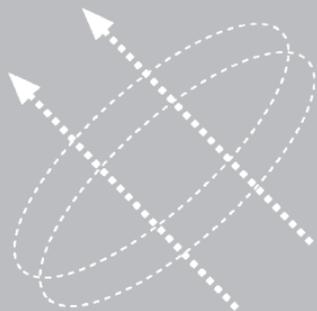


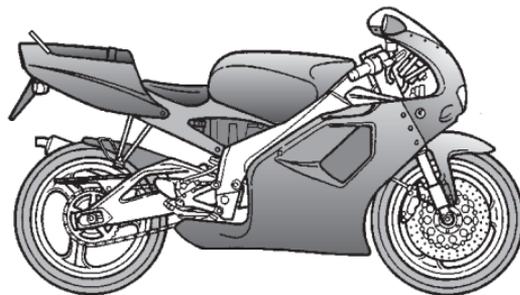
aprilia



use and maintenance

aprilia part# 8102530

RS 125



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This manual is to be considered an integral part of the vehicle, which must be delivered complete with it also in case of resale.

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FOREWORD

Before starting the engine, carefully read this manual, paying particular attention to the chapter "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. For the controls and repairs not expressly described in this manual, for the purchase of **aprilia** Genuine Spare Parts, accessories and other products, as well as for specific technical advice, contact only **aprilia** Official Outlets and Officials Dealers, who can ensure you reliable and prompt servicing. Thank you for choosing **aprilia**. We wish you a nice ride.

Carefully observe the instructions preceded by the following warning signs:



Safety norms and regulations to protect the driver and other people from severe injuries or grave risks.



Caution norms and suggestions to avoid damaging the vehicle and/or hurting yourself or other people.



Indications to make the operations easier. Technical information.

IMPORTANT:

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

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

The label is placed under the saddle.

aprilia CODICE RICAMBI spare parts code number									
N°		I.M.			A	B	C	D	E
I	UK	A	P	SF	B	D	F	E	
GR	NL	CH	DK	J	SGP	PL	IL	ROK	
MAL	RCH	BM							

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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.

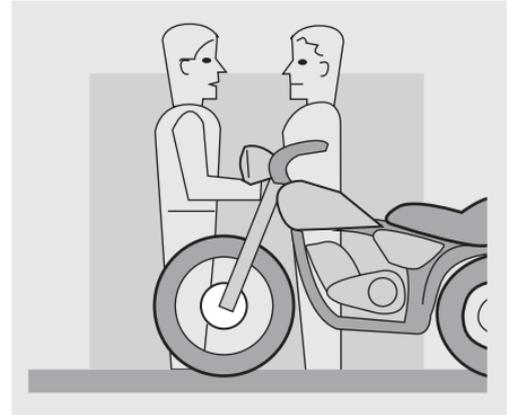


The use of medicines, alcohol and drugs or psychotropic substances notably increases the risk of accidents.

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

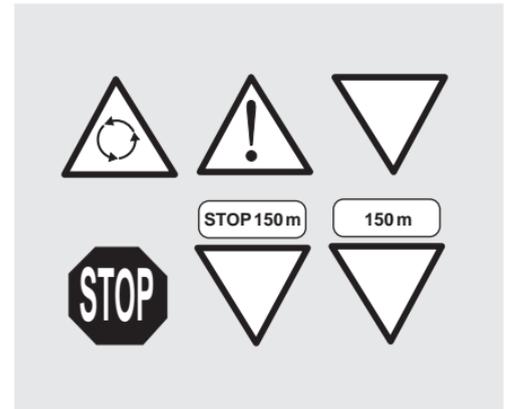
Most road accidents are caused by the driver's lack of experience.

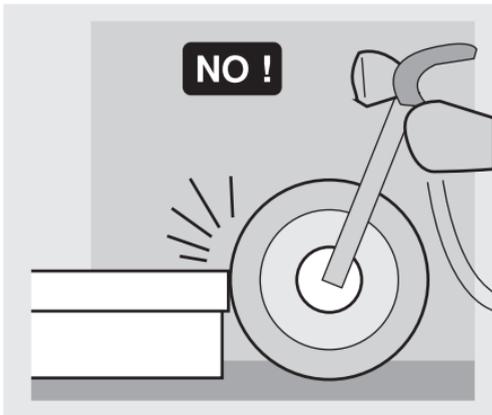
NEVER lend the vehicle to beginners and, in any case, make sure that the driver has all the requirements for driving.



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

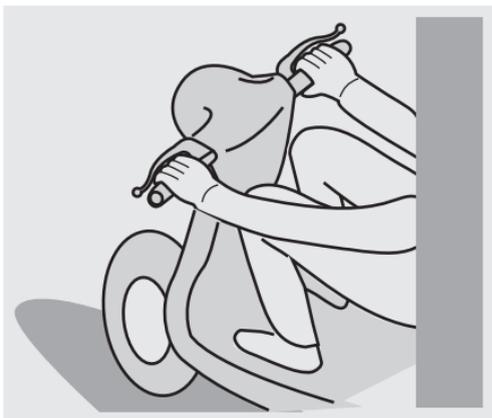
Avoid abrupt movements that can be dangerous for yourself and other people (for example: rearing up on the back wheel, speeding, etc.), and give due consideration to the road surface, visibility and other driving conditions.





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

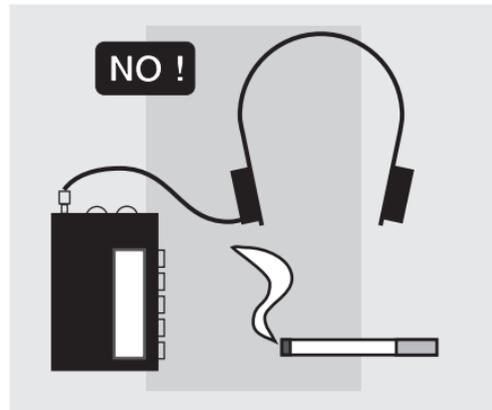
Avoid riding in the slipstream created by preceding vehicles in order to increase your speed.



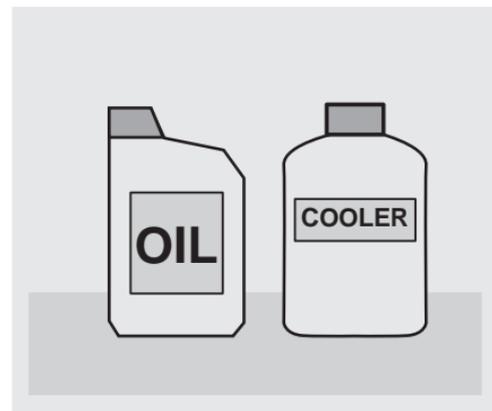
Always drive with both hands on the handlebars and both feet on the footrests, in the correct driving posture.

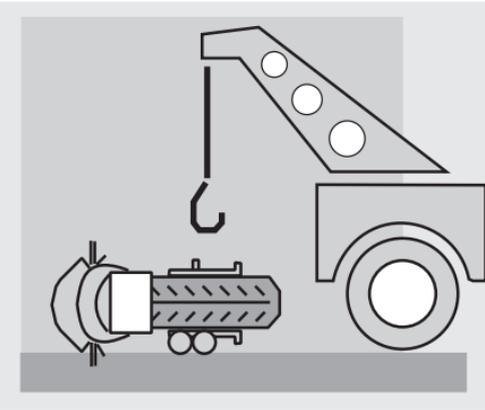
Absolutely avoid standing up or stretching your limbs while driving.

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.





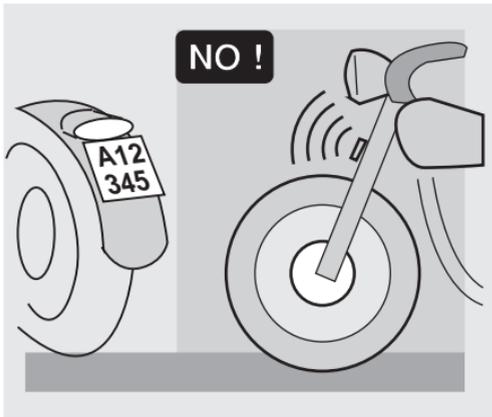
If the vehicle has been involved in an accident, make sure that no damage has occurred to the control levers, pipes, wires, braking system and vital parts.

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.



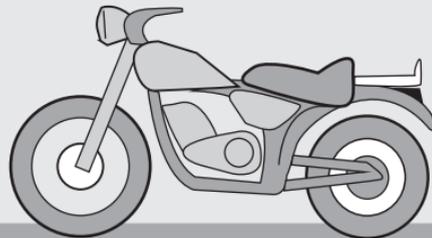
Any modification of the vehicle and/or the removal of original components can compromise vehicle performance levels and safety or even make it illegal.

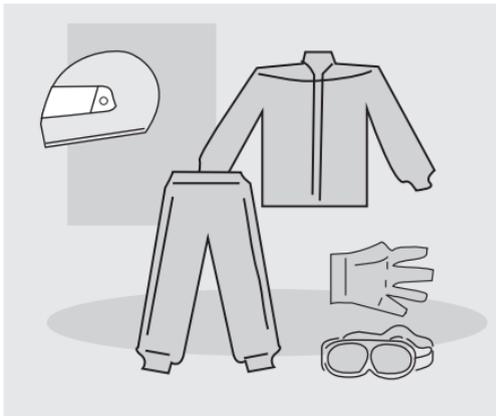
We recommend respecting all regulations and national and local provisions regarding the equipment of the vehicle.

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

Never race with other vehicles.
Avoid off-road riding.

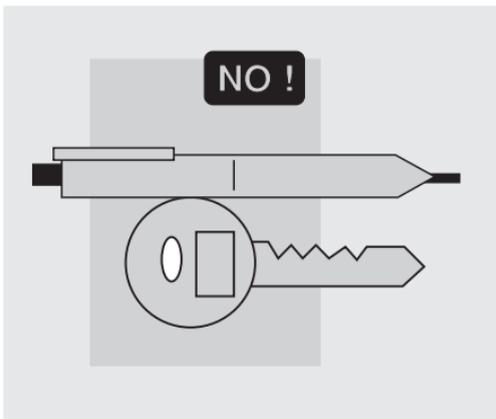
ONLY ORIGINALS





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

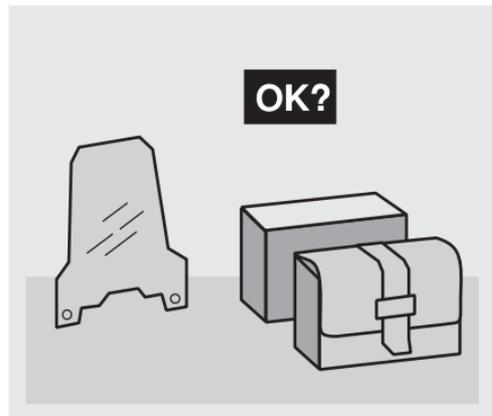
The owner of the vehicle is responsible for the choice, installation and use of any accessory. Avoid installing accessories that cover horns or lights or that could impair their functions, limit the suspension stroke and the steering angle, hamper the operation of the controls and reduce the distance from the ground and the angle of inclination in turns.

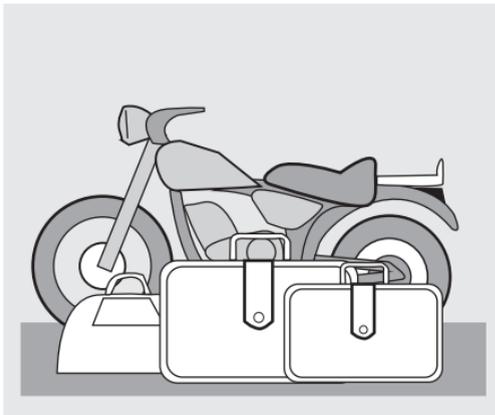
Avoid using accessories that hamper access to the controls, since this can prolong reaction times during an emergency.

Large fairings and windscreens assembled on the vehicle can produce aerodynamic forces capable of compromising the stability of the vehicle while driving.

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.





LOAD

Be careful and moderate when loading your luggage.

Keep any luggage loaded as close as possible to the barycenter of the vehicle and distribute the load uniformly on both sides, in order to reduce imbalance to the minimum.

Furthermore, make sure that the load is firmly secured to the vehicle, especially during long trips.



Absolutely avoid hanging bulky, voluminous, heavy and/or dangerous 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 hanging from its string, because it could hit people or obstacles making you lose control of the vehicle.

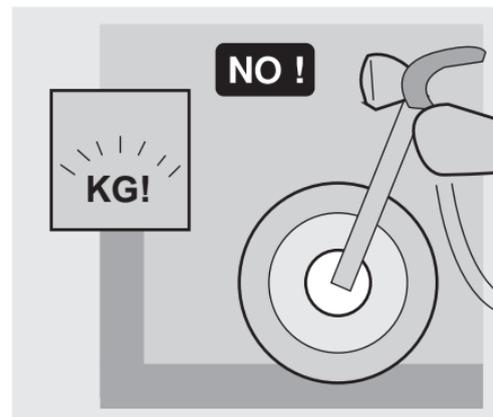
Do not carry any bag if it is not tightly secured to the vehicle. Do not carry bags which protrude too much from the luggage-rack or which cover the lights, horn or indicators.

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.



ARRANGEMENT OF THE MAIN ELEMENTS

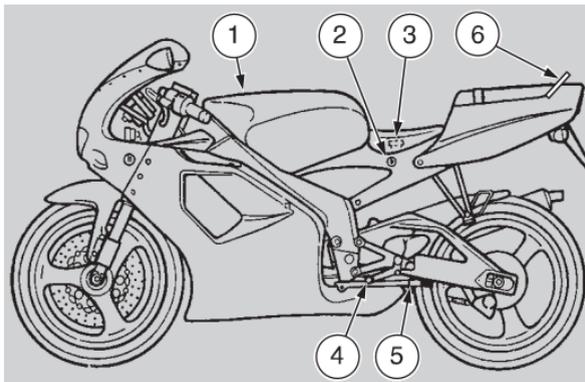


Fig. 1

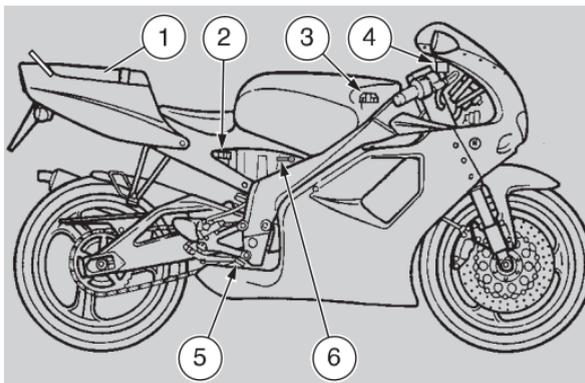


Fig. 2

KEY Fig. 1

- 1) Fuel tank plug
- 2) Saddle lock
- 3) Mixer oil tank plug
- 4) Transmission control lever
- 5) Side stand
- 6) Passenger's handle

KEY Fig. 2

- 1) Pillion
- 2) Rear brake fluid tank
- 3) Coolant expansion tank plug
- 4) Front brake fluid tank
- 5) Rear brake control lever
- 6) Fuel cock

ARRANGEMENT OF THE INSTRUMENTS

KEY Fig. 3

- 1) Left rear-view mirror
- 2) High beam signaller push button (≡D)
- 3) Clutch lever
- 4) Cold start lever (| \ |)
- 5) Dimmer switch (≡D - ≡D)
- 6) Multifunction computer push button (LAP)
- 7) Horn push button (H)
- 8) Direction indicator switch (↔)
- 9) Start push button (S)
- 10) Headlight switch (☀ - ☀ - •)
- 11) Throttle grip
- 12) Front brake lever
- 13) Engine stop switch (○ - ☒)
- 14) Right rear-view mirror
- 15) Instruments and indicators
- 16) Ignition switch/steering lock (○ - ☒ - Ⓜ)

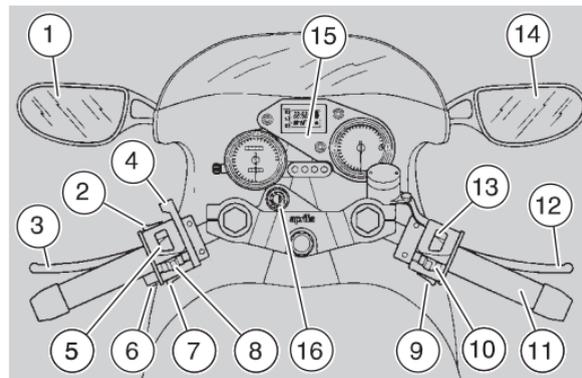


Fig. 3

INSTRUMENTS AND INDICATORS

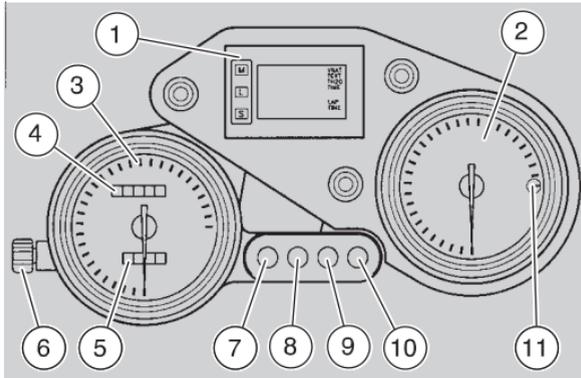


Fig. 4

KEY Fig. 4

- 1) Multifunction computer
- 2) Revolution counter
- 3) Speedometer
- 4) Total kilometres odometer
- 5) Trip odometer
- 6) Trip odometer control knob
- 7) Low fuel warning light (⏴)
- 8) High beam warning light (≡▷)
- 9) Neutral indicator warning light (N)
- 10) Direction indicator warning light (↔)
- 11) Mixer oil reserve warning light (⚙)



**Remember: 1 mile = 1.6 km
1 km = 0.625 miles.**

INSTRUMENTS AND INDICATORS

DESCRIPTION		FUNCTION
Multifunction computer		It indicates the water temperature, the battery voltage, the hour and minutes and it makes it possible to clock and record the track lap times.
Revolution counter		It indicates the number of engine revolutions per minute.
Speedometer		It indicates the driving speed.
Total kilometres odometer		It indicates the total number of kilometres covered.
Trip odometer		It indicates the partial number of kilometres covered.
Trip odometer control knob		By rotating it clockwise, it is possible to set the trip odometer to zero.
Low fuel warning light		It comes on when the quantity of fuel left in the tank is about 3 ℓ.
High beam warning light		It comes on when the headlight is on "high beam" position.
Neutral indicator warning light		It comes on when the transmission is in neutral.
Direction indicator warning light		It blinks when the direction indicators are on.
Mixer oil reserve warning light		It comes on when the ignition switch is in position "○" and the start push button "⊗" is pressed, thus checking the proper functioning of the bulb. If the light does not come on during the starting, provide for replacing the bulb.  If the warning light comes on and does not go out after the start push button "⊗" has been released, or if it comes on during normal functioning, this means that the mixer oil reserve is being used; in this case, top up the mixer oil tank, (see "MIXER OIL TANK" - page 30).



Remember: 1 mile = 1.6 km
1 km = 0.625 miles.

MAIN INDEPENDENT CONTROLS

CONTROLS ON THE LEFT SIDE OF THE HANDLEBAR (Fig. 5)



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

1) DIMMER SWITCH (☰ - ☷)

When the light switch ("CONTROLS ON THE RIGHT SIDE OF THE HANDLEBAR" - page 21) is in position "☼", if the dimmer switch is in position "☰" the high beam comes on, while if it is in position "☷" the low beam comes on.

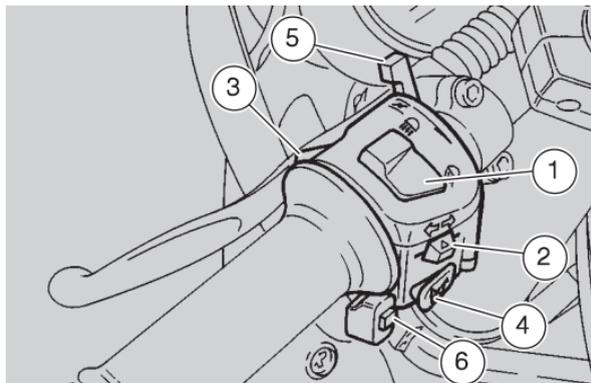


Fig. 5

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 on its centre.

3) HIGH BEAM SIGNALLER PUSH BUTTON (☰)

This push button makes it possible to use the high beam signaller, which is useful to send signals to the forthcoming vehicles when passing and in case of danger or emergency.

4) HORN PUSH BUTTON (☪)

The horn is activated when the "☪" push button is pressed.

5) COLD START LEVER (⌞)

The starter for the cold start of the engine is operated by rotating the cold start lever downwards.

To disconnect the starter, rotate the lever completely upwards.

6) MULTIFUNCTION COMPUTER PUSH BUTTON (LAP)

It makes it possible to use the chronometer of the multifunction computer, (see pages 26÷28).

CONTROLS ON THE RIGHT SIDE OF THE HANDLEBAR (Fig. 6)



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

1) HEADLIGHT SWITCH (☀ - ☾☽ - ●)

When the headlight switch is in position "●", the lights are off; when the switch is in position "☾☽" the parking lights are on; when the switch is in position "☀" the low beam is on. It is possible to turn on the high beam by means of the dimmer switch ("CONTROLS ON THE LEFT SIDE OF THE HANDLEBARS" - page 20).

2) START PUSH BUTTON (⊕)

When pressed, this push button starts the engine. For the starting, see "STARTING" - page 44.

3) ENGINE STOP SWITCH (○ - ⊗)

When the switch is in position "○", it is possible to start the engine; the engine is stopped by moving the switch to position "⊗".

It mainly serves as a safety or emergency switch and in running conditions it must be kept in position "○".

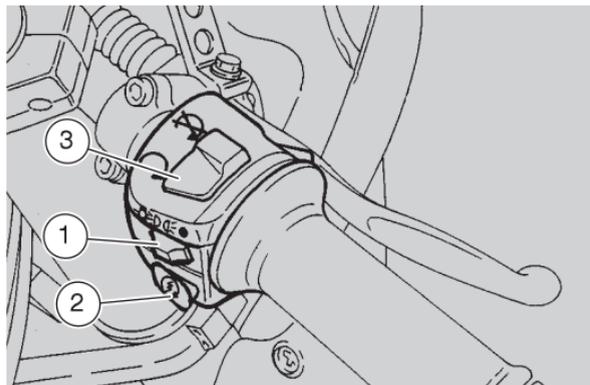


Fig. 6

IGNITION SWITCH (Fig. 7)

The ignition switch is positioned on the upper plate of the steering tube (Fig. 7).

 The ignition key (1) operates the ignition switch/steering lock and opens the glove compartment and the fuel tank plug. Two keys are supplied together with the vehicle (one spare key).

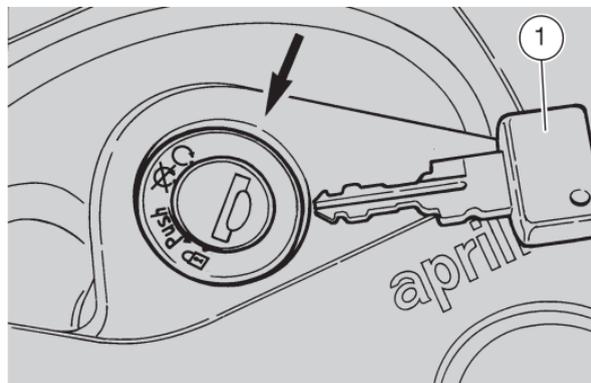


Fig. 7

STEERING LOCK



Never turn the key to position "Ⓐ" in running conditions, in order to avoid losing control of the vehicle.

To lock the steering, turn the handlebars completely leftwards with the key (1) in position "Ⓐ", press the key, release it and turn it to position "Ⓐ". Extract the key.

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

AUXILIARY EQUIPMENT

GLOVE COMPARTMENT (Fig. 8-9)

The glove compartment is under the saddle.

- To unlock the saddle, introduce the ignition key in the lock (2-Fig. 8) and turn it clockwise, after which you can raise the saddle (1-Fig. 8).

To lock the saddle it isn't necessary to use the ignition key; it is sufficient to introduce the tangs into their seats, lower the saddle and press it until it locks.



Before locking the saddle, make sure that you have not left the key inside the compartment.



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

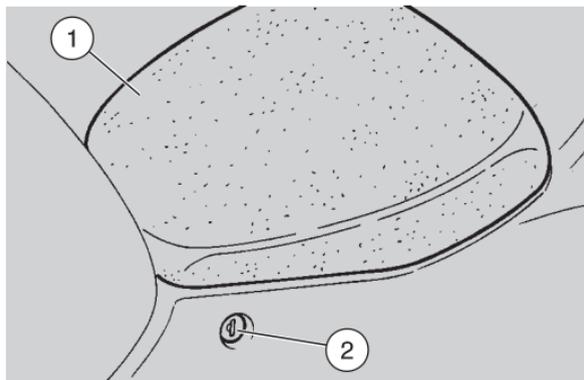


Fig. 8

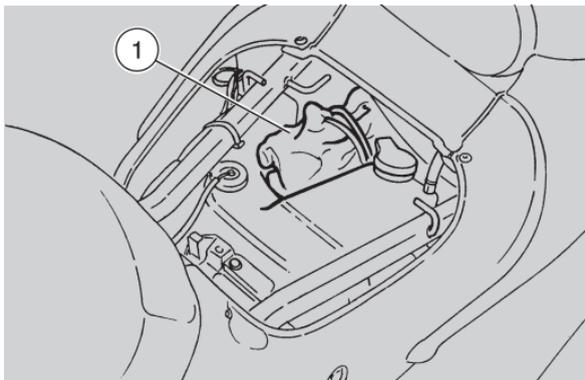


Fig. 9

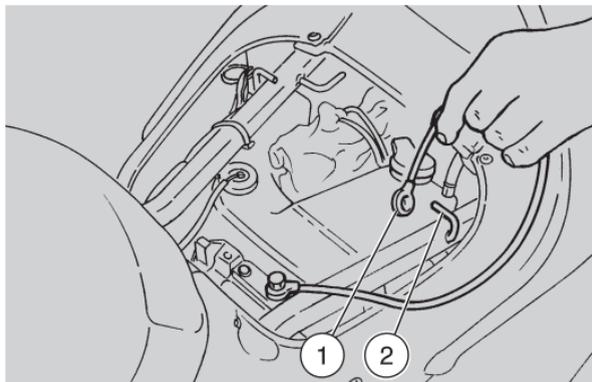


Fig. 10

TOOL KIT (Fig. 9)

To reach the tool kit (1), just unlock and raise the saddle.

In the tool kit the following spanners are provided:

- no. 1 3 mm hexagon spanner
- no. 1 5 mm hexagon spanner
- no. 1 6 mm hexagon spanner
- no. 1 8/10 mm double-ended spanner
- no. 1 10/13 mm double-ended spanner
- no. 1 cross-tip/flat-tip screwdriver
- no. 1 screwdriver handle
- no. 1 17x21x75 mm spark plug spanner
- no. 1 socket spanner rod
- no. 1 pin for 8x180 wheels, bent
- no. 1 tool case.

CRASH HELMET HOOK (Fig. 10)



Do not drive with your helmet hanging from the hook, as this could compromise your safety while driving.

Thanks to this hook, you no longer have to carry the crash helmet with yourself every time you park the vehicle.

To hang the crash helmet, raise the saddle (see p. 23), take out the looped wire (1) and pass it through the visor space or through the fitted slot, then fix the loop to the hook (2).

Now lower the saddle and lock it.

To release the crash helmet from the hook, raise the saddle, release the wire from the hook and lower the saddle; before leaving, take care that the wire doesn't get crushed and that the saddle is well locked.

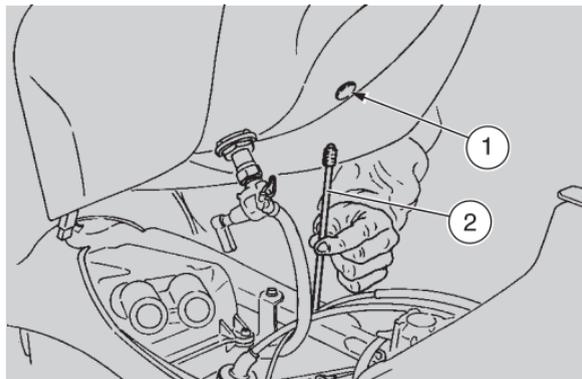


Fig. 11

RAISING THE FUEL TANK (Fig. 11)

To reach the engine from the upper side without removing the fuel tank, proceed as follows:

- remove the saddle;
- unscrew the front fastening screw of the tank;
- raise the front part of the tank;
- keep the tank raised introducing the stem (2) in the opposite seat (1). Said stem is placed on the inner left side of the saddle support.

MULTIFUNCTION COMPUTER

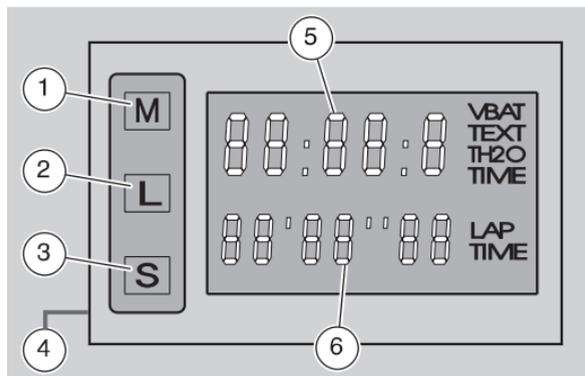


Fig. 12

KEY Fig. 12

- 1) **MODE** push button
- 2) **LOCK** push button
- 3) **START** push button
- 4) **LAP** push button
(on the left half of the handlebars - pos. 6 - Fig. 5)
- 5) Upper display
- 6) Lower display

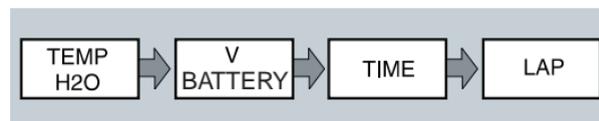


If the writing "LLL" is displayed, check the sensor and/or the electrical connection circuit (possible failure).

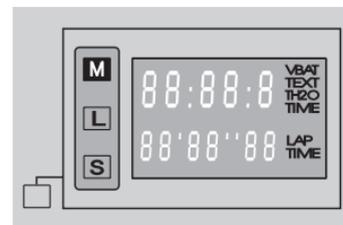
If necessary contact your **aprilia** Official Dealer.

FUNCTION DESCRIPTION

By pressing the "M" push button once and more than once in succession, the following functions are operated, in their respective order:



TEMP H2O (coolant temperature)



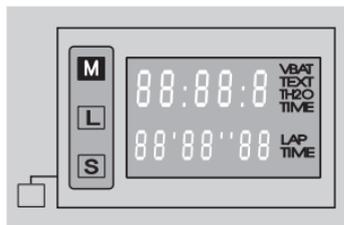
By pressing the "M" function push button once, the coolant temperature in centigrade degrees (°C) is indicated on the upper part of the display, while the current time is displayed on its lower part.

If the temperature exceeds 100°C, the upper part of the display blinks, even if the set function is different from "TEMP H2O".

If the temperature is lower than 30°C, the writing "COLD" appears on the display.

Reading range: 0 ÷ 130°C.

V BATT (Battery voltage)



By pressing the "M" push button for the second time, the battery voltage, expressed in volt, is indicated on the display. The recharge system functions properly if at 4000

rpm the battery voltage, with low beam on, is included between 13 and 15 V. The current time appears in the lower part of the display.

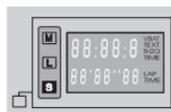
TIME (Setting the hour/minutes)



By pressing the "M" push button for the third time, the hour and minutes are displayed.



To change the time data, proceed as follows:
Press the "L" push button and the number indicating the hours will start blinking.



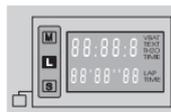
To increase the value, press the "S" push button.



To set the minutes, press the "M" push button.

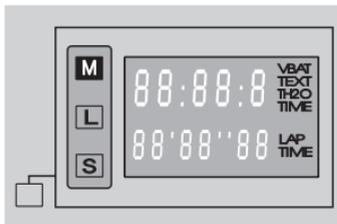


To increase the value, press the "S" push button.



Now, to store the setting of the hour and minutes, press the central "L" push button.

LAP (Stop-watch)



By pressing the "M" push button for the fourth time, the **LAP** function is displayed, which makes it possible to time each lap with the vehicle on the track and to store the data in order to

be able to consult them successively.

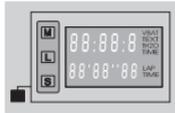
How to use the LAP function. (Only for races in places that are closed to traffic).



To initialize the computer for the timing function, press the "S" push button. The letter "L" (Lap) will blink on the display.



To start the stop-watch, press the "LAP" push button, positioned on the left half of the handlebars.



To display the time taken for one lap, press the "LAP" push button again. After pressing the "LAP" push button, the time obtained in the previous lap is displayed for

about 15 seconds, after which the current time is displayed again.



To end the timing, press the "S" push button.

 It is possible to carry out up to 10 timings. At the last timing, the writing "L10" will appear on the display.

How to recall the time per lap (LAP MEMORY)



To recall the time per lap, press the "L" push button. The writing "Ld" will appear on the display.



To run through the stored times per lap, press the "LAP" push button. The writing "Ld 01" corresponds to lap no. 1, "Ld 02" corresponds to lap no. 2 and so on.

How to delete the stored data



To delete the stored data, press the "L" push button. The writing "L10", "L9" or "L8", etc. will appear on the display.



Now, press the "S" push button and, keeping it pressed, press also the "LAP" push button on the left half of the handlebars. In this way the stored data will be

definitively deleted.

MAIN COMPONENTS

FUEL



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 free flames, sparks and any other heat source to prevent the fuel from catching fire or from exploding.

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. Screw the plug up carefully (Fig. 13) 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.

KEEP AWAY FROM CHILDREN



brim.

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

Use only premium grade petrol, in conformity with the DIN 51600 standard, min. O.N. 98 (N.O.R.M.) and 88 (N.O.M.M.). The fuel tank capacity is approximately 13 ℓ, about 3 ℓ of which make up the reserve.

To unlock the fuel tank plug, insert the key in the lock and turn it anticlockwise (Fig. 13).

ONLY FOR THE CATALYTIC VERSION

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

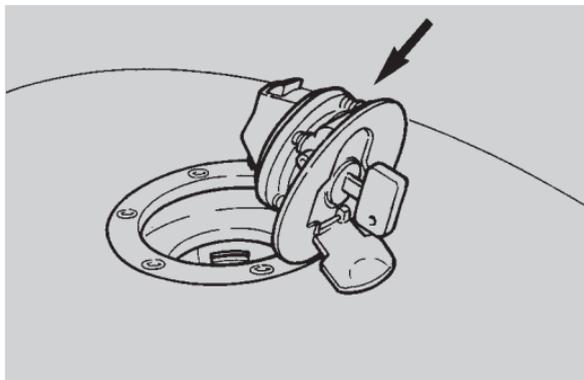


Fig. 13

MIXER OIL TANK (Fig. 14)

The vehicle is provided with a separate mixer to blend the petrol with oil for the lubrication of the engine.



In case you run out of oil in the mixer oil tank or in case the mixer oil pipe is removed, it is necessary to bleed the mixer oil tank (see "BLEEDING THE MIXER OIL TANK" - page 68).

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

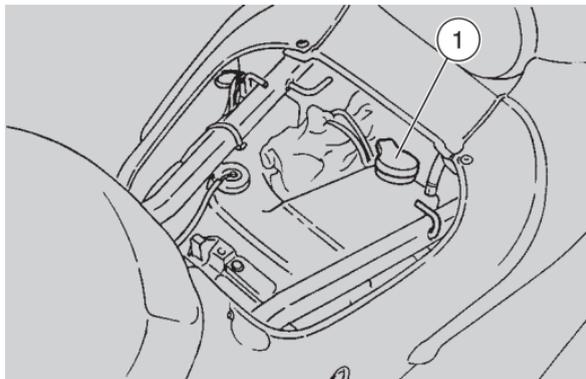


Fig. 14

To pour oil into the tank, remove the saddle (see "GLOVE COMPARTMENT" - page 23) and then take off the pressure plug (1).

OIL TANK CAPACITY: 1.4 ℓ

TANK RESERVE: 0.35 ℓ



Wash your hands carefully after using the oil.

Do not dispose of oil in the environment.

KEEP AWAY FROM CHILDREN.

TRANSMISSION OIL



**Remember: 1 mile = 1.6 km
1 km = 0.625 miles.**

It is necessary to change the transmission oil after the first 1000 km and successively every 12000 km (see "CHECKING THE TRANSMISSION OIL LEVEL AND TOPPING UP" - page 53, "CHANGING THE TRANSMISSION OIL" - page 54 and "LUBRICANT CHART" - page 84).



Used transmission oil can cause severe damages to the skin if handled every day and for long.

Wash your hands carefully after using it.



If the vehicle is used in very dusty areas, the transmission oil should be changed more frequently.

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

BRAKE FLUID (recommendations)



Sudden clearance variations or elastic resistance on the brake lever are 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.**

Make sure that the brake disc and the friction surfaces are neither oily nor greasy, especially after maintenance or checking operations.

Check that the brake cable is neither twisted nor worn out.

Prevent water or dust from accidentally getting into the circuit.

If the brake 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 fluid in the environment.

KEEP AWAY FROM CHILDREN



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

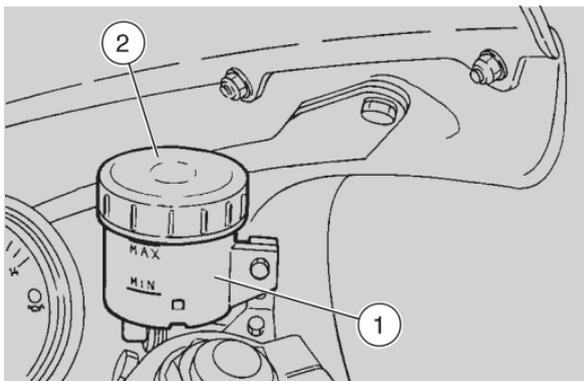


Fig. 15

FRONT BRAKE (Fig. 15)



The brakes are the parts that most ensure your safety and for this reason they must always be perfectly working. The brake fluid must be changed once a year by an **aprilia** Official Dealer.

This vehicle is provided with front hydraulic disc brake. When the disc pads wear out, the level of the fluid decreases to automatically compensate for their wear. Periodically check the brake fluid level in the tank (1) and the wear of the pads (see "CHECKING THE BRAKE PAD WEAR" - page 67).

To check the fluid level, keep the vehicle in vertical position and incline the tank (1), so that the fluid it contains is parallel to the ground. Make sure that the fluid level is included between the "**MIN**" and "**MAX**" marks.

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

Proceed as follows:

- unscrew and remove the plug (2);



In order not to spill the brake fluid while topping up, keep the fluid in the tank parallel to the ground.

- remove the gasket;
- fill the tank until the fluid reaches the "**MAX**" mark;
- put the gasket back;
- put the plug back (2).



**Check the braking efficiency.
If necessary, contact your **aprilia** Official Dealer.**

In case of excessive stroke of the brake lever, of excessive elasticity or in case there is air in the circuit, contact your **aprilia** Official Dealer, since it may be necessary to bleed the system.
In any case, the bleeding must be carried out after the first 1000 km.



**Remember: 1 mile = 1.6 km
1 km = 0.625 miles.**

REAR BRAKE (Fig. 16)



The brakes are the parts that most ensure your safety and for this reason they must always be perfectly working. The brake fluid must be changed once a year by an **aprilia** Official Dealer.

This vehicle is provided with rear hydraulic disc brake. When the disc pads wear out, the level of the fluid decreases to automatically compensate for their wear.

Periodically check the brake fluid level in the tank (1) and the wear of the pads (see "CHECKING THE BRAKE PAD WEAR" - page 67).

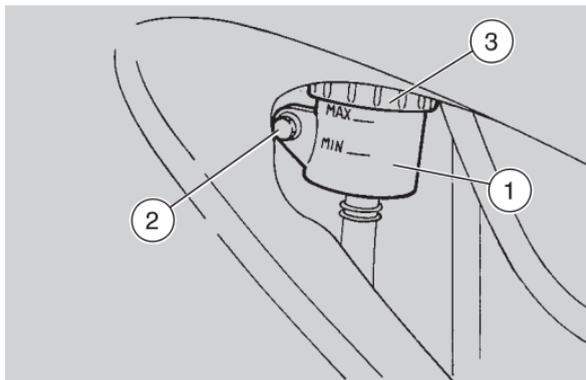


Fig. 16

To check the fluid level, keep the vehicle in vertical position and incline the tank, so that the fluid it contains is parallel to the ground.

Make sure that the fluid level is included between the "MIN" and "MAX" marks. If the fluid level does not reach the "MIN" mark, provide for topping up.

Proceed as follows:

- remove the screw (2);
- remove the tank (1);
- unscrew the plug (3);



In order not to spill the brake fluid when topping up, keep the fluid in the tank parallel to the ground.

- remove the gasket;
- fill the tank until the fluid reaches the "MAX" mark;
- put the gasket back;
- screw and tighten the plug (3) and reassemble the tank (1).



Check the braking efficiency. If necessary, do not hesitate to contact your **aprilia Official Dealer.**

In case of excessive stroke of the brake lever, of excessive elasticity or in case there is air in the circuit, contact your **aprilia** Official Dealer, since it may be necessary to bleed the system. In any case, the bleeding must be carried out after the first 1000 km.



**Remember: 1 mile = 1.6 km
1 km = 0.625 miles.**

ADJUSTING THE REAR BRAKE (Fig. 17)

It is possible to position the brake lever at the wanted height by means of the adjusting screw:

- loosen the lock nut (1);
- tighten the screw thoroughly (2);
- loosen the pump adjuster lock nut (3);
- screw or unscrew the lever adjustment rod (4), until reaching the wanted height of the brake lever;
- tighten the pump adjuster lock nut (3);
- put the adjusting screw back (2);
- minimum lever clearance: 3 - 4 mm
- tighten the lock nut (1).



After the adjustment, make sure that when the brake is released the wheel turns freely.

Minimum lever clearance: 3 - 4 mm.



Check the braking efficiency. If necessary, do not hesitate to contact your **aprilia** Official Dealer.

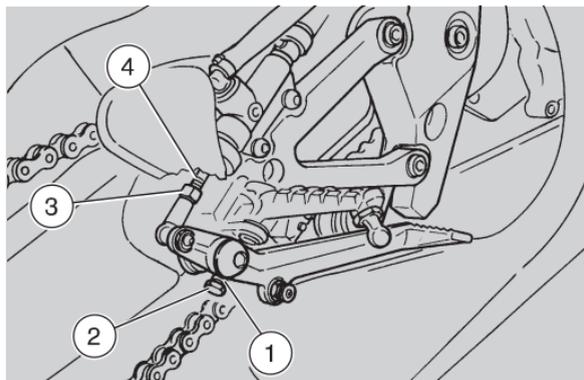


Fig. 17

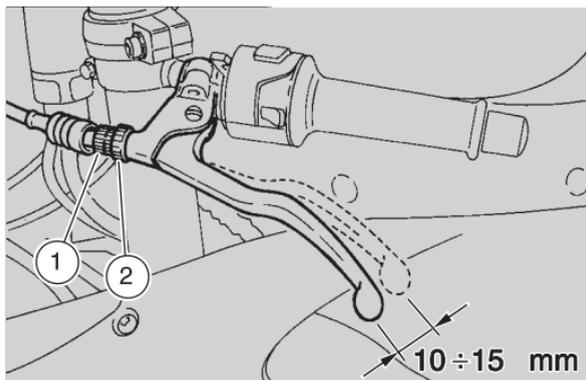


Fig. 18

ADJUSTING THE CLUTCH

If the engine stops or tends to advance when the gears are engaged, or if the clutch slips causing a delay in the acceleration in comparison with the engine speed, adjust the clutch.

Minor adjustments can be carried out by means of the adjuster (1-Fig. 18):

- loosen the lock nut (2-Fig. 18);
- turn the adjuster (1-Fig. 18) until the idle stroke at the clutch lever end is about **10÷15 mm** (see Fig. 18). Tighten the lock nut (2-Fig. 18) and check the adjustment.

If the adjuster is completely screwed or completely unscrewed or if it is not possible to obtain a correct idle stroke:

- unscrew the clutch inspection cover by means of a screwdriver or a coin (Fig. 19);
- loosen the inside nut with the special spanner you will find in the tool kit (2-Fig. 20);
- turn the adjusting screw with a screwdriver (3-Fig. 20) until you take up the slack completely;
- unscrew the above mentioned screw by giving it half a turn, which corresponds to 3-4 mm of cable stroke (1-Fig. 20);
- keeping the adjusting screw fast by means of the screwdriver, tighten the nut with the special spanner;
- reassemble the clutch inspection cover.



Dealer.

If it is not possible to obtain a correct adjustment or if the clutch does not function properly, contact your Aprilia Official

Periodically lubricate the clutch cable with a suitable lubricant, in order to avoid premature wear and corrosion.

Check the integrity of the cable: it must not present flattened parts and the sheath must not be worn out in any point.

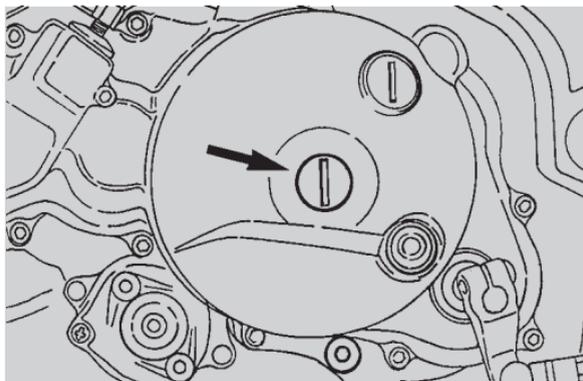


Fig. 19

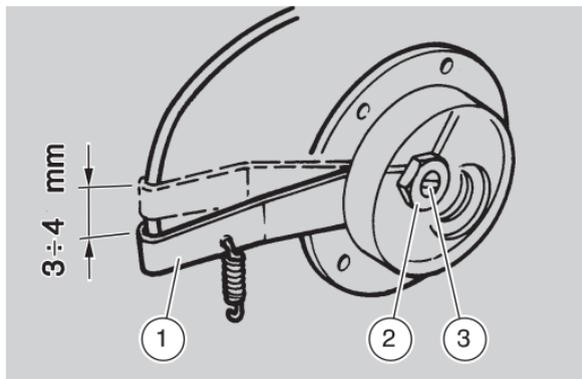


Fig. 20

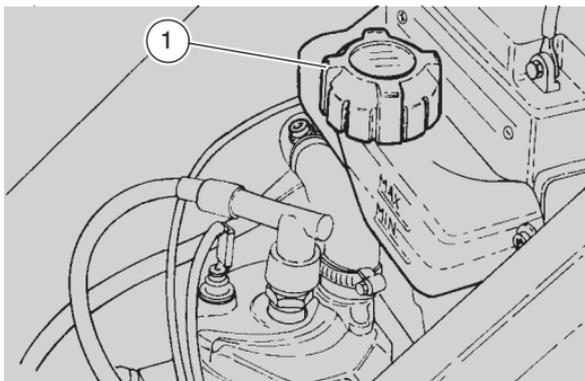


Fig. 21

COOLANT (Fig. 21)



**Remember: 1 mile = 1.6 km
1 km = 0.625 miles.**

Check the coolant level every 1500 km and after long rides; change it every 2 years.

The vehicle is sold with a mixture made up of 70% water and 30% antifreeze.

To use the vehicle when the temperature is below zero, check the coolant level more frequently and, if the temperature is lower than -31°C , add antifreeze until reaching the maximum recommended percentage, that is, 60%, with water in the corresponding percentage of 40%.

For the cooling solution, use drinkable water with few minerals or distilled water, in order not to damage the aluminium engine.



Do not remove the radiator plug 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 can cause severe burns and/or damages.

The coolant is noxious:

DO NOT SWALLOW IT

KEEP AWAY FROM CHILDREN

Checking

Proceed as follows:

- position the vehicle on the side stand;
- raise the fuel tank (see "RAISING THE FUEL TANK" - page 25);
- visually check the coolant level in the tank (the right level should be included between the "MIN" and "MAX" marks);
- if necessary, top up.

Topping up

Proceed as follows:

- position the vehicle on the side stand;
- remove the filling plug (1);
- top up until the level of the fluid contained in the expansion tank reaches the "MAX" mark.



Do not exceed such level, otherwise the fluid will flow out when the engine is running.

- Screw and tighten the filling plug (1);
- lower the fuel tank and put it in its initial position.



To change the fluid, or in case of leaks in the circuit, contact your **aprilia Official Dealer.**

TYRES

This vehicle is provided with tubeless tyres.



Check the tyre inflation pressure at room temperature every month. If the tyres are hot, the measurement is not correct.

Carry out the measurement especially after long rides.

If the inflation pressure is too high, the ground unevenness cannot be dampened and is therefore transmitted to the handlebars, 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 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 get out of the rims. Further, the vehicle could skid while turning.

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

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.

Use only tyres in the size suggested by **aprilia** (see "TECHNICAL DATA" - page 82).

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

Make sure that the tyres always have their valve sealing caps, to prevent them from suddenly going flat.

Change, reparation, maintenance and balancing operations are very important and should be carried out by qualified technicians with appropriate tools.

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 kilometres.

Do not oil the tyres with unsuitable fluids.

INFLATION PRESSURE

FRONT 180 kPa (1,8 bar)
REAR 200 kPa (2 bar)

FOR DRIVE WITH PASSENGER

FRONT 180 kPa (1,8 bar)
REAR 230 kPa (2,3 bar)

MINIMUM TREAD DEPTH LIMIT

FRONT 2 mm
REAR 2 mm

CATALYTIC SILENCER **(For the catalytic version only)**



Avoid parking the RS 125-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 RS 125 is fitted with a silencer with metal catalytic converter of the "platinum-rhodium bivalent" type.

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

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

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

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

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



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

INSTRUCTIONS FOR USE



Before departure, always carry out a preliminary checking of the vehicle to make sure that it functions correctly and safely (see the "PRELIMINARY CHECKING OPERATIONS" table - page 43).

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



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

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

PRELIMINARY CHECKING OPERATIONS

COMPONENT	CHECK	PAGE
Front and rear disc brake	Check the functioning, the idle stroke of the control lever, the brake fluid oil level and make sure there are no leaks. Check the wear of the pads. If necessary, top up the fluid tank.	32 ÷ 37
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.	70
Mixer oil / transmission oil	Check and/or top up if necessary	30 - 31 53 - 54
Wheels / tyres	Check the tyre surface, the inflation pressure, wear and tear and any damage.	39 - 40
Brake levers	Make sure that they work smoothly. If necessary, lubricate the articulations and adjust the stroke.	35
Clutch	The idle stroke at the end of the clutch lever must be 10 ÷ 15 mm; the clutch must function without jerks.	36 - 37
Side stand	Make sure that it works smoothly and that the spring tension brings it back to its normal position. If necessary, lubricate joints and hinges.	–
Fastening elements	If necessary, tighten all the fastening elements.	–
Gearing chain	Check the slack.	55 ÷ 57
Fuel tank	Check the fuel level and top up, if necessary. Make sure there are no leaks or occlusions in the circuit.	29
Coolant	The coolant level in the expansion tank must be included between the " MIN " and " MAX " marks.	38 - 39
Lights, warning lights, horn and electric devices	Check the proper functioning of acoustic and visual devices. Change the bulbs or intervene in case of failure.	72 ÷ 78

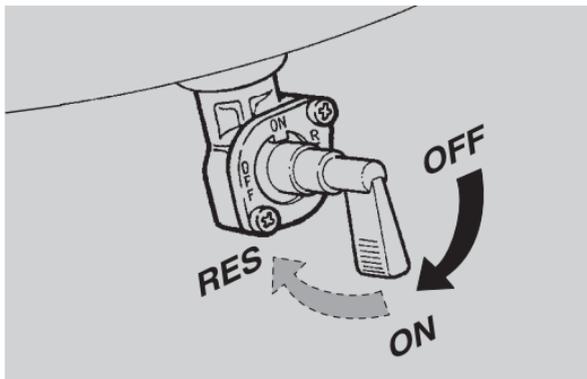


Fig. 22

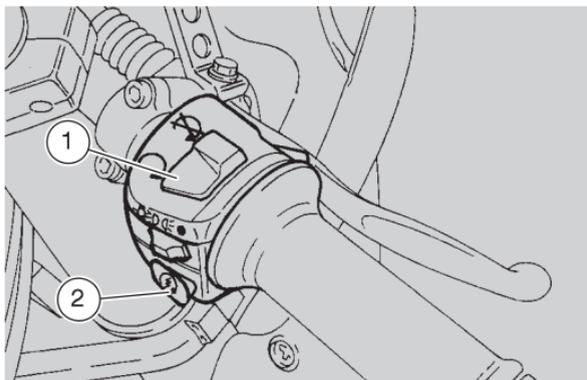


Fig. 23

STARTING



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

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

The non-observance of these warnings could cause loss of consciousness or even lead to death by asphyxia.



The stand is provided with an automatic recovery device.

– Before starting the engine, let the side stand up and block at least one wheel, in order to avoid losing control of the vehicle.

If this operation is carried out on uphill or downhill roads, be particularly careful;

- turn the fuel cock to position "ON" (Fig. 22);
- turn the ignition switch to position "O";
- put the gears in neutral (green warning light "N" on);
- move the engine stop switch (1-Fig. 23) to position "O";
- press the start push button "Ⓜ" (2-Fig. 22) with released throttle grip.

If the engine is cold, rotate the lever "1" downwards (1-Fig. 24).



When the start push button "Ⓢ" is pressed, the mixer oil reserve warning light "Ⓢ" comes on.

With the engine in running condition, when the start push button "Ⓢ" is released, the mixer oil reserve warning light "Ⓢ" must go out; if this does not occur, top up the mixer oil tank, (see "MIXER OIL TANK" - page 30).

- Warm the engine up until it runs normally, with the cold start lever "Ⓢ" (1-Fig.-Fig. 24) completely rotated upwards.



**Never leave with cold engine.
Do not use the cold start lever "Ⓢ" (1-Fig. 24) when starting with hot engine.**

Starting with flooded engine

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

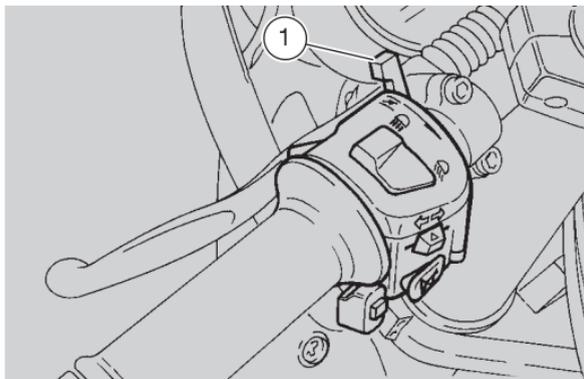


Fig. 24

To clean a flooded engine:

- carry out the first six operations described for the starting (page 44);
- rotate the cold start lever "Ⓢ" (1-Fig. 24) completely upwards;
- let the engine run idly for a few seconds with completely open throttle.

At this point, if the engine starts, bring the throttle to the minimum rpm position and, if the minimum speed is not constant, keep the engine idling with slight movements of the throttle grip.

If the engine does not start, wait 10 seconds and carry out the starting (pages 44 - 45).

DEPARTURE AND DRIVE



Before leaving, carefully read the "SAFE DRIVE" chapter page 5 ÷ 15.

Adjust the inclination of the rear-view mirrors properly.

If there is no other passenger with you, make sure that the rear footrests are closed.

If there is a passenger with you, instruct him/her so that he/she doesn't create problems during the manoeuvres.

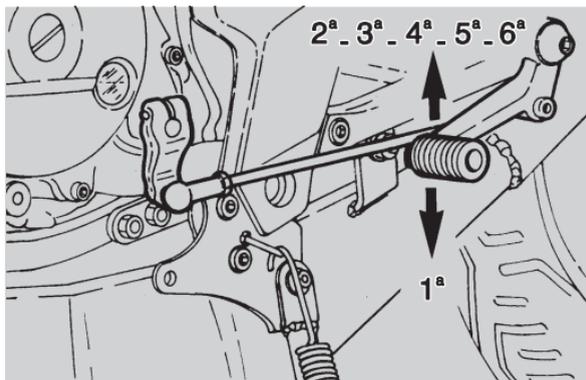


Fig. 25

For the departure, proceed as follows:

- make sure that the engine is warm;
- with released throttle grip and idling engine, pull the clutch lever and engage the first gear by pressing the gearshift foot lever downwards (Fig. 25);
- release the clutch lever gently and at the same time gradually increase the engine speed by rotating the throttle grip;
- when the vehicle reaches a certain speed, release the throttle grip, pull the clutch lever and engage the second gear by lifting the gearshift foot lever. To shift up, repeat this operation.



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.

Before beginning to turn, slow down or brake driving at moderate and constant speed.



If the brakes only are continuously operated on downhill stretches, the friction surfaces can become overheated, thus reducing the braking efficiency.

Exploit the engine compression and shift down using both brakes intermittently.

Do not drive with the engine off!

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.

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 bending the vehicle as little as possible.

Always use the direction indicators timely when you intend to change lane or direction, avoiding sharp and dangerous movements.



If the mixer oil reserve warning light "" comes on during the normal functioning of the engine, this means that the mixer oil reserve is being used; in this case, top up the mixer oil tank, (see "MIXER OIL TANK" - page 30).

RUNNING-IN



Remember: 1 mile = 1.6 km
1 km = 0.625 miles.



After the first 1000 km, carry out the checking operations indicated in the Regular Service Intervals Chart (see "REGULAR SERVICE INTERVALS CHART" - page 51), in order to avoid hurting yourself or other people and/or damaging the vehicle.

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

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

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 put on the brakes with caution, avoiding sharp and prolonged brakings.
- This ensures a correct settlement of the friction material on the brake disc pads.
- During the first 800 km, the engine speed should not exceed 6000 rpm.
- Between the first 800 and 1600 km drive more briskly, change speed and use the maximum acceleration only for a few seconds, in order to ensure better coupling of the components subject to wear; never exceed 9000 rpm.
- After the first 1600 km you can expect better performance from the engine, in any case without exceeding 11000 rpm (red sector of the revolution counter).

STOPPING AND PARKING

To stop the vehicle:

- release the throttle grip, stop the vehicle by putting on both brakes and shifting down according to the speed of the vehicle;
- disengage the clutch before the vehicle has completely stopped, in order to prevent the engine from stalling.

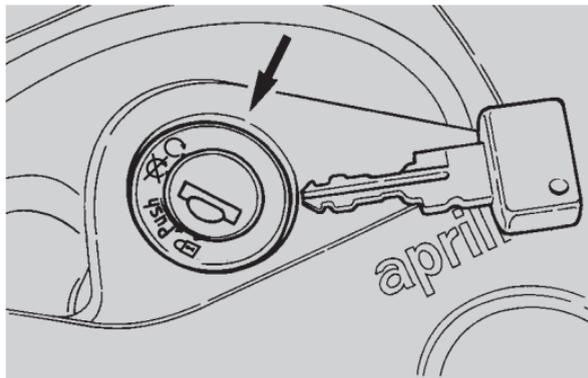


Fig. 26

To park:

- shift the gears to the neutral;
- turn the ignition switch to position "⊗" (Fig. 26);
- turn the fuel cock to position "OFF";
- turn the handlebars completely leftwards;
- lock the steering (see "STEERING LOCK" - page 22) and extract the key;
- use the apposite side stand for parking.



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 block.

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

SUGGESTIONS TO PREVENT THEFT

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

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

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 the space provided in this manual, to facilitate the identification of the owner in case of finding after theft.

SURNAME:

NAME:

ADDRESS:

.....

TELEPHONE NO.:

.....



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

MAINTENANCE



Before beginning any maintenance operation or any inspection of the vehicle, stop the engine, extract the key from the ignition block, if possible lift the vehicle by means of the proper equipment, on firm and flat ground.

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



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

To carry out maintenance operations a basic knowledge of mechanics and sometimes specific tools and technical training are required.

If you need assistance or technical advice consult, when possible, your **aprilia** Official Dealer, who can ensure you quick and careful servicing.

After any maintenance operation, carry out the preliminary checking operations (see the "PRELIMINARY CHECKING OPERATIONS" table - page 43).

REGULAR SERVICE INTERVALS CHART

Checking operations	After running-in (1000 km or 4 months)	Every 4000 km or 8 months	Every 8000 km or 16 months
Battery - fluid level	C	C	
Spark plug	P	P	S
Carburettor	C	P	
Wheel centering		C	
Steering bearings and steering	C	C	
Wheel bearings		C	
Air cleaner		P	
Clutch clearance	R	R	
Braking systems	C	C	
Cooling system	C	C	
Light system	C	C	
Coolant	every 1,500 km: C/ every 2 years: S		
Brake fluid	every year: S/every 4000 km: C		
Mixer oil level	every 500 km: C		
Fork oil	every 12000 km: S		
Transmission oil	S	C	every 12000 km: S
Mixer pump and bleeding	R		R
Tyre inflation pressure	every month: R		
Minimum rpm	R		R
Fuel cock	C	C	
Nut, bolt, screw tightening	C	C	
Suspensions and attitude	C	C	
Brake fluid bleeding	after running-in: C		
Chain tension and lubrication	every 500 km: C		
Fuel pipes		C	every 4 years: S
Piston and small parts	every 8000 km:C/ every 16000 km: S		

C = check, clean, adjust, lubricate or change if necessary
P = clean **S** = change **R** = adjust
 Carry out the maintenance operations more frequently if you use the vehicle in rainy and dusty areas or on uneven ground.
Have the maintenance operations on the indicated components carried out by Aprilia Official Dealers ONLY.



Remember: 1 mile = 1.6 km

1 km = 0.625 miles.

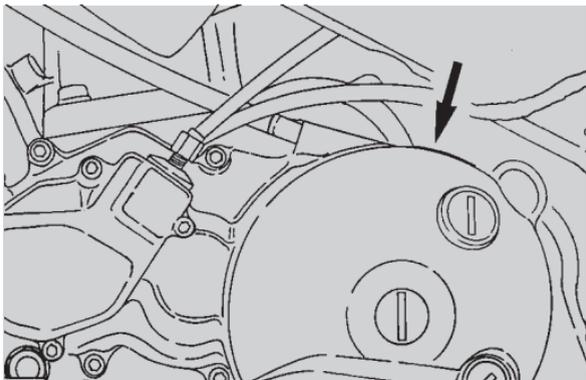


Fig. 27

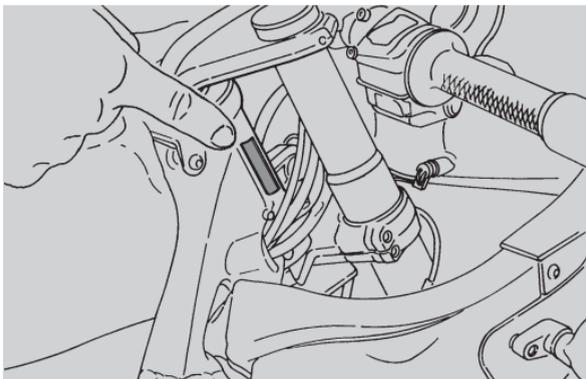


Fig. 28

IDENTIFICATION DATA

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

ENGINE NUMBER

The engine number is stamped on the upper part of the crankcase, on the left (Fig. 27).

Engine no. _____

FRAME NUMBER

The frame number is stamped on the right side of the steering tube (Fig. 28).

Frame no. _____

 **Do not alter the identification numbers if you don't want to incur severe penal and administrative sanctions.**

CHECKING THE TRANSMISSION OIL LEVEL AND TOPPING UP (Fig. 29)



Remember: 1 mile = 1.6 km
1 km = 0.625 miles.

Read pages 31 and 50 carefully.

Check the transmission oil level every 4000 km, excepted the cases in which the oil change is recommended (see "CHANGING THE TRANSMISSION OIL" - page 54).

To carry out the checking:

- stop the engine and let it cool down for at least 10 minutes, in order to allow the oil to flow back to the oil pan;
- keep the vehicle in vertical position, with the two wheels resting on the ground;
- make sure that the oil level reaches or exceeds the middle of the peephole (1);
- if this doesn't occur, it means that the oil quantity is insufficient. In this case, remove the plug (2) and pour small quantities of oil through the filling hole. Wait about 2 minutes, in order to allow the oil to distribute uniformly inside the oil pan, then repeat the operation until the oil level reaches the middle of the peephole (1);
- retighten the filling plug (2).

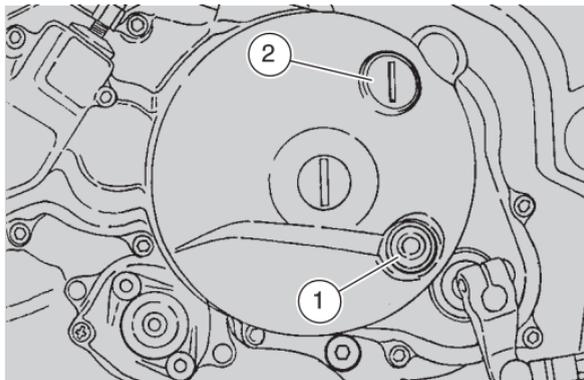


Fig. 29

CHANGING THE TRANSMISSION OIL (Fig. 30)



When warmed up, the engine contains hot oil; therefore, in order to avoid burns, be careful while performing the operations described here below.



**Remember: 1 mile = 1.6 km
1 km = 0.625 miles.**

Read page 50 carefully.

Change the transmission oil after the first 1000 km and successively every 12000 km (see the "REGULAR SERVICE INTERVALS CHART" - page 51).

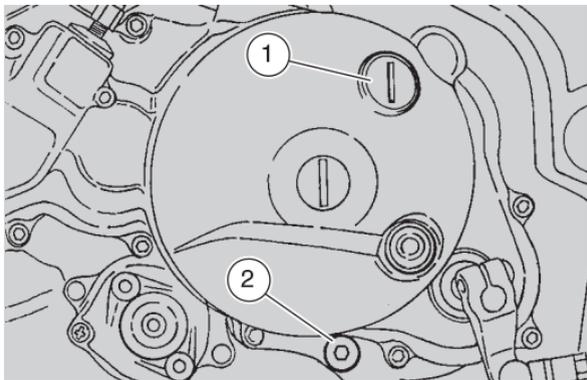


Fig. 30

To carry out the changing:

- warm up the engine for a few minutes, to facilitate the oil outflow during the following draining phase;
- keep the vehicle in vertical position, with the two wheels resting on the ground;
- remove the fairing of the left side;
- unscrew and remove the oil filling plug (1);
- unscrew and remove the oil drain plug (2), positioned on the bottom of the base;
- drain the oil and let it drip into a container for a few minutes;
- remove the metal residues from the drain plug magnet (2);
- retighten the drain plug (2);
- pour about 1000 cm³ of engine oil inside the filling opening (see the "LUBRICANT CHART" - page 84);
- tighten the oil filling plug (1);
- put the fairing back to its position;
- check the oil level (see "CHECKING THE TRANSMISSION OIL LEVEL AND TOPPING UP" - page 53).

CHAIN



An excessive slackening of the chain can make it come out of the pinion, which often results in accidents or serious damages to the vehicle. Periodically check the slack and if necessary adjust it (page 56).

To change the chain, contact your **aprilia Official Dealer, who will ensure you careful and prompt servicing.**

Read page 50 carefully.

The RS 125 is provided with a chain in which the main joint is used.

If maintenance operations are not performed properly, the chain may wear untimely or the pinions may be damaged.

Provide for maintenance 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, position the vehicle on the side stand and put the gears into 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 (Fig. 31);

- move the vehicle forward, in such a way as to be able to check the vertical oscillation of the chain also when the wheel turns; the slack must be constant in all the wheel rotation phases.

If in some sections the slack is greater than in others, this means that there are crushed or seized links. To eliminate the risk of seizures, lubricate the chain frequently (see page 57).

If the slack is uniform and greater than prescribed, carry out the adjustment (see page 56).

If the chain is disassembled and then reassembled, make sure that the clip of the connection link is mounted with its open part opposite to the direction of advancement (Fig. 31).

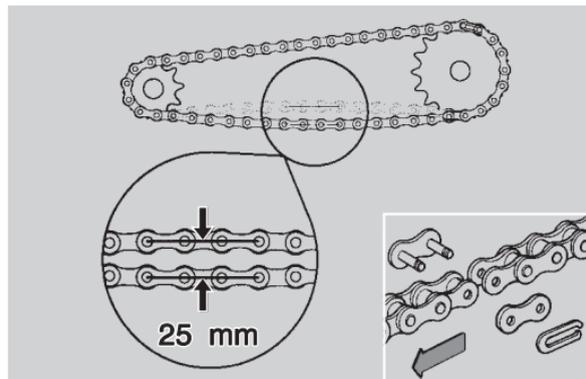


Fig. 31

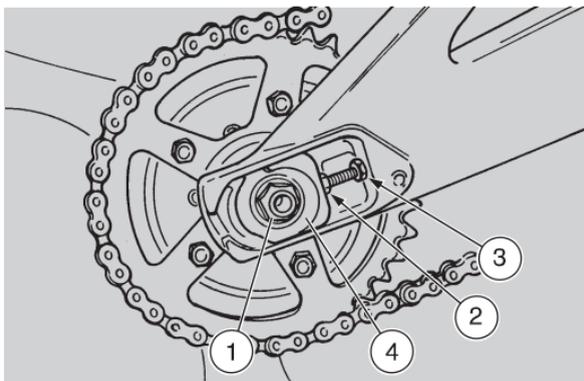


Fig. 32

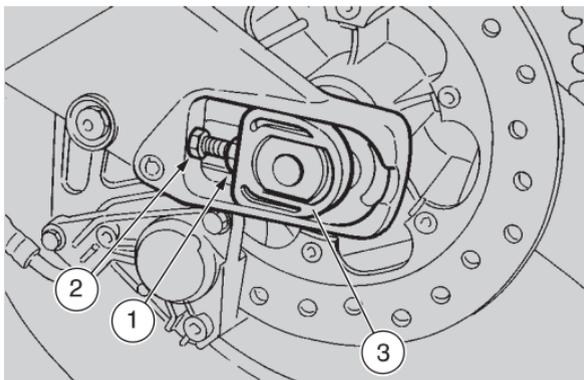


Fig. 33

Adjustment

If after the checking it is necessary to adjust the chain tension, proceed as follows:

- loosen the fastening nut of the rear wheel pin (1-Fig. 32);
- loosen the two lock nuts of the right (2-Fig. 32) and left (1-Fig. 33) adjusters, positioned near the rear wheel pin;
- act on the right (3-Fig. 32) and left (2-Fig. 33) adjusters, making sure that the fixed references on the rear fork coincide on both sides with the mark stamped on the mobile plates (4-Fig. 32, 3-Fig. 33);
- once the operation has been completed, tighten the fastening nut of the rear wheel pin.

Driving torque: 100 Nm (10 kgm);

- tighten the lock nuts of the two adjusters;
- tighten the right and left screws;
- check the slack again (page 55).

Checking the wear and tear of chain and pinions

Furthermore, make sure that chain and pinions do not present:

damaged rollers; loosened pins; dry, rusty, crushed or seized links; incorrect adjustment; excessive wear; excessively worn or damaged pinion teeth.

If the chain rollers are damaged, the pins are loosened and/or the O rings are either damaged or lacking, it is necessary to change the chain.



Lubricate the chain frequently, especially if there are dry or rusty parts. Crushed or seized links must be lubricated and repaired. If this is not possible, consult your **aprilia Official Dealer, who will provide for changing the chain.**

Lubrication and cleaning



**Remember: 1 mile = 1.6 km
1 km = 0.625 miles.**

Lubricate the chain every 1000 km and whenever it is necessary.

Lubricate the chain with thick oil (SAE 80W - 90) or chain grease available on the market.

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

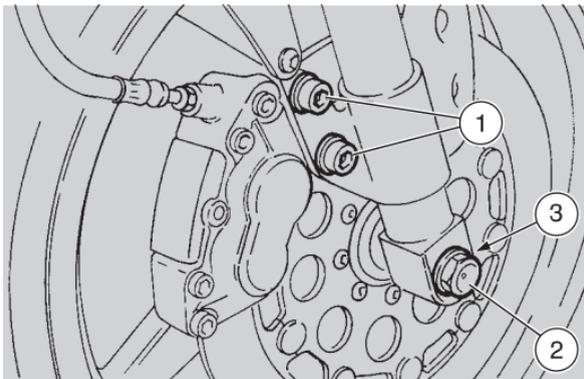


Fig. 34

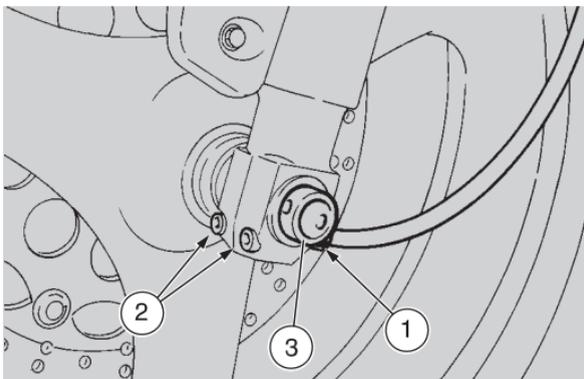


Fig. 35

FRONT WHEEL

DISASSEMBLY

⚠ Never press the front brake lever after removing the brake callipers, otherwise the calliper pistons may go out of their seat, thus causing the outflow of the brake fluid. In this case consult your aprilia Official Dealer, who will carry out the proper maintenance operation.

Read page 50 carefully.

To remove the front wheel, proceed as follows:

- place the vehicle on the side stand;
- remove the two fastening screws of the brake calliper (1-Fig. 34);
- disconnect the odometer cable (1-Fig. 35);
- loosen the wheel pin screw (2-Fig. 34);
- loosen the four screws of the fork clamps (3-Fig. 34, 2-Fig. 35);
- raise the front part of the vehicle and place a support under the engine, to prevent the vehicle from falling down after the wheel has been removed;
- remove the pin screw (2-Fig. 34);
- unscrew and extract the pin (3-Fig. 35);
- remove the wheel.

REASSEMBLY

Read page 50 carefully.

To reassemble the wheel:

- position the wheel between the fork rods;
- insert the pin (3-Fig. 35);
- insert and turn the screw (2-Fig. 34) until the pin sets in the seat;
- position the odometer cable correctly (1-Fig. 35);
- tighten the four screws of the fork clamps (2-Fig. 34) (3-Fig. 35);
- tighten the screw (2-Fig. 34).

Driving torque: 80 Nm (8 kgm);

- mount the brake calliper, tightening the screws (1-Fig. 34).



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

Check the wheel centering.

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

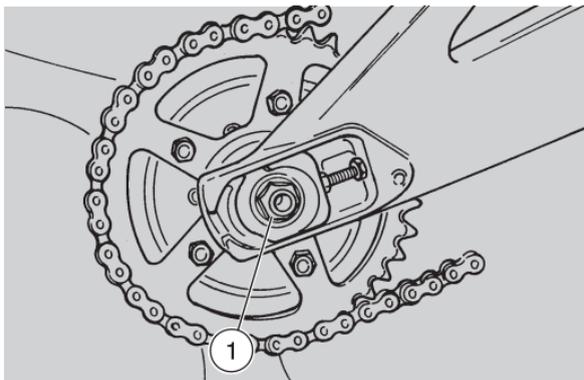


Fig. 36

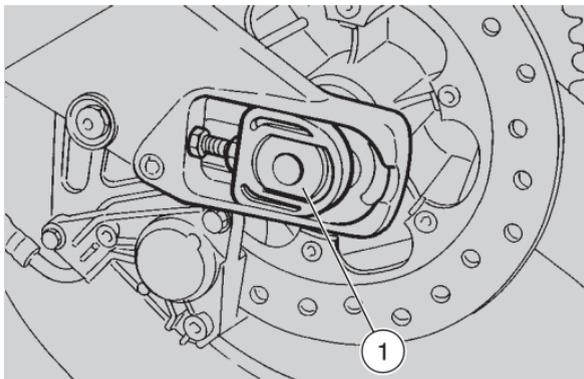


Fig. 37

REAR WHEEL

DISASSEMBLY

 Never press the rear brake lever after removing the wheel, since otherwise the calliper piston may go out of its seat, thus causing the outflow of the brake fluid. In this case consult your **aprilia** Official Dealer, who will carry out the proper maintenance operation.

Read page 50 carefully.

To remove the wheel, proceed as follows:

- raise the rear part of the vehicle and place a support under the engine, to prevent the vehicle from falling down after the wheel has been removed;
- remove the nut (1-Fig. 36);
- extract the pin (1-Fig. 37);
- remove the transmission chain from the crown, by pushing the rear wheel forward;
- remove the wheel from the rear fork.

REASSEMBLY

Read page 50 carefully.

To reassemble the wheel, carry out the following operations:

- position the wheel between the rear fork arms;
- push the wheel forward and position the chain in its seat;
- position the antirotation pin correctly in the brake plate seat;
- insert the pin (1-Fig. 37);
- insert and screw the nut (1-Fig. 36) until the pin sets in the seat;
- check the chain tension (page 55);
- tighten the nut (1-Fig. 36).

Driving torque: 100 Nm (10 kgm).



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

Check the wheel centering.

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

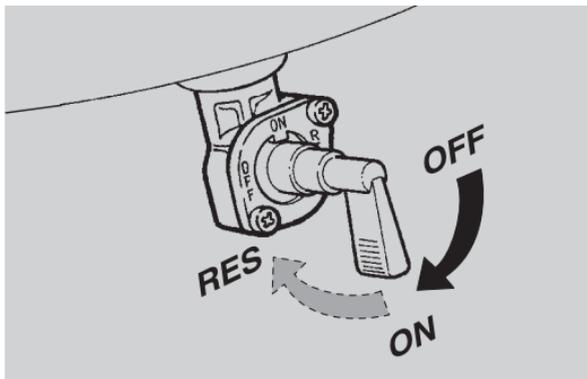


Fig. 38

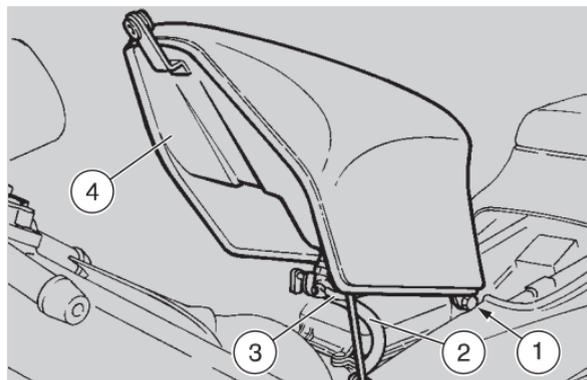


Fig. 39

REMOVING THE FUEL TANK

 When you perform the following operations, be extremely careful: the petrol may flow out of the tank and catch fire if it gets in contact with the red-hot surfaces of the engine!

Read pages 29 and 50 carefully.

To remove the fuel tank, proceed as follows:

- move the fuel cock to position "OFF" (Fig. 38);
- raise the tank (see "RAISING THE FUEL TANK" - page 25);
- disconnect the fuel pipe (2-Fig. 39) and the electric cable (3-Fig. 39);
- unscrew and remove the nut and the fastening screw of the tank (1-Fig. 39);
- remove the fuel tank (4-Fig. 39).

For the reassembly, carry out the same operations reversing the order.

AIR CLEANER



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



**Remember: 1 mile = 1.6 km
1 km = 0.625 miles.**

Read pages 29 and 50 carefully.

Periodically check the conditions of the air cleaner and clean it every 4000 km.

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

For the cleaning, proceed as follows:

- raise the fuel tank (see "RAISING THE FUEL TANK" - page 25);
- remove the filter case cover (1-Fig. 40), by loosening the two screws (2-Fig. 40) (other two screws are positioned on the front part);
- remove the filtering element (3-Fig. 40) and the grid (4-Fig. 40);
- wash the filtering element with clean, non-inflammable solvents or solvents with high volatility point, then let it dry thoroughly;

- apply a filter oil or a thick oil (SAE 80W-90) on the whole surface, then squeeze it to eliminate the oil in excess. It must be well impregnated, though not dripping.

For the reassembly, repeat the same operations reversing the order.

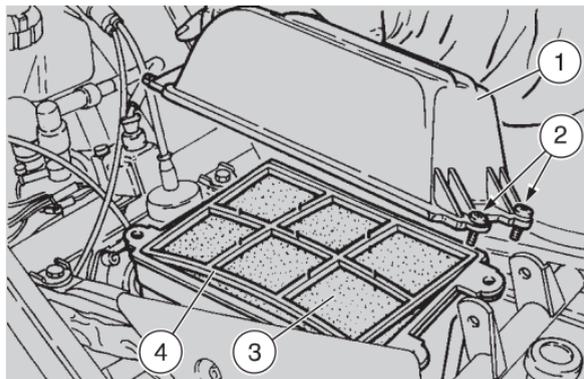


Fig. 40

INSPECTING THE FRONT AND REAR SUSPENSION



Remember: 1 mile = 1.6 km
1 km = 0.625 miles.

Read page 50 carefully.

Change the front suspension oil every 12000 km. Furthermore, carry out the following checking operations:

- Push the fork repeatedly downwards, locking the front brake. The stroke must be gentle and there must be no trace of oil on the rods.
- Lift the rear wheel from the ground by using the proper stand and check the rear fork bearings.
- Check the fastening of all the components and the functionality of the front and rear suspension joints.

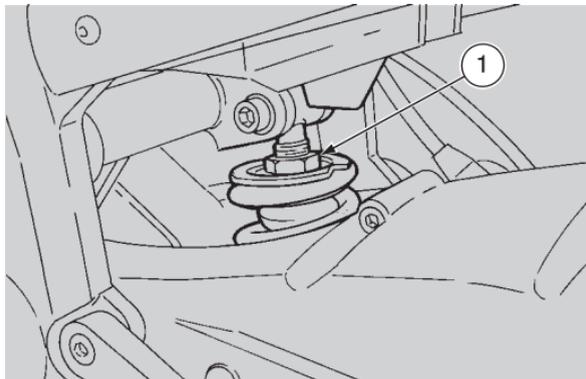


Fig. 41



Dealer.

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



To change the fork oil, contact your **aprilia** Official Dealer, who will ensure you prompt and accurate servicing.

ADJUSTING THE REAR SUSPENSION

Adjusting ring (1-Fig. 41)	By screwing it	By unscrewing it
Function	Spring preload increase	Spring preload decrease
Attitude	The vehicle is more rigid	The vehicle is less rigid
Recommended kind of road	Smooth or normal roads	Roads with uneven surface
Notes	Drive with passenger	Drive without passenger

CHECKING THE STEERING

Read page 50 carefully.

To check the steering it is necessary to:

- raise the front wheel, by means of a support or a special stand;
- shake the fork in the driving direction (Fig. 42);
- if the slack must be adjusted, loosen the lock nut (1 - Fig. 43) and act with the apposite key on the adjusting nut (2-Fig. 43), in order to take up the slack;
- repeat the check until the problem is over;
- tighten the lock nut firmly (1-Fig. 43).



Once this operation has been carried out, make sure that the handlebars turn smoothly, to avoid damaging the balls and losing control of the vehicle.

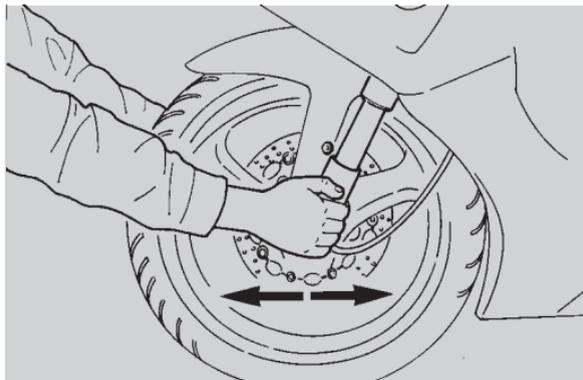


Fig. 42

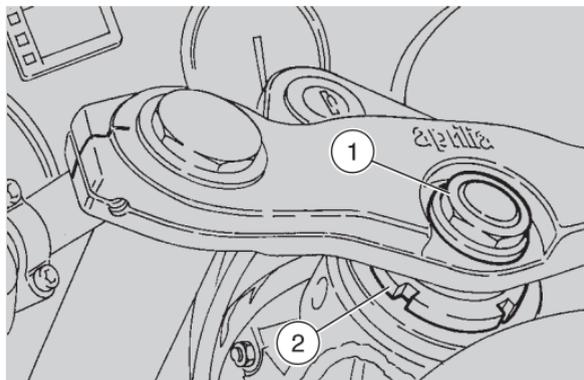


Fig. 43

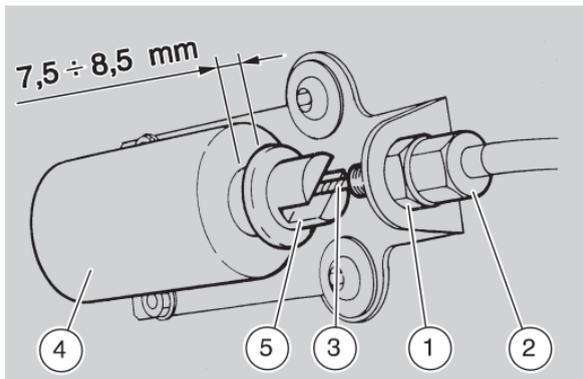


Fig. 44

ADJUSTING THE EXHAUST PORT VALVE "ELECTRONIC RAVE" (Fig. 44) (only for the standard version)

Read page 50 carefully.

The opening and closing of the exhaust port valve "RAVE" are controlled by a solenoid which, when excited, attracts a magnetic core connected with a cable that acts on the valve.

In order to ensure the proper functioning of the system, it is necessary to adjust the cable stroke carefully, proceeding as follows:

- Loosen the adjuster nut (1).
- Unscrew the adjuster completely (2).
- Pull the cable (5), pushing the core (3) inside the solenoid (4). The core (3) will not enter completely. In this way the cable (5) is under traction and the RAVE valve is completely open.
- Keeping the same traction on the core (3), screw the solenoid adjuster (4) almost completely (**leave about 0,5 mm** before the end of stroke).
- Tighten the nut of the adjuster (1).
- To verify if the operation has been correctly performed, make the core (3) go back inside the solenoid (4), then let it go out slowly, accompanying it with the hand to its rest position.
- In this condition the distance must be included between **7,5** and **8,5** mm.

CHECKING THE PAD WEAR (Fig. 45)



**Remember: 1 mile = 1.6 km
1 km = 0.625 miles.**

Read pages 31, 32, 33, 34, 35 and 50 carefully.

Check the brake pad wear after the first 1000 km, then every 4000 km.

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

The wear will be greater when the vehicle is driven on dirty or wet roads.

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

- remove the protection cover (1);
- look through the opening of the brake calliper;
- if the thickness (even of one pad only) is reduced to about 1 mm, replace both pads.

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

- open the cover;
- if the thickness (even of one pad only) has reduced to about 1 mm, replace both pads.



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

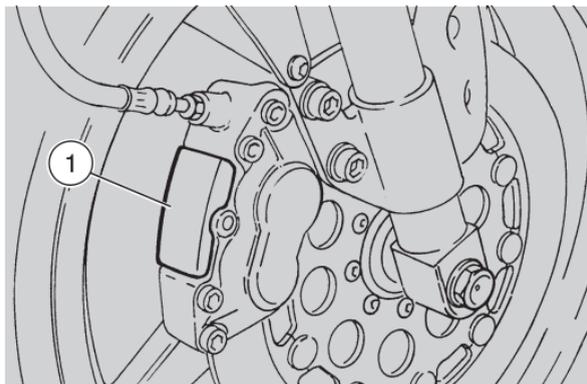


Fig. 45

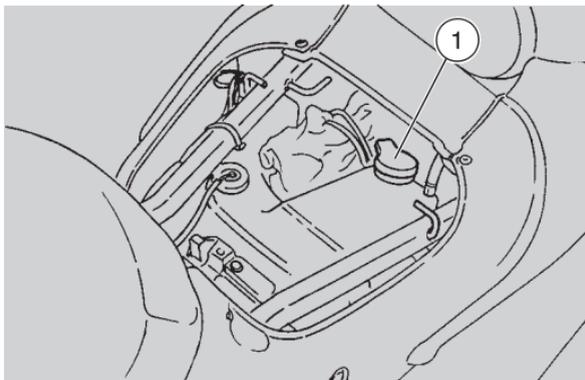


Fig. 46

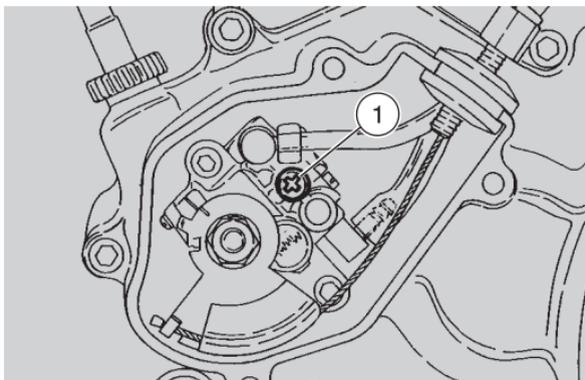


Fig. 47

BLEEDING THE MIXER OIL TANK (Fig. 46-47)

Read page 50 carefully.



If you run out of oil in the mixer tank, or if the mixer oil pipe is removed, it is necessary to bleed the system. This operation is indispensable, since the running of the engine with air in the mixer oil system may cause serious damages to the engine itself.

Proceed as follows:

- remove the saddle (see "GLOVE COMPARTMENT"- page 23);
- remove the plug (1-Fig. 46);
- top up the mixer oil tank (see "MIXER OIL TANK" - page 30);
- remove the left fairing;
- remove the mixer oil pump cover ;
- remove the cross-slotted screw (1-Fig. 47) positioned on the oil mixer pump and wait until the oil has flowed out of the hole;
- when the outflowing oil doesn't present air bubbles any more, put the screw back and tighten it (1-Fig. 47).



It is important to wait until the air has completely gone out, since the engine can be seriously damaged if it runs with air in the mixer oil system.

- For the reassembly, carry out the same operations reversing the order.

IDLING ADJUSTMENT (Fig. 48)

Read page 50 carefully.

Adjust the idling every time it is irregular.

To carry out this operation:

- Warm the engine up until it reaches the normal running temperature.
- Position the vehicle on the stand, keeping the engine on.
- Act on the adjusting screw (1) with a screwdriver, in such a way as to obtain constant rpm of the engine; by rotating it clockwise, you increase the engine rpm, by rotating it anticlockwise, you decrease the engine rpm.
- Screw or unscrew the air screw (2), until you obtain the maximum engine revolutions per minute.
- If necessary, further adjust the idling screw.
- The minimum speed of the engine (idling) must be about 1300 ± 150 rpm.
- By acting on the throttle grip, accelerate and decelerate a few times to verify the correct functioning and to check if the idling speed is constant.

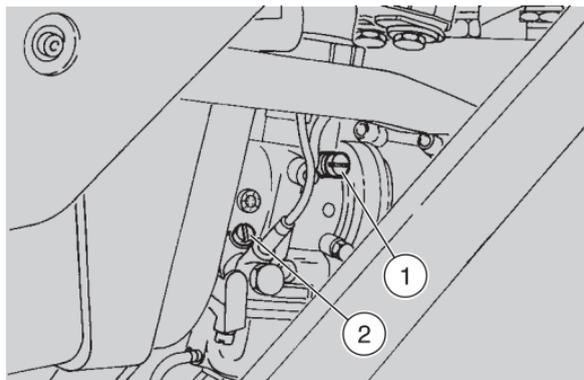


Fig. 48



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

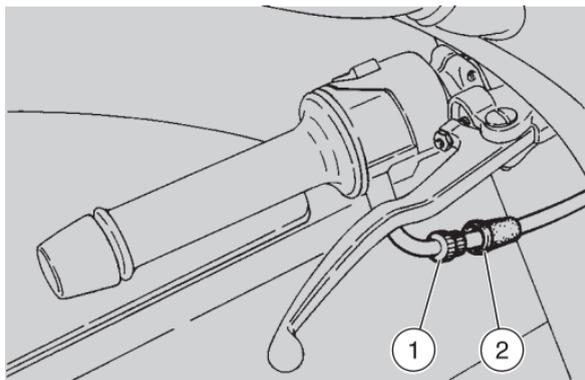


Fig. 49

ADJUSTING THE ACCELERATOR CONTROL (Fig. 49)

The accelerator control must have a slack such as to allow the closing of the carburettor valve and of the lubrication pump.

In order to obtain this, act on the special adjuster (1) positioned at the beginning of the accelerator control cable, after removing the protection element (2).



Perform this operation only after making sure that the cables of the carburettor and of the lubrication pump are properly adjusted.

SPARK PLUG (Fig. 50)



**Remember: 1 mile = 1.6 km
1 km = 0.625 miles.**

Read page 50 carefully.

Change the spark plug every 6000 km.

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

To remove and clean the spark plug:

- remove the saddle (see "GLOVE COMPARTMENT" - page 23);
- raise the fuel tank (see "RAISING THE FUEL TANK" - page 25);
- take off the spark plug cap;
- remove all the dirt from the base of the spark plug, then unscrew it with the spanner you will find in the tool kit and extract it from its seat, taking care that neither dust nor other substances enter into the cylinder.

If the spark plug is wet or very dark, replace it with a new one having lower heat rating; on the contrary, if the spark plug is too light, do just the opposite: a spark plug that functions correctly should be light brown.

- Make sure that on the electrode and on the central porcelain part there are neither carbon deposits, nor corrosion marks; if necessary, clean them with the special cleaners for spark plugs, with an iron wire and/or a metal brush.
- Energetically blow some air, in order to prevent the removed residues from getting into the engine.

If the spark plug has crackings on the insulating material, corroded electrodes or excessive deposits, it must be changed.

- Check the spark plug gap (Fig. 50) with a thickness gauge. The gap must be about **0,5 mm**; if necessary adjust it, carefully bending the earth electrode.
- Make sure that the washer is in good conditions. With the washer on, screw the spark plug by hand in order not to damage the thread.
- Tighten the spark plug by means of the spanner, giving it half a turn to compress the washer.
- Put back the spark plug cap.



The spark plug must be well tightened, otherwise the engine may overheat and be seriously damaged. Use the suggested type of spark plug only (see "TECHNICAL DATA" - page 83), in order not to compromise the life and performance of the engine.

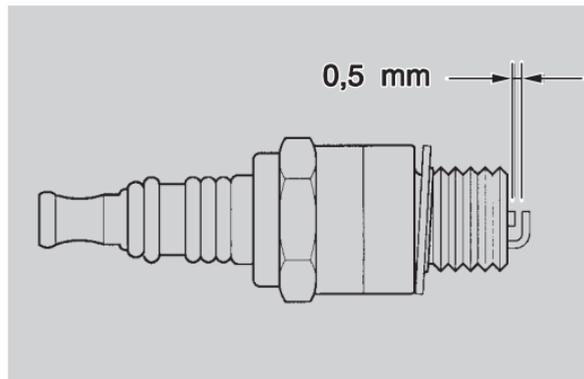


Fig. 50

BATTERY (Fig. 51)



Remember: 1 mile = 1.6 km
1 km = 0.625 miles.

Read page 50 carefully.

Check the electrolyte level and the tightening of the terminals after the first 1000 km and then every 4000 km.



The electrolyte in the battery is toxic and caustic and if it gets in contact with the skin it can cause burns, since it contains sulphuric acid. Wear protection clothes, a face mask and/or goggles during maintenance operations. In case of contact with the skin, rinse with plenty of water. In case of contact with the eyes, rinse with plenty of water for 15 minutes, then consult an oculist without delay.

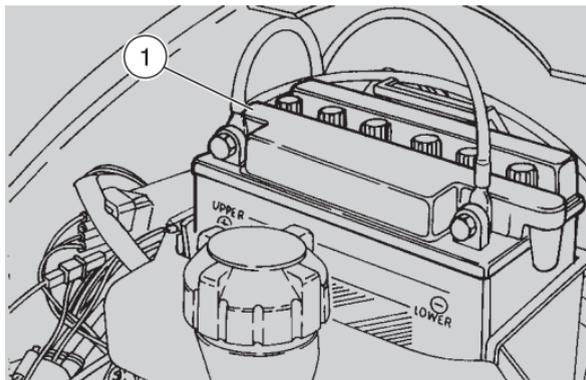


Fig. 51

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

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

During the recharging or the use, make sure that the room is properly ventilated and avoid inhaling the gases released during the recharging. Never invert the connection of the battery cables. Do not incline the vehicle too much, in order to avoid dangerous leakages of battery fluid.

KEEP AWAY FROM CHILDREN

To check the electrolyte level, proceed as follows:

- raise the fuel tank (see "RAISING THE FUEL TANK" - page 25);
- extract the battery (1-Fig. 51);
- make sure that the fluid covers the elements completely (the right level must be included between the two "MIN" and "MAX" marks that are stamped on the battery side).

If necessary, top up by adding distilled water.

To recharge, disconnect the cables, extract the battery from the container and remove the element plugs.

Use an amperage equal to 1/10th of the battery capacity.

After the recharging operation, check the electrolyte level again and if necessary top up with distilled water.

Tighten the plugs.



Always connect the battery breather pipe, to prevent the sulphuric acid vapours from corroding the electric system, painted parts, rubber elements or gaskets when they exit the breather pipe.

LONG PERIOD OF INACTIVITY

If the vehicle remains unused for a long period, remove the battery and recharge it completely, by using a trickle charge.

Place the battery in a cool and dry room.

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

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.

CHANGING THE FUSES (Fig. 52)



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.



If the 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.

Read page 50 carefully.

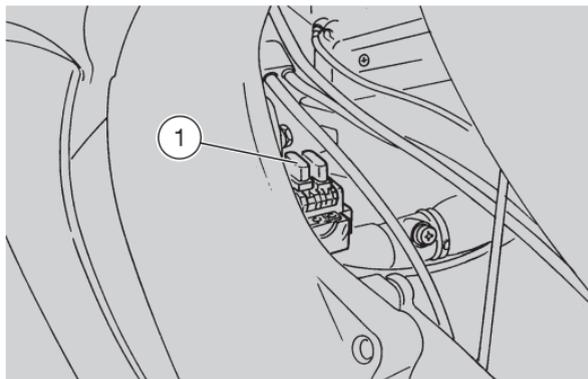


Fig. 52

If an electric component doesn't work or works irregularly, or if the vehicle fails to start, it is necessary to check the fuses:

- turn the ignition switch to position "⊗", to avoid any accidental short circuit;
- raise the fuel tank (see "RAISING THE FUEL TANK" - page 25);
- extract the fuses one by one (1-Fig. 52) and check if the filament is broken;
- before replacing the fuse, try to find out what caused the trouble, if possible;
- then replace the fuse with a new one having the same amperage;
- put back the saddle.

ARRANGEMENT OF THE FUSES

15A fuse - From the battery to:

Regulator, rava electronic control unit, solenoid, head light, intruments light, rear parking light, start relay.

7,5A fuse - From the key switch to:

Rear and front stop switch, direction indicators, horn, coolant temperature indicator, low fuel warning light, neutral indicator warning light, mixer oil reserve warning light.

ADJUSTING THE HEADLIGHT BEAM (Fig. 53-54)

The headlight beam can be adjusted by turning the proper screw with a screwdriver (1-Fig. 53).

By turning it clockwise the headlight beam sets upwards, while by turning it anticlockwise the beam sets downwards.

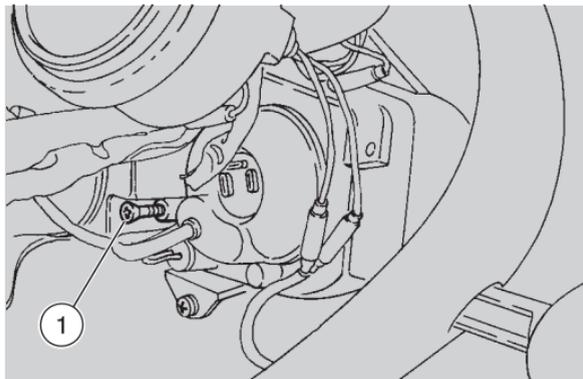


Fig. 53

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 - see Fig. 54).

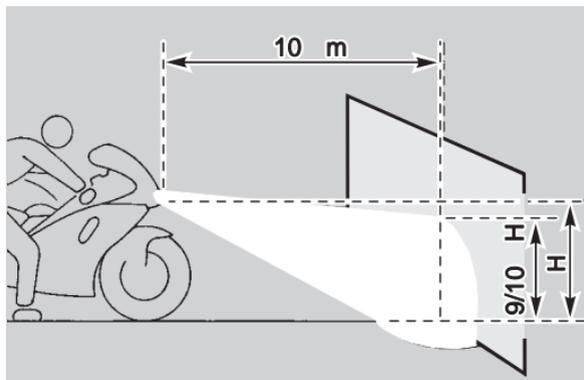


Fig. 54

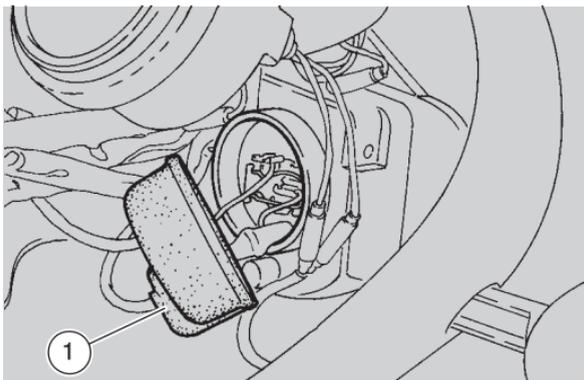


Fig. 55

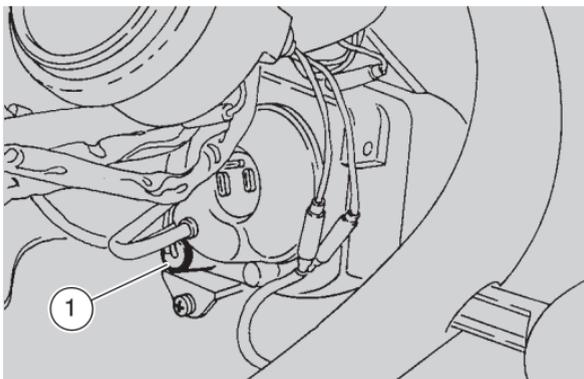


Fig. 56

BULBS



Before changing a bulb, turn the ignition switch to position "⊗".

Change the bulb wearing clean gloves.



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 prevent it from blowing frequently.

Read page 50 carefully.

CHANGING THE HEADLIGHT BULBS (Fig. 55-56)

To change the low and high beam bulbs, proceed as follows:

- take off the rubber cup (1-Fig. 55);
- take off the connector;
- act on the "V"-spring and extract the socket with the bulb;
- replace the damaged bulb;
- to reassembly, carry out the same operations reversing the order.

To change the parking light bulb, proceed as follows:

- remove the rubber socket (1-Fig. 56) and extract the bulb;
- if it is damaged, replace the bulb.

 The right bulb corresponds to the high beam, the left bulb to the low beam and the central bulb to the parking light.

CHANGING THE DASHBOARD BULBS (Fig. 57)

Read pages 76 and 50 carefully.

Proceed as follows:

- take off the ten screws that fasten the front plastic protection;
- remove the rubber sockets and replace the damaged bulbs.

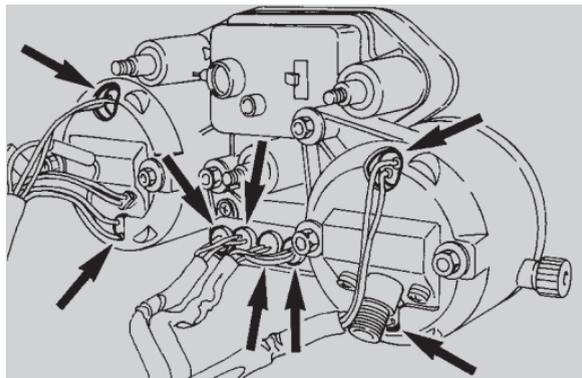


Fig. 57

CHANGING THE REAR LIGHT BULBS (Fig. 58)

Read pages 76 and 50 carefully.

Proceed as follows:

- remove the two screws (1);
- remove the glass (2);
- press the bulb slightly and rotate it anticlockwise;
- remove the bulb from its seat.

 The introduction of a new bulb can be carried out in one sense only, since the two guide pins are misaligned.

- Install a new bulb correctly, then repeat the above operations in the reverse order for the reassembly.

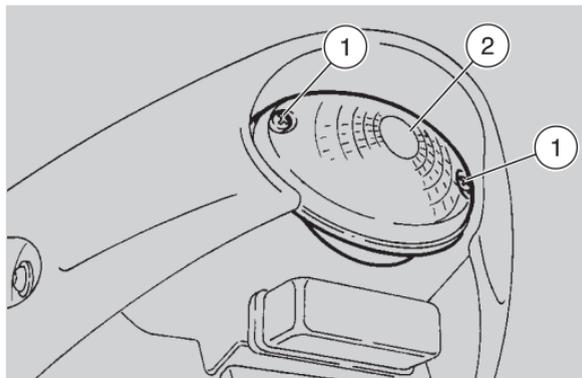


Fig. 58

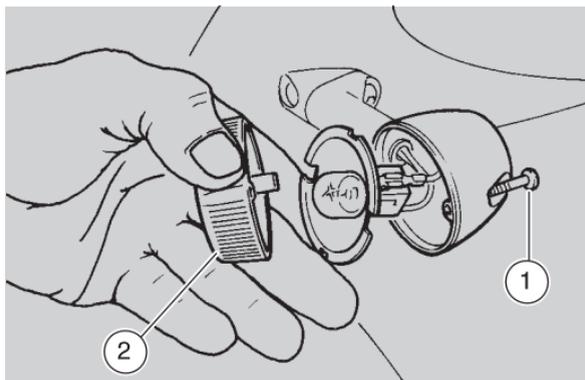


Fig. 59

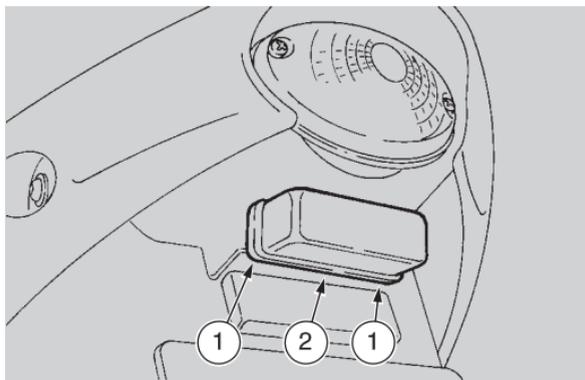


Fig. 60

CHANGING THE DIRECTION INDICATOR BULBS (Fig. 59)

Read pages 76 and 50 carefully.

Proceed as follows:

- extract the screw (1);
- remove the protection glass (2);
- press the bulb slightly and rotate it anticlockwise;
- remove the bulb from its seat;
- correctly install a new bulb.

Repeat the above operations in the reverse order for the reassembly.



Tighten the screw (1) with slight pressure, otherwise the protection glass may break.

CHANGING THE NUMBER PLATE BULB (Fig. 60)

Read pages 76 and 50 carefully.

Proceed as follows:

- remove the 3 screws that fasten the plate frame;
- remove the socket (2) by unscrewing the two fastening screws (1);
- extract the bayonet joint bulb and install a new bulb.

For the reassembly, carry out the operations described above in the reverse order.

TRANSPORT



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

During transport the vehicle must be held upright, in its normal use position, to avoid any oil and battery fluid leakage.

DRAINING THE FUEL TANK

- Read page 29, "FUEL", carefully .
- Stop the engine.
- Empty the fuel tank by means of a manual pump or a similar system.
- Put the free end of the fuel draining pipe into a receptacle.
- Open the carburettor breather acting on the drain screw.

When all the fuel has flowed out, turn the drain screw until the breather shuts.

CLEANING



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.

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 front plastic protection use neutral soap only.

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

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



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

Use neither high-pressure water/air jets, nor vapour jets on the following parts: wheel hubs, controls on the right and on the left side of the handlebars, carburettor, brake pump, instruments and indicators, silencer exhaust, tool case, glove compartment, ignition switch-steering lock.

Avoid damaging rubber and plastic parts with detergents, corrosive solvents or penetrants.

LONG PERIODS OF INACTIVITY

After a long period of inactivity of the vehicle some precautions are necessary to avoid any problem. Furthermore, it is important to carry out the necessary repairs and a general check up BEFORE the period of inactivity, since you could forget to carry them out later.

Proceed as follows:

- Empty the fuel tank and the carburettor (see "DRAINING THE FUEL TANK - page 79).
- Remove the tank plug.
- Extract the spark plug and pour a teaspoon (5-10 cm³) of two-stroke engine oil into the cylinder.

- Press the start push button "I" for a few seconds, to distribute the oil evenly on the cylinder surfaces.
- Remove the battery (see "BATTERY" - page 72) and charge it.
- Wash and dry the vehicle (see "CLEANING - page 79). Polish the painted surfaces with wax.
- Inflate the tyres (see "TYRES" - page 39).
- By means of a suitable support, position the vehicle so that both tyres are raised from the ground.
- Place the vehicle in an unheated, not-humid room, away from sunlight, with minimum temperature variations.
- Cover the vehicle avoiding the use of plastic or waterproof materials.

AFTER A PERIOD OF INACTIVITY

- Uncover and clean the vehicle.
- Check the electrolyte level in the battery and install it (see "BATTERY" - page 72).
- Refill the fuel tank (see "FUEL" - page 29).
- Carry out the preliminary checking operations (see "PRELIMINARY CHECKING OPERATIONS" - page 43).



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

TECHNICAL DATA

DIMENSIONS	Max. length.....	1960 mm
	Max. width.....	780 mm
	Max. height incl. front plastic protection	1090 mm
	Seat height	810 mm
	Wheelbase.....	1345 mm
	Min. ground clearance.....	135 mm
	Steering diameter	4090 mm
	Weight without fuel and oil.....	115 kg
ENGINE	Type.....	One-cylinder, 2-stroke, with lamellar inlet and exhaust port valve. Separate lubrication with variable strength automatic mixer (0.9-2%).
	Number of cylinders.....	1
	Total displacement.....	124.82 cm ³
	Bore and stroke	54 x 54.5 mm
	Compression ratio	12.5 ± 0.5 : 1
	Starting.....	electric
	Clutch.....	oil-immersed multiple discs with hand control on the left side of the handlebars.
	Cooling	liquid-cooled
CAPACITY	Fuel, reserve included.....	13 ℓ
	Fuel reserve	3 ℓ
	Fork oil	430 cm ³ per rod
	Transmission oil	1000 cm ³
	Mixer oil (reserve included).....	1.4 ℓ
	Mixer oil reserve.....	0.35 ℓ
	Coolant	0.8 ℓ (mixture: 30% antifreeze and 70% water)
	Seats	n° 2
	Vehicle max. load (driver+passenger+luggage)	160 kg

GEARS	Type.....	no. 6 gears with foot control on the left
	Ratios: 1st	Z=10/30=1:3.00
	2nd	Z=14/29=1:2.071
	3rd.....	Z=17/27=1:1.588
	4th.....	Z=19/25=1:1.316
	5th.....	Z=21/24=1:1.143
	6th.....	Z=22/23=1:1.045
TRANSMISSION	Primary.....	Z=20/64=1:3.2
	Secondary (chain type).....	Z=16/39=1:2.44
CARBURETTOR	Model	Dell'Orto VHSB 34 LD
	Model (for catalytic version).....	Dell'Orto PHBH 28
	Model (for version F).....	Dell'Orto PHBL 24
FEED	Fuel (normal version)	premium grade petrol according to the DIN 51600 std, min. O.N. 98 (N.O.R.M.) and 88 (NO.M.M.)
	Fuel (catalytic version).....	unleaded petrol according to the DIN 51607 std, min. O.N. 95 (N.O.R.M.) and 85 (NO.M.M.)
FRAME	Type.....	two-beam with cast elements
	Steering inclination angle	25° 30'
	Forestroke	102 mm
SUSPENSIONS	Front.....	telehydraulic fork with helical spring reversed rods adjustable
	Stroke.....	120 mm
	Rear.....	adjustable oscillating rear fork with hydraulic mono-shock absorber with spring preload adjustment
	Stroke (wheel)	120 mm
BRAKES	Front.....	disc brake, Ø 320 mm with hydraulic transmission
	Rear.....	disc brake, Ø 220 mm with hydraulic transmission
WHEELS	RIMS	made of light alloy
	Front.....	17"
	Rear.....	17"

TYRES	Front.....	110 / 70 ZR 17"
	Inflation pressure	180 kPa (1.8 bar)
	Rear.....	150 / 60 ZR 17"
	Inflation pressure	200 kPa (2 bar)
	Inflation pressure (with passenger).....	230 kPa (2.3 bar)
IGNITION	Type.....	CDI
	Spark advance	12° before T.D.C. at 1300 rpm
	Spark plug	NGK BR10 EG
	Spark plug gap	0.5 mm
	Engine idle rpm	1300 ± 150 rpm
ELECTRIC SYSTEM	Battery.....	12 V - 9 Ah
	Fuses	15 / 7.5 A
	Alternator	12 V - 180 W
	Low beam lamp	12 V - 55 W H1
	High beam lamp	12 V - 55 W H3
	Parking light lamp	12 V - 5 W
	Direction indicator lamp	12 V - 10 W
	Revolution counter lamp	12 V - 2 W
	Speedometer lamp	12 V - 2 W
	Tail lamp	12 V - 5+21 W
	Number plate lamp	12 V - 5 W
	Multifunction display lamp	12 V - 2 W
	Low fuel warning light.....	12 V - 2 W
	Idle indicator warning light.....	12 V - 1.2 W
	High beam warning light	12 V - 1.2 W
	Direction indicator warning light	12 V - 1.2 W
Mixer oil level warning light.....	red led diode	

LUBRICANT TABLE

Transmission oil (recommended):  F.C., SAE 75W-90.

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

Mixer oil (recommended):  MAX 2T COMPETITION

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

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

If you need an oil with intermediate characteristics in comparison with the two recommended products, these can be mixed as indicated below:

- SAE 10W  F.A. 5W 67% of the volume, +  F.A. 20W 33% of the volume.
- SAE 15W  F.A. 5W 33% of the volume, +  F.A. 20W 67% of the volume.

Bearings and other lubrication points (recommended):  AUTOGREASE MP.

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):  CHAIN SPRAY.

Brake fluid (recommended):  F.F., DOT 5 (compatible with DOT 4).



Use new brake fluid only.

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



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

APRILIA MOTO U.K. LTD

DUNRAGIT

STRANRAER

WIGTOWNSHIRE DG9 8PN

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TEL. (01581) 400660

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IDEAL MOTOR SPORT PTE LTD

18, HOWARD ROAD

1336 SINGAPORE (SGP)

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FAX 2821012

**AVIRAM & GOLDMAN IMPORT &
MARKETING CO. LTD**

21, TUSHIA STREET

61572 TEL-AVIV

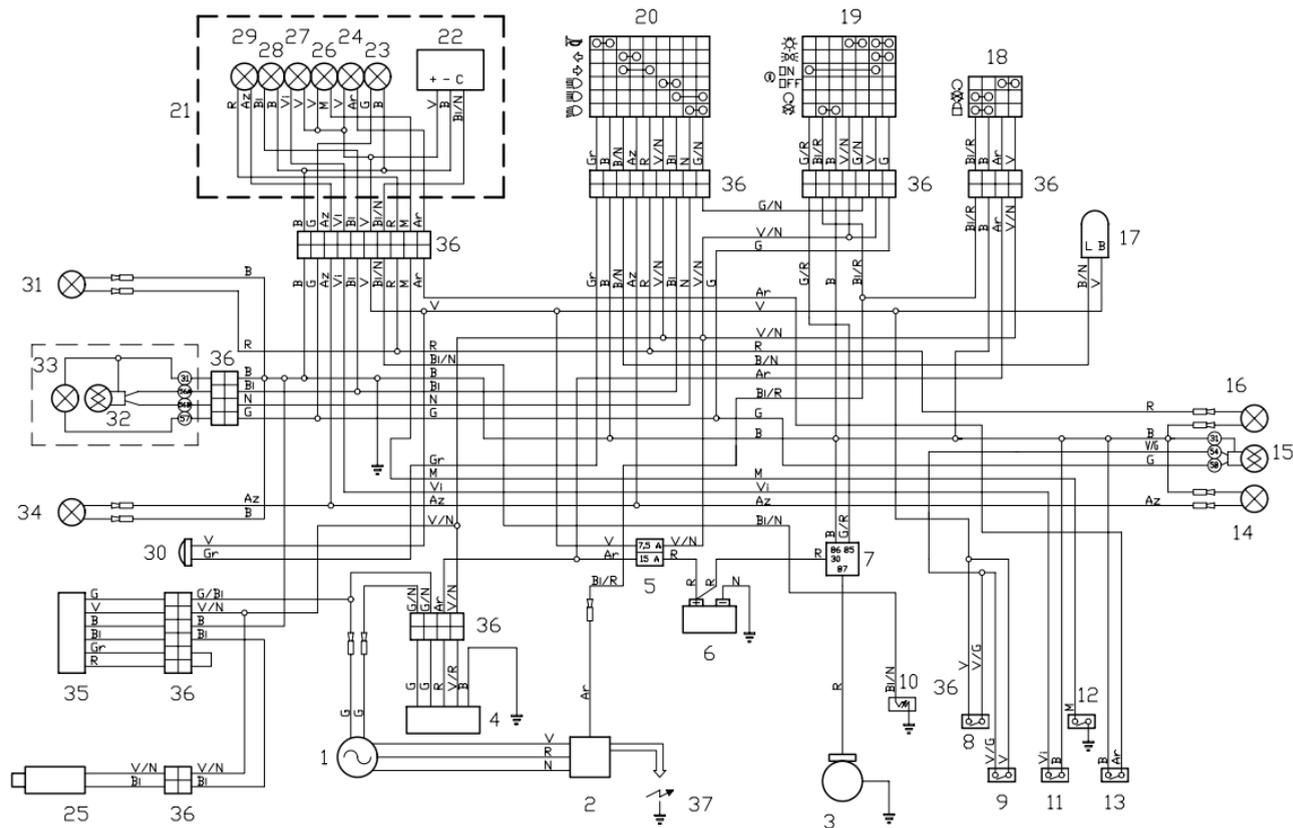
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ISRAEL (IL)

TEL. (3) 5623951

FAX 5623950

WIRING DIAGRAM RS125



WIRING DIAGRAM KEY - RS125

- 1) Generator
- 2) Spool
- 3) Starter
- 4) Voltage regulator
- 5) Fuses
- 6) Battery
- 7) Start relay
- 8) Front stoplight switch
- 9) Rear stoplight switch
- 10) Coolant temperature thermistor
- 11) Mixer oil reserve switch
- 12) Neutral switch
- 13) Low fuel sensor
- 14) Rear left direction indicator
- 15) Rear light
- 16) Rear right direction indicator
- 17) Blinking
- 18) Key switch
- 19) Right dimmer switch
- 20) Left dimmer switch
- 21) Dashboard
- 22) Coolant thermometer
- 23) Dashboard bulbs and parking light warning light
- 24) Low fuel warning light
- 25) Solenoid
- 26) Neutral warning light
- 27) Mixer oil reserve warning light
- 28) High beam warning light
- 29) Direction indicator warning light
- 30) Horn
- 31) Front right direction indicator
- 32) Low/high beam bulb
- 33) Front parking light
- 34) Front left direction indicator
- 35) Electronic RAVE unit
- 36) Multiple connectors
- 37) Spark plug

CABLE COLOURS

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

NOTES

NOTES

NOTES

NOTES

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.