

**aprilia**



**safe drive**



## BASIC SAFETY RULES

The instructions given below cover normal operation of your vehicle and must be carefully observed. By following these rules you will enhance your own safety and the safety of those around you. You will also maximize the life and utility of your vehicle.

Two wheeled vehicles obviously do not provide some of the protection provided by automobiles, therefore it is essential that you wear appropriate protective clothing. Especially, never operate your vehicle without wearing your helmet, gloves, eye protection, a heavy jacket, sturdy footwear, and sturdy full length pants.

However, do not assume that even the best clothing and helmet will protect you in the event of an upset or a crash with another vehicle. At best, this gear provides some protection from scrapes and scratches, but very little, if any, impact protection.

Be sure that you meet all the requirements prescribed by local law, including driver's license, minimum age, training, insurance, taxes, vehicle registration, license plate, etc.

When you first receive your vehicle, practice by riding in areas where there is little traffic. Do not attempt to ride in heavy traffic until you are thoroughly experienced and riding your vehicle has become second nature to you.

Although this vehicle is legal for operation on freeways and expressways, it is advis-



able to not ride on these high speed highways until you are thoroughly familiar with your vehicle, and have attained a high degree of skill in its operation.

A new vehicle must be carefully broken in, see p. 56 (RUNNING-IN).

Before starting the engine, make sure that the brakes, clutch, transmission and throttle controls function properly and that the fuel and oil supply is adequate.

The exhaust system, brakes, and some other parts of the vehicle become very hot during operation. Do not touch any of these parts.

Some medicines or drugs, illegal or prescription, and alcohol significantly increase the risk of accidents. Do not ride while you are under the influence of alcohol or drugs, be they illicit or prescription. Make sure you are in good physical condition and not



ill before riding your vehicle. Do not ride your vehicle when you are particularly tired or fatigued. Alcohol, drugs and fatigue are leading causes of vehicle accidents.

Many accidents are caused by the rider's inexperience and lack of training. Do not ride your vehicle until you have received training from a recognized training organization such as the Motorcycle Safety Foundation. Remember that riding a two wheeled vehicle, though easy and fun, is quite different from driving a car. Do not assume that you can operate your vehicle safely just because you are a competent automobile driver.

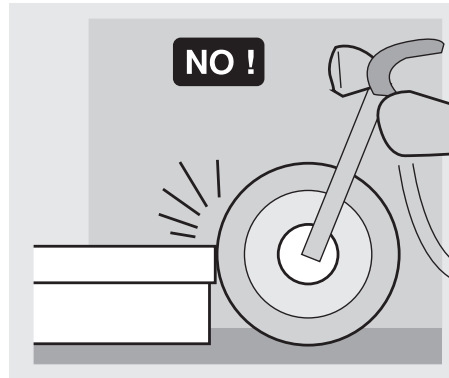
Never lend your vehicle to others unless you are sure that they are competent and properly licensed vehicle operators.



Observe all rules of the road. Particularly pay attention to all warning, regulatory and informational signs.

Avoid showing off (i.e., popping wheelies). Especially observe speed limits, remember that road conditions change with the weather and wet and icy pavements are particularly dangerous for vehicles, especially if you are riding too fast. Remember that automobile drivers have a hard time seeing two wheeled vehicles, so always give the automobile the right of way, even if it is legally yours.

Before changing lane, look over your shoulder to make sure that the way is clear. Do not rely exclusively on the rear-view mirror: you may miscalculate the distance and speed of a vehicle, or you may even not see it at all.

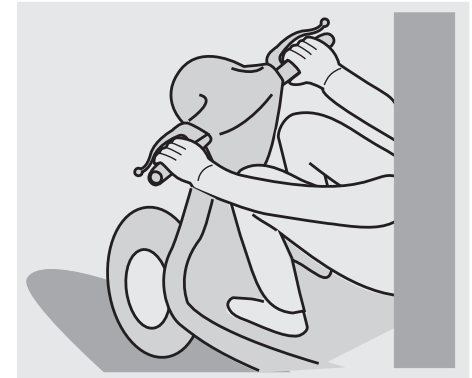


Avoid obstacles that could damage the vehicle or make you lose control.

Do not tailgate, do not attempt to increase your gas mileage by following in the slip stream of cars or trucks in front of you.

In case of accident motorcycles, scooters and mopeds do not provide the same degree of protection ensured by automobiles. The legs, in particular, are exposed the risk of being injured. However, the additional installation of leg guards may actually increase the risk of injuries and their seriousness in case of accident.

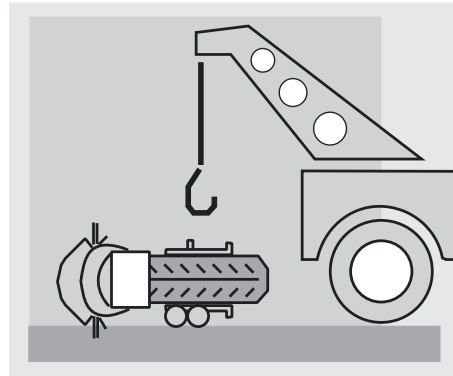
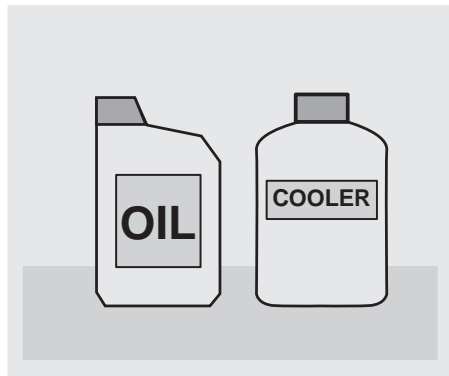
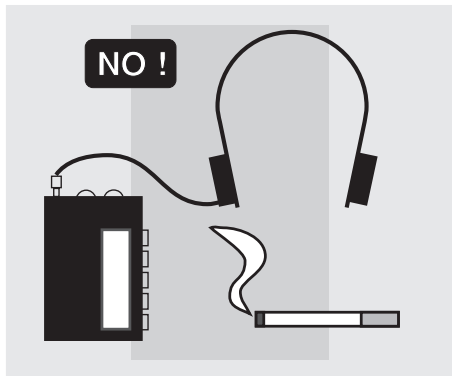
Do not install leg guards available on the market of spare parts and accessories. Non-compliance with these instructions may result in serious injuries or even death.



Always ride with both hands on the handlebars and feet on the footrests.

Never shift gear without using the clutch, if the vehicle is so equipped. Do not operate the shift lever or the other controls suddenly or abruptly. Such misuse can damage the internal components of the vehicle and consequently cause seizure, loss of control, accidents and serious injuries or even death.

Remain in the seat when you are riding. Do not stand up or attempt to stretch while you are riding your vehicle. If you need to rest, pull over to the side of the road when it can be safely done.



It is very important to your safety that you give full attention to the riding task. Watch what you are doing, do not allow yourself to be distracted by other cars, people or things on the roadside, etc. Never smoke, eat, drink, read, etc. while riding your vehicle. If you must consult a map, pull over when it can be done safely.

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

If the throttle sticks open, it may cause a collision with another vehicle, or an upset.

If the throttle sticks, kill the engine with the engine stop switch located on the right handlebar.

Do not attempt to restart the engine until the throttle has been repaired and works perfectly. Failure to obey this warning can

lead to a runaway with seriously injuries or even death.

Your vehicle is equipped with a double cable throttle. One cable opens the throttle when you rotate the throttle grip toward you; the other closes the throttle when you rotate the grip away from you. It is essential, when you release the throttle grip, that it automatically return to the idle position.

This double cable arrangement enhances safety by providing for positive closing of the throttle.

### **⚠ WARNING**

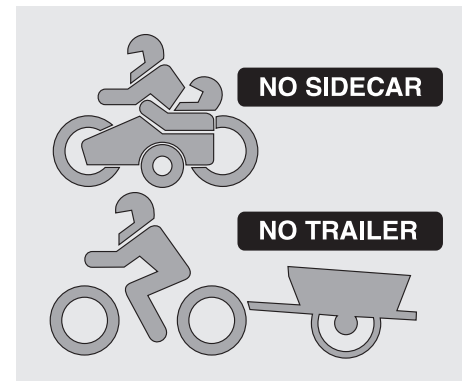
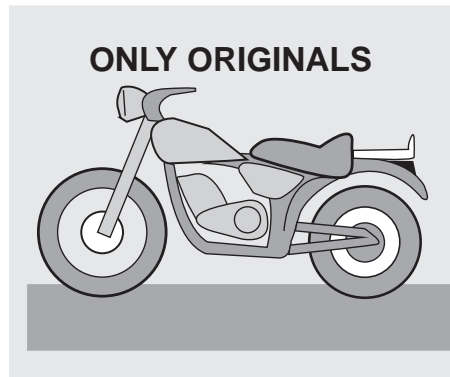
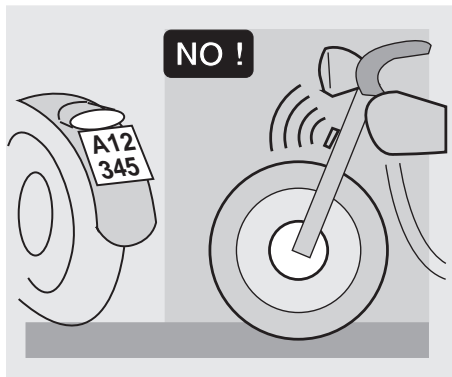
**In the event of a throttle sticking emergency, always kill the engine using the engine stop switch located near the throttle grip on the right handlebar. Never use your vehicle if the throttle does not automatically fully return to the idle position when the throttle grip is re-**

**leased. Contact your Local **aprilia** Dealer for repairs. Failure to heed this warning can lead to a serious accident and subsequent injury or even death.**

If you and your vehicle are involved in an accident, insure that there has been no damage to the control levers, tubes, wires, braking system and other vital parts. If your vehicle is involved in an accident, take it immediately to your Local **aprilia** Dealer who has the equipment and knowledge to check for accidental damage which may compromise your safety.

Your **aprilia** dealer is ready and able to help you with any safety problems that you might have, but of course it is necessary for you to report any malfunctions to your mechanic in order for him to help you.

Do not use your vehicle if it is damaged. A damaged vehicle may become unstable or



present other problems which can increase the risk of accident, and therefore of serious injury or even death.

Do not attempt to modify the position, angle or color of your license plate. Do not cover it with even a clear plastic covering. Do not modify any of the safety equipment of your vehicle, especially such safety related items as directional indicators, rear view mirrors, lights or horns.

Any modification to your vehicle will invalidate the warranty.

Do not modify your engine in an attempt to increase the horsepower. This can result in irreparable damage to the engine, as well as degradation of the performance and handling of the vehicle which could lead to an upset, and serious injury or even death.

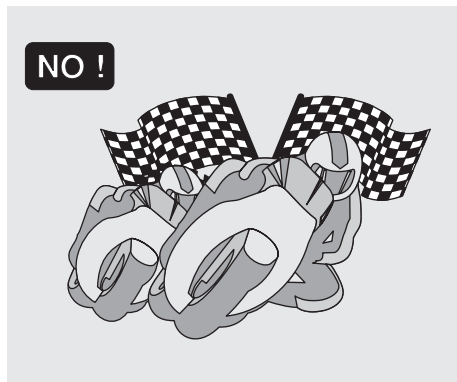
Have your vehicle repaired only with original parts, and use only original **aprilia** or **aprilia** approved accessories. The use of aftermarket accessories and parts can seriously compromise the safety of your vehicle as well as its performance and serviceability. Any modification which affects performance or safety voids your warranty completely.

Tampering with the emissions or noise control systems on your vehicle is against the law, and can be punished by large fines.

In some jurisdictions, it can even lead to the confiscation of your vehicle.

This vehicle was not designed to be equipped with a sidecar or to be used to tow trailers or other vehicles.

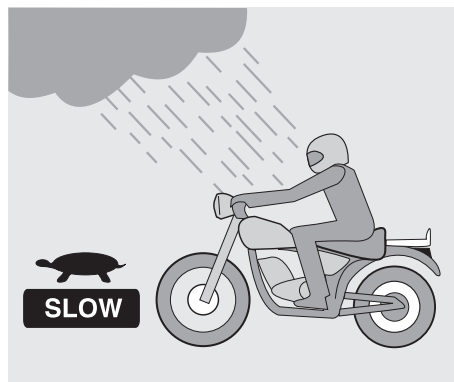
**aprilia** does not manufacture sidecars or trailers and therefore cannot predict the effects of such accessories on the manoeuvrability or stability of the vehicle: it can only warn that such effects may be negative and that any damage to the vehicle components caused by the use of such accessories will not be covered by the warranty.



Never race other vehicles with your vehicle.

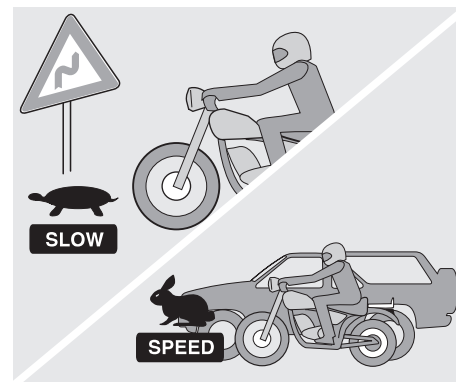
Brake with both the front and rear brakes. The use of one brake only for sudden braking may cause the vehicle to skid or make the rider lose control of the vehicle itself.

When riding down a steep hill, use the engine as a brake by selecting the same gear, or a lower gear, than you would use to climb the hill. Use front and rear brakes sparingly.



Always ride at the appropriate speed and avoid unnecessary hard acceleration. This not only is safer, but also reduces fuel consumption and increases the life of the vehicle.

If you must ride your vehicle in rainy weather, or on loose surfaces, remember that traction is greatly reduced. Under these conditions, all handling of the vehicle must be done gradually and smoothly. Sudden acceleration, braking or turning may make you lose control of your vehicle. When traction is reduced, accelerate and slow using your vehicle's engine braking insofar as possible. Avoid rapid, harsh application of the brakes.



Gradually open and close the throttle, to avoid spinning or skidding the rear wheel.

On rough road surfaces, slow down and ride with particular care.

Try to avoid wide open throttle accelerations, unless they are necessary for such things as passing.

Don't allow your engine to "lug," that is, run at too low an rpm. Shift down to a lower gear. Also, don't over-rev the engine. Observe the redline on the tachometer.

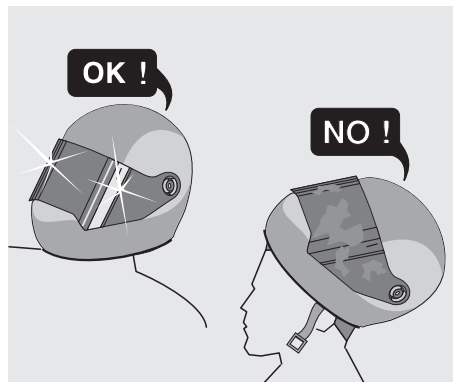
Remember that excessively aggressive cornering can cause your vehicle's tires to lose sideways traction, which can result in an upset and serious injury or even death.



Always observe posted and statutory speed limits, but do not assume that you can ride as fast as the speed limit under all road conditions. Slowing down a little can greatly increase your safety under all road conditions.

Do not ride your vehicle off road.

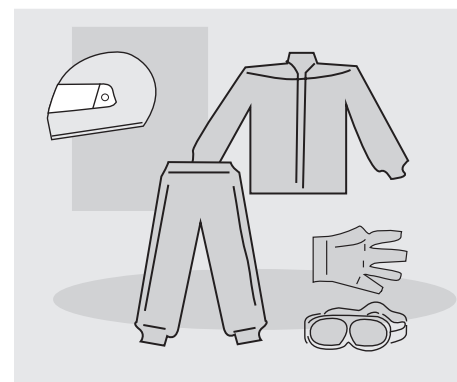
Do not tamper with the muffler system or the emissions control system of your vehicle. This is not only bad for the environment, it can subject you to serious penalties.



## CLOTHING

Before riding your vehicle, ensure that your riding gear is in good condition. To be effective, your helmet must fit properly, and the visor or other eye protection must be clean.

Both research and experience have shown that drivers of other vehicles often do not see vehicles or riders. In order to make yourself more conspicuous to these drivers, wear bright reflective clothing, such as a reflective vest, or clothing with reflective sections sewn into the jacket, pants and gloves. Be particular aware of approaching automobiles and trucks that might be trying to turn left in front of you. Many vehicle accidents are caused by an opposing automobile driver making a left turn without warning in front of the vehicle.

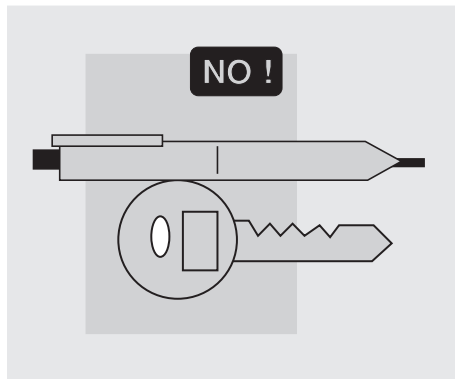


Inevitably, the driver will look right at you, and yet swear that they did not see you before they turned directly into your path. Ride alert!

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.

Always wear your crash helmet. Many accidents are fatal because of injuries to the head.

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.

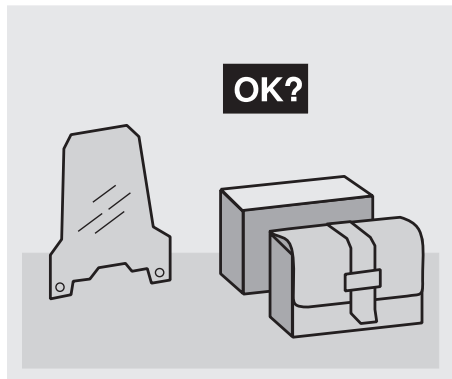


Do not carry sharp objects in your pockets that could be dangerous in case of an upset, for example, pens or mechanical pencils, etc. Also, make sure that your passengers follow this recommendation.

## ACCESSORIES

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

The installation of inappropriate accessories or the overloading of the vehicle may result in the instability of the vehicle itself and cause accidents with consequent risk of serious injuries or even death. Windshields could be particularly dangerous, as they can break and injure or cut the rider in case of accident. In case of doubts with regard to any accessory you would like to install or

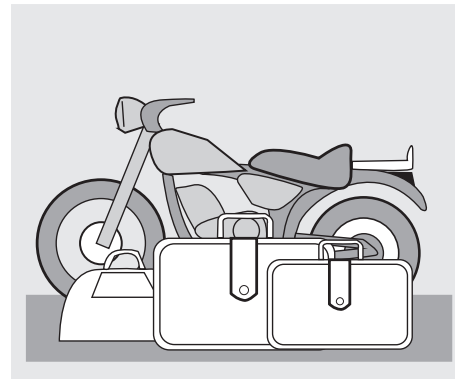


any load you would like to carry, previously consult your Local **aprilia** Dealer.

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.

Fairings and windshields installed on the vehicle may produce aerodynamic forces that will affect the stability of the vehicle during use, especially at high speeds.

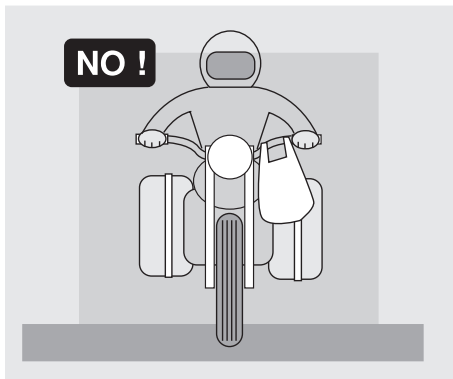


Make sure that anything you carry on your vehicle is securely attached, and cannot come loose and jam the wheels, forks, etc. Do not install any electrical accessories, and do not modify the electrical system of your vehicle. Anything that could cause an electrical overload or other fault could cause the vehicle to suddenly stop, the lights to dim or quit, or the horn and other safety accessories not to work. Use only **aprilia** genuine accessories.

## LOAD

Do not overload your vehicle. Attach luggage or packages as close as possible to the center of your vehicle and distribute the load from side to side as evenly as possible, to keep imbalance to a minimum. Remember that loads tend to loosen with riding, so frequently check the security of your load.



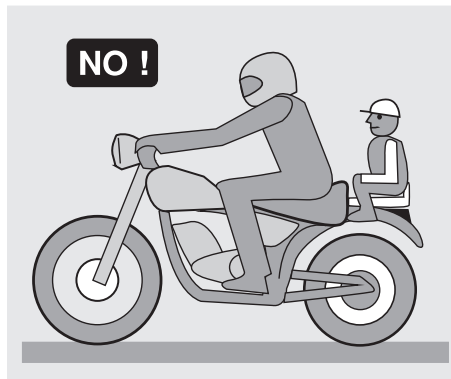


Do not hang anything from your vehicle handlebars, fenders, or forks, because this will upset the handling of your vehicle, and could prevent you from avoiding an accident. Failure to heed this warning can lead to an upset with subsequent serious injury or even death.

Do not ride with your crash helmet hung from the strap because it could easily foul the wheels, fenders, or forks, causing an upset and subsequent serious injury or even death.

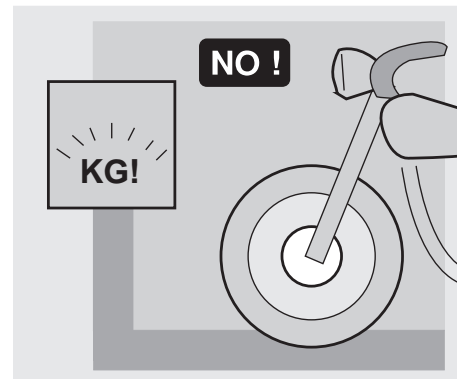
Carry a passenger only if your vehicle is equipped with passenger footrests, hand-grips for the passenger to hold on to, and a passenger seat.

When carrying a passenger, remember that your vehicle's handling is degraded, that the brakes are less efficient, and the center of gravity is higher and further to the rear.



This makes it more likely that the front wheel will come up off the ground, especially on acceleration. Therefore, you should avoid hard acceleration and hard braking. Many accidents are caused by inexperienced riders carrying passengers. Remember that allowance must be made for the extra weight of the passenger for all driving maneuvers.

Avoid abrupt and excessive acceleration. Always slow down in time and calculate longer stopping and manoeuvring distances. Non-compliance with these instructions may lead to the overturning of the vehicle or to other accidents with consequent serious injuries or even death.



Never carry loosely packaged items, make sure that everything that you carry on your vehicle is carefully secured.

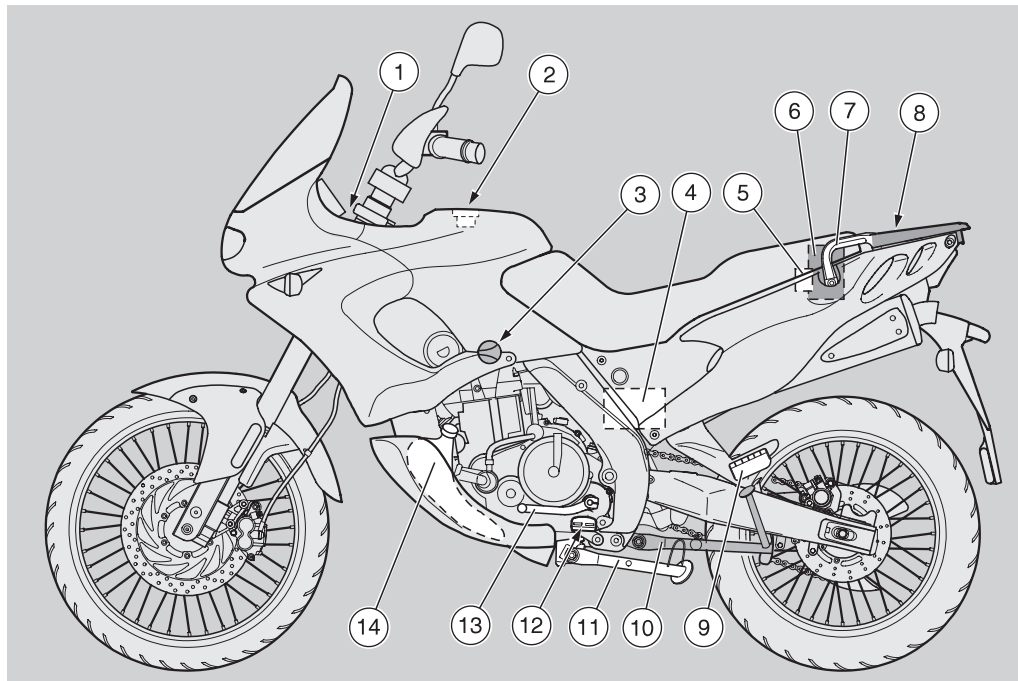
Do not carry packages which protrude from the luggage rack or which cover any of the signal lights, the headlight, or the horn.

Never carry animals or children on the glove compartment or on the luggage rack.

Never exceed the labeled maximum load for each saddlebag.

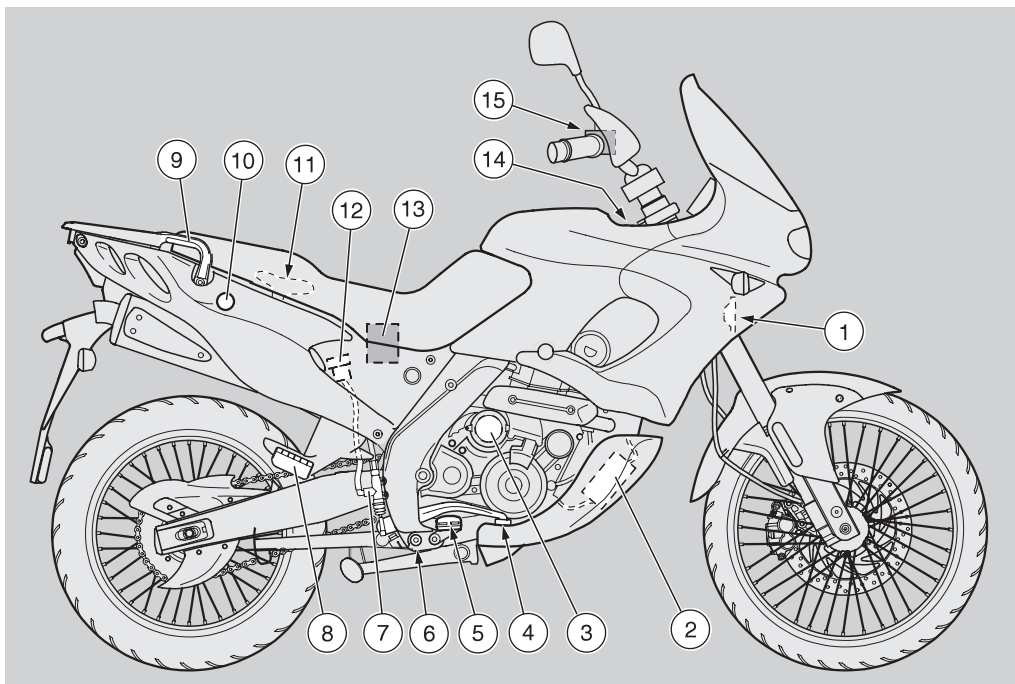
Overloading your vehicle seriously reduces its stability and maneuverability and can lead to an upset with subsequent serious injury or death.

## ARRANGEMENT OF THE MAIN ELEMENTS



### KEY

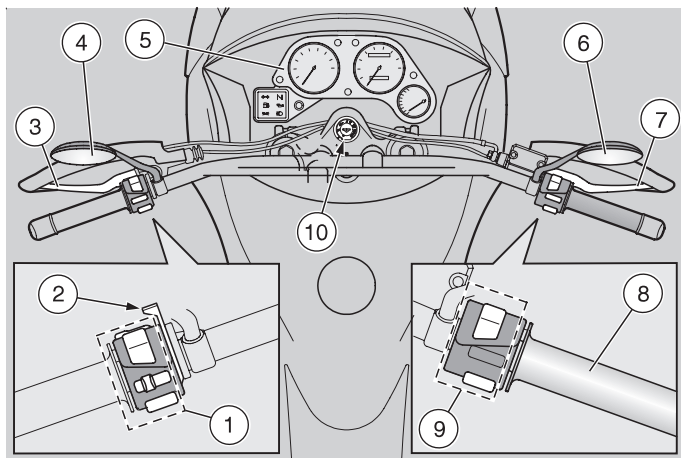
- |   |  |
|---|--|
| 1) Ignition switch/steering lock/parking lights | 8) Rear luggage rack                                 |
| 2) Fuel filler cap                              | 9) Passenger left footrest (snapping, closed / open) |
| 3) Fuel valve                                   | 10) Center stand                                     |
| 4) Battery                                      | 11) Side stand                                       |
| 5) Fuses  | 12) Rider left footrest (with spring, always open)   |
| 6) Glove/tool kit compartment                   | 13) Shift lever                                      |
| 7) Passenger grab rail                          | 14) Expansion tank                                   |



## KEY

- |   |   |
|---|---|
| 1) Horn   | 8) Passenger right footrest (snapping, closed / open) |
| 2) Carbon canister  | 9) Passenger grab rail                                |
| 3) Engine oil filter  | 10) Saddle lock                                       |
| 4) Rear brake pedal   | 11) Crash helmet hook                                 |
| 5) Rider right footrest (with spring, always open)              | 12) Rear brake reservoir                              |
| 6) Anti-theft hook  | 13) Air cleaner                                       |
| (for the <b>aprilia</b> "Body-Guard" armored cable <b>OPT</b> ) | 14) Engine oil level plug-dipstick                    |
| 7) Rear brake master cylinder                                   | 15) Front brake reservoir                             |

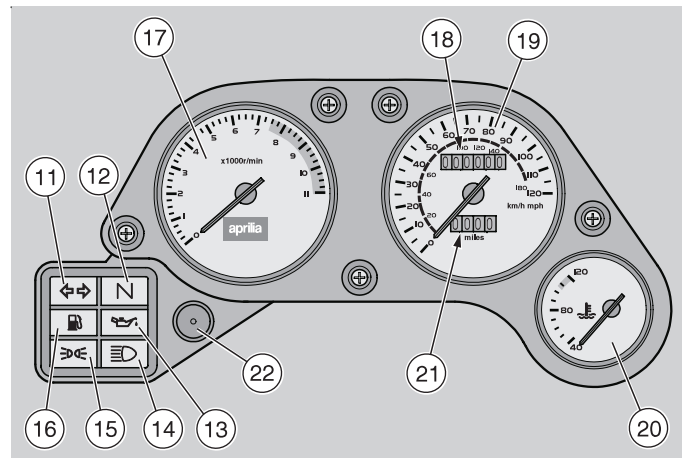
## ARRANGEMENT OF THE INSTRUMENTS/CONTROLS



### KEY

- 1) Electrical controls on the left side of the handlebar
- 2) Cold start lever (I\I)
- 3) Clutch lever
- 4) Left rear-view mirror
- 5) Instruments and indicators
- 6) Right rear-view mirror
- 7) Front brake lever
- 8) Throttle grip
- 9) Electrical controls on the right side of the handlebar
- 10) Ignition switch/steering lock/parking lights (○ - ⌘ - ⌘ - P≤)

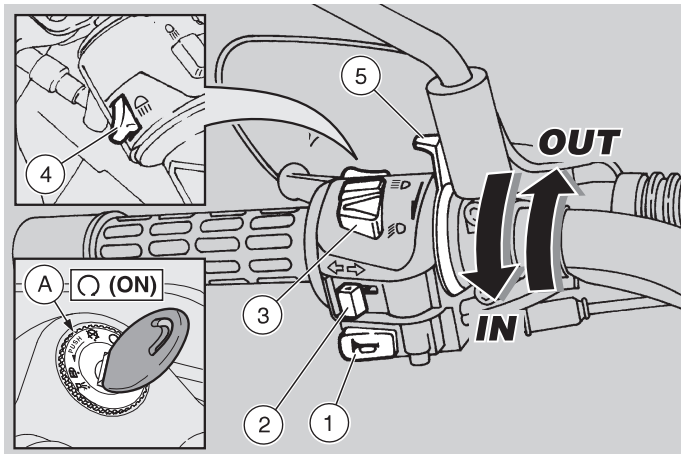
## INSTRUMENTS AND INDICATORS



- 11) Green direction indicator warning light (↔↔)
- 12) Green neutral indicator warning light (N)
- 13) Red engine oil pressure warning light (⚡)
- 14) Blue high beam warning light (≡D)
- 15) Green low beam and parking light warning light (D00)
- 16) Amber low fuel warning light (⛽)
- 17) Tachometer
- 18) Total miles odometer
- 19) Speedometer
- 20) Coolant temperature indicator (⌚) in °C (Celsius degree)
- 21) Trip odometer
- 22) Odometer reset

## INSTRUMENTS AND INDICATORS TABLE

Description		Function
Directional indicator	↔	Blinks when the right (or the left) direction indicator is on.
High beam indicator	≡▷	Comes on when the headlight is in "high beam" position or when the high beam signalling is operated.
Parking light and low beam warning light	▷◁	It comes on when the ignition switch is turned to "○" (ON) or "P" (PARKING) position and automatically the lights are on.
Coolant temperature indicator in °C (Celsius degree)	⊡	<p>It indicates the approximate temperature of the coolant in the engine.</p> <p>When the pointer starts moving beyond the "40" (40 °C) level, the temperature is sufficient for driving the vehicle.</p> <p>The normal running temperature range is indicated by the central area of the scale.</p> <p>If the pointer reaches the red area, stop the engine and check the coolant level, see p. 44 (COOLANT).</p> <p><b>⚠ WARNING</b> Do not operate the vehicle if the maximum temperature is exceeded. Serious engine damage or even seizure may result which can cause an upset and serious injury or even death.</p>
Engine oil pressure warning light	⚠	<p>It comes on whenever the ignition switch is turned to position "○" (ON) and the engine is not running, thus testing the correct operation of the lamp. If during this phase the lamp does not turn on, it must be replaced. The engine oil pressure warning light "⚠" must go off when the engine is running.</p> <p><b>⚠ WARNING</b> If the engine oil pressure warning light "⚠" remains on (when the engine is running), or if it comes on during the normal running of the engine, this means that the oil system is not developing sufficient pressure. In this case, immediately stop the engine and contact your Local Aprilia Dealer. Failure to heed this warning can lead to engine seizure, upset, and serious injury or even death.</p>
Low fuel warning light	⛽	<p>It comes on when the quantity of fuel left in the tank is about 1.59 US gal (6 ℓ) [electrical reserve].</p> <p>In this case move the fuel valve lever to the "RES" position and top up as soon possible, see p. 35 (FUEL).</p>
Neutral indicator warning light	N	Comes on when the gear is in neutral.
Tachometer	rpm	<p>It indicates the number of revolutions of the engine per minute.</p> <p><b>⚠ WARNING</b> Never exceed the engine max. speed rate, see p. 56 (RUNNING-IN).</p>
Trip odometer		Indicates the number of miles covered in a trip. To reset to zero, press the odometer control button.
Odometer		Indicates the total number of miles that the vehicle has traveled since new.
Speedometer		Indicates road speed.
Odometer reset		Press it to reset to zero the trip odometer.



## CONTROLS

**NOTE** The electrical components function only when the ignition switch (A) is in the “○” (ON) position. The parking lights are illuminated besides when the ignition switch (A) is in the “P” (PARKING) position.

### CONTROLS AT THE LEFT HAND GRIP

#### 1) HORN PUSH BUTTON (🔊)

The horn is activated when the push button is pressed.

#### 2) DIRECTION INDICATOR SWITCH (↔)

To indicate the turn to the left, move the switch to the left; to indicate the turn to the right, move the switch to the right. To turn off the direction indicator, press the switch.

#### 3) DIMMER SWITCH (🔼 - 🔽)

When the lever is in the position indicated by the “🔼”, the parking lights, dashboard light and low beam are on.

When the lever is moved to the “🔽”, the high beam is illuminated, the dashboard and parking lights remain on.

#### 4) HIGH BEAM SIGNALING PUSH BUTTON (🔼)

Depress the button momentarily to flash the high beam for signaling when passing, etc. and in the event you need someone's attention in an emergency.

#### 5) COLD START LEVER (🔼)

Operate the cold start (choke) by rotating the lever downwards.

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

## CONTROLS AT THE RIGHT HAND GRIP

### 1) ENGINE STOP SWITCH (○ - ☒)

Use the engine stop switch to stop the engine. It is essential that you be very familiar with this control so that you will automatically stop the engine in the event of a stuck throttle or other engine runaway.

#### ⚠ WARNING

If the throttle sticks open, it may cause a collision with another vehicle, or an upset.

If the throttle sticks, kill the engine with the engine stop switch located on the right handlebar.

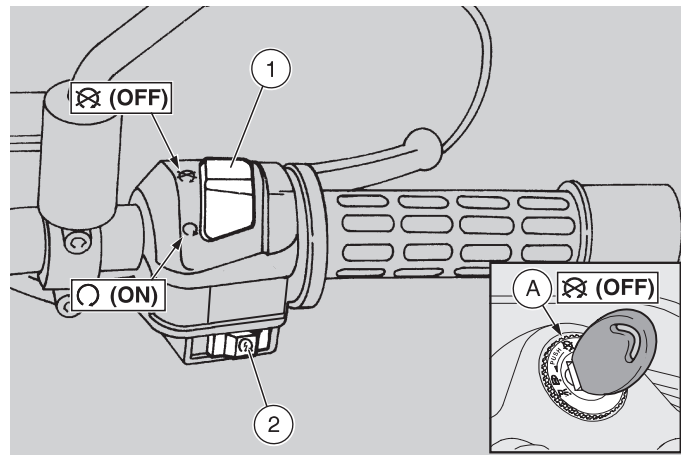
Do not attempt to restart the engine until the throttle has been repaired and works perfectly. Failure to obey this warning can lead to a runaway with seriously injuries or even death.

Your vehicle is equipped with a double cable throttle. One cable opens the throttle when you rotate the throttle grip toward you; the other closes the throttle when you rotate the grip away from you. It is essential, when you release the throttle grip, that it automatically return to the idle position.

This double cable arrangement enhances safety by providing for positive closing of the throttle.

#### ⚠ WARNING

In the event of a throttle sticking emergency, always kill the engine using the engine stop switch located near the throttle grip on the right handlebar. Never use your vehicle if the throttle does not automatically fully return to the idle position when the throttle grip is released. Contact your Local **aprilia** Dealer for repairs. Failure to heed this warning can lead to a serious accident and subsequent injury or even death.



#### ⚠ WARNING

**Do not use the engine stop switch to stop the engine while the vehicle is moving.**

With the switch (1) in the “○” (ON) position it is possible to start the engine. The engine can be stopped by moving the switch (1) to the “☒” (OFF) position.

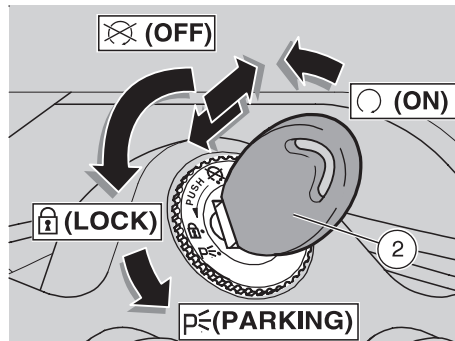
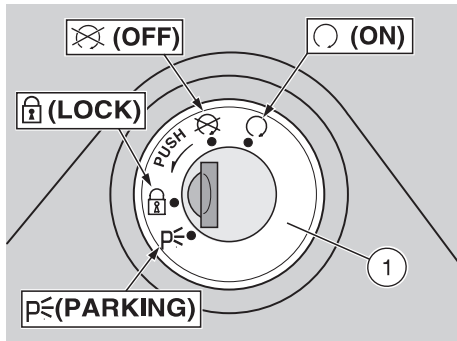
#### ⚠ CAUTION

**Do not leave the ignition on if you have stopped the engine by moving the engine stop switch to the “☒” (OFF) position as this will discharge the battery.**

When the vehicle has come to rest after stopping the engine with the engine stop switch, turn the ignition switch (A) to the “☒” (OFF) position.

### 2) STARTER SWITCH (Ⓢ)

When the starter switch is depressed, the starter is engaged and the engine will start. For starting, see p. 50 (STARTING).



## IGNITION SWITCH


The ignition switch (1) is located on the upper plate of the steering head.

**NOTE** The key operates the ignition switch/steering lock, the saddle lock and the fuel tank lock.

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


## STEERING LOCK

### ⚠ WARNING


Never attempt to place the ignition switch in the locked “” (LOCK) position while the vehicle is moving. This will cause loss of control of the vehicle with possible subsequent accident, serious injury or even death.

## OPERATION

To lock the steering:

- ◆ Place the vehicle on the stand.
- ◆ Turn the handlebar completely leftwards.
- ◆ Turn the key (2) to position “” (OFF) and press it.
- ◆ Release the key (2).

**NOTE** Turn the key (2) and steer the handlebar at the same time.


- ◆ Rotate the key (2) counterclockwise (leftwards), steer the handlebar slowly until the key (2) reaches position “” (LOCK).
- ◆ Extract the key (2).

## PARKING LIGHTS


When you park the vehicle in a dark area, or in a badly lit area (parking-lot or street) it is possible, and useful, may leave the parking lights on, so the vehicle will be easily visible.





For leave the parking lights on:

- ◆ Lock the steering, see beside (STEERING LOCK) without extract the key (2).

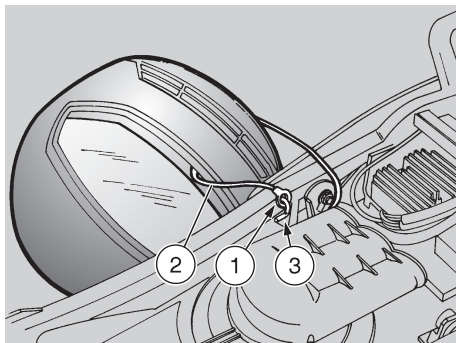
- ◆ Turn the key (2) to position “” (PARKING); automatically the parking lights stay on.
- ◆ Extract the key (2).

### ⚠ CAUTION

Do not leave the ignition switch (1) in the “” (PARKING) position for extended periods of time, as this will cause the battery to become completely run down.

Position	Function	Key removal
 (LOCK) 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.
 (OFF)	Neither the engine, nor the lights can be switched on.	It is possible to remove the key.
 (ON)	The engine and the lights can be switched on.	It is not possible to remove the key.
 (PARKING)	The parking lights are illuminated.	It is possible to remove the key.





### CRASH HELMET HOOK

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

#### **⚠ WARNING**

**Do not ride with the crash helmet hanging from the hook. This may cause an upset with subsequent serious injury or death.**

To secure your crash helmet:

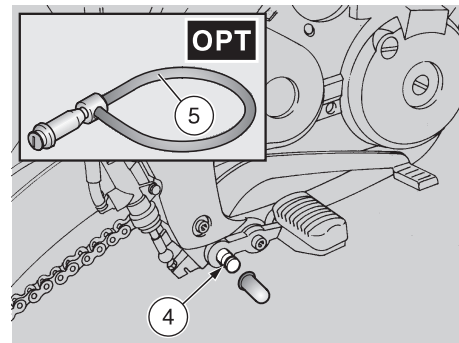
- ◆ Remove the saddle, see p. 81 (REMOVING THE SADDLE).
- ◆ Withdraw the eyelet (1) of the cable (2) from the hook (3).



- ◆ Pass the cable (2) through the visor opening or through the apposite loop on the crash helmet.
- ◆ Insert the eyelet (1) completely in the hook (3).

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

- ◆ Replace the saddle, see p. 81 (REMOVING THE SADDLE).



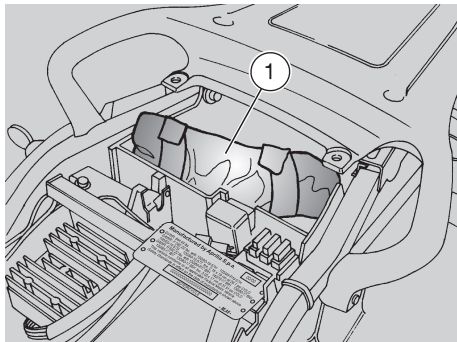
### ANTI-THEFT HOOK

The anti-theft hook (4) is positioned on the right side of the vehicle, near the rider's footboard.

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

#### **⚠ WARNING**

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



### GLOVE/TOOL KIT COMPARTMENT

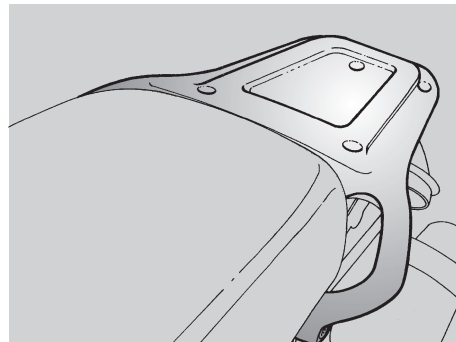
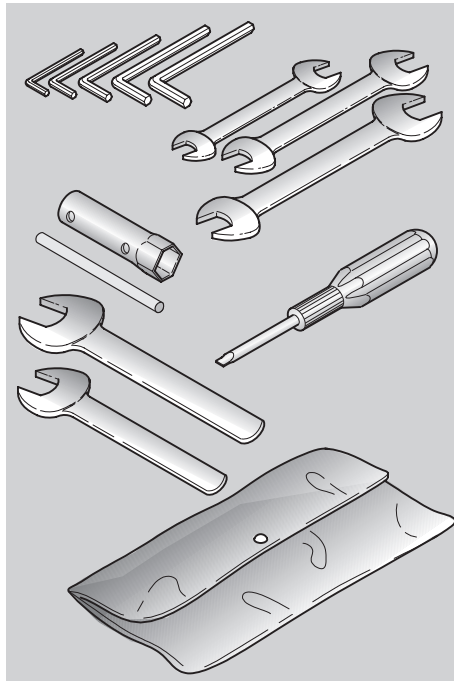
The glove/tool kit compartment is positioned under the rear part of the saddle; to reach it:

- ◆ Remove the saddle, see p. 81 (REMOVING THE SADDLE).

The tool kit (1) includes:

- 3 mm, 4 mm, 5 mm, 6 mm, and 8 mm Allen wrenches;
- a 5.5 and 7 mm open end wrench;
- an 8 and 11 mm open end wrench;
- a 10 and 13 mm open end wrench;
- a 19 mm open end wrench;
- a 24 mm open end wrench;
- an 18 mm spark plug socket wrench;
- a double ended slot/Phillips screwdriver;
- a lever for the spark plug wrench;
- tool pouch.

**Max. allowed weight: 3.31 lb (1.5 kg).**



### REAR LUGGAGE RACK

**Max. allowed weight: 20 lb (9 kg).**

## MAIN COMPONENTS

### FUEL

#### ⚠ WARNING

Gasoline is extremely flammable and in some conditions can become explosive.

Therefore, it is necessary to refuel and carry out maintenance operations involving the fuel system in a well-ventilated area with the engine off.

Do not refuel or do any maintenance on the fuel system with the engine running. Do not smoke while refueling or near fuel vapors.

Never allow any portion of the fuel system to come in contact with naked flames, sparks or other heat sources. Be careful to avoid spilling fuel when you are refueling. Spilled fuel could ignite when it contacts hot engine or exhaust system surfaces. If you accidentally spill some fuel, make sure that it is wiped up or completely evaporated before starting the vehicle.

Since gasoline expands in the fuel tank when the vehicle is sitting in the open sun, never fill the tank completely to the brim. Leave at least one inch of expansion space.

Avoid any contact of the fuel with your skin, and avoid inhalation of fuel vapors. Do not ever attempt to siphon fuel from one container to another using your mouth as suction for a siphon hose.

#### ⚠ WARNING

Gasoline is poisonous and carcinogenic and contains chemical substances that cause birth defects and other reproductive problems. If gasoline should be accidentally spilt on the skin or clothes, immediately wash it off with soap and water and change clothes.

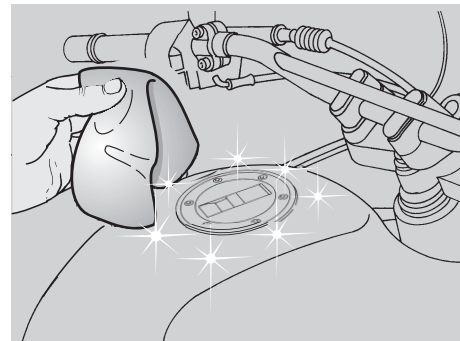
Should you accidentally spill gasoline in your eyes, flush with a large quantity of water and immediately contact a health professional. Should you accidentally get gasoline into your mouth, do not induce vomiting. Drink a large quantity of milk or clear water and immediately contact a health professional.

Never try to siphon gasoline by sucking it with your mouth. Use a manual pump or a similar system.

If your vehicle overturns, it will leak gasoline which is extremely flammable. Flames or sparks may ignite this which will not only destroy the vehicle but also could do serious property damage to surrounding property and cause serious injuries or even death.

**ALWAYS KEEP GASOLINE AWAY FROM CHILDREN.**

**DISPOSE OF UNWANTED GASOLINE PROPERLY, DO NOT DUMP IT INTO STORM SEWERS OR INTO A SINK OR TOILET.**



Use only unleaded petrol minimum octane rating (R+M)/2 method 90.

#### FUEL TANK CAPACITY

(reserve included): 5.81 US gal (22 ℓ).

TANK RESERVE: 1.32 US gal (5 ℓ) [mechanical reserve], 1.59 US gal (6 ℓ) [electrical reserve].

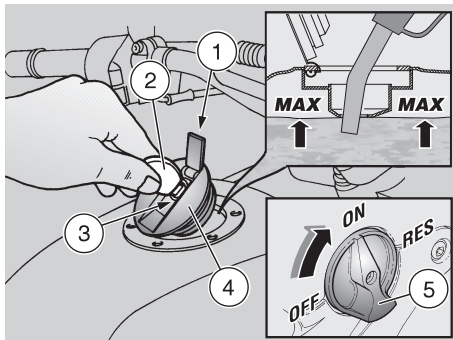
#### REFUEL

To refuel, proceed as follows:

- ◆ Place the vehicle on the center stand, see p. 59 (POSITIONING THE VEHICLE ON THE STAND).

#### ⚠ CAUTION

If necessary, clean the fuel filler cap and the part around it with a clean cloth. Prevent any foreign material from getting into the fuel tank, this could lead to serious engine damage.



- ◆ Lift the little cover (1).
- ◆ Insert the key (2) in the cap lock (3).
- ◆ Turn the key (2) clockwise, pull it and open the fuel filler cap (4).

### ⚠ CAUTION

If to use any container or funnel for refueling, make sure that it is perfectly clean.

Any foreign matter getting into the fuel tank may lead to severe damage.

### ⚠ WARNING

Do not add any additives or other substances to the gasoline.

### ⚠ WARNING

Do not refuel the tank completely; the fuel should never be touching the rim of filler cap seat hole.

- ◆ Refuel.

When you finish the refueling operation:

### ⚠ WARNING

After refueling, replace the fuel filler cap (4) in the correct position.

**NOTE** It is impossible closed the fuel filler cap without the key.

- ◆ With the key (2) insert in the lock (3) close the fuel filler cap (4) rotate counter-clockwise the key and push it.
- ◆ Release the key (2), at this point the fuel filler cap (4) is closed.

### ⚠ WARNING

Make sure that the fuel filler cap (4) is properly closed.

- ◆ Extract the key (2).
- ◆ Replace the little cover (1).

After refueling, before riding away, ensure that the fuel valve lever (5) is to "ON" position.

## LUBRICANTS

### ⚠ WARNING

Proper vehicle lubrication is critical to safe operation.

Failure to maintain proper lubricant levels or to use the proper type of clean, new lubricant, can lead to an engine or transmission seizure with subsequent accident, serious injury or death.

### ⚠ WARNING

Use latex gloves for the maintenance operations that require contact with used oil. Used engine oil may cause skin cancer if repeatedly left in contact with the skin for prolonged periods. Although this is unlikely unless you handle used oil on a daily basis, it is advisable to thoroughly wash your hands with soap and water after handling used oil.

**KEEP OIL AWAY FROM CHILDREN.**

**DISPOSE OF OIL PROPERLY.**

### ⚠ CAUTION

Be very careful when putting oil in your vehicle not to spill oil.


Clean up any oil spilled immediately because oil can damage the finish of your vehicle. Also, oil on the tires creates an extremely slippery and therefore dangerous situation.

### ⚠ CAUTION

In case of oil leakage do not ride your vehicle. Before using the vehicle, have it repaired by your Local **aprilia** Dealer.

## ENGINE OIL

### WARNING

If the engine oil pressure warning light “,” remains on (when the engine is running), or if it comes on during the normal running of the engine, this means that the oil system is not developing sufficient pressure. In this case, immediately stop the engine and contact your Local **aprilia** Dealer. Failure to heed this warning can lead to engine seizure, upset, and serious injury or even death.

### CAUTION

Perform these maintenance operations at one-half of the specified intervals, if your vehicle is often used in rainy or very dusty conditions, or on unpaved roads.

Check the engine oil level every 312 mi (500 km), see p. 66 (CHECKING THE ENGINE OIL LEVEL AND TOPPING UP).

### CAUTION

Have your Local **aprilia** Dealer change the engine oil after the first 625 mi (1,000 km), and thereafter every 3,750 mi (6,000 km).

**NOTE** Use high-quality 5W-40 oil, see p. 104 (LUBRICANT CHART).

## BRAKES

### WARNING

Do not ride your vehicle with worn or malfunctioning brakes! The brakes are the most important safety system of your vehicle, and using the bike with brakes that are anything less than perfect is very likely to lead to a collision or upset, with consequent risk of serious injury or death.

Check the brake pad wear, as shown on p. 69 (CHECKING THE BRAKE PAD WEAR). Have your brakes serviced by your Local **aprilia** Dealer.

### WARNING

Wet conditions seriously degrade the performance of your brakes. When the road is wet from rain, you should plan to use double the normal stopping distances since both the brakes themselves and the traction of the tires on the road are reduced by the presence of water.

Water on the brakes from washing your vehicle, or splashed up from wet roads, or crossing puddles or ditches, can wet the brakes sufficiently to greatly reduce their effectiveness. Failure to heed these warnings may lead to a serious accident with consequent risk of serious injury or even death.

**NOTE** This vehicle is equipped with front and rear disc brakes with separate hydraulic systems.

The following information may refer to just one braking system but should be observed with regard to both brakes.

### WARNING

The brakes are extremely important for your safety. Do not use the vehicle if the brakes do not work perfectly. Always check the brake efficiency before riding.

### WARNING

If the “feel” or position of the brake lever changes, this may be due to some problem in the hydraulic brake system. If you have any doubt regarding the perfect functioning of your brake system, or if the normal pre-ride checks indicate any discrepancy, contact your Local **aprilia** Dealer before riding.

### WARNING

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

Check the brake line, make sure that it is not twisted or kinked, nor leaking.

**KEEP AWAY FROM CHILDREN.**

**DISPOSE OF USED BRAKE FLUID PROPERLY. SEE THE GENERAL WARNINGS AT p. 4 (BRAKE FLUID).**

## DISC BRAKES

### ⚠ WARNING

As mentioned above, the brakes are the most important safety system on your vehicle. For your safety, they must be in perfect repair, so they should be checked every time you ride your vehicle.

Oil or other fluid on a disc will contaminate the brake pads. Dirty pads must be discarded and replaced, a dirty or oily disc must be cleaned with a high quality degreaser.

Have your Local **aprilia** Dealer check the levels of the brake fluid in the reservoirs after the first 625 mi (1,000 km).

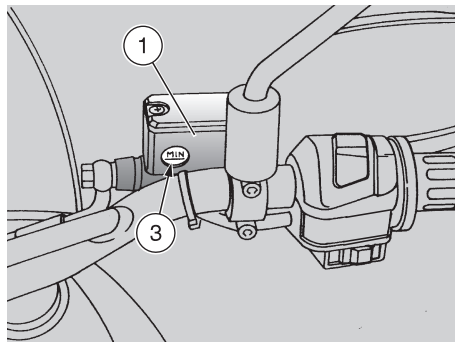
Arrange with your Local **aprilia** Dealer to flush the systems and change all of the brake fluid once every two years.

**NOTE** This vehicle is provided with front and rear disc brakes with separate hydraulic systems.

When the pads wear out the brake fluid level in the reservoir decreases to automatically compensate for their wear.

The front brake fluid reservoir (1) is located on the right end of the handlebar near the front brake lever.

The rear brake fluid reservoir (2) is under the upper part of the fairing on the right side of the vehicle.



Check the levels of the brake fluid in the reservoirs, see below (FRONT BRAKE), p. 40 (REAR BRAKE), and the wear of the pads, see p. 69 (CHECKING THE BRAKE PAD WEAR), every 3,750 mi (6,000 km).

### ⚠ WARNING

**Never use your vehicle if any portion of either brake system is leaking.**

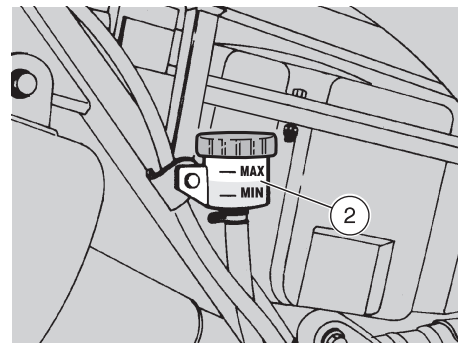
## FRONT BRAKE

### CHECKING THE SYSTEM

**NOTE** Carry out these checks only on a firm, flat surface such as a concrete garage floor.

◆ Place the vehicle on the center stand, see p. 59 (POSITIONING THE VEHICLE ON THE STAND).

**MIN** = minimum level.



- ◆ Rotate the handlebar, so that the fluid contained in the brake reservoir (1) is parallel to the “MIN” mark stamped on the glass gauge (3).
- ◆ Ensure that the fluid contained in the reservoir exceeds the “MIN” mark stamped on the glass gauge (3).

If the fluid does not reach the “MIN” mark:

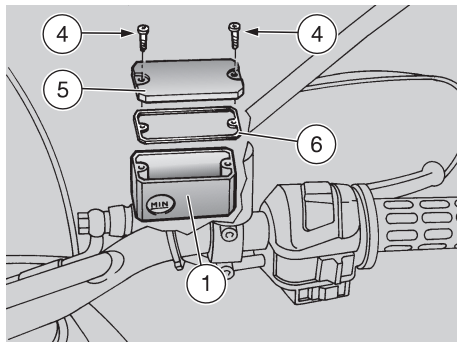
### ⚠ CAUTION

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

◆ Check the front brake pad wear, p. 69 (CHECKING THE BRAKE PAD WEAR) and the front disc wear.

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

◆ Top up the reservoir, see p. 39 (TOPPING UP) .



## TOPPING UP

### ⚠ CAUTION

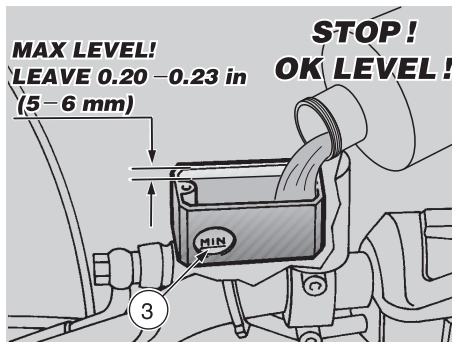
Do not operate the front brake lever with the screws (4) or the cover (5) removed. This will cause brake fluid to squirt out and spill.

- ◆ Unscrew the two screws (4).
- ◆ Remove the cover (5).

### ⚠ WARNING

Avoid any prolonged exposure of the brake fluid to the air. The brake fluid is hygroscopic and when in contact with the air it absorbs its humidity.

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



**NOTE** In order not to spill the brake fluid while topping up, keep the fluid in the reservoir parallel to the reservoir rim.

- ◆ Remove the gasket (6).

**NOTE** In order to reach the “MAX” level, top up until covering the glass (3) completely, but leave a space of 0.20 – 0.23 in (5–6 mm) from the brake fluid reservoir rim.

### ⚠ CAUTION

When topping up, never exceed the “MAX” level. Top up to “MAX” only when new pads are installed.

### ⚠ CAUTION

Do not fill the reservoir to “MAX” with worn pads; this will cause fluid to overflow the reservoir when the pads are renewed.

### ⚠ WARNING

Use only DOT 5 or 4 fluid taken from a clean, sealed container. Never reuse used brake fluid.

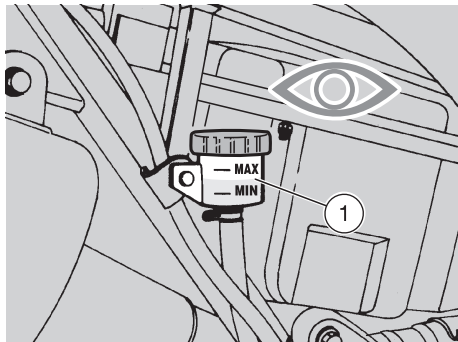
- ◆ Top up the reservoir with brake fluid, until the fluid covers the glass gauge (3) completely.
- ◆ Replace the gasket (6) in its seat correctly.
- ◆ Replace the cover (5).
- ◆ Screw and tighten the two screws (4).

### ⚠ CAUTION

After servicing the brakes, always check them for function. If the stroke of the lever is excessive, or if you detect that the effectiveness of the brakes is reduced in any way, have your vehicle serviced by your Local **aprilia** Dealer. It may be necessary to have your dealer bleed the system, or there may be some other problem with the brake system.

Never ride your vehicle in traffic immediately after servicing the brakes. Always apply the brake lever several times before riding your vehicle. Then, try your vehicle in a parking lot or other safe area with little traffic to ensure that the brakes are working properly. Failure to observe this warning can lead to a serious accident with subsequent serious injury or death.





## REAR BRAKE

### CHECKING THE SYSTEM

**NOTE** Carry out these checks only on a firm, flat surface such as a concrete garage floor.

- ◆ Place the vehicle on the center stand, see p. 59 (POSITIONING THE VEHICLE ON THE STAND).

**MIN** = minimum level.

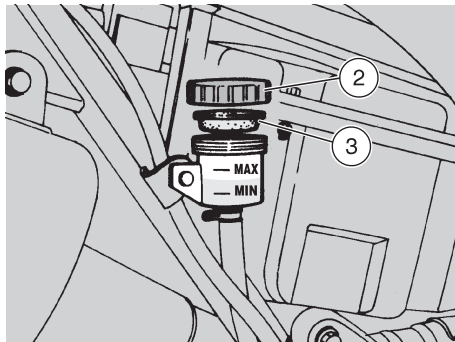
**MAX** = maximum level.

- ◆ Make sure that the fluid level contained in the brake reservoir (1) is above the “**MIN**” mark.

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

### ⚠ CAUTION

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



- ◆ Check the rear brake pad wear, p. 69 (CHECKING THE BRAKE PAD WEAR) and the rear disc wear.

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

- ◆ Top up the reservoir, see below (TOPPING UP) .

### TOPPING UP

### ⚠ CAUTION

**Do not operate the rear brake pedal with the reservoir filler cap (2) removed. This will cause brake fluid to squirt out and spill.**

- ◆ Unscrew and remove the reservoir filler cap (2).



### ⚠ WARNING

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

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

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

**NOTE** In order not to spill the brake fluid while topping up, keep the fluid in the reservoir parallel to the reservoir rim.

- ◆ Remove the gasket (3).





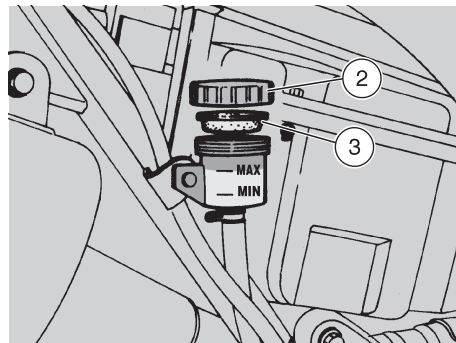
### ⚠ CAUTION

When topping up, never exceed the “MAX” level.  
Top up to “MAX” only when new pads are installed.

### ⚠ CAUTION

Do not fill the reservoir to “MAX” with worn pads; this will cause fluid to overflow the reservoir when the pads are renewed.

**NOTE** In order to fill the reservoir to the “MAX” level, top up until the “MAX” mark is parallel with the brake fluid reservoir top parallel to the ground.



### ⚠ WARNING

Use only DOT 5 or 4 fluid taken from a clean, sealed container. Never reuse used brake fluid.

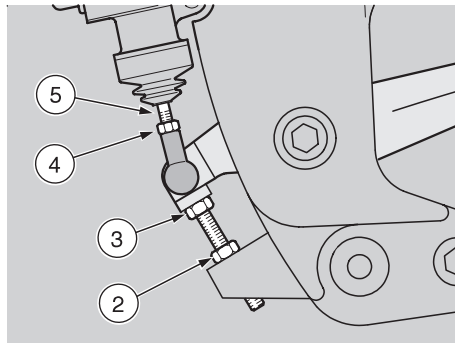
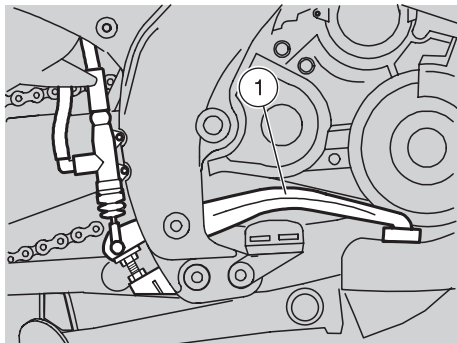
- ◆ Top up the reservoir with brake fluid, until the fluid reaches the “MAX” mark.
- ◆ Replace the gasket (3) in its seat correctly.
- ◆ Replace and tighten the reservoir filler cap (2).



### ⚠ CAUTION

After servicing the brakes, always check them for function. If the stroke of the pedal is excessive, or if you detect that the effectiveness of the brakes is reduced in any way, have your vehicle serviced by your Local **aprilia** Dealer. It may be necessary to have your dealer bleed the system, or there may be some other problem with the brake system.

Never ride your vehicle in traffic immediately after servicing the brakes. Always apply the brake pedal several times before riding your vehicle. Then, try your vehicle in a parking lot or other safe area with little traffic to ensure that the brakes are working properly. Failure to observe this warning can lead to a serious accident with subsequent serious injury or death.



## ADJUSTING THE REAR BRAKE

The brake pedal (1) is adjusted to fit most riders during manufacture. If you wish to adjust the brake pedal:

- ◆ Loosen the lock nut (2).
- ◆ Screw the brake adjuster bolt (3) completely.
- ◆ Loosen the lock nut (4) on the master cylinder push rod (5) and run it as far towards the master cylinder as far as it will go on the threads of the push rod.
- ◆ Screw the push rod (5) completely into the clevis, then unscrew it three to four turns.
- ◆ Adjust the brake adjuster bolt (3) until the brake pedal (1) is positioned as you like it.

- ◆ Screw down and tighten the lock nut (2) on the brake adjuster bolt (3).
- ◆ Screw the master cylinder push rod (5) out of the clevis until it just contacts the master cylinder piston.
- ◆ Then, screw the push rod into the clevis to obtain a minimum clearance of 0.02 – 0.04 in (0.5 – 1 mm) between the master cylinder push rod and the master cylinder piston.
- ◆ Lock the push rod in position with the lock nut (4).



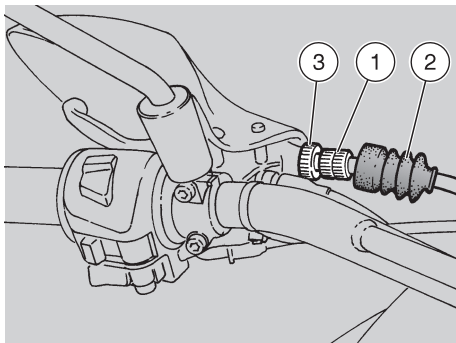
## ⚠ CAUTION

**Be sure there is the specified clearance between the master cylinder push rod and the master cylinder piston. If this caution is not observed, the brake will remain slightly applied, with subsequent brake overheating and wear of pads and discs.**

**Clearance between the push rod and the piston 0.02 – 0.04 in (0.5 – 1 mm).**

## ⚠ WARNING

**After making any brake adjustment apply the brakes repeatedly. Try the brakes in a parking lot or other area where there is little traffic. After you have completed the adjustment, lift the wheel free of the ground and ensure that it rotates freely when the brake is released.**

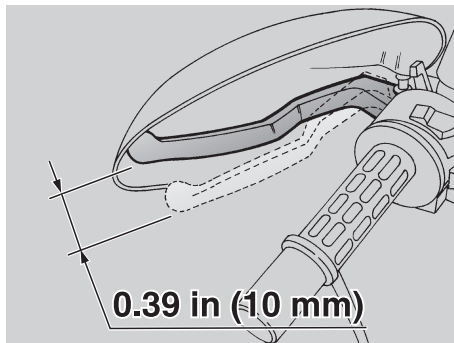


## ADJUSTING THE CLUTCH

Adjust the clutch if the clutch drags or slips during operation.

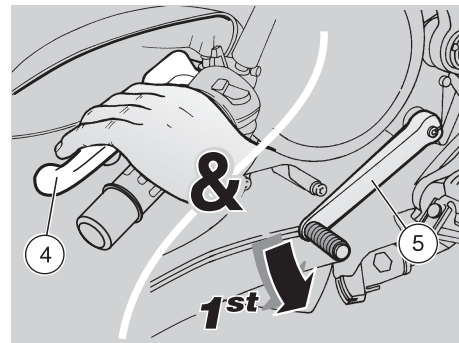
A limited range of adjustment of the clutch can be accomplished using the adjuster (1) located at the left handlebar:

- ◆ Pull back the rubber boot (2).
- ◆ Loosen the lock nut (3).
- ◆ Rotate the adjuster (1) until the free play at the end of the clutch lever is between **0.39 in (10 mm)** (see figure).



- ◆ Tighten the lock nut (3) to lock the adjuster in place.
- ◆ Recheck the free play.
- ◆ Reposition the rubber boot (2).
- ◆ Start the engine, see p. 50 (STARTING).
- ◆ Pull in the clutch lever (4) completely and put the shift lever (5) in the 1st gear.

Make sure that the engine does not stop, that the vehicle does not tend to advance or that the clutch does not slip during the acceleration phase or while the vehicle is running.



## ⚠ WARNING

**If it is not possible to properly adjust the clutch this way, see your Local **aprilia** Dealer.**

**NOTE** Inspect the clutch cable to make sure that it is not damaged. The inner cable must have no broken strands, and the outer cable must not be kinked or bent.

- ◆ Periodically lubricate the clutch cable with a suitable lubricant, see p. 104 (LUBRICANT CHART). This will protect it from excessive wear and corrosion.

## COOLANT

### ⚠ CAUTION

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

Check the coolant level every 625 mi (1,000 km) and after long trips; have the coolant changed by your Local **aprilia** Dealer every 2 years.

### ⚠ WARNING

Coolant is poisonous! Do not ingest coolant under any circumstance. Should you get coolant in your mouth, rinse with cool water and immediately seek medical attention. Coolant is also very dangerous to your skin and eyes. Should you accidentally get coolant on your clothing or skin, change clothes immediately. Wash coolant from your skin with hot water and soap. Should you get coolant in your eyes, flush with plenty of cool water and seek professional medical help at once. Should someone swallow coolant accidentally, induce vomiting, rinse mouth with water, and immediately seek professional medical attention.

### ⚠ WARNING

DISPOSE OF THE COOLANT PROPERLY.

BE SURE TO KEEP THE DRAINED COOLANT AWAY FROM CHILDREN AND PETS. IT IS SWEET TASTING, AS WELL AS EXTREMELY POISONOUS, AND IS VERY ATTRACTIVE TO CHILDREN AND PETS.

Use extra caution not to spill the coolant on any hot parts of the engine. It is flammable, and can emit invisible, noxious fumes.

Always wear rubber or latex gloves when servicing the cooling system.

Have the coolant changed by your Local **aprilia** Dealer.

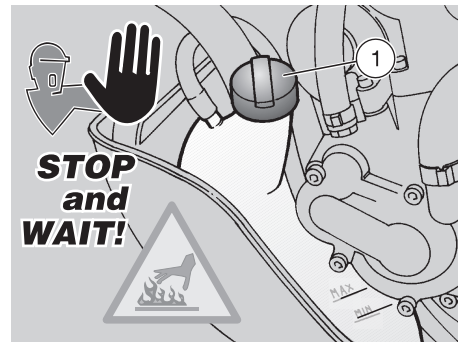
The coolant is made up of 50% water and 50% antifreeze.

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

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

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

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



### ⚠ CAUTION

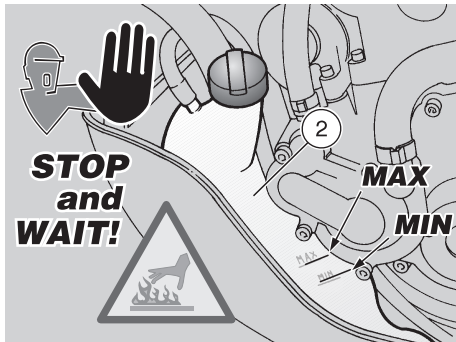
Use only distilled water when topping off the cooling system. This will reduce damage to the engine.

### ⚠ WARNING

The coolant is very hot.

Do not remove the filler cap (1) when the engine is hot since the coolant is under pressure and it will splash out violently.

If it gets in contact with the skin or with your clothing, it may cause severe burns.



## CHECKING AND TOPPING UP

### ⚠ WARNING

Be aware of the risk of burns from the coolant.

Check the coolant level and top up the expansion tank only after the engine has thoroughly cooled.

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

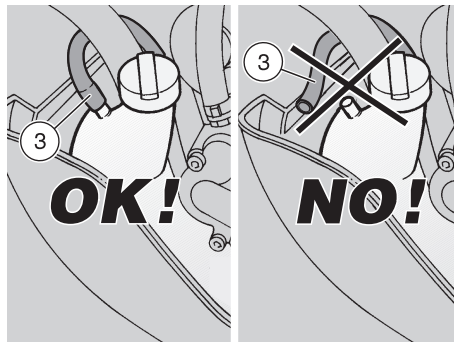
- ◆ Place the vehicle on the center stand, see p. 59 (POSITIONING THE VEHICLE ON THE STAND).

**NOTE** If it is necessary, clean the part of the "MIN" and "MAX" marks with a cloth.

- ◆ Make sure that the level of the fluid contained in the expansion tank (2) is included between the "MIN" and "MAX" marks.

**MIN** = minimum level.

**MAX** = maximum level.



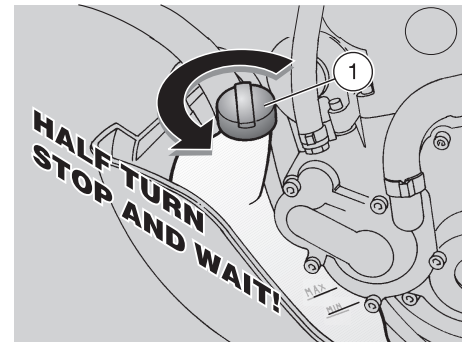
If not, proceed as follows:

**NOTE** The expansion tank is equipped with a breather tube (3). Do not disconnect the breather tube (3).

- ◆ Loosen the filler cap (1) (by giving it half counterclockwise turn), without removing it.
- ◆ Wait a few seconds in order to release any residual pressure that may be present in the circuit.
- ◆ Unscrew and remove the filler cap (1).

### ⚠ WARNING

**Coolant is poisonous! Do not ingest coolant under any circumstance. Should you get coolant in your mouth, rinse with cool water and immediately seek medical attention. Coolant is also very dangerous to your skin and eyes. Should you accidentally get coolant on your clothing or skin, change clothes immediately. Wash coolant from your skin with hot water and soap. Should you get coolant in your eyes, flush with**



plenty of cool water and seek professional medical help at once. Should someone swallow coolant accidentally, induce vomiting, rinse mouth with water, and immediately seek professional medical attention.

### ⚠ WARNING

Do not use your fingers or any other object to check if there is enough coolant.

- ◆ Top up with coolant, see p. 104 (LUBRICANT CHART) until the coolant level reaches approximative the "MAX" notch. Do not exceed this level, otherwise the coolant will flow out while the engine is running.
- ◆ Replace the filler cap (1).

### ⚠ CAUTION

Have any damage or discrepancy repaired by your Local **aprilia** Dealer. Do not attempt to repair the cooling system yourself.

## TIRES

This vehicle is equipped with inner tube tires.

### WARNING

Check the tire inflation at room temperature at least once a week, see p. 100 (TECHNICAL DATA).

Pressure measurement must always be carried out when the tires are cold, as when the tires are warmed up, pressure will increase, and if they are checked at this time erroneous readings will be seen.

If the tire is inflated to too high a pressure, an uncomfortably harsh ride will result, and riding comfort will be compromised. Also, road holding, especially during turns and in wet conditions, will likewise be compromised.

If the tire is underinflated (pressure is too low), the tire may slip on the rim with consequent loss of control. Again, road holding and handling characteristics will be degraded, and brake performance will be reduced.

When the tire is worn to a point where any tread is less than 0.12 in (3 mm) deep, the tire is worn out, and must be replaced. Also, if a tire suffers a puncture that is larger than 0.20 in (5 mm) in its longest dimension, the tire must not be repaired, but should be replaced.

After a tire is repaired, balance the wheels. Use only tires that are listed, see p. 100 (TECHNICAL DATA).

Insure that all tires are equipped with properly installed valve caps.

### WARNING

Do not ride the vehicle if the tire wear indicators show that the tire is worn out. Failure to heed this warning can lead to an accident with subsequent serious injury or even death.

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

There are several kinds of wear indicators.

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

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

If a tire should go flat while you are riding the vehicle, do not attempt to continue riding. Avoid abrupt braking and steering inputs, and avoid shutting the throttle quickly. Slowly decrease the throttle setting, moving to the side of the road, using the engine compression to slow you to a stop. Non-compliance with these instructions may cause accidents with consequent risk of injuries or even death.

If the tires are old, even if not completely worn out, they may become hard and may not ensure good road holding. In this case, have the tires changed.

Have the tire changed when it is worn out or in case of puncture on the tread side, if the puncture is larger than 0.20 in (5 mm).

After repairing a tire, have the wheels balanced.

Use only tires in the size suggested by **aprilia**, see p. 100 (TECHNICAL DATA).

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

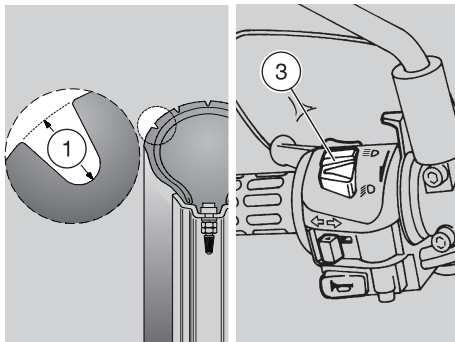
Make sure that the tires always have their valve sealing caps on, to prevent them from suddenly going flat.

Repair, maintenance, changing and balancing of tires are very important to your safety, and should only be performed by qualified mechanics using the appropriate tools.

For this reason, we suggest that you have your tires serviced by your Local **aprilia** Dealer.




### WARNING

New tires are often covered with a slippery mold release compound. Scrub the tires in by riding slowly and making numerous turns for the first few miles. Do not use any kind of tire dressing or other liquid on your tires. Especially do not permit any petroleum products, such as oil, gasoline or brake fluid to come in contact with the tires. If you do, wipe it immediately, then scrub the tire with soap and water and a stiff brush. Do not use a tire that is worn out.





Minimum tread depth is measured as shown above. The minimum tread depth (1) for both the front and the rear tires is 0.12 in (3 mm).

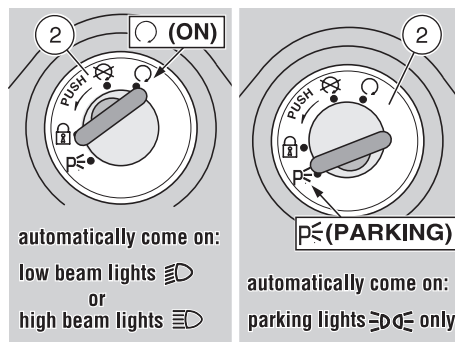
## AUTOMATIC LIGHTS ON

Your vehicle is equipped with lights that come on automatically as soon as the ignition switch (2) is turned to position “○” (ON) (low beam lights “”) or high beam lights “”) position “P<” (PARKING) (only parking lights “”).

For this reason, there is no light switch on your vehicle.

The lights can be switched off only by turning the ignition switch (2) to position “” (OFF).

Before starting the vehicle, make sure that the dimmer switch (3) is in the low beam lights “”) position.



## CATALYTIC CONVERTER

### ⚠ WARNING

The exhaust system of this vehicle is equipped with a catalytic converter. It becomes extremely hot, and cause serious burns and forest fires. Do not touch it! Keep flammable materials away.

### ⚠ WARNING

If your vehicle is equipped with a catalytic converter, do not park it near dry brush, wood, or in places easily accessible to children, as the catalytic converter becomes extremely hot during use. Be careful to avoid any kind of contact before it has completely cooled down.

The catalytic converter, if used, is a metal “platinum-rhodium bivalent” type.

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

dioxide and steam, respectively.

### ⚠ CAUTION

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

## EXHAUST SILENCER

### ⚠ WARNING

Tampering with the exhaust system is prohibited. It is against the law for you to alter the exhaust system in a manner that increases the noise, carefully read p. 5 (WARNINGS - PRECAUTIONS - GENERAL ADVICE).

Periodically inspect the entire exhaust system, including the exhaust pipe and silencer, to make sure that no holes have rusted through. Using a wire or small pick, make sure that the drain hole in the bottom of the muffler is open. If the noise of your vehicle has increased significantly, replace the defective exhaust system components. See your Local **aprilia** Dealer. Tampering with the exhaust system not only makes your vehicle loud, it will reduce its performance and shorten its life.

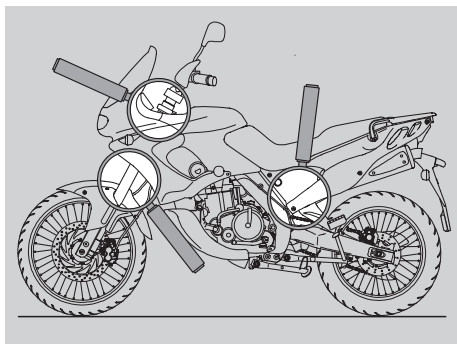
## SPARK ARRESTER

### ⚠ WARNING

If the bike is to be used off-road, on public land, it is the owner's responsibility to install a spark arrester approved by the US Forest Service for this engine displacement or larger.



## INSTRUCTIONS FOR USE

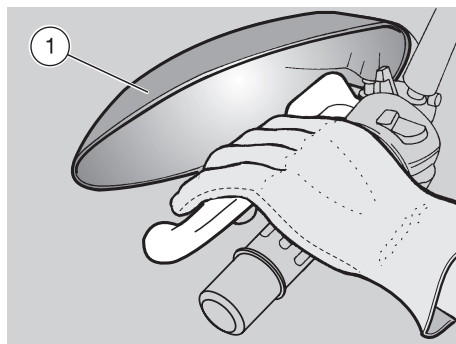


### ⚠ WARNING

Before you ride away, always do a pre ride check to make sure that all systems are working properly and safe, see p. 49 (PRELIMINARY CHECKING OPERATIONS). Failure to follow this warning can lead to engine seizure, handling instabilities or other problems which can result in an upset and subsequent serious injury or even death.

Do not hesitate to consult your Local **aprilia** 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.



Failure to perform the checks described above may cause accidents or make the vehicle overturn, with consequent serious injuries or even death.

### ⚠ WARNING

These hand-guards (1) do not provide crash protection but just protect your hands from branches and flying debris. Always wear appropriate riding gloves.

### ⚠ WARNING

If the throttle sticks open, it may cause a collision with another vehicle, or an upset.

If the throttle sticks, kill the engine with the engine stop switch located on the right handlebar.  
Do not attempt to restart the engine un-

til the throttle has been repaired and works perfectly. Failure to obey this warning can lead to a runaway with seriously injuries or even death.

Your vehicle is equipped with a double cable throttle. One cable opens the throttle when you rotate the throttle grip toward you; the other closes the throttle when you rotate the grip away from you. It is essential, when you release the throttle grip, that it automatically return to the idle position.

This double cable arrangement enhances safety by providing for positive closing of the throttle.

### ⚠ WARNING

In the event of a throttle sticking emergency, always kill the engine using the engine stop switch located near the throttle grip on the right handlebar. Never use your vehicle if the throttle does not automatically fully return to the idle position when the throttle grip is released. Contact your Local **aprilia** Dealer for repairs. Failure to heed this warning can lead to a serious accident and subsequent injury or even death.

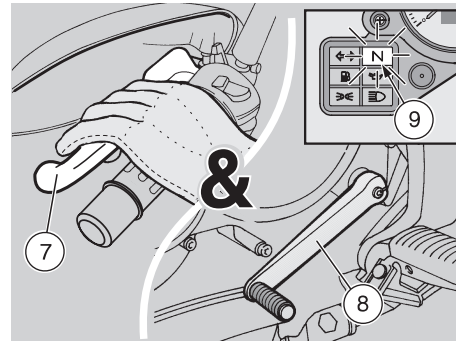
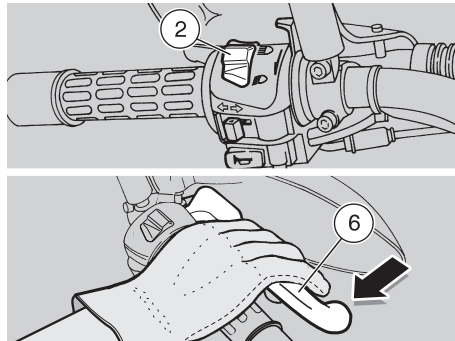
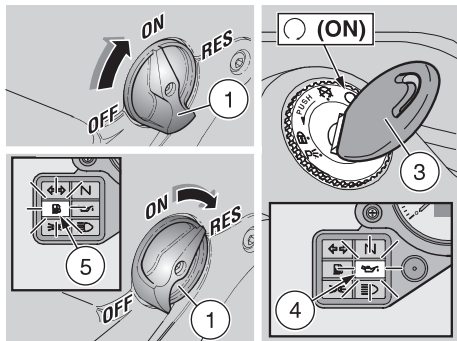
If any fastener is loose, the rider may lose control of the vehicle and risk an accident.

Both situations may cause serious injuries or even death.



## PRELIMINARY CHECKING OPERATIONS

Component	Check	Page
Front and rear disc brakes	Check brake operation, lever and pedal play, fluid levels. Check the pads for excessive wear, check the discs for condition. If the discs are unduly scored or show signs of heat discoloration, do not ride the vehicle. Check both brake systems for evidence of leaks. If there are leaks, do not ride the vehicle.	36 – 42, 69
Throttle	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.	84
Engine oil	Check and/or top up if necessary.	36, 37, 66, 67
Wheel/tires	Check the tire surface, the inflation pressure, wear and tear and any damage. Inspect the rims, spokes and hubs for cracks, looseness or damage. Do not ride the vehicle if there is even the slightest defect in either of the wheels.	46
Brake lever and pedal	Make sure they work smoothly and are properly lubricated.	42
Steering	Make sure that the fork head rotates through its entire range without fouling of any kind. Make sure that the fork stops touch the frame at full left and full right fork lock.	68
Clutch	Check the play of the clutch lever. Ensure that the clutch operates without jerking or slipping.	43
Side stand and center 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. Make sure that the safety switch on the side stand operates correctly.	70
Component nuts, bolts and other fasteners	Check that all fasteners are tight and properly torqued.	61
Drive chain	Check the slack and the conditions of the chain at both sprockets.	78, 79
Fuel tank	Check the fuel level and top up if necessary. Make sure that there are no fuel leaks. Make sure that the filler cap is properly closed.	35, 80, 97
Coolant	With the engine cold, check the coolant level. Make sure that it is at the prescribed level.	44, 45
Engine stop switch (○ - ✕)	Make sure that it functions correctly.	31
Lights, warning lights and electrical devices	Check the proper functioning of all the lights and the horn. Do not ride if any of these are not functioning properly.	87 – 96



## STARTING

### ⚠ WARNING

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

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

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

**NOTE** When the side stand is extended the engine will not start unless the transmission is in neutral. Note also that if you attempt to shift into gear with the side stand down, the engine will stop.

With the side stand retracted, the engine may be started with the gear selector in neutral without pulling in the clutch lever. The engine may be started while the transmission is in gear only if the clutch lever is pulled in.

### ⚠ WARNING

Be careful not to drop the vehicle when you first sit on it.

- ◆ Retract the center stand or the side stand.

### ⚠ WARNING

Ensure that the center stand and the side stand are completely up.

- ◆ Sit astride the vehicle.
- ◆ Move the fuel valve lever (1) to the "ON" position.
- ◆ Make sure the dimmer switch (2) is in the low beam "D" position.
- ◆ Rotate the ignition key (3) to the "ON" position.

At this point the engine oil pressure warning light "⚡" (4) must come on, see p. 29 (Engine oil pressure warning light ⚡).

If the low fuel warning light "⚡" (5) comes on, move the fuel valve lever (1) to the "RES" position.

Top up as soon as possible, see p. 35 (FUEL).

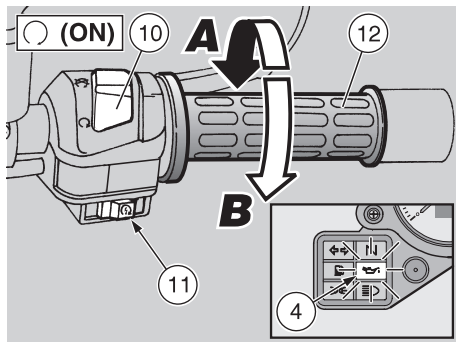
- ◆ Hold the vehicle in place by applying at least one brake (6).
- ◆ Pull in the clutch lever (7) completely and put the shift lever (8) in neutral so that the green warning light "N" (9) is on.
- ◆ Move the engine stop switch (10) to the "O" (ON) position.

**NOTE** After a long period of inactivity, carry out the operations described at p. 52 (STARTING AFTER A LONG PERIOD OF INACTIVITY).

**NOTE** To avoid discharging the battery, and possibly damaging the starter, do not keep the starter button depressed for more than 5 seconds. If the engine does not start in this time, wait for 10 seconds and try again.

### ⚠ CAUTION

Do not depress the starter button "⚡" (11) when the engine is running. This will damage the starter and other important engine components.



- ◆ Press the starter button “Ⓢ” (11) to start the engine. Leave the throttle (12) in the idle position (**Pos. A**). Release the button as soon as the engine catches.

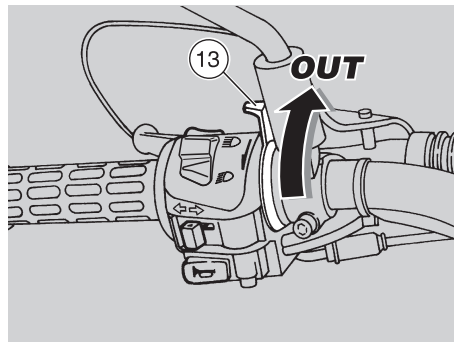
### ⚠ WARNING

If the throttle sticks open, it may cause a collision with another vehicle, or an upset.

If the throttle sticks, kill the engine with the engine stop switch located on the right handlebar.

Do not attempt to restart the engine until the throttle has been repaired and works perfectly. Failure to obey this warning can lead to a runaway with seriously injuries or even death.

Your vehicle is equipped with a double cable throttle. One cable opens the throttle when you rotate the throttle grip toward you; the other closes the throttle when you rotate the grip away from you. It is essen-




tial, when you release the throttle grip, that it automatically return to the idle position. This double cable arrangement enhances safety by providing for positive closing of the throttle.

### ⚠ WARNING

In the event of a throttle sticking emergency, always kill the engine using the engine stop switch located near the throttle grip on the right handlebar. Never use your vehicle if the throttle does not automatically fully return to the idle position when the throttle grip is released. Contact your Local **aprilia Dealer** for repairs. Failure to heed this warning can lead to a serious accident and subsequent injury or even death.

### ⚠ WARNING

As soon as the engine has started, the engine oil pressure warning light “” (4) must go out. If this does not occur,


or if the warning light comes on while the engine is running, this means that the oil system is not developing sufficient pressure. In this case, stop the engine immediately and contact an Local **aprilia Dealer**.

Failure to heed this warning can lead to engine seizure, upset, and serious injury or even death.

### ⚠ CAUTION

Never ride off briskly with a cold engine. Allow the engine to warm up by riding slowly for the first few miles.


Starting a warm engine:

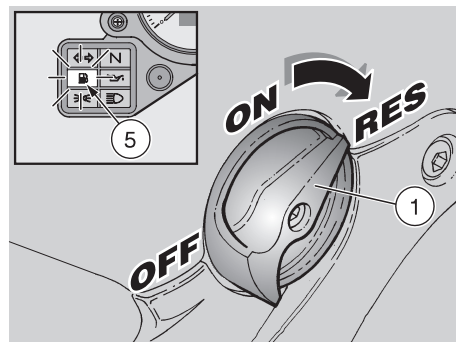
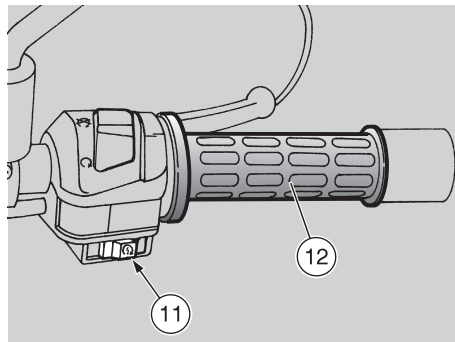
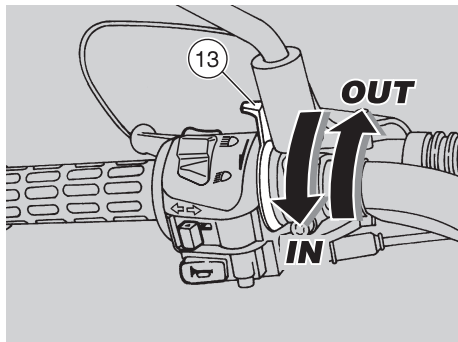
- ◆ Before attempting to start the motor, ensure that the cold start lever “” (13) is not engaged, see p. 52 (STARTING AT VERY COLD AMBIENT TEMPERATURES).

### STARTING WITH A FLOODED ENGINE

If for some reason the engine fails to start after several attempts, it is possible that the engine may be flooded. That is, there may be too much gasoline in the inlet manifolds and the carburetors.

To purge the flooding:

- ◆ Rotate the cold start lever “” (13) upwards.
- ◆ Depress the starter button “Ⓢ” (11) for a few seconds (letting the engine spin over) while holding the throttle (12) in a completely open position (**Pos. B**).



## STARTING AT VERY COLD AMBIENT TEMPERATURES

When the ambient temperature is very cold (less than 0°C) it may be difficult to start the engine on the first try.

If this occurs:

- ◆ Rotate the cold start lever “|↘|” (13) downwards.
- ◆ Depress the starter button “Ⓢ” (11), at the same time, open the throttle (12) slightly.

### If the engine starts:

- ◆ Release the throttle grip (12).
- ◆ After letting the engine run for a few seconds, rotate the cold start lever “|↘|” (13) upwards.
- ◆ If idle is uneven, open the throttle (12) slightly.

### If the engine does not start:

Wait for a few seconds and repeat the above starting procedure.

- ◆ If necessary, remove the spark plug, see p. 86 (SPARK PLUG) and make sure that it is not wet.
- ◆ If the spark plug is wet, clean and dry it.

Before reinstalling it:

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

- ◆ Press the starter button “Ⓢ” (11) and let the starter run for about five seconds without accelerating.

## STARTING AFTER A LONG PERIOD OF INACTIVITY

If the vehicle has not been used for several weeks, it may not start immediately. This may be because the fuel in the carburetors float bowl has evaporated.

In this case:


- ◆ Press the starter button “Ⓢ” (11) for about five seconds. This will fill the float chambers.

## RIDING

### ⚠ WARNING

**Do not place anything inside the front part of the fairing between the handlebar and the dashboard. Any object placed in this area could jam the forks, and also could restrict visibility of the dashboard.**

**NOTE** Before riding away, carefully read the “safe drive” chapter, see p. 17 (SAFE DRIVE).

If the low fuel warning light “” (5) comes on or the engine should die while you are riding because of fuel exhaustion, move the fuel valve lever (1) to the reserve position “RES”. Top up as soon possible, see p. 35 (FUEL).

**FUEL RESERVE:** 1.32 US gal (5 ℓ) [mechanical reserve], 1.59 US gal (6 ℓ) [electrical reserve].

## ⚠ WARNING

If you are riding solo, without a passenger, make sure the passenger foot rests are folded up.

Never take your hands off the hand grips nor your feet off the foot rests while you are riding.

If you carry a passenger, instruct him/her not to move around unduly, and to keep his/her body aligned with yours during turns. Failure to do this could upset the stability of the vehicle.

Before riding away, ensure that the center stand and the side stand is completely up.

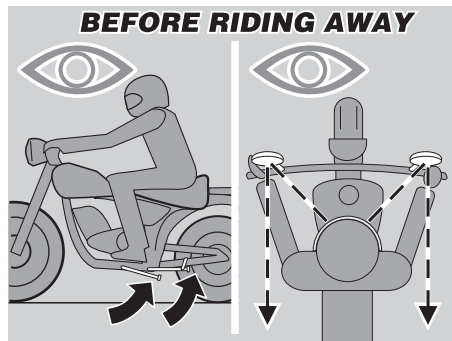
If the throttle sticks open, it may cause a collision with another vehicle, or an upset.

If the throttle sticks, kill the engine with the engine stop switch located on the right handlebar.

Do not attempt to restart the engine until the throttle has been repaired and works perfectly. Failure to obey this warning can lead to a runaway with seriously injuries or even death.

Your vehicle is equipped with a double cable throttle. One cable opens the throttle when you rotate the throttle grip toward you; the other closes the throttle when you rotate the grip away from you. It is essential, when you release the throttle grip, that it automatically return to the idle position.

This double cable arrangement enhances safety by providing for positive closing of the throttle.



## ⚠ WARNING

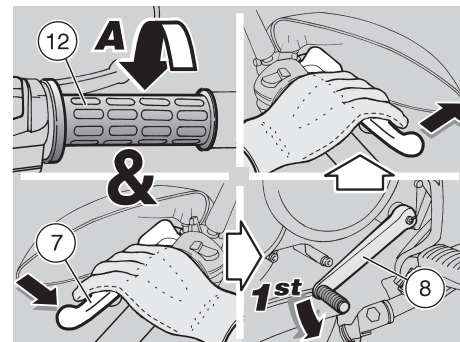
In the event of a throttle sticking emergency, always kill the engine using the engine stop switch located near the throttle grip on the right handlebar. Never use your vehicle if the throttle does not automatically fully return to the idle position when the throttle grip is released. Contact your Local **aprilia** Dealer for repairs. Failure to heed this warning can lead to a serious accident and subsequent injury or even death.

- ◆ Before riding away, be sure that the rear view mirrors are correctly adjusted.

## ⚠ CAUTION

When the vehicle is new to you, practice looking in the rear view mirrors. Only experience will allow you to correctly determine how far behind you following vehicles are.

- ◆ Ride at reduced speed for the first few



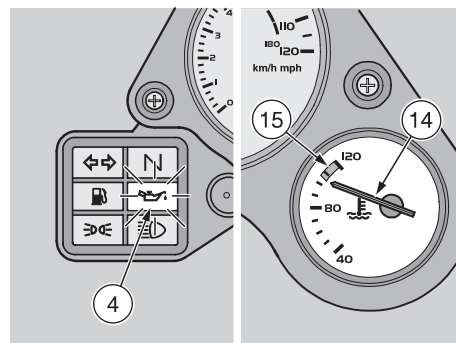
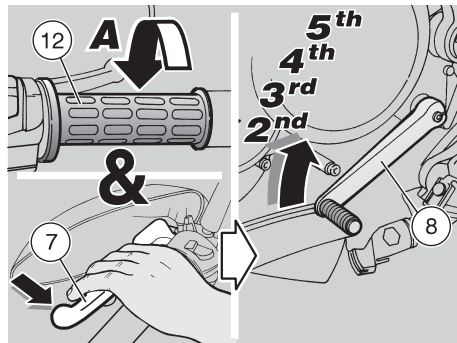
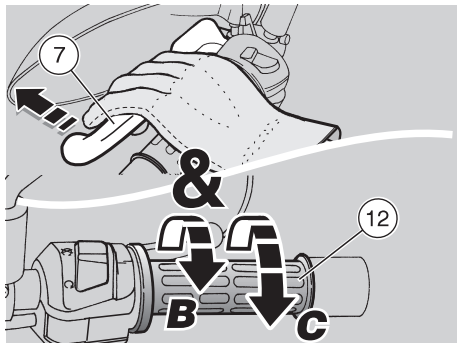
miles in order to warm the engine up.

- ◆ With the throttle grip (12) in the idle position (**Pos. A**), and the engine idling, pull in the clutch lever (7) completely.
- ◆ Engage first gear by pressing downwards on the shift lever (8).
- ◆ Release the brakes.

## ⚠ WARNING

Do not release the clutch too abruptly, or the vehicle will rear in the air (do a wheely) or jerk forwards. Never accelerate abruptly or excessively when releasing the clutch lever in order to prevent the clutch from slipping and overheating (slow release) or the front wheel from lifting (wheely) (quick release).

Failure to observe these instructions can lead to a serious accident with subsequent injury or even death.



- ◆ Slowly but steadily release the clutch lever (7) and, at the same time, open the throttle by rotating the throttle grip (12) slightly counterclockwise (**Pos. B**). This will start the vehicle moving.
- ◆ Increase the speed by gradually rotating the throttle grip (12) (**Pos. C**). Do not exceed the recommended rpm, see p. 56 (RUNNING-IN).

To engage second gear:

### ⚠ CAUTION


Shift gears fairly quickly but without great force. Develop a “feel” for shifting with your left toe. Never lug the engine, that is, running it at too low an rpm which can damage the vehicle’s engine, and causes rough and juddering acceleration.

- ◆ Rotate the throttle grip (12) clockwise (**Pos. A**), pull in the clutch lever (7) and lift the shift lever (8) straight up. Release

the clutch lever (7) gently, and rotate the throttle counterclockwise to accelerate.

- ◆ Repeat the last two operations to shift from second, to third, to fourth, to fifth.

### ⚠ WARNING

If the engine oil pressure warning light “” (4) comes on during the normal running of the engine, this means that the oil system is not developing sufficient pressure. In this case, immediately stop the engine and contact your Local **aprilia** Dealer. Failure to heed this warning can lead to engine seizure, upset, and serious injury or even death.

### ⚠ WARNING

If the pointer (14) of the coolant temperature indicator reaches the red area (15), stop the engine and check the coolant level, see p. 44 (COOLANT).

**Do not operate the vehicle if the maximum temperature is exceeded. Serious engine damage or even seizure may result which can cause an upset and serious injury or even death.**

Shifting from higher to lower gears, that is, downshifting, is accomplished as follows:

- ◆ Rotate the throttle grip (12) clockwise (**Pos. A**), slow the bike with the brakes, pull in the clutch lever (7), depress the shift lever (8) with your toe, release the clutch.

### ⚠ WARNING

Shift gears one by one. Simultaneously downshifting more than one gear may cause the engine to exceed its maximum rated rpm (red line). This can seriously damage the engine.

Before and during downshift, rotate the throttle clockwise to decelerate in order to avoid overspeeding the engine.

Downshifting should be carried out in the following situations:

- ◆ When riding downhill or when braking, in order to increase the braking action by using the compression of the engine.
- ◆ When riding uphill if the engine lugs down (rpm decreases).

### **WARNING**

Avoid opening and closing the throttle repeatedly and continuously. Failure to heed this warning can cause you to accidentally lose control of your vehicle.

When you have to brake, close the throttle and apply both brakes simultaneously in order to obtain the best brake performance.

By applying only the front brake or only the rear brake, you reduce the braking performance considerably and run the risk of locking up one wheel which can cause an upset and subsequent serious injury or even death.

If you stop on an uphill, use brakes only to slow the vehicle and to keep it in place. Slipping the clutch to keep the vehicle in one place on an uphill grade will very quickly ruin the clutch and overheat the engine.

### **WARNING**

Before entering a turn, slow down, using the brakes and the engine, to a constant speed and then accelerate slightly through the turn. Avoid braking at the last moment. This can cause you to lose control of your vehicle.

If the brakes are operated continuously on downhill grades, the discs and pads will overheat, reducing the braking efficiency. Use engine compression and downshift to retard your vehicle while going downhill. Use the brakes as little as possible to maintain a safe speed.

Never coast downhill with the engine off and/or the clutch disengaged or the transmission in neutral.

On roads that are wet or covered with snow, ice or mud, ride very slowly, avoiding braking or accelerating or maneuvering quickly. Hold the handlebars firmly.

Failure to heed these warnings can cause an upset with subsequent serious injury or death.

### **WARNING**

Pay very close attention to any obstacles or variations of the road surface. Uneven roads, rails, manhole covers, painted traffic stripes, traffic dots all become slippery when wet. Avoid particularly steel plates which are sometimes used during road maintenance. They become more slippery than ice once they are wet by rain. If you must ride on such surfaces, decrease your speed and operate the throttle, brakes and steering very gently.

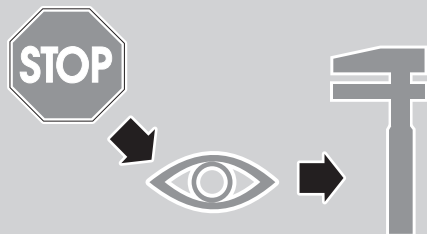
Always use the turn signals any time you intend to change lanes or change direction, and avoid sudden or abrupt turning.

Switch off the direction indicators as soon as you have changed direction.

Overtake and pass only with care, especially in rainy weather when a water cloud created by larger vehicles reduces visibility and the slip stream could cause you to lose control of your vehicle.



## FIRST 625 mi (1,000 km)



### RUNNING-IN

The internal parts of the engine and transmission must be properly run-in to ensure their long life and dependable operation. If possible, while breaking in your vehicle, ride on hilly roads and/or roads with many curves so that the engine and transmission undergo lots of speed changes. It is also important that, during the run-in period, the suspension and brakes be treated gently to allow the mating parts to bed. Therefore, avoid hard braking, high speeds or very bumpy roads during the break in period.

During break in, obey the following rules:

- ◆ Do not open the throttle abruptly or fully at low engine speed. This rule applies even after break in has been completed.
- ◆ During the first 62 mi (100 km), apply the brakes with caution, avoid sudden and prolonged braking. This ensures correct bedding in of the pads on the discs.
- ◆ During the first 312 mi (500 km), never exceed 4,000 rpm.
- ◆ Between 312 mi (500 km) and 625 mi (1,000 km), never exceed 5,000 rpm.

### ⚠ WARNING

**After the vehicle has been operated for 625 mi (1,000 km) perform the “checking operations” shown in column “After running-in” of the REGULAR SERVICE INTERVALS CHART, see p. 62. Rectify any faults found. Failure to heed this warning could lead to damage to your vehicle or engine seizure or other malfunction which could cause an upset and lead to serious injury or even death.**

- ◆ Between the first 625 mi (1,000 km) and 1,250 mi (2,000 km) drive more briskly, changing speed and using maximum acceleration for only a few seconds. Never exceed 5,500 rpm.
- ◆ After the first 1,250 mi (2,000 km) if you have followed the above break in schedule, the engine should be fully broken in, and will deliver maximum performance. However, never exceed the maximum rpm (6,250 rpm).

Engine maximum rpm for the running-in	
Mileage mi (km)	Max. rpm
0-312 (0-500)	4,000
312-625 (500-1,000)	5,000
625-1,250 (1,000-2,000)	5,500
over 1,250 (2,000)	6,250



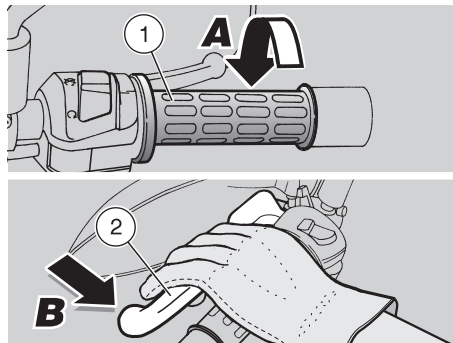


## STOPPING

### **⚠ WARNING**

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

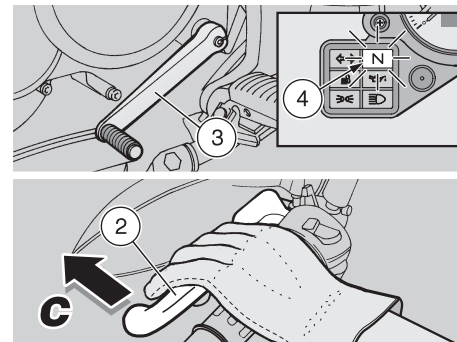
Non-compliance with these instructions may cause accidents with consequent risk of serious injuries or even death.



- ◆ Release the throttle grip (1) (**Pos. A**), gradually put on the brakes and at the same time shift down in order to decrease the speed, see p. 52 (RIDING).

Once the speed has decreased, before stopping the vehicle:

- ◆ Pull in the clutch lever (2) (**Pos. B**) in order to prevent the engine dying.



When the vehicle has come to rest:

- ◆ Position the shift lever (3) in neutral (green warning light "N" (4) on).
- ◆ Release the clutch lever (2) (**Pos. C**).
- ◆ If you are stopping just briefly and not shutting down the engine, keep one brake applied.



## PARKING

### ⚠ WARNING

Park the vehicle only on firm flat ground, otherwise it could fall over.

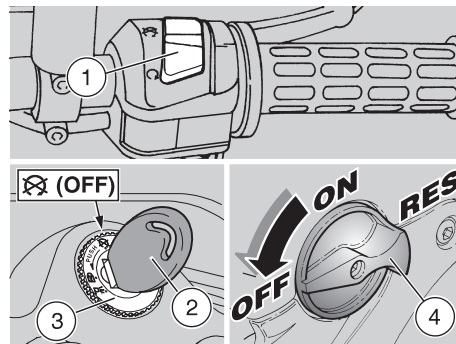
Do not lean the vehicle against walls, do not lay it on the ground.

Park your vehicle away from children and pedestrians, so that they will not come in contact with hot parts.

Do not leave your vehicle unattended with the engine running or with the key in the ignition switch.

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

If the vehicle falls over, it will leak gasoline which is extremely flammable. Flames or sparks could cause a fire which could destroy not only your vehicle but also buildings around it and cause injury or even death to people as well.

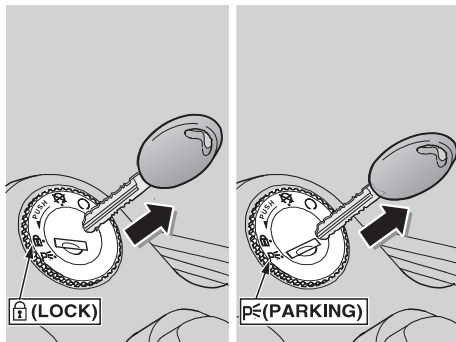


- ◆ Stop the vehicle, see p. 57 (STOPPING).
- ◆ Move the engine stop switch (1) to the “⊗” (OFF) position.

### ⚠ CAUTION

Do not leave the ignition on if you have stopped the engine by moving the engine stop switch to the “⊗” (OFF) position as this will discharge the battery. When the vehicle has come to rest after stopping the engine with the engine stop switch, turn the ignition switch (3) to the “⊗” (OFF) position.

- ◆ Rotate the key (2) and move the ignition switch (3) to the “⊗” (OFF) position.
- ◆ Move the fuel valve lever (4) to the “OFF” position.
- ◆ Position your vehicle on the stand, see p. 59 (POSITIONING THE VEHICLE ON THE STAND).

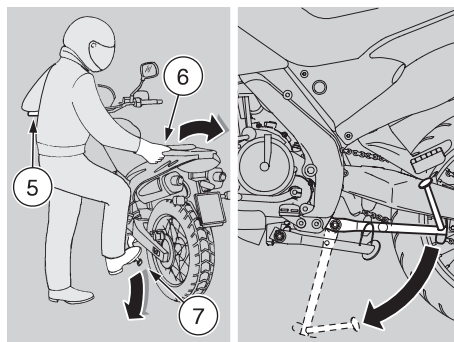


**NOTE** Never leave the key in the ignition switch.

- ◆ Lock the steering, see p. 32 (STEERING LOCK) and extract the key.

When you park the vehicle in a dark area, or in a badly lit, area (parking-lot or street) it is possible, and useful, may leave the parking lights on, so the vehicle will be easily visible.

For leave the parking lights on: see p. 32 (PARKING LIGHTS).



## POSITIONING THE VEHICLE ON THE STAND

### ⚠ WARNING

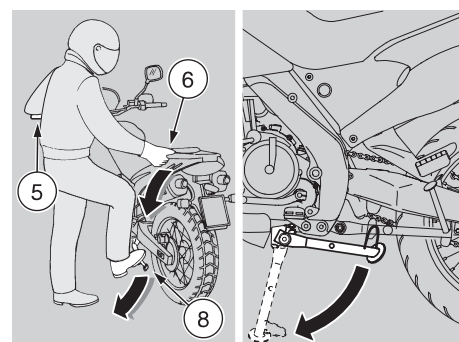
**Position the vehicle on firm and flat ground.**

### CENTER STAND

- ◆ Seize the left handle grip (5) and the left passenger grab rail (6).
- ◆ Put the stand lever (7) down.

### ⚠ WARNING

**Make sure the vehicle is stable when parked. If it falls down, it will certainly be damaged and could injure others as well.**

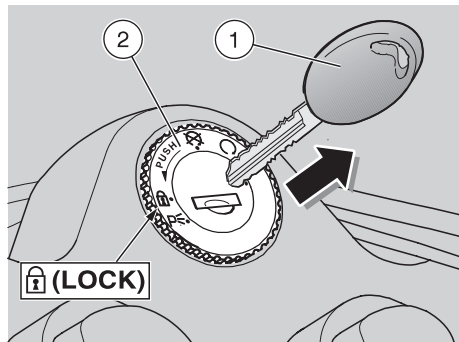


## SIDE STAND


- ◆ Grab the left handle grip (5) and the left passenger grab rail (6).
- ◆ Put the side stand (8) down with your right foot. Make sure it is extended completely and all the way forward.
- ◆ Lean the vehicle to the left until the stand rests firmly on the ground.
- ◆ Turn the handlebars completely against the left stop.

### ⚠ WARNING

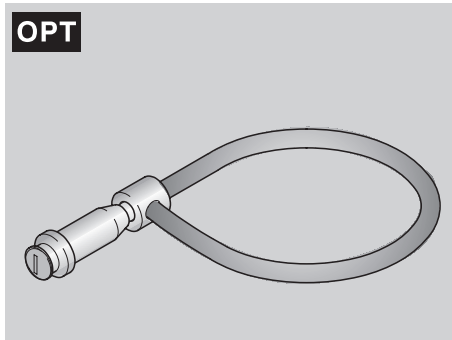
**Make sure the vehicle is stable when parked. If it falls down, it will certainly be damaged and could injure others as well.**



## SUGGESTIONS TO PREVENT THEFT

NEVER leave the key (1) in the ignition switch (2), always use the steering lock “” (LOCK).

Try to park your vehicle in a safe place, if at all possible, in a garage or other protected place.



Lock your vehicle up using a chain and padlock around the rear wheel. Chain the rear wheel to the swinging arm.

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

Make sure that all legal requirements: registration, license plates, insurance, etc. are in order.



Write down your name, address and telephone number and the vehicle identification number in the space below, to facilitate finding the owner in case your vehicle is recovered after theft.

SURNAME: .....

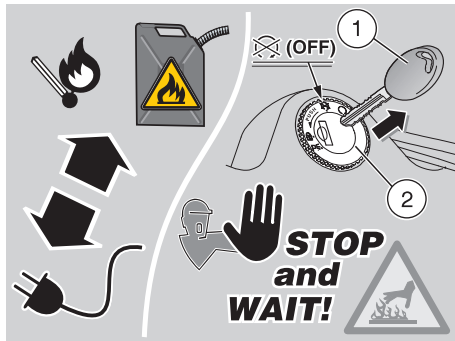
NAME: .....

ADDRESS: .....

.....

TELEPHONE NO.: .....

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



Carefully read p. 2 (FOREWORD) and (INTRODUCTION), p. 3 (SAFETY WARNINGS) and (GENERAL SAFETY RULES), p. 5 (WARNINGS - PRECAUTIONS - GENERAL ADVICE).

## ⚠ WARNING

**Risk of fire.**

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

Before beginning any maintenance operation or any inspection of the vehicle, stop the engine, remove the key (1) from the ignition lock (2), wait until the engine and the exhaust system have cooled down and if possible lift the vehicle by means of the proper equipment, on firm and flat ground.

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

Be careful to avoid hot parts of the engine and exhaust system. They are hot enough to cause serious burns.

Avoid the temptation to hold any part of the vehicle in your mouth. The coatings and platings used are, in some cases, toxic.

## ⚠ CAUTION

In general, reassembly is performed in the reverse order of the disassembly instructions given here.

For some maintenance operations, especially those in which your hands are likely to come in contact with coolant, or engine oil, or gasoline, or brake fluid, it is advisable to use thin disposable gloves, such as those made of latex, rubber or nitrile.

The routine maintenance operations described in this manual can usually be performed by the user. However, in some cases, specific tools and technical expertise may be required.

Do not hesitate to contact your Local **aprilia** Dealer who has all the latest factory information and tools to properly service your vehicle.

Remember that many service operations, if done improperly, can be very hazardous. If you have any questions about your ability to carry out the operations described here, see your Local **aprilia** Dealer.

In all cases, personally carry out the "preliminary checking operations" after any maintenance, see p. 49 (PRELIMINARY CHECKING OPERATIONS).

## ⚠ WARNING

Remember that tightening torque of all fasteners on the wheels, brakes, axles, suspension are extremely important to ensure safety, and must be maintained at the prescribed values.

Check the tightening torques of the fasteners regularly, and always use a torque wrench when installing them.

Failure to adhere to this warning could cause the loosening and subsequent loss of critical fasteners, which could cause a wheel to lock or cause other handling problems with consequent overturning, and the risk of serious injury or even death.

## ⚠ WARNING

Fasteners must be neither overtightened or undertightened. If they are overtightened, the threads may be damaged and the fasteners will be destroyed, whereas if they are undertightened, they can vibrate and become lost. Obviously, under these circumstances, a serious accident with resultant serious injury or death could ensue.

## REGULAR SERVICE INTERVALS CHART

THESE OPERATIONS MAY BE CARRIED OUT BY YOUR Local **aprilia** Dealer, OR BY THE OWNER OF THE VEHICLE

Component	After running-in [625 mi (1,000 km)]	Every 3,750 mi (6,000 km) or 8 months	Every 7,500 mi (12,000 km) or 16 months
Battery / electrolyte level	C	C	
Spark plug		C	S
Drive chain, tension and lubrication	every 312 mi (500 km): C		
Steering bearings and steering	C	C	
Air cleaner		C	S
Fork			C
Clutch clearance	R	R	
Light operation / direction		C	
Light system	C	C	
Safety switches	C	C	
Brake fluid		C	
Coolant	every 625 mi (1,000 km): C		
Engine oil	every 312 mi (500 km): C		
Tires	C	every 625 mi (1,000 km): C	
Tire pressure	every month: R		
Engine idling rpm	R	R	
Engine oil pressure warning light “موتور”	at every start: C		
Spoke tension	C	C	
Front and rear brake pad wear	C	before every trip and every 3,750 mi (6,000 km): C	
Swinging arm pivot			C

**C** = check and clean, adjust, lubricate or change, if necessary; **P** = clean; **S** = change; **R** = adjust.

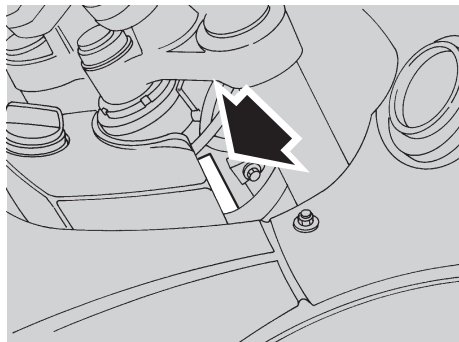
**Perform these maintenance operations at one-half of the specified intervals, if your vehicle is often used in rainy or very dusty conditions, or on unpaved roads.**

**THESE MAINTENANCE OPERATIONS SHOULD ONLY BE PERFORMED OUT BY Local **aprilia** Dealer.**

Component	After running-in [625 mi (1,000 km)]	Every 3,750 mi (6,000 km) or 8 months	Every 7,500 mi (12,000 km) or 16 months
Carburetors	C	P	
Accelerator cables (adjustment)	C		
Timing chain		C	
Wheel bearings		C	
Engine oil	S	S	
Engine oil filter	S	S	
Engine oil filter (on the frame)			P
Tappet clearance	C	C	
Braking systems	C	C	
Cooling system	C	C	
Brake fluid	C	every 2 years: S	
Brake pads	if worn: S		
Coolant	every 2 years: S		
Fork oil			S
Fuel valve	C	C	
Wheels / tires		C	
Nut, bolt, screw tightening	C	C	
Suspensions and attitude	C		C
Brake fluid bleeding	C		
Fuel pipes		C	every 4 years: S

**C** = check and clean, adjust, lubricate or change, if necessary; **P** = clean; **S** = change; **R** = adjust.

**Perform these maintenance operations at one-half of the specified intervals, if your vehicle is often used in rainy or very dusty conditions, or on unpaved roads.**

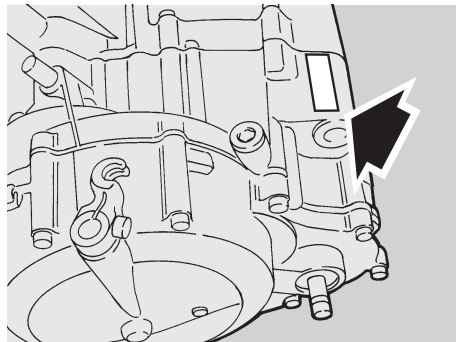


## IDENTIFICATION DATA

It is a good idea to write down the frame and engine numbers in the space provided below. Use the frame number (VIN) to identify your vehicle when ordering spare parts.

### **⚠ WARNING**

**In all states and countries, it is against the law to alter the Vehicle Identification Number (VIN). You can incur severe penalties by doing this. Also, this will immediately invalidate your warranty.**



## FRAME NUMBER

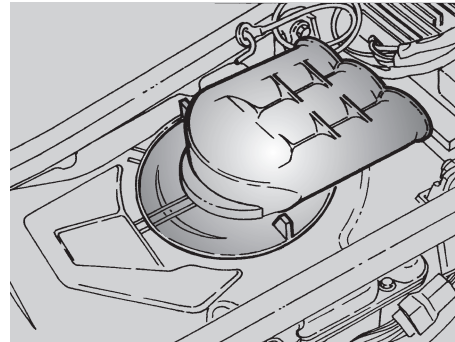
The frame number is stamped on the right side of the fork head.

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

## ENGINE NUMBER

The engine number is stamped on the rear part of the left engine crankcase.

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



## AIR CLEANER

**Carefully read p. 61 (MAINTENANCE).**

### **⚠ WARNING**

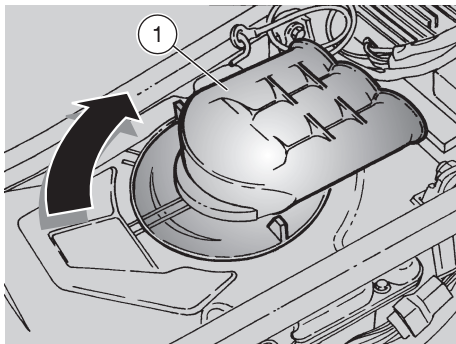
**Do not use gasoline or flammable solvents to wash the air cleaner, in order to avoid fire or explosion.**

Inspect the air cleaner to ensure that it has not become clogged every 3,750 mi (6,000 km) or 8 months of use. Renew the air cleaner every 7,500 mi (12,000 km).

The air cleaner must be inspected more frequently, cleaned if necessary, and replaced more frequently if the vehicle is used on dusty or wet roads.

More frequent cleaning of the air cleaner is suggested, especially if your bike is used under very dusty conditions.





### ⚠ CAUTION

The air cleaner must not be used for more than 7,500 mi (12,000 km) regardless of how many times it has been cleaned in the interval. Under very dusty or dirty conditions, it is advisable to replace the air filter more often.

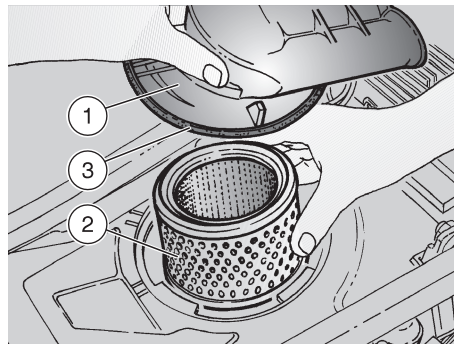
Before the cleaning operation, it is necessary to remove the air cleaner from the vehicle.

### REMOVAL

- ◆ Remove the saddle, see p. 81 (REMOVING THE SADDLE).
- ◆ Rotate the inlet duct (1) clockwise, pull it up, and remove it.
- ◆ Extract the air cleaner (2).

### ⚠ CAUTION

Plug the opening with a clean cloth to prevent any foreign matter from entering the air tubes.



### CLEANING

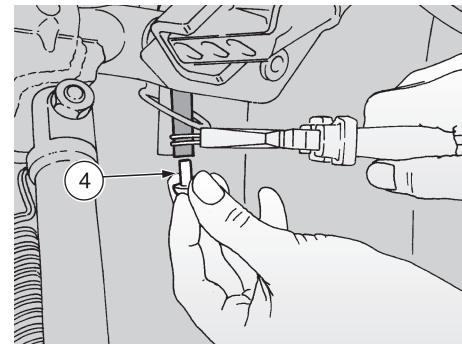
### ⚠ CAUTION

Take great care not to deform the perforated metal outside screen. It is very fragile and can be easily damaged. Never use a screwdriver or other sharp hard tool to remove the air cleaner itself.

### ⚠ WARNING

During this operation, always wear goggles which provide your eyes with 360° protection. Be very careful using compressed air jets, they can cause serious personal injury if directed towards your body.

- ◆ Grasp the air cleaner vertically and strike it repeatedly on a clean hard horizontal surface.
- ◆ If available, clean the air cleaner with a compressed air jet, directing it from the inside of the filter towards the outside.



- ◆ Clean the outer part of the air cleaner with a cloth.

### CHANGING

- ◆ Replace the air cleaner with a new one of the same type.
- ◆ Make sure that the gasket (3) is intact; if it is damaged, change it.
- ◆ Every 3,750 mi (6,000 km) remove the plug (4) so that any dirt that may have accumulated inside the filter case can be removed.

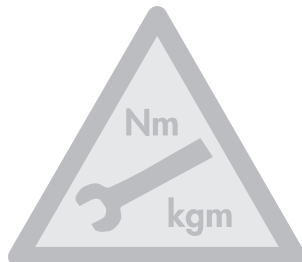


### CHECKING THE ENGINE OIL LEVEL AND TOPPING UP

Carefully read p. 36 (LUBRICANTS), p. 61 (MAINTENANCE) and p. 104 (LUBRICANT CHART).

#### WARNING

It is critical to the safe operation of your vehicle that the proper lubricants, maintained at the proper levels, are used. Failure to heed this warning can lead to an engine seizure with subsequent accident, serious injury or death.



#### WARNING

Remember that the tightening torque of all fasteners on the wheels, brakes, axles, and other components of the suspension system is very important to ensure the safety of the vehicle, and must be kept at the prescribed values.

Check the tightening torque of the fasteners regularly, and always use a torque wrench when reinstalling them. Failure to comply with this warning could allow one of these components to be lost which could lock a wheel or cause other handling problems with consequent overturning and risk of serious injury or even death.



### CHECKING

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

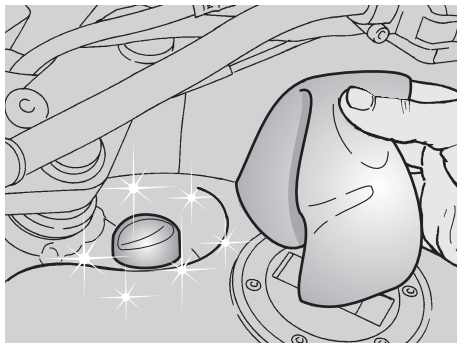
- ◆ Stop the engine and let it cool down for at least ten minutes, in order to allow the oil to flow back to the oil pan and to cool down.

#### WARNING

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

Do not start the engine in closed or badly-ventilated rooms.

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



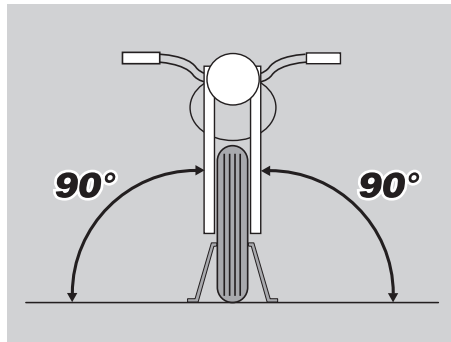
- ◆ Start the engine, see p. 50 (STARTING) and let it idle for about one minute, in order to ensure that any oil which remained in the sump is returned to the oil tank.
- ◆ Stop the engine.

### ⚠ WARNING

Should your vehicle overturn, it will leak gasoline, which is extremely flammable. Flames or sparks may cause a fire, which could destroy not only the vehicle, but also the building in which it is located, and cause serious injuries or even death.

- ◆ Place the vehicle on the center stand see p. 59 (POSITIONING THE VEHICLE ON THE STAND).

**NOTE** If you attempt to check the oil with the vehicle leaned in either direction from the vertical, your measurement will be inaccurate.



### ⚠ CAUTION

Before unscrew and remove the plug / dipstick (1), clean it and the part around it with a clean cloth. Any foreign matter getting into the engine oil system may lead to severe damage.

- ◆ Unscrew and extract the plug/dipstick (1).
- ◆ Clean the part in contact with the oil with a clean cloth.

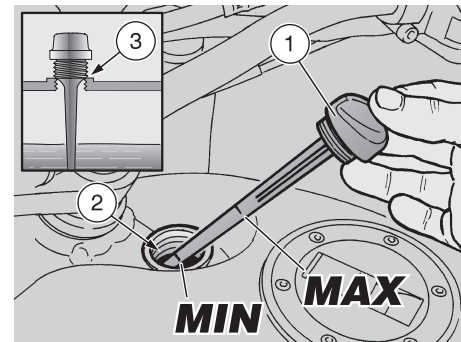
### ⚠ CAUTION

To check the oil level, the plug/dipstick (1) must neither be screwed nor tightened in the filler neck (2).

- ◆ Insert the plug/dipstick (1) completely in the filler neck (2), without screwing or tightening it (3).
- ◆ Withdraw the plug/dipstick (1) again and read the oil level on the graduated marking:

**MAX** = maximum level

**MIN** = minimum level



The difference between “MAX” and “MIN” is about 0.32 US qt (300 cm<sup>3</sup>).

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

### ⚠ WARNING

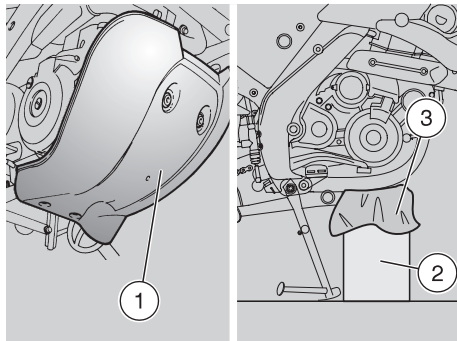
Never exceed the “MAX” mark, nor leave the oil below the “MIN” mark, in order to avoid serious damage to the engine.

- ◆ If necessary, top up the engine oil tank through the filler neck (2), after extracting the plug/dipstick (1).

### ⚠ WARNING

Tighten the plug / dipstick (1) snugly to insure no oil leak.

Never ride the vehicle with low engine oil or with contaminated or unapproved lubricants. This will greatly accelerate the wear of moving parts and cause irreparable failure.



## CHECKING THE STEERING

Carefully read p. 61 (MAINTENANCE).

- ◆ Place the vehicle on the center stand, see p. 59 (POSITIONING THE VEHICLE ON THE STAND).

### ⚠ WARNING

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

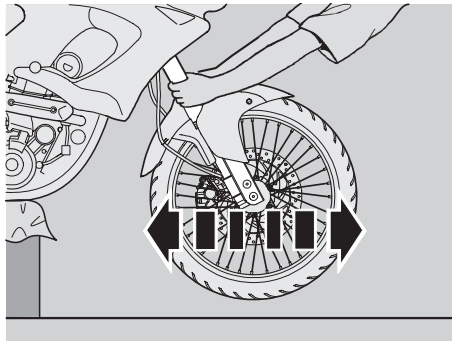
Check the slack in the fork head after the first 625 mi (1,000 km) and thereafter every 3,750 mi (6,000 km).

To check fork head slack:

- ◆ Remove the oil pan guard (1), see p. 82 (REMOVING THE OIL PAN GUARD).

**NOTE** Prepare a 12.60 in (320 mm) high support, the base of which must measure 7.87 x 7.87 in (200 x 200 mm).

- ◆ Place the support (2) under the vehicle and a soft cloth (3) between them, so



that the front wheel can move freely and the vehicle cannot fall down.

### ⚠ WARNING

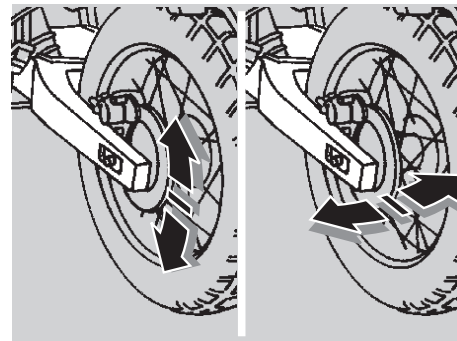
**Make sure that the vehicle is stable. If it falls over, it may cause injury to bystanders and other property, as well as being damaged itself.**

- ◆ Shake the fork in the direction of travel.

**NOTE** Carry out this operation with care. Do not pull the fork back and forth too vigorously, or you may observe play in the center stand, which would give you a false indication of fork head slack.

Repeat this operation several times until you are confident you have accurately assessed the fork head slack.

- ◆ There should be no fore and aft slack. If you detect any slack, arrange to have your vehicle repaired by your Local **aprilia** Dealer.



## CHECKING THE SWINGING ARM FULCRUM SHAFT

Carefully read p. 61 (MAINTENANCE).

Every 7,500 mi (12,000 km) check the swinging arm fulcrum shaft and needle bearings for slacks.

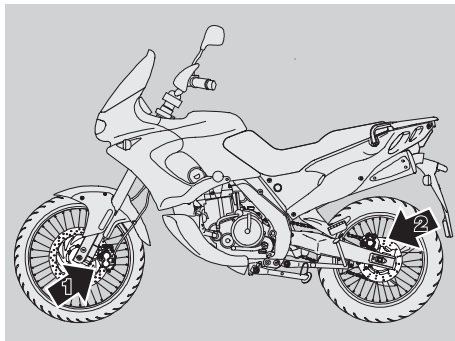
To perform this check:

- ◆ Place the vehicle on the center stand, see p. 59 (POSITIONING THE VEHICLE ON THE STAND).

### ⚠ WARNING

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

- ◆ Attempt to move the swinging arm vertically and laterally, as shown in the illustration above.
- ◆ There should be no vertically and laterally slack. If you detect any slack, arrange to have your vehicle repaired by your Local **aprilia** Dealer.



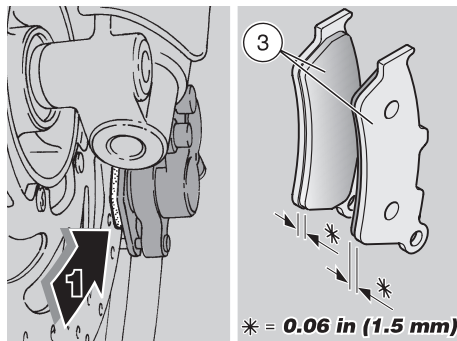
## CHECKING THE BRAKE PAD WEAR

Carefully read p. 37 (BRAKES), p. 38 (DISC BRAKES) and p. 61 (MAINTENANCE).

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

Check the brake pad wear after the first 625 mi (1,000 km), before every trip and thereafter every 3,750 mi (6,000 km).

The amount of wear that the brake pads experience depends on how the vehicle is used, how aggressively it is driven, and the condition of the roads upon which it is operated. Wear will be faster than normal when the vehicle is driven aggressively, or on dusty or wet roads.



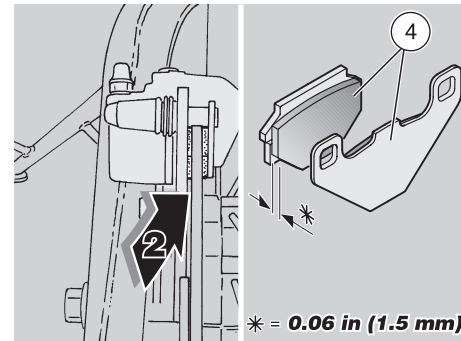
## ⚠ WARNING

Check the wear of the brake pads before every trip.

## CHECKING WEAR OF THE BRAKE PADS

- ◆ Place the vehicle on the center stand, see p. 59 (POSITIONING THE VEHICLE ON THE STAND).
- ◆ Perform a visual check of the friction material thickness. Use a flashlight. See the arrows (1) and (2) above.

If the friction material on one pad of a pair, front (3) or rear (4), is worn to **0.06 in (1.5 mm)** or less, replace both pads.

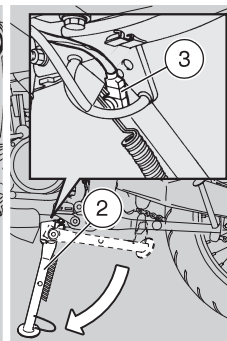
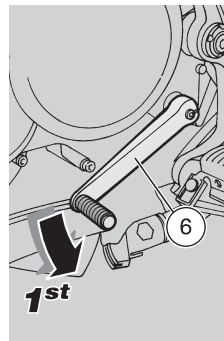
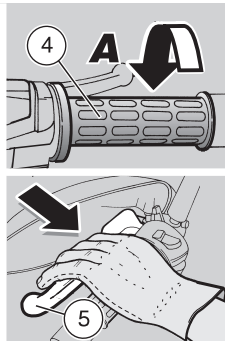
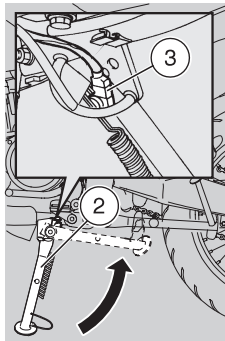
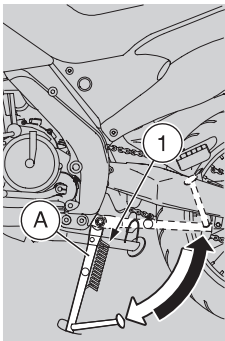
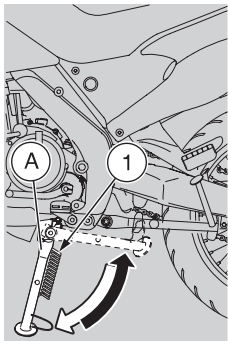


## ⚠ WARNING

Excessive wear of the friction material would cause the contact of the pad metal support with the disc, with consequent metallic noise and production of sparks from the caliper; braking efficiency and safety will be seriously compromised. This could lead to a crash, with subsequent serious injury or death.

## ⚠ WARNING

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



## CHECKING THE STAND

Carefully read p. 61 (MAINTENANCE) and p. 71 (CHECKING THE SWITCHES).

**NOTE** The following information may refer to just one stand but should be observed with regard to both stands.

The stand (A) must rotate about its pivot smoothly and easily.

Perform the following checks:

- ◆ The springs (1) must be free from damage, wear, or rust, and must fully and firmly retract the side stand when the weight of the vehicle is lifted off of it.
- ◆ The stand (A) must rotate freely about its pivot. If necessary, lubricate the pivot, see p. 104 (LUBRICANT CHART).

## CHECKING THE FUNCTIONING OF THE SAFETY SWITCH ON THE SIDE STAND

The side stand (2) is equipped with a safety system, operated by safety switch (3). This system prevents the motor from being started while the stand is extended unless the transmission is in neutral. It also kills the engine if the stand is extended while the engine is running, unless the transmission is in neutral. To check the proper functioning of the safety switch (3):

- ◆ Sit on the vehicle in the normal riding position.
- ◆ Retract the side stand (2).

## ⚠ WARNING

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

Do not start the engine in closed or badly-ventilated rooms.

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

- ◆ Start the engine, see p. 50 (STARTING).
- ◆ Release the throttle grip (4) (**Pos. A**). With the engine idling, pull in the clutch lever (5) completely.
- ◆ Engage first gear, pushing the shift lever (6) downwards.
- ◆ Extend the side stand (2).

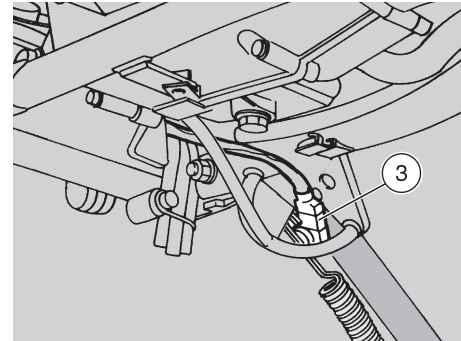
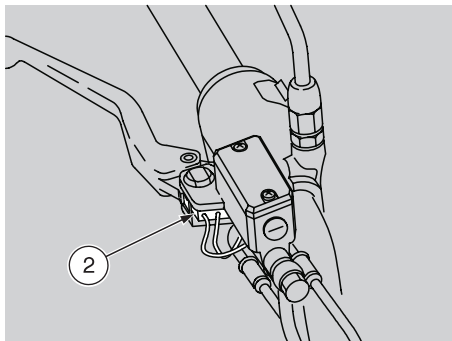
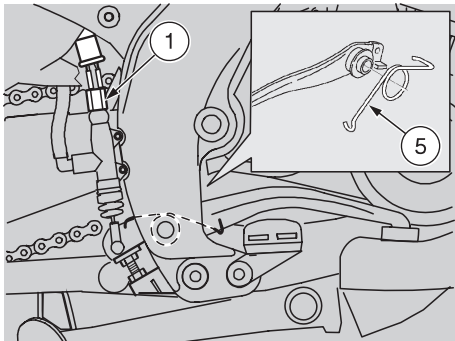
**NOTE** Extending the side stand must kill the engine. If the engine continues to run:

- ◆ Check the safety switch (3) on the side stand (2), see p. 71 (CHECKING THE SWITCHES). Perform the necessary cleaning or repairs.
- ◆ Repeat the check.

## ⚠ WARNING

If the engine does not stop when the side stand is extended, do not ride your vehicle. Contact your Local **aprilia** Dealer.





## CHECKING THE SWITCHES

Carefully read p. 61 (MAINTENANCE).

Check the switches after the first 625 mi (1,000 km) and thereafter every 3,750 mi (6,000 km).

The vehicle is equipped with four switches:

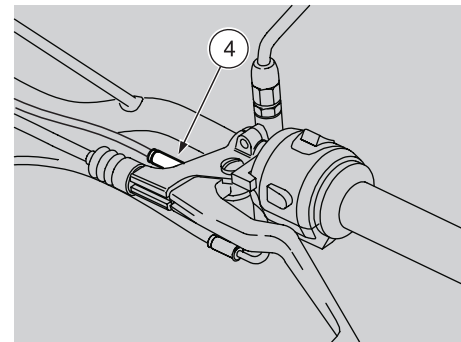
- stoplight switch on the rear brake pedal (1);
- stoplight switch on the front brake lever (2);

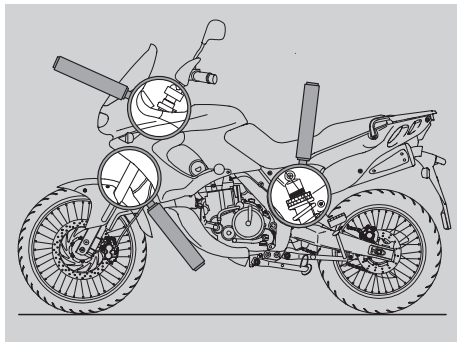
**NOTE** To be able to check the stoplight switch on the front brake lever (2) is necessary remove the right hand-guard, see p. 82 (REMOVING THE HAND-GUARDS).

- safety switch on the side stand (3);
- clutch lever switch (4).

**NOTE** To be able to check the clutch lever switch (4) is necessary remove the left hand-guard, see p. 82 (REMOVING THE HAND-GUARDS).

- ◆ Make sure that there is no dirt or mud on the switch. The switch pin must move freely and without interference, returning automatically to its unapplied position.
- ◆ Check the spring (5); it must not be damaged, worn or stretched.





## INSPECTING THE FRONT AND REAR SUSPENSIONS

### ⚠ CAUTION

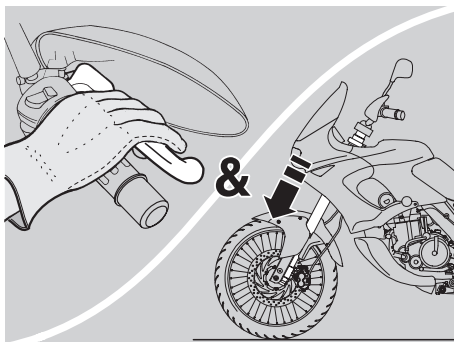
The front fork oil change operation should be entrusted to your Local **aprilia** Dealer.

Carefully read p. 61 (MAINTENANCE).

Have the front fork oil changed after the 7,500 mi (12,000 km).

Every 7,500 mi (12,000 km), carry out the following checking operations:

- ◆ Apply the front brake lever and push up and down on the handlebar repeatedly, pushing the fork up and down. The fork must move smoothly and easily, there must be no trace of oil on the fork tubes.



- ◆ Check the torque of all the fasteners on the front fork and inspect the entire front fork to make sure that it is in good condition without leaks or damage. Repeat for the rear suspension and swinging arm.

### ⚠ CAUTION

Do not ride your vehicle if either suspension is damaged in any way, see your Local **aprilia** Dealer.

## REAR SUSPENSION

The rear suspension consists of a spring-shock absorber unit, fixed to the frame by means of silent-blocks.

To set the vehicle attitude, the rear shock absorber is provided with an adjusting ring nut (1), a locking ring nut (2) and a screw (3) for the adjustment of the damping on extension.

The standard adjustment, set by the manufacturer, is suitable for a driver weighing about 70 kg.

If your weight and needs are different, for example in case of ride with passenger and full load, contact your Local **aprilia** Dealer.

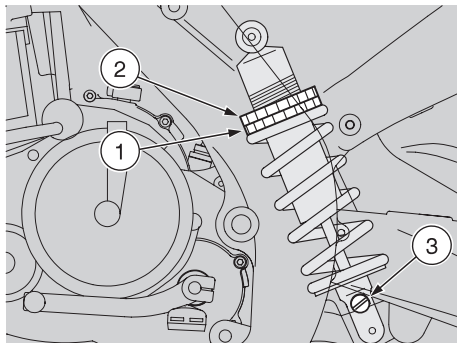
### ⚠ WARNING

Adjust the hydraulic damping with the shock absorber extended, according to the conditions of use of the vehicle.

### ⚠ WARNING

If the vehicle attitude has been set for full load, do not turn the screw (3) fully to the left (counterclockwise). Otherwise, the damping will be insufficient to prevent a jerky ride. If necessary, contact your Local **aprilia** Dealer.





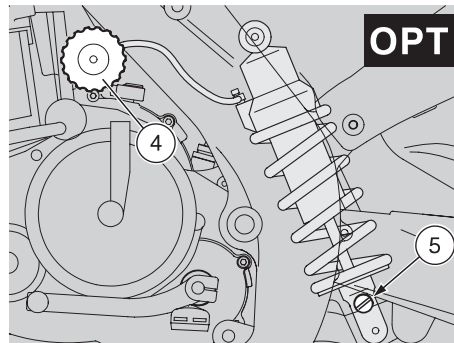
The hydraulic damping may be adjusted to suit the conditions of use of the vehicle. To adjust the damping, screw the damping adjustment screw (3) in or out, per the following instructions:

**Unsurfaced roads or roads with irregular pavement - more damping:**

- ◆ Rotate the screw (3) to the right (clockwise).

**Normal or smooth road surfaces - soft damping:**

- ◆ Rotate the screw (3) to the left (counterclockwise).



**REAR SUSPENSION WITH HYDRAULIC PRELOAD ADJUSTMENT OPT**

This optional type of suspension makes it possible to adjust the preload of the spring and the damping of the shock absorber.

**NOTE** Adjust the preload of the spring and of the hydraulic damping with the shock absorber fully extended, to suit the conditions of use of the vehicle. When the spring preload is increased, it is necessary to also increase the hydraulic damping in order to avoid a jerky ride.

**ADJUSTING THE PRELOAD OF THE SPRING AND OF THE HYDRAULIC BRAKING WITH EXTENDED SHOCK ABSORBER OPT**

**Soft adjustment** - for light load (for example, solo rider).

**Spring:**

- ◆ Rotate the handwheel (4) completely leftwards (counterclockwise).

**Shock absorber:**

- ◆ Rotate the adjusting screw (5) completely leftwards (counterclockwise).

**Intermediate adjustment** - for normal load (for example, rider and passenger).

**Spring:**

- ◆ Starting from the soft adjustment position, rotate the handwheel (4) rightwards (clockwise), giving it 25 clicks.

**Shock absorber:**

- ◆ Starting from the soft adjustment position, rotate the adjusting screw (5) rightwards (clockwise), giving it a full turn (9 clicks).

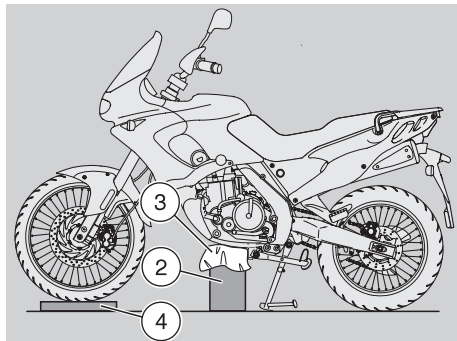
**Hard adjustment** - for heavy load (for example, rider, passenger and luggage).

**Spring:**

- ◆ Rotate the handwheel (4) completely rightwards (clockwise).

**Shock absorber:**

- ◆ Rotate the adjusting screw (5) completely rightwards (clockwise).



## FRONT WHEEL

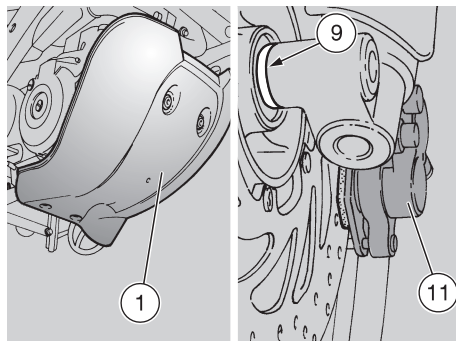
### **⚠ WARNING**

The disassembly and reassembly of the front wheel can be difficult for those unfamiliar with vehicle maintenance. You may wish to have your Local **aprilia** Dealer carry out these operations.

If you wish to perform these operations yourself, carefully read p. 61 (MAINTENANCE).

While disassembling and reassembling the wheel, pay extra care not to damage the brake lines, discs or pads.

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



## DISASSEMBLY

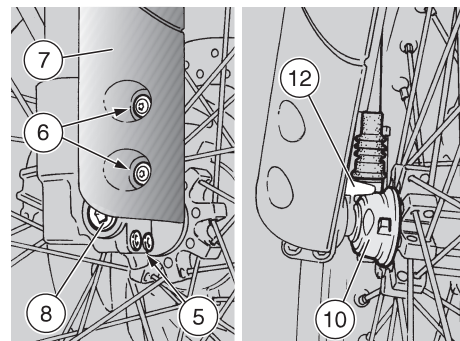
- ◆ Place the vehicle on the center stand, see p. 59 (POSITIONING THE VEHICLE ON THE STAND).
- ◆ Remove the oil pan guard (1), see p. 82 (REMOVING THE OIL PAN GUARD).

**NOTE** Prepare a 12.60 in (320 mm) high support (2), the base of which must measure 7.87 x 7.87 in (200 x 200 mm).

- ◆ Place the support (2) under the vehicle and a soft cloth (3) between them, so that the front wheel can move freely and the vehicle cannot fall down.
- ◆ Place a support (4) under the tire, in such a way as to keep the wheel in its position after loosening it.

### **⚠ WARNING**

Make sure that the vehicle is stable. If it falls, it may cause damage to bystanders and other property, as well as being damaged itself.



- ◆ Have a helper steady the handlebar in the straight ahead position.

**Screw (5) tightening torque:**  
**7.23 ftlb (10 Nm).**

- ◆ Loosen the two axle clamp screws (5), using the appropriate Allen wrench.
- ◆ Unscrew and remove the two screws (6).
- ◆ Move the mudguard support (7) only as much as necessary to unscrew the axle (8).
- ◆ Unscrew the axle (8) completely with the appropriate Allen wrench.

**Axle (8) tightening torque:**  
**57.86 ftlb (80 Nm).**

**NOTE** Observe the arrangement of the speedometer drive (10) and of the spacer ring (9), in order to be able to reassemble them correctly.

**NOTE** To facilitate the extraction of the axle (8), slightly lift the wheel.

- ◆ Support the front wheel and remove the axle (8) manually.
- ◆ Remove the spacer ring (9).
- ◆ Disconnect and remove the speedometer drive (10) from the wheel seat.

### ⚠ CAUTION

**Never touch the front brake lever after removing the front wheel. If you do, the caliper pistons may be pushed out of their seats, and brake fluid will be spilled. Should you accidentally do this, take your vehicle to your Local **aprilia** Dealer who will know how to repair this damage.**

- ◆ Move the front wheel forward until you can withdraw the disc from the brake caliper (11).
- ◆ Remove the wheel completely by pulling it forward.

### REASSEMBLY

- ◆ Apply a thin film of lubricating grease, see p. 104 (LUBRICANT CHART) to the:
  - inside of the speedometer drive (10);
  - outer seats of the wheel hub;
  - front axle (8).
- ◆ Position the wheel on the support between the fork legs.
- ◆ Position the spacer ring (9) in its seat on the wheel (left side of the vehicle).
- ◆ Position the boss of the speedometer drive (10) in the appropriate seat on the wheel hub.
- ◆ Correctly position the speedometer drive seat in correspondence with the special antirotation pin (12).

### ⚠ CAUTION

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

- ◆ Insert the wheel between the fork legs, carefully introducing the disc into the brake caliper.

### ⚠ WARNING

**The front wheel is heavy and can easily crush your fingers should you get them between any part of the wheel and the front fork. Do not attempt to line up the wheel and the axle clamps with your fingers. Failure to heed this warning can lead to serious personal injury.**

- ◆ Move the wheel around until the axle hole and the axle clamps are aligned.
- ◆ Shift the mudguard support (7) only as much as necessary to insert the axle (8) partially (from the right side of the vehicle).
- ◆ Push in the axle (8) completely (fitting the spacer ring (9)) and tighten it to its appropriate tightening torque.

**Axle (8) tightening torque:  
57.86 ftlb (80 Nm).**

- ◆ Correctly position the mudguard support (7).
- ◆ Remove the support (4) from under the tire.
- ◆ Remove the support (2) from under the vehicle.
- ◆ Correctly replace the oil pan guard (1), see p. 82 (REMOVING THE OIL PAN GUARD).

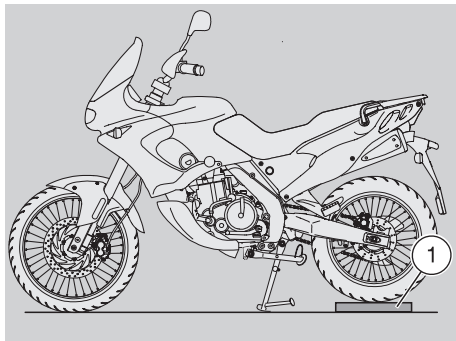
- ◆ Retract the center stand, see p. 59 (POSITIONING THE VEHICLE ON THE STAND).
- ◆ Apply the front brake lever, and then push down on the handlebars, compressing the fork springs several times. This will align the fork tubes.
- ◆ Place the vehicle on the center stand, see p. 59 (POSITIONING THE VEHICLE ON THE STAND).
- ◆ Screw and tighten the two screws (6).
- ◆ Tighten the two axle clamp screws (5).

**Screw tightening torque:  
7.23 ftlb (10 Nm).**

### ⚠ WARNING

**After servicing the brakes, always check them for function. If the stroke of the lever is excessive, or if you detect that the effectiveness of the brakes is reduced in any way, have your vehicle serviced by your Local **aprilia** Dealer. It may be necessary to have your dealer bleed the system, or there may be some other problem with the brake system.**

**Never ride your vehicle in traffic immediately after servicing the brakes. Always apply the brake lever several times before riding your vehicle. Then, try your vehicle in a parking lot or other safe area with little traffic to ensure that the brakes are working properly. Failure to observe this warning can lead to a serious accident with subsequent serious injury or death.**



## REAR WHEEL

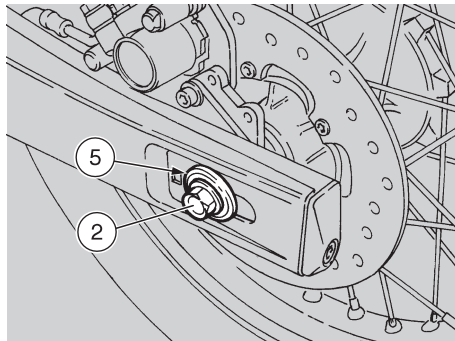
### ⚠ WARNING

The disassembly and reassembly of the rear wheel can be difficult for those unfamiliar with vehicle maintenance. You may wish to have your Local **aprilia** Dealer carry out these operations.

If you wish to perform these operations yourself, carefully read p. 61 (MAINTENANCE).

While disassembling and reassembling the wheel, pay extra care not to damage the brake lines, discs or pads.

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



## DISASSEMBLY

- ◆ Place the vehicle on the center stand, see p. 59 (POSITIONING THE VEHICLE ON THE STAND).

### ⚠ WARNING

Make sure that the vehicle is stable. If it falls over, it may cause injury to bystanders and other property, as well as being damaged itself.

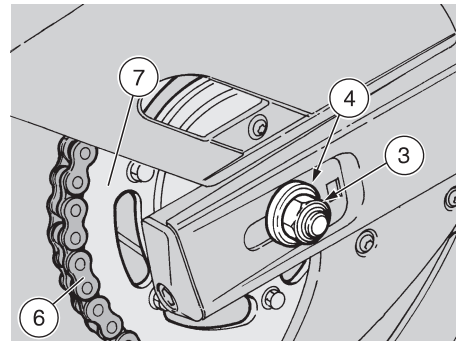
- ◆ Place a support (1) under the tire, in such a way as to keep the wheel in its position after loosening it.
- ◆ Hold the axle (2) from rotating with the appropriate Allen wrench.

**Wheel nut (3) tightening torque:**  
72.33 ftlb (100 Nm).

- ◆ Remove the nut (3) and washer (4).

**NOTE** To facilitate the extraction of the axle (2), slightly raise the wheel.

- ◆ Remove the axle (2) from the right side,



and recover the washer (5).

### ⚠ WARNING

Keep your fingers well away from the chain and sprocket. You could easily lose a finger if it becomes pinched between these two parts. Use heavy work gloves while installing the rear wheel. Never attempt to line the rear wheel up using your fingers. Failure to heed this warning can result in serious personal injury.

- ◆ Remove the drive chain (6) from the rear sprocket (7) and lay it down outside of the rear sprocket.

**NOTE** Place the drive chain (6) outside of the rear sprocket (7).

- ◆ Move the wheel forward and pull the drive chain (6) away from the rear sprocket (7).
- ◆ Pull the wheel backwards, removing it from the swing arm from behind, carefully removing the disc from the brake caliper.