QUADRO 3

USER MANUAL

EURO 4

QUADRO

Dear Customer,

QUADRO thanks you for choosing this vehicle, and welcomes you as a customer!
You can help to maintain the efficiency, performance and safety conditions of your vehicle with careful maintenance, performed only by authorised *QUADRO* dealers or workshops.
Our technicians are committed to producing high quality vehicles, the result of our extensive experience, to guarantee you the pleasure of safe driving over time.
Please read the owner's handbook supplied with your *QUADRO* vehicle carefully, and make sure that all routine and extraordinary maintenance and any technical
servicing is performed exclusively by the specialist staff from our Network of *QUADRO* Dealers.
To ensure the safety, reliability and value of your vehicle, and to maintain the validity of the warranty, use only original
QUADRO spare parts and recommended lubricants.

QUADRO

QUADRO 3

Before you begin using the vehicle, you must read this i nstruction manual carefully

INDEX

CHAP.1 INTRODUCTION


Read this manual before use

1.1 GENERALIT INFORMATION

This manual is an integral and essential part of your vehicle.

Before you begin using the vehicle, you must read this instruction manual carefully and follow all instructions it contains precisely.
The vehicle must not be used by persons who have not thoroughly read and understood the instructions contained in this manual. This manual contains simple and clear descriptions of the operations necessary to understand and use your vehicle, as well as recommendations for safe use of your vehicle in order to avoid personal injury. It also describes the main maintenance operations and periodic checks which must be performed on the vehicle.

The guarantee of correct operation and safety of the vehicle strictly requires that all instructions contained in this manual be applied.

The manual must always accompany the vehicle even when it is resold.

This Owner's Handbook is an integral part of the vehicle and it must therefore be kept in a safe place accessible to all persons who might need to consult it.

If the manual is lost or damaged, request a new one from your dealer, giving them the vehicle specifications.

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Quadro3
USE AND MAINTENANCE
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CHAP.2 SAFETY PRECAUTIONS AND RECOMMENDATIONS

SAFETY PRECAUTIONS AND RECOMMENDATIONS

2.1 ICONS AND INDICATIONS

The symbols below are important for thoroughly understanding this booklet: they indicate the sections where it is necessary to pay greater attention. The symbols are different from each other so it is easier to position of the subjects in the different sectors.

Read this manual before use

DANGER OF BURNS
You might get burnt if you do not observe the instructions preceded by this symbol.

HAZARD FROM MOVING PARTS
Failure to observe the instructions preceded by this symbol may cause dragging, crushing and cutting

BURNING OR ELECTRIC SHOCK HAZARD
Failure to observe the instructions preceded by this symbol may cause burns or electric shocks.

PERSONAL SAFETY
Failure to observe the instructions preceded by this symbol may be very dangerous for people.

LOOKING AFTER THE VEHICLE
Failure to observe the instructions preceded by this symbol causes serious damage to the integrity and/or safety of the vehicle, sometimes even the nullification of the warranty.

PROTECTION OF THE ENVIRONMENT
Instructions preceded by this symbol indicate proper behaviour so as not to damage the natural environment.

EXPLOSION HAZARD
Failure to observe the instructions preceded by this symbol may be very dangerous for people.

RESIDUAL RISKS
This shows the presence of hazards caused by residual risks that the user must pay attention to avoid injury or damage.

FLAMMABLE LIQUID HAZARD
Failure to observe the instructions preceded by this symbol may be very dangerous for people.

PROHIBITION REGARDING THE LUBRICATION OF MOVING PARTS
Failure to observe the instructions preceded by this symbol may be dangerous people.

PROHIBITION ON REMOVING THE GUARDS
Failure to observe the instructions preceded by this symbol may be very dangerous for people

OBLIGATION TO WEAR APPROPRIATE GARMENTS
Failure to observe the instructions preceded by this symbol may be very dangerous for people

OBLIGATION TO USE PROTECTIVE GLOVES
Failure to observe the instructions preceded by this symbol may be very dangerous for people

OBLIGATION TO USE SAFETY FOOTWEAR
Failure to observe the instructions preceded by this symbol may be very dangerous for people

FUEL

2.2 POSITIONING INFORMATIVE STICKERS

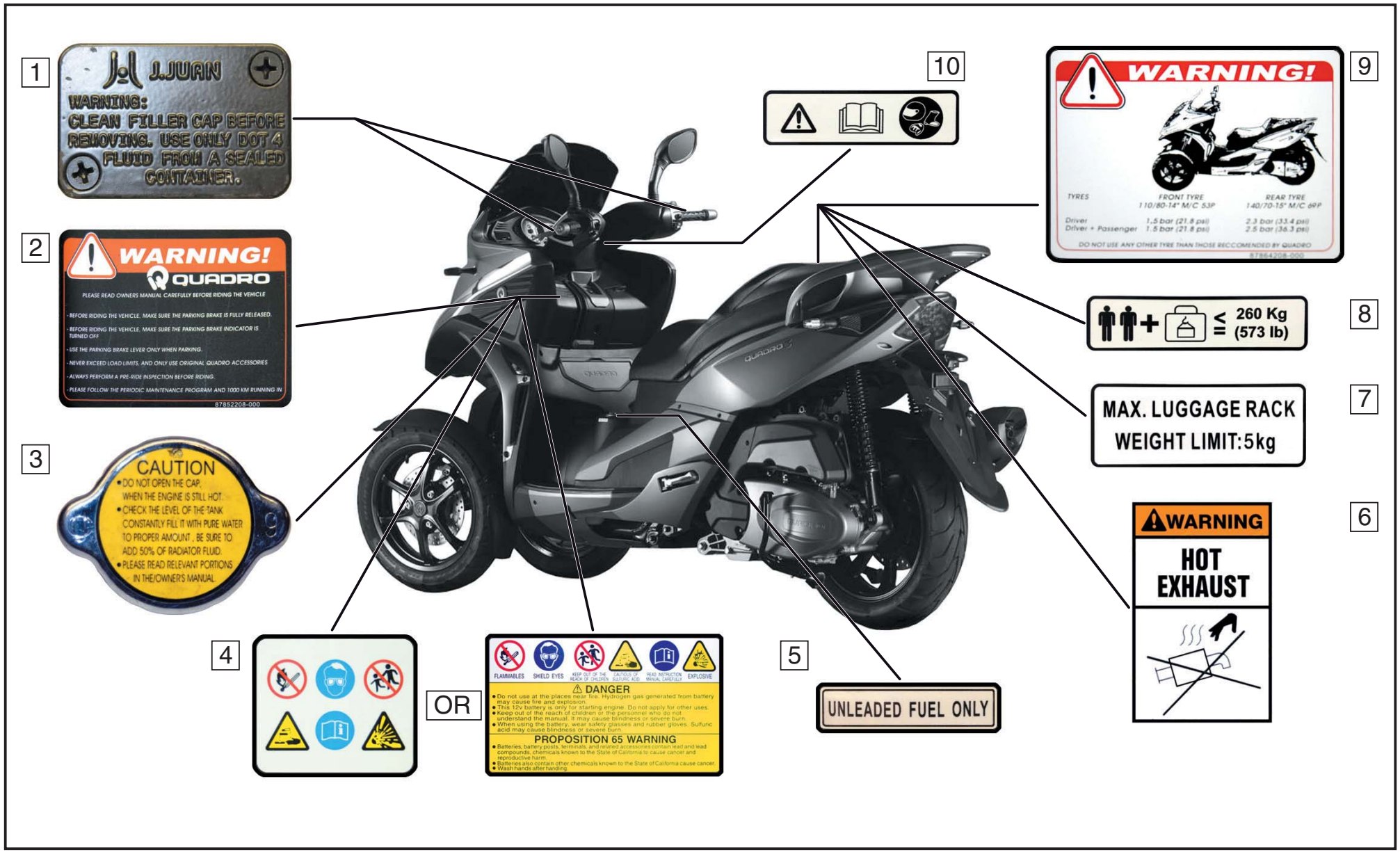


Fig. 01

QSI0075

REFER TO FIGURE 01	TYPE OF STICKER	DESCRIPTION
1	Brake fluid	Clean the tank cap before use. Only use DOT 4 brake fluid from a sealed container
2	General	- Carefully read the Use and Maintenance manual before setting off on the vehicle. - Before driving off on the vehicle, make sure you have released the parking brake completely. - Before driving off on the vehicle, make sure that the parking brake tell tale light is off. - Only use the parking brake when the vehicle is parked. - Never exceed the payload weight allowed and only use genuine Quadro accessories. - Carry out a rough check of the functions before driving off. - Always carry out a scheduled servicing and check once you have reached 1000 km.
3	- Radiator	- Do not open the radiator cap while the engine is still warm. - Check the level of the tank constantly and top up with a 50 - 50% water/coolant solution. - Read the quantities in the Maintenance manual.
4	Battery	- Do not use in places with naked flames present. The hydrogen gas generated by the battery could cause fires and explosions. - This 12v battery can only be used to start the motor. Do not use for other purposes. - Keep out of the reach of children and persons who have not learnt the information from the instruction manual. It may cause serious burns. - When touching the battery, wear protective goggles and rubber gloves. Sulphuric acid could cause blindness and serious burns. - The battery, the poles of the battery, the terminals and the relative components contain lead and lead compounds and chemical substances that could cause cancer and damage to the reproductive system. - The batteries contain other chemical substances that could cause cancer. - Wash your hands after handling the battery.
5	Fuel	Only use unleaded petrol with less than 10% ethanol and with a minimum octane number 95 (RON).
6	Exhaust terminal	High temperature exhaust terminal: danger of serious burns if touched.

SAFETY PRECAUTIONS AND RECOMMENDATIONS

REFER TO FIGURE 01	TYPE OF STICKER	DESCRIPTION		
7	Maximum weight on the rear rack/pillion grab rail	Maximum weight limit that can be transported on the rear rack/pillion grab handle. 5 kg		
8	Maximum permissible load	Do not exceed the maximum load limit allowed (260kg -573 lb)		
9	Tyres		Front tyre:	Rear tyre:
		Dimensions	110/80 - 14” M/C 53P	140/70 - 15” M/C 69P
		Pressure (just driver)	1,5 bar (21,8 psi)	2,3 bar (33,4 psi)
		Pressure (driver + passenger)	1,5 bar (21,8 psi)	2,5 bar (36,3 psi)
		Do not use other tyres that are not recommended by Quadro.		
10	Safety	Carefully read the Use and Maintenance Manual and always use adequate technical clothing		

2.3 GENERAL RECOMMENDATIONS AND REQUIREMENTS

Using Quadro3 requires knowledge of driving techniques for two-wheeled / three-wheeled vehicles.
Ensure you have learnt and practised these techniques with a qualified driving instructor before using the scooter.

Quadro3 has been designed to offer the driver and passenger maximum comfort and safety, however this can only be obtained through responsible use of the scooter.

When necessary, we recommend practising the scooter functions away from heavily trafficked areas.

Do not drive the vehicle if you do not have a valid driving licence.

Driving while under the influence of alcohol and drugs or medicaments, has a significant negative effect on reaction times, decision-making and driving abilities in general; it is also generally punished in accordance with the laws of the country in which you are driving. .

2.4 CLOTHING

The driver and passenger must wear clothing and safety equipment which meets applicable legislation in the country the vehicle is being driven in and protects them as far as possible in the case of an accident. We recommend always wearing a type-approved helmet, visor/goggles, gloves, overall and boots; you should always avoid any clothing or accessories which could get caught in the moving parts of the scooter and/or compromise the driver's view and safety.

Wear adequate technical clothing and safety equipment that is approved and certified and that guarantees optimal protection to the driver and passenger. You are recommended to always wear clothing that makes the driver visible to other road users.

While the scooter is being serviced, wear clothes and protective equipment that are suitable for the operation being carried out.

2.5 REFUELLING THE VEHICLE

While refuelling the scooter, always turn off the engine and check that there are no leaks in order to avoid breathing in petrol fumes; do not smoke, do not use naked flames and do not use mobile telephones, as these may all ignite the highly explosive fuel vapour, and check that there are no fuel leaks.

After refuelling, ensure that the fuel filler cap is closed correctly.

Contact a doctor immediately if fuel is swallowed or comes into contact with eyes or skin.

2.6 SAFE DRIVING

Quadro3 has been designed to transport the driver and a maximum of one passenger. Before driving you must perform a general check on the condition of the scooter, particularly the safety systems, lights and tyres; if you should notice any serious faults, consult an authorised Quadro dealer immediately.

While driving, the driver must keep both hands on the handlebars and the passenger must hold onto the handles at the sides of the seat. Both the passenger and driver must keep both feet on the footrest while the scooter is in motion. We therefore advise you do not transport passengers who are not able to keep their feet firmly planted on the footrest.

Both the driver and the passenger must sit in the right position that allows the driver to control all the functions of the vehicle and does not involve an unbalancing of the load that could jeopardise the stability of the scooter.
Always transport the passenger on the rear of the seat.
Before setting off, allow the scooter to warm up and anyway do not push it to its maximum.

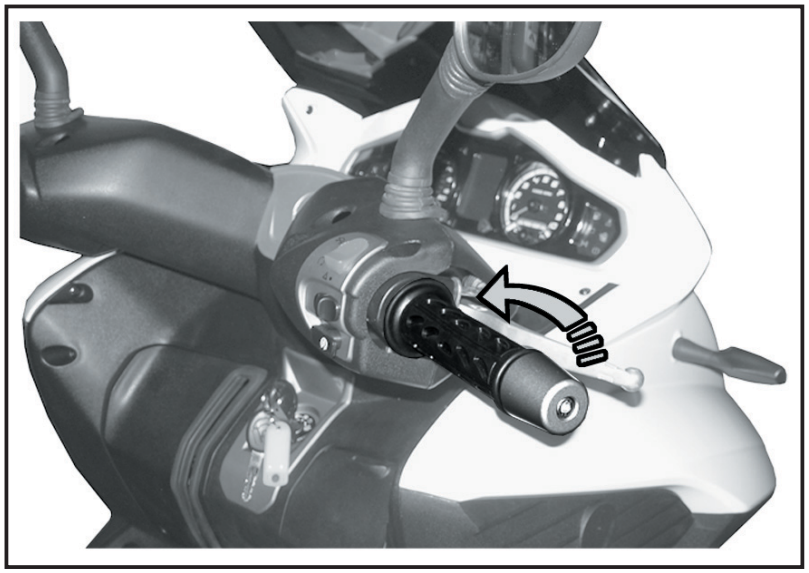


Fig. 01 *QSI0076*

When starting off, release the brake lever and turn the throttle handle slowly in the direction shown by the arrow (**Fig. 01**); to decelerate, release the throttle handle accompanying it.

If you open and close the throttle handle abruptly it could cause the vehicle to race forward suddenly and a possible loss of vehicle control.

Do not attempt to start the vehicle with the throttle open as you might lose control of the scooter.

Comfortable braking is guaranteed by the gradual and simultaneous use of both the front and rear brake.

Should it be necessary to brake in an emergency, do not let the throttle go abruptly but accompany it as quickly as possible to the "gas closed" position.

During a long stretch downhill, release the throttle handle and brake gently intermittently. Using the brakes for a long time continuously could cause them to overheat thus losing braking efficiency.

In order to avoid possible collisions, you should:

- always make yourself visible to other drivers, ensuring you do not drive in their blind spots;
- use appropriate caution when going through road junctions;
- Use the direction indicators to signal a lane change or turning.

Quadro3 has been designed and developed primarily for use on roads; you should therefore avoid long and/or particularly uneven stretches of unpaved roads.

If the road surface is wet, drive very carefully and never brake abruptly as the wheels might lock as a prevention thereby increasing the scooter's stopping distance and time. Always drive over bumpier road surfaces such as tram rails or potholes slowly.

In case of strong gusts of wind, drive the vehicle at a moderate speed.

You should always adapt your speed on the basis of the current road/traffic/atmospheric conditions, and must never in any case exceed the applicable speed limit.

Do not touch any of the mechanical components, as these can reach high temperatures during operation (for example, the exhaust pipe).

Do not start the engine in closed and/or poorly ventilated environments.

The use of the scooter in a closed and/or poorly ventilated environment increases the risk of carbon monoxide poisoning.

2.7 WHEN AT A STANDSTILL

When preparing to get off the scooter, always check you have activated the HTS system lock. If you are carrying a passenger, get the him or her to get off the vehicle first.

The scooter is equipped with a tilting system lock; carefully read section << 4.25 - HTS system>> for correct use when parking/stopping the scooter.

When parking your scooter, ensure it is left in a location where it is not likely to be hit by other traffic; it is also advisable not to park the scooter on steep slopes, uneven surfaces or on leaves, branches or other flammable materials, as the high temperature reached by some components could ignite them

2.8 - LOAD LIMITS

In order not to compromise the stability of the scooter, it is essential not to exceed the maximum permissible load, and to distribute this as uniformly as possible (refer to paragraph «**4.4 - Technical Data**»). You must ensure that any loads are correctly positioned and/or restrained in the areas laid out for them. You should also limit your speed on the basis of the transported load.

Greater stability can be achieved by placing loads inside the compartments provided (the compartment under the seat and the object compartment). Furthermore it is advisable always to fix loads being transported in such a way that during the journey they do not move so as to unbalance the weights causing you to lose control of the vehicle.

The sum of the weight of the driver, the passenger and the load transported must never exceed the maximum specified in section <<4.4 - Technical Data>> of this Use and Maintenance Manual and shown on the rating plate in the compartment under the seat.

Never transport loads on the scooter handlebars.

2.9 UNAUTHORISED MODIFICATIONS/ACCESSORIES AND SPARE PARTS

Do not make any type of modification to the scooter (mechanical components or bodywork), and always use original Quadro components/accessories in order not to compromise vehicle operation and driver/passenger safety. Never install accessories that require the electrical system to be modified.

The use of non-original and/or non-approved parts, even if purchased at authorised Quadro dealers, may result in your warranty lapsing and/or scooter malfunctions.

Never drive the scooter with removed and/or damaged parts.

Rims and tyres are the point where the scooter is in contact with the road surface. The use of rims and tyres with specifications different from those indicated in this Use and Maintenance Manual or not approved could cause instability or a loss of control of the vehicle.

2.10 SAFETY INSTRUCTIONS DURING SERVICING AND MAINTENANCE

- All maintenance operations must be carried out with the vehicle at a standstill on a stand.
- During every phase of the maintenance, users must have the necessary personal protective equipment (gloves, glasses, working clothes).
- The tools used for maintenance must be fit for purpose and of good quality.
- Always keep the area reserved for maintenance operations clean and dry being careful to remove any oil patches in particular.
- Never stick your limbs or fingers in openings without guards on the vehicle.
- Do not use petrol or flammable solvents like detergents but always use non-flammable and non-toxic solvents.
- Limit the use of compressed air (max 2 bar) as far as possible and protect yourself with glasses with side shields.
- Never use naked flames as methods of lighting when carrying out checking or maintenance operations.
- After every maintenance or adjustment operation, make sure no tools or extraneous objects are left among the elements providing motion to the vehicle so as to avoid damage to the vehicle and/or injury to the users.

The maintenance and servicing operations must only be done by qualified personnel.

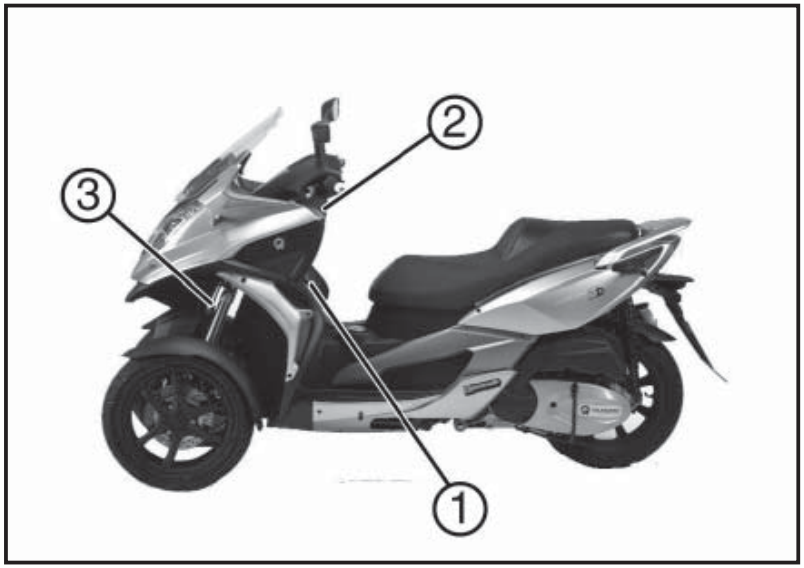


Fig. 01 *QSI0010*

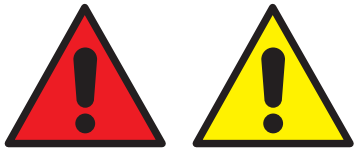
Fig. 02 *QSI0011*

2.11 SAFETY AND REPAIR SYSTEM

The vehicle is fitted with the following safety devices (**Fig. 01**):

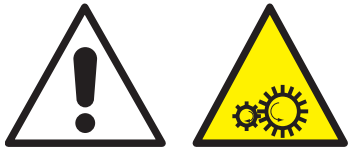
1 - Parking lever
2 - Steering block
3 - Hydraulic Tilting System

The vehicle is fitted with the following guards (**Fig. 02**):



A: Hydraulic Tilting System cylinder cover

B - Heat shield on the exhaust pipe.



Under no circumstances may the guards. labels and plates on the vehicle be modified or removed.

2.12 RESPONSIBILITIES AND LIMITS OF USE

Failure to comply with the operating instructions and safety requirements in this manual will relieve the manufacturer of all responsibility. In driving this vehicle, the driver will assume all the risks associated with the use.

If the maintenance of the vehicle is carried out in a way that does not comply with the instructions provided with non genuine spare parts or anyway in such a way as to jeopardize integrity or modify its characteristics, the manufacturer shall be considered relieved of all responsibility regarding the safety of the person and the defective functioning of the vehicle.

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CHAP.3 HANDLING AND TRANSPORT

3.1 PRELIMINARY OPERATIONS

The vehicle is shipped in perfect working order, it is packaged with a layer of bubble wrap, is anchored to a wooden pallet and is placed in a cardboard box.

When you receive it, remove the packaging and check the vehicle is not damaged. If it is, inform the dealer and the shipper.

The packaging (cardboard box, wooden pallet, bubble wrap, plastic bags etc.) must not be left within the reach of children as it could be dangerous.

3.2 HANDLING

The vehicle weights 200 Kg so, when it is handled, appropriate lifting devices must be used. You are advised to use a forklift truck or a lifting beam.

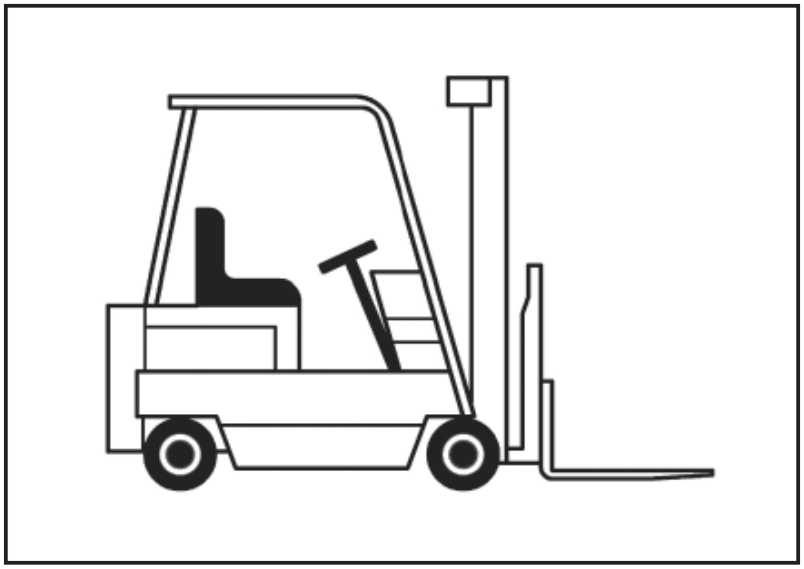


Fig. 01 QSI0012

3.3 TRANSPORT

Do the following to transport the vehicle:

- Switch off the engine.
- Use the approved straps to tie the vehicle. Do not use standard ropes as they could come untied.
- Using the straps, fix the vehicle to the transport vehicle securely to stop it sliding or falling.
- While transporting the vehicle, moderate the speed especially on bends.

CHAP. 4 DESCRIPTION OF THE VEHICLE

DESCRIPTION OF THE VEHICLE

4.1 INTENDED USE

The vehicle is only intended to be used outdoors.
The vehicle is approved for road use and transporting two people.
Any use other than that specified is to be considered prohibited, not intended by the manufacturer and of heightened danger.

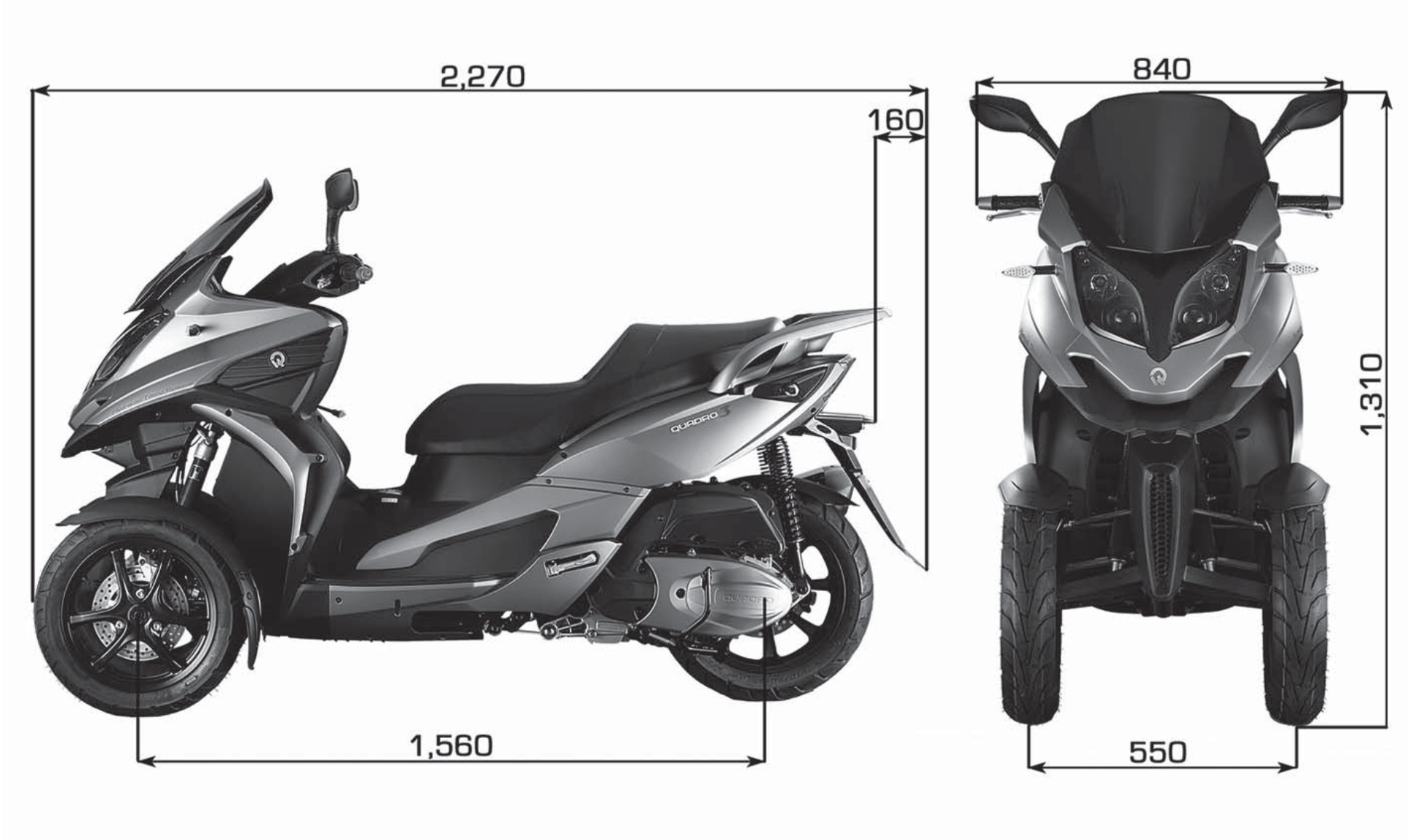
4.2 NOT INTENDED, INCORRECT USE

The vehicle has been designed and manufactured for the specified use: usage other than that indicated by the manufacturer is prohibited and could be dangerous for the users.

IT IS ABSOLUTELY PROHIBITED

- To start up the engine in internal environments. The exhaust gas produced by the engine contains carbon monoxide and other volatile toxic substances which may be deadly if breathed in.
- To drive the vehicle indoors or outside in areas where there is poor ventilation / air exchange.
- To touch the hot engine or exhaust pipe.
- To drive the vehicle under the influence of alcohol or drugs.
- To drive the vehicle if you are less than eighteen years of age and without satisfying the legal requisites to do so.
- To use non-genuine parts.
- To carry out maintenance by non-authorised persons.
- To carry out any maintenance operation while the engine is running.
- To carry out any operations or adhere to standards of conduct not specified in this use and maintenance manual.
- To drive off by mounting the vehicle still on its stand. In any case the rear wheel does not turn when it comes into contact with the ground to avoid abrupt take off.
- To adjust the mirrors while moving: you might lose control of the vehicle.

4.3 TECHNICAL DATA



QSI0009

VEHICLE TECHNICAL DATA	Measure-ment unit	
Length	mm	2,270
Wheelbase	mm	1,560
Track	mm	550
Width (at handlebars)	mm	840
Height (to cowl)	mm	1,310
Seat height	mm	810
Mass in running order	kg	220
Technically admissible mass	kg	480
Maximum payload (driver + passenger + load)	kg	260
Fuel tank	l	13.2
Fuel reserve	l	2.9
Frame	-	Steel tubes and sheet
Seats	-	2
Front suspension	-	HTS system (oleo-pneumatic tilting suspension)
Rear suspension	-	Double exhaust with preloaded spring
Front (disc) brakes	mm	240
Rear (disc) brakes	mm	256
Front wheel rims	in	14 x 2.75
Rear rim	in	15 x 3.75
Front tyre	-	Tubeless 110/80-14 M/C 53 P
Rear tyre	-	Tubeless 140/70-15 M/C 69 P
Front tyre pressure	bar	1.5
Rear tyre pressure	bar	2.3 just driver to 2.5 with passenger

ENGINE TECHNICAL DATA	Measurement unit	
Engine code	-	T69N
Type	-	Single Cylinder, four stroke, four valve
Displacement	cm^3	346
Bore stroke	mm	82 x 65.6
Compression ratio	-	10.6 : 1
Start up	-	Electrical
Minimum engine speed	rpm	1700 ± 100
Engine oil	l	SAE 10W - 60 API-SJ (1.7 l)
Transmission	-	Automatic dry centrifuge clutch, v belt, continuous automatic variator
Final drive	-	Gears in oil bath
Final reduction oil	l	SAE 80W - 90 (200 cm^3)
Lubrication	-	With pressurised wet sump pump
Cooling	-	Liquid type with fan
Fuel supply	-	Electronic injection
Fuel	-	Unleaded petrol, minimum 95 RON (N.O.R.M.) Only use unleaded petrol with less than 10% ethanol
Ignition system	-	Electronic
Spark plug	-	NGK CR8E
Exhaust	-	Catalytic converter with lambda probe
Emission compliance	-	EURO 4
Fuel consumption	l/100km	4,1 (according to WMTC approval requirement cycle)
Emissions (CO2)	g/km	92 (according to WMTC approval requirement cycle)

FEATURES OF THE ELECTRICAL SYSTEM	
Battery	12V 10Ah (GTX12-BS)
Position lightbulbs	12V LED
Front lightbulbs	12V/35-35W H8
Stop lightbulb / position lightbulbs	12V LED
Turn signal lightbulb	12V LED
Instrument cluster lightbulb	12V 3W
Horn	12V 1.5A
30A fuse	Battery charger circuit
15A fuse	General
10A fuse	Lights
15A fuse	EFI
30A, 15A, 10A fuse	Spare

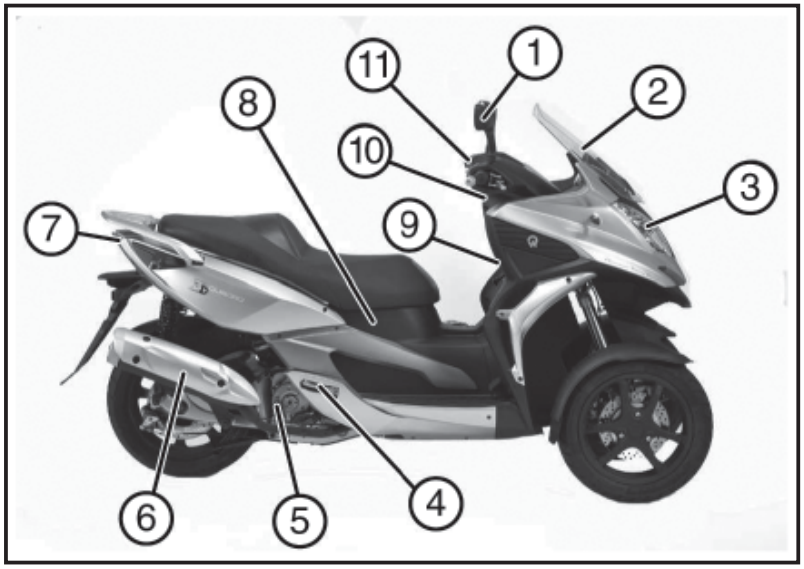


Fig. 01 *QSI0013*

4.4 COMPONENT LOCATION

Right view (**Fig. 01**)

1 - Right-hand mirror
2 - Windscreen
3 - Front light cluster
4 - Right-hand passenger footrest
5 - Engine oil cap/dipstick
6 - Silencer
7 - Rear light cluster
8 - Spark plug
9 - Front box
10 - Ignition key
11 - Right-hand handlebar mounted controls

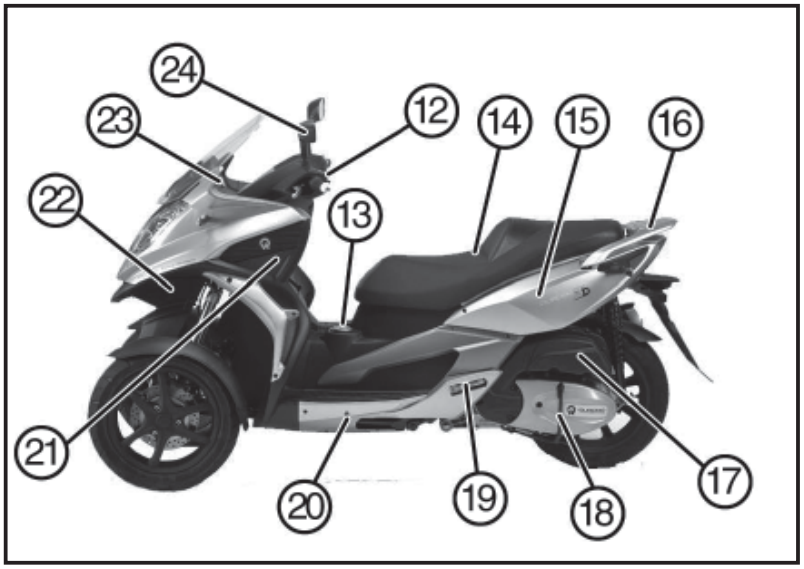


Fig. 02 *QSI0014*

Left view (**Fig. 02**)

12 - Left-hand handlebar mounted controls
13 - Fuel cap
14 - Seat
15 - Fuses
16 - Carrier
17 - Air filter
18 - Stand
19 - Left-hand passenger foot rest
20 - Coolant tank
21 - Battery
22 - Horn
23 - Instrument panel
24 - Left-hand mirror

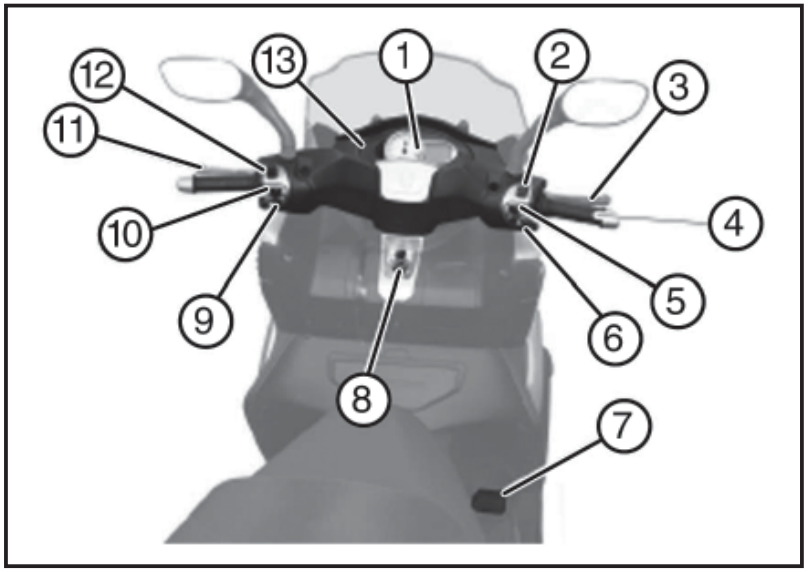


Fig. 01 *QSI0015*

4.5 DASHBOARD LEGEND (Fig. 01)

1 - Instrument panel
2 - Engine cut-off button
3 - Front brake lever
4 - Accelerator control grip
5 - Hazard blinkers
6 - Start-up button
7 - Integrated brake pedal (front/rear)
8 - Ignition key
9 - Horn button
10 - Turn signal switch
11 - Integrated brake lever (front/rear)
12 - Light button
13 - External temperature indicator

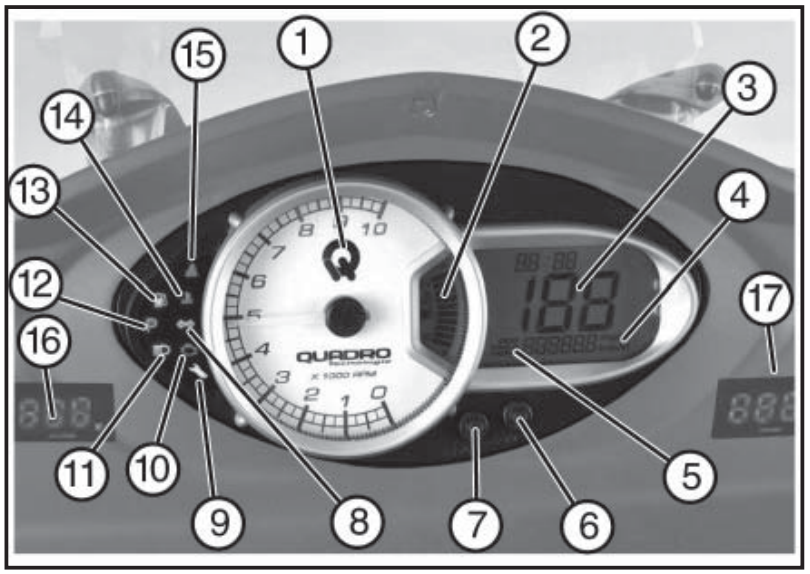


Fig. 02 *QSI0016*

4.6 INSTRUMENT CLUSTER LEGEND (Fig. 02)

1- Rev counter
2 - Fuel gauge
3 - Tachometer
4 - Measurement unit (km/h / mph)
5 - Trip counter / odometer
6 - Adjust button
7 - Select button
8 - Turn signal tell-tale light
9 - Scheduled servicing tell-tale light
10 - Engine malfunction tell-tale light
11 - Full-beam headlight tell-tale light
12 - HTS block and parking brake tell-tale light
13 - Reserve fuel tank tell-tale light
14 - Indicator light not active on this model
15 - Hazard light tell-tale light
16 - External temperature
17 - Coolant tank temperature

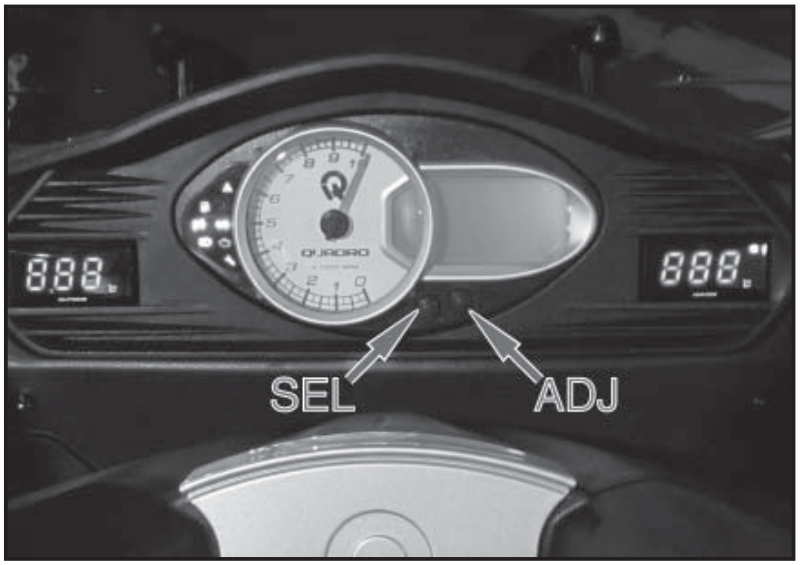


Fig. 01 QSI0026

4.7. INSTRUMENT PANEL FUNCTIONS

List of functions

- Odometer «ODO»
- Trip counter «Trip A» and «Trip B»
- Clock

Scrolling through the functions

Press “ADJ” briefly to change between ODO → TRIP A and → TRIP B

Resetting the trip meter:

Select the trip meter you wish to reset and then hold down «ADJ»

Changing from kilometres per hour [km/h] to miles per hour [mph]

Hold down «ADJ» to toggle

Clock setting (sequence)

1. Hold down «SEL» until the hour digits start to flash
2. Press «ADJ» to set the hours (one press = + 1 hour)
3. Press «SEL» to set the minutes
4. Press «ADJ» to set the minutes (one press = + 1 minute)
5. Press «SEL» to exit the clock setting mode

Fig. 01 QSI0017

4.8 SCHEDULED SERVICING TELL-TALE LIGHT (Fig. 01)

The vehicle is fitted with a service tell-tale light that comes on when the coupons for scheduled servicing fall due.
To turn off the tell-tale light, consult an authorised Quadro dealer

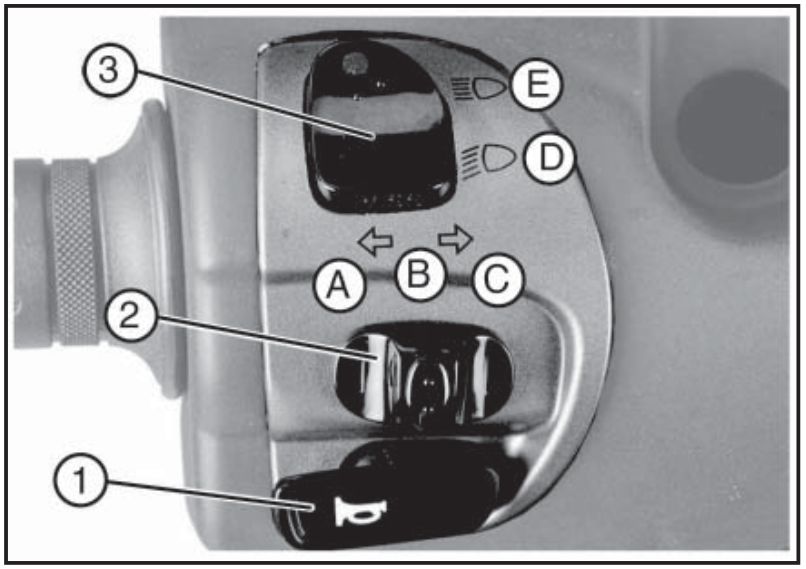


Fig. 02 QSI0018

4.9 - LEFT-HAND HANDLEBAR MOUNTED CONTROLS (Fig. 02)

Horn button «1»

With key-controlled switch at <<ON>>, press the button to sound the horn

Turn signal switch <<2>>

With key-controlled switch at «**ON**» move the stalk rightwards «**C**» to turn on the right-hand blinkers and leftwards «**A**» to activate the left-hand blinkers. Once on, the lever automatically returns to the central position. Press button «**B**» to deactivate the blinkers.

Light button «3»

With the key-controlled switch at «**ON**» and the light switch in dipped position, the full-beam headlights are activated by moving button «**3**» to position «**E**».
The dipped beam headlights are activated by pressing button «**3**» in position «**D**».

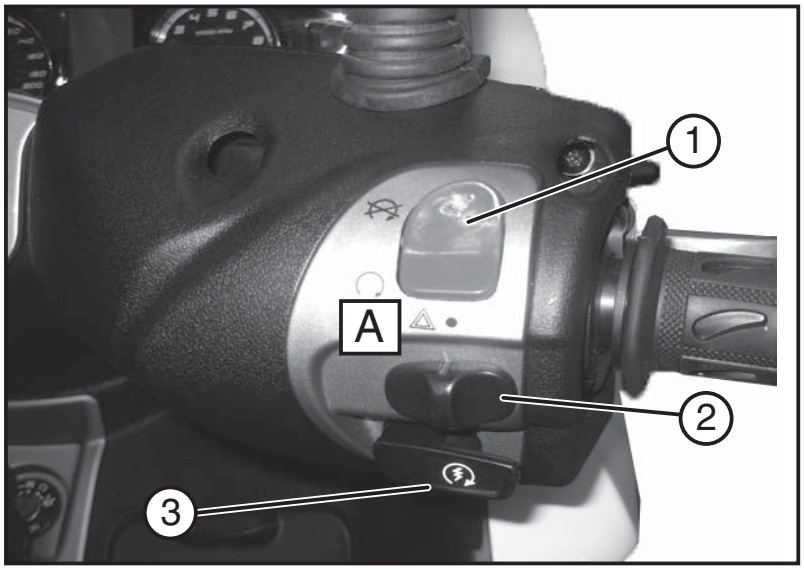


Fig. 01 *QSI0078*

Fig. 02 *QSI0020*

4.10 - RIGHT-HAND HANDLEBAR MOUNTED COTROLS (Fig. 01)

Engine cut-off button «1»

To turn off the vehicle, press button «1», then turn the key-controlled switch to «**OFF**».

By pressing button «1» and leaving the key-controlled switch at <<ON>>, start up is inhibited but not the lighting up of the instrument panel.

Hazard lights switch «2»

By moving the switch «**2**»to position «**A**» the hazard lights are activated

Start-up button «3»

To start up the vehicle, turn the key-controlled switch to «**ON**», pull the front or rear brake lever and press the starter button «**3**» .

4.11 KEYS (Fig. 02)

The scooter is supplied with two identical keys that allow the vehicle to started, turn on the steering lock, open the seat and open the fuel cap (where applicable).

The keys are accompanied by a plate showing their code.

If you need to make a duplicate of the keys, contact an authorized Quadro dealership and provide the plate with the code as well as the key.

We recommend keeping the spare key and the plate away from the scooter, in a safe place so it does not get lost.

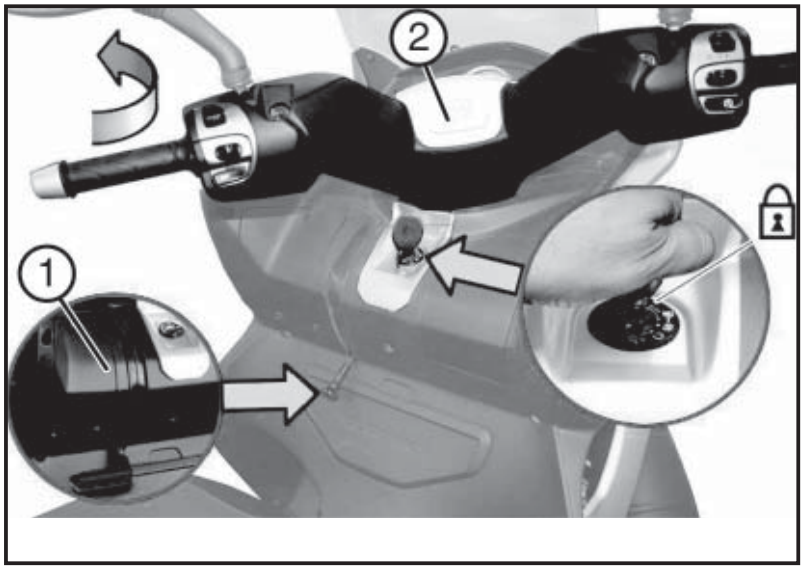


Fig. 01 QSI0021

4.12 STEERING LOCK (Fig. 01)

Proceed as follows to engage the steering lock:

- With the handlebar straight ahead, move the parking lever «**1**» downwards.
- Turn the handlebar «**2**» leftwards.
- Press and turn the key towards the «**LOCK**» position and pull it out.
- Lever «**1**» remains in the locked position until the steering lock is unlocked and the handlebar is straightened up.

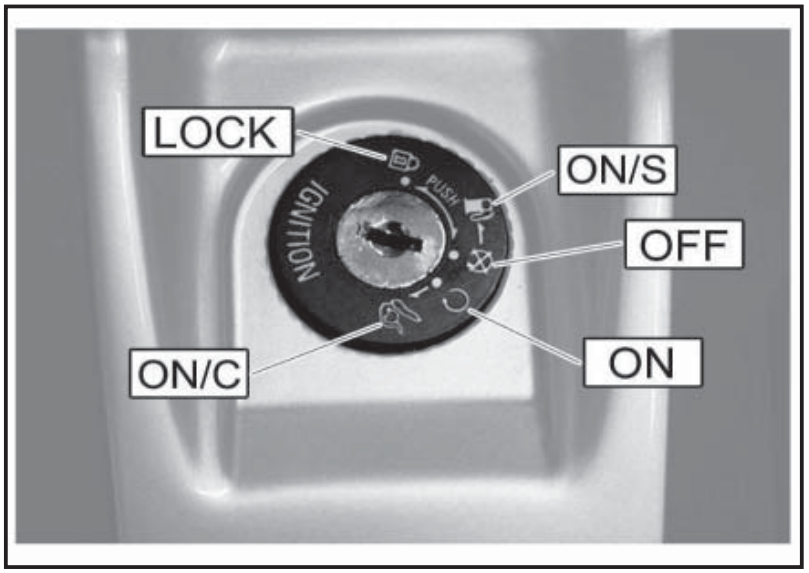


Fig. 01 *QSI0022*

4.13 - KEY-CONTROLLED SWITCH (Fig. 01)

The key-controlled switch is situated at the centre of the upper part of the shield backplate; it is possible to position the switch according to need in the following positions:

«**OFF**»: engine start up is inhibited.

«**ON**»: the engine can be started.

«**LOCK**»: the steering is locked and the engine cannot be started up.
«**ON/C**»: seat opening.
«**ON/S**»: fuel flap opening

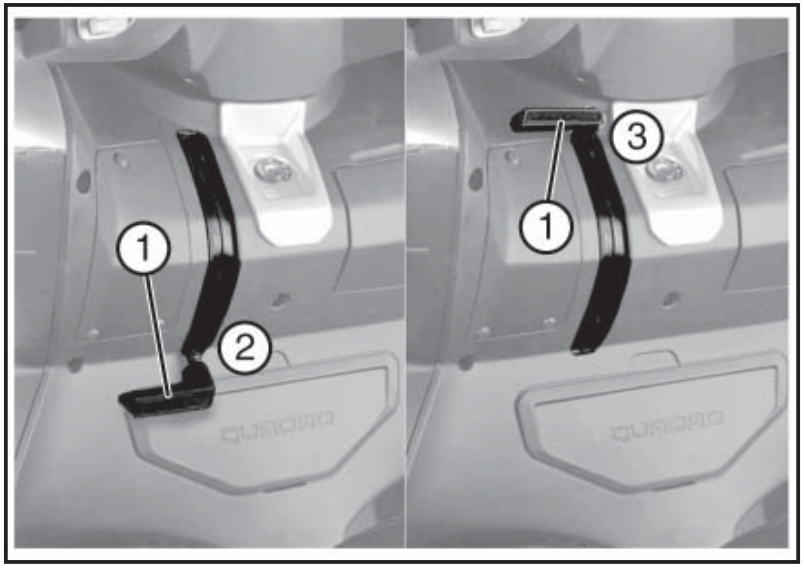


Fig. 02 *QSI0023*

4.14 PARKING LEVER (Fig. 02)

The parking lever «**1**» is situated at the top of the shield backplate.

With the parking lever «**1**» in position «**3**» the wheels of the vehicle are free and can turn.

With the parking lever «**1**» in position «**2**» the rear wheel and the HTS system are locked for parking.

Do not drive with the tilting locking engaged.

A safety device limits the engine speed when the tilting lock is engaged.

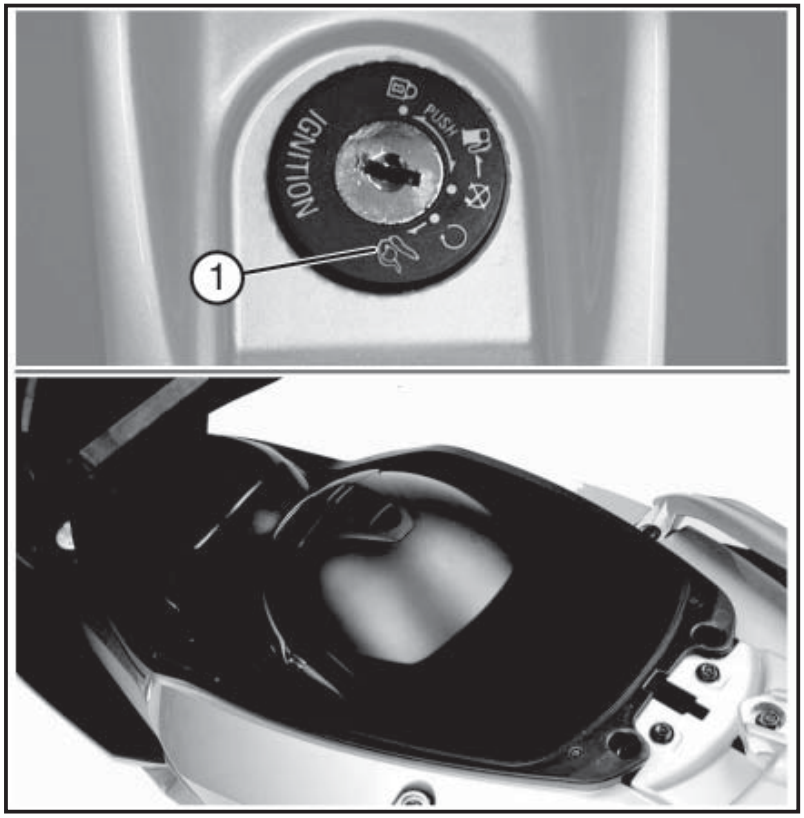


Fig. 01 QSI0024

4.15 STORAGE COMPARTMENT BELOW THE SEAT (Fig. 01)

To access the storage compartment below the seat:

- Insert the key provided, turn the switch in a clockwise direction until reaching the seat opening position «**1**» .
- Lift the seat upwards.
- Access the compartment underneath the seat.

The compartment underneath the seat can accommodate a full face helmet and a demi jet.

To close the storage compartment below the seat:

- Do not let the seat fall from the fully open position. Lower it on the lock and slightly press it down in order to engage the seat on the lock.

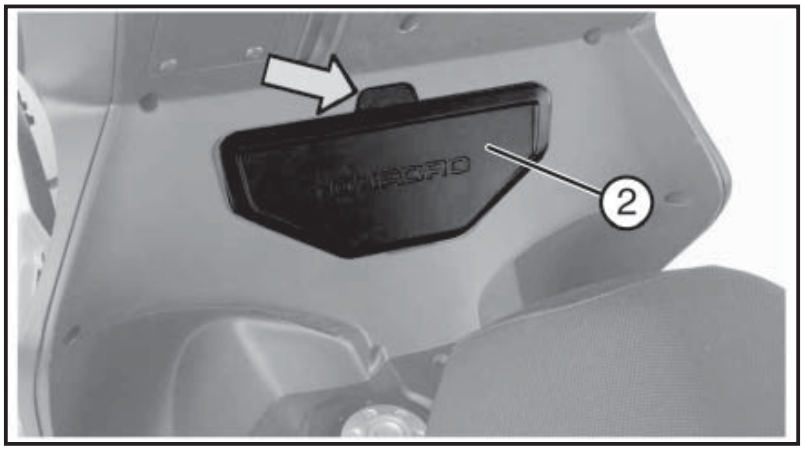


Fig. 01 QSI0025

4.16 FRONT BOX (Fig. 01)

To access the front box «**2**», press on the point shown and open the door to the front box.

Load limit: 1.5 kg

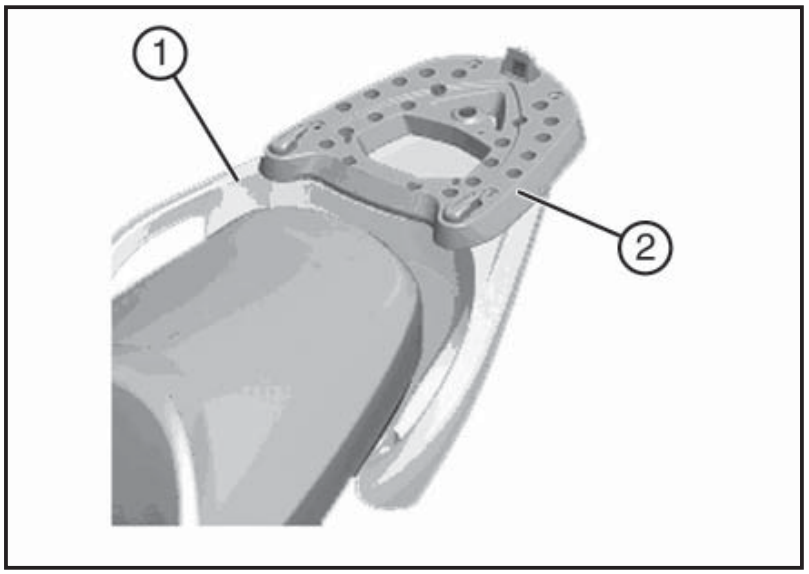


Fig. 01 QSI0027

4.17 LUGGAGE RACK (Fig. 02)

The vehicle has a luggage rack «**1**» where it is possible to install the genuine accessory. In any case do not exceed the limit of the load provided for

Load limit: 5.0 kg

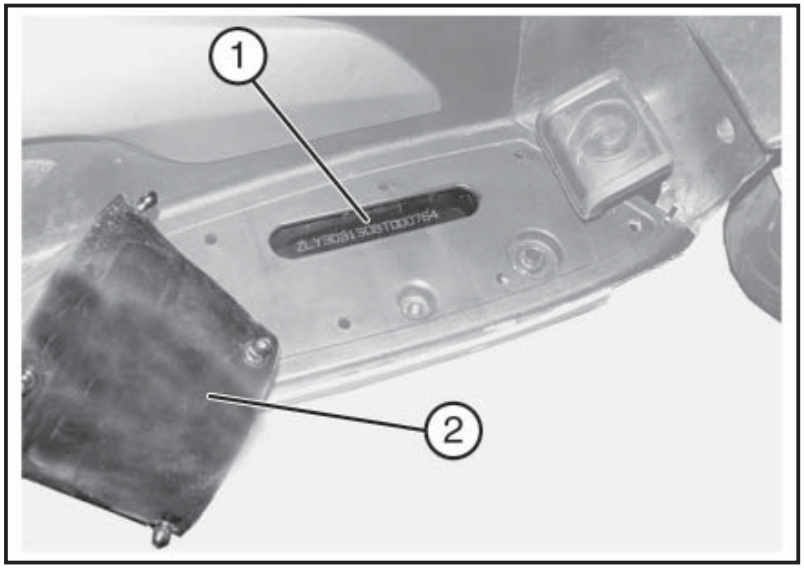


Fig. 01 QSI0029

4.18 IDENTIFICATION

The vehicle is identified by means of two unique numbers, the frame number and the engine number.

- The frame number «**1 - Fig. 01**» is stamped on the right-hand crossbeam of the frame. To access it, remove the foot rest «**2 - Fig. 01**».
- The engine number «**3 - Fig. 02**» is printed on the engine casing.

Write the numbers in the appropriate space so as to be able to provide them if necessary

FRAME NUMBER

ENGINE NUMBER

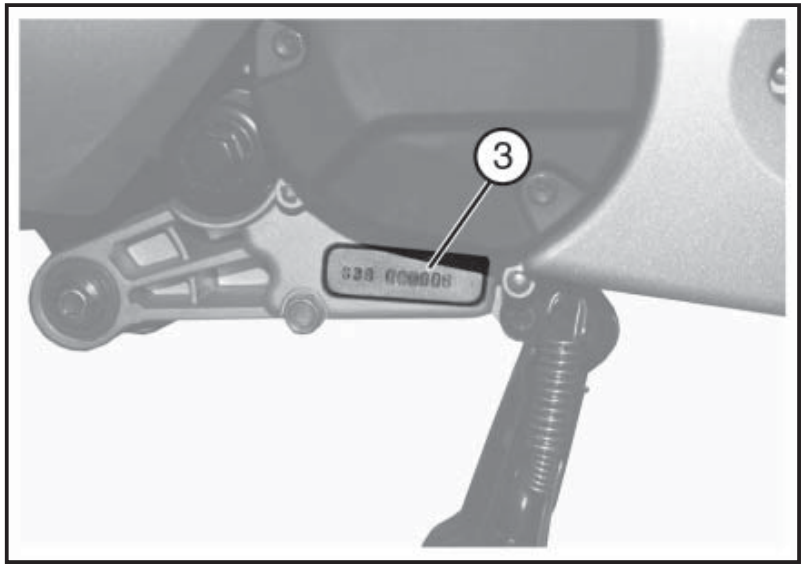


Fig. 02 QSI0030

Alteration of the identification numbers is subject to criminal and administrative penalties. It will also immediately void the warranty

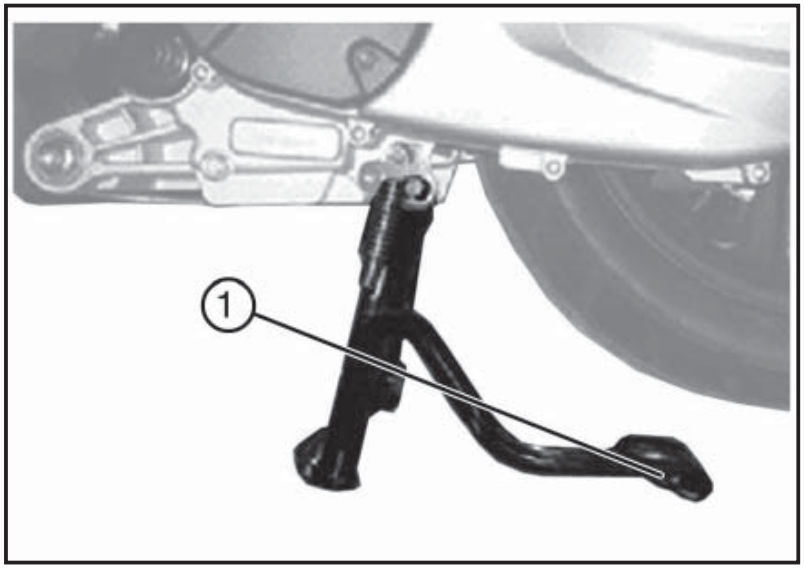
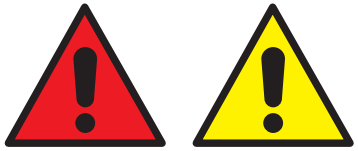


Fig. 01 QSI0031

4.19 CENTRAL STAND (Fig. 01)

Press the stand bracket «**1**» with your foot and at the same time pull the vehicle backwards until it is on its stand.



Do not sit on the vehicle while the stand is on the ground.
Make sure the vehicle is stable, only park on stable ground

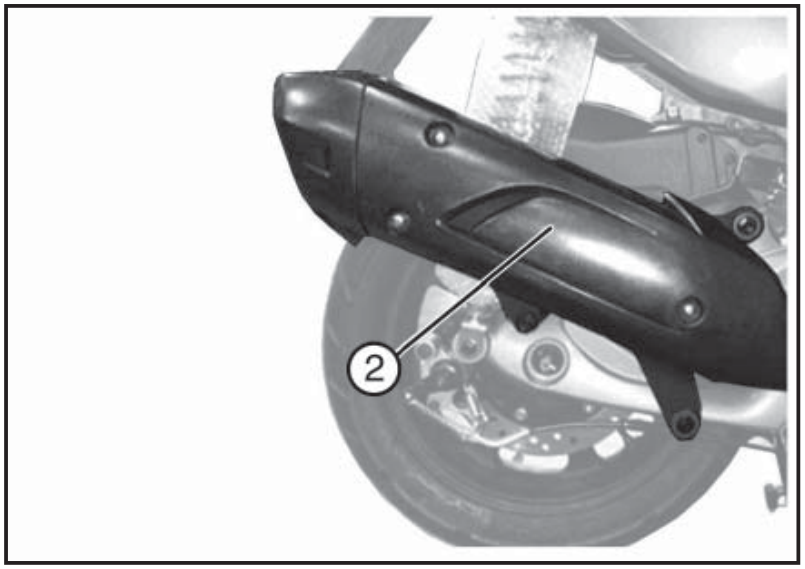


Fig. 02 QSI0032

4.20 EXHAUST SYSTEM (Fig. 02)

The vehicle has a catalytic converter «**2**». The owner is advised that the law prohibits:

- the removal and any modification of any device or element incorporated in a vehicle to contain the noise or polluting emissions, by anyone. Removal is only allowed for maintenance, repair or substitution.
- the use of the vehicle after the exhaust system has been removed or made so it does not work.

The exhaust system must be checked to make sure it is working properly, there must be no sign of rust or perforation. If the noise or the smokiness produced by the exhaust system increase, contact an authorized Quadro dealer.

Any tampering with the exhaust system is prohibited.

Fig. 01 QSI0033

4.21 MIRRORS (Fig. 01)

To fit the mirror, place it in its housing and tighten the nut as shown in the figure.

To adjust the mirror, swivel it until it is in the best position.

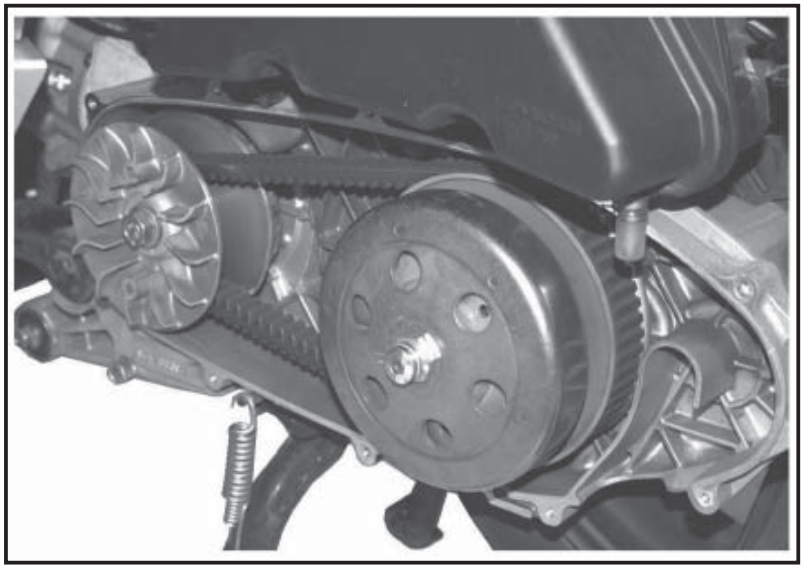


Fig. 02 QSI0034

4.22 AUTOMATIC TRANSMISSION (Fig. 02)

The vehicle has an automatic transmission system to guarantee maximum driving, ease and pleasure with attention to performance and fuel consumption. The transmission consists of an automatic dry centrifuge clutch, v belt and continuous automatic variator.

If you stop going uphill, at a traffic light, in a traffic jam etc use the brake to keep the vehicle still while allowing the engine to idle. The use of the engine brake to keep the vehicle still causes abnormal clutch wear and overheating caused by the rubbing of the clutch mass on the transmission bell housing.

You are advised against use where conditions cause over long sliding of the clutch and therefore its overheating (driving uphill fully loaded, starts with driver and passenger on a slope of more than 15%), if the clutch overheats, allow it to cool off for a few minutes with the engine idling.

4.23 HTS (HYDRAULIC TILTING SYSTEM)

The vehicle is fitted with a revolutionary oleo-pneumatic suspension system called the **HTS (Hydraulic Tilting System)**, patented internationally. Its characteristics are stability, manoeuvrability, safety and fun.

The versatility of this innovative hydraulic suspension system makes it possible to align the wheels with the foot rests constantly thereby keeping the driving trim in a correct and stable position even when balancing is precarious (humps and dips, rails , sudden low objects etc.). Thanks to this innovative form of tilting, the vehicle is able to provide performance, comfort and fun in full safety.

The **Hydraulic Tilting System (HTS)** is applied to the front suspension, thus to the pair of front wheels, which it allows to oscillate and tilt "swinging" at the same time and, compared to the various mechanical systems already present on the market, it is distinguished for how easy it is to use and for how few restraints it imposes therefore determining lightness and minimal maintenance.

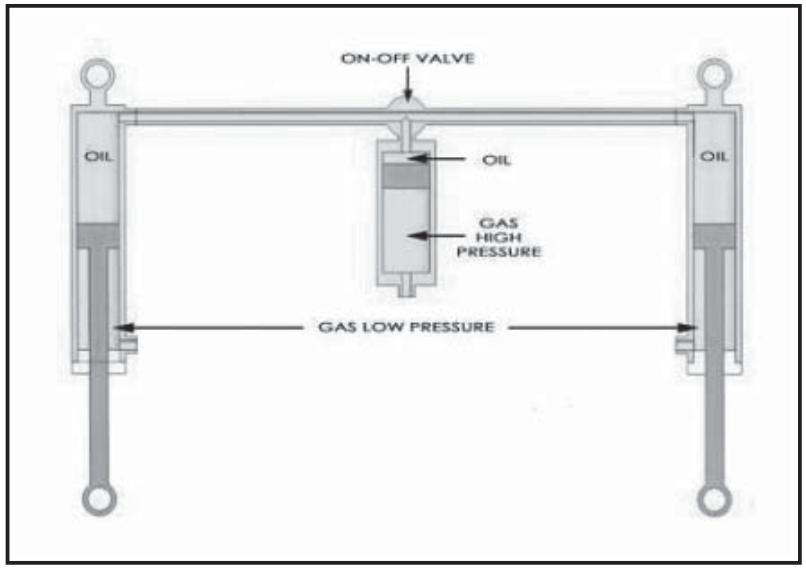


Fig. 01 QSI0033

The HTS is composed of two hydraulic cylinders and a "suspension" cylinder: the first two connect the frame to the swinging arms of the wheels while the second does the job of the traditional shock absorber spring. They are all connected to each other by means of a valve that permits the oil flow in response to the stresses coming from the roughness of the ground and the type of driving. When the valve closes, it permits the stable parking of the vehicle.

Furthermore, the gas, compressed at the bottom of the hydraulic cylinders, helps the vehicle to remain upright so as to impose lightness on manoeuvres from a standstill as well as greater stability during the ride, unmatched by traditional vehicles either during braking or in road holding.

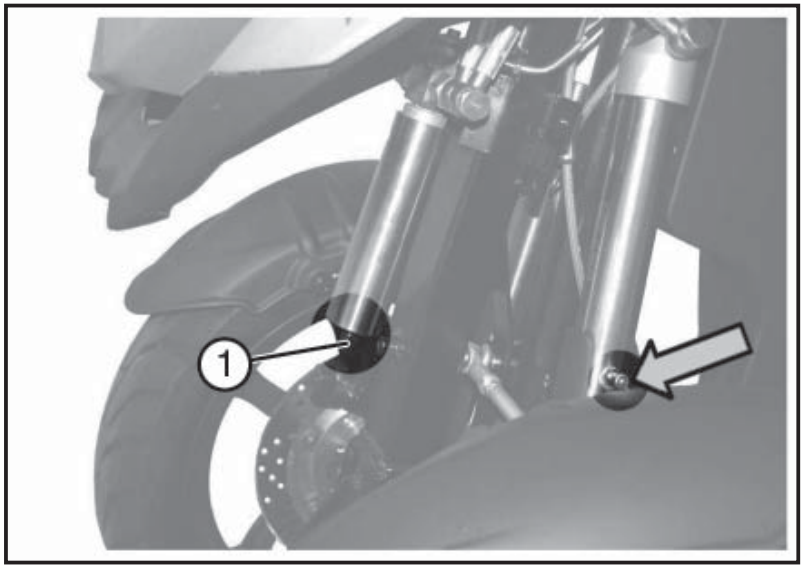


Fig. 01 QSI0036

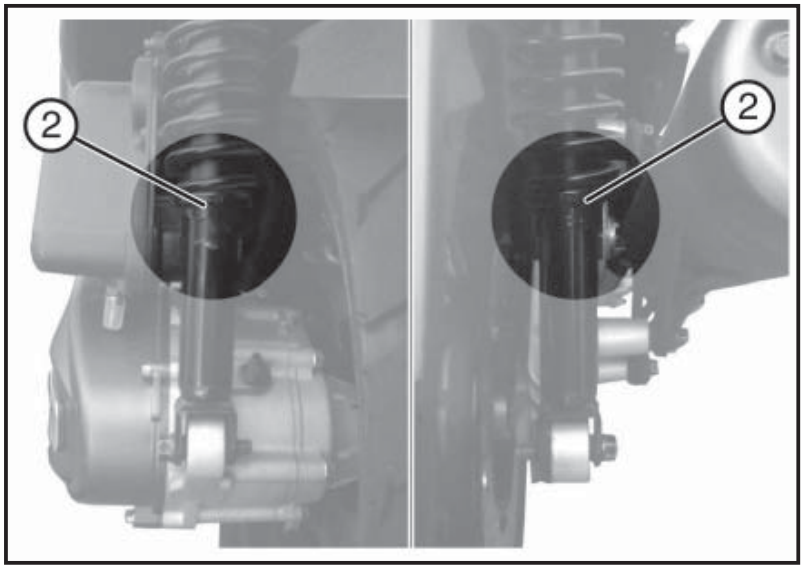


Fig. 02 QSI0037

You must not remove the cap indicated on both cylinders. If the cap is removed there is a risk the gas will escape, thus damaging the HTS system.
You must not remove cap «1 - Fig. 01» on the central suspension cylinder. If the cap is removed there is a risk the gas will escape, thus damaging the HTS system.
Periodically clean and protect the chrome-plated parts of the cylinders with special products.

4.24 ADJUSTING THE DAMPERS (Fig. 02)

The rear dampers are fitted with an adjustment screw to regulate the preload. According to the weight, turn the ring nut «**2**» in such a way as to define the best running conditions. The lowest position corresponds with the maximum preload (driver + passenger + luggage), while the highest position corresponds with preload (just the driver).

The use of the vehicle with the wrong spring preload could reduce the comfort of the ride and how precise the steering is.
Regulate both the dampers with the same preload.

While regulating the dampers, wear gloves so as not to get scratched or grazed.

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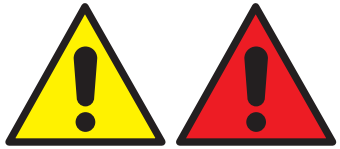
CHAP.5 VEHICLE USE

Fig. 01 *QSI0002*

5.1 PRELIMINARY CHECKS



To make sure vehicle functions perfectly, always carry out the following checks before setting off. Failing to do this could seriously damage the vehicle and cause injuries to the user(s).

Engine oil	Check level.
Final reduction oil	Check for leaks.
Coolant	Check level.
Braking system	Check that the control levers are not held down during function. Check the oil level in the disc brake reservoirs and that there are no leaks in the circuits. Check pad wear.
Throttle command	Check it opens and closes properly through the full rotation of the handlebar.
Lights, tell-tale lights, direction indicators	Check the proper functioning of the sound and visual devices.
Steering	Check the rotation is even, smooth and without play and loosening.
Tyres	Check the correct inflation pressure, the state of wear and any damage.
Central stand	Check it functions properly and the springs that take it to its rest position are working.
Fuel tank	Check the fuel level, any leaks and that the cap is closed properly.
Fasteners	Check that the fixing elements have not worked loose.
HTS System	Check the caps are on and that there are no leaks in the circuit.

5.2 TYRE PRESSURE

The proper tyre pressure will give the greatest driving stability and the longest tyre life.
Check the tyre pressure periodically and before setting off.

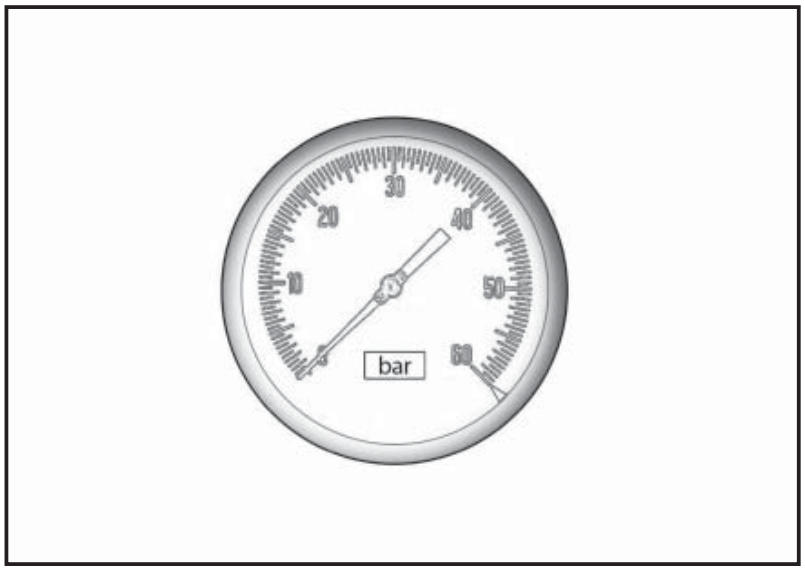
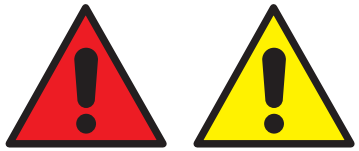


Fig. 01 *QSI0038*



Pressure must be measured while the tyre is cold. The wrong tyre pressure cause the tread to wear in the wrong way. Using the vehicle with the wrong tyre pressure can cause you to lose control, causing serious damage to objects and injury to people.

Front tyre pressure	1,5 bar (22 Psi)
Rear tyre pressure	2.2 bar (32.3 Psi) just the driver
	2.5 bar (36.2 Psi) with passenger.

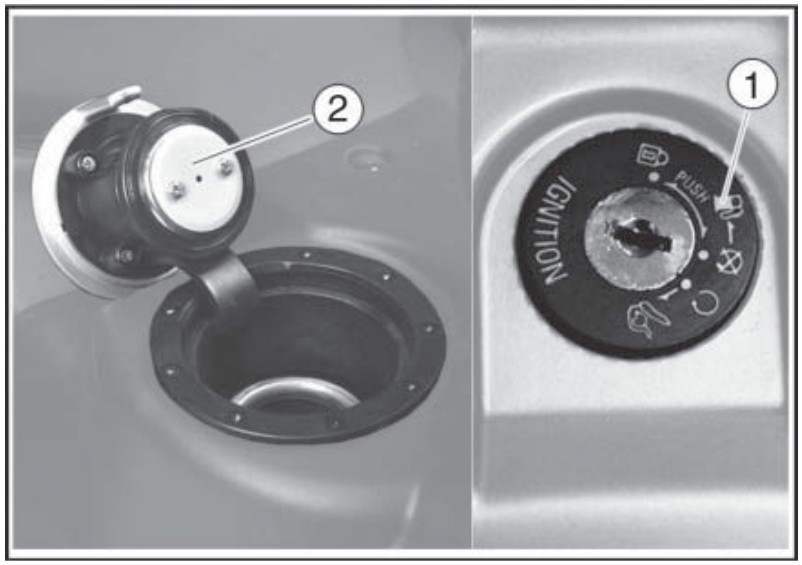


Fig. 01 *QSI0001*

5.3 FUEL FILLING

Versions with visible fuel filler caps

For versions with visible fuel filler caps proceed as follows:

- Insert the ignition keys in the key-controlled switch and turn it counterclockwise to position «**1- Fig. 01**»;
- The fuel filler cap «**2 - Fig. 01**» opens automatically.

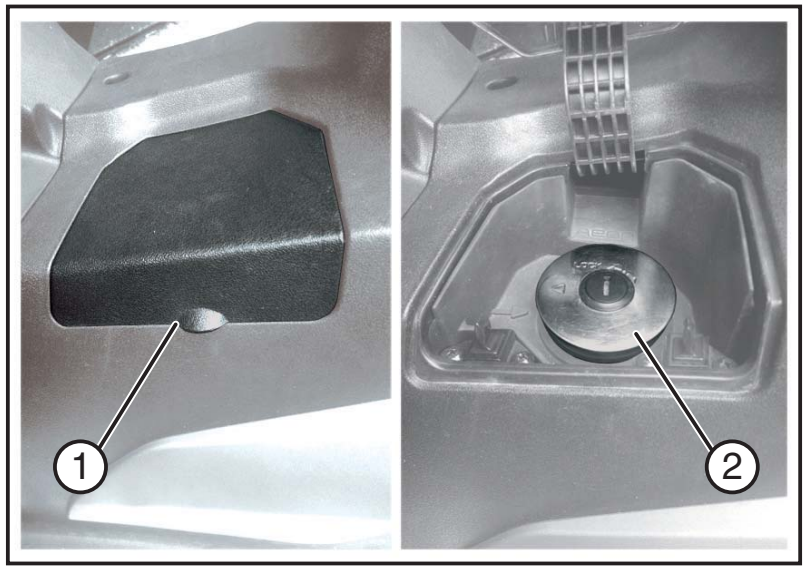


Fig. 02 *QSI0077*

Versions with fuel filler cap under a flap

For versions with fuel filler caps under a closing flap proceed as follows:

- Open the flap«**1- Fig. 02**»;
- Insert the ignition key in the lock and turn it in a counterclockwise direction;
- Remove the fuel filler cap «**2 - Fig. 02**».

Fuel tank capacity: Approx 13.2 l
Reserve: Approx 2.9 l

Always turn the engine off when refuelling. Petrol is highly flammable.
Never smoke or use naked flames while refuelling, and avoid breathing in the fuel vapours.

Use only unleaded petrol with min. 95 RON octane rating.

Only use unleaded petrol with less than 10% ethanol and less than 5% methanol.
After refuelling, ensure that the fuel filler cap is closed correctly.

Do not allow fuel to come into contact with the plastic components of the vehicle to ensure they are not damaged. If this should occur, clean it off as soon as possible using a rag.

Do not use the vehicle until the fuel runs out; should his happen, do not try to start the engine again repeatedly, turn the key-controlled switch to "OFF" and fill the tank with petrol; failure to comply with this construction could damage the fuel feed pump and/or the catalytic converter.

Quadro3 is fitted with a catalytic converter that has the job of reducing polluting emissions by performing a number of chemical reactions. In the case fuel is used with specifications different from those shown above, the parts making up the catalytic converter could be damaged thereby reducing its effectiveness and efficiency and losing the characteristics the machine received approval because of

Never use leaded petrol that might contaminate the metals of the catalytic converter and damage it.

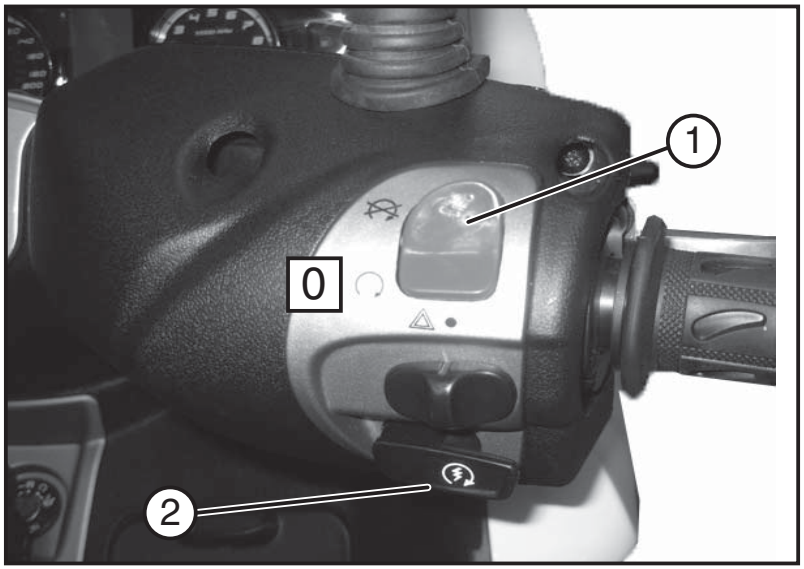


Fig. 01 *QSI0079*

5.4 START UP

Proceed as follows to start the scooter:

- Ensure that button «**1 - Fig. 01**» is in position 0.
- Release the parking brake, if engaged.
- Turn the key to the «**ON**» position.
- Hold the accelerator at the idle position.
- Pull one of the two brake levers on the handlebar (or press the brake pedal) and press the starter button «**2 - Fig. 01**».

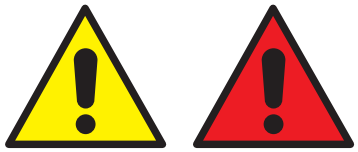
Never start the engine without the filter.
The engine could suck in dust or foreign bodies that might damage it.

After starting the scooter, do not drive fast for the first few minutes. Correctly warming up the engine limits emissions and reduces fuel consumption.

Pay particular attention when parking that the exhaust is not touching inflammable materials or parts of the body. The high temperatures could cause fires and/or burns.

Never over exert the engine at low temperatures to avoid damaging it.
To safeguard the integrity of the engine and its life avoid long periods of excessive revving.
Do not switch off the vehicle after a long period of driving at top speed; rather leave it idling for a few seconds.

If the vehicle is used after not being used for a long period, carry out the operations indicated in chapter «**07 - VEHICLE INACTIVITY**».



Exhaust gas is poisonous to people, do not start up the vehicle in closed or badly ventilated areas

Never try to start the vehicle with the accelerator control fully open, as this could cause a loss of control of the vehicle with the risk of property damage and/or injuries.

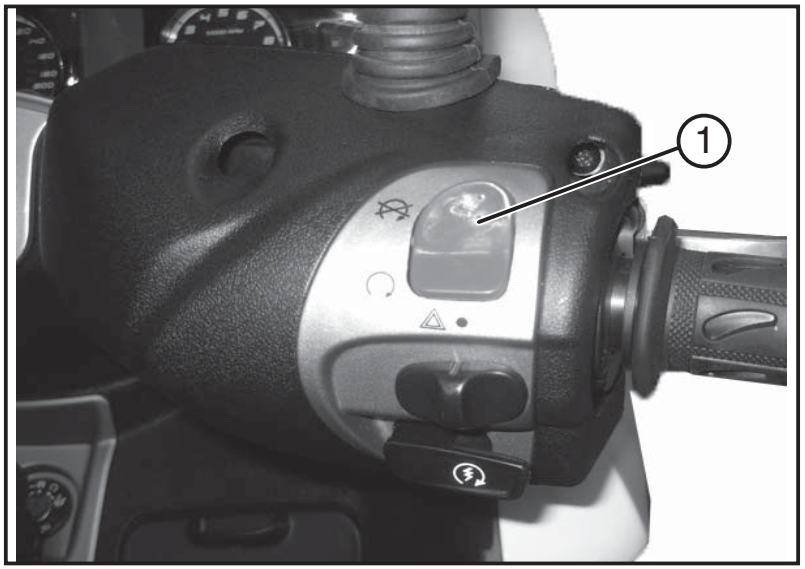


Fig. 01 *QSI0080*

5.5 STOPPING THE ENGINE (Fig. 01)

You can switch off the engine as follows, always and only with the scooter stopped:

1- Press the stop engine command «**1 - Fig.01**», leaving the ignition key in position «**ON**».

In this condition, the engine cannot be started but the instrument panel will still turn on.

2 - Turn the ignition key to the position «**OFF**».

Never turn the key in the «OFF» position while driving.

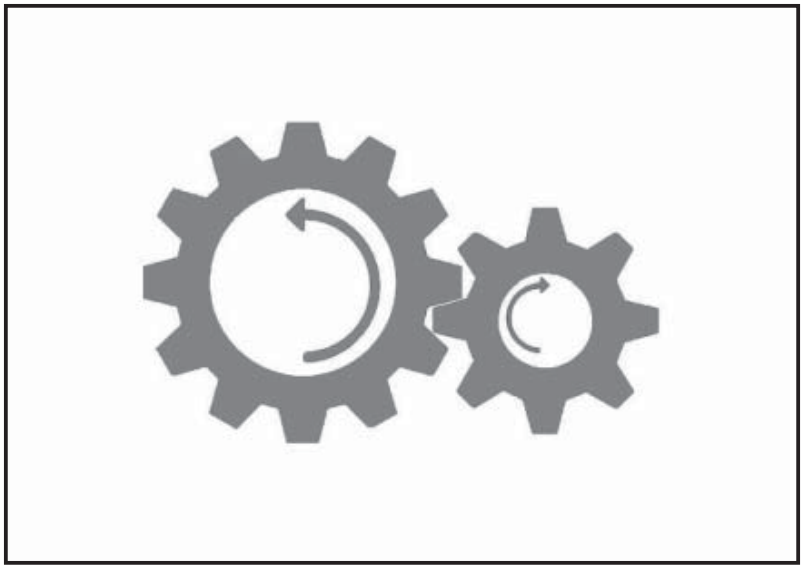


Fig. 02 *QSI0042*

5.6 RUNNING IN (Fig. 02)

Proper running in is essential for the long life of the engine.

ALWAYS CARRY OUT THE FIRST AND MOST IMPORTANT MAINTENANCE OPERATION

The first 1,000 Km are the most important in the life of a vehicle. Proper running in helps to maintain the life and performance of the vehicle as far as possible. *QUADRO* parts are made with high quality materials and they are finished with tight degree of tolerance. Proper running in allows the machined parts to adapt to each other and enter into frictionless combinations.

The reliability and performance of the vehicle depend on strict compliance with the instructions indicated in this section during the running in period. It is particularly important to avoid using the engine in such a way that its parts are exposed to excessive heat.

- The first 500 km with the throttle less than ½ open and travelling at speeds less than 80 k.p.h.
- From 500 to 1000 Km, with the throttle less than ¾ open and travelling at not more than100 k.p.h.

The speed of the vehicle must be varied and not kept steady. This allows the parts to be "loaded" by the pressure and then unloaded allowing them to cool down. This helps the adaptation process of the various parts.
It is essential that, during the running in period, the engine components are not subject to excessive stress to ensure they adapt properly. Do not subject the engine to excessive load under any circumstances.

The 1000 km service is the most important for the vehicle. During the running in, all the parts adapt to each other and settle. All the adjustments must be reviewed, all the fixing elements are tightened and the oil used is changed.

Prompt servicing at 1000 km will guarantee optimal running times and engine performance.

NOTE: The 1000 km service must be done as indicated in the "Scheduled Service Programs" in this manual. Pay particular attention to the CARE and CAUTION points in this section

5.7 SAFE DRIVING

In this section we give some advice for using the vehicle safely on a daily basis. Deeper knowledge of the vehicle and the strict compliance with the safety regulations and all the warnings given in this use and maintenance manual are the basis of safe driving.

- Read the instructions shown in the following manual carefully.
- You should try out the vehicle in an area where there is no traffic, to get to know it thoroughly.
- Always wear a helmet and secure it properly before starting off.
- Slow down and drive carefully on bumpy roads or when it is very windy.
- When driving on wet roads, frequently and delicately apply the brakes as braking in these conditions is not as effective.
- Frequently clean the brake disk if you are using the vehicle on sandy or muddy roads or roads with snow mixed with salt.
- Do not adjust the mirrors while driving because you could lose control of the vehicle.
- Always make sure you are in a good physical and mental state and do not drive under the influence of drugs or alcohol.
- If accessories or luggage have been added, the vehicle may be less stable or not perform as well: drive carefully.
- Do not drive off with the vehicle on its stand.
- Comply strictly with the highway code.
- Interfering with the performance of the vehicle or altering its original parts are prohibited by law and will mean the vehicle no longer conforms with the approved type. It is thus more hazardous in terms of driving safety

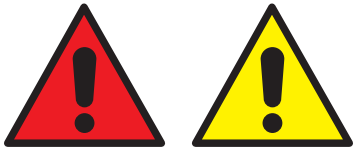
Do not mount pavements, the impact of the wheels with the pavement may damage the suspension system and the rims.

CHAP. 6 VEHICLE MAINTENANCE

VEHICLE MAINTENANCE

6.1 GENERALIT INFORMATION

Ensuring you always follow the scheduled and extraordinary maintenance instructions in this manual will guarantee perfect operation and a long lifetime for your vehicle.



Only trained and informed persons may carry out the maintenance operations described in this chapter.
Specific maintenance operations must be carried out at authorised Quadro dealers or qualified persons.

All maintenance operations must be carried out with the engine off and with the vehicle on its stand and the parking lever applied.
Do not neglect the maintenance operations because the vehicle's long life and efficiency also depend on how they are done.
All the maintenance operations must be done with the vehicle at a standstill with the exception of adjusting the idling.

During the maintenance operations, strictly adhere to the safety measures described in section «**6.2 - Safety regulations for the interventions**»
After every intervention, all the commands/devices must be checked to make sure they work properly.

With an eye to protecting and respecting the environment, you are advised to dispose of all the waste resulting from the maintenance of the vehicle in accordance with the recycling methods required by the laws of each country, currently in force.

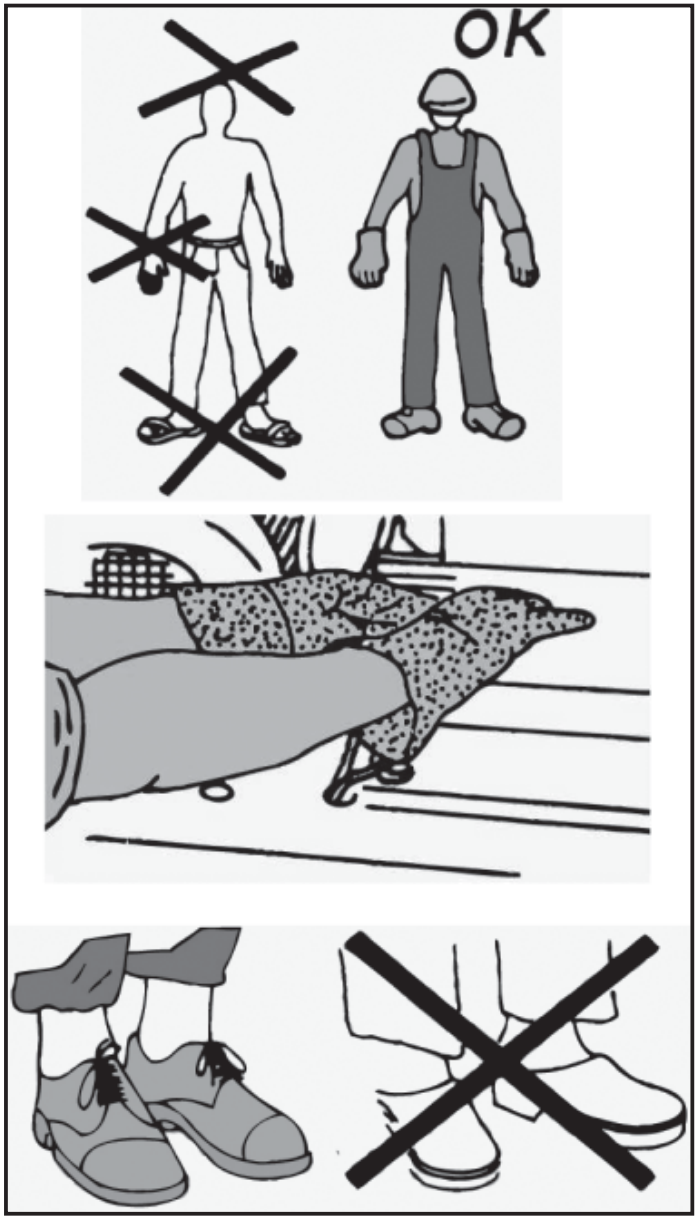


Fig. 01 QSI0043

6.2 SAFETY REGULATIONS FOR THE INTERVENTIONS

All the interventions on the vehicle must be line and strictly comply with the operator safety regulations.

Remove various objects that could cause injury (watches, bracelets, rings etc.).

Wear suitable clothes (overalls or work coats with elasticated wrists) or roll up your sleeves so they do not get caught.

Wear special gloves

Wear special shoes

6.3 DAILY MAINTENANCE

Daily maintenance operations to be carried out before or after the use of the vehicle are as follows:

- Check the coolant level
- Check the engine and final drive oil level
- Check the level of fuel in the tank.
- Check the tyre pressure.
- Check the fuel filler cap is screwed on properly.
- Check the brake sheaths are free of kinks, that the brake callipers are clean and that there are no leaks in the circuits.
- Check the level of the brake fluid in the tanks.
- Check the engine idling speed
- Check the correct opening and closing of the throttle command.
- Check the parking lever is working properly.

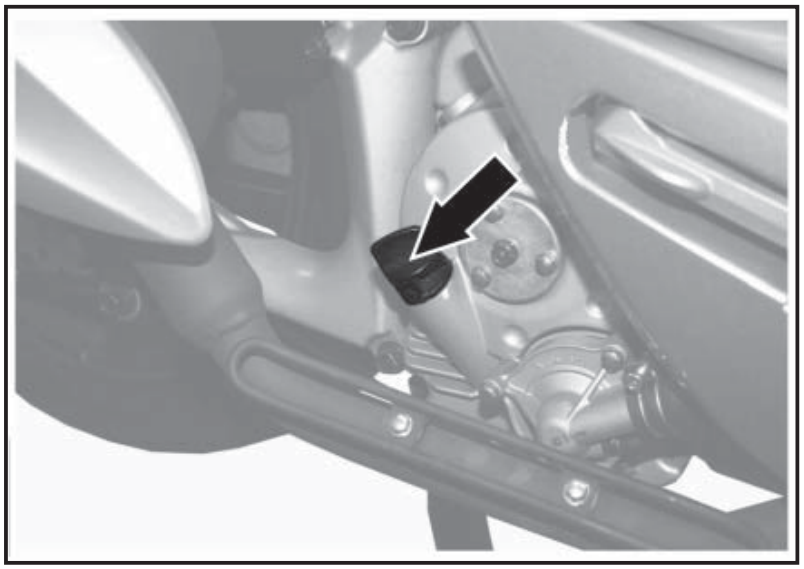


Fig. 01 *QSI0004*

6.4 ENGINE OIL

The engine oil level must be checked and/or changed at the intervals listed in the scheduled maintenance table.

Engine oil: SAE 10W-60 API-S
Quantity of engine oil: 1.6 litres approx. (just sump)
1.7 litres approx. (sump + filter)

Prolonged skin contact with engine oil can be hazardous; it is advisable to wash all body parts which come into contact with oil thoroughly. Keep engine oil outside the reach of children.

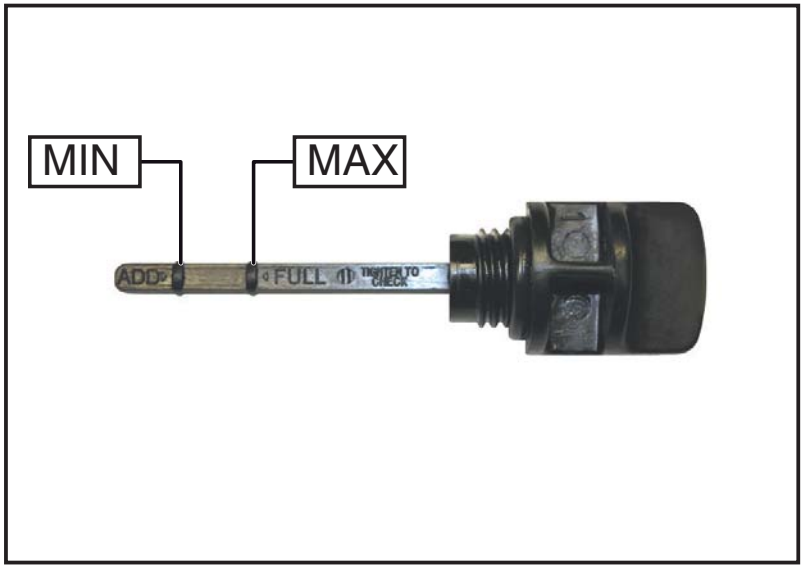


Fig. 01 QSI0074

CHECK

- Wait 5 minutes from when the engine stops
- Position the vehicle on the central stand on flat ground.
- Unscrew the cap-dipstick «**1 - Fig. 02**» and clean it with a clean cloth.
- Screw the cap-dipstick up completely «**1 - Fig. 02**».
- Unscrew the cap-dipstick again «**1 - Fig. 02**» and check that the oil level reaches the level midway between ***MIN*** and ***MAX*** indicated in **Fig. 01**.

Avoid running the engine with insufficient or contaminated oil. Failure to comply with this rule could damage the engine irreparably.

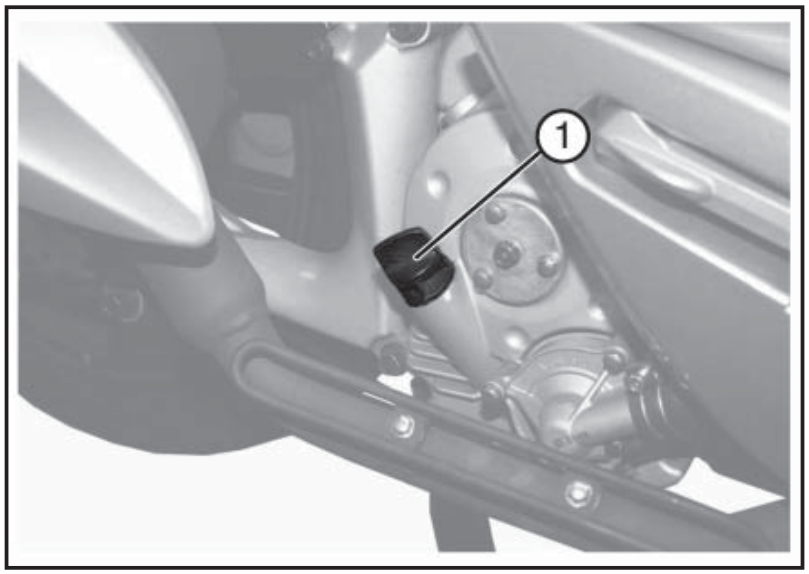


Fig. 02 QSI0042

TOPPING UP

Any oil top ups must be done after checking the level (see what is described in the "CHECK" part of this section).

If the oil level is lower than the ***MIN*** level, bring it up to the correct level using the recommended oil.

- Proceed as follows to top up:
- Remove the cap and dipstick and add oil.
- Check the quantity of oil reaches the level midway between ***MIN*** and ***MAX*** (**Fig. 02**).

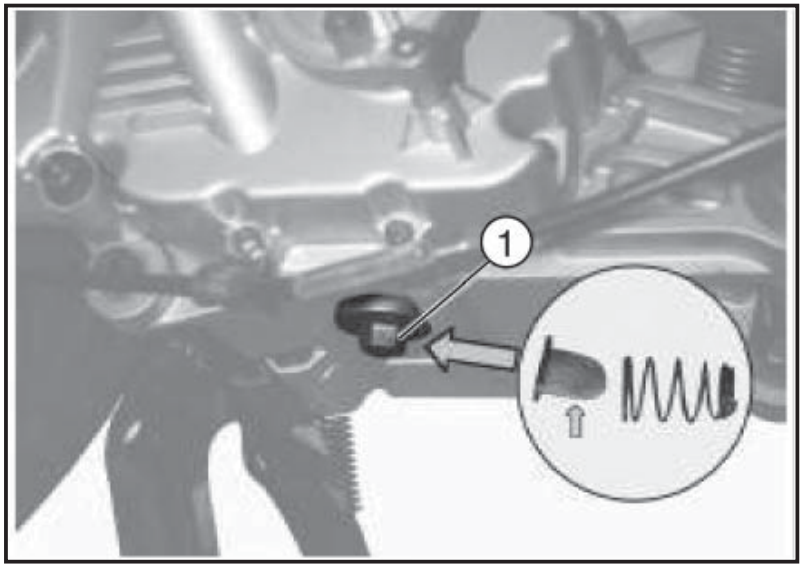


Fig. 01 QSI0005

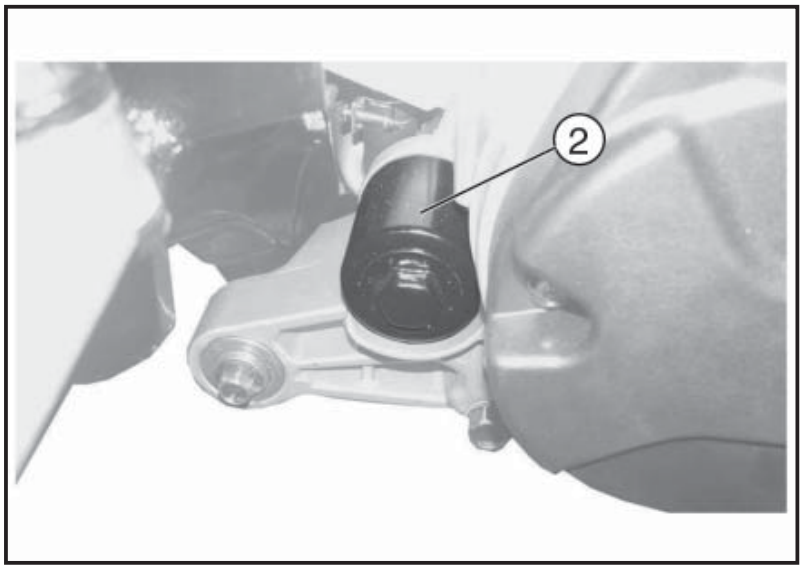


Fig. 02 QSI0037

CHANGE (**Fig. 01**)

- Let the engine warm up for about five minutes then turn off.
- Unscrew the drainage plug «**1 - Fig 01**», recover the spring and mesh filter and let all the oil flow out into a sufficiently large receptacle; remove the cartridge oil filter «**2 - Fig. 02**» and replace it with a new one.
- Insert the support spring and the mesh oil filter after cleaning it (**Fig. 01**) after which tighten up the drainage plug again «**1 - Fig 01**», to the required torque.
- A small amount of oil remains in the engine crankcase, fill up with approx. 1.6 litres of new recommended oil (1.7 litres if you change the oil filter, too) .
- Check the level and top up if necessary until the correct level is reached.

Tightening torques (Nm)

Engine oil drainage plug: 15

An excessive quantity of engine oil may cause reduced performance, reduced peak speed and engine overheating

Warning: hot oil

Do not dump oil, dispose of only at authorised facilities. Adhere to the current legislation in each country for disposal.

We recommend that the above operations are carried out at an authorised Quadro dealership or by qualified personnel.

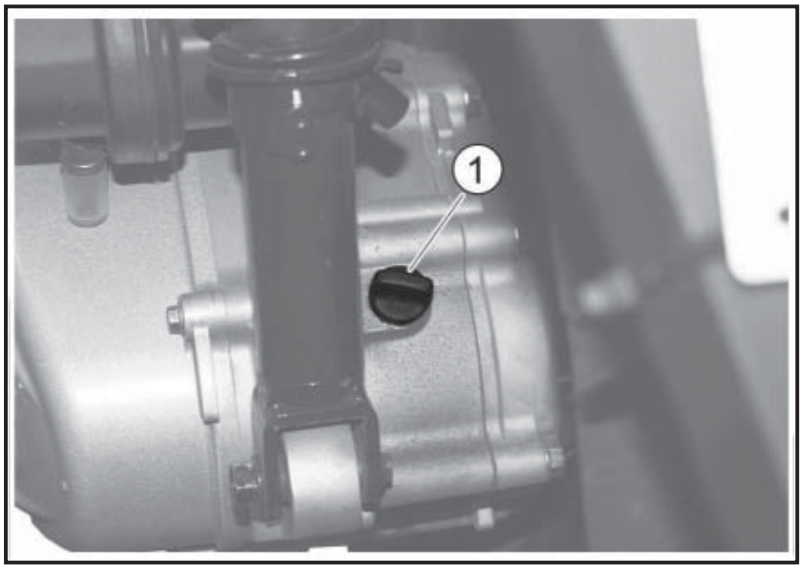


Fig. 01 *QSI0007*

6.5 FINAL DRIVE OIL

The final reduction oil must be changed at the intervals listed in the scheduled maintenance table.

Let the engine cool before carrying out any operation

CHECK **(Fig. 01)**

Before use check that there are no oil leaks from the final drive box. If there are, have the scooter repaired by an authorised *QUADRO* dealer.

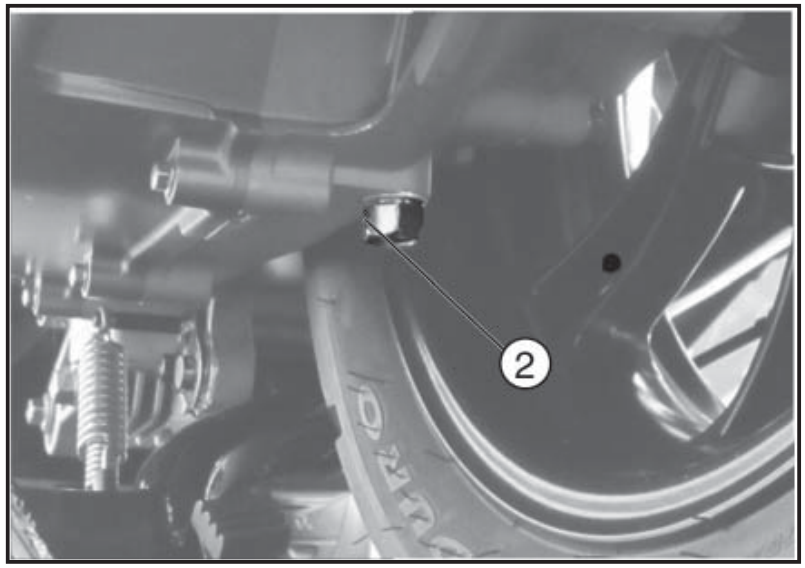


Fig. 02 *QSI0008*

CHANGE **(Fig. 02)**

- Switch on the engine, heat the final drive oil by running for a few minutes, then switch off.
- Put a sufficiently large receptacle under the drainage hole.
- Unscrew the cap «**1 - Fig. 01**».
- Undo the screw «**2 - Fig. 02**», recover the washer and let the oil run out completely.
- Do up the screw «**2 - Fig. 02**» and using a syringe, inject the new oil of the recommended type in the input hole up to the correct level.

Final drive oil: SAE 80W-90 (200 cm^3)

Warning: hot oil.
Do not dump oil, dispose of only at authorised facilities. Adhere to the current legislation in each country for disposal.

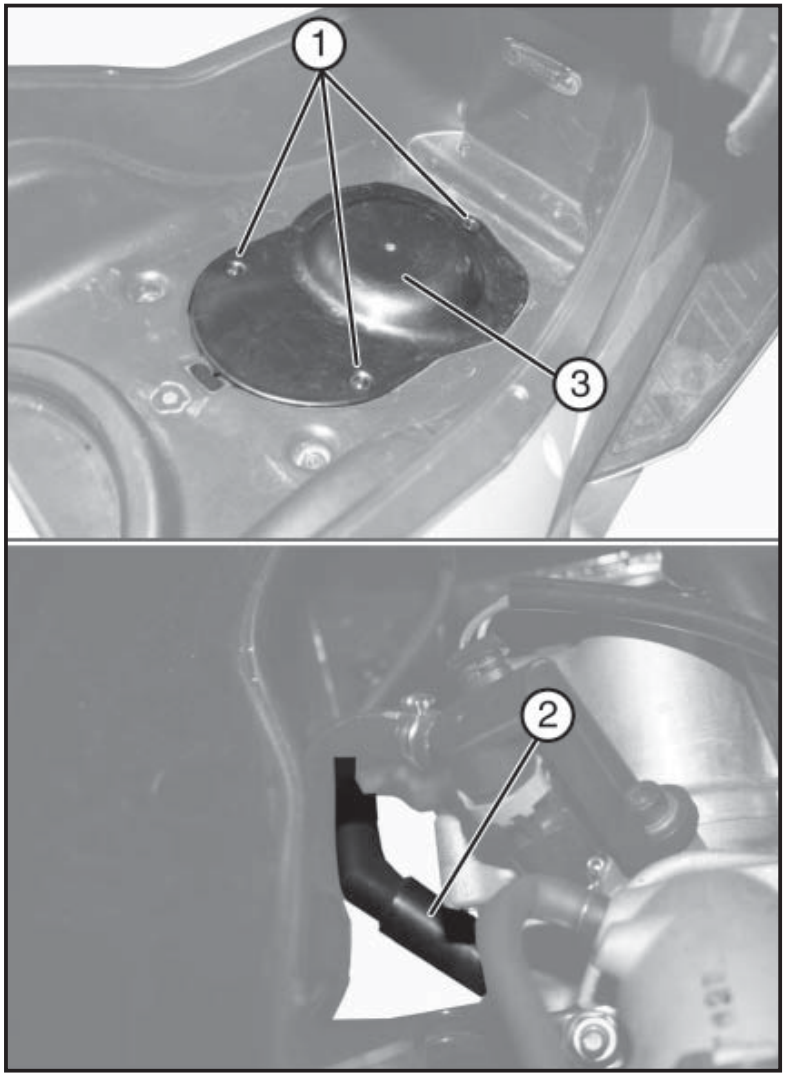
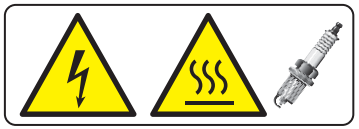


Fig. 01 QSI0046

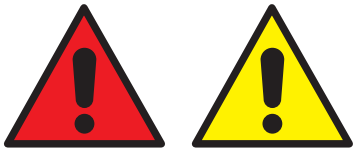
6.6 - SPARK PLUG



Let the engine cool before carrying out any operation.

The spark plug must be checked or changed at the intervals listed in the scheduled maintenance table.

- Position the vehicle on flat ground, on its stand.
- Get into the helmet compartment, undo the three screws«**1**» and remove the inspection cover «**3**»
- Remove the pipe «**2**» from the spark plug.



We recommend that the above operations are carried out at an authorised Quadro dealership or by qualified personnel

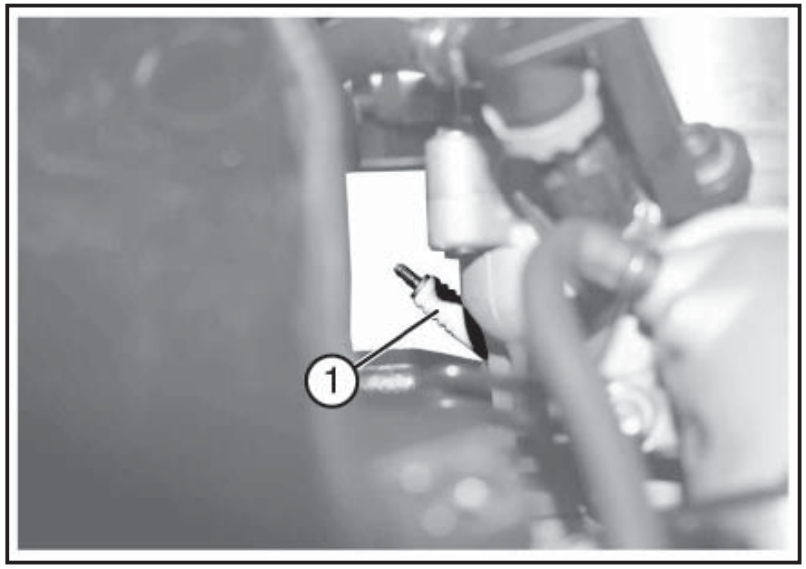


Fig. 01 QSI0047

- Using a socket spanner, undo the spark plug «**1 - Fig. 01**».
- Remove every trace of dirt and any carbon residuals. Check the electrode gap.
- Screw the spark plug back into its hole, manually.
- Tighten up the spark plug.
- Position the spark plug pipe properly.

Type of spark plug recommended: NGK CR8E

Electrode gap: 0.6 ÷ 0.7 mm

Only use plugs of the recommended type so as to avoid serious damage to the engine

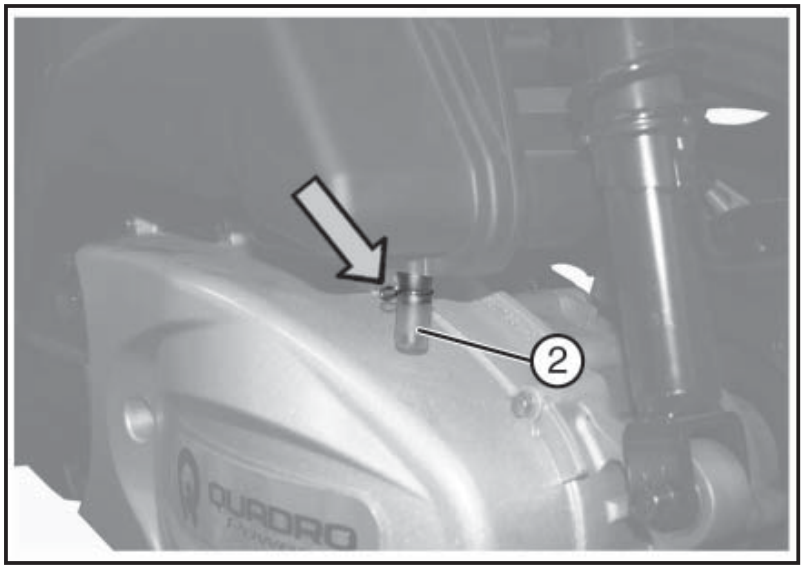


Fig. 02 QSI0048

6.7 OIL VAPOUR RECOVERY (Fig. 02)

- Put a sufficiently large receptacle under the filter.
- Loosen the clip indicated
- Remove the cap «**2**» and empty the oil vapour recovery.
- Recover the condensed oil and deliver it to a collection centre.

We recommend that the above operations are carried out at an authorised Quadro dealership or by qualified personnel.

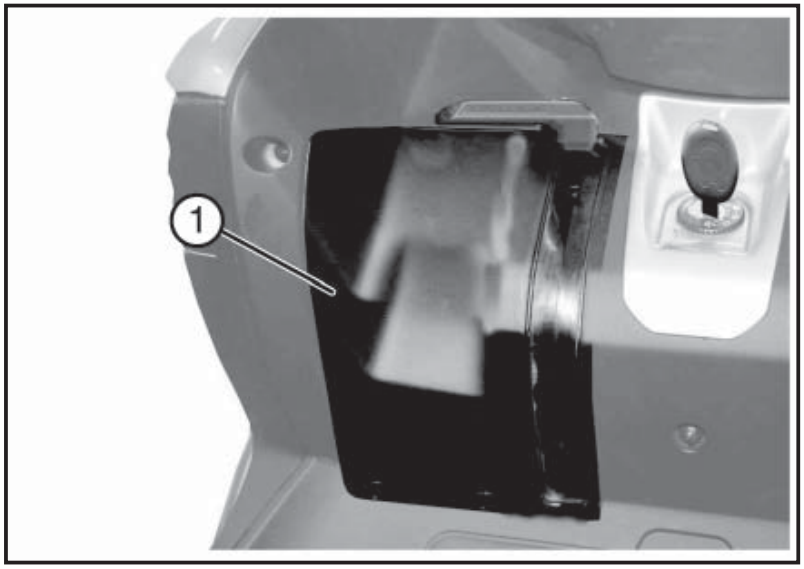
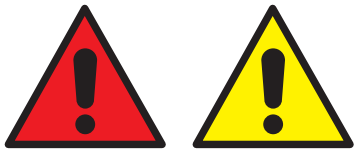


Fig. 01 QSI0049

6.8 - BATTERY



Remove the battery with the engine off and remove the ignition key.

The battery contains harmful and corrosive substances. Contact a doctor immediately if battery acids is swallowed or comes into contact with eyes or skin.

Keep the batteries out of children's reach.

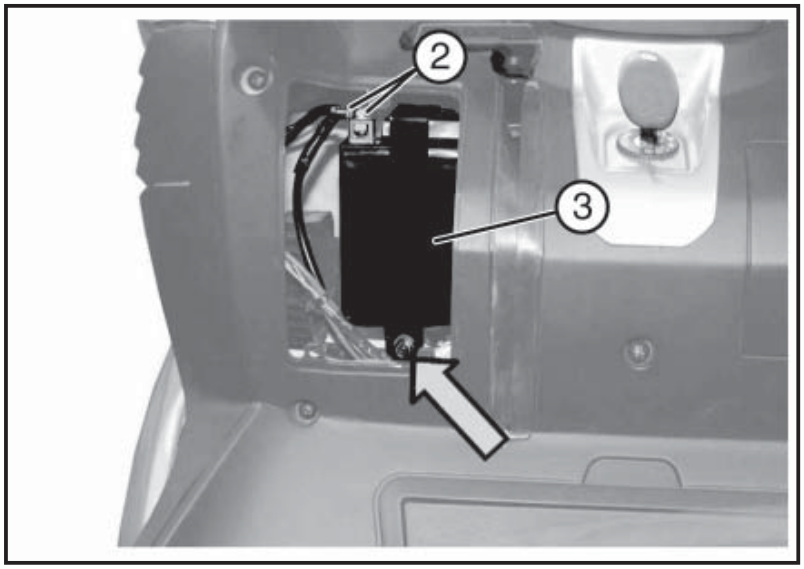


Fig. 02 QSI0050

REMOVAL

Proceed as follows to replace the battery:

- Position the vehicle upright on the central stand.
- Make sure you have removed the ignition key.
- Remove the battery cover «**1 - Fig. 01**» by undoing the two screws at the bottom and removing the three holders situated, one on top of the lid and the other two at the sides.
- Disconnect the cables «**2 - Fig. 02**» of the negative «-» and then the positive one«+» .
- Undo the screws indicated and remove the bracket «**3 - Fig. 02**» .
- Remove the battery.

Do not, under any circumstances, remove the battery leads with the engine running.

Battery acids are inflammable so, for this reason, do not generate sparks, use naked flames or smoke; fire hazard.

Do not dump batteries. Adhere to the current legislation in each country for disposal.

CHECK

Check that the terminals of the leads and the battery clamps are not crusted up. If they are, remove the encrustations with a metal brush.

Fig. 01 *QSI0051*

INSTALLATION

Never invert the battery polarity.
First connect the positive cable, then the negative one.

- Put the battery back into its housing.
- First connect the positive cable «+» and then the negative one «-» , in that order .
- Smear Vaseline or neutral grease on the clamps.
- Position the bracket and fix it into place by doing up the relevant screw.

Battery: 12V – 12 Ah

RECHARGING THE BATTERY

The vehicle uses a sealed battery (maintenance free). Use a battery charger with a low amperage for motorbikes for recharging purposes.
Do not attempt to remove the caps of the battery because you might damage it.

- Remove the battery from its housing.
- Recharge using a current equal to 1/10 the rated current of the battery for 5/10 hours.

Battery voltage: 12V

We recommend that the above operations are carried out at an authorised Quadro dealership or by qualified personnel

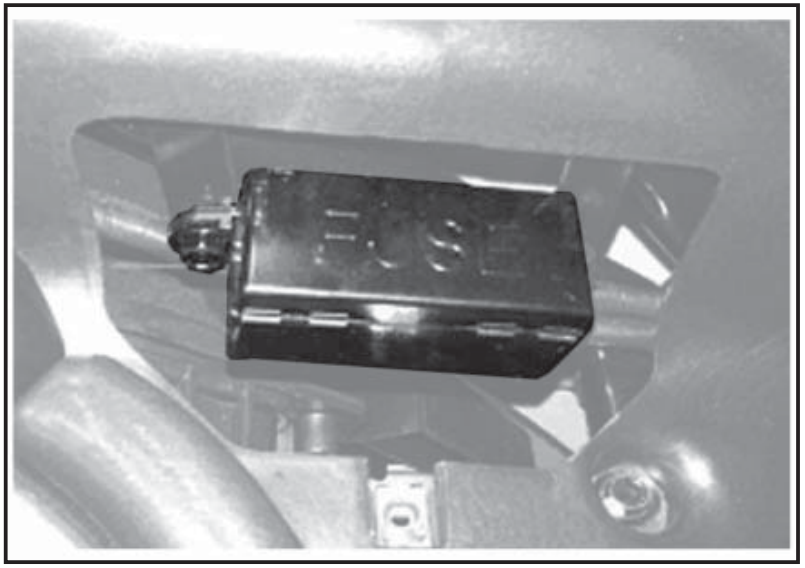
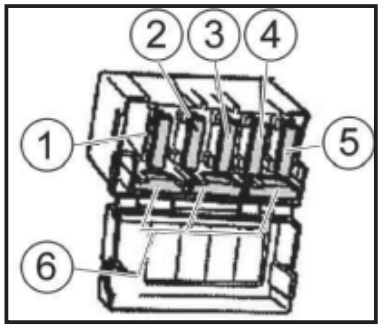


Fig. 01 QSI0052

6.9 - FUSES (Fig. 01)

To access the fuses, turn the key-controlled switch to the seat opening position and once it is open remove the fuse cover in the helmet compartment.

Before replacing the damaged fuse, look for and remove the fault and do not try to repair the fuses. Do not use fuses with an amperage different from that specified.



QSI0054

1. 30A Battery charger circuits
2. 15A General
3. 10A Lights
4. 10A EFI
5. 5A Ignition coil
6. Spare

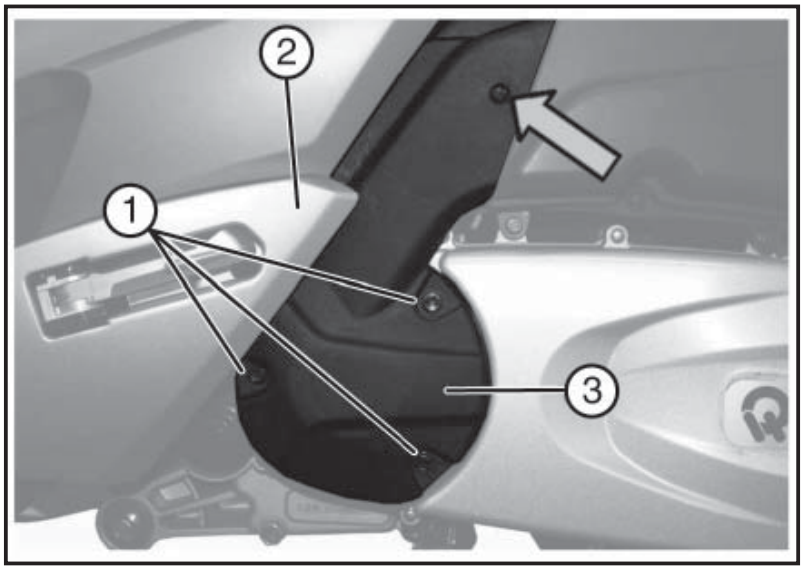


Fig. 01 *QSI0053*

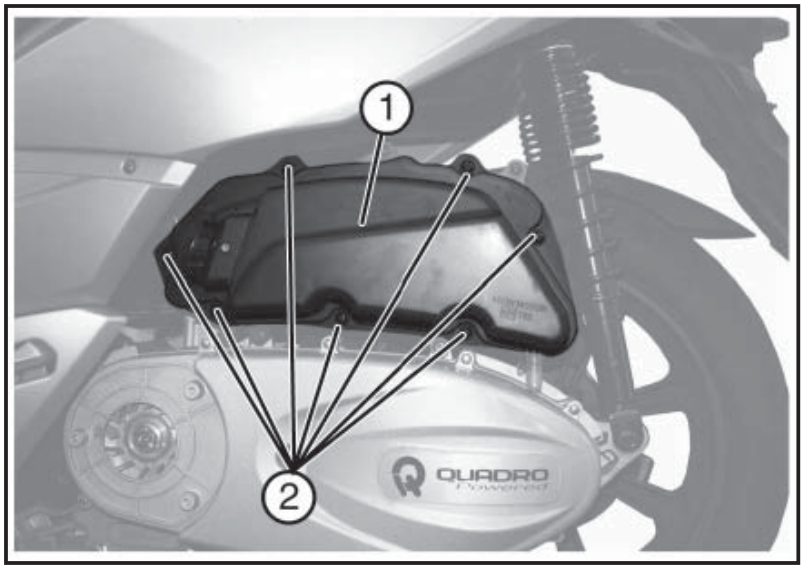


Fig. 02 *QSI0055*

6.10 AIR FILTER (Fig. 01)

Let the engine cool before carrying out any operation.

The air filter must be cleaned at the intervals listed in the scheduled maintenance table.

DISMANTLING

- Unscrew the three screws «**1 - Fig. 01**».
- Undo the screws indicated by the arrow «**Fig. 01**».
- Open the passenger floor and remove the screw.
- To make it easier to remove the conveyor, pull the plastic outwards «**2 - Fig. 01**».
- Remove the conveyor «**3 - Fig. 01**».

- Unscrew the seven screws «**2 - Fig. 02**».
- Remove the lid of the filter box «**1 - Fig. 02**».

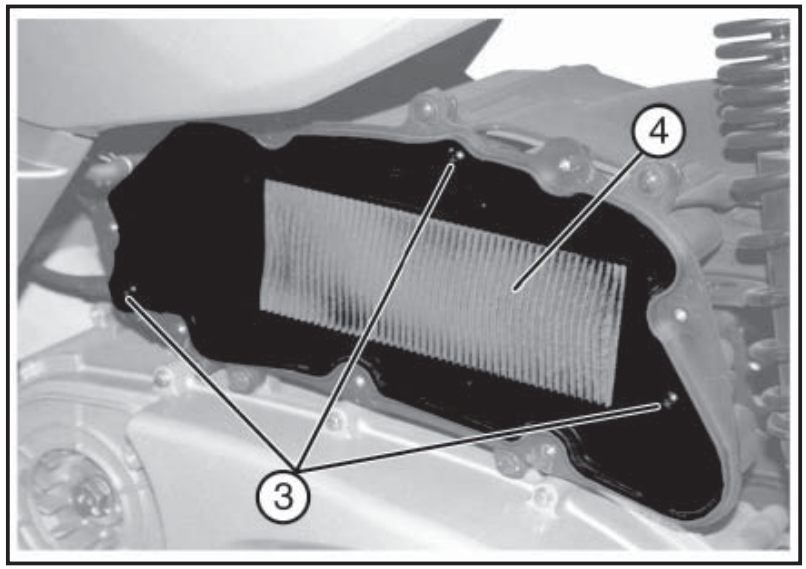


Fig. 01 QSI0056

- Unscrew the three screws «**3 - Fig. 01**».
- Remove the filter element «**4 - Fig. 01**».

Carry out the maintenance operation more frequently if you are using the vehicle on dusty or wet roads.

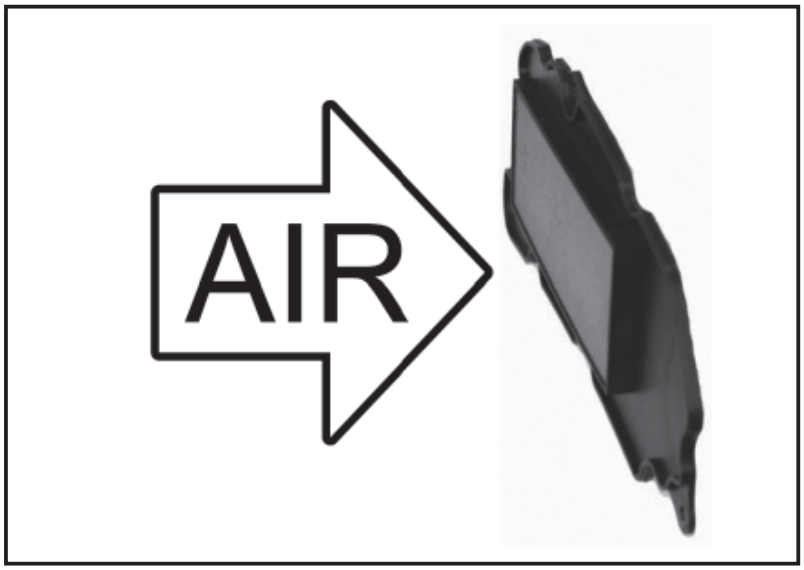


Fig. 02 QSI0057

CLEAN

DO NOT USE PETROL OR INFLAMMABLE SOLVENTS TO CLEAN THE FILTER.

- Clean the whole surface with a clean cloth.
- Blow with a jet of compressed air in the opposite direction from the vacuum.

For refitting, follow the above sequence in reverse order.

We recommend that the above operations are carried out at an authorised Quadro dealership or by qualified personnel.

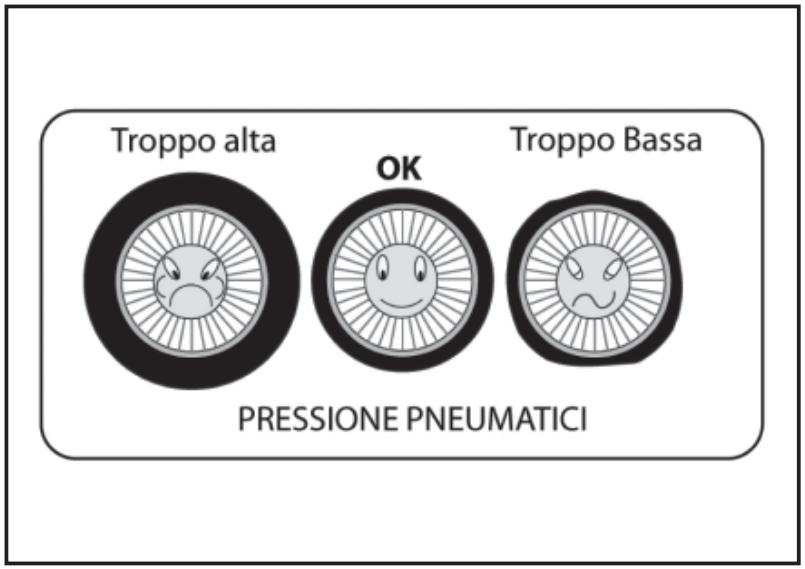


Fig. 01 *QSI0058*

6.11 TYRES (Fig. 01)

Check the vehicle's tyre pressure and wear periodically and before setting off.

Front tyre	Tubeless 110/80-14 53 P
Rear tyre	Tubeless 140/70-15 69 P
Front tyre pressure	1,5 bar (22 Psi)
Rear tyre pressure	2.2 bar (32.3 Psi) just the driver
	2.5 bar (36.2 Psi) with passenger.

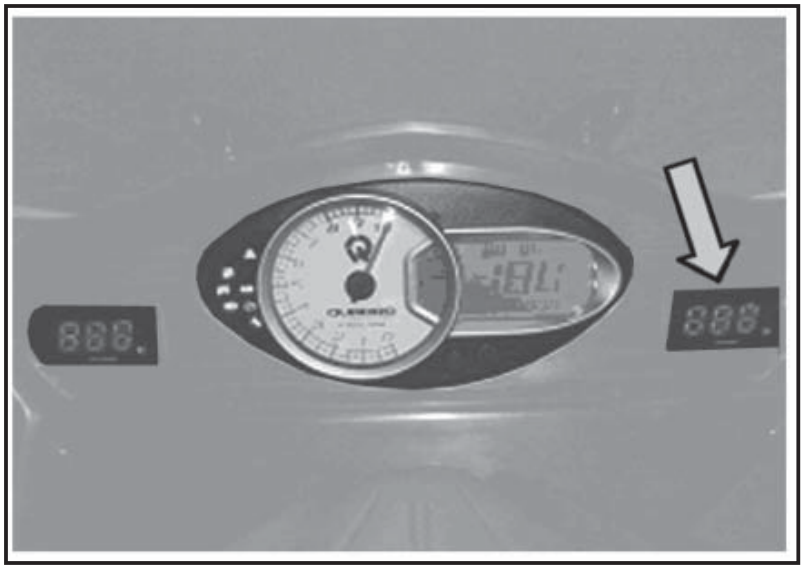


Fig. 02 *QSI0059*

6.12 COOLANT (Fig. 02)

The coolant system has an electric fan (that cuts in at a certain temperature) to guarantee proper functioning in all running conditions.

To ensure the proper operation of the engine, the coolant temperature must not exceed 110°C (right-side indicator). If this value is reached, the indicator starts blinking. Stop the engine immediately, let it cool down and check the coolant level. If it is irregular, please contact an authorised QUADRO dealer.

While running make sure that the level does not exceed the maximum level to prevent the liquid overflowing. Let the engine cool before carrying out any operation.

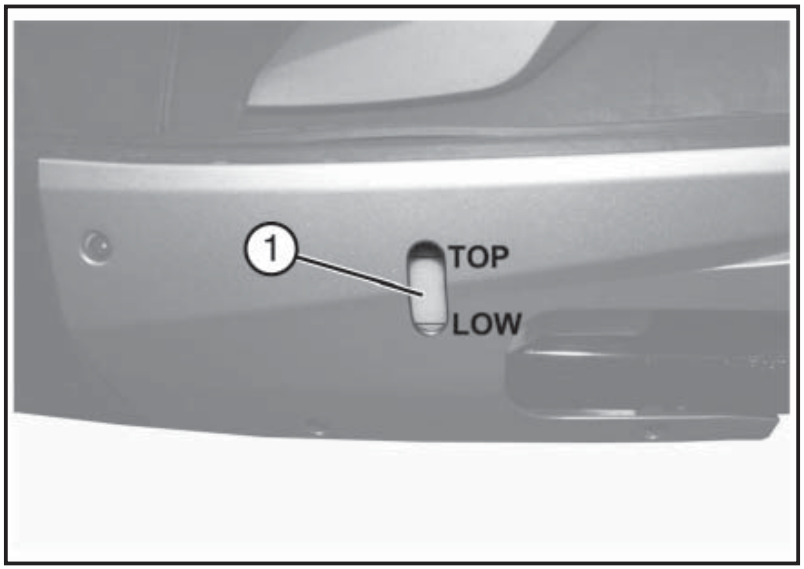


Fig. 01 QSI0060

CHECK (Fig. 01)

The liquid must be checked at the intervals listed in the scheduled maintenance table.

To ensure the engine is functioning properly make sure that the radiator grille is always clean.

Proceed as follows to check the liquid:

- Position the vehicle on the central stand on flat ground.
- Check through the inspection hole «**1**» under the floor that the liquid is at the correct level indicated by the reference ***Top***.

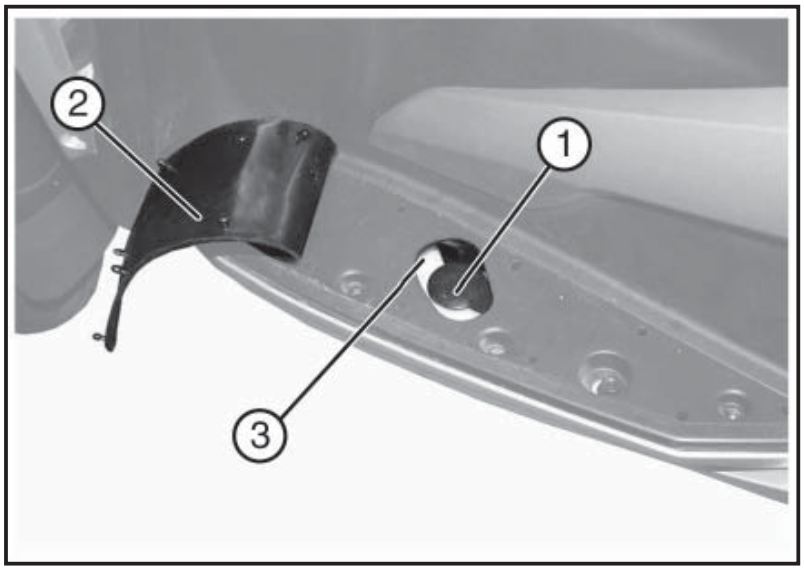


Fig. 02 QSI0061

TOPPING UP (Fig. 02)

To avoid getting burnt, do not undo the expansion tank cap when the engine is still hot.

When the level of the liquid is below the ***LOW*** reference mark, lift the foot rest mat «**2**», remove cap «**1**» of the tank «**3**» and top up if necessary when the engine is cold.

Coolant: CUNA NC 956-16

If you find you frequently need to top up the coolant, you must have the cooling system inspected by an authorised Quadro dealer or service centre.

Fig. 01 QSI0062

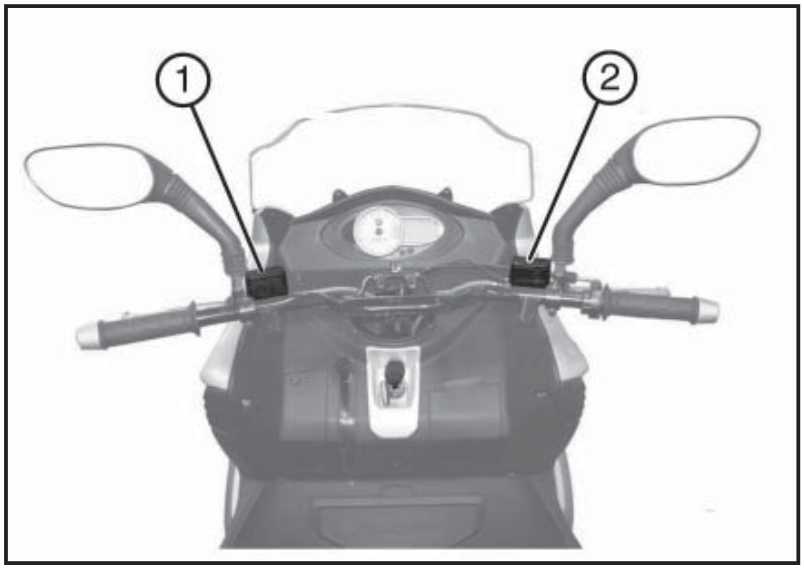


Fig. 02 QSI0063

6.13 BRAKE FLUID (Fig. 01)

CHECK

Before travelling, the engine oil level must be checked at the intervals listed in the scheduled maintenance table. The oil level in the tanks steadily diminishes with the wear of the brake pads.

Before topping up the brake fluid, check the thickness of the brake pads and if they are badly worn, contact an authorized Quadro dealer.

Position the vehicle on the central stand on flat ground.

Check that the level is never lower than the indicated minimum (**Fig. 02**).

The brake fluid tanks are under the handlebars: to access the tanks remove the front handlebar cover.

The tank «**1 - Fig. 02**» refers to the total (front/rear) brake system, tank «**2 - Fig. 02**» refers to the front braking system.

The brake fluid is highly corrosive: avoid contact with the skin and the eyes. In the case of accidental contact wash with large amounts of water. Keep brake fluid out of reach of children.

Make sure the brake tubing is not damaged. Make sure the brake disks are not greasy or worn.

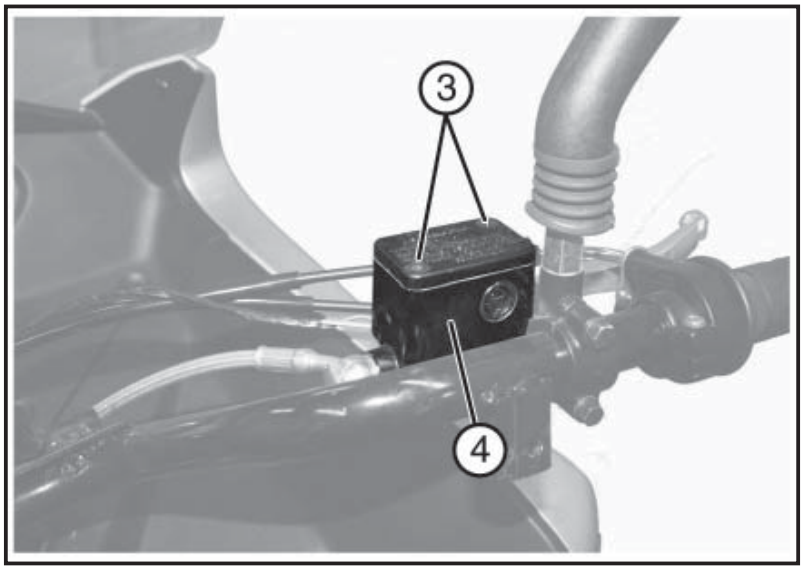


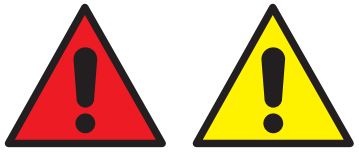
Fig. 01 QSI0064

TOPPING UP (Fig. 01)

- Remove the front handlebar cover.
- Undo the two screws «**3**»and remove the brake fluid tank «**4**» and relative rubber seals.
- Top up with the recommended brake fluid.

Brake fluid: DOT4

Do not dump oil, dispose of only at authorised facilities. Adhere to the current legislation in each country for disposal.



We recommend that the above operations are carried out at an authorised Quadro dealership or by qualified personnel.

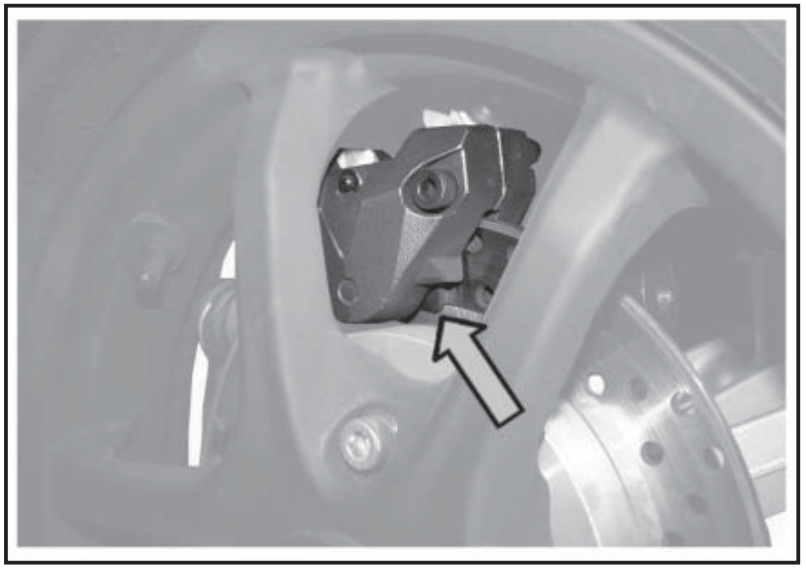
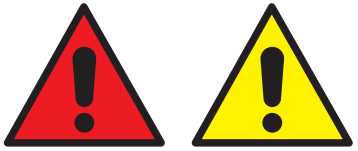


Fig. 02 QSI0065

6.14 FRONT AND REAR DISC BRAKE

To ensure safety, the braking system must always be kept to the highest standard of efficiency.

The life of the brake pads reduces considerably in the presence of dust, mud etc.



We recommend that the above operations are carried out at an authorised Quadro dealership or by qualified personnel.

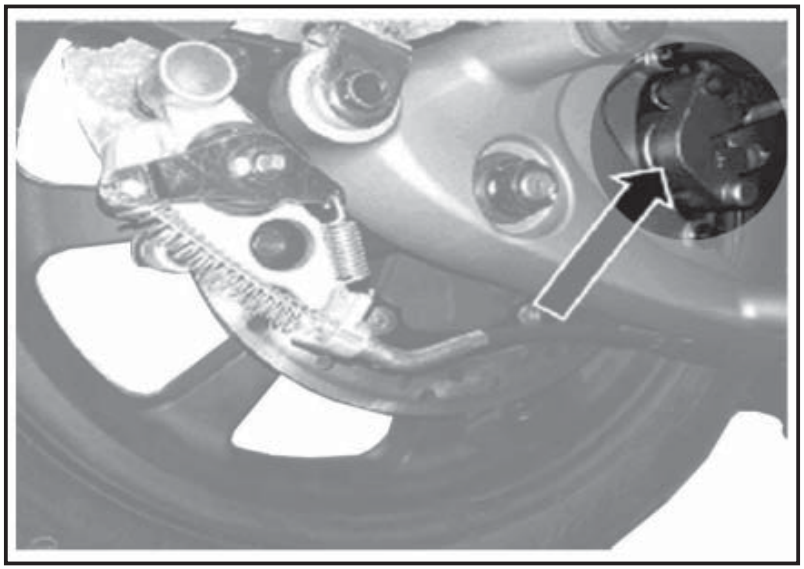


Fig. 01 QSI0066

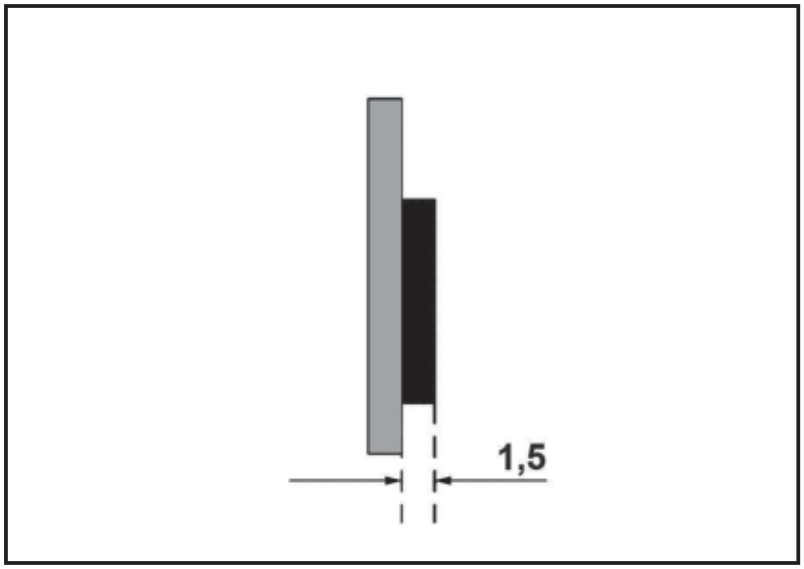


Fig. 02 QSI0067

PADS

Brake pad thickness must be checked at the intervals listed in the scheduled maintenance table.

To check the brake pad thickness:

- Position the vehicle on the central stand.
- Check the pad thickness by looking at the calliper frontally from below.

Replace the brake pads if the thickness of one of the two is less than 1.5 mm

The use of the pads beyond the wear limit may lead to contact between the friction material support and the brake disk with consequent damage to it.

After the replacement of the pads, do not use the vehicle before activating the brake several times for the purpose of settling the pistons and returning the lever travel to the right position.

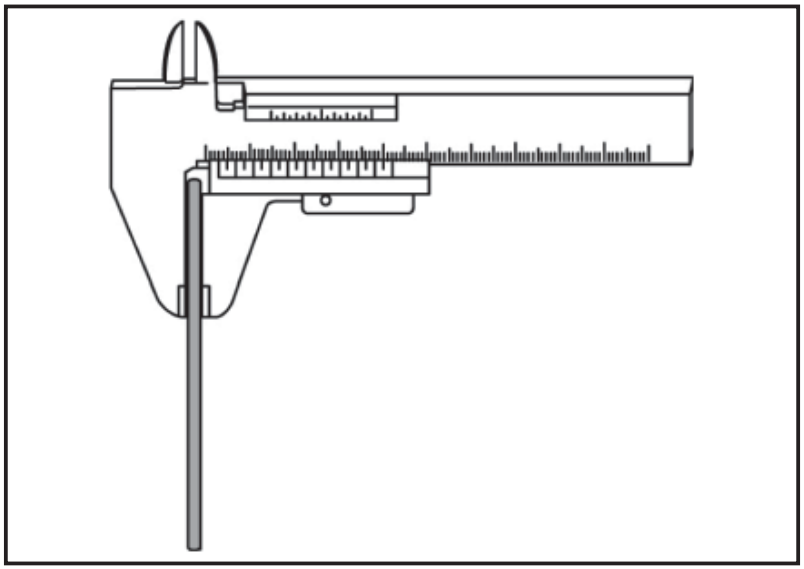


Fig. 01 QSI0068

BRAKE DISC

- Position the vehicle on the central stand.
- Using a gauge check the thickness of the disk.
- If it is thinner than the wear limit have the brake disk replaced at an authorised Quadro dealer.

Thickness of the front disk: 4 mm **Wear limit**: 3.5 mm

Thickness of the rear disk: 5 mm **Wear limit**: 4.5 mm

Fig. 02 QSI0069

FRONT LIGHT CLUSTER (Fig. 02)

Contact an authorized Quadro dealer to replace the bulbs of the front light cluster and turn signal lights.

Position light bulb: 12V LED

Front light bulb: 12V 35-35W

Turn signal light bulbs: 12V LED

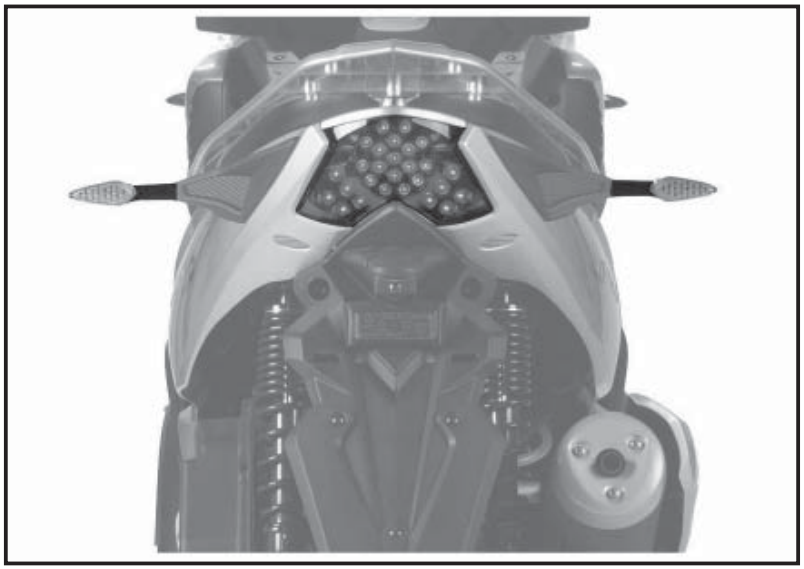


Fig. 01 *QSI0070*

6.16 REAR LIGHT CLUSTER (Fig. 01)

Contact an authorized Quadro dealer to replace the bulbs of the rear light cluster and turn signal lights.

Rear position/stop light bulb: 12V LED

Turn signal light bulbs: 12V LED

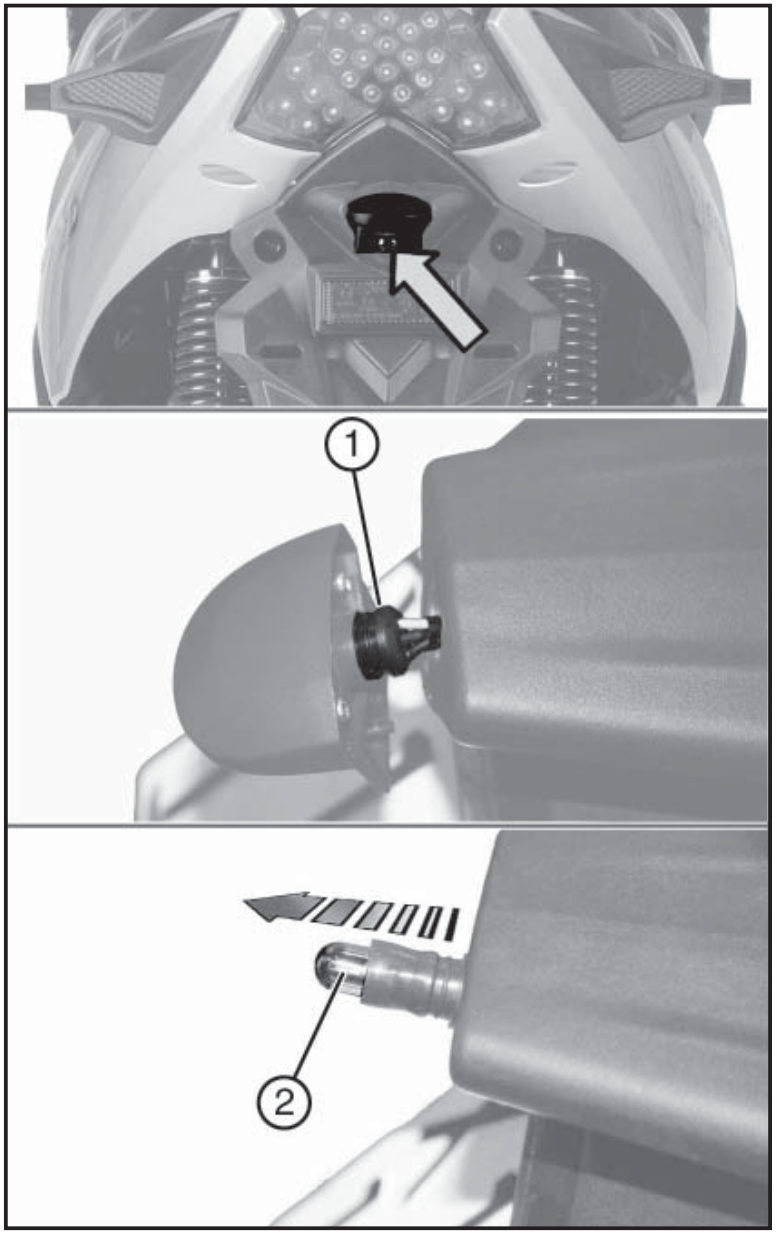


Fig. 01 QSI0071

6.17 NUMBERPLATE LIGHT (Fig. 01)

Before beginning the operations described below, position the vehicle on its central stand and make sure the key is in the "OFF" position.

Proceed as follows to replace the numberplate light bulb:

- Unscrew the screw shown.
- Turn the bulb holder «**1**» and pull it out.

Do not pull the electrical wires to extract the bulb holder

- Take the bulb «**2**» and remove it.
- Replace the bulb «**2**» with a new one.

Numberplate light bulb: 12V 5W

- Refit the number plate bulb by doing the operations described above in reverse order.

We recommend that the above operations are carried out at an authorised Quadro dealership or by qualified personnel.

6.18 SCHEDULED SERVICING

To permit the vehicle to function properly, have a longer life and great performance, provision is made for a number of checks and maintenance interventions against payment that are summarised in the maintenance table

Any faults in the functioning of the vehicle must be promptly reported to an authorized Quadro dealer without waiting for the next scheduled service.
Complying with the scheduled service coupons at the times indicated is essential even you have not done the kilometres provided for.

Unless the services scheduled are complied with, the warranty becomes null and void.

In the "Warranty handbook" the correct ways for applying the warranty and carrying out the scheduled services are described.

PLANNED MAINTENANCE PLAN

The annual checks must be performed every 12 months, unless the mileage interval is reached first.
Check (cleaning and replacing if necessary) the air filter and the variator case air filter more frequently if the scooter is used in very humid or dusty environments.

No.	Part	Operation to be carried out	Odometer reading (km x 1000)									Annual checks	→
			1	5	10	15	20	25	30	35	40		
			Odometer reading (miles x 1000)										
			0.6	3	6	9	12	15	18	21	24		
1 (*)	Valves	Check play, adjust	●		●		●		●		●		On reaching 40,000 km, checks must be repeated starting from the 5,000 km interval
2	Engine air filter	Clean			●				●			●	
		Replacement					●				●		
3 (*)	Spark plugs	Check electrode gap		●		●		●		●			
		Replacement			●		●		●		●		
4	Engine oil	Replacement	●	●	●	●	●	●	●	●	●		
		Check level										●	
5	Engine oil filter	Replacement	●		●		●		●		●		
6 (*)	Fuel circuit and evaporative emissions checking system	Visual check to make sure there are no leaks or cracks, if necessary		●	●	●	●	●	●	●	●	●	
7 (*)	Diagnostics	Inspection with a diagnostic tool and checking of the error code	●	●	●	●	●	●	●	●	●		
8	Engine coolant	Visually check level and for leaks	●	●	●	●	●	●	●	●	●	●	
		Replacement	**Every 36 months**										

(*) Fundamental operation for keeping the emission values stable and controlled

No.	Part	Operation to be carried out	Odometer reading (km x 1000)									Annual checks	→
			1	5	10	15	20	25	30	35	40		
			Odometer reading (miles x 1000)										
			0.6	3	6	9	12	15	18	21	24		
9	V-shaped belt variator and variator rollers	Visual checking for large cracks	●	●	●	●	●	●	●	●	●	●	On reaching 40,000 km, checks must be repeated starting from the 5,000 km interval
		Replace if necessary			●		●		●		●		
10	Clutch	Visually check and replace if necessary			●		●		●		●		
11	Final drive oil	Visually check for leaks	●		●				●				
		Replacement and leakage check	●				●				●		
12 (*)	Exhaust system	Check, tighten (if necessary) and substitute gasket (if necessary)	●	●	●	●	●	●	●	●	●		
13	Timing chain	Replacement									●		
14	Accelerator control grip	Check play, adjust if necessary	●	●	●	●	●	●	●	●	●	●	
15	HTS	Check and restore front accumulator air pressure (central)	●		●		●		●		●	●	
		Visual check on stability	●	●	●	●	●	●	●	●	●	●	
		Change oil									●		
16	HTS switch	Check for correct operation, adjust support if necessary	●	●	●	●	●	●	●	●	●	●	
17	Parking brake mechanism	Check play, functioning and any adjustment	●	●	●	●	●	●	●	●	●	●	
18	Steering bearings	Check play and smoothness of steering	●	●	●	●	●	●	●	●	●		

(*) Fundamental operation for keeping the emission values stable and controlled

No.	Part	Operation to be carried out	Odometer reading (km x 1000)									Annual checks	→
			1	5	10	15	20	25	30	35	40		
			Odometer reading (miles x 1000)										
			0.6	3	6	9	12	15	18	21	24		
19	Braking system	Visually check and replace the front and rear brake pads if necessary	●	●	●	●	●	●	●	●	●	●	On reaching 40,000 km, checks must be repeated starting from the 5,000 km interval
		Visually check brake fluid level and for leaks	●	●	●	●	●	●	●	●	●	●	
		Change brake fluid	**Every 24 months**										
		Visually check for cracks in hoses			●		●		●		●	●	
		Replace hoses	**Every 48 months**										
20	Tyres	Check pressure, wear and damage. Replace if necessary	●	●	●	●	●	●	●	●	●	●	
21	Wheels	Check for misalignment and damage	●	●	●	●	●	●	●	●	●	●	
22	Front wheel bearings	Check play			●		●		●		●		
23	Check steering rods and arms	Check play	●	●	●	●	●	●	●	●	●	●	
24	Safety locks	Check and tighten if necessary	●	●	●	●	●	●	●	●	●	●	
25	Lights, signals, switches	Check operation	●	●	●	●	●	●	●	●	●	●	
26	Central stand	Check functioning and any lubrication		●	●	●	●	●	●	●	●	●	

Engine oil: use SAE10W60.

Quantity of engine oil: 1.7 l

Check the engine oil by positioning the vehicle on the central stand and on a flat surface.

In very humid or dusty environments, clean and/or replace the engine and variator air filter more frequently.

Fig. 01

6.19 PERIODIC AND/OR EXTRAORDINARY MAINTENANCE

Periodic and extraordinary maintenance must be carried out at an authorised Quadro dealership.

6.20 SPARE PARTS AND ACCESSORIES

QSI0072

Quadro recommends the use of genuine parts, the only ones that guarantee the same quality as the components used originally on the vehicle.

The use of non-original parts causes the warranty to become null and void.

QUADRO has a line of spares and accessories for sale that are recognized and the use of which is guaranteed.

Contact an authorized Quadro dealership to make the best choice and to get them fitted properly. The use of accessories and spare parts that are not genuine may compromise the safety and operation of the vehicle.

Be very careful when fitting and removing the mechanical anti-theft devices such as the disk lock, the U-shaped padlocks etc. Be particularly careful around the disk brake, brake/transmission piping, electric cables etc. .

The non-correct use of anti-theft devices or forgetting to remove them before starting up could seriously damage the vehicle and stop it working properly and safely as well compromising the integrity of the vehicle and the safety of the people.

6.21 TROUBLESHOOTING

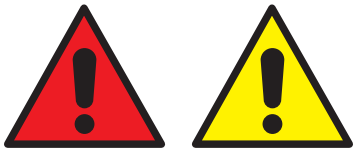
The following table lists the main problems which can occur during operation of the scooter.

Problem	Possible cause	Solution
The engine will not start	A. Engine stop command	A. Place the engine stop command in position
	B. Brakes not activated or brake switch defective	B. Operate the brakes If necessary, see an authorised Quadro centre or qualified workshop.
	C. Fuel tank empty	C. Check the fuel level
	D. Dirty spark plug	D. See an authorised Quadro centre or qualified workshop for cleaning or replacement
	E. Air or fuel filter clogged	E. See an authorised Quadro centre or qualified workshop for cleaning
	F. Clogged engine	F. Remove the spark plug and vaporise fuel inside the cylinder. See an authorised Quadro centre or qualified workshop
	G. Blown fuse	G. Replace the blown fuse and have the vehicle checked by an authorised Quadro centre or qualified workshop
Reduced braking power	A. Damages to the brake lines	A. See an authorised Quadro centre or qualified workshop to have the component(s) replaced
	B. Brake linings or tyres too worn	B. See an authorised Quadro centre or qualified workshop to have the component(s) replaced
	C. Brake disc greasy	C. See an authorised Quadro centre or qualified workshop
	D. Brake pads worn	D. See an authorised Quadro centre or qualified workshop to have the component(s) replaced
	E. Air in the front and rear brake circuits	E. See an authorised Quadro centre or qualified workshop
Noisy Operation	A. Worn bearings	A. See an authorised Quadro centre or qualified workshop to have the component(s) replaced
	B. Damaged silencer	B. See an authorised Quadro centre or qualified workshop to have the component(s) replaced
	C. Problems with the cylinder head	C. See an authorised Quadro centre or qualified workshop to have the component(s) replaced
The vehicle will not move	A. Parking brake and tilting lock engaged	A. Release the parking brake and tilting lock
The engine stalls	A. Air or fuel filter clogged	A. Have the filter cleaned by an authorised Quadro centre or qualified workshop
	B. Silencer clogged	B. See an authorised Quadro centre or qualified workshop
	C. Fuel tank empty	C. Check the fuel level
Suspension ineffective	A. Loss of efficiency / alignment	A. See an authorised Quadro centre or qualified workshop
Poor performance, high fuel consumption	A. Clogged or dirty air filter.	A. Have the filter cleaned by an authorised Quadro centre or qualified workshop

6.22 PUNCTURES

This vehicle is fitted with Tubeless tyres. If you get a puncture they deflate slowly. This means greater safety for the driver. See an authorised Quadro dealer or qualified person to make any repairs.

See an authorised Quadro dealer or qualified person for tyre replacement.



Do not put inner tubes in tubeless tyres.

6.23 CLEANING

To keep the vehicle looking sharp, regular cleaning is recommended. In addition to this always wash it when you have travelled over unmade roads or used the vehicle in very dusty environments.

When washing the vehicle pay the greatest attention to the warnings given in this chapter. Non compliance with certain instructions could nullify the warranty.

Ensure that the engine is off before cleaning the scooter.
Proceed as follows to clean the scooter:

- Remove any dirt from the underbody using a sponge with a mixture of water and neutral detergent specifically for washing vehicle bodywork;
- rinse thoroughly with water in order to remove any detergent residue;
- dry the surfaces with a chamois leather being particularly careful to get at the hidden places where water might accumulate;
- clean the plastic parts with a solution of a special detergent and water, applying it with a soft cloth, then rinse with clean water;

- wash the seat with a special product for the cleaning and care of leather;
- wash the rims with a degreasing product in the ways and with the acting times indicated by the manufacturer.

For a better shine of the painted parts, use non-abrasive polishing products for bodywork.

When cleaning the mechanical parts of the engine, use specific degreasing products, following the manufacturer's instructions.

Never use harsh chemical products on the plastic components (fairing, panels, windscreen, headlight lenses etc.)

Use specific non-abrasive products and a soft cloth to clean the transparent plastic covers (headlight lenses, windscreen, instrument panel lenses).

Do not use sponges or cloths which have come into contact with abrasive chemical products, solvents, thinners, rust treatments, brake fluid, antifreeze etc.

Do not use strong detergents or any type of harsh chemical product (degreasers etc.) for cleaning the windscreen.
Only use soft sponges in order to avoid removing the anti-scratch/anti-reflective treatment.

While washing, braking surfaces come into contact with water and degreasing products: this involves a temporary fall in braking power and increase in braking distance.
To re-establish the normal conditions, work the brakes repeatedly while the vehicle is moving.

If a high-pressure water jet cleaner is used, be careful not to hit the delicate parts of the vehicle (electrical parts, engine etc.) or people, animals or anything else in the vicinity.

If there are chrome-plated parts, use specific products for treating and cleaning chromium.

The use of non-appropriate products or washing methods could cause surfaces to lose their shine.

Clean the vehicle more frequently if you regularly drive on gritted/salted roads.

Use cold water to remove salt as hot water increases the corrosive effect of it.

When cleaning the vehicle it is important to do little things to respect the environment. So always use biodegradable products and spray solutions that do not contain CFCs (chlorofluorocarbons).

Dispose of the products for cleaning the scooter in the ways required by the appropriate agency in your country.

6.24 RECOMMENDED PRODUCTS

To use the *QUADRO* vehicle correctly, the use of products that comply with the specifications below is recommended:

Description	Specifications
Engine oil	SAE 10W - 60 API-SJ
Final reduction oil	SAE 80W - 90
Brake oil	DOT 4
HTS system oil	Motorex SAE 10W
Coolant	CUNA NC 956-16

DO NOT USE PRODUCTS WITH SPECIFICATIONS OTHER THAN THOSE INDICATED, THE INTEGRITY OF THE VEHICLE MIGHT BE COMPROMISED WITH A CONSEQUENT DANGER TO THOSE ON BOARD.

Fig. 01 *QSI0068*

6.25 TOOL KIT

There is a tool kit on the vehicle.

The kit contains the following tools:

- A socket spanner
- A double screwdriver

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CHAP. 7 PERIODS OF INACTIVITY

7.1 PERIODS OF INACTIVITY

If it is necessary to leave the vehicle unused for a long period (because of inactivity during the winter or any other reason) special precautions should be taken with appropriate materials, devices and knowledge. For this reason *QUADRO* recommends doing the maintenance work at a qualified assistance centre. Carry out this operation yourself if necessary following the general indications shown below.

SCOOTER

Thoroughly clean the vehicle and park it on a solid, stable surface, in doors where it is not exposed to direct sunlight or damp. Position it on the central stand and disengage the parking lever to prevent the hydraulic mechanisms being damaged due to the tensioning of the HTS system. Turn the handlebar fully leftwards, lock the steering and remove the ignition key. Then cover the scooter with a breathable sheet.

LEVEL CHECKS

Check the fluid levels and replace them if necessary. In addition, check the coolant system is full of 50% antifreeze solution.

FUEL

Completely fill the tank with fuel mixed with a quantity of stabiliser, as specified by the manufacturer of the stabiliser.

Fuel is highly flammable and explosive. When handling fuel you are running serious risks even of death. Store the vehicle in a well ventilated area. After dealing with fuel, the fuel container cap back on. Check that there are no fuel leaks during refilling. Fuel vapours and/or any other leaks could catch fire. Immediately clean the filling area. Keep the fuel away from heat sources and flames.

BATTERY

1) Remove the vehicle battery consulting section «**6.8 - Battery**».
2) Thoroughly clean the outside of the battery with a light detergent and remove all signs of corrosion from the terminals and the wire connections.
3) Replace the battery in a cool dry environment.
4) Once a month, recharge the battery at 1.2 A x from 5 to 10 hours (using specific and adequate equipment).

TYRES

Inflate the tyres in accordance with the specific regulations.

MECHANICAL PARTS

If it is necessary to protect the mechanical parts with special substances (e.g. antirust products) contact an authorised Quadro dealership.

STARTING TO USE THE VEHICLE AGAIN

Before riding the scooter again after it has been laid up, do the following:

- check the tyre pressure and, if necessary, restore the pressure to what is shown in section «**5.2 – Tyre pressure**»;
- if it is flat, recharge the battery, then put it back on the scooter (see section «**6.8 - Battery**»);
- check the fluid levels and replace them if necessary;
- carry out an approximate check of the scooter's functions, especially the safety systems and lights;

If, after a period of inactivity, you encounter faults in the functioning of the scooter, contact an authorised Quadro dealership.

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CHAP.8 DISMANTLING AND DISPOSAL

8.1 DISMANTLING AND DISPOSAL

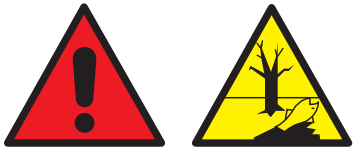
All the vehicle dismantling operations must be line and strictly comply with the operator safety regulations.

Before beginning to dismantle the vehicle, it is essential to remove all items that could cause injury and to wear appropriate garments and special gloves and footwear.

The vehicle consists of recyclable materials broken down into ferrous materials (frame, engine, rims, mechanisms etc.) and plastics (e.g. polypropylene, gaskets, tyres etc.) that do not require particular treatment for dismantling.

During demolition it is however advisable to separate the plastic parts from the ferrous material to send them to specific collection points in compliance with the norms of the country where the vehicle is used.

With regard to the metal parts of the vehicle it is sufficient to separate the steel parts and those of other metals or alloys so they can be sent to the right recycling destination for casting.



The disposal of the vehicle parts must be done with respect for the environment, avoiding the pollution of the soil, water and air and complying with the legislation in each country.

The users of the vehicle are reminded that, for the disposal of components and substances that are harmful for the environment it is necessary to adhere to the legislation in each country.

The user is required to keep up to date regarding the substances that require special disposal or the legislation in each state at the time of disposal.

NOTES

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