



Direction commerciale
Animation technique réseau

WORKSHOP MANUAL



Geopolis
250

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CHARACTERISTICS

■ Engine

	GEOPOLIS 250 cc.
Type.	4-stroke single-cylinder. 4 valves per cylinder with chain driven overhead camshaft
Cooling.	Liquid.
Bore x stroke.	2 x 60 mm.
Cubic capacity.	244 cc.
Max. power output.	16.5 kW at 8000 rpm.
Max. torque rating.	6250 rpm.
Fuel supply.	Indirect electronic injection. Magneti-Marelli
Lubrication.	Trochoidal pump.
Transmission.	By 2 variable pulleys and V-type belt.
Clutch.	Centrifugal automatic.
Spark plug.	Champion RG 4 PHP
Exhaust.	Catalytic.
Standards.	Euro 3.

■ Capacities

Fuel tank.	13.2 l 95 or 98 lead-free.
Engine oil.	1.3 L SAE 5W40. Minimum grade: API SJ.
Relay box.	0.25 L SAE 75W85.
Coolant.	1.4 l. Peugeot coolant part number 754614
Fork.	212cc by tube Esso Univas 46 or Agip H Lift 46.

■ Chassis

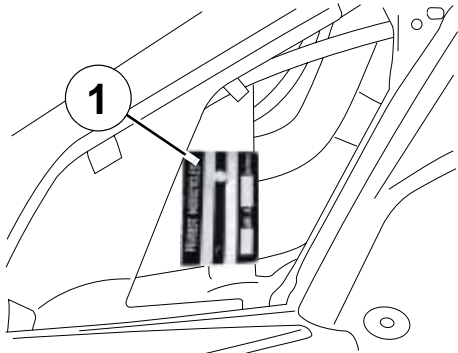
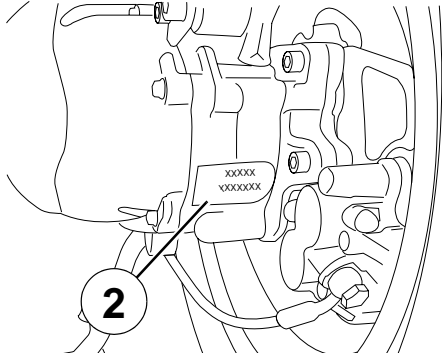
Chassis.	Double cradle out of high-resistance steel tube.
Front suspension.	Hydraulic telescopic fork. Ø37 mm.
Travel.	110 mm.
Rear suspension.	2 adjustable combined spring hydraulic shock absorbers.
Travel.	100 mm.

■ Dimensions and weight

Overall length.	2170 mm.
Width at handlebar.	770 mm.
Height. (without rear-view mirrors).	1425 mm.
Wheelbase.	1420 mm.
Ground clearance.	140 mm.
Saddle height.	784 mm.
Unladen weight.	159 kg.

■ Tyres

Front wheel rim.	16 inch aluminium alloy.
Front tyre.	.110/70 - 16.
Front tyre pressure.	2.1 bars.
Rear wheel rim.	16 inch aluminium alloy.
Rear tyre.	.140/70 - 16.
Rear tyre pressure.	2.3 bars.

Chassis markings	Engine marking
	
<p>1. Manufacturer's plate. (Left side). - VIN number of the RH side of the vehicle.</p>	<p>2. Engine number.</p>

SERVICE SCHEDULE AND COMMISSIONING

Heavy duty servicing is for vehicles used under "harsh" conditions: door-to-door deliveries, intensive urban use (courier), short journeys with engine cold, dusty areas, ambient temperature over 30°C.

Service operations.	1000 kms or 1 months	Every 5000 kms or 12 months	Every 10000 kms	Every 15000 kms	Every 20000 kms
Heavy duty servicing.	500 kms	Every 2500 kms	Every 5000 kms	Every 7500 kms	Every 100000 k ms

■ Check

Throttle cable play.	C	C	C		C
Steering column play.	C	C	C		C
Operation of electrical equipment.	C	C	C		C
Condition of front and rear brake hydraulic controls.	C	C	C		C
Condition of petrol pipes.	C	C	C		C
Condition of oil pipes.	C	C	C		C
Tyre pressures.	C	C	C		C
Tyre condition, pressure and wear.	C	C	C		C
Condition of the front suspension.	C	C	C		C
Condition of the rear suspension.	C	C	C		C
Brake fluid level.	C	C	C		C
Battery electrolyte level *.	C	C	C		C
Coolant level.	C	C	C	C	C
Engine oil level.	C				
Tightening the engine mounting and linkrod.		C	C	C	C
Tightness of nuts and bolts.	C	C	C		C

■ Change

Spark plug.					R
Inlet silencer/air filter.			N		N
Front brake pads #.		C	C	C	C
Rear brake pads #.		C	C	C	C
Drive pulley bearings and guides #.			C		C
Transmission belt.				R	
Belt anti-flapping roller #.			C		C
Engine oil (+ clean strainer).	R	C	R	C	R
Engine oil filter.	R		R		R
Relay box oil.	R		C		R
Brake fluid and coolant.	Once every 2 years				

Service operations.	1000 kms or 1 months	Every 5000 kms or 12 months	Every 10000 kms	Every 15000 kms	Every 20000 kms
Heavy duty servicing.	500 kms	Every 2500 kms	Every 5000 kms	Every 7500 kms	Every 100000 k ms

■ **Check and lubricate**

Driven pulley: Moving flange and needle bush.			G		G
Drive pulley/Movable face.			G		G

■ **Reading the ECU fault codes**

Injection and ABS/PBS* system.	C	C	C	C	C
--------------------------------	---	---	---	---	---

■ **Test machine**

On road	C	C	C	C	C
---------	---	---	---	---	---

C: Check.

N: Clean.

R: Change.

G: Check and lubricate.

* Depending on equipment.

Change if necessary.

■ **Battery preparation (Except battery without maintenance)***

Remove the battery.

Remove the 6 filler caps and the vent plug.

Fill with electrolyte to the level marked "UPPER LEVEL".

Electrolyte: (35% sulfuric acid = 1.28g/cm³). 1 litre can P/N 752740; 5 litre can P/N 752741.

Leave the battery to stand for around half an hour.

Top up if necessary.

Charge the battery for at least 2 hours with a current of 0.4A.

Refit the battery and connect the vapour vent pipe.

Connect the red wire lug to the battery's + terminal, and the green wire lug to the battery's - terminal.

Then, the battery level should be topped up if necessary, after fully charging, using distilled water only.

■ **Checks before handing over to the customer**

Check the wheel nuts are tight.

Check nuts and bolts are tight.

Check brake adjustment and efficiency.

Check the tyre pressures cold.

Check operation of the lights, flashers, horn, and brake light.

Check the different warning lights work.

Carry out a road test.

* Depending on equipment.

SPECIAL IMPORTANT POINTS

■ Oil and fuel



This engine is designed to run on 95 or 98 unleaded fuel only.



Fuel pipes must absolutely be changed if there are any signs of wear, cracks, etc.
The clips are specific, they must always be changed each time they are removed and replaced with new genuine parts clips.



Petrol is highly inflammable, do not smoke in the working area and avoid proximity to flames or sparks. Work in a clear and well-ventilated area.
Before carrying out any work, leave the engine to cool for at least 2 hours.

■ Starting up after overhauling the engine

When starting the engine hot or cold do not accelerate.

Check the coolant level in the header tank.

After road-testing the machine, check there are no fault codes left in the ECUs (using the diagnostic tool).

■ Electricity

All components of the electrical system are powered with 12 volts DC.

The battery must not be disconnected while the engine is running and the voltage must be at least 7 volts for the ECU to function and enable engine starting.

■ Special features

An immobiliser built in the ECU provides the antitheft function by means of a transponder

The ECU features a diagnosis function which allows you to read memorized faults using the diagnostic tool.

TIGHTENING TORQUES**■ Engine part**

Drive pulley	8 m.daN
Driven pulley	5.5 m.daN
Clutch plate and shoes	4.8 m.daN
Belt anti-flapping roller	1.5 m.daN
Transmission cover	1.2 m.daN
Relay box cover	2.5 m.daN
Filler cap. Relay box	1.5 m.daN
Flywheel magneto cover	1.2 m.daN
Stator	1 m.daN
Engine speed sensor	0.5 m.daN
Rotor	9.5 m.daN
Freewheel	1.4 m.daN
Starter motor	1.2 m.daN
Automatic tensioner	1.2 m.daN
Automatic tensioner plug	0.5 m.daN
Spark plug	1.2 m.daN
Decompressor valve balance weight	0.8 m.daN
Decompressor valve housing	1.2 m.daN
Chain tensioner	1 m.daN
Camshaft stop plat	0.5 m.daN
Cylinder head bolt	1.2 m.daN
Cylinder head	Procedure
Cylinder head cover	0.7 m.daN
Inlet manifold	1.2 m.daN
Injection rail	0.7 m.daN
Oil pressure switch	1.2 m.daN
Oil pump	0.6 m.daN
Oil pump pinion	1.2 m.daN
Oil pump cover	0.8 m.daN
Oil pan	1.2 m.daN
Crankcase	1.2 m.daN
Filler cap. Engine oil	2.5 m.daN
Water pump cap	0.7 m.daN
Thermostatic valve cover	0.4 m.daN
Cooling system bleeder screw	0.3 m.daN

■ Body panels

Front mudguard.	0.8 to 1.2 m.daN
Handlebar cover.	0.2 to 0.4 m.daN
Front shield panels.	0.2 to 0.4 m.daN
Rear shield.	0.2 to 0.4 m.daN
Bottom panel.	0.2 to 0.4 m.daN
Floor panel.	0.4 to 0.6 m.daN
Saddle storage compartment.	0.8 to 1.2 m.daN
Rear panels.	0.2 to 0.4 m.daN
Grab handle.	2 to 2.5 m.daN
Rear mudguard.	0.4 to 0.6 m.daN

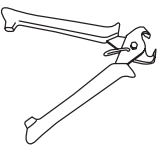

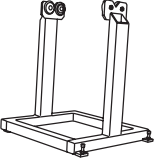

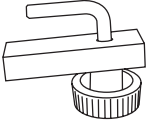
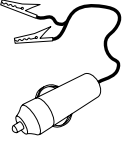

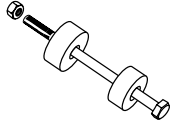
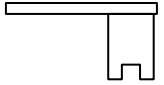
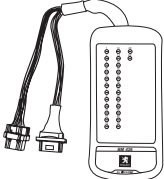
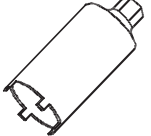
■ Cycle part

Front wheel spindle.	6.5 m.daN
Rear wheel bolt.	10 m.daN
Rear wheel spindle nut.	13.5 m.daN
Linkrod to engine pivot.	5.8 m.daN
Linkrod to frame pivot.	5.8 m.daN
Linkrod connecting pin	3.6 m.daN
Linkrod to frame adjustment locknut	10 m.daN
Linkrod to frame mounting bolt	6.8 m.daN
Shock absorber top mount.	4.5 m.daN
Shock absorber bottom mount.	4.5 m.daN
Exhaust to cylinder head mounting nut.	1.8 m.daN
Exhaust to casing mounting bolt.	2.5 m.daN
Exhaust clamp.	1.8 m.daN
Upper cone (in 2 operations).	4/2.2 m.daN
Upper cone locknut.	Hand tightened
Steering locknut.	7.5 m.daN
Front brake caliper.	2.5 m.daN
Rear brake caliper.	2.5 m.daN
Front brake disc.	3 m.daN
Rear brake disc.	0.9 m.daN
Handle bar.	4 m.daN

■ Standard

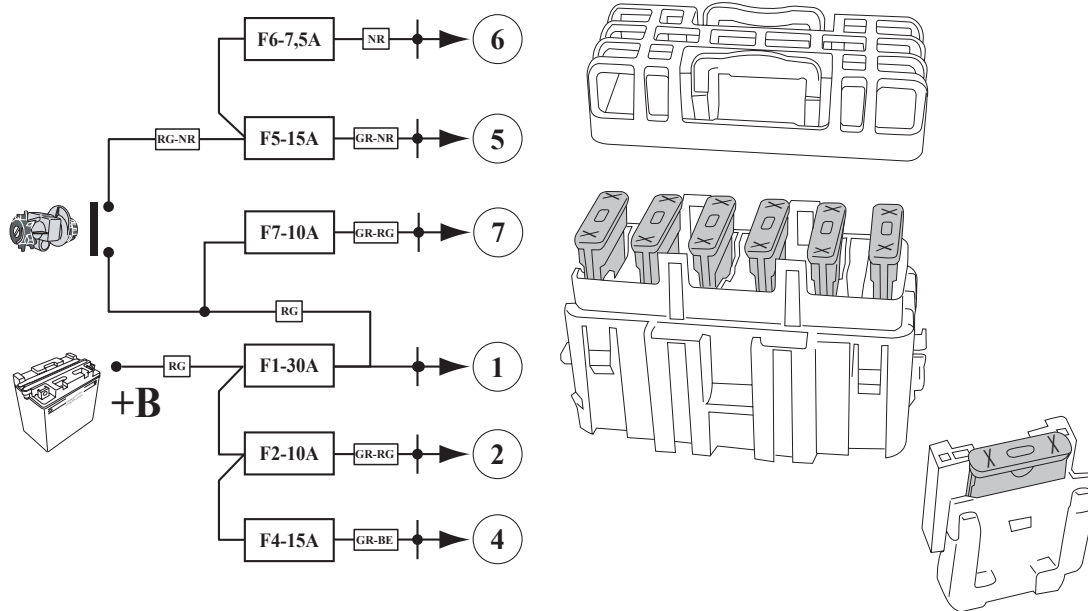
Nut and bolt 5 mm diameter.	0.6 m.daN
Nut and bolt 6 mm diameter.	1 m.daN
Nut and bolt 8 mm diameter.	2.2 m.daN
Nut and bolt 10 mm diameter.	3.5 m.daN
Nut and bolt 12 mm diameter.	5.5 m.daN

SPECIAL TOOLS

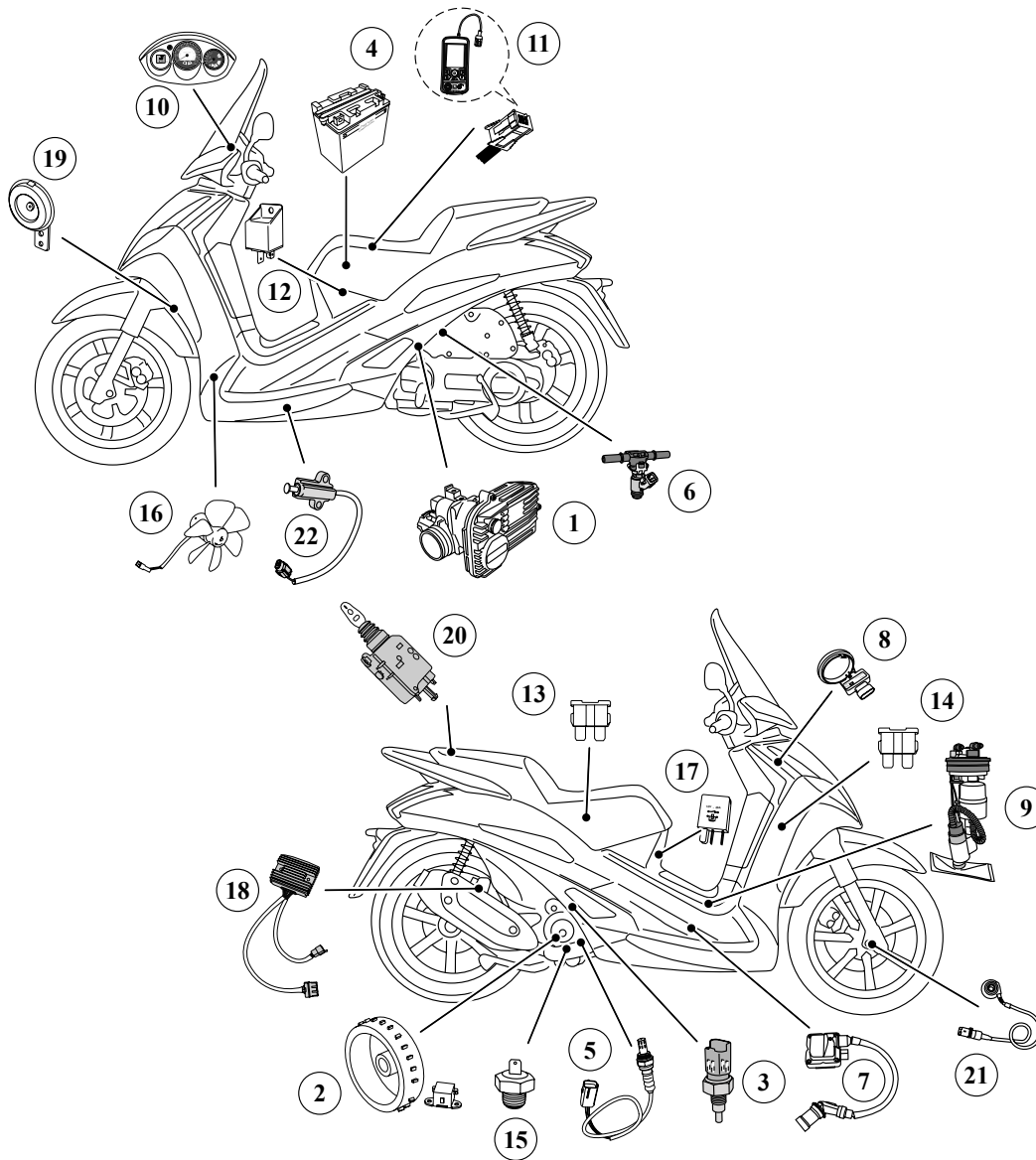
	Tool N°	Designation	Used with		Tool N°	Designation	Used with
	750539	Tie-wrap pliers			757877	Pressure gauge	
	754278	Balance support with pins Ø15 and Ø17 mm			758358	TEP 2005	
	755996	Hose clamp			758585	Power supply cable tool	
	756017	Fuel injector power supply harness			758810	Steering head cup installation tool	
	756715 (*)	Tank gauge spanner			758924	24 way terminal block (*)	
	757860	Steering tool					

(*) New or modified tool.

■ Fuses and energy distribution



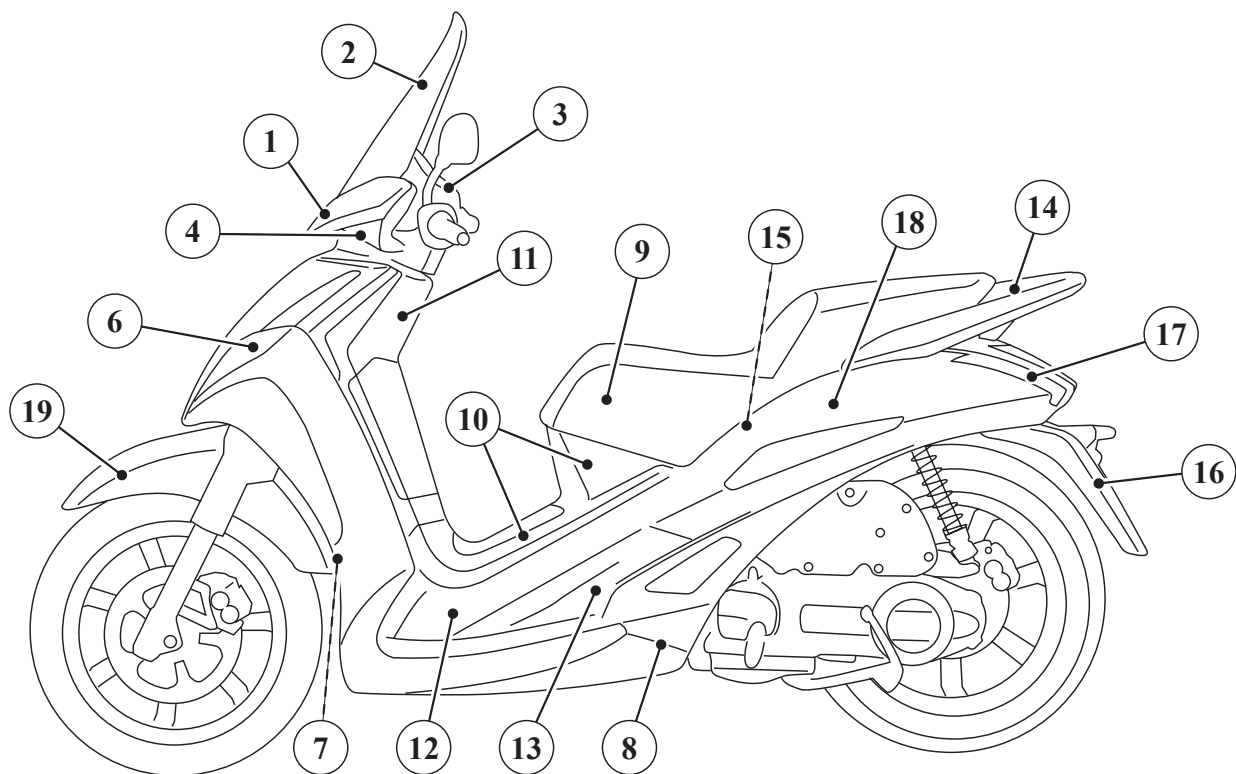
Geopolis 250 cc	
F1	Regulator. Ignition switch. F7.
F2	Injection ECU. Injection relay: HT coil. Petrol injector. Petrol pump. Lambda sensor. Fan relay.
F4	Instrument panel. Lighting relay. Fan relay.
F5	Instrument panel. Dip switch (main/low headlight). Horn. Number plate light. Sidelight. Stop light contact.
F6	Injection ECU. Transponder antenna. Diagnostic plug. Injection relay. Lighting relay.
F7	Accessory socket.

LOCATION OF COMPONENTS

- | | |
|--------------------------------------|--|
| 1. Injection ECU. | 13. Fuses |
| 2. Engine speed and position sensor. | 14. 10 A fuse. (Accessory socket. 12V). |
| 3. Engine temperature sensor. | 15. Oil pressure switch |
| 4. Battery. | 16. Motor-driven fan. |
| 5. Lambda sensor. | 17. Lighting relay/Fan relay/Power supply relay. |
| 6. Petrol injector. | 18. Voltage regulator. |
| 7. Ignition coil. | 19. Horn. |
| 8. Transponder antenna | 20. Saddle lock. |
| 9. Petrol pump. | 21. Machine speed sensor. |
| 10. Diagnostic light. | 22. Kickstand switch. |
| 11. Diagnostic plug. | |
| 12. Starter motor relay | |

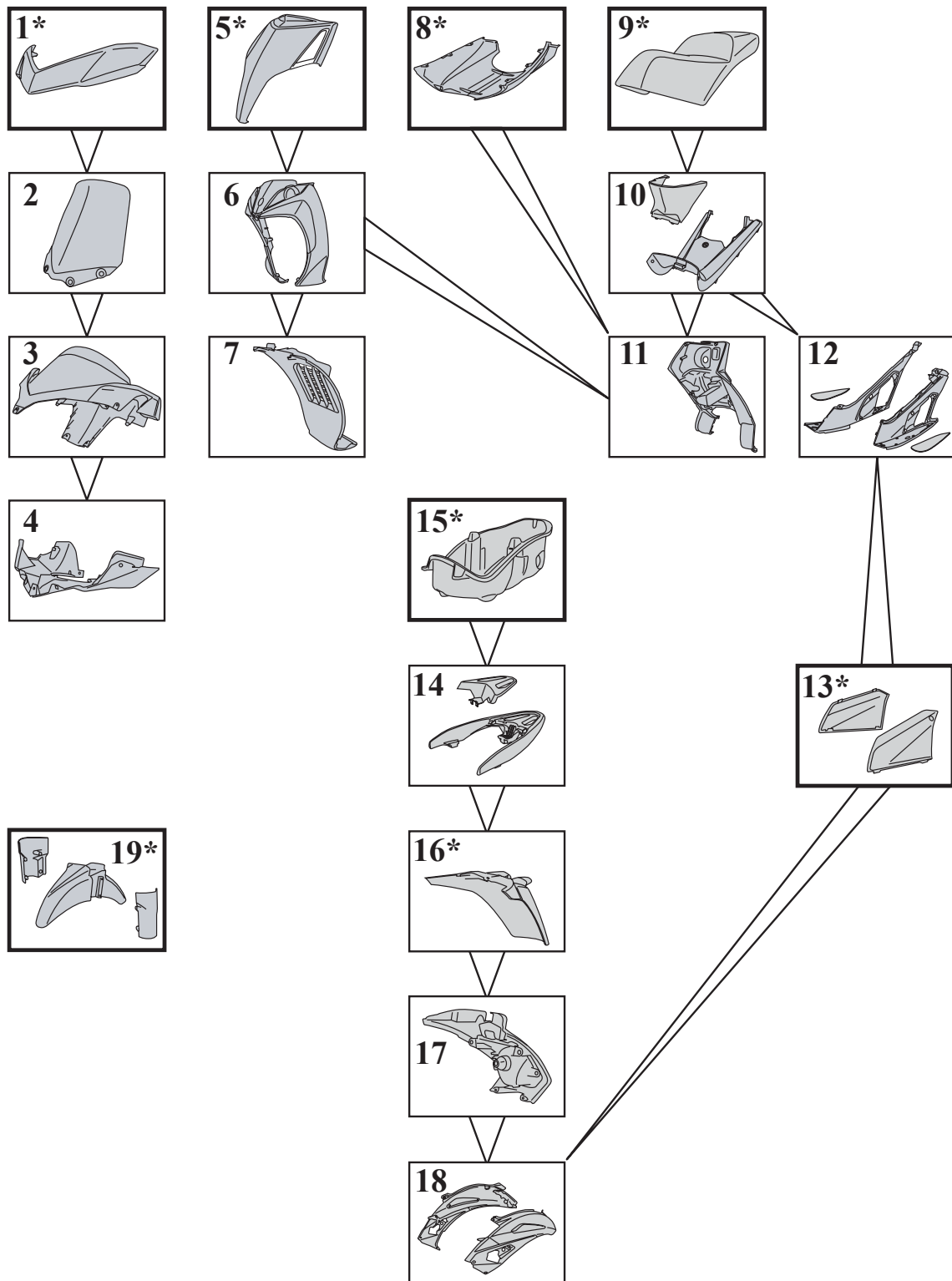
BODY PANELS

■ Location of body components



- | | |
|-----------------------------|-------------------------|
| 1. Handlebar front fairing. | 11. Rear shield. |
| 2. Wind protector. | 12. Footboard. |
| 3. Counter panel. | 13. Access door. |
| 4. Lower handlebar cover. | 14. Luggage carrier. |
| 5. Front top cover panel. | 15. Helmet compartment. |
| 6. Front shield panels. | 16. Mudflap. |
| 7. Mudguard. | 17. Rear cover. |
| 8. Bottom panel. | 18. Side panels. |
| 9. Saddle. | 19. Front mudguard. |
| 10. Tank streamlining. | |

■ Body component sequence of disassembly

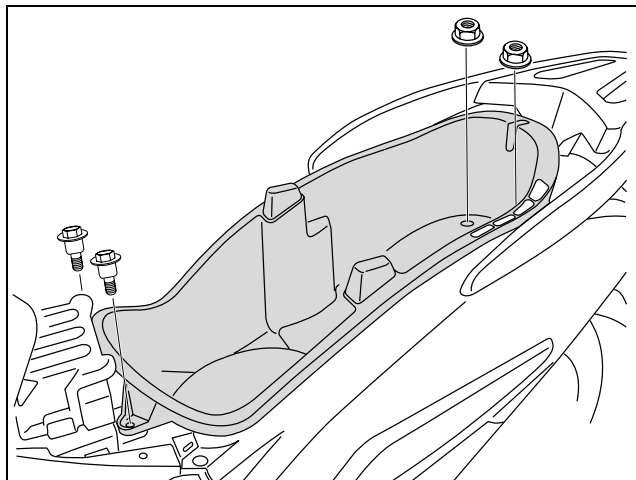


* This item may be removed on its own.

■ **Removal of the storage compartment**

Procedure 1.

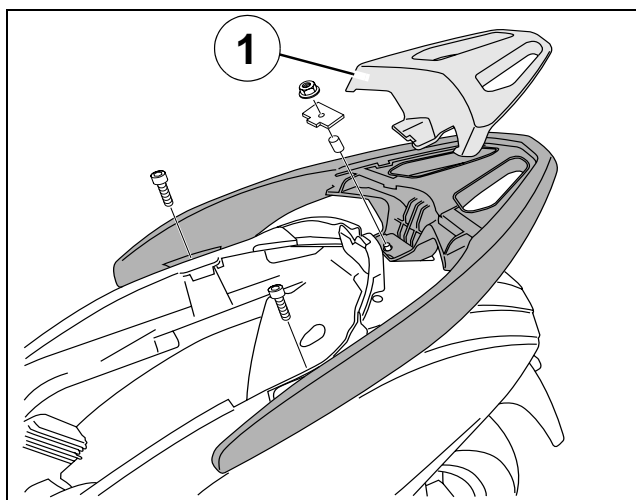
- Remove the storage compartment. (2 screws and 2 nuts).



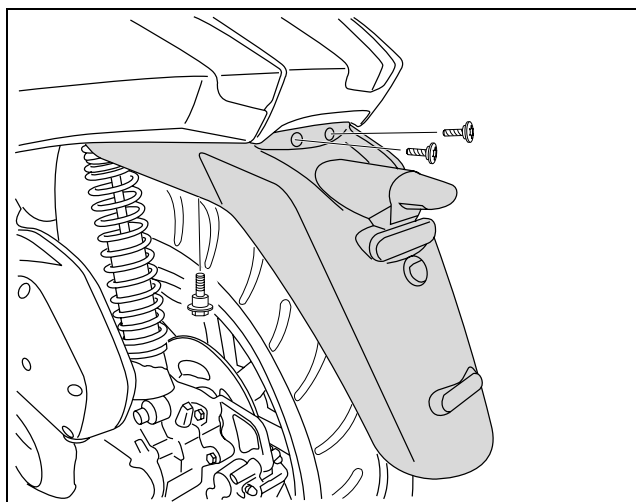
■ **Removal of a RH or LH side cover**

Procedure 2.

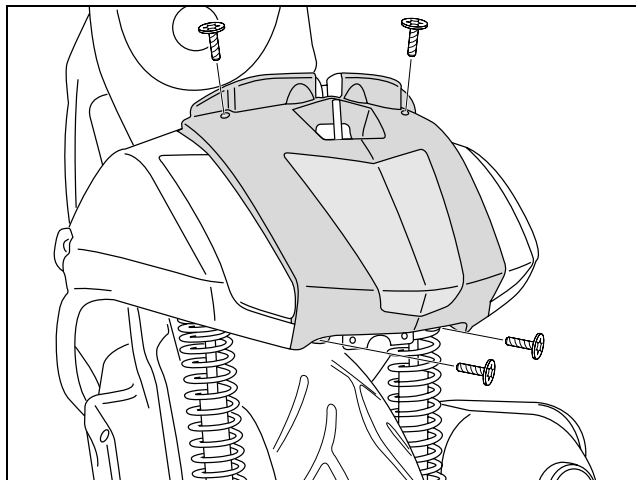
- Remove the storage compartment. See: Procedure 1. page 18.
- Remove the luggage carrier trim. (1)
- Remove the luggage carrier. (2 screws and 1 nut).



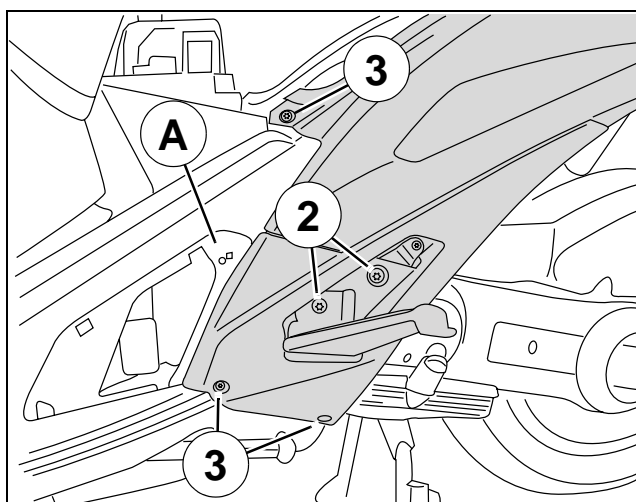
- Remove the splash guard. (4 screw).
- Disconnect the license plate light.



- Remove the rear body cover. (4 screw).



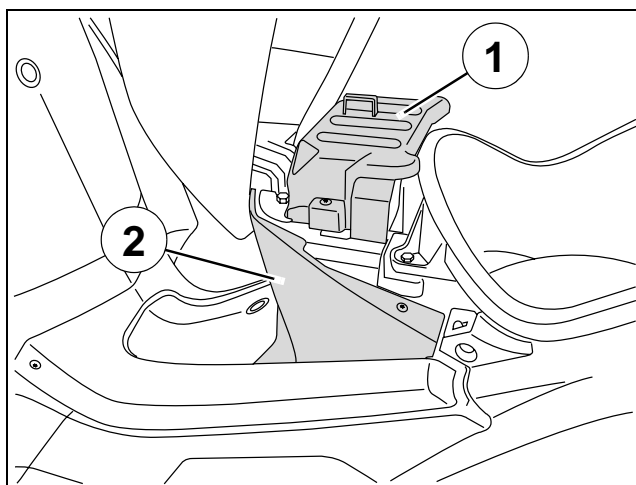
- Remove the access door. (1 screw).
- Remove the 2 screws that secure the footrest. (2)
- Remove the rear cover 3 fixing screws. (3)
- Unclip the support (A) and remove the side panel together with the footrest.



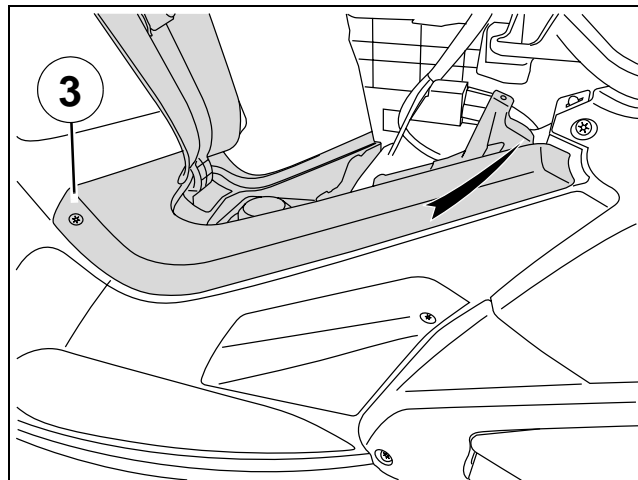
■ Removal of the tank covers

Procedure 3.

- Remove the saddle. (2 screw).
- Remove the battery cover. (1)
- Open the tank filler cap door.
- Remove the upper fairing. (2)



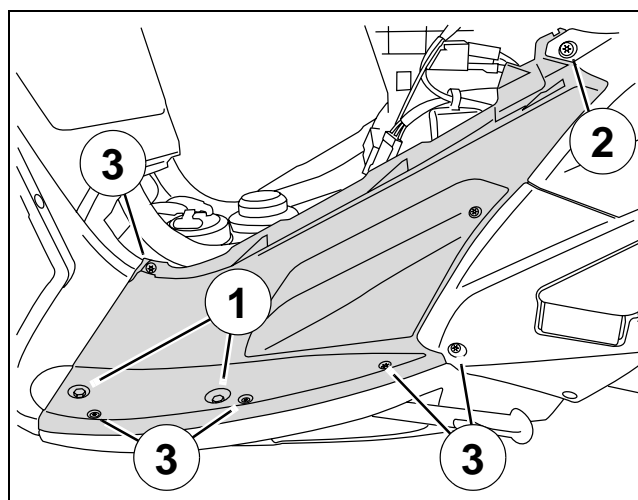
- Remove the 2 fixing bolts. (3)
- Remove the fuel tank cover panel by sliding it rearwards.



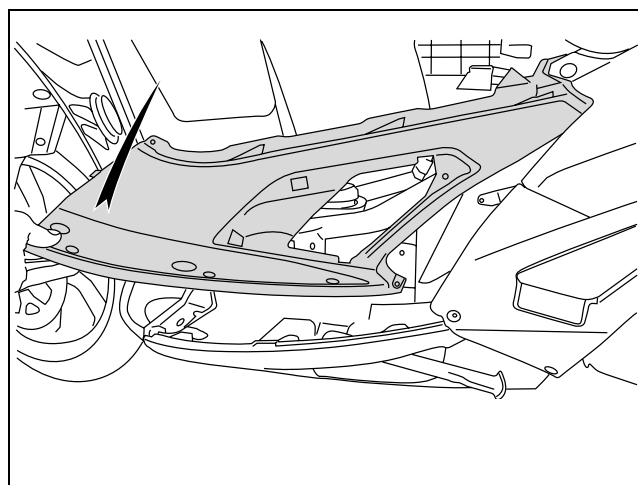
■ **Removal of a RH or LH footboard**

Procedure 4.

- Remove the tank cover panel. See: Procedure 3. page 19.
- On each side remove:
 - 2 washer head screws.Ø6 mm. (1)
 - 1 washer head screw.Ø5 mm. (2)
 - 5 plastic screws.(3)



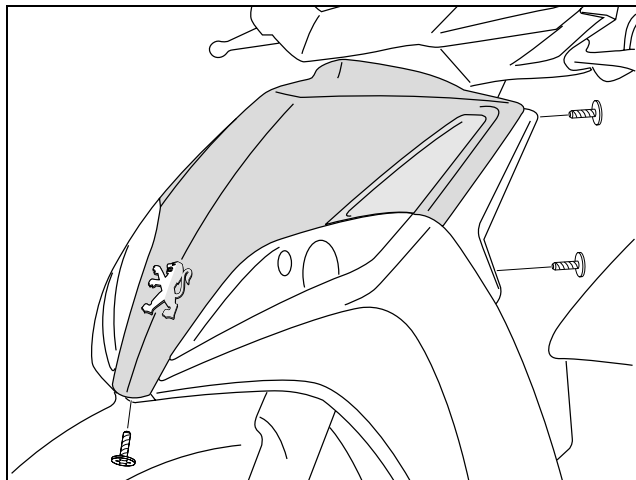
- Remove the access door.
- Separate the front of the footboard which is linked to the rear part of the leg shield panel.
- Remove the footboard.



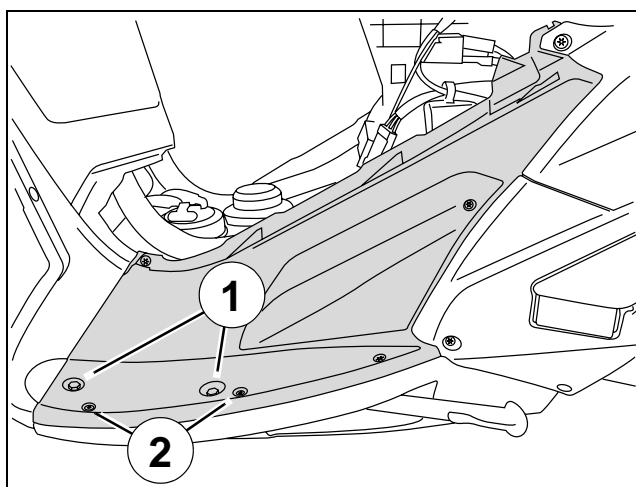
■ Removal of the front shield panel

Procedure 5.

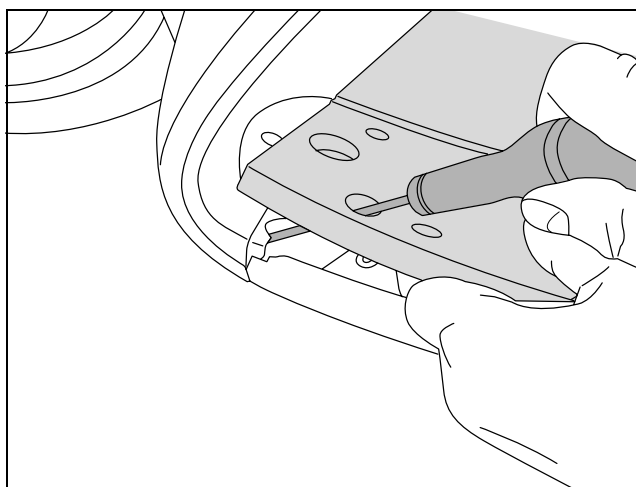
- Remove the front top cover panel. (5 screw).



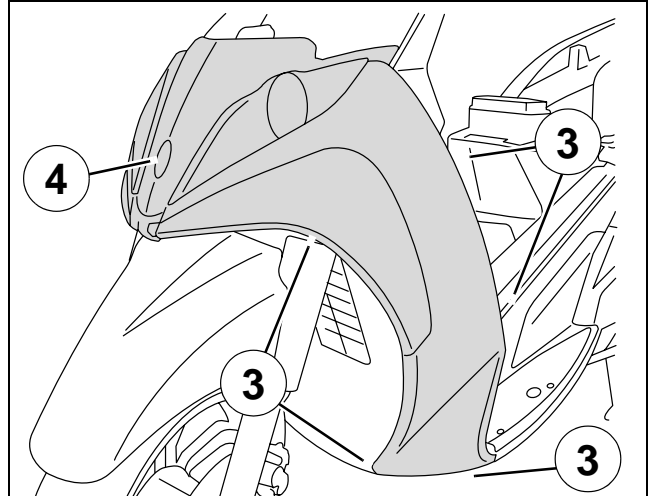
- Remove the footboard mat.
- On each side remove:
 - 2 washer head screws. Ø6 mm. (1)
 - 2 plastic screws. (2)



- Lift the footboard in order to reach the screw that secures the shield panel.

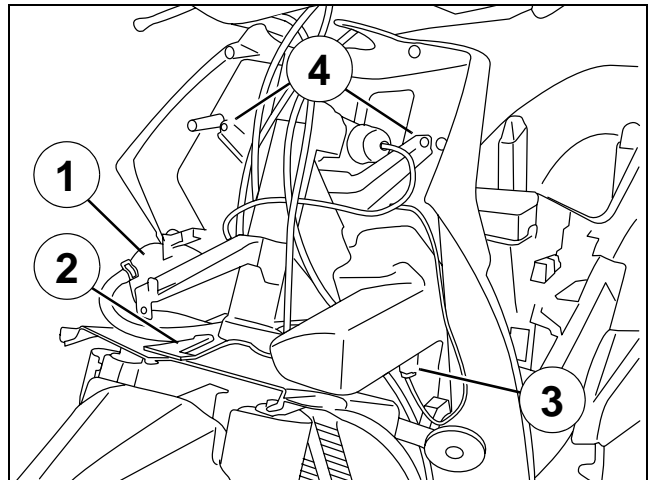


- On each side remove:
 - 5 plastic screws. (3)
- Remove the centre screw. (4)
- Remove the front legshield assembly.
- Disconnect the lighting and direction indicator connections.



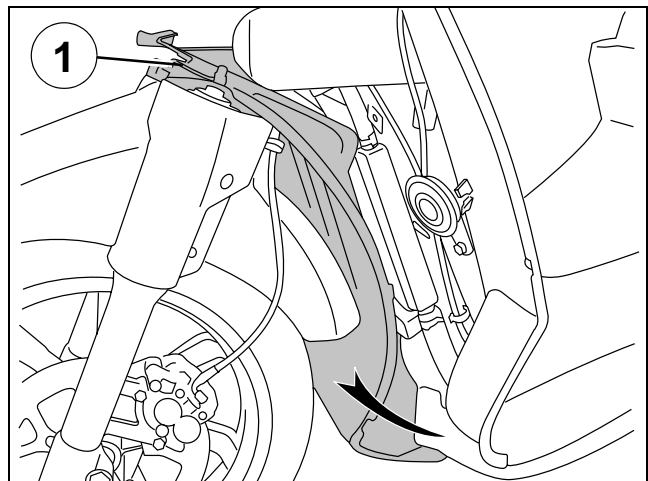
■ Removal of the rear shield panel

- Remove the footboards. See: Procedure 4. page 20.
- Remove the front legshield assembly. See: Procedure 5. page 21.
- Remove the header tank. (Right side) (1)
- Remove the fuse holder. (Right side) (2)
- Disconnect the accessory plug. (Left side) (3)
- Remove the 2 fixing bolts. (4)
- Remove the rear shield panel.



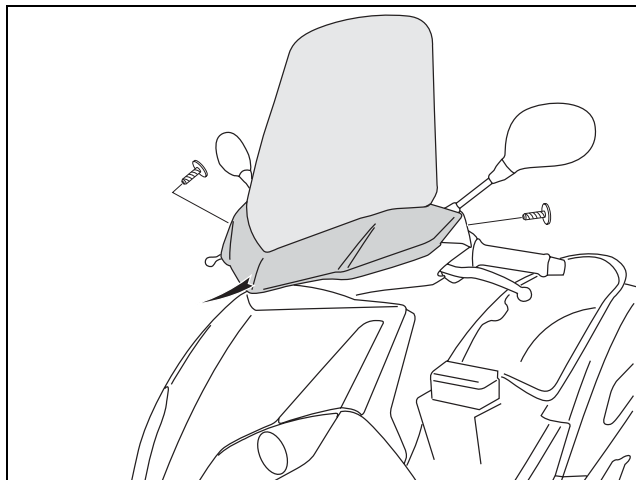
■ Removal of the dirt shield

- Remove the front legshield assembly. See: Procedure 5. page 21.
- Remove the dirt shield (1) by unclipping it from the upper bracket and by swivelling it to the right or to the left

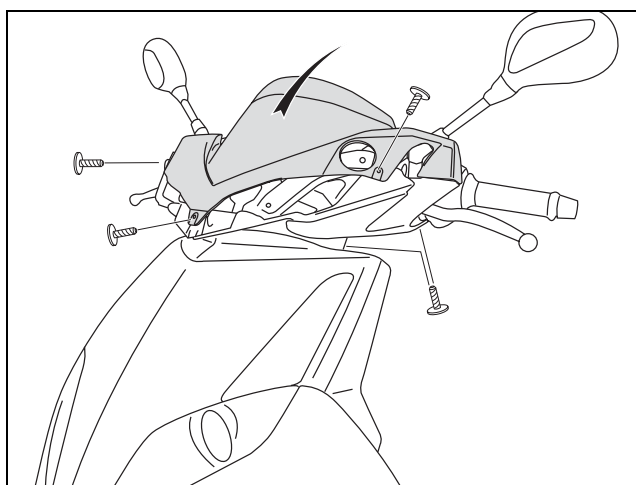


■ Removal of the instrument cluster

- Remove the handlebar front cover. (2 screw).
- Remove the screen. (4 screw).



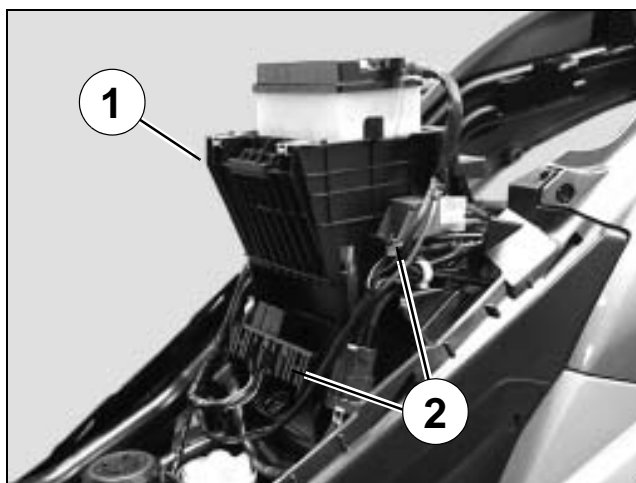
- Remove the handlebar rear cover and instrument cluster assembly. (7 screw).
- Disconnect the instrument cluster.



■ Removal of the battery holder

Procedure 6.

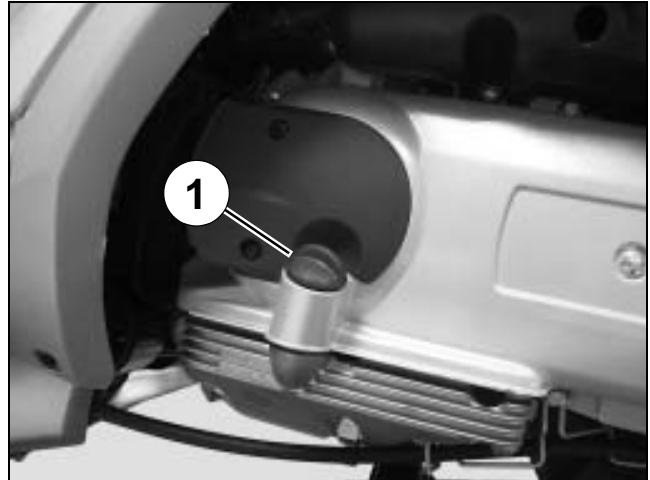
- Remove the tank cover panel. See: Procedure 3. page 19.
- Remove the storage compartment. See: Procedure 1. page 18
- Disconnect and remove the battery.
- Unclip from the battery holder:
 - The fuses. (1)
 - The relays. (2)
- Remove the battery bracket. (3 screw).



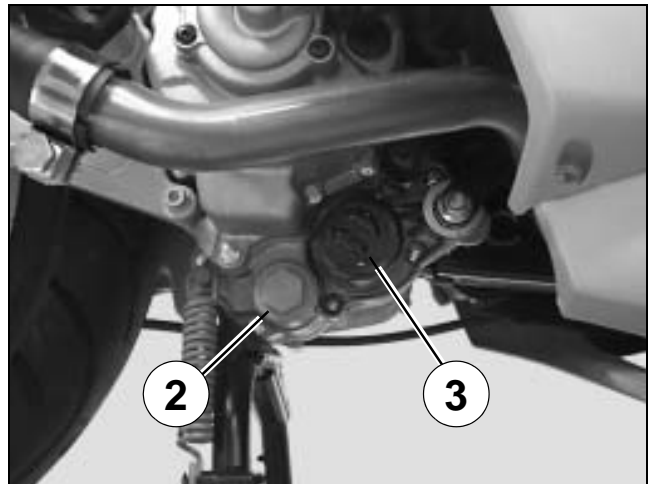
SERVICE OPERATIONS

■ **Changing the engine oil and replacing the oil filter**

- Remove the engine's oil filler cap. (1)



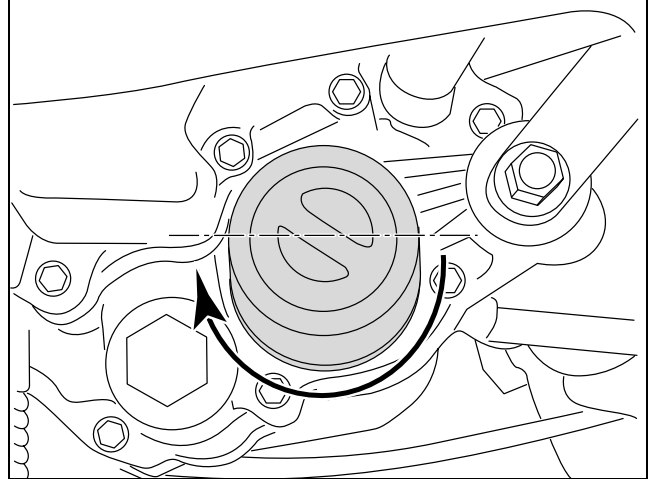
- Remove the cap and the filter to drain oil from the engine. (2)
- Remove the oil filter by unscrewing it. (3)



**Drain the engine when it is warm.
Wear gloves in order not to get burnt.**

- Lubricate the rubber seal of a new oil filter.
- Screw the filter until it is in contact with the engine casing and then screw the filter a half turn by hand.
- Fit the oil strainer and the drain plug.

Tightening torque: 2.5 m.daN.

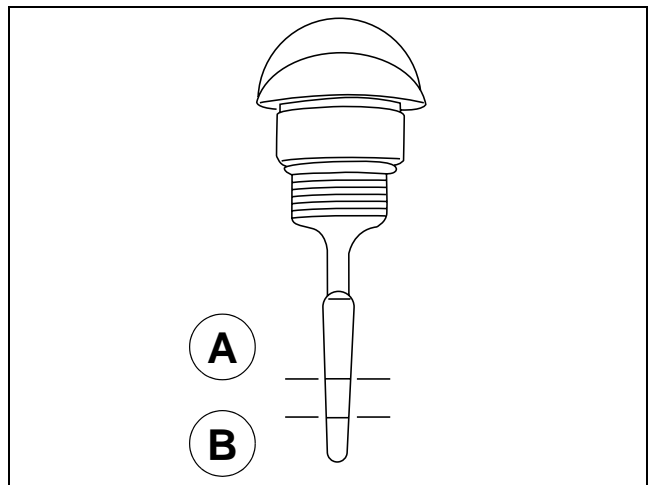


- Fill the engine with 1.3 L motor oil through the filler hole.
- Fit the filler cap.
- Start the engine, let it run for a few minutes and then stop it.
- Check the oil level by using the marks on the filler cap.

- A. Oil level high.
- B. Oil level low.

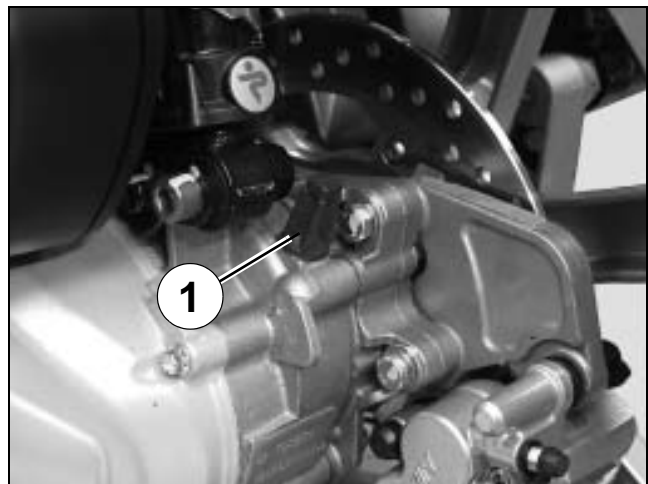
- Add oil if necessaire.

Note: Check the level with the machine parked on its centre stand, on level ground.

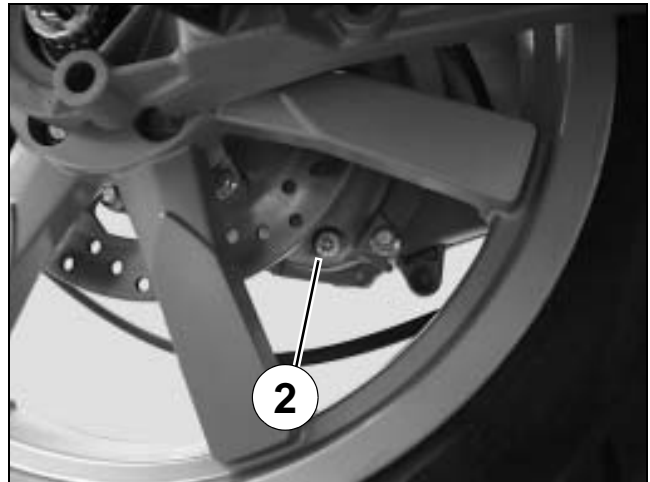


■ Draining the relay box

- Remove the relay box filler cap. (1)



- To drain the engine remove the cap and let the oil drip. (2)



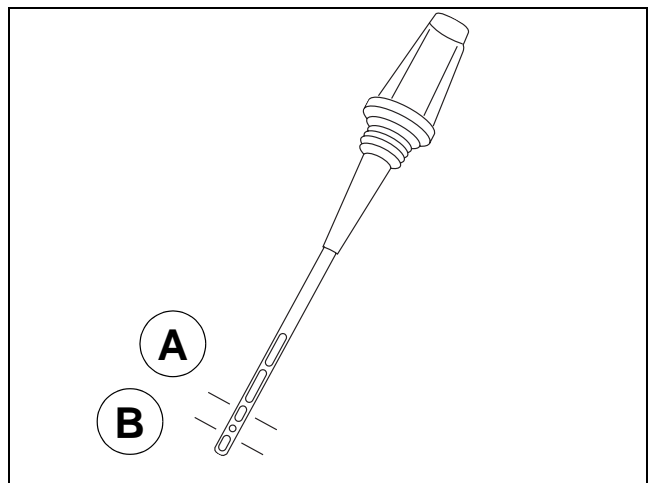
- Fit the drain plug.

Tightening torque: 1.5 m.daN.

- Fill the relay box with 0.25 L oil through the filler hole.
- Check the oil level by using the marks on the filler cap.

- A. Oil level high.
- B. Oil level low.

- Add oil if necessary.



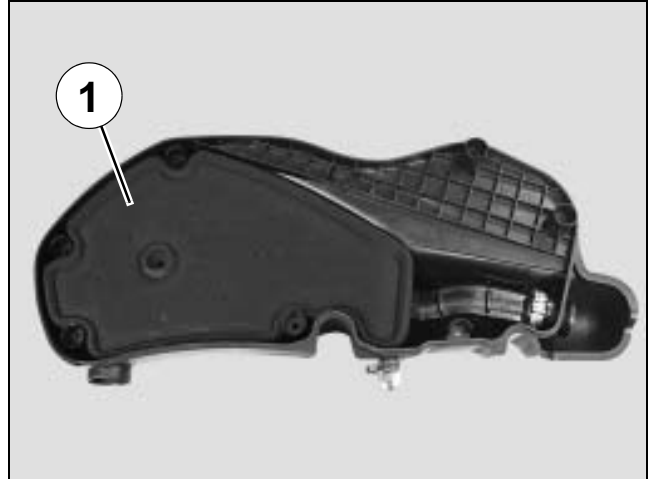
Note: Check the level with the machine parked on its centre stand, on level ground.

■ Replacing the air filter

- Remove the air filter cover (9 bolts) and its seal.



- Remove the air filter. (1)



■ Removal of the spark plug

- Remove the storage compartment. See: Procedure 1. page 18.
- Remove the access door.
- Disconnect the suppressor.
- Remove the spark plug.

Essential precautions: When re-installing, screw in the spark plug (a few turns) by hand. For torquing, use a spark plug wrench equipped with a dial.

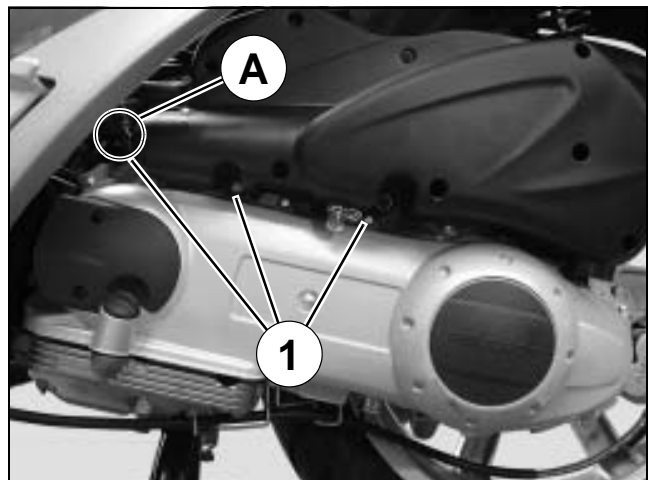
- Tighten the spark plug.



Tightening torque: 1.2 m.daN.

■ Replacing the rollers and drive belt

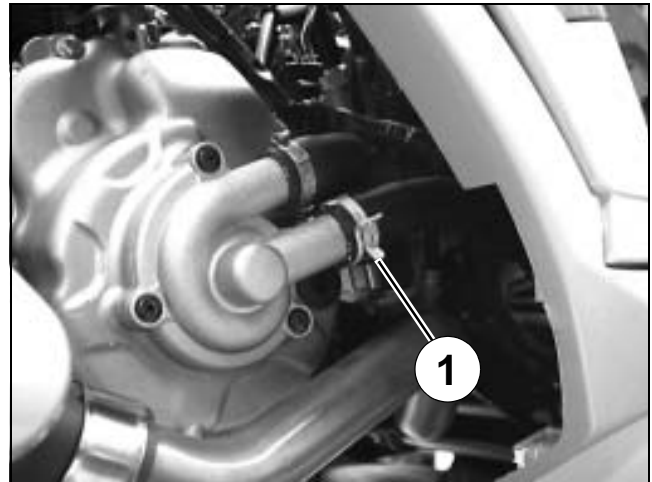
- Remove the storage compartment. See: Procedure 1. page 18.
- Remove the 3 air filter box fixing bolts (1). (including 1 screw, 1 nut and 1 pin in (A)).
- Remove the transmission cover. (Refer to the 250cc Engine workshop manual. 4 valves. Reference 758850.



■ **Draining the cooling circuit**

- Remove the storage compartment. See: Procedure 1. page 18.
- Remove the header tank cap.
- Disconnect the lower pump from the coolant pump to drain the cooling system. (1)

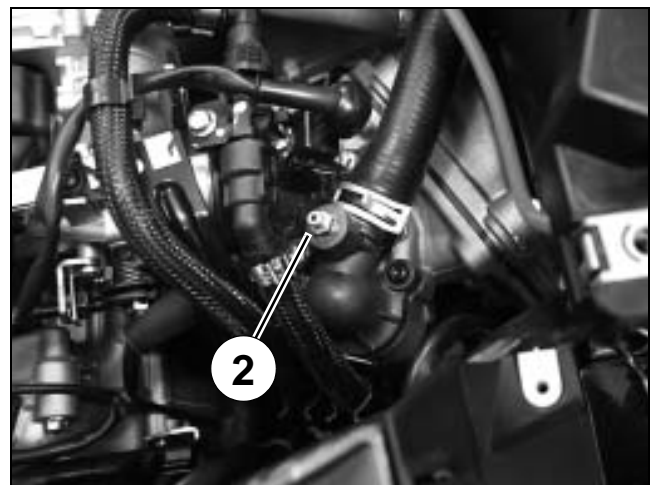
Note: The cooling system is drained when the engine is cold.



- Connect the lower hose to the water pump
- Fill the circuit with 1.3 L of coolant.
- Loosen the bleeder screw (2) to remove air contained in the engine.
- Close the bleeder screw.

Tightening torque: 0.3 m.daN.

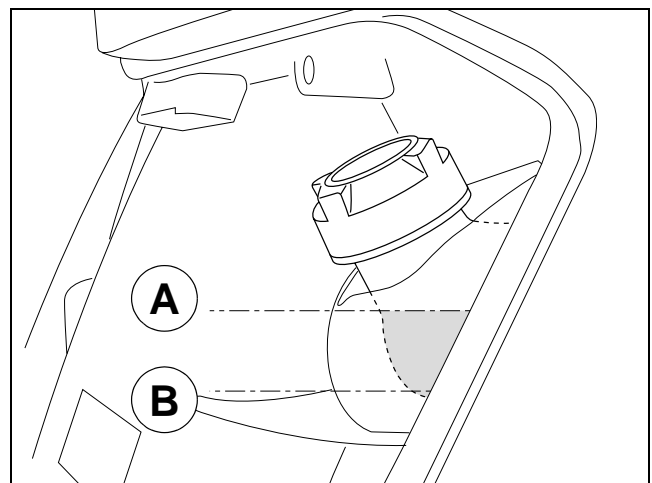
- Start the engine and accelerate in order to warm it up.
- Stop the engine once it reaches its operating temperature. (Approximately 90°C).



- Check the coolant level in the header tank.
- If necessary add coolant in the header tank.

- A. Maximum level.
- B. Minimum level.

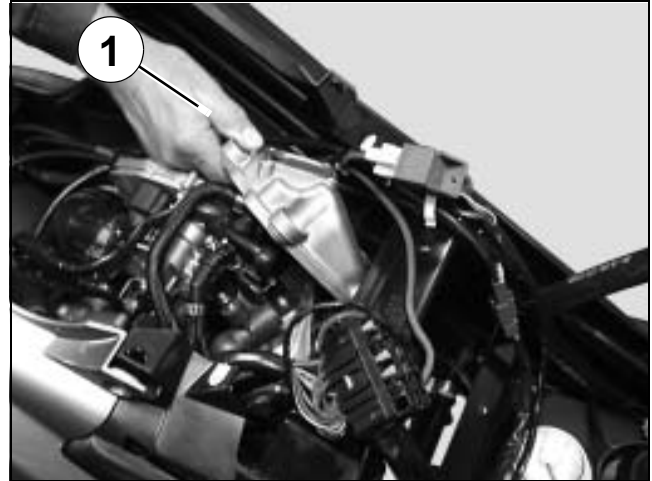
Note: Check the level with the machine parked on its centre stand, on level ground.



■ Installing the valve clearance

- Remove the storage compartment. See: Procedure 1. page 18
- Remove the oil vapour suction box. (4 screw).
- Remove the rocker cover. (5 screw).

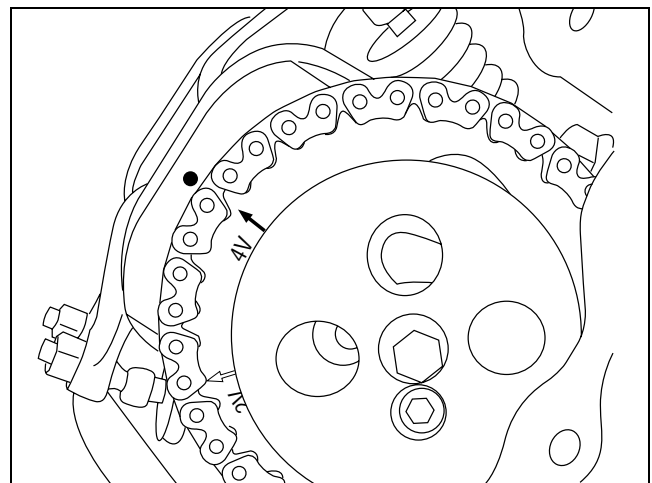
Tightening torque: 0,7 m.daN.



- Remove the transmission air filter cover. (2 screw)



- Using a screwdriver, turn the crankshaft so as to align the camshaft gear mark (4V) with the cylinder head mark.

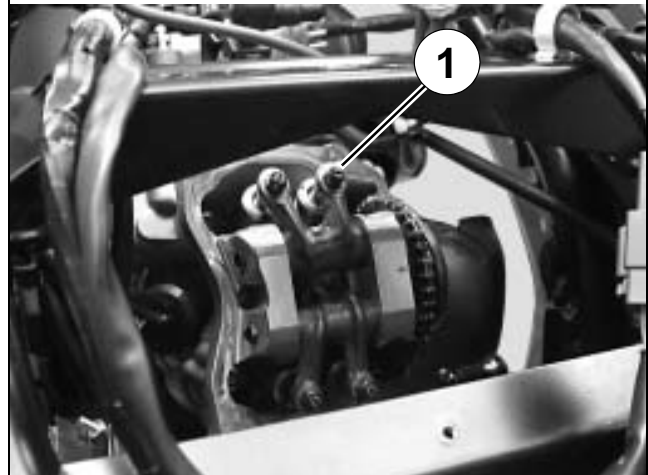


- Loosen the lock nut of the rocker adjustment screw. (1)
- By means of feeler gauges, adjust the clearance of every valve by acting on the rocker set screw.

Clearances:

- 10/100 at the intake.
- 15/100 at the exhaust.

- Immobilize the rocker set screw.
- Tighten the locknut without altering the adjustment.
- Check the adjustment.



■ **Replacing the brake pads**

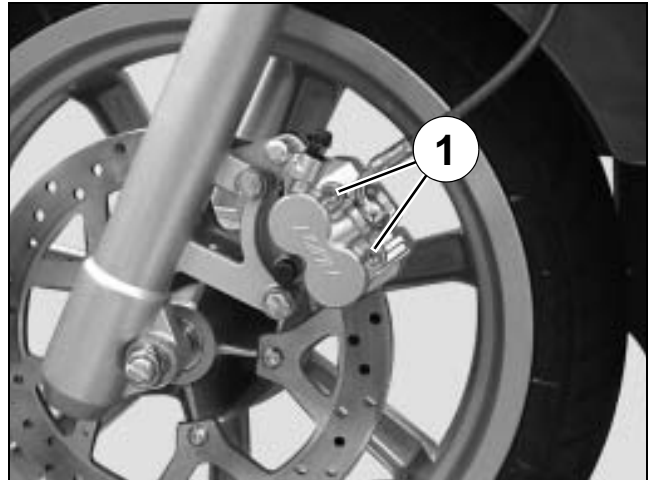
Front brake

- Remove the 2 spindles (1). (or 1 spindle and 1 pin in the ABS/PBS version).
- Remove the calliper. (2 screw).
- Remove the brake pads.

Mini. thickness: 1.5 mm.

- When refitting the brake pads, push the pistons all the way into their housing.

Note: After refitting, actuate the brake levers several times to bring the brake pads against the brake disc.



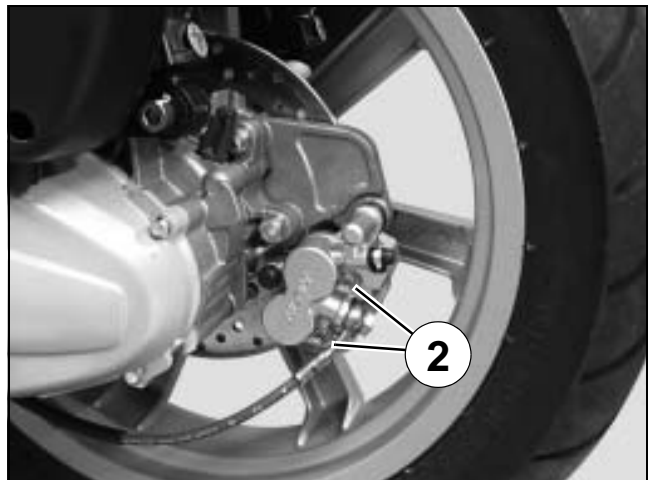
Rear brake

- Remove the 2 spindles (2). (or 2 spindles in the ABS/PBS version).
- Remove the calliper. (2 screw).
- Remove the brake pads.

Mini. thickness: 1.5 mm.

- When refitting the brake pads, push the pistons all the way into their housing.

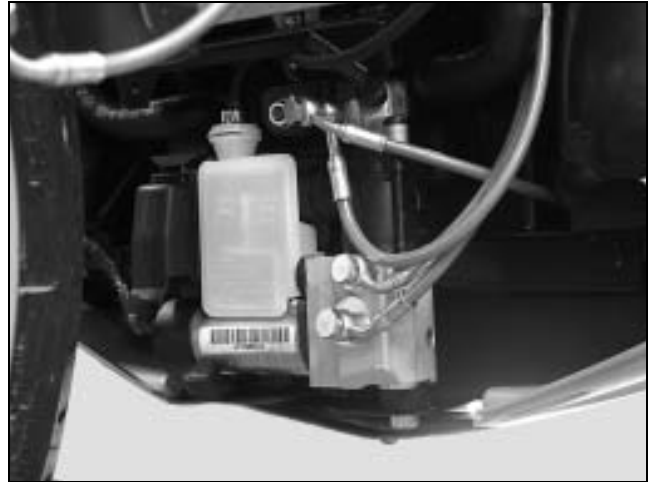
Note: After refitting, actuate the brake levers several times to bring the brake pads against the brake disc.



SERVICING AN ABS/PBS SYSTEM

■ Removal of the brake modulator

- Remove the front shield panel. See: Procedure 5. page 21.
- Remove the mudguard.
- Disconnect the modulator.
- Pinch the supply hose of the tank using the hose clamp P/N 755996
- Disconnect the supply hose.
- Disconnect the hydraulic controls.
- Remove the brake modulator.



Hold the brake levers at 20 mm from the rest position using plastic straps. This operation allows you to close the circuits and to avoid emptying the hydraulic controls when disconnecting the modulator.

Place a pan under the modulator so that the brake fluid will drip into it.

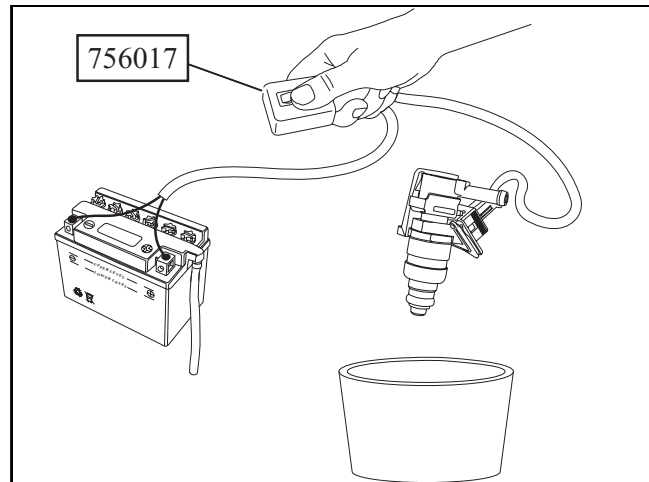
Do not remove the master cylinder covers.



Drain the braking circuit (Refer to the workshop manual (See manual and method N° 32))

MISCELLANEOUS OPERATIONS**■ Procedure for reducing the fuel circuit pressure****Procedure 7.**

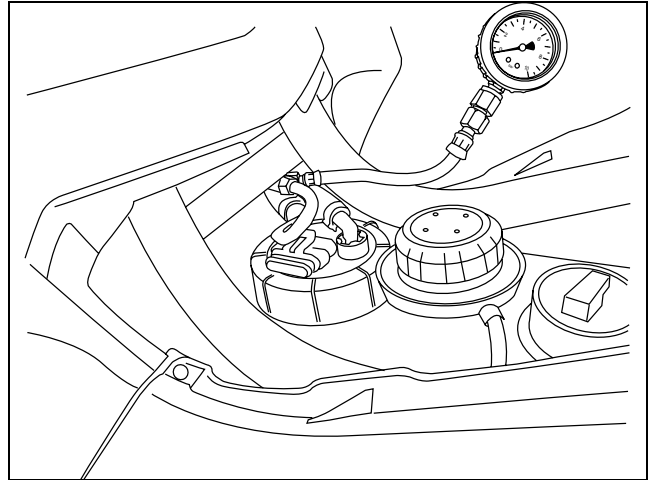
- Remove the storage compartment. See: Procedure 1. page 18.
- Disconnect the fuel injector.
- Remove the fuel injector.
- Remove the fuel injector without disconnecting the supply hose.
- Connect the fuel injector power supply harness tool P/N 756017 to the fuel injector and the battery.
- Place the injector above a pan.
- Actuate the contact switch of the tool 2 times for 5 seconds while respecting a released time of 5 seconds between each action, in order to drop the pressure inside the supply hose of the fuel manifold.



The pressurised jet of fuel may be dangerous for the skin, do not expose the hands to the jet of fuel when opening the injector.

■ Checking fuel pressure

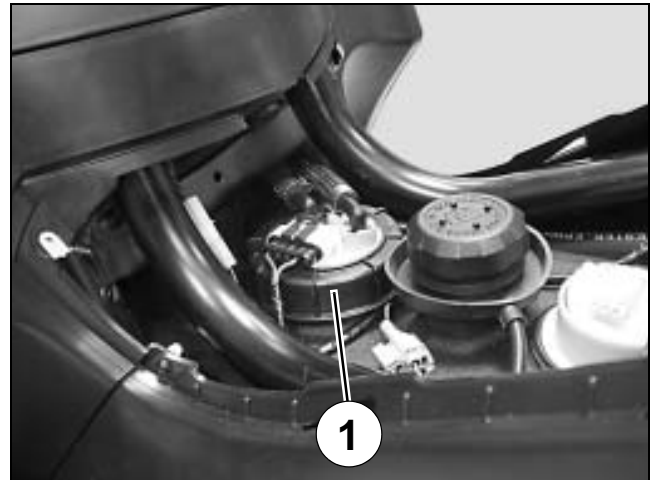
- Remove the tank cover panel. See: Procedure 3. page 19.
- Carry out the procedure for lowering the pressure in the fuel system. See: Procedure 7. page 33.
- Disconnect the fuel supply hose.
- Insert the pressure gauge P/N 757877 between the gauge well and the supply hose.
- Always use hose clamps that are in good condition.
- Turn the ignition on 3 times to bleed the fuel system.
- With the engine stopped, check the fuel pressure which must be 2.5 bars when switching on the fuel pump.



**Before disconnecting the pressure gauges, lower the fuel pressure in the fuel system.
Always reinstall the hoses with new hose clamps.**

■ **Removal of the fuel pump**

- Remove the tank cover panel. See: Procedure 3. page 19.
- Carry out the procedure for lowering the pressure in the fuel system. See: Procedure 7. page 33.
- Disconnect the fuel pump.
- Disconnect the 2 fuel pipes.
- Loosen by hand the pump locking ring. (1)
- Remove the fuel pump.

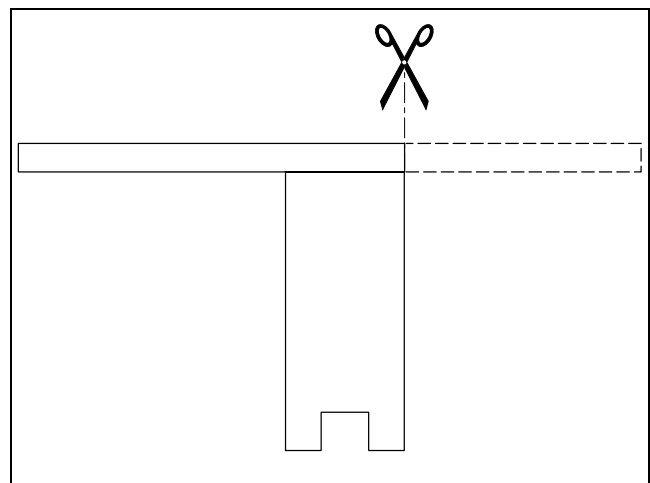


■ **Removal of the fuel gauge**

- Remove the tank cover panel. See: Procedure 3. page 19.
- Disconnect the fuel gauge.
- Using tool P/N 756715, remove the fuel gauge

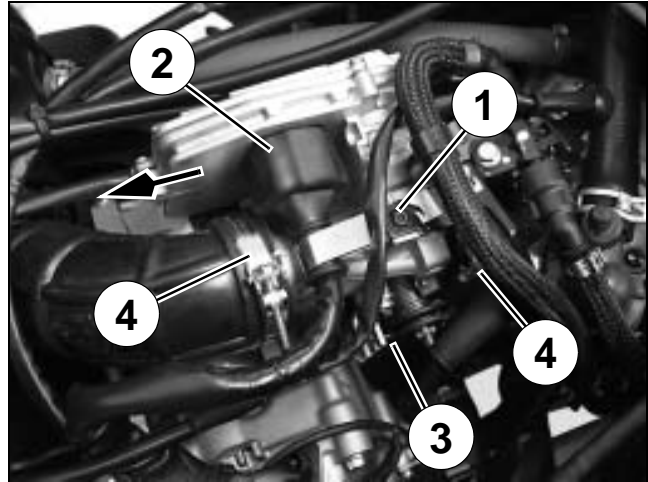


Note: Modify the tool P/N 756715 as shown in the sketch in order to use it with the Geopolis.



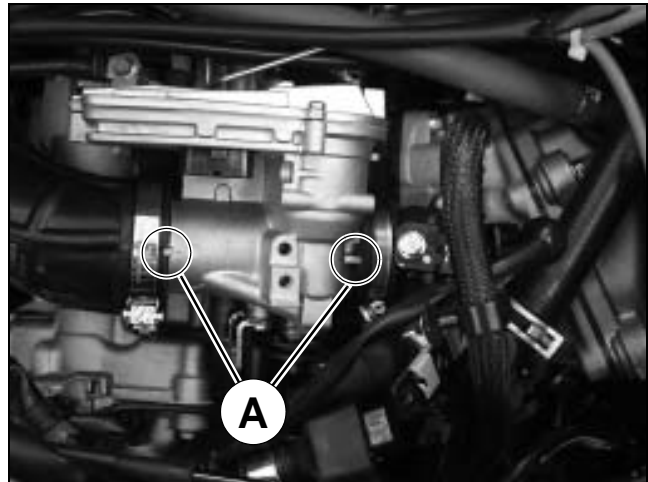
■ Removal of the throttle box

- Remove the storage compartment. See: Procedure 1. page 18.
- Disconnect the battery.
- Remove the screw (1) that secures the wiring harness clamp and the fuel hose anchor bracket.
- Disconnect the throttle unit. (2)
- Disconnect the throttle cable (3) from the throttle unit.
- Loosen the collars. (4)
- Remove the throttle box by first pulling it off the intake coupling.



Reassembly: Make sure the throttle box is properly positioned in the flexible couplings and that the centring pins are locked in. (A)

Check: Using the diagnostic tool, check for fault codes, clear them if necessary.



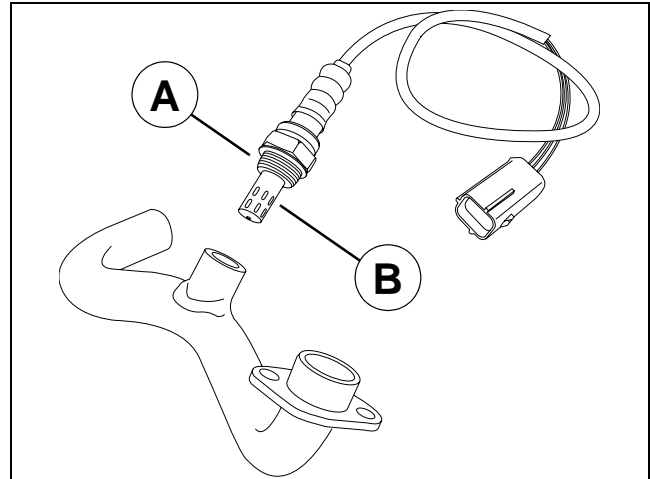
■ Removal of the lambda sensor

- Remove the bottom panel.
- Remove the exhaust. (1 collar and 3 screws).
- Remove the header pipe.



- Disconnect and remove the Lambda sensor.

Note: When reinstalling, lubricate the threads (A) of the sensor with graphite grease.

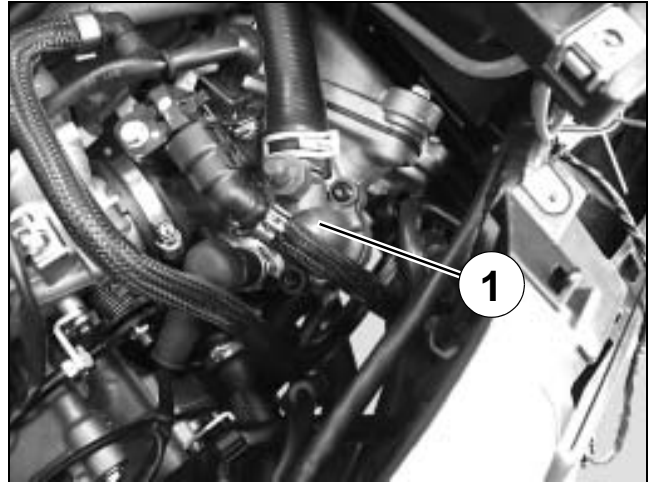


In order not to damage the Lambda sensor, never lubricate or clean the end piece (B) which is exposed to the exhaust gas.

■ Removal of the thermostat

- Remove the storage compartment. See: Procedure 1. page 18.
- Disconnect the battery.
- Remove the screw that secures the wiring harness clamp and the fuel hose anchor bracket.
- Disconnect the lower pump from the coolant pump to drain the cooling system.
- Remove the top (1) from the thermostat (2 screws) without disconnecting the hose.
- Remove the thermostat.

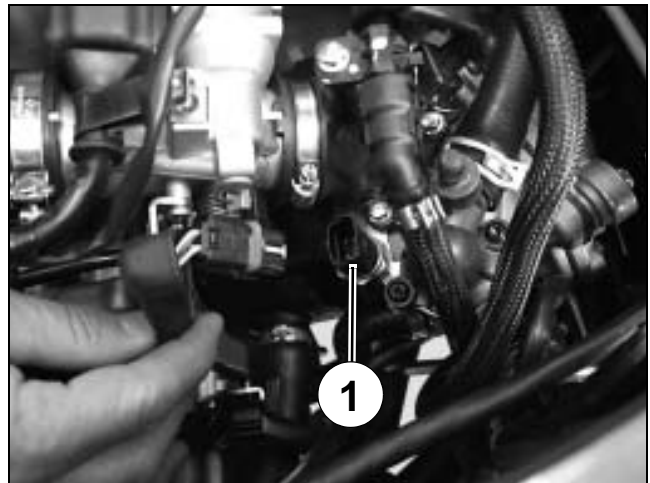
Note: After refitting, bleed the engine circuit hot and check the coolant level in the header tank. (Peugeot approved coolant).



■ Removal of the temperature sensor

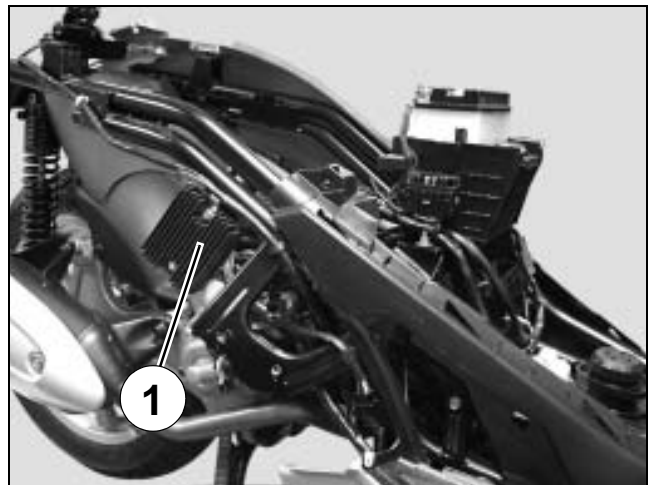
- Remove the storage compartment. See: Procedure 1. page 18.
- Disconnect the battery.
- Remove the screw that secures the wiring harness clamp and the fuel hose anchor bracket.
- Disconnect the temperature sensor. (1)
- Remove the engine temperature sensor.

Note: After refitting, bleed the engine circuit hot and check the coolant level in the header tank.



■ Removal of the regulator

- Remove the tank cover panel. See: Procedure 3. page 19.
- Remove the RH fairing. See: Procedure 2. page 18.
- Disconnect and remove the regulator. (1)



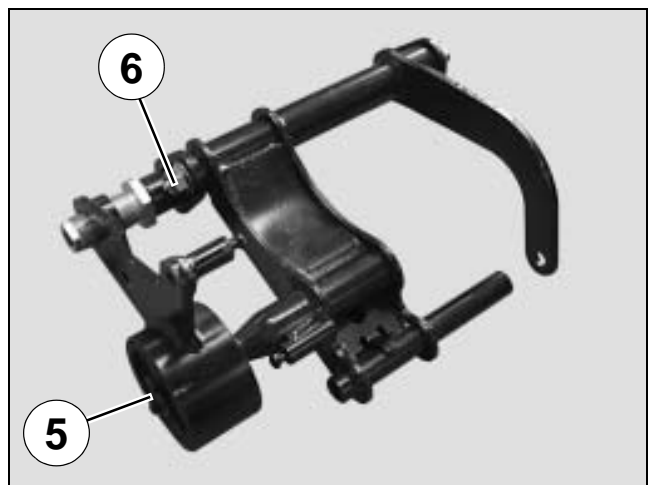
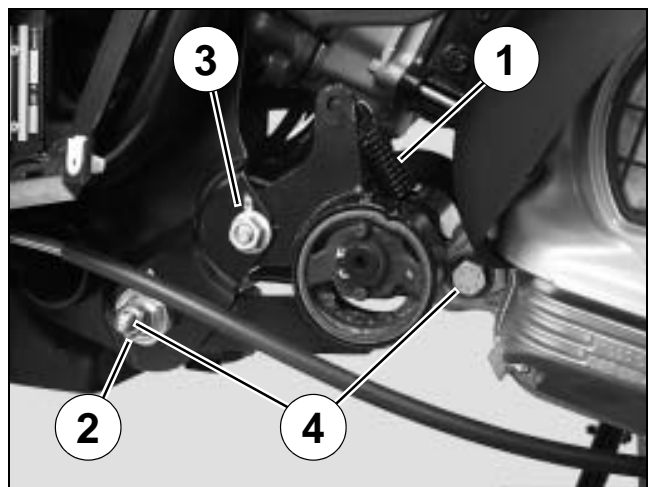
■ Removal of the radiator

- Remove the tank cover panel. See: Procedure 3. page 19.
- Disconnect the fan.
- Remove the front shield panel. See: Procedure 5. page 21.
- Remove the mudguard.
- Remove the upper fixing bolts.
- Drain the cooling circuit.
- Disconnect the 4 hoses of the radiator's cooling circuit.
- Remove the radiator.



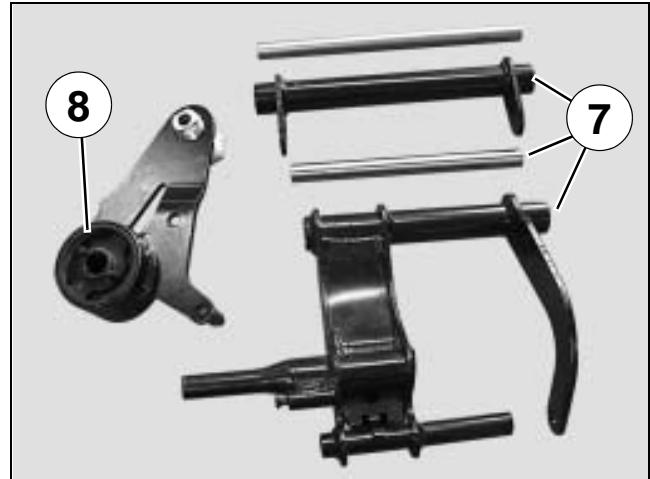
■ Removal of the engine mounting assembly

- Remove the side fairings. See: Procedure 2. page 18.
- Remove the bottom panel.
- Suspend or immobilize the machine securely.
- Remove the tension spring. (1)
- Remove the adjusting ring locknut. (2)
- Remove the screw that secures the silent block holder. (3)
- Remove the engine 2 pins securing it to the frame linkrod and engine linkrod. (4)
- Remove the engine mounting assembly.
- Remove the circlip. (5)
- Remove the linkrod connecting pin. (6)



- Check the condition of the spacers and needle bearings. (7)
- Make sure that the silent block is not cracked.(8)

Note: We recommend greasing all needle bearings when refitting these parts.



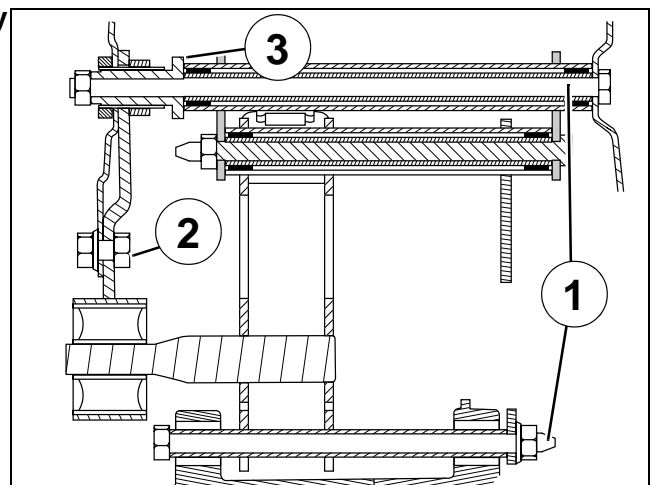
■ Installing the engine mounting assembly

- Assemble the engine linkrod assembly.
- Fit and tighten the linkrod connecting pin.

Note: Reinstall the pin using standard thread lock.

Tightening torque: 3.6 m.daN.

- Install the engine mounting assembly in the frame.
- Fit the 2 pins but do not tighten them. (1)
- Fit screw that secures the silent block holder.(2)
- Screw but do not tighten the adjusting ring, so that it comes against the linkrod.(3)
- Tighten the adjusting ring locknut.(4)



Tightening torque: 10 m.daN.

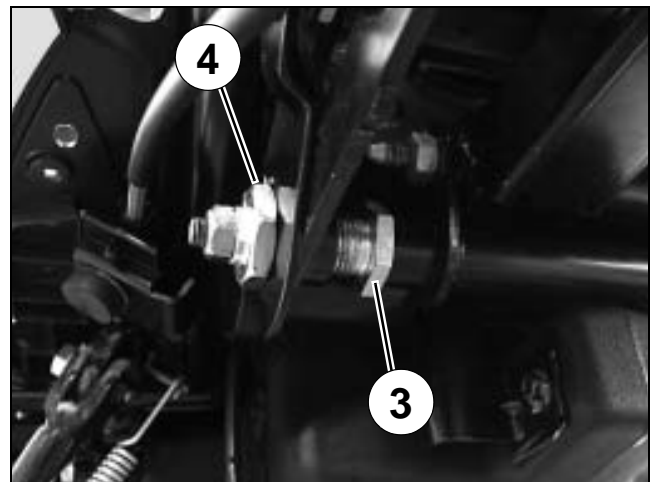
- Tighten the 2 securing pins.

Note: Reinstall the pins using standard thread lock.

Tightening torque: 5.8 m.daN.

- Tighten the screw that secures the silent block holder.

Tightening torque: 6.8 m.daN.



Note: When refitting, respect the way the pins are installed as shown in the figure.

■ Removal of the cylinder head

■ Removal of the cylinder / piston

Note: To remove the cylinder head, remove the power propulsion unit.

- Remove the side fairings. See: Procedure 2. page 18.
- Remove the tank cover panel. See: Procedure 3. page 19.
- Carry out the procedure for lowering the pressure in the fuel system. See: Procedure 7. page 33.

- Disconnect the 2 fuel injector supply hoses.
- Disconnect the lower pump from the coolant pump to drain the cooling system. (1)
- Disconnect the coolant outlet to the thermostat.

- Disconnect:
 - The battery.
 - The fuel injector.
 - The throttle box.
 - The temperature sensor.
 - The lambda sensor.
 - The magneto.
 - The starter motor.
 - The suppressor.

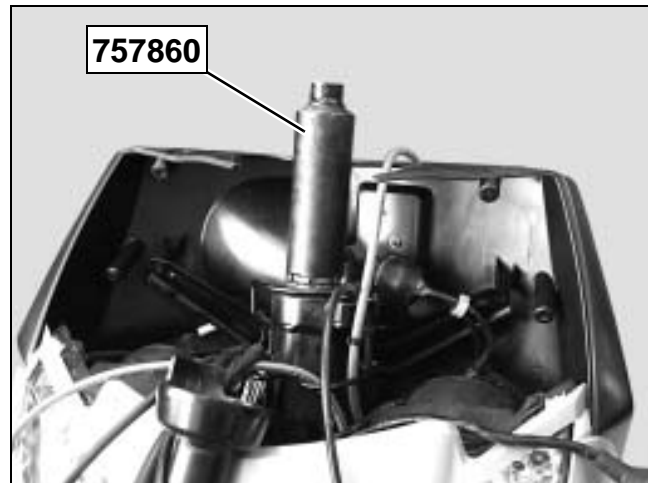
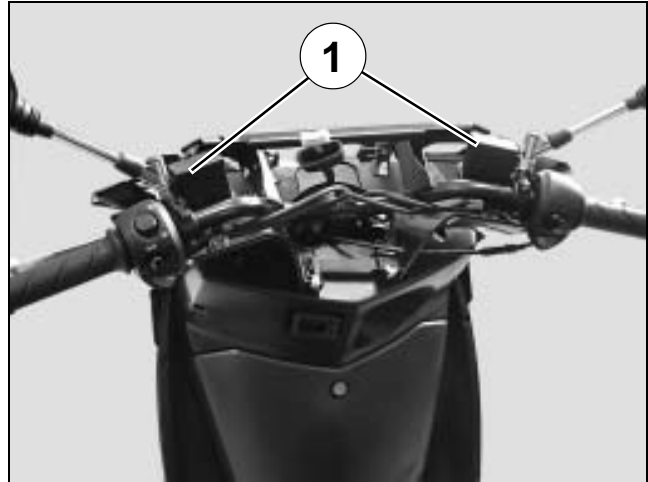
- Dieconnect the the throttle control cable from the throttle box.
- Remove the calliper.
- Remove the hydraulic control from its guides on the engine casing.
- Suspend or wedge the machine frame before removing the power unit.
- Remove the shock absorber lower mounts.
- Remove the linkrod-to-engine connecting pin.
- Remove the power propulsion unit from the frame.

Note: For removal of the cylinder head, cylinder and piston, see the workshop manual:
4 stroke engine. 4 valves. Reference: 758850.

■ Removal of the fork

■ Replacing the bearings of the steering system

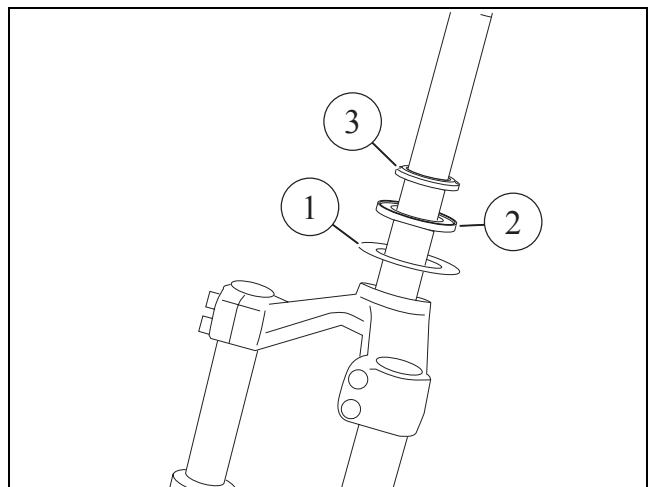
- Remove the front top cover panel.
- Remove the handlebar front and rear covers.
- Remove the 2 upper screws that secure the rear shield panel.
- Remove the braking units on the handlebars.(1)
- Remove the handlebars from the fork tube.
- Remove the front mudguard.
- Remove the front brake caliper from the fork tube.
- Remove the front wheel.
- Using tool P/N 757860 remove the steering locknut.
- Remove:
 - The lock washer.
 - the adjustable cone locknut.
 - the rubber washer.
 - the adjustable cone.
- Remove the fork.
- Remove the balls.
- Using a drift, remove the steering head cups.



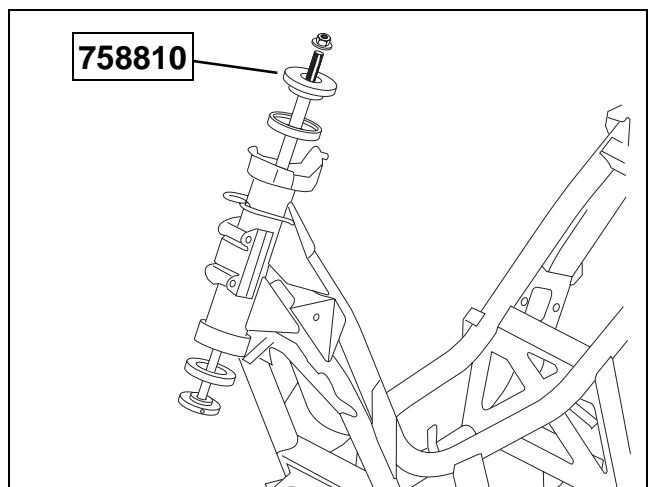
- Using a chisel, pry the steering head cup off by pressing the tool behind the dust cover.



- Install the following new parts:
 - The plain washer. (1)
 - The dust cover. (2)
 - The fork cone. (3)



- Install new steering head cups using tool P/N 758810.



■ Steering system tightening method

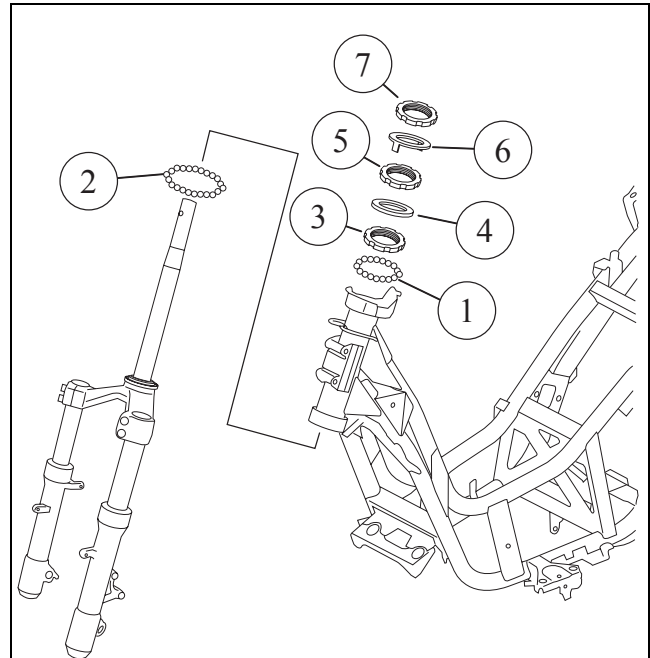
- Grease the cup bearing races.
- Fit the caged ball bearing. (1 and 2).
- Fit the fork into the steering column.
- Install the adjustable cone and tighten it. (3)

Tightening torque: 4 m.daN.

- Loosen and then retighten the adjustable cone.

Tightening torque: 2.2 m.daN.

- Install the rubber washer. (4)
- Finger tighten the adjustable cone locknut (5) so that its notches are aligned with those of the adjustable cone.
- Fit the lock washer (6) in the notches of the locknut and adjustable cone.
- Install the steering head locknut and tighten it. (7)



Tightening torque: 7.5 m.daN.

■ **Removal of the suspension arm**

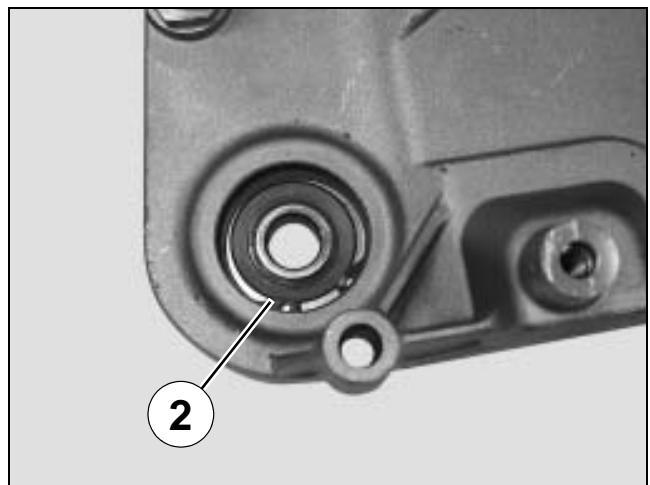
- Remove the exhaust. (1 collar and 3 screws)



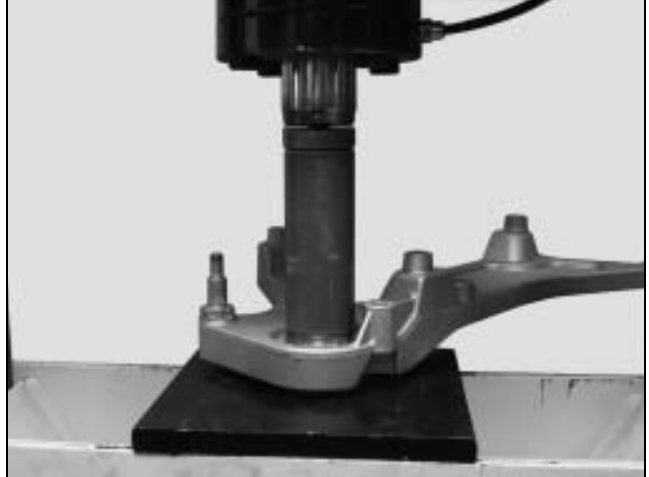
- Remove the pin, the nut retainer and the wheel nut. (1)
- Remove the suspension arm (3 screws and 1 nut).



- Remove the circlip. (2)
- Using a drift, remove the bearing.



- Using a press and a drift driver, place a new bearing in the suspension arm, by pushing against the outer cage of the bearing.
- Install the circlips.







 **UTAC**
CERTIFICATION
SYSTEMES QUALITE
ISO 9001
Certificat n° SQ/0766-3

P/N. 758915

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