

**aprilia**

**ATLANTIC** 125/250/500 SPRINT




**aprilia** part# 8181011

**use+maintenance**book



## SAFETY WARNINGS

The symbols and warnings used throughout this manual have the following meanings:

 **Safety warning. This symbol attached to the vehicle or in the manual indicates a potential risk of personal injury. Non-compliance with the indications given in the messages preceded by this symbol may result in grave risks for your and other people's safety and for the vehicle!**

### WARNING

**Indicates a potential hazard which may result in serious injury or even death.**

### CAUTION

**Indicates a potential hazard which may result in minor personal injury or damage to the vehicle.**

**NOTE** The word "NOTE" in this manual identifies important information or instructions.

## TECHNICAL INFORMATION

★ The operations preceded by this symbol must be repeated on the opposite side of the vehicle.

Unless expressly indicated otherwise, reassembly is a reversal of the disassembly procedure.

The terms "right" and "left" are referred to the rider seated on the vehicle in the normal riding position.

## WARNINGS - PRECAUTIONS - GENERAL ADVICE

Before starting the engine, read this manual thoroughly paying special attention to section "SAFE RIDING".

Your and other people's safety largely depends on your reflexes and agility, but there are other key factors, such as your knowledge of the vehicle's operation and condition, as well as of the basic rules of "SAFE RIDING". Becoming thoroughly familiar with vehicle is essential to mastering safe riding techniques in traffic.

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**NOTE** This manual must be considered as an integral part of the vehicle and must always accompany it, also in the event the vehicle is resold.

**aprilia** has carried out this manual with the maximum attention, in order to supply the user with correct and updated information.

However, since **aprilia** constantly improves the design of its products, there may be slight discrepancies between the characteristics of your vehicle and those described in this manual. For any clarification concerning the information contained in this manual, do not hesitate to contact your **aprilia** Authorised dealer.

For control and repair operations not expressly described in this publication, for the purchase of **aprilia** genuine spare parts, accessories and other products, as well as for specific advice, contact exclusively **aprilia** Authorised Dealers and Service Centres, which guarantee prompt and accurate assistance.

Thank you for choosing **aprilia**. We wish you a nice ride.

All rights of electronic storage, reproduction and total or partial adaptation with any means reserved for all Countries.

**NOTE** Some countries have statutory emission and noise control regulations in place requiring that motor vehicles undergo periodical inspections.

Users in these countries must:

- contact an **aprilia** Authorised dealer to have the non-homologated components replaced with others homologated for use in the country in question;
- have their vehicles inspected at the required intervals.

**NOTE** Soon after purchasing the vehicle, write down the identification data indicated on the SPARE PARTS IDENTIFICATION LABEL in the table here below. The label is on the left tube of the frame; to read it, it is necessary to remove the left inspection cover, see page 57 (REMOVING THE RIGHT AND LEFT INSPECTION COVERS).

<b>aprilia</b>		YEAR		Y	1	2	3	4	
SPARE PARTS IDENTIFICATION		I.M.		A	B	C	D	E	
I	UK	A	P	SF	B	D	F	E	GR
NL	CH	DK	J	SGP	SLO	IL	ROK	MAL	RCH
HR	AUS	USA	BR	RSA	NZ	CDN			

These data indicate:

- YEAR = year of manufacture (Y, 1, 2, ...);
- I.M. = modification code (A, B, C, ...);
- COUNTRY CODES = homologation country (I, UK, A, ...).

and are to be supplied to the **aprilia** Authorised dealer as reference data for the purchase of spare parts or specific accessories of the model you have acquired.

Market versions are identified by the following symbols throughout the manual:

- 125** 125 cc version
- 250** 250 cc version
- 500** 500 cc version
- OPT** optional

### VERSION:

- I** Italy
- UK** United Kingdom
- A** Austria
- P** Portugal
- SF** Finland
- B** Belgium
- D** Germany
- F** France
- E** Spain
- GR** Greece
- NL** Holland
- CH** Switzerland
- DK** Denmark
- J** Japan
- SGP** Singapore
- SLO** Slovenia
- IL** Israel
- ROK** South Korea
- MAL** Malaysia
- RCH** Chile
- HR** Croatia
- AUS** Australia
- USA** United States of America
- BR** Brazil
- RSA** South Africa
- NZ** New Zealand
- CDN** Canada

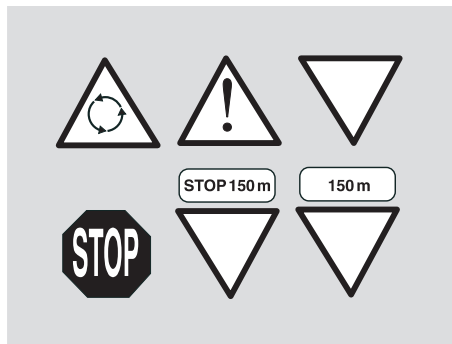
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# aprilia



safe riding



## BASIC SAFETY RULES

To drive the vehicle, you must satisfy certain legal requirements (driving licence, minimum age limit, psychophysical fitness, insurance, vehicle licence tax, vehicle registration, number plate, etc.).

Begin to familiarise yourself with the vehicle by riding in low traffic areas and/or private ground.

Certain prescribed medicines, alcohol, drugs and psychotropic substances will affect your riding, thereby increasing the risk of an accident.

Your riding is also affected by your physical and mental condition - do not ride if you are feeling ill, upset, tired or sleepy.

Most road accidents are caused by inexperienced riders.

**NEVER** lend your vehicle to a beginner and make sure any person borrowing your vehicle fills the legal requirements for driving.

Strictly observe all posted signs and national and local road regulations.

Avoid any sudden or risky manoeuvres that may endanger your and other people's safety (for example: wheelies, speeding, etc.), and adjust your riding style to road surface conditions, visibility, etc.

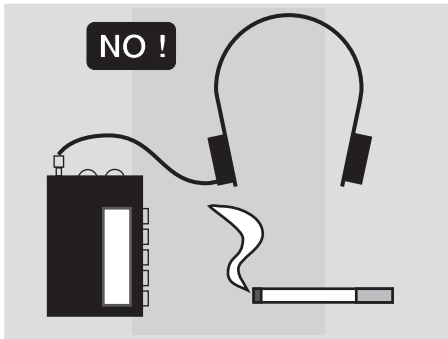
Avoid obstacles that could damage the vehicle or make you lose control of the vehicle.

Avoid riding in the slipstream of vehicles ahead in order to increase your speed.

### **⚠ WARNING**

**Always hold the handlebars with both hands and keep both feet on the footpegs (or on the rider's footboards), in the correct riding position.**

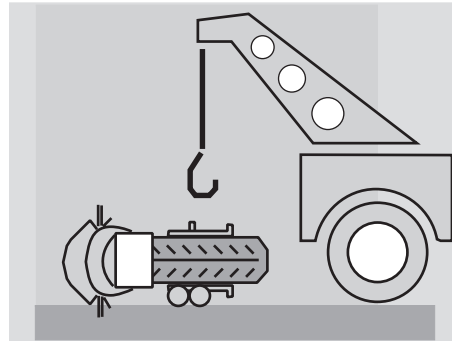
Do not stand up or stretch your limbs while riding.



Do not allow yourself to become distracted by other persons or by smoking, eating, drinking, reading etc. when riding.

Use only the specified fuels and lubricants indicated in the "LUBRICANT CHART" and check oil, fuel and coolant levels at regular intervals.

If the vehicle has been involved in an accident, check the control levers, pipes and hoses, wires, the braking system and key components for damage.

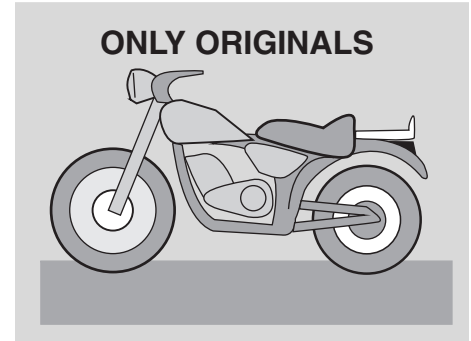


If necessary, have the vehicle inspected by an **aprilia** Authorised dealer who should carefully check the frame, handlebars, suspensions, safety parts and all the devices that you can not check by yourself. Remember to report any malfunction to the technicians and/or mechanics to facilitate their work.

Never use the vehicle when the amount of damage it has suffered makes it unsafe to ride.

Never change the position, inclination or colour of: number plate, direction indicators, lights and horns.

Any modification made to the vehicle will invalidate the warranty.



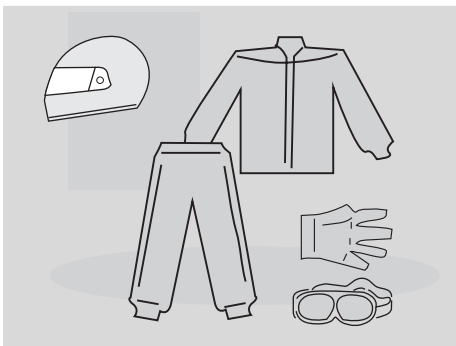
Making any modifications to the vehicle and/or removing the original components can adversely affect vehicle performance and safety or make it illegal to ride.

Observe applicable law and all national and local regulations concerning vehicle equipment.

In particular, avoid any modifications apt to enhance performance or alter the vehicle's original specifications.

Never race with other vehicles.

Do not ride off road.

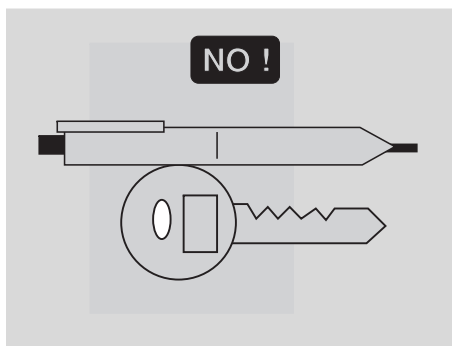


## CLOTHING

Always wear and fasten your helmet correctly before moving off. Make sure your helmet complies with applicable regulations, is not damaged, is the right size and keep the visor clean.

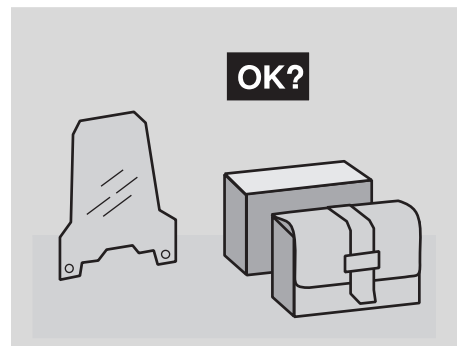
Wear protective clothing, preferably bright and/or reflective clothing. This will ensure you are easily seen by other road users and reduce the risk of an accident, besides affording improved protection in the event of a fall.

Wear tight-fitting clothing fastened at the wrists and ankles; make sure no strings, belts and ties are hanging loose; make sure no items of clothing or other objects can distract you or become entangled with moving parts or with the handlebars.



Do not ride with sharp or pointed objects in your pockets as they might cause injury in the event of a fall

(this includes keys, pens, glass vials, etc. - note that the same applies to your passenger).



## ACCESSORIES

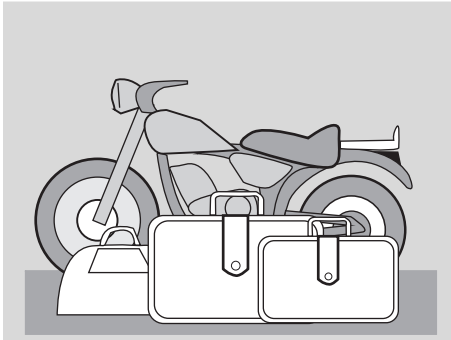
The owner of the vehicle is responsible for the choice, installation and use of any accessory.

Any accessories installed must not cover the horns or lights or impair their operation, restrict suspension travel and steering angle, impair the operation of any vehicle controls or affect ground clearance or bank angle in a bend.

Avoid using accessories that may hamper access to vehicle controls, as this can slow down your reaction in an emergency.

Large fairings and windshields may affect the vehicle's aerodynamics and make it unstable, especially at high speeds.





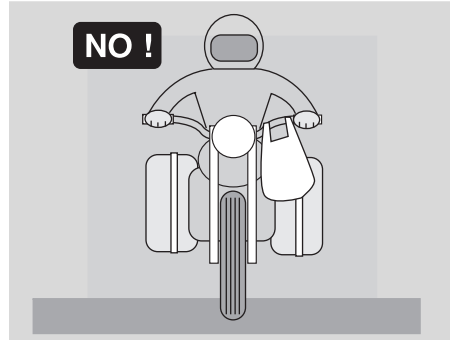
Make sure any accessories installed are fastened securely to the vehicle and will not affect safety during riding.

Do not install or modify any electric devices in such a manner as to exceed vehicle capacity, as this may lead to a power shortage or failure causing the engine to stop suddenly or rendering the horn and lights inoperative.

**aprilia** recommends the use of genuine accessories (**aprilia** genuine accessories).

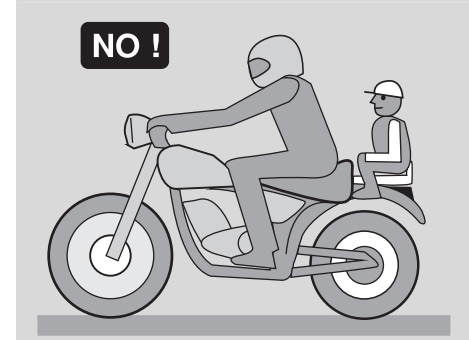
## **LOAD**

Be careful not to overload the vehicle with exceeding luggage. Place your luggage as close as possible to the centre of gravity of the vehicle and make sure its weight is evenly distributed across both sides of the vehicle to keep it stable. Make sure that the luggage is firmly secured to the vehicle, especially before long trips.



Avoid fixing bulky, heavy and/or dangerous objects to the handlebars, mudguards and forks - this could slow down the vehicle's response in turns and would inevitably affect handling.

Do not secure bulky bags to the vehicle sides, as they could hit people or obstacles when riding, resulting in loss of control.



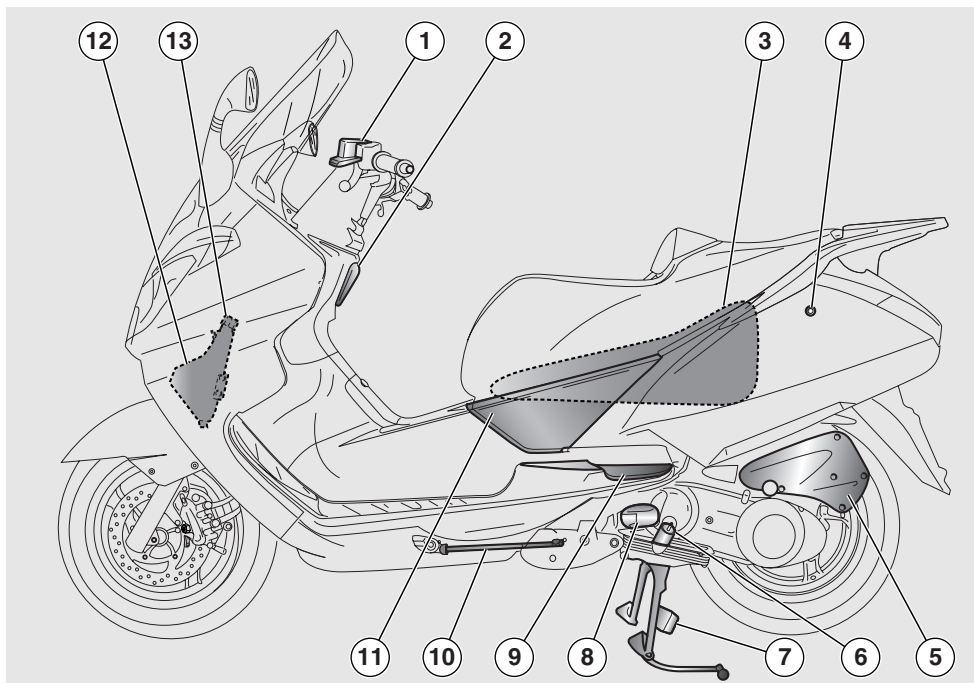
Do not carry any luggage unless firmly secured to the vehicle.

Do not carry any bags which protrude too much over luggage rack or cover the lights, horn or indicators.

Do not carry pets or children sitting on the glove compartment or on the luggage rack. Do not exceed the maximum load capacity of each luggage rack.

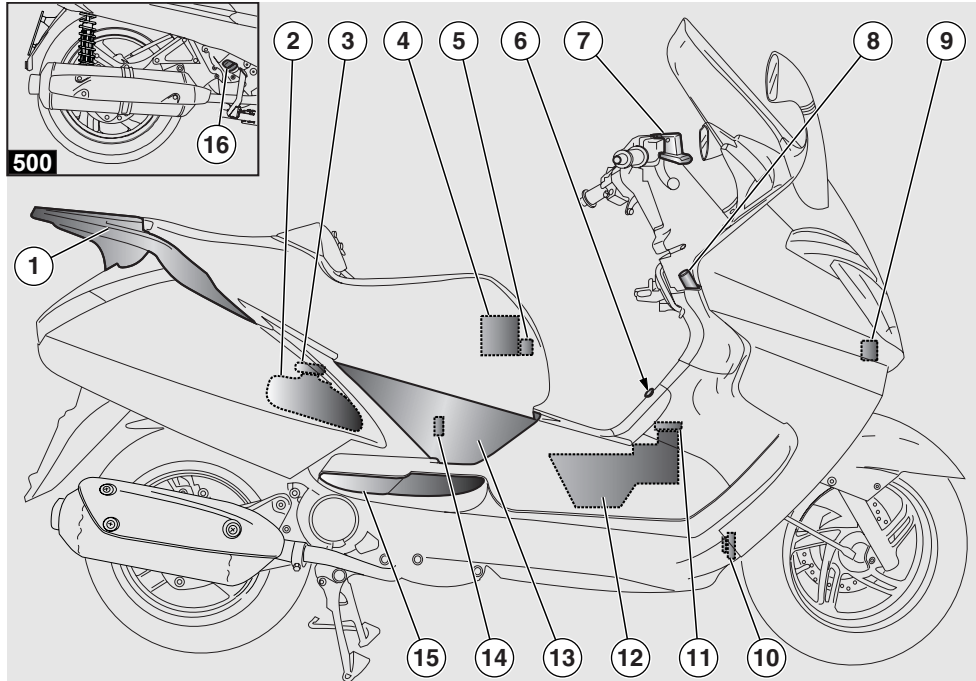
The overloaded vehicle will become unstable and handle poorly.

## ARRANGEMENT OF THE MAIN ELEMENTS



### KEY

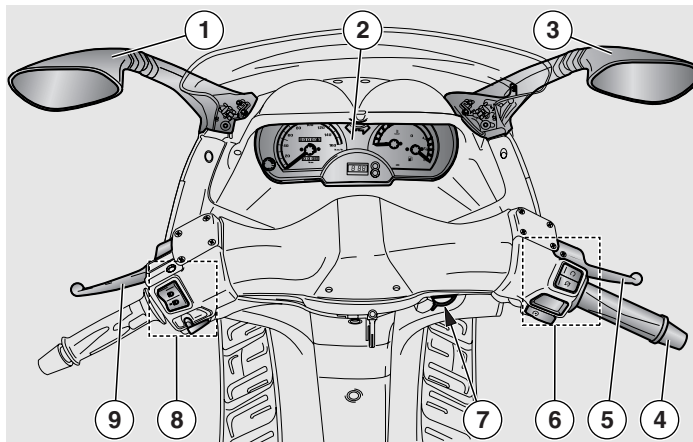
- |  |  |
|--|--|
| 1) Rear brake fluid reservoir                              | 8) Converter air scoop                     |
| 2) BAG HOOK  | 9) Left passenger footpeg                  |
| 3) Helmet compartment                                      | 10) Side stand                             |
| 4) Seat lock   | 11) Left inspection cover                  |
| 5) Air filter  | 12) Expansion tank <b>500</b>              |
| 6) Engine oil level / filler<br>plug <b>125</b> <b>250</b> | 13) Coolant expansion tank plug <b>500</b> |
| 7) Centre stand  |  |






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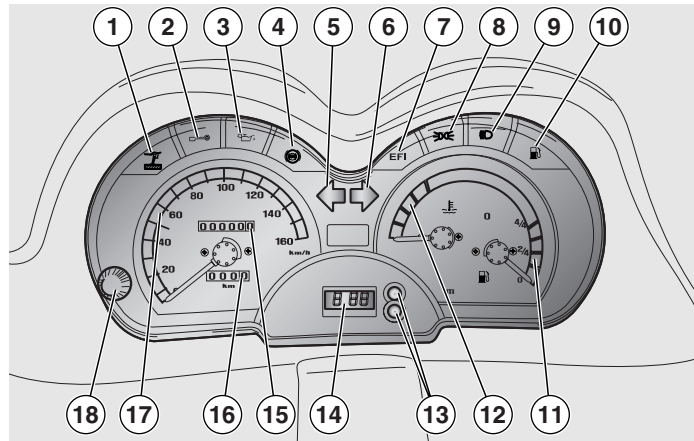
- |   |  |   |
|---|--|---|
| 1) Passenger grab handle                      | 8) Ignition switch/steering lock         | 15) Right passenger footpeg                   |
| 2) Expansion tank <b>125 250</b>              | 9) Auxiliary fuse carrier <b>125 250</b> | 16) Engine oil level / filler plug <b>500</b> |
| 3) Coolant expansion tank plug <b>125 250</b> | 10) Warning horn                         |   |
| 4) Battery                                    | 11) Fuel tank filler plug                |   |
| 5) Main fuse carrier                          | 12) Fuel tank                            |   |
| 6) Fuel filler cap flap                       | 13) Right inspection cover               |   |
| 7) Front brake fluid reservoir                | 14) Spark plug                           |   |

## LOCATION OF INSTRUMENTS/CONTROLS














### LOCATION OF INSTRUMENTS/CONTROLS - KEY

- |   |   |
|---|---|
| 1) Left rear-view mirror                                  | 7) Ignition switch/steering lock<br>(  -  -  ) |
| 2) Instruments and indicators                             | 8) Electrical controls on the left side of the handlebar  |
| 3) Right rear-view mirror                                 | 9) Combined brake lever (front and rear)  |
| 4) Throttle grip  |   |
| 5) Front brake lever                                      |   |
| 6) Electrical controls on the right side of the handlebar |   |



## INSTRUMENTS AND INDICATORS KEY



- |   |   |                           |
|---|---|---------------------------|
| 1) Amber "stand down" light (  )                                     | 7) Red "EFI" light  | 16) Trip meter            |
| 2) Red antitheft (IMMOBILIZER) light (  ) (only for preset vehicles) | 8) Green low beam light (  )           | 17) Speedometer           |
| 3) Red engine oil pressure warning light (  )                        | 9) Blue high beam warning light (  )   | 18) Trip meter reset knob |
| 4) Red ABS light (  ) (only if provisions are made for ABS)          | 10) Amber low fuel warning light (  )  |                           |
| 5) Green left direction indicator light (  )                         | 11) Fuel level indicator (  )          |                           |
| 6) Green right direction indicator light (  )                        | 12) Coolant temperature indicator (  ) |                           |
|   | 13) Digital clock function and setting push buttons   |                           |
|   | 14) Digital clock   |                           |
|   | 15) Total kilometres odometer   |                           |

## INSTRUMENTS AND INDICATORS TABLE

### ⚠ CAUTION

When the key is turned to ON “









Description	Function
<b>ABS (Anti-lock Braking System) light</b> (  )	Only for preset vehicles. Anti-lock braking system check-up. Comes on in the event of a malfunction.  <b>⚠ CAUTION</b> If the light comes on during normal engine operation, it means that the anti-locking system is not operating correctly. When this is the case, stop the engine immediately and contact an <b>aprilia</b> Authorised dealer.
<b>Antitheft device (immobilizer) light</b> (  )	Only for preset vehicles. Blinks when the engine is off as a deterrent to prevent theft. Indicates that the antitheft system is operating.
Engine oil pressure warning light (  )	Comes on when the ignition switch is set to "  " with the engine stopped as a led test. The warning light must go off when the engine is running.  <b>⚠ CAUTION</b> If the light stays on or comes on during normal operation, it means that oil pressure in the circuit is too low. Stop the engine immediately and contact an <b>aprilia</b> Authorised dealer.
<b>Side stand light</b> (  )	Comes on when the side stand is down.  <b>⚠ CAUTION</b> When the side stand is down, the warning light comes on and engine starting is inhibited.
<b>Electronic fuel injection check light</b> (EFI)	It comes on for about three seconds whenever the ignition switch is set to "  " with the engine stopped as a test of injection system operation. The warning light must go off when the engine is running.  <b>⚠ CAUTION</b> If the light comes on during normal engine operation, it means that the electronic fuel injection system is not operating correctly. When this is the case, stop the engine immediately and contact an <b>aprilia</b> Authorised dealer.
<b>Right direction indicator warning light</b> (  )	It blinks when the right direction indicator is on.
<b>Left direction indicator warning light</b> (  )	It blinks when the left direction indicator is on.
<b>Low beam light</b> (  )	Comes on when the low beam is on.
<b>High beam warning light</b> (  )	Comes on when the headlight high beam is on or when you flash the high beam (PASSING  ) .
<b>Fuel reserve light</b> (  )	It comes on when the quantity of fuel left in the tank is approx. 1,5 litres.

Description	Function
Fuel level indicator (  )	It indicates the approximate fuel level in the tank. When the pointer reaches the red area, the quantity of fuel left in the tank is about 1.5 litres. <b>When the light comes on, refuel as soon as possible, see page 23 (FUEL).</b>
Coolant temperature indicator (  )	It indicates the approximate temperature of the coolant in the engine. When the pointer starts moving beyond level "MIN", the temperature is sufficient for driving the vehicle. If the pointer reaches the red area or the light comes on, stop the engine and check the coolant level, see page 27 (COOLANT).  <b>⚠ CAUTION Exceeding the maximum coolant temperature allowed (red "max." area) may lead to severe engine damage.</b>
Digital clock	Hour and date display, see page 19 (DIGITAL CLOCK/DATE DISPLAY).
Total kilometres odometer	It indicates the total number of kilometres covered.
Trip meter	Gives distance covered since the trip meter was last reset using the reset knob.
Speedometer	Indicates road speed.

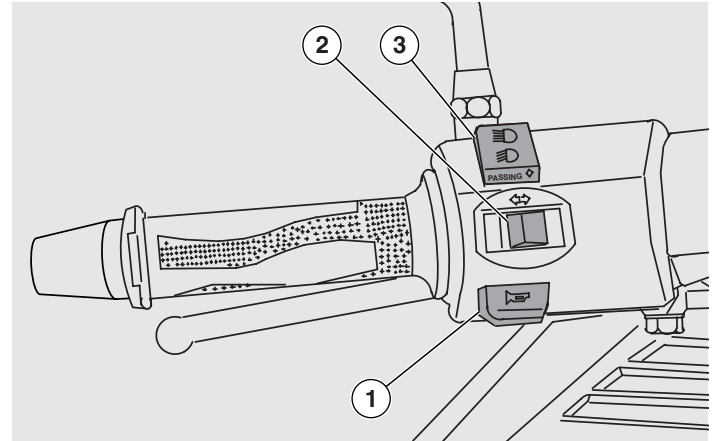
## MAIN INDEPENDENT CONTROLS

### CONTROLS ON LEFT HANDLEBAR

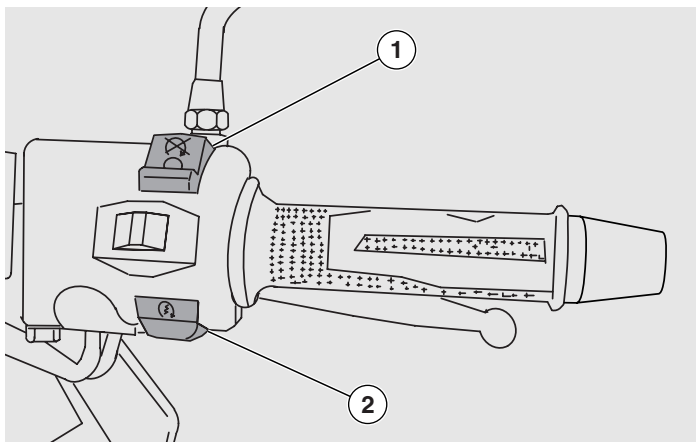
**NOTE** The electric components only operate when the ignition switch is in the “ $\odot$ ” position.

- 1) **HORN BUTTON** (  )  
Press this button to operate the horn.
- 2) **TURN INDICATION SWITCH** (  )  
To indicate the turn to the left, move the switch to the left; to indicate the turn to the right, move the switch to the right. Press the switch to cancel the signal.
- 3) **DIMMER SWITCH** (  -  ) / **HIGH BEAM FLASHER PUSH-BUTTON (PASSING**  )  
If the dimmer switch is in position “”, the low beam comes on, while if it is in position “”, the high beam comes on. The high beam flasher is operated by pressing the dimmer switch to position (PASSING  ).

**NOTE** Release the dimmer switch to turn off the high beam.







## CONTROLS ON RIGHT HANDLEBAR

**NOTE** The electric components only operate when the ignition switch is in the “○” position.

### 1) Engine stop switch (○-⊗)

## ⚠ WARNING

**Do not operate the engine stop switch “○ - ⊗” while riding.**

This switch serves as a safety or emergency switch. With the switch pressed in position “○”, it is possible to start the engine; the engine can be stopped by pressing the switch to position “⊗”.

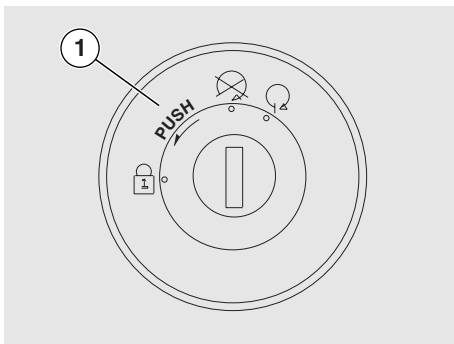
## ⚠ CAUTION

**With the engine stopped and the ignition switch in position “○”, the battery may run flat.**

**When the vehicle has come to a standstill and you have stopped the engine, set the ignition switch to position “⊗”.**

### 2) STARTER BUTTON (⚡)

When the starter button “⚡” is pressed, the starter motor will crank the engine. For the starting procedure, see page 32 (STARTING).



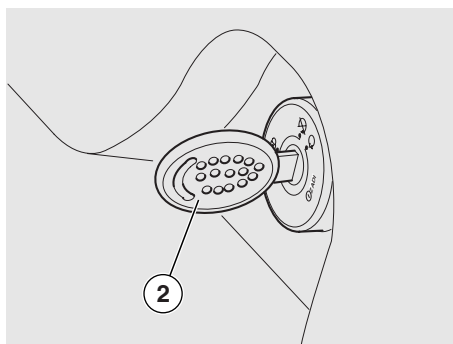
### IGNITION SWITCH

The ignition switch (1) is positioned on the right side of the steering head.

**NOTE** The key (2) operates the ignition switch / steering lock, the seat lock, the glove compartment flap and the fuel filler plug flap.

Two keys are supplied together with the vehicle (one spare key).

**NOTE** Store the spare key in a safe place (other than the vehicle).



### STEERING LOCK




#### ⚠ WARNING

**Never turn the key to position " 🔒 " when riding, or you will lose control of the vehicle.**

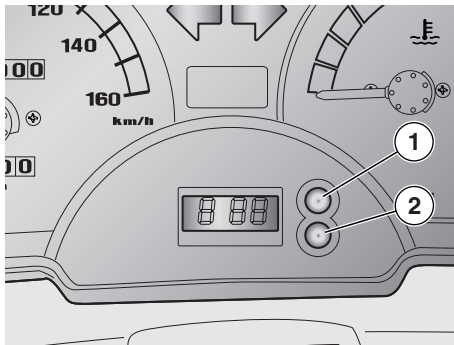
#### OPERATION

To lock the steering:

- ◆ Turn the handlebar fully to the left.
- ◆ Push in the key (2) and turn it to position " 🔒 ".

Position	Function	Key removal
 Steering lock	The steering is locked. It is not possible to start the engine or switch on the lights.	It is possible to remove the key.
	Neither the engine, nor the lights will operate.	It is possible to remove the key.
	The engine and the lights can be operated.	It is not possible to remove the key.

## AUXILIARY EQUIPMENT



### DIGITAL CLOCK/DATE DISPLAY

#### Setting the date display:

- ◆ Normal display: hours and minutes.
- ◆ Date display: press the push button (1) once to display month and day.
- ◆ Second display: press the push button (1) twice to display the seconds.

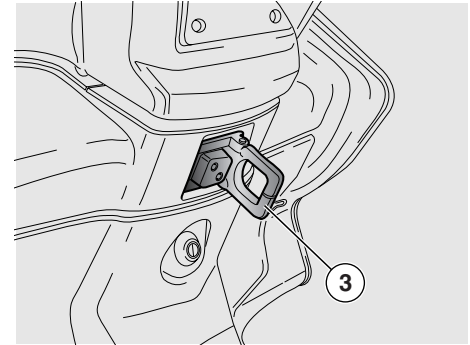
**NOTE** To replace the clock battery, contact an **aprilia** Authorised Dealer.

#### Setting:

- ◆ Press the push button (2) once: date and time will be displayed alternately.
- ◆ Month: press the push button (2) again and the month will be displayed on the left (the rest disappears). Press the push button (1) to set the desired month.
- ◆ Day: press the push button (2) again and the day will be displayed on the right. Press the push button (1) to set the desired day.
- Hour: press the push button (2) again and the time will be displayed on the left with letter "A" or "P" (A = AM, P = PM). Press the push button (1) to set the desired time.
- ◆ Minutes: press the push button (2) again and the minutes will be displayed on the right. Press the push button (1) to set the desired minutes.

Now the clock is set.

Press the push button (2) and then the push button (1), again to return to normal operation.



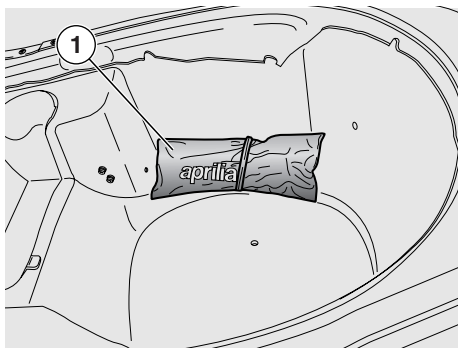
### BAG HOOK

#### ⚠ WARNING

**Do not hang excessively bulky bags or parcels to the hook, as this may seriously compromise the manoeuvrability of the vehicle or the movement of your feet.**

The bag hook (3) is positioned on the front part of the inner shield.

**Maximum allowed weight: 1.5 kg**



The tool kit **500** includes:

- double-ended crosshead/flat-blade screwdriver;
- handle for screwdriver;
- 8 mm combination wrench;
- 16x70 mm socket wrench with hexagon;
- 13 mm combination wrench;
- pin wrench with square pin;
- tool case.

## TOOL KIT

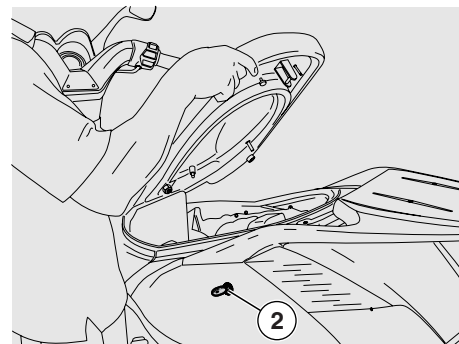
The tool kit (1) is fixed inside the helmet/glove compartment under the seat.

To reach the crash helmet case, proceed as follows:

Release the seat, see page 20 (UNLOCKING/LOCKING THE SEAT).

The tool kit **125** **250** includes:

- 6x128 Phillips/hexagon screwdriver with handgrip;
- 2.5 mm Allen wrench;
- 16x140 spark plug socket with 8.5 4-hole gasket;
- 8 mm combination wrench;
- 8x120 mm rod.

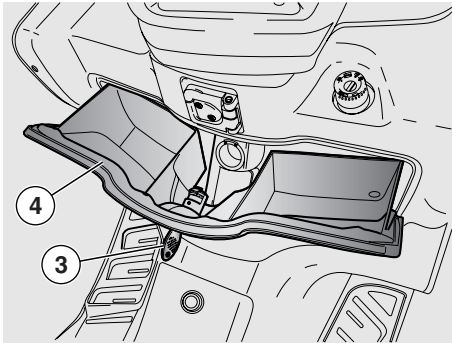


## UNLOCKING/LOCKING THE SEAT

- ◆ Insert the key (2) into the seat lock.
- ◆ Press and turn the key counter clockwise.
- ◆ To lock the seat, lower and press it (without exerting too much pressure), thus making the lock snap shut.

### **⚠ WARNING**

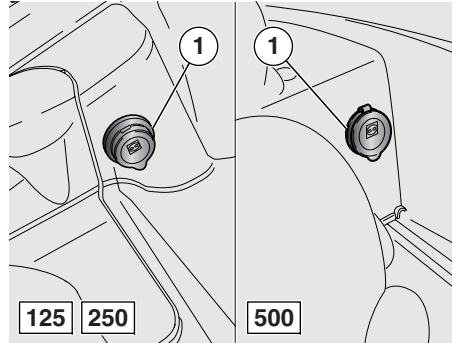
**Before leaving, make sure that the seat is properly locked.**



### GLOVE/TOOL KIT COMPARTMENT

The glove compartment can accommodate bulky objects when you leave your bike unattended.

- ◆ Insert the key (3) in the lock.
- ◆ Press and turn the key counter clockwise.
- ◆ Open the compartment flap (4).

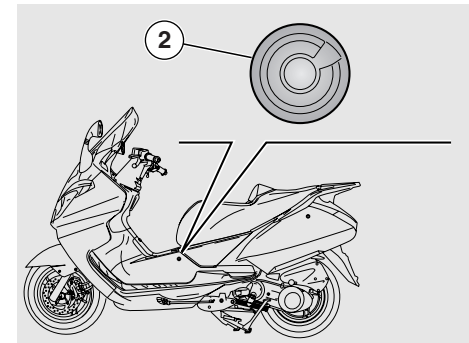


### POWER OUTLET

- ◆ A 12V power socket (1) is fitted inside the helmet compartment.
- ◆ It can be used to recharge small appliances rated up to 180 W (mobile phone, inspection lamp, etc.).

### ⚠ CAUTION

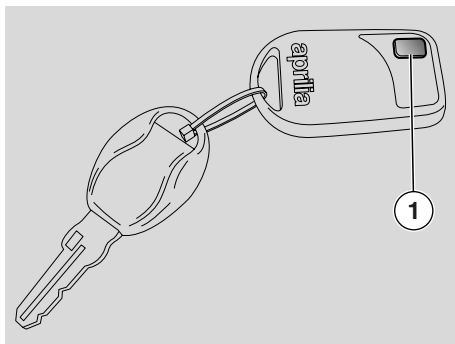
**Prolonged use of the power socket with the engine stopped may compromise the battery charge.**



### PRESETTING THE INTERPHONE KIT

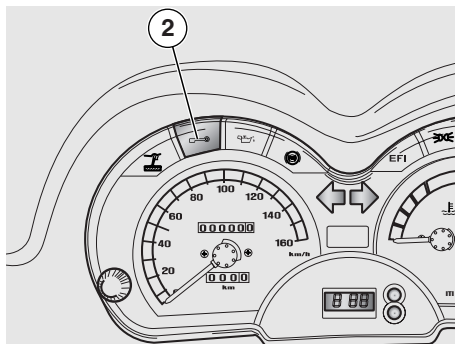
Only for preset vehicles.

- ◆ Inside the front shield is a power socket for the interphone system control unit.
  - ◆ On the (right and left) sides of the central tunnel are two standard jacks (2) for the interphone/microphone headsets.
- Have the system installed by an **aprilia** Authorised Dealer.



### **ANTITHEFT ALARM SYSTEM 500**

The vehicle is fitted with a siren alarm system. It can be armed or disarmed using push-button (1) on the remote control. When arming it, you will hear two short beeps and all the direction indicators will flash twice to confirm alarm is now armed. When disabling it, you will hear one short beep and all the direction indicators will flash once to confirm alarm is now disarmed.



Once it is armed, the alarm light (2) on the instrument panel will flash, the motion sensors and the under-seat compartment sensors will activate after 30 seconds.

After 50 seconds from vehicle switch-off, or from alarm disable, the system automatically disables engine ignition, in order to ensure a minimum safety level in case you forget to enable the alarm system manually. In this case, the siren connected to the motion and under-seat compartment sensors is not active, but the vehicle can not be started.

### **⚠ CAUTION**

**Please refer to the manual supplied together with the vehicle for further details on alarm system operation and settings.**

## MAIN COMPONENTS

### FUEL

#### **⚠ WARNING**

The fuel used in internal combustion engines is highly flammable and can become explosive under particular conditions. It is important to refuel and service the vehicle in a well-ventilated area, with the engine off. Do not smoke while refuelling or near fuel vapours, in any case avoid contact with naked flames, sparks and any other heat source or source of ignition to prevent fires or explosion. Avoid spilling fuel, as it may ignite when in contact with hot engine parts. In the event of accidental spillage, make sure that the area has completely dried before starting the engine. Never fill the tank to the rim, as fuel expands from heat and when left under direct sunlight. Tighten the filler plug securely after refuelling. Avoid contact with skin, do not inhale fuel vapours; do not swallow fuel or transfer it between different receptacles using a hose.



**DO NOT RELEASE FUEL IN THE ENVIRONMENT.**

**KEEP AWAY FROM CHILDREN.**

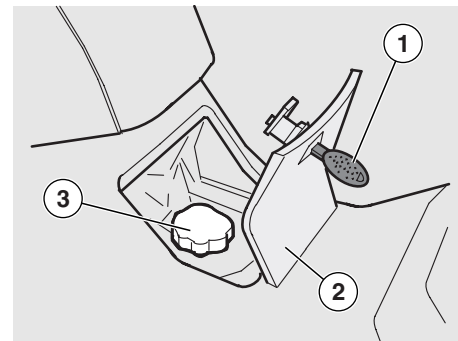
Use only premium grade unleaded petrol with 91 RON and 81 MON octane rating minimum.

FUEL TANK CAPACITY (reserve included):

- 9.5 ℓ **125** **250**
- 14.5 ℓ **500**

FUEL RESERVE:

- 1.5 ℓ



To reach the filler plug, proceed as follows:

- ◆ Insert the key (1) into the lock (2) of the filler cap flap, which is positioned between the footrest platforms.
- ◆ Turn the key clockwise, pull and open the flap.
- ◆ Unscrew the filler plug (3).

## LUBRICANTS

### ⚠ WARNING

Prolonged or repeated contact with oil may cause severe skin damage.

Wash your hands carefully after handling engine oil.

Wear latex gloves during servicing.

KEEP AWAY FROM CHILDREN.

DO NOT DISPOSE OF OIL IN THE ENVIRONMENT

### ⚠ CAUTION

Proceed with care.

Do not spill the oil!

Take care not to smear any component, the area in which you are working and the surrounding area.

Carefully remove any trace of oil.

In case of oil leakage or malfunctions, contact an **aprilia** Authorised dealer.



### Transmission fluid

For instructions on transmission oil check and change, see page 40 (SCHEDULED MAINTENANCE CHART).

To check the fluid level and to change the fluid, contact an **aprilia** Authorised Dealer.

## ENGINE OIL

Periodically check the engine oil level, see page 48 (CHECKING AND TOPPING UP ENGINE OIL LEVEL).

**NOTE** Use oil with specifications 5/W - 40, see page 79 (LUBRICANT CHART).

### ⚠ CAUTION

When topping up the engine oil, never exceed the "MAX" level.

For instructions on engine oil check and change, see page 40 (SCHEDULED MAINTENANCE CHART).

Have engine oil changed at an **aprilia** Authorised dealer.





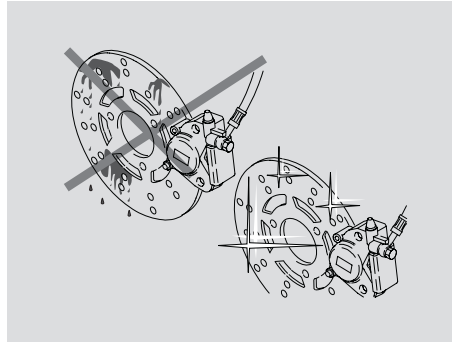
## **BRAKE FLUID - recommendations**

**NOTE** This vehicle is fitted with front and rear disk brakes. Each braking system is operated by an independent hydraulic circuit.

The following information applies to both braking systems.

### **⚠ WARNING**

Sudden changes in brake lever play or a spongy feel of the lever may indicate problems with the hydraulic system. If in doubt about the braking efficiency of your bike or if you are not able to perform routine checks, contact an **aprilia** Authorised dealer.



### **⚠ WARNING**

Pay special attention to the brake disc and friction material, making sure that they are neither dirty nor oily, especially after maintenance operations or inspections.

Make sure the brake hose is not twisted or worn.

**KEEP AWAY FROM CHILDREN.**

**DO NOT RELEASE INTO THE ENVIRONMENT.**



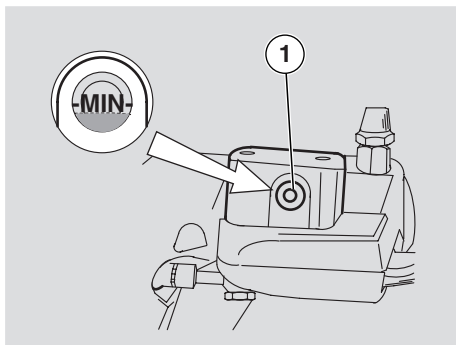
## **DISC BRAKES**

### **⚠ WARNING**

The brakes are critical to your safety and must always be kept in sleek running order. Check the brakes before each ride.

A dirty disk will soil the pads, leading to loss of braking efficiency. Dirty pads must be replaced, while dirty discs must be cleaned with a high-quality degreaser.

Have brake fluid changed at an **aprilia** Authorised dealer every two years.



**NOTE** This vehicle is equipped with front and rear disc brakes operated by independent hydraulic circuits.

The following information applies to both braking systems.

Brake fluid level decreases gradually as the brake pads wear down.

The brake reservoirs are positioned on the handlebar, near the brake lever couplings.

Periodically check the brake fluid level in the reservoirs, see on the side (CHECK) and the wear of the pads, see page 53 (CHECKING THE BRAKE PADS FOR WEAR).

### **⚠ WARNING**

**Do not use the vehicle if the braking system is leaking fluid.**

### **CHECK**

To check the brake fluid level, proceed as follows:

**NOTE** Position the vehicle on firm and flat ground.

- ◆ Position the vehicle on the centre stand.
- ◆ Rotate the handlebar, so that the fluid contained in the brake reservoir is parallel to the "MIN" mark stamped on the glass gauge (1).
- ◆ Make sure that the fluid contained in the reservoir exceeds the "MIN" mark stamped on the glass gauge (1).

**MIN** = minimum level.

### **⚠ CAUTION**

**Do not use the vehicle if the fluid is below the "MIN" mark.**

### **⚠ CAUTION**

**Brake fluid level decreases as the brake pads wear down.**

Should the level be too low:

- ◆ Check the brake discs and pads for wear, see page 53 (CHECKING THE BRAKE PADS FOR WEAR).

If the pads and/or the disc do not need replacing:

- ◆ Contact an **aprilia** Authorised Dealer, who will provide for topping up.

### **⚠ WARNING**

**Check the brake for proper operation. When the brake lever has exceeded travel or if you notice a loss of braking, contact an **aprilia** Authorised dealer. The braking system may need bleeding.**

## COOLANT

### ⚠ CAUTION

**Do not ride when coolant is below the minimum level MIN.**

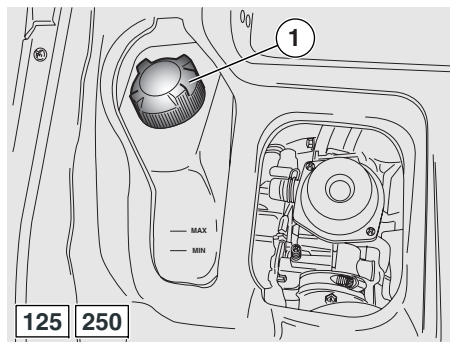
Periodically check the coolant level and after long trips; have the coolant changed by an **aprilia** Authorised Dealer every 2 years.

### ⚠ WARNING

**Coolant is toxic when ingested. Contact with eyes or skin may cause irritation. In the event of contact with eyes or skin, rinse repeatedly with abundant water and seek medical advice. In the event of ingestion, induce vomiting, rinse mouth and throat with abundant water and seek medical advice immediately. DO NOT RELEASE INTO THE ENVIRONMENT.**

**KEEP AWAY FROM CHILDREN.**

**Take care not to spill coolant onto hot engine parts. It may ignite and produce invisible flames. Wear latex gloves during servicing. Have the coolant changed at an **aprilia** Authorised Dealer.**



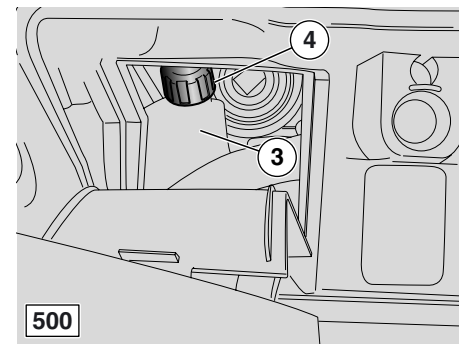
Coolant mixture is a 50% solution of water and antifreeze.

This is the ideal solution for most operating temperatures and provides good corrosion protection.

This solution is also suited to the warm season, as the mixture is less prone to evaporative loss and will reduce the need for top-ups.

In addition, less water evaporation means fewer mineral salts depositing in the radiator, which helps preserve the efficiency of the cooling system.

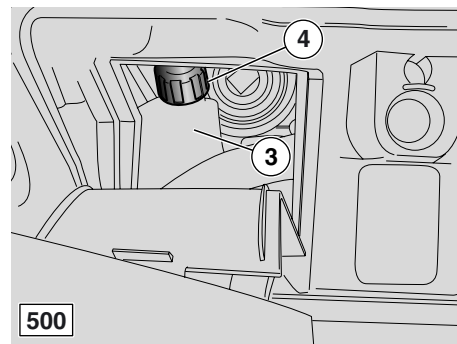
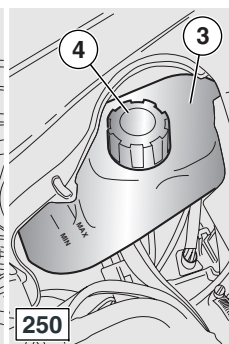
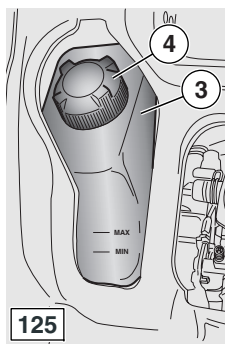
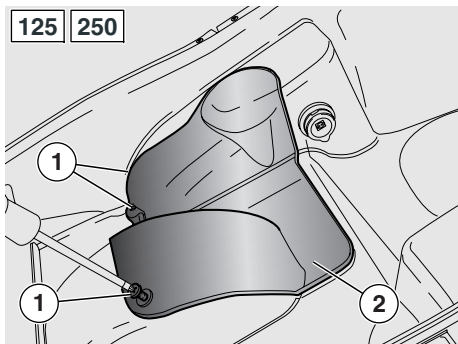
When temperature drops below zero degrees centigrade, check the cooling system frequently and add more antifreeze (up to 60% maximum) to the solution.



Use distilled water in the coolant mixture. Tap water will damage the engine.

### ⚠ WARNING

**Do not remove the expansion tank plug (1) when the engine is hot, since coolant is very hot and under pressure. Contact with skin or clothes, may cause severe scalding and/or damage.**



## CHECKING AND TOPPING UP

### ⚠ WARNING

Wait for the engine to cool down before checking or topping up coolant level.

- ◆ Stop the engine and wait until it has cooled down.

**NOTE** Position the vehicle on firm and flat ground.

- ◆ **125** **250** Open the helmet compartment under the seat.
- ◆ **125** **250** Unscrew the two screws (1) and remove inspection cover (2).
- ◆ **500** Open the glove compartment and release the stop rods moderately pressing down.
- ◆ **500** Remove the left inspection cover prising the top tab open.

- ◆ Make sure that the level of the fluid contained in the expansion tank (3) is included between the "MIN" and "MAX" marks.

**MIN** = minimum level.  
**MAX** = maximum level

If not so:

- ◆ Loosen the filler plug (4) (by turning it anticlockwise), without removing it.
- ◆ Wait a few seconds in order to release any residual pressure.
- ◆ Unscrew and remove the cap (4).

### ⚠ WARNING

**Coolant is toxic when ingested. Contact with eyes or skin may cause irritation. Do not put your fingers or any other object into the filler opening in order to ensure that there is coolant.**

### ⚠ CAUTION

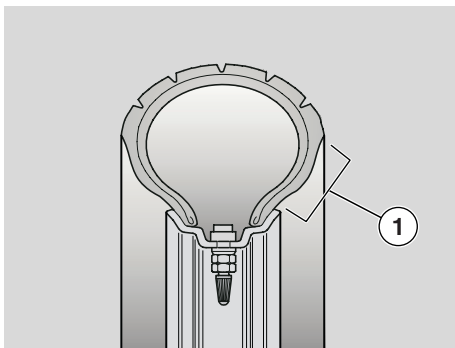
**Never top up beyond the "MAX" level mark or coolant will leak out when the engine is running.**

- ◆ Top up with coolant, see page 79 (LUBRICANT CHART) up to just below the "MAX" mark.
- ◆ Refit the filler plug (4).

### ⚠ CAUTION

**If coolant level drops too quickly or the tank is empty, check the cooling circuit for leaks. Have the repair carried out at an aprilia Authorised dealer.**

- ◆ Refit the inspection cover, ensure it is correctly secured.



## TYRES

This vehicle is equipped with tubeless tyres.

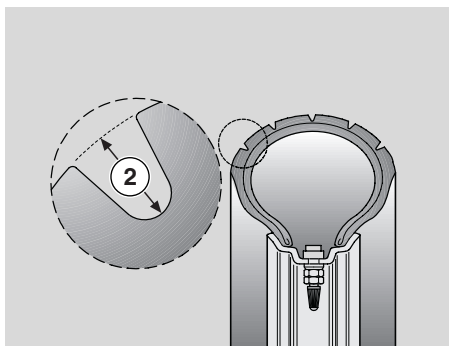
### **⚠ WARNING**

Periodically check the tyre inflation pressure at room temperature, see page 75 (TECHNICAL DATA).

Measuring pressure on hot tyres will lead to inaccurate measurement.

It is especially important to measure tyre pressure before and after a long trip.

Over-inflated tyres will not absorb bumps when riding on rough road surfaces and resulting vibration is transferred through the handlebar, giving a harsh ride and reducing tyre grip especially during cornering.



Conversely, under-inflation will put more stress on the sidewalls (1) and the tyre may slip on the rim or even come off the rim, leading to loss of control.

The tyres could come off the rims under harsh braking.

Finally, the vehicle could skid during cornering.

Inspect tyre surface condition and check for wear, as worn tyres lead to poor road holding and handling.

Some of the tyres approved for this vehicle are equipped with wear indicators.

There are several kinds of wear indicators.

For more information on how to check the tyres for wear, contact your Dealer.

Visually inspect the tyres for wear and have them changed if worn.

Old tyres, even if not completely worn down, may become hard and provide poor grip.

If so, have them replaced.

Have a tyre changed when worn or punctured, if the puncture in the tread is larger than 5 mm.

Have the wheels balanced after each tyre repair.

Use only tyres in the size suggested by **aprilia**, see page 75 (TECHNICAL DATA).

Do not install tube tyres on tubeless tyre rims or vice versa.

Always check that the caps are in place on the valves, or the tyres may deflate suddenly.

Tyre replacement and repair, as well as wheel servicing and balancing are delicate operations. They should be carried out using adequate tools and are best left to experienced mechanics. Have your tyres and wheels serviced at an **aprilia** Authorised dealer or a specialised tyre repairer. New tyres may be coated with an oily film: ride carefully until covering several kilometres. Do not oil the tyres with unsuitable fluids.

## MINIMUM RECOMMENDED TREAD DEPTH (2)

Front: ..... 1.5 mm (  3 mm)

Rear: ..... 1.5 mm (  3 mm)

### **WARNING**

**Never exceed the maximum load allowed. Overloading the vehicle will impair stability and handling and may damage the tyres.**

  **MAXIMUM load 210 Kg.**

 **MAXIMUM load 200 Kg.**

### **TYRE PRESSURE**

	FRONT	REAR
SOLO	2,0	2,2
FULL LOAD (passenger + rider)	2,2	2,4

After extensive testing, **aprilia** approved the tyres listed below for this model. Use these tyres only:

	MAKE	SIZE	TYPE
FRONT	BRIDGESTONE	110/90-13" 56P	HOOP
REAR	BRIDGESTONE	130/70-13" 63P REINF	HOOP
FRONT	SAVA	110/90-13" 56P	MC28DIAMONDS
REAR	SAVA	130/70-13" 63P REINF	MC28DIAMONDS

### **Tyre pressure**

	FRONT	REAR
SOLO	2,3	2,4
FULL LOAD (passenger + rider)	2,3	2,6

After extensive testing, **aprilia** approved the tyres listed below for this model. Use these tyres only:

	MAKE	SIZE	TYPE
FRONT	MICHELIN	120/70-14" 55S	GOLD STANDARD
REAR	MICHELIN	140/60-14" 64S	GOLD STANDARD

## **EXHAUST MUFFLER/EXHAUST SILENCER**

### **WARNING**

**Tampering with the noise control system is prohibited.**

Owners are warned that the law may forbid:

- The removal or disconnection of any device or element of design incorporated into any new vehicle to limit the noise emissions before its sale or delivery to the final purchaser or while it is in use except if carried out for maintenance, repair or replacement purposes; and
- The use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

Check the exhaust muffler/silencer and the silencer pipes, making sure that they show no traces of rust or holes and that the exhaust system is operating properly.

If the exhaust system noise increases, contact an **aprilia** Authorised dealer immediately.

## INSTRUCTIONS FOR USE


### WARNING

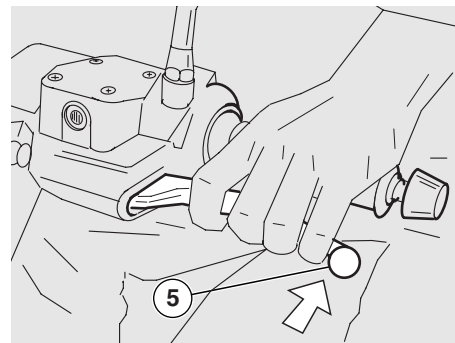
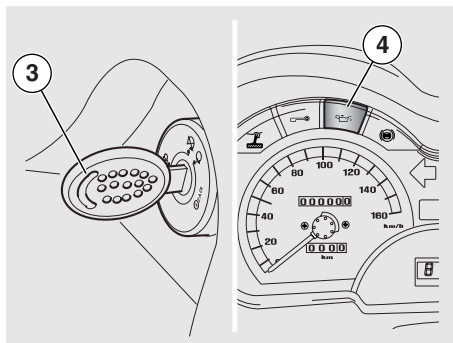
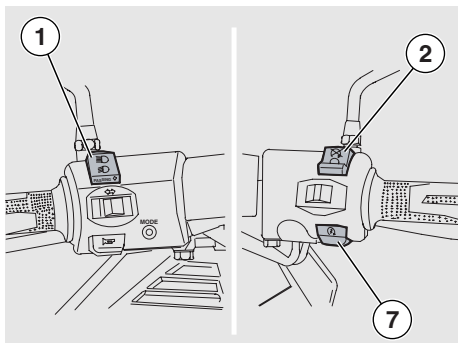
Check the vehicle before each ride to ensure safe riding. (See the PRE-RIDE CHECKS CHART on the side). Failure to perform these checks may lead to severe personal injury or vehicle damage.

If you have any doubts on the operation of the vehicle controls or believe that any vehicle components might be faulty, do not hesitate to contact an **aprilia** Authorised dealer.

A quick pre-ride check takes just a few minutes and greatly improves your safety.

### PRE-RIDE CHECKS CHART

Part	Check	page
Front and rear disc brakes	Check for proper operation, check lever free play, fluid level and check for leaks. Check the pads for wear. Top up brake fluid, if necessary.	25 53
Brake levers	Make sure that they work smoothly. If necessary, lubricate the joints.	-
Throttle	Check for smooth operation; throttle should snap fully open and closed at all positions of the steering. Adjust and/or lubricate as required.	60
Engine oil	Check and/or top up as required.	24
Wheels / tyres	Check tyre surface, inflation pressure. Check for wear or damage.	29
Steering	Steering should rotate smoothly and evenly. There should be no play or looseness.	56
Side stand and centre stand	Make sure that they work smoothly and that the spring tension brings them back to their normal position. Lubricate joints and connections, if necessary.	54
Fastening elements	Make sure that the fastening elements are not loose. Adjust or tighten as required.	-
Fuel tank	Check fuel level and top up, if necessary. Make sure there are no leaks or obstacles in the circuit. Make sure the filler plug is tightened securely.	23 72
Coolant	Coolant level in the expansion tank must be between the "MIN" and "MAX" marks.	27 28
Engine stop switch (  )	Make sure that it operates correctly.	18
Lights, warning lights, horn and electrical devices	Check the proper operation of the acoustic and visual devices. Change the bulbs or repair if faulty.	62 68



## STARTING

### ⚠ WARNING

Exhaust gases contain carbon monoxide, which is extremely toxic if inhaled. Do not start the engine in an enclosed space or poorly ventilated area.

Failure to observe this warning may lead to loss of consciousness or even death by asphyxia.

Do not get on the vehicle for starting it. Do not start the engine with the vehicle positioned on the side stand.

- ◆ To start the vehicle, position it on the centre stand.
- ◆ Make sure that the dimmer switch (1) is in position "☞".
- ◆ Set the engine kill switch (2) to "○" (this only applies to some market versions).

- ◆ Turn the key (3) and set the ignition switch to position "○".

### ⚠ CAUTION

The following happens:

- the engine oil pressure light "⚡" (4) on the instrument panel should come on. The light should go out as soon as you start the engine.

If the light does not come on or fails to go out after three seconds, contact an **aprilia** Authorised Dealer.

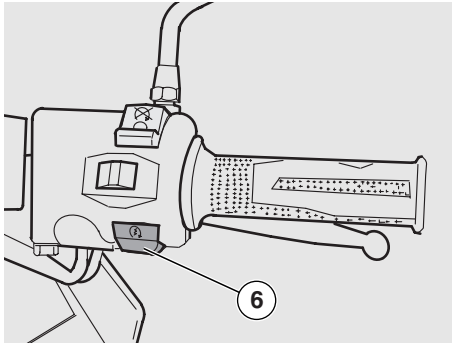
- ◆ Lock at least one wheel, by pulling a brake lever (5). If this operation is not carried out, the start relay receives no current and therefore the engine does not start.

**NOTE** After a long period of inactivity, carry out the operations described at page 33 (STARTING AFTER A LONG PERIOD OF INACTIVITY).

**NOTE** To avoid the excessive wear of the battery, do not keep the starter pushbutton "ⓘ" pressed for more than five seconds (ten after a long period of inactivity). If the engine does not start within fifteen seconds, wait ten seconds before operating the starter button "ⓘ" again.

- ◆ **500** Ensure that the alarm is disabled and engine starting is enabled.

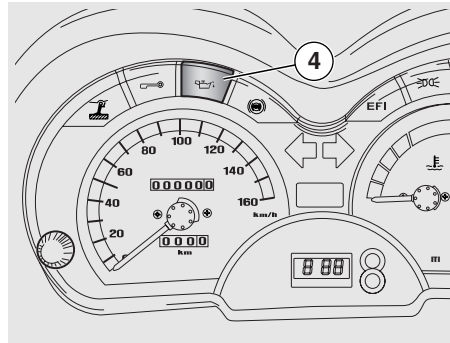




### ⚠ CAUTION

**Avoid pressing the starter button "ⓘ" (6) when the engine is running, or the starter motor may damage.**

- ◆ Press the starter button "ⓘ" (6) without accelerating and release it as soon as the engine starts.



### ⚠ CAUTION

**As soon as the engine has started, the engine oil pressure warning light "Ⓜ" (4) must go out. If the light stays on or comes on during normal operation, it means that oil pressure in the circuit is too low. Stop the engine immediately and contact an **aprilia** Authorised dealer. Do not use the vehicle with insufficient engine oil, in order to avoid damaging the engine components.**

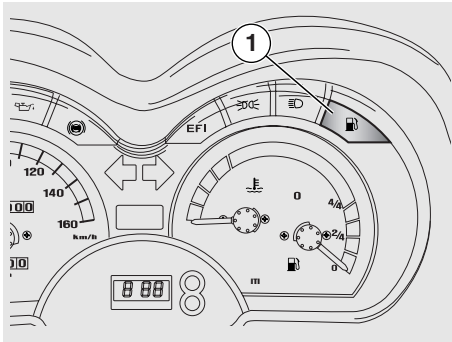
- ◆ Keep at least one brake operated and do not accelerate until you are ready to move off.

### DIFFICULT STARTING

The fuel system manages starting according to engine temperature, ambient temperature and pressure.

### STARTING AFTER A LONG PERIOD OF INACTIVITY

After a long period of inactivity, if the start is not immediate, this may be due to the fact that the fuel circuit is partially empty.

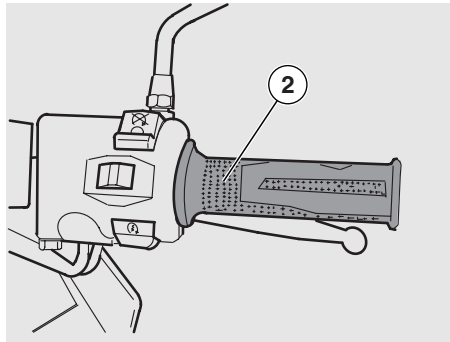


## MOVING OFF AND RIDING

**NOTE** Before moving off, carefully read section "Safe Riding", see page 5 (SAFE RIDING).

### ⚠ CAUTION

If the low fuel warning light "⛽" (1) positioned on the dashboard comes on while the vehicle is running, this means that the electric reserve is operating and there are still 1.5 ℓ of fuel available. Refuel as soon as possible, see page 23 (FUEL).



### ⚠ WARNING

While riding, keep your hands on the handlebar and your feet on the footpegs.

**NEVER RIDE IN ANY POSITION OTHER THAN THE RECOMMENDED RIDING POSITION.**

If you are riding with a passenger, give your passenger proper instructions to avoid problems when manoeuvring.

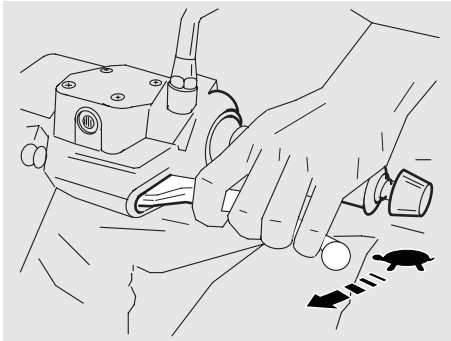
Before leaving, make sure that the stand/stands is/are completely up.

To move off:

- ◆ Release the throttle grip (2) (**Pos. A**), engage the rear brake, then move the vehicle down the stand.
- ◆ Get on the vehicle, keeping at least one foot on the ground in order not to lose balance.
- ◆ Adjust the rear-view mirrors.

### ⚠ WARNING

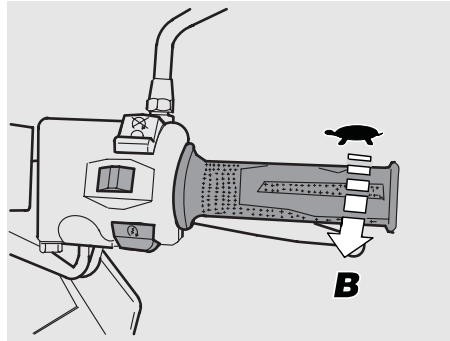
With the vehicle stopped, try to familiarise with the use of the mirrors. Convex mirrors provide a larger view, but any objects seen in these mirrors seem farther than they really are. It may take some time to learn to judge the distance of traffic behind accurately.



- ◆ Release the brake lever and accelerate by rotating the throttle grip moderately; the vehicle will start moving.

### **⚠ CAUTION**

Never move off abruptly with a cold engine. To reduce emissions and fuel consumption, ride slowly until covering several miles to warm the engine up to operating temperature.

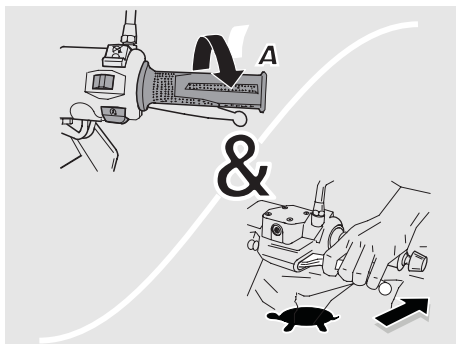


### **⚠ WARNING**

Do not open and close the throttle repeatedly and continuously, or you may lose control of the vehicle. When you need to brake, close the throttle and use both brakes for smooth braking; take care to apply the right amount of pressure to both brakes. Using one brake only gives less braking power and you could lock a wheel and lose grip. To stop uphill, decelerate completely and use the brakes to keep the vehicle at standstill. Do not use engine braking or the clutch may overheat.

### **⚠ WARNING**

When approaching a turn, slow down or brake and take the turn at moderate, constant speed or accelerate slightly; braking in a turn will greatly increase your chances of skidding. Continued application of the brakes on long downhill grades may cause the brakes to overheat, thereby reducing braking efficiency. Shift down to use engine braking and apply both brakes intermittently. Never ride downhill with the engine off! If the road surface is wet or slippery (snow, ice, mud, etc.), ride slowly, do not brake or swerve suddenly, or you may lose grip and fall. Watch out for obstacles or sudden changes in the road surface. Uneven roads, rails, manhole covers, indications painted on the road surface, building site metal plates become rather slippery by rain. For this reason all these obstacles have to be carefully avoided, driving smoothly and bending the vehicle as little as possible.



### **⚠ WARNING**

Signal your intention to change lane or turn in good time using the direction indicators and avoid sudden swerving or movements.

Switch off the direction indicators as soon as you have finished turning. Be extremely careful when overtaking or being overtaken.

When riding in the rain, the spray thrown up by the tyres of large vehicles will reduce your vision; the air wave created by a large vehicle may make you lose control of the vehicle.

## **RUNNING-IN**

### **⚠ WARNING**

After the first 1000 km (625 mi), carry out the checking operations indicated in the column "After running-in" of the **REGULAR SERVICE INTERVALS CHART**, see 40-43, in order to avoid hurting yourself or other people and/or damaging the vehicle.

Correct engine running-in is essential to ensuring proper performance and durability. Twisty, hilly roads are ideal for an effective running-in of engine, suspension and brakes.

**NOTE** Only after the first 1000 km (625 mi) of running-in it is possible to obtain the best speed and acceleration performance from the vehicle.

Follow these recommendations:

- ◆ Do not open the throttle completely if the speed is low, both during and after the running-in.
- ◆ **0-100 km (0-62 mi)**  
Until you have covered the first 100 km (62 mi), use the brakes gently and avoid harsh, prolonged braking. This will help the brake pads bed in properly against the brake discs.
- ◆ **0-500 km (0-312 mi)**  
During the first 500 km (312 mi), do not exceed the 80% of the maximum allowed speed.

- ◆ Avoid driving at constant speed for long distances.
- ◆ After the first 1000 km (625 mi), progressively increase the speed until reaching the highest performance levels.

## STOPPING

### ⚠ WARNING

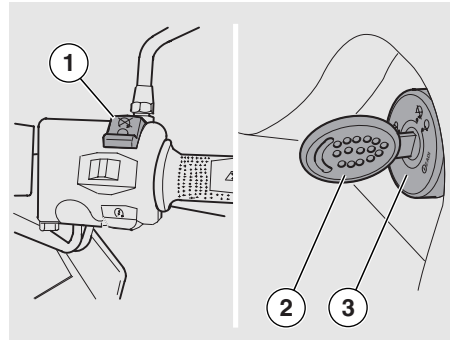
If you can, do not stop or slow down suddenly and avoid limit-braking.

- ◆ Release the throttle grip (pos. A) and gradually put on the brakes to stop the vehicle.
- ◆ If you need to stop only briefly, keep at least one brake applied.

### ⚠ WARNING

Park the vehicle on firm and level ground, to prevent it from falling. Do not lean the vehicle against a wall, or lay it on the ground. Make sure that the vehicle, and in particular hot vehicle components, may not put the safety of persons and children at risk. Do not leave the vehicle unattended with the engine running or the key in the ignition switch. Do not sit on the vehicle when the stand is down.

- ◆ Stop the vehicle, see above (STOPPING).



- ◆ Set the engine stop switch (1) to position "ⓘ".

### ⚠ CAUTION

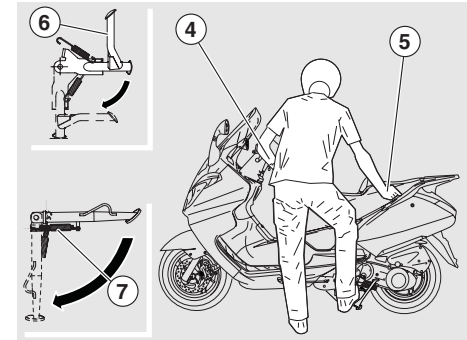
With the engine stopped and the ignition switch in position "⊖", the battery may run flat.

- ◆ Turn the key (2) and set the ignition switch (3) to position "⊖".
- ◆ Place the vehicle on the stand, see on the side (PLACING THE VEHICLE ON THE STAND).

### ⚠ CAUTION

Never leave the key in the ignition switch.

- ◆ Lock the steering, see page 18 (STEERING LOCK) and remove the key.



## PUTTING THE VEHICLE ON THE STAND

Carefully read page 37 (STOPPING).

### CENTRE STAND

- ◆ Grasp the left grip (4) and the passenger grab rail (5).
- ◆ Push down the stand lever (6).

### Side stand

- ◆ Grasp the left grip (4) and the passenger grab rail (5).
- ◆ Push on the side stand with your right foot and lower it completely (7).
- ◆ Lean the vehicle to the side until the stand is resting on the ground.
- ◆ Turn the handlebar fully to the left.

### ⚠ WARNING

Make sure that the vehicle is stable.

## SUGGESTIONS TO PREVENT THEFT

### CAUTION

**Do not use any "brake lock" devices. Failure to heed this warning can seriously damage the braking system and lead to an accident thus provoking serious injuries or death.**

NEVER leave the key in the ignition switch and always use the steering lock.

Park the vehicle in a safe place, possibly in a garage or at a guarded parking place.

If possible, use the appropriate **aprilia** "Body-Guard" shielded cable **OPT**, or an additional antitheft device.

Make sure you have all the necessary documents with you and that the road tax has been paid.

Write your personal data and telephone number in this page to help trace the vehicle back to you in the event it is stolen and subsequently recovered.

SURNAME:.....

NAME: .....

ADDRESS: .....

.....

TELEPHONE NO.: .....

**NOTE** Recovered vehicles are often traced back to the owner thanks to his/her details recorded in the Owner's Manual.

### **⚠ WARNING**

**Risk of fire.**

**Keep fuel and other flammable substances away from electric components.**

**Before beginning any maintenance operation or any inspection of the vehicle, stop the engine, extract the key from the ignition block, wait until the engine and the exhaust system have cooled down and if possible lift the vehicle by means of the proper equipment, on firm and flat ground.**

**Before proceeding, make sure that the room in which you are working is properly ventilated.**

**Keep away from the red-hot parts of the engine and of the exhaust system, in order to avoid burns.**

**Do not put any vehicle parts into your mouth: vehicle components are not edible and some of them are harmful or even toxic.**



### **⚠ CAUTION**

**Unless expressly indicated otherwise, reassembly is a reversal of the disassembly procedure.**

**Wear latex gloves during servicing.**

Normally, the owner can take care of routine maintenance. However, some maintenance operations require specific tools and are best left to experienced mechanics.

If you need assistance or technical advice, contact your **aprilia** Authorised dealer, for guaranteed accurate, prompt service.

We recommend having the vehicle road-tested at the **aprilia** Authorised dealer after repair or servicing.

In addition, perform the "Pre-ride checks" after each maintenance operation, see page 31 (PRE-RIDE CHECKS CHART).

## SCHEDULED MAINTENANCE CHART <sup>125</sup>

Suitable maintenance ensures optimum operating conditions and performance and it is essential for vehicle long life.

This is why **aprilia** has made a list of checks and service operations to be performed against payment, which are summarised in the table on next page. It would be recommended to promptly report any failure to an **aprilia** Authorised Dealer so that it can be immediately repaired, rather than waiting until the following scheduled service inspection.

It is very important to have the service inspections performed at recommended time intervals even though set mileage has not been reached. Timely service inspections are necessary for a correct use of the warranty. Please see the "Warranty booklet" for any other detail on Warranty application and on "Scheduled Maintenance".

<b>Operations to be carried out by the aprilia Authorised Dealer (which can be carried out even by the user).</b>
<b>After running-in 1000 km (625 mi)</b>
<b>Check, clean, adjust, lubricate and change, if necessary</b>
Rear shock absorbers - check
Battery / terminals - check
Spark plug - check
Carburettor - idling - adjustment
Accelerator operation - check
Brake operation - check
Coolant - check
Engine oil - change
Tire/inflating pressure - every month
Battery terminals tightening - check

Front suspension - check
Brake pads wear - check
<b>Every 6000 km (3750 mi) or 8 months</b>
<b>Check, clean, adjust, lubricate and change, if necessary</b>
Rear shock absorbers - check
Battery / terminals - check
Spark plug - check
Air filter - cleaning
Accelerator operation - check
Brake operation - check
Converter grease - change
Brake light switch - check
Coolant - every 1000 km (625 mi) - check
Coolant - change every 16 months
Engine oil - every 1000 km (625 mi) - check
Engine oil - change every 6000 km (3750 mi)
Beam setting - light operation - check
Tire/inflating pressure - every month - check
Front suspension - check
Brake pads wear - every 2000 km (1243 mi) - check
<b>Every 12000 km (7500 mi) or 16 months</b>
<b>Check, clean, adjust, lubricate and change, if necessary</b>
Spark plug - change
Coolant - every 1000 km (625 mi) - check
Coolant - change every 16 months
Engine oil - every 1000 km (625 mi) - check
Engine oil - change every 6000 km (3728 mi)



<b>Operations to be carried out by the aprilia Authorised Dealer</b>
<b>After running-in 1000 km (625 mi)</b>
<b>Check, clean, adjust, lubricate and change, if necessary</b>
Steering bearings - check
Engine oil filter - change
Brake fluid - check
Front suspension fluid - check
Transmission oil - change
Engine oil filter screen and magnetic screw - check
Nut, bolt, screw tightening - check
Cylinder head nut tightening - check
Brake fluid bleeding - check
<b>Every 6000 km (3750 mi) or 8 months</b>
<b>Check, clean, adjust, lubricate and change, if necessary</b>
Converter belt - check
Steering bearings - check
Engine oil filter - change
Wheel bearings - check
Secondary air scoop filter - cleaning
Converter cover air filter - cleaning
Valve clearance - check
Brake fluid - check
Front suspension fluid - check
Transmission oil - every 6000 km (3750 mi) - check
Transmission oil - change every 24000 km (14913 mi)
Engine oil filter screen and magnetic screw - check
Converter rollers and converter plastic guides - check
Wheels / tires - check

Nut, bolt, screw tightening - check
Carburetion at idle speed - adjustment
Transmission oil - every 6000 km (3750 mi) - check
Transmission oil - change every 24000 km (14913 mi)
Fuel lines - check
<b>Every 12000 km (7500 mi) or 16 months</b>
<b>Check, clean, adjust, lubricate and change, if necessary</b>
Converter belt - change
Clutch shoes - check
Brake fluid: change every 2 years
Front suspension fluid - change
Converter rollers and converter plastic guides - change
Fuel lines - change every 2 years

## SCHEDULED MAINTENANCE CHART <sup>250</sup>

Suitable maintenance ensures optimum operating conditions and performance and it is essential for vehicle long life.

This is why **aprilia** has made a list of checks and service operations to be performed against payment, which are summarised in the table on next page. It would be recommended to promptly report any failure to an **aprilia** Authorised Dealer so that it can be immediately repaired, rather than waiting until the following scheduled service inspection.

It is very important to have the service inspections performed at recommended time intervals even though set mileage has not been reached. Timely service inspections are necessary for a correct use of the warranty. Please see the "Warranty booklet" for any other detail on Warranty application and on "Scheduled Maintenance".

<b>EVERY 2 years</b>
<b>Operation</b>
Coolant - change
Brake fluid - change
<b>At 1000 km</b>
<b>Operation</b>
Safety fastening points - check
Throttle control - adjust
Oil filter - change
Electric system and battery - check
Coolant level - check
Brake fluid level - check
Engine oil - change
Brake pads - check for wear
Tire pressure and wear - check
Vehicle and braking system test - road test

Hub oil - change
Steering - check
<b>At 5000 km, 25000 km, 35000 km 55000 km, 65000 km</b>
<b>Operation</b>
Engine oil - check level/top up
Brake pads - check for wear
<b>At 10000 Km, 50000 Km, 70000 Km</b>
<b>Operation</b>
Safety fastening points - check
Throttle control - adjust
Air filter - cleaning
Belt comp.air filter - check
Engine oil filter - change
Electric system and battery - check
Coolant level - check
Brake fluid level - check
Engine oil - change
Brake pads - check for wear
Converter rollers/ sliders - change
Tire pressure and wear - check
Vehicle and braking system test - road test
Hub oil - check
Suspensions - check
Steering - check
<b>At 15000 Km, 45000 Km, 75000 Km</b>
<b>Operation</b>
Engine oil - check level/top up
Brake pads - check for wear
Belt - change

<b>At 20000 Km, 40000 Km and at 80000 Km</b>
<b>Operation</b>
Spark plug - change
Throttle control - adjust
Air filter - cleaning
Belt comp.air filter - check
Engine oil filter - change
Valve clearance - check
Electric system and battery - check
Coolant level - check
Brake fluid level - check
Engine oil - change
Brake pads - check for wear
Converter rollers/ sliders - change
Tire pressure and wear - check
Vehicle and braking system test - road test
Hub oil - change
Suspensions - check
Steering - check
<b>At 30000 km</b>
<b>Operation</b>
Safety fastening points - check
Belt - change
Throttle control - adjust
Air filter - cleaning
Belt comp.air filter - check
Engine oil filter - change
Electric system and battery - check
Coolant level - check
Brake fluid level - check

Engine oil - change
Brake pads - check for wear
Converter rollers/ sliders - change
Tire pressure and wear - check
Vehicle and braking system test - road test
Hub oil - check
Suspensions - check
Steering - check
<b>At 60000 km</b>
<b>Operation</b>
Spark plug - change
Belt - change
Throttle control - adjust
Air filter - cleaning
Belt comp.air filter - check
Engine oil filter - change
Valve clearance - check
Electric system and battery - check
Coolant level - check
Brake fluid level - check
Engine oil - change
Brake pads - check for wear
Converter rollers/ sliders - change
Tire pressure and wear - check
Vehicle and braking system test - road test
Hub oil - change
Suspensions - check
Steering - check

## SCHEDULED MAINTENANCE CHART <sup>500</sup>

Suitable maintenance ensures optimum operating conditions and performance and it is essential for vehicle long life.

This is why **aprilia** has made a list of checks and service operations to be performed against payment, which are summarised in the table on next page. It would be recommended to promptly report any failure to an **aprilia** Authorised Dealer so that it can be immediately repaired, rather than waiting until the following scheduled service inspection.

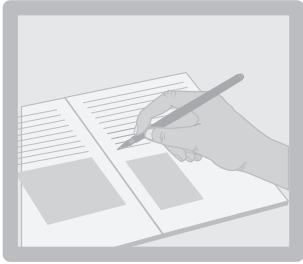
Timely service inspections are necessary for a correct use of the warranty. Please see the "Warranty booklet" for any other detail on Warranty application and on "Scheduled Maintenance".

<b>EVERY 2 years</b>
<b>Operation</b>
Coolant - change
Brake fluid - change
<b>At 1000 km</b>
<b>Operation</b>
Safety fastening points - check
Throttle control - adjust
Engine oil filter - change
Electric system and battery - check
Coolant level - check
Brake fluid level - check
Engine oil - change
Brake pads - check for wear
Tire pressure and wear - check
Vehicle and braking system test - road test
Hub oil - change

Idling speed - adjust
Crankcase breather - drain
Steering - check
Injection system tubes sealing - visual check
<b>Every 5000 km</b>
<b>Operation</b>
Engine oil - check level/top up
Brake pads - check for wear
<b>At 10000 km, 30000 km, 50000 km and at 70000 km</b>
<b>Operation</b>
Safety fastening points - check
Spark plug - change
Belt - change
Throttle control - adjust
Air filter - check
Belt comp.air filter - check
Engine oil filter - change
Valve clearance - check
Electric system and battery - check
Coolant level - check
Brake fluid level - check
Engine oil - change
Brake pads - check for wear
Converter rollers/ sliders - change
Tire pressure and wear - check
Vehicle and braking system test - road test
Hub oil - check
Idling speed - adjust
Stand striker roller - change

Suspensions - check
Steering - check
Injection system tubes sealing - visual check
Crankcase breather - drain
<b>At 20000 km, 40000 km, 60000 km and at 80000 km</b>
<b>Operation</b>
Safety fastening points - check
Driven pulley bush
Spark plug - change
Belt - change
Throttle control - adjust
Air filter - check
Belt comp.air filter - check
Engine oil filter - change
Valve clearance - check
Electric system and battery - check
Coolant level - check
Brake fluid level - check
Engine oil - change
Brake pads - check for wear
Converter rollers/ sliders - change
Tire pressure and wear - check
Vehicle and braking system test - road test
Hub oil - check
Idling speed - adjust
Stand striker roller - change
Crankcase breather - drain
Suspensions - check
Steering - check

Injection system tubes sealing - visual check
Fuel filter - check

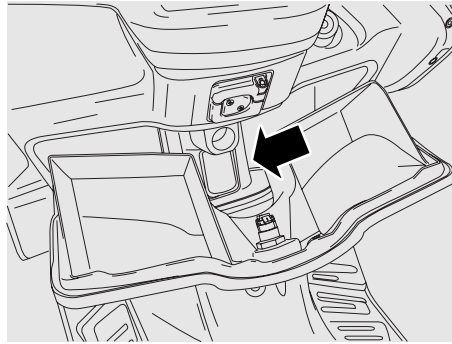


## IDENTIFICATION DATA

It is a good rule to report the frame and engine numbers in the space provided in this manual.

The frame number must be quoted when purchasing spare parts.

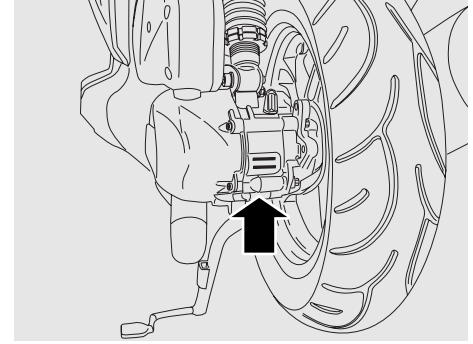
**NOTE** Altering a vehicle identification numbers is illegal and punished by the law with fines and imprisonment. In addition, altering the frame number invalidates the warranty.



## FRAME NUMBER

The frame number is stamped on the frame central tube. To expose the frame number, open the glove compartment (page 21 (GLOVE/TOOL KIT COMPARTMENT)) and remove the snap-on guard.

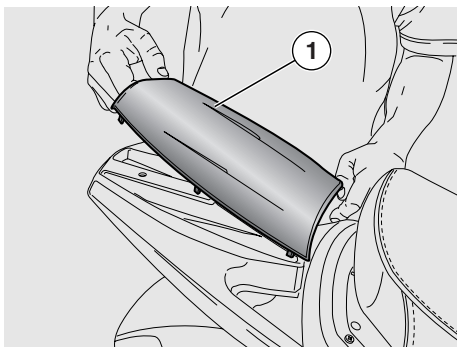
Frame no. \_\_\_\_\_



## ENGINE NUMBER

The engine number is stamped near the lower support of the rear shock absorber.

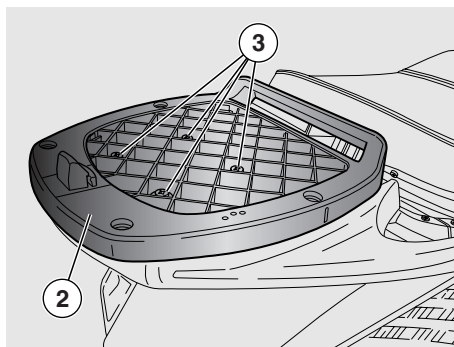
Engine no. \_\_\_\_\_



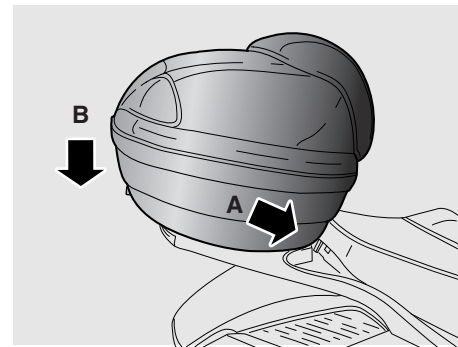
### **ADDITIONAL CASE** OPT

Position the vehicle on the centre stand.

- ◆ Remove the protective cover (1).



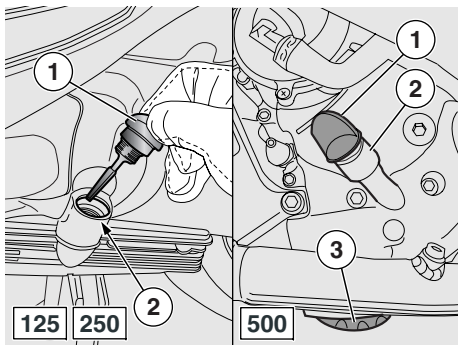
- ◆ Fit the case mounting plate (2) and tighten the four screws (3).



- ◆ Locate the front end (A) of the case to the support on the mounting plate. Press down the rear end (B) of the case moderately until locking it in place.

### **⚠ CAUTION**

**Ensure that the case is securely in place.**



## CHECKING AND TOPPING UP ENGINE OIL LEVEL

Carefully read page 79 (LUBRICANT CHART), page 39 (MAINTENANCE) and page 24 (LUBRICANTS).

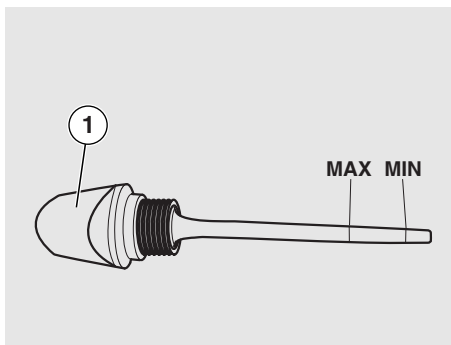
### CHECK

**NOTE** Position the vehicle on firm and flat ground.

- ◆ Position the vehicle on the centre stand.

### **⚠ WARNING**

The engine and the components of the exhaust system become very hot and remain hot for some time after the engine has been stopped. Before handling these components, wear insulating gloves or wait until the engine and the exhaust system have cooled down.



- ◆ Stop the engine and let it cool down, in order to allow the oil to flow into the oil pan and to cool down.

**NOTE** Failure to perform the operations described above may result in the incorrect measurement of the engine oil level.

- ◆ Unscrew and extract the plug/dipstick (1).
- ◆ Clean the part in contact with the oil with a clean cloth.
- ◆ Tighten the plug/dipstick (1) completely, screwing it into the filling hole (2).
- ◆ Withdraw the plug/dipstick (1) again and read the oil level on the dipstick itself:

**MAX** = maximum level;

**MIN** = minimum level.

The difference between “MAX” and “MIN” amounts to approximately

– 200 cu. cm. **125** **250**

– 400 cc **500**

- ◆ The level is correct if the oil reaches approx. the “MAX” mark on the dipstick.

### **⚠ CAUTION**

Never exceed the “MAX” mark or let oil level drop below the “MIN” mark, as this may lead to severe engine damage.

- ◆ If necessary, provide for topping up.

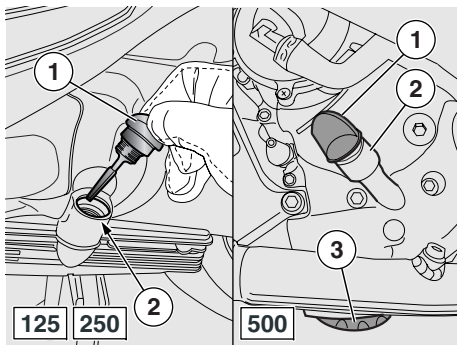
### TOPPING UP

- ◆ Pour a small quantity of oil in the filling hole (2) and wait about one minute, so that the oil flows into the oil pan.
- ◆ Check the oil level and top up if necessary.
- ◆ Top up by adding small quantities of oil, until reaching the prescribed level.
- ◆ At the end of the operation, screw and tighten the plug/dipstick (1).

### **⚠ WARNING**

Do not use the vehicle with insufficient lubrication or with contaminated or unsuitable lubricants, since this would cause early wear of the moving parts and may also cause irreparable failures.





## CHANGING ENGINE OIL AND OIL FILTER

Have engine oil changed at an **aprilia** Authorised dealer.

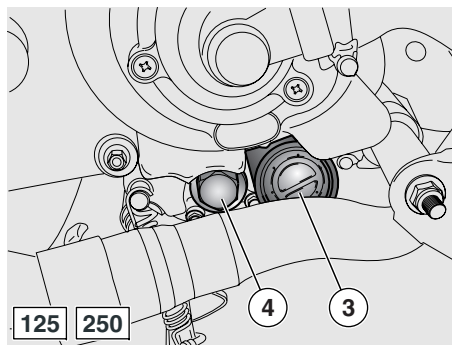
Carefully read page 79 (LUBRICANT CHART), page 39 (MAINTENANCE) and page 24 (LUBRICANTS).

**NOTE** Position the vehicle on firm and flat ground.

- ◆ Position the vehicle on the centre stand.

### ⚠ WARNING

The engine and the components of the exhaust system become very hot and remain hot for some time after the engine has been stopped. Before handling these components, wear insulating gloves or wait until the engine and the exhaust system have cooled down.

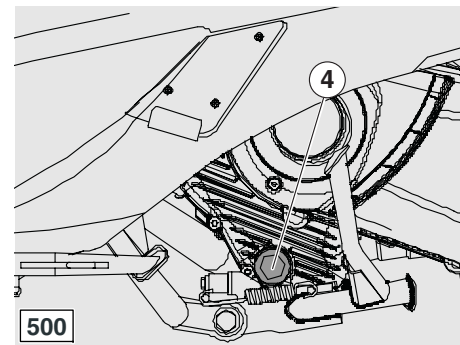


- ◆ Stop the engine and let it cool down, in order to allow the oil to flow into the oil pan and to cool down.
- ◆ Unscrew and extract the plug/dipstick (1).
- ◆ Unscrew and remove the oil cartridge filter (3).

### ⚠ WARNING

Do not use the vehicle with insufficient lubrication or with contaminated or unsuitable lubricants, since this would cause early wear of the moving parts and may also cause irreparable failures.

- ◆ Unscrew and remove the oil drain plug (4) and then drain all engine oil.
- ◆ Install a new oil cartridge filter (3). Lubricate the filter O-rings before installation.
- ◆ Screw and tighten the engine oil drain plug (4).

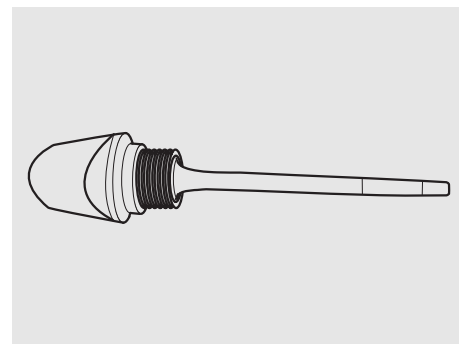
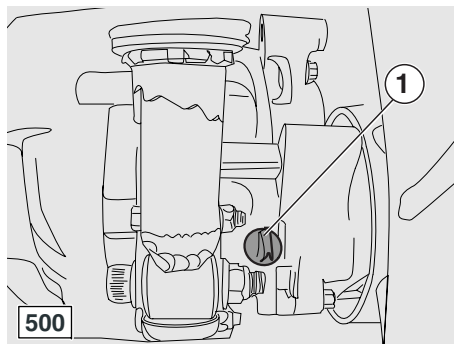
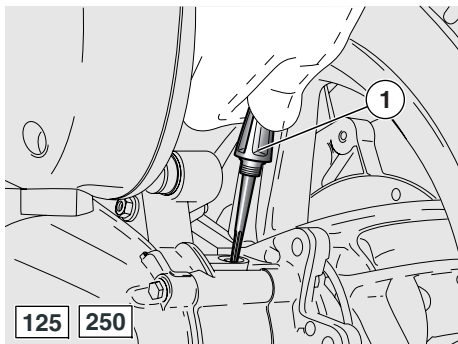


- ◆ Pour engine oil into the filler opening (2), see page 75 (TECHNICAL DATA).
- ◆ Screw and tighten the oil dipstick (1).
- ◆ Start the engine and let it run for several minutes. Stop the engine and let it cool down. Check engine oil level using the dipstick (1) and top up as required without exceeding the "MAX" mark.

For top-ups and oil changes, use synthetic oil SAE 5/W -40 type exceeding the API SJ specification. Always use new oil.

### ⚠ WARNING

Used oil contains substances that are very dangerous for the environment. Have the oil changed at an **aprilia** Authorised, who will dispose of used oil in accordance with applicable regulations.



## CHECKING AND TOPPING UP TRANSMISSION FLUID LEVEL

Carefully read page 79 (LUBRICANT CHART), page 39 (MAINTENANCE) and page 24 (LUBRICANTS).

**NOTE** Position the vehicle on firm and flat ground.

- ◆ Position the vehicle on the centre stand.

### ⚠ WARNING

The engine and the components of the exhaust system become very hot and remain hot for some time after the engine has been stopped. Before handling these components, wear insulating gloves or wait until the engine and the exhaust system have cooled down.

- ◆ Unscrew and extract the plug/dipstick (1).

- ◆ Clean the part in contact with the oil with a clean cloth.
- ◆ Tighten the plug/dipstick (1) completely, screwing it into the filling hole.
- ◆ Withdraw the plug/dipstick (1) again and read the oil level on the dipstick itself:

**MAX** = maximum level;

**MIN** = minimum level.

- ◆ The level is correct if the oil reaches approx. the "MAX" mark on the dipstick.

### ⚠ CAUTION

Never exceed the "MAX" mark or let oil level drop below the "MIN" mark, as this may lead to severe engine damage.

- ◆ If necessary, provide for topping up.

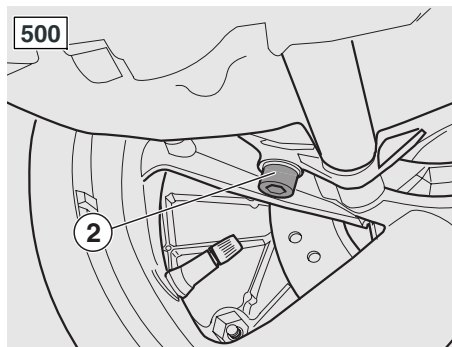
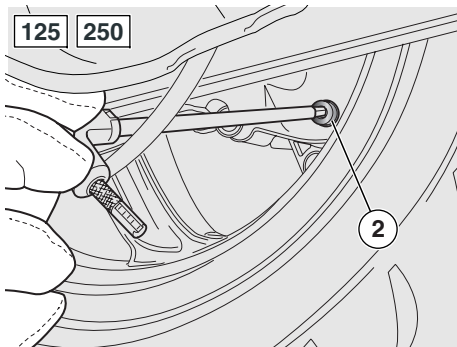
## TOPPING UP

- ◆ Pour a small quantity of oil in the filling hole and wait about one minute, so that the oil flows into the oil pan.
- ◆ Check the oil level and top up if necessary.
- ◆ Top up by adding small quantities of oil, until reaching the prescribed level.
- ◆ At the end of the operation, screw and tighten the plug-dipstick (1).

**For top-ups and oil changes, use synthetic oil SAE 75/W -90 type exceeding the API GL3 specification. Always use new oil.**

### ⚠ WARNING

Do not use the vehicle with insufficient lubrication or with contaminated or unsuitable lubricants, since this would cause early wear of the moving parts and may also cause irreparable failures.



For top-ups and oil changes, use the oil specified in the LUBRICANT CHART. Always use new oil.

### CHANGING TRANSMISSION OIL

Have engine oil changed at an **aprilia** Authorised dealer.

Carefully read page 79 (LUBRICANT CHART), page 39 (MAINTENANCE) and page 24 (LUBRICANTS).

**NOTE** Position the vehicle on firm and flat ground.

- ◆ Position the vehicle on the centre stand.

### ⚠ WARNING

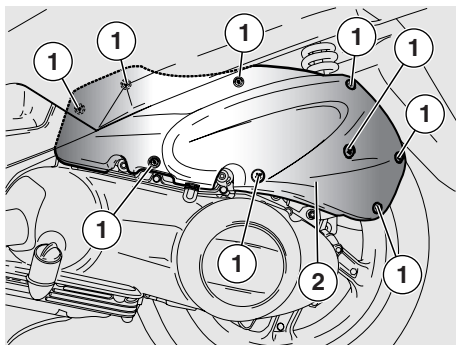
The engine and the components of the exhaust system become very hot and remain hot for some time after the engine has been stopped. Before handling these components, wear insulating gloves or wait until the engine and the exhaust system have cooled down.

- ◆ Stop the engine and let it cool down, in order to allow the oil to flow into the oil pan and to cool down.

### ⚠ WARNING

Make sure not to spill oil on the rear brake disc while changing oil.

- ◆ Unscrew and extract the plug/dipstick (1).
- ◆ Release and remove the transmission fluid drain screw (2).
- ◆ Let all transmission oil drain out. Collect it in a container with adequate capacity.
- ◆ Fit and tighten the transmission fluid drain screw (2).
- ◆ Fill about 150 cc **125** **250** , 250 cc **500** of the specified into the transmission.
- ◆ Screw and tighten the plug/dipstick (1).
- ◆ Check transmission oil level using the dipstick (1) and top up as required without exceeding the “MAX” mark.



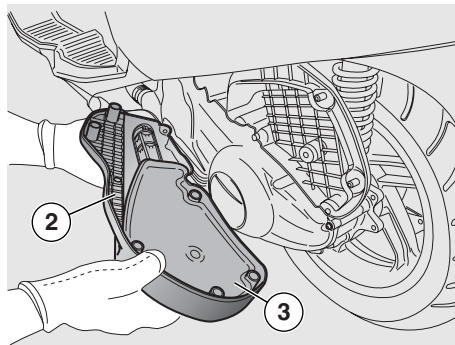
## AIR FILTER

Carefully read page 39 (MAINTENANCE).

For instructions on air filter cleaning and check, see page 40 (SCHEDULED MAINTENANCE CHART).

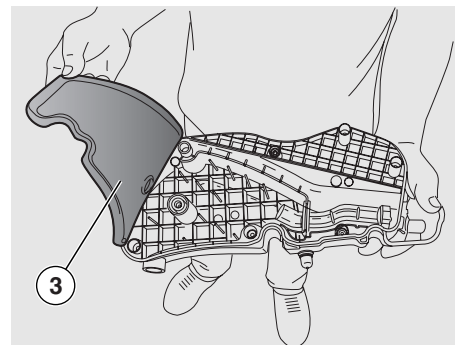
If the vehicle is used on dusty or wet roads, the cleaning or changing operations should be carried out more frequently.

To clean the filtering element it is necessary to remove it from the vehicle.



## REMOVING

- ◆ Position the vehicle on the centre stand.
- ◆ Unscrew and remove the nine screws (1).
- ◆ Remove the filter casing cover (2) together with the filter (3).
- ◆ Check the filtering element (3) and change it if required.



## CLEANING

### ⚠ WARNING

**Do not use petrol or inflammable solvents to wash the filtering element, in order to avoid fires or explosions. Do not use additives or fluid detergents, as this would lead to moisture build-up inside the filter casing. Use compressed air only.**

- ◆ Blow the filtering element (3) with compressed air.

### ⚠ CAUTION

**NEVER SMEAR THE FILTERING ELEMENT WITH OIL. Any oil seeping into the belt casing would damage the belt and cause it to slip.**

## CHECKING THE BRAKE PADS FOR WEAR

Carefully read page 39 (MAINTENANCE), page 25 (DISC BRAKES) and page 25 (BRAKE FLUID - recommendations).

**NOTE** The following instructions apply to both braking systems.

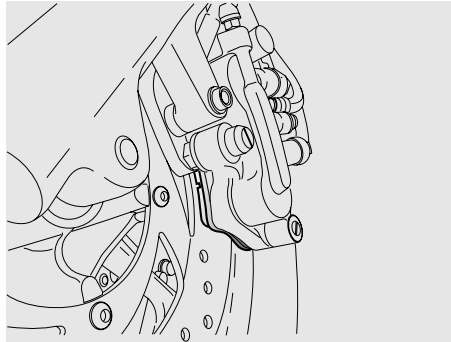
Check brake pads for wear as specified in the scheduled maintenance chart, see page 40 (SCHEDULED MAINTENANCE CHART), according to the displacement of the vehicle. The rate at which brake pads will wear depends on vehicle usage, riding style and road surface condition.

### **⚠ WARNING**

**Inspect the brake pads before each ride.**

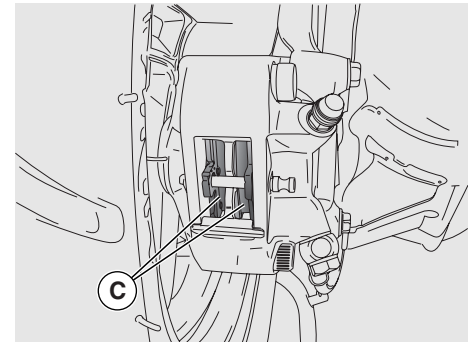
Outlined below is a quick brake pad inspection procedure:

- ◆ Position the vehicle on the centre stand.
- ◆ Visually check in-between brake disc and pads as follows.



### **FRONT BRAKE CALLIPERS**

- Check the pads of both callipers looking from the bottom up at the front end.

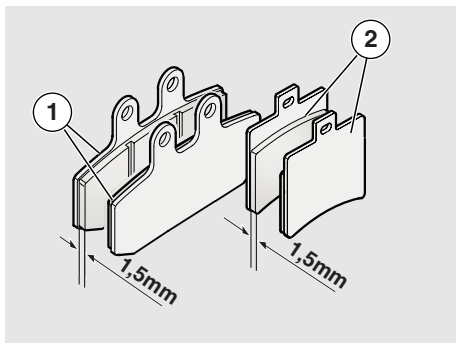


### **REAR BRAKE CALLIPER**

- Check both pads (C) looking from the bottom up at the rear end.

### **⚠ WARNING**

**If brake pads were allowed to wear down until uncovering the metal substrate, metal-to-metal contact with the brake disc would lead to rattle and the brake calliper sparking; this would result in loss of braking and brake disc damage, causing a dangerous riding condition.**

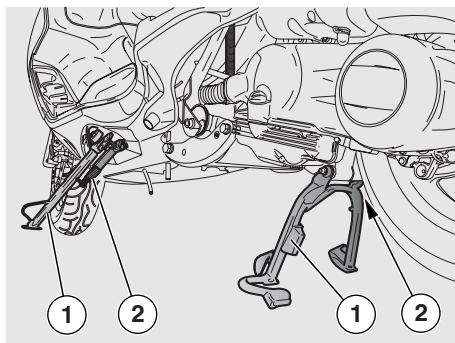


◆ Should friction material (of even one pad only) be worn down to 1.5 mm of thickness, have both pads replaced.

- Front brake pads (1).
- rear brake pads (2).

### **WARNING**

**Have the coolant changed at an **aprilia** Authorised Dealer.**



### **CHECKING THE STAND**

**Carefully read page 39 (MAINTENANCE).**

**NOTE** The following information applies to both centre and side stand.

It is important that no components interfere with stand (1) rotation.

Check for the following:

- ◆ The springs (2) must not be damaged, worn, rusty or weakened.
- ◆ The side stand must rotate freely, if necessary grease the joint, see p.page 79 (LUBRICANT CHART).



### **CHECKING THE SWITCHES**

The vehicle is fitted with two switches:

- Brake light switch on the rear brake lever (integral braking system).
- Brake light switch on the front brake lever.
- Side stand down switch.

If you need assistance or technical advice, contact your **aprilia** Authorised dealer, for guaranteed accurate, prompt service.

## INSPECTING THE FRONT AND REAR SUSPENSIONS

Carefully read page 39 (MAINTENANCE).

### ⚠ CAUTION

Have the front fork oil changed by an **aprilia** Authorised dealer, for guaranteed accurate, prompt service.

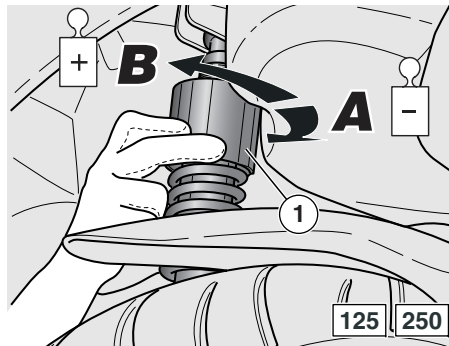
Have the front suspension fluid and fork oil seals changed as specified in the scheduled maintenance chart, see page 40 (SCHEDULED MAINTENANCE CHART), according to the displacement of the vehicle.

Periodically check for the following:

- ◆ Keep the front brake lever pulled in and push down on the handlebar repeatedly to compress the front fork.
- ◆ The fork should compress in a smooth movement and must show no traces of oil on the legs.
- ◆ Ensure that all components are properly tightened and check the front and rear suspension articulated joints for correct operation.

### ⚠ CAUTION

In the event of malfunction or if the suspension needs expert servicing, contact an **aprilia** Authorised dealer.



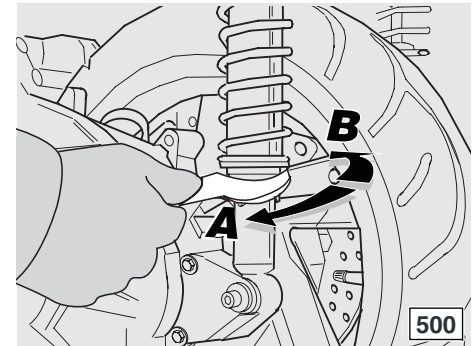
### ADJUSTING THE REAR SUSPENSION 125 250

The rear suspension consists of a double effect shock absorber (compression/rebound damping) fixed to the engine by means of a silentblock.

The standard adjustment, set by the manufacturer, is suitable for a rider weighing about 70 kg. If your weight and needs are different, adjust the ring nut (1), thus setting the ideal travelling conditions (see table).

### ADJUSTMENT OF THE REAR SUSPENSION SPRING PRELOAD

Adjusting ring nut	Rotation (arrow A)	Rotation (arrow B)
Function	Spring preload decrease	Spring preload increase
Track alignment	Ride without passenger	Ride with passenger



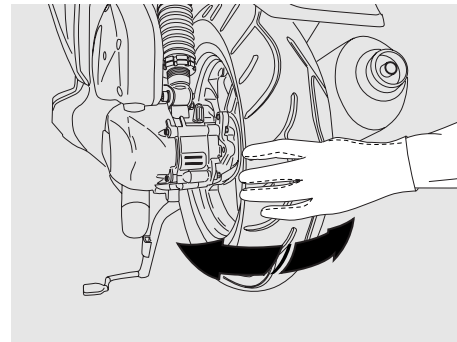
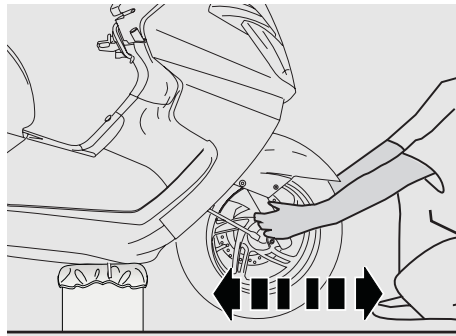
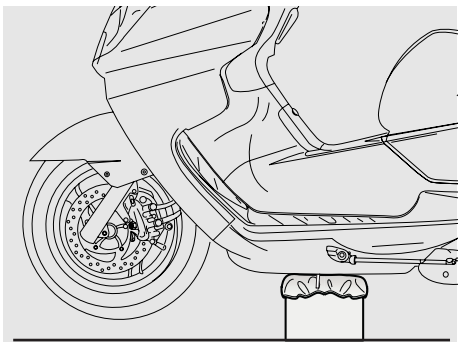
### ADJUSTING THE REAR SUSPENSION 500

The rear suspension consists of two double effect shock absorbers (compression/rebound damping) fixed to the engine by means of a silentblock.

The standard adjustment, set by the manufacturer, is suitable for a rider weighing about 70 kg. If your weight and needs are different, adjust the ring nut (1) with the appropriate spanner provided in the tool kit, thus setting the ideal travelling conditions (see table).

### ⚠ CAUTION

Adjust both shock absorbers to the same setting.



### CHECKING THE STEERING

Carefully read page 39 (MAINTENANCE).

Occasionally check the steering slack.

Check as follows:

- ◆ Position the vehicle on the centre stand.

**NOTE** Provide a support of adequate height and width to support the vehicle safely.

- ◆ Place the support under the vehicle and a spongy cloth between them, so that the front wheel can move freely and the vehicle can not fall down.

### ⚠ CAUTION

Make sure that the vehicle is stable.

- ◆ Shake the fork in the riding direction.

### ⚠ CAUTION

**Do not shake the fork excessively, otherwise you may take in consideration the movement of the stand, thus observing an incorrect slack. Repeat the previous operation more than once.**

- ◆ If you find that there is considerable slack, contact your **aprilia** Authorised Dealer to restore the optimal steering conditions.

### CHECKING THE ENGINE PIVOT

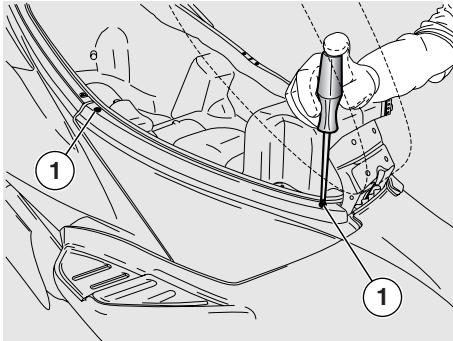
Carefully read page 39 (MAINTENANCE).

Periodically check the slack existing between the engine pivot bushings.

Check as follows:

- ◆ Position the vehicle on the centre stand.
- ◆ Shake the wheel right and left with respect to the riding direction.
- ◆ If any slack should be noticed, contact your **aprilia** Authorised Dealer, to restore the optimal operating conditions.





### REMOVING THE RIGHT AND LEFT INSPECTION COVERS

Carefully read page 39 (MAINTENANCE).

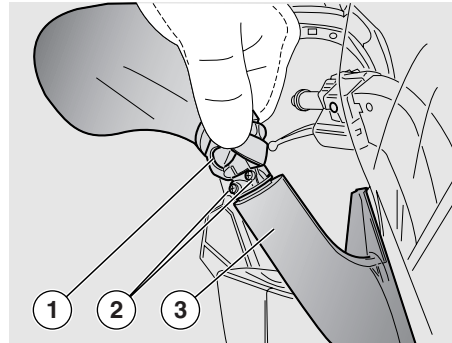
- ◆ Position the vehicle on the centre stand.
- ◆ Raise the seat.
- ◆ Release and remove the screws (1).

#### ⚠ CAUTION

Proceed with care.  
Do not damage the lower tabs and/or their seats.  
Handle plastic and paint-finished parts with care to avoid scratching or damage.

#### ⚠ CAUTION

Upon reassembly, fit the tabs correctly in the appropriate seats.



### REMOVING THE REAR-VIEW MIRRORS

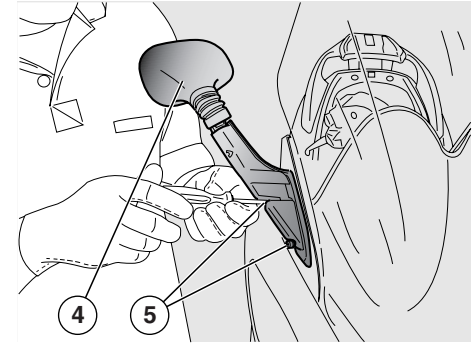
Carefully read page 39 (MAINTENANCE).

The following information applies to both rear-view mirrors.

- ◆ Position the vehicle on the centre stand.

**NOTE** Collect the left mirror components separately from the right mirror components.

- ◆ Slip off the rubber gaiter (1) and unscrew the two retaining screws (2).
- ◆ Remove the protective cover (3).



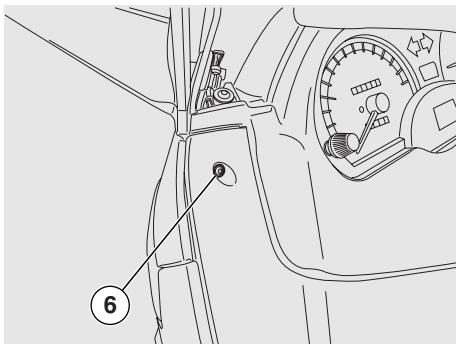
#### ⚠ CAUTION

Hold the rear-view mirror (4), to prevent it from accidentally falling down.

#### ⚠ CAUTION

Handle plastic and paint-finished parts with care to avoid scratching or damage.

- ◆ Remove the two screws (5).
- ◆ Remove the rear-view mirror (4).



## REMOVING THE FRONT COVER

Carefully read page 39 (MAINTENANCE).

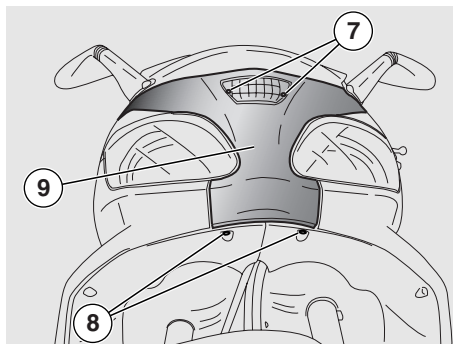
- ◆ Position the vehicle on the centre stand.
- ◆ Release and remove the two screws (6).

### ⚠ CAUTION

Proceed with care.

Do not damage the tabs and/or their seats.

Handle plastic and paint-finished parts with care to avoid scratching or damage.



- ◆ Unscrew and remove the two screws (7).
- ◆ Unscrew and remove the two screws (8).

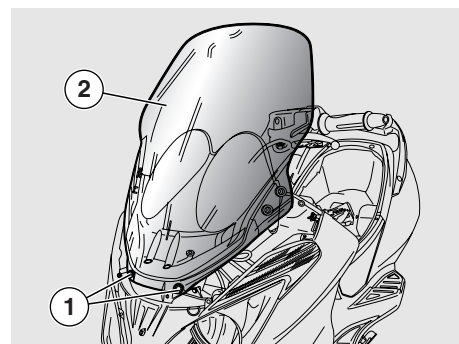
### ⚠ CAUTION

Pay attention to the fixing tab clips. They might come loose during removal.

- ◆ Pull the front cover (9) gently to remove.

### ⚠ CAUTION

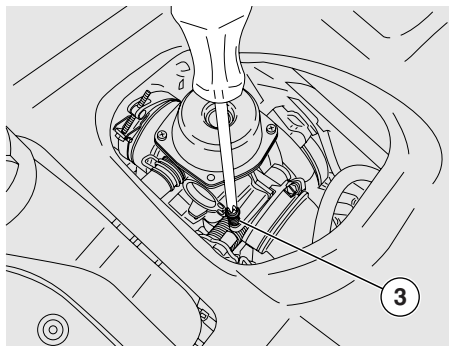
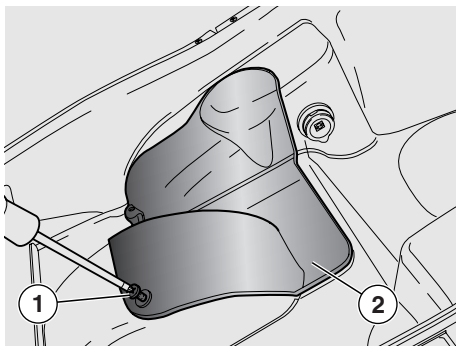
Ensure that the tabs with the clips locate correctly into their seats on refitting.



## REMOVING THE HEADLIGHT FAIRING

Carefully read page 39 (MAINTENANCE).

- ◆ Position the vehicle on the centre stand.
- ◆ Remove the rear-view mirrors, see page 57 (REMOVING THE REAR-VIEW MIRRORS).
- ◆ Remove the front cover, see page 58 (REMOVING THE FRONT COVER).
- ◆ Release and remove the two screws (1) securing the windshield to the vehicle.
- ◆ Remove the windshield (2).



**NOTE** Do not turn the air adjusting screw to avoid variations of the carburetion setting.

If necessary, contact your **aprilia** Authorised dealer.

## IDLING ADJUSTMENT <sup>125</sup>

Carefully read page 39 (MAINTENANCE).

Adjust the idling speed every time it is erratic.

To carry out this operation, proceed as follows.

- ◆ Ride for a few miles until reaching the normal operating temperature, see Coolant temperature indicator "E", page 14 (INSTRUMENTS AND INDICATORS TABLE), then stop the engine.
- ◆ Position the vehicle on the centre stand.
- ◆ Remove the right inspection cover, see page 57 (REMOVING THE RIGHT AND LEFT INSPECTION COVERS).
- ◆ Connect an electronic rev counter to the spark plug cable.
- ◆ Start the engine.

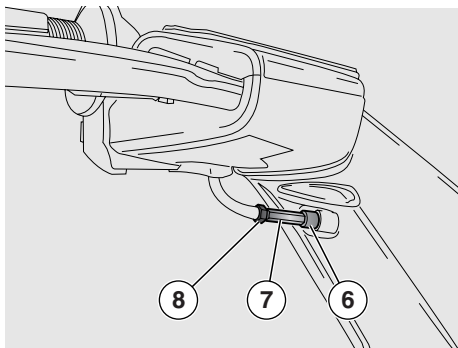
Correct engine rpm reading is about:

- <sup>125</sup> 1600 ± 100 rpm;

Note that the rear wheel will be at standstill.

If necessary:

- ◆ Open the helmet compartment under the seat.
- ◆ Unscrew the screw (1) and remove the protective cover (2).
- ◆ Turn the adjuster screw (3) on the carburettor.
- ◆ By **SCREWING IT** (clockwise), you increase the engine rpm.
- ◆ By **UNSCREWING IT** (anticlockwise), you decrease the engine rpm.
- ◆ Turn the throttle twistgrip, accelerating and decelerating a few times to make sure that it operates correctly and to check if the idling speed is constant.



## ADJUSTING THE THROTTLE CONTROL

Carefully read page 39 (MAINTENANCE).

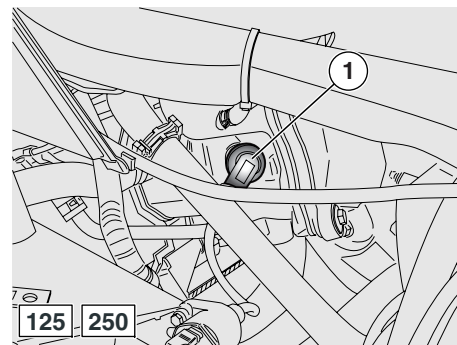
There should be **2 - 3 mm** free play in the throttle twistgrip (measured at twistgrip edge).

If this is not the case, proceed as follows:

- ◆ Position the vehicle on the centre stand.
- ◆ Withdraw the protection (6).
- ◆ Loosen the lock nut (7).
- ◆ Rotate the adjuster (8) until achieving the specified free play.
- ◆ When finished, tighten the lock nut (7) and check free play again.
- ◆ Refit the protection (6).

## ⚠ WARNING

When finished, turn the handlebar to make sure its movement does not affect the engine idle rpm and check that the throttle grip - when opened and then released - returns smoothly to the closed position.



## SPARK PLUG

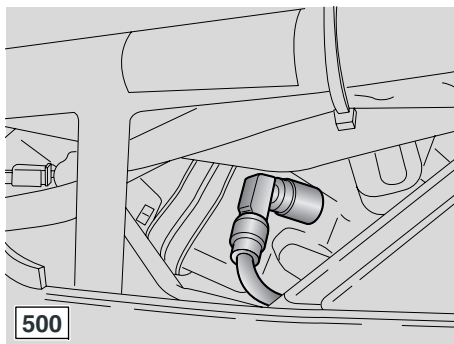
Carefully read page 39 (MAINTENANCE).

Check the spark plug every time a scheduled maintenance service is performed.

At regular intervals, remove the spark plug and clean off any carbon deposits or replace as required.

To reach the spark plug:

- ◆ **125 250** Remove the right inspection cover, see page 57 (REMOVING THE RIGHT AND LEFT INSPECTION COVERS).
- ◆ **500** Remove the left inspection cover, see page 57 (REMOVING THE RIGHT AND LEFT INSPECTION COVERS).



To remove and clean the spark plug:

### **⚠ WARNING**

**Before carrying out the following operations, let the engine and the silencer cool down to ambient temperature, in order to avoid burns.**

- ◆ Disconnect spark plug high tension cable cap (1).
- ◆ Remove all the dirt from the base of the spark plug, then unscrew it with the spanner you will find in the tool kit and extract it from its seat, taking care that neither dust nor other substances enter the cylinder.
- ◆ Make sure that there are neither carbon deposits, nor corrosion marks on the electrode and on the central part; if necessary, clean them with the special cleaners for spark plugs, with an iron wire and/or a metal brush.

- ◆ Energetically blow some air, in order to prevent the removed residues from getting into the engine. Change the spark plug if it shows cracks on the insulating material, corroded electrodes or excessive deposits.
- ◆ Check the electrode gap with a feeler gauge. The gap must be **0.7 – 0.8 mm**; if necessary, adjust it, carefully bending the earth electrode.
- ◆ Make sure that the washer is in good condition. Fit the washer and screw the spark plug finger-tight to avoid damaging the thread.
- ◆ Tighten using the spanner supplied with the tool kit. Screw in each spark plug by one half turn to compress the washer.

**Spark plug tightening torque:**  
12 -14 Nm (1.2 -1.4 kgm).

### **⚠ CAUTION**

**The spark plug must be tightened firmly, otherwise the engine may overheat and severe damage may occur.**

**Use recommended spark plugs only, see page 75 (TECHNICAL DATA). A spark plug of the wrong rating may shorten engine life and cause loss of performance.**

- ◆ Fit the spark plug cap properly, to prevent it coming off due to engine vibration.

- ◆ **125 250** Refit the right inspection cover, see page 57 (REMOVING THE RIGHT AND LEFT INSPECTION COVERS).
- ◆ **500** Refit the left inspection cover, see page 57 (REMOVING THE RIGHT AND LEFT INSPECTION COVERS).

## BATTERY

Carefully read page 39 (MAINTENANCE).

Check electrolyte level (only 125 250 ) and terminals tightening as specified in the scheduled maintenance chart, see page 40 (SCHEDULED MAINTENANCE CHART), according to the vehicle displacement.

### WARNING

**Risk of fire.**

Keep fuel and other flammable substances away from electric components.

Battery fluid is toxic and corrosive; it contains sulphuric acid and contact with skin will cause severe burns. Wear protective clothing and a face or eye protection before servicing the battery. In case of contact with skin, rinse with plenty of fresh water.

In case of contact with eyes, rinse with plenty of water for fifteen minutes and contact an eye specialist without delay.

If battery fluid is accidentally swallowed, drink abundant water or milk, then continue with magnesia milk or vegetable oil and seek medical advice immediately.

The battery gives off explosive gases and must be kept away from flames and sources of ignition or heat; do not smoke near the battery.

Provide proper ventilation while the battery is under charging and do not inhale the gases produced by the battery during the charging process.

**KEEP AWAY FROM CHILDREN.**

**Avoid leaning the vehicle at steep angles or you might spill battery fluid.**

### WARNING

Never invert the battery cables.

Ensure that the ignition switch is in position "⊗" before connecting or disconnecting the battery, otherwise some components might damage. Connect the positive cable (+) first and then the negative cable (-). Disconnect in the reverse order.

Battery fluid is corrosive.

Do not spill it, especially on plastic parts.

If you have installed a "MAINTENANCE-FREE" battery, use a specific battery charger to recharge it (this will be the constant voltage/amperage or constant voltage type).

Using a conventional battery charger might damage your maintenance-free battery.

## LONG INACTIVITY OF THE BATTERY

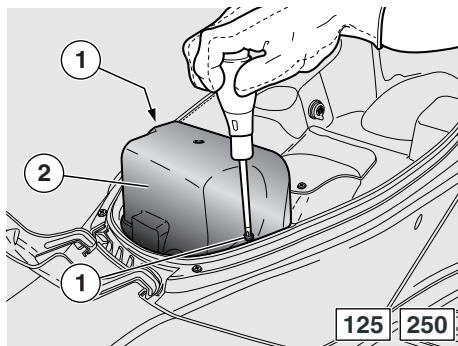
If the vehicle remains unused for more than fifteen days, it is necessary to recharge the battery, in order to prevent sulphation, see page 64 (CHARGING THE BATTERY).

◆ Remove the battery, see page 63 (REMOVING THE BATTERY) and store it in a cool, dry place.

To avoid degradation in the wintertime or while the vehicle is stored away, check battery charge at regular intervals (monthly).

◆ Recharge the battery fully at a normal charge rate, see page 64 (CHARGING THE BATTERY).

If you are leaving the battery installed to the vehicle, disconnect the cables from the terminals.

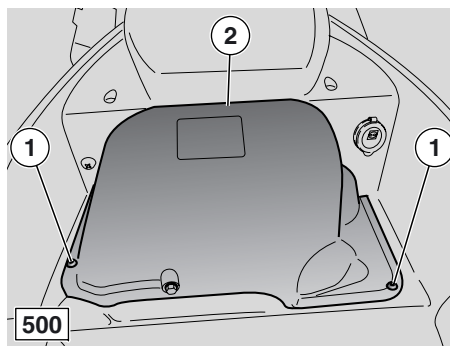


## REMOVING THE BATTERY COVER

Carefully read page 62 (BATTERY).

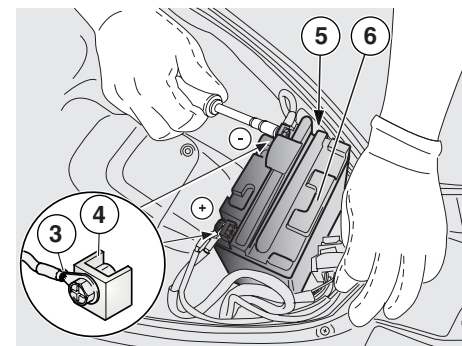
**NOTE** Position the vehicle on firm and flat ground.

- ◆ Make sure that the ignition switch is in position "⊗".
- ◆ Raise the seat, see page 20 (UNLOCKING/LOCKING THE SEAT).
- ◆ Unscrew and remove the two screws (1).
- ◆ Remove the battery cover (2).



## CHECKING AND CLEANING THE TERMINALS

- ◆ Remove the battery cover, see (REMOVING THE BATTERY COVER) at the side.
  - ◆ Ensure that the ignition switch is in the "⊗" position.
  - ◆ Check that battery lead connections (3) and battery terminals (4) are:
    - in good condition (and not corroded or covered with deposits);
    - covered with neutral grease or Vaseline.
- If necessary:
- ◆ Disconnect first the negative (-) and then the positive cable (+).
  - ◆ Brush with a wire brush to eliminate any sign of corrosion.
  - ◆ Connect first the positive (+) and then the negative cable (-).
  - ◆ Coat the terminals of cables and battery with neutral grease or Vaseline.



## REMOVING THE BATTERY

- ◆ Remove the battery cover, see (REMOVING THE BATTERY COVER) at the side.
- ◆ Remove the battery breather pipe (5) ( 125 250 only).
- ◆ Disconnect first the negative (-) and then the positive cable (+).
- ◆ Remove the battery (6), and put it on a flat surface in a cool, dry place.

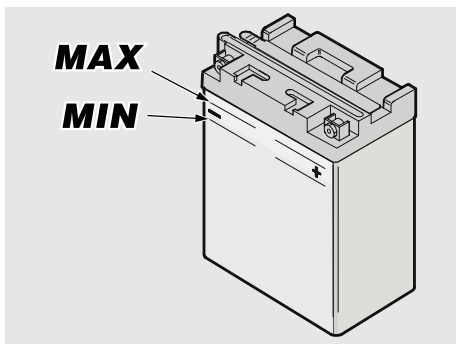
### ⚠ WARNING

Once removed, the battery must be stored in a safe place and kept away from children.

- ◆ Refit the battery cover, see (REMOVING THE BATTERY COVER) at the side.

### ⚠ WARNING

Handle with care and use great caution, as battery fluid may spill out of the breather ( 125 250 only).



### CHECKING BATTERY FLUID LEVEL 125 250

To check the battery fluid level:

- ◆ Remove the battery cover, see page 63 (REMOVING THE BATTERY COVER).
- ◆ Make sure that battery fluid level is between the "MIN" and "MAX" marks on the battery. If not so:
- ◆ Remove the battery caps.

### CAUTION

**Top up with distilled water only. Do not exceed the "MAX" mark, because battery fluid expands when the battery is under charging.**

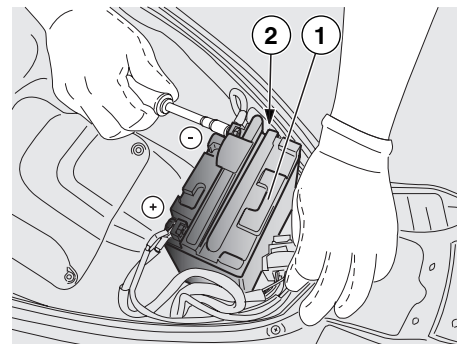
- ◆ Add distilled water until achieving correct level.

### CHARGING THE BATTERY

- ◆ Remove the battery, see page 63 (REMOVING THE BATTERY).
- ◆ Remove the battery caps ( 125 250 only).
- ◆ Check battery fluid level, see at the side (CHECKING BATTERY FLUID LEVEL) ( 125 250 only).
- ◆ Connect the battery to a battery charger.
- ◆ Recommended charge rate is 1/10th of battery capacity.
- ◆ After charging the battery, check battery fluid level again and top up with distilled water if needed ( 125 250 only).
- ◆ Refit the battery caps ( 125 250 only).

### WARNING

**When you disconnect the battery charger, allow 5-10 minutes before refitting the battery, as it will keep producing gas for a few minutes.**



### INSTALLING THE BATTERY

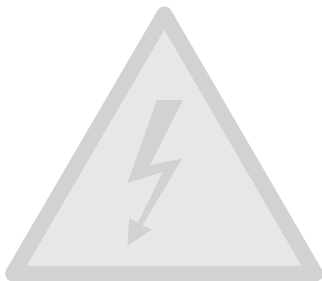
- ◆ Remove the battery cover, see page 63 (REMOVING THE BATTERY COVER).
- ◆ Refit the battery (1) into its mount.
- ◆ Connect the battery breather pipe (2) ( 125 250 only).

### CAUTION

**Always connect the battery breather pipe, to prevent the sulphuric acid vapours from corroding the electric system, painted parts, rubber elements or gaskets when they exit the breather pipe itself ( 125 250 only).**

- ◆ Connect first the positive (+) and then the negative cable (-).
- ◆ Coat the terminals of cables and battery with neutral grease or Vaseline.
- ◆ Refit the battery cover, see page 63 (REMOVING THE BATTERY COVER).





## CHANGING THE FUSES

Carefully read page 39  
(MAINTENANCE).

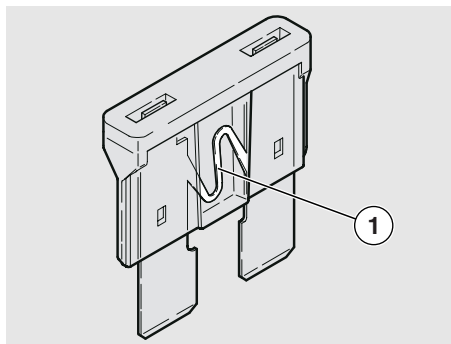
### ⚠ CAUTION

**Do not repair faulty fuses.  
Never use a fuse of a rating other than  
specified. This could damage the  
electric system or cause a short circuit,  
with the risk of fire.**

**NOTE** When a fuse fitted in a particular position keeps blowing frequently, there might be a short circuit or overloading. When this is the case, contact an **aprilia** Authorised dealer.

Checking the fuses is recommended whenever an electric component fails to operate or is malfunctioning, or when the engine does not start.

Check the 3 A and the 15 A fuses first and then the 30A fuses.

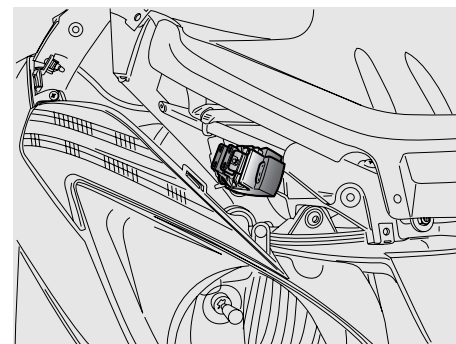


Check as follows:

- ◆ Remove the battery cover, see page 63 (REMOVING THE BATTERY COVER) or (125 250 only) remove the front cover, see page 58 (REMOVING THE FRONT COVER).
- ◆ Extract all fuses one by one and check for blown fuses. A blown fuse is identified by the filament (1) in the centre being broken.
- ◆ Before replacing a fuse, identify the cause of the failure, if possible.
- ◆ Replace the blown fuse with a new one with equal current rating.

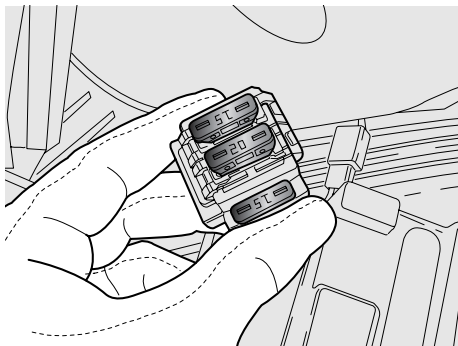
**NOTE** When you use one of the spare fuses, remember to add a new spare fuse into the proper seat.

- ◆ Refit the battery cover, see page 63 (REMOVING THE BATTERY COVER) or (125 250 only) refit the front cover, see page 58 (REMOVING THE FRONT COVER).



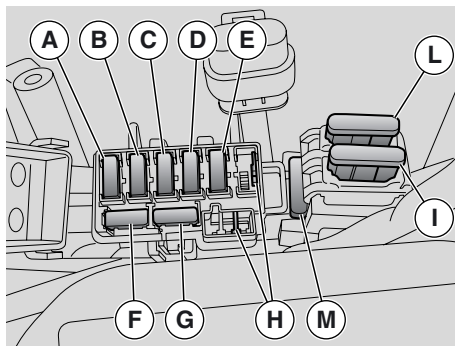
## ARRANGEMENT OF AUXILIARY FUSES (FRONT COVER) 125 250

- **15A fuse**  
From ignition switch to: lights, horn, brake lights.
- **7.5A fuse**  
From ignition switch to: starting interlock system, automatic starter.



### ARRANGEMENT OF MAIN FUSES (BATTERY COMPARTMENT) <sup>250</sup> <sup>125</sup>

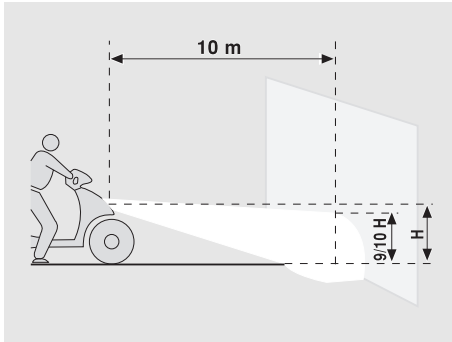
- **20A fuse**  
From ignition switch to: ignition switch, helmet compartment light.
- **15A fuse**  
From battery to: power socket.



### ARRANGEMENT OF THE FUSES <sup>500</sup>

- 15A fuse (A)  
From voltage regulator to: injection, brake lights/starting logics (Housing A on the wiring diagram).
- 15A fuse (B)  
From ignition switch to: engine kill logics, brake lights (Housing B on the wiring diagram).
- 15A fuse (C)  
From ignition switch to: lights, horn, instrument panel, fan relay, radio power supply (Housing C on the wiring diagram).
- 15A fuse (D)  
From main fuse to power socket inside glove compartment.
- 3A fuse (E)  
From voltage regulator to ECU permanent power supply (Housing E on the wiring diagram).
- 15A fuse (F)  
Spare.

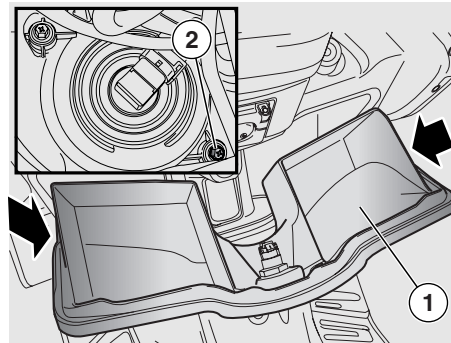
- 3A fuse (G)  
Spare.
- Spare (H)
- 30A fuse (I)  
From battery to: ignition switch, fuse (A), helmet compartment light, cooling fan, instrument panel permanent power supply.
- 30A fuse (L)  
From battery to: voltage regulator, fuse (B), fuse (C).
- 30A fuse (M)  
Spare.



### VERTICAL ADJUSTMENT OF THE HEADLIGHT BEAM

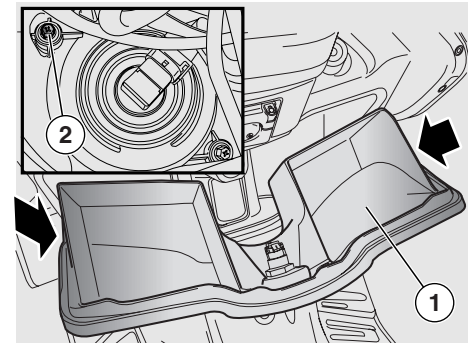
For a quick beam inspection, place the vehicle on level ground, ten metres away from a vertical wall.

Switch on the low beam, sit astride the vehicle and make sure that the light spot on the wall is just below the horizontal line of the headlight (about nine-tenths of overall height).



To adjust the headlight beam:

- ◆ Open the glove compartment (1) and release the side stop rods moderately pressing down.
- ◆ Remove the right and left protective covers by pressing on the upper locking tab.
- ◆ Turn the lower adjuster screws (2) of both headlamp bulbs with a screwdriver or an 8mm wrench to adjust as follows: turn **CLOCKWISE** to lower the beam. Turn **ANTICLOCKWISE** to raise the beam.



### HORIZONTAL ADJUSTMENT OF THE HEADLIGHT BEAM

- ◆ Open the glove compartment (1) and release the side stop rods moderately pressing down.
- ◆ Remove the right and left protective covers by pressing on the upper locking tab.

To adjust the headlight beam:

- ◆ Turn the upper adjuster screws (2) of both headlamp bulbs with a screwdriver or an 8mm wrench. Turn **CLOCKWISE** and the beam will move to the **LEFT** (when viewed in the direction of travel). Turn **ANTICLOCKWISE** and the beam will move to the **RIGHT** (when viewed in the direction of travel).

## BULBS


Carefully read page 39  
(MAINTENANCE).

### ⚠ WARNING

Risk of fire.

Keep fuel and other flammable substances away from electric components.

### ⚠ CAUTION

Before changing a bulb, set the ignition switch to position “

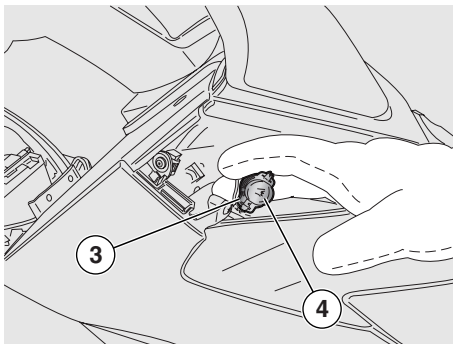
Wear clean gloves or use a clean, dry cloth to handle the new bulb.

Do not put your fingerprints on the bulb, as this may lead to overheating and failure.

If you have handled the bulb with bare hands, clean it with alcohol to avoid any damage.

**DO NOT PULL ON THE WIRES.**

**NOTE** Before changing a bulb, check the fuses, see page 65 (CHANGING THE FUSES).



### REPLACING THE FRONT DIRECTION INDICATOR BULBS

Read paragraph (BULBS) at the side carefully.

To change the bulbs:

- ◆ Remove the front cover, see page 58 (REMOVING THE FRONT COVER).

### ⚠ CAUTION

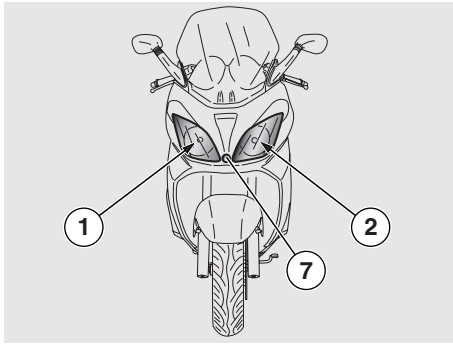
Proceed with care.

Do not damage the tabs and/or their seats.

- ◆ Working from the front of the vehicle, twist the bulb holder (3) with the bulb (4) clockwise and extract both from their seat.
- ◆ Press the bulb (4) slightly and rotate it anticlockwise.
- ◆ Extract the bulb from its seat.

**NOTE** Insert the bulb into the bulb holder, so that the two pins slide into the slots in the holder.

- ◆ Fit a new bulb of equal rating.
- ◆ Reverse removal procedure to install the bulb.



## CHANGING THE HEADLIGHT BULBS

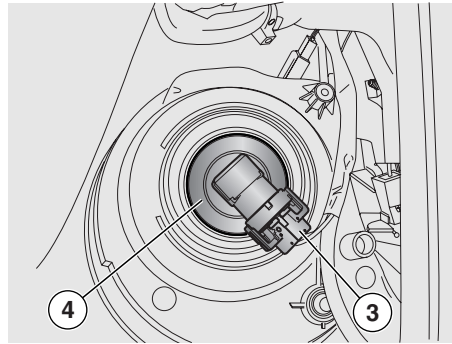
Carefully read page 68 (BULBS).

The headlight accommodates:

- One high beam bulb (1).
- One low beam bulb (2).
- One front parking light bulb (7).

To change the bulbs:

- ◆ Open the glove compartment and release the side stop rods moderately pressing down, see page 67 (VERTICAL ADJUSTMENT OF THE HEADLIGHT BEAM).



## HIGH AND LOW BEAM BULBS

### ⚠ CAUTION

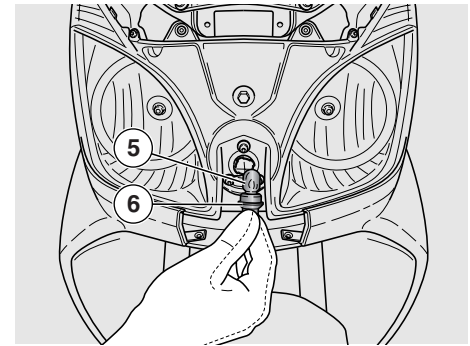
Never pull on the wiring to disconnect a bulb connector.

- ◆ Grasp the bulb connector (3) and pull to disconnect it from the bulb.
- ◆ Rotate the bulb (4) anticlockwise and extract it from its seat.

Upon reassembly:

**NOTE** Insert the bulb in the holder, making the three bulb pins match with the relevant guides on the reflector seat.

- ◆ Position the bulb (4) in the reflector and rotate it clockwise.
- ◆ Connect the bulb electric connector (3).



## REPLACING THE PARKING LIGHT BULB

Carefully read page 68 (BULBS).

**NOTE** The parking light bulb may be replaced without removing the headlight reflector or lens.

To change the bulbs:

- ◆ Remove the front cover, see page 58 (REMOVING THE FRONT COVER).

### ⚠ CAUTION

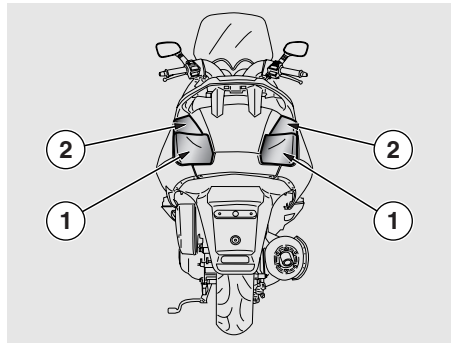
Proceed with care.

Do not damage the tabs and/or their seats.

- ◆ Twist the complete bulb holder (6) from the rear end and remove.
- ◆ Extract the bulb (5) from its seat.

**NOTE** Insert the bulb (5) into the bulb holder (6), so that the two pins slide into the slots in the holder.

- ◆ Fit a new bulb of equal rating.
- ◆ Reverse removal procedure to install the bulb.



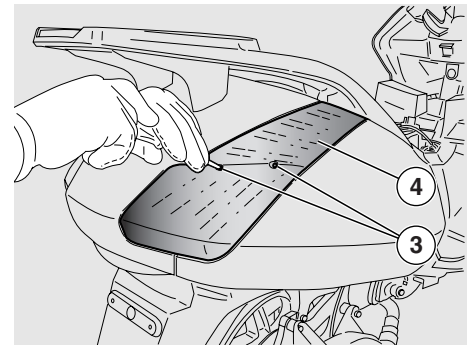
### CHANGING THE TAIL LIGHT BULBS

Carefully read page 68 (BULBS).

The tail light accommodates the following bulbs:

- Two parking light/brake light bulbs (1).
- Two rear direction indicator bulbs (2).

**NOTE** The following information applies to both direction indicators.



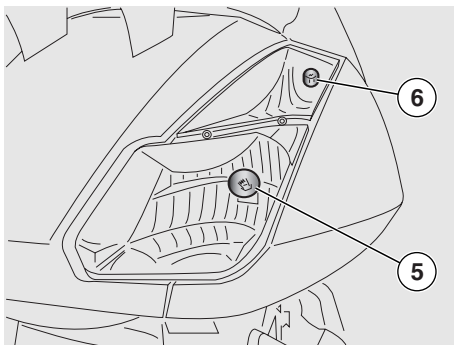
To change the bulbs:

- ◆ Unscrew the two retaining screws (3) and remove lens (4).

### ⚠ CAUTION

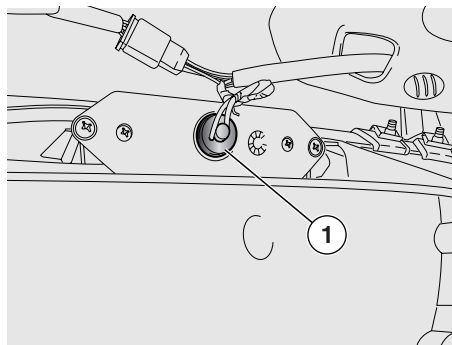
**Proceed with care.**

**Do not damage the tabs and/or their seats.**



- ◆ Rotate anticlockwise and extract the parking/brake light bulb (5) or the direction indicator bulb (6).
- ◆ Fit a new bulb of equal rating.

**NOTE** On refitting, ensure that the lens (4) locates properly into its slot.



### REPLACING THE NUMBER PLATE BULB

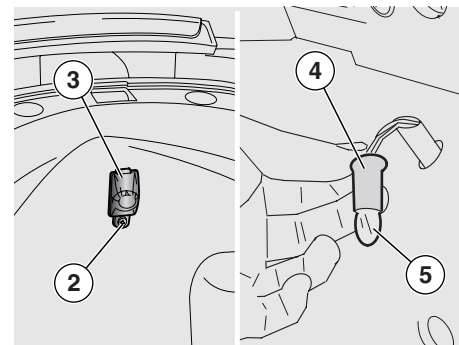
Carefully read page 68 (BULBS).

To change the bulbs:

#### ⚠ CAUTION

**Do not pull on the wires to remove the bulb holder.**

- ◆ Grasp the bulb holder (1) and pull to extract.
- ◆ Remove the bulb and fit a new bulb of equal rating.



### REPLACING THE HELMET COMPARTMENT LIGHT BULB

Carefully read page 68 (BULBS).

To change the bulbs:

- ◆ Raise the seat, see page 20 (UNLOCKING/LOCKING THE SEAT).
- ◆ Release and remove the screw (2) securing the transparent cover to the battery cover.
- ◆ Remove the transparent cover (3) by pulling it downwards.

#### ⚠ CAUTION

**Do not pull on the wires to remove the bulb holder.**

- ◆ Grasp the bulb holder (4) and pull to extract.
- ◆ Remove the bulb (5) and fit a new bulb of equal rating.

### **WARNING**

Before transporting the vehicle, it is necessary to empty the fuel tank completely, making sure that it is completely dry.

During transport, the vehicle must be firmly secured in an upright position to avoid fuel, oil and coolant leaks.

If stranded, do not have the vehicle towed - contact a roadside service firm instead.

### **DRAINING THE FUEL TANK**

Carefully read page 23 (FUEL).

### **WARNING**

**Risk of fire.**

**Allow some time for the engine and muffler to cool down completely.**

**Fuel vapours are harmful to human health.**

**Ensure the area is well ventilated before proceeding.**

**Do not inhale fuel vapours.**

**Do not smoke, nor use naked flames.**

**DO NOT RELEASE FUEL IN THE ENVIRONMENT.**

- ◆ Place the vehicle on the centre stand on firm and level ground.
- ◆ Stop the engine and wait until it has cooled down.
- ◆ Prepare a container large enough to hold the fuel in the tank and place it on the floor on the left side of the vehicle.
- ◆ Remove the fuel filler plug.
- ◆ Drain fuel using a manual pump or similar system. Do not damage the fuel pump assembly (fuel level sensor accommodated inside the tank).

### **WARNING**

**Refit the filler plug after draining all fuel.**





Clean the vehicle frequently if it is used in particular areas or conditions, such as:

- ◆ Polluted areas (town and industrial areas).
- ◆ High salinity and humidity (sea areas, hot and damp climates).
- ◆ Seasonal/environmental conditions (road salt and chemicals spread on the roads in the wintertime).
- ◆ Make sure to clean off any industrial residue and pollutants, tar, dead insects, bird droppings, etc. from the body panels and fairings.
- ◆ Avoid parking the vehicle under trees. Resins, fruits or leaves falling from the trees may contain aggressive chemical substances that may damage the paintwork.

### **⚠ WARNING**

After the vehicle has been washed, braking efficiency could be temporarily impaired because the friction surfaces of the braking systems may still be wet. Ride carefully as braking distance will be longer. Operate the brakes repeatedly to restore normal operation. Perform the recommended pre-ride checks, see page 31 (PRE-RIDE CHECKS CHART).

To remove dirt and mud from painted surfaces, use a low-pressure water jet on dirty areas, remove mud and dirt with a soft car body sponge soaked with abundant water and shampoo (2 - 4% parts of shampoo). Then rinse with plenty of water and dry with chamois leather. Clean the outer parts of the engine using a degreaser, small brushes and cloth.

### **⚠ CAUTION**

**Before washing the vehicle**

- 1) Empty the front and under-seat compartments. Remove the matting inside the under-seat compartment.
- 2) Make sure the compartments are properly closed.
- 3) Use only mild detergent to wash the vehicle, rinse with water, but do not use a water cleaner (see page 73).

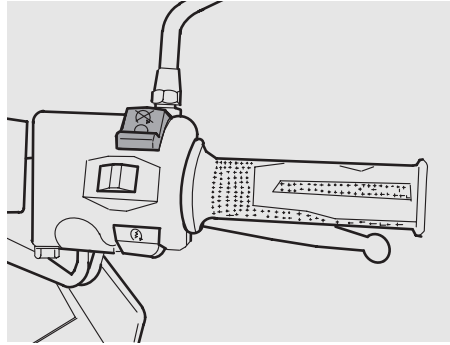
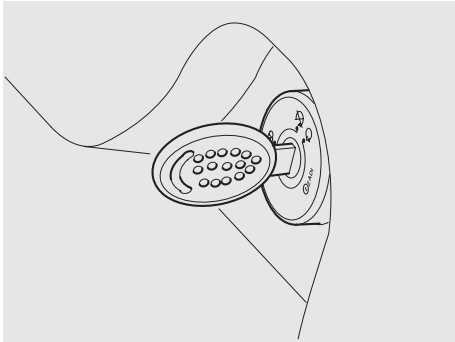
### **⚠ CAUTION**

Wash the vehicle thoroughly before applying silicone wax. Do not polish matt-painted surfaces with polishing paste. Do not wash the vehicle under the sun, especially in the summertime, when the body is still warm, as the shampoo will dry before you can rinse it away and could damage the paint. Do not use fluids at a temperature higher than 40°C to clean the plastic components of the vehicle. Do not aim high-pressure water/air jets or steam jets at the following parts: wheel hubs, controls on the right and left side of the handlebar, bearings, brake master cylinders, instruments and indicators, silencer exhaust, glove/tool kit compartment, ignition switch/steering lock. Do not use alcohol, fuel or solvents to clean the rubber and plastic parts: use only water and mild soap.

Do not use solvents or oil-derived fluids (such as acetone, trichloroethylene, turpentine, fuel, thinners) to clean the seat. You can use detergents with surface-active agents up to 5% (mild soap, degreasing agents or alcohol). Carefully dry the seat when clean.

### **⚠ WARNING**

Do not apply protection waxes to the seat, or it may become slippery.



### LONG PERIODS OF INACTIVITY

When the vehicle is to remain unused for long periods, some precautions are necessary to avoid damage.

Do not postpone necessary repairs or you could forget them when you take the vehicle out of storage; a general check up is also recommended.

Proceed as follows:

- ◆ Drain the fuel tank completely.
- ◆ Remove the spark plug, see page 60 (SPARK PLUG).
- ◆ Pour a teaspoon of engine oil (5-10 cu.cm) into the cylinder.

**NOTE** Put a clean cloth on the cylinder, near the spark plug seat, in order to protect it from oil sprays.

- ◆ Turn the ignition switch to position “○” and press the engine start push-button “⊗” for a few seconds, to distribute the oil evenly on the cylinder surfaces.
- ◆ Remove the cloth.
- ◆ Refit the spark plug.
- ◆ Remove the battery, see page 62 (LONG INACTIVITY OF THE BATTERY) and page 63 (REMOVING THE BATTERY).
- ◆ Wash and dry the vehicle, see page 73 (CLEANING).
- ◆ Polish painted surfaces with wax.
- ◆ Inflate the tyres, see page 75 (TECHNICAL DATA).
- ◆ By means of a suitable support, position the vehicle so that both tyres are raised from the ground.
- ◆ Store the vehicle in an unheated, dry place, away from sunlight, where temperature is reasonably steady.

- ◆ Wrap and tie a plastic bag around the exhaust pipe opening to keep moisture out.
- ◆ Cover the vehicle avoiding plastic or waterproof covers.

### AFTER STORAGE

- ◆ Remove the cover and clean the vehicle, see page 73 (CLEANING).
- ◆ Check battery charge, see page 64 (CHARGING THE BATTERY) and install it, see page 64 (INSTALLING THE BATTERY).
- ◆ Fill the fuel tank, see page 23 (FUEL).
- ◆ Perform the recommended pre-ride checks, see page 31 (PRE-RIDE CHECKS CHART).

### WARNING

**Test ride the vehicle at moderate speed in an area away from traffic.**

## TECHNICAL DATA

<b>Dimensions</b>	Max. Length <b>125</b> <b>250</b>	2085 mm
	Max. Length <b>500</b>	2200 mm
	Max. Width <b>125</b> <b>250</b>	785 mm
	Max. Width <b>500</b>	815 mm
	Max. height (headlight fairing included)	1370 mm
	Seat height	790 mm
	Wheelbase <b>125</b>	1470 mm
	Wheelbase <b>250</b>	1480 mm
	Wheelbase <b>500</b>	1550 mm
	Minimum ground clearance	190 mm
	Loadless weight (in running order) <b>125</b>	162 kg
	Loadless weight (in running order) <b>250</b>	170 kg
	Loadless weight (in running order) <b>500</b>	210 kg
<b>Engine</b>	Make <b>125</b>	M23BM
	Make <b>250</b>	M23AM
	Make <b>500</b>	M346M
	Type	One-cylinder, 4-stroke engine with 4 valves, forced lubrication with wet sump, one overhead camshaft.
	Number of cylinders	1
	Total displacement <b>125</b>	124 cu. cm.
	Total displacement <b>250</b>	244 cu. cm.
	Total displacement <b>500</b>	459 cm <sup>3</sup>
	Bore / stroke <b>125</b>	57 x 48.6mm
	Bore / stroke <b>250</b>	72 x 60mm
	Bore / stroke <b>500</b>	92 x 69mm
	Compression ratio <b>125</b>	12.0 ± 0.5 : 1
	Compression ratio <b>250</b>	11.0 ± 0.5 : 1
Compression ratio <b>500</b>	10.5 ± 0.5 : 1	
Starting	electric	
Engine idling rpm <b>125</b> <b>250</b>	1600 ± 100 rpm	
Engine idling rpm <b>500</b>	1450 ± 100 rpm	
Clutch	Centrifugal	
Gearbox	automatic	

	Cooling	Liquid cooling (50% water + 50% coolant) with forced circulation	
	Valve clearance	Intake 0.10 / Exhaust 0.15	
<b>Fuel supply</b>	Model 125	CVK 7 30 KEIHIN Carburettor	
	Model 250	Throttle body ø 32 mm	
	Model 500	Throttle body ø 38 mm	
	Fuel	Premium-grade unleaded petrol, minimum octane rating 95 (ROM) and 85 (MON).	
<b>Capacities</b>	Fuel (reserve included) 125 250	9.5 ℓ	
	Fuel (reserve included) 500	14.5 ℓ	
	Fuel reserve	1.5 ℓ	
	Engine oil 125	1150 cu. cm.	
	Engine oil 250	1300 cu. cm.	
	Engine oil 500	1700 cu. cm.	
	Transmission fluid 125 250	150 cu. cm.	
	Transmission fluid 500	250 cu. cm.	
	Cooling system 125 250	1,200 cu. cm.	
	Cooling system 500	1,500 cu. cm.	
	Seats	2	
	Max. carrying load (rider + passenger + luggage) 125 250	210 kg	
	Max. carrying load (rider + passenger + luggage) 500	200 kg	
	<b>Transmission</b>	Converter	automatic, stepless
		Primary	V-belt
Final		gears	
Total engine/wheel ratio 125			
minimum		1:29.26	
maximum		1:8.78	
Total engine/wheel ratio 250			
minimum		1:19.30	
maximum		1:6.80	
Total engine/wheel ratio 500			
minimum	1:12.72		
maximum	1:4.88		
<b>Frame</b>	Type	Single-beam, superimposed double cradle	
	Steering head angle	28°	
	Trail	104 mm	

<b>Suspensions</b>	Front	hydraulically operated telescopic fork	
	Stroke	105 mm	
	Rear	Hydraulic shock absorber	
	Stroke <b>125</b> <b>250</b>	105 mm	
<b>Brakes</b>	Stroke <b>500</b>	90 mm	
	Front <b>125</b> <b>250</b>	disc brake - Ø 240 mm - with hydraulic transmission	
	Front <b>500</b>	disc brake - Ø 260 mm - with hydraulic transmission	
	Rear <b>125</b> <b>250</b>	Hydraulic disk brake - Ø 190 mm – integral braking system.	
	Rear <b>500</b>	Hydraulic disk brake - Ø 220 mm – integral braking system.	
<b>Wheel rims</b>	Front <b>125</b> <b>250</b>	E - 13 x 3.00 DOT - D	
	Front <b>500</b>	E - 14 x 3.00 DOT - D	
	Rear <b>125</b> <b>250</b>	E - 13 x 3.50 DOT - D	
	Rear <b>500</b>	E - 14 x 3.75 DOT - D	
	<b>Tyres</b>	Type	tubeless
Front <b>125</b> <b>250</b>		110 / 90 - 13" 56P	
Front <b>500</b>		120 / 70 - 14" 55R	
Rear <b>125</b> <b>250</b>		130 / 70 - 13" 63P	
Rear <b>500</b>		140 / 60 - 14" 64R	
STANDARD INFLATION PRESSURE			
Front <b>125</b> <b>250</b>		200 kpa	
Front <b>500</b>		230 kpa	
Rear <b>125</b> <b>250</b>		220 kpa	
Rear <b>500</b>		240 kpa	
INFLATION PRESSURE WITH PASSENGER			
Front <b>125</b> <b>250</b>	220 kpa		
Front <b>500</b>	230 kpa		
Rear <b>125</b> <b>250</b>	240 kpa		
Rear <b>500</b>	260 kpa		
<b>Ignition</b>	Type	Capacity discharge ignition with variable advance	
	Spark advance <b>125</b>	Variable, controlled by the ECU 5°/minimum - 24°/>4000 rpm	
	Spark advance <b>250</b>	Variable, controlled by the ECU 4°/minimum - 15°/4000 -6000 rpm	
	Spark advance <b>500</b>	Variable, controlled by the ECU 20°/3100 rpm - 33°/6200 rpm	

<b>Spark plug</b> 125 250	Standard	NGK - CR8EB
	As an alternative	NGK - CR7EB NGK - CR9EB CHAMPION RG6YC CHAMPION RG4HC CHAMPION RG6YC CHAMPION RG4HC
<b>Spark plug</b> 500	Standard	NGK - CR7EKB NGK - CR8EKB
	As an alternative	0.7 – 0.8 mm
	Spark plug gap	12 V - 12 Ah
<b>Electric system</b>	Battery	20 - 15 - 7.5 A
	Fuses 125 250	3 - 15 - 30 A
	Fuses 500	12 V - 180 W
	Generator (with permanent magnet) 125	12 V - 235 W
	Generator (with permanent magnet) 250	12 V – 380 W
<b>Bulbs</b>	Generator (with permanent magnet) 500	12 V – 55 W
	Low beam	12 V – 55 W
	High beam	12 V – 16 W
	Parking light	12 V – 10 W
	Direction indicator light	12V - 5W / 21W
	Tail light / brake light	12 V - 1.2 W
<b>Warning lights</b>	Instrument panel lighting	12 V - 1.2 W
	Direction indicators	12 V - 1.2 W
	Engine oil pressure	12 V - 1.2 W
	Low beam	12 V - 1.2 W
	High beam	12 V - 1.2 W
	Fuel reserve	12 V - 1.2 W

## LUBRICANT CHART



**(Recommended) Engine oil:**  SUPERBIKE 4, SAE 5W - 40.


As an alternative to recommended fluids, top brand oils meeting or exceeding A.P.I. SJ specifications can be used.


**(Recommended) Transmission fluid:**  F.C., SAE 75W-90.

As an alternative to recommended fluids, top brand oils meeting or exceeding A.P.I. GL3 specifications can be used.

**(Recommended) Fork fluid:**  F.A. 5W fork oil or  F.A. 20W.

When you wish to obtain an intermediate response between those offered by  F.A. 5W and  F.A. 20W oils, you may mix the different products as follows:

SAE 10W =  F.A. 5W 67% of volume +  F.A. 20W 33% of volume.

SAE 15W =  F.A. 5W 33% of volume +  F.A. 20W 67% of volume.

**Bearings and other lubrication points (recommended):**  BIMOL GREASE 481.

As an alternative to recommended grease, use top brand rolling bearing grease that will resist a temperature range of -30°C +140°C, with dropping point 150°C - 230°C, high corrosion protection, good resistance to water and oxidation.

**Battery lead protection:** Neutral grease or Vaseline.

### WARNING

**Use new brake fluid only. Do not mix different brands or types of oil unless you are sure that the different oil bases are compatible.**

**(Recommended) brake fluid:**  F.F. DOT 4 (compatible DOT 5).

As an alternative to the recommended product, top brand brake fluid meeting or exceeding SAE J1703, NHTSA 116 DOT 4, ISO 4925 specifications for synthetic brake fluid can be used.

### WARNING

**Use only antifreeze and anticorrosive without nitrite, ensuring protection at -35°C at least.**

**Engine coolant (recommended):**  ECOBLU -40°C.

As an alternative to the recommended product, top brand brake fluid meeting or exceeding CUNA NC 956-16 specifications for ethylene glycol coolant can be used.

**THE VALUE OF SERVICE** aprilia

Thanks to ongoing technical updates and product-specific technical training, **aprilia** Authorised Network engineers are familiar with every detail of this vehicle and have the special equipment required for correct maintenance and repair.

A vehicle kept in sleek running order is a reliable vehicle. Pre-ride checks, proper maintenance at the recommended intervals and using **aprilia** Original Parts only are key factors!

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**Piaggio & C. S.p.A.** wishes to thank you for purchasing this vehicle and recommends the following:

- Do not release oil, fuel, polluting substances and components into the environment.
- Do not keep the engine running when not necessary.
- Avoid disturbing noise.
- Respect the environment.