145
OWNER'S MANUAL

Dear Client,

Thank you for choosing Alfa Romeo.

Your **Alfa 145** *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 characterize this **Alfa 145**.

The booklet "Alfa Romeo Aftercare" 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 tranquility that comes from knowing that an efficient, willing and widespread organization is at your service for any assistance problems you may have.

Whats more every single component of the **Alfa 145** *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.

"Alfa Romeo Aftercare" booklet

The "Alfa Romeo Aftercare" 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 of 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 the Alfa Romeo Dealers.

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 marking up your **Alfa 145**. 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 145** 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's Handbook.

PROHIBITION SYMBOLS

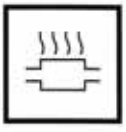
Battery
Keep away from naked flames.

Battery
Keep away from children.

Heat shields - belts - pulleys - fan
Do not touch.

Passenger's Air bag
Do not install child safety seats on the front passenger seat.

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 "Recommended fluids and lubricants".

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

Windscreen wiper
Use only the recommended fluid; see table "Recommended fluids and lubricants".

Engine
Use only the recommended lubricant; see table "Recommended 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 "Recommended fluids and lubricants".

OBLIGATION SYMBOLS

Battery
Protect your eyes.

Battery - Jack
See the Owner's Handbook.

CONTENTS

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READY TO GO

In the following pages you will find a summary of all the information necessary for the correct use of the Services of your vehicle.

Just a few minutes will allow you to get to know the main controls, the warning lights and the instruments with which your new vehicle is equipped.

To ensure safe driving the following chapters of the booklet should also be read through.

DASHBOARD

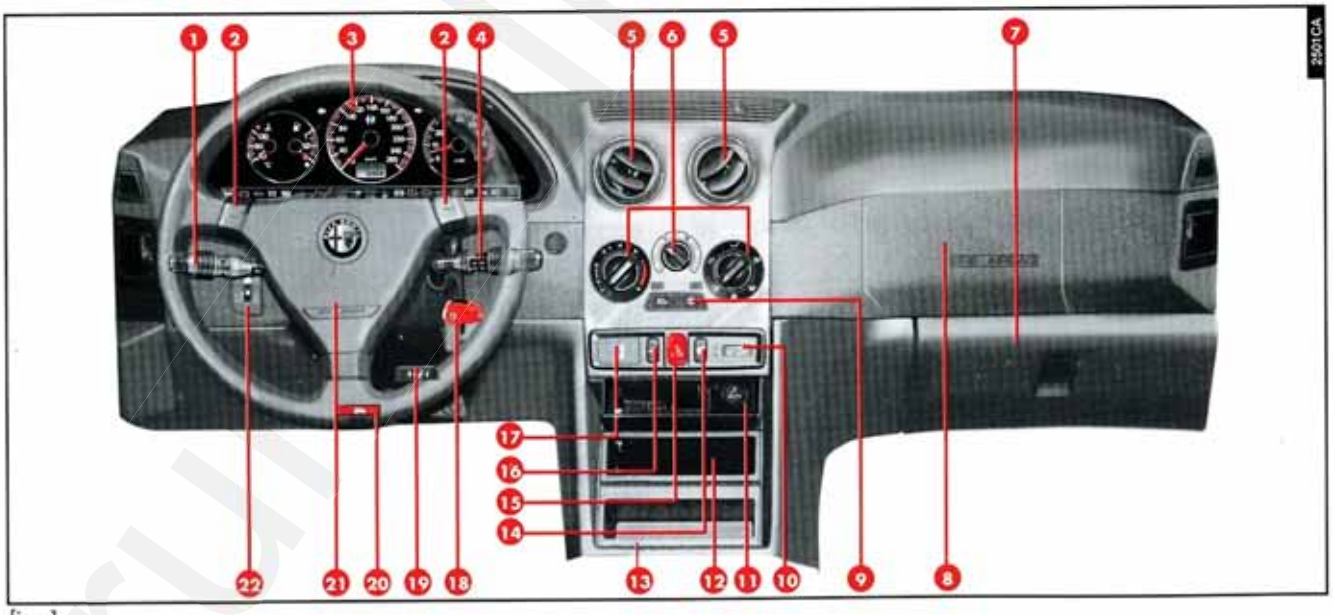


fig. 1

1 Outer lights control lever. **2** Horn. **3** Instrument cluster. **4** Windscreen wiper-washer/rearscreen wiper-washer (optional for versions/markets where applicable) control lever. **5** Centre air vents. **6** Heating and ventilation controls. **7** Document drawer/compartment. **8** Passenger's Air bag (optional for versions/markets where applicable). **9** Controls for climate control system (optional for versions/markets where applicable) and recirculation. **10** Digital clock. **11** Ashtray and cigar lighter. **12** Radio compartment. **13** Glovebox. **14** Foglamp switch (optional for versions/markets where applicable). **15** Hazard warning light switch. **16** Tailgate opening button (optional for versions/markets where applicable). **17** Door open check panel (optional for versions/markets where applicable). **18** Ignition switch. **19** Steering wheel locking/unlocking lever. **20** Bonnet opening lever. **21** Driver's Air bag (optional for versions/markets where applicable). **22** Headlamp aiming device.

THE ALFA ROMEO CODE SYSTEM

To increase protection against attempted theft, the car is fitted with an electronic engine lock system (Alfa Romeo CODE) 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.

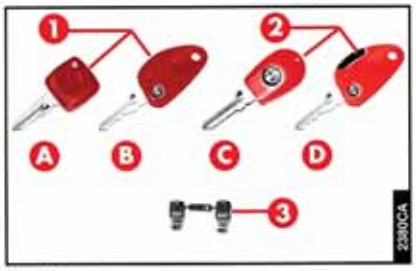


fig. 2

THE KEYS

The car is supplied with two types of keys (**fig. 2**). The key (**1**) with the bordeaux grip is the "master" key. Only one is supplied and depending on the trim level, it may be as follows:
– type **A** for base versions;
– type **B** for versions with remote door locking/unlocking systems or alarm system.

The main key (**2**) is red and supplied in two copies and depending on the trim level, the following combinations are possible:
– 2 copies of type **C** for cars with base trim level;
– 2 copies of type **D** for cars with remote door locking/unlocking systems or alarm system.

The type **C** main key operates:
– the ignition
– door locks
– boot lock.

The type **D** main key operates:
– the ignition
– door locks
– boot lock
– remote door locking/unlocking system (optional for versions/markets where applicable)
– alarm system (optional for versions/markets where applicable).

The CODE card (**fig. 3**) is also supplied with the keys and for cars fitted with alarm system also two copies of the emergency key (**3-fig. 2**); for use of these, refer to "Electronic alarm".

WARNING In order to ensure perfect efficiency of the electronic devices contained inside the keys, they should never be directly exposed to the rays of the sun.

WARNING The code numbers on the CODE card and the key with the bordeaux grip 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.

fig. 3

WARNING 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 Authorized Alfa Romeo Services.

WARNING - U.K. VEHICLES ONLY

At the behest of the motor insurance companies the CODE card for emergency starting and replacement of keys is not provided. If you need assistance please contact your nearest Alfa Romeo Dealer or telephone free phone 0800 717000.

OPERATION (fig. 4)

Each time the ignition key is turned to the **STOP** position, the Alfa Romeo CODE deactivates the functions of the engine electronic control unit. Each time the car is started turning the ignition key to **MAR**, the Alfa Romeo CODE control unit sends a recognition code to the engine control unit to deactivate the inhibitor.

This condition is shown by a brief flash of the warning light (**A**) on the instrument cluster.

If the code has not been recognised correctly, the Alfa Romeo CODE warning light (**A**) stays on together with the injection failure warning light (**B**). In this case, follow the instructions given in "The Alfa Romeo CODE system" in chapter "Getting to know your car".

fig. 4

If after 2 seconds with the key at MAR, the Alfa Romeo CODE warning light (A) turns on again flashing at appr. half a second intervals, the possibility exists that the code of the keys has not been memorised, therefore the car is not protected by the Alfa Romeo CODE system against attempted theft. In this case contact Alfa Romeo Authorized Services immediately to have the key codes memorised.

ELECTRONIC ALARM

(Optional for versions/markets where applicable)

The electronic alarm system is controlled by the receiver located on the front roof light and it is turned on and off by the remote control incorporated in the main key (**B-fig. 5**) which sends the crypted, variable code.

The electronic alarm can only be operated when the key has been removed from the ignition, or is in the **STOP** position.

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

fig. 5

HOW TO ACTIVATE THE ELECTRONIC ALARM

To engage the electronic alarm simply press and release the button (**A-fig. 5**) of the key (**B**) pointing it in the direction of the vehicle.

With the exception of some markets the electronic alarm will give out an acoustic "Beep" and the hazard warning lights will come on for approximately three seconds, the door lock is engaged and the led (**A-fig. 6**) on the steering column trim lights up.

The led inside the (**A-fig. 6**) car flashes as long as the system is active.

For some versions/markets even if the button on the remote control has not been pressed, after appr. 30 seconds from when the key has been moved to **STOP** or **PARK** and one of the doors or the boot has been opened and then closed, the electronic alarm will come on automatically.

When the system operates automatically, the doors are not locked.

HOW TO DEACTIVATE THE ELECTRONIC ALARM

To deactivate the electronic alarm simply press and release the button (**A-fig. 5**) on the key (**B**).

The flashing led (**A-fig. 6**) will go out.

With the exception of some markets the electronic alarm will give two "Beeps" and the hazard warning lights will flash twice and the doors unlock.

fig. 6

HOW TO CUT OFF THE ELECTRONIC ALARM

(for versions/markets where applicable)

If the batteries in the remote control device transmitter are flat or if a fault affecting the electronic alarm is detected the system can be cut off using the emergency key (**3-fig. 2**) supplied with the car keys.

To deactivate the electronic alarm completely (for instance during maintenance operations on the electric system, vehicle battery replacement, etc.) proceed as follows:

– open the boot, raise the trim (**A-fig. 7**) on the right-hand side of the boot to gain access to the key switch on the siren body;

– remove the protective cap (**B-fig. 7**) from the key switch;

– insert the emergency key (**C-fig. 8**) and turn it counter-clockwise (**OFF** position) = alarm deactivated.

To reactivate the electronic alarm turn the key clockwise (**ON** position) = alarm activated.

For some versions/markets deactivation only involves the alarm siren.

This key switch is not applicable for the U.K. market.

When the electronic alarm has been cut off it is still possible to activate/deactivate the centralized door locking system using the remote control.

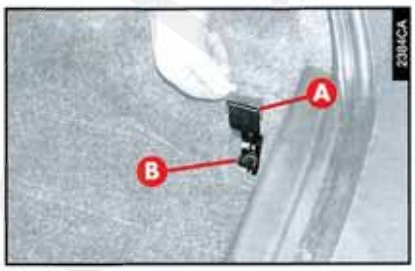


fig. 7

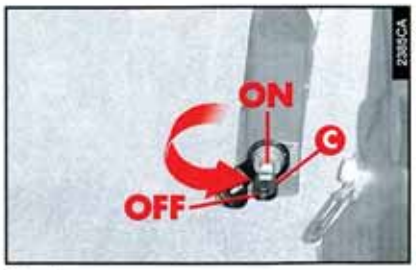


fig. 8

REMOTE CONTROL DOOR LOCKING SYSTEM

The system comprises a receiver located on the front roof light and a transmitter (remote control) incorporated in the main key (**B-fig. 9**). To lock/unlock the doors, point the transmitter towards the car, press and release the button (**A-fig. 9**).

Each transmitter has a label with the specific transmitter code numbers. The label should be stuck (at delivery) in the space provided on the back of the CODE card.

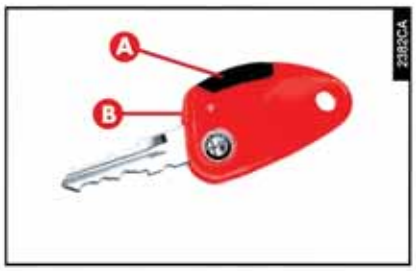


fig. 9

IGNITION DEVICE

SWITCH (fig. 10)

The key can be turned to one of four positions:

– **STOP**: engine off, the key can be removed, engine inhibitor engaged, steering lock engaged, services cut off except those that are not "key-operated" (e.g. tailgate electric lock for versions/markets where applicable).

– **MAR**: drive position. The engine inhibitor is deactivated and all the electric devices are supplied, except those cut off for safety reasons (e.g. tailgate electric lock enabled, for versions/markets where applicable).

– **AVV**: starts the engine.

– **PARK**: engine off, the key can be removed, engine inhibitor engaged, steering lock engaged, side lights automatically turned on, electric tailgate lock enabled (for versions/markets where applicable).

WARNING To turn the key to the **PARK** position button (**A**) located on the ignition block must first be pressed.

fig. 10

When leaving the vehicle always remove the key from the ignition to prevent any occupants of the vehicle from accidentally activating the controls. Never leave children in the vehicle unaccompanied. Remember to engage the handbrake, and, if the vehicle is parked on a slope, to engage first gear. If the vehicle is facing downhill, engage reverse gear.

STEERING LOCK

Engaging the steering lock:

– turn the ignition key to the **STOP** or **PARK** position and remove the key. Turn the steering wheel slightly to facilitate the locking action.

Removing the steering lock:

– turn the ignition key to the **MAR** position while gently rocking the steering wheel from side to side.

SUNROOF

(Optional for versions/markets where applicable)

Press button (**A-fig. 11**) on the end (**1**) to open and on the end (**2**) to close.

Press the end (**2**) when the sunroof is closed to raise the rear part of the sunroof (quarterlight position).

If the ignition device is tampered with (for example an attempted theft) have it checked over at an Alfa Romeo Authorized Service Station, before travelling again.

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.

Open and close the roof only when the vehicle is stationary.

fig. 11

REAR-WIEW MIRRORS

INNER (fig. 12)

Using the lever (**A**) two different positions are obtained: normal and antiglare.

DOOR MIRRORS (MANUAL CONTROL) (fig. 13)

Direct the mirror using the knob (**A**).

DOOR MIRRORS (ELECTRIC CONTROL) (fig. 14)

(Optional for versions/markets where applicable)

Select one of the two mirrors using switch (**A**).

Move the mirror using button (**B**).

Position the switch (**A**) in the intermediate locking position.

fig. 12

fig. 13

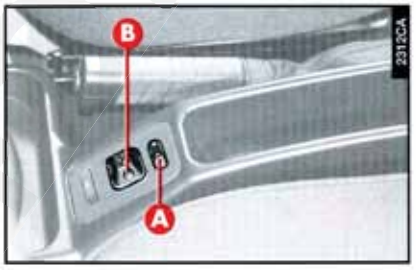


fig. 14

DOORS

To lock/release the door locks:

– From outside, turn the key (**A-fig. 15**) in the lock of one of the doors.

– From inside, move the button (**C-fig. 16**) to position **1** to lock and to position **2** to release.

To open the doors:

– From outside, raise the handle (**B-fig. 15**).

– From inside, pull the lever (**D-fig. 16**).

STEERING WHEEL

To allow rake adjustment, move the lever (**fig. 17**).

Position **A** - Steering wheel released.

Position **B** - Steering wheel locked.

Any adjustments must be carried out only with the vehicle stationary.

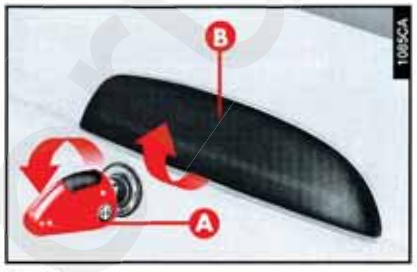


fig. 15

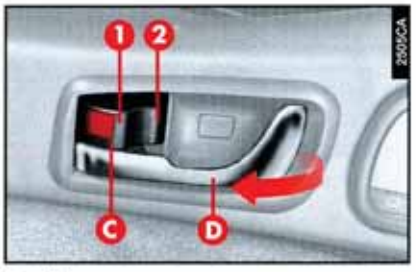


fig. 16

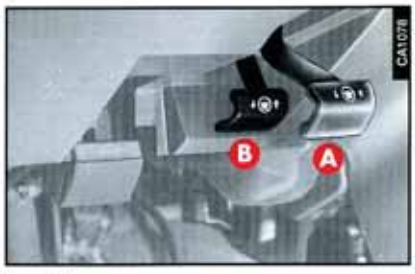


fig. 17

SEATS

Manual controls (**fig. 18**) for:

A - Longitudinal adjustment.

B - Height adjustment (optional for versions/markets where applicable).

C - Seat back rake adjustment.

D - Driver's side: reclining backrest. Passenger's side: reclining backrest and sliding seat.

In seats fitted with side Air bags, the handle (**D**) is positioned in the upper part of the outer side of the seat back rest.

Any adjustments must be carried out only with the vehicle stationary.

SEAT BELTS

The procedures described below should be carried out before driving off. Avoid doing them with the car on the move.

Adjust the height of the front seat belts (**fig. 19**) by using the grip (**A**) and moving the ring (**B**) upwards or downwards until it slots into one of the set positions.

Adjust the length of the rear centre seat belt (**fig. 20**) running the tape in the buckle (**A**), pulling the end (**B**) in the direction of the arrow to tighten and section (**C**) to slacken.

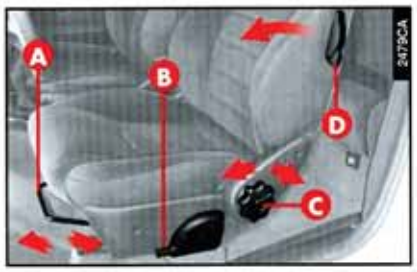


fig. 18

fig. 19

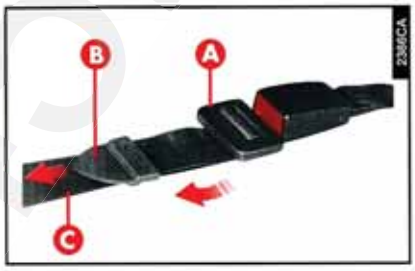


fig. 20

STEERING COLUMN LEVERS

LEFT-HAND LEVER (fig. 21)

– In position **A** = Right-hand direction indicators on.

– In position **B** = Left-hand direction indicators on.

– Pulled towards the steering wheel 1st click (unstable position) = Flashing.

– Pulled towards the steering wheel 2nd click (stable position) = High beam headlamps.

– Knurled ring (1) at **O** = Lights off.

– Knurled ring (1) at = Side lights.

– Knurled ring (1) at = Dipped beam headlamps.

– Button pressed = Rear fog guards.

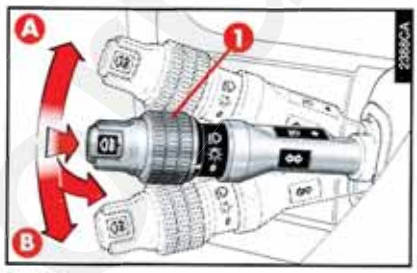


fig. 21

RIGHT-HAND LEVER (fig. 22)

– In position **A** = Windscreen wiper stationary.

– In position **B** (unstable) = Windscreen wiper gives a quick wipe.

– In position **C** = Windscreen wiper operates intermittently at adjustable frequency (Knurled ring 2).

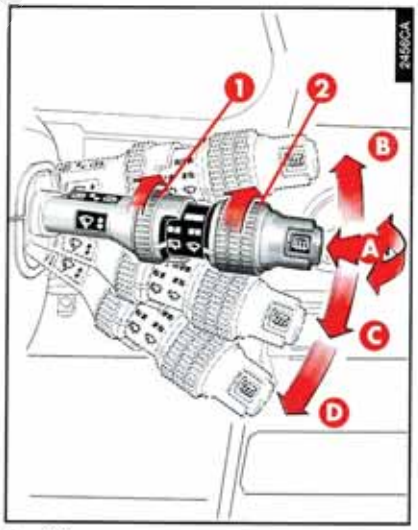


fig. 22

– Knurled ring (2) at:

= Windscreen wiper operates intermittently at low frequency.

■■ = Windscreen wiper operates intermittently at medium frequency.

■■■ (or for versions/markets where applicable ▬) = Windscreen wiper operates intermittently at high frequency (or for versions/markets where applicable, continuous slow operation).

– In position **D** = Windscreen wiper operating continuously at fast speed.

– button pressed = Rearscreen heating on.

– Pulled towards the steering wheel (unstable position) = Windscreen washer and, only with the side lights on, headlamp washer.

– Pushed towards the dashboard (unstable position) = rearscreen washer/wiper (for versions/markets where applicable).

– Knurled ring (1) at:

■■ = Rearscreen wiper operating.

= Rearscreen wiper stationary.

INSTRUMENT PANEL (fig. 23)

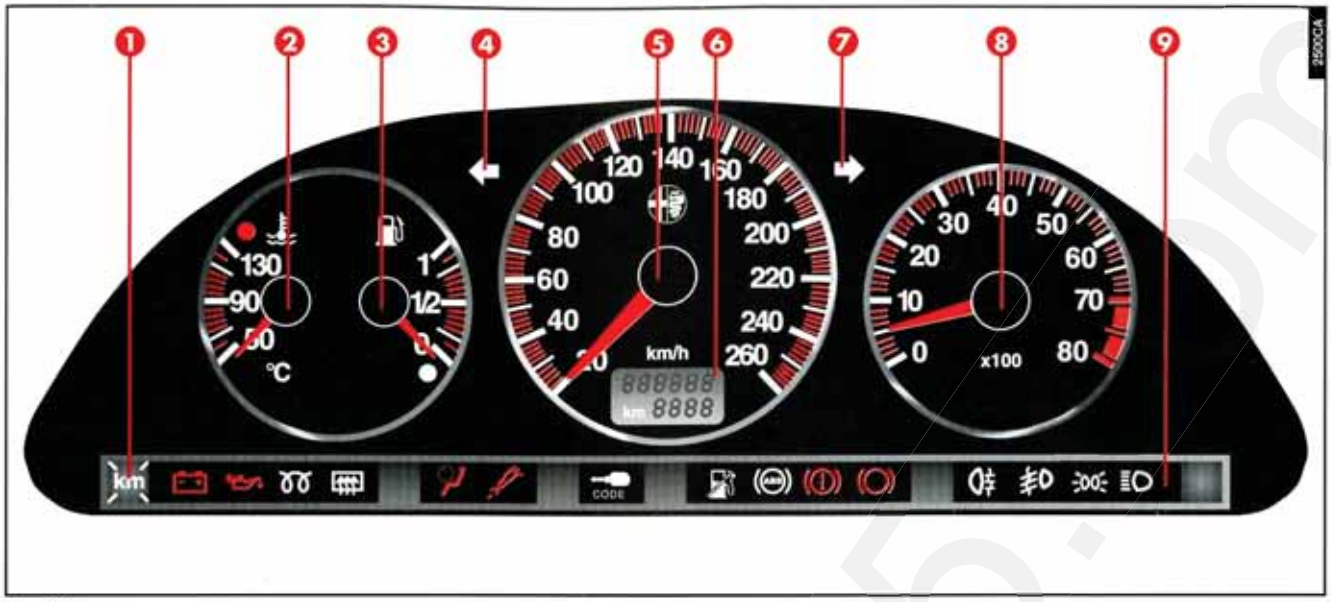


fig. 23

1 Trip meter reset button. **2** Engine coolant temperature gauge with maximum temperature warning light. **3** Fuel gauge with reserve warning light. **4** Left direction indicator warning light. **5** Speedometer. **6** Mileage recorder/trip meter. **7** Right direction indicator warning light. **8** Rev counter. **9** Services warning light.

WARNING Depending on the versions of the car, the rev counter and speedometer may have different red sectors and clock values.

POWER WINDOWS

(Optional for versions/markets where applicable)

Switches on the off-side door for (**fig. 24**):

A - Off-side window control.

B - Near-side window control.

Switch on the near-side door for (**fig. 25**):

A - Near-side window control.

WARNING The driver's power window is fitted with a "constant automatic operating" device.

Automatic operation of the driver's window is obtained pressing the switch for about one second: the window stops when it reaches the end of its stroke (or pressing the switch again).

HAZARD WARNING LIGHTS

To switch the hazard warning lights on or off, press button (**A-fig. 26**).

Use of the hazard lights is governed by the highway code of the country you are driving in. Make sure you keep to the relevant rules.

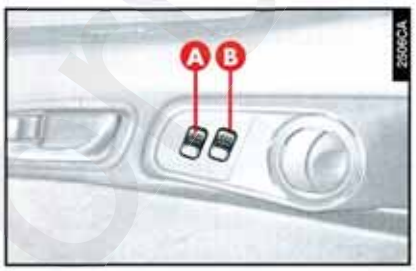


fig. 24

fig. 25

fig. 26

FRONT FOGLIGHTS

(Optional for versions/markets where applicable)

To switch the front foglights on or off press button (**A-fig. 27**).

This can only be done if the external lights are already switched on.

REAR FOG GUARDS

Press button (**A-fig. 28**) to turn the rear fog guards on/off.

They can only be turned on if the low beam headlights or fog lights have been turned on.

HEATING AND CLIMATE CONTROL

CONTROLS FOR VERSIONS WITH HEATER (fig. 29)

A - Air temperature adjustment knob.

B - Fan speed adjustment knob.

C - Air distribution selector knob.

D - Air recirculation on/off lever.

fig. 27

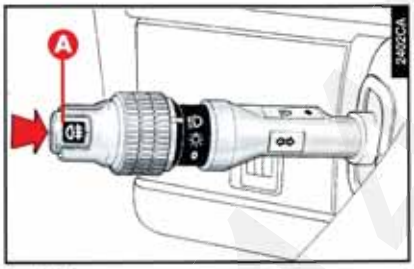


fig. 28

fig. 29

CONTROLS FOR VERSIONS WITH CLIMATE CONTROL UNIT WITH AUTOMATIC TEMPERATURE CONTROL (fig. 30)

(Optional for versions/markets where applicable)

A - Air temperature adjustment knob.

B - Knob for adjusting fan speed and selecting manual/automatic mode

C - Air distribution selector knob.

D - Compressor on warning light.

E - Conditioner compressor on/off button.

F - Air recirculation on/off button.

G - Recirculation on warning light.

LUGGAGE COMPARTMENT

To open the luggage compartment from outside (**fig. 31**):

– Turn the badge (**A**) and open using the key (**B**).

To open the luggage compartment from inside (**fig. 32**):

– Pull the lever (**A**) at the side of the driver's seat.

Open the boot only when the vehicle is stationary.

fig. 30

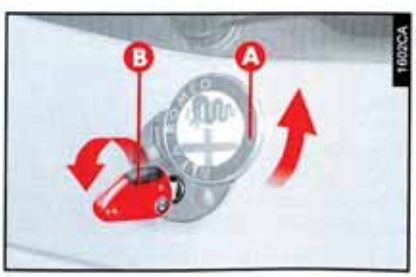


fig. 31

Or (optional for versions/markets where applicable), with the ignition key at **STOP** or **PARK**, press the button (**A-fig. 33**).

BONNET

To open the bonnet:

— Pull lever (**A-fig. 34**) from inside the vehicle.

— From the front part of the vehicle, pull safety lever (**B-fig. 35**) upwards.

— Raise the bonnet and insert the prop.

To close:

— Release the prop, lower the bonnet and at about 20 cm. from the engine compartment let it drop, making sure that it is closed completely and not merely caught in the safety position.

fig. 32

Perform the operation only when the vehicle is stationary.

fig. 33

fig. 34

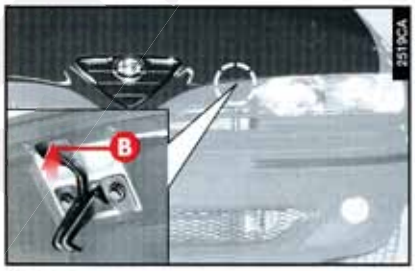


fig. 35

REFUELLING

PETROL ENGINES

For vehicles fitted with petrol engines only four-star lead-free fuel with an octane number (R.O.N.) of 95 or over must be used. Never use leaded petrol, even in minute quantities as this would irreversibly damage the exhaust gas catalyzer. If leaded fuel is added to the fuel tank, no matter how small the quantity, DO NOT START THE ENGINE. Completely drain the fuel circuit and tank.

DIESEL ENGINES

The vehicle must only be refueled with diesel fuel. 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.

Open the flap (**A-fig. 36**) and using the ignition key, open the lock and unscrew the petrol cap.

When refilling hook the cap (**B**) on the flap (**A**) as illustrated.

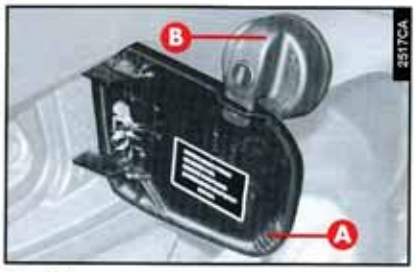


fig. 36

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.

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.

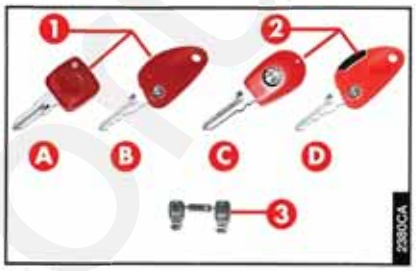


fig. 1

THE KEYS

The car is supplied with two types of keys (**fig. 1**).

The key (**1**) with the bordeaux grip is the "master" key. Only one is supplied its purpose is for memorising the codes of the other keys, therefore the use of it is recommended only in exceptional cases.

If it goes astray subsequent repair operations on the Alfa Romeo CODE system and on the engine control unit will no longer be possible.

Depending on the trim level the keys supplied with the car may be the following:

– type **A** for base versions;

– type **B** for versions with remote door locking/unlocking systems or alarm system.

The main key (**2**) is red and supplied in two copies and depending on the trim level, the following combinations are possible:

– 2 copies of type **C** for cars with base trim level

– 2 copies of type **D** for cars with remote door locking/unlocking systems or alarm system.

The type **C** main key operates:

– the ignition
– door locks
– boot lock.

The type **D** main key operates:

– the ignition
– door locks
– boot lock
– remote door locking/unlocking system (optional for versions/markets where applicable)
– alarm system (optional for versions/markets where applicable).

WARNING In order to ensure perfect efficiency of the electronic devices contained inside the keys, they should never be directly exposed to the rays of the sun.

Cars fitted with an alarm system are supplied, for versions/markets where applicable, with emergency keys (**3-fig. 1**); to see how they work, see paragraph "Electronic alarm".

The CODE card (**fig. 2**) is also supplied with the keys and it contains the codes of the keys (both the mechanical one and the electronic one for emergency starting) has spaces for sticking the labels of any alarm system remote controls.

The code numbers on the CODE card and the key with the bordeaux grip must be kept in a safe place.

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.

fig. 2

If the car changes owner the new owner must be given the bordeaux key (as well as the other keys) and the CODE card.

WARNING - U.K. VEHICLES ONLY

At the behest of the motor insurance companies the CODE card for emergency starting and replacement of keys is not provided. If you need assistance please contact your nearest Alfa Romeo Dealer or telephone free phone 0800 717000.

OPERATION (fig. 3)

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.

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.

This condition is indicated by a brief flash of the warning light (**A**) on the instrument cluster.

If the code has not been recognised correctly, the Alfa Romeo CODE system warning light (**A**) stays on together with the injection failure warning light (**B**).

In this case, you are advised to move the key back to **STOP** and then back to **MAR**; if the block persists, try again, possibly with the other keys provided with the car. If the engine still fails to start, follow the emergency procedure de-

fig. 3

scribed below and then contact Authorized Alfa Romeo Services.

WARNING 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.

To memorise the code of the keys it is absolutely necessary to use the "master" key. Therefore this key must be kept in a safe place and given to Authorized Alfa Romeo Services together with all the other keys in your possession, each time the code of a new key needs to be memorised. The codes of any keys not provided during the memorising procedure are cleared from the memory. The reason for this is to ensure that any keys that have been lost or stolen are no longer able to start the engine.

WARNINGS 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 Authorized Alfa Romeo Dealer.

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

If after 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.

WARNING The system is protected by a fuse housed in the main fusebox (see "In the event of a burnt fuse or relay" 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.

WARNING 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 **STOP** 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 injection warning light will come on for eight seconds 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).

WARNING 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 according to CE directive 95/56 comprises: transmitter, receiver, control unit with siren and volumetric sensors. The electronic alarm is controlled by the receiver in the front roof lamp 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 (volumetric protection) and operates the central door locking system. It also makes it possible to cut off volumetric protection and/or the siren.

WARNING 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. 4)

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.

WARNING If when button **A** is pressed the led **B** flashes briefly only once, the batteries need replacing as described on the following page.

Replacing the batteries

If when the button (**A-fig. 4**) of the remote control is pressed the led (**B-fig. 4**) flashes briefly only once and the led on the steering column trim (**A-fig. 5**) stays on (after turning off), the batteries must be replaced with others of an equivalent type available from normal outlets:

– open the plastic covers in correspondence with the hollow provided (**A-fig. 6**);

– remove the flat batteries and insert new ones making sure they are in the correct direction (**fig. 6**);

– close the plastic covers, making sure they are closed properly.

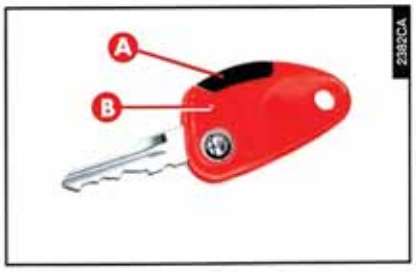


fig. 4

fig. 5

For further information, contact Alfa Romeo Authorized Services.

Dead batteries are harmful for the environment. They must be disposed of in special containers as specified by current regulations.
Avoid exposure to naked flames and high temperatures.
Keep out of reach of children.

fig. 6

Requesting additional remote controls

The receiver can recognise up to 5 remote controls.

Should a new remote control be necessary for any reason during the life of the vehicle, contact Authorized Alfa Romeo Services directly.

ACTIVATING THE ALARM

When the doors and boot/bonnet lids are closed and the ignition key is in the **STOP** or **PARK** 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, the door lock is engaged.

Engagement of the alarm is preceded by a self diagnosis phase characterized by a change in the frequency at which the led (**A-fig. 5**) flashes. If an anomaly is detected the system gives off a further "BEEP".

Surveillance

When the system has been turned on, the led (**A-fig. 5**) on the upper steering column trim will flash to indicate that the system is in the surveillance mode.

The led (**A**) inside the vehicle will flash continuously while the system is under surveillance.

WARNING 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.

WARNING 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 door
2 flashes: left door
3 flashes: —
4 flashes: —
5 flashes: volumetric sensors
6 flashes: bonnet
7 flashes: boot
8 flashes: tampering with car starting cables
9 flashes: tampering with battery or cutting emergency key cables
10 flashes: at least three causes of alarm.

AUTOMATIC ENGAGEMENT OF THE ALARM

(Optional for versions/markets where applicable)

If the alarm has not been engaged with the remote control it will come on automatically after an established time of 30 seconds from the moment that the ignition key has been turned to the to the **STOP** or **PARK** positions and a door or the boot has been opened and then closed again.

This condition is shown by the intermittent illumination of the led in the vehicle and by the signalling described previously.

To deactivate the alarm press the button on the remote control.

The alarm is also automatically engaged when the doors are closed using the key.

When the alarm is engaged automatically the doors are not locked.

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.

INTERRUPTING THE ALARM

To interrupt the alarm press the button on the remote control or, for versions/markets where applicable, deactivate the alarm using the emergency key as described in the following paragraph.

DEACTIVATING THE ALARM

(for versions/markets where applicable)

To completely deactivate the electronic alarm (for example when carrying out maintenance operations to the electrical system or replacing the battery etc.) proceed as follows:

– open the boot, raise the edge (**A-fig. 7**) of the right-hand boot trim to gain access to the key on the siren body;

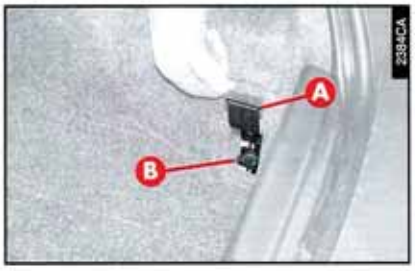


fig. 7

– remove the protective cap (**B-fig. 7**) from the key switch;

– insert the emergency key (**C-fig. 8**) and turn it counter-clockwise (**OFF** position) = alarm deactivated.

To reactivate the alarm, turn the key clockwise (**ON** position) = alarm activated.

This key switch is not applicable for the U.K. market.

At the end of the alarm deactivation or activation procedure, remove the emergency key, cover the switch with its protective cap and close the boot.

WARNING If it is necessary for the vehicle to lie inactive for long periods (over 3 weeks) the electronic alarm should be deactivated to avoid draining the battery.

fig. 8

When the alarm is deactivated it is still possible to operate the centralized locking system using the remote control.

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 **MAR**, 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 (fig. 9)

(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**) pressed for 4 seconds when engaging the system.

fig. 9

MINISTERIAL HOMOLOGATION

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 after 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).

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.

REMOTE CONTROL DOOR LOCKING SYSTEM

The system comprises a receiver inside the front roof lamp and a transmitter (remote control), incorporated in the key (**B-fig. 10**). To lock/unlock the locks, point the transmitter towards the car, press and release the button (**C-fig. 10**).

Every transmitter has a label containing the specific transmitter code. The label should be stuck (at delivery) in the special space on the back of the CODE card.

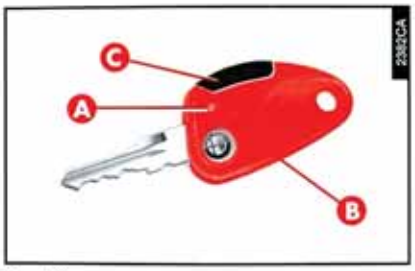


fig. 10

If pressing the button (**C-fig. 10**) of the remote control, the led (**A-fig. 10**) only gives one brief flash, the batteries need replacing as described in the previous paragraph "Electronic alarm".

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

IGNITION DEVICE

THE SWITCH (fig. 11)

The key can be moved to one of four positions:

– **STOP**: engine off, key removable, engine inhibitor engaged, steering lock engaged, services cut off except those that are not "key-operated" (e.g. tailgate electric lock optional for versions/markets where applicable).

– **MAR**: drive position. The engine inhibitor is deactivated and all the electric devices are supplied, except those cut off for safety reasons (e.g. tailgate electric lock enabled (for versions/markets where applicable).

fig. 11

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

– **AVV**: starting the engine.

WARNING 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.

– **PARK**: engine off, the key can be removed, engine inhibitor engaged, steering lock engaged, side lights automatically turned on, electric tailgate lock enabled (for versions/markets where applicable).

WARNING To turn the key to the **PARK** position button (**A**) located on the switch, should be pressed first.

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.

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.

STEERING LOCK

Engaging lock:

– move the ignition key to the **STOP** or **PARK** 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.

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

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

OPENING/CLOSING FROM OUTSIDE

– To open the door, turn the key counter-clockwise, then raise the handle (**A-fig. 12**).

– To close the door, turn the key clockwise in the lock.

fig. 12

OPENING/CLOSING FROM INSIDE (fig. 13)

— To open the door pull the handle (**B**) regardless of the position of knob (**A**).

— To close the door, pull, then to prevent it from being opened from outside, press button (**A**) at point (**1**).

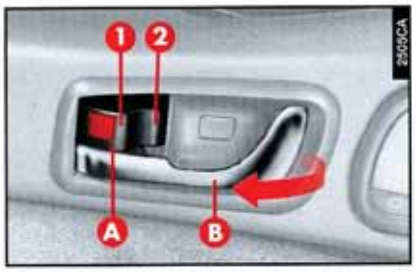


fig. 13

CENTRALIZED LOCKING
(Optional for versions/markets where applicable)

This permits centralized locking of all doors.

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

WARNING 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).

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 doors.

— **From inside:** with the doors shut, press one of the buttons (**A-fig. 13**) on the doors, in position (**1**) to activate or in position (**2**) to deactivate the centralized locking system.

WARNING It is not possible to keep the knob (**A-fig. 13**) down if the door has not been shut properly.

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

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

SEATS

FRONT SEATS (fig. 14)

Adjustments may be made solely with the car stationary.

Moving the seat backwards or forwards

Lift lever (**A**) and push the seat backwards or forwards. 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 angle of the backrest

This can be done by turning the knob (**B**) until the desired position is reached.

Tipping the backrest forwards

To permit access to the rear seats pull the handle upwards (**C**) and then tip the backrest forwards.

Tipping the backrest of the passenger seat forward makes it possible to slide the seat forwards also.

Repositioning the backrest in the upright position automatically repositions the seat.

Once the backrest has been moved to the correct position for driving ensure that it is correctly locked into place.

In the seats fitted with side Air bags, the handle (**C**) is positioned in the upper part of the outer side of the seat back rest.

fig. 14

Driver's seat height adjustment
(Optional for versions/markets where applicable)

Completely pull out the lever (**D-fig. 15**) and move it up or down until obtaining the required height, then insert the lever again.

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

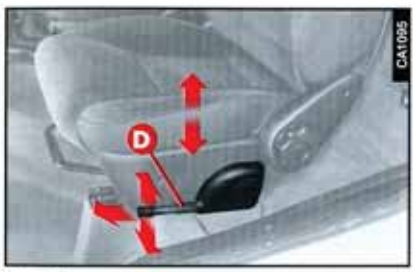


fig. 15

Seat warming (fig. 16)
(Optional for versions/markets where applicable)

Driver's seat warming is activated and deactivated by the switch in position (**A**).

Adjusting the headrests (fig. 17)

In order to increase the safety of passengers, the headrests are adjustable in height.

To adjust, move the headrest up or down, then release it and make sure that it is locked on one of the positions provided.

WARNING The shape of the headrest may vary depending on the version and/or market. The example shown is used only to demonstrate the methods by which it can be adjusted.

Remember that the headrests 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. 18)

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

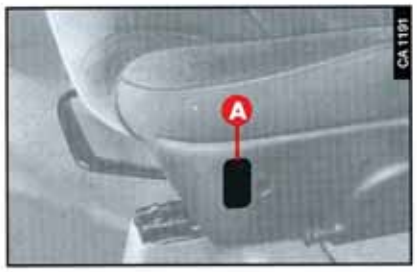


fig. 16

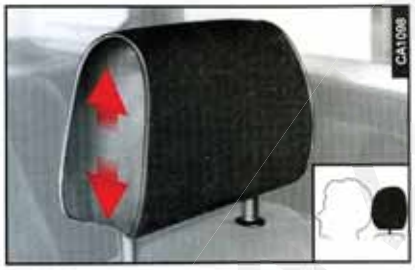


fig. 17

fig. 18

REAR SEAT

Enlarging the luggage compartment

When wanting to put a particularly heavy load in the boot when travelling at night, it is wise to check and if necessary adjust the low beam headlamps (see the "Headlamps" paragraph).

The luggage compartment can be extended by tipping the rear seat down.

– Roll up the rear window curtain after freeing it from the clips (**A-fig. 19**) and seatings (**B-fig. 19**) and separating the adhesive strips (**C-fig. 19**) located on the sides of the curtain. If necessary completely remove the curtain by unhooking the clips located at the front ends.

– Hook the buckles (**A-fig. 20**) of the rear seat belts to the tongues on the seat backrest.

– Pull the handle (**A-fig. 21**) in the centre of the rear cushion in the direction of the arrow and tilt it forwards.

If your vehicle is fitted with a split rear seat (optional for versions/markets where applicable) either of the two parts can be moved separately thus making it possible to vary the loading possibilities on the basis of the number of rear seat passengers.

– Remove the rear headrest (**A-fig. 22**), if fitted, setting them in the special slots (**B-fig. 22**) on the lower part of the cushion.

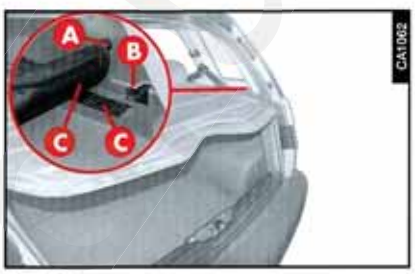


fig. 19

fig. 20

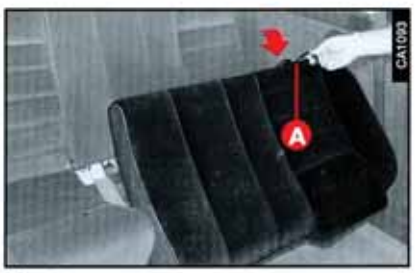


fig. 21

— Makes sure that each rear seat belt is inserted in its bracket then raise the seat back fastening pins (**A-fig. 23**) and tilt it forward to obtain a single loading platform (**B-fig. 24**).

To return the seat to the normal position:

— Arrange the seat belts to one side so they do not get in the way when the seat-back is raised.

— Raise the backrest and push it backwards until it hooks into place with an audible click.

— Return the cushion to the horizontal position whilst holding up the central seat belt.

Make sure that the belts are not twisted between the cushion and seat back.

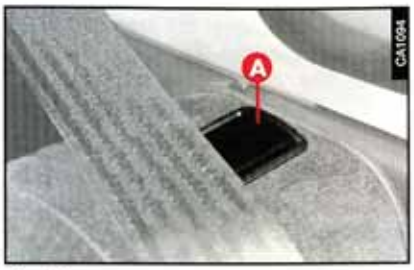


fig. 23

Headrest rear seats (fig. 25)

The car is fitted with two headrests for the side seats (for versions/markets where applicable).

The rear headrests are adjustable in height and tilt.

To adjust, the headrest can be raised and lowered to certain preset positions according to the passenger's height.

If necessary, the headrests can be removed as follows:

— raise the headrests to the maximum height;

— press both buttons (**A** and **B-fig. 25**) and remove the headrests.

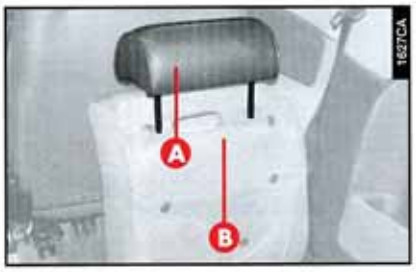


fig. 22

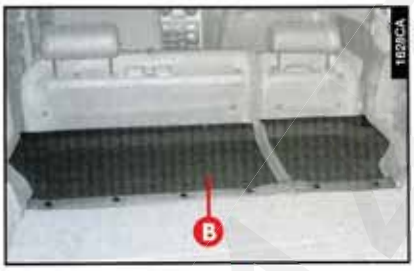


fig. 24

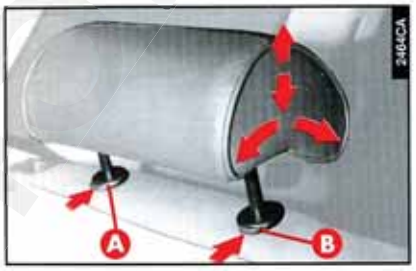


fig. 25

Remember that the headrests should be adjusted so that the back of the head and not the neck rests on them. Only in this position do they exert their protective action in the event of a crash from behind.

STEERING WHEEL ADJUSTMENT

The position of the steering wheel is height-adjustable.

To carry out this operation, release the lever (**A-fig. 26**) pulling towards the steering wheel (position **1**). After putting the steering wheel in the most suitable position, lock pushing the lever completely forwards (position **2**).

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

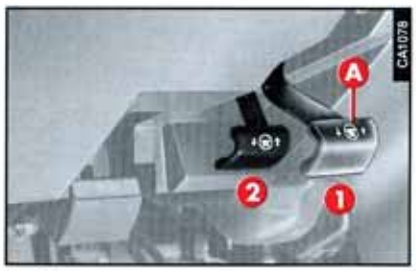


fig. 26

ADJUSTING THE REAR-VIEW MIRRORS

INTERNAL REAR-VIEW MIRROR

The mirror, fitted with a safety device which releases it in the event of a violent impact can be moved to two positions: normal or anti-glare by operating lever (**A-fig. 27**).

fig. 27

DOOR MIRRORS

Manual adjustment (fig. 28)

The position of the mirror can be adjusted from inside using knob (**A**).

Electric adjustment (fig. 29)

(Optional for versions/markets where applicable)

— Using the switch (**A**) select the mirror required (right or left).

— Using button (**B**), in one of the four directions, direct the mirror selected previously.

— Position the switch (**A**) in the intermediate locking position.

Adjustment is possible only with the ignition key at **MAR**.

Folding (fig. 30)

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

When travelling the door mirrors must always be in position (A).

fig. 28

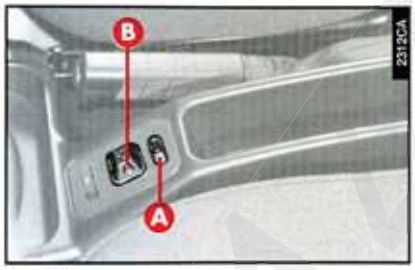


fig. 29

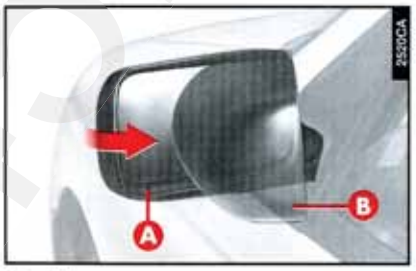


fig. 30

The electrically-adjusted mirrors are fitted with heating coils which prevent misting and they come into action pressing the button (**A-fig. 31**).

This feature is automatic, therefore, with the button pressed, heating is activated and deactivated according to a sequence managed by an electronic control unit depending on the temperature of the passenger compartment.

The curved door mirrors (for versions/markets where applicable) slightly alter the perception of distance.

POWER WINDOWS

(Optional for versions/markets where applicable)

Driver's (fig. 32)

To raise or lower the front windows, with the ignition key at **MAR**, press the buttons in the points described below.

Point **A** - To raise the driver's window

Point **B** - To lower the driver's window

Point **C** - To raise the passenger's window

Point **D** - To lower the passenger's window

WARNING The driver's power window is fitted with a "constant automatic operating" device. Automatic operation of the driver's window is obtained pressing the switch for about one second: the window stops when it reaches the end of its stroke (or pressing the switch again).

Passenger' side (fig. 33)

Button (**A**) without "constant operating" device controls the passenger's window.

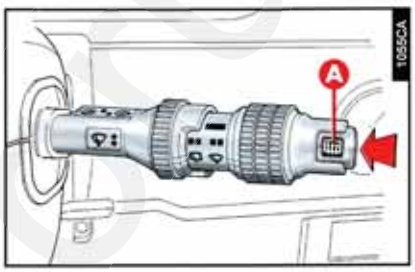


fig. 31

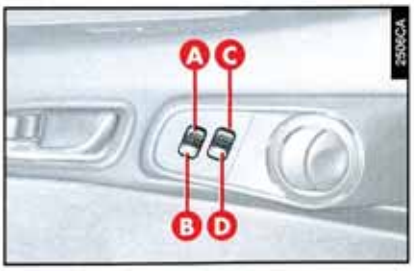


fig. 32

fig. 33

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

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

FRONT AND REAR SIDE BELTS

The car is fitted with pre-tensioning devices and seat belts with three anchorage points, on request also for the third rear passenger, with an automatic rewinding device that allows a good degree of freedom of movement.

To guarantee the highest degree of protection the backrest should be kept as erect as possible and the seat belt should fit closely to the chest and hips. Always fasten your seat belts in both the front and rear seats. Driving without seat belts greatly increases the risk of serious injury or death in the event of an accident.

After grasping the lower part of the belt from the external side of the seat, fasten the seat belt by gripping the tab (**A-fig. 34**) and unwinding the belt until the tab can be inserted in the buckle (**B-fig. 34**).

The belt is correctly fastened when you hear it click into place.
To release the seat belts, press button (**C-fig. 34**).

The locking device fitted to the rewinding mechanism will lock the belt each time it is jerked, for example in case of abrupt deceleration or accident.

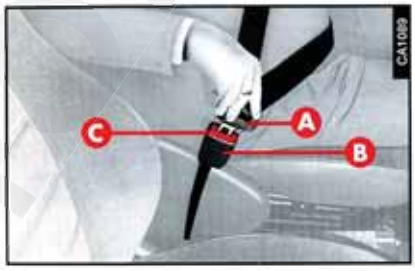


fig. 34

If the seat belt is jerked and locks allow it to rewind a little to disengage the locking mechanism.

The seat belt retractor will adapt the belt to the body of the person wearing it to give him/her freedom of movement.

If the car is parked on a steep slope the reel might lock; this is normal.

Accompany the belt during rewinding to prevent it getting entangled.

ADJUSTING HEIGHT OF FRONT SEAT BELTS (fig. 35)

The ring attached to the front seat belts can be moved to four positions allowing the belts to be adjusted.

The height of the seat belt attachment should always be altered to suit the height of the person wearing the seat belt.

This precaution makes it possible to improve the efficiency of the seat belt which greatly reduces the risk of injury in the event of an accident.

The correct position is obtained when the belt passes about half way between the tip of the shoulder and the neck.

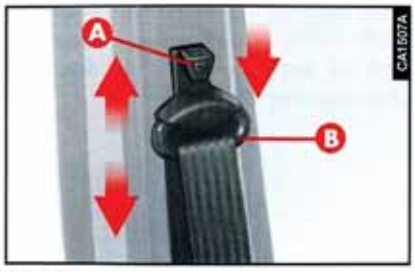


fig. 35

To adjust the attachment raise or lower the grip (**A-fig. 35**) and move at the same time the ring (**B-fig. 35**) to one of the set positions.

After adjusting check that the sliding mechanism is engaged in one of the set positions. When grip (A) is released jerk the mechanism to lock the anchoring device if it is not in one of the stable positions.

USING THE REAR SEAT BELTS

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 seat.

In order to ensure that the correct tabs are fitted in the correct clips, the tabs of the side belts and the clip of the central belt (only abdominal) are incompatible.

You should put the belt on when you are sitting upright and leaning back in your seat.

When the rear seats are not occupied, use the special retainer tabs (**A-fig. 36**) on the seat back to hold the belt buckles.

To use the belts, press the button on the buckles (**B-fig. 36**).

To offer the highest level of protection, the rear seat belts should be fastened as shown in fig. 37.

CENTRE REAR SEAT BELT (fig. 38)

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.

WARNING The belt is adjusted properly when it fits closely across the hips.

fig. 36

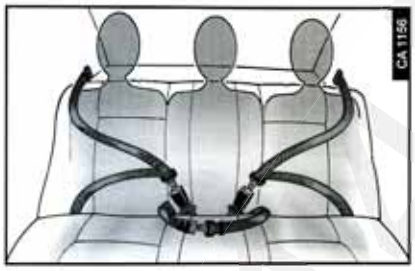


fig. 37

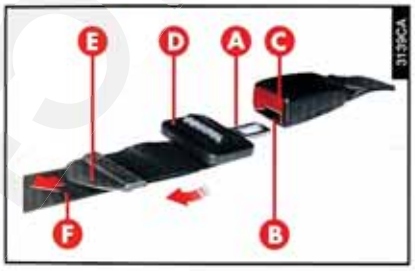


fig. 38

GENERAL INSTRUCTIONS FOR THE USE OF THE SEAT BELTS

All the occupants of the vehicle are obliged to respect the local traffic laws regarding the wearing of seat belts.

Remember that, in the event of an accident, any passengers occupying the rear seats who are not wearing a seat belt not only subject themselves to great personal risk but constitute a danger to the occupants of the front seats.

Seat belts should always be worn in both the front and rear positions. Travelling without seat belts increases the risk of serious injury or death in the case of accident.

The seat belt must not be twisted and should cling tightly to the body. The upper part must pass over the shoulder and diagonally across the chest. The lower part must rest across the pelvis and not across the stomach to eliminate the risk of sliding forwards. Do not use devices (clips, stoppers, etc.) which keep the belts away from the body (fig. 39).

Do not carry children on your knee using a single seat belt for two people (fig. 40).

fig. 39

fig. 40

If the seat belt has been subjected to shock, for example during an accident, it must be completely replaced together with the attachments and their screws, and the pretensioning devices if fitted, even if visible defects are not detected as the belt may have lost its resilience.

Pregnant women should follow local regulations regarding the use of seat belts. It is however strongly recommended that the lap belt be fitted low down so that it passes under the stomach rather than pressing on it (**fig. 41**).

fig. 41

HOW TO KEEP THE SEAT BELTS ALWAYS IN EFFICIENT CONDITIONS

– Always use the belts with the tape well taut and never twisted; make sure that it is free to run without impediments.

– 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 any other chemical substance that might weaken the fibres.

– Prevent the reels from getting wet: correct operation of them is only guaranteed if water does not get inside.

CARRYING CHILDREN SAFELY

For the best level of protection in the event of a crash all occupants must travel seated and secured by suitable restraint systems.

This is even more important for children.

Compared with adults, a child's head is proportionately larger and heavier than the rest of the body, while muscles and bone structure are not completely developed. Therefore, in order to restrain them correctly in the event of a crash, different systems are needed than adult seat belts.

The results of research on the best protection for a child are summarised in European Standard ECE-R 44, which in addition to making them compulsory, subdivides restraint systems into 4 groups:

Group 0	0-10 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 may be noted, the groups partially overlap and in fact, in commerce it is possible to find devices that cover more than one weight group.

All the restraint devices must bear the homologation data, together with the control brand, on a solidly fixed label which must absolutely not be removed.

Over 36 kg in weight and 1.50 m in height, from the point of view of restraint systems, children are considered as adults and wear belts normally.

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

You are always recommended to carry children on the rear seat as this is the most protected position in the event of a crash. In any case, a child's seat should absolutely never be placed on the front seat of a car fitted with passenger's Air bag, which, could cause even lethal harm during inflation, regardless of the seriousness of the crash that triggered it.

GROUP 0

Babies up to 10 kg must be carried facing behind (**fig. 42**) on a cradle seat, which, supporting the head, does not induce strain on the neck in the case of sharp deceleration.

The cradle is restrained by the car safety belts and it should in turn restrain the child with the belts incorporated on it.

The illustrations are indicative only for assembly. Assemble the seat according to the compulsory instructions provided with it.

fig. 42

GROUP 1

Starting from 9 kg in weight, children may be carried facing forwards with seats fitted with front cushion (**fig. 43**), through which the car seat belt restrains both child and seat.

Seats exist which are suitable for covering weight groups 0 and 1 with a rear connection to the car belts and its own belts to restrain the child. Because of their mass, they can be dangerous if installed incorrectly fastened to the car belts with a cushion. Strictly adhere to the assembly instructions provided.

GROUP 2

Starting from 15 kg in weight children may be restrained directly by the car seat belts. Child seats only have the function of positioning the child correctly in relation to the belts, so that the diagonal part adheres to the chest and never to the neck and that the horizontal part adheres to the child's pelvis and not to the abdomen (**fig. 44**).

The illustrations are indicative only for assembly. Assemble the seat according to the compulsory instructions provided with it.

fig. 43

The illustrations are indicative only for assembly. Assemble the seat according to the compulsory instructions provided with it.

fig. 44

GROUP 3

Starting from 22 kg in weight a booster cushion alone is sufficient (**fig. 45**). The child's chest is thick enough not to need the spacer back rest any more.

Over 1.50 m tall children may wear seat belts like adults.

fig. 45

Below we are summarising the rules of safety for carrying children

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

2) If a passenger's Air bag is installed children should **never** travel on the front seat.

3) Carefully follow the instructions provided with the child's seat itself, which the supplier is obliged to attach. Keep them in the car together with the documents and this booklet. Do not use used seats without the instructions for use.

4) Always pull the tape to check that the belts are buckled.

5) All restraint systems are strictly for one child only: never use for two children at the same time.

6) Always make sure that the belts do not rest on the child's neck.

7) During the journey, do not allow the child to stay in abnormal positions or release the belts.

8) Do not carry children in your arms, not even small babies. No-one, however strong, can keep hold of them in a crash.

9) In the case of accidents, replace the child's seat with a new one.

PRE-TENSIONING DEVICES

To increase the efficiency of the front seat belts the vehicle is fitted with pre-tensioning devices.

These devices "feel" that the vehicle is being subject to a violent impact by way of a sensor and rewind the seat belts a few centimeters.

In this way they ensure that the seat belt adheres to the wearer before the restraining action begins.

The seat belts lock to indicate that the devices have intervened. A small amount of smoke may be produced. This smoke is in no way toxic and presents no fire hazard.

The emergency tensioning retractor needs no maintenance or lubrication. Any modification to its original features will nullify the retractor's effectiveness.

If, due to unusual natural events (floods, high waves etc.), the device has been affected by water and mud, it must be replaced.

The pretensioner will give maximum protection when the seat belt adheres snugly to the wearer's chest and hips.

Pre-tensioning devices can only be used once and they are triggered even if the seat belts are nor fastened. After they have been triggered contact Alfa Romeo Authorized Services to have them replaced. The validity of the devices is 10 years from the date of production on the sticker; the pretensioners should be changed as this date approaches.

Operations involving banging, vibrations or heating (above 100 °C for a maximum of 6 hours) in the area of the pretensioner may damage or trigger off the device. Vibrations from rough road surfaces or accidental jolting caused by mounting pavements etc. do not have any effect on the pretensionner. If, however, you need assistance, go to Alfa Romeo Authorized Services.

Never disassemble or tamper with the pretensioner components. All interventions must be carried out by qualified and authorised personnel. Always contact Alfa Romeo Authorized Services.

AIR BAG

(Optional for versions/markets where applicable)

The car can be fitted with a driver's Air bag (**fig. 46**); optional for versions/markets where applicable, the passenger's air bag can be supplied (**fig. 47**) and side Air bags (**fig. 48**).

fig. 46

DESCRIPTIONS AND OPERATION

The Air bag is a safety device which comes into operation instantaneously in the event of a head-on collision.

It is formed of an instantly inflating cushion contained in a special recess on the steering wheel, in the dashboard on the passenger's side and on the outer side of both front seats.

In the event of a crash, the deceleration sensor activates the instant inflating device of the cushion or cushions which form a barrier between the body of the occupants and the structures of the vehicle which could cause injury (**fig. 49**).

The bag deflates immediately afterwards.

The Air bag is a device to protect against average and heavy head-on crashes. In the event of side crashes and bumps from behind, or minor crashes its action is unnecessary and could be inappropriate. Therefore the failure to trigger the device in these cases is not a symptom of system failure.

Triggering of the Air bag produces heat and releases a small amount of powder. This powder is not harmful and does not indicate the start of fire, also the surfaces of the deployed bag and the vehicle 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.

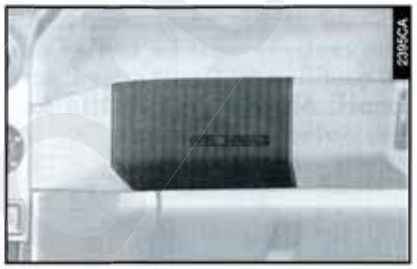


fig. 47

fig. 48

fig. 49

When the ignition key is turned to the MAR position the warning light should come on on the instrument panel and turn off after appr. 4 seconds. If the light fails to light up or if it remains on or if it lights up when the vehicle is in motion contact Alfa Romeo Authorized Services immediately.

You are reminded that when the engine is running the Air bag can be triggered even with the car at a standstill if it is bumped at the front by another car moving quickly enough.

Alfa Romeo recommends you to always make sure that children are seated secured by suitable restraint systems, on the rear seat which is the most possible protected position.

FRONT PASSENGER'S AIR BAG

(Optional for versions/markets where applicable)

The passenger's Air bag has been designed and calibrated to improve the protection of a person wearing a seat belt.

At its maximum inflation its volume fills most of the space between dashboard and passenger.

In the event of a crash a person that is not wearing a seat belt moves forward and may come into contact with the bag while it is still opening, with decidedly lower protection than the best possible.

Therefore, the Air bag is complementary to and does not replace the use of seat belts, which you are advised to always use, as specified by law in Europe and most other countries.

Passenger presence sensor (P.P.D.)

(for versions/markets where applicable)

For cars fitted with passenger's front Air bag, the front passenger seat is fitted with a sensor that detects the presence of a person (or of any object weighing more than a determinate value) and enables operation of the front passenger's Air bag and of the side one, if fitted.

If the sensor detects no "presence" for a determinate length of time (approx. 30 seconds) it automatically deactivates the passenger's Air bag and the side Air bag if fitted.

The sensor might fail to detect the presence of an occupant due to the interposition of cushions in general or medical aids (cushions, hoops, etc.), which therefore must never be used on the front passenger seat fitted with P.P.D.

SIDE AIR BAGS

(optional for versions/markets where applicable)

The task of the side Air bags is to ensure protection of the occupants of the front seats in a side crash.

They are formed of an instantly inflating cushion housed on the outer side of the front seat backs. In the event of a side crash, this type of Air bag helps to improve the protection level offered by the structure of the vehicle.

If triggered, the side Air bag installed on the seat ensures that the cushion is always in the best position in relation to the occupant, regardless of the seat adjustment and the size of the occupant.

In the event of a side crash, the Air bag control unit activates the cushion inflating device on the side of the crash, protecting the occupant's chest.

The passenger presence sensor, described in the previous paragraph, deactivates operation of the passenger's side Air bag if it does not detect a presence on the seat.

For vehicles with side Air bags, do not cover the seat back with covers.

GENERAL CAUTIONS

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

The Air bag system does not require maintenance.

However its efficiency covers a period of 10 years. The expiry date can be found on the label on the driver's door pillar. After this date contact Alfa Romeo Authorized Services.

All the diagnosis, repair and replacement operations regarding the Air bag must only be carried out by Alfa Romeo Authorized Services.

WARNING The activation of pretensioners, front Air bags and side Air bags is decided in a differentiated manner by the electronic control unit depending on the type of crash. Therefore, the failure to activate one or more of them does not mean that the system is not working properly.

Do not apply stickers or other objects to the steering wheel or to the Air bag console on the passenger side.

SERIOUS DANGER: with a car fitted with an Air bag on the passenger's side, do not place a child's seat on the front seat.

The Air bag is triggered for shocks greater in magnitude than the pre-tensioners.

For impacts between these two activation thresholds, it is therefore normal that only the pre-tensioners be triggered.

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 Authorized Alfa Romeo Services.

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.

The Air bag does not substitute the seat belts, but only increases their effectiveness. Moreover, since the Air bag does 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.

If an accident has triggered the Air bag Alfa Romeo Authorized Services must be contacted so that the Air bags, seat belts, relative pre-tensioners and child seat, if fitted, can be replaced.

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

When vehicle ownership is changed the new owner must be informed of the presence of the Air bag, its methods of use and the above warnings and also be given this "Owner's Manual".

STEERING WHEEL LEVERS

The devices and services controlled by the levers on the steering wheel can only be activated when the ignition key is in the **MAR** position.

LEFT-HAND LEVER

The left-hand lever controls the external lights and the rear foglight.

When the external lights are switched on the various controls located on the dashboard are illuminated.

The sidelights will come on if the ignition key is in the **PARK** position, regardless of the position of the knurled ring.

Lights switched off (fig. 50)

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

Sidelights (fig. 51)

The sidelights are switched on by turning the knurled ring from **O** to ☼.

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

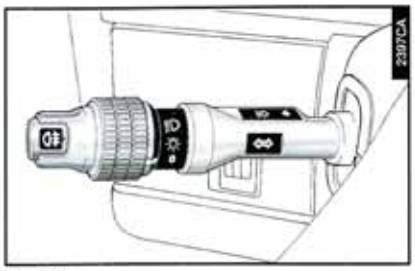


fig. 50

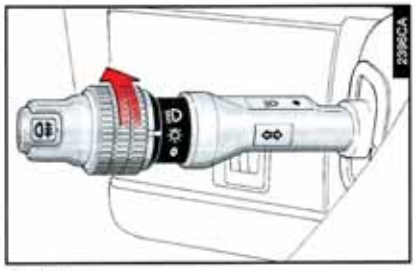


fig. 51

Dipped-beam headlights (fig. 52)

These are switched on by turning the knurled ring from ☼ to ≡D.

Main-beam headlights (fig. 53)

When the knurled ring is in the ≡D position the headlights can be changed from dipped-beam to main-beam by pulling the lever towards the steering wheel as far as possible and then releasing it (stable position). The ≡D warning light will come on on the instrument panel. To return from main-beam to dipped-beam, once again pull the lever towards the steering wheel and then release.

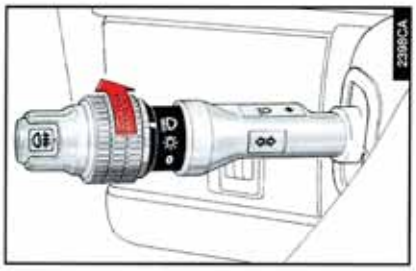


fig. 52

Flashing (fig. 54)

The headlights are flashed by pulling the lever towards the steering wheel (unstable position) regardless of the position of the knurled ring. The ≡D warning light on the instrument panel will come on at the same time.

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

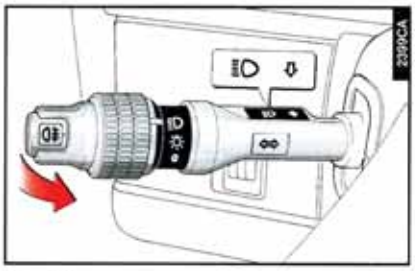


fig. 53

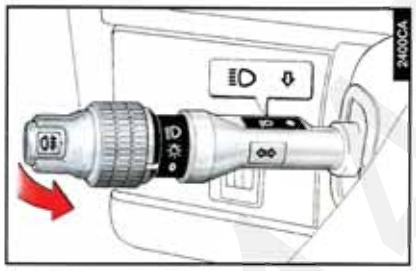


fig. 54

Direction indicators (fig. 55)

Moving the lever to the stable position will:

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

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

One of the warning lights (⇦ or ⇨) will come on on the instrument panel at the same time.

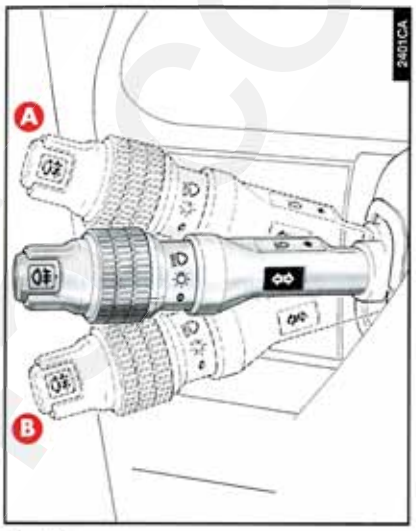


fig. 55

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

WARNING 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.

Rear fog guards (fig. 56)

These are turned on with the side lights or fog lamps on, pressing the ◐ button at the end of the lever. At the same time, the ◐ warning light on the instrument cluster turns on. To turn off the rear fog guards, press the ◐ button again.

WARNING You are reminded to use the rear fog guards according to local regulations. The rear fog guard system meets EEC/ECE standards.

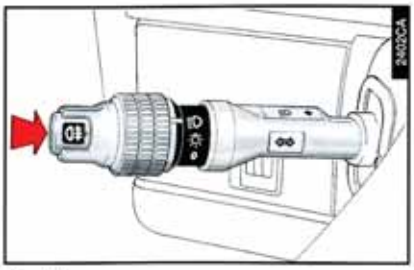


fig. 56

RIGHT-HAND LEVER

The right lever controls the windscreen wiper/washer, the rearscreen wiper/washer and rearscreen heating.

The rearscreen heating control also operates the door mirror defrosting feature (optional for versions/markets where applicable) while the windscreen washer control also operates the headlamp washer feature (optional for versions/markets where applicable).

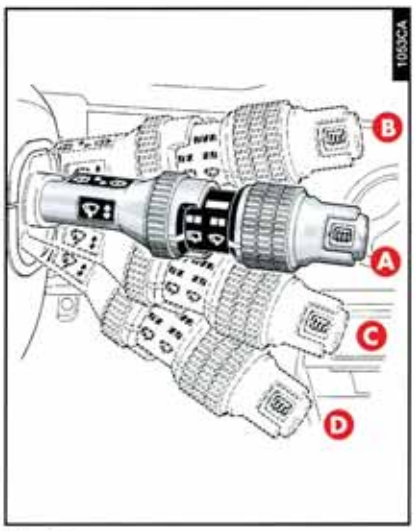


fig. 57

Windscreen wiper (fig. 57 - fig. 58)

The lever has four positions which correspond to the following:

A - Windscreen wiper off.

B - Temporary position (unstable position).

Operation in position **B** is limited to the time in which the lever is held in this position.

C - Intermittent operation.

With the lever in position **C**, turning the knurled ring (**E**) the three possible intermittent operating speeds are selected (or for versions/markets with two intermittent operating speeds and one continuous speed):

Slow frequency.

■■ Medium frequency.

■■■ (or for versions/markets where applicable ▬) Fast frequency (or for versions/markets where applicable, first low continuous speed).

D - Continuous operation.

Rearscreen wiper (fig. 59)

(Optional for versions/markets where applicable)

Turning the knurled ring (**A**) turns on/off the rearscreen wiper:

Stationary.

■■ Operating.

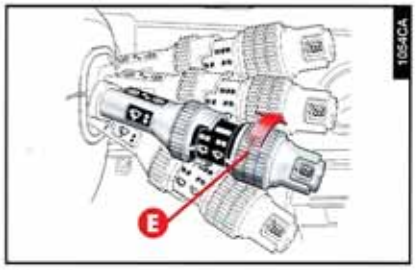


fig. 58

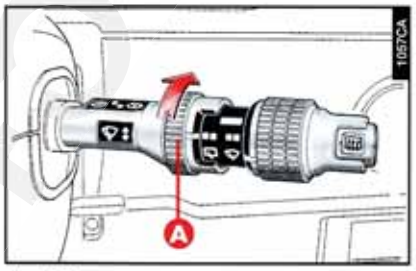


fig. 59

Windscreen wiper/washer (fig. 60)

Pulling the lever towards the steering wheel to position **1** (unstable position) operates the washer and wiper which stops automatically after a few seconds.

The washer stops working when the lever is released.

WARNING If the wiper is already working, it still accomplishes a few strokes continuously regardless of the position of the lever and/or knurled ring (**A**).

Rearscreen wiper/washer (fig. 60)

(Optional for versions/markets where applicable)

Pushing the lever towards the dashboard to position **2** (unstable position) operates the rearscreen washer/wiper function.

The rearscreen washer/wiper stops working as the lever is released.

Headlamp washer (fig. 61)

(Optional for versions/markets where applicable)

These come into action when the windscreen washer is turned on with the side lights on.

Rearscreen heating (fig. 62)

To turn the rearscreen heating on/off press the button at the end of the lever.

At the same time the warning light on the instrument cluster lights up.

The function is automated, so when the button is pressed, heating of the screen is activated and deactivated according to a sequence controlled by an electronic control unit depending on the temperature of the passenger compartment.

To stop heating earlier, press the button again.

WARNING Do not put stickers on the inner part of the rearscreen on the heat-

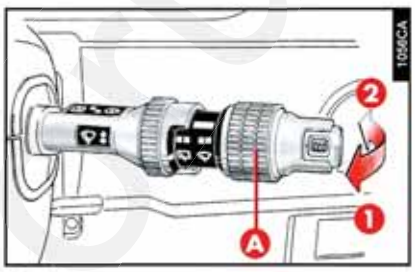


fig. 60

fig. 61

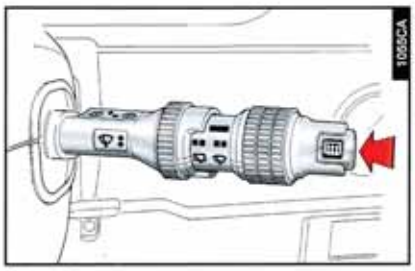


fig. 62

ing filaments to avoid damage which could compromise them.

When cleaning the inner side of the rear-screen take care not to damage the heating filaments.

Defrosting the door mirrors (fig. 62)

(Optional for versions/markets where applicable)

The car may be fitted with door mirror heating which comes into operation when the rearscreen heating is turned on.

The function is automated, so when the button is pressed, heating of the glass is activated and deactivated according to a sequence controlled by an electronic control unit depending on the temperature of the passenger compartment.

To stop heating earlier, press the button again.

INSTRUMENT PANEL

WARNING Depending on the different vehicle versions, the rev counter and speedometer may have danger sectors (red) which differ in size and different clock values.

SPEEDOMETER (fig. 63)

A - Speedometer.
B - Mileage recorder.
C - Trip meter.

The trip meter reset button is at the left end of the services warning lights.

Press to reset.

fig. 63

REV COUNTER (fig. 64)

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

ENGINE COOLANT TEMPERATURE GAUGE WITH MAXIMUM TEMPERATURE INDICATOR (fig. 65)

A - Engine coolant temperature gauge.

Normally the dial should be on the centre values of the scale. If the dial approaches the maximum values, speed should be reduced.

fig. 64

B - Maximum coolant temperature warning light.

If this warning light turns on, it means that the coolant temperature is too high; in this case, stop the engine and contact Authorized Alfa Romeo Services.

WARNING The temperature of the engine coolant may rise towards the maximum values when the vehicle is driven at low speeds especially when the ambient air temperature is high.
In this case the vehicle should be stopped and the engine switched off for a few minutes after which the journey can be resumed, preferably at a higher speed.

FUEL LEVEL GAUGE WITH RESERVE INDICATOR (fig. 66)

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

D - Reserve warning light.
This turns on to indicate that appr. 5 to 7 litres of fuel are left in the tank.

DOOR CLOSING INDICATOR (fig. 67)

(Optional for versions/markets where applicable)

If a led of the indicator device (**A**) lights up, this means that the corresponding door or tailgate is not properly shut.

CLOCK (fig. 68)

The display lights up by turning the ignition key to **MAR**.

To adjust the hours press button (**A**).

To adjust the minutes press button (**B**).

fig. 65

fig. 66

fig. 67

Each press of the button moves forward by one unit.

Keeping the button pressed for a few seconds automatic fast forward is obtained.

WARNING If the electric supply is cut off (for example after removing the battery or if the circuit protection fuse is tripped) the count circuit stops. When the power is restored, adjust the clock.

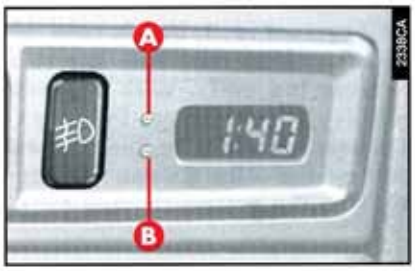


fig. 68

WARNING LIGHTS

WARNING The presence and/or position of the warning lights may vary depending on the version/market.

Low battery charge

This warning light (RED) should be out when the engine is running.
(A slight delay is permitted when the engine is running at idle). If it 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.

Insufficient oil pressure

This warning light (RED) 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.

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

Air bag malfunction
(Optional for versions/markets where applicable)

When the ignition key is turned to the **MAR** position the warning light (RED) will come on and should go out as after appr. 4 seconds. This warning light will come on permanently when an anomaly affecting the Air bag system is detected.

If the warning light fails to light up or if it remains on or if it lights up when the vehicle is travelling, switch off the engine immediately and contact Alfa Romeo Authorized Services.

Injection system malfunction

When the ignition key is turned to the **MAR** position the warning light (RED) should come on and then go out when the engine is started.
If the warning light stays on or turns on when the vehicle is travelling, contact Alfa Romeo Authorized Services.

Brake pad wear

This warning light (RED) comes on when the brake pedal is pressed and the brake pads are found to be worn; have them replaced as soon as possible.

WARNING As the vehicle is fitted with a front pad wear detector only on the lefthand side, if necessary, when replacing the front brake pads also, check the rear ones.

Insufficient brake fluid and/or handbrake on

This warning light (RED) comes on 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.

If the warning light comes on when the vehicle is in movement check if the handbrake is not engaged. If the warning light stays on with the handbrake not engaged, stop immediately and contact Alfa Romeo Authorized Services.

Faulty ABS anti wheel-locking

This warning light (AMBER YELLOW) 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.

The car is fitted with an electronic brake distributor (EBD). If the and 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.

The turning on of the warning light with the engine running normally indicates an ABS system fault only. 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.

Glow plugs (JTD Version)

The warning light (AMBER YELLOW) turns on when the ignition key is turned to **MAR**. When the glow plugs have reached the pre-established temperature, the warning light goes out. Start the engine as soon as the light goes out. For versions/markets where applicable, flashing of the warning light for about 30 seconds after starting the engine indicates a fault to the glow plug warming system, in which case, contact Authorized Alfa Romeo Services.

Alfa Romeo CODE system

When the ignition key is turned to **MAR** the warning light (AMBER YELLOW) should flash only once 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".

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

Rearscreen heating

The warning light (AMBER YELLOW) lights up when electric rearscreen heating is turned on.

Rear foglight

This warning light (AMBER YELLOW) comes on when the rear foglights are on.

Fuel cut-off switch

The warning light (AMBER YELLOW) turns on when the automatic fuel cut-off switch comes into action.

If a smell of fuel is noted when the switch has come on or leaks are noted from the fuel supply system, do not reset the switch to avoid the danger of fire.

Front foglights

(Optional for versions/markets where applicable)

This warning light (GREEN) comes on when the front foglights are on.

Sidelights and dipped-beam head-lights

This warning light (GREEN) comes on when the sidelights or dipped-beam headlights are switched on.

Left-hand direction indicator (intermittent)

This warning light (GREEN) 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 (GREEN) 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.

Main-beam headlights

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

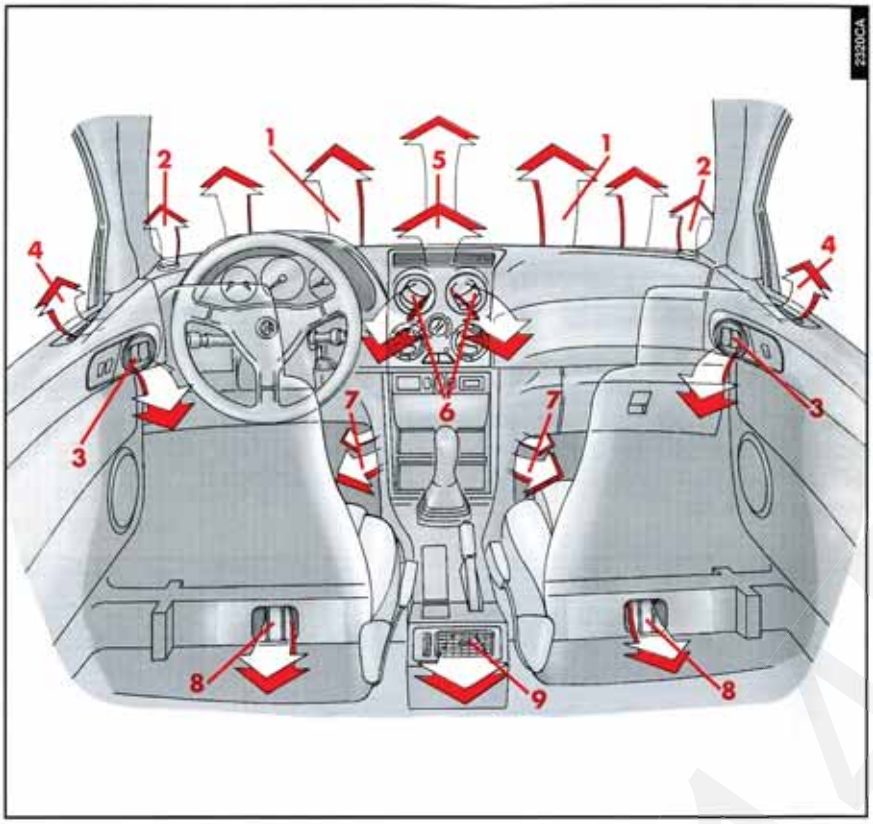


fig. 69

1 Centre vents for windscreen defrosting and demisting.

2 Side vents for windscreen defrosting and demisting.

3 Adjustable side vents (on door).

4 Vents for defrosting and demisting the side windows (on door).

5 Upper vent.

6 Centre adjustable vents.

7 Front lower vents.

8 Additional rear lower vents (for versions/markets where applicable).

9 Air vents for rear seats (only for versions/markets where applicable).

ADJUSTING THE CENTRE AND SIDE VENTS (ON DOORS) (fig. 70)

Each vent has two levers (**A**); press to open/close.

The air flow is directed turning the vent using the fins.

fig. 70

ADJUSTING THE UPPER VENT (fig. 71)

The vent is fitted with an opening/closing control (**B**).

○ = Completely open.

● = Completely closed.

The air flow is adjusted through the knob (**B**).

The highest flow of air is obtained when the pictogram on the control is seen at its largest.

The vent is always supplied, regardless of the position of the air distribution control.

ADJUSTING THE REAR VENT (ON TUNNEL CONSOLE) (fig. 72)

(for versions/markets where applicable)

The air flow is adjusted horizontally moving the lever (**A**) sideways; for vertical adjustment turn the vent itself lightly pressing on the fins.

SIDE WINDSCREEN VENTS (fig. 73)

In addition to the centre vents for defrosting and demisting the windscreen, there are two fixed vents (**A**) at either end of the dashboard.

fig. 71

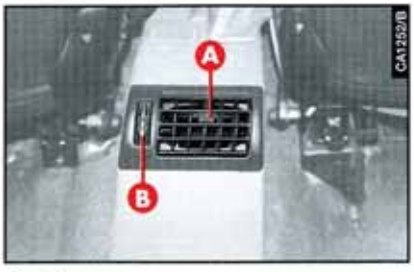


fig. 72

fig. 73

HEATING AND VENTILATION

MANUAL CONTROLS (fig. 74)

A - Air temperature adjustment knob; **B** - Fan speed adjustment knob; **C** - Air distribution selector knob; **D** - Air recirculation on/off lever.

Air temperature adjustment

The temperature of the air admitted to the vehicle is raised or lowered turning the knob (**A**) clockwise or counter-clockwise respectively.

fig. 74

Fan speed regulation control

To select the quantity of air and turn on the fan at the different speeds the knob (**B**) should be moved to one of the various positions as follows:

– Position 0 permits air to flow into the passenger compartment when the vehicle is in movement.

– Positions 1 to 4 engage the fan at its four speeds; travelling at low speed, it is advisable to engage the fan to improve ventilation.

Air distribution control

The air is distributed to the various vents by positioning the knob (**C**) in sequence to one of the symbols as follows:

Air flow towards the upper centre and side vents, with possibility of adjustment using the controls on the actual vents.

Splitting of air flow between the centre and side vents and the lower part of the passenger compartment.

Air flow to the lower part of the passenger compartment.

Splitting of air flow between the windscreen/ side windows and the lower part of the vehicle.

Air flow towards the windscreen and side windows for demisting/defrosting.

Lever for engaging/disengaging the air recirculation function

Moving the lever (**D**) from position (**1**) to position (**2**) activates the recirculation feature.

In this case the flow of external air is shut off and the heating-ventilation system treats only the air drawn from the passenger compartment, if the fan speed control is turned to a position between 1 and 4.

To deactivate recirculation, move the lever (**D**) from position (**2**) to position (**1**).

WARNING The recirculation function should be used 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.

WARNING The lever (**D**) must never be left in the intermediate position: this would compromise system operation.

WARNING Through the recirculation function it is possible to increase the heating action since the air treated has a higher temperature than the outside air; it is however unadvisable to use it on rainy/cold days as it would considerably increase the possibility of misting the windows.

HEATING

To obtain the required temperature, proceed as follows:

– Pointer on knob (**A**), temperature adjustment, to RED zone (position between **4** and **5**).

– Pointer on knob (**B**), air volume adjustment, to the speed required.

– Pointer on knob (**C**), air distribution, to:

To direct the flow of air towards the centre and side vents.

To distribute the flow between the centre and side vents and the lower part of the passenger compartment.

To heat the lower part of the passenger compartment (useful when the outside temperature is very cold).

To distribute the flow between the windscreen/side windows and lower part of the passenger compartment.

To direct the air flow towards the windscreen and side windows.

WARNING The **highest heating power** is obtained as follows:

with the engine cold

i.e. when the coolant fluid temperature is below 70 °C (engine coolant temperature dial on the left of the intermediate section between 50 and 90 °C):

– set the index of knob (**A**) as far as it will go clockwise;

– set the index of knob (**B**) to the second or third fan speed (knob index on 1 or 2);

with the engine warm

i.e. when the coolant temperature is above 70 °C (coolant fluid temperature dial over the intermediate section between 50 and 90 °C):

– set the index of knob (**A**) as far as it will go clockwise;

– set the index of knob (**B**) to the highest speed of the fan (knob index on 4).

DEMISTING AND/OR DEFROSTING OF THE WINDSCREEN AND FRONT SIDE WINDOWS

— Disengage recirculation if engaged previously.

— Turn knob (**A**), temperature adjustment as far as possible clockwise (RED zone, position **5**).

— Turn knob (**B**), air volume adjustment, to maximum fan speed.

— Turn knob (**C**), air distribution, to .

When demisting/defrosting has taken place, adjust the controls to maintain the ideal conditions of visibility.

WARNING The hotter the engine the more effective the defrosting function.

WARNING In the event of heavy damp and/or rain and/or big differences in temperature between the passenger compartment and outside, it is advisable to proceed as follows to prevent the windows from misting:

— air recirculation off (lever (**D**) on position);

— air temperature knobs at vents (**A**) turned to RED sector;

— fan on 3rd speed at least;

— air distribution knob (**C**) on symbol with the possibility of passing to position if heavier misting is noted.

To defrost or demist the rearscreen, press the button on the right steering wheel lever (see paragraph "Steering wheel levers").

VENTILATION

— Pointer on knob (**A**), temperature regulation, to BLUE zone (position **3**).

— Pointer on knob (**B**), regulation of volume of air, to desired speed.

— Pointer on knob (**C**) air distribution to .

If the external temperature is moderately cold it may be necessary to slightly warm the passenger compartment.

In this case turn the knob (**A**) clockwise (beginning of the RED zone) and position the knob (**C**) to the symbol .

CLIMATE CONTROL UNIT WITH AUTOMATIC TEMPERATURE CONTROL

(Optional for versions/markets where applicable)

The coolant used for the climate control system is "R134a" which meets current regulations and which does not harm the environment in the event of accidental spillage.
Absolutely avoid the use of other fluids which are incompatible with the system components.

This system makes it possible to control the climate of the passenger compartment maintaining the temperature level required by the owner.

This condition is obtained proceeding as follows:

— turn knob (**A-fig. 75**) to select the required temperature;

— turn knob (**B-fig. 75**) to select the **AUTO** position.

DESCRIPTION OF CONTROLS (fig. 75)

A - Air temperature adjustment knob; **B** - Fan speed adjustment knob and for selecting manual/automatic mode; **C** - Air distribution selector knob; **D** - Compressor on warning light; **E** - Climate control compressor on/off button; **F** - Air recirculation on/off button; **G** - Recirculation on warning light.

Air temperature adjustment knob

Turning the knob (**A**) respectively clockwise or counter-clockwise highers or lowers the temperature of the air admitted to the passenger compartment.

fig. 75

The extreme positions correspond to **HI** and **LO** ("Maximum" and "Minimum" air temperature respectively).

Fan speed adjustment knob

Turning knob (**B**) it is possible to:

— select the **AUTO** position and make the system optimise operation in order to reach the temperature required in the shortest time possible;

— select one of the four fan speeds to personalise the amount of air available, while maintaining the required temperature.

Air distribution knob

Turning the knob (**C**) clockwise the following positions are selected in sequence:

Air flow towards the upper centre and side vents, with possibility of adjustment using the controls on the actual vents.

Splitting of air flow between the upper centre and side vents and the lower part of the passenger compartment.

Air flow to the lower part of the passenger compartment.

Splitting of air flow between the windscreen/side windows and the lower part of the vehicle.

Air flow towards the windscreen and side windows for quick demisting/defrosting.

MAX Automatic air flow and operation in conditions which ensure quick defrosting/demisting of the windscreen and side windows (see paragraph "Quick demisting and/or defrosting of the windscreen").

Air recirculation on/off button

Pressing button (**F**) engages the recirculation feature and turns on the corresponding warning light (**G**).

In this case, the flow of outside air is shut off, therefore the climate control system directly treats the air contained in the passenger compartment, if the air quantity adjustment control is turned to positions between 1 and 4.

WARNING The air recirculation function should be chosen when stationary in a queue or tunnel to prevent polluted air from entering the vehicle. Prolonged use of this function should however be avoided, especially if there are several persons aboard.

WARNING The compressor and recirculation feature status and operating mode shown by the warning lights on the corresponding buttons (**E**) and (**F**) are stored even when the engine is not running. Therefore when the engine is started again, the last items selected before turning off are resumed.

Climate control on/off button

The climate control compressor is engaged pressing the button (**E**) and the fan is also operated automatically at 1st speed even if the air quantity adjustment knob (**B**) is at position 0. When the system is operating the corresponding warning light turns on (**D**). Climate control can only be turned on when the engine is running.

WARNING Depending on how the "Heating" and "Cooling" system is working, the recirculation function makes it possible to reach the conditions required faster. However it is unadvisable to use it on rainy/cold days as it would considerably increase the possibility of misting the windows especially if the air conditioner is off.

COOLING

To cool the air with the engine running and the windows closed, proceed as follows:

– Temperature adjustment knob pointer (**A**) on the required value.

– Air quantity adjustment knob pointer (**B**) on:

– the speed required to personalise the amount of air admitted

– on **AUTO** when wanting to activate automatic fan operation (conditions to ensure that the set temperature is reached in the shortest time possible).

– Air distribution knob pointer (**C**) on symbol .

– Centre, side and upper vents completely open.

– Compressor on/off knob (**E**) pressed (warning light **D** on).

When requiring to moderate the cooling action, increase the temperature turning knob (**A**) clockwise.

WARNING To obtain the **maximum cooling power**, position:

– knob (**A**) at **LO**;

– knob (**B**) at maximum speed;

– engaging recirculation, button (**F**), helps to quicken air cooling.

DEMISTING AND/OR DEFROSTING THE WINDSCREEN AND SIDE WINDOWS

– Switch recirculation off if engaged previously.

– Turn knob (**A**), temperature adjustment as far as possible clockwise (RED zone, position **3**).

– Turn knob (**B**), air volume adjustment, to the maximum fan speed.

– Turn knob (**C**), air distribution, to the symbol.

– Close the rear air vent (where applicable).

After demisting/defrosting use the controls to maintain the best conditions of visibility.

WARNING The hotter the engine the more effective will defrosting be.

WARNING In cases of heavy damp and/or rain and/or big differences in temperature between inside the car and outside it is advisable to proceed as follows to demist the windows:

– air recirculation off, warning light on button (**G**) off;

– air temperature at outlet knob turned to the RED zone (position between **2** and **3**);

– fan at 3rd speed at least;

– air distribution knob on symbol with the possibility of passing to position if no more misting is noted;

– climate control compressor on, warning light on button (**D**) on.

WARNING An important feature of the climate control unit is air dehumidification. It is always advisable to turn on the compressor pressing the ✿ button (**D**) to prevent the possibility of misting.

To defrost and demist the rearscreen, press the button at the end of the right-hand steering wheel lever (see paragraph "Steering wheel levers").

"QUICK" DEMISTING AND/OR DEFROSTING OF THE WINDSCREEN AND FRONT SIDE WINDOWS

The MAX function **automatically** sets the system as described below in order to obtain quick demisting/defrosting of the windscreen and front side windows:

– maximum air flow and temperature;

– air recirculation off (warning light **G** off) meaning air admitted from outside;

– compressor on (warning light **D** on);

– air distribution towards the windscreen and side windows;

After demisting/defrosting simply use the air distribution knob to restore the required condition.

The action of the system is increased closing the rear seat vents.

WARNING The function MAX is at its highest level of effectiveness when the engine is hot (see note (*) referring to the table CLIMATE CONTROL FUNCTIONS ENABLED AUTOMATICALLY).

HEATING

To obtain the temperature required, proceed as follows:

– Temperature adjustment knob pointer (**A**) on the temperature required.

– Air quantity adjustment knob pointer (**B**) on:

– the speed required to personalise the quantity of air admitted

– on **AUTO** when wanting to activate the fan automatically.

– Air distribution knob pointer (**C**) on:

To direct the flow of air towards the centre and side vents.

To distribute the flow between the centre, side and lower vents.

To heat the lower part of the passenger compartment (useful when the outside temperature is very cold).

To distribute the flow between the windscreen/side windows and lower part of the passenger compartment.

To direct the air flow towards the windscreen and side windows.

WARNING The **maximum heating power** is obtained setting:

– knob (**A**) to **HI**;

– knob (**B**) to the maximum speed.

Dust/pollen 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, clearly, it is effective with the windows closed.

The dust/pollen filter should be checked over at least once a year by an Alfa Romeo Authorized Service Station, 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.

CLIMATE CONTROL FUNCTIONS ENABLED AUTOMATICALLY

Action made by user	Function enabled automatically	Warning visible to user	Reason
MAX function on (turning knob (**C**) completely clockwise)	Compressor on Recirculation off Maximum air flow rate (*) Maximum air temperature (**)	Warning light (**D**) on Warning light (**G**) off	To quickly demist/defrost the windows

(*) In "cold" car conditions (low temperature outside, in passenger compartment and of engine coolant fluid) the air flow rate is limited to 35% of the maximum to avoid admitting too much cold air to the passenger compartment.
(**) The temperature of the air distributed is proportionate with the temperature of the engine coolant fluid.

CONTROLS

OPENING THE LUGGAGE COMPARTMENT (fig. 76)

To open the boot pull the lever (**A**) at the side of the driver's seat.

Do not operate the boot release lever with the car on the move.

Or (optional for versions/markets where applicable), with the ignition key at **STOP** or **PARK**, press button (**B-fig. 77**).

WARNING If the car (for versions/markets where applicable) is fitted with check panel (**A**), the specific led will light up if the tailgate is not shut properly.

HAZARD WARNING LIGHTS (fig. 77)

These are switched on by pressing button (**C**) 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 warning lights and the emergency indicator on the instrument panel. This function is switched off by pressing the button again.

Use of the hazard warning lights is ruled by the Highway Code of the country in which the car is used. Observe regulations.

FRONT FOGLIGHTS (fig. 78)

(Optional for versions/markets where applicable)

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

The warning light will come on on the instrument panel.

Press the button (**A**) again to switch the front foglights off.

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

fig. 76

fig. 77

fig. 78

REAR FOG GUARDS (fig. 79)

These are turned on, with the dipped beam headlamps or fog lights on, by pressing button (**A**).

At the same time, warning light on the instrument cluster 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 (**A**) is pressed. Press button (**A**) to turn them off.

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

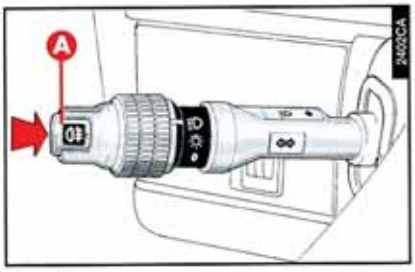


fig. 79

AUTOMATIC FUEL CUT-OFF SWITCH (fig. 80)

This is an automatic safety switch positioned under the driver's seat, which comes into action in the event of a crash of a certain magnitude and cuts off the fuel supply.

When this switch is activated the warning light on the cluster turns on.

If a smell of fuel is noted following an accident, or the fuel system is leaking, to avoid the risk of fire do not reset the switch.

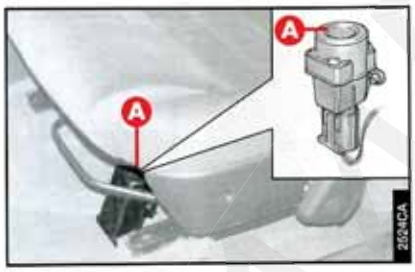


fig. 80

If no fuel leaks are noted and the car can move off again, press button (**A**) to reactivate the supply system; the warning light on the cluster goes out.

HEADLIGHT CORRECTOR (fig. 81)

The control (**A**) on the plate at the side of the steering column can be moved to four positions corresponding to various vehicle loads given below.

The headlights should be adjusted exactly to compensate for vehicle loading.

Position **0**: 1 or 2 people occupying front seats, full fuel tank, on-board equipment present.

Position **1**: 5 people on-board.

Position **2**: 5 people on-board, luggage compartment full (50 kg approximately).

Position **3**: Driver and 300 kg in luggage compartment.

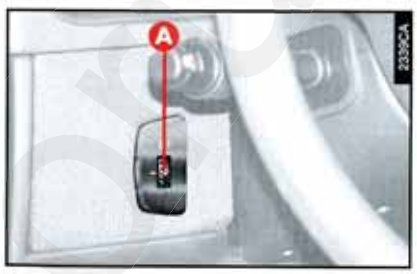


fig. 81

Check the positioning of the headlight beams every time you change the load to be carried.

GEARSHIFT LEVER (fig. 82)

To engage the gears, completely depress the clutch and move the gearshift lever to the position corresponding to the gear chosen.

The gear positions shown below are also on the lever knob.

To engage reverse gear (R) make sure the car has stopped then, from the neutral position move the lever to the right and then backwards.

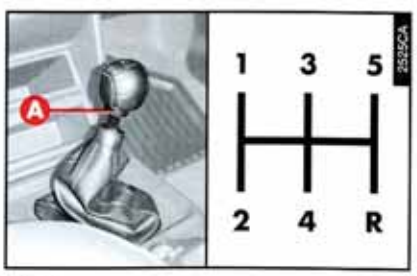


fig. 82

For 1.9 JTD version to engage reverse gear (R) it is necessary to wait for the car to be stationary, then raise the ring under the grip (**A-fig. 82**) (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.

To change gear smoothly, the clutch pedal must be fully depressed. Therefore, there should be no hindrances under the pedal unit. Make sure that any mats are well laid and do not interfere with the pedals.

HAND BRAKE (fig. 83)

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.

The wheels should be locked after a few clicks of the hand brake. If this does not occur contact Alfa Romeo Authorized Services to have the hand brake adjusted.

To release the hand brake (**fig. 83**):

– 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.

For "emergency" use (e.g. uphill starts) you are advised to always keep the button pressed.

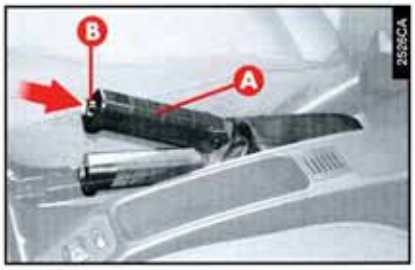


fig. 83

INTERNAL FITTINGS

GLOVEBOX (fig. 84)

To open the glovebox use lever (**A**).

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

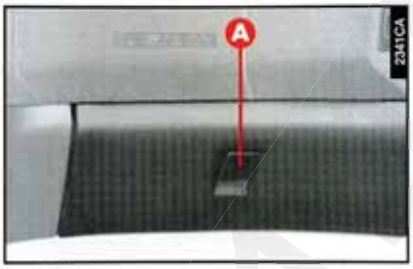


fig. 84

GRAB HANDLES (fig. 85)

A grab handle is fitted above the front near-side door.

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

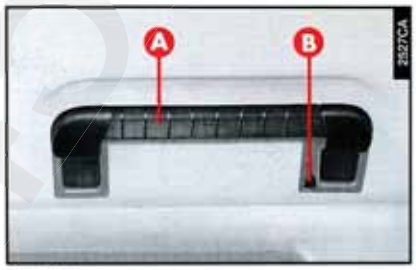


fig. 85

FRONT ROOF LAMP (fig. 86)

The roof lamp comprises a courtesy light and a reading spot light.

Courtesy light

The courtesy light, fitted (for versions/markets where applicable) with a timer, turns on automatically for a pre-established length of time when a door is opened if button (**A**) is in position **1**.

With the doors closed the courtesy light can be turned on moving button (**A**) to position **2**.

The courtesy light stays off when button (**A**) is in position **0**.

Reading spot light

The spot light is off when button (**B**) is in position **0**, on when the button is in position **1**.

FRONT ASHTRAY AND CIGAR LIGHTER (fig. 87)

To open the ashtray (**A**) push and release the front of the ashtray.

Press knob (**B**) in to use the cigar lighter; 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.

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.

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

REAR ASHTRAYS (fig. 88)

An ashtray (**A**) is fitted to each side panel in the rear of the vehicle.

To open, pull downwards as shown below.

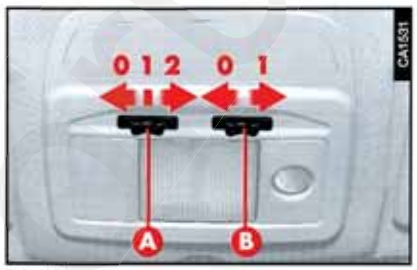


fig. 86

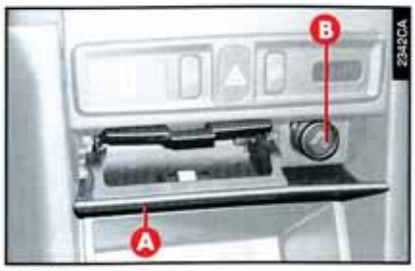


fig. 87

fig. 88

REAR SIDE WINDOWS (fig. 89)

These can be opened to the quarterlight position by lever (**A**) as shown in the diagram.

To close the window reverse the procedure until the lever clicks into place.

SUN VISORS (fig. 90)

These can be adjusted frontally and laterally.

On the back of the driver's sun visor there is vanity mirror under a sliding flap. To use the mirror, move the sliding cover **A-fig. 90**.

TELEPASS PROVISION

On request, for versions/markets where applicable, the car can be fitted with a specific electric connector for connecting a Telepass receiver/transmitter module, which can be found at specialised retailers'.

fig. 89

fig. 90

TELEPHONE PROVISION

On request, for versions/markets where applicable, the car can be fitted with a provision for installing a cellular telephone.

The provision comprises:
– dual-purpose aerial on the roof;
– speaker on the passenger's door together with the Woofer speaker;
– cables for connecting the speaker aerial and vehicle electric supply.

The cable connection layout is given in the chapter "Accessory installation".

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.

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. 91 - fig. 92)

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

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

The sunroof is fitted with a curtain below which prevents sun radiation and is drawn by hand using a catch.

fig. 91

fig. 92

The curtain is drawn by the roof when the roof opens and is pushed completely inside the roof panel when the roof is opened completely. With the closing movement the curtain will come out partially so that the hand catch is accessible (**A-fig. 93**).

Open and close the roof only when the vehicle is stationary.

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.

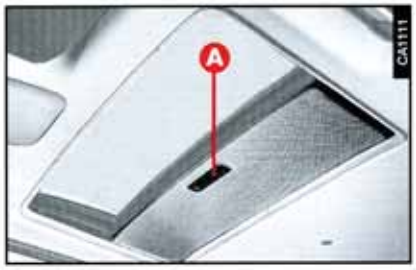


fig. 93

RAISING TO THE QUARTERLIGHT POSITION

This can only be achieved (**fig. 94**) when the sunroof is completely closed. Press front end (**2**) of the control button (**A**).

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

fig. 94

fig. 95

EMERGENCY OPERATION

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

1. Apply leverage to the point indicated by the arrow and remove the plate (**A-fig. 95**).

2. Using the special key provided in the tool box press and rotate bushing (**B-fig. 96**) to move the sunroof clockwise to open and counterclockwise to close.

WARNING 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.

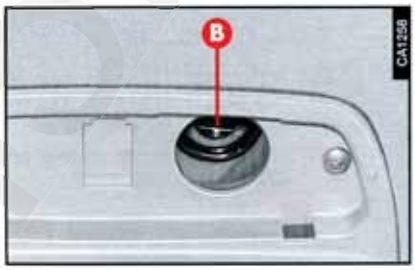


fig. 96

LUGGAGE COMPARTMENT

The boot lid can be opened from outside the vehicle and from inside the vehicle.

WARNING If the boot is not properly shut, the corresponding warning light on the check panel will come on (for versions/markets where applicable).

OPENING FROM OUTSIDE (fig. 97)

Turn the badge (**A**) in the direction shown by the arrow, insert the key (**B**) and turn it counter-clockwise.

OPENING FROM INSIDE (fig. 98)

To open from inside, pull lever (**A**) at the side of the driver's seat or (optional for versions/markets where applicable) with the ignition key in the **STOP** or **PARK** position press button (**B**) on the dashboard.

Do not operate the boot release lever with the car on the move.

Lifting the boot lid is made easier by the action of the gas springs (**A-fig. 99**).

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.

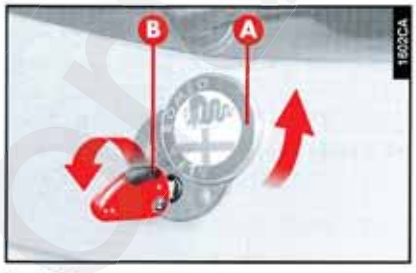


fig. 97

fig. 98

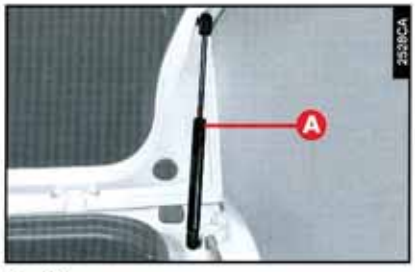


fig. 99

When the boot is opened the light (**A-fig. 100**) (for versions/markets where applicable) will come on. This light will go out again when the boot is closed.

To close the boot lower it and press down above the locking mechanism until it is heard to click into place.

WARNING 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.

Do not load the luggage compartment above the permitted maximum (see "Technical specifications"). Also make sure that the objects contained in the boot are well secured to prevent them from being thrown forward causing harm to the passengers in the event of sharp braking.

SECURING THE LOAD (fig. 101)

The loads carried may be blocked with straps hooked to the special rear rings (**A**) and side rings (**B**) in the boot.

The rings also serve to secure the luggage retaining net available upon request, for versions/markets where applicable, c/o Alfa Romeo Authorized Services.

A heavy load that has not been secured may cause serious harm to passengers in the event of an accident.

Adding objects on the parcel shelf or tailgate (speakers, spoiler, etc.) may compromise the tailgate side shock absorbers.

When wanting to carry a spare can of petrol, this must be done in compliance with the law, only using a certified can, appropriately fastened to the load restraint eyelets. Even so, the risk of fire is increased.

fig. 100

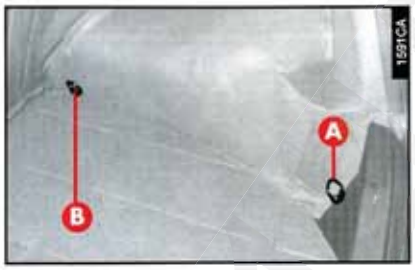


fig. 101

BONNET

The lever used to open the bonnet is located under the left end of the dashboard.

To open:

– Pull the lever (**A-fig. 102**) until the bonnet clicks open.

Only with the car stationary.

– Press the safety lever upwards (**B-fig. 103**).

– Release the prop (**C**) from its clamp.

– Insert the end of the prop in its housing (**D**) in the bonnet.

Warning! Incorrect positioning of the prop may cause the bonnet to drop violently.

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.

If checks need to be carried out in the engine compartment when the engine is still warm, keep away from the fan as it could start up even when the key is removed from the ignition. Wait until the engine cools down.

Scarves, ties and loose clothing may be caught in the moving parts.

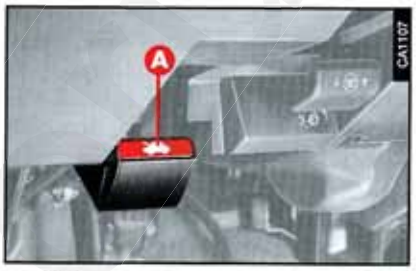


fig. 102

fig. 103

To close:

— Position the support rod in its seating.

— Lower the bonnet until approximately 20 centimeters from the engine compartment and then let it drop ensuring that it is fully closed and not just held in position by the safety hook.

If the bonnet does not close properly do not push it down but open it again and repeat the above procedure.

Always check that the bonnet is closed properly to avoid it opening while the car is travelling.

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.

COMPENSATION FOR TILT

When the vehicle is loaded the beam from the headlights is raised due to the backwards tilt of the vehicle.

Check the positioning of the headlight beams every time you change the load to be carried.

In this case, it is necessary to adjust the aim as described, depending on the type of device with which the vehicle is fitted.

MANUAL ADJUSTMENT (fig. 104)

The adjustment device comprises a lever (**A**), in the rear of each of the two lamp units, which have the following positions:

Position **1** - vehicle with normal load;

Position **2** - vehicle with full load.

Both levers must be in the same position.

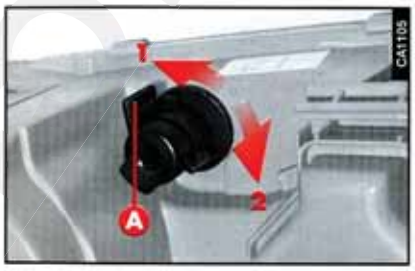


fig. 104

ELECTRICAL ADJUSTMENT (fig. 105)

Use the adjustment knob (**A**) at the side of the steering column.

The knob can be moved to four positions corresponding to various vehicle load given below:

Position **0** - 1 or 2 people occupying front seats, full fuel tank, on-board equipment present.

Position **1** - 5 people on-board.

Position **2** - 5 people on-board, luggage compartment full (50 kg approximately).

Position **3** - Driver and 300 kg in luggage compartment.

HEADLAMP AIMING FOR RIGHT-HAND OR LEFT-HAND DRIVE TRAFFIC (fig. 106)

The adjustment device is a lever (**A**) inside the lamp unit next to the parabola, which has the following two different positions:

Position **1** - left-hand drive traffic;

Position **2** - right-hand drive traffic.

WARNING The low beams are directed by the factory for circulation (right or left) according to the country in which the vehicle is marketed.

In the case of trips to countries that drive on the other side of the road, it is necessary to adapt low beam aiming to local regulations.

If necessary, to do this, contact Authorized Alfa Romeo Services.

Both levers must be in the same position.

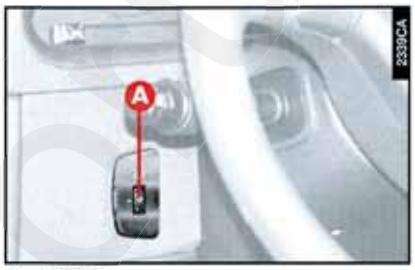


fig. 105

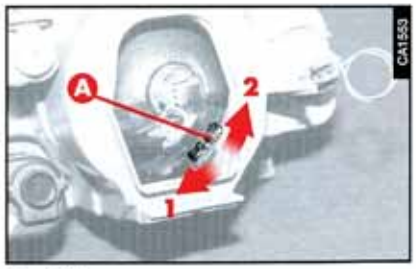


fig. 106

ADJUSTING THE FRONT FOGLIGHTS (fig. 107)

(Optional for versions/markets where applicable)

To adjust the height of the beam of the front foglights adjust screw (**A**), to which access is gained through the hole (**B**) on the front bumper.

To have the position checked and if necessary adjusted, contact Alfa Romeo Authorized Services.

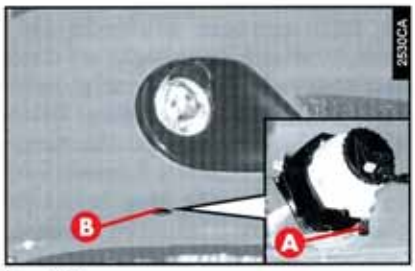


fig. 107

ABS

(Optional for versions/markets where applicable)

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.

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.

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.

In the event of a system fault, with lighting up of the 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:

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.

The car is fitted with an electronic brake distributor (EBD). If the and 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.

The turning on of the warning light with the engine running normally indicates an ABS system fault only. 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.

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.

SOUND SYSTEM

The vehicle has provision (optional for versions/markets where applicable) for the installation of a sound system. This provision is supplied in three types as described below.

STANDARD

The standard equipment is composed of:

– radio supply cables

– cables for front speakers on door panels

– cables for rear speakers on side panels

– coaxial cable for the radio-antenna connection

– sound system housing

– housing of front and rear speakers on the side panels.

COMPLETE PROVISION (without sound system)

(Optional for versions/markets where applicable)

The vehicle may be fitted, in addition to the standard components, with:

– speakers and tweeters on the front door

– speakers on the rear side panels

– disturbance suppressors

– antenna on the roof (**fig. 108**).

fig. 108

COMPLETE WITH SOUND SYSTEM (fig. 109)

(Optional for versions/markets where applicable)

In addition to the components described previously, the car may be fitted with two (alternative) different types of sound system.

PROVISION FOR ANTENNA (fig. 110)

After removing the plastic cap (**A**) from the roof of the vehicle screw the threaded end of the antenna into the seating.

RADIO COMPARTMENT (fig. 111)

The radio is to be installed in the special compartment on the centre console, under the ashtray and cigar lighter lid, normally occupied by the oddments compartment (**A**).

Removing the compartment, access is gained to the aerial coaxial cable, a connector for the radio supply and a connector for connecting the radio to the speakers.

Alfa Romeo is able to supply sound systems and speakers which are specific to your vehicle. For their installation contact Alfa Romeo Authorized Services only as this will guarantee the best results and avoid problems which may prejudice the warranty cover.

fig. 109

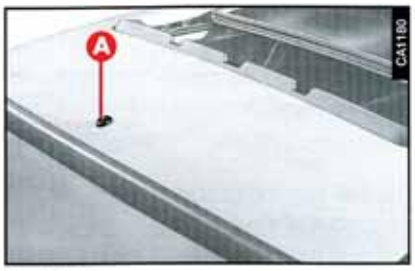


fig. 110

fig. 111

RECESSES FOR FRONT SPEAKERS (fig. 112)

The front speakers are to be installed in the special housings (**A**) on the door panels.

TWEETER COMPARTMENTS (fig. 112)

The tweeters are installed in the special housings (**B**) on the door pillars.

COMPARTMENTS FOR REAR SPEAKERS (fig. 113)

The rear speakers are to be installed in the special housings (**A**) on the rear side panels.

WARNING Insert a flat blade screwdriver in the grate edge cuts to remove the front and rear loudspeaker grates. Be careful to prevent damaging the involved components.

If equipment (sound systems, CD player, cassette player etc.) with a "personalized anti-theft code" is fitted to the vehicle the manufacturer's instructions should be followed if the battery is removed from the vehicle or the power supply circuit is in any way interrupted as this constitutes an "UNAUTHORIZED" removal of the apparatus.

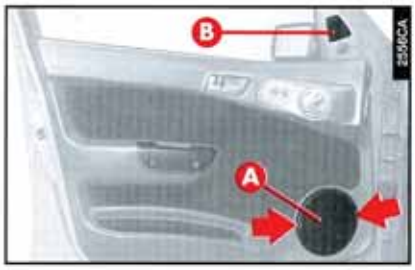


fig. 112

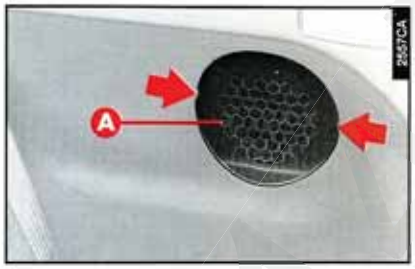


fig. 113

REFUELLING

PETROL ENGINES

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.

In order to prevent the vehicle being filled with leaded petrol the diameter of the filler neck is smaller than the nozzle used on pumps delivering leaded petrol.

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 quantities, DO NOT START THE ENGINE. Do not attempt to dilute the petrol with lead free fuel. Drain the entire fuel circuit and tank.

If the catalyst is not working properly harmful emissions reach the exhaust resulting in environment pollution.

DIESEL ENGINES

The vehicle must only be filled with diesel fuel. If the tank is accidentally filled with another type of fuel do not start the engine but drain the tank. If the engine has been run even for a brief period the tank must be drained together with the entire fuel circuit.

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 Arexons 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 filler cap (**B-fig. 114**) is fitted with a key-lockable lock; access to it is gained opening the flap (**A**), then using the ignition key turn counter-clockwise and remove the cap.

When refilling hook the cap on the flap (**A**) using the support provided as illustrated.

Do not go near the fuel filler with naked flames or lit cigarettes: danger of fire.
Also avoid going too near the filler with the face to avoid inhaling harmful vapours.

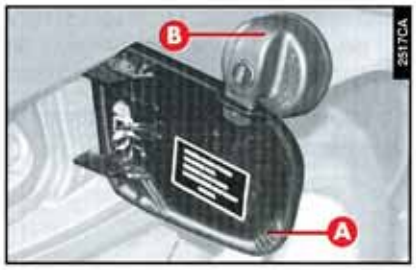


fig. 114

If necessary, replace the fuel filler cap only by another original one, otherwise the efficiency of the fuel vapour recovery system could be compromised.

WARNING 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.

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 parts 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)

Trivalent catalytic converter (catalytic silencer)

The exhaust system is fitted with a catalyzer formed of alloys of noble metals. It is housed in a stainless steel container which is able to resist the high operating temperatures.

The catalyzer converts the unburnt hydrocarbons, carbon monoxide and nitrogen oxides present in the exhaust gas (even if in small quantities thanks to the electronic injection and ignition system) into harmless compounds.

Due to the high temperatures reached during operation of the catalytic converter the vehicle should not be parked over inflammable materials (paper, fuel oils, grass, dry leaves etc.).

Lambda probe

A sensor (lambda probe) measures the content of oxygen present in the exhaust gas.

The signal transmitted by the lambda probe is used by the injection and ignition electronic control unit to adjust the air-fuel mixture.

Anti-evaporation system

As it is impossible, even when the engine is switched off, to prevent the formation of fuel vapours, a system has been devised which imprisons the vapours in a special activated carbon container.

During operation of the engine these vapours are sucked up and sent to combustion.

EMISSION REDUCING DEVICES
(Diesel engines)

Oxidising catalytic converter

Converts the polluting substances present in the exhaust gases (carbon monoxide, unburned hydrocarbons and particulate) into harmless compounds, 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 specifications 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.

STARTING THE ENGINE

WARNING 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.).

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 the **MAR** to the **AVV** position.

PROCEDURE FOR PETROL ENGINES

WARNING It is important not to press the accelerator until the engine has started.

With cold engine:

1) Make sure the handbrake is engaged.

2) Move the gear lever to neutral.

3) Press the clutch pedal completely to prevent the starter motor from having to pull the gearbox gears into rotation.

4) Ensure that the systems and electrical devices, especially if they absorb high quantities of energy (e.g. heated rear windscreen) are switched off.

5) Turn the ignition key to the **AVV** position and release it as soon as the engine starts.

Never leave the ignition key in the MAR position when the engine is switched off.

6) If the engine does not start, return the key to the **STOP** position and repeat the operation.

With hot engine:

1) Make sure the handbrake is engaged.

2) Move the gear lever to neutral.

3) Fully depress the clutch pedal.

4) Ensure that the systems and electrical devices, especially if they absorb high quantities of energy (e.g. heated rear windscreen), are switched off.

5) Turn the ignition key to the **AVV** position releasing it as soon as the engine starts.

6) 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.

WARNING 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) Make sure the handbrake is engaged.

2) Move the gearshift lever to neutral.

3) Turn the ignition key to the **MAR** position. The warning light on the instrument cluster will turn on.

4) Wait for the warning light to go off, which will depend on how warm the engine is. With the engine very hot the warning light may stay on for such a short time that it is not noticed.

5) Fully depress the clutch pedal.

6) Turn the ignition key to **AVV** as soon as the warning light goes off. Waiting too long would make the glow plug heating work pointless. Release the key as soon as the engine starts.

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

WARNING The electric devices that absorb much energy (air conditioner, rear-screen 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 the vehicle's battery. Never use a battery charger to start the engine (see "In the event of a flat battery" 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 kilometers of the journey. Wait until the engine coolant temperature is between 50 and 60 °C.

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".

STARTING WITH INERTIA MANOEUVRES

Starting by pushing, towing or running downhill must absolutely be avoided. These manoeuvres may cause fuel to flow into the catalyst and damage it irreparably.

Remember that the servobrake and power steering are not activated until the engine is started, therefore considerably greater effort is required on the brake pedal and steering wheel.

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.

WARNING After a taxing drive it is better to allow the engine to "catch its breath" before turning it off by letting it idle to allow the temperature in the engine compartment to fall.

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 of the turbocharger.

PARKING

When the vehicle is parked, proceed as follows:

– Switch off the engine.

– Engage the handbrake.

– Engage first gear if the vehicle is facing uphill or reverse if the vehicle is facing downhill.

– 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 the battery, never leave the ignition key in the MAR position when the engine is not running.

Never leave children unattended in the vehicle. Always remove the key from the ignition when leaving the vehicle and take it with you.

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 relative to 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.

– When carrying children, follow the instructions given in the paragraph "Carrying children safely" 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 the 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 the 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 easy assimilable foods will help keep reflexes ready and aid concentration for a safe journey.

Driving under the influence of alcohol, drugs and/or some medicines is highly dangerous.
Never drive when drunk or under the effect of drugs or medicines.

Never travel with objects on the floor in front of the driver's seat: when braking they could get stuck under the pedals, making accelerating or braking impossible.

Care should be given to the encumbrance of any mats: even a minor inconvenience to the braking system could require a longer pedal stroke than normal.

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 breaks 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 systems.

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 to depress the brake pedal.

— 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.

NIGHT DRIVING

Night driving involves a greater degree of concentration, both physical and nervous. Some suggestions relative to 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 road users.

— Use the main-beam only 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 traction 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 loose 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 "Getting to 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 due 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 the liquids (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 down hill 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 up hill 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 when 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.

WARNING 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.

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 object.

— Check the efficiency of the braking system especially before long journeys.

— Check the handbrake and brake fluid minimum level warning light (!) on the instrument panel. If the (!) warning

light comes on and stays 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 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 kilometers travelled.

Take care when fitting additional spoilers, alloy wheels and wheel caps that are not standard items: they may reduce the ventilation of the brakes, thus their effectiveness under heavy and repeated braking conditions, or long downhill journeys.

Water, ice and salt sprayed on roads can deposit on the brake disks, reducing the braking action the first time the brakes are used.

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)

(Optional for versions/markets where applicable)

The vehicle is fitted with a wheel anti-lock system (ABS) with electronic brake distributor (EBD); you are recommended to take account of the following advice:

— 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 the weather, road and traffic conditions.

— Deceleration always depends on the degree of grip between the tyre 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.

The car is fitted with an electronic brake distributor (EBD). If the and 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.

The turning on of the warning light with the engine running normally indicates an ABS system fault only. 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.

The ABS system does not excuse the driver from driving carefully particularly if the road is wet, icy or covered in snow.

POWER STEERING

(Optional for versions/markets where applicable)

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.

Do not push on the power steering stroke limit if the engine has not been running more than 15 seconds: this produces noise and may damage the system.

WINDSCREEN/REARSCREEN WIPER BLADES

The windscreen wiper blades should be checked periodically. Dirty or worn blades greatly reduce visibility. The windscreen and windows should be cleaned regularly and grease, dirt and tar removed.

In this way the life of the blades will be extended considerably.

Before operating the windscreen wipers remove snow or ice from the windscreen and check that the wiper blade is not frozen to the windscreen. Use an antifreeze product if necessary.

Do not operate the windscreen wipers on dry glass.

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.

WINDOWS

Do not apply stickers or similar adhesives to the windows as these may distract the driver and block his vision.

WHEELS

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.

Compact spare wheel

The car is fitted with a specific compact spare wheel depending on the type of rim (steel or alloy) of the wheels fitted.

WARNING If steel rims are replaced by alloy ones or vice versa, the compact spare wheel is to be changed.

The compact spare wheel must only be used in an emergency. Even in this situation its use must be reduced to a minimum. The speed of the vehicle when using the compact spare wheel must not exceed 80 km/h. The handling of the vehicle will be altered when the spare wheel is being used. Avoid abrupt acceleration and braking, sharp turns and fast cornering.

Snow chains cannot be fitted to the compact spare wheel so, if a front wheel (drive) is punctured and chains must be used, the front axle should be fitted with normal tyres and the spare wheel fitted to the rear.

In this way, as two normal tyres are fitted to the front of the vehicle, snow chains can be mounted.

Periodically check that the pressure of the compact spare wheel is 4.2 bars (kg/cm^2).

WARNING The life of the spare wheel should not exceed 3,000 km. After this distance it should be replaced with another of the same type and suited to the type of rim used (see "Technical specifications").

Do not attempt to fit a traditional tyre to a rim designed for use as a compact spare wheel.

Two compact spare wheels should never be used together. Have the punctured wheel repaired and replaced as soon as possible.

Rims

Steel or alloy rims must be mounted using the bolts which are specifically designed for use with the type of rim.

Thus, when replacing the steel wheels with those in light allow the bolts must also be replaced.

The bolts should be tightened to a torque of 98 Nm (10 kg).

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 a sustained high speed especially on rough road surfaces.

– 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 tyre pressure replace the wheel and have it checked at the first occasion.

– 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 compact spare wheel must reflect the indications given in the "Technical specifications" section 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 year 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.

WARNING Some types of tyre 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 wearing of the tread. If they are, contact Alfa Romeo Authorized Services who will eliminate the cause of the 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 round, replacing those on the front with those on the rear and vice-versa, 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**).

Do not cross the tyres over.

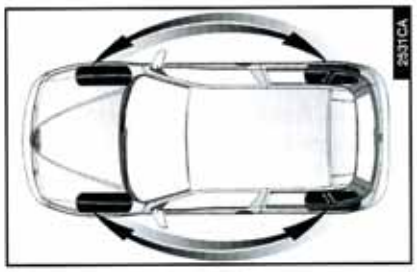


fig. 1

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 pressures given in the chapter "Technical specifications".

Incorrect tyre pressure causes tyre wear (**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 edges.

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.

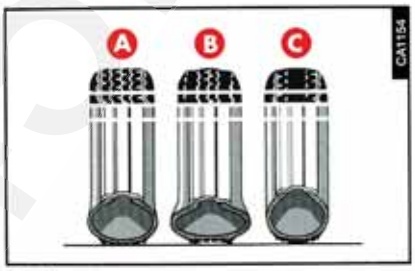


fig. 2

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.

WARNING 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.

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 sports 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 metres have been driven.

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.

Snow chains cannot be fitted to the spare wheel so, if a front (drive) tyre is punctured and chains must be fitted, the rear wheel should be fitted to the front of the vehicle (inflate the tyres to the specified pressure as soon as possible) and the spare tyre should be fitted to the rear.

A snow chain can then be safely fitted to the front wheel.

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.

Some suggestions which may help you to keep the running costs of your vehicle down and lower the amount of toxic emissions released into the atmosphere are given below.

GENERAL CONSIDERATIONS

Vehicle maintenance

The overall state of the vehicle is an important factor which has a marked influence over fuel consumption and driving comfort and on the life span of your vehicle. For this reason care should be taken to maintain your vehicle by carrying out the necessary checks and regulations in accordance with the specifications given in the scheduled maintenance programme (see sections... spark plugs, idle, air/diesel filters, timing).

Tyres

Tyres should be checked at least every four weeks: if the pressure is too low fuel consumption increases as the resistance to the rolling movement of the tyre is greater. In this state, tyre wear is increased and vehicle handling suffers which will affect safety.

Unnecessary loads

Do not travel with too much luggage stowed in the boot. The weight of the vehicle (especially when driving in town) and its trim greatly affects consumption and stability.

Luggage/Ski racks

Remove luggage or ski racks from the roof of the vehicle as soon as they are no longer needed. These accessories reduce the aerodynamic penetration of the vehicle and will increase consumption. When transporting particularly large objects, use a trailer where possible.

Electrical devices

Use the electrical devices for the necessary time only. The heated rear window, supplementary lights, windscreen wipers, heating system blower require large amounts of energy and, increasing the request for power also increases fuel consumption (up to +25% when driving in built-up areas).

Climate control unit

The climate control unit is an additional load which greatly affects the engine leading to higher consumption (on average up to +20%). When the temperature outside the vehicle permits it, use the air vents where possible.

Spoilers

The use of aerodynamic optional extras which are not certified for specific use on the vehicle, may reduce the aerodynamic penetration of the vehicle and increase consumption.

STYLE OF DRIVING

Starting

Do not warm the engine when the vehicle is stationery or at high or low revs: in this way the engine will warm up gradually increasing consumption and emissions. You should drive off slowly straight away avoiding high revs so that the engine will warm up more quickly.

Unnecessary actions

Avoid revving the engine when stopped at traffic lights or before switching off the engine and avoid doubling the clutch as these actions have no purpose on modern vehicles and serve only to increase consumption and pollution.

Gear selection

As soon as the traffic and road conditions allow it, shift to a higher gear. Using a lower gear to liven up acceleration greatly increases consumption. In the same way, improper use of the higher

gears will increase consumption, emissions and wear and tear on the engine.

Top speeds

Fuel consumption increases considerably as speed increases. For example, when accelerating from 90 to 120 kph, fuel consumption increases by about +30%. Your speed should be kept as even as possible and superfluous braking and acceleration avoided as this increases both consumption and emissions. A "soft" way of driving should be adopted by attempting to anticipate manoeuvres to avoid imminent danger and to keep maintain a safe distance from the vehicle in front in order to avoid braking sharply.

Acceleration

Accelerating violently increasing the revs will greatly affect consumption and emissions: acceleration should be gradually and not exceed the maximum torque.

CONDITIONS OF USE

Cold starting

Frequent cold starting will not enable the engine to reach optimal running temperature. It follows therefore that consumption will be higher (from +15% to +30% in built-up areas) as will the production of toxic emissions.

Traffic and road conditions

Heavy traffic and higher consumption are synonymous; for example, when driving slowly with frequent use of the lower gears or in large towns where there are numerous traffic lights.

Winding roads, mountain roads and bumpy roads also have a negative effect on consumption.

Enforced halts

During prolonged hold-ups (traffic lights, level crossings) the engine should be switched off.

PROTECTING EMISSION REDUCING DEVICES

The correct operation of the anti-pollution devices not only guarantees respect for the environment by also has a great influence on vehicle performance.

These devices should be kept in top 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 difficulty with starting is experienced do not insist with extended attempts. Do not attempt to bump start the vehicle in any way as this would damage the catalytic exhaust system.

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.

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.

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 fulfills 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 jeopardize the bodywork warranty cover.

The ABS system with which the car is fitted does not control the trailer braking system.
Particular care is therefore necessary on slippery surfaces.

Under no circumstances should the hydraulic braking system of the vehicle be tampered with to command the brakes of the trailer.

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 the fully loaded trailer should be checked to ensure that is does not exceed the limits given in the log book.

The vertical loading on the ball hook must not in any case exceed the limits specified in the "Technical specifications" section.

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.

WARNINGS AND SUGGESTIONS

Some indications relative to 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.

VEHICLE INACTIVITY

If the vehicle is to be left inactive for long periods the following precautions should be noted:

– House the vehicle under 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 windscreen 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 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 working the clutch pedal.

This operation must be performed in the open. The exhaust gases contain carbon monoxide which is extremely toxic and may also be lethal.

– Check that the various devices (headlights, direction indicators etc.) are working correctly.

WARNING 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

Cellphones and other radio transmitters (e.g. CB radios) cannot be used inside the vehicle, unless you use a separate aerial mounted outside the vehicle.

The use of cellphones, 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 systems such as engine control units, 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

In addition to the legal requirements we recommend keeping the following in the car (**fig. 3**):

– first-aid kit with non-alcoholic base disinfectant, sterile gauze, a roll of gauze bandage, plasters, etc.

– torch;

– round-ended scissors;

– work gloves.

The parts described and illustrated are available from Lineaccessori Alfa Romeo.

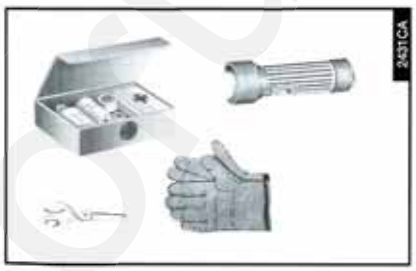


fig. 3

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

Wheel changing and correct use of the jack and compact 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, especially 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, place wedges or other suitable devices under the wheels to prevent the car from rolling.

Never start the engine when the car is raised on the jack.

When towing a trailer, always remove the trailer before lifting the car.

The spare wheel is specific to your model of car; do not use it on other models, or use the spare wheel of other models on your car.

Should the type of wheels used be changed (alloy rims instead of steel), it is also necessary to replace the complete kit of fastening bolts with others of suitable size.

The compact spare wheel should only be used in an emergency and even then its use should be kept to a minimum. Do not drive at speeds of over 80 km/h when using the spare wheel. The car will handle differently when the spare wheel is fitted.

Avoid sudden acceleration or braking, sharp corners and fast bends.

Always make sure that the pressure of the compact spare wheel is 4.2 bar (kg/cm^2).

The life of the spare wheel is approx. 3,000 km. After this distance it should be replaced with another of the same type and suited to the type of rim used (see "Technical specifications").

Never attempt to fit a traditional tyre to a rim designed for use as a compact spare wheel. Have the punctured wheel repaired and replaced as soon as possible.

Two or more compact spare wheels should never be used together.

Do not grease the threads of bolts before installing them; they might slip out.

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.

The vehicle may fall if the jack is not positioned correctly.

Do not use the jack for higher capacities than stated on its label.

Snow chains cannot be fitted to the compact spare wheel, so, if a front wheel (drive) is punctured and chains need to be used, the front axle should be fitted with normal wheels and the spare wheel fitted to the rear. In this way, as two normal tyres are fitted to the front of the vehicle, snow chains can be mounted, thereby overcoming an emergency.

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 the tyres and of the compact 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

You are informed that:

– The jack mass is 2.600 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 first gear or reverse.

– Raise the boot trim using the special handle (**A-fig. 1**).

– Slacken the fastening nut (**B**) and release the compact spare wheel.

– Remove the jack (**C**) and the tool container (**D**).

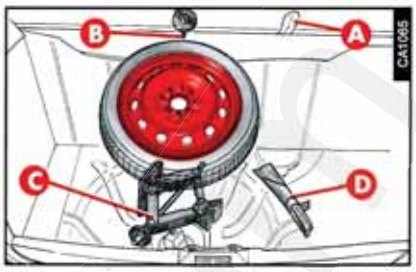


fig. 1

– Remove the wheel cap (**A-fig. 2**) (only for versions with steel rims) carefully using a screwdriver on several points of the circumference.

– Slacken the bolts about one turn (counter-clockwise) (**B-fig. 3-4**) fastening the wheel to be changed.

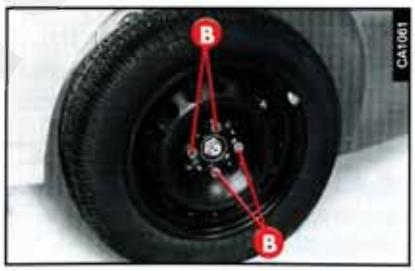


fig. 3 - Versions with steel rims

– Position the jack in correspondence with the symbol ▼ (**B-fig. 5**) near the wheel to be changed and at a depth of about 10 cm. towards the centre of the car as shown in **fig. 5**.

– Operate the jack with a fixed wrench (**C-fig. 5**) to extend it until the groove (**A-fig. 5**), on the upper part of the jack inserts correctly on the lower profile of the body.

– Work the jack and lift the car until the wheel is a few centimetres above the ground.

– Completely slacken the fastening bolts and remove the wheel to be changed.

fig. 2

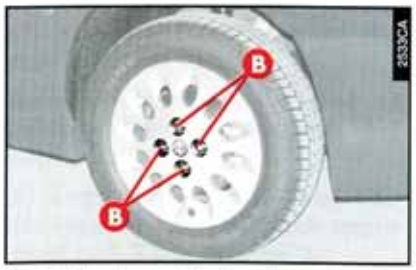


fig. 4 - Versions with alloy rims

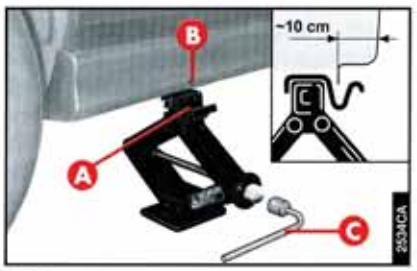


fig. 5

– Make sure that the contact surfaces of the compact spare wheel with the hub are clean and free of impurities which may later cause the fastening bolts to slacken.

– Install the spare wheel by matching one of the holes (**A-fig. 6**) with the corresponding pin (**B-fig. 6**).

– Tighten the five fastening bolts.

– Lower the car and remove the jack.

– Fully tighten the bolts in the sequence shown in **fig. 7**, without refitting the cap.

fig. 6

REFITTING A NORMAL WHEEL

– Following the procedure described previously, raise the car and remove the spare wheel.

– Fit a normal wheel bearing in mind that the pin (**B-fig. 8**) must match one of the holes (**A-fig. 8**).

– Tighten the bolts.

For cars with alloy rims inserting the wheel bolts is facilitated using the special centering pin.

– Tighten the pin (**A-fig. 9**) in one of the fastening bolt holes.

– Fit the wheel on the pin and fasten it with four bolts.

fig. 7

– Remove the centering pin (**A-fig. 9**) and tighten the last bolt.

– Lower the car and remove the jack; then tighten the bolts as described previously for the spare wheel (**fig. 7**).

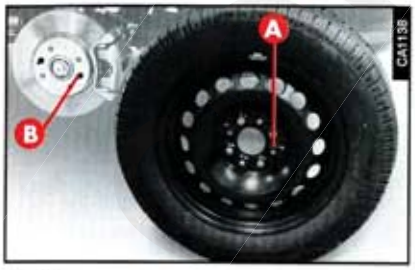


fig. 8

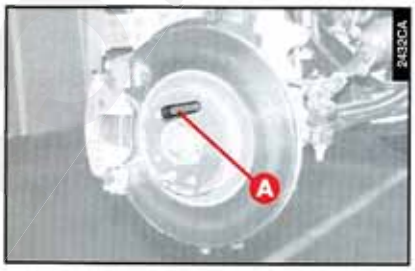


fig. 9

– 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 and proceeding round until it is securely attached.

WARNING Incorrect assembly can cause the cap to slip off with the car on the move.

Afterwards:

– lower the jack completely, put it back in the boot and put the tool container back in place;

– stow the compact spare wheel in the space provided in the boot;

– fasten the spare wheel with the locknut (**B-fig. 1**) and lower the boot trim.

IF ONE OF THE EXTERNAL LIGHTS GOES OUT

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.

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.

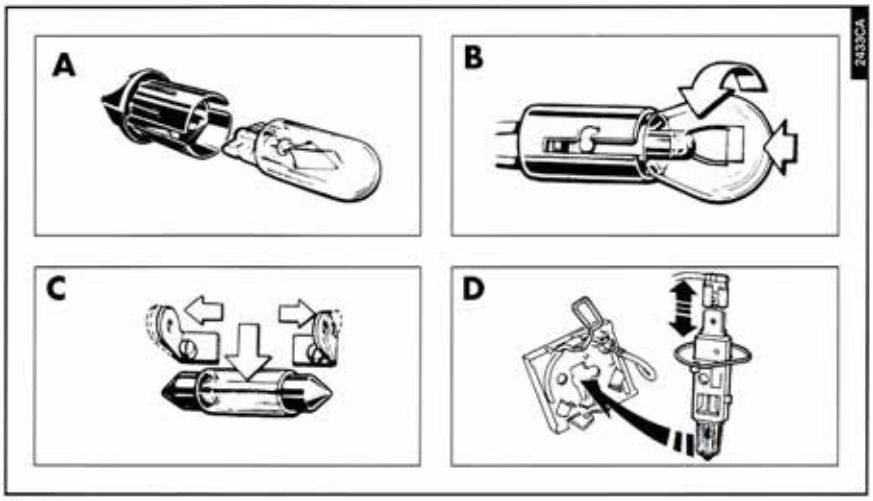


fig. 10

— Always check the height of the headlight beam after changing a bulb to ensure they are safe.

TYPES OF BULBS (fig. 10)

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.

BULBS	TYPE	W
HIGH BEAM	D (H1)	55
LOW BEAM	D (H1)	55
FRONT SIDELIGHT	A (W5W)	5
FRONT DIRECTION INDICATOR	B (PY21W)	21
SIDE DIRECTION INDICATOR	A (W5W)	5
REAR DIRECTION INDICATOR	B (P21W)	21
STOP/SIDE LIGHT	B (P21/5W)	21/5
REVERSING LIGHT	B (P21W)	21
REAR FOG GUARDS	B (P21W)	21
NUMBER PLATE LIGHTING	A (W5W)	5
FOG LAMPS	D (H3)	55
EXTRA STOP LIGHT (3RD STOP)	A (2.3W)	2.3
FRONT ROOF LAMP (COURTESY LIGHT)	C (C10W)	10
FRONT ROOF LAMP (SPOT LIGHT)	B (6WX)	6
BOOT LIGHT	C (C5W)	5

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.

Halogen bulbs contain pressurised gas, in the case of breakage they may burst.

FRONT LIGHT UNITS

The front light units contain the bulbs of the side lights, low beams and high beams.

To change the bulbs it is necessary to remove the cover concerned moving the fastening catches (**A-fig. 11**) in the direction of the arrows.

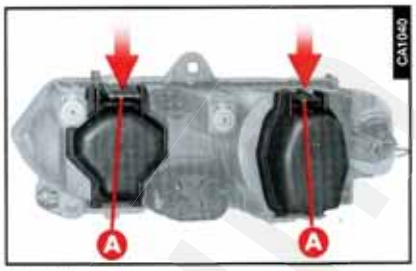


fig. 11

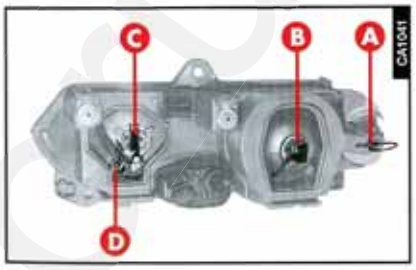


fig. 12

When the bulbs have been replaced refit the cover in the correct position turning clockwise and ensuring that it clicks into place.

The layout of the bulbs in the unit is as follows (**fig. 12**):

A. Direction indicator
B. Low beams
C. High beams
D. Side lights.

To change the bulb concerned, proceed as follows:

Side lights

To change the bulb (Type A, 5W):

— Withdraw the bulb holder (**A-fig. 13**) from its housing.

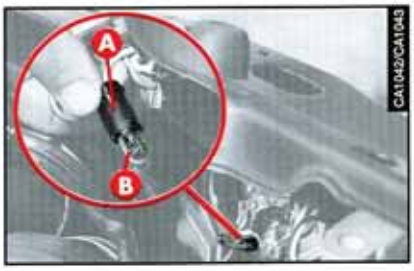


fig. 13

— Remove the bulb (**B-fig. 13**) and change it.

— Refit the bulb holder.

High and low beams

The replacement procedure is the same for both bulbs (Type D, 55W):

— Remove the protective cover.

— Release the bulb holder catch (**A-fig. 14**).

— Withdraw the terminal (**B-fig. 14**) of the supply cable.

— Remove and replace the bulb (**C-fig. 14**).

WARNING Position the bulb correctly making the references on the bulb coincide with the grooves on the parabola holder cup.

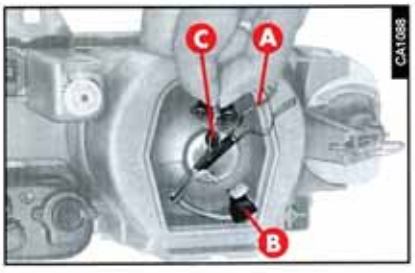


fig. 14

— Reconnect the supply cable and clamp the bulb with the fastening catch.

— Refit the protective cover correctly.

FRONT DIRECTION INDICATORS

To replace the bulb (Type B, 21W):

— Pull the fastening catch in the direction shown by the arrow (**A-fig. 15**) of the transparent cover (**B-fig. 15**) and remove it from the front of the car.

— Remove the bayonet-type bulb (**C-fig. 15**) turning counter-clockwise.

— Insert the new bulb.

— Refit the bulb holder.

— Refit the transparent cover (**B-fig. 15**) checking that the catch hooks correctly.

SIDE DIRECTION INDICATOR REPEATERS

To replace the bulb (Type A, 5W):

— Remove the indicator (**A-fig. 16**) complete with bulb holder (**B-fig. 16**) firstly pushing in the direction of the arrow and then releasing the rear.

— Withdraw the bulb holder (**B-fig. 16**) turning slightly.

— Remove the snap-fitted bulb (**C-fig. 16**) and change it.

— Insert the bulb holder in the indicator, then position the indicator making sure that the catch clicks (**D-fig. 16**).

Take care not to damage the bodywork or the transparent cover when removing the side direction indicator unit.

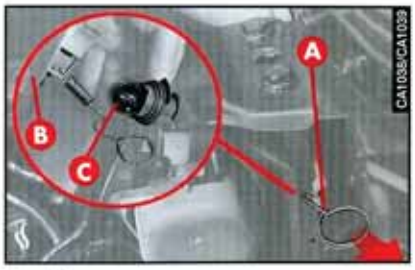


fig. 15

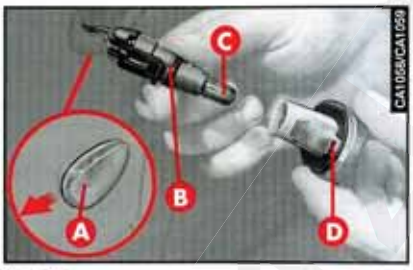


fig. 16

FRONT FOG LAMPS

(Optional for versions/markets where applicable)

To change the bulb (Type D, 55W):

— Remove the frame (**A-fig. 17**).

— Withdraw the lamp, slackening the fastening screws (**B-fig. 17**).

— Disconnect the connector (**A-fig. 18**) of the lamp unit.

Turn and remove the rear cover (**B-fig. 18**).

— Release the bulb holder catch (**A-fig. 19**).

— Withdraw the supply cable terminal and remove the bulb (**B-fig. 19**).

— Reverse the sequence described for removal to fit a new bulb and refit the unit.

To adjust the front foglights contact Alfa Romeo Authorized Services.

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.

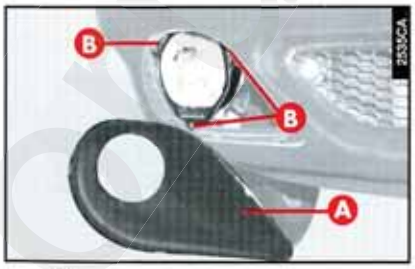


fig. 17

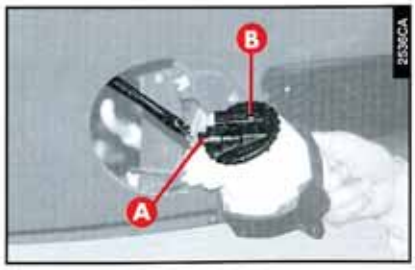


fig. 18

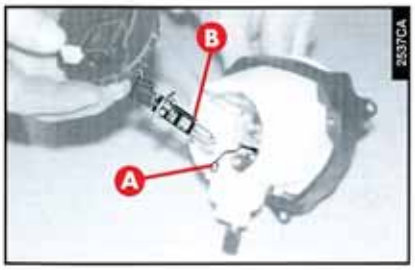


fig. 19

REAR DIRECTION INDICATORS, SIDELIGHTS AND BRAKE LIGHTS

To replace these bulbs (Type B, Direction indicators and brake lights 21W/Sidelights 5W):

– Lift the panel (**A-fig. 20**) in the floor of the luggage compartment.

– Remove the bulb-holder assembly freeing it from the clips (**B-fig. 20**) and withdrawing it axially in relation to its seating.

– Replace the round bayonet-type side and brake light bulb (**C-fig. 20**) or direction indicator bulb (**D-fig. 20**).

– Insert the bulb-holder assembly.

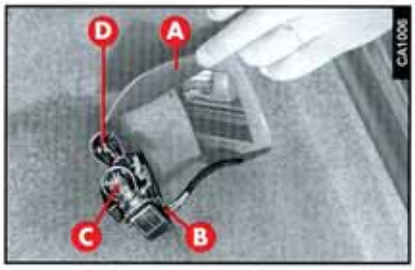


fig. 20

REVERSING AND REAR FOGLIGHT BULBS

To replace the bulbs (Type B, Power 21W):

– Remove the cover (**A-fig. 21**) for the rear foglights or cover (**B-fig. 21**) for the reversing lights in the inner part of the tailgate.

fig. 21

– Twist and remove the bulb-holder (**C-fig. 21**).

– Replace the bulb (**D-fig. 21**).

– Re-position the bulb-holder and cover.

NUMBER PLATE LIGHTS

To replace this bulb (Type A, 5W):

– Remove the bulb-holder (**A-fig. 22**).

– Replace the bulb (**B-fig. 22**) and refit the bulb-holder.

EXTRA STOP LIGHT (3rd STOP)

To change the bulb (Type A, 2.3W):

– Raise the tailgate, release the protections (**A-fig. 23**), then slacken the screws (**B-fig. 23**) fastening the light unit (**C-fig. 23**) and remove it disconnecting the electric wiring.

– Slacken the screws (**D-fig. 24**) fastening the light unit to its support.

– Slacken the screws (**E-fig. 24**) fastening the bulb holder (**F-fig. 24**) to the transparent unit (**G-fig. 24**).

– Change the bulbs.

– Refit the bulb holder and light unit making sure the screws are fastened correctly (**B-fig. 23**).

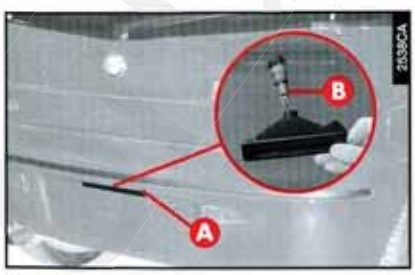


fig. 22

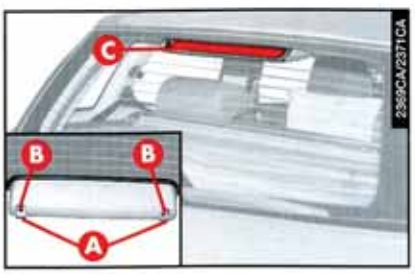


fig. 23

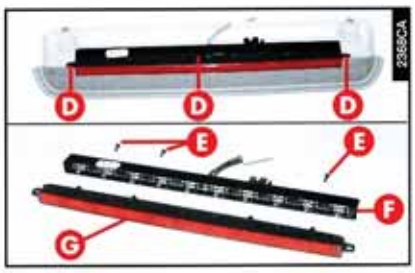


fig. 24

IF ONE OF THE INTERNAL LIGHT GOES OUT

COURTESY LIGHT AND SPOT LIGHT

Removing the roof lamp

– Remove the cover (**A-fig. 25**) levering in the point shown by the arrow.

– Slacken the screws (**B-fig. 26**) fastening the roof lamp.

Courtesy light bulb

– Overturn the cover (**C-fig. 27**) moving the catch in the direction of the arrow.

– Change the bulb concerned (**A-fig. 28**) (Type C, 10W) pulling outwards, releasing from the side contacts and making sure the new bulb is correctly locked between the contacts.

Spot light

– Remove the bulb (**B-fig. 28**) (Type B, 6W) with bayonet coupling and change it.

To refit the roof lamp reverse the sequence followed for removal.

fig. 27

fig. 25

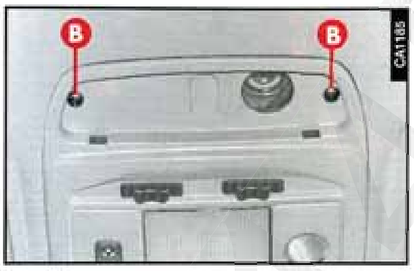


fig. 26

fig. 28

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.

BOOT LIGHT

(Optional for versions/markets where applicable)

To remove the bulb (Type C, 5W):

– Remove the transparent cover (**A-fig. 29**) complete with the bulb using a flat screwdriver.

– Change the bulb (**B-fig. 29**) pulling outwards, making sure that the new bulb is correctly positioned between the contacts.

– Refit the transparent cover checking that the catch clicks (**C-fig. 29**).

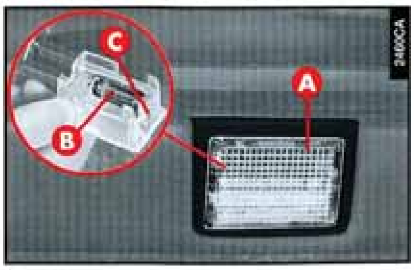


fig. 29

IN THE EVENT OF A BURNT FUSE OR RELAY

GENERAL (fig. 30)

When a service is not working, check the efficiency of the protection fuse, the conductor element (**A**) must not be broken, otherwise, replace with a fuse of the same Amp rating (same colour).

1 - Intact fuse

2 - Fuse with broken filament.

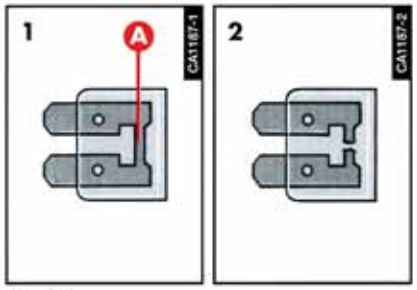


fig. 30

Never replace a broken fuse with anything other than a new fuse.

Never replace a fuse with another with a higher amp rating, DANGER OF FIRE!

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.

If a fuse blows again contact Alfa Romeo Authorized Services.

The tables of page 144 and 145 show the system or component protected by each fuse.

GENERAL PROTECTION FUSES

The vehicle is fitted with a set of fuses which, in addition to the fuses for the single services, protects all the supply cables with the exception of the starter motor cable and the cable between the starter motor and the battery.

These cables are at any rate protected by a special sheath which protects them from extreme thermal and mechanical stresses.

The general protection fuses are located in the engine compartment and housed inside and, if necessary, on one outside part of one container.

To remove the cover of the container release the side catches.

— T.SPARK engines - **A-fig. 31** and **fig. 32**

— 1.9 JTD engine - **B-fig. 31** and **fig. 33**.

The systems and devices protected by general fuses are listed in the tables of page 144 and 145.

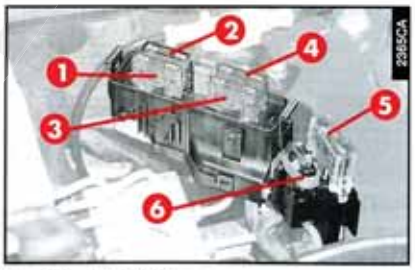


fig. 32 - T.SPARK engines

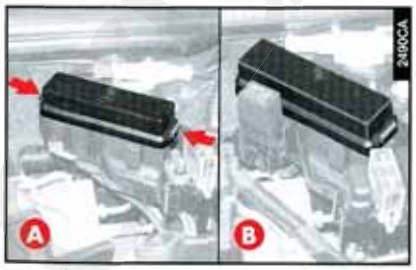


fig. 31

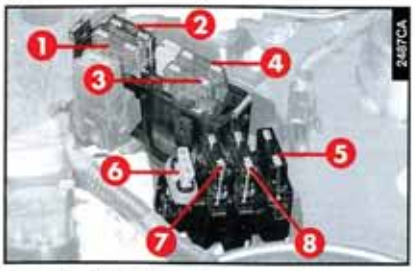


fig. 33 - 1.9 JTD engine

FUSES AND RELAYS NEXT TO THE INJECTION CONTROL UNIT (fig. 34)

For 1.9 JTD engine on a special bracket under the passenger's side floor trim, in correspondence with the injection control unit, there is a set of fuses and relays.

The devices protected by the fuses distinguished by numbers **1** and **2** in **fig. 34** are given in the tables of page 144 and 145.

Relays

A. Fuel pump relay

B. Injection system relay.

For access to these fuses and relays, contact Authorized Alfa Romeo Services.

fig. 34 - 1.9 JTD engine

FUSES AND RELAYS ON AUXILIARY BRACKET (fig. 35)

The protection fuses for some services (supplied as optional or only for certain specific market versions) are located on an auxiliary bracket close to the main fusebox.

The devices protected by fuses on the auxiliary bracket are listed in the tables of page 144 and 145.

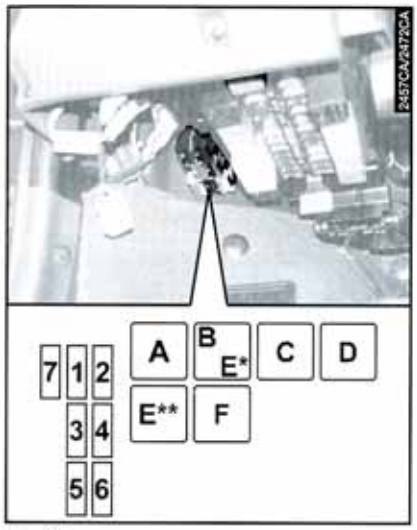


fig. 35

Relays (fig. 35)

A. Direction indicator timer

B. Fuel oil warming control relay (1.9 JTD only)

C. Headlamp washer relay (optional for versions/markets where applicable)

D. Passenger power window relay

E. Door mirror defrosting device relay (optional for versions/markets where applicable)

(*) Location for T.SPARK engines
(**) Location for 1.9 JTD engine

F. Tailgate opening relay (optional for versions/markets where applicable).

FUSES AND RELAYS IN THE CONTROL BOX

The fuses of the main devices are in a control box under the dashboard, to the left of the steering column.

For access to it, pull the lever (**A-fig. 36**) with the word "FUSE" so that the control box moves to an easily accessible position.

Each fuse is stamped with the pictograms which identify the component protected by the fuse.

In the centre, in the vertical position in relation to the fuse, there are six spare fuses, one for each amp rating (colour).

fig. 36

The devices protected by the fuses in the control box (**fig. 37**) are listed in the tables of page 144 and 145.

Relays (fig. 38)

A. Spare
B. Rear fog guards
C. Sunroof
D. High beam headlamps
E. Services cut out at starting
F. Fog lamps
G. Low beam headlamps
H. Rearscreen heating
I. Door locking control unit
L. Horns
M. Side lights
N. Windscreen/rearscreen wiper switch
O. Spare
P. Radiator fan (except 1.9 JTD with air conditioner)
Q. Direction indicators/hazard warning lights.

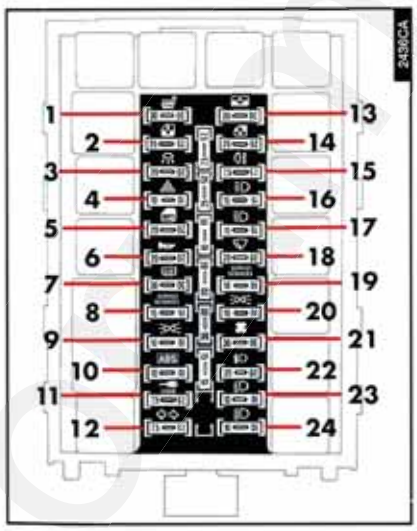


fig. 37

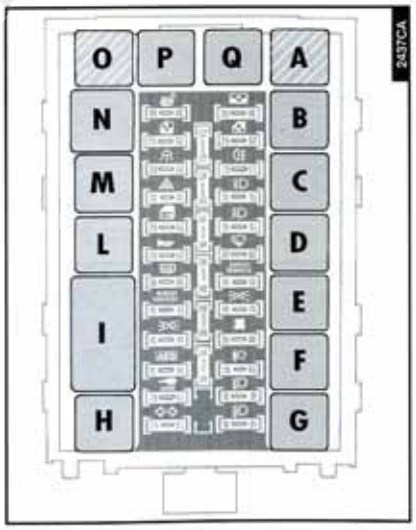


fig. 38

FUSES AND RELAYS IN THE ENGINE COMPARTMENT

The fuses and relays in the engine compartment are housed on a bracket at the side of the battery protected by a special cover and their number varies depending on the version.

Access to the fuses and relays is gained by removing the cover (**A-fig. 39**).

The devices protected by the fuses in the engine compartment are listed in tables of page 144 and 145.

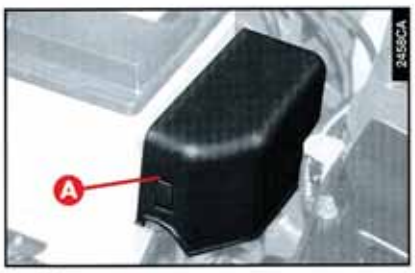


fig. 39

T.SPARK engines

Relays (fig. 40)

A. Main relay

B. Fuel pump and services relay

C. Climate control compressor relay (optional for versions/markets where applicable)

D. Relay for engaging the radiator fan 2nd speed.

1.9 JTD Engine

Version with heater

Relays (fig. 41)

A. Relay for engaging the radiator fan 2nd speed

Version with air conditioner

The component protected by the fuse distinguished by number **1** in **fig. 41** is given in the tables of pages 144 and 145.

Relays (fig. 41 and 42)

B. Relay for engaging the fan 1st speed

C. Relay for engaging the fan 2nd speed

D. Climate control compressor relay

In addition, only for versions with air conditioner, on the engine fan duct there is a switch for the engine fan 2nd speed.

For versions/markets where applicable, for the 1.9 JTD engine, the following relays are to be found in correspondence of the right headlamp:

– Additional passenger compartment heater relay 1st level

– Additional passenger compartment heater relay 2nd level

– Additional heater safety switch.

WARNING The layout of the relays may vary according to the versions and markets, therefore if you suspect a fault, you are advised to contact Authorized Alfa Romeo Services.

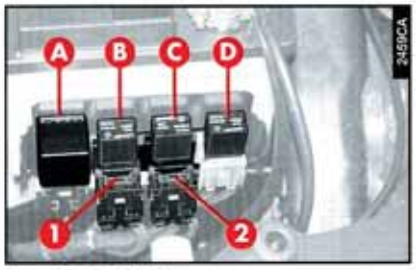


fig. 40 - T.SPARK engines

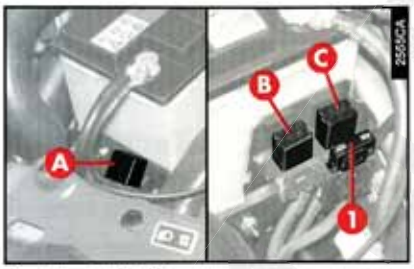


fig. 41 - 1.9 JTD engine

fig. 42 - 1.9 JTD engine

System / Component	Fuse no.	Amperage	Location
Left front side light	20	10A	fig. 37
Right front side light and corresponding warning light	9	10A	fig. 37
Left rear side light	9	10A	fig. 37
Right rear side light	20	10A	fig. 37
Left low beam headlamp	23	10A	fig. 37
Right low beam headlamp	24	10A	fig. 37
Left high beam headlamp	17	15A	fig. 37
Right high beam headlamp	16	15A	fig. 37
Stop lights	8	15A	fig. 37
Additional stop light (3rd stop)	8	15A	fig. 37
Left number plate light	20	10A	fig. 37
Right number plate light	9	10A	fig. 37
Right trailer side light	20	10A	fig. 37
Left trailer side light	9	10A	fig. 37
Reversing light	8	15A	fig. 37
Car and trailer rear fog guards and corresponding warning light	15	7.5A	fig. 37
Trailer stop light	8	15A	fig. 37
Hazard warning lights	4	10A	fig. 37
Direction indicators	12	7.5A	fig. 37
Fog lamps and corresponding warning light	20 22	10A 20A	fig. 37 fig. 37

System / Component	Fuse no.	Amperage	Location
Interior roof lamps and boot light	3	20A	fig. 37
Glove box light	19	10A	fig. 37
Windscreen/rearscreen wiper	8 18	15A 20A	fig. 37 fig. 37
Horn	6	20A	fig. 37
Clock	3	20A	fig. 37
Power windows and door locking system	3	30A	fig. 35
Front power windows	2 19 20	25A 10A 10A	fig. 37 fig. 37 fig. 37
Rear power windows	14 19 20	25A 10A 10A	fig. 37 fig. 37 fig. 37
Door locking device	5	20A	fig. 37
Rearscreen heating	7 19	30A 10A	fig. 37 fig. 37
Door mirror adjustment	19 20	10A 10A	fig. 37 fig. 37
Door mirror defrosting	5 7	7.5A 30A	fig. 35 fig. 37
Cigar lighter	19 20	10A 10A	fig. 37 fig. 37
Headlamp washer	2	20A	fig. 35
Headlamp aiming device	24	10A	fig. 37

System / Component	Fuse no.	Amperage	Location
Instrument cluster	4 8 9	10A 15A 10A	fig. 35 fig. 37 fig. 37
Low beam headlamp warning light	17	15A	fig. 37
Rearscreen heating warning light	7	30A	fig. 37
Check panel	8	15A	fig. 37
Generator charge warning light	8	15A	fig. 37
Low oil pressure warning light	8	15A	fig. 37
Radio	20	10A	fig. 37
Alarm system	6	20A	fig. 35
Radio receiver	3	20A	fig. 37
Controls lighting	8 9	15A 10A	fig. 37 fig. 37
Sunroof	13 19	30A 10A	fig. 37 fig. 37
Seat warming	1	30A	fig. 37
Boot release button	3	20A	fig. 37
Air conditioner compressor	1 3 19	10A 20A 10A	fig. 35 fig. 37 fig. 37
Air bag system	4	10A	fig. 35
ABS system	5 10	60A 10A	fig. 32-33 fig. 37

System / Component	Fuse no.	Amperage	Location
Alfa Romeo Code system – T.SPARK engines	7 11	7,5A 7,5A	fig. 35 fig. 37
– 1.9 JTD engine	1	7,5A	fig. 34
Engine cooling radiator fan	2 11	40A 7,5A	fig. 32-33 fig. 37
– 1.9 JTD engine with air conditioner	1	40A	fig. 41
Passenger compartment fan	21	30A	fig. 37
Injection system	11 1 2 2	7,5A 15A 15A 7,5A	fig. 37 fig. 40 fig. 40 fig. 34
– 1.9 JTD engine			
Electronic injection-ignition system (petrol engines only)	6	30A	fig. 32-33
All devices activated with the ignition key at MAR do not work	1	30A	fig. 32-33
Almost all the electric systems and components do not work	3 4	60A 60A	fig. 32-33 fig. 32-33
Load cut off during starting	19	10A	fig. 37
Additional heater (1.9 JTD version) for versions/markets where applicable	7	70A	fig. 33
Glow plugs and resistance on fuel oil filter (1.9 JTD version)	8	60A	fig. 33

IN THE EVENT OF A FLAT BATTERY

STARTING WITH AN AUXILIARY BATTERY (fig. 43)

If the battery is flat, the engine can be started using another battery of the same or higher capacity (see "Technical specifications" chapter).

This is what you should do (**fig. 43**):

– Connect the positive terminals (plus sign + next to the terminal) of the two batteries with a special cable.

– Connect a second cable to the negative terminal (–) of the auxiliary battery with an earth point ⏚ on the engine or on the gearbox of the car to be started.

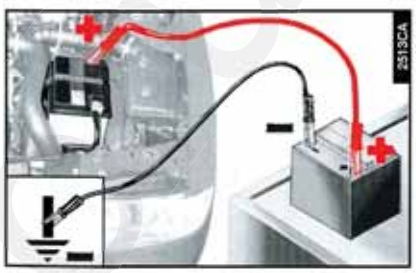


fig. 43

WARNING Do not directly connect the negative terminals of the two batteries: any sparks may set fire to the gas that may be released from the battery.

– Start the engine.

– When the engine has started, remove the cables, reversing the sequence described previously.

If after a few attempts the engine fails to start, do not insist pointlessly and contact the nearest Authorized Alfa Romeo Services.

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.

To avoid damaging the vehicle's electrical system follow the manufacturer's 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.

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.

IF THE VEHICLE IS TO BE LIFTED

USING THE JACK

See paragraph "In the event of a puncture" of this chapter.

Take note:

– the jack mass is 2.600 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.

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.

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 illustrated, approx. 20 cm from the profile of the wheelhouse in correspondence with the ▼ symbol (**fig. 44**).

The car is to be lifted positioning the jack or the workshop lift arm plate only in the points shown.

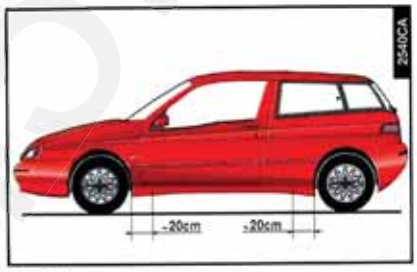


fig. 44

IF THE VEHICLE IS TO BE TOWED

The tow ring supplied with the vehicle is housed in the tool container located under the boot mat.

To install the tow ring, proceed as follows:

– Take the tow ring from the tool container.

– On the front end firmly screw the ring in its housing as shown in **fig. 45**.

– On the rear end remove the lid (**A-fig. 46**) snap-fitted on the rear bumper as follows:

Using the flat blade of a screwdriver 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 in its housing.

Make sure that the tow ring is firmly tightened (it must be turned about 9-10 times in its threaded housing); carefully clean the threaded housing before tightening the ring.

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.

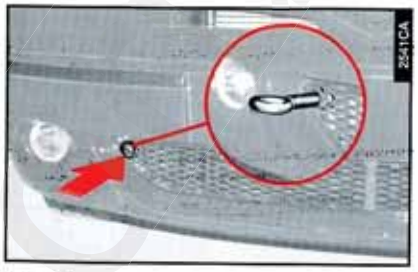


fig. 45

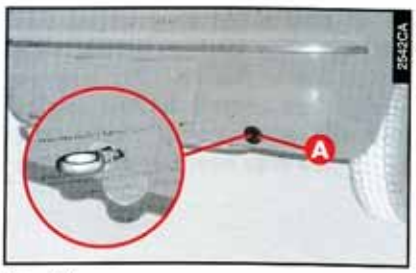


fig. 46

IF AN ACCIDENT OCCURS

— It is important to keep calm.

— If you are not directly involved in the accident, stop at least ten metres away from the accident.

— If you are on a motorway do not obstruct the emergency lane with your car.

— Turn off the engine and turn on the hazard lights.

— At night, illuminate the scene of the accident with your headlights.

— Act carefully, you must not risk being run over.

— Mark the accident by putting the red triangle at the regulatory distance from the car where it can be clearly seen.

— If the doors are blocked, do not try to get out of the vehicle by breaking the stratified windscreen. The rear and side windows are easier to break.

— Call the emergency services making the information you give as accurate as you can. On the motorway use the special column-mounted emergency phones.

— In pile-ups on the motorway, particularly when the visibility is bad, there is a high risk of other vehicles running into those already immobile. Get out of the vehicle immediately and take refuge behind the guard rail.

— Remove the ignition keys of the vehicles involved.

— If you can smell petrol or other chemicals, do not smoke and make sure all cigarettes are extinguished.

— Use a fire extinguisher, blanket, sand or earth to put out fires no matter how small they are. Never use water.

IF ANYONE IS INJURED

— Never leave the injured person alone. The obligation to provide assistance exists even for those not directly involved in the accident.

— Do not congregate around the injured person.

— Reassure the injured person that help is on its way and will arrive soon. Stay close by to calm him/her down in case of panic.

— Unfasten or cut seat belts holding injured parties.

— Do not give an injured person anything to drink.

— Never move an injured person except in the following cases.

— Pull the injured person from the car only if it risks catching fire, it is sinking in water or is likely to fall over a cliff or similar. Do not pull his/her arms or legs, do not bend the head and, as far as possible, keep the body horizontal.

FIRST-AID KIT (fig. 47)

A first-aid kit is available from Lineaccessori Alfa Romeo.

The first-aid kit must at least contain:

— sterile gauze for covering and cleansing wounds;

— bandages of different widths;

— antiseptic plasters of different sizes;

— a roll of plaster;

— a packet of cotton wool;

— a bottle of disinfectant;

— a packet of paper handkerchiefs;

— a pair of scissors with rounded tips;

— a pair of pincers;

— two haemostatic loops.

fig. 47

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 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.

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.

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.

Vehicle maintenance should be entrusted to an Alfa Romeo Authorized Service. For interventions of routine maintenance and small repairs you wish to carry out your-self, 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.

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.

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.

Ensure that scarves, ties and loose clothing cannot get caught by moving parts.

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 △ can be a necessary condition for the guarantee.

It is possible to ask the Alfa Romeo Organisation for an estimate of the cost of service coupon operations.

WARNING You are advised to contact Alfa Romeo Authorized Services in the event of any minor operating faults, without waiting for the next service coupon.

WARNING The programmed maintenance coupons are specified by the Manufacturer. The failure to have them carried out may invalidate the warranty.

PROGRAMMED MAINTENANCE SCHEDULE

thousand of kilometers	20	40	60	80	100	120	140	160	180
Check tyre conditions and wear	+	+	+	+	+	+	+	+	+
Check front disk brake pad wear indicator (present only on the left-hand side)	+	+	+	+	+	+	+	+	+
Check conditions of rear disk brake pads		+		+		+		+	
Check conditions and wear of rear brake drum			+			+			+
Check intactness of axle shaft and power steering boots, joint caps and check tightness of brake and fuel lines	+	+	+	+	+	+	+	+	+
Sight check of conditions of accessory drive belt			+						+
Check handbrake lever stroke		+		+		+		+	
Check/adjust valve clearance (1.9 JTD engine)	+	+		+		+		+	
Check petrol engine exhaust emission		+		+		+		+	
Check turbo diesel engine smoke		+		+		+		+	
Check antievaporation system				+				+	
Change fuel filter (1.9 JTD engine)	+	+	+	+	+	+	+	+	+
Change air cleaner cartridge (petrol engines)		+		+		+		+	
Change air cleaner cartridge (diesel engines)	+	+	+	+	+	+	+	+	+
Check and if necessary top up fluid levels (brakes, hydraulic clutch, power steering, windscreen wiper, battery, engine cooling, etc.)	+	+	+	+	+	+	+	+	+

thousand of kilometers	20	40	60	80	100	120	140	160	180
Change timing belt						+			
Change counter-rotating shafts belt (where applicable)						+			
Change spark plugs					+				
Check engine control systems (through diagnostic socket)		+		+		+		+	
Check gearbox and differential oil level				+				+	
Change engine oil (*)	+	+	+	+	+	+	+	+	+
Change engine oil filter	+	+	+	+	+	+	+	+	+
Change brake fluid (or every 24 months)			+			+			+
Check pollen filter (at all events every 12 months)	+	+	+	+	+	+	+	+	+

(*) at all events 18 months if mileage is lower

N.B.:

To keep the engine in good operating conditions (and also to avoid invalidating the warranty), in some countries/markets the fuel intake unit must be changed every 80,000 km. It is therefore necessary to ask the local Alfa Romeo Service Network for information.

ADDITIONAL WORK

In addition to keeping to the Programmed Maintenance Schedule, to keep the car in tip top condition it is also necessary to follow the recommendations below:

Every 1000 km or before long journeys, check and if necessary top up:

— The engine oil level.

— The level of the oil in the cooling circuit.

— The level of the brake/clutch fluid.

— The power steering fluid level.

— Electrolyte level.

— The tyre pressure.

— The level of the liquid in the windscreen wiper/washer and headlight washer system (if present).

Every 5000 km (only for 1.9 JTD engines):

— Drain water condensate from the filter.

Engine oil

If the vehicle is used prevailingly under one of the following particularly harsh conditions:

— Trailer towing.

— Dusty roads.

— Short journeys (less than 7-8 km) repeated journeys with outside temperature below 0 °C.

— The engine frequently running at idle speed or driving long distances at low speed (or in the event of prolonged inactivity).

It is advisable to change the engine oil more frequently than specified in the Programmed Maintenance Schedule.

Air cleaner

If the vehicle is habitually driven on dusty roads the air cleaner should be changed more frequently than specified.

Brake pads

The brake pads are subject to a different degree of use and wear, depending on the conditions of use and driving style. When the front brake pad wear warning light turns on the instrument cluster, immediately have the pad thickness checked by Alfa Romeo Authorized Services.

Since the car is fitted with wear sensors only for the front left brakes only the rear brakes should also be checked when the front pads are replaced.

The rear pads may not however need to be replaced due to their use on the vehicle but should in any case be checked at a later date.

Brake/clutch fluid

The brake fluid is hygroscopic and absorbs humidity. To avoid braking anomalies the brake fluid should be changed periodically regardless of the mileage (refer to the Programmed Maintenance Schedule).

Climate control system (Optional for versions/markets where applicable)

To maintain the air conditioner in top condition it should be run for a few minutes every 15 days even during the winter, by activating the compressor for a few minutes.

Contact Alfa Romeo Authorized Services to have the system maintained and charged with refrigerant when necessary. The use of any type of gas other than that specified may cause irreparable damage to the components of the system and the environment.

Before the summer when the system is used to the full it should be checked over to ensure that it is working efficiently.

The coolant gas used in the system is R134a which is not harmful to the environment in the event of accidental leaks. Never use R12 gas which in addition to being incompatible with the system components, contains chlorofluorocarbons (CFCs) which are an environmental hazard.

Dust/pollen filter
(Only cars with climate control system)

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

If the car is frequently used in dusty or highly polluted environments, the filtering element should be checked more often than stated in the Programmed Maintenance Schedule; in particular it should be changed if a lowering of the air flow into the passenger compartment is noted.

If the filter is not replaced the efficiency of the heating-ventilation system may be seriously compromised.

Battery

You should check the status of the battery charge preferably at the beginning of the cold season to avoid the possibility of the electrolyte freezing.

This check should be carried out more frequently if the vehicle is used mainly for short trips, or if it is fitted with accessories that permanently absorb electricity even with the ignition key removed, especially in the case of after market accessories.

Fuel oil filter
(Diesel engines only)

The varying degree of purity of fuel oil in commerce may make it necessary to change the fuel oil filter more frequently than given in the Programmed Maintenance Schedule.

Antifreeze

The cooling system should be topped up with Alfa Romeo Climafluid Super Permanent —40 °C to preserve the protective characteristics of the mixture.

Wheels

Routinely and before long journeys, check the pressure of each tyre, including the spare.

The pressure should be checked with the tyre rested and cold.

Regularly check the tread depth with respect to the regulation minimum.

WARNING Some types of tyres are fitted with wear indicators. The tyres must be replaced as soon as these indicators appear on the tread of the vehicle.

Routinely check that the tyres have no cuts on the sides, swelling or uneven tread wear; if so, contact Alfa Romeo Authorized Services.

If a tyre is punctured, stop immediately and change it to avoid damaging the tyre, rim, suspension and steering.

The wheels (rims and tyres) installed in the factory are the most suitable for the characteristics of the vehicle and guarantee the greatest safety and comfort under all normal driving conditions.

Before replacing the rims or tyres already fitted to your vehicle check the table listing the permitted types given in the "Technical specifications" chapter of this manual or contact Alfa Romeo Authorized Services.

The original rim-tyre match should however be maintained.

When changing tyres, always fit new ones, avoiding those from a doubtful source.

WARNING Particular uses of the vehicle (for example when driving on roads covered with salt and/or corrosive substances, unmade roads etc.) will necessitate regular checking of the boots of the half-shafts and steering box and lubrication of the joints, hinges, door and boot catches etc.

When it is strictly necessary (in an emergency for example) to use lubricants and/or fluids which do not have the same characteristics as those specified by the manufacturer (see table "Recommended fluids and lubricants" in the chapter "Technical specifications") these should be replaced as soon as possible and the filters of the relative circuits substituted.

Rubber hoses

The hoses of the braking, power steering, fuel supply systems etc. must be checked carefully at the intervals given in the Programmed Maintenance Schedule.

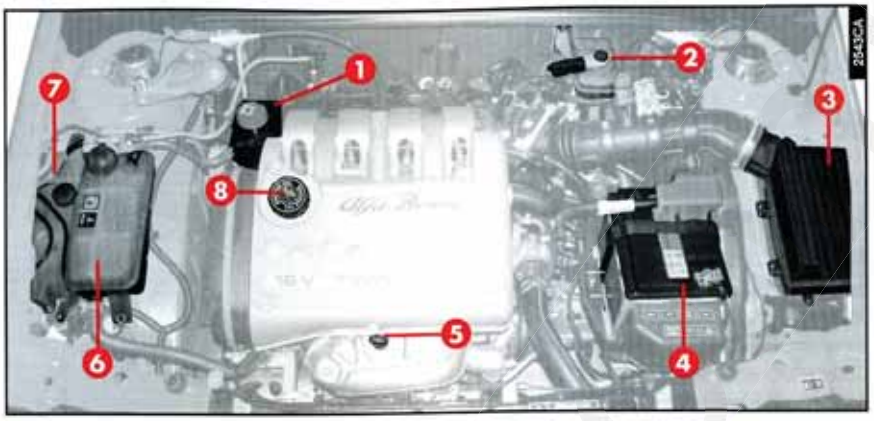


fig. 1

T.SPARK versions

1. Power steering coolant reservoir - **2.** Brake/clutch fluid reservoir - **3.** Air cleaner - **4.** Battery - **5.** Engine oil dipstick - **6.** Engine coolant reservoir - **7.** Windscreen/headlight washer fluid reservoir - **8.** Engine oil filler cap.

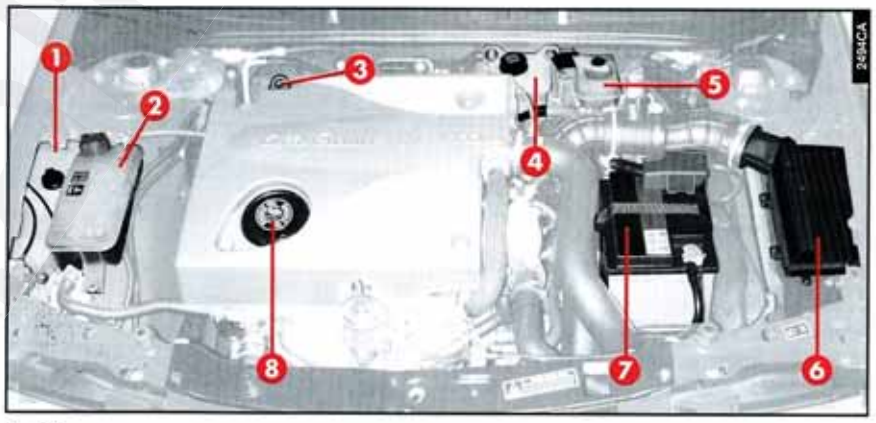


fig. 2

1.9 JTD version

1. Windscreen/headlamp washer fluid reservoir - **2.** Engine coolant fluid reservoir - **3.** Engine oil dipstick - **4.** Power steering fluid reservoir - **5.** Brake and clutch fluid reservoir - **6.** Air cleaner - **7.** Battery - **8.** Engine oil filler cap.

PROTECTIVE SHIELD UNDER ENGINE (fig. 3)

(for versions/markets where applicable)

The car is fitted with a protective shield under the engine.

WARNING The description of the procedure for removing the protection under the engine is given for information purposes only. These operations should be carried out by Authorized Alfa Romeo Services.

When changing the gearbox and differential oil this protection should be removed as follows:

– Slacken the screws (**A**) and remove the shield.

CHECKING ENGINE OIL LEVEL

Fig. 4: T.SPARK versions
Fig. 5: 1.9 JTD version

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 to permit the oil return to the sump.

Remove the dipstick (**A**), clean it, replace it, remove it once again and check that the level is between the MIN and MAX marks on the dipstick.

The interval between the MIN and MAX marks corresponds to approximately 1 litre of oil.

WARNING 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.

To avoid burns particular care should be taken when working inside the engine compartment when the engine is warm.

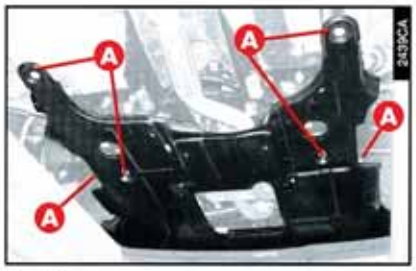


fig. 3

fig. 4 - T.SPARK versions

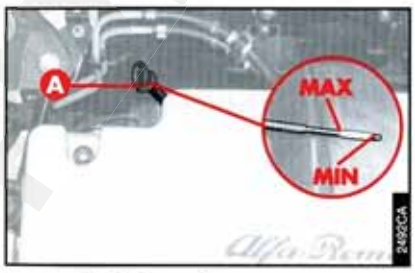


fig. 5 - 1.9 JTD version

TOPPING UP ENGINE OIL

Fig. 6: T.SPARK versions
Fig. 7: 1.9 JTD version

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.

WARNING After topping up the engine oil, before checking the level, run the engine a few seconds and wait for a few minutes after stopping it.

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.

When changing or topping up engine oil never exceed the MAX mark. For 1.9 JTD version too much engine oil could cause oil to be withdrawn by the blow-by circuit resulting in a rapid increase of engine speed (in this case no longer controllable even releasing the accelerator and moving the ignition key to STOP) and damage to the engine with the risk of seizure or fire.

fig. 6 - T.SPARK versions

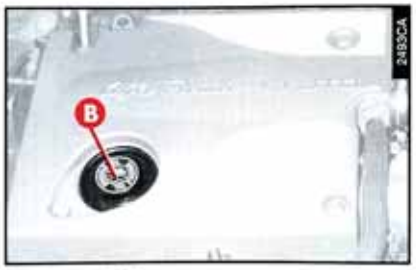


fig. 7 - 1.9 JTD version

CHANGING ENGINE OIL

Fig. 8: 1.4 T.SPARK version
Fig. 9: 1.6-1.8 T.SPARK and ✤ versions
Fig. 10: 1.9 JTD version

The frequency with which the oil should be changed depends on the kilometers travelled, the period between oil changes and the type of use to which the vehicle has been subjected.

The oil must be changed when the engine is warm to allow the waste oil to drain off easily as described below.

— Ensure that the vehicle is standing on a level surface, with the handbrake engaged and that the engine is switched off and warm.

— Place a suitable container under the drainage cap.

— Remove the filler cap and the dipstick in order to facilitate drainage.

— Unscrew the drainage cap (**A**) located under the oil sump and allow the oil to drain off.

Proceed with care when removing the drainage cap as the oil may be extremely hot.

— Replace the engine oil filter (see following paragraph).

— Clean the sump's drainage cap (**A**) and refit it.

— Pour oil in the correct type and quantities into the filler neck (see table of "Recommended fluids and lubricants" in the chapter "Technical specifications").

— Close the filler neck.

— Clean the dipstick and check that the oil level does not exceed the MAX level.

— Re-insert the dipstick.

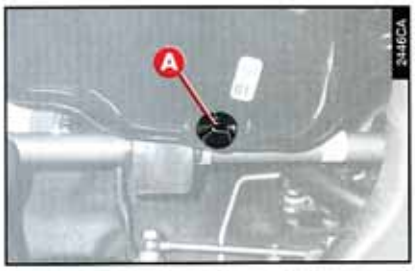


fig. 8 - 1.4 T.SPARK version

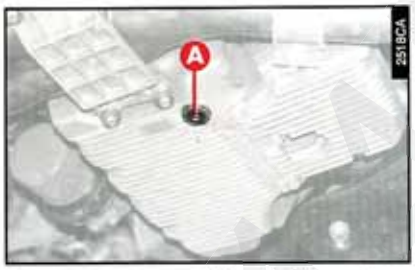


fig. 9 - 1.6-1.8 T.SPARK and ✤ versions

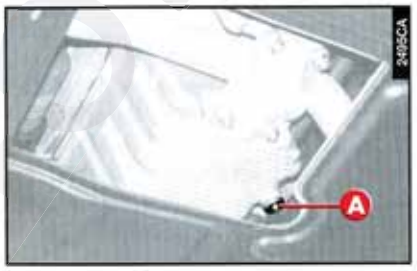


fig. 10 - 1.9 JTD version

Warnings

Due to the content of detergent additives, new oil will darken after a brief period of use. This is quite normal and the oil need not be replaced more frequently than specified.

If oils of the recommended make (see table of "Recommended fluids and lubricants" in the chapter "Technical specifications") are not available other well-known makes may be used as long as they correspond to the specified classification and viscosity.

In this case however the engine oil and filter should be changed after 10,000 km.

The research and development programmes undertaken by the lubricant manufacturers ensure that continual improvements are made often involving new names or names which differ from those given in the "Recommended fluids and lubricants" table. If in doubt contact Alfa Romeo Authorized Services remembering that the oil used must conform to the specified classification.

Local regulations should be followed when disposing of waste oil.

Used engine oil and filter contain pollutants. Contact Alfa Romeo Authorized Services to have the oil and filter changed as these are equipped to dispose of the waste oil and filters respecting the environment and laws.

CHANGING ENGINE OIL FILTER

Fig. 11: T.SPARK versions
Fig. 12: 1.9 JTD version

To change the engine oil filter proceed as follows:

— Unscrew and remove the engine oil filter cartridge (**A**) using the appropriate spanner.

— Lubricate the gasket of the new filter with engine oil.

— Hand tighten the new filter onto the engine block.

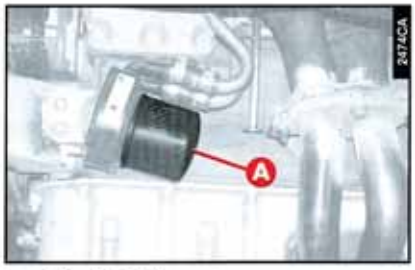


fig. 11 - T.SPARK versions

WARNING The filter must be replaced each time the engine oil is changed.

CHECKING LEVELS AND REPLACING GEARBOX AND DIFFERENTIAL OIL

WARNING The description of the procedures for checking and changing the gearbox/differential oil is given for information only as this operation should only be carried out by Alfa Romeo Authorized Services.

The level should be checked with the car on level ground and with the engine stopped and cold.

T.SPARK versions (fig. 13)

To check the oil level, proceed as follows:

– To check the oil level in the gearbox-differential group, remove the filler cap (**A**): the oil should just touch the lower edge of the hole.

When changing the lubricant with a warm gearbox-differential, note the following:

– Place a suitable container under the car in correspondence of the drain cap (**B**).

– Remove the filler cap (**A**) and the drainage cap (**B**) and allow the oil to drain off completely.

– Clean the drainage cap (**B**) and screw it back into place.

– Top up through hole (**A**) with the correct type of oil in the specified quantity (see table of "Recommended fluids and lubricants" in the chapter "Technical specifications").

– Check that the oil reaches the lower edge of the hole, clean the cap, and screw on.

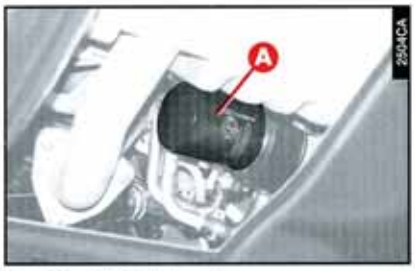


fig. 12 - 1.9 JTD version

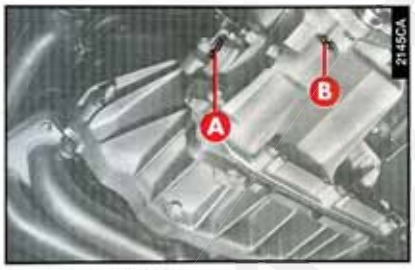


fig. 13 - T.SPARK versions

1.9 JTD version (fig. 14)

To check the oil level, proceed as follows:

– Remove the dipstick (**A**) and clean it.

– Insert the dipstick completely again then remove it and check that the oil level coincides with the reference mark on the dipstick.

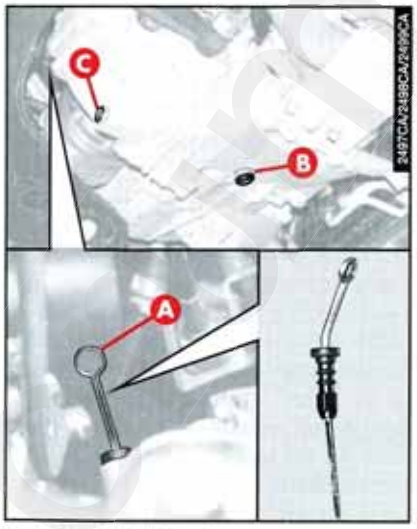


fig. 14 - 1.9 JTD version

– Upon completion of this operation refit the dipstick completely.

For changing the oil (with the gearbox-differential unit hot), proceed as described below:

– Remove the protection under the engine.

– Place a suitable container under the car in correspondence of the drain plug (**B**).

– Remove the dipstick (**A**) and the gearbox oil drain plug (**B**) and/or differential oil drain plug (**C**), then allow the oil to drain off completely.

– Clean the drain plugs (**B**) and/or (**C**) and re-tighten them.

– Fill with oil of the type and in the quantity specified (see table of "Recommended fluids and lubricants" in the chapter "Technical specifications"), through the hole of the dipstick (**A**).

– Check the oil level (see previous paragraph).

– Reinstall the protection under the engine.

CHECKING AND TOPPING-UP ENGINE COOLANT (fig. 15)

Periodically check that the level of liquid 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.

To avoid being burnt, when the engine is hot do not remove the cap from the expansion tank.

fig. 15

The cooling system is pressurised. If necessary replace the cap only with another original one, otherwise the efficiency of the system could be compromised.

The antifreeze mixture contained in the cooling circuit guarantees protection down to –40 °C. Use Climafluid Super Permanent –40 °C antifreeze when topping-up available from Authorized Alfa Romeo Services.

CHECKING POWER STEERING OIL LEVEL

Fig. 16: T.SPARK versions
Fig. 17: 1.9 JTD version

Check that the oil in the reservoir is at the MAX level.

fig. 16 - T.SPARK versions

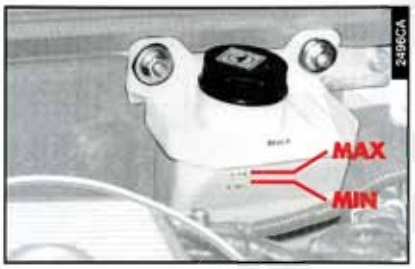


fig. 17 - 1.9 JTD version

This operation must be carried out with the car on level ground and when the engine is stationary and cold.

Check that the level reaches the MAX reference notch on the reservoir or coincides with the upper notch (maximum level) on the dipstick integral with the reservoir cap.

TOPPING UP THE POWER STEERING OIL

If the level of the oil in the power steering reservoir falls below the specified level, top up with one of the products listed in the table of "Recommended 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 to the MAX level notch and then replace the cover.

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.

WARNING Contact Alfa Romeo Authorized Services for maintenance and repair operations.

Power steering fluid is highly inflammable. Do not let it come into contact with hot engine parts.

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 "Recommended fluids and lubricants" in the "Technical specifications" chapter should be used.

From time to time check the instrument panel warning light by pressing cap (**B**) of the reservoir (**A**) (with the ignition key at **MAR**) instrument warning panel light (!) should come on.

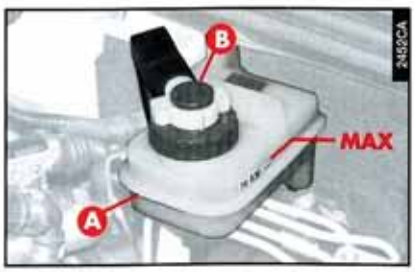


fig. 18

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.

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.

Brake and clutch fluid is poisonous and corrosive. In the event of accidental 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)

Check the level of the windscreen washer and headlamp washer (if installed) fluid. As the reservoir (**A**) is made of transparent plastic material checking the level is easy and there is no need to remove the cap (**B**).

Some commercial additives for windscreen washers are inflammable. The engine compartment contains hot components which could set it on fire.

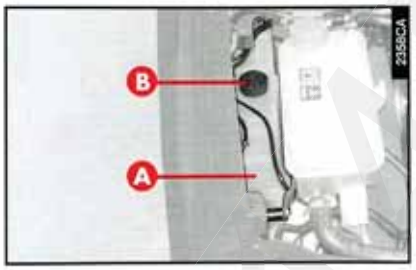


fig. 19

To avoid damaging the pump motors do not use the windscreen washers when the reservoir is empty.

Do not travel with the windscreen washer reservoir empty: the action of the windscreen washer is fundamental for improving vision.

WARNING When topping up use the special detergents available in the shops ensuring that they contain anti-scale 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.

The description of the procedure for changing the cleaner is described for informative purposes only. This operation should be carried out by Authorized Alfa Romeo Services.

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 vehicle.

To change the filter:

— Remove the cover (**A-fig. 20**) slackening the fastening screws.

— Raise the cover and change the air cleaner.

fig. 20

DIESEL FILTER
(1.9 JTD version)

WARNING The description of the procedures to purge water from the system and replace the cartridge is given for information only as these operations should only be carried out by Alfa Romeo Authorized Services.

WATER PURGE

The presence of water in the supply circuit may seriously damage the injection system (pump, delivery valve, atomizers etc.) and cause irregular running.

If this operation is not carried out correctly and with the due precautions, driving safety may be compromised with dangerous fuel leaks.

Bleed the filter as follows:

– Unscrew knob (**A-fig. 21**) until a steady flow of fuel is obtained; then tighten the knob.

Do not dispose of water mixed with fuel oil drained from the filter in the environment. It is advisable to have the draining operation carried out by Authorized Alfa Romeo Services who are specially equipped for disposal fully respecting nature and legal regulations.

REPLACING THE CARTRIDGE

To replace the cartridge proceed as follows:

WARNING The appropriate spanner should be used to replace the cartridge.

Removal

– Loosen the filter cartridge (**A-fig. 22**) using the appropriate spanner and remove it from its support (**B-fig. 22**).

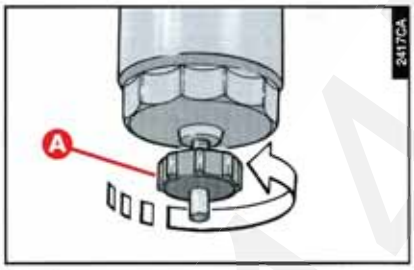


fig. 21

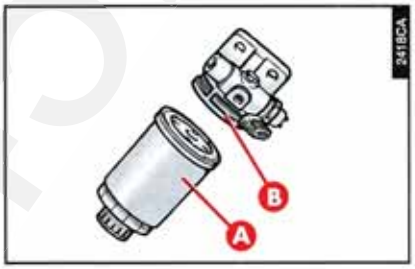


fig. 22

Installation

– Lubricate the gasket of the new cartridge with engine oil and then fill with fuel.

– Hand tighten the filter cartridge into place and then tighten further using the appropriate spanner.

WARNING After replacing the filter cartridge or draining the fuel circuit (e.g. after running out of fuel) air need not be purged from the system as this occurs automatically when the engine is started.

DUST/POLLEN FILTER
(Optional for versions/markets where applicable)

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 an 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.

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

BATTERY

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**).

The batteries contain substances which are extremely harmful to the environment. Alfa Romeo Authorized Services should be contacted when replacing a battery as they are equipped to dispose of the batteries respecting both the environment and legal requirements.

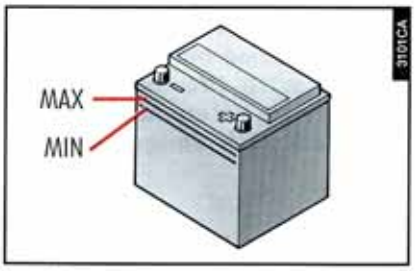


fig. 23

If the level is below the MIN mark 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, radio, telephone etc.) contact Alfa Romeo Authorized Services who will be able to recommend the most suitable devices and to 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.

When doing any work on the battery or near it, always wear special protective goggles.

Working with the fluid level too low damages the battery irreparably, even breaking the body and completely leaking the acid contained.

Incorrect fitting of electrical and electronic accessories can seriously damage the car.

CHARGING THE BATTERY

WARNING 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:

WARNING 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.

The fluid contained in the battery is poisonous and corrosive. Avoid contact with the skin or eyes. The battery should be charged in a well ventilated place and kept away from naked flames or sources of sparks: danger of explosion and fire.

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.

WARNING 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" in the chapter "Getting the best out of your car".

USEFUL HINTS TO EXTEND THE LIFE OF YOUR BATTERY

To avoid rapidly draining the energy stored in the battery and ensure that it continues to work correctly, the following should be noted:

– The clamps should always be fully tightened.

– Within reason, avoid using electrical devices (radio, hazard warning lights, parking lights etc.) when the engine is switched off.

– When the vehicle is parked in a garage ensure that the doors, boot/bonnet lids and internal flaps are closed so that the roof light does not stay on permanently.

– Before carrying out any work on the electrical system disconnect the negative cable from the battery.

If after purchasing your car you want to install electric accessories which require a power supply (alarm, voice feature, radio-navigator with satellite antitheft feature, etc.) contact the Authorized Alfa Romeo Services whose qualified personnel will be able to suggest the most appropriate devices in the Lineaccessori and evaluate the total electric absorption rate making sure that the vehicle's electric system is able to withstand the required load or whether it is better to integrate it with a more powerful battery.

In fact, these devices continue to absorb electricity when the ignition key has been removed (car parked, engine off) with the possibility of gradually draining the battery.

The total absorption of these accessories (standard and installed later) must be below 0.6 mA x Ah (of the battery), as shown in the table below:

Battery rating	Maximum allowable loadless absorption
45 Ah	27 mA
50 Ah	30 mA
60 Ah	36 mA

Please also remember that services with a high absorption rating activated by the owner, such as for example bottle warmers, vacuum cleaners, cellular phone, mini fridge, etc. quicken the battery discharging process if they are used when the engine is not running.

WARNING When needing to install additional systems, remember that improper branches on connections of the wiring harness is dangerous, especially if safety devices are involved.

ELECTRONIC CONTROL UNITS

With normal use of the vehicle no particular precautions need be taken.

If interventions are to be carried out on the electrical system or the vehicle is to be jump started the following must be heeded:

– Always switch off the engine before disconnecting the battery from the electrical system.

– If is necessary to recharge the battery, disconnect the battery from the electrical 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.

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 compromise 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 the 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.

WINDSCREEN/ REARSCREEN WIPER BLADES

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:

– Raise the windscreen wiper arm and position the blade so that it forms an angle of about 90° with the arm.

– Press tab (**B**) of the blade coupling spring and push the blade towards the base of the arm (**A**).

– When the spring is released from the curved top of the arm, move the blade to allow the arm to be withdrawn 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.

– Lower the windscreen wiper arm.

WARNING 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.

Rearscreen wiper blades (fig. 25)

Routinely clean the blades and make sure that they are intact; if the rubber wipers are distorted or worn, change the wiper blades completely as follows:

– Raise the cover (**A-fig. 25**) and loosen the nut (**B**) fastening the arm.

– When refitting fully tighten the nut (**B**) to prevent any movement of the arm with respect to the spindle which would damage the grooves on both.

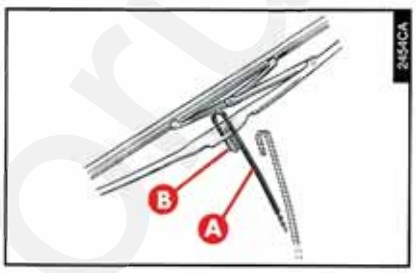


fig. 24

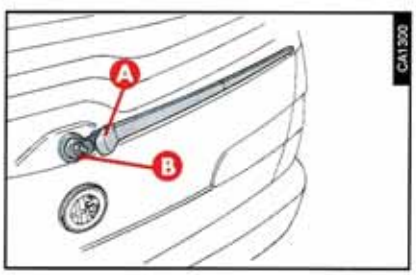


fig. 25

HEADLAMP WASHER

(Optional for versions/markets where applicable)

Make sure that the spray jets (**A-fig. 26**) spray an adequate jet of fluid and are correctly aimed.

If the jets fail to work properly check that the supply circuits are not clogged and if necessary use a pin to unclog the outlet holes.

fig. 26

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 specialised workshops 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 commercializes 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.

WARNING 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 specialized 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.

WARNING The engine compartment 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.

INTERIOR FITTINGS

Periodically check that water is not trapped under the carpets (due to water dripping off shoes, umbrellas etc.) which could cause oxidization 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 SEATS

— 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.

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.

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 position 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.

IDENTIFICATION DATA

The identification data should be recorded. The identification data are carried on labels located in the following positions (**fig. 1**):

1 - Identification label

2 - Body label

3 - Bodywork paint identification label

4 - Engine label

BODY LABEL

The body label carrying the following information is located in the engine bay to one side of the right-hand shock absorber upper connection:

– Type of vehicle: ZAR 930000.

– Manufacturer's serial number (chassis number).

BODYWORK PAINT IDENTIFICATION LABEL (fig. 2)

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.

ENGINE LABELS

On the rear left-hand side, gearbox side.

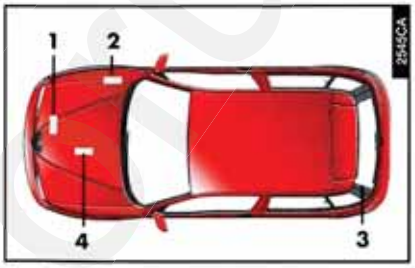


fig. 1

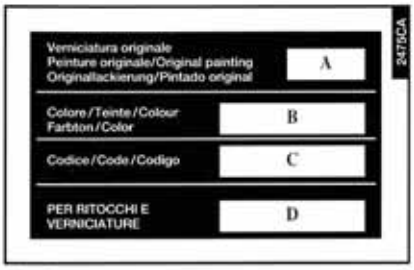


fig. 2

IDENTIFICATION LABEL (fig. 3)

This is located in the engine bay on the front crossmember.

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 (diesel versions only)

F. Space for punching manufacturer's name.

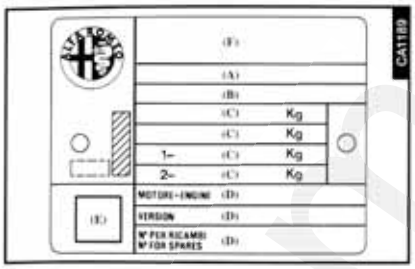


fig. 3

ENGINE AND BODY VERSION CODES

	1.4 T.SPARK	1.6 T.SPARK	1.8 T.SPARK	♣	1.9 JTD
Engine code	AR 33503	AR 67601	AR 32201	AR 32301	AR 32302
Body code	930 A3A00 23 930 A3A00 14 (*)	930 A2B00 21 930 A2B00 13 (*) 930 A2C00 22 (*)	930 A1A00 32 930 A1A00 33 (*)	930 A5000 34 930 A5000 35 (*)	930 A4B00 45

(*) Versions for specific markets

ENGINE

	1.4 T.SPARK	1.6 T.SPARK	1.8 T.SPARK	♣	1.9 JTD
Position	Front transversal	Front transversal	Front transversal	Front transversal	Front transversal
Number and arrangement of cylinders	4 in line	4 in line	4 in line	4 in line	4 in line
Cycle	Otto	Otto	Otto	Otto	Diesel
Bore	82 mm	82 mm	82 mm	83 mm	82 mm
Stroke	64.87 mm	75.65 mm	82.7 mm	91 mm	90.4 mm
Total cubic capacity	1370 cm^3	1598 cm^3	1747 cm^3	1970 cm^3	1910 cm^3
Compression ratio	10.5 : 1	10.3 : 1	10.3 : 1	10 : 1	18.45 : 1
Maximum horsepower					
kW EEC	76	88	106	114	77
CV EEC	103	120	144	155	105
r.p.m.	6300	6300	6500	6400	4000
Max torque					
Nm EEC	124	144	169	187	255
kgm EEC	12.7	14.7	17.2	19.1	26
r.p.m.	4600	4500	3500	3500	2000

VALVE GEAR TIMING

	1.4 T.SPARK	1.6 T.SPARK	1.8 T.SPARK	♣	1.9 JTD
Intake					
– opens before TDC	– | 17° (*)	– | 17° (*)	– | 22° (*)	– | 22° (*)	0°
– opens after TDC	8° | –	8° | –	3° | –	3° | –	–
– closes after BDC	40° | 15° (*)	46° | 21° (*)	51° | 26° (*)	51° | 26° (*)	32°
Exhaust					
– opens before BDC	26°	26°	47°	47°	32°
– closes after TDC	1°	1°	4°	4°	0°
Tappet clearance for checking timing					
– intake mm	0.45	0.45	0.45	0.45	0.50
– exhaust mm	0.45	0.45	0.45	0.45	0.50
Tappet clearance cold					
– intake mm	–	–	–	–	0.30 ± 0.05
– exhaust mm	–	–	–	–	0.35 ± 0.05

(*) With intervention of phase variator

FUEL SUPPLY AND IGNITION

	1.4 T.SPARK	1.6 T.SPARK	1.8 T.SPARK	♣	1.9 JTD
Supply	Electronic injection Multi Point	Electronic injection Multi Point	Electronic injection Multi Point	Electronic injection Multi Point	Direct injection with overboosting
Idle r.p.m.	880	840 ± 50	840 ± 50	840 ± 50	800 ± 30
Spark plugs (*)	NGK PFR6B + NGK PMR7A [NGK BKR6EKPA + NGK PMR7A]	NGK PFR6B + NGK PMR7A [NGK BKR6EKPA + NGK PMR7A]	NGK PFR6B + NGK PMR7A [NGK BKR6EKPA + NGK PMR7A]	NGK PFR6B + NGK PMR7A [NGK BKR6EKPA + NGK PMR7A]	–
Replace every	100.000 km	100.000 km	100.000 km	100.000 km	–
Firing order	1-3-4-2	1-3-4-2	1-3-4-2	1-3-4-2	–
Injection order	–	–	–	–	1-3-4-2

(*) there are two different spark plugs, one of each type, per cylinder
[ ] alternative

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.

TRANSMISSION

	1.4 T.SPARK	1.6 T.SPARK	1.8 T.SPARK	♣	1.9 JTD
Gearbox	Five forward gears + reverse with synchronizers for forward speeds				
Clutch	Dry single disk with hydraulic operation				
Drive	Front	Front	Front	Front	Front

TRANSMISSION RATIOS

	1.4 T.SPARK	1.6 T.SPARK	1.8 T.SPARK	♣	1.9 JTD
1st gear	3.909	3.909	3.909	3.545	3.800
2nd gear	2.238	2.238	2.238	2.238	2.235
3rd gear	1.520	1.520	1.520	1.520	1.360
4th gear	1.156	1.156	1.156	1.156	0.971
5th gear	0.919	0.971	0.971	0.946	0.763
Reverse	3.909	3.909	3.909	3.909	3.545

DIFFERENTIAL

	1.4 T.SPARK	1.6 T.SPARK	1.8 T.SPARK	♣	1.9 JTD
Differential final drive pair	3.866	3.562	3.562	3.562	3.176
Number of teeth	15/58	16/57	16/57	16/57	17/54

BRAKES

		1.4 T.SPARK	1.6 T.SPARK	1.8 T.SPARK	♣	1.9 JTD
Service brakes	front	Disk	Disk	Disk	Disk	Disk
	rear	Drum	Drum	Disk	Disk	Drum
		Servobrake. Electric control with pad wear indicator. Environment-friendly linings. For cars fitted with ABS system (optional for versions/markets where applicable) and electronic brake distributor (EBD)				
Handbrake		Controlled by hand lever operating rear brakes				

Water, ice and salt on the roads can deposit on the brake disks, reducing the braking action the first time they are used.

Take care when fitting additional spoilers, different alloy wheels and wheel caps; they may reduce ventilation of the brakes, thus their efficiency during violent and repeated barking conditions, or on long downhill slopes.

SUSPENSION

	1.4 T.SPARK	1.6 T.SPARK	1.8 T.SPARK	♣	1.9 JTD
Front	McPherson type to independent wheels, with lower wishbones, telescopic struts, helical springs and stabiliser bar				
Rear	to independent wheels, with tension arms, helical springs, shock absorbers separated from the springs and stabiliser bar				

STEERING

	1.4 T.SPARK	1.6 T.SPARK	1.8 T.SPARK	♣	1.9 JTD
Type	Rack and pinion Hydraulic power steering with liquid reservoir in engine compartment				
Turning radius (between pavements)	10.5 m	10.5 m	11 m	11 m	10.5 m

Do not push on the power steering stopper with the engine running for more than 15 seconds consecutively; this produces noise and may damage the system.

WHEEL GEOMETRY

	1.4 T.SPARK	1.6 T.SPARK	1.8 T.SPARK	♣	1.9 JTD
Front wheels – toe-in	−1 ± 1 mm (0 ± 1 mm)*		0 ± 1 mm		−1 ± 1 mm

The values refer to the vehicle in running order

(*) For sports version (for versions/markets where applicable).

TYRES (TUBELESS)

	1.4 T.SPARK	1.6 T.SPARK	1.8 T.SPARK	♣	1.9 JTD
Rim size (steel)	5½J x 14"	5½J x 14"	6J x 15"	–	5½J x 14"
(alloy)	5½J x 14" (6J x 15")*	5½J x 14" (6J x 15")*	6J x 15" (6J x 15")*	6J x 15"	5½J x 14" (6J x 15")*
Tyres	185/60 R14" 82H	185/60 R14" 82H	195/55 R15" 84V	–	185/60 R14" 82H
(for steel wheels)	PIRELLI P6000 MICHELIN MXV-3A FIRESTONE FH690 GOODYEAR NCT2	PIRELLI P6000 MICHELIN MXV-3A FIRESTONE FH690 GOODYEAR NCT2	PIRELLI P6000 GOODYEAR EAGLE NCT3 MICHELIN SXGT	–	PIRELLI P6000 MICHELIN MXV-3A FIRESTONE FH690 GOODYEAR NCT2
(for alloy wheels)	185/60 R14" 82H PIRELLI P6000 MICHELIN MXV-3A FIRESTONE FH690 GOODYEAR NCT2	185/60 R14" 82H PIRELLI P6000 MICHELIN MXV-3A FIRESTONE FH690 GOODYEAR NCT2	195/55 R15" 84V PIRELLI P6000 GOODYEAR EAGLE NCT3 MICHELIN SXGT	195/55 R15" 84V PIRELLI P6000 GOODYEAR EAGLE NCT3 MICHELIN SXGT	185/60 R14" 82H PIRELLI P6000 MICHELIN MXV-3A FIRESTONE FH690 GOODYEAR NCT2
	195/55 R15" 84V* PIRELLI P6000 MICHELIN SXGT GOODYEAR EAGLE NCT3	195/55 R15" 84V* PIRELLI P6000 MICHELIN SXGT GOODYEAR EAGLE NCT3	195/55 R15" 84V* PIRELLI P6000 GOODYEAR EAGLE NCT3 MICHELIN SXGT	– –	195/55 R15" 84V* PIRELLI P6000 MICHELIN SXGT GOODYEAR EAGLE NCT3
Tyre pressure cold in bar (kg/cm²)					
– reduced load (2 occupants)	Front 2,2 Rear 2	Front 2,2 Rear 2	Front 2,2 Rear 2	Front 2,3 Rear 2,1	Front 2,2 Rear 2
– full load	Front 2,5 Rear 2,5	Front 2,5 Rear 2,5	Front 2,5 Rear 2,5	Front 2,5 Rear 2,5	Front 2,5 Rear 2,5

(*) For sports version (for versions/markets where applicable).

	1.4 T.SPARK	1.6 T.SPARK	1.8 T.SPARK	♣	1.9 JTD
Spare wheel (compact type)					
Steel rim	4J x 15"	4J x 15"	4J x 15"	4J x 15"	4J x 15"
Alloy rim	4.00B x 15"	4.00B x 15"	4.00B x 15"	4.00B x 15"	4.00B x 15"
Tyre size	115/70 R15" 90M	115/70 R15" 90M	115/70 R15" 90M	115/70 R15" 90M	115/70 R15" 90M
Pressure in bar (kg/cm²)	4.2	4.2	4.2	4.2	4.2

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.

Warnings: Tyre pressure should be increased by 0.3 bars when driving at sustained high speed
Do not use inner tubes with tubeless tyres.

The specified dimensions remaining unchanged, for driving safety the car must be fitted with tyres of the same brand and type on all wheels.

ELECTRICAL SYSTEM

	1.4 T.SPARK	1.6 T.SPARK	1.8 T.SPARK	♣	1.9 JTD
Operating voltage	12 volt	12 volt	12 volt	12 volt	12 volt
Battery capacity	45 Ah ÷ 50 Ah (60 Ah)* (with climate control system)	45 Ah ÷ 50 Ah (60 Ah)* (with climate control system)	45 Ah ÷ 50 Ah (60 Ah)* (with climate control system)	45 Ah ÷ 50 Ah (with climate control system)	60 Ah
Alternator	14 V - 75 A ÷ 14 V - 85 A (with climate control system)	14 V - 75 A ÷ 14 V - 85 A (with climate control system)	14 V - 75 A ÷ 14 V - 85 A (with climate control system)	14 V - 75 A ÷ 14 V - 85 A (with climate control system)	14 V - 85 A ÷ 14 V - 100 A (with climate control system)

(*) For versions/markets where applicable

Alterations or repairs to the electric system carried out incorrectly and without taking account of the system specifications, may cause abnormal functioning with the risk of fire.

PERFORMANCE

	1.4 T.SPARK	1.6 T.SPARK	1.8 T.SPARK	✤	1.9 JTD
Maximum speed	185 km/h	195 km/h	207 km/h	211 km/h	185 km/h
Acceleration from 0-100 km/h	11.2 s	10.2 s	9.1 s	8.3 s	10.4 s
Kilometer from stationary	32.8 s	31.3 s	30 s	29.3 s	32.7 s

WEIGHTS

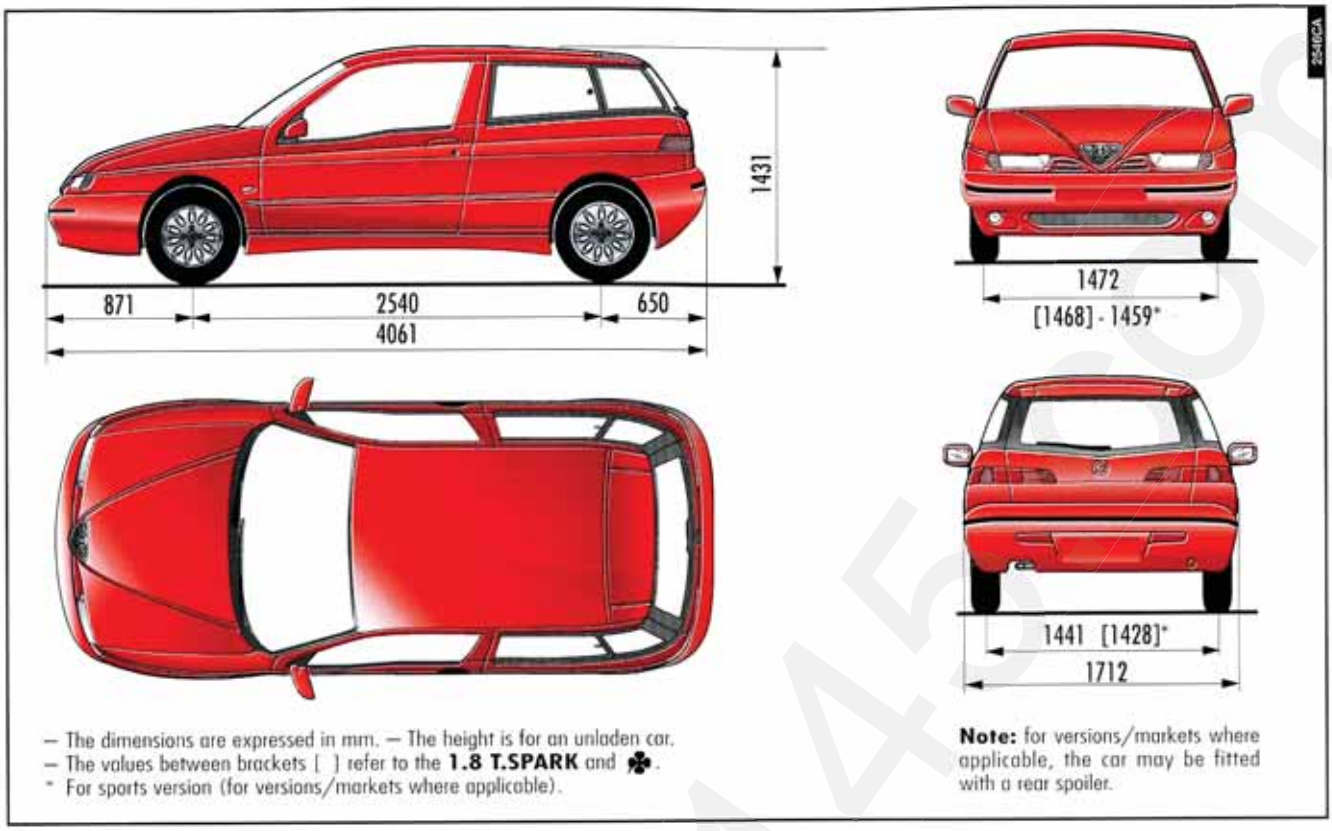
	1.4 T.SPARK	1.6 T.SPARK	1.8 T.SPARK	✤	1.9 JTD
Kerb weight	1135 kg	1165 kg	1195 kg	1240 kg	1210 kg
Max permitted weight (*)	1655 kg	1685 kg	1715 kg	1765 kg	1730 kg
Payload including driver (**)	520 kg	520 kg	520 kg	525 kg	520 kg
Towable weight	1100 kg	1200 kg	1200 kg	1200 kg	1300 kg
Towable weight Certified only for (CH)	800 kg	900 kg	900 kg	1200 kg	1300 kg

(*) Weight not to be exceeded: the driver must arrange the goods in the luggage compartment and/or load surface so that they comply with these limits.
(**) If special equipment is fitted (sunroof, tow hitch etc.) the unladen weight increases, thus reducing the payload as specified in the maximum weight allowed.

LUGGAGE COMPARTMENT

	1.4 T.SPARK	1.6 T.SPARK	1.8 T.SPARK	✤	1.9 JTD
Capacity (litres)					
with rear seat back raised	320	320	320	320	320
with rear seat back folded	1130	1130	1130	1130	1130

DIMENSIONS



– The dimensions are expressed in mm. – The height is for an unladen car.
– The values between brackets [ ] refer to the **1.8 T.SPARK** and ♣.
* For sports version (for versions/markets where applicable).

Note: for versions/markets where applicable, the car may be fitted with a rear spoiler.

fig. 4

SERVICING

	1.4 T.SPARK	1.6 T.SPARK	1.8 T.SPARK	♣	1.9 JTD
Type of fuel	Four star unleaded petrol with an octane number (R.O.N.) above 95				Fuel oil
Capacity of fuel tank	51 litres	51 litres	61 litres	61 litres	61 litres
Reserve of	5÷8 litres	5÷8 litres	5÷8 litres	5÷8 litres	5÷8 litres
Engine oil (quantity for periodical substitution)	4.4 litres	4.4 litres	4.4 litres	4.4 litres	4.2 litres
Gearbox/differential oil	2 litres	2 litres	2 litres	2 litres	2 litres
Capacity of engine cooling circuit	8.4 litres	8.4 litres	8.4 litres	8.3 litres	6.1 litres
Windscreen washer fluid reservoir capacity	2.5 litres	2.5 litres	2.5 litres	2.5 litres	2.5 litres

ENGINE OIL CONSUMPTION

Consumption depends on how the car is driven and on the conditions of use.

Oil consumption of up to one litre every 1,000 km is permissible.

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.

RECOMMENDED FLUIDS AND LUBRICANTS

	1.4 T.SPARK	1.6 T.SPARK	1.8 T.SPARK	♣	1.9 JTD
Engine	**20K** – SAE 10W40 ACEA A3-96, API SJ (*)				**TURBODIESEL** SAE 10W40 - (ACEA B3-96, API CD)
Gearbox/differential	**TUTELA ZC 75 SYNTH** – SAE 75W90, API GL 5				
Power steering	**TUTELA GI/A** (G.M. DEXRON II)				
Hydraulic brake and clutch fluid	**Alfa Romeo BRAKE FLUID SUPER DOT 4** (DOT 4, SAE J1703 F)				
Engine coolant fluid	**Alfa Romeo Climafluid Super Permanent –40 °C**				

(*) For sports type driving Alfa Romeo recommends Racing 10W60 entirely synthetic oil.

For use under particularly harsh weather conditions, Performer 5W30, ACEA A1, API SJ engine oil is recommended.

Warning: Do not top up with a different engine oil than the already existing one.

FUEL CONSUMPTION

CONSUMPTION ACCORDING TO EEC STANDARD 93/116 (litres x 100 km)

Fuel consumption values given in the tables were measured in accordance with the methodology described by the Directive 93/116/CE in force from January 1996.

This Directive prescribes realistic fuel consumption measurement procedures based on everyday conditions of vehicle use.

Fuel consumption measurement procedures consist in:

- an urban cycle which is started with a cold start and simulates driving in built-up areas;
- an extraurban cycle characterised by frequent acceleration in all gears corresponding to normal use of the vehicle in an extraurban context; the driving speed varies from 0 to 120 kph;
- average combined consumption is obtained by taking about 37% of the urban cycle and about 63% of the extra-urban cycle.

	1.4 T.SPARK	1.6 T.SPARK	1.8 T.SPARK	♣	1.9 JTD
Consumption on urban route	10.7	11.1	11.5	12.4	7.6
Consumption on extraurban route	6.3	6.5	6.6	6.6	4.7
Consumption on mixed route	7.9	8.2	8.4	8.7	5.7

Note: Fuel consumption is influenced by factors such as road, traffic, and weather conditions, driving style, overall vehicle conditions, trim, fittings and accessories, vehicle load, roof racks, and other conditions which can effect vehicle aerodynamics. Actual fuel consumption may vary from the values measured (see paragraph "Economy and environment-friendly driving").

CO_2 EMISSION AT THE EXHAUST (g/km)

	1.4 T.SPARK	1.6 T.SPARK	1.8 T.SPARK	♣	1.9 JTD
Max value	187	195	200	210	152

The CO_2 emission levels (g/km) are measured on a mean combined cycle.

ACCESSORY INSTALLATION

The accessories fitted to the **Alfa 145** *are not only specific, exclusive and personalized products specially created to blend in total harmony with the stylistic aspects of the vehicle and designed to fit comfortably into the overall setting but are useful and functional in any situation in which the* **Alfa 145** *finds itself.*

If you wish to give your **Alfa 145**, *more of a sporty feel, Alfa Romeo has produced alloy rims, steering wheel, knobs and seat coverings in leather which harmonize with the design of the car making it more personal and aggressive in keeping with the Alfa Romeo tradition.*

For your children's safety the seats proposed by the Lineaccessori Alfa Romeo meet the requirements of the severest European regulations at present in force.

All the Alfa Romeo accessories are described in a specific catalogue which can be obtained through the Alfa Romeo Authorized Services Network where our staff will be willing to show you the accessories in detail.

The following pages show the charts and instructions for the correct installation of some accessories. Installation must always be carried out by qualified personnel. Alfa Romeo has held specific Service Network personnel training courses for the **Alfa 145**.

RADIO SYSTEM

LAYOUT OF ELECTRIC PROVISION AND ADDITIONAL BRANCHES (fig. 1)

(Option for versions/markets where applicable)

1. Right front tweeter
2. Left front tweeter
3. Right front speaker
4. Left front speaker
5. Right rear speaker
6. Left rear speaker
7. Radio receiver set
8. Aerial
9. Fuse and relay box

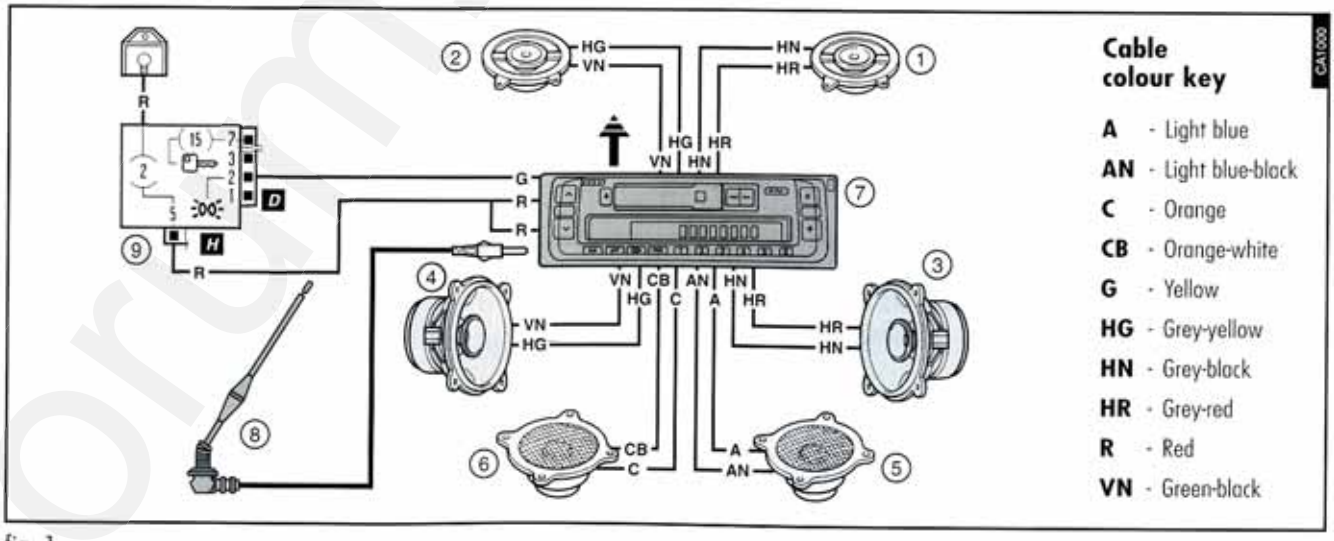


fig. 1

TRAILER TOWING DEVICE

INSTALLING TOW HOOK (fig. 2)

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.

The mechanical connection between the hook and trailer must be:

– "ISO 50" 2nd category ball hook (CUNA Table NC 138-40).

– 2nd category ball eyelet model "CUNA 502" (CUNA Table NC 438-40).

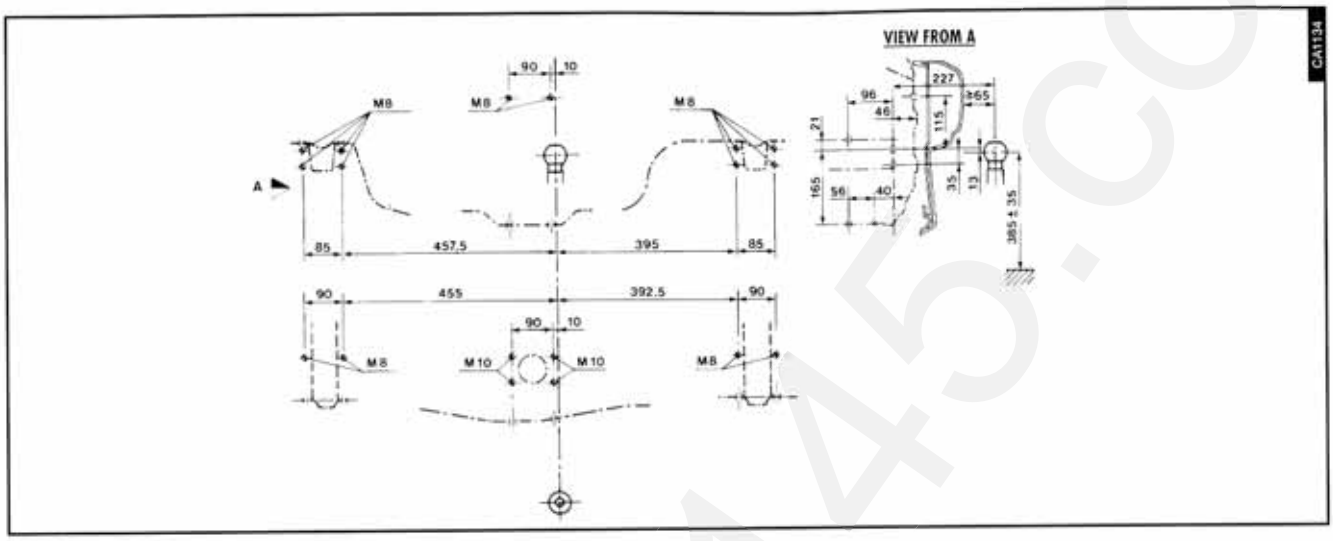


fig. 2

LAYOUT OF ELECTRIC BRANCHES (fig. 3)

The coupling for connecting the trailer electric cable connector should be fitted on the hook support arm, in the position considered most appropriate.

For the electrical connection, referred to in the following diagram, a 12 V 7-pole connector must be used (see CUNA UNI Table 9128).

1. Control box

2. Connection on control box for stop light supply

3. Connection on control box for trailer rear fog guard supply

4. Connection on control box for left rear side light

5. Connection on control box for right rear side light

6. Connection on control box for direction indicators

7. Earth point

8. Seven-pin socket

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 (illustrated in the diagram that follows), the vehicle's electrical system can only be connected to the supply cable for an electric brake and to the cable for in 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 mm^2.

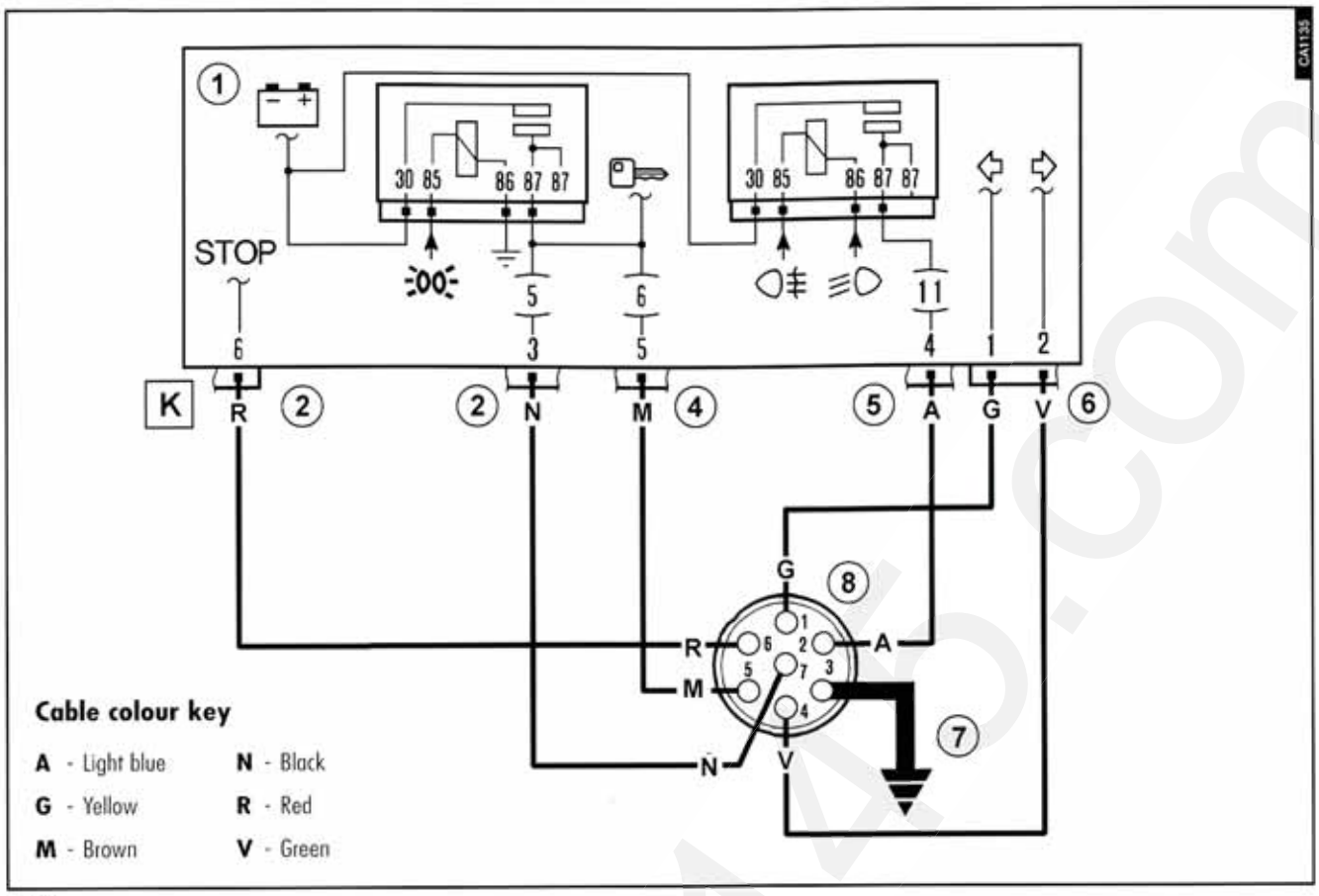


fig. 3

CELLULAR TELEPHONE SYSTEM

The aerial, speaker and vehicle supply connection cables are located in the front right-hand part of the centre tunnel and access to them is gained by removing the lid (**A-fig. 4**).

fig. 4

The cable connection layout is as follows:

N - dashboard earth on driver's side;

RG - fusebox (3 - 20A fuses);

G - lights positive (+);

AR - protected key positive (+) (8 - 15A fuses);

VN - double coil speaker;

VG - double coil speaker;

GN - radio mute serial.

The maximum power that can be applied to the aerial is 20W.

ROOF BAR ATTACHMENTS

The vehicle can be fitted with special roof bars.

These bars are specifically designed for your vehicle and should be fixed to the pins (**A-fig. 5**) located under the seal as shown in the diagram.

Check the attachment screws after driving a few kilometers to see that they are correctly tightened.

Legal restrictions should be observed regarding maximum loading on roof-racks.

The load should be evenly spread over the roof bars. Steering will be more responsive in the presence of a tailwind.

Take care not knock objects on the parcel shelf when opening the boot.

fig. 5

INDEX

The texts, 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 specifications and equipment on board may be altered without prior notice. Contact the factory sales network for detailed information.

RADIO FREQUENCY REMOTE CONTROL: MINISTERIAL HOMOLOGATIONS

International automobile code	Country	Homologation number
A	Austria	CEPT LPD F
B	Belgium	RTT/D/X1238 - RTT/D/X1180
CH	Switzerland	BAKOM 96.0331.K.P
D	Germany	G129383H - G127064H
E	Spain	E01960330
F	France	960186PPL0
GB	Great Britain	11698
GR	Greece	ΥΠΜΕ/ΔΤΕΕ/ΕΚ411
I	Italy	CEPT-LPD I DGPGF/SEGR/2/03/337910/F0/0001695/04/09/96
NL	Holland	NL96040272
P	Portugal	ICP-016TC-96

BUNDESAMT FÜR POST UND TELEKOMMUNIKATION

Federal Office For Posts And Telecommunications

BAUMUSTERPRÜFBESCHEINIGUNG
TYPE-EXAMINATION CERTIFICATE

Registriernummer : G129383H Anzahl der Anlagen: 2

Benannte Stelle : Bundesamt für Post und Telekommunikation

Bescheinigungsinhaber: TRW SIPEA S.p.A.
Via XXV Aprile, 46
I-10042 NICHELINO (TO)

Produktbezeichnung : 6.03185

Produktbeschreibung : Funkanlagen geringer Leistung für nichtöffentliche Funkanwendungen in den ISM-Frequenzbereichen

Produkthersteller : TRW SIPEA S.p.A.
Via XXV Aprile, 46
I-10042 NICHELINO (TO)

Vorschriften : BAPT 222 TV 125, Ausgabe Dezember 1994 auf Grundlage der angewandten technischen Vorschrift I-ETS 300 220, Ausgabe Oktober 1993

Prüfergebnis : Das geprüfte Baumuster erfüllt die Anforderungen der oben genannten Vorschriften.

Saarbrücken, den 05.12.1996

gezeichnet:
Heinz Krämer

BUNDESAMT FÜR ZULASSUNGEN IN DER TELEKOMMUNIKATION

Federal Approvals Office For Telecommunications Of The Federal Republic Of Germany

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Registriernummer : G127064H Anzahl der Anlagen: 2

Benannte Stelle : Bundesamt für Zulassungen in der Telekommunikation

Bescheinigungsinhaber: TRW Module Systems S.A.
Rue de la Falaise
F-95520 OSNY

Produktbezeichnung : RRH2/RF/3TX/2RX

Produktbeschreibung : Funkanlagen geringer Leistung

Produkthersteller : TRW Module Systems S.A.
Rue de la Falaise
F-95520 OSNY

Vorschriften : BAPT 222 TV 125, Ausgabe Dezember 1994 auf Grundlage der angewandten technischen Vorschrift I-ETS 300 220, Ausgabe Oktober 1993

Prüfergebnis : Das geprüfte Baumuster erfüllt die Anforderungen der oben genannten Vorschriften.

Saarbrücken, den 18.06.1996

gezeichnet:
Hans-Werner Bley

E	D.G. Tel.	01 96 0330

BZT G129 383H

AGRÉÉ DGPT Ministère chargé des Télécommunications

agr. 960186PPLO
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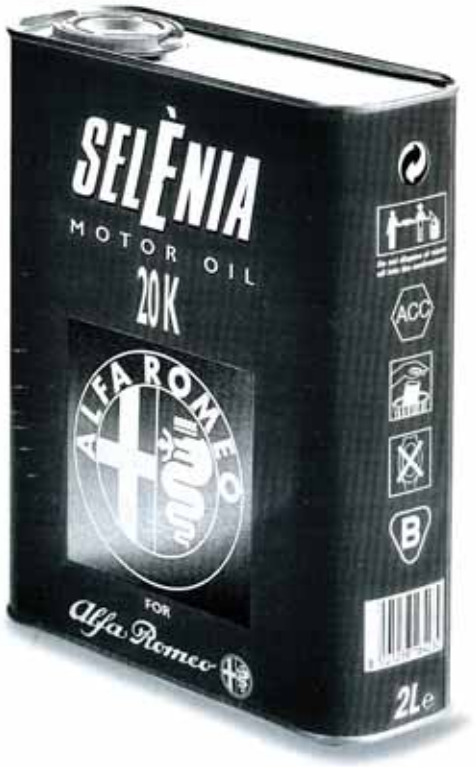

TYRE INFLATION PRESSURE COLD (bar)

		1.4 T.SPARK	1.6 T.SPARK	1.8 T.SPARK	♣	1.9 JTD
Tyre	Standard	185/60 R14" 82H	185/60 R14" 82H	195/55 R15" 84V	195/55 R15" 84V	185/60 R14" 82H
	Optional	195/55 R15" 84V*	195/55 R15" 84V*	–	–	195/55 R15" 84V*
– reduced load (2 persons)		Front 2.2 Rear 2	Front 2.2 Rear 2	Front 2.2 Rear 2	Front 2.3 Rear 2.1	Front 2.2 Rear 2
– full load		Front 2.5 Rear 2.5	Front 2.5 Rear 2.5	Front 2.5 Rear 2.5	Front 2.5 Rear 2.5	Front 2.5 Rear 2.5
Compact spare wheel		4.2	4.2	4.2	4.2	4.2

(*) For sports version (for versions/markets where applicable)

Warning: Tyre pressure should be increased by 0.3 bars when driving at sustained high speed.

The specified dimensions remaining unchanged, for driving safety the car must be fitted with tyres of the same brand and type on all wheels.

ENGINE OIL REPLACEMENT

	1.4 T.SPARK	1.6 T.SPARK	1.8 T.SPARK	♣	1.9 JTD
Quantity for periodical replacement	4.4 litres 3.9 kg	4.4 litres 3.9 kg	4.4 litres 3.9 kg	4.4 litres 3.9 kg	4.2 litres 3.75 kg

REFUELLING (litres)

	1.4 T.SPARK	1.6 T.SPARK	1.8 T.SPARK	♣	1.9 JTD
Fuel tank capacity	51	51	61	61	61
Reserve	5 ÷ 8	5 ÷ 8	5 ÷ 8	5 ÷ 8	5 ÷ 8

Only use unleaded petrol with over 95 R.O.N.

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