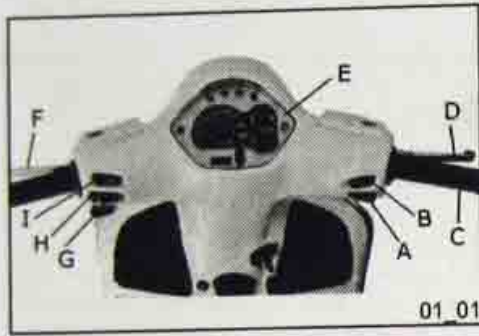


**Vespa GTS Super 125 i.e.**

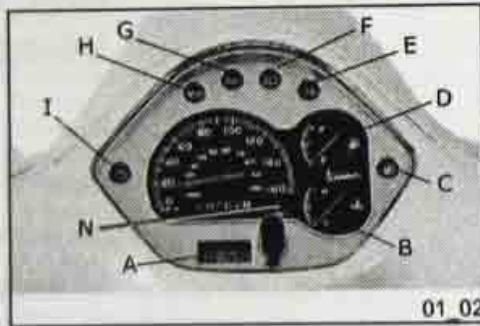
**Vespa®**





### Dashboard (01\_01)

- A = Starter button
- B = Engine block Run-Off switch
- C = Throttle grip
- D = Front brake lever
- E = Instrument panel
- F = Rear brake lever
- G = Horn button
- H = Turn indicator switch
- I = Light switch



### Analogue instrument panel (01\_02)

- A = Digital clock with calendar
- B = Cooling liquid temperature gauge
- C = Fuel reserve warning light
- D = Fuel gauge
- E = Headlight warning light
- F = High-beam warning light
- G = Turn signal indicator light
- H = Low oil pressure warning light

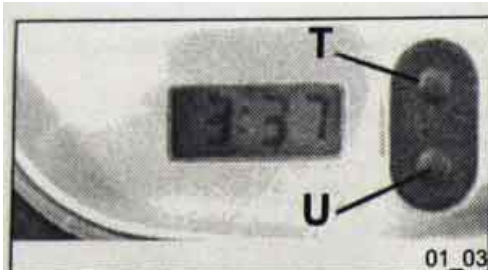
**I** = Engine - injection system fault warning light

**N** = Immobilizer LED



**THE ENGINE - INJECTION SYSTEM FAULT WARNING LIGHT "I" LIGHTS IN TWO DIFFERENT MODES:**

- **FLASHING: ENGINE COOLANT TEMPERATURE TOO HIGH. STOP THE ENGINE IMMEDIATELY AND CONTACT AN AUTHORISED SERVICE CENTRE FOR ASSISTANCE.**
- **LIT CONSTANTLY: OTHER ENGINE - INJECTION SYSTEM FAULTS. CONTACT AN AUTHORISED SERVICE CENTRE FOR ASSISTANCE.**



### Clock (01\_03)

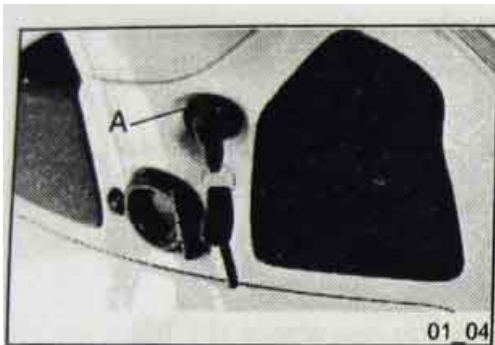
Hours and minutes are displayed in a 1 to 12, AM or PM, format on the instrument panel.

Operating the function selection switch «T» month, day and seconds can be seen besides hours and minutes. In order to adjust the above mentioned functions, operate button «U». The digital clock is powered by a battery (battery life is about 2 years); lift the whole instrument panel to replace the battery. It is advisable to take your vehicle to an **Authorised Service Centre** for this operation.

#### WARNING



**DEAD BATTERIES ARE HARMFUL TO THE ENVIRONMENT. THEY MUST BE DISPOSED OF IN SUITABLE CONTAINERS AS PRESCRIBED BY THE REGULATIONS IN FORCE.**



### Key switch (01\_04)

**LOCK** = ignition disabled, extractable key, mechanical antitheft device enabled.

**OFF** = ignition disabled, extractable key, mechanical antitheft device disabled.

**ON** = Prestarting position, key cannot be removed, mechanical antitheft system deactivated.

### Locking the steering wheel

Turn the handlebar to the left (as far as it will go), turn the key to «**LOCK**» and remove the key.

#### CAUTION



**DO NOT TURN THE KEY TO «LOCK» OR «KEY OFF» WHILE RIDING.**

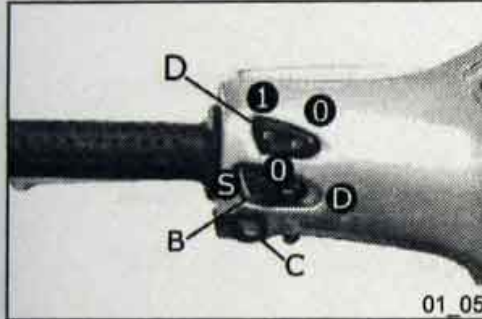
### Releasing the steering wheel

Reinsert the key and turn it to «**OFF**».

**CAUTION**



**DO NOT TURN THE KEY TO «LOCK» OR «KEY OFF» WHILE RIDING.**

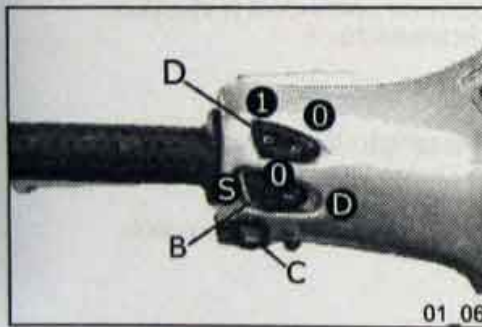


**Switch direction indicators (01\_05)**

Lever towards "S" = Left turn indicator is switched on;

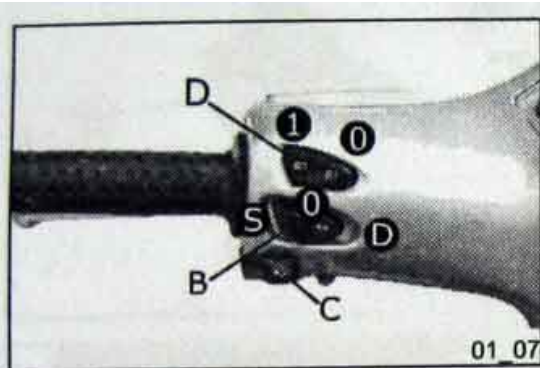
Lever towards "D" = Right turn indicator is switched on;

The lever returns automatically to position "0" and the turn indicator "B" remains on; press the lever to turn them off.



**Horn button (01\_06)**

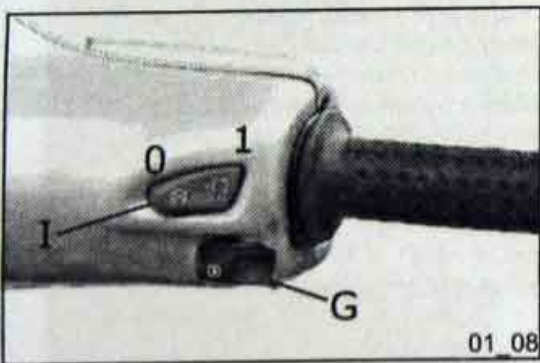
Push the «C» button to sound the horn.



**Light switch (01\_07)**

0 = Low-beam and tail light

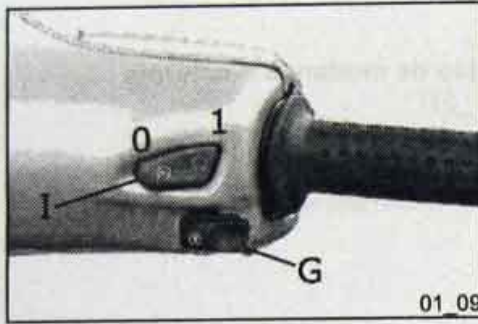
1 = High-beam and tail light



**Start-up button (01\_08)**

Starter button "G"





### Engine stop button (01\_09)

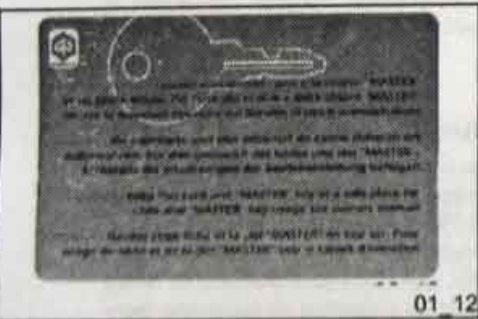
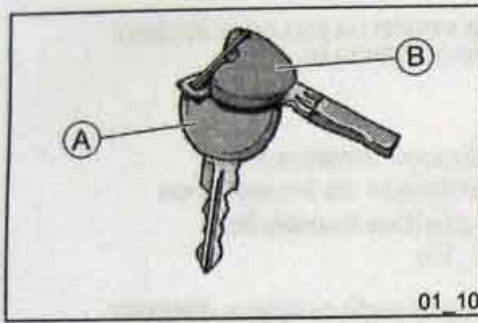
0 = OFF

1 = RUN

### The immobilizer system

In order to enhance theft protection, the vehicle is equipped with a «**PIAGGIO IMMOBILIZER**» electronic engine locking device that is activated automatically when the starter key is removed. Upon start-up, the «**PIAGGIO IMMOBILIZER**» system checks the starter key, and only if this key is recognised will the immobilizer system allow the vehicle to be started.





## Keys (01\_10, 01\_11, 01\_12)

The vehicle is supplied with two types of keys. The red-handgrip key «A» is the "MASTER" key. Only a single copy of this key is supplied, which is necessary to program all your other keys and for your dealer to perform some maintenance operations. We therefore recommend that it be used only under exceptional circumstances. The black key «B» (single copy supplied) is used for normal operations and for start-up.

Together with the keys comes a CODE CARD which is imprinted with the mechanical code of the keys.

### WARNING

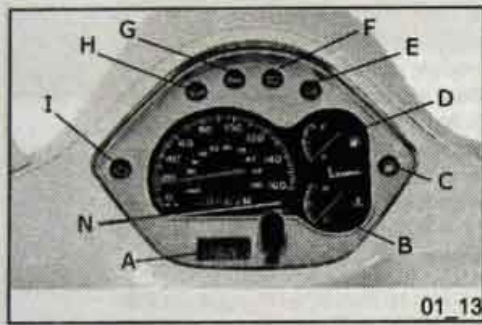


**LOSING THE RED KEY PREVENTS ANY REPAIRS OF THE 'PIAGGIO IMMOBILIZER' SYSTEM AND THE ENGINE CONTROL UNIT.**

### WARNING



**KEEP THE 'CODE CARD' AND THE RED HANDGRIP KEY IN A SAFE PLACE (NOT ON YOUR VEHICLE).**



### Immobilizer device enabled indicator led (01\_13)

Activation of the «PIAGGIO IMMOBILIZER» system is signalled by a flashing warning light «N» (see «Analogue instrument panel» section).

In order to reduce battery discharge, the indicator LED turns off automatically after 48 hours of uninterrupted functioning.

Should the system fail, different LED flashing patterns will be provided by an **Authorised Piaggio-Gilera Service Centre** with information on the type of fault detected.

### Operation

Every time the starter key is removed in the "OFF" or "LOCK" position, the safety system activates the immobilizer system. Turning the key to "ON" disables the engine lock, provided that the safety system recognises the code transmitted by the key. If the code is not recognised, turn the key first to "OFF" and then to "ON"; if the

lock cannot be disabled, try with the other key supplied (red-coloured). If the engine cannot be started, contact an **Authorised Piaggio Service Centre**, which is provided with the electronic equipment required to detect and repair the system. The immobilizer is also activated by shutting off the engine with the RUN OFF switch. This even occurs if the key is turned to ON.

When additional keys are required, please note that data storage (up to 3 keys max.) must be done on all keys, both new ones and existing ones. Take the key with the red grip and all the black keys supplied to an **Authorised Piaggio Service Centre**. The codes of keys not submitted for the new programming procedure are deleted from the memory. Any lost keys will therefore not be enabled to start the engine.

#### **WARNING**



**EACH KEY HAS ITS OWN AND UNIQUE CODE, WHICH MUST BE STORED IN THE SYSTEM CONTROL UNIT MEMORY.**

**VIOLENT SHOCKS MAY AFFECT THE ELECTRONIC COMPONENTS OF THE KEY.**

**IF OWNERSHIP OF THE VEHICLE IS TRANSFERRED, THE RED HANDGRIP KEY (AS WELL AS THE OTHER KEYS)**

**AND THE "CODE CARD" MUST ALSO BE TRANSFERRED TO THE NEW OWNER.**

### **Programming the immobilizer system**

Below is described the procedure to follow for programming the **PIAGGIO IMMOBILIZER** system and/or for storing other key codes. The programming procedure should be carried out with the engine stop switch set to «**RUN**».

#### **Procedure start - red key**

Insert the red handgrip key in the switch key (in "OFF" position) and turn it to "ON". After 1 - 3 seconds, turn the key to «OFF » again and pull it out.

### **Intermediate step - blu key**

Within ten seconds after pulling out the red key, insert the black key and promptly turn it to «**ON**». After 1-3 seconds, turn the key to "**OFF**" again and pull it out.

In this way, a maximum of 3 blue keys can be programmed by repeating the above procedure and keeping the indicated times.

### **Final step - red key**

After pulling out the last black key, insert the red key again and turn it to "**ON**" (this operation should be performed within 10 seconds of pulling out the previous key). Leave it in this position for 1 to 3 seconds and return it to «**OFF**».

### **Proper programming check**

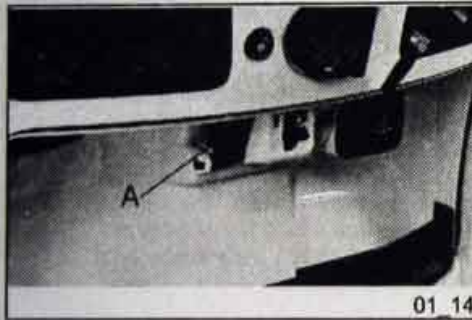
Insert the red key disabling the transponder (i.e., tilt the key cap by 90°) and turn the key to "**ON**". Perform the engine start-up operation. Ensure that the engine does not start. Insert the blue key



and repeat the start-up operation. Check that engine starts.

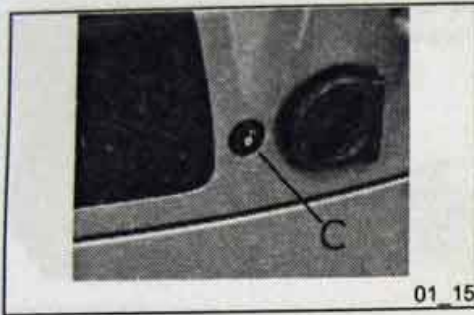
**WARNING**

**SHOULD THE ENGINE START WITH THE RED KEY (WITH TRANSPONDER OFF), OR IN THE EVENT OF WRONG OPERATION DURING PROGRAMMING, REPEAT THE PROCEDURE FROM THE BEGINNING.**

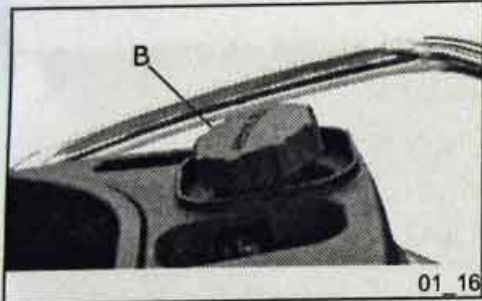


**Accessing the fuel tank  
(01\_14, 01\_15, 01\_16)**

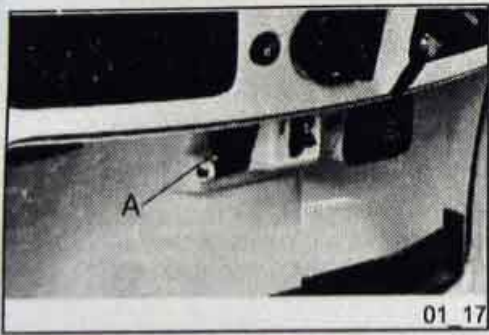
With the key set to «OFF» or «ON», or with engine on, it is possible to electrically open the saddle by pressing the button «C». If the saddle opening system does not work, operate the emergency lever «A». Then, unscrew cap «B» and the fuel tank can be reached.



01 15



01 16

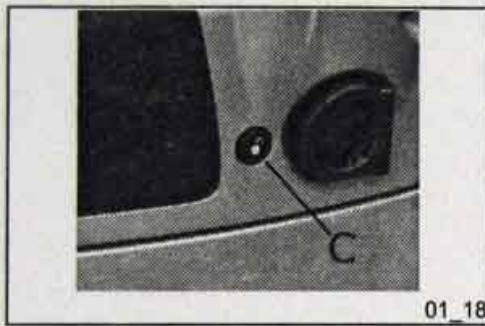


01 17

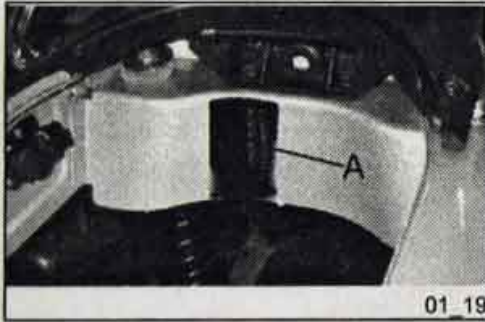
### Opening the saddle (01\_17, 01\_18)

With the key set to «OFF» or «ON», or with engine on, it is possible to electrically open the saddle by pressing button «C». If the electric opening does not work, use the emergency lever "A". When the key





is set to «LOCK» the saddle cannot be opened.



### Identification (01\_19, 01\_20, 01\_21)

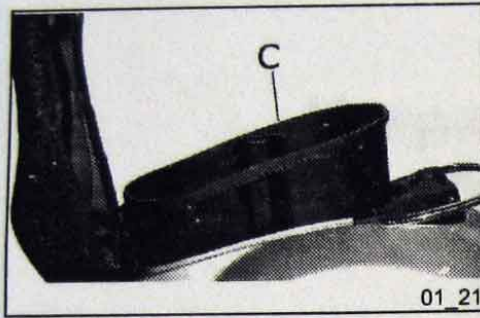
The identification registration numbers consist of a prefix followed by a number stamped on both the chassis «A» and the engine «B». These numbers must always be indicated on spare parts requests. To read the chassis number, lift the saddle and remove the helmet compartment «C». We recommend checking that the chassis registration number stamped on the vehicle corresponds with that on the vehicle documentation.



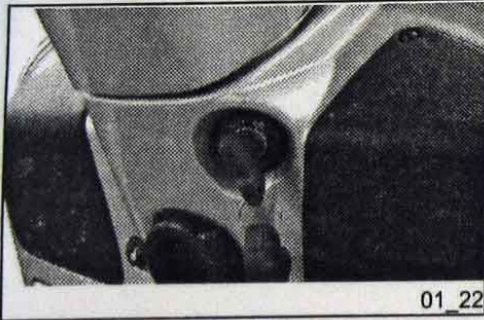
#### CAUTION



**BE REMINDED THAT ALTERING IDENTIFICATION REGISTRATION NUMBERS CAN LEAD TO SERIOUS**



**PENAL SANCTIONS (IMPOUNDING OF THE VEHICLE, ETC.).**



**Rear top box opening (01\_22)**

Insert the key into the switch and press down until the glove compartment opens. If the switch is set to "**LOCK**", turn the key to "**OFF**" or "**ON**" before pressing it down.

## **Checks**

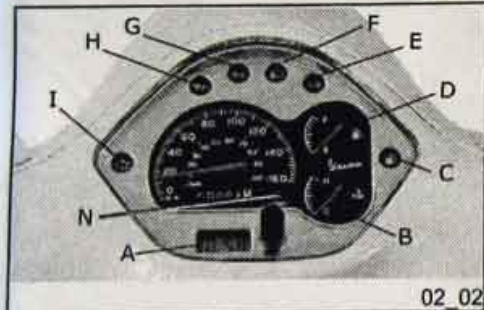
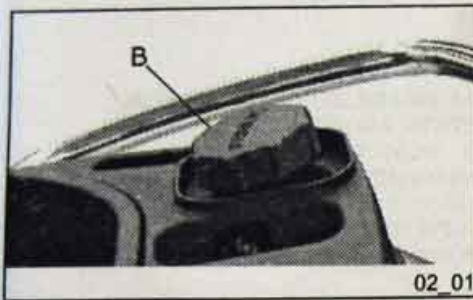
Before using the vehicle, check:

1. That the fuel tank is full.
2. The correct fluid level for front and rear brakes.
3. That the tyres are properly inflated.
4. The correct functioning of tail lights, headlamp, turn indicators, stop light and license plate light.
5. The correct functioning of front and rear brakes.
6. The oil level in the in the gearcase.
7. The engine oil level.
8. The coolant level.

## **Checks**

Before using the vehicle, check:

- 1. That the fuel tank is full.**
- 2. The correct fluid level for front and rear brakes.**
- 3. That the tyres are properly inflated.**
- 4. The correct functioning of tail lights, headlamp, turn indicators, stop light and license plate light.**
- 5. The correct functioning of front and rear brakes.**
- 6. The oil level in the in the gearcase.**
- 7. The engine oil level.**
- 8. The coolant level.**



## Refuelling (02\_01, 02\_02)

Fuel: lift the saddle and unscrew the cap «B». Recommended fuel: Unleaded petrol, min 95 octane. The warning light «C» lights to indicate that the fuel level is in reserve.

### WARNING



**SWITCH OFF THE ENGINE BEFORE REFUELLING WITH PETROL.**

**PETROL IS HIGHLY INFLAMMABLE.**

**DO NOT SMOKE AND KEEP NAKED FLAMES AT A DISTANCE: FIRE HAZARD.**

**DO NOT INHALE FUEL FUMES.**

**DO NOT ALLOW PETROL TO COME INTO CONTACT WITH HOT ENGINE OR ANY PLASTIC PARTS.**

### CAUTION



**PETROL DAMAGES THE PLASTIC PARTS OF THE BODYWORK.**



**TO PREVENT FUEL SPILLAGE ONTO THE HOT ENGINE AND PLASTIC COMPONENTS, ENSURE THAT THE**

**FUELLING NOZZLE IS INSERTED FULLY INTO THE MOUTH OF THE FUEL TANK.**

**CAUTION**



**USING OILS OTHER THAN THOSE RECOMMENDED CAN SHORTEN THE LIFE OF THE ENGINE.**

**CAUTION**



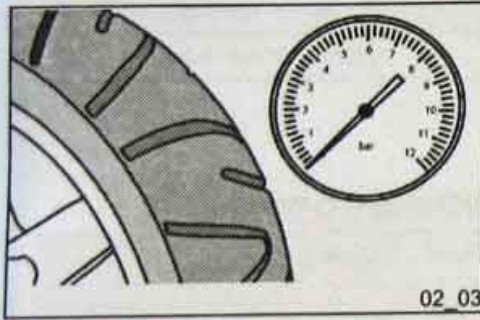
**DO NOT USE THE VEHICLE TO THE COMPLETE EXHAUSTION OF THE FUEL; SHOULD THIS OCCUR, DO NOT ATTEMPT TO START THE ENGINE. TURN THE KEY SWITCH TO «OFF» AND TOP-UP THE TANK AS SOON AS POSSIBLE. FAILURE TO FOLLOW THESE GUIDELINES COULD DAMAGE THE FUEL PUMP AND/OR THE CATALYTIC CONVERTER.**

**Characteristic**

**Fuel tank capacity**

**~ 9.2 litres**





### Tyre pressure (02\_03)

Check tyre pressure and wear periodically (roughly every 500 km). Tyres feature wear indicators; replace tyres as soon as these indicators become visible on the tyre tread. Also check that the tyres do not show signs of splitting at the sides or irregular tread wear; if this occurs, go to an authorised workshop or at least to a workshop equipped to replace tyres.

#### CAUTION



**TYRE PRESSURE SHOULD BE CHECKED WHEN TYRES ARE COLD. INCORRECT TYRE PRESSURE CAUSES ABNORMAL TYRE WEAR AND MAKES RIDING DANGEROUS.**

**TYRES MUST BE REPLACED WHEN THE TREAD REACHES THE WEAR LIMITS SET FORTH BY LAW.**

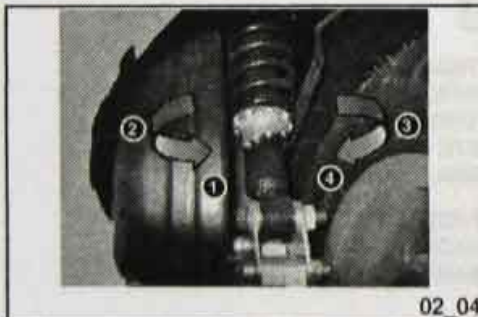


## **TYRES**

Front tyre	120/70 - 12" 51P Tubeless
Rear tyre	Tubeless 130/70 12" 62P

## **TYRE INFLATION PRESSURE**

Front tyre pressure (with passenger)	1.8 bar (-)
Rear tyre pressure (with passenger)	2.0 bar (2.2)



02\_04

### **Shock absorbers adjustment (02\_04)**

The preloading of the springs can be adjusted to 4 positions acting on the ring nut located in the lower part of the shock absorbers with the specific spanner supplied.

**Position 1:** minimum preload: driver only

**Position 2** medium preloading: rider only

**Position 3** medium preloading: rider and passenger

**Position 4:** maximum preloading: rider, passenger, and luggage.

In order to carry out this operation you will need to use the specific spanner in the kit.

**CAUTION**



**RIDING THE VEHICLE WITH THE SPRING PRELOADING NOT CORRECTLY SET FOR THE RIDER AND POSSIBLE PASSENGER, COULD REDUCE THE COMFORT OF THE RIDE AND THE PRECISION OF THE STEERING.**

**WARNING**



**WE RECOMMEND WEARING GLOVES WHILE CARRYING OUT THIS OPERATION IN ORDER TO AVOID INJURIES.**

**WARNING**



**WE STRONGLY RECOMMEND NOT TO ADJUST BOTH SHOCK ABSORBERS WITH DIFFERENT PRELOADING**

**Running in (02\_05)**

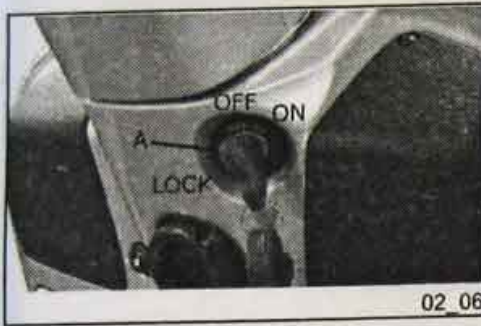
**WARNING**



**DURING THE FIRST 1000 KM DO NOT RIDE THE VEHICLE OVER 80% OF ITS MAXIMUM SPEED. AVOID TWISTING THE THROTTLE GRIP FULLY OR KEEPING A CONSTANT SPEED ALONG LONG SECTIONS OF ROAD. AFTER THE FIRST 1000 KM, GRADUALLY INCREASE SPEED UNTIL REACHING THE MAXIMUM PERFORMANCE.**



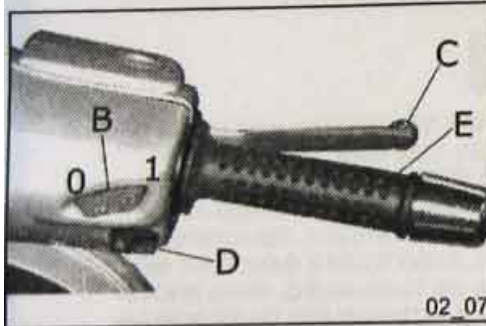
02\_05



## Starting up the engine (02\_06, 02\_07)

To start the engine it is necessary, before pressing the starter button, to pull and keep pulled the front or rear brake lever, which activates the appropriate switch allowing start-up.

1. Rest the vehicle on its centre stand, ensuring the rear wheel is not touching the ground.
2. Hold the throttle grip «E» in the idle position.
3. Insert key into ignition switch «A» and turn it to "ON".
4. Ensure that the "OFF-ON" switch «B» is set to ON.
5. Pull and hold the front «C» or rear brake lever, then press the electric starter button «D».



### WARNING



**THE AUTOMATIC TRANSMISSION MAKES THE REAR WHEEL TURN EVEN WHEN THE THROTTLE IS SLIGHTLY TWISTED. RELEASE THE BRAKE CAREFULLY AFTER STARTING, AND THEN ACCELERATE GRADUALLY.**

## CAUTION



**DO NOT START-UP THE ENGINE IN CLOSED AREAS BECAUSE EXHAUST GASES ARE TOXIC.**

## Precautions

### WARNING



**NEVER STRESS THE ENGINE AT LOW TEMPERATURES IN ORDER TO AVOID POSSIBLE DAMAGE. BE CAREFUL NEVER TO EXCEED THE MAXIMUM SPEED WHILE RUNNING DOWNHILL, IN ORDER TO AVOID DAMAGING THE ENGINE. IN ANY CASE, IN ORDER TO PRESERVE THE ENGINE FROM PROLONGED OVER-REVING, THE REVOLUTION LIMITER WILL BE ACTIVATED IF THE ENGINE SPEED EXCEEDS THE ESTABLISHED THRESHOLD. DO NOT ACTIVATE THE REVOLUTION LIMITER RECURRENTLY SO AS TO AVOID DAMAGING THE CATALYTIC CONVERTER.**

## WARNING

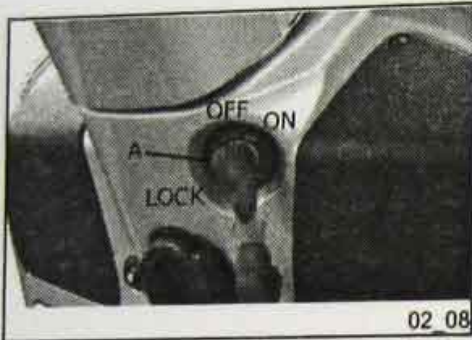


**AFTER A LONG DISTANCE COVERED AT THE MAXIMUM SPEED, DO NOT STOP THE ENGINE IMMEDIATELY, BUT LET IT RUN AT IDLE FOR A FEW SECONDS.**

### **Difficult start up**

In the rare case of a flooded engine, and in order to facilitate start-up, try putting the vehicle into motion with the throttle slightly open. It is however necessary, once the engine is started, to take your vehicle to an **Authorised Service Centre** to determine the cause of this problem and to re-establish the vehicle proper functioning.





### Stopping the engine (02\_08, 02\_09)

Fully untwist the throttle grip and then turn the switch «A» to "OFF" (extractable key), or turn switch «B» to "OFF".

#### CAUTION

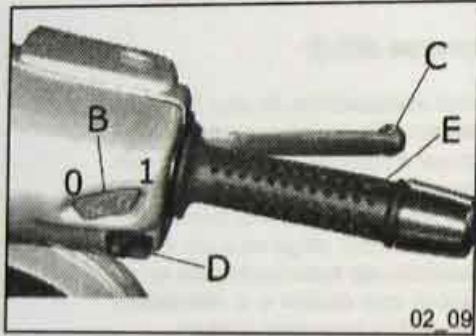


**DUE TO THE HIGH TEMPERATURES THE CATALYTIC CONVERTER CAN REACH, ALWAYS TAKE CARE, WHEN PARKING THE VEHICLE, THAT THE EXHAUST DOES NOT COME INTO CONTACT WITH FLAMMABLE MATERIALS, TO AVOID SERIOUS BURNS.**

#### CAUTION



**DO NOT SHUT OFF THE ENGINE WHILE THE VEHICLE IS MOVING. UNBURNED FUEL COULD ENTER THE CATALYTIC CONVERTER AND BURN, CAUSING THE CONVERTER TO OVERHEAT AND POSSIBLY DESTROYING IT.**

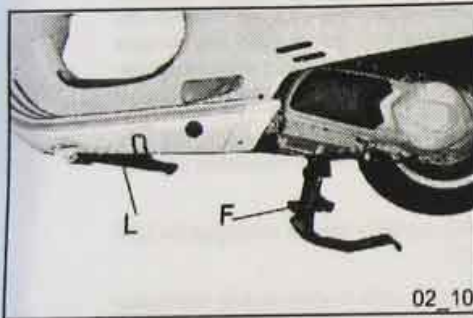




## Stand (02\_10)

### CENTRE STAND

Push with your foot on the centre stand's fork «F» while lifting the vehicle backward, holding onto the handlebar.



### SIDE STAND

With your foot push the projection of the stand «L» in order to open it and at the same time lean the vehicle on you.



## Automatic transmission (02\_11)

To ensure simple, pleasurable riding, the vehicle is equipped with automatic transmission with regulator and centrifugal clutch. The system is designed to provide the best performance (acceleration and consumption) while riding on both flat roads and uphill.

If you have to stop on an uphill slope (traffic lights, traffic jam, etc.) **use only the brake to keep the vehicle still, leaving the engine running at idle speed. Us-**

**ing the engine to keep the vehicle still can cause the clutch to overheat, due to the friction of the clutch mechanism itself against the clutch bell.**

It is therefore recommended to avoid conditions of prolonged clutch slippage (other than those previously indicated) like driving uphill fully laden on steep slopes or starting off with driver and passenger at slopes greater than 25%.

Observe the following precautions if the clutch overheats:

1. Do not continue riding in such conditions.
2. Let the clutch cool down with the engine at idle speed for a few minutes.

## **Safe driving**

Some simple tips are provided below that will enable you to use your vehicle on a daily basis, confidently and safely. Your skill and your mechanical knowledge are the basis of safe riding. We recommend trying out the vehicle in traffic-free zones in order to acquire a good knowledge of the vehicle it self.

1. Before riding off, remember to put on the helmet and fasten it correctly.

2. Reduce speed on rough roads and ride with care.

3. After riding on a long stretch of wet road without using the brakes, braking can be poor at the beginning. In these conditions, it is a good idea to apply the brakes from time to time.

4. Do not brake hard on wet, unsurfaced or slippery roads.

5. Avoid riding off by mounting the scooter when it is resting on its support. In any case, in order to avoid abrupt departures, the rear wheel should not be turning when it comes into contact with the ground.

6. If you use the scooter on roads covered with sand, mud, snow mixed with salt, etc., we recommend that you clean the brake disc frequently with a non-aggressive detergent in order to avoid the formation of abrasive build-ups in the holes, which could result in early wear of the brake pads.

#### **CAUTION**



**ALWAYS RIDE WITHIN YOUR LIMITS  
RIDING UNDER THE INFLUENCE OF  
ALCOHOL OR OTHER DRUGS AND  
CERTAIN MEDICINES IS EXTREMELY  
DANGEROUS.**

**CAUTION**



ANY CHANGES TO THE VEHICLE PERFORMANCE AS WELL AS ALTERATIONS TO ORIGINAL STRUCTURAL PARTS IS STRICTLY FORBIDDEN BY LAW, AND RENDERS THE VEHICLE NO LONGER CONFORMING TO THE APPROVED TYPE AND DANGEROUS FOR RIDING.

**CAUTION**



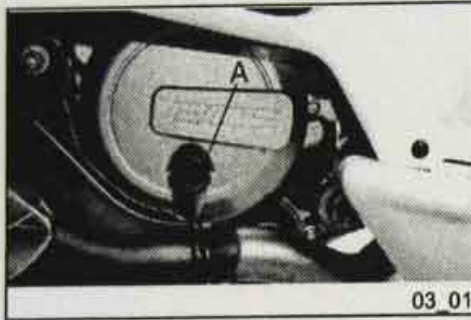
DO NOT ADJUST THE MIRRORS WHILE RIDING. THIS COULD CAUSE YOU TO LOOSE CONTROL OVER THE VEHICLE.

**WARNING**

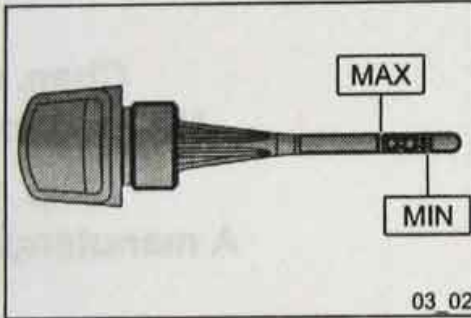


IN ORDER TO PREVENT ANY ACCIDENTS RIDE VERY CAREFULLY AFTER ADDING ACCESSORIES AND WHILE CARRYING LUGGAGE. THE ADDITION OF ACCESSORIES AND LUGGAGE CAN REDUCE YOUR SCOOTER STABILITY AND PERFORMANCE, AS WELL AS THE LEVEL OF SAFETY DURING USE. NEVER DRIVE THE SCOOTER EQUIPPED WITH ACCESSORIES AT A SPEED

**HIGHER THAN 100 km/h (see section "SPARE PARTS AND ACCESSORIES")**



03\_01

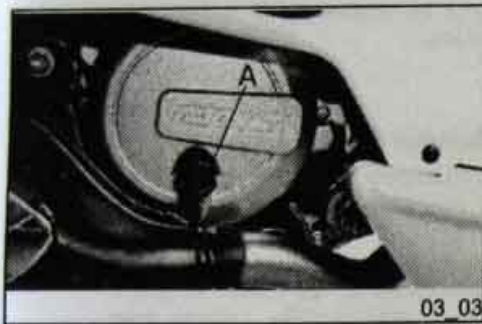


03\_02

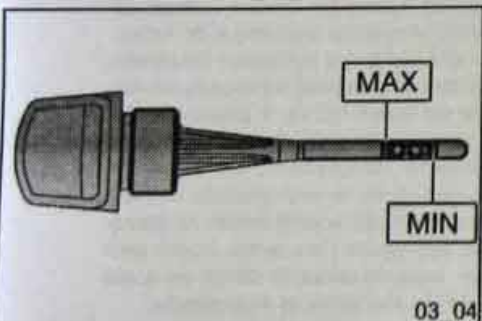
**Engine oil level (03\_01, 03\_02)**

In 4T engines, engine oil is used to lubricate the distribution elements, main bearings and thermal group. **An insufficient quantity of oil can seriously damage the engine.** In all four-stroke engines, a loss of efficiency in oil performance and certain consumption should be considered normal. Consumption can particularly reflect the conditions of use (i.e. when driving at 'full acceleration' all the time, oil consumption increases). The replacement intervals provided for by the maintenance programme are defined depending on the total content of oil in the engine and the average consumption measured following standardised methods. **In order to prevent any problems, we recommend checking oil level more frequently than indicated in the Scheduled Maintenance table or before setting off on long journeys.** The vehicle is, however, equipped with an oil pressure warning light on the instrument panel.





03\_03



03\_04

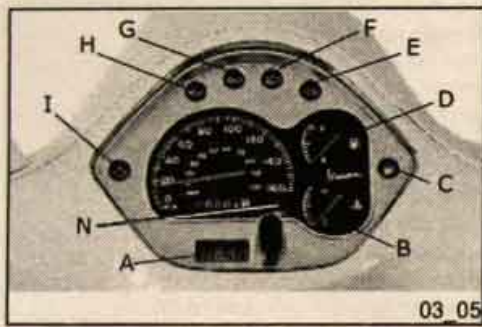
### Engine oil level check (03\_03, 03\_04)

Every time the scooter is used, a visual check should be made on the level of the engine oil when the engine is cold. The oil level should be somewhere between the **MAX** and **MIN** index marks on the level bar; the check must be made with the scooter upright, resting on the centre stand. If the check is carried out after the vehicle has been used, and therefore with a hot engine, the level line will be lower; in order to carry out a correct check, wait at least 10 minutes after the engine has been stopped so as to get the correct level.

### Engine oil top-up

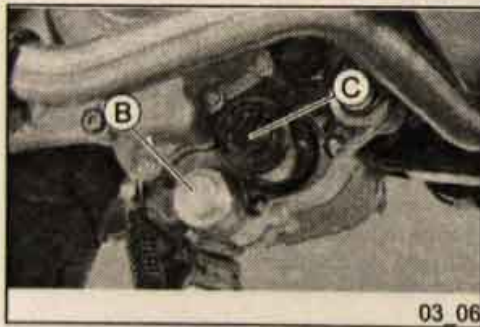
Always check the oil level before topping up, and add oil **without exceeding the MAX** level. Getting an oil level between the **MIN** and **MAX** levels requires ~ 400 cm<sup>3</sup> of oil. Take your vehicle to an **Authorised Service Centre** to have the oil checked and if necessary, topped-up as indicated in the scheduled maintenance table.





### Warning light (insufficient oil pressure) (03\_05)

The vehicle is equipped with a warning light "H" that lights up when the key is turned to «ON». However, this light should come off once the engine has been started. If the light comes on while braking, at idle speed or while turning a corner, it is necessary to check the oil level and top it up if required. If after having topped-up the oil, the warning light still comes on while braking, at idle speed or while turning a corner, it will be necessary to take your vehicle to an Authorised Service Centre.



### Engine oil change (03\_06)

Have oil changed and the cartridge filter «C» replaced as indicated in the scheduled maintenance table at an **Authorised Service Centre**. The engine should be emptied by draining the oil through drainage plug «B» of the mesh filter on the flywheel side. In order to facilitate the oil drainage, loosen the cap/dipstick. Since a certain quantity of oil still remains in the circuit, add approx. 950 + 1000 cm<sup>3</sup>

of oil through the cap «A. Then start the engine, leave it running for a few minutes and shut it off: after 5 minutes, check the level and if necessary, top-up **without exceeding the MAX level**. The cartridge filter must be replaced at every oil change. For top-ups and changes, use new oil of the recommended type.

#### WARNING



**RUNNING THE ENGINE WITH INSUFFICIENT LUBRICATION OR WITH INADEQUATE LUBRICANTS ACCELERATES THE WEAR AND TEAR OF THE MOVING PARTS AND CAN CAUSE IRRETRIEVABLE DAMAGE.**

#### WARNING



**EXCESSIVE OIL LEVEL AT TOP-UPS CAN LEAD TO SCALE FORMATION AND VEHICLE MALFUNCTION.**

#### CAUTION



**USED OILS CONTAIN SUBSTANCES HARMFUL TO THE ENVIRONMENT. FOR OIL CHANGE, CONTACT AN AUTHORISED SERVICE CENTRE WHICH IS EQUIPPED TO DISPOSE OF USED**

**OILS IN AN ENVIRONMENTALLY  
FRIENDLY AND LEGAL WAY.**

**CAUTION**



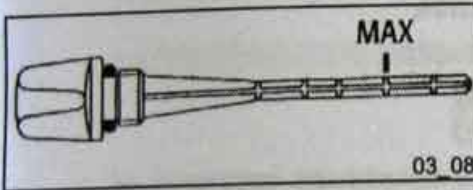
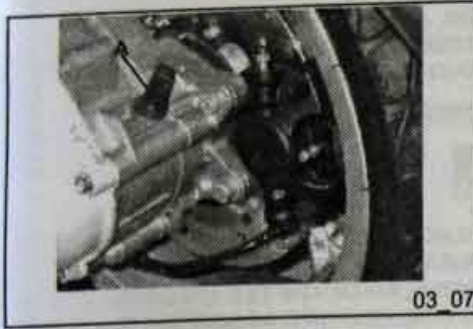
**USING OILS OTHER THAN THOSE  
RECOMMENDED CAN SHORTEN THE  
LIFE OF THE ENGINE.**

**Recommended products**

**AGIP CITY HI TEC 4T**

*Engine oil*

SAE 5W-40, API SL, ACEA A3, JASO  
MA Synthetic oil



### Hub oil level (03\_07, 03\_08)

Check the oil in the rear hub. To check the rear hub oil level, proceed as follows:

- 1) Park the scooter on level ground and rest it on its stand.
- 2) Unscrew dipstick «A», wipe it clean with a cloth, reinsert it and **tighten completely**.
- 3) Pull out the dipstick and check that the oil level is above the first notch from the bottom.
- 4) Reinsert the dipstick and ensure that it is tightened correctly.

**N.B.**

**THE NOTCHES ON THE HUB OIL LEVEL DIPSTICK, EXCEPT THE ONE INDICATING THE MAX LEVEL, REFER TO OTHER MODELS BY THE MANUFACTURER AND HAVE NO SPECIFIC FUNCTION FOR THIS MODEL.**

**CAUTION**



**RIDING THE VEHICLE WITH INSUFFICIENT HUB LUBRICATION OR WITH CONTAMINATED OR IMPROPER LUBRICANTS ACCELERATES THE WEAR AND TEAR OF THE MOVING PARTS AND CAN CAUSE SERIOUS DAMAGE.**

**CAUTION**



**USED OIL CAN HARM THE ENVIRONMENT. COLLECTION AND DISPOSAL SHOULD BE CARRIED OUT IN COMPLIANCE WITH REGULATIONS IN FORCE.**

**CAUTION**



**AN EXCESSIVE QUANTITY OF OIL CAN LEAD TO SPILL OVER, WHICH MAY CAUSE THE ENGINE AND THE WHEEL TO GET DIRTY.**

**CAUTION**



**WHEN REPLACING THE HUB OIL DO NOT LET THE OIL COME INTO CONTACT WITH THE REAR BRAKE DISC.**

**CAUTION**



**FOR OIL REPLACEMENT, CONTACT ANY AUTHORISED SERVICE CENTRE AS THEY ARE EQUIPPED TO DISPOSE OF USED OILS IN AN ENVIRONMENTALLY FRIENDLY AND LEGAL WAY.**

## **Recommended products**

### **AGIP ROTRA 80W-90**

*Rear hub oil*

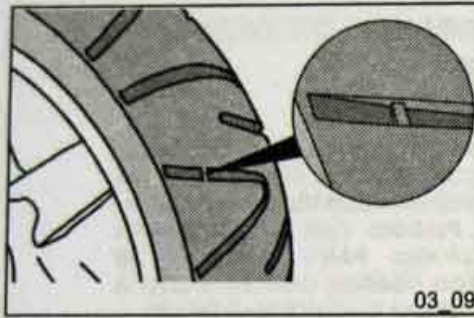
SAE 80W/90 Oil that exceeds the requirements of API GL3 specifications

## **Characteristic**

**Rear hub oil**

250 cc





## Tyres (03\_09)

Check tyre pressure and wear periodically (roughly every 500 km). Tyres feature wear indicators; replace tyres as soon as these indicators become visible on the tyre tread. Also check that the tyres do not show signs of splitting at the sides or irregular tread wear; if this occurs, go to an authorised workshop or at least to a workshop equipped to replace tyres.

### CAUTION



**TYRE PRESSURE SHOULD BE CHECKED WHEN TYRES ARE COLD. INCORRECT TYRE PRESSURE CAUSES ABNORMAL TYRE WEAR AND MAKES RIDING DANGEROUS.**

**TYRES MUST BE REPLACED WHEN THE TREAD REACHES THE WEAR LIMITS SET FORTH BY LAW.**

## TYRES

Front tyre

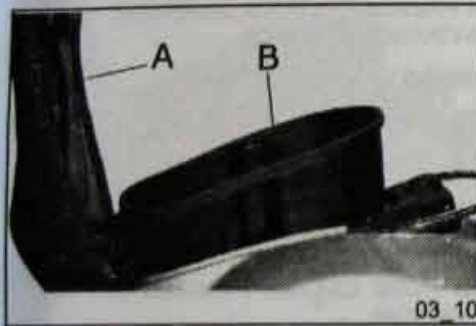
120/70 - 12" 51P Tubeless

Rear tyre

Tubeless 130/70 12" 62P

### **TYRE INFLATION PRESSURE**

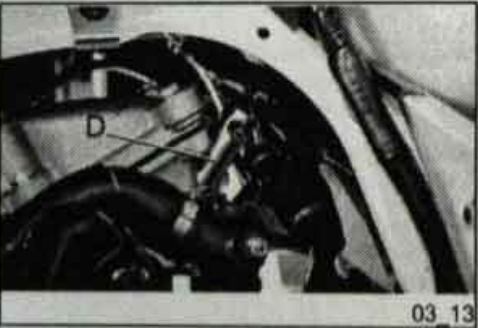
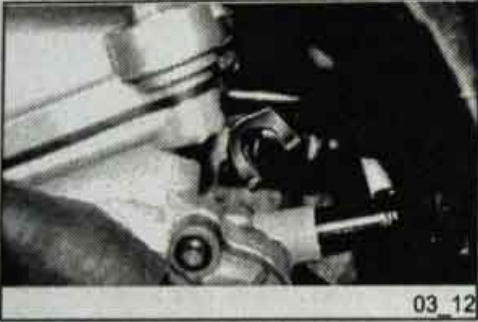
Front tyre pressure (with passenger)	1.8 bar (-)
Rear tyre pressure (with passenger)	2.0 bar (2.2)



### **Spark plug dismantlement (03\_10, 03\_11, 03\_12, 03\_13)**

Proceed as follows:

1. lift the saddle «A»
2. lift the helmet compartment «B» and reach into the spark plug with your hand;
3. Disconnect spark plug HV wire cap «C», turning it to release from the retainer, and remove from its seat;
4. unscrew the spark plug using the spark plug spanners «D» supplied;
5. When refitting, place the spark plug in the hole at the due inclination and screw it by hand until it is finger tight;
6. use the box-spanner«D» supplied only for locking;



7. push the cap «C» fully onto the spark plug, turning and fitting into its retainer.

**CAUTION**



THE SPARK PLUG MUST BE REMOVED WHEN THE ENGINE IS COLD. THE SPARK PLUG SHOULD BE CHECKED EVERY 6,000 KM AND REPLACED EVERY 12,000 KM. THE USE OF NON-CONFORMING IGNITION CONTROL UNITS AND SPARK PLUGS OTHER THAN THOSE PRESCRIBED CAN SERIOUSLY DAMAGE THE ENGINE

**CAUTION**



THE USE OF SPARK PLUGS OTHER THAN THOSE RECOMMENDED OR A SHIELDLESS SPARK PLUG CAP COULD CAUSE DISTURBANCES TO THE SYSTEM.

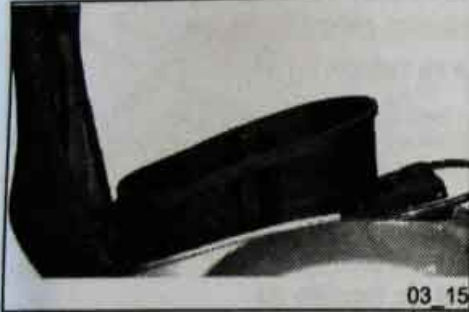
**Electric characteristic**

spark plug

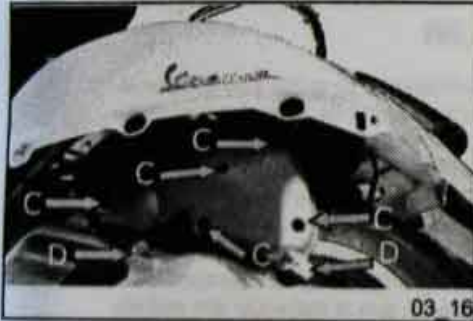
NGK CR8EKB



03\_14



03\_15



03\_16

## Removing the air filter (03\_14, 03\_15, 03\_16, 03\_17)

Proceed as follows:

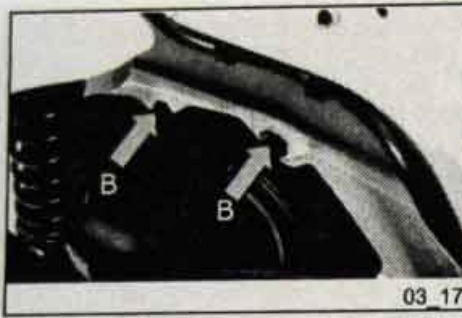
1. undo the fixing screws «A» and remove the left side fairing;
2. remove the helmet compartment;
3. unscrew the fixing screws «B» that can be reached after removing the helmet compartment;
4. unscrew the screws «C» and remove the air filter cover.

Remove the filtering element and clean it with water and shampoo; then dry it with a clean cloth and short blasts of compressed air. Finally, immerse it in a mixture containing 50% oil of the recommended type and 50% petrol. Then gently squeeze the filter element between your hands, allow it to drip and then refit it. Possible oil or water deposits can be eliminated by removing the two rubber caps «D».

### CAUTION



IF THE VEHICLE IS USED ON DUSTY ROADS, IT IS NECESSARY TO SERVICE THE AIR FILTER MORE OFTEN TO AVOID DAMAGING THE ENGINE.



03\_17

#### CAUTION



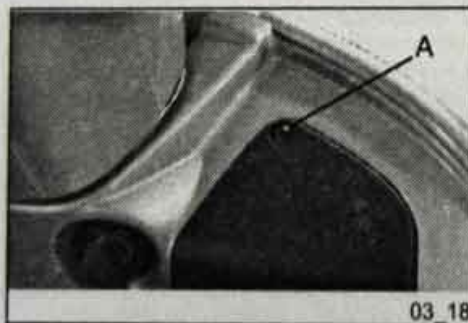
IN ORDER NOT TO DAMAGE THE VEHICLE PLASTIC COVERS CONTACT AN AUTHORISED SERVICE CENTRE TO HAVE THE AIR FILTER CLEANED.

#### Recommended products

##### AGIP FILTER OIL

*Oil for air filter sponge*

Mineral oil with specific additives for increased adhesiveness

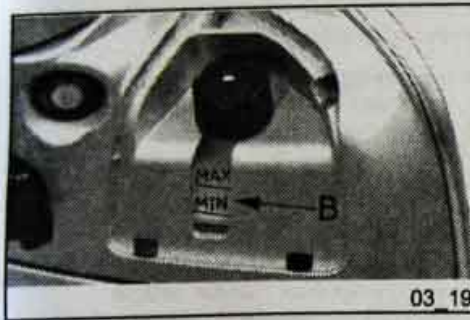


03\_18

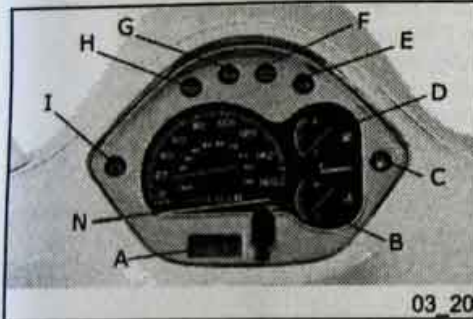
#### **Cooling fluid level (03\_18, 03\_19, 03\_20)**

Engine cooling is carried out by a forced-circulation coolant system. The cooling circuit holds approx. 2.100 + 2.150 l of coolant consisting of a mixture of 50% de-ionised water and 50% glycol ethylene-based antifreeze solution with corrosion inhibitors. The recommended coolant, supplied with the scooter, is already mixed and ready for use. For proper functioning of the engine, ensure that the pointer of the coolant temperature gauge





03\_19



03\_20

remains in the middle area of the scale. If the needle enters the red zone on the dial or the engine - injection system warning light "I" starts flashing, stop the engine, allow it to cool down and check the coolant level; if level is OK, take your scooter to an **Authorised Piaggio Service Centre**. Should the coolant level exceed the above values during a non-demanding ride, shut off the engine and let it cool down. Then check the coolant level; if level is OK, take your scooter to an **Authorised Piaggio Service Centre**. Check coolant when the engine is cold at the intervals indicated in the scheduled maintenance table, following the steps below.

a) Place the scooter in a vertical position on the stand.

b) Unscrew the fixing screw «A» and remove the cover.

c) Check the fluid level according to the two marks- MIN and MAX «B» on the reservoir

d) Top up if the fluid level is below the MIN level on the scale inside the expansion tank. The fluid level must always be between the MIN and MAX levels.

If the fluid is near the minimum level, top-up only when the engine is cold. If it is necessary to top up the coolant frequently, or if the expansion tank is completely dry, you should look for the cause in the cooling system. It is therefore indispen-