

Brough Superior

Since 1919

OWNER'S MANUAL

BROUGH
SUPERIOR
MOTORCYCLES
OWNER'S MANUAL

<https://www.motorcycle-manual.com/>

This manual should be considered an integral part of the motorcycle and must accompany it throughout the motorcycle's life time. If the motorcycle is sold this manual must be given to the new owner. The manual must be carefully preserved, if it deteriorates or is lost immediately ask one of our dealers, or a Brough Superior approved workshop, for another copy. The quality and safety standards for Brough Superior's motorcycles are regularly updated following the development of new design solutions, equipment and accessories. This manual contains the latest information available at the time of printing however Brough Superior reserves the right to introduce modifications at any time, without prior notice and without any obligation. It may be therefore that you notice some differences in comparing certain illustrations with your actual motorcycle. Any copying or disclosure, even partial, of the subjects treated in this current manual is absolutely forbidden. All rights are reserved by Brough Superior Motorcycles.

For all repairs and even advice please contact our approved service centres. Our team is also at the disposal of Brough Superior motorcycle owners for any questions, advice or suggestions.

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OWNER'S MANUAL

INTRODUCTION

SAFETY GUIDELINES

We are delighted to count you among the members of the Brough Superior family and we congratulate you on the choice you have just made. We think that you will use your new Brough Superior not only as your usual form of transport but also for long journeys. Brough Superior Motorcycles s.a.s hopes that all your outings on your new motorcycle are enjoyable.

Your motorcycle is the result of constant work in research and development at Brough Superior Motorcycles s.a.s; for this high quality to be maintained it is vital that you scrupulously adhere to the maintenance programme and use only original spare parts. This manual contains instructions for carrying out minor maintenance procedures. More major procedures are contained in the workshop manual which is made available to workshops approved by Brough Superior Motorcycles s.a.s.

In your own interest, for your safety and to guarantee a properly functioning motorcycle we strongly advise you to go to a Dealer or a Brough Superior Motorcycles s.a.s approved workshop for all procedures described in the maintenance programme, see page 67.

Our highly qualified personnel, equipped with the special instruments and tooling necessary for carrying out the correct procedures, only use original parts coming from Brough Superior, which guarantee a perfect fit, correct functioning and a long life for the motorcycle.

The warranty will not be upheld if the motorcycle is used in sporting competitions. The alteration or the modification, even partial, of the components nullifies the warranty. Mistaken or insufficient maintenance procedures and the use of none-original spare parts or parts not clearly approved by Brough Superior could lead to the warranty being cancelled, in addition to any potential damage or the loss of expected performance.

Your safety and the safety of others is extremely important, which is why Brough Superior Motorcycles s.a.s recommends that you ride your motorcycle in a responsible fashion.

Before mounting your motorcycle and heading out onto the road for the first time, read this manual carefully from start to finish and carefully follow the guidelines; this will enable you to have all the information required to ensure the proper use and correct maintenance of your motorcycle. If you have any doubts or questions contact a Dealer or an approved workshop.

WARNING SYMBOLS USED IN THE MANUAL

With regard to any potential dangers to which yourself and/or other people may be exposed, we have employed security messages preceded by a warning symbol and one of either two terms: **ATTENTION** or **IMPORTANT**.



ATTENTION

Ignoring the instruction may lead to a dangerous situation and cause serious personal injury to the user, or any other people, even death.



IMPORTANT

The motorcycle or its components could be adversely affected.



REMARK

Additional information on the theme being described.

AUTHORISED USE

The motorcycle must only be used on asphalted road or paved road which is flat and levelled. The motorcycle can not be used on non-asphalted roads or off-road.



ATTENTION

Off-road use may cause a loss of control leading to damage to the vehicle or injury to people, even death.



ATTENTION

This motorcycle must never be used to draw a trailer or hitch a side-car; both could cause loss of control of the vehicle and consequently an accident.

This motorcycle is solely designed to transport one rider. The total weight of the motorcycle when operational, with the rider, must not exceed 341kg/752lb.

RIDER'S RESPONSIBILITIES

All riders must have a valid rider's licence.



ATTENTION

To ride without a licence is illegal and punishable by law. Ensure you always have the document with you when preparing to use the motorcycle. Never lend the motorcycle to inexperienced riders or anyone without a valid licence.

Certain countries require obligatory insurance cover.

Never go out onto the road under the influence of alcohol and/or drugs. To ride under the influence of alcohol and/or drugs is illegal and punishable by law.



ATTENTION

Avoid taking medicines before going out onto the road without taking prior advice from your doctor about potential secondary effects. Certain medicines can lead to drowsiness or cause other undesired effects which can dim reflexes and the ability of the rider to control the motorcycle, so increasing the risk of an accident.



ATTENTION

Check your country's laws. Subscribe to an appropriate insurance and carefully keep the paperwork with the other documents relating to the motorcycle.

Some countries have imposed by law the use of an approved helmet for the riders' safety. Riding the motorcycle without a helmet might be punishable by law. Verify that the helmet conforms to safety specifications; it must give good visibility, be the appropriate size for the rider's head and carry the certification label of the country of origin.

The laws which regulate road traffic vary between countries. Check the laws operating in your own country before setting out on the road with the motorcycle and always abide by them.



ATTENTION

Not wearing a helmet, if there is an accident, increases the risk of serious personal injury, even death.

RIDER'S TRAINING

Many accidents are caused by a rider's lack of experience with a motorcycle. The method of riding, the manoeuvres, and the braking have to be accomplished differently from other vehicles.



ATTENTION

The lack of skill of the rider or an improper use of the motorcycle can cause a loss of control, serious damage and even death.

RIDER'S EQUIPMENT

The equipment is vitally important with regard to the rider's safety, simply put a motorcycle can't protect a person from a collision as well as a car.

Appropriate equipment includes: a helmet, protection for the eyes, gloves, boots or ankle high shoes, a protective jacket and long trousers.

The helmet should incorporate the characteristics described on page 8; if the helmet doesn't include a visor ensure you wear adequate eye wear.

The gloves must have 5 fingers, in a material resistant to abrasions, such as leather.

The boots or motorcycle shoes should have non-slip soles and protection for the ankles.

The jacket and the trousers, or a combination of the two, must be made from leather or another material resistant to abrasions, with colour and inserts which are clearly visible.



IMPORTANT

For safety, this type of clothing has to be used all year, in summer as well as winter. Avoid wearing free-flowing clothing or accessories which could get caught up in the motorcycle's machinery.

OPTIMAL PRACTICES TO ENSURE SAFETY

Before, during and after usage never forget to follow simple but very important procedures to ensure the safety of people and to maintain the all round performance of the motorcycle



IMPORTANT

Throughout the running-in period respect carefully the instructions contained in this manual's chapter 'Precautions to take during the running-in period' p40. If these rules are not observed Brough Superior Motorcycles s.a.s is absolved from all responsibility in case of damage to the engine or reduction of its life span.



ATTENTION

Don't take to the road with the motorcycle without having completely mastered the different controls necessary to ride correctly.

Always before starting carry out the checks described in this manual (see page 42).



ATTENTION

Failure to implement these checks can cause damage to the motorcycle or cause personal injury to the rider.



ATTENTION

Start the engine in the open air or a well ventilated area. It is strongly advised not to start the engine in a confined space. The exhaust fumes are poisonous and can cause unconsciousness, even death in a very short window of time.



IMPORTANT

The rider must ALWAYS keep his/her hands on the handlebars.

The rider must rest his/her feet on the foot rests when the motorcycle is on the road.



IMPORTANT

Be very careful at crossroads, when coming out of private properties or car parks and on the slip roads to motorways.



IMPORTANT

Stay highly visible by avoiding riding in the 'blind spot' of vehicles ahead of you.



IMPORTANT

ALWAYS signal every change of direction or change of road well in advance using the indicators.



IMPORTANT

Park the motorcycle using the side stand in a place safe from collisions. Never park the motorcycle on uneven or unstable ground because it could fall.



IMPORTANT

Check the tyres regularly to detect cuts or cracks, bulges at the sides or clear signs that indicate interior damage; replace the tyres if they are seriously damaged. Remove gravel or any other foreign body stuck in the tyre.



IMPORTANT

The engine, as well as the exhaust pipes and the silencers, stays hot for a long time, even after stopping the engine; be careful that no part of your body touches the exhaust system to avoid the risk of injury and be careful not to park the motorcycle close to flammable materials.



ATTENTION

When the motorcycle isn't in view always remove the ignition key and keep it in a place inaccessible to people who don't have the ability to use the motorcycle.

REFUELLING

Refuel in the open air when the engine has been stopped. Never smoke or use unguarded flames whilst refuelling. Be careful not to spill fuel on the engine or the exhaust pipes. When refuelling don't fill the tank completely; the fuel level must stay below the fill hole in the filler cap recess. When refuelling avoid as far as possible inhaling the fuel's vapours and try to ensure they don't come into contact with your eyes, skin or clothes.



ATTENTION

If you feel unwell due to the prolonged inhalation of fuel vapours, stay in the open air and consult your doctor. If there is contact with the eyes, rinse them with plenty of water. If there is contact with the skin wash immediately with soap and water.



ATTENTION

Fuel is highly flammable, if you inadvertently spill it on your clothes change them.



IMPORTANT

The motorcycle is compatible with fuels containing a maximum of only 10% ethanol (E10). The use of fuels containing over 10% ethanol is forbidden. The use of such fuels could seriously damage the engine and components of the motorcycle. The use of fuels with over 10% ethanol cancels the warranty.

RIDING WITH A FULL LOAD

This motorcycle was designed to run safely for long distances with a full load.

However, the distribution of weight on the motorcycle is very important to avoid compromising safety and to ensure there are no difficulties during rapid and sudden manoeuvres.



ATTENTION

Don't surpass the total weight allowance for the motorcycle.



IMPORTANT

Don't fix large or heavy objects to the upper yoke or on the front mud guard because they will cause dangerous instability. Don't insert objects for transport in the gaps in the frame because they could hamper the motorcycle's moving parts.



ATTENTION

Ensure that the tyres are inflated to the recommended pressure and in good condition.

Refer to the section 'Tubeless tyres' on page 62.

DANGEROUS PRODUCTS – WARNINGS USED ENGINE OIL



IMPORTANT

The frequent and prolonged contact of the skin to used engine oil could lead to skin cancer. If there is daily handling of used engine oil it is advised to wash the hands thoroughly with soap and water immediately following contact. Keep used oil away from children

BRAKE DUST

Never use jets of compressed air or dry brushes to clean the brake system.

BRAKE FLUID



ATTENTION

Brake fluid is corrosive and may damage the motorcycle's plastic parts, rubber or paint. Before starting maintenance of the system cover these parts with a clean workshop cloth each time servicing takes place. Keep brake fluid away from children.



ATTENTION

The liquid used in the braking system is corrosive. In case of accidental contact with the eyes or skin wash the area concerned with abundant clean water.

COOLANT

In certain conditions the ethylene glycol present in the engine coolant is flammable and the flame isn't visible. If the ethylene glycol should burn the flame isn't visible but it can cause severe burning.



ATTENTION

Avoid spilling engine coolant on the exhaust system or any part of the engine. It might be that these are sufficiently hot to inflame the liquid which will then burn without visible flames.

The coolant (ethylene glycol) may cause skin irritations and it is poisonous if swallowed. Keep it away from children.

Don't remove the radiator cap when the engine is still hot.

The coolant is under pressure and can cause burns.

Keep hands and clothes away from the cooling fan because this starts automatically.

BATTERY



ATTENTION

The battery produces explosive gases; keep it away from sparks, flames and cigarettes. Always charge the battery in an area sufficiently aerated.

VEHICLE IDENTIFICATION NUMBER



REMARK

These numbers identify the motorcycle's model and are important when ordering spare parts. Please write the motorcycle's frame number in the space below.

FRAME N°

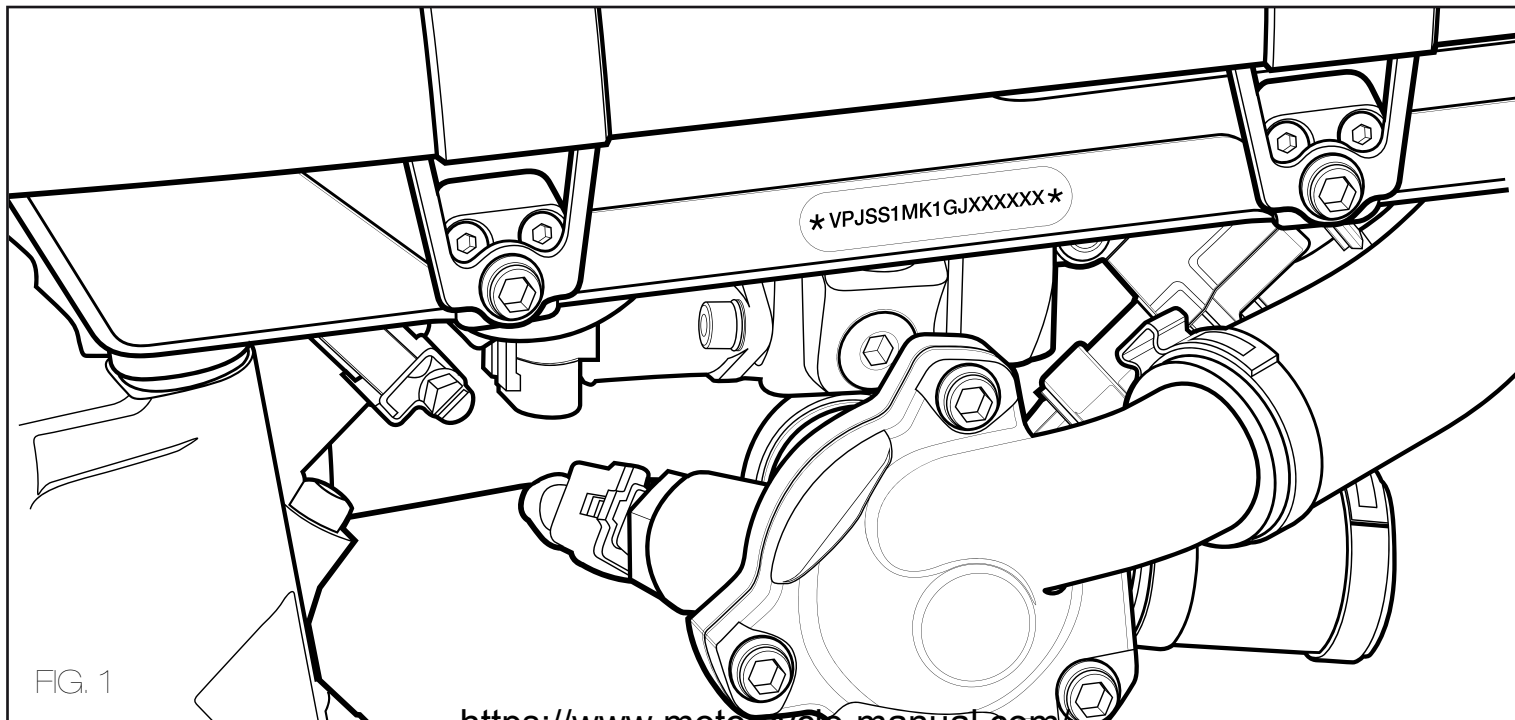


FIG. 1

ENGINE IDENTIFICATION NUMBER



REMARK

These numbers identify the motorcycle's model and are important when ordering spare parts. Please write the motorcycle's engine number in the space below.

ENGINE N°

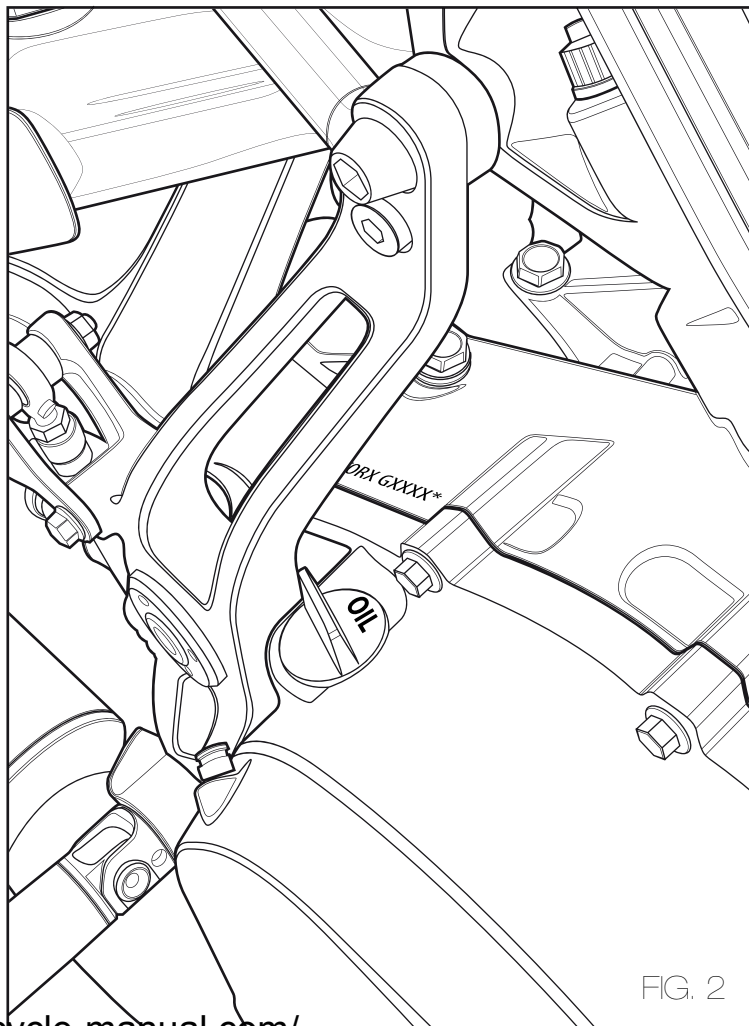


FIG. 2

DASHBOARD

The dashboard on the handlebars includes a needle speedometer and a LCD display where the main indications can be seen (engine revolutions, temperature of coolant and odometer)

1) LCD DISPLAY

2) SPEED INDICATOR

Indicates the speed being travelled.

3) NEUTRAL INDICATOR LIGHT **N**

This lights up when the gear is in a neutral position.

4) MAIN BEAM INDICATOR

This lights up when the main beam is activated.

5) ENGINE OIL PRESSURE INDICATOR

This lights up when the engine oil pressure is insufficient. It should light up when the motorcycle is started but disappear several seconds after the engine starts. It may light up if the engine is very hot but should disappear when the engine speed increases.

6) FUEL RESERVE INDICATOR

This lights up when there is about 4.5 litres of fuel left in the tank (the reserve).

7) INDICATOR LIGHT

This lights up and flashes in accordance with which indicator is being employed.

8) INDICATOR (DIAGNOSTIC ENGINE / VEHICLE - EOBD)

This lights up following errors with the « engine » and/or « vehicle » and in certain cases shows a fault with the engine.

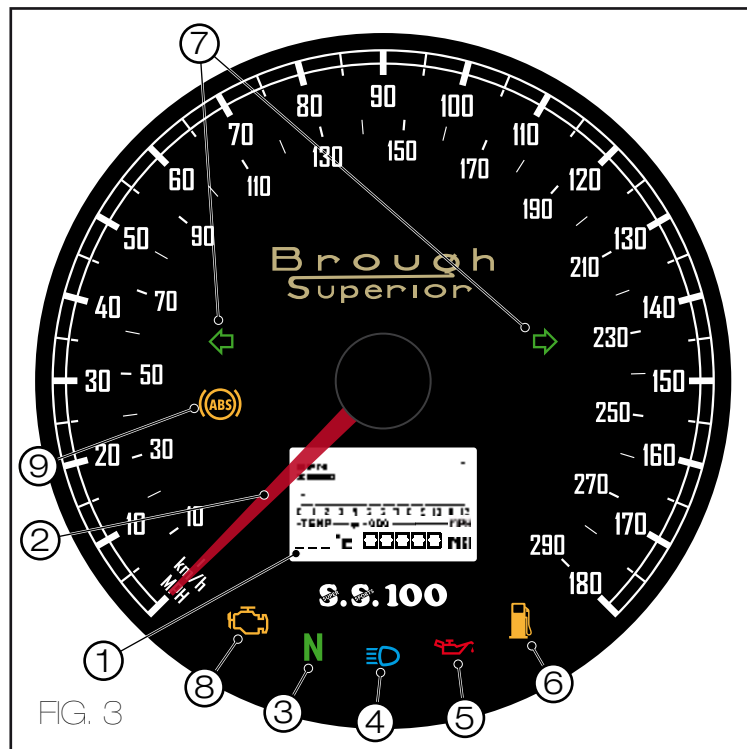


FIG. 3

9) ANTI-LOCK BRACKING SYSTEM INDICATOR

is the brake assist system that limits wheel lockup during periods of heavy braking.



IMPORTANT

Don't use the motorcycle if the indicator **ENGINE OIL** is on, to avoid damaging the engine.

LCD – PRINCIPAL FUNCTIONS

1) REV COUNTER

Indicates the engine revolutions per minute (rpm).

2) WATER TEMPERATURE GAUGE

Indicates the temperature of the engine coolant.

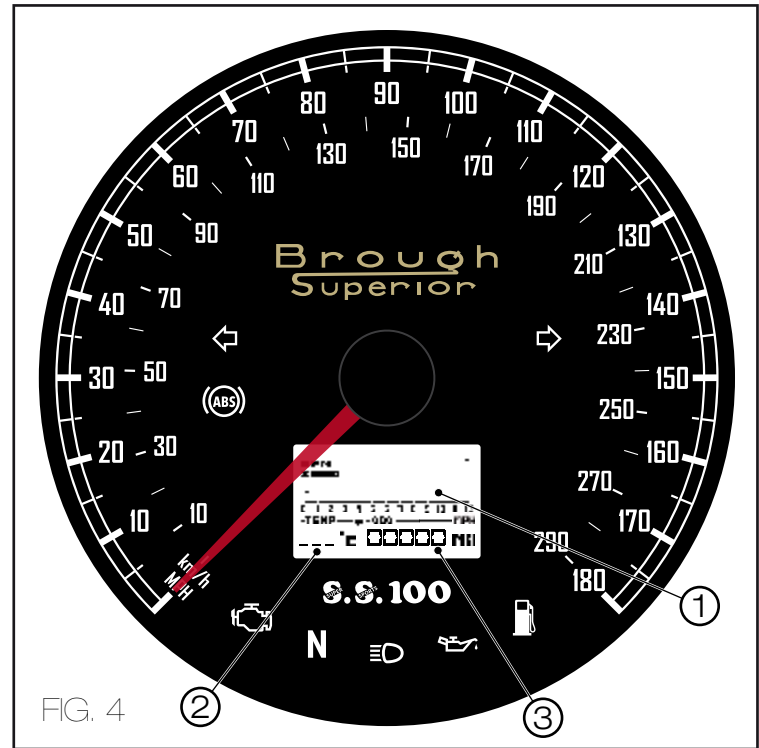
3) ODOMETER

Indicates the distance travelled by the vehicle.



IMPORTANT

Don't use the motorcycle if the temperature reaches the maximum count, engine damage could result.



VEHICLE SPEED INDICATOR

This function indicates the speed of the vehicle (km/h or mph) using a needle (1).
The control panel receives information on the real speed (calculated in km/h or mph) and displays this speed in line with current legal stipulations (homologation). The maximum speed displayed is 290km/h (180mph). Above 290km/h (180mph) the needle can not display the speed.



REMARK

This speed is shown in km/h & mph measurements.

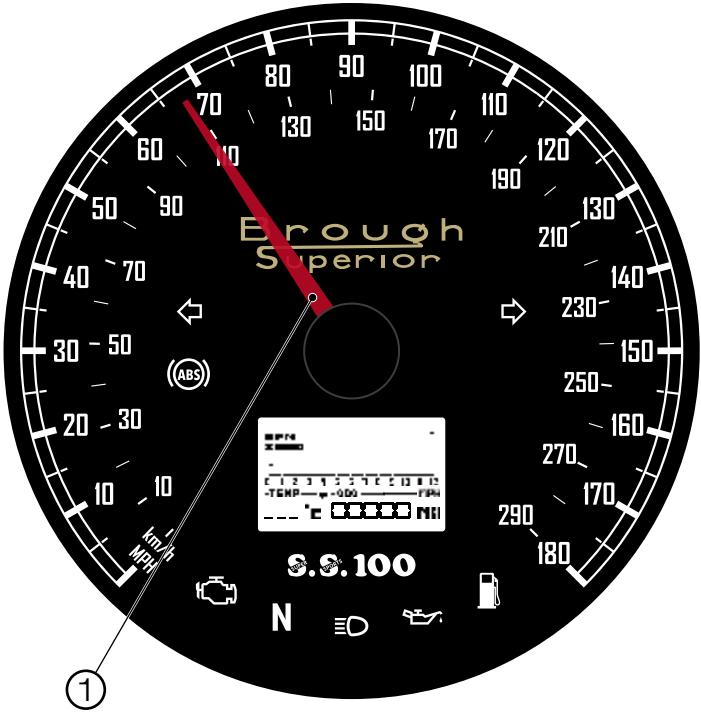


FIG. 5

REV COUNTER (RPM)

This function displays the engine revolutions per minute. The control panel receives information on the number of revs and displays the data progressively from left to right illustrating the number of revs per minute.

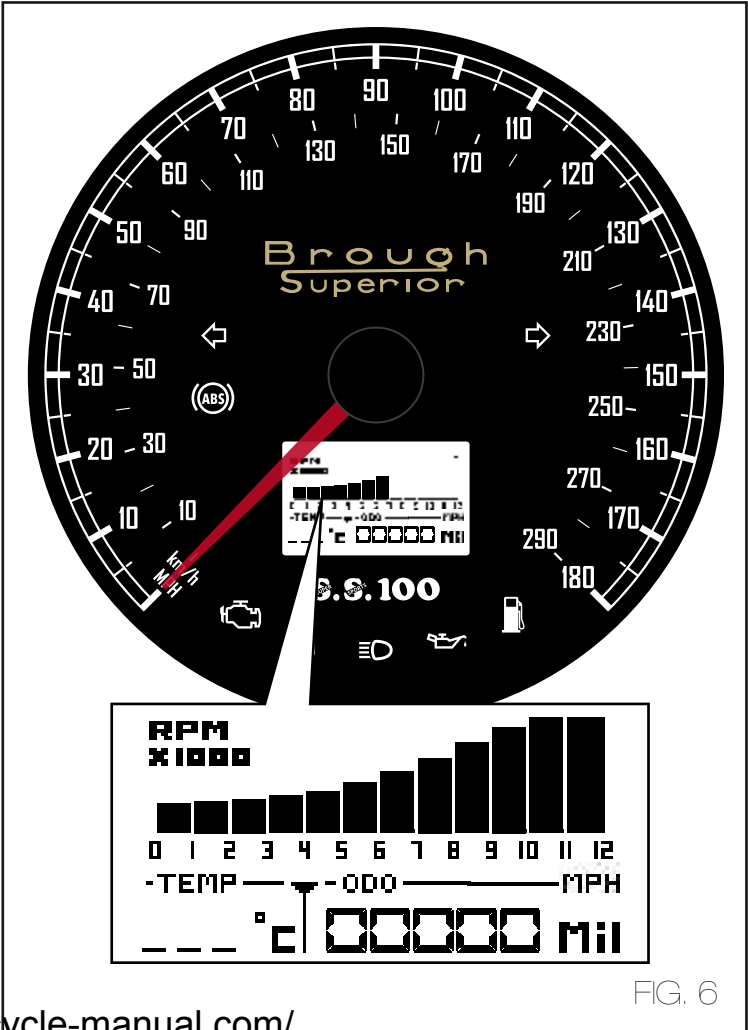
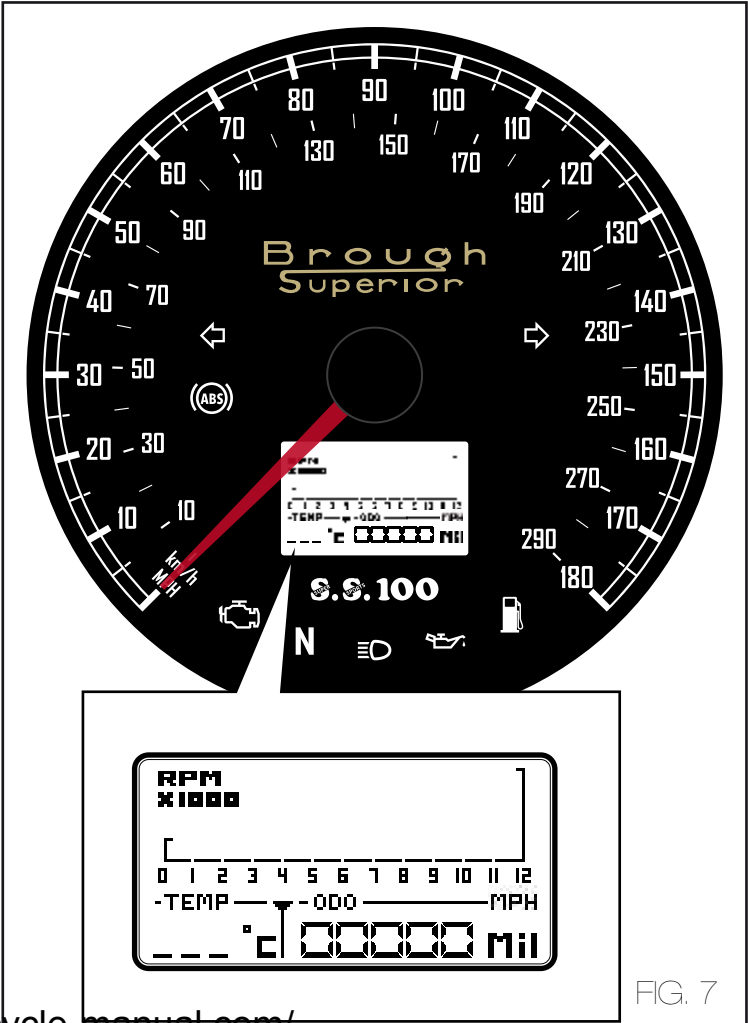


FIG. 6

TEMPERATURE OF ENGINE COOLANT

This function displays the temperature of the engine coolant.
The measurement employed is °C.



INDICATOR OF TOTAL DISTANCE TRAVELLED (MILEAGE COUNTER)

This function displays the total distance travelled (in km or miles depending on the application selected).

When the engine starts the system automatically enters into this function. The data is permanently memorised and can not, for any reason, be taken back to zero. If the data is superior to 99,999 km (or 99,999 miles) the number 99999 will be permanently displayed. If the power supply is interrupted the data is not lost.

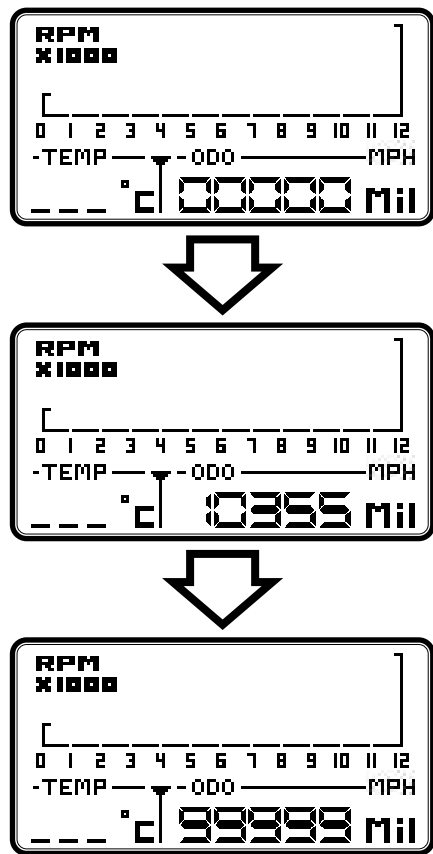


FIG. 8

INDICATOR OF THE DAILY DISTANCE TRAVELLED (TRIP A /TRIP B)

This function indicates the distance travelled in a day (in km or miles depending on the application selected) by simply pressing button (1) to display consecutively trip A and trip B (2 Fig. 10). To return to zero hold down button (1). If the number exceeds 9999.9 the distance travelled sets back to zero and the counter automatically restarts.

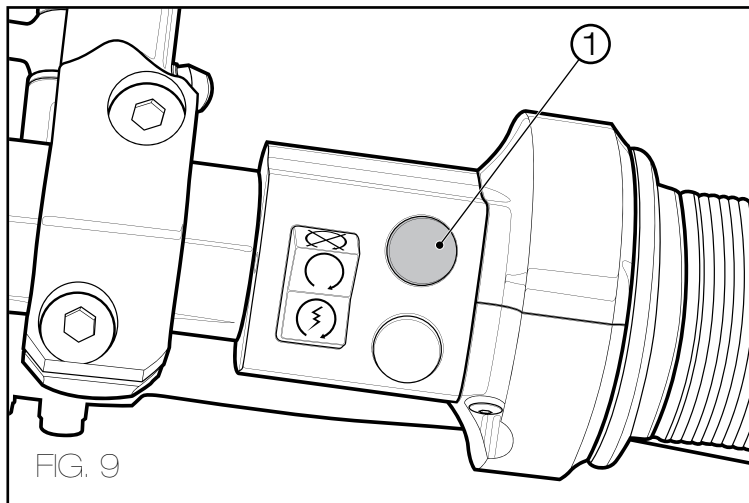


FIG. 9

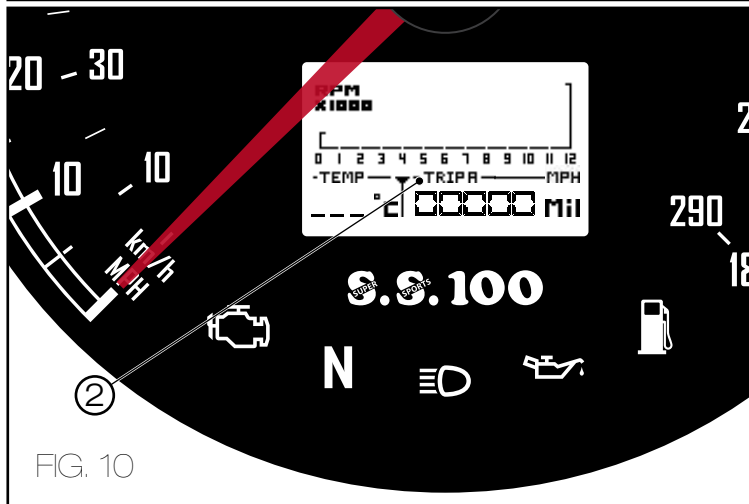


FIG. 10

STRUCTURE OF LCD PARAMETERS

You can access the main menu (Fig 13) by pressing button (1) for several seconds. The access to this function offers the possibility to modify the units of measure as well as the different settings for the LCD screen. General information relating to the control unit can also be found in this section.

CHOICE OF UNITS OF MEASURE

If you wish to change the units of measure open the principal menu then select 'Units', you then have the choice between the display in mph or km/h. Hold down button (1) to validate (Fig. 11)

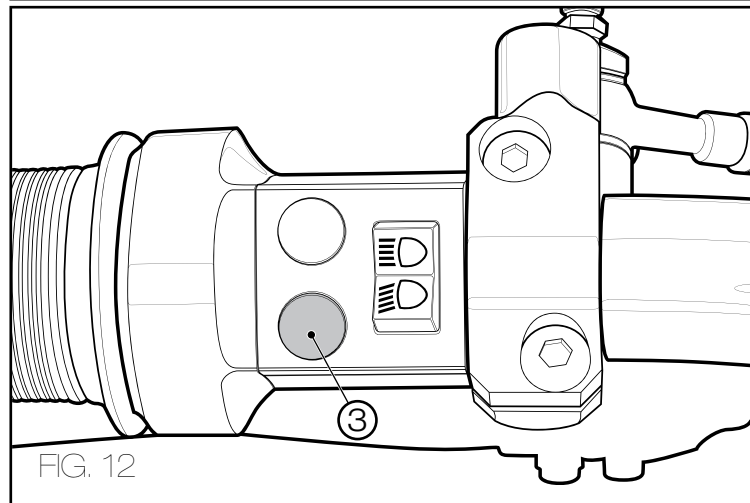
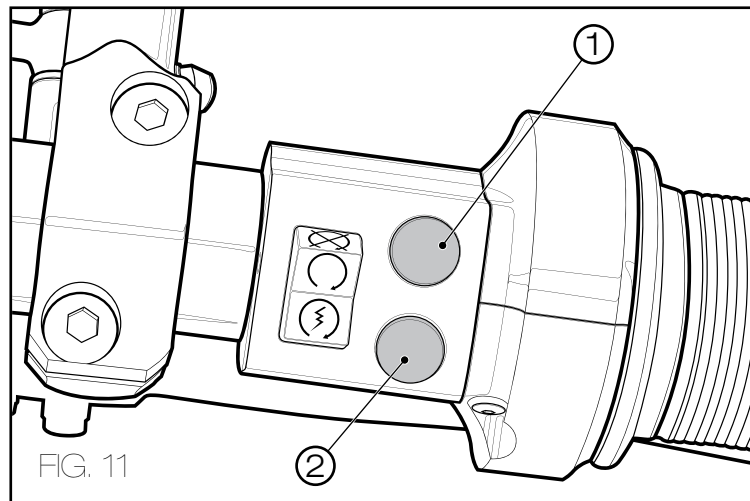
SETTINGS FOR LUMINOSITY AND CONTRAST

This menu allows access to auto-dimming (5 Fig. 13), adjustment of luminosity, the adjustment of contrast and the activation of the flashing of LEDs.

The contrast can be regulated by using the buttons (2 Fig. 11) and (3 Fig. 12), each flash of the indicator corresponds to a value. To increase or diminish the contrast push on the button (2 Fig. 11) or (3 Fig. 12) then validate by pushing the same button again.

INFORMATION

In this section you can also identify the firmware and hardware and the battery charge.



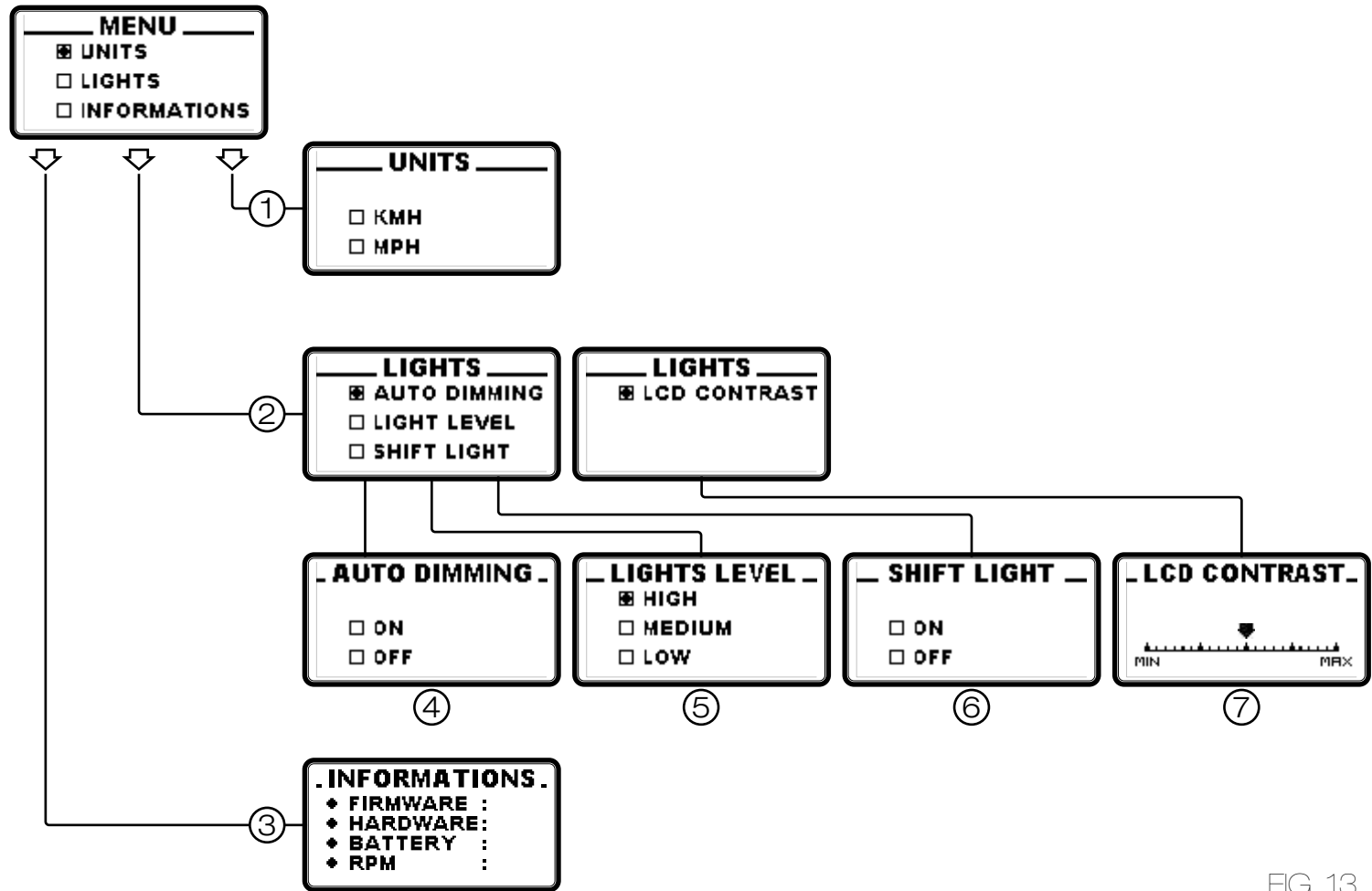


FIG. 13

LIGHT CONTROLS

When the motorcycle is being started the dipped beam and the main beam are off. Once the engine has been engaged the dipped beam is automatically activated; it is possible to change from dipped beam to main beam or flash the headlights by using switch (3).

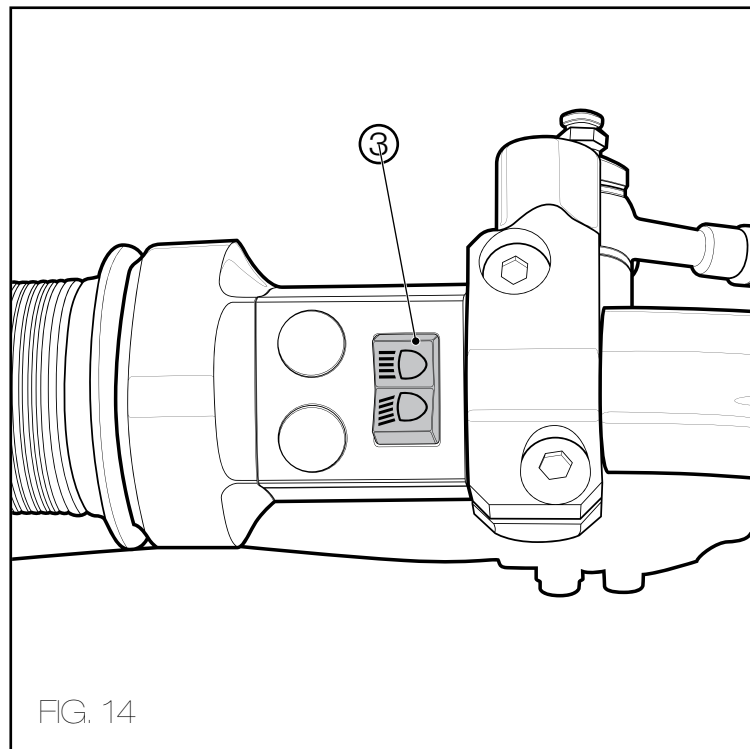
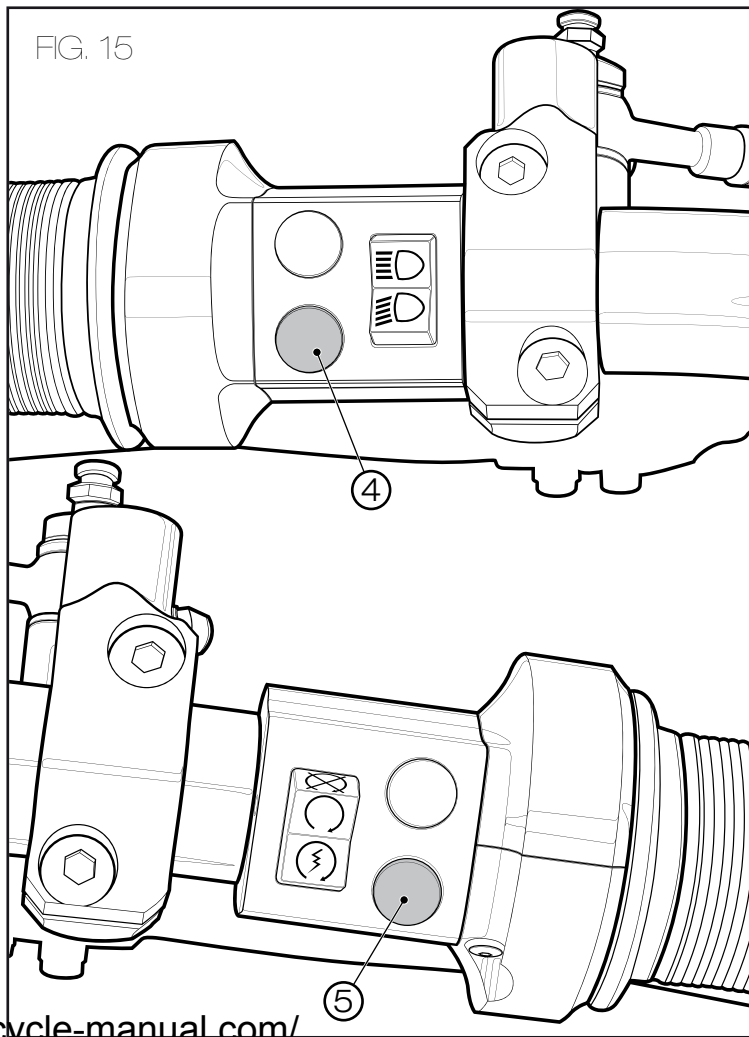


FIG. 14

INDICATORS

To activate the left indicator push on button (4), the right indicator is activated by pushing button (5). After activating the indicators it is possible to deactivate them by pushing again on the same button. To activate the warning light push on the buttons (4) and (5). Repeat the procedure to deactivate.



INFORMATION RELATED TO THE OPERATION OF THE ABS SYSTEM

Engine stopped / speed less than 5 km/h		
Indicator light off	Flashing indicator light	Fixed indicator light
-	ABS disabled through the function corresponding from the menu (**)	ABS activated, but not yet in use
Engine running / speed less than 5 km/h		
Indicator light off	Flashing indicator light	Fixed indicator light
-	ABS disabled through the function corresponding from the menu	ABS activated, but not yet in use
Engine running / speed over 5 km/h		
Indicator light off	Flashing indicator light	Fixed indicator light
ABS activated and in use	ABS disabled through the function corresponding from the menu	ABS disabled and out of service at because of a problem

(**) The ABS shall only be considered to be effectively deactivated when the tell-tale remains flashing after the engine has been started.

VERIFICATION OF THE CLEANLINESS OF THE ABS SYSTEM

Check the cleanliness of the front (1) and rear (2) toothed wheels before starting the motorcycle.



ATTENTION

Obstruction of the reading holes impairs the proper functioning of the device. In the presence of especially muddy ground, it is therefore recommended to pay particular attention to it because sudden anomalies in the functioning of the system could occur.



ATTENTION

Prolonged wheelie can disable the ABS system.

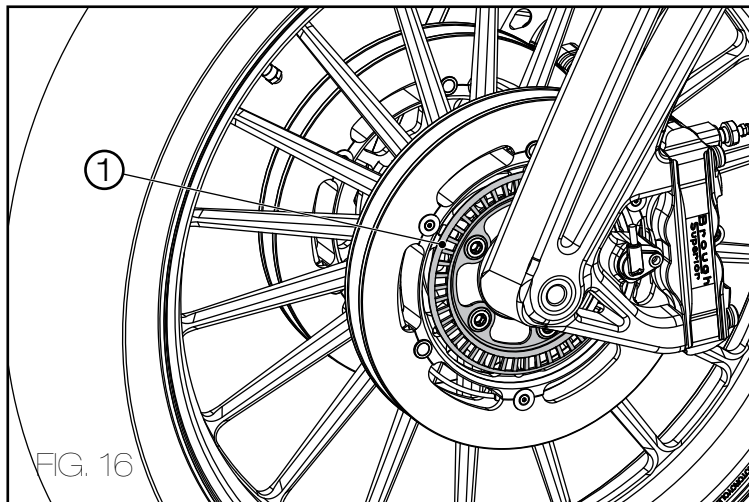


FIG. 16

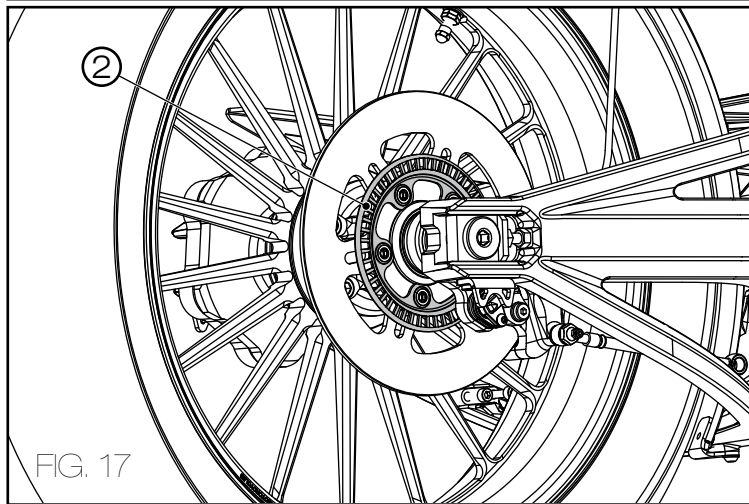


FIG. 17

OWNER'S MANUAL

MOTORCYCLE CONTROLS

POSITION OF MOTORCYCLE CONTROLS



ATTENTION

This chapter illustrates the position and the function of the controls necessary to ride the motorcycle. Please read each description carefully before using any particular control.

- 1) Dashboard.
- 2) Left hand switch and buttons.
- 3) Clutch lever.
- 4) Rear brake pedal.
- 5) Right hand switch and buttons.
- 6) Throttle.
- 7) Front brake lever.
- 8) Gear selector.

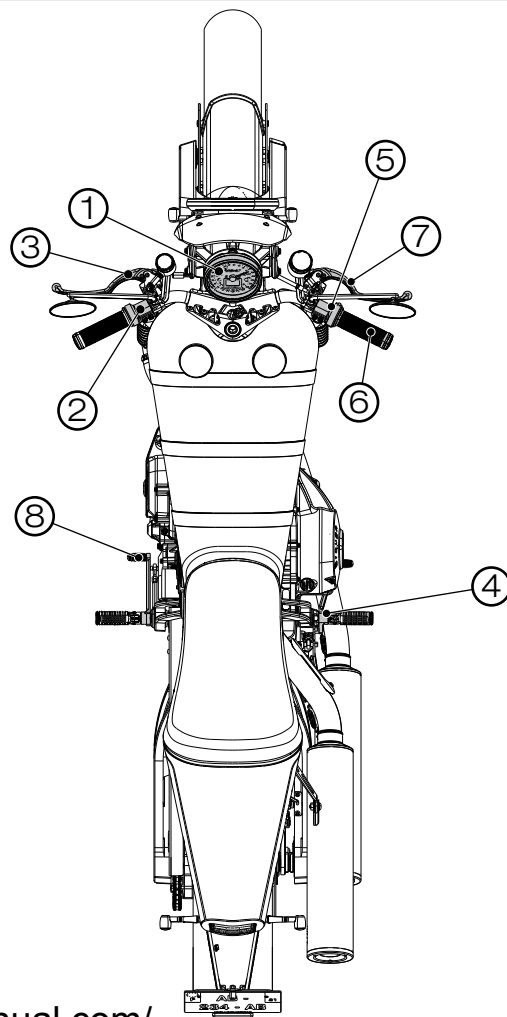


FIG. 18

<https://www.motorcycle-manual.com/>

LEFT HAND SWITCH AND BUTTONS

1) Forward-reverse switch for lights in two positions:

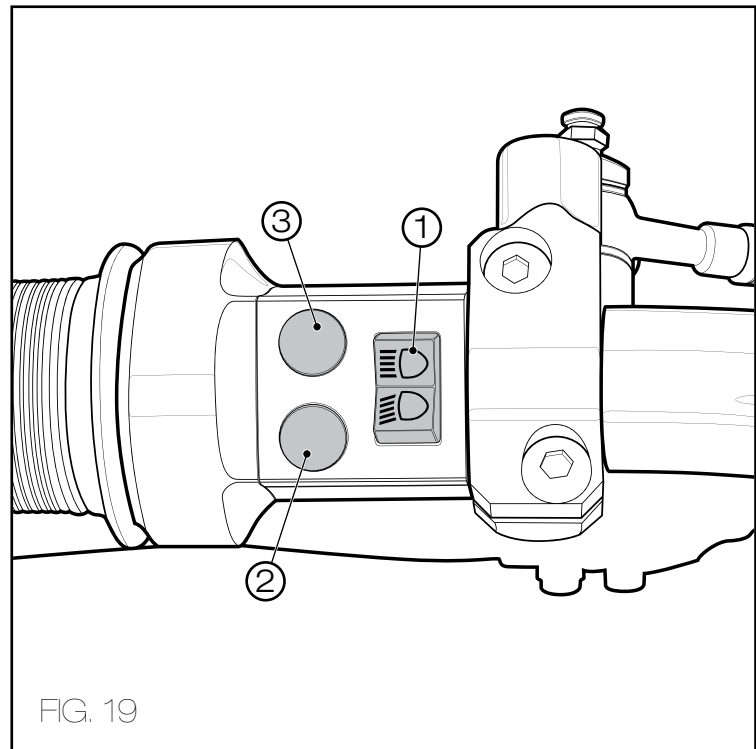
The dipped beam  is activated by pressing the switch downwards whilst the main beam  is activated by pressing the switch upwards. The high beam flashes could be done by doing pressure on the downward position.

2) Button  = indicator

- First push  = left turn;

- Second push  = indicator off.

3) Button  = warning horn



CLUTCH LEVER

The lever (1) which controls the clutch is equipped with an adjustment wheel (2) for adjusting the distance between the lever and the twistgrip on the handlebar. Turn the wheel clockwise to create more space between the lever and the twistgrip. Vice-versa, turn the wheel anti-clockwise to bring the lever closer.

The actioning of the lever (1) decouples the engine transmission from the gear box and thus from the driving wheel. Its use is very important during the motorcycle ride, particularly when starting.



ATTENTION

The clutch lever must be set when the motorcycle is stopped.



IMPORTANT

The correct use of the clutch lever will prolong the life of the engine and avoid damaging the transmission system.

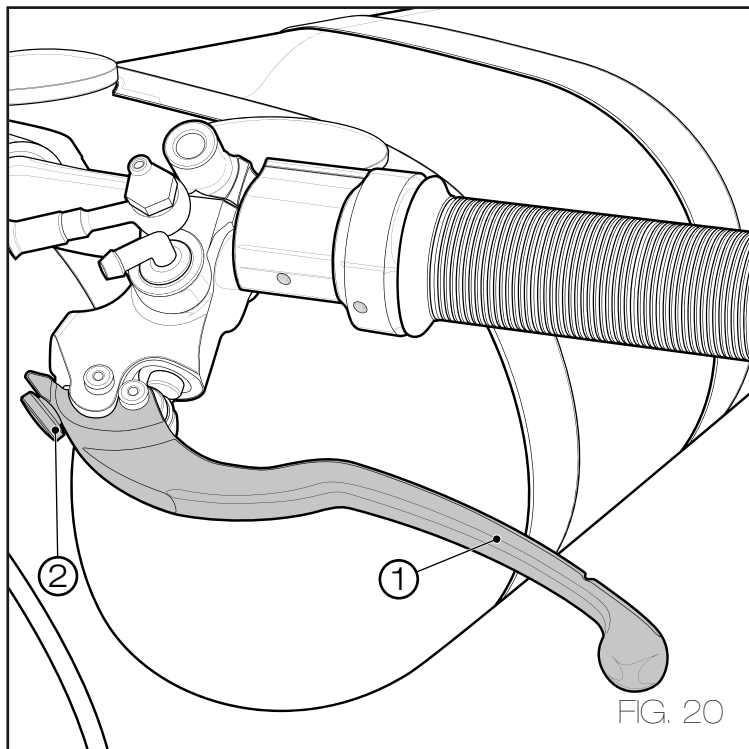


FIG. 20



REMARK

It is possible to start the engine with the side stand lowered and the gears in a neutral position.

RIGHT HAND SWITCH AND BUTTONS

1) Red switch

KILL / IGNITION / STARTING THE ENGINE

The switch (1) has three positions in which it can be used, these are:

- A) top:  KILL. In this position it is impossible to start the engine and all the electronic devices are off.
- B) central:  IGNITION. This position is the only one which allows ignition.
- C) bottom:  ENGINE START. In this position it is possible to start the engine.

2) Button  = indicator

- First push  = right turn;

- Second push  = indicator off.

3) Button TRIP = access to the functions described in the pages dedicated to the control panel. **TRIP**

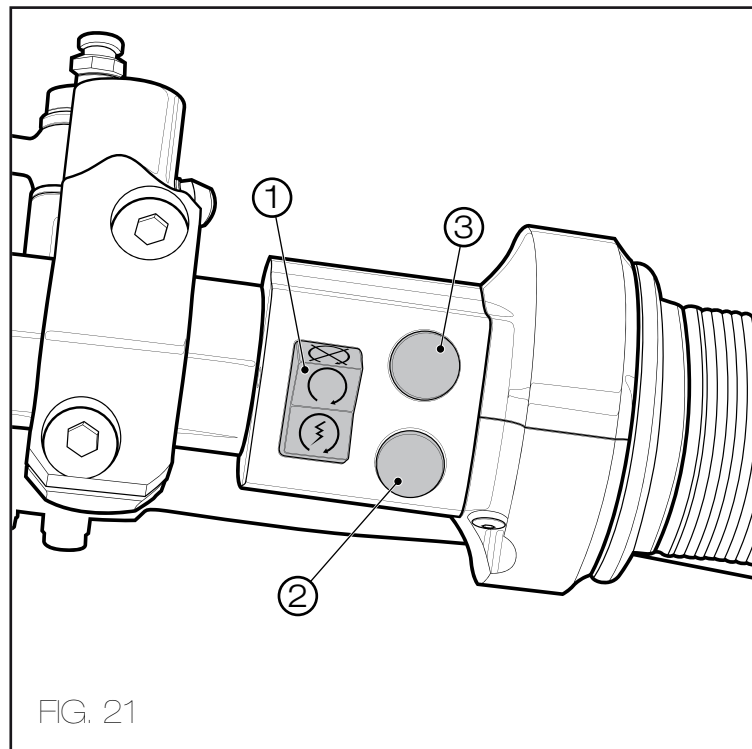


FIG. 21

THROTTLE

The throttle (1) on the right hand side of the handlebars, commands the throttle body valves to open. Once released, the throttle automatically comes back to its initial idling position.

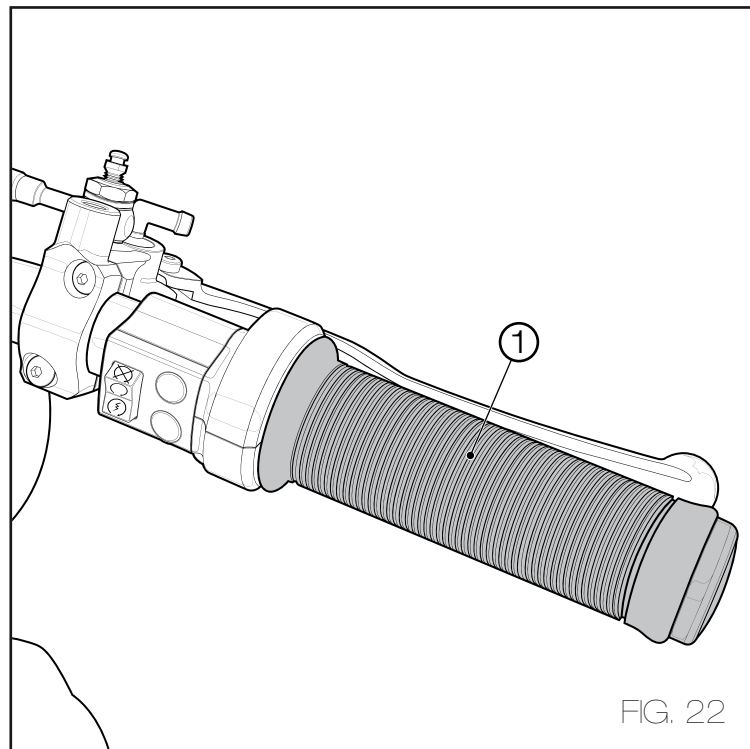


FIG. 22

FRONT BRAKE LEVER

To apply the front brake, pull the lever (1) towards the twistgrip. A minimal effort by the hand is enough because the functioning is hydraulic.

The lever (1) has an adjustment wheel (2) for adjusting the distance between the lever and the twistgrip on the handlebar. Turn the wheel clockwise to distance the lever from the twistgrip. Vice-versa, turn the wheel anti-clockwise to pull the lever closer.

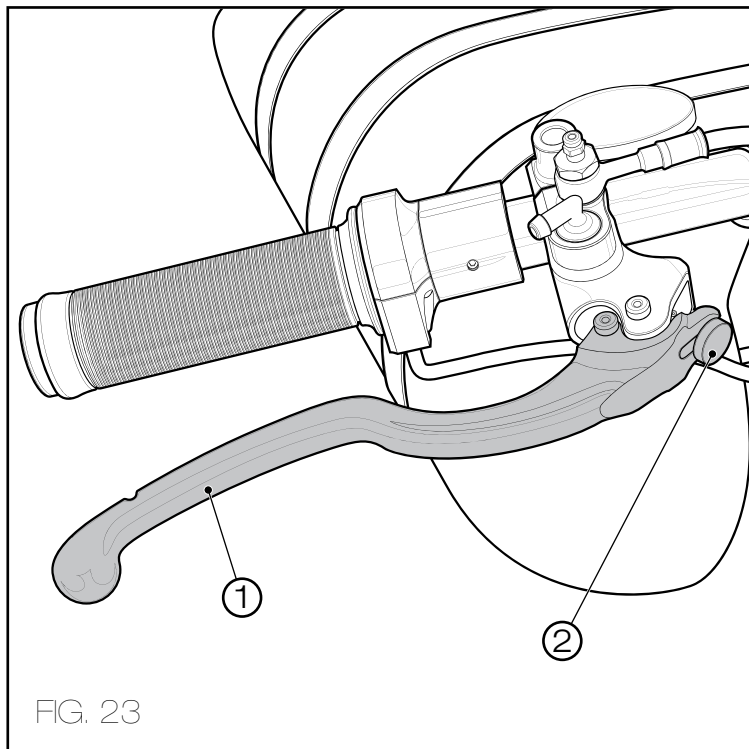
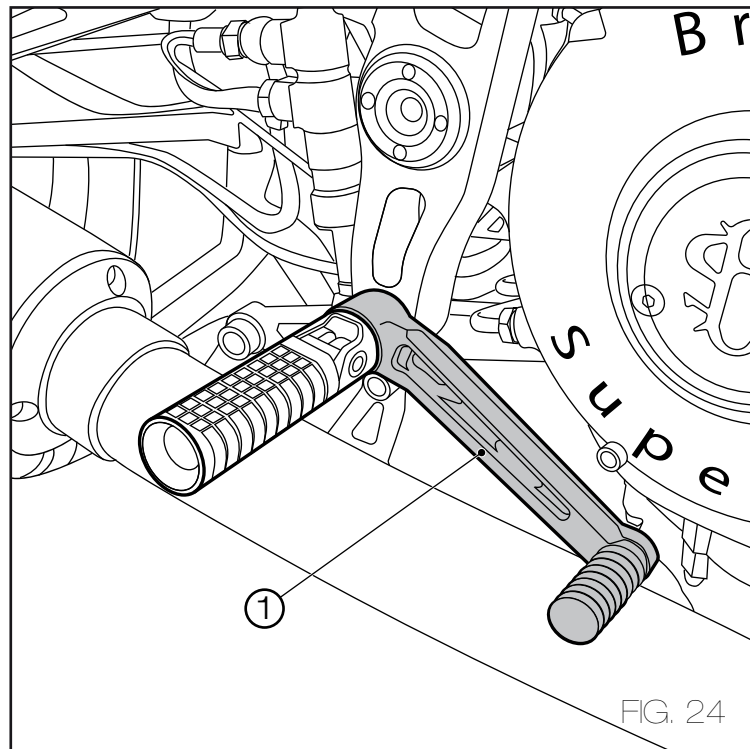


FIG. 23

REAR BRAKE PEDAL

To apply the rear brake press the pedal (1).
The control system is an hydraulic type.



GEAR SELECTOR

The gear selector (1) has a central rest N position, this position is signalled by the lighting up of **N** (3, Fig. 3) on the dashboard.

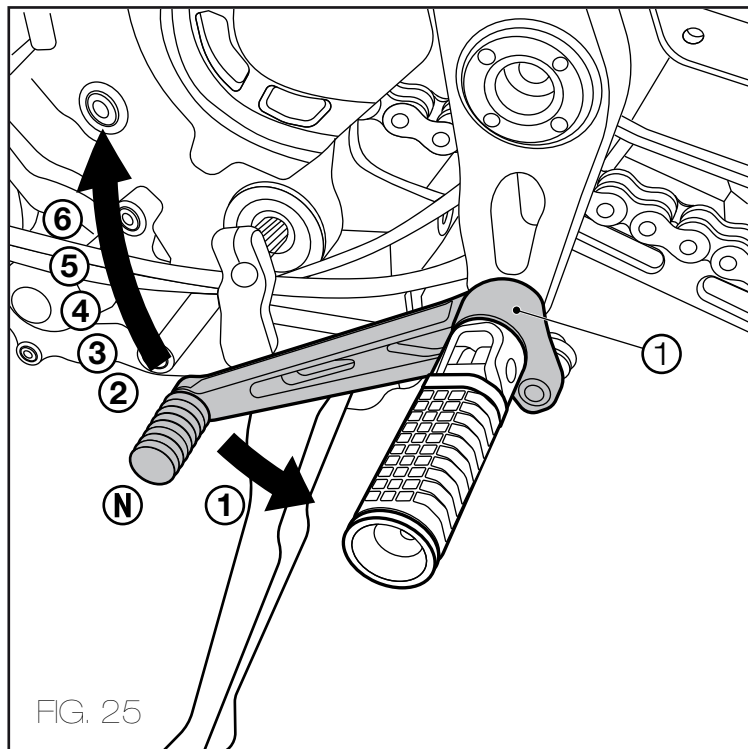
The pedal can be moved:

lower = push the selector down to engage the 1st gear and to shift down.

With this manoeuvre the **N** on the control board disappears.

- higher = move the selector up to engage the 2nd gear and afterwards the 3rd, 4th, 5th and 6th.

Each movement of the selector corresponds to a single gear change.



OWNER'S MANUAL

MAIN ELEMENTS AND DEVICES

POSITION ON THE MOTORCYCLE

- 1) Fuel tank caps.
- 2) System to unlock the seat.
- 3) Side Stand.
- 4) Mirrors.
- 5) Adjustment of front suspension.
- 6) Adjustment of rear suspension.
- 7) Silencers.
- 8) OBD socket (under the seat).
- 9) Tyres pressure information (under the seat).

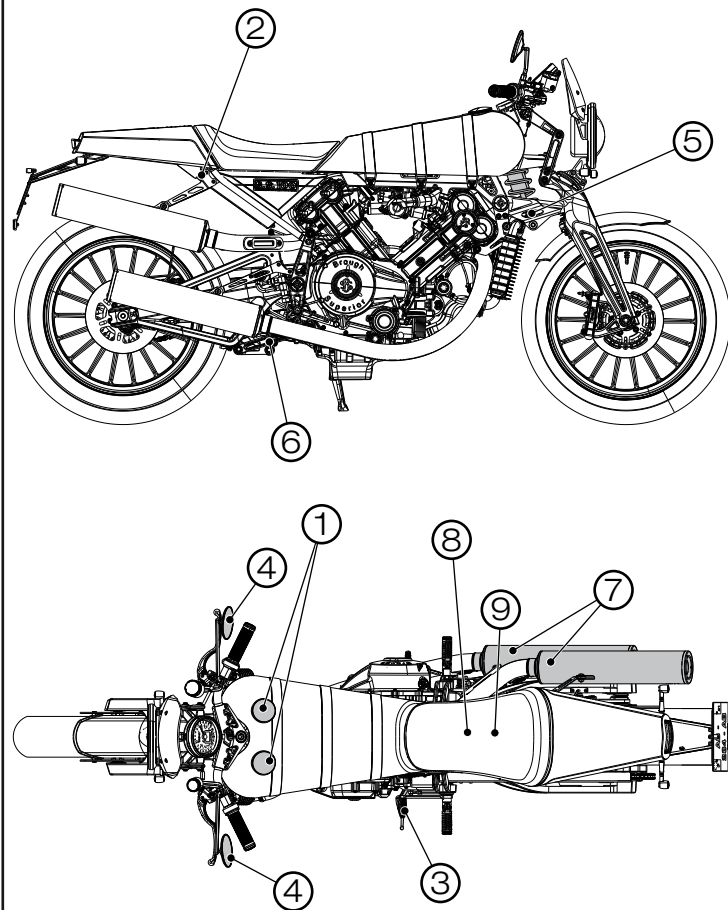


FIG. 26

<https://www.motorcycle-manual.com/>

FUEL TANK CAPS

TO OPEN

Turn the cap anti-clockwise to unlock it (1) then lift the cap (2) to draw it from its housing.

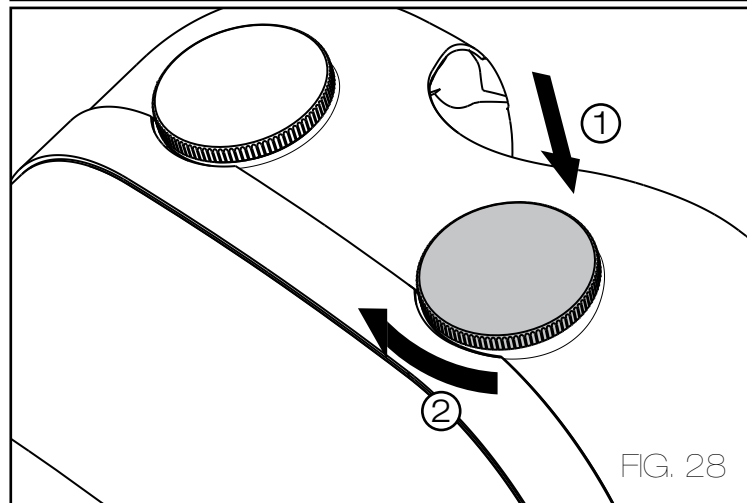
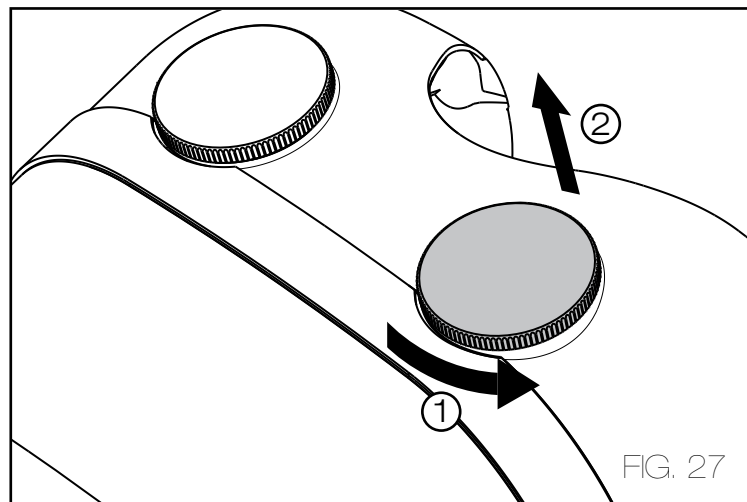
TO CLOSE

Close the cap again by installing it in its housing (1) then turn clockwise (2)



REMARK

After each refuelling always ensure that the cap is perfectly in place and firmly closed.

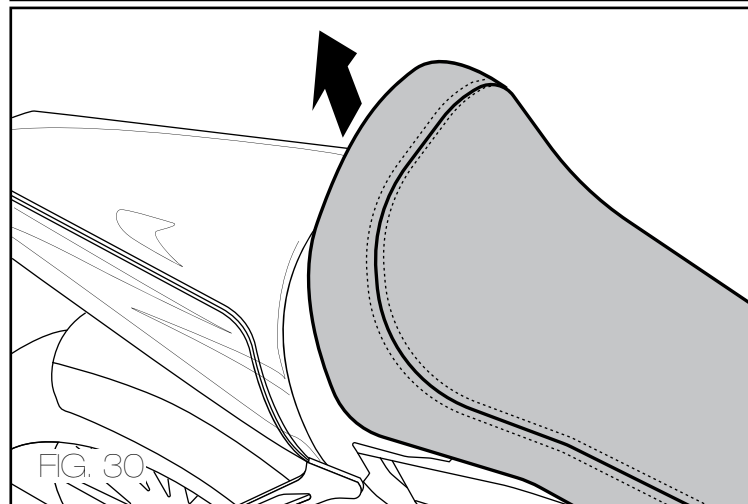
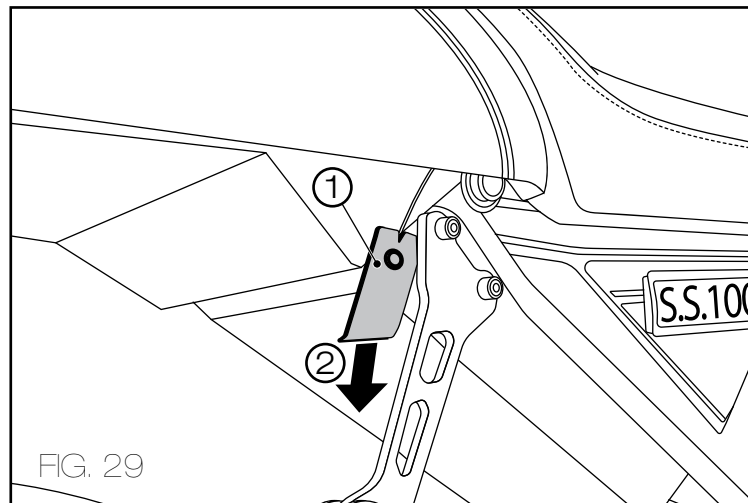


SYSTEM TO UNLOCK THE SEAT

By pulling the leather strap (1) it is possible to remove the seat.

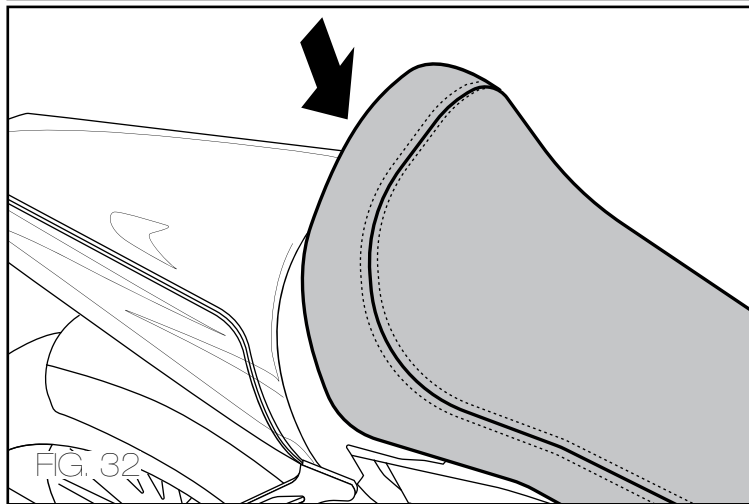
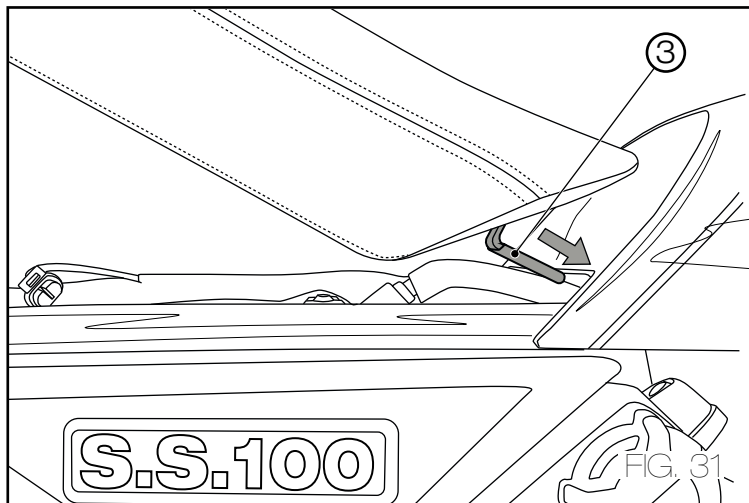
REMOVAL OF THE SEAT

Pull on the leather strap to liberate the seat from its support (2). Lift up the back of the seat then take it out of the stops before pulling it rearwards.



RETURNING THE SEAT

Ensure all the elements are placed correctly and fixed in the compartment under-the-seat. Insert the tang (3) at the bottom of the seat under the tank, then push on the back end of the seat until you hear the click of the locking mechanism. Be sure the seat is firmly fixed.



SIDE STAND



IMPORTANT

Use the side stand to support the motorcycle. Before using the stand check that the area where the stand will be used is solid and flat. Shifting or gravelly ground, tarmac made soft by the heat etc can lead to the parked motorcycle falling badly. On sloping ground always park the motorcycle with the rear wheel on the downward side.

To use the side stand, push your foot down on the stand (1) – keeping both hands on the handlebars – until it is fully extended. Incline your motorcycle until the stand rests on the ground.

To return the side stand to its 'resting' position (horizontal) incline the motorcycle to the right while raising the stand with the top of your foot.



ATTENTION

Don't remain sitting on the motorcycle parked on its side stand.



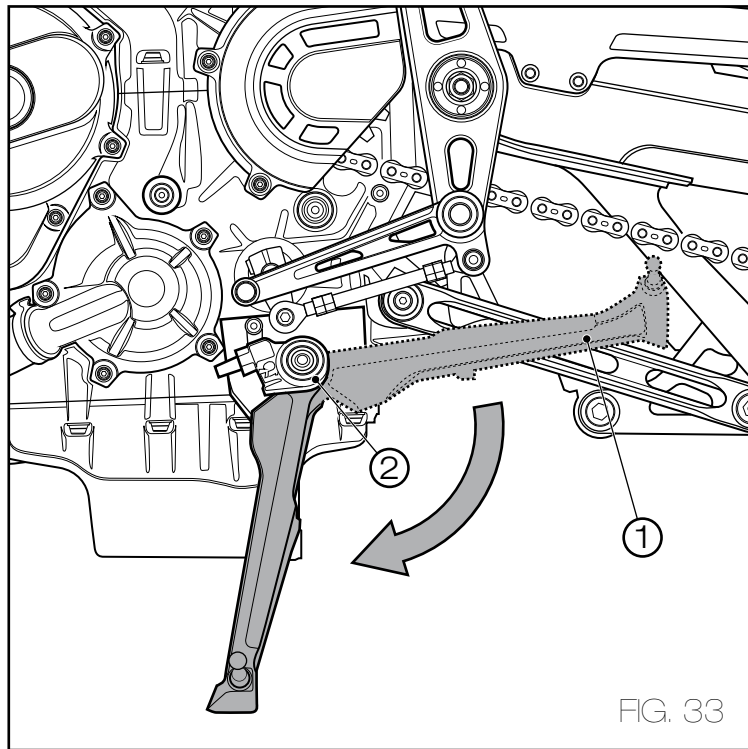
REMARK

It is advised to periodically control the working of the restraint system and the security device. (2)



REMARK

It is possible to start the motorcycle with the side stand unfolded and the gear selector in the neutral position.



ADJUSTMENT OF THE FRONT AND REAR SUSPENSION

The suspensions of the motorcycles are adjustable but the adjustments must be made by a dealer or at a Brough Superior approved workshop.



ATTENTION

The shock absorber contains high pressure gas and could cause serious damage if it is handled by an inexperienced person.

OWNER'S MANUAL

HOW TO USE THE MOTORCYCLE

PRECAUTIONS TO TAKE DURING THE RUNNING-IN PERIOD

MAXIMUM ROTATION SPEED

Throughout the running-in period and for a normal use the speed of rotation to respect is:

- 1) upto 1 000 km ;
- 2) from 1 000 to 2 500 km

UP TO 1000 KM

During the first 1000 km of riding pay attention to the rev counter. It must not exceed the following number: 5500-6000 rpm.

During the first hours of use it is advised to variegate the engine speed and load, whilst respecting the limits established. Winding roads and gentle inclines are particularly useful for an efficient running in of the engine, the brakes and the suspension.

During the first 100km use the brakes with precaution avoiding hard and prolonged braking; this will allow the linings of the brake pads to adapt to the brake discs.

To enable the reciprocal adaptation of all the moving mechanical parts and too avoid compromising the lifespan of the main parts of the engine, it is advised that you don't accelerate too abruptly and for too long at high speed. It is equally advised to frequently check the chain and to lubricate it, if necessary.

<https://www.motorcycle-manual.com/>

FROM 1000 TO 2500 KM

We can demand a higher performance from the engine, but never exceed 7 000 revs/mn.



IMPORTANT

Throughout the running-in period carefully respect the timeline for maintenance operations and servicing, recommended in the warranty booklet (see page 69). Failure to observe these rules absolves Brough Superior Motorcycles s.a.s from all responsibility in case of damage to the engine or a reduction in its life span.

These few precautions permit the optimisation of the life cycle of the engine, reducing the need for servicing or for adjustments.

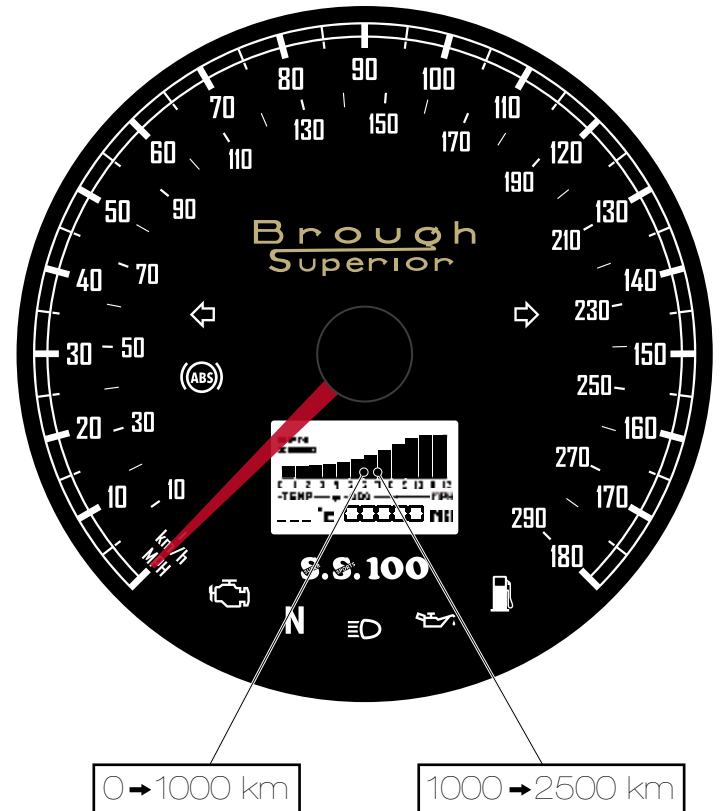


FIG. 34

CHECKS BEFORE TAKING TO THE ROAD



ATTENTION

Carry out these checks before taking to the road to limit deterioration of the motorcycle and the risk of serious personal injury to the rider.

Before taking to the road, check:

FUEL IN THE TANK

Check the level of fuel in the tank. If necessary refuel.

BRAKE AND CLUTCH FLUID

Check the level of fluid in the appropriate reservoirs.

LEVEL OF ENGINE OIL

Check the level through the sight glass. If necessary top up.

COOLANT

Check the level of liquid in the expansion vessel, if necessary top up.

LIGHTS AND INDICATORS

Check the condition of the light and indicator bulbs and that the warning horn functions. If the lights don't work visit a Dealer or a Brough Superior approved workshop.

CONDITION OF THE TYRES

Check the pressure and state of wear of the tyres.

FUNCTIONING OF CONTROLS

Try the levers and the brake pedals, the clutch, gears and the throttle to ensure they work.

SIDE STAND

Check the stand functions correctly and it is in the correct position.

STARTING/STOPPING THE ENGINE



ATTENTION

It is sensible to familiarise yourself with the controls that will be used during the ride before starting the engine.



ATTENTION

The exhaust fumes are poisonous and can cause unconsciousness and even death in a short space of time. Never start the engine in a confined area.

After starting the engine with the red switch (1), only the green light (2) should be lit.

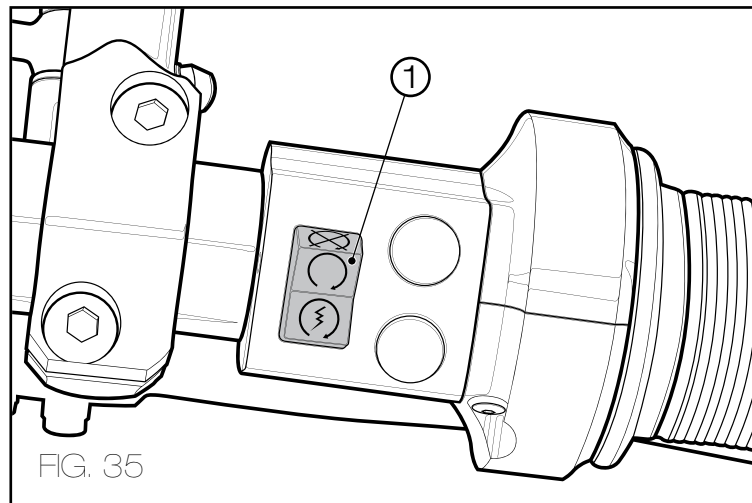


FIG. 35

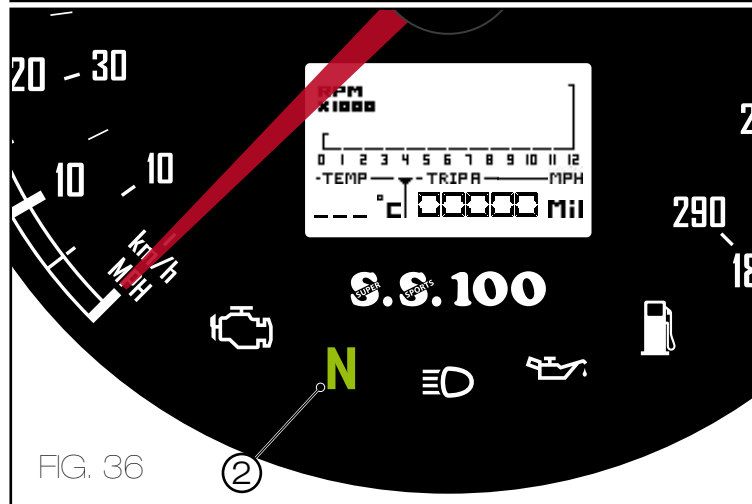


FIG. 36



ATTENTION

The safety sensor stops the starting if the side stand isn't at rest (horizontal position).



REMARK

It is possible to start the engine in gear by pulling the clutch lever or with the side stand unfolded and the gear selector in a neutral position. Move the red switch (1) downwards to deactivate the engine kill. Press the bottom of the switch (2) to start the engine.

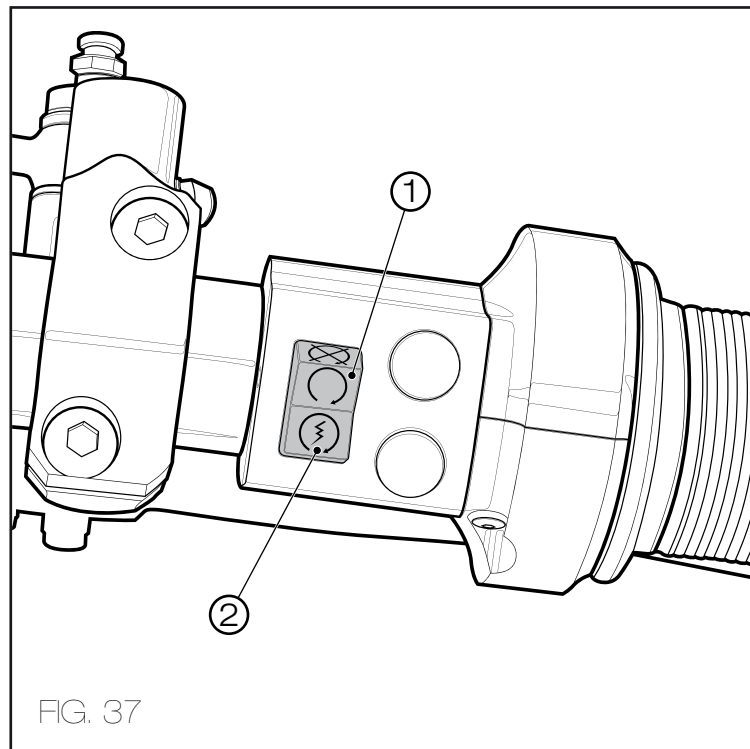


FIG. 37

STARTING AND SETTING OUT

- 1) Declutch by using the clutch lever.
 - 2) With your foot, press on the gear selector to engage the first gear.
 - 3) Accelerate by using the throttle and release simultaneously and gradually the clutch lever; the motorcycle will start to move.
 - 4) Release the clutch lever and accelerate.
 - 5) To move up a gear, cut the gas to lower the engine speed, declutch, lift the gear selector and release the clutch lever.
- To move from a higher gear to a lower gear release the throttle, declutch, then move down by engaging the lower gear and release the clutch lever.

An important use of the controls: when going up hill and the motorcycle starts to lose speed, engage the lower gear; in doing so one avoids abnormal demands on the engine.



ATTENTION

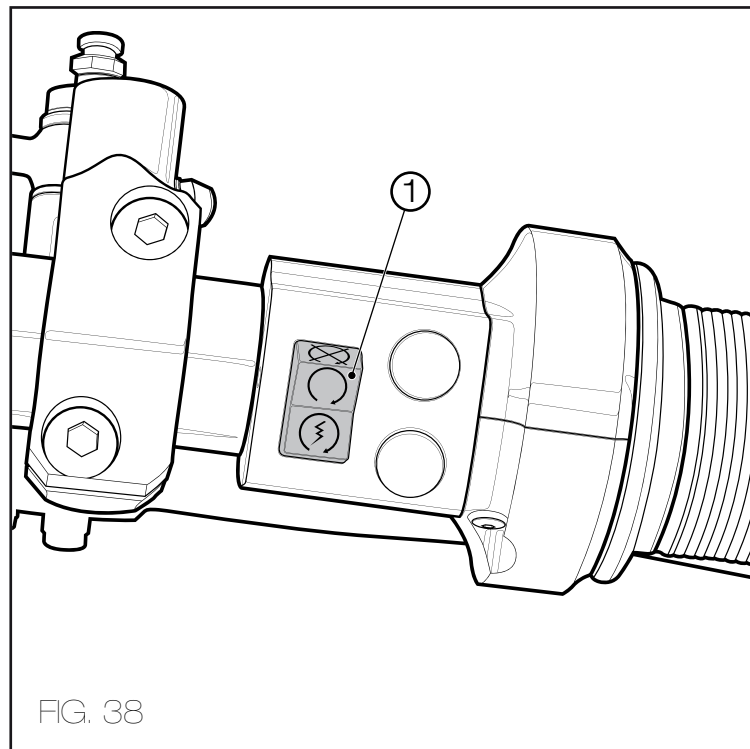
Avoid accelerating abruptly, which risks drowning the engine and provoking stopping-and-starting of the transmission system. Avoid holding the clutch lever whilst riding, to prevent the overheating and premature wearing of the lining.

BRAKING

Reduce speed by changing down gears to use the engine brake, then apply the two brakes. Declutch before the motorcycle stops to avoid the engine stalling.

STOPPING THE MOTORCYCLE

Reduce the speed, change down and release the throttle. Change down until engagement of the 1st gear then put the gear selector in neutral. Brake and stop the motorcycle. Stop the engine by moving the red switch upwards (1).



PARKING AND STEERING LOCK

Put the vehicle on the side stand after stopping to park. The handlebars should be turned completely to the left. You can lock the direction by pushing on the steering lock and then turning it left to enable the extraction of the key.



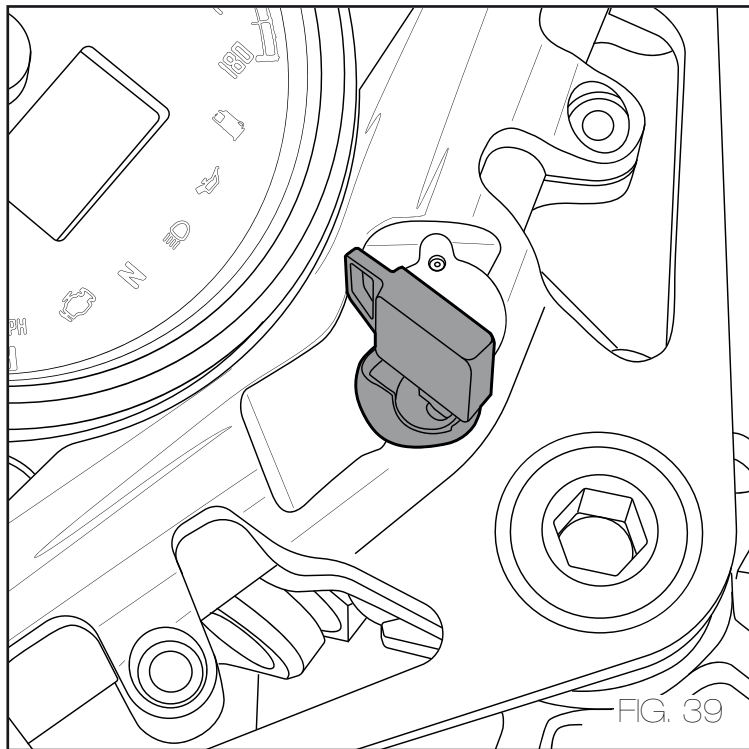
ATTENTION

After the engine has stopped the exhaust system may be hot ; make sure no part of your body touches the exhaust system and don't park the motorcycle close to flammable materials (including wood, leaves etc).



ATTENTION

The use of antitheft device prevents the motorcycle working (example: locking the disc) is very dangerous and may compromise the proper functioning of the motorcycle and the safety of the rider.



REFUELLING

During refuelling don't over-fill the tank. The fuel level must stay below the fill hole. Use a fuel having a reduced quantity of lead and a minimum octane rating of 95 RON.



ATTENTION

The motorcycle is compatible only with fuels having a maximum ethanol content of 10 % (E10). The use of fuels having a higher percentage of ethanol than 10% is forbidden. The use of these fuels may seriously damage the engine and the components of the motorcycle. The use of fuels with more than 10% ethanol cancels the warranty.

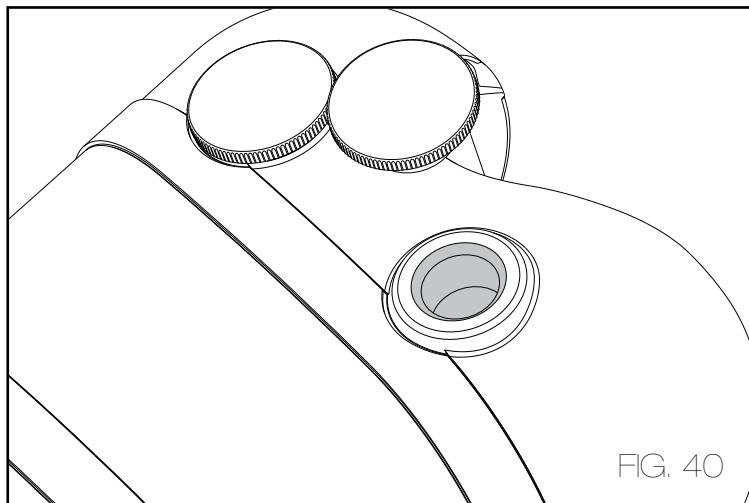


FIG. 40

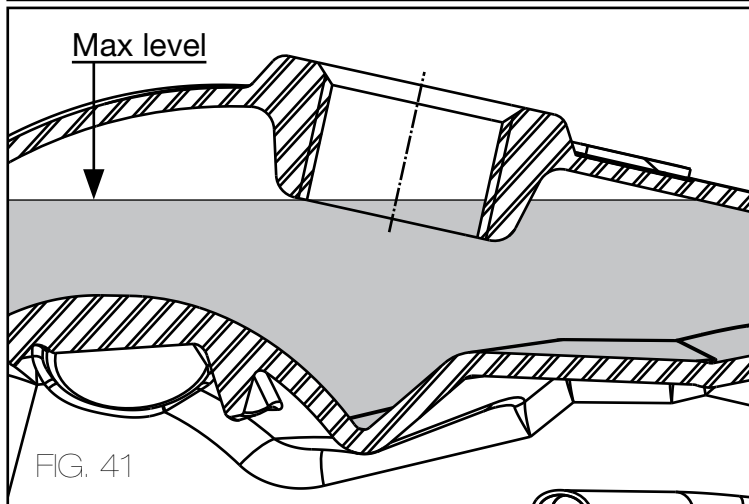


FIG. 41

OWNER'S MANUAL

PRINCIPAL USE AND MAINTENANCE PROCEDURES

REPLACEMENT OF THE AIR FILTER



IMPORTANT

To carry out maintenance operations related to the air filter visit a Dealer or a Brough Superior approved workshop.

CHECKING AND TOPPING UP THE ENGINE COOLANT

Check the coolant level in the expansion tank on the right side of the motorcycle. Check if the level is visible through the control window on the side of the expansion tank. If the water level is not visible, have it refilled by a Brough Superior dealer or authorized workshop.

Cooling system capacity: 2.3 - 2.5 dm³ (litres).

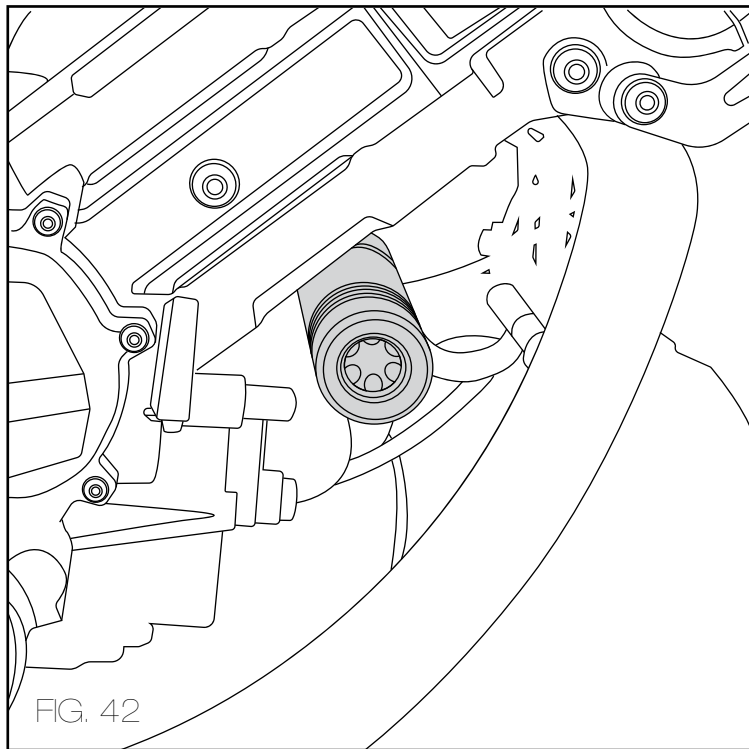


FIG. 42

CHECKING THE LEVEL OF BRAKE AND CLUTCH FLUIDS

The FLUID shouldn't be below the mark MIN of the corresponding reservoir. If the level is insufficient there is a risk that air will be admitted which could inadvertently impact the hydraulic system.

Regarding the topping up or draining of these fluids at the intervals demanded in the maintenance table in the warranty booklet, refer to a Dealer or a Brough Superior approved workshop (see page 69).



IMPORTANT

It is recommended to replace all the hoses every 4 years.

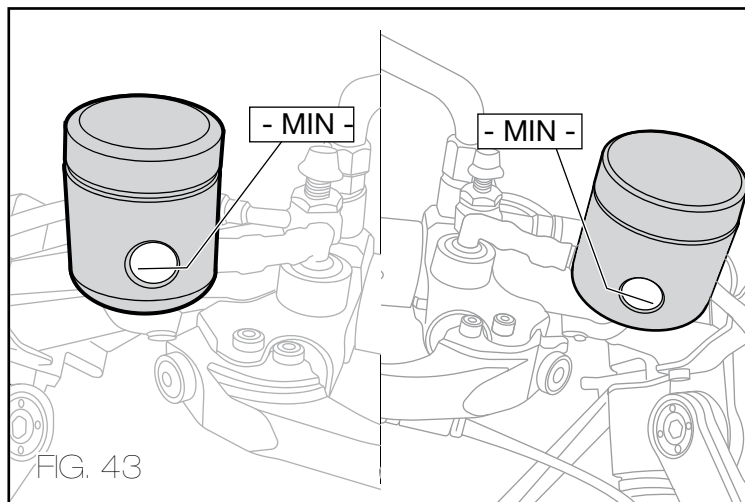


FIG. 43

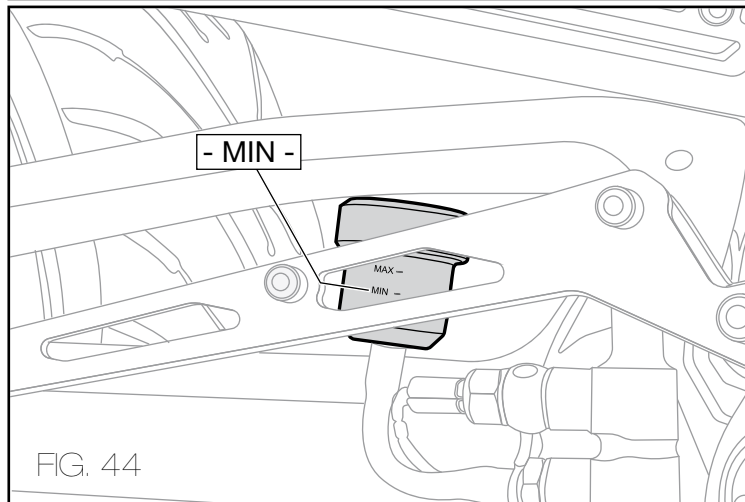


FIG. 44

BRAKING SYSTEM

If the brake pads are in good condition but you notice a lot of mechanical slack, either at the throttle or the brake pedal, visit a Dealer or a Brough Superior approved workshop to check out the system and, if necessary, purge it.



ATTENTION

Avoid all contact between the brake and clutch fluids and the paint and plastic because these two fluids are very corrosive and could attack painted or plastic parts. The hydraulic oil is corrosive and can cause damage and even injury. Oils of different qualities should not be mixed. Check that joints are not leaking.

CLUTCH SYSTEM

Play at the control lever and a motorcycle which jumps or stops when engaging the gears, signals the presence of air in the system. Visit a Dealer or a Brough Superior approved workshop to check the system and, if necessary, purge it.

CHECKING THE WEAR OF BRAKE PADS Contrôler l'usure

Check the wear to the brake pads through the opening between the calliper halves. If the thickness of the lining, even of one pad, is about 1mm, replace the two pads.



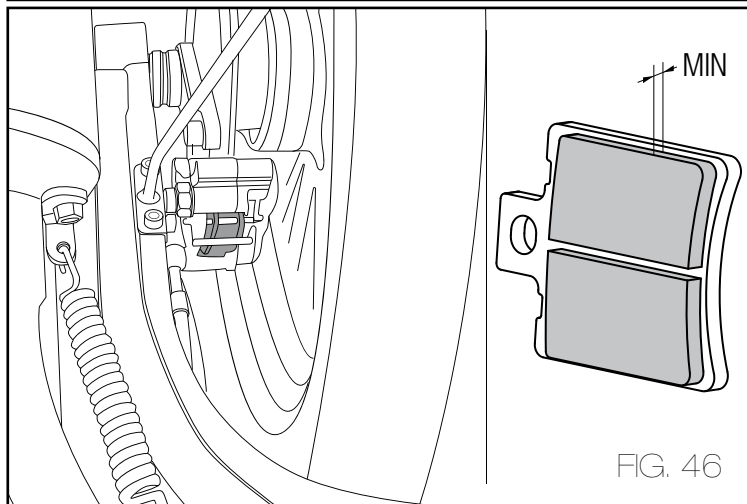
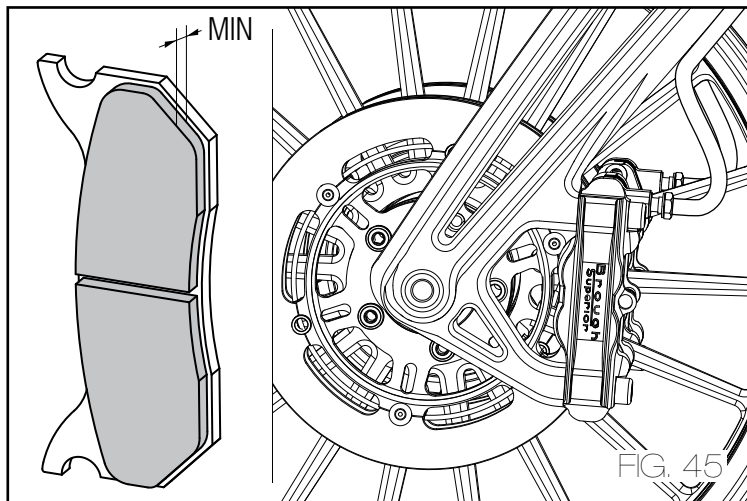
ATTENTION

Wear to the lining beyond the limit would lead to the contact of the metallic support with the brake disc, compromising the efficiency of the braking, the integrity of the disc and the safety of the rider.



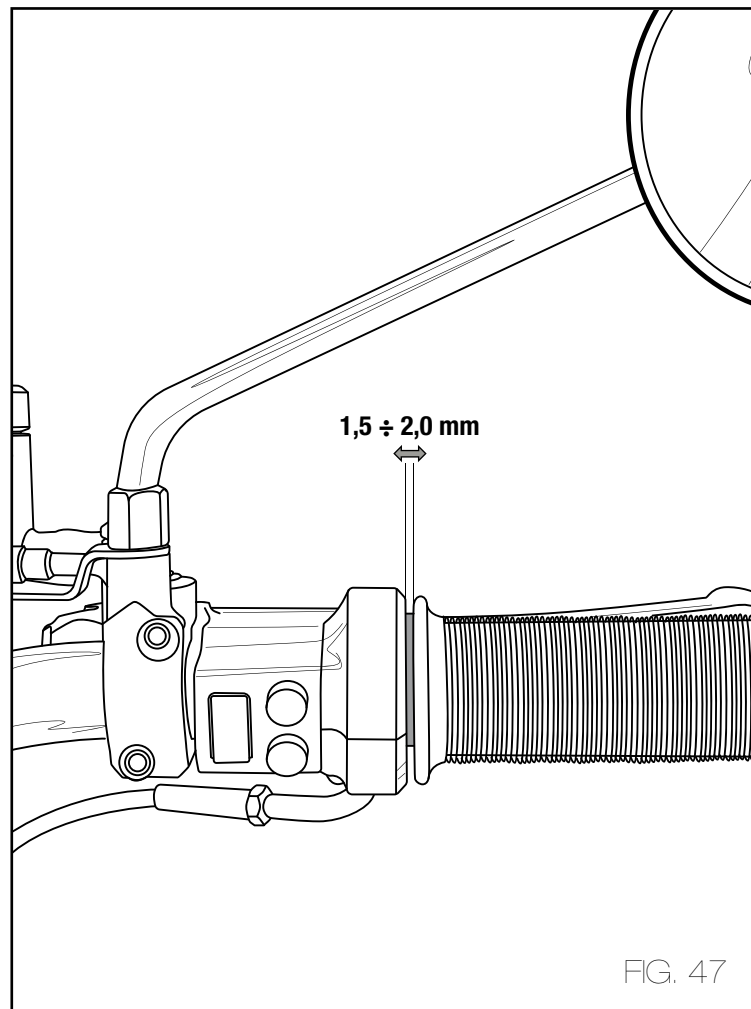
IMPORTANT

To replace the brake pads visit a Dealer or a Brough Superior approved workshop.



ADJUSTMENT OF THROTTLE FREE PLAY

The throttle, in rest position of turning, must have free play, measured at the inner edge of the throttle at $1,5 \div 2,0$ mm..



CHARGING THE BATTERY

To recharge the battery it is advised to plug in the charger delivered with the motorcycle at the plug connector situated under the seat (1).

Remove the seat from its support (fig 48)

Connect the charger to the plug connector (1)

Reposition the seat in its original place after the battery has been fully charged.



IMPORTANT

Connect the battery to the battery charger before starting it. Always connect the positive red terminal (+) first.

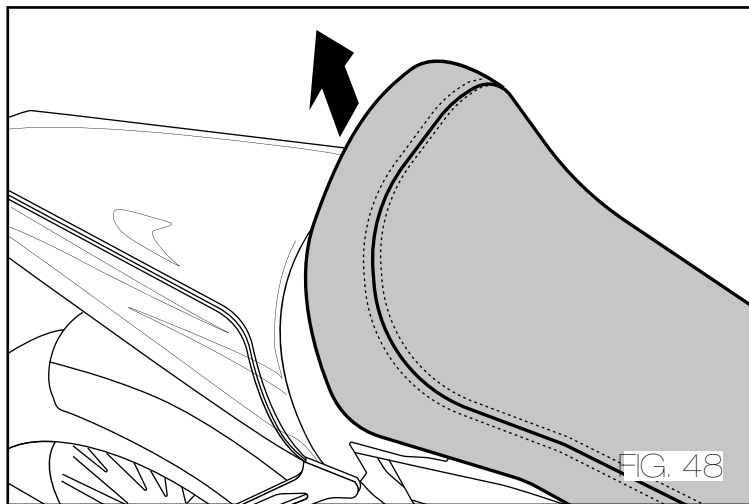


FIG. 48

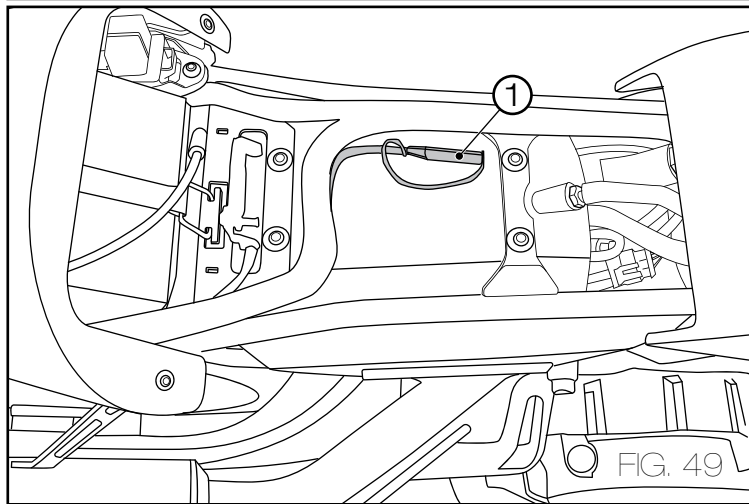


FIG. 49

CHARGING THE BATTERY DURING THE WINTER

Your motorcycle has a connector (1) to which it is possible to link the special battery charger (2) delivered with the motorcycle.



REMARK

The electrical circuit of the model is designed to have a very low absorption when the contact is cut. The battery is nonetheless subject to physical automatic de-charge which depends on the period of non-use as well as environmental conditions.



IMPORTANT

If the voltage of the battery isn't maintained at a minimal level of charge through a special maintainer, irreversible sulfidation occurs leading to reduced battery performance.



REMARK

During the periods of non-use of the motorcycle (for over about 30 days), it is advised to use the charge maintainer provided with the motorcycle.



REMARK

The use of charge maintainers not approved by Brough Superior can cause damage to the electrical circuit of the motorcycle. The motorcycle's warranty doesn't cover the battery when it is damaged because the advice above hasn't been followed, it would denote poor maintenance.

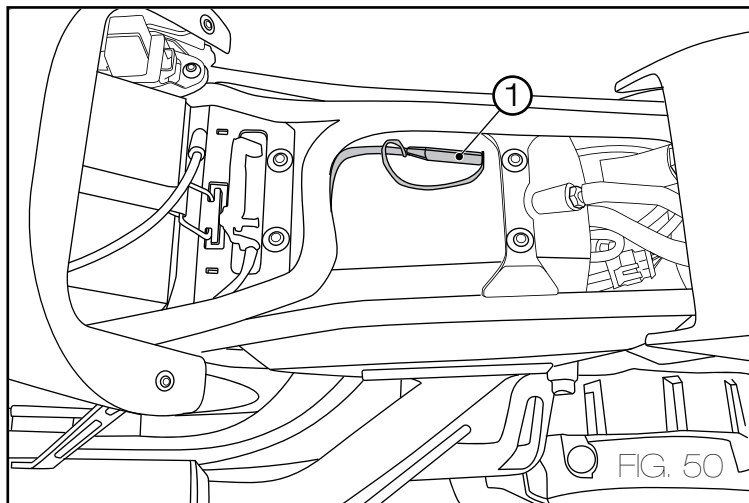


FIG. 50

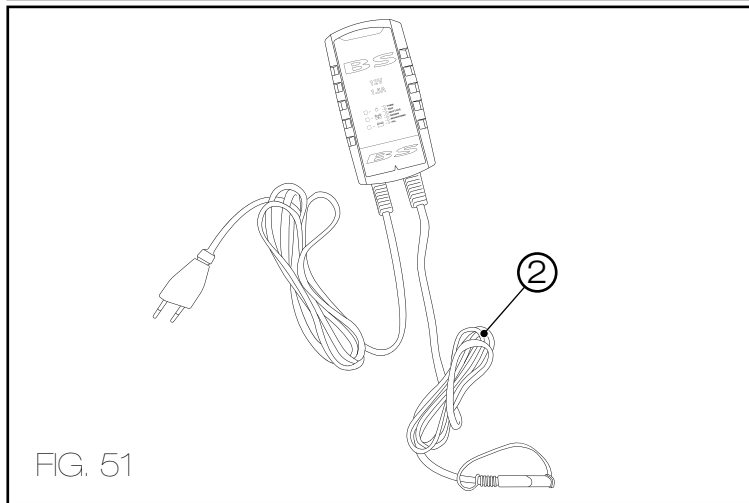


FIG. 51

DRIVE CHAIN ADJUSTMENT



IMPORTANT

For tensioning the chain visit a Dealer or Brough Superior approved workshop.

To find the position where the chain is most tense turn the rear wheel. Place the motorcycle on the side stand. Push the chain downwards as far as possible, then release the chain. Measure the 'window'. The distance should be $10 \div 15$ mm (Fig. 52).



IMPORTANT

If the chain is too tense or too slack, an adjustment needs to be made to ensure the measurement corresponds to that indicated.



ATTENTION

Proper tightening of the bolts situated on the two sides of the swing arm (1) is fundamental to the safety of the rider.



IMPORTANT

An incorrect tension provokes premature wearing of the transmission system..

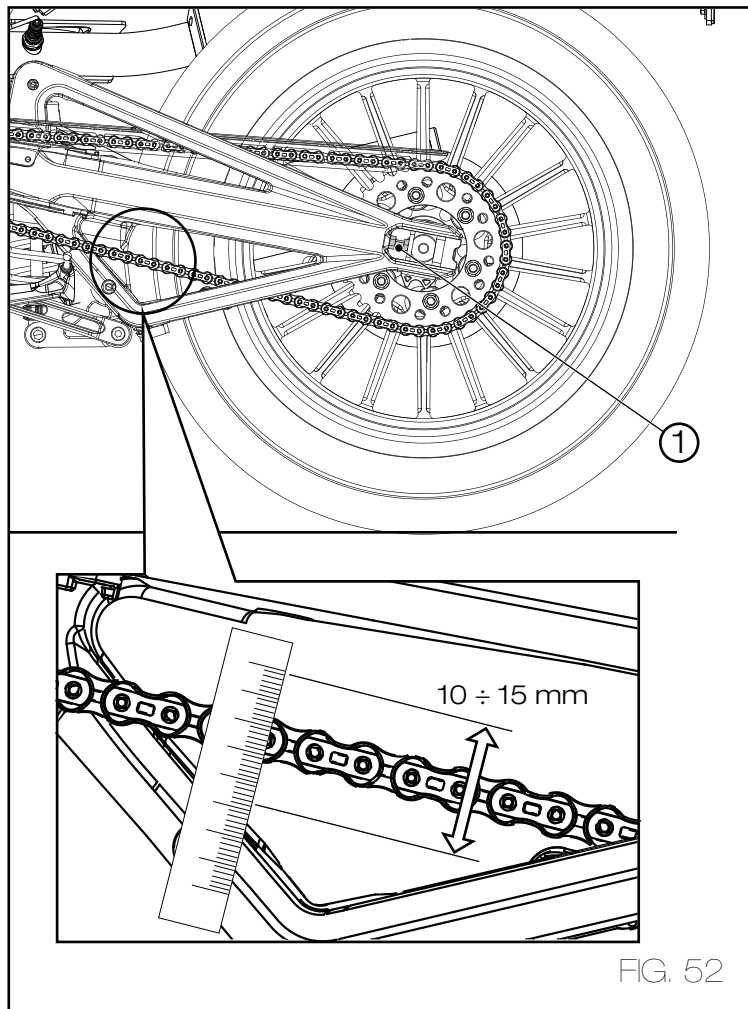


FIG. 52

LUBRICATING THE CHAIN

To protect against exterior agents and to ensure a longer life for the lubrication, the chain is the O-ring type. To avoid damaging the O-rings during the cleaning of the chain only use dedicated solvents and don't clean too violently by using a steam or high pressure water jet.

Dry the chain by compressed air or with an absorbing product and lubricate each of its components with ELF MOTO CHAIN LUB or ELF MOTO CHAIN PASTE.



IMPORTANT

The use of non specified lubricants could damage the chain, the rear sprocket and the engine sprocket.

ORIENTATION OF THE HEADLIGHT

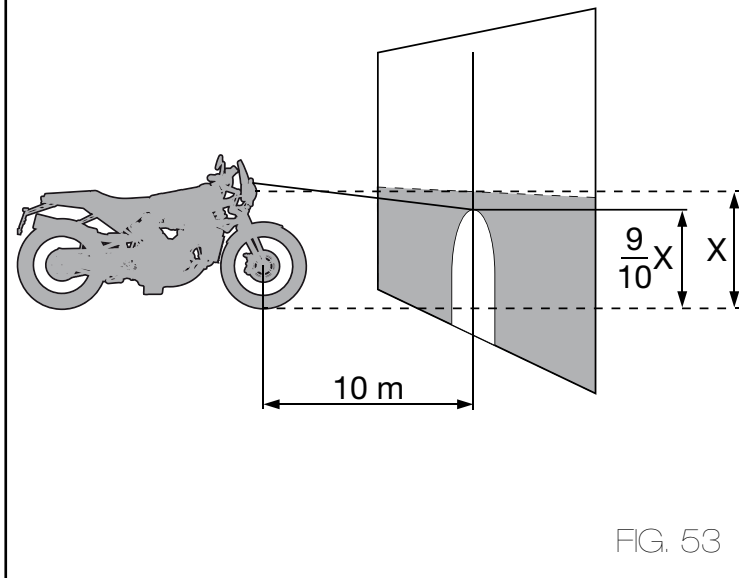
To check the orientation of the headlight the rider has to sit on the seat and the tyres should be at the pressure indicated by the manufacturer.

The motorcycle must be plumb with its longitudinal axis and opposite a screen or a wall 10m away. Trace a horizontal line on the wall corresponding to the height of the centre of the headlight and a vertical line extending the longitudinal axis of the motorcycle. It is advised to do the orientation in semi-darkness. Put on the dipped beam: the height of the top limit of the delimitation between the dark zone and the illuminated zone mustn't exceed $\frac{9}{10}$ of the distance between the ground and the centre of the headlight.



REMARK

Ensure the procedures followed match those required in the destination country of the motorcycle. The procedure described here is that required by European legislation concerning the maximum height of the light beam.



Correction to the vertical orientation of the headlight is carried out setting the bolt (1)

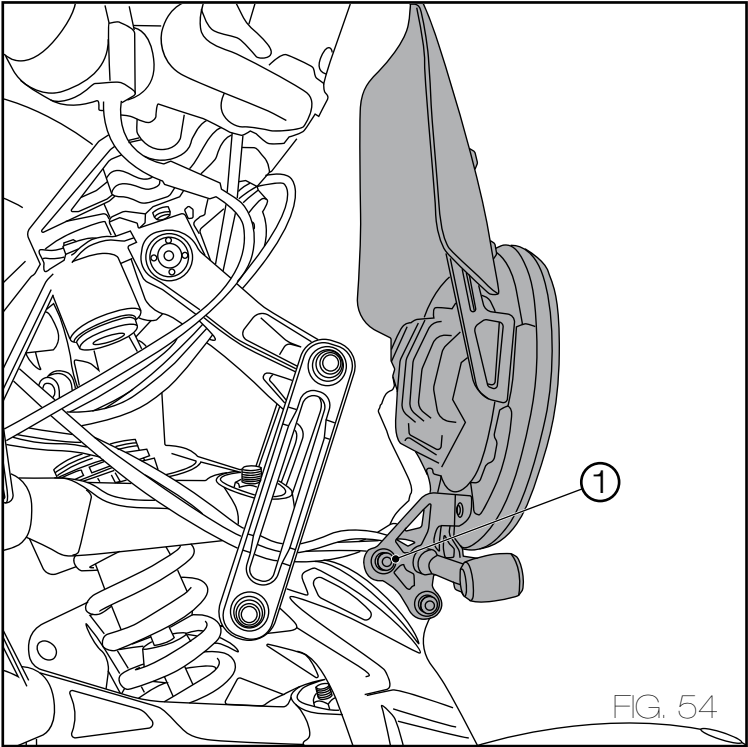
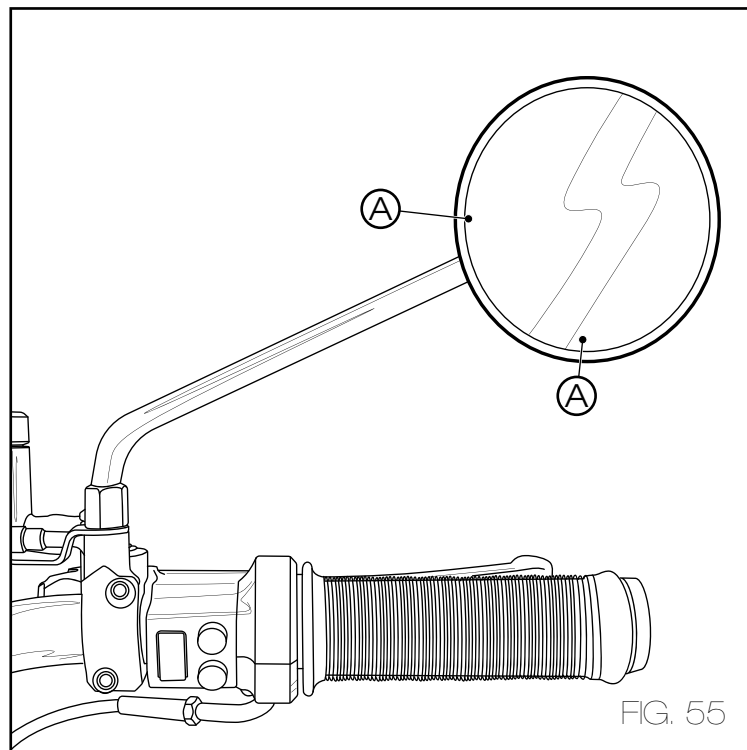


FIG. 54

ADJUSTMENT OF THE MIRRORS

Manually adjust the mirrors by exerting pressure on the points (A)



TUBELESS TYRES

Pressure of front tyre :

2,40 bars (rider only).

Pressure of rear tyre :

2,60 bars (rider only).

The outside temperature and the altitude can affect the pressure of the tyres. The pressure should be controlled and adapted each time there is a journey into high mountains or into areas with a large range of temperatures.



IMPORTANT

To check and correct the tyre pressure it is necessary to do so when the motorcycle is cold. To avoid damaging the front rim the pressure should be raised by $0.2 \div 0.3$ bar before riding on deformed surfaces.

REPAIR OR REPLACEMENT OF TYRES (TUBELESS)

If there are light perforations tubeless tyres lose pressure very slowly, thanks to a certain degree of automatic sealing. If a tyre is slightly down check carefully for leaks.



ATTENTION

Replace the tyre if it is punctured.

Replace the tyres using the brand and type first used. To avoid losing pressure whilst riding ensure that the caps protecting the valves are tightly screwed. Never use a tyre with an inner tube: the non-respect of this norm may cause sudden bursting and compromise the safety of the rider.

After replacing the tyre rebalance the wheel.



ATTENTION

Don't take off nor move the wheel balance weights.



REMARK

Visit a Dealer or a Brough Superior approved workshop for the replacement of tyres in order to guarantee that the wheels are removed and refitted correctly.

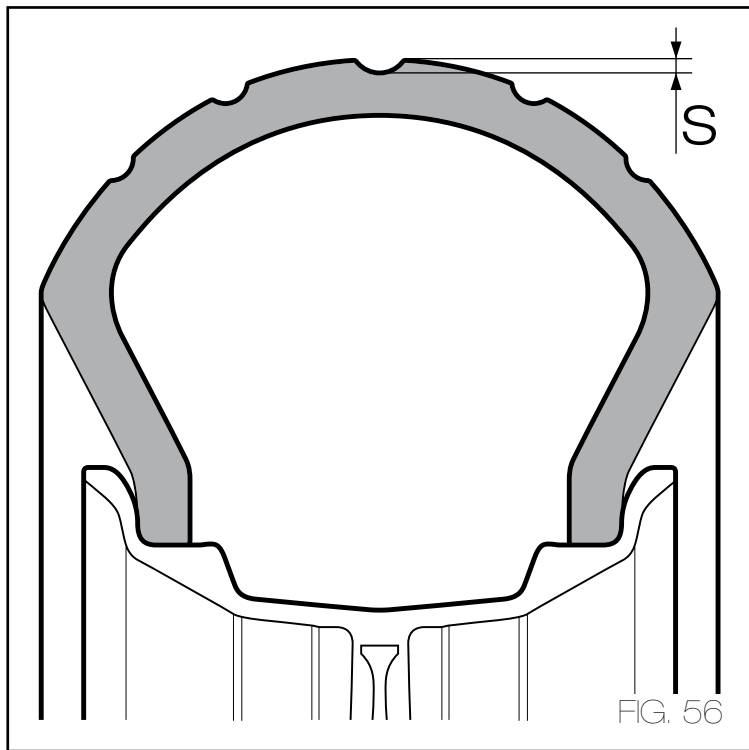
MINIMUM TYRE TREAD

Where the tyre is most worn measure the minimum thickness of the tread (Fig.56). It must be more than 2mm and more than the local legal requirement.



IMPORTANT

It is necessary to regularly check the state of the tyres to detect cuts, cracks, bulges or sizeable marks that signify serious deterioration. Remove any foreign material lodged in the tyres.



CHECKING THE ENGINE OIL

The level of oil in the engine is visible through the sight glass (1) situated to the right of the clutch cover. Check the level with the motorcycle perfectly vertical and the engine cold. The level of the oil must be situated between the markers (Fig 57). If the level is low, top up by adding the engine oil ELF MOTO 4 RACE 10W60. Take off the filling cap and add the oil until reaching the correct level. Replace the cap.



IMPORTANT

To drain the engine oil and replace the oil filters at the intervals set out in the planned maintenance programme of the Warranty Booklet (see p69), visit a Dealer or a Brough Superior approved workshop.

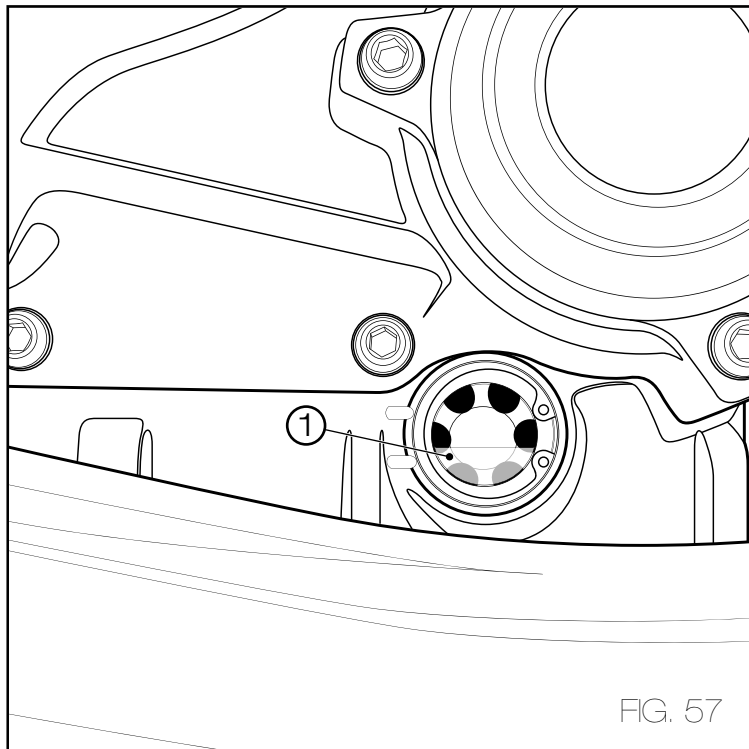
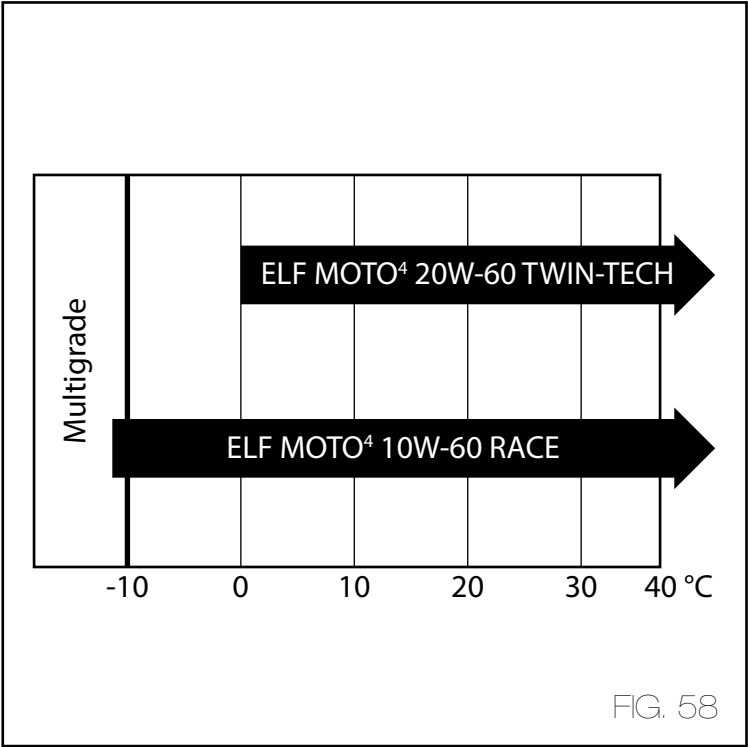


FIG. 57

VISCOSITY

ELF MOTO4 RACE 10W-60

The other viscosities appearing in the table can be used if the average local temperature of where the motorcycle is ridden is within the specified bounds.



GENERAL CLEANING



REMARK

In order to maintain the brilliance of the painted and metallic surfaces it is important to regularly wipe down the motorcycle in accordance with its use and the road conditions. For that, the use of dedicated, biodegradable products is recommended. Avoid using solvents which are too aggressive or detergents. Simply use water and neutral soap for the cleaning of the windscreen and the seat. Only use dedicated products for the aluminium components which must be regularly cleaned. Detergents or products containing abrasive substances or caustic soda are prohibited.



REMARK

Use soft dust-clothes. The use of partly abrasive sponges or of steel wool is prohibited. The warranty will not be granted to motorcycles when insufficient maintenance is noted.



IMPORTANT

To avoid the formation of halos caused by the evaporation of water on hot surfaces, don't wash the motorcycle just after use. Don't wash the motorcycle with high pressure jets or hot water jets. It is forbidden to use a high pressure cleaner on the motorcycle, it could lead to damaging the body work, scuffing, and deterioration of the wheel hubs, electrical circuits, the air intake duct, the silencers and other technical components, thereby putting the safety of the vehicle at risk. All parts of the engine which are dirty must be cleaned with special degreasing products while avoiding contact with the transmission system; the chain, the sprocket etc.

Dry the motorcycle with a leather shammy after having rinsed it in warm water.



ATTENTION

If after a wash the brakes no longer respond, wash them with a none-greasy solvent, same for the discs. Grease or lubricant should not be used on the discs to avoid compromising their efficiency and that of the brake callipers.



REMARK

Don't use alcohol or derivatives to clean the control panel.
Clean and dry the wheel rims after each ride because they are made from machined aluminium.

PROLONGED INACTIVITY

It is advised to carry out the following procedures if the motorcycle won't be used for a long period of time:

General cleaning

Drain the fuel tank

Use the side stand to support the motorcycle

Disconnect and remove the battery

If the motorcycle stays unused for more than a month cover it with the protective cover provided, which shouldn't damage the paint work or retain condensation..

Check and eventually recharge or replace the battery.

IMPORTANT INSTRUCTION

In certain countries (France, Germany, Great Britain, Switzerland etc), local legislation demands adherence to certain anti-pollution and anti-noise rules.

Carry out the periodic checks stipulated and replace defective parts with spare parts originating from Brough Superior, conforming to each country's norms.

OWNER'S MANUAL

PLANNED MAINTENANCE PROGRAMME

PROCEDURES TO BE CARRIED OUT BY THE DEALER

List of procedures with type of intervention (limit in km/miles or time (months))	Km x 1000 Mi x 1000	1	15	30	45	60	Time (months)
		0,6	9	18	27	36	
Check for all potential technical updates and recall campaigns		•	•	•	•	•	12
Drain the engine oil and replace the filter		•	•	•	•	•	12
Clean the engine oil's suction filter		•					-
Check and/or adjust valve clearance				•		•	-
Replace the sparkplugs				•		•	-
Clean the air filter			•		•		-
Replace the air filter				•		•	-
Check the level of the brake and clutch fluid		•	•	•	•	•	12
Drain brake and clutch fluid							36
Check wear on the brake pads and discs. Replace them if necessary		•	•	•	•	•	12
Check bolts are tight on the brake calipers and brake disc flanges.		•	•	•	•	•	12
Check wheel nuts are tight front and rear		•	•	•	•	•	12
Check fixtures are tight for the engine frame			•	•	•	•	-
Check the wheel hub bearings				•		•	-
Check and lubricate the rear wheel spindle				•		•	-
Check the rubber torque dampers on the sprocket						•	-

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List of procedures with type of intervention (limit in km/miles or time) Time (months)	Km x 1000 Mi x 1000	1	15	30	45	60	Time (months)
		0,6	9	18	27	36	
Check the sprocket nut and the final drive drive sprocket		•	•	•	•	•	12
Check the wear of the final drive (chain, drive sprocket and rear sprocket) and the chain pad			•	•	•	•	12
Check the tension and lubrication of the chain		•	•	•	•	•	12
Check the steering bearings				•		•	-
Check the steering tie-rods			•	•	•	•	-
Visual check of the sealing elements for shock absorbers front and back		•	•	•	•	•	12
Check suspension ball joints		•	•	•	•	•	12
Visual check of fuel intake tubes			•	•	•	•	12
Check the points of friction, of play and the freedom of movement and the positioning of flexible pipes and visible electrical cabling		•	•	•	•	•	12
Lubricate handlebar levers and pedal controls			•	•	•	•	12
Drain the coolant					•		12
Check the level of coolant and the integrity of the circuit			•	•	•	•	12
Check the pressure and wear of the tyres		•	•	•	•	•	12
Check the functioning of the electronic safety devices (side stand sensor, front and back brake switches, engine stop switch, gear position sensor)		•	•	•	•	•	12
Check the headlight devices, the indicators, the warning horn and controls		•	•	•	•	•	12
Final test and road trial, check the safety devices, the electric fans and engine idling function correctly.		•	•	•	•	•	12

List of procedures with type of intervention (limit in km/miles or time) Time (months)	Km x 1000 Mi x 1000	1	15	30	45	60	Time (months)
		0,6	9	18	27	36	
Fill out the proof of servicing coupon for the on-board documentation		•	•	•	•	•	12

PROCEDURES TO BE CARRIED OUT BY THE CUSTOMER

List of procedures with type of intervention (limit in km/miles or time)	Km x 1 000	1
	Mi x 1 000	0,6
	Month	6
Check and top up if necessary the level of engine oil		•
Check the level of brake and clutch fluid		•
Check the pressure and wear of the tyres		•
Check the tension and lubrication of the chain		•
Check the brake pads. If they are worn ask a Dealer to replace them		•

OWNER'S MANUAL

TECHNICAL SPECIFICATIONS

WEIGHT

In working order, without fluids or battery: 206 kg

Fully loaded: 341 kg



ATTENTION

Non-respect of the weight limit could negatively impact the handling and the performance of the motorcycle, as well as provoke a loss of control.

REFILLING	TYPE	QUANTITY
Fuel tank, with a reserve of 4.5L	Unleaded petrol with a minimum octane rating of at least RON95	13 L ± 0,2 L
Engine crankcase and air filter housing	ELF MOTO ⁴ RACE 10W/60	4 L
Brake system front and back and clutch	TOTAL HBF 4	-
Cooling system	COOLELF AUTO SUPRA -37°C	2,3 L - 2,5 L



ATTENTION

The motorcycle is only compatible with fuel having a maximum ethanol content of 10% (E10). The use of fuel having a percentage of ethanol higher than 10% is forbidden. Use of these fuels could severely damage the engine and the motorcycle's components. The use of fuels with a percentage of ethanol higher than 10% cancels the warranty.

<https://www.motorcycle-manual.com/>

SS100 DIMENSIONS

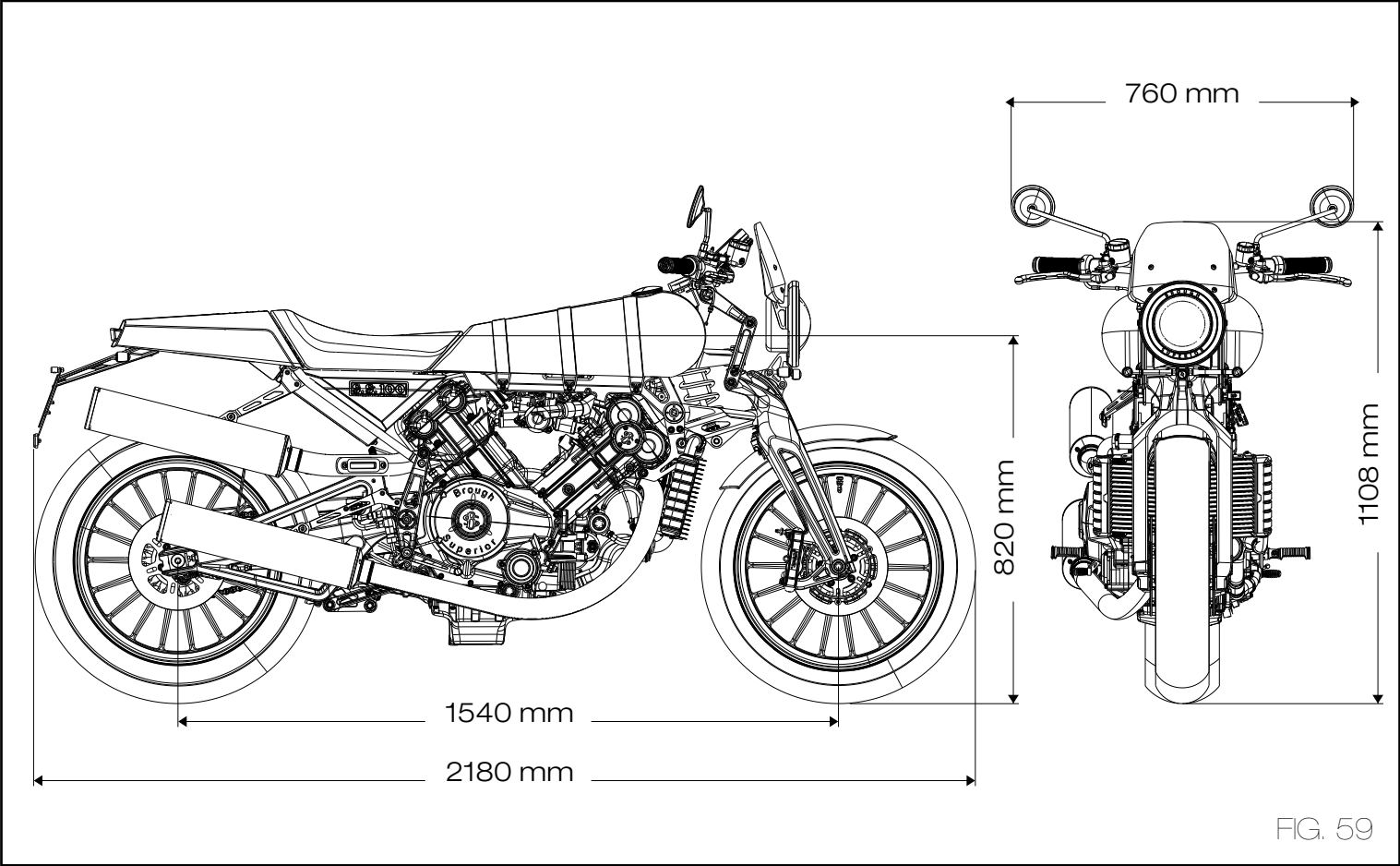


FIG. 59

PENDINE SAND RACER DIMENSIONS

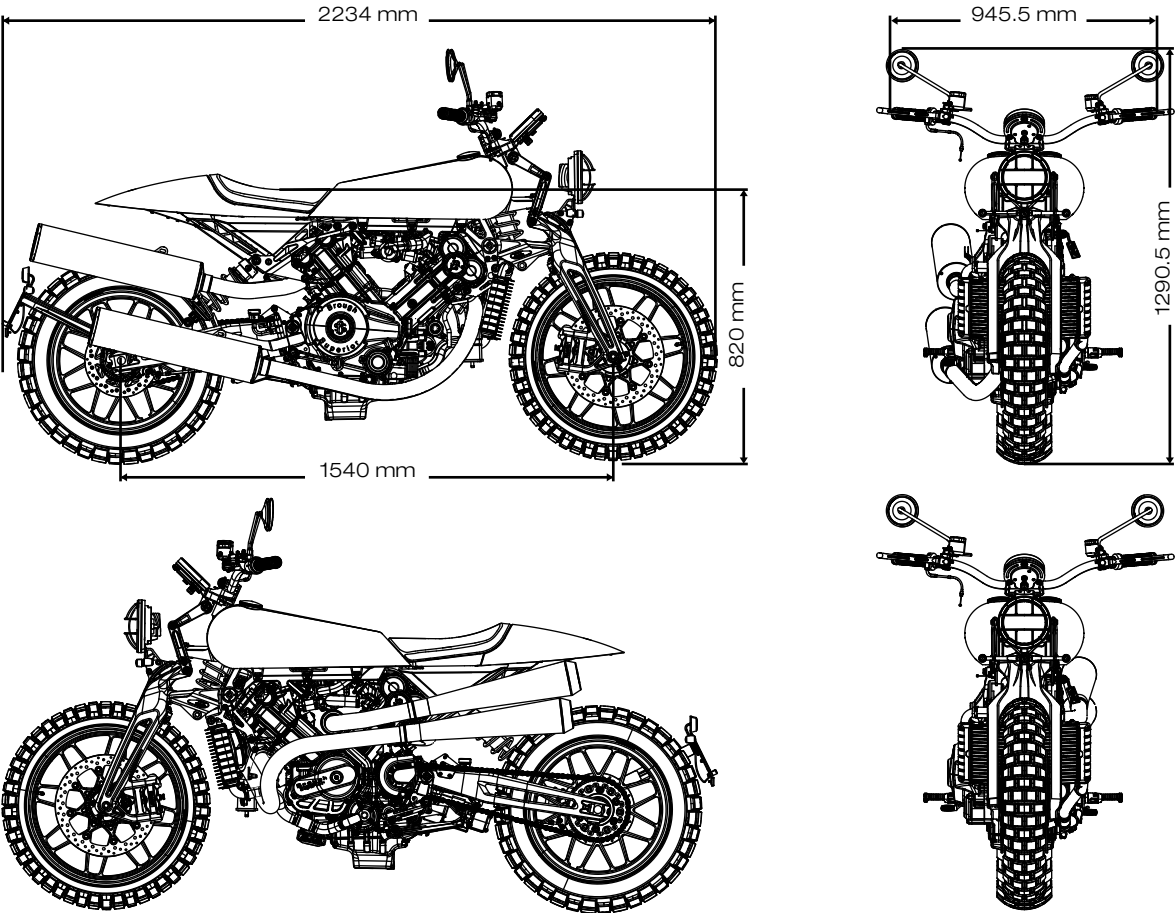
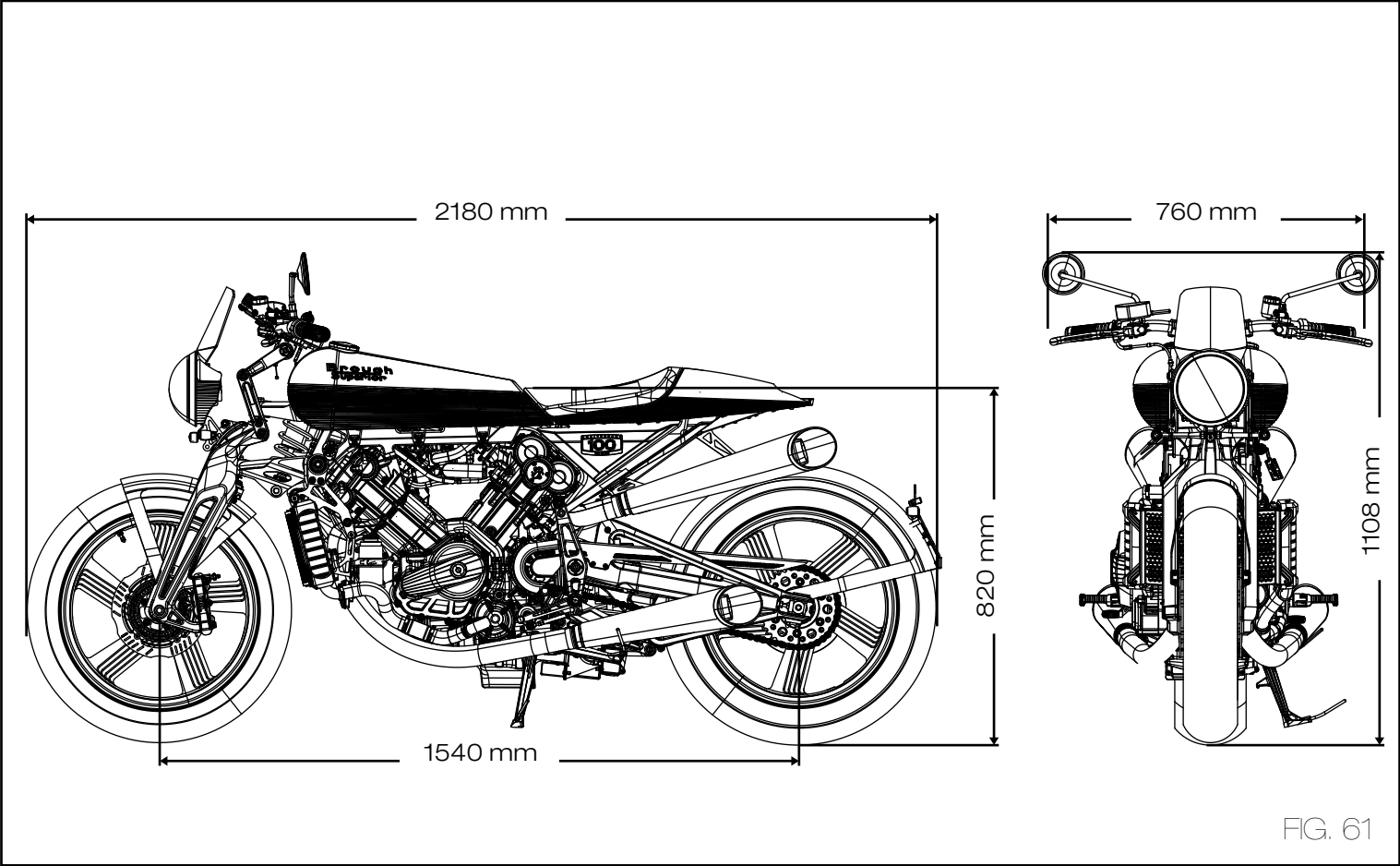


FIG. 60



ENGINE

Liquid cooled, DOHC, 88° V-Twin engine, 4 stroke, 4 valves per cylinder, chain driven/composite gears.

Dimensions: 94 x 71.8 mm

Capacity: 997 cc

Output: Homologation Euro 4

75 kW ou 102 bhp @ 9600 rpm

Maximum torque: Homologation Euro 4:

87 Nm @ 7300 rpm

Compression ratio11:1

Carburant/ignition system:

Electronic injection with Synerject ECU and throttle body Synerject 2 x 50mm, each with one injector

Gear box: 6 speed

Clutch: Oil-immersed multi-disc clutch with hydraulic functioning



IMPORTANT

Do not exceed the specified rpm, for any reason.



ATTENTION

If there is a need to replace the rear sprocket visit a Dealer or a Brough Superior approved workshop. The incorrect replacement of this component may seriously compromise the safety of the rider and irreparably damage the motorcycle.

FRAME

Machined titanium frame and rear subframe in titanium.

SUSPENSION

SS100 & Anniversary: Fork in cast aluminium, linked to two triangular articulations, shock with adjustable spring preload

and rebound with 120mm travel. Cast aluminium swing arm pivoting in the crankcase, shock with adjustable spring preload and rebound with progressive linkage and rocker system and 130mm travel.

Pendine Sand Racer: Front suspension similar to SS100 and Anniversary models.. Machined Aluminium swingarm pivoting in engine crankcases, with preload and rebound adjustable monoshock

Head angle / Trail

SS100 & Anniversary: 23.4° with 94 mm trail via 38 mm fork offset

Pendine Sand Racer: 24.8° with 108 mm trail via 38 mm fork offset

Weight/Distribution: 206 kg dry. Weight distribution: 50/50

BRAKES

Front SS100 & Anniversary: Discs in stainless steel Beringer 4D, 4 x 230mm with 2 x four pistons Beringer radial calipers.

Front Pendine Sand Racer: 2 x 320mm Beringer Stainless Steel discs with 2 x two-piston Beringer radial calipers

Rear: Discs in stainless steel Beringer 4D 1 x 230 mm with 1 x twin piston caliper Beringer.

RIMS / TYRES

SS100 & Anniversary:

Front: 120/70-18 tyre on a 3.50 aluminium cast CNC rim.

Rear: 160/60-18 tyre on a 4.25 aluminium cast CNC rim.

Pendine Sand Racer:

Front: 120/70-19 tyre on a 3.50 aluminium cast CNC rim.

Rear: 170/60-17 tyre on a 4.5 aluminium cast CNC rim.

<https://www.motorcycle-manual.com/>

Tyres pression:

Front: 240 kPa / Rear: 260 kPa.



ATTENTION

The liquid used in the braking system is corrosive. In case of accidental contact with the eyes or skin wash the part concerned abundantly with running water.

PERFORMANCES

The maximum speed at each change of gears can only be obtained by respecting scrupulously the rules for running-in and by keeping to the maintenance programme.

TRANSMISSION

Wet clutch controlled by lever on the left side of the handlebars.

Primary transmission via spur gears.

Ratio engine sprocket / clutch sprocket: 39/77

Constant mesh, 6 speed, gearbox, selector pedal to the left.

Ratio output gearbox pinion / rear sprocket: 15/38

Total ratios :

1st: 15/41 - 2nd: 19/39 - 3th: 21/34 - 4th: 24/32

- 5th: 26/30 - 6e: 28/29



IMPORTANT

The ratios indicated have been homologated and must not therefore be modified.

However, Brough Superior Motorcycles is available to adapt the motorcycle to special circuits or competitions and to suggest ratios other than the standard; visit a dealer or a Brough Superior approved workshop.



IMPORTANT

If these rules are not followed Brough Superior is absolved from all responsibility for all potential damage to the engine and all potential problems concerning its life span.

EXHAUST SYSTEM

Silencers in stainless steel with bottom of the tips in aluminium. Built in catalyzer and two Lambda sensors.

ELECTRICAL CIRCUIT

It principally consists of the following:

Front headlight:

Bulb for dipped beam is a LED type : 4 LEDS (13,5 V - 24,3 W) ;

Bulb for the main beam is a LED type: 5 LEDS (13,5 V - 18,9 W) ;

Position light is a LED type : 5 LEDS (13,5 V - 6,2 W) ;

Electrical controls on the handlebars.

Front indicators : LED (13,5 V - 4,7 W).

Warning horn.

Brake light switches.

Sealed battery, 12 V - 10 Ah.

ALTERNATOR 14 V - 490 W - 35 A.

MASTER FUSE, protected by an automotive type fuse of 30 A, ABS excluded with two dedicated, placed on the start solenoid, behind the battery.

Electric starter: 12 V - 0,7 kW.

Rear light, stop indicator and rear indicators:

position: (13,5 V - 0,3 W) ;

stop: LED (13,5 V - 1,4 W) ;

rear indicators: LED (13,5 V - 2,06 W).

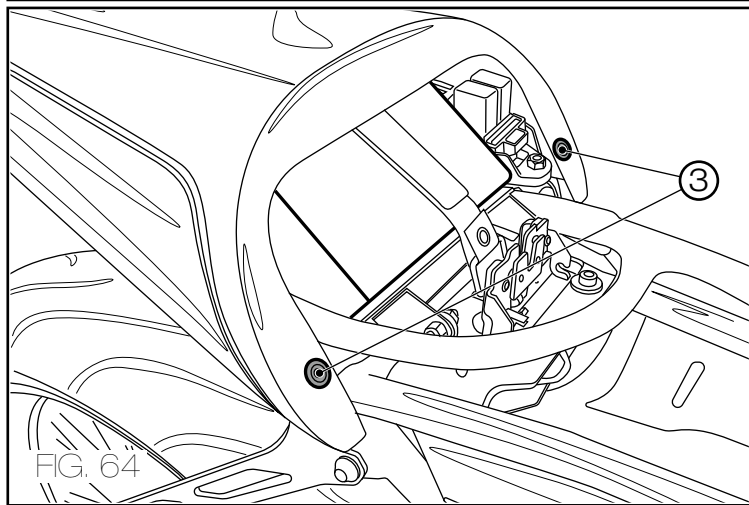
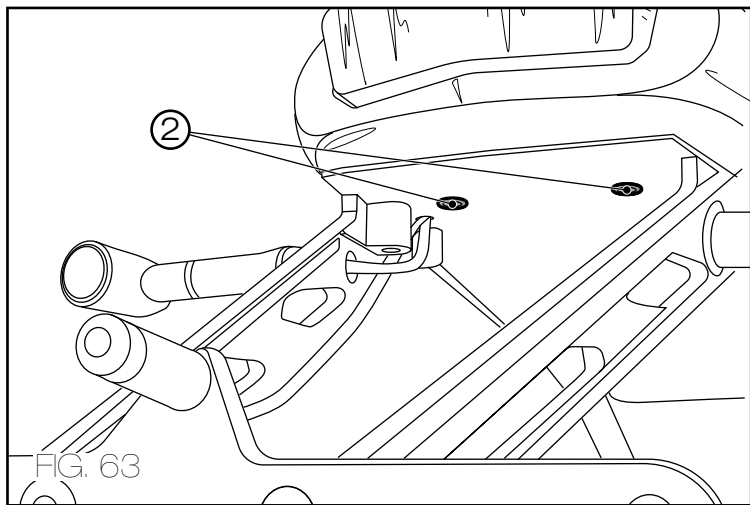
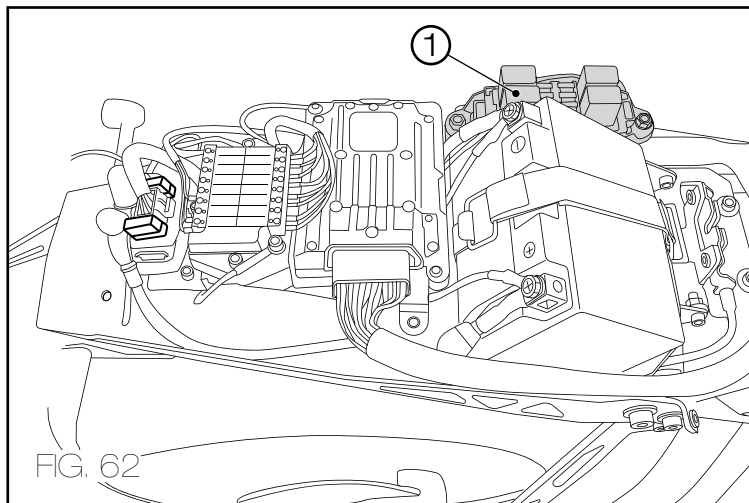
Lighting for the number plate: LED (13,5 V - 0,7 W).

FUSES

To protect the electric components there are seven fuses placed inside the fuse box next to the battery (Fig 62).

Refer to the table on the next page to identify their function and the amperage. The fuse box is positioned under the panel in the electrics unit.

To access the fuses remove the seat (see 'System to unlock the seat' page 36) then the panel by taking out bolts 2 and 3 (see Fig 63 and Fig 64). The fuses used are accessible by lifting up the protective cover on which is indicated how the fuses are arranged and the amperage.



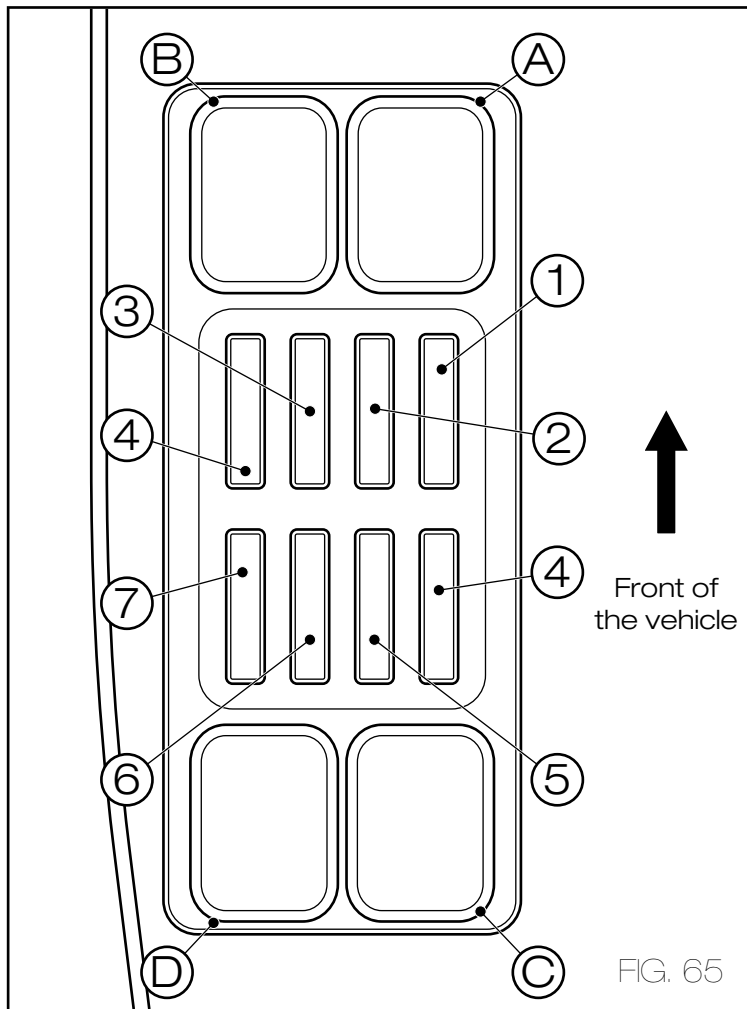


FIG. 65

Legend for the Fuse Box

Position	Consumers	Values
1	VBK	A15
2	VBD	A30
3	ECU	A5
4	FUEL	A5
5	FAN	A5
6	M.UNIT V.2	A5
7	SPEEDOMETER	A15
8	VBR	A30
A	KEY RELAY	-
B	FAN RELAY	-
C	FUEL RELAY	-
D	MAIN RELAY	



REMARK

Removal of the panel is necessary to access the main fuse. To access the main fuse (1) which is at the end of the electrics unit, remove the protective cap. A break in the internal conductive filament (2 Fig. 67) indicates a blown fuse.



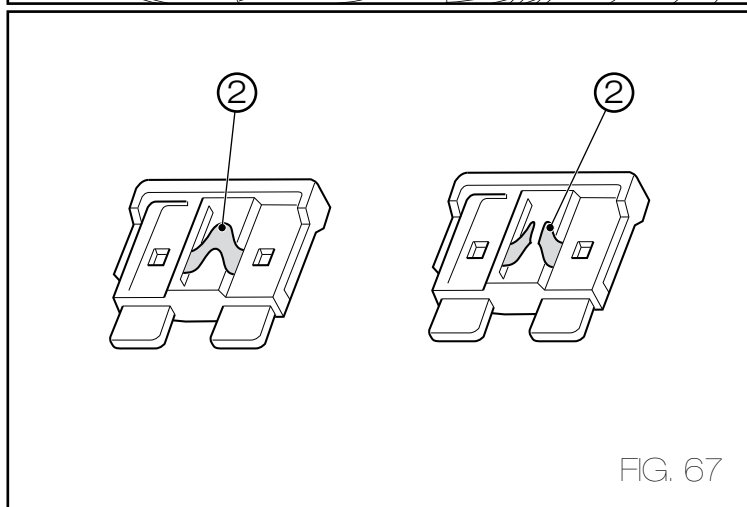
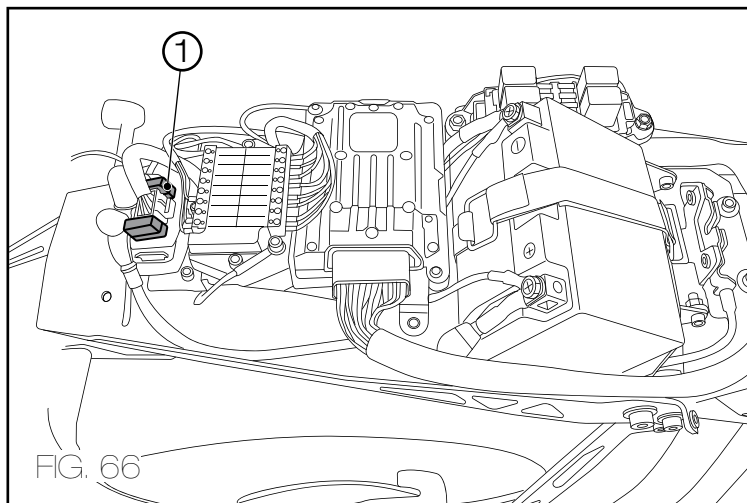
IMPORTANT

Before replacing the fuse cut the contact (key at OFF) to avoid the risks of short circuiting.



ATTENTION

Never use a fuse having performances different to those prescribed. If this rule is not observed the electrical system can be damaged and there may be a risk of fire.



LOCATION OF THE OBD DIAGNOSTIC SHEET

Removal of the saddle is necessary to access to the diagnostic sheet (1) under the backrest, please refer to the method used to remove the saddle (Fig. 29, page 38).

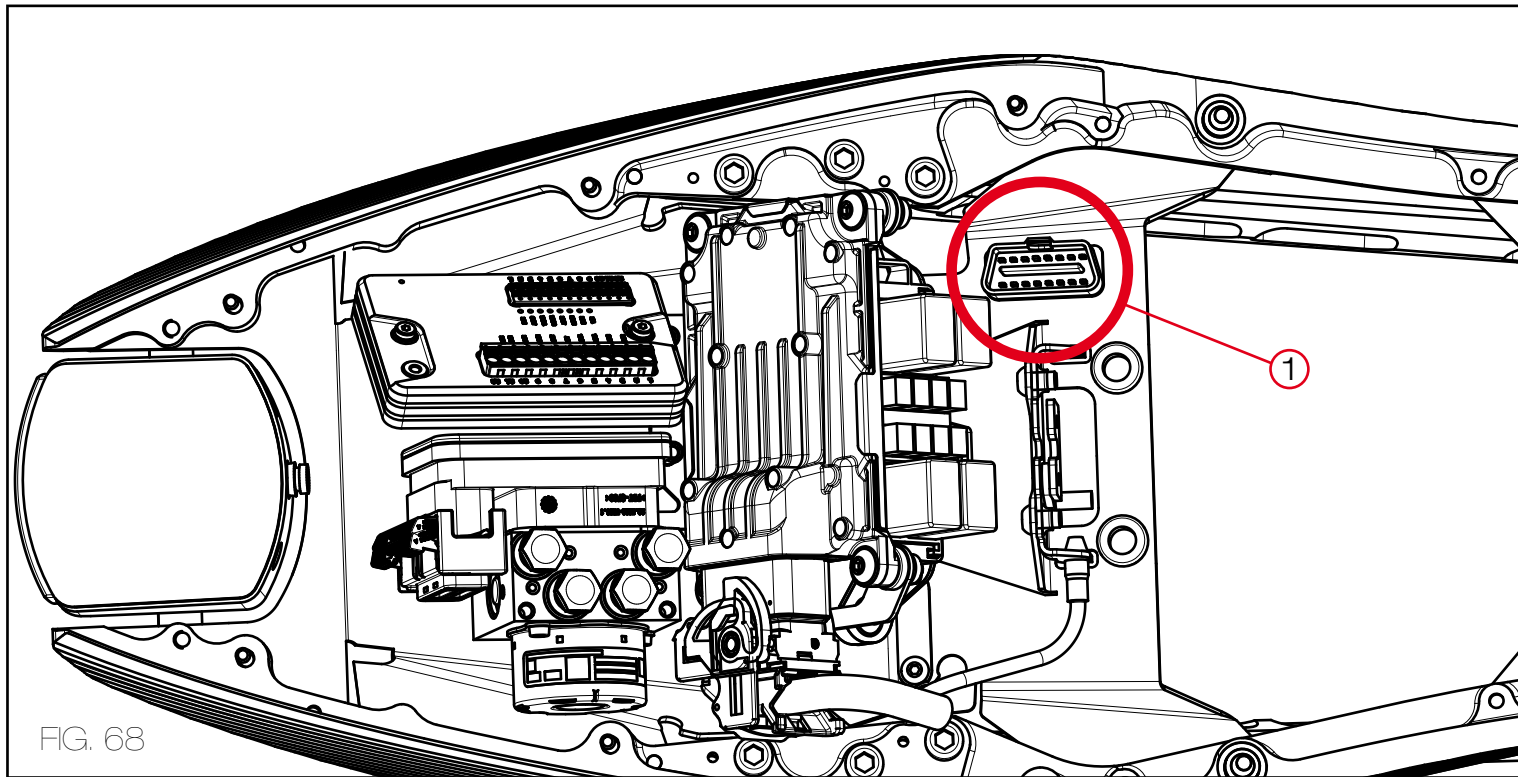


FIG. 68



IMPORTANT

Any operation requiring access to the OBD sheet must be performed by your Brough Superior dealer or authorized repairer.

<https://www.motorcycle-manual.com/>

OWNER'S MANUAL

CHART OF MAINTENANCE

MOTORCYCLE TESTED AT DELIVERY

Date : _____

Stamp / Signature

FIRST SERVICE AFTER RUNNING-IN PERIOD

Date : _____

at : _____ Km / Miles

NEXT SERVICE

at : _____

Or, if reached earlier

at : _____ Km / Miles

Stamp / Signature

SERVICE BROUGH SUPERIOR

Date : _____

at : _____ Km / Miles

NEXT SERVICE

at : _____

Or, if reached earlier

at : _____ Km / Miles

Stamp / Signature



IMPORTANT

Make sure all maintenance procedures are entered in this booklet by your Dealer or Brough Superior approved workshop. Each attestation of maintenance is a vital condition for the preservation of the warranty.

<https://www.motorcycle-manual.com/>

SERVICE
BROUGH SUPERIOR

Date: _____

at: _____ Km / Miles

NEXT SERVICE

at: _____
Or, if reached earlier

at: _____ Km / Miles

Cachet / Signature

SERVICE
BROUGH SUPERIOR

Date: _____

at: _____ Km / Miles

NEXT SERVICE

at: _____
Or, if reached earlier

at: _____ Km / Miles

Cachet / Signature

SERVICE
BROUGH SUPERIOR

Date: _____

at: _____ Km / Miles

NEXT SERVICE

at: _____
Or, if reached earlier

at: _____ Km / Miles

Cachet / Signature

SERVICE
BROUGH SUPERIOR

Date: _____

at: _____ Km / Miles

NEXT SERVICE

at _____
Or, if reached earlier

at: _____ Km / Miles

Cachet / Signature

SERVICE
BROUGH SUPERIOR

Date: _____

at: _____ Km / Miles

NEXT SERVICE

at _____
Or, if reached earlier

at: _____ Km / Miles

Cachet / Signature

SERVICE
BROUGH SUPERIOR

Date: _____

at: _____ Km / Miles

NEXT SERVICE

at _____
Or, if reached earlier

at: _____ Km / Miles

Cachet / Signature

**SERVICE
BROUGH SUPERIOR**

Date: _____

at: _____ Km / Miles

NEXT SERVICE

at _____
Or, if reached earlier

at: _____ Km / Miles

Cachet / Signature

**SERVICE
BROUGH SUPERIOR**

Date: _____

at: _____ Km / Miles

NEXT SERVICE

at _____
Or, if reached earlier

at: _____ Km / Miles

Cachet / Signature

**SERVICE
BROUGH SUPERIOR**

Date: _____

at: _____ Km / Miles

NEXT SERVICE

at _____
Or, if reached earlier

at: _____ Km / Miles

Cachet / Signature

OWNER'S MANUAL

CHART OF SERVICING

This table provides a record of maintenance work, repairs and special interventions carried out on your motorcycle

[illegible]

~~<https://www.motorcycle-manual.com/>~~

REMINDER – MAINTENANCE TIMETABLE

KM / MILES	BROUGH SUPERIOR MOTORCYCLES SERVICE	MILEAGE	DATE
1 000 / 621,4			
15 000 / 9320,6			
30 000 / 18641,1			
45 000 / 27961,7			
60 000 / 37282,3			

OWNER'S MANUAL

CONDITIONS OF WARRANTY

This motorcycle is the fruit of constant work in research and development by our team, in order to attain the highest levels of quality, reliability, performance and safety.

You optimise the protection offered by the warranty covering your vehicle by maintaining it in conformity with the recommendations contained in this manual and the planned maintenance programme. The attestations of service must be stamped by your Dealer or Brough Superior approved workshop. Make sure you have this manual available before every service, repair or other work. During the warranty period Brough Superior Motorcycles s.a.s guarantees that the motorcycle is exempt from all material defect and/or manufacturing defect at the moment of its realisation.

All elements shown to be defective during this period will be repaired or replaced, at the discretion of Brough Superior Motorcycles s.a.s, by a Dealer or approved workshop. The elements replaced or repaired will be covered by the warranty until the end of the initial warranty period. All parts replaced during the period covered by the warranty must be returned to Brough Superior Motorcycles s.a.s by the dealer or approved workshop and will become the property of Brough Superior Motorcycles s.a.s.

Brough Superior Motorcycles can, at any moment outside the warranty period, repair or replace a defective element, without it representing an admission of responsibility in any way.

Brough Superior Motorcycles s.a.s is responsible for bearing the cost of the labour for all procedures carried out during the warranty period, which can be transferred to future owners until the end of the initial period.

CONDITIONS AND EXCEPTIONS

- 1.The motorcycle mustn't, for any reason, be used in competition, be used in conditions other than those authorised (Authorised use, page 7) or be maintained or repaired in an incorrect or unsuitable way.
2. No unauthorised modification, repair or replacement should be carried out on the motorcycle without the prior approval of Brough Superior Motorcycles s.a.s.
3. The attestations of maintenance in this manual must be duly filled out in order to prove all servicing carried out by a Dealer or approved workshop, and the servicing must be done at the specified intervals.
4. The warranty will not cover any defect incurred through bad repairing/modification carried out by personnel not approved by Brough Superior Motorcycles s.a.s.
5. All use of parts or accessories not approved by Brough Superior Motorcycles s.a.s which cause defects can not be covered by the warranty.
- 6.The warranty does not cover the costs brought about by the dismantling or the replacement of parts not included in the initial equipment or not recommended by Brough Superior Motorcycles.
- 7.The warranty does not cover the costs brought about by the transport of the motorcycle to or from a Dealer negligence. (All use of high pressure cleaning systems is forbidden.)

10. The motorcycle's battery is under warranty for 6 months, from the date the motorcycle is purchased. Thereafter the battery is totally excluded from the warranty. The battery provided with the motorcycle must be sufficiently charged to compensate for the loss of charge due to the starting of and/or use of electrical equipment when the engine has stopped.

11. The warranty doesn't cover motorcycles used for commercial purposes.

12. The warranty doesn't cover defects which aren't made known to an approved Dealer in the ten days following their discovery.

13. The warranty doesn't cover motorcycles which haven't been correctly lubricated or motorcycles where an inappropriate lubricant or fuel has been used.

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