aprilia

RST mille **Futura**

use+**maintenance**book

aprilia part# 8104163

First edition: january 2001

Reprint:

Produced and printed by:
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Soave (VERONA) - Italy
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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 INFORMATION

★ 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.

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 Keep a stock of one bulb per type with the vehicle (see technical data).

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

aprilia has carried out this manual with the maximum attention, in order to supply the user with correct and updated information. However, since **aprilia** constantly improves the design of its products, there may be slight discrepancies between the characteristics of your vehicle and those described in this manual. For any clarification concerning the information contained in this manual, do not hesitate to contact your **aprilia** 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.

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** Official 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 Soon after purchasing the vehicle, write down the identification data indicated on the SPARE PARTS IDENTIFICATION LABEL in the table here below. This label is positioned on the left side of the saddle support; to read it, it is necessary to remove the saddle, see p. 26 (UNLOCKING/LOCKING THE SADDLE).

aprilia	YEAR	Y	1	2	3	4
SPARE PARTS IDENTIFICATION	I.M.	A	B	C	D	E

I	UK	A	P	SF	B	D	F	E	GR
NL	CH	DK	J	SGP	SLO	IL	ROK	MAL	RCH
HR	AUS	USA	BR	RSA	NZ	CDN			

These data indicate:

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

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

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

ASD **automatic light switching version (Automatic Switch-on Device)**

OPT **optional**

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

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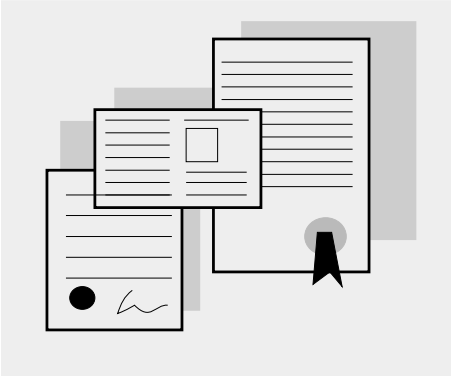
safe drive



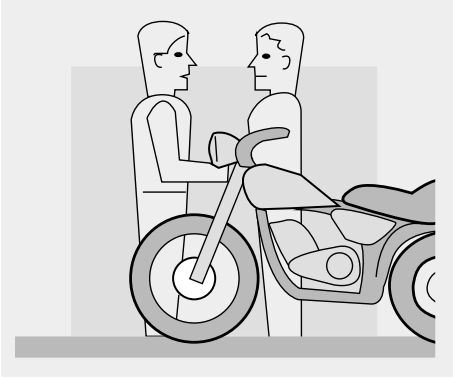
BASIC SAFETY RULES

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.).

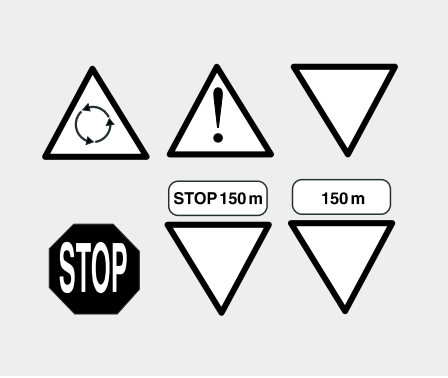
Gradually get to know the vehicle by driving it first in areas with low traffic and/or private areas.

The use of medicins, 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.

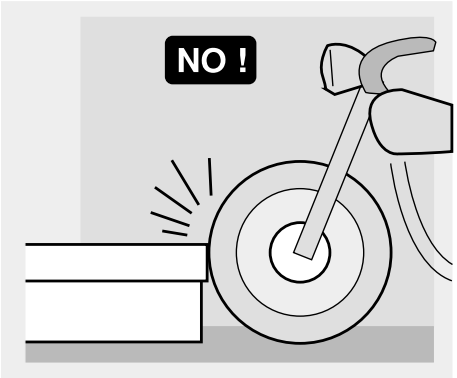


Most road accidents are caused by the driver's lack of experience.
NEVER lend the vehicle to beginners and, in any case, make sure that the driver has all the requirements for driving.



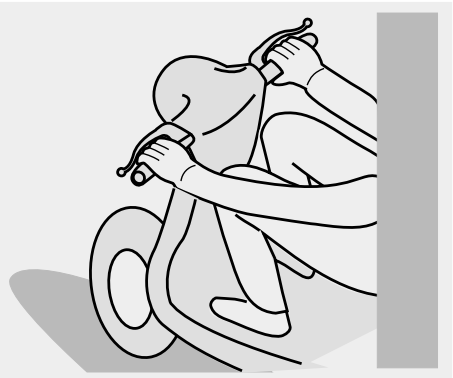
Rigorously observe all road signs and national and local road regulations.

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.



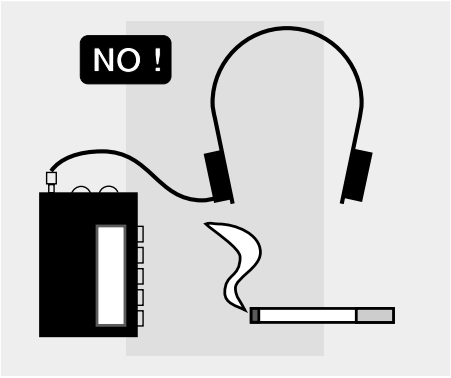
Avoid obstacles that could damage the vehicle or make you lose control.

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

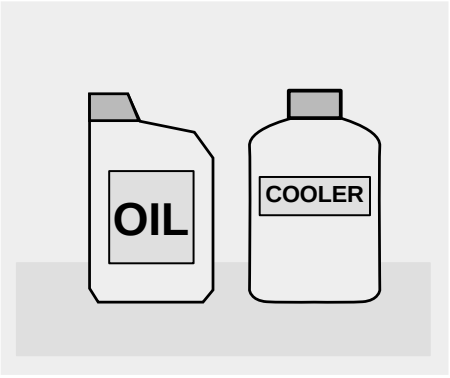


Always drive with both hands on the handlebars and both feet on the footrests (or on the rider's footboards), in the correct driving posture.

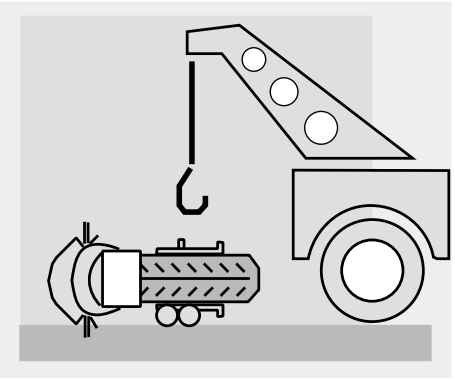
Avoid standing up or stretching your limbs while driving.



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.

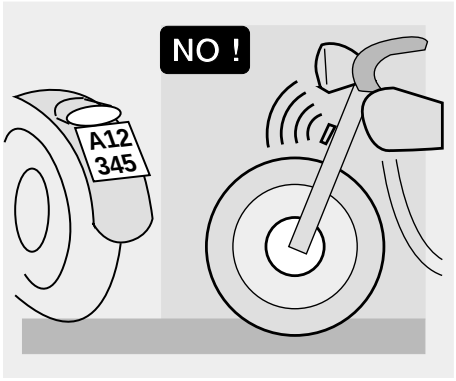


If the vehicle has been involved in an accident, make sure that no damage has occurred to the control levers, pipes, wires, braking system and vital parts.

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.

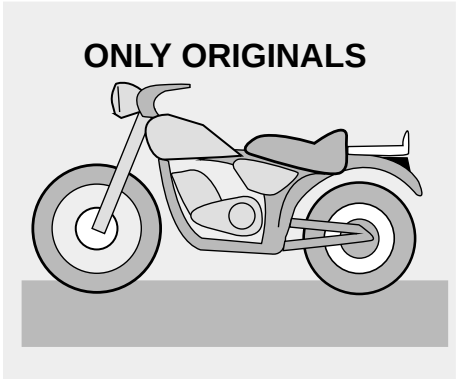
Always remember to report any malfunction to the technicians to help them in their work.

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.



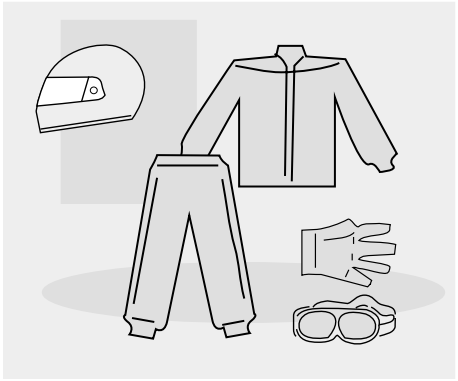
Any modification of the vehicle and/or the removal of original components can compromise vehicle performance levels and safety or even make it illegal.

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.

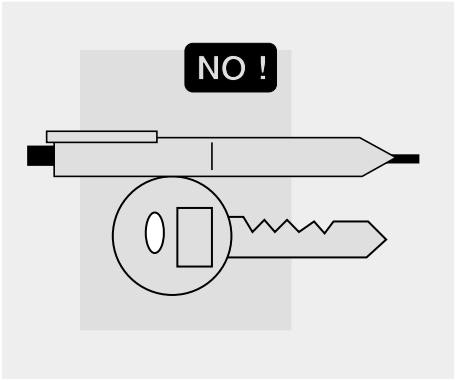


CLOTHING

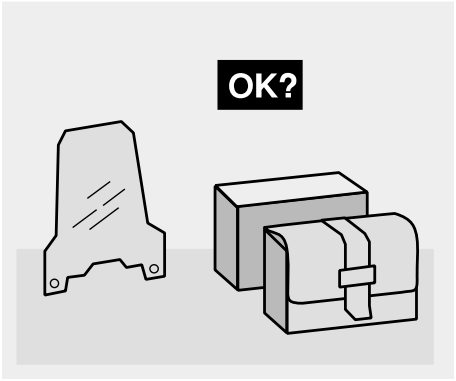
Before starting, always wear a correctly fastened crash helmet. Make sure that it is homologated, in good shape, of the right size and that the visor is clean.

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.

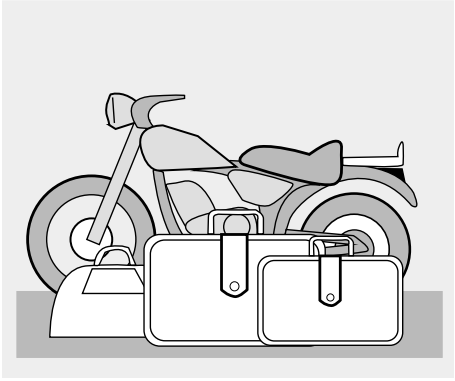


Do not keep objects that can be dangerous in case of fall, for example pointed objects like keys, pens, glass vials etc. in your pockets (the same recommendations also apply to passengers).



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 shortage in the horn and in the lights.
aprilia recommends the use of genuine accessories (**aprilia** genuine accessories).

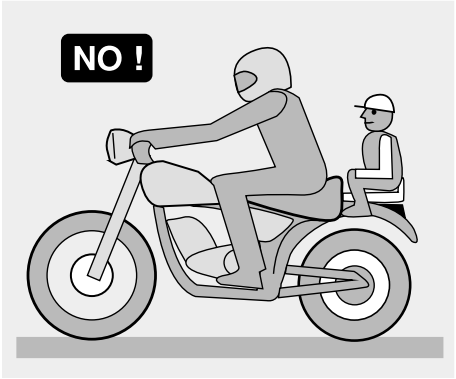
LOAD

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 umbalance 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 danger-

ous objects on the handlebars, mudguards and forks, because the vehicle might respond more slowly in turns and its manoeuvrability could be unavoidably impaired.

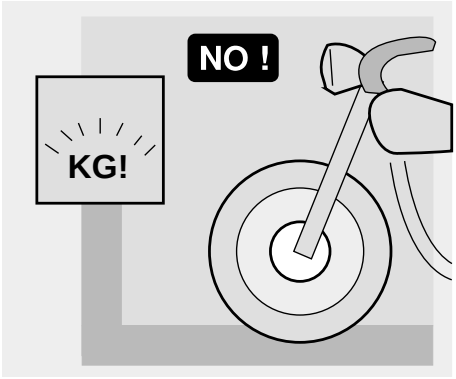
Do not place bags that are too bulky on the vehicle sides and do not ride with the crash helmet, because they could hit people or obstacles, making you lose control of the vehicle.



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

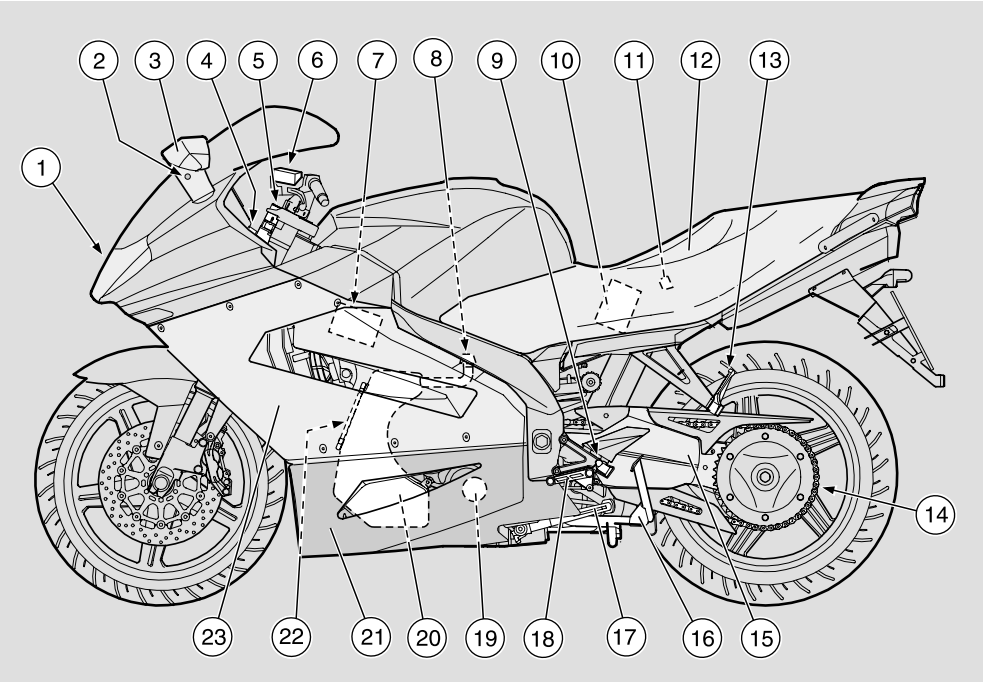
Do not carry bags which protrude too much from the luggage-rack or which cover the lights, horn or indicators.

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



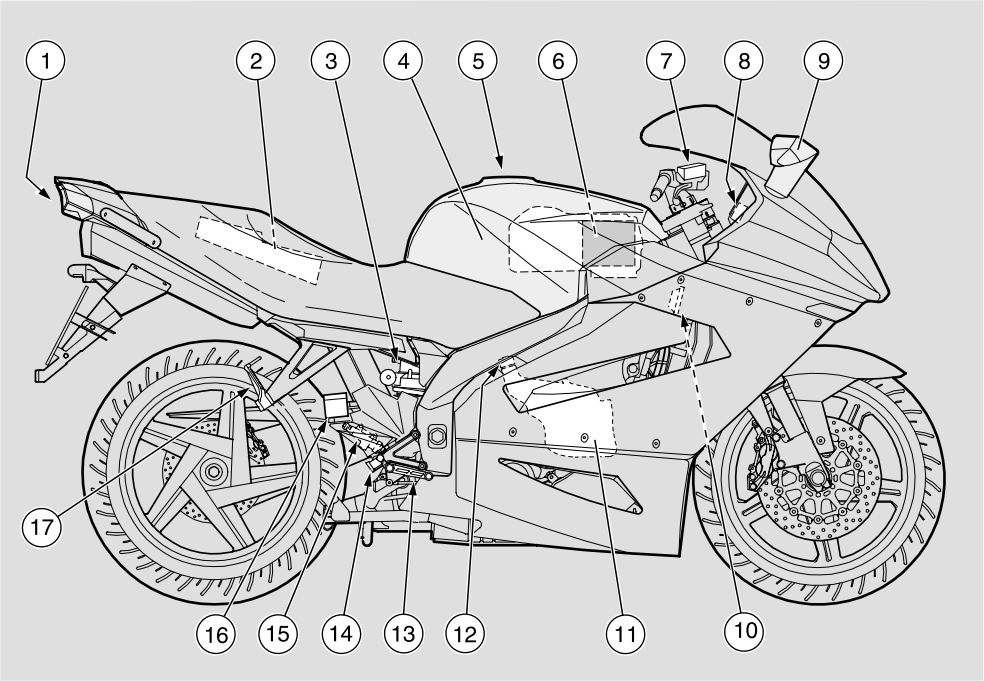
Do not exceed the maximum load allowed for each side-bag.

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



KEY

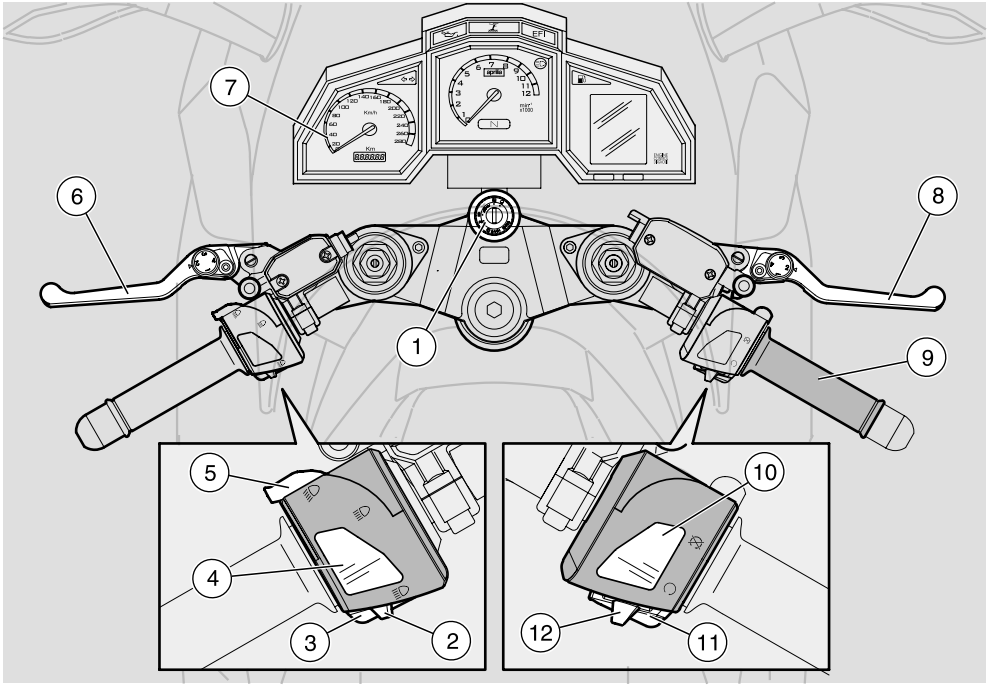
1) Headlight
2) Air temperature sensor
3) Left rear-view mirror
4) Saddle lock
5) Ignition switch/steering lock/parking lights
6) Clutch fluid reservoir
7) Electronic unit
8) Engine oil tank cap
9) Rider left footrest
10) Battery
11) Main fuse carrier (30A)
12) Saddle
13) Passenger left footrest (snapping, closed/open)
14) Drive chain
15) Rear fork
16) Centre stand
17) Side stand
18) Shifting lever
19) Engine oil filter
20) Engine oil tank
21) Lower left fairing
22) Engine oil level
23) Left fairing



KEY

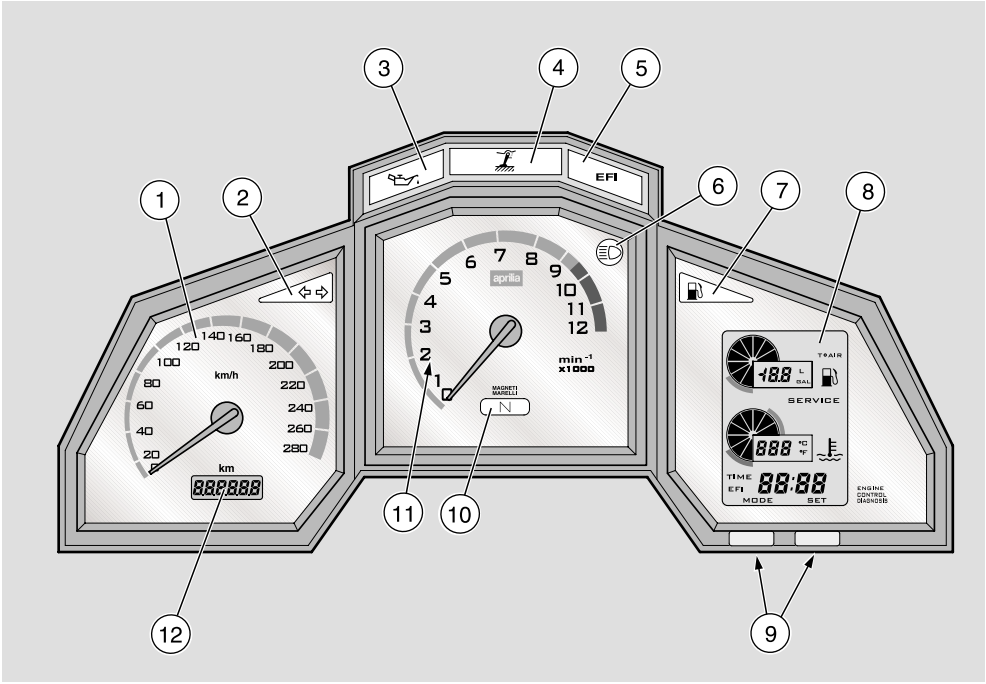
1) Rear light
2) Glove/tool kit compartment
3) Rear shock absorber
4) Fuel tank
5) Fuel tank filler cap
6) Air cleaner
7) Front brake fluid tank
8) Secondary fuse carrier (15A)
9) Right rear-view mirror
10) Horn
11) Coolant expansion
12) Coolant expansion tank cap
13) Rear brake control lever
14) Rider right footrest
15) Rear brake pump
16) Rear brake fluid tank
17) Passenger right footrest (snapping, closed/open)

ARRANGEMENT OF THE INSTRUMENTS/CONTROLS



KEY

1) Ignition switch/steering lock/parking lights (○ - ⚿ - 🔒 - ⊨)
2) Direction indicator switch (⇦⇨)
3) Horn push button (📯)
4) Dimmer switch (≣D - ≣D)
5) High beam signaller push button (≣D)/LAP push button (multi-function)
6) Clutch lever
7) Instruments and indicators
8) Front brake lever
9) Throttle grip
10) Engine stop switch (○ - ⚿)
11) Start push button (Ⓢ)
12) Light switch (☼ - ≡D⊂ - •) (not provided for **ASD**)



KEY

1) Speedometer
2) Green direction indicator warning light LED (⇦ ⇨)
3) Red engine oil pressure warning light LED (🛢)
4) Amber side stand down warning light LED (🏍)
5) Red diagnostic warning light LED (EFI)
6) Blue high beam warning light LED (≡D)
7) Amber low fuel warning light LED (⛽)
8) Right multifunction digital display (fuel level/air temperature - coolant temperature - clock/injection system error codes)
9) SET and MODE programming buttons
10) Green neutral indicator warning light LED (N)
11) Revolution counter
12) Left digital display (odometer)

INSTRUMENTS AND INDICATORS TABLE

⚠ CAUTION

The switching km/mi ℓ/gal, °C/°F is set and fixed by aprilia in the vehicle production phase, according to the country of destination.
This setting cannot be modified successively.

NOTE Whenever the ignition switch is turned to position "○", all the LED warning lights, including the dashboard lighting LEDs, come on on the dashboard for approximately three seconds, thus testing the correct operation of the LEDs.

Description	Function
Direction indicator warning light LED ⇦⇨	Blinks when the direction indicators are on.
High beam warning light LED ≣D	Comes on when the high beam bulbs are on or when the headlight signaller is operated.
Revolution counter *rpm*	Indicates the number of revolutions of the engine per minute. **⚠ CAUTION** **Never exceed the engine max. speed rate, see p. 54 (RUNNING-IN).**
Amber low fuel warning light LED ⛽	Comes on when the quantity of fuel left in the tank is about 4 ± 1 ℓ. **In this case, top up as soon as possible, see p. 28 (FUEL).**
Side stand down war warning light LED	Comes on when the side stand is down.
Engine oil pressure warning light LED	Comes on whenever the ignition switch is in position "○" and the engine is not running, thus checking the functionality of the LED. If the light LED does not come on in this phase, contact an **aprilia** Official Dealer. **⚠ CAUTION** **If the engine oil pressure warning light LED "" remains on after the start or comes on during the normal operation of the engine, this means that the engine oil pressure in the circuit is insufficient.** **In this case, stop the engine immediately and contact an aprilia Official Dealer.**
Neutral indicator warning light LED N	Comes on when the gear is in neutral.

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Description		Function	
Diagnostic warning light LED EFI		Comes on for approximately three seconds whenever the ignition switch is turned to position "○", thus testing the correct operation of the LED. **⚠ CAUTION If the diagnostic warning light LED "EFI" comes on and blinks when the engine is started or starts blinking during the normal operation of the engine, this means that the electronic unit has detected an anomaly. In many cases, the engine keeps running with reduced performance levels; immediately contact an aprilia Official Dealer.**	
Speedometer (km/h)		It indicates the driving speed.	
Digital display (left side)	**Odometer (km - mi)**	Indicates the partial or total number of kilometres (miles) covered.	To alternate the data displayed, see p. 20 (SETTING BUTTONS).
Multifunction digital display (right side)	**Fuel level indicator.** ⛽	Indicates the fuel level in the tank. The fuel quantity is shown by the indicator range (analog display) and by the value expressed in ℓ (gal) (numerical display). When the fuel tank is full the indicator range is completely on and the numerical display indicates "F". As the fuel level decreases, the marked area of the indicator range and the value in ℓ (gal) decrease accordingly. When no segment of the indicator range is on, the numerical display blinks indicating "- -" and the low fuel warning light LED blinks, this means that the quantity of fuel left in the tank amounts to less than 4 ± 1 ℓ. **In this case, top up as soon as possible, see p. 28 (FUEL).** **⚠ CAUTION When no segment of the indicator range is on, the numerical display blinks indicating "8.8" and the low fuel warning light LED blinks, contact an aprilia Official Dealer.** **NOTE** The digital sector can be used alternatively to display the air temperature (T°AIR), while the analog display remains off.	

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Multifunction digital display (right side)	**Air temperature indicator.**	**T°AIR**	The numerical sector can be used to display the air temperature in °C (°F) as an alternative to the fuel level indicator ⛽ (the indicator range remains off). With temperatures under -20 °C (-4 °F) the writing "- -" is displayed; between -20 °C (-68 °F) and 50 °C (122 °F) the exact temperature value is displayed; over 50 °C (122 °F) the writing " 50" (" 122") is displayed. **⚠ WARNING** **When the digital display blinks indicating a temperature equal to or lower than 3°C (37.4 °F), drive at moderate speed, since there may be ice formation, and avoid abrupt brakings or manoeuvres that may cause loss of grip.** Independently of the function displayed (fuel level or air temperature), when the air temperature is equal to or lower than 3 °C (37.4 °F) the display blinks indicating the temperature for ten seconds (even if in the meantime the temperature increases and exceeds 3 °C (37.4 °F). If the temperature remains under 3 °C (37.4 °F), the procedure is repeated every five minutes for three times. **NOTE** After the ten seconds have elapsed, the display always returns to the function displayed before (fuel level or air temperature). **⚠ CAUTION** **When the digital display blinks showing the writing " _ _" or the writing "- -", contact an aprilia Official Dealer.**	To alternate the data displayed, see p. 20 (SETTING BUTTONS).

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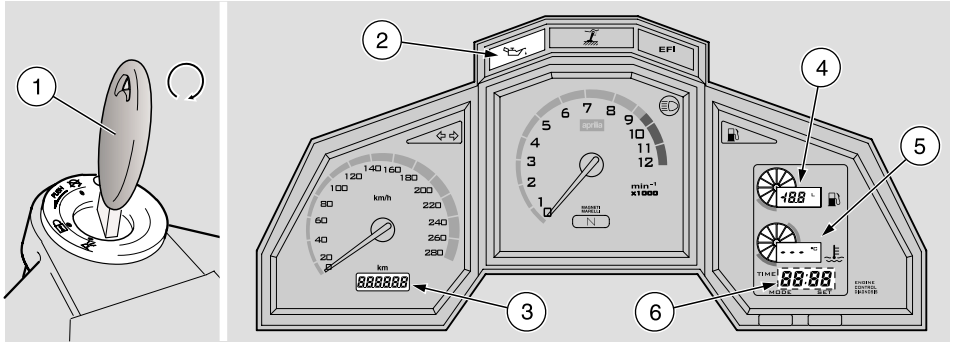
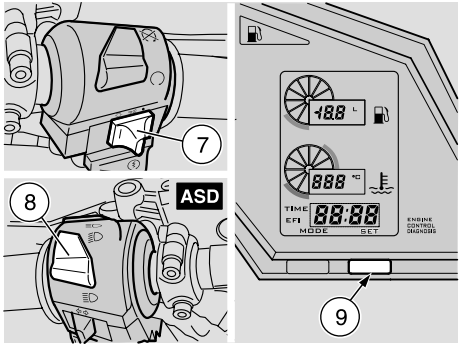
Multifunction digital display (right side)	**Coolant temperature indicator (°C/°F)**	Indicates the temperature of the coolant in the engine, see p. 20 (SETTING BUTTONS). The temperature is indicated by the indicator range (analog display) and by the value expressed in °C (°F) (digital display). Up to 35 °C (97 °F) the writing "---" is displayed. **⚠ CAUTION** **The switching on and off of the cooling fans does not depend on the position of the ignition switch. To lower the coolant temperature the cooling fans operate even when the engine is not running and are switched off automatically.** **⚠ CAUTION** **If the maximum allowed temperature (125°C or 257 °F) is exceeded, the engine may be seriously damaged.** If a temperature of 116 – 125 °C (241 – 257 °F) is displayed and the second-last segment of the indicator range blinks, stop the engine, wait for the cooling fans to be switched off and check the coolant level, see p. 38 (COOLANT). If a temperature of 126 – 135 °C (259 – 275 °F) is displayed and the last two segments of the indicator range blink, stop the vehicle and let the engine idle for approximately two minutes, thus allowing the coolant to circulate regularly in the system; then, press the engine stop switch to position "⊠" and check the coolant level, see p. 38 (COOLANT). If the situation on the dashboard remains the same after the coolant level has been checked, do not start the vehicle and contact an **aprilia** Official Dealer.	To alternate the data displayed, see p. 20 (SETTING BUTTONS).
	Service operation indicator "SERVICE"	After the first 1000 km (625 mi) and successively every 7500 km (4600 mi), the word **"SERVICE"** appears. **⚠ CAUTION** **In this case contact an aprilia Official Dealer, who will carry out the operations indicated in the regular service intervals chart, see p. 60 (REGULAR SERVICE INTERVALS CHART).**	
	Clock	Indicates the hour and minutes according to the presetting, see p. 20 (SETTING BUTTONS).	





SETTING BUTTONS

⚠ WARNING

The operations described below must be carried out with the vehicle at rest. Performing these operations while the vehicle is running may be cause of accidents.

NOTE The following information is to be considered as referred to the vehicle at rest.

When the ignition key (1) is turned to position "○", the following lights come on on the dashboard within three seconds:

– all the warning lights LED;
– all the dashboard lighting LEDs;
– all the segments on the left display;
– all the segments and writings on the right multifunction display;
– the pointers of the indicators move to the bottom of the indicator range;

thus testing the operation of LEDs, writings, segments and instruments.

After three seconds, the engine oil pressure warning light LED "🛢" (2) remains on on the dashboard (and will remain on until the engine is started) and the following will appear on the displays:

– total number of kilometres covered (3);
– fuel quantity (4);
– coolant temperature (5) [up to 35 °C (95°F) the writing "---" is displayed];
– hour and minutes (6).

ADJUSTING THE DASHBOARD LIGHTING

It is possible to select three different levels for the dashboard lighting: 100%; 60%; 25%.

For the adjustment, proceed as follows:

◆ Move the light switch (7) to position "≡D◊≡";
◆ **ASD** Bring the dimmer switch "≡D - ≡D" (8) to position "≡D".

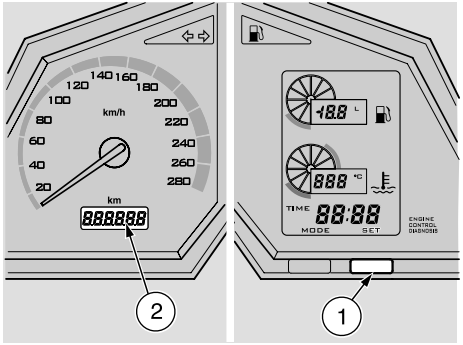
NOTE Three seconds after the last selection, the button **SET** returns to the switching mode total/partial kilometres (miles) odometer.

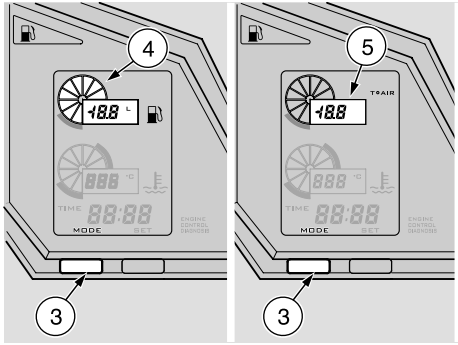
◆ Turn the ignition switch (1) to position "○" and, within three seconds, press the button **SET** (9) in sequence, thus obtaining the three lighting levels.
◆ Select the desired lighting level.

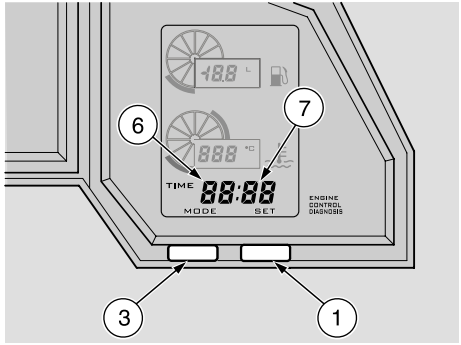
SWITCHING FROM km/mi, ℓ/gal, °C/°F

⚠ CAUTION

The switching km/mi ℓ/gal, °C/°F is set and fixed by aprilia in the vehicle production phase, according to the country of destination.
This setting cannot be modified successively.







SWITCHING FROM TOTAL TO PARTIAL KILOMETRE (MILE) ODOMETER

Left display

◆ Press and release the button **SET** (1); the relevant total partial or total kilometres (miles) covered will appear on the display.

NOTE Whenever the ignition switch is turned to position "○", the display always indicates the total number of kilometres (miles) covered.

To set the partial kilometre (mile) odometer to zero, proceed as follows:

◆ Display the partial number of kilometres covered, see above.
◆ Press the button **SET** (1) for more than three seconds; the segments (2) are set to zero.

NOTE If the battery is removed, the partial number of kilometres is set to zero.

SWITCHING FROM FUEL LEVEL INDICATOR TO AIR TEMPERATURE INDICATOR

Multifunction display right side

◆ Press and release the button **MODE** (3); the fuel level indicator (4) or the air temperature indicator (5) (numerical display only) will appear on the display.

NOTE Whenever the ignition switch is turned to position "○", the fuel level indicator (4) always appears on the display.

SETTING THE CLOCK (HOURS AND MINUTES)

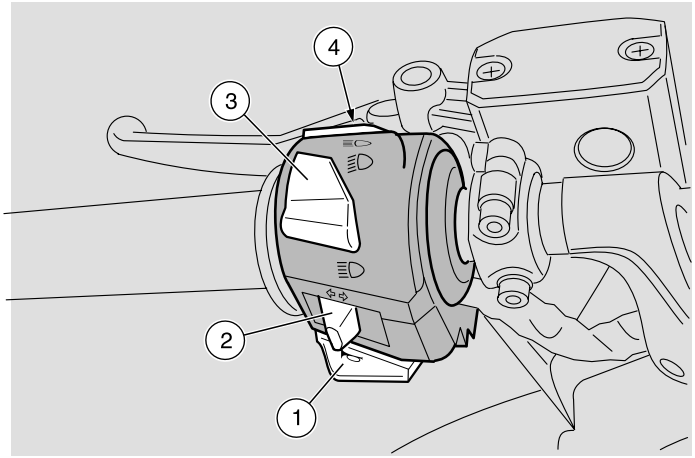
NOTE The setting of the clock can be carried out only with the vehicle at rest.

◆ Press the **MODE** (3) push button for more than three seconds, the segments corresponding to the hours (6) will blink.

NOTE If the button **SET** (1) is pressed and released, the data are changed one by one; if the button **SET** (1) is kept pressed, the data change scrolling quickly and cyclically.

◆ Press the **SET** (1) push button and select the desired hour.
◆ To confirm the time setting, press and release the button **MODE** (3), and the minute segments (7) will blink.
◆ Press the **SET** (1) push button and select the desired minutes.
◆ To confirm the minute setting, press and release the **MODE** (3) push button.

NOTE If the battery is removed, the clock is set to zero.



CONTROLS ON THE LEFT PART OF THE HANDLEBAR

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

1) HORN PUSH BUTTON (🔔)
The horn is activated when the push button is pressed.

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) DIMMER SWITCH (≡D - ≡D)
When the light switch is in position "☼": if the dimmer switch is in position "≡D", the high beam comes on; while if it is in position "≡D", the low beam comes on.

3) DIMMER SWITCH (≡D - ≡D) ASD
When it is in position "≡D" the parking lights, the dashboard light and the low beam are always on.
When it is in position "≡D", the high beam comes on.

4) HIGH BEAM SIGNALLING PUSH BUTTON (≡D)
It makes it possible to use the high beam for signalling to forthcoming vehicles while overtaking and in case of peril and/or emergency.
The high beam blinking is operated by pressing the push button, independently of the position of the light switch (☼ - ≡D - •).

NOTE To disconnect the high beam blinking, release the push button.

CONTROLS ON THE RIGHT PART OF THE HANDLEBAR

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

1) ENGINE STOP SWITCH (○ - ⊗)

⚠ WARNING

Do not operate the engine stop switch "○ - ⊗" in running conditions.

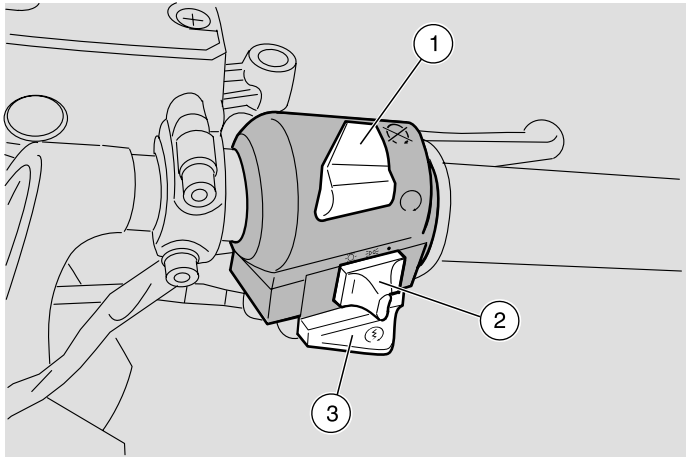
This is a safety or emergency switch.
With the switch pressed in position "○", it is possible to start the engine; when the switch is pressed to position "⊗", the engine stops.

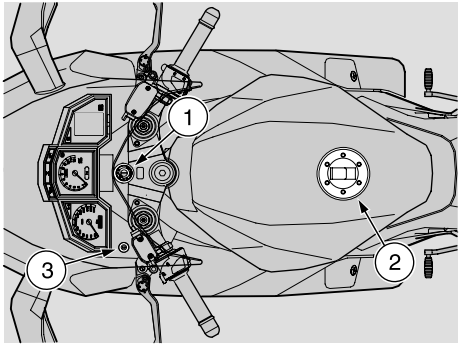
⚠ CAUTION

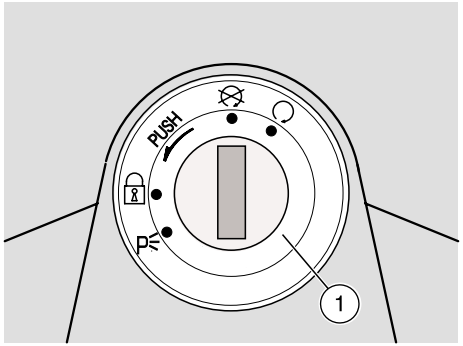
With stopped engine and ignition switch in position "○", the battery may discharge.
When the vehicle has come to rest, after stopping the engine, move the ignition switch to position "⊗".

2) LIGHT SWITCH (☼ - ≡D◐ - •) (not provided for ASD)
When the light switch is in position "•", the lights are off; when the switch is in position "≡D◐", 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.

3) START PUSH BUTTON (Ⓢ)
When the start push button "Ⓢ" is pressed, the starter makes the engine run. For the starting, see p. 48 (STARTING).







IGNITION SWITCH

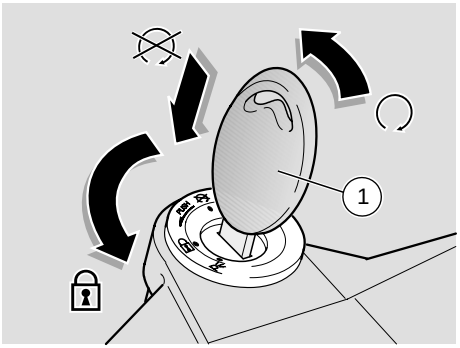
The ignition switch (1) is positioned on the upper plate of the steering column.

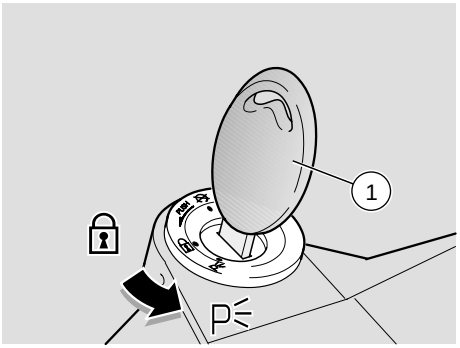
NOTE The key operates the ignition switch/steering lock, the fuel tank lock (2) and the saddle lock (3).

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

NOTE Do not keep the spare key on the vehicle.

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.
	The parking lights are on.	It is possible to remove the key.





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 to position "⊗".
- Press the key and rotate it to position "🔒".

NOTE If it is necessary to switch on the parking lights, see p. 25 (PARKING LIGHTS).

- Extract the key.

PARKING LIGHTS

The vehicle is provided with front and rear parking lights. Even if it is always advisable to park the vehicle in the appropriate parking areas and in any case in illuminated places, the parking lights are very useful when it is necessary to park the vehicle in a dark or badly illuminated area, or in any case when the vehicle must be visible.

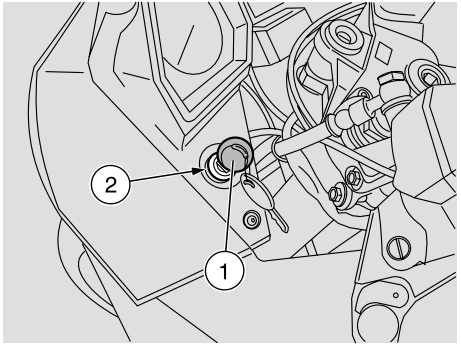
OPERATION

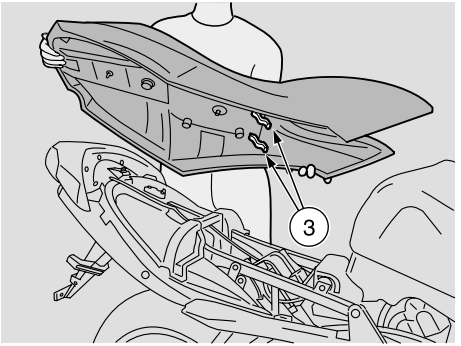
To switch on the parking lights, proceed as follows:

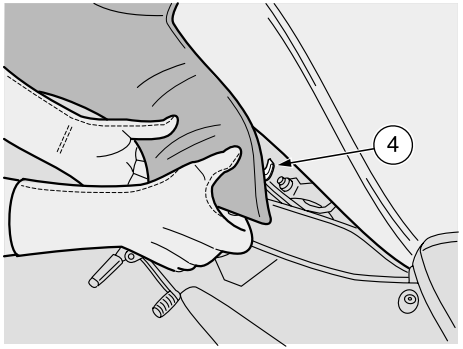
- Lock the steering without extracting the key (2), see p. 25 (STEERING LOCK).
- Turn the key (2) to position "P≤" (PARKING).
- Make sure that both parking lights (front and rear) are on and operate correctly.
- Remove the key (2).

⚠ CAUTION

Do not leave the parking lights on for long periods, in order to avoid the wear of the battery due to the current consumption required by the lights. The complete wear of the battery makes it impossible to start the vehicle.







UNLOCKING/LOCKING THE SADDLE

- Position the vehicle on the centre stand, see p. 56 (POSITIONING THE VEHICLE ON THE STAND).
- Insert the key (1) in the saddle lock (2).
- Turn the key (1) clockwise and raise and remove the saddle.

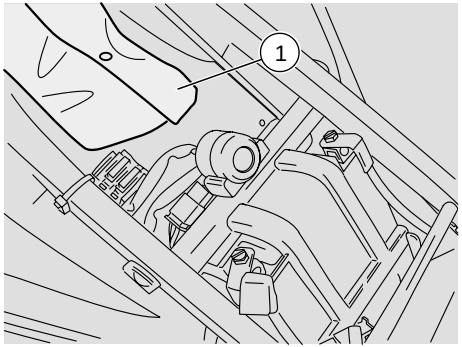
NOTE Before lowering and locking the saddle, make sure that you have not left the key in the glove/tool kit compartment.

To lock the saddle:

- Position the tangs (3) in the seat, lower and press the saddle, making the lock snap.
- ★Grasp the front part of the saddle and couple the tang (4) to the fuel tank.

⚠ WARNING

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



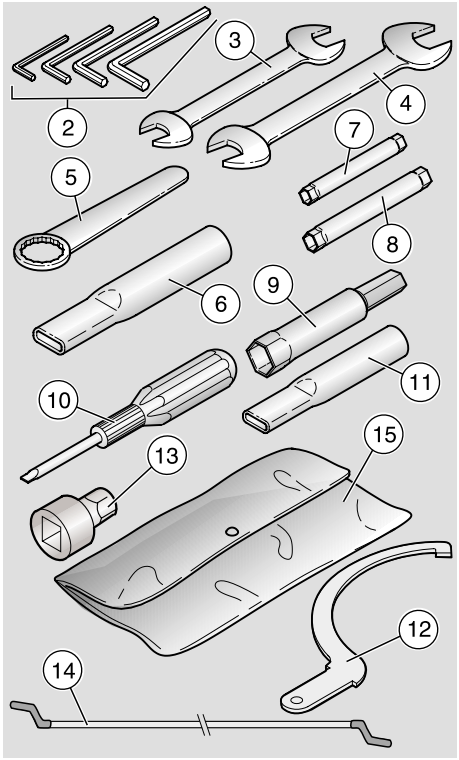
GLOVE/TOOL KIT COMPARTMENT

To reach the glove/tool kit compartment, proceed as follows:

◆ Remove the rider saddle, see p. 26 (UNLOCKING/LOCKING THE SADDLE).

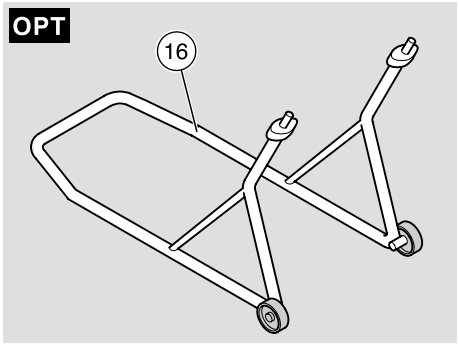
The tool kit (1) includes:

– 3, 4, 5, 6 mm bent hexagon spanners (2);
– 8 – 10 mm double fork spanner (3);
– 11 – 13 mm double fork spanner (4);
– 22 mm simple box spanner (5);
– extension for simple box spanners (6);
– 6 – 7 mm double socket spanner (7);
– 8 – 10 mm double socket spanner (8);
– 16 mm socket spanner for spark plug (9);
– double-ended, cross-/cut-headed screwdriver (10);
– extension for pin spanner (11);
– pin spanner for wheel hub (12);
– bush 22 mm (13);



– fuel tank support rod (14).
– tool case (15);

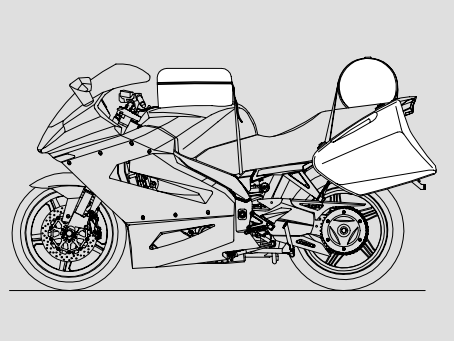
Maximum allowed weight: 1.5 kg.



SPECIAL TOOLS OPT

To perform some specific operations, it is advisable to use the following special tools (to be requested to an **aprilia** Official Dealer):

Tool	Operations
Front support stand (16), see p. 68 (POSITIONING THE VEHICLE ON THE FRONT SUPPORT STAND OPT).	Front wheel disassembly.



ACCESSORIES

The vehicle may be equipped with the following accessories (to be requested to the **aprilia** Official Dealer):

– side bags OPT;
– bag on the tank OPT;
– rear central bag OPT.

⚠ WARNING

The bags for the transport of luggage have been designed in such a way as not to compromise the stability of the vehicle.
It is forbidden to anchor luggage or objects to the accessories mentioned above.
It is compulsory to install both side bags taking care to distribute the weight of the luggage uniformly.

⚠ WARNING

Excluding the original aprilia transport bags OPT, do not install any other kind of bag or case on the rear part of the vehicle.

⚠ WARNING

Failure to comply with the instructions given above will cause:

– the unbalance of the vehicle with consequent risk of fall while the vehicle is running, is being parked or is at rest;
– an overload on the bearing structure of the vehicle, with risk of deformation or breakage;
– the invalidity of the guarantee.

MAIN COMPONENTS

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 has completely dried and before starting the vehicle verify that there is no fuel inside the fuel filler neck.
Since petrol expands under the heat of the sun and due to the effects of sun radiation, never fill the tank to the brim.

⚠ WARNING

Screw the plug up carefully after refuelling. 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.

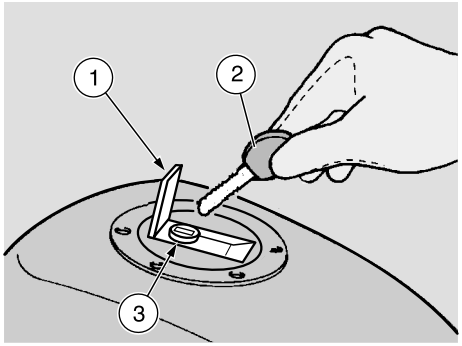
Use only unleaded petrol, in conformity with the DIN 51 607 standard, min. O.N. 95 (N.O.R.M.) and 85 (N.O.M.M.)

To refuel, proceed as follows:

- ◆ Raise the flap (1).
- ◆ Insert the key (2) in the tank plug lock (3).
- ◆ Turn the key clockwise, pull and open the fuel flap.

FUEL TANK CAPACITY (reserve included): 21 ℓ

TANK RESERVE: 4 ± 1 ℓ



⚠ CAUTION

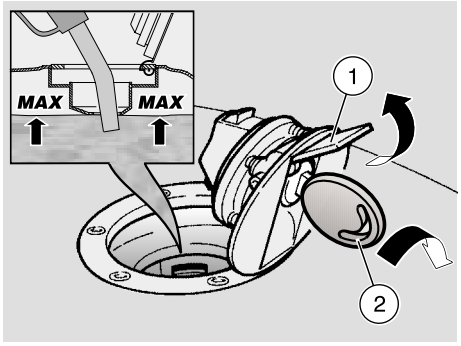
Do not put additives or other substances into the fuel.
If you use a funnel or other similar items, make sure that they are perfectly clean.

⚠ WARNING

Do not fill the tank completely; the maximum fuel level must remain below the lower edge of the filler neck (see figure).

⚠ CAUTION

During the refilling operations, be careful to avoid damaging the inner parts of the tank with the fuel pump.



- ◆ Refuel.

After refuelling:

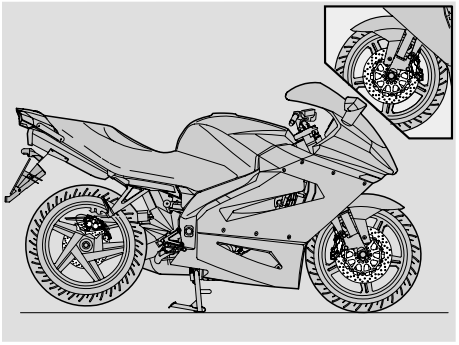
NOTE The cap can be closed only when the key (2) is inserted.

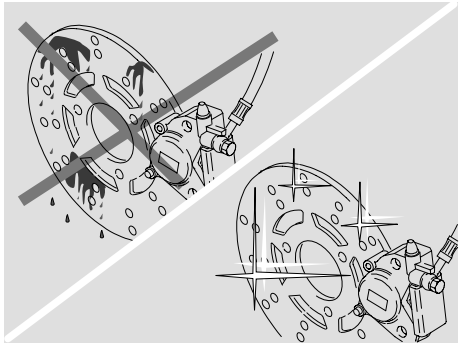
- ◆ With inserted key (2), close the cap by pressing it.

⚠ WARNING

Make sure that the cap is properly closed.

- ◆ Withdraw the key (2).
- ◆ Close the flap (1).





BRAKE FLUID - recommendations

NOTE This vehicle is provided with front and rear disc brakes, with separate hydraulic circuits.

The following information refers to a single braking system, but is valid for both.

⚠ 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

Make sure that the brake discs are neither oily nor greasy, especially after maintenance or checking operations.

Check that the brake cables are neither twisted nor worn out.

Prevent water or dust from accidentally getting into the circuit.

In case maintenance operations are to be performed on the hydraulic circuit, it is advisable to use latex gloves.

If the brake fluid gets in contact with the skin or the eyes, it can cause serious irritations.

⚠ WARNING

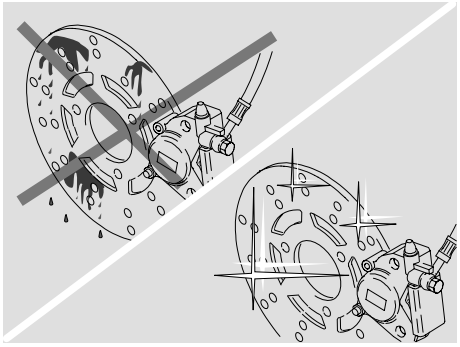
Carefully wash the parts of your body that get in contact with the liquid. Consult a doctor or an oculist if the liquid gets in contact with your eyes.

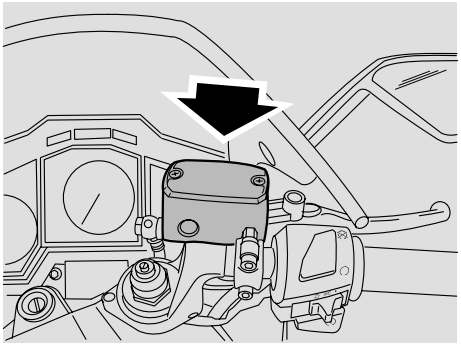
DO NOT DISPOSE OF THE FLUID IN THE ENVIRONMENT.

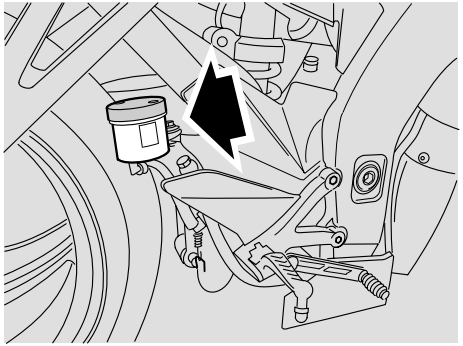
KEEP AWAY FROM CHILDREN.

⚠ CAUTION

When using the brake fluid, take care not to spill it on the plastic or painted parts, since it can damage them.







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.

Use brake fluid of the type specified in the lubricant chart, see p. 109 (LUBRICANT CHART).

NOTE This vehicle is provided with disc brakes with two, front and rear braking systems having separate hydraulic circuits.

The front braking system is with double disc (right and left side).

The rear braking system is with single disc (right side).

The following information refers to a single braking system, but is valid for both.

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

The front brake reservoir is positioned on the right part of the handlebar, near the front brake lever coupling.

The rear brake reservoir is positioned on the right side of the vehicle, near the rear brake control lever.

NOTE Perform the maintenance operations with doubled frequency if the vehicle is used in rainy or dusty areas, on uneven surfaces or on racetracks.

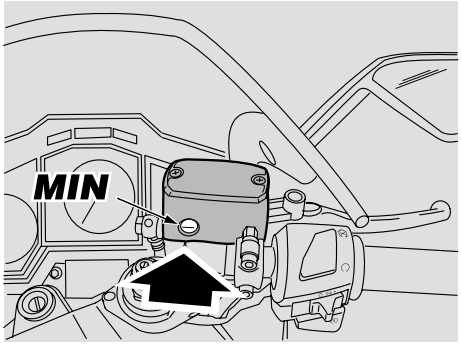
Have the brake discs checked by an **aprilia** Official Dealer after the first 1000 km (625 mi) and successively every 7500 km (4687 mi).

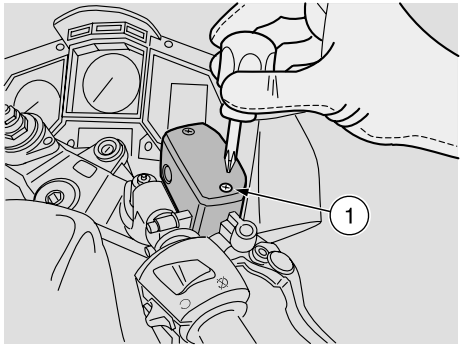
Before departure, check the brake fluid level in the reservoirs, see p. 32 (FRONT BRAKE), p. 34 (REAR BRAKE), and the wear of the pads, see p. 84 (CHECKING THE BRAKE PAD WEAR).

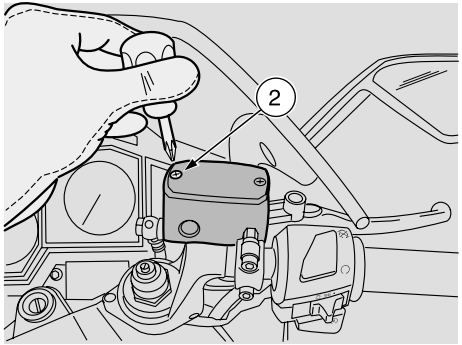
Have the brake fluid changed every two years by an **aprilia** Official Dealer.

⚠ WARNING

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







FRONT BRAKE

CHECK

- Position the vehicle on the centre stand, see p. 56 (POSITIONING THE VEHICLE ON THE STAND).
- Rotate the handlebar completely leftwards.
- Make sure that the fluid level exceeds the "**MIN**" mark.

MIN= minimum level

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. 84 (CHECKING THE BRAKE PAD WEAR) and the disc wear.

If the pads and/or the disc do not need replacing, provide for topping up.

TOPPING UP

Carefully read p. 30 (BRAKE FLUID - recommendations).

⚠ CAUTION

The brake fluid may flow out of the tank. Do not operate the front brake lever if the screws (1) and (2) are loose or, most important, if the brake fluid tank cover has been removed.

⚠ CAUTION

Position a cloth under the brake reservoir, in case some fluid should be spilled.

- Turn the handlebar completely rightwards.
- Unscrew the screw (1), using a short, cross-tip screwdriver.

⚠ CAUTION

Do not unscrew the screw (2) with the handlebar rotated to the right, in order not to spill any fluid.

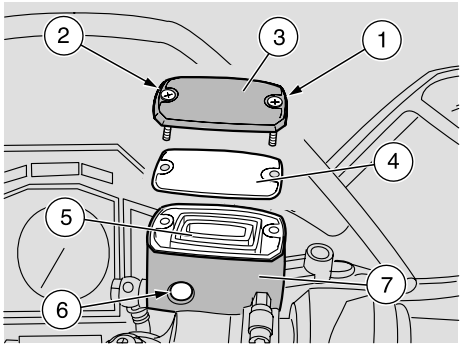
- Rotate the handlebar completely leftwards.
- Unscrew the screw (2).

⚠ WARNING

Avoid any prolonged exposure of the brake fluid to the air.

The brake fluid is hygroscopic and when in contact with the air it absorbs its humidity.

Leave the brake fluid tank open ONLY for the time necessary for topping up.



- Raise and remove the cover (3) together with the screws (1) and (2).
- Remove the guide cover (4).
- Remove the gasket (5).

⚠ CAUTION

In order not to spill the brake fluid while topping up, do not shake the vehicle.

Do not put additives or other subtances into the fluid.

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

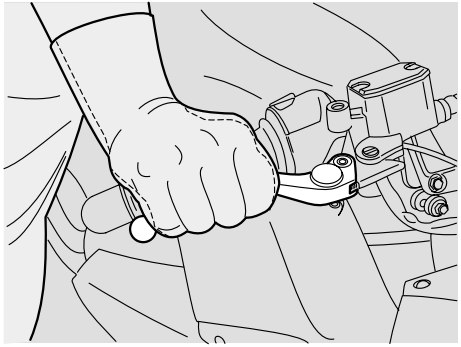
NOTE In order to reach the "**MAX**" level, top up until covering the glass (6) completely, with the brake fluid reservoir rim parallel to the ground.

- Top up the reservoir (7) by adding brake fluid, see p. 109 (LUBRICANT CHART), until reaching the correct level.

⚠ CAUTION

Do not exceed the "MAX" level while topping up.
It is advisable to top up until reaching the "MAX" level only with new pads.

Do not reach the "MAX" level with worn out pads, since this will cause a fluid outflow when the pads are changed.

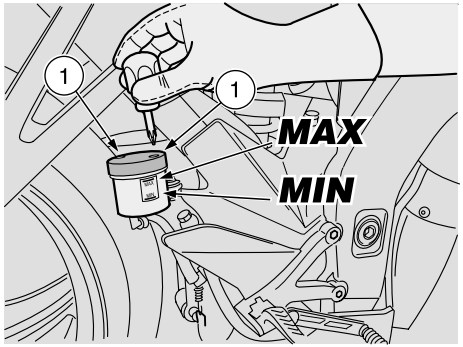


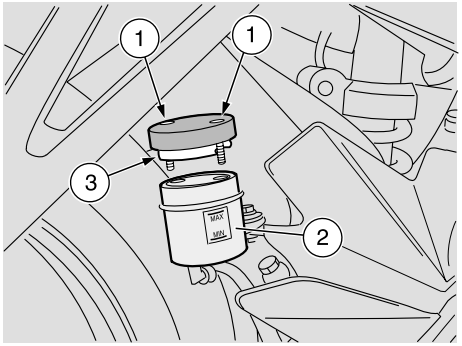
- Put back the gasket (5) in its seat correctly.
- Put back the guide cover (4) correctly.
- Put back the cover (3).
- Screw and tighten the screw (2).
- Turn the handlebar completely rightwards.
- Screw and tighten the screw (1).

⚠ WARNING

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 BRAKE

CHECK

- Position the vehicle on the centre stand, see p. 56 (POSITIONING THE VEHICLE ON THE STAND).
- Make sure that the fluid level exceeds the "**MIN**" mark.

MIN= minimum level
MAX= maximum level

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. 84 (CHECKING THE BRAKE PAD WEAR) and the disc wear.

If the pads and/or the disc do not need replacing, provide for topping up.

TOPPING UP

Carefully read p. 30 (BRAKE FLUID - recommendations).

⚠ CAUTION

The brake fluid may flow out of the tank. Do not operate the rear brake lever if the screws (1) are loose or, most important, if the brake fluid tank cover has been removed.

⚠ WARNING

Avoid any prolonged exposure of the brake fluid to the air.
The brake fluid is hygroscopic and when in contact with the air it absorbs its humidity.
Leave the brake fluid tank open ONLY for the time necessary for topping up.

- Unscrew the two screws (1) of the brake reservoir (2) by means of a short, cross-headed screwdriver.
- Raise and remove the cover together with the screws (1) and the gasket (3).

⚠ CAUTION

In order not to spill the brake fluid while topping up, keep the fluid in the tank parallel to the tank rim (in horizontal position).

Do not put additives or other subtances into the fluid.

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

- Top up the reservoir (2) by adding brake fluid, see p. 109 (LUBRICANT CHART), until reaching the correct level included between the "**MIN**" and "**MAX**" marks".

⚠ CAUTION

It is advisable to top up until reaching the "MAX" level only with new pads. Do not reach the "MAX" level with worn out pads, since this will cause a fluid outflow when the pads are changed.
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.

CLUTCH FLUID - recommendations

NOTE This vehicle is provided with hydraulic clutch control.

⚠ CAUTION

Sudden resistance or clearance problems on the clutch lever may be due to troubles in the hydraulic system.
For any doubt regarding the perfect functioning of the system and in case you are not able to carry out the usual checking operations, contact your aprilia Official Dealer.

⚠ CAUTION

Make sure that the cable is neither twisted nor worn out.
Prevent water or dust from accidentally getting into the circuit.

In case maintenance operations are to be performed on the hydraulic circuit, it is advisable to use latex gloves.

If the fluid gets in contact with the skin or the eyes, it can cause serious irritations.
Carefully wash the parts of your body that get in contact with the liquid. Consult a doctor or an oculist if the liquid gets in contact with your eyes.

DO NOT DISPOSE OF THE FLUID IN THE ENVIRONMENT.

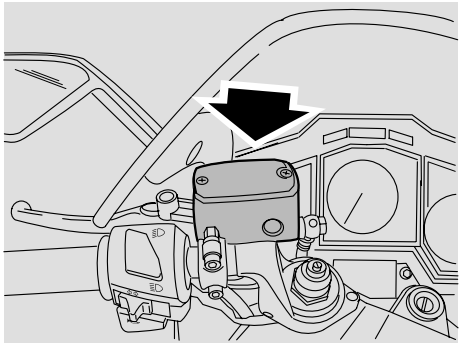
KEEP AWAY FROM CHILDREN.

When using the fluid, take care not to spill it on the plastic and painted parts, since it damages them.

The clutch control fluid must be changed every two years by an aprilia Official Dealer.

Use fluid of the type specified in the lubricant chart, see p. 109 (LUBRICANT CHART).

The clutch fluid reservoir is positioned on the left part of the handlebar, near the clutch control lever coupling.

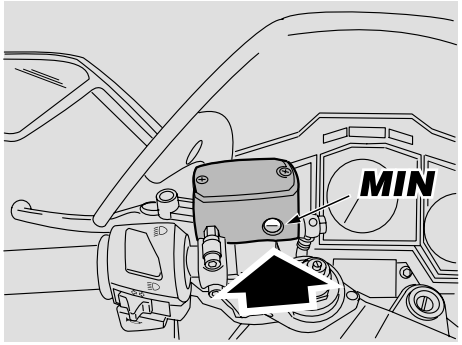


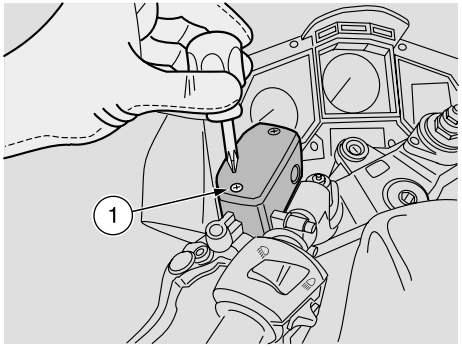
NOTE Perform the maintenance operations with doubled frequency if the vehicle is used in rainy or dusty areas, on uneven surfaces or on racetracks.

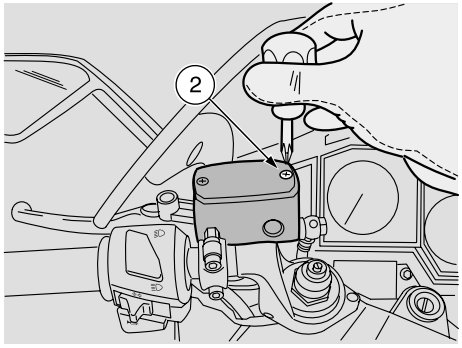
Before departure, check the fluid level in the tank, see p. 36 (CLUTCH); have it changed by an **aprilia** Official Dealer every two years.

⚠ WARNING

Do not use the vehicle if you notice fluid leakages from the clutch control system.







CLUTCH

NOTE Perform the maintenance operations with doubled frequency if the vehicle is used in rainy or dusty areas, on uneven surfaces or on racetracks.

Have the clutch checked by an **aprilia** Official Dealer every 7500 km (4687 mi).

In case of use on racetracks:

have the clutch checked by an **aprilia** Official Dealer every 3750 km (2343 mi).

NOTE The engine is provided with an hydraulic control clutch, aided by the PPC (Pneumatic Power Clutch) exclusive patented system, which avoids the bouncing of the rear wheel.

CHECK

- Position the vehicle on the centre stand, see p. 56 (POSITIONING THE VEHICLE ON THE STAND).
- Turn the handlebar completely rightwards.
- Make sure that the fluid level exceeds the "**MIN**" mark.

  MIN= minimum level

- If the fluid does not reach the "**MIN**" mark, provide for topping up.

TOPPING UP

Carefully read p. 35 (CLUTCH FLUID - recommendations).

⚠ CAUTION

The fluid may flow out. Do not operate the clutch control lever if the reservoir plug is loose or has been removed.

⚠ WARNING

Avoid any prolonged exposure of the clutch fluid to the air.
The clutch fluid is hygroscopic and when in contact with the air it absorbs its humidity.
Leave the clutch fluid tank open ONLY for the time necessary for topping up.

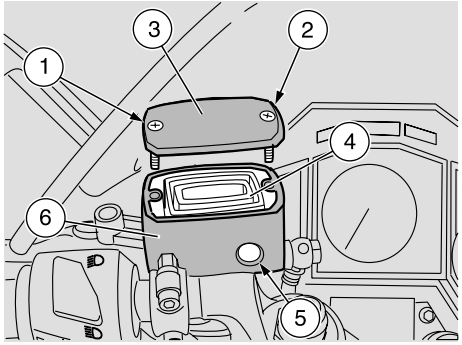
⚠ CAUTION

Position a cloth under the brake reservoir, in case some fluid should be spilled.

- Rotate the handlebar completely leftwards.
- Unscrew the screw (1), using a short, cross-tip screwdriver.

⚠ CAUTION

Do not unscrew the screw (2) with the handlebar rotated to the left, in order not to spill any fluid.



- Turn the handlebar completely rightwards.
- Unscrew the screw (2).

⚠ CAUTION

Do not shake the vehicle, in order not to spill fluid while topping up.

Do not put additives or other subtances into the fluid.

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

- Raise and remove the cover (3) together with the screws (1) and (2).
- Remove the gasket (4).

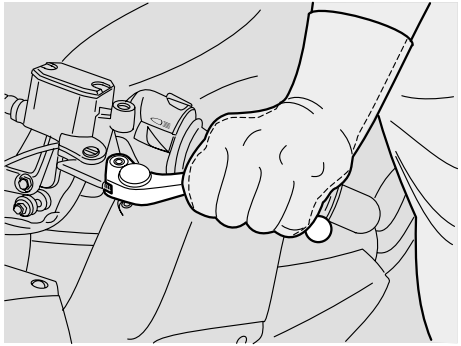
NOTE In order to reach the "**MAX**" level, top up until covering the glass (5) completely, with the clutch fluid reservoir rim parallel to the ground.

- Top up the reservoir (6) by adding clutch fluid, see p. 109 (LUBRICANT CHART), until reaching the correct level.

⚠ CAUTION

Do not exceed the "MAX" level while topping up.

- Put back the gasket (4) in its seat correctly.
- Put back the cover (3).
- Screw and tighten the screw (2).
- Rotate the handlebar completely leftwards.
- Screw and tighten the screw (1).



⚠ WARNING

Check the clutch efficiency.

If the stroke of the clutch control lever is excessive or if the clutch system is not efficient, contact your aprilia Official Dealer, since it may be necessary to bleed the system.

COOLANT

⚠ CAUTION

Do not use the vehicle if the coolant is below the minimum prescribed level (LOW).

NOTE Perform the maintenance operations with doubled frequency if the vehicle is used in rainy or dusty areas, on uneven surfaces or on racetracks.

Before departure, check the coolant level, see p. 39 (CHECKING AND TOPPING UP); have the coolant changed every two years: for this operation, contact an **aprilia** Official Dealer.

⚠ WARNING

The coolant is noxious: do not swallow it; if the coolant gets in contact with the skin or the eyes, it can cause serious irritations.

If the fluid gets in contact with your skin or eyes, rinse with plenty of water and consult a doctor. If it is swallowed, induce vomit, rinse mouth and throat with plenty of water and consult a doctor without delay.

KEEP AWAY FROM CHILDREN.

DO NOT DISPOSE OF THE FLUID IN THE ENVIRONMENT.

Be careful not to spill the coolant on the red-hot parts of the engine: it may catch fire and send out invisible flames.

In case any maintenance operation should be required, it is advisable to use latex gloves.

⚠ CAUTION

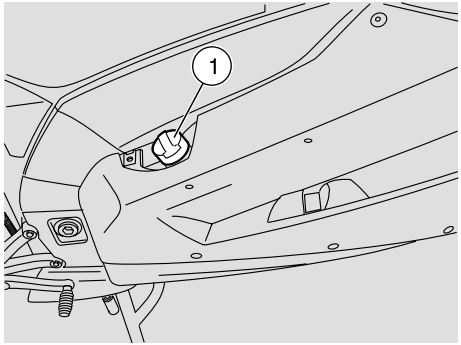
Have the pads changed by your aprilia Official Dealer.

The coolant is composed of 50% water and 50% antifreeze.

This mixture is ideal for most running temperatures and ensures good protection against corrosion.

It is advisable to keep the same mixture also in the hot season, since in this way losses due to evaporation are reduced and it is not necessary to top up very frequently.

The mineral salt deposits left in the radiator by evaporated water are thus reduced and the efficiency of the cooling system remains unchanged.

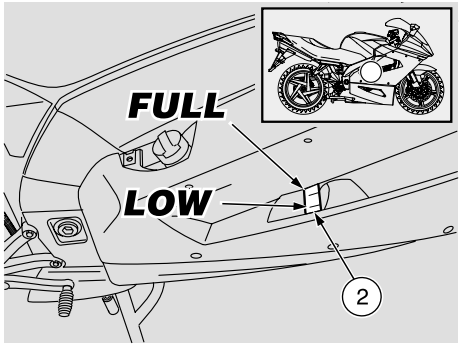


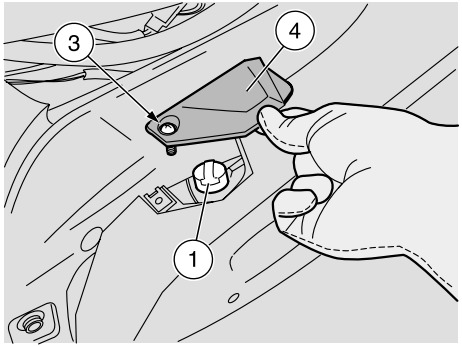
If the outdoor temperature is below 0°, check the cooling circuit frequently and if necessary increase the antifreeze concentration (up to maximum 60%).

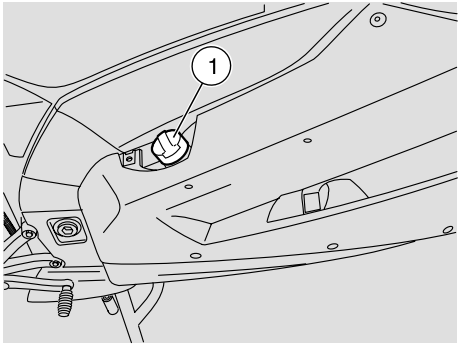
For the cooling solution use distilled water, in order not to damage the engine.

⚠ WARNING

Do not remove the expansion tank plug (1) when the engine is hot, since the coolant is under pressure and its temperature is high.
If it gets in contact with the skin or with clothes it may cause severe burns and/or damage.







CHECKING AND TOPPING UP

⚠ WARNING

Check the coolant level and top up the expansion tank with cold engine.

- Stop the engine and wait until it has cooled down.
- Keep the vehicle in vertical position, with the two wheels resting on the ground.
- Make sure that the coolant contained in the expansion tank (2) is included between the "**FULL**" and "**LOW**" marks, by checking through the appropriate slot on the right fairing".

  FULL = maximum level
  LOW = minimum level

If not, proceed as follows:

- Unscrew and remove the screw (3).
- Remove the cover (4).
- Unscrew and remove the filling cap (1).

⚠ WARNING

The coolant is noxious: do not swallow it; if the coolant gets in contact with the skin or the eyes, it can cause serious irritations.
Do not use your fingers or any other object to check if there is enough coolant.

⚠ CAUTION

Do not put additives or other subtances into the fluid.

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

- Top up the expansion tank by adding coolant, see p. 109 (LUBRICANT CHART), until this almost reaches the "**FULL**" level. Do not exceed this level, otherwise the fluid will flow out while the engine is running.
- Put back the filling cap (1).

⚠ CAUTION

In case of excessive consumption of coolant and in case the tank remains empty, make sure that there are no leaks in the circuit. Have it repaired by an aprilia Official Dealer.

TYRES

This vehicle is provided with tubeless tyres.

NOTE Perform the maintenance operations with doubled frequency if the vehicle is used in rainy or dusty areas, on uneven surfaces or on racetracks.

⚠ WARNING

Check the inflation pressure at room temperature every two weeks.

Check the conditions of the tyres and the inflation pressure at room temperature every 1000 km (625 mi), see p. 105 (TECHNICAL DATA).

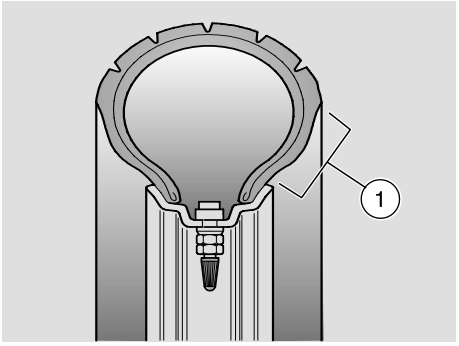
⚠ WARNING

Periodically check the tyre inflation pressure at room temperature, see p. 105 (TECHNICAL DATA).

If the tyres are hot, the measurement is not correct.
Carry out the measurement especially before and after long rides.

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. 105 (TECHNICAL DATA); the use of tyres different from those prescribed may adversely affect the manoeuvrability of the vehicle.

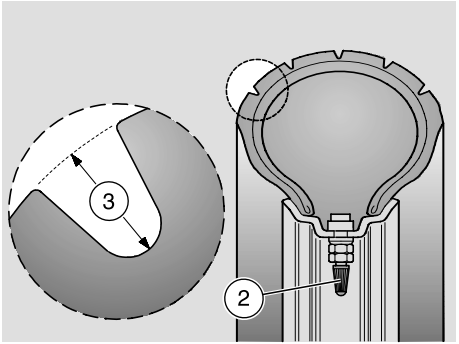
Do not install tyres with air tube on rims for tubeless tyres and viceversa.

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

ENGINE OIL

⚠ WARNING

Engine oil may cause serious damage to the skin if handled daily and for long periods.

Wash your hands carefully after use.

KEEP AWAY FROM CHILDREN.

DO NOT DISPOSE OF THE OIL IN THE ENVIRONMENT.

Put it in a sealed container and take it to the filling station where you usually buy it or to an oil salvage center.

In case any maintenance operation should be required, it is advisable to use latex gloves.

⚠ CAUTION

If the engine oil pressure warning light LED "" comes on during the normal operation of the engine, this means that the engine oil pressure in the circuit is insufficient.

In this case, check the engine oil level, see p. 63 (CHECKING THE ENGINE OIL LEVEL AND TOPPING UP); if the level isn't correct, stop the engine immediately and contact an aprilia Official Dealer.

⚠ CAUTION

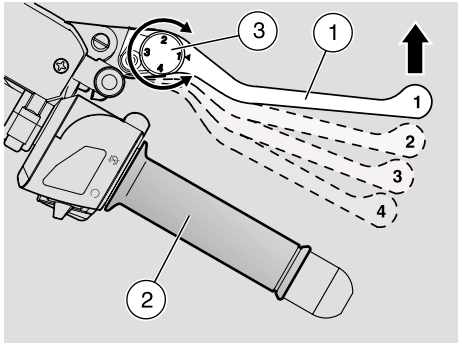
Proceed with care.
Do not spill the oil!
Take care not to smear any component, the area in which you are working and the surrounding area. Carefully remove any trace of oil.

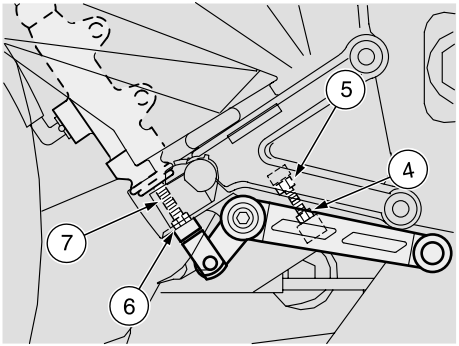
In case of leakages or malfunctions, contact an aprilia Official Dealer.

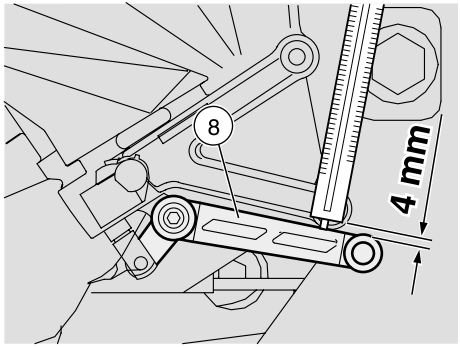
Periodically check the engine oil level, see p. 63 (CHECKING THE ENGINE OIL LEVEL AND TOPPING UP).

For the engine oil change, see p. 60 (REGULAR SERVICE INTERVALS CHART) and p. 64 (CHANGING THE ENGINE OIL AND THE OIL FILTER).

NOTE Use high-quality 15W – 50 oil, see p. 109 (LUBRICANT CHART).







ADJUSTING THE FRONT BRAKE CONTROL LEVER AND THE CLUTCH CONTROL LEVER

It is possible to adjust the distance between the lever (1) end and the grip (2), by rotating the adjuster (3).

The positions "**1**" and "**4**" correspond to an approximate distance of 105 and 85 mm, respectively, between the lever end and the grip.

The positions "**2**" and "**3**" correspond to intermediate distances.

◆ ★Push the control lever (1) forward and rotate the adjuster (3) until the desired number is positioned in correspondence with the reference arrow.

ADJUSTING THE REAR BRAKE CONTROL LEVER CLEARANCE

The brake control lever is positioned ergonomically during the assembly of the vehicle.

If necessary, it is possible to adjust the brake control lever clearance:

◆ Loosen the lock nut (4).
◆ Screw the brake adjuster (5) completely.
◆ Screw the lock nut (6) completely on the pump control rod (7).
◆ Screw the pump control rod (7) completely, then unscrew it by giving 3 – 4 turns.
◆ Screw the brake adjuster (5) until the brake pedal reaches the desired height.
◆ Lock the brake adjuster (5) by means of the lock nut (4).
◆ Unscrew the pump control rod (7) and bring it in contact with the pump piston.
◆ Screw the rod in order to ensure a minimum clearance of **0.5 – 1** mm between the pump control rod (7) and the pump piston.

⚠ CAUTION

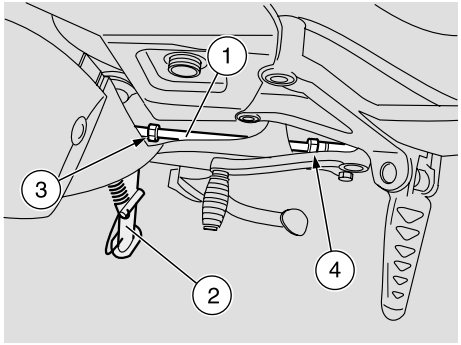
Make sure that there is a certain idle stroke in the movement of the lever (8), to prevent the brake from remaining applied and the consequent untimely wear of the braking elements.

Lever (8) idle stroke: 4 mm (measured at the lever end).

◆ Lock the pump control rod (7) by means of the lock nut (6).

⚠ CAUTION

After the adjustment, make sure that the wheel rotates freely with released brake.
Check the braking efficiency.
If necessary, contact your aprilia Official Dealer.



ADJUSTING THE SHIFTING LEVER

It is possible to adjust the position of the shifting lever by means of the rod (1), proceeding as follows:

- Position the vehicle on the centre stand, see p. 56 (POSITIONING THE VEHICLE ON THE STAND).
- Lower the side stand (2), to facilitate the operations.
- Loosen the nuts (3) and (4).
- Rotate the rod and adjust the shifting lever height.
- Tighten the nuts (3) and (4).

AUTOMATIC LIGHT SWITCHING VERSION ASD

The vehicles provided with this device can be immediately recognized, since the lights come automatically on as soon as the ignition switch is turned to position "○".

For this reason, no light switch is provided.

The lights can be switched off only by turning the ignition switch to position "⊗".

Before starting the vehicle, make sure that the dimmer switch is in position "≡D" (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.

⚠ CAUTION

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

EXHAUST SILENCER/EXHAUST TERMINAL

⚠ WARNING

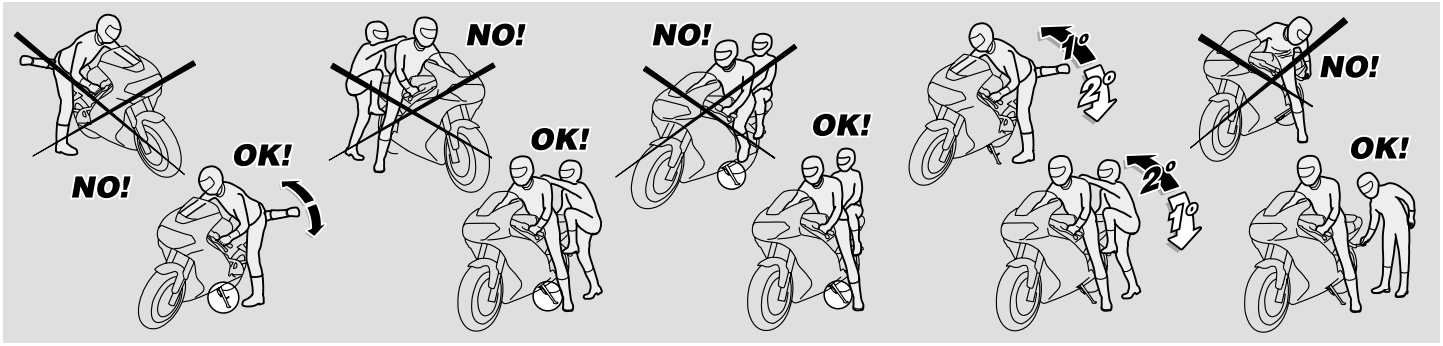
Tampering with the noise control system is prohibited.

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;
– 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.



GETTING ON AND OFF THE VEHICLE

The instructions below must be followed with the maximum care in order to avoid any injury to persons and damage to property and to the vehicle, caused by the falling of the rider or the passenger from the vehicle and/or the falling or overturning of the vehicle itself.

⚠ WARNING

Risk of falling and overturning.
Proceed with care.

The operations and movements required to get on and off the vehicle must be performed with complete freedom of movement and with the hands free from obstruction caused by holding objects, the helmet, gloves or glasses.

The vehicle is provided with two stands: centre stand and side stand.

⚠ CAUTION

Do not start the engine with the vehicle positioned on the centre stand. Engaging the gears may make you lose control of the vehicle.
Do not get on or let the passenger get on the vehicle if this is positioned on the centre stand.
It is forbidden to position the vehicle on the centre stand while seated astride the vehicle in riding position.

Get on and off the vehicle only from the left side and always with extended side stand.

⚠ CAUTION

Do not apply the load of your weight or of the passenger's weight onto the side stand.

The stand has been designed to support the weight of the vehicle and a minimum load, without the rider and the passenger.

Getting on the vehicle into the riding position with extended side stand is permitted only for the purpose of preventing the vehicle from falling or overturning and does not envision the loading of the weight of the rider and passenger onto the side stand.

While getting on and off, the weight of the vehicle may cause an unbalance and the consequent loss of equilibrium, and the vehicle may fall or overturn.

NOTE The rider must always be the first person to get on the vehicle and the last to get off and it is the rider who controls the balance and stability of the vehicle when the passenger gets on and off.

When getting on and off the vehicle, the passenger must make careful movements, in order to maintain the balance of the vehicle and the rider.

NOTE The rider is responsible for instructing the passenger how to safely get on and off the vehicle.

The vehicle is equipped with special passenger footrests to make it easier to get on and off the vehicle. The passenger must always use the left footrest to get on and off the vehicle.

Neither get off, nor try to get off the vehicle by jumping or stretching your leg down to the ground. In both cases this would compromise the stability and balance of the vehicle.

NOTE Bags or objects strapped to the rear of the vehicle can represent an obstacle while getting on and off.

In any case, perform a controlled movement with your right leg, which must avoid striking and safely pass the rear part of the fairing or the luggage without creating unbalance.

GETTING ON THE VEHICLE

- Grasp the handlebar correctly and get on the vehicle without loading your weight onto the side stand.

NOTE If it is impossible for you to place both feet on the ground, place the right foot on the ground (in case of unbalance, the left side of the vehicle is prevented from falling over by the side stand) and keep the left foot ready to rest on the ground.

- Place both feet on the ground and straighten the vehicle into riding position while keeping it in balance.

NOTE The rider must not extract or attempt to extract the passenger footrest while seated astride the vehicle, because this might compromise the stability and balance of the vehicle.

- Have the passenger extract the two passenger footrests.
- Instruct the passenger how to safely get on the vehicle.
- Kick the side stand completely back using your left foot.

GETTING OFF THE VEHICLE

- Choose a suitable parking area, see p. 55 (PARKING).
- Stop the vehicle, see p. 55 (STOPPING).

⚠ WARNING

Make sure that the parking surface is free from obstacles, firm and flat.

- With the left shoe heel, extend the side stand completely by acting on the appropriate lever.

NOTE If it is impossible for you to place both feet on the ground, place the right foot on the ground (in case of unbalance, the left side of the vehicle is prevented from falling over by the side stand) and keep the left foot ready to rest on the ground.

- Place both feet on the ground, keeping the vehicle in balance in riding position.
- Instruct the passenger how to safely get off the vehicle.

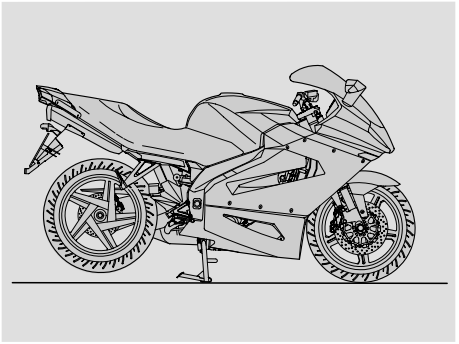
⚠ CAUTION

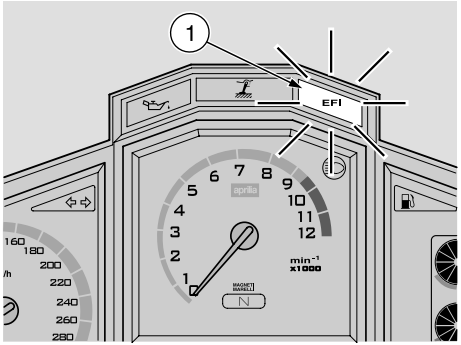
Risk of falling and overturning.
Make sure that the passenger has got off the vehicle.
Do not load your weight onto the side stand.

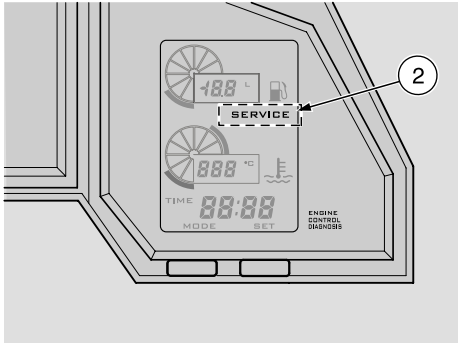
- Incline the vehicle until the stand rests on the ground.
- Grasp the handlebar correctly and get off the vehicle.
- Rotate the handlebar completely leftwards.
- Lift the passenger footrests.

⚠ CAUTION

Make sure that the vehicle is stable.







PRELIMINARY CHECKING OPERATIONS

⚠ 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.

NOTE This vehicle is set so that any anomaly can be detected in real time and stored by the electronic unit.

Whenever the ignition switch is turned to position "○", the diagnostic warning light LED "**EFI**" (1) comes on on the dashboard for approximately three seconds.

⚠ CAUTION

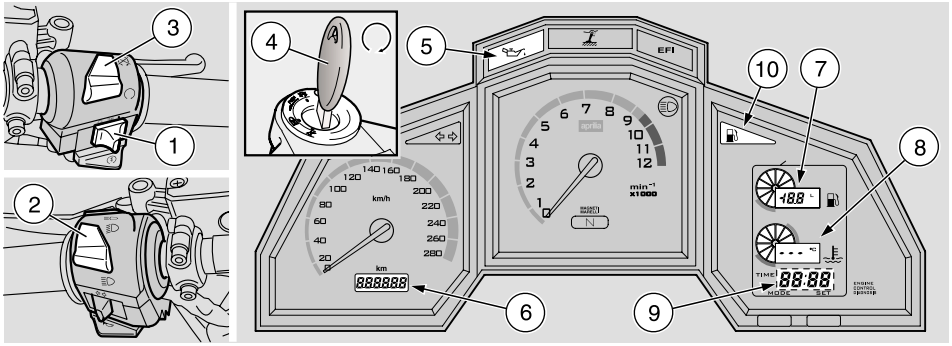
If the diagnostic warning light LED "EFI" (1) comes on and blinks when the engine is started or starts blinking during the normal operation of the engine, this means that the electronic unit has detected an anomaly.
In many cases, the engine keeps running with reduced performance levels; immediately contact an aprilia Official Dealer.

⚠ CAUTION

After the first 1000 km (625 mi) and successively every 7500 km (4687 mi), the writing "SERVICE" (2) appears on the right display.
In this case contact an aprilia Official Dealer, who will carry out the operations indicated in the regular service intervals chart, see p. 60 (REGULAR SERVICE INTERVALS CHART).

PRELIMINARY CHECKING OPERATIONS

Component	Check	Page
Front and rear disc brakes	Check the functioning, the idle stroke of the control levers, the fluid level and make sure there are no leaks. Check the wear of the pads. If necessary, top up the fluid tank.	30 (BRAKE FLUID - recommendations), 31 (DISC BRAKES), 32 (FRONT BRAKE), 34 (REAR BRAKE), 84 (CHECKING THE BRAKE PAD WEAR)
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.	85 (ADJUSTING THE ACCELERATOR CONTROL)
Engine oil	Check and/or top up if necessary.	41 (ENGINE OIL), 63 (CHECKING THE ENGINE OIL LEVEL AND TOPPING UP)
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.	40 (TYRES)
Brake levers	Make sure that they work smoothly. Lubricate the articulations and adjust the stroke if necessary.	42 (ADJUSTING THE REAR BRAKE CONTROL LEVER CLEARANCE)
Clutch	Check the operation of the clutch, the idle stroke of the control lever, the fluid level and any leaks. If necessary, top up the fluid; the clutch must operate without jerking and/or slipping.	35 (CLUTCH FLUID - recommendations), 36 (CLUTCH)
Steering	Make sure that the steering rotates smoothly, without any clearance or slackening.	–
Side stand and centre stand	Make sure that it operates correctly. Make sure that when the stand is let lifted or lowered there is no friction and that the spring tension brings it back to its normal position. If necessary, lubricate joints and hinges. Make sure that the safety switch operates correctly.	87 (CHECKING THE STAND), 93 (CHECKING THE SWITCHES)
Fastening elements	Make sure that the fastening elements are not loose. If necessary, adjust or tighten them.	–
Drive chain	Check the slack.	74 (DRIVE CHAIN), 75 (CLEANING AND LUBRICATION)
Fuel tank	Check the fuel level and top up, if necessary. Check the circuit for leaks. Make sure that the fuel cap is correctly closed.	28 (FUEL), 76 (LIFTING THE FUEL TANK)
Coolant	The coolant level in the expansion tank must be included between the “**FULL**” and “**LOW**” marks.	38 (COOLANT), 39 (CHECKING AND TOPPING UP)
Engine stop switch (○ - ⊗)	Make sure that it operates correctly.	23 [ENGINE STOP SWITCH (○ - ⊗)]
Lights, warning lights LED, horn, rear brake light switch end electric devices	Check the proper functioning of the acoustic and visual devices. Change the bulbs or intervene in case of failure.	90 (BATTERY) – 100 (CHANGING THE REAR LIGHT BULB)



STARTING

⚠ WARNING

This vehicle is considerably powerful and must be used gradually and with the greatest care.

Do not position any object inside the front part of the fairing (between the handlebar and the dashboard), in order not to hinder the rotation of the handlebar and visibility toward the dashboard.

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

⚠ WARNING

Exhaust gases contain carbon monoxide, which is extremely noxious if inhaled.
Avoid starting the engine in closed or badly-ventilated rooms.

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

NOTE With the side stand lowered, the engine can be started only if the gears are in neutral; in this case, if you try to engage the gears, the engine stops.

With the side stand lifted, it is possible to start the engine either in neutral gear or with engaged gears and pulled in clutch lever.

- Get on the vehicle in riding position, see p. 44 (GETTING ON AND OFF THE VEHICLE).
- Make sure that the stand is completely lifted.
- **Not provided for ASD**. Make sure that the light switch (1) is in position “•”.
- Make sure that the dimmer switch (2) is in position “≡D”.
- Move the engine stop switch (3) to position “○”.
- Rotate the key (4) and move the ignition switch to position “○”.

  At this point the following lights come on on the dashboard within three seconds:

– all the warning lights LED;
– all the dashboard lighting LEDs;
– all the segments on the left display;
– all the segments and writings on the right multifunction display;
– the pointers of the indicators move to the bottom of the indicator range;

thus testing the operation of LEDs, writings, segments and instruments.

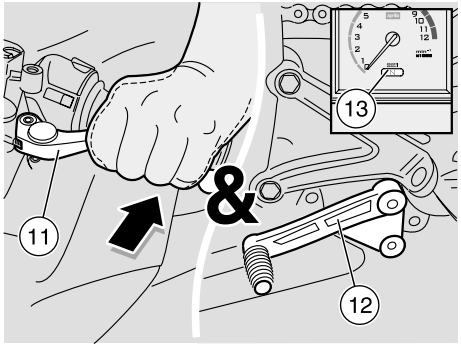
The fuel pump will pressurize the fuel supply circuit, sending out a hum for about three seconds.

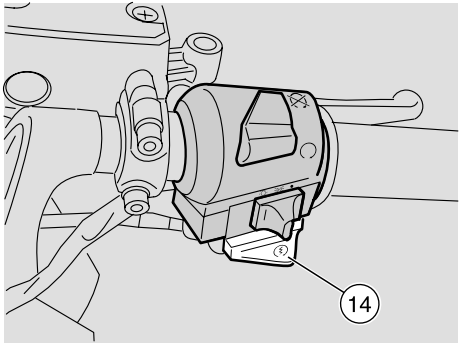
After three seconds, the engine oil pressure warning light LED “” (5) remains on on the dashboard (and will remain on until the engine is started) and the following will appear on the displays:

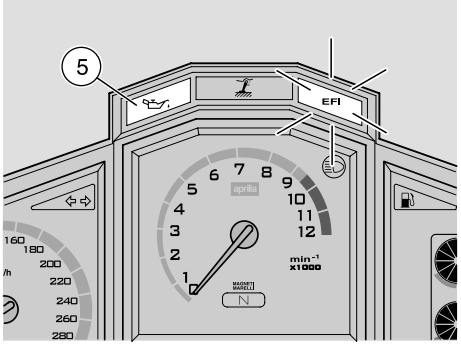
– total number of kilometres covered (6);
– fuel quantity (7);
– coolant temperature (8) [up to 35 °C (95 °F) the writing “---” is displayed];
– hour and minutes (9).

⚠ CAUTION

If the low fuel warning light LED “” (10) comes on on the dashboard, provide for topping up as soon as possible, see p. 28 (FUEL).







◆ Operate the front brake lever completely.
◆ Pull the clutch lever (11) completely and shift the gearbox lever (12) into neutral [green warning light LED "N" (13) on].

NOTE If the room temperature is low (near to or lower than 0 °C – 32 °F), see p. 50 (STARTING WITH COLD ENGINE).

⚠ CAUTION

To avoid excessive consumption of the battery, do not keep the start push button "Ⓢ" pressed for more than fifteen seconds.
If the engine does not start in this lapse of time, wait ten seconds and press the start push button "Ⓢ" again.

◆ Press the start push button "Ⓢ" (14) without accelerating and release it as soon as the engine starts.

⚠ CAUTION

Avoid pressing the start push button "Ⓢ" (14) when the engine is running, since you may damage the starter.

If the engine oil pressure warning light LED "🛢" (5) remains on, or if it comes on during the normal operation of the engine, this means that the oil pressure in the circuit is insufficient.
In this case, stop the engine immediately and contact an aprilia Official Dealer.

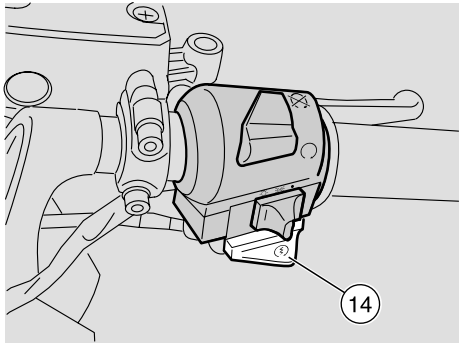
◆ Keep at least one brake lever pulled and do not accelerate until you start.

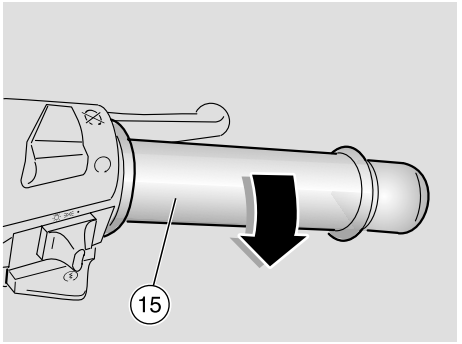
⚠ CAUTION

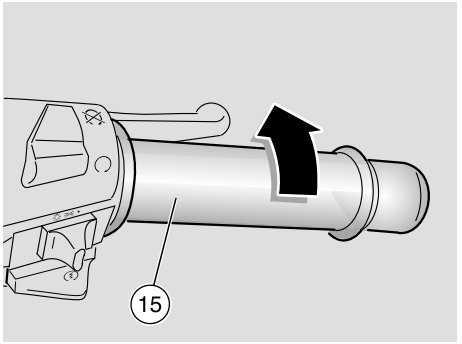
Never leave abruptly with cold engine.
To reduce the emission of polluting substances and the consumption of fuel, warm the engine up by proceeding at low speed for the first miles.

⚠ CAUTION

If the diagnostic warning light LED "EFI" on the dashboard starts blinking during the normal operation of the engine, this means that the electronic unit has detected an anomaly.
In many cases, the engine keeps running with reduced performance levels; immediately contact an aprilia Official Dealer.







STARTING WITH COLD ENGINE

When the room temperature is low (about 0 °C / 32 °F), it may be difficult to start the engine at the first attempt.

In this case:

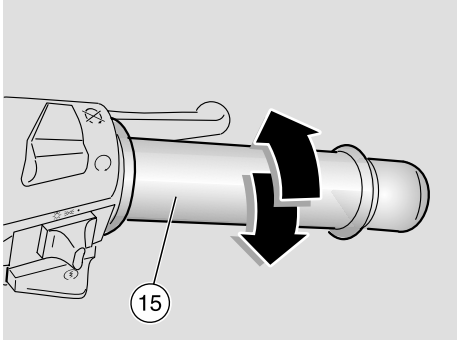
- Insist for at least ten seconds with the start push button "⍟" (14) pressed and at the same time moderately rotate the throttle grip (15).

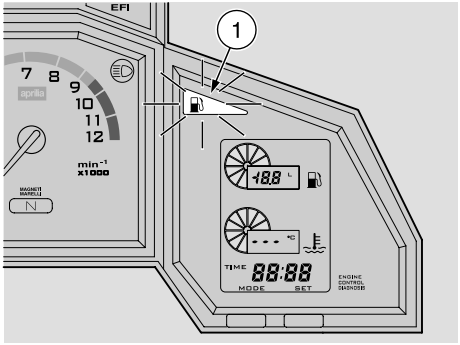
If the engine starts.

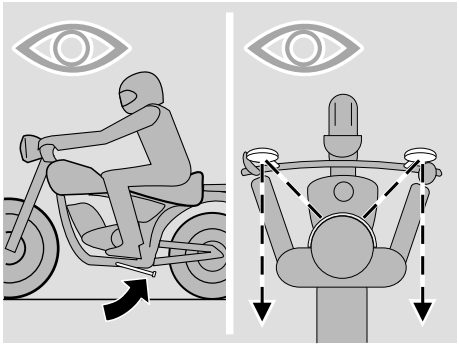
- Release the start push button "⍟" (14) and the throttle grip (15).
- If the idling is unstable, twist the throttle grip (15) slightly and frequently.

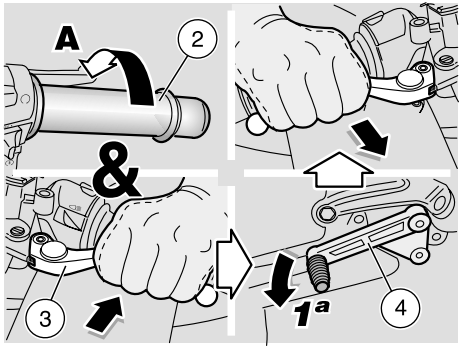
If the engine does not start.

Wait a few seconds and repeat the cold START PROCEDURE.









DEPARTURE AND DRIVE

⚠ WARNING

This vehicle is considerably powerful and must be used gradually and with the greatest care.

Do not position any object inside the front part of the fairing (between the handlebar and the dashboard), in order not to hinder the rotation of the handlebar and visibility toward the dashboard.

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

⚠ CAUTION

If the low fuel warning light LED "⛽" (1) comes on on the dashboard while the vehicle is running, this means that the quantity of fuel left in the tank amounts to 4.5 ± 1 ℓ.

Provide for topping up as soon as possible, see p. 28 (FUEL).

⚠ WARNING

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 is completely lifted.

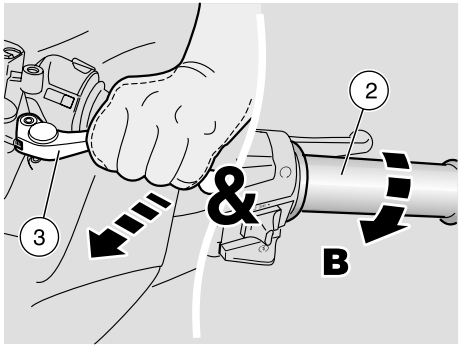
To leave:

- Start the engine, see p. 48 (STARTING).
- Adjust the inclination of the rear-view mirrors correctly, see p. 86 (REAR-VIEW MIRRORS).

⚠ CAUTION

With the vehicle at rest, try to get acquainted with the use of the rear-view mirrors. The reflecting surface is convex, therefore the objects seem to be farther away than they actually are. These mirrors offer a "wide-angle" view and only experience will allow you to evaluate the distance of the following vehicles correctly.

- With released throttle grip (2) (**Pos.A**) and engine idling, pull the clutch lever (3) completely.
- Engage the first gear, by pushing the gear lever (4) downwards.
- Release the brake lever (pulled on the starting).



⚠ WARNING

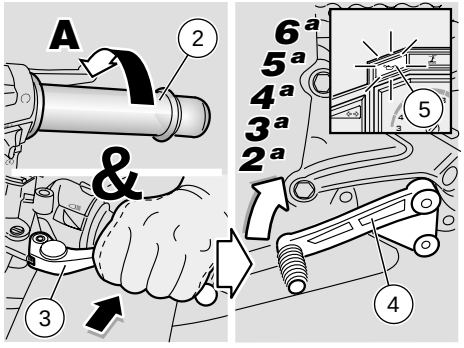
On departure, the abrupt release of the clutch lever may cause the engine to stall or the vehicle to jerk forwards.

Never accelerate abruptly or excessively when releasing the clutch lever, in order to prevent the clutch from "slipping" (slow release) or the front wheel from raising "rearing up" (quick release).

- Slowly release the clutch lever (3) and at the same time accelerate by slightly turning the throttle grip (2) (**Pos.B**).

The vehicle will start moving.

- Ride at reduced speed for the first miles, in order to warm the engine up.



⚠ CAUTION

Never exceed the recommended rpm, see p. 54 (RUNNING-IN).

- Increase the speed by gradually rotating the throttle grip (2) (**Pos.B**), without exceeding the recommended rpm, see p. 54 (RUNNING-IN).

To engage the second gear:

⚠ CAUTION

Proceed quickly.
Never ride the vehicle at too low rpm.

- Release the throttle grip (2) (**Pos.A**), pull the clutch lever (3) and lift the shifting lever (4). Release the clutch lever (3) and accelerate.
- Repeat the last two operations and shift up.

⚠ CAUTION

If the engine oil pressure warning light LED "🛢" (5) comes on during the normal operation of the engine, this means that the engine oil pressure in the circuit is insufficient.

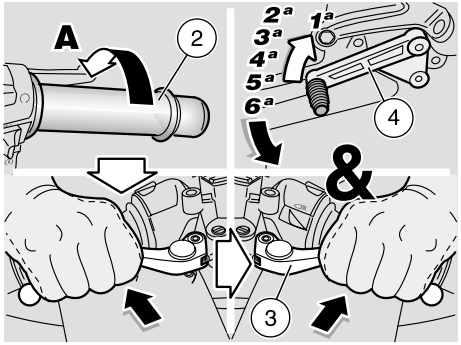
In this case, stop the engine immediately and contact an aprilia Official Dealer.

The downshifting should be carried out in the following situations:

- When riding downhill or when braking, in order to increase the braking action by using the compression of the engine.
- When riding uphill, if the gear engaged is not suitable to the speed (high gear, moderate speed) and the engine rpm decreases.

⚠ CAUTION

Shift the gears one by one; the simultaneous downshifting of more than one gear may make you exceed the maximum rpm (red line).
Before and during the downshifting, release the throttle grip and decelerate, in order to avoid the "red line".



To shift down, proceed as follows:

- Release the throttle grip (2) (**Pos.A**).
- If necessary, pull the brake levers moderately and decrease the speed of the vehicle.
- Pull the clutch lever (3) and lower the shifting lever (4) to shift down.
- If the brake levers are pulled, release them.
- Release the clutch lever and accelerate moderately.

⚠ CAUTION

If a temperature of 126 – 135 °C (259 – 275 °F) is displayed on the right side of the multifunction display and the last two segments of the indicator range blink, stop the vehicle and let the engine idle for approximately two minutes, thus allowing the coolant to circulate regularly in the system; then, press the engine stop switch to position "⊗" and check the coolant level, see p. 38 (COOLANT).

If the situation on the dashboard remains the same after the coolant level has been checked, do not start the vehicle and contact an aprilia Official Dealer.

Do not turn the ignition switch to position "⊗", since the cooling fans would stop independently of the coolant temperature and in this case the temperature would increase further.

If the diagnostic warning light LED "EFI" on the dashboard starts blinking during the normal operation of the engine, this means that the electronic unit has detected an anomaly.

In many cases, the engine keeps running with reduced performance levels; immediately contact an aprilia Official Dealer.

To avoid the overheating of the clutch, keep the engine running with vehicle at rest, engaged gears and pulled clutch lever for the shortest possible time.

⚠ WARNING

Avoid opening and closing the throttle grip repeatedly and continuously, so that you do not accidentally lose control of the vehicle. 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 steady may cause the overheating of the clutch.

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 surfaces may overheat, thus reducing the braking efficiency. Exploit the engine compression and shift down by putting on both brakes intermittently.

Never drive downhill with the engine off!

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 ground.

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 leaning the vehicle as little as possible.

Always use the turn 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.

RUNNING-IN

The running-in of the engine is essential to ensure its duration and 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.
During running-in, change speed.
In this way the components are first "loaded" and then "relieved" and the engine parts can thus cool down.
Even if it is important to stress the engine components during running-in, take care not to exceed.

NOTE Only after the first 1500 km (937 mi) of running-in you can expect the best performance levels from the vehicle.

Keep to the following indications:

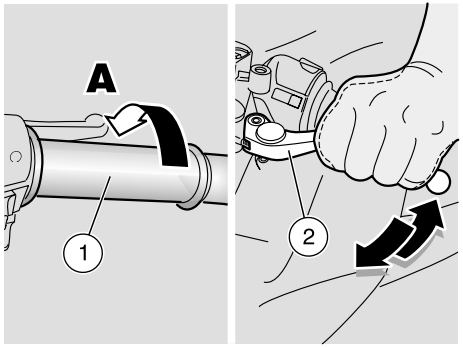
- Do not open the throttle completely if the speed is low, both during and after the running-in.
- During the first 100 km (62 mi) put on the brakes with caution, avoiding sharp and prolonged brakings. This ensures a correct bedding-in of the pads on the brake disc.
- During the first 1000 km (625 mi) never exceed 6000 rpm.

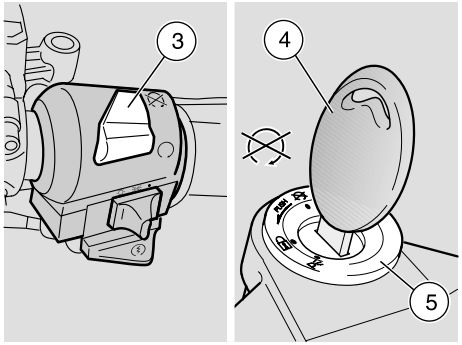
⚠ WARNING

After the first 1000 km (625 mi), have an aprilia Official Dealer carry out the checks indicated in the column "After running-in" of the regular service intervals chart, see p. 60 (REGULAR SERVICE INTERVALS CHART), in order to avoid hurting yourself or other people and/or damaging the vehicle.

- Between the first 1000 (625 mi) and 1500 km (937 mi) drive more briskly, change speed and use the maximum acceleration only for a few seconds, in order to ensure better coupling of the components; never exceed 7500 rpm (see table).
- After the first 1500 km (937 mi) you can expect better performance from the engine, however, without exceeding the maximum allowed (10500 rpm).

Engine maximum rpm recommended	
Mileage km (mi)	**rpm**
0 – 1000 (0 – 625)	6000
1000 – 1500 (625 – 937)	7500
over 1500 (937)	10500





STOPPING

⚠ WARNING

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

- Release the throttle grip (1) (**Pos.A**), gradually put on the brakes and at the same time shift down in order to decrease the speed, see p. 51 (DEPARTURE AND DRIVE).

Once the speed has decreased, before stopping the vehicle:

- Pull the clutch lever (2) in order to prevent the stopping of the engine.

When the vehicle has come to rest:

- Shift the gear lever to neutral (green warning light LED "N" on).
- Release the clutch lever (2).
- In case of a brief stop, keep at least one brake on.

PARKING

It is very important to choose a suitable parking area, respecting the road signs and the indications given below.

⚠ 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 get too near the cooling fans even if they are still, since they may start moving and suck clothes edges, hair, etc.

⚠ WARNING

The fall or excessive inclination of the vehicle may cause the fuel to flow out of the tank.

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

⚠ CAUTION

Do not apply the load of your weight or of the passenger's weight onto the side stand.

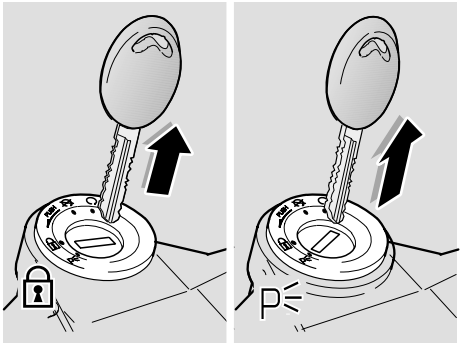
To park the vehicle:

- Choose a suitable parking area.
- Stop the vehicle, see p. 55 (STOPPING).
- Move the engine stop switch (3) to position "⊠".
- Rotate the key (4) and move the ignition switch (5) to position "⊠".

⚠ WARNING

When getting on or off the vehicle, keep to the instructions given, see p. 44 (GETTING ON AND OFF THE VEHICLE).

- Following the indications, wait until the passenger has got off the vehicle before dismounting.
- Lock the steering, see p. 25 (STEERING LOCK) and extract the key.

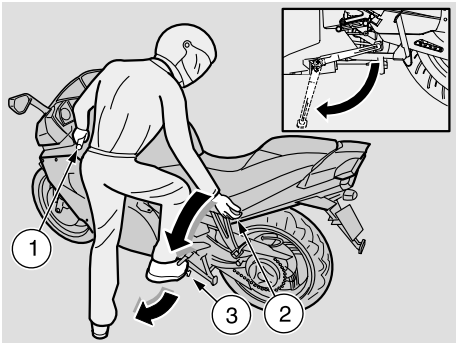


⚠ WARNING

Make sure that the vehicle is stable.

The vehicle is provided with front and rear parking lights. Even if it is always advisable to park the vehicle in the appropriate parking areas and in any case in illuminated places, the parking lights are very useful when it is necessary to park the vehicle in a dark or badly illuminated area, or in any case when the vehicle must be visible.

To switch on the parking lights, see p. 25 (PARKING LIGHTS).



POSITIONING THE VEHICLE ON THE STAND

SIDE STAND

To place the vehicle on the side stand while seated astride the vehicle, see p. 44 (GETTING ON AND OFF THE VEHICLE).

If any manoeuvre (for example, moving the vehicle) required the lifting of the stand, to place the vehicle on the stand again, proceed as follows:

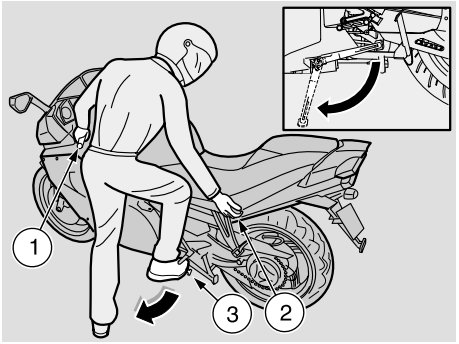
⚠ WARNING

Make sure that the parking surface is free from obstacles, firm and flat.

- Choose a suitable parking area, see p. 55 (PARKING).
- Grasp the left grip (1) and the handle (2).
- Press the side stand with your right foot and extend it completely (3).
- Incline the vehicle until the stand rests on the ground.
- Steer the handlebar completely leftwards.

⚠ WARNING

Make sure that the vehicle is stable.



CENTRE STAND

⚠ WARNING

It is forbidden to position the vehicle on the centre stand while seated astride the vehicle in riding position.

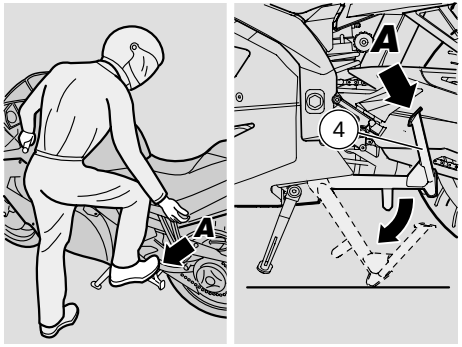
⚠ WARNING

Make sure that the parking surface is free from obstacles, firm and flat.

- Choose a suitable parking area, see p. 55 (PARKING).
- Grasp the left grip (1) and the handle (2).

⚠ CAUTION

The lowering of the side stand is suggested, for safety reasons, in order to prevent the vehicle from falling down or overturning in case of unbalance.

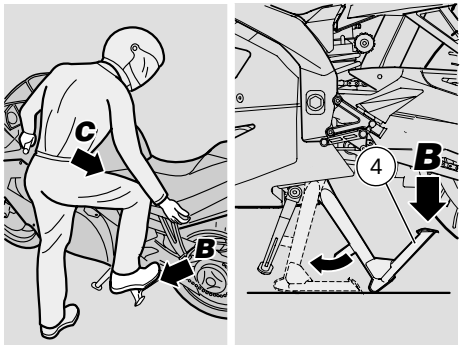


NOTE Do not let the side stand touch the ground. Keep the vehicle in vertical position.

- Press the side stand with your right foot and extend it completely (3).
- Push down the lever (4) of the centre stand (**Pos.A**) and rest it on the ground.

⚠ CAUTION

Proceed with care.
The positioning of the vehicle on the centre stand may be difficult, since the vehicle is very heavy. Release the grip (1) and the handle (2) only after positioning the vehicle on the stand.

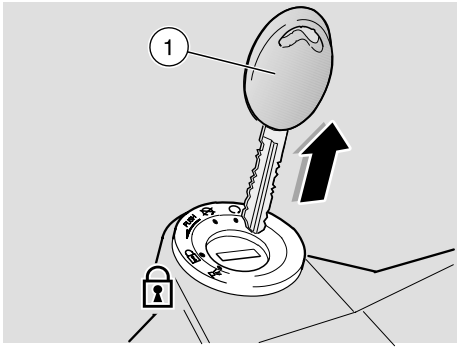


- Load your weight on the lever (4) (**Pos.B**) of the centre stand and at the same time move your centre of gravity towards the rear part of the (**Pos.C**) vehicle.

⚠ WARNING

Make sure that the vehicle is stable.

- Let the side stand lifted.



SUGGESTIONS TO PREVENT THEFT

NEVER leave the ignition key (1) inserted and always use the steering lock "🔒".

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

When possible, use 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 this page, to facilitate the identification of the owner in case of finding after theft.

SURNAME: .....

NAME: .....

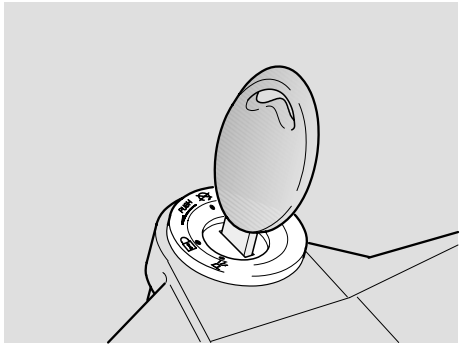
ADDRESS: .....

.....

TELEPHONE NO.: .....

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

MAINTENANCE



Carefully read p. 2 (SAFETY WARNINGS), (TECHNICAL INFORMATION) and (WARNINGS - PRECAUTIONS - GENERAL ADVICE).

⚠ WARNING

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

Before beginning any service operations or inspection of the vehicle, switch off the engine and remove the key, wait until the engine and the exhaust system have cooled down and, if possible, lift the vehicles with the proper equipment onto firm and flat ground.

⚠ WARNING

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

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

Do not hold any mechanical piece or other parts of the vehicle with your mouth: the components are not edible and some of them are noxious or even toxic.

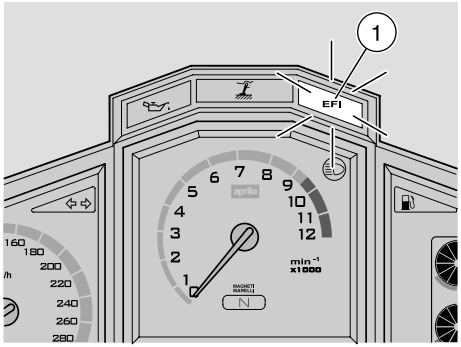
⚠ CAUTION

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

In case any maintenance operation should be required, it is advisable to use latex gloves.

Routine maintenance operations can usually be carried out by the user, but sometimes specific tools and specific technical skills may be required.
In case periodic maintenance operations, assistance or technical advice are needed, contact an **aprilia** Official Dealer, who will 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.



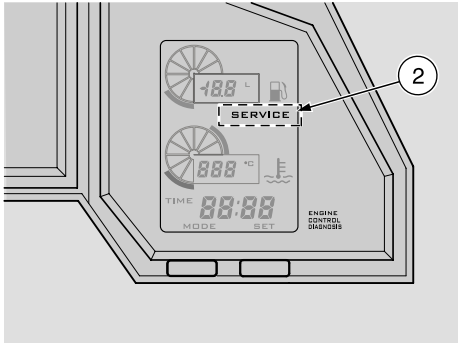
In any case, personally carry out the "Preliminary checking operations" after any maintenance operation, see p. 47 (PRELIMINARY CHECKING OPERATIONS).

NOTE This vehicle is set so that any anomaly can be detected in real time and stored by the electronic unit.

Whenever the ignition switch is turned to position "❍", the diagnostic warning light LED "**EFI**" (1) comes on on the dashboard for approximately three seconds.

⚠ CAUTION

If the diagnostic warning light LED "EFI" (1) comes on and blinks when the engine is started or starts blinking during the normal operation of the engine, this means that the electronic unit has detected an anomaly.



In many cases, the engine keeps running with reduced performance levels; immediately contact an aprilia Official Dealer.

⚠ CAUTION

After the first 1000 km (625 mi) and successively every 7500 km (4687 mi), the writing "SERVICE" (2) appears on the right display.
In this case contact an aprilia Official Dealer, who will carry out the operations indicated in the regular service intervals chart, see p. 60 (REGULAR SERVICE INTERVALS CHART).

REGULAR SERVICE INTERVALS CHART

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

Key

① = check and clean, adjust, lubricate or change, if necessary;

② = clean;

③ = change;

④ = adjust.

NOTE Perform the maintenance operations with doubled frequency if the vehicle is used in rainy or dusty areas, on uneven surfaces or on racetracks.

(*) = In case of use on racetracks, change every 3750 km (2343 mi).

(**) = Check every two weeks or according to the intervals indicated.

Component	After running-in [1000 km (625 mi)]	Every 7500 km (4687 mi) or 12 months	Every 15000 km (9375 mi) or 24 months
Spark plugs (*)	–	①	③
Air cleaner	–	①	③
Engine oil filter (*)	③	③	–
Engine oil filter (on oil tank)	②	–	②
Fork	①	–	①
Light operation/direction	–	①	–
Light system	①	①	–
Safety switches			
Clutch fluid	–	①	–
Brake fluid	–	①	–
Coolant	–	–	①
Engine oil	③	③ (*)	–
Tyres	①	every 1000 km (625 mi): ①	
Tyre pressure (**)	④	every 1000 km (625 mi): ④	
Engine oil pressure warning light LED	at every start: ①		
Drive chain tension and lubrication	every 1000 km (625 mi): ①		
Brake pad wear	①	before every trip and every 2000 km (1250 mi): ①	

OPERATIONS TO BE CARRIED OUT BY THE aprilia Official Dealer

Key

① = check and clean, adjust, lubricate or change, if necessary;

② = clean;

③ = change;

④ = adjust.

NOTE Perform the maintenance operations with doubled frequency if the vehicle is used in rainy or dusty areas, on uneven surfaces or on racetracks.

(*) = In case of use on race tracks, check every 3750 km (2343 mi).

Component	After running-in [1000 km (625 mi)]	Every 7500 km (4687 mi) or 12 months	Every 15000 km (9375 mi) or 24 months
Rear shock absorber	–	–	①
Transmission cables and controls	①	①	–
Rear suspension linkage bearings	–	–	①
Steering bearings and steering clearance	①	①	–
Wheel bearings	–	①	–
Brake discs	①	①	–
General running of the vehicle			
Adjusting the valve clearance	④	–	④
Braking systems	①	①	–
Cooling system	–	①	–
Throttle body pin greasing	①	①	–
Clutch fluid	every 2 years: ③		
Brake fluid			
Coolant			
Fork oil	after the first 7500 km (4687 mi) and successively every 22500 km (14000 mi): ③		
Fork oil seals	after the first 30000 km (18750 mi) and successively every 22500 km (14000 mi): ③		
Brake pads	if worn: ③		
Wheel/Tyres	①	①	–
Nut, bolt, screw tightening			
Cylinder synchronization	①	①	–
Suspensions and attitude	①	–	①
Final transmission (chain, crown and pinion)	–	①	–
Fuel pipes	–	①	every 4 years: ③
Clutch wear (*)	–	①	

IDENTIFICATION DATA

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

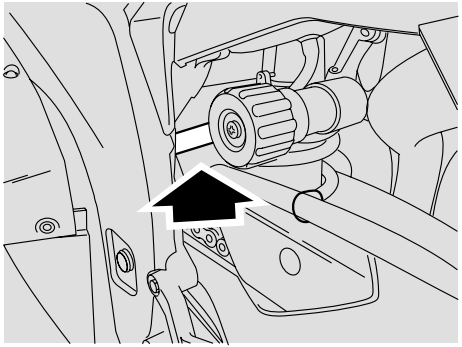
The frame number can be used for the purchase of spare parts.

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 right side of the steering column.

Frame no. _____



ENGINE NUMBER

The engine number is stamped on the rear part of the engine, near the pinion.

Engine no. _____

CHECKING THE ENGINE OIL LEVEL AND TOPPING UP

Carefully read p. 41 (ENGINE OIL) and p. 58 (MAINTENANCE).

Periodically check the engine oil level, change the oil after the first 1000 km (625 mi) and successively every 7500 km (4687 mi) or 12 months, see p. 64 (CHANGING THE ENGINE OIL AND THE OIL FILTER).

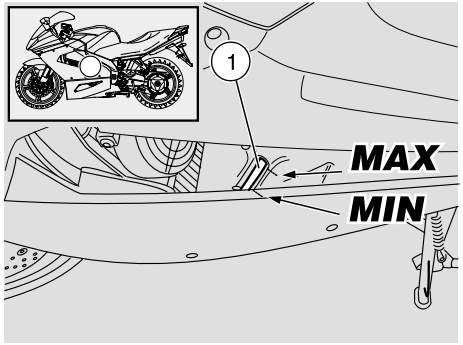
In case of use on racetracks, change the engine oil every 3750 km (2343 mi).

For the check, proceed as follows:

⚠ CAUTION

The engine oil level must be checked with warm engine.
If the check is carried out with cold engine, the oil level may temporarily lower below the "MIN" mark.
This is not a problem, provided that the engine oil pressure warning light LED "🛢" does not come on, see p. 16 (INSTRUMENTS AND INDICATORS TABLE).

NOTE To warm the engine and have the engine oil reach the operating temperature, do not let the engine idle with the vehicle at rest. According to the correct procedure, it is advisable to carry out the check after a trip of after covering approximately 15 km (10 mi) on a road outside town (this is sufficient for the engine oil to reach the operating temperature).



- Stop the engine, see p. 55 (STOPPING).
- Keep the vehicle in vertical position, with the two wheels resting on the ground.
- Check the oil level in the transparent pipe (1) through the appropriate slot provided on the left fairing.

MAX = maximum level

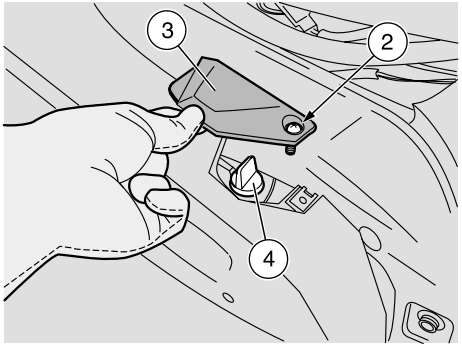
MIN = minimum level.

The difference between "**MAX**" and "**MIN**" amounts to approximately 500 cm^3.

- The level is correct when the oil almost reaches the "**MAX**" mark.

⚠ CAUTION

Never exceed the "MAX" mark, nor leave the oil below the "MIN" mark, in order to avoid serious damage to the engine.



If necessary, top up the engine oil by proceeding as follows:

- Unscrew and remove the screw (2).
- Remove the cover (3).
- Unscrew and remove the filling cap (4).

⚠ 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.

NOTE Use high-quality 15W – 50 oil, see p. 109 (LUBRICANT CHART).

- Top up the tank and restore the correct level, see p. 109 (LUBRICANT CHART).

CHANGING THE ENGINE OIL AND THE OIL FILTER

⚠ CAUTION

The engine oil and the oil filter change operations may be difficult for unskilled operators.

If necessary, contact your aprilia Official Dealer.

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

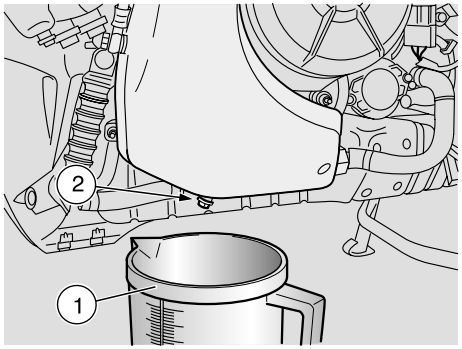
Carefully read p. 41 (ENGINE OIL) and p. 58 (MAINTENANCE).

Periodically check the engine oil level, see p. 63 (CHECKING THE ENGINE OIL LEVEL AND TOPPING UP) change the oil after the first 1000 km (625 mi) and successively every 7500 km (4687 mi) or 12 months.

⚠ CAUTION

In case of use on racetracks, change every 3750 km (2343 mi).

If the vehicle is used in dusty areas, change the oil more frequently.

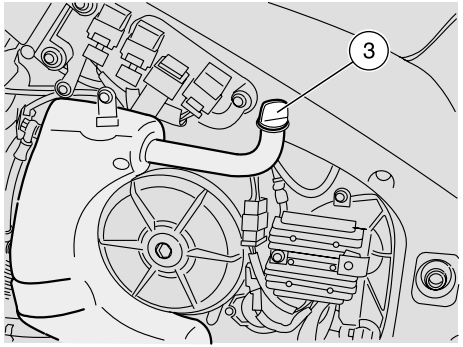


⚠ WARNING

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

To change, proceed as follows:

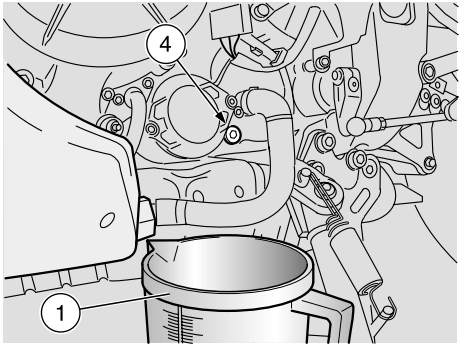
- Remove the left fairing, see p. 77 (REMOVE THE LEFT FAIRING).
- Remove the left lower fairing, see p. 77 (REMOVING THE LEFT LOWER FAIRING).
- Position a container (1) with more than 4000 cm^3 capacity in correspondence with the drain plug (2) positioned on the tank.
- Unscrew and remove the drain plug (2) positioned on the tank.
- Unscrew and remove the filling cap (3).

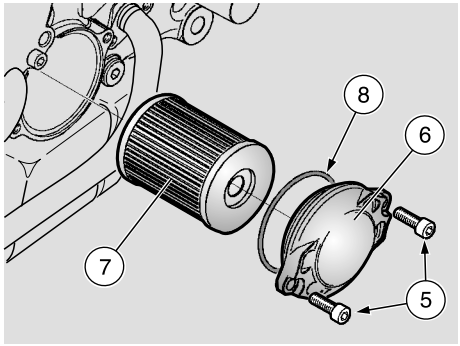


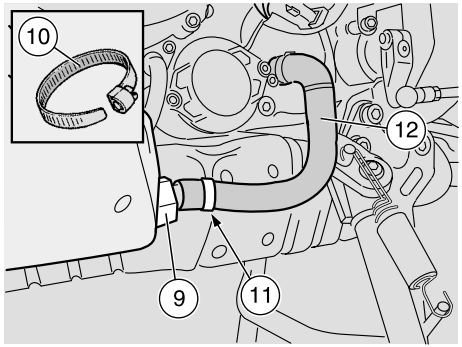
- Drain the oil and let it drip into the container (1) for a few minutes.
- Check and if necessary replace the sealing washer of the drain plug (2) positioned on the tank.
- Screw and tighten the drain plug (2) on the tank.

Drain plug (2) driving torque: 15 Nm (1.5 Kgm).

- Move the container (1) and position it under the engine base, in correspondence with the drain plug positioned on the engine (4).
- Unscrew and remove the drain plug positioned on the engine (4).
- Drain the oil and let it drip into the container (1) for a few minutes.







⚠ CAUTION

Do not dispose of the oil in the environment. Put it in a sealed container and take it to the filling station where you usually buy it or to an oil salvage center.

- Remove the metal residues from the drain plug (4) magnet.
- Screw and tighten the drain plug (4).

Driving torque of the drain plug (4) positioned on the engine: 12 Nm (1.2 kgm).

- Clean the parts dirty with oil with a cloth.

CHANGING THE ENGINE OIL FILTER

Change the engine oil filter after the first 1000 km (625 mi) and successively every 7500 km (4687 mi) or 12 months (on each engine oil change).

- Unscrew the two screws (5) and remove the cover (6).
- Remove the engine oil filter (7).

⚠ CAUTION

Do not use filters that have already been used.

- Spread an oil film on the sealing ring (8) of the new engine oil filter.
- Fit the new engine oil filter.
- Put back the cover (6), screw and tighten the two screws (5).

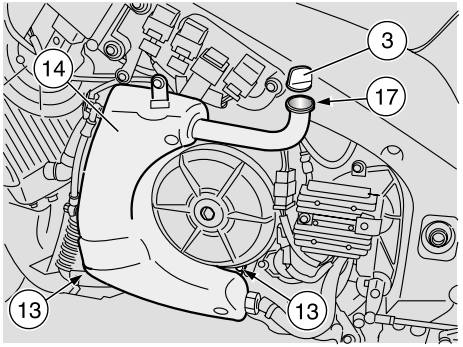
CLEANING THE ENGINE OIL FILTER ON THE TANK

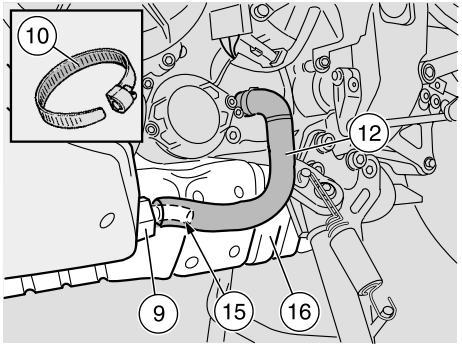
Clean the engine oil filter (9) on the tank after the first 1000 km (625 mi) and successively every 15000 km (9375 mi) (or every two engine oil changes).

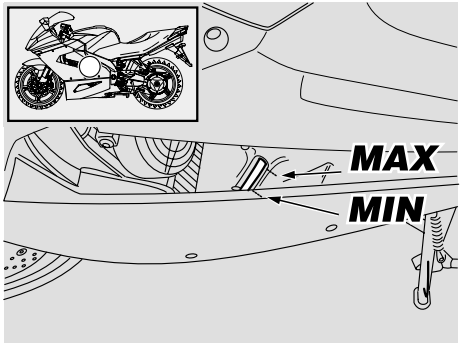
NOTE Prepare a screwdriver-type pipe clamp (10) to replace the original one (special type).

- Loosen the clamp (11) and disconnect the pipe (12).
- Unscrew the engine oil filter (9) positioned on the tank.

NOTE To withdraw the engine oil filter it is necessary to remove the engine oil tank partially.







- Unscrew and remove the two screws (13).
- Partially remove the engine oil tank (14) towards the outside.
- Pull the engine oil filter (9) and clean it with a jet of compressed air.

⚠ CAUTION

Upon reassembly, make sure that the coupling (15) of the engine oil filter (9) is directed towards the outside.
The pipe (12) must not be in contact with the drain compensator (16).

- Check the seal of the engine oil filter (9) positioned on the tank; screw and tighten it.

Engine oil filter (9) driving torque: 30 Nm (3.0 kgm).

- Screw the two screws (13).
- Connect the pipe (12) and tighten the new clamp (10).

⚠ 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.

NOTE Use high-quality 15W – 50 oil, see p. 109 (LUBRICANT CHART).

- Pour about 3500 cm³ of engine oil through the filling opening (17), see p. 109 (LUBRICANT CHART).
- Tighten the filling cap (3).
- Put back the left lower fairing, see p. 77 (REMOVING THE LEFT LOWER FAIRING).
- Put back the left fairing, see p. 77 (REMOVE THE LEFT FAIRING).
- Start the engine, see p. 48 (STARTING) and let it idle for about one minute, in order to ensure the filling up of the engine oil circuit.
- Check the oil level and top up if necessary, see p. 63 (CHECKING THE ENGINE OIL LEVEL AND TOPPING UP).

AIR CLEANER

Check the air cleaner every 7500 km (4687 mi) or 12 months, change it every 15000 km (9375 mi) or more frequently if the vehicle is used on dusty or wet roads.

It is possible to clean the air cleaner partially after using the vehicle on this kind of roads.

⚠ CAUTION

The partial cleaning of the filter does not exclude or postpone the replacement of the filter itself. Do not start the engine if the air cleaner has been removed. Do not clean the filtering element with petrol or solvents, since they may cause a fire in the fuel supply system, with serious danger for the persons in the vicinity and for the vehicle.

DO NOT DISPOSE OF POLLUTING SUBSTANCES OR COMPONENTS IN THE ENVIRONMENT.

◆ Every 7500 km (4687 mi), remove the plug (1), empty its content into a container and deliver it to a salvage centre.

REMOVAL

◆ Lift the fuel tank, see p. 76 (LIFTING THE FUEL TANK)
◆ Unscrew and remove the seven screws (2) that fasten the filter case cover (3).
◆ Remove the filter case cover (3).
◆ Extract the air cleaner (4).
◆ Check the conditions of the gasket (5) and change it if it is damaged.

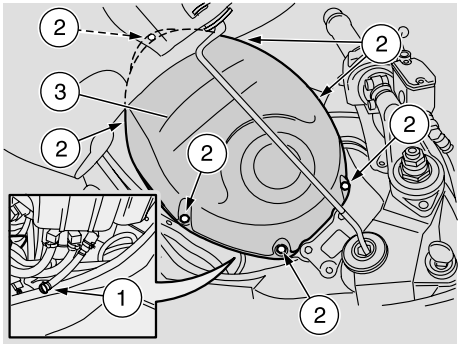
⚠ CAUTION

Plug the opening with a clean cloth, in order to prevent any foreign matter to get ito the suction ducts.

Upon reassembly, before positioning the filter case cover (3), make sure that you have not left the cloth or other objects inside the filter case (6).

Make sure that the filtering element is positioned correctly, in such a way as to prevent non-filtered air from entering.

Remember that the untimely wear of the piston segments and the cylinder may be caused by a faulty or uncorrectly positioned filtering element.



PARTIAL CLEANING

⚠ CAUTION

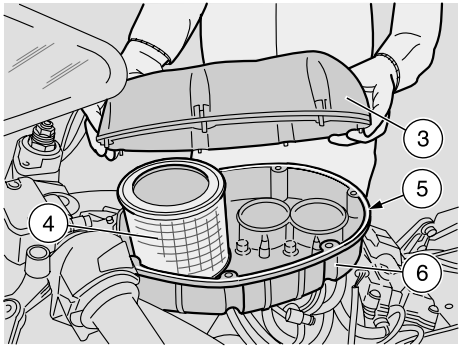
Do not press or strike the metal net of the air cleaner (4).
Do not use screwdrivers or alike.

◆ Seize the air cleaner (4) vertically and strike it more than once on a clean surface.
◆ If necessary, clean the air cleaner (4) with a compressed air jet (directing it from the inside towards the outside of the filter).

⚠ CAUTION

When cleaning the filtering element, make sure that there are no tears.
Otherwise, change the filtering element.

◆ Clean the outer part of the air cleaner (4) with a clean cloth.

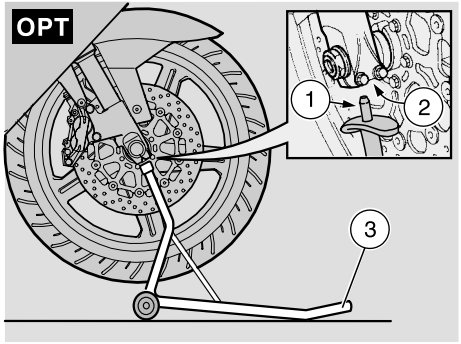


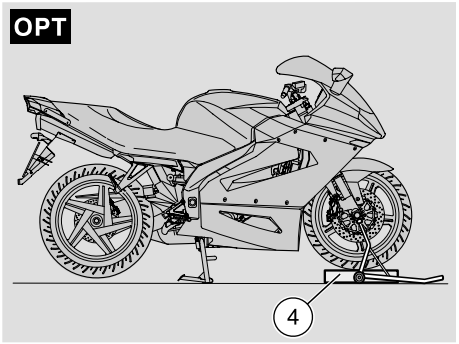
CHANGING

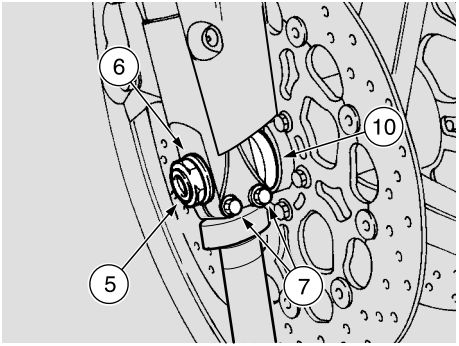
⚠ CAUTION

Do not use filters that have already been used.

◆ Replace the air cleaner (4) with a new one of the same type.







POSITIONING THE VEHICLE ON THE FRONT SUPPORT STAND OPT

- Position the vehicle on the centre stand, see p. 56 (POSITIONING THE VEHICLE ON THE STAND).
- Insert the two ends of the stand (1) in the two holes (2) positioned on the lower ends of the front fork.
- Rest one foot on the front part of the stand (3).
- Push the stand (3) downwards until it reaches the end of its stroke.

FRONT WHEEL

⚠ CAUTION

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

If necessary, contact your aprilia Official Dealer.
If you want to perform these operations personally, keep to the following instructions.

Carefully read p. 58 (MAINTENANCE).

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

⚠ WARNING

Riding with damaged rims may be dangerous for the rider, other persons and the vehicle.

Check the conditions of the wheel rim and change it if it is damaged.

DISASSEMBLY

- Remove the front brake calipers, see p. 71 (FRONT BRAKE CALIPERS).
- Put a support (4) under the tyre, in such a way as to keep the wheel in its position after loosening it.

⚠ CAUTION

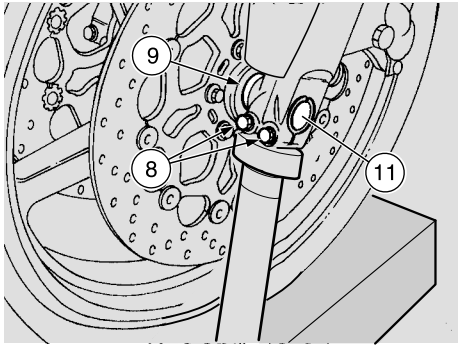
Make sure that the vehicle is stable.

- Have someone keep the handlebar steady in running position, so that the steering is locked.

Wheel nut (5) driving torque: 80 Nm (8 kgm).

- Loosen and remove the wheel nut (5), taking the washer (6).

Wheel pin clamp screw driving torque: 22 Nm (2.2 kgm).



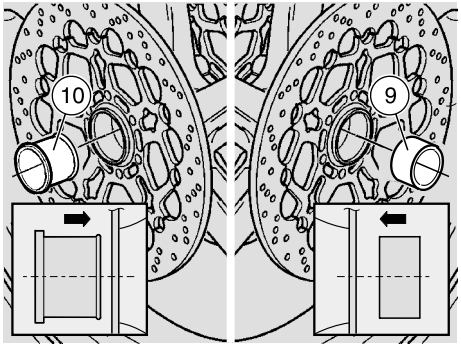
- Partially unscrew the two wheel pin clamp screws (7) (right side).
- Partially unscrew the two wheel pin clamp screws (8) (left side).

NOTE Take notice of the position of the left (9) and right spacer (10), in order to be able to reassemble them correctly.

NOTE To facilitate the extraction of the wheel pin, slightly raise the wheel.

- Push the wheel pin (11), by carefully acting on the threaded end and using a rubber hammer if necessary.
- Support the front wheel and manually withdraw the wheel pin (11).
- Remove the wheel by withdrawing it from the front.

NOTE The left (9) and right (10) spacers remain positioned in the respective seats in the wheel; if they should come off or be removed, take care to put them back correctly (see REASSEMBLY).



REASSEMBLY

- Spread a film of lubricating grease on the whole length of the wheel pin (11), see p. 109 (LUBRICANT CHART).

⚠ CAUTION

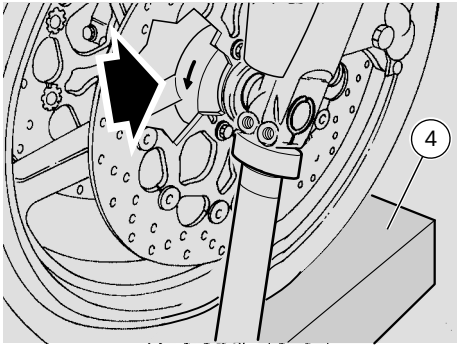
While reassembling the wheel, be careful not to damage the brake pipes, discs and pads.

NOTE Carry out the operation described below only if the right spacer (10) has come off its seat.

- Insert the spacer ring (10) with its longer diameter towards the outside of the vehicle.

⚠ CAUTION

The arrow on the wheel hub indicates the direction of rotation.
Upon reassembly, make sure that the wheel is positioned correctly: the arrow must be visible on the left side of the vehicle.



- Position the wheel between the fork rods on the support (4).

⚠ WARNING

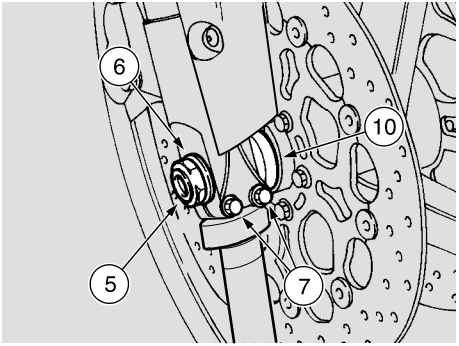
Danger of injury. Do not introduce your fingers to align the holes.

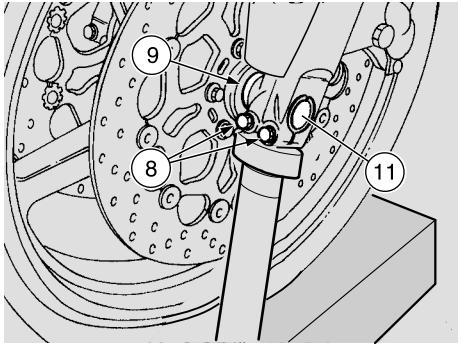
- Move the wheel until its central hole and the holes on the fork are aligned.
- Introduce the wheel pin (11) completely from the left side.

NOTE Make sure that the wheel pin (11) is completely inserted.

- Position the washer (6) and tighten the wheel nut (5) manually.

NOTE In this phase, for the temporary tightening of the two wheel pin clamp screws (8) (left side), the driving torque value need not be respected.





- Screw the two wheel pin clamp screws (8) (left side) and tighten them as much as necessary to lock the rotation of the wheel pin (11).
- Tighten the wheel nut (5) completely.

Wheel nut (5) driving torque: 80 Nm (8.0 kgm).

- Tighten the two wheel pin clamp screws (7) (right side).

Wheel pin clamp screw driving torque: 22 Nm (2.2 kgm).

- Loosen the two wheel pin clamp screws (8) (left side).
- Put back the front brake calipers, see p. 71 (FRONT BRAKE CALIPERS).
- With pulled front brake lever, press the handlebar repeatedly, thrusting the fork downwards. In this way the fork rods will settle properly.
- Position the vehicle on the centre stand, see p. 56 (POSITIONING THE VEHICLE ON THE STAND).
- Tighten the two screws (8) of the wheel pin clamp (left side).

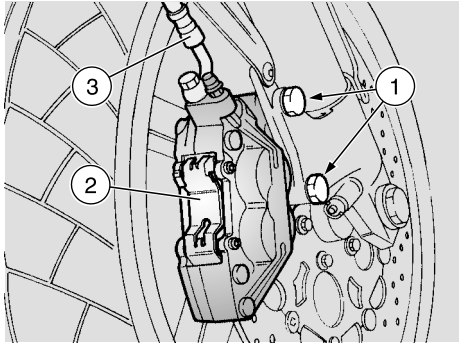
Wheel pin clamp screw driving torque (8): 22 Nm (2.2 kgm).

- Make sure that the following components are not dirty:

– tyre;
– wheel;
– brake discs.

⚠ WARNING

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



FRONT BRAKE CALIPERS

Carefully read p. 58 (MAINTENANCE).

⚠ WARNING

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.

⚠ CAUTION

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

NOTE For the removal of the front brake calipers, it is necessary to prepare the appropriate front support stand OPT.

DISASSEMBLY

◆ Position the vehicle on the appropriate front support stand, see p. 68 (POSITIONING THE VEHICLE ON THE FRONT SUPPORT STAND OPT).

⚠ CAUTION

Make sure that the vehicle is stable.

◆ Manually rotate the wheel, so that the space between two spokes of the rim is in correspondence with the brake caliper.

◆ Have someone keep the handlebar steady in running position, so that the steering is locked.

Brake caliper screw driving torque (1): 50 Nm (5.0 kgm).

◆ ✶ Unscrew and remove the two brake caliper screws (1).

⚠ CAUTION

Never pull the brake lever after removing the caliper, otherwise the 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.

◆ ✶ Withdraw the brake caliper (2) from the disc, leaving it attached to the pipe (3).

Work on the second brake caliper:

◆ Repeat the operations marked with ✶.

REASSEMBLY

⚠ CAUTION

Proceed with care, in order not to damage the brake pads.

◆ ✕ Insert the brake caliper (2) on the disc and position it so that its fastening holes and the holes on the support are aligned.

⚠ WARNING

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

◆ ✕ Screw and tighten the two screws (1) that fasten the brake caliper.

Brake caliper screw driving torque (1): 50 Nm (5.0 kgm).

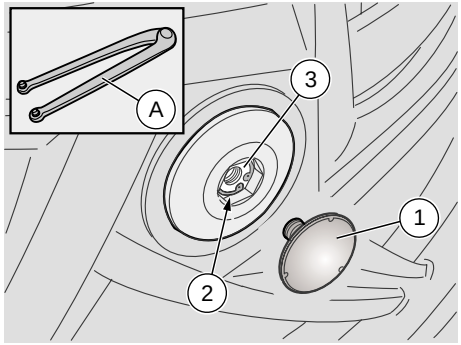
Work on the second brake caliper:

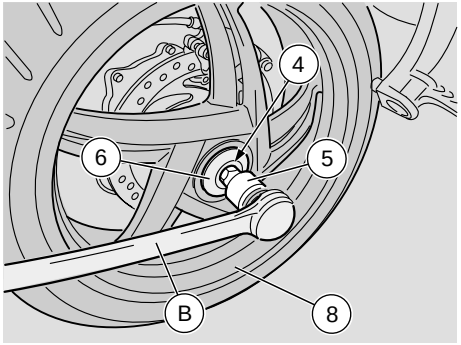
◆ Repeat the operations marked with ✕.

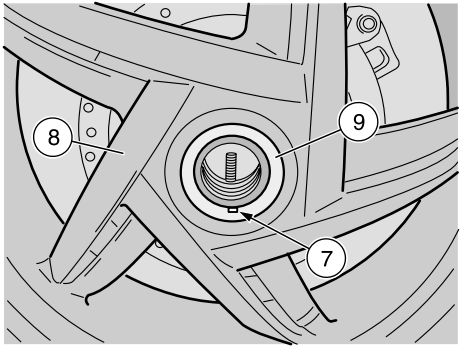
◆ Remove the front support stand OPT, see p. 68 (POSITIONING THE VEHICLE ON THE FRONT SUPPORT STAND OPT).

⚠ CAUTION

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







REAR WHEEL

⚠ CAUTION

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

If necessary, contact your aprilia Official Dealer.

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

Carefully read p. 58 (MAINTENANCE).

⚠ WARNING

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

⚠ WARNING

Riding with damaged rims may be dangerous for the rider, other persons and the vehicle.
Check the conditions of the wheel rim and change it if it is damaged.

NOTE For the removal of the rear wheel it is necessary to have a caliper spanner (A) and an appropriate dynamometric spanner (B).

DISASSEMBLY

- Position the vehicle on the centre stand, see p. 56 (POSITIONING THE VEHICLE ON THE STAND).
- With the caliper spanner, unscrew and remove the cover (1).
- Remove the seeger (2).
- Withdraw the locking nut (3).
- Engage the first gear, to prevent the wheel from turning.
- Insert the bushing (5) provided in the tool kit into the screw hole (4).
- Insert the dynamometric spanner into the hexagonal seat of the bushing (5).

Wheel fastening screw driving torque: 170 Nm (17.0 kgm).

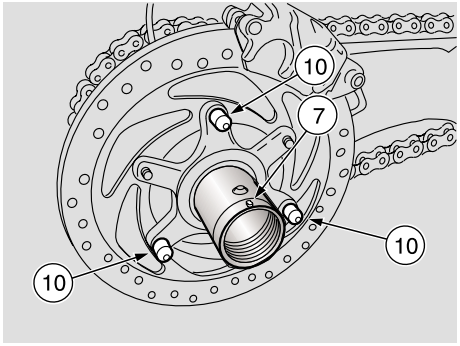
- Unscrew and remove the wheel fastening screw (6).

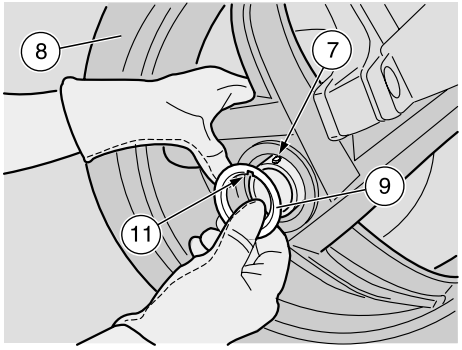
⚠ WARNING

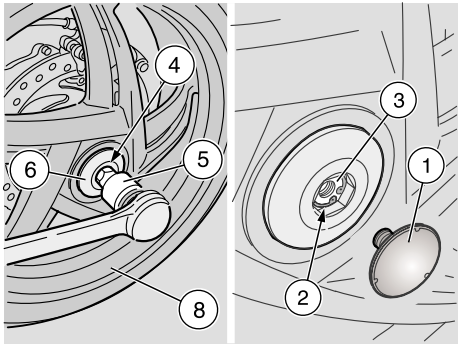
The propeller shaft is provided with a tang (7).
Prevent the tang (7) from coming off its seat during the removal of the wheel.

In this case:

- Position the shifting lever in neutral.
- Turn the wheel in such a way as to position the tang (7) in the lower part.
- Remove the wheel (8) completely and take the centering bush (9).







REASSEMBLY

⚠ WARNING

Before proceeding with the reassembly, make sure that the tang (7) is present and correctly positioned. If it has come off its seat, position it correctly. Do not forget to put it back.

- Rotate the propeller shaft in such a way as to position the tang (7) in the upper part.
- Position the wheel (8) on the propeller shaft, making sure that the three driving pins (10) are correctly inserted in the appropriate seats in the wheel.
- Engage the first gear, to prevent the wheel from turning.
- Make sure that the tang (7) is positioned in the appropriate seat in the propeller shaft.
- Correctly position the centering bush (9), fitting the tang (7) in the slot (11).
- Spread a film of lubricating grease on the thread of the wheel fastening screw (6).
- Manually screw the wheel fastening screw (6).
- Insert the bushing (5) into the screw hole (4).
- Insert the dynamometric spanner into the hexagonal seat of the bushing (5).

⚠ WARNING

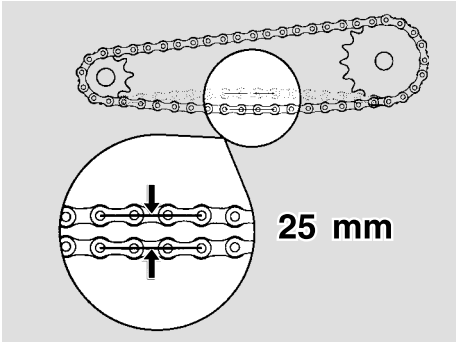
Make sure that the wheel fastening screw (6) is tightened with the prescribed driving torque.

Wheel fastening screw driving torque: 170 Nm (17.0 kgm)

- Tighten the wheel fastening screw (6).
- Insert the locking nut (3) in the screw hole (4), trying to find the correct position for the complete insertion of the nut itself.
- Correctly position the snap ring (2).
- Screw the plug (1).

⚠ CAUTION

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.



DRIVE CHAIN

Carefully read p. 58 (MAINTENANCE).

The vehicle is equipped with an endless chain, in which a ring link joint is not used.

⚠ CAUTION

An excessive slackening of the chain may cause noise or make the chain rattle, with consequent wear of the shoe and of the chain guide plate.
Periodically check the slack and adjust it if necessary, see p. 74 (ADJUSTMENT).
To change the chain, contact an aprilia Official Dealer, who will ensure you prompt and accurate servicing.

Incorrect maintenance may cause the untimely wear of the chain and/or damages to the pinion and/or the crown.

⚠ CAUTION

Carry out the maintenance operations more frequently if you use the vehicle in difficult conditions or on dusty and/or muddy roads.

CHECKING THE SLACK

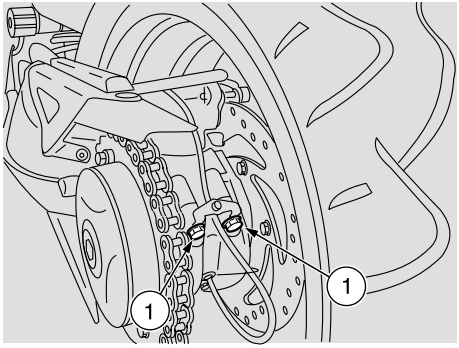
To check the slack, proceed as follows:

- Stop the engine, see p. 55 (STOPPING).
- Position the vehicle on the centre stand, see p. 56 (POSITIONING THE VEHICLE ON THE STAND).
- Position the shifting lever in neutral.
- Make sure that the vertical oscillation, in an intermediate point between pinion and crown in the lower part of the chain, is about **25 mm**.
- Move the vehicle forwards, or turn the wheel, in order to be able to check the vertical oscillation of the chain even when the wheel turns; the slack must be constant in all the rotation phases of the wheel.

⚠ CAUTION

If in some positions the slack is higher than in others, this means that there are crushed or seized links; in this case, contact an aprilia Official Dealer. To prevent the risk of seizures, lubricate the chain frequently, see p. 75 (CLEANING AND LUBRICATION).

If the slack is uniform, but higher or lower than **25 mm**, adjust it, see p. 74 (ADJUSTMENT).



ADJUSTMENT

If after the check it is necessary to adjust the chain tension, slacken the chain to increase the slack, tighten the chain to decrease it.

The vehicle is provided with an adjusting device with metal ring, which makes it possible to tighten or slacken the chain.

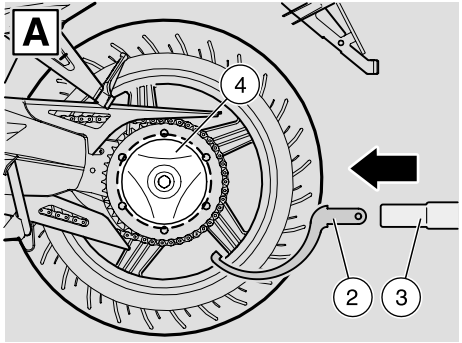
By rotating the metal ring clockwise you tighten the chain; by rotating the metal ring anticlockwise you slacken the chain.

- Position the vehicle on the centre stand, see p. 56 (POSITIONING THE VEHICLE ON THE STAND).

Driving torque of nuts (1): 30 Nm (3.0 kgm).

- Loosen the nuts (1).

NOTE Prepare the pin spanner (2) and its extension (3) provided in the tool kit.



To slacken the chain:

◆ Insert the pin spanner (2) as indicated in the figure (A).

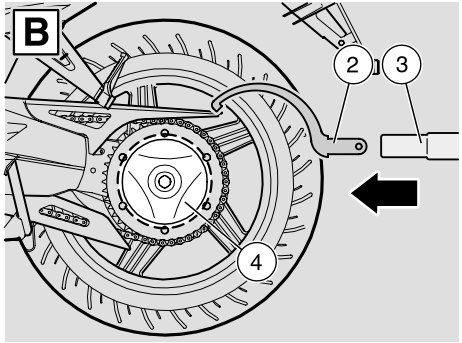
To tighten the chain:

◆ Insert the pin spanner (2) as indicated in the figure (B).

Once the pin spanner (2) has been correctly inserted:

◆ Couple the pin spanner (2) to the metal ring (4).
◆ Insert the extension (3) in the pin spanner.
◆ Use the pin spanner (2) to adjust the chain slack.
◆ Check the chain slack, see p. 74 (DRIVE CHAIN).
◆ Tighten the two nuts (1).

Driving torque of nuts (1): 30 Nm (3.0 kgm).



CHECKING THE DRIVING CHAIN, PINION AND SPROCKET WEAR

Further, check the chain and sprockets and make sure that they do not present:

– damaged rollers;
– loose pins;
– dry, rusty, crushed or seized links;
– excessive wear;
– lacking O rings;
– sprocket or teeth excessively worn or damaged.

⚠ CAUTION

If the chain rollers are damaged, the pins are loose and/or the O rings are damaged or lacking, it is necessary to change the whole chain unit (both sprockets and chain).

⚠ CAUTION

Lubricate the chain frequently, especially if there are dry or rusty parts.

The crushed or seized links must be lubricated and made work again.
If this is not possible, contact an aprilia Official Dealer, who will provide for changing the chain.

◆ Finally, check the wear of the rear fork protection shoe.

CLEANING AND LUBRICATION

⚠ CAUTION

The drive chain is provided with O rings among the links, in order to keep the grease inside them.
Carry out the adjustment, lubrication, cleaning and change of the chain with great care.

Never wash the chain with water jets, steam jets, high-pressure water jets and highly inflammable solvents.

◆ Wash the chain with naphtha or kerosene. If it tends to rust quickly, intensify the maintenance intervals.

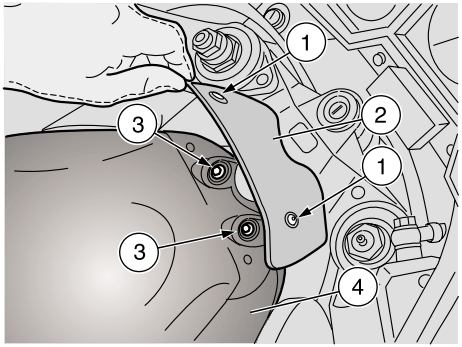
Lubricate the chain every 1000 km (625 mi) or whenever necessary.

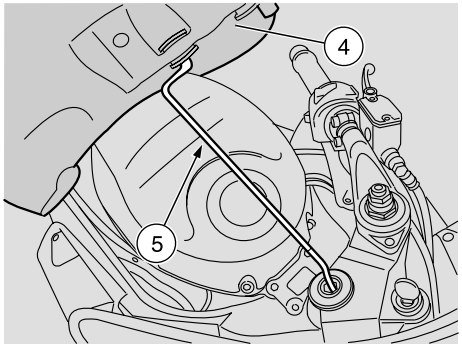
◆ After washing the chain and letting it dry, lubricate it with spray grease for chains provided with sealing rings, see p. 109 (LUBRICANT CHART).

⚠ CAUTION

The lubricants for chains available on the market may contain substances that are dangerous for the rubber sealing rings of the chain.

NOTE Do not use the vehicle soon after lubricating the chain, since due to the centrifugal force the lubricant would be sprayed outwards and dirty the surrounding areas.





LIFTING THE FUEL TANK

Carefully read p. 28 (FUEL) and p. 58 (MAINTENANCE).

⚠ 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 and do not use naked flames.

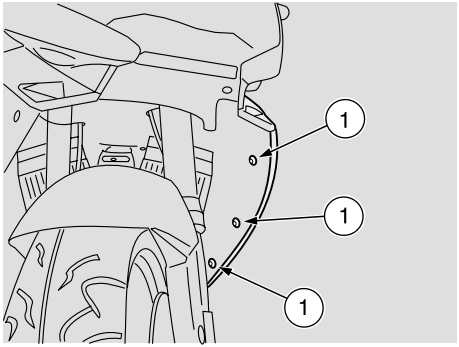
DO NOT DISPOSE OF FUEL IN THE ENVIRONMENT.

- Remove the rider saddle, see p. 26 (UNLOCKING/LOCKING THE SADDLE).
- Unscrew and remove the two screws (1).
- Remove the grille (2).
- Unscrew and remove the two screws (3) that fasten the front part of the fuel tank (4), taking bushes and washers.

NOTE Prepare the support rod (5) provided in the tool kit.

The rubber-covered end of the rod (5) must be introduced in the central hole of the steering pin.

- Lift the front part of the fuel tank (4) and introduce the rod (5) as indicated in the figure.



REMOVE THE LEFT FAIRING

Carefully read p. 58 (MAINTENANCE).

⚠ WARNING

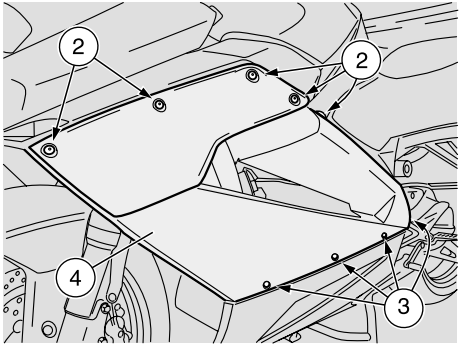
Wait until the engine and the exhaust silencer have completely cooled down.

- Position the vehicle on the centre stand, see p. 56 (POSITIONING THE VEHICLE ON THE STAND).
- Unscrew and remove the three screws (1).
- Unscrew and remove the five upper screws (2).
- Unscrew and remove the four lower screws (3).

⚠ CAUTION

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

- Remove the side fairing (4).



REMOVING THE LEFT LOWER FAIRING

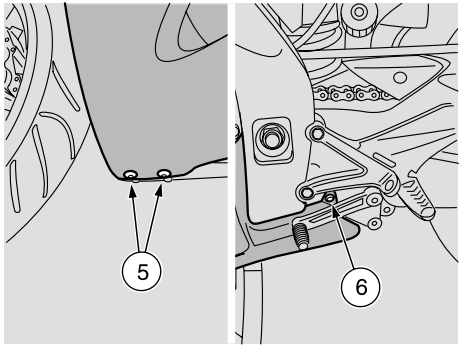
Carefully read p. 58 (MAINTENANCE).

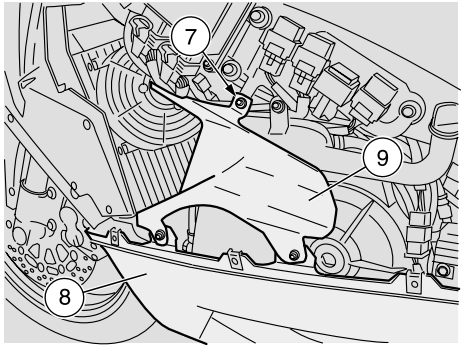
- Remove the left fairing, see p. 77 (REMOVE THE LEFT FAIRING).
- Unscrew and remove the two lower screws (5).
- Unscrew and remove the rear screw (6).
- Unscrew and remove the screw (7).

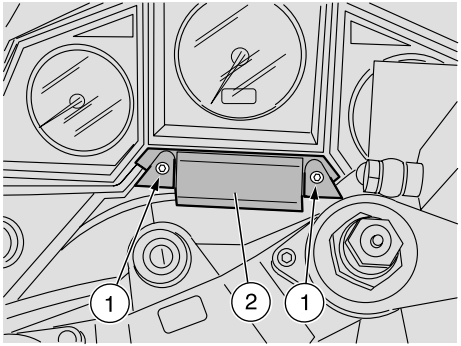
⚠ CAUTION

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

- Remove the left lower fairing (8) complete with the guard (9).







REMOVING THE FUSE BOX COVER

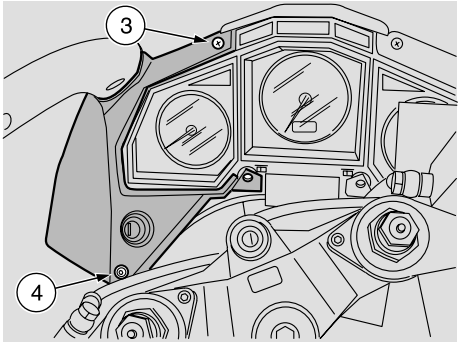
Carefully read p. 58 (MAINTENANCE).

◆ Unscrew and remove the two screws (1).

⚠ CAUTION

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

◆ Remove the fuse box cover (2) and take the bush.



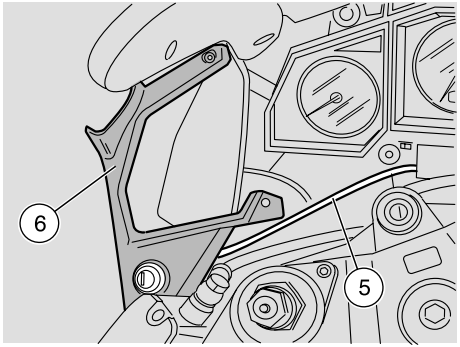
REMOVING THE DASHBOARD PANEL

Carefully read p. 58 (MAINTENANCE).

The dashboard panel is constituted by two units: right part and left part.

NOTE The following information refers to one unit only, but is valid for both.

◆ Remove the fuse box cover, see p. 78 (REMOVING THE FUSE BOX COVER).
◆ Unscrew and remove the screw (3).
◆ Unscrew and remove the screw (4).



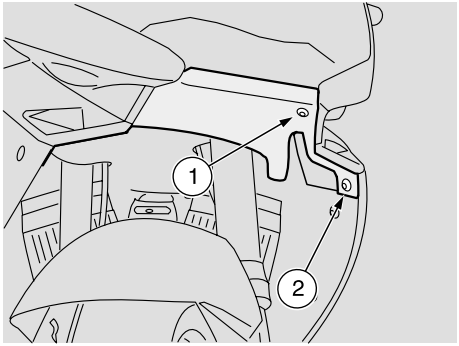
⚠ CAUTION

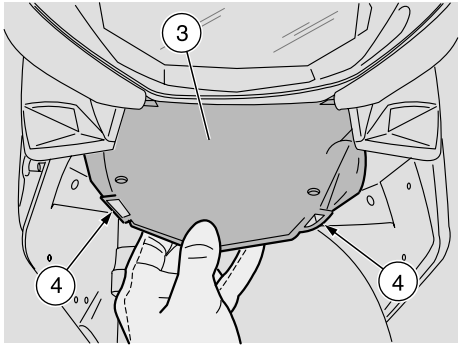
Handle the plastic and painted components with care to avoid scraping or damaging them.

Do not damage the tangs and/or their seats.

NOTE The left dashboard panel remains attached to the saddle lock cable (5). Carry out the partial removal.

◆ Remove the dashboard panel (6).





REMOVING THE LOWER COVER OF THE FRONT PART OF THE FAIRING

Carefully read p. 58 (MAINTENANCE).

- ★Unscrew and remove the screw (1).
- ★Unscrew and remove the screw (2).

⚠ CAUTION

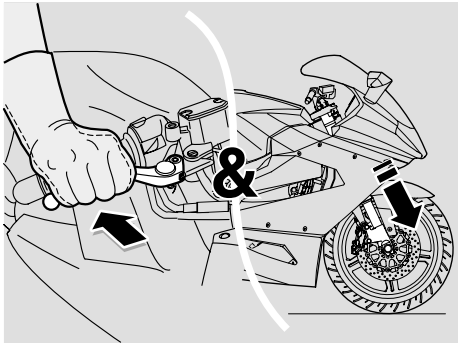
Proceed with care.
Do not damage the tangs and/or their seats.

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

- Remove the lower cover of the front part of the fairing (3).

⚠ CAUTION

Upon reassembly, fit the tangs correctly (4) in the appropriate seats.



INSPECTING THE FRONT AND REAR SUSPENSIONS

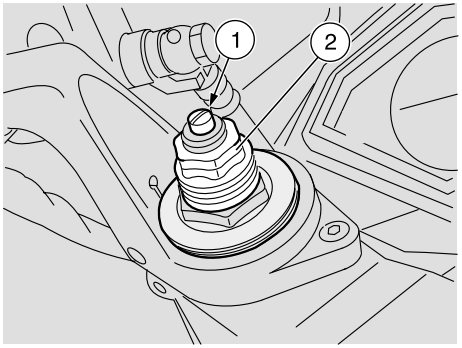
Carefully read p. 58 (MAINTENANCE).

NOTE Have the front fork oil changed by an **aprilia** Official Dealer, who will ensure you prompt and accurate servicing.

Have the front fork oil changed after the first 7500 km (4687 mi) and successively every 22500 km (14000 mi).

Carry out the following checks after the first 1000 km (625 mi) and successively every 15000 km (9375 mi):

- With pulled front brake lever, press the handlebar repeatedly, thrusting the fork downwards. The stroke must be gentle and there must be no trace of oil on the rods.
- Check the fastening of all the components and the functionality of the front and rear suspension joints.



⚠ CAUTION

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

FRONT SUSPENSION

Have the fork oil seals changed by a **aprilia** Official Dealer after the first 30000 km (1875 mi) and successively every 22500 km (14000 mi).
The front suspension consists of an hydraulic fork connected to the steering column by means of two plates.

For the setting of the vehicle attitude, each rod of the fork is provided:

– with an upper screw (1) for the adjustment of the hydraulic braking with extended shock absorber;
– an upper nut (2) for the adjustment of the spring preload.

ADJUSTING THE FRONT FORK

The standard setting of the front fork is adjusted in such a way as to be suitable for most driving conditions, at high and low speed, for the transport of the rider with luggage.
However, it is also possible to adjust the setting according to the intended use of the vehicle.

NOTE Before acting on the adjusters, choose the desired adjustment, following the indications given in the table at p. 81.

TYPES OF ADJUSTMENT

Standard adjustment:
for normal load (for example, rider and luggage).

Medium adjustment:
for heavy load (for example, passenger, rider and luggage).

Rigid adjustment:
for sporty riding.

Soft adjustment:
for less sporty riding (touristic).

⚠ CAUTION

Do not force the rotation of the adjusting screw (1) beyond the end of stroke in both directions, in order to avoid any damage.
Set the same spring preload and hydraulic braking for both rods: a different setting of the rods decreases the stability of the vehicle while riding.

When the spring preload is increased, it

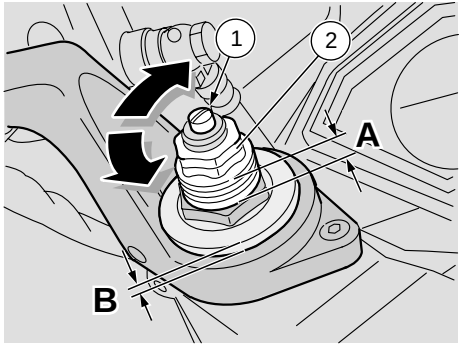
is necessary to increase also the hydraulic braking, in order to avoid sudden jerks while riding.

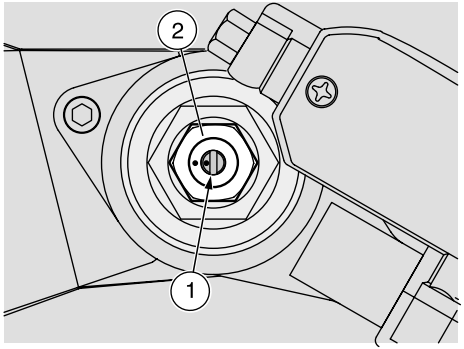
⚠ CAUTION

For the adjustment, always start from the most rigid setting [complete clockwise rotation of the screw (1)]. As a point of reference for the adjustment of the hydraulic braking with extended shock absorber, use the notches obtained on the adjusting screw (1).
Gradually rotate the screw (1) giving 1/8 turn per time.
Test the vehicle repeatedly on the road, until obtaining the optimal adjustment.

⚠ CAUTION

No adjustment of the rod protrusion (B) is planned.
It is forbidden to modify the attitude of the vehicle by modifying this protrusion. In the standard setting the rod protrusion reaches the first notch (B). If you should notice that the rod protrusion is not as prescribed, contact an aprilia Official Dealer



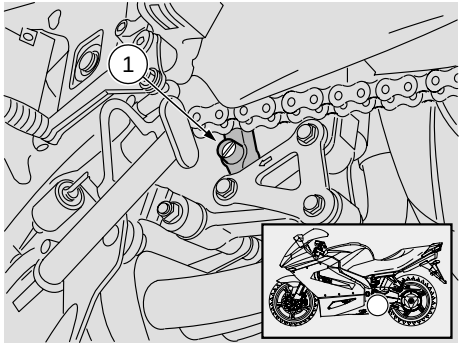


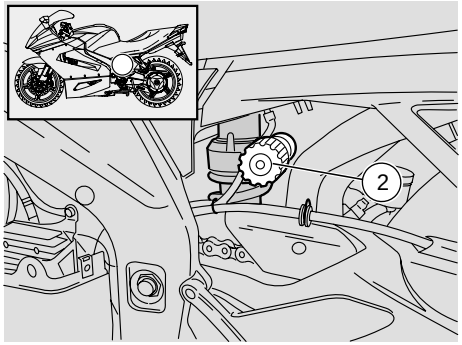
FRONT FORK ADJUSTMENT TABLE

Front suspension	Standard adjustment	Soft adjustment	Rigid adjustment	Medium adjustment
Hydraulic adjustment with extended shock absorber, screw (1)	from completely closed (*) open (**) 1.25 turns	from completely closed (*) open (**) 1.5 turns	from completely closed (*) open (**) 1 turn	from completely closed (*) open (**) 1.25 mm
Spring preload, nut (2) [protrusion reference, notches (A)]	at the 6th notch	at the 7th notch	at the 5th notch	at the 7th notch

(*) = clockwise

(**) = anticlockwise





REAR SUSPENSION

The rear suspension consists of a spring-shock absorber unit, fixed to the frame by means of a uni-ball and to the rear fork by means of lever systems.

For the setting of the vehicle attitude, the shock absorber is provided:

– with a screw adjuster (1) for the adjustment of the hydraulic braking with extended shock absorber;
– a knob adjuster (2) for the adjustment of the spring preload (3).

ADJUSTING THE REAR SHOCK ABSORBER

Check and if necessary adjust the rear shock absorber every 15000 km (9375 mi).

The standard setting of the rear shock absorber is adjusted so that it is suitable for most driving conditions, at high and low speed, for the transport of the rider with luggage.
However, it is also possible to adjust the setting according to the intended use of the vehicle.

⚠ WARNING

Before acting on the adjusters, wait for the engine and the exhaust silencer to cool down completely.

TYPES OF ADJUSTMENT

Standard adjustment:
for normal load (for example, rider and luggage).

Medium adjustment:
for heavy load (for example, passenger, rider and luggage).

Rigid adjustment:
for sporty riding.

Soft adjustment:
for less sporty riding (touristic).

⚠ CAUTION

Adjust the spring preload and the hydraulic braking with extended shock absorber according to the conditions of use of the vehicle.

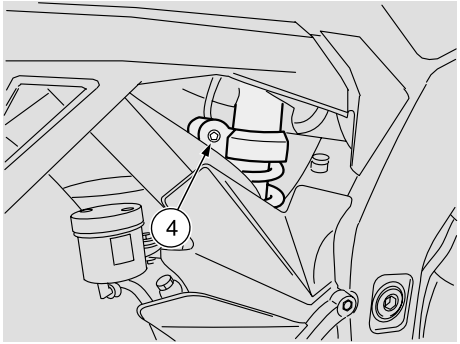
When the spring preload is increased, it is necessary to increase also the hydraulic braking with extended shock absorber, in order to avoid sudden jerks while riding.

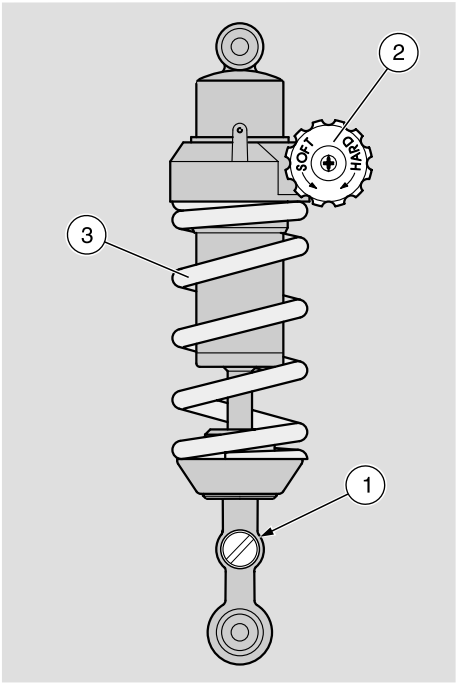
If necessary, contact an aprilia Official Dealer.

Test the vehicle repeatedly on the road, until obtaining the optimal adjustment.

⚠ CAUTION

To avoid affecting the operation of the shock absorber, neither remove the screw (4), nor adjust the underlying membrane, since this may cause nitrogen to flow out, with consequent risk of accidents.



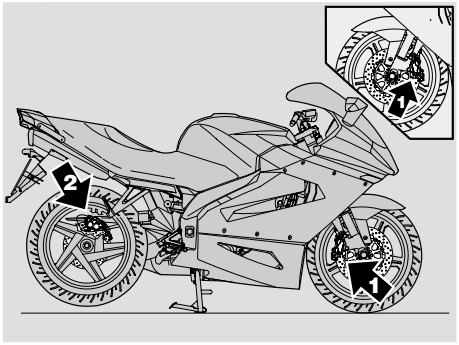


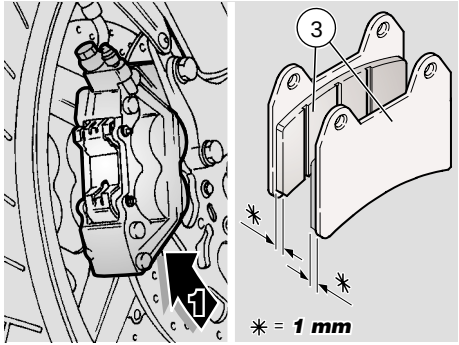
REAR SHOCK ABSORBER ADJUSTMENT TABLE

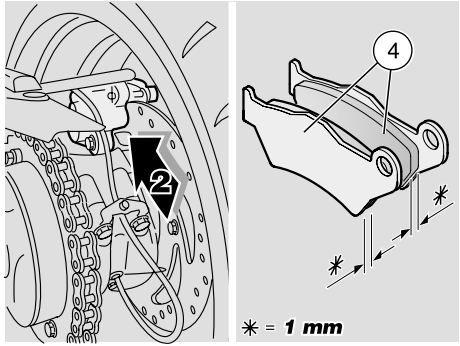
Rear suspension	Standard adjustment	Soft adjustment	Rigid adjustment	Medium adjustment
Hydraulic adjustment with extended shock absorber, screw (1)	from completely closed (*) open (**) 9 clicks	from completely closed (*) open (**) 10 clicks	from completely closed (*) open (**) 8 clicks	from completely closed (*) open (**) 7 clicks
Spring preload, knob (2)	from completely open (**) close (*) 14 clicks	from completely open (**) close (*) 4 clicks	from completely open (**) close (*) 22 clicks	from completely open (**) close (*) 34 clicks

(*) = clockwise

(**) = anticlockwise







CHECKING THE BRAKE PAD WEAR

Carefully read p. 30 (BRAKE FLUID - recommendations), p. 31 (DISC BRAKES) and p. 58 (MAINTENANCE).

NOTE The following information refer to a single braking system, but are valid for both.

Check the brake pad wear after the first 1000 km (625 mi) and successively every 2000 km (1250 mi) and before every trip.

The wear of the disc brake pads depends on the use, on the kind of drive and on the road.

⚠ WARNING

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

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

- Position the vehicle on the centre stand, see p. 56 (POSITIONING THE VEHICLE ON THE STAND).
- Carry out a visual check between the disc and the pads, proceeding:
  - from below, on the front part, for the front brake calipers (1);
  - from above, on the rear part, for the rear brake calipers (2).

⚠ CAUTION

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 front (3) or rear pad (4) only] has reduced to about **1 mm** (or even if only one of the wear indicators is not visible any longer):

- **for the front brake calipers** (right and left), have all pads of both calipers changed.
- **for the rear brake caliper**, have both pads of the caliper changed.

⚠ WARNING

Have the pads changed by your aprilia Official Dealer.

IDLING ADJUSTMENT

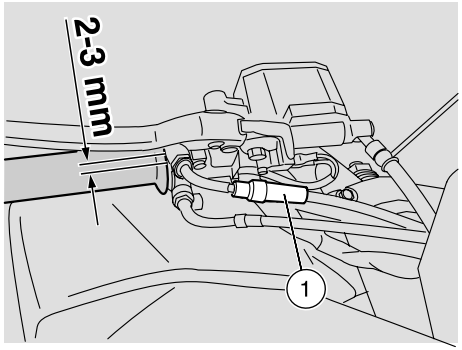
⚠ CAUTION

The idling adjustment operations require specific knowledge, contact an aprilia Official Dealer.

ADJUSTING THE COLD START CONTROL (⍱)

⚠ CAUTION

The operations necessary to adjust the cold start control "⍱" require specific skills and therefore should be carried out by an aprilia Official Dealer.



ADJUSTING THE ACCELERATOR CONTROL

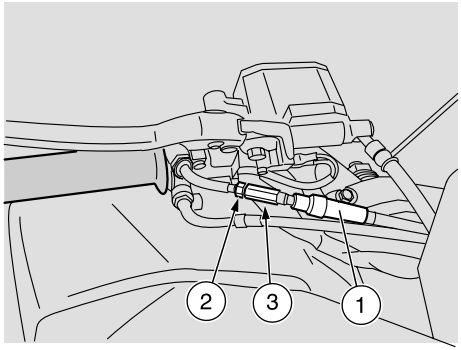
Carefully read p. 58 (MAINTENANCE).

Have the accelerator control cables checked by an **aprilia** Official Dealer after the first 1000 km (625 mi) and successively every 7500 km (4687 mi).

The idle stroke of the throttle grip must be **2 – 3 mm**, measured on the edge of the grip itself.

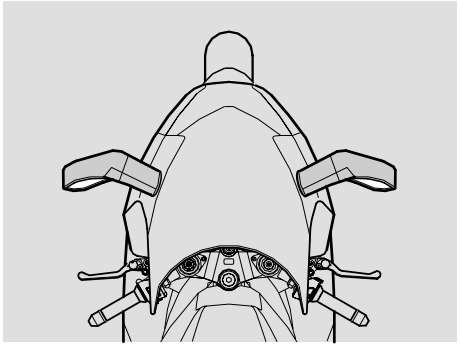
If not, proceed as follows:

- Position the vehicle on the centre stand, see p. 56 (POSITIONING THE VEHICLE ON THE STAND).
- Withdraw the protection element (1).
- Loosen the lock nut (2).
- Rotate the adjuster (3) in such a way as to restore the prescribed value.
- After the adjustment, tighten the lock nut (2) and check the idle stroke again.
- Put back the protection element (1).



⚠ CAUTION

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.



REAR-VIEW MIRRORS

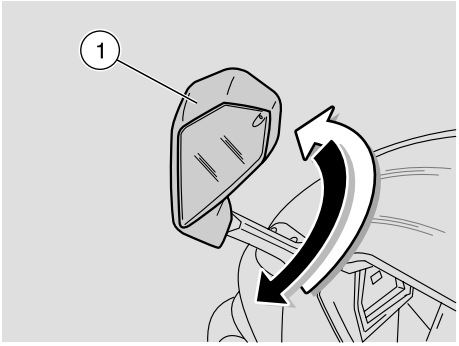
The rear-view mirrors house the front direction indicators.
In order to reduce the overall dimensions of the vehicle, the rear-view mirrors are provided with a joint that allows them to be rotated upwards.

⚠ WARNING

Do not leave with the rear-view mirrors rotated upwards.
Before leaving, always make sure that the rear-view mirrors are not rotated upwards and are correctly adjusted.

⚠ WARNING

For the adjustment of the rear-view mirrors, wear clean gloves or use a clean cloth, in order to avoid dirtying the reflecting surface and reducing visibility.



Rotation of the rear-view mirrors

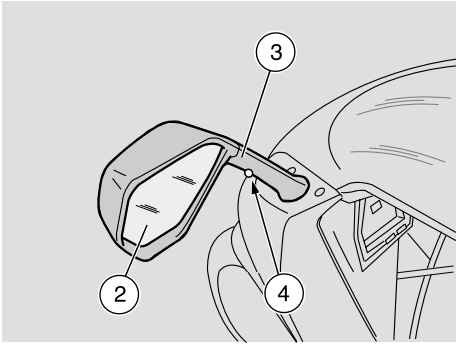
⚠ CAUTION

Handle the components with care.

◆ Rotate the mirror support (1) upwards, until you hear it snap.

⚠ CAUTION

To move the mirror support (1) back to its initial position, rotate it in the opposite direction.
Do not rotate the rear-view mirrors in the wrong directions, otherwise the electric cables of the direction indicators may be damaged.



Adjustment of the rear-view mirrors.

◆ Get on the vehicle in riding position, see p. 44 (GETTING ON AND OFF THE VEHICLE).

⚠ CAUTION

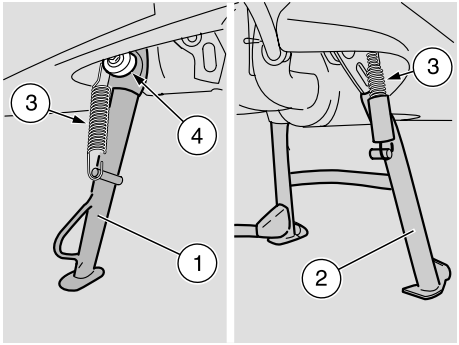
Handle the components with care.

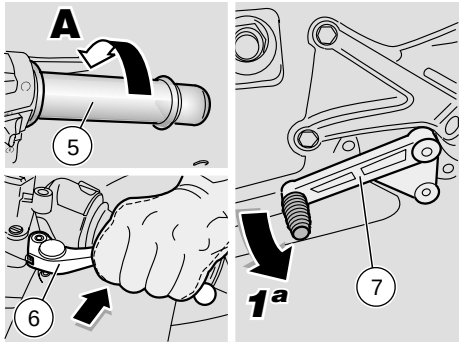
◆ Adjust the inclination of the rear-view mirror (3) correctly, by working on the reflecting surface (2) with your fingers.

Repeat the same operations to adjust the other rear-view mirror.

NOTE The vehicle is provided with an air temperature sensor (4) positioned on the left rear-view mirror.

◆ Make sure that there are no dirt or mud deposits.





CHECKING THE STAND

Carefully read p. 58 (MAINTENANCE) and p. 93 (CHECKING THE SWITCHES).

The vehicle is provided with two stands:
– side stand (1);
– centre stand (2).

The stand has two positions:

– normal or lifted;
– extended.

It is the rider who must provide for extending and lifting the stand.

The stand must rotate without hindrances.

The springs (3) provide for keeping the stand in the desired position (extended or lifted).

CENTRE STAND

- Position the vehicle on the side stand, see p. 56 (POSITIONING THE VEHICLE ON THE STAND).
- The springs (3) must not be damaged, worn, rusty or weakened.
- Make sure that when lifted the stand presents no slacks.
- Move the stand and release it, making sure that the springs lift it completely.
- The side stand must rotate freely, if necessary grease the joint, see p. 109 (LUBRICANT CHART).

SIDE STAND

- Position the vehicle on the centre stand, see p. 56 (POSITIONING THE VEHICLE ON THE STAND).
- The springs (3) must not be damaged, worn, rusty or weakened.
- Make sure that the stand presents no slack in either position (extended and lifted).
- Lower the stand, making sure that the springs provide for extending it completely.
- Move the stand to let it lifted and release it halfway to make sure that the springs provide for lifting it completely.
- The side stand must rotate freely, if necessary grease the joint, see p. 109 (LUBRICANT CHART).

The side stand (1) is provided with a safety switch (4) that has the function to prevent or interrupt the operation of the engine with the gears on and the side stand (1) lowered.

To check the proper functioning of the safety switch (4), proceed as follows:

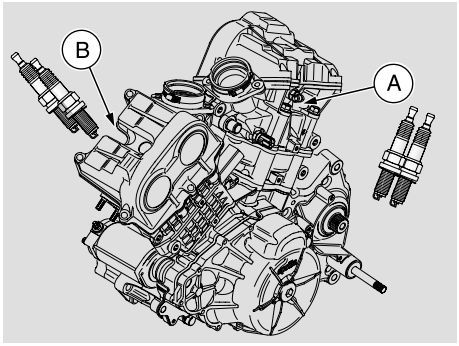
- Start the engine, see p. 48 (STARTING).
- With released throttle grip (5) (**Pos.A**) and engine idling, pull the clutch lever (6) completely.
- Engage the first gear, by pushing the gear lever (7) downwards.
- Lower the side stand (1), thus operating the safety switch (4).

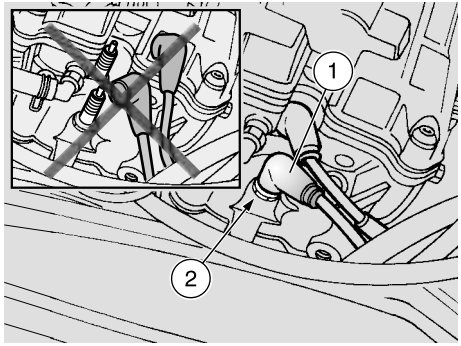
At this point:

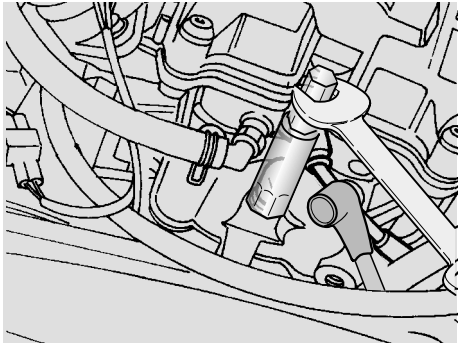
– the engine must stop;
– the side stand down warning light LED "" must come on.

⚠ CAUTION

If the engine does not stop, contact an aprilia Official Dealer.







SPARK PLUGS

Carefully read p. 58 (MAINTENANCE).

⚠ CAUTION

Check, clean or change all the spark plugs, one by one.

Check the spark plugs every 7500 km (4687 mi), change them every 15000 km (9375 mi).

In case of use on racetracks, change the spark plugs every 3750 km (2343 mi).

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

⚠ CAUTION

Even if only one spark plug needs changing, always replace all of them.

To reach the spark plugs:

⚠ WARNING

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

- Lift the fuel tank, see p. 76 (LIFTING THE FUEL TANK)

NOTE The vehicle is equipped with two spark plugs per cylinder (A) and (B).

The following operations refer to the two spark plugs of one cylinder, but are valid for both cylinders.

⚠ CAUTION

Carry out all the operations indicated on the first spark plug and then repeat them on the second spark plug of the same cylinder.

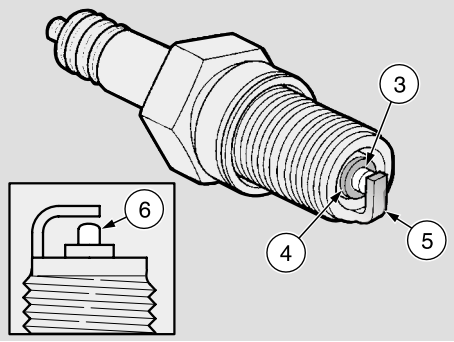
For the removal, proceed as follows:

⚠ CAUTION

Do not invert the position of the two spark plug caps.

Do not remove the two spark plug caps at the same time.

- Remove the cap (1) of the spark plug (2).
- Remove any trace of dirt from the spark plug base.
- Introduce the special spanner provided in the tool kit on the spark plug.
- Insert the 13 mm fork spanner provided in the tool kit in the hexagonal seat of the spark plug spanner.
- Unscrew the spark plug and extract it from its seat, taking care to prevent dust or other substances from getting inside the cylinder.



For the check and cleaning:

⚠ CAUTION

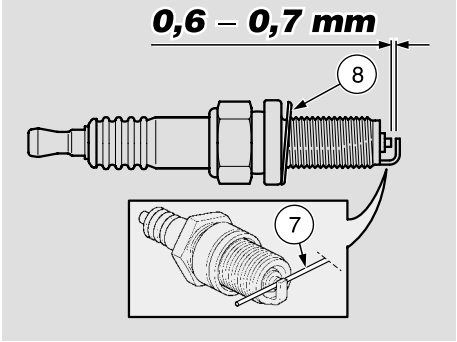
This vehicle is fitted with spark plugs featuring platinum-type electrodes.
To clean the spark plugs, do not use wire brushes and/or abrasive products, but only a pressurized air jet.

Key:

– centre electrode (3);
– insulating (4);
– side electrode (5).

◆ Make sure that there are neither carbon deposits, nor corrosion marks on the electrodes and on the insulating material; if necessary, clean them with a pressurized air jet.

If the spark plug has crackings on the insulating material, corroded electrodes, excessive deposits or the tip (6) of the central electrode (3) is rounded, it must be changed.



⚠ CAUTION

When changing the spark plug, check the thread pitch and length.

If the threaded part is too short, the carbon deposits will accumulate on the thread seat, and therefore the engine may be damaged during the installation of the right spark plug.

Use the recommended type of spark plugs only, see p. 105 (TECHNICAL DATA), in order not to compromise the life and performance of the engine.

To check the spark plug gap, use a wire thickness gauge (7) to avoid damaging the platinum covering.

◆ Check the spark plug gap with a wire thickness gauge (7).

⚠ CAUTION

Do not try to recover the spark plug gap in any way.

The gap must be **0.6 – 0.7 mm**, otherwise it is necessary to change the spark plug.

◆ Make sure that the washer (8) is in good conditions.

For the installation:

◆ With the washer on (8), 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 (2.0 kgm).

⚠ CAUTION

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

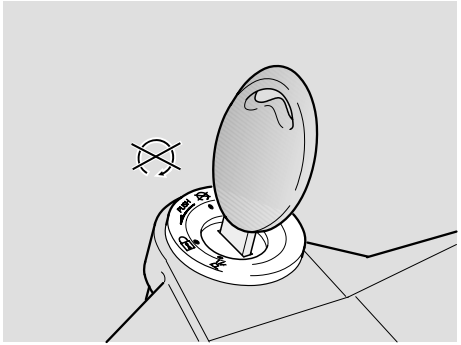
⚠ CAUTION

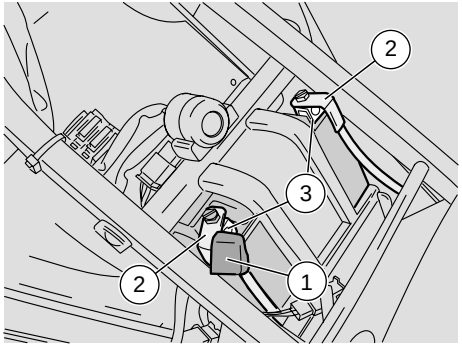
Make sure that the cap (1) is correctly connected to the spark plug (2). Due to the vibrations of the engine, the incorrect position would cause the disconnection of the spark plug cap, with serious damage to the engine.

◆ Correctly insert the cap (1) in the spark plug (2), until you hear the click.

NOTE Repeat the operations described on the second spark plug of the same cylinder and successively on both spark plugs of the other cylinder.

◆ Put back the fuel tank, see p. 76 (LIFTING THE FUEL TANK).





BATTERY

Carefully read p. 58 (MAINTENANCE).

⚠ WARNING

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

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.

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

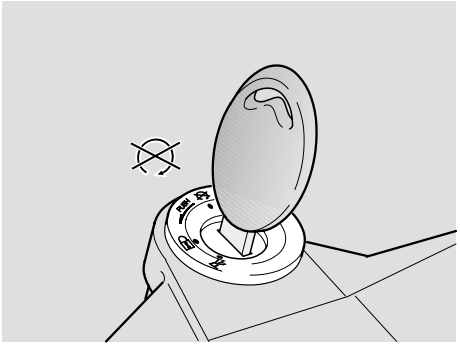
CHECKING AND CLEANING THE TERMINALS

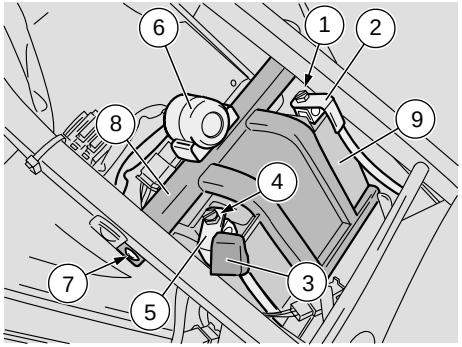
Carefully read p. 90 (BATTERY).

- Make sure that the ignition switch is in position "⊠".
- Remove the rider saddle, see p. 26 (UNLOCKING/LOCKING THE SADDLE).
- Remove the red protection element (1).
- Make sure that the cable terminals (2) and the battery terminals (3) are:
  - in good conditions (and not corroded or covered with deposits);
  - covered with neutral grease or vaseline.

If necessary, proceed as follows:

- Disconnect first the negative (**–**) and then the positive cable (**+**).
- Brush with a wire brush to eliminate any sign of corrosion.
- Reconnect first the positive (**+**) and then the negative cable (**–**).
- Cover the terminals of the cables and of the battery with neutral grease or vaseline.
- Put back the saddle, see p. 26 (UNLOCKING/LOCKING THE SADDLE).





REMOVING THE BATTERY

Carefully read p. 90 (BATTERY).

⚠ CAUTION

With the removal of the battery the digital clock and the partial kilometre odometer are set to zero. To set the clock again, see p. 20 (SETTING BUTTONS).

- Make sure that the ignition switch is in position "⊠".
- Remove the rider saddle, see p. 26 (UNLOCKING/LOCKING THE SADDLE).
- Unscrew and remove the screw (1) on the negative terminal (**–**).
- Move the negative cable (2) sidewards.
- Remove the red protection element (3).
- Unscrew and remove the screw (4) on the positive terminal (**+**).
- Move the positive cable (5) sidewards.

⚠ CAUTION

Do not force the electric cables.

- Remove the start relay (6).
- ★Unscrew and remove the screw (7).
- Lift the bracket (8) that locks the battery.
- Grasp the battery (9) firmly and remove it from its compartment by lifting it.

⚠ WARNING

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

- Position the battery on a flat surface, in a cool and dry place.

⚠ WARNING

Upon reassembly, connect first the positive cable (+) and then the negative cable (–).

- Put back the saddle, see p. 26 (UNLOCKING/LOCKING THE SADDLE).

CHECKING THE ELECTROLYTE LEVEL

Carefully read p. 90 (BATTERY).

The vehicle is equipped with a maintenance-free battery, which does not require any check of the electrolyte level.

RECHARGING THE BATTERY

Carefully read p. 90 (BATTERY).

⚠ CAUTION

Do not remove the battery plugs: without plugs the battery may be damaged.

- Remove the battery, see p. 91 (REMOVING THE BATTERY).
- Prepare an appropriate battery charger.
- Set the charger for the desired type of recharge (see table).
- Connect the battery with a battery charger.

⚠ WARNING

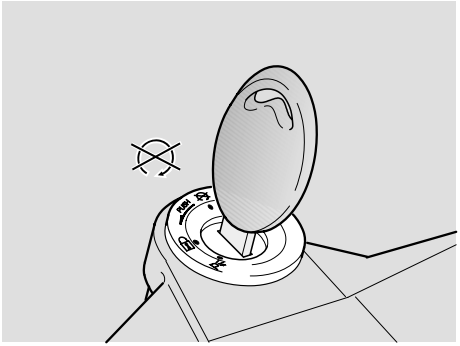
During the recharging or the use, make sure that the room is properly ventilated and avoid inhaling the gases released during the recharging.

- Switch on the battery charger.

Recharge	Voltage (Amperes)	Time (hours)
Normal	1.2	8 - 10
Quick	12	0.5

⚠ WARNING

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



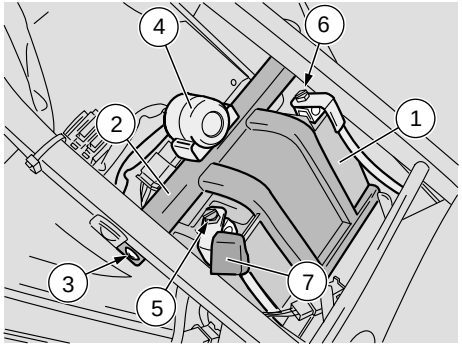
INSTALLING THE BATTERY

Carefully read p. 90 (BATTERY).

- Make sure that the ignition switch is in position "⚿".
- Remove the rider saddle, see p. 26 (UNLOCKING/LOCKING THE SADDLE).

NOTE The battery (1) must be positioned in its compartment with the terminals directed towards the rear part of the vehicle.

- Put the battery (1) in its compartment.
- Put back the bracket (2) that locks the battery.
- ★Screw and tighten the screw (3).
- Put back the start relay (4) in the correct position.



⚠ WARNING

Upon reassembly, connect first the positive cable (+) and then the negative cable (–).

- Connect the positive terminal (**+**) by means of the screw (5).
- Connect the negative terminal (**–**) by means of the screw (6).
- Put back the red protection element (7).
- Put back the saddle, see p. 26 (UNLOCKING/LOCKING THE SADDLE).

LONG INACTIVITY OF THE BATTERY

⚠ CAUTION

If the vehicle remains unused for more than twenty days, disconnect the 30A fuses, in order to avoid the deterioration of the battery caused by the current consumption due to the multifunction computer.

NOTE With the removal of the 30A fuses the functions of the digital clock are set to zero. To reset these functions, see p. 20 (SETTING BUTTONS).

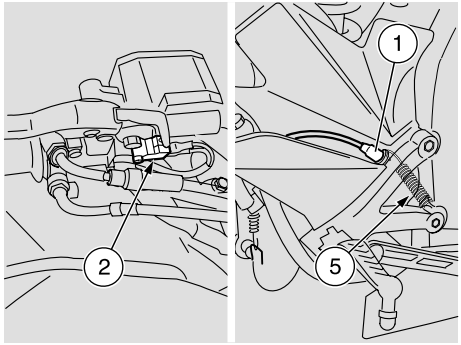
If the vehicle remains unused for more than fifteen days, it is necessary to recharge the battery, in order to prevent its sulphation, see p. 92 (RECHARGING THE BATTERY).

- Remove the battery, see p. 91 (REMOVING THE BATTERY) and put it in a cool and dry place.

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. 92 (RECHARGING THE BATTERY).

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

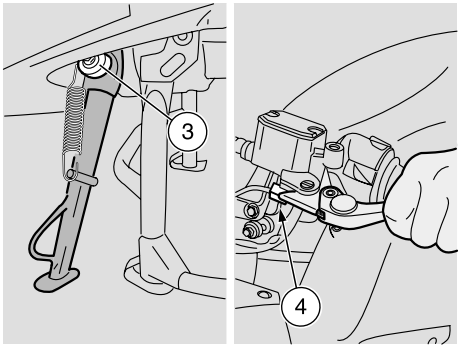


CHECKING THE SWITCHES

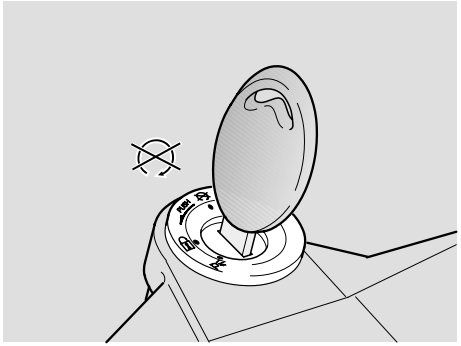
Carefully read p. 58 (MAINTENANCE).

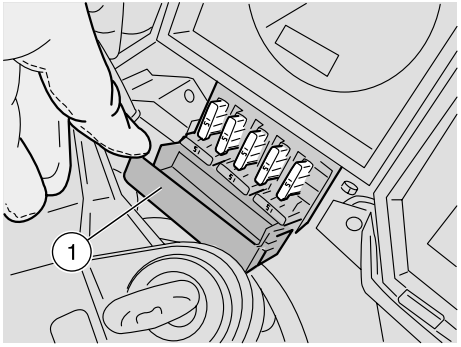
The vehicle is provided with four switches:

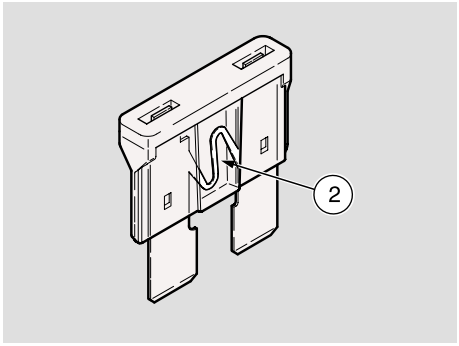
1) Stoplight switch on the rear brake control lever;
2) Stoplight switch on the front brake control lever;
3) Safety switch on the side stand;
4) Switch on the clutch control lever.



- 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.
- Check the spring (5): it must not be damaged, worn or weakened.







CHANGING THE FUSES

Carefully read p. 58 (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 fuses.
Check first the 15A secondary fuses and then the 30A primary fuses.

For the check, proceed as follows:

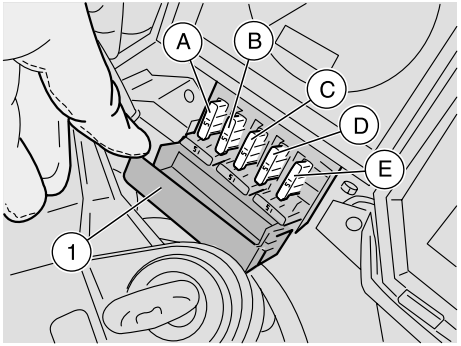
- Turn the ignition switch to position "⚿", to avoid any accidental short circuit.
- Remove the fuse box cover, see p. 78 (REMOVING THE FUSE BOX COVER).
- Open the cover of the box (1) containing the secondary fuses.
- Extract the fuses one by one and check if the filament (2) is broken.
- Before replacing a fuse, try to find out the cause of the trouble, if possible.
- Replace the damaged fuse with a new one having the same amperage.

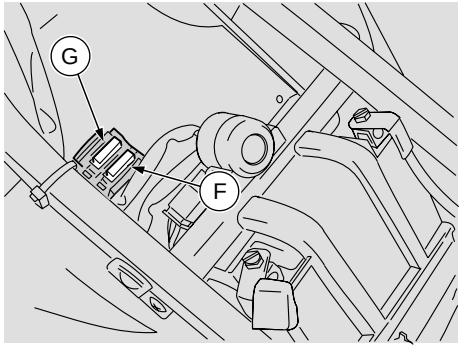
NOTE If you use one of the spare fuses, put a new fuse in the proper seat.

- Remove the rider saddle, see p. 26 (UNLOCKING/LOCKING THE SADDLE).
- Carry out the operations previously described for the secondary fuses also for the main fuses.

NOTE The removal of the 30A fuses requires the setting to zero of the following functions: digital clock.

To reset these functions, see p. 20 (SETTING BUTTONS).





ARRANGEMENT OF THE 15A SECONDARY FUSES

A) From voltage regulator to: headlight, dashboard.

B) From voltage regulator to: fuel pump.

C) From ignition switch to: parking lights, rear stoplights, horn, direction indicators.

D) From ignition switch to: start, safety logic.

E) From voltage regulator to: free

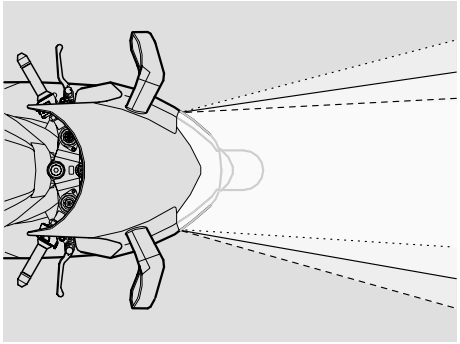
NOTE Three fuses are spare fuses.

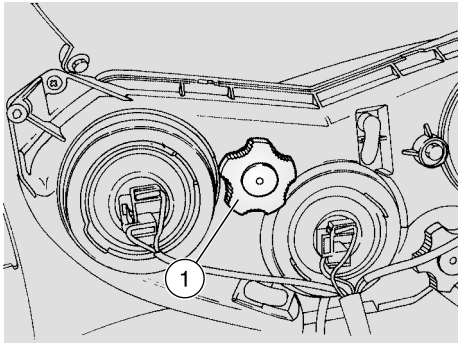
ARRANGEMENT OF THE 30A MAIN FUSES

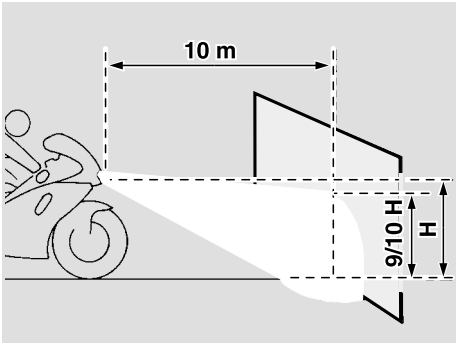
F) From battery to: voltage regulator, fuse A, fuse B, fuse C.

G) From battery to: ignition switch, fuse C, fuse D.

NOTE One fuse is a spare fuse.







HORIZONTAL ADJUSTMENT OF THE 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 adjust the headlight beam:

- Remove the left dashboard panel, see p. 78 (REMOVING THE DASHBOARD PANEL).
- Get on the vehicle in riding position, see p. 44 (GETTING ON AND OFF THE VEHICLE).
- Working on the rear left side of the front part of the fairing, adjust the appropriate knob (1).

  BY TURNING IT CLOCKWISE, you turn the beam to the left.

  BY TURNING IT ANTICLOCKWISE, you turn the beam to the right.

After the adjustment:

⚠ WARNING

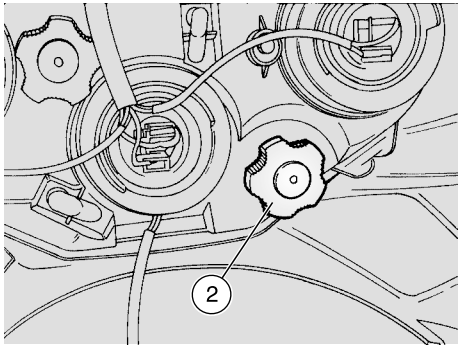
Make sure that the vertical adjustment of the headlight beam is correct.

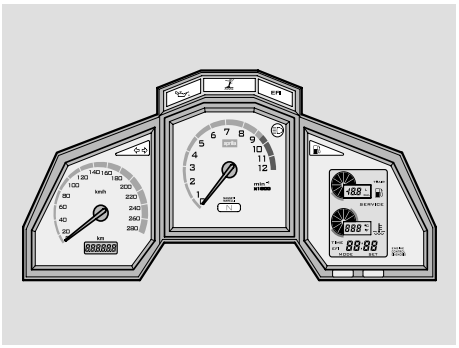
ADJUSTING THE VERTICAL HEADLIGHT BEAM

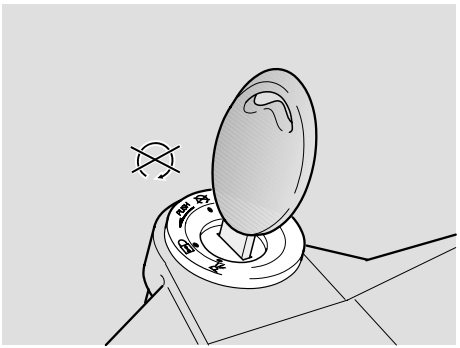
NOTE To check the direction of the headlight beam, specific procedures must be adopted, in accordance with the regulations in force in the country where the vehicle is used.

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:

- Remove the right dashboard panel, see p. 78 (REMOVING THE DASHBOARD PANEL).
- Get on the vehicle in riding position, see p. 44 (GETTING ON AND OFF THE VEHICLE).
- Working on the rear right side of the front part of the fairing, adjust the appropriate knob (2).

  BY TURNING IT CLOCKWISE, you set the beam downwards.

  BY TURNING IT ANTICLOCKWISE, you set the beam upwards.

After the adjustment:

⚠ WARNING

Make sure that the vertical adjustment of the headlight beam is correct.

DASHBOARD LIGHTING

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

BULBS

Carefully read p. 58 (MAINTENANCE).

⚠ WARNING

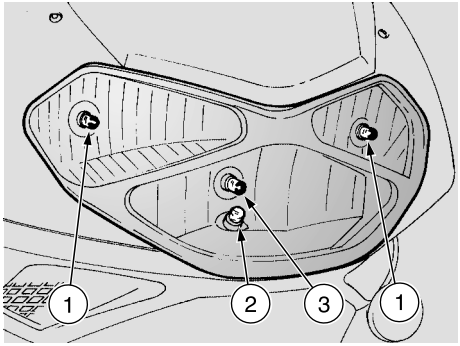
Risk of fire.
Keep fuel and other flammable substances away from the electrical components.

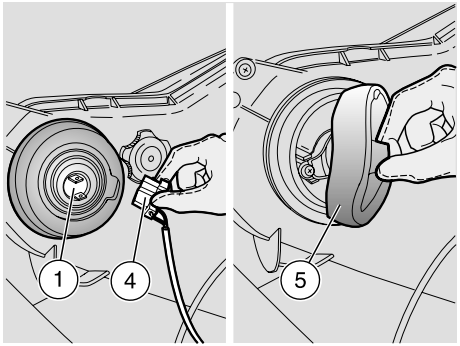
⚠ CAUTION

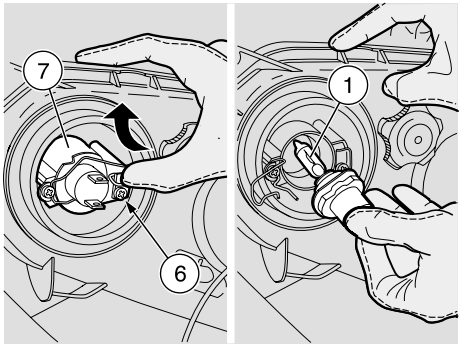
Before changing a bulb, move the ignition switch to position "⊠" and wait a few minutes, so that the bulb cools down.
Change the bulb wearing clean gloves or using a clean and dry cloth.
Do not leave fingerprints on the bulb, since these may cause its overheating and consequent breakage.
If you touch the bulb with bare hands, remove any fingerprint with alcohol, in order to avoid any damage.

DO NOT FORCE THE ELECTRIC CABLES.

NOTE Before changing a bulb, check the fuses, see p. 94 (CHANGING THE FUSES).







CHANGING THE HEADLIGHT BULBS

Carefully read p. 97 (BULBS).

The headlight contains:

– two high beam bulbs (1) (side);
– one parking light bulb (2) (lower).
– one low beam bulb (3) (lower).

The high beam and the low beam bulbs are equal to each other.
If either of them is damaged and no spare bulb is available, it is possible to invert them.
This operation is intended only to make it easier for the rider to go back home or to reach a shop where he can by a new bulb, but the replacement of the damaged bulb remains indispensable.

To change, proceed as follows:

NOTE To change the low beam and high beam bulbs it is necessary to remove the right and left dashboard panels.
To remove the parking light it is necessary to remove the lower cover.

HIGH BEAM BULBS

NOTE Proceed on the side of the bulb to be changed.

NOTE Extract the connectors one by one, in such a way as to avoid positioning them wrongly upon reassembly.

If it is necessary to remove all the connectors at the same time, mark them and make sure that you position them correctly upon reassembly.

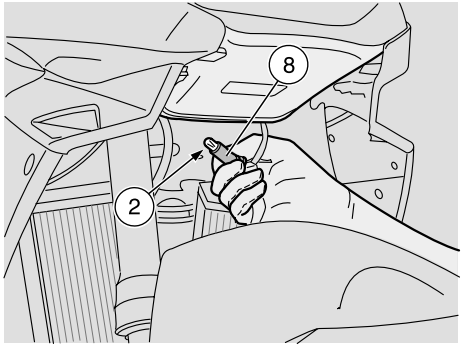
◆ Remove the dashboard panel, see p. 78 (REMOVING THE DASHBOARD PANEL).

⚠ CAUTION

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

◆ Grasp the electric connector of the bulb to be replaced (4), pull it and disconnect it from the bulb (1).
◆ Move the protection element (5) with your hands.
◆ Release the check spring (6) positioned at the rear of the bulb socket (7).
◆ Extract the bulb (1) from its seat and replace it with a new one of the same type.

NOTE Insert the bulb in the bulb socket, making the relevant positioning seats coincide.



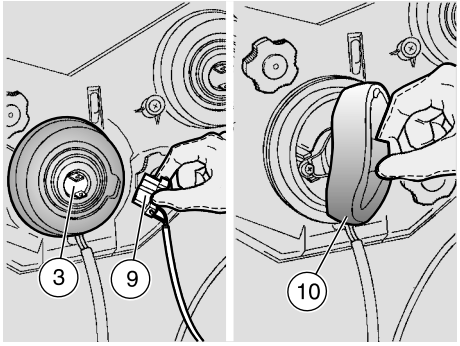
PARKING LIGHT BULB

◆ Remove the lower cover of the front part of the fairing, see p. 79 (REMOVING THE LOWER COVER OF THE FRONT PART OF THE FAIRING).

⚠ CAUTION

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

◆ Grasp the parking light bulb socket (8), pull it and remove it from its seat.
◆ Withdraw the bulb (2) and replace it with one of the same type.



LOW BEAM BULB

NOTE Extract the connectors one by one, in such a way as to avoid positioning them wrongly upon reassembly.

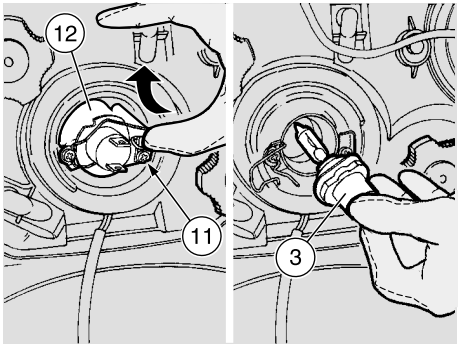
If it is necessary to remove all the connectors at the same time, mark them and make sure that you position them correctly upon reassembly.

◆ Remove the right dashboard panel, see p. 78 (REMOVING THE FUSE BOX COVER).

⚠ CAUTION

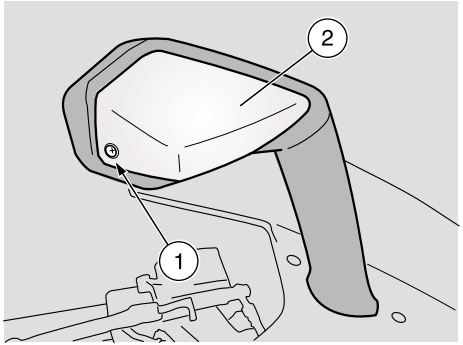
To extract the bulb electric connector, do not pull its electric wires.

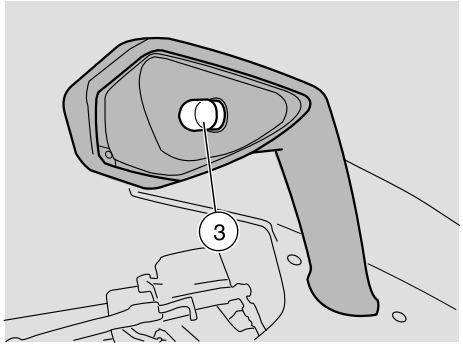
◆ Grasp the bulb electric connector (9), pull it and disconnect it from the bulb (3).
◆ Move the protection element (10) with your hands.

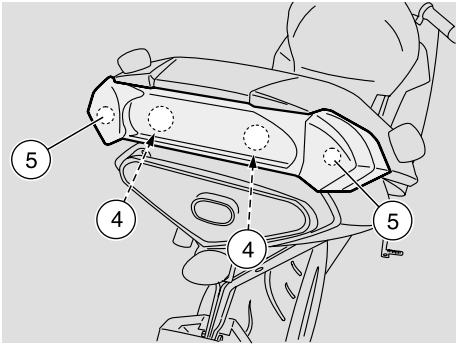


◆ Release the check spring (11) positioned at the rear of the bulb socket (12).
◆ Extract the bulb (3) from its seat and replace it with a new one of the same type.

NOTE Insert the bulb in the bulb socket, making the relevant positioning seats coincide.







CHANGING THE FRONT DIRECTION INDICATOR BULBS

Carefully read p. 97 (BULBS).

- Position the vehicle on the centre stand, see p. 56 (POSITIONING THE VEHICLE ON THE STAND).
- Unscrew and remove the screw (1).

⚠ CAUTION

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

- Remove the protection screen (2).

⚠ CAUTION

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.

⚠ CAUTION

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.

CHANGING THE REAR DIRECTION INDICATOR BULBS

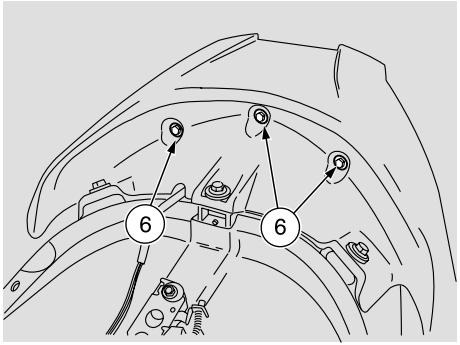
For the removal of the rear direction indicator bulbs, see p. 100 (CHANGING THE REAR LIGHT BULB).

CHANGING THE REAR LIGHT BULB

Carefully read p. 97 (BULBS).

The rear light contains:

– two parking light/stoplight bulb (4).
– two rear direction indicator bulbs (5).



To change, proceed as follows:
Before changing a bulb, check the efficiency of the stoplight switches, see p. 93 (CHECKING THE SWITCHES).

⚠ WARNING

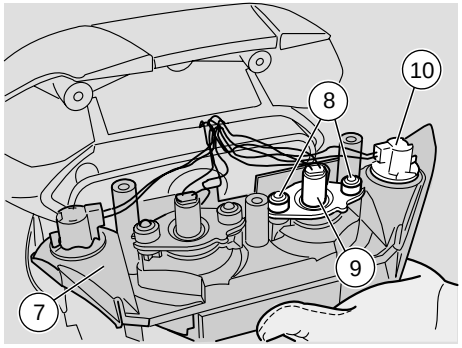
Wait until the exhaust silencer have completely cooled down.

- ◆ Remove the rider saddle, see p. 26 (UNLOCKING/LOCKING THE SADDLE).
- ◆ Unscrew and remove the three screws (6).

⚠ CAUTION

Handle with care. Do not force the electric cables.

- ◆ Partially remove the rear light (7).



⚠ WARNING

Upon reassembly, make sure that the rear light cables are positioned correctly and that there is no contact with the exhaust silencer.

PARKING LIGHT/STOPLIGHT BULB

- ◆ Unscrew and remove the two screws (8).
- ◆ Partially remove the bulb socket (9).
- ◆ Press the bulb (4) slightly and rotate it anticlockwise.
- ◆ Extract the bulb (4) from its seat.

⚠ CAUTION

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.

REAR DIRECTION INDICATOR BULBS

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

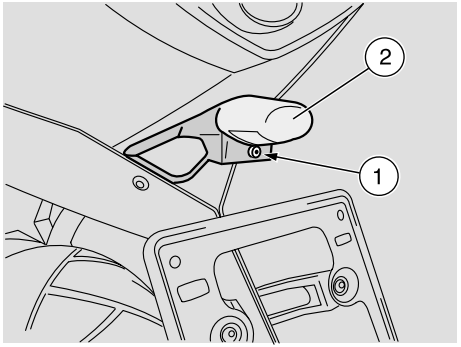
If it is necessary to remove all the bulb socket at the same time, mark them and make sure that you position them correctly upon reassembly.

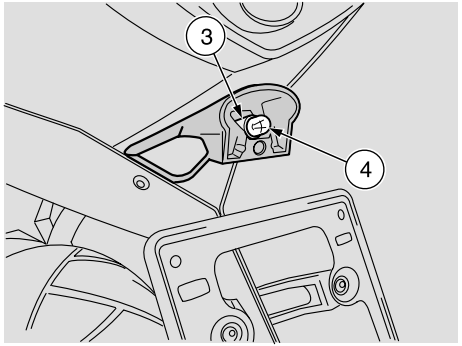
- ◆ Rotate the bulb socket (10) anticlockwise.
- ◆ Press the bulb (5) slightly and rotate it anticlockwise.
- ◆ Extract the bulb (5) from its seat.

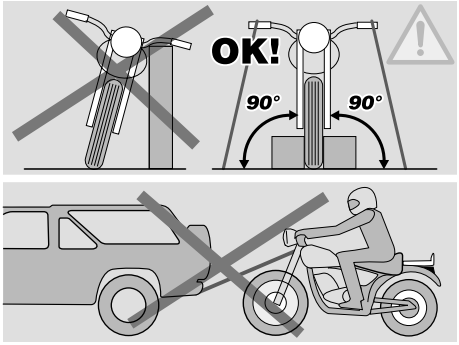
⚠ CAUTION

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.







CHANGING THE NUMBER PLATE BULB

Carefully read p. 97 (BULBS).

To change, proceed as follows:

- Position the vehicle on the centre stand, see p. 56 (POSITIONING THE VEHICLE ON THE STAND).
- Unscrew and remove the screw (1), taking the nut.
- Remove the light unit (2).

⚠ CAUTION

Do not pull the electric wires to extract the bulb socket.

- Grasp the bulb socket (3), pull it and remove it from its seat.
- Withdraw the bulb (4) and replace it with a new one of the same type.

TRANSPORT

NOTE During transport, the vehicle must be kept in vertical position, it must be firmly anchored and the 1st gear must be engaged, in order to avoid any leak of fuel, oil, coolant.

⚠ CAUTION

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

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.

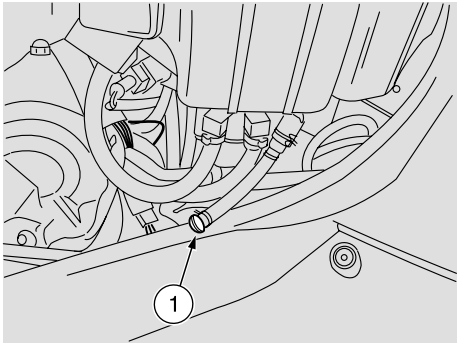
⚠ WARNING

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. 47 (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.

After washing the vehicle, always:

- Lift the fuel tank, see p. 76 (LIFTING THE FUEL TANK)
- Remove the cap (1).
- Empty its content into a container and deliver it to a salvage centre.

⚠ 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 use polishing pastes on matt paints

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.

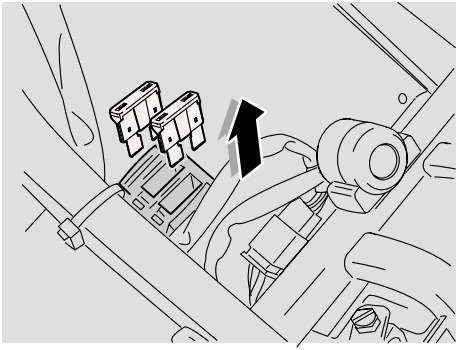
Do not use liquids at a temperature exceeding 40°C to clean the plastic components of the vehicle.

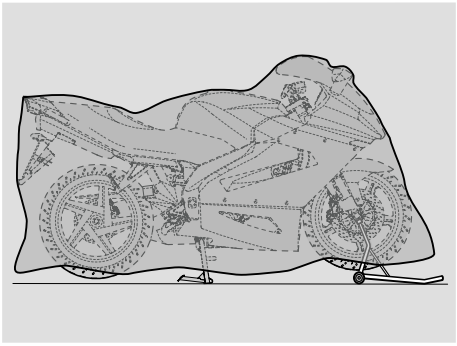
Do not direct high-pressure water or air jets or steam jets on to the following components: wheel hubs, controls on the right and left side of the handlebar, bearings, brake pumps, instruments and indicators, exhaust pipes, glove/tool kit compartment, ignition switch/steering lock, radiator wings, fuel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

Do not use alcohol, petrol or solvents to clean the rubber and plastic parts and the saddle: use only 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

⚠ CAUTION

If the vehicle remains unused for more than twenty days, disconnect the 30A fuses, in order to avoid the deterioration of the battery caused by the current consumption due to the multifunction computer.

NOTE With the removal of the 30A fuses the functions of the digital clock are set to zero. To reset these functions, see p. 20 (SETTING BUTTONS).

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:

- Remove the battery, see p. 91 (REMOVING THE BATTERY) and p. 93 (LONG INACTIVITY OF THE BATTERY).
- Wash and dry the vehicle, see p. 103 (CLEANING).
- Polish the painted surfaces with wax.
- Inflate the tyres, see p. 40 (TYRES).
- 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.

NOTE Position the vehicle on the front support stand OPT, so that both tyres are raised from the ground.

- Position the vehicle on the appropriate front support stand, see p. 68 (POSITIONING THE VEHICLE ON THE FRONT SUPPORT STAND OPT).
- Cover the vehicle avoiding the use of plastic or waterproof materials.

AFTER A PERIOD OF INACTIVITY

- Uncover and clean the vehicle, see p. 103 (CLEANING).
- Check the charge of the battery, see p. 92 (RECHARGING THE BATTERY) and install it, see p. 92 (INSTALLING THE BATTERY).
- Refill the fuel tank, see p. 28 (FUEL).
- Carry out the preliminary checking operations, see p. 47 (PRELIMINARY CHECKING OPERATIONS).

⚠ WARNING

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

TECHNICAL DATA

DIMENSIONS	Max. length	2170 mm
	Max. width	740 mm
	Max. height (front part of the fairing included)	1220 mm
	Seat height	830 mm
	Distance between centres	1435 mm
	Min. ground clearance	120 mm
	Weight ready for starting	235 kg
ENGINE	Model	V990
	Type	60° longitudinal V-type, two-cylinder, 4-stroke, with 4 valves per cylinder, DOHC.
	Number of cylinders	2
	Total displacement	997.62 cm^3
	Bore/stroke	97 mm/67.5 mm
	Compression ratio	11.8 ± 0.5: 1
	Starting	electric
	Engine idling rpm	1250 ± 100 rpm
	Clutch	multidisc in oil bath, with hydraulic control on the left side of the handlebar and PPC device
	Lubrication system	dry pan with separate oil tank and cooling radiator
	Air cleaner	with dry filter cartridge
	Cooling	liquid-cooled
TRANSMISSION	Type	mechanical, 6 gears with foot control on the left side of the engine
CAPACITY	Fuel (reserve included)	20.5 ℓ
	Fuel reserve	4 ± 1 ℓ
	Engine oil	oil change 3700 cm^3 – oil and oil filter change 3900 cm^3
	Fork oil	553 ± 2.5 cm^3 (per rod)
	Coolant	2.5 ℓ (50% water + 50% antifreeze with ethylene glycol)
	Seats	2
	Vehicle max. load	182 kg (driver + passenger + luggage)

GEAR RATIOS	Ratio	Primary	Secondary	Final ratio	Total ratio
	1ª	31/60 = 1: 1.935	14/35 = 1: 2.50	16 / 43 = 1: 2.687	13.00
	2ª		16/28 = 1: 1.750		9.102
	3ª		19/26 = 1: 1.368		7.117
	4ª		22/24 = 1: 1.090		5.674
	5ª		23/22 = 1: 0.956		4.975
	6ª		27/23 = 1: 0.851		4.431

DRIVE CHAIN	Type	endless (with no connection link) with sealed links
	Model	525
FUEL SUPPLY SYSTEM	Type	electronic injection (Multipoint)
	Choke	Ø 51 mm
FUEL SUPPLY	Fuel	Unleaded petrol according to the DIN 51607 standard, min. O.N. 95 (N.O.R.M.) and 85 (N.O.M.M.)
FRAME	Type	two-beam frame with light alloy cast elements and extruded elements
	Steering inclination angle	26°
	Fore stroke	97 mm
SUSPENSIONS	Front	upside-down telescopic adjustable fork with hydraulic operation, rod Ø 43 mm
	Stroke	120 mm
	Rear	oscillating rear fork in light alloy with differentiated profile arms and hydropneumatic adjustable mono-shock absorber
	Wheel stroke	120 mm
BRAKES	Front	with double floating disc – Ø 300 mm, calipers with four pins with differentiated diameter – Ø 30 mm – Ø 34 mm
	Rear	disc brake – Ø 255 mm, caliper with double pin – Ø 28 mm
WHEEL RIMS	Type	in light alloy with withdrawable pin
	Front	3.50 x 17”
	Rear	5.50 x 17”

TYRES

▲ = touristic use; ⛝ = sporty use

Wheel	Make	Type	Size	Recommended	Pressure kPa (bar)
					▲
					Solo rider
Front (series)	METZELER	ME Z4 B	120/70ZR17”	▲	250 (2.5)
Rear (series)	METZELER	ME Z4	180/55ZR17”	▲	290 (2.9)
Front (series)	MICHELIN	PILOT SPORT	120/70ZR17”	⛝	250 (2.5)
Rear (series)	MICHELIN	PILOT SPORT	180/55ZR17”	⛝	290 (2.9)
Front (alternative)	METZELER	ME Z3	120/70ZR17”	⛝	250 (2.5)
Rear (alternative)	METZELER	ME Z3	180/55ZR17”	⛝	290 (2.9)
Front (alternative)	PIRELLI	MTR21A	120/70ZR17”	▲	250 (2.5)
Rear (alternative)	PIRELLI	MTR22	180/55ZR17”	▲	280 (2.8)

SPARK PLUGS	Standard	NGK R DCPR9E
	- Alternative	NGK R DCPR8E
	Spark plug gap	0.6 – 0.7 mm
	Resistance	5 kΩ
ELECTRIC SYSTEM	Battery	12 V – 12 Ah
	Main fuses	30 A
	Secondary fuses	15 A
	Generator (with permanent magnet)	12 V – 400 W
BULBS	Low beam (halogen)	12 V – 55 W H7
	High beam (halogen)	12 V – 55 W H7
	Front parking light	12 V – 5 W
	Direction indicators	12 V – 10 W
	Rear parking lights/Stoplight	12 V – 5 / 21 W
	Number plate light	12 V – 5 W
WARNING LIGHTS	Neutral	LED
	Direction indicators	LED
	Low fuel	LED
	High beam	LED
	Stand down	LED
	Engine oil pressure	LED
	Diagnostics	LED

LUBRICANT CHART

Engine oil (recommended): IP EXTRA RAID 4, SAE 15W - 50 or Agip TEC 4T SAE 15W - 50.
As an alternative to the recommended oil, it is possible to use high-quality oils with characteristics in compliance with or superior to the CCMC G-4, A.P.I. SG specifications.

Fork oil (recommended): IP F.A. 5W or IP F.A. 20 W 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 IP F.A. 5W and IP F.A. 20 W or Agip FORK 5W and Agip FORK 20W, these can be mixed as indicated below:

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

SAE 15W = IP F.A. 5W 33% of the volume, + IP 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): IP 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.

Spray grease for chains (recommended): IP CHAIN SPRAY or Agip CHAIN LUBE.

⚠ WARNING

Use new brake fluid only.

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

⚠ WARNING

Use new clutch fluid only.

Clutch fluid (recommended): IP 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): IP ECOBLU -40 °C or Agip COOL.

aprilia

ASK FOR GENUINE SPARE PARTS ONLY

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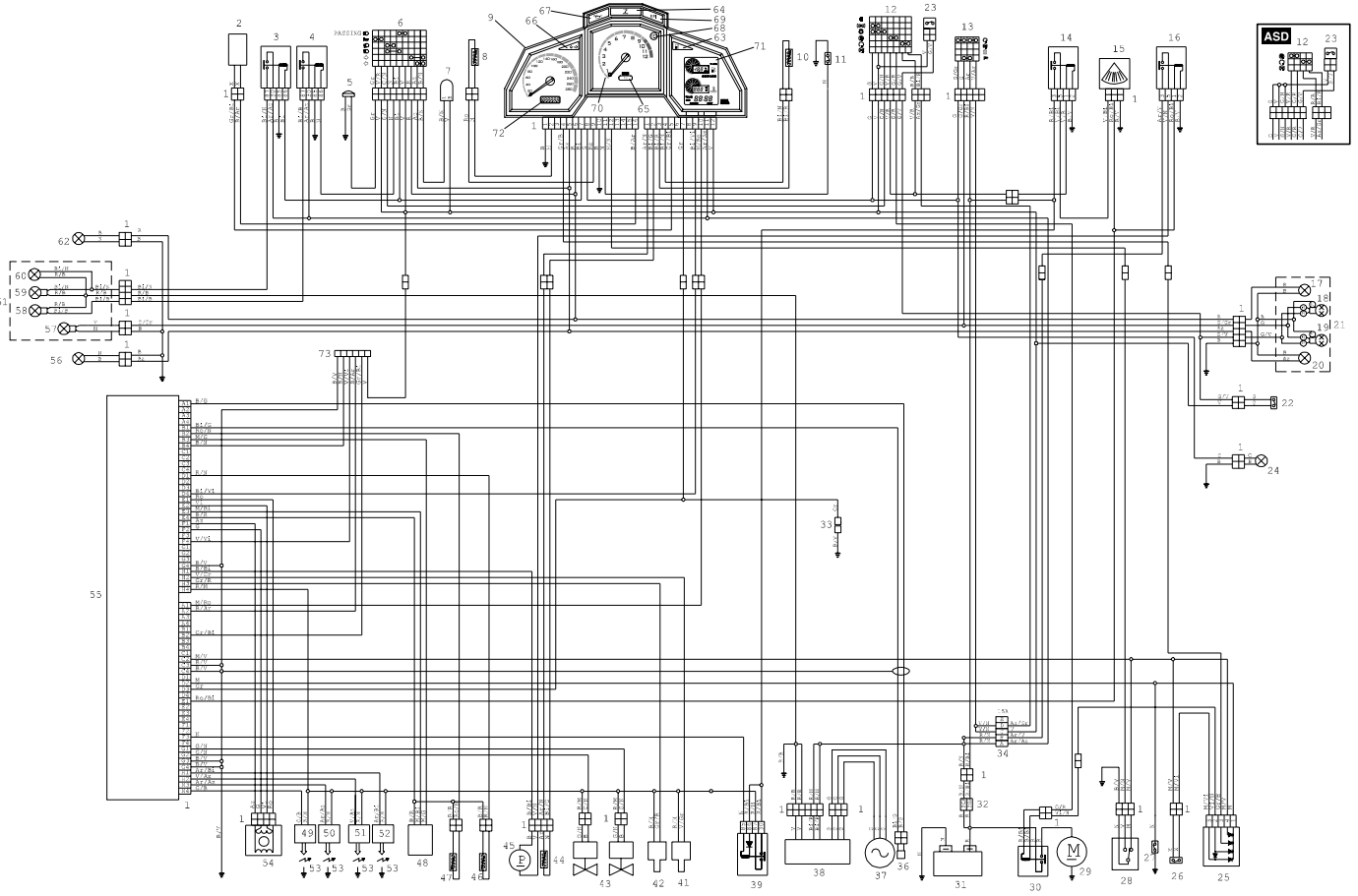
WIRING DIAGRAM - RST mille Futura



WIRING DIAGRAM KEY - RST mille Futura

1) Multiple connectors
2) Speed sensor
3) High beam relay
4) Low beam relay
5) Horn
6) Left dimmer switch
7) Blinking
8) Air thermistor (dashboard)
9) Dashboard
10) Coolant temperature thermistor (dashboard)
11) Engine oil pressure switch
12) Right dimmer switch
13) Ignition switch
14) Engine stop relay
15) Fall sensor
16) Fuel pump relay
17) Rear right direction indicator
18) Parking light bulb/rear stoplight
19) Parking light bulb/rear stoplight
20) Rear left direction indicator
21) Rear light
22) Rear stoplight switch
23) Front stoplight switch
24) Number plate bulb
25) Diode module
26) Clutch control lever switch
27) Neutral gear switch
28) Side stand switch
29) Starter
30) Start relay
31) Battery
32) Main fuses (30A) (ignition)
33) TEST connectors
34) Secondary fuses (15A)
    A - headlight, dashboard
    B - fuel pump
    C - parking lights, rear stoplights, horn, direction indicators
    D - start, safety logic
    E - free
35) –
36) Pick up
37) Generator
38) Voltage regulator
39) Injection relay
40) –
41) Rear cylinder injector
42) Front cylinder injector
43) Cooling fans
44) Low fuel sensor
45) Fuel pump
46) Air thermistor (electronic unit)
47) Coolant temperature thermistor (electronic unit)
48) Throttle valve position sensor
49) Rear cylinder coil
50) Rear cylinder coil
51) Front cylinder coil
52) Front cylinder coil
53) Spark plugs
54) Automatic air
55) Electronic unit
56) Front left direction indicator
57) Front parking light bulb
58) Low beam bulb
59) High beam bulbs
60) High beam bulbs
61) Headlight
62) Front right direction indicator
63) Amber low fuel warning light LED
64) Side stand down war warning light LED
65) Neutral warning light LED
66) Direction indicator warning light LED
67) Engine oil pressure warning light LED
68) High beam warning light LED
69) Diagnostic warning light LED
70) Revolution counter
71) Multifunction display (right side)
72) Multifunction display (left side)
73) Diagnostic connection

CABLE COLOURS

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