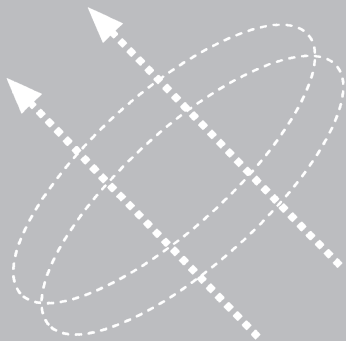


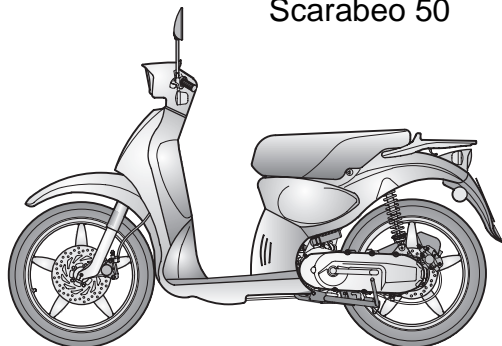
aprilia



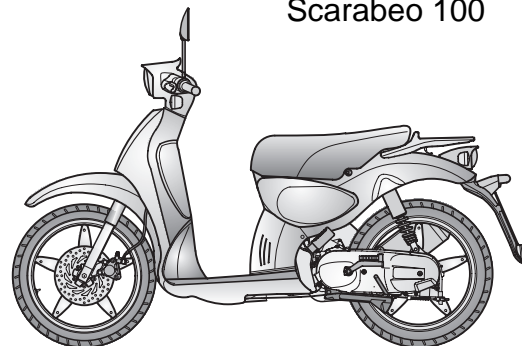
use and maintenance

aprilia part# 8104221

Scarabeo 50



Scarabeo 100



First edition: april 2000


Reprint:

Produced and printed by:
stp editing division
Soave (VERONA) - Italy
Tel. +39 - 045 76 11 911
Fax +39 - 045 76 12 241
E-mail: customer@stp.it
www.stp.it

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SAFETY WARNINGS

The following precautionary warnings are used throughout this manual in order to convey the following messages:

 **Safety warning. When you find this symbol on the vehicle or in the manual, be careful to the 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 precedes important information or instructions.





TECHNICAL

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

If not expressly indicated otherwise, for the reassembly of the units repeat the disassembly operations in reverse order.

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

 Any mention to the use of the vehicle with passenger is to be intended as referred only to the countries where this is allowed.

In the text and figures the symbols   preceded by the symbol of the model ( ) refer exclusively to the model indicated.

WARNINGS - PRECAUTIONS - GENERAL ADVICE

Before starting the engine, carefully read this manual and in particular the section "SAFE DRIVE".

Your and other people's safety depends not only on your quickness of reflexes and on your agility, but also on what you know about the vehicle, on its efficiency and on your knowledge of the basic information for "SAFE DRIVE". Therefore, get a thorough knowledge of the vehicle, in such a way as to be able to drive in the traffic safely.

NOTE This manual must be considered as an integral part of the vehicle and must always accompany it, even in case of re-sale.

aprilia has produced 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** Official 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** Official Dealers and Service Centers, which guarantee prompt and accurate assistance.

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

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

NOTE In some countries the antipollution and noise regulations in force require periodical inspections.

The user of the vehicle in these countries must:

- contact an **aprilia** Authorized Dealer to have the non-homologated components replaced with others homologated for use in the country in question;
- carry out the required periodical inspections.

NOTE When asking your Dealer for spare parts, specify the spare parts code indicated on the SPARE PARTS IDENTIFICATION LABEL.

Write down the identification code in the space here below, in order to remember it also in case of loss or deterioration of the label.

The label is positioned on the left beam of the frame; to be able to read it, remove the inspection cover, see p. 60 (REMOVING THE INSPECTION COVER).

aprilia N°				YEAR	T	V	W	X	Y
SPARE PARTS CODE NUMBER				I.M.	A	B	C	D	E
I	UK	A	P	SF	B	D	F	E	GR
NL	CH	DK	J	SGP	PL	IL	ROK	MAL	RCH
BM	USA	AUS	BR	RSA	NZ	CDN	HR	SLO	

In this manual the various versions are indicated by the following symbols:

- 50** 50 cm³ model
- 100** 100 cm³ model
- ASD** automatic light switching version (Automatic Switch-on Device)
- OPT** optional
- (C)** drum brake version
- (*)** catalytic version

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
- PL** Poland
- IL** Israel
- ROK** South Korea
- MAL** Malaysia
- RCH** Chile
- BM** Bermuda
- USA** United States of America
- AUS** Australia
- BR** Brazil
- RSA** South Africa
- NZ** New Zealand
- CDN** Canada
- HR** Croatia
- SLO** Slovenia

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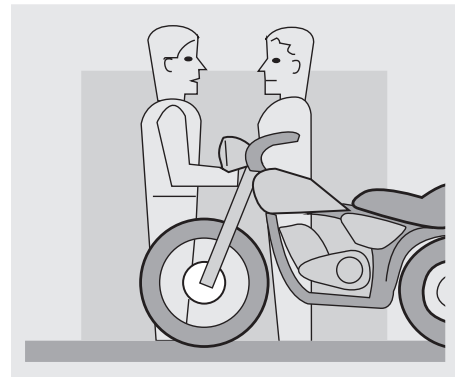
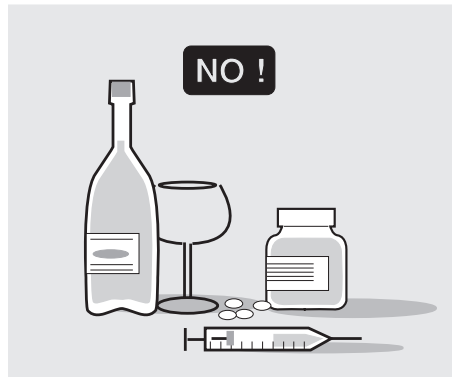
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aprilia



safe drive





BASIC SAFETY RULES

To drive the vehicle it is necessary to be in possession of all the requirements prescribed by law (driving licence, minimum age, psychophysical ability, insurance, state taxes, vehicle registration, number plate, etc.).

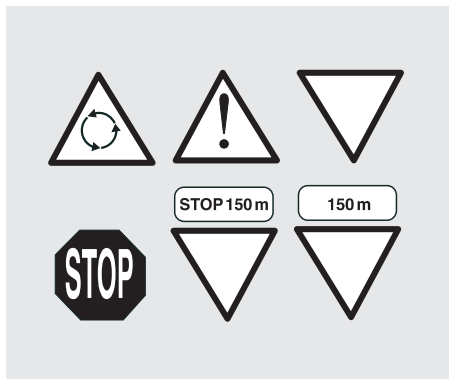
Gradually get to know the vehicle by driving it first in areas with low traffic and/or private areas.

The use of medicines, alcohol and drugs or psychotropic substances notably increases the risk of accidents.

Be sure that you are in good psychophysical conditions and fit for driving and pay particular attention to physical weariness and drowsiness.

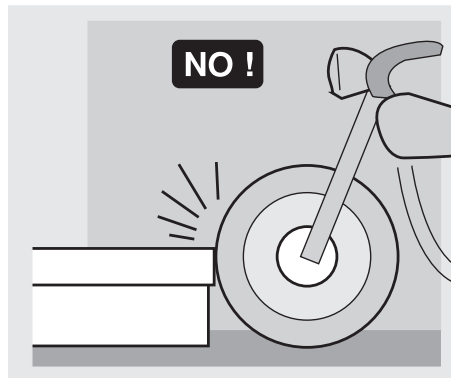
Most road accidents are caused by the driver's lack of experience.

NEVER lend the vehicle to beginners and, in any case, make sure that the driver has all the requirements for driving.



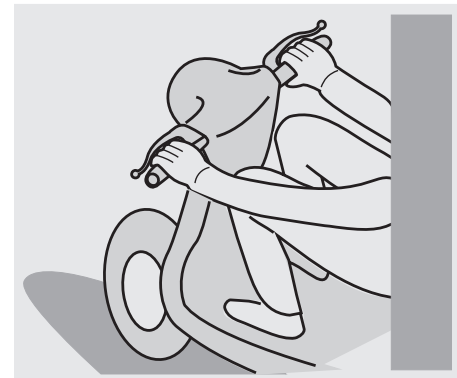
Rigorously observe all road signs and national and local road regulations.

Avoid abrupt movements that can be dangerous for yourself and other people (for example: rearing up on the back wheel, speeding, etc.), and give due consideration to the road surface, visibility and other driving conditions.

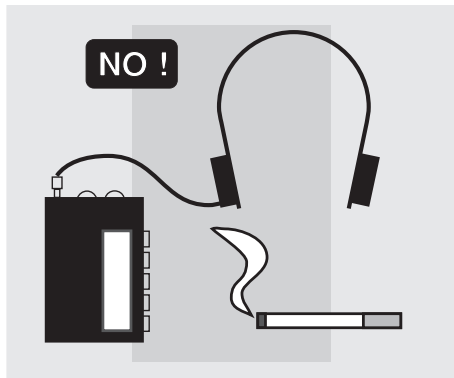


Avoid obstacles that could damage the vehicle or make you lose control.

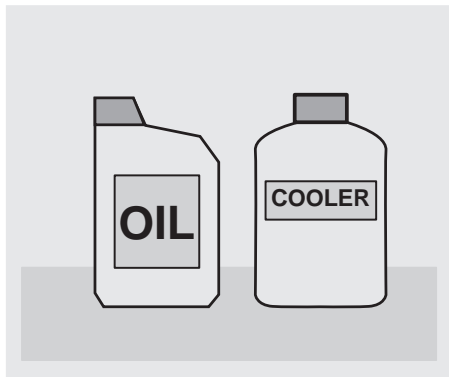
Avoid riding in the slipstream created by preceding vehicles in order to increase your speed.



Always keep both hands on the handlebars and both feet on the footboard (or on the footrests), in the correct driving posture. Avoid standing up or stretching your limbs while driving.



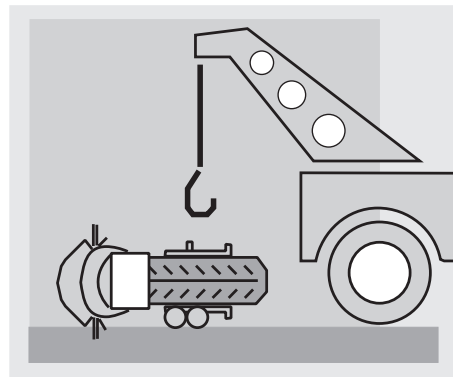
The driver should pay attention and avoid distractions caused by people, things and movements (never smoke, eat, drink, read, etc.) while driving.



Use only the vehicle's specific fuels and lubricants indicated in the "LUBRICANT CHART"; check all oil, fuel and coolant levels regularly.

If the vehicle has been involved in an accident, make sure that no damage has occurred to the control levers, pipes, wires, braking system and vital parts.

If necessary, have the vehicle inspected by an **aprilia** Official Dealer, who should carefully check the frame, handlebars, suspensions, safety parts and all the devices that you cannot check by yourself.



Always remember to report any malfunction to the technicians to help them in their work.

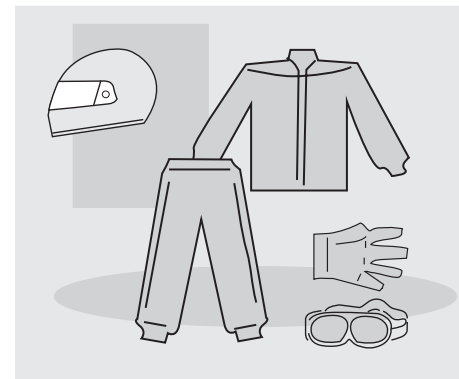
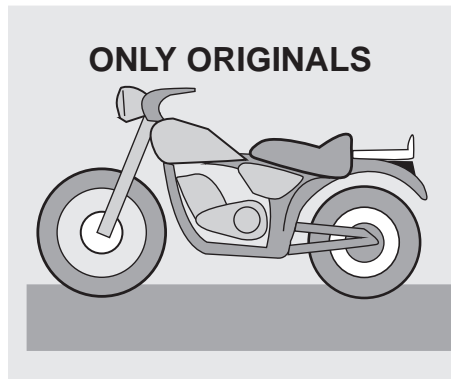
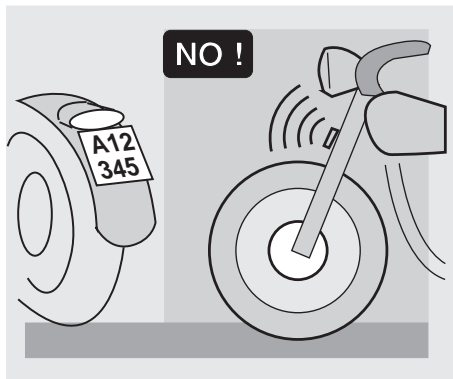
Never use the vehicle when the amount of damage it has suffered endangers your safety.

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

Any modification of the vehicle will result in the invalidity of the guarantee.

For only vehicles up to 50 cm³ included

Any modification of the engine or of other members which is aimed at increasing the speed or the power of the vehicle is prohibited by the law; in fact, any modification resulting in an increase of the maximum speed or of the engine displacement would change the scooter into a motorcycle,



which implies the following obligations for the owner:

- new homologation;
- new registration;
- appropriate driving license.

Further, said modifications cause the loss of the insurance cover, since insurance policies expressly prohibit to make technical changes aimed at increasing the vehicle performance levels.

For the reasons stated above, the failure to comply with the tampering prohibition is punished by law with appropriate sanctions (including the confiscation of the vehicle), which, according to the case, can be combined with the sanctions provided for not using the crash helmet and/or the number plate, for the violation of fiscal obligations (ownership tax) and with penal sanctions provided for using the vehicle without driving license.

For only vehicles over 50 cm³

Any modification of the vehicle and/or the removal of original components can compromise vehicle performance levels and safety or even make it illegal.

We recommend respecting all regulations and national and local provisions regarding the equipment of the vehicle.

In particular, avoid all modifications that increase the vehicle's performance levels or alter its original characteristics.

Never race with other vehicles.

Avoid off-road driving.

CLOTHING

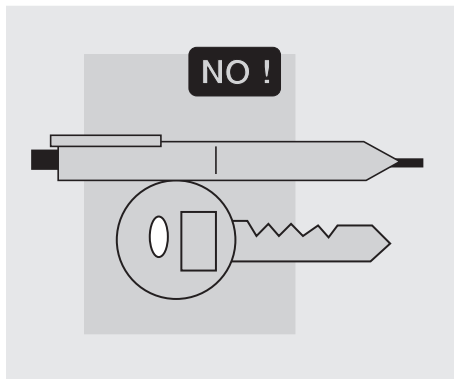
Before starting, always wear a correctly fastened crash helmet. Make sure that it is homologated, in good shape, of the right size and that the visor is clean.

Wear protective clothing, preferably in light and/or reflecting colours.

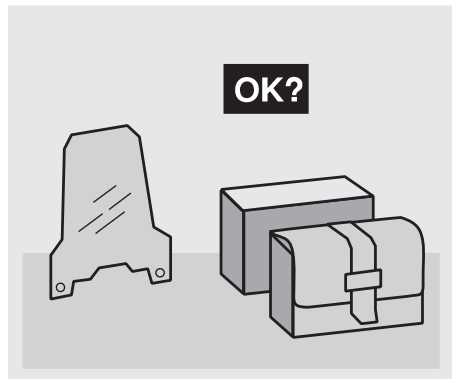
In this way you will make yourself more visible to the other drivers, thus notably reducing the risk of being knocked down, and you will be more protected in case of fall.

This clothing should be very tight-fitting and fastened at the wrists and ankles.

Strings, belts and ties should not be hanging loose; prevent these and other objects from interfering with driving by getting entangled with moving parts or driving mechanisms.



Do not keep objects that can be dangerous in case of fall, for example pointed objects like keys, pens, glass vials etc. in your pockets (the same recommendations also apply to passengers).



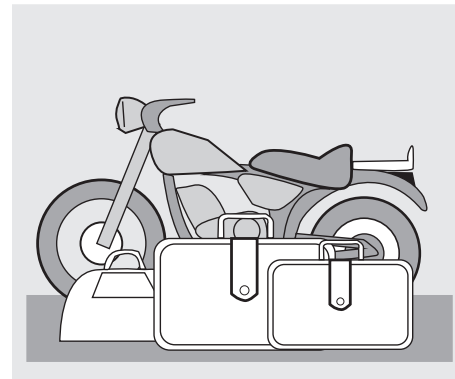
ACCESSORIES

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

Avoid installing accessories that cover horns or lights or that could impair their functions, limit the suspension stroke and the steering angle, hamper the operation of the controls and reduce the distance from the ground and the angle of inclination in turns.

Avoid using accessories that hamper access to the controls, since this can prolong reaction times during an emergency.

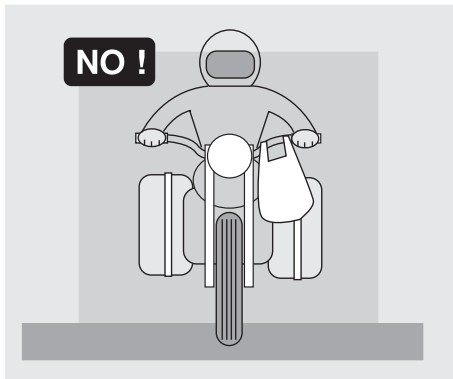
Big fairings and windshields installed on the vehicle may produce aerodynamic forces that affect the stability of the vehicle, especially when riding at high speed.



Make sure that the equipment is well fastened to the vehicle and not dangerous during driving. Do not install electrical devices and do not modify those already existing to avoid electrical overloads, because the vehicle could suddenly stop or there could be a dangerous current short-age in the horn and in the lights. **aprilia** recommends the use of “**aprilia** genuine accessories”.

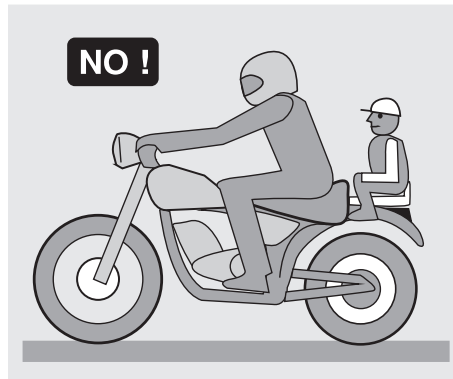
LOAD

Be careful and moderate when loading your luggage. Keep any luggage loaded as close as possible to the center of gravity of the vehicle and distribute the load uniformly on both sides, in order to reduce imbalance to the minimum. Furthermore, make sure that the load is firmly secured to the vehicle, especially during long trips.



Avoid hanging bulky, heavy and/or dangerous objects on the handlebars, mudguards and forks: the vehicle might respond more slowly in turns and its manoeuvrability could be unavoidably impaired.

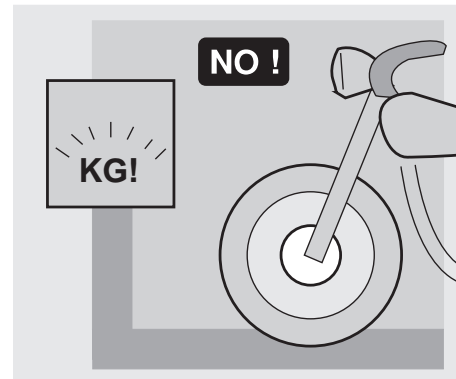
Do not place bags that are too bulky on the vehicle sides, because they could hit people or obstacles, making you lose control of the vehicle.



Do not carry any bag if it is not tightly secured to the vehicle.

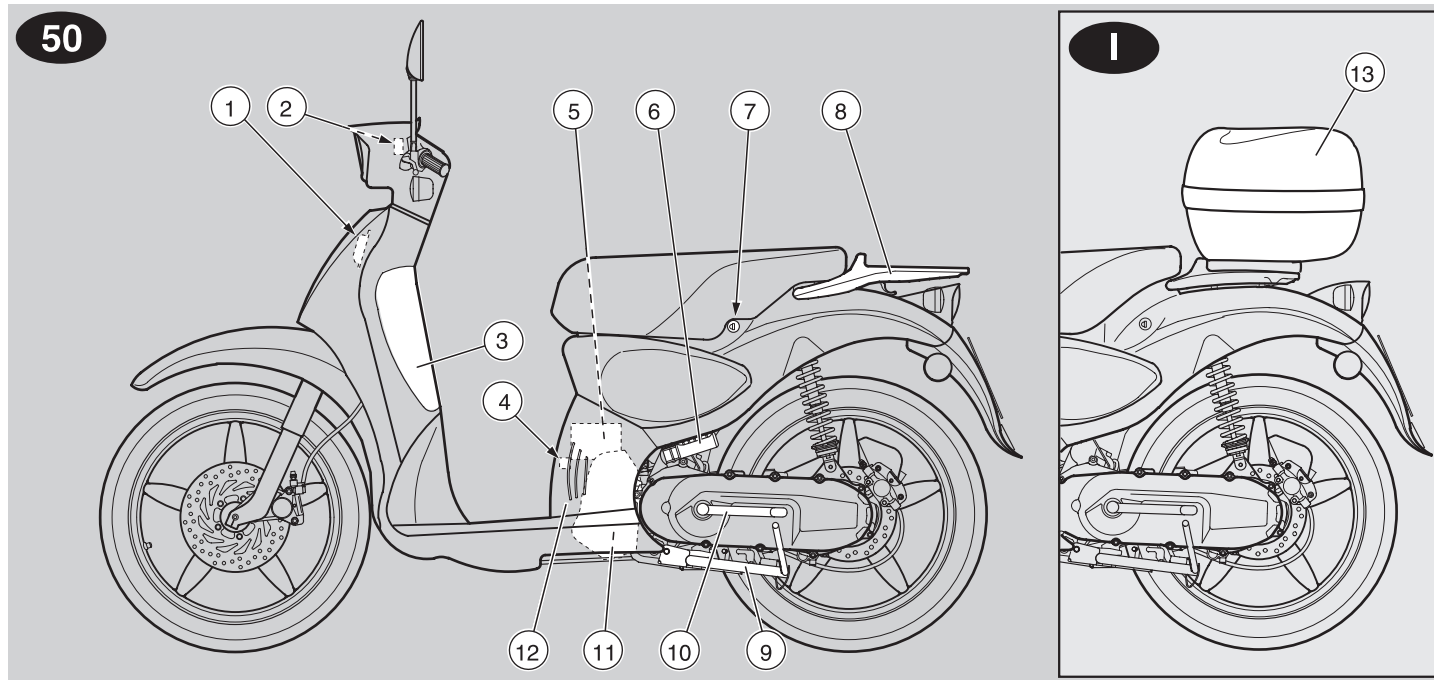
Do not carry bags which protrude too much from the luggage-rack or which cover the lights, horn or indicators.

Do not carry animals or children on the glove compartment or on the luggage-rack.




Do not exceed the maximum load allowed for each side-bag.

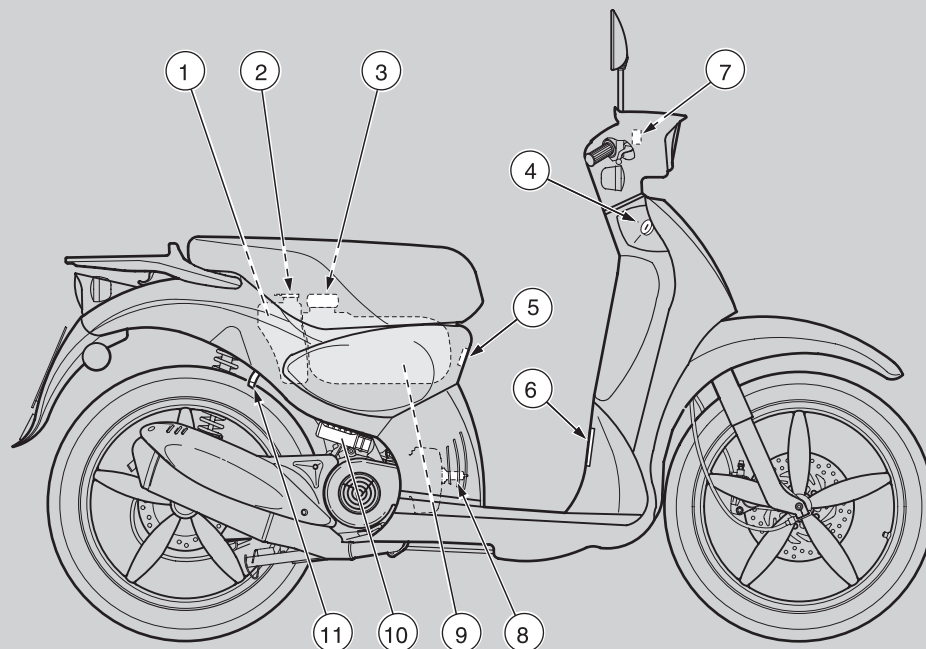
When the vehicle is overloaded, its stability and its manoeuvrability can be compromised.



KEY

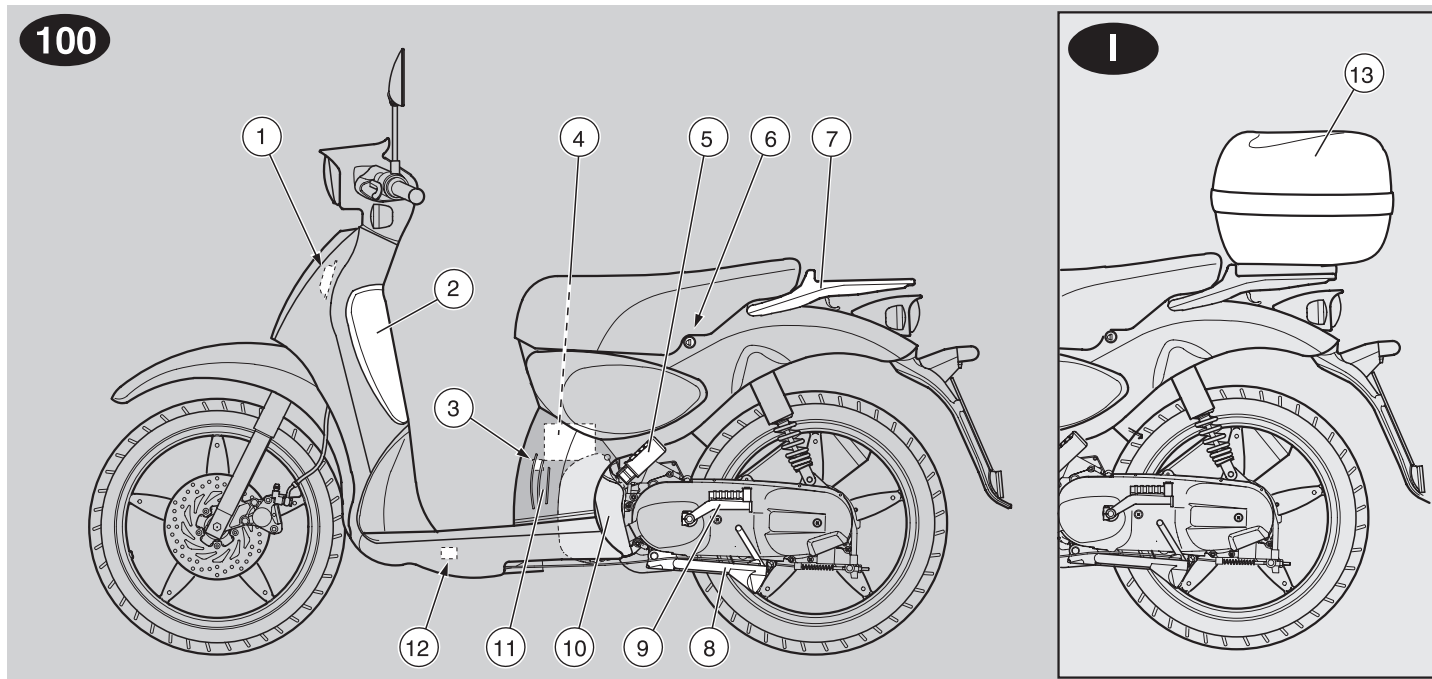
- | | | |
|-------------------------|---|---|
| 1) Horn | 6) Passenger left footrest
(in the countries where required) | 10) Kick starter |
| 2) Rear brake reservoir | 7) Saddle lock | 11) Air cleaner |
| 3) Glove compartment | 8) Luggage rack | 12) Inspection cover |
| 4) Fuse carrier | 9) Centre stand | 13)  Crash helmet case |
| 5) Battery | | |

50




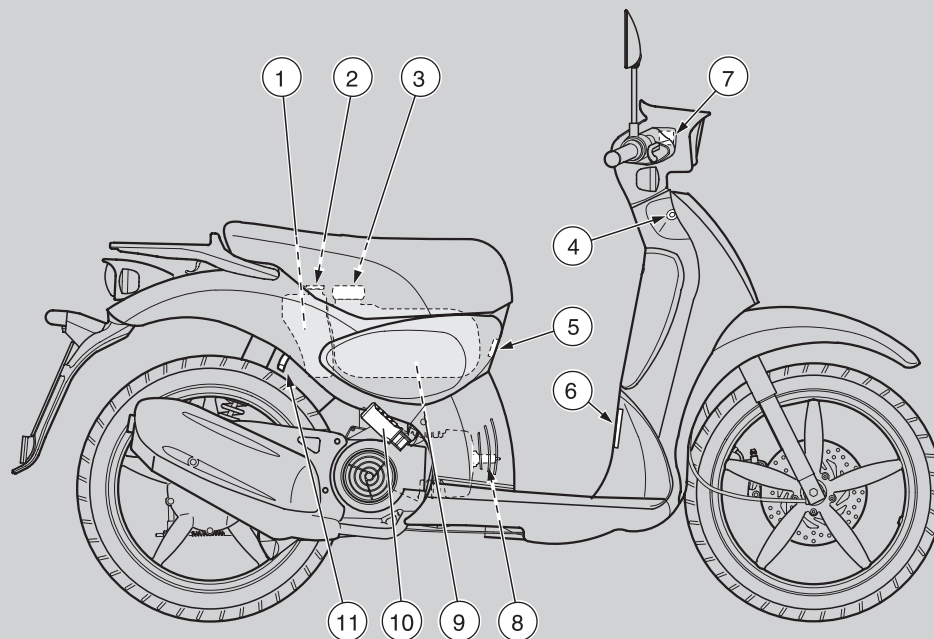
KEY

- | | | |
|----------------------------------|--------------------------|---|
| 1) 2 stroke oil tank | 6) Frame number cover | 10) Passenger right footrest |
| 2) 2 stroke oil tank plug | 7) Front brake reservoir | (in the countries where required) |
| 3) Fuel tank plug | 8) Spark plug | 11) Anti-theft hook (for the aprilia |
| 4) Ignition switch/steering lock | 9) Fuel tank | "Body-Guard" armored cable OPT) |
| 5) Bag hook | | |



KEY

- | | | |
|----------------------------|------------------|---|
| 1) Horn | 6) Saddle lock | 11) Inspection cover |
| 2) Glove compartment | 7) Luggage rack | 12) Speed variator air cleaner |
| 3) Fuse carrier | 8) Kick starter | 13)  Crash helmet case |
| 4) Battery | 9) Air cleaner | |
| 5) Passenger left footrest | 10) Centre stand | |



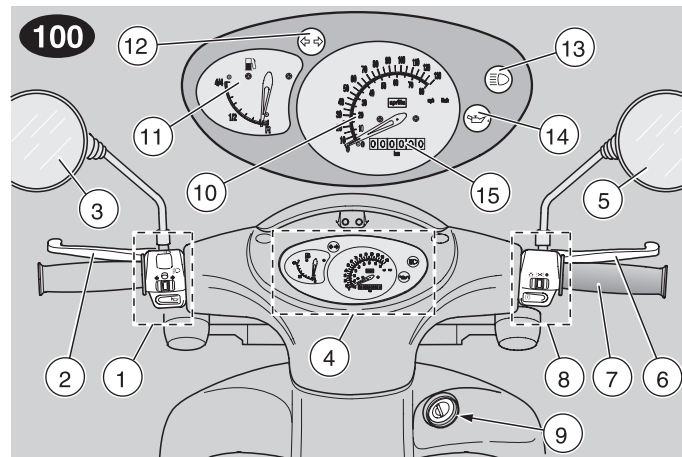
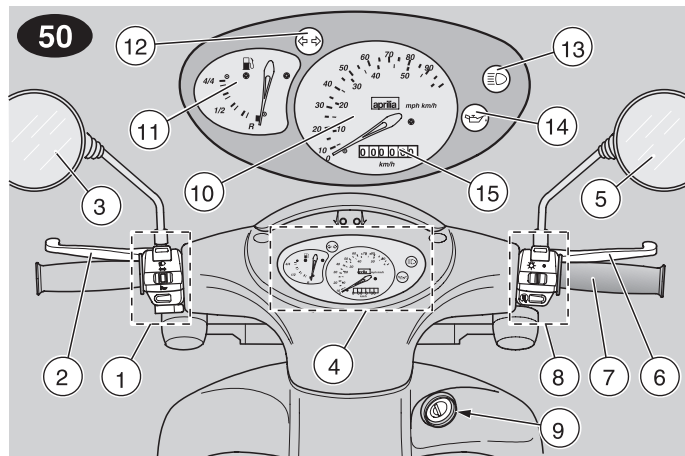
KEY

- 1) 2 stroke oil tank
- 2) 2 stroke oil tank plug
- 3) Fuel tank plug
- 4) Ignition switch/steering lock
- 5) Bag hook

- 6) Frame number cover
- 7) Front brake reservoir
- 8) Spark plug
- 9) Fuel tank

- 10) Passenger right footrest
- 11) Anti-theft hook (for the **aprilia** "Body-Guard" armored cable **OPT**)

ARRANGEMENT OF THE CONTROLS / INSTRUMENTS AND INDICATORS







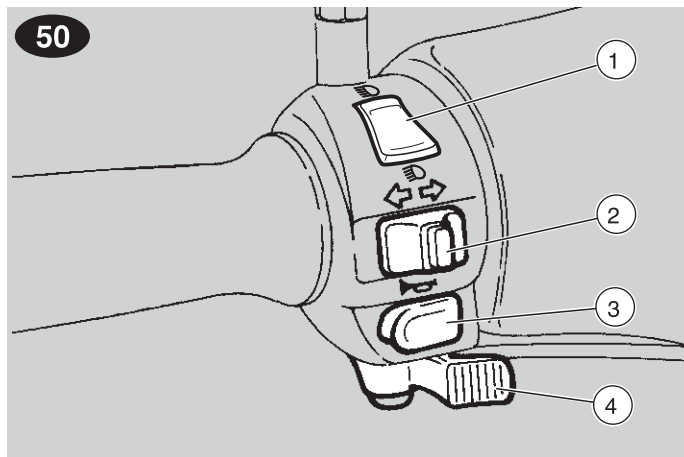
KEY

- 1) Electrical controls on the left side of the handlebar
- 2) Rear brake lever
- 3) Left rear-view mirror
- 4) Instruments and indicators
- 5) Right rear-view mirror (in the countries where required)
- 6) Front brake lever
- 7) Throttle grip
- 8) Electrical controls on the right side of the handlebar
- 9) Ignition switch/steering lock (○ - ✕ - Ⓐ)

- 10) Speedometer
- 11) Fuel level indicator (■)
- 12) Green direction indicator warning light (↔⇨)
- 13) Blue high beam warning light (≡▷)
- 14) Red 2 stroke oil reserve warning light (⚡)
- 15) Odometer

INSTRUMENT AND INDICATOR TABLE

Description	Function
Direction indicator warning light 	It blinks when the direction indicators are on.
2 stroke oil reserve warning light 	<p>It comes on when the ignition switch is in position “○” and the start push button “Ⓢ” is pressed, thus checking the proper functioning of the bulb. If the light does not come on during the starting, provide for replacing the bulb.</p> <p>⚠ CAUTION If the warning light comes on and does not go out after the start push button “Ⓢ” has been released, or if it comes on during normal functioning, this means that the 2 stroke oil reserve is being used; in this case, top up the 2 stroke oil tank, see p. 28 (2 STROKE OIL).</p>
Total kilometres odometer	It indicates the total number of kilometres covered.
Speedometer	It indicates the driving speed.
High beam warning light 	It comes on when the headlight in high beam position.
Fuel level indicator 	It indicates the approximate fuel level in the tank.



CONTROLS ON THE LEFT SIDE OF THE HANDLEBAR

NOTE The electrical parts work only when the ignition switch is in position “O”.

NOTE The lighting system works only when the motor is running.

1) DIMMER SWITCH (D - HD) (not provided in the ASD version)

When the light switch (☀ - ●) is in position “☀”, if the dimmer switch is in position “D”, the low beam comes on, while if it is in position “HD”, the high beam comes on.

2) DIRECTION INDICATOR 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. To turn off the direction indicator, press the switch.

3) HORN PUSH BUTTON (📢)

The horn is activated when the push button is pressed.

4) COLD START LEVER (🔧)

The lever for the cold start of the engine is operated by rotating the lever clockwise (outwards).

To disconnect the cold start, return the lever to its initial position.

CONTROLS ON THE RIGHT SIDE OF THE HANDLEBAR

NOTE The electrical parts work only when the ignition switch is in position “○”.

NOTE The lighting system works only when the motor is running.

1) LIGHT SWITCH (☀ - ●)

NOTE Before using the light switch, make sure that the dimmer switch (☹ - ☹) is in position “☹”.

When the light switch is in position “●”, the lights are off; when the light switch is in position “☀”, the rear parking light, the dashboard lights and the low or high beam are on.

By means of the dimmer switch (☹ - ☹), it is possible to operate the low or high beam.

1a) DIMMER SWITCH (☹ - ☹) ASD

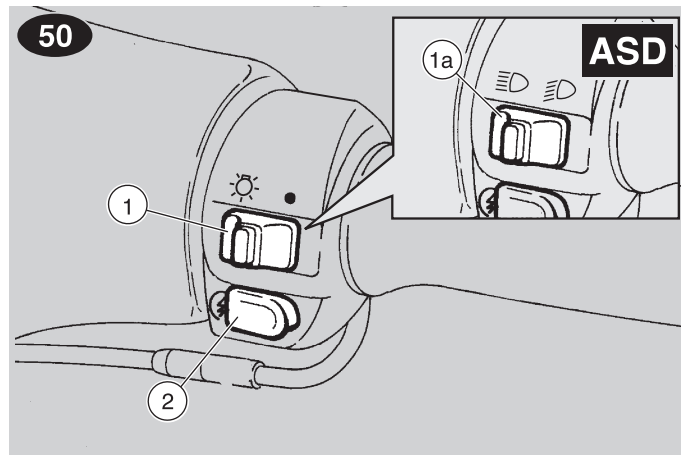
When the dimmer switch is in position “☹”, the low beam, the rear parking light and the dashboard lights are on; when the dimmer switch in position “☹”, the high beam, the rear parking light and the dashboard lights are on.

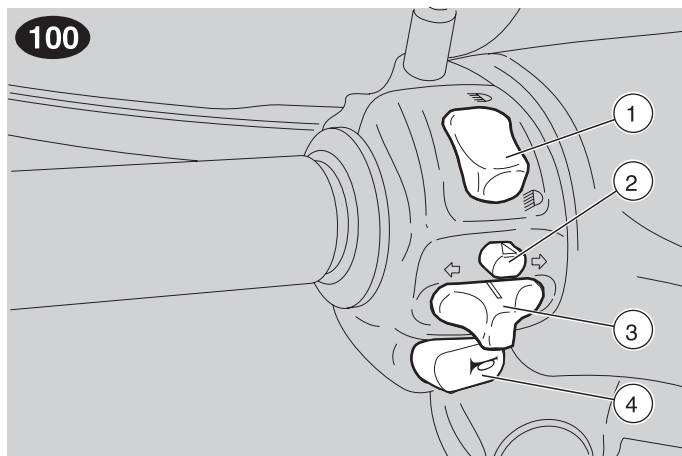
NOTE The lights can be switched off only by stopping the engine.

2) START PUSH BUTTON (Ⓢ)

When the start push button is pressed and one of the brake levers (front or rear) is activated at the same time, the starter makes the engine run.

For the starting procedure, see p. 36 (STARTING).











CONTROLS ON THE LEFT SIDE OF THE HANDLEBAR

NOTE The electrical parts work only when the ignition switch is in position “O”.

NOTE The lighting system works only when the motor is running.

1) DIMMER SWITCH (-)

When the light switch ( -  - ) is in position “  ”, if the dimmer switch is in position “  ”, the low beam comes on, while if it is in position “  ”, the high beam comes on.

2) DIRECTION INDICATOR DISCONNECTION BUTTON ()

When the direction indicator switch (3) is positioned on the right or on the left, the operation of the direction indicators can be interrupted by pressing the button.

3) DIRECTION INDICATOR 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 button (2) to disconnect the direction indicators.

4) HORN PUSH BUTTON ()

The horn is activated when the push button is pressed.

CONTROLS ON THE RIGHT SIDE OF THE HANDLEBAR

NOTE The electrical parts work only when the ignition switch is in position “○”.

NOTE The lighting system works only when the motor is running.

1) LIGHT SWITCH (☀ - ☹ - ●)

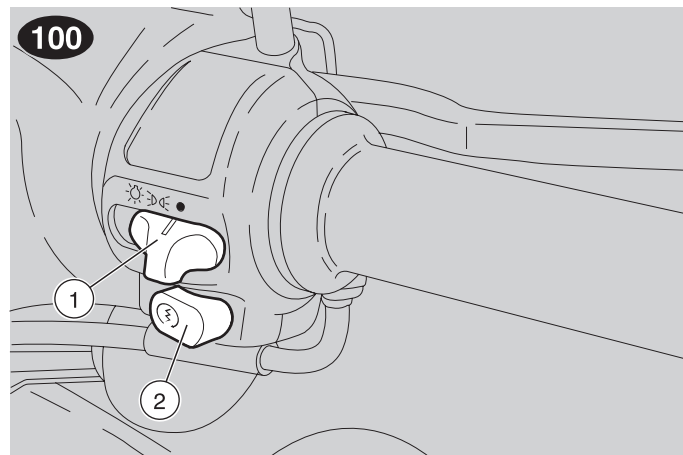
NOTE Before using the light switch, make sure that the dimmer switch (☹ - ☹) is in position “☹”.

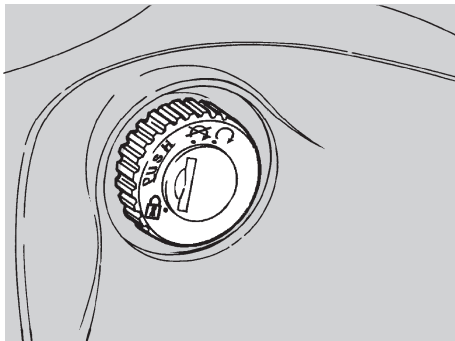
When the light switch is in position “●”, the lights are off; when the switch is in position “☹”, the parking lights and the dashboard light are on; when the switch is in position “☀”, the parking lights, the dashboard light and the low beam are on. The high beam can be operated by means of the dimmer switch (☹ - ☹).

2) START PUSH BUTTON (Ⓢ)

When the start push button is pressed and one of the brake levers (front or rear) is activated at the same time, the starter makes the engine run.

For the starting procedure, see p. 36 (STARTING).





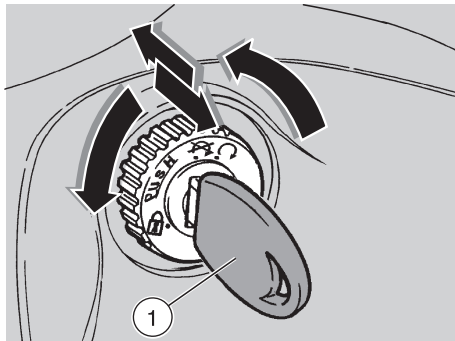
IGNITION SWITCH

The ignition switch is positioned on the right side, near the steering column.

NOTE The key (1) operates the ignition switch/steering lock, the glove compartment and the saddle lock.

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

NOTE Do not keep the spare key on the vehicle.



STEERING LOCK

⚠ WARNING

Never turn the key to position “🔒” in running conditions, in order to avoid losing control of the vehicle.

OPERATION

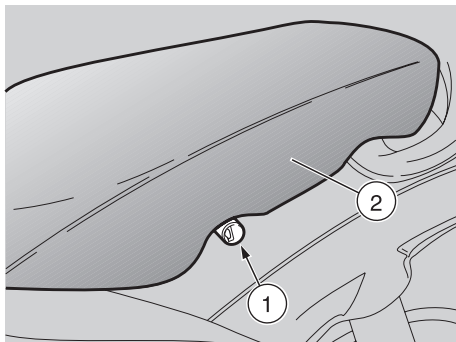
To lock the steering:

- ◆ Turn the handlebar completely leftwards.
- ◆ Turn the key (1) to position “🔒” and press it.
- ◆ Release the key.

NOTE Turn the key and steer the handlebar at the same time.

- ◆ Rotate the key (1) anticlockwise (leftwards), steer the handlebar slowly until the key (1) reaches position “🔒”.
- ◆ Extract the key.

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



UNLOCKING/LOCKING THE SADDLE

To unlock and lift the saddle:

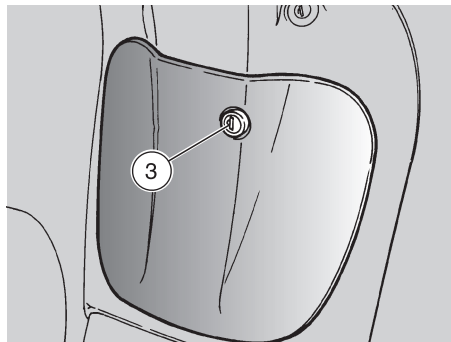
- ◆ Position the vehicle on the centre stand on firm and level ground.
- ◆ Insert the key in the saddle lock (1).
- ◆ Turn the key clockwise and raise the saddle (2).

NOTE Before lowering and locking the saddle, make sure that you have not left the key under the saddle.

- ◆ To lock the saddle, lower it and press it on its centre, making the lock snap shut.

⚠ WARNING

Before leaving, make sure that the saddle is properly locked.



GLOVE COMPARTMENT

To open the glove compartment, proceed as follows:

- ◆ Position the vehicle on the centre stand on firm and level ground.
- ◆ Introduce the ignition key in the lock (3) and rotate it clockwise.

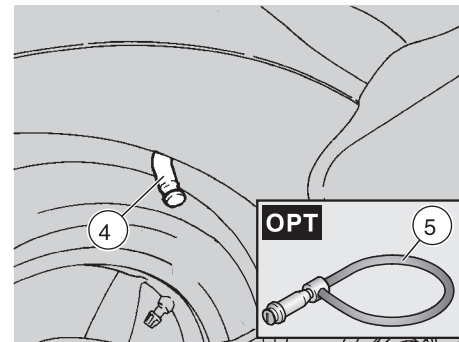
To lock the compartment:

- ◆ Introduce the ignition key, rotate it clockwise and push it at the same time, then rotate the key in the opposite direction to lock the compartment.
- ◆ Remove the key and make sure that the compartment is locked.

⚠ WARNING

Do not load the glove compartment excessively.

Maximum allowed weight: 1.5 kg.



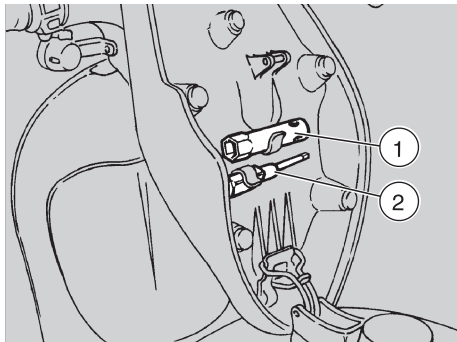
ANTI-THEFT HOOK

The anti-theft hook (4) is positioned on the right side of the vehicle.

To prevent the vehicle from being stolen, it is advisable to secure it with the **aprilia** "Body-Guard" armored cable **OPT** (5), available at any **aprilia** Official Dealer.

⚠ WARNING

Do not use the hook to lift the vehicle or for any purpose other than securing the vehicle once it has been parked.



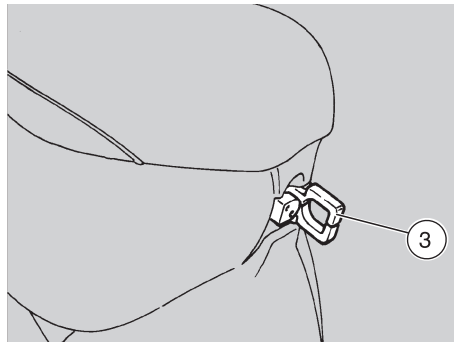
TOOL KIT

To reach the tool kit, unlock and raise the saddle, see p. 23 (UNLOCKING/LOCKING THE SADDLE).

The keys are fixed on the underside of the saddle.

The tool kit includes:

- n. 1 21 mm socket spanner (1);
- n. 1 screwdriver (2), cross-tipped on one end (type PH size 2) and provided with a 4 mm hexagon spanner on the other hand.



BAG HOOK

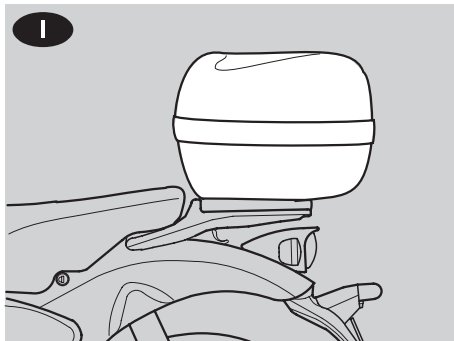
⚠ WARNING

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 under the front part of the saddle.

Max. allowed weight: 1.5 kg.





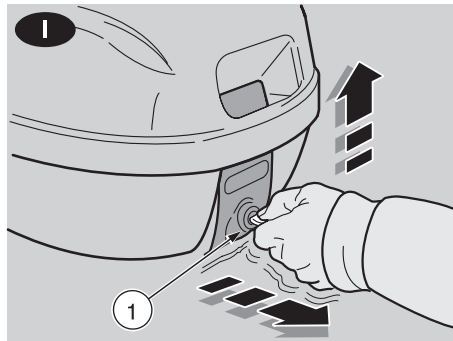
CRASH HELMET CASE ❶

NOTE The crash helmet case is supplied as standard equipment only with version ❶.

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

NOTE Do not keep the spare key on the vehicle.

NOTE The case can contain one crash helmet.



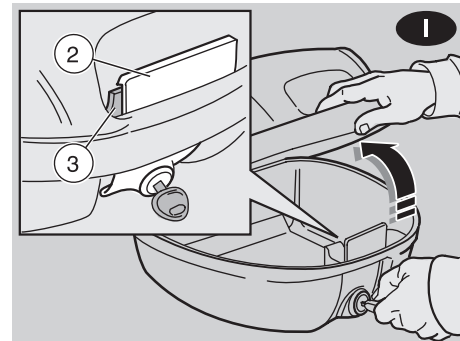
⚠ WARNING

Do not overload the crash helmet case.

Maximum allowed weight: 3 kg

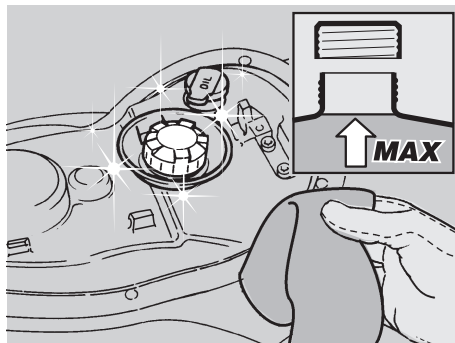
Thanks to the crash helmet case, you needn't carry the helmet or other encumbering objects with you every time you park the vehicle. To reach the crash helmet case, proceed as follows:

NOTE It is possible to remove the crash helmet case from the vehicle and to use it as hand luggage, see p. 63 (REMOVING THE CRASH HELMET CASE ❶).



To reach the crash helmet case, proceed as follows:

- ◆ Introduce the key (1) in the lock.
- ◆ Turn the key (1) clockwise.
- ◆ Raise the lock body (2) and release it from the cover coupling (3).
- ◆ Open the crash helmet case.



FUEL

⚠ WARNING

The fuel used for internal combustion engines is extremely inflammable and in particular conditions it can become explosive.

It is important to carry out the refuelling and the maintenance operations in a well-ventilated area, with the engine off.

Do not smoke while refuelling or near fuel vapours, in any case avoid any contact with naked flames, sparks and any other heat source to prevent the fuel from catching fire or from exploding.

⚠ WARNING

Further, prevent fuel from flowing out of the fuel filler, as it could catch fire when getting in contact with the red-hot surfaces of the engine.

In case some fuel has accidentally been spilt, make sure that the area is completely dry before starting the vehicle.

Since petrol expands under the heat of the sun and due to the effects of sun radiation, never fill the tank to the brim.

Screw the cap carefully after refuelling.

⚠ WARNING

Avoid any contact of the fuel with the skin and the inhalation of vapours; do not swallow fuel or pour it from a receptacle into another by means of a tube.

DO NOT DISPOSE OF FUEL IN THE ENVIRONMENT.

KEEP AWAY FROM CHILDREN.



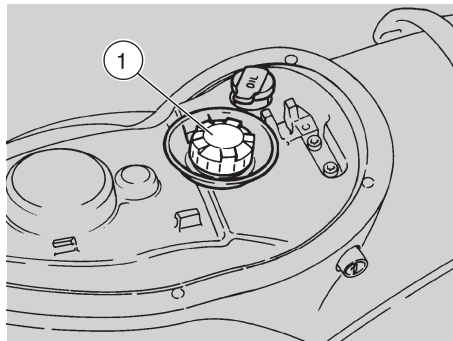
50

Use only premium grade petrol (4 Stars **UK**), in conformity with the DIN 51600 standard, min. O.N. 98 (N.O.R.M.) and 88 (N.O.M.M.).

***** Use only unleaded petrol, in conformity with the DIN 51607 standard, min. O.N. 95 (N.O.R.M.) and 85 (N.O.M.M.).

100

Use only unleaded petrol, in conformity with the DIN 51607 standard, min. O.N. 95 (N.O.R.M.) and 85 (N.O.M.M.).



To refuel, proceed as follows:

- ◆ Lift the saddle, see p. 23 (UNLOCKING/LOCKING THE SADDLE).
- ◆ Unscrew and remove the fuel tank plug (1).

FUEL TANK CAPACITY
(reserve included): 7 ℓ
TANK RESERVE: 1 ℓ



CAUTION

Do not put additives or other substances into the fuel.

If you use a funnel or other similar items, make sure that they are perfectly clean.

- ◆ Refuel.

WARNING

After refuelling, put back the cap (1) in the correct position.

- ◆ Put back the cap (1).

LUBRICANTS

WARNING

Oil can cause serious damage to the skin if handled every day and for long periods.

Wash your hands carefully after using oil.

In case any maintenance operation has to be carried out, it is advisable to use latex gloves.

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 leakages or malfunctions, contact an **aprilia** Official Dealer.

2 STROKE OIL


50

Top up the 2 stroke oil tank every 500 km (312 mi).

100

Top up the 2 stroke oil tank every 400 km (250 mi).

The vehicle is provided with a separate mixer that makes it possible to mix petrol with oil for the lubrication of the engine, see p. 84 (LUBRICANT CHART).

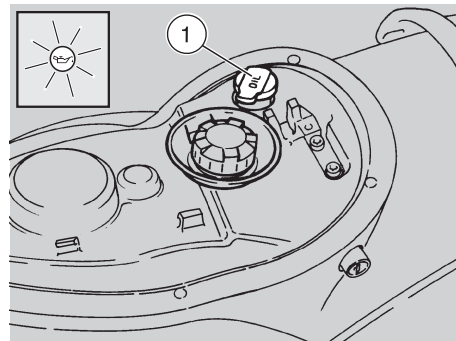
The reserve is indicated by the coming on of the 2 stroke oil reserve warning light “

CAUTION

The use of the vehicle without 2 stroke oil causes serious damages to the engine.

If you run out of oil in the 2 stroke oil tank or if the 2 stroke oil pipe has been removed, it is necessary to contact an **aprilia** Official Dealer, who will provide for bleeding the system.

This operation is indispensable, since the operation of the engine with air in the mixer oil system may cause serious damages to the engine itself.



To top up the 2 stroke oil tank, proceed as follows:

- ◆ Lift the saddle, see p. 23 (UNLOCKING/LOCKING THE SADDLE).
- ◆ Remove the plug (1).

2 STROKE OIL TANK CAPACITY: 1 ℓ

TANK RESERVE: 0.35 ℓ

CAUTION

Do not put additives or other substances into the oil.

If you use a funnel or other similar items, make sure that they are perfectly clean.

- ◆ Top up the 2 stroke oil tank.

CAUTION

After refuelling, put back the cap (1) in the correct position.

- ◆ Put back the cap (1).



TRANSMISSION OIL

50

Have the transmission oil level checked every 3000 km (1875 mi), or every 6 months.

100

Have the transmission oil level checked every 4000 km (2500 mi), or every 6 months.

It is necessary to have the transmission oil changed after the first 500 km (312 mi) and successively every 12000 km (7500 mi), or every 2 years.

To check the oil level and to change the oil, contact an **aprilia** Official Dealer.

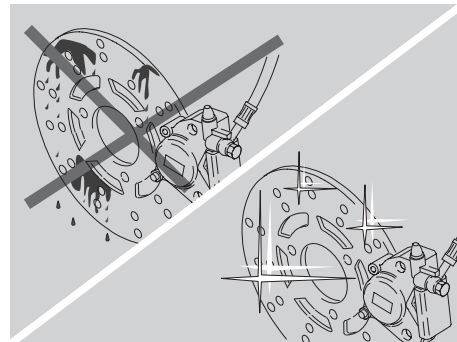


BRAKE FLUID - recommendations

WARNING

Sudden resistance or clearance problems on the brake lever may be due to troubles in the hydraulic system.

For any doubt regarding the perfect functioning of the braking system and in case you are not able to carry out the usual checking operations, contact your **aprilia** Official 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 that the brake pipe is neither twisted nor worn out.

KEEP AWAY FROM CHILDREN. DO NOT DISPOSE OF THE FLUID IN THE ENVIRONMENT

DISC BRAKES


⚠ WARNING

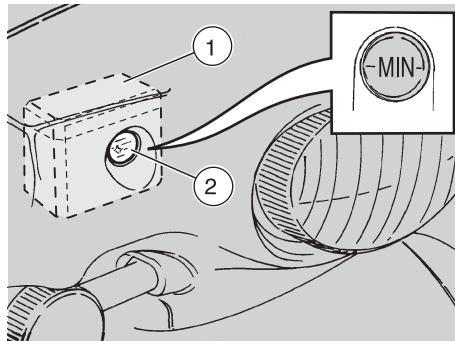
The brakes are the parts that most ensure your safety and for this reason they must always be perfectly working; check them before every trip.

A dirty disc soils the pads, with consequent reduction of the braking efficiency. Dirty pads must be replaced, while dirty discs must be cleaned with a high-quality degreaser.

The brake fluid must be changed every two years by an **aprilia** Official Dealer.

For any doubt regarding the perfect functioning of the braking system and in case you are not able to carry out the usual checking operations, contact your **aprilia** Official Dealer.

NOTE For the version with rear drum brake , the following information refers to the front disc brake only.



When the disc pads wear out, the level of the fluid decreases to automatically compensate for their wear.

The brake fluid reservoir (1) is positioned near the front brake lever coupling. Periodically check the brake fluid level in the reservoir (1) and the pad wear, see p. 56 (CHECKING THE BRAKE PAD WEAR).

⚠ WARNING

Do not use the vehicle if the braking system leaks fluid.

CHECKING

To check the brake fluid level, proceed as follows:

- ◆ Position the vehicle on the centre stand on firm and level ground.

- ◆ Rotate the handlebar, so that the fluid contained in the brake reservoir is parallel to the “**MIN**” mark stamped on the glass gauge (2).

MIN = minimum level.

- ◆ Make sure that the fluid contained in the reservoir exceeds the “**MIN**” mark stamped on the glass gauge (2).

If the fluid does not reach at least the “**MIN**” mark:

⚠ CAUTION

When the disc pads wear out, the level of the fluid decreases progressively to compensate for their wear.

- ◆ Check the brake pad wear, see p. 56 (CHECKING THE BRAKE PAD WEAR) and the disc wear.

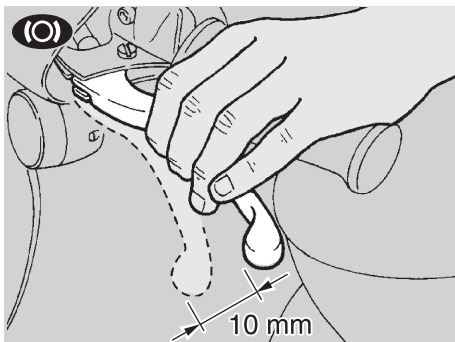
If the pads and / or the disc do not need replacing:

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

⚠ CAUTION

Check the braking efficiency.

In case of excessive stroke of the brake lever or reduced efficiency of the braking system, contact an **aprilia Official Dealer, since it may be necessary to bleed the system.**



REAR DRUM BRAKE 50 (O) - 100

⚠ WARNING

The brakes are the parts that most ensure your safety and for this reason they must always be perfectly working.

For any doubt regarding the perfect functioning of the braking system and in case you are not able to carry out the usual checking operations, contact your **aprilia** Official Dealer.

ADJUSTING THE BRAKE

- ◆ Measure the distance covered by the lever before the brake starts its braking action. The idle stroke at the end of the brake lever must be about **10 mm**.

To adjust the clearance, proceed as follows:

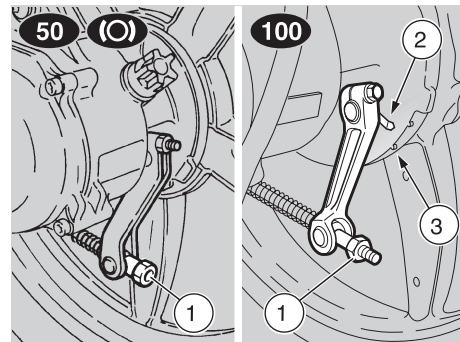
- ◆ Act on the adjuster (1).
- ◆ Put on the brake repeatedly and make sure that the wheel turns freely after the brake has been released.
- ◆ Check the braking efficiency.

⚠ CAUTION

If the adjuster (1) can be screwed up completely, this means that the brake shoes are worn out. In this case, see p. 57 (CHECKING THE SHOE WEAR (O)).

The fact that the adjuster (1) can be tightened completely or the indicator (2) is positioned beyond the reference tooth (3) indicates that the brake shoes are worn; in this case, p. 57 (CHECKING THE SHOE WEAR (O)).

NOTE The heating of the brake shoes caused by the braking action may modify the clearance between the friction material and the drum. For this reason, it is advisable to check the clearance even with the shoes at operating temperature.



- ◆ Carry out a trial run operating the rear brake two or three times.

⚠ WARNING

Carry out this check with the engine at rest.

- ◆ Park the vehicle, see p. 43 (PARKING).
- ◆ Make sure that the wheel turns freely.

If necessary:

⚠ WARNING

When the engine is hot, be careful not to burn yourself while carrying out the following operations.

- ◆ Loosen the adjuster (1), making sure that the wheel turns freely.



TYRES

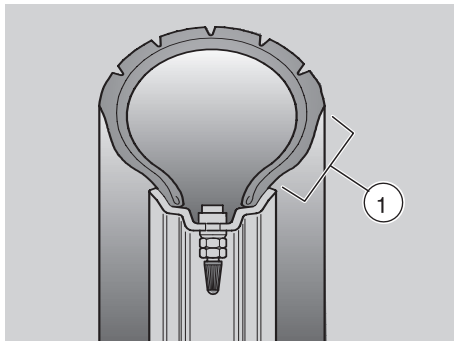
This vehicle is provided with tyres with inner tube.

⚠ WARNING

Periodically check the tyre inflation pressure at room temperature, see p. 81 (TECHNICAL DATA).

If the tyres are hot, the measurement is not correct.

Carry out the measurement especially before and after long rides.



⚠ WARNING

If the inflation pressure is too high, the ground unevenness cannot be dampened and is therefore transmitted to the handlebar, thus compromising the driving comfort and reducing the road holding during turns.

If, on the contrary, the inflation pressure is too low, the tyre sides (1) are under greater stress and the tyre itself may slip on the rim or it may become loose, with consequent loss of control of the vehicle.

In case of sudden braking the tyres could even come off the rims. Further, the vehicle could skid while turning.



⚠ WARNING

Check the surface and the wear of the tyres, since tyres in bad conditions can impair both the grip and the controllability of the vehicle.

Some types of tyres homologated for this vehicle are provided with wear indicators.

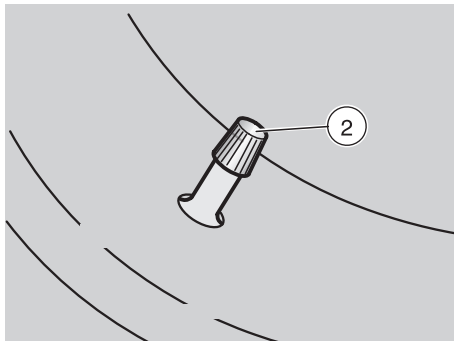
There are several kinds of wear indicators.

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

Visually check if the tyres are worn and in this case have them changed.

Change the tyre when it is worn out or in case of puncture on the tread side, if the puncture is larger than 5 mm.

After repairing a tyre, have the wheels balanced.



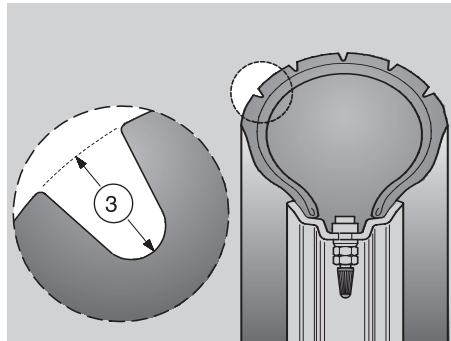
⚠ WARNING

The tyres must be replaced with other tyres of the type and model recommended by the manufacturer, see p. 81 (TECHNICAL DATA); the use of tyres different from those prescribed may adversely affect the manoeuvrability of the vehicle.

Do not install tyres with air tube on rims for tubeless tyres and viceversa.

Make sure that the inflation valves (2) always have their sealing caps on, to prevent the tyres from suddenly going flat.

Change, repair, maintenance and balancing operations are very important and therefore they must be performed by qualified technicians with appropriate tools.



⚠ WARNING

For this reason, it is advisable to have the above mentioned operations carried out by an **aprilia** Official Dealer or by a qualified tyre repairer.

If the tyres are new, they may still be covered with a slippery film: drive carefully for the first miles. Do not oil the tyres with unsuitable fluids. If the tyres are old, even if not completely worn out, they may become hard and may not ensure good road holding.

In this case, replace them.

MINIMUM TREAD DEPTH LIMIT (3):



front and rear 1.5 mm ( 3 mm)

and in any case not less than prescribed by the regulations in force in the country where the vehicle is used.




AUTOMATIC LIGHT SWITCHING VERSION

The vehicles provided with the Automatic Switch-on Device can be immediately recognized, since the lights come automatically on as soon as the engine is started.

For this reason the light switch has been replaced with a dimmer switch “ - ”.

The lights can be switched off only by stopping the engine.

♦ Before starting the vehicle, make sure that the dimmer switch is in position “” (front low beam).



CATALYTIC SILENCER

WARNING

Avoid parking the vehicle catalytic version near dry brush wood or in places easily accessible to children, as the catalytic silencer becomes extremely hot during use; be very careful and avoid any kind of contact before it has completely cooled down.

The catalytic vehicle is fitted with a silencer with metal catalytic converter of the “platinum-rhodium bivalent” type.

This device provides for the oxidation of the CO (carbon monoxide) and of the HC (unburned hydrocarbons) contained in the exhaust gases, changing them into carbon dioxide and steam, respectively.

Due to the catalytic reaction, the high temperature reached by the exhaust gases makes for the burning of the oil particles, thus keeping the silencer clean and eliminating the exhaust fumes.

To have the catalytic converter function correctly and for long and to reduce possible problems regarding the soiling of the thermal unit and of the exhaust, it is necessary to avoid covering long distances with the engine running at constantly low rpm.

It is sufficient to alternate these periods with periods in which the engine runs at relatively high rpm, even if only for a few seconds, but rather frequently.

What has been stated above assumes particular importance for the cold starting of the engine: in this case, in order to reach a rpm regime sufficient to enable the “priming” of the catalytic reaction, just make sure that the temperature of the thermal unit has reached at least 50°C, which generally occurs a few seconds after starting the engine.

CAUTION

Do not use leaded petrol, since it causes the destruction of the catalytic converter.

EXHAUST SILENCER

WARNING

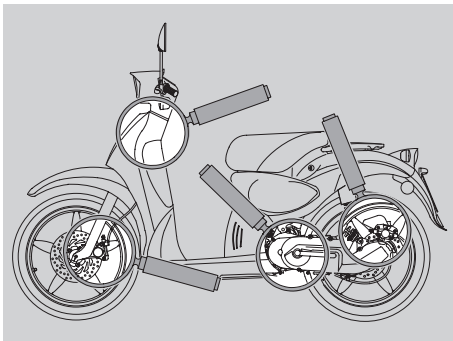
Tampering with the noise control system is prohibited.

Owners are warned that the law may prohibit:

- the removal or rendering inoperative by any person, other than for purposes of maintenance, repair or replacement, of any device or element of design incorporated into any new vehicle – for the purpose of noise control – prior to its sale or delivery to the ultimate purchaser or while it is in use; 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 silencer and the silencer pipes, making sure that there are neither signs of rust, nor holes and that the exhaust system works effectively.

If the noise produced by the exhaust system increases, immediately contact your **aprilia** Official Dealer.



⚠ WARNING


Before departure, always carry out a preliminary checking of the vehicle, to make sure that it functions correctly and safely, see the following table PRELIMINARY CHECKING OPERATIONS.

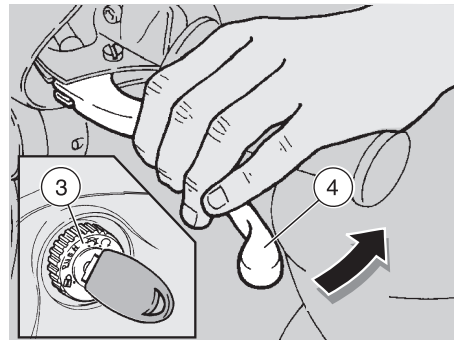
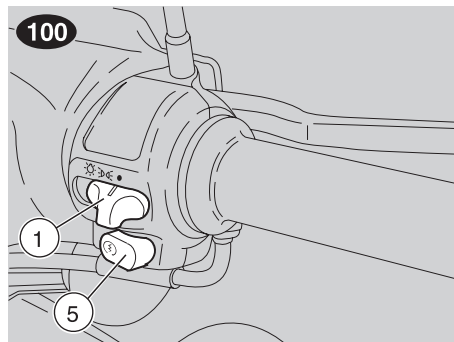
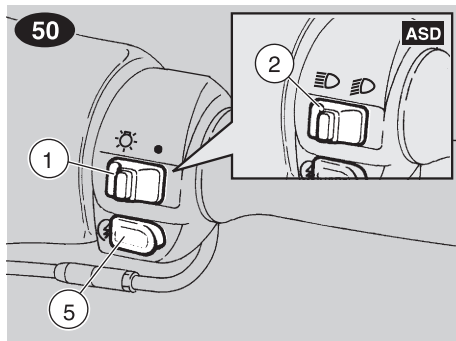
The non-performance of these checking operations can cause severe personal injuries or damages to the vehicle.

Do not hesitate to consult your **aprilia** Official Dealer in case there is something you do not understand about the functioning of some controls or in case you suspect or discover some irregularities.

It does not take long to carry out a check-up and this operation ensures you much more safety.

PRELIMINARY CHECKING OPERATIONS

Component	Check	Page
Disc brakes	Check the functioning, the fluid level and make sure there are no leaks. Check the wear of the pads. Top up, if necessary.	30, 56
Rear drum brake 	Check the functioning, the idle stroke and the control lever conditions. If the clearance is not correct, adjust it.	31, 57
Accelerator	Make sure that it works smoothly and that it is possible to open and close it completely, in all steering positions. If necessary, adjust and/or lubricate it.	65
2 stroke oil	Check and/or top up, if necessary.	28
Wheel/tyres	Check the tyre surface, the inflation pressure, wear and tear and any damage. Remove any foreign matter that may be stuck in the tread grooves.	32
Brake levers	Make sure that they work smoothly. If necessary, lubricate the articulations.	29, 30, 31
Steering	Make sure that the steering rotates smoothly, without any clearance or slackening.	—
Stand	Make sure that they work smoothly and that the spring tension brings it back to its normal position. If necessary, lubricate joints and hinges.	—
Fastening elements	Make sure that the fastening elements are not loose. If necessary, adjust or tighten them.	—
Fuel tank	Check the fuel level and top up, if necessary. Make sure there are no leaks or occlusions in the circuit.	26
Lights, warning lights, horn and electric devices	Check the proper functioning of all the devices. Change the bulbs or intervene in case of failure.	68 – 76



STARTING

⚠ WARNING


Exhaust gases contain carbon monoxide, which is extremely noxious if inhaled.

Avoid starting the vehicle in closed or badly-ventilated rooms.

The non-observance of this warning may cause loss of consciousness or even lead to death by asphyxia.

Do not get on the vehicle for the starting.


ELECTRIC STARTING


- ◆ Position the vehicle on the centre stand on firm and level ground.
- ◆ Make sure that the light switch (1) is in position “•”.
- ◆ **ASD** Make sure that the dimmer switch (2) is in position “
 - ◆ Turn the ignition switch (3) to position “O”.

- ◆ Lock at least one wheel, by pulling a brake lever (4).


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 p. 38 (STARTING AFTER A LONG PERIOD OF INACTIVITY).


NOTE To avoid the excessive wear of the battery, do not keep the start push button “

- ◆ Press the start push button “

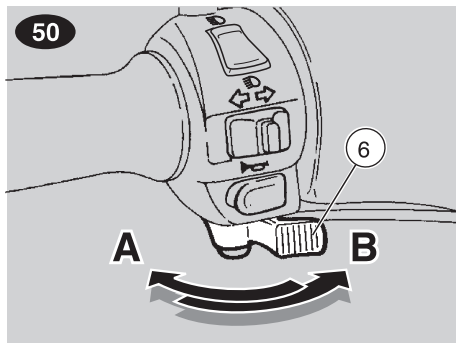
⚠ CAUTION

When the start push button “

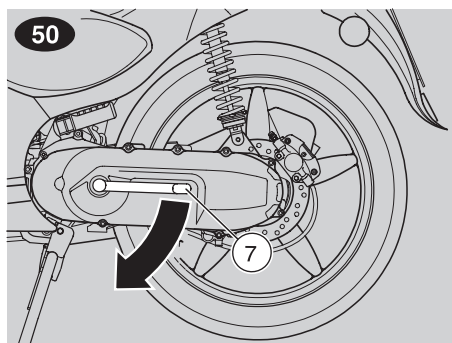
With the engine in running condition, when the start push button “

Avoid pressing the start push button “

36 use and maintenance Scarabeo 50 - Scarabeo 100



- ◆ **50** If the vehicle is started with cold engine, rotate the cold start lever “|\\|” (6) clockwise (outwards) (**pos. A**).
- ◆ Do not accelerate and pull the brake levers at the same time until you move off.
- ◆ Warm the engine up before leaving.
- ◆ **50** When the engine is warm, rotate the cold start lever “|\\|” (6) anticlockwise (inwards) (**pos. B**).

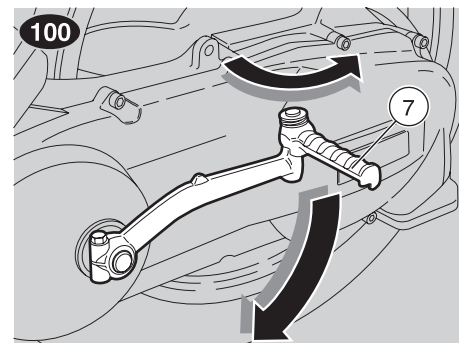


KICK START

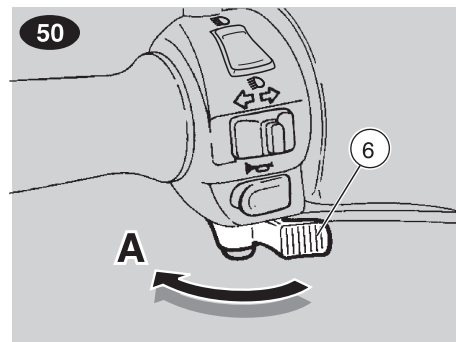
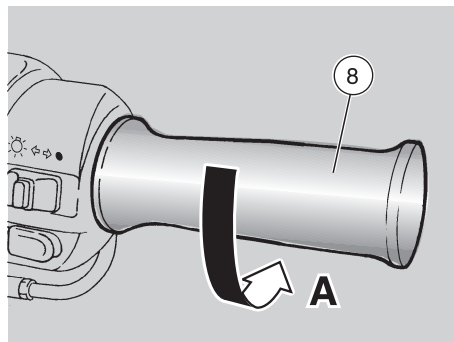
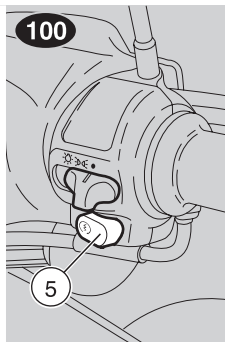
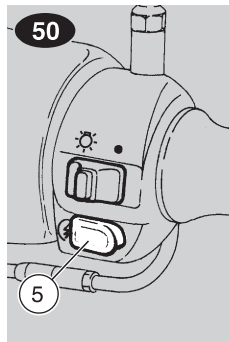
- ◆ Position the vehicle on the centre stand on firm and level ground.
- ◆ Move to the left side of the vehicle.
- ◆ Make sure that the light switch (1) is in position “•”.
- ◆ **ASD** Make sure that the dimmer switch (2) is in position “☰”.
- ◆ Turn the ignition switch (3) to position “○”.
- ◆ To avoid losing control of the vehicle during the starting, lock both wheels by putting on the brake levers (4).
- ◆ **100** Rotate the start pedal (7) outwards.

⚠ CAUTION

Do not push down the kick starter with the engine on.




- ◆ Push down the kick starter (7) with your right foot, releasing it immediately. If necessary, repeat the operation until the engine starts.
- ◆ **100** Rotate the start pedal (7) back to its original position.



STARTING WITH FLOODED ENGINE

If the starting is not carried out properly or if there is too much fuel in the intake ducts and in the carburettor, the engine may get flooded.


To clean a flooded engine:


- ◆ Press the start push button “” (5) for a few seconds (letting the engine spin over) with completely open throttle (8) (**pos. A**).

STARTING WITH COLD ENGINE

When the room temperature is low (near or below 0°C), it may be difficult to start the engine at the first attempt.

In this case:

- ◆ **50** Rotate the cold start lever “” (6) clockwise (outwards) (**pos. A**).

- ◆ Press the start push button “” (5) and at the same time rotate the throttle grip (8) moderately.

If the engine starts.

- ◆ Release the throttle grip (8).
- ◆ If the idling is unstable, twist the throttle grip (8) slightly and frequently.

To leave, see p. 39 (DEPARTURE AND DRIVE).


If the engine does not start.

Wait a few seconds and repeat the STARTING WITH COLD ENGINE procedure.

- ◆ If necessary, remove the spark plug, see p. 67 (SPARK PLUG) and make sure that it is not wet.
- ◆ If the spark plug is wet, clean and dry it.

Before reinstalling it:


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

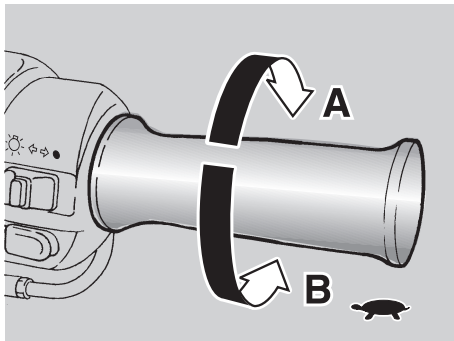
- ◆ Press the start push button “” (5) and let the starter run for about five seconds without accelerating.

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.

In this case:

- ◆ Press the start push button “” (5) for about five seconds, in order to ensure the filling of the float chamber.



DEPARTURE AND DRIVE

NOTE Before departure, carefully read the “safe drive” chapter, see p. 5 (SAFE DRIVE).

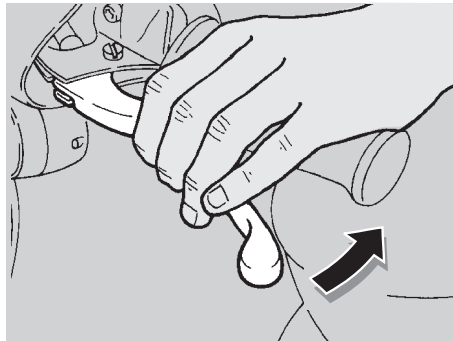
⚠ WARNING

Any mention to the use of the vehicle with passenger is to be intended as referred only to the countries where this is allowed.

If you drive without passenger, make sure that the passenger footrests are folded.

While riding, keep your hands on the grips and your feet on the footrests.

NEVER RIDE IN ANY POSITION OTHER THAN THOSE INDICATED.



⚠ WARNING

If you drive with a passenger, instruct him/her so that he / she does not create problems during manouvres.

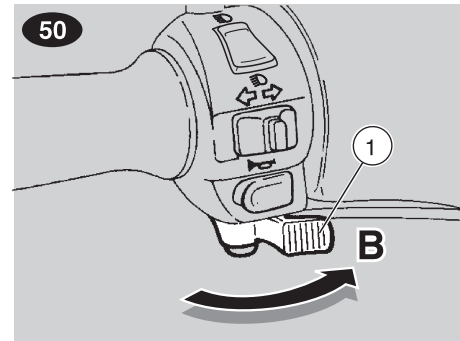
Before leaving, make sure that the stand/stands is / are completely up.

To leave:

- ◆ Release the throttle grip (pos. A), put on 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 inclination of the rear-view mirrors correctly.

⚠ WARNING

With the vehicle at rest, try to get acquainted with the use of the rear-view mirrors.



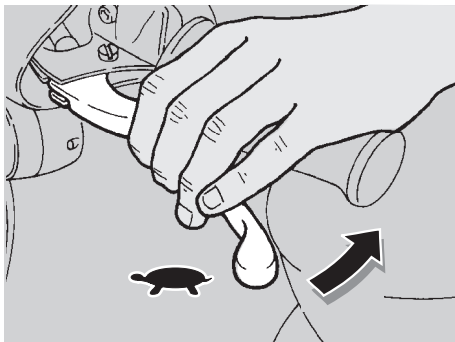
- ◆ To leave, release the brake lever and accelerate by gently rotating the throttle grip (pos. B); the vehicle will start moving.
- ◆ **50** With warm engine, rotate the cold start lever “1” (1) anticlockwise (inwards) (pos. B).

⚠ CAUTION

Never leave abruptly with cold engine. To reduce the emission of polluting substances and the consumption of fuel, warm the engine up by proceeding at low speed for the first miles.

⚠ WARNING

Avoid opening and closing the throttle repeatedly and continuously, so that you do not accidentally lose control of the vehicle.



⚠ WARNING

If you have to brake, close the throttle and put on both brakes in order to obtain uniform deceleration, properly exerting pressure on the braking parts. By putting on the front brake only or the rear brake only, you reduce the braking force considerably, thus running the risk of locking one wheel and consequently losing grip.

If you stop uphill, decelerate completely and use the brakes only to keep the vehicle steady.

The use of the engine to keep the vehicle at a halt may cause the overheating of the speed variator.



⚠ WARNING

Before beginning to turn, slow down or brake driving at moderate and constant speed or accelerating slightly; avoid braking at the last moment: it would be very easy to skid.

If the brakes are operated continuously on downhill stretches, the friction material may overheat, thus reducing the braking efficiency.

Exploit the engine compression by putting on both brakes intermittently. Never drive downhill with the engine off!



⚠ WARNING

When visibility is insufficient, switch on the low beam even during the day, in order to make your vehicle more visible. In case of wet ground or scarce wheel grip (snow, ice, mud, etc.), drive slowly, avoiding sudden brakings or manoeuvres that could make you lose grip and fall down.



⚠ WARNING

Pay the utmost attention to any obstacle or variation of 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

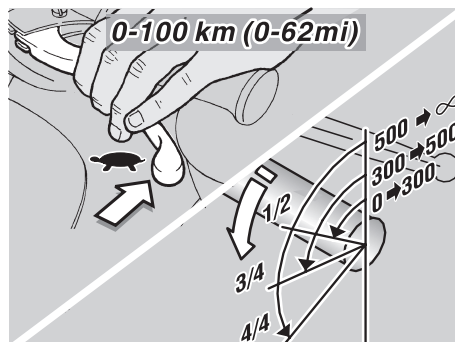
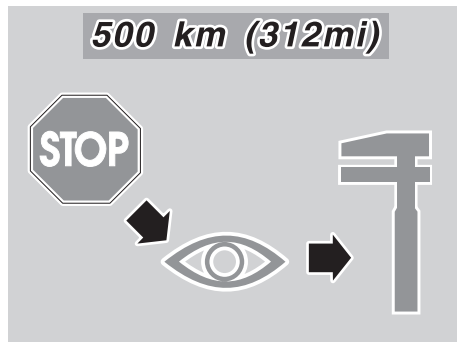
Always use the direction indicators in time when you intend to change lane or direction, avoiding sharp and dangerous movements. Switch off the direction indicators as soon as you have changed direction.

Be extremely careful when you overtake other vehicles or are overtaken. In case of rain, the water cloud created by big vehicles reduces visibility; the air shift may make you lose control of the vehicle.



⚠ WARNING

If the 2 stroke oil reserve warning light “” comes on during the normal functioning of the engine, this means that the 2 stroke oil reserve is being used; in this case, top up the 2 stroke oil tank, see p. 28 (2 STROKE OIL).



RUNNING-IN

⚠ WARNING

After the first 500 km (312 mi), carry out the checking operations indicated in the column “After running-in” of the **REGULAR SERVICE INTERVALS CHART**, see p. 46, in order to avoid hurting yourself or other people and/or damaging the vehicle.

The running-in of the engine is primary to ensure its correct functioning and its correct functioning.

If possible, drive on hilly roads and/or roads with many bends, so that the engine, the suspensions and the brakes undergo a more effective running-in.

For the first 500 km (312 mi), keep to the following indications:

◆ 0-100 km (0-62 mi)

During the first 100 km (62 mi) put on the brakes with caution, avoiding sharp and prolonged brakings.

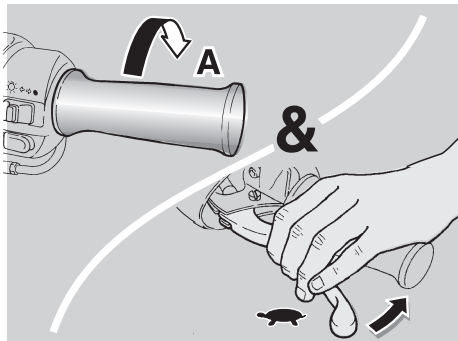
This ensures a correct bedding-in of the pads on the brake disc.

◆ 0-300 km (0-187 mi)

Do not keep the throttle grip open more than one half for long stretches.

◆ 300-500 km (187-312 mi)

Do not keep the throttle grip open more than three-fourths for long stretches.



STOPPING

⚠ WARNING

If possible, avoid stopping abruptly, slowing down suddenly and braking at the last moment.

- ◆ Release the throttle grip (**pos. A**) and gradually put on the brakes to stop the vehicle.
- ◆ In case of a brief stop, keep at least one brake on.



PARKING

⚠ WARNING

Park the vehicle on firm and flat ground, to prevent it from falling down.

Neither lean the vehicle against walls, nor lay it on the ground.

Make sure that the vehicle and especially its red-hot parts do not represent a danger for persons and children.

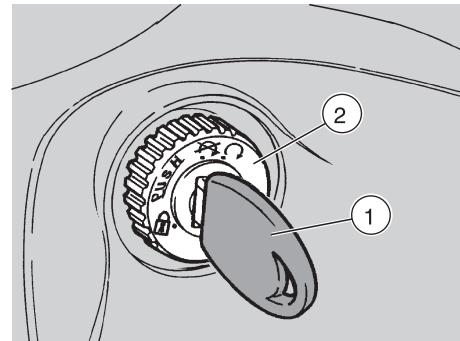
Do not leave the vehicle unattended when the engine is on or the key is inserted into the ignition switch.


Do not sit on the vehicle when the stand is down.

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

⚠ CAUTION

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



- ◆ Rotate the key (1) and move the ignition switch (2) to position “”.
- ◆ Position the vehicle on the stand, see p. 44 (POSITIONING THE VEHICLE ON THE STAND).

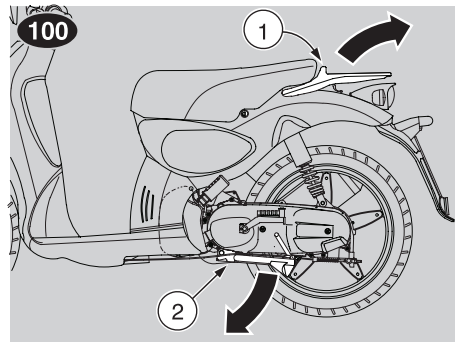
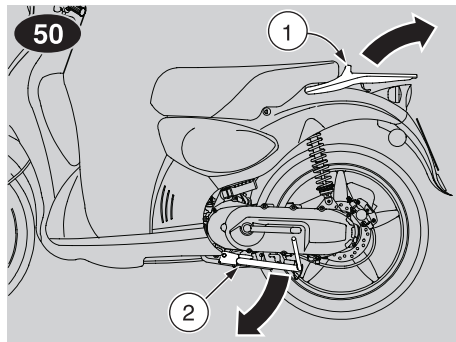
⚠ CAUTION

It is not necessary to close the fuel tap when the engine is off, since it is equipped with an automatic closing system.

⚠ CAUTION

Never leave the key in the ignition switch.

- ◆ Lock the steering, see p. 22 (STEERING LOCK) and extract the key (1).



POSITIONING THE VEHICLE ON THE STAND

Carefully read p. 43 (PARKING).

CENTRAL STAND

- ◆ Seize the left grip and the rear handle (1).
- ◆ Press the stand lever (2) downwards.

CAUTION

Make sure that the vehicle is stable.

SUGGESTIONS TO PREVENT THEFT

NEVER leave the ignition key inserted and always use the steering lock.

Park the vehicle in a safe place, possibly in a garage or a protected place.

If possible, use the appropriate **aprilia** “Body-Guard” armored cable **OPT**, or an additional anti-theft device.

Make sure that all documents are in order and the road tax has been paid.



Write down your personal data and telephone number in the space provided in this page, to facilitate the identification of the owner in case of finding after theft.

SURNAME:

NAME:

ADDRESS:

.....

TELEPHONE NO.:

NOTE Very often stolen vehicles are identified thanks to the data written on the use/maintenance manual.



⚠ WARNING

Risk of fire.

Keep fuel and other flammable substances away from the electrical 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.



⚠ WARNING

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

The vehicle is made up of not edible parts. Never bite, suck, chew or swallow any part of the vehicle for any reason.

⚠ CAUTION

If not expressly indicated otherwise, for the reassembly of the units repeat the disassembly operations in reverse order.

In case any maintenance operation has to be carried out, it is advisable to use latex gloves.



Normally, the routine maintenance operations can be performed by the user; however, in some cases the use of specific tools and technical expertise may be required.

If you need assistance or technical advice, consult your **aprilia** Official Dealer, who can ensure you prompt and accurate servicing.

Ask your **aprilia** Official Dealer to test the vehicle on the road after a repair or periodic maintenance operation.

In any case, personally carry out the "Preliminary checking operations" after any maintenance operation, see p. 35 (PRELIMINARY CHECKING OPERATIONS).

REGULAR SERVICE INTERVALS CHART

OPERATIONS TO BE CARRIED OUT BY THE **aprilia** Official Dealer (WHICH CAN BE CARRIED OUT EVEN BY THE USER)

Components	After running-in [500 km (312 mi)]	Every 4000 km (2500 mi) or 8 months	Every 8000 km (5000 mi) or 16 months
Battery / electrolyte level 50	①	①	
Spark plug	①	①	③
Carburettor - idling	④	①	
Air cleaner	①	②	
Speed variator air cleaner 100			②
Brake locking operation	①	①	
Light system	①	①	
Stop light switches		①	
Brake fluid		①	
2 stroke oil 50	every 500 km (312 mi): ①		
2 stroke oil 100	every 400 km (250 mi): ①		
Light direction - operation		①	
Tyres - inflation pressure	every month: ④		
Brake pad wear	①	every 2000 km (1250 mi): ①	

① = check and clean, adjust, lubricate or change, if necessary; ② = clean; ③ = change; ④ = adjust.

Carry out the maintenance operations more frequently if you use the vehicle in rainy and dusty areas or on uneven ground.

OPERATIONS TO BE CARRIED OUT BY THE **aprilia** Official Dealer

Components	After running-in [500 km (312 mi)]	Every 4000 km (2500 mi) or 8 months	Every 8000 km (5000 mi) or 16 months
Variator belt		①	
Steering bearings and steering	①	①	
Wheel bearings		①	
Removal of deposits from the exhaust 50		②	
Braking systems	①	①	
Cylinder cooling system 100	every 20000 km (12500 mi): ② (outside cleaning)		
Rear brake cam pin greasing 100		①	
Brake fluid	every 2 years: ③		
Mixer / accelerator operation	①	①	
Transmission oil 50	③	every 3000 km (1875 mi): ①	every 12000 km (7500 mi) or every 2 years: ③
Transmission oil 100	③	①	
Wheels / tyres		①	
Nut, bolt, screw tightening	①	①	
Front and rear suspension	①	①	
2 stroke oil reserve warning light	①	①	
Brake fluid bleeding	①		
Fuel pipe	every 4000 km (2500 mi): ① / every 4 years: ③		
Braking system pipe	every 4000 km (2500 mi): ① / every 4 years: ③		
2 stroke oil pipe	①		①
Rear brake shoe wear 100	①	①	
① = check and clean, adjust, lubricate or change, if necessary; ② = clean; ③ = change; ④ = adjust.			
Carry out the maintenance operations more frequently if you use the vehicle in rainy and dusty areas or on uneven ground.			

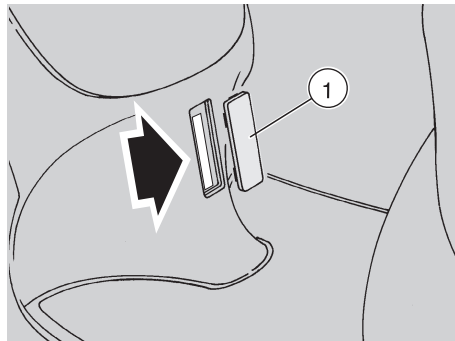


IDENTIFICATION DATA

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

The frame number can be used for the purchase of spare parts.

NOTE Do not alter the identification numbers if you do not want to incur severe penal and administrative sanctions. In particular, the alteration of the frame number results in the immediate invalidity of the guarantee.



FRAME NUMBER

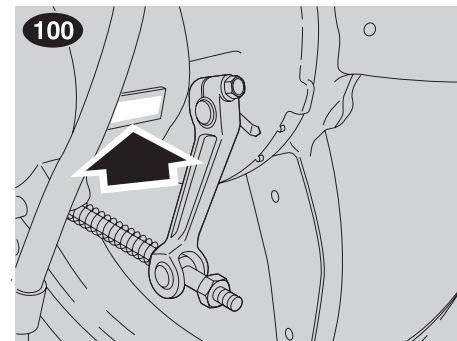
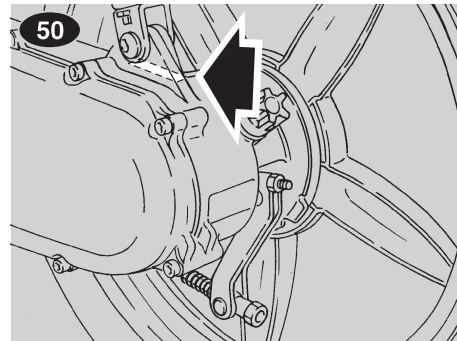
The frame number is stamped on the central tube of the frame. To be able to read it, it is necessary to remove the cover (1).

Frame no. _____

ENGINE NUMBER 50

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

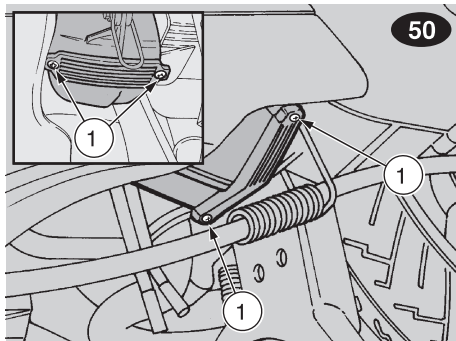
Engine no. _____



ENGINE NUMBER 100

The engine number is stamped on the rear side, near the rear brake adjuster.

Engine no. _____



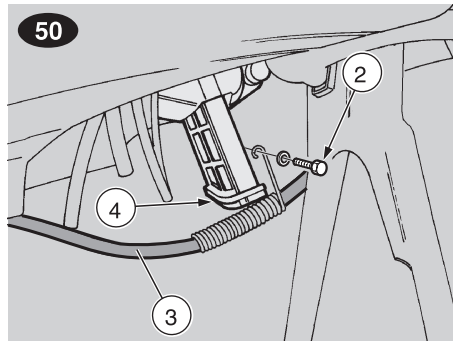
AIR CLEANER 50

Carefully read p. 45 (MAINTENANCE).


Check the conditions of the air cleaner and clean it monthly or every 4000 km (2500 mi), depending on the conditions in which the vehicle is used.

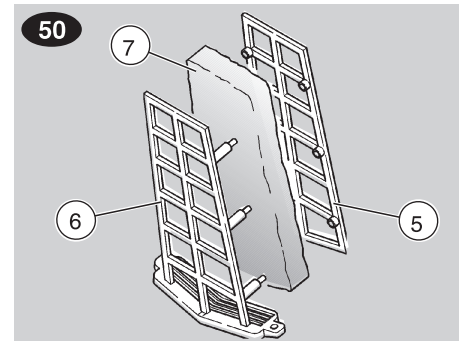
If the vehicle is used on dusty or wet roads, the cleaning operations and any replacement should be carried out more frequently.

Before the cleaning operation, it is necessary to remove the air cleaner from the vehicle.



REMOVAL

- ◆ Position the vehicle on the centre stand on firm and level ground.
- ◆ Unscrew and remove the two screws (1).
- ◆ Unscrew and remove the screw (2) together with the washer.
- ◆ Move the rear brake pipe (3) sideways.
- ◆  Move the rear brake cable (3) sideways.
- ◆ Withdraw the whole filter (4) by pulling it downwards.



CLEANING THE AIR FILTER

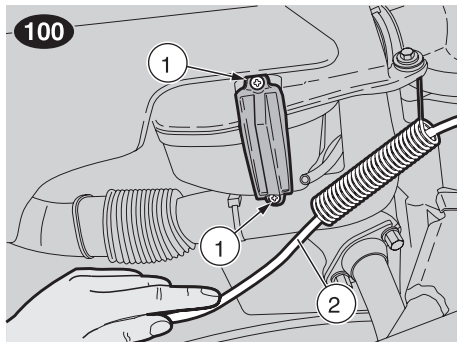
- ◆ Separate the grid (5) from the support (6).
- ◆ Remove the filtering element (7).

WARNING

Do not use petrol or inflammable solvents to wash the air cleaner, in order to avoid fires or explosions.

- ◆ To clean the filtering element use clean, non-inflammable solvents or solvents with high volatility point, then let it dry thoroughly.
- ◆ Apply a filter oil on the whole surface of the filtering element, then squeeze it to eliminate the oil in excess.

NOTE The filter must be well impregnated, though not dripping.



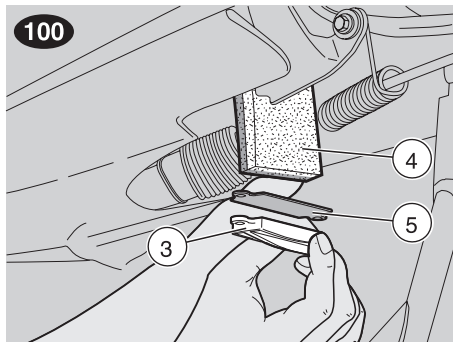
AIR CLEANER 100

Carefully read p. 45 (MAINTENANCE).

Check the conditions of the air cleaner and clean it monthly or every 4000 km (2500 mi), depending on the conditions in which the vehicle is used.

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

Before the cleaning operation, it is necessary to remove the air cleaner from the vehicle.



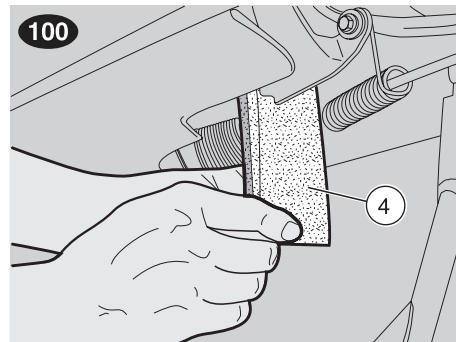
REMOVAL

- ◆ Position the vehicle on the centre stand on firm and level ground.
- ◆ Unscrew and remove the two screws (1).
- ◆ Move the rear brake cable (2) sideways and keep it in this position with your hand.

⚠ CAUTION

Pay attention to the correct position of the lower cover (3) and the filtering element (4), in such a way as to be able to reposition them correctly (the filtering element must be inserted with the side made of black rigid spongy material facing the front of the vehicle).

- ◆ Withdraw the lower cover (3) from below and take the gasket (5).
- ◆ Withdraw the filtering element (4).

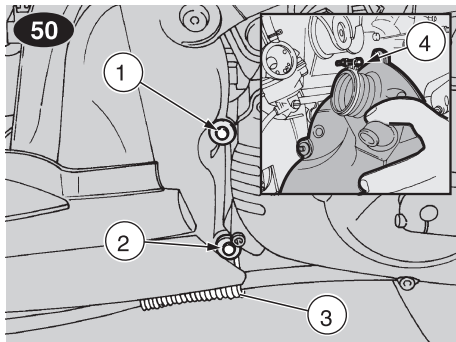


CLEANING

⚠ WARNING

Do not use petrol or inflammable solvents to wash the filtering element, in order to avoid fires or explosions.

- ◆ Wash the filtering element (4) with clean, non-inflammable solvents or solvents with high volatility point, then let it dry thoroughly.
- ◆ Apply a filter oil on the whole surface of the filtering element.



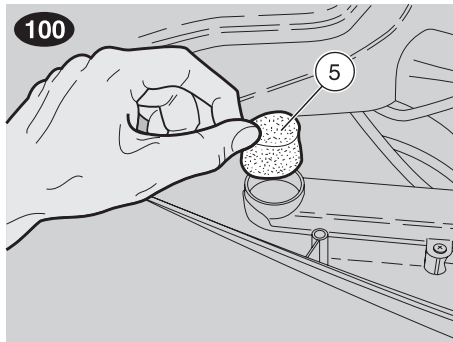
REMOVING THE WHOLE AIR CLEANER CASING 50

Carefully read p. 45 (MAINTENANCE).

- ◆ Remove the footboard, see p. 62 (REMOVING THE FOOTBOARD).
- ◆ Remove the battery box, see p. 62 (REMOVING THE BATTERY BOX).
- ◆ Unscrew and remove the screws (1) and (2), taking the relevant washers.

NOTE Upon reassembly, position the cable guide (3) correctly.

- ◆ Loosen the screw (4) of the air manifold clamp.
- ◆ Grasp the air manifold in correspondence with the clamp and pull it, thus removing the whole air cleaner casing.



SPEED VARIATOR AIR CLEANER 100

Carefully read p. 45 (MAINTENANCE).

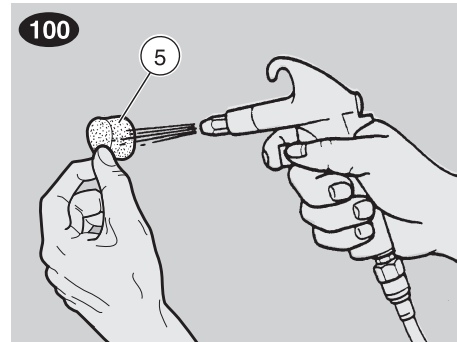
The air cleaner should be inspected and cleaned every 8000 km (5000 mi), depending on the conditions of use.

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

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

REMOVAL

- ◆ Remove the footboard, see p. 62 (REMOVING THE FOOTBOARD).
- ◆ Remove the filtering element.
- ◆ Check the filtering element (5) and change it if necessary.



CLEANING

⚠ WARNING

Do not use petrol or inflammable solvents to wash the filtering element, in order to avoid fires or explosions.

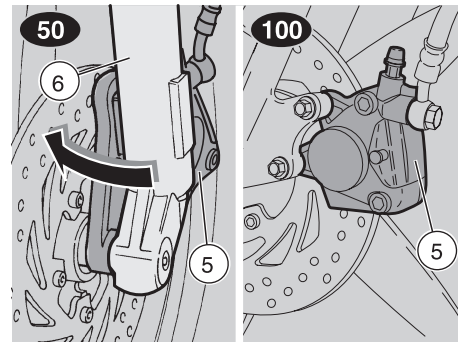
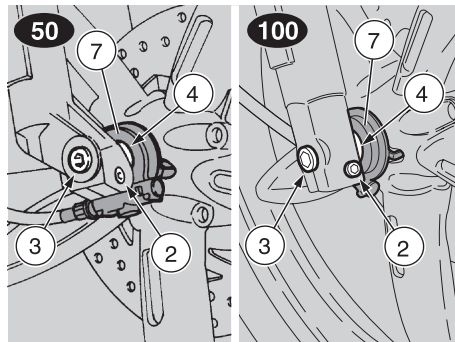
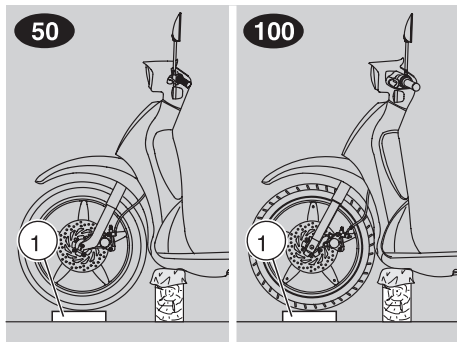
Do not use any additive or liquid to clean the filtering element, in order to avoid the formation of moisture inside the speed variator.

Use only compressed air.

- ◆ Clean the filtering element (5) by means of a pressurized air jet.

⚠ CAUTION

DO NOT OIL THE FILTERING ELEMENT, since the oil may get into the belt case and damage the belt or make it slip.



FRONT WHEEL

DISASSEMBLY

⚠ CAUTION

The disassembly and reassembly of the front wheel may be difficult for unskilled operators.

If necessary, contact an **aprilia** Official Dealer.

If you want to perform these operations personally, keep to the following instructions.

Carefully read p. 45 (MAINTENANCE).

While disassembling and reassembling the wheel, be careful not to damage the brake pipes, the discs and the pads.

- ◆ Position the vehicle on the centre stand on firm and level ground.

NOTE Prepare a support with base measuring 200 x 200 mm, whose height should be 270 mm for the **50** and 230 mm for the **100**.

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

⚠ CAUTION

Make sure that the vehicle is stable.

- ◆ Put a support (1) under the tyre, in such a way as to keep the wheel in its position after loosening it.
- ◆ Loosen the screw (2) of the wheel pin clamp.
- ◆ Unscrew the wheel pin (3) completely.

Wheel pin driving torque:
50 Nm (5 kgm).

- ◆ Support the front wheel and manually withdraw the wheel pin (3).
- ◆ Take the washer (4).

⚠ CAUTION

Never pull the front brake lever after removing the wheel, otherwise the caliper pistons may go out of their seats, thus causing the outflow of the brake fluid. In this case consult your **aprilia Official Dealer, who will carry out the proper maintenance operation.**

- ◆ Make the front wheel advance until you can withdraw the disc from the brake caliper (5).
- ◆ **50** Without removing the brake caliper, rotate the left rod (6) clockwise, in such a way as to create the space necessary to withdraw the wheel.
- ◆ Withdraw the front wheel completely.
- ◆ Disconnect the odometer control (7).

REASSEMBLY

Carefully read p. 45 (MAINTENANCE).

⚠ CAUTION

While reassembling the wheel, be careful not to damage the brake pipe, the disc and the pads.


To reassemble the front wheel, proceed as follows:

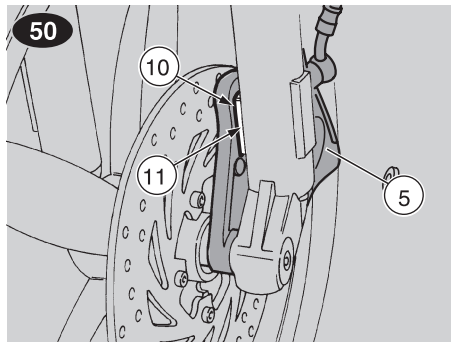
- ◆ Spread a film of lubricating grease on the whole length of the wheel pin (2), see p. 84 (LUBRICANT CHART).
- ◆ Position the wheel between the fork rods (1).
- ◆ Position the tang (8) of the odometer control (7) in the appropriate seat in the wheel hub.

⚠ WARNING

Danger of injury. Do not introduce your fingers to align the holes.

- ◆ Move the wheel until its central hole and the holes on the fork are aligned.

NOTE  The slot (10) in the brake caliper (5) must be located in the lug (11) on the inside of the left fork leg.

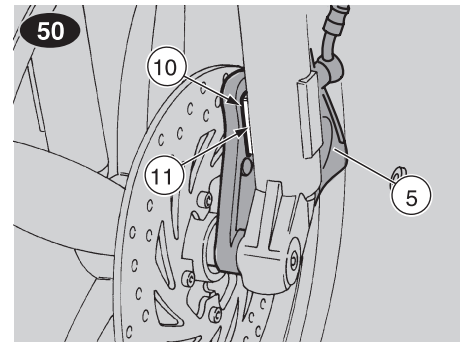


- ◆ Insert the wheel between the rods, carefully introducing the disc in the brake caliper.
- ◆ Insert the washer (4) between the odometer control (7) and the fork right rod.
- ◆ Introduce the wheel pin (3) completely and tighten it manually.
- ◆ Tighten the nut (3) completely.

Wheel pin driving torque:
50 Nm (5 kgm).

- ◆ With pulled front brake lever, press the handlebar repeatedly, thrusting the fork downwards.
In this way the fork rods will settle properly.
- ◆ Tighten the screw (9) of the wheel pin clamp.

Driving torque of the wheel pin clamp screw: 12 Nm (1.2 kgm).



- ◆ Make sure that the following components are not dirty:
 - tyre;
 - wheel;
 - brake discs.

⚠ CAUTION

After reassembly, pull the front brake lever repeatedly and check the correct functioning of the braking system.

Check the wheel centering.

Have the driving torques, centering and balancing of the wheel checked by your **aprilia Official Dealer, in order to avoid accidents that may be harmful for you and/or other people.**

REAR WHEEL

DISASSEMBLY

CAUTION

The disassembly and reassembly of the rear wheel may be difficult for unskilled operators. If necessary, contact an **aprilia** Official Dealer.

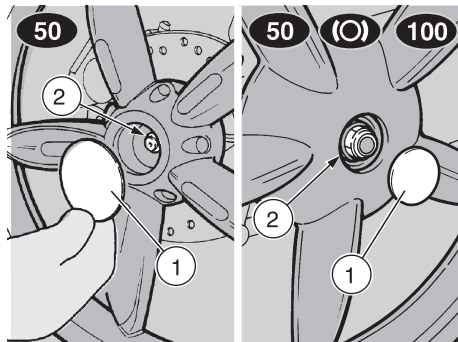
If you want to perform these operations personally, keep to the following instructions.

Carefully read p. 45 (MAINTENANCE).

Before carrying out the following operations, let the engine and the silencer cool down until they reach room temperature, in order to avoid burns.

50 While disassembling and reassembling the wheel, be careful not to damage the brake pipe, the disc and the pads.

- ◆ Position the vehicle on the centre stand on firm and level ground.
- ◆ **50** Deflate the rear tyre completely.
- ◆ Remove the exhaust silencer, see p. 61 (REMOVING THE EXHAUST SILENCER).
- ◆ Remove the cover (1).



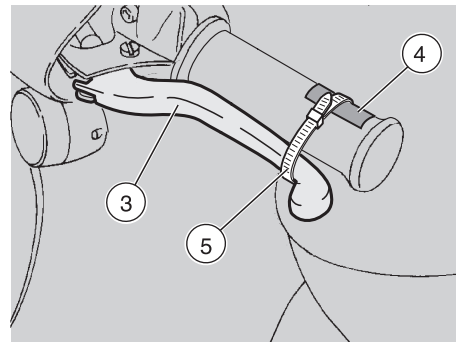
NOTE To unscrew the wheel nut (2), it is necessary to lock the rotation of the wheel.

- ◆ Pull the rear brake lever (3) completely, then put a small piece of cardboard (4) on the grip and keep the rear brake lever pulled by holding it against the grip by means of a plastic band (5).
- ◆ Unscrew and remove the wheel nut (2) and the washer.

NOTE Upon reassembly, change the wheel nut (special type).

Wheel nut (2) driving torque:
110 Nm (11 kgm).

- ◆ Release the rear brake lever.
- ◆ **50** Withdraw the wheel.
- ◆ **50** Remove the rear brake caliper, see p. 59 (REMOVING THE REAR BRAKE CALIPER **50**).



- ◆ **50** Withdraw the wheel.

NOTE Use **aprilia** Genuine Spare Parts only.

After the reassembly, make sure that the following elements are not dirty:

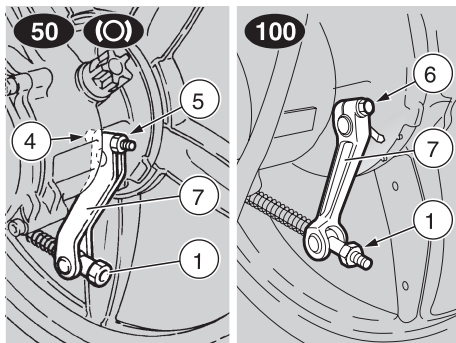
- tyre;
- wheel;
- **50** brake discs.

CAUTION

After reassembly, pull the rear brake lever repeatedly and check the correct functioning of the braking system.

Check the wheel centering.

Have the driving torques, centering and balancing of the wheel checked by your **aprilia** Official Dealer, in order to avoid accidents that may be harmful for you and/or other people.



GREASING THE REAR BRAKE CAM PIN (O)

Carefully read p. 45 (MAINTENANCE).

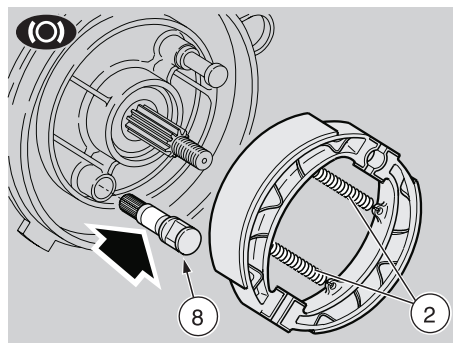
NOTE Grease the rear brake cam pin every 4000 km (2500 mi). If the vehicle is used on dusty roads, this operation must be carried out more frequently.

⚠ CAUTION

The greasing of the rear brake cam pin can be difficult or complicated for an unskilled operator.

If necessary, contact your **aprilia** Official Dealer.

If you want to carry out this operation by yourself, keep to the following instructions:

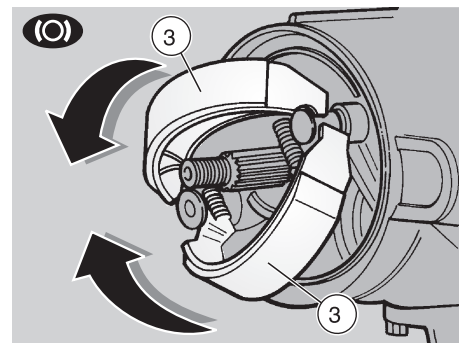


- ◆ Disassemble the rear wheel, see p. 54 (REAR WHEEL).
- ◆ Unscrew and remove the adjuster (1).

⚠ WARNING

Do not dirt the shoes and the friction material with grease, to avoid compromising the braking efficiency of the vehicle. This operation may be difficult because the springs (2) resist considerably to the removal of the shoes. Be careful not to crush or bruise your hands and fingers.

- ◆ Grasp the inner edge of the two friction elements (3) at its centre and, pulling toward yourself, shake the two shoes, thus releasing them.
- ◆ **50** Lock the screw (4), by means of an hexagon spanner, and loosen the nut (5).
- ◆ **100** Loosen the screw (6).
- ◆ Remove the pin lever (7).
- ◆ Withdraw the cam pin (8).



⚠ CAUTION

Moderately grease only the central part of the pin.

Avoid dirtying the cam or the areas around the pin seat with grease.

- ◆ Grease the central part of the pin by using grease for kinematic motions, see p. 84 (LUBRICANT CHART).

Upon reassembly:

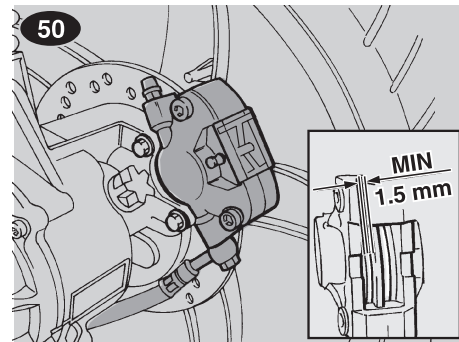
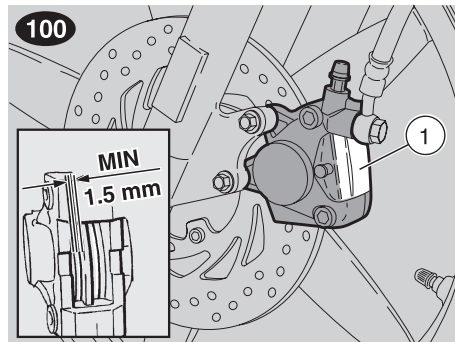
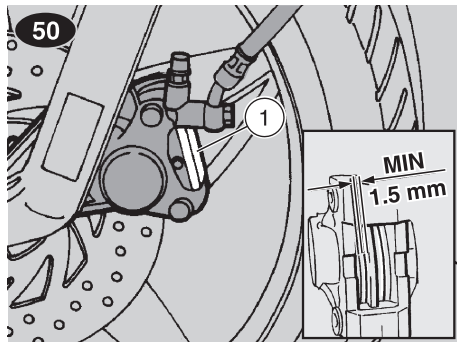
⚠ CAUTION

Neither strike, nor force the cam pin (8) with hammers or others tools, in order not to damage the two O-rings.

- ◆ Manually insert the cam pin (8), rotating and pushing it slightly.

⚠ CAUTION

Make sure that the springs are correctly coupled.



CHECKING THE BRAKE PAD WEAR

Carefully read p. 29 (BRAKE FLUID - recommendations), p. 30 (DISC BRAKES), p. 45 (MAINTENANCE).

Check the brake pad wear after the first 500 km (312 mi) and successively every 2000 km (1250 mi).

The wear of the brake pads depends on the use, on the kind of drive and on the road. The wear will be greater when the vehicle is driven on dirty or wet roads.

⚠ WARNING

Check the wear of the brake pads especially before every trip.

To carry out a rapid checking of the wear of the front pads, proceed as follows:

- ◆ Position the vehicle on the centre stand on firm and level ground.
- ◆ Remove the brake caliper cover (1).
- ◆ Carry out a visual check between brake disc and pads.

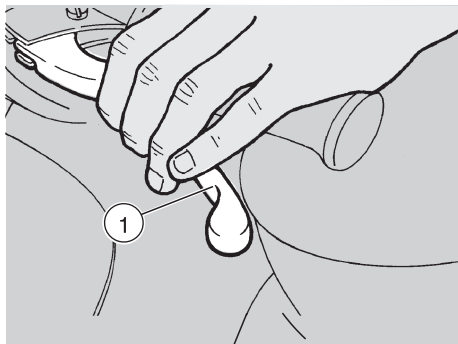
⚠ WARNING

The excessive wear of the friction material would cause the contact of the pad metal support with the disc, with consequent metallic noise and production of sparks from the caliper; braking efficiency, safety and soundness of the disc would thus be negatively affected.

- ◆ If the thickness of the friction material (even of one pad only) has reduced to about **1.5 mm**, replace both pads.

⚠ WARNING

Have the pads changed by your **aprilia** Official Dealer.



CHECKING THE SHOE WEAR (100)

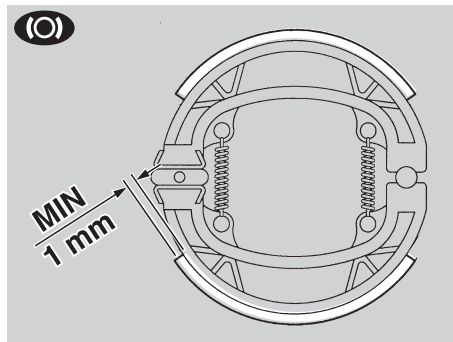
Carefully read p. 31 (REAR DRUM BRAKE 50 (100) - 100) and p. 45 (MAINTENANCE).

Check the wear of the rear brake shoes after the first 500 km (312 mi) and successively every 4000 km (2500 mi).

To check the wear of the rear brake shoes, proceed as follows:

50

- ◆ Remove the rear wheel, see p. 54 (REAR WHEEL).
- ◆ At this point it is possible to check the thickness of the friction material, which must never be less than 1 mm. If the minimum allowed limit has been reached, if you notice any irregularity in the operation or if any part is damaged, contact your **aprilia** Official Dealer, who will provide for changing the brake shoes.



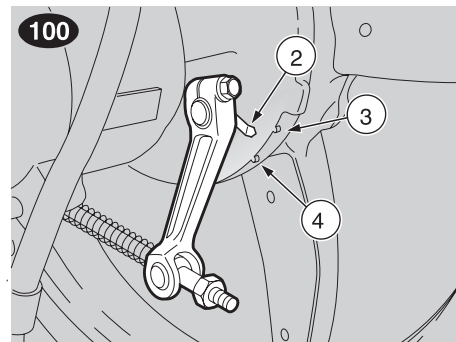
100

- ◆ Pull the rear brake lever (1) completely and keep it pulled.
- ◆ Check the position of the rear brake shoe wear indicator (2).

Position	Wear condition
Indicator between the two reference teeth (3) and (4).	Rear brake shoes within the wear limit.
Indicator on or beyond the lower reference tooth (4).	Rear brake shoes worn. To be replaced.

⚠ WARNING

If the rear brake shoe wear indicator (2) is positioned on or beyond the lower reference tooth (4), contact an **aprilia** Official Dealer, who will provide for replacing the rear brake shoes.



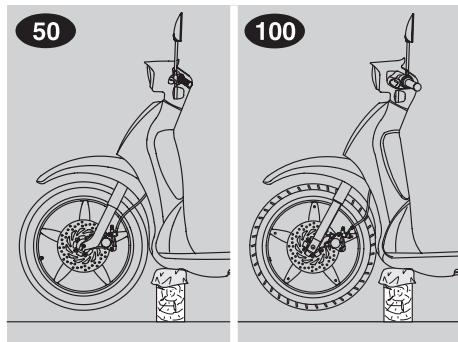
INSPECTING THE FRONT AND REAR SUSPENSIONS

Carefully read p. 45 (MAINTENANCE).

Check the tightening of all the components and the functionality of the articulations of the front and rear suspensions after the first 500 km (312 mi) and successively every 4000 km (2500 mi).

⚠ CAUTION

If you notice irregularities in the operation or if the help of a qualified technician is necessary, contact your **aprilia** Official Dealer.



CHECKING THE STEERING

Carefully read p. 45 (MAINTENANCE).

Every now and then it is advisable to check the steering, in order to verify if there are slacks.

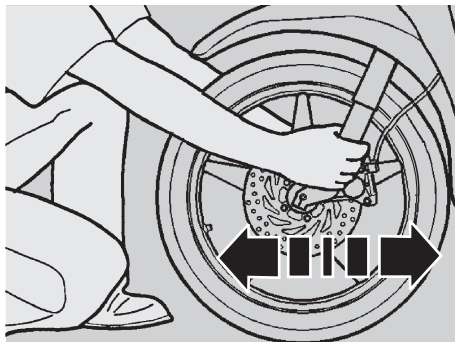
To check the steering it is necessary to:

- ◆ Position the vehicle on the centre stand on firm and level ground.

NOTE Prepare a support with base measuring 200 x 200 mm, whose height should be 270 mm for the **50** and 230 mm for the **100**.

⚠ CAUTION

Make sure that the vehicle is stable.

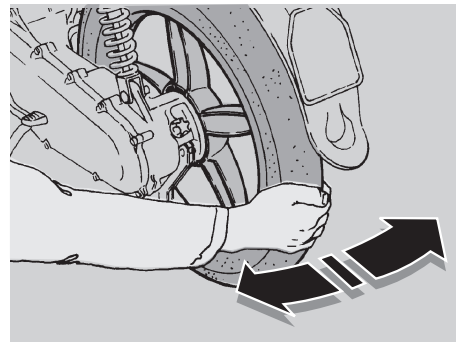


- ◆ Place the support under the vehicle and a spongy cloth between them, so that the front wheel can move freely and the vehicle cannot fall down.
- ◆ Shake the fork in the direction of travel.

NOTE 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 a considerable slack, contact your **aprilia** Official Dealer to restore the optimal steering conditions.



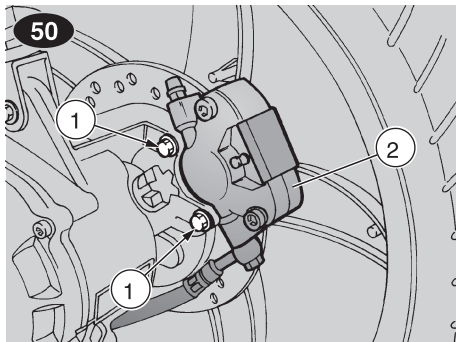
CHECKING THE ENGINE FULCRUM AXIS

Carefully read p. 45 (MAINTENANCE).

Periodically check the slack existing between the engine pin bushings.

To carry out this operation, proceed as follows:

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



REMOVING THE REAR BRAKE CALIPER 50

Carefully read p. 45 (MAINTENANCE).

⚠ CAUTION

Upon disassembly, take care not to damage the brake pipe, disc and pads.

- ◆ Position the vehicle on the centre stand on firm and level ground.
- ◆ Unscrew and remove the two screws (1).

Brake caliper screw driving torque (1):
27 Nm (2.7 kgm).

⚠ WARNING

Upon reassembly of the brake caliper, replace the caliper fastening screws (1) with two new screws of the same type.



⚠ CAUTION

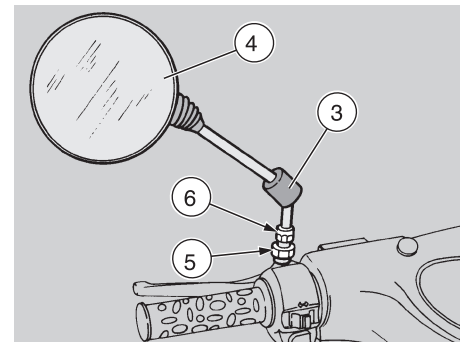
Never pull the rear brake lever after removing the brake caliper, otherwise the caliper pistons may go out of their seats, thus causing the outflow of the brake fluid.

In this case consult your **aprilia** Official Dealer, who will carry out the proper maintenance operation.

- ◆ Remove the brake caliper (2), by carefully withdrawing it from the brake disc.

⚠ WARNING

After reassembly, pull the rear brake lever repeatedly and check the correct functioning of the braking system.



REMOVING THE REAR-VIEW MIRRORS

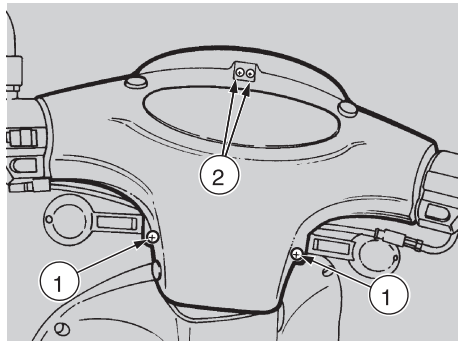
Carefully read p. 45 (MAINTENANCE).

- ◆ Position the vehicle on the centre stand on firm and level ground.
- ◆ Lift the protection element (3).

⚠ CAUTION

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

- ◆ Keep the screw (5) locked and loosen the nut (6) completely.
- ◆ Remove the rear-view mirror (4).



REMOVING THE FRONT HANDLEBAR COVER

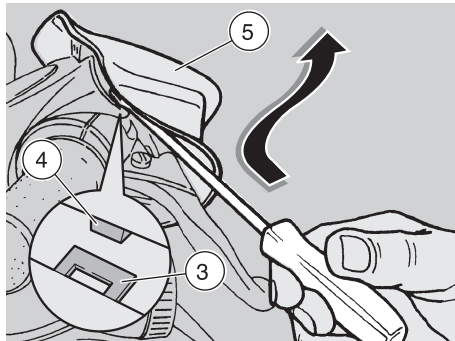
Carefully read p. 45 (MAINTENANCE).

- ◆ Position the vehicle on the centre stand on firm and level ground.
- ◆ Unscrew and remove the two screws (1).
- ◆ Unscrew and remove the two screws (2).

⚠ CAUTION

Proceed with care, in order not to damage the seat (3) of the tang (4).

- ◆ ★ By means of a small-tipped screwdriver, lift the tang (4) positioned inside the front handlebar cover (5).
- ◆ ★ Repeat the operation described above on the lower part of the handlebar cover.

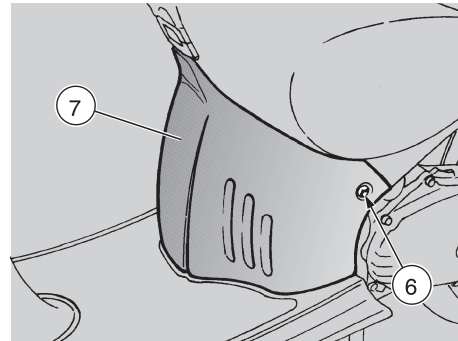


⚠ CAUTION

Handle the plastic and painted components with care and avoid scraping or damaging them.

- ◆ Remove the front handlebar cover (5), taking care not to break the tangs.

NOTE Upon reassembly, make sure that the tangs are correctly inserted.



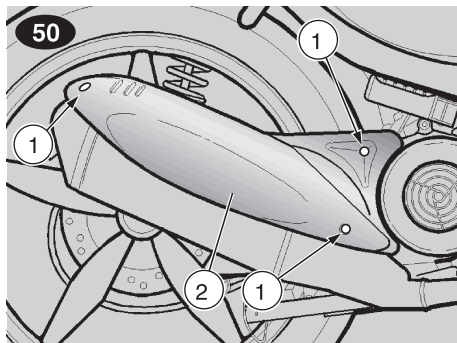
REMOVING THE INSPECTION COVER

Carefully read p. 45 (MAINTENANCE).

⚠ CAUTION

Handle the plastic and painted components with care and avoid scraping or damaging them.

- ◆ Position the vehicle on the centre stand.
- ◆ ★ Unscrew and remove the screw (6).
- ◆ Remove the inspection cover (7).



REMOVING THE EXHAUST SILENCER

Carefully read p. 45 (MAINTENANCE).

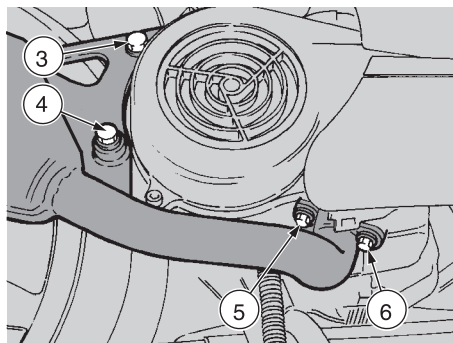
- ◆ Position the vehicle on the centre stand on firm and level ground.

⚠ WARNING

Before performing the operations described below, let the engine and the exhaust silencer cool down until they have reached room temperature, in order to avoid burns.

50

- ◆ Unscrew and remove the three screws (1).
- ◆ Remove the protection cover (2).



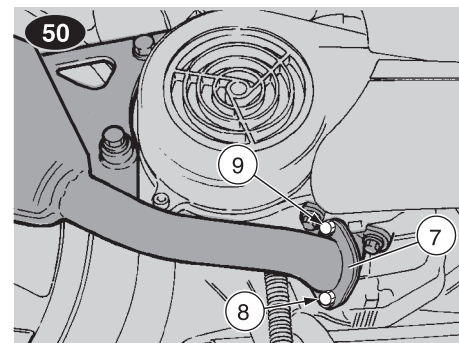
- ◆ Unscrew and remove the two screws (3) and (4) that fasten the exhaust silencer to the engine.

Screw (3) and (4) driving torque:
25 Nm (2.5 kgm).

50

⚠ CAUTION

If the additional flange (7) is provided, do not unscrew the screws (8) and (9), but follow the procedure described here below.

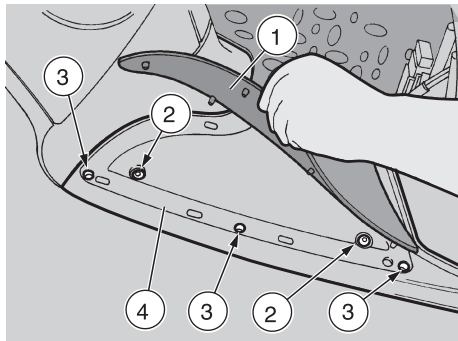


- ◆ Unscrew and remove the screws (5) and (6).

Screw (5) and (6) driving torque:
12 Nm (1.2 kgm).

- ◆ Remove the exhaust silencer.

NOTE Upon reassembly, replace the gasket positioned between the exhaust manifold and the silencer with a new one.



REMOVING THE FOOTBOARD

Carefully read p. 45 (MAINTENANCE).

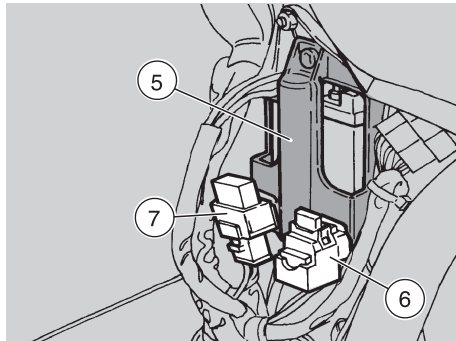
- ◆ Remove the inspection cover, see p. 60 (REMOVING THE INSPECTION COVER).
- ◆ Remove the footboard mat (1).
- ◆ ★ Unscrew and remove the two screws (2).
- ◆ ★ Unscrew and remove the three screws (3).

⚠ CAUTION

Proceed with care.

Do not damage the tangs and/or the relevant seats.

- ◆ Slightly raise the rear part of the footboard (4) and withdraw it from the base of the inner shield.



⚠ CAUTION

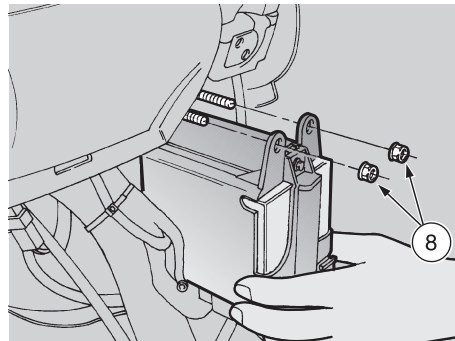
Do not force the lower shield, since it is fixed to the frame by means of two front screws only.

NOTE Upon reassembly, introduce first the central tangs and then the side tangs. Before introducing the three screws (3), make sure that the hole on the footboard and the screw seat are aligned.

REMOVING THE BATTERY BOX

Carefully read p. 45 (MAINTENANCE).

- ◆ Remove the inspection cover, see p. 60 (REMOVING THE INSPECTION COVER).



- ◆ Remove the fuse-carrier block (6) and the start relay block (7) from the battery box (5).

⚠ CAUTION

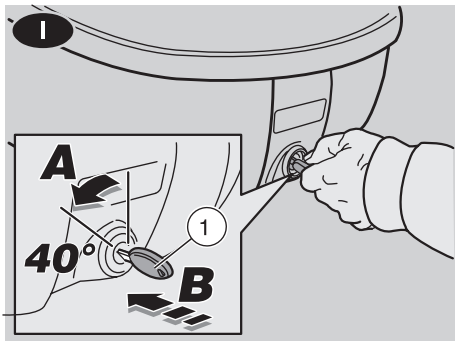
Handle the plastic and painted components with care and avoid scraping or damaging them.

- ◆ Unscrew and remove the two nuts (8).

⚠ CAUTION

50 Proceed with care. To avoid dangerous leakages of battery fluid, do not incline the battery box excessively.

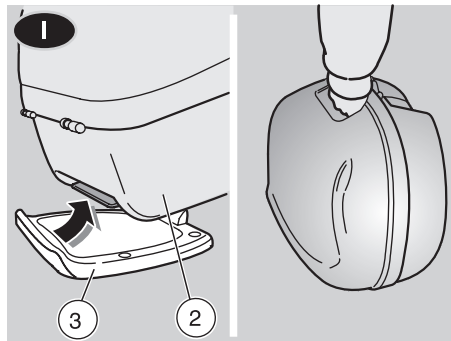
- ◆ Extract the battery box (together with the battery) and put it on the footboard.



REMOVING THE CRASH HELMET CASE ❶

Carefully read p. 45 (MAINTENANCE).

- ◆ Position the vehicle on the centre stand.
- ◆ Insert the key (1) in the lock and turn it approximately 40° anticlockwise (Pos.A).
- ◆ Press the key (Pos.B) until releasing the crash helmet case (2) from the plate (3).
- ◆ Turn the key (1) back to the centre of the lock and remove it.
- ◆ Remove the crash helmet case (2).

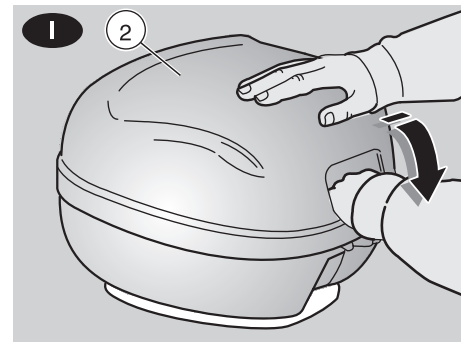
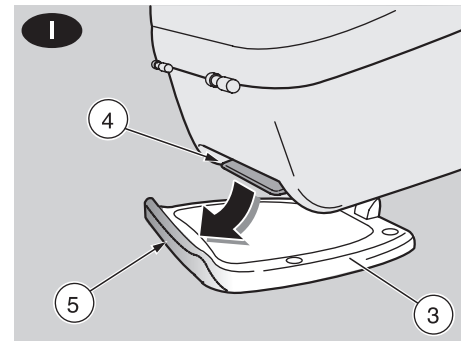


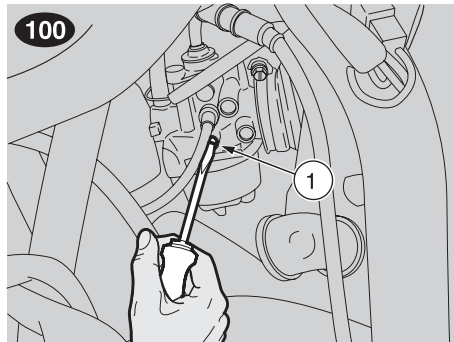
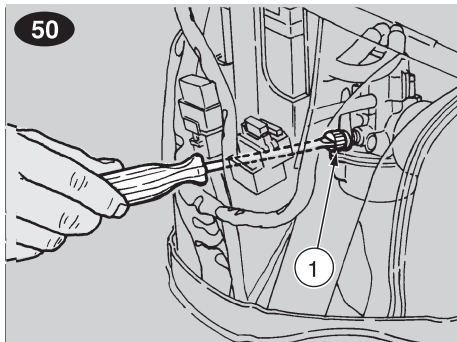
Upon reassembly, proceed as follows:

- ◆ Insert the coupling (4) of the crash helmet case in the appropriate seat (5) on the plate (3).
- ◆ Press the crash helmet case (2) downwards and make the lock snap shut.

⚠ WARNING

Before leaving, make sure that the crash helmet case is properly locked.





IDLING ADJUSTMENT

Carefully read p. 45 (MAINTENANCE).

Adjust the idling after the first 500 km (312 mi) and every time it is irregular.

To carry out this operation, proceed as follows:

- ◆ Drive for a few miles until the engine reaches the normal running temperature, then stop the engine.
- ◆ Remove the inspection cover, see p. 60 (REMOVING THE INSPECTION COVER).
- ◆ Connect an electronic revolution counter to the spark plug cable.

⚠ WARNING

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

- ◆ Start the engine.

_____ 50 _____
The minimum speed of the engine (idling) must be about 1800 ± 100 rpm; in this case the engine does not make the rear wheel rotate.

_____ 100 _____
The minimum speed of the engine (idling) must be about 1400 ± 100 rpm; in this case the engine does not make the rear wheel rotate.

If necessary:

- ◆ Act on the adjusting screw (1) positioned on the carburettor.

By **SCREWING IT** (clockwise), you increase the engine rpm.

By **UNSCREWING IT** (anticlockwise), you decrease the engine rpm.

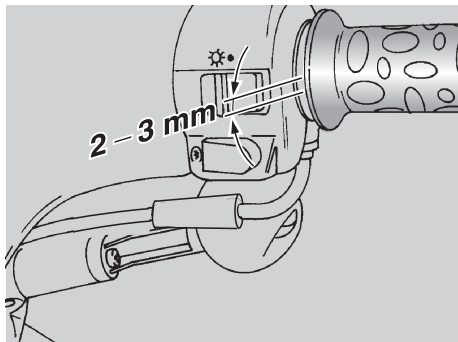
- ◆ Twist the throttle grip, accelerating and decelerating a few times to make sure that it functions correctly and to check if the idling speed is constant.

NOTE Do not act on the air adjusting screw, to avoid variations of the carburation setting.

⚠ CAUTION

If necessary, contact your **aprilia Official Dealer**.

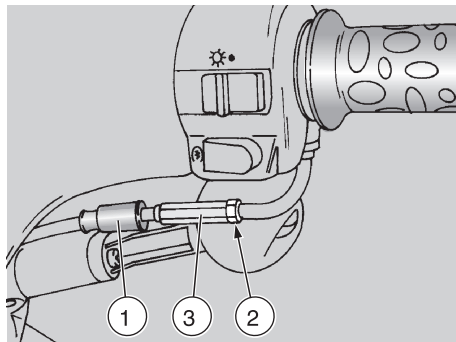




ADJUSTING THE ACCELERATOR CONTROL

Carefully read p. 45 (MAINTENANCE).

The ideal slack of the accelerator control should be about **2-3 mm**.



To adjust the slack, proceed as follows:

- ◆ Position the vehicle on the centre stand on firm and level ground.
- ◆ Remove the protection element (1).
- ◆ Loosen the nut (2) (by turning it clockwise).
- ◆ Act on the adjuster (3), positioned at the beginning of the accelerator control cable.

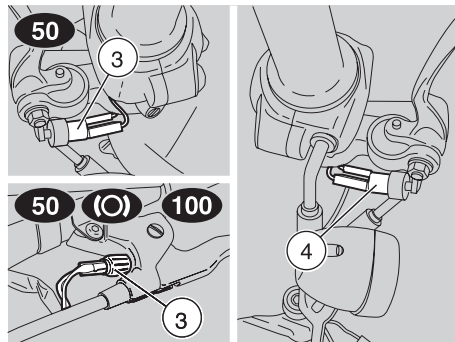
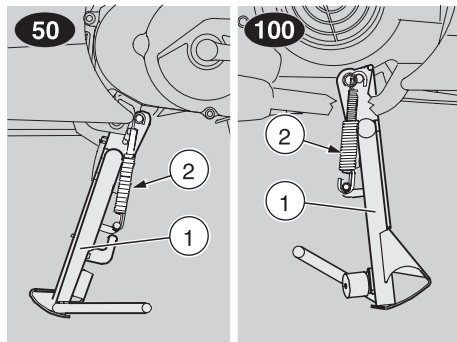
After the adjustment:

- ◆ Tighten the nut (2) (by turning it anti-clockwise), thus locking the adjuster (3) and put back the protection element (1).



⚠ WARNING

After the adjustment, make sure that the rotation of the handlebar does not modify the engine idling rpm and that the throttle grip returns smoothly and automatically to its original position after being released.



CHECKING THE STAND

Carefully read p. 45 (MAINTENANCE).

The stand (1) must rotate without hindrances.

Carry out the following checks:

- ◆ The springs (2) must not be damaged, worn, rusty or weakened.
- ◆ The stand must rotate freely, if necessary grease the joint, see p. 84 (LUBRICANT CHART).

CHECKING THE SWITCHES

Carefully read p. 45 (MAINTENANCE).

The vehicle is provided with two switches:

- stoplight switch on the rear brake control lever (3);
- stoplight switch on the front brake control lever (4).

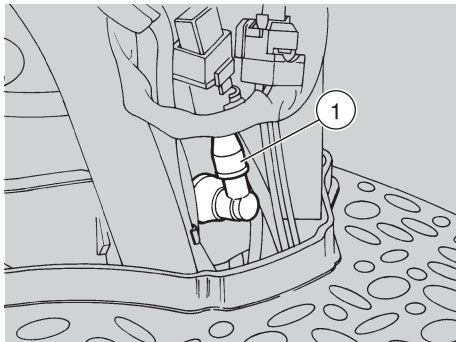
To reach the switches, proceed as follows:

- ◆ Remove the front handlebar cover, see p. 60 (REMOVING THE FRONT HANDLEBAR COVER).



Periodically carry out the following checks:

- ◆ Make sure that there are no dirt or mud deposits on the switch; the pin must be able to move without interferences, returning automatically to its initial position.
- ◆ Make sure that the cables are connected correctly.



SPARK PLUG

Carefully read p. 45 (MAINTENANCE).

Check the spark plug after the first 500 km (312 mi), and successively every 4000 km (2500 mi). Change it every 8000 km (5000 mi).

Periodically remove the spark plug and clean it carefully, removing carbon deposits; change it if necessary.

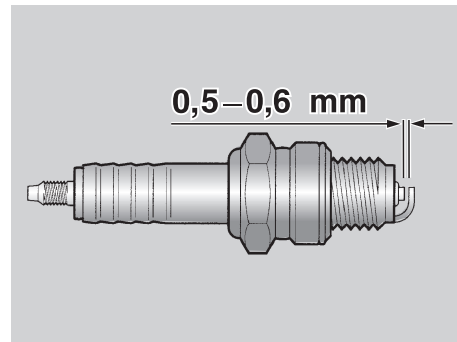
To reach the spark plug:

- ◆ Remove the inspection cover, see p. 60 (REMOVING THE INSPECTION COVER).

To remove and clean the spark plug:

- ◆ Take off the spark plug 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 porcelain 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.
If the spark plug has crackings on the insulating material, corroded electrodes or excessive deposits, it must be changed.
- ◆ Check the spark plug gap with a thickness gauge.
The gap must be **0.5 – 0.6 mm**; if necessary adjust it, carefully bending the earth electrode.
- ◆ Make sure that the washer is in good conditions. With the washer on, screw the spark plug by hand in order not to damage the thread.
- ◆ Tighten the spark plug by means of the spanner you will find in the tool kit, giving it half a turn to compress the washer.

Spark plug driving torque:
20 Nm (2 kgm).

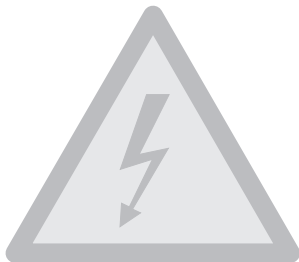


⚠ CAUTION

The spark plug must be well tightened, otherwise the engine may overheat and be seriously damaged.

Use the recommended type of spark plug only, see p. 81 (TECHNICAL DATA), in order not to compromise the life and performance of the engine.

- ◆ Position the spark plug cap (1).
- ◆ Put back the inspection cover, see p. 60 (REMOVING THE INSPECTION COVER).



BATTERY

Carefully read p. 45 (MAINTENANCE).


⚠ WARNING

Risk of fire.

Keep fuel and other flammable substances away from the electrical components.

⚠ CAUTION

Never invert the connection of the battery cables.

Connect and disconnect the battery with the ignition switch in position “”, otherwise some components may be damaged.

Connect first the positive cable (+) and then the negative cable (-).

Disconnect following the reverse order.

50

Check the electrolyte level and the tightening of the terminals after the first 500 km (312 mi) and then every 4000 km (2500 mi).

⚠ WARNING

The electrolyte in the battery is toxic and caustic and if it gets in contact with the skin it can cause burns, since it contains sulphuric acid. Wear protection clothes, a face mask and/or goggles during maintenance operations.

In case of contact with the skin, rinse with plenty of water.

In case of contact with the eyes, rinse with plenty of water for fifteen minutes, then consult an oculist without delay.

If the electrolyte is accidentally swallowed, drink a lot of water or milk, then continue drinking milk of magnesia or vegetable oil and consult a doctor without delay.

The battery gives off explosive gases; keep it away from flames, sparks, cigarettes and any other source of heat.

During the recharging or the use, make sure that the room is properly ventilated and avoid inhaling the gases released during the recharging.

KEEP AWAY FROM CHILDREN.

Do not incline the vehicle too much, in order to avoid dangerous leaks of the battery fluid.

The electrolyte is corrosive.

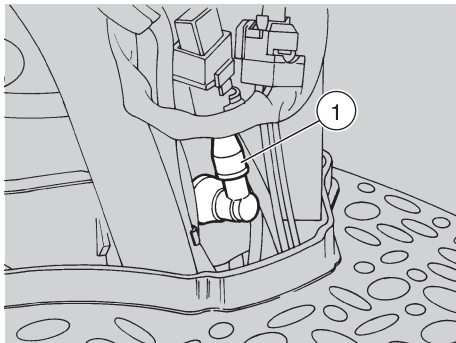
Do not pour or spill it, especially on the plastic parts.

100

⚠ CAUTION

This vehicle is provided with a maintenance-free battery and no operation is necessary, excepting occasional checks and the recharge when required.

NOTE If you need assistance or technical advice, consult your **aprilia** Official Dealer, who can ensure you prompt and accurate servicing.



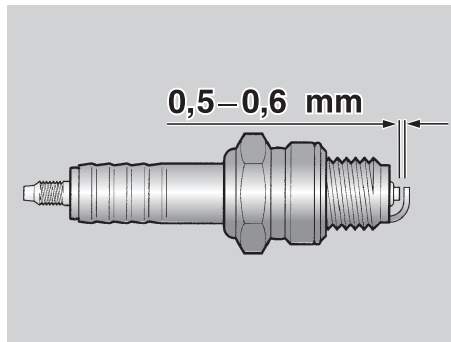
LONG INACTIVITY OF THE BATTERY

If the vehicle remains unused for more than fifteen days, it is necessary to recharge the battery, in order to prevent its sulphation, see p. 71 (RECHARGING THE BATTERY).

It is important to check the charge periodically (about once a month), during the winter or when the vehicle remains unused, in order to prevent the deterioration of the battery.

- ◆ Recharge it completely with a normal charge, see p. 71 (RECHARGING THE BATTERY).

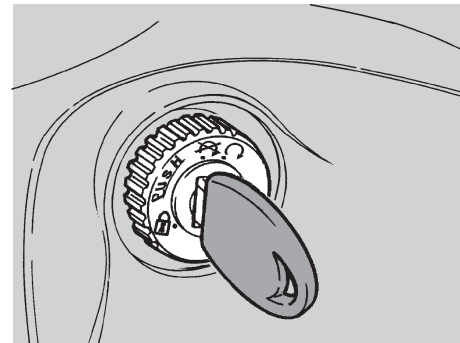
If the battery remains on the vehicle, disconnect the cables from the terminals.



CHECKING AND CLEANING THE TERMINALS

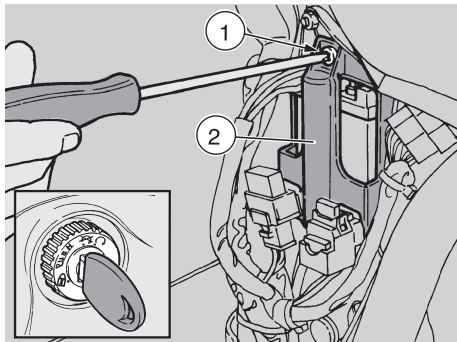
Carefully read p. 68 (BATTERY).

- ◆ Remove the battery (partial removal), see p. 70 (REMOVING THE BATTERY).
- ◆ Make sure that the cable terminals (1) and the battery terminals (2) are:
 - in good conditions (and not corroded or covered with deposits);
 - covered with special grease or Vaseline.



If necessary:

- ◆ Make sure that the ignition switch is in position "X".
- ◆ Disconnect first the negative (–) and then the positive cable (red) (+).
- ◆ Brush with a wire brush to eliminate any sign of corrosion.
- ◆ Reconnect first the positive (red) (+) and then the negative cable (–).
- ◆ Cover the terminals with special grease or Vaseline.
- ◆ Put back the battery, see p. 71 (INSTALLING THE BATTERY).



REMOVING THE BATTERY

Carefully read p. 68 (BATTERY).

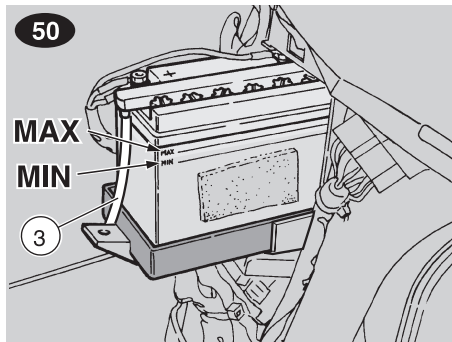
PARTIAL REMOVAL

- ◆ Make sure that the ignition switch is in position "X".
- ◆ Remove the inspection cover, see p. 60 (REMOVING THE INSPECTION COVER).
- ◆ Unscrew and remove the screw (1).
- ◆ Rotate the battery cover (2) downwards.

⚠ CAUTION

The battery is connected with the electric cables. Do not force the cables while removing it.

- ◆ Withdraw the battery from its box.



COMPLETE REMOVAL

- ◆ Disconnect first the negative cable (–) and then the positive cable (+).
- ◆ 50 Disconnect the breather pipe (3).
- ◆ Remove the battery from its compartment and put it on a level surface in a cool and dry place.

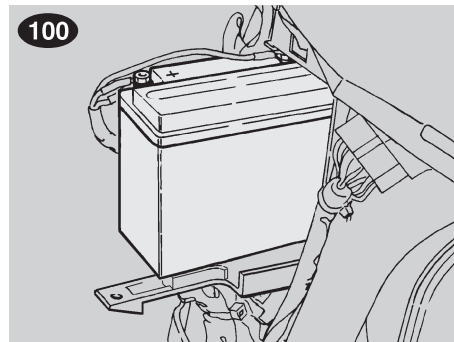
⚠ WARNING

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

CHECKING THE ELECTROLYTE LEVEL 50

Carefully read p. 68 (BATTERY).

- ◆ Remove the battery (partial removal), see p. 70 (REMOVING THE BATTERY).



- ◆ Make sure that the fluid level is included between the two "MIN" and "MAX" notches stamped on the battery side.

Otherwise:

- ◆ Unscrew and remove the element plugs.

⚠ CAUTION

Top up with distilled water only. Do not exceed the "MAX" mark, since the electrolyte level increases during the recharge.

- ◆ Top up by adding distilled water.

⚠ CAUTION

After topping up, put back the element plugs in the correct position.

- ◆ Put back the element plugs.

RECHARGING THE BATTERY

Carefully read p. 68 (BATTERY).

- ◆ Remove the battery (complete removal), see p. 70 (REMOVING THE BATTERY).
- ◆ Prepare an appropriate battery charger.

100

NOTE Do not remove the battery plugs; without plugs the battery may be damaged.

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- ◆ Unscrew and remove the element plugs.
- ◆ Check the electrolyte level, see p. 70 (CHECKING THE ELECTROLYTE LEVEL 50).

- ◆ Connect the battery with a battery charger.

NOTE A recharge with an amperage equal to 1/10th of the battery capacity is recommended.

- ◆ Switch on the battery charger.

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- ◆ After the recharging operation, check the electrolyte level again and if necessary top up with distilled water.
- ◆ Replace the element plugs.

⚠ CAUTION

Reassemble the battery only 5-10 minutes after disconnecting the recharger, since the battery continues to produce gas for a short lapse of time.

INSTALLING THE BATTERY

Carefully read p. 68 (BATTERY).

- ◆ Make sure that the ignition switch is in position "X".
- ◆ Put the battery in its container.

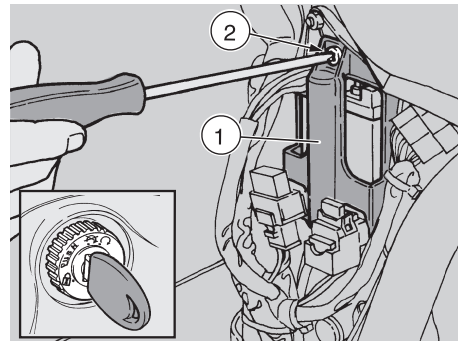
50

- ◆ Connect the breather pipe.

⚠ 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.

The breather pipe must be connected in such a way as to prevent any crushing, otherwise the pressure inside the battery may increase with consequent risk of damage.



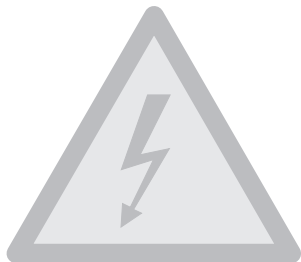
- ◆ Connect, in order, the positive (red) (+) and negative (-) cable.
- ◆ Cover the terminals with special grease or Vaseline.

⚠ CAUTION

Upon reassembly the electric cables must be guided in the correct position, in such a way as not to crush them.

The negative cable (-) must not overlap the positive cable (+) fastening, but it must be positioned beside it, between the battery and the compartment.

- ◆ Push the battery inside the battery compartment.
- ◆ Close the battery cover (1).
- ◆ Screw and tighten the screw (2).
- ◆ Put back the inspection cover, see p. 60 (REMOVING THE INSPECTION COVER).



CHANGING THE FUSE

Carefully read p. 45 (MAINTENANCE).

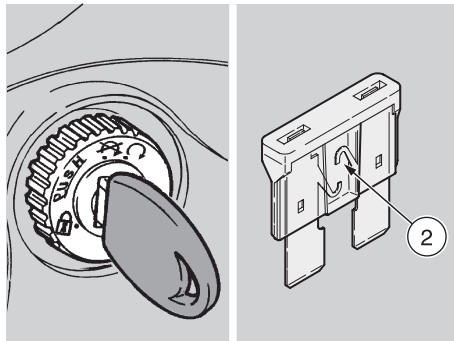
⚠ CAUTION

Do not repair faulty fuses. Never use fuses different from the recommended ones.

The use of unsuitable fuses may cause damages to the electric system or, in case of short circuit, even a fire.

NOTE If a fuse blows frequently, there probably is a short circuit or an overload in the electric system.

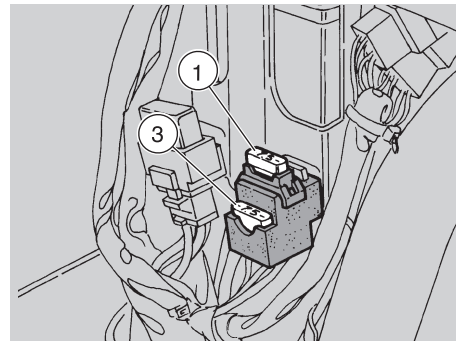
In this case it is advisable to consult an **aprilia** Official Dealer.



If an electric component does not work or works irregularly, or if the vehicle fails to start, it is necessary to check the fuse (1).

To check the fuse, proceed as follows:

- ◆ Turn the ignition switch to position “”, to avoid any accidental short circuit.
- ◆ Remove the inspection cover, see p. 60 (REMOVING THE INSPECTION COVER).
- ◆ Extract the fuse (1) and check if the filament (2) is broken.
- ◆ Before replacing the fuse, try to find out the cause of the trouble, if possible.



- ◆ Then replace the damaged fuse with the spare fuse (3) or with a new one having the same amperage.

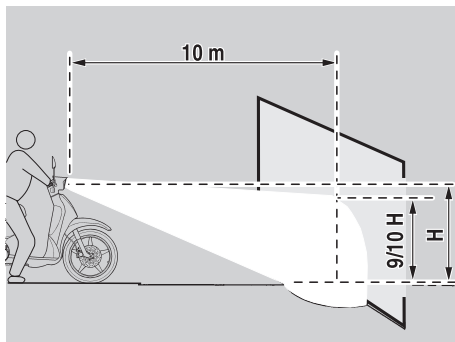
NOTE If you use one of the spare fuse (3), put a new fuse in the suitable seat.

- ◆ Put back the inspection cover, see p. 60 (REMOVING THE INSPECTION COVER).

ARRANGEMENT OF THE FUSE

7.5 A fuse from the battery to:

all the electric loads, excluding the light circuit, which is fed with alternate current.



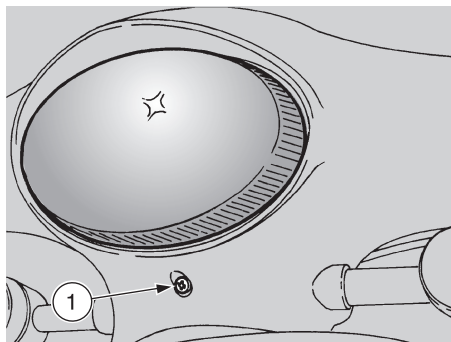
ADJUSTING THE VERTICAL HEADLIGHT BEAM

NOTE To check the direction of the headlight beam, specific procedures must be adopted, in accordance with the regulations in force in the country where the vehicle is used.



To rapidly check the correct direction of the beam, place the vehicle on flat ground, 10 m away from a wall.

- ◆ Turn on the low beam, sit on the vehicle and make sure that the beam projected on the wall is slightly under the horizontal line of the headlight (about 9/10th of the total height).



To adjust the headlight beam:

- ◆ Position the vehicle on the centre stand on firm and level ground.
- ◆ Act on the suitable screw (1) by means of a screwdriver.

By TURNING IT CLOCKWISE, you set the beam upwards.

By TURNING IT ANTICLOCKWISE, you set the beam downwards.

BULBS

Carefully read see p. 46 (REGULAR SERVICE INTERVALS CHART).

⚠ WARNING

Risk of fire.

Keep fuel and other flammable substances away from the electrical components.

⚠ CAUTION

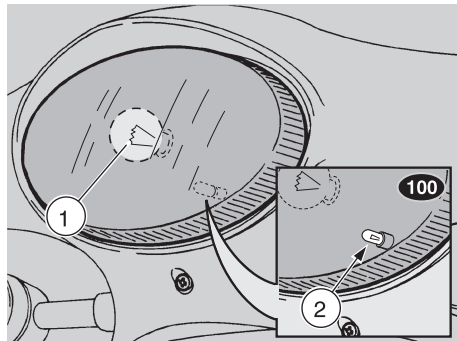
Before changing a bulb, move the ignition switch to position “” and wait a few minutes, so that the bulb cools down.

Change the bulb wearing clean gloves or using a clean and dry cloth.

Do not leave fingerprints on the bulb, since these may cause its overheating and consequent breakage.

If you touch the bulb with bare hands, remove any fingerprint with alcohol, in order to avoid any damage.

DO NOT FORCE THE ELECTRIC CABLES.



CHANGING THE HEADLIGHT BULBS

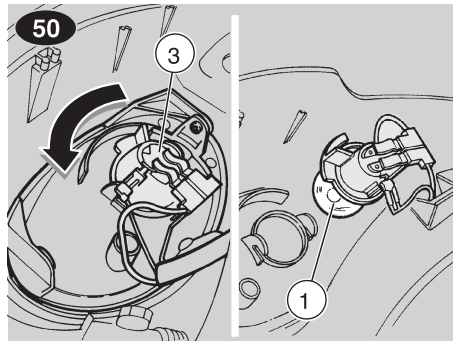
Carefully read p. 73 (BULBS).

The headlight contains:

- one low beam/high beam bulb (1);
- **100** one parking light bulb (2) (lower).

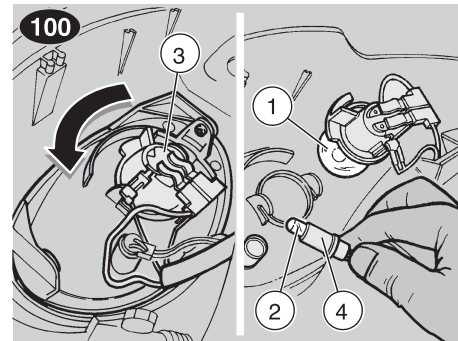
To change the bulb, proceed as follows:

- ◆ Remove the front handlebar cover, see p. 60 (REMOVING THE FRONT HANDLEBAR COVER).



LOW/HIGH BEAM BULB

- ◆ Rotate the bulb socket (3) anticlockwise and extract it out of seat.
- ◆ Slightly press the low/high beam bulb (1) and rotate it anticlockwise, extract it and replace it with a new one of the same kind.

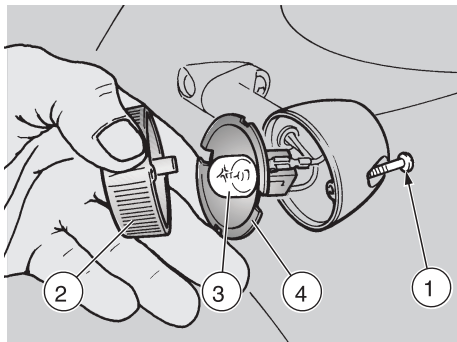


PARKING LIGHT BULB **100**

⚠ CAUTION

To extract the bulb socket, do not pull the electric wires.

- ◆ Grasp the parking light bulb socket (4), pull it and remove it from its seat.
- ◆ Withdraw the bulb (2) and replace it with one of the same type.



CHANGING THE FRONT AND REAR DIRECTION INDICATOR BULBS

Carefully read p. 73 (BULBS).

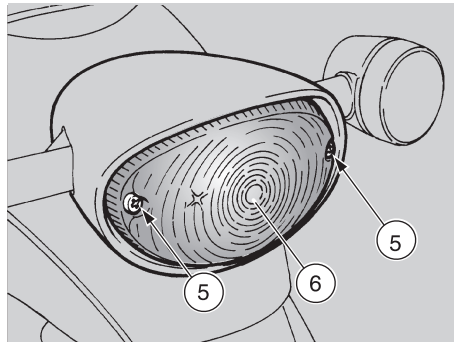
- ◆ Position the vehicle on the stand.
- ◆ Unscrew and remove the screw (1).

NOTE While removing the protection screen, proceed carefully in order not to break the cog.

- ◆ Remove the protection screen (2).

NOTE Upon reassembly, correctly position the protection screen in its seat. Tighten the screw (1) moderately and carefully, to avoid damaging the protection screen.

- ◆ Press the bulb (3) slightly and rotate it anticlockwise.
- ◆ Extract the bulb (3) from its seat.



NOTE Insert the bulb in the bulb socket, making the two bulb pins coincide with the relevant guides on the socket.

- ◆ Correctly install a new bulb of the same type.

NOTE If the bulb socket (4) goes out of its seat, insert it correctly, making the bulb socket opening coincide with the screw seat.

CHANGING THE REAR LIGHT BULB

Carefully read p. 73 (BULBS).

To change them, proceed as follows:

- ◆ Unscrew and remove the two screws (5).

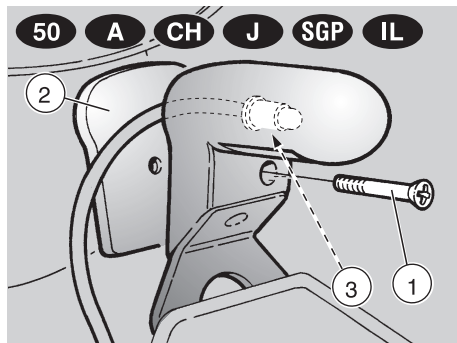
NOTE While removing the protection screen, proceed carefully in order not to break the cog.

- ◆ Remove the protection screen (6).
- ◆ Press the bulb slightly and turn it anticlockwise.
- ◆ Remove the bulb from its seat.

NOTE Insert the bulb in the socket, making the two bulb pins coincide with the relevant guides on the socket.

- ◆ Correctly install a new bulb of the same type.

NOTE Upon reassembly, position the protection screen correctly in its seat. Tighten the screws (1) moderately and carefully, in order not to damage the protection screen.

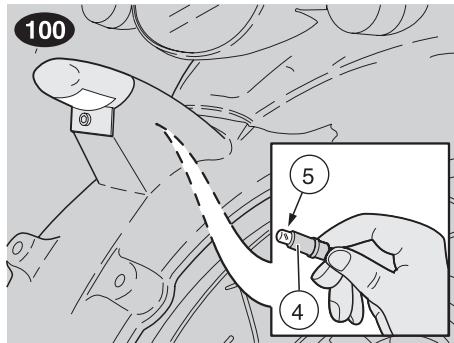


CHANGING THE NUMBER PLATE BULB 50 A CH J SGP IL

Carefully read p. 73 (BULBS).

To change the bulb, proceed as follows:

- ◆ Unscrew and remove the screw (1).
- ◆ Remove the cover (2).
- ◆ Extract the rubber bulb socket (3).
- ◆ Withdraw the bulb from its seat.
- ◆ Correctly install a new bulb, following the reverse order.



CHANGING THE NUMBER PLATE BULB 100

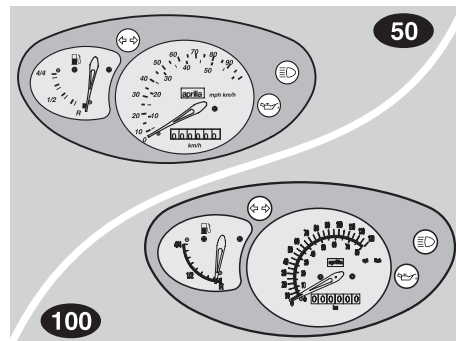
Carefully read p. 73 (BULBS).

⚠ CAUTION

To extract the bulb electric connector, do not pull its electric wires.

- ◆ Working on the lower inner side of the mudguard, grasp the bulb socket (4), pull it and extract it from its seat.
- ◆ Withdraw the bulb (5) and replace it with a new one of the same type.

NOTE Upon reassembly, make sure that the bulb socket (4) is correctly inserted in its seat.



CHANGING THE DASHBOARD BULBS

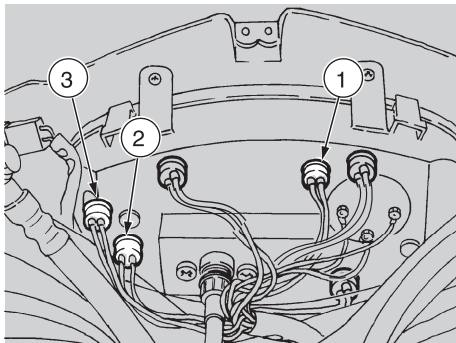
Carefully read p. 73 (BULBS) carefully.

The dashboard contains:

- The warning light bulbs;
- The dashboard lighting bulbs;

To change the bulbs, proceed as follows:

- ◆ Remove the front handlebar cover, see p. 60 (REMOVING THE FRONT HANDLEBAR COVER).



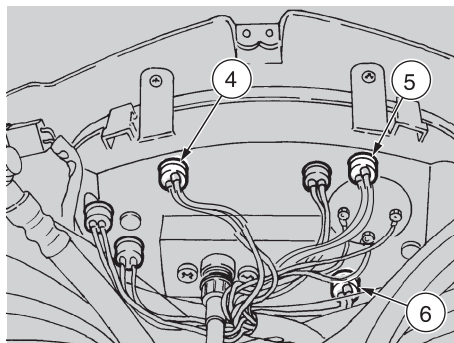
WARNING LIGHT BULBS

NOTE Extract the bulb sockets one by one, in such a way as to avoid positioning them incorrectly during the reassembly.

- ◆ Extract the relative bulb socket:

Pos.	Warning light	Colour
1	Direction indicators (↔)	green
2	2 stroke oil reserve (⚙️)	red
3	High beam (≡D)	blue

- ◆ Extract the bulb and replace it with one of the same type.



DASHBOARD LIGHTING BULBS

⚠️ CAUTION

Extract the bulb sockets one by one, in such a way as to avoid positioning them incorrectly during the reassembly.

- ◆ Extract the bulb socket of the dashboard part in which there has been a light decrease:

Pos.	Lit part
4	upper right part
5	upper left part (*)
6	lower right part

(*) Some versions may come without this bulb.

- ◆ Extract the bulb and replace it with one of the same type.

TRANSPORT



⚠️ WARNING

Before transporting the vehicle, it is necessary to empty the fuel tank and the carburettor completely, see p. 78 (DRAINING THE FUEL TANK) making sure that both are completely dry.

During transport the vehicle must be kept in vertical position and be firmly anchored, in order to avoid any leakage of fuel, oil or coolant.

⚠️ WARNING

In case of failure, do not tow the vehicle, but ask for assistance.

DRAINING THE FUEL TANK

Carefully read p. 26 (FUEL).

⚠ WARNING

Risk of fire.

Wait until the engine and the exhaust silencer have completely cooled down. Fuel vapours are noxious for your health.

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

Do not inhale fuel vapours.

Do not smoke, nor use free flames.

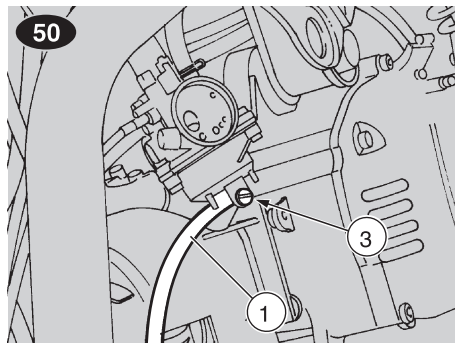
DO NOT DISPOSE OF FUEL IN THE ENVIRONMENT.

- ◆ Position the vehicle on the centre stand on firm and level ground.
- ◆ Stop the engine and wait until it has cooled down.
- ◆ Prepare a container with capacity exceeding the fuel quantity present in the tank and put it on the ground on the left side of the vehicle.
- ◆ Remove the filler cap.
- ◆ Empty the fuel tank by means of a manual pump or a similar system.

⚠ WARNING

After draining the tank, put back the filler cap in the correct position.

- ◆ Put back the filler cap.

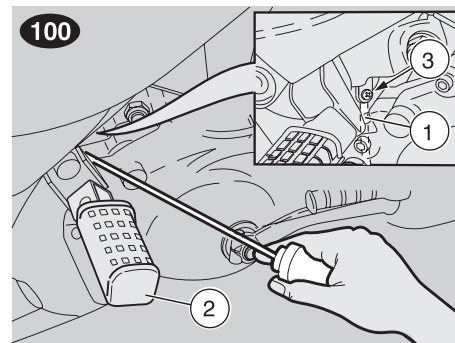


To empty the carburettor completely, proceed as follows:

- ◆ **50** Remove the filter casing, see p. 51 (REMOVING THE WHOLE AIR CLEANER CASING **50**).
- ◆ Put the free end of the pipe (1) into a receptacle.

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- ◆ Open the left passenger footrest (2).
 - ◆ Working on the left side of the vehicle, introduce a screwdriver between the footrest and the engine.
-
- ◆ Open the carburettor outlet by loosening the drain screw (3) positioned under the float chamber.



When all the fuel has flowed out of the carburettor:

- ◆ Tighten the drain screw (3) completely.

⚠ WARNING

Tighten the drain screw (2) with care, to avoid fuel leakages from the carburettor during the refuelling.

If necessary, contact an **aprilia** Official Dealer.

CLEANING

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

- ◆ Polluted areas (cities and industrial areas).
- ◆ Areas characterized by an high percentage of salinity and humidity (sea areas, hot and humid climates).
- ◆ Particular conditions (use of salt and anti-ice chemical products on the roads during the winter).
- ◆ Avoid leaving deposits of industrial and polluting powders, tar spots, dead insects, bird droppings, etc. on the body.
- ◆ Avoid parking the vehicle under trees, since in some seasons residues, resins, fruits or leaves fall down, which contain substances that may damage the paint.

⚠ WARNING

After the vehicle has been washed, its braking functions could be temporarily impaired because of the presence of water on the grip surfaces. Calculate long braking distances to avoid accidents. Brake repeatedly to restore normal conditions.

Carry out the preliminary checking operations, see p. 35 (PRELIMINARY CHECKING OPERATIONS).

To remove dirt and mud from the painted surfaces use a low- pressure water jet, carefully wet the dirty parts, remove mud and filth with a soft car sponge impregnated with a lot of water and shampoo (2 – 4% parts of shampoo in water).

Then rinse with plenty of water and dry with chamois leather.

To clean the outer parts of the engine use a degreaser, brushes and wipers.

⚠ CAUTION

To clean the lights, use a sponge soaked with water and a neutral detergent, rubbing the surfaces delicately and rinsing frequently with plenty of water.

Polish with silicone wax only after having carefully washed the vehicle.

Do not wash the vehicle under the sun, especially during the summer, when the body is still warm, since if the shampoo dries before being rinsed away, it can damage the paint.

Do not use liquids at a temperature exceeding 40°C to clean the plastic components of the vehicle.



⚠ CAUTION

Do not direct high-pressure water or air jets or steam jets on to the following components: wheel hubs, controls on the right and left side of the handlebar, bearings, brake pumps, instruments and indicators, silencer exhaust, glove/tool kit compartment, ignition switch/steering lock, fuel cap, lights and electric connections.

Do not use alcohol or solvents to clean the rubber and plastic parts, the saddle and the headlight: use water and mild soap.

⚠ WARNING

Do not apply protection waxes onto the saddle, in order not to make it too slippery.

LONG PERIODS OF INACTIVITY

After a long period of inactivity of the vehicle some precautions are necessary to avoid any problem.

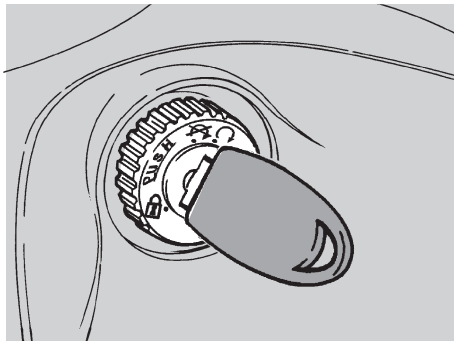
Further, it is important to carry out the necessary repairs and a general check up before the period of inactivity, since you could forget to carry them out later.

Proceed as follows:

- ◆ Empty the fuel tank and the carburettor, see p. 78 (DRAINING THE FUEL TANK).
- ◆ Extract the spark plug, see p. 67 (SPARK PLUG) and pour a teaspoon (5-10 cm³) of two-stroke engine oil into the cylinder,

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

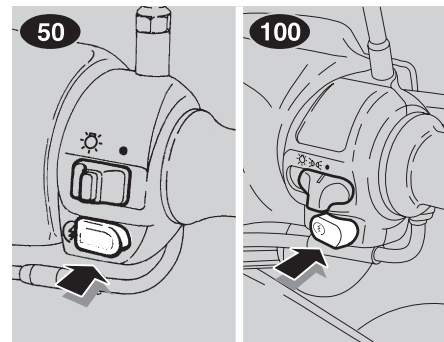
- ◆ Move the ignition switch to position “○”, press the start push button “Ⓐ” for a few seconds, to distribute the oil evenly on the cylinder surfaces.
- ◆ Remove the cloth.
- ◆ Put back the spark plug.
- ◆ Remove the battery, see p. 70 (REMOVING THE BATTERY).
- ◆ Wash and dry the vehicle, see p. 79 (CLEANING).
- ◆ Polish the painted surfaces with wax.



- ◆ Inflate the tyres, see p. 32 (TYRES).
- ◆ By means of a suitable support, position the vehicle so that both tyres are raised from the ground.
- ◆ Place the vehicle in an unheated, not-humid room, away from sunlight, with minimum temperature variations.
- ◆ Position and tie a plastic bag on the final pipe of the exhaust silencer, in order to prevent moisture from getting into it.
- ◆ Cover the vehicle avoiding the use of plastic or waterproof materials.

AFTER A PERIOD OF INACTIVITY

- ◆ Uncover and clean the vehicle, see p. 79 (CLEANING).
- ◆ Check the charge of the battery, see p. 71 (RECHARGING THE BATTERY) and install it, see p. 71 (INSTALLING THE BATTERY).





- ◆ Make sure that the fuel drain screw is thoroughly screwed (breather pipe closing index), see p. 78 (DRAINING THE FUEL TANK).
- ◆ Refuel, see p. 26 (FUEL).
- ◆ Carry out the preliminary checking operations, see p. 35 (PRELIMINARY CHECKING OPERATIONS).

⚠ WARNING

Have a test ride at moderate speed in a low-traffic area.

TECHNICAL DATA

DIMENSIONS	Max. length	50 1875 mm - 100 1945 mm
	Max. width (to the brake levers)	710 mm
	Max. height (to the rear-view mirrors)	50 1240 mm - 100 1270 mm
	Seat height	50 770 mm - 100 765 mm
	Distance between centres	50 1245 mm - 100 1265 mm
	Min. ground clearance	50 155 mm - 100 150 mm
	Weight without driver (ready for starting)	50 79 kg - 100 92 kg
ENGINE	Model	2-stroke with controlled ignition
	Type	50 4 MYAP - 100 4 VP mm
	Number of cylinders	1
	Total displacement	50 49,26 cm ³ - 100 101 cm ³
	Bore/stroke	50 40 mm / 39.2 mm - 100 52 mm / 47.6 mm
	Compression ratio	50 12.5 ± 0.5:1 - 100 10.3:1
	Starting	electric + kick starter
	Clutch	centrifugal
	Change gear 50	automatic stepless variator
TRANSMISSION	Change gear 100	automatic ventilated stepless speed change gear
	Cooling	with forced air
	Speed change gear	automatic and stepless
	Primary	V-belt
CAPACITY	Ratios	minimum for stepless change: 50 2.6 - 100 2.15 maximum for stepless change: 50 0.862 - 100 0.818
	Secondary	with gears
CAPACITY	Fuel (reserve included)	7 ℓ
	Fuel reserve	1 ℓ
	Transmission oil	110 cm ³
	2 stroke oil (reserve included)	1 ℓ
	2 stroke oil reserve	0.35 ℓ
	Seats 50	n° 1 (2 in the countries where this is allowed)
	Seats 100	n° 2
	Vehicle max. load (driver+luggage)	110 Kg
	Vehicle max. load (driver+passenger+luggage)	185 kg (50 in the countries where this is allowed)

CARBURETTOR	Model:	
	– standard	50 DELL'ORTO PHBN 12 - 100 DELL'ORTO PHVA
	Choke tube	50 Ø12 mm - 100 Ø15.8 mm
FUEL SUPPLY	Fuel 50	premium grade petrol (4 Stars UK) according to the DIN 51600 standard, min. O.N. 98 (N.O.R.M.) and 88 (N.O.M.M.)
	Fuel 50 	unleaded petrol according to the DIN 51607 standard, min. O.N. 95 (N.O.R.M.) and 85 (N.O.M.M.)
	Fuel 100	unleaded petrol according to the DIN 51607 standard, min. O.N. 95 (N.O.R.M.) and 85 (N.O.M.M.)
FRAME	Type	one-beam, split in two cradles
SUSPENSIONS	Front.....	hydraulically operated telescopic fork
	Stroke.....	80 mm
	Rear	hydraulic mono-shock absorber
	Stroke.....	68 mm
BRAKES	Front.....	disc brake, Ø 220 mm with hydraulic transmission
	Rear 50	drum brake, Ø 190 mm, with hydraulic transmission
	Rear 50 	drum brake, Ø 110 mm, with mechanic transmission
	Rear 100	disc brake, Ø 130 mm with mechanic transmission
WHEELS	Rims.....	alloy
	Front.....	1.60 x 16"
	Rear	1.85 x 16"
TYRES	Front.....	50 2,50 x 16" - 42J - 100 80 / 80 x 16" PIRELLI 40J TLMT15 MANDRAKE CHENG SHIN RUBBER C6101 50J TL
	Rear	50 2,75 x 16" - 46J - 100 90 / 80 x 16" PIRELLI 51J TLMT15 MANDRAKE CHENG SHIN RUBBER C6101 54J TL
	STANDARD INFLATION PRESSURE	
	Front.....	180 kPa (1.8 bar)
	Rear	220 kPa (2.2 bar)
	INFLATION PRESSURE WITH PASSENGER (where drive with passenger is allowed)	
	Front.....	200 kPa (2.0 bar)
	Rear	250 kPa (2.5 bar)



IGNITION

Type	CDI
Spark advance 50	14° ± 2° before T.D.C.
Spark advance 100	14° ± 2° before T.D.C.
Standard spark plug	50 NGK BR7 HS - 100 NGK BR8 HS
Spark plug gap	0.5 – 0.6 mm
Engine idle rpm	50 1800 ± 100 rpm - 100 1400 ± 100 rpm

ELECTRIC SYSTEM

Battery	12 V - 4 Ah
Fuse	7.5 A
Generator (with permanent magnet)	50 12 V - 85 W/ 100 12 V - 110 W
Low/high beam bulb	12 V - 35/35 W
Rear parking light 100	12 V - 5 W (W 2.1 x 9.5 d)
Direction indicator bulbs	12 V - 10 W
Rear parking light/stoplight bulb	12 V - 5/21 W
Number plate bulb	12 V - 5 W
Dashboard bulbs	12 V - 1.2 W
High beam warning light	12 V - 1.2 W
Direction indicator warning light	12 V - 3 W
2 stroke oil reserve warning light	12 V - 1.2 W

LUBRICANT CHART

Transmission oil (recommended):  F.C., SAE 75W - 90 or  Agip GEAR SYNTH, SAE 75W - 90.





As an alternative to the recommended oil, it is possible to use high-quality oils with characteristics in compliance with or superior to the A.P.I. GL-4 specifications.

Mixer oil (recommended):  GREEN HIT 2 or  Agip CITY 2T.



As an alternative to the recommended oil, use high-quality oils with characteristics in compliance with or superior to the ISO-L-ETC++, A.P.I. TC++ specifications.

Fork oil (recommended):  F.A. 5W or  F.A. 20W fork oil;



an alternative  Agip FORK 5W or  Agip FORK 20W fork oil.

If you need an oil with intermediate characteristics in comparison with the  F.A. 5W and  F.A. 20W or  Agip FORK 5W and  Agip FORK 20W, these can be mixed as indicated below:

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

 Agip FORK 5W 67% of the volume +  Agip FORK 20W 33% of the volume;

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

 Agip FORK 5W 33% of the volume +  Agip FORK 20W 67% of the volume.

Bearings and other lubrication points (recommended):  AUTOGREASE MP or  Agip GREASE 30.

As an alternative to the recommended product, use high-quality grease for rolling bearings, working temperature range -30°C.... +140°C, dripping point 150°C... 230°C, high protection against corrosion, good resistance to water and oxidation.

Protection of the battery poles: neutral grease or vaseline.

WARNING

Use new brake fluid only.

Brake fluid (recommended):  F.F., DOT 5 (DOT 4 compatible) or  Agip BRAKE 5.1, DOT 5 (DOT 4 compatible).

WARNING

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

Engine coolant (recommended):  ECOBLU - 40°C or  Agip COOL.

NOTE



ASK FOR GENUINE SPARE PARTS ONLY

I APRILIA s.p.a. via G. Galilei, 1 - 30033 Noale (VE) Italy
Tel. +39(0)41 5829111 - Fax +39(0)41 441054 - Servizio Clienti **aprilia** +39(0)41 5786269

F APRILIA WORLD SERVICE B.V. Z.A. Central Parc - 255 BLD Robert Ballanger
B.P. 77- 93421 Villepinte (F) - Tel. (0) 149634747 - Fax (0) 149638750

D MOTORRAD GmbH Am Seestern 3 D-40547 Düsseldorf (D)
Tel. (211) 59018-00 - Fax (211) 5901819

E APRILIA WORLD SERVICE B.V. ESPAÑA Calle Alcorcon 19 - 28850 Torrejón de Ardoz - Madrid (E)
Tel. (91) 6778083 - Fax (91) 6778577

NL APRILIA NEDERLAND Nikkelstraat 1 - 4823 AE Breda (NL)
Tel. (076) 5431640 - Fax (076) 5431649

UK APRILIA MOTO U.K. LTD. Dunragit - Stranraer - Wigtownshire DG9 8PN - Scotland (UK)
Tel. (01776) 888670 - Fax (01581) 400661

USA APRILIA USA Inc. 110 Londonderry Court, Suite 130 - Woodstock, GA 30188 (USA)
Tel. 770 592 2261 - Fax 770 592 4878

A GINZINGER IMPORT GmbH & CO Frankfurterstrasse 19 - 4910 Ried im Innkreis (A)
Tel. (7752) 88077 - Fax (7752) 70684

P MILFA IMPORTAÇÃO EXPORTAÇÃO LDA. Avenida da Republica 692 - 4450-238 Matosinhos (P)
Tel. 229382450 - Fax 229371305

SF TUONTI NAKKILA OY P.o.B. 18 - 29250 Nakkila (SF)
Puh. (02) 5352500 - Fax (02) 5372793

B RAD n.v. / s.a. Industriegebied - Landegemstraat 4 - B - 9031 Drongen-Baarle
Tel. (09) 2829410 - Fax (09) 2829433

GR MOBILITY S.A. av. Messogion 191 - 11525 Athens (GR)
Tel. (1) 6728705 - Fax (1) 6728727

GR MOBILITY A.E. Λ. Μεσογειων 191 - 115-25 Αθηνα - Ελλάδα
Τηλ. (1) 6728705 - Φαξ: (1) 6728727

CH MOHAG AG Bernerstrasse Nord 202 - 8064 Zurich (CH)
Tel. (1) 4348686 - Fax (1) 4348606

DK S T.M.P. Islandsvej 3 - 7900 Nykøbing Mors (DK)
Tel 97722233 - Fax 97722133 - E-mail: t_m_p@post4.tele.dk

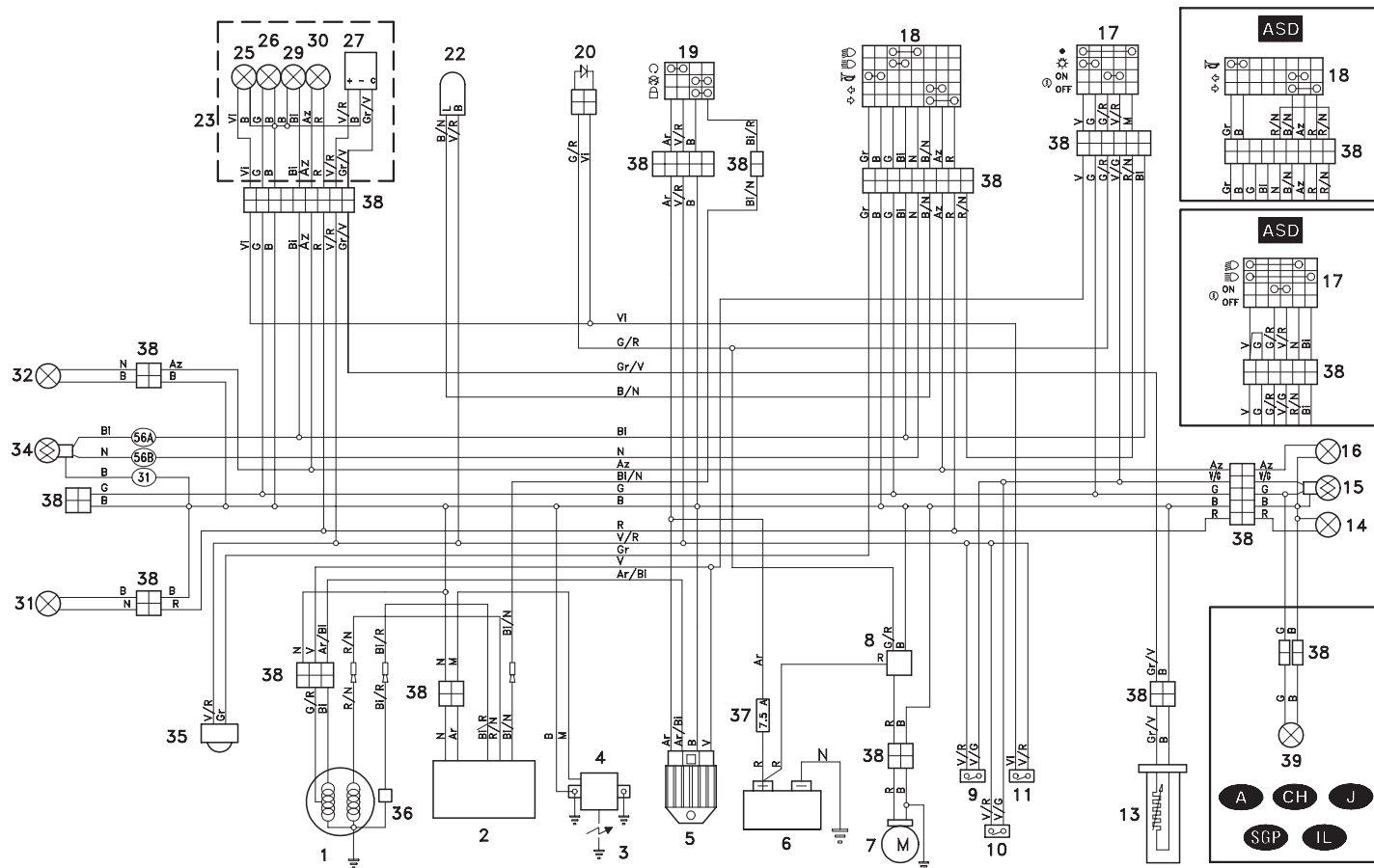
J BOSCO MOTO CO. LTD. 22-25 Hakunoshima 2 Chome Minoo-Shi 562 Osaka
562-0012 OSAKA (J) - Tel. (0727) 253311 - Fax (0727) 253322

J 株式会社 ボスコ・モト 〒 562-0012 大阪府箕面市白島 2 丁目 22-25
電話 : (0727)25-3311 - FAX : (0727)25-3322

SGP IDEAL MOTOR SPORT PTE. LTD. 20 Mactaggart Road, #01-01 Khong Guan Industrial Building 368079 Singapore (SGP)
Tel. 2820082 - Fax 2821012

PL	MOTO SP. ZOO	Ul. Trakt Lubelski 298 B - 04-667 Warszawa (PL) Tel. (22) 121183 - Fax (22) 121183
IL	AVIRAM & GOLDMAN IMPORT & MARKETING CO. LTD.	21, Tushia Street - P.O. BOX 57266 - 61572 - Israel - Tel-Aviv (IL) Tel. (3) 5623951 - Fax (3) 5623950
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RCH	HARLEY DAVIDSON SANTIAGO	Isidora Goyenechea 2926 - Santiago (RCH) Tel. (2) 2321667 - Fax (2) 2321894
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BR	APRILIA-BRASIL	Av. Europa, 352 - Jardim Europa - 01449-001 Sao Paulo-SP (BR) Tel. (11) 30691220 Fax. (11) 30691221
AUS	JOHN SAMPLE GROUP PTY LTD.	8, Sheridan Close - NSW 2214 - Milperra - Sydney (AUS) Tel. (2) 97722666 - Fax (2) 97742321
RSA	MOTOVELO S.A.	Old Pretoria Road - Wynberg - Johannesburg (RSA) Tel. (11) 7868486 - Fax (11) 7868482
NZ	MOTORCYCLING DOWNUNDER LTD.	35, Manchester Street - P.o.B. 22416 - Christchurch (NZ) Tel. (3) 3660129 - Fax (3) 3667580
HR	ING-KART, d.o.o.	Miroslava Magdalenica, 1 - 10000 Zagreb (HR) Tel. (1) 3491107 / 3491091 - Fax (1) 3491555
SLO	AVTO TRIGLAV, d.o.o.	Baragova 5 - 1113 Ljubljana (SLO) Tel. (61) 1883420 - Fax (61) 1883465
M	BIKES & COMPANY LTD.	178, Marina Street, Pieta. MSD 08. (M) - Tel. (+356) 236 665 - Fax (+356) 239 368
TR	METRO MOTORLU ARACLAR TICARET A.S.	Mihrabat Caddesi Akbeyoskak Yetimoglu Is Merkezi - 81640 - Kavacik-Istanbul (TR) - Tel. (0216) 4251565 - Fax (0216) 3312606
CZ	A. SPIRIT A.S.	Cernokostelecka 116 - 10000 Praha 10 (CZ) Tel. (02) 703049 - Fax. (02) 703158
IRL	K.D.I. KAWASAKI DISTRIBUTOR IRL. LTD.	17 Wood Street - Dublin 8 (IRL) Tel. (1) 4756046 Fax. (1) 4756461
N	MC TEMA A.S.	Kjørbekkdalen 6,3735 Skien, Norway (N) Tel. 35506780 Fax. 35506781

WIRING DIAGRAM - Scarabeo 50



WIRING DIAGRAM KEY - Scarabeo 50

- 1) Generator
- 2) CDI
- 3) Spark plug
- 4) H.T. coil
- 5) Voltage regulator
- 6) Battery
- 7) Starter
- 8) Start relay
- 9) Front stoplight switch
- 10) Rear stoplight switch
- 11) 2 stroke oil reserve switch
- 12) -
- 13) Fuel level sensor
- 14) Rear right direction indicator
- 15) Rear parking light/stoplight bulb
- 16) Rear left direction indicator
- 17) Right dimmer switch
- 18) Left dimmer switch
- 19) Ignition switch
- 20) Control diode
- 21) -
- 22) Blinking
- 23) Dashboard
- 24) -
- 25) 2 stroke oil reserve warning light
- 26) Dashboard light
- 27) Fuel level instrument
- 28) -
- 29) High beam warning light
- 30) Direction indicator warning light

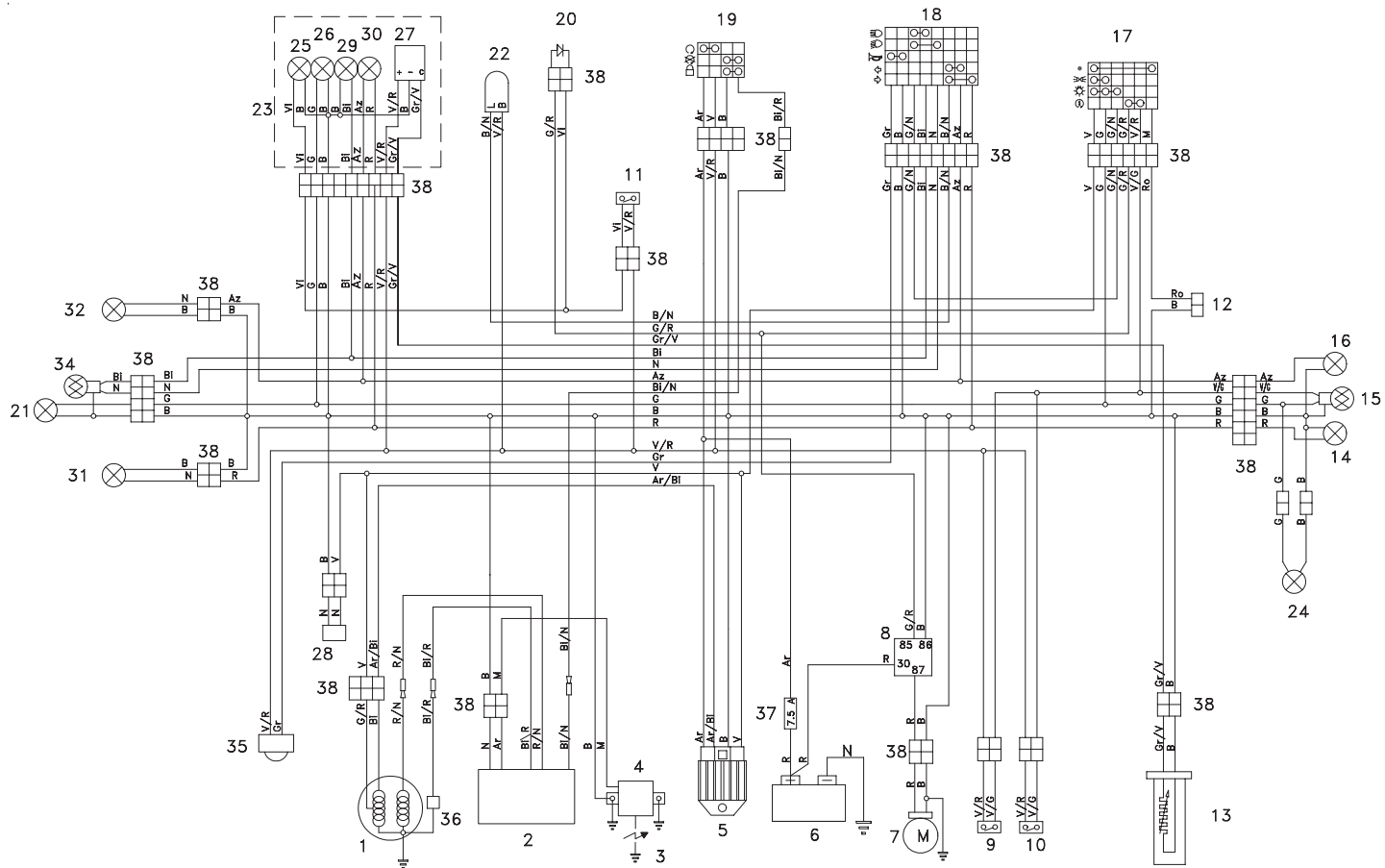
- 31) Front right direction indicator
- 32) Front left direction indicator
- 33) -
- 34) Low/high beam bulb
- 35) Horn
- 36) Pick up
- 37) Fuse
- 38) Multiple connectors
- 39) Number plate light

A **CH** **J** **SGP** **IL**

CABLE COLOURS

- Ar** Orange
Az Light blue
B Blue
Bi White
G Yellow
Gr Grey
M Brown
N Black
R Red
V Green
Vi Violet
Ro Pink

WIRING DIAGRAM - Scarabeo 100



WIRING DIAGRAM KEY - Scarabeo 100

- 1) Generator
- 2) CDI
- 3) Spark plug
- 4) H.T. coil
- 5) Voltage regulator
- 6) Battery
- 7) Starter
- 8) Start relay
- 9) Front stoplight switch
- 10) Rear stoplight switch
- 11) 2 stroke oil reserve switch
- 12) Resistor
- 13) Fuel level sensor
- 14) Rear right direction indicator
- 15) Rear parking light/stoplight bulb
- 16) Rear left direction indicator
- 17) Right dimmer switch
- 18) Left dimmer switch
- 19) Ignition switch
- 20) Control diode
- 21) Front parking light
- 22) Blinking
- 23) Dashboard
- 24) Number plate light
- 25) 2 stroke oil reserve warning light
- 26) Dashboard light
- 27) Fuel level instrument
- 28) Automatic starter
- 29) High beam warning light
- 30) Direction indicator warning light

- 31) Front right direction indicator
- 32) Front left direction indicator
- 33) -
- 34) Low/high beam bulb
- 35) Horn
- 36) Pick up
- 37) Fuse
- 38) Multiple connectors

CABLE COLOURS

- Ar** Orange
Az Light blue
B Blue
Bi White
G Yellow
Gr Grey
M Brown
N Black
R Red
V Green
Vi Violet
Ro Pink

aprilia s.p.a. wishes to thank its customers for the purchase of this vehicle.

- Do not dispose of oil, fuel, polluting substances and components in the environment.
- Do not keep the engine running if it isn't necessary.
- Avoid disturbing noises.
- Respect nature.