The alarm system is connected to the vehicle's Immobilizer system.

• If the siren is inadvertently started, it can be silenced not only by operating the remote control again, but also by setting the ignition key to MAR-1. Therefore bear in mind that the electronic code on your Code Card applies not only for the Immobilizer, but also for managing problems concerning the alarm in the Service Network. For the Code Card, the same recommendations therefore apply as found in the paragraph concerning the Immobilizer.

• Repeatedly using the remote control at close range inhibits its operation for another 30 seconds in order to prevent the system actuators from overheating.





### Immobilizer

To improve protection against attempted theft, the vehicle is equipped with an electronic engine Immobilizer. In fact, the ignition keys are equipped with an electronic device which transmits a coded signal to the Immobilizer control unit.

### Vehicle keys

Two keys are supplied and make up a "Set" (keys + Immobilizer + EDC).

Code Card

A Code Card is supplied together with the keys and contains:

A. The electronic code to be used in the event of an emergency start-up. B. the mechanical code of the keys.

**NOTE** The user should always keep the electronic code specified on the Code Card with him for possible emergency start-up.

#### 307

### High protection Immobilizer (optional)

This system is a high protection anti-theft device which can only be disabled using the remote control key provided.

The remote control (1) not only opens the door but also enables the Body Computer control unit when the engine is started.

The engine cannot be started until the button (1) has been pressed.

### Code Card

A Code Card is supplied together with the keys and contains:

A. The electronic code to be used in the event of an emergency start-up.

B. the mechanical code of the keys.

NOTE The user should always keep the electronic code specified on the Code Card with him for possible emergency start-up.



# Start-up and driving



### **Emergency start-up**

Allows the engine to be started if the key is not recognised. If the key is not recognised, the engine cannot be started and the warning light turns on continuously.

Starting is possible by entering the 5 digit electronic code and using the accelerator pedal as follows. the procedure can be interrupted at any moment by turning the key to STOP-0.

- To carry out the procedure correctly, carefully watch the status of the general fault warning light as indicated in the figure.
- Set the key to MAR-I and fully depress the accelerator pedal.
- When the warning light turns off, release the accelerator pedal.
- The warning light will start to flash slowly when the accelerator pedal is released.
- When the number of flashes corresponds to the first digit of the electronic code, press the accelerator pedal fully down (the led stays on fixed and then goes out, wait for it to do so before releasing the pedal), now release it and continue with the same procedure for the other digits of the code.

• If the code entered is correct, the immobilizer warning light stays on and the general fault warning light deactivates, otherwise it stays on permanently and the procedure has to be repeated.

• If the general fault warning light is off, start the engine going from MAR-I to AVV-2.

### **ATTENTION** Do not turn the key back to STOP-0.

In any case, contact the Service Network as soon as possible to check the system.

#### WARNINGS:

• Each key supplied has a common mechanical code and a unique electronic code, different from the others, which must be stored in the system control unit. When additional keys are requested, remember that the code is recorded on all the keys, including those already in your possession. Contact the Service Network directly, bringing all the keys in your possession and the Code Card with you. The codes of any keys not presented during the new memorisation process are erased from the memory; this ensures that lost keys will no longer be able to start the engine.

• The Code Card is an essential and unique element associated with each vehicle; therefore it is recommended that it is kept in a safe place. It is therefore recommended to write down the codes without leaving it in the vehicle and to carry it at all times to avoid the risk of losing it.

• If vehicle ownership changes, it is essential that all the keys and the Code Card are handed over to the new owner.







STOP-0= Insertion and extraction of the key - engine off - steering lock, Immobilizer engaged. MAR-I = Pre-installation for engine starting – various indicators, immobilizer disabled (running position).

AVV-2= Start engine (unstable position: when released, it returns automatically to MAR-1.



### Risk of injury:

Risk of the steering wheel locking while driving. - In the event of tampering with the ignition switch (e.g. attempt to steal the car), it is advisable to have the correct operation of the device checked by the Service Network. Failure to comply with these prescriptions can result in the risk of serious injury and

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

#### Immobilizer recognition

Turn the ignition key to MAR-I, the engine lock is only disabled if the protection system recognises the key code.

If the code is valid, the control unit of the protection system sends an appropriate codified signal to the electronic control unit of the engine enabling the starting of the engine.

Warning light (3) on = no key recognition.

Warning light (3) off = key recognised.

In this case, it is recommended to turn the key to STOP-0 and then back to MAR-1; if immobilisation continues retry with the other key supplied.

If the engine still does not start, contact the Service Network.



# Immobilizer system activation

Turn the key to STOP-0 to activate the system: engine stopped, key can be removed. Subsequently, the main functions which can be enabled with the key are summarised (with or without the remote control).



# 312 Start-up and driving

KEY TYPE	UNLOCK DOORS	LOCK DOORS FROM THE OUTSIDE	UNLOCK LOADING COMPARTMENT DOORS
Standard key	Turn key anti-clockwise (driver's side)	Turn key clockwise (driver's side)	_
Key with remote control	Turn key anti-clockwise (driver's side)	Turn key clockwise (driver's side)	-
Key with remote control	Brief pressure on button	Brief pressure on button	Brief pressure on button
Turn indicators flash (only with key with remote control)	2 flashes	l flash	2 flashes
Deterrent Led	Turning off	ON steady for 3 seconds and successive flashing of the deterrence Led	Deterrence flashing/off

The warning light **(3)** coming on approximately two seconds after starting the vehicle does not necessary mean there is a fault with the system, but in certain cases it highlights a situation that can be interpreted as attempted tampering by a thief, or a particularly low battery charge status.

If this occurs, in order to implement a system test, stop the vehicle, switch off the engine and set the key to STOP-0; turn the key to the MAR-1 position again; the warning light **(3)** will come on and must go off after approx. I second.

If it remains on after this last procedure, repeat the operation, waiting in the STOP-0 position for more than 30 seconds. If even after this attempt the warning light stays permanently on when the key is in the MAR-1 position, contact the Service Network immediately.

Follow the indications/warnings relating to the Immobilizer system which appear on the display (if fitted).





# Starting the engine

• Insert the key in the ignition switch and turn it clockwise to the MAR-I position.

• If the vehicle has a mechanical gearbox, make sure the gearbox is in neutral or fully depress the clutch pedal. If the vehicle has an automatic gearbox, fully depress the brake pedal. Refer to the relevant paragraph entitled for more information.

• Then turn the key to the position AVV-2 and release it as soon as the engine starts, without pressing the accelerator pedal. (If this is not done, a puff of black smoke when starting is considered normal).



Risk of intoxication or poisoning

Before starting the engine in closed premises, make sure that they are adequately ventilated, since the exhaust gases are toxic.

Failure to comply with these prescriptions can result in the risk of serious injury

• If the engine does not start easily, do not run the starter for more than **30 s**. After starting the engine, drive slowly with the engine at medium rpm to allow it to reach the optimum running temperature.

**NOTE** Remember that the brake-servo and the electric power steering are not active until the engine is running therefore a much greater force than normal needs to be exerted on the brake pedal and on the steering wheel.

**NOTE** vehicles with a mechanical gearbox have a safety device which prevents start-up if the clutch is not fully depressed. Vehicles with an automatic gearbox have a safety device which prevents start-up if the service brake is not pressed. A warning appears on the dashboard to help remind the driver of the correct procedure. For vehicles equipped with an electric parking brake and only in some conditions, start-up could also be permitted even without the clutch or brake pedal being pressed. In any case, drivers are reminded to always follow the indications provided above. **NOTE** The ignition device has a safety device which, in case of failed ignition, makes it necessary to turn the key to the STOP-0 position before repeating the ignition manoeuvre.

This achieves the following:

- A continuous and regular flow of oil in the entire lubrication circuit.
- Maintaining the exhaust emissions within the prescribed limits.
- Limited fuel consumption.



General prescriptions

In order to reduce harmful emissions, it is advisable not to keep the engine running at idle speed for an extended period, whether cold or hot.

Correct behavior will ensure that vehicle is used as environmentally friendly as possible

**ATTENTION** Act immediately in case of excessive smoke from the exhaust, as it can cause damage to the environment and the engine. A first step is to change the fuel filter cartridge.

**NOTE** If necessary, have the fuel injection system checked by specialised personnel. To obtain maximum benefits from these operations, replace using original IVECO cartridges. If any operations on the injection system are needed, contact the Service Network.

**ATTENTION** Never exceed an engine speed of **4500 RPM**.

#### Indication of engine oil level

Indication of the oil level is given on the instrument panel when the engine is started. Five possible levels can be indicated (below are descriptions of the action that the driver should take with each of these oil levels).

The measurement is updated each time the doors are locked using the remote control, the key is set to engine start-up if in the previous cycle the engine has reached a suitable temperature and if the engine has then been switched off for at least twenty minutes (to allow correct circulation and allow the oil to collect in the engine sump).

If these conditions are not met, the instrument panel will show the level which was measured during the last valid reading cycle.

Failure to display the level may be caused by the level being above or below the maximum and minimum limits or by an error in the measuring sensor.

**NOTE** In these conditions, check the oil level using the dipstick or contact the Service Network.

At each top up or oil change, indication of the level will be updated when the conditions indicated above occur.

**NOTE** If the oil level is too low or too high, return the level in the sump to that required during the next scheduled service.

#### **Oil consumption**

The consumption of engine oil may vary depending on the type of work the vehicle is used for/the road conditions. Particularly difficult work and heavy usage (e.g. a fully loaded vehicle travelling on the motorway at a high speed and/or severe and repeated tilting) increase the consumption of engine oil, which could result in the oil level needing to be topped up more regularly than at the scheduled maintenance intervals. Running the vehicle with the level of engine oil below the minimum quantity fails to keep the engine properly lubricated, exposing it to a higher risk of suffering irreparable damage.

Display on the instrument panel with the "Matrix" version

Figure (A) shows the display when the oil level is at the maximum level.

Figure **(B)** shows the display when the oil level is at the minimum level.

**NOTE** In the figures, **(c)** refers to the head of the "oil level" in the languages available on the instrument panel.



In addition to showing the maximum and minimum levels, the dashboard display also provides information on the intermediate levels. The table lists all the oil levels along with descriptions of them and the action that the driver must take when each one is shown.



### Start-up and driving



INDICATION OF ENGINE OIL LEVEL ON DISPLAY	ACTION THAT THE DRIVER MUST TAKE	
MIN MAX Engine oil level indicator on	<ul> <li>Warning: Engine oil below minimum level!</li> <li>Extremely high risk of damaging the engine!</li> <li>To return to the optimal level and continue driving without engine problems, before using the vehicle the engine oil MUST be topped up with:</li> <li>2,5 L for FIC engines.</li> <li>1,5 L for FIA engines with dipstick with yellow eyelet terminal.</li> <li>2,5 L for FIA engines with dipstick with green eyelet terminal.</li> </ul>	

**NOTE** After topping up the oil, wait at least **20 min** with the engine switched off before checking the oil level with a dipstick. If the dipstick does not show the maximum level, add more oil and check the level again.

### Indication of engine oil level

Indication of the oil level is given on the instrument panel when the engine is started. Five possible levels can be indicated (below are descriptions of the action that the driver should take with each of these oil levels).

If these conditions are not met, the instrument panel will show the level which was measured during the last valid reading cycle.

Failure to display the level may be caused by the level being above or below the maximum and minimum limits or by an error in the measuring sensor.

**NOTE** In these conditions, check the oil level using the dipstick or contact the Service Network.

At each top up or oil change, indication of the level will be updated when the conditions indicated above occur.

**NOTE** If the oil level is too low or too high, return the level in the sump to that required during the next scheduled service.

#### **Oil consumption**

The consumption of engine oil may vary depending on the type of work the vehicle is used for/the road conditions. Particularly difficult work and heavy usage (e.g. a fully loaded vehicle travelling on the motorway at a high speed and/or severe and repeated tilting) increase the consumption of engine oil, which could result in the oil level needing to be topped up more regularly than at the scheduled maintenance intervals. Running the vehicle with the level of engine oil below the minimum quantity fails to keep the engine properly lubricated, exposing it to a higher risk of suffering irreparable damage.



# Dashboard display with "Comfort" version

Figure (A) shows the display when the oil level is at the maximum level.

Figure (B) shows the display when the oil level is at the minimum level.

**NOTE** In the figures, **(c)** refers to the head of the "oil level" in the languages available on the instrument panel.

In addition to showing the maximum and minimum levels, the dashboard display also provides information on the intermediate levels. The table lists all the oil levels along with descriptions of them and the action that the driver must take when each one is shown.
INDICATION OF ENGINE OIL LEVEL ON DISPLAY	ACTION THAT THE DRIVER MUST TAKE	
	Do not top up the oil.	
	Do not top up the oil. Level correct	
	Oil level decreasing	
	Warning: Engine oil level low	
	<ul> <li>Schedule engine oil top-up. The oil level must be topped up immediately if long journeys are planned with:</li> <li>I,5 L (approx.) for FIC engines.</li> <li>I L (approx.) for FIA engines with dipstick with yellow eyelet terminal.</li> <li>2 L (approx.) for FIA engines with dipstick with green eyelet terminal.</li> </ul>	
	Warning: Minimum engine oil level reached!	
	<ul> <li>I he engine oil must be topped up with:</li> <li>I,5 L — 2 L for FIC engines</li> <li>I L — I,5 L for FIA engines with dipstick with yellow eyelet terminal.</li> <li>2 L — 2,5 L for FIA engines with dipstick with green eyelet terminal.</li> </ul>	

INDICATION OF ENGINE OIL LEVEL ON DISPLAY	ACTION THAT THE DRIVER MUST TAKE
MIN OOO MAX *Engine oil level indicator on	<ul> <li>Warning: Engine oil below minimum level!</li> <li>Extremely high risk of damaging the engine!</li> <li>To return to the optimal level and continue driving without engine problems, before using the vehicle the engine oil MUST be topped up with:</li> <li>2,5 L for FIC engines.</li> <li>1,5 L for FIA engines with dipstick with yellow eyelet terminal.</li> <li>2,5 L for FIA engines with dipstick with green eyelet terminal.</li> </ul>
MIN O O O MAX *Engine oil level indicator on	<ul> <li>Warning: Engine oil below minimum level!</li> <li>Extremely high risk of damaging the engine!</li> <li>To return to the optimal level and continue driving without engine problems, before using the vehicle the engine oil MUST be topped up with:</li> <li>2,5 L for FIC engines.</li> <li>1,5 L for FIA engines with dipstick with yellow eyelet terminal.</li> <li>2,5 L for FIA engines with dipstick with green eyelet terminal.</li> </ul>

**NOTE** \*The engine oil level indicator light is only present on FIA engines

**NOTE** After topping up the oil, wait at least **20 min** with the engine switched off before checking the oil level with a dipstick. If the dipstick does not show the maximum level, add more oil and check the level again.



**Dashboard display with "TFT" version** Figure **(A)** shows the display when the oil level is at the maximum level.

# Start-up and driving 329

Figure **(B)** shows the display when the oil level is at the minimum level.

**NOTE** In the figures, **(c)** refers to the head of the "oil level" in the languages available on the instrument panel.

In addition to showing the maximum and minimum levels, the dashboard display also provides information on the intermediate levels. The table lists all the oil levels along with descriptions of them and the action that the driver must take when each one is shown.





INDICATION OF ENGINE OIL LEVEL ON DISPLAY	ACTION THAT THE DRIVER MUST TAKE
0 50 100 <b>****</b> %	<ul> <li>Warning: Minimum engine oil level reached!</li> <li>The engine oil must be topped up with:</li> <li>I,5 L — 2 L for FIC engines</li> <li>I L — I,5 L for FIA engines with dipstick with yellow eyelet terminal.</li> <li>2 L — 2,5 L for FIA engines with dipstick with green eyelet terminal.</li> </ul>
0 50 100 0 50 100 722754 *Engine oil level indicator on	<ul> <li>Warning: Engine oil below minimum level!</li> <li>Extremely high risk of damaging the engine!</li> <li>To return to the optimal level and continue driving without engine problems, before using the vehicle the engine oil MUST be topped up with:</li> <li>2,5 L for FIC engines.</li> <li>1,5 L for FIA engines with dipstick with yellow eyelet terminal.</li> <li>2,5 L for FIA engines with dipstick with green eyelet terminal.</li> </ul>

**NOTE** \*The engine oil level indicator light is only present on FIA engines.

**NOTE** After topping up the oil, wait at least **20 min** with the engine switched off before checking the oil level with a dipstick. If the dipstick does not show the maximum level, add more oil and check the level again.

#### Stopping the engine

To stop the engine turn the key back to STOP-0.



#### General risk, general prescriptions

Extract the key from the ignition block only when the vehicle is stationary. Never leave the vehicle without engaging the parking brake.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

**ATTENTION** On vehicles used to transport of people fitted with an outswinging door, do not operate this door unless the parking brake is engaged.

If inadvertently this is not the case, the control unit will switch off the engine immediately and prevent it from restarting for a duration of approximately 15 seconds. If an attempt is made to start the engine without waiting for this time to elapse, the control unit will again calculate this complete time interval (15 seconds) before going ahead with the correct start-up procedure. (Device present based on the version/market).





### Inertia safety switch

(If fitted for the models equipped with 'Start & Stop' system)

It is housed inside the engine compartment on the wall diving the compartment from the interior compartment (flame guard wall) in line with the driver's seat (left-hand drive vehicle): In the event of a crash, the Start & Stop system will be prevented from working by a particular component.

If the vehicle is able to start again, press the safety cut-off switch **(I)** to put the Start & Stop system back into operation.

#### Start & Stop

#### Introduction

This system automatically stops the engine each time the vehicle has stopped (e.g.: at a traffic light) and restarts it when the driver wants to restart driving. By reducing the running time of the engine at low idle speed, the Start & Stop device increases efficiency by reducing consumption, harmful gaseous emissions and acoustic pollution. The system is always active when the vehicle is switched on.

#### Operating mode and engine stop

With the vehicle stationary, the engine will stop with the gear in neutral and the clutch pedal completely released.

With an automatic gearbox and when the vehicle is stationary, the engine stops with the brake pedal pressed.

**NOTE** Stopping the engine is only permitted after exceeding a speed of approx. 10 km/h to prevent repeated engine stops when driving at a slow speed.

The engine stop is indicated by the (A) indicator light on the dashboard switching on.



# Engine restart mode

To restart the engine, completely press down the clutch pedal. With an automatic gearbox, release the brake pedal to start the engine up again

Manual deactivation of the system To manually deactivate the system, press the button **(I)** located on the central dashboard.

# Conditions when the engine does not stop

To guarantee the requirements of comfort, limiting polluting emissions and for reasons of safety, the engine will not turn off even if the device is active. These conditions include:

- Engine still cold.
- Particularly cold external temperature, when the designated indication is included.
- battery not sufficiently charged.
- Heated rear window activated.
- Electronically activate heated rear-view mirrors.
- Windscreen wiper operating at maximum speed.
- Particular filter (DPF) regeneration in progress.
- Driver's door not closed.
- Driver's seat belt not fastened.
- Reverse gear engaged (for example, when parking).
- Automatic gearbox ratio engaged from 2nd to 8th gear.
- Automatic gearbox errors or overtemperature.

• With the power take-off (PTO) engaged from the Expansion Module or engine in PTO speed check status.

**ATTENTION** When Start & Stop is activated and a series of on/off cycles of the engine are performed with the ignition key without opening the driver's door, the system enters a mode in which the brake and clutch must be pressed or an engine key on/off cycle is required in order to start the engine.

#### **Restart conditions**

To guarantee the requirements of comfort, limiting polluting emissions and for reasons of safety, the driver may be requested via an informational message on the dashboard display to restart the engine.

For example, in the following cases:

- battery not sufficiently charged.
- Windscreen wiper operating at maximum speed.
- Reduced vacuum in the braking system, for example after repeatedly pressing down on the brake pedal.
- Engine stopped by the Start & Stop system for longer than approx. three minutes.

Attention! With an automatic gearbox, the engine can be restarted automatically without any action by the driver if the conditions indicated above are present or for example:

• Vehicle stationary and steering wheel turned by more than one complete turn to the right or left.

Vehicle stationary and equipped with Radar and Queue Assist:

- The Radar detects forward movement of the target vehicle
- Pressing the accelerator pedal.

**ATTENTION** If the engine is stopped by the Start & Stop system, the engine can be restarted automatically without any action by the driver if the vehicle is in movement, for example when driving on hills.

**NOTE** If the engine is turned off inadvertently, due to a sudden release of the clutch pedal with the gear engaged, if the Start & Stop system is active, the engine can be restarted by fully pressing down on the clutch pedal.

# Safety functions

If the engine is stopped by the Start & Stop system and the driver unfastens his seatbelt and opens the driver's door or passenger side door, the engine can only be restarted if the driver presses the brake and clutch pedal in sequence (keeping the brake pressed down). This condition is signalled to the driver by an informational message on the dashboard display. If the AEBS system is activated (namely the vehicle is equipped with Radar), the Start & Stop function will deactivate automatically.



#### **Operating irregularities**

In the case of malfunction, the Start & Stop system will deactivate. The driver will be informed of the fault by the warning light  $\Delta$  activating together with a message on the dashboard display.

In this case, contact the Service Network.

#### Vehicle inactivity

In cases of vehicle inactivity, pay particular attention when disconnecting the electrical power supply from the battery.

This procedure is carried out by disconnecting the connector (1) by pressing button (2) from the battery status monitoring sensor (3) installed on the negative battery pole (4). The sensor (3) must never be disconnected from the pole except in the case of replacing the battery.

**ATTENTION** when the connection is restored (1), check that the connector (1) is inserted as far as the end of travel (mechanical catch)

**ATTENTION** The original first equipment battery fitted on the vehicle is a battery with charging optimisation during braking phases. Always contact the Service Network when replacing the battery. Replace the battery with a battery of the same type and with the same specifications.

#### **Emergency start**

In the event of an emergency start with an auxiliary battery, never connect the negative cable (-) of the auxiliary battery to the negative pole (3) of the vehicle battery, but only to a designated ground point (follow the cable connection procedure described in the paragraph <u>490</u>

**ATTENTION** Before opening and lifting the engine bonnet, make sure that the engine is switched off and that the ignition switch is set STOP-0. Comply with what is specified on the plate applied near the front cross member. It is recommended to remove the engine ignition key when other people are in the vehicle.

**ATTENTION** The vehicle may only be left after removing the ignition key. During refuelling operations, make sure that the engine is turned off: the ignition switch must be set to STOP- 0. Also refer to what is specified in the 'Safety at service stations' paragraph in 'The driver's seat' chapter.

**ATTENTION** If climatic comfort is more important, the Start & Stop system can be disabled to permit continuous operation of the air conditioning system.





#### **Recharging the battery**

**ATTENTION** The description of the battery recharging procedure is provided for information purposes only. The Service Network is available for any information necessary for carrying out this procedure.

**NOTE** We recommend slow charging at a low amperage for about 24 hours.

**NOTE** Charging must be carried out with a maximum recharge current 1/20 of the normal capacity.

**NOTE** Charging of more than 24 hours or more aggressive charging could damage the battery.

Proceed as follows for recharging:

- Disconnect the connector (1) after pressing button (2), from the battery status monitoring sensor (3) installed on the negative battery pole (4).
- Connect the positive cable of the recharging device to the positive pole of the battery **(5)** and the negative cable to the sensor terminal **(6)**.
- Set the maximum charging voltage to **I5 V**
- Switch on the battery charger.
- When recharging is complete, turn off the recharging device.
- After disconnecting the recharging device, reconnect the connector (1) to the sensor (3).

Warning: when the connection is restored (1), check that the connector (1) is inserted as far as the end of travel (mechanical catch).

The sensor **(3)** must never be disconnected from the terminal except when replacing the battery or removing it from the battery housing.

When the sensor (3) is disconnected, the stored battery data will be temporarily lost. When reconnected, the sensor will begin a phase of self-configuration. This procedure analyses the battery when it is in use and in standby mode, and therefore could take some days if the vehicle is only used occasionally. During this phase, the Start & Stop function (if fitted on the vehicle) may not be available.



#### Run lock

Where permitted with certain equipment specifications, the device allows the engine to be kept running while the vehicle is stationary without the key in the pawl.

#### Activation procedure

- Execute start engine.
- Enable the "Run lock" by pressing the relevant button (1) on the dashboard.
- Turn the engine ignition key, moving the ignition switch to the "STOP-0" position. In this status the engine will remain switched on and the "Run lock" will therefore stay enabled.

**NOTE** In this status the centralised locking system can be remote controlled (do not use the button on the dashboard) and the doors can be opened/closed.

#### **Activation requirements**

The "Run lock" can only be enabled if the following requirements are met (manual gearbox) when button **(I)** is pressed:

- The vehicle's gearbox is in position "N" (Neutral). Vehicle with automatic gearbox in position "P" (Parking) or "N" (Neutral).
- The parking brake is engaged (this simply requires moving the lever on the floor).
- The vehicle is stationary with a speed of **0 km/h**.

#### **Turning off**

The vehicle will deactivate the "Run-lock" (vehicle key removed from the ignition switch pawl) if one of the following conditions is detected:

- The parking brake is disengaged (lever on floor fully down).
- Pressure on the clutch pedal (vehicles with manual gearboxes).
- Gearbox set to "P" / "N" in "D" or "R" (with automatic gearbox).
- Vehicle speed greater than **0 km/h**.
- The function is switched off via button (1).

#### **OBW – On Board Weight**

#### **General information**

The OBW system, if present on the vehicle, is able to estimate the vehicle's load (in tons). This information is available on the specific page (Vehicle info), in the digital display menu on the dashboard and by using the buttons on the steering wheel.

**ATTENTION** The information can be sent directly to the authorities via the chrono-tachograph (if installed on the vehicle).

**ATTENTION** Please refer to the user manual provided by the Manufacturer of the chrono-tachograph for information on its use.

#### Operation

The vehicle estimates the load dynamically, for this reason the information will be available after driving for at least **20 min**.

To ensure the best weight estimate is provided, we recommend using a dynamic driving style, alternating prolonged accelerations with gear changes.





#### **Electric power-assisted steering**

The electric power steering system reduces the load on the steering wheel and consequently the effort the driver must exert in order to steer: It works with the engine switched on. When the vehicle is loaded, the servo assistance is increased as the effort applied to the steering increases in order to reduce the effect of the vehicle's load on the driver. The servo assistance is decreased as the speed increases in order to adjust the responsiveness of the system.

#### City function Enabling/disabling the City function (where available)

To enable the function, press the button **(1)** on the dashboard. Activation of the function is indicated by the LED **(2)** integrated into the button. The 'City' function reduces the effort required to turn the steering wheel, thereby facilitating parking manoeuvres: enabling the function is particularly useful when driving in urban centres.

**NOTE** In some situations, such as repeated cornering from stationary on hot days, the power steering may overheat and not work as well as it should. In this instance, an indicator light on the dashboard comes on and a relevant message appears.

**NOTE** In the event of reduced assistance, the Lane Keeping Assistant function is disabled.

#### Indicators for the driver

In the event of malfunctioning, the driver will see the following indicator lights:

FAULT	WARNING LIGHT
Serious fault with the EPS system	
EPS fault (vehicles with TFT display)	
EPS fault (vehicles with Comfort display)	Myellow



Risk of accident

If the protective cowling breaks, it is possible that water could penetrate. At low temperatures this water would freeze which could cause driving to lock. Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

**NOTE** If there is ice when the ignition is switched on, the 'Serious fault with the EPS' indicator light comes on, the message 'possible freezing of the EPS' appears and the relative acoustic signal is sounded.



#### Risk of accident

With ice present and when travelling at speeds exceeding 10 km/h, the "EPS Critical fault" indicator light is displayed accompanied by an acoustic indicator. The power steering begins to vibrate to delay the freezing of the water, vehicle speed is limited. Stop in a suitable area and contact the Service Network.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle



SV149



#### Anti-Lock Braking System "ABS"

EBD - Electronic Brake – force Distribution. Electronic brake force distribution system

**ATTENTION** A breakdown of the ABS - EBD device modifies the braking behaviour of the vehicle. Contact the Service Network as soon as possible, and drive with extreme caution.

Comply with the following:

- During the braking action, the brake pedal may be subjected to light pulsations due to the ABS system.
- When the ABS is activated, pulsations are felt on the brake pedal, do not release the pressure but keep the pedal fully pressed down; this way the vehicle will stop in the shortest possible distance, compatibly with the road conditions.
- The performance of the system, in terms of active safety, must not lead the driver to take pointless or unnecessary risks.
- Driving must in any case take into account the weather conditions, visibility and traffic.
- Maximum possible deceleration in any case always depends on the grip between the tyres and road surface. Bear in mind that in the event of snow or ice, the grip is greatly reduced and therefore, in these conditions, stopping distances remain high even with the ABS system.

• The switching on of the ABS warning lights + (1) warning light with the engine running and of the EBD fault message, indicates a fault in the system with the failure of both the ABS and EBD functions. In this case, hard braking can lock the wheels, with risk of the vehicle skidding. If only the ABS warning light turns on, the EBD can continue to function, while the ABS function is lost. In all cases, drive the vehicle, avoiding sudden braking, to the nearest Service Network point for a system check-up.







SV149

SV150

#### ABS and ESP

(if together with automatic gearbox)

In addition to the typical brake control functions, these systems make it possible to inhibit shifting to a higher gear in a curve.

The switching on of the ABS warning lights + (1) warning light with the engine running and of the EBD fault message, indicates a fault in the system with the failure of both the ABS and EBD functions.

The ABS warning light on fixed signals a system failure; the ABS warning light on fixed together with the **(I)** warning light and the EBD failure message indicates an EBD system failure.

**ATTENTION** The application of just some of the special camper fittings could have contributed to the downgrading of the ESP system to ASR + Hill Holder + ABS + EBD + MSR + LAC. Please contact the IVECO Service Network for information.

**ATTENTION** Downgrading from the ESP system to ASR + Hill Holder + ABS + EBD + MSR + LAC leads to the complete deactivation of vehicle stability control (ESP) with the driver subsequently losing all stability control assistance.

#### VEHICLES WITH REAR DIFFERENTIAL LOCK:

• In some road surface conditions, the simultaneous application of the brakes and the differential lock could make the vehicle less stable compared to when the brakes are applied without the differential lock, even when there is an ABS system.

• The rear differential lock should only be used in cases of real need on straight stretches of road and at speeds of less than **I5 km/h**. Using this device improperly can compromise the handling of the vehicle and cause mechanical damage to it.

• In some road surface conditions, applying the brakes and differential lock at the same time could decrease the vehicle's stability even with ABS or ESP system.

• In some road surface conditions, engaging the differential lock could compromise the operation of the ESP system and therefore vehicle handling.

The differential lock device does not cut out automatically: follow the instructions to disengage it. To restore normal operation, stop the vehicle and release the button.
If lock fails to disengage immediately when releasing the relevant button, vary the driving

• If lock fails to disengage immediately when releasing the relevant button, vary the driving direction to eliminate any stress. Make sure that the differential lock has disengaged correctly before driving off again.

#### ESP

Electronic system for stability control

The system analyses the trajectory set by the driver, via the signal of the steering angle sensor, with the actual one followed by the vehicle via the yaw sensor, the accelerometers and the wheel speed sensors.

If the vehicle loses stability, the system acts by braking the single wheels and controlling the engine, reducing its speed. In short we have the following functions:

- ASR: traction control.
- ESP: stability control
- Hill Holder: uphill start assistance.
- HBA: increase in braking pressure in the case of emergency braking.
- LAC: adaptive braking control based on load distribution.
- TSM: adjustment of the ESPcontrol functions if a trailer is connected to dampen any swaying.
- HRB: increase in braking force on the rear axle in the case of emergency braking.
- HFC: recognition and compensation of the loss of braking performance due to brake overheating.
- RMI & ROM: vehicle rolling control in the case of emergency steering.

Correct action by the ESP system is ensured by continual checks on the vehicle operating data. If there are errors that can make the ESP functions no longer available, operation of the ABS system and electronic braking distribution is in no way impaired. However, in this case, the relative **(1)** indicator light signals the fault and the vehicle must then be taken to the Service Network as soon as possible.

The ESP system provides the driver with an aid, in the event of losing vehicle stability, but it does not ensure full control in all conditions. The effectiveness of the aid provided by the ESP system depends on the conditions in which it has to operate, for example, the conditions of the road surface, tyres, braking system, suspension, etc.



General risk, general prescriptions

The presence of safety systems (ABS, ESP, ecc. ) on board the vehicle does not relieve the driver of the responsibility of driving carefully. The driver is the only one responsible for the way the vehicle is driven.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle



**ATTENTION** For all vehicles and particularly for those equipped with ESP it is not permitted to make any changes to the vehicle equipment, suspensions, wheelbase, gearbox, engine, steering system, electronic control unit parameters, sensors and their positioning, or the ESP modulator connection pipes.



#### General risk, general prescriptions

The use of tyres not foreseen in the vehicle's registration document is not only prohibited by law, but could also have a negative impact on the proper operation of the ESP and the ABS systems. Partial or complete non observance of these prescriptions can lead to serious

Partial or complete non observance of these prescriptions can lead to serious damages to the vehicle



#### General prescriptions

For vehicles equipped with ESP it is recommended to use the same type of tyres on the front and rear axle: it is therefore recommended not to combine winter tyres on the rear axle and summer tyres on the front axle.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle



#### General risk, general prescriptions

To fit out vehicles equipped with ESP, make sure you have the specific "Directives for converting and fitting out vehicles" for vehicles with this device. Partial or complete non observance of these prescriptions can lead to serious

damages to the vehicle

# CWA System (Crosswind)

This function allows the vehicle to stabilise when there is sudden gust of wind from the side of the vehicle and perpendicular to it. This function reduces the lateral deviation of the vehicle, controlling its trajectory through intervention of the ESP system.

**ATTENTION** Presence of the CWA system does not relieve the driver of the requirement to drive safely, in full observance of the limits set by the type of road, the Highway Code and without placing himself, the passengers or other persons at risk.



General risk, general prescriptions

The presence of safety systems (ABS, ESP, ecc. ) on board the vehicle does not relieve the driver of the responsibility of driving carefully. The driver is the only one responsible for the way the vehicle is driven.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

#### HDC SYSTEM (Hill Descent Control)

This function allows the cruising sped to be controlled when driving downhill at low speed thereby letting the driver drive down steep inclines slowly and safely.

#### Selecting the system

The function is selected by pressing the button indicated in the figure. Activation of the LED integrated into the button indicates that the system is engaged when the following conditions are met:

- electric parking brake (EPB) disengaged;
- vehicle speed below 30 km/h;
- driver's side door closed.

Activation of the symbol shown in the figure on the dashboard display indicates that the system is enabled.

**ATTENTION** Do not use this function with the manual gearbox in neutral without any gear engaged. For vehicles with the Hi-Matic gearbox, the gearbox itself will be in control of ensuring the most suitable transmission ratio.

**ATTENTION** The braking system can overheat if the system is used for extended periods of time. In this case the HDC system (if active) will be gradually deactivated after having provided the driver with suitable warnings (deactivation of the LED on the button); it will only be possible to reactivate it when the temperature of the brakes has dropped sufficiently. The distance that can be travelled will depend on the temperature of the brakes and therefore the incline, the load and vehicle speed.

**ATTENTION** Presence of the HDC system does not in any way relieve the driver of the obligation to drive carefully, in full observance of the limits set by the type of road and the regulations of the Highway Code, without putting the driver, passengers or any other person at risk.

#### System activation

Once enabled the HDC system will automatically activate if the vehicle is driven downhill on a suitable incline.



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As the vehicle begins to travel downhill, the driver will act normally on the brake pedal. The required speed is then set by releasing the brake pedal. This speed is maintained until the next action on the brake pedal or accelerator pedal. When vehicle speed exceeds **30 km/h**, the function is deactivated and the LED on the button deactivates.

The driver can resume control of the vehicle at any time by acting on the brake pedal or the accelerator pedal.

#### Turning off the system

The HDC system is deactivated but remains available if one to the following conditions occurs:

• the vehicle is travelling downhill on an incline which is less than the intervention threshold of the system, the vehicle is travelling on a flat road or if it travelling uphill.

• The automatic gearbox is set to P (Park).

#### Disabling the system

The system is deactivated and disabled if one of the following conditions occurs:

- the driver acts on the button on the dashboard;
- the electric parking brake (EPB) is engaged;
- driver's side door is opened;
- the threshold speed **30 km/h** is exceeded

List of symbols on the dashboard

SYMBOL	MEANING	COLOUR
() () ()	HDC system active	Green
() () ()	HDC system selected	White
5 (A)	HDC system fault	amber





### Lane Departure Warning System (LDWS)

The LDWS (Lane Departure Warning System) warns the inattentive or tired driver of the imminent involuntary departure of the vehicle from the lane, signalling the crossing of the lines that mark off the driving lane.

This system uses computer vision technology and is based on the detection of the vehicle position in relation to the horizontal road marking limits by a camera/sensor **(I)** in order to ensure the vehicle remains inside the lane.

The camera is a fixed unit located on the top part of the windscreen.

When both lane limits are detected and the vehicle crosses one of these lanes without the consent of the driver (turn indicator not on), the driver is alerted by an alarm and a notification on the dashboard, so that they can intervene to ensure the vehicle remains inside the lane.

If crossing onto a lane on the left or right side of the road, the driver is alerted by an audible signal and an indication on the dashboard.

#### Acoustic signal

The signal involves muting the factory-fitted radio (if present) and the simultaneous activation of a dashboard buzzer.

# **Dashboard indications**

Dashboard indications signal when:

• Lane signs are detected, the system goes to stand-by, the system is ready to warn the driver but there is no detection of the vehicle leaving the lane imminently.

Crossing horizontal road markings.

The horizontal road markings have been crossed and a lane departure has been detected. This is indicated by activation of the symbol in the figure on the instrument panel.

### Activation of the system for vehicles with the "COMFORT" instrument panel

To activate:

- Press the button (2) on the instrument panel.
- The LED (3) in the button will activate indicating that the LDWS function is active.







# Activation of the system for vehicles with the "TFT" instrument panel

From the designated page ADAS menù available in the menu of the multifunctional digital display on the dashboard, navigating using the buttons on the steering wheel.

# Once Lane assist config has been selected, the system activation page can be accessed: **Activation / deactivation via the button**

LDW can be activated or deactivated using the button on the central dashboard.

To activate:

- Press the button (2) on the instrument panel.
- After activation, the LED **(3)** on the button turns grey and the following message is displayed: "LDW enabled". The LDW warning light on the dashboard will disappear.
- The LDW system is activated.

To deactivate:

- Press the button (2) on the instrument panel.
- After deactivation, the LED on the button will turn yellow and the **(3)**LDW warning light on the instrument panel will appear.
- The LDW system is deactivated.
• LDW: automatic engagement, checking the item on the page of the display (black circle).

**NOTE** The menu does not activate the system but enables deactivation via the button on the dashboard. The dashboard displays two menus: one is for vehicles with the LDW system only, the other is for vehicles with LDW + PLKA.

When the engine is started and the ignition switch is set to MAR - I, irrespective of the previous status (on or off), the system carries out an initialisation lasting approximately four seconds and maintains the insertion status of the previous shutdown.

Once initialisation is complete, the LDWS system only informs the driver if vehicle speed has exceeded **60 km/h**.

If the vehicle has exceeded **60 km/h**, the system will continue to warn the driver until the speed falls below **55 km/h**.

If the speed falls below **55 km/h** there will be no more warnings until vehicle speed has exceeded **60 km/h**.

The warning will be possible again until the vehicle speed falls below **55 km/h**. The system can be deactivated by acting on the dashboard display to allow the driver full control.

Other activation conditions include:

- Vehicle speed is between 60 km/h (37 mph) and maximum vehicle speed.
- The lane delimitation lines are perfectly visible on both sides or at least on one side (only on the side where the limit is detected).
- Visibility conditions are suitable.
- The road is straight or has wide bends.
- Sufficient distance is maintained from the vehicle in front which allows the road markings to be seen by the system.
- The turn indicator (indicating lane departure) is not activates and neither are the hazard warning lights.

If the turn indicator is engaged, it will suppress the LDW warning on the side on which the turn indicator is active. It will remain active if the horizontal road markings are exceeded on the side opposite to the one where the turn indicator is active.

For example: when the left turn indicator is engaged, if the left hand horizontal road markings of the lane in which the vehicle is travelling are crossed, no warning signal will be given.



Vice versa, the system will warn the driver if the right horizontal road markings of the lane in which the vehicle is travelling are crossed.

**NOTE** LDWS (Lane Departure Warning System) recognises intentional lane changes by monitoring the use of the turn indicators.

**NOTE** The windscreen must be clean to allow the information regarding the lane detected by the camera to be received.

**NOTE** It is recommended that the LDWS (Lane Departure Warning System) system is used when driving on roads with a high traffic flow, such as motorways.

**NOTE** By activating the hazard lights (hazard), warning of any deviation from the current lane will be suppressed when crossing the horizontal road markings of both sides of the lane in which the vehicle is travelling.

**NOTE** In the event of a system error which causes a malfunction of the LDWS, a warning signal will be provided on the vehicle dashboard.



General risk, general prescriptions

While the Lane Departure Warning system is extremely effective in preventing accidents resulting from tiredness or distractions, it is still only an aid to driving which does not regulate or correct the direction of the vehicle. The driver is fully responsible for how the vehicle is driven Failure to comply with these prescriptions can result in the risk of serious injury and

serious damages to the vehicle

Furthermore, also in compliance with what is indicated by the Highway Code, pauses are recommended while driving in order to stretch your legs and freshen up. Furthermore, the driver is notified of the status of system operation (on/off) by the message ('LDW engaged'/'LDW disengaged') in the designated area of the dashboard.

### System fault / camera view blocked

In the presence of a serious breakdown or a stuck indicator sensor, the driver is warned with the appearance of a message, in the appropriate area of the dashboard.

Display message area, message: LDW serious fault'

LDW serious fault' symbol.

Display message area, message: LDW not available.

## Warning signal on the dashboard of camera view blocked

**NOTE** The camera might have limited functions or fail to operate due to weather conditions, such as heavy rain, hail, thick fog or heavy snow, layers of ice on the windscreen.

**NOTE** Functionality of the camera can also be compromised by dust, condensation, dirt or ice on the windscreen, traffic conditions (e.g.: Vehicles advancing alongside your vehicle, vehicles crossing your path or in the opposite direction on the same route, bend with small bending radius), road surface and driving conditions. Therefore make sure that the windscreen is always clean. Use specific cleaning products and clean cloths to avoid scratching the windscreen. Functionality of the camera can be limited or absent in certain driving, traffic and road surface conditions.

**NOTE** Protruding loads on the vehicle's roof may prevent the camera from working correctly. Before setting off make sure to arrange the load so that the camera's field of view is not obstructed.

**NOTE** The windscreen needs to be replaced if it presents scratches, chips or is broken. This must only be carried out by a Service Network workshop.

**NOTE** Do not replace the windscreen on your own, risk of malfunction! You are advised to replace the windscreen if the camera zone is damaged.

**NOTE** Never tamper with or carry out any interventions on the camera. Never tamper with the camera cover inside the vehicle. If there is a fault, contact a Service Network workshop immediately.

**NOTE** Do not cover the camera's field of view with tape or other objects. Make sure to also pay attention to objects on the vehicle's bonnet (e.g.: Layer of snow) and make sure they do not interfere with the camera.

### LDWS system calibration

The system does not require any calibration during the normal life cycle of the vehicle. However, new calibration may be required if significant modifications are made to the vehicle which could modify the height of the camera.

By way of example, these modifications could include:

- Modifying and replacing suspensions with others which are different from those indicated for the type of vehicle.
- · Modifications to the wheelbase of the vehicle.
- Replacing the tyres with others which have different measurements compared to the original tyres.
- Replacing a shattered windscreen.

Operators are also reminded that any modification to the vehicle must be carried out by a Service Network workshop.

## PLKA (proactive assistance system for maintaining lane)

### **General information**

The PLKA system is an extension of Lane Departure Warning and monitors the area in front of the vehicle by means of a camera **(1)** at the top of the windscreen.

PLKA is a reactive system which helps the driver keep the vehicle in the required lane, detecting the road markings delimiting the lane.

The driver is notified by a visual indicator on the dashboard. In this case the driver is required to act on the steering wheel, applying a rotating force to correct the trajectory of the vehicle. If the driver does not act appropriately on the steering wheel and the vehicle continues to move outside of the horizontal lane markings, the LDWS system will provide another visual and acoustic indicator to warn the driver that the vehicle must go back into the correct lane. In this case the driver is asked to act on the steering wheel through a forced rotation applied to the steering wheel.

**NOTE** The driver can cancel the PLKA driving aid at any time, by applying a slight counterforce on the steering wheel even when the turn indicators are not activated. In this case the LDWS (Lane Departure Warning System) warnings will activate.

**NOTE** When a trailer is connected, the PLKA system disables automatically.



**ATTENTION** The PLKA function is a driving assistance function and might not always clearly recognise the road markings. In this case, PLKA can: provide an unnecessary intervention/warning; or not provide any intervention/warning.

The system does not relieve the driver of the responsibility of driving carefully. The driver is the only person responsible for ensuring that the vehicle is driven safely, and in any case, must pay careful attention while driving, observe the road markings (especially horizontal markings) and the surrounding environment. Failure to observe these indications can cause serious personal injury and damage to the vehicle.

### System limitation

The PLKA system might not operate correctly or may fail completely if the vehicle is loaded incorrectly.

If you are not able to adapt your style of driving, the PLKA system cannot reduce the risk of accidents nor ignore the laws of physics.

The PLKA system is not able to take into consideration the conditions of the road, weather or traffic.

The PLKA system is to be considered a driving aid. You are always responsible for maintaining the distance of the vehicle ahead, vehicle speed, suitable braking times and remaining in your lane.

**ATTENTION** The PLKA system will not keep the vehicle in its lane in all driving conditions.

The system might not operate correctly in the following conditions:

- poor visibility due to insufficient road lighting or due to rain, surface spray, fog or snow.
- If the windscreen is dirty, fogged up or covered by decals (by example) in the operating range of the camera.
- Camera glare for example caused by on-coming traffic, the sun, or reflections from a wet road surface.
- If the road markings are not clearly visible, for example in areas where work is being carried out.
- If the road markings are worn, dark or covered by snow or dirt.
- The road markings between lanes change rapidly, for example the lanes merge, intersect or diverge.

- There is not enough distance between your vehicle and the vehicle in front and therefore the road markings cannot be detected.The road is narrow and winding.In conditions of variable shadows.





# System activation / deactivation

Enabling / disabling the system from the dashboard. The PLKA system can be enabled or disabled from the driving assistance menu on the dashboard.

To enable it, press the button **(8)** on the left side of the steering wheel.

then select Lane Assist config and set LDW + PLKA.

# Start-up and driving 369

The PLKA can be adapted to personal driving style using the Lane assist setting, which can be accessed using the Driving Assistance menu.

The system has three settings for "Sensitivity" and "Force". The system will remember the last "Lane assistance settings" (Sensitivity and resistance) selected on deactivation of the PLKA and will restore the last setting the next time the PLKA is activated.

**NOTE** Depending on the vehicle type, there might be a fixed setting for "Sensitivity" and "Force" which cannot be adjusted by the driver. In this case, the 'Lane Assisting' option will be missing from the 'ADAS' menu.

**NOTE** IN FLEET MODE (option valid for vehicle belonging to fleets). the settings are pre-set and cannot be modified by the driver.





### Activation / deactivation via the button

If enabled via the ADAS menu, the PLKA system can be activated or deactivated using the button on the central console.

To activate:

I. Press the button (2) on the instrument panel.

2. When activated, the LED (3) on the button will turn grey and a message is displayed: "Config. Active: LDW + PLKA" The instrument panel indicator will appear on the display The

symbol indicator will appear on the and will be either white or green.

3. The PLKA system is activated.

To deactivate:

I. Press the button (2) figure on the instrument panel.

2. After deactivation, the LED (3) on the button will turn yellow and the indicator symbol

on the instrument panel will disappear.

3. The PLKA system is deactivated.

## Activation conditions of the PLKA system

When activated, the PLKA system is able to assist the driver while driving if the following conditions are met:

- The driver always keeps at least one hand on the steering wheel.
- Vehicle speed exceeds 60 km/h (37 mph).
- A lane delimiting line is clearly visible on both sides.
- Lane width is appropriate (not too narrow / not too wide).
- Visibility conditions are sufficient.
- The road is straight or has wide bends.
- An adequate distance is maintained from the vehicle in front.
- The turn indicator (indicating lane departure) is not active.
- No trailer is connected to the vehicle.

If these conditions are met, the system is able to assist the driver and the green indicator

symbol intrument panel activates.

**ATTENTION** A trailer connected to a vehicle will significantly affect vehicle dynamics. For this reason, adequate support of the PLKA system is not ensured and therefore use of the PLKA function is not recommended. It is recommended that the driver deactivates the PLKA function when the vehicle is used with trailer connected. The driver will be fully responsible for failure to observe the indications below.

# **PLKA** system intervention

Once active and ready for operation, the PLKA system acts on the steering wheel and attempts to keep the vehicle in its lane provided that system constraints are observed.

If the PLKA intervenes, the green indicator symbol in the instrument panel turns yellow.

PLKA system intervention is suppressed if:

- a driving safety system such as ABS, AEBS or ESP intervenes.
- The turn indicator has been set and a lane change in that direction has been detected. In this case, the warnings are suppressed for a certain period of time.
- The emergency lights are activated
- Rapid acceleration.
- Heavy braking.
- Abrupt steering (for example, to avoid an obstacle or change lanes rapidly).



### System error

If there is a serious system fault, the driver is notified by a warning message "PLKA serious error" in the designated area of the instrument panel.

Furthermore, the yellow symbol *initial will activate indicting system error*.

**NOTE** In the event of a fault, the system is deactivated and a warning message appears on the instrument panel. If the error persists, even after the vehicle has been restarted, contact the Service Network. If the error has been resolved during the driving cycle, the indicator

symbol A disappears. To reactivate the function, the driver has to press the button (2) twice in the central control panel.

## Speed limiter (SPEED LIMITER-SL)

### Introduzione

This device allows the vehicle speed limit to be set to values which can be programmed by the driver.

It is possible to program the maximum speed with the vehicle stationary or travelling. The minimum programmable speed is **30 km/h**.

When the device is active vehicle speed will depend on the pressure on the accelerator pedal, until the programmed speed limit has been reached.

## **Device engagement**

To engage the device, press the button (1) on the steering wheel. **Buttons on the steering wheel** 

**NOTE** The figures show the steering wheel with a more complete description of the buttons. Refer to what is present on your vehicle.

The buttons on the steering wheel are valid for Cruise Control (CC) / Adaptive Cruise Control (ACC) and Queue Assist and allow actuation of the following functions:

- SET +: programming the speed limit (saving a higher speed value).
- SET -: programming the speed limit (saving a lower speed value).

**NOTE** Activation of the function results in deactivation of the following functions: Cruise Control (CC) / Adaptive Cruise Control (ACC) and Queue Assist.



## **Cruise Control - Speed Limit**

**NOTE** Operation of the Cruise Control function excludes operation of the Speed Limiter function.

## Automatic disengagement of the device

The device disengages automatically if there is a system fault. In this case, contact a Service Network workshop.

## Speed programmer (Cruise Control-CC)

Cruise Control maintains the required constant speed, and, if necessary, can also brake the vehicle in certain situations.

**NOTE** Cruise Control informs the driver of the status of the operation and the set speed.

**ATTENTION** When cruise control is managed by the radar, the radar might not detect the presence of vehicles travelling in the same direction.

**ATTENTION** The Cruise Control function does not replace the braking system of the vehicle.



Risk of injury:

The system does not control nor adjust the vehicle direction. - The driver is the only one responsible for driving the vehicle and must always maintain control over all vehicle functions, in particular the steering, accelerator and brakes. Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

**NOTE** The figures show the steering wheel with a more complete description of the buttons. Refer to what is present on your vehicle.

**NOTE** Do not heat the cold engine by increasing the engine rpm using the speed programmer lever. This action causes an error in the engine control unit.

This function can be used with a minimum speed request of **30 km/h** (up to the vehicle's maximum legal speed) on long, dry straight sections of road and with minimal gear change (e.g. Motorways). The device is not as useful on busy extra-urban roads. Do not use the device in cities.

**NOTE** When setting the speed of the function, always respect the speed limits of the road on which you are travelling.

**NOTE** Do not put the gearbox in neutral when driving with the device engaged.

**NOTE** Contact a Service Network workshop if the device is not working correctly or is faulty.

**NOTE** The electronic Cruise Control can be dangerous when the system is unable to maintain a constant speed. In certain conditions the speed can be excessive, with the risk of losing control of the vehicle and causing accidents.

#### Limited system function

**ATTENTION** The "Radar" will provide an Error status for all "Cruise" functions if it loses its functionality (for example, due to braking or engine problems, etc.). To reset the system, set the ignition switch to 'STOP-0' and then to 'MAR-1'. If the problem persists, contact the Service Network.

**ATTENTION** Cruise Control is not to be used in heavy traffic conditions on winding roads or on particularly demanding mountain roads (for example in the presence of tight bends, winding, icy, snow-clad, slippery roads, etc.) or in poor road grip conditions.

**NOTE** When Cruise Control is managed by the radar, the function can require the use of the brakes to maintain or reach the set speed. In the event of faulty brake lights (for example, if they are broken), the Cruise function (of the radar) might not be set.

### Activating the function

Press the button (1), shown in the figure, to activate the function. Activation is signalled to the driver by the white symbol on the dashboard display. If the 'Speed Limiter' is engaged, pressing the button (1) deactivates this function.

The function can be activated without taking into account the present movement conditions of the vehicle. To activate the function the driver simply needs to press the button **(1)**.

**ATTENTION** It is dangerous to leave the Cruise Control engaged when it is not being used. There is a risk of activating it accidentally and losing control of the vehicle due to an unexpected excessive speed.

## Activating the function

With the function activated, with the white symbol present but without any speed indication, pressing the SET + or SET - buttons activates the Cruise Control with the current speed of the vehicle. If the function is enabled with a cruising speed but not active, the indication will be white with the detected speed; in this case, pressing the RES button activates Cruise Control and the vehicle will maintain the set speed. If this speed is not the desired speed then press the SET + or SET - buttons.

In this case, the cruising speed is set after having pressed the RES button. The driver can then change the value.

When the vehicle has reached the required speed, when the accelerator is released the vehicle will change to the selected speed.

When the driver presses the accelerator pedal and the function is active with the set speed, the function is temporarily suspended as the driver has clearly signalled that they wish to take control of the vehicle (the symbol remains green).

The function takes control again when the driver releases the pedal within a certain amount of time and does not exceed the speed set above a certain threshold.

The system will then return the vehicle speed to that chosen by the driver.



If the driver presses the accelerator pedal for a certain amount of time or the vehicle speed is greater than the set value above a certain threshold, the functions deactivate, the symbol turns white.

On downhill stretches with the function active, it is possible that the vehicle speed increases slightly as regards to the saved speed.

When the driver requests activation of the function but the activation conditions are not met, a visual and audible warning informs the driver that the function is not available.

The system cannot be set:

- When the brake pedal is pressed.
- When the brakes have overheated.
- When the electric parking brake or hand brake are engaged.
- When the gear shift lever is in the P (park), R (reverse) or N (neutral) position (versions with automatic gearbox).

• When the gear shift lever is in the R (reverse), neutral or 1 st gear position (versions with manual gearbox).

• When the clutch is pressed (versions with manual gearbox).

• When the engine rpm exceeds the maximum threshold (versions with manual and automatic gearboxes) or below the minimum threshold (versions with manual gearbox only).

- When an ESC system intervention (or ABS, or other stability systems) are in operation or have just finished.
- When the AEBS system is performing an automatic braking intervention (where present).
- Interventions on the retarder.
- Driver's door and passenger door open.
- When the vehicle speed is not within the set speed range.
- When the service brakes are in operation.

**ATTENTION** Before pressing the SET + (or SET –) buttons the vehicle must travel at a constant speed on a flat surface.

**NOTE** The function saves the speed on downhill and uphill stretches of road. A slight variation in speed on slight uphill stretches of road is perfectly normal.

# **Recalling the speed**

**NOTE** Version with automatic gearbox (operational in Drive mode - automatic): Press the RES button and release.

**NOTE** For versions with manual gearboxes, before recalling the previously set speed, the vehicle speed must be near the same, before pressing the RES button and releasing it.

### Varying the speed Increasing the speed

Once the device is set, it is possible to increase the saved speed by pressing and holding the SET + button.

### Pressing the SET + button once

• the set speed increases by **I km/h**. Each time the button is pressed, there is an increase of **I km/h**.

## Pressing and holding the SET + button

• the speed increases in steps of **10 km/h** until the button is released. The set speed will be rounded up the next decimal value, for example: speed set **53 km/h** » **60 km/h** » **70 km/h**. The increase in the set speed is shown on the display.

### Decreasing the speed

Once the device is set it is possible to decrease the saved speed by pressing and holding the  $\mathsf{SET}-\mathsf{button}.$ 

### **Pressing the SET – button once**

• the set speed decreases by **I km/h**. Each time the button is pressed, there is a decrease of **I km/h**.

## Pressing and holding the SET - button









the speed decreases in steps of 10 km/h until the button is released. The set speed will be rounded down to the next decimal value, for example: speed set 53 km/h » 50 km/h »
40 km/h. The reduction in the set speed is shown on the display.

## **Recalling the speed**

Once the system has been cleared but not deactivated, simply press the RES button. The system will be set with the last saved speed before recalling the previously set speed.

**NOTE** The speed can only be recalled if the previously set speed has been deleted (green symbol  $\rightarrow$  white symbol).

# Turning the device off

Pressing the CANC button, the brake pedal or the clutch pedal (vehicles with manual gearbox) deactivates Cruise Control without clearing the saved speed. Cruise Control can also be deactivated if the electric parking brake (EPB) is activated.

## **Disabling the device**

The device is disengaged:

- By pressing the button (1).
- By pressing the 'Speed Limiter' button.
- By turning the ignition switch to 'STOP-0'.

### Working Engine Speed Demand

This function is used to change the default engine speed setting for the function 'engine speed control using the Cruise Control function controls'.

The activation sequence is as follows:

I. start the engine;

2. press and then release the clutch pedal;

3. press the RESUME button to activate the function: the engine speed will immediately reach the stored value;

4. the engine speed can be modified by pressing the SET+ and SET- buttons of the Cruise Control;

5. when the desired engine speed has been reached, press the RESUME button for at least one second to save the new speed.

**NOTE** The controls of the Cruise Control manage the Working Engine Speed Demand function when the vehicle is stationary or its speed is lower than a value that can vary between **I0 km/h** km/h and **20 km/h**km/h (based on the version), whereas they manage Cruise Control at higher speeds.

This function is used to manage the power take-off (PTO), but is also available if the vehicle is not equipped with PTO.





# ACC speed programmer - Adaptive Cruise Control (Automatic speed regulation system)

Adaptive Cruise Control (ACC) is an electronically controlled driver assistance system which combines the functionalities of Cruise Control with a distance control function from the vehicle in front.

Adaptive Cruise Control (ACC) uses radar (1) installed at the centre of the front bumper and a camera (2) positioned in the central section of the windscreen, at the top, to identify the presence of a vehicle in front travelling at a close distance.



General risk, general prescriptions

The presence of safety systems (ABS, EVSC, etc.) onboard does not relieve the driver of the responsibility of driving carefully. The driver is the only one responsible for the way the vehicle is driven.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

**ATTENTION** Always pay maximum attention when driving, so that you are always ready to act on the brakes when necessary.

**ATTENTION** The system is a driving aid: The driver must always pay full attention when driving. Driving is always the responsibility of the driver, who must always take into account traffic conditions in order to drive as safely as possible. The driver must always maintain a safe distance from the vehicle in front of them.

**ATTENTION** The Adaptive Cruise Control system is not to be used in heavy traffic conditions on winding roads or on particularly demanding mountain roads (for example in the presence of tight bends, winding, icy, snow-clad, slippery roads, etc.) or in conditions with poor road grip.

**ATTENTION** The device cannot react when there are pedestrians, oncoming vehicles travelling in the opposite direction, vehicles crossing the vehicle's path travelling in the same direction but slowly and stationary objects (for example: a broken down vehicle or a vehicle stuck in traffic). For this reason, you are advised against activating ACC in urban areas where there are more likely to be pedestrians, bicycles and motorbikes which the ACC system is not able to detect.

**ATTENTION** The driver must made fully aware that the ACC is not to be activated when the vehicle is fitted with a spare wheel.

**ATTENTION** The device is not able to take into consideration road, traffic or weather conditions or poor visibility (for example: fog).

**ATTENTION** The device will not always recognise complex driving conditions, which could cause it to make incorrect or non-existent evaluations on the safety distance to be maintained.

**ATTENTION** When ACC brakes and the speed of the vehicle fitted with ACC is lower than **30 km/h** (shown on the cluster), ACC is preselected as the speed range is no longer guaranteed. This means that the ACC will never be activated during stop periods, as below a certain speed, ACC is automatically deactivated.

**ATTENTION** The system might have limited functions or fail to operate due to weather conditions, such as heavy rain, hail, thick fog, heavy snow or ice or condensation on the windscreen.

**ATTENTION** The camera could have limited or no functionality if there is an accumulation of dust or dirt on the windscreen, therefore make sure that the windscreen is always kept clean. Use specific detergents to clean the windscreen and use clean cloths to ensure it is not scratched.

**ATTENTION** The camera must be recalibrated in its original position if the windscreen or component is repaired or replaced. In this case, contact a Service Network workshop.

**ATTENTION** Keep the field of view of the radar and camera free and clean (from mud, snow, etc.). If there is an accumulation of material (snow, ice, other material, etc.), radar operation and the respective functions could be compromised. If there is an excessive amount of accumulation, the yellow Radar symbol will appear on the instrument panel. The function will be unavailable if this symbol appears.

**ATTENTION** There is no limited functionality for ACC. If the radar and camera sensors are faulty, the function is not available.

**ATTENTION** The area of the bumper in front of the sensor must not be covered with stickers, auxiliary lights or any other object.

**ATTENTION** The functionality can be compromised by any structural modifications made to the vehicle, e.g. modification of the front axle, tyre change (e.g. use of the spare wheel, use of tyres with different dimensions, variation in geometric parameters) or a load larger than the vehicle's standard expected load.

**ATTENTION** Incorrect repairs carried out on the front of the vehicle (for example: Bumpers, chassis) may alter the position of the radar sensor thereby compromising its operation. Contact a Service Network workshop for any repairs of this type. **ATTENTION** Never tamper with or carry out any interventions on the radar sensor or the camera on the windscreen. In the sensor is faulty, please contact a Service Network workshop.

**ATTENTION** Do not wash the area below the bumper with pressurised water: In particular, make sure that the electrical connector of the system is not affected by water.

**ATTENTION** Pay attention when carrying out repairs or painting the area around the radar (plate which covers the sensor). In the event of head-on collisions the sensor may automatically deactivate and show that the function is faulty, due to misalignment. Driver information is displayed by an orange icon, see indication shown on cluster. Even if there is no warning of a malfunction, deactivate the system if there is the possibility that the radar has been altered (for example due to a head-on collision at low speed, such as when parking). In these cases, contact a Service Network workshop to have the radar realigned or replaced.

**ATTENTION** The system deactivates if the rear stop lights stop working.

**ATTENTION** You are advised to check the functionality of the vehicle's stop lights and those of the trailer, if present.

**NOTE** If a trailer is coupled to the vehicle, the driver is responsible for maintaining the trailer brake lights.

**NOTE** For correct operation, the field of view of the radar and the camera must not be obstructed.



**NOTE** For any type of vehicle maintenance operation the function must be clearly deactivated.

### Operation

Two operating modes are available:

• Cruise Control mode electronic button (2) to keep the vehicle at a constant preset speed. (the icon relating to Cruise Control is displayed on the instrument cluster).

• Adaptive Cruise Control mode button (1) to keep the vehicle at a constant speed as well as at a suitable distance from the vehicle in front, if detected.

Use the buttons on the steering wheel to change the operating mode.

The functions have a set activation order CC ACC.

Activating the highest function also means activating the lowest function.

Turning off of the currently activated or the lowest functions means all the functions are turned off.

The driver will be informed of the highest activated function, then that which was last chosen by the driver.

**NOTE** The figures show the buttons on the steering wheel in the most complete configuration. Refer to what is present on your vehicle.

# ADAPTIVE CRUISE CONTROL activation/deactivation Activation

Press and release the button (1) to activate the device.

When the driver presses the button (1) for the ACC the first time (just like the button (2) for CC), the symbol which appears on the display will be white when there is no speed. The symbol will turn green once the speed has been set (system set) and will show the cruising speed.

**ATTENTION** It is dangerous leaving the device activated when it is not being used: There is a risk of setting it accidentally and losing control of the vehicle due to an unexpected excessive speed.



## **Turning off**

To deactivate the device, press and release button (1) or (2).

# Setting the required speed

The device can be set with a speed between **30 km/h** (shown on instrument cluster) and the maximum speed available from the vehicle. These are speed values shown on the cluster. When the vehicle has reached the required speed, press and release the SET + or SET – button to set the vehicle speed to the current speed: The set speed appears on the display. No special intervention is required on the accelerator pedal to set the Cruise. In fact, even the speed can be set (activating ACC even without pressing the accelerator pedal). When a Cruise speed has been set, the ACC will be active.

The system cannot be set:

- When the brake pedal is pressed.
- When the brakes have overheated.
- When the electric parking brake or hand brake are engaged.
- $\bullet$  When the gear shift lever is in the P (park), R (reverse) or N (neutral) position (versions with automatic gearbox).
- When the gear shift lever is in the R (reverse), neutral or 1st gear position (versions with manual gearbox).
- When the clutch is pressed (versions with manual gearbox).
- When the service brakes are in operation.
- When the engine rpm exceeds the maximum threshold (versions with manual and automatic gearboxes) or below the minimum threshold (versions with manual gearbox only).
- When an ESC system intervention (or ABS, or other stability systems) are in operation or have just finished.
- When the AEBS system is performing an automatic braking intervention (where present).
- retarder interventions.
- Driver's door and passenger door open.
- When the vehicle speed is not within the set speed range.



8

**ATTENTION** The device does not deactivate when speeds exceeding the speed set on the dashboard are reached with the accelerator pedal depressed. When the driver presses the accelerator pedal and the function is active with the set speed, the function is temporarily suspended as the driver has clearly signalled that they wish to take control of the vehicle (the symbol remains green). The function takes control again when the driver releases the pedal within a certain amount of time and does not exceed the speed set above a certain threshold. The system will then return the vehicle speed to that chosen by the driver. If the driver presses the accelerator pedal for a certain amount of time or the vehicle speed is greater than the set value above a certain threshold, the functions deactivate, the symbol turns white.

### Automatic activation by CC and ACC.

If the CC is active (CC icon green and a speed has been set) and the driver requests activation of the ACC, by pressing the button **(1)**, the ACC system activates directly introducing the set speed and loading the distance with the default value of the two bars. The driver will see the green ACC icon with the set speed and default distance, two bars.

### Varying the speed Increasing the speed

Once the device is set, it is possible to increase the saved speed by pressing and holding the SET + button.

## Pressing the SET + button once

• the set speed increases by **I km/h**. Each time the button is pressed, there is an increase of **I km/h**.

## Pressing and holding the SET + button

• the speed increases in steps of **10 km/h** until the button is released. The set speed will be rounded up the next decimal value, for example: speed set **53 km/h** » **60 km/h** » **70 km/h**. The increase in the set speed is shown on the display.

### Decreasing the speed

Once the device is set it is possible to decrease the saved speed by pressing and holding the  ${\sf SET}-{\sf button}.$ 

### **Pressing the SET – button once**

• the set speed is reduced by **I km/h**. Each time the button is pressed, there is a decrease of **I km/h**.

## Pressing and holding the SET - button

the speed decreases in steps of 10 km/h until the button is released. The set speed will be rounded down to the next decimal value, for example: speed set 53 km/h » 50 km/h »
40 km/h. The reduction in the set speed is shown on the display.

## **Recalling the speed**

Once the system has been cleared but not deactivated, simply press the RES button. The system will be set with the last saved speed before recalling the previously set speed.

**NOTE** The speed can only be recalled if the previously set speed has been deleted (green symbol  $\rightarrow$  white symbol).



390



## Setting the distance between vehicles

The distance between your vehicle and the one in front can be set by choosing from the settings, I bar (short), 2 bars (average), 3 bars (maximum).

Distances from the vehicle in front are proportional to the speed.

When first used, the distance is set to two bars (average).

The distance value is saved if the function is suspended by the driver (symbol turns green)  $\rightarrow$  white symbol with set speed and distances).

The distance value is not saved during deactivation or when turning the function off. When it is next reactivated, the default value will always be 2.

## Adjusting the distance

To adjust the distance setting, press and release the button shown in the figure. Each time the button is pressed the distance setting changes according to the following logic: Medium  $\rightarrow$  Long  $\rightarrow$  Medium  $\rightarrow$  Short

If there are no vehicles in front, the set speed is maintained.

When a vehicle is detected by the sensor then vehicle will adapt its own speed to that of the detected vehicle and will maintain the distance based on the value chosen by the driver, the lower the number of bars the shorter the distance from the vehicle in front. If the vehicle in front accelerates, the system will accelerate to match the speed until the set speed is reached. If the speed of the vehicle in front is greater than the set speed, the system will not accelerate further.

The vehicle maintains the set distance until:

• The vehicle in front accelerates to a speed greater than the set speed;

• Adaptive Cruise Control.clears / deactivates.

**ATTENTION** Maximum braking action by the device is limited. The driver can in any case always brake manually if necessary.

**ATTENTION** The driver is responsible for making sure that there are no pedestrians, other vehicles or objects in the vehicle trajectory. Failure to observe these indications could cause accidents of personal injury.

**ATTENTION** It is the full responsibility of the driver to maintain a safe distance from the vehicle in front, fully observing highway regulations of the country in which you are driving.





# Turning off

- when you press the CANC button;
- when the conditions described during the following occur: "Setting the required speed";

• when the vehicle speed falls below the minimum set speed (e.g.: If there are vehicles that are travelling slowly).

These conditions result in cancellation of the set speed (symbol turns green)  $\rightarrow$  white symbol with set speed displayed and distances). In this case the driver can set the cruise speed with SET +/- o RES

If the ACC is working (green symbol) and the driver wishes to deactivate the function with the CANC, I or 2 button, the radar will request deceleration or braking to prevent uncomfortable dynamic behaviour. In this event the minimum speed is not controlled.

# Disabling

The device is deactivated and the speed is cancelled if:

- the Adaptive Cruise Control button (1) is pressed;
- the electronic Cruise Control button (2) is pressed;
- the Speed Limiter button is pressed;
- the ignition switch is set to 'STOP-0'.

**NOTE** The operations above result in direct deactivation of the function. In this case the driver is provided with no indication. Pressing the SET or RES buttons will have no effect.

# **Brake-only status**

When the ACC is in operation and the following occurs:

- First level AEBS intervention.
- Neutral engagement while travelling.
- Problem in the engine.
- Radar sensor obstructed.
- Stability interventions.

The function intervenes remaining active and ensuring braking actions if necessary to avoid a likely collision with the vehicle in front.

In this status the ACC only requires braking without maintaining the cruising speed and the driver is informed that he must take control of the vehicle.

Any intervention by the driver will deactivate the function.

**ATTENTION** During the Brake only status, if vehicle speed is **< 30 km/h**, the function will remain deactivated as the braking request has terminated and the conditions to remain in Brake-only for ACC are no longer met.

**ATTENTION** If the ACC system is not able to maintain the safety distance from the vehicle in front, a warning message will appear: "Safety distance not guaranteed" on the instrument panel. In this case, act immediately on the brake pedal to stop the vehicle if necessary.

### Limited system function

**ATTENTION** The "Radar" will provide an Error status for all "Cruise" functions if it loses its functionality (for example, due to braking or engine problems, etc.). To reset the system, set the ignition switch to 'STOP-0' and then to 'MAR-1'. If the problem persists, contact the Service Network.

## **Changing lanes**

**ATTENTION** The device might not detect the presence of a vehicle until it has fully entered the lane in which it is travelling. In this case, sufficient distance from the vehicle changing lanes might not be guaranteed: drivers must always pay careful attention and be ready to act on the brakes if necessary.

### Vehicle not aligned

**ATTENTION** The device might not detect a vehicle travelling in the same lane if it is not perfectly aligned in the same direction of travel, or a vehicle which is entering the lane from a parallel lane. In these cases, sufficient distance from the vehicles ahead cannot be guaranteed. A vehicle which is not in line can enter or exit the direction of travel, causing an unexpected braking or acceleration of the vehicle.

394



## **Queue Assist**

"Queue Assist" is a function associated with the "Adaptive Cruise Control (ACC)" speed programmer.

In addition to the "ACC" function, "Queue Assist" is able to stop the vehicle only when it detects another moving vehicle in front which decelerates until coming to a standstill. Once the vehicle has stopped, "Queue Assist" will keep the vehicle at a standstill and braked. If the driver does not intervene in any way after the vehicle has stopped, the "Queue Assist" function will remain active and the electric parking brake will automatically engage within a few minutes.

**ATTENTION** The system is not able to react in the presence of animals, pedestrians, bicycles or motorbikes. The driver must always be ready to react should animals, pedestrians, bicycles or motorbikes appear.

**ATTENTION** The system cannot respond in the presence of stationary vehicles (parked or broken down) and traffic jams.

"Queue Assist" uses radar "radar" (1) installed at the centre of the front bumper and a camera (2) positioned in the central section of the windscreen, at the top, to identify the presence of a vehicle in front travelling at a close distance.



General risk, general prescriptions

The presence of safety systems (ABS, ESP, ecc. ) on board the vehicle does not relieve the driver of the responsibility of driving carefully. The driver is the only one responsible for the way the vehicle is driven.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

# Enabling the Queue Assist function (white QA symbol active on the dashboard)

With the "QA" off ("QA OFF"), the "Queue Assist" function is enabled by acting on the "Queue Assist" button on the side of the right lever of the steering wheel, when:

• "Cruise Control (CC)" and "Adaptive Cruise Control (ACC)" functions both "OFF".

• "Cruise Control" function enabled (white "CC" symbol on the dashboard) and the "Adaptive Cruise Control (ACC)" function "OFF".

• "Cruise Control (CC)" and "Adaptive Cruise Control (ACC)" functions both enabled (white "CC" and "ACC" symbols on the dashboard).

**ATTENTION** When the "Queue Assist" function is enabled, it will not be able to control the vehicle and will not be able to request acceleration or braking actions. The driver will be fully responsible for vehicle control. Once the function is activated, it will be possible to modify the set distance using the designated key. The distance set will be maintained if the function is activated. The activation and deactivation stages do not modify the distance value.

# $\label{eq:control} \mbox{ Activation of the Queue Assist with Cruise Control and Adaptive Cruise Control functions not active }$

With:

- "Cruise Control (CC)" and "Adaptive Cruise Control (ACC)" functions both "OFF".
- "Cruise Control" function enabled (white "CC" symbol on the dashboard) and the "Adaptive Cruise Control (ACC)" function "OFF".

• "Cruise Control" and "Adaptive Cruise Control" functions both enabled (white "CC" and "ACC" symbols on the dashboard).

Activation of the "Queue Assist" function from the OFF status ("QA OFF") provides for the two following modes:

## Mode I

The "Queue Assist" function can be enabled when the vehicle is moving (step 1) and then activated (step 2).

# Wheelbase I

Enabling the "Queue Assist" function using the button on the steering wheel lever: the QA symbol on the instrument panel will turn white, but the function will not be able to implement braking or acceleration actions, i.e. actively control the vehicle.

# Step 2



Activation of the Queue Assist function using the "SET+/SET-" buttons, or the "RES" button only if there is a previously set speed.; if the activation conditions have been met, the symbol on the instrument panel will turn green and the function will actively control vehicle braking and acceleration.

If the "Queue Assist" activation conditions have not been met, a message will appear on the instrument panel indicating that the "QA" cannot be activated and therefore the function will not be activated. If the first activation is carried out with the ignition switch set to 'STOP-0', i.e. no speed is stored, pressing the RES key will have no effect and it will not be possible to activate the "Queue Assist" function.

If the vehicle is stationary and the "QA" function is enabled (white symbol): In order to be able to activate the "Queue Assist" function with the vehicle stationary, the driver must fully depress and hold the brake pedal and make sure that the vehicle is at a complete standstill.

While keeping the brake pressed and with the function enabled (white symbol), the driver must press the "SET+ / SET-" or "RES" button in order to activate the Queue Assist function; the driver can only release the brake pedal completely when the Queue Assist function is active and the "QA"symbol on the dashboard has turned green. The vehicle will be kept at a standstill by the function.

### Mode 2

The Queue Assist function can be activated directly. In this case enabling is not required. When the driver presses the service brake pedal to keep the vehicle stationary (with the gearshift set to 'drive') and presses the Queue Assist key, the function activates directly with the speed set to **30 km/h** and the distance set at 2 bars.

The Queue Assist function remains active when the driver releases the brake pedal, the vehicle will be kept stationary by Queue Assist.

In order to start driving again, the driver must give consent to drive off.

**NOTE** Make sure that the gearbox selector is in "DRIVE" in order to activate the "Queue Assist" function.
If the "Queue Assist" function is active, as soon as the system identifies that there is a moving vehicle ahead, which is decelerating to come to a standstill, the "Queue Assist" function will independently brake the vehicle; while approaching the vehicle ahead, and during the braking phase, check that the vehicle detected is displayed on the instrument panel and be ready to act on the brake pedal.

**ATTENTION** When the vehicle is coming to a standstill via the "Queue Assist" function, if the system is not able to bring it to a complete standstill, the message "BRAKE!" will appear on the instrument panel. In this case, act immediately on the brake pedal to stop the vehicle.

**ATTENTION** If the vehicle ahead is identified on the instrument panel and the "Queue Assist" system is not able to maintain the safety distance from the vehicle, a warning message will appear: "Safety distance not guaranteed" on the instrument panel. In this case, act immediately on the brake pedal to stop the vehicle if necessary.

# Activation of Queue Assist with Cruise Control and Adaptive Cruise Control functions not active

With "Queue Assist" "OFF", one of two situation will be present:

I. If the "Cruise Control" function is present and active, when the driver presses the "QA" button and the activation conditions have been met, "Queue Assist" activates with the cruising speed set in the "Cruise Control" function and with an average vehicle distance (two bars in the figure); if "QA" activation conditions have not been met, QA does not activate but "Cruise Control" will remain active.

2. If "Adaptive Cruise Control" is present and active, when the driver presses the "QA" button and the "QA"activation conditions have been met, the function activates with the cruising speed set in the Adaptive Cruise Control function and with the vehicle distance set previously with "ACC". If "QA" activation conditions have not been met, QA does not activate but "Adaptive Cruise Control" will remain active.

**ATTENTION** In relation to the traffic conditions and while driving in heavy traffic, the system could generate heavy braking actions.



**ATTENTION** With the vehicle in motion, make sure that there are no objects or stationary (stopped) vehicles in front of your vehicle before activating the Queue Assist function.

**ATTENTION** Make sure that there are no animals, pedestrians, bicycles or motorbikes in front of your vehicle before requesting activation of the "Queue Assist" function.

**ATTENTION** Make sure there is a safe distance from the (moving) vehicle ahead, before requesting activation of the "Queue Assist" function.

#### Setting the speed

The device can be set with the vehicle stationary or whilst the vehicle is moving, between 0 km/h and the maximum permitted speed for the vehicle. When the vehicle has reached the required speed, press and release the SET + or SET – button to set the vehicle speed to the current speed: the set speed appears on the display.

When the driver presses the brake pedal with the gearbox in 'drive' and the vehicle stationary and uses the button for the first direct activation, the set speed will be **30 km/h**. If vehicle speed is less than **30 km/h**, pressing and releasing the SET+ o SET- button, **30 km/h** will be set as the speed.

The system cannot be set:

- if the vehicle is moving and the brake pedal is pressed.
- If the driver's seat belt is not fastened.
- If the driver's door or passenger door is open.
- When the brakes have overheated.
- If the vehicle is stationary and the electric parking brake has been actuated.
- When the gearbox lever is set to P (parking), R (reverse gear) or N (neutral).
- When engine speed is above the maximum threshold or below a minimum threshold.

• When an "ESC" system intervention (or "ABS", or other stability systems) are in operation or have just finished.

• Any intervention of the retarder.

• If the radar sensor is obstructed (in this case, clean the area of the bumper where the sensor is positioned).

- When an automatic braking intervention is in progress by the "AEBS" system, if present ("Automatic Emergecy Brake System").
- On roads with a steep incline.
- If current vehicle speed exceeds the maximum speed that can be set for the "Queue Assist"function.
- In the event of a fault in the device.
- When the service brakes are in operation.

#### Varying the speed Increasing the speed

Once the device is set, it is possible to increase the saved speed by pressing and holding the "SET +" button.

## Pressing the SET + button once

• the set speed increases by **I km/h**. Each time the button is pressed, there is an increase of **I km/h** 

## Pressing and holding the SET + button

• the speed increases in steps of **10 km/h** until the button is released. The set speed will be rounded up the next decimal value, for example: speed set **53 km/h** » **60 km/h** » **70 km/h**. The increase in the set speed is shown on the display.

#### Decreasing the speed

Once the device is set it is possible to decrease the saved speed by pressing and holding the "SET –" button.

## Pressing the SET - button once

• the set speed decreases by **I km/h**. Each time the button is pressed, there is a decrease of **I km/h**.

## Pressing and holding the SET - button

the speed decreases in steps of 10 km/h until the button is released. The set speed will be rounded down to the next decimal value, for example: set speed 53 km/h » 50 km/h »
40 km/h The reduction in the set speed is shown on the display.



400



## **Recalling the speed**

Once the system has been cleared but not deactivated, simply press the RES button and remove your foot from the accelerator pedal to recall it. The system will be set with the most recent speed saved.

## Driving off from standstill with the Queue Assist function active

When the "Queue Assist" function is active and the vehicle is kept at a standstill by the function itself, the driver must intervene with a quick movement on the accelerator pedal to drive off with the vehicle.

The driver is required must monitor the road and assess the presence of any obstacles which might not be recognised by the system (pedestrians, animals, bicycles, motorbikes, objects in general) between his vehicle and the vehicle ahead.

When the vehicle ahead has driven off and has reached a suitable safety distance and after having made sure there are no obstacles between his vehicle and the vehicle in front, the driver can lightly and briefly press and release the accelerator to drive off.

In this phase, the driver must keep his hands on the steering wheel and be ready to act promptly on the brake pedal if necessary.

In order to drive off, the driver must make sure that the gearbox selector is set to "DRIVE" and check the area around the vehicle, keeping their hands on the steering wheel and their foot close to the brake pedal.

**ATTENTION** When the function is activated, the driver is in control of the vehicle when it is to be driven off. To do this, the driver lightly presses and then immediately releases the accelerator pedal thereby allowing the vehicle to be driven with the function still active. Pressing and holding the accelerator pedal allows the driver to manage the vehicle independently of the function which will remain active, but will not intervene. The next time the accelerator pedal is released, the function will resume operation. If no vehicle is detected in front of the sensor, the vehicle will continue with Queue Assist active, accelerating to bring the vehicle to the set speed. If there is a vehicle in front, Queue Assist will follow it: if a vehicle is detected as stationary, the vehicle will not request acceleration. If the vehicle ahead accelerates and the distance exceeds a certain thresholds, the vehicle will accelerate following the vehicle in front. If the driver does not give consent, the vehicle will remain stationary. Consent is intended as the driver's wish for the vehicle to move.

## 40 I

## Disabling of the Queue Assist function

There are two types of deactivation procedures:

I. Switching off or complete deactivation of the function (from "QA" active or "QA" preselected with QA Off).

Complete deactivation of the function is achieved:

• Pressing the side ''QA'' button with ''QA'' active (green symbol) or ''QA'' preselected (white symbol).

- Setting the ignition switch to "STOP-0".
- Pressing the ON button of the "Cruise Control" (CC) function.
- Pressing the ON/OFF button of the "Adaptive Cruise Control" (ACC) function.
- Pressing the ON/OFF button of the "Speed Limiter" (SL) function (if present on the vehicle).

By fully deactivating the function, "Queue Assist" will change to "QA OFF" and all the "Cruise Control" (CC) and "Adaptive Cruise Control" (ACC) functions will be switched off.

**ATTENTION** The driver must always pay careful attention when switching off the "Queue Assist" function as the "Cruise Control" and "Adaptive Cruise Control"functions will be switched off, and he must always be ready to resume control of the vehicle.

2. Temporary deactivation of the function (from the "QA" active state to "QA" preselected/ enabled state). The "Queue Assist" function will enter and remain in the enabled status (white "QA" symbol), i.e. the "Radar" will not be able to intervene on vehicle braking or acceleration.

Temporary deactivation of the function is achieved:

- Pressing the CANC button.
- pressing the brake pedal.
- Any intervention of the retarder.
- When vehicle conditions are such that the function must be temporarily disabled.
- Driver's seat belt unfastened.
- Driver's door or passenger side door opened.
- When the brakes have overheated.
- When the electric parking brake is actuated by the driver with the vehicle at a standstill.
- When the gearbox lever is set to P (parking), R (reverse gear).
- With the vehicle stationary, when the gearbox lever is set to N.
- When engine speed is above the maximum threshold or below a minimum threshold.



• When an automatic braking intervention is in progress by the AEBS (Automatic Emergecy Brake System). system

• On roads with a steep incline.

• If the radar sensor is obstructed (in this case, clean the area of the bumper where the sensor is positioned).

• If current vehicle speed exceeds the maximum speed that can be set for the Queue Assistfunction.

• If the Queue Assist system is active in "Brake-Only mode and the driver resumes vehicle control by acting on the accelerator pedal, brake pedal, push-button panel (Cruise controls).

• In the event of a fault in the device.

In some cases, if the system is temporarily deactivated, a warning message might appear on the instrument panel.

In the case of temporary deactivation, the Queue Assist function will go into the enabled status as will the "Cruise Control" and Adaptive Cruise Control functions.

**ATTENTION** Always pay careful attention to the colour of the Queue Assist function symbol on the instrument panel and be ready to resume control of the vehicle if the system deactivates

**ATTENTION** The driver must always pay careful attention in the event of temporary deactivation of the Queue Assist function as the Cruise Controland Adaptive Cruise Controlfunctions will enter the enabled status, and he must always be ready to resume control of the vehicle.

#### **Brake-only status**

When the QA is active and one of the following conditions occurs:

- First level AEBS intervention.
- Neutral engagement while travelling.
- Engine fault.
- Radar sensor obstructed.
- Traction or stability control interventions.

The function intervenes remaining active and ensuring braking actions if necessary to avoid a likely collision with the vehicle in front.

In this status the QA only requires braking without maintaining the cruising speed and the driver is informed that he must take control of the vehicle.

**NOTE** Any intervention by the driver will deactivate the function.

**ATTENTION** As in ACC, the device does not deactivate when speeds exceeding the speed set on the dashboard are reached with the accelerator pedal depressed. When the driver depresses the accelerator pedal and the function activates with the set speed, the function is temporarily suspended as there is a clear action by the driver to take control of the vehicle (symbol remains green). The function takes control again when the driver releases the pedal within a certain amount of time and does not exceed the speed set above a certain threshold. The system will then return the vehicle speed to that chosen by the driver. If the driver keeps the accelerator pedal depressed beyond a certain time or vehicle speed exceeds the set speed beyond a certain threshold, the function will temporarily deactivate and switch to the enabled status (white symbol).

**ATTENTION** During the Brake only status, if the vehicle stops with the active intervention of the function, the QA will deactivate independently as the braking request is terminated.

#### Setting the distance between vehicles

The distance between the driver's vehicle and the vehicle in front can be set by pressing the button on the steering wheel.

The following settings are available:

- I bar (short).
- 2 bras (medium).
- 3 bars (maximum).

The distance setting is shown on the display by the dedicated symbol.

When first used, the distance is set to two bars. Once the driver has modified the distance, the following conditions can be present:



404



I. In the case of complete disabling (QA function moves from the ON status to the "OFF" status), the distance setting will not be saved.

2. In the case of deactivation (QA function moves from the active status to the enabled status), the distance setting will be saved.

## Setting the distance

To reduce or increase the distance, press and release the button indicated by the arrow in the figure.

It is possible to modify the distance when the Queue Assist function is enabled or when the Queue Assist function is active.

**NOTE** The button indicated by the arrow in the figure to modify the distance is the same as the one for the ACC function.

If there are no vehicles in front, the set speed is maintained.

The device automatically adjusts the vehicle speed to maintain the distance setting, regardless of the set speed.

The vehicle maintains the set distance until:

- the vehicle ahead accelerates to a speed greater than the set speed.
- the vehicle ahead leaves the lane or the detection range of the Queue Assist device sensor.
- The function is not deactivated or disabled.

**ATTENTION** Maximum braking action by the device is limited. The driver can in any case always brake manually if necessary.

**ATTENTION** The driver is responsible for making sure that there are no pedestrians, other vehicles or objects in the vehicle trajectory. Failure to observe these indications could cause accidents of personal injury.

**ATTENTION** It is the full responsibility of the driver to maintain the safety distance from the vehicle ahead, fully observing the Highway Code regulations.

## Limited system function

**ATTENTION** The Radar will provide an error status for all "Cruise" functions if the "radar" loses its functionality completely (for example, due to braking or engine problems, etc.). To restore the system carry out a "key-off / key-on". If the problem persists, contact the Service Network.

When the conditions limiting system functionality have terminated, it will resume normal and complete operation. If the problem persists, contact the Service Network.

**ATTENTION** In some driving conditions, the device might not operate correctly: the driver must therefore always keep full control of the vehicle.

**ATTENTION** The QA is not to be used in heavy traffic conditions on winding roads or on particularly demanding mountain roads (for example in the presence of tight bends, winding, icy, snow-clad, slippery roads, etc.) or in conditions with poor road grip.

## Towing a trailer

**ATTENTION** Towing a trailer is not recommended while using the device.

#### Vehicle not aligned

**ATTENTION** The device might not detect a vehicle travelling in the same lane if it is not aligned in the same direction of travel, or a vehicle which is entering the lane from a parallel lane. In these cases, sufficient distance from the vehicle ahead cannot be guaranteed. A vehicle which is not in line can enter or exit the direction of travel, causing an unexpected braking or acceleration of the vehicle.

#### Steering and bends

**ATTENTION** When approaching a bend with the device set, the device could limit speed and acceleration to ensure vehicle stability, even if no other vehicles ahead have been identified. As the vehicle drives out of the bend, the device will resume the speed set previously. This serves to ensure comfortable driving and prevent the driver from lateral, sudden or heavy accelerations.

**ATTENTION** In tight bends, device performance may be limited. In this case, it is recommended that the device is deactivated.

#### Using the device on an incline

**ATTENTION** When driving on roads with a variable incline, the device might not detect the presence of a vehicle in its lane. Device performance might be limited based on speed, vehicle load, traffic conditions or the steepness of the ascent/descent.

#### **Changing lanes**

**ATTENTION** The device might not detect the presence of a vehicle until it has fully entered the lane in which it is travelling. In this case, sufficient distance from the vehicle changing lanes might not be guaranteed: drivers must always pay careful attention and be ready to act on the brakes if necessary.

#### Small vehicles

**ATTENTION** Some narrow vehicles may not be detected by the system. In this case, sufficient distance from the vehicles in front cannot be guaranteed.

## Stationary vehicles and objects

The device is not able to detect the presence of stationary vehicles or objects. For example, the device is not able to intervene in situations whereby the vehicle ahead leaves its lane and the vehicle in front of it is at a standstill in the same lane. Always pay maximum attention while driving, so you are always ready to act promptly on the brakes if necessary.

Objects, on-coming vehicles, other vehicles crossing the path of the vehicle

**ATTENTION** The device is not able to detect the presence of objects, on-coming vehicles or other vehicles crossing the path of the vehicle and will therefore not intervene.

**ATTENTION** Always pay maximum attention when driving, so that you are always ready to act on the brakes when necessary.

**ATTENTION** The system deactivates if it detects that the driver's seat belt is unfastened or that the driver's door or the passenger door is open.

**ATTENTION** The system is a driving aid: The driver must always pay full attention when driving. The driver is always fully responsible for driving safely, and must always consider the traffic conditions to ensure safe driving. The driver is always required to maintain a safe distance from the vehicle ahead.

**ATTENTION** The device does not recognise pedestrians, on-coming vehicles, other vehicles crossing the path of the vehicle or stationary objects (for example: a broken down vehicle or vehicles stopped in a traffic jam) and animals.

**ATTENTION** The device is not able to take into consideration road, traffic or weather conditions or poor visibility (for example: fog).

**ATTENTION** The device will not always recognise complex driving conditions, which could cause it to make incorrect or non-existent evaluations on the safety distance to be maintained.

**ATTENTION** The system might have limited functions or fail to operate due to weather conditions, such as heavy rain, hail, thick fog, heavy snow or ice or condensation on the windscreen, or if there is an accumulation of dust or dirt on the windscreen.

**ATTENTION** The area of the bumper in front of the sensor must not be covered with stickers, auxiliary lights or any other object.

**ATTENTION** Keep the field of view of the radar and camera free and clean (from mud, snow, etc.). If there is an accumulation of material (snow, ice, other material, etc.), radar operation and the respective functions could be compromised. If there is an excessive amount of accumulation, the yellow Radar symbol will appear on the instrument panel. The function will be unavailable if this symbol appears.

**ATTENTION** If the camera cannot be used correctly, the function will not be available. Therefore, make sure that the windscreen is always kept clean. Use specific cleaning products and clean cloths to avoid scratching the windscreen.

**ATTENTION** Functionality can be compromised by any structural modifications made to the vehicle, for example, changing the tyres (tyres of a different size, changes to the geometric parameters) or a load larger than the standard load permitted for the vehicle.

**ATTENTION** For correct operation, the field of view of the radar and the camera must not be obstructed.

**ATTENTION** The camera must also be recalibrated in its original position if the windscreen is repaired or replaced. contact a Service Network workshop.

**ATTENTION** Operation can be compromised by any structural modification to the vehicle, such as particular outfittings. Do not activate QA when the spare wheel is fitted.

**ATTENTION** Incorrect repairs carried out on the front of the vehicle (for example: Bumpers, chassis) may alter the position of the radar sensor thereby compromising its operation. Contact the Service Network.

**ATTENTION** Never tamper with or carry out any interventions on the radar sensor or the camera on the windscreen. In the event of a fault with the sensor, please contact the Service Network.

**ATTENTION** Vehicle maintenance personnel are reminded to set the QA to OFF or KEY-OFF before carrying out any maintenance operations.

**ATTENTION** In the event of a head-on collision, the sensor will automatically deactivate and a warning signal will appear on the display indicating that the sensor must be repaired. Even if there is no warning of a malfunction, deactivate the system if there is the possibility that the radar sensor has been altered (for example due to a head-on collision at low speed, such as when parking). In these cases, contact the Service Network to have the radar sensor realigned or replaced.

**ATTENTION** Do not wash the area below the bumper with pressurised water: In particular, make sure that the electrical connector of the system is not affected by water.

**ATTENTION** When carrying out repairs or painting the area around the sensor (plate which covers the sensor).

**ATTENTION** Do not use the "QA" function if the brake lights or the trailer brake lights are not working. Ensure they are repaired immediately check the trailer brake lights if the trailer is not certified.

**ATTENTION** The driver is fully responsible for ensuring that the vehicle is immobilised before loading / unloading operations.

**ATTENTION** Do not activate the "QA" in urban areas as the system does not recognise pedestrians.

**ATTENTION** Do not leave the vehicle unless it is safe. The driver must apply the electronic parking brake, engage P (parking), switch off the QA and switch the engine off.

## **AEBS** system

The AEBS (Advanced Emergency Braking System)+City Brake PRO is a driver assistance system which warns the driver in order to prevent a frontal collision or ease the effects of a collision.

The system automatically measures the distance of the vehicle from the vehicle in front and if a situation of risk arises, it alerts the driver so that the service brakes can be activated if necessary.

The system receives measurement data from a radar **(1)** installed in the middle of the front bumper and a camera **(2)** (if fitted) positioned in the central area at the top of the windscreen.

The system will help the driver by decelerating the vehicle as much as possible if the driver presses the brake pedal independently of the system warnings.

The system will help the driver by decelerating the vehicle as much as possible if the driver presses the brake pedal after the system issues a collision alarm warning.

The system is able to warn the driver and automatically operate the emergency brake if impact is unavoidable.

## Disabling/re-enabling the system and setting the sensitivity level

The system is always active when the vehicle is switched on. The system can be disabled and/or re-enables using the buttons on the steering wheel.

By selecting AEBS + City Brake PRO (a black circle will appear when they are checked) from the designated page (ADAS menu) available in the multifunctional digital display of the instrument panel and navigating using the keys on the steering wheel, the system activation page can be accessed:







The system has three sensitivity levels. This configuration can be accessed from the main dashboard menu.

The levels are:

- Low: approved performance and low number of interventions (false positive).
- Medium: default setting.

• High: slight increase in performance to the detriment of the number of interventions.

The figure indicates the action radius of the system. NOTE



General risk, general prescriptions The presence of safety systems (ABS, EVSC, etc.) onboard does not relieve the driver of the responsibility of driving carefully. The driver is the only one responsible for the way the vehicle is driven. Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

**NOTE** The AEBS+City Brake PRO is a driver assistance system: it helps the driver prevent a collision or lessen the effects thereof. The system does not always prevent a potential collision from happening. The system does not relieve the driver of his duty to drive safely. The AEBS+City Brake PRO system detects the driver's intention to look attempt the action. Consequently, if the driver attempts to activate the system voluntarily, it may not respond.

**NOTE** Manoeuvres carried out by the driver (acceleration, braking, steering) take priority over system requests, which is not disabled but returns to operation when the driver has finished their manoeuvre.

ATTENTION Activation of the turn indicators momentarily inhibits the system.

The AEBS+City Brake PRO system is structured on three intervention levels depending on the predicted potential collision time:

LEVEL I

up.



• Visual and acoustic warnings: symbol 🗡 🖛 steady on (yellow) and "Collision Warning" pop-

This caution level warns the driver so that he can intervene and take control of the vehicle in order to avoid the collision before the system activates the emergency brake.



## LEVEL 2:

• Visual and acoustic warnings and immediate braking action: in addition to the acoustic and visual warnings of LEVEL I, the system limits vehicle power and warns the driver by briefly braking. The driver can still drive the vehicle and correct the situation of risk.

LEVEL 3



• Visual and acoustic warnings and emergency braking: symbol steady on Steady on BRAKE!" pop-up screen and emergency brake activation, useful for preventing or limiting damage resulting from a possible collision.

The system is equipped with a counter which is able to record every occurrence of emergency braking of the vehicle. After three interventions, the system will indicate error and the symbol will appear. This will not result in the vehicle stopping. It can still be driven without the functions offered by the AEBS+City Brake PRO system; the driver should contact the Service Network as soon as possible to reset the counter and restore the functionality of the AEBS+City Brake PRO system.

The system will always be active when the vehicle is started. To disable it, go to the menu in the dashboard settings. Each time the ignition key is turned to the engine start-up position, the system is activated regardless of the previous activation/deactivation status.

**ATTENTION** This is not valid for vehicles with NI type approval (vehicles with PTT / GVW not exceeding **3,5 t**), which keep the most recent activation status in the memory.



The symbol will appear on the instrument panel. To enable the system again, go to the dashboard menu. The system will be disabled if there is an error or a fault in the system. The

symbol will appear on the instrument panel.

There may be limited operation of the system in the event of tunnels and ATTENTION bridges.

ATTENTION There may be limited operation of the system during the first few kilometres after a load change.

**ATTENTION** The system is only able to detect vehicles travelling in the same direction as you and which are stationary in front of your vehicle.

**ATTENTION** The system may not operate at high efficiency if the driver does not maintain the mandatory safe distance.



**NOTE** The driver can inhibit or interrupt system intervention by depressing the accelerator pedal (kick down), activating the turn indicators or turning the steering wheel.

**ATTENTION** After the vehicle is shut down the brake callipers may remain locked for around two seconds for safety reasons. Make sure you depress the brake pedal should the vehicle move forward slightly.

#### **Driving in certain conditions**



General risk, general prescriptions

The system may trigger or brake unexpectedly. The driver will have to take special care and take full control of the vehicle in order to avert unexpected vehicle behaviour.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

In certain driving and traffic situations the system may unexpectedly intervene in cases of:

- Driving into/out of a bend.
- Junctions and exits.
- Fixed objects on the side of the carriageway.

• Reflections from metallic objects that are not other vehicles, such as: crash rails, signposts, car park barriers, motorway tolls, level crossings, railway lines, gates, objects near building works or those located above the vehicle (e.g. flyovers).

• Damaged road surfaces.

# Start-up and driving 417

Other driving and traffic conditions for which the system may unexpectedly intervene include:

• Presence of advancing vehicles and/or small vehicles or vehicles alongside your vehicle.

• Presence of vehicles advancing crossways or in the opposite direction on the same route your vehicle is travelling on.

- Overtaking and changes of route of other vehicles.
- There may be limited operation of the system in the event of tight bends.



# 418 Start-up and driving



- Vehicles which unexpectedly exit or enter your driving lane.
- Winding roads.
- Similarly the system can intervene inside multi-storey car parks, tunnels or due to reflections from the road surface.

**ATTENTION** The system is designed exclusively for use on roads and not off-road.

**ATTENTION** The system is active even if a trailer with a towing hitch with a total mass equal to **3,5 t** is attached.

**ATTENTION** The AEBS+City Brake PRO system must be deactivated when a trailer is connected.

If there is a fault in the AEBS+City Brake PRO system, the symbol will appear on the instrument panel accompanied by the following messages: "AEBS+City Brake PRO Error" in the case of a system error and "AEBS+City Brake PRO not available" if the control unit is not working.

For vehicles equipped with radar and a camera, the AEBS + CB (City Brake PRO) system is available and will activate at a speed of **5 km/h**. For vehicles equipped with radar only, the speed activation is **15 km/h**. In the event of an intervention, both configurations are active up to **0 km/h**.

**ATTENTION** Make sure that the system is switched off if testing the vehicle on roller test benches and when maintenance operations are carried out.

#### Radar sensor



General risk, general prescriptions

Do not obstruct the sensor view with decals, paint or any other object which could block the line of vision. The sensor and its coverage are significant components for safety. Do not install additional components on the sensor and its cover and do not change the position.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

**ATTENTION** Keep the field of view of the radar and camera free and clean (from mud, snow, etc.). If there is an accumulation of material (snow, ice, other material, etc.), radar operation and the respective functions could be compromised. If there is an excessive amount of accumulation, the yellow Radar symbol will appear on the instrument panel. The function will be unavailable if this symbol appears.

**ATTENTION** If there are internal problems in the radar or it is faulty, the Symbol will appear in red on the instrument panel and the message "AEBS ERROR" will be shown on the dashboard.

**ATTENTION** The sensor must be recalibrated in its original position if the position has been modified following an accident or bumper replacement. Contact the Service Network.

**NOTE** The system's electromagnetic emissions are significantly below the legal limits; there are therefore no minimum safety distances or time limits to be observed.

#### Camera

• The camera may also have limited or absent functionality due to adverse weather conditions (heavy rain, hail, thick fog, heavy snow, condensation and ice on the windscreen) or a build up of dust and dirt on the windscreen.

• Therefore make sure that the windscreen is always clean. Use specific cleaning products and clean cloths to avoid scratching the windscreen.

• Protruding loads on the vehicle's roof may prevent the camera from working correctly: make sure that they are arranged so that they do not interfere with the camera's operating range.

**ATTENTION** The camera must also be returned to its original position if the windscreen is repaired or replaced.

**ATTENTION** For systems consisting of radar and camera, if the camera is not available, performance will be reduced and the "AEBS+City Brake PRO limited performance" pop-up

will appear on the dashboard with the relevant symbol  $rac{1}{2}$ 



General risk, general prescriptions

In "Limited Performance" mode, malfunctions may arise with speeds exceeding 90km/ h. In the event of danger, the driver will only be notified with the LEVEL I warning. Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

**NOTE** The AEBS+City Brake PRO system, in each of its operating modes, respects the type-approval requirements in the Directive. EU 47/2012. EU 562/2015 and ECE131.

**ATTENTION** The AEBS+City Brake PRO system must be deactivated if using snow chains.



General risk, general prescriptions

Check the external deceleration indicators (brake stop lights) and deactivate the ABS in the event of a malfunction.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle



General risk, general prescriptions The AEBS function is a driving assistance function: the driver is still fully responsible for ensuring safe driving and must in any case pay careful attention to the driving conditions and the surrounding environment. Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

**NOTE** The "soft mute" function may not be supported; this depends on the configuration of the radio installed in the vehicle. This means that during AEBS+City Brake PRO intervention (level 1 + level 2 + level 3) the volume of the radio may not be reduced to facilitate the warning buzzer.



## Dusk sensor and rain sensor

The light sensor is coupled with the rain sensor and is located near the top of the windscreen. It can detect variations in the intensity of the light outside the vehicle and when it is raining.

## Light sensor

When the vehicle is stationary and the engine is on, you can choose between three ambient light sensitivity settings by navigating through the dashboard display menu using the buttons on the left-hand side of the steering wheel. You can scroll (up or down) through the main menu by pressing the up and down arrow buttons.

Select the "Vehicle Settings" item using the up and down arrows. Press the "OK" button in the centre to access/select the submenu screen.

Select the "Light sensor sensitivity" item using the up and down arrows. Press the "OK" button to access/select the submenu screen.

Select the sensitivity you require from those available in the menu:

- High.
- Medium.
- Low.

Press the "OK" button to confirm your selection. Press and release the left arrow button to return to the main menu.

**NOTE** The higher the sensitivity, the lower the amount of external light needed to switch on the low beam lights.





#### Rain sensor

The sensor can detect the presence of rain and (based on the speed at which the vehicle is travelling and the amount of water present on the windscreen) manages automatic windscreen wiper modes.

You can choose between three sensitivity settings by navigating through the dashboard display menu using the buttons on the left-hand side of the steering wheel.

Auto Winer sensitivi DOWN цîр OK Vehicle Settings Auto Wiper sensitivity Cornering Lights . C Auto Wiper sensitivity Medium Setting Light sensor sensitive Low Confirmed . LEFT Ok to selec Ok to set DOWN Auto Wiper sensitivity 8 Low Ok to set 714214 Select the "Vehicle Settings" item using the up and down arrows. Press the "OK" button in the centre to access/select the submenu screen. Select the "Auto Wiper sensitivity" item using the up and down arrows. Press the "OK" button to access/select the submenu screen.

Select the sensitivity you require from those available in the menu:

- High.
- Medium.
- Low.

Press the "OK" button to confirm your selection. Press and release the left arrow button to return to the main menu. **NOTE** The higher the sensitivity, the lower the amount of water needed to come into contact with the sensor to switch on wiping.

To activate the automatic function: set the wiper switch to "AUTO".



The wiping speed depends on the speed at which the vehicle is travelling. Wiping is intermittent at low speed; as the vehicle speed increases, the wiping speed varies according to the amount of rain present.

To deactivate the automatic function: Turn the wiper switch to the "0" position to disable the function.

**ATTENTION** The function can only be activated with the ignition switch is in the "MAR-I" position.

**ATTENTION** Do not activate the rain sensor when washing the vehicle in a car wash.

**ATTENTION** If there is frost on the windscreen, make sure that the device has been switched off.

## traction plus

'Traction plus' is a driving and acceleration assistance system for use on roads with low grip and an uneven surface (snow/tarmac, ice/tarmac, mud/tarmac, etc.). It enables the engine torque to be adequately distributed over the rear axle when one of the two drive wheels skids. The system brakes the wheel that is losing grip (or is skidding more than the other drive wheel), thereby transferring the engine torque to the wheel that has better grip on the ground.

This function can be activated manually by pressing the button **(I)** on the dashboard and it intervenes below **65 km/h**. The system switches off automatically when the vehicle starts travelling above this speed (the LED on the button remains on) and it reactivates when the button is pressed and vehicle speed falls below the threshold of **65 km/h**.

**NOTE** The 'Traction plus' system is only effective on uneven road surfaces that differ between the two drive wheels.

**NOTE** When the acceleration manoeuvre is complete, the driver must fully depress the accelerator pedal in order to transfer the entire engine torque to the wheel that is seizing.

**NOTE** System intervention is indicated on the dashboard by the ESP indicator light flashing.



#### Hill Holder

The system keeps the vehicle braked for approximately **2 s** in the following situations:

- uphill, if the slope is sufficient for activating the function, a forward gear is engaged;
- downhill, if the slope is sufficient for activating the function, a reverse gear is engaged.



#### General risk, general prescriptions

The presence of safety systems (ABS, ESP, ecc. ) on board the vehicle does not relieve the driver of the responsibility of driving carefully. The driver is the only one responsible for the way the vehicle is driven.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

#### **Rear parking sensors**

**Parking sensors operation** 

(if provided)

#### **Rear parking sensors**

These are located in the rear running board of the vehicle and are used to detect and notify the driver (beeper) when there are obstacles behind the vehicle.

## Switching on

The sensors turn on automatically when reverse gear is engaged. The system beeps to indicate that they are active.

#### Acoustic signal

When reverse gear is engaged, after the beeper has sounded, the system beeps intermittently to indicate detection of an obstacle.

The buzzer:

• beeps faster as the obstacle approaches the running board; becomes continuous below approximately **30 cm**: do not continue reversing when the beeper is sounding continuously;

• it deactivates after approximately **5** s due to the side sensors if the distance between the vehicle and the obstacle remains unchanged and the continuous sound is not present. This eliminates the parallel wall effect.

• For obstacles further than 160 cm (approximately), there is no warning.





**Detection distances** 

The detection distances are those shown in the figure (the values are in mm). If the sensors detect multiple obstacles, only the closest is taken into consideration.

**ATTENTION** For the system to operate correctly, the sensors must be clean of mud, dirt, ice and snow. To clean the parking sensors, please refer to the paragraph 'Caring for the vehicle'.

**ATTENTION** approximate.



General risk, general prescriptions

The parking sensors and the camera are simply able to assist the driver, but the driver remains fully responsible for any dangerous manoeuvres. Always pay full attention and make sure that while making a manoeuvre, there are no people (especially children) or animals present.

Detection of obstacles and/or the view provided by the camera are

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

**ATTENTION** Always look out for obstacles above and below the sensors when parking. Objects close to the rear of the vehicle are sometimes not detected by the sensors and can damage the vehicle or themselves be damaged.

**ATTENTION** The sensor signals may be faulty due to damage to the sensors themselves, dirt, ice and snow on the sensors or ultrasound systems (including truck pneumatic brakes or pneumatic jacks) in the vicinity, special loads and the position of the electropneumatic suspensions.

**ATTENTION** The system is capable of detecting the installation of IVECO trailer hooks. Different trailer hooks must be installed symmetrically relative to the vehicle's axis, without invading the field of the sensors (in particular with the 13 pin socket).

**ATTENTION** Installing especially large trailer hooks (providing they are symmetrical) widens the continuous signalling range.

## **Operation with trailer**

If using the trailer on a vehicle with parking sensors, these sensors could give incorrect readings due to the presence of the trailer. If the socket connecting the trailer to the vehicle has pin 12 connected to ground, the signalling from the parking sensors will be inhibited.

Please contact the Service Network for information.

Operators are reminded to carry out the trailer electrical connection with the key set to OFF.

# 432 Start-up and driving



# Camera

(if provided)

The purpose of the camera is to aid the driver when parking and loading/unloading the vehicle. The system allows the driver to view the rear part of the vehicle on the liquid crystal display in the cab.
### Service brake

• With the engine switched off, servo-assistance it not supplied to the braking system, to brake it is therefore necessary to exert a greater force on the brake pedal.

• In the event of trouble with a braking circuit, the pedal stroke will lengthen and it is necessary to apply a greater force on the brake pedal.

**ATTENTION** The stop distances are greater, immediately check the system at a Service Network workshop.

• Respect the vehicle's maximum capacity and the value of the maximum permissible loads on the single front and rear axles in order to avoid abnormal stress with negative effects on the brakes.

#### EUC - TSM - HRB - HFC - RMI - HBA

#### **EUC - Enhanced Under-Steering Control**

This function reduces understeering (tendency of the vehicle to increase the vehicle's trajectory on bends) by reducing the average curvature radius. This system acts on all four wheels (at different levels) in order to improve the vehicle's manoeuvrability when cornering, as well as reducing engine torque.

#### **TSM - Trailer Sway Mitigation**

This annuls the trailer oscillations (caused for example by uneven roads, sudden bursts of wind) that can cause the vehicle-trailer unit to become unstable by reducing the engine torque and, in the case of intense oscillations, intervening on the brakes.

#### **HRB - Hydraulic Rear Wheel Boost**

This function increases the pressure of the rear wheel brakes when ABS intervention on the front axle is detected. This allows the vehicle stopping distance to be reduced especially with heavy load, exploiting all of the braking power of the rear axle.

## **HFC - Hydraulic Fading Compensation**

With this function, the system is able to detect fading conditions (high pressure on the brake pump master cylinder with low vehicle deceleration) and therefore increase the pressure in the braking circuit until the ABS is activated.

#### **RMI - Roll Movement Intervention & Rom - Roll Over Mitigation**

Based on normal ESC behaviour, this function reduces the risk of overturning when driving in a dynamic manner, such as when exiting the motorway at a high speed. Roll-over risk determination is based on steering gradient for RMI and on side accelerations for ROM. When risk of roll-over is detected, braking torque is applied on the exterior front wheel, reducing lateral force and consequently the risk of the vehicle rolling over. Aside from braking actions, the engine torque can also be reduced.

#### HBA - Hydraulic Brake Assist

Reduces braking distance to the minimum possible in emergency situations. Emergency braking is detected by very rapid brake operation which then generates the maximum brake pressure as fast as possible.



# Using the parking brake

# USE THE PARKING BRAKE ONLY WHEN THE VEHICLE IS STATIONARY

• To engage the parking brake, pull the lever upwards to provide the device with the necessary capacity according to the gradient of the ground and the load. (With the ignition key in position MAR-I the related warning light on the dashboard lights up).

• When an increase is noticed in the number of clicks for being able to park the vehicle correctly, have the system checked immediately at a Service Network workshop.

• To disengage the parking brake, pull the lever (3) slightly upwards, press button (4) and lower the lever completely, into the rest position (warning light off (D)). In order to avoid accidental movements of the vehicle, disengage the parking brake while pressing the service brake.

• Uphill or downhill, with a particular steep gradient, put a wedge (chock) respectively either behind or in front of the wheels of the most laden axle (normally behind or in front of the rear wheels with the vehicle loaded, the front wheels with the vehicle unladen).

## Position of the parking brake lever for right-hand drive vehicles.

The parking brake lever for left-drive vehicles may be positioned in the following locations.

• (A) . On the floor, to the side of the driver's seat near the vehicle entrance.

• **(B)**. On the floor, to the side of the driver's seat to the right and centre of the vehicle.





# Electric parking brake (EPB)

## (If fitted)

The electronic parking brake (EPB) guarantees better use and optimal performance compared to manual actuation.

The electronic parking brake has a switch and a motor for controlling the callipers (or the drum in 50C/70C vehicles) for each rear wheel. The operating logic of the device is managed by software inside the ESP system.

# Using the electronic parking brake

There are two ways of engaging the electronic parking brake:

## Manual engagement

To engage the electronic parking brake manually when the vehicle is stationary, briefly pull the switch (1) on the dashboard.

When engaging the electronic parking brake, you may hear a slight noise coming from the rear of the vehicle.



# Automatic engagement/disengagement

• From the designated page (Vehicle Setting) available in the menu of the multifunctional digital display on the dashboard, navigating using the buttons on the steering wheel.

#### Start-up and driving

Select the Electric Parking Brake item and you will be taken to the page for automatic device activation:

• Auto apply: Select automatic engagement by checking the item on the page of the display (black circle).

• Drive away: Select automatic brake disengagement by checking the item on the page of the display (black circle).

**NOTE** The automatic functions will only work if the driver's seat belt is fastened.

**NOTE** When engaging the electronic parking brake with the service brake pedal depressed, you may feel the pedal move slightly.

With the electronic parking brake engaged on the instrument panel, the relevant indicator light and the LED on the switch itself will come on.

**ATTENTION** If the red EPB fault warning light comes on, some of the electronic parking brake's function will be deactivated. In this case, the driver is responsible for actuating the brake and parking the vehicle safely.

**ATTENTION** When the driver is notified of a fault with the parking brake system via the red EPB indicator light or other means, the driver must stop using the parking brake system functions and contact a centre in the Service Network.

The light indicating that the system is activated may switch on if the hydraulic system becomes temporarily unavailable and braking is then carried out by the electric motors.



The rear stop lights will also switch on automatically, as with normal braking effected by depressing the brake pedal.

To cancel the braking request while the vehicle is in motion, release the switch (1). If, while using this procedure, the vehicle is braked to a speed of less than around **3 km/h** and the switch (1) is kept pulled, the parking brake will be engaged permanently.

**ATTENTION** Driving the vehicle with the electric parking brake engaged can cause serious damage to the braking system.

**ATTENTION** Never use the electric parking brake to decelerate the vehicle as this could cause serious damage to the parking brake system itself; if using in an emergency condition, contact an authorised workshop immediately.

**ATTENTION** Once the electric parking brake has been activated during dynamic braking (not for normal parking), the vehicle will need to be taken to a workshop in order to replace the brake shoes.

If, in exceptional circumstances, it is necessary to request braking intervention while the vehicle is in motion, keep the switch **(I)** pulled the entire time you want the brake to intervene. In this condition, the ESP pump assists the EPB in decelerating the vehicle. Intervention of the ESP pump could generate a noise which the driver can hear.

#### Disengaging the electronic parking brake manually

To disengage the electronic parking brake manually, the ignition switch must be in the "MAR-0" position. You also need to depress the brake pedal, then briefly press the switch **(1)**. During disengagement, you may hear a slight noise coming from the rear of the vehicle and you may feel the brake pedal move slightly.

Once the electronic parking brake has been disengaged, the light indicating system engagement on the dashboard display and the LED on the switch **(I)** go out.

If the indicator light on the dashboard remains lit with the electronic parking brake disengaged, this means there is a fault: In this case, contact the Service Network.



**ATTENTION** The indicator light on the switch **(I)** coming on indicates that intervention from the braking system has been requested: Before leaving the vehicle, always make sure that the light indicating activation (engagement) of braking action on the dashboard is actually on.

**ATTENTION** On versions with an automatic gearbox, never use position "P" (parking) instead of the electronic parking brake. When parking the vehicle, always engage the electronic parking brake to prevent uncontrolled movement of the vehicle from causing injuries or other damage.

### Electronic parking brake operating modes

The electronic parking brake can work in the following modes:

• "Dynamic actuation mode": This mode is activated by continually pulling the switch while driving

**ATTENTION** This mode must only be used in the event of an emergency.

• "Static and release actuation mode": When the vehicle is stationary, the electronic parking brake can be engaged by pulling the switch **(I)** once only. To disengage the brake, press the switch **(I)** and depress the brake pedal at the same time.

• "Drive Away Release" (if fitted): The electronic parking brake will be disengaged automatically if the system detects that the driver wants to drive the vehicle forwards or reverse. The driver's seat belt must be fastened and the driver's door must be closed.

• "Safe Hold": when vehicle speed is less than **1,5 km/h** or **3 km/h** (depending on the version) and the driver's intention to leave the vehicle is identified, the electric parking brake will engage automatically thereby putting the vehicle into safe conditions.

• "Autoapply": if vehicle speed is less than **I**,**5** km/h or **3** km/h (depending on the version), the electric parking brake engages automatically when the ignition switch is set to "STOP-0". When the parking brake is engaged and applied to the wheels, the LED on the switch **(I)** and the indicator light on the dashboard light up at the same time. The "Autoapply" function can be temporarily excluded by pressing the switch **(I)** while setting the ignition switch to "STOP-0".



**ATTENTION** the safety functions which engage automatically ("Safe hold"," Autoapply") must not be used to stop the vehicle while travelling.

### Safe Hold (if fitted)

For safety reasons, the electronic parking brake engages automatically if the vehicle is not in a safe situation. The parking brake engages automatically to prevent the vehicle from moving in the following instances (depending on the equipment):

• vehicle speed is less than 1,5 km/h or 3 km/h (depending on the version).

• Driver's presence is not detected (depending on the versions): driver's door open, driver's seat belt not fastened, driver not sitting in the driver's seat).

• No attempts to depress the brake pedal or the accelerator pedal (or the clutch pedal on versions fitted with a manual gearbox) have been detected.

The "Safe Hold" function can be temporarily excluded in these two conditions: I. by pressing the switch **(I)** if it has not yet intervened, i.e. when the driver's door is closed and the seat belt is fastened and pressing and holding it while the door is opening or the seat belt is being unfastened.

2. If it has not intervened (driver's door open or seat belt unfastened), by pressing the brake pedal and the switch **(1)** at the same time and then releasing the brake pedal first, followed by the switch **(1)**.

Once deactivated, the function will be reactivated when the vehicle speed reaches **20 km/h** or when the ignition switch is moved to the "STOP–0" and then to "MAR–1".

**ATTENTION** Always engage a gear before leaving the vehicle – first gear when parking on uphill or reverse gear when parking downhill. On versions with an automatic gearbox, move the gear-change lever to the parking position ('P'), then engage the electronic parking brake.

**ATTENTION** Uphill or downhill, especially when the gradient is very steep, place a wedge (or wheel chock, available depending on the vehicle and the on-board equipment) either behind or in front of the wheels of the most laden axle (normally behind or in front of the rear wheels with the vehicle loaded, or the front wheels with the vehicle unladen). In some of the conditions indicated above, the message "Parking not guaranteed" will appear on the multifunction digital display, the parking brake warning light will flash and an acoustic indicator will be emitted. Above **26%** on 35S, 35C and 50C vehicles and **18%** on 70C vehicles, vehicle parking not guarantees and in this case the driver will be notified with the warning message "Parking not guaranteed". Furthermore, parking is not guaranteed in the following conditions: when the estimated temperature of the discs is **300 °C** and the incline of the road is **16%** for 35S and 35C vehicles; and when the estimated temperature of the discs is **200 °C** and the incline of the road is **10%** for 50C and 70C vehicles.

**ATTENTION** When performing parking manoeuvres on sloping roads, it is important to steer the front wheels towards the pavement (when parking downhill) or in the opposite direction (if the vehicle is parked uphill).

**ATTENTION** When leaving the vehicle, always remove the engine ignition key from the switch and take it with you.

The electronic parking brake EPB guarantees better use and optimal performance compared to manual actuation.

**ATTENTION** If there is a fault in the vehicle's service battery, an emergency start (using a booster) is required to release the electronic parking brake. If the start attempt fails, contact a workshop in the Service Network.

**ATTENTION** The manual release operation of the parking brake must be carried out by specialised personnel of the Service Network.

**ATTENTION** Using the "Drive Away" function without the driver's seat belt fastened and the driver's door closed can cause serious damage to the braking system.

## Pedals

## Manual gearbox vehicle pedals

- I. Clutch release pedal.
- 2. Service brake pedal.
- 3. Accelerator pedal.

## Pedal assembly for vehicles with Hi-Matic automatic gearbox

Manual gearbox vehicle pedals 4. Service brake pedal. 5. Accelerator pedal.





## "ECOSWITCH PRO" function

#### (if present)

Activation of the 'Ecoswitch PRO' function cuts the torque and the power from the engine, applies a speed limit of **125 km/h** and determines a softer response of the accelerator pedal. With this function activated, the driving style imposed by the vehicle helps the driver optimize fuel consumption and reduce gas emissions.

The vehicle is able to determine the incline of the road after driving for a few minutes, the vehicle load conditions automatically excluding limitations when faced with an uphill stretch of road, when the vehicle is travelling with high loads and based on the driving style and conditions.

It is therefore possible to keep the function engaged most of the time, letting the system adjust its reaction to the conditions of use.

It is however possible to exclude the function at any given moment using the key on the dashboard.

## Key

- (A): axle power expressed in kW
- **(B)**: axle torque expressed in Nm
- (C): engine rpm
- Continuous curve: delivered power and torque with 'Ecoswitch PRO' deactivated
- Broken curve of delivered power and torque with 'Ecoswitch PRO' engaged

**NOTE** The 'Ecoswitch PRO' function is present on a number of engines/powers therefore the curves indicated in the graph are by way of example only. The power and torque values vary in relation to the different engines.

## Start-up and driving 447

Press the button **(1)** as shown in the figure to activate the function. Function engagement is signalled by activation of the indicator light **(2)** on the key, the message 'ECO engaged' appears and (for versions with 'TFT' instruments) activation of the € symbol on the dashboard. Deactivation is signalled by the indicator light **(2)** switching off on the key, the message 'ECO deactivated' appears and (for versions with 'TFT' instruments) the € symbol on the dashboard deactivates.

When the limitations are automatically excluded from the system, the € symbol switches off on the dashboard, (for versions with 'TFT' instruments) a warning message appears and the indicator light **(2)** remains on.

The activation status of the 'Ecoswitch PRO' function is stored when the engine is switched off and then automatically restored when the engine is next started with activation of the warning light **(2)**.

In periods when limitations are automatically excluded by the system, pressing the key (1) only determines deactivation or activation of the indicator light (2).

During the vehicle mission, the 'ECO PRO' mode could be automatically deactivated if there is an error in the 'ECM engine control unit. In this case (for versions with 'TFT' instruments), the  $\in$  symbol switches off on the dashboard and the 'ECM' indicator light activates.







#### (if fitted)

The "ECOSWITCH PRO" function, available upon request in this configuration, can only be engaged by the fleet manager and the driver is not able to manually intervene to deactivate it. The system consists of the key switch **(I)** shown in the figure.

By turning the key in a clockwise direction, setting it to "ON" with the symbol ( $\epsilon$ ), the "ECO" mode is always automatically active each time the engine is started.

On the dashboard (for versions with "TFT" instruments), the symbol (e) appears on the display together with the message "ECO" to inform the driver that this mode is present. When the limitations are automatically excluded from the system, the (e) symbol (for versions with "TFT" instruments) switches off on the dashboard and a warning message appears.

During the vehicle mission, the "ECO PRO" mode could be automatically deactivated if there is an error in the "ECM" engine control unit. In this case (for versions with "TFT" instruments), the (€) symbol switches off on the dashboard and the "ECM" indicator light activates.

To deactivate the function, the fleet manager has to turn the key switch **(1)** in an anticlockwise direction setting it to the "OFF" position indicated in the figure.



## "Locked ECOSWITCH PRO" function

(if present)

The 'ECOSWITCH PRO' function, available upon request in this configuration, is always active on the vehicle and cannot be deactivated.

The 'ECO PRO' mode is always automatically active each time the engine is started. The

symbol and the message 'ECO on' appear on the instrument panel to notify the driver of this mode.

When the limitations are automatically excluded from the system, the € symbol (for versions with 'TFT' instruments) switches off on the dashboard and a warning message appears. During the vehicle mission, the 'ECO PRO' mode could be automatically deactivated in the

event of an error in the engine control unit 'ECM', in this case the symbol **Solution** on the instrument panel goes out and the 'ECM' warning light is on.

## "ECOSWITCH PRO" function for vehicles equipped with "Hi-Matic" gearbox

(If present)

With the 'Hi-Matic' automatic gearbox, the function is activated automatically when the gearbox is in 'ECO' mode. The 'Ecoswitch PRO' function applies a speed limit of **125 km/h**\* and makes the accelerator pedal softer.

With this function activated, the driving style imposed by the vehicle helps the driver to further optimise their fuel consumption and reduce gas emissions.

The vehicle is capable of detecting the inclination of the road and (after a few minutes of driving) the load on the vehicle, automatically switching the limits off and restoring the standard accelerator reaction when tackling a climb or when the vehicle is travelling with a very high load, and according to the conditions and the driving style of the vehicle.

It is therefore possible to keep the function activated for most of the time, leaving the system to adapt its responses to the conditions of use.

In any case, the function can be deactivated by switching to the 'Power' or 'Manual' driving mode on the 'Hi-Matic' gearbox.

The operating status of the 'Hi-Matic' gearbox ('ECO') is displayed on the dashboard. During the vehicle mission, 'ECO PRO' mode may be deactivated automatically if an error occurs in the 'ECM' engine control unit.

If this happens, the 'ECM' indicator light on the dashboard will switch on.

**NOTE** \* for vehicles destined for the Austrian market, the limit is equal to **90 km/h**.

# "ECOSWITCH PRO FLEET" function for vehicles equipped with "Hi-Matic" gearbox

(if fitted)

The 'ECOSWITCH PRO' function, available upon request in this configuration, only allows the fleet manager to engage it without the driver being able to manually intervene to deactivate it. With the function active, the automatic gearbox only operates in 'Automatic' and 'ECO' mode. It is possible to move to manual gearbox mode for a limited time of **8** s to handle temporary driving conditions.

The system consists of the key switch **(I)** shown in the figure.

By turning the key in a clockwise direction, setting it to 'ON' at the  $\in$  symbol, the 'ECO' mode is always automatically active each time the engine is started.

The operating status of the 'Hi-Matic' ('ECO') gearbox appears on the control panel.

During the vehicle mission, the 'ECO PRO' mode could be automatically deactivated if there is an error in the 'ECM' engine control unit.

In this case, the 'ECM' activates in the control panel.

To deactivate the function, the fleet manager has to turn the key switch **(I)** in an anticlockwise direction setting it to the 'OFF' position indicated in the figure.



# "ECOSWITCH PRO Locked" function for vehicles equipped with "Hi-Matic" gearbox

### (if fitted)

The function described on the previous pages, which is available upon request in this configuration, is activated at all times in the vehicle and cannot be deactivated.

The automatic gearbox will only work in 'Automatic' mode or 'ECO' mode. The gearbox can still be switched to manual mode for a limited period of **8 s** to tackle temporary driving conditions.

'ECO' mode is activated automatically every time the engine is turned on. The operating status of the 'Hi-Matic' gearbox ('ECO') is displayed on the dashboard. During the vehicle mission, 'ECO PRO' mode may be deactivated automatically if an error occurs in the 'ECM' engine control unit.

If this happens, the 'ECM' indicator light on the dashboard will switch on.

#### **Mechanical gearbox**

#### Starting the engine

• Depress the clutch pedal fully and engage the most suitable gear for the road conditions, incline and vehicle load.

- Disengage the parking brake completely.
- Slowly release the clutch pedal and gradually accelerate.
- Engage the next gears.

The engine must never exceed the rpm corresponding to maximum speeds, even downhill.

## Selecting a gear

As soon as traffic and road conditions allow, use a higher gear. Using a low gear for faster acceleration will increase consumption. Improper use of a high gear increases consumption, emissions and engine wear.

## Stopping the vehicle

- Release the accelerator pedal and gradually depress the brake pedal.
- When the vehicle is about to stop, disengage the clutch and shift the gear lever to neutral.
- With the vehicle stopped, engage the parking brake.

Caution: Avoid using parking brake when the vehicle is moving.

**ATTENTION** Do not rest your foot on the clutch pedal while vehicle is in motion, except when changing gears.

#### Reverse gear engagement on vehicles with six gears

To engage reverse gear from neutral, lift the sliding ring **(I)** below the grip, move the lever to the left and then forwards.

## **Reversing buzzer (if fitted)**

The system is on when reverse gear is selected: the acoustic warning at the rear of the vehicle emits an intermittent beep. The purpose of this device is to warn people near the vehicle that it is moving backwards.





454



## **HI-MATIC** automatic gearbox

#### (if present)

The HI-MATIC gearbox is an automatic gearbox with torque converter. The gearbox gearings are activated by means of electric actuators in the electro-hydraulic system and all the commands reach the control system via the CAN network.

The automatic gearbox electronic control lever replaces the conventional mechanical lever and is not mechanically connected to the gearbox.

In order to use the automatic gearbox correctly, this chapter must be read fully so that the user is fully aware, from the moment the vehicle is first used, of the correct actions and which actions may be carried out.

**ATTENTION** Failure to observe the indications below may have a serious damaging effect on the gearbox.

- Only select P (Parking) when the vehicle is completely stationary.
- The 'Parking' is automatically engaged when the ignition key is set to 'STOP-0'.
- Select 'R' (Reverse) or move from here to another position only when the vehicle is travelling at very low speed (below **5 km/h**)

• To move from 'P' to R (Reverse), or N (Neutral) or D (Drive), (with the engine running and the vehicle stationary), fully depress the brake pedal.



General risk, general prescriptions

Only engage the gear when the engine is running at the normal idle speed and the driver's foot is firmly in contact with the brake pedal. Moving the gearbox lever from P (Parking) or N (Neutral) with the engine speed above idle can cause the vehicle to accelerate dangerously and cause the driver to lose control of the vehicle. Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

**ATTENTION** Unexpected movement of the vehicle may cause injury to those travelling inside the vehicle or those near the vehicle.



General prescriptions

Before leaving the vehicle, always engage the parking brake, move the gearbox to P (Parking) (vehicles with an automatic gearbox), engage the appropriate gear (vehicles with a manual gearbox) and switch off the engine.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

#### Automatic gearbox controls

The automatic gearbox is controlled by the monostable shift lever allowing for the following states to be selected:

- P (Parking) button: parking.
- R (Reverse) : reverse gear.
- N (Neutral) : neutral.
- D (Drive) : automatic forward gear (8 speed).
- + / -: move into a higher /lower gear (manual mode)
- ECO/PWR:ECO driving mode or POWER driving mode (only in automatic mode)

Information regarding the gear and engaged driving mode also appears on the display. The display shows the driver the gear engaged together with the driving mode 'A' (automatic) or 'M' (semi-automatic).

The lever symbols are back-lit with a low intensity light. Specific lighting is available for the following symbols: 'P', 'R', 'N' and 'D'.

When the ignition key is set to 'MAR-1', the symbols on the control panel activate in the following sequence: 'P'-'D'-'N'-'R'-'P'.

After the initial test, letter 'P' will remain active (normally when the key is set to 'MAR-1', the gearbox is in Parking ). In any case, the engine can only be started with 'P' or N'.

After having started the engine, press the brake pedal to engage the gear ('D' or 'R') (the message "Press brake to engage gear".

**ATTENTION** If the 'P' does not stay on after having carried out the initial check and the 'N' begins to flash on the lever (with 'N' activated on the dashboard), this indicates that it was not possible to engage 'Parking'. Pay close attention and always engage the parking brake ('Parking' does NOT engage automatically by moving the ignition switch to 'STOP-0'). Go to the nearest Service Network workshop.



### Automatic gearbox states

#### **Auto Parking function**

Vehicles with an automatic gearbox are equipped with an auxiliary device which, if possible, sets the gearbox to "parking" when it detects that the driver has left the vehicle. This function only activates with the vehicle stationary (less than **0.5 km/h**). If the driver does not operate the brake pedal or the accelerator, the gearbox shifts to 'parking' when no driver is detected. This is assessed on the basis of the vehicle configuration:

• detecting the driver sitting in the driver's seat;

• assessing a change in status of the driver's seat belt from fastened to unfastened, or the change in status of the driver's door from closed to open.

If the 'Auto Parking' function cannot be activated due to an internal fault, 'Parking' will not be automatically engaged even at speeds of less than **0.5 km/h**. In this case, a warning 'Auto P not active, make the vehicle safe' appears on the instrument panel'.

**ATTENTION** If the warning message 'Auto P not active, make the vehicle safe' appears on the instrument panel, go to the closest lveco Service Network workshop to have the vehicle checked.

This function does not replace the obligation of the driver to act correctly. Before leaving the vehicle, always apply the parking brake, set the gearbox to P (Parking) as described in the general indications. In an emergency situation, refer to the indications provided in the section 'manual release of position P'.

## P (Parking)

Use this to park the vehicle. 'Parking' can be selected by pressing 'P' (1) or it engages automatically when the ignition switch is set to 'STOP-0'.

When 'Parking' is engaged and the key is set to 'STOP-0', the 'P' symbol lights up and 'P' is shown on the display with the relative symbol.

When the engine is off, only 'P' can be selected. The engine can be started with the gearbox in 'P'. Gear engagement from 'P' (Parking) is only possible with the brake pedal pressed. It is recommended that this position is not selected while the vehicle is moving. If 'P' were to be selected with vehicle speed below **3 km/h**, the gearbox will go to neutral (letter 'N' active on the display) but the command is saved ('N' fixed on plus 'P' flashing on the lever).



If the vehicle is stopped within 5 seconds, 'Parking' is engaged, otherwise the gearbox stays in 'N' and the command is cancelled. At this point, select the required control again. If 'P' is requested at a speed exceeding **3 km/h**, the gearbox engages 'N' (the letter 'N' activates on the display and the lever).

Always use the parking brake when parking. In particular, when parking on a sloping road, always engage the parking brake before pressing 'P'.



#### General prescriptions

Before leaving the vehicle, always engage the parking brake, move the gearbox to P (Parking) (vehicles with an automatic gearbox), engage the appropriate gear (vehicles with a manual gearbox) and switch off the engine.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle



#### General prescriptions

Never use P (Parking) (vehicles with an automatic gearbox) or the gear engaged (vehicles with a manual gearbox) as a replacement for the parking brake.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

# R (Reverse)

This allows the vehicle to be put into reverse gear. When reverse gear is engaged, the symbol 'R' (1) activates on the lever.

'R' appears on the display.

When reverse gear is engaged, a single beep warns the driver of this change in the gearbox status. During any manoeuvres, other beeps are not connected to the gearbox but to other functions (for example: parking sensors).

It is recommended that 'R'(Reverse) is only engaged when the vehicle is completely stationary or in any case, when travelling at speeds of less than **5 km/h**.

If reverse gear is requested while the vehicle is moving forwards at a speed greater than

**5 km/h** but less than **10 km/h**, the gearbox goes into neutral ('N' activates on in the display) but the command is stored ('N' stays on with 'R' flashing on the lever).

If the vehicle is stopped within 5 seconds, reverse gear is engaged, otherwise the gearbox stays in 'N' and the command is cancelled.

At this point, select the required control again. If reverse gear is requested at a speed exceeding **I 0 km/h**, the gearbox engages 'N' (letter 'N' activates on the display and the lever).





# N (Neutral)

While the engine is running, it is not possible to move from 'P' to 'N' unless the brake pedal is pressed.

With 'N' engaged, the symbol 'N' (1) activates on the lever.

'N' appears on the display.

Engage the parking brake and press 'P' (Parking) if you plan on leaving the vehicle.



General risk, general prescriptions

Do not drive downhill in neutral, with the clutch disengaged and/or the engine switched off. This is a dangerous way to drive and reduces the possibility of the driver being able to intervene if the traffic or road conditions suddenly change with the added risk that the driver may lose control of the vehicle.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

**ATTENTION** Towing the vehicle may cause serious damage to the gearbox. See the relevant chapter for further information.

# D (Drive) – Automatic mode

This is the normal state used for driving on most urban and extra-urban roads. It ensures that the gear most suitable for driving requirements and greatest fuel economy is automatically engaged. In this state, the gearbox automatically selects a higher or lower gear as required. 'D' (Drive) allows an optimal driving state in all normal conditions of use.

When the gearbox is in 'D', the symbol 'D' (1) activates on the lever, the current gear appears on the display beside the letter 'A' (automatic mode) together with the selected driving mode (ECO/POWER).

(ECO) mode is automatically engaged however the driver can move to (POWER) mode by moving the lever to the right **(2)**.

Revert to the ECO mode by shifting the lever to the right. The display will show the status icons of the mode in use and driving style ECO or POWER.

The 'Kick down' function is activated by fully depressing the accelerator pedal. This function decides autonomously whether to shift down one or more gears depending on engine speed in order to ease overtaking or lane re-entry.

## +/- - Manual mode (Drive)



In this mode the gearbox interacts with the driver for the gears to be engaged manually allowing the driver to have more control over the vehicle.

In this mode, the gearbox system allows better exploitation of the engine brake actions, thus eliminating undesired shifts into higher or lower gears and improving overall vehicle performance.

To move into manual mode, a gear needs to be selected using the +/- controls.

No symbols will light up on the lever. The display will show the current gear WITHOUT the letter "A" beside it but with the letter "M" (manual mode) **(1)**.

Manual mode can be engaged at any time without the accelerator pedal needing to be released.

In manual mode, the gearbox shifts to a higher or lower gear when the driver manually engages the gear + / -.

The gearbox remains in that gear until the driver engages a higher or lower gear.

The gearbox automatically engages a lower gear when the vehicle slows down to a stop (to prevent the engine from jerking) and the current gear appears on the display in the dashboard. When in manual mode, it is possible for the vehicle to set off in second gear.

With the engine running and the gearbox in 'Parking', press the brake pedal, select 'D' and then +/- to move into manual mode (if '---' is pressed, the gearbox remains in first gear, if ' + 'is pressed, the gearbox goes into second gear).

To go back to automatic mode, move the lever to the right (ECO/PWR) or select 'D'.

# ECO/PWR (ECO/POWER)

When the vehicle is in automatic mode **(D)**, it is possible to change the driving mode from 'ECO' to 'POWER' by moving the lever to the right (ECO/PWR). The selected driving mode appears on the display.

In 'ECO', the gear changes are optimized to ensure maximum fuel economy. In POWER, the gear changes occur at higher engine speeds in order to exploit the torque developed by the engine.

**NOTE** In some conditions of speed limitation below **90 km/h**, the gearbox might not select the longer gears.

## ASIS (Adaptive Shift Strategy)

This feature allows the gearbox to adapt temporarily to route characteristics and the load.

There is an engine speed/gear shift correlation interval for each of the two profiles, 'ECO/ POWER', based on the conformation of the road. If the gearbox is in 'ECO' mode, it can move automatically to a greater or lesser performing 'ECO' condition depending on the road incline. With cold oil (below **30** °C), the clutch adjusts in order to warm the oil quickly. With high oil temperatures, clutch slippage will be limited as much as possible. If the temperature exceeds **120** °C, a protection strategy will be activated for the transmission parts which will temporarily limit the gearbox functions.

## Using the speed programmer (Cruise Control)

Cruise Control use is described in the specific section in the this manual. With an automatic gearbox, the only difference is that Cruise Control deactivation does not occur when the gears are changing.

It is therefore possible, keeping the programmed speed and without using the accelerator pedal:

• to change gears (in manual mode), by moving the control lever forwards or backwards.

• Assist gear changes (in automatic mode) if appropriate for the changes in road incline.

## Signals on the dashboard display

If the gearbox oil reaches an excessively high temperature, the yellow symbol  $\checkmark$  activates and the message "High gearbox temperature" appears on the display. The vehicle does not need to be stopped.

It is recommended that the driver slows down and drives at a moderate speed. If the message remains active, stop and wait a few minutes.

If the message remains when the vehicle is started up again, contact the closest Service Network workshop.

If the message "P not active, engage handbrake" appears, this indicates that the gearbox is not able to engage 'Parking'. The gearbox stays in 'N' (Neutral) and the parking brake needs to be engaged.

If the message "P may only be activated whilst vehicle is stationary" appears, this may indicate that 'Parking'has been requested but cannot be engaged since vehicle speed is too high, or that 'Parking' has been engaged but the vehicle is still moving (for example: sliding on snow).

In the event of a fault in the gearbox, the yellow symbol "Gearbox fault" appears on the display.

In the event of a serious fault, the red symbol **(I)** activates and the message "Serious gearbox fault" appears on the display.

If a fault occurs, go to the nearest Service Network workshop.

## "Limp Home" system

The 'Limp home' system is a completely automatic mode which, in the case of any faults in the gear actuation elements, activates a protection strategy limiting the gearbox function and selecting sixth gear, thus allowing the vehicle to move under emergency conditions.

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**ATTENTION** If 'Limp Home' is active, do not switch off the engine. If the engine is switched off with limp home active, the next time the engine is started, the gearbox might not have enough pressure to operate and the vehicle would have to be towed.

#### Manual release of the gearbox from position 'P' (Parking)

Manually disengaging the gearbox from 'P' (Parking) allows the vehicle to be recovered by a recovery vehicle or to be towed for short distance if this is not possible using the gearbox lever normally (for example, if the engine does not start or there is an electrical fault). It is a device which is to be used exclusively to emergency situations.

**ATTENTION** Always engage the parking brake before manually disengaging the gearbox from position 'P' (Parking). If the gearbox is disengaged without the parking brake being engaged, the vehicle may move unintentionally and cause damage to people or things in its path.

The device allowing manual emergency disengagement of the gearbox is located on the floor, to the right of the driver's seat. Open the cover of the protective element located on the mat to the right of the driver's seat.

Keep pulling the cable for the duration of the manoeuvre. As soon as it is released, the gearbox will go back to being locked in the 'Parking' position.

# **On-board equipment**

Chrono-tachograph	464
Lower part of dashboard, passenger side	465
On-board equipment	470

#### Chrono-tachograph

Please refer to the user manual provided by the Manufacturer of the chrono-tachograph for information on its use. The chrono-tachograph must be installed on the vehicle if its weight (with or without a trailer) exceeds 3.5 tonnes.

Modification of this control instrument or the signal transmission system which affect registration by the control instrument, particularly if for the purpose of fraud, may violate the Highway Code and national criminal or administrative regulations.

The chrono-tachograph is installed and sealed by authorized personnel: do not, in any way, access the device or the relative power supply and registration cables. The owner of the vehicle on which the tachograph is installed is responsible for ensuring that the device is regularly checked.

This check must be carried out in compliance with the established due dates as provided for by the Highway Code and by national regulations. A test confirming the correct operation of the device must also be carried out. Make sure that after each check, the identification plate is updated and that it contains the prescribed data.

For any further information contact the device Manufacturer.

**NOTE** If a chrono-tachograph is installed and the vehicle is to be left for more than 5 days, it is recommended that the negative terminal of the battery is disconnected to preserve the charge.

**NOTE** Please see the paragraph "Caring for the vehicle" for information regarding external cleaning of the device.

# Lower part of dashboard, passenger side

The following is available:

- I. Open compartment.
- 2. Compartment which closes with a door.

The designated plate is to be found inside vehicles which are equipped with brake power regulator.



# On-board equipment

466



## Vehicles with climate control unit

For vehicles equipped with a climate control unit, the compartment is cooled. Act on the thermostat (1) to adjust the cooling.

The following compartments could be found in the central part of the dashboard:

- I. Compartment available for fitting a radio in after market. 2.
- 2. Storage compartment
- 3. Chrono-tachograph compartment, on vehicles where available or mandatory.
- 4. Storage compartment (with no buttons).
- 5. Document compartment.

Instead of the compartment **(4)**, the following may be present:

6. Cup holders. 7. Document holder.



## On-board equipment



# **Cigarette lighter**

### (if provided)

It is located in the lower part of the dashboard. To activate it, press the button. The button automatically returns to its original position after a few seconds, and the cigarette lighter is ready for use.



## Risk of burns

Always check that the cigarette lighter switches itself off: - The cigarette lighter reaches high temperatures. - Handle with care and do not let children use it. Failure to comply with these prescriptions can result in the risk of serious injury



#### Contamination, fire

- Do not use the ashtray both for cigarette butts and paper: this could cause a fire. -Never use the cigarette lighter as a power socket to connect auxiliary electrical devices. Use the specific electrical socket.

Correct behavior will ensure that vehicle is used as environmentally friendly as possible

Power socket, installation of additional electrical appliances. A socket is provided for the connection of additional electrical devices. The technical specifications of this socket are as follows: 180 W - 12 V; protection fuse **20 A**.



General risk, general prescriptions

The power socket may be destroyed! Connect only appliances with maximum rating equal or lower to the socket rating.

Partial or complete non observance of these prescriptions can lead to serious damages to the vehicle



General prescriptions

Connect only devices with pins with a positive pole in the centre of the socket. Partial or complete non observance of these prescriptions can lead to serious damages to the vehicle

**ATTENTION** Extended use of the power socket when the engine is not running might discharge the battery.

468


General risk, general prescriptions The connected supplementary electrical devices must have electromagnetic compatibility compliant with current regulations, in order to avoid disturbance of vehicle operation.

Partial or complete non observance of these prescriptions can lead to serious damages to the vehicle

Do not install additional electrical / electronic equipment not provided for by IVECO or illegal (e.g. C.B. equipment with powers above the legal limit of 5 W or what is specified by current regulations), as they could cause noise or electromagnetic interference with the on-board equipment.



## **On-board equipment**

The on-board equipment is contained in the specific compartment **(1)** located in the central part of the chassis. These may vary depending on the type of chassis requested. The following may be included: seat belts, external and internal rear-view mirrors, handles and other small parts necessary for the correct assembly.

**NOTE** The figure is valid for left-hand drive vehicles and right-hand drive vehicles.

73

9

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Operator roadside repairs	
Informative note on tyres	47
Tyre pressure monitoring system (TPMS)	47
Tyre pressure	48
Winter tyres	49
Changing wheels	49
Lifting points	49
Spare wheel	49
Jack	49
Hub cover	50
Light alloy hubcaps	50
FIX & GO quick tyre repair kit	51
Valve types	52
Automatic battery disconnector	52
Emergency switch	52
Starting with an auxiliary battery	52
Starting with inertia manoeuvres	53
Battery location	53
Vehicle battery replacement	53
Recharging	53
Battery characteristics	53
Chassis vehicle prolonged downtime or stoppage	53
Precautions to be used with electronic control units installed	54
Changing bulbs	54
Adjusting the headlight light beam	55
Types of bulbs	55
Towing the vehicle	55

# 472 Operator roadside repairs

Towing a vehicle equipped with a Hi-Matic gearbox	556
Tow hook	557
Manual activation of power take-off	558
Replacing windscreen wiper brushes	559
Replacing windscreen wiper brushes	560

#### Informative note on tyres

#### Tyres purchased with the vehicle

• All the tyres fitted by lveco on the Daily – called S2R2 (summer) and S2WR2 (winter) – meet UNI ECE 117 regulations with regard to rolling resistance limits, wet grip and rolling noise. Furthermore, as of 1st November 2017, tyre manufacturers are no longer allowed to make products with the code S1 or R1. The code depicted in the image **(1)**, for example, is written on the shoulder of the tyre.

• The tyres sold together with the vehicle guarantee the safety and reliability parameters to which IVECO has committed itself when meeting the standards designed for the client.

• Road holding, comfort, fuel consumption, and the vehicle's grip when braking on wet and dry roads are not guaranteed if different tyres are used. It is therefore advisable to request that your tyre repair shop uses tyres from the IVECO accessory line catalogue.

• Iveco has fitted all vehicles in the Daily range with tyres that have rolling class A to C for summer and rolling class C to E for winter, thereby helping to reduce fuel consumption and the quantity of CO2 responsible for the greenhouse effect.

#### Wear, ageing and deterioration of the tread

• How many kilometres the tread will last depends on various different factors: Pressure, driving style, heavy braking, type of road surface, operating temperature, composition of the rubber, incorrect suspension angles.

• You can minimise wear on the tread by maintaining the optimum pressure below specified in the vehicle's use and maintenance manual at all times.

• The tyres are equipped with **1,6 mm** notches indicating the minimum acceptable limit of the tread according to the Highway code image **(2)**. To ensure good road holding, however, we recommend replacing the tyres at a minimum pitch of **3 mm**.

• If the tread exhibits excessive wear on the outer or inner sides, this may be caused by excessive convergence (toe in) or divergence (toe out) of the suspension angles. In either case, contact a workshop in the Service Network immediately.

• Never exceed the maximum loads permitted on the axles specified in the manual or the maximum speeds allowed by the vehicle and by the highway code of the country in question.

• If insufficient or excess pressure is indicated on vehicles equipped with the TPMS pressure control system, check the pressure as soon as possible and avoid driving any further.





## Operator roadside repairs

474



#### Changing the tyres

• We recommend changing the tyres after no more than six years, even if the minimum tread pitch has not been reached: The rubber tends to stiffen over time, thereby reducing the safety performance of the tyre and the vehicle.

- Contact a tyre dealer to find out the date of manufacture.
- The new tyres must have been made no more than 12 months before they are fitted.
- Do not use summer tyres below **5** °C because the rubber tends to stiffen, losing its roadholding characteristics and the grip of the tread when braking.

• Each time the tyres are replaced, the workshop must notify the customer of the information indicated on the label **(3)** before purchase, thereby allowing the customer to make an informed choice based on the parameters.

## Tyre pressure monitoring system (TPMS)

## Description of the tyre pressure monitoring system (TPMS)

The tyre pressure monitoring system constantly checks the pressure of all the tyres, using sensors on the wheels.

The multifunction digital display of the dashboard informs the driver promptly in the event of a critical loss of pressure.

The real pressure of the tyre is continuously transmitted from each wheel via radio to the electronic control unit TPMS. Here the signals of all the wheels and the information displayed on the dashboard is assessed.

If the pressure should change in a critical manner, the wheel module will transmit the measured values in shorter time sequences.

The system goes well beyond simple instantaneous measurement of tyre pressure, as it compares the measurement with the model parameters/values entered in the TPMS control unit, and if they are exceeded, it transmits an alarm signal.

The control unit is able to distinguish a critical situation from a normal situation such as pressure peaks while driving on even road surfaces, or if the load is unevenly distributed. If an irregularity is detected, the display will not only display this information, but will also indicate the exact wheel involved. The sensors record the values for every single twin wheel.

**NOTE** to ensure the display of the actual pressure, wait until the system has warmed up. It could take up to 10 minutes driving at a speed of at least **25 km/h**.

## **Component description**

- Electronic control unit.
- Sensors on the wheels.
- Dashboard display.

The interaction system with TPMS installed on the vehicle is configured in two different versions:

- 2-axle vehicles (2 front wheels, 2 rear wheels). Normal pressure set: front (example,
- 3,5 bar), rear (4 bar).

• 2-axle vehicles (2 front wheels, 4 rear twin wheels). Normal pressure set: front (example, **3,75 bar**), rear (example, **4,4 bar**).





**NOTE** The pressure is not fixed for all vehicles but depends on the vehicle configuration such as max. weight and size of the tyre. The values are by way of example only. A nominal tyre pressure is stored for each axle. This value depends on vehicle configuration, size of the tyres and GVW, see the table in the paragraph "Tyre pressure".

#### Wheel sensor

I. Inflation fitting ('valve').

2. Wheel sensor.

The identification code stamped on the adhesive plate, of the wheel sensor makes it recognisable, thereby guaranteeing the unequivocal assignment of the sensors to the respective wheels.

This code "informs" the control unit of the position of the wheel module. This excludes the possibility of pressure signals originating from another vehicle from being transmitted to the vehicle's own system.

The wheel module identification code is assigned on the production line and cannot be changed.

This identification number is stored inside the wheel module and is essential for it to work. If a tyre has to be replaced, the assignment between the wheel and its wheel module must be maintained.

If a tyre is replaced, the system recognises the new tyre if the vehicle is driven for **10 min** at **25 km/h**.

#### **TPMS** control unit

The TPMS control unit immediately recognises a change in the nominal pressure of the tyres compared to the programmed nominal value.

This is immediately recognised via a combined assessment of the threshold pressure values and the detected pressure values.

Incorrect tyre pressure is immediately shown on the dashboard display.

#### **G**eneral information

The TPMS system has been designed for original tyres and wheels. The pressures and alarms indicated by the TPMS system have been established on the basis of the type-approved tyres fitted on the vehicle.

The use of tyres of a smaller dimension, type and/or design which differ from the originals tyres, could cause the system to malfunction or could damage the sensors.

Wheels fitted in aftermarket could damage the sensors. Contact the Service Network before purchasing.

The use of tyre sealants in aftermarket could damage the tyre pressure control system. After having used tyre sealant, contact the Service Network to arrange to have the sensors checked.

After having checked and adjusted the inflation pressure, always refit the valve cap to prevent the introduction of moisture or dirt which could damage the tyre pressure control sensor.

**NOTE** Some external parameters (for example: external temperature, etc..) could affect the information relating to the TPMS indicated on the vehicle dashboard.

**NOTE** The tyre inflation pressure and the 'under-inflated' warning signal could change depending on the environmental conditions.

**NOTE** Presence of the TPMS system does not relieve the driver of the obligation to regularly check the tyre pressure (including the spare wheel) and ensure that maintenance is carried out correctly: the system does not serve to indicate a potential fault with a tyre.

**NOTE** The TPMS system is not able to indicate sudden losses of tyre pressure (for example: in the event of a tyre blow-out). In this case, stop the vehicle, brake with extreme care, and do not steer abruptly.

**NOTE** When restoring the correct tyre pressure, remember that it must be done when the tyres are cold and "rested"; if the tyres are checked while warm, do not reduce the pressure even if it exceeds the specified value. Repeat the check with cold tyres.

**NOTE** If one or more wheels without sensors are fitted (for example: if a spare wheel is fitted), the system will no longer be available for the new wheels and a warning message will be displayed until wheels with sensors are once again fitted.

**NOTE** Tyre pressure can vary based on the external temperature. The system might temporarily indicate low pressure. In this case, check the pressure of the tyres when cold and restore the pressure values if necessary.

**NOTE** When a tyre is removed, the aluminium valve should also be replaced: contact a Service Network workshop. The assembly/disassembly operations of the tyres and/or rims require special precautionary measures. To prevent damage or incorrect assembly of the sensors, tyres and/or rims must only be replaced by specialised personnel. contact a Service Network workshop.

#### Operation

The following information can be accessed from the designated page (Vehicle Info) available in the menu of the digital multifunctional display on the dashboard using the buttons on the steering wheel:



- Pressure of the tyre(s).
- Over-inflation and under-inflation status of tyre(s).

• High temperature warning of the tyre(s).

• Battery indicator of sensor discharged. The sensor must be replaced within the next few weeks.

**NOTE** The figures represent the display of vehicles with rear single wheels and vehicles with rear twin wheels respectively. The values indicated in the figures are by way of example only, the correct pressures for each vehicle version are provided in the specific table.



# List of symbols on the dashboard

480

SYMBOL	MEANING
(!)	<ul> <li>When a TPMS system error is detected, the symbol is displayed. This will also happen if one or more than one wheel is fitted without a sensor. The indication will remain visible until the problem is resolved. The warning light activates signalling that the tyre pressure is less than or greater than the recommended value and/or that a slow pressure leak has been detected. In these cases, optimal fuel consumption and the best service life of the tyre might not be guaranteed. If two or more tyres are in the conditions indicated above, the display will show the indications relating to each tyre, in order.</li> <li>ATTENTION Do not continue driving if one or more tyres are under-inflated as vehicle stability will be compromised. Stop the vehicle avoiding braking actions and abrupt steering. Ensure the tyre is repaired immediately using the designated tyre repair kit or using the spare wheel and contact the Service Network workshop as soon as possible.</li> </ul>
	High tyre temperature, check the tyre.
2.5 📗 bar	Indication of tyre pressure.
📗 bar	Tyre pressure not detected.
0.5 🛄 bar *	Incorrect pressure conditions. <ul> <li>Indication of air leak.</li> <li>Indication of under-inflation showing the pressure value and the relative wheel (yellow).</li> <li>Indication of over-inflation.</li> </ul>
(⊉) ⊪ bar ↓ ↓ 2.5 ₪ bar	High temperature of the tyre: the high temperature symbol displayed (thermometer) alternating with the correct pressure value.

SYMBOL	MEANING
2.5 🛯	Sensor low battery charge.
If the battery is flat, and at t	the same time, pressure is incorrect, the battery symbol of the wheel will overlap the symbol of the yellow wheel.

# Tyre pressure

		"H NO LOAD		
E/ DEX	FRONT AXLE	RELATIVE PRESSURE	REAR AXLE	RELATIVE PRESSURE
	Front sing	gle wheel	Rear sing	gle wheel
6 - ~ 6 - ~	1300	250 kBa (	760	
6 - २	1200	<b>3,5 bar</b> ; 51 psi)	1020	<b>3,5 bar</b> ; 51 psi)
6 - २	1300		1030	
	Front sing	gle wheel	Rear tw	in wheel
6 - R	1350		1300	

			VEHICLE WITH NO LOAD			
MODEL	GVW <b>(*)</b> (KG)	LOAD INDEX	FRONT AXLE	RELATIVE PRESSURE	REAR AXLE	RELATIVE PRESSURE
	Single wheel vehicles		Front sin	gle wheel	Rear sing	gle wheel
30S-33S	3000 3300	215/65 R16 - 109/107R 225/65 R16 - 112/110R	1300	350 kPa (	760	
355	3500	225/65 R16 - 112/110R		<b>3,5 bar</b> ; 51 psi)		<b>3,5 bar</b> ; 51 psi)
200	3800	235/65 R16 -	1300		1030	
202	3800	115/113R				
	Twin wheel vehicles			Front single wheel		in wheel
350 400	3500	195/75 R16 -	1350		1300	
330-700	4200	107/105R	1330		1500	
	3500	195/75 R16 -	1350		1310	
35C-50C	4200		1400		1260	
	5000		3	<b>350 kPa</b> (	1500	<b>350 kPa</b> (
60C	4200	225/65 R16 - 112/110R	1500	<b>3,5 bar</b> , 51 psi)	1500	<b>3,5 bar</b> ; 51 psi)
60C-65C	6000–6500	225/75 R16 - 118/116R	1500		1500	
70C	7000	225/75 R16 -	1550		1550	
			1550			

			MAXIMUM PERMITTED LOADS ON SINGLE AXLES							
MODEL	GVW <b>(*)</b> (KG)	LOAD INDEX FRONT AXLE RELATIVE PRESSURE	LOAD INDEX FRONT AXLE RELATION		GVW (*) (KG) LOAD INDEX FRONT AXLE RELATIVE PRESSURE	) LOAD INDEX FRONT AXLE RELATIV PRESSUF		RELATIVE PRESSURE	REAR AXLE	RELATIVE PRESSURE
	Single wheel vehicles		Front sin	gle wheel	Rear sing	gle wheel				
305-335	3000	215/65 R16 - 109/107R 225/65 R16 - 112/110R	1750	215/65 = 400 kPa ( 4,0 bar 58 psi) 225/65 = 370 kPa ( 3,7 bar 53 psi)	1900	215/65 = 425 kPa ( 4,25 bar 62 psi 225/65 = 400 kPa ( 4,0 bar 58 psi)				
	3300		1800		2060	<b>425 kPa</b> ( <b>4,25 bar</b> ; 62 psi)				
355	3500	225/65 R16 - 112/110R	1900	<b>400 kPa</b> ( <b>4,0 bar</b> 58 psi)	2240	<b>475 kPa</b> ( <b>4,75 bar</b> ; 69 psi)				
200	3800	235/65 R16 - 115/113R	<b>350 kPa</b> ( <b>3,5 bar</b> 51 psi)	350 kPa (	2240	<b>450 kPa</b> ( <b>4,5 bar</b> ; 65 psi)				
385	3800			2430	<b>475 kPa</b> ( <b>4,75 bar</b> ; 69 psi)					
	Twin wheel vehicles		Front sin	gle wheel	Rear tw	in wheel				
250 400	3500	195/75 R16 -	1900	<b>450 kPa</b> (	2600					
55C-40C	4200	107/105R	1900	<b>4,5 bar</b> , 65 psi)	3100	350 kPa (				
	3500				2600	<b>3,5 bar</b> ; 51 psi)				
35C-50C	4200	195/75 R16 -	2100	500 kPa (	3100					
	5000	ιιυ/Ιυ <del>δ</del> κ	2100	2100	<b>3,0 bar</b> , 73 psi)	3700	<b>450 kPa</b> ( <b>4,5 bar</b> ; 65 psi)			

484

# Operator roadside repairs

			MAXIMUM PERMITTED LOADS ON SINGLE AXLES			
MODEL	GVW <b>(*)</b> (KG)	LOAD INDEX	FRONT AXLE	RELATIVE PRESSURE	REAR AXLE	RELATIVE PRESSURE
60C	4200	225/65 R16 - 112/110R	2200	<b>400 kPa (4 bar</b> ; 58 psi)	4200	<b>400 kPa</b> ( <b>4,0 bar</b> ; 58 psi)
60C-65C	6000–6500	225/75 R16 - 118/116R	2300	<b>450 kPa</b> ( <b>4,5 bar</b> ; 65 psi	5000	<b>500 kPa</b> ( <b>5,0 bar</b> ; 73 psi)
70C	7000	225/75 R16 -	2500	<b>475 kPa</b> ( <b>4,75 bar</b> ; 69 psi)	5250	550 kPa (
72C	7200	121/120R	2700	<b>525 kPa</b> ( <b>5,25 bar</b> ; 76 psi)	0000	<b>5,5 bar</b> ; 80 psi)

# **Operator roadside repairs**

			FULLY LOADE FRONT ANI	ED VEHICLE: GVW ( D REAR AXLE AND	*) DISTRIBUTION E THE RELATIVE PRE	ETWEEN THE ESSURES (**)
MODEL	GVW <b>(*)</b> (KG)	LOAD INDEX	LOAD ON FRONT AXLE (%)	RELATIVE PRESSURE	LOAD ON REAR AXLE (%)	RELATIVE PRESSURE
Single wheel vehicle:			Front sin	gle wheel	Rear sing	gle wheel
	3000	3000				215/65 =
305-335	3300	215/65 R16 - 109/107R 225/65 R16 - 112/110R	45	350 kPa (	55	400 kPa ( 4,0 bar 58 psi 225/65 = 370 kPa ( 3,7 bar 53 psi
355	3500	225/65 R16 - 112/110R	43	<b>3,5 Dar</b> 51 psi)	57	<b>400 kPa</b> ( <b>4,0 bar</b> ; 58 psi)
385	3800	235/65 R16 -	41		59	<b>450 kPa</b> (
	3800	115/113R	וד		57	<b>4,5 bar</b> ; 65 psi)
	Twin wheel vehicles		Front sin	gle wheel	Rear tw	in wheel

486

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					FULLY LOADED VEHICLE: GVW (*) DISTRIBUTION BETWEEN THE FRONT AND REAR AXLE AND THE RELATIVE PRESSURES (**)			
MODEL	GVW <b>(*)</b> (KG)	LOAD INDEX	LOAD ON FRONT AXLE (%)	RELATIVE PRESSURE	LOAD ON REAR AXLE (%)	RELATIVE PRESSURE		
250 400	3500	195/75 R16 -	41		59			
33C-40C	4200	107/105R	36		64	<b>350 kPa</b> (		
	3500		41		59	<b>3,5 bar</b> ; 51 psi)		
35C-50C	4200	195/75 R16 - 110/108R	36		64			
	5000		<b>350</b> <b>3,5 ba</b> 30	<b>350 kPa</b> (		400 kPa (		
60C	4200	225/65 R16 - 112/110R		350 kPa ( 3,5 bar, 51 psi)	70	<b>4,0 bar</b> ; 58 psi)		
60C-65C	6000–6500	225/75 R16 - 118/116R						<b>450 kPa</b> ( <b>4,5 bar</b> ; 65 psi)
70C	7000	225/75 R16 -	26		74	<b>525 kPa</b> (		
72C	7200	121/120R	26		74	<b>5,25 bar</b> ; 76 psi)		

For the exact capacity of the vehicle please consult the 'Vehicle identification plate' at numbers (1) and (2)

(\*) GVW: gross vehicle weight. (\*\*): the data as a percentage refers to the average between the various wheelbases.

The pressures refer to tyres sold with the vehicle. If replacing with tyres of different brands, check that the pressures above do not exceed those indicated on the tyres.

With vehicle in drive gear, these tables allow to define the correct operating pressure of tyres according to both the type of tyres fitted and of weights acting on front and rear axles.

The indicated pressures refer to cold tyres with an external temperature of 20 °C.

The outside temperature increasing by 10 °C causes a pressure increase of 0,1 bar. Check the pressure with the tyres cold (stopped at least three hours ago) if possible and after having driven no more than 2 km.

# 489

Vehicle identification plate
(1) Max. permissible weight on front axle.
(2) Max. permissible weight on rear axle.

	IVECO SP	A	
		1)	
12)		2)	
dein		3)	kg
Ψ.		4)	kg
	1-	5)	kg
Corrected	2-	6)	kg
value	<sup>Туре</sup> 7)		
m	Wheelbase 8)	n° of axles	13)
	Engine type 9)	Engine powe	r kW



#### Winter tyres

If necessary, to tackle snowy or muddy roads, use winter-type tyres that can be identified by the code 'M+S' ("Mud and Snow") reported on the shoulder or the tyre. Moreover, on the shoulder, the winter tyres may show a drawing of a mountain and/or a star profile (see the picture).

For the correct choice of the winter-type tyres, please contact the Service Network, which will be at your disposal to suggest the most suitable types of tyre according to your needs and to the type of vehicle.

#### Attention!

- Please remember that the winter tyres should be fitted to all the wheels of the vehicle. Furthermore, they should be all of the same type and dimension on every wheel.
- When using the winter tyres, please follow the requirements of the Manufacturer, with particular attention to the indication concerning the maximum allowed speed that should always be observed.

#### Chain suitability of the vehicle tyres

For the correct choice of the chains, please contact the Service Network, which will be at your disposal to suggest the most suitable types according to your needs and to the type of vehicle.

**NOTE** The chains should be fitted on the drive wheels (rear wheels).

**NOTE** The use of the chains is regulated by the rules of the Highway Code.



General risk, general prescriptions

With the chains fitted: -Drive carefully at a moderate speed (below 50Km/h) -Do not accelerate brusquely to prevent the wheels from slipping which could cause the chains to break -After some meters, check that the chains are fitted and tensioned correctly.

#### **Changing wheels**

#### **General** guidelines

When changing the wheels you must take some simple precautions, as described below:

• Stop the vehicle in a position that does not constitute a traffic hazard and makes it possible to change the wheel safely. If possible the ground should be flat and compact.

• Switch off the engine and engage the parking brake (electric, see the button in the figure) (mechanical, see the lever in the figure), using the control / lever (1).

- Put the vehicle into first or reverse gear.
- Where required by law, put on the reflector vest before leaving the vehicle.

• Indicate the presence of the parked vehicle in accordance with current regulations in force in the country where driving: - hazard lights; - reflective warning triangle; - other.



General risk, general prescriptions

- Passengers should leave the vehicle and stay well away from the traffic. - The vehicle rescue operator must wear a designated reflective vest.

Failure to comply with these prescriptions can result in the risk of serious injury



General risk, general prescriptions

Before raising the vehicle, remember not only to engage the parking brake but to also use chocks to block the wheels which remain on the ground.

Partial or complete non observance of these prescriptions can lead to serious damages to the vehicle

## General warning on the directional tyres

• Wheels with directional tread can be recognised by the arrow on the side that indicates the expected rolling direction. Its characteristics can only be maintained in terms of grip, noise, wear resistance and above all drainage on wet surfaces if the right direction is observed.

• If replacing the tyre after a puncture with the arrow facing the opposite direction to that of driving, drive very carefully and replace the tyre as soon as possible, as the performance indicated above is limited, especially on wet surfaces..









## Lifting points

The lifting points are indicated in the figure respectively for:

• Lifting point for vehicles with MECTOR suspensions.

• Lifting point for vehicles with transverse leaf spring suspensions.

• Rear axle







## Spare wheel

To remove the wheel, proceed as follows:

- Remove the clip **(I)**.
- Hold the slide (2) and unscrew the locking device (3).
- Lower the wheel carrier slide (2) and unscrew the nut(s) (4) fixing the wheel.

**NOTE** To make the spare wheel more easily accessible, position the vehicle with the chassis raised.

When refitting the replaced wheel, fully tighten the device (3) on the spare wheel holder.



General risk, general prescriptions

Periodically check that the spare wheel is properly secured. Vibrations could cause bolt loosening.

# Spare wheel holder for vehicles with single wheels

On vehicles with single rear wheels, the spare wheel can be removed as follows:

• Insert the pentagonal head wrench (1) into the seat in the releasing device (2).

• Turn the spanner (1) anti-clockwise with the wheel resting on the ground and continue turning until the winch stops.

- Move the wheel outside the vehicle chassis (see figure).
- Unscrew the threaded knob (3).
- Free the wheel from the fixing device (4).



## Operator roadside repairs



To store the replaced wheel, proceed as follows:

- Unscrew the threaded knob (3).
- Free the wheel from the fixing device (4).
- Attach the fixing device (4) to the wheel's rim.
- Insert the fixing device's stud into the hole in the wheel's rim.
- Screw in the knob (3).

• Move the wheel inside the chassis (see figure).

• Insert the pentagonal head wrench (1) into the seat in the releasing device (2).

497

• Turn the wrench **(1)** in a clockwise direction until the yellow notch **(3)**can be seen through the designated clear window or the anti-shock clutch engages.

**NOTE** The winch can only be operated with the special spanner **(I)**. Without this wrench, the outer part of the seat **(2)** will turn without engaging. The seat is perforated for the insertion of a padlock.





# Jack

(if provided)

For the rules of inspection and maintenance, follow the instructions provided in the specific documentation provided by the jack manufacturer. After using it, close it properly.



General prescriptions

To use the jack you must scrupulously follow the instructions indicated on the plate attached to it.

Partial or complete non observance of these prescriptions can lead to serious damages to the vehicle



General prescriptions

The jack must only be used for short periods, e.g. for changing the wheel. Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle



General risk, general prescriptions

- Do not use the jack if the roadbed is not solid and compact. - Do not lift the vehicle without having clearly identified the lifting points. - Do not use the jack for loads greater than those indicated on the label attached to it.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle



General risk, general prescriptions

- If the jack is not positioned correctly it may cause the raised vehicle to fall. - Do not position yourself (even partially) under the raised vehicle. If necessary contact the Service Network, which is equipped for this purpose.

**ATTENTION** The jack can not be repaired: if broken, it must be replaced with a new, original one.

**ATTENTION** No tools other than the supplied lever can be used with the jack.

- Take the tools required for the operation. These are located in the container under the driver's seat (see the "On-board Equipment" chapter).
- Take the spare wheel (see the "Spare wheel" paragraph in this chapter).
- If necessary, remove the light alloy hub cap (see the "Light Alloy Hubcaps" paragraph of this chapter).
- With the wheel to be changed touching the ground, loosen the wheel stud nuts.
- Position the jack under the lifting support nearest to the wheel to be replaced. These are illustrated in the "Lifting Points" paragraph.



#### General prescriptions

For correct tightening only use the tools supplied with the vehicle.

- Raise the vehicle.
- Unscrew the wheel nuts completely using the spanner and remove the wheel.
- Fit the spare wheel. Before fitting the wheel, clean the studs, the nuts and the contact surfaces to remove any contamination that could ultimately cause loosening of the wheel nuts. The above suggestion may also help in future nut loosening.







General risk, general prescriptions

Inform any persons present that the vehicle is about to be lifted. They must move away from the immediate vicinity of the vehicle to avoid a dangerous situation where they could touch the vehicle, even inadvertently.

## 501

# Note for vehicles with twin wheels

In the case of changing an internal wheel:

- The wheel must be positioned correctly on the hub respecting the centrings (1) at  $120^{\circ}$  indicated in the figures.

- Fit the wheel correctly as indicated in the figure.
- Do not damage the inside tyre's valve.



502



#### Wheel nut tightening torque

Securing front and rear wheels (M14 threaded stud) models 30S - 35S: (maximum value; minimum value): **176 – 144 N·m** (**17,6 – 14,4 kgm**).

Securing front and rear wheels (M14 threaded stud) models 30S-35S equipped with alloy rims: (maximum value; minimum value) **245 – 200 N·m** (**24,5 – 20,0 kgm**). Securing front and rear wheels (M18 × 1.5 threaded nut) models 35C - 40C - 45C - 50C

(maximum value; minimum value) 350 – 290 N·m (35,7 – 29,5 kgm).

Securing front and rear wheels (M18 × 1.5 threaded nut) models 60C - 65C (maximum value; minimum value) **350 – 290 N·m** (**35,7 – 29,5 kgm**).

Securing front and rear wheels (M18 × 1.5 threaded nut) models 70C - 72C (maximum value; minimum value) **350 – 290 N·m** (**35,7 – 29,5 kgm**).

Important: when the vehicle is new and at each disassembly, retighten the nuts after the first **50 km** and the next **100 km**.

Furthermore, as soon as possible:

I. Check the pressure of the new tyre (see the table in the chapter 'Technical specifications') and for extra safety also that of the other tyres.

2. Check that the wheel nuts are tightened to the correct torque.

• Tighten the nuts slightly to fasten the wheel to its mount.

• Lower the wheel to the ground and finish tightening the nuts, working on opposite pairs (see the figure). Applying bodyweight (approx. 70 kg) to the end of the lever will provide approximately the required torque.

• Lower the wheel to the ground and finish tightening the nuts, working on opposite pairs (see the figure). Applying bodyweight (approx. 70 kg) to the end of the lever will provide approximately the required torque.

- Put away the replaced wheel.
- Put away the tools used.



**ATTENTION** Have the replaced wheel repaired and refitted as soon as possible.

**ATTENTION** Regularly check the pressure of the tyres and of the spare wheel, observing the values listed in the ''Technical specifications'' chapter.



#### Hub cover

Each type of hub cover has fastening holes for the studs / nuts which are wider than the others in order to facilitate wheel assembly and disassembly.

The assembly sequence is as follows:

- 30S-35S on all wheels
- 35C-40C-45C- 50C (only on front wheels)
- 60C-65C-70C-72C (only on front wheels)

## Vehicles 30S-35S

- fit the wheel (1) onto the hub;
- tighten the studs (2) to secure the wheel (1);
• insert the wheel hub cap (3) aligning the two largest holes (4) indicated in the figure;



- fit the four remaining studs on the wheels.Screw in and tighten all the elements.

# **Operator roadside repairs**

506



**Integral wheel cap with hook on rim (optional)** In vehicles equipped with integral wheel cap (if fitted) proceed as follows to prevent any malfunctioning of the tyre valve:

• When fitting the wheel cap, align the pressure valve **(I)** with the housing seat.

# Wheel hub cap configuration models 35C-40C-45C-50C only on front wheels

To fit the hub cover, proceed as described above. The figure shows the complete wheel. The legend identifies the components.

Legend:

I. Wheel

2. Fastening nuts

3. Hub cab

4. Centring holes - they are in threes.





# Wheel hub cap configuration models 60C-65C-70C-72C only on front wheels

To fit the hub cover, proceed as described above. The figure shows the complete wheel. The legend identifies the components.

- Legend:
- I. Wheel
- 2. Fastening nuts
- 3. Hub cab
- 4. Centring holes they are in threes

# Light alloy hubcaps

(if provided) To replace a hubcap, proceed as follows:

• Remove the hub cover cap **(I)** with a screwdriver.

Unscrew the screws with the appropriate tool (2) and remove the hub cap.

• Unscrew the wheel's fixing nuts (3) and remove the bracket (4). After changing the wheel, carry out the above steps in reverse order.



# FIX & GO quick tyre repair kit



#### Risk of skin irritation or allergic reactions

The cartridge contains ethylene glycol. Contains latex: may provoke an allergic reaction. Do not ingest. Irritant in contact with the eyes. May provoke a reaction if inhaled or in contact with the skin.

Failure to comply with these prescriptions can result in the risk of serious injury



Avoid contact with the skin, eyes and clothing. In the event of contact, wash with plenty of running water. If ingested, do not provoke vomiting; rinse your mouth and drink abundant water. Seek immediate medical attention.

Failure to comply with these prescriptions can result in the risk of serious injury



#### Risk of intoxication or poisoning

Risk of intoxication or poisoning

Keep out of the reach of children. Keep the cartridges in the compartment away from heat sources The product must not be used by those who suffer from asthma Do not inhale the vapours during intake and introduction operations Seek medical advice immediately if any allergic reactions occur.

Failure to comply with these prescriptions can result in the risk of serious injury



#### Disposal of liquids

The sealant has an expiration date. Replace the cartridge if the sealant has expired. Do not dump expired cartridges containing the sealant, but dispose of them in accordance with established legislation.

Correct behavior will ensure that vehicle is used as environmentally friendly as possible

# Location

The FIX & GO kit is located as follows.

# With single-seat passenger seat

With the single-seat passenger the kit is located below the seat itself.

# With two-seater passenger bench seat

With the two-seater passenger bench seat the kit is located below the seat on the opposite side to the driver's seat.

If there is compartment below the bench seat, the kit is located in the compartment.



# 512 Operator roadside repairs



# **R**emoving the kit

For passenger safety, the kit is secured by a protective bracket preventing it from moving forward.

Remove the protective bracket (unhooking the spring catch) to remove the kit. If there is a storage compartment below the passenger seat, for safety reasons, the kit is located in that storage compartment. Lift the seat to remove the kit.

The kit holder is secured to the floor with velcro. 'Rip' the kit up from the floor, separating the trim on the holder from the velcro mat.

# 

# Kit components

The tyre quick repair kit includes:

- A compressor body (A) with pressure gauge and black inflation hose (B);.
- Relative black and white (transparent) striped silicon pipe (D).

• Round decal **(E)** with the words "MAX.**80 km/h**", to be positioned where it can be clearly seen by the driver (next to the instrument panel) indicating that the tyre has been repaired using the kit.

- A pair of protective gloves.
- Information leaflet, shown in the figure, required for correct use of the kit.
- Adapters for inflation of different elements and valve extension for vehicles with twin rear wheels.

**NOTE** These parts are contained behind a door in the base of the compressor.

**ATTENTION** Information must be provided showing that the tyre has been repaired with the quick repair kit. After using the kit, the information leaflet (shown in the figure) must be given to those who will be handling the treated tyre.

**ATTENTION** If the compressor overheats and locks up due to excessive overheating, disengage it and wait a few minutes for it to cool down, then try again. The quick repair kit may not work with tyres other than those with which the vehicle is delivered. If the tyres have to be replaced, use those approved by the Manufacturer. Contact the Service Network.

**ATTENTION** Do not operate the kit for more than **20 min** at a time. It may overheat.

**ATTENTION** The tyre repair kit is only suitable for temporary repairs; the repaired tyres must be inspected as soon as possible by the Service Network.

• The sealant fluid is effective for temperatures between -20 °C and 40 °C

• Tyres with damage of less than **4 mm** in diameter on the tread and the shoulder of the tyre can be repaired.

• It does not work with damage to the walls of the tyre. In this case, contact the Service Network.

• Do not use the repair kit if the tyre is too damaged. In this case, contact the Service Network.

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# 514 Operator roadside repairs



• If the rim is deformed (to such an extent as to cause the air to leak out) the tyre cannot be repaired. In this case, contact the Service Network.

- Do not remove foreign bodies (screws, nails) puncturing the tyre.
- The contents of one cartridge can repair one tyre only.
- Spare cartridges are available from the Service Network.



Disposal of liquids

The sealant has an expiration date. Replace the cartridge if the sealant has expired. Do not dump expired cartridges containing the sealant, but dispose of them in accordance with established legislation. Correct behavior will ensure that vehicle is used as environmentally friendly as

possible

# Using the kit for a repair

**ATTENTION** Wear the gloves provided in the tyre repair kit.

**ATTENTION** Only actuate the compressor of the inflation kit when it has been connected to the tyre valve.

I. Engage the parking brake. Unscrew the tyre valve cap, pull out the black and white (transparent) striped silicone filling pipe **(A)** and tighten the ring nut on the tyre valve.

**NOTE** For repairs on rear tyres of vehicles with twin wheels, see the instructions in the relevant paragraph.



2. Insert the plug into the vehicle power socket  ${\bf I2}~{\bf V}.$ 

3. Start the vehicle engine.

- 4. Turn the selector (1) anti-clockwise to the repair position (A).
- 5. Operate the kit by pressing the 'ON / OFF' (2) switch.

Inflate the tyre to the pressure indicated by the Manufacturer.

For a more precise reading, check the pressure on the pressure gauge (3) with the kit switched off without moving the switch (1) from the repair position.

**ATTENTION** Do not switch off the compressor during the tyre repair and inflation operation (approx. two minutes to inject the sealant into the tyre, followed by approx. six minutes for inflation).

# Vehicles with rear twin wheels

Outer wheels.

If a vehicle with twin wheels have a punctured tyre, use the valve extension shown in the figure.

This extension (1) is located inside the hatch in the base of the inflation kit.



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- Screw the extension onto the valve (1) of the tyre.
- $\bullet$  Screw the black and white (transparent) striped silicone inflation pipe  $({\ensuremath{A}})$  onto the extension.
- Follow the repair procedure described before.

**NOTE** The extension **(I)** may be used one time only.

# Inside wheels

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If a vehicle with twin wheels have a punctured tyre, use the valve extension shown in the figure.

This extension (1) is located inside the hatch in the base of the inflation kit.

- Screw the extension (1) to that (2) present on the inside tyre.
- Follow the repair procedure described before.

After using the kit and completed the repair, have the extension **(2)** checked over by the Service Network; it may need to be replaced.

**NOTE** The extension **(I)** may be used one time only.

# **Operator roadside repairs**

517

If within **10 min** a pressure of at least **3 bar** is not reached; disconnect the silicone pipe with black and white (transparent) stripes (A) refilling from the valve and pull the plug out of the power socket 12 V. Then move the vehicle forwards by approximately 10 m to distribute the liquid sealant inside the tyre and inflate again.

If also in this case within 10 min of the kit switching on a pressure of at least 3 bar is not reached; do not drive the vehicle as the tyre may be too damaged and the kit may not be able to ensure the correct seal.

In this case, contact the Service Network. If the tyre has reached the pressure specified by the Manufacturer, drive off immediately.

**NOTE** Apply the sticker in a position clearly visible to the driver to indicate that one of the tyres has been repaired with the repair kit.



General prescriptions

- Drive carefully especially on bends. - Do not exceed 80 km/h. - Do not accelerate and brake brusquely.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

ATTENTION Do not affix the sticker to the steering wheel airbag cover. Affix it next to the instrumentation as shown in the figure.







After having driven for approx. **10 min** or travelled **8 km**: 6. Stop the vehicle, engage the parking brake and check the tyre pressure.

To check the tyre pressure with the compressor, use the black pipe **(B)**.

**NOTE** The black and white (transparent) striped silicone transparent pipe **(A)** is the one used for repair.

**ATTENTION** If the pressure drops below **3 bar** do not continue driving: the tyre is too damaged and the kit cannot ensure a safe seal.

If the pressure detected is at least **3 bar**, restore the correct pressure and continue driving. In any case, contact the Service Network as soon as possible.

# Using the kit to restore inflation pressure

Engage the parking brake:

I. Unscrew the tyre valve cap, pull out the black inflation pipe **(A)** and tighten the ring nut on the valve.



2. Insert the plug into the vehicle power socket **I2 V**.

3. Start the vehicle engine.

4. Turn the selector (I) clockwise to the re-inflation position (B).

5. Operate the kit by pressing the 'ON / OFF' (2) switch. Inflate the tyre to the pressure specified in this publication. For a more precise reading, check the pressure on the pressure gauge (3) without moving the central switch from the re-inflation position.

**NOTE** To deflate the tyre, press button (4).

**NOTE** if you need to check the pressure of a rear outer twin tyre, use the appropriate extension.



#### **Operator roadside repairs** 520



# Replacing the cartridge

- Push the cartridge release button (1).
  Extract the cartridge.
  Insert the spare and push it in until it engages automatically.

• Insert the semi-transparent pipe **(A)** into its seat.

# Valve types

**NOTE** If the TPMS option is fitted, the valve used is a Clamp-in with integrated pressure sensor and lock nut. This valve is also fitted on the spare wheel. It must be replaced when the internal battery is flat.



#### General risk, general prescriptions

The valves (of any type) must be replaced with the same original spare parts recommended by IVECO. This intervention must always be carried out by the Service Network. The TPMS valve has an identification number printed on the body of the sensor.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

**NOTE** Tightening torque of the nut on the Clamp-in valve: **8** N·m.

#### Use of the inflation extension piece for dual wheels

**NOTE** When inflating the outer dual rear wheels, use the extension piece provided in the kit underneath the seat.

Valve for 35C-50C vehicles.





Valve for 60C-70C vehicles.

# Snap-in TPMS rubber valve extension for inner wheel

**NOTE** For the versions with TPMS on 60-72C vehicles, the valve extension on the inner dual rear wheel must be replaced using the genuine IVECO spare part with the following number in particular: 5802331103. Length **160 mm** and aluminium connecting ring nut **(1)**.

Replacement with a standard brass extension plus ring nut may cause ATTENTION galvanic corrosion on the aluminium TPMS valve and consequently malfunctioning.

### Automatic battery disconnector

The electrical system of the vehicle may be equipped with an automatic battery disconnect switch. This function is carried out thanks to the battery disconnect switch located below the positive pole of the battery intervening and disconnecting some electrical charges of the vehicle to reduce the power draw.

No specific command is required to activate this function. After having set the engine ignition key to 'STOP 0', the battery disconnect switch automatically disconnects the main loads of the vehicle after approximately **20 min** and after having checked the necessary vehicle conditions. Some actions or states may inhibit (or delay) the disconnection:

- Engine ignition key set to 'MAR-1'
- Hazard lights active;
- Side lights active;
- Horn active;
- Spot light active;
- Door release/lock control (for both the cab area and the loading compartment);
- Door open/close transition (including sliding side doors and rear panels;
- Bonnet open/close transition (only with anti-theft siren);
- lveco radio present as first equipment.

With the disconnect switch open (loads disconnected), the complete power supply of the electrical system will be automatically restored (disconnect switch closed) when the actions or states listed above occur. This is with the exception of some types of radio. The activation of these will require vehicle power to be restored by one of the other methods indicated.



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# **Emergency switch**

The electrical system of the vehicle may be equipped with an 'Emergency Switch' which can be operated by the button on the central dashboard.

Pressing the 'OFF' button as indicated in the figure disconnects some electrical loads by operating the battery isolator, with the following effects:

- Activation of hazard lights.
- Activation of side lights.
- Double door unlocking (after which the central locking is disabled).
- Engine switched off (when the speed falls below 4 km/h).
- Opening of the outswinging door (if present).
- Activation of the outswinging door step light (if present).

The tachograph and the instrument cluster remain powered.

The Emergency switch can be operated with the ignition key in the 'MAR – 1' position or within 3 minutes after the key is moved to the 'STOP–0' position. If the control is activated after **3 min** since the time when the engine starter key is turned to position 'STOP–0' the function will be activated only after turning the key to the 'MAR – 1' position.

**ATTENTION** pressing the Emergency switch cuts off power to some vehicle systems. This operation is potentially damaging and must only be carried out in emergency situations.

**ATTENTION** if there is an AdBlue® system, the system will not drain correctly if the 'OFF' button is pressed. This intervention is damaging and is only to be carried out in emergency situations with system operation being restored as soon as conditions permit.

**ATTENTION** After stopping the engine, wait for **10 min** before removing power from the engine or disconnecting the batteries. Failure to respect this indication may damage the AdBlue® system. Only in an emergency should the batteries be disconnected without waiting **10 min** after the engine has been switched off.

To restore the power supply to the electrical system, press the 'OFF' button again.

**NOTE** The battery disconnecting switch is located on the positive terminal of the battery.



# Starting with an auxiliary battery

If the battery is drained, it is possible to start the engine using another battery, with the same or slightly greater capacity compared to the drained battery.

NOTE It is recommended that the Service Network is contacted to check/replace the battery.



#### Risk of electrocution

The starting procedure described below must be carried out by skilled personnel, since incorrect actions can cause electrical discharges of substantial intensity. Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle



#### Risk of injury:

The liquid contained in the battery is a corrosive acid substance; absolutely avoid any contact with the eyes or skin. Any action taken on the batteries must be made in a well ventilated areas and away from any naked flame or other sources of sparks (cigarettes, welding machines, etc.)

Failure to comply with these prescriptions can result in the risk of serious injury

To start-up, proceed as follows:

- Disconnect all electrical devices that are not strictly necessary.
- Open and lift the engine compartment bonnet.
- Lift the small door (1) so as to be able to connect the positive pole of the battery.
- The section of the conductor of the cables used for the battery emergency start-up must be of a suitable length and cross-section to prevent hazardous over-heating and failed start-ups.

• Connect the positive terminals of the two batteries (+ sign next to the terminal) using a specific cable as shown in the figure.



• Use a second cable to connect the negative terminal (-) of the auxiliary battery only in the ground point (below the windscreen near the coolant tank) shown in the figure. Connection on the other ground points is prohibited.

• Caution: when the connection is restored, check that the connectors are inserted correctly making sure that, where present, the connectors are inserted as far as the end of travel (mechanical catch).

- start the engine;
- When the engine is running, remove the cables in the reverse order;

• When the engine has started, keep it running long enough to ensure the battery is completely recharged.

**NOTE** It is not recommended to start the vehicle using a quick battery charger (booster). If necessary, consult the Service Network.

If the engine does not start after several attempts, do not persist; contact the Service Network.



# Contamination, fire

Do not connect the negative terminals of the two batteries directly: any sparks could ignite the detonating gas which could leak from the battery.

 $\bar{\mathsf{Failure}}$  to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle



#### General risk, general prescriptions

If the auxiliary battery is fitted on another vehicle, make sure that there are no metal parts which are accidentally in contact with each other between that vehicle and the vehicle with the drained battery.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

# Starting with inertia manoeuvres

Under no circumstances should the vehicle be started by pushing, towing or on downward slopes.

These actions could cause fuel to flow into the catalytic converter and damage it beyond repair.



General risk, general prescriptions

With the engine stopped there is no assisted power for brakes and steering. This requires a considerably greater effort when braking and steering. Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

# **Battery** location

# Location of the battery on the vehicle

The vehicle battery is located in a designated compartment inside the door on the passenger side.

To access this compartment, remove the door (1) by releasing the retainers (2).

In this condition, it is possible to access the battery negative pole.





# Vehicle battery replacement

(procedure only for vehicles with electronic alarm)

- $\bullet$  Open the engine bonnet and prepare the positive battery cable for disconnection, BUT WITHOUT DISCONNECTING IT.
- $\bullet$  Get back into the cab, set the ignition switch to MAR-1 and IMMEDIATELY turn it back to STOP- 0.
- From this moment, you have **I5 s** to disconnect the vehicle's positive battery cable.

• If the disconnection operation takes place **I5 s** after the STOP-0, MAR-I, STOP-0 operation is performed with the key inserted in the ignition switch, the siren will go off, as it is powered directly by its own buffer battery. In this event, reconnect the positive battery cable and repeat the entire operation.

# Recharging

**NOTE** The description of the battery recharging procedure is provided for information purposes only. The Service Network is available for any information necessary for carrying out this procedure

**NOTE** We recommend slow charging at a low amperage for about 24 hours.

**NOTE** Charging must be carried out with a maximum recharge current 1/20 of the normal capacity.

**NOTE** Charging of more than 24 hours or more aggressive charging could damage the battery.

Proceed as follows for recharging:

- If the vehicle is equipped with an alarm system, deactivate the system.
- after pressing the button (2), disconnect the connector (1) (if fitted) from the battery status monitoring sensor (3) fitted to the negative terminal (4) of the battery.
- Connect the positive cable of the recharging device to the positive pole of the battery **(5)** and the negative cable to the sensor terminal **(6)**.
- Set the maximum charging voltage to **I5 V**
- Switch on the battery charger.
- After recharging, switch off the charger before disconnecting it from the battery.
- After disconnecting the charger, reconnect the connector (1) to the sensor (3).

**ATTENTION** When the connection (I) is restored, check that the connector (I) is inserted correctly making sure that, where present, the connector is inserted as far as the end of travel (mechanical catch).



534



The sensor **(3)** must never be disconnected from the terminal except when replacing the battery or removing it from the battery housing.

When the sensor (3) is disconnected, the stored battery data will be temporarily lost. When reconnected, the sensor will begin a phase of self-configuration. This procedure analyses the battery when it is in use and in standby mode, and therefore could take some days if the vehicle is only used occasionally.

# **Battery characteristics**

The battery used on the vehicle has an electronic device under the label that is able to store specific battery information.

The device is located under the label "IVECO RF Power". Avoid the following in order to prevent damaging the device and losing all information useful when replacing the battery under warranty:

- High pressure washing of the entire battery installation area
- Wash using fluids other than water;
- Removing the label for any reason;
- Cutting the label and/or damaging it;
- Placing objects above or near the device;

**ATTENTION** Wilful tampering of the label shall void the device warranty.

**ATTENTION** The original first equipment battery fitted on the vehicle is a battery with charging optimisation during braking phases. Always contact the Service Network when replacing the battery. Replace the battery with a battery of the same type and with the same specifications.



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# Warning for injury prevention while handling batteries

I. Smoking and handling of fires and naked flames is strictly prohibited. Do not generate sparks. Do not generate sparks while connecting devices or measuring instruments directly to batteries. Before disconnecting batteries, disconnect live devices (tachograph, internal lights, etc.) by removing the corresponding fuse in the control unit. Disconnect the ground first. Avoid short circuits caused by wrong connections or by handling with fixed wrenches. Do not remove the caps from the terminals if not necessary. During connection, install the ground cable last.

2. Wear safety goggles or masks!

3. Keep acids and batteries out of the reach of children!

4. The battery contains acid. Wear protection gloves and garments. Do not tilt or overturn the battery: Acid leaks from exhaust holes may occur.

5. Pay attention to the warnings in the operating instructions and the documentation of the battery manufacturer.

6. Risk of explosion! Special care is required after recharging the battery or after long trips.While recharging, explosive gas is produced (mixture of hydrogen and oxygen). Provide proper ventilation.



#### Disposal of spare parts

The batteries contain substances that are extremely dangerous for the environment. For the replacement of old batteries, please contact the Service Network which is equipped for the disposal of used batteries.

Correct behavior will ensure that vehicle is used as environmentally friendly as possible



#### General risk, general prescriptions

Incorrect installation of electrical devices may result in serious damage to the vehicle. Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

# Risk of injury:

The liquid contained in the battery is a corrosive acid substance; absolutely avoid any contact with the eyes or skin. Any action taken on the batteries must be made in a well ventilated areas and away from any naked flame or other sources of sparks (cigarettes, welding machines, etc.)

Failure to comply with these prescriptions can result in the risk of serious injury

A battery which is kept at a charge of less than **50%** can become damaged due to sulfation, capacity is reduced and start-up is compromised. Furthermore it will have a greater tendency to freezing (in this case, it can happen at **10 °C**).



General risk, general prescriptions

It is strictly forbidden to use a quick battery charger for emergency start-up Partial or complete non observance of these prescriptions can lead to serious damages to the vehicle

# Useful advice

In order to prevent rapid discharge of the battery and to conserve it during operating times, observe the following recommendations:

- Terminals should always be properly fastened.Do not keep devices on for long with engine off (car radio, lights, etc.).

• When the engine is shut off and the vehicle is left after being correctly parked, make sure that no internal or external lights are left on.

# Chassis vehicle prolonged downtime or stoppage

In order to preserve battery service life and charge, in the event of extended vehicle downtime or stoppage (longer than 7 days), it is recommended that the negative pole of the battery is disconnected. Proceed as follows:

- Access the battery compartment as described previously.
- Grasp the connector (2) as indicated in the figure.
- Press the connector (2) lock button (1).

• Remove the connector (2) and put it in the battery compartment so it is not damaged.

Reconnect the connector by proceeding in the reverse order as stated above.

**NOTE** On restoring the connection, check that the connector **(2)** is inserted correctly as described previously, making sure that it is inserted to the end of travel.





## Precautions to be used with electronic control units installed

To prevent incorrect operations which may permanently impair or decrease control unit operations, follow the instructions described below:

- In case of any work on the chassis requiring arc welding: contact the Service Network, which will supply correct instructions for the required operation.
- Do not disconnect and/or connect connectors from/to the control units with the engine running or control units powered.
- After any maintenance requiring battery disconnection, make sure the terminals are properly connected to the poles when reconnecting it.
- Do not disconnect the battery with the engine running.
- Do not use a battery charger to start the engine.
- Disconnect the battery from the on-board system in case of charging.
## Changing bulbs

(If indicated, ''Chassis Cowl'' "Cowl" vehicles).

(To open the engine compartment, refer to the relevant section "Opening and closing the engine bonnet" in the chapter "Checks to be carried out by the user").



#### Front light assembly

The light assembly contains the bulbs of the side lights, turn indicators, low beams and high beams. The headlight bulbs are arranged as follows:

3. A) Full LED headlight (Optional)

B) Front headlight with bulb lamp.

I. Front turn indicator with bulb (only available with component 3-B).

2. A) LED fog lights (Optional) - (only available with component 3-A).

B) Fog lights with bulb (only available with component 3-B).

4. Side marker lights for the VAN with LED technology.

To access the bulb **(I)** unscrew the bulb holder.

To access the lamps (3), (2), first remove the rear rubber cover.

After replacing the bulbs, refit the bulb holders and covers making sure they are positioned correctly.

**ATTENTION** When the weather is cold or damp or after heavy rain or after the vehicle has been washed, the headlight surface may mist over and/or droplets of condensation may appear on the inside. This is a natural occurrence which is due to the difference in temperature and humidity between the inside and the outside of the headlight. However, it is not a fault and does not compromise the normal operation of the lighting device. The condensation disappears when the lights are switched and the vehicle is moving, starting from the centre and working out towards the edges.

**ATTENTION** Do not touch the halogen bulbs with your fingers; protect them with tissue paper. When handling, only touch the metal part. If the transparent bulb comes into contact with fingers, the brightness of the light will be reduced and the life duration of the bulb could be compromised. In case of accidental contact, clean them with alcohol and leave them to dry. It is recommended that the bulbs are replaced by the Service Network, when possible. Halogen lamps contain pressurized gas and if they break, the shattered glass could be projected out.



#### General risk, general prescriptions

Respect the powers indicated by the manufacturer, or there will be diagnostics signals on the dashboard and possible switching off of the light system to protect against overloads managed by the control unit. Partial or complete non observance of these prescriptions can lead to serious damages to the vehicle

#### Risk of injury:

Modifications or repairs to the electrical equipment carried out incorrectly and without taking into account the technical characteristics of the system can cause abnormal function and create a fire hazard. Before working on the electrical system, disconnect the battery cables.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

#### LED headlight

I. Front light assembly with LED technology.





Description of the headlight with LED technology:

2. High beam lights.

3. Low beam lights.

4. Three daytime running lights (DRL Daytime Running light).

When the vehicle is on, the daytime running lights are on and all three activate. When the turn indicator is activated, the colour of the three lights changes from white to orange intermittently.

When the low beam lights are activated, the daytime running lights automatically become the side lights.

When the high beam lights are activated, the low beam lights and side lights are also activated.

## Internal view of the halogen headlamp

I. D.R.L. lights

2. Low beam and side light.

3. High beam.



#### Internal view of the LED headlamp

I. Control unit (one for each LED headlamp).

If there is a fault or malfunction in the LED headlamp, contact the IVECO Service Network.



#### **Operator roadside repairs** 546



## Side lights

To replace the parking lamp, proceed as follows: • Remove the cover **(I)** by pulling the specific tab.

Take out the bulb holder (2) in order to replace the side light (3).

#### Replacing low beam / high beam light

Proceed as follows to replace a bulb:

- Remove the cover by pulling the specific tab.
- Release the lamp retaining clip (1).
- Lift and pull the two legs (2) towards you, positioning them both on the cup of the bulb.
- Using two fingers, hold the connector (3) and pull it towards you.
- After having removed it, disconnect the lamp and replace it with a new one without touching the glass with your fingers.
- Check that the connector (3) is fully inserted in the base on the terminal itself.
- Fit the connector back on and the bulb, making sure the profile and the two bumps match up in the reflector seat.
- Refit the bulb holder clip by lifting and pulling the two legs towards you, positioning them both on the cup of the bulb.
- Check that the bulb is positioned correctly from outside the headlight.
- refit the protective cover applying pressure all around the rim.

## Replacing D.R.L. bulb

Proceed as follows to replace a D.R.L. bulb:

- Unscrew the bulb holder (1) and remove it from the light assembly then replace the bulb (2) with another one with the same characteristics.
- Refit the bulb holder by following the instructions described above but in the reverse order.







#### Front turn indicators

3. A) Full LED headlight (Optional).B) Front headlight with bulb lamp.

2. Front turn indicator with bulb (only available with component 3-B)3. A) LED fog lights (Optional) - (only available with component 3-A).B) Fog lights with bulb (only available with component 3-B).

**NOTE** in the case of the fully LED light optional, the space for the front turn indicator is not available (it will be closed by a plastic screen).

**NOTE** if the optional fog light is not requested (LED or with bulb lamp), the space for the component is not available (it will be closed by a plastic screen).

#### Front fog lights

(if provided).

To replace the fog light lamp (LED or bulb), proceed as follows:

Unscrew the plate (1) fastening screw (2).
Remove the plate (1) with the help of a screwdriver to access the whole bulb holder assembly.

• Remove the three screws (3) and after having disconnected the electrical connector, remove the fog light LED or bulb.





#### Operator roadside repairs

550



# **3** 715402

#### Front turn indicators

Front turn indicator with bulb:

1. Front turn indicator with bulb (only available with component 3-B Headlamp with bulb lamp).

if replacing the front turn indicator (2) with a bulb:

- remove the plastic plate (by removing the central screw) with the help of a screw driver (around the edge) to release the plastic plate.
- Then unscrew the two screws (1) and remove the plastic cover of the turn indicator.

Rear view of the disassembled component:

- Disconnect the electric connector of the lamp.
- Turn the housing (3) of the lamp, remove the old lamp and replace it with one that is working with the same features.
- Refit following the removal operations in the reverse order.

#### Adjusting the headlight light beam

It is essential that the headlights are adjusted properly, not only for the safety of the driver but also for all road users. To ensure the best visibility conditions when travelling with the lights on, the car must have a correct beam setting.

For possible adjustment and control, contact the Service Network.

For possible manual adjustment and control, contact the Service Network. The headlight positioning device can have four positions: rest position 0 and 3 correction positions.

#### Headlight alignment device

This works when the ignition key is set to 'I-MAR' and the low beam lights are on. When the vehicle is loaded, it inclines slightly backwards causing the light beam to rise. In this case, correct alignment has to be carried out once again.

#### Headlight position adjustment

Cluster version: 1. TFT 2. COMFORT

To adjust, act on the buttons with the headlight symbol and next to the  $\blacktriangle$  /  $\checkmark$  arrows shown in the figure and located on the central dashboard.

The instrument panel display will provide a visual indication of the adjustment position.

**NOTE** Check the direction of the light beam every time the weight of the transported load changes.



#### Fog light direction

(where envisaged)

For possible adjustment and control, contact the Service Network.

#### Adjusting the headlights while travelling abroad

The direction of the low beam head lights is adjusted for circulation in the country where the vehicle is registered.

In countries which drive on the other side of the road, so as to prevent glare for drivers travelling in the opposite direction, the direction of the light beam must be adjusted using the self-adhesive application which has been designed for this specific purpose. Contact the Service Network.

## Types of bulbs

The vehicles may have the following types of bulbs:

- All glass bulb **(1)**inserted with pressure, simply pull to remove.
- Bayonet bulb (2) to remove press the bulb and turn anticlockwise.
- Cylindrical bulb (3) to remove, release from the relative contacts.
- Halogen bulb (4) to remove, release the locking spring from its seat.
- Halogen bulb (5) to remove, release the locking spring from its seat.





#### Towing the vehicle

Use the screw-in pull hook included in the on-board equipment and insert it in the point located under the vehicle bumper. It can be accessed by removing the cover shown in the figure.

If towing the vehicle for long stretches is necessary, disconnect the propeller shaft from the rear axle flange.

If the engine does not start (e.g. battery flat or very low temperatures) use an auxiliary battery with equivalent electrical characteristics (refer to the section on batteries).

**NOTE** Remember that a tow trailer reduces the possibility of overcoming the maximum incline, increases stopping distances and increases the time required for overtaking in relation to the total weight. When travelling downhill, move into a low gear rather than constantly using the brake.

**NOTE** If towing a vehicle, remember that more force needs to be applied to the brake pedal and the steering wheel as the brake-servo and electric power steering are not available.

555

Push starting is not recommended. However, if push or pull starting is necessary proceed as follows:

- Engage a high gear (for example, 3rd, 4th),
- moderate the speed (also downhill),
- release the clutch pedal gradually.



#### General risk, general prescriptions

With the engine stopped there is no assisted power for brakes and steering. This requires a considerably greater effort when braking and steering.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle





#### Towing a vehicle equipped with a Hi-Matic gearbox

Towing vehicles with Hi-Matic gearbox. With the engine off, the gearbox drive trains are locked in the parking position (position 'P' on the gearbox lever).

With the engine running, the parking condition can usually be deactivated by means of the gearbox lever.

In the event of a fault, there is a release lever **(I)** located near the handbrake lever which can be used to move the vehicle.

The vehicle is always to be towed with the engine running and with the gearbox set to N. If it is not possible to start the engine, once the release lever (1) has been disengaged, the vehicle can be recovered by a recovery vehicle or it can be towed for short distances in the workshop or to move the vehicle in order to put it in a safe condition for propeller shaft removal operations.

The vehicle can only be towed longer distances once the propeller shaft has been separated from the gearbox drive output flange.

#### Tow hook

(if provided) For trailers with inertia braking.

I. Ball tow hook.

2. 13 pole connector (**12 V**) for light system.

If the tow hook is fitted externally, as well as installing the structure and hook correctly (both type approved), the IVECO requirements relating to the electrical system (Directives for bodybuilders) must be fully observed. Do not overload the electrical system of the vehicle with the trailer lights.

To install the trailer lights, read the instructions provided below in the paragraph "Trailer light repetition".

Please contact the Service Network for information.

Follow any additional instructions provided by the hook manufacturer.

The tow hook can be applied without authorisation only on specifically foreseen cross

members and on vehicles for which IVECO anticipates the towing of trailers.

The subsequent installation of the tow hook on vehicles for which its installation was not originally foreseen must be authorised by IVECO

Refer to the publication 'Directives for Bodybuilders' for the installation of the tow hook.



#### General prescriptions

The tow hook must be suitable for permitted loads and be type approved according to national standards. As tow hooks are important elements for the safety of vehicle operation (subjected to specific type approval in some countries), no change must be made to them.

Partial or complete non observance of these prescriptions can lead to serious damages to the vehicle





#### Manual activation of power take-off

If the control malfunctions or power is not supplied to it, the power take-off (PTO) can be engaged and disengaged manually using the emergency procedure described below.

#### Engaging the power take-off manually

Turn off the engine and engage the parking brake. Make sure that the vehicle cannot move: if necessary, use wedges (under at least one wheel) to hold it in place.

Loosen the M6 screw (1) at the end of the solenoid in the PTO control and remove it. In its place, insert a screw longer than or equal to **50 mm** (not supplied) and tighten it until the PTO is engaged.

#### Disengaging the power take-off manually

Turn off the engine and engage the parking brake. Make sure that the vehicle cannot move; if necessary, use wedges (under at least one wheel) to hold it in place.

Fully loosen the screw at the end of the solenoid in the PTO control and remove it. The internal spring will put the selector back in the rest position and the PTO will be disengaged. Retighten the M6 screw originally fitted on the command (length **10 mm**) to prevent water and/or dust from entering the solenoid.

#### **Replacing windscreen wiper brushes**

**NOTE** A small ladder might be useful when replacing the windscreen wipers making the wipers more easily accessible.

When the wiper brushes are worn, the windscreen will not be correctly cleared and streaks may appear or the movement may not be fluid.

Replace the wiper brushes whenever they become worn and preferably in spring and in autumn.

To replace the brushes, proceed as follows:

• Lift the windscreen wiper arm (1) completely and position the brush so that it forms a **90°** angle with the arm.

• Extract the brush (2) which has been inserted with pressure, from the arm (1).

• Refit the new brush making sure it is locked in.





#### **Replacing windscreen wiper brushes**

**NOTE** Procedure only for bodied vehicles.

**NOTE** A small ladder might be useful when replacing the windscreen wipers making the wipers more easily accessible.

When the wiper brushes are worn, the windscreen will not be correctly cleared and streaks may appear or the movement may not be fluid.

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- Extract the brush (2) which has been inserted with pressure, from the arm (1).
- Refit the new brush making sure it is locked in.

## Ordinary maintenance

Operator checks	562
Bonnet	563
Checks to be carried out	566
Before each trip	567
Every week	573
Caring for the vehicle	574

#### **Operator checks**

Becoming familiar with some simple control and verification procedures is very important. Carry out a preventive check-up of all the services required for the correct replacement of tyres (positioning the jack for lifting, use of wrenches, etc.). Do not consider these procedures troublesome routines; to a large extent, the perfect vehicle operation depends on these procedures.

Good preventive maintenance on your part supports the scheduled maintenance required by the Service Network, saving you time and inconvenience.

**ATTENTION** In the event of abnormal smoke emission at the exhaust or unusual engine noises, go to an IVECO service centre.



General prescriptions

If there is any fault, malfunction, etc., do not perform any operation on the vehicle but contact the Service Network.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

#### Bonnet

#### Opening

Inside the vehicle

Release the engine bonnet by lifting the lever located in the lower section of the dashboard and highlighted in the figure.

This lever releases the bonnet clip from the hook.

Outside the vehicle

• By acting on the lever located inside the front grille, release the bonnet closing device **(1)**.



## 564 Ordinary maintenance



Using both hands, hold the bonnet while it opens so it doesn't open brusquely.

The bonnet will remain in the open position thanks to the springs indicated in the figure.

**ATTENTION** Before opening and lifting the bonnet, ensure that the windscreen wipers are in their operating position resting against the windscreen. If the windscreen wipers are raised they could be damaged and/or damage the bonnet paintwork.



#### Risk of injury:

When the engine compartment is open there is risk of burns due to very hot engine parts. When the engine is running, injuries may occur due to revolving components of the engine. Be careful with scarves or loose clothing: they may get caught in moving parts.

Failure to comply with these prescriptions can result in the risk of serious injury

#### Closing

To close the bonnet proceed as follows:

• lower the bonnet and guide it to a suitable height so that it can then be released and let fall into its locking position completely and mate with its locking mechanism.

• Check that the bonnet is properly closed and not merely resting on the body. If it is still open, do not push the bonnet against its locking device but rather raise it again and repeat the closing operation.



#### General risk, general prescriptions

Always check that the bonnet is closed and secured correctly. If while driving the driver realises that it is not closed correctly, he must pull over, stop immediately and close it properly.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle



# Checks to be carried out

- Before each trip
- I. Engine oil.
- 2. Engine coolant.
   3. Brake fluid.
- 4. Wiper fluid.

## Every week

- 5. Fuel filter.
- 6. Tyres.

#### Before each trip

I. Check the engine oil level with the dipstick (I).

Top-up if necessary through the filler (2).



Risk of injury:

After topping up, close the filler properly to prevent dangerous oil leaks while driving. Failure to comply with these prescriptions can result in the risk of serious injury

**ATTENTION** Never exceed the maximum level when topping up with oil.

The oil level must be between the MIN and MAX reference marks on the dipstick (1). The oil level must never exceed the MAX reference point on the dipstick.

**NOTE** It is essential that you wait at least **20 min** after the engine has stopped before checking the level.

**NOTE** On engines equipped with a particulate filter the oil must be changed at authorised workshops only.



Use the recommended product for topping up: • SAE 0W-30 / ACEA C2

## Ordinary maintenance 569

## 2. Check the coolant level.

#### Engine

The level must be between the MIN and MAX reference marks on the tank.

Use the recommended product for topping up:

Concentrated OAT protective fluid for radiators The level should never go below the MIN level. Top-up if necessary through the filler **(3)**.



#### Risk of injury:

Carry out the check only with the engine off and sufficiently cooled; otherwise opening the plug could cause hot fluid to spray out.

Failure to comply with these prescriptions can result in the risk of serious injury





3. Check the brake control fluid level.

Unscrew the plug and check that the brake fluid is at the maximum level. If the level is low, contact the Service Network. Use the recommended product for topping up: FMVSS I I 6 - DOT 4 / ISO 4925 / SAE J 1704



General risk, general prescriptions The brake fluid is poisonous and corrosive: in the event of accidental contact immediately wash with water and neutral soap. Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

4. Check the fluid level in the windscreen washer tank

The table provides the ratio of water to fluid for any top-ups required: CUNA NC 956-11



EXTERNAL TEMPERATURE	-35 °C	-20 °C	-10 °C	0 °C	SUM MER
CUNA NC 956-11 (in parts)	I	I	I	I	I
Water (in parts)	-	I	2	6	10

Also check that the lines are not clogged; If necessary, clean the nozzles with a needle.



Contamination, fire

Some commercial windscreen washer additives are inflammable: pay attention to contact with hot parts of the engine.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle  $% \left( {{{\rm{T}}_{\rm{s}}}} \right)$ 

Also check:

- The condition of the battery terminal connection cables.
- Operation of the service and parking brakes.
- Operation of the lights, warning lights, horn and windscreen wipers.

#### **Every week**

5. Fuel filter check. If the water presence indicator light activates on the instrument panel, the vehicle must be taken immediately to a Service Network workshop to eliminate the water accumulated in the filter body to avoid damage to the fuel system. If the warning light remains on, replace the sensor unit.

**ATTENTION** On vehicles fitted with a hydraulically controlled clutch, the tank cover must not be removed: the assembly is maintenance free.

Also check:

• Check the exhaust gas system.

Devices that can be used to reduce diesel engine emissions include the particulate filter and the exhaust gas recirculation system (E.G.R.).

In some conditions the particulate filter can generate high exhaust gas temperatures. Therefore do not park the vehicle on flammable material such as grass, dry leaves, pine needles, etc. – risk of fire.



Contamination, fire

Do not park the vehicle on flammable material such as paper, grass or dried leaves. Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle



#### Caring for the vehicle

General rules for looking after and cleaning the cowl vehicles if the component is fitted



General risk, general prescriptions

Detergents pollute water: - Therefore, wash the vehicle in an area equipped for collection and purification of the fluids used for washing. Correct behavior will ensure that vehicle is used as environmentally friendly as possible



Risk of injury:

Dispose of consumable materials and the parts in contact with them (for example filters) in accordance with the law. The workshops of the Service Network are equipped for this purpose.

Correct behavior will ensure that vehicle is used as environmentally friendly as possible

Dispose of cloths and empty detergent containers in full compliance with environmental protection regulations in force. For this reason, read the instructions provided on the containers regarding disposal and collection.

Looking after the vehicle is necessary in order to keep it efficient and in good condition. The frequency of washing depends on the following factors:

- Areas with high atmospheric pollution.
- Eliminate any dirt from the upper parts of the bodywork.
- Parking under trees producing resinous substances.

**ATTENTION** The water jets produced by a high pressure water jet could damage parts of the bodywork, chassis, tyres, and components which are not visible on the vehicle but could break and risk causing accidents. Immediately replace any damaged parts.



#### General prescriptions

When washing using a high pressure water jet cleaner: - Do not use nozzles with a round jet. - The minimum distance between the nozzle of the high pressure water jet cleaner and the part to be washed is at least 40 cm. - When using a high pressure water jet cleaner, constantly move the direction of the water jet. Partial or complete non observance of these prescriptions can lead to serious damages to the vehicle



#### Risk of injury:

The vehicle surfaces are slippery when being washed. - Do not stand on steps, foot boards or parts of the vehicle or outfitting to wash the vehicle. These may become wet and slippery. - Always use robust ladder which are suitable for the purpose. Failure to comply with these prescriptions can result in the risk of serious injury

#### Manual washing

With regards manual washing, it is recommended that:

- The engine is allowed to cool down before washing, especially after a long journey.
- The vehicle is not washed indirect sun light. This advice is valid above all in the summer months.
- Do not use boiling water.
- Use a neutral detergent for vehicles. The Service Network can be consulted for advice on choosing the correct product.
- Spray the vehicle with water at low pressure.

Do not spray water directly:

- inside the air intakes.
- Inside the door compartments (risk of water remaining) .
- On rubber bellows and boots.
- On brake hoses.
- On electrical and electronic components.

When washing the vehicle, do not use:

- dry cloths, with rough or hard fibres.
- Abrasive products.
- Solvents or products containing solvents.
- Do not rub the surfaces.

• Do not use blunt or hard utensils on the paint and protective film (for example: scrapers, rings) which could scratch the paint or other surfaces.

Use a soft sponge and rinse frequently with plenty of water.

On the drive train and on the propeller shafts.

Do not allow liquid with the detergent to dry on the bodywork. Rinse with running water.

**ATTENTION** After washing the vehicle, braking action may be reduced.



General risk, general prescriptions

Do not leave the vehicle parked up for long immediately after washing. Detergents can increase corrosion of the brake discs. Drive the vehicle for a few minutes braking carefully to eliminate any traces of water and restore the braking action. Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

#### Automatic washing

In order to prevent any damage to the vehicle:

- make sure that the size of the washing system is appropriate for the type and size of the vehicle.
- Remember to fold in the external rear-view mirrors and remove the radio aerial before entering the washing station. If this is not done, these parts could be damaged.
- When leaving the washing station, remember to reposition the rear view mirrors correctly and refit the radio aerial.

With regards automatic washing, it is recommended that:

• If the vehicle is particularly dirty, a preliminary wash is carried out before entering the washing station.

- Make sure that the side windows are closed.
- Make sure that the climate control system is off.
- To avoid any damage, make sure that the windscreen wipers are not engaged.

After the automatic washing, remove any wax residue:

• From the windscreen and the rubber profiles of the windscreen wipers. This will prevent streaks forming on the windscreen and reduce the noise of the wipers due to any wax residue on the windscreen.
### Cleaning the paint

**ATTENTION** To prevent any damage occurring: do not apply adhesive paints, films or magnetic plates.

**ATTENTION** To avoid corrosion, immediately repair any damage such as scratches or abrasions. Contact the Service Network.

With regards cleaning the paint, remember that:

- to avoid excessive rubbing during washing, eliminate any traces of dirt as soon as they appear.
- The residue of insects on the bodywork must be removed with a specific detergent.
- To avoid any scratching on the bodywork, bird droppings must be dampened first with a wet sponge.
- Remove any traces of tree resin, oils, wax, fuel and tar with a specific product. Contact the Service Network for choosing the right stain remover.

# Cleaning the windscreen and windows



General risk, general prescriptions

When cleaning the windscreen: - set the ignition switch to "STOP-0". - check that the wipers are not engaged.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

With regards cleaning the windscreen, remember:

With the engine bonnet closed, only lift the windscreen wipers from the windscreen when the arms are vertical. Otherwise, the paint on the bonnet could be damaged.

Do not pull the brushes from the wipers. If they are pulled, they could break.

Lift the wiper arms from the windscreen until the locking position is triggered.

Do not rub the wiper brushes excessively so as to prevent any damage to the graphite coating. After cleaning the windscreen and before starting the engine or the wipers, bring the wiper brushes back into position on the windscreen.

When bringing them back into position, hold them and until they are repositioned on the glass. A sudden knock against the windscreen could damage both the wipers and the windscreen.

To clean the windscreen and the windows, use a specific detergent. Do not use solvents, abrasive products, dry cloths with rough or hard fibres. Contact the Service Network for the most suitable product.

**ATTENTION** Do not use blunt or hard utensils on the windscreen and windows (for example: scrapers, rings) which could scratch the windows.

It is recommended that the window seals, contact surfaces and window guides are cleaned regularly with a damp cloth.

#### **Cleaning the wheels**

Do not use acid or alkaline detergents as these products could cause corrosion of the nuts, studs or balancing weights.

Also remember to follow the indications provided with regards cleaning with a high pressure water jet machine and the procedure to follow after washing:

**ATTENTION** After washing the vehicle, braking action may be reduced.



General risk, general prescriptions

Do not leave the vehicle parked up for long immediately after washing. Detergents can increase corrosion of the brake discs. Drive the vehicle for a few minutes braking carefully to eliminate any traces of water and restore the braking action. Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

#### **Cleaning the external lights**

To clean the headlights and lights, use a suitable neutral detergent and cloths to prevent any scratches on the lighting system lenses. Contact the Service Network for the most suitable product.

Proceed as follows to clean the aluminium platforms:

- Do not use abrasive products as these could scratch or damage the surfaces.
- Brush the aluminium platforms with a mix of water and neutral detergent.

#### Cleaning the tow hook

Do not use a high pressure water jet to clean the tow hook (the electrical connections could be damaged).

Follow the instructions provided by the manufacturer of the tow hook. If interventions on the tow hook need to be carried out, contact the Service Network which is equipped for this purpose.

# Washing the engine



General risk, general prescriptions

This operation must be done by the Service Network, which is equipped for collection and purification of the fluids used for washing. Washing must performed when the engine is cold and with great care, to avoid damage to the electronic components fitted on the vehicle. Correct behavior will ensure that vehicle is used as environmentally friendly as

**NOTE** Washing must be carried out with the engine ignition key set to 'STOP-0', i.e. with the engine off and cold. The engine is only to be washed with cold water, not pressurised and after having suitably protected the electrical and electronic components.

# **Cleaning the interior**



Risk of damage

possible

To wash the interior: -Do not use detergents containing alcohol, benzine or abrasive components -Do not use detergents for the home -Avoid contact with insecticides, cosmetics and other substances -Do not use products for external washing, films and air fresheners

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle



#### Risk of damage

These products may contain solvents which could corrode the surfaces in synthetic material or make them porous. Furthermore, if the air bag were to open, parts of the instrument panel could detach and cause injury.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

When cleaning the interior, the steering wheel, the gearbox lever and the moulding, use a soft damp cloth with a small amount of soap. To clean heavy duty dirt, contact the Service Network for the most suitable product.

#### **Cleaning the seats**

To clean the seats, use a soft damp cloth with a small amount of soap. To prevent any marks forming or any becoming larger, wash and test a small area of the seat first. To clean heavy duty dirt, contact the Service Network for the most suitable product. After having washed the seat, open the interior compartment allowing both the seat and the interior compartment to dry quickly in the air.

**NOTE** The final result of cleaning the interior depends on the type of dirt in the interior compartment

#### Cleaning the instrument panel and display

**ATTENTION** To avoid any damage to the surfaces of the dashboard and display: do not use detergents containing alcohol, petrol or abrasive components. Furthermore, contact with these products is dangerous for health.

**ATTENTION** When cleaning, do not exert pressure on the instrument panel and display surfaces. There may be the risk of damage or breakages.

Proceed as follows to clean the instrument panel and display:

- The instrument panel and display must be off and not working.
- Clean the surfaces with a microfibre cloth and a detergent suitable for the TFT LCD display. Contact the Service Network for the most suitable product.
- Dry the surfaces with a dry microfibre cloth.

#### Cleaning the roof trim

To clean the roof trim, use a soft brush or a hard brush with dry shampoo for heavy duty dirt.

#### Cleaning the seat belts

An incorrect cleaning procedure could damage the seat belt fabric making it less efficient in the event of an accident. In this case, the seat belt fibres could tear with the risk of serious injury, even death, for the driver and the passengers in the vehicle. For this reason, remember:

**ATTENTION** An incorrect cleaning procedure could damage the seat belt fabric making it less efficient in the event of an accident. In this case, the seat belt fibres could tear with the risk of serious injury, even death, for the driver and the passengers in the vehicle.

**ATTENTION** To clean the seat belts: -Do not use bleach on the seat belts. -Do not dye the seat belts. -Do not use solvents or chemical detergents.

-Do not dry the seat belts in direct sunlight or near intense heat (temperatures greater than

**80 °C**)

# Scheduled maintenance

The philosophy of scheduled maintenance	584
Scheduled maintenance (FIA engine with oversized oil sump)	586
Scheduled maintenance (FIA engine with standard oil sump)	591
Scheduled maintenance (FIC engine)	596

#### The philosophy of scheduled maintenance

Long life and efficient operation with regular maintenance.

To be sure that the vehicle is always in perfect operating condition, the inspections, controls and adjustments of the various parts described below must be carried out at the indicated intervals.

Regular maintenance is the best guarantee of safety and for keeping management costs as low as possible.

Contact the Service Network for carrying out specified operations.

Maintenance work must be carried out at the established number of kilometres.

These operations are obligatory during the warranty period and failure to carry them out will invalidate the warranty.

This work must only be carried out by the Service Network, who will confirm it with a date, stamp and signature in the special boxes provided in the overall maintenance plan.

#### Scheduled maintenance plan

Scheduled Maintenance includes Engine Oil and Standard services, plus a set of operations known as "Extra-Plan" and others known as "Timed".

Normally there are no different programs in relation to vehicle use.

If there is a difference in terms of "mission", the number of programs will be the same as the number of missions.

The systematic use of recommended lubricants allows for lengthy intervals of time between replacements at relatively limited costs. For more information, consult the recommended lubricants summary card.

#### EO = ENGINE OIL

The "engine oil " service is indicated by the letters EO = "Engine Oil".

#### **M = STANDARD SERVICE**

The "standard" services are marked with the letter M = Maintenance. These must be carried out at regular km intervals, normally in multiples.

# **EP/T EXTRA PLAN OPERATIONS - TIMED OPERATIONS**

The non-scheduled operations are marked with the letters EP = "Extra Plan". These operations are complementary to "standard" services and must be carried out at intervals that are not compatible with standard services.

The timed operations are marked with the letter T = Timed.

They are exclusively carried out in specific time-based intervals and are normally executed during particular seasonal conditions.

To minimise vehicle maintenance stops it is advisable to schedule the extra-plan stops according to the vehicle's average annual mileage, where possible making them coincide with the specified distance intervals.

**ATTENTION** The correlation, if necessary, between the mileage interval and the hours of use interval (if contained in the routine maintenance summary card) is valid if the ratio with the average working speed of the vehicle (regularly presented) is respected. The correlation is specified merely as a guide to assist in the plan of hypothetical maintenance stops. Therefore the time intervals indicated for the extra plan operations are limited, independently of the number of kilometres actually travelled.

# Scheduled maintenance (FIA engine with oversized oil sump)

**NOTE** The information provided below is valid for the entire vehicle configuration; access the interactive maintenance plan to obtain the scheduled maintenance for a specific vehicular configuration (VIN).

**NOTE** For the Russia, Belarus and Kazakhstan markets, due to increased dust content, fuel quality, temperature range and road surface, the interval for carrying out all maintenance must be halved, both in terms of mileage and months.

#### MAINTENANCE SERVICES SCHEDULE

#### Intervals for carrying out "Standard" services

ENGINE OIL	EO	MI	M2	M3	M4
SAE 0VV-30 / ACEA C2 (I)	Every <b>60.000 km</b> or 24 months	Every 60.000 km	Every I 20.000 km	Every 180.000 km	Every 360.000 km

#### NOTES:

(1) IVECO recommends using these oils to obtain better fuel economy. The new vehicle is already equipped by IVECO with these types of lubricants, which are suitable for cold climates (minimum temperature down to -30 °C). The lubricant replacement intervals in this document refer to the use of these types of oil

#### Intervals for "Extra-plan" services

USAGE	EPI	EP2	EP3	EP4
All	Every <b>120.000 km</b> or 48 months	Every <b>I 50.000 km</b> or 36 months	Every <b>150.000 km</b> or 48 months	Every 200.000 km

#### Intervals for "Extra-plan" services

USAGE	EP5	EP6	EP7	EP8
Road	Every 200.000 km	Every <b>250.000 km</b> or 60 months	Every <b>300.000 km</b> or 96 months	Every <b>350.000 km</b> or 60 months
Heavy-duty use	Every 200.000 km	Every <b>250.000 km</b> or 60 months	Every <b>300.000 km</b> or 96 months	Every <b>200.000 km</b> or 60 months

#### Intervals for "Timed Operation" services

ті	Т2	ТЗ
Every 12 months	Every 24 months	Every 48 months

# IMPORTANT FOR VEHICLES EQUIPPED WITH PARTICULATE FILTER:

At each oil change, the particulate filter (DPF) regeneration counter must be zeroed. This operation must be carried out using diagnostic instruments, selecting "CHANGING OIL" from the menu "REPLACING PARTS" from the area "SPECIFIC FUNCTIONS" of the engine control unit EDC 17.

#### WARNINGS:

• Refuelling. Use only diesel oil normally available on the market which meets the requirements of standard EN 590. Fuel additives are not recommended and may lead to limitations of the warranties offered for the vehicle. Refuelling of diesel from drums or cans or of uncertain origin is strongly discouraged due to the possible presence of impurities and water which can cause premature clogging of the fuel filter and also deterioration of engine performance or damage to the fuel system.

• Diesel oil for low temperatures. The degree of fluidity of the diesel fuel may be reduced at low temperatures due to the separation of the paraffin. This results in the filters becoming clogged. The EN 590 standard provides for various categories of diesel oil for use at low ambient temperatures. It lies entirely with the oil company to comply with the standards relating to the climatic conditions (seasons and geographical location of the countries).

• Engine damage caused by delayed elimination of water from the fuel filter. Vehicles with diesel engine: Delayed removal of water from the fuel filter can cause engine damage. If the warning light comes on, immediately drain the water from the fuel filter.

**NOTICE** In the case of uses that may call for more frequent regeneration of the particulate filter (only for vehicles equipped with this device), it may be necessary to anticipate the engine oil and filter change intervals. In this case the need to perform this operation in extra-plan conditions is indicated by the on-board computer.

# EO SERVICES

SERVICE	TYPE OF INTERVENTION
EO	Change the engine oil <b>(I)</b>
EO	Restore engine oil quality counter with diagnostics instrument
EO	Replace the engine oil filter <b>(1)</b>

NOTES:

(1)In the case of uses that may call for more frequent regeneration of the particulate filter (only for vehicles equipped with this device), it may be necessary to anticipate the engine oil and filter change intervals. In this case the need to perform this operation in extra-plan conditions is indicated by the on-board computer.

# **STANDARD SERVICES**

TYPE OF INTERVENTION	MI	M2	M3	<b>M</b> 4
Check brake hydraulic system fluid level	٠	٠	•	٠
Replace fuel filter cartridge <b>(2)</b>		٠		•
Check condition of the various drive belts	٠	٠	٠	٠
Check the conditions of the steering box rack sleeves	•	•	•	•

TYPE OF INTERVENTION	MI	M2	M3	M4
Check brake disc and pad wear	٠	٠	٠	٠
Check rear axle breather efficiency		•		٠
Check fixing of steering box and support		٠		٠
Check the condition of the propeller shaft mounts		٠		٠
Check the linkage, articulated joints and steering column		٠		٠
Check cardan joints and propeller shaft flange fixing			•	٠
Check parking brake stroke	•	٠	٠	٠
Check headlamp levelling		•		•
Engine EDC system check-up using diagnostic tool		٠		٠

# NOTES:

(2) Early clogging of the diesel filter is mainly due to high levels of impurities present in the diesel (beyond the limits set by the standard EN 590) and, to a lesser extent, to the heavy use of the vehicle. For these reasons, the fuel filter cartridge must be replaced when indicated by the clogging warning light sensor, even if the specified maintenance interval has not been reached.

# **EXTRA-PLAN SERVICES**

SERVICES	TYPE OF INTERVENTION
EPI	Replace cartridge and clean air filter shell <b>(I)</b>
EP2	Change gearbox oil.
EP3	Replace alternator and water pump belt <b>(2)</b> .
EP3	Replace air conditioner compressor drive belt <b>(2)</b> .

SERVICES	TYPE OF INTERVENTION
EP4	Removal - installation of the automatic gearbox hydrokinetic converter <b>(3)</b> .
EP5	Automatic gearbox oil change.
EP5	Change automatic gearbox oil filter.
EP6	Replace toothed distributor belt <b>(4)</b> .
EP6	Replace the timing system drive belt automatic tensioner.
EP7	Replace alternator adjustable belt tensioner.
EP8	Change rear axle differential oil.

# NOTES:

(1) Early filter clog is generally due to environmental conditions. For this reason it must be replaced when indicated by the relevant sensor (if present) regardless of the instructions. If there is no clogging indicator, the air filter must be checked every **50.000 km**.

(2) In the case of heavy-duty use (dust and/or heat), replace every 60.000 km.

(3) Replacement to be carried out only on vehicles equipped with Telma retarder with automatic gearbox ZF 8HP.

(4) When using the vehicle under severe conditions (dust and/or heat) the timing belts must be replaced every **120.000 km**.

# TIMED SERVICES

SERVICES	TYPE OF INTERVENTION
ТІ	Check fuse valves (if present)
ТІ	Check ground cables (if present)
ТІ	Check efficiency of the control unit solenoid valve (if present)
Т2	Check coolant density.

SERVICES	TYPE OF INTERVENTION
Т2	Change pollen filter.
Т2	Change oil and bleed hydraulic brake system.
ТЗ	Replace P&CM control unit buffer battery

# Scheduled maintenance (FIA engine with standard oil sump)

**NOTE** The information provided below is valid for the entire vehicle configuration; access the interactive maintenance plan to obtain the scheduled maintenance for a specific vehicular configuration (VIN).

**NOTE** For the Russia, Belarus and Kazakhstan markets, due to increased dust content, fuel quality, temperature range and road surface, the interval for carrying out all maintenance must be halved, both in terms of mileage and months.

#### MAINTENANCE SERVICES SCHEDULE

#### Intervals for carrying out "Standard" services

ENGINE OIL	EO	MI	M2	M3	M4
SAE 0W-30 / ACEA C2 (I)	Every <b>50.000 km</b> or 24 months	Every 50.000 km	Every 100.000 km	Every I 50.000 km	Every 300.000 km

NOTES:

(1) IVECO recommends using these oils to obtain better fuel economy. New vehicles are already equipped by IVECO with this type of lubricant.

### Intervals for "Extra-plan" services

USAGE	EPI	EP2	EP3	EP4
All	Every <b>100.000 km</b> or 36 months	Every <b>I 50.000 km</b> or 36 months	Every <b>150.000 km</b> or 48 months	Every 200.000 km
USAGE	EP5	EP6	EP7	EP8
Road	Every 225.000 km	Every <b>250.000 km</b> or 60 months	Every <b>300.000 km</b> or 96 months	Every <b>350.000 km</b> or 60 months
Heavy-duty use	Every 225.000 km	Every <b>250.000 km</b> or 60 months	Every <b>300.000 km</b> or 96 months	Every <b>200.000 km</b> or 60 months

#### Intervals for "Timed Operation" services

ті	Т2	тз	Τ4
Every 12 months	Every 12 months	Every 24 months	Every 48 months

# IMPORTANT FOR VEHICLES EQUIPPED WITH PARTICULATE FILTER:

At each oil change, the particulate filter (DPF) regeneration counter must be zeroed. This operation must be carried out using diagnostic instruments, selecting "CHANGING OIL" from the menu "REPLACING PARTS" from the area "SPECIFIC FUNCTIONS" of the engine control unit EDC 17.

WARNINGS:

• Refuelling. Use only diesel oil normally available on the market which meets the requirements of standard EN 590. Fuel additives are not recommended and may lead to limitations of the warranties offered for the vehicle. Refuelling of diesel from drums or cans or of uncertain origin is strongly discouraged due to the possible presence of impurities and water

which can cause premature clogging of the fuel filter and also deterioration of engine performance or damage to the fuel system.

• Diesel oil for low temperatures. The degree of fluidity of the diesel fuel may be reduced at low temperatures due to the separation of the paraffin. This results in the filters becoming clogged. The EN 590 standard provides for various categories of diesel oil for use at low ambient temperatures. It lies entirely with the oil company to comply with the standards relating to the climatic conditions (seasons and geographical location of the countries).

• Engine damage caused by delayed elimination of water from the fuel filter. Vehicles with diesel engine: Delayed removal of water from the fuel filter can cause engine damage. If the warning light comes on, immediately drain the water from the fuel filter.

**NOTICE** In the case of uses that may call for more frequent regeneration of the particulate filter (only for vehicles equipped with this device), it may be necessary to anticipate the engine oil and filter change intervals. In this case the need to perform this operation in extra-plan conditions is indicated by the on-board computer.

# EO SERVICES

SERVICE	TYPE OF INTERVENTION
EO	Change the engine oil <b>(I)</b>
EO	Restore engine oil quality counter with diagnostics instrument
EO	Replace the engine oil filter <b>(I)</b>

#### NOTES:

(1)In the case of uses that may call for more frequent regeneration of the particulate filter (only for vehicles equipped with this device), it may be necessary to anticipate the engine oil

and filter change intervals. In this case the need to perform this operation in extra-plan conditions is indicated by the on-board computer.

### STANDARD SERVICES

TYPE OF INTERVENTION	МІ	M2	M3	M4
Check brake hydraulic system fluid level		٠	•	•
Replace fuel filter cartridge <b>(2)</b>		•		•
Check condition of the various drive belts	•	٠	٠	٠
Check the conditions of the steering box rack sleeves	•	•	•	•
Check brake disc and pad wear	•	•	•	•
Check rear axle breather efficiency		•		•
Check fixing of steering box and support		٠		•
Check the condition of the propeller shaft mounts		٠		•
Check the linkage, articulated joints and steering column			•	•
Check cardan joints and propeller shaft flange fixing			•	•
Check parking brake stroke		•	•	•
Check headlamp levelling			•	•
Engine EDC system check-up using diagnostic tool		•		•

#### NOTES:

(2) Early clogging of the diesel filter is mainly due to high levels of impurities present in the diesel (beyond the limits set by the standard EN 590) and, to a lesser extent, to the heavy use of the vehicle. For these reasons, the fuel filter cartridge must be replaced when

indicated by the clogging warning light sensor, even if the specified maintenance interval has not been reached.

# **EXTRA-PLAN SERVICES**

SERVICES	TYPE OF INTERVENTION
EPI	Replace cartridge and clean air filter shell <b>(I)</b>
EP2	Change gearbox oil
EP3	Replace alternator and water pump belt (2)
EP3	Replace air conditioning system compressor drive belt (2)
EP4	Change automatic gearbox oil
EP4	Change automatic gearbox oil filter
EP5	Removal - installation of the automatic gearbox hydrokinetic converter (3)
EP6	Replacing cogged timing belt (4)
EP6	Replace the timing system drive belt automatic tensioner
EP7	Replace alternator adjustable belt tensioner
EP8	Change rear axle differential oil

# NOTES:

(1) Early filter clog is generally due to environmental conditions. For this reason it must be replaced when indicated by the relevant sensor (if present) regardless of the instructions. If there is no clogging indicator, the air filter must be checked every **50.000 km**.

(2) In the case of heavy-duty use (dust and/or heat), replace every 60.000 km.

(3) Replacement to be carried out only on vehicles equipped with Telma retarder with automatic gearbox ZF 8HP.

(4)When using the vehicle under severe conditions (dust and/or heat) the timing belts must be replaced every **120.000 km**.

#### TIMED SERVICES

SERVICES	TYPE OF INTERVENTION
ТІ	Check coolant density
T2	Check fuse valves (if present)
T2	Check ground cables (if present)
Т2	Check efficiency of the control unit solenoid valve (if present)
Т3	Change pollen filter
Т3	Change oil and bleed hydraulic brake system
Τ4	Replace P&CM control unit buffer battery

# Scheduled maintenance (FIC engine)

**NOTE** The information provided below is valid for the entire vehicle configuration; access the interactive maintenance plan to obtain the scheduled maintenance for a specific vehicular configuration (VIN).

**NOTE** For the Russia, Belarus and Kazakhstan markets, due to increased dust content, fuel quality, temperature range and road surface, the interval for carrying out all maintenance must be halved, both in terms of mileage and months.

# MAINTENANCE SERVICES SCHEDULE

# Intervals for carrying out "Standard" services

ENGINE OIL	EO	МІ	M2	M3	<b>M</b> 4
SAE 0W-30 / ACEA C2 (I)	Every <b>50.000 km</b> or 24 months	Every 50.000 km	Every 100.000 km	Every I 50.000 km	Every 300.000 km

# NOTES:

(1) IVECO recommends using these oils to obtain better fuel economy. New vehicles are already equipped by IVECO with this type of lubricant.

# Intervals for "Extra-plan" services

USAGE	EPI	EP2	EP3	EP4
All	Every <b>100.000 km</b> or 36 months	Every <b>150.000 km</b> or 36 months	Every <b>I 50.000 km</b> or 48 months	Every 200.000 km

USAGE	EP5	EP5 EP6	
Road	Every <b>225.000 km</b>	Every <b>300.000 km</b> or 96 months	Every <b>350.000 km</b> or 60 months
Heavy-duty use	Every <b>225.000 km</b>	Every <b>300.000 km</b> or 96 months	Every <b>200.000 km</b> or 60 months

#### Intervals for "Timed Operation" services

ті	Т2	ТЗ	Т4
Every 12 months	Every 12 months	Every 24 months	Every 48 months

#### IMPORTANT FOR VEHICLES EQUIPPED WITH PARTICULATE FILTER:

At each oil change, the particulate filter (DPF) regeneration counter must be zeroed. This operation must be carried out using diagnostic instruments, selecting "CHANGING OIL" from the menu "REPLACING PARTS" from the area "SPECIFIC FUNCTIONS" of the engine control unit EDC 17.

# WARNINGS:

• Refuelling. Use only diesel oil normally available on the market which meets the requirements of standard EN 590. Fuel additives are not recommended and may lead to limitations of the warranties offered for the vehicle. Refuelling of diesel from drums or cans or of uncertain origin is strongly discouraged due to the possible presence of impurities and water which can cause premature clogging of the fuel filter and also deterioration of engine performance or damage to the fuel system.

• Diesel oil for low temperatures. The degree of fluidity of the diesel fuel may be reduced at low temperatures due to the separation of the paraffin. This results in the filters becoming clogged. The EN 590 standard provides for various categories of diesel oil for use at low ambient temperatures. It lies entirely with the oil company to comply with the standards relating to the climatic conditions (seasons and geographical location of the countries).

• Engine damage caused by delayed elimination of water from the fuel filter. Vehicles with diesel engine: Delayed removal of water from the fuel filter can cause engine damage. If the warning light comes on, immediately drain the water from the fuel filter.

**NOTICE** In the case of uses that may call for more frequent regeneration of the particulate filter (only for vehicles equipped with this device), it may be necessary to anticipate the engine oil and filter change intervals. In this case the need to perform this operation in extra-plan conditions is indicated by the on-board computer.

# EO SERVICES

SERVICE	TYPE OF INTERVENTION
EO	Change the engine oil <b>(1)</b>
EO	Restore engine oil quality counter with diagnostics instrument
EO	Replace the engine oil filter <b>(I)</b>

# NOTES:

(1)In the case of uses that may call for more frequent regeneration of the particulate filter (only for vehicles equipped with this device), it may be necessary to anticipate the engine oil and filter change intervals. In this case the need to perform this operation in extra-plan conditions is indicated by the on-board computer.

# **STANDARD SERVICES**

TYPE OF INTERVENTION		M2	M3	M4
Check brake hydraulic system fluid level		٠	٠	٠
Replace fuel filter cartridge <b>(2)</b>		٠		٠
Check condition of the various drive belts		٠	٠	٠
Check the conditions of the steering box rack sleeves		٠	٠	٠
Check brake disc and pad wear		•	•	٠
Check rear axle breather efficiency		•		•

TYPE OF INTERVENTION	MI	M2	M3	M4
Check fixing of steering box and support		•		•
Check the condition of the propeller shaft mounts		•		•
Check the linkage, articulated joints and steering column			•	•
Check cardan joints and propeller shaft flange fixing			•	•
Check parking brake stroke	•	•	•	•
Check headlamp levelling			•	•
Engine EDC system check-up using diagnostic tool		•		•

### NOTES:

(2) Early clogging of the diesel filter is mainly due to high levels of impurities present in the diesel (beyond the limits set by the standard EN 590) and, to a lesser extent, to the heavy use of the vehicle. For these reasons, the fuel filter cartridge must be replaced when indicated by the clogging warning light sensor, even if the specified maintenance interval has not been reached.

# **EXTRA-PLAN SERVICES**

SERVICES	TYPE OF INTERVENTION		
EPI	Replace cartridge and clean air filter shell <b>(I)</b>		
EP2	Change gearbox oil		
EP3	Replace alternator and water pump belt (2)		
EP3	Replace air conditioning system compressor drive belt (2)		
EP4	Change automatic gearbox oil		
EP4	Change automatic gearbox oil filter		

SERVICES	TYPE OF INTERVENTION
EP5	Removal - installation of the automatic gearbox hydrokinetic converter (3)
EP6	Replace alternator adjustable belt tensioner
EP7	Change rear axle differential oil

NOTES:

(1) Early filter clog is generally due to environmental conditions. For this reason it must be replaced when indicated by the relevant sensor (if present) regardless of the instructions. If there is no clogging indicator, the air filter must be checked every **50.000 km**.

(2) In the case of heavy-duty use (dust and/or heat), replace every 60.000 km.

(3) Replacement to be carried out only on vehicles equipped with Telma retarder with automatic gearbox ZF 8HP.

# TIMED SERVICES

SERVICES	TYPE OF INTERVENTION
ТІ	Check coolant density
Т2	Check fuse valves (if present)
T2	Check ground cables (if present)
Т2	Check efficiency of the solenoid valve (if present)
ТЗ	Change pollen filter
ТЗ	Change oil and bleed hydraulic brake system
Τ4	Replace P&CM control unit buffer battery

# **Technical specifications**

Vehicle identification data	604
Vehicle identification plate	607
Engine	608
Additional technical specifications	612
Radio pin out	615
Declaration of conformity for radio appliances	617
Fuel inlet	627
AdBlue filler cap opening	629
AdBlue filler door opening	631
Refuelling	632
International designation of lubricants	641
Selective catalytic reduction system - HI-SCR	645

# Vehicle identification data





# Figure legend

(A), this figure shows the layout of the data plates on the "Chassis Cowl" vehicles.

(B), this figure shows the layout of the data plates on the "Stripped Chassis Cowl" vehicles. The identification data of your vehicle are: type and number of the engine, type and number of the chassis, the manufacturer's plate and the identification plate.

**NOTE** Both figures are valid for left-hand drive vehicles and right-hand drive vehicles.

# Data plate legend

(1) Chassis. The marking (located at the front on the chassis right-hand side-member, with the vehicle in the direction of driving) consists of 17 alphanumeric characters assigned by the manufacturer to the individual vehicle. This punching identifies each vehicle unequivocally for a period of 30 years.

(2) Engine. Marking on the engine crankcase.

(3) Vehicle identification data plate. For vehicle identification in compliance with C.E.E directives.

#### Vehicle identification plate

- I. Country of production.
- 2. Name and address of manufacturer.
- 3. Name of manufacturing company.
- 4. Type-approval number of the whole vehicle.
- 5. Vehicle identification number.
- 6. Maximum weight of technically permissible load.
- 7. Maximum weight of technically permissible combination.
- 8. Maximum weight technically permissible on each axle listed in order from front to rear.
- 9. Maximum weight technically permissible on each axle listed in order from front to rear.
- 10. Vehicle type (type-approval name).
- II. Wheelbase.
- 12. Corrected value of the smoke absorption coefficient.
- 13. Engine type.
- 14. Number of axles.
- 15. Engine power.
- 16. Code: 96/53/EC ARTICLE 10B COMPLIANT XXXX KG.
- 17. Code: 96/53/EC ARTICLE 9A COMPLIANT.



# Engine

**ATTENTION** Vehicle operation, at its full power, is guaranteed for use at a height of **2500 m** above sea level and at an operating temperature of not less than **-25 °C**.

# FIA engines

ENGINE TYPE		FIAGL4IIY
Number of cylinders		4
Bore	mm	88
Stroke	mm	94
Displacement	cm3	2287
Max. rated output	kW (HP)	100 (136)
Operating at approximately	rpm	3500
Max. torque	Nm	350
Operating at approximately	rpm	1500
Turbo System		EVGT
Exhaust System		CCDPF+SCR
Type Approval		EURO 6D-LD

FIA engines

ENGINE TYPE		FIAGL411D
Number of cylinders		4
Bore	mm	88
Stroke	mm	94
Displacement	cm3	2287
Max. rated output	kW (HP)	100 (136)
Operating at approximately	rpm	3500
Max. torque	Nm	350
Operating at approximately	rpm	1500
Turbo System		EVGT
Exhaust System		CCDPF+SCR
Type Approval		EURO VI (HD) D

# FIC engines

ENGINE TYPE		FICFL4116	FICFL4117	FICFL4115
Number of cylinders		4	4	4
Bore	mm	95.8	95.8	95.8
Stroke	mm	104	104	104
Displacement	cm3	2998	2998	2998
Max. rated output	kW (HP)	7 ( 60)	32 ( 80)	155 (210)
Operating at approximately	rpm	3500	3500	3500
Max. torque	Nm	430	430	470
Operating at approximately	rpm	1000	1000	1000
Turbo System		VGT	VGT	EVGT
Exhaust System		CCDPF+SCR	CCDPF+SCR	CCDPF+SCR
Type Approval		EURO VI D-HD	EURO VI D-HD	EURO VI D-HD

# Additional technical specifications

#### Gearbox

Manual, with synchromesh gears. 2835.6 D.O.D - 2840.6 O.D with 6 forward gears and 1 reverse gear. Upon request, type 8HP with 8 speeds, automatic control with torque converter and electronic management.

# Clutch

d. |0" |/2 - s. |0 |/2" d. ||" - s. ||"

#### Front axle

With independent wheels, with wheel centring on the hub. Axle: QUADLEAF 30S - 33S - 35S - 35C - 40C. Axle: QUADTOR 35C - 50C - 60C - 70C.

#### Rear axle

Single reduction. Bridge: NDA - RS; NDA - RG; 450511; 450517/2.

# Steering system

Power steering on all versions.

#### **Front suspension**

With cross leaf spring on models 35S - 35C. With torsion bars on models 50C - 65C - 70C. Optional with torsion bars on models 35C. Double-acting telescopic hydraulic shock absorbers. Depending on the version, front stabiliser bar standard/on request/not fitted.

#### **Rear mechanical suspension**

According to the version:

- with single-blade to three-blade parabolic leaf springs.
- with strengthened single-blade parabolic leaf springs.
- with half-elliptic leaf springs.
- with semi-elliptical leaf springs plus auxiliary spring.

Leaf springs with spring rubber bushings. Double-acting telescopic hydraulic shock absorbers.
#### **Pneumatic rear suspension**

Powered by the electric compressor. Levelling valves with electronic control and button controls on the dashboard. Depending on the version, front stabiliser bar standard/on request/not fitted.

#### **Braking system**

Ventilated disc brakes with floating callipers on front and rear wheels with hydraulic control, with device signalling low brake fluid level and front and rear pad wear.

U.D.T. diagnostics hydraulic system.

Compliant with directive CEE 98/12 and ECE R13.

ESP device, including ABS– ASR– ABS+EBD functions available as standard on all models in the range.

Parking brake with manual control acting on the rear wheels:

• Combined calliper on models 35S - 35C.

• Drum on models 50C - 65C - 70C.

#### **Electric system**

Battery: 105 A·h Carbon maintenance free. Battery: 105 A·h Carbon+ MICROHYBRID FLOODED TECHNOLOGY (Start & Stop version). Battery: 110 A·hCarbon+ Starter motor 2,3 kW

Alternator:220 A.

SMART alternator able to recover energy during vehicle braking allowing fuel consumption to be reduced.

**NOTE** To ensure maximum vehicle operation, any parts that need replacing such as batteries, IBS sensor, alternator must be replaced with original first equipment parts. Contact the Service Network. longlife high beam and low beam lights. D.R.L ultra longlife lights. Bulbs must be replaced with others of the same type.

LAMPS	ТҮРЕ	POWER (WATT)
High and low beam lights	high beam lights H1 12 V	55
High and low beam lights	low beam lights H7 12 V	55
Front fog lights	Halogen H11	55
Front side lights	tubular W5W	5
D.R.L lights	tubular W21W	21
Rear side markers (dumper/cab version)	T4W	5

# Radio pin out

If the vehicle is prearranged for a radio, it is possible to install one in after-market following the indications in the table:



CONNECTOR BLOCK	PIN	DESCRIPTION
A	I	CAN H (Low speed – high signal)
A	2	Not connected
A	3	CAN L (Low speed – low signal)
A	4	Switching on (+ I 2 V)
А	5	12 V switch (output) 150 mA maximum
A	6	Lighting
A	7	Battery
А	8	GND
В	I	Right door panel speaker +
В	2	Right door panel speaker -
В	3	tweeter right strut +
В	4	tweeter right strut-
В	5	tweeter left strut +
В	6	tweeter left strut –
В	7	Left door panel speaker +
В	8	Left door panel speaker -
С	-  7	Not connected
D	1-10	Not connected

## Declaration of conformity for radio appliances

Information relating to conformity of the radio appliance to Directive 2014/53/UE is indicated below.

#### Bosch -Radio FUN plus cable

The manufacturer, Robert Bosch Car Multimedia GmbH, states that the Iveco Daily Fun radio complies with directive 2014/53/UE.

The complete text of the EU declaration of conformity is available from the website:

#### http://cert.bosch-carmultimedia.net

#### Bosch - RadioBT LDWS with external microphone

The manufacturer, Robert Bosch Car Multimedia GmbH, states that the Daily MY2014 LDWS Ext Mic radio complies with directive 2014/53/UE.

The complete text of the EU declaration of conformity is available from the website:

## http://cert.bosch-carmultimedia.net

Frequency band	Radiated Power [EIRP]	Hints / Restriction
2400 MHz - 2480 MHz	Bluetooth < <b>I 0 mW</b>	Internal antenna

## Delphi – Radio DAB

The manufacturer, Delphi Deutschland GmbH, states that the Radio DAB radio complies with directive 2014/53/UE.

The complete text of the EU declaration of conformity is available from the website:

## http://delphi.com/automotive-homologation/radio/

Frequency band	Radiated Power [EIRP]	Hints / Restriction
2402 MHz – 2480 MHz	Bluetooth< <b>+6 dBm</b>	Antenna Internal

## Body Computer Module / Remote control

The manufacturer, Magneti Marelli, states that the Body Computer Module / Remote control radio complies with directive 2014/53/UE.

The full texts of the EU declarations of conformity are available from:

## http://www.magnetimarelli.com/homologation

Body Computer Module BCML7		
Frequency Range	125 KHz	
Transmitting Power	25.9 dBμA/m @10m	
Class	1	
Frequency Range	433.05 - 134,70 MHz	
Receiver category	2	
Remote Control TRF198		
Frequency Range	433.92 MHz	
Transmitting Power	-I,9 dBm +/-I dBm	
MARELLI Europe S.p.A. Viale A. Borletti 61/63, Corbetta, Italy		

# СПРОЩЕНА ДЕКЛАРАЦІЯ про відповідність



BCML7 TRF198

справжнім Magneti Marelli SpA заявляє, що тип радіообладнання (позначення типу радіообладнання комп'ютерний модуль BCML7 і пульт дистанційного керування TRF198) відповідає Технічному регламенту радіообладнання; повний текст декларації про відповідність доступний на веб-сайті за такою адресою: https://www.magnetimarelli.com/homologation/UKR/IVECO-BCML7-REV1 https://www.magnetimarelli.com/homologation/UKR/IVECO-TRF198.01-REV1

## Infotainment System - Hi-connect

The manufacturer, APTIV, states that the Hi-connect radio complies with directive 2014/53/ UE.

The full texts of the EU declarations of conformity are available from:

## https://www.aptiv.com/automotive-homologation

Frequency range and max. power output (if applicable):

Infotainment System		
Bluetooth	2402 – 2480 MHz +4 dBm (2.51 mW) EIRP	
AM Receiver	531 – 1602 MHz	
FM Receiver	87.5 – 108 MHz	
DAB Band II Receiver	174.928 – 239.200 MHz	
DAB L-Band Receiver	1452.96 – 1490.624 MHz	
GPS Receiver	1575.42 MHz	

MINISTERIAL TYPE APPROVAL FOR SPECIFIC MARKETS (The radio appliances are compliant with the countries or local regulations).

COUNTRY	TYPE-APPROVAL ABBREVIATION FOR RADIO- FREQUENCY REMOTE CONTROL (TRF198)	TYPE-APPROVAL ABBREVIATION FOR BODY COMPUTER (BCML7)	
EU	CE*	CE * E24 - 116RAI_000029; E24 - 116RI_000030 E24 10R-041061	
USA	FCC: 2ADPXTRF198**	RX2BCML7 **	
ARGENTINA	CNC ID: H-16905 Tipo de Equipo: TRANSMISOR Modelo: TRF198 COMISIÓN NACIONAL DE COMUNICACIONES H-16905	CNC ID H-13146 Tipo de Equipo: TRANSCEPTOR MOVIL Modelo: BCML7 COMISIÓN NACIONAL DE COMUNICACIONES H-13146	
AZERBAIJAN	ID: SS/2-SIV-340 - ID: 031.01.19.03124.13	ID: SS/2-SIV-339 - ID: 031.01.19.03129.13	
BAHRAIN	Certificate ID: 2173	Certificate ID: 2172	
BRAZIL	N° 3   7   - 15-5386*** Marca Galactic de Judit Christian Johnson Judit Marca Galactic Tor 10 Marca Christian Christian Marca Christian Christian Marca Ch	425 I - I 3-5386*** BCM L7 A251 - I 3 - 5386 U 01/07/9458178 1008	
CANADA	IC: 12548A-TRF198	IC: 4983A-BCML7	
CHILE	ORD N°1155	ORD N°8347	

Country	Type-approval abbreviation for radio-frequency remote control (TRF198)	Type-approval abbreviation for Body Computer (BCML7)	
CHINA	CMIIT ID: 2012DJ8116	CMIIT ID:2012DJ4342	
DOMINICAN REPUBLIC	N°I 1001343	N°12000992	
JAPAN	JUB000044	/	
JORDAN	TRC/LPD/2011/102	TRC/LPD/2012/75	
KUWAIT	Certificate ID: 1707	Certificate ID: 1706	
LEBANON	2111/0&M/2014	2110/O&M/2014	
MEXICO	IFT: RLVGITR15-2213****	IFT:RCPMABC14-0263 ****	
MOROCCO	MR 6345 ANRT 2011 AGREE PAR L'ANRT MAROC Numéro d'agrément : MR 6345 ANRT 2011 Date d'agrément : 13 JUN 2011	MR 6968 ANRT 2012 AGREE PAR L'ANRT MAROC Numéro d'agrément : MR 6968 ANRT 2012 Date d'agrément : 22 FEV 2012	
OMAN	TRA/TR-R/1327/13 OMAN - TRA TRA/TR-R/1327/13 D13100428	TRA/TA-R/1351/13 OMAN - TRA TRA/TA-R/1351/13 D13100428	
PARAGUAY	2012-09-1-0161	2012-12-1-0225	

	ictQatar/RT/2013/R-3540	ictQatar/RT/2013/R-3541	
QATAR	ictQATAR Type Approval re. No.: RT/2013/R-3540	ictQATAR Type Approval re. No.: RT/2013/R-3541	
RUSSIA	RU0000013036	RU0000014240 + GOST MARK N°0981022	
SAUDI ARABIA	Certificate ID: 20130714102	Certificate ID: 20130814101	
SERBIA	PI618119100	PI618119800	
SINGAPORE	Registration Number: N4768-16 Complies with IMDA Standards N4768-16	Registration Number: N4770-16 Complies with IMDA Standards N4770-16	
South Africa	TA-2011/505 TA-2011/505 TA-2011/505 APPROVED	TA-2011/1915 TA-2011/1915 TA-2011/1915 APPROVED	
SYRIA	712/4/14	4/4/ 4	
TAHITI	ANFR/APF/2014.015.la	ANFR/APF/2014.013.la	

UKRAINE			
UNITED ARAB EMIRATES	TRA REGISTERED No: ER0115209/13	TRA REGISTERED NO: ER0115159/13	
URUGUAY	N°329/FR/2012	N°493/FR/2012	
VENEZUELA	MCM0001	MCM0002	

\*The manufacturer Magneti Marelli SpA, declares that the radio equipment type Body Computer Module BCML7 and Remote

Control TRF198.01 are in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address:

http://www.magnetimarelli.com/homologation/RED

\*\* FCC REGULATORY NOTICES:

Modification statement Magneti Marelli S.p.A. has not approved any changes or modifications to this device by the user. Any changes or modifications could void the user's authority to operate the equipment.

Interference statement This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Radiation exposure statement This device complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency Exposure Guidelines in Supplement C to OET65. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

\*\*\*ANATEL:

"Este equipamento opera em character secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em character primário." \*\*\*\*IFETEL:

"La operación de este equipo está sujeta a las siguientes dos condiciones:

I. Es posible que este equipo o dispositivo no cause interferencia perjudicial.

2. Este equipo o dispositivo debe aceptar cualquier interferencia. Incluyendo la que pueda causar su operación no deseada".

#### **Fuel inlet**

## Fuel filler cap port opening

('Chassis Cowl' versions)

It may be necessary to open the protective cover by acting on the zipper (1) on reduced cowl vehicles 'Chassis Cowl' to access the fuel filler.

**NOTE** The figure is valid for left-hand drive vehicles and right-hand drive vehicles.

The tank fuel filler neck (diesel) is located to the left side of the front door compartment. Open the door **(2)** by acting on the recess **(3)**.

Then open the fuel cap (4) keeping hold of it until the plastic line (5) is sufficiently taut. In this condition, the plug is supported by the ropes and is prevented from knocking against any painted parts of the bodywork.

**NOTE** The figure is valid for left-hand drive vehicles and right-hand drive vehicles.

## (Chassis version)

To access the fuel filler, after unlocking it with its key, unscrew the cap **(I)** slowly to avoid any fuel splashes.

**NOTE** The figure is valid for left-hand drive vehicles and right-hand drive vehicles.



General risk, general prescriptions

Switch off the additional heater, where present, before refuelling. Partial or complete non observance of these prescriptions can lead to serious

damages to the vehicle and can sometimes result in the guarantee being voided





General risk, general prescriptions

- If the fuel cap has to be replaced, ask the Service Network for the specific one for the vehicle model. - Avoid spilling fuel when refuelling. Fuel contains alcohol which could damage the paint.

Partial or complete non observance of these prescriptions can lead to serious damages to the vehicle and can sometimes result in the guarantee being voided



General risk, general prescriptions

Fuel vapours are extremely flammable and can even be explosive in enclosed spaces. While refuelling: - Switch off the engine - Do not smoke or use a naked flame - Do not spill the fuel - Switch off all appliances which produce radio frequencies Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle



**NOTE** To prevent the small door from breaking or damage to the door, remember: after having refuelled and closed the filler neck with the plug, close the small door **(2)** and then close the driver's side door on bodied vehicles.

**NOTE** The figure is valid for left-hand drive vehicles and right-hand drive vehicles.

## AdBlue filler cap opening

(If fitted).

**NOTE** This description is also valid for the cab versions which have the filler cap located in the same position as on the van version.

The plug **(I)** of the AdBlue® tank is located to the side of the driver's side front door. It opens when unscrewed in an anti-clockwise direction. It closes when screwed in a clockwise direction.

• Open the front door (2) in order to open the filler door (3).

Lift the small door (3) acting on the recess (4).





unscrew the plug **(5)** slowly to avoid any fumes.

**NOTE** In order to comply with current regulations, the cap secured to the vehicle with a plastic cord **(6)** so that it will not get lost. The cord also acts as a way of referencing plug assembly, since it can be fitted in only one way.

**NOTE** Do not remove the cord; not only does this risk damaging the plug, but is also against the law.

**ATTENTION** To prevent the small door from breaking or damage to the door, remember: after having refuelled and closed the filler with the plug, close the small door and then close the driver's side door.

#### AdBlue filler door opening

(if provided).

TheAdBlue® tank plug is located in the front section opposite the driver's seat. It opens when unscrewed in an anti-clockwise direction. It closes when screwed in a clockwise direction.

• Lift the small door (1) acting on the recess (3).

• Unscrew the plug (3) slowly to prevent the inhalation of fumes and hold it until the plastic cord (4) is sufficiently taut. In this condition, the plug is supported by the ropes and is prevented from knocking against any painted parts of the bodywork.

**NOTE** The figure is valid for left-hand drive vehicles and right-hand drive vehicles.

**NOTE** In order to comply with current regulations, the cap secured to the vehicle with a plastic cord **(4)** so that it will not get lost. The cord also acts as a way of referencing plug assembly, since it can be fitted in only one way.

Do not remove the cord; not only does this risk damaging the plug, but is also against the law.



#### Refuelling



#### Risk of injury:

Dispose of consumable materials and the parts in contact with them (for example filters) in accordance with the law. The workshops of the Service Network are equipped for this purpose.

Correct behavior will ensure that vehicle is used as environmentally friendly as possible



General risk, general prescriptions

- The use of special additives could limit claims under the warranty. - Lubricant additives are not necessary.

Partial or complete non observance of these prescriptions can lead to serious damages to the vehicle



Risk of injury:

- The consumables are harmful to health. - If a product is ingested, see a doctor immediately. - Keep consumable materials out of the reach of children. Failure to comply with these prescriptions can result in the risk of serious injury

## For the Argentina - Brazil markets

To ensure correct operation of the exhaust gas treatment system and to maintain emissions within the limits established by the type-approval, IVECO only authorises use of the fuel Diesel S10 specified by standards ANP 31/09 (for Brazil) or Diesel Grade 3 specified by standards SE n.1283 (for Argentina). The use of any other diesel oil will make the vehicle warranty void.

#### 633

#### Refuelling

There is a label near the filler neck indicating the correct fuel to use. When there is label (1), use commercially available diesel oil in accordance with the EN 590 standard

When the label (2) is present, EN 590 diesel oil or XTL/HVO fuel can be used in accordance with the standard EN 15940.

Fuel additives are not recommended. The use of additives can limit performance levels guaranteed for the vehicle.

Refuelling from drums or cans could pollute the diesel oil, resulting in problems with the fuel supply system; in these cases it is necessary to carry out adequate filtration or sedimentation of any impurities present.



## **Diesel oil for low temperatures**

The degree of fluidity of the diesel fuel may be reduced at low temperatures due to the separation of the paraffin. This results in the filters becoming clogged.

The EN 590 standard provides for various categories of diesel oil for use at low environmental temperatures.

It is the full responsibility of the oil companies to comply with the standard based on climatic conditions (seasons and geographical position of countries).

## XTL Fuel

XTL is an alternative fuel to diesel known as hydrotreated vegetable oil.

XTL is a biodiesel fuel obtained from natural waste; raw material comes from controlled and certified cultivation facilities.

XTL has high levels of cetane and contains no sulphur or aromatics; no ash is produced during the combustion process.

The use of XTL  $\rm \tilde{f}uel$  provides significant improvements in terms of reductions in CO2 emissions.

The hydrotreatment of vegetable oils is a way of producing high quality diesel biodiesel fuels without compromising the quality of the fuel or the exhaust gas emissions of the engines after the treatment.

These fuels are now known as "renewable diesel" rather than "biodiesel" which is reserved for fatty acid methyl esters.

## **NOTE** XTL diesel has the commercial name of HVO

#### Fuel tank plug

(only for vehicles with fuel tank filler cap on the cab pillar)



#### General risk, general prescriptions

Fuel vapours are extremely flammable and can even be explosive in enclosed spaces. While refuelling: - Switch off the engine - Do not smoke or use a naked flame - Do not spill the fuel - Switch off all appliances which produce radio frequencies Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

#### Opening/closing the plug during refuelling.

To open/close the filler plug, simply turn the key in its slot (no need to unscrew it). To satisfy established regulations, the plug is fitted with a device to prevent the key being removed while it is open, and a plastic cord to prevent it being removed from the vehicle. The cord also acts as a way of referencing plug assembly, since it can be fitted in only one way. Do not remove the cord; not only does this risk damaging the plug, but is also against the law.

## **Check levels**

The following quantities are not binding. The exact control must be carried out by checking the levels.



#### Risk of injury:

Verification of the efficiency of the air conditioning system with the recharge, repair and replacement are not the responsibility of the owner. These must only be carried out by the Service Network.

Failure to comply with these prescriptions can result in the risk of serious injury and serious damages to the vehicle

Technical specifications

COMPO	ONENT	INTERNATIONAL DESIGNATION	QUANTITY
Standard engine torque for FIA	(MAX level)	Engine oil SAE 0W-30 fully	5,4 L
engines	(MIN level)	standard: ACEA C2.	3,3 L
		Qualification IVECO Standard 18-1811 SCI LV-	7,8 L
Increased engine torque (Optional) for FIA versions	(MAX level) (MIN level)	16 Engine oil SAE 5W-30 fully synthetic. Conforming to standard: ACEA C2. Qualification IVECO Standard 18-1811 SC1	4,6 L
		Engine oil SAE 0W-30 fully	6,6 L
FIC engine sump	(MAX level) (MIN level)	synthetic. Conforming to standard: ACEA C2. Qualification IVECO Standard 18-1811 SC1 LV- 16 Engine oil SAE 5W-30 fully synthetic. Conforming to standard: ACEA C2. Qualification IVECO Standard 18-1811 SC1	4,29 L
Gearbox 2835.6 without PTO pre-installation		For manual and automated transmissions, SAE 75W-80 / API GL-4 / ZF TE-ML 01L,02L. Qualification IVECO Standard 18-1807 MGS1	2 L
Consult the list of recommended fluids present in the "CONSUMABLES" booklet included in the on-board documentation			

COMPONENT	INTERNATIONAL DESIGNATION	QUANTITY	
Gearbox 2835.6 with PTO pre-installation	For manual and automated transmissions, SAE 75W-80 / API GL-4 / ZF TE-ML 01L,02L. Qualification IVECO Standard 18-1807 MGS1	2,2 L	
Gearbox 2835.6 with PTO	For manual and automated transmissions, SAE 75W-80 / API GL-4 / ZF TE-ML 01L,02L. Qualification IVECO Standard 18-1807 MGS1	2,6 L	
2840.6 gearbox	For manual and automated transmissions, SAE 75W-80 / API GL-4 / ZF TE-ML 01L,02L. Qualification IVECO Standard 18-1807 MGS1	2 L	
Gearbox 2840.6 with PTO	For manual and automated transmissions, SAE 75W-80 / API GL-4 / ZF TE-ML 01L,02L. Qualification IVECO Standard 18-1807 MGS1	2,4 L	
Consult the list of recommended fluids present in the "CONSUMABLES" booklet included in the on-board documentation			

Technical specifications

1	2	0
6	- 1	9
0	-	-

COMF	PONENT	INTERNATIONAL DESIGNATION	QUANTITY
ZF 8HP 70L - Hi-Matic gearbox (automatic)	total quantity	Oil for automatic	9,5 L
	quantity to be replaced	specifications ZF TE-ML 11. Qualification IVECO Standard 18-1807 Class AG3/VII	3,5 – 51 (1)
NDA RS, NDA RG rear axle		For axles with extreme	1,35 L
450511 rear axle		75W-85 – 75W-90 / API GL-	1,9 L
450517/2 rear axle		5 / MT-1. Qualification IVECO Standard 18-1805 RAS-1	3,1 L
Brake circuit		Synthetic oil for clutch and brake hydraulic control. Complies with standards: NHTSA 116 – DOT 4 / ISO 4925 Class 4 / Standard SAE J 1704. Qualification IVECO Standard 18-1820	I,II L
Windscreen washer		Liquido per lavacristalli. Miscela di alcoli e tensioattivi CUNA NC 956- I I. Qualificazione IVECO Standard 18-1802	6 L
Fuel tank		Diesel fuel	70 L/90 L/100 L/120 L
Consult the list of recommended fluids present in the "CONSUMABLES" booklet included in the on-board documentation			

# Technical specifications

COMF	PONENT	INTERNATIONAL DESIGNATION	QUANTITY
Quantity of coolant in the air-cone	ditioning system***	Refrigerant for A/C systems. Qualification IVECO STANDARD 18- 1835 ****-*	0,475 +/- 0,025 kg
	Total tank capacity	AdBlue fluid level. Meets the requirements of ISO 22241. Qualification IVECO Standard 18-1852	18 L
AdBlue (Urea) tank	Tank payload		17 L
Engine cooling system (Urea)		Ethylene glycol based concentrated protective fluid with OAT for cooling system radiators containing corrosion inhibitors. Complies with standards: CUNA NC 956-16 / ASTM D6210 / ASTM D3306. Qualificat (2)	9 L
Antifreeze protection-concentration <b>50%</b>			
Freezing point <b>-35 °C</b>			
Anti-seizure assembly paste. Synthetic oil based for high temp	erature applications -40 °C to +120	° <b>C</b> not copper based NLGI 2consiste	ncy.
Consult the list of recom	mended fluids present in the "CON	SUMABLES" booklet included in the	e on-board documentation

(C.T.R. = Contractual Technical Reference)

(1) The amount of oil to be added can vary depending on the temperature of the gearbox when emptied.

(2) Use diluted to **50%** with distilled water.

\*\*\* The system contains fluorinated greenhouse gases.

\*\*\*\* Global warming potential: Global Warming Potential (GWP) of 1430.

\*\*\*\*\* CO2 equivalent: 0,679 t

**NOTE** FIA Engine. Quantity of oil in the cartridge filter and heat exchanger **I L (0,88 kg**). FIC Engine. Quantity of oil in the cartridge filter and heat exchanger **I,I4 L (I kg**)

## International designation of lubricants INTERNATIONAL DESIGNATION OF LUBRICANTS - GREASES - LIQUIDS

COMPONENT	INTERNATIONAL DESIGNATION (*)	CONSUMABLE IDENTIFICA TION CODE (2)
Engine oil	Engine oil SAE 0W-30 fully synthetic. Conforming to standard: ACEA C2. Qualification IVECO Standard 18-1811 SC1 LV-16	242
	Engine oil SAE 5W-30 fully synthetic. Conforming to standard: ACEA C2. Qualification IVECO Standard 18-1811 SC1	148
Oil for differential	For axles with extreme pressure characteristics, 75W-85 – 75W-90 / API GL-5 / MT-1. Qualification IVECO Standard 18-1805 RAS-1	54
(*) Refer to the list of recommended fluids in the "CONSUMABLES" manual, part of the on-board documentation		

COMPONENT	INTERNATIONAL DESIGNATION (*)	CONSUMABLE IDENTIFICA TION CODE (2)
Oil for mechanical gearboxes	For manual and automated transmissions, SAE 75W-80 / API GL-4 / ZF TE-ML 01L,02L. Qualification IVECO Standard 18- 1807 MGS1	55
Oil for automatic gearboxes	Oil for automatic gearboxes, meets specifications ZF TE-ML 11. Qualification IVECO Standard 18- 1807 Class AG3/VII	225
Grease for general greasing	Multiuso per ingrassaggio generale e cuscinetti mozzi ruote, NLGI 2. Qualificazione IVECO Standard 18-1810 classe I	157
Hydraulic brake and clutch control fluid	Synthetic oil for clutch and brake hydraulic control. Complies with standards: NHTSA 116 – DOT 4 / ISO 4925 Class 4 / Standard SAE J 1704. Qualification IVECO Standard 18-1820	51
Windscreen washer fluid	Liquido per lavacristalli. Miscela di alcoli e tensioattivi CUNA NC 956- I I. Qualificazione IVECO Standard 18-1802	233
Specific grease for bearings and wheel hubs	Multi-purpose for general greasing and wheel hub bearings, NLGI3. Qualification IVECO Standard 18- 1810 class I	158
(*) Refer to the list of recommended fluids in the "CONSUMABLES" manual, part of the on-board documentation		

COMPONENT	INTERNATIONAL DESIGNATION (*)	CONSUMABLE IDENTIFICA TION CODE (2)
Concentrated protective coolant for radiators	Ethylene glycol based concentrated protective fluid with OAT for cooling system radiators containing corrosion inhibitors. Complies with standards: CUNA NC 956-16 / ASTM D6210 / ASTM D3306. Qualificat (1)	257
AdBlue fluid	AdBlue fluid level. Meets the requirements of ISO 22241. Qualification IVECO Standard 18- 1852	202
(*) Refer to the list of recommended fluids in the "CONSUMABLES" manual, part of the on-board documentation		

# NOTE

(I) To be used diluted to 50% with distilled water for protection down to – 35 °C.

**NOTICE** Warranty - IVECO guarantees optimum engine performance with the use of recommended lubricants.

If non-recommended products are used, lubricants with minimum ACEA performance are acceptable for the diesel engines specified in the table. The use of products with features below these ACEA specifications could cause damage to the engine that is not covered by the warranty.

**NOTICE** IVECO recommends using SAE 0W-30 / ACEA C2 engine oil for benefits in terms of fuel economy. The new vehicle is already equipped by IVECO with this lubricant.

**ATTENTION** (2) To correctly identify the type of fluid, refer to the "CONSUMABLES" manual on board the vehicle.

#### Selective catalytic reduction system - HI-SCR

In order to meet requirements of pollution emission standards in force, IVECO uses (if necessary) the High efficiency Selective Catalyst Reduction (HI-eSCR) technology. Iveco has chosen the combination of a DOC (Diesel Oxidation Catalyst) for the treatment of unburnt hydrocarbons (HC) and the carbon monoxide (CO) combined with the DPF (Diesel Particulate Filter) to reduce particulate emissions and with SCR (Selective Catalyst Reduction) for the reduction of the NOx via the DeNOx 3.1. system. This technology reduces the amount of particulate matter (PM), and the polluting nitrogen oxides (NOx) are converted in the exhaust system into nitrogen (the main element of the atmosphere) and water. This transformation requires the action of the **AdBlue®** (mixture of

water and urea), which is injected upstream of the SCR module.

With this treatment we have:

- Reduction in nitrogen oxide emissions.
- Reduction in particulate emissions.
- Reduction in fuel consumption.



## Description of the HI-eSCR system

The exhaust gases leaving the turbine enter the DOC oxidation catalyst (1) in which the hydrocarbons (HC) and the carbon monoxide (CO) are converted into carbon dioxide (CO2) and water (H2O). Subsequently, the exhaust gases pass through the particulate filter DPF (2), which traps the carbon particles that become particulate. To make the DPF more efficient, these particles must be constantly regenerated. This is done by means of a series of sensors and a control unit, which ensure that the exhaust gas in this phase reaches the filter at a high temperature, thereby burning the particulate matter. Afterwards, the pressurised gas enters the SCR (3) module. Through an injection of urea, the temperatures are lowered and the chemical conversion takes place, resulting in free nitrogen (N2) and water vapour (H2O). The CUC (Clean Up Catalyst) (4), located in the end section, has the task of oxidising the excess AdBlue®.

#### AdBlue® fluid

**AdBlue**® is the trade name of a water-urea solution which provides the following advantages:

- Odourless composition.
- No toxicity.
- Non flammable.
- No colouring.
- Availability.

**ATTENTION** Only use **AdBlue®**. Other fluids can damage the system: in addition, the exhaust emissions would no longer comply with legal regulations. Distributors are responsible for the conformity of their product. Observe the storage and maintenance precautions in order to conserve the initial quality. IVECO does not provide any warranty in the case of operating defects and damage caused to the vehicle following the use of urea (**AdBlue®**) which is not compliant with the standards.



General risk, general prescriptions

The introduction of any diesel, additive or other liquid into the AdBlue tank will cause irreversible damage to the AdBlue circuit pump module and may also damage the exhaust gas treatment system.

Partial or complete non observance of these prescriptions can lead to serious damages to the vehicle and can sometimes result in the guarantee being voided



General risk, general prescriptions

Risk of injury:

If AdBlue comes into contact with painted or aluminium parts during refuelling, immediately rinse the affected parts with plenty of water. Partial or complete non observance of these prescriptions can lead to serious damages to the vehicle



If AdBlue is overheated inside the tank to more than 50°C (e.g. due to direct sunlight), the AdBlue could break down, forming ammonia vapours. Ammonia vapours have a pungent smell: Be careful when you loosen the tank cap. Failure to comply with these prescriptions can result in the risk of serious injury

**NOTE AdBlue®** freezes at a temperature of approximately -11 °C. Vehicles equipped with an **AdBlue®** preheating system also ensure vehicle use in winter with temperatures below -11 °C. At low temperatures, **AdBlue®** crystals may form on the hose between the engine and the silencer. This crystallisation does not affect the operation of the exhaust gas purification system in any way. If necessary, **AdBlue®** crystals may be removed with clean water.



General risk, general prescriptions

The vehicle should not run without AdBlue to prevent environmental pollution. Correct behavior will ensure that vehicle is used as environmentally friendly as possible

Filling with AdBlue® is as easy as ordinary refuelling, if done at an appropriate filling station. Keep to the indications for low fluid level provided on your vehicle's instrumentation in order to be able to fill up within the foreseen time periods.

The EURO 6/ EURO VID anti-pollution standard oblige the manufacturers of industrial vehicles to provide for engine performance degradation if, during vehicle use, NOx emissions do not meet type-approval requirements.

Therefore, if you travel with an empty **AdBlue®** tank (**AdBlue®** level below the minimum threshold for metering device operation), or if other reasons do not allow the vehicle to meet the NOx emissions required by the standards, the performance of your engine will be limited (derating) through the reduction in engine torque. Derating is signalled in advance by the activation and flashing of the yellow OBD warning light on the dashboard.
Performance limitation can occur in the case of:

- Low quantity of **AdBlue®** in the tank or completely empty tank.
- Poor AdBlue® quality.
- Abnormal consumption of AdBlue®.
- Hi-eSCR system fault.

Derating activates the first time the vehicle is at null speed and continues until normal operating conditions of the anti-pollution devices enable the vehicle to meet again the NOx emission standards (if the AdBlue® tank is empty, it is necessary to refill it). It has no effect on vehicle reliability.

Details of possible fault or malfunction conditions can be found in the chapter "List of warning lights".

 $\bar{\mathsf{R}}$  member that the on-board control unit records these events so that they are available for checks by the authorities.

**NOTE** Between the low level **AdBlue®** indicator light activating and the OBD indicator light activating, it is possible to drive at least **200 km**.

## Plates

Plates



## Plates Symbols

On some components of our vehicle or near them, specific coloured plates are applied to recall the user's attention to the precautions to be observed.

Hazard symbols

I. Battery-Corrosive liquid.

2. Battery-Explosion.

3. Expansion tank - Do not remove the plug with hot coolant.

4. Belts and pulleys - Moving parts: keep body parts and clothes at a safe distance.

5. Climate control pipes - Do not open. High pressure gas.

Prohibition symbols

6. Battery - Do not approach with naked flames.

7. Battery - Keep out of reach of children.

8. Heat guards/belts/pulleys/fan.

9. Passenger side airbag - Do not fit child seats on the front passenger seat.

Warning symbols

I I. Brake circuit - Never exceed the maximum level of fluid in the tank. Use the prescribed fluid.

12. Windscreen wiper - Use the specified fluid.

13. Engine - Use the specified lubricant

14. Expansion tank - Use the specified fluid.

Symbols of obligation

15. Battery - Protect the eyes.

16. Battery/Jack - Refer to the Use and Maintenance handbook.

## Data plate warning of high voltage

Located on the inside of the engine compartment. Indicates the presence of high-voltage electrical components.

### Window decal for parking brake use (if included in equipment)

Located on the driver's side of the windscreen. Indicates use of the parking brake.

## Speed limiter window decal (if fitted in equipment)

Located at the centre of the windscreen. Indicates the presence of the speed limiter and the speed at which is programmed.





## Identification plate for bodywork paint

Applied to the inside of the engine compartment, it provides identification data of the paint for any touch-up or repainting operations.

## Front air bag identification plate, passenger side

Applied beneath the passenger side sun visor.

Users are reminded that the vehicle is not type-approved for transporting children in travel seats.

It is mandatory for the vehicle manufacturer to ensure this plate is present on the sun-visor regardless of the type of vehicle approval.

**Plates** 

#### Plates 655

## Braking corrector data plate (if included in equipment)

On vehicles equipped with this device the data plate is located inside the hatch of the glove compartment on the passenger side dashboard.

**NOTE** The location of this plate is given for information purposes only. Please note that any work on the braking system of the vehicle must only be carried out by the Service Network.

#### Fluorinated greenhouse gases data plate

This data plate, located on the engine bonnet buffer, indicates the presence of fluorinated gases in the climate control system refrigerant fluid.

#### Speed limit sticker

States speed limit for chassis vehicles inside the chassis outfitting workshops.





# $\label{eq:AdBlue} AdBlue \, nameplate \\ \ensuremath{\mathbb{R}} \ (where \ refilling \ with \ AdBlue \\ \ensuremath{\mathbb{R}} \ is \ required \ and \ only \ for$

**vehicles for the China Market**) On the inside of the AdBlue® filler inlet flap,only for vehicles for the China Market, there is nameplate (1) indicating the characteristics of the fluid to be introduced into the tank.

658 664

## Electric onboard panels

Cab fuses	
Fuse box ECU and engine compartment relays	

#### Cab fuses



General risk, general prescriptions

Before any interventions involving the electrical system, disconnect the batteries (disconnect terminals / open circuit by operating the main current relay switch). Partial or complete non observance of these prescriptions can lead to serious damages to the vehicle



#### General prescriptions

- Avoid any tampering with the electrical system. If this is necessary however, contact the Service Network. - Only use fuses with the specified amperage: risk of fire. Partial or complete non observance of these prescriptions can lead to serious damages to the vehicle

**ATTENTION** Information in this chapter is supplied purely for informational purposes. We do not recommend to repair / replace components (fuses and relays); in any case contact the Service Network.



General risk, general prescriptions

Never replace the maxifuses. If necessary, contact the Service Network. Partial or complete non observance of these prescriptions can lead to serious damages to the vehicle

## 659

### **General** information

The fuses protect the electrical system and intervene in the event of a fault / intervention on the system.

When a device does not function correctly, check the efficiency of the relative fuse.

The conductive element (1) of an integral fuse must not be interrupted.

The conductive element (2) of an interrupted fuse is not continuous.

If this is not the case, replace the blown fuse with another of same ampere (same colour).

To remove the fuses from their seat, use the tweezers (3) supplied. It is located inside the cover of the fusebox control unit in the engine compartment.

The figure shows how to use the tweezers (3) correctly.



660



## Fusebox control unit

The fusebox control unit is located near the driver's seat, below the right part of the central dashboard.

To access it, carefully pull the door **(1)**, downwards and remove it. Use the specific tweezers to help remove the fuses.



Fusebox control unit

FUSE	USE	RATED CAPACITY
F-12	Unavailable (internal protection).	_
F-13	Unavailable (internal protection).	—
F-31	Power supply +15 A; wiper/headlight washing; windscreen washing; climate control unit; heater; heated windscreen and rear window; power window plate and mirror switch; unit heater; differential lock; heated mirrors; heated glass of the outswinging door (function protected in the Vendor versions).	5 A
F-32	Unavailable (internal protection).	—
F-33	Power supply +30 bodybuilder socket; tachograph; trailer control unit and 13- pin socket additional heater timer; EOBD socket; anti-theft system; HI-MATIC gearbox control unit; T.G.C; IBS; QDB; SGW; PCM; step light relay with T.G.C.	15 A
F-34	Power supply +30 radio MY IVECO INFOTAINMENT; connector for bodybuilders; (CAN Open).	20 A
F-36	Power supply +30 A; Expansion Module (CAN Fully OPT).	15 A
F-37	Power supply +15, switch for signalling stop (brake pedal); instrument panel; radar control unit (AEBS).	7,5 A
F-38	Power supply +30, central locking.	20 A
F-42	Power supply +15 ABS control unit; speed sensor.	5 A
F-43	Power supply + <b>30 A</b> windscreen washer pump.	20 A
F-47	Left-hand window lift.	25 A
F-48	Right-hand window lift.	25 A
F-49	Power supply +15 dashboard for various controls; outswinging door; climate control unit; electric retarder; EM bodybuilder socket; tachograph; differential lock; EOBD relay coil; control unit and trailer socket; LDWS; PCM; FMS int indicator light; Smartrelay; TELMA int indicator light; int differential lock.	5 A

FUSE	USE	RATED CAPACITY
F-50	Airbag +15 power supply.	5 A
F-51	Power supply +15 automatic gearbox gear selector; parking sensors; radio; clutch pedal; Green Filter; reversing light; internal temperature sensor; LDWS; USB port power adapter $24 \vee - 12 \vee$ ; button back-lighting.	5 A
F-53	Power supply +30 USB port - FMS - climate control unit.	5 A
F-89	Horn.	7,5 A
F-90	Unavailable (internal protection).	_
F-91	Unavailable (internal protection).	_
F-92	Left fog light.	7,5 A
F-93	Right fog light.	7,5 A

Fuse box ECU and engine compartment relays





FUSE	USE	RATED CAPACITY
F-I	Air suspension solenoid valves (60 q superior versions if fitted)	40 A
F-2	Urea	40 A
F-3	ESP	40 A
F-4	ESP braking system (without EPB)	30 A
F-5	Air suspension solenoid valves and ECAS control unit (if fitted)	40 A
F-6	Headlight washers - Rear differential lock - Heated rear window	40 A
F-7	Power supply for: cigarette lighter (FI6)- power socket (F24)- heated seats (F60)	40 A
F-8	Fuel pump	15 A
F-9	Gearbox oil cooling fan (HI-MATIC)	30 A
F-10	Induction power take-off (PTO)	20 A
F-11	EDC	15 A
F-14	Main relay	5 A
F-15	Spare	—
F-16	Cigarette lighter	10 A
F-17	EDC	10 A
F-18	Expansion module	15 A
F-19	Heated rear windows	30 A
F-20	Expansion module	15 A
F-21	TPMS System	5 A

FUSE	USE	RATED CAPACITY
F-22	EDC	25 A
F-23	Wipers	30 A
F-24	Power socket	10 A
F-30	Side marker lamps and Battery cut-off	7,5 A
F4-B	Heated seats	20 A
F7-B	Rear differential lock	30 A
F8–B	Spare	
F4-A	Blow by	10 A
F5-A	Urea	15 A
F6-A	Urea	15 A
FI-B	Headlight washer	15 A
F7-A	Trailer socket	7,5 A
F3-B	Heated windscreen (if fitted)	10 A
FI-A	Heated mirrors	10 A
F5-B	Outswinging door heated glass (If fitted)	15 A
F8-A	Trailer socket	7,5 A
F-81	Mirrors, heated windscreen, outswinging door heated glass	30 A
F-82	Body computer (BCM)	70 A
F-83	Internal cab fans	40 A
F-84	Baruffaldi connector (direct speed)	7,5 A

FUSE	USE	RATED CAPACITY
F-85	Heated fuel filter	25 A
F-87	Engine start-up (T10) - EDC - ECU Hi-Matic - ECU EPS	5 A
F2-A	Urea	7,5 A
F3-A	Tachograph, dashboard, IBS, heater, Webasto, anti-theft, Battery Cut-Off	5 A
F2-B	Heater unit	5 A
F6-B	Outswinging door	30 A
NOTE Fuses on the 75016–A module are identified as "FA"NOTE Fuses on the 75016–B module are identified as "FB"		

RELAY	USE
T2	Engine start consent in automatic (Stop & Start versions)
T6	Side marker lights
Т5	Baruffaldi joint
T3	Gearbox oil cooling fan
Τ7	Drain wrench
Т8	Fuel pump
Т9	Main relay
TIO	Engine start-up
T14	Baruffaldi joint
T17	Wipers
Т19	Wipers
T20	Diagnostics
Т30	Internal cab fans
Т31	Fuel filter heating
RI-A	Urea
R4-A	Automatic engine start-up (Stop & Start )
R2-A	Heated mirrors and windscreen
R3-A	Climate control unit compressor
RI-B	Heater unit
R2-B	Battery cut off Emergency switch

RELAY	USE	
R3-B	Battery cut off Emergency switch	
Т64	Heated rear windows	
Т65	Gearbox oil cooling fan (versions with automatic gearbox)	
R4-B	Headlight washer	
<b>NOTE</b> Relays on the 75	.016–A module are identified as "RA" <b>NOTE</b> Relays on the 75016–B module are identified as "RB"	

## Module fuse 70060 in the engine compartment

RELAY	USE	FUSE RATED CAPACITY
FIOI	ESP with EPB	40 A

## 75016\_D module located in the storage compartment in the dashboard

RELAY	USE
RI	Induction PTO engagement/disengagement
R2	Spare
R3	Outswinging door heated glass
R6	Super vision Expansion Module
R5	K LINEAir suspensions
R4	CAN FULLY OP Expansion Module



## 75016\_VEHH module located in passenger side storage compartment

RELAY	USE	RATED CAPACITY
RI	Engine start-up prevention with Stop & Start (T2)	_
R2	Engine start-up prevention (T10)	—
R3	Relay for activation of indicator light for tail lift in operation	_
R4	Ramp spot light	—
FI	Ramp power supply	10 A
from F2 to F8	Spare	—

## Index

A	
ACC speed programmer - Adaptive Cruise Control (Automatic speed regulation system)	382
Accessories fitted by the user	283
AdBlue filler cap opening	629
AdBlue filler door opening	63
Additional technical specifications	612
Adjusting the headlight light beam	551
AEBS system	4
Airbag	205
Airbag failure warning light	128
Anti-Lock Braking System "ABS"	348
Arm rests	204
ASR	147
Automatic battery disconnector	523
Automatic gearbox states	456

В	
Battery characteristics	535
Battery location	531
Before each trip	567
Bonnet	563

C	
Cab fuses	658
Caring for the vehicle	574
Central air vents	247
Central compartments / Compartment with inductive charge function	191
Central dashboard	44
Central door locking / unlocking from inside the vehicle	146

Central locking	303
Centralised locking + electronic alarm	304
Changing bulbs	541
Changing wheels	491
Chassis vehicle prolonged downtime or stoppage	539
Checks to be carried out	566
Chrono-tachograph	464
Compartments in the upper part of the dashboard	20
Controls and devices	197
Controls at the steering wheel	130
CWA System (Crosswind)	354

U	
Dashboard commands	138
Description of the chassis	
Diagram of air distribution	244
Disclaimer	270
Display	6 ,  64
DPF (Diesel Particulate Filter)	125
Driver's side front airbag	208
Driving compartment	15
Dusk sensor and rain sensor	422

E	
ECAS - Electronic control air suspensions	243
Economical and ecological driving	296
"ECOSWITCH PRO FLEET" function	448
"ECOSWITCH PRO FLEET" function for vehicles equipped with "Hi-Matic" gearbox	451
"ECOSWITCH PRO Locked" function for vehicles equipped with "Hi-Matic" gearbox	452
"ECOSWITCH PRO" function	446
"ECOSWITCH PRO" function for vehicles equipped with "Hi-Matic" gearbox	450

Electric onboard panels	657
Electric parking brake (EPB)	438
Electric power-assisted steering	346
Emergency switch	524
Engine	608
Environmental information	13
ESP	352
EUC - TSM - HRB - HFC - RMI -HBA	434
Every week	573
External lights	225

F	
FIX & GO quick tyre repair kit	510
Front airbag passenger side	209
Fuel Economy	170
Fuel inlet	627
Fuse box ECU and engine compartment relays	664

G	
Gear Shift Indicator (GSI)	47
Generic hazard indicator light	63–64

н	
HDC SYSTEM (Hill Descent Control)	355
Head rest	203
Heated seat	202
Heating and ventilation	248
HI-MATIC automatic gearbox	454
Hill Holder	428
Hub cover	504

L. L	
Immobilizer	30
Independent additional heater	26
Indication of engine oil level	316, 32
Indicators on the instrument panel	17
Inducement	
Inducement and EOBD II (MIL) warning light operation	14
Inducement warning light	
Inertia safety switch	33
Informative note on tyres	47
Installation of electric/electronic devices	I
Instrument lighting adjustment	4
Instrument panel	25, 32, 3
Interior equipment	19
International designation of lubricants	64
Introduction of telematics (optional Telematics Box)	27
J	
Jack	49
к	
Key switch positions	31

L	
Lane Departure Warning System (LDWS)	358
Lifting points	492
Light alloy hubcaps	509
List of symbols on buttons and switches	135
List of warning lights	48, 65, 79, 97
Load advice	23
"Locked ECOSWITCH PRO" function	449

Index 677

Lower part of dashboard, passenger side	465
м	
Manual activation of power take-off	558
Mechanical gearbox	453
Menu items	52,  73
Ν	
Navi repetition	69
0	
OBW – On Board Weight	345
On-board equipment	463, 470
Opening doors and external compartments	24
Operator checks	562
Operator roadside repairs	471
Ordinary maintenance	561
Р	
Pedals	445
Plates	651-652
PLKA (proactive assistance system for maintaining lane)	365
Position of the parking brake lever for right-hand drive vehicles.	437
Power take-off	241
Precautions to be used with electronic control units installed	540
Q	
Queue Assist	394
Quick installation guide for the "DAILY Business Up" application	271

R	
Radio and multimedia navigation system	269
Radio pin out	615
Rear differential lock engagement	242
Rear parking sensors	429
Recharging	533
Refuelling	632
Remote Assistance - IVECO OVER THE AIR UPDATE	281
Removing the protective cover from reduced cowl vehicles	21
Replacing the remote control battery	301
Replacing windscreen wiper brushes	559–560
Run lock	344

s

Safe driving	289
Safety	5
Safety warnings symbols	
SBR system (Seat Belt Reminder)	213
Scheduled maintenance	583
Scheduled maintenance (FIA engine with oversized oil sump)	586
Scheduled maintenance (FIA engine with standard oil sump)	591
Scheduled maintenance (FIC engine)	596
Seat belts	217
Seat for cowl vehicle manoeuvres	199
Seats	200
Selective catalytic reduction system - HI-SCR	645
Service brake	433
Setup Menu	149, 151, 172
Smart alternator	129
Spare wheel	494
Speed limiter (SPEED LIMITER-SL)	373

Speed programmer (Cruise Control-CC)	375
Start & Stop	335
Start-up and driving	287
Starting the engine	314
Starting with an auxiliary battery	526
Starting with inertia manoeuvres	530
Steering column switch (multifunction steering wheel lever)	235
Steering lock	302
Steering wheel adjustment	224
Stopping the engine	333
Sun visors / Storage tray	196

Т	
Table of acronyms	6
Tablet holder	193
Technical specifications	603
The philosophy of scheduled maintenance	584
Tow hook	557
Towing a vehicle equipped with a Hi-Matic gearbox	556
Towing the vehicle	554
traction plus	427
TRIP button	238
Trip computer	166, 187
Types of bulbs	553
Tyre pressure	482
Tyre pressure monitoring system (TPMS)	475

U	
USB port modules	195
Using the parking brake	436

v	
Valve types	521
Vehicle access step	19
Vehicle battery replacement	532
Vehicle identification data	604
Vehicle keys	299

W		
Warnings relating to the use of airbags	211	
Winter tyres	490	
Working Engine Speed Demand	381	