

Owner's manual

MULTISTRADA
MULTISTRADA 1200S



Owner's manual

ENGLISH

MULTISTRADA

MULTISTRADA 1200S

Dair[®]

This manual forms an integral part of the motorcycle and must be kept with it whole its service life.

If the motorcycle is resold, the manual must always be handed over to the new owner.

This manual must be preserved with care. If it lost or becomes damaged, contact a Ducati Dealer or authorised Service Centre without delay to obtain a new copy of the manual.

The quality standards and safety of Ducati motorcycles are steadily improved as new design solutions, equipment and accessories are developed. While the information contained in this manual is current at the time of going to print, Ducati Motor Holding S.p.A. reserves the right to make changes at any time without notice and without any obligations. For this reason, the illustrations in this manual might differ from your motorcycle.

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Enjoy your ride!

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Routine maintenance record 306

Introduction

Safety guidelines

We would like to welcome you among Ducati enthusiasts, and congratulate you on your excellent choice of motorcycle. We think you will ride your Ducati motorcycle for long journeys as well as short daily trips. Ducati Motor Holding S.p.A. wishes you smooth and enjoyable riding.

Your motorcycle is the result of Ducati Motor Holding S.p.A.'s on-going research and development efforts. It is important that you preserve its quality standard by strictly observing the maintenance plan and using genuine spare parts. This manual provides instructions on minor maintenance operations. Major maintenance operations are described in the Service Manual available to Ducati Authorised Service Centres.

In your own interest, for your safety and in order to guarantee product reliability, you are strongly advised to refer to our authorised Dealers and Service Centres

for any operations listed in the scheduled maintenance chart, see page 287.

Our highly skilled staff have access to special implements and appropriate equipment required to perform any servicing job at best, and use Ducati original spare parts only as the best guarantee for full interchangeability, smooth running and long life.

All Ducati motorcycles come with a Warranty Card. The warranty does not apply to motorcycles used in racing competitions.

Tampering with or altering any components, even partially, will make the warranty null and void effective immediately. Improper or poor maintenance, using other than original spare parts or parts not expressly approved by Ducati may invalidate your warranty rights and lead to damage or loss of performance.

Your safety and that of other road users are very important. Ducati Motor Holding S.p.A. recommends that you ride responsibly.

Before using your motorcycle for the first time, read this entire manual carefully and closely follow the guidelines outlined in it. The manual provides full information on proper motorcycle operation and

maintenance. In case of any doubts, please call a Dealer or Authorised Service Centre.

The terms RIGHT and LEFT refer to the motorcycle viewed from the riding position.

Safety alerts

To alert you to potential hazards that could potentially harm you or other persons, the following safety alerts have been used:

- Safety labels on motorcycle;
- Safety messages preceded by a warning symbol and the word WARNING or IMPORTANT.

Warning

Failure to comply with these instructions may put you at risk and result in severe injury to rider or other persons or even death.

Important

Possibility of damaging the motorcycle and/or its components.

Note

Additional information concerning the job being carried out.

Permitted use

This motorcycle may be used for riding on dirt trails or for off-road riding.



Warning

This motorcycle may not be used to tow any trailers or with a side-car attached; this can lead to loss of control and result in an accident.

This motorcycle carries the rider and can carry a passenger.



Warning

The total weight of the motorcycle in running order including rider, passenger, luggage and additional accessories should not exceed 430 kg/948 lb.



Warning

The maximum weight permitted for the side panniers, top case and the tank bag must never exceed 35 kg, divided as follows:

10 kg max. per side pannier;

10 kg max for the top case;

5 kg max. for the tank bag.

D-Air® device preliminary instructions and recommendations



Warning

The D-Air® protection system was developed by DAINESE and tested by TÜV to be used on asphalt only. Therefore, in order to avoid any undesired activation of the Jacket and/or Waistcoat, the relevant electronic device must be disabled when riding off-road - by "off-road" we mean the track use as well. Warning: with Jacket/Waistcoat electronic device off, the rider and passenger protection is disabled.

- The D-Air® system is a new, smart, tested device conceived to be used on the road only. When riding on the track or off-road - by "off-road" we mean on uneven, steep and low-grip roads - it is compulsory to disable the device on the garment (jacket or waistcoat) available at a Ducati Dealer or Ducati authorised service centre. The device installed on the garment (Jacket or Waistcoat) communicates with the control unit and the sensors installed on the motorcycle. There is no physical/mechanical element linking the motorcycle and the user. D-Air® is able to identify front, lateral and rear impacts and skidding, and to transmit via radio the inflation input to the system installed in the garment.

- Motorcycling is a dangerous activity that might lead to personal injuries or even death. Ducati products are conceived to offer comfort and high protection, however no protection system or product can ensure a complete protection against injuries in case of falls, collisions, impacts, loss of control or other. Riders must be familiar with the use of motorcycles and relevant equipment and aware of their skills and limits to understand any potential risks and therefore decide whether to take them or not. For these reasons, and without prejudice to the rights granted by law are complied with, Ducati shall not be held liable for injury to people or damage to property caused, even indirectly, by the use of any of its products.
- To make the most of its functions, D-Air® must be installed and worn correctly, respecting the instructions and warnings provided by this use and maintenance manual.
- D-Air® does not replace other protection equipment such as helmet, eye wear, back protectors, boots, gloves, or other. This System works together with the specified protections. Helmet and back protectors must be compulsorily worn together with the D-Air® device. Always use the System with the back protector provided with the D-Air® Jacket/Waistcoat. Failure to observe this instruction may lead to personal injuries in case of falls under particular circumstances.
- People with pacemakers or other electro medical equipment must not use D-Air® as electric noise may impair the correct operation of said equipment.
- People with any kind of back or neck problem must no use this device.
- Upon airbag inflation, the rider/passenger may feel a light pressure on the body side covered by the airbag.
- The passenger must wear helmets with visor only.
- Neither the rider nor the passenger must be pregnant. The risk of abortion in case of system activation has not been assessed.

- Piercings could increase the pain perception in case of activation.
- Neither the rider nor the passenger must have breast silicone prostheses. The break risk in case of system activation has not been assessed.
- The D-Air® system of your bike must be used exclusively within a temperature range of -20 °C and 80 °C. Prolonged exposure of the System to a temperature lower than -20 °C or higher than 80 °C could impair System operation.
- The D-Air® device integrated in the jacket must be used exclusively within a temperature range of -10 °C to 50 °C, when discharged (normal usage), and within a temperature range of 0 °C and +40 °C, when charged. Prolonged exposure of the System to a temperature lower than -10 °C or higher than 55 °C could impair System operation.
- D-Air® is subject to wear, depending on its actual use conditions. Before using or storing the D-Air Device®, always check for signs of wear or damage.
- The Device must be overhauled by a Ducati Dealer or authorised service centre at the time intervals that will be shown on the display. A correct maintenance is essential for a correct operation of the System. For further details, refer to the specific paragraph about the device.
- Wearing waterproof jackets over the garment is allowed. The use of waterproof backpacks or similar items on the garment is allowed. Place keys, mobiles and other devices and accessories in the external pockets of your garment.
- Do not modify in any way the D-Air® device and its components. Any change could affect D-Air Device® operation, and thus its functions in case of fall or accident. Do not add decorations, ribbons or patches on the bag positioning area. Do not connect any electrical equipment or external battery to the system's cables. D-Air® components can be modified exclusively by a DUCATI Dealer or authorised service centre.

- Avoid turning on the D-Air[®] device on the garment (jacket/waistcoat) when you are not wearing it or when you are not using the motorcycle. If the jacket/waistcoat is used in an improper way, D-Air[®] could be triggered in a wrong way with possible damage to property and injuries to people. Always make sure that the D-Air[®] device installed in the jacket/waistcoat is off before storing it for transport. When the jacket/waistcoat is not used, D-Air[®] must be off.
- Before using D-Air[®], it is necessary to check its operation as specified in paragraph "Using the D-Air[®] device". In case of errors or other fault warnings, do not use the D-Air[®] device and contact a DUCATI Dealer or authorised service centre.
- Do not recharge the D-Air[®] device while wearing it.
- Do not leave the D-Air[®] device in the jacket/waistcoat recharge near flammable surfaces or objects.
- Keep D-Air[®] out of children's reach to avoid any personal risk.
- In case of any evident malfunction, turn the device off and contact a DUCATI Dealer or authorised service centre.
- Once deployed, the Device must not be used again until its functionality is restored by a Ducati Dealer or authorised service centre.
- In case of damage to the D-Air[®] device, contact a DUCATI Dealer or authorised Service Centre.



Warning

Riders without helmets are more likely to suffer severe bodily injury or die if they are in an accident.



Warning

Check that your helmet complies with safety specifications, permits good vision, is the right size for your head, and carries a certification label indicating that it conforms to the standards in force in your state. Road traffic laws differ from state to state. Learn about traffic laws in your state before riding and always obey them.

Rider's obligations

All riders must hold a valid licence.

Warning

Riding without a licence is illegal and is prosecuted by law. Always make sure you have your licence with you when riding. Do not let inexperienced riders or persons without a valid licence use your motorcycle.

Do not ride under the influence of alcohol and/or drugs.

Warning

Riding under the influence of alcohol and/or drugs is illegal and is prosecuted by law.

Do not take prescription or other drugs before riding unless you have consulted your doctor about their side effects.

Warning

Some medications and drugs may cause drowsiness or other effects that slow down reaction time and the rider's ability to control the motorcycle, possibly leading to an accident.

Some states require vehicle insurance.

Warning

Check your state laws. Obtain insurance coverage and keep your insurance document secure with the other motorcycle documents.

To protect rider and passenger safety, some states mandate the use of a certified helmet.

Warning

Check your state laws. Riding without a helmet may be punishable by law.

Warning

Riders without helmets are more likely to suffer severe bodily injury or die if they are in an accident.



Warning

Check that your helmet complies with safety specifications, permits good vision, is the right size for your head, and carries a certification label indicating that it conforms to the standards in force in your state. Traffic laws differ from state to state. Learn about traffic laws in your state before riding and always obey them.

Use, conditions and efficiency of D-Air®

The jacket/waistcoat provided with D-Air® must be worn and turned on correctly. Never remove the protectors integrated in the D-Air jacket/waistcoat. After device deployment, have the protector or garment replaced by a Ducati Dealer or authorised service centre.



Important

D-Air® has been conceived to reduce the risk of injuries, by limiting the forces transmitted in case of falls or impacts against obstacles. Nevertheless, we remind that no protector is able to protect against torsions, bending or extreme movements. No back or lumbar protector is able to protect against severe spinal injuries. No protection device can protect against all possible impacts due to accidents, thus ensuring a complete protection against injuries.

Rider training

Accidents are frequently due to inexperience. Driving a motorcycle is different from driving other vehicles and requires specific riding and braking techniques.



Warning

Poor training or improper operation of the vehicle can lead to loss of control, death or severe damage.

Riding gear

Riding gear is very important for safety. Unlike cars, a motorcycle offers no impact protection in an accident.

Proper riding gear includes helmet, eye protection, gloves, boots, long sleeve jacket and long pants.

- The helmet must meet the requirements listed at page 14; if your helmet does not have a visor, use suitable eye wear;
- Use five-finger gloves made from leather or abrasion-resistant material;
- Riding boots or shoes must have non-slip soles and offer ankle protection;
- Jacket, trousers or riding suit must be made from leather or abrasion-resistant material and have high-visibility colours and inserts.

Important

Never wear loose clothing, items or accessories that may become tangled in motorcycle parts.

Important

For your safety, always wear suitable protective gear, regardless of season and weather.

Important

Have your passenger wear proper protective clothing.

D-Air® intended use

Warning

The D-Air® protection system was developed by DAINESE and tested by TÜV to be used on asphalt only. Therefore, in order to avoid any undesired activation of the Jacket and/or Waistcoat, the relevant electronic device must be disabled when riding off-road - by "off-road" we mean the track use as well. Warning: with Jacket/Waistcoat electronic device off, the rider and passenger protection is disabled.

D-Air® is an innovative system designed for riders' safety on the road. It has not been conceived for use on uneven roads or off-road. The Jacket/Waistcoat provided with the D-Air® Device can be worn by the motorcycle rider and passenger.

Warning

Do not use D-Air® for purposes other than those it has been designed for.



Warning

Do not use D-Air® for motocross, super-motard, trial, off-road or other sports.



Warning

D-Air® does not provide additional protection with respect to the approved garments on the areas that are not covered by the airbag or upon circumstances that do not entail its activation and thus airbag inflation.



Warning

Do not use the D-Air® device without the integrated protectors.

In particular, the D-Air® jacket/waistcoat:

- 1) Offers supplementary protection by means of the airbag in the back area. The D-Air Device® is certified according to PrEN 1621-4:2010.
- 2) It limits neck movements upon impacts. D-Air® prevents the head-neck from bending excessively and reduces helmet movements (tested by TÜV SUD GmbH).

- 3) It offers an "invisible protection". Comfort and ergonomics are tested by TÜV SUD GmbH.

To keep the airbags in the correct position upon inflation in order to reduce neck movements during possible impacts, limit the head inclination (tested by TÜV SUD Automotive GmbH), the airbags are positioned and fixed in the front part of the body.



Important

It is compulsory to use all supplied protections (for example: back protectors, shoulder protectors, etc.) with which the inflatable system is designed to interact. D-Air® does not replace in any way the standard protections which, indeed, contribute to its efficacy.

Information about the materials used for D-Air®

We hereby certify that the materials that come into contact with the person have been realised with non-toxic, harmless products, as per EC Regulation 1907/2006 (R.E.A.C.h.).

Such materials are free of azoic dyes that, by release of one or more azoic groups, could release dangerous

aromatic amines, as per EC Regulation 1907/2006 (R.E.A.C.h.). Furthermore, marketed items do not contain more than 0.1% weight/weight of SVCH substances (Substance of Very High Concern), specified in article 59 and listed in the "Candidate List" issued by the European Chemical Agency (ECHA).

Best practices for motorcycle safety

These few simple operations are critical to people safety and to preserving the full performance of your motorcycle. Never forget to perform them before, while and after riding.

Important

Closely follow the indications provided at chapter "Riding the motorcycle" during the running-in period.

Failure to follow these instructions releases Ducati Motor Holding S.p.A. from any liability whatsoever for any engine damage or shorter engine life.

Warning

Before riding your motorcycle, become familiar with the controls you will need to use when riding.

Perform the checks recommended in this manual before each ride (see page page 244).

Warning

Failure to carry out these checks before riding may lead to motorcycle damage and injury to rider and/or passenger.

Warning

Start the engine outdoors or in a well ventilated area. The engine should never be started or run indoors.

Exhaust gases are poisonous and may lead to loss of consciousness or even death within a short time.

Use proper body position while riding and ensure your passenger does the same.

Important

Rider must hold the handlebar with both hands at ALL TIMES while riding.

Important

Both rider and passenger should keep their feet on the footpegs when the motorcycle is in motion.

Important

The passenger should always hold on to the grabhandles under the seat with both hands.



Important

Be very careful when tackling road junctions, or when riding in areas near exits from private grounds, car parks or on slip roads to access motorways.



Important

Be sure you are clearly visible and do not ride within the blind spot of vehicles ahead.



Important

ALWAYS signal your intention to turn or pull to the next lane in good time using the suitable turn indicators.



Important

Park your motorcycle where no one is likely to knock against it, and use the side stand. Never park on uneven or soft ground, or your motorcycle may fall over.



Important

Visually inspect the tyres at regular intervals for detecting cracks and cuts, especially on the side walls, bulges or large spots that are indicative of internal damage. Replace them if badly damaged. Remove any stones or other foreign bodies caught in the tread.



Warning

Engine, exhaust pipes and silencers stay hot long after the engine is switched off; pay particular attention not to touch the exhaust system with any body part and do not park the vehicle next to flammable material (wood, leaves etc.).



Warning

Always remove the key when you leave your motorcycle unattended and make sure it is not accessible to persons not authorised to use the motorcycle.

D-Air® service life

The service life of a protection device depends on its use frequency and care.

To have components subject to wear checked and overhauled, contact a DUCATI Dealer or authorised service centre.



Warning

Before using D-Air®, check its conditions: in case of doubts on possible worn/broken/damaged parts, contact a Ducati Dealer or authorised service centre.

Refuelling

Refuel outdoors with the engine turned off.

Do not smoke or use open flames when refuelling.

Be extremely careful not to spill fuel on the engine or on the exhaust pipe.

Never fill the tank completely. Fuel should never be touching the rim of filler recess.

While refuelling, avoid inhaling fuel vapours and avoid contact with eyes, skin or clothing.



Warning

The motorcycle is only compatible with fuel having a maximum content of ethanol of 10% (E10). Using fuel with ethanol content over 10% is forbidden. Using it could result in severe damage of the engine and motorcycle components. Using fuel with ethanol content over 10% will make the warranty null and void.



Warning

In the event of illness after prolonged breathing of fuel vapours, stay outdoors and seek medical advice. In the event of contact with eyes, flush with plenty of water. After contact with skin, wash immediately with water and soap.



Warning

Fuel is highly inflammable. Clothing with spilled fuel on it should be removed as possible.

Carrying the maximum load allowed

Your motorcycle is designed for long-distance riding, carrying the maximum load allowed in full safety. Even weight distribution is critical to preserving these safety features and avoiding trouble when performing sudden manoeuvres or riding on bumpy roads.

Warning

Maximum speed allowed with side panniers and top case installed is 180 km/h and must in any case comply with statutory provisions.

Warning

Do not exceed the total permitted weight for the motorcycle and pay attention to information provided below regarding load capacity.

Information about carrying capacity

Important

Arrange your luggage or heavy accessories in the lowest possible position and close to motorcycle centre.

Important

Never fix bulky or heavy objects to the handlebar or to the front mudguard as this would affect stability and cause danger.

Important

Be sure to secure the luggage to the supports provided on the motorcycle as firmly as possible. Improperly secured luggage may affect stability.

Important

Do not insert any objects you may need to carry into the gaps of the frame as these may foul moving parts.

Warning

Make sure the tyres are inflated to the proper pressure and that they are in good condition.

Please, refer to paragraph "Tyres" in page 278.



Important

If the side panniers are fitted (available upon request from the Ducati spare parts service), divide the baggage and accessories based on their weight and place them uniformly inside the side panniers. Lock both side panniers using the suitable key lock.

Dangerous products - warnings

Used engine oil



Warning

Prolonged or repeated contact with used engine oil may cause skin cancer. If working with engine oil on a daily basis, we recommend washing your hands thoroughly with soap immediately afterwards. Keep away from children.

Brake lining debris

Never attempt to clean the brake assembly using compressed air or a dry brush.

Brake fluid



Warning

Spilling brake fluid onto plastic, rubber or painted parts of the motorcycle may cause damages. Protect these parts with a clean shop cloth before proceeding to service the system. Keep away from children.



Warning

The brake fluid used in the brake system is corrosive. In the event of accidental contact with eyes or skin, wash the affected area with abundant running water.

Coolant

Engine coolant contains ethylene glycol, which may ignite under particular conditions, producing invisible flames. Although the flames from burning ethylene glycol are not visible, they are still capable of causing severe burns.



Warning

Take care not to spill engine coolant on the exhaust system or engine parts.

These parts may be hot and ignite the coolant, which will subsequently burn with invisible flames. Coolant (ethylene glycol) is an irritant and is poisonous when ingested. Keep away from children. Never remove the radiator cap when the engine is hot. The coolant will be scalding hot and is under high pressure. The cooling fan operates automatically: keep hands well clear and make sure your clothing does not snag on the fan.

Battery



Warning

The battery gives off explosive gases; never cause sparks or allow naked flames and cigarettes near the battery. When charging the battery, ensure that the working area is properly ventilated.

Vehicle identification number



Note

These numbers identify the motorcycle model and should always be indicated when ordering spare parts.

It is recommended to record the frame number of your motorcycle in the space below.

Frame number

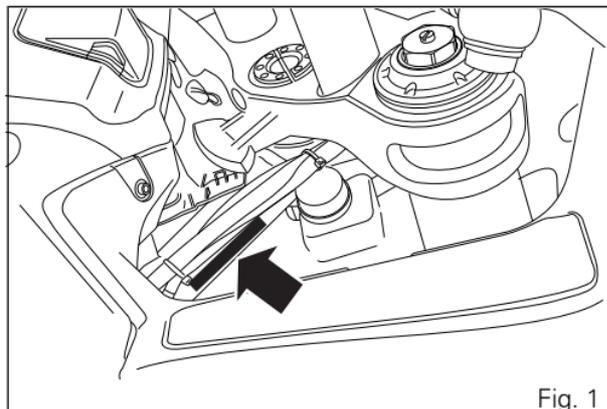


Fig. 1

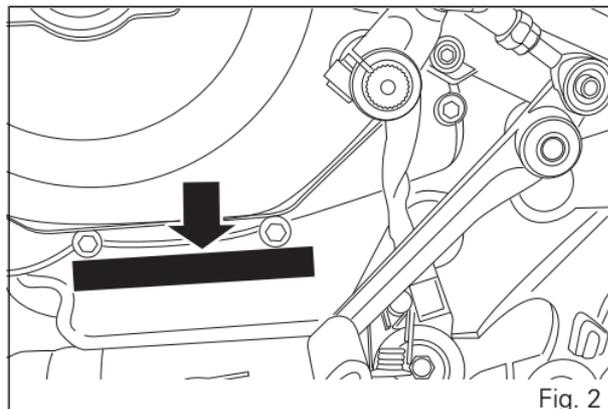
Engine identification number



Note These numbers identify the motorcycle model and should always be indicated when ordering spare parts.

It is recommended to record the number of your motorcycle's engine in the space below.

Engine number



Instrument panel (Dashboard)

Instrument panel

1) LCD Dot-Matrix.

2) REV COUNTER (rpm).

It indicates engine rpm value.

3) NEUTRAL LIGHT N (GREEN).

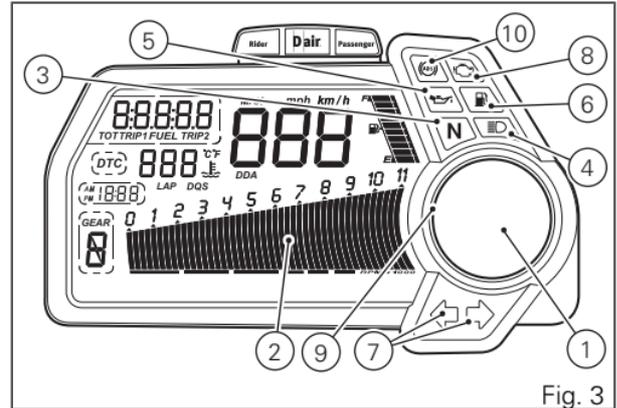
Comes on when in neutral position.

4) HIGH BEAM LIGHT  (BLUE).

Comes on when high beams are on.

5) ENGINE OIL PRESSURE LIGHT  (RED).

Comes on when engine oil pressure is too low. It must turn on at "Key-On", but must turn OFF a few seconds after the engine has started. It may shortly come on when the engine is hot, however, it should go out as the engine revs up.



Important

If the ENGINE OIL light stays ON, stop the engine or it may suffer severe damage.

6) FUEL WARNING LIGHT  (AMBER YELLOW).

Comes on when fuel is low and there are about 4 litres of fuel left in the tank.

7) TURN INDICATOR LIGHTS  (GREEN).

The light of the turn indicator in operation illuminates and flashes.

8) "ENGINE/VEHICLE DIAGNOSIS - EOBD" LIGHT

 (AMBER YELLOW).

It turns on in the case of "engine" and/or "vehicle" errors and in some cases will lock the engine.

9) "OVER REV" LIMITER / "DTC" TRACTION CONTROL LIGHT (RED).

	Over rev light
No rev limitation	Off
1st threshold - no. RPM before the limiter threshold (*)	On - STEADY
Limiter (Overrev) kicks in (*)	On - Flashing

(*) each calibration of the engine control unit, depending on model, may have a different setting for the thresholds before the rev limiter kicks in and the rev limiter threshold.

	DTC intervention light
No intervention	Off
DTC intervention	On - Steady



Note

Should both lights for Over rev Function activation and DTC intervention come on, instrument panel will give priority to Over rev Function.

10) ABS LIGHT  (AMBER YELLOW) (Fig. 3).

Engine OFF / speed below 5 Km/h		
Light OFF	Light flashing	Light steady on
-	ABS disabled with the menu function (**)	ABS enabled, but not functioning yet
Engine on / speed below 5 Km/h		
Light OFF	Light flashing	Light steady on
-	ABS disabled with the menu function	ABS enabled, but not functioning yet
Engine on / speed above 5 km/h		
Light OFF	Light flashing	Light steady on
ABS enabled and functioning	ABS disabled with the menu function	ABS disabled and not functioning due to a problem

(**) the ABS can be considered as really disabled only when light continues flashing even after engine starting.

11) AIRBAG WARNING LIGHT: RIDER **Rider** (GREEN) (Fig. 4).

Turns on when the Rider AIRBAG jacket is connected and ready to work.

12) AIRBAG WARNING LIGHT: AIRBAG diagnosis

Dair (YELLOW) (Fig. 4).

Turns on when the AIRBAG jacket device has a problem, whereas it is off if the AIRBAG works correctly.

13) AIRBAG WARNING LIGHT: PASSENGER

Passenger (GREEN) (Fig. 4).

Turns on when the Passenger AIRBAG jacket is connected and ready to work.

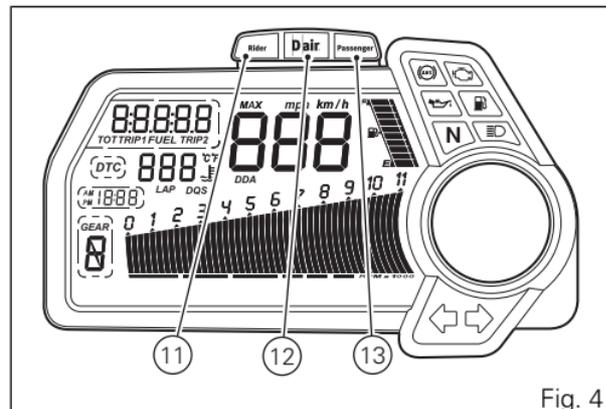


Fig. 4

OPERATION STATUS	WARNING LIGHTS		
			
	RIDER (green)	WARNING (amber yellow)	PASSENGER (green)
<p>AIRBAG – OK and upon KEY ON</p> <p>After warning light check, for the first 30 seconds or until one of the two jackets is connected, the bike system informs the user to turn them on through a quick blinking of jacket warning lights.</p>	QUICK BLINK	OFF	QUICK BLINK

OPERATION STATUS	WARNING LIGHTS		
<p>AIRBAG – OK and upon KEY ON AFTER AN INPUT TO OPEN THE AIRBAG</p> <p>For the first 30 seconds after the Key-On subsequent to an input to open (fire) the airbag, both with connected or not connected jackets, system must be re-initialized (by downloading the fire data inside a suitable inner memory). This condition is communicated to the user through a slow and alternate blinking of jacket warning lights.</p> <p>Under this condition, the Dashboard will display an AirBag error during the whole re-initialization procedure</p>	SLOW ALTERNATE BLINK	OFF	SLOW ALTERNATE BLINK
<p>AIRBAG – OK JACKETS - NOT CONNECTED</p> <p>Under standard operating conditions and with jackets not connected, all system warning lights will be OFF.</p>	OFF if the RIDER jacket is not connected	OFF	OFF if the PASSENGER jacket is not connected

OPERATION STATUS	WARNING LIGHTS		
<p>AIRBAG – OK JACKETS - CONNECTED and OK</p> <p>Under standard operating conditions and with jacket (jackets) connected, the system will inform the user about which jacket is connected to the system and if its operation is OK. This condition will be signalled through the relevant warning light steady on.</p>	<p>ON</p> <p>if the RIDER jacket is connected and is OK</p>	<p>OFF</p>	<p>ON</p> <p>if the PASSENGER jacket is connected</p>
<p>AIRBAG – OK JACKETS - CONNECTED and IN ERROR</p> <p>Under standard operating conditions and with jacket (jackets) connected, the system will inform the user if and which jacket is in error. This condition will be signalled through the relevant warning light slow blinking.</p>	<p>SLOW BLINK</p> <p>if the RIDER jacket is connected and in error</p>	<p>ON</p>	<p>SLOW BLINK</p> <p>if the PASSENGER jacket is connected and in error</p>

OPERATION STATUS	WARNING LIGHTS		
<p>AIRBAG - DEGRADED OPERATION JACKETS - CONNECTED / NOT CONNECTED</p> <p>System is in degraded operating conditions when the airbag does not ensure any protection against skidding. This condition, whether jackets are connected or not, is signalled to the user through the quick blinking of the warning light.</p> <p>Jacket warning lights are ON or OFF if the corresponding jacket is connected.</p>	<p>ON</p> <p>if the RIDER jacket is connected and is OK</p> <p>OFF</p> <p>if the RIDER jacket is not connected</p>	<p>QUICK BLINK</p>	<p>ON</p> <p>if the PASSENGER jacket is connected and is OK</p> <p>OFF</p> <p>if the PASSENGER jacket is not connected</p>
<p>AIRBAG – OK and AFTER AN INPUT TO OPEN THE AIRBAG JACKETS - CONNECTED / NOT CONNECTED</p> <p>After an input to open the airbag, system signals this condition; it enters a permanent lock status if at least one jacket is connected (the dealer intervention is necessary to clear this lock) or a temporary lock status if no jacket is connected. After this condition occurs, the connection with jackets will be interrupted and such condition will be signalled through the warning light coming steady on.</p>	<p>OFF</p>	<p>ON</p>	<p>OFF</p>

OPERATION STATUS	WARNING LIGHTS		
<p>AIRBAG - IN ERROR JACKETS - CONNECTED / NOT CONNECTED</p> <p>System is in error mode whenever an error is detected on bike system, whether jackets are connected or not. Under this condition, the connection with jackets is interrupted and such condition is signalled through the warning light coming steady on.</p>	OFF	ON	OFF
<p>AIRBAG - LOW BATTERY VOLTAGE JACKETS - CONNECTED / NOT CONNECTED</p> <p>System is under low battery voltage conditions (low-power mode) whenever battery voltage reading is below the minimum level necessary for system correct operation (7.5 Volt), whether jackets are connected or not. When system is in low-power mode, airbag protection is not available.</p> <p>This condition, whether jackets are connected or not, is signalled to the user through the warning light coming steady on. Jacket warning lights are ON or OFF if the corresponding jacket is connected.</p>	<p>ON if the RIDER jacket is connected and is OK OFF if the RIDER jacket is not connected</p>	ON	<p>ON if the PASSENGER jacket is connected and is OK OFF if the PASSENGER jacket is not connected</p>

Function buttons

1) CONTROL BUTTON

Button used to display and set instrument panel parameters with the position "▲".

2) CONTROL BUTTON

Button used to display and set instrument panel parameters with the position "▼".

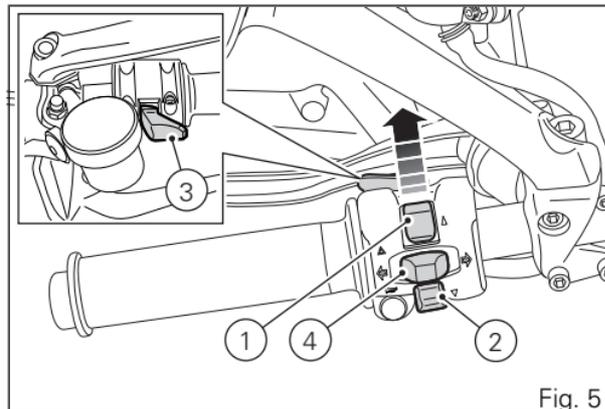
3) HIGH-BEAM FLASH BUTTON (FLASH)

The high-beam flash button may also be used for LAP functions.

4) TURN INDICATORS CANCEL BUTTON

The turn indicators on/off button may also be used for navigating through the MENU and for activating the "Riding Mode".

Press this button for 3 seconds to the left to activate the Hazard lights.



Acronyms and abbreviations used in the Manual

ABS

Antilock Braking System

BBS

Black Box System

CAN

Controller Area Network

DDA

DUCATI Data Acquisition

DSS

DUCATI Skyhook Suspension

DSB

Dashboard

DTC

DUCATI Traction Control

HF

Hands Free

ECU

Engine Control Unit

Technological Dictionary

Riding Mode

The rider can choose from four different preset bike configurations (Riding Modes) and pick the one that

best suits his/her riding style or ground conditions. The Riding Modes allow the user to instantly change the engine power delivery (ENGINE), the ABS settings, the DTC settings as well as, on "Sport" versions, the suspension settings (DSS).

Available Riding Modes: Sport, Touring, Urban and Enduro.

Within every Riding Mode, the rider can customise any settings.

DSS (Ducati SkyHook System)

Multistrada 1200 is equipped with the brand new suspension control system called DSS (Ducati Skyhook System): DDS is a dynamic suspension damping control system. By selecting a certain Riding Mode, the rider can establish the default suspension behaviour, suspension response and hence the motorcycle response.

DSS default setting can be changed using the corresponding menu through the instrument panel. This menu allows the rider to increase or decrease the base damping settings characterising the operation of fork and rear shock absorber for each Riding Mode.

Ducati Traction Control (DTC)

The Ducati Traction Control system (DTC) supervises the rear wheel slipping control and settings vary through eight different levels that are programmed to offer a different tolerance level to rear wheel slipping. Each Riding Mode features a pre-set intervention level. Level eight indicates system intervention whenever a slight slipping is detected, while level one is for very expert riders because it is less sensitive to slipping and intervention is hence softer.

Anti-lock Braking System (ABS)

The ABS system fitted on Multistrada 1200 is a system that actuates combined braking with anti lift-up function for the rear wheel so as to guarantee not only a reduced stopping distance, but also a higher stability under braking. The ABS features 3 levels, one associated to each Riding Mode.

Hands Free (HF)

The Hands free system allows the rider to start the motorbike without actually using the ignition key. The key must simply be within a certain range from the motorbike, for instance in the rider's pocket. The electric steering lock used by the Hands free system locks the handlebar on the right or on the left, making for a more versatile parking solution.

The Hands free system is connected to the other control units on the bike and to the instrument panel via the CAN line.

The system can enable ignition (key present and recognised) or disable it (key not present or not recognised - immobilizer function) thanks to this line. The instrument panel displays any notice, such as the warnings concerning low key battery or key not present.

LCD unit functions

Warning

Operate on instrument panel only when the motorcycle is stopped. Do not operate on instrument panel while you are riding the motorcycle under no circumstances.

1) SPEEDOMETER.

It indicates riding speed.

2) ODOMETER.

Gives total distance covered.

3) TRIP METER.

Indicates distance travelled since the meters (TRIP 1 and TRIP 2) were last reset.

4) CLOCK.

5) FUEL LEVEL.

6) ENGINE RPM INDICATOR (RPM).

7) LAP TIME, MAXIMUM SPEED AND MAXIMUM RPM RECORDING (LAP).

8) DTC ACTIVE/NOT ACTIVE INDICATOR.

9) GEAR INDICATOR.

10) WATER TEMPERATURE INDICATOR.

It indicates engine coolant temperature.

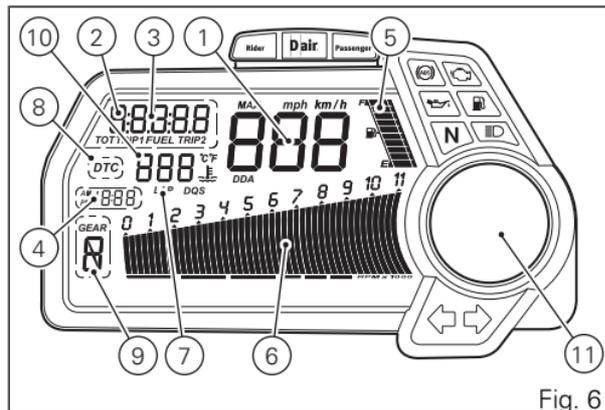


Fig. 6

Important

Do not ride the motorcycle if temperature reaches the max. value as engine could suffer severe damage.

11) LCD Dot-Matrix.

LCD - How to set/display parameters

At the end of the check, the instrument panel always displays the Odometer (TOT) as the "main" indication on the main display and the "riding mode" on the round display.



Note

The check can be interrupted by pressing button (1).

At the end of the initial check, the instrument panel will always show the "main" display. The main LCD (A) indicates the following information:

- Vehicle speed indication;
- Engine rpm indication (RPM);
- Gear indication;
- Clock indication;
- Fuel level indication;
- Coolant temperature indication;
- TOT - Odometer.

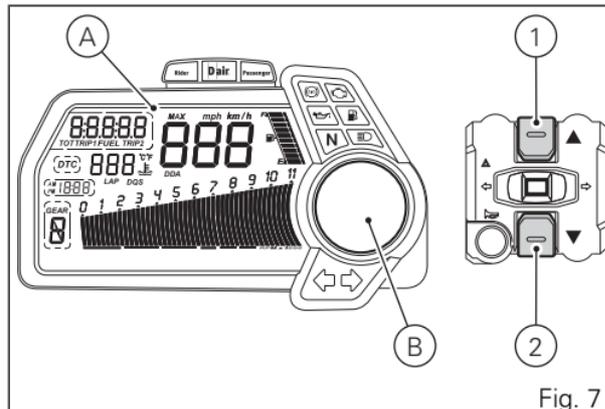


Fig. 7

The Dot-Matrix LCD (B, Fig. 7) indicates the following information:

- WARNING (only if active);
- ERRORS (only if active);
- DESMO SERVICE (only if active);
- SET UP - "Riding Mode" set indication.

At this point, by pressing button (1, Fig. 7) it is possible to switch to the following functions, displayed on the main LCD (A, Fig. 7):

- TRIP1: Trip meter 1;
- TRIP2: Trip meter 2.

At this point, by pressing button (2, Fig. 7) it is possible to switch to the following functions, displayed on the Dot-matrix LCD (B, Fig. 7):

- RANGE - Remaining range;
- CONS. - Instant fuel consumption;
- CONS. AVG - Average Fuel Consumption;
- SPEED AVG - Average speed;
- AIR - Air temperature;
- TRIP TIME - Trip time;
- AIRBAG - Jacket battery status.

Vehicle speed indicator

This function displays vehicle speed (Km/h or mph depending on the set measurement system) on main LCD.

The instrument panel receives information about the actual motorcycle speed (calculated in km/h) and displays the value increased by 5%.

The max. displayed speed is 299 km/h (186 mph).

When speed exceeds 299 km/h (186 mph) a string of dashes "--" (not flashing) will be displayed.

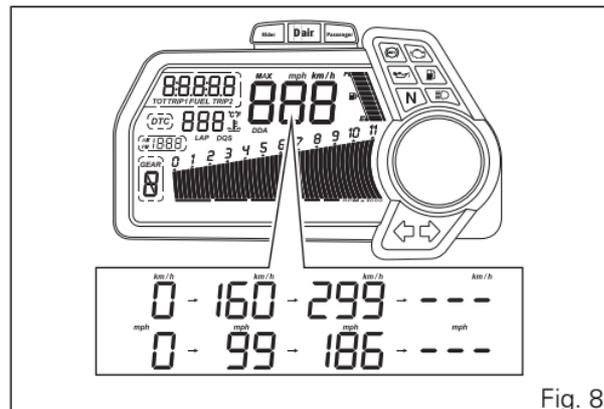


Fig. 8

Engine rpm indicator (RPM)

This function displays the rpms on the main LCD. Instrument panel receives rpm value and displays it. Value is progressively displayed from left to right identifying rpm value.

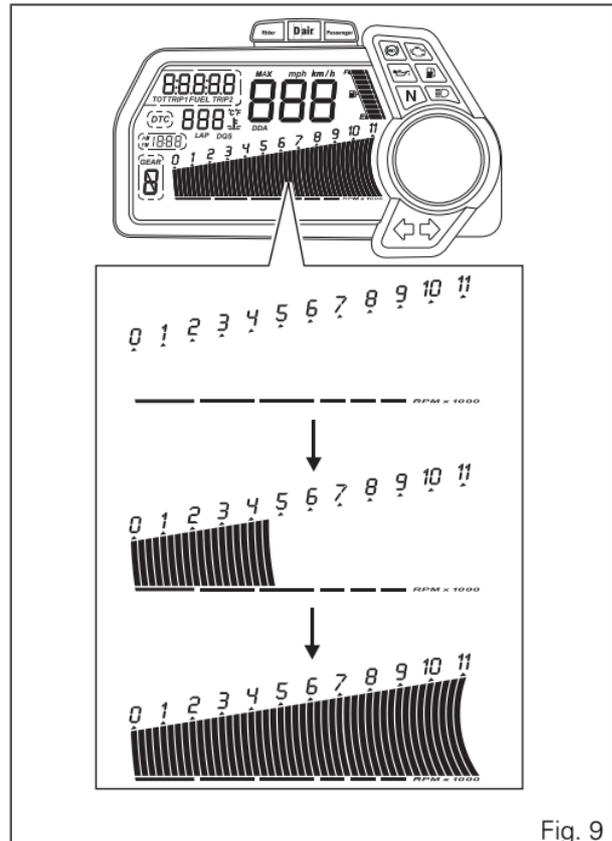


Fig. 9

Engaged gear indicator

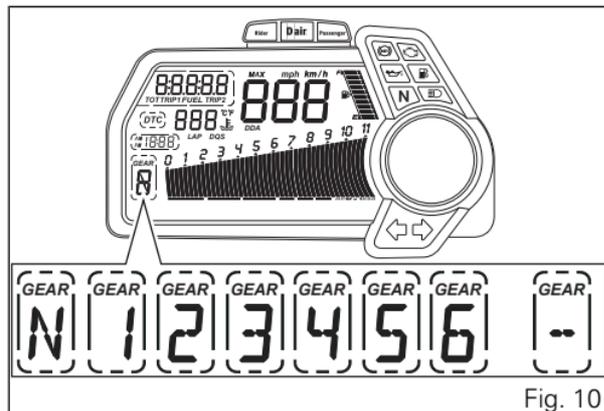
This function displays the gears.

Instrument panel receives the information and indicates the engaged gear or "N" for neutral.



Note

In case of gear sensor "error", a dash "-" (not flashing) will be displayed.



Clock

This function allows displaying time indication.
Time is always displayed according to the following sequence:

AM 0:00 to 11:59;

PM 12:00 to 11:59.

In case of battery off (Batt-OFF), when the voltage is restored and upon next Key-On, clock will be reset and will automatically start counting from "0:00".

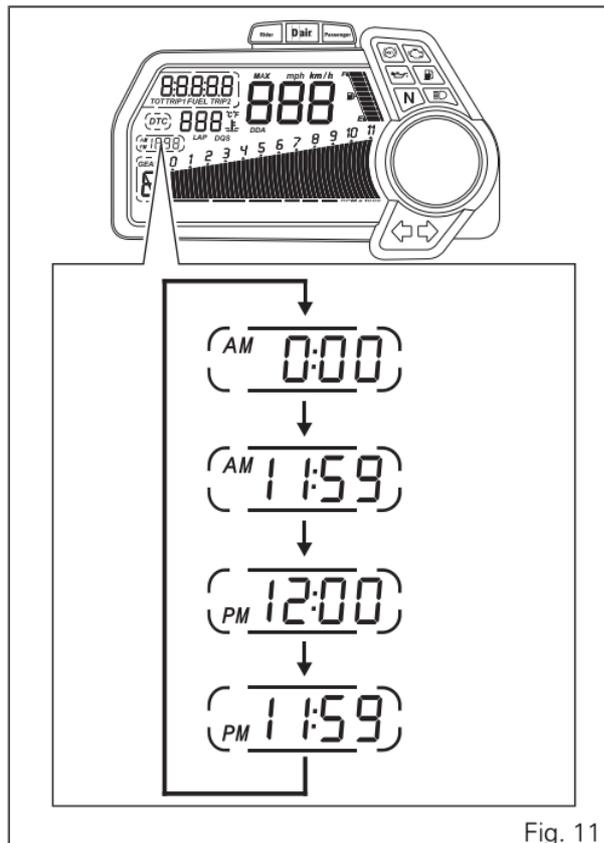


Fig. 11

Fuel level indicator

This function displays the fuel level. The low fuel light turns on when the level goes down to 2 marks and there are approximately 4 litres in the tank; if the level goes further down the last mark will be displayed flashing.

Important

If the vehicle enters the reserve status and the light has turned on, it is recommended to turn the vehicle off when refuelling (Key-Off); if fuel is added without turning it off (Key-On and engine off) the data may not be immediately updated.

Note

In the case of a level sensor "error", the bargraph without marks is displayed and the rest of the digit will flash.

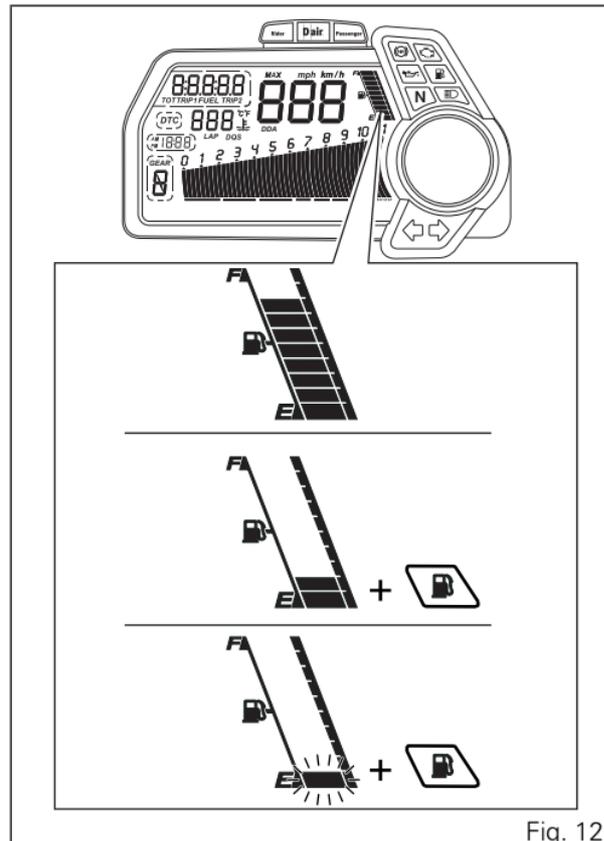


Fig. 12

Coolant temperature

This function describes the operation of engine coolant indicator. Temperature unit of measurement can be selected (°C or °F).

For Europe, Canada, France and Japan versions, the default unit is °C, while for UK and USA versions the default unit is °F.

Value is indicated as follows:

- if the reading is between -39 °C and +39 °C, "LO" is shown flashing on the instrument panel (steady);
- if the reading is between +40 °C and +120 °C, it is shown on the instrument panel (steady);
- if reading is +121 °C or higher, "HI" is shown flashing on the instrument panel.

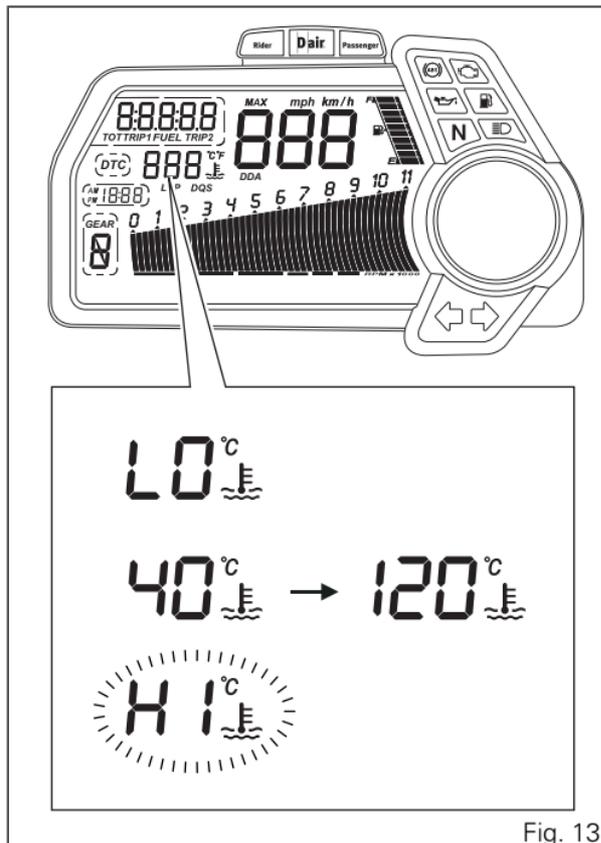


Fig. 13



Note

If the sensor is in fault, the three flashing dashes ("---") will be displayed and, at the same time, the "Engine/Vehicle Diagnosis - EOBD" light will come on.

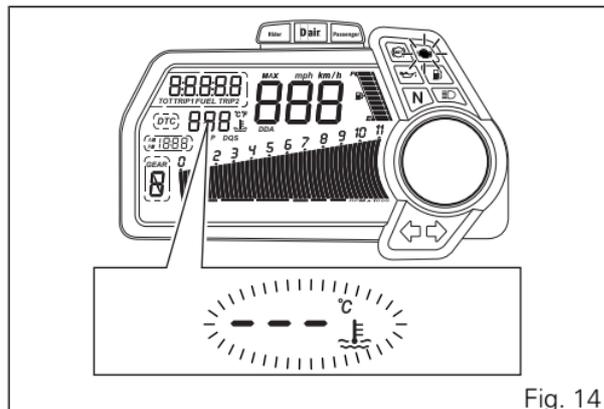


Fig. 14

Total distance covered indicator:

"Odometer"

This function shows the total distance covered by the vehicle.

Upon Key-On, system will automatically access this function.

The value is saved permanently and cannot be reset. If the distance travelled exceeds 99999 km (or 99999 miles), the value "99999" will be displayed permanently.

For the Europe, Canada, France and Japan versions, the default unit is km, while for the UK and USA versions the default unit is mi.



Note

If a string of flashing dashes "----" is displayed within odometer function, please contact a Ducati Dealer or Authorised Service Centre.

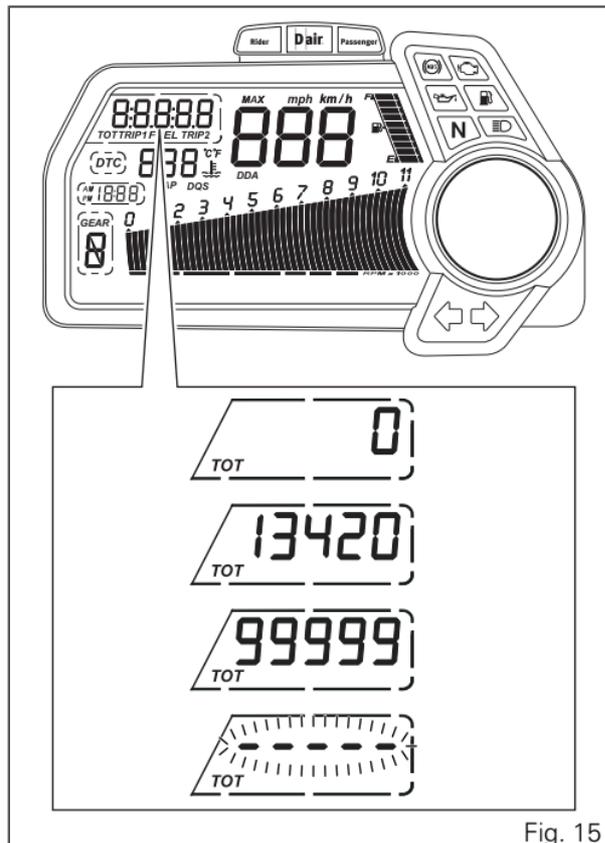


Fig. 15

"Trip 1" meter

This function shows the distance travelled since the trip meter was last reset.

When this function is accessed and button (1) is kept pressed for 3 seconds, trip meter will be reset. When the reading exceeds 999.9, distance travelled is reset and the meter automatically starts again. If the system measurement units are changed at any moment, or if there is an interruption in the power supply (Battery Off), the distance travelled is reset and the count starts from zero (considering the newly set unit of measurement).



Note

When this reading is reset, also "Average Consumption", "Average Speed" and "Trip Time" functions are reset.

For the Europe, Canada, France and Japan versions, the default unit is km, while for the UK and USA versions the default unit is mi.

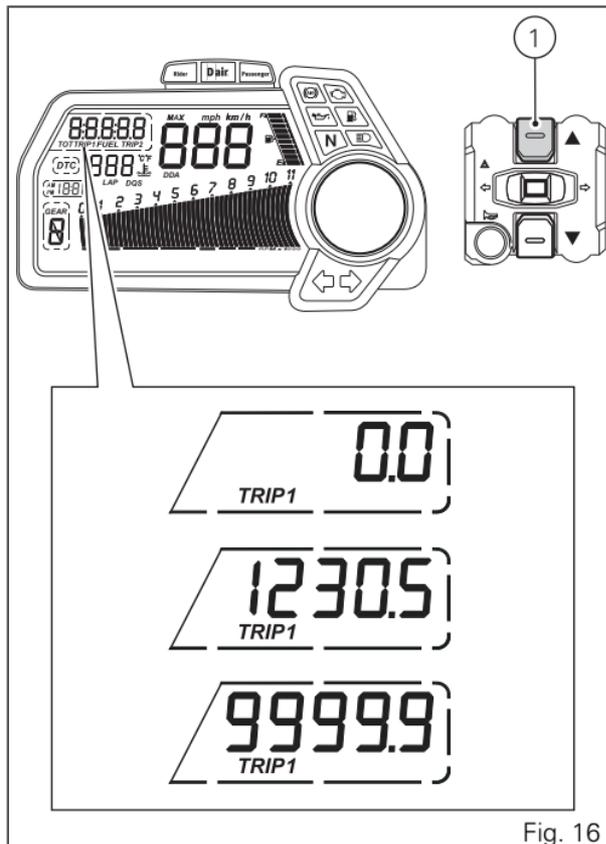


Fig. 16

"Trip 2" meter

This function shows the distance travelled since the trip meter was last reset.

When this function is accessed and button (1) is kept pressed for 3 seconds, trip meter will be reset. When the reading exceeds 999.9, distance travelled is reset and the meter automatically starts again. If the system measurement units are changed at any moment, or if there is an interruption in the power supply (Battery Off), the distance travelled is reset and the count starts from zero (considering the newly set unit of measurement).

For the Europe, Canada, France and Japan versions, the default unit is km, while for the UK and USA versions the default unit is mi.

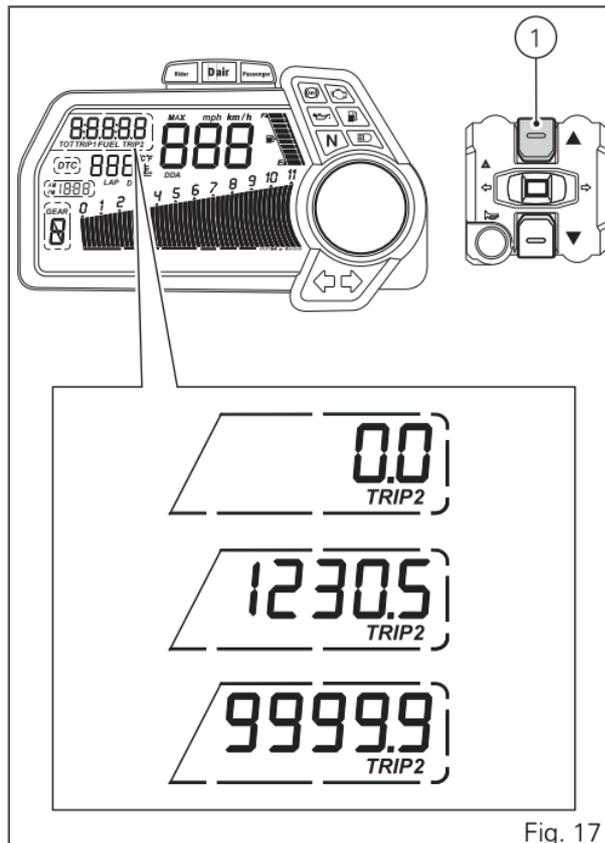


Fig. 17

Indication if the DTC function is active/not active

This function indicates if DTC (Ducati Traction Control) is active.

When "DTC" is not lit up inside the rim, this means that the function is disabled.

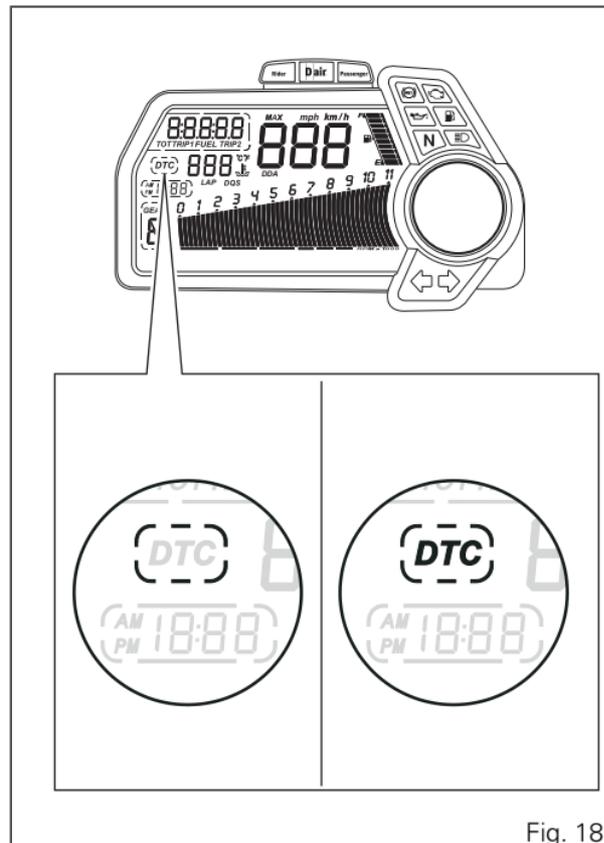


Fig. 18

Indication if the LAP function is active/not active

This function indicates if LAP (Lap number) is active. When "LAP" is off, function is disabled.

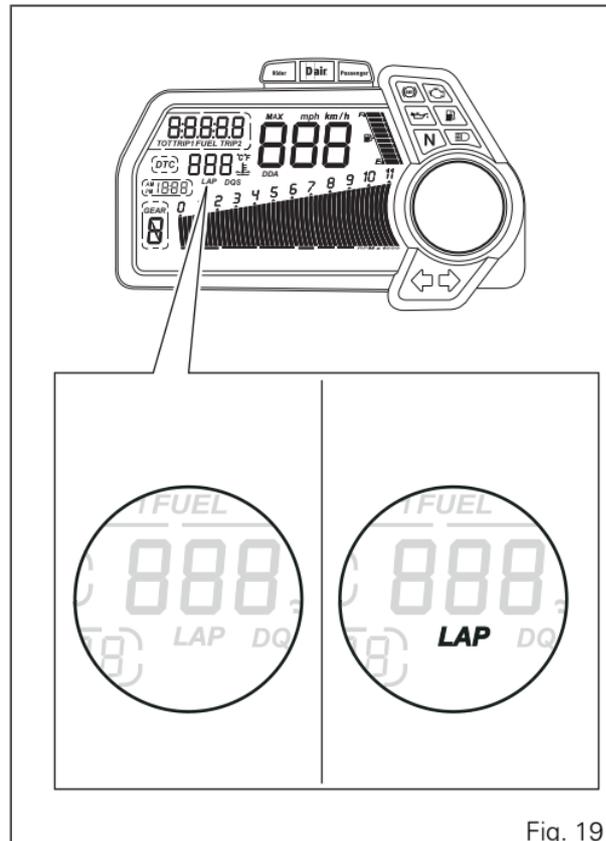


Fig. 19

Warning indication (Alarms/Signals)

The instrument panel shows some warnings/malfunxions in real time on the round "Dot-Matrix" display (B) that are not dangerous for correct vehicle operation.

Upon Key-On (once check routine is completed) one or more "warnings" are displayed, if active.

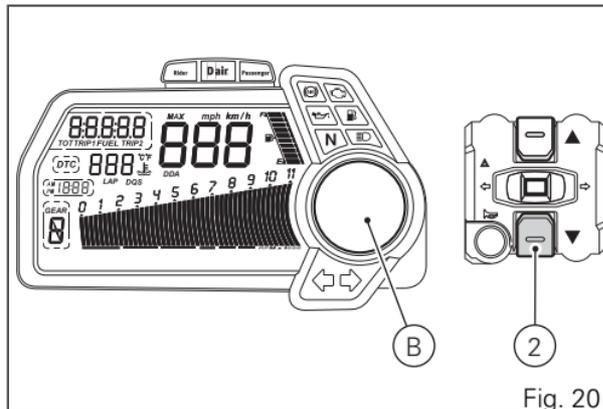
If a "warning" is activated during operation, the relevant indication is automatically shown on the round "Dot-Matrix" display (B).

If several warnings are present, they are displayed in "rolling" mode every 3 seconds.



Note

When one or more "warnings" are activated, no warning light will come on.



The following "warnings" could be displayed:

- Battery level;
- Traction control;
- Hands free key;
- Hands free key battery level;
- Coolant temperature;
- Steering unlock error;
- Rider Jacket Low Battery Level;
- Passenger Jacket Low Battery Level;
- Rider Jacket Maintenance;
- Passenger Airbag Jacket Maintenance;
- DTC off road setting (DTC OFF ROAD);
- ABS disabled (ABS OFF);
- Rider Airbag Jacket error;
- Passenger Airbag Jacket error;
- Indication of rear suspension pre-load setting in progress.

When one or more "warnings" are active, it is possible to switch to other functions by pushing button (2, Fig. 20).

"Low" battery level

The activation of this "warning" indicates that the status of the battery vehicle is low.

It is activated when the battery voltage is equal to or below 11.0 Volt.

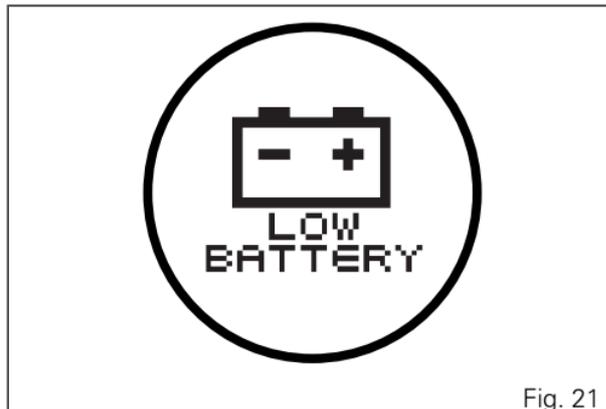


Note

In this case, Ducati recommends charging battery in the shortest delay using the special instrument as engine could not be started.

Two conditions are provided in order to save battery charge:

- 1) when engine is running, if engine is stopped but instrument panel is not turned off, the suspension system power is cut after 30 seconds;
- 2) when engine is stopped, if instrument panel is turned on but engine is not started, the suspension system power is cut after 30 seconds.



Note

When the suspension system is not powered it is quite hard due to the considerable hydraulic damping it offers and this is true even when the motorcycle is off. This means that the rider will feel very well when suspension power is cut off.

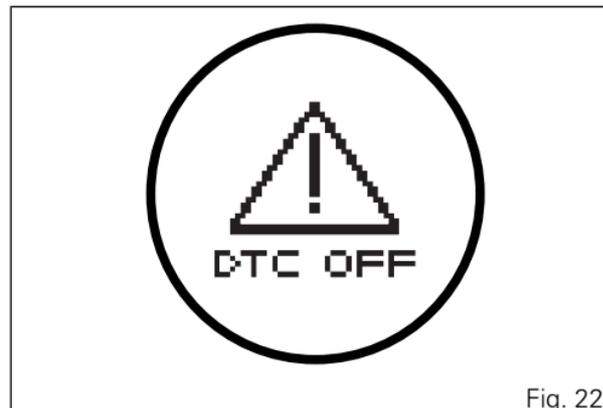
Traction Control (DTC) deactivated

The activation of this “warning” indicates that DTC (Ducati Traction Control) has been turned off.



Note

In this case, Ducati recommends paying special attention while riding as vehicle behaves differently from when the Traction Control is active.



Hands Free key (HF) not recognised

The activation of this “warning” indicates that the Hands Free system does not detect the active key (1, Fig. 75) near the vehicle.



Note

In this case, Ducati recommends making sure that the active key is nearby (and that it was not lost) or that it works properly.



Fig. 23

"Low" Hands Free key (HF) battery level

The activation of this "warning" indicates that the Hands Free system has detected that the battery that permits the active key (1, Fig. 75) to communicate and turn the vehicle on is almost discharged.



Note

In this case, Ducati recommends changing battery in the shortest delay.

Replace the battery as described in the paragraph "Replacing the active key battery" page 151.



Fig. 24

"High" engine coolant temperature

The activation of this "warning" indicates that the engine coolant temperature is high. It is activated when the temperature reaches 121°C (250°F).



Note

In this case, Ducati recommends stopping riding and turning engine immediately off; making sure that fans are working.

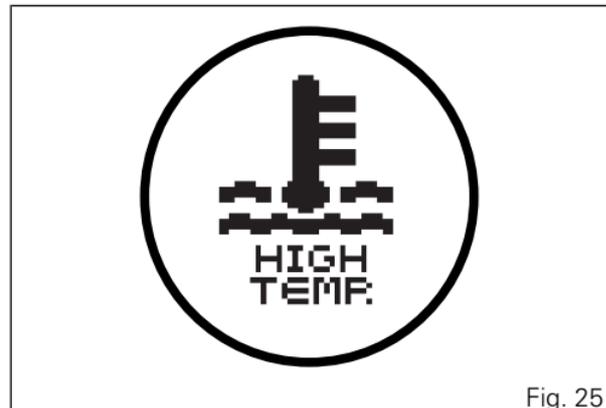


Fig. 25

Steering release error - Steering still locked

The activation of this "warning" indicates that the Hands Free System was not able to extract the steering lock.



Warning

In this case, Ducati recommends switching vehicle off and on again (Key-Off / Key-On), keeping handlebar fully turned. If warning is still present (and steering does not "unlock"), contact a Ducati Dealer or Authorised Service Centre.

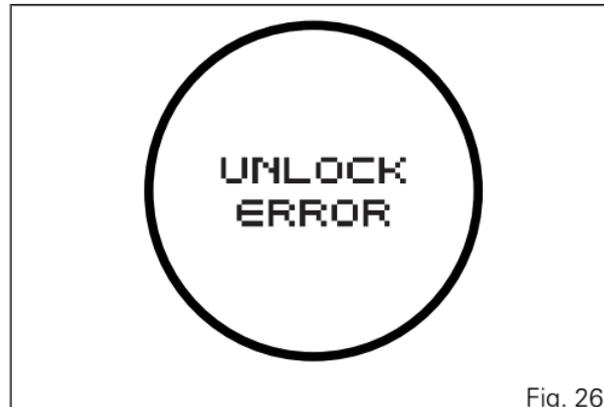


Fig. 26

Rider Airbag jacket low battery level

This function warns when the Rider jacket battery level is "low" and it is recommendable to recharge it.

Once the Warning has been automatically activated, it is possible to use button (2, Fig. 20) to scroll the other functions.



Note

In case both jackets have a low battery level (Low Battery) the "Passenger Low Battery" and "Rider Low Battery" messages will appear automatically and be scrolled every 3 seconds.

For details about the operation and/or specific instructions/recommendations refer to paragraph "The D-Air® system".



Fig. 27

Passenger Airbag jacket low battery level

This function warns when the Passenger jacket battery level is "low" and it is recommendable to recharge it.

Once the Warning has been automatically activated, it is possible to use button (2, Fig. 20) to scroll the other functions.



Note

In case both jackets have a low battery level (Low Battery) the "Passenger Low Battery" and "Rider Low Battery" messages will appear automatically and be scrolled every 3 seconds.

For details about the operation and/or specific instructions/recommendations refer to paragraph "The D-Air[®] system".



Rider Airbag jacket maintenance

This function warns when it is necessary to perform maintenance operations on the Rider jacket of the AIRBAG system.

Once the Warning has been automatically activated, it is possible to use button (2, Fig. 20) to scroll the other functions.



Note

This warning indicates that it is necessary to inspect the Rider jacket (maintenance); contact a Ducati authorised service centre.

For details about the operation and/or specific instructions/recommendations refer to paragraph "The D-Air[®] system".



Fig. 29

Passenger Airbag jacket maintenance

This function warns when it is necessary to perform the maintenance operations on the Passenger jacket of the AIRBAG system.

Once the Warning has been automatically activated, it is possible to use button (2, Fig. 20) to scroll the other functions.



Note

This warning indicates that it is necessary to check the Passenger jacket (maintenance); therefore contact a Ducati authorised service centre.

For details about the operation and/or specific instructions/recommendations refer to paragraph "The D-Air[®] system".



Fig. 30

DTC off-road setting (DTC OFF ROAD)

Activation of this warning indicates that it is necessary to ride carefully on asphalt because this Traction control setting is "extreme" (designed for off-road use).

This warning is displayed whenever DTC (Ducati Traction Control) levels 1 and 2 are used.



Warning

In this case Ducati recommends to ride very carefully and use a DTC (Ducati Traction Control) setting of this kind only OFF road.

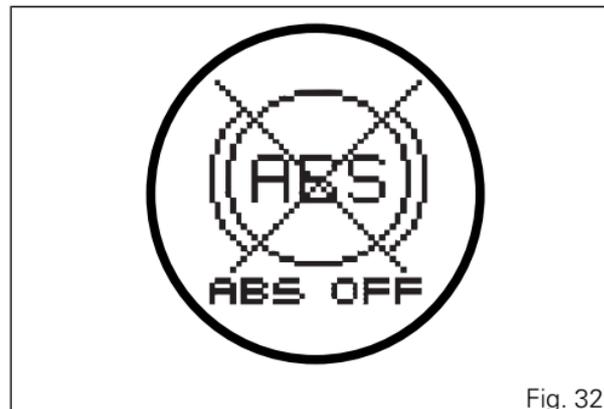


Fig. 31

ABS disabled (ABS OFF)

Activation of this warning indicates that it is necessary to ride carefully because the ABS is disabled.

 **Warning** In this case Ducati recommends you pay utmost attention when riding and especially while braking.

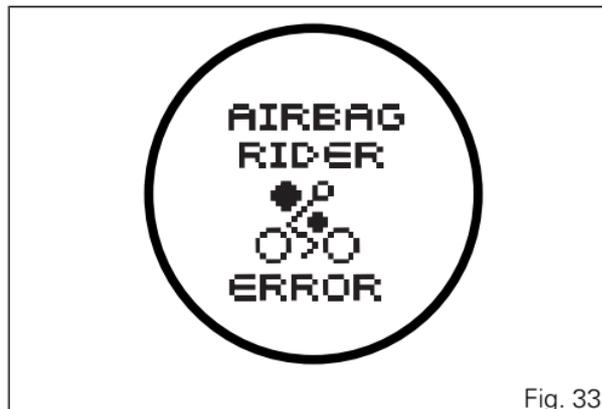


Rider Airbag jacket error

This function warns of a problem on the AIRBAG system Rider jacket.

Once the Error has been automatically displayed, it is possible to use button (2, Fig. 20) to scroll the other functions.

For details about the operation and/or specific instructions/recommendations refer to paragraph "The D-Air[®] system".

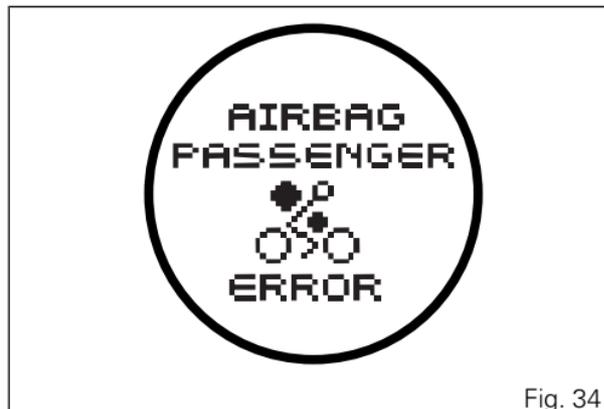


Passenger Airbag jacket error

This function warns of a problem on the AIRBAG system Passenger jacket.

Once the Error has been automatically displayed, it is possible to use button (2, Fig. 20) to scroll the other functions.

For details about the operation and/or specific instructions/recommendations refer to paragraph "The D-Air[®] system".



Indication function - Rear suspension preload setting in progress

This function warns user that system is currently "calibrating" rear shock absorber preload. "Calibration" is performed automatically upon the first "Key-On" after battery is reconnected.



Note

During "calibration" the message on display reads "DSS – PRE LOAD CALIBRATION WAIT..." and in this period Ducati recommends to avoid starting the vehicle and/or changing "Riding Mode".



Fig. 35

Instrument panel diagnosis

This function allows detecting any vehicle abnormal behaviour. Instrument panel activates, in real time, any vehicle abnormal behaviour (ERRORS). At Key-On (at the end of the check) one or more "ERRORS" are displayed (only if they are active). If an "error" is activated during operation, the relevant indication is automatically shown on the round "Dot-Matrix" display (B). If there are multiple errors, they will scroll automatically every 3 seconds. The "Engine/vehicle diagnosis - EOBD" light always turns on when one or more errors are active. When one or more errors are active, it is possible to switch to other functions by pushing the button (2). Hereinafter is the table of the possible displayed errors.

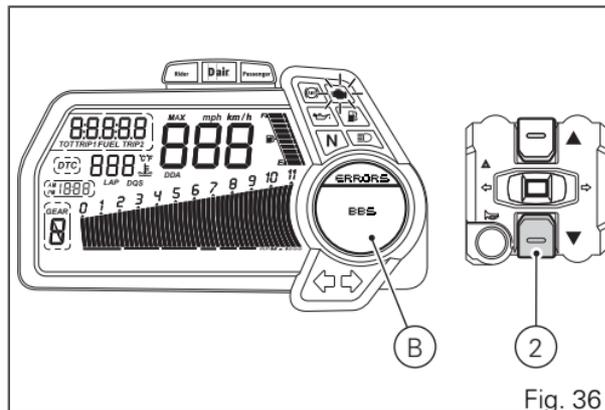


Fig. 36



Warning

When one or more errors are displayed, always contact a Ducati Dealer or authorised Service Centre.

ERROR MESSAGE	ERROR
CAN LINE	CAN line "BUS Off" (communication line of the several control units)
UNKNOWN DEVICE	Control unit not acknowledged by the system - wrong SW
ABS (Antilock Braking System)	ABS control unit faulty communication / operation
BBS (Black Box System)	BBS control unit faulty communication / operation
BBS (Black Box System)	BBS control unit general malfunction
BBS (Black Box System)	Exhaust valve motor EXVL malfunction
DASHBOARD	DSB control unit faulty communication / operation
HANDS FREE	HF control unit faulty communication / operation
HANDS FREE	General malfunction of the HF control unit
HANDS FREE	Malfunction of key and/or antenna (Immobilizer)
ENGINE	ECU control unit faulty communication / operation
ENGINE	General malfunction of the ECU control unit
ENGINE	Throttle position sensor malfunction
ENGINE	Throttle motor and/or relay malfunction
ENGINE	Pressure sensor malfunction

ERROR MESSAGE	ERROR
ENGINE	Engine coolant temperature sensor malfunction
ENGINE	Intake duct air temperature sensor malfunction
ENGINE	Injection relay malfunction
ENGINE	Ignition coil malfunction
ENGINE	Injector malfunction
ENGINE	Engine rpm sensor malfunction
ENGINE	Lambda sensor or Lambda sensor heater malfunction
ENGINE	motorcycle starting relay malfunction
ENGINE	Secondary air sensor malfunction
DSS (Ducati Skyhook Suspension)	Front suspension compression general malfunction
DSS (Ducati Skyhook Suspension)	Front suspension rebound general malfunction
DSS (Ducati Skyhook Suspension)	Rear suspension compression general malfunction
DSS (Ducati Skyhook Suspension)	Rear suspension rebound general malfunction
DSS (Ducati Skyhook Suspension)	Rear suspension spring preload general malfunction
DSS (Ducati Skyhook Suspension)	Front and/or rear accelerometer general malfunction
GEAR SENSOR	Gear sensor malfunction
FUEL SENSOR	Reserve NTC sensor malfunction
SPEED SENSOR	Front and/or rear speed sensor malfunction

ERROR MESSAGE	ERROR
BATTERY	Battery voltage too high or too low
STOP LIGHT	Stop light not working
FAN	Electric cooling fan malfunction
AIRBAG	AIRBAG (D-Air®) control unit general malfunction
AIRBAG	AIRBAG (D-Air®) Rider jacket general malfunction
AIRBAG	AIRBAG (D-Air®) Passenger jacket general malfunction
AIRBAG	AIRBAG (D-Air®) accelerometer general malfunction

Maintenance indicator

This function indicates that the vehicle is about to or has travelled a distance for which an Authorised Ducati Service Centre should be contacted to have the general maintenance or oil change performed.

Residual range indication when the SERVICE is due

When 1000 Km (621 miles) are left until reaching the mileage programmed by Ducati for having the "SERVICE" performed, the instrument panel activates (at the end of the initial check) the indication of which type of service should be performed and the residual range (count-down).

The indication is activated each time the motorcycle is turned on (Key-On) for 5 seconds (flashing).

The residual range is updated every 100 Km (-1000, -900, -800, -700, etc.).



Warning

Indication can be reset only by the Ducati Dealer or Authorised Service Centre carrying out the maintenance operations.

Indication of range reached for SERVICE

If you reach the mileage programmed by Ducati, the instrument panel will activate (at the end of the initial check) the indication that you should go to a Ducati Dealer or Authorised Service Centre to have the scheduled maintenance “DESMO SERVICE” or “OIL SERVICE” performed.

The indication is activated each time the motorcycle is turned on (Key-On) (not flashing); pressing the button (2) the other functions can be displayed. The indication will remain until it is reset and it can be displayed at any moment by scrolling the functions.

Warning

Indication can be reset only by the Ducati Dealer or Authorised Service Centre carrying out the maintenance operations.

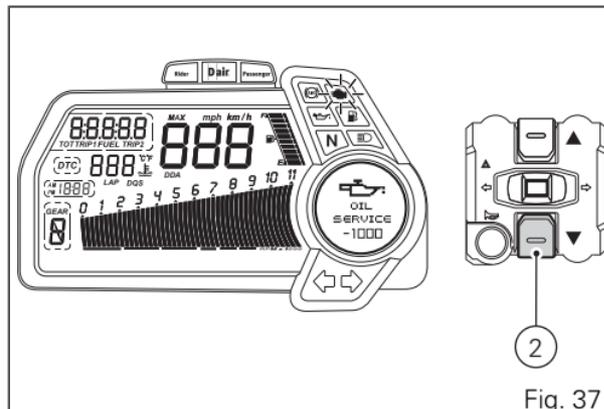


Fig. 37

Note

The distance travelled thresholds are defined in an “absolute” sense and do not account for when the indication “reset” request is made by the Authorised Ducati Service Centre.

Maintenance table

Indicator	Mileage travelled	count down -1000 Desmo service	count down -1000 Oil service	Desmo service	Oil service
1	1000				•
2	11000		•		
	12000				•
3	23000	•			
	24000			•	
4	35000		•		
	36000				•
5	47000	•			
	48000			•	
6	59000		•		
	60000				•
7	71000	•			
	72000			•	
8	83000		•		
	84000				•

Indicator	Mileage travelled	count down -1000 Desmo service	count down -1000 Oil service	Desmo service	Oil service
9	95000	●			
	96000			●	

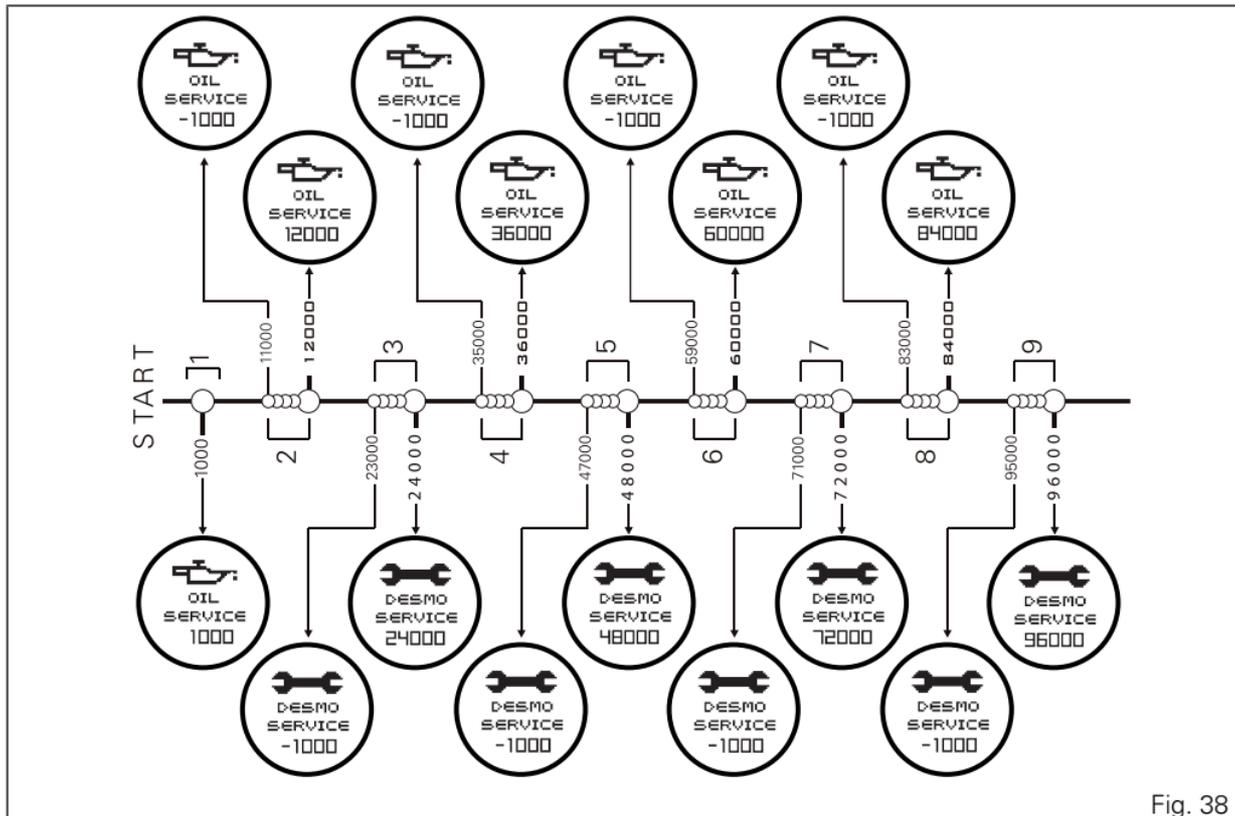


Fig. 38

SET UP - "Riding Mode set" indication

This function indicates the "Riding Mode" set for the vehicle. Four "Riding Modes" are available: SPORT, TOURING, URBAN and ENDURO. Each riding mode can be changed using the "Riding Mode" function.

The default "Riding Mode" is Touring with motorcycle setup for rider only.

The following are indicated:

- the set Riding Mode;
- the maximum engine power associated to it: for the Europe, UK and USA versions 150 HIGH, 150 LOW and 100 HP, while for the France and Japan versions HIGH, MIDDLE and LOW;
- the Traction Control level (DTC) associated to it;
- the ABS level associated to it;
- the motorcycle setup.

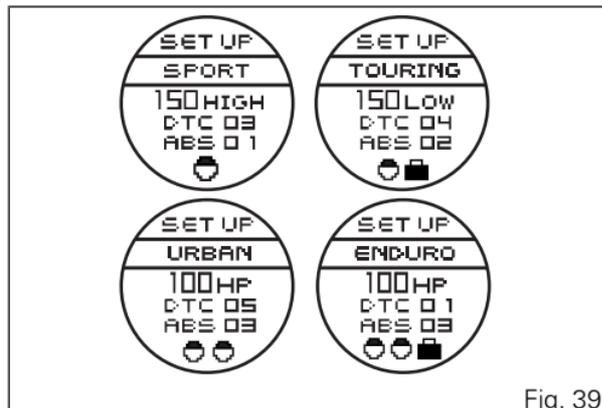


Fig. 39

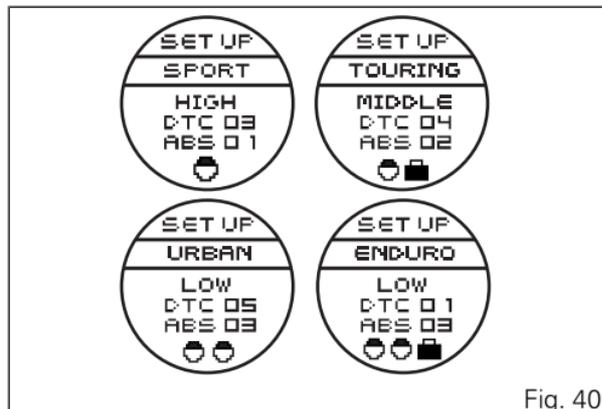
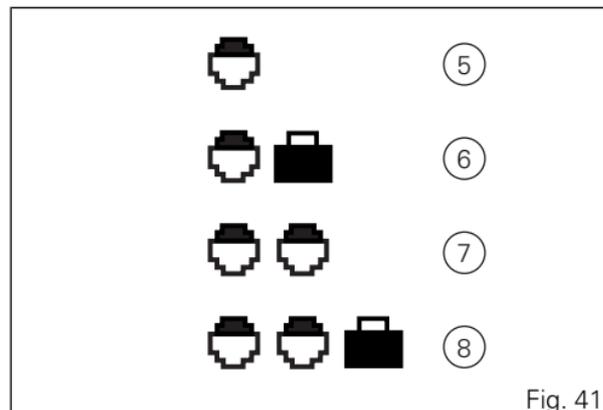


Fig. 40

The available setup settings are as follows:

- rider only (5);
- rider with luggage (6);
- rider with passenger (7);
- rider with passenger and luggage (8).



Indicator "RANGE" - Fuel range

This function indicates the distance that can be travelled with the fuel currently in the tank. The calculation is made based on the fuel level and an average consumption in reference to the last 30 seconds of driving (not the average fuel consumption "CONS.AVG").

For the Europe, Canada, France and Japan versions the default unit is km, while for the UK and USA versions the default unit is mi.

If you refuel adding more than 4 litres of fuel with the vehicle switched off (key-off), at the subsequent key-on, the remaining range reading will be updated instantaneously and will be calculated based on the new fuel level and an average fuel consumption of 18.0 Km/L; otherwise (that is, if you add less than 4 litres) the reading will only be updated after the vehicle is in movement (not instantaneously).

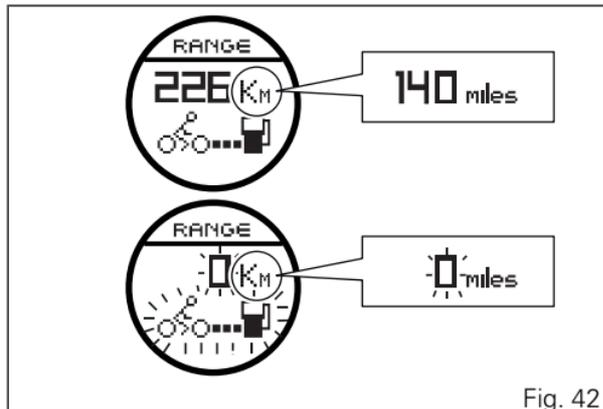


Fig. 42

When the range arrives to "0" the indication will flash together with the symbol (motorcycle + fuel pump). The active calculation phase occurs when the engine is running and the vehicle is moving (moments when the vehicle is not moving when speed is equal to 0 and/or when the engine is off are not considered).



Warning

It is recommended to turn off the motorcycle (Key-Off) when refuelling; if adding fuel without turning off the motorcycle (Key-On/engine off), the reading will be updated as soon as the vehicle starts to move (speed greater than zero).



Warning

Ducati recommends not trying to use all the residual range indicated.

Indicator "CONS." - Instantaneous fuel consumption

This function indicates the "instantaneous" fuel consumption.

The calculation is made considering the quantity of fuel used and the distance travelled during the last second.

For the Europe, Japan and China versions the value is expressed in "L/100" (litres/100 Km); it is possible to set the unit of measurement "Km/L" (kilometres/litre) through the "Setting special" function. For the UK version the reading is in "mpg UK" (miles per UK gallon).

The active calculation phase only occurs when the engine is running and the vehicle is moving (moments when the vehicle is not moving when speed is equal to 0 and/or when the engine is off are not considered). Dashes "-.-." are shown on the display when the calculation is not made.

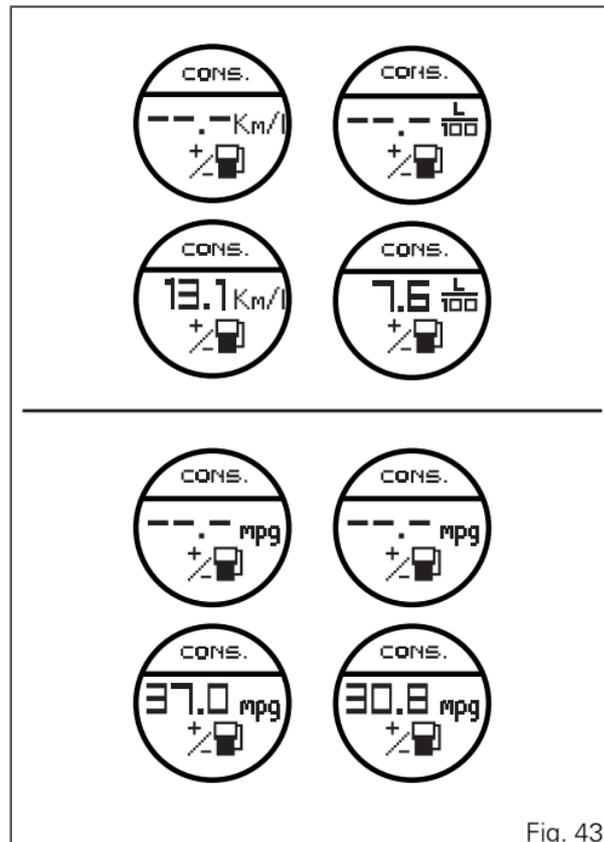


Fig. 43

Indicator "CONS.AVG" - Average fuel consumption

This function indicates the "average" fuel consumption. The calculation is made considering the quantity of fuel used and the distance travelled since Trip 1 was last reset. When Trip 1 is reset, the value is reset and the first value available is displayed 10 seconds after the reset. Dashes "---" are shown on the display during the first 10 seconds when the value is not yet available.

For the Europe, Japan and China versions the datum is expressed in "L/100" (litres/100 Km); it is possible to set the unit of measurement "Km/l" (kilometres/litre) through the "Setting special" function. For the UK version the reading is in "mpg UK" (miles per UK gallon).

The active calculation phase occurs when the engine is running and the vehicle is stopped (moments when the vehicle is not moving and the engine is off are not considered).

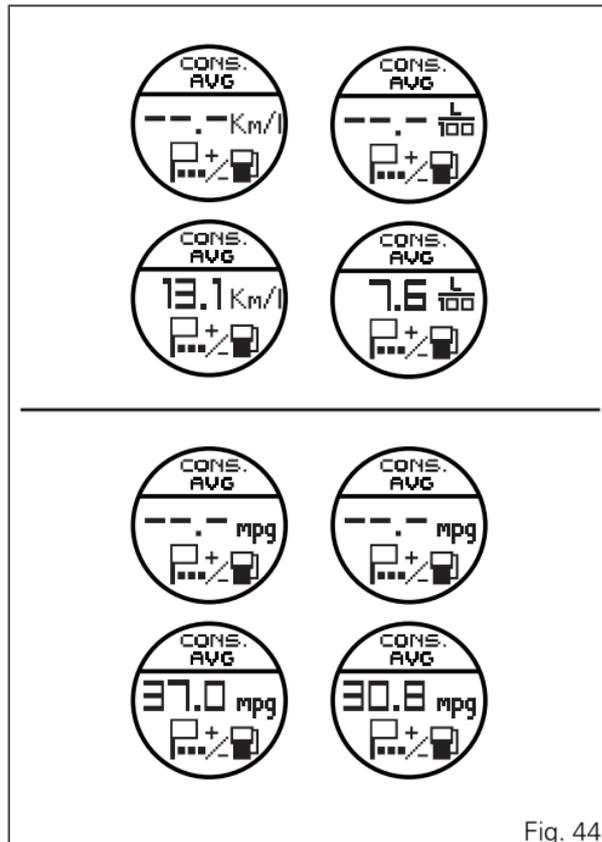


Fig. 44

Indicator "SPEED.AVG" - Average speed

This function shows the average speed of the motorcycle.

The calculation considers the distance and time since Trip 1 was last reset. When Trip 1 is reset, the value is reset and the first value available is displayed 10 seconds after the reset. Dashes "--" are shown on the display during the first 10 seconds when the value is not yet available. The active calculation phase occurs when the engine is running and the vehicle is stopped (moments when the vehicle is not moving and the engine is off are not considered). The calculated value is displayed increased by 5% to align it with the vehicle indicated speed.

For the Europe, Canada, France and Japan versions the default unit is km/h, while for the UK and USA versions the default unit is mph.

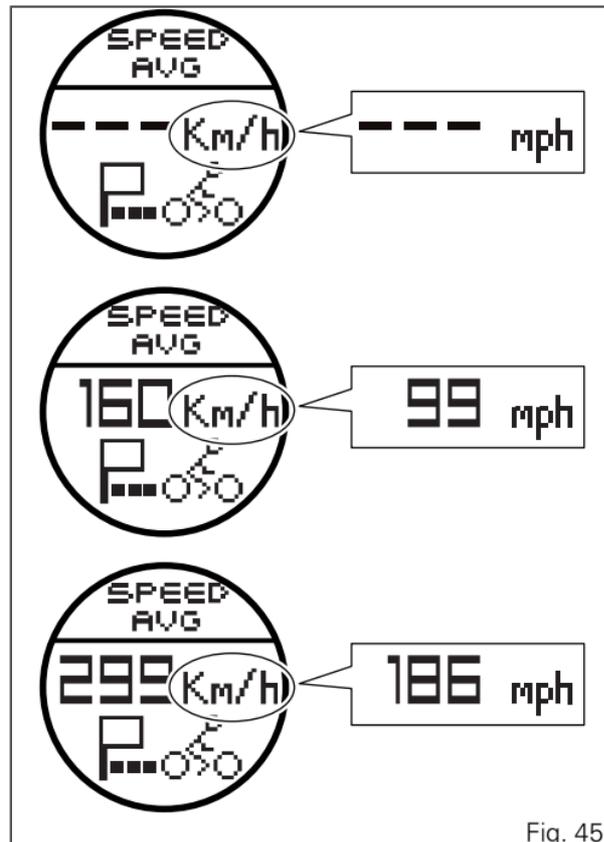


Fig. 45

Air temperature indicator

This function allows displaying ambient temperature. Displaying range: $-39\text{ }^{\circ}\text{C} \div +124\text{ }^{\circ}\text{C}$.

In the event of a sensor FAULT ($-40\text{ }^{\circ}\text{C}$, $+125\text{ }^{\circ}\text{C}$ or disconnected), a string of dashes " --- " (not flashing) is displayed and the "Engine/Vehicle Diagnosis - EOBD" light comes on and an error is indicated in the "Errors" Menu.



Note

When the motorcycle is stopped, the engine heat could influence the displayed temperature.

For Europe, Canada, France and Japan versions, the default unit is $^{\circ}\text{C}$, while for UK and USA versions the default unit is $^{\circ}\text{F}$.

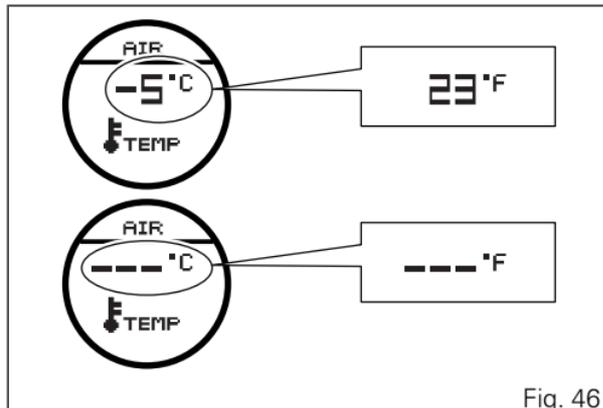


Fig. 46

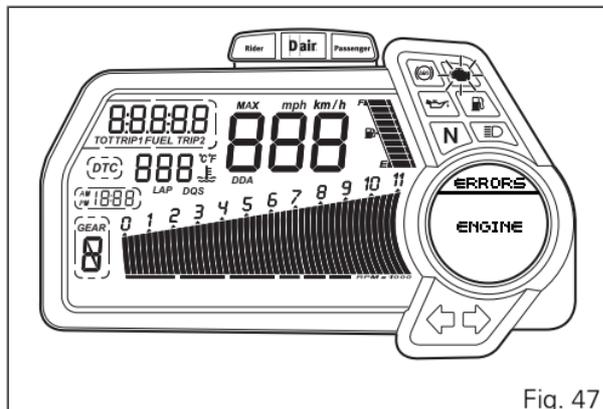


Fig. 47

When temperature reading drops until reaching 4°C (39°F), the ice warning will be enabled. This indication will be disabled as soon as temperature rises up to 6°C (43°F).



Warning

This warning does not eliminate the possibility of icy road areas even with temperatures above 4°C (39°F); when ambient temperature is "low", ride responsibly, especially on road areas not exposed to sunlight and/or on bridges.

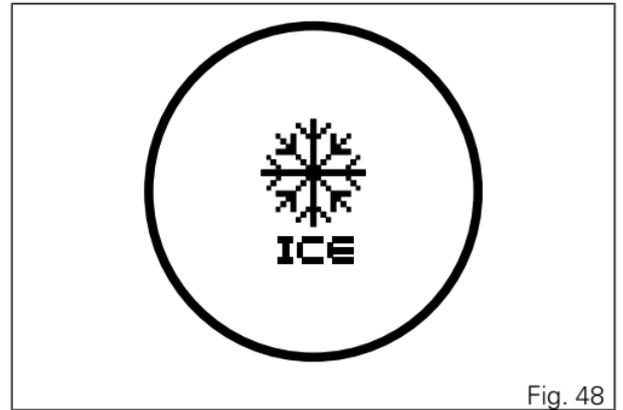


Fig. 48

Indicator "TIME TRIP" - Trip time

This function shows the vehicle trip time.

The calculation considers the time since Trip 1 was last reset. When Trip 1 is reset, this value is reset as well.

The active phase calculation occurs when the engine is running and the vehicle is stopped (when the vehicle is not moving and the engine is off the time is automatically stopped and restarts when the counting active phase starts again).

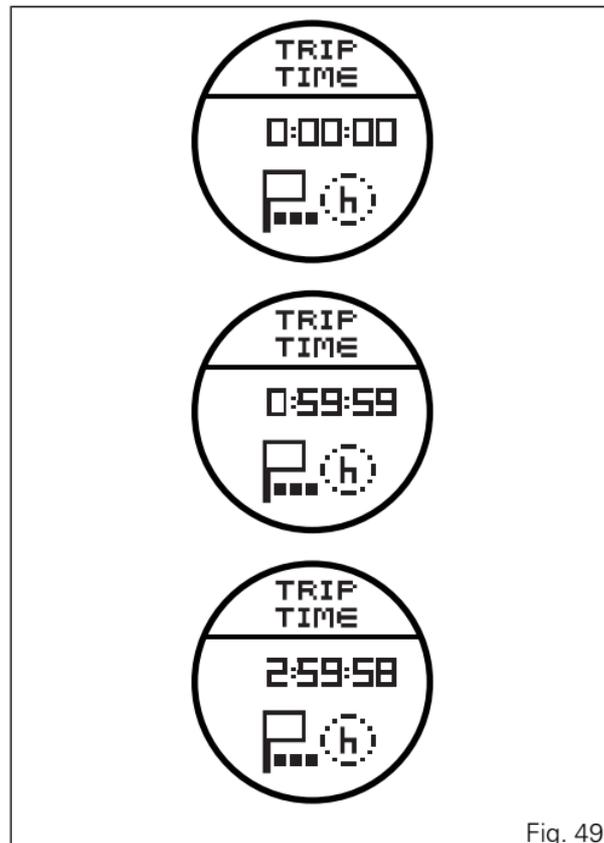


Fig. 49

Jacket battery status indication

This function provides the battery status indication of the Airbag system Rider and Passenger jacket.

Rider jacket battery status indication

- STATUS (A): 4 notches steady on indicate that the batteries are completely charged and the residual life is higher than 20 hours.
- STATUS (B): 3 notches steady on indicate that the residual life is between 10 and 20 hours.
- STATUS (C): 2 notches steady on indicate that the residual life is lower than 10 hours.
- STATUS (D): 1 notch steady on indicates that the residual life is lower than 1 hour.
- STATUS (E): 1 notch blinks to indicate that the Rider jacket device is about to turn off due to an insufficient residual charge.

Together with STATUS (E), the "Rider Low Battery" "Warning" is displayed and the battery status indication will be disabled. In this circumstance, it is nevertheless possible to use button (2) to scroll the available functions and go back to the jacket battery status indication even with active "Warning".

- STATUS (F): all notches off indicate that the Rider jacket battery status is not available due to a problem or because the jacket has not been connected.

Passenger jacket battery status indication

- STATUS (G): 4 notches steady on indicate that the batteries are completely charged and the residual life is higher than 20 hours.
- STATUS (H): 3 notches steady on indicate that the residual life is between 10 and 20 hours.
- STATUS (I): 2 notches steady on indicate that the residual life is lower than 10 hours.
- STATUS (L): 1 notch steady on indicates that the residual life is lower than 1 hour.
- STATUS (M): 1 notch blinks to indicate that the Passenger jacket device is about to turn off due to an insufficient residual charge.

Together with STATUS (M), the "Passenger Low Battery" "Warning" is automatically displayed and the battery status indication will be disabled. In this circumstance, it is nevertheless possible to use button (2) to scroll the available functions and go back

to the jacket battery status indication even with active "Warning".

- STATUS (N): all notches off indicate that the Passenger jacket battery status is not available due to a problem or because the jacket has not been connected.

For details about the operation and/or specific instructions/recommendations refer to paragraph "The D-Air[®] system".

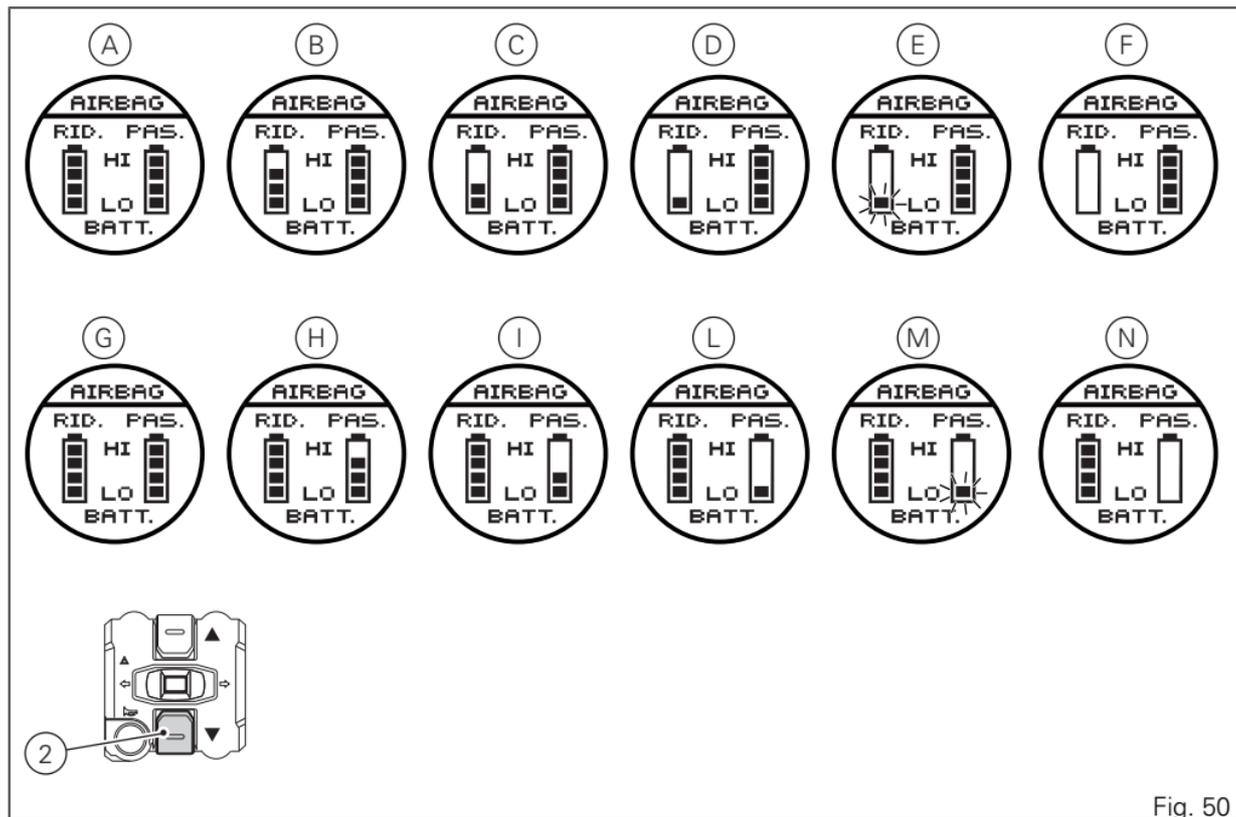


Fig. 50

"Riding Style" function (riding style change)

This function changes the motorcycle riding mode (SET UP).

Each riding mode is associated with a different intervention level of the traction control (DTC - Ducati Traction Control), a different level of brake control (ABS - Antilock Braking System) and different engine power and output (Engine).

Each riding mode change is also associated with a different motorcycle setup.

To change the motorcycle riding mode, press the reset button once (4) and the "SET UP" menu will appear on the round display.

Every time the reset button (4) is pressed, the instrument panel scrolls through all the available riding modes; once the desired riding mode is highlighted, press the reset button (4) for 3 seconds and the Instrument panel will check the position of the throttle control and front and rear brake pressure:

- if throttle is closed and brakes are released or vehicle is at a standstill, the Instrument panel confirms the selected riding mode (*) and displays the "standard page";

if throttle is open or brakes are applied and vehicle is not at a standstill, the instrument panel displays the warning "CLOSE THROTTLE AND RELEASE BRAKES" and only when all required conditions are verified (throttle closed and brakes released or vehicle at a standstill) (9) the instrument panel confirms the selected riding mode (*) and displays the "standard page".



Note

(*) If the change of Riding mode is associated with the ABS change of state from ON to OFF or vice-versa, the instrument panel also starts the "procedure for disabling or activating the ABS", respectively, upon confirmation of the selected riding mode.

If you do not close the throttle and release the brakes or stop the vehicle (zero speed) within 5 seconds from the "CLOSE THROTTLE AND RELEASE BRAKES" warning, the procedure for changing the "Riding Mode" is aborted and the instrument panel displays the "standard page" without changing any setting.

If the "SET UP" menu is activated and the reset button is not pressed (4) for 10 consecutive seconds, the

instrument panel will automatically exit the display mode without making any change.



Warning

Ducati recommends changing the Riding mode when the motorcycle is stopped. If the riding mode is changed while riding, be very careful (it is recommended to change the Riding mode at a low speed).

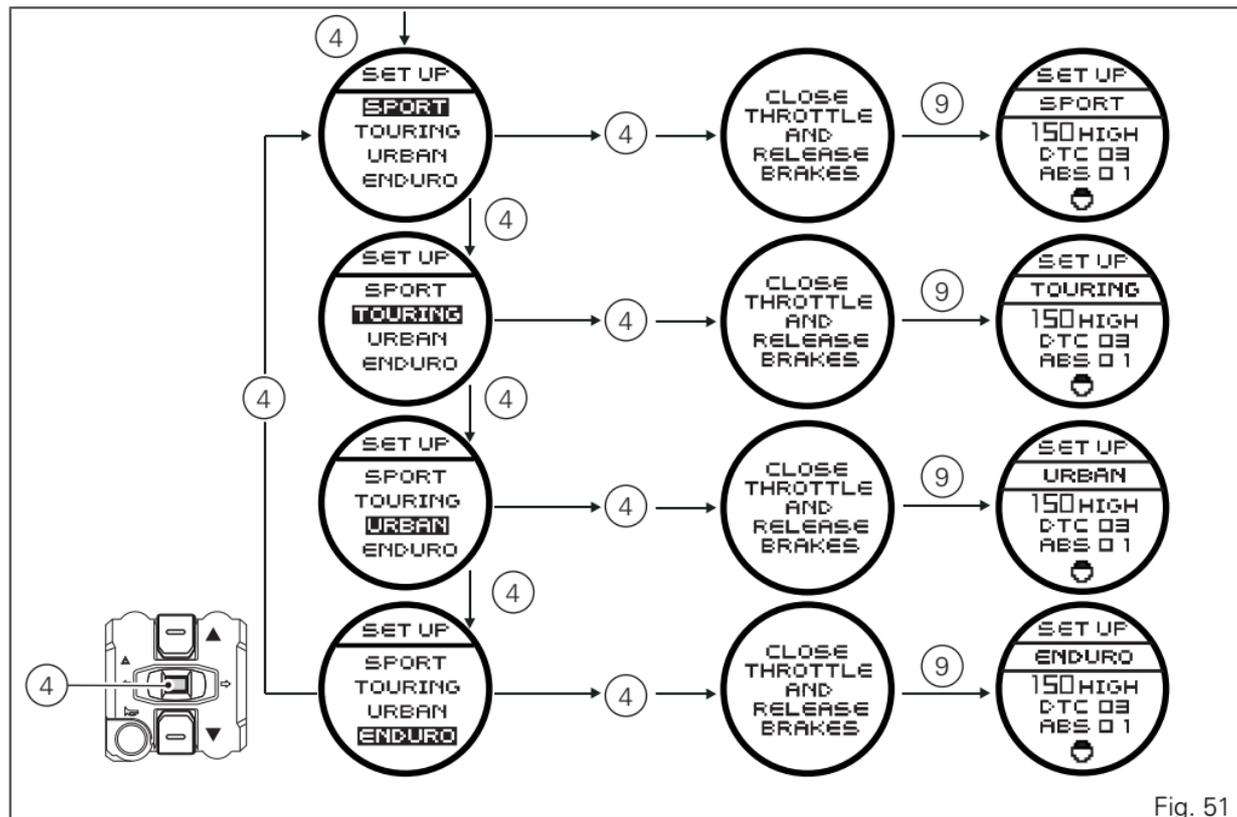


Fig. 51

"LOAD" function (bike setting change)

This function changes vehicle setup.

Each individual riding mode is associated with four different setups.

- rider only (5);
- rider with luggage (6);
- rider with passenger (7);
- rider with passenger and luggage (8).

To change the vehicle setup, press the reset button (4) for 3 seconds consecutively and the "LOAD" menu will appear on the round display (B). The desired setup can be selected by pressing the same reset button multiple times (4). To confirm the setup, press the same reset button again for 3 seconds (4). At the end of the 3 seconds, the change occurs immediately and the instrument panel exits the display mode automatically. Example: if a setup change is made from "rider only" (5) to "rider with luggage" (6), the change may vary depending on the set riding mode (the "rider with luggage" setup (6) may have different adjustments depending on the riding mode that is set: SPORT, TOURING, URBAN or ENDURO). If the "LOAD" menu is activated and the reset button (4) is not pressed for 10 consecutive seconds, the

instrument panel will automatically exit the display mode without making any change.



Warning

The setup change can lead to a different motorcycle riding style; it is recommended to be careful if changing the setup while riding (it is recommended to change the setup at a low speed).

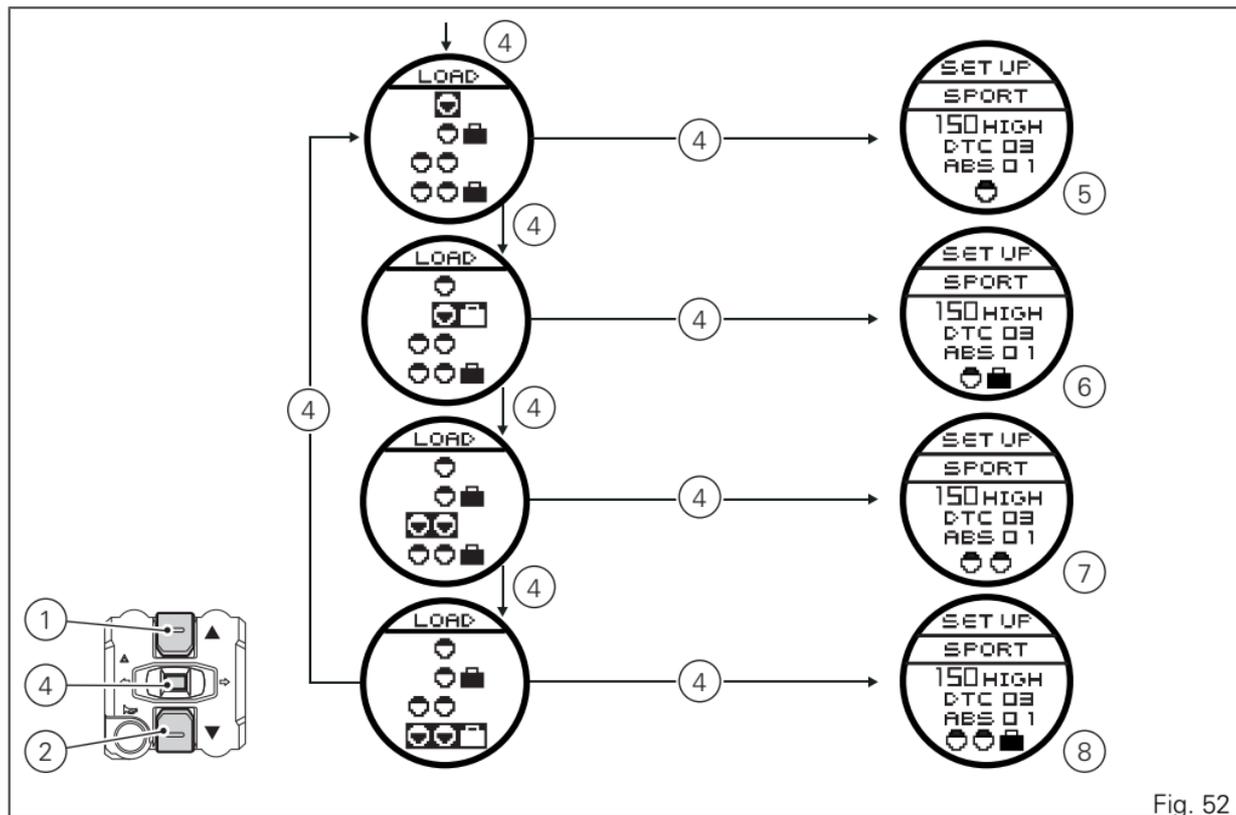


Fig. 52

"Heated handgrips" control function

This function activates and adjusts heat level of the heated handgrips.

To open the "H.GRIPS" control menu, press Start button (12) located on the RH switch.



Note

The Start button (12) controls the heated handgrips only when the engine is running.

After opening the menu, press several times the same button to select one option (arrows indicate the selected item). If arrows are pointing to "OFF", the handgrips heating is off; select "MIN" to activate heating at minimum level; select "MID" to activate heating at intermediate level; select "MAX" to activate heating at maximum level.

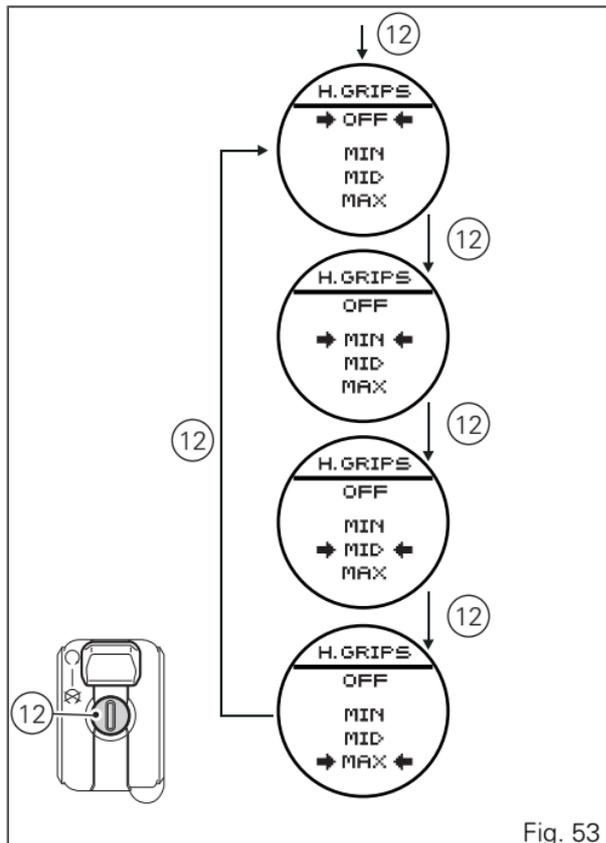


Fig. 53

Once you select the heating setup, the Start button (12) shall no longer be pressed; after 3 seconds that no change is made, the Instrument panel automatically quits the menu and retains the last setting stored.

If the handgrips are activated, the Instrument panel warns the user upon every key-on (warning displayed for 5 seconds) and every 5 minutes while running (warning displayed for 5 seconds) by indicating "H. GRIPS ACTIVATED".



Note

This means that if heated handgrips are enabled and engine stops, the heating is "temporarily" disabled but the ON indication is still active. Heating will automatically turn on when engine is started again.



Fig. 54



Note

Handgrip heating requires a high current draw which, at low engine rpm, might result in the battery getting soon flat. If the battery is not fully charged (voltage below 11.9 V) handgrip heating is disabled to ensure engine start-up ability; it will automatically activate again when battery voltage is above the specified value.

"Setting" menu

This menu is used to set/enable some motorcycle functions. Press button (2) to enter the "setting menu".



Note

Once this menu has been accessed, it is not possible to scroll the functions on the main display.



Important

For safety reasons, the setting menu can be accessed only when vehicle speed is below or equal to 20 Km/h; if this menu is accessed and vehicle speed is above 20 Km/h, instrument panel will automatically quit it and shift back to "main" screen.

Setting menu "items" are the following:

- EXIT;
- BATTERY;
- SETUP;
- B.LIGHT;
- LAP;
- RPM;
- CLOCK;
- PIN CODE;

- AIRBAG;
- EXIT.

To exit the setting menu, use button (1) or button (2) to select "EXIT" (present at the beginning and end of the menu item list) and press the reset button (4).

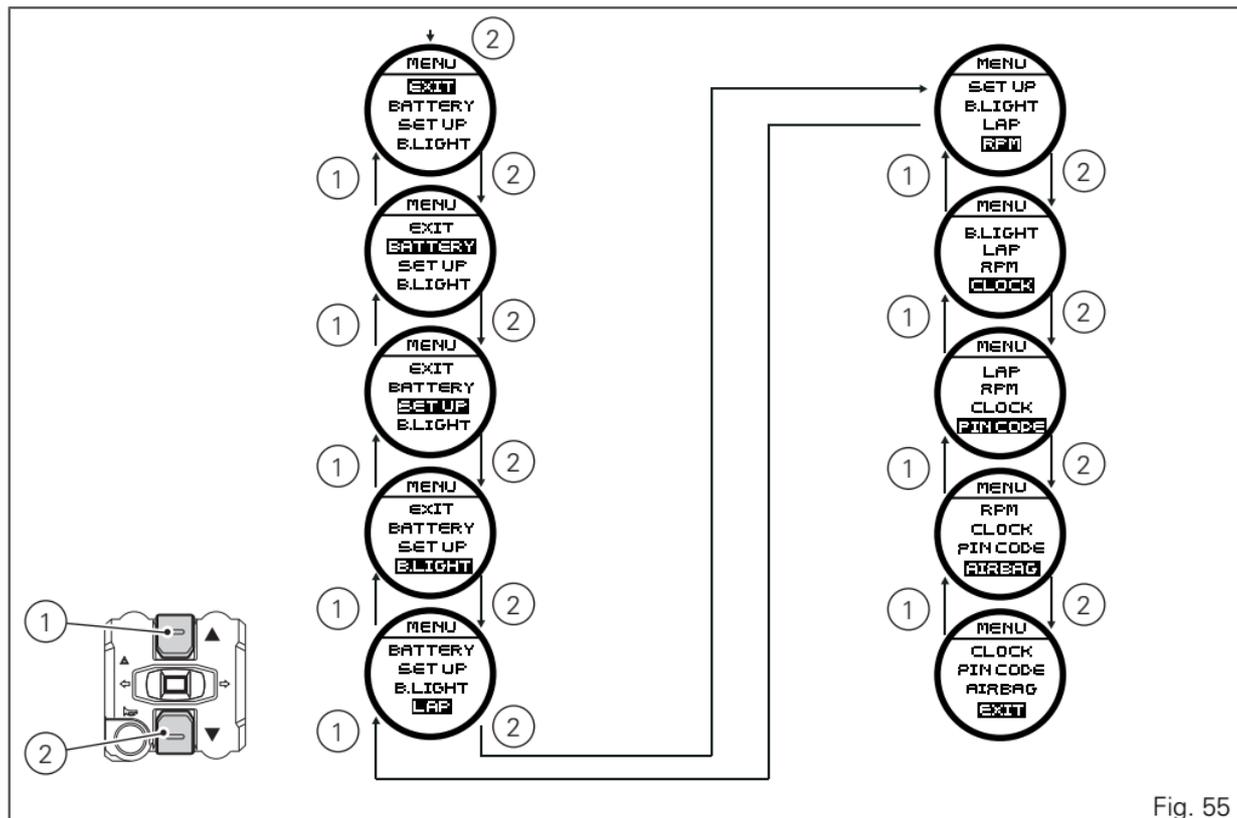


Fig. 55

Battery voltage indicator (BATTERY)

This function describes the battery voltage indicator.

To display the function, enter the "Setting" menu page 101 and access the "BATTERY" page.

The information will be displayed as follows:

- if battery voltage is between 11.8 and 14.9 Volt the reading will be displayed steady;
- if battery voltage is between 11.0 and 11.7 Volt the reading will be displayed flashing;
- if battery voltage is between 15.0 and 16.0 Volt the reading will be displayed flashing;
- if battery voltage is equal to or less than 10.9 Volt, "LOW" is shown flashing;
- if battery voltage is equal to or more than 16.1 Volt, "HIGH" is shown flashing;



Note

Dashes " - - - " appear if the reading is not available (9).

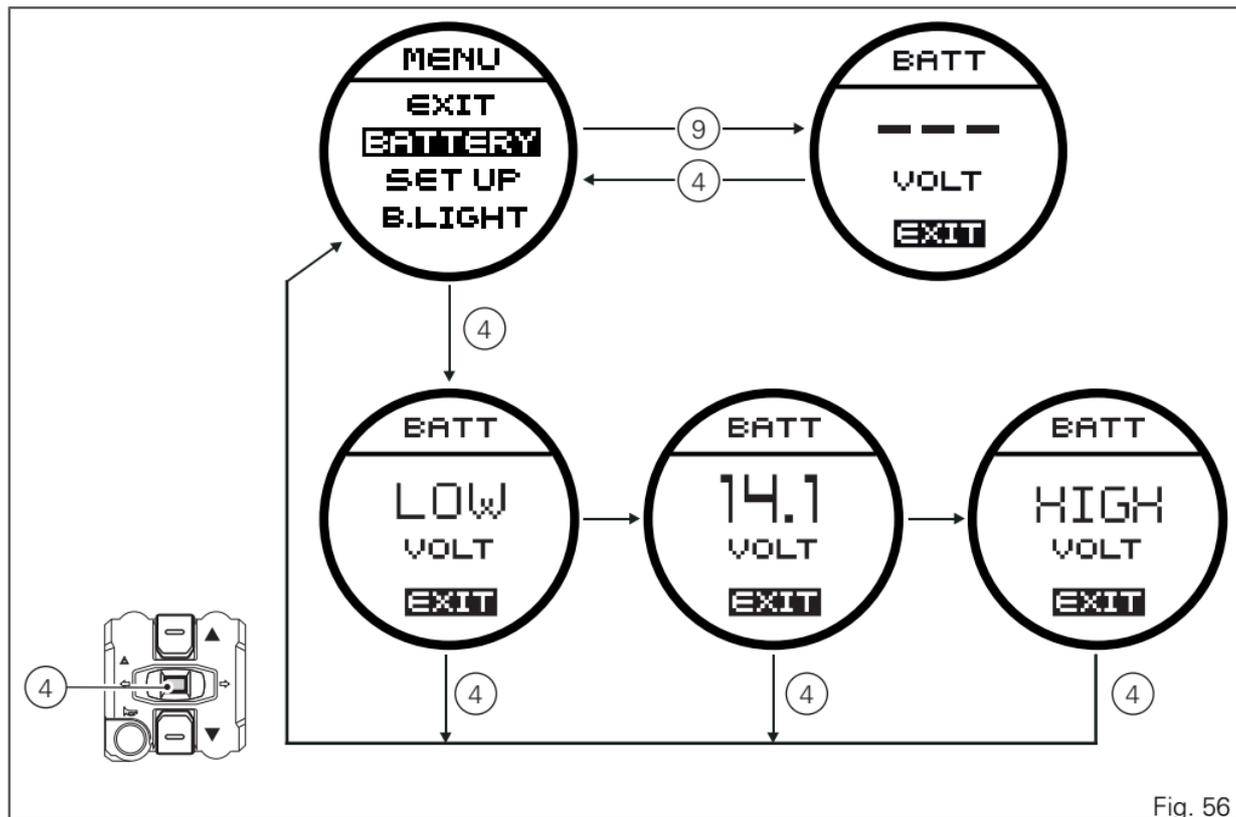


Fig. 56

"Riding Mode" customisation

This function customises each riding style.

To display the function, enter the "setting" menu page 101 and access the "SET UP" page.

When accessing the function, the four riding modes appear on the round display (SPORT, TOURING, URBAN and ENDURO); to customise the parameters, use buttons (1 or 2) to select the riding mode to be changed and press the reset button (4) to confirm. The parameters that can be customised are "DTC" (Ducati Traction Control), "ABS" (Antilock Braking System), "ENGINE" and the electronic suspension settings "DSS".

Any parameter change made is saved in the memory also after a Battery-Off.

To change the DTC parameters see the "DTC (Ducati Traction Control)" paragraph page 107.

To change the ABS parameters see the "ABS setting function" paragraph page 114.

To change the Engine parameters see the "ENGINE (engine power control)" paragraph page 118.

To change the electronic suspension parameters see the "DSS setting function" paragraph page 120.

The parameters set by Ducati for each individual driving style can be reset with the "DEFAULT" function.

To reset the "default" parameters see the "DEFAULT (Resetting Ducati default parameters)" paragraph page 132.



Warning

Changes should only be made to the parameters by people who are experts in motorcycle set-up; if the parameters are changed accidentally, use the "DEFAULT" function to restore factory settings.

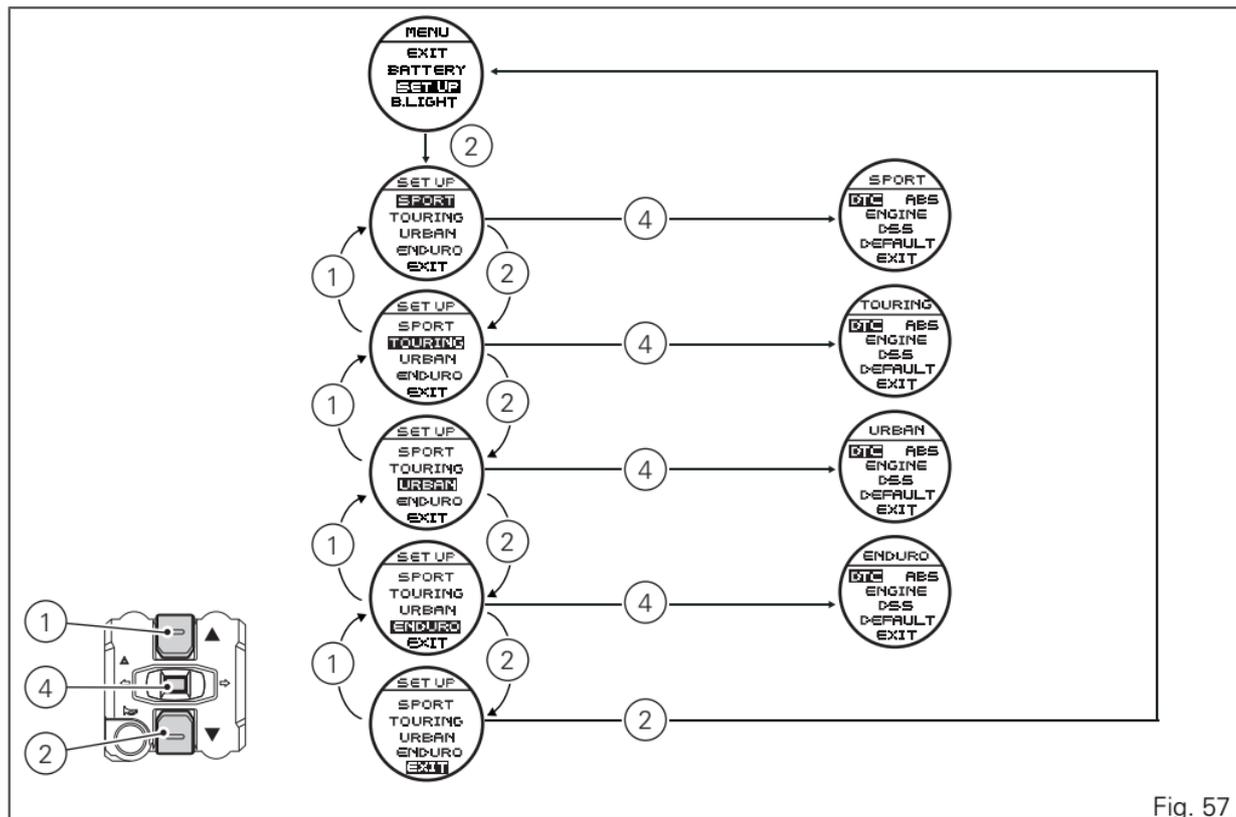


Fig. 57

DTC (Ducati Traction Control) setting function

This function customises the intervention level of the DTC (Ducati Traction Control).

To display the function, enter the "setting" menu page 101 and access the "SET UP" page.

Use buttons (1) and (2) to select the riding mode to be changed and press the reset button (4) to access the "DTC" function.

When accessing the function, the set DTC level "LEVEL" will appear at the top of the round display. The intervention levels range from "1" to "8"; the higher the number, the greater the intervention of the Traction Control system.

To change the DTC intervention level, use buttons (1) and (2) to select the "LEVEL" indication and press the reset button (4). The number to be set is shown on the display; buttons (1) and (2) can increase or decrease the number; press the reset button (4) to confirm the new level.

If you set it to "OFF" the DTC is disabled.

At this point, store the new setting by pressing the reset button (4) with "MEMORY" displayed.

The upper indication "LEVEL" will be updated to confirm that the new setting was "received" and stored.

To exit the function, select "EXIT" and press the reset button (4). The DTC intervention increases, passing from level 1 to level 8.



Warning

When you select and store DTC levels 1 or 2, the system automatically triggers the "DTC OFF ROAD" warning; in this case Ducati recommends you pay utmost attention when riding and use this type of DTC setting OFF road only.

The following table indicates the most suitable level of DTC intervention for the various riding types as well as the default settings in the "Riding Mode" that can be selected by the rider:

DTC LEVEL	RIDING MODE	USE	DEFAULT?
1	ENDURO Professional	Off-road for very expert riders. It allows considerable spinning of the rear wheel. It does not ensure a suitable control of poor grip on asphalt.	NO
2	ENDURO	Off-road for less experienced riders. It does not ensure a suitable control of poor grip on asphalt.	It is the default level for the "ENDURO" Riding Mode
3	TRACK	Track for very expert riders. Permits sliding sideways	NO
4	SPORT	Sporty driving on a road or track	It is the default level for the "SPORT" Riding Mode
5	TOURING	Normal riding	It is the default level for the "TOURING" Riding Mode

DTC LEVEL	RIDING MODE	USE	DEFAULT?
6	URBAN	“Very safe” riding together with the use of 100 HP ENGINE (maximum power 100 HP)	It is the default level for the “URBAN” Riding Mode
7	RAIN	Wet road	NO
8	HEAVY RAIN	Wet road and slippery asphalt	NO

Tips on how to select the sensitivity level



Warning

The 8 DTC level settings have been calibrated using the same tyres as those originally supplied with your motorcycle (same make, model and size).

The use of tyres of different size to the original tyres may alter the operating characteristics of the system. In the case of minor differences, such as for example tyres of a different make and/or model than the OE ones, but with the same size (rear = 190/55-17; front = 120/70-17), it may be sufficient to simply select the suitable level setting from those available to restore optimal system operation.

If tyres of a different size class are used or if the tyre dimensions differ significantly from the original tyres, it may be that the system operation is affected to the point where none of the 8 available level settings will give satisfactory results. In this case it is advisable to deactivate the traction control system.

If level 8 is selected, the DTC control unit will kick in at the slightest hint that the rear wheel is starting to spin.

Between level 8 and level 1 there are a further 6 intermediate levels. The level of DTC sensitivity decreases in equal steps from level 8 to level 1. Levels 1 and 2 are specifically designed for OFF-ROAD conditions and do not ensure a suitable control with poor grip on asphalt.

When level 3 or 4 is selected the DTC control unit will allow the rear wheel to spin and also slide sideways on exiting a corner; we recommend that this setting is only used by very experienced riders on the track. The choice of the correct level depends on 3 main variables:

- 1) The grip (type of tyre, amount of tyre wear, the road/track surface, weather conditions, etc.);
- 2) The characteristics of the path/circuit (bends all taken at similar speeds or at very different speeds);
- 3) The riding mode (whether the rider has a "smooth" or a "rough" style).

Relation of the DTC sensitivity level to grip conditions: The choice of level setting depends greatly on the grip conditions of the track/circuit (see below, tips for use on the track and on the road).

Relation of the DTC sensitivity level to the path characteristics:

If all the corners on the track/circuit can be taken at a similar speed, it will be easier to find an intervention level that is satisfactory for every bend; on the other hand, if the track has, for example, one corner that is much slower than all the others, it will be necessary to find a compromise level (on the slow corner the DTC will tend to kick in more than on the faster corners).

The relation of the DTC intervention level to riding mode:

The DTC will tend to kick in more with a “smooth” riding style, where the bike is leaned over further, rather than with a “rough” style, where the bike is straightened up as quickly as possible when exiting a turn.

Tips for use on the track

We recommend that level 6 is used for a couple of full laps (to allow the tyres to warm up) in order to get used to the system. Then try levels 5, 4, etc., in succession until you identify the DTC sensitivity level that suits you best (always try each level for at least two laps to allow the tyres to warm up).

Once you have found a satisfactory setting for all the corners except one or two slow ones, where the system tends to kick in and control too much, you can try to modify your riding style slightly to a more “rough” approach to cornering i.e. straighten up more rapidly on exiting the corner, instead of immediately trying a different level setting.

Tips for use on the road

Activate the DTC, select the URBAN Riding Mode (preset DTC level 6) and ride the motorcycle in your usual style; if the level of DTC sensitivity seems excessive, try swapping to TOURING Riding Mode (preset DTC level 5), if you still feel the system is too much sensitive try the SPORT Riding Mode (preset DTC level 4). If no Riding Mode meets your requirements, you can still customise the settings following the instructions in the table above until you find the level that best suits your riding style.

If changes occur in the grip conditions and/or circuit characteristics and/or your riding style, and the level setting is no longer suitable, switch to the next level up or down and proceed to determine the best setting (e.g. if with level 7 the DTC intervention seems excessive, switch to level 6; alternatively, if on

level 7 you cannot perceive any DTC intervention, switch to level 8).

Abs setting function

This Function allows customisation of the ABS (Antilock Braking System) level as well as its disabling.

To display the function, enter the "setting" menu page 101 and access the "SET UP" page.

Select the "riding mode" to be changed and enter the "ABS" function. When accessing the function, the set ABS level "LEVEL:" will appear at the top of the display.

To change the ABS intervention level, use buttons (1) and (2) to select the "LEVEL:" indication and press button (4).

The number to be set is shown on the display; buttons (1) and (2) can increase or decrease the number; press button (4) to confirm the new level.

If you set it to "OFF" the ABS is disabled.

At this point, store the new setting by pressing the button (4) for 3 seconds with "MEMORY" displayed.

The upper indication "LEVEL" will be updated to confirm that the new setting was "received" and stored.

To exit the function, select "EXIT" and press the button (4).



Warning

When the ABS status "OFF" is selected and stored, the warning "ABS OFF" will be automatically displayed; in this case Ducati recommends you pay utmost attention when riding and especially while braking.

The following table indicates the most suitable level of ABS intervention for the various riding types as well as the default settings in the "Riding Mode" that can be selected by the rider:

LEVEL	MODE	USE	DEFAULT?
OFF		The ABS is disabled.	NO
1	ENDURO	Exclusively for off road use, for expert riders (not recommended for road use). Both wheels are controlled by the ABS system (preventing them from locking), but on the rear wheel the system control allows the wheel to lock for long periods (to improve braking in off-road conditions). System does NOT control lift-up, but implements a light combined braking (front and rear).	It is the default level for the "ENDURO" riding mode.
2	SPORT	For road use in good grip conditions. Both wheels are controlled by the ABS system which combines braking power and generates pressure even on the rear calliper when using the front brake only. Anti lift-up control is NOT active since this setting mostly focuses on braking power and leaves the rider control any lift-ups.	It is the default level for the "SPORT" riding mode.
3	ROAD	For use under any riding condition. Both wheels are controlled by the ABS system which combines braking power generating pressure even on the rear calliper when using the front brake. The system controls lift-up in most cases and ensures safe and consistent braking performance.	It is the default level for the "TOURING" and "URBAN" riding modes.

Tips on how to select the sensitivity level



Warning

The levels of the ABS system your motorcycle is equipped with were calibrated with original equipment tyres.

The use of tyres of different size and characteristics to the original tyres may alter the operating characteristics of the system thus making it unsafe. It is recommended not to install tyres of different size than the ones approved for your vehicle.

The originally supplied tyres are: (front 120/70ZR17 - rear 190/55ZR17).

- Pirelli Scorpion Trail.
- Pirelli Angel GT;

Selecting level 3, the ABS will intervene to ensure a very stable braking, good lift-up control, allowing the vehicle to keep a good alignment during the whole braking. Switching from level 3 to level 2, braking power is given priority over stability and lift-up control: level 2 provides no lift-up control.

Level 1 is designed for off-road use. This level provides no lift-up control, while the rear brake is

controlled so as to guarantee prolonged slipping of the rear wheel. Front and rear combined braking is active.

The choice of the correct level mainly depends on the following parameters:

- 1) The tyre/road surface grip (type of tyre, amount of tyre wear, type of road/track surface, weather conditions, etc.).
- 2) The rider's experience and sensitivity: expert riders can tackle a lift-up in trying to reduce the stopping distance to a minimum, while less expert riders are recommended to use setting 3, that will help them keep the vehicle more stable even in emergency braking.

ENGINE setting function (Engine Power Control)

This function customises engine power and output. To display the function, enter the "setting" menu page 101 and access the "SET UP" page. Use buttons (1) and (2) to select the riding mode to be changed and press the reset button (4) to access the "ENGINE" function.

When accessing the function, the Engine setting appears at the top of the round display:

- 150 HIGH, 150 LOW, or 100 HP (for EU, UK, USA versions);
- HIGH, MID, or LOW (for France and Japan versions).

To change the engine "power", use buttons (1) and (2) to select the "NEW SET" indication and press the reset button (4).

Use buttons (1) and (2) to select one of the three options (150 HIGH, 150 LOW or 100 HP) or (HIGH, MID e LOW) for France and Japan versions; press the reset button (4) to confirm the new level.

At this point, store the new setting by pressing the reset button (4) for 3 seconds with "MEMORY" displayed.

The upper indication will be updated to confirm that the new setting was "received" and stored. To exit the function, select "EXIT" and press the reset button (4).

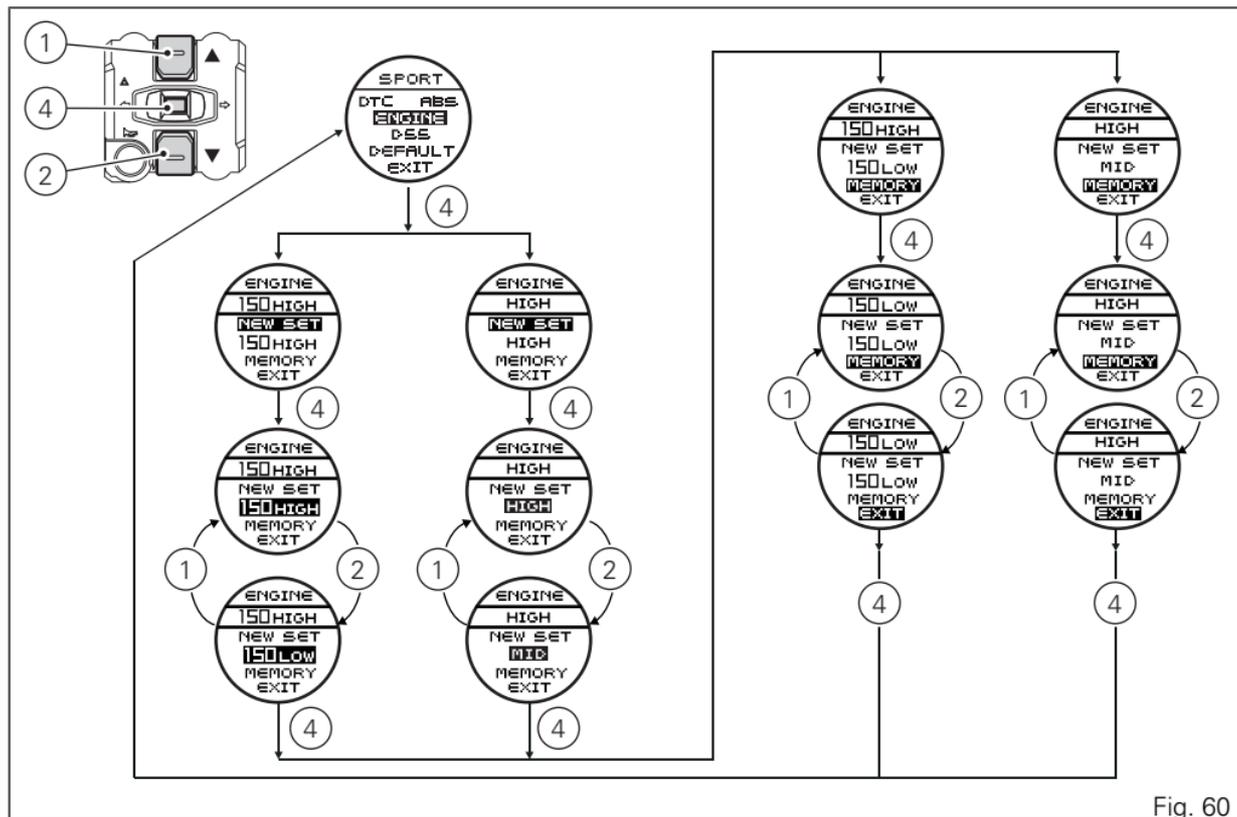


Fig. 60

DSS setting function

To display the DSS (Ducati Skyhook Suspension) function, enter the "setting" menu page 101 and access the "SET UP" page.

Use buttons (1) and (2) to select the riding mode to be changed and press the reset button (4) to access the "DSS" function.

When accessing the function, the four different types of setup appear on the round display

- rider only;
- rider with luggage;
- rider with passenger;
- rider with passenger and luggage.

Use buttons (1) and (2) to select the setup to customise and press the reset button (4).

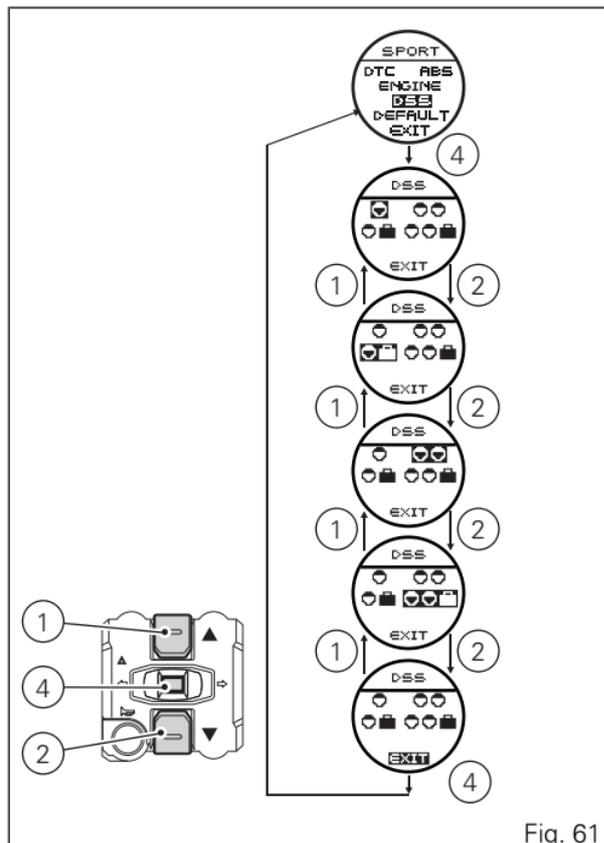


Fig. 61

The three parameters to change appear on the round display:

- FRONT: adjustment of the front suspension rebound and compression;
- REAR: adjustment of the rear shock absorber rebound and compression;
- PRE-LOAD: adjustment of the rear shock absorber spring preload.

Use buttons (1) and (2) to select the parameter to change and press the reset button (4).

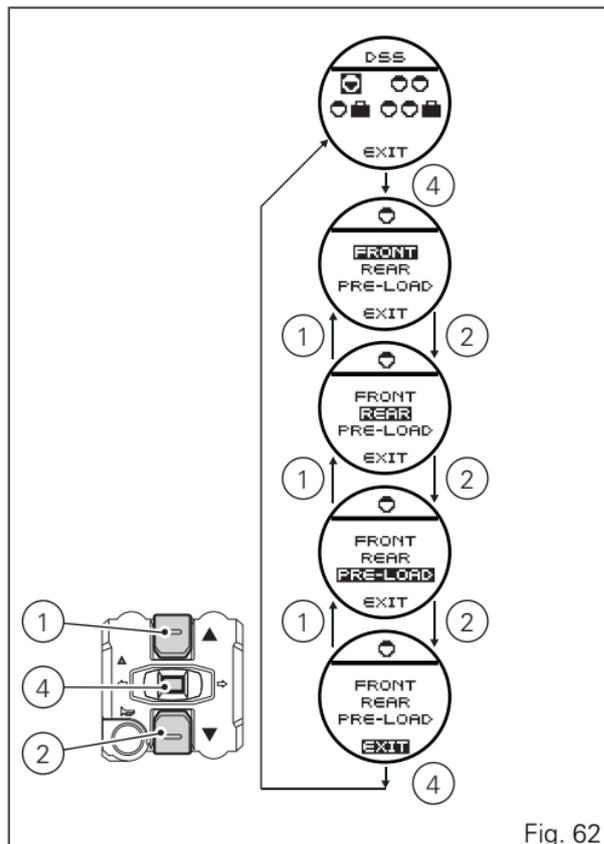


Fig. 62

“FRONT” adjustment

The display shows 5 blocks in vertical, on the left, the arrow on the right side of the block indicates the last setting stored

The following options are available (reading the list from top to bottom):

- HARD (Hard level);
- Hard Medium (Hard Medium level);
- MEDIUM (Medium level);
- Soft Medium (Soft Medium level);
- SOFT (Soft level).

Use buttons (1) and (2) to select the block corresponding to the new level to be set; press button (4) for 3 seconds to confirm the new level. After these 3 seconds the block corresponding to the new level set will flash for 3 seconds (indicating system is changing the setup), then it will stop flashing and the arrow will indicate the new level set. To exit the function, select “EXIT” and press the reset button (4).

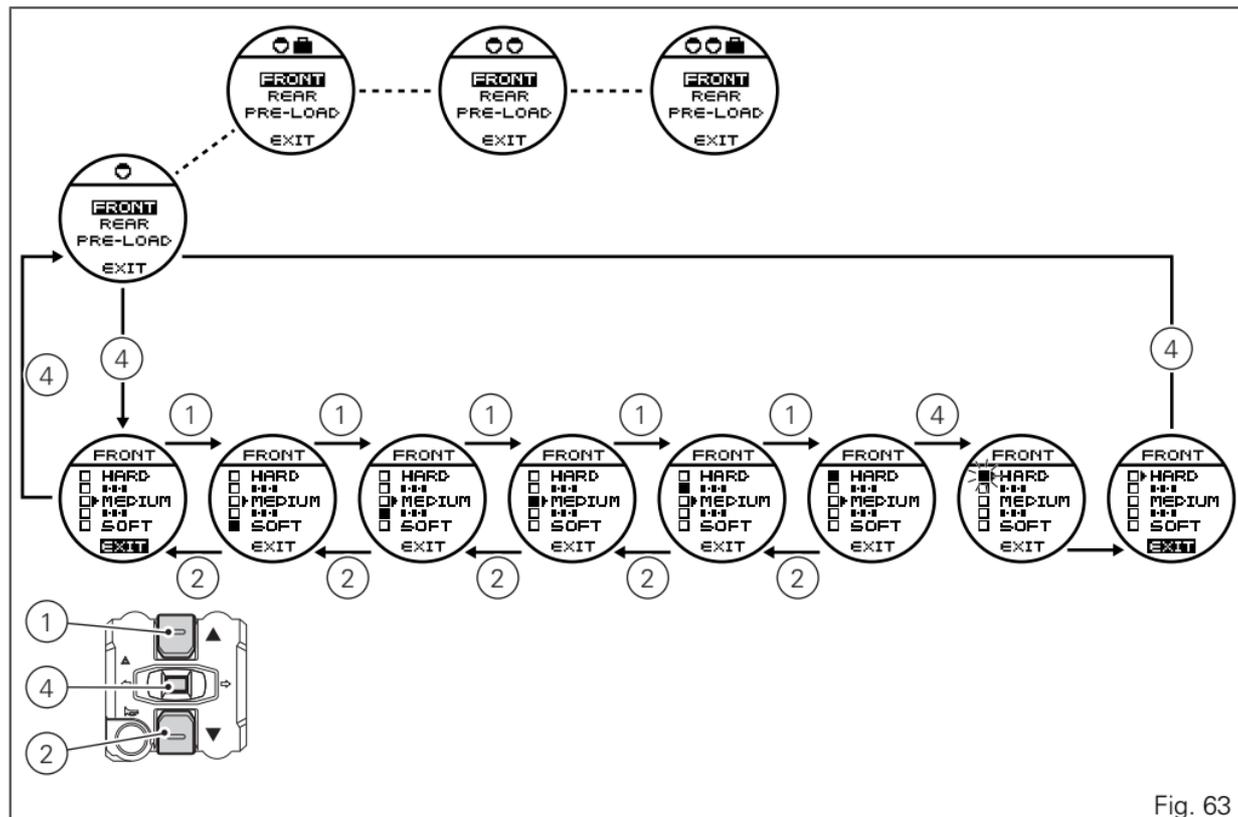


Fig. 63

“REAR” adjustment

The display shows 5 blocks in vertical, on the left, the arrow on the right side of the block indicates the last setting stored

The following options are available (reading the list from top to bottom):

- HARD (Hard level);
- Hard Medium (Hard Medium level);
- MEDIUM (Medium level);
- Soft Medium (Soft Medium level);
- SOFT (Soft level).

Use buttons (1) and (2) to select the block corresponding to the new level to be set; press button (4) for 3 seconds to confirm the new level. After these 3 seconds the block corresponding to the new level set will flash for 3 seconds (indicating system is changing the setup), then it will stop flashing and the arrow will indicate the new level set. To exit the function, select “EXIT” and press the reset button (4).

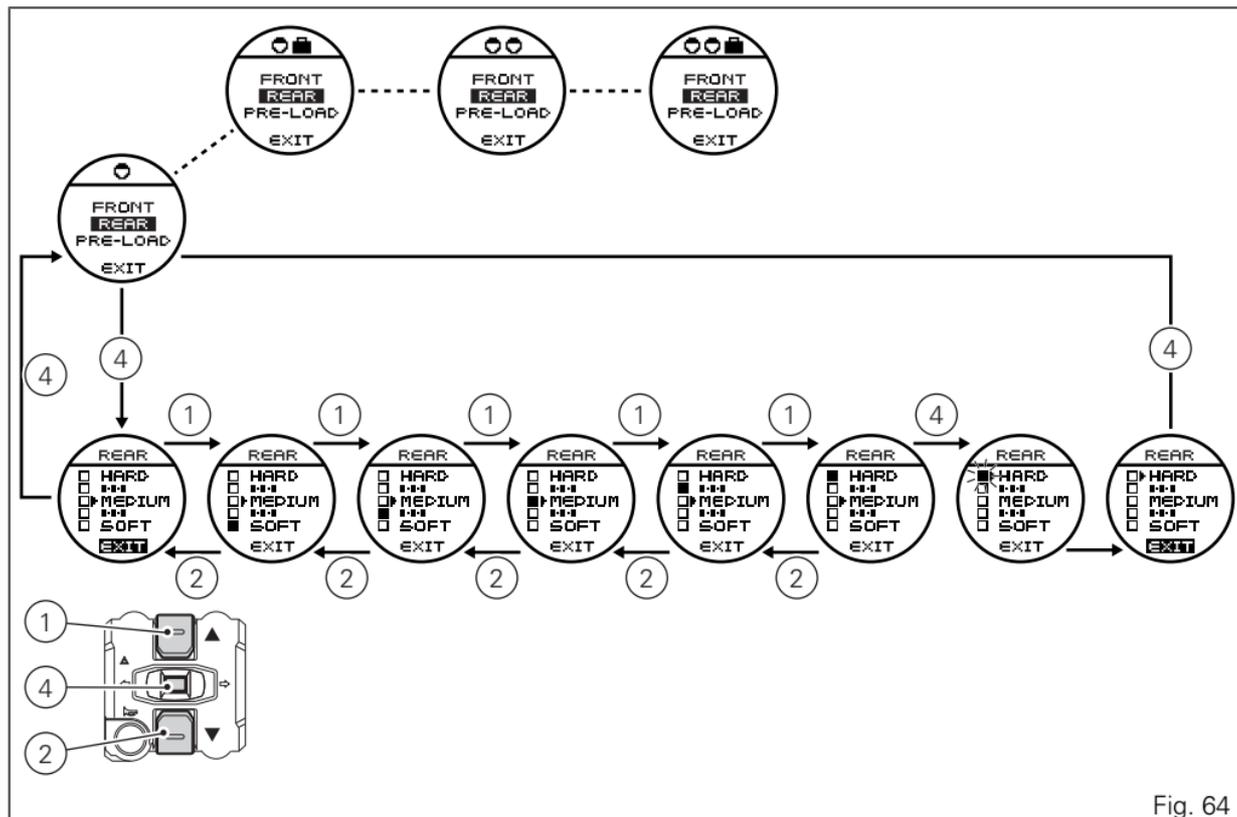


Fig. 64

“PRE-LOAD” adjustment

- the top of the round display will show the “preload” and a bargraph indicating the set value;
- use buttons (1) and (2) to select “NEW SET” and press the reset button (4).
- The number to be changed is shown on the display;
- buttons (1) and (2) can increase or decrease the number (between 1 and 16);
- press the reset button (4) to confirm the new level.

At this point, store the new setting by pressing the reset button (4) for 3 seconds with “MEMORY” displayed. The upper indication and the bargraph will be updated to confirm that the new setting was “received” and stored.

To exit the function, select “EXIT” and press the reset button (4).

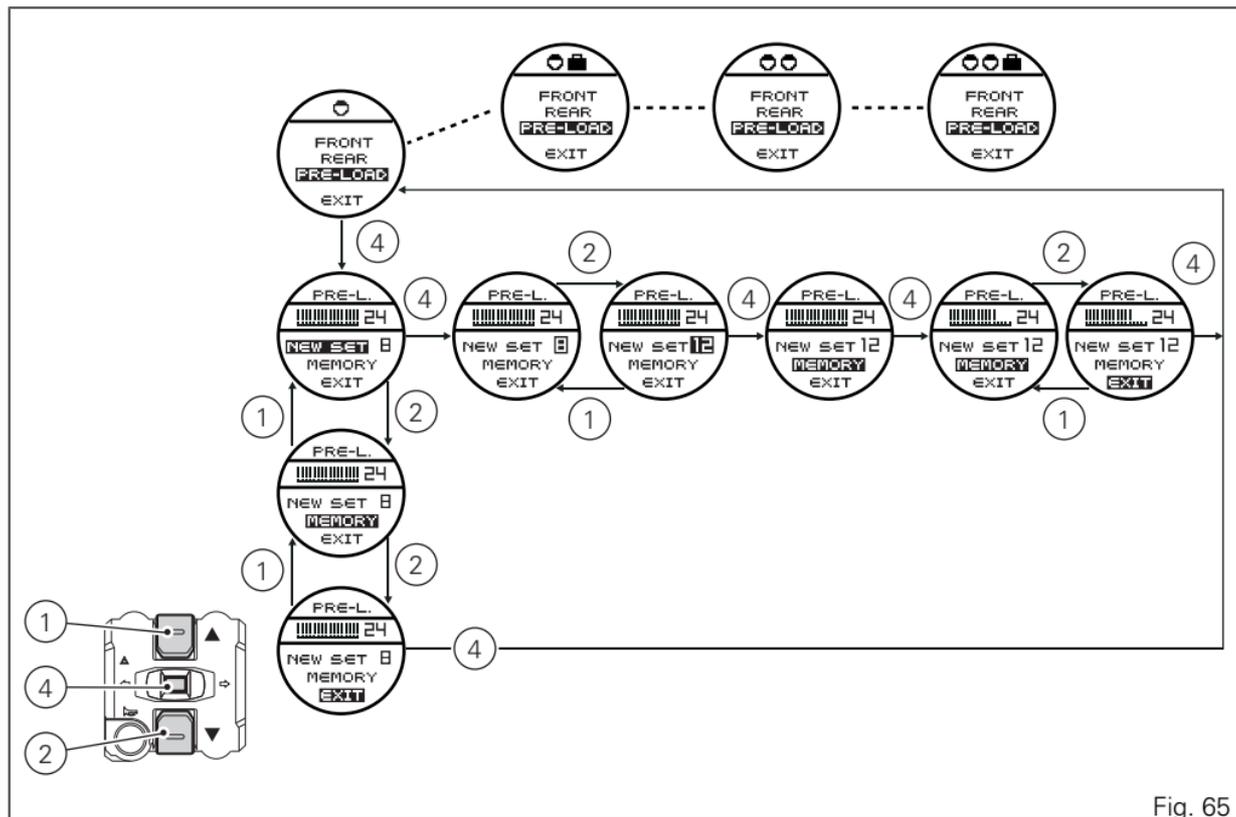


Fig. 65

DSS (Ducati SkyHook System)

Multistrada 1200 is equipped with the brand new suspension control system called DSS (Ducati Skyhook System): DSS is a dynamic suspension damping control system.

Dynamically, the purpose of a vehicle suspension is generally twofold: to allow the vehicle to absorb the surface bumps by "filtering" their effects on vehicle chassis (and therefore on the rider) and ensure optimum contact between the wheels and the ground. The aim of the DSS is to enhance the comfort level ensured by a normal passive suspension while keeping performance unchanged.

The DSS relies on the vehicle's sensors to determine its lengthwise and vertical movements, and adjusts suspension damping settings accordingly. In particular, the DSS also communicates with the DTC and ABS control units to continuously determine the motorcycle status in real time. This results in a generally more comfortable motorcycle, able to better dampen ground bumps without affecting handling and with rider always in control. Vertical movements are minimised as well as all sinking movements (pitching) that occur under braking and acceleration.

The DSS is fully integrated with the motorcycle Riding Modes. By selecting a certain Riding Mode, the rider can establish the base suspension behaviour, suspension response and hence the motorcycle response. Then, according to motorcycle dynamics, the DSS will intervene and rectify the motorcycle response, regardless of the set Riding Mode, which simply determines the base suspension behaviour (i.e. more comfortable for URBAN riding mode and more precise for SPORT riding mode).

To better understand this feature, take for instance the URBAN and TOURING Riding Modes. The URBAN Riding Mode is set to offer a motorcycle handling suitable for town use: the base suspension behaviour is hence focused on maximising damping of bumps and for this reason the suspension will generally feel more comfortable.

The TOURING Riding Mode is designed for a more touring use, that is more demanding for the motorcycle and requires a more controlled and precise base suspension behaviour. But in both cases the DSS kicks in if the motorcycle behaviour and in particular its vertical and lengthwise movements cause poor comfort or poor vehicle performance, no matter if this occurs while riding at a consistent speed or under braking or acceleration.

Two conditions are provided in order to save battery charge:

- 1) when engine is running, if engine is stopped but instrument panel is not turned off, the suspension system power is cut after 30 seconds;
- 2) when engine is stopped, if instrument panel is turned on but engine is not started, the suspension system power is cut after 30 seconds.



Note

When the suspension system is not powered it is quite hard due to the considerable hydraulic damping it offers and this is true even when the motorcycle is off. This means that the rider will feel very well when suspension power is cut off.



Note

In key-off (motorcycle off) the motorcycle feels hard because the not powered valves allow just a minimum damping.

The table below indicates the Riding Modes of the Multistrada 1200 and the corresponding suspension behaviour.

ENDURO	When the ENDURO Riding Mode is selected, the DSS will have a base suspension setting that dampens the bumps typical of any off-road tracks and ensures optimised longitudinal dynamics for the level of grip typical of off-road conditions.
SPORT	When the SPORT Riding Mode is selected, the DSS will have a hard base suspension setting, optimised for road use, with ground in good condition and few bumps. The motorcycle will be very sensitive and controlled, and rider can exploit the full potential of the vehicle.
TOURING	When the TOURING Riding Mode is selected, the DSS will have a base suspension setting optimised for a touring use, hence with a comfortable, and yet controlled, base suspension setting.
URBAN	When the URBAN Riding Mode is selected, the DSS will have a base suspension setting that will best absorb any bumps typical of town use, while yet keeping a great control on vehicle dynamic response, with a highly comfortable overall behaviour.

DSS default setting can be changed using the corresponding menu through the instrument panel. This menu allows the rider to increase or decrease the base damping settings characterising the operation of fork and rear shock absorber for every Riding Mode. When SOFT setting is selected, the DSS will change the suspension settings so as to be generally softer; while when HARD setting is selected, the DDS will change the suspension settings so as to be generally harder. The DSS also interfaces with the vehicle load setting, which can range from rider only to rider and passenger with luggage. This means that changing the load setting not only affects the rear shock absorber preload - in order to always ensure ideal handling even with luggage on-board - but it also affects the parameters determining vehicle dynamic control. So, selecting the correct load setting allows a perfect response and handling considering the dynamics generated when riding with luggage. It is possible to change the base setting even for the preload, thanks to the specific menu in the instrument panel. The preload actuator range is 12 mm, the instrument panel allows preload adjustment through 24 positions, which means that every position corresponds to a preload change of 0.5 mm. This

should ensure the rider to find the perfect setting under any load condition.



Warning

The DSS setting greatly depends on the load setting. Riding the motorcycle with a load setting that does not match the actual load conditions does not guarantee optimum operation of the system. The DSS was calibrated using the standard springs of the motorcycle. Any change to the parts involved in this system could impair optimum operation of the system and motorcycle.

DEFAULT function (Resetting Ducati default parameters)

This function resets the parameters set by Ducati for each riding style. To display the function, enter the "setting" menu page 101 and access the "SET UP" page.

Use the buttons (1) and (2) to select the riding mode for which you want to restore the settings and access the "DEFAULT" function.

When accessing the function "DEFAULT PARAMETER?" will appear on the round display. To reset the parameters, select "YES" and press the reset button (4). To restore parameters, system needs approximately 2 seconds; meanwhile, "WAIT...." indication is displayed. Once procedure is completed, the round display shows "DEFAULT OK" to confirm that parameters have been reset to factory settings.

Important

This procedure restores the parameters of all riding modes.

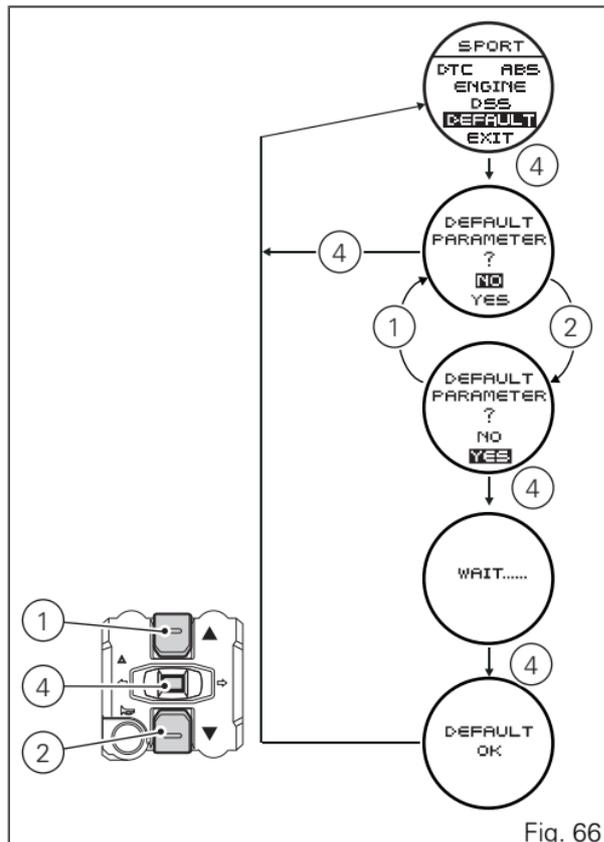


Fig. 66

Instrument panel backlighting setting function

This function adjusts the instrument panel backlighting intensity.

To display the function, enter the "setting" menu page 101 and access the "B. LIGHT" page.

The information will be displayed as follows:

- the arrows indicate the setting currently in use;
- use buttons (1) and (2) to select the new setting;
- to store the new setting press the reset button (4); the arrows will move on to the stored setting.

To exit, select "EXIT" and press the reset button (4).

"MAX" setting: storing this condition, the backlighting is at maximum brightness.

"MID" setting: storing this condition, the backlighting is reduced approximately 30% relative to maximum brightness.

"MIN" setting: storing this condition, the backlighting is reduced approximately 70% relative to maximum brightness.



Note

In the event of an interruption of the power supply from the battery, when power is restored at the next Key-On, the backlighting will always be set by default to maximum brightness.

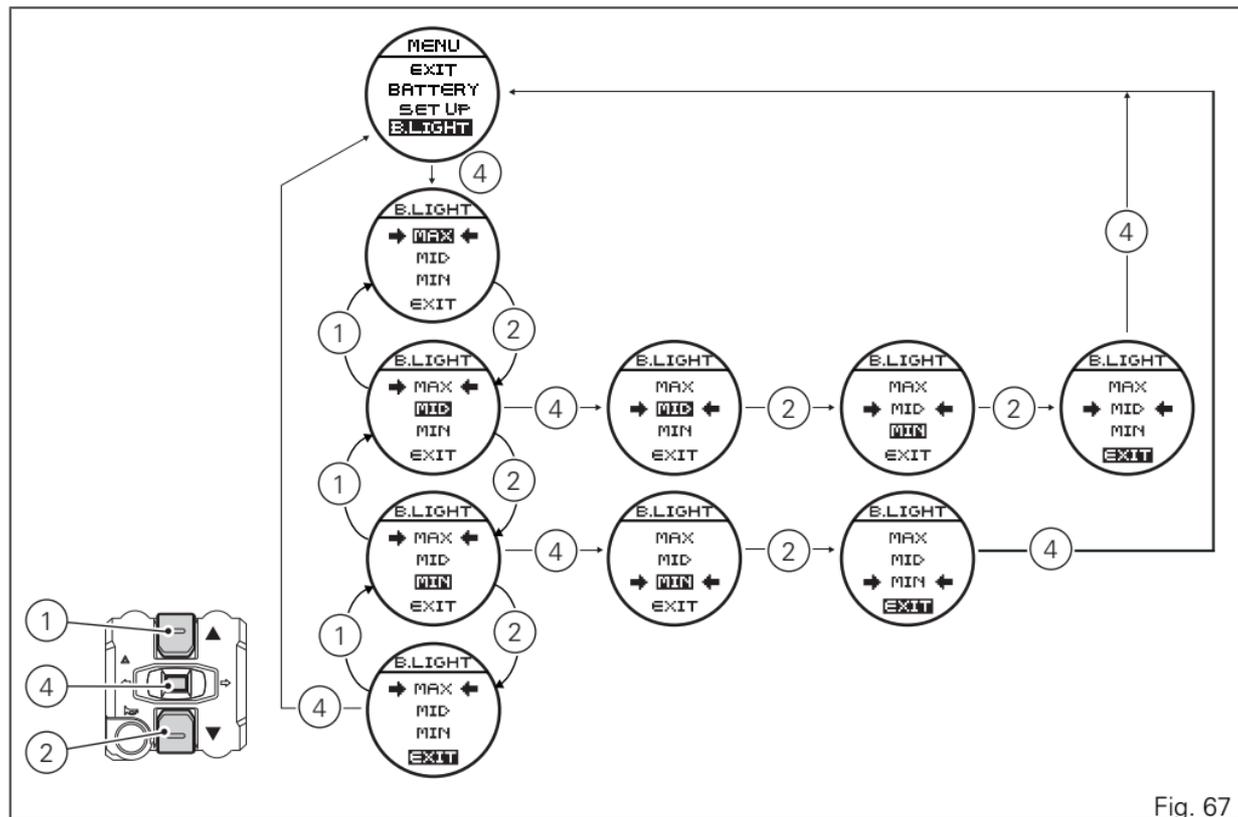


Fig. 67

LAP Activation/Deactivation function (lap time)

This function activates and deactivates the LAP function (lap time).

To display the function, enter the "Setting" menu page 101 and access the "LAP" page.

- the arrows indicate the setting currently in use;
- use buttons (1) and (2) to select the new setting;
- to store the new setting press the reset button (4);
- the arrows will move to the new stored condition.

To exit, select "EXIT" and press the reset button (4). Storing the "OFF" condition disables the LAP function. Storing the "ON" condition enables the LAP function (see LAP registration operation page 137).



Note

When "LAP" function is active, flash button (3) takes on the dual function of high beam "FLASH" and LAP timer Start / Stop.

LAP registration function

This function describes the "LAP" time registration.

If the function is activated (see "LAP activation/deactivation description" page 135), the lap time can be registered as follows:

- the first time the flash is pressed (3) starts the "lap timer" for the first lap and the instrument panel shows the "START LAP" indication on the round display (B) for 4 seconds and then returns to the "previous" page;
- from this moment, each time that the flash is pressed (3) the round display (B) automatically shows the lap time for 10 seconds and then returns to the "previous" page.

Up to 30 lap times can be stored. Once the memory is full, the instrument panel no longer stores lap times when the flash button (3) is pressed, and the flashing message "LAP MEMORY FULL" is shown on the round display for 3 seconds until the times are reset. When the LAP function is set disabled, the current "lap" is not stored. If the LAP function is active and suddenly the motorcycle is suddenly turned off (Key-Off), the function will be automatically disabled (even

if the lap timer was active, the current "lap" is not stored).

If the time is never "stopped", it will roll over upon reaching 9 minutes, 59 seconds and 99 hundredths; the lap timer starts counting from 0 (zero) and will keep running until the function is disabled. If however the LAP function is switched on and the memory has not been cleared, but fewer than 30 laps have been saved (e.g. 18 laps), the Instrument panel will store any remaining laps until the memory is full (in this case, it will store an additional 12 laps).

This function only displays lap times being recorded; but other data are also saved (MAX speed, MAX rpm, rev limiter if reached) for viewing at a later time in the Lap Memory function (stored LAPs viewing).

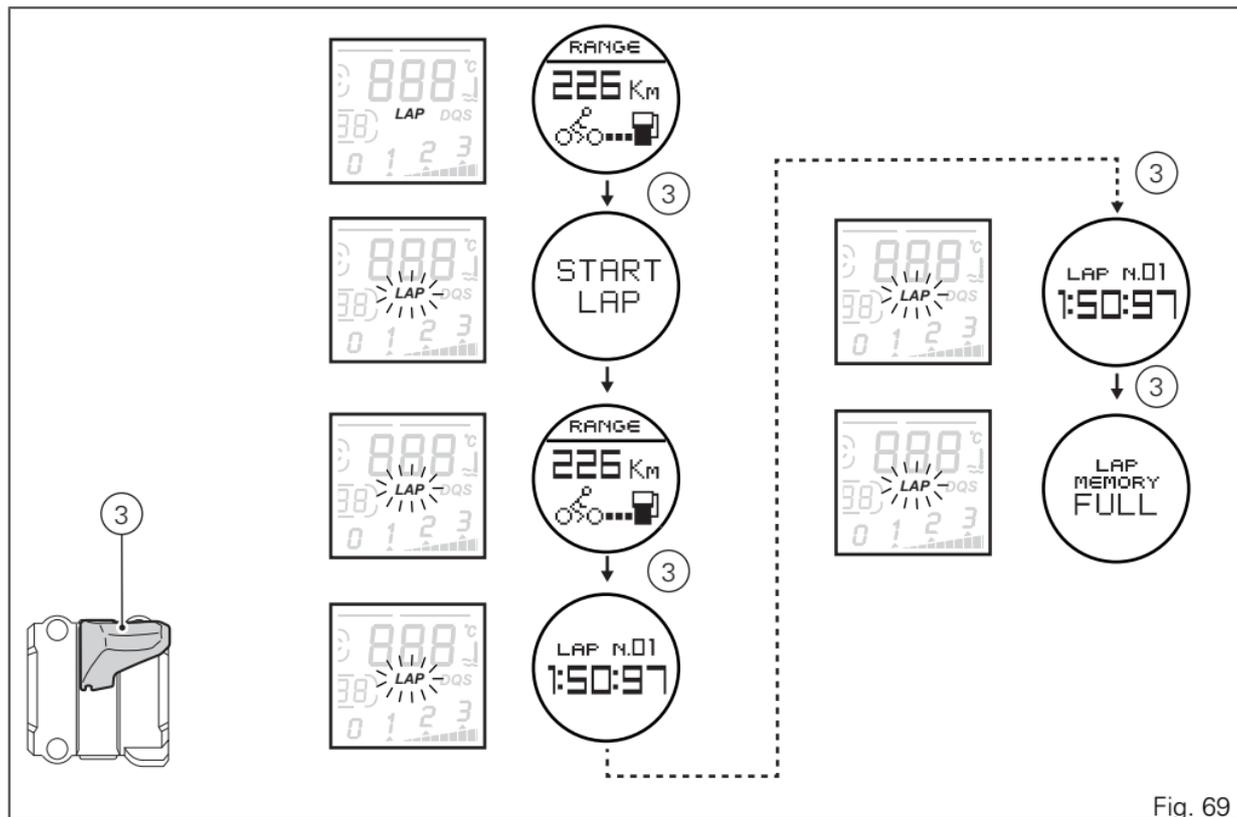


Fig. 69

Stored LAP display function

This function displays the stored LAPs.

To display the function, enter the "Setting" menu page 101 and access the "LAP" page.

In the next display, press the reset button (4) showing "MEMORY".

The instrument panel displays the information as follows.

Round display (B):

- the number of the displayed lap (ex: N.1);
- "NEXT" to display the next LAP;
- "RESET" to delete all the stored times.

To exit, select "EXIT" and press the reset button (4).

Main display (A):

- the time to the upper left (ex: 1:50:97);
- the maximum speed reached in the registered LAP to the upper right;
- the number of maximum RPMs reached in the registered lap at the bottom.



Note

The MAX stored speed is indicated on the main display (A) (increased by 8%). If MAX speed reading exceeds 299 km/h (186 mph) while the information is stored, speed reading is displayed (example: 316 km/h).

If there is no reading in the memory, the 30 times are shown, with the display showing "0.00.00", MAX rpm = 0 and MAX speed = 0. If while registering the LAP the engine reaches the threshold that precedes the rev limiter or rev limiter threshold, the relative light "Over Rev" (9) will turn on when displaying the stored times. To display other stored times, select "NEXT" and press the reset button (4); the next lap will be displayed each time the reset button (4) is pressed. To delete all the stored times, select "RESET" and press the reset button (4) for 3 seconds.



Note

If the stored times are deleted while the LAP function is active, it will be automatically deactivated.

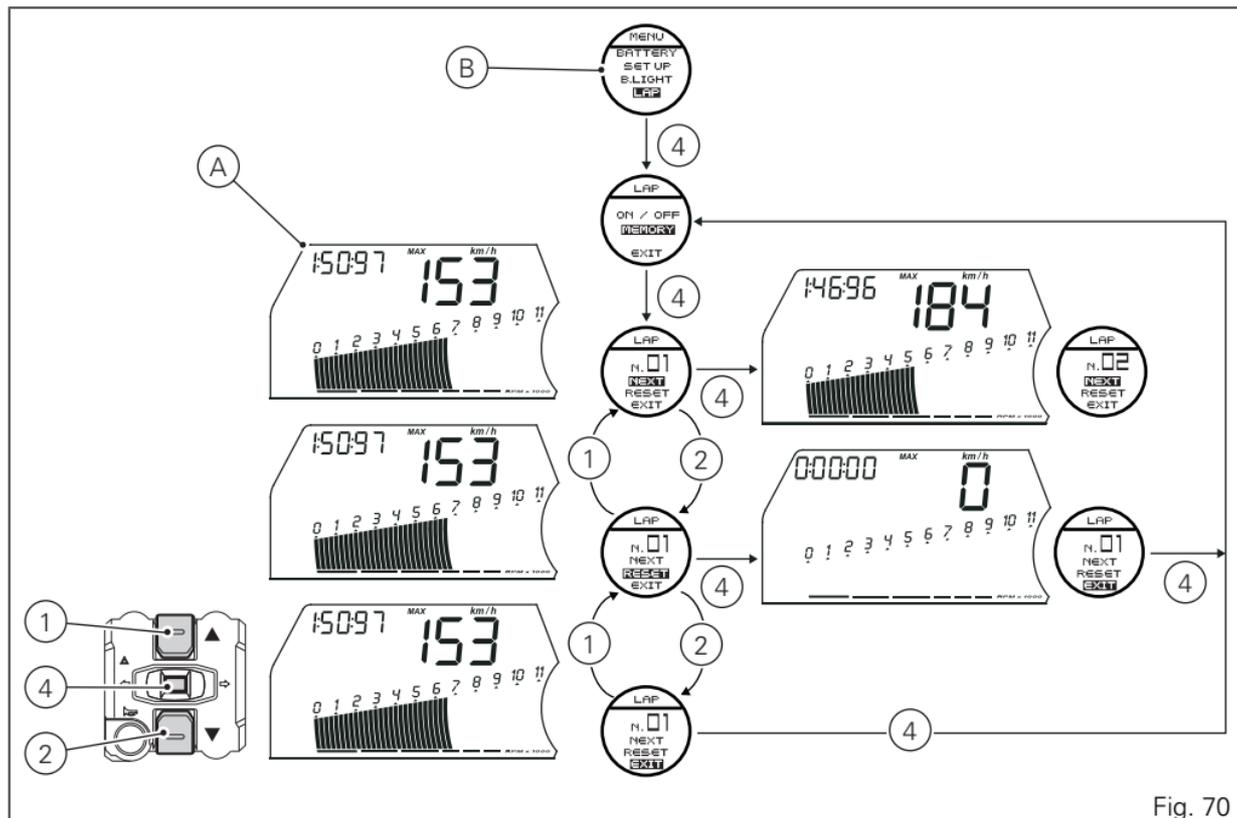


Fig. 70

Digital RPM indication function

This function displays the number of RPMs for improved accuracy when setting idle rpm.

To display the function, enter the "Setting" menu page 101 and access the "RPM" page.

The display shows the numerical value of the RPM with a precision of 50 rpm.

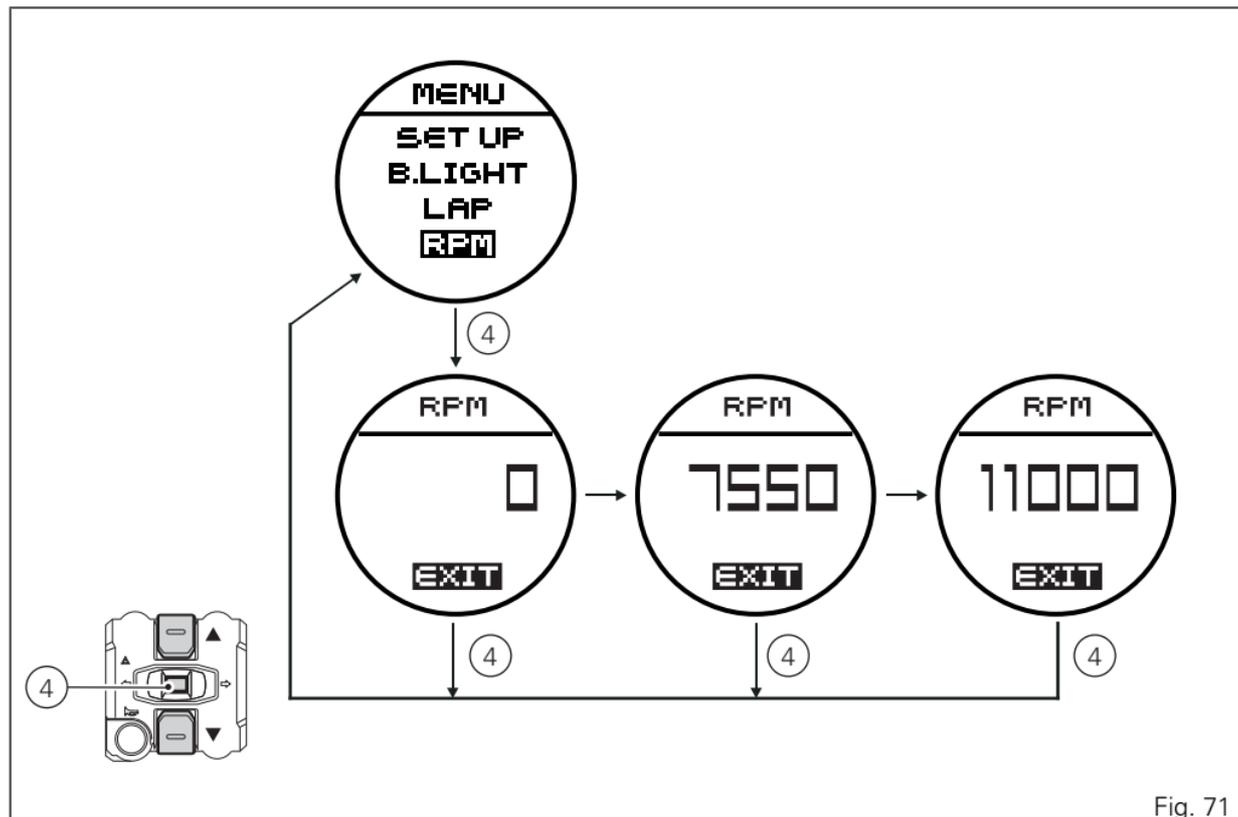


Fig. 71

Clock setting function

This function allows adjusting clock.

To display the function, enter the "Setting" menu page 101 and access the "CLOCK" page.

In the next display, press the reset button (4) showing "SET UP" for 3 seconds to proceed with the actual setting.

"SET CLOCK" appears on the round display (B) to indicate that the clock is being set; the time is set on the main display (A).

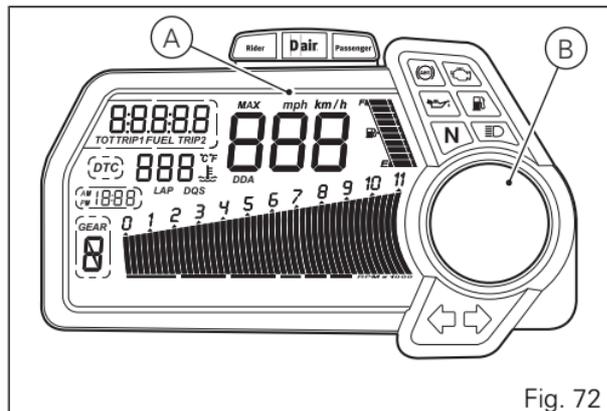


Fig. 72

Clock Setting

When you access this function, the text "AM" flashes; if you press button (2) "PM" flashes; if you press the button (2) you will return to the previous step (if it is 00:00, when switching between "AM" to "PM", 12:00 will be displayed); press button (1) to shift to hour setting, hours will start flashing.

Each time you press the button (2), the digit will increase by one hour. If you hold button (2) down, the number increases cyclically in steps of one hour every second (when the button is held depressed, the hours do not flash).

Pressing button (1) gives access to the minute setting mode; minutes start to flash. Each time you press the button (2), the digit will increase by 1 minute. If you

hold the button (2) down, the count increases cyclically in steps of 1 minute every second. If button (2) is kept pressed for more than 5 seconds, steps increase in steps of 1 every 100 m (seconds will not flash while button (2) is pressed). Pressing button (1) the indication of the new time will flash and "MEM" will appear on the round display. To confirm (store) the new set time press the reset button (4). To quit, select "EXIT" and press the reset button (4).



Note

In case of battery off, when the Voltage is restored and upon next Key-On, clock will have to be set again (it will automatically start counting from 00:00).

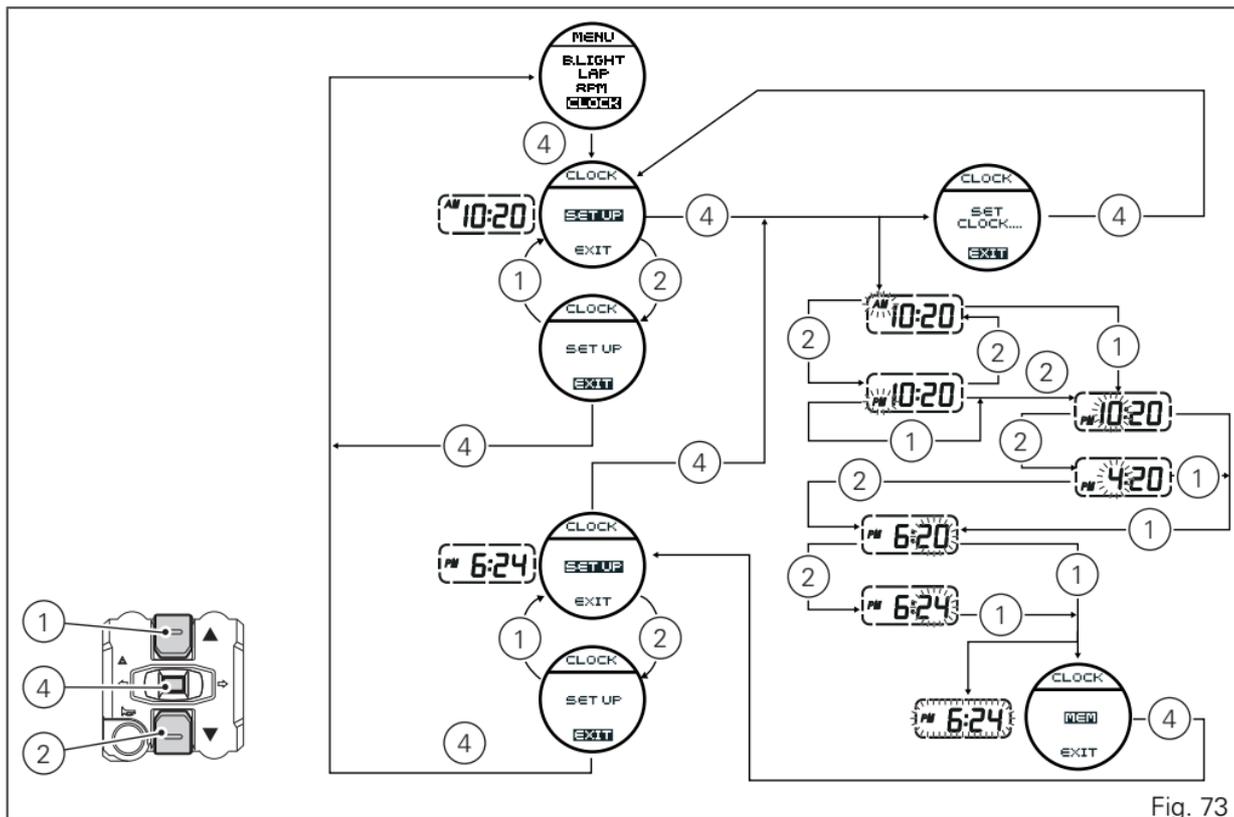


Fig. 73

D-Air kit number indication

This function allows displaying the number of the D-Air® specific kit installed onboard the vehicle.

The KIT unique number identifies the AIRBAG system installed on the motorcycle. It corresponds to the number of SIM CARDS sold together with the Rider and Passenger jackets.

To display the number of AIRBAG KIT installed on the motorcycle enter the Setting Menu, use buttons (1) and (2) to select AIRBAG and press button (4). Press button (4) again to quit.

For details about the operation and/or specific instructions/recommendations refer to paragraph "The D-Air® system".

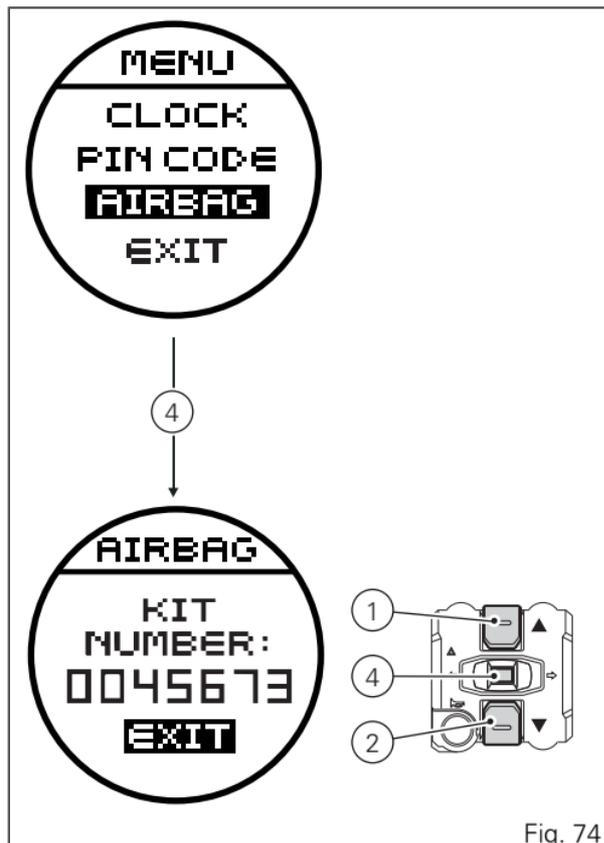


Fig. 74

Immobilizer system

For improved antitheft protection, the motorcycle is equipped with an IMMOBILIZER, an electronic system that inhibits engine operation whenever the ignition switch is turned off.

The grip of each ignition key contains an electronic device that modulates the output signal from a special antenna in the headlight fairing when the ignition is switched On. The modulated signal acts as a password (which is different at each start-up) and tells the ECU that an "authorised" ignition key is being used to start up the engine. When the ECU recognises the signal, it enables engine start-up.

Keys

The Owner receives a set of keys comprising:

- 1 active key (1);
- 1 passive key (2).

They contain the code used by the "Hands free" system for the Key-On, in different modes.

The active key (1) is the one that is normally used and has a button (A) that when pressed makes the metal part exit (B).

The metal part returns inside the grip by pushing it in.

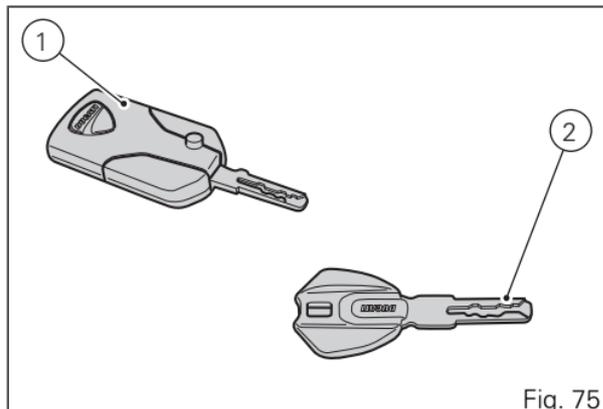


Fig. 75

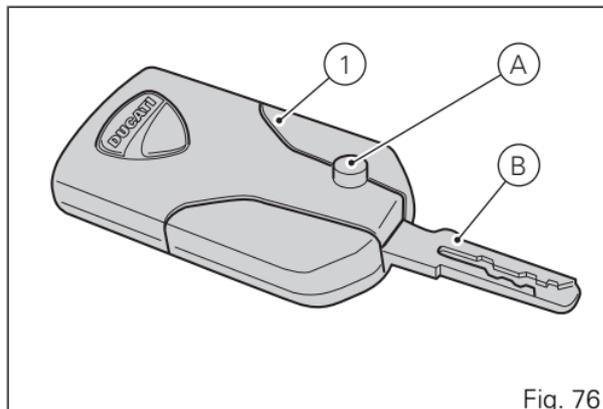


Fig. 76

The key contains a battery that must be replaced when the message "low level" is displayed under the key and battery symbols when the instrument panel is turned on.



Note

In this case, replace the battery as soon as possible.

When the charge level goes below a certain limit, the key can only work in passive mode, like the passive key: in this case, the instrument panel will not display any message.



Fig. 77



Warning

Do not ride with the key (active or passive) inserted in the lock of the tank cap or in the seat lock as it could come out and represent a potential danger. Furthermore, if bumped, the key mechanism and the integrated circuit could be damaged.

Also riding in poor weather conditions with the key inserted could cause damage to its integrated circuit.

Do not leave the key on the motorcycle when washing it as it could be damaged, not being watertight.

Replacing the battery in the active key

Only use 3 Volt CR 2032 lithium ion batteries.



Note

The keys do not need to be reprogrammed after replacing the battery.

Remove the metal part of the battery.

Use a large sized coin to pry open the shells of the plastic grip (2 euro coin) as shown in the figure.



Important

Insert the coin only in the indicated point. Do not other use other objects inserted in points that are different than what is shown, as it could damage the integrated circuit and/or the protective gasket.

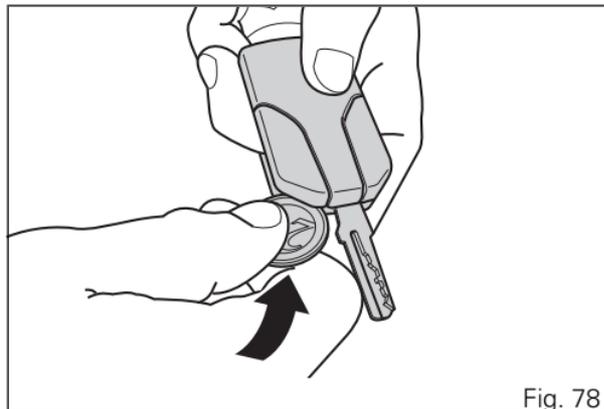


Fig. 78

Once the plastic shells have been separated, remove the printed circuit board (1) prying it up GENTLY with a small flat screwdriver, as shown in the figure.



Important

Insert the point of the flat screwdriver just under the printed circuit board, being very careful not to damage it. Do not apply force on the battery or battery holder.

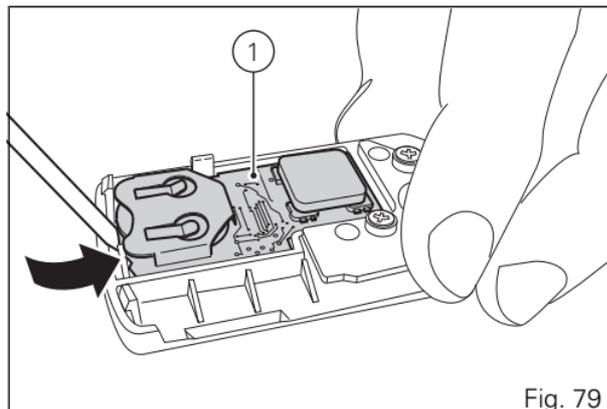
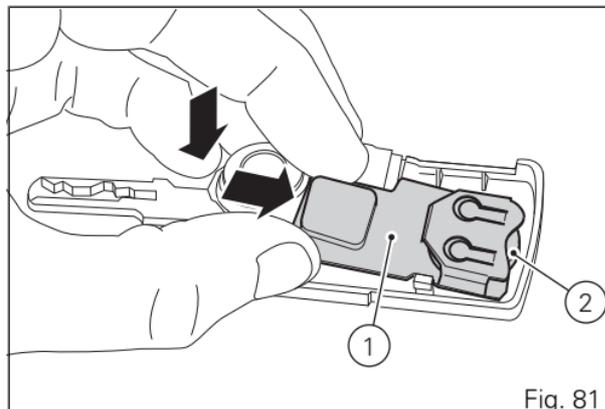
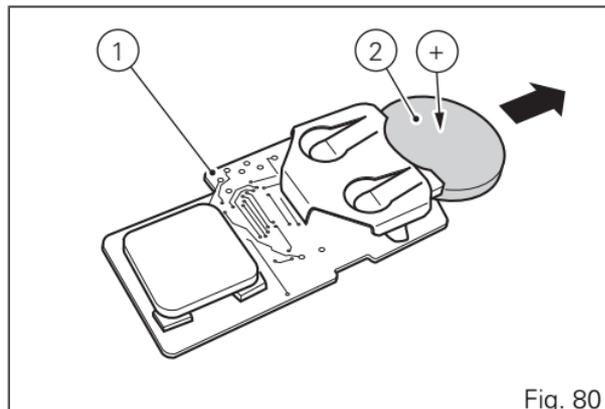


Fig. 79

Remove the battery (2) from the printed circuit board (1) and replace it with a new one.
Pay attention to polarity: the positive pole (+) must face upward.

⚠ Important
Only use the required type of battery.

Reinsert the printed circuit board (1) from the side with the battery (2) into the plastic shell.



Apply slight pressure on the antenna (3) of the printed circuit board until you hear a click.

Align the two shells of the grip and press on the area indicated by the arrows to reclose them.

Make sure that you hear a "click" upon closing and that the key is well closed.

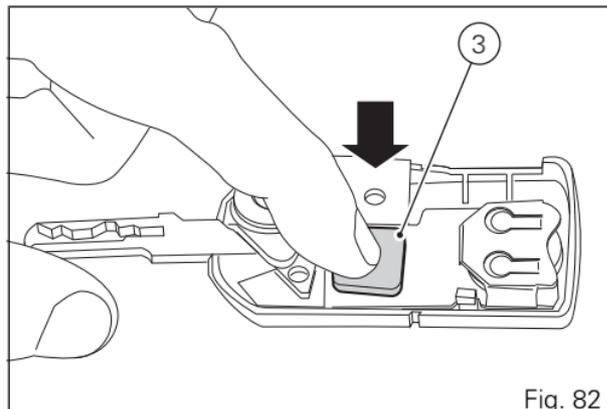


Fig. 82

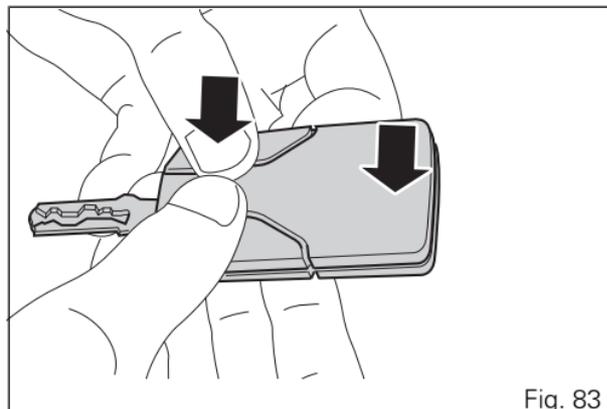


Fig. 83

Duplicate keys

If you need any duplicate keys, contact the Ducati Service network with all the keys you have left.

The Ducati Service Centre will program all the new keys as well as any keys you already have.

You may be asked to provide proof that you are the legitimate owner of the motorcycle.

The codes of any keys not submitted will be wiped off from the memory to make those keys unserviceable in case they have been lost.

Immobilizer override procedure

This procedure makes it possible to "temporarily" turn on the motorcycle if the HF (Hands Free) System is not working.



Note

The PIN CODE function must be activated by the user by entering your 4-digit PIN in the instrument panel, otherwise the motorcycle cannot be started temporarily in the case of a malfunction.



Warning

The motorcycle owner must activate (store) the PIN code; if there is already a stored PIN, contact an Authorised Ducati Dealer to have the function "reset". To perform this procedure, the Authorised Ducati Dealer may ask you to demonstrate that you are the owner of the motorcycle.

PIN CODE activation function

To display the function, enter the "Setting" menu page 101 and access the "PIN CODE" page.



Note

If "MODIFY" appears when accessing this function, this means that there is already a stored PIN and therefore the function is already active.

When accessing the function, "NEW PIN" and four dashes "- - - -" will appear on the round display; now enter a 4 digit code.

Entering the code:

each time you press the button (2) the displayed number increases from "0" to "9" and then returns to "0"; to confirm the number, press the reset button (4).

Repeat the procedure until inserting the fourth digit.

Press the reset button (4) again to confirm.

"OK" and "EXIT" will appear on the display. To confirm the PIN that was entered, press the reset button (4) again showing "OK". "NEW PIN MEM" will appear on the display for 3 seconds to confirm that the PIN was stored. At the end of the 3 seconds, the instrument panel exits automatically from the display

and returns to the "setting" menu. From this moment, "MODIFY" will be displayed when accessing the "PIN CODE" function and the PIN can be changed again.

Pin code stored (10).

Pin code not stored (11).

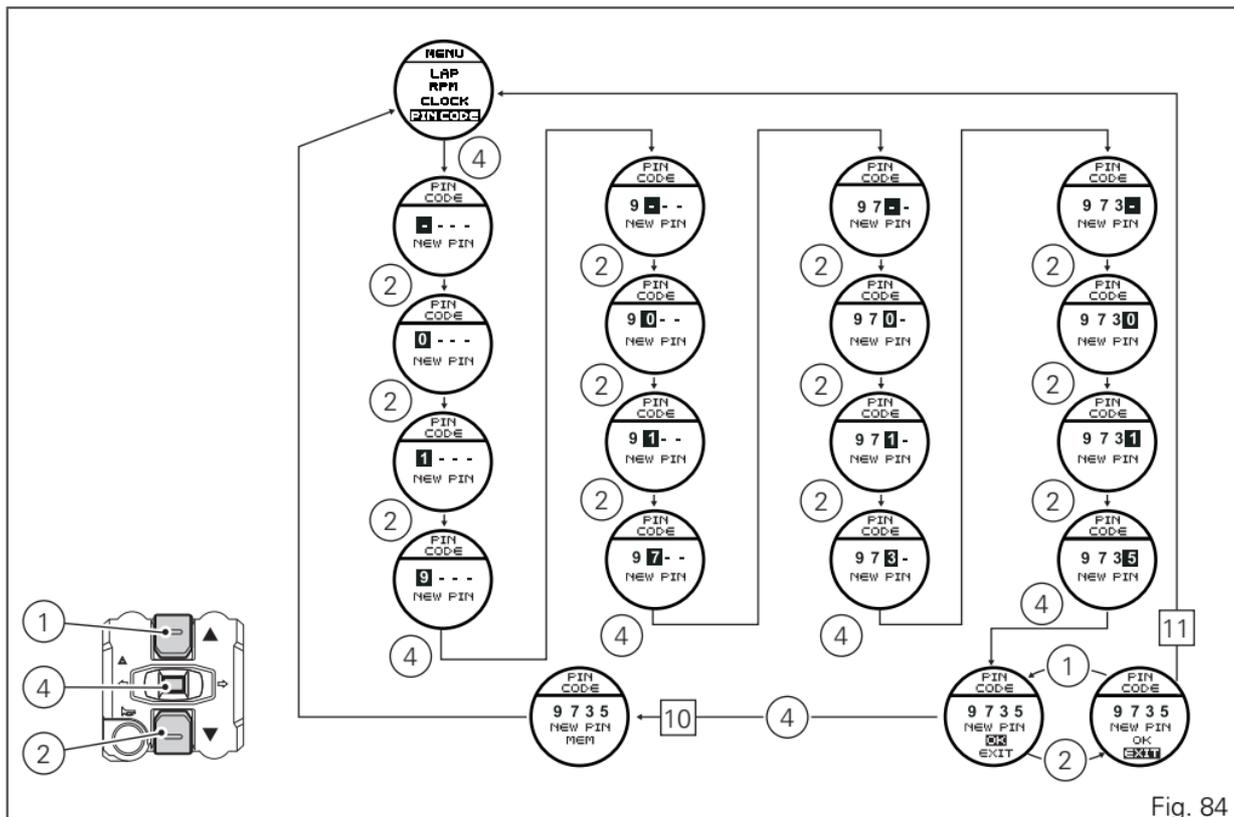


Fig. 84

PIN CODE change function

This function changes your four number PIN CODE. To display the function, enter the "Setting" menu page 101 and access the "PIN CODE" page.



Note

If "NEW PIN" and the dashes "----" appear when accessing this function, this means that the function was not active as the PIN CODE was never entered. Enter your PIN as described in the previous paragraph "PIN CODE activation function".

When accessing the function, "MODIFY" will appear on the round display; press the reset button (4) showing "MODIFY" to modify the PIN.



Note

To change the PIN code, you must remember the already stored PIN.

"OLD PIN" and four dashes "----" will appear on the round display; now enter the previously stored 4 digit code.

Entering the "old" PIN: each time you press the button (2) the displayed number increases from "0" to "9" and then returns to "0".

To confirm the number, press the reset button (4). Repeat the procedure until entering the fourth digit. Press the reset button (4) again to confirm. "OK" and "EXIT" will appear on the display.

To confirm the "old" PIN that was entered, press the reset button (4) again showing "OK".

If the code is not correct, "OLD PIN WRONG" will appear for 3 seconds and then the instrument panel will return displaying "MODIFY" so you can repeat the attempt of entering the "old" code.

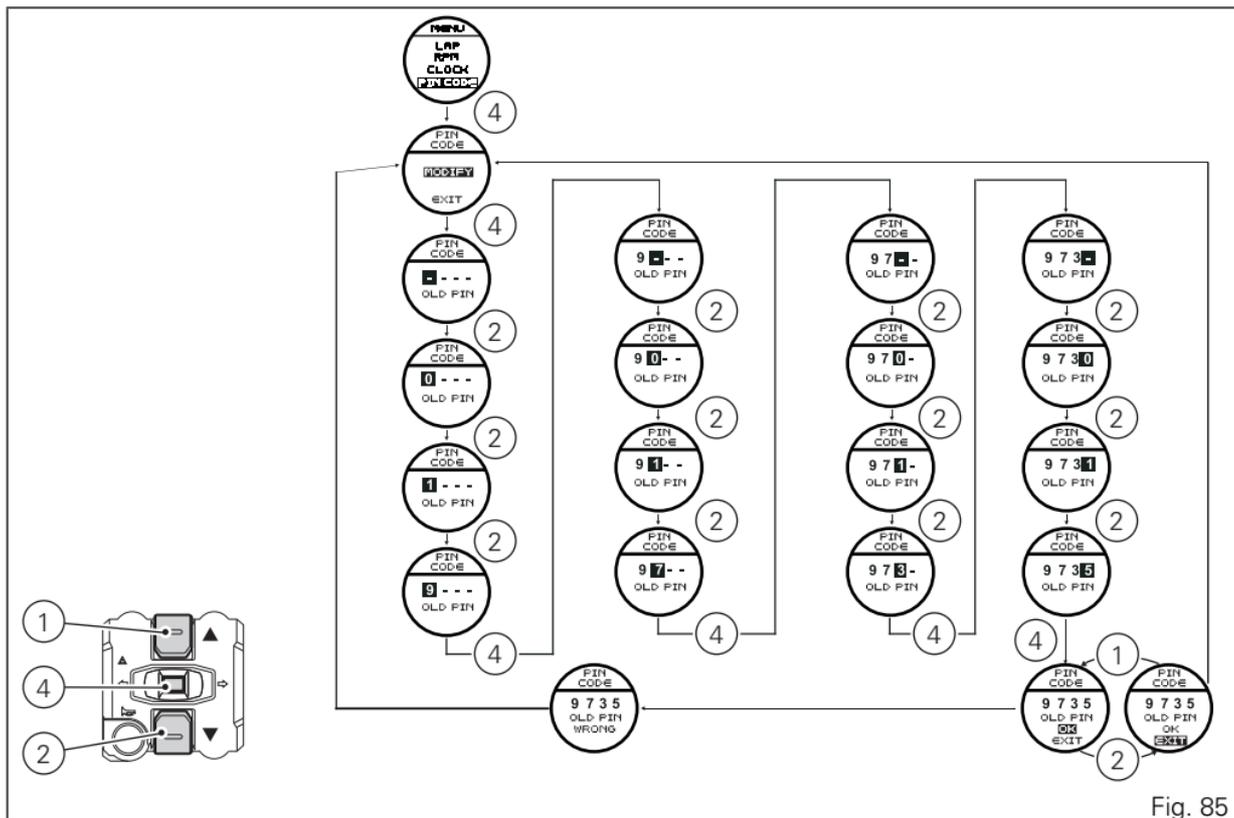


Fig. 85

If the code was entered correctly the message "NEW PIN" and four dashes "----" will appear on the round display; now enter the "new" 4 digit code. Entering the "new" PIN: each time you press the button (2) the displayed number increases from "0" to "9" and then returns to "0".

To confirm the number, press the reset button (4).

Repeat the procedure until entering the fourth digit.

Press the reset button (4) again to confirm.

"OK" and "EXIT" will appear on the display.

To confirm the PIN that was entered, press the reset button (4) again showing "OK".

"NEW PIN MEM" will appear on the display for 3 seconds to confirm that the PIN was stored.

At the end of the 3 seconds, the instrument panel exits automatically from the display and returns to the "setting" menu.

The PIN CODE modification procedure is complete.



Note

You can change your PIN CODE for an unlimited number of times.

Light control

Headlight control

This function allows you to reduce current consumption from the battery, by automatically managing headlight switching-off.

Upon Key-On, low and high beams are Off. When the engine is started, the low beam lights turn on automatically. From this moment, “normal” operation is activated: switch to high beam (i.e. high beam and low beam light on at the same time) using button (3) or operate the “FLASH” signal (using button 3). If engine is not started upon key-on, it is anyway possible to switch the lights on by pushing the button on the LH high/low beam switch (button 3).

The low beam lights are turned on the first time it is pressed; from this moment, the same button can be used to switch on (and off) the high beam light (if the engine is not started within 60 seconds, the low beam or high beam light that was turned on will turn off).

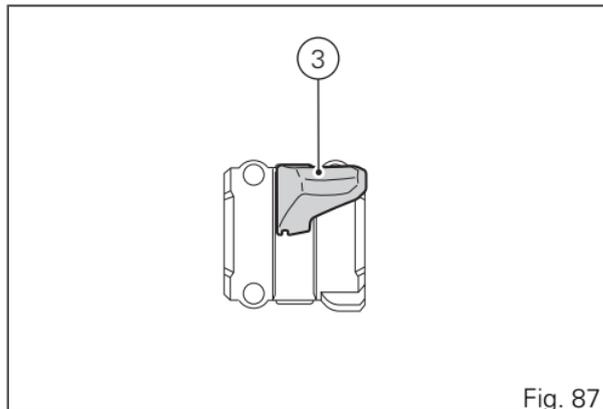


Fig. 87

If the headlight was turned on before starting the engine with the procedure described above, the headlight turns off automatically when starting the vehicle and will turn ON again when the engine has been completely started.

Turn indicators (Automatic Reset)

Turn indicators are automatically reset by the instrument panel.

After activating one of the two turn indicators, user can reset them using the reset button (4). If turn indicator is not manually "reset", instrument panel will automatically disable the turn indicator after having travelled 500 m (0.3 miles) since it was activated.

The counter for the distance travelled for automatic deactivation is activated at speeds below 80 Km/h (50 mph).

If the calculation of the distance for automatic deactivation is activated and then the motorcycle exceeds a speed of 80 km/h (50 mph), the calculation is interrupted and will restart when the speed returns below the indicated threshold.

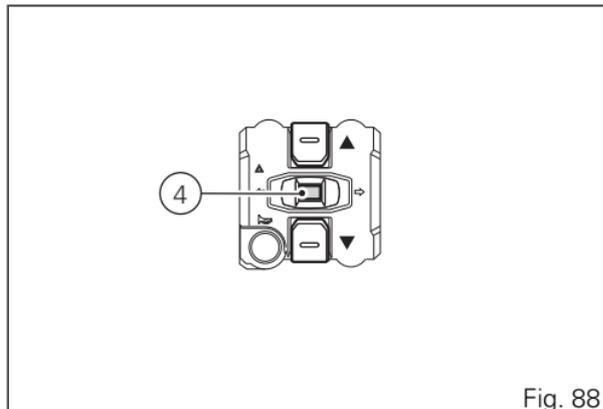


Fig. 88

Hazard

All turn indicators can be turned on together (Hazard function) as emergency indicator.

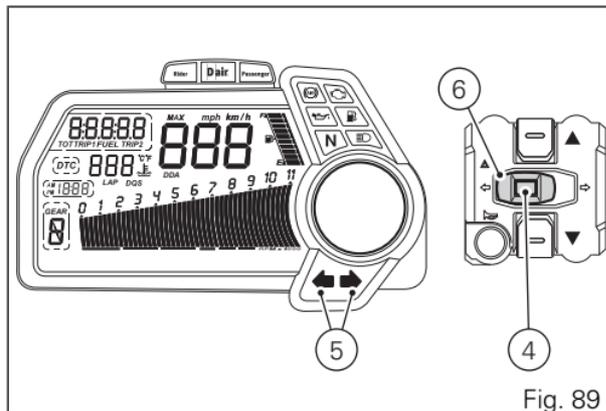
To activate the Hazard function (i.e., all 4 turn indicators) you must hold for 3 seconds the switch that normally activates the left turn indicator (button (4) in position (6)).

The Hazard function can only be activated with Key-On (not with Key-Off).

When the Hazard function is active, both warning lights (5) on the Instrument panel will flash at the same time.

To disable the Hazard function (switch off the 4 turn indicators) just press once the button that normally activates the left turn indicator (button (4) in position (6)) or press the turn indicator cancel button (button (4) in central position).

The Hazard function can also be disabled with Key-Off: just press the switch that normally activates the left turn indicator once (button (4) in position (6)).



As soon as the Hazard function is activated, the 4 turn indicators will stay on even if rider turns the key-Off. They will turn off automatically after 120 minutes (2 hours), unless the rider "manually" turns them off earlier thereby stopping the automatic countdown.

“Parking” function

This function allows enabling the "PARKING" mode. The "PARKING" function activates the front and rear parking lights when the motorcycle is turned off, so it is visible when parked.

The function is activated by pressing the button (2) for 3 seconds during the first 60 seconds after the motorcycle was turned off.

Once this function has been enabled, the indication will be shown on the round display for 5 seconds, and lights will stay on for 2 hours. After this time, they will automatically turn off.

To interrupt the function, turn the vehicle on and off.



Note

If there is a sudden interruption in the battery while the function is active, the instrument panel will disable the function when the voltage is restored.



Fig. 90



Warning

The frequent use of this function can considerably reduce the battery charge; Ducati recommends using this function only when really necessary.

Warning reading "Hold the button to lock the steering"

This indicates that rider must hold button (1) depressed to engage the steering lock.

The warning stays displayed for 2 seconds; after this time, if steering is in the correct position (fully turned to the right or left), the system locks it and the display will read "STEERING LOCKED", as described on the following page.



“Steering locked” on indication

This function informs that the steering lock was activated.

The steering lock can be activated during the first 60 seconds after turning off the vehicle by pressing down the “RUN” button for 3 seconds.

If the steering lock was activated correctly, the instrument panel will show the indication in the round display for 5 seconds.



Note

The steering lock can only be activated when the steering is in position.



Fig. 92

Indication of incorrect position of the red starter button

This message warns the user that the button should be returned to the "upper" position in order to ensure that there is not an excessive current absorption by the system.

Important

This could lead to battery discharge in a short time.

Any incorrect position is detected within the first 60 seconds after vehicle switch-off (Key-Off).

If you press the starter button (1) to switch off (Key-Off), or engage the steering lock, after 5 seconds the system activates the warning "RED SWITCH NOT RELEASED" as a flashing message.



Fig. 93

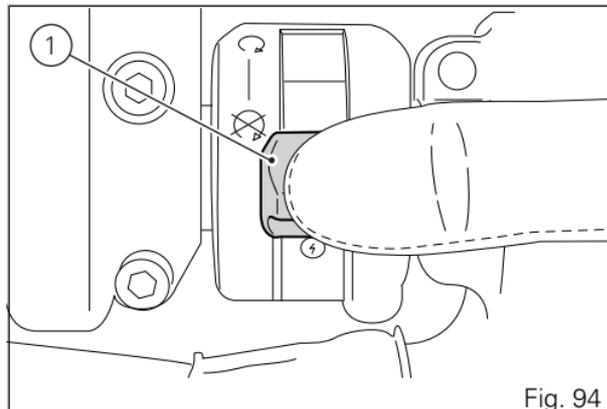


Fig. 94

Button (1) must be taken back to its upper position in order to avoid any power absorption, which could drain the battery.
In this case, report the fault to Dealer or Authorised Service Centre.

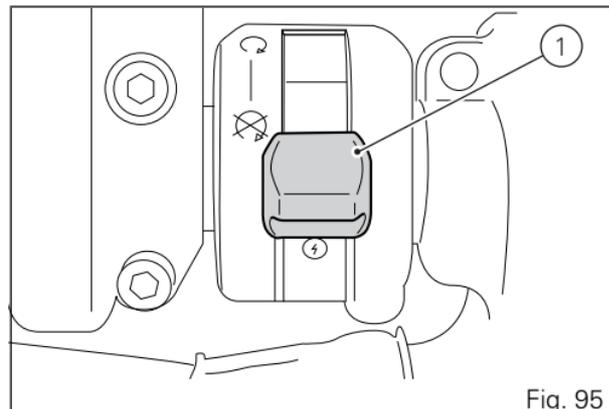


Fig. 95

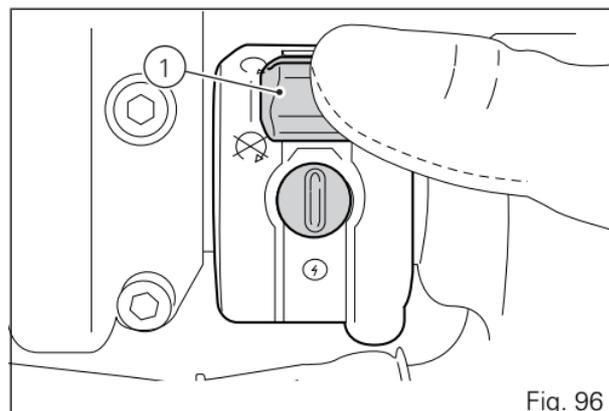


Fig. 96

Changing unit of measurement

This function allows you to change the units of measurement of the displayed values.

In order to enter this menu it is necessary to start the vehicle by holding down contemporaneously both the flash button (3) and the reset button (4) for at least 3 seconds.

After entering this menu, "UNITS" is displayed; to set the units of measurements press the reset button (4). The instrument panel displays the values that can be modified; use buttons (1) and (2) to select the value to modify and press the reset button (4) again.



Note

In this MENU all other functions are disabled.

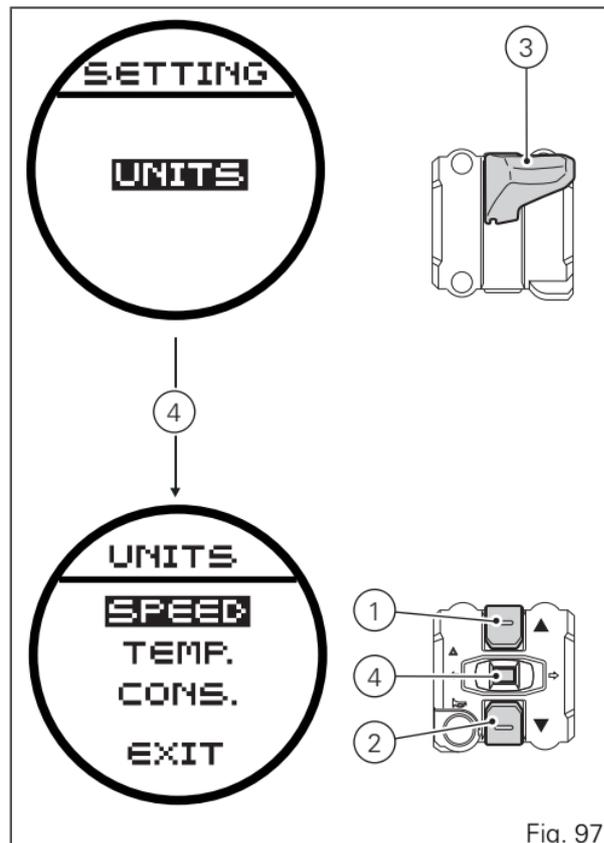


Fig. 97

"SPEED" setting

The arrows indicate the current setting, with buttons (1 and 2) it is possible to select the new setting.

To store the new setting it is necessary to press the reset button (4) for 3 seconds.

After the setting is stored, system quits the page and rider should do a Key-Off; upon next Key-on any new unit of measurement will be set.

1) Km/h: by setting this condition the following values will have the same units of measurement:

- TOT, TRIP1, TRIP2, RANGE: Km
- Vehicle average speed: Km/h

2) mph: by setting this condition the following values will have the same units of measurement:

- TOT, TRIP1, TRIP2, RANGE: miles
- Vehicle average speed: mph

"TEMP." setting

The arrows indicate the current setting, with buttons (1 and 2) it is possible to select the new setting.

To store the new setting it is necessary to press the reset button (4) for 3 seconds.

After the setting is stored, system quits the page and rider should do a Key-Off; upon next Key-on any new unit of measurement will be set.

3) °C: by setting this condition the following values will have the same units of measurement:

- Engine coolant temperature and T_AIR: °C

4) °F: by setting this condition the following values will have the same units of measurement:

- Engine coolant temperature and T_AIR: °F

"CONS." setting

The arrows indicate the current setting, with buttons (1 and 2) it is possible to select the new setting.

To store the new setting it is necessary to press the reset button (4) for 3 seconds.

After the setting is stored, system quits the page and rider should do a Key-Off; upon next Key-on any new unit of measurement will be set.

5) Km/L: by setting this condition the following values will have the same units of measurement:

- CONS. and CONS. AVG: km/L

6) L/100: by setting this condition the following values will have the same units of measurement:

- CONS. and CONS. AVG: L/100

7) mpgal UK : by setting this condition the following values will have the same units of measurement:

- CONS. and CONS. AVG: mpgal UK

8) mpgal USA : by setting this condition the following values will have the same units of measurement:

- CONS. and CONS. AVG: mpgal USA

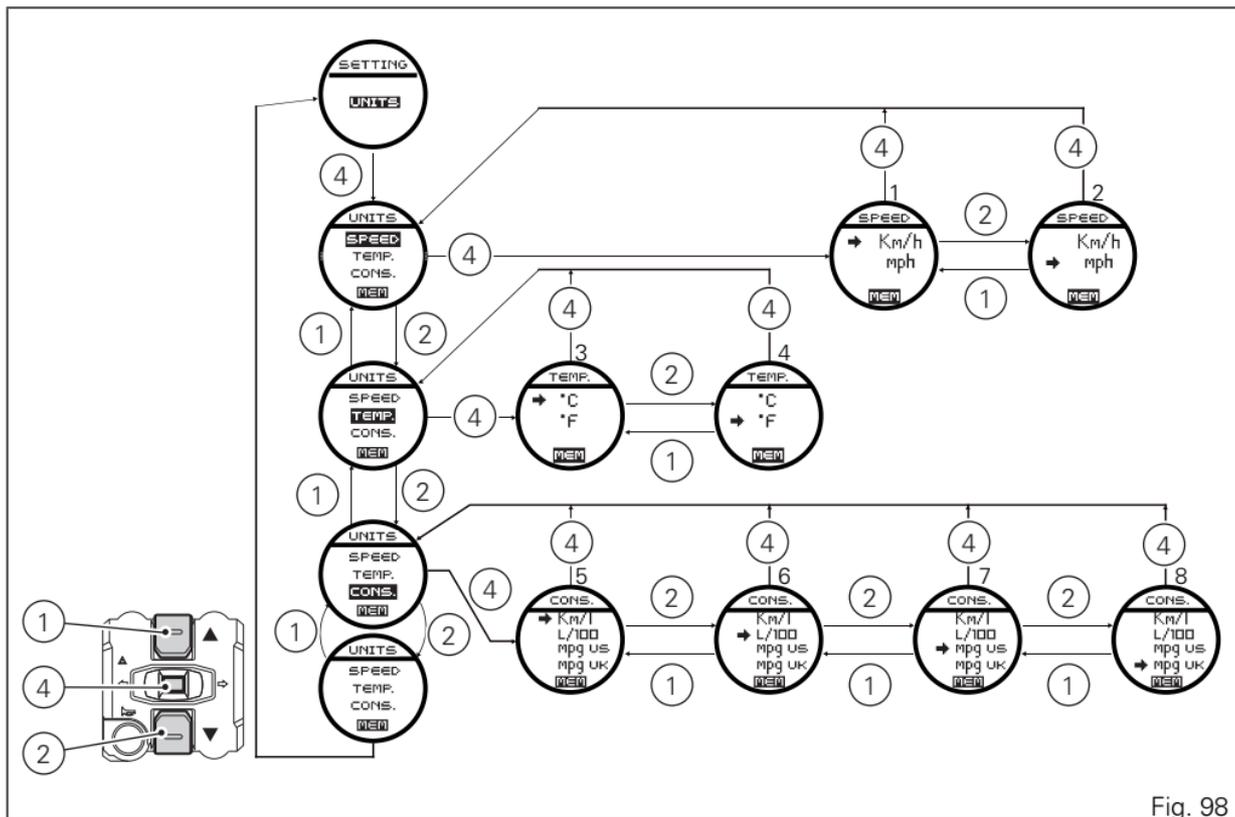


Fig. 98

Controls



Warning

Do not tamper, remove or move the control unit of the D-Air[®] system. Please contact a Ducati Dealer or Authorised Service Centre.

Position of motorcycle controls



Warning

This section shows the position and function of the controls used to ride the motorcycle. Be sure to read this information carefully before you use the controls.

- 1) Instrument panel.
- 2) "Hands free" system.
- 3) Left switch.
- 4) Clutch lever.
- 5) Rear brake pedal.
- 6) Right switch.
- 7) Throttle twistgrip.
- 8) Front brake lever.
- 9) Gear change pedal.
- 10) D-Air[®] instrument panel.
- 11) D-Air[®] control unit.

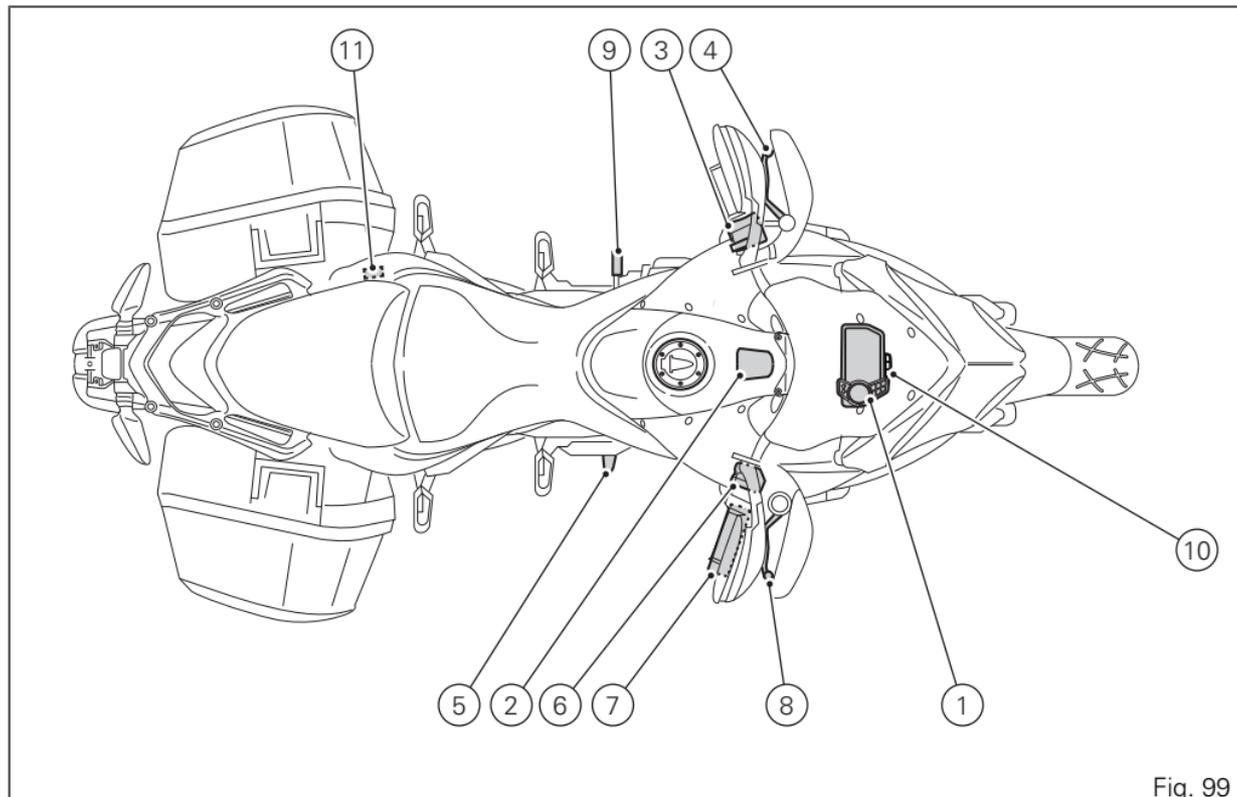


Fig. 99

"Hands free" system

The Hands free system consists of:

- 1) Hands free lock;
- 2) Antenna;
- 3) Active key;
- 4) Passive key;
- 5) Electric plug (Optional).

The "Hands free" lock (1) is located on tank front side and can be accessed by removing lid (8, Fig. 102).

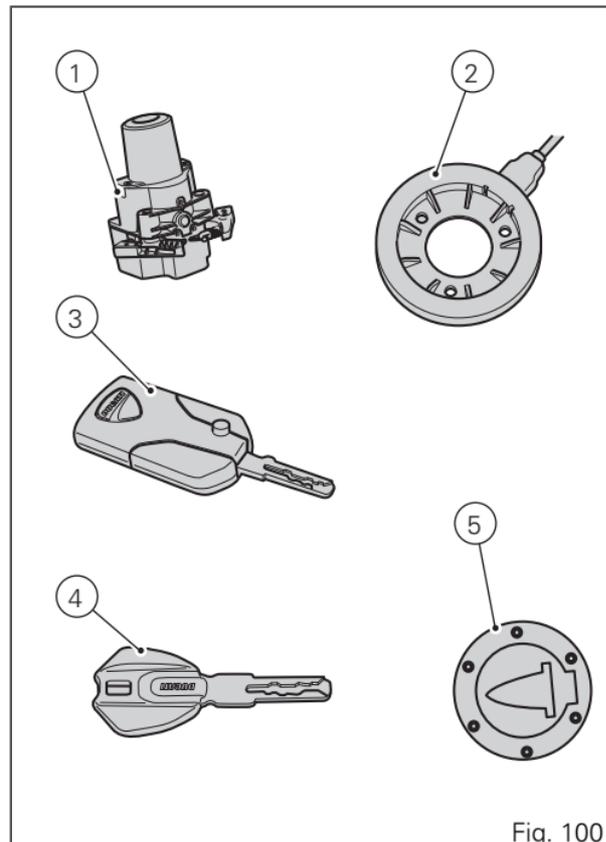


Fig. 100

Hands free system "Key-On" and "Key-Off"

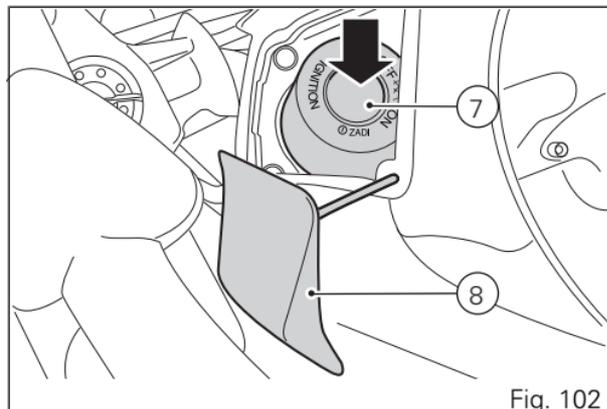
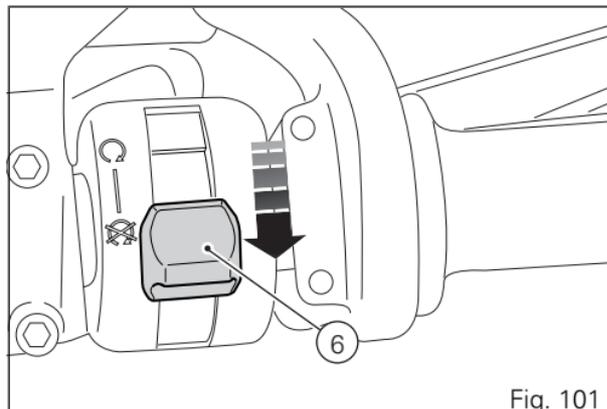
Key-On consists in turning on the hands free system and all electronic devices. Key-Off consists in turning off the hands free system and all electronic devices, and ensures engine is turned off. Key-On is done using button (6) on the right switch on the handlebar or using the emergency button (7) on the Hands free lock. Key-Off is done using button (6) on the right switch on the handlebar or using button (7) on the Hands free lock.

Warning

Button (7) remains hidden under lid (8). Remove lid to reach button (7).

Note

Using one of the two buttons (6) or (7) does not exclude using the other one, namely if one is pressed for switching on, the other one can be used for switching off, and vice versa



Key-On can only occur in the presence of one of the two keys (3) or (4) or using the pin code. Key-Off can also occur without any key (3) or (4). Key-Off occurs when motorcycle speed is equal to zero, by pressing button (6) on the handlebar or by pressing the Hands free button (7). When speed other than zero, perform key-off by pressing the Hands free button (7).



Note

When battery is flat, the active key (3) behaves as the passive one (4). Instrument panel shows when battery is flat.

The mechanical part (A) of the key (3) is used to open the fuel filler cap, the seat latch and bag locks. The metal part (A) of the key (3) remains hidden inside its housing, you can take it out by pressing button (B).

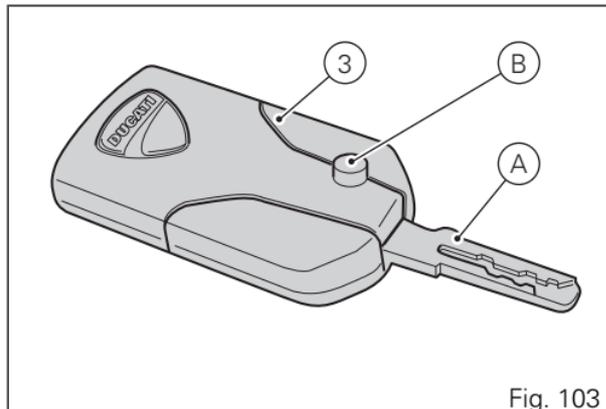


Fig. 103



Note

With the vehicle in "Key-On" and "engine off" condition, if the presence of the active key (3) is not detected for thirty consecutive seconds, the motorcycle will turn off automatically without any action by the rider.

Key-On/Key-Off using the red button on the handlebar with the active key

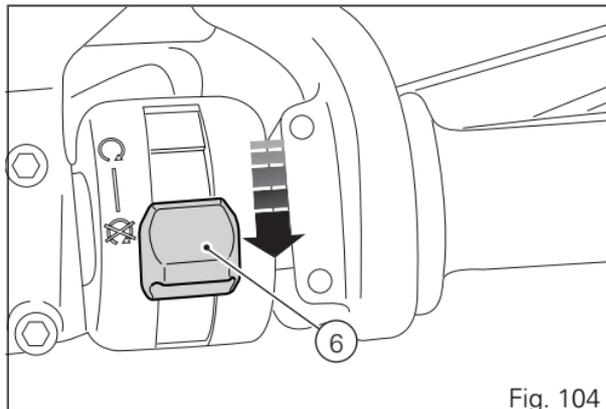
A Key-On can be performed by pressing the red button (6) on the handlebar in the HANDS FREE ON/OFF position and in the presence of the active key (3, Fig. 100).



Note

The active key (3) has a range of approx. 1.5 m, therefore it must be located within this range to be detected by the system.

Key-Off can be performed by pressing the red button (6) on the handlebar in the HANDS FREE ON/OFF position. It can also be performed without the key (3, Fig. 100) only if motorcycle speed is equal to zero.



Key-On/Key-Off using the button on the Hands free lock with the active key

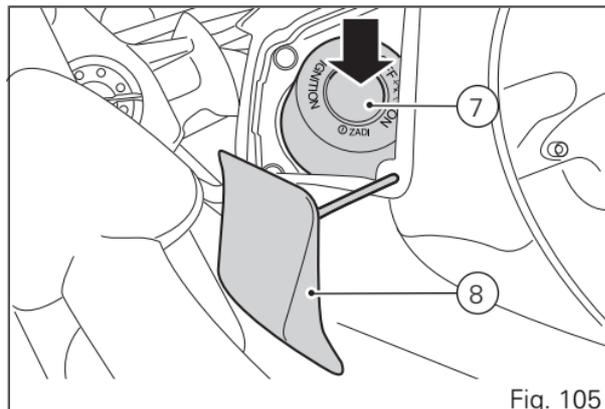
Key-On can be performed by pressing button (7) on the Hands free lock (1, Fig. 100) and with the presence of the active key (3, Fig. 100).



Note

The active key (3) has a range of approx. 1.5 m, therefore it must be located within this range to be detected by the system.

Key-Off can be performed by pressing button (7) on the Hands free lock (1, Fig. 100), also without the key (3, Fig. 100).



Key-On/Key-Off using the red button on the handlebar with the passive key

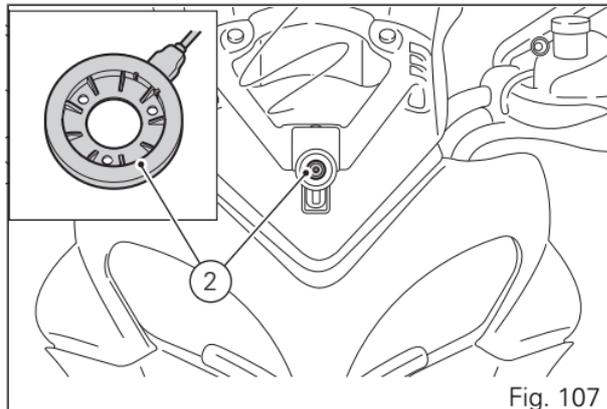
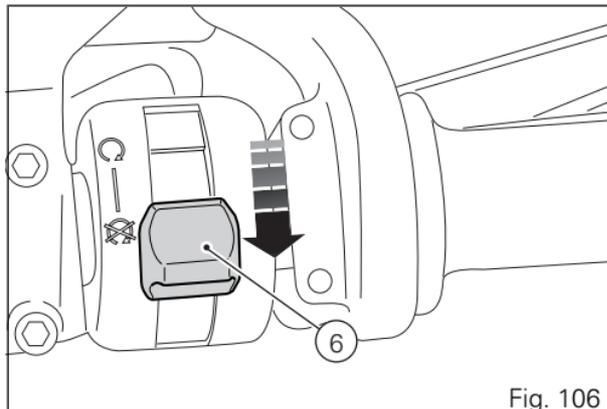
A Key-On can be performed by pressing the red button (6) on the handlebar in the HANDS FREE ON/OFF position and in the presence of the passive key (4, Fig. 100).



Note

The passive key (4) has a range of a few cm, therefore it must be positioned close to the antenna (2).

Key-Off can be performed by pressing the red button (6) on the handlebar in the HANDS FREE ON/OFF position. It can also be performed without the key (4, Fig. 100) only if motorcycle speed is equal to zero.



Key-On/Key-Off using the button on the Hands free lock with the passive key

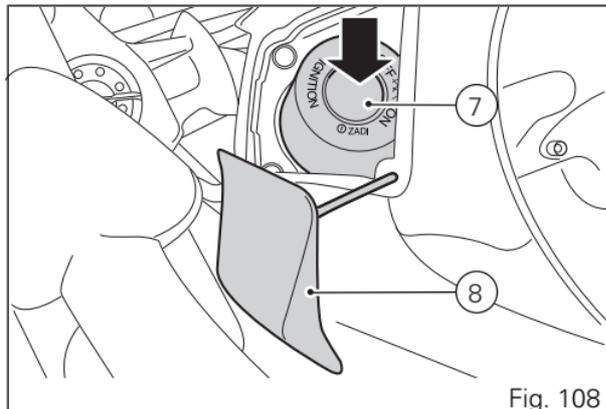
Key-On can be performed by pressing button (7) on the Hands free lock and with the presence of the passive key (4, Fig. 100).



Note

The passive key (4) has a range of a few cm, therefore it must be positioned close to the antenna (2).

Key-Off can be performed by pressing button (7) on the Hands free lock (1, Fig. 100), also without the key (4, Fig. 100).



Key-On/Key-Off using the pin code (immobilizer override)

Key-On can be performed by pressing button (7) on the hands free lock (1, Fig. 100) without the presence of the keys (3, Fig. 100) and (4, Fig. 100) and entering the pin code on the instrument panel.

Key-Off can be performed by pressing button (6) on the handlebar, from Engine On position to Engine Off position (Fig. 106).

After each Key-Off, if the key is not present upon next Key-On, the pin code must be entered. The pin code is set by the customer upon delivery of the motorcycle. The function is not enabled unless a pin code has been set. When the Hands Free button (7) is pressed, the instrument panel activates the backlighting and the round display to allow the rider to enter the four digit pin code. Entering the correct pin turns on the instrument panel and enables engine starting. Pin code must be entered within 120 seconds, after which a Key-Off occurs automatically.

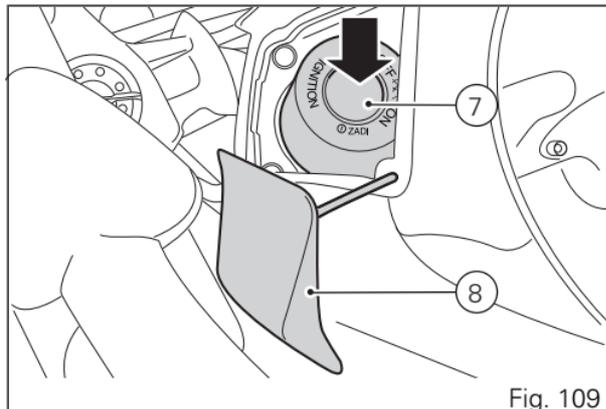


Fig. 109

Entering PIN CODE function for overriding purposes

This function allows the rider to "temporarily" turn on the motorcycle in case of HF (Hands Free) system "malfunction".

If the motorcycle cannot be turned on using the normal starter button, press the "emergency" Hands Free button (7), lifting lid (8), to activate the function. After having pressed the button, the instrument panel only activates the round display (B) (as well as the backlighting), to allow the rider entering the 4-digit PIN code.

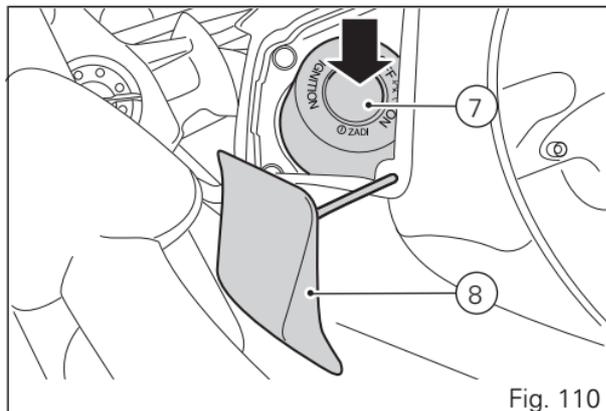


Fig. 110

Entering the code:

each time button (2) is pressed, the highlighted number increases from "0" to "9" and then goes back to "0"; to confirm the desired number press the reset button (4). Repeat the procedure until entering the fourth digit. Press the reset button (4) again to confirm.

If the code is incorrect (A), the Instrument Panel will return to the initial indication to allow you entering the code again.



Note

There is no limit to the number of times the code can be re-entered; the instrument panel will turn off automatically 120 seconds after any attempt to enter the code.

If the entered code is correct (B), the message "PIN OK" and the code flashing will be displayed for 4 seconds.

After 4 seconds, the instrument panel will return to the "normal" view (with all indications active).

From this moment, the vehicle can be started using the start button (Key-On).



Note

The vehicle can be started until a Key-Off is performed. If the problem still persists upon the next starting attempt, repeat the procedure from the beginning in order to start the motorcycle "temporarily" again.



Important

If this procedure is necessary in order to start the motorcycle, contact an Authorised Ducati Service Centre as soon as possible to fix the problem.

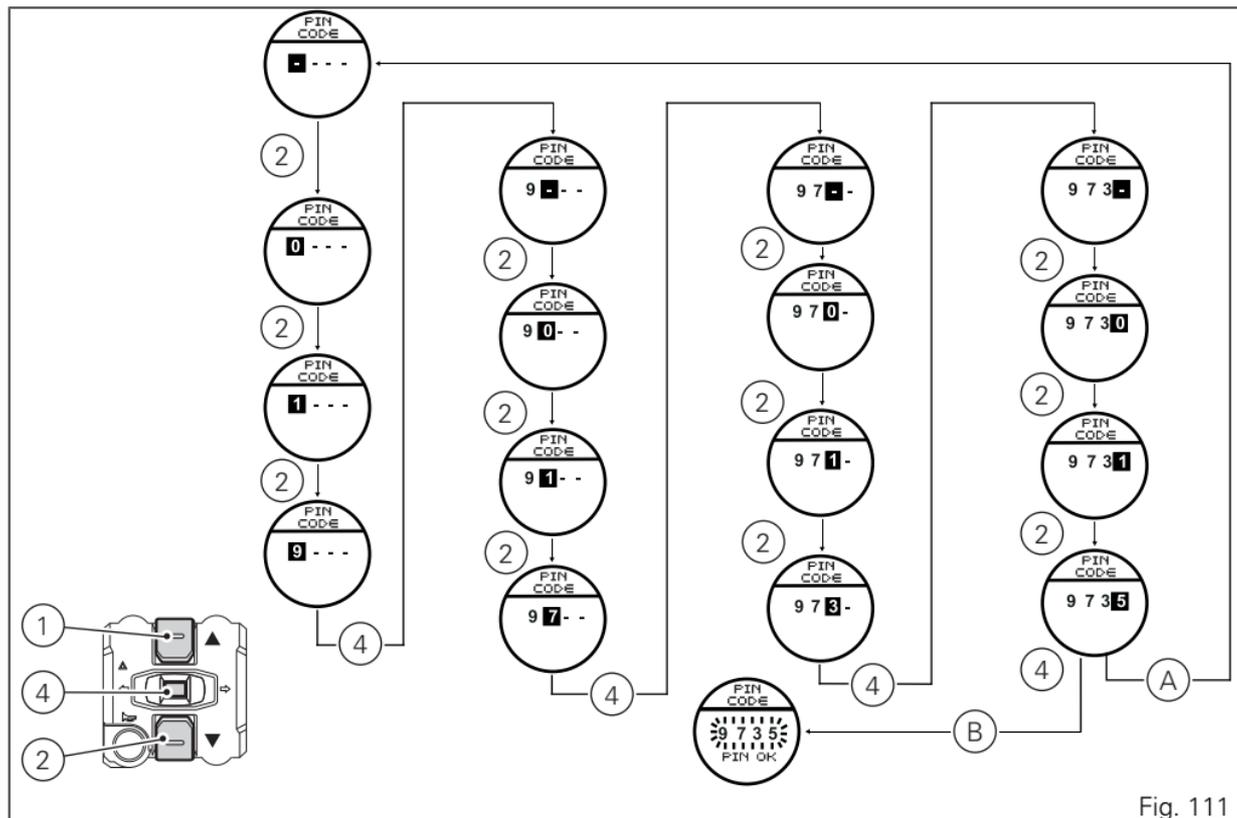


Fig. 111

D-Air system D-Air® device description



Warning

The D-Air® protection system was developed by DAINESE and tested by TÜV to be used on asphalt only. Therefore, in order to avoid any undesired activation of the Jacket and/or Waistcoat, the relevant electronic device must be disabled when riding off-road - by "off-road" we mean the track use as well. Warning: with Jacket/Waistcoat electronic device off, the rider and passenger protection is disabled.

D-Air® is an innovative system designed for riders' safety on the road. When riding on uneven roads or off-road it is compulsory to disable the device. It consists of two units: one including sensors and electronic components already installed on the vehicle, which recognises the motorcycle crash and fall conditions; the other one is an electronic unit that, together with the air system integrated in the garment (Jacket/Waistcoat), activates the airbag supplementary protection device.

The jacket/waistcoat provided with the D-Air® system can be worn by the motorcycle rider and passenger.



Important

The jacket/waistcoat with D-Air® system is not supplied with the bike and it must be purchased at a Ducati Dealer or authorised service centre.

When D-Air® is activated

The sensors installed on the vehicle (fork sensors and control unit under the seat) constantly monitors motorcycle movements. Information provided by the sensors is processed by the control unit and, in case the recorded values exceed the pre-set thresholds, the system inflates the airbag.

Following is a list of accident conditions that trigger the D-Air® device:

- Impact against an obstacle.
- Rear impact.
- Loss of control with consequent vehicle lateral fall.

Accident conditions, motorcycle impact (M) against an obstacle (O), for which D-Air® has obtained the certification by the TÜV SUD Notified Body, are shown in the figure (Fig. 112).

The assessed angle of incidence against the obstacle is between 90° and 135°.

The real crash tests that allowed defining this range have been performed according to the ISO 13232 standard.

The lateral fall or skidding is a condition where the motorcycle falls on the road while moving and keeps a horizontal position with respect to the ground for a certain time. In this case, the D-Air® device is able to recognise the skidding or fall condition and quickly inflates the airbag to protect the rider and/or passenger only against the second impact (the rider hits obstacles or other objects around him/her after falling down), as the airbag remains inflated for some seconds.

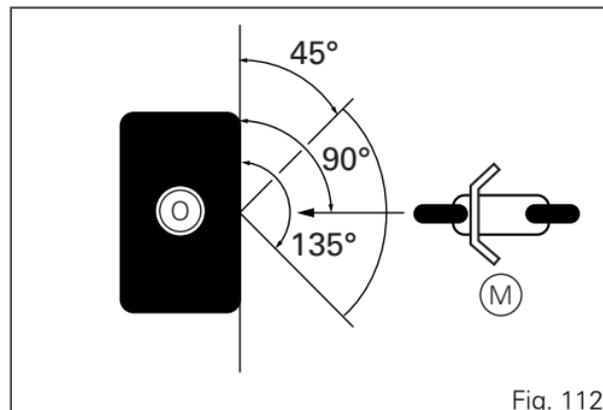


Fig. 112

In this case it is not possible to provide protection against the first impact (on the road), since the activation logic detects the skidding or fall condition and the airbags are inflated completely only after the rider and/or passenger hit/s the road.

System components

The D-Air® system consists of:

- one control unit (A) located under the seat, on the left side of the motorcycle;
- two sensors (B), one for each fork;
- one display (C) located on the main instrument panel;
- the D-Air® device inside a specific band fixed by means of a zip on the jacket/waistcoat (D) that can be purchased at a Ducati Dealer or authorised service centre.

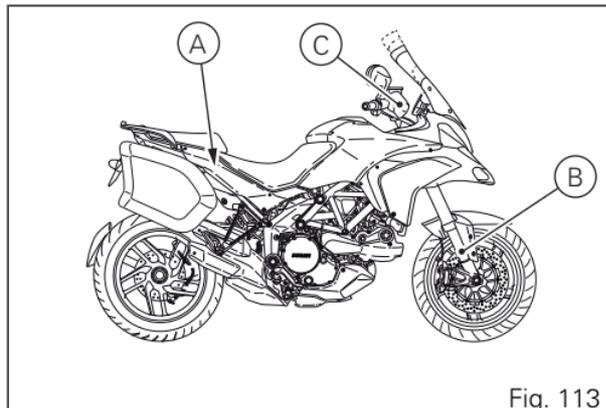


Fig. 113

Warning

In case the left side body panel where the D-Air® system control unit is located must be replaced, contact a Ducati Dealer or Authorised Service Centre and order the suitable spare part for Multistrada 1200s D-Air® model.

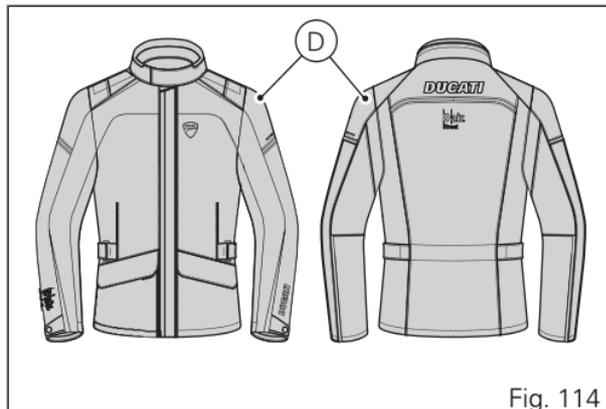


Fig. 114

Control unit (A) is the "brain" of D-Air®: it contains the electronic parts that analyse and process the data sent by the sensors and trigger the airbag inflation if necessary. The sensor designed to detect the skidding or fall condition is integrated in the control unit, which is located in the point nearest to the motorcycle centre of gravity.

Warning

Do not tamper, remove or move the control unit of the D-Air® system. Please contact a Ducati Dealer or Authorised Service Centre.

Sensors (B) positioned on the fork legs detect the accident conditions: impact against an obstacle or rear impact. They are installed on the front fork, one on the right and one on the left side, near the wheel hub.

Display (C) shows the user interface that allows the user to monitor the D-Air® system status.

The garment that integrates the D-Air® system in a specific band, is a Gore-Tex® jacket or waistcoat that can be purchased at a Ducati Dealer or authorised service centre.

Inside the band, the electronic parts, powered by a rechargeable battery inside the case, manage the operation of the system. Furthermore, it retains the airbag.

The operation status is checked by a remote turning on/off system, whereas the battery charge level can be checked on the instrument panel of your bike or by pressing the specific button or viewing the LED bar located on the band rear side.

Warning

The band, that contains the D-Air® system and closes the airbag fabric coating, is sealed upon packaging. Removing the seals nulls and voids the product warranty. Do not remove the warranty seals. If necessary, contact the nearest DUCATI Dealer or Authorised Service Centre.

SIM CARD

When you purchased your Multistrada D-Air® you received two SIM CARDS in the package. The information necessary to distinguish between Rider and Passenger SIM CARD is printed on them. These SIM CARDS allow univocally pairing the D-Air® system installed on your bike with the specific Jacket/Waistcoat purchased at a Ducati Dealer or Authorised Service Centre.

If you lose one or both SIM CARDS, new ones can be requested at a DUCATI Dealer or Authorised Service Centre, where a D-Air® system new "Kit number" will be paired with the new SIM CARDS.

D-Air system use

D-Air® turning on and off on jacket/waistcoat

The device on the jacket/waistcoat (D) is provided with a remote on/off system located on the band right side. A vibra motor inside the system communicates, through coded vibrations, the jacket/waistcoat operation status.

Following are the meanings of the vibrations generated by the vibra motor:

1) 1-second vibration.

Turning off warning of the D-Air® system installed in your jacket/waistcoat.

The causes could be:

- missing or removed SIM CARD;
- missing radio connection with your motorcycle for more than 10 minutes;
- Airbag in degraded operating mode (airbag does not ensure any protection in case of bike skidding).

2) 1-second triple vibration.

Lost pairing with the system installed on the motorcycle.



Fig. 115

On the front side of the jacket/waistcoat turning on/off system, a slider (E) allows you to turn the jacket/waistcoat device on and off. Slider (E) in upper position (I) turns the device on whereas if in the lower position (O) it turns the device off.

On the side, two symbols indicate the status of the Jacket/Waistcoat on/off system:

- (I) System on.
- (O) System off.

Important

If upon turning on the system (cursors in position "I") the SIM CARD is not inserted in the device, the remote control will vibrate to indicate that the system is turning off due to the missing SIM CARD.

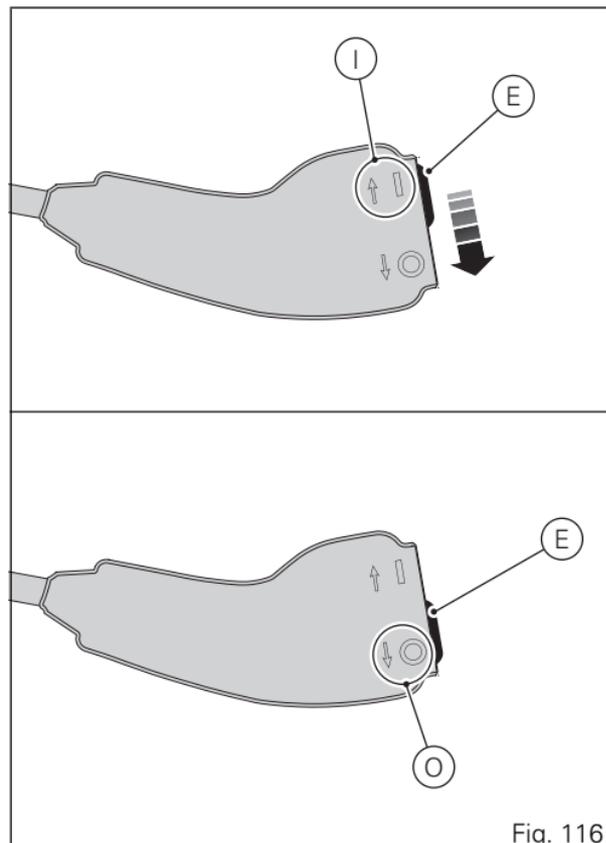


Fig. 116

Checking the charge status of the Jacket/ Waistcoat D-Air® device

To check the internal rechargeable battery status of the D-Air® device, it is necessary to press the thermoformed button (P) on the LED bar on the back side of the band.

Several LEDs (L), from 1 to 4, will turn on to indicate the residual charge: 1 means that it is necessary to recharge the batteries whereas 4 means the battery is fully charged.

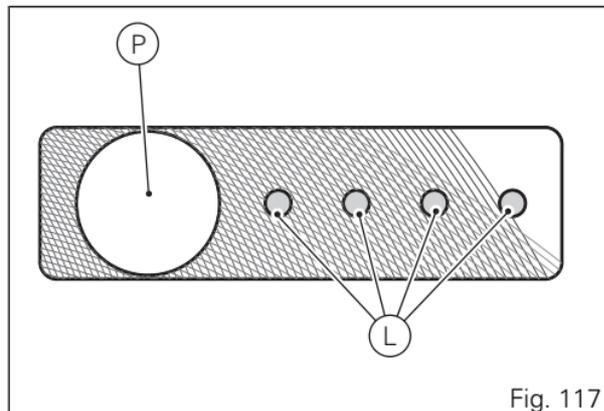


Fig. 117

Charging the internal battery of the D-Air® system in your jacket/waistcoat

The D-Air® system installed in your Jacket/Waistcoat is supplied by a LiFePo battery pack (3.2 V, 2400 mAh) that ensures a range of 30 hours.

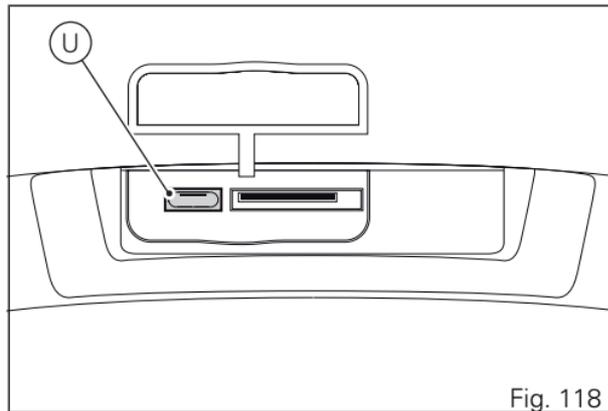
Should the battery charge level be too low, charge the D-Air® system using the battery charger supplied in the package.

To ensure a longer service life of the battery it is a good rule to recharge the system when the residual charge is equal to or lower than 2 notches: the battery status can also be displayed on the instrument panel by entering the relevant function.

Should you plan to store the D-Air® system for a long time (for example during the winter), charge the system completely before storing it.

The battery charger must be connected to a common house power outlet (230 Vac at 50 Hz); make sure that your power outlets comply with said requirements.

The system can also be recharged with a computer through a USB connection.



Open the protection lid on the bottom of the D-Air® installed in your jacket/waistcoat, find the USB micro-port (U) and connect the battery charger cable.

At the beginning of the recharging phase, 4 LEDs turn on in sequence to indicate that the recharging is in progress. When the battery is charged, 4 green LEDs will be steady on. Disconnect the battery charger as soon as the recharging process is completed.

The system complete recharging usually takes approximately 4 hours.

When the recharging phase is completed or almost completed and you disconnect the battery charger, the D-Air® device turns off automatically.

If, upon turning off, the slider is in position "I" (ON), to turn on again the D-Air® system of your Jacket/Waistcoat, first move slider to "O" and then to "I" again.

Should the system turn off because of an insufficient battery charge, to turn the D-Air® system on again recharge the batteries for at least 5 minutes.

The LEDs indicating the internal battery residual charge of your Jacket/Waistcoat D-Air® device operate as indicated below: each LED corresponds to a certain amount of hours of battery range.

The same indication can be displayed on the instrument panel by entering the function "Airbag jacket battery status indication".

D-Air® device residual life:

- 4 notches: more than 20 hours;
- 3 notches: between 10 and 20 hours;
- 2 notches: less than 10 hours;
- 1 notch, steady on: less than 1 hour;
- 1 blinking notch: the system is about to turn off due to insufficient residual charge.

Wearing the Jacket/Waistcoat equipped with D-Air® system.



Warning

Upon purchase, check the size of the jacket/waistcoat equipped with D-Air® system. The jacket/waistcoat can be purchased at a Ducati dealer or authorised service centre.

After putting on your Jacket, check the correct position of the passive protectors (if any) on your shoulders and elbows.

Make sure that the back protector supplied with the jacket, located in the internal pocket is correctly positioned.

Buckle the lumbar protector around your waist ensuring it is well-fitting on your body. If necessary, use the sliders to adjust it.

When using the Waistcoat with D-Air® system, check the passive protectors integrated in the jacket that is going to be worn under the Waistcoat with D-Air® device.

Close the jacket with its zip.

What to do in case of errors

In case of an error concerning the D-Air® system installed on your motorcycle or Jacket/Waistcoat, the AIRBAG DIAGNOSIS warning light turns on (steady) and the display shows the "ERRORS AIRBAG" message: contact a Ducati Dealer or authorised service centre.

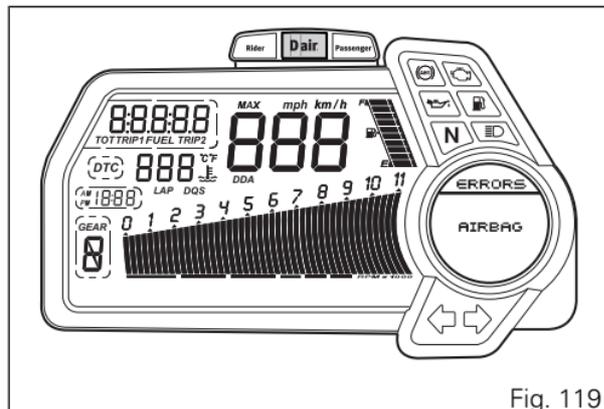


Fig. 119

D-Air system installation

The D-Air® system does not require cables to activate the airbags.

The motorcycle control unit and the unit installed in the jacket/waistcoat communicate by means of a radio-frequency interface.

The system works only if the unit on the motorcycle communicates correctly with the paired D-Air® system installed in the jacket/waistcoat.

The PAIRING of the two sub-assemblies occurs through the two SIM CARDS, one for the rider and one for the passenger, supplied with the motorcycle featuring the D-Air® system.

Inserting the SIM CARD in your jacket/ waistcoat

To allow the pairing the D-Air® system installed on the bike with the one installed in your garment, it is necessary to insert the SIM CARD in the specific slot on the jacket/waistcoat.

Proceed as follows:

- (1) detach the plug with gold plated contacts from the PVC support.
- (2) Find the rubber pad on the lower side of the jacket that closes the SIM Holder.
- (3) Remove the rubber pad.
- (4) Insert the SIM CARD making sure that the bevelled edge is on top left and that the USB micro-port is on the SIM Holder's left side.
- (5) Push the SIM CARD fully home until it "clicks" into its Holder.

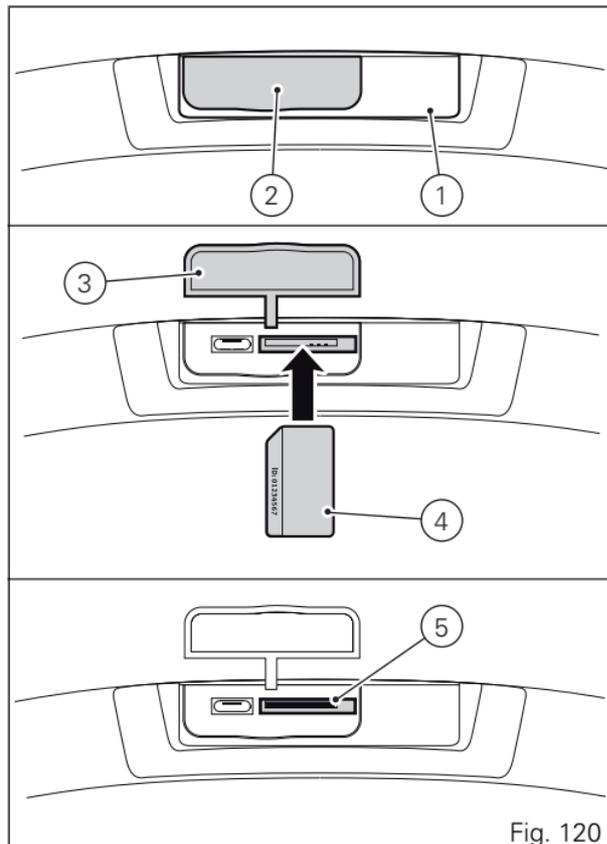


Fig. 120

D-Air® pairing procedure.

The SIM CARDS must be inserted in the relevant slots on your jacket/waistcoat before turning the D-Air® system on as described in the paragraph "D-Air® turning on and off on jacket/waistcoat".

After inserting the SIM CARD, go to the vehicle and turn the key to ON: it is not necessary to start the engine.

The system installed on your bike will perform an automatic booting procedure that takes a few seconds.

If the system does not detect errors, the RIDER (11) and/or PASSENGER (13) warning light/s blink/s quickly for the first 30 seconds after Key-on or until at least one jacket is connected to remind the user to connect the RIDER and/or PASSENGER jacket. Move the slider on the garment band to "I" to turn on the system in your jacket/waistcoat.

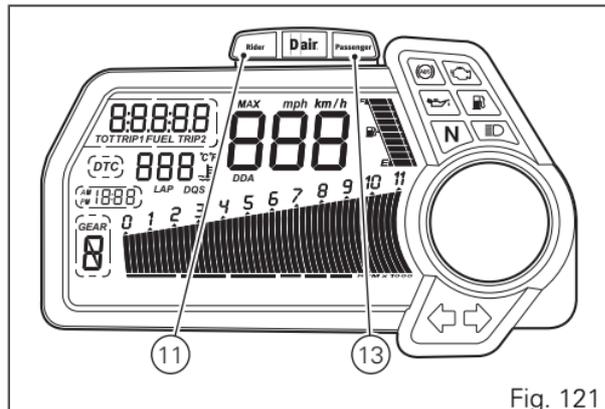


Fig. 121

If the RIDER jacket/waistcoat pairing has succeeded, the RIDER warning light (11) remains steady on. The function "Airbag jacket battery status indication" is automatically displayed to show the battery status of the system installed in the RIDER jacket/waistcoat. Likewise, if the PASSENGER jacket/waistcoat pairing has succeeded, the PASSENGER warning light (13) remains steady on. The function "Airbag jacket battery status indication" is automatically displayed to show the battery status of the system installed in the PASSENGER jacket/waistcoat.

D-Air system maintenance

Maintenance of the D-Air® system installed on your motorcycle and jacket/waistcoat

D-Air® has been designed and produced according to high quality standards to ensure its correct operation over time.

Nevertheless, it is always a good rule to perform a regular maintenance of the system that entails a few simple operations.

When cleaning the motorcycle, it is necessary to follow some rules to avoid damaging the control unit, the sensors and the display.

Do not clean the motorcycle with high pressure water jets or steam cleaners near the control unit under the seat, the fork sensors and the display.

Do not use aggressive chemical products or solvents near the display, fork sensors and control unit under the seat. Should the vehicle ordinary and extraordinary maintenance operations require the temporary removal of the sensor units (High Range or Low Range), have it performed by a DUCATI dealer or authorised service centre.

Any modification of control unit and sensors may lead to a faulty operation of the system and nulls and voids the Ducati warranty.



Warning

Do not tamper, remove or move the control unit of the D-Air® system. Please contact a Ducati Dealer or Authorised Service Centre.

Do not use aggressive chemical products (such as alcohol, solvents, etc.) to clean the display. Use soft cloths to clean the display protection cover.

Do not use abrasive cloths that may impair the display readability.

Avoid direct contact between display and oils/fuels that may damage it and its readability.

Check the display conditions at regular intervals.

Breaks or cracks may favour water infiltrations and impair the system operation.

Washing the garment: Gore-Tex jacket, only.

Wash the garment referring to the instructions provided on the garment itself or in the specific informative notes.

Washing the garment: Waistcoat, only

The waistcoat must be exclusively washed using soft cloths dampened with water or neutral soapy water without softener.

Remove the soapy solution using only a soft cloth dampened with clean, cold water.

Do not rub with abrasive materials and do not leave the garment to soak.

Protect the electronic parts prior to washing to prevent water from reaching it.

Hang the garment to dry, protecting it against direct exposure to light and heat sources. At any rate, always refer to the indications provided on the garment itself or in the specific informative notes.

Scheduled maintenance

The D-Air® system must undergo a scheduled maintenance, reminded to the user by means of a message on the display.

Through the specific function the display warns the user about the maintenance intervals as follows:

- 15 days before the due date, the display shows "AIRBAG RIDER MAINT" and/or "AIRBAG PASSENGER MAINT";
- after the maintenance date, the "AIRBAG RIDER MAINT" and/or "AIRBAG PASSENGER MAINT" warnings will remain displayed at all times while using the system.

Warning

The activation of this Warning does not jeopardise the D-Air® system operation.



Fig. 122



Fig. 123

The scheduled maintenance of the D-Air® device installed in the jacket/waistcoat consists in checking the overall conditions of the protection system and of the jacket, which must be carried out by a Ducati Dealer or authorised service centre.

Left-hand switch

1) Dip switch, two-position light selector switch:

(A) pushed up: low beam ON ();

(B) pushed down: high beam ON ();

(C) pushed to the side: high-beam flasher () (FLASH), "Start-Stop lap" function.

2) 3-position turn indicator switch ():

centre position = OFF;

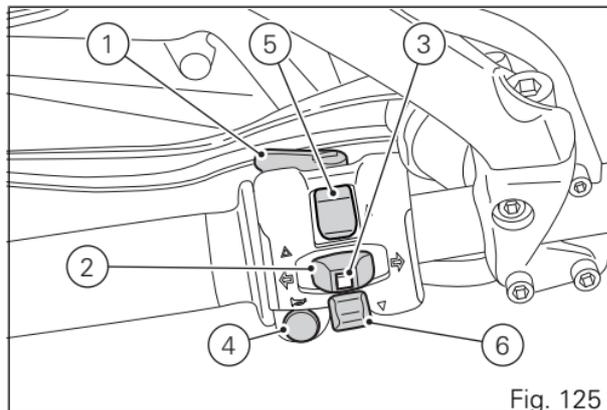
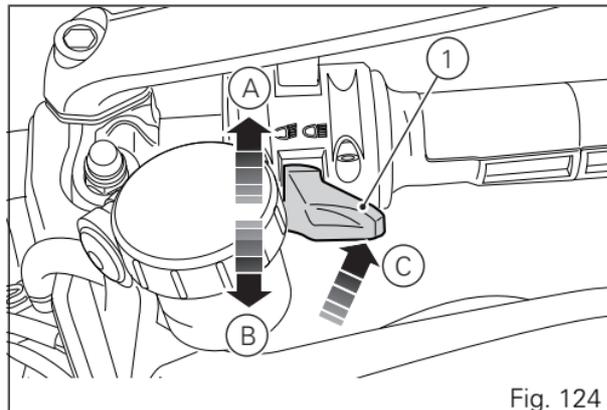
position () = left turn;

3) Turn indicator OFF, "Riding Mode" activation and menu navigation button.

4) Button () = warning horn.

5) Menu navigation, main display scroll, and TRIP1 and TRIP2 reset button.

6) Menu navigation, round Dot-Matrix display scroll button.



Clutch lever

Lever (1) disengages the clutch. It features a dial adjuster (2) for lever distance from the twistgrip on handlebar. The lever distance can be adjusted through 10 clicks of the dial (2). Turn clockwise to increase lever distance from the twistgrip. Turn the adjuster counter clockwise to decrease lever distance. When the clutch lever (1) is operated, drive from the engine to the gearbox and the drive wheel is disengaged. Using the clutch properly is essential to smooth riding, especially when moving off.



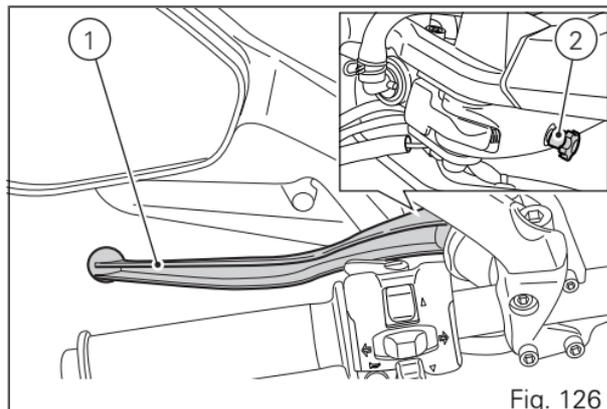
Warning

Set clutch lever when motorcycle is stopped.



Important

Using the clutch properly will avoid damage to transmission parts and spare the engine.



Note

The engine can be started with the side stand down and the gearbox in neutral. If starting with a gear engaged, pull in the clutch lever (in this case the side stand must be up).

Right-hand switch

- 1) Red ON/OFF switch.
- 2) Black ENGINE START button

The switch (1) has three positions:

- A) centre: RUN OFF. In this position, the engine cannot be started and all electronic devices are off.
- B) pushed down: ON/OFF. In this position, the system can be turned on (Key-On) and off (Key-Off).
- C) pushed up: RUN ON. The engine can only be started in this position, pushing the black button (2).

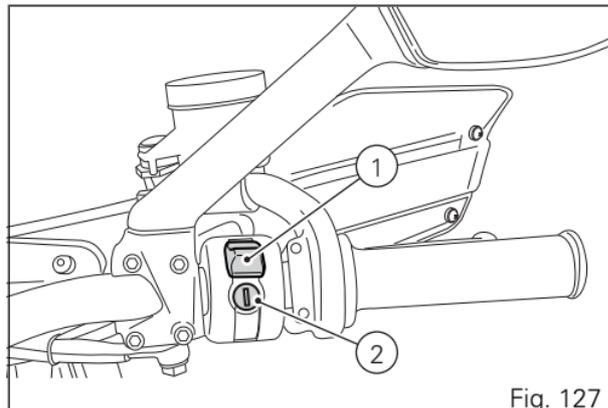


Fig. 127

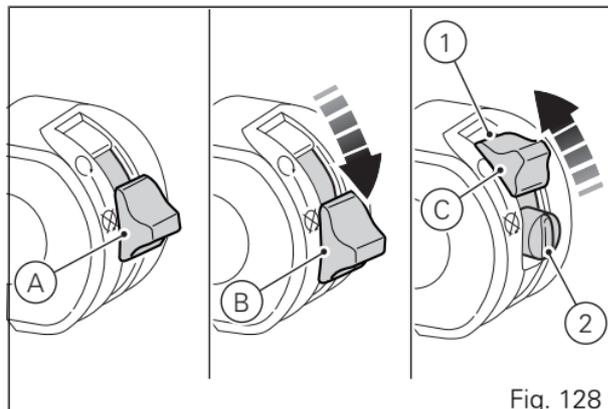


Fig. 128

Throttle twistgrip

The twistgrip on the right handlebar opens the throttles. When released, it will spring back to the initial position (idling speed).

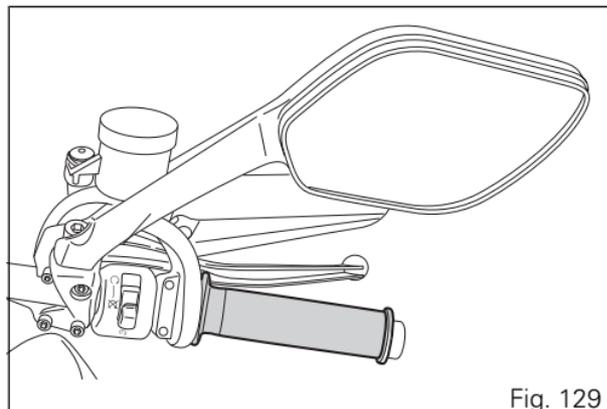


Fig. 129

Front brake lever

Pull in the lever (1) towards the twistgrip to operate the front brake. The system is hydraulically operated and you just need to pull the lever gently.

The brake lever (1) has a dial (2) for adjusting the distance between lever and twistgrip on the handlebar.

The lever distance can be adjusted through 10 clicks of the dial (2).

Turn clockwise to increase lever distance from the twistgrip. Turn the adjuster counter clockwise to decrease lever distance.

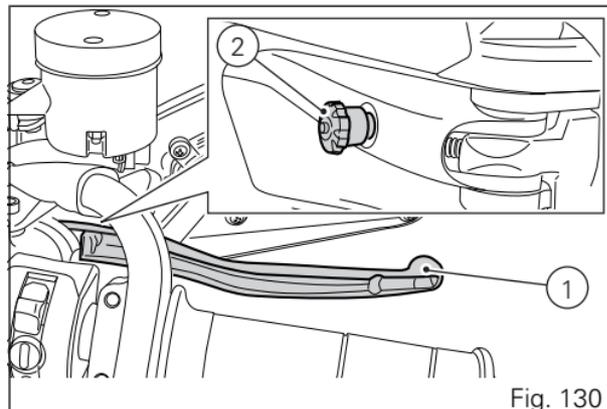
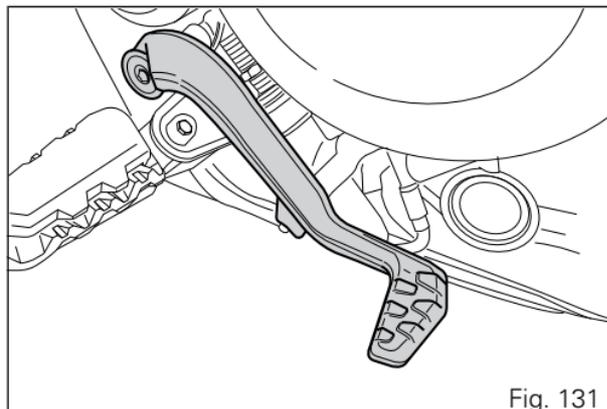


Fig. 130

Rear brake pedal

Push down on the pedal with your foot to operate the rear brake.

The system is hydraulically operated.



Gear change pedal

When released, the gear change pedal automatically returns to rest position N in the centre. This is indicated by the instrument panel light N (3, coming on.

The pedal can be moved:

- down = press down the pedal to engage the 1st gear and to shift down. The N light will go out;
- upwards= lift the pedal to engage the 2nd gear and then 3rd, 4th, 5th and 6th gears.

Each time you move the pedal you will engage the next gear.

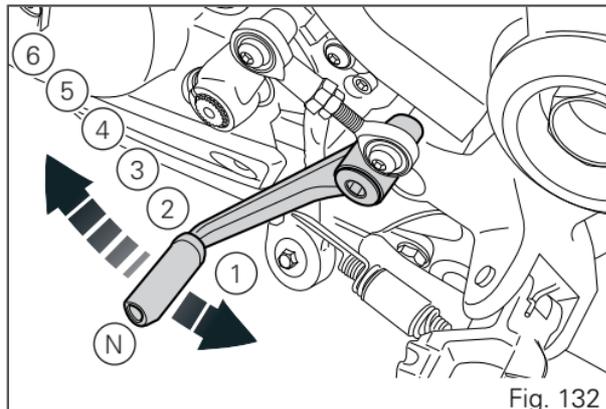


Fig. 132

Adjusting the position of the gearchange and rear brake pedals

The position of the gearchange and rear brake pedals in relation to the footrests can be adjusted to suit the requirements of the rider.

Adjust the pedals as follows:

Gear change pedal

Use an open ended spanner to hold the spherical end on the rod (1) on the flat (2) and loosen the counter nut (3).

Turn the screw (4) to detach the rod completely from the gear change lever.

Turn the rod (5), until the gear change pedal is set to the desired position.

Tighten the screw (4) to secure the gearchange lever to the rod (5).

Tighten the counter nut (3) onto the spherical end (1).

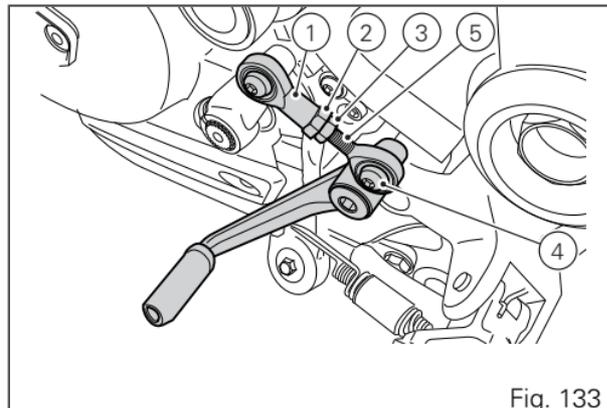


Fig. 133

Rear brake pedal.

Loosen counter nut (7).

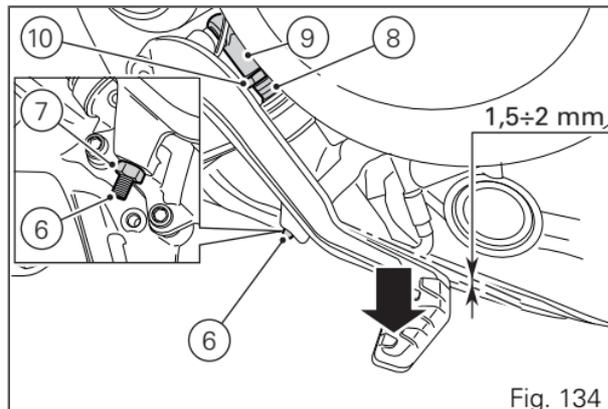
Turn pedal stroke adjusting screw (6) until pedal is in the desired position. Tighten the counter nut (7).

Operate the pedal by hand to check that there is 1.5 to 2 mm of free play before the brake bites. If not, check to modify the length of the cylinder push-rod in the following mode.

Slacken off the counter nut (10) on the pushrod.

Screw the pushrod (8) into the fork (9) to increase the free play, or screw it out to reduce it.

Tighten the counter nut (10) and recheck the pedal free play.



Main components and devices

Position on the vehicle

- 1) Tank filler plug.
- 2) Seat lock.
- 3) Side stand.
- 4) Power outlet.
- 5) Rear-view mirrors.
- 6) Front fork adjusters.
- 7) Rear shock absorber adjusters.
- 8) Catalytic converter.
- 9) Exhaust silencer.
- 10) Centre stand.

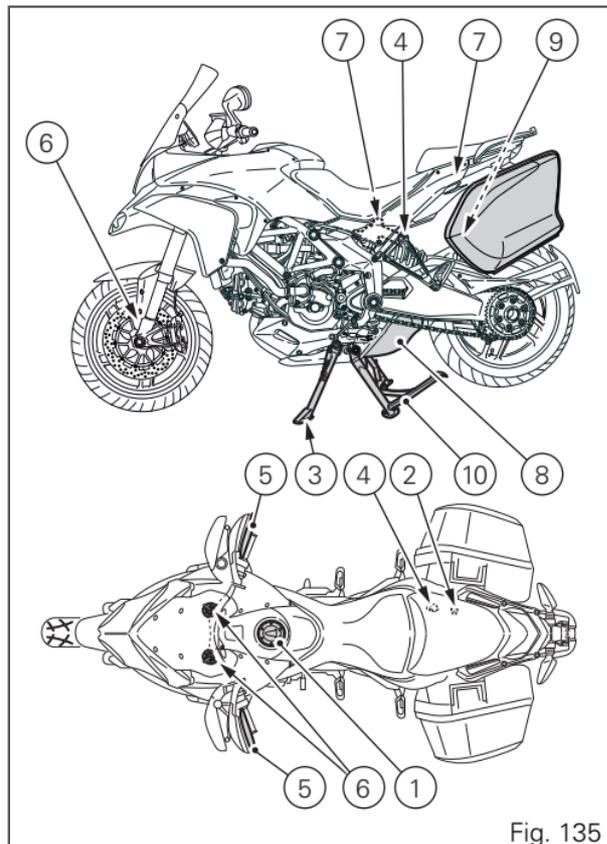


Fig. 135

Tank filler plug

Opening

Lift the cover (1) and insert the active or passive key into the lock. Turn the key clockwise 1/4 turn to unlock.

Lift the plug (2).

Closing

Close the cap (2) with the key inserted and press it into its seat. Remove the key and replace the lock cover (1).



Note

Plug can only be closed when key is inserted.



Warning

After refuelling, always make sure that the plug is perfectly in place and closed.

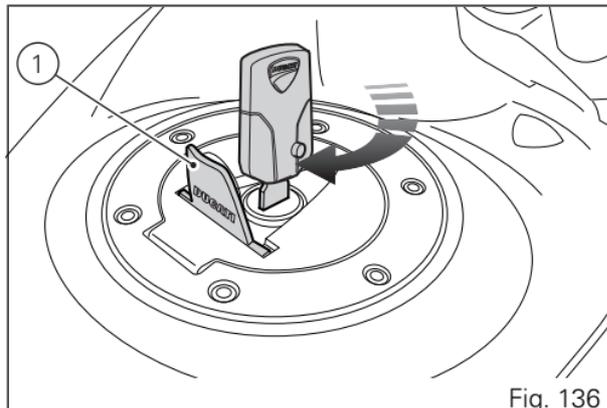


Fig. 136

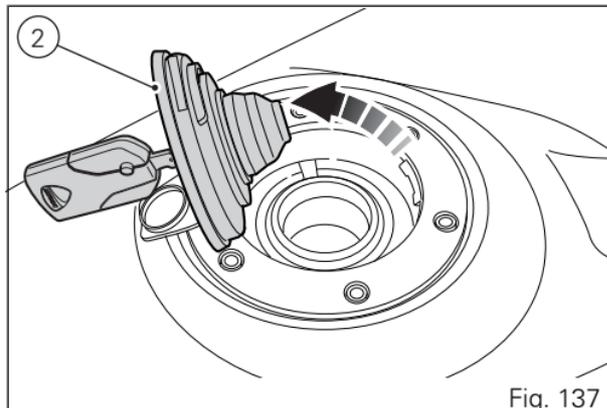


Fig. 137

Electric fuel cap opening (optional)

The electric cap (2, Fig. 137) opens after every key-off within 60 seconds operating the lever (1, Fig. 136) located on it.

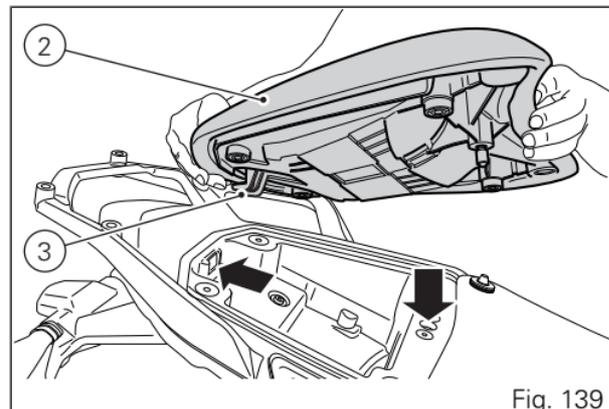
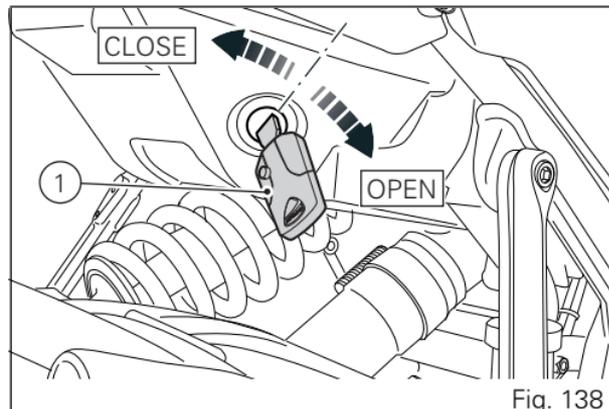
Seat lock

By operating the lock (1) the passenger seat can be removed to access the tool kit compartment and the rider seat to access the battery and other devices.

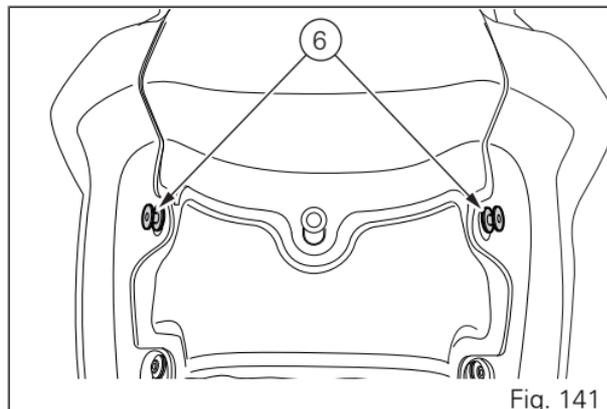
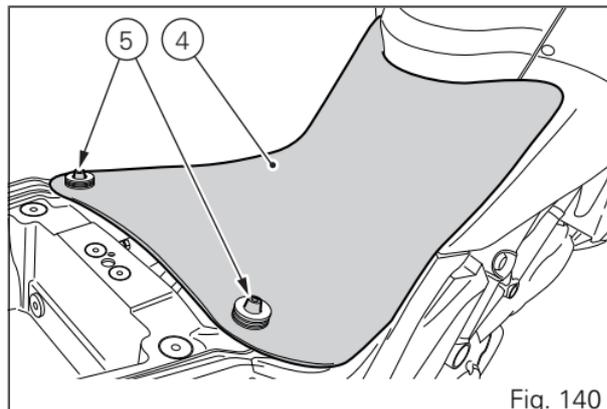
Removal of the seats

Insert the active or passive key into the lock (1) and rotate it clockwise until you hear the release click in the passenger seat.

To remove the passenger seat (2) lift up the front part and pull it forward to free the rear hook (3) on the bottom of the seat.



To remove the rider seat (4) remove the rear part from the pin (5) on the frame.
Pull it backwards and at the same time push the front part of the rider seat downwards to unhook it from the pins (6) on the tank.



Refitting the seats

Position the front part of the rider seat (4), with slots (7), in the pins (6, Fig. 141) of the tank.

Push on the front end of the rider seat to move the pins (6) to the bottom of the slots (7).

Insert the rear part of the rider seat into the pin (5, Fig. 140) of the frame.

Insert the rear hook (3, Fig. 139) into the opening in the tail guard and lower the front part of the passenger seat (2) until you hear the pin click in the latch.

Make sure that the passenger seat is properly secured by gently pulling it upwards.

Remove key from the lock (1, Fig. 138).

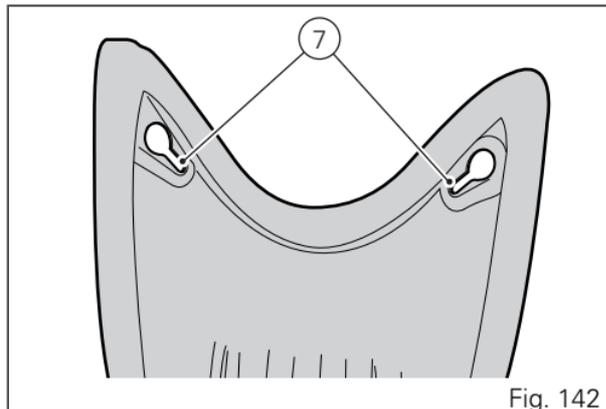


Fig. 142

Helmet cable

Remove the passenger seat and the rider seat as described in the paragraph "Removal of the seats" page 218.

Pass the cable (1) through the helmet and insert the ends of the cable in the frame pin (2).

Leave the helmet hanging and refit the passenger seat and the rider seat to hold it in place.



Warning

This device protects the helmet against theft when the motorcycle is parked. Do not leave the helmet attached when riding the motorcycle; it could interfere with your movements and cause loss of control of the motorcycle.

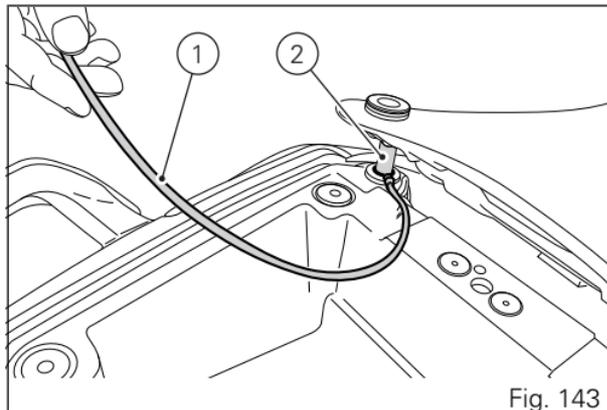


Fig. 143

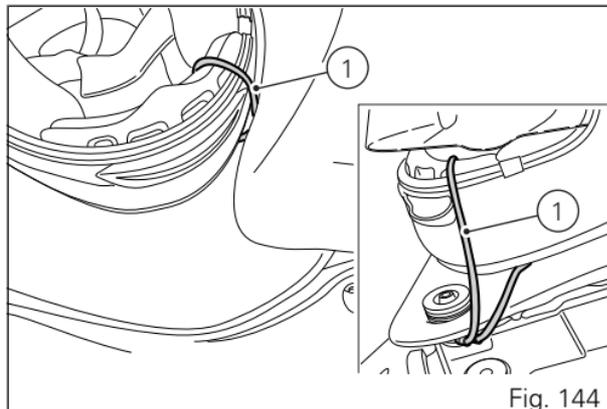


Fig. 144

Side stand

Important

Place the motorcycle on the side stand only when you are not going to use it for short periods of time. Before lowering the side stand, make sure that the bearing surface is hard and flat.

Do not park on soft or pebbled ground or on asphalt melt by the sun heat and similar or the motorcycle may fall over. When parking in downhill road tracts, always park the motorcycle with its rear wheel facing downhill.

To pull down the side stand, hold the motorcycle handlebars with both hands and push down on the side stand (1) with your foot until it is fully extended. Tilt the motorcycle until the side stand is resting on the ground.

To move the side stand to its rest position (horizontal position), lean the motorcycle to the right while lifting the thrust arm (1) with your foot.

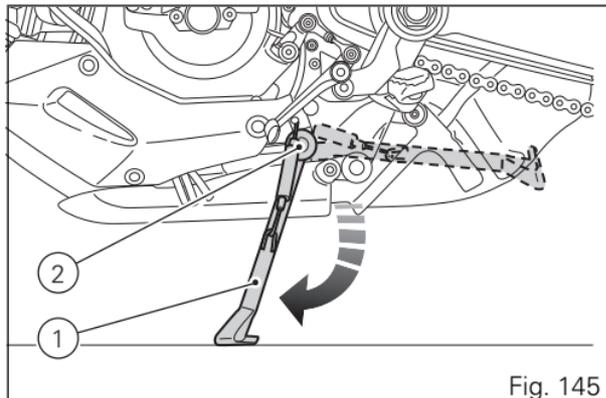


Fig. 145

Warning

Do not sit on the motorcycle when it is supported on the side stand.

Note

Check for proper operation of the stand mechanism (two springs, one into the other) and the safety sensor (2) at regular intervals.



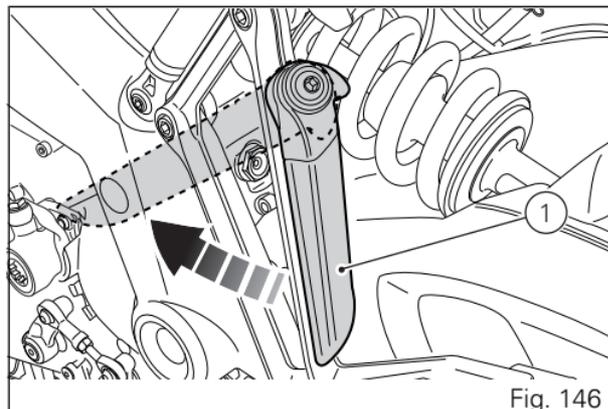
Note

The engine can be started with the side stand down and the gearbox in neutral. If starting with a gear engaged, pull in the clutch lever (in this case the side stand must be up).

Motorcycle lifting handle

To help you position the motorcycle on the centre stand or support it during the small parking manoeuvres, use handle (1) pivoted on the LH passenger footpeg bracket.

Turn handle outward to use it; release after use, it will automatically spring back in place.



Power outlet

The motorcycle is equipped with two 12 V power outlets protected by a fuse located in the rear fuse box. It is possible to connect to each power outlet loads up to 4 A (if both are used at the same time) or up to 8 A if only one is in use.

The power outlets are positioned on the left (1) and right (2) sides of the motorcycle behind the passenger pedal support bracket.

Important

When the engine is off, do not leave accessories connected to the power outlets for a long period of time as the motorcycle battery could run flat.

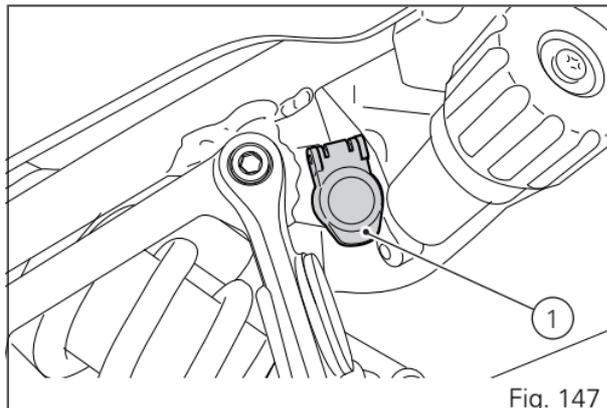


Fig. 147

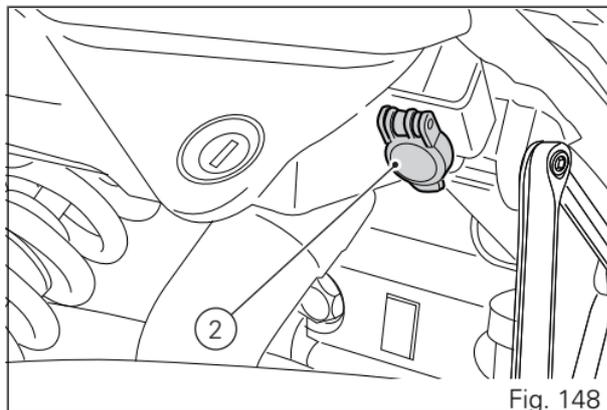


Fig. 148

Central stand

Always use the centre stand (1) to safely park the vehicle. Its structure allows to support the motorcycle even under full load.



Warning

Before lowering the centre stand, check that the ground is sufficiently even and firm.

Hold the left-hand grip with your left hand, and hold the handle (2) with the other hand. With your right foot, push on the mating surface (3) of the centre stand, until it rests on the ground; meanwhile, pull motorcycle up and back by means of the handle. To take centre stand back to the rest position, simply push vehicle forward, holding it by the handlebar, until the rear wheel gets to the ground. The stand goes automatically back in place.

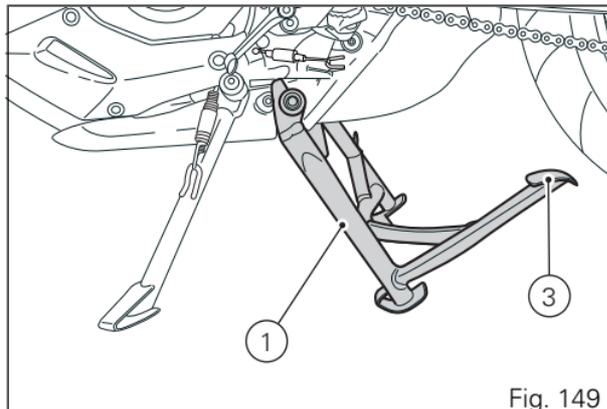


Fig. 149

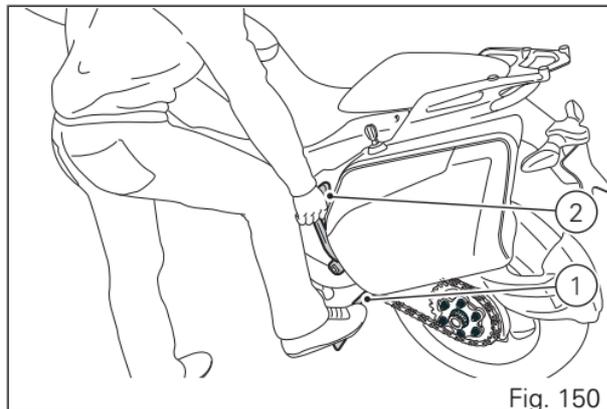


Fig. 150



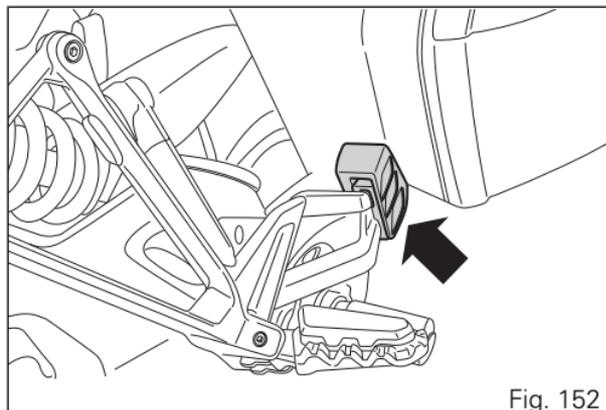
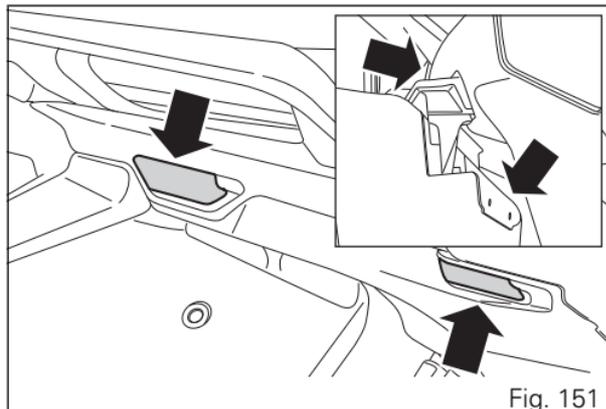
Warning

Before moving off, always make sure that the centre stand is in its rest position.

Check for proper operation of the stand mechanism (two springs, one into the other) at regular intervals.

Fitting the Ducati side panniers

Set pannier in the relevant seat on the motorcycle (Fig. 151) and on the mount located on footpeg holder plate (Fig. 152).



Side pannier use

Opening

Open the side pannier as follows.

Insert the key on the pannier lock and turn clockwise.

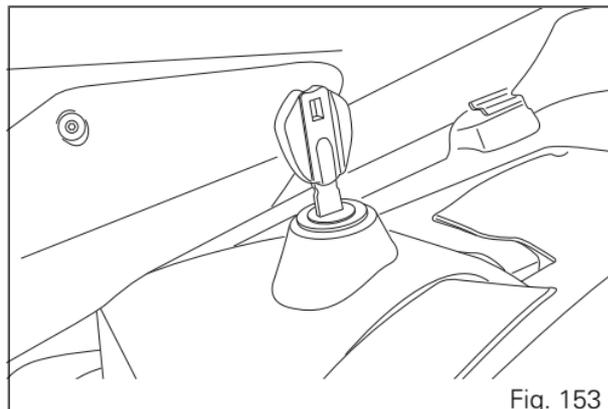


Fig. 153

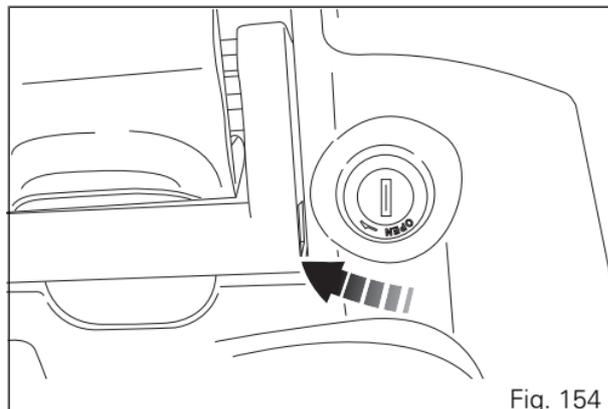


Fig. 154

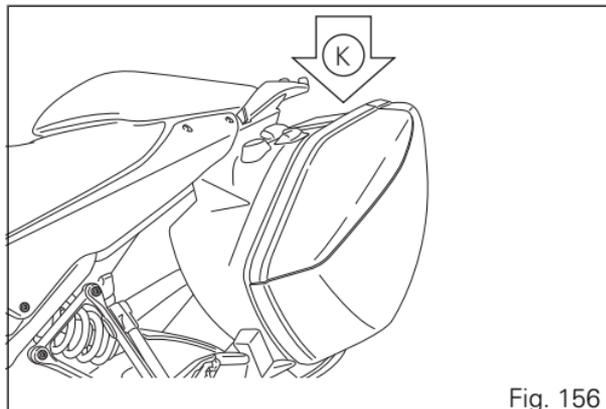
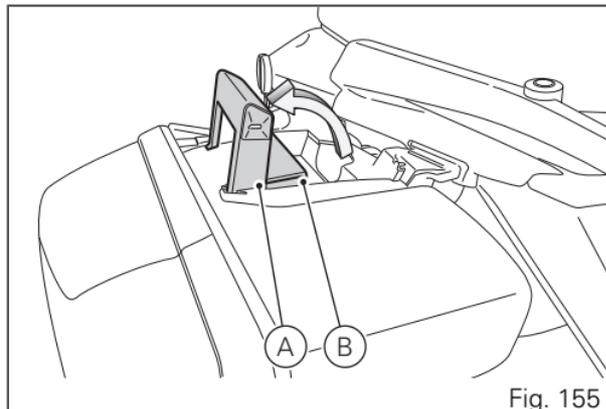
Lift handle (A) and opening plate (B) to open the pannier.

⚠ Important

It is recommended NOT to ride the motorcycle above 180 Km/h when side panniers are installed, and in any case to ride within the speed limits prescribed by the law at all times.

⚠ Warning

The side panniers are only for light luggage: each pannier can contain a maximum of 10 kg (K). Excessive weight might compromise vehicle control.



The pannier fixed part features fastening straps (C) to support the luggage.



Warning

Position the baggage evenly by keeping the heaviest elements in the pannier innermost side to avoid unbalancing the vehicle.

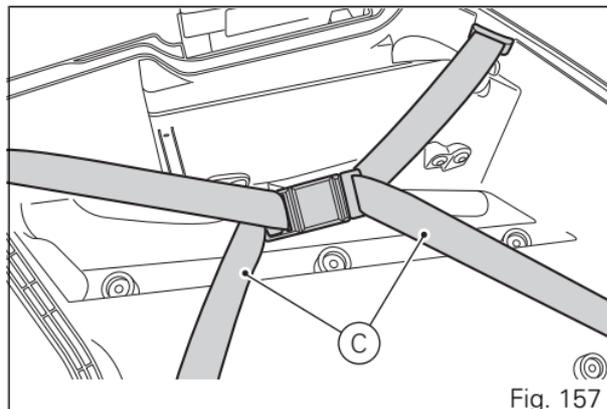


Fig. 157

Closing

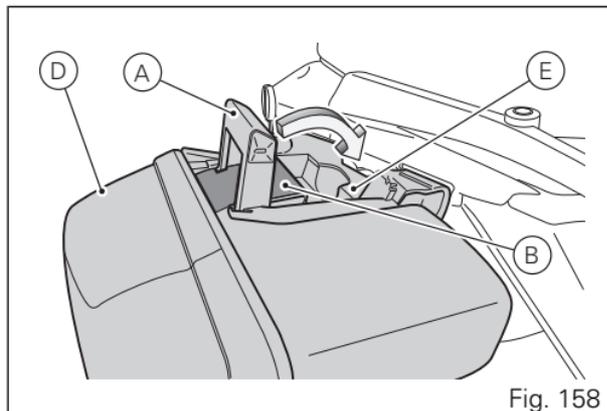
Close the side pannier as follows.

Raise and close the external lid (D) by fitting the edge all around inside the relevant channel on pannier fixed part: only in this way pannier can be closed.

Engage opening flap (B) to pannier inner lid (E) and push down handle (A).

Turn the key anti-clockwise.

Only in this condition can the key be removed.



Removal

To remove the side pannier, turn key to open position and lift handle (A).

Slide it slightly back and remove by pulling it out.

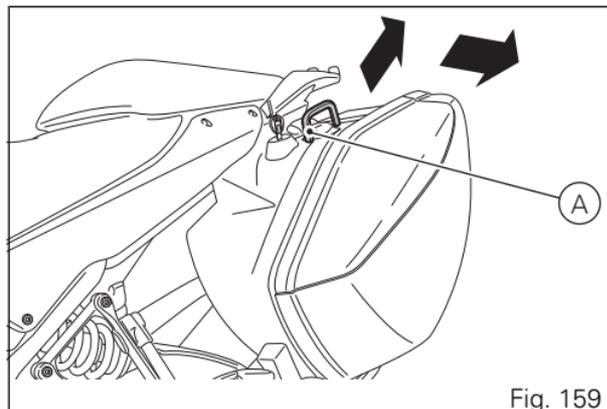


Fig. 159

Adjusting the front fork

The front fork used on this motorcycle has rebound, compression and spring preload adjustment. The fork is adjusted for rebound and compression by electric impulses sent by the instrument panel to the adjusters inside the fork legs; spring preload adjustment is manual.

Warning

Have the spring preload adjusted at a Ducati Dealer or authorised Service Centre.

For fork adjustment, follow the description at page 120 "DSS setting function".

For more details on operation of the fork and the DSS (Ducati SkyHook System) please refer to page 38 and page 128.

Spring preload default settings:

- 8 mm (left leg);
- 2 mm (right leg);

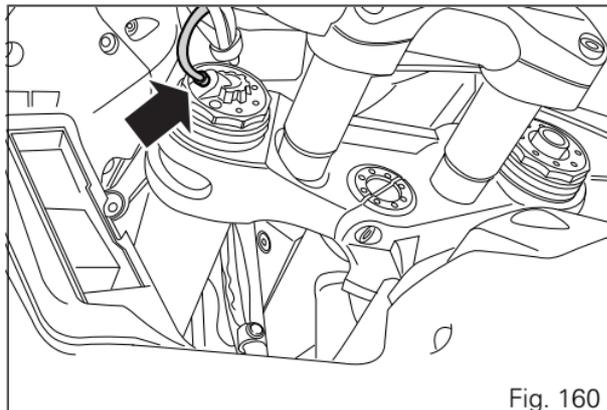


Fig. 160

Adjusting the rear shock absorber

The rear shock absorber has commands that enable you to adjust the setting to suit the load on the motorcycle.

Warning

The shock absorber is filled with gas under pressure and may cause severe damage if taken apart by unskilled persons.

When carrying a passenger and luggage, set the rear shock absorber spring to proper preload to improve motorcycle handling and keep safe clearance from the ground. You may find that rebound damping needs adjusting as well. The shock absorber is adjusted by electric impulses sent by the instrument panel to the adjusters inside the shock absorber body.

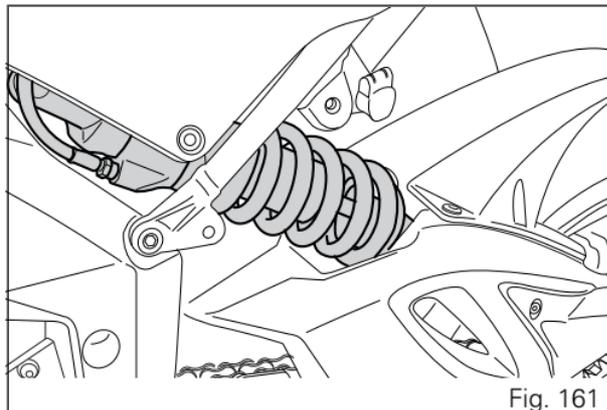


Fig. 161

Changing the motorcycle track alignment

Motorcycle setup is the optimal result of tests carried out under different riding conditions by our technical staff. The rider can set four different setup configurations on the instrument panel:

- Rider only (1);
- Rider with luggage (2);
- Rider with passenger (3);
- Rider with passenger and luggage (4).

For each of these settings, four riding modes (SPORT, TOURING, URBAN and ENDURO) can be selected and within each of these, the initial settings for traction control (DTC), engine power, suspension damping control and ABS level can be modified. To change the setup, proceed as described on page 105 "Riding Mode Customisation".

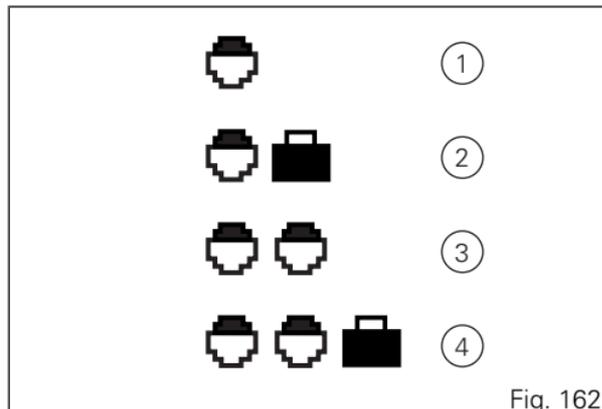


Fig. 162

Riding the motorcycle

Running-in recommendations

Maximum rotation speed

Rotation speed for running-in period and during standard use (rpm):

- 1) up to 1,000 km;
- 2) from 1,000 to 2,500 km.

Up to 1,000 km

During the first 1000 km, keep an eye on the rev counter. It should never exceed: 5,500÷6,000 rpm. During the first hours of riding, it is advisable to run the engine at varying load and rpm, though still within recommended limit.

To this end, roads with plenty of bends and even slightly hilly areas are ideal for a most efficient running-in of engine, brakes and suspensions. For the first 100 km use the brakes gently. Avoid sudden or prolonged braking. This will allow the friction material on the brake pads to bed in against the brake discs.

For all mechanical parts of the motorcycle to adapt to one another and above all not to adversely affect the life of basic engine parts, it is advisable to avoid harsh accelerations and not to run the engine at high rpm for too long, especially uphill.

Furthermore, the drive chain should be inspected frequently. Lubricate as required.

From 1,000 to 2,500 km

At this point, you can squeeze some more power out of your engine. However never exceed 7,000 rpm.

Important

During the whole running-in period, the maintenance and service rules recommended in the Warranty Card should be observed carefully. Failure to follow these instructions releases Ducati Motor Holding S.p.A. from any liability whatsoever for any engine damage or shorter engine life.

Strict observance of running-in recommendations will ensure longer engine life and reduce the likelihood of overhauls and tune-ups.

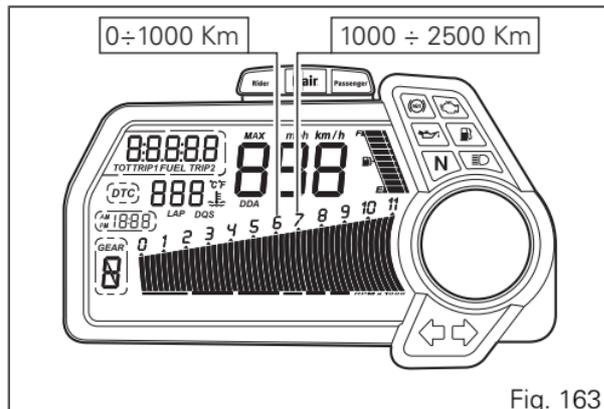


Fig. 163

Pre-ride checks



Warning

Failure to carry out these checks before riding, may lead to motorcycle damage and injury to rider and passenger.

Before riding, perform a thorough check-up on your bike as follows:

- **FUEL LEVEL IN THE TANK**
Check the fuel level in the tank. Fill tank if needed (page 251).
- **ENGINE OIL LEVEL**
Check the oil level in the sump through the sight glass. Top up if needed (page 281).
- **BRAKE AND CLUTCH FLUID**
Check fluid level in the relevant reservoirs (page 255).
- **COOLANT**
Check coolant level in the expansion reservoir. Top up if needed (page 253).
- **TYRE CONDITION**
Check tyre pressure and condition (page 278).

- **CONTROLS**
Work the brake, clutch, throttle and gear change controls (levers, pedals and twistgrip) and check for proper operation.
- **LIGHTS AND INDICATORS**
Make sure lights, indicators and horn work properly. Replace any burnt-out bulbs (page 270).
- **KEY-OPERATED LOCKS**
Ensure that fuel filler plug (page 216) and seat (page 218) are locked.
- **SIDE STAND**
Make sure that side stand operates smoothly and is in the correct position (page 222).

ABS light

After Key-On, the ABS light (10, stays on.
When the vehicle speed exceeds 5 km/h, the warning light switches off to indicate the correct operation of the ABS system.



Warning

In case of malfunction, do not ride the motorcycle and contact a Ducati Dealer or authorised Service Centre.

ABS device

Check that the front (1) and rear (2) phonic wheels are clean.

Warning

Clogged reading slots would compromise system proper operation. It is recommended to disable ABS system in case of muddy road surface because under this condition the system might be subject to sudden failure.

Warning

Prolonged rearing could deactivate the ABS system.

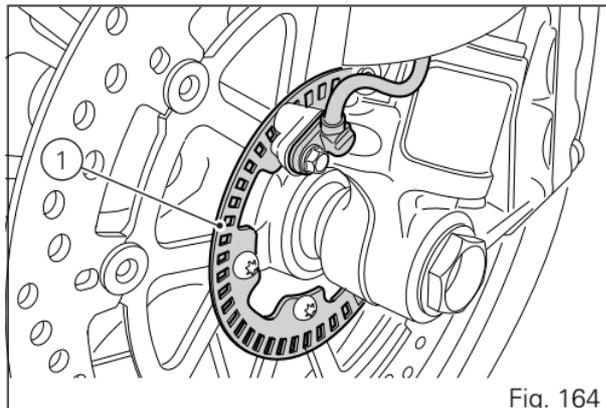


Fig. 164

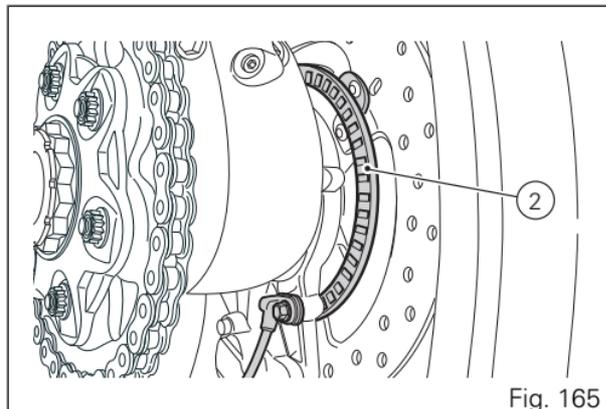


Fig. 165

Engine on/off

Warning

Before starting the engine, become familiar with the controls you will need to use when riding.

Warning

Never start or run the engine indoors. Exhaust gases are poisonous and may lead to loss of consciousness or even death within a short time.

In the presence of the active or passive key, perform a Key-On (turning on the "Hands free" system and all on-board electronic devices) by pushing the red switch (1), on the right side of the handlebar, downward. The instrument panel will perform the initialisation and will control the on-board systems, turning on all lights in sequence, from the bottom to the top, for a few seconds. After this control, only the green light (2) and the red light (3) must remain on.

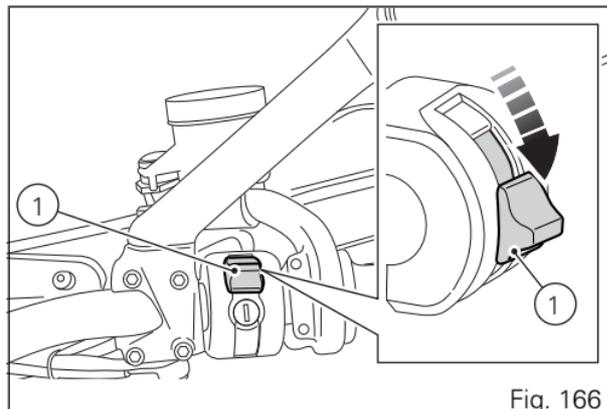


Fig. 166

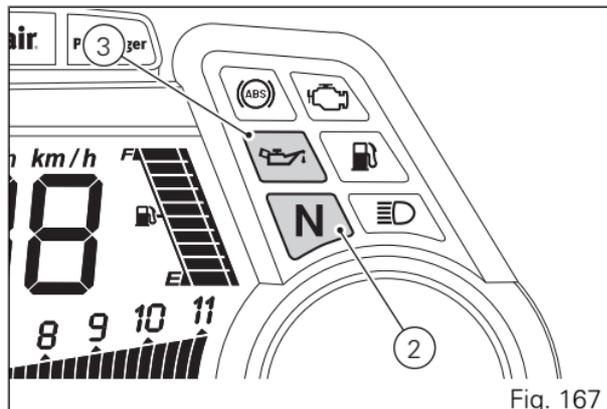


Fig. 167

Warning

The side stand must be fully up (in a horizontal position) as its safety sensor prevents engine start when down.

After Key-On, but with the engine not yet started, the system will perform a Key-Off automatically if the presence of the active key is not detected within 10 seconds.

Note

It is possible to start the engine with side stand down and the gearbox in neutral. When starting the motorcycle with a gear engaged, pull the clutch lever (in this case the side stand must be up).

Move the red switch (1) up to uncover the black button (4). Push the button (4) to start the engine.

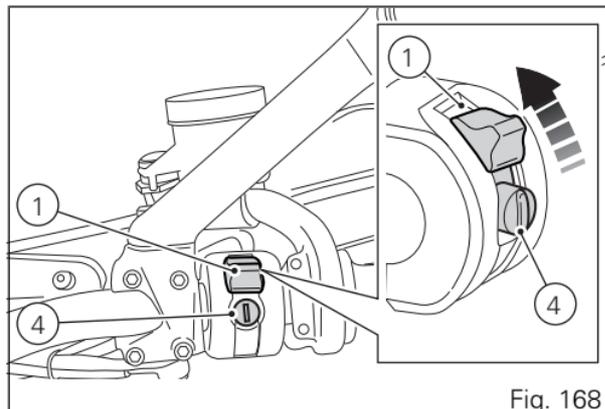


Fig. 168

Important

Do not rev up the engine when it is cold. Allow some time for oil to be heated and reach all points that need lubricating.

The red oil pressure warning light (3, Fig. 167) should go out a few seconds after the engine has started. The engine will shut off by turning the red key (1, Fig. 168) on the handlebar to RUN OFF. To turn on the “Hands free” system and all electronic onboard systems, refer to page 176 “Hands Free System”.

Moving off

- 1) Disengage the clutch by squeezing the clutch lever.
- 2) Push down the gear change lever firmly with the tip of your foot to engage first gear.
- 3) Raise the engine revs by turning the throttle twistgrip while gradually releasing the clutch lever. The motorcycle will start moving off.
- 4) Release the clutch lever completely and accelerate.
- 5) To shift up, close the throttle to slow down engine, disengage the clutch, lift the gear change lever and let go of clutch lever. To shift down, proceed as follows: release the twistgrip, pull the clutch lever, shortly speed up to help gears synchronise, shift down (engage next lower gear) and release the clutch.

The controls should be used correctly and timely: when riding uphill do not hesitate to shift down as soon as the motorcycle tends to slow down, so you will avoid stressing the engine and the motorcycle abnormally.



Warning

Avoid harsh accelerations, as this may lead to misfiring and transmission snatching. The clutch lever should not be held in longer than necessary after a gear is engaged, otherwise friction parts may overheat and wear out.



Warning

Prolonged rearing could deactivate the ABS system.

Braking

Slow down in time, shift down to engine-brake first and then brake applying both brakes. Pull the clutch lever before stopping the motorcycle, to avoid sudden engine stop.

ABS system

Using the brakes correctly under adverse conditions is the hardest – and yet the most critical - skill to master for a rider. Braking is one of the most difficult and dangerous moments when riding a two wheeled vehicle: the possibility of falling or having an accident during this difficult moment is statistically higher than any other moment. A locked front wheel leads to loss of traction and stability, resulting in loss of control. The Anti-Lock Brake System (ABS) has been developed to enable riders to use the vehicles braking force to the fullest possible amount in emergency braking or under poor pavement or adverse weather conditions.

ABS uses hydraulics and electronics to limit pressure in the brake circuit when a special sensor mounted to the wheel signals the electronic control unit that the wheel is about to lock up.

This avoids wheel lockup and preserves traction.

Pressure is raised back up immediately and the control unit keeps controlling the brake until the risk of a lockup disappears. Normally, the rider will perceive ABS operation as a harder feel or a pulsation of the brake lever and pedal.

The front and rear brakes use the same control systems: the ABS fitted to this motorcycle features a combined braking action connecting the rear

braking circuit to the front one when using the front brake. The opposite is not true: the rear brake control does not affect the front braking system.

The system can be disabled from the instrument panel, by setting it OFF within the required Riding Mode.



Warning

Although the system has a combined braking feature (rear brake activation when using the front brake only), using one brake control or the other separately will decrease the motorcycle braking efficiency.

Never use the brake controls harshly or suddenly as you may cause the rear wheel lift up and lose control of the motorcycle.

When riding in the rain or on slippery surfaces, braking will become less effective. Always use the brakes very gently and carefully when riding under these conditions. Any sudden manoeuvres may lead to loss of control. When tackling long, high-gradient downhill road tracts, shift down gears to use engine braking. Apply one brake at a time and use brakes sparingly. Keeping the brakes applied all the time would cause the friction material to overheat and reduce braking power dangerously. Underinflated or overinflated tyres reduce braking efficiency, handling accuracy and stability in a bend.

Stopping the motorcycle

Reduce speed, shift down and release the throttle twistgrip. Shift down to engage first gear and then neutral.

Apply the brakes and bring the motorcycle to a complete stop.

Turn off the engine moving the red switch (1).

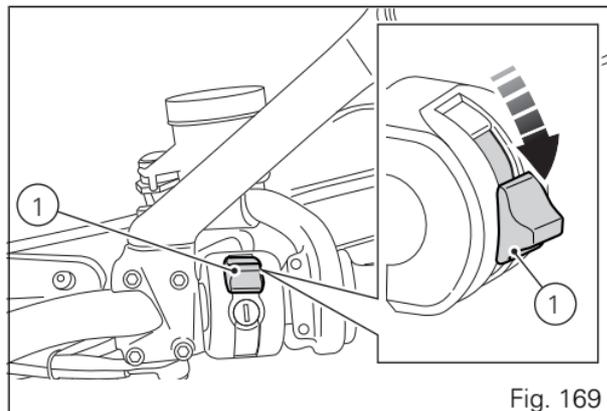


Fig. 169

Parking

Park the stopped motorcycle on the side stand. Turn the handle completely to the left or right. The steering lock can be engaged if this is done within 60 seconds from engine stop.

If you wish to lock the steering during this period of time, move down the red switch (1) again and hold it pressed for 3 seconds with the steering fully turned to the left or right. After one second, the instrument panel reads "KEEP PRESSED FOR LOCK", this message will stay displayed for 2 seconds and the steering lock engages after this time. If the steering lock is correctly engaged, the instrument panel displays the message: "STEERING LOCKED". While if it fails to engage, after 5 seconds the instrument panel displays the message: "RED SWITCH NOT RELEASED".

If this is the case, release the switch and try locking the steering again within 60 seconds from Key-off. In case of failed locking, contact a Ducati authorised Service Centre.

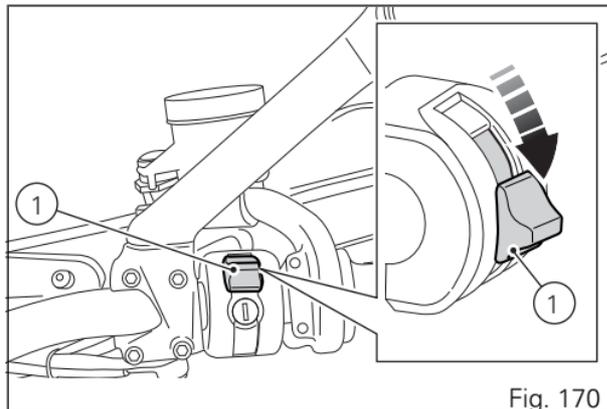


Fig. 170

Press button (2, Fig. 171) for at least 3 seconds: the indication of the activated function (Fig. 172) will appear on the round display of the instrument panel for 5 seconds and the lights will remain on for 2 hours. After this period of time, they will turn off automatically.



Note

If there is a sudden interruption in the battery voltage during the "Parking" function, the instrument panel will disable this function when the voltage is restored.



Important

The frequent use of this function can considerably reduce the battery charge; it is recommended to use this function only when really necessary.

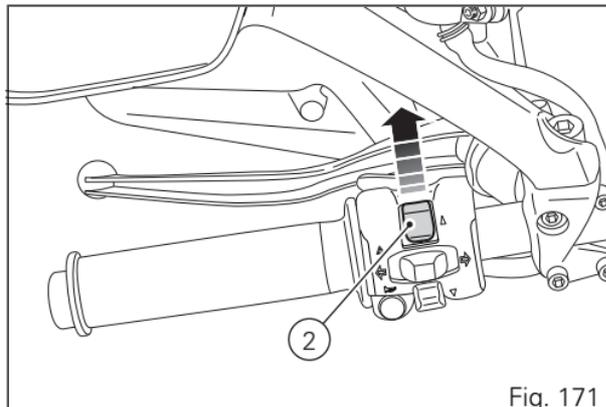


Fig. 171



Fig. 172



Warning

The exhaust system might be hot, even after engine is switched OFF; pay particular attention not to touch exhaust system with any body part and do not park the motorcycle next to inflammable material (wood, leaves etc.).



Warning

Using padlocks or other locks designed to prevent motorcycle motion, such as brake disc locks, rear sprocket locks, and so on is dangerous and may impair motorcycle operation and affect the safety of rider and passenger.

Refuelling

Never overfill the tank when refuelling. Fuel should never be touching the rim of filler recess.



Warning

Use fuel with low lead content and an original octane number of at least 95.



Warning

The motorcycle is only compatible with fuel having a maximum content of ethanol of 10% (E10). Using fuel with ethanol content over 10% is forbidden. Using it could result in severe damage of the engine and motorcycle components. Using fuel with ethanol content over 10% will make the warranty null and void.

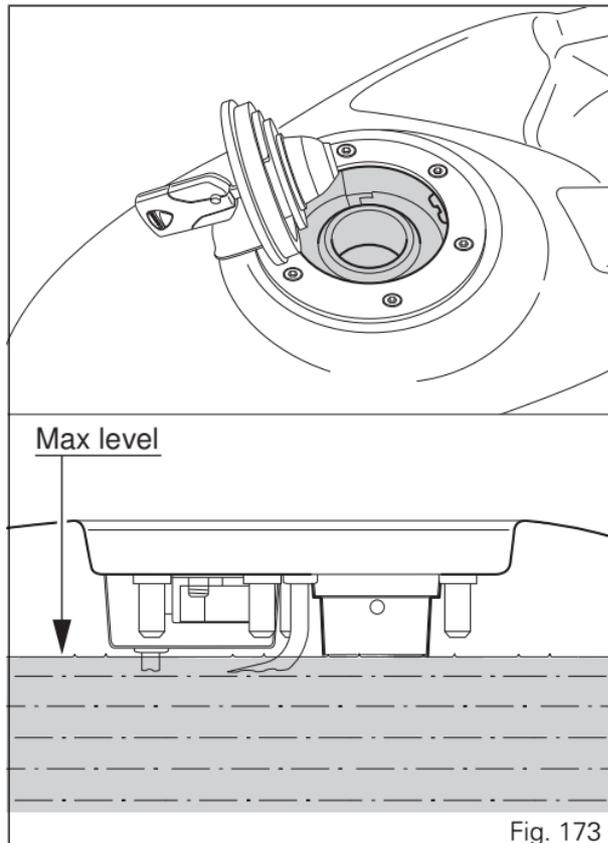


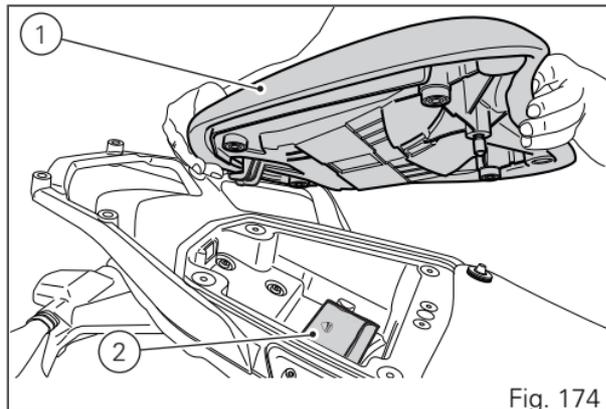
Fig. 173

Tool kit and accessories

The compartment under the passenger seat (1) holds:
an Owner's manual and tool kit (2) including:

- 1 90° needle with rubber scraper;
- 2 rubber cylinders for punctures;
- 2 high pressure spray cans;
- 2 valve adaptors (if not provided with the spray cans);
- 1 5 mm Allen wrench x gravel guard;
- 1 10 mm Allen wrench x eccentric clamp;
- 1 pin wrench for the eccentric;
- 1 extension per pin wrench, 10 mm Allen wrench, screwdriver;
- 1 chain tensioning gauge (for its use refer to the instructions on page 268);
- 1 Phillips screwdriver or 10 mm wrench for battery;

To access the compartment remove the passenger seat.



The following are also provided as standard:

- front semi-mudguard kit;
- long rear mudguard kit;

Main maintenance operations

Checking and topping up coolant level

Check the coolant level in the expansion reservoir on the right-hand side of the headstock.

Steer the handlebar completely to the left and check that the level is between the MIN and MAX marks on the side of the expansion reservoir.

Top up if the level is below the MIN mark.

Unscrew the filler plug (1) and add ENI Agip Permanent Spezial antifreeze, which is not to be diluted, up to MAX level.

Refit the plug (1).

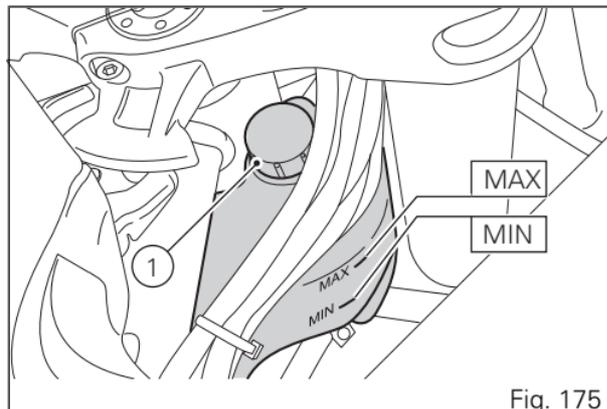


Fig. 175

This type of mixture ensures the best operating conditions (the coolant starts to freeze at $-20^{\circ}\text{C}/-4^{\circ}\text{F}$).
Cooling circuit capacity: 2.3 cu. dm (litres).



Warning

Make sure the engine is cold before proceeding. Attempting to change the coolant with the engine hot could lead to burns from hot coolant or scalding steam.

Checking brake and clutch fluid level

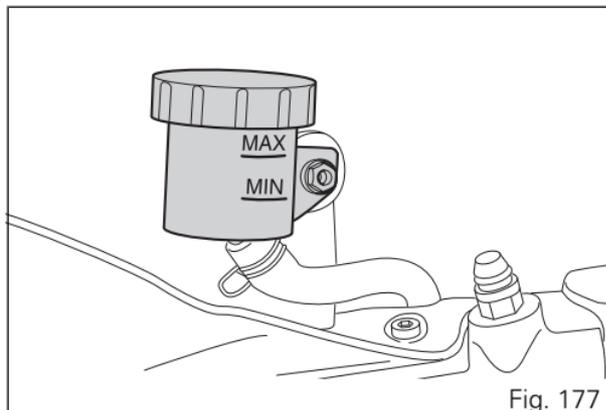
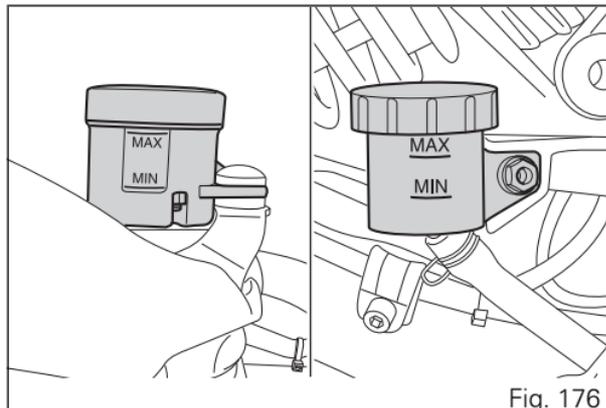
The level must not go below the MIN mark shown on the respective reservoirs ((Fig. 176) shows the front and rear brake fluid reservoirs, (Fig. 177) shows the clutch fluid reservoir).

If level drops below the limit, air might get into the circuit and affect the operation of the system involved.

Brake and clutch fluid must be topped up and changed at the intervals specified in the scheduled maintenance table reported in the Warranty Booklet; please contact a Ducati Dealer or authorised Service Centre.

Important

It is recommended all brake and clutch lines be changed every four years.



Brake system

If you find exceeding play on brake lever or pedal and brake pads are still in good condition, contact your Ducati Dealer or authorised Service Centre to have the system inspected and any air drained out of the circuit.



Warning

Brake and clutch fluid can damage paintwork and plastic parts, so avoid contact. Hydraulic oil is corrosive; it may cause damage and lead to severe injuries. Never mix fluids of different qualities. Check seals for proper sealing.

Clutch system

If the control lever has exceeding play and the transmission snatches or jams as you try to engage a gear, it means that there might be air in the circuit. Contact your Ducati Dealer or authorised Service Centre to have the system inspected and air drained out.



Warning

Clutch fluid level will increase as clutch plate friction material wears down. Do not exceed the specified level (3 mm above the minimum level).

Checking brake pads for wear

Check brake pads wear through the inspection hole in the callipers.

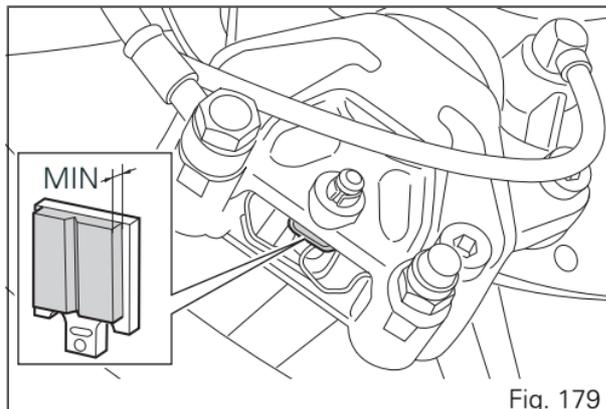
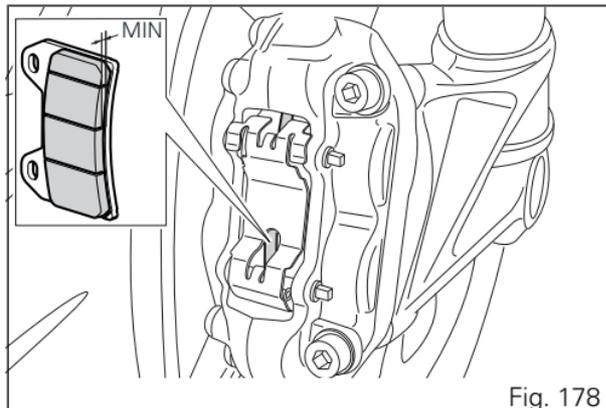
Change both pads if friction material thickness of even just one pad is about 1 mm.

Warning

Friction material wear beyond this limit would lead to metal support contact with the brake disc thus compromising braking efficiency, disc integrity and rider safety.

Important

Have the brake pads replaced at a Ducati Dealer or authorised Service Centre.



Lubricating cables and joints

Check the outer sheath of the throttle and cold start control cables for damage at regular intervals. The outer plastic cover should not be flattened or cracked. Work the controls to make sure the cables slide smoothly inside the sheaths: if you feel any friction or catching, have the cable replaced by a Ducati Dealer or Authorised Service Centre. To avoid this kind of problem with the throttle cable, unscrew the two retaining screws (1) to open the case and then the grease cable ends and pulley (2) with SHELL Advance Grease or Retinax LX2 grease.

Warning

Carefully close the control after engaging the cable in the pulley.

Refit the cover and tighten the screws (1) to 10 Nm.

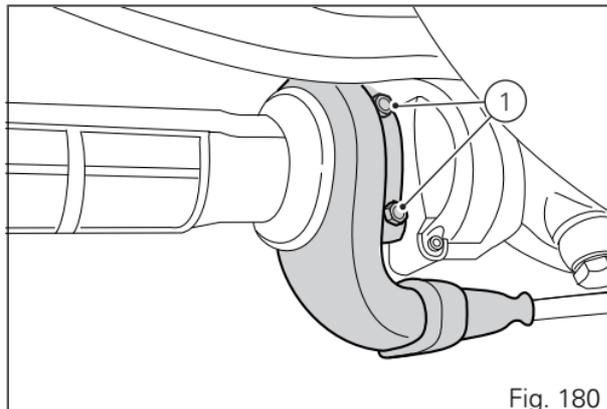


Fig. 180

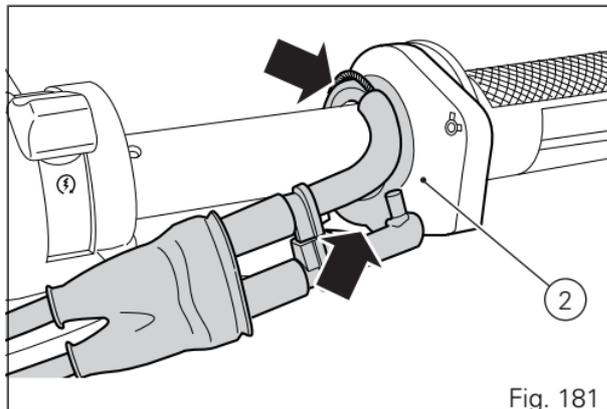
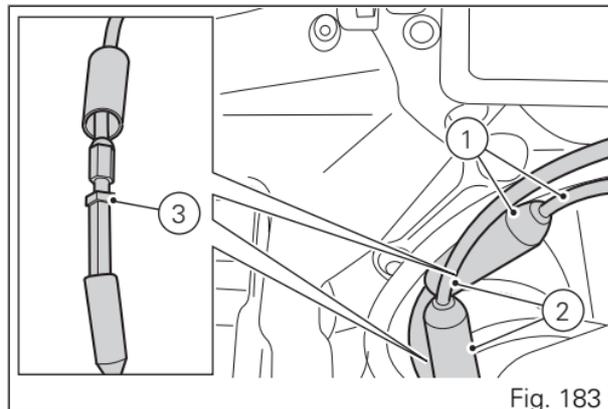
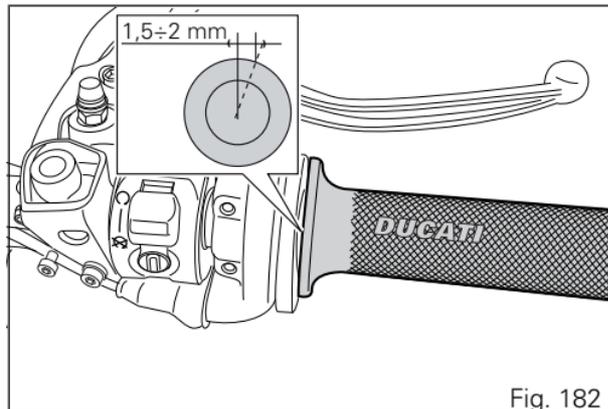


Fig. 181

To ensure smooth operation of side stand joint, clean off any dirt and apply SHELL Alvania R3 at all points exposed to friction.

Adjusting throttle control free play

The throttle twistgrip must have free play of 1.5 - 2.0 mm in all steering positions, measured on the outer edge of the twistgrip. If necessary, adjust it using the adjusters (1 and 2) located on the headstock on the left-hand side of the vehicle. Adjuster (1) is for throttle opening, adjuster (2) for closing. Slip the rubber gaiters off the adjusters and loosen the counter nuts (3). Adjust both adjusters by the same amount: turn clockwise to increase free play and anticlockwise to reduce free play. When finished, tighten the counter nuts (3) and refit the rubber gaiters to the adjusters.



Charging the battery

Before charging the battery, it is best to remove it from the motorcycle.

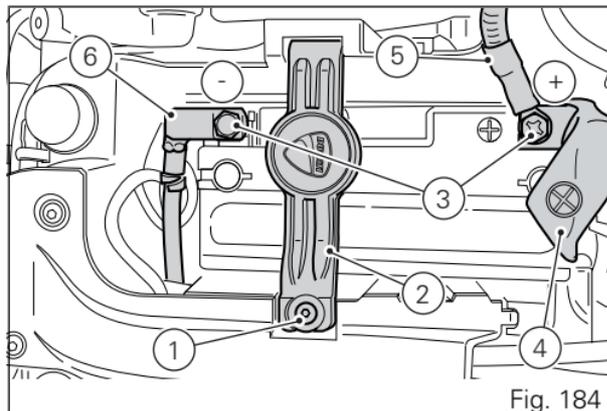
Remove the rider seat, unscrew the screw (1) and remove the bracket (2). Loosen the screws (3), to remove the positive cable (4) and (ABS) (5) from the positive terminal and the negative cable (6) from the negative terminal always starting from the negative one (-) and remove the battery by sliding it outwards.

Warning

The battery gives off explosive gases; never cause sparks or allow naked flames and cigarettes near the battery. When charging the battery, ensure that the working area is properly ventilated.

Charge the battery in a ventilated room.

Connect the battery charger leads to the battery terminals: the red one to the positive terminal (+), the black one to the negative terminal (-).



Important

Make sure the charger is OFF when you connect the battery to it, or you might get sparks at the battery terminals that could ignite the gases inside the cells. Always connect the red positive (+) terminal first.

Grease the screws (3).

Refit the battery on the support, connect the positive cable (4) and ABS (5) to the positive terminal and the negative cable (6) to the negative terminal of the battery, by starting always from the positive (+), and fit the screws (3).

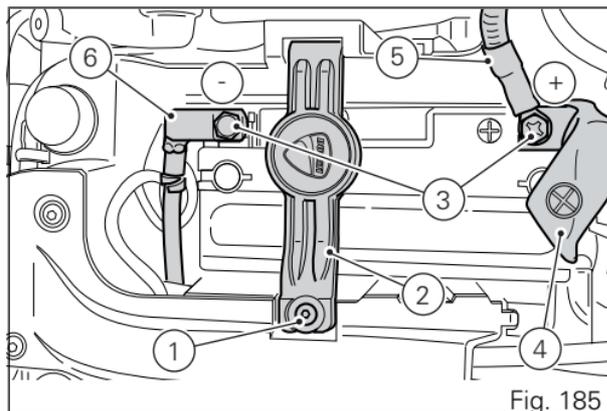
Place the battery retaining bracket (2) and tighten the screw (1).



Warning

Keep the battery out of the reach of children.

Charge the battery at 0.9 A for 5÷10 hours.



Charging and maintenance of the battery during winter storage

Your motorcycle is equipped with a connector (1) under the seat to which you can connect a special battery charger (2) (Battery maintainer kit part no. 69924601A - various countries; Battery maintainer kit part no. 69924601AX - for Japan, China and Australia only) available from our sales network.



Note

The electric system of this model is designed so as to ensure there is a very low power drain when the motorcycle is OFF. Nevertheless, the battery features a certain self-discharge rate that is normal and depends on ambient conditions as well as on "non-use" time.

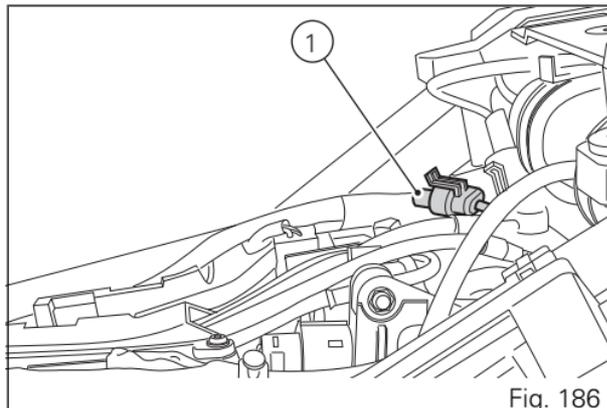


Fig. 186

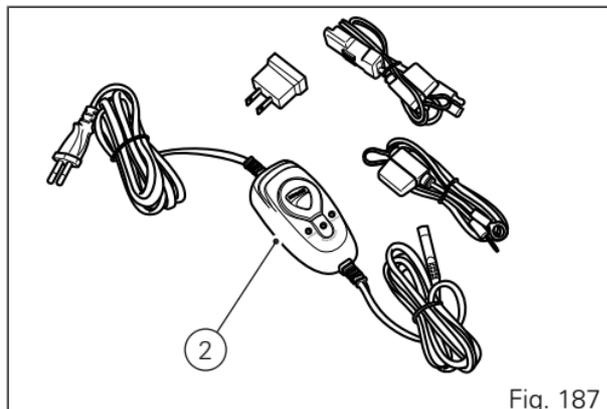


Fig. 187



Important

If battery is not kept at a minimum charge level by a suitable battery charge maintainer, sulphation may occur and this is an irreversible phenomenon causing decreasing battery performance.



Note

When the motorcycle is left unused (approximately for more than 30 days) we recommend owners to use the Ducati battery charge maintainer (Battery maintainer kit part no. 69924601A - various countries; Battery maintainer kit part no. 69924601AX - for Japan, China and Australia only) since its electronics monitors the battery voltage and features a maximum charge current of 1.5 Ah. Connect the maintainer to the diagnostics socket located in the rear side of the motorcycle.



Note

Using charge maintainers not approved by Ducati could damage the electric system; motorcycle warranty does not cover the battery if damaged due to failure to comply with the above indications, since it is considered as wrong maintenance.

Checking drive chain tension



Important

Have chain tension adjusted by a Ducati Dealer or authorised Service Centre.

With the motorcycle on its side stand, measure chain tension as follows: press with a finger in the centre of the bottom run of the chain, release it and measure the distance (A) between the centre of chain link pins and the swingarm aluminium part.

It must be: $A = 35 \div 37$ mm.

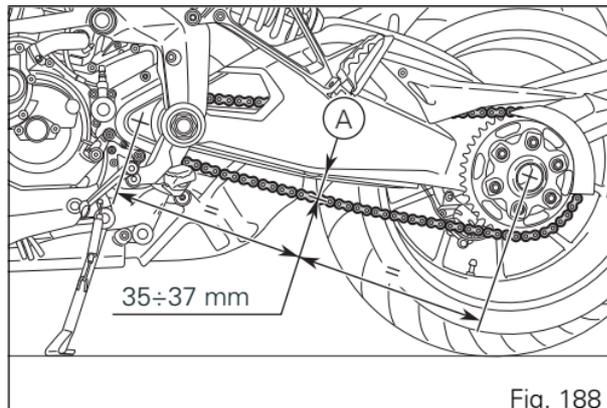


Fig. 188

Warning
Correct tightening of swinging arm screws (1) is critical to rider and passenger safety.

Important
Improper chain tension will lead to early wear of transmission parts.

To access the screws (1), remove the rear gravel guards (2) and chain guard (3), unscrewing the three screws (4).

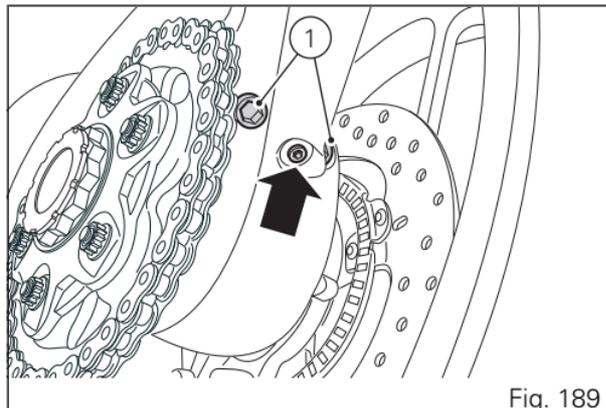


Fig. 189

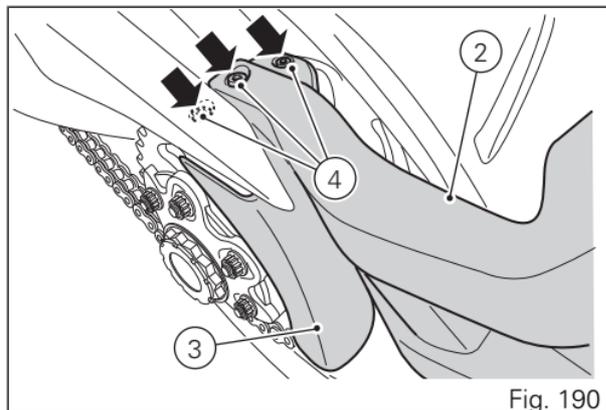


Fig. 190

Chain lubrication

The chain fitted on your motorcycle has O-rings to protect its moving parts from dirt, and to hold the lubricant inside.

The seals might be irreparably damaged if the chain is cleaned using any solvent other than those specific for O-ring chains or washed using steam or water cleaners.

After cleaning, blow the chain dry or dry it using absorbent material and apply SHELL Advance Chain or Advance Teflon Chain on each link.



Important

Using non-specific lubricants may cause severe damage to the chain and the front and rear sprocket.

Using the supplied chain tension gauge

For a correct measure the bike must be placed on the side stand. Always check the chain correct tensioning in the point where it is stretched the most (repeat the gauging on more equidistant points of the chain).



Note

Chain tension changes according to the set Riding Mode. We recommend to carry out the gauging with load setting at Level 1 ("URBAN" Riding Mode and bike set on "RIDER ONLY").

Before proceeding lower the chain with your finger, release it and fit the instrument (1).

The chain tensioning gauge (1) must be inserted between the swingarm and the lower chain slider in correspondence of the slider central fixing point (Fig. 192).

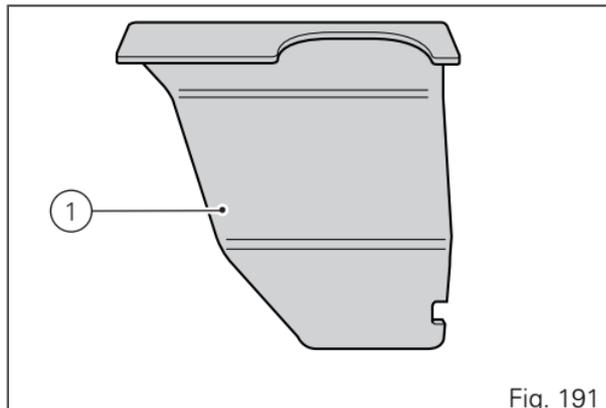


Fig. 191

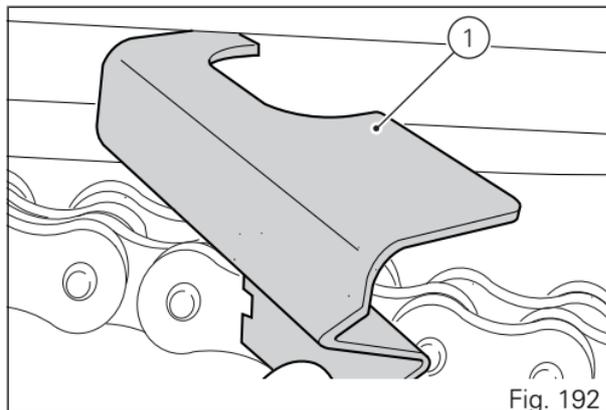


Fig. 192

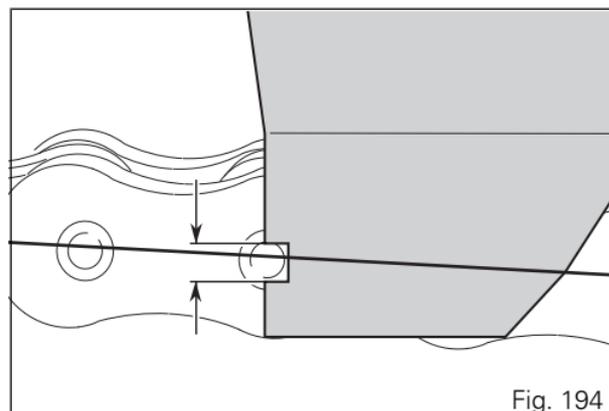
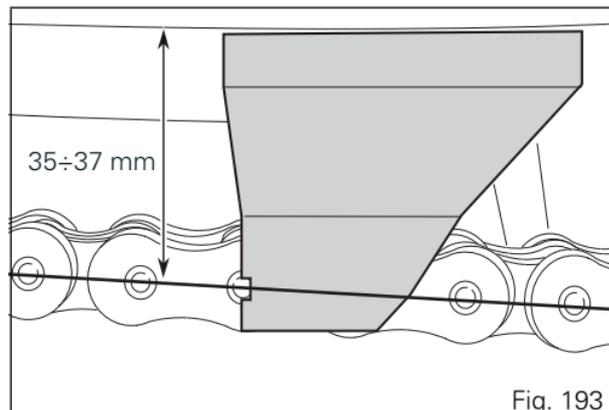
To detect the correct chain tensioning check the correspondence of the chain pins axle (black line in (Fig. 193)), inside the reference notch on the chain tensioning gauge (interval delimited by the arrows in (Fig. 193)).

In case the chain pins are above or below such notch (Fig. 194), you will have to tension the chain page 265.



Important

Have chain tension adjusted by a Ducati Dealer or authorised Service Centre.



Replacing the high and low beam bulbs

Before replacing a burnt-out bulb, make sure that the new one matches the voltage and wattage specifications in paragraph "Electric System".

Always ensure that the new bulb you have installed operates properly before refitting any parts you have removed.

(Fig. 195) shows the locations of the parking light LED unit (1), low beam LED unit (2) and high beam lights (3).

To access the right or left side headlight bulbs, remove the corresponding panel, proceeding as follows.



Note

The figures show the replacement of the lights on the right side of the headlight: the procedure is the same for the left side ones.

Remove the panel cover (2).

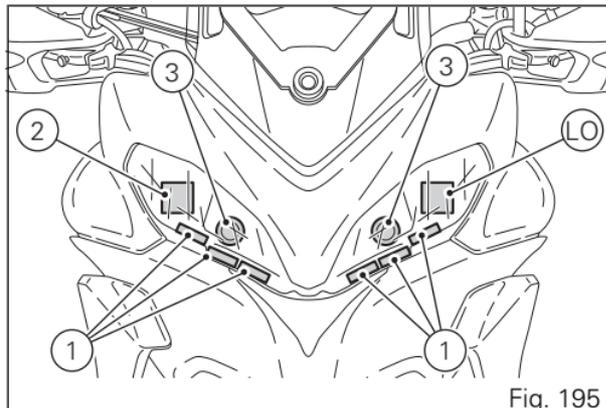


Fig. 195

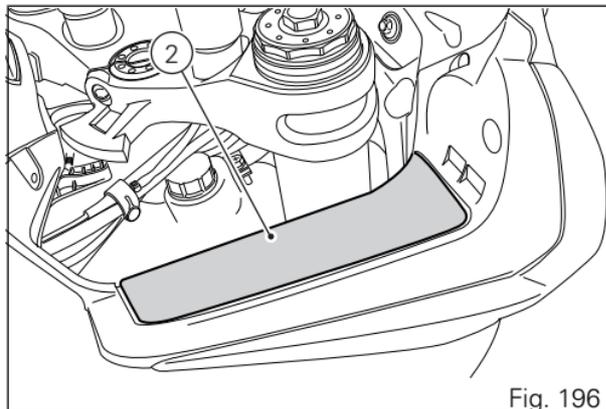


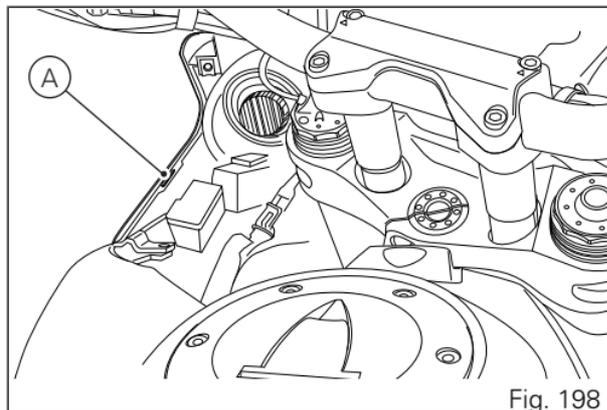
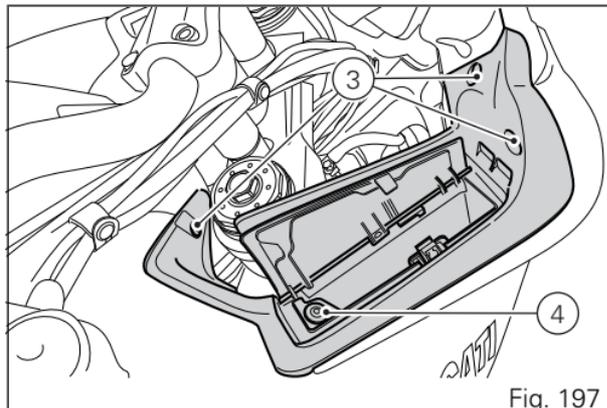
Fig. 196

Unscrew the four screws (3) that fasten the panel (4) to headlight fairing. Remove the panel (4), lifting the rear part to unhook the tabs from the slots (A) in the headlight fairing.



Note

Be careful to hold the new bulb at the base only. Never touch the transparent body with your fingers or it will blacken resulting in reduced bulb brilliancy.



Detach the connector (5) from the bulb holder (6). Turn the bulb holder with the burnt-out bulb counter clockwise and remove it. Replace the bulb with an identical one.

When refitting, turn the bulb holder (6) clockwise to lock it into the headlight body.

Reconnect the connector (5) and refit the panels (4) that were removed being careful to insert the tabs (B) into the slots (A) (Fig. 198) made in the headlight fairing.



Note

To replace the parking light LED bulb, contact an Authorised Ducati Service Centre.

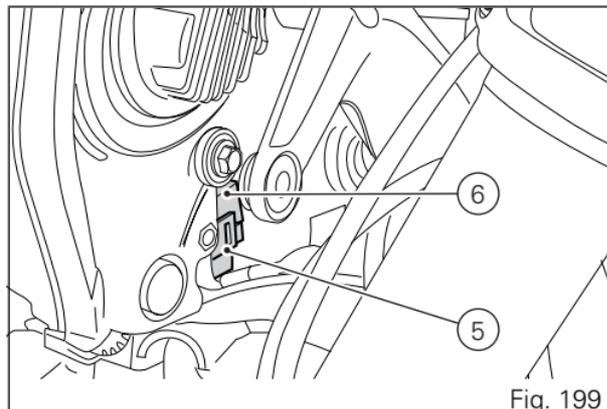


Fig. 199

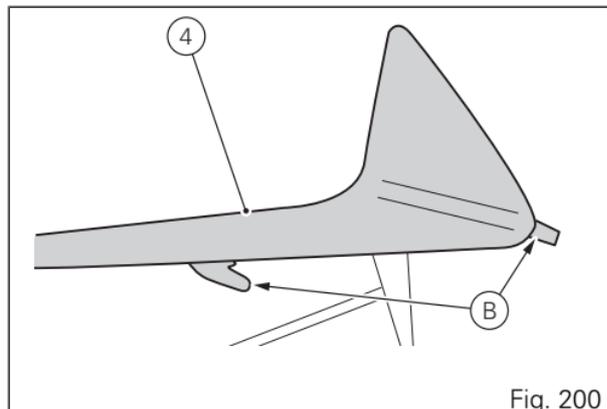


Fig. 200

Rear turn indicators

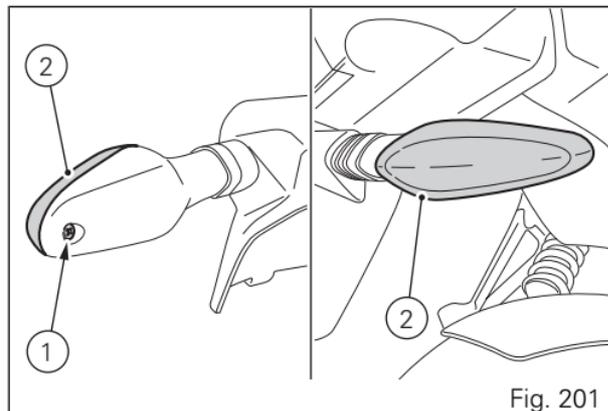
Loosen the screw (1) and detach the lens (2) from the turn signal support.

The bulb is of the banjo-type: press and rotate anticlockwise to remove.

Fit the spare bulb by pressing and turning clockwise until it clicks.

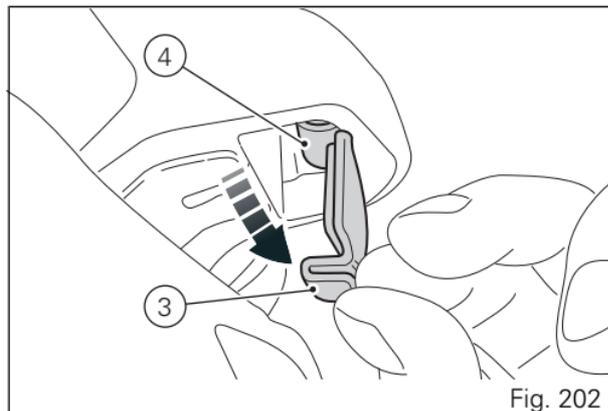
Refit the cup (2) by inserting the tab into the corresponding slot in the turn indicator support.

Refit and tighten the screw (1).



Number plate light

To access the bulb in the number plate light open the number plate lens (3), pull the bulb (4) out of the holder and replace it.



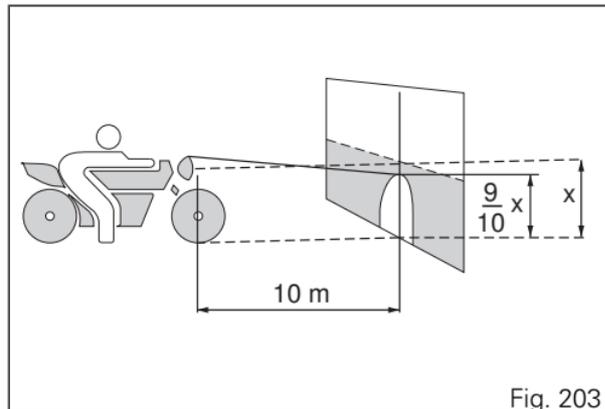
Beam setting



Note

The headlight features a double beam adjustment, one for the right beam and one for the left beam

To check the headlight aim, place the motorcycle upright with the tyres inflated to the correct pressure and one person sitting astride the motorcycle. The motorcycle should be perfectly vertical, with its longitudinal axis at right angles to a wall or screen at a distance of 10 metres. then draw a horizontal line dictated by headlamp centre and a vertical one in line with the longitudinal axis of motorcycle. If possible, perform this check in dim light. Switch on the low beam and adjust the aiming of the left and right-hand beams. The height of the upper limit between the dark area and the lit area must not be more than nine tenths of the height from ground of headlight centre.



Note

This is the procedure specified by Italian regulations for checking the maximum height of the light beam. Please adapt said procedure to the provisions in force in your own country.

Procedure for adjusting the low beam/high beam height

- 1) Switch on the low beam/high beam.
- 2) Fully cover and blank one of the two beams
- 3) Adjust the height of the visible beam by working the corresponding screw adjuster (1), i.e., the one located on the same side as the beam being adjusted. Turn the screw (1) of the headlight clockwise, the light beam will move downwards; turn it counter clockwise to move beam up.
- 4) Cover the adjusted beam and uncover the other one.
- 5) Adjust the height of the visible beam by working the corresponding screw adjuster (1), i.e., the one located on the same side as the beam being adjusted. Turn the screw (1) of the headlight clockwise, the light beam will move downwards; turn it counter clockwise to move beam up.

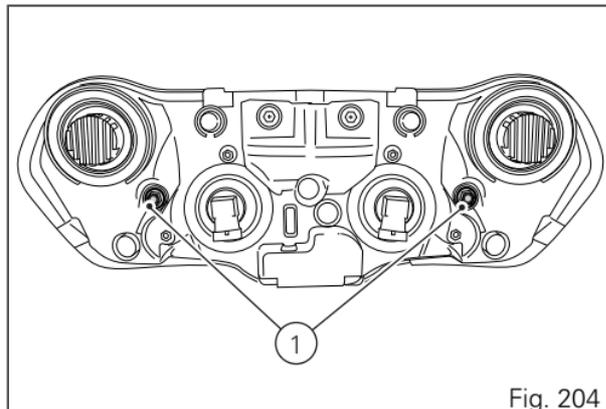


Fig. 204

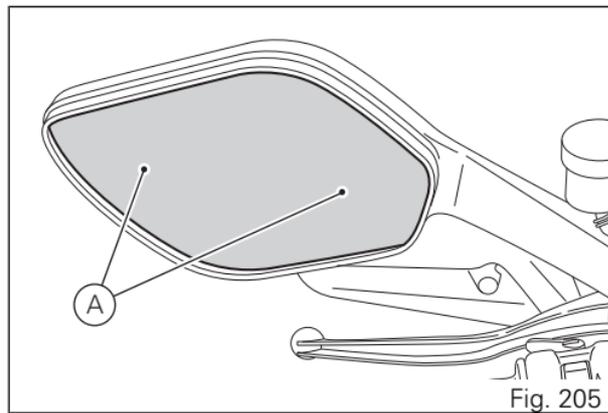


Warning

The headlight might fog up if the motorcycle is used under the rain or after washing. Switch headlight on for a short time to dry up any condensate.

Rear-view mirror adjustment

The rear-view mirror can be adjusted manually by pressing points (A).



Tubeless tyres

Front tyre pressure:

2.50 bar (rider only) - 2.9 bar (with passenger and/or bags).

Rear tyre pressure:

2.50 bar (rider only) - 2.9 bar (with passenger and/or bags).

As tyre pressure is affected by temperature and altitude variations, you are advised to check and adjust it whenever you are riding in areas where ample variations in temperature or altitude occur.

Important

Check and adjust the pressures with the tyres cold. To avoid front wheel box distortion, when riding on bumpy roads, increase tyre pressure by 0.2 ÷ 0.3 bar.

Tyre repair or change (Tubeless tyres)

In the event of a tiny puncture, tubeless tyres will take a long time to deflate, as they tend to keep air inside. If you find low pressure on one tyre, check the tyre for punctures.

Warning

Punctured tyres must be replaced. Replace tyres with recommended standard tyres only. Be sure to tighten the valve caps securely to avoid leaks when riding. Never use tube type tyres. Failure to heed this warning may lead to sudden tyre bursting and to serious danger to rider and passenger.

After replacing a tyre, the wheel must be balanced.

Warning

Do not remove or shift the wheel balancing weights.

Note

Have the tyres replaced at a Ducati Dealer or authorised Service Centre. Correct removal and installation of the wheels is essential. Some parts of the ABS (such as sensors and phonic wheels) are mounted to the wheels and require specific adjustment.



Warning

When changing the front wheel, the Ducati Dealer or authorised Service Centre must follow the instructions given in the Workshop Manual concerning removal and installation of the front wheel shaft.

Minimum tread depth

Measure tread depth (S Fig. 206) at the point where tread is most worn down: it should not be less than 2 mm, and in any case not less than the legal limit.



Important

Visually inspect the tyres at regular intervals for detecting cracks and cuts, especially on the side walls, bulges or large spots that are indicative of internal damage. Replace them if badly damaged. Remove any stones or other foreign bodies caught in the tread.

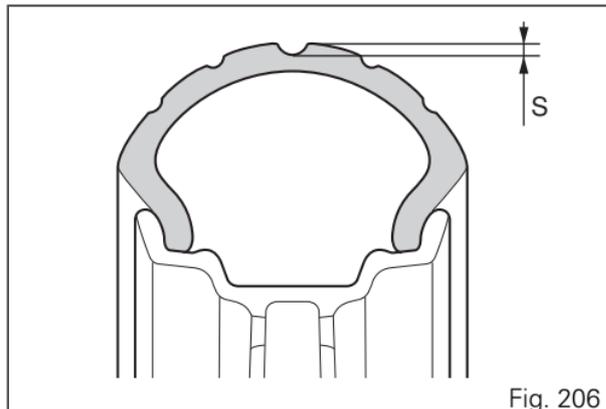


Fig. 206

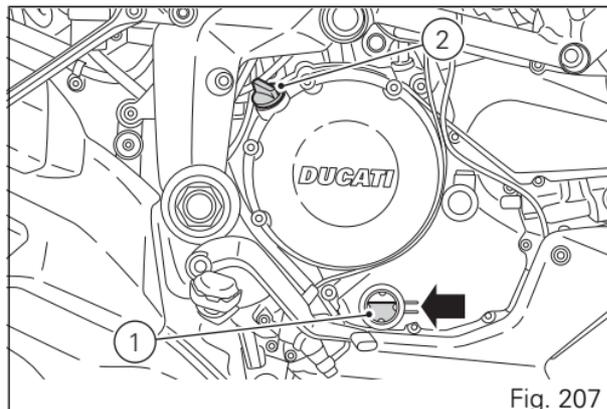
Check engine oil level

Check the engine oil level through the sight glass (1) on the clutch cover. Oil level must be checked with the motorcycle perfectly upright and the engine cold. Oil level should be between the marks on the sight glass. If the level is low, top up with SHELL Advance 4T Ultra engine oil. Remove the oil filler cap (2) and top up until the oil reaches the required level. Refit the plug.



Important

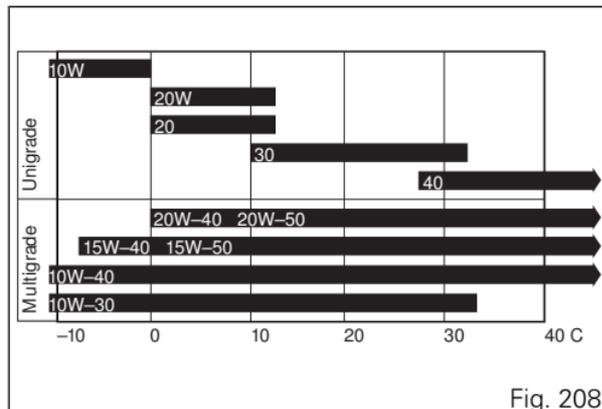
Engine oil and oil filters must be changed by a Ducati Dealer or authorised Service Centre at the intervals specified in the scheduled maintenance chart reported in the Warranty Card.



Viscosity

SAE 15W-50

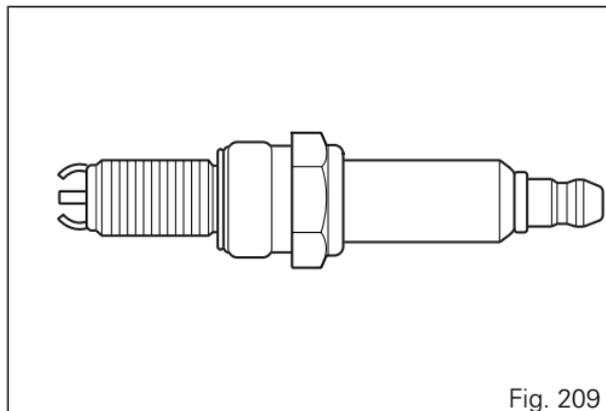
The other viscosity degrees indicated in the table can be used if the local average temperature is within the limits specified for that oil viscosity.



Cleaning and replacing the spark plugs

Spark plugs are essential to smooth engine running and should be checked at regular intervals.

Have the spark plug replaced at a Ducati Dealer or authorised Service Centre.



Cleaning the motorcycle

To preserve the finish of metal parts and paintwork, wash and clean your motorcycle at regular intervals, anyway according to road conditions. Use specific products only. Prefer biodegradable products. Avoid aggressive detergents or solvents.

Use only water and neutral soap to clean the Plexiglas and the seat.

Periodically clean by hand all aluminium components. Use special detergents, suitable for aluminium parts. Do not use abrasive detergents or caustic soda.



Note

Do not use sponges with abrasive parts or steel wool: only use soft cloths.

However, the warranty does not apply to motorcycles whenever poor maintenance status is ascertained.



Important

Do not wash your motorcycle right after use. When the motorcycle is still hot, water drops will evaporate faster and spot hot surfaces. Never clean the motorcycle using hot or high-pressure water jets.

Cleaning the motorcycle with a high pressure water jet may lead to seizure or serious faults in forks, wheel hubs, electric system, headlight (fogging), fork seals, air inlets or exhaust silencers, with consequent loss of compliance with the safety requirements. Clean off stubborn dirt or exceeding grease from engine parts using a degreasing agent. Be sure to avoid contact with drive parts (chain, sprockets, etc.).

Rinse with warm water and dry all surfaces with chamois leather.



Warning

Braking performance may be impaired immediately after washing the motorcycle. Never grease or lubricate the brake discs to avoid losing braking power. Clean the discs with an oil-free solvent.



Warning

The headlight might fog up due to washing, rain or moisture. Switch headlight on for a short time to dry up any condensate.

Carefully clean the phonic wheels of the ABS in order to ensure system efficiency. Do not use aggressive products in order to avoid damaging the phonic wheels and the sensors.

When cleaning the motorcycle, it is necessary to follow some rules to avoid damaging the D-Air[®] system (control unit, sensors and display). Do not clean the motorcycle with high pressure water jets or steam cleaners near the control unit under the seat, the fork sensors and the display. Do not use aggressive chemical products or solvents near the display, fork sensors and control unit under the seat. For further information refer to paragraph "D-Air[®] system maintenance".

Storing the motorcycle

If the motorcycle is to be left unriden over long periods, it is advisable to carry out the following operations before storing it away:

- clean the motorcycle;
- empty the fuel tank;
- pour a few drops of engine oil into the cylinders through the spark plug bores, then turn the engine over by hand a few times to form a protective film of oil on the inner walls of the cylinder;
- place the motorcycle on a service stand;
- disconnect and remove the battery.

Battery should be checked and charged (or replaced, as required) whenever the motorcycle has been left unriden for over a month.

Protect the motorcycle with a suitable canvas. This will protect paintwork and let condensate breathe out.

The canvas is available from Ducati Performance.

Important notes

The legislation in some countries (France, Germany, Great Britain, Switzerland, etc.) sets certain noise and pollution standards.

Periodically carry out the required checks and replace parts as necessary, using Ducati original spare parts, in compliance with the regulations in the country concerned.

Scheduled maintenance chart

Scheduled maintenance chart: operations to be performed by the Dealer

List of operations and type of intervention [set mileage (km/mi) or time interval *]	Km. x1000	1	12	24	36	48	Time (months)
	mi. x1000	0.6	7.5	15	22.5	30	
Reading of the error memory with DDS and check of Software version update on control units.		•	•	•	•	•	12
Check the presence of any technical updates and recall campaigns		•	•	•	•	•	12
Change engine oil and filter		•	•	•	•	•	12
Clean engine oil intake filter		•					-
Check and/or adjust valve clearance				•		•	-
Change timing belts				•		•	60
Change spark plugs				•		•	-
Changing air filter				•		•	-
Check brake and clutch fluid level		•	•	•	•	•	12
Change brake and clutch fluid							36
Check pad wear and brake discs. Change, if necessary		•	•	•	•	•	12

List of operations and type of intervention [set mileage (km/mi) or time interval *]	Km. x1000	1	12	24	36	48	Time (months)
	mi. x1000	0.6	7.5	15	22.5	30	
Check tightening of the safety components (brake disc flange screws, brake calliper screws, front/rear wheel nuts, sprocket and final drive sprocket nuts)		●	●	●	●	●	12
Check and lubricate the rear wheel shaft				●		●	-
Check the drive chain tension and lubrication		●	●	●	●	●	12
Check final drive wear (chain, front and rear sprockets) and chain sliding shoes			●	●	●	●	12
Visual check of front fork and rear shock absorber seals		●	●	●	●	●	12
Change front fork fluid					●		-
Check the freedom of movement and tightening of side and central stand (if installed)		●	●	●	●	●	12
Check rubbing points, clearance, freedom of movement and positioning of hoses and electric wiring in view		●	●	●	●	●	12
Check coolant level		●	●	●	●	●	12
Change coolant						●	48
Check electric fan operation		●	●	●	●	●	12
Check tyre pressure and wear		●	●	●	●	●	12
Check the battery charge level		●	●	●	●	●	12

List of operations and type of intervention [set mileage (km/mi) or time interval *]	Km. x1000	1	12	24	36	48	Time (months)
	mi. x1000	0.6	7.5	15	22.5	30	
Check idling		●	●	●	●	●	12
Check the operation of the safety electrical devices (side stand sensor, front and rear brake switches, engine stop switch, gear/neutral sensor)		●	●	●	●	●	12
Check the indicators and lighting		●	●	●	●	●	12
Reset Service indication through DDS		●	●	●	●	●	-
Road test of the motorcycle, testing the safety devices (ex. ABS and DTC)		●	●	●	●	●	12
Softly clean the motorcycle		●	●	●	●	●	12
Fill out that the service was performed in on-board documentation (Service Booklet)		●	●	●	●	●	12

Scheduled maintenance chart: operations to be performed by the customer

List of operations and type of intervention [set mileage (km/mi) or time interval *]	Km. x1000	1
	mi. x1000	0.6
	Months	6
Check engine oil level		●
Check brake and clutch fluid level		●
Check tyre pressure and wear		●
Check the drive chain tension and lubrication		●
Check brake pads. If necessary, contact your dealer to change pads		●

* Service operation to be carried out in accordance with the specified distance or time intervals (km, miles or months), whichever occurs first.

Technical data

Weights

Weight in running order without fluids and battery:

206 kg.

Carrying full load: 430 kg.

Warning

Failure to observe weight limits could result in poor handling and impair the performance of your motorcycle, and you may lose control of the motorcycle.

Warning

The maximum weight permitted for the side panniers, top case and the tank bag must never exceed 35 kg, divided as follows:

10 kg max. per side pannier (1);

10 kg max for the top case (2);

5 kg max. for the tank bag (3).

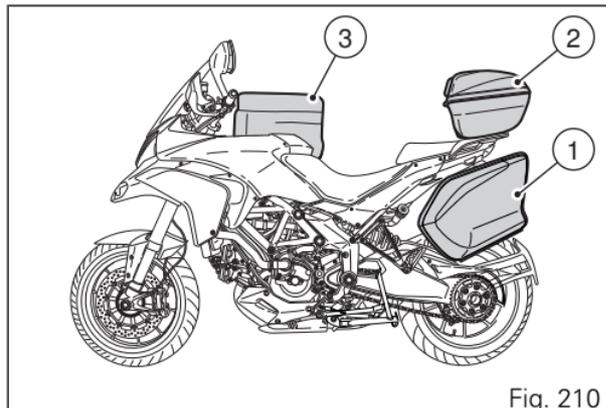


Fig. 210

Overall dimensions (mm)

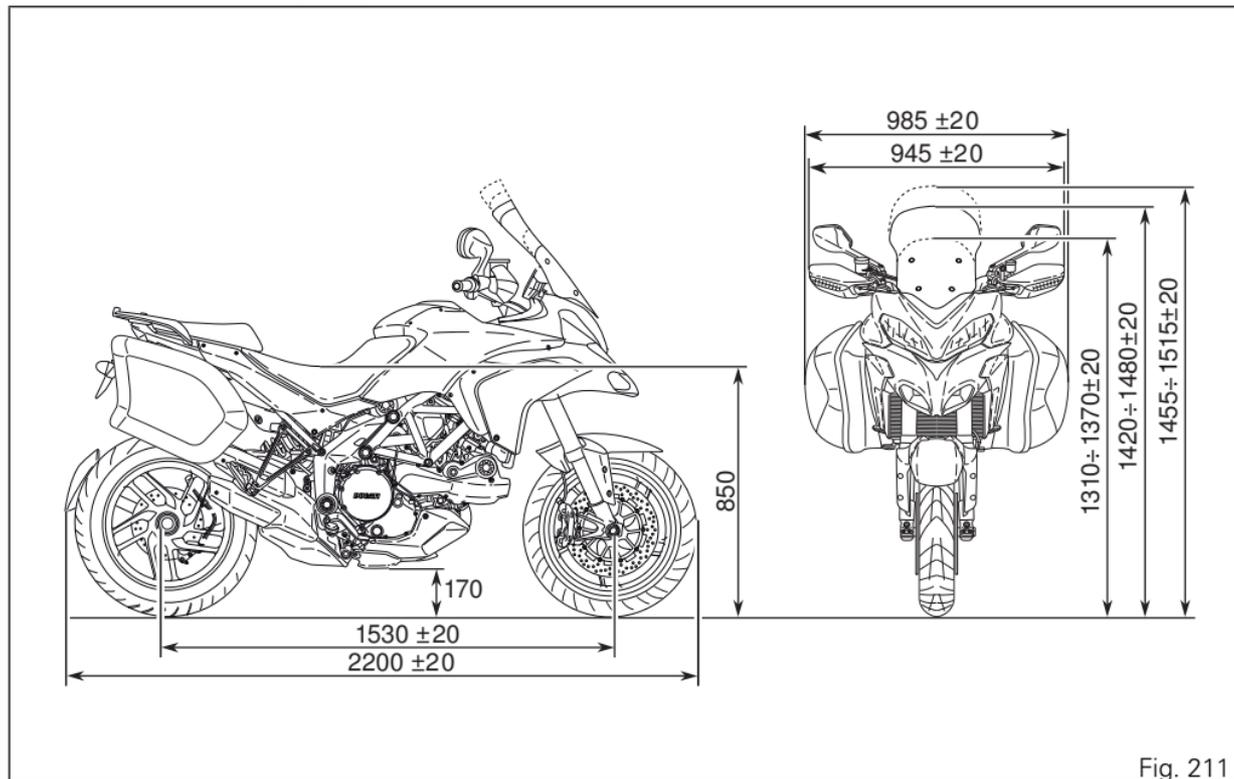


Fig. 211

Top-ups

TOP-UPS	TYPE	
Fuel tank, including a reserve of 4 cu. dm (litres)	Unleaded fuel with a minimum octane rating of RON 95.	20.0 cu. dm (litres).
Sump and filter	SHELL - Advance 4T Ultra	4.10 cu. dm (litres).
Front/rear brake and clutch circuits	SHELL Advance Brake DOT 4	-
Protectant for electric contacts	SHELL Advance Contact Cleaner	-
Front fork	SHELL Advance Fork 7.5 or Donax TA	580 ± 5 g. 660 ± 5 cc.
Cooling circuit	ENI Agip Permanent Spezial antifreeze (do not dilute, use pure)	2.3 cu. dm (litres)



Important

Do not use any additives in fuel or lubricants. Using them could result in severe damage of the engine and motorcycle components.



Warning

The motorcycle is only compatible with fuel having a maximum content of ethanol of 10% (E10). Using fuel with ethanol content over 10% is forbidden. Using it could result in severe damage of the engine and motorcycle components. Using fuel with ethanol content over 10% will make the warranty null and void.

Engine

Longitudinal 90° "L" twin cylinder, four-stroke.

Bore, mm:

106.

Stroke, mm:

67.9.

Total displacement, cu. cm:

1198.4.

Compression ratio:

11.5±0.5:1

Max crankshaft power (95/1/EC), kW/HP:

110.3 kW/150 HP at 9,250 rpm

Max torque at crankshaft (95/1/EC):

12.7 kgm/124.5 Nm at 7,500 rpm

Maximum rpm:

10,700.



Important

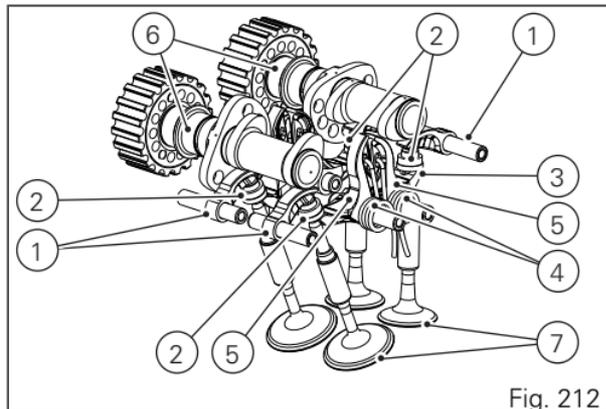
Do not exceed the specified rpm limits in any running conditions.

Timing system

DESMODROMIC with four valves per cylinder, operated by eight rocker arms (four opening rockers and four closing rockers) and two overhead camshafts. It is operated by the crankshaft through spur gears, belt rollers and toothed belts.

Desmodromic timing system

- 1) Opening (or upper) rocker.
- 2) Opening rocker shim.
- 3) Closing (or lower) rocker shim.
- 4) Return spring for lower rocker.
- 5) Closing (or lower) rocker.
- 6) Camshaft.
- 7) Valve.



Performance data

Maximum speed in any gear should be reached only after a correct running-in period with the motorcycle properly serviced at the recommended intervals.



Important

Failure to follow these instructions will release Ducati Motor Holding S.p.A. from any liability for any engine damage or shortened engine life.

Spark plugs

Make:

NGK

Type:

MAR10A-J

Fuel system

MITSUBISHI indirect electronic injection.

Oval throttle body (corresponding diameter): 56 mm

Injectors per cylinder: 1

Firing points per injector: 12

Fuel specifications: 95-98 RON.



Warning

The motorcycle is only compatible with fuel having a maximum content of ethanol of 10% (E10). Using fuel with ethanol content over 10% is forbidden. Using it could result in severe damage to the engine and motorcycle components. Using fuel with ethanol content over 10% will make the warranty null and void.

Brakes

Separate-action anti-lock brake system operated by hall-type sensors mounted to each wheel with phonic wheel detection: ABS can be disabled.

FRONT

Semi-floating drilled twin-disc.

Braking material: steel.

Carrier material: aluminium

Disc diameter: 320 mm.

Hydraulically operated by a control lever on handlebar right-hand side.

Brake calliper make: BREMBO.

Type: P4-32 pistons.

Friction material: Toshiba TT 2172 HH.

Master cylinder type: PR18/19.

REAR

With fixed drilled steel disc.
Disc diameter: 245 mm.
Hydraulically operated by a pedal on RH side.
Make: BREMBO
Type: P34e pistons.
Friction material: FERIT I/D 450 FF.
Master cylinder type: PS 11.
2-piston fixed calliper, 34 mm diameter.

Warning

The brake fluid used in the brake system is corrosive.
In the event of accidental contact with eyes or skin, wash the affected area with abundant running water.

Transmission

Wet clutch controlled by the lever on left-hand side of the handlebar.
Drive is transmitted from engine to gearbox main shaft via spur gears.
Engine sprocket/clutch gearwheel ratio: 33/61
6-speed gearbox with constant mesh gears, gear change pedal on left side of motorcycle.
Gearbox output sprocket/rear chain sprocket ratio: 15/40

Total gear ratios:

1st gear 15/37
2nd gear 17/30
3rd gear 20/27
4th gear 22/24
5th gear 24/23
6th gear 25/22

Drive chain from gearbox to rear wheel.

Make: REGINA
Type: 136ZRPB
Size: 5/8" x 1/16"
Links: 108

Important

The above gear ratios are the homologated ones and under no circumstances must they be modified.

However, if you wish to tune up your motorcycle for competitions or special tracks, Ducati Motor Holding S.p.A. will be pleased to provide information about the special ratios available. Contact a Ducati Dealer or Authorised Service Centre.



Warning

If the rear sprocket needs replacing, contact a Ducati Dealer or authorised Service Centre.

If improperly replaced, this component could seriously endanger your safety, as well as the passenger one, and cause irreparable damage to your motorcycle.

Frame

ALS420 steel tube trellis frame.

ALS 450 steel tube trellis frame rear subframe.

Die-cast light alloy connecting side plates, pivoted on the engine.

Steering head angle: 25°.

Wheels

Front

10-spoke, light-alloy rims.

Size: MT3.50x17"

Rear

10-spoke, light-alloy rims.

Size: MT6.00x17"

Both wheels have removable axles.

Tyres

Front

Tubeless, radial tyre.

Size: 120/70-ZR17

Rear

Tubeless, radial tyre.

Size: 190/55-ZR17

Suspensions

Front

Hydraulic upside-down fork

The fork is adjusted by electric impulses sent by the instrument panel to the adjusters. Only the right-hand fork leg is equipped with external adjuster for setting the preload of the internal spring

Stanchion diameter:

48 mm.

Wheel travel: 170 mm.

Rear

The shock absorber is adjustable for rebound and compression, with remote control for spring preload and is adjustable. Its upper section is pivot connected to the frame and the lower section is pivot connected to a light alloy swingarm. The swinging arm rotates around a pivot shaft that passes through frame and

engine. The whole system gives the bike excellent stability.

Shock absorber stroke: 59.5 mm.

Rear wheel travel: 170 mm.



Note

The front fork and the rear shock absorber are adjusted by electric impulses sent by the instrument panel to the adjusters.

Exhaust system

One-piece stainless steel silencer with aluminium terminals.

Catalytic converter built into the silencer and lambda sensors on the exhaust pipes at the head output.

Available colours

Ducati Anniversary red 473.101 (PPG);

Clear lacquer code 228.880 (PPG);

Racing Grey frame and black wheel rims.

Matt Chrome 928.10046 (PALINAL);

Black chrome Glossprimer 87311952 (PALINAL);

Semigloss clear lacquer for chrome finish 923I2294 (PALINAL);

Racing Grey frame and black wheel rims.

Electrical system

Basic electric items are:

Headlight:

low beam type: LED lamp;

high beam lamp type: 2xH11 (12V-55W);

parking light: LED lamp.

Electrical controls on handlebars.

Turn indicators:

front: LEDs (9.8 V - 2.2 W);

rear: halogen lamp, RY10W type, amber yellow (12V-10W).

Horn.

Stop light switches.

Sealed battery, 12V-10 Ah.

12 V-500 W GENERATOR.

ELECTRONIC RECTIFIER, protected by a 30A fuse

located on the solenoid starter, behind battery (C, Fig. 214).

Starter motor: 12V-0.7 kW.

Tail and stop light: LEDs (13.5 V- 4.2 W/1.5 W).

Number plate light: C5W lamp (12-5W).



Note

For bulb replacement, please refer to paragraph "Replacing the high and low beam bulbs".

Fuses

There are twelve fuses that protect the electric components, located inside the front and rear fuse boxes, and one on the solenoid starter. There is a spare fuse in every box.

Refer to the table below to identify the circuits protected by the various fuses and their ratings.

The front fuse box (A, Fig. 213) is located inside the left panel and can be reached by removing the inspection cover. To expose the fuses, lift the box protective cover. Mounting position and ampere capacity are marked on box cover.

The rear (B, Fig. 214) and the ABS fuse boxes (C, Fig. 214) are located on rear subframe right-hand side, next to the ABS control unit. To reach rear and ABS fuse boxes, remove rider seat, see page 218. To expose the fuses, remove box protective cover. Mounting position and ampere capacity are marked on box cover.

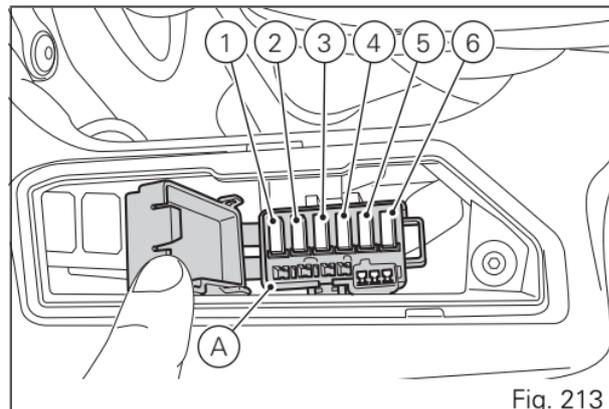


Fig. 213

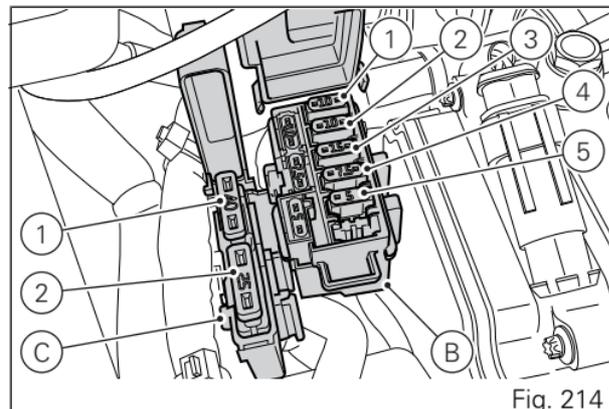


Fig. 214

Front fuse box key		
Pos	El. item	Rat.
1	Lights	20 A
2	Instrument panel	10 A
3	ECU	5 A
4	Key-sense	10 A
5	Injection starter contactor	20 A
6	Throttle opening motor remote control switch (ETV)	10 A

Rear fuse box key		
Pos	El. item	Rat.
1	Black Box System (BBS)	10 A
2	BBS remote control switch	10 A
3	Power sockets/ GPS navigation system / Alarm	15 A

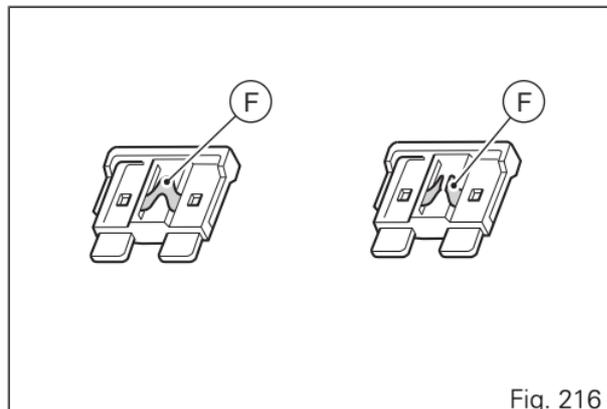
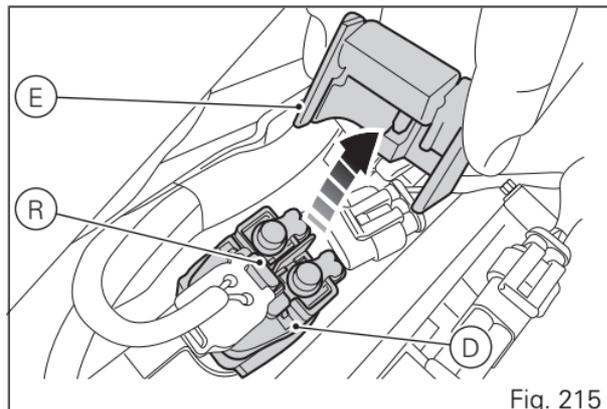
Rear fuse box key		
4	Diagnosis	7.5 A
5	Airbag System Control Unit (D-Air®)	5 A

ABS fuse box key		
Pos	El. item	Rat.
1	ABS 1	40 A
2	ABS 2	25 A

The main fuse (R) is located in front of the rear fuse box, on solenoid starter (D). Remove the fuse cap (E) to reach it. A blown fuse can be identified by breakage of the inner filament (F).

⚠ Important
Switch the ignition key to OFF before replacing the fuse to avoid possible short-circuits.

⚠ Warning
Never use a fuse with a rating other than specified. Failure to observe this rule may damage the electric system or even cause fire.



Injection /electric system diagram key

- | | |
|----------------------------------|---|
| 1) Right-hand switch | 25) Fuel level |
| 2) Immobilizer | 26) Rear right turn indicator |
| 3) Hands Free Relay | 27) Tail light |
| 4) Hands free | 28) Rear left turn indicator |
| 5) Front fuse box | 29) Rear wiring |
| 6) RH fan | 30) Vehicle control unit (BBS) |
| 7) LH fan | 31) Anti-theft system alarm |
| 8) ABS fuse box | 32) Exhaust valve motor |
| 9) Fuel pump relay | 33) Gear sensor |
| 10) Ride-by-wire relay (ETV) | 34) Rear speed sensor |
| 11) Injection control unit (EMS) | 35) ABS control unit |
| 12) GPS navigation system | 36) Throttle handgrip position sensor (APS) |
| 13) Left 12V power socket | 37) Potentiometer motor / ride-by-wire (TPS/ ETV) |
| 14) Right 12V power socket | 38) Timing rpm sensor |
| 15) Rear fuse box | 39) Vertical MAP sensor |
| 16) Data Acquisition / Diagnosis | 40) Horizontal MAP sensor |
| 17) Starter motor | 41) Engine temperature |
| 18) Secondary air actuator | 42) Air temperature sensor |
| 19) Fused solenoid | 43) Vertical lambda sensor |
| 20) Battery | 44) Horizontal lambda sensor |
| 21) Wiring ground | 45) Oil pressure switch |
| 22) Rectifier | 46) Rear stop light |
| 23) Generator | 47) Side stand switch |
| 24) Fuel pump | 48) Clutch switch |
| | 49) Front stop light |
| | 50) Main vertical injector |

- 51) Main horizontal injector
- 52) Horizontal coil
- 53) Vertical coil
- 54) Left-hand switch
- 55) Horn
- 56) Front speed sensor
- 57) Anti-theft system alarm LED
- 58) Front left turn indicator
- 59) Instrument panel
- 60) Front right turn indicator
- 61) High beam relay
- 62) Low beam
- 63) Left high beam
- 64) Right high beam
- 65) Hands Free - tank plug connection
- 66) Heated handgrip connector
- 67) Accelerometer 1 - front fork
- 68) Accelerometer 2 - front fork
- 69) Adjusting the front fork
- 70) Adjusting the rear suspension
- 71) Active suspension control unit
- 72) Accelerometer 3 - rear suspension
- 73) Right accelerometer – Airbag System (D-Air®)
- 74) Left accelerometer – Airbag System (D-Air®)
- 75) Airbag System – (D-Air®)

- 76) Airbag System Diagnosis (D-Air®)
- 77) Airbag System Instrument Panel (D-Air®)

Wire colour coding

- B Blue
- W White
- V Violet
- Bk Black
- Y Yellow
- R Red
- Lb Light blue
- Gr Grey
- G Green
- Bn Brown
- O Orange
- P Pink



Note

The electric system wiring diagram is at the end of this manual.

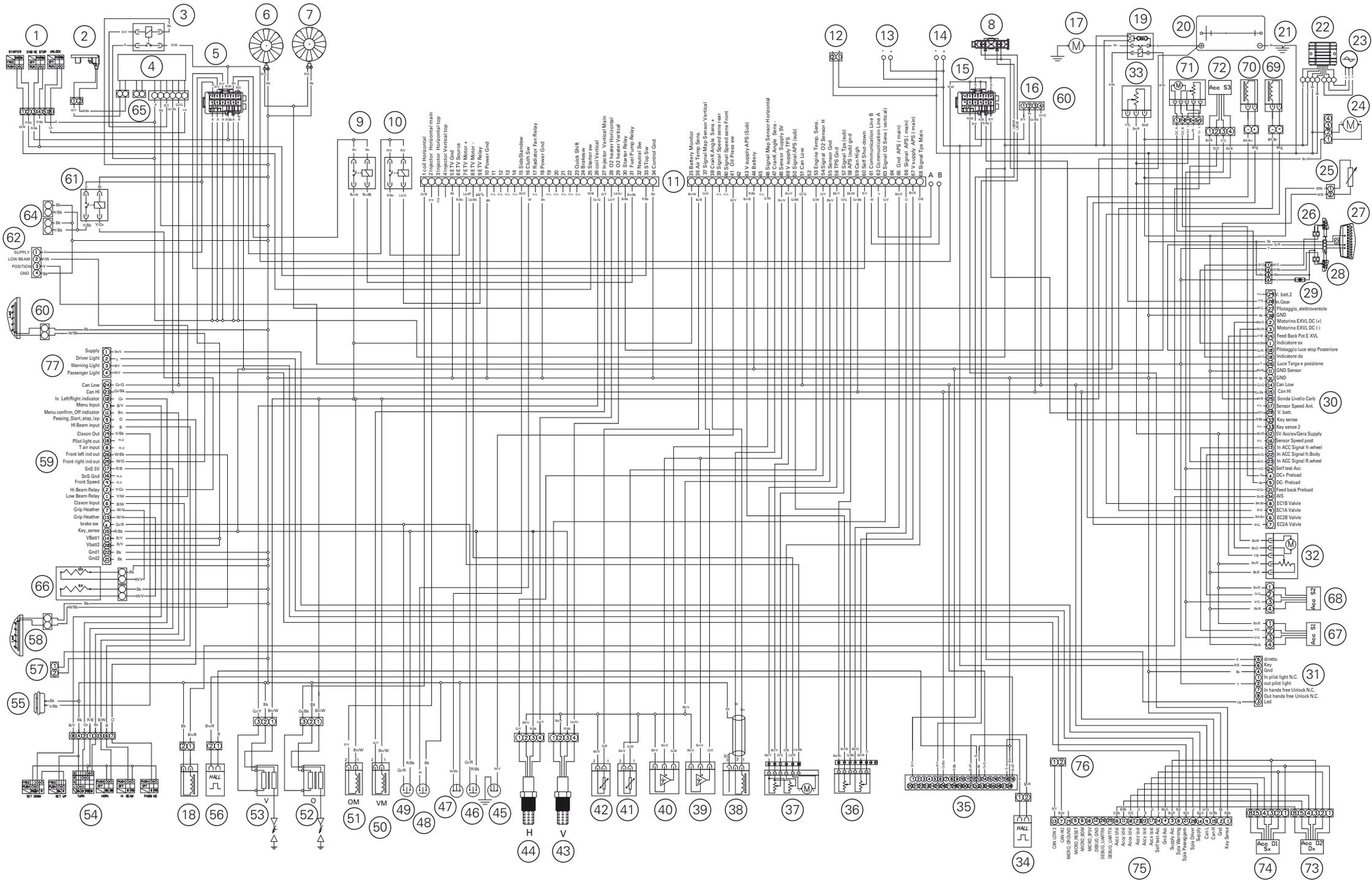
Routine maintenance record

Routine maintenance record

KM	NAME	MILEAGE	DATE
	DUCATI SERVICE		
1000			
12000			
24000			
36000			
48000			
60000			

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