

Dear Client,

Thank you for choosing Alfa Romeo.

*Your **Alfa 166** has been designed to guarantee the safety, comfort and driving pleasure typical of Alfa Romeo.*

This booklet will help you to get to know the characteristics and operation of your vehicle.

*The following pages contain all the indications necessary for you to be able to maintain the high standards of performance, quality, safety and respect for the environment which characterise this **Alfa 166**.*

The Warranty Booklet also contains the regulations, the warranty certificate and a guide to the services offered by Alfa Romeo - services which are essential and precious because, when you purchase an Alfa Romeo you are not only acquiring a car, but the tranquillity that comes from knowing that an efficient, willing and widespread organization is at your service for any assistance problems you may have.

*What's more every single component of the **Alfa 166** is fully recyclable. At the end of your car's useful lifespan any Alfa Romeo dealer would be pleased to make arrangements for your car to be recycled and nature benefits in two ways: there's no pollution from waste disposal, and the demand for raw materials is reduced.*

Have a good trip.

Any queries concerning servicing should be forwarded to the showroom from which the vehicle was purchased, the subsidiary company or to our branch offices or associated companies.

WARRANTY BOOKLET

The Warranty Booklet is delivered together with every new vehicle and contains the regulations tied to the services given by Alfa Romeo Services and to the warranty conditions.

Correctly carrying out the scheduled services specified by the manufacturer is the best way to maintain the performance, safety characteristics and low running costs of your vehicle. It is also necessary to maintain warranty cover.

“Service” guide

This contains the Alfa Romeo Authorized Services. The services can be recognized by the presence of the Alfa Romeo badge and logo.

The Alfa Romeo organization in Italy can be found in the telephone book under the letter “A” Alfa Romeo.

Not all the models described in this booklet are available in all countries. Only some of the fittings described in this booklet are fitted as standard to the vehicle. The list of available accessories should be requested from Alfa Romeo Dealers.

VERY IMPORTANT!

FUEL CAPACITY



Petrol engines: only use unleaded petrol with no less than 95 R.O.N.

JTD engines: only use Diesel fuel for motor vehicles that meet European Specification EN590.

STARTING THE ENGINE



Petrol engines with mechanical transmission: engage the handbrake; set the gearshift lever to neutral; fully depress the clutch without pressing the accelerator, then turn the ignition key to **AVV** and release it as soon as the engine has started.

Petrol engines with automatic electronic transmission (Sportronic): make sure that the handbrake is engaged and that the gearshift lever is at **P**; keep the brake pedal fully depressed without pressing the accelerator; then turn the ignition key to **AVV** and release it as soon as the engine has started.

JTD engines with mechanical transmission: engage the handbrake; set the gearshift lever to neutral; fully depress the clutch without pressing the accelerator; turn the ignition key to **MAR** and wait for the **TO** warning light to go off, then turn the ignition key to **AVV** and release it as soon as the engine has started.

JTD engines with automatic electronic transmission (Sportronic): make sure that the handbrake is engaged and that the gearshift lever is at **P**; keep the brake pedal fully depressed without pressing the accelerator; turn the ignition key to **MAR** and wait for the **TO** warning light to go off, then turn the ignition key to **AVV** and release it as soon as the engine has started.

PARKING ON FLAMMABLE MATERIAL



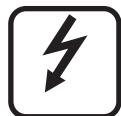
While working, the catalyst develops a very high temperature. Do not park the car over grass, dry leaves, pine needles or any other inflammable materials: risk of fire.

RESPECTING THE ENVIRONMENT



The vehicle is fitted with a system that allows continuous diagnosis of the components correlated with emissions to ensure better respect for the environment.

ACCESSORY ELECTRICAL DEVICES



If after purchasing the car you wish to install accessories that need an electrical supply (with the risk of gradually draining the battery), contact Alfa Romeo Authorised Services who will assess the overall electrical absorption and check whether the car system is able to withstand the load required.

CODE CARD



Keep it in a safe place, not in the car. It is advisable to always keep the electronic code on the CODE card with you in case emergency starting is necessary.

SCHEDULED SERVICING



Correct maintenance makes it possible to preserve vehicle performance levels and safety, respect for the environment and low running costs unaltered over the course of time.

THE OWNER HANDBOOK...



...you will find important information, advice and warnings for correct use, driving safety and vehicle maintenance over time. Pay particular attention to the symbols  (personal safety)  (protecting the environment)  (vehicle safety).

THE SYMBOLS USED IN THIS BOOKLET

The symbols illustrated in these pages show the subjects which should, in particular, be closely studied.



PERSONAL SAFETY

Warning: partially or fully ignoring these rules may lead to serious injury.



PROTECTING THE ENVIRONMENT

This indicates the correct procedures to be followed to prevent the vehicle from damaging the environment.



VEHICLE SAFETY

Warning: partially or fully ignoring these rules may lead to serious damage being caused to the vehicle which, in some circumstances, may cause forfeiture of the warranty cover.

SYMBOLS

Special coloured labels have been attached near to or actually on some of the components making up your **Alfa 166**. These labels bear symbols that remind you of the precautions to be taken as regards that particular component.

A list of the symbols to be found on your **Alfa 166** is given below, with the name of the component to which it relates at the side of it.

These symbols are divided into the following four categories: danger, prohibition, warning and obligation.

DANGER SYMBOLS



Battery

Corrosive fluid.



Battery

Explosion.



Fan

May cut in automatically when the engine is off.



Expansion tank

Do not remove the cap when the coolant is boiling.



Coil

High voltage.



Belts and pulleys

Moving parts; keep limbs and clothing away.



Climate control tubing

Do not open.

Gas under high pressure.



Jack

See the owner Handbook.

PROHIBITION SYMBOLS



Battery

Keep away from naked flames.



Battery

Keep away from children.



Heat shields - belts - pulleys - fan

Do not touch.



Passenger's Air bag

Do not install a child's seat on the front passenger's seat with operational air bag.

WARNING SYMBOLS



Catalytic converter

Do not park over inflammable materials. See paragraph "Protecting emission reducing devices".



Power steering

Do not exceed the maximum fluid level in the reservoir. Use only the recommended fluid; see table "Specifications of fluids and lubricants".



Brake circuit

Do not exceed the maximum fluid level in the reservoir. Use only the recommended fluid; see table "Specifications of fluids and lubricants".



Windscreen wiper

Use only the recommended fluid; see table "Specifications of fluids and lubricants".



Engine

Use only the recommended lubricant; see table "Specifications of fluids and lubricants".



Unleaded petrol vehicle

Use only unleaded petrol with RON 95.



Diesel vehicle

Use only diesel fuel.



Expansion tank

Use only the recommended fluid; see table "Specifications of fluids and lubricants".

OBLIGATION SYMBOLS



Battery

Protect your eyes.



Battery - Jack

See the Owner Handbook.

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*The text, illustrations and specifications given herein are based on
the vehicle at the date of going to press.*

*In our ongoing striving to improve our products, Alfa Romeo may
introduce technical changes during production, therefore the spec-
ifications and equipment on board may be altered without prior
notice. Contact the factory sales network for detailed information.*

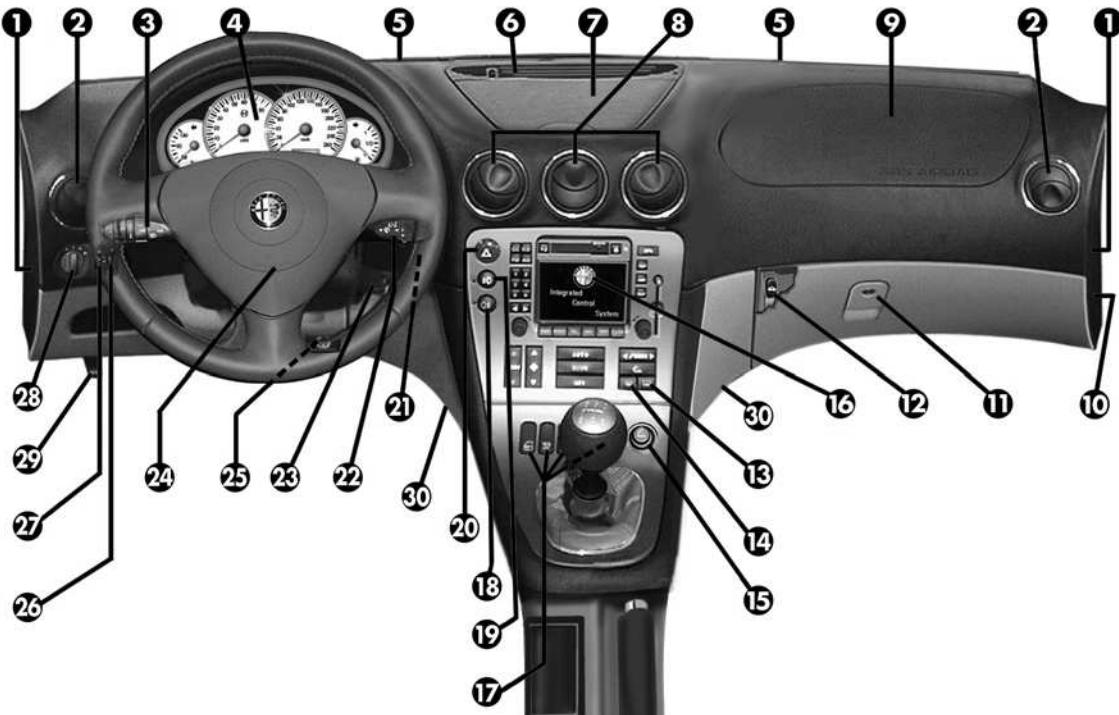
GETTING TO KNOW YOUR CAR

Sit comfortably in your vehicle and carefully read through the following pages.

You will immediately recognize the parts described and rapidly get to know the controls and devices fitted to your vehicle.

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DASHBOARD



AQD0002m

fig. 1

- 1** Air ducts for side window outlets.
- 2** Side air vents.
- 3** Light switch lever (high beam, flashing, direction indicators and controls for Cruise Control (automatically keeping a set speed) (if present).
- 4** Instrument cluster.
- 5** Outlets for windscreen.
- 6** Upper outlet.
- 7** Oddments compartment.
- 8** Centre air vents.
- 9** Passenger's air bag.
- 10** Manual passenger's side Air bag deactivation switch.
- 11** Glove box.
- 12** Boot opening button (in glove box).
- 13** Button for rearscreen defrosting, door mirrors and resistances at base of windscreen (if present).
- 14** Button for windscreen/front side windows and door mirrors defrosting, rearscreen heating, resistances at base of windscreen (if present).
- 15** Cigar lighter.
- 16** Alfa Romeo I.C.S. (INTEGRATED CONTROL SYSTEM): RDS radio, computer on board (TRIP), climate control, clock and outside/inside temperature, GSM phone and navigation system (if present).
- 17** Buttons for central locking, fuel flap opening, switching off the ASR function of the VDC system switching on the STR system (if present).
- 18** Rear fog guard switch.
- 19** Front fog light switch.
- 20** Hazard warning light switch.
- 21** Inside temperature sensor.
- 22** Windscreen wiper/washer control lever and rain sensor (if present).
- 23** Ignition switch (ignition device).
- 24** Driver's air bag and horn.
- 25** Lever for releasing/locking adjustable steering wheel.
- 26** Instrument lighting adjustment.
- 27** Headlamp aiming device control (except versions with gas discharge headlights).
- 28** Outside lights switch.
- 29** Bonnet opening lever.
- 30** Front floor air outlets.

ALFA ROMEO I.C.S. SYSTEM

CONTROLS ON STEERING WHEEL (fig. 2)

(on request for versions/markets
where applicable)

The main audio functions (AUDIO) of
the Alfa Romeo I.C.S. system are repeat-
ed on the steering wheel, which facili-
tates control.

- A** - Mute button
- B** - Volume highering button
- C** - Volume lowering button
- D** - Multifunction key:
 - Radio: call preset stations (1 to 6)
 - CD player: select next track
- E** - Multifunction key:
 - Radio: call preset stations (6 to 1)
 - CD player: select previous track
- F** - Radio frequency range select button
(FM-A, FM-B, FM-AS, MW, LW) and avail-
able audio sources (Radio — Cassette
player —CD player).

Mute key (A)

To turn the Mute function on, briefly
press button **(A)**: the volume will lower
gradually.

To turn the Mute function off, briefly
press button **(A)** again. The volume will
higher gradually returning to the previous-
ly set value.

The Mute function is also turned off
pressing one of the volume adjustment
keys **(B)** or **(C)**: in this event volume is
directly changed.

When the Mute function is on, all the
other functions can be used and if traffic
information is received the message ig-
nores the Mute function.

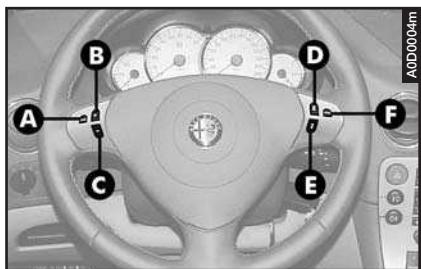


fig. 2

Volume adjustment keys (B) and (C)

Press **(B)** to increase volume and **(C)** to lower it.

Pressing briefly the key volume change is gradual by steps. Pressing it longer volume change is faster.

If volume is changed during a traffic bulletin, the new value is kept only for the bulletin in progress.

Multifunction keys (D) and (E)

Multifunction keys **(D)** and **(E)** shall be used for tuning preset radio stations, for backward rewinding and for selecting next/previous CD track.

Press **(D)** to select stations from 1 to 6, or to play next CD track.

Press **(E)** to select stations from 6 to 1, to play previous CD track.

Frequency range and audio source select key (F)

To cyclically select the frequency ranges and audio sources, briefly and repeatedly press key **(F)**.

The frequencies/sources available are: FM-A, FM-B, FM-AS, MW, LW, CC*, CD**.

(*) Only if the cassette is inserted.

(**) Only if a CD is inserted.

THE ALFA ROMEO CODE SYSTEM

To increase protection against attempted theft, the car is fitted with an electronic engine lock system (Alfa Romeo CODE) certified in accordance with EC Directive 95/56 which is activated automatically when the key is removed from the ignition.

In fact the grip of each key contains an electronic device which modulates the radio frequency signal transmitted when the engine is started by a special aerial incorporated in the ignition switch.

This modulated signal is the "password" by which the control unit recognises the key and only in this condition can the engine be started.

THE KEYS

The car is provided with the key (**A**-fig. 4) with metal insert with power-assisted opening, remote control for opening the boot and remote control for unlocking/locking the doors and electronic alarm (where applicable).



fig. 4

The key operates:

- the ignition
- door locks
- boot lock
- glovebox lock
- remote door locking/unlocking system
- alarm system (optional for versions/markets where applicable)
- deactivation of the passenger's Air bag.

IMPORTANT In order to ensure the perfect efficiency of the electronic devices contained inside the key, avoid exposing it to direct sunlight.

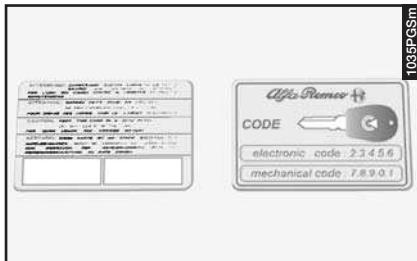


fig. 5

The CODE card (**fig. 5**), provided with the key, bears the key codes (both mechanical and electronic code for emergency starting).

The code numbers on the CODE card must be kept in a safe place, not in the car.

The driver should always keep the electronic code given on the CODE card with him in the event of having to carry out emergency starting.



If the car changes ownership the new owner must be given all the keys and the CODE card.

KEY WITH RADIO FREQUENCY TRANSMITTER WITH RE-CLOSABLE METALLIC INSERT WITH POWER-ASSISTED OPENING (**fig. 6**) (optional for versions/markets where applicable)

The key is fitted with:

- a metallic insert (**A**) that can be re-closed in the key grip
- button (**B**) for power-assisted opening of the metallic insert
- button (**C**) for remote opening/closing of the doors and turning the electronic alarm on/off (where fitted)
- led (**D**) that signals the sending of the code to the electronic alarm system receiver

- button (**E**) for remote boot opening.

The metallic insert (**A**) of the key operates:

- the ignition
- front door locks
- boot lock
- glove box lock
- passenger's Air bag deactivation switch.

To move the metallic insert out of the key grip, press button (**B**).

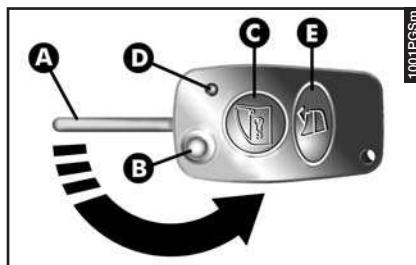


fig. 6



WARNING

When button (B) is pressed, take the utmost care to prevent the metal insert from causing injury or damage when it comes out. Button (B) must only be pressed when the key is away from the body, in particular the eyes, and from objects that could be spoilt (e.g. clothes). Never leave the key unattended to prevent anyone, especially children, from holding it and pressing button (B) inadvertently.

To insert the metallic insert in the key grip, keep button (B-**fig. 6**) pressed and turn the insert on the direction of the arrow until it clicks into place, then release the button (B).

To open/close the doors by remote control, press button (C). On cars fitted with electronic alarm system, pressing button (C) also turns the electronic alarm on/off and the led (D) flashes while the transmitter sends the code to the receiver. This rolling code changes at each transmission.

IMPORTANT If led (D) flashes only once briefly when button (C) is pressed, the battery need changing as described below.

Opening the boot

The boot can be opened by remote control from outside pressing button (E-**fig. 6**), also when the electronic alarm (where fitted) is on.

In this case the alarm disengages the boot control sensor, the system (with the exception of versions for certain markets) sounds two beeps and the direction indicators light up for about three seconds.

When the boot is closed again the control function is restored, the system (with the exception of versions for certain markets) sounds two beeps and the direction indicators light up for about three seconds.

KEY BATTERY CHANGE

If pressing the remote control buttons (**A** or **B**-**fig. 7**), the led (**C**-**fig. 7**) gives only one brief flash and the alarm system led (where fitted) (**A**-**fig. 8**) on the dashboard stays on glowing steadily for about 2 minutes (after turning off the alarm and with the ignition switch off), it is necessary to replace the battery with a new one of the equivalent type to be found c/o normal retailers.

To replace the battery, remove the plastic lid (**A**-**fig. 9**), insert the new battery according to the correct polarity and put the lid back on.

For further information contact Authorised Alfa Romeo Services.



Dead batteries constitute a hazard for the environment and must be disposed of in the special containers as specified by the relative laws.

OPERATION

Each time the ignition key is turned to the **STOP** position, the Alfa Romeo CODE system deactivates the functions of the engine electronic control unit.

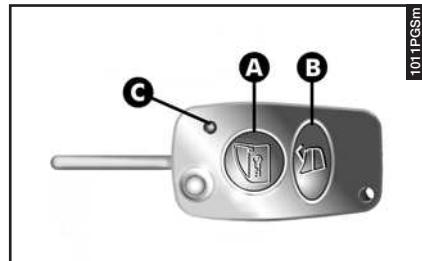


fig. 7

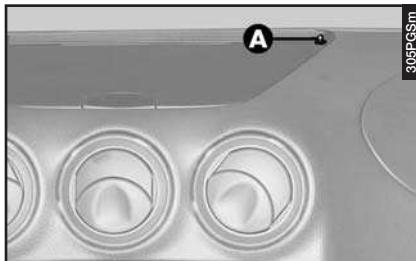


fig. 8

Each time the engine is started, turning the key to the **MAR** position, the control unit of the Alfa Romeo CODE system sends a recognition code to the engine control unit to deactivate the inhibition of the functions.

The recognition code, which is crypted and variable between over 4 billion combinations, is only sent if the system control unit has recognised the code sent to it by the key, which contains an electronic transmitter, through an aerial in the ignition switch.

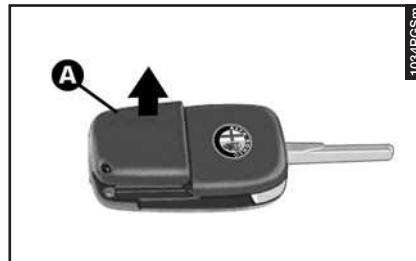


fig. 9

This condition is indicated by a brief flash of the warning light  (A-fig. 10) on the check panel.

If the code has not been recognised correctly, the Alfa Romeo CODE system warning light  (A-fig. 10) stays on together with the EOBD/fuel supply-ignition system failure warning light (B-fig. 10) .

In this case, you are recommended to return the key to the **STOP** position and then back to **MAR**; if the inhibition persists, try again possibly with the other key provided with the car. If it is still impossible to start the car, carry out the emergency starting procedure described herein and turn to an Alfa Romeo Authorized Service.

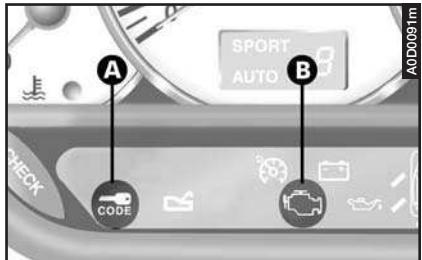


fig. 10

IMPORTANT Every electronic key has its own code, which must be memorised by the system control unit. To memorise new keys, up to a maximum of seven, apply solely to Alfa Romeo Authorized Services taking with you all the keys in your possession, the CODE card, a personal identity document and the car's possession documents.



The codes of the keys not provided during the new memorising procedure are erased from the memory. This is to ensure that any lost or stolen keys can no longer be used to start the car.

IMPORTANT The Alfa Romeo CODE warning light comes on when travelling with the ignition key on **MAR**:

1) If the warning lamp lights up while the car is moving, it means that the system is running a self-diagnosis (e.g. due to a voltage drop). The first time you stop you can test the system as follows: switch the engine off by turning the ignition key

to **STOP**; then turn the key back to **MAR**: the warning lamp will light up and should go out in the space of about one second. If the warning lamp fails to go out, leave the key at **STOP** for more than 30 seconds and repeat the procedure described previously. If the problem persists, contact your Authorised Alfa Romeo Dealer.

2) If the warning lamp flashes it means that the car is not protected by the immobiliser. Contact your Authorised Alfa Romeo Code Dealer immediately and get them to store the codes of all the keys in the memory.



If after about 2 seconds with the key in the MAR position, the Alfa Romeo CODE warning light turns on again flashing at appr. half second intervals, this means that the code of the keys has not been memorised, thus the car is not protected by the Alfa Romeo CODE system against attempted theft. In this case, contact an Authorized Alfa Romeo Service to have the key codes memorised.

IMPORTANT In the case of fast starting, turning the key directly from **STOP** to **AVV**, the recognition code might not be transmitted completely, preventing the engine from starting: try again more slowly.

IMPORTANT The system is protected by two fuses housed in the main fusebox (see "If a fuse or relay blows" in the chapter "In an emergency").

EMERGENCY STARTING

If it is not possible to deactivate the engine inhibitor with the ignition key, Alfa Romeo Authorized Services can carry out the emergency procedures using the code of the CODE card, or, you may do this yourself, following the procedure described below.

IMPORTANT You are advised to carefully read the entire procedure before carrying it out.

If a mistake is made during the emergency procedure, the ignition key should be turned to the **STOP** position and the operations must be repeated from the start (point 1).

1) Read the 5-figure electronic code on the CODE card.

2) Turn the ignition key to the **MAR** position.

3) Fully depress the accelerator pedal and keep it pressed. The EOBD/fuel supply-ignition system failure warning light  will come on for eight seconds approximately and will then go out; now release the accelerator pedal.

4) The warning light  begins to flash: after it has flashed for the same number of times as the first digit on the code of the card, press completely and hold down the accelerator pedal until the warning light  comes on (for 4 seconds) and then goes out again; now release the accelerator pedal.

5) The warning light  will begin to flash: after it has flashed for the same number of times as the second digit on the code of the CODE card, press completely and hold down the accelerator pedal.

6) Repeat this procedure in the same way for the other digits on the CODE card code.

7) After entering the last figure, keep the accelerator pedal pressed. The warning light  turns on (for four seconds) and then goes off; now release the accelerator pedal.

8) A quick flash of the warning light  (for appr. 4 seconds) confirms that the operation has taken place correctly.

9) Start the car turning the ignition key from the **MAR** position to the **AVV** position without returning the key to the **STOP** position.

Conversely, if the warning light  stays on, turn the ignition key to **STOP** and repeat the procedure starting from point 1).

IMPORTANT After emergency starting it is advisable to turn to an Alfa Romeo Authorized Service, because the procedure described must be repeated each time the engine is started.

ELECTRONIC ALARM

(optional for versions/markets where applicable)

DESCRIPTION

The system certified in accordance with EC Directive 95/56 comprises: transmitter, receiver, control unit with siren and volumetric sensors. The electronic alarm is controlled by the receiver and it is turned on and off through the remote control incorporated in the key which sends the crypted, variable code. The electronic alarm monitors: unlawful opening of the doors, bonnet and boot (perimetral protection), operation of the ignition key, battery and emergency key cable cutting, the presence of moving bodies in the passenger compartment (volumetric protection) and operates the central door locking system. It also makes it possible to cut off volumetric protection and/or the siren.

IMPORTANT The engine inhibitor function is guaranteed by the Alfa Romeo CODE system which is activated automatically when the ignition key is removed from the lock.

REMOTE CONTROL (fig. 11)

The remote control is incorporated in the key and it is fitted with a button (A) and a led (B); the button activates the control, the led flashes while the transmitter sends the code to the receiver. This code (rolling code) changes at each transmission.

IMPORTANT If, when pressing the push-button (A), the led (B) issues just a short flash, replace the batteries as shown in the previous paragraph.

Request for additional remote controls

The receiver can recognise up to 5 remote controls.

If during the life of the car a new remote control is needed for any reason whatsoever, contact Alfa Romeo Authorized services directly, taking with you the CODE card, a personal identity document and the car's possession documents.

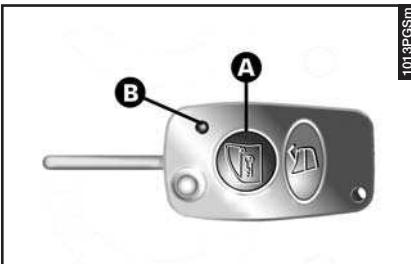


fig. 11

ACTIVATING THE ALARM

When the doors and boot/bonnet lids are closed and the ignition key is in the **STOP** position (key removed), point the remote control towards the car and press the button on the ignition key.

With the exception of some markets the system sounds a "BEEP", the hazard warning lights turn on for appr. three seconds and the door lock is engaged.

Engagement of the alarm is preceded by a self-diagnosis characterised by a change in the frequency at which the led (**A-fig. 12**) flashes. If an anomaly is detected the system gives off a further "BEEP".

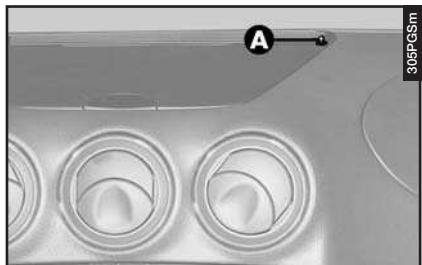


fig. 12

Surveillance

When the system has been turned on, the led (**A-fig. 12**) on the dashboard will flash to indicate that the system is in the surveillance mode.

The led (**A**) inside the car flashes throughout the whole time the vehicle is under surveillance.

IMPORTANT Operation of the electronic alarm is adapted at the origin to the regulations of the different countries.

Self-diagnosis and monitoring of doors and bonnet/boot

If, after the alarm has been activated, a second acoustic signal is heard, check that all the doors and bonnet/boot are closed properly and engage the system once again.

On the other hand, if a door or bonnet/boot lid is not correctly closed it will not be controlled by the system.

If the control signal is repeated when the doors and bonnet/boot are closed properly this means that the self-diagnosis function has detected a system operating fault, in which case it is necessary contact Alfa Romeo Authorized Services.

DEACTIVATING THE ALARM

To deactivate the alarm press the button on the remote control. The system performs the following (with the exception of some markets):

- the direction indicators turn on twice briefly
- two beeps are sounded briefly by the siren
- the doors are released.

IMPORTANT If the led in the car stays on when the system has been deactivated, (maximum of 2 minutes or until the ignition key is moved to **MAR**) the following should be borne in mind:

- if the led stays on permanently, it means that the remote control batteries are flat and need replacing;
- if the led continues to flash, but at different intervals than normal, it means that attempts to steal the car have been made, counting the number of flashes it is also possible to identify the type of attempt:

1 flash: right front door

2 flashes: left front door

3 flashes: right rear door

4 flashes: left rear door

5 flashes: volumetric sensors

6 flashes: bonnet

7 flashes: boot

8 flashes: tampering with car starting cables

9 flashes: tampering with battery cables or cutting emergency key cables

10 flashes: at least three causes of alarm.

WHEN THE ALARM IS TRIGGERED

When the alarm is engaged it will sound when:

— One of the doors, the bonnet or the boot is opened.

— The battery is disconnected or the electric cables are cut, or the emergency key cables are cut.

— Intrusion into the passenger compartment, e.g. window being broken (volumetric protection).

— Attempt to start the engine (key at **MAR**).

Depending on the markets, the triggering of the alarm will activate the siren and the hazard warning lights (for about 26 seconds). The methods of operation and the number of cycles may vary depending on the versions/markets. However a maximum number of cycles is foreseen. Once the alarm cycle has come to an end the system will return to its normal monitoring state.

SWITCHING OFF THE ALARM

To switch off the alarm, press the remote control button on the key. If the alarm does not turn off due to a flat remote control battery or system fault, open the door after unlocking with the lock key, then place the key in the ignition switch and turn it to **MAR**.

To turn on the alarm again, turn the key to **STOP** and remove it, then press the remote control button after leaving the car and shutting the doors. If the alarm does not turn on and the led on the remote control gives only one brief flash while the led on the dashboard stays on glowing steadily for about 2 minutes, the key battery should be replaced by a new one of the equivalent type on sale c/o normal retailers. To change the battery follow the instructions given at paragraph "Key battery change" on previous pages.

If it is not possible to switch on the alarm with a new remote control battery, contact Alfa Romeo Authorised Services to have the system checked.

IMPORTANT If the car is to remain inactive for a prolonged length of time (over three weeks) and security conditions permitting, it is advisable to operate central locking turning the key in the door lock to avoid engaging the alarm and draining the battery.

VOLUMETRIC PROTECTION

To guarantee correct operation, all the windows and the sunroof (optional for versions/markets where applicable) should be closed. This function can be excluded (for example when leaving animals on-board the vehicle) by performing the following operations in quick succession: when the ignition key is at the **MAR** position, move the key to the **STOP** position and then return the key to the **MAR** and then once again to the **STOP** position. Remove the ignition key. The led in the vehicle will come on for about 2 seconds to confirm that the function has been excluded.

To restore volumetric protection move the ignition key to the **MAR** position and hold it in this position for more than 30 seconds.

If requiring to activate an electric control operated by the ignition key at **MAR** (e.g. electric windows) with the volumetric protection deactivated, turn the ignition key to **MAR**, operate the control and return the key to **STOP** within a maximum time of 30 seconds. This way volumetric protection is not restored.

CUTTING OUT OPERATION OF THE SIREN

(optional for versions/markets where applicable)

When requiring to dispense with the siren acoustic signalling in the alarm condition, simply keep the remote control button (**A**-fig. 13) pressed for 4 seconds when engaging the system.

This condition is shown by a series of 5 beeps in quick succession after the normal acoustic/visual signals when the system is operated.

The next time the system is activated, normal operation of the siren is restored automatically.

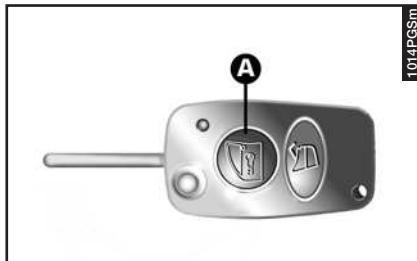


fig. 13

MINISTERIAL HOMOLOGATIONS

In keeping with the laws in force in each country on the subject of radio frequency, we point out that:

- the separate homologation numbers for each market are given on the last pages of this handbook before the alphabetical index (for some countries also homologation document);
- for markets in which the transmitter needs to be marked with the homologation number, this has been stated on the component.

(Depending on the versions/markets, the code may also be marked on the transmitter and/or on the receiver).

REMOTE CONTROL DOOR LOCKING SYSTEM

The system comprises a receiver and a transmitter (remote control) incorporated in the key (**B-fig. 14**). To lock/unlock the locks, point the transmitter towards the car, press and release the button (**C**). If, when pressing the remote control push-button (**C**), the led (**A**) issues just a short flash, replace the batteries as described in the "The Alfa Romeo CODE system" paragraph.

IMPORTANT Should it be necessary to programme additional remote controls, contact Alfa Romeo Authorized Services.

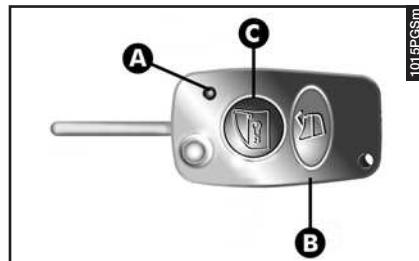


fig. 14

IGNITION DEVICE

THE SWITCH (fig. 15)

The switch has four positions:

- **STOP**: engine switched off, key can be removed, engine lock engaged, steering lock engaged, all services excluded apart from those powered directly (e.g. hazard warning light I.C.S. system (except climate control)).
- **ACC**: position for using the cigar lighter and of the I.C.S. system (except climate control).
- **MAR**: drive position. The engine lock is deactivated and all electrical devices are powered.

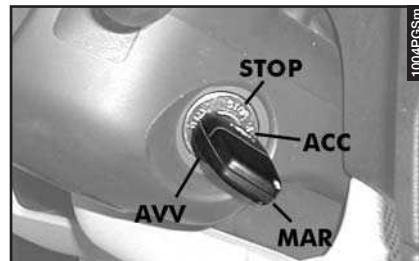


fig. 15

IMPORTANT Never leave the key in this position when the engine is stationary.

— **AVV**: starting the engine.

IMPORTANT If the engine does not start return the ignition key to the **STOP** position and repeat the sequence.

The ignition block is fitted with a safety device preventing it from being moved to the **AVV** position when the engine is already running.



If the ignition device is tampered with (for example during an attempted break-in) have it checked over by Alfa Romeo Authorized Services, before travelling again.

WARNING



It is absolutely forbidden to carry out whatever after-market operation involving steering system or steering column modifications (e.g.: installation of anti-theft Device) that could badly affect performance and safety, cause the lapse of warranty and also result in non-compliance of the car with homologation requirements.

STEERING LOCK

Engaging lock:

— move the key to the **STOP** position and remove the key lightly turning the steering wheel to facilitate the locking action.

Releasing the lock:

— turn the key to the **MAR** position and gently rock the steering wheel in both directions.



WARNING

When leaving the vehicle always remove the key from the ignition to prevent any passenger in the car from inadvertently activating the controls.

Never leave children unattended in a car. Remember to engage the handbrake and if the vehicle is facing uphill, first gear and if the vehicle is facing downhill, reverse.



WARNING

Never remove the key with the car on the move. The steering wheel would lock automatically the first time the steering wheel is turned. This also occurs if the car is towed.

DOORS

AUTOMATIC DOOR LOCKING

The automatic door locking function activates automatically when the car speed exceeds 20 km/h.

This function can be deactivated and reactivated by the following procedure, to be carried out with the car at a standstill, key at **STOP** and doors closed:

- turn the key to **MAR**
- keep button (**A-fig. 20**) on the central console pressed until completing a full centralised door locking cycle (opening and closing or vice versa).



WARNING

Before opening a door ensure that this can be done safely.

IMPORTANT Depending on the versions/markets the lock for the key may only be present on the driver's door.

— To close the door, turn the key in the opposite direction.

Rear doors

— To open the door, only with the inner knob (**A-fig. 17**) raised, pull the opening handle (**B-fig. 18**).

— To close the door in safety, press the button (**A-fig. 17**) also with the door open, then close it.

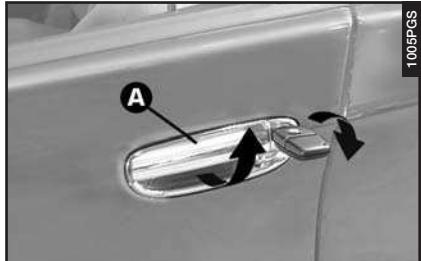


fig. 16



fig. 17

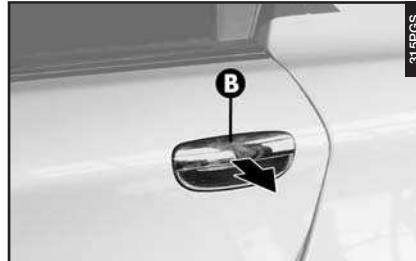


fig. 18

OPENING/CLOSING FROM INSIDE

Front doors

- To open the door pull the handle (**A-fig. 19**) regardless of the position of knob (**B-fig. 19**).
- Pull the door to close; then, to prevent the door from being opened from

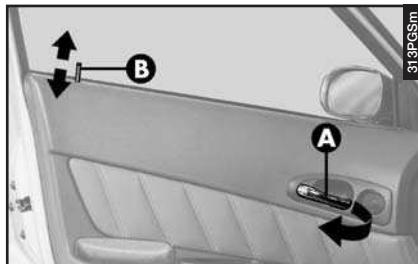


fig. 19



fig. 20

outside, press the button (**A-fig. 20**) on the centre console or the knob (**B-fig. 19**).

Rear doors (fig. 21)



- To open the door pull handle (**B**).
- To close the door press the knob (**A**) even when the door is open, and then close it.

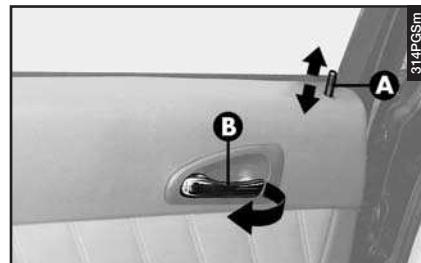


fig. 21

CENTRALIZED LOCKING

This permits centralized locking of all doors, both front and rear.

To operate the centralized locking device the doors must be perfectly closed otherwise the system will not work.

IMPORTANT If one of the doors is not closed properly the led on the relative "door open" display will come on.

For versions/markets where applicable, central locking depends on the complete closing of all the doors and of the boot.

— **From outside:** when the doors are closed, insert and turn the key in the lock of one of the two front doors.

IMPORTANT Depending on the versions/markets the lock for the key may only be present on the driver's door.

— **From inside:** with the doors closed, press the button (**A-fig. 20**) on the centre console or one of the knobs (**B-fig. 19**) on the front doors to engage (lock) central locking.

By pressing the knob (**A-fig. 21**) on one of the rear doors only that particular door will be locked.

To unlock central locking press the button again (**A-fig. 20**).

IMPORTANT For the front doors it is not possible to keep the knob (**B-fig. 19**) down if the door has not been shut properly.

IMPORTANT If the power supply is interrupted (burnt fuse, battery disconnected etc.) each door can be opened manually from both inside and outside the vehicle.

IMPORTANT The centralized locking system can be deactivated, thus unlocking all doors, by lifting the door opening lever on one of the two front doors.

CHILD SAFETY LOCK (fig. 22)

The rear doors are equipped with a special device which prevents the door being opened from inside.

The device can be engaged when the door is open by acting on the relative control using the ignition key.

Position **1** = Device inactive

Position **2** = Device engaged.

This device should be used when children are in the back seat to prevent them from opening the door whilst the car is moving.

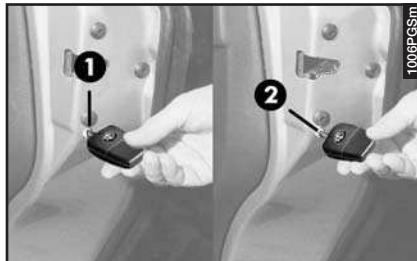


fig. 22

IMPORTANT Do not overlook child safety; the following recommendations should be heeded:

— Engage the child safety device.

— Do not leave a child alone in the vehicle.

— Follow the current laws regarding child restraint and safety systems.



WARNING

After activating the safety device check that it is working correctly by pulling on the inner lever used to open the door.

SEATS

FRONT SEATS



WARNING

Adjustments may be made solely with the car stationary.

Manual adjustment controls

Moving the seat backwards or forwards

Lift lever (A-**fig. 23**) and push the seat backwards or forwards.

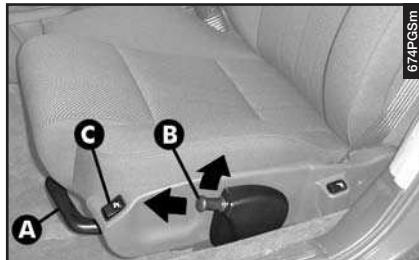


fig. 23

IMPORTANT Once you have let go of the lever, check that the seat is firmly locked in the runners by trying to move it back and forth. If the seat is not locked properly, in the case of collision it might move unexpectedly with clearly dangerous consequences.

Adjusting the height of the driver's seat

To raise the seat, pull the lever (**B**-**fig. 23**) taking it upwards, then continue operating the lever (up and down) until reaching the required height. To lower the seat, push the lever (**B**) downwards, then operate the lever (up and down) until reaching the height required.

IMPORTANT Adjustment must only be carried out when seated in the driver's seat.

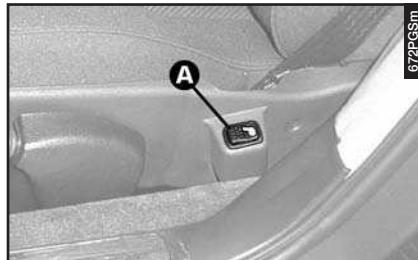


fig. 24

Seat inclination power adjustment

The adjustment is performed by applying pressure on the front or back part of the two-position switch (**C**-**fig. 23**).

Seat warming (fig. 24)

(optional for versions/markets where applicable)

The seat warming pad can be switched on and off using switch (**A**) on the outer side of the seat.

When the warming pad is on, the led on the switch turns on.

Controls for seats with electric adjustment (on request for versions/markets where applicable)

The position of the seats is adjusted electrically with the controls (**A**-fig. 25-26) and (**B**-fig. 25-27):

A - Multifunction control:

1 - raising the front of the seat

2 - raising the rear of the seat

3 - vertical movement of the seat

4 - longitudinal movement of the seat.

B - Multifunction control:

5 - seat back rake adjustment

6 - lumbar adjustment of the seat.

C - Seat heating.

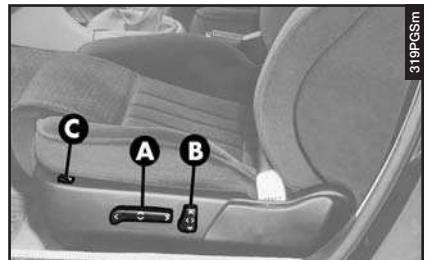


fig. 25

Lumbar adjustment of the seat is carried out raising or lowering the control (**B**-fig. 25-27), until finding the most comfortable position.

Seat heating (fig. 28)

Seat heating is turned on and off using the switch (**C**) on the outer side of the seat.

When seat warming is on the led on the switch lights up.

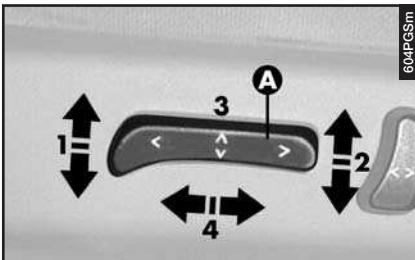


fig. 26

Memorising the driver's seat positions (fig. 29)

The system makes it possible to memorise and call up three different positions of the driver's seat.

To memorise a seat position, proceed as follows:

1) Adjust the position of the driver's seat with the controls described in the previous paragraph.

2) Simultaneously press (for about 1 second) the button (**MEM**-fig. 29) and one of the buttons (**1**), (**2**), or (**3**), each corresponding to a position that can be memorised.

3) Proceed in the same way to memorise the other two positions of the seat.

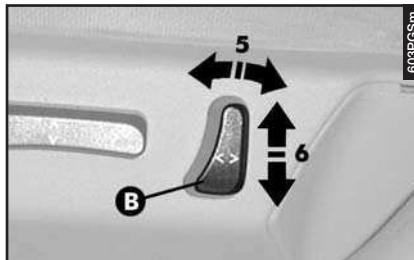


fig. 27

When memorising a new position of the seat the previous one memorised with the same button is cleared automatically.

Keeping the corresponding button (1), (2), or (3) pressed the positions memorised can be called even if the ignition key is in the **STOP** position or removed.

IMPORTANT Memorising the positions of the seat does not include turning on the heating.

Adjusting the headrests (fig. 30)

Front headrests are adjustable in height and rake: to adjust the height, move the headrest up or down, then release it and make sure that it is locked on one of the positions provided. To adjust the rake, turn the headrest forwards to the required position.



fig. 28

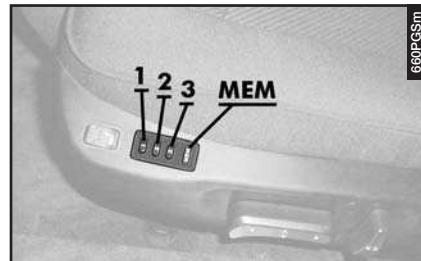


fig. 29

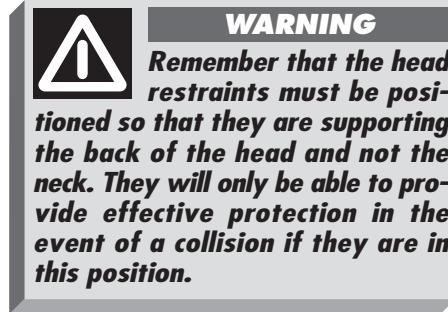


fig. 30

WARNING

Remember that the head restraints must be positioned so that they are supporting the back of the head and not the neck. They will only be able to provide effective protection in the event of a collision if they are in this position.

Rear pockets (fig. 31)

The front seats are provided with a pocket in the rear of the seat back.

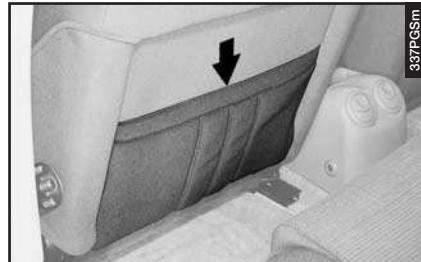


fig. 31

Centre armrest (fig. 32-33)

To raise/lower the armrest, lower it as illustrated. To lower/raise the armrest keep the lock button pressed (**A**-fig. 32).

To use the armrest, lower it as illustrated.

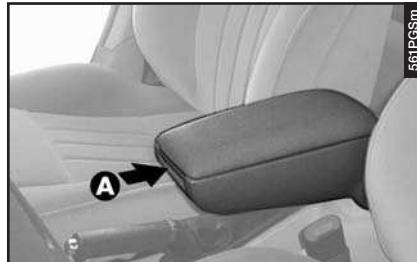


fig. 32

There is a compartment inside the armrest: to open, lift the cover (fig. 33).



fig. 33

REAR SEAT

Centre armrest

To use the centre armrest, lower it as illustrated (fig. 34).

Ski compartment

The compartment may be used for carrying long loads. To gain access to this compartment, lower the armrest and then lower the lid (A-fig. 35) onto the armrest.

Pull the handle (A-fig. 36) to open the door from the luggage compartment.

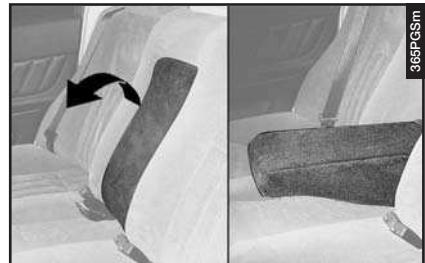


fig. 34

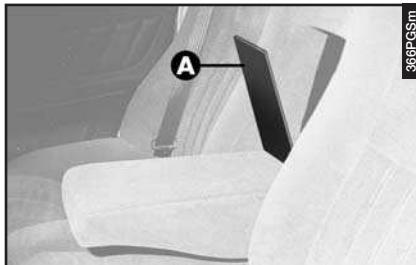


fig. 35

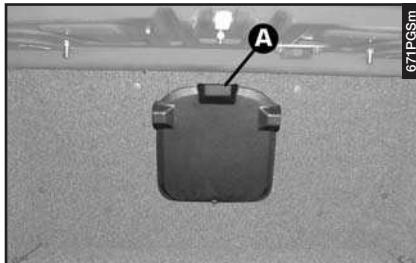


fig. 36

Headrest (fig. 37)

The car is fitted with two headrests for the side rear seats.

The rear headrests are fixed and integrated in the seat back.



fig. 37

STEERING WHEEL ADJUSTMENT (fig. 38)

The steering wheel position is adjustable and may be moved nearer to or further away from the driver and also raised or lowered.

To do this, it is necessary to release lever (A) pulling it towards the steering wheel. After setting the steering wheel in the most appropriate position, lock it pushing the lever forwards fully home.



WARNING

It is absolutely forbidden to carry out whatever after-market operation involving steering system or steering column modifications (e.g.: installation of anti-theft Device) that could badly affect performance and safety, cause the lapse of warranty and also result in non-compliance of the car with homologation requirements.

ADJUSTING THE REAR-VIEW MIRRORS

INTERNAL REAR-VIEW MIRROR (fig. 39-40)

The mirror, fitted with a safety device which releases it in the event of a violent impact can be moved to two positions operating lever (A-fig. 39): normal or anti-glare.

IMPORTANT The configuration of the mirror may vary depending on the vehicle trim level. The figure here is demonstrative only to show how it is adjusted.

For some versions/markets the mirror (fig. 40) automatically sets to the day or night position.



WARNING

The steering wheel position must only be adjusted with the vehicle stationary.

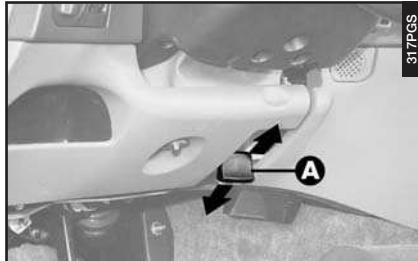


fig. 38

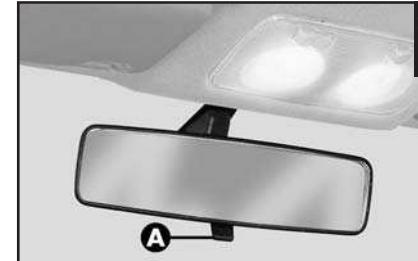


fig. 39



fig. 40

DOOR MIRRORS

Electrically adjustable (fig. 41)

- Select the mirror to be adjusted using switch (A) (right or left).
- Press button (B) to one of the four directions and adjust the mirror selected previously.
- Position the switch (A) in the intermediate locking position.

The mirror can only be adjusted electrically when the ignition key is in the **MAR** position.

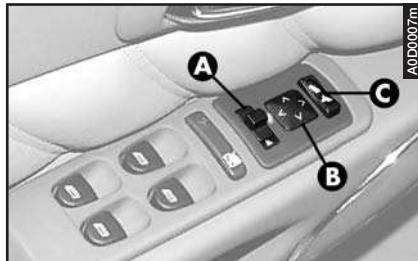
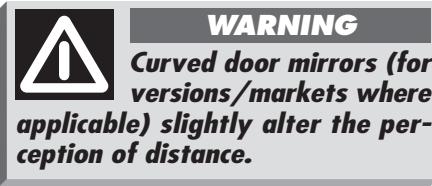


fig. 41



Folding (fig. 41-42)

- If necessary (for example when the size of the mirror causes difficulty in narrow places) the door mirror can be folded in towards the vehicle from position (A-**fig. 42**) to position (B).

For some versions/markets the mirrors can be folded electrically using a button (**C**-fig. 41).

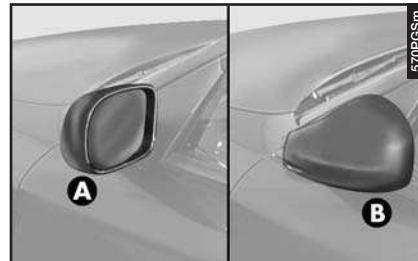
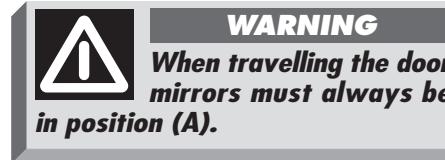


fig. 42



Defrosting/demisting (fig. 43)

The electric mirrors can be fitted with heating coils which are operated together with rearscreen heating pressing button (A) which prevent the mirrors from frosting and/or misting.

This function is timed and is deactivated after a few minutes.



fig. 43

POWER WINDOWS

FRONT

Driver's side (fig. 44)

The driver's door armrest contains the buttons which, with the ignition key at **MAR**, operate the following windows:

A - left front window

B - right front window.

Press the button to lower the window.
Pull the button to raise it.

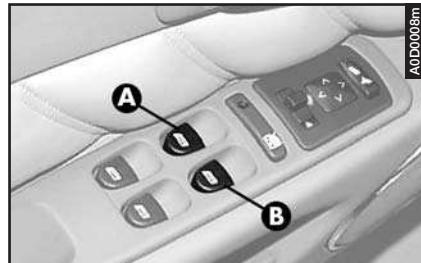


fig. 44

IMPORTANT The driver's power window is fitted with a "continuous automatic operation" device for both lowering and raising the window. A brief press on the upper or lower part of the button will cause the window to move and continue its stroke automatically: the window stops in the position required by pressing either the upper or lower part of the button again.

With the ignition key at **STOP** or removed, the power windows remain activated for about 2 minutes or until a front door is opened.

Passenger's side (fig. 45)

Button **(A)** is used to operate the passenger's window.

The passenger's window is fitted with a device for "continuous automatic operation" only for lowering it.

The device works as described for the driver's window.

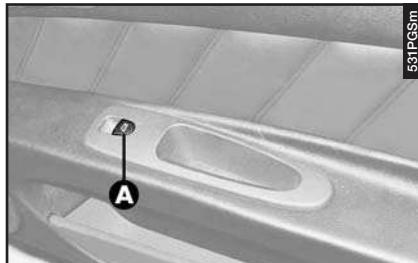


fig. 45

REAR

The rear windows are operated by the split controls on the driver's door and those on each rear door.

With the ignition key on **MAR**, press the button to lower the window, pull the button or raise it.

Controls on driver's door (fig. 46)

The following controls are located on the inner driver's door panel plate:

C - left rear window

D - right rear window

E - rear door window controls inhibitor (with the inhibitor activated the led on the button is lit).

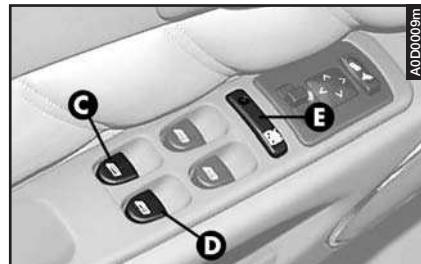


fig. 46

Controls on rear doors (fig. 47)

Each rear door panel plate contains a button (**A**) for operating the corresponding window.



Do not hold the button down when the window is fully open or fully closed.



fig. 47



WARNING

Incorrect use of the power windows can be dangerous. Before and during operation of them always make sure that the passengers are not exposed to the risk of harm caused either directly by the windows in motion or by personal objects drawn or knocked by them. When leaving the vehicle always remove the ignition key to prevent passengers (especially children) from being injured by the power windows inadvertently operated.

SEAT BELTS

USING THE SEAT BELTS

The belt should be worn keeping the chest straight and rested against the seat back.

Take hold the tongue (**A**-fig. 48) and insert it into the buckle (**B**), until hearing the locking click.

At removal, if it jams, let it rewind for a short stretch, then pull it out again without jerking.

To unfasten the seat belts, press button (**C**).

Guide the seat belt with your hand while it is rewinding, to prevent it from twisting.

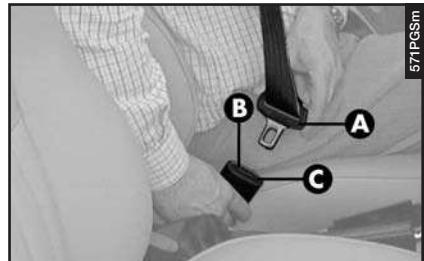


fig. 48

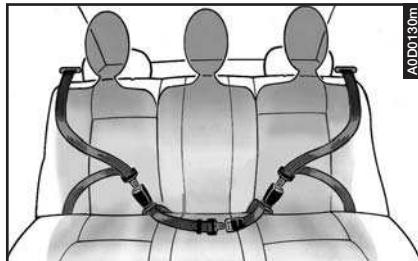


fig. 49

The rear seat is fitted with inertial seat belts with three anchor points with reel for the side seats and an abdominal belt with two anchor points for the centre (**A**-fig. 49). For versions/markets where applicable, the centre seat can be fitted with inertial seat belt with three anchor points and reel like side seats (**fig. 50**).

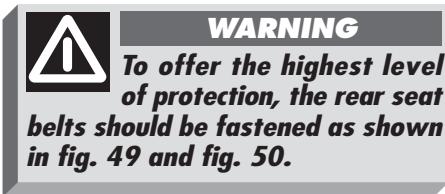


fig. 49/A



WARNING

Remember that in the event of a violent collision, back seat passengers not wearing seat belts also represent a serious danger for the front seat passengers.

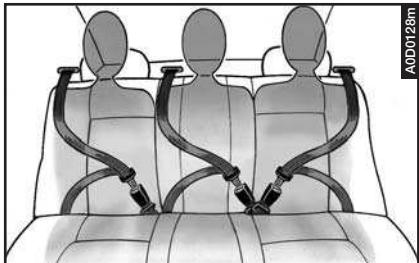


fig. 50

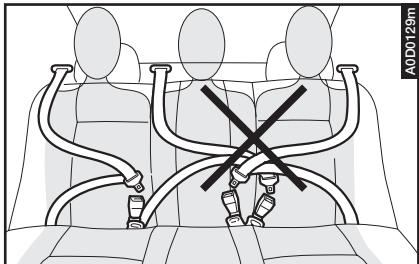


fig. 50/A

REAR CENTRAL ABDOMINAL BELT (fig. 51) (where provided)

Fasten the belt by inserting the tab (A) into the clip (B) until a click is heard.

To adjust the belt, run the tape in the buckle (D) pulling the end (E) to tighten and part (F) to loosen.

Press button (C) to release the belt.

IMPORTANT The belt is adjusted correctly when it adheres to the pelvis.

When the rear seats are not occupied, the appropriate spaces between the backrest and cushion should be used to stow the seat belt clips neatly.

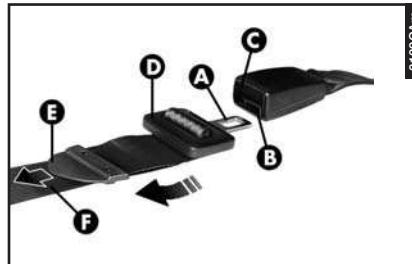


fig. 51

FRONT SEAT BELT HEIGHT ADJUSTMENT



WARNING

Make the height adjustment when the car is stationary.

Always adjust the height of the seat belt to fit the person wearing it.

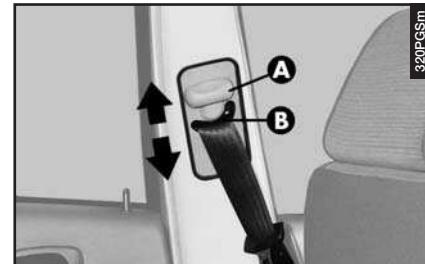


fig. 52

This precaution could greatly reduce the risk of injury in case of collision.

Correct adjustment is obtained when the belt passes half way between the end of the shoulder and the neck.

4 different adjustments in height are provided.

To adjust the attachment raise or lower the grip (**A**-fig. 52) and ring (**B**-fig. 52) to one of the set positions.



WARNING

After adjustment, always check that the slider is anchored in one of the positions provided. To do this, with the button (A-fig. 52) released, exert a further pressure to allow the anchor device to catch if release did not take place at one of the preset positions.

PRETENSIONERS

To increase the efficiency of the front seat belts, the **Alfa 166** is fitted with pretensioners.

These devices "feel", through a sensor, that a violent crash is in progress and rewind the seat belts a few centimetres. In this way they ensure that the seat belt adheres perfectly to the wearer before the restraining action begins.

The seat belt locks to indicate that the device has intervened; the seat belt cannot be drawn back up even when guiding it manually.

IMPORTANT To obtain the highest degree of protection from the action of the pretensioning device, wear the seat belt keeping it firmly close to the chest and pelvis.

Front seat pretensioners activate only if front seat belts are properly fitted into buckles.

A small amount of smoke may be produced. This smoke is in no way toxic and presents no fire hazard.

The pretensioner does not require any maintenance or greasing. Anything that modifies its original conditions invalidates its efficiency. If due to unusual natural events (floods, sea storm, etc.) the device has been affected by water and mud, it must necessarily be replaced.



WARNING

The pretensioner can only be used once. After a collision that has triggered it, have it replaced at an Alfa Romeo Authorized Services. The validity of the device is 10 years starting from the date of production, the pretensioners should be replaced at an Alfa Romeo Authorized Services as this date approaches.



Operations which lead to knocks, vibrations or localised heating (over 100°C for a maximum of 6 hours) in the area around the pretensioners may cause damage or trigger them. These devices are not affected by vibrations caused by irregularities of the road surface or low obstacles such as kerbs, etc. Contact a Alfa Romeo Authorized Services for any assistance.

GENERAL INSTRUCTIONS FOR USING THE SEAT BELTS

The driver must comply with (and have the vehicle occupants follow) all the local legal regulations concerning the use of seat belts.

Always fasten the seat belts before starting.



WARNING

For maximum safety, keep the back of your seat upright, lean back into it and make sure the seat belt fits closely across your chest and hips. Make sure that the seat belts of the front and rear passengers are fastened at all times! You increase the risk of serious injury or death in a collision if you travel with the belts unfastened.



WARNING

The belt should not be twisted, make sure that it is taut and adheres to the passenger's body. The upper part should pass over the shoulder and cross the chest diagonally. The lower part should adhere to the pelvis and to the abdomen of the passenger, (fig. 53). Do not use any objects (pegs, stoppers, etc.) to keep the belts away from the body.



WARNING

Under no circumstances should the components of the seat belts and pretensioner be tampered with or removed. Any operation should be carried out by qualified and authorised personnel. Always contact Alfa Romeo Authorized Services. If the belt has been subjected to heavy stress, for example after an accident, it should be changed completely together with the anchors, anchor fastening screws and the pretensioners. In fact, even if the belt has no visible defects, it could have lost its resilience.

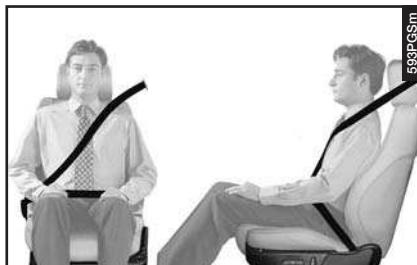


fig. 53



WARNING

Never travel with a child sitting on the passenger's lap with a single belt to protect them both (fig. 54). Do not fasten other objects to the body.



fig. 54

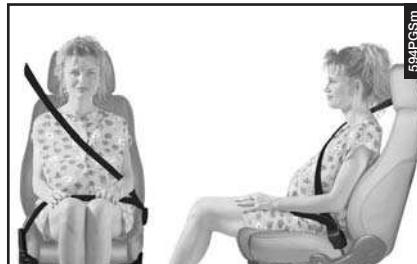


fig. 55

Seat belts are also to be worn by expectant mothers: the risk of injury in the case of accident is greatly reduced for them and the unborn child if they are wearing a seat belt.

Of course they must position the lower part of the belt very low down so that it passes under the abdomen (**fig. 55**).

HOW TO KEEP THE SEAT BELTS ALWAYS IN EFFICIENT CONDITIONS

1) Always use the belt with the tape taut and never twisted; make sure that it is free to run without impediments.

2) After a serious accident, replace the belt being worn at that time, even if it does not appear damaged. Always replace the seat belts if pretensioners have been activated.

3) To clean the belts, wash by hand with neutral soap, rinse and leave to dry in the shade. Never use strong detergents, bleach or dyes or other chemical substance that might weaken the fibres.

4) Prevent the reels from getting wet: their correct operation is only guaranteed if water does not get inside.

5) Replace the seat belt when showing significant wear or cut signs.

CARRYING CHILDREN SAFELY



WARNING

SERIOUS DANGER: Never place cradle child's seats on the front passenger seat of cars fitted with passenger air bag since the air bag activation could cause serious injuries, even mortal. You are advised to carry children always on the rear seat, as this is the most protected position in the case of a crash. In any case, children's seats must absolutely not be fitted on the front seat of car's with passenger's air bag, which during inflation could cause serious injury, even mortal, regardless of the seriousness of the crash that triggered it.

Children may be placed on the front seat of cars fitted with passenger's air bag deactivation. In this case, it is absolutely necessary to check the warning light  on the cluster to make sure that deactivation has actually taken place (see paragraph "Front and side air bags" at item "Passenger's front air bag"). The front passenger seat shall be adjusted in the most backward position to prevent any contact between child's seat and dashboard.

For optimal protection in the event of a crash, all passengers must be seated and wearing adequate restraint systems.

This is even more warning for children.

According to 2003/20/EC Directive, this prescription is compulsory for all European Community countries.

Compared with adults, their head is proportionally larger and heavier than the rest of the body, while the muscles and bone structure are not completely developed. Therefore, correct restraint systems are necessary, other then adult seat belts.

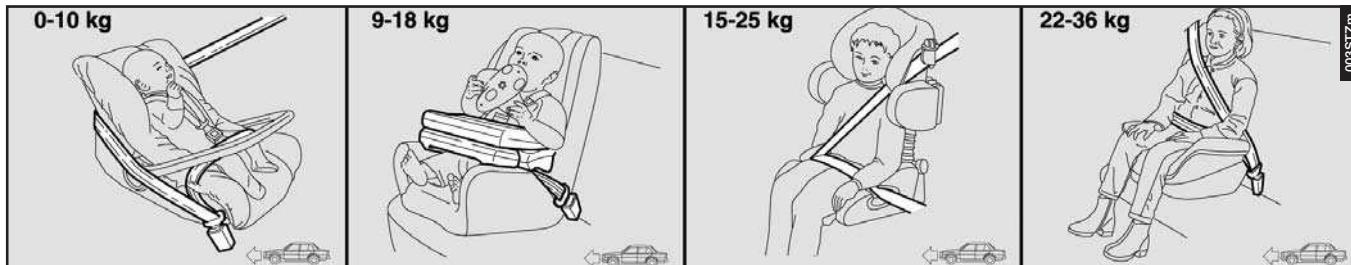


fig. 56

The results of research on the best child restraint systems are contained in the European Standard ECE-R44. This Standard enforces the use of restraint systems classified in five groups:

Group 0	0-10 kg in weight
Group 0+	0-13 kg in weight
Group 1	9-18 kg in weight
Group 2	15-25 kg in weight
Group 3	22-36 kg in weight

As it may be noted, the groups overlap partly and in fact, in commerce it is possible to find devices that cover more than one weight group (**fig. 56**).

All restraint devices must bear the certification data, together with the control brand, on a solidly fixed label which must absolutely never be removed. Over 481.50 m in height, from the point of view of restraint systems, children are considered as adults and wear the seat belts normally.

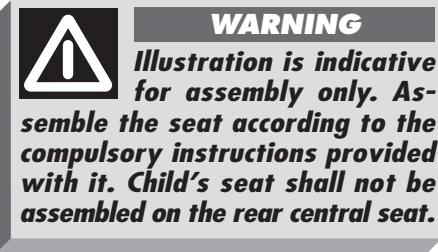
Lineaccessori Alfa Romeo offers seats for each weight group, which are the recommended choice, as they have been designed and experimented specifically for Alfa Romeo cars.

GROUP 0 and 0+

Babies up to 13 kg must be carried facing backwards on a cradle seat, which, supporting the head, does not induce stress on the neck in the event of sharp deceleration. The cradle is restrained by the car seat belts, as shown in (**fig. 57**) and in turn it must restrain the child with its own belts.



fig. 57



GROUP 1

Starting from 9 kg to 18 kg in weight, children may be carried facing forwards, with seats fitted with front cushion (**fig. 58**), through which the car seat belt restrains both child and seat.



fig. 58



WARNING

Illustration is indicative for assembly only. Assemble the seat according to the compulsory instructions provided with it. Child's seat shall not be assembled on the rear central seat.



WARNING

Seats exist which are suitable for covering weight groups 0 and 1 with a rear connection to the vehicle belts and their own belts to restrain the child. Due to their size, they can be dangerous if installed incorrectly fastened to the car belts with a cushion. Carefully follow the instructions for installation provided with the seat.

GROUP 2

Starting from 15 kg to 25 kg in weight, children may be restrained directly by the car belts. The only function of the seat is to position the child correctly in relation to the belts, so that the diagonal part adheres to the chest and not to the neck and that the horizontal part clings to the child's pelvis and not the abdomen (**fig. 59**).



WARNING

Illustration is indicative for assembly only. Assemble the seat according to the compulsory instructions provided with it. Child's seat shall not be assembled on the rear central seat.

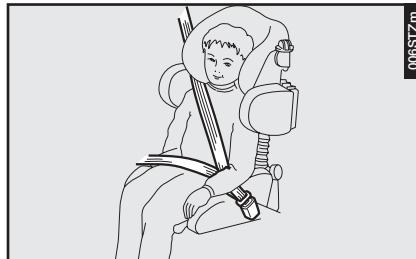


fig. 59

GROUP 3

For children from 22 kg up to 36 kg the size of the child's chest no longer requires a support to space the child's back from the seat back.

(**Fig. 60**) shows proper child seat positioning on the rear seat.

Children taller than 1.50 m can wear seat belts like adults.



fig. 60



WARNING

Illustration is indicative for assembly only. Assemble the seat according to the compulsory instructions provided with it. Child's seat shall not be assembled on the rear central seat.

Below is a summary of the rules of safety to be followed for carrying children:

1) The recommended position for installing children's seat is on the rear seat, as it is the most protected in the case of a crash.



WARNING

In cars fitted with passenger air bag never place child's restraint systems on the front seat since children shall never be seated on the front passenger seat.

2) If the passenger's air bag is deactivated always check the warning light  on the cluster to make sure that it has actually been deactivated.

3) Attain to the instructions for fastening the specific child restraint system which you are using. These instructions must be provided by the manufacturer. Keep the child restraint system installation instructions with the car documents and this Handbook. Never use a child restraint system without installation instructions.

4) Always check the seat belt is well fastened by pulling the webbing.

5) Only one child is to be strapped to each retaining system.

6) Always check the seat belts do not fit around the child's throat.

7) While travelling, do not let the child sit incorrectly or release the belts.

8) Passengers should never carry children on their laps. No-one, however strong they are, can hold a child in the event of a crash.

9) In case of an accident, replace the seat with a new one.

PASSENGER SEAT COMPLIANCE WITH REGULATIONS ON CHILD'S SEAT USE

The car, for versions/markets where applicable, complies with the new Directive 2000/3/EC regulating child's seat assembling on the different car seats according to the following table:

Group	Range of weight	SEAT		
		Front passenger	Lateral central passenger	Rear central passenger
Group 0,0+	until 13 kg	U	U	(*)
Group 1	9 -18 kg	U	U	(*)
Group 2	15 - 25 kg	U	U	(*)
Group 3	22 - 36 kg	U	U	(*)

Key:

U = suitable for child restraint systems of the "Universal" category, according to European Standard ECE-R44 for the specified "Groups"

(*) = child's seat cannot be installed on the rear centre seat

FRONT AND SIDE AIR BAGS

The car is fitted with front Air bags for the driver (**fig. 61**) and front passenger (**fig. 62**), side bags (**fig. 63**) and front window bags.



fig. 61

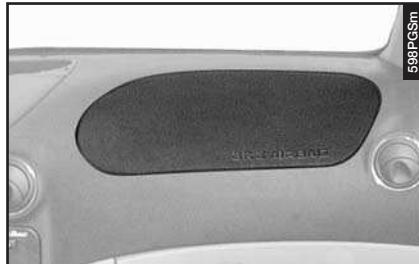


fig. 62

FRONT AIR BAGS

Description and operation

The front Air bag (driver's and passenger's) is a safety device that comes into action in the event of a head-on collision.



fig. 63

It is formed of an instantly-inflating cushion contained in a special recess:

- in the centre of the steering wheel for the driver,
- in the dashboard with a larger-sized cushion for the passenger.

The front Air bag (driver's and passenger's) is a device designed to protect the occupants in the event of head-on collision of medium-high severity by the interposition of the cushion between the occupant and the steering wheel or dashboard.

In the event of a crash, the electronic control unit processes the signals leading from a deceleration sensor and when necessary, triggers inflation of the cushion.

The cushion inflates instantly as a protective barrier between the occupants' bodies and the structures which could cause injury. The cushion deflates immediately afterwards.

The front Air bag (driver and passenger) has been designed to protect the occupants in the event of head-on crashes of medium-high severity, by placing the cushion between the occupant and the steering wheel or dashboard.

In case of crash, a person not wearing the seat belt moves forward and may come into contact with the cushion while it is still inflating. Under this circumstance the protection offered by the air bag is reduced.

Front air bags are designed to protect car's occupants in front crashes and therefore non-activation in other types of collisions (side collisions, rear-end shunts, roll-overs, etc...) is not a system malfunction.

In collisions against highly deformable or mobile objects (such as road signs, heaps of gravel or snow, parked vehicles, etc.), in rear crashes (such as bumps from behind by another vehicle), side impacts, and in case of wedging under other vehicles or protective barriers (for example under a truck or guard rail), the Air bag is not triggered as it offers no additional protection compared with the seat belts, consequently, it would be pointless.

Therefore the failure to be triggered does not mean that the system is not working properly.

PASSENGER'S FRONT AIR BAG

The passenger's front air bag has been designed to improve the protection of a person wearing a seat belt.

Its volume at maximum inflation fills most of the space between the dashboard and the passenger.



WARNING

SERIOUS DANGER: The car is fitted with an Air bag on the passenger's side. Never place cradle child's seats on the front passenger seat of cars fitted with passenger air bag since the air bag activation could cause serious injuries, even mortal. In the case of need, always deactivate the passenger's Air bag when a child's seat is placed on the front seat. The front passenger seat shall be adjusted in the most backward position to prevent any contact between child's seat and dashboard. Even if not compulsory by law, you are recommended to reactivate the Air bag immediately as soon as child transport is no longer necessary.

MANUAL DEACTIVATION OF PASSENGER'S FRONT AIR BAG

Should it be absolutely necessary to carry a child on the front seat, the passenger's front Air bag can be deactivated.

Deactivation takes place operating the special key switch on the right of the dashboard (**fig. 65**) using the car's ignition switch. Access to the switch is only possible with the door open.

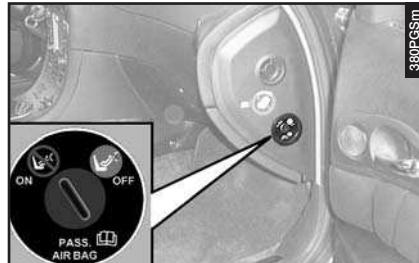


fig. 65

Deactivation/reactivation takes place with ignition key at **STOP** and operating it in the special key switch on the right-hand side of the dashboard (**fig. 65**).

You can reach the switch only if the door is opened.



WARNING

Operate the switch only when the engine is not running and the ignition key is removed.

The key switch (**fig. 65**) has two positions:

1) Passenger's front Air bag active (**ON** position) warning light on cluster off; it is absolutely prohibited to carry children on the front seat.

2) Passenger's front Air bag deactivated (**OFF** position) warning light on cluster on; it is possible to carry children protected by special restraint systems on the front seat.

The warning light on the instrument cluster glows steadily until the passenger's Air bag is reactivated.

Deactivation of the front passenger's Air bag does not inhibit operation of the side Air bag.

With the door open the key can be inserted and removed in both positions.



WARNING

Warning light indicates also warning light failure. This is indicated by intermittent flashing, over 4 seconds, of warning light . In this event, warning light could be not up to indicate restraint system failures, if any. Stop the car and contact Alfa Romeo Authorized Services to have the system checked.

SIDE AIR BAGS (SIDE BAG - FRONT WINDOW BAG)

Side air bags have the task of increasing protection of the occupants in the event of a side crash of medium-high severity.

They are made of two types of instantly-inflating cushions:

— side bags, housed in the back rest of the front seats; with this solution it is always possible to have the air bag (cushion) in the optimum position in relation to the passenger, regardless of the adjustment of the seat;

— front window bags, which are "curtain" cushions, are housed behind the side roof linings; this solution designed to protect the head, makes it possible to offer the highest degree of protection to the front occupants in the event of a side crash, thanks to the wide cushion inflation surface.

In the event of a side crash the electronic control unit processes the signals leading from a deceleration sensor and, when necessary, triggers inflation of the air bags.

The bags inflate instantaneously, setting themselves between the body of the front passengers and the car door. The bags deflate immediately afterwards.

In the event of minor side crashes (for which the restraining action of the seat belts is sufficient), the air bags are not deployed. Also in this case it is of vital importance to wear the seat belts since in case of side crash they guarantee proper positioning of the occupant and prevent the occupant to be pitched out of the car in case of violent crashes.

Therefore the side air bags do not replace but are complementary to the use of belts, which you are recommended to always wear, as specified by law in Europe and most non-European countries.

Operation of the side air bags and front window bags is not disabled by the front air bag deactivation switch, as described in the previous paragraphs.

IMPORTANT In the event of side crash, you can obtain the best protection by the system keeping a correct position on the seat, thus allowing correct front window bag unfolding.



WARNING

WARNING *Never rest head, arms and elbows on the door, on the windows and in the front window bag area to prevent possible injuries during the inflation phase.*

IMPORTANT The front and/or side air bags may be activated if the car is subjected to heavy shocks or accidents that involve the underbody area, such as for example violent bumps against steps, pavements or fixed obstacles on the ground, falling into big holes or bumpy roads.

IMPORTANTS The triggering of air bags releases a small amount of powder. This powder is not harmful and does not indicate a start of fire; also the surfaces of the deployed bag and the car interior may be covered with dusty residue: this may irritate the skin and eyes. In the event of exposure, wash with neutral soap and water.



WARNING

Never lean head, arms and elbows out of the window.

The air bag system has a validity of 14 years as concerns the pyrotechnic charge and 10 years as concerns the coil contact. Contact Alfa Romeo Authorized Services as this date approaches.

IMPORTANT If an accident has triggered the air bag, Alfa Romeo Authorized Services must be contacted to have the devices activated replaced and to have the whole system checked.

All operations involving checking, repairing and replacing components concerning the Air bag must be carried out by Alfa Romeo Authorized Services.

If the car is to be demolished, Alfa Romeo Authorized Services should be contacted beforehand to have the system deactivated.

If the car changes ownership, the new owner must be informed of the instructions for use and of the above warnings and be given this "Owner's Manual".

IMPORTANT The triggering of the pretensioners, front air bags and side bags is decided by the electronic control unit in a differentiated manner depending on the type of crash. The failure to trigger one or more of them does not necessarily indicate a system malfunction.

GENERAL WARNINGS



WARNING

If the warning light does not turn on when turning the ignition key to MAR or if it stays on when travelling, this could indicate a failure in safety retaining systems; under this condition air bags or pretensioners could not trigger in the event of collision or, in a restricted number of cases, they could trigger accidentally. Stop the car and contact a Alfa Romeo Authorized Services to have the system checked.



WARNING

Do not cover back rest of front seats with trims or covers there are not set for the use of side bags.



WARNING

Never travel with objects on your lap, in front of your chest or with a pipe, pencil, etc. between your lips; injury may result in the event of the air bag being triggered.



WARNING

If the car has been stolen or an attempt to steal it has been made, if it has been subjected to vandals or floods, have the Air bag system checked by Alfa Romeo Authorized Services.



WARNING

When the ignition key is turned to the MAR position, the warning light  (with passenger's front air bag deactivation switch in the ON position) turns on and flashes for few seconds to remind that passenger's air bag will be deployed in a crash, after which it should go off.



WARNING

Always keep your hands on the steering wheel rim when driving, so that if the Air bag is triggered, it can inflate without meeting any obstacles which could cause serious harm to you. Do not drive with the body bent forwards, keep the seat back rest in the erect position and lean your back well against it.



WARNING

Please remember that with the ignition key at MAR, the air bags can be triggered also on a stationary vehicle, if it is bumped by another moving vehicle. Therefore, even with the car stationary, never allow children on the front seat. On the other hand, remember that with the car stationary and ignition key at STOP no safety device (air bags or pretensioners) will be triggered in the event of an impact; in this case the failure to trigger safety devices should not be considered as a system failure.



WARNING

Please don't apply stickers or other objects to the steering wheel, to the air-bag cover on the passenger's side or on the side roof lining to the upholstery on the roof side. Don't place objects on the dashboard passenger's side (such as mobile phones) because they could tamper with the correct opening of the passenger's air-bag and than cause serious injuries to the vehicle occupants.



WARNING

Do not wash the seat back rest with pressurised water or steam (by hand or at automatic seat washing stations).



WARNING

The front air bag is triggered for shocks greater in magnitude than the pretensioners. For impacts between these two thresholds, it is therefore normal that only the pretensioners are triggered.



WARNING

Do not hook rigid objects to the coat hooks and to the support handles.



WARNING

The air bag does not substitute the seat belts, but only increases their effectiveness. Moreover, since the front air bags do not come into operation in the event of front impact at low speed, side collisions, bumps from behind or overturning, in these circumstances the occupants would only be protected by the seat belts which must therefore always be fastened.

LIGHTS SWITCH AND STEERING WHEEL LEVERS

The device and services controlled by the levers on the steering wheel can only be activated when the ignition key is in the **MAR** position (except the parking lights which can always be switched on).

LIGHTS SWITCH (fig. 66)

Lights switched off

When the pointer on the knurled ring (**A**) is opposite the symbol **O**, the external lights are switched off.



fig. 66

Sidelights

The sidelights are switched on by turning the knurled ring (**A**) from **O** to **✉**.

The **✉** warning light on the instrument panel will come on at the same time.

Dipped-beam headlights

These are switched on by turning the knurled ring (**A**) from **✉** to **≡**.

Parking lights

When the pointer of the switch (**A**) corresponds with the **P≤** symbol, the side lights stay on regardless of the position of the ignition key.

If moving the left-hand lever (**fig. 67**) downward, only the left-hand side parking lights switch on, while moving the lever upward, only the right-hand side parking lights switch on.

LEFT LEVER (fig. 67)

The left lever operates the high beam lights and the direction indicators.

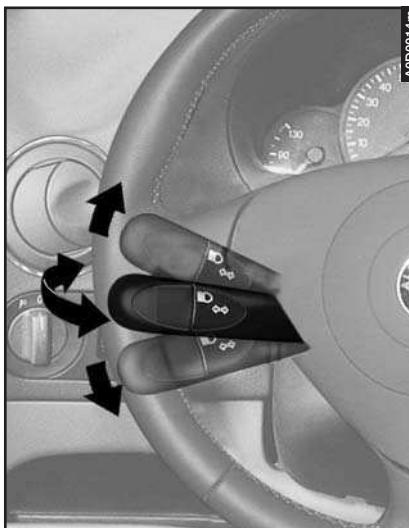


fig. 67

Main-beam headlights (fig. 68)

When the knurled ring in the **≡** position the headlights can be changed from dipped-beam to main-beam by pushing the lever towards the dashboard (stable position).

The **≡** warning light will come on the instrument panel.

To return from main-beam to dipped-beam, once again pull the lever towards the steering wheel and then release.



fig. 68

Flashing (fig. 69)

The headlights are flashed by pulling the lever towards the steering wheel (unstable position) regardless of the position of the light switch.

The warning light  on the instrument panel will come on at the same time.

IMPORTANT Only the main beam lights are flashed. To avoid penalties, follow local regulations.



fig. 69

Direction indicators (fig. 70)

Moving the lever to the stable position:

Up (**A**) - engages the right-hand direction indicators.

Down (**B**) - engages the left-hand direction indicators.

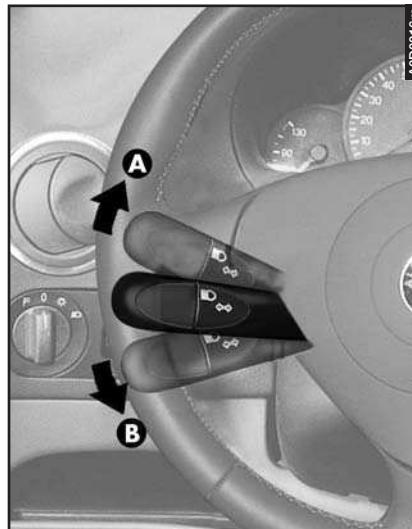


fig. 70

One of the warning lights   will light up on the instrument panel at the same time.

The lever returns to its home position automatically and the indicators are switched off when the steering wheel is straightened.

IMPORTANT If you wish to signal a rapid change of direction involving only a minimum movement of the steering wheel, the lever can be moved up or down without it clicking (unstable position). When released the lever will return to its home position.

"Follow me home" device (fig. 71)

This function allows the illumination of the space in front of the car for the length of time set, and is activated with the ignition key at **STOP** or removed, pulling the left-hand lever towards the steering wheel.



fig. 71

This function is activated pulling the lever within 2 minutes from when the engine is turned off. At each single movement of the lever, the staying on of the dipped beams and sidelights is extended by 30 seconds up to a maximum of 3.5 minutes; the lights switch off automatically after the time set.

Each time the lever is operated, the warning light on the cluster turns on.

This function can be interrupted by keeping the lever pulled towards the steering wheel for more than 2 seconds.

RIGHT-HAND LEVER (fig. 72)

The right-hand lever is used to operate the windscreen wiper and the windscreen washer.

The control used to activate the windscreen washer also activates the headlight washers (optional for versions/markets where applicable).

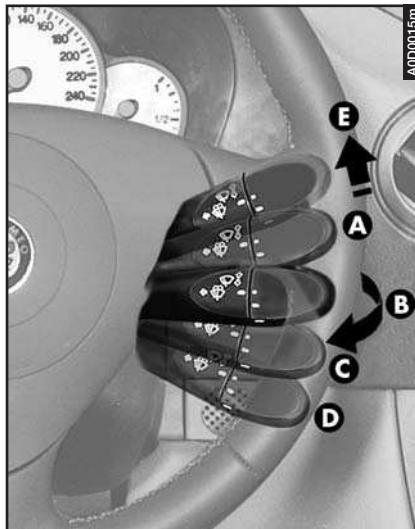


fig. 72

Windscreen wiper (fig. 72-73)

The lever can be moved to five different positions corresponding to:

A - Stationary (off)

B - Intermittent.

With the lever in position **B**, turning the ring (**1**-fig. 73) four possible intermittent speeds are obtained (except versions with rain sensor):

■ = intermittent slow

■ = intermittent medium

■ = intermittent medium-fast

■ = intermittent fast.

C - Continuous, slow

D - Continuous, fast

E - Fast, temporary (unstable position).

Operation in position **E** is limited to the time the lever is held in this position. When the lever is released, it returns to position **A** automatically stopping the wiper.

Rain sensor (fig. 72-73)

(optional for versions/markets where applicable)

The rain sensor is an electronic device coupled with the windscreen wiper and its purpose is to automatically adapt the frequency of the wiper strokes according to the intensity of the rain during intermittent operation.

All the other functions controlled by the right-hand lever (switching the wiper off, slow and fast continuous operation, fast temporary operation, windscreen washer and headlight washer) remain unchanged.

The rain sensor is activated automatically moving the right-hand lever to position (**B**) and its field of adjustment changes gradually.



fig. 73

Operating the windscreen washer with the rain sensor activated (lever in position **B**) the normal washing cycle is carried out at the end of which the rain sensor resumes normal operation automatically.

Moving the key to the **STOP** position the rain sensor is deactivated and the next time the car is started (key in **MAR** position) it is not reactivated even if the lever is still in position (**B**). In this case to activate the rain sensor, simply move the lever to position (**A**) or (**C**) and then back to position (**B**).

When the rain sensor is reactivated in this way, the wiper performs at least one stroke, even if the windscreen is dry, to signal that the sensor has been reactivated.

The rain sensor is fastened to the windscreen inside the area cleaned by the wiper and it controls an electronic control unit, which in turn controls the windscreen wiper motor.

At each start the rain sensor automatically (in about 2 minutes) stabilises at a temperature of about 40°C to eliminate any condensation from the control surface and prevent the formation of ice.

The rain sensor is capable of detecting and adapting automatically to the presence of the following particular conditions which call for different sensitivity:

- impurities on the control surface (saline deposits, dirt, etc.)
- streaks of water caused by partial wear of the windscreens wiper
- difference between day and night (the human eye is more disturbed during the night by a wet windscreens surface).

Windscreen washer (fig. 74)

The windscreen washer is operated by pulling the lever towards the steering wheel.

Keeping the lever pulled the windscreen wiper is turned on continuously. When the lever is released the wiper continues for a few strokes and then stops or continues at the speed set.

Headlight washer (fig. 75)

(optional for versions/markets where applicable)

These are operated when the low beam headlights are on and the windscreen washer is switched on.



fig. 74

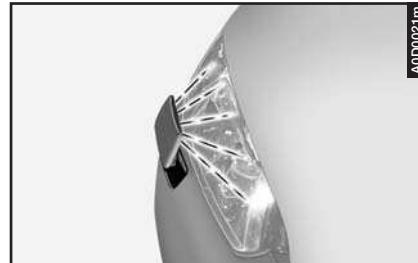


fig. 75

STR SYSTEM (SPORT THROTTLE RESPONSE)

(optional for versions/markets where applicable)

The STR system offers the driver the possibility of brilliant, sporty driving without forsaking relaxing driving in other circumstances with smoother, more gradual engine response.

In fact, according to preference, the driver can choose between sporty fast acceleration control and smoother more gradual control, for example in city driving.

To engage the sporty response (also when travelling), press the switch (**A**-fig. 76) on the centre console. To prevent this function from being engaged unintentionally, the system requires the accelerator pedal to be completely released for engagement. When the sporty response is enabled warning light (**B**) on the switch lights up.

To restore the most comfortable response press the button again (**A**) and completely release the accelerator: the warning light (**B**) on the switch goes out.

Whenever the engine is switched on, the control unit positions on the most comfortable response. If before switching off the sporty response was stored, it will automatically be retrieved releasing the accelerator pedal after the first acceleration.



fig. 76

Automatic engagement

The system allows passing from the standard map to the sporty one with a quick press on the accelerator. This function is useful in all situations, such as for example overtaking or emergency manoeuvres, where maximum acceleration is needed.

When the need for maximum power ceases, the system automatically resumes the standard map.

CRUISE CONTROL

(fig. 77) (optional for versions/markets where applicable)

GENERAL DESCRIPTION

The electronic cruise control makes it possible to drive the car at the required speed without pressing the accelerator pedal. This reduces driving fatigue on motorways, especially during long journeys because the speed memorised is automatically maintained.

IMPORTANT The Cruise Control can only be engaged with speed over 30 km/h and, just for certain versions up to 180 km/h.



fig. 77



WARNING

The cruise control must only be activated when the traffic and the road make it possible to travel safely at a constant speed for a sufficiently long time.

The device is automatically disengaged in any one of the following cases:

- pressing the brake pedal;
- pressing the clutch pedal;
- inadvertently moving the automatic gearshift lever to **N**.



WARNING

On vehicles with automatic transmission, never move the lever to N when the car is on the move.

CONTROLS (fig. 78)

The cruise control is controlled by switch (A), knurled ring (B) and by button (C).

Switch (A) has two positions:

— **OFF** in this position the device is deactivated;

— **ON** is the device's normal operating position. When the device starts to act on the engine, the corresponding warning light on the instrument cluster turns on.

The knurled ring (B) serves to memorise and maintain the car speed or to increase or reduce the speed memorised.

Turn the knurled ring (B) to the (+) position to memorise the speed reached or to increase the speed memorised.

Turn the knurled ring (B) to the (-) to reduce the speed memorised.

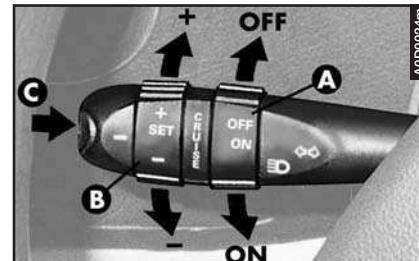


fig. 78

Each time the knurled ring (**B**) is operated the speed increases or lowers by approx. 1 km/h. Keeping the ring turned the speed changes continuously. The new speed reached will be maintained automatically.

With button (**C**) it is possible to reset the speed memorised.

IMPORTANT Turning the ignition key to the **STOP** position or switch (**A**) to **OFF**, the memorised speed is cleared and the system is disengaged.

To memorise the speed

Turn switch (**A**) to **ON**, wait for 2 seconds at least, then bring the car to the required speed as usual by pressing the accelerator pedal or by turning the ring nut (**B**) to (+) or to (-) and then releasing it. The car speed is memorised and it is therefore possible to release the accelerator pedal.

The car will continue to travel at the required speed until one of the following conditions takes place:

- pressing the brake pedal;
- pressing the clutch pedal;
- inadvertently moving the automatic

gearshift lever to position **N**.

IMPORTANT In the case of need (for example overtaking) it is possible to accelerate simply pressing the accelerator pedal; afterwards, releasing the accelerator pedal, the car will resume the speed memorised previously.

To restore the speed memorised

If the device has been disengaged, for example by pressing the brake or clutch pedal, the speed memorised can be restored as follows:

- gradually accelerate until reaching a speed approaching the one memorised;
- engage the gear selected when the speed was memorised (4th, 5th or 6th gear);
- press button (**C**).

To increase the speed memorised

The speed memorised can be increased in two ways:

- pressing the accelerator and then memorising the new speed reached (turning the knurled ring (**B**) for more than three seconds;

or

— turning the knurled ring (**B**) momentarily to the (+) position: each pulse of the knurled ring will correspond to a small increase of the speed (approx. 1 km/h) while pressing continuously will correspond to a continuous increase of the speed. Releasing the knurled ring (**B**) the new speed will remain automatically memorised.

To reduce the memorised speed

The memorised speed can be reduced in two ways:

- disengaging the device (for example pressing the brake pedal) and then memorising the new speed (turning the knurled ring (**B**) to the (+) position for at least three seconds);

or

- keeping the knurled ring (**B**) pressed on the (-) position until reaching the new speed which will be automatically memorised.

Resetting the speed memorised

The memorised speed is automatically reset:

- turning off the engine;
- or
- moving the switch (A) to the **OFF** position.



WARNING

When travelling with the cruise control engaged, never move the gearshift lever to neutral and do not move the automatic gearshift lever to N. You are advised to engage the cruise control only when the traffic and road conditions permit under completely safe conditions, i.e.: straight, dry road, dual carriage-way or motorway, flowing traffic and smooth tarmac. Do not engage the device in town or in heavy traffic conditions.



WARNING

The Cruise Control can only be engaged with speed over 30 km/h and, just for certain versions up to 180 km/h. The device must only be engaged in 4th, 5th or 6th gear, depending on the vehicle speed. On cars with electronic automatic gearbox it must be engaged only with the lever at position D in the automatic mode without then moving the gearshift lever by hand or with 3rd or 4th gear engaged in the sequential manual mode.

Moving downhill with the device engaged, the car speed might be slightly higher than the speed memorised due to the change in engine load.



WARNING

Should the device not be working properly or fail to operate, move the switch (A-fig. 78) to the OFF Position and contact Authorized Alfa Romeo Services after checking that the protection fuse is intact. The switch (A-fig. 78) may be left constantly at ON without damaging the device. You are however advised to deactivate the device when not in use, moving the switch (A) to OFF, to avoid accidentally memorising the speed.

PARKING SENSORS

(optional for versions/markets where applicable)

The parking system detects and informs the driver (through an intermittent acoustic signal) about the presence of obstacles in the rear part of the car.

ACTIVATION

The sensors are automatically activated when the reverse gear is engaged.

The sound produced by the acoustic alarm becomes continuous when the distance between the car and the obstacle is less than 30 cm.

ACOUSTIC SIGNAL

When the reverse gear is engaged an intermittent acoustic signal is automatically activated.

The acoustic signal:

- raises with the reduction of distance between the car and the obstacle;
- becomes continuous when the distance between the car and the obstacle is less than 30 cm and stops if the distance raises.
- is constant if the distance is unvaried. If this situation takes place for side sensors, the signal is stopped after about 3 seconds to prevent sound indications when performing manoeuvres near walls.

INSTRUMENT PANEL

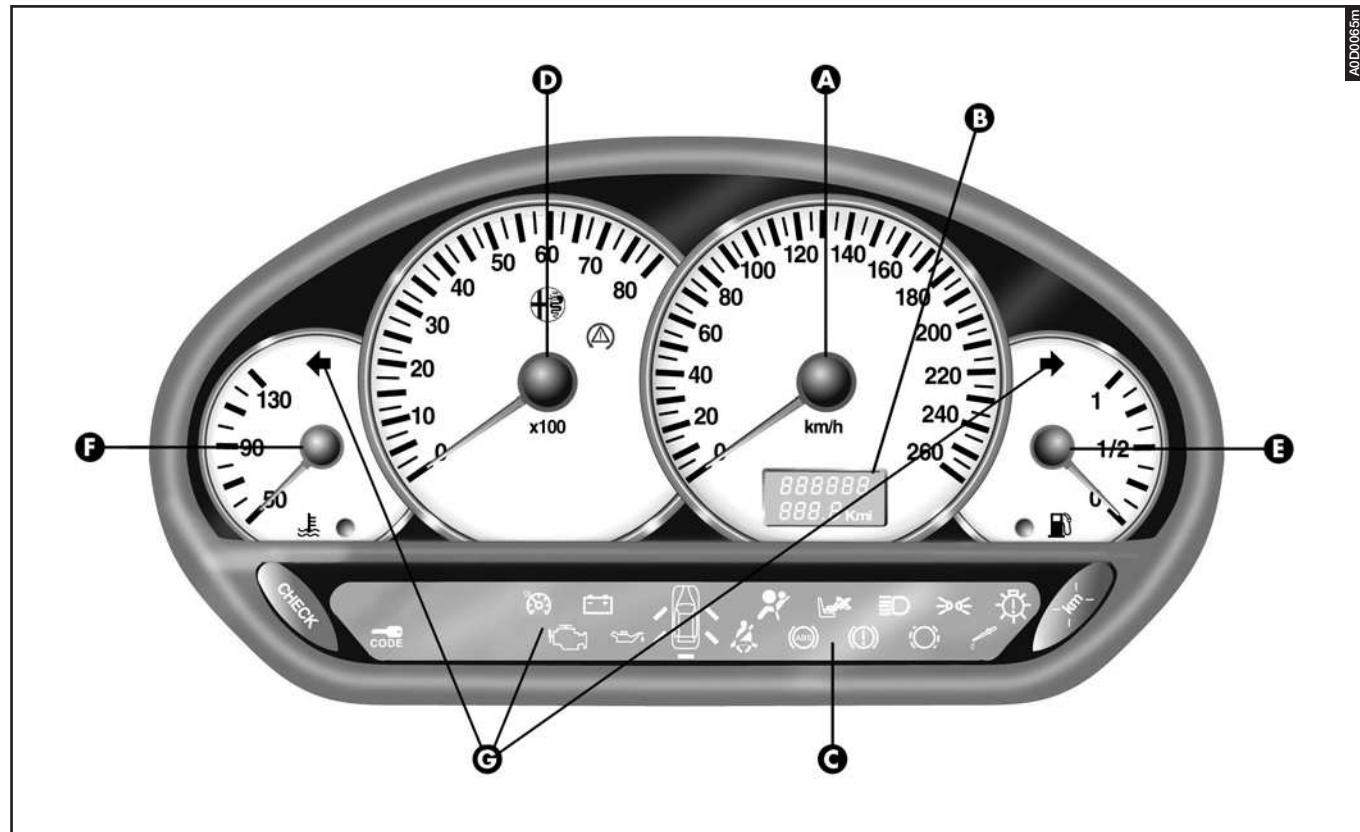


fig. 80 - 2.0 T.SPARK, 2.5 V6 24V and 3.2 V6 24V versions

AOD005m

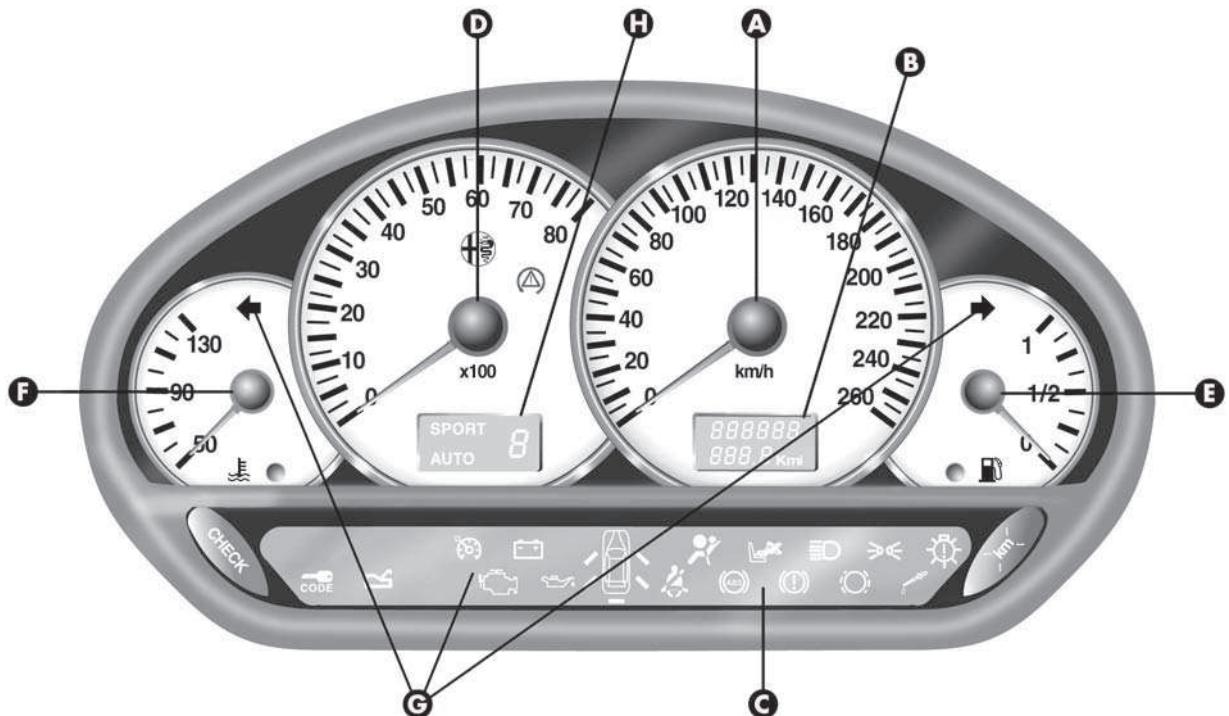


fig. 81 - 3.0 V6 24V version (Sportronic)

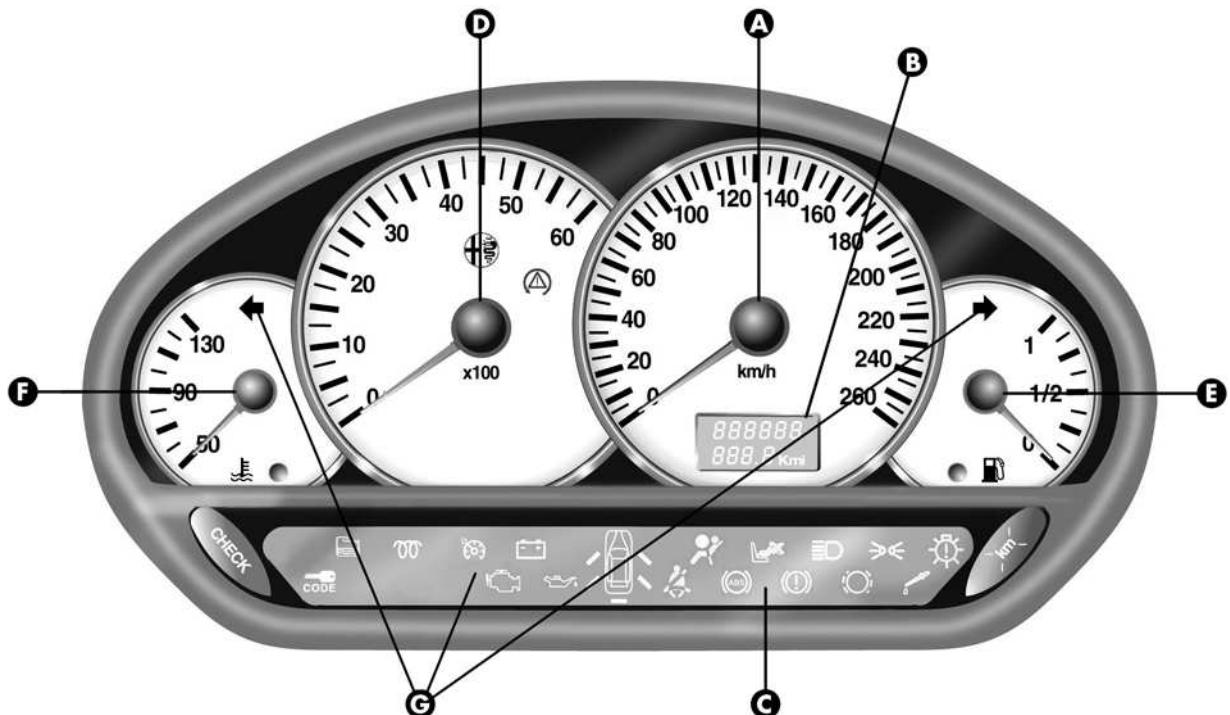


fig. 82 - JTD and JTD 20V Multijet versions

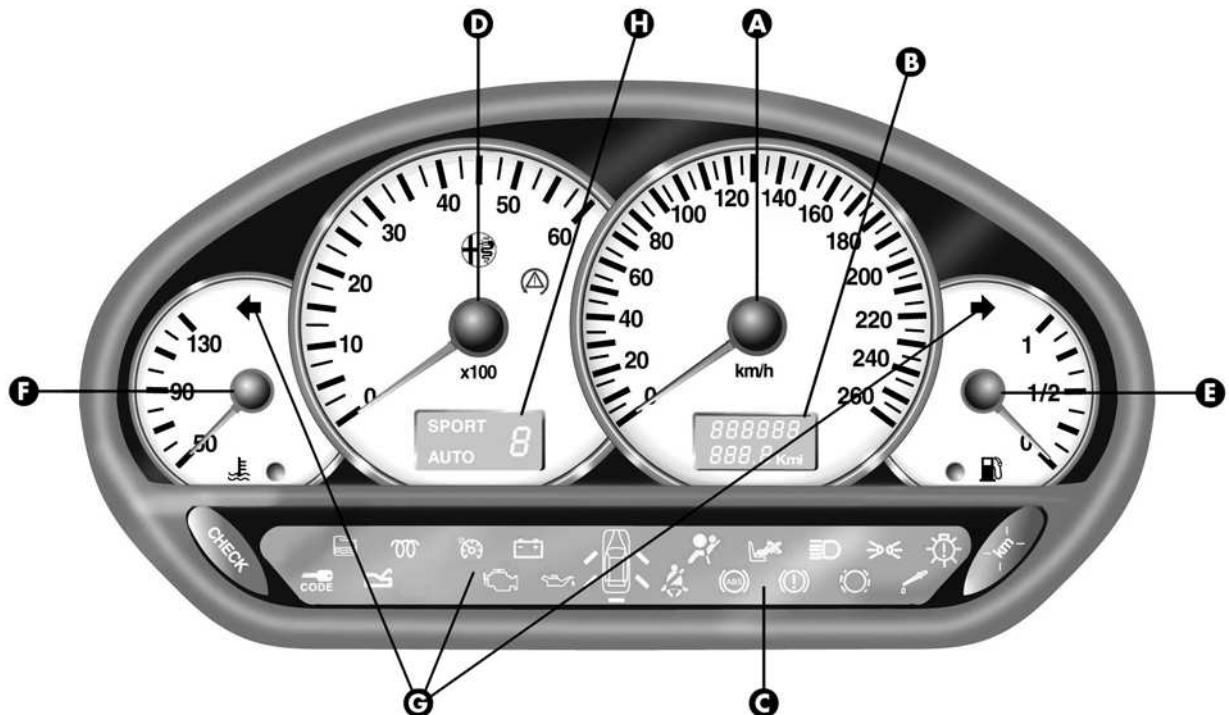


fig. 83 - JTD 20V Multijet (Sportronic) version

IMPORTANT Depending on the trim levels, the dial of the instruments may be either light grey or black, with green or red light.

A - Speedometer

IMPORTANT The rev counter may have different clock values depending on the different versions of the car.

B - Mileage recorder with double meter display (total and trip)

The display shows:

- the mileage on the first line (6 figures)
- the trip meter (4 figures) on the second line.

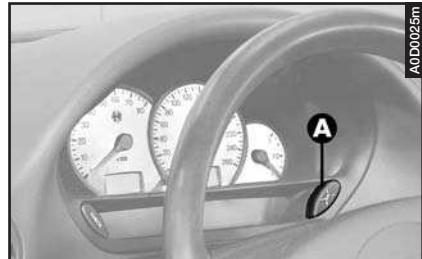


fig. 84

Reset the partial km. and hold the push-button pressed for approx. 1 second (**A**-
fig. 84).

IMPORTANT The trip meter reading is not stored if the battery is disconnected.

C - Check panel (fig. 85)

This electronic device checks and indicates any inefficiencies that may adversely affect running the car and driving safety.

The check panel mainly performs two functions:

- 1) Warning lights check.

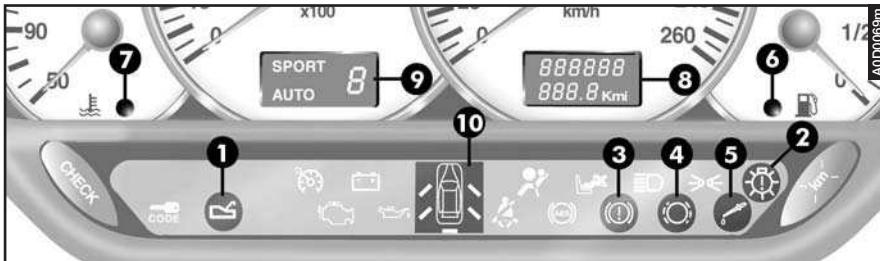


fig. 85

Moving the ignition key to **MAR** the following warning lights and displays turn on and go out after approx. 6 seconds:

- 1 - Electronic automatic gearbox (where applicable)
- 2 - Light failure
- 3 - Low brake fluid and/or handbrake engaged
- 4 - Front brake pad wear
- 5 - Low engine oil level
- 6 - Fuel reserve
- 7 - Maximum engine coolant fluid temperature
- 8 - Mileage recorder display
- 9 - Electronic automatic gearbox display (where applicable)

Any faults are signalled by the turning on of the corresponding warning light for approx. 15 seconds after the end of the check.

2) Doors and boot open warning.

With the ignition key at **MAR**, if a led of the car symbol (**10**) lights up, the corresponding door or the boot has not been shut properly.

To repeat the check, with the ignition key in the **MAR** position and the engine off, press the button (**A-fig. 86**).



fig. 86

D - Rev counter

The danger zone (red) indicates excessively high engine revs. Do not drive for long periods with the pointer in this area.

With the engine at idle speed, the rev counter may indicate a gradual or sudden speed increase depending on the cases; this is normal as it occurs in the normal operation, for example when the climate control compressor is engaged or the fan. In particular a slow change in speed helps preserve the battery charge.

IMPORTANT Depending on the versions/markets of the car, the rev counter may have danger sectors (red) of different size and with different top of scale values.

IMPORTANT The electronic ignition control system gradually shuts off the flow of fuel when the engine is "over-revving" resulting in a gradual loss of engine power.

E - Fuel gauge and reserve warning light

This shows the amount of fuel left in the fuel tank.

This warning light comes on to indicate that about 9 litres of fuel are left in the tank.

IMPORTANT Under certain conditions (heavy slopes, for instance) the reading on the gauge may differ from the actual amount of fuel in the tank and changes in level may be indicated late.

This is part of the operating logic of the electronic control circuit to avoid highly unstable readings due to swaying of the fuel when travelling.

F - Engine coolant temperature gauge and maximum temperature warning light (fig. 87)

This shows the temperature of the engine coolant fluid and begins when the fluid temperature exceeds about 50°C.

The pointer should normally be towards the middle of the scale. If the pointer reaches the higher temperature values the request for vehicle performance should be decreased.

The illumination of this warning light indicates an excessive temperature of the engine cooling fluid. In this case, stop the car and contact Alfa Romeo Authorized Services.

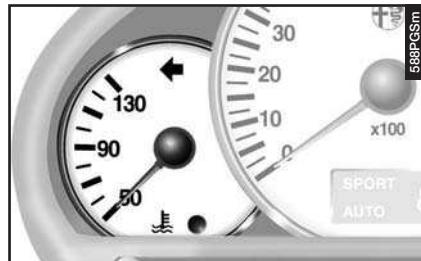


fig. 87

IMPORTANT The temperature of the engine coolant may rise towards the maximum values by obstruction or dirt on the outer part of the engine cooling radiator.

In this case you are advised to inspect and remove any obstructions and have the outside of the radiator washed as soon as possible.

G - The warning lights

IMPORTANT The presence of the warning lights may vary depending on the type of engine and trim level.



Insufficient brake fluid and/or handbrake on

This warning light stays on for about 15 seconds, after the end of the check, when the level of the brake fluid falls below the minimum, possibly due to a leakage in the system and when the handbrake is engaged.

When the ignition key is turned to **MAR** the warning light comes on but must go out after approx. 6 seconds.





Air bag malfunction

When the ignition key is turned to the **MAR** position the warning light will come on and should go out as after about. 4 seconds.

This warning light will come on permanently when an anomaly affecting the Air bag system is detected.



WARNING

If the  warning light does not turn on when turning the ignition key to MAR or if it stays on when travelling, this could indicate a failure in safety retaining systems; under this condition air bags or pretensioners could not trigger in the event of collision or, in a restricted number of cases, they could trigger accidentally. Stop the car and contact Alfa Romeo Authorized Services to have the system checked immediately.



Insufficient oil pressure

This warning light should be out when the engine is running.

When the ignition key is turned to the **MAR** position the warning light comes on and should go out as soon as the engine is started.



Low engine oil level

This warning light stays on for approx. 15 seconds, after the check, when the engine oil level is low.

With the ignition key at **MAR**, pressing the check button, the warning light turns on but must go out after approx. 6 seconds.



If the warning light  comes on when the vehicle is in movement, switch the engine off immediately and contact Alfa Romeo Authorized Services.



If the  warning light stays on after the check, do not try to get peak performance out of the engine and top up the oil as soon as possible.



Low battery charge

This warning light should be out when the engine is running (a slight delay is permitted when the engine is running at idle speed).

If the warning light comes on, Alfa Romeo Authorized services should be contacted immediately.

When the ignition key is moved to the **MAR** position the warning light comes on and should go out as soon as the engine is started.



Brake pad wear

This warning light comes on when the brake pedal is pressed and the front brake pads are found to be worn, have them replaced as soon as possible. When the ignition key is turned to **MAR** the warning light comes on but must go out after approx. 6 seconds.

IMPORTANT As the vehicle is fitted with brake pad wear sensors for the front wheels only, when these are replaced check the back brake pads at the same time.



Alfa Romeo CODE system

When the ignition key is turned to **MAR** the warning light should come on and then go out. If the warning lights stays on with the key in the **MAR** position, it indicates a possible failure: see "The Alfa Romeo CODE system".

IMPORTANT The turning on contemporaneously of warning lights and indicates a failure of the Alfa Romeo CODE system.



Seat belts not fastened

When the ignition key is turned to **MAR** the warning light turns on but it must go out after approx. 15 seconds.

For versions/markets where applicable, the warning light turns on permanently when, with the key in the **MAR** position, the driver's seat belt is not fastened properly.



Engine control system (EOBD) failure (versions in compliance with Directive 98/69/EC – EURO3 or Directive 2001/1/EC level B – EURO4)

Normally, when you turn the ignition key to **MAR**, the warning light must come on but must switch off when the engine is running. It initially lights up to indicate that the warning light is working.

If the warning light stays on permanently or comes on when the car is moving:

1) With a fixed light - indicates that the supply/ ignition system is malfunctioning that could cause high exhaust emissions, possible loss of performance, bad driveability and high consumptions.

In these conditions, you may continue to drive while avoiding asking a lot from the engine or high speeds. The prolonged use of the car when this warning light is on could cause damage. Contact an Alfa Romeo Authorized Service Station as soon as possible. The warning light turns off if the malfunction disappears, however the system stores the warning anyhow.

2) Flashing light - indicates that the catalytic converter could be damaged (see paragraph on "Engine control system (EOBD)" in this chapter).

If the warning light is on and flashing, take your foot off the accelerator and drive at low speeds until the warning light stops flashing; continue travelling at a moderate speed trying to avoid driving conditions that could cause the warning light to flash again. Contact an Alfa Romeo Authorized Service Station as soon as possible.



Engine control system (EOBD) (versions for markets where applicable)

1) In normal conditions, turning the ignition key to **MAR**, the dial warning light turns on but it should go off when the engine has started. The initial turning on indicates that the warning light is working properly.

2) If the warning light stays on or turns on when travelling, it indicates a fault in the supply /ignition system which could cause high exhaust emissions, possible lack of performance, poor handling and high consumption levels.

In these conditions, it is possible to continue driving without however demanding heavy effort or high speeds.

 **If, when turning the ignition key to MAR, the warning light does not switch on or if, when driving, the light flashes or emits a fixed light, contact an Alfa Romeo Authorized Service Station as soon as possible.**

Prolonged use of the car with the warning light on may cause damage. Contact an Alfa Romeo Authorized Service as soon as possible.

The warning light turns off if the fault disappears, but it is still stored by the system.



Glowplugs

(JTD and JTD 20V Multijet versions)

The warning light comes on when the ignition key is turned to **MAR** position. When the glowplugs have reached the established temperature the warning light will go out. Start the engine as soon as the warning light has gone out.

For versions/markets where applicable, the warning light flashes for approx. 30 seconds after starting the engine meaning that there is a fault to the glow plug warning system, in which case, contact Alfa Romeo Authorized Services.

With a high ambient temperature the warning light may turn on imperceptibly.



Presence of water in the fuel oil filter

(JTD and JTD 20V Multijet versions)

When the ignition key is turned to the **MAR** position the warning light should come on and must go out after approx. 4 seconds.

The warning light switches on fixed when driving, to indicate the presence of water in the fuel oil filter.

In case the indicator light switches on, even if just for a few seconds, we recommend to contact an Alfa Romeo Authorised Service as soon as possible in order to purge the water from the fuel oil filter and avoid severe damages to the injection pump and to the fuel oil supply circuit as well as the engine irregular operation.



Faulty ABS anti-wheel-locking

This warning light comes on when the system is inefficient. In this case normal braking is ensured without though, making use of the ABS system. Alfa Romeo Authorized Services should however be contacted as soon as possible.

When the ignition key is turned to **MAR** the warning light comes on but must go out after approx. 4 seconds.



WARNING

The car is fitted with an electronic braking device (EDB). If the and warning lights turn on at the same time, this means that there is an EBD system fault; in this case violent braking may be accompanied by early rear wheel locking, with the possibility of skidding. Drive the car extremely carefully to the nearest Authorized Alfa Romeo workshop to have the system checked.



WARNING

The turning on of only the (ABS) warning light with the engine running normally indicates a fault to the ABS system only. In this case the braking system is still efficient, though without the aid of the anti-lock device. Under these conditions performance of the EBD system may be reduced. in this case too, you are advised to go immediately to the nearest Authorized Alfa Romeo workshop, driving in such a way as to avoid sharp braking, to have the system checked over.



Left-hand direction indicator (intermittent)

This warning light comes on when the control lever is moved downwards or, together with the right-hand warning light, when the hazard warning lights are switched on.



Right-hand direction indicator (intermittent)

This warning light comes on when the control lever is moved upwards or, together with the left-hand warning light, when the hazard warning lights are switched on.



Sidelights

This warning light comes on when the sidelights are switched on.



Lights failure

The warning light stays on for about 15 seconds, after the check, when a failure is detected on one of the following lights:

- low beam headlights
- high beam headlights
- flashing (only gas discharge headlights)
- side/tailights
- direction indicators
- brake lights (stop lights)
- third stop light
- rear fog guards
- number plate lights.

The warning of a fault may mean one or more blown bulb, a burnt fuse or cut off connection.

Turning the key to **MAR** the warning light turns on, but it should go out after about 5 seconds.



Main-beam headlights

This warning light comes on when the main-beam is switched on.



Cruise Control

(on request for versions/markets where applicable)

The warning light turns on, with the control switch in the **ON** position, when the device starts to act on the engine.



VDC System (Vehicle Dynamics Control)

(on request for versions/markets where applicable)

Turning the ignition key to **MAR**, the warning light on the instrument cluster lights up and must go out after about 4 seconds.

If the warning light does not go out or stays on when travelling, contact Authorised Alfa Romeo Services. Although the absence of the VDC function does not affect the car safety, it is however recommended to drive at moderate speed.

Flashing of the warning light when travelling means that the VDC system has cut in.



Electronic automatic gearbox (optional for versions markets where applicable)

This warning light stays on for about 15 seconds, after the check, for an automatic gearbox failure. When travelling, the warning flashes for a failure to the electronic automatic gearbox and it stays on permanently if the gearbox oil temperature is too high.

Turning the ignition key to **MAR** the warning light turns on but it must go out after about 6 seconds.



If the warning light stays on permanently, reduce the performance level required from the engine until it goes out and then contact Authorized Alfa Romeo Services as soon as possible to have the gearbox oil level checked. If the warning light flashes, minimise the performance level required and contact Authorized Alfa Romeo Services immediately.



Passenger's Air bag deactivated

This warning light turns on when the passenger's Air bag is deactivated.



WARNING

Warning light indicates also warning light failure. This is indicated by intermittent flashing, over 4 seconds, of warning light *. In this event, warning light could be not up to indicate restraint system failures, if any. Stop the car and contact Authorized Alfa Romeo Services have the system checked.

H - Electronic automatic gearbox display (for Sportronic versions)

The display shows:

- the set operating mode (automatic/manual) on the left
- the gear engaged on the right.

CLIMATE CONTROL

AQDO027m

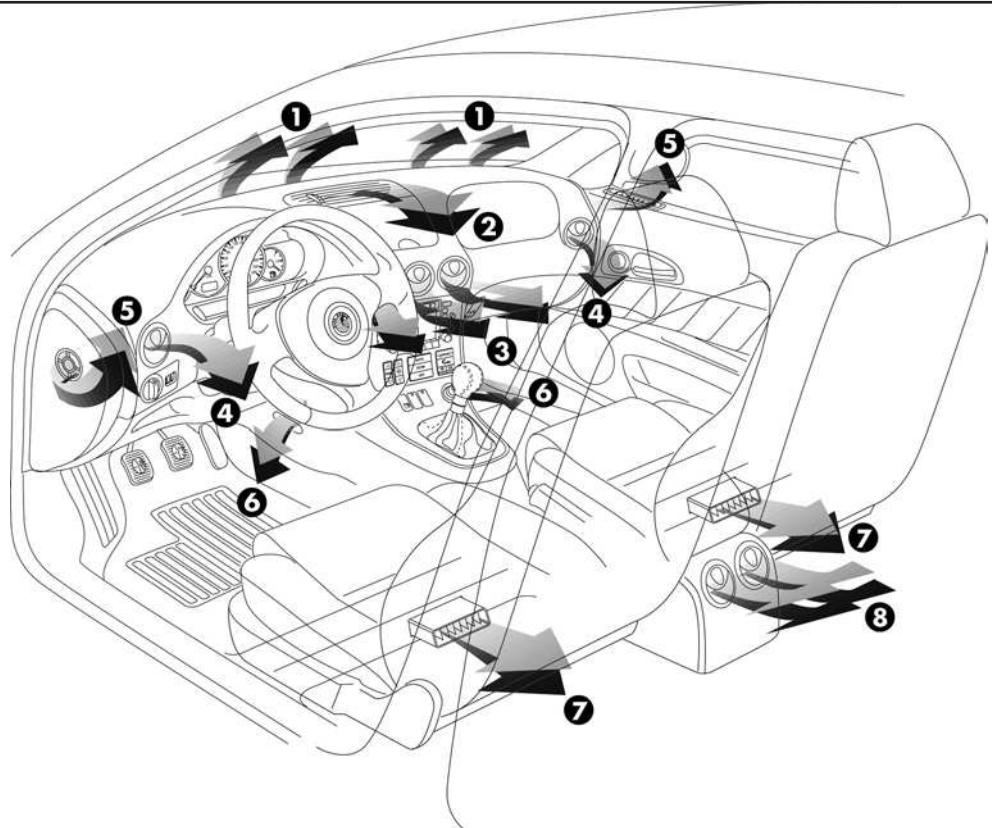


fig. 88

The passenger compartment climate control (heating, cooling and ventilation) can be used in the following ways:

- manual climate control, by selecting the functions using the control panel buttons;
- automatic climate control, managed by the system electronic control unit.

The air is admitted to the passenger compartment through a series of outlets/vents located on the dashboard, on the front door panels, centre console and floor as illustrated (**fig. 88**):

- 1** Centre vents for demisting/defrosting the windscreen
- 2** Upper adjustable centre vent
- 3** Central movable and adjustable outlets
- 4** Movable and adjustable side outlets
- 5** Vents for demisting/defrosting the side windows
- 6** Front seat floor vents
- 7** Rear seat floor vents
- 8** Rear seat adjustable and movable outlets.

ADJUSTING THE CENTRE UPPER VENT (fig. 89)

The upper vent is fitted with an opening/closing control (**A**)

- = Completely open
- = completely closed.

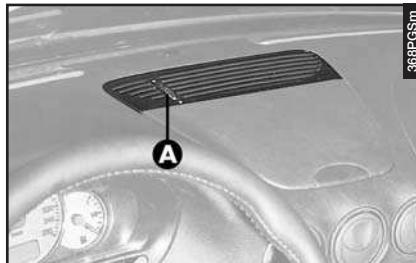


fig. 89



fig. 90

ADJUSTABLE AND MOVABLE OUTLETS (fig. 90-91-92)

To open the round air vents, press on the fins (**A**) in point (**B**).

The air flow is directed by turning the outlets using the fins or changing their slope.

Fig. 90: front seats (in the middle of the dashboard)

Fig. 91: front seats (at the ends of the dashboard)

Fig. 92: rear seats (on the centre console).

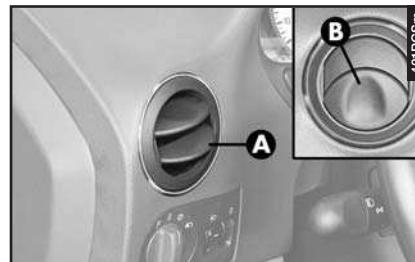


fig. 91

SIDE VENTS (fig. 93)

The front door panels contain fixed side vents (**A**) for defrosting or demisting the side windows.



fig. 92



fig. 93

CLIMATE CONTROL UNIT



The climate control system uses "R134a" coolant fluid which meets current regulations on the subject and which does not harm the environment in the event of leakage.

Absolutely avoid the use of other fluids which are incompatible with the system components.

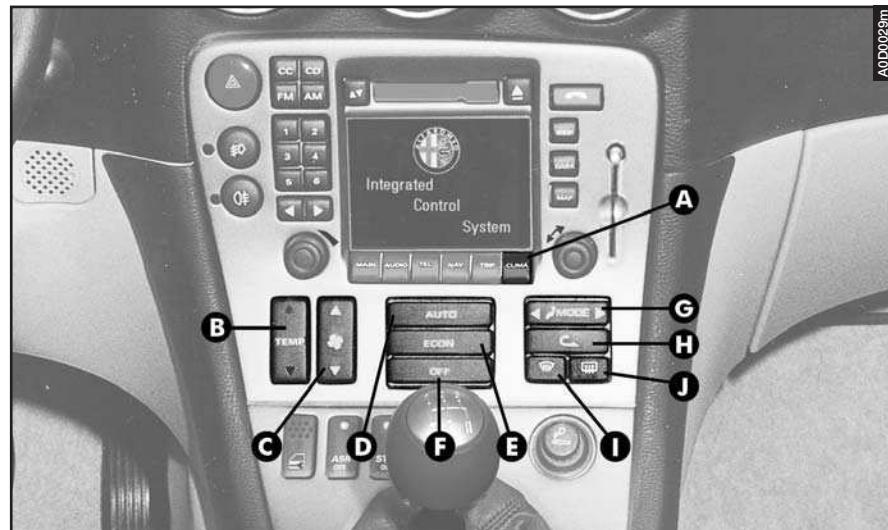


fig. 94

EQUIVALENT TEMPERATURE

The system makes it possible to control the passenger compartment climate maintaining the "equivalent temperature" level required by the driver. This "equivalent temperature" is an estimator of the ideal temperature (obtained through the development of a complex mathematical algorithm) needed to obtain the best temperature and well-being in the passenger compartment.

To bring about this operating condition, select:

- the "equivalent temperature" required pressing the button (**B**-**fig. 94**);
- the **AUTO** position pressing the button (**D**).

IMPORTANT The compressor can be engaged automatically or manually. To switch from one operating mode to the other see the "Compressor on/off button" paragraph in this chapter.

DESCRIPTION OF CONTROLS

(**fig. 94**)

- A** - Climate control dedicated screen selector button.
- B** - Rocker button for adjusting the "equivalent temperature".
- C** - Rocker button for fan speed adjustment.
- D** - Automatic system operation selector button.
- E** - Climate control compressor off/on button.
- F** - Climate control system off/on button.
- G** - Rocker button for selecting air distribution.
- H** - Air recirculation on/off button.
- I** - On/off button for maximum defrosting/demisting windscreens and front side windows, rearscreen heating, door mirror resistances and resistances at windscreens base (where applicable).
- J** - On/off button for rearscreen heating and mirror defrosting and resistances in windscreens wiper blade parking are at the base of the windscreens (where applicable).



Adjustment button for required equivalent temperature

Pressing this rocker button up or down respectively raises or lowers the equivalent temperature required in the passenger compartment.

Pressing the button upwards or downwards to the extreme **HIGH** or **LOW** positions, the functions with the highest heating or cooling power are engaged.



Fan speed adjustment button

Pressing this rocker button up or down respectively increases or lowers the fan speed (thus the amount of air admitted to the passenger compartment), while maintaining the objective of the equivalent temperature required.



Automatic operation button

Pressing the **AUTO** button the system automatically adjusts the amount and distribution of air admitted to the passenger compartment.



Compressor off/on button

Pressing the **ECON** button turns the climate control compressor on/off.

IMPORTANT With the compressor off it is not possible to admit air to the passenger compartment at a temperature below the outside temperature, in particular environment conditions, the windows may quickly steam.



Climate control off/on button

Pressing the **OFF** button turns the climate control on/off (including ventilation only).

IMPORTANT With the climate control off and in particular environment conditions, the windows may steam quickly.



Passenger compartment air distribution button

Pressing the **MODE** rocker button towards the left or right manually selects air distribution in the passenger compartment, while maintaining the objective of the equivalent temperature required.



Air recirculation on/off button

Pressing this button engages/disengages recirculation of the air admitted to the passenger compartment.

IMPORTANT Depending on how the system is working (heating or cooling the passenger compartment) the recirculation function makes it possible to reach the required conditions faster. It is however advisable to use this function on rainy/cold days as it would considerably increase the possibility of misting the windows, especially if the conditioner is off. It is advisable to use this function when the vehicle is stationary in a queue or tunnel to prevent polluted air from entering the passenger compartment. Prolonged use of this function should however be avoided, especially if there are several persons aboard.



Windscreen and front side windows demisting/defrosting button

Pressing this button the climate control automatically activates the necessary functions (quantity, distribution, temperature of the air admitted to the passenger compartment) to quicken demisting/defrosting of the windscreens and front side windows. Rearscreen heating, door mirror heating and the resistances at the base of the windscreens (in the wiper blade parking area) are also automatically engaged (for a determinate length of time) where applicable.



Rearscreen demisting/defrosting on/off button

Pressing this button engages demisting/defrosting of the rearscreen, door mirrors and (optional for versions/markets where applicable) the resistances at the base of the windscreens (in the wiper blade parking area).



IMPORTANT Do not stick stickers on the inside of the rearscreen over the heating filaments to prevent damage that might adversely affect the system.

DESCRIPTION OF OPERATING STRATEGIES

Operating the  button, the climate control system sets to automatically control the following functions:

- temperature of the air at the vents and outlets
- fan speed (constantly changing)
- air distribution
- air recirculation
- compressor engagement.

It is still however possible to intervene manually on the following functions:

- fan speed
- air distribution
- air recirculation
- compressor engagement.

The functions activated manually have priority over the automatic ones and they remain memorised until automatic control is re-activated.

With one or more functions engaged manually, adjustment of the temperature admitted to the passenger compartment

still continues to be controlled automatically by the system except with the compressor off: in fact, in this condition the air admitted to the passenger compartment cannot be below the outside temperature.

Pressing the  button for engaging/disengaging automatic operation, the system may be in one of the following conditions:

- **FULL AUTO** with automatic control of the fan speed and air distribution;
- **AUTO** with automatic control only of the fan speed or of air distribution according to the driver's preference;
- **MAN** with manual operation where the driver controls the fan speed and air distribution directly.

Pressing the  button turns the compressor on/off. With the compressor off, the air admitted to the passenger compartment can not be cooled or dehumidified and recirculation is switched off automatically to avoid misting the windows: when wanting to activate recirculation in the condition, press the corresponding  button.

Pressing the  button again with the compressor off, will restore the operating conditions of before the compressor was turned off.

Pressing the  button turns off/back on the climate control, in the former case air is no longer admitted to the passenger compartment which is thus isolated from outside, in the latter, the previous operating mode is restored.

Pressing the  button selects the possible air distributions to the passenger compartment:

 Flow of air towards the windscreens and front side windows

 Distribution of the flow between the windscreens /front side windows and lower part of the passenger compartment

 Flow of air to the lower part of the passenger compartment and secondary flow of air towards the windscreens and front side windows

 Distribution of the flow between the upper centre, centre, side and rear outlets and the lower part of the passenger compartment

 Flow of air towards the centre upper vent, centre and side dashboard outlets and rear outlets.

If the system was in the **FULL AUTO** mode, pressing the  button passes to the simple automatism condition: i.e. the system chooses the fan speed and mixing to obtain the equivalent temperature required, but will not change the distribution selected manually.

Pressing the recirculation button , the system automatically reactivates the compressor if it was deactivated manually; to maintain recirculation with the compressor off, it is necessary to press the  button to deactivate the compressor.

IMPORTANT In this condition (recirculation on and compressor off), remember that the windows may steam up very quickly.

Pressing the  button the climate control automatically activates the functions required to quicken demisting/de-frosting of the windscreen and side windows. Rearscreen heating and door mirror heating are also automatically engaged (for a determinate length of time).

Pressing the  button engages rearscreen heating and door mirror heating for a determinate length of time.

Manually setting one of the climate control functions, the others continue to be controlled automatically; in particular the air temperature is always controlled automatically to reach the required "equivalent temperature" in the passenger compartment.

IMPORTANT When working in the **FULL AUTO** condition, the system can automatically engage recirculation or deactivate the compressor to cool/heat the passenger compartment faster or demist/defrost the windscreen and side windows.

IMPORTANT When the engine is turned off the system memorises the climate control operating condition, which will be automatically resumed when the engine is started again.

ACTIVATED CARBON DUST/POLLEN AIR FILTER

The filter has the specific capability to combine the mechanical air filtering function with an electrostatic effect so that the outside air admitted to the passenger compartment is purified and free of particles such as dust, pollen etc.

In addition to the above-mentioned function there is also an effective reduction of the concentration of pollutants owing to a layer of activated carbons on the lower surface of the filter.

The filtering action takes place when air is admitted from outside (recirculation off) and when the air is recirculated (recirculation on).

The dust/pollen filter should be checked over at least once a year by Alfa Romeo Authorized Services, preferably at the beginning of summer.

If the vehicle is habitually driven in polluted areas or on dusty roads the system should be checked and if necessary changed more often.



If the filter is not replaced the efficiency of the climate control system may be seriously compromised.

ADDITIONAL HEATER

(Optional, for JTD and JTD 20V Multijet versions, where applicable)

The additional heater makes it possible to integrate heating of the engine coolant fluid, immediately after starting the engine and when travelling, to more quickly reach and maintain the optimum operating temperature of the engine and passenger compartment heater.

The device works completely automatically and it is activated only when the engine is running with an outside temperature of +5°C or less and a coolant fluid temperature below 60°C.

When the coolant fluid reaches 61°C, the electronic control unit reduces the power of the burner and stops the heater when a temperature of 72°C is reached, reactivating it automatically when the fluid temperature falls below 60°C. Conversely, if after reducing the power of the burner, the fluid temperature begins to fall, the control unit cuts in to restore full power.

The system comprises:

- a fuel oil burner for heating the water and a combustion gas exhaust silencer.
- A batching pump connected to the car reservoir pipes to supply the burner.
- An electronic control unit for controlling burner adjustment.
- An outside temperature sensor.

IMPORTANT The heater is fitted with a thermal limiting device which cuts off combustion in the event of overheating due to lack/leaks of coolant fluid.

The heater is also protected by the automatic fuel cut-off switch, which shuts off the fuel in the event of a crash of a certain size: to see how this works see the "automatic fuel cut-off switch" paragraph.

IMPORTANT When the heater is working with the vehicle stationary and the engine running, standing outside the car near the rear wheel arch a low noise caused by normal operation of the heater can be heard.



WARNING

The burner exhaust gas is released in the centre floor area: therefore never park the car with the engine running over inflammable surfaces, fire hazard!



The temperature near the heater should never exceed 120°C (e.g. during body painting operations in the workshop oven). Higher temperature could damage the electronic control unit components. For maintenance and repairs contact only Authorized Alfa Romeo Services and only use original spare parts.

MAINTENANCE

Have the additional heater checked at regular intervals by Authorized Alfa Romeo Services. This will ensure safe, cost-effective working of the heater and also long life.

CONTROLS

OPENING THE LUGGAGE COMPARTMENT (fig. 95)

To open the luggage compartment from inside the car press the button (A) (with the car stationary) inside the glovebox.

Because of its position, the control cannot be operated when the glovebox is key-locked.

IMPORTANT The corresponding warning light on the check panel lights up if the luggage compartment is not shut properly.

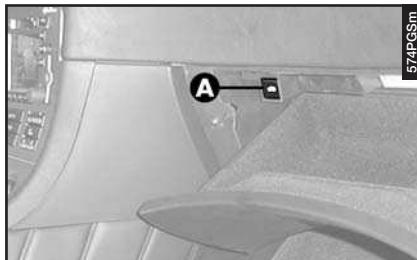


fig. 95

HAZARD WARNING LIGHTS

(fig. 96)

These are switched on by pressing button (A) regardless of the position of the ignition key.

When the hazard warning lights are switched on the switch itself begins to flash together with the direction indicator on the instrument panel. This function is switched off by pressing the button again.

IMPORTANT Use the hazard lights in compliance with local regulations.



fig. 96

FRONT FOGLIGHTS (fig. 97)

These come on when the button (A) is pressed and when the external lights are already on.

When the foglights are on the led next to the button lights up.

Press the button again to switch the front foglights off.

IMPORTANT The front foglights should be used in compliance with the local traffic laws. The front foglights system meets EEC/ECE regulations.



fig. 97

REAR FOG GUARDS (fig. 98)

These are turned on, with the dipped beam headlights or fog lights on, by pressing button (B).

When the rear fog guards are on the led next to the button lights up.

Turning the ignition key to **STOP** the fog guards are automatically turned off and they do not come on the next time the engine is started unless button (B) is pressed. Press button (B) to turn them off.

IMPORTANT Always use the rear fog guards in accordance with local regulations. The fog guard system complies with EEC/ECE standards



fig. 98

DASHBOARD LIGHTING ADJUSTMENT (fig. 99)

When the outside lights are on, the dashboard lighting is adjusted pressing button (A).



fig. 99

OPENING THE FUEL FLAP (fig. 100)

The fuel flap is released from inside the car pressing the button (A) with the engine off.



fig. 100

GEARSHIFT LEVER (fig. 101)

Depending on the versions, the car is fitted with a manual gearbox with six gears or with an electronic automatic gearbox (see "Technical specifications" chapter).

In versions with manual gearbox the position of the single gears is shown on the gearshift lever knob.

When changing gear always fully depress the clutch pedal. Before engaging reverse gear (R) wait for the car to be stationary.

To engage reverse gear (R) it is necessary to wait for the car to be stationary, then raise the ring under the grip (A) (with the fingers of the same hand holding the lever). After engaging reverse gear, release the ring. It is not necessary to raise the ring on the lever when shifting from reverse to another gear.

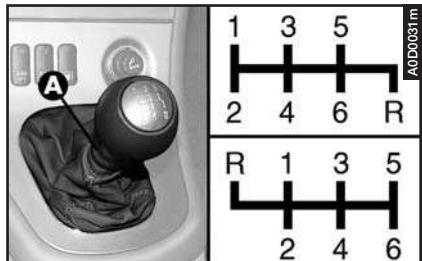


fig. 101

HAND BRAKE (fig. 102)

The hand brake is located between the two front seats.

To operate the brake when the vehicle is stationary pull the lever upwards until the required braking action is obtained.

When the ignition key is in the MAR position the (!!) warning light will come on on the instrument panel.

To release the hand brake:

— Slightly lift the lever (A) and press the button (B).

— holding the button down lower the lever: the (!!) warning light on the instrument panel will go out.

To prevent the car from moving accidentally, keep the brake pedal pressed when engaging the handbrake.

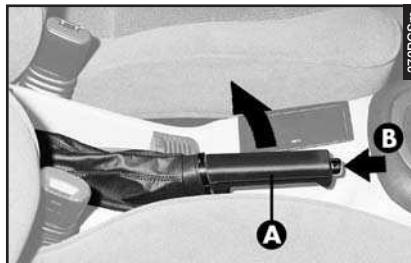
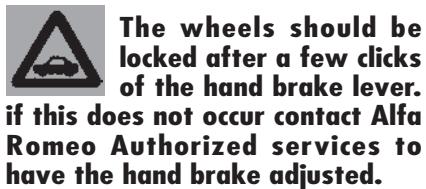


fig. 102

ELECTRONIC AUTOMATIC GEARBOX (SPORTRONIC)

(optional for versions/markets where applicable)

The Sportronic is an automatic gearbox with four speeds plus reverse (3.0 V6 24V version) and five speeds plus reverse (JTD 20V Multijet version) with self-adapting control (i.e. capable of adapting to the driver's driving style), which transmits power continuously and with very fast electrohydraulic gear engagement times.

STARTING THE ENGINE

The engine can be started only with the gearshift lever in the **P** or **N** position.

For safety reasons, it is advisable to start the engine with the brake pedal pressed.

IMPORTANT When moving off, after starting the engine, do not press the accelerator pedal before and during the movement of the gearshift lever. This is particularly important when the engine is cold.

MOVING OFF

After starting the engine, with the engine idling and keeping the brake pedal pressed, move the gearshift lever to position **D**. Release the brake pedal and gradually press the accelerator pedal.

IMPORTANT Movement of the lever from position **P** is allowed only with the ignition key at **MAR** and the button on the lever and the brake pedal pressed.

The 3.0 V6 24V version features an automatic winter driving programme (described in the following pages), whereas the JTD 20V Multijet version features a specific function enabling to engage at standstill up to the 3rd gear (in sequential mode) to guarantee pickup even under extreme grip conditions, in addition to ASR assistance.



Do not attempt to obtain peak performance until the engine has reached normal operating temperature.

STOPPING THE CAR

To stop the car simply press the brake pedal regardless of the position of the gearshift lever.

IMPORTANT The key may be removed only with the gear shift lever in position **P** and within a max. time of 25 seconds from the engine switch off. If the lever is not in position **P**, when opening the door a buzzer will advise the driver for approx. 15 seconds.

In the case of an emergency (faults, flat battery, etc.) the ignition key can be removed from the switch pulling the knob (**A**-fig. 103) under the ignition switch.

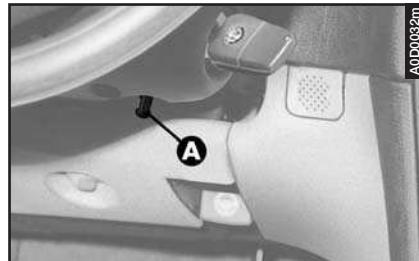
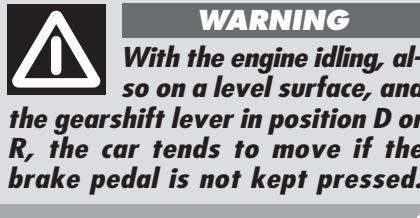


fig. 103

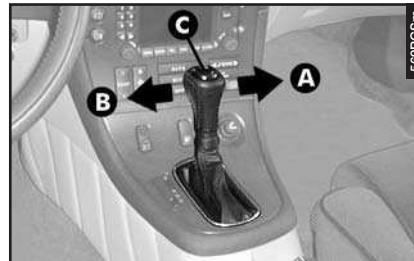


fig. 104

SELECTING AUTOMATIC/SEQUENTIAL MANUAL OPERATION

The main feature of this gearbox is the possibility of being used in the automatic or sequential manual mode. The operating mode is chosen positioning the gearshift lever (fig. 104) in the right sector (**A**) (automatic gearshifting) or left sector (**B**) (sequential manual gearshifting). The gearbox operating mode and the gear engaged are shown on the display (**A**-fig. 105):

SPORT - sequential manual operation (lever in left sector)

AUTO - automatic operation (lever in right sector)

1-2-3-4 – gear engaged
(3.0 V6 24V version)

1-2-3-4-5 – gear engaged
(JTD 20V Multijet version)

AUTOMATIC OPERATION

For automatic operation move the lever in the right sector (**A-fig. 105**) with four positions:

P - park

R - reverse

N - neutral

D - forward gear.

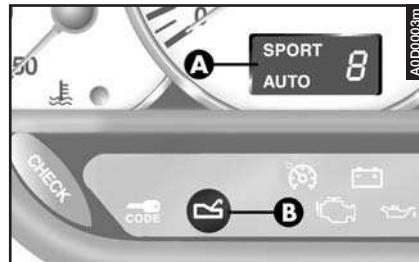


fig. 105

P - Park

To prevent accidental movements, the lever can only be moved to position **P** with the button (**C-fig. 104**) pressed.

When the car is parked, always set the lever to this position. A device in the gear box locks the driving wheels.



WARNING

Always pull the hand brake completely before leaving the vehicle.



WARNING

Move the gearshift lever to position P when getting out of the car leaving the engine running.

Move the gearshift lever to position **P** with the car stationary and the engine idling before switching off.

For safety reasons the ignition key can only be removed with the gearshift lever in this position.



WARNING

Before moving the lever from position P, press the brake pedal: the vehicle must be stationary.

In case of emergency (low battery), it is possible to move the lever from position **P**, pressing on the lever lock device (**B**-fig. 107) through the plugged hole (**A**-fig. 106).

You are advised to have this operation carried out by Authorised Alfa Romeo Services.

R - Reverse

Move the gearshift lever to **R** with the vehicle stationary, the engine idling and the brake pedal pressed.

To prevent accidental movements, the lever can only be moved to this position with the button (**C**-fig. 104) pressed.

With the lever in position **R** the reversing lights turn on and a buzzer will sound for about 5 seconds.

IMPORTANT With the lever in position **R**, reverse gear is not engaged if the vehicle speed exceeds the established limit. When the speed falls below this value, reverse gear engages and stays engaged even if the limit is exceeded.



WARNING

Before moving the lever, press the brake pedal: the car must be stationary.

N - Neutral

This is the neutral position to be used if the car is to be pushed or towed.

With the gearshift lever in this position, keep the car braked pressing the brake pedal.

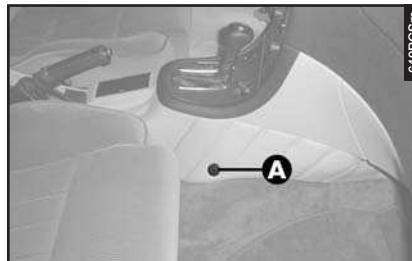


fig. 106

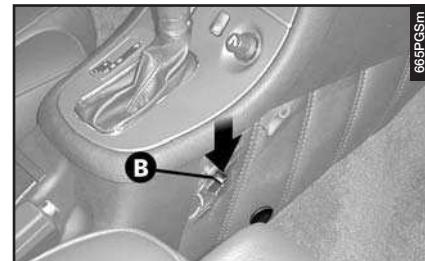


fig. 107



WARNING

With the engine idling and the gearshift lever is in position N, the car tends to move also on a level surface: keep the brake pedal pressed when the lever is in position N.

D - Forward gear

This is the position to be used when driving forward normally. The electronic control unit controls automatic engagement of the gears depending on the position of the accelerator, driving speed, engine rpm, longitudinal and transversal acceleration and the type of road.

The electronic gearbox can choose between different operating programmes, which range between comfortable economy driving and sporty driving coming into operation between the lowest and the highest speeds.

The electronic control unit can acknowledge special circumstances, such as running along a bend, by means of the instant front wheel revolution speeds difference between given by the ABS active sensors, preventing shifting to a higher gear before engine rpm limit is attained. Only with this condition at the end of the bend will the gearbox engage the longer ratio. This strategy makes it possible to improve the balance of the car and assure prompt acceleration at the end of the bend, because the ideal gear has already been engaged.

In the same way, during braking, lower gears are engaged to better exploit the braking action of the engine.



WARNING

With the engine at idle speed and the lever in position D the car tends to move also on a level surface: keep the brake pedal pressed until moving off.

Kickdown

To obtain optimum acceleration, for example when overtaking, the gearbox will kickdown by one or two gears simply by quickly pressing fully home the accelerator pedal.

Engagement of the next longer ratio will take place when the maximum rpm limit is reached.

Engagement of automatic sporty programme

(only 3.0 V6 24V version)

When wanting to drive in a sporty manner exploiting automatic gearbox operation, simply move the lever to the left sector from position **D**, without moving it on the (+) and (-) positions. In fact, with the lever in this position the sportiest automatic programme is engaged.

The sporty programme will remain engaged until the gearshift lever is moved.

Moving the lever to the right sector re-engages automatic operation with the different operating programmes, while pushing it forwards or backwards on the (+) or (-) positions sequential manual operation is selected.

SEQUENTIAL MANUAL OPERATION

For the sequential manual mode, move the lever to the left sector (**B-fig. 104**) with 2 positions, as shown by the symbols on the lever mask:

(+) = engagement of the higher ratio

(-) = engagement of the lower ratio.

Moving the gearshift lever to the manual sector is only possible from position **D**: The ratio selected by the automatic gearbox when the lever is moved will remain engaged.

When the sequential manual mode is selected, the word **SPORT** (**A-fig. 105**) and the gear engaged light up on the display on the instrument cluster.

To select the higher ratio move the lever in the (+) direction and to shift down move the lever to (-).



WARNING

When the sequential manual mode has been set and a high gear is engaged, to accelerate rapidly, for example to overtake, it is necessary to down-shift by hand: the kickdown feature cannot be engaged!

Moving the lever back to position **D** the gearbox instantly resumes the automatic mode selecting the ratio according to the driving characteristics.

IMPORTANT The electronic control unit is programmed to change gear one at a time, therefore repeated fast actuation will not result in repeated engagements of the gears. The higher or lower gear is engaged moving the lever to the (+) or (-) position when the previous request has been performed.

In the event of fault to the sequential manual gearshift system (**SPORT**) the system will select the automatic mode and the display on the instrument cluster will show **AUTO**.

FAULT SIGNALLING

Automatic gearbox faults are indicated by the warning light (**B-fig. 105**) on the instrument cluster as follows:

— warning light glowing steadily = automatic gearbox oil maximum temperature

— warning light flashing = automatic gearbox fault.

Turning the ignition key to **MAR** the warning light should turn on and go out after about 4 seconds. If the warning light stays on or if it turns on when travelling, this indicates a gearbox fault (flashing light) or gearbox oil overheating (steadily glowing light).

Warning light glowing steadily

If the warning light turns on and glows steadily when travelling, this indicates that the gearbox oil has reached the maximum temperature.

You are therefore advised to stop the car with the engine at idle speed (gearshift lever at **P**) until the warning light goes out and then resume your journey without pushing the engine to peak performance.

If the warning light turns on again, it is necessary to stop again with the engine idling until it goes out.

If there are less than 15 minutes between one turning on of the warning light and the next, you are advised to stop the car, switch off the engine and allow the engine-gearbox unit to cool down completely.

Warning light flashing

If the warning light flashes when the engine is started, this indicates a fault in the automatic gearbox.

The automatic control system sets an "emergency" programme engaging 3rd or 4th gear (depending on the speed at which the fault occurred).

Turning the engine on and off again, the system self-diagnostic feature may exclude the fault and then turn off the warning light. The fault remains in the memory and it is therefore advisable to have the automatic gearbox checked by Alfa Romeo Authorized Services.



WARNING

When travelling with the gearbox faulty, drive with the utmost care in consideration of the limited performance (in terms of acceleration and speed) that the car can offer.



WARNING

When travelling with the gearbox faulty, the reversing gear lock might not be active: absolutely never move the lever to the R position with the car on the move.

PUSH STARTS

Starting by pushing or towing the car is not possible. In the event of an emergency, when the battery is flat, start the car with a suitable emergency battery, following the instructions given in the chapter "In an emergency".

TOWING THE CAR

WARNING For towing the car comply with current local regulations. Also follow the instructions given in the chapter "In an emergency".

If the car needs to be towed adhere to the following recommendations:

— if possible, carry the vehicle on the floor of a rescue vehicle;

— if this is not possible, tow the car raising the driving wheels (front) from the ground;

— if this, too, is not possible, the car should not be towed for more than 50 km at a speed of no more than 50 km/h.

When towing, the gearshift lever should be at **N**.



Do not start the engine while the car is being towed.



The failure to comply with these instructions may cause serious damage to the automatic gearbox.

CONSTRUCTIONAL FEATURES

The Sportronic gearbox is fully automatic with electrohydraulic control and four forward gears plus reverse (3.0 V6 24V version) and five forward gears plus reverse (JTD 20V Multijet version).

It is controlled by an electronic control unit which handles:

- the torque distributor
- gearshifting
- specific programmes

The gearbox is coupled with a fluid power torque distributor with piloted antislip device which makes it possible to obtain demultiplication ratios.

The particularity of this gearbox which works without idle gear enables:

- higher compactness and weight reduction
- improved output due to less friction
- lower stress of transmission parts

GENERAL FEATURES

Electronic gearbox management makes it possible to obtain gearshifting suited to momentary engine characteristics with a certain elasticity.

The electronic control unit has the task of:

- adapting the oil pressure for gearshift-ing to the engine torque
- activating safety functions
- defining the manual gearshifting pro-gramme
- system diagnostics.

For controlling these operating logics the control unit uses the following signals:

- engine rpm
- throttle position
- engine temperature
- turbine rpm
- vehicle speed
- gearbox oil temperature
- gearshift selector lever position
- accelerator pedal position (kickdown)
- brake pedal position

In addition the control unit converses with the electronic control units of the ABS, injection-ignition, VDC and Cruise Control.

Conditions of use analysed by the control unit

The control unit analyses each single condition of use of the car, discriminating it on the basis of the signals received from the various sensors.

The conditions analysed are:

- starting (position/accelerator pedal changing speed)
- acceleration (accelerator pedal completely pushing down speed)
- full load (number of engine full load kickdown signals or position maintenance time)
- braking (accelerator pedal release time and braking system operation)
- type of programme (gearshift selector lever position)
- winter driving (driving wheel skidding/ABS sensors active) (only 3.0 V6 24V version)
- driving with trailer or uphill (car speed in relation to transmitted torque)

— entering a bend (transversal acceleration detected by the difference in the difference between the wheels of one side and the other/ABS sensors active)

— downhill driving (acceleration of the car in relation to the position of the accelerator pedal)

— driving in town or queues (accelerator pedal position and car speed)

— gear required by the driver (gearshift selector level position).

Management of gearshift programmes

To optimise vehicle handling the electronic control unit has the following memorised programmes:

- automatic operation
- manual operation
- winter driving (only 3.0 V6 24V version)
- protection against high temperature of the gearbox oil.

Automatic programme

In relation to the car speed and torque transmitted, the control unit detects the slope of the road surface and depending on the sporty features chosen, it autonomously chooses the programme most suited to the situation.

Automatic sporty programme (only 3.0 V6 24V version)

This function makes it possible to drive sportively while exploiting automatic operation of the gearbox.

To engage this function set the lever to the left sector in the central position, without moving it to (+) or (-): the sportiest programme will remain engaged until the lever is moved.

Manual sequential programme

This function enables manual sequential use of the gearbox merely moving the selector lever to the left.

To avoid overrevving or excessively low engine rpm, the control unit inhibits requests for gearshifting that would cause such situations.

Winter driving programme

(only 3.0 V6 24V version)

This programme engages automatically if a driving wheel skids and it changes to specific gears. Starting is possible only in 2nd gear.

Engine heating programme (only 3.0 V6 24V version)

This programme allows the engine to reach normal operating temperature in the shortest time possible (depending on the outside temperature) highering the gearshifting points in relation to engine temperature.

The programme engages automatically after starting, if the engine temperature is below 30°C and it remains active up to 34°C.

High gearbox oil temperature safety programme

This is activated when the gearbox oil reaches high temperature.

To facilitate oil cooling, this programme inhibits gearshifting, either up or down. It is however possible to use the manual programme

INTERNAL FITTINGS

GLOVE BOX (fig. 108-109)

On the dashboard there is a key-lockable glovebox with light. The lock can be opened/closed using the ignition key.

To open the glovebox pull lever (A).

The compartment is lit by a courtesy light (B) when it is open with the ignition key at MAR.

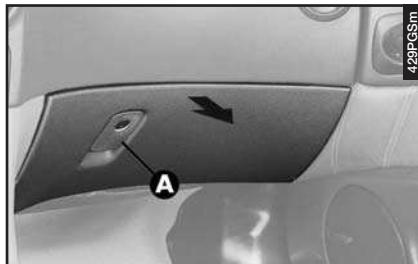


fig. 108



WARNING

Do not travel with the glovebox open; it could harm the passenger in the event of an accident.

ODDMENTS COMPARTMENTS ON THE DASHBOARD

Upper compartment (fig. 110-111)

This is fitted with a lid. To open, press and release the button (A). To close the lid, simply lower it.

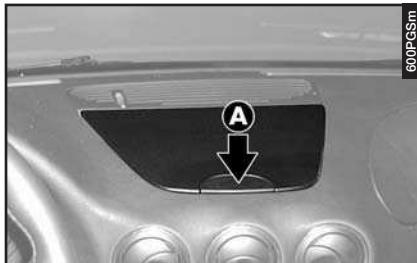


fig. 110

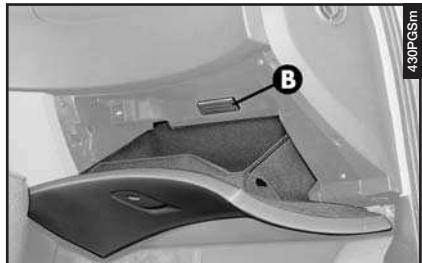


fig. 109

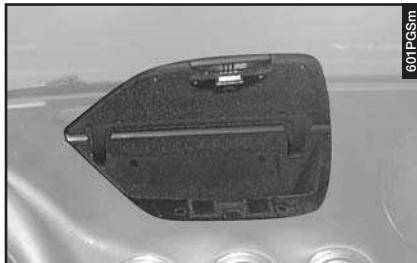


fig. 111

Left side compartment (fig. 112)

On the lower side of the dashboard, at the left of the steering wheel, there is an oddments compartment (A).

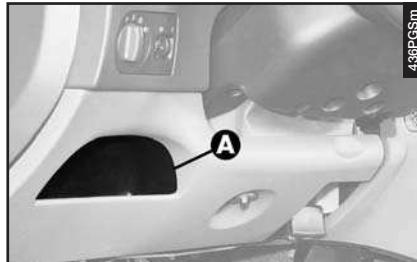


fig. 112

COMPARTMENTS AND POCKETS ON THE DOORS (fig. 113-114)

Each door is fitted with a pocket.

fig. 113 - Front doors

fig. 114 - Rear doors.



fig. 113



fig. 114

COIN/CARD/ OBJECT HOLDERS (fig. 115)

The coin holder (**A**) is located on the central console.

The card holder (**B**) may contain a card in the vertical position.

The object holder (**C**) is located next to the hand brake.

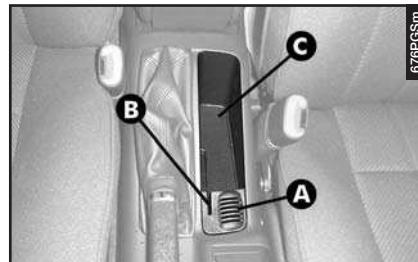


fig. 115

REAR ODDMENTS COMPARTMENT (fig. 116-117)

This is on the parcel shelf and it has a lid.

To open the lid raise it pulling the handle (**A**).

To close, simply lower it.

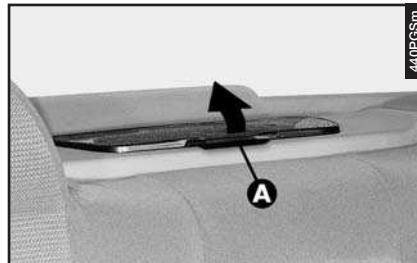


fig. 116

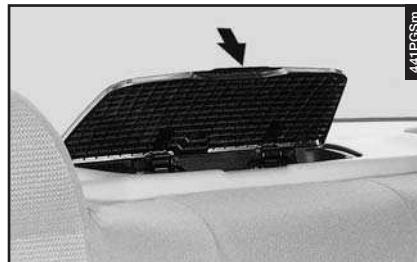


fig. 117

CIGAR LIGHTER (fig. 118)

Press knob (A) in to use the cigar lighter, with ignition key at **ACC** or **MAR**; after some seconds the knob will return automatically to its initial position and the cigar lighter is ready to use.

Remove the tray to empty and clean the ashtray.



WARNING

The cigar lighter gets extremely hot. Handle with care and prevent its use by children: danger of fire and/or burning.



Always ensure that the cigar lighter has turned off.

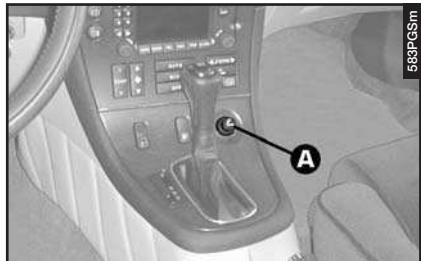


fig. 118

FRONT ASHTRAY (fig. 119)

To open the protective lid (A) press in the point shown by the arrow.

To empty the ashtray, pull out the tray, pressing towards the left on the open lid: the tray is released and it moves up automatically. Re-insert the tray in the special guides and pressing gently.

The ashtray is lit when the key is at **MAR**.



WARNING

Do not use the ashtray as paper bin: it might set on fire in contact with cigarette stubs.

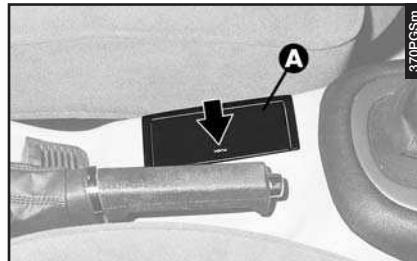


fig. 119

REAR ASHTRAYS (fig. 120)

There is an ashtray on each rear door.

To empty remove the ashtray pressing the tab (A). When refitting, firstly insert the lower part, press the tab, then push the upper part into place.

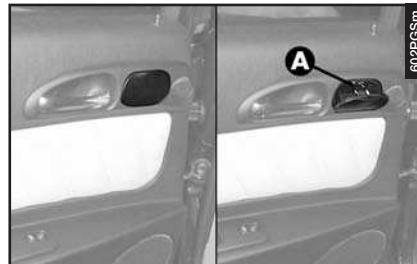


fig. 120

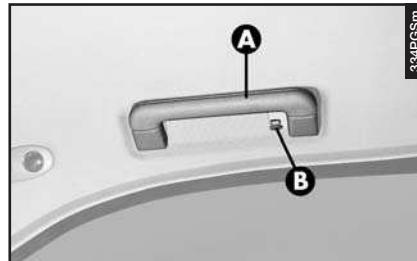


fig. 121

GRAB HANDLES (fig. 121)

Two grab handles are located at front doors.

Two grab handles (**A**) are located above the rear doors fitted with a coat hook (**B**).

SUN VISORS (fig. 122)

These can be adjusted at the front and side.

The rear side of each sun visor (**A**) is fitted with a small mirror with sliding cover.



fig. 122

FRONT ROOF LIGHT (fig. 123)

The roof light comprises two lights with the corresponding control switch.

With the switches (**A**) and (**B**) in the central position (**1**), both lights gradually turn on until reaching their maximum intensity when a door is opened. The light go off gradually after about 8 seconds from where the last door is closed.

If a door is left open, the lights gradually go out after about 3 minutes. To turn them on again, open another door or shut and re-open the same one. The lights go out when the ignition key is turned to **MAR** (with the doors closed) or engaging central door locking.

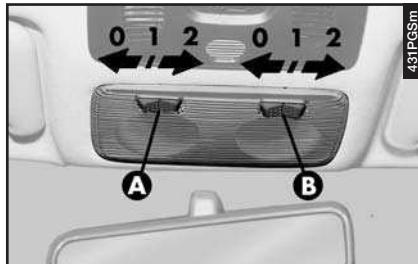


fig. 123

Moving switches (**A**) and (**B**) to the left (position **0**), the lights stay off (**OFF** position).

Moving switch (**A**) and (**B**) to the right (position **2**), the lights stay on.

With switches (**A**) and (**B**) the lights are turned on individually.

WARNING Before leaving the car, make sure that both switches are in the central position.

COURTESY LIGHTS (fig. 124)

Lowering the passenger's sun visor the courtesy light on the roof panel can be seen.



fig. 124

This light makes it possible to use the courtesy mirror under conditions with dim light.

Switch the light on and off, with the start key in **MAR** position, using switch (A).

REAR ROOF LIGHTS (fig. 125)

In correspondence with each rear door there is a light which turns on automatically when a door is opened.

They are timed and work in the same way as described for the front roof light.

They can be turned on and off by hand pressing the switch (A).

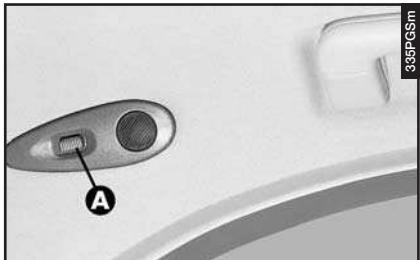


fig. 125

DOOR LIGHTS (fig. 126-127)

In the lower part of each door there is a sill light.

(A) - Front doors

(B) - Rear doors

Operation of these lights is coupled with the front roof lamp.



fig. 126

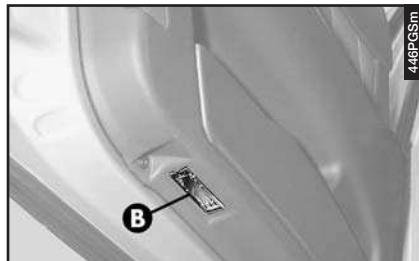


fig. 127

TELEPHONE PROVISION

On request for versions/markets where applicable, the car may be fitted with a provision for the installation of a cellular telephone.

This provision comprises:

- aerial on the roof;
- speaker on the passenger door together with the woofer speaker,
- aerial/speaker and car electrical supply cables.



For the installation of the cellular phone and connection to the provision in the car, contact only Authorized Alfa Romeo Services; this will guarantee first-rate results with no possibility of any inconvenience that may compromise the safety of the vehicle.

SUNROOF

(optional for versions/markets where applicable)

The sunroof can only be operated when the ignition key is in the **MAR** position.



WARNING

Improper use of the sunroof can be dangerous.

Before and while operating it always make sure that the passengers are not exposed to the risk of harm caused either directly by the sunroof in motion or by personal items drawn or knocked by it.



Do not open the sunroof when snow or ice are on the roof as this may damage it.

SLIDING FORWARDS/BACKWARDS (fig. 128-129-130)

Press part **(1)** of the button (**A**-fig. 128) to open the roof; press part **(2)** of the button to close it.

When the button is released the sunroof will stop in that position.



fig. 128

When the sunroof is opened a small spoiler (**B**-fig. 129) rises which diverts the flow of air.



WARNING

When leaving the vehicle the ignition key should be removed to avoid accidents involving the sunroof which could be inadvertently operated by any passengers remaining in the vehicle.



Routinely check that the side water drain holes (C-fig. 130) are clear.

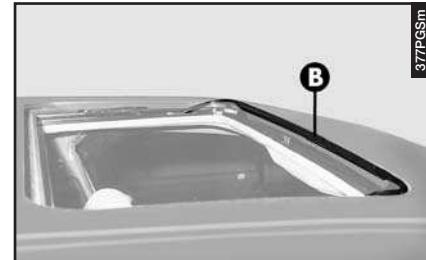


fig. 129

SLIDING WING

The sunroof is equipped with manual-operated sliding wing preventing direct sun rays. To open the wing pull handle (**A**-fig. 131).

When opening the sunroof, the wing is automatically pushed inside the roof panel. When closing the sunroof, the wing comes out partially in order to have access to the handle for manual closing.

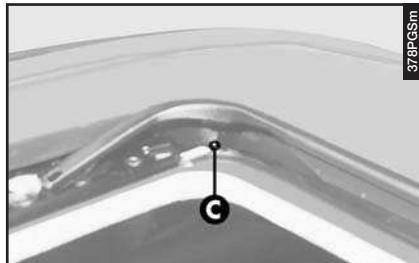


fig. 130

REAR LIFTING

This can only be achieved when the sunroof is completely closed. Press the front end (**2**) of the control button (**A**-fig. 128).

Press end (**1**) of the button (**A**-fig. 128) to return the sunroof to the horizontal position (roof closed).



fig. 131

EMERGENCY OPERATION

(fig. 132-133-134)

If the electrical control device does not work the sunroof can be opened manually as follows:

— Apply leverage to the points indicated by the arrows and remove the plate with switch (**A**-fig. 132).

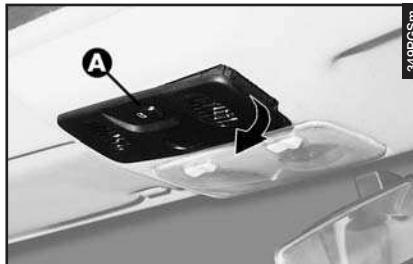


fig. 132

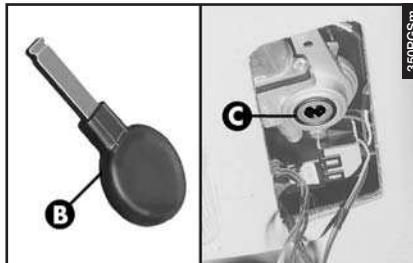


fig. 133

— Using the special key (**B**-fig. 133) provided in the tool bag rotate bushing (**C**-fig. 133) of the motor to move the sunroof.

IMPORTANT When the operation has been ended the key should be turned half a turn in the opposite direction until a click is heard before it is removed.



fig. 134
351PGSm

LUGGAGE COMPARTMENT

The boot lid can be opened from outside the vehicle and from inside the vehicle.

IMPORTANT If the boot is not properly shut, the corresponding warning light on the check panel will come on.

OPENING FROM OUTSIDE (fig. 135)

Turn the badge (**A**) in the direction shown by the arrow, insert the key (**B**) and turn it anticlockwise.

Opening is facilitated by a servocontrol which operates the lock.

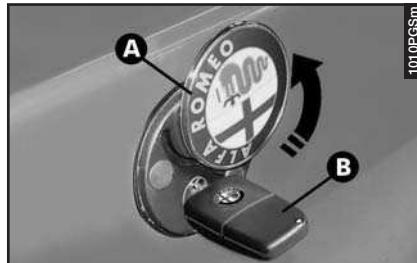


fig. 135
101PGSm

OPENING FROM INSIDE (fig. 136)

To open from inside:

— With the vehicle stationary, press button (**A**) inside the glovebox.

Due to its position, this control cannot be operated when the glovebox is key-locked.

REMOTE CONTROL OPENING (fig. 137)

(optional for the versions/markets where applicable)

The luggage compartment may be remote opened by pressing the push-button (**A**-fig. 137) on the key with metallic insert (**B**), even when the electronic alarm is ON (where installed).

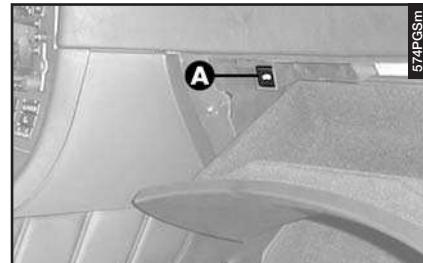


fig. 136
574PGSm

In this case the alarm disengages the boot control sensor, the system (with the exception of versions for certain markets) sounds two beeps and the direction indicators light up for about three seconds.

When the boot is closed again the control function is restored, the system (with the exception of versions for certain markets) sounds two beeps and the direction indicators light up for about three seconds.

EMERGENCY OPENING

The luggage compartment lock is released by a servocontrol when opening the bonnet from inside or using the key. However, it is always possible to open the luggage compartment, even in case of insufficient battery power: just rotate the key wider and simultaneously press the bonnet edge by the hand.

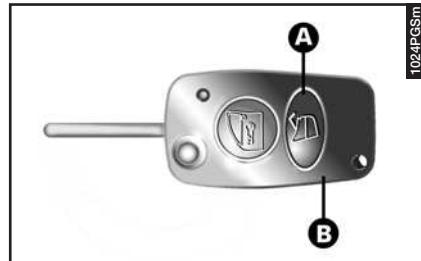


fig. 137

IMPORTANT Apply a moderate pressure only on the bonnet edge, immediately above the lock.

LIFTING AND CLOSING

Lifting the boot lid is made easier by the action of the gas springs (**B**-fig. 138).



The gas springs are calibrated to guarantee correct operation with loading specified by the manufacturer. Arbitrary additions to the boot lid (spoiler etc.) may affect its operation and safety.

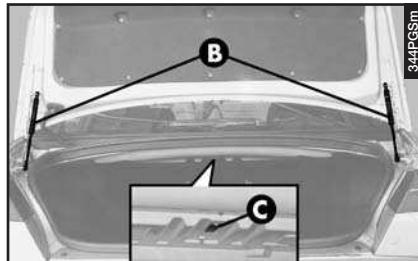


fig. 138

When the boot is opened the light (**C**-fig. 138) will come on. This light will go out again when the boot is closed.

In order to close, lower the bonnet by the handle (**A**-fig. 139) on the lining and press next to the lock till it clicks into the right position.

Leaving the boot open, the light goes out automatically after a few minutes. To turn it on again, open the boot and close it again.

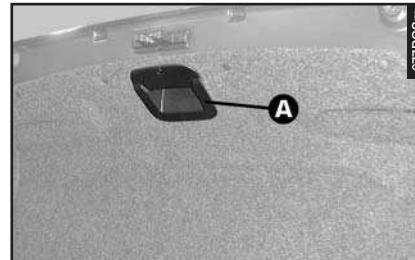


fig. 139

SECURING THE LOAD

The loads carried may be blocked with straps hooked to the special rings in the boot corners (fig. 140). The rings also serve to secure the luggage retaining net (available on request c/o Alfa Romeo Authorized Services).

IMPORTANT Travelling at night with a load in the boot it is necessary to adjust the height of the low beam headlights (see next paragraph "Headlights" in this chapter). For correct use of the aiming device, also make sure that the load does not exceed the values given in the same paragraph.

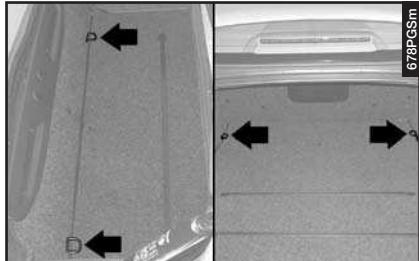


fig. 140



BONNET

The lever used to open the bonnet is located under the left end of the dashboard.

To open:

- Pull the lever (A-fig. 141) until the bonnet clicks open.

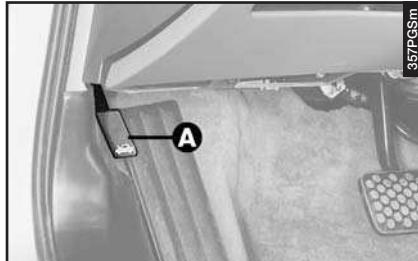


fig. 141

- Raise the safety lever upwards (**B**-fig. 142).
- Raise the bonnet.



WARNING

DANGER-SERIOUS INJURY. When carrying out checks or maintenance operations in the engine compartment, take special care not to bump the head on the raised bonnet.

IMPORTANT Bonnet raising is aided by two gas springs. Do not tamper with these springs and always accompany the bonnet while raising it.

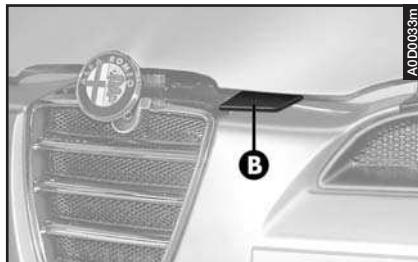


fig. 142

To close:

- Lower the bonnet to approx. 20 cm from the engine bay, then let it drop. Try lifting it to make sure that it is shut completely and not simply caught in the safety position.

If the bonnet does not close properly do not push it down but open it again and repeat the above procedure.



WARNING

For safety reasons the bonnet shall always be perfectly closed when travelling. Always check for proper bonnet locking. If the bonnet is left inadvertently open, stop the car immediately and close the bonnet.

HEADLIGHTS

IMPORTANT On the inside surface of the headlight there could appear a slight coat of fogging; this does not show a defect, since it is a natural occurrence due to low temperature and to the degree of humidity in the air; it will soon disappear as soon as the lights are turned on. The presence of drops inside the headlight shows water seepage, refer to the Alfa Romeo Dealership.

GAS DISCHARGE HEADLIGHTS

(optional for versions/markets where applicable)

Gas discharge headlights (xenon) work with a voltaic arc, in an atmosphere saturated with pressurised xenon gas, instead of the incandescent filament.

The lighting produced is remarkably higher than that of the conventional light in both terms of the quality of the light (lighter) and of the amplitude and position of the lit area.

The advantages offered by better lighting are noted (due to less sight fatigue and better orientation capability of the driver, thus of travelling safety) especially in bad weather, fog and/or insufficient signs, because of the higher lighting of the side beams which are normally shaded.

The heavy increase of lighting in the side beams considerably increases driving safety because it allows the driver to better see other users at the sides of the road (pedestrians, cyclists and motorcyclists).

Very high voltage is needed to trigger the voltaic arc, after which the supply can be at low voltage.

The headlights reach their maximum intensity after about 15 seconds from switching on.

The high luminosity produced by this type of headlight calls for the use of an automatic system to keep the headlight beam aiming constant and prevent dazzling other vehicles when braking, accelerating and carrying loads.

The electromechanical system for automatic constant beam aiming makes the headlight aiming device superfluous.

Xenon lights are very long-lasting and failure is unlikely.



WARNING

If necessary, have the system checked and any repairs done only by Authorized Alfa Romeo Services.

AIMING LOW BEAM HEADLAMPS FOR LEFT/RIGHT CIRCULATION

(only for versions with gas discharge headlamps)

On cars fitted with gas discharge headlamps (xenon bulbs) (optional for versions/markets where applicable) with high lighting power, when passing from a country with right circulation to one with left circulation or vice versa it is necessary to change the aiming of the low beams, to optimise lighting of the edge of the road and avoid glaring vehicles met.

IMPORTANT Contact Alfa Romeo Authorised Services to have low beam headlamps correctly adjusted.



WARNING

When returning to the country of origin, remember to change the low beam aiming again.

BEAM AIMING

(excluding versions with gas discharge headlights)

The adjustment of the headlights is vital to your safety and comfort and to that of other road users.

The adjustment of the headlights is also governed by precise regulations.

Contact Alfa Romeo Authorized Services to have the headlights correctly adjusted.

ADJUSTING THE FRONT FOGLIGHTS (fig. 143)

To adjust the height of the beam of the front foglight adjust screw (**A**).



To have the position checked and if necessary adjusted, contact Alfa Romeo Authorized Services.

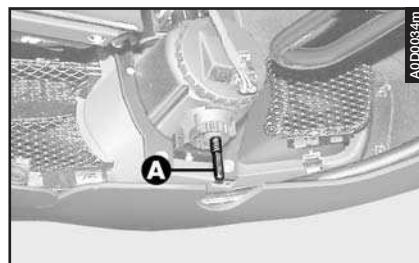


fig. 143

ENGINE CONTROL SYSTEM (EOBD)

(versions in compliance with Directive 98/69/EC — EURO3 or Directive 2001/1/EC level B — EURO4)

The EOBD (European On Board Diagnosis) system fitted on the car conforms with the 98/69/EC (EURO3) Directive for 2.0 T.SPARK, 2.5 V6 24V, 3.0 V6 24V (Sportronic), JTD, JTD 20V Multijet and JTD 20V Multijet (Sportronic) versions and with the 2001/1/EC level B (EURO4) Directive for 3.2 V6 24V version.

This system continuously monitors the components of the vehicle related to emissions; it also indicates, when the  warning light comes on on the instrument panel, that the components in question are in poor condition.

The objective is the following:

- to keep under control the efficiency of the system;
- to indicate when a malfunction causes an increase in the emissions beyond the threshold established by European regulations;
- to indicate the need to replace the deteriorated components.

The system also has a diagnostic connector, which can be interfaced with adequate instruments, that enables the error codes stored in the control unit to be read, together with a series of specific parameters concerning the operation and diagnosis of the engine.



If, when the ignition key is turned to MAR, the  warning light does not come on or if, when driving, it lights up and emits a fixed light or a flashing one, contact an Alfa Romeo Authorized Service Station as soon as possible.

IMPORTANT After the problem has been resolved, to completely check the system, the Alfa Romeo Authorized Service Station must carry out tests on a test bench and, if necessary, road tests that could be long.

ABS

The car is fitted with an ABS system which prevents wheel lock when braking, better exploits wheel grip and keeps the vehicle controllable within the limits of the available grip also during emergency braking.

The driver can feel that the ABS is operational by a light pulsing of the brake pedal, accompanied by noise.

This should not be interpreted as malfunctioning of the brakes, but it is the signal to the driver that the ABS system is working: it is the warning that the car is travelling at the limit of grip and that it is therefore necessary to adapt the speed to the type of road on which you are travelling.

The ABS system is an additional part of the basic braking system; in the event of a fault it is disabled, leaving the braking system in the same conditions as a car without ABS.

In the event of a failure, though being unable to rely on the antilock effect, there is absolutely no adverse effect on vehicle braking performance in terms of braking capacity.

If you have never used a car with ABS before, you are advised to learn how to use it with a few preliminary trials on a slippery surface, naturally under safety conditions and fully adhering to the Highway Code of the country concerned. You are also advised to carefully read the following information.

The advantage of the ABS compared with the conventional system is that it makes it possible to maintain maximum vehicle handling performance also in the case of hard braking under grip limit conditions, avoiding wheel lock.

Do not however expect the braking distance always to be reduced with the ABS system: for example, on soft surfaces such as gravel or fresh snow on slippery surfaces, the distance might increase.

In order to be able to exploit as far as possible the possibility of the antilock system in the case of need, it is wise to follow a few pieces of advice.



WARNING

The ABS exploits the available grip in full, but it cannot increase it; therefore caution is required on slippery surfaces, without running un-necessary risks.

**WARNING**

If the ABS cuts in, it means that the grip limit between the tyres and the road surface has been reached: it is necessary to slow down and adapt driving to the grip available.

**WARNING**

In the event of a system fault, with lighting up of the (ABS) warning light, have the vehicle checked immediately by Authorized Alfa Romeo Services, driving slowly to be able to regain full system performance.

Braking on corners always requires the utmost caution, even with the help of the ABS.

The most important piece of advice however, is the following:

**WARNING**

When the ABS cuts in and you feel the pedal pulse, do not reduce the pressure, but keep the brake pedal firmly pressed with no fear; this way you will stop in the shortest space possible, compatibly with the conditions of the road surface.

Following these instructions you will be in a condition to obtain peak braking performance at all times.

WARNING Cars fitted with ABS must only be fitted with wheel rims, tyres and brake linings of the type and brand approved by the Manufacturer.

The braking system is completed by the EBD (Electronic Brake Distributor) which distributes the braking action through the ABS control unit and sensors.

**WARNING**

The car is fitted with an electronic brake distributor (EBD). If the (ABS) and (O) warning lights come on at the same time when the engine is running, there is an EBD system fault; in this case, violent braking may lock the rear wheels too early, with the possibility of skidding. Drive extremely carefully to the nearest Authorized Alfa Romeo Services to have the system checked over.



WARNING

The turning on of the (ABS) warning light with the engine running normally indicates an ABS system fault. In this case the braking system preserves its effectiveness, without however making use of the antilock device. Under these circumstances, the EBD system may fail to give top performance. In this case, too, you are recommended to contact Authorized Alfa Romeo Services immediately driving in such a way as to avoid abrupt braking, to have the system checked.



WARNING

If the (!) low brake fluid level warning light comes on, stop the car immediately and contact the nearest Authorized Alfa Romeo Services. Indeed, any leak of fluid from the hydraulic system compromises the effectiveness of both the conventional brake system and the system with antilock system.

BRAKE ASSIST (Brake assist in an emergency)

This system, that cannot be cut out, recognizes emergency braking on the ground of the brake pedal operation speed and allows to speed up the braking action.

On versions fitted with VDC system, Brake Assist is deactivated in the event of VDC system failure (indicated by the switching on of the relevant warning light).

VDC AND ASR SYSTEMS

(on request for versions/markets where applicable)

VDC SYSTEM (VEHICLE DYNAMICS CONTROL): GENERAL

The VDC is an electronic vehicle stability control system which, acting on the torque and braking the wheels in a differentiated manner, helps to bring the car back to the correct course in the event of loss of grip.

While travelling the car is subjected to lateral and longitudinal forces that may be controlled by the driver up to when the tyres offer adequate road-holding; when this falls below the minimum level, the car starts to deviate from the course required by the driver.

Above all on rough surfaces (such as cobbles, or due to the presence of water, ice or soil), changes in speed (when accelerating or braking) and/or course (bends or the need to avoid obstacles) can cause the tyres to lose grip.

When the sensors detect the conditions that would lead to skidding, the VDC system acts on the engine and brakes generating a stabilising torque.



WARNING

The system performance levels, in terms of active safety, should not induce the driver to run pointless and unjustified risks. Driving conduct should always be suited to the conditions of the road surface, vision and traffic. The responsibility for road safety is always and anyway the vehicle driver's concern.

The VDC system helps the driver to keep control of the car in the event of loss of tyre grip.

The forces induced by the VDC system to control the lack of stability of the car always and anyway depend on the grip between the tyre and the road surface.

VDC SYSTEM OPERATION

The VDC system turns on automatically when the car is started and cannot be switched off. It is however possible to cut off operation of the ASR system pressing the corresponding button on the centre console.

The main components of the VDC system are:

- an electronic control unit which processes the signals received from the various sensors and brings about the most appropriate strategy;
- a sensor that detects the position of the steering wheel;
- four sensors that detect the rotation speed of each wheel;
- a sensor that detects rotation of the car around the vertical axis;
- a sensor that detects lateral acceleration (centrifugal force).

The heart of the VDC system is a sensor that originates from the field of aeronautics, which detects rotations of the car around its vertical axis. The centrifugal forces generated when the car runs on a bend are detected by a highly sensitive, lateral acceleration sensor.

The stabilising action of the VDC system is based on calculations made by the system's electronic control unit which processes the signals received from the steering wheel rotation, lateral acceleration and individual wheel rotation sensors. These signals allow the control unit to recognise the manoeuvre the driver intends to do when turning the steering wheel.

The control unit processes the information received from the sensors and is therefore capable of detecting the position of the car and comparing it with the trajectory the driver would like to follow instant by instant. In the event of a discrepancy, the control unit chooses and commands the most suitable action to bring the car back to the required course within a fraction of a second: braking one or more wheels at a different braking force and, if necessary it reduces the power transmitted by the engine.

The corrective actions are changed and controlled continuously until the car returns to the required course.

The action of the VDC system considerably increases the active safety of the vehicle under many critical situations and it is particularly useful also when the road surface grip conditions change.

ASR FUNCTION (ANTISLIP REGULATION): GENERAL

The ASR system integrates the VDC system controlling the vehicle drive and coming into operation automatically each time one or both driving wheels skid.

Two different control systems are activated, depending on the skidding conditions:

— If skidding concerns both driving wheels, because it is caused by the excessive power transmitted, the ASR system cuts in reducing the power transmitted by the engine.

— If skidding concerns only one driving wheel, the ASR system cuts in automatically braking the skidding wheel, with an effect similar to that of a self-locking differential.



WARNING

For the VDC, ASR and ABS systems to work correctly, the tyres must be of the same brand and type on all wheels, in perfect conditions and above all of the specified type, brand and size.

The action of the ASR system is particularly helpful under the following conditions:

- Skidding of the inner wheel on a bend, due to the effect of the dynamic changes of the load or over-accelerating.
- Excessive power transmitted to the wheels, also in relation to the conditions of the road surface.
- Acceleration on slippery, snowy or icy surfaces.
- In the case of loss of grip on a wet surface (aquaplaning).



fig. 144

TURNING ON THE ASR FUNCTION

The ASR function turns on automatically each time the engine is started.

When travelling it is possible to switch the system off and on again pressing the switch (**A-fig. 144**) on the centre console.

The warning light (**B-fig. 144**) on the switch turns on to indicate that the system is off.

If the function is turned off while travelling, it will turn on again automatically the next time the engine is started.

IMPORTANT When driving on snow, with snow chains fitted, it may be helpful to switch off the ASR function: in these conditions in fact, skidding of the driving wheels when moving off helps to obtain better traction.

CUTTING IN OF THE VDC SYSTEM

The cutting in of the VDC system is indicated by the flashing of the warning light (**A-fig. 145**) on the instrument cluster, to inform the driver that the car is in critical conditions of stability and grip.

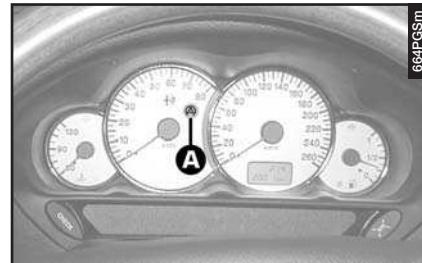


fig. 145

VDC AND ASR SYSTEM FAILURE WARNINGS

In the event of failures the VDC and ASR systems switch off automatically and the warning light (**A-fig. 145**) on the instrument cluster turn on glowing steadily.

The table below summarises the indications given by the warning lights in the different operating conditions.

In the event of a failure to the VDC or ASR systems, the car behaves like the version not equipped with these systems: at all events, you are recommended to contact Authorised Alfa Romeo Services as soon as possible.

Conditions of use or fault	System status	ASR warning light on button	VDC warning light on cluster	ABS warning light on cluster	EBD warning light on cluster
Engine starting (turning key to MAR)	Lamp check	On for about 4 seconds	On for about 4 seconds	On for about 4 seconds	On for about 4 seconds
Driving in Normal Conditions	ASR on	ASR enabled VDC enabled	Off	Off	Off
	ASR off Manually	ASR disabled VDC enabled	On	Off	Off
Driving in Conditions that might cause skidding	ASR on	ASR active VDC active	Off	Flashing	Off
	ASR off Manually	ASR disabled VDC active	On	Flashing	Off
ASR system fault	ASR disabled	On	On	Off	Off
Fault VDC	VDC disabled	Off	On	Off	Off
Fault VDC/ASR	VDC/ASR disabled	On	On	Off	Off
Fault ABS	ABS/VDC/ASR disabled	On	On	On	Off
Fault EBD	ABS/VDC/ASR/EBD disabled	On	On	On	On

SOUND SYSTEM

The vehicle is fitted with a complete radio system.

The radio is integrated in the Alfa Romeo I.C.S. system and, optional for versions/markets where applicable, it can be integrated with the DSP (Digital Sound Processing System) and Compact Disc player.

The features of the radio, DSP (Digital Sound Programming) system and Compact Disc player are described in the Alfa Romeo I.C.S. supplement enclosed herewith.

FRONT SPEAKERS (fig. 146)

The front speakers are housed in the front door panels

A - Tweeter

B - Woofer.

REAR SPEAKERS (fig. 147)

The speakers are housed on the rear door panels.

A - Tweeter

B - Woofer.

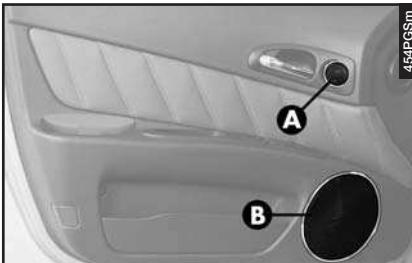


fig. 146

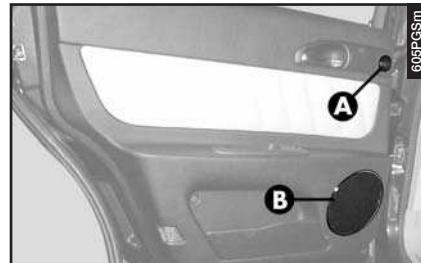


fig. 147

SPEAKERS ON PARCEL SHELF

(**fig. 148**) (optional for versions/markets where applicable)

When the complete sound system (DSP - Digital Sound Processing system and Compact Disc player) is required the car is supplied with a parcel shelf fitted with speakers housed at the ends of the parcel shelf.



fig. 148

COMPACT DISC PLAYER

(**fig. 149**) (optional for versions/markets where applicable)

The Compact Disc player is housed in the special compartment (**A**) on the left-hand side of the boot, under the CD player for the Alfa Romeo I.C.S. navigation system.

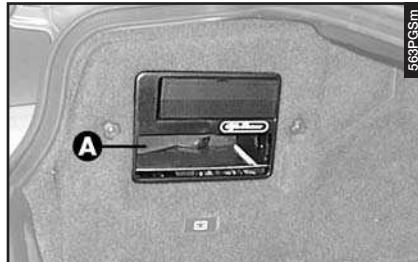


fig. 149

REFUELING

PETROL ENGINES

In order to prevent the vehicle being



The anti-pollution devices present on the vehicle impose the use of four-star unleaded fuel with an octane number (R.O.N.) above 95.

Filled with leaded petrol the diameter of the filler neck is smaller than the nozzle used on pumps delivering leaded petrol.



If the catalyst is not working properly harmful emissions reach the exhaust resulting in environment pollution.



Under no circumstances should conventional leaded petrol be used as this would irreparably damage the catalyst. If the tank is accidentally filled with leaded fuel, even in minute quantity, DO NOT START THE ENGINE. Do not attempt to dilute the petrol with lead free fuel. Drain the entire fuel circuit and tank.

DIESEL ENGINES



The car must be refuelled only with fuel oil for motor vehicles, in conformity with European specification EN590. The use of other products or mixtures may damage the engine irreparably resulting in invalidation of the warranty for the damage caused. If another type of fuel is accidentally added to the fuel tank do not start the engine. Drain the tank. If the engine has been run even for an extremely brief period the supply circuit must be drained together with the tank.

If these precautions are not observed the engine will suffer serious damage.

Fill the fuel tank before it is completely empty in order to prevent air from getting into the circuit.

During cold weather (external temperature below -10°C) the additive **DIESEL MIX** should be used especially if the vehicle is lying inactive for long periods. This product should be mixed with the diesel fuel in the quantities specified on the bottle.

FUEL CAP

The fuel cap is released from inside the car pushing the button (**A**-fig. 150) with the engine off.

When refuelling the cap can be hung to the flap (**A**-fig. 151) using the hook provided.

To avoid misplacing it when refuelling, the cap is connected to the filler neck with a cord.



fig. 150

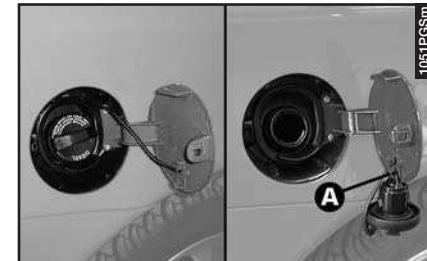
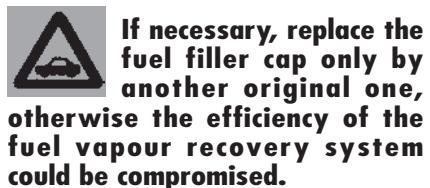


fig. 151



IMPORTANT The fuel tank is sealed hermetically and pressure may build up inside. Any noise of rushing air when the cap is removed is perfectly normal.

EMERGENCY FLAP OPENING DEVICE

If the electrical control fails to work it is still possible to open the flap by pulling the cord (**A**-fig. 152) on the right-hand side of the luggage compartment.

Access to the cord is gained opening the lid (**B**).

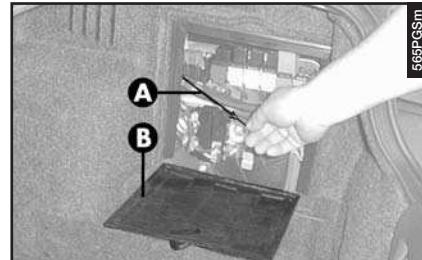


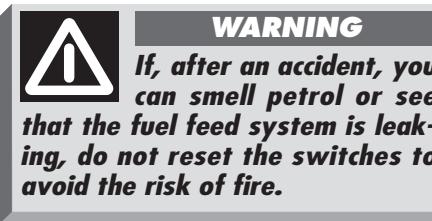
fig. 152

AUTOMATIC FUEL CUT-OFF SWITCH

The car is equipped with a safety switch which is triggered in the event of a crash to interrupt the flow of fuel and stopping the engine as a consequence. This also prevents fuel leaks due to fuel lines breaking.

After the crash, remember to turn the ignition key to **STOP** to prevent the battery running down.

If no leaks or damages to electric devices (e.g.: headlights) are found and the car can be restarted, reactivate the fuel cut-off switch. Follow the instructions given below.



DOOR UNLOCKING IN CASE OF ACCIDENT

In case of accident with activation of the inertial switch as a consequence, door locks are automatically unlocked to let rescuers reach the passenger compartment from the outside.



WARNING

Anyway, door opening from the outside depends on their conditions after the accident: if a door is distorted it might be impossible to open it even if it is unlocked. In this case try to open the other car doors.

RESETTING THE FUEL CUT-OFF SWITCH

To reactivate the automatic fuel cut-off switch, press button (fig. 153) under the driver's seat.



WARNING

Before resetting the fuel cut-off switch, carefully check for any fuel leaks or damages to the car electric devices (e.g.: headlights).

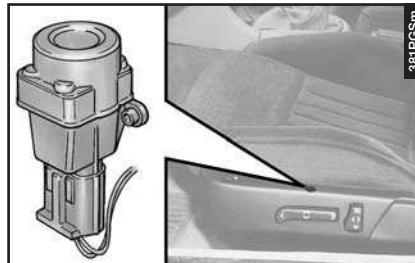


fig. 153

ENVIRONMENTAL PROTECTION

The design and construction of the vehicle have not only been developed with the traditional aspects of performance and safety in mind but also take into account the increasingly pressing problems tied to protecting the environment.

The choice of materials, techniques and particular devices are the result of work which has made it possible to drastically reduce the harmful effects on the environment and guarantee respect for the severest international norms.

USE OF NON-TOXIC MATERIALS

None of the components of the vehicle contain asbestos. The padding and the climate control system do not contain CFCs which are held to be responsible for the destruction of the ozone layer.

The colouring agents and the corrosion inhibitors used on the nuts, screws and bolts do not contain cadmium or chrome which could pollute the atmosphere or water tables.

EMISSION REDUCING DEVICES

(Petrol engines)

Catalysts

The exhaust system is fitted with a system of catalysts formed of precious metal alloys housed in a stainless steel container which withstand high operating temperatures.

The catalysts convert unburned hydrocarbons, carbon monoxide and nitric oxides in the exhaust gas (even in minimal quantity, thanks to the electronic ignition and injection systems) into non polluting compounds.



WARNING

Due to the high temperature reached while the catalysts are working, it is advisable not to park the car over inflammable material (paper, fuel oils, grass, dry leaves, etc.).

Lambda sensors

The lambda sensors detect the oxygen content in the exhaust gas.

The signals transmitted by the Lambda sensors are used by the electronic control unit of the injection-ignition system to adjust the air-fuel mixture.

Anti-evaporation system

(only petrol versions)

As it is impossible, even when the engine is switched off, to prevent the formation of fuel vapours, a system has been devised which traps them in a special carbon container.

During operation of the engine these vapours are withdrawn and sent to combustion.

EMISSION REDUCING DEVICES

(diesel engines)

Oxidising catalytic converter

Converts the polluting substance in the exhaust gases (carbon monoxide, unburnt hydrocarbons and particulate), thus reducing the fumes and smell that are typical of diesel engines.

The catalytic converter consists of a stainless steel case that houses a ceramic honeycomb coated with noble metal used as a catalyst.

Exhaust gas recirculation system (E.G.R.)

This system recycles, i.e. re-uses, a varying percentage of the exhaust gases depending on engine operating conditions.

It is used, when necessary, to control nitric oxides.

GETTING THE BEST OUT OF YOUR CAR

Reading this chapter and following the advice, recommendations and specification given in it will make it possible for you to get the best from your vehicle in terms of safety, performance, reliability and length of life.

This chapter mostly deals with procedures of a general nature.

However, in some cases, it may deal with exclusive and particular operations.

Pay close attention therefore to the information given as this will allow you to exploit your vehicle to the full.

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STARTING THE ENGINE

IMPORTANT The car is fitted with an electronic engine lock device. If the engine fails to start see "The Alfa Romeo CODE system".



In addition to the notes and specifications given below we recommend that, during the initial period, you do not drive to full vehicle performance (for example excessive acceleration, long journeys at top speed, hard braking etc.).



WARNING

Running the engine in confined areas is extremely dangerous. The engine consumes oxygen and produces carbon monoxide which is a highly toxic and lethal gas.

The ignition switch is fitted with a safety device which obliges the driver to return the ignition key to the **STOP** position before repeating the starting operation if the engine does not start immediately.

Similarly, when the engine is running, the device prevents the key being moved from **MAR** to the **AVV** position.

PROCEDURE FOR PETROL ENGINES

With cold engine:

- 1) Engage the handbrake.
- 2) Ensure that the systems and electrical devices, especially if they absorb high quantities of energy (e.g. heated rear windscreen), are switched off.
— Versions with mechanical transmission: set the gearshift lever to neutral and fully depress the clutch without pressing the accelerator.
— Versions with automatic electronic transmission (Sportronic): make sure that the gearshift lever is at **P** and keep the brake pedal fully depressed without pressing the accelerator.
- 3) Turn the ignition key to the **AVV** position releasing it as soon as the engine starts.
- 4) If the engine does not start immediately, return the key to the **STOP** position and repeat the procedure, slightly pressing the accelerator pedal without pumping it.



Never leave the ignition key in the **MAR position when the engine is switched off.**

- 5) If the engine does not start immediately, return the key to the **STOP** position and repeat the operation

With hot engine:

- 1) Engage the handbrake.
- 2) Ensure that the systems and electrical devices, especially if they absorb high quantities of energy (e.g. heated rear windscreen), are switched off.

- 3) — Versions with mechanical transmission: set the gearshift lever to neutral and fully depress the clutch without pressing the accelerator.

- Versions with automatic electronic transmission (Sportronic): make sure that the gearshift lever is at **P** and keep the brake pedal fully depressed without pressing the accelerator.

- 4) Turn the ignition key to the **AVV** position releasing it as soon as the engine starts.

- 5) If the engine does not start immediately, return the key to the **STOP** position and repeat the procedure, slightly pressing the accelerator pedal without pumping it.

IMPORTANT If it is difficult to start the engine do not insist with extended attempts which may damage the catalyzer but contact Alfa Romeo Authorized Services.

PROCEDURE FOR DIESEL VERSIONS

- 1) Engage the handbrake.
- 2) — Versions with mechanical transmission: set the gearshift lever to neutral and fully depress the clutch without pressing the accelerator.
 - Versions with automatic electronic transmission (Sprintronic): make sure that the gearshift lever is at **P** and keep the brake pedal fully depressed without pressing the accelerator.
- 3) Turn the ignition key to the **MAR** position. the **W** warning light on the instrument cluster will turn on.
- 4) Wait for the **W** warning light to go off, which will depend on how warm the engine is. If the engine is very warm the turning on of the warning light may be so fast as to go by unnoticed.
- 5) Turn the ignition key to **AVV** as soon as the **W** warning light goes off. Waiting too long would make the glow plug heating work pointless.



For versions/markets where applicable the warning light **W flashes for about 30 seconds after starting the engine meaning that there is a fault to the glow plug warming system, in which case, contact Alfa Romeo Authorized Services.**

IMPORTANT The electric devices that absorb much energy (air conditioner, rearscreen heating, etc.) are disengaged automatically during engine starting.

If the engine does not start at the first attempt, move the ignition key back to the **STOP** position before repeating starting.

If starting is difficult (with the Alfa Romeo CODE system efficient), do not insist with prolonged attempts.

Only use an auxiliary battery if it is noted that the cause is due to low charge of vehicle's battery. Never use a battery charger to start the engine (see "If the battery is flat" in the chapter "In an emergency").

WARMING THE ENGINE

- Drive off slowly, at medium revs without accelerating abruptly.
- Do not drive at full performance for the initial kilometres of the journey. Wait until the engine coolant temperature is between 50 and 60°C.

SWITCHING OFF

- Release the accelerator pedal and wait until the engine reaches idle speed.
- Turn the ignition key to the **STOP** position and switch off the engine.

IMPORTANT After a hard journey, it is advisable to allow the engine to "get its breath back" before switching off, running it at idle speed to allow the temperature in the engine compartment to cool down.



For vehicles equipped with turbocharger in particular and for other vehicles in general, revving the engine before switching off should be avoided.

Revving the engine serves no purpose and consumes fuel for no reason. It may also cause damage to the bearings on the rotor.

EMERGENCY STARTING



Do not bump, tow or coast start the vehicle as this would irreparably damage the exhaust gas catalyzer.

Starting with an auxiliary battery

If the engine does not start (with the Alfa Romeo CODE system efficient), use an auxiliary battery as described in the chapter "In an emergency".

SAFE DRIVING

This paragraph supplies suggestions and indications for the correct and safe use of your vehicle in the most common situations.

In addition to this, suggestions are given concerning the main organs which ensure the safety of the vehicle and its passengers.

BEFORE DRIVING OFF

Before driving off, especially before a long journey, the following procedures should be carried out:

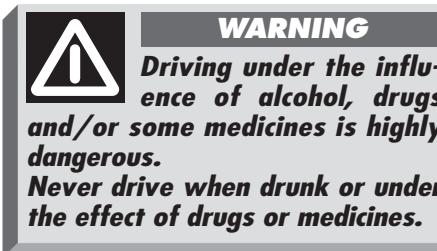
- Adjust the seat, steering wheel and rear-view mirrors in order to obtain a correct position for driving.
- Check that nothing can get under the foot pedals, especially under the brake pedal.
- If children are present in the car adhere to the instructions given in the paragraph "General instructions for the use of the seat belts and child restraint system" in the chapter "Getting to know your car".

- Check the operation of the horn.
- Check the operation and degree of wear of the windscreen wipers.
- Check the operation of the external lights and if necessary, clean the light units.
- Above all when driving at night, check the alignment of headlight beams before starting off.
- Check that no oil or other liquid is leaking out under the car.
- Ensure that luggage is stowed away correctly.
- Ensure that, in addition to yourself, all passengers have fastened their seat belts.
- Ensure that the handbrake is released and that the warning lights on the instrument panel do not indicate a malfunction. To avoid accidental movements of the car, disengage the handbrake keeping the brake pedal pressed.

The following should also be noted:

- Long distances should be tackled when in good health and should where possible be programmed, especially when the roads are busy.

- A light meal containing easily assimilable foods will help keep reflexes ready and aid concentration for a safe journey.



WHEN TRAVELLING

- Driving with care also means being able to predict the actions of other road users, respecting the speed limits and occupying the near-side lane on motorways.

- Use the direction indicators when changing direction.

- Switch on the external lights at sunset.

- Keep a safe distance from the vehicle in front. A "safe" distance will vary according to the speed of the vehicle, weather conditions and road-traffic conditions.

- Never drive with one hand resting on the gear lever. The involuntary movement of the gear lever which this causes, even if slight, will cause avoidable wear to the internal elements of the gearbox.

- Never drive with the gearbox in neutral.

- Do not drive with your foot resting on the clutch pedal as this habit leads to rapid wearing of the clutch.

- Do not drive for long periods without a break. During a break get out of the vehicle and move around a bit to shake off drowsiness.

- Ensure that the air in the vehicle is changed constantly using the many possibilities offered by the heating-ventilation and climate control system.



WARNING

Ensure that both yourself and your passengers are wearing their seat belts. Travelling without seat belts greatly increases the risks of serious injury or even death in the event of an accident.

— Do not coast the vehicle down hill with the engine switched off as this eliminates the engine braking effect thus requiring a greater effort on the brake pedal, on the power steering and considerably more effort on the steering wheel.

— If it is necessary to stop the vehicle following a malfunction, park off the road, switch on the hazard warning lights and set up the warning triangle to alert other road users of the presence of your vehicle. At all times comply with the current road traffic regulations.

PARKING

When the vehicle is parked, proceed as follows:

- Switch off the engine.
- Engage the handbrake.
- Engage first gear if parking the car uphill or reverse if parking the car on a sloping road. On cars with automatic gearbox set the gear lever to P.
- Turn the front wheels so that the vehicle will immediately come to a halt if the handbrake slips.



To avoid useless consumption of power and possible draining of the battery, never leave the ignition key in the MAR position when the engine is not running.



WARNING

Never leave children unattended in the vehicle. Always remove the key from the ignition when leaving the vehicle and take it with you.

NIGHT DRIVING

Night driving involves a greater degree of concentration, both physical and nervous. Some suggestions concerning night driving follow:

— Drive with particular care, reducing speed if necessary especially on unlit roads.

— Maintain a greater distance from the vehicle in front than during the day as it is more difficult to judge the speed of a vehicle when only the lights can be seen.

— If you become drowsy stop the car and rest. Continuing the journey when sleepy is dangerous for yourself and for others.

— Ensure that the headlights are correctly aligned: if they are too low visibility is reduced and if they are too high they may cause disturbance to other users.

— Use the main-beam outside built-up areas and only when you are certain that other drivers are not disturbed by their use.

— When meeting vehicles coming in the opposite direction, switch off the main-beam and drive with the dipped-beam headlights on.

— Keep the headlights and light units clean at all times.

DRIVING UNDER ADVERSE WEATHER CONDITIONS

Rain and fog can be extremely dangerous if the style of driving is not adapted to suit these conditions. Some suggestions are given below:

- if the road is wet, the friction between wheel and asphalt is greatly reduced thus increasing the stopping distance and decreasing road holding when cornering.

Reduce speed and keep further back from the vehicle in front.

- Heavy rain and fog reduce visibility. Headlights should be switched on as the road traffic laws and common sense dictate, above all to render yourself visible to others.

- Do not drive over puddles or flooded roads at high speed as the aquaplaning phenomenon may cause you to lose control over the vehicle.

- If visibility is already reduced prevent it from worsening by ensuring that the windows do not steam up. Use the heating-ventilation controls as indicated in the chapter "Know your vehicle".

- Check the condition of the windscreen wiper blades.

- If fog is very thick avoid travelling where possible. If travelling cannot be avoided drive with extreme care and moderate your speed. Avoid overtaking.

- If the vehicle is forced to stop owing to a malfunction or zero visibility conditions, pull off the road, switch on the hazard warning lights and if possible, the dipped-beam headlights.

MOUNTAIN DRIVING

Mountain driving requires a greater degree of concentration. Some practical hints follow:

- Before driving off check the level of fluids (engine oil, brakes, coolant) and the state of the tyres.

- When travelling down hill use the engine braking by engaging lower gears to prevent the brakes from overheating.

- Never coast downhill with the engine off or in neutral and especially not with the ignition key removed.

- Drive at a moderate speed and avoid cutting corners.

- Remember that overtaking uphill is slower and therefore requires a greater length of clear road. If you are being overtaken on a hill move over to enable the other vehicle to pass in safety.

WINTER DRIVING

If the temperature falls below 0°C or in the presence of snow or ice the following recommendations should be followed:

- Before driving off check that the windscreen wipers are not frozen to the windscreen.

- Remove the snow from the air intake (grille) at the base of the windscreen.

- Do not stop long on deep snow with the engine running: the snow might divert the exhaust gas carbon monoxide into the passenger compartment.

- Ensure that brakes and tyres are in perfect working order.

- Ensure that the detergent liquid located in the windscreen/headlight washers has been topped up with anti-freeze and anti-scale additives.

- Use engine braking where possible and avoid abrupt braking.

— During cold weather even apparently dry roads may be covered with occasional patches of ice. Pay great attention therefore when driving on roads which are in the shade, or where rocks or trees line the road and on which ice may persist.

IMPORTANT To avoid damaging tyres do not drive on bare patches of asphalt with snow chains fitted to the vehicle. In extreme cases proceed slowly and remove the chains as soon as possible. When driving on snow with snow chains fitted, it might be helpful to turn off the ASR function of the VDC system (if present): in fact, in these conditions, skidding of the driving wheels when moving off makes it possible to obtain higher traction.

BRAKES

An efficient braking system is vital to the safety of the vehicle and its passengers.

To use the brakes correctly and to improve their efficiency and limit wear the following recommendations should be followed:

— Do not drive with your foot resting on the brake pedal.

— Ensure that the brake pedal is not blocked by the mat or other objects.

— Check the efficiency of the braking system especially before long journeys.

— Check the handbrake and brake fluid minimum level warning light (①) on the instrument panel. If the (②) warning light comes on and stays on when the vehicle is travelling check that the handbrake is not engaged. If it is not, stop the vehicle immediately and check the level of the brake fluid. If the level is low the anomaly affecting the circuit should be rectified immediately. If the (③) warning light comes on when the brake pedal is pressed, this means that the front brake pads have reached the minimum permitted thickness. Have them replaced as soon as possible by Alfa Romeo Authorized Services.

— The brake fluid is hygroscopic (i.e. it absorbs humidity). To prevent the onset of braking anomalies it should therefore be replaced every two years regardless of the kilometres travelled.

SERVO BRAKE

The vehicle is equipped with a servo-braking system (active only when the engine is running). When the engine is stationary a greater effort is required to depress the brake pedal in order to obtain the same braking effect.

ANTI WHEEL-LOCK SYSTEM (ABS)

The vehicle is equipped with an ABS system with electronic braking device (EBD), the following should be heeded:

— A slight pulsing may be felt on the brake pedal caused by the intervention of the ABS system.

— The performance of the system, in terms of active safety, should not induce the driver to take unnecessary and unjustified risks.

— The conduct of the driver must always reflect weather, road and traffic conditions.

— Deceleration always depends on the degree of grip between the tyres and the road surface. Obviously road holding is

greatly reduced when there is ice or snow on the road. Under these conditions the stopping distance is increased despite the use of the ABS system.



WARNING

The ABS system does not dispense the driver from driving carefully, especially when the road is icy, snowed over or wet.



WARNING

The car is fitted with an electronic braking device (EBD). If the (ABS) and (!) warning lights turn on at the same time, this means that there is an EBD system fault; in this case violent braking may be accompanied by early rear wheel locking, with the possibility of skidding. Drive the car extremely carefully to the nearest Authorized Alfa Romeo workshop to have the system checked.



WARNING

The turning on of only the (ABS) warning light with the engine running normally indicates a fault to the ABS system only. In this case the braking system is still efficient, though without the aid of the anti-lock device. Under these conditions performance of the EBD system may be reduced. In this case too, you are advised to go immediately to the nearest Authorized Alfa Romeo workshop, driving in such a way as to avoid sharp braking, to have the system checked over.

BRAKE ASSIST (Brake assist in an emergency)

This system, that cannot be cut out, recognizes emergency braking on the ground of the brake pedal operation speed and allows to speed up the braking action.

On versions fitted with VDC system, Brake Assist is deactivated in the event of VDC system failure (indicated by the switching on of the relevant warning light).

VDC SYSTEM (VEHICLE DYNAMICS CONTROL):

The VDC is an electronic vehicle stability control system which, acting on the torque and braking the wheels in a differentiated manner, helps to bring the car back to the correct course in the event of loss of grip.

When the sensors detect the conditions that would lead to skidding, the VDC system intervenes on the engine and on the brakes producing a stabilising torque.



WARNING

The system performance levels, in terms of active safety, should not induce the driver to run pointless and unjustified risks. Driving conduct should always be suited to the conditions of the road surface, vision and traffic. The responsibility for road safety is always and anyway the vehicle driver's concern.



WARNING

The VDC system helps the driver to keep control of the car in the event of loss of tyre grip.

The forces induced by the VDC system to control the lack of stability of the car always and anyway depend on the grip between the tyre and the road surface.

The VDC system turns on automatically when the car is started and cannot be switched off. It is however possible to cut off operation of the ASR system pressing the corresponding button on the centre console.

ASR FUNCTION (ANTISLIP REGULATION): GENERAL

The ASR system integrates the VDC system controlling the vehicle drive and coming into operation automatically each time one or both driving wheels skid.

POWER STEERING

The hydraulic power steering is only active when the engine is running. If the engine is switched off greater effort will be required to turn the wheel.

As the steering system is a mechanical organ which is closely tied to driving safety, the vehicle should be stopped and Alfa Romeo Authorized Services contacted if an anomaly is detected.

IMPORTANT Keep the steering wheel turned at the end of its stroke, in both directions, only for the strictly indispensable time.

WINDOWS

Do not apply stickers or similar adhesives to the windows as these may distract the driver and block his vision.

WINDSCREEN WIPER BLADES

The windscreen wiper blades should be checked periodically. Dirty or worn blades greatly reduce visibility. The windscreens and windows should be cleaned regularly and grease, dirt and tar removed. In this way the life of blades will be extended considerably.



When changing the wiper blades follow the instructions contained in the package which is available as a spare part and read the indications given in the "Car maintenance" chapter of this booklet.

Before operating the windscreen wipers, remove snow or ice from the windscreens and check that the wiper blade is not frozen to the windscreens. Use an antifreeze product if necessary.

Do not operate the windscreen wipers on dry glass.

WHEELS



WARNING

The jack should only be used when changing a wheel; Do not work under the vehicle when this is only supported using the jack.

The wheels (rims and tyres) installed in the factory are those which are most suited to the characteristics of the vehicle and guarantee the greatest degree of safety and comfort under all normal driving conditions.

Before replacing the rims or tyres installed on your vehicle consult the table indicating the permitted types given in the "Technical specifications" chapter of this manual or contact Alfa Romeo Authorized Services.

The original rim-tyre match should be followed when changing tyres.



WARNING

While the specified dimensions remain unchanged, for travelling safety and correct operation of the VDC, ASR and ABS systems the tyres must absolutely be of the same brand and type on all wheels, in perfect conditions and above all of the specified type and brand.



WARNING

**On cars fitted with tyres 215/55 R16 (*), 225/45 R17, 235/40 R18 and spare wheel with tyre 215/55 R16 (*), since the spare wheel is different from the standard wheels, observe the instructions for use given below.
(*) For versions/markets where applicable tyres 205/55 R16.**

SPARE WHEEL

Cars fitted with steel rims and tyres 215/55 R16 (*) have spare wheel identical with the standard wheels. Cars fitted with aluminium alloy rims and tyres 215/55 R16 (*), 225/45 R17 and 235/40 R18 have the spare wheel with steel rim and tyre 215/55 R16 (*).

(*) For versions/markets where applicable tyres 205/55 R16.

IMPORTANTS (when using a spare wheel different from the other wheels of the car)

- The spare wheel should only be used in an emergency.
- Use of the spare wheel should be kept to a minimum. Do not drive at speeds of over 80 km/h.
- The car will handle differently when the spare wheel is fitted. Avoid sudden acceleration or braking, sharp corners and fast bends.
- Check at regular intervals that spare wheel pressure is equal to 2.7 bar (2.7 kg/cm²).

- Two or more spare wheels should never be used together. Have the wheel changed repaired and refitted as soon as possible.

Rims

The bolts should be tightened to a torque of 86 Nm (8.8 kgm).

Tyres

The tyres installed on the vehicle are of the tubeless type and do not have an inner tube. To obtain the greatest degree of comfort, safety and length of life of the tyres, the following recommendations should be observed.

- With new tyres do not drive at full speed until the first 100 km have been reached.
- Before entering a tight bend, even if the vehicle permits it, reduce speed.
- Avoid sharp acceleration and unnecessary braking.
- Do not travel for long periods at sustained high speed especially on rough roads.

— Have the wheels balanced and the front and rear axles set correctly.

— Avoid hitting the side walls of the tyres, for example when parking.

— Never tamper with the valve on the tyre.

— Do not insert anything between the rim and the tyre.

— If the rim is bent, have it replaced.

— In the event of an abnormal drop in the tyre pressure replace the wheel and have it checked.

— When balancing the wheels use the counterweights which are specifically designed for tubeless tyres. To balance light alloy rims only Alfa Romeo original weights should be used.

— The tyre pressure, including that of the spare wheel must reflect the indications given in the "Technical specifications" of this manual.

— Have the tyres checked periodically to ensure that they are not damaged in any way.

— Second-hand tyres of unknown origin or over 6 years old must only be used in emergencies and with great care.

— Inner tubes must not be fitted to tubeless tyres.

— Avoid parking the vehicle on the edge of a step or other irregularities in the road surface.

— Have the tyre tread checked periodically and replace when the legal minimum is reached.

IMPORTANT Some types of tyres are fitted with wear indicators. As soon as these wear indicators appear on the tyre tread, the tyres must be replaced.

Periodically check that the tyres are not showing signs of irregular tread wear. If they are, contact Alfa Romeo Authorized Services who will eliminate the cause of irregular wear.

Tread wear increases the danger of aquaplaning on wet surfaces.

To ensure uniform wear between the tyres on the front axle and those on the rear axle, the tyres should be switched around every 10,000 - 15,000 km keeping the tyres on the same side of the vehicle to avoid inverting the direction of rotation (**fig. 1**).

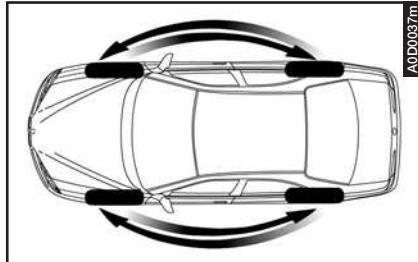
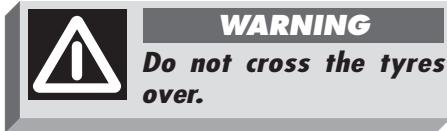


fig. 1

Note for one way tyres: There are arrows on the side of one-way tyres indicating the direction of rotation. When a wheel is changed (for example after a puncture), the direction of the arrow on the spare wheel might not coincide with the direction of rotation of the wheel to be changed. Even in these conditions the tyre is still safe but you are advised to have the tyre repaired and refitted as soon as possible, because top performance is obtained when all the wheels turn in the direction of the arrow.

Tyre pressure and wear

The correct tyre pressure will not only ensure that your tyres last longer but will also make your vehicle safer as they have a direct influence over road holding.

The pressure of each tyre, including that of the spare tyre should be checked regularly and always before a long journey.

The tyres should be checked when cold using a pressure gauge and inflated to the pressure given in the chapter "Technical specifications".

Incorrect tyre pressure causes tyre wear (**fig. 2**):

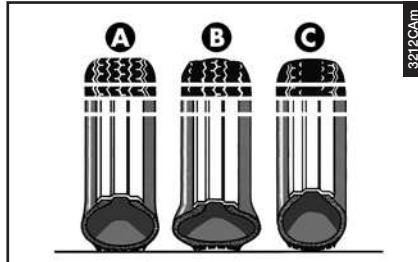


fig. 2

A - Normal pressure: tread uniformly worn.

A correct pressure will ensure a longer life for your tyre and improve performance as the tread will then be working along the entire width of the tread and wear will be more uniform.

These conditions also lead to:

- better road holding of the vehicle
- easier and more precise steering
- reduced fuel consumption due to a lower resistance against the rolling of the tyre.

B - Insufficient pressure: tread worn more along the edge.

Low tyre pressure will cause irregular wearing of the tread (greater along the sides) and cause the tyre to overheat which could lead to parts of the tyre breaking off and cause damage to the shell of the tyre itself.

This type of damage could lead to sudden loss of pressure or cause the tyre to burst.

C - Excessive pressure: tread worn more towards the centre.

Overinflating the tyres leads to:

- irregular wearing of the tread, concentrated more towards the centre of the tread
- a reduction in the level of comfort
- a greater vulnerability of the tyre to knocks

IMPORTANT When the vehicle is being used the pressure increases naturally. In exceptional cases when checking tyre pressure when hot, do not reduce the pressure.

Wheel balancing

Each wheel together with its tyre is balanced, both statically and dynamically, in the factory. When the tyres are replaced the wheels must be rebalanced to prevent vehicle instability, wearing of the components of the steering system and irregular tyre wear.



When balancing wheels made of light alloy only original Alfa Romeo counterweights should be used.

WINTER TYRES

These tyres are specially designed for driving on snow and ice, to be fitted in replacement of those fitted on the car.

Use winter tyres of the same size as the normal tyres provided on the car.

Alfa Romeo Authorised Services will be pleased to advise you on the choice of the car most suited to the use the Customer intends to make of it.

For the type of tyre to be used, inflation pressures and the specifications of winter tyres, follow the instructions given in the "Technical Specifications" chapter.

The winter features of these tyres are reduced considerably when the tread depth is below 4 mm. In this case, they should be replaced.

Due to the winter features, under normal conditions of use or on long motorway journeys, the performance of these tyres is lower than that of normal tyres.

It is necessary therefore to limit their use to the purposes for which they are certified.

WARNING When winter tyres are used with a maximum speed index below the one that can be reached by the vehicle (increased by 5%), place a notice in the passenger compartment, plainly in the driver's view which states the maximum permissible speed of the winter tyres (as per CE Directive).

Fit the same type of tyre on all four wheels (brand and profile) to ensure higher driving safety when braking and good handling.

Remember that it is inappropriate to change the direction of rotation of tyres.

SNOW CHAINS

Use of snow chains should be in compliance with local regulations. Snow chains should only be applied to the drive wheels (front). The sport connotation of the vehicle requires the use of specific types of snow chain. Alfa Romeo Authorized Services should first be contacted before purchasing or using snow chains. Check the tension of the chain after the first few dozen metres have been driven.

IMPORTANT When driving on snow with snow chains fitted, it might be helpful to turn off the ASR function of the VDC system (if present): in fact, in these conditions, skidding of the driving wheels when moving off makes it possible to obtain higher traction.



**Snow chains can be fitted only on wheels with 6.5J x 16" rims and 215/55 R16 tyres or 7.5J x 17" rims and 225/45 R17 tyres.
(*) Pour versions/marché lorsqu'il est prévu pneus 205/55 R16.**



Drive at a moderate speed when snow chains have been fitted to the wheels. Avoid potholes, steps and pavements, and do not drive for long stretches on snow-free roads, otherwise you risk damaging the tyres, suspension and steering.

ECONOMY AND ENVIRONMENT-FRIENDLY DRIVING

How you use and how you drive your vehicle directly influence fuel consumption and environmental impact.

By following a few simple guidelines and without incising on the "liveliness" of the vehicle, it is possible to avoid damaging the environment and often, at the same time, to limit fuel consumption.

The following helpful suggestions will allow you to save in running costs and reduce harmful emissions.

GENERAL CONSIDERATIONS

Vehicle maintenance

The conditions of the vehicle are an important factor which affects fuel consumption as well as driving tranquillity and the life of the car itself. For this reason, care should be given to maintenance, having the checks and adjustments given in the scheduled maintenance programme carried out (see ... spark plugs, idle speed, air/fuel oil filter, timing).

Tyres

Check the tyre pressure at least every 4 weeks: if the pressure is too low, consumption increases as resistance to rolling is higher. It should also be underlined that in these conditions, tyre wear increases resulting in poor handling and lower safety.

Useless loads

Do not overload the boot (especially in town), as this will heavily affect fuel consumption and stability of the vehicle.

Roof rack/ski rack

Remove the roof rack or ski rack immediately after use. These accessories lower air drag and adversely affect consumption levels. For particularly bulky loads the use of a trailer is preferable.

Electric services

Use electric devices only for the necessary time. Rearscreen heating, additional headlights, wipers and the heater fan consume a considerable amount of energy, increasing the need for current higher fuel consumption (up to +25% in the urban cycle).

Climate control system

The climate control system is a further load that weighs considerably on the engine inducing higher consumption levels (on average up to +20%). Outside temperature permitting, preferably use the air vents.

Spoilers

The use of spoilers that have not been certified by Alfa Romeo can adversely affect air drag and fuel consumption.

DRIVING STYLE

Starting

Do not warm the engine stationary at idle speed or high speed: in these conditions the engine warms much more slowly, increasing consumption and emissions. It is therefore advisable to move off immediately and slowly, avoiding high speeds. This will warm up the engine more quickly.

Pointless manoeuvres

Avoid revving the engine when waiting at traffic lights and before switching the engine off. This, like revving before changing gear, serves absolutely no purpose on modern cars and increases consumption and emission levels.

Gearshifting

As soon as the road and traffic conditions permit it, engage a higher gear. The use of a low gear to obtain lively accelerating increases fuel consumption.

In the same way, incorrect use of a gear increases consumption, emission and engine wear.

Top speed

Fuel consumption increases considerably with the speed of the car: it is helpful to observe that passing from 90 to 120 km/h consumption increases by + 30%. Also maintain the most uniform possible speed, avoiding superfluous braking and accelerating which cost fuel while increasing emission levels. You are therefore advised to adopt a "smooth" driving style, trying to anticipate manoeuvres to avoid imminent danger and respect safety distances to avoid having to slow down abruptly.

Acceleration

Violent accelerating bringing the engine to high rpm has a considerable adverse effect on consumption and emission levels; it is wise to accelerate gradually without exceeding the maximum permissible torque.

CONDITIONS OF USE

Cold starting

Brief and frequent cold starts do not allow the engine to reach the optimum operating temperature. This leads to a significant increase in consumption (from +15% up to +30% in the urban cycle) and in the emission of pollutants.

Traffic situations and road conditions

Rather high consumption levels are linked with heavy traffic situations, for example in slow-moving queues with the frequent use of low gears or in big towns with many traffic lights.

Also winding mountain roads and rough roads adversely affect consumption levels.

Halts in the traffic

During prolonged halts (e.g. level crossings) it is advisable to switch the engine off.

PROTECTING EMISSION REDUCING DEVICES

The correct operation of the anti-pollution devices not only guarantees respect for the environment but also has a great influence on vehicle performance.

These devices should be kept in good condition to permit economical and ecological use of your vehicle.

The programmed Maintenance Schedule should be carefully followed.

For petrol engines, only unleaded fuel should be used.



If starting is difficult, do not insist with prolonged attempts. Do not push, tow or coast start the vehicle: these may all damage the catalysts.

Use an auxiliary battery to start the vehicle in an emergency.

If the engine is not "running smoothly" when the vehicle is travelling, reduce the request for performance to a minimum and contact Alfa Romeo Authorized Services as soon as possible.

When the fuel reserve warning light comes on fill up as soon as possible. A low fuel level may cause an irregular supply to the engine with inevitable increase of the exhaust gas temperature.

When travelling downhill for long stretches slightly rev the engine every now and again. This action will extend the life of the catalyzer.

Never run the engine, even as a test, with one or more spark plugs disconnected.



WARNING

During normal operation the catalytic converter reaches high temperatures. Do not therefore park the vehicle over inflammable materials (grass, dry leaves, pine needles etc.): fire hazard. Do not install other heat shields and do not remove the existing ones on the catalyst and on the exhaust pipe. Do not spray anything on the catalyst, lambda sensor and exhaust pipe.



WARNING

The failure to follow these rules may cause a fire hazard.

TOWING TRAILERS

GENERALITIES

The vehicle can be used to tow trailers after a suitable tow hook has been fitted. Alfa Romeo retails a tow hook which fulfils the safety and legal requirements. This tow hook should be fitted by Alfa Romeo Authorized Services which will ensure a better result and avoid problems arising which may jeopardise the body-work warranty cover.



WARNING

Under no circumstances should the hydraulic braking system of the vehicle be tampered with to control the brakes of the trailer.

When hooking up a caravan or trailer check that the maximum towable weights (given in the log book) and the maximum load permitted on the vehicle's tow hook (given on the label applied to the structure of the trailer), are above or equal to the overall weight and loading on the towing eye.



WARNING

The ABS system with which the car is fitted does not control the trailer braking system. Particular care is therefore necessary on slippery surfaces.

The trailer's braking system must be separate from the vehicle's hydraulic system.

The vehicle-trailer match must conform to the specifications of the road-traffic laws.

Towing weight refers to the overall weight of a fully loaded trailer including all accessories and personal belongings. To avoid sanctions the overall weight of a fully loaded trailer should be checked to ensure that it does not exceed the limits given in the log book.

The vertical loading on the ball hook should not in any case exceed the limits specified in the "Technical specifications" section.

WARNINGS AND SUGGESTIONS

Some indications concerning driving with a trailer are given below:

- Install the specific rear-view mirrors as specified by law.
- Remember that when towing a trailer steep inclines are harder to climb.
- When travelling down hill engage a low gear rather than constantly using the brake.
- Drive within the permitted speed limits for vehicles with trailers. In any case the maximum speed should never exceed 100 km/h.

INSTALLING TOW HOOK (fig. 3)

The chart shows the attachment points for fixing the tow hook to the body.

These points must not be changed irrespective of the shape and size of the hook. For mechanical connection the following must be used:

- "ISO 50" 2nd category ball hook (CUNA Table NC 138-40)
- 2nd category ball eyelet model "CUNA 502" (CUNA Table NC 438-40)

The tow hook structure must be fastened in the points shown by the symbol  with a total of 12 M10 screws.

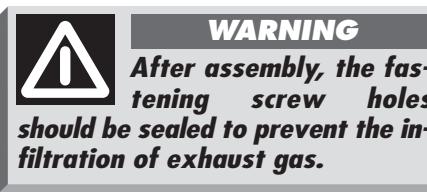
The inner plate (1) should be at least 4 mm thick.

The side plates (2) should be at least 5 mm thick.

The fastening points (3) must be fitted with a spacer with a 25 mm diameter and 6 mm thickness.

IMPORTANT It is compulsory to fasten a label of suitable size and material (clearly visible) at the height of the hook ball with the wording:

MAX. LOAD ON BALL 60 kg.



Do not connect any trailer services (fan, fridge, etc.) to the vehicle's electrical system.

Apart from the electrical branches taken off for the obligatory signalling devices, the vehicle's electrical system can only be connected to the supply cable for an electric brake and to the cable for internal light, though not above 15W, in the trailer.

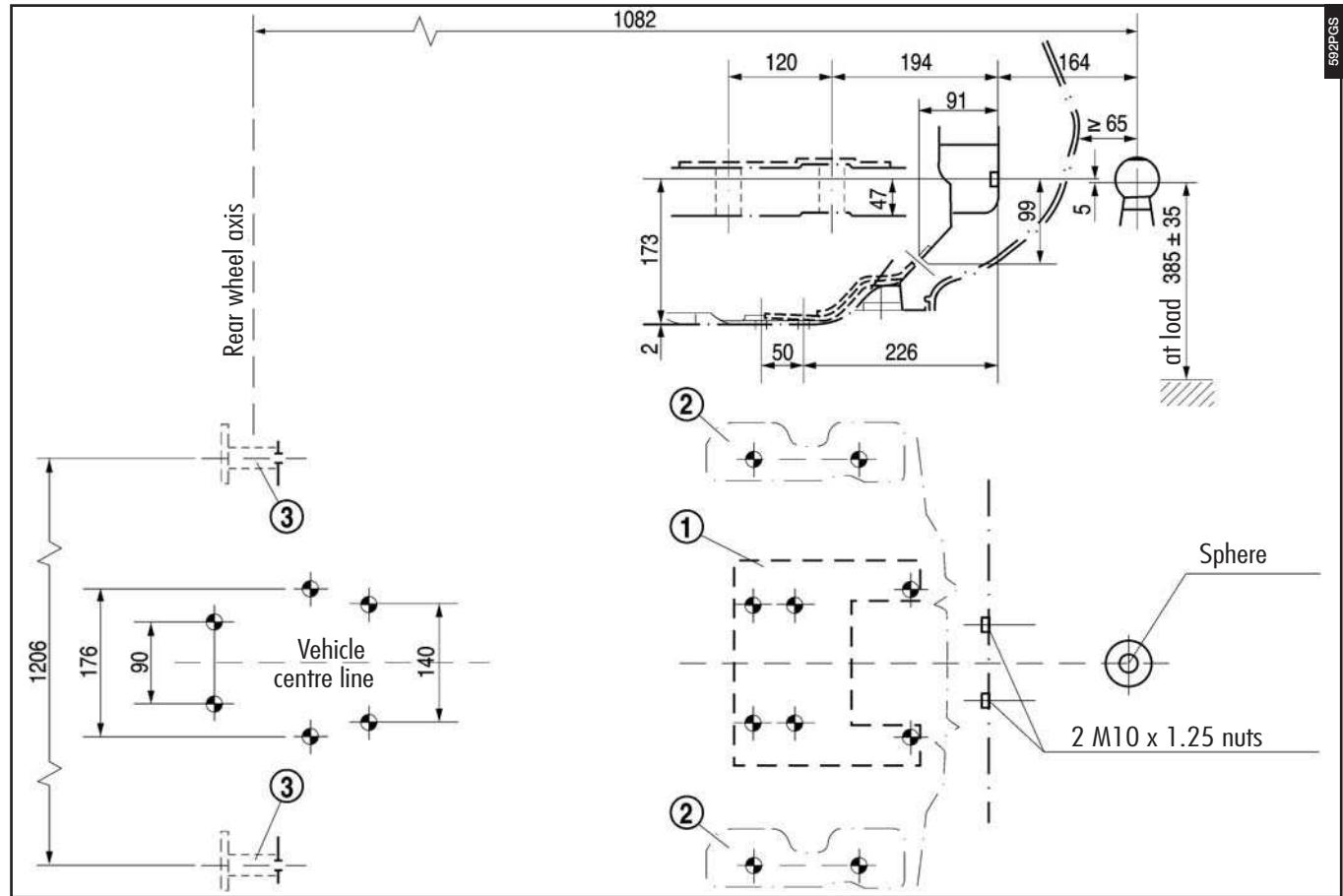
The electric brake must be directly supplied by the battery through a cable with a cross-section of over 2.5 mm².

ELECTRICAL CONNECTIONS

The attachment for the trailer wiring connections are to be applied to the tow hook support in the most suitable position.

For the electrical connections a 13 pole, 12V connection must be used.

For vehicle-trailer electrical connections contact Authorized Alfa Romeo Services.



VEHICLE INACTIVITY

If the vehicle is to be left inactive for long periods the following precautions should be noted:

- House the vehicle under a cover in a dry and possibly ventilated place.
- Engage a gear.
- Release the handbrake.
- Clean and protect the paintwork by applying silicon wax.
- Cover the rubber windscreens wiper blades with talcum powder and raise them off the glass.
- Open the windows slightly.
- Cover the vehicle with a cloth or perforated plastic cover. Do not use compact plastic covers which prevent the humidity on the surface of the vehicle from evaporating.
- Inflate the tyres to a pressure of 0.5 bars above normal. If possible rest the tyres on wooden planks and periodically check the pressure.

— Switch off the alarm system (if fitted) with the remote control, then deactivate it with the emergency key.

— Disconnect the terminals from the battery poles (negative pole first) and check the battery charge. When the vehicle is in storage, this check should be carried out once a month. If the no-load voltage is less than 12.5V, recharge the battery.

REMOVING FROM STORAGE

Before using your vehicle after a long period of inactivity the following operations should first be carried out:

- Do not dust the outside of the vehicle.
- Visually check that there are no leaks (oil, brake and clutch fluid, engine coolant etc.).
- Replace the engine oil and filter.
- Check:
 - Gearbox-differential oil level
 - Brake-clutch fluid level
 - Level of engine coolant fluid.

— Check the air cleaner and replace if necessary.

— Check tyre pressure and ensure that they are not damaged, cracked or cut. If they are they must be replaced.

— Check the state of the drive belts in the engine bay.

— Connect the cables of the battery after checking that the charge is adequate.

— Re-activate the alarm system, if fitted, using the emergency key.

— With the gear lever in neutral start the engine and allow the engine to run for a few seconds whilst repeatedly pumping the clutch pedal.



WARNING

This operation must be performed in the open. The exhaust gases contain carbon monoxide which are highly toxic and lethal.

– Check that the various devices (headlights, direction indicators etc.) are working correctly.

IMPORTANT In order to perform these operations correctly refer to the relative subjects in the chapter "Car maintenance".

ACCESSORIES PURCHASED BY THE OWNER

RADIO TRANSMITTERS AND CELLPHONES

Radio transmitters (e.g. CB radios) cannot be used inside the vehicle, unless you use a separate aerial mounted outside the vehicle.



WARNING

The use of CB radios or similar inside the passenger compartment (without an outside aerial) produces electromagnetic RF fields; if these are amplified by the resonance inside the passenger compartment, they may not only result in a potential health hazard, or poor functioning of the electronic system such as engine control unit, ABS/EBD control units, etc. fitted to the vehicle, but also put the safety of your vehicle in jeopardy.

The transmission and reception efficiency of this equipment may also be affected by the shielding effect of the vehicle's body.

USEFUL ACCESSORIES

Independently of current legal obligations, we suggest keeping the following in the car (**fig. 4**):

- first aid kit containing a non alcoholic disinfectant, sterile gauze, bandage roll, plasters, etc.
- torch;
- rounded scissors;
- work gloves.



fig. 4

IN AN EMERGENCY

The following pages give indications necessary in the event of an emergency.

The subjects dealt with take into account numerous minor problems which the driver may have to face and indicate the type of intervention to be carried out. Contact Alfa Romeo Authorized Services for the more serious problems.

The following pages should therefore, be read through carefully so that, if an emergency arises, you know where to search for the relevant information.

IN THE EVENT OF A PUNCTURE	page	158
IF ONE OF THE EXTERNAL LIGHTS GOES OUT	165	
IF ONE OF THE INTERNAL LIGHTS GOES OUT	181	
IN THE EVENT OF A BURNT FUSE OR RELAY	186	
IN THE EVENT OF A FLAT BATTERY	194	
IF THE VEHICLE OR ANOTHER VEHICLE IS TO BE TOWED	196	
IF THE VEHICLE IS TO BE LIFTED	197	
IN THE EVENT OF AN ACCIDENT	198	

IN THE EVENT OF A PUNCTURE



WARNING

Wheel changing and correct use of the jack and spare wheel call for some precautions as mentioned below.

Signal the presence of the stationary vehicle according to current regulations: hazard warning lights, reflecting triangle, etc.

Any passengers should leave the car, specially if the vehicle is heavily laden, and wait for the wheel to be changed out of harm of the traffic.

If parked on a slope or rough road, place wedges or other suitable devices under the wheels to prevent the car from rolling. Do not grease the threads of bolts before installing them; they might slip out.



WARNING

The spare wheel is specific to your model of car: do not use it on another model or use the spare wheel of other models on your car. On cars fitted with tyres 215/55 R16 (), 225/45 R17, 235/40 R18 and spare wheel with tyre 215/55 R16 (*), since the spare wheel is different from the standard wheels, observe the instructions for use given below:*

- The spare wheel should only be used in an emergency.*
- Use of the spare wheel should be kept to a minimum. Do not drive at speeds of over 80 km/h.*
- The car will handle differently when the spare wheel is fitted. Avoid sudden acceleration or braking, sharp corners and fast bends.*
- Check at regular intervals that spare wheel pressure is equal to 2.7 bar (2.7 kg/cm²).*
- Two or more spare wheels should never be used together. Have the wheel changed repaired and refitted as soon as possible.*



WARNING

On cars fitted with tyres 215/55 R16 (), 225/45 R17, 235/40 R18 and spare wheel with tyre 215/55 R16 (*), do not apply the wheel cap on the spare wheel. The spare wheel has an orange sticker with the main cautions about use of the wheel itself and instructions for use.*

The sticker must absolutely never be removed or covered.

The sticker contains the following instructions in four languages:

- WARNING! Only for temporary use 80 km/h max!*
- Replace with standard service wheel as soon as possible.*
- Do not cover these instructions.*
- The vehicle may fall if the jack is not positioned correctly.*

(*) Tyre 205/55 R16 for versions/markets where applicable.



WARNING

The jack only serves for changing wheels on the car with which it is provided or on cars of the same model. It must not be used for other purposes such as for instance raising cars of other models. In no case should it be used for repairs under the vehicle.



Do not use the jack for higher capacities than stated on its label.



Absolutely never tamper with the inflation valve. Do not insert tools of any kind between the rim and the tyre.



Routinely check that the pressure of tyres and spare wheel is as specified in the "Technical specifications" chapter. Raise the car only laterally. The car must absolutely never be raised placing the plate of the workshop lift arm under the aluminium crossmember of the rear suspension.

CHANGING A WHEEL

Please be informed that:

- The jack mass is 2.100 kg.
- The jack requires no adjustment.
- The jack cannot be repaired, in the event of breakage it must be replaced by another original one.
- No tools other than its operating crank can be fitted to the jack

To change a wheel proceed as follows:

- Stop the car in such a position that it is not dangerous for the traffic where it is possible to change the wheel safely. Where possible, park on a level, compact surface.
- Engage the handbrake
- Engage 1st gear or reverse. For cars with automatic gearbox set the lever to position **P**.
- Open the boot.
- Fold forward the boot mat (**A-fig. 1**).
- Slacken the ring nut (**A-fig. 2**) and remove the spare wheel.
- Take the tool bag (**A-fig. 3**) and bring it near to the wheel to be changed.

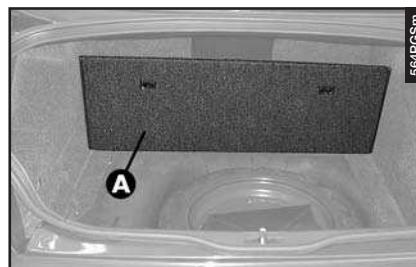


fig. 1

— Remove the wheel cap (**A**-fig. 4) (only for versions with steel rims) levering on the edge with the flat-tipped screwdriver provided in the tool bag.



fig. 2

— Using the L-wrench (**B**-fig. 5) provided, loosen the fastening bolts (**A**) by about one turn.

— Position the jack under the car next to the wheel to be replaced (**fig. 6**):

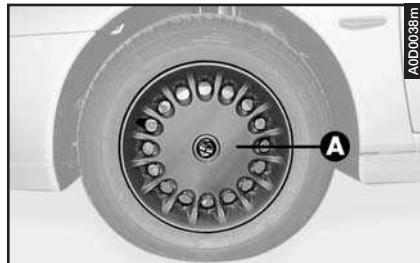


fig. 4

Position 1: changing a rear wheel;

Position 2: changing a front wheel.

— Turn the knob (**A**-fig. 7) of the jack to extend it until the pin (**B**), on the upper part of the jack inserts correctly in the seat on the body (**C**).

— Fit the L-wrench (**A**-fig. 8) on the jack pin (**B**).

— Work the jack and raise the car, until the wheel is a few centimetres above ground.

— Completely unscrew the fastening bolts (**A**-fig. 9) and remove the wheel.

— Make sure the spare wheel is clean and free of impurities on the hub contact surface which could cause slackening of the fastening bolts later.

— Install the spare wheel making the hub pin (**A**-fig. 10) coincide with one of the holes (**B**-fig. 11) of the wheel.

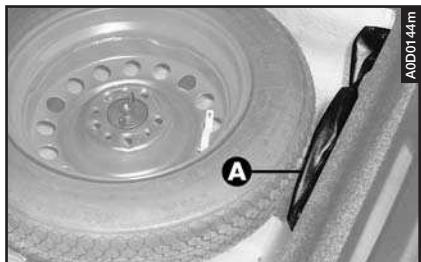


fig. 3



fig. 5

— Tighten the five fastening bolts (**A**-fig. 12).

— Lower the car and remove the jack (fig. 13).

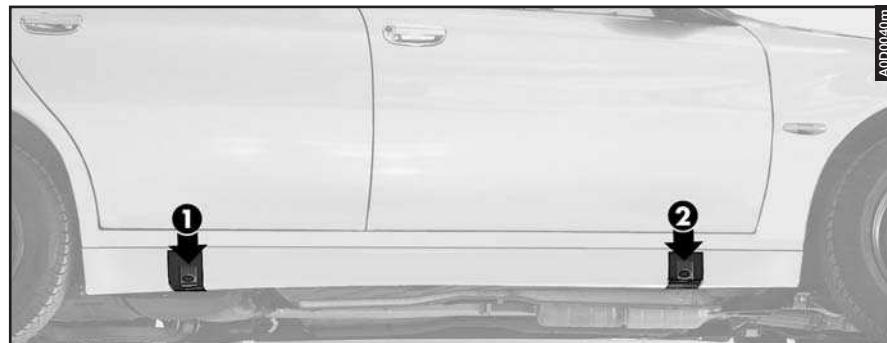


fig. 6

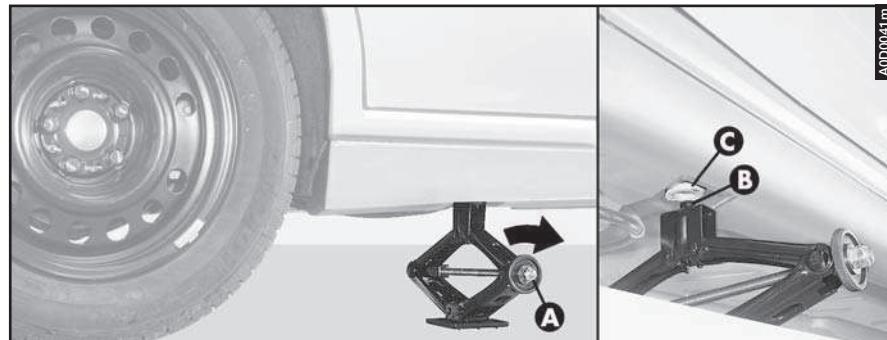


fig. 7

— Completely tighten the bolts in the sequence shown (fig. 14).

— On cars having the same alloy rims as the spare wheel ones, wheel cap can be fitted following the instructions given in the following paragraph.

IMPORTANT Never fit the wheel cap to the spare wheel if the spare wheel is different from the standard one.

After refitting a wheel:

— Stow the spare wheel in the space provided in the luggage compartment and fasten it with the ring nut (**A**-fig. 2).

— Put jack and tools back in the bag and stow it in the boot.

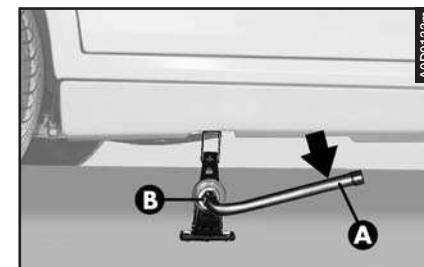


fig. 8

REFITTING A NORMAL WHEEL

Refit the wheel as described below:

— Stop the car in such a position that it is not dangerous for the traffic where it is possible to change the wheel safely. Where possible, park on a level, compact surface.

— Engage the handbrake

— Engage 1st gear or reverse. For cars with automatic gearbox set the lever to position **P**.

— Open the boot.

— Fold back the boot mat (**A**-fig. 1).

— Take the tool bag (**A**-fig. 3) and the spare wheel and bring them near to the wheel to be changed.

— Remove the wheel cap (**A**-fig. 4) (if present) levering on the edge with the flat-tipped screwdriver provided in the tool bag.

— Using the L-wrench (**B**-fig. 5) provided, loosen the fastening bolts (**A**) by about one turn.

— Position the jack under the car next to the wheel to be replaced (**fig. 6**):

Position **1**: changing a rear wheel;

Position **2**: changing a front wheel.

— Turn the knob (**A**-fig. 7) of the jack to extend it until the pin (**B**), on the upper part of the jack inserts correctly in the seat on the body (**C**).

— Fit the L-wrench (**A**-fig. 8) on the jack pin (**B**).

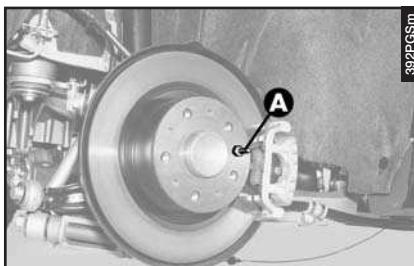


fig. 10

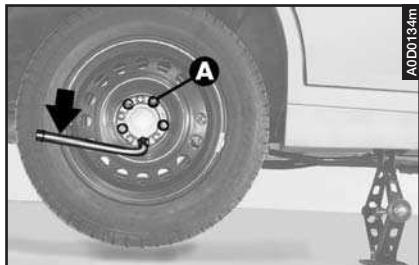


fig. 9

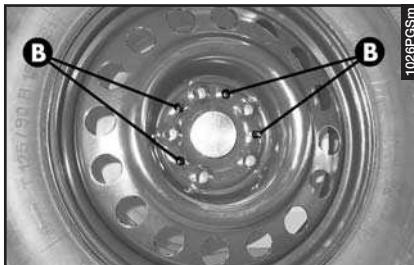


fig. 11

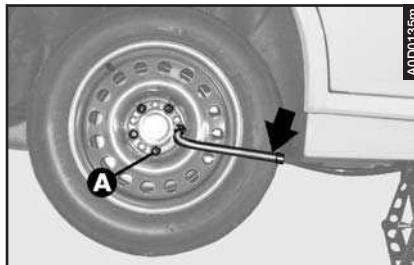


fig. 12

- Work the jack and raise the car, until the wheel is a few centimetres above ground.
- Completely unscrew the fastening bolts (**A-fig. 16**) and remove the wheel.
- Make sure that the wheel to be installed is clean and free of impurities on the hub contact surface which could cause slackening of the fastening bolts later.
- Install the wheel making the hub pin (**A-fig. 10**) coincide with one of the holes (**B-fig. 11**) of the wheel.
- Tighten the five fastening bolts (**A-fig. 17**).

For cars with alloy rims it is easier to insert the wheel bolts using the specific centering pin.

- Screw the centering pin (**A-fig. 18**) in one of the fastening bolt holes.
- Push the wheel on the pin and fasten it with four bolts.
- Remove the centering pin (**A-fig. 19**) and screw the last fastening bolt.

- Lower the car and remove the jack (**fig. 20**).
- Completely tighten the bolts in the sequence shown (**fig. 21**).
- If present, fit the hub cap so that the valve can come out through the tapered hole. Press the edges of the hub cap starting from near the valve hole (**A-fig. 22**) and proceeding round until it is securely attached.

IMPORTANT Incorrect fitting might cause the wheel cap to come off when the car is on the move.

After refitting a wheel:

- Stow the spare wheel in the space provided in the luggage compartment and fasten it with the ring nut (**A-fig. 2**).

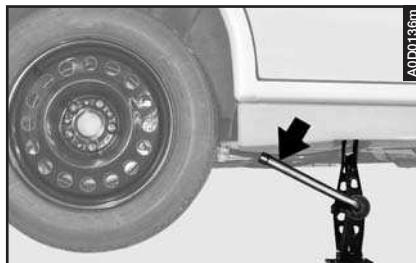


fig. 13

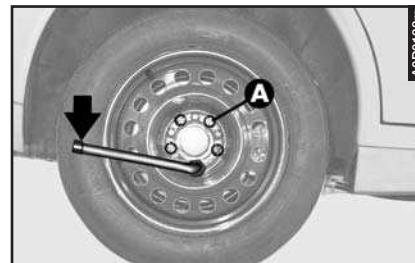


fig. 15

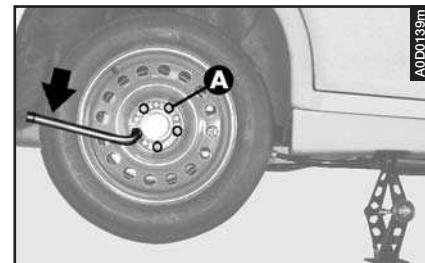


fig. 16

- Put jack and tools back in the bag and stow it in the boot

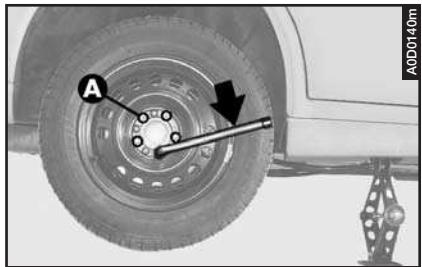


fig. 17

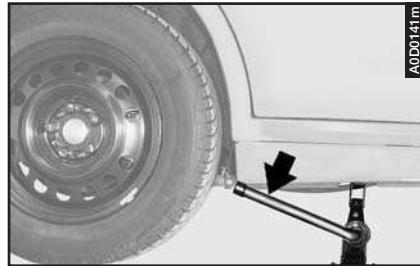
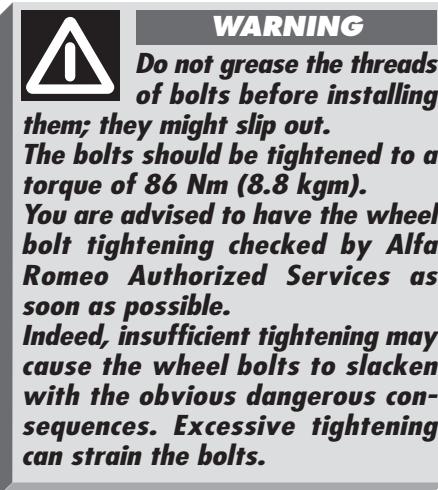


fig. 20



fig. 21

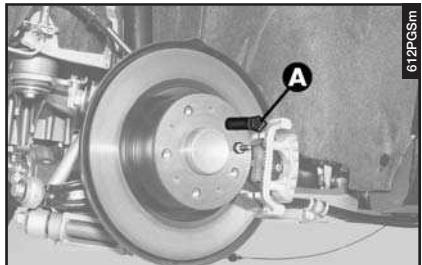


fig. 18

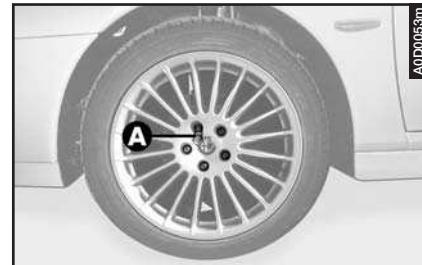


fig. 19

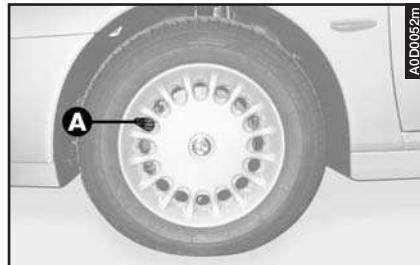


fig. 22

IF ONE OF THE EXTERNAL LIGHTS GOES OUT



WARNING

Alterations or repairs to the electric system not carried out correctly and without taking into account the specifications of the system may cause malfunctioning and the risk of fire.

IMPORTANT The headlight inner surface might be slightly misted: this should not be considered irregular but a natural phenomenon due to low temperature and the air humidity level. Misting will disappear as soon as the headlights are turned on. Drops inside the headlight mean water infiltration: contact Alfa Romeo Authorized Services.

GENERAL INSTRUCTIONS

- When a light is not working check that the corresponding fuse is intact before replacing the bulb.
- For the location of fuses, refer to the paragraph "In the event of a burnt fuse" in this chapter.
- Before changing a bulb check the contacts for oxidation.
- Burnt bulbs must be replaced with others of the same type and power.
- Always check the height of the headlight beam after changing a bulb to ensure they are safe.

TYPES OF BULBS (fig. 23)

Various types of bulbs are fitted to your vehicle.

A. All glass bulbs

These are pressure-fitted. Pull to remove.

B. Bayonet type bulbs

Press the bulb, turn counter-clockwise to remove this type of bulb from its holder

C. Tubular bulbs

Free them from their contacts to remove.

D. Halogen bulbs

To remove free it from the clip on its seating.

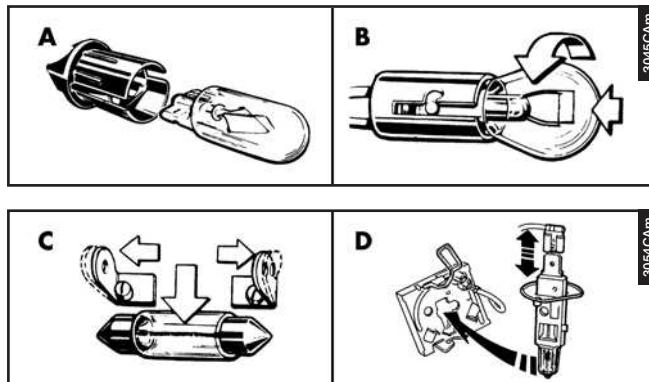


fig. 23



Halogen bulbs must be handled touching only the metallic part. If the transparent bulb is touched with the fingers its lighting intensity is reduced and the life of the bulb may be compromised. If touched accidentally, rub the bulb with a cloth moistened with methylated spirits and allow to dry.



Where possible the bulbs should be replaced by Alfa Romeo Authorized Services. The correct operation and positioning of the external lights are vital to the safety of the vehicle and its passengers and the subject of specific laws.



WARNING

Halogen bulbs contain pressurised gas, in the case of breakage they may burst.

BULBS	TYPE	W
LOW BEAM/HIGH BEAM (GAS DISCHARGE HEADLIGHTS)	D (D1)	35
HIGH BEAM HEADLAMP SIGNALLER (GAS DISCHARGE HEADLIGHTS)	D (H1)	55
LOW BEAM (HALOGEN BULB HEADLIGHTS)	D (H7)	55
HIGH BEAM (HALOGEN BULB HEADLIGHTS)	D (H7)	55
FRONT SIDE LIGHT	B (H6W)	6
FOG LAMPS	D (H3)	55
FRONT DIRECTION INDICATORS (COLOURED BULB)	B (PY21W)	21
SIDE DIRECTION INDICATORS	A (5W Amber)	5
REAR DIRECTION INDICATOR	non-replaceable LEDs	
STOP/SIDE LIGHT	B (21/5W)	21/5
REVERSING LIGHT	B (P21W)	21
REAR FOG GUARD	B (P21W)	21
ADDITIONAL STOP LIGHT (3rd STOP)	A (W2.3W)	2.3
REAR SIDE LIGHT (ON BOOT LID)	B (R5W)	5
FRONT ROOF LIGHTS	B (10W Halogen)	10
BOOT LIGHT	C (10W)	10
GLOVEBOX AND DOOR LIGHTS	A (W5W)	5
SUN VISOR LIGHT	C (C5W)	5
NUMBER PLATE LIGHT	A (W5W)	5
REAR ROOF LIGHTS	B (HT5W Halogen)	5

FRONT LIGHT UNITS - GAS DISCHARGE HEADLIGHTS

(optional for versions/markets where applicable)

The front light units with gas discharge headlights contain low beam/high beam (gas discharge), high beam headlamp signaller (halogen), sidelight and direction indicator bulbs.

The bulbs are arranged inside the light unit as follows (**fig. 24-25**):

- A. Direction indicator
- B. High beam headlamp signaller and sidelight
- C. Gas discharge low beam/high beam.

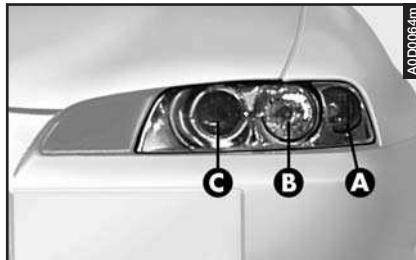


fig. 24

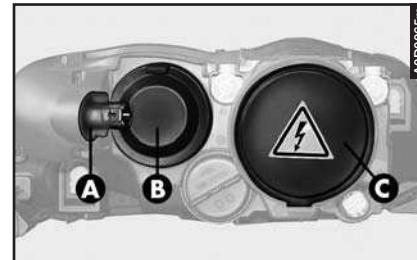


fig. 25



WARNING

Any work on the front light units should be carried out with the light switch at position 0 (lights off) and with the ignition key removed from the switch: danger of electric discharge.

Low beams/high beams

Xenon bulbs are very longlasting and failure is highly unlikely.



WARNING

If necessary, have the system checked and if necessary repaired only by Authorized Alfa Romeo Services.

The following paragraph describes how to replace xenon bulbs correctly.



WARNING

Any work on the front light units should be carried out with the light switch at position 0 (lights off) and with the ignition key removed from the switch: danger of electric discharge.

To replace the bulb (Type D – D1, 35W):

- Remove the engine compartment cover after turning the fastening pins.
- Remove the rubber cap (**A**-fig. 26) by pulling the tab (**B**).

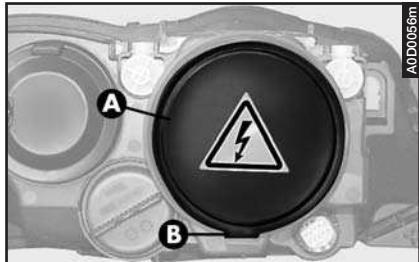


fig. 26



Xenon bulbs may only be touched on the metal part. If the glass bulb is touched by the fingers, clean it carefully with a clean cloth moistened with methylated spirit and allow to dry before refitting the bulb.

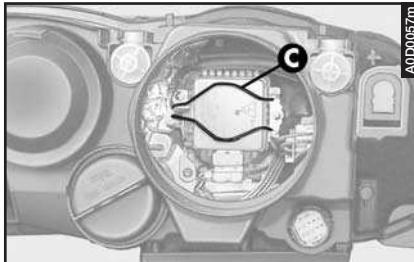


fig. 27

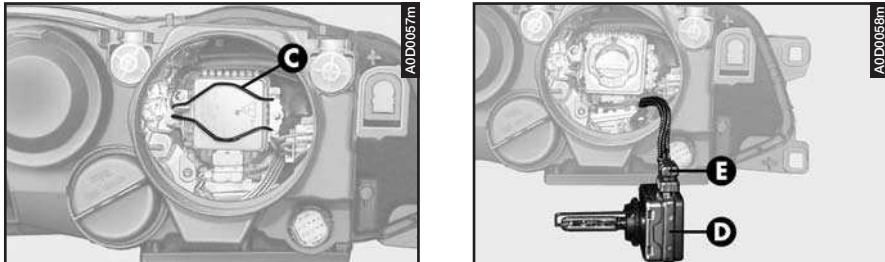


fig. 28

– Release the clip (**C**- fig. 27).

– Remove the bulb (**D**- fig. 28) and disconnect the snap-fitted connector (**E**).

– Fit connector to new bulb.

– Fit the bulb in the headlight reflector making the notch coincide with the corresponding groove.

– Lock the bulb with the clip.

– Fit the rubber cap.

– Refit the engine compartment cover and fasten turning the fastening pins.

High beam headlamp signaller

To replace the bulb (Type D – H1, 55W):

- Remove the engine compartment cover after turning the fastening pins.
- Turn counter-clockwise and remove the direction indicator bulb holder (**A**-**fig. 29**), without disconnecting the connector to widen the working space.
- Remove the rubber cap (**B**) by pulling the tab (**C**).

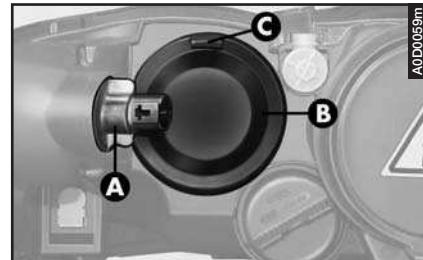


fig. 29

- Disconnect the snap-fitted connector (**D**- **fig. 30**) and release clip (**E**).
- Remove the bulb (**F**- **fig. 31**).

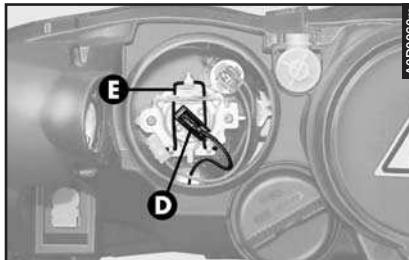


fig. 30

- Fit new bulb in the headlight reflector making the notches coincide with the corresponding grooves.
- Lock the bulb with the clip.
- Fit the connector to the bulb.
- Fit the rubber cap.
- Fit the direction indicator bulb holder and lock it by turning it clockwise.
- Refit the engine compartment cover and secure it by turning the fastening pins.

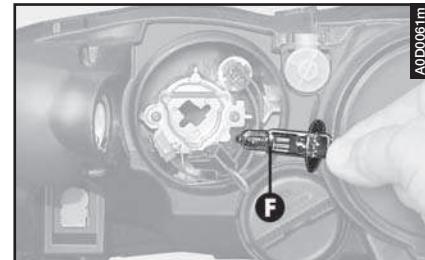


fig. 31

Front sidelights

To replace the bulb (Type B – H6W, 6W):

- Remove the engine compartment cover after turning the fastening pins.
- Turn counter-clockwise and remove the direction indicator bulb holder (**A**-
fig. 32) without disconnecting the connector to widen the working space.
- Remove the rubber cap (**B**) by pulling the tab (**C**).

— Press the two retaining tabs and remove the bulb holder (**D**- **fig. 33**).

— Remove the bulb (**E**- **fig. 34**) from the bulb holder, pushing it slightly and turning it counter-clockwise.

— Fit the new bulb into the bulb holder, pushing it slightly and turning it clockwise.

— Push the bulb holder down in its seat.

— Fit the rubber cap.

— Fit the direction indicator bulb holder and lock it by turning it clockwise.

— Refit the engine compartment cover and secure it by turning the fastening pins.

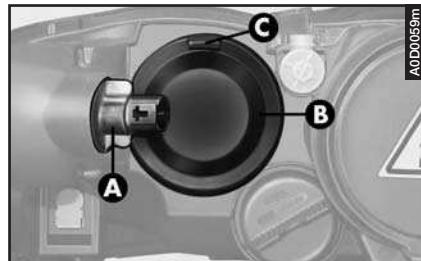


fig. 32

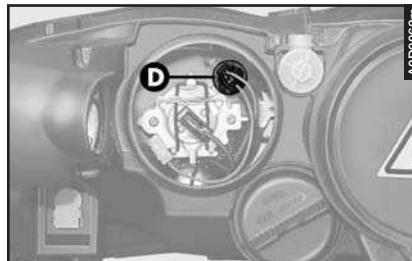


fig. 33

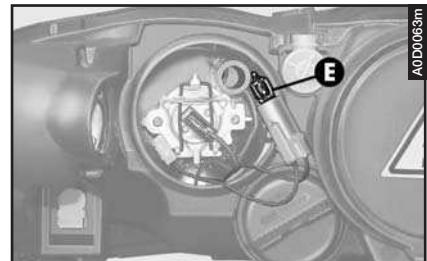


fig. 34

Front direction indicators

To replace the bulb (Type B – PY21W, 21W, coloured):

- Remove the engine compartment cover after turning the fastening pins.
- Turn counter-clockwise and remove the bulb holder (**A**- **fig. 35**) without disconnecting the connector.
- Remove the bulb (**B**- **fig. 36**) from the bulb holder, pushing it slightly and turning it counter-clockwise.

— Fit the new bulb into the bulb holder, pushing it slightly and turning it clockwise.

— Fit the bulb holder and lock it by turning it clockwise.

— Refit the engine compartment cover and secure it by turning the fastening pins.

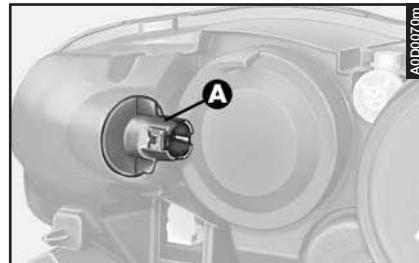


fig. 35

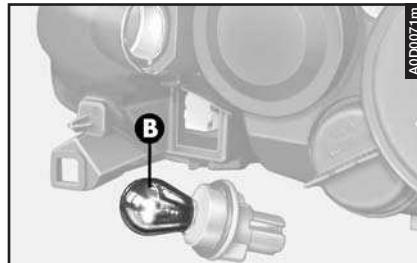


fig. 36

FRONT LIGHT UNITS – HALOGEN BULB HEADLIGHTS

(optional for versions/markets where applicable)

The front light units with halogen bulb headlights contain low beam, high beam, sidelight and direction indicator bulbs.

The bulbs are arranged inside the light unit as follows (**fig. 37-38**):

A. Direction indicator

B. High beam headlight and sidelight

C. Low beam headlight.

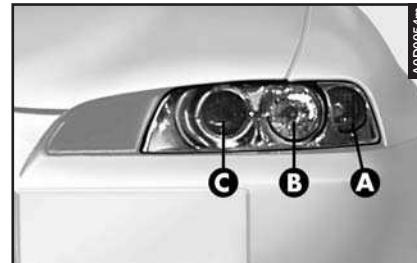


fig. 37

Low beam headlights

To replace the bulb (Type D – H7, 55W):

- Remove the engine compartment cover after turning the fastening pins.
- Remove the rubber cap (**A**- **fig. 39**) by pulling the tab (**B**).
- Disconnect the snap-fitted connector (**C**- **fig. 40**).
- Release the clip (**D**).
- Remove the bulb (**E**- **fig. 41**).

— Fit the bulb in the headlight reflector making the notch coincide with the corresponding groove.

- Lock the bulb with the clip.
- Fit the connector to the new bulb.
- Fit the rubber cap.

— Refit the engine compartment cover and secure it by turning the fastening pins.

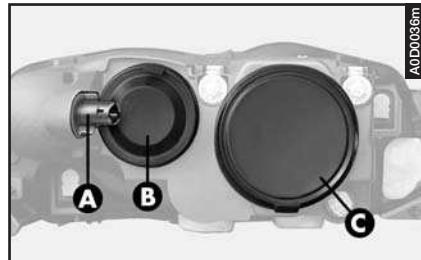


fig. 38

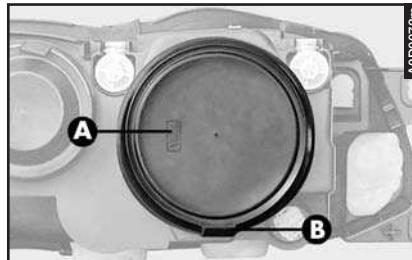


fig. 39

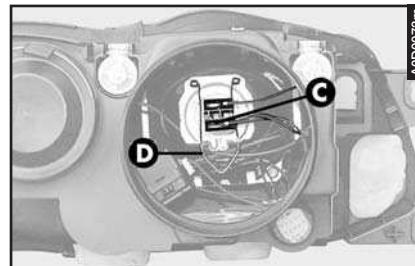


fig. 40

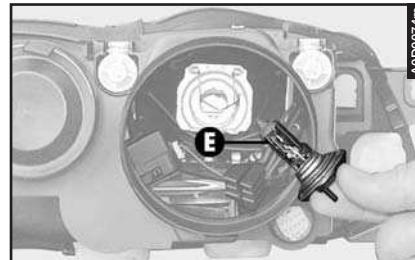


fig. 41

High beam headlights

To replace the bulb (Type D – H7, 55W):

- Remove the engine compartment cover after turning the fastening pins.
- Turn counter-clockwise and remove the direction indicator bulb holder (**A**-**fig. 42**) without disconnecting the connector to widen the working space.
- Remove the rubber cap (**B**) by pulling the tab (**C**).

- Disconnect the snap-fitted connector (**D**- **fig. 43**) and release the clip (**E**).
- Remove the bulb (**F**- **fig. 44**).

— Fit the new bulb in the headlight reflector making the notches coincide with the corresponding grooves.

- Lock the bulb with the clip.
- Fit the connector to the bulb.
- Fit the rubber cap.
- Fit the direction indicator bulb holder and lock it by turning it clockwise.
- Refit the engine compartment cover and secure it by turning the fastening pins.

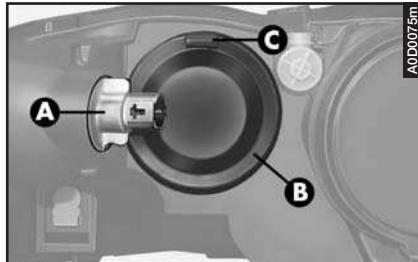


fig. 42

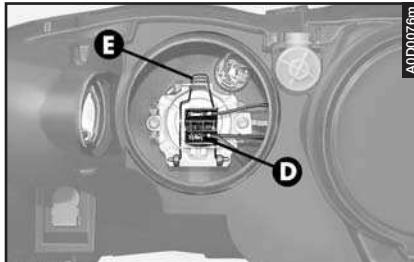


fig. 43

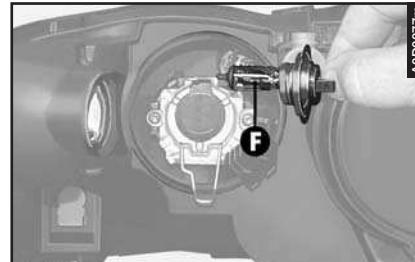


fig. 44

Front sidelights

To replace the bulb (Type B – H6W, 6W):

- Remove the engine compartment cover after turning the fastening pins.
- Turn counter-clockwise and remove the direction indicator bulb holder (**A**-
fig. 45) without disconnecting the connector to widen the working space.
- Remove the rubber cap (**B**) by pulling the tab (**C**).

— Press the two retaining tabs and remove the bulb holder (**D**- **fig. 46**).

— Remove the bulb (**E**- **fig. 47**) from the bulb holder, pushing it slightly and turning it counter-clockwise.

— Fit the new bulb into the bulb holder, pushing it slightly and turning it clockwise.

- Push the bulb holder down in its seat.
- Fit the rubber cap.

— Fit the direction indicator bulb holder and lock it by turning it clockwise.

— Refit the engine compartment cover and secure it by turning the fastening pins.

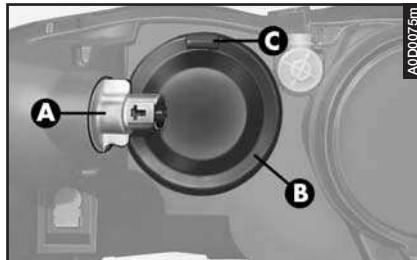


fig. 45

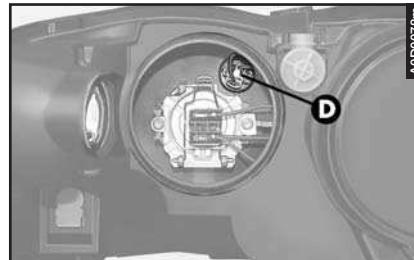


fig. 46

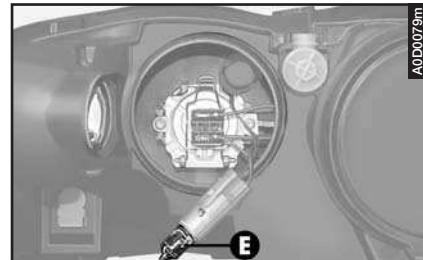


fig. 47

Front direction indicators

To replace the bulb (Type B – PY21W, 21W, coloured):

- Remove the engine compartment cover after turning the fastening pins.
- Turn counter-clockwise and remove the bulb holder (**A- fig. 48**), without disconnecting the connector.
- Remove the bulb (**B- fig. 49**) from the bulb holder, pushing it slightly and turning it counter-clockwise.

— Fit the new bulb into the bulb holder, pushing it slightly and turning it clockwise.

— Fit the bulb holder and lock it by turning it clockwise.

— Refit the engine compartment cover and secure it by turning the fastening pins.

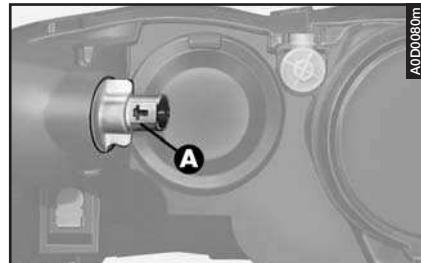


fig. 48

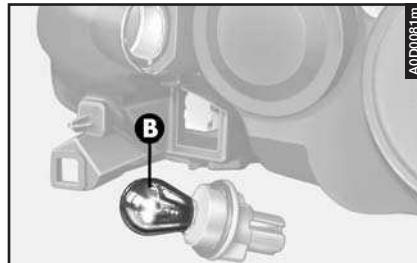


fig. 49

FRONT FOGLIGHTS

To replace the bulb (Type D - H3, 55W) proceed under the car as follows:

- Disconnect the connector (**A- fig. 50**) from the light unit.
- Turn the cover (**B**) counter-clockwise and remove it.
- Disconnect the connector (**C- fig. 51**) from the bulb.
- Release the clip and remove the bulb (**D- fig. 52**).

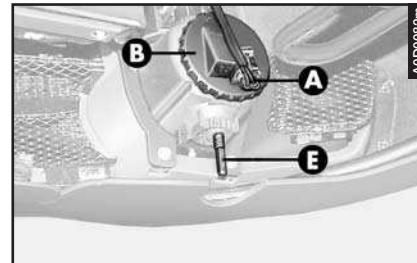


fig. 50

- Fit the new bulb in the headlight reflector making the notches coincide with the corresponding grooves.
- Lock the bulb with the clip.
- Fit the connector to the bulb.
- Refit the cover and lock it by turning it clockwise.
- Refit the light unit connector.

IMPORTANT The screw (E- fig. 50) serves to adjust the beam of the foglights.

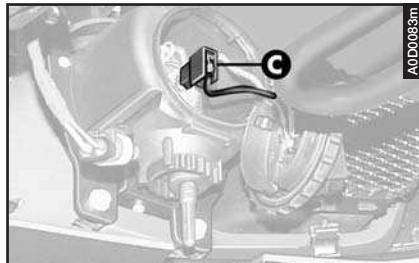


WARNING

The efficiency of the lights will be decreased and may inconvenience other road users if the light units are not correctly adjusted. If in doubt contact Alfa Romeo Authorized Services to have them checked and adjusted if necessary.

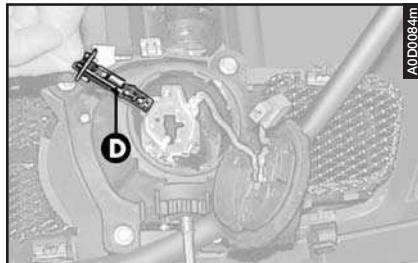


To adjust the front foglights contact Alfa Romeo Authorized Services.



A0D0083m

fig. 51



A0D0084m

fig. 52

SIDE DIRECTION INDICATORS

To replace a bulb (Type A, 5W amber):

- Push the transparent cover (**fig. 53**) towards the rear of the car to compress the tab (**A-fig. 54**). Release the catch (**B**) and remove the unit.
- Turn the bulb holder (**C-fig. 55**) counter-clockwise and remove it from the transparent cover (**D**).

— Withdraw the bulb (**E**) which is of the pressure-fitted type and replace it.

- Insert the bulb-holder (**C**) in the transparent cover (**D**).

Refit the unit firstly inserting the catch (**B-fig. 54**) on the front part and then pressing the rear part until the catch (**A**) clicks into place.



Take care not to damage the bodywork or the transparent cover when removing the side direction indicator unit.



fig. 53

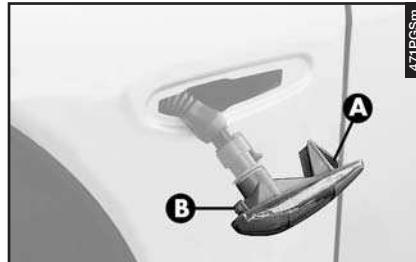


fig. 54

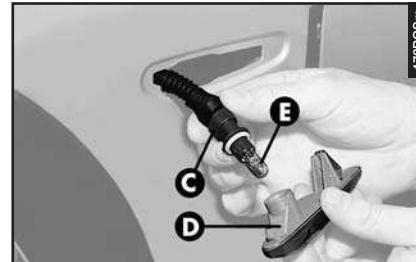


fig. 55

GUARDS AND SIDELIGHTS

To replace the bulbs (Type B, 21W reversing light and rear fog guard, 5W sidelight):

— Open the boot.

— Lower the lid (**A-fig. 56**) of the boot trim corresponding with the light concerned and remove the bulb holder unit (**B-fig. 57**) releasing the retainer catch (**C**).

— Remove and replace the bulb concerned (spherical with bayonet coupling) pushing gently and turning counter-clockwise (**fig. 58**):

(**D**) Reversing light bulb

(**E**) Rear fog guard bulb

(**F**) Sidelight bulb.

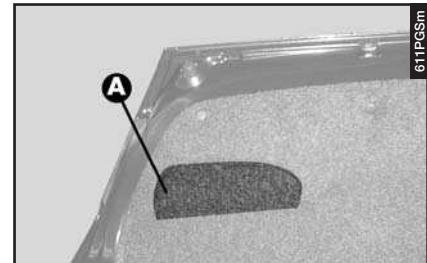


fig. 56

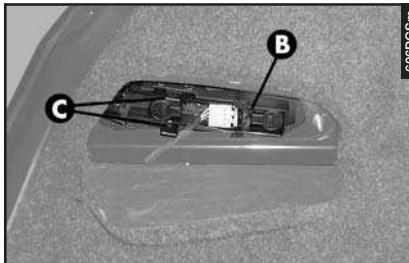


fig. 57

— Re-insert the bulb holder unit fastening it correctly in place using the retainer catches (**C-fig. 57**).

— Shut the trim lid.

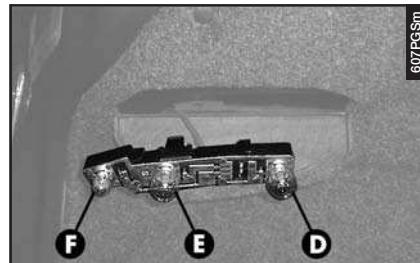


fig. 58

DIRECTION INDICATORS AND SIDE LIGHTS/STOP LIGHTS (fig. 59)

WARNING The rear direction indicators comprise LEDs integrated in the light unit: should they fail to operate, contact Authorized Alfa Romeo Services.

To replace the bulb (Type B, sidelight 5W/stop light 21W):

- Open the boot
- Remove the bulb holder (**A**-**fig. 59**) turning counter-clockwise.
- Remove and replace the bulb (**B**) (spherical type with bayonet coupling) pushing gently and turning counter-clockwise.

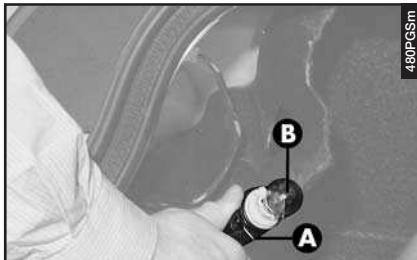


fig. 59

- Re-insert the bulb holder unit correctly in place and fasten turning clockwise.

NUMBER PLATE LIGHTS (fig. 60-61-62)

To replace the bulbs (Type A, 5W):

- Withdraw the number plate light unit releasing the catch (**A**-**fig. 60**) using a flat screwdriver protected with a soft cloth.
- Withdraw the unit (**B**-**fig. 61**).
- Withdraw the bulb holder (**C**-**fig. 62**) turning gently and replace the bulb (**D**) which is snap-fitted.
- Refit the bulb holder (**C**-**fig. 62**) and the complete unit (**B**-**fig. 61**).



fig. 60

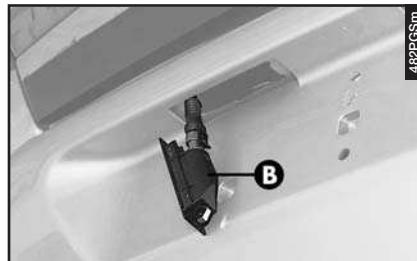


fig. 61

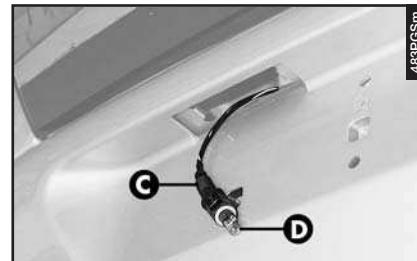


fig. 62

ADDITIONAL STOP LIGHT (3rd STOP)

To replace the bulbs (Type A, 2.3 W):

- Remove the rubber caps (**A**-fig. 63).

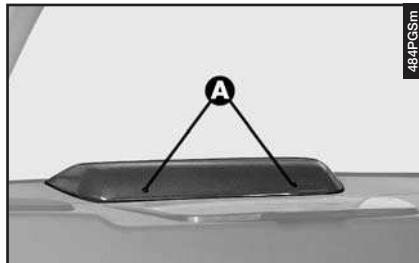


fig. 63

— Slacken the two screws fastening the light unit (**B**-fig. 64) and remove it releasing the two catches (**C**).

- Disconnect the connector (**D**-fig. 64) of the light unit.

— Slacken the two screws (**E**-fig. 65) and separate the light unit from the cover.

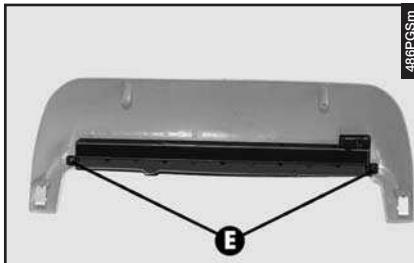


fig. 65

— Slacken the four screws (**F**-fig. 66) fastening the transparent cover.

- Remove the transparent cover (**G**-fig. 67) and replace the bulb concerned

— Refit the transparent cover locking it with the screws (**F**-fig. 66).

— Refit the cover on the light unit and fasten it with the screws (**E**-fig. 65).

- Connect the connector (**D**-fig. 64).

— Re-position the unit correctly firstly inserting the two catches (**C**-fig. 64) and then tightening the fastening screws.

- Refit the protective caps (**A**-fig. 63).

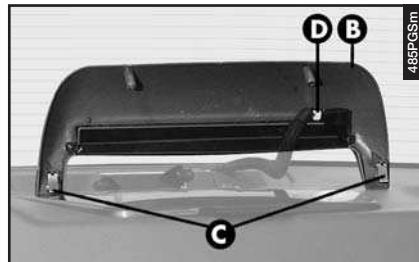


fig. 64

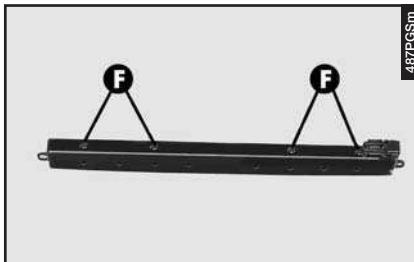


fig. 66

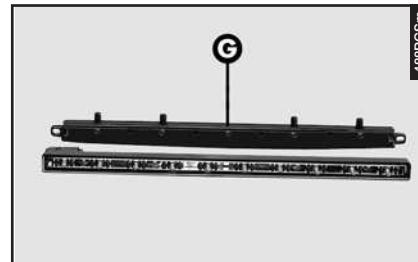


fig. 67

IF ONE OF THE INTERNAL LIGHTS GOES OUT

FRONT ROOF LIGHT

To replace the bulbs (Type B, 10W Halogen):

- Remove the roof light (**A**-fig. 68) levering in the point illustrated.
- Remove the screen (**B**-fig. 69) firstly releasing it from the catch (**C**) on the right and then from the two stoppers on the left.
- Remove and replace the bulb concerned (**D**-fig. 70) (tubular with bayonet coupling), pushing gently and turning counter-clockwise.

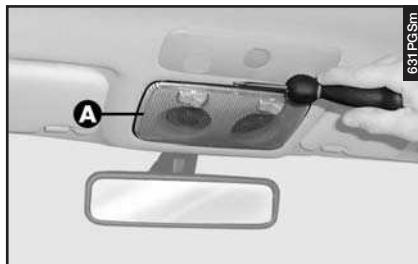


fig. 68

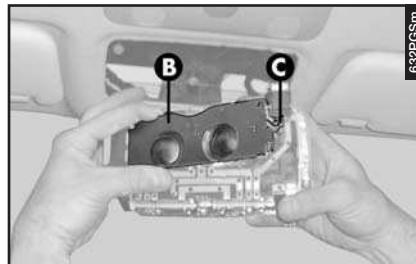


fig. 69



When refitting the roof light ensure that the electrical wiring is correctly arranged and does not interfere with the edges of the light or retaining clips.

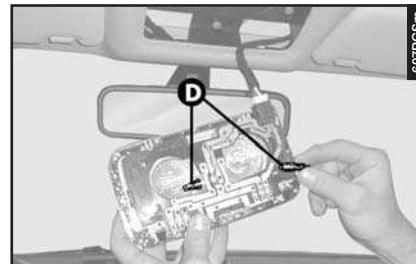


fig. 70

REAR ROOF LIGHTS

To replace the bulbs (Type B, 5W):

- Remove the roof light (**A-fig. 71**) levering in the point illustrated.

— Remove and replace the bulb (**B-fig. 72**) (tubular with bayonet coupling) pushing gently and turning counter-clockwise.

— Refit the roof light firstly hooking the catch (**C-fig. 72**) and pressing on the other side until the catch clicks into place (**D-fig. 72**).

COURTESY LIGHTS

To replace the bulb (Type C, 5W):

- Remove the light (**A-fig. 73**) levering in the point illustrated.

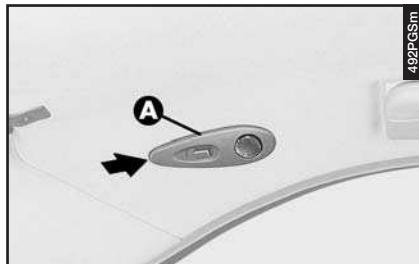


fig. 71

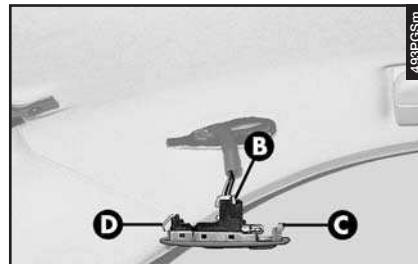


fig. 72

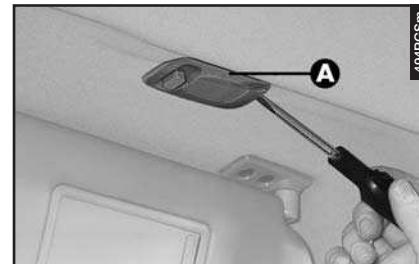


fig. 73

- Remove the screen (**B**-fig. 74) releasing it from the catches (**C**-fig. 74)
- Remove the bulb (**D**-fig. 75) pulling outwards and releasing from the side contacts.
- Insert the new bulb making sure that it is positioned correctly and locked between the contacts.
- Refit the screen (**B**-fig. 74) inserting it correctly between the catches (**C**-fig. 74).

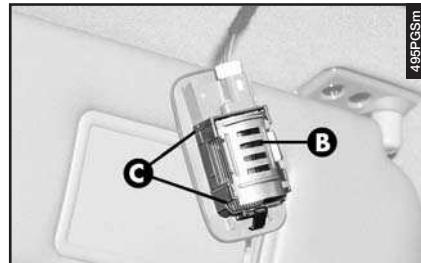


fig. 74

- Refit the light unit firstly inserting from the side (**E**-fig. 75) and then pressing on the other side until the catch clicks into place (**F**-fig. 75).

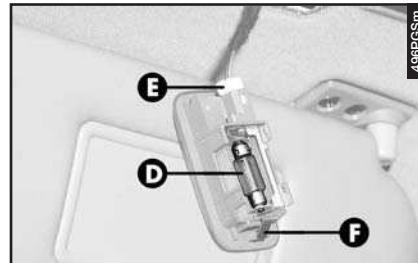


fig. 75

GLOVEBOX LIGHT

To replace the bulb (Type A, 5W):

- Remove the light pushing with a screwdriver on the tab (**A**-fig. 76)
- Press the sides of the bulb screen (**B**-fig. 77) in correspondence with the two fastening pins and turn it.

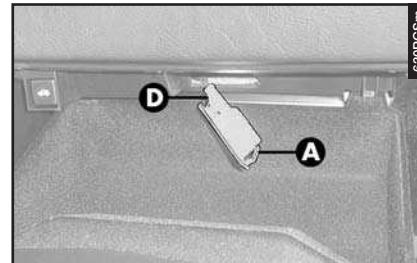


fig. 76

— Change the bulb (**C**-fig. 77) which is pressure-fitted.

— Re-position the screen inserting the two fastening pins.

— Re-install the light inserting it in the correct position firstly on one side (**D**-fig. 76) and then pushing on the other until the tab clicks.

DOOR LIGHTS

To replace the bulb (Type A, 5W):

— Remove the light pushing with a screwdriver on the tab (**A**-fig. 78).

— Press on the side of the screen (**B**-fig. 79) in correspondence with the two fastening pins and turn it.

— Change the bulb (**C**-fig. 79) which is pressure-fitted.

— Re-position the screen inserting the two fastening pins.

— Re-install the light inserting it firstly on one side (**D**-fig. 78) and then pushing on the other until the tab clicks.

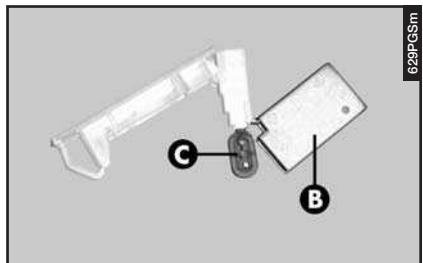


fig. 77

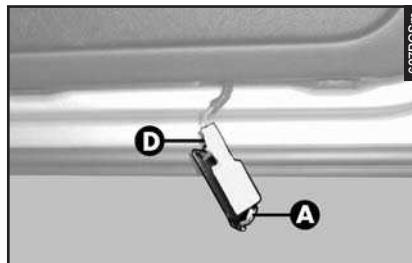


fig. 78

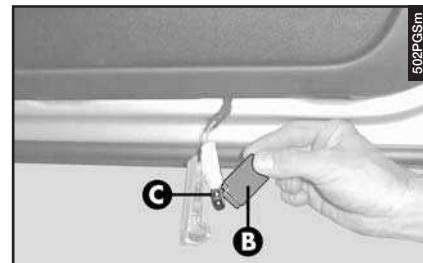


fig. 79

LUGGAGE COMPARTMENT LIGHT

To replace the bulb (Type C, 10W):

- Remove the light levering on point **(A- fig. 80)** with a screwdriver.

– Lift the protection cover (**B- fig. 81**).

– Remove the snap-fitted bulb (**C- fig. 82**).

– Fit the new bulb locking it between the two contacts.

– Lower the protection cover.

– Refit the light by locking it in its seat.

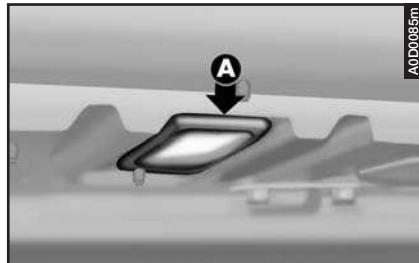


fig. 80

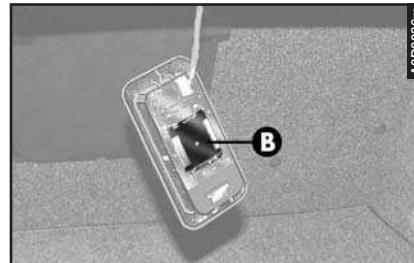


fig. 81

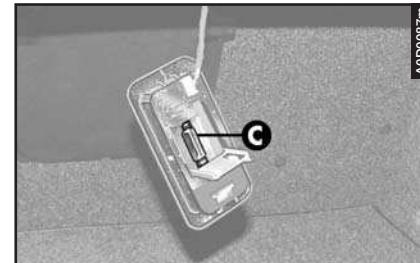


fig. 82

IN THE EVENT OF A BURNT FUSE OR RELAY

GENERALITIES (fig. 83)

When an electric device is no longer working, check that its fuse is intact.

A - Intact fuse

B - Fuse with damaged filament.

Remove the fuse to be replaced using the pincer (**C**) on the fusebox.

Replace the fuse with another of the same rating and colour.

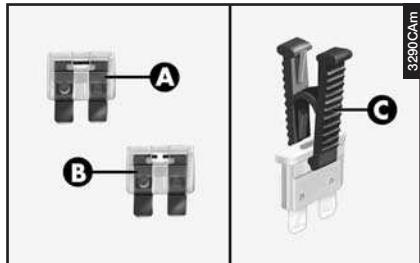


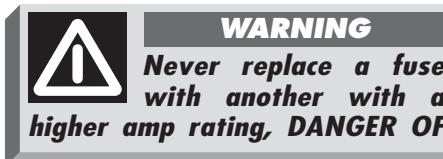
fig. 83



Never replace a damaged fuse with anything other than an intact fuse.



Before replacing a fuse check that the key has been removed from the ignition and that all the services are switched off and/or disengaged.



FUSES AND RELAYS IN THE CONTROL UNIT

The fuses for the main devices are housed in a control unit under the dashboard, to the left of the steering column.

Access to it is gained slackening the knob (**A**-fig. 84) and lowering the panel (**B**).

The graphic symbols which distinguish the main electric component corresponding to each fuse are given on a label on the inner wall of the panel.



fig. 84

In the upper part of the control unit there is a pincer (**C**-fig. 85) for removing fuses.

At the sides of the control unit there are some spare fuses (**C**-fig. 86); after replacing a fuse you are advised to replenish the stock of fuses when they are used.

The systems and devices protected by fuses are listed in the tables on next pages.

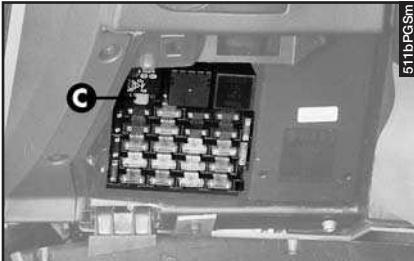


fig. 85

The circuits operated by relays are the following (**fig. 86**):

- A** - Switch discharge relay
- B** - Headlight washer timer.

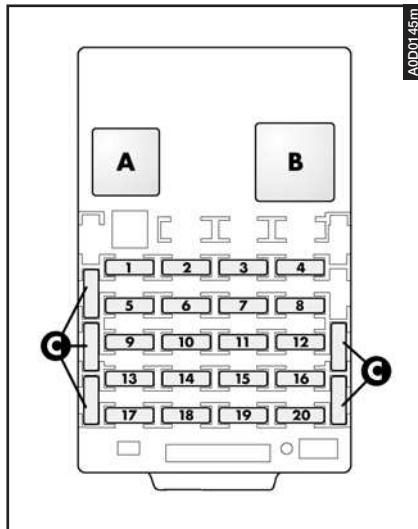


fig. 86

FUSES AND RELAYS IN ENGINE BAY

The fuses and relays in the engine bay are housed:

- In a box set next to the left side panel (**fig. 88**).
- On a bracket set behind the left headlight (**fig. 91**).

To gain access to the box, remove the cover (**A-fig. 87**), releasing it from the retaining clips.

The devices protected by the fuses in the engine bay are listed in the tables on next pages.

IMPORTANT The arrangement of the relays may vary depending on the versions and markets. In the event of a suspected anomaly, contact Alfa Romeo Authorized Services.



fig. 87



fig. 88

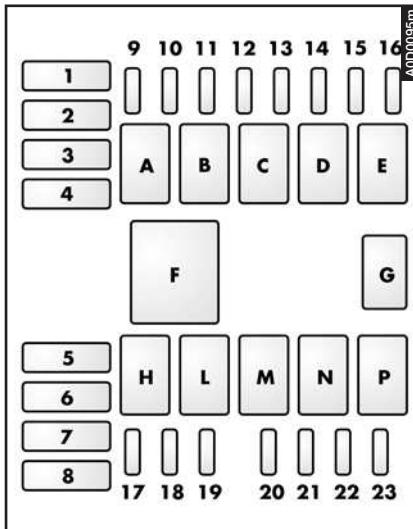


fig. 89

Circuits operated by relays are the following (**fig. 89**):

- A.** Dipped beam headlight
- B.** Climate control fan
- C.** Horn
- D.** Front fog light
- E.** Electronic automatic gearbox control unit (Sportronic versions)
- F..** Petrol versions (single fan): engine cooling radiator (high speed)
JTD versions (two-fan): engine cooling radiator (high speed)
- G.** Conditioner compressor
- H.** Petrol versions: engine cooling radiator (low speed)
JTD versions (two-fan): engine cooling radiator (high speed)

- L.** Fuel pump
- M.** Electronic injection main relay
- N.** Starter motor
- P.** Diesel filter warming (JTD versions)
JTD versions (two-fan): engine cooling radiator (low speed)

To gain access to relays on the bracket set behind the left headlight (**fig. 91**), remove the cover (**A-fig. 90**) after turning the fastening pins (**B**).

Circuits operated by relays are the following (**fig. 91**):

- Brown base relay: additional heater (JTD versions)
- Black base relay: engine cooling radiator relay, high speed (JTD versions).

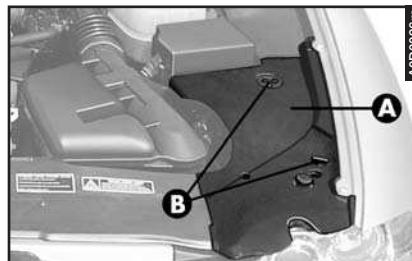


fig. 90

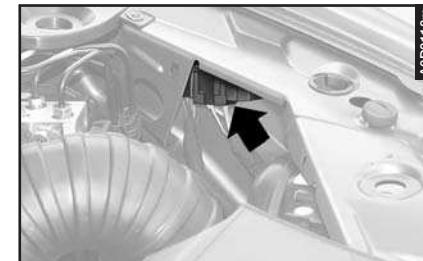


fig. 91

FUSES AND RELAYS IN THE BOOT

Fuses and relays are housed in the right-hand side of the boot are housed in a box, in the recess closed by cover (**A**-fig. 92).

To open the cover turn the knob (**B**).

The devices protected by the fuses in the boot are listed in the tables on next pages.

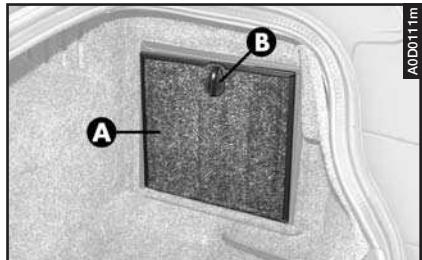


fig. 92

IMPORTANT The arrangement of the relays may vary depending on the versions and markets. In the event of a suspected anomaly, contact Alfa Romeo Authorized Services.

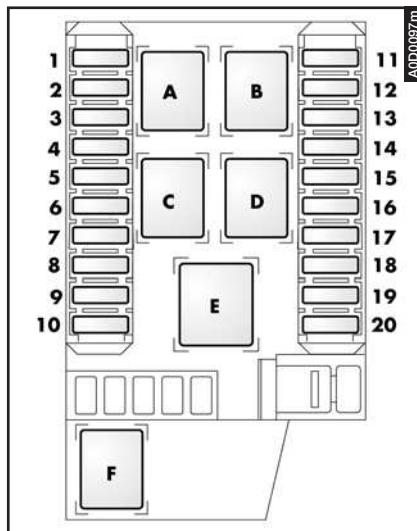


fig. 93

Circuits operated by relays are the following (fig. 93):

A. Air mixing actuator, climate control unit, additional heater control (JTD versions)

B. Rearscreen heating relay

C. Seat warming control, electrochromic driving mirror, sun visor light, rain sensor, parking sensor control unit, door mirror control light, remote control receiver, alarm system control unit, driver's power window control LOCK warning light

D. Windscreen heating, door mirror defrosting

E. Front seat warming, rear current socket, front seat electric adjustment, powered sunroof

F. Direction indicators, trailer presetting

External lights	Fuse no.	Ampere	Location
Brake lights (switch)	9 1	5A 15A	fig. 86 fig. 86
Direction indicators	12	10A	fig. 93
External lights (control)	5	10A	fig. 86
Front fog lights	16	15A	fig. 89
Headlights and headlight position sensor (gas discharge headlights)	6	7.5A	fig. 86
IGE control unit:			
- brake light switch	1	15A	fig. 86
- brake lights	9	5A	fig. 86
- headlight spot	11	15A	fig. 86
- left side lights	17	10A	fig. 86
- rear light units	15	10A	fig. 86
- right side lights	8	10A	fig. 86
Left dipped beam headlight	12	15A	fig. 89
Reversing lights (only versions with manual gearbox)	13	10A	fig. 86
Right dipped beam headlight	10	15A	fig. 89

Internal lights	Fuse no.	Ampere	Location
Dashboard light dimmer	5	10A	fig. 86
Door mirror control light	15	10A	fig. 93
Glovebox light	5	10A	fig. 86
Seat warming control light	15	10A	fig. 93
Sun visor lights	15	10A	fig. 93

System/Component	Fuse no.	Ampere	Location
ABI control unit	13	10A	fig. 86
ABI control unit – Central locking	19	20A	fig. 93
ABI control unit – Front LH power window	18	20A	fig. 93
ABI control unit – Front RH power window	3	20A	fig. 93
ABI control unit – Rear LH power window	14	20A	fig. 93
ABI control unit – Rear RH power window	17	20A	fig. 93
ABS control unit	9 7 3	5A 40A 40A	fig. 86 fig. 89 fig. 89
Additional heater (JTD versions)	17 13	20A 10A	fig. 89 fig. 93
Alarm system (control unit)	12 15	10A 10A	fig. 93 fig. 93
Alfa Romeo Code System	20 16	5A 5A	fig. 86 fig. 86
Cell phone (handset)	18 5	5A 10A	fig. 86 fig. 86
Central locking (ABI control unit)	19	20A	fig. 93
Cigar lighter	7	20A	fig. 86
Climate control fan	2	30A	fig. 89
Climate control unit	19	5A	fig. 86

System/Component	Fuse no.	Ampere	Location
Conditioner compressor	13	7.5A	fig. 89
Cruise Control	5	10A	fig. 86
Diesel fuel filter warming (JTD versions)	23	30A	fig. 89
	5	40A	fig. 89
Door mirror defrosting	2	7.5A	fig. 93
Electrochromic driving mirror	15	10A	fig. 93
Electronic automatic gearbox (3.0 V6 24V Sportronic version)	6	20A	fig. 89
Electronic automatic gearbox (Sportronic versions):			
- control unit, sensors and gearshift lever	10	5A	fig. 86
	15	15A	fig. 89
- gearshift lever	2	10A	fig. 86
	5	10A	fig. 86
- sensors	13	10A	fig. 86
	16	5A	fig. 86
Electronic injection control unit	20	10A	fig. 89
	21	15A	fig. 89
	22	20A	fig. 89
Electronic injection system	16	5A	fig. 86
Engine control unit	18	7.5A	fig. 89
Engine cooling control unit	16	5A	fig. 86
Engine cooling radiator fan	4	60A	fig. 89

System/Component	Fuse no.	Ampere	Location
Engine cooling radiator fan	5	40A	fig. 89
EOBD system (socket)	18	5A	fig. 86
Front LH power window (ABI control unit)	18	20A	fig. 93
Front RH power window (ABI control unit)	3	20A	fig. 93
Front LH seat electric adjustment	6	30A	fig. 93
Front RH seat electric adjustment	5	30A	fig. 93
Front LH seat warming	9	10A	fig. 93
Front RH seat warming	8	10A	fig. 93
Fuel pump	19	15A	fig. 89
Fuel pump relay coil (engine bay box)	16	5A	fig. 86
Glow plug (JTD versions)	8	60A	fig. 89
Headlight washer (intermittent)	12	20A	fig. 86
Horns	11	15A	fig. 89
I.C.S. system	5	10A	fig. 86
	6	7.5A	fig. 86
	7	20A	fig. 86
	18	5A	fig. 86
Instrument panel	6	7.5A	fig. 86
	18	5A	fig. 86

System/Component	Fuse no.	Ampere	Location
Navigator	18	5A	fig. 86
Parking sensors (control unit)	15	10A	fig. 93
Power windows (driver's control LOCK warning light)	15	10A	fig. 93
Powered sunroof	10	20A	fig. 93
Presetting	4	—	fig. 93
	11	—	fig. 93
Rain sensor	15	10A	fig. 93
Rear current socket	16	20A	fig. 93
Rear LH power window (ABI control unit)	14	20A	fig. 93
Rear RH power window (ABI control unit)	17	20A	fig. 93

System/Component	Fuse no.	Ampere	Location
Rearscreen heating	1	30A	fig. 93
Relay coil T21, T22, T23 (boot box)	3	5A	fig. 86
Relay coil T24 (boot box)	5	10A	fig. 86
Remote control receiver	15	10A	fig. 93
Sound amplifier	20	25A	fig. 93
Sound system	4	15A	fig. 86
Sound system controls on steering wheel	5	10A	fig. 86
Starter motor	1	30A	fig. 89
Trailer presetting	12	10A	fig. 93
Windscreen heating	7	15A	fig. 93
Windscreen wiper	14	25A	fig. 86

IN THE EVENT OF A FLAT BATTERY

STARTING WITH AN AUXILIARY BATTERY

If the battery is flat, it is possible to start the engine using an auxiliary battery (**B**-fig. 96) with the same electrical characteristics as the original battery (**A**-fig. 96) (see chapter "Technical specifications").

The battery is housed on the left-hand side of the boot, protected by a cover.

If the battery is low, the servocontrol operating when the luggage compartment opens from inside or by the key does not work. However, it is always possible to open the luggage compartment

to reach the battery. Just rotate the key wider simultaneously pressing on the bonnet edge by the hand.

IMPORTANT Apply a moderate pressure only on the bonnet edge, immediately above the lock.

On versions without navigation system and without CD player, access to the battery is gained by slackening the knob (**A**-fig. 94) and removing the battery cover.

On versions with navigation system and/or CD player, access to the battery is gained by slackening the knobs (**A**-fig. 95) and removing the cover (**B**).

Starting with an auxiliary battery does not damage the Alfa Romeo CODE system and must be carried out as follows:

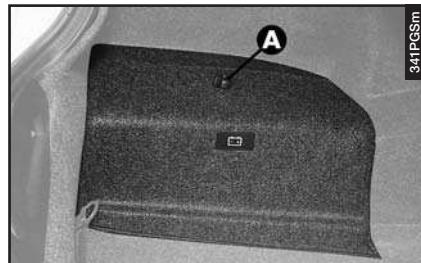


fig. 94

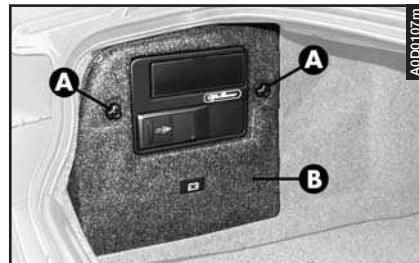


fig. 95

— Switch off all the not strictly necessary electric devices.

— Connect a jump lead to the positive terminals (**1**-fig. 96) of the two batteries (+ sign next to the terminal).

— Connect another jump lead to the negative terminals (**2**) of both batteries (- sign next to the terminal).

— Start the engine.

— When the engine has started, remove the cables reversing the sequence described for connecting them.

— If after a few attempts, the engine fails to start, do not insist pointlessly and contact the nearest Authorized Alfa Romeo Services.

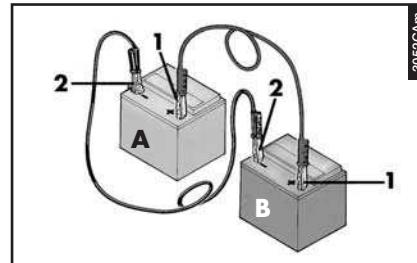


fig. 96

At the end of the operation refit the battery cover.

IMPORTANT If the battery was completely drained, it may be necessary to carry out the Alfa Romeo I.C.S. "self-teaching" operation as follows:

- Let the engine idle to allow the battery to recharge and make sure it will start next time.
- Switch the engine off.
- Turn the ignition key to **MAR** and leave it in this position for 30 seconds to 1 minute, then turn it to **STOP** for about 5 to 10 seconds, after which the engine can be started.



WARNING

This starting procedure must be carried out by qualified personnel as incorrect operations may provoke electrical discharge of great intensity. The liquid contained in the battery is toxic and corrosive. Avoid contact with skin and eyes.

Keep naked flame, and lighted cigarettes away from the battery. Do not cause sparks.



Never use a quick battery charger to start the engine in an emergency as this could damage the electronic systems of your vehicle, particularly the control units which manage the starting and supply functions.



The battery terminal connecting and disconnecting operations generate current that may cause problems to the car's electronic systems. Therefore, this operation should be carried out by skilled personnel.



To avoid damaging the vehicle's electrical system follow the manufacturer's system instructions accompanying the jump leads. The jump leads must be of a sufficient cross-section and long enough to ensure that the two vehicles do not touch.

IF THE VEHICLE IS TO BE TOWED

Towing the vehicle (fig. 97)

The rings for towing the vehicle are housed in the right and left lower part of the underbody.

Towing another vehicle (fig. 98-99)

The tow ring supplied with the vehicle is housed in the tool container under the boot mat.

To install the tow ring, proceed as follows:

— Take the tow ring from the tool container.

— Remove the cover (**A**-fig. 98) snap-fitted on the rear bumper as follows:

Take the screwdriver from the tool container in the boot, under the trim.

Using the flat bladed side protected with a soft cloth, insert the screwdriver on the upper part of the cap and press gently to prise the catch from its housing.

— Firmly screw the ring (**B**-fig. 99) in its housing.



fig. 97

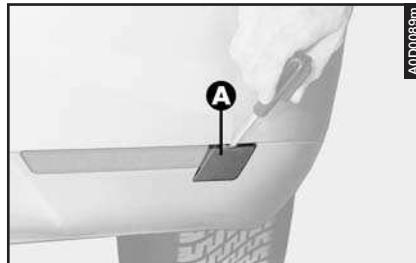


fig. 98

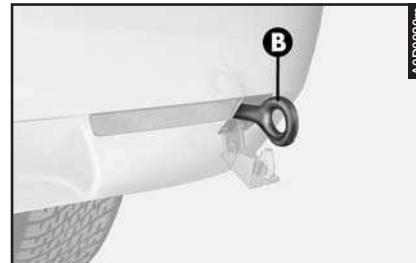


fig. 99

WARNING

Make sure that the tow ring is firmly tightened (it must be turned about 8 times in its threaded housing); carefully clean the threaded housing before tightening the ring.



WARNING

Before beginning to tow the car, turn the ignition key to MAR and then to STOP, do not remove it. Removing the key automatically engages the steering lock resulting in the impossibility to steer the wheels. When towing remember that without the help of the servobrake and power steering, it is necessary to exert more effort on the brake pedal and for steering. Do not use flexible cables for towing and avoid jerks. During towing operations make sure that fastening the joint to the car does not damage the components in contact with it. When towing the car it is compulsory to comply with the specific traffic regulations concerning both the towing device and behaviour on the road.

IF THE VEHICLE IS TO BE LIFTED

USING THE JACK

See paragraph "In the event of a puncture" of this chapter.

You are informed that.

- the jack mass is 2.100 kg;
 - the jack requires no adjustment;
 - the jack cannot be repaired and in case of breakage it must be replaced by another original one.
- no tool other than its cranking lever may be installed on the jack.



WARNING

The purpose of the jack is only for replacing wheels on the car with which it is provided or on cars of the same model. It must never be used for other purposes such as for example raising cars of other models. In no case must it be used for repairs under the car.



WARNING

The car may fall if the jack is not positioned correctly. Never use the jack for higher capacities than the one stated on its label.

USING AN ARM LIFT OR WORKSHOP LIFT

The vehicle must only be lifted laterally positioning the ends of the arms or the workshop lift in the areas (1-2) illustrated, approx. 30 cm from the profile of the wheelhouse (**fig. 100**).



The car is to be lifted positioning the jack or the workshop lift arm plate only in the points shown (1-2 fig. 100).

Between the lift plate and the body interpose a rubber pad with a maximum size of 60x60 mm and maximum thickness of 30 mm. The pad should insert in the special recess on the under door panel, without interfering with it.



fig. 100

IN THE EVENT OF AN ACCIDENT

- It is important to keep calm.
- If you are not directly involved, stop at a distance of at least ten metres from the accident.
- On the motorway stop without obstructing the emergency lane.
- Turn off the engine and switch on the hazard warning lights.
- At night, light the place of the accident with your headlights.
- Take care not to put yourself in danger of being run over.
- Signal the accident placing the reflecting triangle plainly in view at the regulation distance.
- Call the rescue organisation giving information as exact as possible. On motorways use the special call boxes.
- In motorway pileups, especially with poor visibility, the risk exists of being involved in other crashes. Leave the vehicle immediately and go over the guard rail.

- If the doors are blocked, do not try to get out of the car breaking the wind-screen which is stratified. The windows and rear-screen can easily be broken.

- Remove the ignition key from the vehicles involved.

- If you smell fuel or other chemical products, do not smoke and stub cigarettes.

- To put out even small fires use the extinguisher, blankets, sand, earth. Never use water.

IF THERE ARE INJURED PERSONS

- Never abandon an injured person. Persons not directly involved in an accident are obliged to give their help.

- Do not crowd around injured people.

- Reassure an injured person that help is on the way, stay near to cope with any panic.

- Release or cut the seat belts of injured persons.

- Do not give injured persons to drink.

- An injured person should never be moved, except in the cases listed below.

- Remove an injured person from the vehicle only in danger of fire, sinking or falling.

- When removing an injured person: do not pull the limbs or bend the head and keep the body as horizontal as possible.

FIRST AID KIT

In addition to the first-aid kit, it is also wise to keep an extinguisher and a blanket in the car.

CAR MAINTENANCE

The best way to preserve the performance and safety characteristics of your vehicle is to have it periodically inspected and maintained.



It may often be necessary to perform the maintenance operations marked with the symbol illustrated previously in order to avoid invalidation of the warranty cover.

The following pages contain the Programmed Maintenance Schedule and describe the most common checks and inspections which are fundamental to a correct maintenance schedule.

These operations should be carried out at the intervals indicated in the Programmed Maintenance Schedule.

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PROGRAMMED MAINTENANCE

PRECAUTIONS

Many moving parts, high voltage cables and parts that reach high temperatures which may cause serious injury to unqualified persons are located in the engine compartment.

The following precautions should therefore be taken:

- Switch off the engine and wait until it cools.
- Be particularly cautious when working near the engine cooling fan as this may cut in unexpectedly on the basis of the engine coolant temperature.
- Do not smoke or use naked flame.
- Always keep a fire extinguisher to hand.
- Do not use the jack supplied with the car for checking underneath it.



WARNING

The jack with which the vehicle is fitted must only be used when changing a wheel. All other operations where the vehicle must be lifted require the use of specific procedures and should be carried out by Alfa Romeo Authorized Services.



WARNING

Ensure that scarves, ties and loose clothing cannot get caught by moving parts.



Vehicle maintenance should be entrusted to an Alfa Romeo Authorized Service. For interventions of routine maintenance and small repairs you wish to carry out yourself, make sure you always have the proper equipment, genuine Alfa Romeo spare parts and the necessary liquids; do not, however, carry out these operations if you have no experience.



WARNING

DANGER-SERIOUS INJURY. When carrying out checks or maintenance operations in the engine compartment, take special care not to bump the head on the raised bonnet.



WARNING

Never smoke when working in the engine compartment: inflammable gas and vapours may be present which constitute a fire hazard.



If the car is frequently used for towing trailers, the interval between programmed maintenance operations should be reduced.



Warning, when topping up never confuse the various types of fluids which are incompatible and could seriously damage the vehicle.

GENERALITIES

Perfect performance and the life of every car are strictly connected with correct use of it, but above all on the care with which routine maintenance operations are carried out for which new programming criteria have been adopted owing to product development.

The mileage for programmed maintenance coupons is 20,000 km.

It is however wise to remember that the car still needs routine care such as for instance checking and topping up the fluids, checking the tyre pressure, etc.

Correct vehicle maintenance is surely the best way to preserve its performance levels, safety and environment protection features and low running costs over the years.

Also remember that strictly observing the maintenance instructions given in this Handbook marked by the symbol

It is possible to ask the Alfa Romeo Organisation for an estimate of the cost of service coupon operations.

IMPORTANT You are advised to contact Alfa Romeo Authorized Services in the event of any minor operating faults, without waiting for the next service coupon.

IMPORTANT The programmed maintenance coupons are specified by the Manufacturer. The failure to have them carried out may invalidate the warranty.

PROGRAMMED MAINTENANCE SCHEDULE

	thousands of kilometres	20	40	60	80	100	120	140	160	180
Check tyre conditions and wear		●	●	●	●	●	●	●	●	●
Check front disk brake pad wear indicator		●	●	●	●	●	●	●	●	●
Check conditions of rear disk brake pads			●		●		●		●	
Check intactness of axle shaft and power steering boots, joint caps and check brake and fuel lines for leaks		●	●	●	●	●	●	●	●	●
Sight check for conditions: exterior bodywork and underbody protection (exhaust pipes - fuel supply - brakes) rubber parts (boots - sleeves - bushes - etc.)		●	●	●	●	●	●	●	●	●
Check for bonnet and boot lock cleanliness, lever cleanliness and lubrication		●	●	●	●	●	●	●	●	●
Check condition of timing drive belt				●						●
Sight check for conditions of Poly-V accessory drive belt				●						●
Check handbrake lever stroke				●		●		●		●
Check/adjust valve clearance (JTD 10V versions)		●	●		●		●		●	
Check (petrol versions) engine exhaust emissions			●		●		●		●	
Check (JTD versions) engine smoke			●		●		●		●	
Check operation of anti evaporation system					●				●	

	thousands of kilometres	20	40	60	80	100	120	140	160	180
Change fuel filter (diesel versions)		●	●	●	●	●	●	●	●	●
Change air cleaner cartridge (petrol versions)			●		●		●		●	
Change air cleaner cartridge (diesel versions)		●	●	●	●	●	●	●	●	●
Check and if necessary top up fluid level (brakes, hydraulic clutch, power steering, windscreen wiper, battery, engine coolant, etc.)		●	●	●	●	●	●	●	●	●
Replacement of timing gear drive belt (*) and Poly-V accessory drive belt								●		
Replacement of counter-rotating shaft drive belt (2.0 T.SPARK engine only)								●		
Replacement of spark plugs (petrol versions)							●			
Check operation of engine control systems (through diagnostics socket)			●		●		●		●	
Check manual gearbox and differential oil level					●				●	
Check electronic automatic gearbox oil level (Sportronic versions)			●		●		●		●	
Change engine oil and oil filter		●	●	●	●	●	●	●	●	●
Change brake fluid (or every 24 months)				●			●			●
Check dust/pollen filter		●	●	●	●	●	●	●	●	●

(*) Or every 3 years in harsh conditions (cold climates, stop and go city traffic).

Or every 5 years, regardless of the mileage.

ANNUAL INSPECTION PLAN

An annual inspection plan has been established for cars that cover less than 20,000 km a year (e.g. 10,000 km). It consists of the following:

- Checking the condition/wear of tyres, and adjusting pressure (including the compact spare wheel, where applicable).
- Checking the lighting system (headlights, turn indicators, hazard warning lights, boot light, passenger compartment, warning lights of instrument panel, etc.).
- Checking the working order of the windscreen wiper-washer and adjusting the nozzles.
- Checking the positioning/wear of the windscreen wipers.
- Checking the condition and wear of the front brake pad.
- Visually checking the following: engine, gearbox, transmission, piping (exhaust, fuel supply, brakes) rubber items (casings, sleeves, bushings etc.), hoses of braking and supply systems.
- Check for bonnet and boot lock cleanliness, lever cleanliness and lubrication.
- Checking the battery charge condition.
- Visually checking the condition of the belts and various controls.
- Checking and topping up, if necessary, the level of liquids (coolant, brake fluid, windscreen washer fluid, battery etc.).
- Replacing the engine oil.
- Replacing the engine oil filter.
- Replacing the pollen filter (only for vehicles with automatic climate control).

ADDITIONAL OPERATIONS

Every 1000 km or before long journeys check and if necessary top up:

- the engine coolant fluid level
- brake fluid/hydraulic clutch control fluid level
- power steering fluid level
- windscreen washer and headlamp washer fluid level
- tyre pressure and conditions.

Every 3000 km check the level of the engine oil and top up if necessary.

Every 5000 km (only for fuel oil engines): drain the condensation water from the filter. You are recommended to use products of the **FL Selenia**, designed and developed expressly for Alfa Romeo cars (see the table "Specifications of fluids and lubricants" in the Technical specifications" chapter).

IMPORTANT - Engine oil

Change the engine oil more frequently than stated in the Scheduled Maintenance Programme if the car is used prevailingly in one of the following particularly harsh conditions:

- trailer or caravan towing
- dusty roads
- short, repeated journeys (less than 7-8 km) with an outside temperature of below freezing point.
- engine idling frequently or driving long distances at low speed (e.g. taxi or door-to-door deliveries) or in the case of prolonged inactivity.

IMPORTANT - Air cleaner

Using the car on dusty roads, change the air cleaner more frequently than stated in the Scheduled Maintenance Programme.

For any doubts about the intervals between engine oil and air cleaner changes in relation to how the car is used, contact Authorised Alfa Romeo Services.

IMPORTANT - Fuel oil filter

The variety of the degree of purity of the fuel oil in commerce may make it necessary to change the fuel oil filter more frequently than stated in the Scheduled Maintenance Programme. If the engine is "sobbing" it is a sign that the filter needs changing.

IMPORTANT - Pollen filter

If the car is used frequently in dusty or heavily polluted environments, you are recommended to change the activated carbon filtering element more frequently; in particular, it should be changed if a lower flow of air admitted to the passenger compartment is noted.

IMPORTANT - Batteries

You are recommended to have the battery charge conditions checked, preferably at the onset of winter, to avoid the possibility of freezing the electrolyte.

This check should be carried out more frequently if the car is used prevailingly for short journeys, or if it is fitted with services that absorb high amounts of current permanently with the ignition key off, especially if installed in the after market.

In the case of use of the car in hot climates or particularly harsh conditions, it is wise to check the level of the battery fluid (electrolyte) at more frequent intervals than stated in the Scheduled Maintenance Programme.

IMPORTANT - Remote control

If when pressing the remote control button of the key, the operating led on the key flashes briefly only once, the battery need replacing with other of the same type.

**WARNING**

Never smoke during work in the engine compartment: there is the possibility of inflammable gas and vapours with the risk of fire.



When topping up take care not to confuse the various types of fluids: they are all incompatible and could seriously damage the car.



Vehicle maintenance should be entrusted to the Alfa Romeo Service Network. For ordinary and minor operations you can do yourself, always make sure you have adequate tools, original Alfa Romeo spares and the correct fluids. Do not carry out these operations if you have no experience.



If the vehicle is frequently used for towing trailers, the interval between one programmed maintenance and the next should be reduced.

CHECKING LEVELS, TOPPING UP AND REPLACING

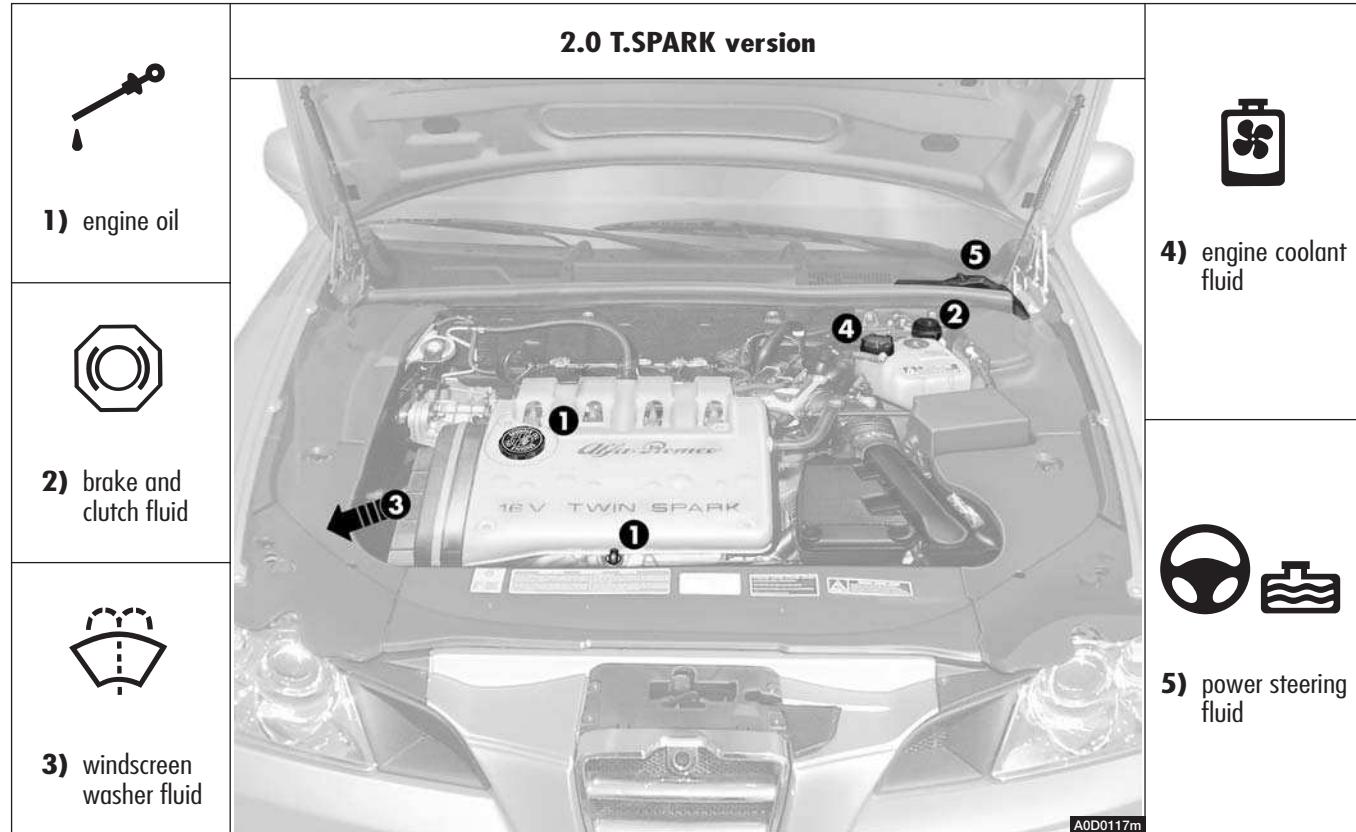


fig. 1

2.5 V6 24V - 3.0 V6 24V versions



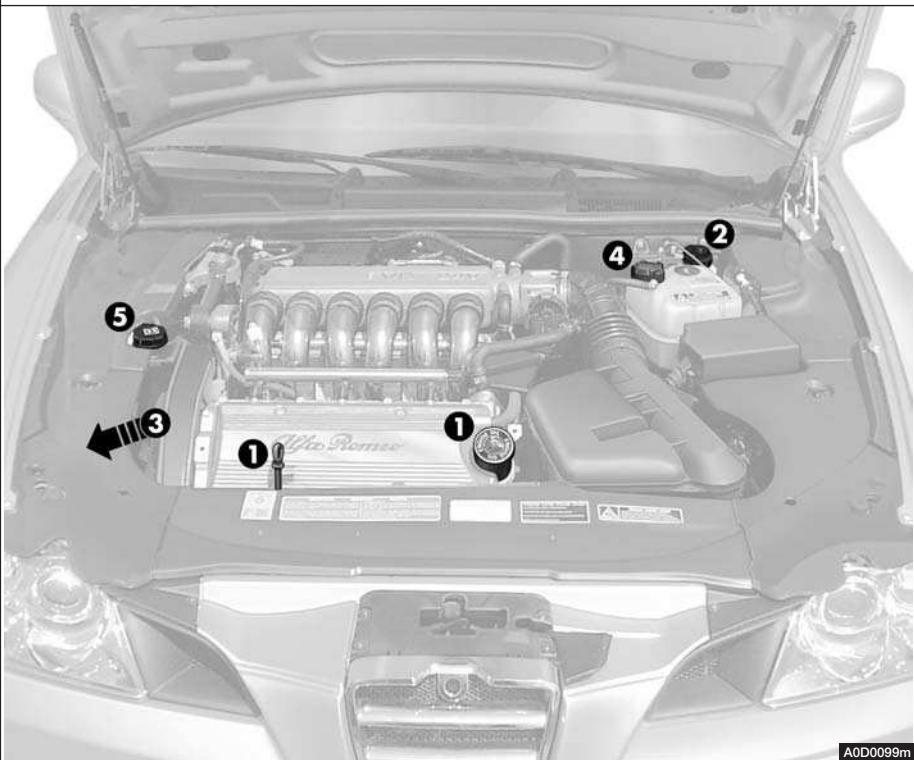
1) engine oil



2) brake and clutch fluid



3) windscreens washer fluid



4) engine coolant fluid



5) power steering fluid

fig. 2

3.2 V6 24V version



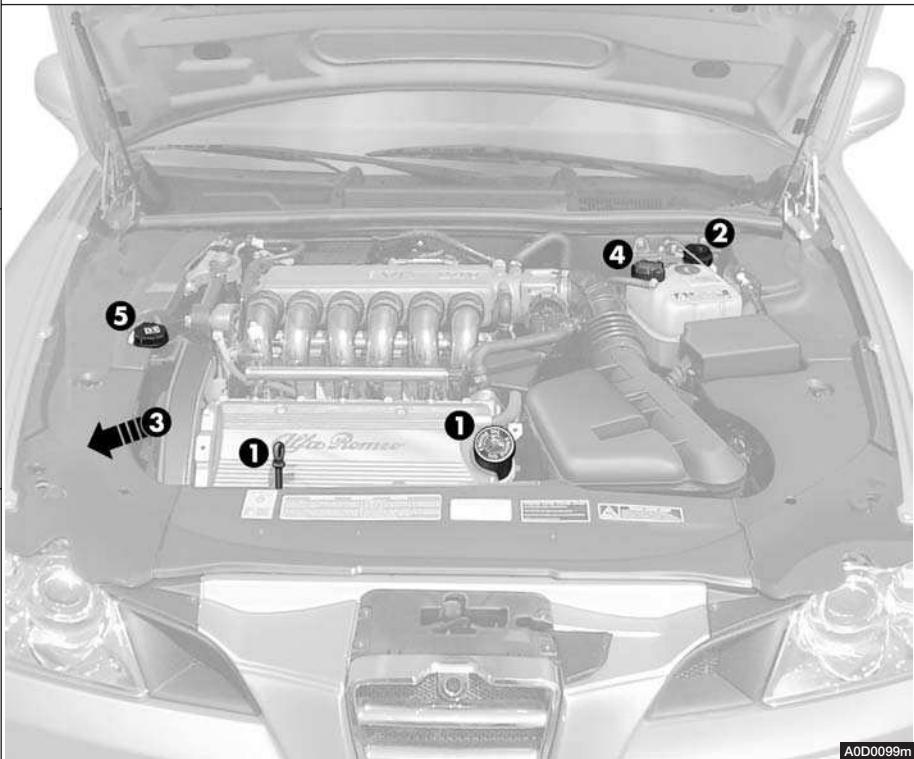
1) engine oil



2) brake and clutch fluid



3) windscreens washer fluid



4) engine coolant fluid



5) power steering fluid

fig. 3

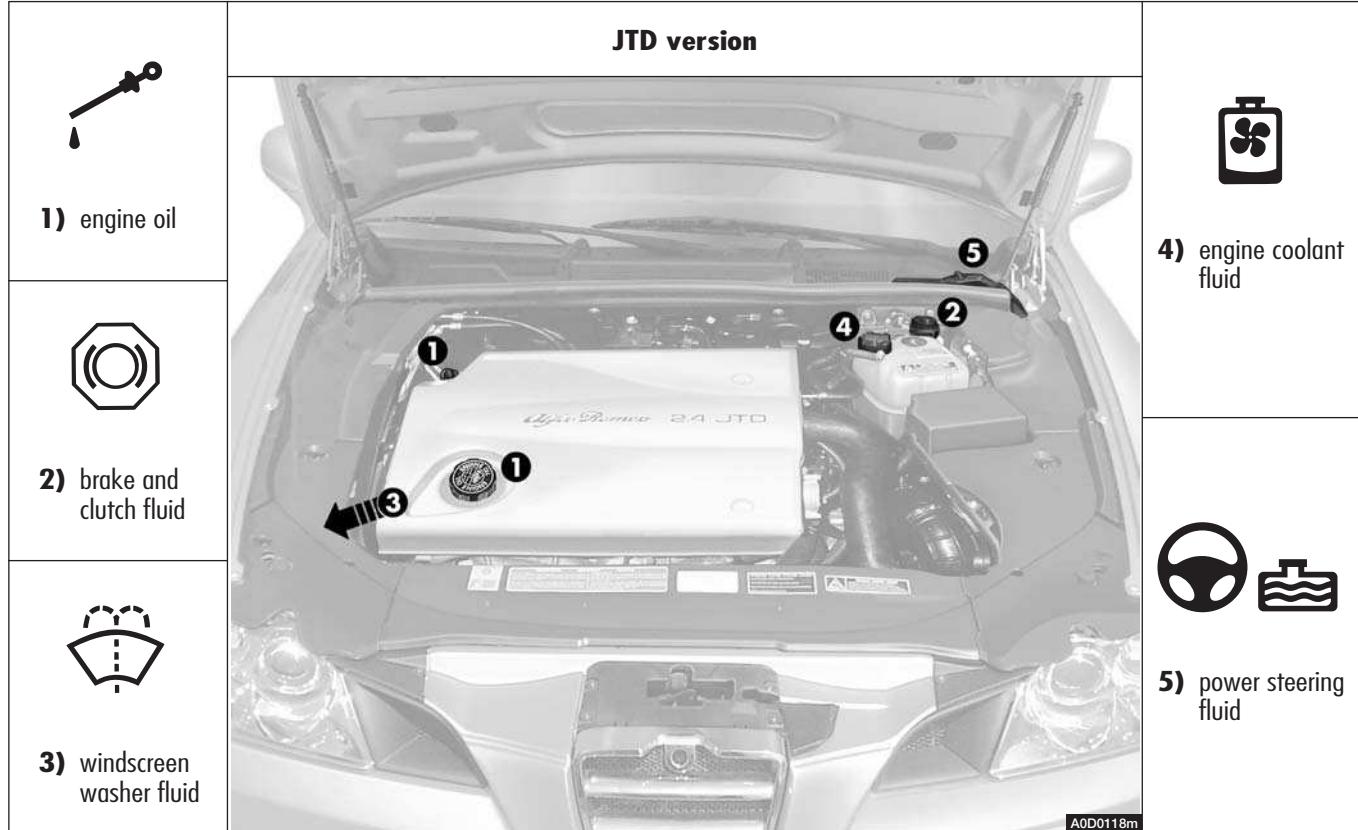


fig. 4

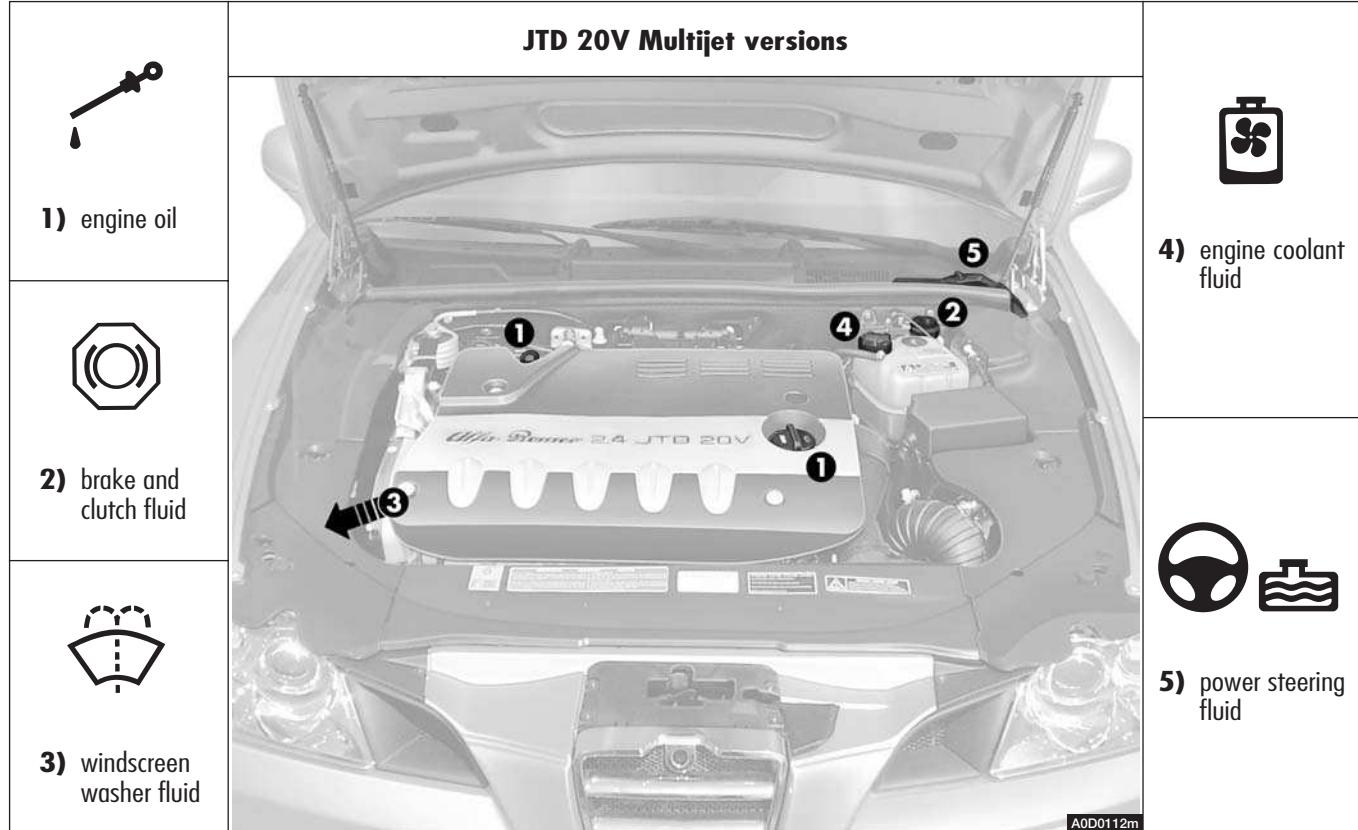


fig. 5

PROTECTIVE SHIELD UNDER ENGINE

The car is fitted with a protective shield under the engine.

IMPORTANT When changing the engine oil and filter, checking and changing the gearbox and differential oil, this protection should be removed. This operation should be carried out by Alfa Romeo Authorized Services.

CHECKING ENGINE OIL LEVEL

Fig. 6: 2.0 T.SPARK version

Fig. 7: 2.5 V6 24V - 3.0 V6 24V
3.2 V6 24V versions

Fig. 8: JTD version

Fig. 9: JTD 20V Multijet versions

The engine oil level should be checked when the vehicle is standing on a level surface a few minutes (about 5) after the engine has been switched off.

Remove the dipstick (**A**), clean it, then re-insert it completely, remove it once again and check that the level is between the MIN and MAX marks on the dipstick.

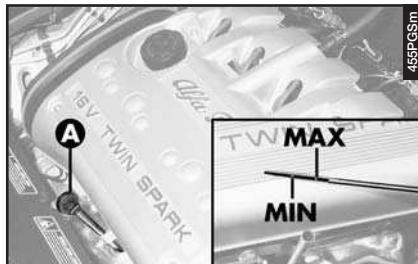


fig. 6 - 2.0 T.SPARK version

The interval between the MIN and MAX marks corresponds to approximately 1 litre of oil.

Max. engine oil consumption is usually 400 grams every 1000 km.

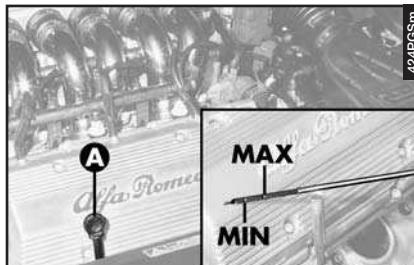


fig. 7 - 2.5 V6 24V - 3.0 V6 24V
3.2 V6 24V versions

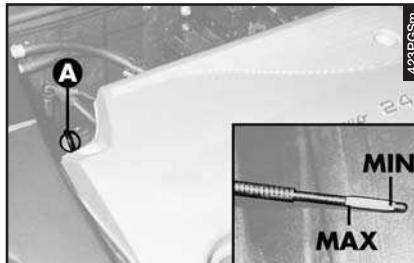


fig. 8 - JTD version

When the car is new, the engine needs to run in, therefore the engine oil consumption can only be considered stabilised after the first 5000-6000 km.

The oil consumption depends on driving style and the conditions under which the car is used.



WARNING

To avoid burns particular care should be taken when working inside the engine compartment when the engine is warm.

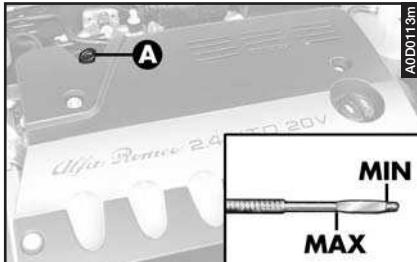


fig. 9 - JTD 20V Multijet versions

TOPPING UP ENGINE OIL

Fig. 10: 2.0 T.SPARK version

Fig. 11: 2.5 V6 24V - 3.0 V6 24V
3.2 V6 24V versions

Fig. 12: JTD version

Fig. 13: JTD 20V Multijet versions

When the level falls to the MIN mark, cap (B) should be removed and the system topped up to the MAX mark through the filler neck.

Do not exceed the MAX mark when topping up with engine oil.

IMPORTANT After topping up the engine oil, before checking the level, run the engine a few seconds and wait for a few minutes (approx. 5) after stopping it.

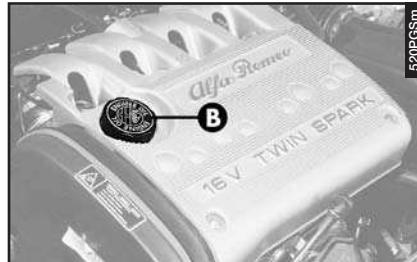


fig. 10 - 2.0 T.SPARK version

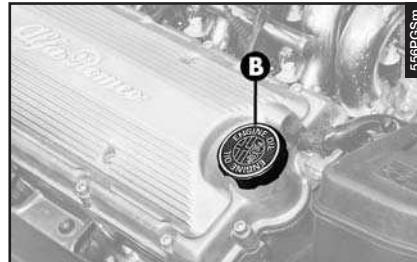


fig. 11 - 2.5 V6 24V - 3.0 V6 24V
3.2 V6 24V versions



WARNING

Remember that when the engine is warm the electric fan, which is operated on the basis of the engine coolant temperature, could cut-in automatically and cause injury.



Never add oil with characteristics (classification, viscosity) which are different from those of the oil already in the circuit.



WARNING

Never exceed the MAX level when topping up or changing engine oil. Too much engine oil would cause it to be taken in through the blow-by cylinder. For JTD versions this can rapidly increase the engine speed (no longer controllable, in this case, by releasing the accelerator pedal and moving the ignition key to STOP) and damage to the engine with the risk of seizing or fire.

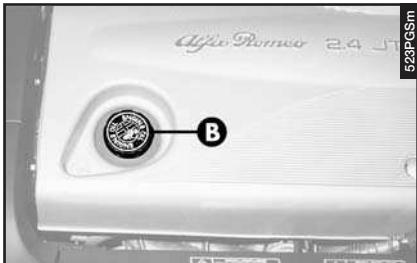


fig. 12 - JTD version

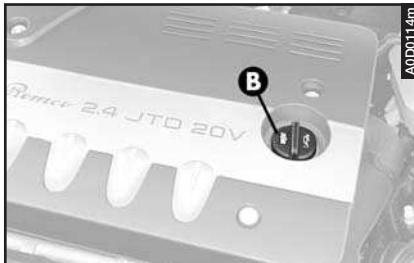


fig. 13 - JTD 20V Multijet versions

CHECKING AND TOPPING-UP ENGINE COOLANT (fig. 14)

Periodically check that the level of fluid in the expansion tank when cold and with the car on level ground, is between "MIN" and "MAX".

If the level is too low, unscrew cap (A) on the expansion tank and top-up.



Top up only with the same fluid contained in the cooling circuit.



WARNING

The cooling system is pressurised. If necessary replace the cap only with another original one, otherwise the efficiency of the system could be compromised.



WARNING

To avoid being burnt, when the engine is hot do not remove the cap from the expansion tank.



The antifreeze mixture contained in the cooling circuit guarantees protection down to -35°C.

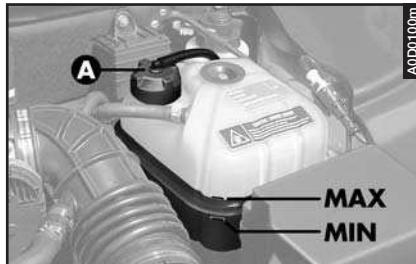


fig. 14

CHECKING POWER STEERING OIL LEVEL

Fig. 15: 2.0 T.SPARK - JTD - 3.2 V6 24V versions

Fig. 16: 2.0 T.SPARK - JTD - JTD 20V Multijet versions

Fig. 17: 2.5 V6 24V - 3.0 V6 24V versions

Check that the oil in the reservoir is at the maximum level.

This operation must be carried out with the car on level ground and when the engine is stationary and cold.

On 2.0 T.SPARK, JTD and JTD 20V Multi-jet versions access to the reservoir is gained by removing the cover (**A-fig. 15**) after turning the fastening pins withdraw the tube (**B-fig. 16**).

Slacken the cap (**C-fig. 16-17**) and check that the level corresponds to the reference notch of the maximum level on the dipstick which is an integral part of the cap.

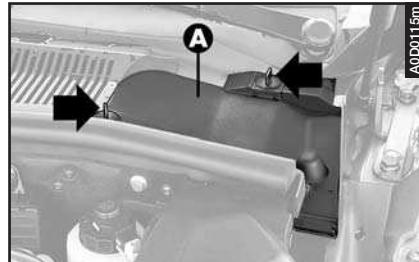


fig. 15 - 2.0 T.SPARK - JTD
JTD 20V Multijet versions

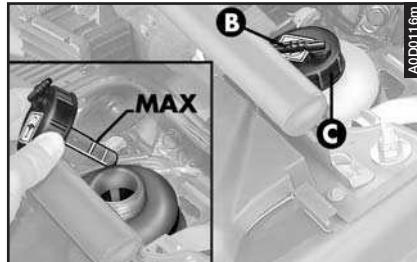


fig. 16 - 2.0 T.SPARK - JTD
JTD 20V Multijet versions

TOPPING UP THE POWER STEERING OIL

If the level of the oil in the power steering reservoir falls below the specified level, top up only with one of the products listed in the table of "Specifications of fluids and lubricants" in the "Technical specifications" chapter as follows.

– Start the engine and allow the oil in the reservoir to settle.

– When the engine is running turn the steering wheel lock to lock a few times.

– Top up the MAX level notch and then replace the cover.

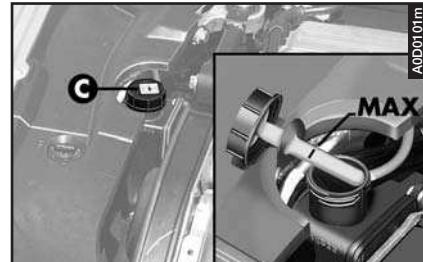


fig. 17 - 2.5 V6 24V – 3.0 V6 24V
3.2 V6 24V versions

On 2.0 T.SPARK, JTD and JTD 20V Multijet versions insert the tube on the cap and refit the cover fastening with the three screws.



Oil consumption is very low; if topping up again is needed shortly afterwards, have the system checked for possible leaks by Alfa Romeo Authorized services.

IMPORTANT Contact Alfa Romeo Authorized Services for maintenance and repair operations.



CHECKING AND TOPPING UP THE BRAKE AND CLUTCH FLUID (fig. 18)

Check that the liquid contained in the reservoir reaches the maximum mark. When periodically topping up or changing (which should in any case be carried out every two years) only the products listed in the table of "Specifications of fluids and lubricants" in the "Technical specifications" chapter should be used.

From time to time check the instrument panel warning light by pressing cover (B) of the reservoir (A) (with the ignition key at MAR) the instrument warning panel light (①) should come on.

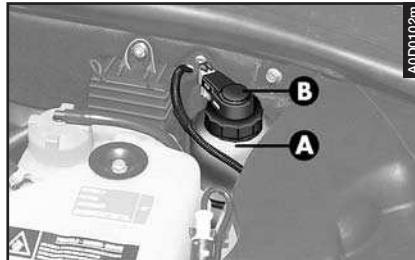


fig. 18



When the cap (B) is screwed off the reservoir ensure that the electrical connections are not disconnected. Do not allow the liquid to come into contact with painted components. If it does, wash it off immediately with water.



WARNING

Symbol  on the container indicates synthetic type brake fluid distinguishing it from the mineral kind. Using mineral type fluids damages the special rubber braking system gaskets beyond repair.



WARNING

Brake and clutch fluid is poisonous and corrosive. In the event of contact wash the parts concerned immediately with neutral soap and water, then rinse thoroughly. See a doctor at once if the fluid is swallowed.

CHECKING AND TOPPING UP THE WINDSCREEN/HEADLIGHT WASHER FLUID (fig. 19-20)

Access to the windscreen/headlight washer fluid reservoir, remove the cover (A-**fig. 19**) after turning the pins (B).

Then remove the cap (C-**fig. 20**) and pour the fluid in the tank until the level can be seen through the filler neck.

Then close the filler with the cap and refit the cover fastening with the two pins.



WARNING

Some commercial additives for windscreen washers are inflammable. The engine compartment contains hot components which could set it on



To avoid damaging the pump motor do not use the windscreen washers when the reservoir is empty.

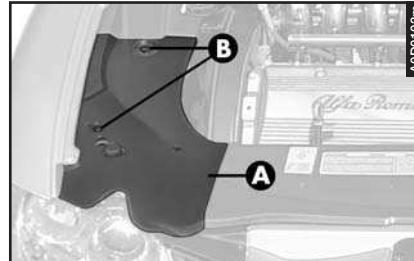


fig. 19



fig. 20



WARNING

Do not travel with the windscreen washer reservoir empty: the action of the windscreen washer is fundamental for improving vision.

IMPORTANT When topping up use the special detergents available in the shops ensuring that they contain antiscale and antifreeze properties.

If in doubt contact Alfa Romeo Authorized Services who will be able to recommend the most suitable products.

AIR CLEANER

The air cleaner is connected to the temperature and air flow sensors which send the electrical signals needed for correct operation of the injection and ignition system to the control unit.

It must therefore always be in perfect conditions to ensure correct operation of the engine, low consumption and exhaust emission levels.



When the car is habitually driven in dusty areas, the cleaner should be changed at shorter intervals than those given in the Programmed Maintenance Schedule.



Any attempt to clean the air cleaner may cause serious engine damage.



If they are not carried out correctly and with the due precautions, the operations involving cleaner replacement described herein may compromise the safety of the car. This operation should be carried out by Alfa Romeo Authorized Services.

DIESEL FILTER

DRAINING CONDENSATION WATER



Water in the supply circuit can seriously damage the whole injection system and cause malfunctions to engine operation. Should the warning lamp , contact as soon as possible the Alfa Romeo Authorised Service for drainage operations.

DUST/POLLEN FILTER

The filter mechanically/electrostatically filters the air provided that the windows are shut.

The dust/pollen filter should be checked over once a year by Alfa Romeo Authorized Service station preferably at the beginning of the summer.

If the vehicle is habitually driven in cities, motorways or on dusty roads the system should be checked over more often than specified in the Programmed Maintenance Schedule.

IMPORTANT If the filter is not replaced the efficiency of the climate control system may be seriously compromised.

BATTERY

The battery (**fig. 22**) is housed on the left-hand side of the boot, protected by a cover.

On versions without navigation system and without CD player, access to the battery is gained by slackening the knob (**A-fig. 21**) and removing the battery cover.

On versions with navigation system and /or CD player, access to the battery is gained by slackening the knobs (**A-fig. 22**) and removing the cover (**B**).



fig. 21

The battery adopted is of the "Limited Maintenance" type and under normal conditions of use will not require topping up.

The level of the electrolyte solution must however be between the MIN and MAX reference marks when the vehicle is stationary on a level surface (**fig. 23**).

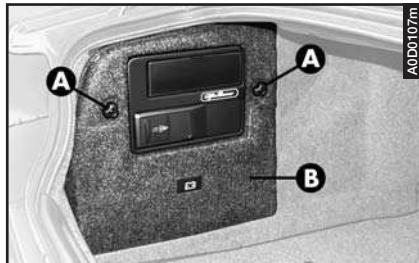


fig. 22

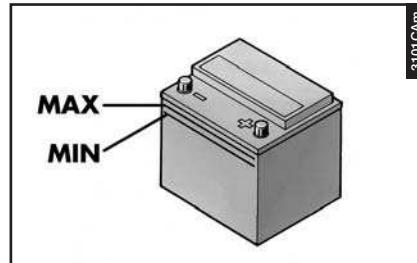


fig. 23

 **The batteries contain substances which are extremely harmful to the environment. Alfa Romeo Authorized Services should be contacted when equipped to dispose of the batteries respecting both the environment and legal requirements.**

 **If the level is low, contact Alfa Romeo Authorized Services.**



Serious damage may be caused to the vehicle if electrical accessories are incorrectly installed. If, after purchasing your vehicle, you wish to install accessories (theft alarm, voice feature, satellite radio-navigator with antitheft function, etc.) contact Alfa Romeo Authorized Services whose qualified personnel in addition to being able to recommend the most suitable devices from Lineaccessori will determine whether it will be necessary to install a more powerful battery.



If the car is to remain stationary for a long time in very cold weather, remove the battery and take it to a warm place, otherwise it might freeze.



WARNING

When doing any work on the battery or near it, always wear special protective goggles.



WARNING

Working with the fluid level too low damages the battery irreparably, even breaking the body and completely leaking the acid contained.



The wrong electric and electronic accessory installation may cause severe vehicle damages.

CHARGING THE BATTERY

IMPORTANT The description of the battery charging procedure is described only for informative purposes. This operation should be carried out by Authorized Alfa Romeo Services.

Charging should be slow at a low amp rating for about 24 hours. Charging for a longer time may damage the battery.

Charge the battery as follows:

— If the car is fitted with an alarm system, turn off the alarm with the remote control and deactivate the system turning the emergency key to “**OFF**” (see “Electronic alarm” in the chapter “Getting to know your car”).

— Disconnect the terminals of the electric system from the battery poles.

— Connect the charger cables to the battery.

— Turn on the charger.

— After charging turn off the charger before disconnecting it from the battery.

— Re-connect the terminals to the battery poles correctly.

— Turn the ignition key to **MAR** and leave it in this position for 30 seconds to 1 minute, then turn to **STOP** for about 5 to 10 seconds, after which the engine can be started.

— Remember to reactivate the alarm system (if present) turning the emergency switch to “**ON**”.



WARNING

The fluid contained in the battery is poisonous and corrosive. Avoid contact with the skin or eyes. The battery should be charged in a ventilated place away from naked flames or possible sources of sparks: danger of explosion and fire.



WARNING

Never attempt to charge a frozen battery before thawing it, the danger of explosion exists. If it has frozen, always check that the inside elements are not broken (risk of short circuit) and that the body is not cracked, with the risk of acid coming out which is poisonous and corrosive.

IMPORTANT A battery kept at below 50% of its capacity is damaged by sulphation, the capacity is reduced and starting is difficult, there is also more possibility of freezing (this can occur at -10°C). In the event of a prolonged stop, refer to "Vehicle inactivity".

USEFUL HINTS TO EXTEND THE LIFE OF YOUR BATTERY

To avoid quickly draining the battery and to preserve its operating conditions over the course of time, carefully follow the instructions below.

- The terminals must always be tightened.
- As far as possible avoid keeping services on for a long time with the engine stopped (radio, hazard warning lights, parking lights, etc.).
- When leaving the vehicle parked in a garage, make sure that the doors, bonnet, boot and interior lids are properly shut to prevent lights from staying on.

— Before doing any work on the electric system, disconnect the battery negative terminal.

If after purchasing the car, you wish to install electrical accessories which need a permanent electrical supply (alarm, hands-free phone, radio-navigator with satellite anti-theft function, etc.) contact Authorised Alfa Romeo Services whose qualified personnel, in addition to suggesting the most suitable devices from Lineaccessori will be able to evaluate the total electrical absorption, checking whether the car's electric system is able to support the load required or whether a battery with higher capacity is necessary.

In fact, these devices continue to absorb current with the ignition key off (car parked, engine off) and may gradually drain the battery.

The total absorption of these accessories (standard and installed later) must be $0.6 \text{ mA} \times \text{Ah}$ (of the battery), as shown in the table below:

Battery	Maximum permissible loadless absorption
100 Ah	60 mA

You are also reminded that services with high current absorption activated by the user, such as bottle warmers, vacuum cleaners, cellular telephone, mini refrigerator, etc. accelerate the battery drainage process if they are powered with the engine not running.

IMPORTANT It should also be noted that improper branches on connectors of the electric wiring for installing additional equipment is dangerous, particularly if safety devices are involved.

ELECTRONIC CONTROL UNITS

With normal use of the vehicle no particular precautions need to be taken.

If interventions are to be carried out on the electrical system or emergency starting the following must be heeded:

- Always switch off the engine before disconnecting the battery from the electrical system.
- If battery charging is necessary disconnect it from the electric system.
- When starting in an emergency only an auxiliary battery must be used and not a battery charger.
- Check that the polarity is correct and that the connections between the battery and the electrical system are sound.
- Before connecting or disconnecting the terminals of the electronic units ensure that the ignition key is not in the **MAR** position.
- Do not check for current in the cables by short-circuiting the ends.
- If electrical welding is to be carried

out on the body of the vehicle the electronic control units must be disconnected or removed if the work involves the production of high temperatures.



WARNING

If additional systems are to be installed on the vehicle the danger of incorrectly taking branches from the electrical wires cannot be emphasized too strongly especially if devices essential to the safety of the vehicle and its occupants are involved (ignition, injection, ABS ...). The incorrect installation of radio systems, electronic theft alarms, radiotelephones etc. can interfere with the electronic control units and compromises the warranty cover. For these interventions we recommend that you contact Alfa Romeo Authorized Services.

The loadless absorption of all the accessories installed in the after market must not exceed 20 mA (reading with the vehicle stationary).

SPARK PLUGS

If the engine is running unevenly have the spark plugs checked by Alfa Romeo Authorized Services.



The spark plugs must be changed at intervals given in the Programmed Maintenance Schedule. Only use spark plugs of the specified type (see table of "Fuel Supply and Ignition" in the "Technical specifications" chapter): if the thermal grade is inadequate, or the foreseen life is not guaranteed inconveniences may result.

IMPORTANT On 2.0 T.SPARK engine removing the spark plug caps requires the use of a special tool which avoids damage: therefore for this operation you are recommended to contact Authorized Alfa Romeo Services.

WINDSCREEN WIPER BLADES (fig. 24)

Periodically clean the wiper blades and ensure that they are not damaged. If the rubber blades are bent or worn in parts they should be replaced, as follows:

- Press the tab (B) of the blade catch spring and push the blade towards the base of the arm (A).
- When the catch spring has been freed from the curved top of the arm, withdraw the blade from the arm through the slot.

— Insert a new blade passing it through the curved top of the arm (A) through the slot.

— Lift the blade to clamp tab (B) of the coupling spring with the curved top of the arm.

IMPORTANT The blades may differ according to the versions. In any case, follow the instructions provided in the packs available as spares from Alfa Romeo Authorized Services.

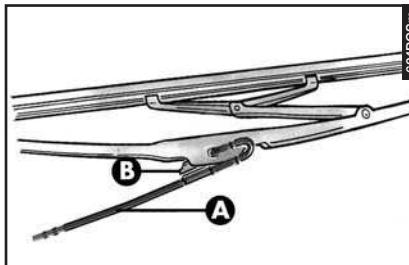


fig. 24

SPRAY JETS

Make sure that the windscreen and headlight washer jets deliver a jet of fluid which is adequate and correctly directed.

If the spray devices are not working check that the supply circuit is not blocked. If necessary unclog the nozzles using a needle.

BODYWORK

PROTECTION FROM ATMOSPHERIC AGENTS

Alfa Romeo employs manufacturing technologies which are designed to protect the bodywork against chemical corrosion caused by various factors, for example:

- atmospheric pollution.
- Salty air and humidity (coastal areas, hot-humid climates).
- Road surfaces covered with salt and de-icing products during the winter.

To further increase resistance against corrosion the following procedures have been adopted:

- painting system and paint products which render the vehicle particularly resistant to corrosion and abrasion.
- Wide use of sheet metal which is extremely resistant to corrosion.
- Spraying of the underbody, engine bay, wheel arches and boxed parts with suitable products which adhere strongly to the metal parts and have a high protection capability.

— Application of enamels with greater resistance to atmospheric pollutants.

— Adoption of "open" boxed parts to prevent condensation from triggering corrosion from the inside.

The underbody is treated with the application of a special protective material.

If this protective layer requires restoration the exhaust system, lambda probe and catalytic converter must be left free of any wax, oil, plastic and/or inflammable product.

This should therefore be carried out by Alfa Romeo Authorized Services.

RECOMMENDATIONS TO PRESERVE THE BODYWORK

Particular care should be taken to ensure that residual deposits of industrial dust, tar spots, dead insects etc. do not remain on the bodywork.

Where possible do not park under trees as, during certain seasons, residues, buds and leaves containing chemical substances which are harmful to the paint may fall onto the vehicle.

When topping up ensure that petrol, lubricating oil, brake fluid, liquid for the cooling system, battery electrolyte solution etc. is not splashed onto the bodywork.

If this should occur however, clean the area immediately and wash the vehicle as soon as possible.

PAINT

The paintwork does not only serve an aesthetic purpose but also protects the underlying sheet metal.

In the case of deep scrapes or scores you are advised to have the necessary touching up carried out immediately by a specialised workshop to avoid the formation of rust.

Normal paint maintenance consists in washing at intervals depending on the conditions and environment of use.

For example:

— in areas with high atmospheric pollution.

— Roads sprayed with salt.

— Parking under trees that release resinous substances.

It is wise to wash the car more frequently.

Alfa Romeo markets a complete series of products specifically designed for the care and cleanliness of its vehicles (shampoo, wax, touch-up paint stick, stain remover, polish etc.).

The characteristics of these products are compatible with the type of paint, gaskets and trim of all Alfa Romeo vehicles.

The application of these products should however be carried out by Alfa Romeo personnel who will be able to guarantee the best results and avoid problems which may compromise the bodywork warranty cover.



Detergents cause water pollution. The car should therefore be washed in areas equipped for the collection and purification of the liquid used in the washing processes.

To correctly wash the car, proceed as follows:

1) Spray the vehicle with a low pressure jet of water.

2) Pass a sponge moistened with a light detergent solution (2-4% shampoo in water) over the bodywork rinsing the sponge frequently.

3) Rinse well with water and dry with a jet of air or chamois leather.

When drying off take particular care to cover the less visible parts like the bonnet and boot lids and around the headlights where water may stagnate.

The vehicle should not be taken to an enclosed area immediately but left in the open so that the residual water can evaporate.

Do not wash the vehicle after it has been left in the sun or when the bonnet is hot as this may alter the shine of the paintwork.

Plastic parts must be cleaned in the same way as the rest of the vehicle. Specific products need only be used when dirt is particularly resistant.

IMPORTANT Bird droppings must be washed off immediately as the acid contained in them is particularly aggressive.

To better protect the paint, occasionally polish with special products (silicone wax) which leave a protective layer on the body.

WINDOWS

Use specific products to clean the windows. Clean cloths should be used to avoid scratching or altering the transparency of the glass.



The inside of the rear windscreen should be wiped gently with a cloth in the direction of the filaments to avoid damaging the heating device.

ENGINE COMPARTMENT

At the end of the winter the engine compartment should be carefully washed. Contact a specialised workshop to have this done.



Detergents cause water pollution. The car should therefore be washed in areas equipped for the collection and purification of the liquid used in the washing processes.

IMPORTANT The vehicle should be washed with the engine cold and the ignition key turned to **STOP**. After washing make sure that the various protections (e.g. rubber caps and recess covers) have not been damaged or removed.



For washing the engine compartment, you are recommended to use "FULCRON" available in Alfa Romeo Lineaccessori. In any case, only use soda-free detergent solutions preferably alkalinized with metasilicates.

After washing the engine compartment it must be accurately rinsed with a specific operation and dried. In fact the normal passage of the body washing tunnel is unable to rinse the engine compartment adequately.

INTERIOR FITTINGS

Periodically check that water is not trapped under the carpets (due to water dripping off shoes, umbrellas etc.) which could cause oxidisation of the sheet metal.

CLEANING SEATS AND CLOTH PARTS

- For the seats and parts in fabric (velvet, suede, etc.) dust may be removed using a soft brush.
- To remove grease stains specific products may be used closely following the manufacturer's instructions.
- For more accurate cleaning, rub the seats with a sponge moistened with a solution of water and neutral detergent in the proportions stated on the package.

CLEANING LEATHER PARTS

- Remove dried on dirt with a chamois leather or a lightly moistened cloth without pressing too hard.
- Remove liquid and grease stains with a dry absorbent cloth without rubbing. Following this wipe with a soft cloth or chamois leather moistened with water and neutral soap.

If the stain persists use specific products in accordance with the instructions for use.



Never use spirit or alcohol-based products.



WARNING

Never use inflammable products such as fuel oil ether or rectified petrol. The electrostatic charges generated by rubbing when cleaning may cause fire.

PLASTIC PARTS

Should it be necessary to remove dust, dirt, etc. from the surface of the light units (and/or direction indicators) only use a solution of neutral soap and water and a soft cloth.

Absolutely never use chemical solvents and/or petroleum derivatives such as petrol, methylated spirits, ammonia, acetone, etc. which could spoil the material and reduce its transparency, adversely affecting travelling safety.

For internal plastic parts use specific products to preserve the appearance of the components.



Never use spirit or petrol to clean the glass on the instrument panel.

I.C.S. MASK AND CENTRAL CONSOLE

Remove finger prints with common alcohol-free water and surfactants glass detergent. Rub surfaces with a clean cotton rag moistened with detergent.

WARNING

Do not keep aerosol cans in the car. There is the risk they might explode. Aerosol cans must never be exposed to a temperature above 50°C. The temperature inside the car might go well beyond that figure when exposed to the sun's rays.

TECHNICAL SPECIFICATIONS

The following pages give the various specifications of the vehicle.

These pages will probably represent the main reference point in this booklet for the "experts and enthusiasts".

This section should be consulted in order to identify the main characteristics of your vehicle referred to in the previous chapters.

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IDENTIFICATION DATA

The identification data should be recorded. The identification data is carried on labels in the following positions (**fig. 1**):

- 1** - Identification label
- 2** - Body label
- 3** - Bodywork paint identification label
- 4** - Engine label.

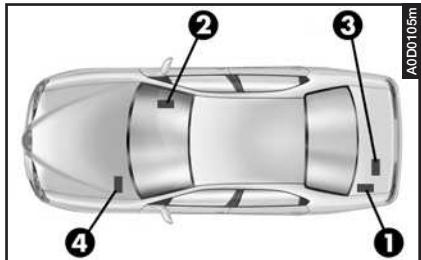


fig. 1

BODY LABEL

The body label carrying the following information is located in front of the right front seat concealed by the lid (**A-fig. 2**), it is printed with the body identification (**fig. 3**) including:

- Type of vehicle
- Manufacturer's serial number (chassis number).

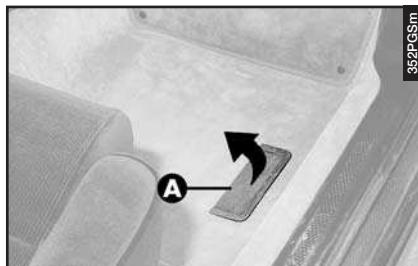


fig. 2



fig. 3

ENGINE LABELS

On the rear left-hand side, gearbox side.

BODYWORK PAINT IDENTIFICATION LABEL (fig. 4)

This is applied to the inner part of the luggage compartment and carries the following data:

- A** - Paint manufacturer
- B** - Name of colour
- C** - Colour code
- D** - Colour code for touching up and respraying.

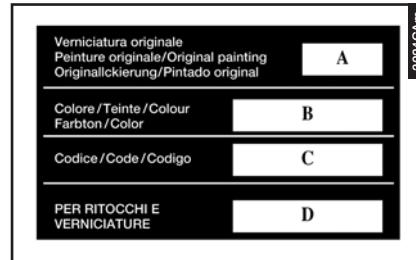


fig. 4

IDENTIFICATION LABEL

This is located in the left-hand side of the boot (next to the battery) (fig. 5).

It carries the following identification data:

A - Space for details of national homologation

B - Space for punching the consecutive chassis number

C - Space available for maximum weights authorised by various national laws

D - Space for version and any supplementary indications to those specified

E - Space for smoke index (2.4 JTD versions only)

F - Space for punching manufacturer's name.

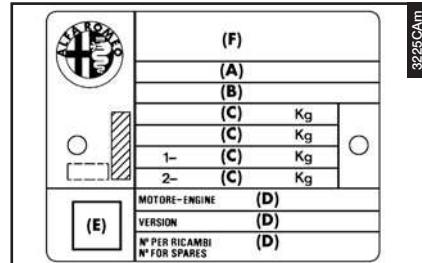


fig. 5

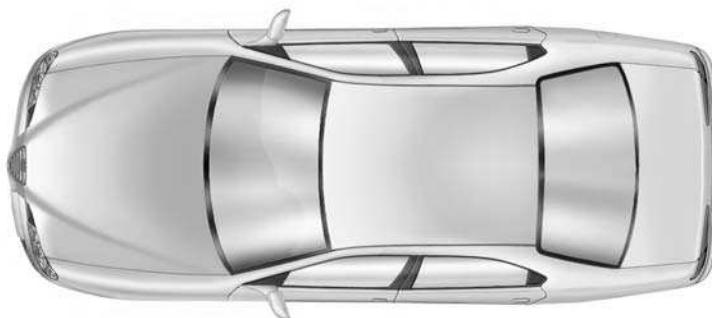
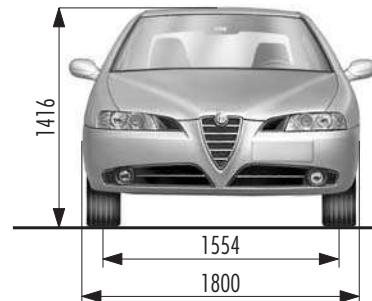
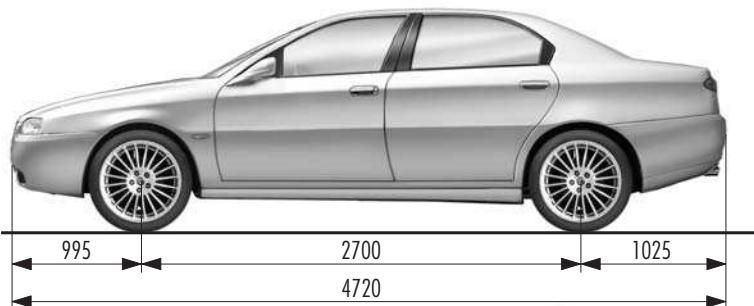
ENGINE AND BODY VERSION CODES

	2.0 T.SPARK	2.5 V6 24V	3.0 V6 24V (Sportronic)	3.2 V6 24V	JTD	JTD 20V Multijet	JTD 20V Multijet (Sportronic)
Engine Code	AR 36301	AR 36201	AR 36101	936A000	841C000	841G000 841M000 (*)	841H000 841N000 (*)
Body Code	936A3B00 14C	936A2100 13C	936A1101 12C	936AXB00 17	936AXA00 16C	936AXC00 18 936AXE00 20 (*)	936AXD01 19 936AXF01 21 (*)

(*) For specific markets

DIMENSIONS

A0D016m



— The dimensions are expressed in mm

— The height indicated is for an unladen car

fig. 6

ENGINE

	2.0 T.SPARK	2.5 V6 24V	3.0 V6 24V (Sportronic)	3.2 V6 24V	JTD	JTD 20V Multijet	JTD 20V Multijet (Sportronic)
Position	Front transversal	Front transversal	Front transversal	Front transversal	Front transversal	Front transversal	Front transversal
Number and arrangement of cylinders	4 in line	6 in 60°V	6 in 60°V	6 in 60°V	5 in line	5 in line	5 in line
Cycle	Otto	Otto	Otto	Otto	Diesel	Diesel	Diesel
Bore	83 mm	88 mm	93 mm	93 mm	82 mm	82 mm	82 mm
Stroke	91 mm	68.3 mm	72.6 mm	78 mm	90.4 mm	90.4 mm	90.4 mm
Total cubic capacity	1970 cm ³	2492 cm ³	2959 cm ³	3179 cm ³	2387 cm ³	2387 cm ³	2387 cm ³
Maximum horse power	kW CEE	110	138	162	176.5	110	129
	CV CEE	150	188	220	240	150	175
	rpm	6300	6300	6300	6200	4000	4000
Max torque	Nm CEE	181	221	265	289	305	385
	kgm CEE	18.5	22.5	27.0	29.4	31.1	39.2
	rpm	3800	5000	5000	4800	1800	2000
							1750

SERVICING

	2.0 T.SPARK	2.5 V6 24V	3.0 V6 24V (Sportronic)	3.2 V6 24V	JTD	JTD 20V Multijet	JTD 20V Multijet (Sportronic)	
Type of fuel	Four star unleaded petrol with an octane number (R.O.N.) above 95				Diesel fuel (European Specification EN590)			
Capacity of fuel tank	69 litres	69 litres	69 litres	69 litres	69 litres	69 litres	69 litres	
Reserve of	9 litres	9 litres	9 litres	9 litres	9 litres	9 litres	9 litres	
Engine oil (quantity for periodical change, including the oil filter change)	4.40 litres	5.90 litres	5.90 litres	5.90 litres	5.50 litres	5.0 litres	5.0 litres	
Gearbox/differential oil (except versions with electronic automatic gearbox)	1.6 litres	1.6 litres	—	2.0 litres	1.7 litres	1.45 litres	—	
Capacity of engine cooling circuit	7.9 litres	10.3 litres	10.3 litres	10.3 litres	9.1 litres	9.1 litres	9.1 litres	
Windscreen washer fluid reservoir capacity	7 litres	7 litres	7 litres	7 litres	7 litres	7 litres	7 litres	

ENGINE OIL CONSUMPTION

Max. engine oil consumption is usually 400 grams every 1000 km.

During the initial period of use of the vehicle the engine is settling, therefore engine oil consumption may be considered stabilised only after the first 5,000 - 6,000 km.

IMPORTANT Consumption depends on how the car is driven and on the conditions of use.

LUGGAGE COMPARTMENT

	2.0 T.SPARK	2.5 V6 24V	3.0 V6 24V (Sportronic)	3.2 V6 24V	JTD	JTD 20V Multijet	JTD 20V Multijet (Sportronic)
Capacity (dm ³)	490	490	490	490	490	490	490

WEIGHTS

	2.0 T.SPARK	2.5 V6 24V	3.0 V6 24V (Sportronic)	3.2 V6 24V	JTD	JTD 20V Multijet	JTD 20V Multijet (Sportronic)
Kerb weight	1420 kg	1490 kg	1550 kg	1540 kg	1510 kg	1540 kg	1580 kg
Max. permitted weight (*)	1930 kg	2000 kg	2060 kg	2050 kg	2020 kg	2050 kg	2090 kg
Payload including driver (**)	510 kg	510 kg	510 kg	510 kg	510 kg	510 kg	510 kg
Towable weight	1500 kg	1500 kg	1500 kg	1500 kg	1500 kg	1500 kg	1500 kg
Max. load on ball	60 kg	60 kg	60 kg	60 kg	60 kg	60 kg	60 kg

(*) Loads not to be exceeded. It is the owner's responsibility to place loads in the boot and/or on the loading surface within the maximum permissible weight limits.

(**) With special fittings (sunroof, trailer towing device, etc.) the unloaded weight increases, thereby reducing the useful capacity with regard to maximum permissible loads.

FUEL SUPPLY AND IGNITION

	2.0 T.SPARK	2.5 V6 24V	3.0 V6 24V (Sportronic)	3.2 V6 24V	JTD	JTD 20V Multijet	JTD 20V Multijet (Sportronic)
Supply	MPI Bosch Motronic M1.5.5 electronic injection and ignition with knock selective control	MPI Bosch Motronic ME2.1 electronic injection and ignition with knock selective control	MPI Bosch Motronic ME2.1 electronic injection and ignition with knock selective control	MPI Bosch Motronic ME7 electronic injection and ignition with knock selective control	Direct injection with variable geometry turbo supercharger and intercooler Bosch EDC 15 electronic diesel control	Direct injection with variable geometry turbosupercharger and intercooler Bosch EDC 16 electronic diesel control	Direct injection with variable geometry turbosupercharger and intercooler Bosch EDC 16 electronic diesel control
Spark plugs	NGK BKR6EKPA + NGK PMR7A (*)	NGK PFR6B	NGK PFR6B	NGK RPFR6B	—	—	—
Replace every	100,000 km	100,000 km	100,000 km	100,000 km	—	—	—
Firing order	1-3-4-2	1-4-2-5-3-6	1-4-2-5-3-6	1-4-2-5-3-6	—	—	—
Injection order	—	—	—	—	1-2-4-5-3	1-2-4-5-3	1-2-4-5-3

(*) There are two different spark plugs, one of each type, per cylinder.



WARNING

Alterations or repairs to the supply system not carried out correctly or without taking account of the technical specifications of the system, may cause abnormal functioning with the risk of fire.

PERFORMANCE

	2.0 T.SPARK	2.5 V6 24V	3.0 V6 24V (Sportronic)	3.2 V6 24V	JTD	JTD 20V Multijet	JTD 20V Multijet (Sportronic)
Maximum speed	211 km/h	225 km/h	236 km/h	245 km/h	210 km/h	222 km/h	218 km/h
Acceleration from 0-100 km/h	9.8 s	8.4 s	8.6 s	7.4 s	9.9 s	8.9 s	8.9 s
kilometre from stationary	30.8 s	28.6 s	28.5 s	27.5 s	31.2 s	29.0 s	30.0 s

FUEL CONSUMPTION

The fuel consumption values shown in the following tables were established during homologation tests prescribed in specific European Directives.

The test conditions adopted include the following:

- **an urban cycle:** this includes cold starting followed by simulation of a mixed urban route;
- **an extraurban cycle:** this includes frequent accelerating in all gears, simulating normal extraurban use of the vehicle; the speed varies between 0 and 120 kph;
- **combined consumption:** this is calculated by considering a route consisting of about 37% urban cycle and 63% extraurban cycle.

IMPORTANT The type of route, traffic conditions, weather conditions, driving style, conditions of the vehicle, trim level/ equipment/ accessories, vehicle load, presence of a roof rack, other items that negatively affect the aerodynamics of the vehicle or wind resistance may lead to different fuel consumption levels than those measured by the above-mentioned procedures (see “Economy and environment-friendly driving” paragraph in the “Getting the best out of your car” chapter).

CONSUMPTION ACCORDING TO EEC STANDARD 1999/100 (litres x 100 km)

	2.0 T.SPARK	2.5 V6 24V	3.0 V6 24V (Sportronic)	3.2 V6 24V	JTD	JTD 20V Multijet	JTD 20V Multijet (Sportronic)
On urban route	13.8	17.2	19.4	18.3	9.7	9.9	12.1
On extraurban route	7.3	8.8	9.3	9.1	5.8	6.1	6.9
On mixed route	9.7	11.9	13.0	12.5	7.2	7.5	8.9

CO₂ EMISSION AT THE EXHAUST

The CO₂ emission levels shown in the following tables are measured on a mixed cycle.

CO₂ EMISSION ACCORDING TO EEC STANDARD 1999/100

	2.0 T.SPARK	2.5 V6 24V	3.0 V6 24V (Sportronic)	3.2 V6 24V	JTD	JTD 20V Multijet	JTD 20V Multijet (Sportronic)
Value (g/km)	230	284	310	297	192	198	235

BRAKES

	2.0 T.SPARK	2.5 V6 24V	3.0 V6 24V (Sportronic)	3.2 V6 24V	JTD	JTD 20V Multijet	JTD 20V Multijet (Sportronic)
Service brakes							
front	Self-ventilating disk	Self-ventilating disk	Self-ventilating disk	Self-ventilating disk	Self-ventilating disk	Self-ventilating disk	Self-ventilating disk
rear	Disk	Disk	Disk	Disk	Disk	Disk	Disk

Wheel anti-lock system (ABS) with electronic braking distribution
Servo-brake. Brake pad wear indicator. Gasket of ecological type.

Handbrake

Controlled by hand lever operating on rear brakes

STEERING

	2.0 T.SPARK	2.5 V6 24V	3.0 V6 24V (Sportronic)	3.2 V6 24V	JTD	JTD 20V Multijet	JTD 20V Multijet (Sportronic)
Type	Rack and pinion Hydraulic power steering with liquid reservoir in engine compartment						
Turning radius (between pavements)	11.6 m	11.6 m	11.6 m	11.6 m	11.6 m	11.6 m	11.6 m

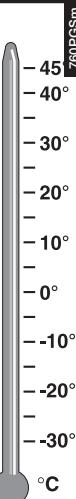
TRANSMISSION

	2.0 T.SPARK	2.5 V6 24V	3.0 V6 24V (Sportronic)	3.2 V6 24V	JTD	JTD 20V Multijet	JTD 20V Multijet (Sportronic)
Gearbox	Six forward gears plus reverse all synchronised	Six forward gears plus reverse all synchronised	Automatic 4-gear transmission plus reverse	Six forward gears plus reverse all synchronised	Six forward gears plus reverse all synchronised	Six forward gears plus reverse all synchronised	Automatic gearbox, 5 forward gears plus reverse
Clutch	Dry single disk with hydraulic operation	Dry single disk with hydraulic operation	—	Dry single disk with hydraulic operation	Dry single disk with hydraulic operation	Dry single disk with hydraulic operation	—
Drive	Front	Front	Front	Front	Front	Front	Front

SPECIFICATIONS OF LUBRICANTS AND FLUIDS

USABLE PRODUCTS AND THEIR SPECIFICATIONS

Use	Quality specifications of lubricants and fluids for correct running of the vehicle	Recommended fluids and lubricants	Applications
Lubricants for petrol engines 2.0 T.SPARK	Synthetic oil, SAE 10W-60	SELENIA RACING	
2.5 V6 24V, 3.0 V6 24V and 3.2 V6 24V	Synthetic based oil, SAE 10W-40, exceeding ACEA A3, API SL specifications.	SELENIA 20K FOR ALFA ROMEO	SAE 10W-40
	Synthetic based oil, SAE 5W-30, exceeding API SL, ACEA A1-A5, FIAT 9.55535-M1 specifications. Recommended for temperatures below -20 °C.	SELENIA PERFORMER MULTIPOWER	SAE 5W-30 SAE 5W-40 SAE 10W-60
Lubricants for diesel engines	Synthetic based oil, SAE 5W-40, exceeding ACEA B4, API CF, FIAT 9.55535-M2 specifications.	SELENIA WR	



(*) For decidedly sportive use of the car wholly synthetic **SELENIA RACING** 10W-60 engine oil is recommended. **SELENIA PERFORMER** is not required when using **SELENIA RACING** 10W-60 engine oil.

WARNING Do not top up with oil that has different specifications than the one already in the engine.

Use	Quality specifications of lubricants and fluids for correct running of the vehicle	Recommended fluids and lubricants	Applications
Lubricants and greases for transmission	Synthetic based oil, SAE 75W-80 EP, exceeding API GL-5, MIL-L- 2105 D LEV specifications.	TUTELA CAR ZC 75 SYNTH	Mechanical gearbox and differential
	Fully synthetic oil, SAE 75W-85, exceeding API GL 4, ZF TE ML06 (B&C) LEVEL, ALLISON C4 specifications.	TUTELA CAR MATRYX	Mechanical gearbox and differential, high temperatures
	Oil type "ATF DEXRON II D LEV".	TUTELA GI/A	Hydraulic power steering unit. Automatic gearbox.
	Oil type "ATF DEXRON III".	TUTELA CAR GI/E	The electronic automatic gearbox is fitted with oil that does not need replacement. gearbox. In the event of oil leakage, contact Authorised Alfa Romeo Services.
	Lithium-soap-based grease with molybdenum bisulphate, consistency NLGI = 2.	TUTELA MRM 2	C.V. joints
Brake fluid	FMVSS n° 116 DOT 4, ISO 4925, SAE J 1704, CUNA NC 956-01 synthetic fluid.	TUTELA CAR TOP 4 FOR ALFA ROMEO	Hydraulic brake and clutch controls
Radiator protection	Protective, red colour, with antifreeze action, based on inhibited monoethylene glycol, with O.A.T. formula, exceeding CUNA NC 956-16, ASTM D 3306 specifications.	PARAFLU UP	Cooling circuits. Strength: 50% to -35 °C. Not to be mixed with products having different formulation.
Windscreen/headlamp washer fluid	Mixture of spirits and surface-active agents CUNA NC 956-11.	TUTELA PROFESSIONAL SC 35	To be used neat or diluted.

RYM AND TYRES

	Progression and Impression Versions	Distinctive Version
Standard fittings		
- rim diameters	6.5J x 16"	7.5J x 17"
- tyres (tubeless)	215/55 R16 93W (*)	225/45 R17 91Y
Optional (for versions/markets where applicable)		
- rim diameters	7.5J x 17"	6.5J x 16"
- tyres (tubeless)	225/45 R17 91Y	215/55 R16 93W (*)
- rim diameters	8J x 18"	8J x 18"
- tyres (tubeless)	235/40 R18 91Y	235/40 R18 91Y
Winter tyres		
- rim diameters	7J x 16"	7J x 16"
- tyres (tubeless)	215/55 R16 93H M+S	215/55 R16 93H M+S
- rim diameters	6.5J x 16"	6.5J x 16"
- tyres (tubeless)	205/55 R16 91H M+S	205/55 R16 91H M+S

(*) For versions/markets where applicable tyres 205/55 R16 91W.

SPARE WHEEL

Cars fitted with steel rims and tyres 215/55 R16 (*) have spare wheel identical with the standard wheels. Cars fitted with aluminium alloy rims and tyres 215/55 R16 (*), 225/45 R17 and 235/40 R18 have the spare wheel with steel rim and tyre 215/55 R16 (*).



WARNING

On cars fitted with tyres 215/55 R16 (*), 225/45 R17, 235/40 R18 and spare wheel with tyre 215/55 R16 (*), since the spare wheel is different from the standard wheels, observe the instructions for use given below.

— The spare wheel should only be used in an emergency.

— Use of the spare wheel should be kept to a minimum. Do not drive at speeds of over 80 km/h.

— The car will handle differently when the spare wheel is fitted. Avoid sudden acceleration or braking, sharp corners and fast bends.

— Check at regular intervals that spare wheel pressure is equal to 2.7 bar (2.7 kg/cm²).

Two or more spare wheels should never be used together. Have the wheel changed repaired and refitted as soon as possible.

Note for one way tyres

There are arrows on the side of one-way tyres indicating the direction of rotation. When a wheel is changed (for example after a puncture, the direction of the arrow on the spare wheel might not coincide with the direction of rotation of the wheel to be changed. Even in these conditions the tyre is still safe but you are advised to have the tyre repaired and refitted as soon as possible, because top performance is obtained when all the wheels turn in the direction of the arrow.

Note The vehicles are fitted with tubeless tyres. See chapter "Getting the best out of your car" for indications concerning tyres in general and the specific recommendations for tubeless tyres. When replacing tyres and/or rims maintain the original rim/tyre match.

IMPORTANT Tyre pressure should be increased by 0.3 bars when driving at sustained high speed. With winter tyres the pressure should be +0.2 bar higher than the rating specified for standard tyres. Do not use inner tubes with tubeless tyres.



Snow chains can be fitted only on wheels with 6.5J x 16" rims and 215/55 R16 (*) tyres or 7.5J x 17" rims and 225/45 R17 tyres.

(*) For versions/markets where applicable tyres 205/55 R16.

TYRE INFLATION PRESSURE (unladen and in running order)

	Tyres 205/55 R16 91W (*)		Tyres 215/55 R16 93W		Tyres 225/45 R17 91Y		Tyres 235/40 R18 91Y	
	front	rear	front	rear	front	rear	front	rear
Reduced load (2 occupants)	bar	2.3	2.3	2.3	2.3	2.7	2.5	2.7
Full load	bar	2.3	2.3	2.3	2.3	2.7	2.5	2.7
Spare wheel	bar	2.3		2.3		2.7		2.7

(*) For versions/markets where applicable



WARNING

While the specified dimensions remain unchanged, for travelling safety and correct operation of the VDC, ASR and ABS systems the tyres must absolutely be of the same brand and type on all wheels, in perfect conditions and above all of the specified type and brand.

CORRECT TYRE READING

Below are the instructions necessary to know the meaning of the code stamped on the tyre.

The code may be like one of the examples given below.

Example:
225/45 R 17 91 Y
or
225/45 ZR 17

225 = Nominal width (distance in mm between the sides).

45 = Percentage height/width ratio.

R = Radial tyre.

ZR = Radial tyre with speed above 240 kph.

17 = Rim diameter in inches.

91 = Load (capacity) index, e.g. 91 = 600 kg. Not present in ZR tyres.

Y, Z = Maximum speed index. In ZR tyres the speed index Z is before the R.

Load index (capacity)

60	= 250 kg
61	= 257 kg
62	= 265 kg
63	= 272 kg
64	= 280 kg
65	= 290 kg
66	= 300 kg
67	= 307 kg
68	= 315 kg
69	= 325 kg
70	= 335 kg
71	= 345 kg
72	= 355 kg
73	= 365 kg
74	= 375 kg
75	= 387 kg
76	= 400 kg
77	= 412 kg
78	= 425 kg
79	= 437 kg
80	= 450 kg
81	= 462 kg
82	= 475 kg
83	= 487 kg
84	= 500 kg
85	= 515 kg
86	= 530 kg
87	= 545 kg
88	= 560 kg
89	= 580 kg
90	= 600 kg
91	= 615 kg
92	= 630 kg
93	= 650 kg
94	= 670 kg
95	= 690 kg
96	= 710 kg
97	= 730 kg
98	= 750 kg
99	= 775 kg
100	= 800 kg
101	= 825 kg
102	= 850 kg
103	= 875 kg
104	= 900 kg
105	= 925 kg
106	= 950 kg

Maximum speed index

Q = up to 160 kph.

R = up to 170 kph.

S = up to 180 kph.

T = up to 190 kph.

U = up to 200 kph.

H = up to 210 kph.

V = over 210 kph.

ZR = over 240 kph.

W = up to 270 kph.

Y = up to 300 kph.

UNDERSTANDING RIM MARKING

The following are the necessary indications to understand the meaning of the markings on the rim, as shown in **fig. 7**.

Example:
6.5J x 16"

6.5 = Rim width in inches (**1**)

J = Rim drop centre outline (side projection where the tyre bead rests) (**2**)

16" = Rim nominal diameter in inches (corresponds to diameter of the tyre to be mounted) (**3** = \emptyset)

Maximum speed index for snow tyres

Q M+S = up to 160 kph.

T M+S = up to 190 kph.

H M+S = up to 210 kph.

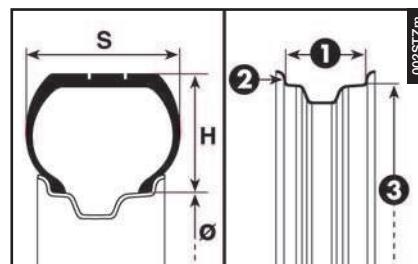


fig. 7

RADIO FREQUENCY REMOTE CONTROL: MINISTERIAL HOMOLOGATIONS

International automobile code	Country	Homologation number
A	Austria	CEPT LPD F
B	Belgium	RTT/D/X1792
CH	Switzerland	BAKOM 99.0196.K.P
CRO	Croatia	
CY	Cyprus	
D	Germany	CTC R 000 196 L
DK	Denmark	
E	Spain	E D.G.Tel. 09 99 0366
F	France	99 0148 PPL O
FIN	Finland	
GB	Great Britain	CEPT SRD1eGB RFNRCAB1\TA38618A
GBZ	Gibraltar	
GR	Greece	CEPT LPD GR.YME - TA212

International automobile code	Country	Homologation number
H	Hungary	
I	Italy	DGPGF/4/2/03/339999/ F0/0004562/02/06/99
IRL	Ireland	
IS	Iceland	
L	Luxembourg	
N	Norway	
NL	Holland	CEPT LPD F
P	Portugal	ICP 026TC99
S	Sweden	
SLO	Slovenia	

For markets in which transmitter marking is required, the homologation number has been reproduced directly on the key grip.

CEPT LPD - F

Attesté

★ ★ ★
★ ART ★
★ ★ ★

Conforme

atc 99 0148 PPL 0
date 11/05/1999
pres. TRW



Radiocom
Privées France
Professionnel

RIGHT HAND DRIVE VERSION

This chapter describes the main characteristics of the right hand drive version.

For any topic not specifically dealt with in this chapter, refer to the main chapter of the Owner's manual which should be thoroughly read to ensure that the vehicle is used correctly and that the maximum performance is obtained under conditions of safety.

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DASHBOARD

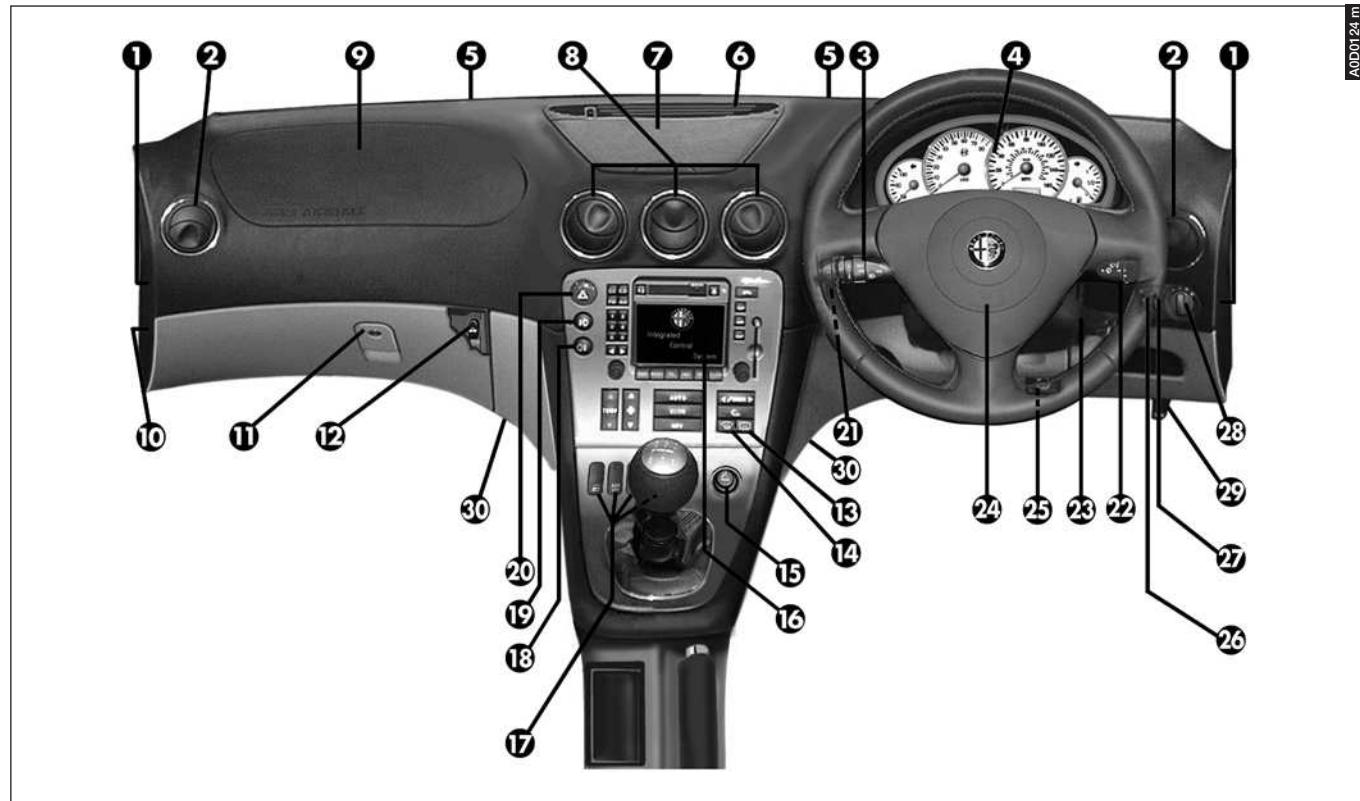


fig. 1

- 1** Air ducts for side window outlets.
- 2** Side air vents.
- 3** Light switch lever (high beam, flashing, direction indicators) and controls for Cruise Control (automatically keeping a set speed, if present).
- 4** Instrument cluster.
- 5** Outlets for windscreen.
- 6** Upper outlet.
- 7** Oddments compartment.
- 8** Centre air vents.
- 9** Passenger's air bag.
- 10** Manual passenger's side Air bag deactivation switch.
- 11** Glove box.
- 12** Boot opening button (in glove box).
- 13** Button for rearscreen defrosting, door mirrors and resistances at base of windscreen (if present).
- 14** Button for windscreen/front side windows and door mirrors defrosting, rearscreen heating, resistances at base of windscreen (if present).
- 15** Cigar lighter.
- 16** Alfa Romeo I.C.S. (INTEGRATED CONTROL SYSTEM): RDS radio, computer on board (TRIP), climate control, clock and outside/inside temperature, GSM phone and navigation system (if present).
- 17** Buttons for central locking, fuel flap opening, switching off the ASR function of the VDC system switching on the STR system (if present).
- 18** Rear fog guard switch.
- 19** Front fog light switch.
- 20** Hazard warning light switch.
- 21** Inside temperature sensor.
- 22** Windscreen wiper/washer control lever and rain sensor (if present).
- 23** Ignition switch (ignition device).
- 24** Driver's air bag and horn.
- 25** Lever for releasing/locking adjustable steering wheel.
- 26** Instrument lighting adjustment.
- 27** Headlamp aiming device control (except versions with gas discharge headlights).
- 28** Outside lights switch.
- 29** Bonnet opening lever.
- 30** Front floor air outlets.

INSTRUMENT PANEL

A000125m

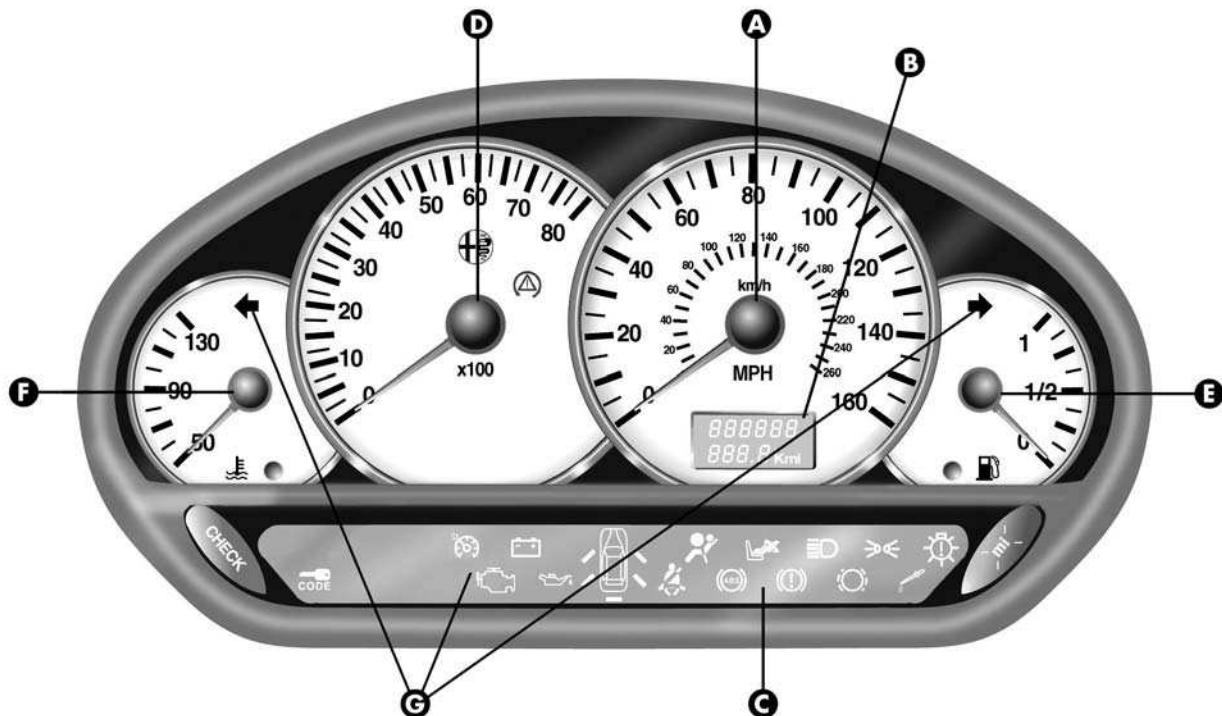


fig. 2 - 2.0 T.SPARK and 3.2 V6 24V versions

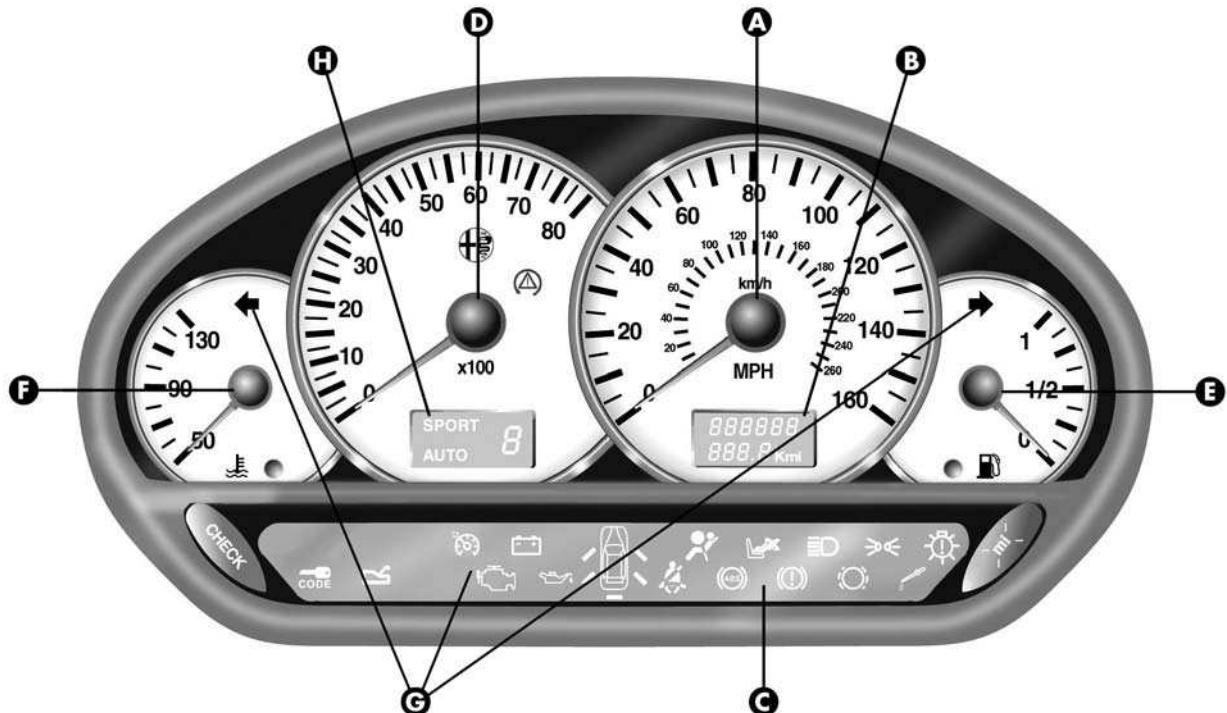


fig. 3 - 3.0 V6 24V (Sportronic) version

- A** - Speedometer
- B** - Mileage recorder with double meter display (total and trip)
- C** - Check panel
- D** - Rev. counter
- E** - Fuel gauge and reserve warning light
- F** - Engine coolant temperature gauge and maximum temperature warning light
- G** - Warning lights
- H** - Electronic automatic gearbox display

IMPORTANT Depending on the trim levels, the dial of the instruments may be either light grey or black, with green or red light.

CONTROLS

LIGHTS SWITCH (fig. 4)

The device and services controlled by the levers on the steering wheel can only be activated when the ignition key is in the **MAR** position (except the parking lights which can always be switched on).



fig. 4

Lights switched off

When the pointer on the knurled ring (**A**) is opposite the symbol **O**, the external lights are switched off.

Sidelights

The sidelights are switched on by turning the knurled ring (**A**) from **O** to **✉**.

The **✉** warning light on the instrument panel will come on at the same time.

Dipped-beam headlights

These are switched on by turning the knurled ring (**A**) from **✉** to **✉**.

Parking lights

When the pointer of the switch (**A**) corresponds with the **P** symbol, the side lights stay on regardless of the position of the ignition key.

DASHBOARD LIGHTING ADJUSTMENT (fig. 5)

When the outside lights are on, the dashboard lighting is adjusted turning button (A).



fig. 5

FUEL CUT-OFF SWITCH AND CIRCUIT BREAKER

The car is fitted with two safety switches that come into operation in the case of an accident to block fuel supply and power, thereby stopping the engine and the car electric utilities.

To reactivate the fuel cut-off switch press button under the passenger's seat (fig. 6).

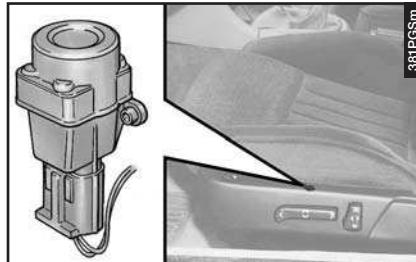


fig. 6

Circuit breaker is located on the left side of the boot, inside a box directly set and connected to the battery positive terminal.



WARNING

Before resetting fuel cut-off switch and circuit breaker, carefully read the related paragraph in chapter "Getting to know your car".

DEACTIVATING THE FRONT PASSENGER'S AIR BAG (fig. 7)

Should it be absolutely necessary to carry a child on the front seat, the passenger's Air bag on the vehicle must be deactivated.

Deactivation takes place using the car ignition key to operate the special switch on the left hand side of the dashboard. Access to the switch is gained only with the door open.

Deactivation/reactivation takes place with ignition key at **STOP** and operating it in the special key switch on the right-hand side of the dashboard (fig. 7).

You can reach the switch only if the door is opened.

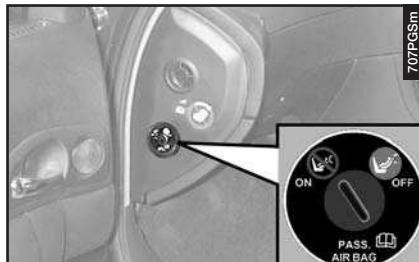


fig. 7



WARNING

Operate the switch only when the engine is not running and the ignition key is removed.



WARNING

SERIOUS DANGER: *The car is fitted with an Air bag on the passenger's side. Never place cradle child's seats on the front passenger seat of cars fitted with passenger air bag since the air bag activation could cause serious injuries, even mortal. In the case of need, always deactivate the passenger's Air bag when a child's seat is placed on the front seat. The front passenger seat shall be adjusted in the most backward position to prevent any contact between child's seat and dashboard. Even if not compulsory by law, you are recommended to reactivate the Air bag immediately as soon as child transport is no longer necessary.*

The key-operated switch has two positions:

1) Passenger's Air bag activated. (**ON** position) warning light on instrument cluster off; it is absolutely prohibited to carry a child on the front seat.

2) Passenger's Air bag deactivated (**OFF** position) warning light on instrument cluster on; it is possible to carry a child protected by special restraint system on the front seat.

The warning light on the cluster stays on permanently until the passenger's Air bag is reactivated.

When the door is open, the key can be inserted and removed in both positions.

Deactivation of the passenger's front Air bag inhibits too the left-hand side Air bag (if present).



WARNING

Warning light indicates also warning light failure. This is indicated by intermittent flashing, over 4 seconds, of warning light . In this event, warning light could be not up to indicate restraint system failures, if any. Stop the car and contact Alfa Romeo Authorized Services to have the system checked.

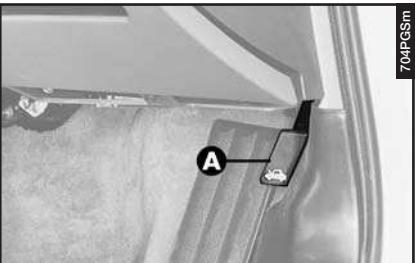


fig. 8

BONNET

The lever used to open the bonnet is located under the right end of the dashboard.

To open:

- Pull the lever (**A-fig. 8**) until the bonnet clicks open.



WARNING

Do this only with the car stationary.

- Raise the safety lever upwards (**B-fig. 9**).

- Raise the bonnet.

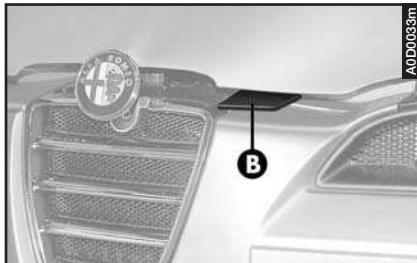


fig. 9



WARNING

DANGER-SERIOUS INJURY. When carrying out checks or maintenance operations in the engine compartment, take special care not to bump the head on the raised bonnet.

IMPORTANT Bonnet raising is aided by two gas springs. Do not tamper with these springs and always accompany the bonnet while raising it.

To close:

- Lower the bonnet to approx. 20 cm. from the engine bay, then let it drop. Try lifting it to make sure that it is shut completely and not simply caught in the safety position. If the bonnet does not close properly do not push it down but open it again and repeat the above procedure.



WARNING

For safety reasons the bonnet shall always be perfectly closed when travelling. Always check for proper bonnet locking. If the bonnet is left inadvertently open, stop the car immediately and close the bonnet.

FUSES AND RELAYS IN THE CONTROL UNIT

The fuses for the main devices are housed in a control unit under the dashboard, to the right of the steering column.

Access to it is gained slackening the knob (**A**-fig. 10) and lowering the panel (**B**).

The graphic symbols which distinguish the main electric component corresponding to each fuse are given on a label on the inner wall of the panel.

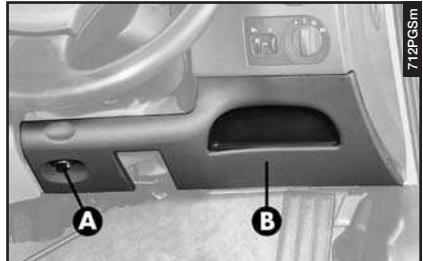


fig. 10

In the upper part of the control unit there is a pincer (**C**-fig. 11) for removing fuses.

At the sides of the control unit there are some spare fuses (**D**-fig. 12); after replacing a fuse you are advised to replenish the stock of fuses when they are used.

The devices protected by the fuses in the control unit are listed in the tables see chapter "In emergency".

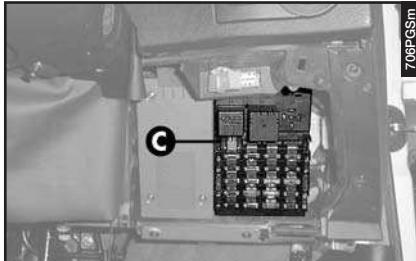


fig. 11

- A** - Switch discharge relay
- B** - Direction indicator/hazard warning light flashing device

C - Headlight washer timer.

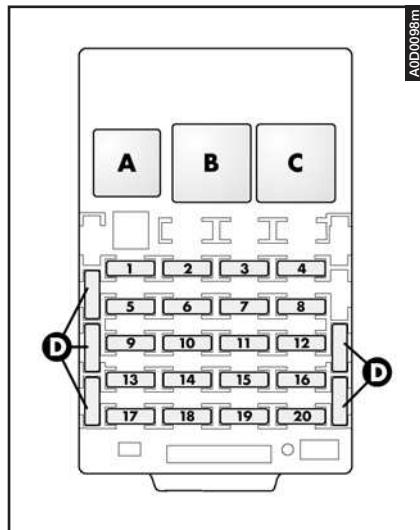


fig. 12

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NOTES





TYRE INFLATION PRESSURE COLD (BAR)

	Tyres 205/55 R16 91W (*)		Tyres 215/55 R16 93W		Tyres 225/45 R17 91Y		Tyres 235/40 R18 91Y	
	front	rear	front	rear	front	rear	front	rear
Reduced load (2 occupants)	bar	2.3	2.3	2.3	2.3	2.7	2.5	2.7
Full load	bar	2.3	2.3	2.3	2.3	2.7	2.5	2.7
Spare wheel	bar	2.3		2.3		2.7		2.7

(*) For versions/markets where applicable

Tyre pressure should be increased by 0.3 bar when driving at sustained high speed. With winter tyres the pressure should be +0.2 bar higher than the rating specified for standard tyres.

ENGINE OIL REPLACEMENT (litres)

	2.0 T.SPARK	2.5 V6 24V	3.0 V6 24V (Sportronic)	3.2 V6 24V	JTD	JTD 20V Multijet	JTD 20V Multijet (Sportronic)
Engine oil (quantity for periodical change, including the oil filter change)	4.40	5.90	5.90	5.90	5.50	5.0	5.0

Do not discard used oil in the environment

REFUELLING (litres)

	2.0 T.SPARK	2.5 V6 24V	3.0 V6 24V (Sportronic)	3.2 V6 24V	JTD	JTD 20V Multijet	JTD 20V Multijet (Sportronic)
Fuel tank capacity	69	69	69	69	69	69	69
Reserve (litres)	9	9	9	9	9	9	9

Only use unleaded petrol with no less than 95 R.O.N.

Only use Diesel fuel for motor vehicles that meet European Specification EN590.

Alfa 166
4th Edition



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