

GILERA WOULD LIKE TO THANK YOU

for choosing one of its products. We have prepared this manual to help you to get the very best from your vehicle. Please read it carefully before riding the vehicle for the first time. It contains information, tips and precautions for using your vehicle. It also describes features, details and devices to assure you that you have made the right choice. We believe that if you follow our suggestions, you will soon get to know your new scooter and it will serve you well for a long time to come. This booklet forms an integral part of the vehicle; should the vehicle be sold, it must be transferred to the new owner.

## Stalker 50



**GILERA®**

The instructions given in this manual are intended to provide a clear, simple guide to using your vehicle; this booklet also details routine maintenance procedures and regular checks that should be carried out on the vehicle at an **authorised Dealer or Service Centre**. The booklet also contains instructions for simple repairs. Any operations not specifically described in this booklet require the use of special tools and/or particular technical knowledge: to carry out these operations, refer to any **authorised Dealer or Service Centres**.



### **Personal safety**

Failure to completely observe these instructions will result in serious risk of personal injury.



### **Safeguarding the environment**

Sections marked with this symbol indicate the correct use of the vehicle to prevent damaging the environment.



### **Vehicle intactness**

The incomplete or non-observance of these regulations leads to the risk of serious damage to the vehicle and sometimes even the invalidity of the guarantee.

*The signs that you see on this page are very important. They are used to highlight parts of the booklet that should be read with particular care. The different symbols are used to make each topic in the manual simple and quick to locate.*



# INDEX

<b>VEHICLE</b> .....	7	Fuses.....	37
Dashboard.....	8	Frontlightgroup.....	38
Clock.....	9	Headlightadjustment.....	39
Keyswitch.....	10	Frontdirectionindicators.....	40
Lockingthesteeringwheel.....	11	Rearopticalunit.....	41
Switchdirectionindicators.....	11	Rear-viewmirrors.....	41
Hornbutton.....	12	Idleadjustment.....	42
Lightswitch.....	12	Frontandreardiscbrake.....	43
Start-upbutton.....	13	Reardrumbrake.....	44
Openingthesaddle.....	13	Puncture.....	44
Keys.....	14	delveicolo.....	45
Identification.....	15	Cleaningthevehicle.....	45
<b>USE</b> .....	17	<b>TECHNICALDATA</b> .....	51
Checks.....	18	Toolkit.....	56
Refuelling.....	18	<b>SPAREPARTSANDACCESSORIES</b> .....	57
Tyrepressure.....	20	Warnings.....	58
Runningin.....	21	<b>SCHEDULEDMAINTENANCE</b> .....	59
Startinguptheengine.....	21	Scheduledservicingtable.....	60
Difficultstartup.....	22		
Stoppingtheengine.....	23		
Catalyticsilencer.....	23		
Automatictransmission.....	24		
Safedriving.....	25		
<b>MAINTENANCE</b> .....	27		
Huboillevel.....	28		
Tyres.....	30		
Sparkplugdismantlement.....	31		
Removingtheairfilter.....	32		
Secondaryairsystem.....	33		
Intakeplug.....	33		
Checkingthebrakeoillevel.....	34		
Battery.....	35		
Long periods of inactivity.....	36		



# Stalker 50



**GILERA®**



**Chap. 01  
Vehicle**

## **Dashboard (01\_01)**

**A** = Speedometer

**B** = Mileometer

**C** = Fuel level indicator

**D** = Clock/Calendar

**E** = Turn signal indicator

**F** = Oil mixer reserve indication light

**G** = High beam indicator

**H** = Fuel reserve indication light

**I** = Position light indicator

**L** = High beam/dipped beam selector

**M** = Turn signal selector

**N** = Horn button

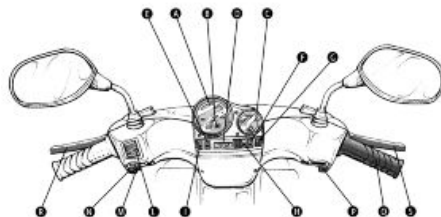
**P** = Starter button

**Q** = Throttle

**R** = Rear brake lever

**S** = Front brake lever





01\_01

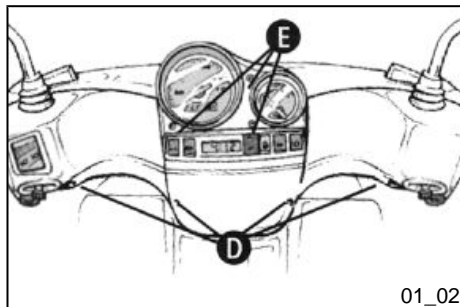
### Clock (01\_02, 01\_03)

Positioned on the instrument panel (see figure), it displays hours and minutes from 1 to 12, A (a.m.) or P (p.m.). By pressing "A" the clock can display the date or seconds for a few seconds (it automatically returns to displaying the time). Use button "B" to select the monthday- hour-minutes and then set them with button "A". The digital clock is battery operated, (which last about 2 years). To change the clock battery the entire instrument panel needs to be disassembled being careful not to disconnect any connections, then remove the plastic cap to access the battery "C". To disassemble the instrument panel proceed as follows. Remove the handlebar cover and the four screws "D" shown in figure and then the three screws "E" securing the instrument panel.

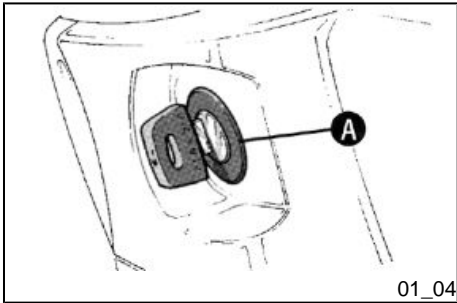
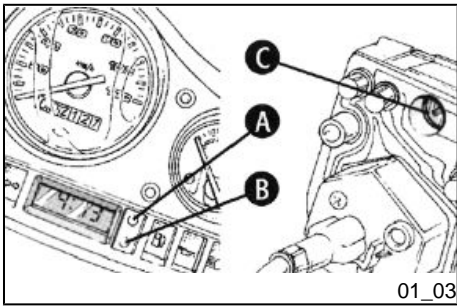
#### WARNING



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



01\_02

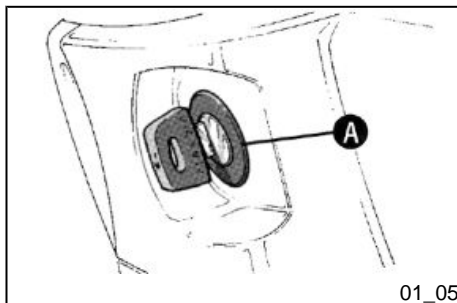


### Keyswitch (01\_04)

**LOCK**= Ignition blocked, key can be extracted, steering lock installed.

**OFF** = Ignition blocked, key can be extracted, steering lock not on.

**ON** = Starter position, steering lock not on, key cannot be extracted.



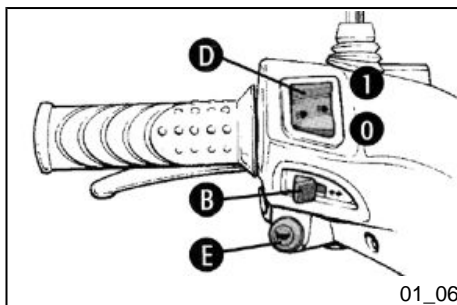
### Locking the steering wheel (01\_05)

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

#### CAUTION

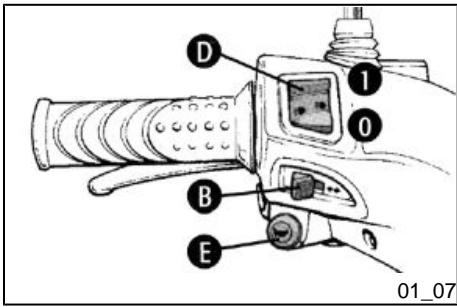


**DO NOT TURN THE KEY TO «LOCK» OR «KEY OFF» WHILE RIDING.**



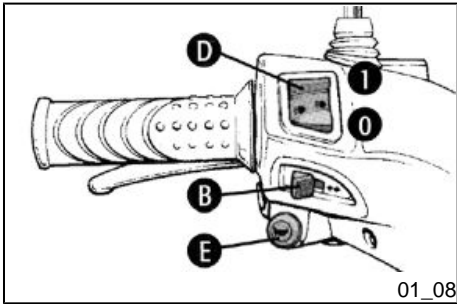
### Switching direction indicators (01\_06)

To set the left turn indicators flashing, move lever «**B**» to the left; to set the right turn indicators flashing, move it to the right. The lever automatically returns to the central position and the indicators remain on. To turn the indicators off, press the lever towards the switch.



### Hornbutton (01\_07)

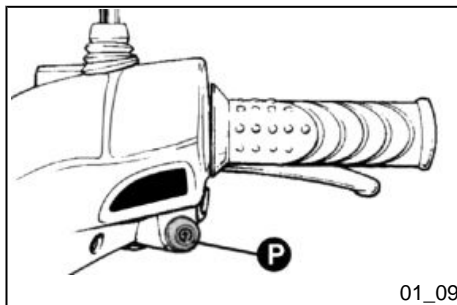
Horn button «E»



### Lightswitch (01\_08)

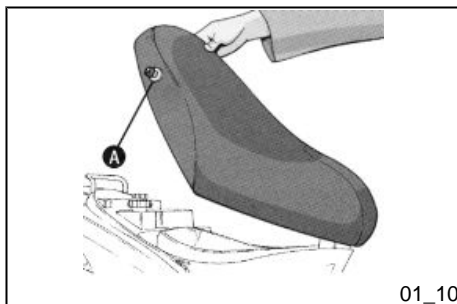
0 = Low-beam and tail light

1 = High-beam and tail light



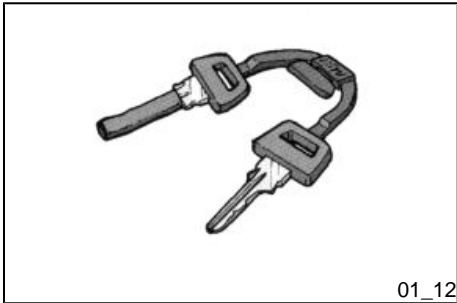
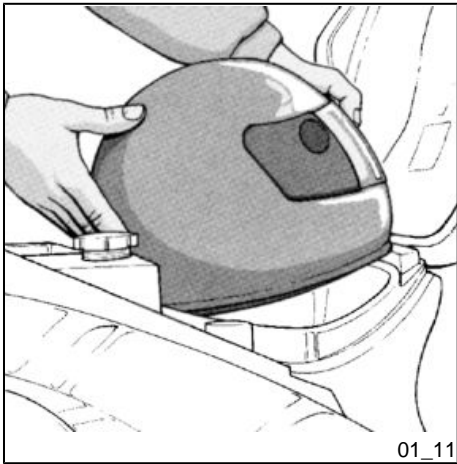
### Start-upbutton (01\_09)

To start the engine, press the starter button, «P», after pulling either one of the two brake levers.



### Openingthesaddle (01\_10, 01\_11)

Insert the key in lock «A», turn it anticlockwise and tip the saddle forward.  
After having tipped the saddle, place the helmet as shown in the figure.



### Keys (01\_12)

The vehicle is supplied with two keys (one spare) which serve to start the engine and unlock the saddle compartment. The keys are accompanied by a tag marked with the identification code to be quoted when ordering duplicates.

#### **WARNING**

**WE RECOMMEND KEEPING THE DUPLICATE KEY TOGETHER WITH ITS CODE IN A SAFE PLACE AND NOT ON THE VEHICLE**

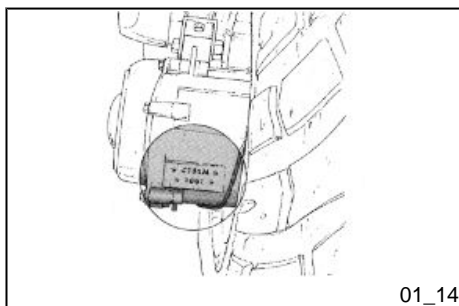
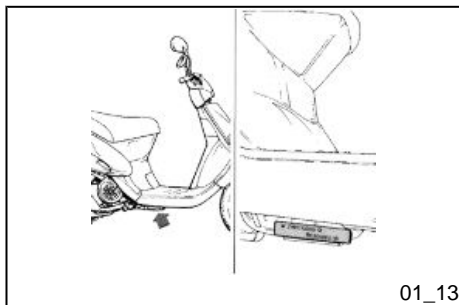
### Identification (01\_13, 01\_14)

The identification numbers consist of a prefix stamped on the chassis and on the engine, followed by a number. They must be quoted when ordering spare parts. We recommend that you check that the prefix and chassis number stamped on the vehicle correspond with those in the vehicle documents.

#### CAUTION



**PLEASE REMIND THAT ALTERING IDENTIFICATION REGISTRATION NUMBERS CAN LEAD TO SERIOUS PENAL SANCTIONS (IMPOUNDING OF THE VEHICLE, ETC.).**







# Stalker 50

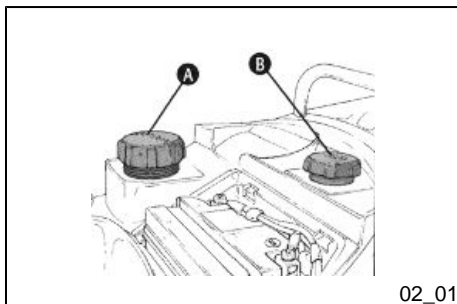


**Chap. 02**  
**Use**

## Checks

Before using the vehicle, check:

1. That the petrol tank and the oil reservoir are full.
2. Rear hub oil level.
3. That the tyres are properly inflated.
4. The correct functioning of headlights, rear light and turn indicators.
5. The correct functioning of front and rear brakes.
6. The fluid level in the brake pump reservoir.



02\_01

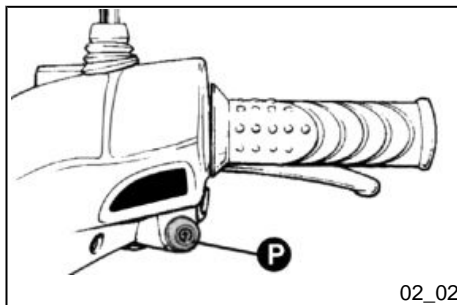
## Refuelling (02\_01, 02\_02)

Fill fuel tank «A» as shown in the figure with unleaded gasoline with minimum octane rating 95. The rider is informed when fuel is low by the fuel warning light on the instrument panel; see section "The dashboard". Fill the oil tank «B» using the recommended oil.

The minimum oil level is shown by the oil warning light on the instrument panel; see section "The dashboard".

If the above warning light turns on, upon the first refuel and in any case not exceeding 150 km travel, top up the oil tank with at least 0.5÷0.7 lt. Every time the engine is started (electrically), the mixer oil reserve warning light must turn on and off when the «P» starter button is released (section "Start-up button"). If the warning light fails to illuminate, it is faulty. In this case, turn to an **Authorized Piaggio Service Centre**.

Drainage is required in case of removal and reassembly of the "mixer" device. However, the ducts can remain without oil. After these operations, refill the fuel tank with 3 lt. mixture at 2% of recommended oil. The next refills must be performed using **fuel only**.

**CAUTION**

**SHUT OFF THE ENGINE BEFORE REFUELLING WITH PETROL. PETROL IS HIGHLY FLAMMABLE. DO NOT LET PETROL SPILL FROM THE TANK OR WHILE REFUELLING**

**CAUTION**

**DO NOT BRING NAKED FLAMES OR CIGARETTES NEAR THE MOUTH OF THE FUEL TANK: FIRE HAZARD. ALSO AVOID INHALING HARMFUL VAPOURS.**

**CAUTION**

**THE USE OF OILS AND SPARK PLUGS OTHER THAN THOSE RECOMMENDED CAN SHORTEN THE LIFE OF THE ENGINE.**

**Recommended products**

**eni i-Ride PG 2t**

*Synthetic based lubricant for low smoke 2-stroke engines and additives.  
API TC - JASO FC - ISO-L-EGD*

**Characteristic****Oil mixer reservoir**

Plastic, with a capacity of ~ 1.2 l (including a ~0.400 l reserve).

## Tyrepressure

### 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.**

### Characteristic

**Tyre pressure (rear wheel)**

**Rear wheel: 1,7 bar**

**Rear wheel (Driver and luggage)**

**Rear wheel (Driver and luggage): 2 bar**

**Tyre pressure (front wheel)**

**Front wheel: 1.2 bar**

## Runningin (02\_03)

### 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\_03

## Startinguptheengine (02\_04)

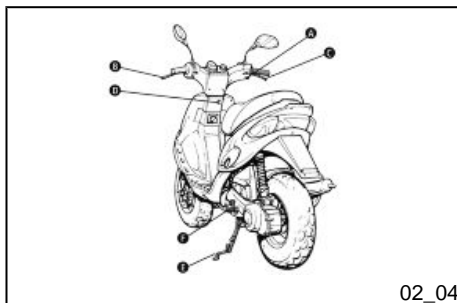
The vehicle is equipped with automatic transmission with direct drive, so that start-up is effected by twisting the throttle grip to the minimum; to start-off from stationary position, progressively twist the throttle grip. The vehicle is equipped with a fuel valve and a starter which switch on automatically as soon as the engine is started. In order to start the engine, it is necessary to pull either the rear brake lever "B" or the front brake lever "C", before pressing the starting button, "A", so as to disengage the safety switches.

**A:** Place the vehicle on its stand; check that the rear wheel is off the ground.

**B:** Keep the throttle closed.

**C:** Insert the key into the ignition switch and turn it to «ON». When turning the key to «ON», the oil warning light turns on for a few seconds indicating the correct operation of the bulb and electric circuit.

**D:** Push the starter button after pulling the rear brake lever «B» and/or the front brake lever «C».



02\_04

## CAUTION

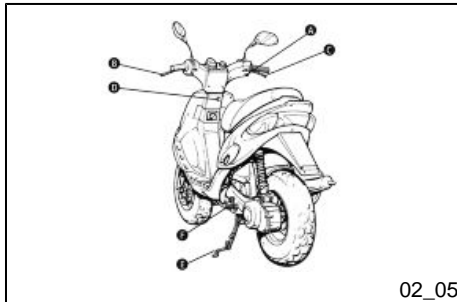


DO NOT CARRY OUT THESE OPERATIONS IN CLOSED AREAS SINCE EXHAUST GASES ARE TOXIC.

## CAUTION



ALWAYS PLACE THE VEHICLE ON ITS STAND BEFORE KICK STARTING.



## Difficultstartup (02\_05)

If there is a problem you can follow the instructions below:

**1. Carburettor flooded.** Place the vehicle on the centre stand and check that the rear tyre is off the ground. Open the throttle fully and press the starter button for five seconds and then stop for five seconds. If the engine does not start after a few attempts, let the engine sit for a few minutes and then repeat the above operations. In any case do not operate the starter motor longer than 20" in an attempt to start the engine.

**2. Battery or starter motor inefficiency.** Put the scooter on its stand "E"; make sure that the rear wheel is off the ground, turn the key switch «D» to «ON» and use the kick-starter «F».

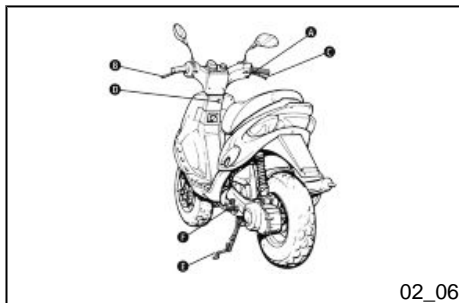
**3. Empty fuel tank.** After refuelling the scooter, start the engine by pressing the starter button «A» with the throttle at a minimum to provide maximum aspiration for the tap. If the vehicle cannot be started by any of these procedures, contact an **Authorised Piaggio-Gilera Service Centre**.

**CAUTION**

**ALWAYS PLACE THE VEHICLE ON ITS STAND BEFORE KICK STARTING.**

**Stoppingtheengine (02\_06)**

Stop acceleration, then turn the key switch «D» to «OFF » to stop the engine (extractable key).

**Catalyticsilencer****CAUTION**

**TAMPERING WITH THE CATALYTIC SILENCER MAY CAUSE SEVERE DAMAGE TO THE ENGINE.**

**CAUTION**

**WHEN PARKING THE VEHICLE, DUE TO THE HIGH TEMPERATURES THE CATALYTIC CONVERTER CAN REACH, ALWAYS BE CAREFUL THAT THE MUF-**

**FLER 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.**



### **Automatictransmission (02\_07)**

To ensure simple, pleasurable riding, the vehicle is equipped with automatic transmission with regulator and centrifugal clutch. The system is designed to give the best possible performance in terms of both acceleration and consumption, on level ground and uphill, thanks to the adjustments made to engine speed and transmitted torque. If you have to stop on an uphill slope (traffic lights, traffic jam, etc.) only use the brake to keep the vehicle still, leaving the motor running at idling speed. Using the motor to keep the vehicle still can cause the clutch to overheat. This problem is due to the friction of the clutch parts on the clutch bell. It is therefore recommended to avoid conditions of prolonged clutch slippage leading to clutch overheating (for example, as well as the situation described above, riding uphill fully laden on steep slopes or starting off on slopes greater than 25%, etc.):

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



## Safedriving (02\_08)

### WARNING



**SOME SIMPLE TIPS ARE PROVIDED BELOW WHICH WILL ENABLE YOU TO USE YOUR VEHICLE ON A DAILY BASIS MORE EASILY AND SAFELY.**

<

Your ability and your knowledge of the vehicle form the basis of safe riding. We recommend trying out the vehicle in traffic-free zones to get to know your vehicle completely.

#### **ALWAYS DRIVE WITHIN YOUR LIMITS**

1. Before riding off, remember to put on your helmet and fasten it correctly.
2. Reduce speed and ride cautiously on uneven roads.
3. Remember that after riding on a long stretch of wet road without using the brakes, the braking effect is initially lower. Under these conditions, it is a good idea to operate the brakes from time to time.
4. Do not brake hard on a wet surface, on dirt tracks or on any slippery road surface.
5. If you have to brake, use both brakes in order to divide the braking action between both wheels.
6. Avoid starting off by mounting the vehicle while it is still resting on its stand. In any case, the rear wheel should not be turning when it comes into contact with the ground, in order to avoid abrupt departures.
7. If the vehicle is used on roads covered with sand, mud, snow mixed with salt, etc., clean the brake disc frequently with mild detergent in order to prevent abrasive substances from building up within the holes, which can result in early wear of the brake pads.



8. Any elaboration that modifies the vehicle's performances, such as tampering with original structural parts is strictly forbidden by law, and renders the vehicle not conforming to the approved type and therefor dangerous to ride.

**CAUTION**

**RIDING UNDER THE INFLUENCE OF ALCOHOL, DRUGS OR CERTAIN MEDICINES CAN BE EXTREMELY DANGEROUS FOR ONESELF AND FOR OTHERS.**

**CAUTION**

**ANY ELABORATION THAT MODIFIES THE VEHICLE'S PERFORMANCES, SUCH AS TAMPERING WITH ORIGINAL STRUCTURAL PARTS IS STRICTLY FORBIDDEN BY LAW, AND RENDERS THE VEHICLE NO LONGER CONFORMING TO THE APPROVED TYPE AND DANGEROUS FOR RIDING.**

# Stalker 50



**Chap. 03**  
**Maintenance**

## Huboillevel

Check that there is oil in the rear hub

### Recommended products

#### **AGIP GEAR SAE 80W-90**

*Lubricant for gearboxes and transmissions.*

API GL-4

### Characteristic

#### **Rear hub oil**

Quantity: approx. 75 cm<sup>3</sup>

Remove the oil filler cap/dipstick «**A**» Unscrew the oil filler plug «**B**» and drain out all the oil. Screw in the drainage cap again and fill the hub with the specified oil.

### Characteristic

#### **Rear hub oil**

Quantity: approx. 75 cm<sup>3</sup>

Rest the vehicle on its centre stand on an even surface. Unscrew the dipstick «**A**», dry it with a clean cloth and then reinsert it, **screwing it tightly into place**. Take out the dipstick and check that the oil level reaches the 3rd notch from the bottom. Screw the dipstick back into place completely.

**CAUTION**

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



**USED OILS CONTAIN SUBSTANCES HARMFUL TO THE ENVIRONMENT. TO HAVE THE OIL CHANGED, CONTACT AN AUTHORISED PIAGGIO SERVICE CENTRE, WHICH ARE EQUIPPED TO DISPOSE OF USED OILS IN ENVIRONMENTALLY-FRIENDLY MANNER AND IN COMPLIANCE WITH THE REGULATIONS IN FORCE.**

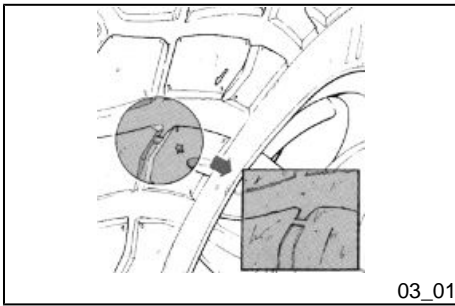
**N.B.**

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

**Recommended products****AGIP GEAR SAE 80W-90**

*Lubricant for gearboxes and transmissions.*

API GL-4



## Tyres (03\_01)

Periodically check the inflation pressure of each tire.

The tires have tread wear indicators and must be replaced as soon as the indicators are visible on the tread; tires must be replaced by an authorized service center, or center equipped for changing tires.

### 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.**

### Characteristic

**Tyre pressure (front wheel)**

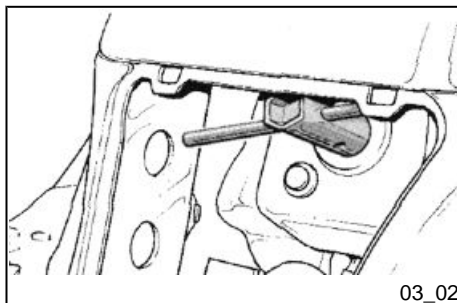
**Front wheel:** 1.2 bar

**Tyre pressure (rear wheel)**

**Rear wheel:** 1,7 bar

**Rear wheel (Driver and luggage)**

**Rear wheel (Driver and luggage):** 2 bar



## Sparkplugdismantlement (03\_02)

Proceed as follows:

Once the spark plug access cover placed on the central cover is removed, disconnect the HV cable spark plug and remove the plug with the box-spanner supplied.

When refitting the spark plug, tighten it by hand, being sure to insert it at the right angle; Use the wrench only to fasten it.

When refitting the cover, follow the procedure in the reverse order, taking care that the fitting teeth of the spark plug cover are introduced into the corresponding places on the central cover.

### CAUTION



**THE SPARK PLUG MUST BE REMOVED WHEN THE ENGINE IS COLD. THE USE OF SPARK PLUGS OF DIFFERENT THERMAL GRADE FROM THAT REQUIRED OR WITH INAPPROPRIATE THREADS MAY SERIOUSLY DAMAGE THE ENGINE.**

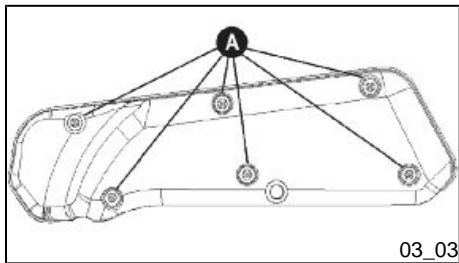
### Characteristic

**recommended spark plug:**

CHAMPION RN3C

**Electrode gap**

0.6 ÷ 0.7 mm



### Removing the air filter (03\_03)

Undo the 6 cross-slotted screws «A». Remove the cover and take it out from its seat. Remove the filtering element and wash it with water and neutral soap; then dry it with a clean rag and short blasts of compressed air. Immerse a sponge in a mixture of 50% petrol and 50% specified oil. remove it from the solution, compress it with your hands without wringing out, let it drain and refit.



**DRIVING WITH AN AIR FILTER WHICH IS NOT CORRECTLY LUBRICATED WITH OIL OR INCORRECTLY FITTED, MAY CAUSE SERIOUS DAMAGE TO THE ENGINE AND THE CATALYTIC CONVERTER.**



**AN OIL FILTER WHICH IS TOO DIRTY CAUSES A VARIATION IN THE ENGINE CARBURETION WITH SUBSEQUENT CHANGES IN THE VEHICLE BEHAVIOUR (E.G. UNSTABLE MINIMUM) AND POSSIBLE DAMAGE OF THE CATALYTIC CONVERTER.**

#### CAUTION



**IN CASE OF RIDING ON DUSTY ROADS IT IS ADVISABLE TO CLEAN THE AIR FILTER MORE FREQUENTLY THAN INDICATED IN THE RELEVANT CHAPTER ON SCHEDULED MAINTENANCE.**

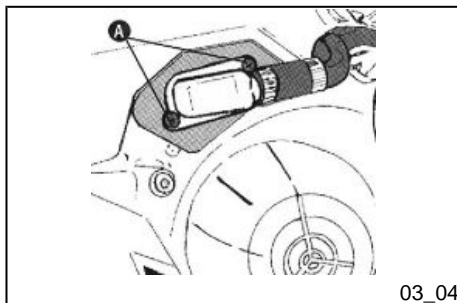
### Recommended products

#### AGIP FILTER OIL

*Special product for the treatment of foam filters.*

-





03\_04



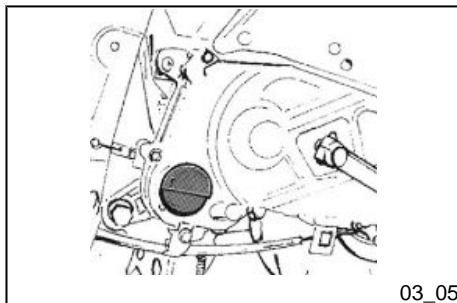
**CONTACT AN AUTHORISED PIAGGIO-GILERA SERVICE CENTRE TO CARRY OUT THESE OPERATIONS.**

### Intakeplug (03\_05)

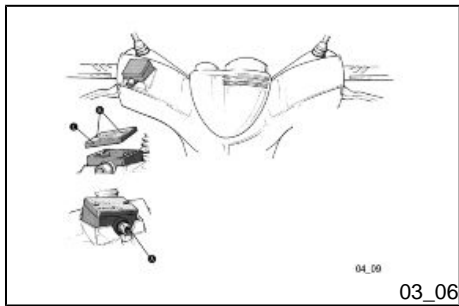
Remove the cap of the transmission cover operating on the corresponding release slots with a plain slot screwdriver. Wash the sponge in water and soap without removing it from its seat. Dry it with compressed air before refitting it taking care to do so at the correct angle.

#### CAUTION

**WARNING. SHOULD THERE BE PROBLEMS DURING THE IDLE SPEED ADJUSTMENT OPERATION, IT MAY BE NECESSARY TO ADJUST THE LEVEL OF EXHAUST EMISSIONS (CO). TURN TO AN AUTHORISED PIAGGIO SERVICE CENTRE TO CARRY OUT THESE OPERATIONS.**



03\_05



### Checking the brake oil level (03\_06)

The brake fluid reservoir is equipped with a sight glass «A» made of transparent material; the quantity of liquid contained in the sight glass indicates the level of liquid in the reservoir.

When the sight glass «A» is full, the level inside the reservoir exceeds the MIN level; when it is partially full, the level drops to the MIN level; when it is fully empty, the level of fluid in the reservoir is below the MIN level.

The brake fluid level may fall due to wear on the brake pads. Should the level appear to be below the minimum mark, please contact your nearest **PIAGGIO-GILERA Dealer or Authorised Service Centre** in order to carry out a thorough inspection of the braking system. If you need to top up the level, follow the steps listed below. Unscrew the 2 screws "B", remove the tank cap "C" and pour in the required quantity of fluid (the brake fluid level must be above minimum). Place the handlebar in the riding position and pay attention not to tilt the vehicle in order to keep the brake fluid reservoir in horizontal position when checking the fluid level.

#### CAUTION



**TOP-UPS SHOULD ONLY BE CARRIED OUT WITH DOT4 CLASSIFIED BRAKE FLUID.**

#### CAUTION



**THE BRAKING CIRCUIT FLUID IS HIGHLY CORROSIVE. THEREFORE, WHEN TOPPING UP, AVOID LETTING IT COME INTO CONTACT WITH THE PAINTED PARTS OF THE VEHICLE. THE BRAKING CIRCUIT FLUID IS HYGROSCOPIC, THAT IS, IT ABSORBS HUMIDITY FROM THE SURROUNDING AIR. IF MOISTURE CONTAINED IN THE BRAKE FLUID EXCEEDS A CERTAIN VALUE, THIS WILL RESULT IN INEFFICIENT BRAKING.**

**WARNING**

IN NORMAL CLIMATIC CONDITIONS IT IS ADVISABLE TO REPLACE THE ABOVE-MENTIONED FLUID EVERY 2 YEAR. NEVER USE BRAKE FLUID CONTAINED IN CONTAINERS WHICH ARE ALREADY OPEN OR PARTIALLY USED.

**Battery (03\_07)**

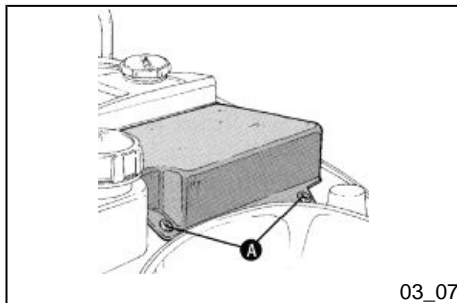
To have access to the battery it is necessary to remove the saddle («Keys» section) and the access hatch to the battery compartment unscrewing the star-head screws «A» shown in the figure

**CAUTION**

IN ORDER TO AVOID DAMAGING THE ELECTRICAL SYSTEM, NEVER DISCONNECT THE WIRING WHILE THE ENGINE IS RUNNING. DO NOT TIP THE VEHICLE TOO MUCH IN ORDER TO AVOID DANGEROUS LEAKAGE OF THE BATTERY ELECTROLYTE.

**CAUTION**

ELECTROLYTE CONTAINS SULPHURIC ACID: AVOID CONTACT WITH EYES, SKIN AND CLOTHES. IN CASE OF ACCIDENTAL CONTACT, RINSE WITH ABUNDANT WATER AND CONSULT A DOCTOR.



**WARNING**

**USED BATTERIES ARE HARMFUL FOR THE ENVIRONMENT. COLLECTION AND DISPOSAL SHOULD BE CARRIED OUT IN COMPLIANCE WITH REGULATIONS IN FORCE.**

**Long periods of inactivity**

Battery performance will be poor if the vehicle is not used for a long time. This is the result of the natural phenomenon of battery discharging, and may be due to residual absorption by vehicle components with constant power consumption. Poor battery performance may also be due to environmental conditions and the cleanliness of the poles. In order to avoid difficult starts and/or irreversible damage to the battery, follow any of these steps:

- **At least once a month** start the engine and run it slightly above idle speed for 10-15 minutes. This keeps all the engine components, as well as the battery, in good working order.
- Take your vehicle to a garage (as indicated in the «Vehicle not used for extended periods» section) to have the battery removed. Have the battery cleaned, charged fully and stored in a dry, ventilated place. Recharge **at least once every two months**.

**N.B.**

**THE BATTERY MUST BE CHARGED WITH A CURRENT EQUAL TO 1/10 OF THE RATED CAPACITY OF THE BATTERY AND FOR NOT LONGER THAN 10 HOURS. CONTACT AN AUTHORISED SERVICE CENTRE TO CARRY OUT THIS OPERATION SAFELY. WHEN REFITTING THE BATTERY MAKE SURE THE LEADS ARE CORRECTLY CONNECTED TO THE TERMINALS.**

**WARNING**

**DO NOT DISCONNECT THE BATTERY CABLES WITH THE ENGINE RUNNING, THIS CAN CAUSE IRREPARABLE DAMAGE TO THE VEHICLE'S ELECTRONIC CONTROL UNIT.**

**WARNING**

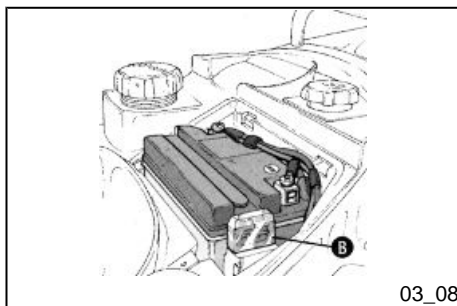
**USED BATTERIES ARE HARMFUL FOR THE ENVIRONMENT. COLLECTION AND DISPOSAL SHOULD BE CARRIED OUT IN COMPLIANCE WITH REGULATIONS IN FORCE.**

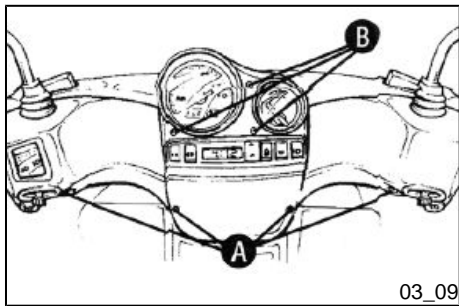
**Fuses (03\_08)**

The electrical system is protected by a plug fuse «**B**» located to the left of the battery compartment. The ignition system, headlight and the rear light are not fuse-protected. Before replacing a blown fuse, find and solve the problem that caused it to blow. Do not replace the fuse with any alternative form of conductor

**CAUTION**

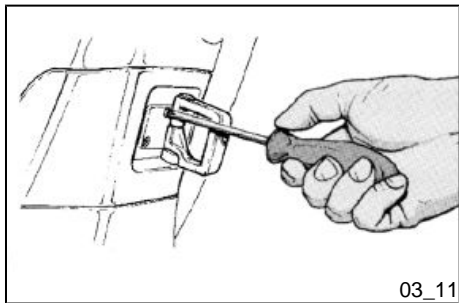
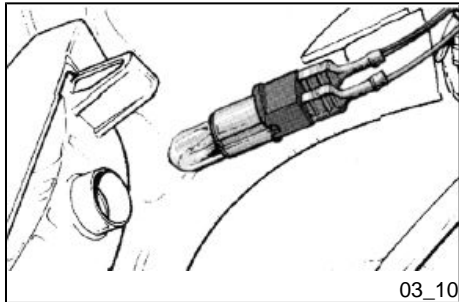
**IN ORDER TO AVOID DAMAGING THE ELECTRICAL SYSTEM, NEVER DISCONNECT THE WIRING WHILE THE ENGINE IS RUNNING. DO NOT TIP THE VEHICLE TOO MUCH IN ORDER TO AVOID DANGEROUS LEAKAGE OF THE BATTERY ELECTROLYTE.**



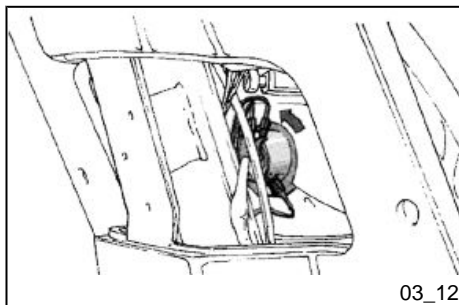


### Frontlightgroup (03\_09, 03\_10, 03\_11, 03\_12)

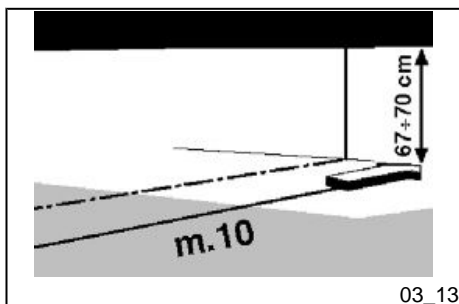
To access the headlight bulb, remove the three screws "B" that secure it. Then remove the 4 screws "A" that secure the handlebar. You will now be able to remove the bulb as shown in figure. To refit follow the same steps in the opposite order.



To access the headlight bulb, remove the rear cover, by taking out the two bag hook screws. Turn the bulb holder anticlockwise and take out the bulb. To refit follow the same steps but in reverse order.



03\_12

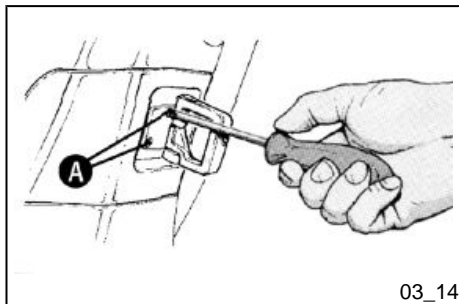


03\_13

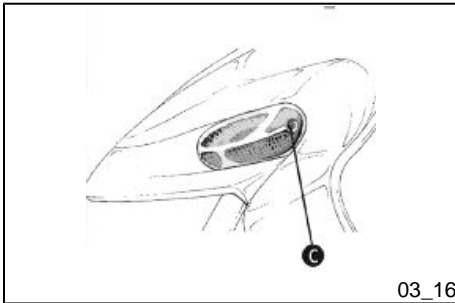
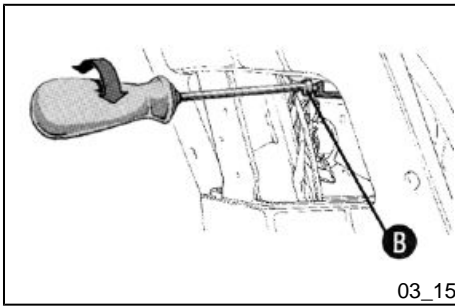
### Headlight adjustment (03\_13, 03\_14, 03\_15)

Set the motorscooter with driver on level ground at a distance of 10 m. from a white screen in semi-darkness. Make sure the vehicle axis is at right angles to the screen. Mark the screen with a horizontal line 65-67 cm. from the ground. Start the engine with the throttle fully rotated clockwise in the idle position so that the scooter does not move. Switch on the headlight lower beam and position it so that the boundary between the brightly illuminated area and the surrounding area is no higher than the line you have drawn. The headlight position is adjusted by means of a screw, to access it you must remove the cover on the countershield at the height of the clip. Then turn screws "A" as shown in figure. Adjust the headlight by using a phillips screwdriver on screws "B" as shown in figure.

Before adjusting the headlight angle, make sure the tires are inflated to the specified pressure (see section Tyres).



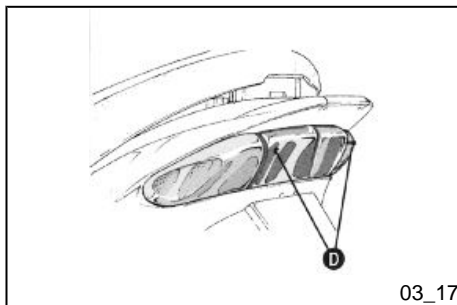
03\_14



### Frontdirectionindicators (03\_16)

Use a Phillips screwdriver on the screw «C» shown in the figure. The bulb has a bayonet fitting, to remove it press gently, and turn it anticlockwise about 30° and then withdraw it. To refit follow the same steps but in reverse order.

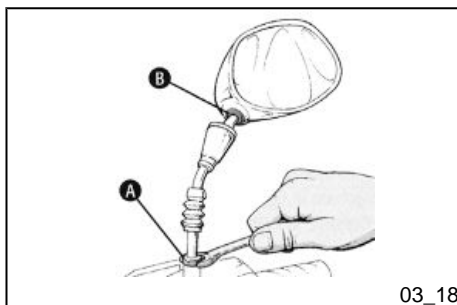




03\_17

### Rearopticalunit (03\_17)

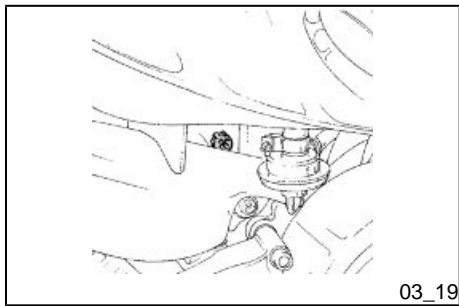
To access the taillight, remove the 2 screws "D" that secure it. This way both the taillight and turn indicator bulbs can be removed. The bulbs have a bayonet coupling, to remove them press gently and twist counterclockwise about 30°. To reassemble the parts follow the above steps on the opposite order.



03\_18

### Rear-viewmirrors (03\_18)

To adjust the stem position, lift the rubber protection and loosen the nut «A» with an open wrench (opening 13 mm); adjust the stem to the best position and tighten the screw. The rear-view mirror is fitted on a stem with a ball "joint" «B». The mirror can be adjusted to the desired position manually.



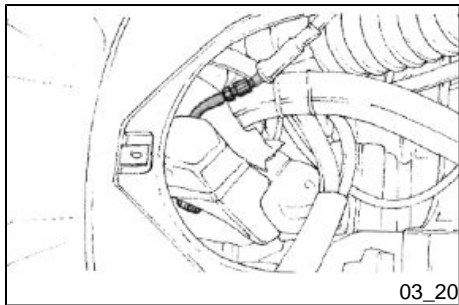
03\_19

### Idleadjustment (03\_19, 03\_20)

To adjust idle speed it is necessary to reach the set screw located in the carburettor.

To carry out this adjustment it is necessary to reach the catalytic muffler as shown in the picture, or else by lifting the saddle and removing the hatch located at the bottom of the helmet compartment.

Turn the set screw for clearance adjustment of the throttle control transmission, then replace the rubber protection cap. Adjust idle speed with the rear wheel off the ground (vehicle on stand) and with a warm engine. turn the knob-type head screw in or out until the engine idles smoothly (around 1800/2000rpm.), i.e. without the rear wheel being moved by the engine.



03\_20

#### CAUTION



**WHEN ADJUSTING IDLE SPEED, PAY SPECIAL ATTENTION NOT TO TOUCH THE CATALYTIC MUFFLER TO AVOID BURNS.**



**SHOULD THERE BE PROBLEMS DURING THE IDLE SPEED ADJUSTMENT OPERATION, IT MAY BE NECESSARY TO ADJUST THE LEVEL OF EXHAUST EMISSIONS (CO). THIS OPERATION MUST BE CARRIED OUT AT AN AUTHORISED PIAGGIO-GILERA SERVICE CENTRE.**

### Frontandreardiscbrake (03\_21)

The brake disc and pad wear is automatically compensated, therefore it has no effect on the functioning of the front and rear brakes. For this reason it is not necessary to adjust the brakes. An excessively elastic brake lever stroke may indicate the presence of air in the braking circuit or an irregular brake operation. In this case, mainly due to the importance of brakes to guarantee safe riding conditions, the vehicle should be taken to an **Authorised Piaggio-Gilera Service Centre** in order to be checked.

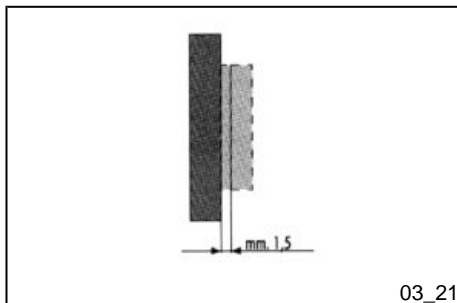
#### CAUTION



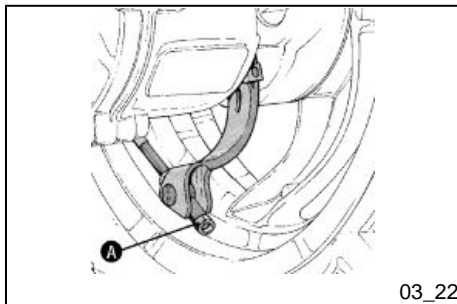
**BRAKING SHOULD BEGIN AFTER ABOUT 1/3 OF THE BRAKE LEVER STROKE.**



**CHECK THE BRAKE PADS REGULARLY (EVERY 5000 KM). IF THE THICKNESS OF ONE OR BOTH PADS IS IN THE REGION OF 1.5 MM, BOTH PADS MUST BE CHANGED. THIS OPERATION MUST BE CARRIED OUT AT AN AUTHORISED PIAGGIO-GILERA SERVICE CENTRE. AFTER REPLACING THE BRAKE PADS DO NOT USE THE VEHICLE BEFORE HAVING USED THE BRAKE LEVER SEVERAL TIMES IN ORDER TO ALLOW THE PADS TO SETTLE AND THE LEVER STROKE TO BE SET TO THE CORRECT POSITION.**



03\_21



03\_22

### Rear drum brake (03\_22)

Actuate on the set screw «A» indicated on the figure bearing in mind that **the wheel must rotate freely** when the control lever is in neutral.

#### CAUTION



**BRAKING SHOULD BEGIN AFTER ABOUT 1/3 OF THE BRAKE LEVER STROKE.**



03\_23

### Puncture (03\_23)

The vehicle is equipped with Tubeless tyres. When there is a puncture, Tubeless tyres -unlike balloon tyres- go flat very slowly. This offers greater riding safety. A tyre that goes flat very slowly can be repaired with an "INFLATE AND REPAIR" spray. Tyres should be later fully repaired at an **Authorised Piaggio-Gilera Service Centre**.



03\_24

### **delveicolo (03\_24)**

We recommend carrying out the following operations:

1. General cleaning of the vehicle.
2. With the engine off and the piston at the bottom dead centre position, **remove the spark plug**, and pour 1-2 cm<sup>3</sup> of recommended oil through its hole. Press the engine start pedal 3 or 4 times letting the engine perform a few revolutions slowly, then replace the spark plug.
3. Drain up all the vehicle fuel; spread antirust grease on the uncoated metal parts; keep the wheels off the ground, by resting the chassis on two wooden wedges.
4. For the battery, follow the procedures described in the «Battery» section.
5. Drain the petrol from the carburettor float chamber through the bleed cap.

### **Recommended products**

#### **eni i-Ride PG 5W-40**

*Synthetic based lubricant for high-performance four-stroke engines.*

JASO MA, MA2 - API SL - ACEA A3



03\_25

### **Cleaningthevehicle (03\_25)**

Use a low pressure jet of water to soften the caked dirt and mud deposited on the painted surfaces. Once softened, sponge off mud and dirt using a car body sponge soaked in a car body shampoo and water solution (2-4% of car shampoo in water). Then rinse with abundant water, and dry with a shammy cloth. For the engine exterior, use petrol, a brush and clean cloths. Petrol can damage paintwork. Remember that any polishing with silicone wax must always be preceded by washing.

**WARNING**

To avoid the appearance of oxidations, wash the vehicle every time it is used in certain areas or in special conditions of:

- Environmental / seasonal conditions: use of salt, de-icer chemical products on the road in winter.
- Air pollution: city and/or industrial areas.
- Salinity and humidity of the atmosphere: marine areas, hot and wet weather.

**WARNING**

- Prevent deposits from remaining on the bodywork, industrial and pollutant residual dust, tar spots, dead insects, bird droppings, etc.
- Do not park the vehicle under the trees. In some seasons, in fact, residues, resins, fruits or leaves may fall from the trees, containing chemicals that are harmful to the paintwork.

**CAUTION**

**DETERGENTS POLLUTE WATER. THEREFORE THE VEHICLE SHOULD BE WASHED IN AN AREA EQUIPPED FOR THE COLLECTION AND PURIFICATION OF THE LIQUIDS USED.**

**WARNING**

NEVER WASH THE VEHICLE UNDER DIRECT SUNLIGHT, ESPECIALLY IN SUMMER WHEN THE BODYWORK IS STILL HOT, AS THE CAR SHAMPOO MAY DRY BEFORE BEING RINSED OFF, AND COULD DAMAGE THE PAINTWORK. NEVER USE RAGS SOAKED IN PETROL OR DIESEL OIL TO CLEAN THE PAINTED OR PLASTIC SURFACES, IN ORDER TO PREVENT THEM LOSING THEIR SHINE AND MECHANICAL CHARACTERISTICS.

**WARNING**

WHEN WASHING THE ENGINE WITH A HIGH-PRESSURE WATER JET:

- ONLY USE FAN SPRAY JETS.
- DO NOT PLACE THE NOZZLE CLOSER THAN 60 CM.
- DO NOT USE WATER AT TEMPERATURES OVER 40° C.
- DO NOT DIRECT THE JETS DIRECTLY TO CARBURETTOR, WIRINGS, SLOT DIFFUSERS ON THE TRANSMISSION COVER AND SCROLL COVER.

**DIFFICULT STARTING**

No fuel in tank	Refuel
Filters, jets or carburettor dirty or clogged.	Contact an <b>Authorised Piaggio-Gilera Service Centre</b>
Insufficient battery charge	Kick-start. Recharge the battery.

### IRREGULAR IGNITION

No spark from spark plug. Due to the presence of high voltage, this check should only be carried out by an expert.	Check that the electrodes are correctly adjusted (0.6-0.7 mm) Check that the electrodes are clean (clean with pure petrol and metal brush or with emery cloth). Check the spark plug insulator: Replace the spark plug if the insulator is cracked or broken. If the spark plug is in good condition, take your vehicle to an <b>Authorised Piaggio-Gilera Service Centre</b> .
--	---

### LACK OF COMPRESSION

Threaded spark plug seat, head fixing loose; worn piston gas rings	Contact an <b>Authorised Piaggio-Gilera Service Centre</b>
--	--

### HIGH CONSUMPTION AND LOW PERFORMANCE

Air filter blocked or dirty.	Clean with water and shampoo and impregnate with petrol and specific oil («Air filter removal» section)
------------------------------	---



**INSUFFICIENT BRAKING**

Oil on drum or disc. Worn pads/shoes	Contact an <b>Authorised Piaggio-Gilera Service Centre</b>
--------------------------------------	--

Rear brake incorrectly adjusted. Air in the brake system	Contact an <b>Authorised Piaggio-Gilera Service Centre</b>
---	--

**INSUFFICIENT SUSPENSION**

Oil leak; worn limit switch bumpers; worn shock absorber attachment points	Contact an <b>Authorised Piaggio-Gilera Service Centre</b>
--	--

**AUTOMATIC TRANSMISSION PROBLEMS**

Deteriorated roller container or belt.	Contact an <b>Authorised Piaggio-Gilera Service Centre</b>
---	--

**INCREASED EXHAUST NOISE**

Deterioration of the SAS system and/or of the tab	Contact an <b>Authorised Piaggio-Gilera Service Centre</b>
--	--



# Stalker 50



**Chap. 04**  
**Technicaldata**

### **TECHNICAL DATA**

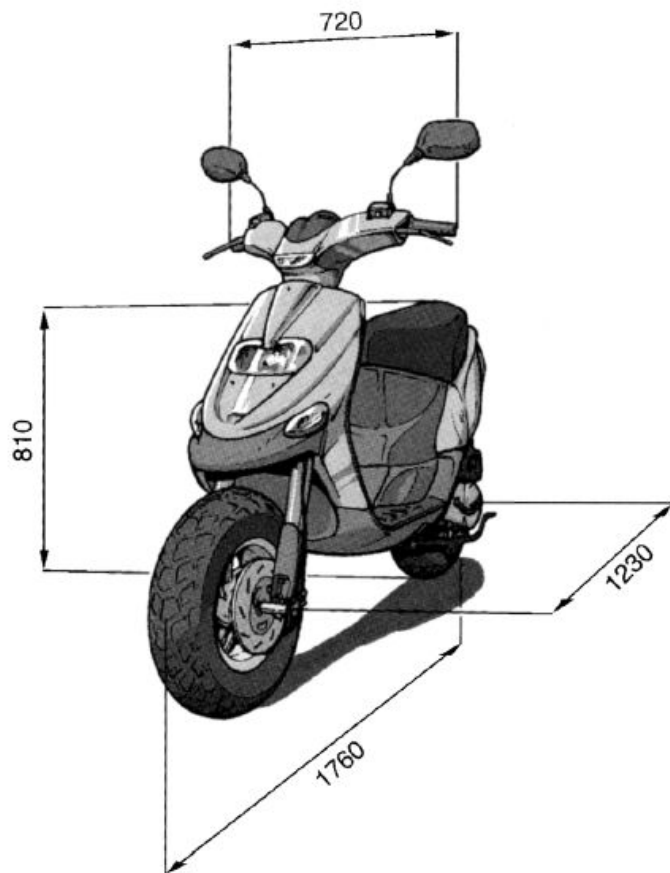
ENGINE	single cylinder; 2-stroke
Bore x stroke	40 X 39.3 mm
Cubic capacity	49.3 cm <sup>3</sup>
Compression ratio	9.5 ÷ 11.2
Ignition advance (before TDC)	17° ± 1° at 4000 rpm
Weber Carburettor	18 OM
Dellorto Carburettor	PHVA 17.5ID
Spark plugs	CHAMPION RN3C
Max. speed	According to current legislation

### **TECHNICAL DATA**

Maximum height	810 mm.
Overall width	720 mm.
Overall length	1760 mm.
Wheelbase	1230 mm.
Fuel supply	Petrol-oil mixture by carburettor, automatic mixer (variable flow according to engine speed and throttle valve opening) and a vacuum-operated cock.

Exhaust muffler	Expansion-type muffler.
Electronic ignition	Consisting of a capacitive discharge microprocessor device, with separate HV coil.
Lubrication	Engine lubrication (piston, cylinder, crankshaft, main bearings) with mixer oil.
Cooling	Forced-circulation air cooling.
Transmission	With automatic expandable pulley variator, torque server, V-belt, automatic clutch, gear reduction unit.
Front brake	(Ø 190 mm) disc brake with hydraulic control (lever on the handlebar right side end).
Rear brake	(Ø 110 mm) drum brake with expanding shoes, mechanically controlled (lever on the handlebar left hand end).
Rear brake	(Ø 190 mm) disc brake with hydraulic control (lever on the handlebar right side end).
Wheels	with 3.50x10" wheel rims in light alloy.
Front tyre	120/90-10"
Rear tyre	130/90-10"
Front suspension	fork with inverted stems, with hydraulic double-acting shock absorber.

Rear suspension	hydraulic single sock absorber, helical coaxial spring. Chassis to engine support with swinging arm.
Chassis	made of welded tubular steel with sheet metal reinforcement.
Kerb weight	87 kg
Maximum load	Driver only.
Fuel tank	Plastic, with a capacity of 6 litres (approximate value) including reserve of ~ 1.5 l.
Oil mixer reservoir	Plastic, with a capacity of ~ 1.2 l (including a ~0.400 l reserve).
Rear hub oil	Quantity: approx. 75 cm <sup>3</sup>



04\_01

## **Toolkit**

Wrenches: one box-spanner (13 -21 mm); one twin screwdriver. The tools are located under the seat in a specific container.



# Stalker 50



**Chap. 05**  
**Spareparts and accessories**



## Warnings (05\_01)

### CAUTION



**WE STRONGLY RECOMMEND USING ORIGINAL PIAGGIO-GILERA SPARE PARTS, THE ONLY PARTS THAT GUARANTEE THE SAME QUALITY LEVEL AS THE ORIGINAL PARTS ASSEMBLED ON THE VEHICLE.**

**IT SHOULD BE REMEMBERED THAT USING NON-ORIGINAL SPARE PARTS CAUSES YOUR WARRANTY RIGHTS TO EXPIRE.**

### CAUTION



**PIAGGIO-GILERA MARKETS ITS OWN LINE OF ACCESSORIES, WHICH ARE COVERED BY A MANUFACTURER'S WARRANTY ON THE BASIS OF THEIR USE. IT IS THEREFORE ABSOLUTELY NECESSARY TO CONTACT AN AUTHORISED PIAGGIO-GILERA DEALER OR SERVICE CENTRE TO CHOOSE THEM AND HAVE THEM CORRECTLY ASSEMBLED. THE USE OF NON-ORIGINAL ACCESSORIES MAY AFFECT THE STABILITY AND OPERATION OF YOUR VEHICLE AND REDUCE SAFETY LEVELS WITH POTENTIAL RISKS FOR THE RIDER.**

# Stalker 50



**Chap. 06**  
**Scheduled maintenance**



06\_01

## Scheduledservicingtable (06\_01)

Adequate maintenance is fundamental to ensuring long-lasting, optimum operation and performance of your vehicle.

To this end, a series of checks and maintenance operations (at the owner's expense) have been suggested, which are included in the summary table on the following page. Any minor faults should be reported without delay to an **Authorised Service Centre or Dealer** without waiting until the next scheduled service to solve it.

It is indispensable to have your vehicle serviced to the prescribed intervals of time, even if you have not reached the predicted mileage. Punctual vehicle servicing is necessary for the correct use of the guarantee. For any further information concerning Warranty procedures and 'Scheduled Maintenance', please refer to the 'Warranty Booklet'.

### MAINTENANCE TABLE

km x 1,000	1	5	10	15	20	25	30	35	40	45	50	55	60
Safety fasteners	I		I		I		I		I		I		I
Spark plug		I	R	I	R	I	R	I	R	I	R	I	R
Drive belt			I	R	I		R		I	R	I		R
Mixer belt					R				R				R
Throttle control - mixer	A	A	A	A	A	A	A	A	A	A	A	A	A
Air filter		C	C	C	C	C	C	C	C	C	C	C	C
SAS filter			I	C	I		C		I	C	I		C
Electrical system and battery	I	I	I	I	I	I	I	I	I	I	I	I	I
Cylinder ventilation system					I				I				
Brake levers	L	L	L	L	L	L	L	L	L	L	L	L	L

km x 1,000	1	5	10	15	20	25	30	35	40	45	50	55	60
Brake fluid **	I	I	I	I	I	I	I	I	I	I	I	I	I
Mixer	I	I	I	I	I	I	I	I	I	I	I	I	I
Mixer oil*	I	I	I	I	I	I	I	I	I	I	I	I	I
Hub oil	R	I	R	I	R	I	R	I	R	I	R	I	R
Headlight direction adjustment			A		A		A		A		A		A
Brake Pads/Shoes	I	I	I	I	I	I	I	I	I	I	I	I	I
Sliding shoes / CVT rollers			R		R		R		R		R		R
Tyre pressure and wear	I	I	I	I	I	I	I	I	I	I	I	I	I
Vehicle road test	I	I	I	I	I	I	I	I	I	I	I	I	I
Idle speed	A		A		A		A		A		A		A
Odometer gear	L		L		L		L		L		L		L
Suspension			I		I		I		I		I		I
Steering	A		I		I		I		I		I		I
Transmission			L		L		L		L		L		L
Mixer oil pipes	I		I		I		I		I		I		I

*I: INSPECT AND CLEAN, ADJUST, LUBRICATE OR REPLACE, IF NECESSARY*

*C: CLEAN, R: REPLACE, A: ADJUST, L: LUBRICATE*

*Clean the SAS air filter every 2 years*

*\* Check level every 500 km*

*\*\* Replace every 2 years*

## RECOMMENDED PRODUCTS TABLE

Product	Description	Specifications
AGIP GEAR SAE 80W-90	Lubricant for gearboxes and transmissions.	API GL-4
eni i-Ride PG 5W-40	Synthetic based lubricant for high-performance four-stroke engines.	JASO MA, MA2 - API SL - ACEA A3
AGIP FILTER OIL	Special product for the treatment of foam filters.	-
AGIP GP 330	Water repellent springy calcium spray grease.	R.I.D./A.D.R. 2 10°b) 2 R.I.Na. 2.42 - I.A.T.A. 2 - I.M.D.G. class 2 UN 1950 Pag. 9022 EM 25-89
eni i-Ride PG 2t	Synthetic based lubricant for low smoke 2-stroke engines and additives.	API TC - JASO FC - ISO-L-EGD
AGIP GREASE MU3	Yellow-brown, lithium-base, medium-fibre multipurpose grease.	ISO L-X-BCHA 3 - DIN 51 825 K3K -20

# TABLE OF CONTENTS

## **B**

Battery: 35

## **C**

Checks: 18

Clock: 9

## **F**

Fuses: 37

## **I**

Identification: 15

## **K**

Keys: 14

## **M**

Maintenance: 27

## **P**

Puncture: 44

## **R**

Refuelling: 18

## **T**

Toolkit: 56

Tyres: 30

## **V**

Vehicle: 7



The descriptions and images in this publication are given for illustrative purposes only and are not binding. While the basic characteristics as described and illustrated in this booklet remain unchanged, Piaggio & C. S.p.A. reserves the right, at any time and without being required to update this publication beforehand, to make any changes to components, parts or accessories, which it considers necessary to improve the product or which are required for manufacturing or construction reasons.

Not all versions/models shown in this publication are available in all countries. The availability of each model should be checked at the official PIAGGIO sales network.

© Copyright 2012 - Piaggio & C. S.p.A. All rights reserved. Reproduction of this publication in whole or in part is prohibited.

Piaggio & C. S.p.A. Viale Rinaldo Piaggio, 25 - 56025 PONTEDERA (PI), Italy

[www.piaggio.com](http://www.piaggio.com)