# MULTISTRADA

#### MULTISTRADA I200 ENDURO



Owner's manual

**ENGLISH** 

# **MULTISTRADA**

#### MULTISTRADA 1200 ENDURO

This manual forms an integral part of the motorcycle and must be kept with it for its whole 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 is 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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#### 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 Workshop 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 374.

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 contact a Dealer or Authorised Service Centre.

Warning symbols used in the manual Several kinds of warnings are used as an alert of the possible hazards for you or other persons such as:

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

# Warning Failure to comply with these instructions may put you at risk, and could lead to severe injury or even death of the rider or other persons.

# Important Possibility of damaging the motorcycle and/or its components.

# Note Additional information about the current operation.

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

#### Intended use

## Warning

This motorcycle is designed for both use on road and light off road duty. Do not use on competitive off-road circuits or extreme jumps.

## 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 465kg/1025lb

# Warning

The maximum weight permitted for the side panniers and the top case must never exceed 15 kg (33 lb), divided as follows:

5 kg (11 lb) max. per side pannier; 5 kg (11 lb) max. for the top case.

## Warning

The maximum speed permitted with the side panniers, the top case and the tank bag fitted must not exceed 180 km/h (112 mph) and at any rate it must comply with the applicable statutory speed limits.

The motorcycle can be equipped with M+S category tyres: Ducati recommends Pirelli Scorpion Rally tyres.

# **Warning**

#### Maximum speed with M+S category tyres

The maximum speed specified for the motorcycle can be higher than the one allowed for the tyre. Higher speeds can damage the tyres and cause accidents. Pay attention to the maximum speed allowed for the tyres. When using tyres of the M+S category, like Pirelli Scorpion Rally recommended by Ducati, it is necessary not to exceed the speed limit corresponding to the speed index specified for that tyre: 190 km/h (118 mph) for Pirelli Scorpion Rally tyres.

# Warning

When using M+S category tyres, do not exceed 190 km/h (118 mph).

## **Important**

Using the motorcycle under extreme conditions, such as very damp and muddy roads or dusty and dry environment, could cause above-average wear of components like the drive system, the brakes or the air filter. If the air filter is dirty, the engine could get damaged. Therefore, this might translate in required service or replacement of the wear parts earlier than specified in the scheduled maintenance chart.

#### 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. Road traffic laws differ from state to state. Learn about traffic laws in your state before riding and always obey them.

#### Rider's training

Accidents are frequently due to inexperience. Riding, manoeuvres and braking must be performed in a different way than on the other vehicles.

#### Warning

Untrained riders or a wrong use of the vehicle may lead to loss of control, serious injuries or even death.

#### Apparel

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 trousers.

- The helmet must meet the requirements listed at page 11; 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.

#### Safety "Best Practices"

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 342).

## 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 grab handles 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.).

#### Refuelling

Refuel outdoors with engine off.

Do not smoke or use open flames while refuelling. Be careful not to spill fuel on engine or exhaust pipe. Never completely fill the tank when refuelling. Fuel should never be touching the rim of filler recess. When refuelling, avoid breathing the fuel vapours and prevent fuel from reaching your eyes, skin or clothes.

### 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 case of indisposition caused by breathing fuel vapours for a long time, stay in the open air and contact your doctor. In case of contact with eves. thoroughly flush with water; in case of contact with skin, immediately clean with water and soap.

# Warning

Fuel is highly flammable, in case of accidental spillage of fuel on your clothes it is necessary to change into clean clothes.

#### 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

The maximum speed permitted with the side panniers, the top case and the tank bag fitted must not exceed 180 km/h (112 mph) and at any rate it must comply with the applicable statutory speed limits.

## 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.

Refer to paragraph "Tyres" on page 364.

### Important

If you install the side panniers (available on request from Ducati Parts service), sort out luggage and accessories according to their weight and arrange them in the side panniers to evenly distribute the weight. Close the side panniers with the relevant key locks.

## **↑** Warning

The maximum weight permitted for the side panniers and the top case must never exceed 15 kg (33 lb), divided as follows:

5 kg (11 lb) max. per side pannier; 5 kg (11 lb) max. for the top case.

## | Warning

The total weight of the motorcycle in running order including rider, passenger, luggage and additional accessories should not exceed 465kg/1025lb.

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 dust

Never 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 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

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.

### 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 irritant and poisonous when ingested. Keep away from children. Never remove the radiator cap when the engine is hot. The coolant is under pressure and will cause severe burns.

The cooling fan operates automatically: keep hands well clear and make sure your clothing does not snag on the fan.

#### Battery

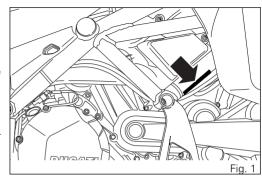
#### Vehicle identification number

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



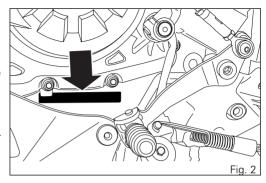
#### Engine identification number

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



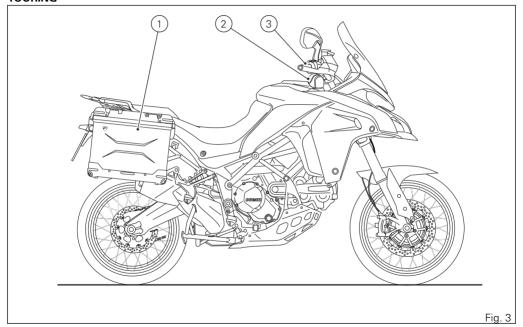
#### Option kits / Customisations

Four customisation kits designed to enhance different styles of the motorcycle. Four sets of equipment, that can be matched together at will to lend your Multistrada the character that suits you best.

- TOURING;
- SPORT;
- URBAN;
- ENDURO.

Information herein refers to Multistrada 1200 Enduro. Information on any other customisation (TOURING, SPORT, URBAN and ENDURO) is indicated only when different from the Multistrada 1200 Enduro.

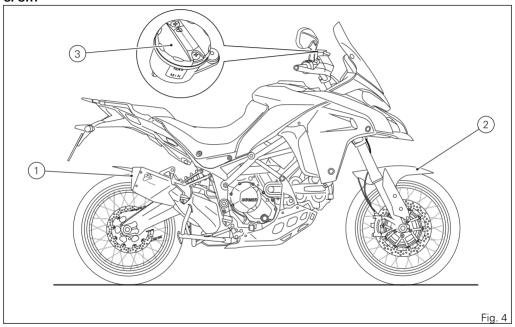
#### **TOURING**



#### **TOURING**

- 1) Ducati Performance aluminium side pannier set by Touratech with 85 I total capacity;
- 2) Handlebar bag;
- 3) Heated handgrips adjustable through 3 levels.

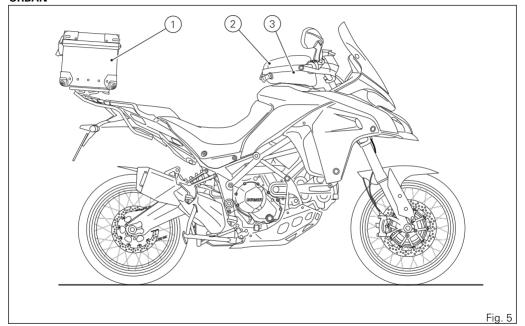
#### **SPORT**



#### **SPORT**

- "Termignoni" carbon type-approved silencer (compliant with EU type-approval requirements);
- 2) Carbon front mudguard;
- Billet aluminium clutch and brake fluid reservoir covers.

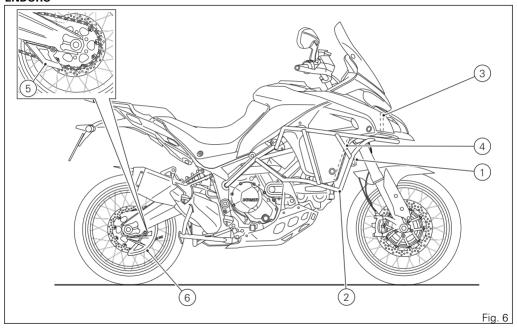
#### **URBAN**



#### URBAN

- 1) Touratech 38-litre aluminium top case;
- 2) Semi-rigid tank bag with quick fitting;
- 3) USB hub for charging electronic devices.

#### **ENDURO**



#### **ENDURO**

- 1) Additional lights;
- Ducati Performance engine protection bars by Touratech;
- 3) Ducati Performance protection for oil cooler by Touratech;
- Ducati Performance radiator protection by Touratech;
- 5) Chain lower protection;
- 6) Rear brake disc protection.

## Instrument panel (Dashboard)

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

#### Instrument panel

- 1) Display.
- 2) NEUTRAL LIGHT N (GREEN).

Comes on when in neutral position.

3) CRUISE CONTROL LIGHT (GREEN).

Comes on to indicate operation of the Cruise Control.

4) HIGH BEAM LIGHT ≣O (BLUE).

It turns on to indicate that the high beam lights are on and when the flasher is activated

- litres of fuel left in the tank.
- 6) TURN INDICATOR LIGHTS ⇔ (GREEN).

Illuminates and flashes when the turn indicator is in operation.

7) 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.

#### 8) DTC / DWC WARNING LIGHT (AMBER YELLOW).

This light indicates DTC/DWC system enabling/disabling status.

Speed below 5 Km/h (3 mph)				
Light OFF	Light flashing	Light steady on		
	DTC/DWC enabled but not yet func- tioning since initialisation is in pro- gress or functioning with degraded performance			
Speed above 5 Km/h (3 mph)				
Light OFF	Light flashing	Light steady on		
DTC/DWC enabled and functioning	DTC/DWC enabled but there is a fault in the system causing degraded performance	DTC/DWC disabled and/or not functioning due to a fault in the BBS control unit		

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

10) ABS LIGHT ((G) (AMBER YELLOW). Indicates ABS status.

Speed below 5 Km/h (3 mph)				
Light OFF	Light flashing	Light steady on		
-	ABS enabled but not yet function- ing since initialisation is in progress or there is a fault of the IMU control unit	due to a fault in the ABS control unit		
Speed above 5 Km/h (3 mph)				
Light OFF	Light flashing	Light steady on		
ABS enabled and functioning	ABS enabled but a fault is detected by the IMU control unit	ABS disabled and not functioning due to a fault in the ABS control unit		

# 11) GENERIC ERROR WARNING LIGHT (AMBER YELLOW).

It turns on when there are any "vehicle" errors, i.e. active errors triggered by any control unit other than the engine control unit.

#### 12) DTC INTERVENTION (AMBER YELLOW).

	DTC
No intervention	Light OFF
Spark advance cut	Light steady ON
Injection cut	Light steady ON

#### 13) OVER REV / IMMOBILIZER SYSTEM (RED)

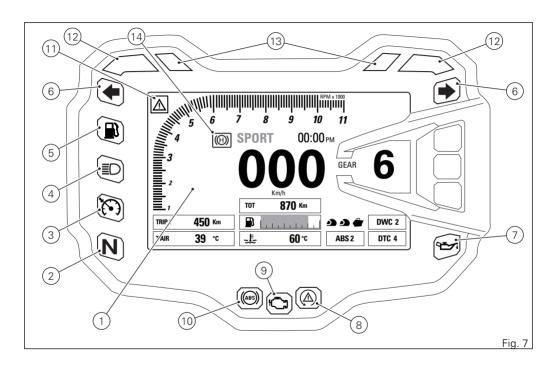
	Over rev
No intervention	Light OFF
First threshold (N RPM before the limit- er kicks in)	Light steady ON
Limiter	Light ON flashing

## Note

Each calibration of the Engine Control Unit may have a different setting for the thresholds that precede the rev limiter and the rev limiter itself.

	Immobilizer
Key-ON status	Light OFF
Key-OFF status	Light ON flashing
Key-off status for over 1 hour	Light OFF

14) VHC Vehicle Hold Control (AMBER YELLOW) It turns on upon activation of the VHC system: the ABS of the Multistrada 1200 Enduro is equipped with the Vehicle Hold Control (VHC) system. This system, when activated, keeps the vehicle at a standstill by quickly activating the rear brake: the warning light remains steady. The warning light starts blinking when the VHC system is about to release the rear brake pressure and thus to stop keeping the vehicle at a standstill: pressure is decreased gradually. The warning light turns off when the VHC system is disabled.



# Acronyms and abbreviations used in the Manual

**ABS** 

Antilock Braking System

**BBS** 

Black Box System

CAN

Controller Area Network

LIN

Local Interconnect Network

DSB

Dashboard

DSS

**DUCATI SkyHook System** 

DTC

**DUCATI Traction Control** 

DWC

**DUCATI Wheelie Control** 

**ECU** 

**Engine Control Unit** 

VHC

Vehicle Hold Control

Technological Dictionary

Riding Mode

The rider can choose from 4 different preset bike configurations (Riding Modes) and pick the one that best suits his/her riding style or ground conditions. The Riding Modes allow user to instantly change the engine power delivery (Power Mode), ABS, DTC and DWC settings, vehicle setup and instrument panel graphics.

Available Riding Modes: Sport, Touring, Urban and Enduro. Within every Riding Mode, the rider can customise any settings.

#### Power Mode

The Power Modes are the different engine maps the rider can select to change power level and delivery to suit his/her own riding style and surface conditions. There are three Power Modes, one for each Riding Mode:

- LOW, with 'soft' power delivery;
- MED, with 'soft' power delivery;
- HIGH, with 'instant' power delivery.

## Ride by Wire (RbW)

The Ride by Wire system is the electronic device that controls throttle opening and closing. Since there is no mechanical connection between the throttle

twistgrip and the throttle bodies, the ECU can adjust power delivery by directly affecting throttle opening angle.

The Ride by Wire system allows you to obtain different power level and delivery according to the selected Riding Mode (Power Mode), but even to accurately control the engine brake (EBC), thereby helping to control the rear wheel slipping (DTC).

#### 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 calibrated to offer a different tolerance level to rear wheel slipping. Each Riding Mode features a pre-set intervention level. Level 8 indicates system intervention whenever a slight slipping is detected, while level 1 is for offroad use and very expert riders because it is less sensitive to slipping and intervention is hence softer.

### Anti-lock Braking System (ABS) 9.1ME

The ABS 9.1ME system fitted to the Multistrada 1200 Enduro is a safety system preventing wheel lockup while riding with the motorcycle not leaning over. The Multistrada 1200 Enduro ABS also features a "cornering" function that widens ABS functionality to

the conditions where the motorcycle is leaning over, thus preventing wheel lockup and slipping as much as possible, within the physical limits allowed by the vehicle and by the road conditions. The Multistrada 1200 Enduro ABS implements rear wheel lift-up control and combined braking (from front to rear) in order to ensure not only smaller stopping distance under braking, but also the best possible stability. The system features 3 levels, one associated to each Riding Mode. ABS can be disabled.

The Multistrada 1200 Enduro ABS is provided with the Vehicle Hold Control (VHC). The system, when activated, keeps the vehicle at a standstill. During the restart, the user only has to concentrate on the clutch and acceleration control, while the VHC gradually decreases the rear brake pressure.

### Ducati Wheelie Control (DWC)

The Ducati Wheelie Control system (DWC) supervises control of wheelie movement and settings vary through eight different levels that are calibrated to offer a different prevention and reaction to wheelies. Each Riding Mode features a pre-set intervention level. Level eight indicates a setting that minimises motorcycle tendency to shift up in a wheelie and maximises reaction to the same, if it

occurs. While level one is for expert riders and features a lower wheelie control in terms of prevention and less strong reaction to the same, if it occurs.

#### Inertial Measurement Unit (IMU)

The Multistrada 1200 Enduro is fitted with a Bosch inertial platform, equipped with inertial measurement unit (IMU). The IMU constantly monitors motorcycle incidence and lean angle, matching them with ABS, DWC signals and DSS semi-active suspension information, thereby optimising the efficiency of all these systems, regardless of motorcycle position.

#### Ducati Cruise Control

Multistrada 1200 Enduro features a system for maintaining the cruise speed, the Ducati Cruise Control. System can be enabled with engaged gear equal to or higher than the second gear and vehicle speed ranging between 50 Km/h (30 mph) and 200 Km/h (125 mph).

#### Ducati SkyHook Suspension

Multistrada 1200 Enduro is equipped with the brand new suspension control system called DSS (Ducati Skyhook System): DSS is a dynamic suspension damping control system. The suspensions of a vehicle usually have two main dynamic functions: allowing the vehicle to absorb the bumps on the road by filtering their effects on vehicle body (and, consequently, on rider) and allowing the optimal contact between wheels and asphalt. The DSS system purpose is to improve the comfort offered by a standard passive suspension keeping at the same time the same performance.

# Desmodromic Variable Timing (DVT)

The DVT system allows optimised timing setting according to engine load and speed, as well as to continuously advance or delay exhaust and intake valve timing through the rotation of the camshafts, thereby ensuring utmost efficiency throughout the rpm range and high performance at high speed, with an optimised torque curve at low rpm.

# Information statement on UE directive 2014/53/UE

Your vehicle is equipped with a range of radio equipment. The manufacturers of this radio equipment declare that this equipment complies with Directive 2014/53/EU where required by law.

The complete text of the EU declaration of conformity is available at the following web address: certifications.ducati.com

#### Manufacturers' addresses

All relevant components pursuant to 2014/53/EU must bear the manufacturer's address. For components that, due to their size or nature, cannot be furnished with a sticker, the respective manufacturers' addresses as required by law are listed here:

Radio equipment installed in the vehicle	Manufacturers' addresses
Bluetooth	COBO S.p.a. Via Tito Speri, 10 25024 - Leno (BS) Italy
Hands free	ZADI S.p.a. Via Carl Marx, 138 41012 - Carpi (MO) Italy
D-Air	Dainese S.p.a. Via dell'Artigianato, 35 36060 - Molvena (VI) Italy
E-Lock	ZADI S.p.a. Via Carl Marx, 138 41012 - Carpi (MO) Italy
GPS	PROSA S.r.I. Via dell'Elettricità, 3/d 30175 - Venezia Marghera (VE) Italy

	Frequency band
Bluetooth	2,402 MHz ÷ 2,480 MHz

Hands free unit	134.5 KHz 868.35 MHz
Hands free key	868.35 MHz
D-Air	868 MHz 2.4 GHz
E-lock	134.5 KHz
GPS	1575.4 MHz

#### **Function buttons**

1) UP CONTROL SWITCH " A "

Button used to display and set instrument panel parameters with the position " **\( \Lambda \)**".

2) DOWN CONTROL SWITCH "▼"

Button used to display and set instrument panel parameters with the position "  $\blacksquare$  ".

3) ON/OFF AND LIGHT BUTTON (LOW BEAMS / HIGH BEAMS)(Fig. 9)

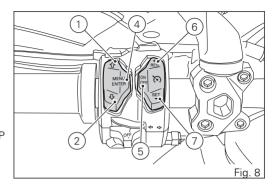
The high-beam flash button may also be used for LAP functions.

4) CONFIRM MENU / SETTING MENU ENTRY BUTTON

Button used to confirm during MENU navigation.

5) CRUISE CONTROL BUTTON - ON/OFF

Button used to switch the Cruise Control function on/ off.



6) CRUISE CONTROL BUTTON - RES (Resume) / + (more) (Fig. 8)

Button used to increase set cruise speed for the Cruise Control.

7) CRUISE CONTROL BUTTON - SET (Setup) / - (less) (Fig. 8)

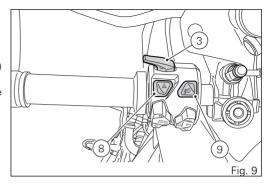
Button used to set/decrease set cruise speed for the Cruise Control

8) HAZARD BUTTON

Button used to switch on/off all four turn indicators (Hazard function).

9) FOG LIGHT BUTTON (OPTION)

Button used to switch on/off the fog lights (option).



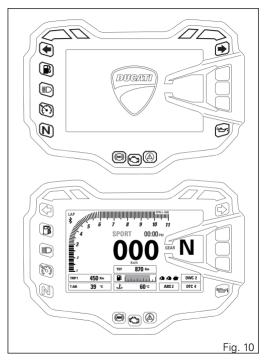
## Parameter setting/displaying

Upon key-on, the instrument panel displays the DUCATI logo and switches on the LED warning lights in two steps ("initial check routine").

After this routine, the instrument panel displays the main page in one of the available layouts (TRACK, FULL, CORE and OFF ROAD), depending on the one in use before last KEYOFF.

During this first check stage, if the motorcycle speed exceeds 10 km/h (6 mph) (actual speed), the instrument panel will stop:

- the display check routine and display the standard screen containing updated information;
- the warning light check routine and leave ON only the warning lights that are actually active at the moment

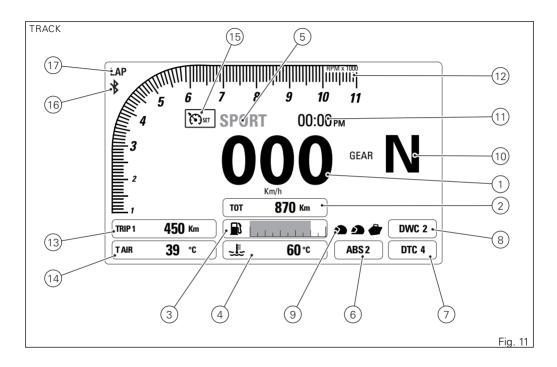


The main screen can have four different layouts:

TRACK, FULL, CORE and OFF ROAD.

Data displayed on the main screen for TRACK layout are as follows:

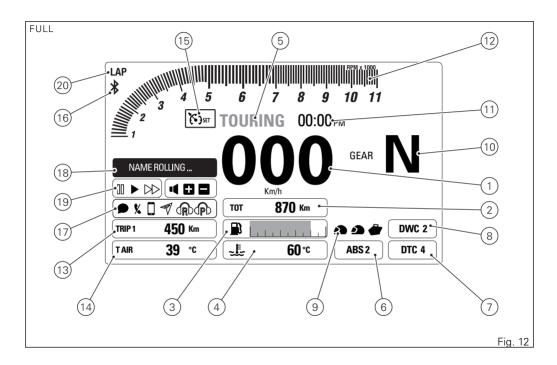
- 1) Motorcycle speed.
- 2) Odometer
- 3) Fuel level.
- 4) Engine Coolant temperature
- 5) Set Riding Mode.
- 6) ABS ON/OFF indication.
- DTC level indication (ON) or DTC OFF indication.
- 8) DWC level indication or DWC off indication.
- 9) LOAD settings (motorcycle setup)
- 10) Gear indication
- 11) Clock.
- 12) Rev counter
- 13) Menu 1 (Range, Trip 1, Trip 2, Trip time).
- 14) Menu 2 (Instant fuel consumption, Average fuel consumption, Average speed, Ambient air temperature, Lap time - only if active).
- 15) Cruise Control indication.
- 16) Bluetooth indication
- 17) LAP indication (only if active).



Data displayed on the main screen for FULL layout are as follows:

- 1) Motorcycle speed.
- 2) Odometer
- 3) Fuel level.
- 4) Engine Coolant temperature
- 5) Set Riding Mode.
- 6) ABS ON/OFF indication.
- 7) DTC level indication (ON) or DTC OFF indication
- 8) DWC level indication or DWC off indication.
- 9) LOAD settings (motorcycle setup)
- 10) Gear indication.
- 11) Clock.
- 12) Rev counter
- 13) Menu 1 (Range, Trip 1, Trip 2, Trip time).
- 14) Menu 2 (Instant fuel consumption, Average fuel consumption, Average speed, Ambient air temperature).
- 15) Cruise Control indication.
- 16) Bluetooth indication
- 17) Infotainment Menu Connected devices / phone calls / sms
- Infotainment Menu Player (calls) / Phone (Recall)

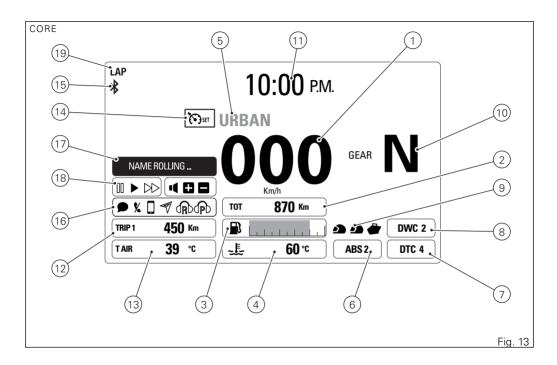
- Infotainment Menu Player (volume / track selection)
- 20) LAP indication (only if active).



Data displayed on the main screen for CORE layout are as follows:

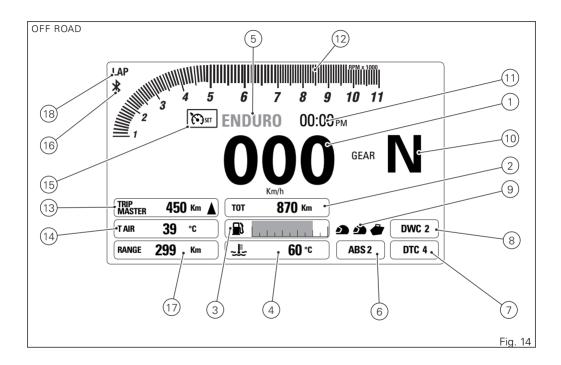
- 1) Motorcycle speed.
- 2) Odometer
- 3) Fuel level.
- 4) Engine Coolant temperature
- 5) Set Riding Mode.
- 6) ABS ON/OFF indication.
- 7) DTC level indication (ON) or DTC OFF indication
- 8) DWC level indication or DWC off indication.
- 9) LOAD settings (motorcycle setup)
- 10) Gear indication
- 11) Clock.
- 12) Menu 1 (Range, Trip 1, Trip 2, Trip time).
- Menu 2 (Instant fuel consumption, Average fuel consumption, Average speed, Ambient air temperature).
- 14) Cruise Control indication.
- 15) Bluetooth indication
- 16) Infotainment Menu Connected devices / phone calls / sms
- Infotainment Menu Player (calls) / Phone (Recall)

- Infotainment Menu Player (volume / track selection)
- 19) LAP indication (only if active).



Data displayed on the main screen for OFF ROAD layout are as follows:

- 1) Motorcycle speed.
- 2) Odometer
- 3) Fuel level.
- 4) Engine Coolant temperature
- 5) Set Riding Mode.
- 6) ABS ON/OFF indication.
- DTC level indication (ON) or DTC OFF indication
- 8) DWC level indication or DWC off indication.
- 9) LOAD settings (motorcycle setup)
- 10) Gear indication.
- 11) Clock.
- 12) Rev counter
- 13) TRIP MASTER
- 14) Ambient air temperature (T AIR).
- 15) Cruise Control indication.
- 16) Bluetooth indication
- 17) Residual range (RANGE)
- 18) LAP indication (only if active).

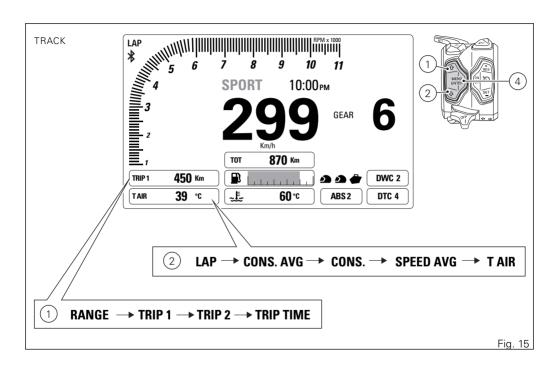


From the main screen, with TRACK layout, press button (1) on LH switch to view Menu 1 information.

- RANGE:
- TRIP 1;
- TRIP 2;
- TRIP TIME.

Press button (2) on LH switch to view Menu 2 information.

- Lap time (LAP) only if active;
- Average fuel consumption (CONS. AVG);
- Instantaneous fuel consumption (CONS.I);
- Average speed (SPEED AVG);
- Air temperature.

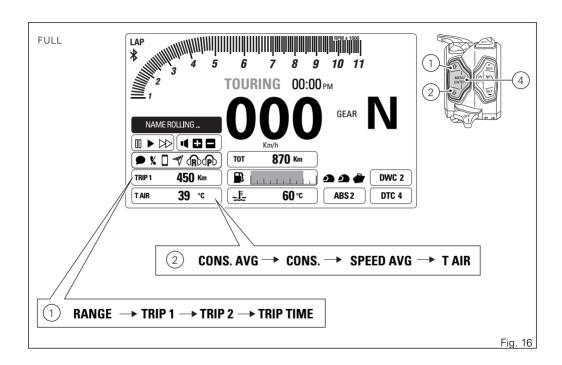


From the main screen, with FULL layout, press button (1) on LH switch to view Menu 1 information.

- RANGE;
- TRIP 1;
- TRIP 2;
- TRIP TIME;
- PLAYER ON/OFF (active only with connected Smartphone).

Press button (2) on LH switch to view Menu 2 information.

- Average fuel consumption (CONS. AVG);
- Instantaneous fuel consumption (CONS.I);
- Average speed (SPEED AVG);
- Air temperature.

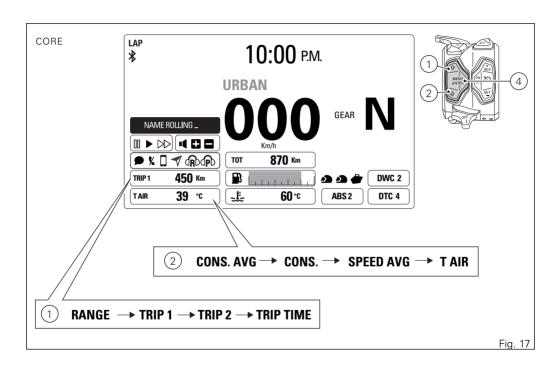


From the main screen, with CORE layout, press button (1) on LH switch to view Menu 1 information.

- RANGE:
- TRIP 1;
- TRIP 2;
- TRIP FUEL (when function is active);
- PLAYER ON/OFF (active only with connected Smartphone).

Press button (2) on LH switch to view Menu 2 information

- Average fuel consumption (CONS. AVG);
- Instantaneous fuel consumption (CONS.I);
- Average speed (SPEED AVG);
- Air temperature.



OFF ROAD layout does not feature any Menu 1 or Menu 2.

The functions for "TRIP MASTER", "TAIR" and "RANGE" are displayed instead of Menu 1 and Menu 2. Buttons (1) and (2) on LH switch are only used for the "TRIP MASTER" function.

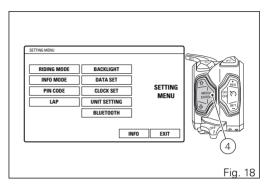
In the 3 layouts (TRACK, FULL, CORE) the instrument panel stores Menu 1 and Menu 2 settings in use upon KEY-OFF. On the following KEY-ON, previously stored Menu 1 e Menu 2 pages are displayed. In case of sudden and unexpected power OFF, the instrument panel displays the default settings for Menu 1 and Menu 2 upon the following KEY-ON; in particular:

- Menu 1 default page = RANGE;
- Menu 2 default page = CONS AVG (Average fuel consumption).

When the standard screen of set layout is displayed, hold button (4) for 2 seconds, when actual motorcycle speed is <= (lower than or equal to) 20 km/h (12 mph), to enter the Setting menu, where you can set any function.

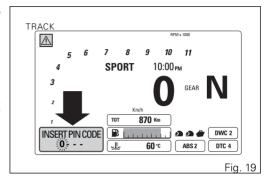
# Important

You can enter the SETTING MENU only if vehicle actual speed is <= (lower than or equal to) 20 km/h (12 mph). Within the SETTING MENU, if vehicle actual speed exceeds 20 km/h (12 mph), the instrument panel automatically quits the menu and shows the Standard Screen.



If the key is not acknowledged upon Key-ON and once the check routine is over, the following will happen:

- if the PIN CODE function is not active, the instrument panel skips the warning light check, displays the standard screen with an error warning and does not allow accessing the PIN CODE function of the Setting Menu;
- if the PIN CODE function is active, the PIN CODE function page is displayed on the instrument panel, allowing rider to enter the release code.



#### Main functions

Data displayed in the standard screen of the selected display layout (TRACK, FULL, CORE, or OFF ROAD) are the following:

Main information

- Engine rpm indication (RPM)
- Motorcycle speed
- Odometer (TOT)
- Fuel level
- Engine Coolant temperature
- Riding Mode
- ABS
- DTC
- DWC
- LOAD (motorcycle setup and semi-active suspension setup)
- Gear
- Clock

- the menus display the following functions:
  - Residual range (RANGE)
  - Trip meter 1 (TRIP1)
  - Trip meter 2 (TRIP2)
  - Trip time (TRIP TIME)
  - Instantaneous fuel consumption (CONS.)
  - Average Fuel Consumption (CONS. AVG)
  - Average speed (SPEED AVG)
  - Ambient air temperature
  - I AP time
  - TRIP MASTER

#### Additional information

- LAP
- Infotainment Bluetooth
- Cruise Control
- Vehicle Hold Control (VHC)
- Service indication (SERVICE)
- Warnings/Alarms
- Heated handgrip (optional)

The functions within the Setting Menu that can be modified by the user are the following:

- Riding mode customisation (RIDING MODE): this menu allows customisation of:
  - Engine setting (ENGINE)
  - DTC level setting (DTC)
  - DWC level setting (DWC)
  - ABS setting (ABS)
  - Semi-active suspension setting (DSS)
  - Reset to default settings (DEFAULT)
- Display mode setting (INFO MODE)
- PIN CODE (enter/change)
- LAP (view/delete/reset automatic settings)
- Display backlighting (BACK LIGHT)
- Date setting (DATE SET)
- Clock setting (CLOCK SET)
- Unit setting (Speed Temperature Fuel consumption) (UNIT SETTING)
- Bluetooth setting (pairing/deleting any paired devices)
- General information indication (INFO): Battery voltage — rpm digital indication — Bluetooth version

## Engine rpm indication (RPM)

The instrument panel receives the engine rpm information and displays it on the relevant bargraph (in TRACK, FULL and OFF ROAD display modes only). The information is displayed by the bargraph filling from the left to the right according to the engine rpm and with the enlargement of the numerical digit of the relevant miles (e.g., if the RPM value is "8000" or higher, number "8" is displayed bigger).

The range between 8500 and 10500 rpm (prewarning area) is displayed in orange both for the bargraph filling and for the indication of value "10" (orange area).

The range between 10500 and 11000 rpm (warning area) is displayed in red both for the bargraph filling and for the indication of value "11" (red area).

TRACK layout indicates rpm in a different way compared to FULL and OFF ROAD layouts.

CORE layout does not provide for rpm indication.

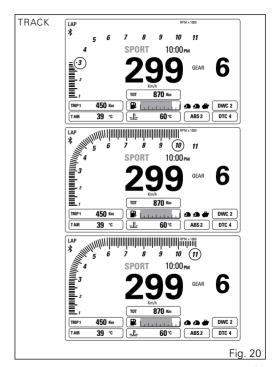










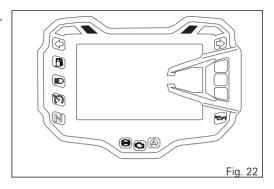






Fig. 21

When the threshold before the rpm limiter is reached, the corresponding warning lights will turn on.



## Motorcycle speed

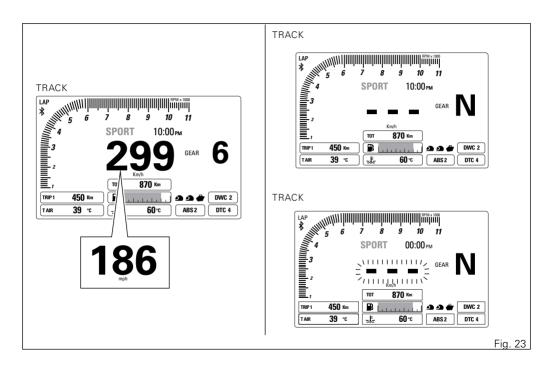
The instrument panel receives information about the actual motorcycle speed (calculated in km/h) and displays the value increased by 5% and converted in the set unit of measurement (km/h or mph).

A string of dashes "- - -" is displayed with the set unit of measurement if:

- speed is equal to 299 km/h or 186 mph or if instrument panel is not receiving the speed value ("---" steady ON);
- the rear speed sensor is in fault (flashing "- -").

Considering that the FULL, CORE and OFF ROAD layouts show the values for this function in a similar to the TRACK layout, the example shown depicts the function in TRACK layout.

Note
If the instrument panel does not receive any information on the unit of measurement, the last unit of measurement set is displayed flashing.



# Riding Mode

The Riding Mode can be selected from the instrument panel. Four preset riding modes are available: SPORT, TOURING, URBAN and ENDURO. The selected and active riding mode is displayed on the top part of the instrument panel display, above the speed indication, in all four layouts.

Every Riding Mode contains the following parameters, set by Ducati or customised by the user through the setting function pages:

- a specific level of intervention for the DTC traction control (1, 2, 3, 4, 5, 6, 7, 8, OFF);
- a specific level of intervention for the DWC (1, 2, 3, 4, 5, 6, 7, 8, OFF);
- a specific ABS calibration (1, 2, 3, OFF);
- a specific engine power that will change throttle behaviour (HIGH, MEDIUM, LOW);
- a specific calibration of DSS suspensions (setup of front and rear suspensions and spring preload setup for the rear shock absorber).

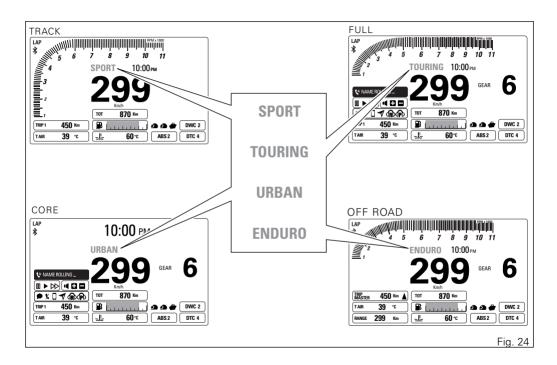
A different standard screen layout (TRACK, FULL, CORE and OFF ROAD) is associated to every riding mode; it is set by Ducati or customised by the user

from the setting functions; the layouts set by Ducati are associated to the Riding modes as follows:

- TRACK layout for the SPORT Riding mode;
- FULL layout for the TOURING Riding mode;
- CORE layout for the URBAN Riding mode;
- OFF ROAD layout for the ENDURO Riding mode.

# 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).



# Selecting the Riding Mode

Press CONFIRM MENU button (4) to enter the menu for selecting the Riding Mode (A). The instrument panel displays the speed indication (on the RH side) and displays riding mode name (on the LH side):

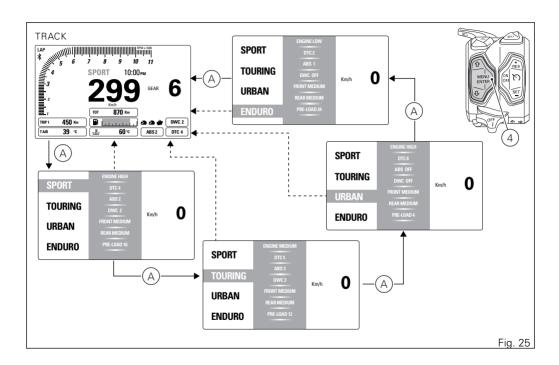
- SPORT
- TOURING
- URBAN
- ENDURO

One of them will be marked to indicate the last memorised condition that is currently active.

For the marked Riding Mode, instrument panel displays information concerning some of the associated parameters:

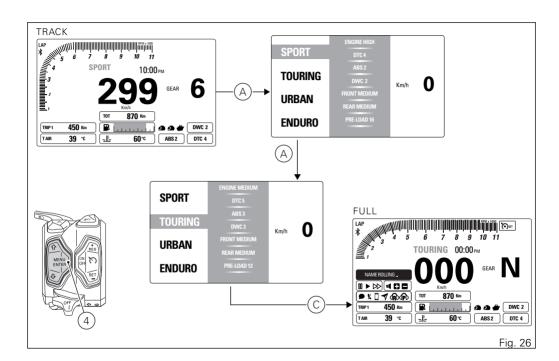
- engine power (ENGINE): ENGINE lettering followed by set engine power (HIGH, MEDIUM or LOW);
- ABS system: ABS lettering followed by the set calibration level (1, 2, 3) in case ABS is active or followed by OFF in case ABS is disabled.
- DTC system: DTC lettering followed by the set level (1, 2, 3, 4, 5, 6, 7, 8) in case DTC is active or followed by OFF in case DTC is disabled;
- DWC system: DWC lettering followed by the set level (1, 2, 3, 4, 5, 6, 7, 8) in case DWC is active or followed by OFF in case DWC is disabled;
- DSS front suspension: FRONT lettering followed by set compression and rebound for the fork;
- DSS rear suspension: REAR lettering followed by set compression and rebound for the rear shock absorber;
- rear shock absorber spring preload: PRE-LOAD lettering followed by set spring preload (from 01 to 24) for the rear shock absorber.

Displayed information includes the values stored for each single Riding Mode. The stored settings may be the factory ones (Ducati default settings) or the ones customised by the owner. Any time CONFIRM MENU button (4) is pressed, the selected riding mode is highlighted together with the associated parameters (A, Fig. 25).



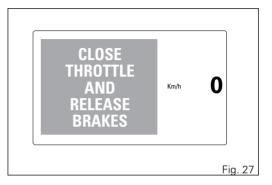
Once the desired riding mode (A, Fig. 26) is highlighted, confirm the selection by holding down the CONFIRM MENU button (4) for 2 seconds: the new riding mode selection is stored and the standard screen (C, Fig. 26) is displayed for the selected riding mode.

Once the desired riding mode is highlighted, if the CONFIRM MENU button (4) is not pressed within 5 seconds, the new riding mode selection is not stored and the standard screen is displayed.



When system requests rider to confirm the riding mode change, the procedure will output an error if:

- the vehicle is stopped, the instrument panel only checks whether the throttle control is closed / open by indicating CLOSE THROTTLE if so;
- the vehicle is moving, the instrument panel checks whether the throttle control is open / closed or whether the brakes are pulled or not; the instrument panel may display CLOSE THROTTLE AND RELEASE BRAKES or CLOSE THROTTLE or RELEASE BRAKES.

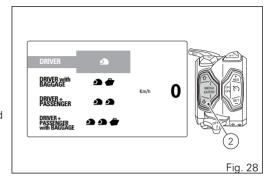


# Changing motorcycle Load Mode

This function allows changing the motorcycle load setup under static and dynamic conditions, thereby modifying the suspension setup within the current Riding Mode.

Available settings are as follows:

- Rider only: symbol with one helmet steady on;
- Rider with luggage: symbol with one helmet and luggage steady on;
- Rider and passenger: symbol with two helmets steady on;
- Rider and passenger with luggage: symbol with two helmets and luggage steady on.



# Warning

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

Every load setup is associated with a specific front fork rebound and compression damping, a specific rear shock absorber rebound and compression damping as well as a specific rear shock absorber spring preload.

Press button (2) for two seconds to activate the load mode function menu

Every time user presses button (2), the instrument panel will highlight, within the motorcycle load mode menu, one of the four available options.

Once the required setup is highlighted, hold button (2) for two seconds to confirm: the motorcycle load mode will be stored and standard screen will be displayed, showing the just-selected load mode. Once the desired load mode is highlighted, if the button (2) is not pressed within 5 seconds, the new load mode selection will not be stored and the standard screen will be displayed.

Example of operation: if load mode is changed from "rider only" to "rider with luggage", the change extent can vary depending on set riding mode: in fact, "rider with luggage" load mode could feature different settings according to set riding mode, SPORT. TOURING, URBAN or ENDURO.

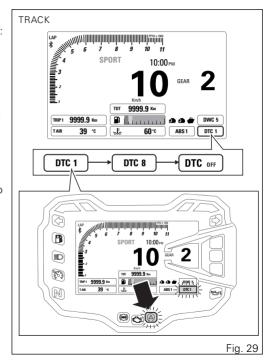
Warning Changing load mode could result in a different riding style: it is recommended to pay utmost attention when changing load mode wile riding (it is recommended to change load mode at low speed).

# DTC

The instrument panel displays DTC status as follows:

- if DTC is active, DTC lettering and the Traction Control intervention level number (1 to 8);
- if DTC is active, but system is in degraded operation due to a fault, DTC lettering and the DTC intervention level number, 1 to 8 (flashing); also the DTC/DWC warning light starts flashing;
- if DTC is not active, DTC OFF warning;
- if system is in fault, DTC lettering and the intervention level number (1 to 8) in orange.

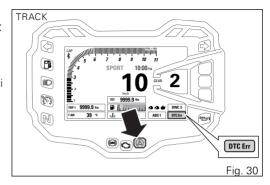
Considering that the FULL, CORE and OFF ROAD layouts show the values for this function in a similar to the TRACK layout, the example shown depicts the function in TRACK layout.



If DTC is in fault or the Black Box is in fault, the instrument panel will display DTC Err and DTC/DWC warning light will be steady on.

Warning

In case of system malfunction, contact a Ducati Dealer or Authorised Service Centre.



Warning
DTC is a rider aid that can be used on the track, on the road and off road. The system is designed to make riding easier and to enhance safety, but in no way relieves the rider of the obligation to drive responsibly and to maintain a high standard of riding in order to avoid accidents, whether caused by his own errors or those of other road users, through making emergency manoeuvres, in accordance with the prescriptions of the road traffic code.

The rider must always be aware that active safety systems have a preventive function. The active elements help the rider control the motorcycle. making it as easy and safe to ride as possible. The presence of an active safety system should not encourage the rider to ride at speeds beyond the reasonable limits, not in accordance with the road conditions, the laws of physics, good riding standards and the requirements of the road traffic code.

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

DTC	RIDING MODE	USE	DEFAULT
OFF		The DTC is disabled.	NO
1	OFF-ROAD Professional	This level is designed exclusively for off- road use, for very expert riders (not rec- ommended for road use). The DTC in this mode allows considerable spinning of the rear wheel. In this level, the sys- tem does NOT ensure a correct control of traction loss on asphalt.	
2	OFF-ROAD	This level is designed exclusively for off- road use, for not very expert riders (not recommended for road use). In this lev- el, the system does NOT ensure a cor- rect control of traction loss on asphalt.	"ENDURO" Riding Mode
3	SPORT / TRACK	This level is designed for track use, with good grip conditions, for very expert riders. In this mode, the DTC allows sideslipping.	
4	SPORT	This level is designed for both track and road use, with good grip conditions.	It is the default level for the "SPORT" Riding Mode

DTC	RIDING MODE	USE	DEFAULT
5	TOURING	This level is designed for road use, with good grip conditions.	It is the default level for the "TOURING" Riding Mode
6	SAFE & STABLE	This level is designed for use in any rid- ing conditions, on the road with good grip.	
7	RAIN	This level is designed for road use, when surface is wet.	NO
8	HEAVY RAIN	This level is designed for road use, when surface is wet and very slippery.	NO

# Tips on how to select the sensitivity level

Warning

Excellent operation of the DTC system, for all available levels, is ensured only with the OE tyres and/or with the ones recommended by Ducati. In particular, OE tyres for this motorcycle are Pirelli Scorpion Trail II or Pirelli Scorpion Rally in the following sizes: 120/70ZR19 at the front, 170/60ZR17 at the rear. The use of tyres of different sizes and

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.

characteristics to the original tyres and/or those

recommended by Ducati may alter the operating

If level 8 is selected, the DTC will kick in at the slightest hint that the rear wheel is starting to spin. Between level 8 and level 1 there are other 6 intermediate levels. DTC intervention decreases regularly from level 8 to level 1.

Levels 1 and 2 were specifically designed for off-road use and do not ensure a correct control of traction loss on asphalt.

With levels 3 and 4, DTC control unit allows both rear tyre spinning and sliding sideways when exiting a turn; we recommend using these levels only on track and to very experienced riders.

The choice of the correct level depends on 3 main variables:

- The grip (type of tyre, amount of tyre wear, the road/track surface, weather conditions, etc.);
- 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).

## Level depends on grip conditions

The choice of level setting depends greatly on the grip conditions of the track/path (see below, tips for use on the track and on the road). Poor grip requires a higher level that ensures a more aggressive DTC intervention.

# Level depends on type of track/path

If the track/path features bends all taken at similar speeds, it will be easier to find a level suitable for all bends; while a track/path with bends all requiring different speeds will require a DTC level setting that is the best compromise for all bends.

# Level depends on riding style

The DTC will tend to kick in more with a "smooth" riding style, where the motorcycle is leaned over further, rather than with a "rough" style, where the motorcycle 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 in order to heat the tyres and get used to the system. Then try levels 6, 5, 4, etc., in succession until you identify the DTC sensitivity level that suits you best.

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

We recommend level 6 be used in order to get used to the system (default level for the URBAN riding mode). If the level of DTC intervention seems aggressive, try reducing the setting to levels 5, 4, etc., until you find the level that suits you best. 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).

# Tips for off-road use

We recommend level 2 be used in order to get used to the system (default level for the ENDURO riding mode). If DTC intervention is felt to be too much aggressive, try level 1.

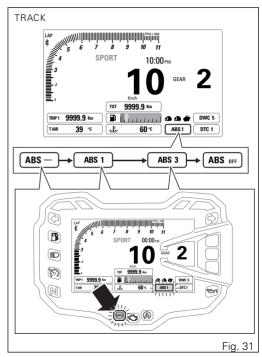
## **ABS**

The motorcycle is equipped with ABS, the instrument panel indicates ABS status (on or off) by switching off, on or flashing the ABS warning light.

The instrument panel displays:

- if the ABS is active, the message ABS with the set intervention level number (1 to 3) (steadily);
- if ABS is active, but system is in degraded operation due to a fault (no "cornering" feature"), ABS lettering and the ABS intervention level number, 1 to 8 (flashing); also the ABS warning light starts flashing;
- if system is in fault, ABS lettering and the intervention level in orange.

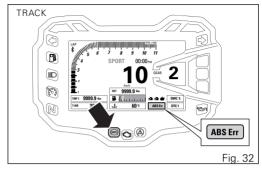
Considering that the FULL, CORE and OFF ROAD layouts show the values for this function in a similar to the TRACK layout, the example shown depicts the function in TRACK layout.

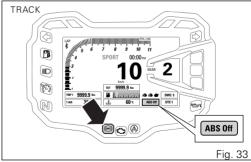


If the ABS is in fault, the instrument panel will display ABS Err and ABS warning light will be steady on.

Warning
In case of system malfunction, contact a Ducati
Dealer or Authorised Service Centre

If ABS is disabled, the instrument panel will display ABS OFF indication and ABS light will be steady on.





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 motorcycle: 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 Braking System (ABS) has been developed to enable riders to use the motorcycle braking force to the fullest possible amount in emergency braking or under poor pavement or adverse weather conditions. ABS is an electrohydraulic device that controls the pressure in the brake circuit when the control unit, by processing information from wheel sensors, determines that one or both wheels are about to lock up. In this case. pressure decrease in the brake circuit allows the wheel to carry on turning, thereby preserving grip. After that, the control unit restores the pressure in the brake circuit, to resume the braking action. This cycle is repeated many times until the problem is completely eliminated. 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 do not use separate control systems: the ABS on this bike provides for an electronic combined braking action that also activates the rear brake system when the rider uses only the front brake. The contrary is not true: the rear brake control will not affect the front brake.

The Multistrada 1200 ABS also features a "cornering" function that widens ABS functionality to the conditions where the motorcycle is leaning over, thus controlling the front and rear brake systems depending on the vehicle lean angle with the purpose of preventing wheel lockup and slipping as much as possible, within the physical limits allowed by the vehicle and by the road conditions.

If desired, the system can be deactivated from the instrument panel, setting the level to OFF within the Riding Mode for which you wish to disable it.

# Warning

Although combined braking is available (rear brake activation when rider uses only the front brake), using the two brake controls separately reduces the motorcycle braking power.

Never use the brake controls harshly or suddenly as you may cause 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 and overinflated tyres reduce braking efficiency, handling accuracy and stability in a bend.

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:

ABS	RIDING MODE	CHARACTERISTIC	DEFAULT
OFF		The ABS is disabled	NO
1	OFF-ROAD	This level is designed exclusively for off-road use, for expert riders (not recommended for road use). ABS in this level only controls the front wheel, and thus allows rear wheel lockup (thus helping braking efficiency on dirt roads).  The system in this level does NOT control lift-up, there is NO front-to-rear combined braking and the cornering feature is NOT active.	

ABS	RIDING MODE	CHARACTERISTIC	DEFAULT
2	SPORT	This level is designed for road use, with good grip conditions. ABS in this level controls both wheels, system creates pressure also at the rear calliper when the rider uses only the front brake (combined braking) and the cornering function is active. In this level system does NOT control lift-up: this calibration focuses on braking power and wheel lift-up should be managed by the rider.	
3	SAFE & STABLE	This level is designed for use in any riding conditions to provide a safe and consistent braking action. ABS in this level controls both wheels, system creates pressure also at the rear calliper when the rider uses only the front brake (combined braking), and the cornering function and lift-up control function are active.	"TOURING" and "URBAN" riding modes.

Tips on how to select the sensitivity level

# Warning

Excellent operation of the ABS system, for all available levels, is ensured only with the braking system and OE tyres and/or with the ones recommended by Ducati. In particular, OE tyres for this motorcycle are Pirelli Scorpion Trail II or Pirelli Scorpion Rally in the following sizes: 120/70ZR19 at the front, 170/60ZR17 at the rear. The use of tyres of different size and characteristics to the original tyres and/or those recommended by Ducati 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.

Selecting level 3, the ABS will ensure a very stable braking thanks to lift-up control and front-to-rear combined braking, and the motorcycle will keep a good alignment during the whole braking action. ABS level 3 features active cornering function which, with vehicle leaning over, prevents wheel lockup and slipping as much as possible, within the physical limits allowed by the vehicle and by the road conditions.

Selecting level 2, the ABS will privilege more and more the braking power rather than stability and lift-up control, which is disabled in level 2. Level 2 provides for the front-to-rear combined braking and the cornering function.

ABS level 1 is specific for off-road use and ABS is active only on the front wheel to help braking performance on dirt roads. In this level there is no lift-up control, neither front-to-rear combined braking, nor cornering function.

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

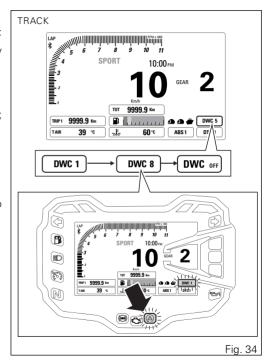
- The tyre/road grip (type of tyre, amount of tyre wear, the road/track surface, weather conditions, etc.).
- 2) The rider's experience and sensitivity: expert riders can tackle a lift-up in trying to reduce the stopping distance to a minimum, while less expert riders are recommended to use setting 3,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

## **DWC**

The instrument panel displays DWC status as follows:

- if DWC is active, DWC lettering and the currently set Wheelie Control intervention level number (1 to 8);
- if DWC is active, but system is in degraded operation due to a fault, DWC lettering and the DWC intervention level number, 1 to 8 (flashing); also the DTC/DWC warning light starts flashing;
- if DWC is not active, DWC OFF warning;
- if system is in fault, DWC lettering and the intervention level number (1 to 8) in orange.

Considering that the FULL, CORE and OFF ROAD layouts show the values for this function in a similar to the TRACK layout, the example shown depicts the function in TRACK layout.



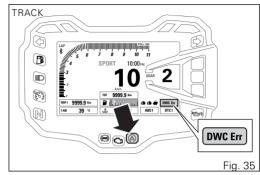
If DWC is in fault or the Black Box is in fault, the instrument panel will display DWC Err and DTC/DWC warning light will be steady on.

Warning

In case of system malfunction, contact a Ducati Dealer or Authorised Service Centre.

Note

If DTC is set to OFF, DWC is also forced to OFF.



The Ducati Wheelie Control system (DWC) supervises control of wheelie movement and settings vary through eight different levels that are calibrated to offer a different prevention and reaction to wheelies. Each Riding Mode features a pre-set intervention level. Level eight indicates a setting that minimises motorcycle tendency to shift up in a wheelie and maximises reaction to the same, if it occurs. While level one is for expert riders and features a lower wheelie control in terms of prevention and less strong reaction to the same, if it occurs.

elements help the rider control the motorcycle, making it as easy and safe to ride as possible. The presence of an active safety system should not encourage the rider to ride at speeds beyond the reasonable limits, not in accordance with the road conditions, the laws of physics, good riding standards and the requirements of the road traffic code.

# Warning

DWC is a rider aid that can be used on both the track and the road. The system is designed to make riding easier and to enhance safety, but in no way relieves the rider of the obligation to drive responsibly and to maintain a high standard of riding in order to avoid accidents, whether caused by his own errors or those of other road users, through making emergency manoeuvres, in accordance with the prescriptions of the road traffic code.

The rider must always be aware that active safety systems have a preventive function. The active

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

DWC	USE		DEFAULT
OFF		The DWC is disabled.	NO
1	HIGH PERFORMANCE	Road use and track use for expert riders. The system allows wheelies, but de- creases the speed at which the front wheel lifts.	NO
2	PERFORMANCE	Road use and track use for expert riders. The system allows wheelies, but decreases the speed at which the front wheel lifts.	It is the default level for the "SPORT" Riding Mode
3	SPORTIVE	Track use and road use for expert riders. The system reduces the motorcycle's proneness to do wheelies and intervenes in case of wheelie.	It is the default level for the "TOURING" Riding Mode
4	SPORTIVE	Track and road use for all kinds of riders. The system reduces the motorcycle's proneness to do wheelies and inter- venes in case of wheelie.	NO

DWC		USE	DEFAULT
5	SAFE & STABLE	Level for all kinds of riders. The system reduces the motorcycle's proneness to do wheelies and sensitively intervenes in case of wheelie.	
6	SAFE & STABLE	Level for all kinds of riders. The system reduces the motorcycle's proneness to do wheelies and sensitively intervenes in case of wheelie.	
7	HIGH SAFE & STABLE	Level for all kinds of riders. The system reduces the motorcycle's proneness to do wheelies and sensitively intervenes in case of wheelie.	
8	HIGH SAFE & STABLE	Level for all kinds of riders. The system reduces the motorcycle's proneness to do wheelies to a minimum level and sensitively intervenes in case of wheelie.	

# Tips on how to select the sensitivity level

Warning

Excellent operation of the DWC system, for all available levels, is ensured only with the OE final drive ratio and with OE tyres and/or with the ones recommended by Ducati. In particular, OE tyres for this motorcycle are Pirelli Scorpion Trail II or Pirelli Scorpion Rally in the following sizes: 120/70ZR19 at

the front, 170/60ZR17 at the rear. The use of tyres of different size and characteristics to the original tyres and/or those recommended by Ducati 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.

At level 8 the DWC system reduces the motorcycle's proneness to do wheelies to a minimum level and sensitively intervenes in case of wheelie. Between level 8 and level 1 there are further intermediate levels of intervention for the DWC. Levels 1, 2 and 3 allow easier wheelies, but reduce their speed: these levels are recommended only for track use and for expert riders who can control wheelies on their own and

exploit the system feature that reduces the speed at which the front wheel tends to lift.

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

- The rider's experience;
- The characteristics of the path/circuit (bend exit with low or high gear engaged).

# The rider's experience

The choice of level setting depends greatly on the riders' experience and ability to control wheelies on their own. Levels 1, 2 and 3 require a great experience to ensure proper control.

# Level depends on type of track/path

If the track/path features bends where out speed and gear are low, a lower level will be necessary; while a track/path with faster bends will allow the use of a higher level setting.

# Tips for use on the track

We recommend to use level 8 for a couple of full laps in order to get used to the system. Then try levels 7, 6, etc., in succession until you identify the DWC sensitivity level that suits you best (always try each

level for at least two laps to allow the tyres to warm up).

# Tips for use on the road

Activate the DWC, select level 8 and ride the motorcycle in your usual style; if the level of DWC sensitivity seems excessive, try levels 7, 6, etc., until you find the one that suits you best. If changes occur in the circuit characteristics, 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 DWC intervention seems excessive, switch to level 6; alternatively, if on level 7 you cannot perceive any DWC intervention, switch to level 8).

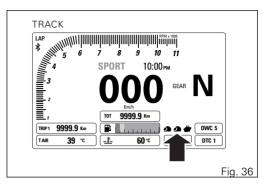
# Motorcycle setup

The instrument panel displays motorcycle setup according to DSS (Ducati Skyhook Suspension) electronic suspension setup.

It is possible to associate any of the four available setups with a specific riding mode:

- Rider only: symbol with one helmet steady on;
- Rider with luggage: symbol with one helmet and luggage steady on;
- Rider and passenger: symbol with two helmets steady on;
- Rider and passenger with luggage: symbol with two helmets and luggage steady on.

Considering that the FULL, CORE and OFF ROAD layouts show the values for this function in a similar to the TRACK layout, the example shown depicts the function in TRACK layout.



Note In case of system fault, set setup symbol will be ORANGE.

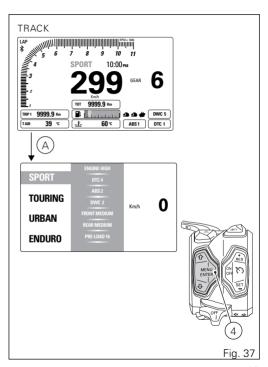
Warning
In case of system malfunction, contact a Ducati
Dealer or Authorised Service Centre.

# DSS

Every riding mode is associated with a specific calibration of the DSS Suspensions (front and rear suspension setup and rear shock absorber spring preload setup), designed by Ducati or customised by the user through the setting functions.

When you select the riding mode, i.e., when pressing CONFIRM MENU (4) from the main page, and you open the menu for selecting the riding mode (A), among the parameters associated to each riding mode the following are listed:

- FRONT (DSS front suspension) followed by set compression and rebound for the fork;
- REAR (DSS rear suspension) followed by set compression and rebound for the rear shock absorber;
- PRE-LOAD (rear shock absorber spring preload) followed by set spring preload (from 01 to 24) for the rear shock absorber.



Multistrada 1200 Enduro is equipped with the brand new suspension control system called DSS (Ducati Skyhook System): DSS is a dynamic suspension damping control system. The suspensions of a vehicle usually have two main dynamic functions: allowing the vehicle to absorb the bumps on the road by filtering their effects on vehicle body (and, consequently, on rider) and allowing the optimal contact between wheels and asphalt. The DSS system purpose is to improve the comfort offered by a standard passive suspension keeping at the same time the same performance.

The DSS system makes use of several sensors present on the motorcycle to define its setup and vertical and longitudinal movements, and adapt suspension damping accordingly. The DSS, in particular, dialogues also with the DTC control unit and the ABS to define motorcycle status minute by minute. The result of this process is a more comfortable bike, able to better absorb asphalt bumps without affecting vehicle balance or its rideability. Vertical movements as well as sinking (pitching) during braking and acceleration are minimised.

The DSS system is fully integrated with bike Riding Modes. By selecting a certain Riding Mode, the rider can establish the default suspension behaviour, suspension response and hence the motorcycle response. In addition, based on bike dynamics, the DSS will intervene to correct its behaviour regardless of the Riding Mode that will nevertheless define suspension basic behaviour (namely, more comfortable for RM URBAN and more controlled for RM SPORT).

To better understand this aspect, let's consider the URBAN and TOURING Riding Modes, for example. The URBAN riding mode was set for city use: suspension basic behaviour is thus focused on maximum damping of asphalt bumps and, to this end, suspension will generally be more comfortable. The TOURING Riding Mode, on the contrary, was devised for a tourist style, more demanding for the bike and requiring a stricter and more controlled basic behaviour of the suspension. In both cases, the DSS system intervenes whenever bike behaviour - its setup, vertical and longitudinal movements in particular - result in poor comfort or limited vehicle performance; both when riding at constant speed and when braking or accelerating.

To save battery charge, two conditions are envisaged:

- with engine running, if engine is turned off but instrument panel is still on, after 30 seconds suspensions are no longer powered;
- with engine off, if instrument panel is turned on but engine is still off, after 30 seconds suspensions are no longer powered.

# Note These suspensions, when not powered, are particularly hard due to the high hydraulic damping, as it happens when bike is off. The transition from

it happens when bike is off. The transition from powered suspensions to suspensions off can be perfectly perceived.

Note With key-off (bike off), suspension is hard as valves, being not powered, keep hydraulic damping at the minimum level.

The following table shows the Riding Modes of Multistrada 1200 and the relevant suspension behaviour.

ENDURO	When ENDURO Riding Mode is selected, the DSS will allow a basic suspension setting for a good absorption of off-road typical bumps and offering a longitudinal dynamics optimised for the off-road grip.
SPORT	When SPORT Riding Mode is selected, the DSS system will allow a stiff suspension basic setting, duly optimised for use on good grip roads and with a few bumps. The bike will be very responsive and controlled, allowing the rider to fully exploit it.
TOURING	When the TOURING Riding Mode is selected, the DSS will allow a suspension basic setting optimised for tourist riding offering a comfortable but controlled basic setting.
URBAN	When the URBAN Riding Mode is selected, the DSS will allow a basic suspension setting allowing good absorption of common city riding bumps, at the same time maintaining high control of bike dynamics, with a general behaviour of high comfort.

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. When a SOFT setting is selected, the DSS will change suspension response to be softer. while if a HARD setting is selected, the DSS will on the contrary change suspension response to be harder.

The DSS system also interacts with bike load setting, from the individual rider to the pillion rider and several bags calibration. Indeed, selecting a different load. besides changing rear shock absorber preload to ensure a constant and correct response while riding with a load, also affects the parameters defining bike dynamic response. Load selection thus ensures motorcycle top performance in accordance with loadrelated dynamics.

In the ENDURO riding mode we recommend the rider setting only to ride on off-road paths with just little bumps in touring style. On the other hand, we recommend the settings with a higher, up to the passenger + pannier setting, when riding on off-road paths with high bumps in sports style.

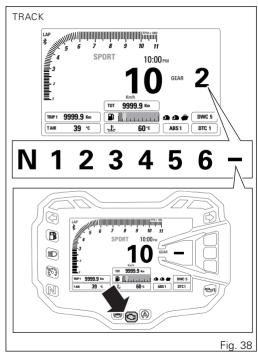
Preload basic setting can be changed as well, through the special menu on the instrument panel. The preload actuator specific range is 12 mm, the instrument panel allows setting preload value among 24 positions; a preload change of 0.5 mm corresponds to each position and allows any rider to find the optimal setting for each load condition.

Warning
The DSS system setting strongly depends on specified bike load. Riding the bike with a load setting other than the real one does not ensure system optimal operation. The DSS system was calibrated with bike standard springs. Any change to the components involved in the system could result in a non-perfect behaviour of system and bike.

#### Gear

The instrument panel receives information about the gear engaged and displays the corresponding value. If a gear is engaged, the displayed value may range from 1 to 6, while if in neutral N is displayed. A string of flashing dashes "--" is displayed if gear teach-in procedure has not been carried out yet, or if instrument panel is not receiving gear information. If the gear sensor is in fault, a string of dashes "--" is displayed steady on.

Considering that the FULL, CORE and OFF ROAD layouts show the values for this function in a similar to the TRACK layout, the example shown depicts the function in TRACK layout.



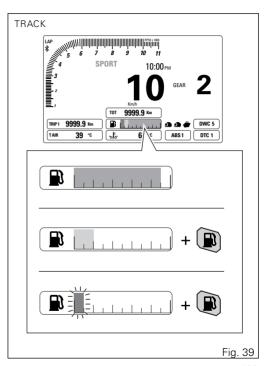
#### Fuel level

This function displays the fuel level.

The low fuel light turns on when the level goes down to 2 steady marks that become orange and the fuel pump symbol is steady and orange: this means that there are approximately 4 litres in the tank.

If the level goes further down, the last mark will be red and flashing and the fuel pump symbol will be steady and red.

Considering that the FULL, CORE and OFF ROAD layouts show the values for this function in a similar to the TRACK layout, the example shown depicts the function in TRACK layout.



Note
In case of fault or error of the fuel level sensor,
no level marks will be displayed, the fuel pump
symbol will be red and flashing, and the Fuel Range
warning light will be on.

#### Odometer (TOT)

The odometer counts and displays the total distance covered by the motorcycle with the set unit of measurement (km or mi).

The odometer number (in km or miles) is displayed with the message TOT and the indication of the unit of measurement. When the maximum value is reached (199999 km or 199999 mi) the instrument panel will permanently display said value.

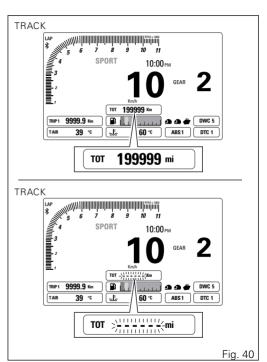
The odometer value is saved permanently and cannot be reset under any circumstances.

Considering that the FULL, CORE and OFF ROAD layouts show the values for this function in a similar to the TRACK layout, the example shown depicts the function in TRACK layout.

The reading is not lost in case of a power OFF (Battery OFF).

Note
If a string of flashing dashes "---- " is displayed

within odometer function, please contact a Ducati
Dealer or Authorised Service Centre.



#### Engine Coolant temperature

The instrument panel receives information about the engine temperature (already calculated in °C) and displays the value in the set unit of measurement (°C or °F), followed by the unit of measurement and the engine temperature symbol.

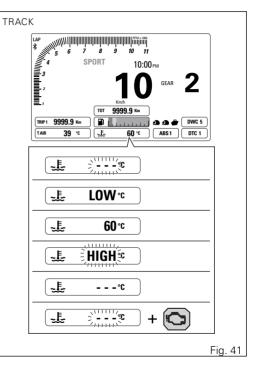
The temperature display range goes from 40 °C to +120 °C (+104 °F  $\div$  +248 °F).

If reading is:

- <= (lower than or equal to) -40 °C (-40 °F), a string of flashing dashes " - - - " is displayed;
- within the range -39 °C (-38 °F) to +39 °C (+102 °F), "LOW" is displayed steadily;
- within the range +40 °C (+104 °F) to +120 °C (+248 °F), the value is displayed steadily;
- >= (higher than or equal to) +121 °C (+250 °F),
   "HIGH" is displayed flashing and in red, the
   Coolant Temperature symbol is steady and red.

If the coolant temperature sensor is in fault, a string of flashing dashes "- - -" is displayed with the set unit of measurement and the MIL light turns on.

If the instrument panel is not receiving coolant temperature value, a string of steady dashes "---" is displayed, followed by the unit of measurement.



Note
If the instrument panel does not receive any information on the unit of measurement, the last unit of measurement set is displayed flashing.

#### Clock

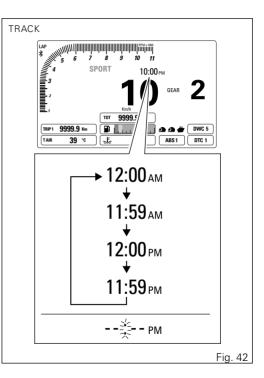
The instrument panel receives information about the time to be displayed.

The instrument panel shows the time in the following format:

- hh (hours) : mm (minutes);
- followed by a.m. (from 12:00 to 11:59) or p.m. (from 12:00 to 11:59).

In case of a power off (Battery Off), upon the following Key-On, the instrument panel displays 4 dashes " - - : - - " steadily and with flashing colon, until clock is set through the Setting Menu.

Considering that the FULL, CORE and OFF ROAD layouts show the values for this function in a similar to the TRACK layout, the example shown depicts the function in TRACK layout.



#### Menu Functions

For each of the four riding modes (SPORT, TOURING, URBAN and ENDURO) menu functions can be displayed in one of the following four layouts or modes:

- TRACK:
- FULL;
- CORE;
- OFF ROAD.

#### Available functions are:

- Residual range (RANGE);
- Trip meter 1 (TRIP1);
- Trip meter 2 (TRIP2);
- Trip time (TRIP TIME);
- Instant fuel consumption (CONS.);
- Average Fuel Consumption (CONS AVG);
- Average speed (SPEED AVG);
- Ambient air temperature;
- LAP time (if active);
- TRIP MASTER (only displayed in OFF ROAD layout).

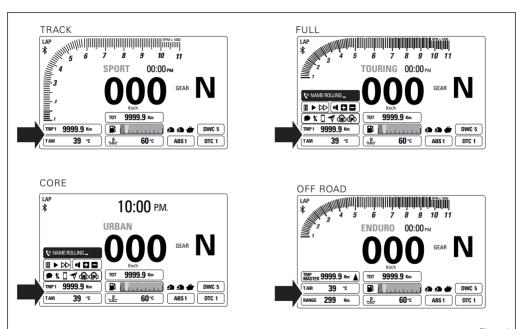


Fig. 43

#### Residual range (RANGE)

This function displays the range according to the remaining fuel in the tank.

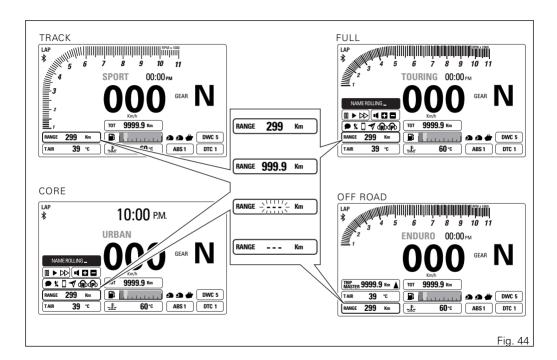
Information is indicated as RANGE, in the set unit of measurement.

If there is any function fault, the instrument panel will display three flashing dashes "---".

If the instrument panel is not receiving RANGE information, a string of three steady dashes "- - -" is displayed, followed by the unit of measurement.

## Note

If the instrument panel does not receive any information on the unit of measurement, the last unit of measurement set is displayed flashing.



#### Trip meter 1 (TRIP 1)

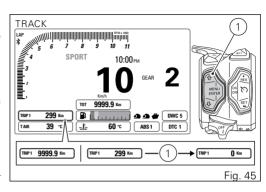
The trip meter counts and displays the partial distance covered by the motorcycle with the set unit of measurement (km or mi) and is used as a basis to calculate average fuel consumption, average speed and trip time. The TRIP1 number (in km or miles) is displayed with the message TRIP1 and the indication of the unit of measurement.

When the reading exceeds the maximum value of 9999.9 km or 9999.9 mi, distance travelled is reset and the meter automatically starts counting from 0 again.

While the trip meter is displayed, press button (1) for 2 seconds to reset TRIP 1. When TRIP1 is reset, the average fuel consumption, average speed and trip time data are reset as well.

Considering that the FULL and CORE layouts show the values for this function in a similar way to the TRACK layout, the example shown depicts the function in TRACK layout.

The TRIP1 counter is automatically reset in case the system unit of measurement is changed manually or after a Battery-OFF: the counter will then start back from zero, considering the new units of measurement



#### Trip meter 2 (TRIP 2)

The trip meter counts and displays the partial distance covered by the motorcycle with the set unit of measurement (km or mi).

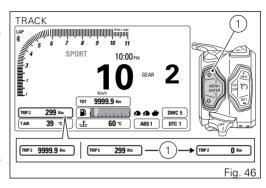
The TRIP2 number (in km or miles) is displayed with the message TRIP2 and the indication of the unit of measurement.

When the reading exceeds the maximum value of 9999.9 km or 9999.9 mi, distance travelled is reset and the meter automatically starts counting from 0 again.

While the trip meter is displayed, press button (1) for 2 seconds to reset TRIP 2.

The TRIP2 counter is automatically reset in case the system unit of measurement is changed manually or after a Battery-OFF: the counter will then start back from zero, considering the new units of measurement.

Considering that the FULL and CORE layouts show the values for this function in a similar way to the TRACK layout, the example shown depicts the function in TRACK layout.

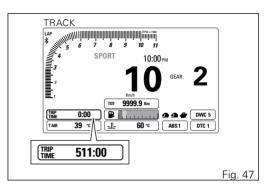


#### Trip time (TRIP TIME)

The instrument panel calculates and displays the trip time as hhh:mm followed by TRIP TIME. The calculation considers the time since TRIP1 was last reset. When TRIP1 is reset, this value is reset as well. The time count active phase occurs when the engine is running and the motorcycle is stopped (the time is automatically stopped when the motorcycle is not moving and the engine is OFF and restarts when the counting active phase starts again).

When the reading exceeds 511:00 (511 hours and 00 minutes), the meter is reset and automatically starts counting from 0 again.

Considering that the FULL and CORE layouts show the values for this function in a similar way to the TRACK layout, the example shown depicts the function in TRACK layout.



If you change the unit of measurement for an item connected to Speed (and distance) or Consumption or after a Battery-OFF, the trip time value will be automatically reset.

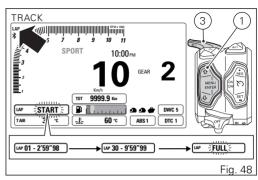
Note
If you change the unit of measurement for an item connected to Speed (and distance) or Consumption or after a Battery-OFF, the trip time value will be automatically reset.

#### I AP time

The LAP function is visible for the TRACK layout under menu 1.

LAP function information is available when the function is active.

When the LAP function is active, upon the first press on FLASH button (3) main screen will display LAP flashing at the top left-hand side, menu 1 will display LAP 01, and START will be flashing for 4 seconds within menu 1. Upon any further press of the FLASH button (3), the just ended lap number and time are displayed with a resolution of one hundredth of a second ("0'00"'00") for 6 seconds and then lap timer is displayed again together with the number of new current lap (if LAP function is selected from menu 1).



If the LAP function is not selected from the menu, the instrument panel will go back to the functions present before the FLASH button (3) was pressed.

It is possible to scroll the other menu functions at any time.

When storing the 15th LAP, the LAP function is stopped and, upon any further press on the FLASH button (3), the instrument panel will display flashing FULL message for 4 seconds warning that the storage space for lap times is full.

## Note

When the LAP function is active, the FLASH button takes on the dual function of high beam flash.

#### LAP recording

If the LAP function is active, it is possible to record the lap time, for a total of 15 consecutive laps. Operation:

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 zero and will keep running until the lap is stopped or the recording function is disabled.

During every lap, the following data are stored:

- no. 15 lap times (time between consecutive start and stop);
- no. 15 values for max. RPM (maximum RPM value reached in every lap);
- no. 15 values for max. speed (maximum speed value reached in every lap).

#### Average fuel consumption

The instrument panel calculates and displays the motorcycle average fuel consumption, the set unit of measurement and CONS. AVG.

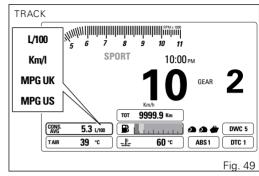
The calculation is made considering the quantity of fuel used and the distance travelled since TRIP1 was last reset.

Considering that the FULL and CORE layouts show the values for this function in a similar way to the TRACK layout, the example shown depicts the function in TRACK layout.

## Note

It is possible to change the units of measurement of Speed (and distance travelled as well) from km/h (and km) to mph (and mi) through the SETTING MENU, using the UNITS SETTING function.

When TRIP1 is reset, the value is reset and the first value available is displayed 10 seconds after the reset. During the first 10 seconds, when the value is not yet available, the display will show a string of three dashes "--.-" steadily as average fuel consumption. Value is expressed in the set unit of measurement (litres / 100 km or mpg UK or mpg USA).



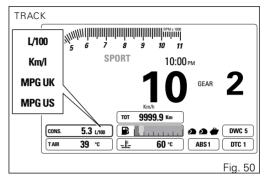
The active calculation phase occurs when the engine is running and the motorcycle is stopped: (moments when the motorcycle is not moving and the engine is OFF are not considered).

#### Instantaneous fuel consumption

The instrument panel calculates and displays the motorcycle instantaneous fuel consumption, the set unit of measurement and CONS. text.

The calculation is made considering the quantity of fuel used and the distance travelled during the last second. Value is expressed in the set unit of measurement: litres / 100 km or mpg UK or mpg USA. The active calculation phase only occurs when the engine is running and the motorcycle is moving (moments when the motorcycle is not moving when speed is equal to 0 and/or when the engine is OFF are not considered). When the calculation is not made, a string of three dashes is displayed " - - . - " steadily as instantaneous fuel consumption.

Considering that the FULL and CORE layouts show the values for this function in a similar way to the TRACK layout, the example shown depicts the function in TRACK layout.



## Note

It is possible to change the units of measurement of Speed (and distance travelled as well) from km/h (and km) to mph (and mi) through the SETTING MENU, using the UNITS SETTING function.

#### Average speed

The instrument panel calculates and displays the motorcycle average speed, the set unit of measurement and SPEED AVG text.

The calculation considers the distance and time since TRIP1 was last reset.

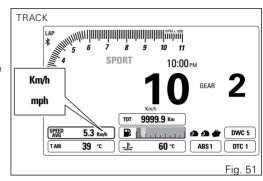
The average speed value displayed is calculated by adding 5% so as to be consistent with motorcycle speed indication.

Considering that the FULL and CORE layouts show the values for this function in a similar way to the TRACK layout, the example shown depicts the function in TRACK layout.

## Note

It is possible to change the units of measurement of Speed (and distance travelled as well) from km/h (and km) to mph (and mi) through the SETTING MENU, using the UNITS SETTING function.

When TRIP1 is reset, the value is reset and the first value available is displayed 10 seconds after the reset. During the first 10 seconds, when the value is not yet available, the display will show a string of three dashes "---" steadily as average speed.



The active calculation phase occurs when the engine is running even if the motorcycle is stopped (moments when the motorcycle is not moving and the engine is OFF are not considered).

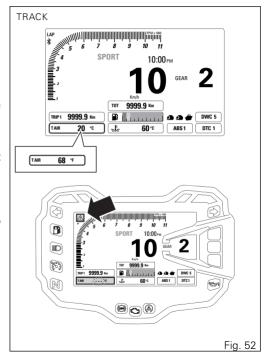
#### Ambient air temperature

The instrument panel displays the ambient temperature in the set unit of measurement (°C or °F), followed by the set unit of measurement, the message T AIR and the thermometer symbol. The temperature value is displayed when ranging from -39 °C to +125 °C (or -38 °F  $\div$  +257 °F). For any different temperature (below -39 °C (-38 °F) or above +125 °C (+257 °F)) a string of three dashes "---" is steadily displayed, followed by the unit of measurement.

If the air temperature sensor is in fault, the instrument panel will show three flashing dashes "---" as air temperature value, followed by the unit of measurement and the Generic Error light will turn on. Considering that the FULL, CORE and OFF ROAD layouts show the values for this function in a similar to the TRACK layout, the example shown depicts the function in TRACK layout.

### Note

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



#### TRIP MASTER

Trip Master meter counts and displays the partial kilometres or miles run by the vehicle. Trip Master count increases with mileage, can be reset and can also be "stopped" (paused) and "reversed" (countdown).

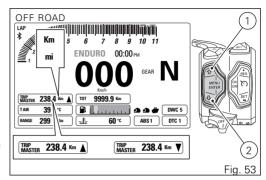
Trip Master is only displayed in OFF ROAD layout. The instrument panel displays the value indicated as TRIP MASTER and an arrow up (when count is increasing) or down (when count is decreasing). TRIP MASTER function can be managed via button (1) and button (2), but only within OFF ROAD layout.

#### Press button (1):

- if count is increasing, it stops (PAUSE) and value is flashing; press again button (1) to resume metering;
- if count is decreasing, it changes and starts increasing the value.

#### Press button (2):

 if count is increasing, it changes and starts decreasing the value.



 if count is decreasing, it stops (PAUSE) and value is flashing; press again button (2) to resume metering.

When count is 0.0 (Km or miles), the Trip Master can only be increased and it is not possible to reverse the count as long as value is below or equal to 100 metres (0.1 miles).

If value reaches 999.9 (Km or miles), while increasing, it will get automatically back to zero (0.0) and carry on increasing.

If value reaches 0.0 (Km or miles), while decreasing, the counting will stop (PAUSE), value will flash and calculation will be reversed to become increasing. Value is automatically reset and counter restarts its increasing operation in the following instances:

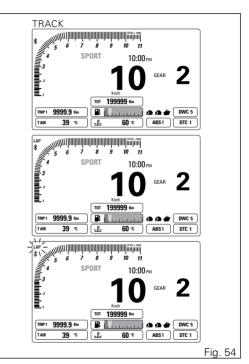
- upon any power off (Battery-Off);
- if units of measurement are changed through the Dashboard UNIT SETTING function.

# Auxiliary functions

The instrument panel displays the LAP function status (LAP recording on or off).

LAP message at top left-hand side is on if the LAP function is active, and is off if the LAP function is not active; the same message will flash in the recording stage.

Considering that the FULL, CORE and OFF ROAD layouts show the values for this function in a similar to the TRACK layout, the example shown depicts the function in TRACK layout.



Heated handgrips (option) control function

This function allows enabling and adjusting the heated handgrips.

Press the heated handgrips button (12) and the instrument panel will display grip icon followed by OFF indication.

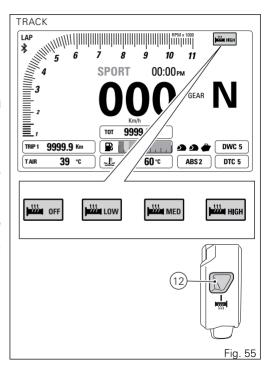
Any time you press button (12), the instrument panel will toggle from OFF to the following settings: LOW, MED and then HIGH (and then back to OFF).

## Note

The heated handgrips are actually "on" (heating) only when engine is running.

Level selection with Heated Handgrips "on": When setting LOW, MED or HIGH level, the icons will have the following background colours (for both DAY and NIGHT backlighting options of the instrument panel):

- GREEN for LOW:
- YELLOW for MED;
- RED for HIGH



Level selection with Heated Handgrips "off": Even if heated handgrips are turned off, it is still possible to set them to LOW, MED or HIGH level, but the icon will have a white background (in DAY backlighting option of the instrument panel) or BLACK (in NIGHT backlighting option of the instrument panel).

Note

The heated handgrips with engine at idle (RPM <= 2000) are controlled by setting the temperature to "Low" even though set by user to "Medium" or "High"; as soon as engine revs up (RPM > 2000) the heat will increase and reach the actual user-setting.

Note
In case of Battery-Off, upon the following
Battery-On / Key-On, the Dashboard sets this function
by default to "OFF".

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.

# 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.

#### Infotainment

Multistrada 1200 fits the Ducati Multimedia System (DMS) as standard, thanks to which the user can answer phone calls, select and listen to music tracks, and receive SMS notifications by means of the Bluetooth technology.

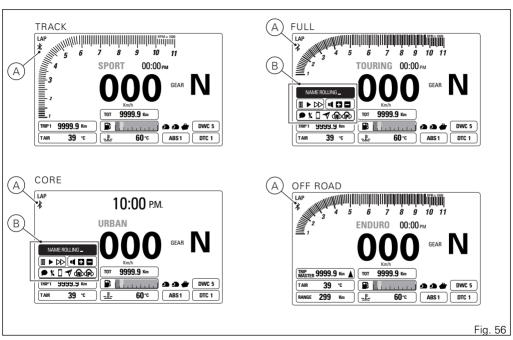
The instrument panel displays the Infotainment function status: Bluetooth activation and any connected devices (smartphone, earphones, navigator).

When the Bluetooth is active, the main screen displays the Bluetooth icon (A). Moreover, in the FULL and CORE layouts, the Infotainment functions are visible within the dedicated menus (B).

In the TRACK and OFF ROAD layouts, the Infotainment functions are not visible on the instrument panel, but calls can nevertheless be answered/rejected/terminated using the function buttons.

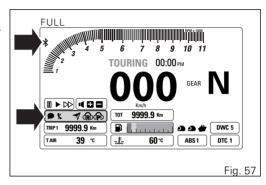
# **Warning**

All data concerning the Infotainment (Player, access to Contact List, Name of devices, etc.) are managed for use of Western character sets.



If Bluetooth is active, apart from the Bluetooth icon, also connected device indication is displayed, such as smartphone, rider and passenger helmet earphones, Ducati GPS navigator.

It is possible to connect up to a maximum of 4 devices.



#### Phone

#### Use the PHONE function:

- to manage incoming calls by means of button (1) and button (2);
- to recall the last calling number within 5 seconds from call interruption (RECALL function).

# Note

It is not possible to make a call by selecting the name/number from the contact list through the function buttons.

When there is an incoming call (B) the blue colour filling the rectangle is flashing; while, when you answer the call, the blue background stops flashing. In the TRACK and OFF ROAD layouts, when there is an incoming call, the instrument panel will not display the caller's name or number. The rider will hear the ringing tone through Bluetooth earphones upon any incoming call.

If there is an incoming call while the Player (A) is active, the latter is paused throughout the phone call and will resume operation when call is over. To answer the call, press button (2).

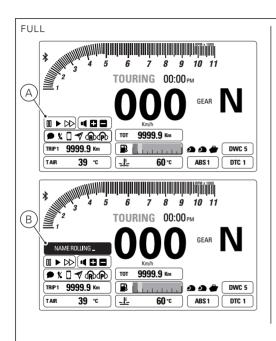
To terminate the call, keep button (1) pressed for 2 seconds.

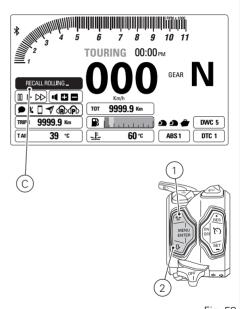
If main screen is set to FULL or CORE layout, during 5 seconds after hang-up, the rectangle corresponding to the Recall function (C) is activated to allow the recall.

After this 5 second time, the rectangle for the recall function is disabled.

In TRACK and OFF ROAD layouts, no recall function is provided.

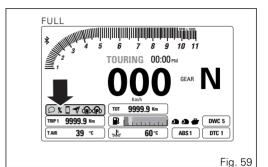
To activate the Recall function within the 5 seconds, press button (2).

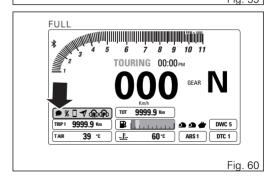




In case of missed calls from the moment the smartphone is connected to the bike to the moment it is disconnected, the missed call symbol will be displayed. The number of missed calls is not displayed.

In case there is at least one SMS/MMS/EMAIL not read from the moment the smartphone is connected to the bike to the moment it is disconnected, the unread message symbol will be displayed. The number of unread messages is not displayed.





#### Player

The Player can be activated only in URBAN or TOURING riding mode.

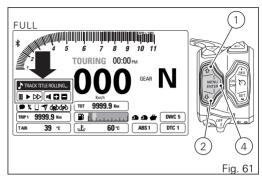
If at least one Smartphone device is connected (blue icon on main screen), Menu 1 in the FULL and CORE layouts will include PLAYER OFF option.

The Player is activated by pressing button (1) for 2 seconds.

On instrument panel, Menu 1 includes PLAYER ON option and the Player controls are activated. If the Player is turned on, button (1), button (2) and button (4) can only be used to control the PLAYER. If the Player is ON, but instrument panel is not receiving track name, it pauses the track being played and the message "NOT AVAILABLE" is displayed within the track name box

# **Important**

The Player function can not be activated through Menu 1 when a call is incoming, in progress or in recall



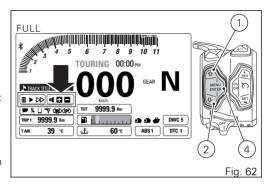
Adjust volume as follows:

- increase volume: press button (1);
- decrease volume: press button (2).

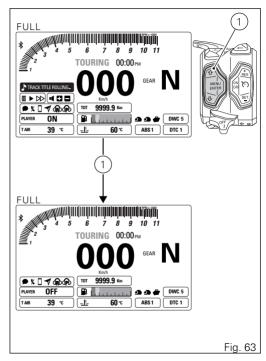
The Player can be cyclically set to pause/play by pressing button (4) for 2 seconds.

It is possible to skip to next track, pressing button (4): system will skip forward once every time button is pressed.

The player can be turned off by quitting the player control (pressing button (2) for 2 seconds) and then pressing button (1) for 2 seconds: under menu 1, item will be PLAYER OFF in place of "Player ON" within 3 seconds.



Press button (2) for 2 seconds to quit Player controls, although maintaining Player ON, in the current status.



#### F.A.Q.

# 1) Why don't I receive any notification of received e-mails?

E-mails are notified only if configured on the telephone source application. Check also that your phone supports the MAP profile.

If so, the DUCATI MULTIMEDIA SYSTEM, during the pairing phase, will send an access request to such profile which can be notified to the user explicitly (depending on the operating system) by requesting access authorisation to message notifications.

# 2) Why don't I receive any notification of received messages?

Check that your phone supports the MAP profile. If so, the DUCATI MULTIMEDIA SYSTEM, during the pairing phase, will send an access request to such profile which can be notified to the user explicitly (depending on the operating system) by requesting access authorisation to message notifications.

#### 3) Earphones do not connect. Why?

If they have been already paired once, we recommend resetting the earphones and pair them again with the motorcycle (see earphones instruction manual).

# 4) When I receive a call, the instrument panel displays the caller number but not the name (despite being saved in the contact list).

Check that the phone supports the PBAP profile. If so, the DUCATI MULTIMEDIA SYSTEM, during the pairing phase, will send an access request to such profile which can be notified to the user explicitly (depending on the operating system) by requesting access authorisation to the phone contact list.

# 5) By activating the Player through the instrument panel, music does not start.

The activation depends on the phone settings. In this case, after activating the Player through the instrument panel, also start the music application on your Smartphone.

# 6) It happens that the music is played with continuous interruptions.

If the devices have just been connected, it may be that the Bluetooth control unit is still completing the connection phase with the concerned devices. It is furthermore necessary to activate the PBAP and MAP profiles. Therefore, in case of iOS, please refer to point 7). In case of Android, please refer to points 2)4)

# 7) I do not receive any message notification on my iPhone. Why?

Select Bluetooth in the Setting Menu. In the list "My devices" select "i" next to "Ducati Media System". Flag "Show notifications".

#### Cruise Control

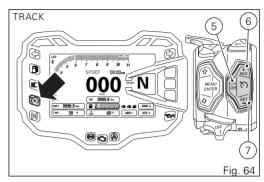
Multistrada 1200 is equipped with a system for maintaining the cruise speed: Ducati Cruise Control.

This function displays Cruise Control status and "target" speed.

When Cruise Control is activated by pressing ON/OFF button (5), the instrument panel will turn on the Cruise Control warning light.

In these conditions, the Ducati Cruise Control is ready to be set with the target speed to be maintained automatically, with no need to hold the throttle twistgrip in position.

Considering that the FULL, CORE and OFF ROAD layouts show the values for this function in a similar to the TRACK layout, the example shown depicts the function in TRACK layout.



When SET button (7) is pressed, current speed is set as target cruise speed.

To confirm correct setting of cruise speed, the target speed is activated on the instrument panel for 5 seconds then followed by the "Set" icon.

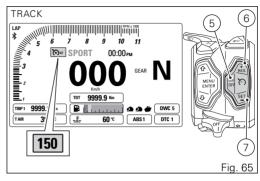
It is possible to increase or decrease set cruise speed. by pressing buttons (6) and (7), respectively. Every "click" corresponds to a speed increase or decrease of 1 Km/h

The new set target speed is displayed in place of the SET icon when system is reaching said speed. When the new requested target speed has been reached for over 5 seconds, the SET icon is displayed again.

Press RES button (6) to resume previous SET speed, in case the Ducati Cruise Control was disabled

**Important** In case of a long DTC (Traction Control) event,

the Cruise Control will automatically turn off.



Once the system is enabled, it is possible to set the current speed as the desired speed by pressing RES (6) or SET (7): press RES (6) if no target speed has been previously set.

In this case, the system saves the vehicle current speed and keeps it without the rider having to work on the twistgrip: the set speed is displayed on the instrument panel.

In stand-by mode, if you press RES (6) and a target speed has been previously set and the operating conditions are met, the system starts working again and brings the vehicle to the last set target speed.

It is possible to enable the Ducati Cruise Control only if the below conditions are met:

- second gear or higher engaged;
- vehicle speed higher than or equal to 50 Km/h (30 mph) or lower than or equal to 200 Km/h (125 mph);
- the brake has been applied at least once (no matter if at the front or the rear side) after the key-ON.

The Ducati Cruise Control can be disabled as follows:

- turning the throttle twistgrip in the direction as to decelerate;
- by pressing button (5);
- activating the front brake;
- activating the rear brake;
- pulling the clutch.

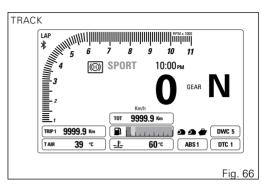
The Ducati Cruise Control system controls the vehicle speed only between 50 Km/h (30 mph) and 200 Km/h (125 mph).

#### Vehicle Hold Control

The Multistrada 1200 Enduro ABS is provided with the Vehicle Hold Control (VHC). This system, when activated, keeps the vehicle at a standstill by quickly activating the rear brake. The system allows the user to enjoy a more comfortable restart while just having to control the clutch and throttle pressure.

This function is activated when the user, with a bike at a standstill and with folded side stand, applies a high pressure on the front or rear brake lever. Upon its activation, according to the vehicle status, the system calculates and applies a pressure to the rear system by acting on the pump and the ABS control unit valves.

The system can be activated at all ABS levels except when the ABS is OFF, and its activation is indicated by the VHC warning light. The warning light will start blinking when the VHC system will be about to release the rear brake pressure and thus to stop keeping the vehicle at standstill: pressure will be decreased gradually.



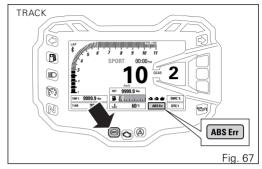
This function is disabled when the user starts or pulls the front brake lever twice in close sequence or after 9 seconds from the activation, or when the user opens the side stand.

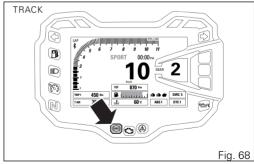
# **↑** Warning

The system can not be compared with a parking brake: during its activation we recommend keeping your hands on the handlebar in order to take control of the vehicle as soon as the system is disabled.

# Warning

The system can be activated only if the ABS is not in fault or in the initialisation phase or in degraded operation: when the ABS system is in fault, the ABS warning light is steady, whereas when the ABS system is in the initialisation phase or in degraded operation, the ABS warning light blinks.





#### Service indication (SERVICE)

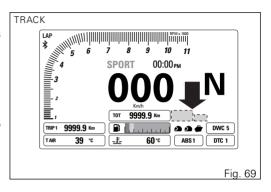
This indication shows the user that the motorcycle is due for service and must be taken to a Ducati Authorised Service Centre.

The service warning indication can be reset only by the Authorised Ducati Service Centre during servicing.

Considering that the FULL, CORE and OFF ROAD layouts show the values for this function in a similar to the TRACK layout, the example shown depicts the function in TRACK layout.

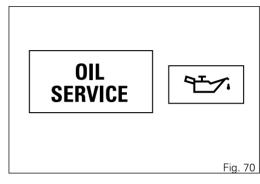
There are 3 types of scheduled maintenance interventions:

- OIL SERVICE ZERO: service at the first 1000 km (600 mi);
- OIL SERVICE and SERVICE DATE: oil service or annual service (requiring the same maintenance operations);
- DESMO SERVICE.



### OIL SERVICE zero warning

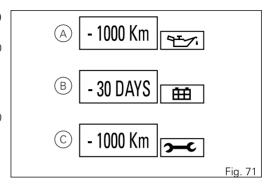
The first service warning is the OIL SERVICE zero and is triggered as soon as the odometer reaches the first 1,000 km (600 mi). Warning is displayed until "Reset" by the Ducati authorised service centre, during maintenance.



# OIL SERVICE or SERVICE DATE or DESMO SERVICE countdown indication

After OIL SERVICE zero indication first reset (at 1,000 km - 600 mi), the instrument panel activates the following indications in yellow for 5 seconds upon Key-ON:

- the count of the mileage in kilometres (miles) remaining before the next OIL SERVICE (A) 1000 km (600 mi) earlier than the service threshold;
- the count of the days remaining before the next SERVICE DATE (B) 30 days earlier than the service threshold;
- the count of the mileage in kilometres (miles) remaining before the next DESMO SERVICE (C) 1000 km (600 mi) earlier than the service threshold.

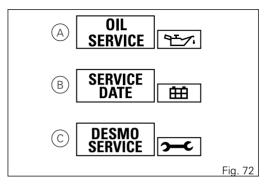


# OIL SERVICE or SERVICE DATE or DESMO SERVICE indication

When the service threshold is reached, the warning for the type of service required is triggered:

- OIL SERVICE (A);
- SERVICE DATE (B);
- DESMO SERVICE (C).

Required service warning is triggered and displayed in red until "Reset" by the Ducati authorised service centre, during maintenance.

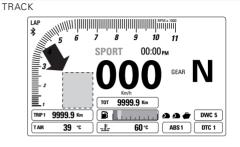


### Warnings/Alarms

The instrument panel manages a number of warnings / alarms, aimed at giving useful information to the rider during use.

Upon Key-On, if there are any active warnings, the instrument panel displays the present warnings. During normal use, whenever a warning is triggered, the instrument panel automatically displays the warning. Whenever a warning is triggered, it is displayed for 10 seconds in a (well-visible icon) "large" size and then continues being displayed in the small size ("small" icon).

If several warnings are active, the corresponding icons will be displayed one after the other, each remaining on display for 3 seconds.



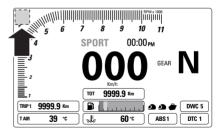


Fig. 73

Warning
If one or several warnings are triggered and, at the same time, the Generic Error light turns on, the small warning icon is not displayed on instrument panel until the Generic Error light stays on; warnings will only be displayed within the first 10 seconds as a large-size icon.

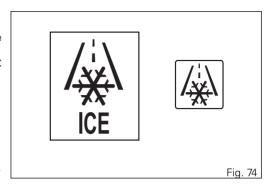
Considering that the FULL, CORE and OFF ROAD layouts show the values for this function in a similar to the TRACK layout, the example shown depicts the function in TRACK layout.

#### Ice

This function warns the rider when there might be ice on the road, due to the low external temperature. This warning turns on when temperature drops to 4°C (39°F) and turns off when temperature rises to 6°C (43°F).

# 

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.



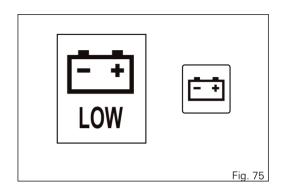
### Low battery indication (LOW Battery)

This function warns the user that the status of the vehicle battery is low.

Warning is activated when battery voltage is lower than/equal to 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.

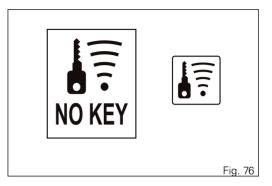


#### Hands Free (HF) Key not acknowledged

The activation of this "warning" indicates that the Hands Free system does not detect the "active key" 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.



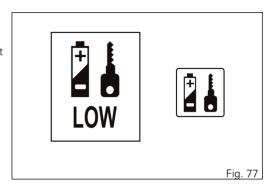
#### "Low" battery level of Hands Free (HF) key

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

### Note

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

To change battery, refer to paragraph "Replacing the battery in the active key" page 267.



#### DTC off-road setting (DTC ENDURO)

The activation of this "warning" indicates that you must ride "carefully" on the asphalt as the bike is set with an "extreme" Traction control (devised for off road use).

This warning activates when DTC (Ducati Traction Control) intervention levels 01 and 02 are used.

# Warning

In this case, Ducati recommends to ride carefully and use this type of DTC (Ducati Traction Control) setting NOT for road, but for off-road use only.





Fig. 78

#### ABS off-road setting (ABS ENDURO)

When this warning is activated, it is necessary to ride carefully because ABS setting in use is the one designed for dirt roads and only the front wheel braking is controlled by the system in this case. This warning is activated whenever ABS level 01 is selected.

Warning

In this case, Ducati recommends to ride carefully and use this type of ABS setting NOT for road, but for off-road use only.

ABS ENDURO

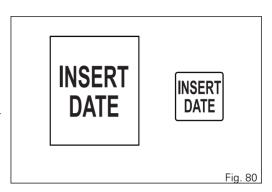


Fig. 79

#### Date setting

This function prompts the user to enter the date via the Setting Menu.

Note
In this case Ducati recommends to stop and enter the calendar date using the function "DATASET".



Steering unlock error - Steering still locked

The activation of this "warning" indicates that the Hands Free System was not able to disengage 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 Authorised Service Centre.





Fig. 81

### Error warnings

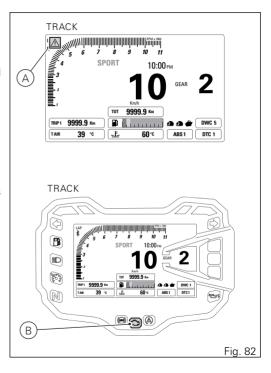
The instrument panel manages error warnings in order to allow the rider to identify any abnormal motorcycle behaviour in real time.

Upon Key-On, in case of errors, the instrument panel turns on the MIL light (B) (in case of errors directly connected to the engine control unit) or the Generic Error light (A) (in case of any other errors).

During normal operation, when an error is triggered, the instrument panel turns on the MIL light or the Generic Error light (A).

# Warning

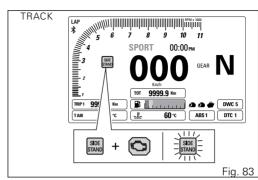
When one or more errors are displayed, always contact a Ducati Dealer or authorised Service Centre.



### Side stand warning

The instrument panel receives information on side stand status and if side stand is down/open, the icon "SIDE STAND" is displayed on a red background. In case of Side stand sensor fault, the instrument panel will display the stand down/up indication with MIL light on.

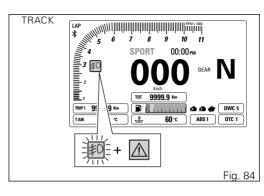
If instrument panel does not receive side stand status, stand down/open "SIDE STAND" indication will flash to indicate an undefined status.



## Fog lights

The instrument panel activates the fog light warning light when the fog lights (option) are present and active.

In case of fog light fault, the DSB displays the flashing Fog Light warning light and turns on the Generic Error light.



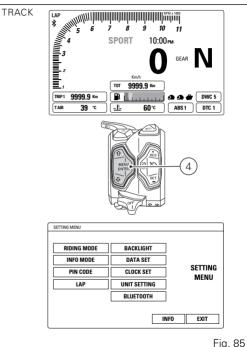
### Setting MENU

This menu allows enabling, disabling and setting some motorcycle functions.

To enter the Setting Menu it is necessary to hold button (4) for two seconds, with Key-ON and motorcycle actual speed ≤ (lower than or equal to) 20 km/h (12 mph): within this menu, it is no longer possible to view any other function.

The Setting MENU displays the following functions:

- RIDING MODE
- INFO MODE
- PIN CODE
- LAP
- BACK LIGHT
- DATA SET
- CLOCK SET
- UNIT SETTING
- BLUETOOTH (only if Bluetooth is active)



riy. ot

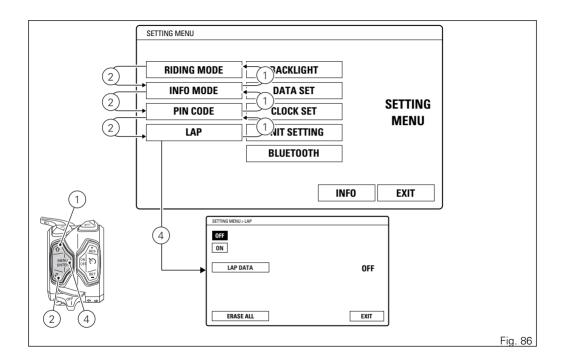
# Important

For safety reasons, it is recommended to use this Menu with the motorcycle at a standstill.

Press buttons (1) and (2) to highlight the customisable parameters one by one: in particular, use button (2) to highlight the following item and button (1) to highlight the previous item.

After highlighting the required parameter, press button (4) to open the corresponding menu page. If function is not available or temporarily disabled, the menu page can not be opened.

At the top of instrument panel display is a text indicating the menu and sub-menu path during navigation through the setting functions. To guit the Setting Menu you shall highlight "EXIT" and press button (4).



#### Customising the Riding Mode

All settings of every riding mode can be customised. You enter the Setting Menu.

Select "RIDING MODE" option, by pressing button (1) or (2). Once function is highlighted, press button (4). Enter the "RIDING MODE" menu. Select the desired riding mode (SPORT, TOURING, URBAN or ENDURO), by pressing button (1) or (2). Once the desired mode is highlighted, press button (4). You open the selected riding mode customisation Menu. While if you highlight "EXIT" and press button (4) you guit the sub-menu and go back to previous page.

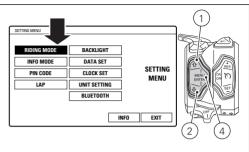
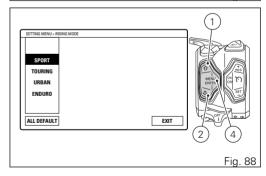


Fig. 87



The parameters that can be customised for every riding mode are the following:

- ENGINE
- DTC
- DWC
- ABS
- Setting motorcycle setup and relevant DSS semiactive suspension settings (front fork - rear shock absorber)
  - rider only
  - rider with luggage
  - rider and passenger
  - rider and passenger with luggage
- DEFAULT

Press buttons (1) and (2) to highlight the customisable parameters one by one: in particular, use button (1) to highlight the following item and button (2) to highlight the previous item.

After highlighting the required parameter, press button (4) to open the corresponding menu page. Any parameter change made is saved and remains in the memory also after a Battery-OFF.

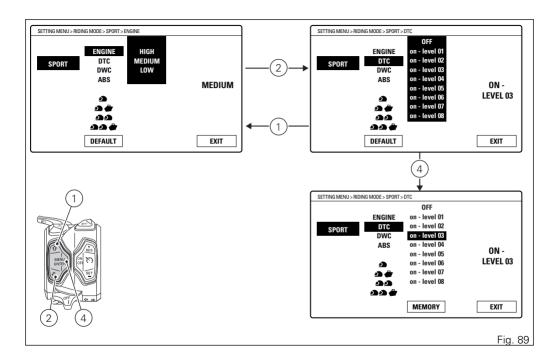
The riding parameters set by Ducati can be restored for each single riding mode through the DEFAULT Function.

If you highlight "EXIT" and press button (4) you quit the sub-menu and go back to previous page.

# 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.

If the DTC is disabled (set to OFF), the DWC parameter can not be changed and is forced to level OFF.



# Customising the Riding Mode: Engine setting

This function customises engine power associated with each riding mode.

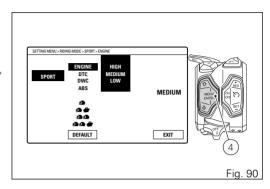
You enter the Setting Menu. Select "RIDING MODE" option, by pressing button (1) or (2).

Once function is highlighted, press button (4). Enter the "RIDING MODE" menu.

Select the desired riding mode (SPORT, TOURING, URBAN or ENDURO) from the drop-down menu, by pressing button (1) or (2). Once the desired mode is highlighted, press button (4).

You open the selected riding mode customisation Menu.

Select the parameter to be customised (ENGINE) from the drop-down menu, by pressing button (1) or (2). Once the desired parameter is highlighted, press button (4).



When entering the function, currently set engine power is indicated on the right (e.g.: MEDIUM). The central drop-down menu lists the available customisation options:

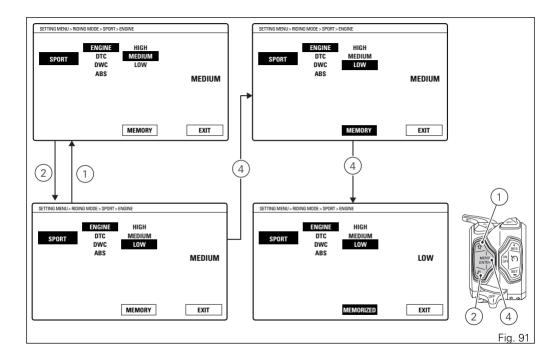
- HIGH
- MEDIUM
- LOW

Press buttons (1) and (2) to highlight the available power options one by one: in particular, use button (2) to highlight the following item and button (1) to highlight the previous item.

Once the desired power level is highlighted, press button (4) to highlight MEMORY in orange. To save the new setting, hold button (4) for two seconds while the message MEMORY is highlighted in orange.

If storage is successful, MEMORIZED will be highlighted in green for two seconds, power level will be refreshed and then EXIT will be highlighted in green.

To exit the menu and go back to previous page, select EXIT and press button (4).



# Customising the Riding Mode: DTC level setting

This function disables or sets DTC level for the selected riding mode.

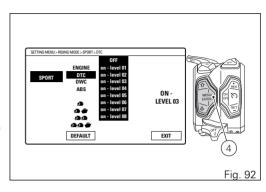
You enter the Setting Menu. Select "RIDING MODE" option, by pressing button (1) or (2).

Once function is highlighted, press button (4). Enter the "RIDING MODE" menu. Select the desired riding mode (SPORT, TOURING, URBAN or ENDURO) from the drop-down menu, by pressing button (1) or (2).

Once the desired mode is highlighted, press button (4).

You open the selected riding mode customisation Menu

Select the parameter to be customised (DTC) from the drop-down menu, by pressing button (1) or (2). Once the desired parameter is highlighted, press button (4).

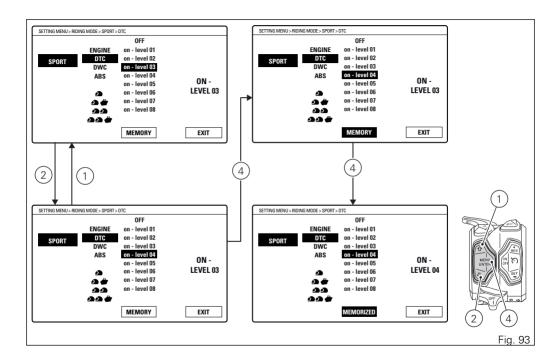


When entering the function, the currently set DTC level or status is indicated on the right (e.g.: ON LEVEL 03).

Customisation options are indicated on the central drop-down menu: levels 1 to 8 and status OFF. Once the desired new setting is highlighted, press button (4) to highlight MEMORY in orange. To save the new setting, hold button (4) for two seconds while the message MEMORY is highlighted in orange.

If storage is successful, MEMORIZED will be highlighted in green for two seconds, set level or status will be refreshed and then EXIT will be highlighted in green.

To exit the menu and go back to previous page, select EXIT and press button (4).



# Customising the Riding Mode: DWC level setting

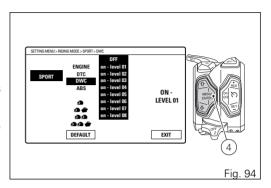
This function disables or sets DWC level for the selected riding mode.

You enter the Setting Menu. Select "RIDING MODE" option, by pressing button (1) or (2). Once function is highlighted, press button (4).

Enter the "RIDING MODE" menu. Select the desired riding mode (SPORT, TOURING, URBAN or ENDURO) from the drop-down menu, by pressing button (1) or (2). Once the desired mode is highlighted, press button (4).

You open the selected riding mode customisation Menu. Select the parameter to be customised (DWC) from the drop-down menu, by pressing button (1) or (2). Once the desired parameter is highlighted, press button (4).

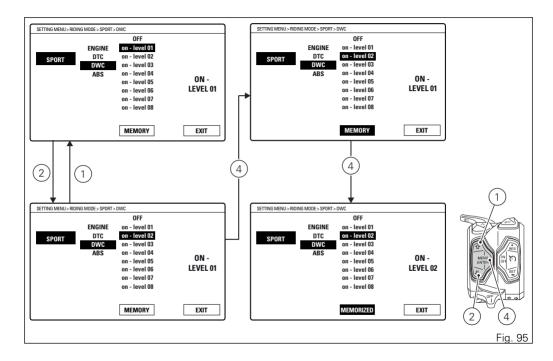
If the DTC is disabled (set to OFF), the DWC parameter can not be changed and is forced to level OFF.



When entering the function, the currently set DWC level or status is indicated on the right (e.g.: ON LEVEL 01).

Customisation options are indicated on the central drop-down menu: levels 1 to 8 and status OFF. Once the desired new setting is highlighted, press button (4) to highlight MEMORY in orange. To save the new setting, hold button (4) for two seconds while the message MEMORY is highlighted in orange.

If storage is successful, MEMORIZED will be highlighted in green for two seconds, set level or status will be refreshed and then EXIT will be highlighted in green.



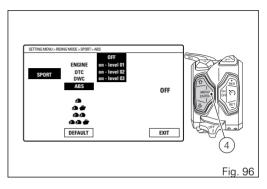
Customising the Riding Mode: ABS setting This function disables or sets ABS level for the selected riding mode. You enter the Setting Menu.

Select "RIDING MODE" option, by pressing button (1) or (2).

Once function is highlighted, press button (4).

Enter the "RIDING MODE" menu. Select the desired riding mode (SPORT, TOURING, URBAN or ENDURO) from the drop-down menu, by pressing button (1) or (2).

Once the desired mode is highlighted, press button (4). You open the selected riding mode customisation Menu. Select the parameter to be customised (ABS) from the drop-down menu, by pressing button (1) or (2). Once the desired parameter is highlighted, press button (4).



When entering the function, the currently set ABS level or status is indicated on the right (e.g.: OFF). Customisation options are indicated on the central drop-down menu: levels 1 to 3 and status OFF. Press buttons (1) and (2) to highlight the levels one by one: in particular, use button (1) to highlight the following item and button (2) to highlight the previous item.

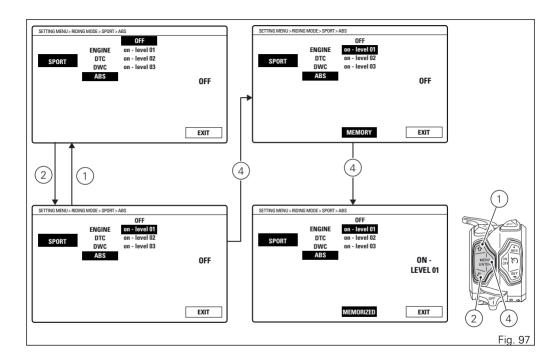
Once the desired level is highlighted, press CONFIRM MENU button (4) to highlight MEMORY. Once the desired new setting is highlighted, press button (4) to highlight MEMORY in orange. To save the new setting, hold button (4) for two seconds while the message MEMORY is highlighted in orange.

If storage is successful, MEMORIZED will be highlighted in green for two seconds, set level or status will be refreshed and then EXIT will be highlighted in green.

To exit the menu and go back to previous page, select EXIT and press button (4).

## Note

When you enable or disable the ABS through this function, i.e. toggling from disabled to enabled system or vice-versa, the procedure for activating or deactivating the ABS is carried out: the change of status of the ABS control unit is not instantaneous, it requires at least 6 seconds.



# Customising the Riding Mode: DSS suspension setting

This function allows selecting the motorcycle setup and type of control of the electronic suspension associated with each riding mode.

You enter the Setting Menu. Select "RIDING MODE" option, by pressing button (1) or (2).

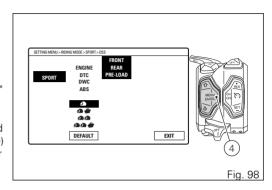
Once function is highlighted, press button (4).

Enter the "RIDING MODE" menu. Select the desired riding mode (SPORT, TOURING, URBAN or ENDURO) from the drop-down menu, by pressing button (1) or (2).

Once the desired mode is highlighted, press button (4).

You open the selected riding mode customisation Menu

Select the setup to be customised from the dropdown menu items, by pressing button (1) or (2).



Available setup types are four:

- Rider only (one passenger symbol);
- Rider with luggage (one passenger with luggage symbol);
- Rider and passenger (two passengers symbol);
- Rider and passenger with luggage (two passengers with luggage symbol).

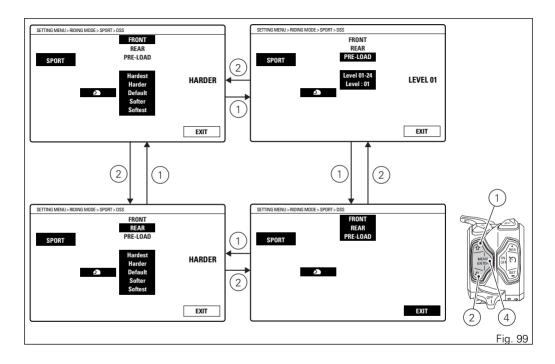
For every setup, user can set the electronic suspension setup:

- FRONT: fork compression and rebound setting (Hardest, Harder, Default, Softer, Softest);
- REAR: rear shock absorber compression and rebound setting (Hardest, Harder, Default, Softer, Softest):
- PRE-LOAD: rear shock absorber spring preload (Level 01-24).

Once the desired setup is highlighted, press button (4).

Setup customisation page will open.

Select one of the suspension settings from the central drop-down menu, by pressing button (1) or (2). For every setting, the menu below shows available options and currently set value is on the right.



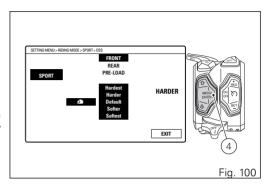
### Fork compression and rebound setting

This function allows changing Electronic Suspension (DSS) front fork compression/rebound setting for every single riding mode and for each suspension setup.

Open the setup customisation page as previously described.

Select FRONT (front fork) from the central drop-down menu, by pressing button (1) or (2). The menu below shows available options and currently set value is on the right.

Once setup is highlighted, press button (4).



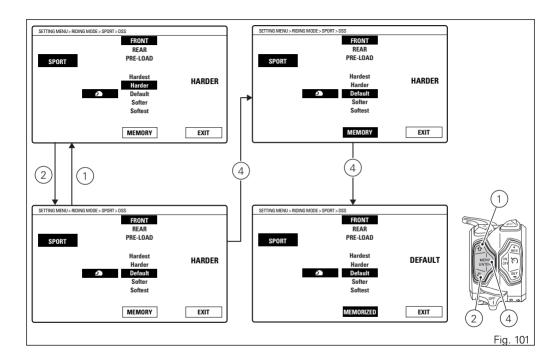
Available customisation options are as follows:

- HARDEST:
- HARDER;
- DEFAULT;
- SOFTEST
- SOFTER.

Use button (1) or (2) to select one of the available customisation options and press button (4) to confirm and highlight MEMORY.

To save the new setting, hold button (4) for two seconds while the message MEMORY is highlighted in orange.

If storage is successful, MEMORIZED will be highlighted in green for two seconds, customised option will be refreshed and then "EXIT" will be highlighted in green.



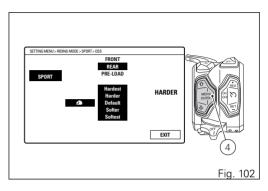
Adjustment of rear suspension rebound and compression damping

This function allows changing Electronic Suspension (DSS) rear shock absorber compression/rebound damping setting for every single riding mode and for each suspension setup.

Open the setup customisation page as previously described

Select REAR (rear shock absorber) from the central drop-down menu, by pressing button (1) or (2). The menu below shows available options and currently set value is on the right.

Once setup is highlighted, press button (4).



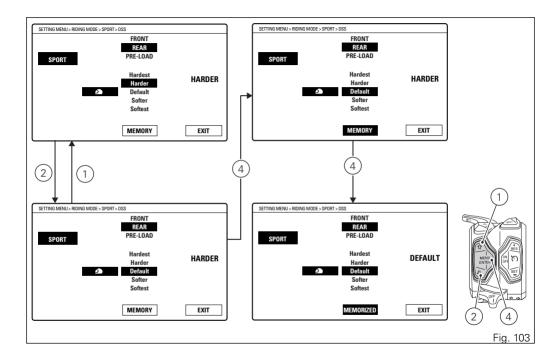
Available customisation options are as follows:

- HARDEST;
- HARDER;
- DEFAULT;
- SOFTEST:
- SOFTER.

Use button (1) or (2) to select one of the available customisation options and press button (4) to confirm and highlight MEMORY.

To save the new setting, hold button (4) for two seconds while the message MEMORY is highlighted in orange.

If storage is successful, MEMORIZED will be highlighted in green for two seconds, customised option will be refreshed and then "EXIT" will be highlighted in green.



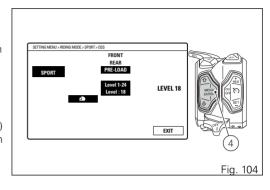
Adjustment of the rear shock absorber spring preload

This function allows changing Electronic Suspension (DSS) rear shock absorber spring preload setting for every single riding mode and for each suspension setup.

Open the setup customisation page as previously described.

Select PRELOAD (rear shock absorber spring preload) from the central drop-down menu, by pressing button (1) or (2). The menu below shows available options and currently set value is on the right.

Once setup is highlighted, press button (4).



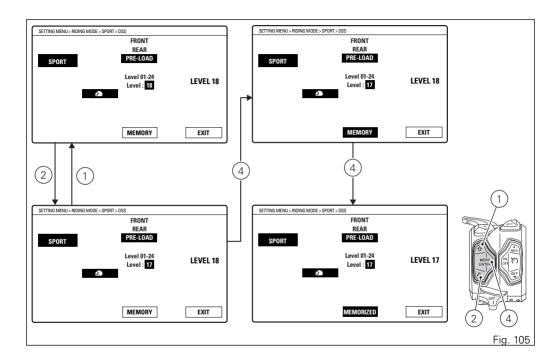
Possible customisation options are from level 01 to 24

Each time you press button (1), the displayed number increases from 01 to 24 and then returns to 01. Each time you press button (2), the displayed number decreases from 24 to 01 and then returns to 24.

Once the desired level is highlighted, press confirm button (4) to highlight MEMORY.

To save the new setting, hold button (4) for two seconds while the message MEMORY is highlighted in orange.

If storage is successful, MEMORIZED will be highlighted in green for two seconds, level will be refreshed and then "EXIT" will be highlighted in green. To exit the menu and go back to previous page, select EXIT and press button (4).



# Customising the Riding Mode: Reset to default settings (DEFAULT)

This function allows restoring the default values set by Ducati for the parameters associated to a specific riding mode.

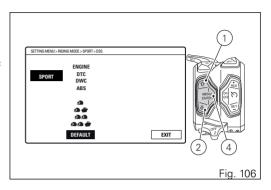
You enter the Setting Menu. Select "RIDING MODE" option, by pressing button (1) or (2).

Once function is highlighted, press button (4). Enter the "RIDING MODE" menu.

Select the desired riding mode (SPORT, TOURING, URBAN or ENDURO) from the drop-down menu, by pressing button (1) or (2). Once the desired mode is highlighted, press button (4).

You open the selected riding mode customisation Menu

Select DEFAULT option, by pressing button (1) or (2). Once desired parameter is highlighted, keep button (4) pressed for two seconds.



It will take three seconds to restore parameters, during which the display will show "WAIT...".

Once procedure is completed, "OK" will appear for two seconds to confirm that default parameters have been restored and the message EXIT will be highlighted.

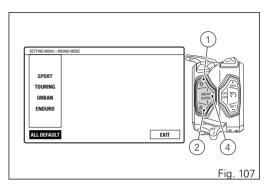
# Customising the Riding Mode: Reset to default settings (ALL DEFAULT)

This function allows restoring the default values set by Ducati for all the parameters associated to all riding modes.

To gain access to this function, enter the Setting Menu, use button (1) or (2) to select RIDING MODE and press button (4). Then use button (1) or (2) to select ALL DEFAULT and keep button (4) pressed for two seconds.

## Note

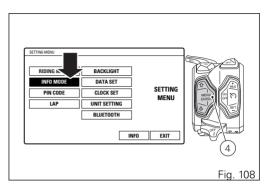
If "ALL DEFAULT" option cannot be selected, it means that all parameters for all riding modes are already in the "Default" condition.



## Display mode setting

The display mode can be customised by selecting one of the four available display modes: CORE, FULL, TRACK and OFF ROAD. Every mode is associated to a Riding Mode and in "Default" mode, when the Riding Mode changes, also the display mode changes.

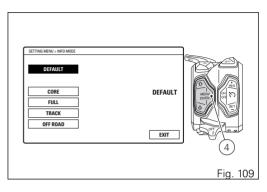
Nevertheless, it is possible to select a specific display mode so that the instrument panel layout stays the same, regardless of the selected Riding Mode. To select the display mode open the Setting Menu. Select INFO MODE option, by pressing button (1) or (2). Once function is highlighted, press button (4).



Enter the INFO MODE menu.

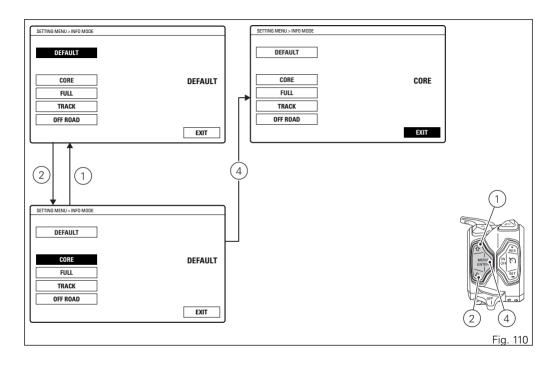
Ducati associated by default the layouts to the Riding modes as follows:

- CORE layout for the URBAN Riding mode;
- FULL layout for the TOURING Riding mode;
- TRACK layout for the SPORT Riding mode;
- OFF ROAD layout for the ENDURO Riding mode.



To select a layout for all riding modes, press button (1) or button (2). Once mode is highlighted, press button (4). The selected option is stored, current mode indication is refreshed and the EXIT option is automatically highlighted.

Press button (4) to go back to previous display mode.



#### Pin Code

This function allows the user to activate or modify the PIN CODE.

The PIN CODE is initially not present in the motorcycle, it must be activated by the user by entering his/her 4-digit PIN in the instrument panel, otherwise the motorcycle cannot be started temporarily in the case of a malfunction.

To activate this function, refer to "Entering the PIN"

To change the PIN refer to "Changing the PIN CODE" procedure.

In order to temporarily start the motorcycle in case of malfunction, please refer to the Vehicle Overriding procedure page 272.

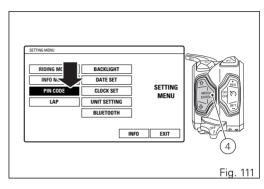
## Warning

CODE" procedure.

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.

## Activating the PIN CODE

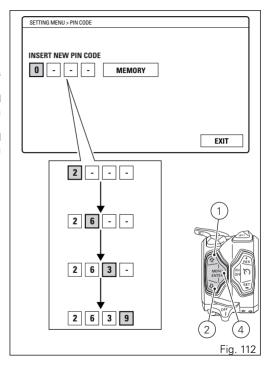
To activate the PIN CODE function and enter your own PIN CODE you must open the Setting Menu. Select PIN CODE option, by pressing button (1) or (2). Once function is highlighted, press button (4). You open the PIN CODE menu.



When entering the function, the display shows the message INSERT NEW PIN CODE followed by the first digit in green and three dashes "0 - - -". Entering the code:

- Press button (4), only one digit indicating "0" turns green;
- 2) Each time you press the button (2) the displayed number increases by one (+ 1) up to "9" and then starts back from "0":
- 3) Each time you press the button (1) the displayed number decreases by one (-1) up to "1" and then starts back from "0":
- 4) To confirm the number, press the button (4);

Repeat the procedures until you confirm all the 4 digits of the PIN CODE.

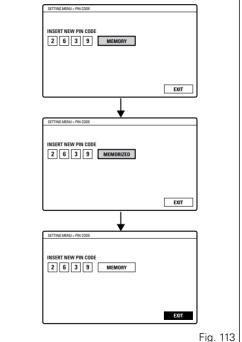


When you press button (4) to confirm the fourth and last digit, the instrument panel highlights the message MEMORY.

To save the new setting, hold button (4) for two seconds while the message MEMORY is highlighted in orange.

If storage is successful, MEMORIZED will be highlighted in green for 1 second, and then EXIT will be highlighted in green.

Once the first PIN CODE is stored, this menu page is no longer available and is replaced by the page for changing the PIN CODE. The page for entering the very first PIN CODE is active and available again only in case the PIN CODE function is reset (but this is only possible at a DUCATI Authorised Service Centre).



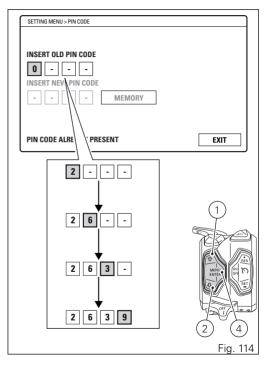
## Changing the PIN CODE

To change the existing PIN CODE and activate a new one, you must open the Setting Menu.

Select "PIN CODE" option, by pressing button (1) or (2). Once function is highlighted, press button (4). You open the "PIN CODE" menu. When opening the function, the screen displays INSERT OLD PIN CODE and three dashes "0 - - -", the first digit "0" is highlighted in green.

Entering the "old" code:

- Press button (4), only one digit indicating "0" turns green;
- 2) Each time you press the button (2) the displayed number increases by one (+ 1) up to "9" and then starts back from "0":
- 3) Each time you press the button (1) the displayed number decreases by one (-1) up to "1" and then starts back from "0";
- 4) To confirm the number, press the button (4);



Repeat the procedures until you confirm all the 4 digits of the PIN CODE.

When you press button (4) to confirm the fourth and last digit:

- if the PIN is not correct, the instrument panel displays WRONG for 3 seconds and then highlights the string of four dashes "----" for the OLD PIN to allow you to try again;
- if the PIN code is correct, the instrument panel displays CORRECT for 3 seconds, the screen displays INSERT NEW PIN CODE and four dashes "----", the first of which is highlighted in green, for the user to enter the new PIN CODE.

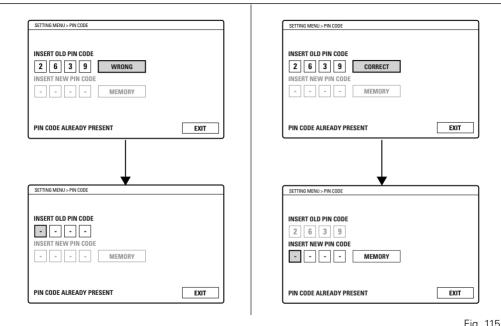
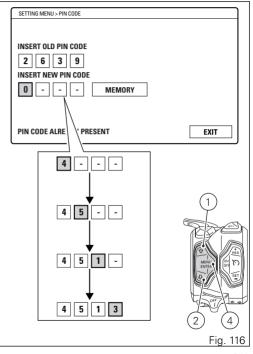


Fig. 115

#### Entering the "new" code:

- Press button (4), only one digit indicating "0" turns green;
- 2) Each time you press the button (2) the displayed number increases by one (+ 1) up to "9" and then starts back from "0":
- 3) Each time you press the button (1) the displayed number decreases by one (- 1) up to "1" and then starts back from "0":
- 4) To confirm the number, press the button (4)

Repeat the procedures until you confirm all the 4 digits of the PIN CODE.

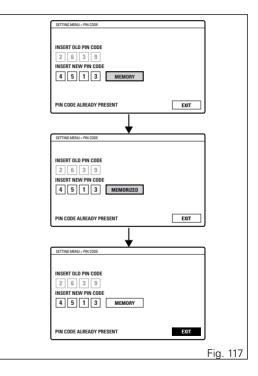


When you press button (4) to confirm the fourth and last digit, the instrument panel highlights the message MEMORY.

To save the new setting, hold button (4) for two seconds while the message MEMORY is highlighted in orange.

If storage is successful, MEMORIZED will be highlighted in green for two seconds, and then EXIT will be highlighted in green.

If settings have not been saved, the instrument panel highlights again the string of four dashes "----" of the NEW PIN to allow the rider to try again and enter a new code.

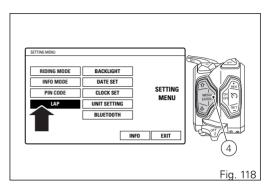


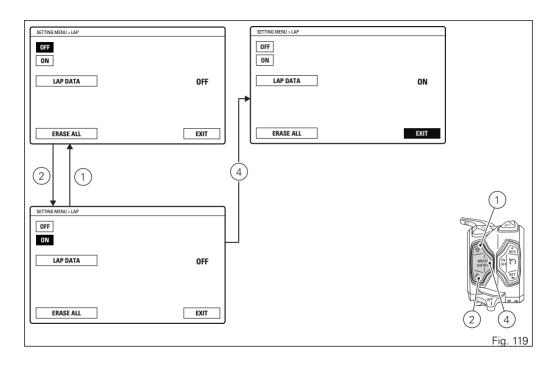
### LAP

To open the LAP function menu, enter the Setting Menu. Select LAP option, by pressing button (1) or (2). Once function is highlighted, press button (4). You open the LAP Menu.

The menu allows you to:

- OFF: disable the LAP function;
- ON: enable the LAP function;
- LAP DATA: view LAPs previously recorded by means of the "LAP recording" function;
- ERASE ALL: delete all recorded LAPs.





### Displaying the stored Laps

To view the stored LAPs, you must enter the LAP menu.

Select "LAP DATA" option, by pressing button (1) or (2). Once function is highlighted, press button (4). When you enter the function, the following is displayed:

- TIME followed by the recorded lap time;
- SPEEDMAX followed by the top speed reached during the lap;
- RPMMAX followed by the maximum RPM value reached during the lap;
- The message LAP followed by the number of the LAP (e.g.: LAP 01).

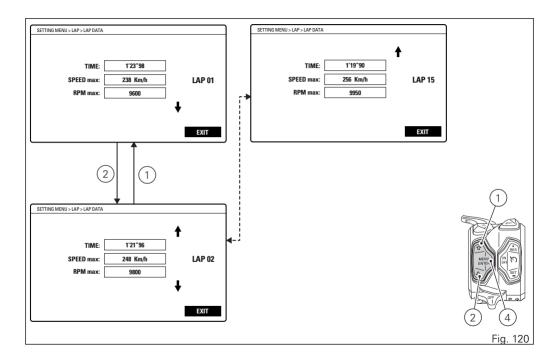
Press the buttons (1) and (2) to highlight stored LAPS one by one; in particular: use button (2) to view the next lap (laps are displayed in increasing order, i.e. LAP 01 ... LAP 02 ... LAP 03 ... LAP 15); and then highlight EXIT; use button (1) to view the previous lap (laps are displayed in decreasing order, i.e. LAP 15 ... LAP 14 ... LAP 13 ... LAP 01); and then highlight EXIT. To exit the menu and go back to previous page, select EXIT and press button (4).

## Note

The MAX stored speed is reached during lap (increased by 5%).

## Note

If the memory is empty, the display shows the lap timer reading "-.-.-", MAX RPM = ----- and MAX speed = -----.



#### **Erasing stored Laps**

To erase the stored LAPs, you must enter the LAP menu.

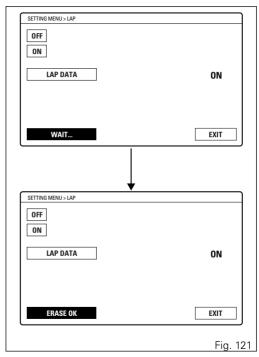
LAPs can be erased from the LAP menu or from the LAP viewing page (LAP DATA).

Select "ERASE ALL" option, by pressing button (1) or (2). Once function is highlighted, press CONFIRM MENU button (4).

User must confirm deletion by pressing button (4) for two seconds.

After two seconds, the instrument panel display shows:

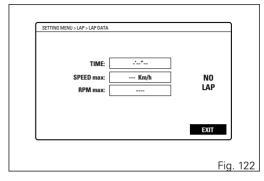
- WAIT... for two seconds:
- and then ERASE OK for 2 seconds to inform about the result of the deletion process.



Deletion is one single command that erases all stored laps.

After deletion, the Laps 01 to 15 are displayed with all parameters showing an indefinite value "-" (time = -' - -' - - , rpm = ---- , speed = ---).

To exit the menu and go back to previous page, select EXIT and press button (4).

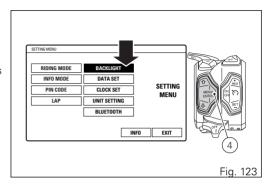


#### Display backlighting setting

This function allows selecting the instrument panel backlighting.

You enter the Setting Menu. Select "BACKLIGHT" option, by pressing button (1) or (2). Once function is highlighted, press button (4).

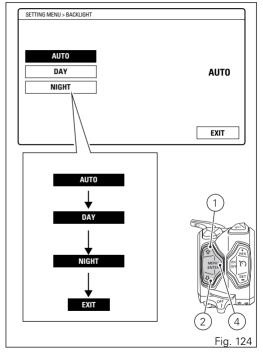
You open the "BACKLIGHT" menu.



When entering the function, available backlighting options are indicated on the left: DAY, NIGHT, AUTO, while currently selected option is indicated on the right.

Press buttons (1) and (2) to highlight the instrument panel backlighting options one by one: in particular, use button (2) to highlight the following item and button (1) to highlight the previous item. Once the desired backlighting option is highlighted, press button (4) to confirm. The instrument panel immediately activates the option selected by the user and highlights the corresponding name.

To exit the menu and go back to previous page, select EXIT and press button (4).



Select DAY (day mode) to permanently set display "white" background for improved readability - recommended in conditions of strong ambient light. Select NIGHT (night mode) to permanently set display black background for dimmed visibility - recommended in case of poor ambient light and/or at night.

Select AUTO (automatic mode) to automatically adjust background colour according to ambient light (detected by a sensor).

It will be "white" for better visibility with high ambient light and "black" for a dimmed visibility with low ambient light.

#### Date setting

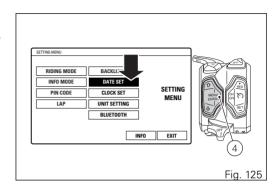
This function allows user to set or change the date. You enter the Setting MENU.

Select "DATE SET" option, by pressing button (1) or (2).

Once function is highlighted, press button (4).

## Important

Every time the battery is disconnected, the calendar date is reset and must be set again.



When entering the function, available settings are indicated on the left: YEAR, MONTH, DAY, while current date is indicated on the right (e.g.: 2012/01/27).

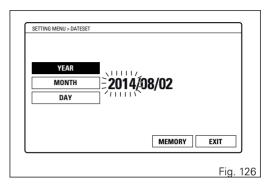
#### Year setting

Select "YEAR" option, by pressing button (1) or (2). Once highlighted, press CONFIRM MENU button (4). Year value starts flashing.

Press button (1) to decrease year value by 1 unit: 2099, 2098, ... 2000, 2099.

Press button (2) to increase year value by 1 unit: 2000, 2001, ... 2099, 2000.

Once you reach the value to be set, press button (4) and the set year will stop flashing.



#### Month setting

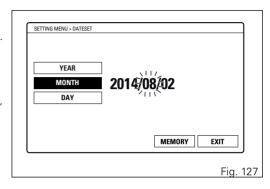
Select "MONTH" option, by pressing button (1) or (2). Once option is highlighted, press button (4).

Month value starts flashing.

Press button (1) to decrease month value by 1 unit: 12, 11, ... 01, 12.

Press button (2) to increase month value by 1 unit: 01, 02, ... 12, 01.

Once you reach the value to be set, press button (4) and the set month will stop flashing.



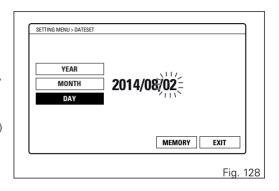
#### Day setting

Select "DAY" option, by pressing button (1) or (2). Once option is highlighted, press button (4). Day value starts flashing.

Press button (1) to decrease day value by 1 unit: 31, 30, ... 01, 31.

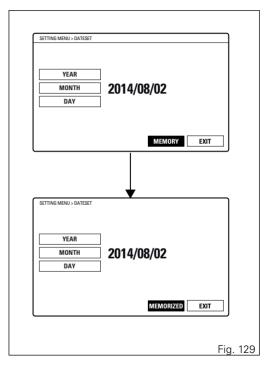
Press button (2) to increase day value by 1 unit: 01,  $02, \dots 31, 01$ .

Once you reach the value to be set, press button (4) and the set day will stop flashing.



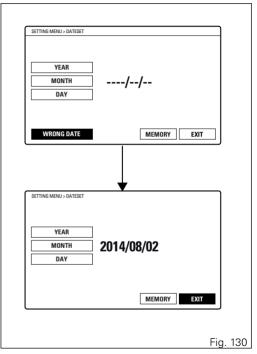
#### Storing the date

To store set/modified date, select MEMORY using buttons (1) and (2) and press button (4) for 2 seconds. The instrument panel will display MEMORIZED for two seconds and then automatically highlight EXIT.



If date is not correct, the instrument panel will display "WRONG DATE" flashing for three seconds and then will automatically highlight EXIT, while date is indicated as "——/—/—" steady. It is still possible to set a new date.

To go back to previous page (setting menu page), press button (4) when EXIT is highlighted.



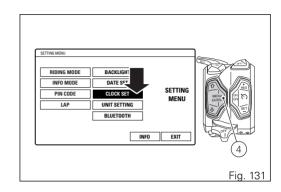
#### Clock setting

This function allows user to set or adjust the time. You enter the Setting Menu. Select "CLOCK SET" option, by pressing button (1) or (2).

Once function is highlighted, press button (4). You open the "CLOCKSET" Menu.

Note

Every time the battery is disconnected, the clock is reset and must be set again by the user.



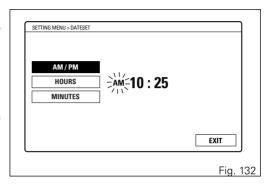
When entering the function, available settings are indicated on the left: HOUR, MINUTE, AM/PM, while set time is indicated on the right (e.g.: 10: 30 a.m.).

#### Setting AM/PM

Select "AM/PM" option, by pressing button (1) or (2). Once highlighted, press CONFIRM MENU button (4). The value will start flashing.

Select AM or PM option, by pressing button (1) or (2) respectively.

Once you reach the value to be set, press button (4) and the set value will stop flashing.



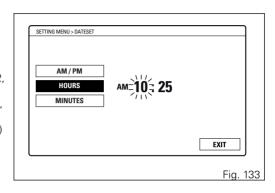
#### Setting the hours

Select "HOUR" option, by pressing button (1) or (2). Once option is highlighted, press button (4). Hour value starts flashing.

Press button (1) to decrease hour value by 1 unit: 12, 11, ... 1, 12.

Press button (2) to increase hour value by 1 unit: 12, 1, ... 12.

Once you reach the value to be set, press button (4) and the set hour value will stop flashing.



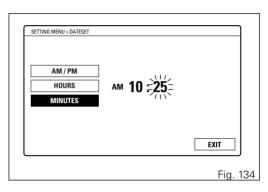
#### Setting the minutes

Select "MINUTE" option, by pressing button (1) or (2). Once highlighted, press CONFIRM MENU button (4). Minute value starts flashing.

Press button (1) to decrease minute value by 1 unit: 59, 58, ... 00, 59.

Press button (2) to increase minute value by 1 unit: 00, 01, ... 59, 00.

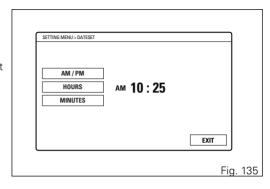
Once you reach the value to be set, press CONFIRM MENU button (4) and the set minutes will stop flashing.



#### Storing the time

Time is set automatically any time you quit each single setting (and colon is flashing).

To exit the menu and go back to previous page, select EXIT and press button (4).



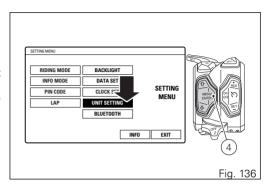
#### Setting the units of measurement

This function allows you to change the units of measurement of the displayed values, regardless of the Country configuration.

To manually set the units of measurement, you must enter the Setting Menu.

Select "UNIT SETTING" option, by pressing button (1) or (2). Once function is highlighted, press CONFIRM MENU button (4).

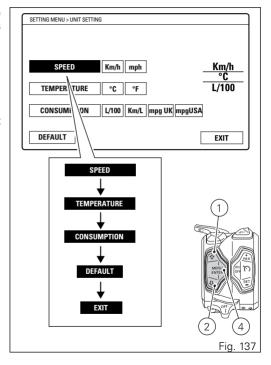
You enter the "UNITS SETTING" menu.



When entering the function, the display shows on the left the list of values for which units of measurements can be set:

- SPEED:
- TEMPERATURE:
- fuel consumption (CONSUMPTION);
- reset to automatic settings (DEFAULT).

To exit the menu and go back to previous page, select EXIT and press button (4).



#### Setting the units of measurement: Speed

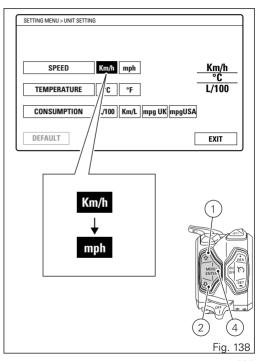
This function allows to change the units of measurement of speed (and hence even the ones of distance travelled).

You open the "UNITS SETTING" menu, as described on the previous pages.

Select "SPEED" option, by pressing button (1) or (2). Once function is highlighted, press CONFIRM MENU button (4). You open the "SPEED" menu.

When you enter the function, the current unit of measurement is displayed, followed by the list of the possible units: km/h, mph.

Press buttons (1) and (2) to highlight the units of measurement one by one: in particular, use button (1) to highlight the following item and button (2) to highlight the previous item. Select the required unit of measurement and then press the CONFIRM MENU button (4) to confirm: the selected unit is stored and the "EXIT" option is highlighted.



The selected unit of measurement will be used by the instrument panel for the following indications:

- Motorcycle speed and Average speed (km/h or mph);
- Odometer, Trip1, Trip2 and Trip Fuel (km or mi).

Setting the units of measurement: Temperature

This function allows you to change the units of measurement of the temperature.

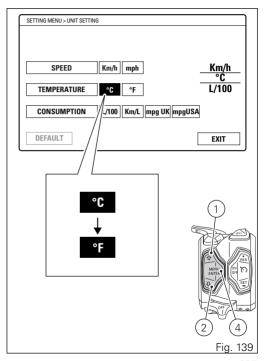
You open the "UNITS SETTING" menu, as described on the previous pages.

Select "TEMPERATURE" option, by pressing button (1) or (2).

Once function is highlighted, press CONFIRM MENU button (4).

You open the "TEMPERATURE" menu. When you enter the function, the current unit of measurement is displayed, followed by the list of the possible units: °C, °F.

Press buttons (1) and (2) to highlight the units of measurement one by one: in particular, use button (1) to highlight the following item and button (2) to highlight the previous item. Select the required unit of measurement and then press the CONFIRM MENU button (4) to confirm: the selected unit is stored and the "EXIT" option is highlighted.



The selected unit of measurement will be used by the instrument panel for the following indications:

- Engine coolant temperature and ambient air temperature.

# Setting the units of measurement: Fuel consumption

This function allows you to change the units of measurement of the fuel consumption.

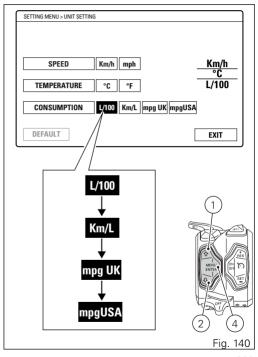
You open the "UNITS SETTING" menu, as described on the previous pages.

Select "CONSUMPTION" option, by pressing button (1) or (2).

Once function is highlighted, press CONFIRM MENU button (4). You open the "CONSUMPTION" menu. When you enter the function, the current unit of measurement is displayed, followed by the list of the possible units: L / 100km, km / L, mpg (UK), mpg (USA).

Press buttons (1) and (2) to highlight the units of measurement one by one: in particular, use button (1) to highlight the following item and button (2) to highlight the previous item.

Select the required unit of measurement and then press the CONFIRM MENU button (4) to confirm: the selected unit is stored and the "EXIT" option is highlighted.



The selected unit of measurement will be used by the instrument panel for the following indications:

Instantaneous fuel consumption and Average fuel consumption.

# Setting the units of measurement: Reset to automatic settings

This function allows you to restore the automatic settings for the units of measurement of all indications displayed on the instrument panel. You open the "UNITS SETTING" menu, as described on the previous pages. Select "DEFAULT" option, by pressing button (1) or (2).

Once function is highlighted, press CONFIRM MENU button (4) for 3 seconds. WAIT... will be displayed for two seconds, and then the UNITS SETTING menu page with the EXIT option highlighted.
To exit the menu and go back to previous page, select EXIT and press button (4).

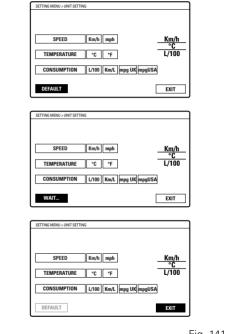


Fig. 141

#### Bluetooth device setting

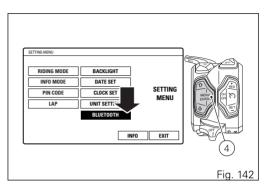
This function allows pairing and/or deleting any paired Bluetooth devices.

To do this, you must enter the Setting Menu. Select "BLUETOOTH" option, by pressing button (1) or (2). Once function is highlighted, press button (4). You enter the "BLUETOOTH" menu, which is active only if the Bluetooth function is active.

The BLUETOOTH menu is not available if the player is active or when there is an incoming call, a call is in progress or during recall.

To carry out the pairing procedure, refer to "Pairing of a new device".

To delete any paired devices, refer to "Deleting a paired device".



#### Pairing of a new device

This function allows user to associate (pair) one or several Bluetooth devices by running the "PAIRING" control.

Set the Bluetooth device to ensure it can be detected by the control unit, so turn device on and make it visible to other devices.

A Bluetooth device in visible mode transmits a wireless signal allowing it to be detected by other devices. This function is called pairing mode. The motorcycle is equipped with a Bluetooth control unit that works as a hub between the various supported electronic devices relying on a Bluetooth communication interface.

Warning

Bluetooth Headset device manufacturers may incorporate certain changes within the standard protocols over the course of the lifecycle of the device (Smartphones and Earphones).

# Warning

These changes are outside the control of Ducati and may result in Bluetooth Headset devices functionality becoming impaired (sharing Music, multimedia player, etc.) and may equally affect some types of Smartphones (depending on supported Bluetooth profiles). This is why Ducati cannot guarantee multimedia player proper operation for:

- any earphones not coming with the "Ducati Kit part no. 981029498";
- any Smartphones not supporting the required Bluetooth profiles (even though paired to earphones coming with the "Ducati Kit part no. 981029498").

Warning

In case of interference or noise due to particular conditions of the external environment, the Ducati earphone kit part no. 981029498 also allows sharing the music being played directly from rider helmet to passenger helmet (for further details please refer to the manual of the earphones coming with the Ducati kit part no. 981029498).

### Note

The Ducati kit part no. 981029498 can be purchased separately at a Ducati Dealer or Authorised Service Centre.

When opening the BLUETOOTH menu for the first time, the first label highlighted by default will be "PAIRING".

The Pairing function is activated by pressing button (4): this runs a search for all Bluetooth devices present within a certain range. Device search symbol is activated and message "WAIT..." is displayed. The pairing ends automatically when devices are detected within the range.

If Pairing is not successful, "PAIRING LOST. PLEASE EXIT" message will be displayed. Now you can only quit the BLUETOOTH Setting Menu, and then go back in to run a new Pairing procedure.

If Pairing is successful, as soon as Bluetooth devices are detected, their name is displayed in a list: up to 20 devices can be displayed.

The list of devices found within the range during the Pairing stage does not include already paired devices, even if their Bluetooth connection is ON.

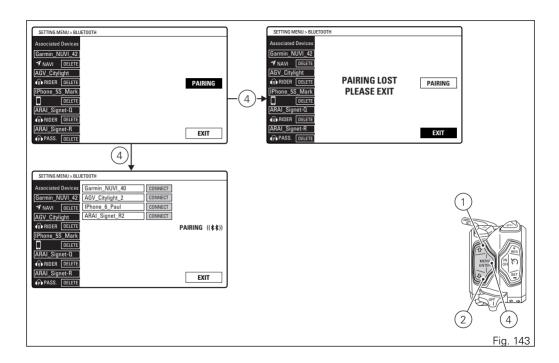
If two or more Bluetooth devices have the same name, the list of devices detected will include two or more labels with the same name.

If one of the devices detected has no name, it is not included in the list of devices detected.

During the search stage, user can:

- scroll the list by pressing buttons (1) and (2);
- select "CONNECT", by pressing button (4) on the device to be paired. After selection, the label of the selected device will display "WAIT".

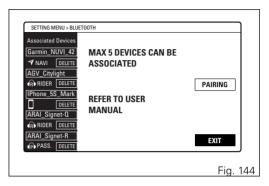
To quit the Pairing stage, select EXIT and press button (4).



It is possible to pair up to:

- 2 smartphones;
- 1 navigator;
- 1 rider helmet;
- 1 passenger helmet.

If at least 5 devices have already been paired and the user attempts to run the Pairing, the following message will be displayed: "MAX 5 DEVICES CAN BE ASSOCIATED" and "REFER TO USER MANUAL". System automatically highlights DELETE indication for the first associated device and user can delete one or several devices (refer to Deleting associated devices) or guit the Bluetooth Setting Menu.



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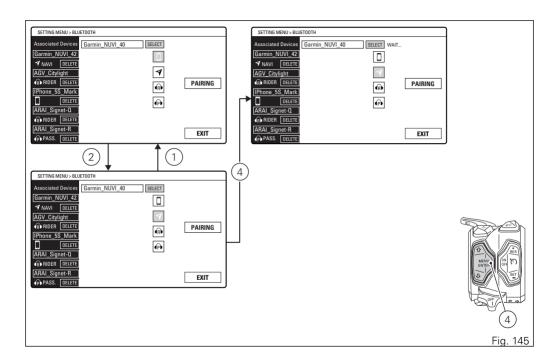
When device is associated and connected, the user will select the type of connected device, using buttons (1), (2) and then button (4) to confirm. Types of devices can be:

- Smartphone;
- Rider helmet;
- Passenger helmet;
- GPS navigation system.

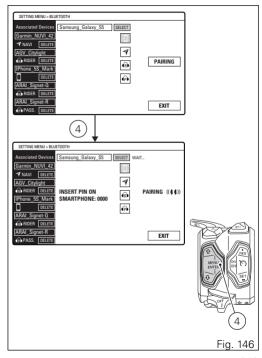
After selecting the type of device, "WAIT..." will be displayed.

After pairing, WAIT message is replaced by the name of the connected device: name of device only displays the first characters.

Pairing deactivation takes place when quitting the Bluetooth Setting Menu or when no more Bluetooth devices are present.



To pair a Smartphone, the pairing procedure with the Bluetooth control unit requires user to enter a code (0000), which is only necessary the first time the device is paired with the Bluetooth control unit. In this case, the Instrument panel displays the PIN to be entered "INSERT PIN ON SMARTPHONE: 0000". When user enters the PIN on the Smartphone, the device will be paired.



#### GPS navigation system

If you wish to connect a Bluetooth Navigator, the connection procedure shall be completed on the navigator, by selecting the connection with the motorcycle Bluetooth control unit. In this case, within the Bluetooth Setting Menu, during pairing, you will find the indication "CONNECT ON NAVI", which will go out as soon as connection between control unit and device is successfully established.

## Note

If user does not complete the pairing procedure on the Navigator within 90 seconds, pairing screen on instrument panel will go out, and display will go back to Bluetooth Setting Menu main screen.

In case of pairing in progress, scrolling is activated 90 seconds after pairing start (if there were errors during pairing) during which system only allows selection of the flashing box around EXIT option to abort pairing, if necessary:

 press UP/DOWN to highlight Exit in green (and press ENTER to quit the Bluetooth Setting Menu);  press UP/DOWN to highlight Exit in white (in this case it is not possible to quit the Bluetooth Setting Menu).

## Warning

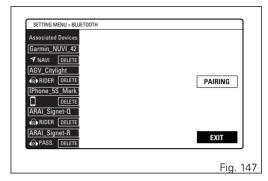
Ducati does not ensure a correct connection to the Ducati Multimedia System of Bluetooth navigators that are not provided in the following kits:

- Kit of Ducati Zumo satellite navigator 350
- Kit of Ducati Zumo satellite navigator 390
- Kit of Ducati Zumo satellite navigator 395

### Note

The Ducati kits mentioned above can be purchased separately at a Ducati Dealer or Authorised Service Centre.

After pairing, message WAIT will be replaced by the name of connected device. (system will scroll through its complete name, and then string is cut to the first characters).



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#### Deleting associated devices

From the Bluetooth menu, associated device list can be opened by pressing button (4) at DEVICE item. From the list of associated devices, user can select the device by pressing button (1) or button (2). Then press button (4) for at least two seconds, at "DELETE" item to delete it.

The deleted device will be erased from the list of associated devices. The list of associated devices is then refreshed. Select the flashing box of the EXIT option, and press button (4) to quit the list of associated devices and go back to Setting Menu main screen.

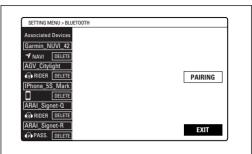
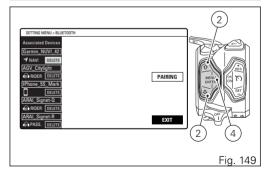


Fig. 148



#### Information (INFO)

This function allows displaying several useful details. To view the "INFO", enter the Setting Menu, use button (1) or (2) to select "INFO" and press button (4). Available information:

- BATTERY (battery voltage);
- RPM (engine rpm indication);
- BLUETOOTH version (Bluetooth module version).

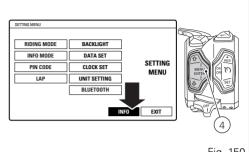
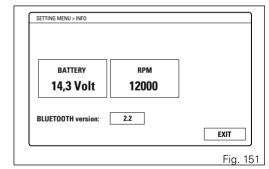


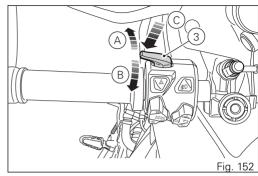
Fig. 150



#### Light control Low / High beam

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

At Key-On, the high beam and low beam lights are OFF, only the parking lights are turned on. Once the engine is started, the low beam is turned on; with engine running the standard operation of the lights is restored: it is possible to switch the high beam on and off using button (3) in positions (A) and (B). If engine is not started upon key-on, it is anyway possible to switch high/low beams on by pushing button (3) position (C) on LH switch.



If engine is not started within 60 seconds since "manual ignition", the low and/or high beam lights are turned OFF.

If the low beam and/or high beam was turned on before starting the engine (with the procedure described above), the headlight turns off automatically when starting the engine and will turn ON again when the engine has been completely started.

Function for switching the Cornering lights on/off

This Function allows the automatic switch-on/off of the Cornering lights. The cornering lights are used to enhance lighting in a bend, i.e., in the part of the road ahead, on the side of the bend. The cornering lights are activated on the right when the lean angle is to the right, while they activate on the left when the lean angle is to the left.

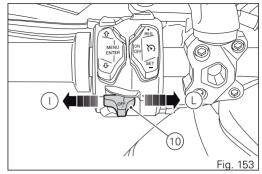
#### Turn indicators

Turn indicators are automatically reset by the instrument panel.

To activate the left turn indicators, press button (10) in position (I); to activate the right turn indicators, press button (10) in position (L).

Turn indicators can be cancelled by pressing button (10) on LH switch.

If the turn indicator is not reset manually, the instrument panel will automatically switch it off after the motorcycle has travelled 500 m (0.3 miles) from when the turn indicator was activated. The counter for the distance travelled for automatic deactivation is only 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 will be interrupted and will restart when the speed returns below the indicated threshold.

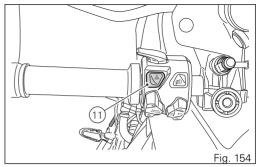


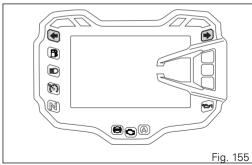
#### Warning

The automatic deactivation systems are assist systems helping the rider control the turn indicators in the most comfortable and easy way. Such systems have been designed to work in most riding manoeuvres, nonetheless the rider must pay attention to the turn indicator operation (disabling or enabling them by hand if needed).

#### Hazard function (4 turn indicators)

The "Hazard" function turns all four turn indicators on at the same time to signal an emergency condition. Push button (11) to activate the "Hazard" function. It can only be activated when vehicle is turned on (Key-ON). When the "Hazard" function is active, all four turn indicators blink at the same time as well as warning lights on the instrument panel. The "Hazard" function can be manually turned off exclusively when vehicle is on (Key-ON), by pressing button (11).





Once the "Hazard" function is activated, if vehicle is turned off (key turned to "OFF"), the function stays active for 2 hours. After 2 hours, the turn indicators switch OFF automatically in order to save battery charge.

#### Note

If user performs a Key-ON while the "Hazard" function is still active, the function will remain ON (temporary turn indicator control interruption is allowed during the instrument panel initial check routine).

#### 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.

#### Note

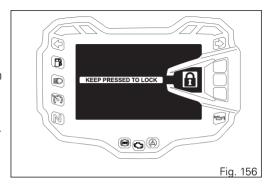
The "Hazard" function has higher priority compared to normal operation of the single turn indicators, this means that, as long as it is active, it will not be possible to activate the single right or left turn indicators.

Warning reading "Keep pressed to lock" (upon Key-Off)

This warns that it is necessary to keep the button pressed to engage the steering lock.

The steering lock can be turned on during the first 60 seconds after turning off the vehicle by pressing the starter button.

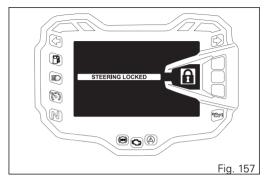
Message "KEEP PRESSED TO LOCK" is displayed if the starter button is depressed for at least 1 second.



Warning reading "Steering locked" (upon Key-Off)

This warns that the steering lock was activated after Key-Off.

If the steering lock was activated correctly, the Instrument panel will display "STEERING LOCKED" indication for 5 seconds.



#### Immobilizer system

To further improve the anti-theft protection, the motorcycle is equipped with an engine electronic block system (IMMOBILIZER) that is automatically activated every time the instrument panel is switched 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 is the "password", different upon every Key-On, used by the control unit to acknowledge the key. Engine can be started only after key acknowledgement.

#### Keys

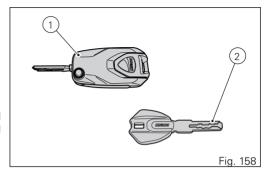
The Owner receives a set of keys comprising:

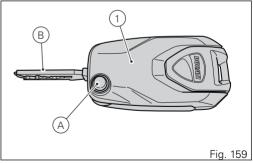
- 1 active key (1);
- 1 passive key (2).

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.





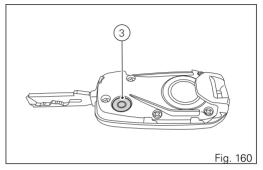
The key has a RESET button (3) of the microprocessor managing the electronic parts: if a key-on is not possible because the key is not acknowledged by the Hands Free system in active and/or passive mode, press RESET button to re-enable the correct operation of the key.

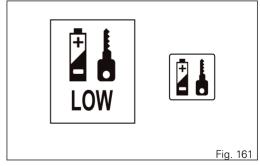
The active key contains a battery that must be replaced when the message "low level" is displayed under the key and battery symbols when the instrument panel is turned on.

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.





Warning
Do not ride with the (active or passive) key 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.

#### Active key reset

To reset the active key, it is necessary to press button (A) which opens the metal part.

Remove the plastic rear cover (4) by pushing it forward and then lift it as shown in the picture.

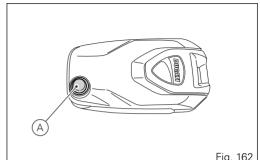
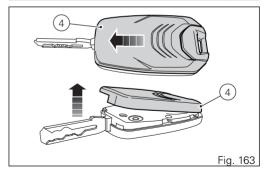
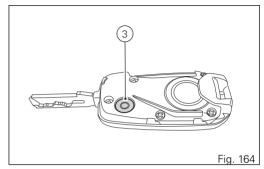
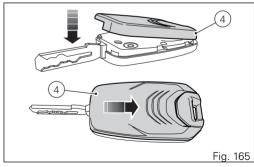


Fig. 162



Press RESET button (3) until you hear it click. Reinstall the rear plastic cover (4) and slightly push it backward as shown in the figure. Make sure it is well closed.





#### Replacing the battery in the active key

Note

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

Remove the metal part of the battery.

Remove the rear plastic shell of the grip by pushing it forward and lifting it as shown in the figures.

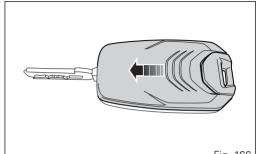
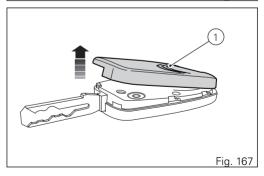


Fig. 166



After separating the plastic shells, remove the battery protection cap (2).

Remove battery (3) and install a new one.

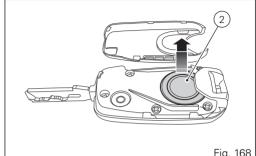
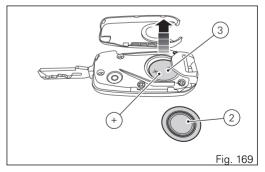


Fig. 168

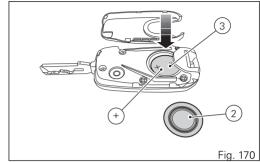


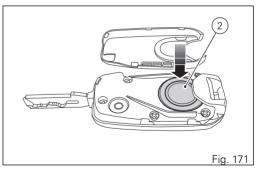
Install the battery in place, paying attention to respect polarity: positive pole (+) must be facing up.



Only use the required type of battery.

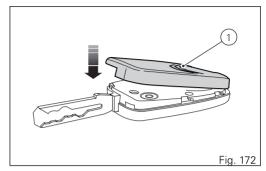
Refit protection cap (2) on the battery.

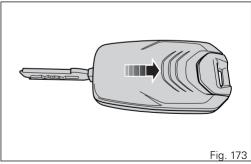




Reinstall the rear plastic shell and push slightly as shown in the figure.

Make sure shells close properly and that the key is well closed.





#### Duplicate keys

When a customer needs spare keys, he/she shall contact a Ducati authorised service centre and bring all keys he/she still has.

The Ducati authorised service centre will program all new and old keys.

The Ducati authorised service centre may ask to the customer to prove to be the motorcycle owner.

The codes of the keys missing during the programming procedure will be erased to ensure that any lost key can not start the engine.

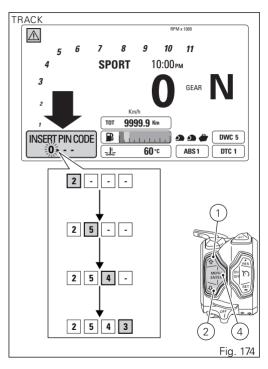
## Restoring motorcycle operation via the PIN CODE

In case of key acknowledgement system or key malfunction, the instrument panel allows the user to enter his/her own PIN code to temporarily restore motorcycle operation.

If the PIN CODE function is active, the instrument panel activates the possibility to enter the release code within "Menu 1" and displays the message INSERT PIN CODE with zero ("0") as first digit and a string of three dashes "----" under it. Entering the code:

- Press button (4), only one digit indicating "0" turns green;
- each time you press the button (2) the displayed number increases by one (+ 1) up to "9" and then starts back from "0":
- each time you press the button (1) the displayed number decreases by one (- 1) up to "1" and then starts back from "0":
- 4) to confirm the number, press the button (4).

Repeat the procedures until you confirm all the 4 digits of the PIN CODE.

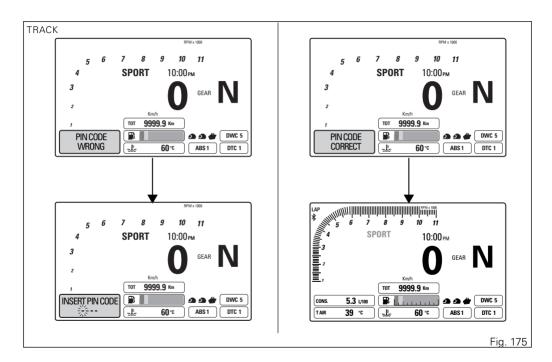


When you press button (4) to confirm the fourth and last digit:

- if the PIN code is not correct, the instrument panel displays WRONG for 3 seconds and then highlights the string of four dashes "----" to allow you to try again. The number of possible attempts is determined by a preset time-out of 2 minutes.
- if the PIN CODE is correct, the instrument panel shows CORRECT for 3 seconds, and then displays the "standard screen".

#### **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.

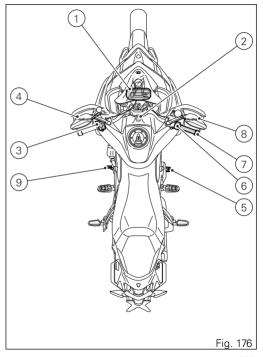


#### Controls

#### 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.

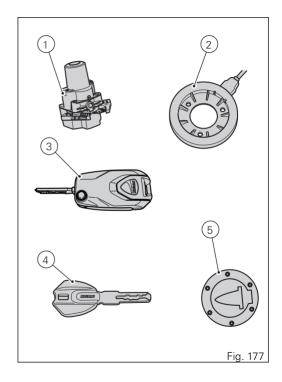
- 1) Instrument panel.
- 2) "Hands free" system.
- 3) Left-hand switch.
- 4) Clutch lever.
- 5) Rear brake pedal.
- 6) Right-hand switch.
- 7) Throttle twistgrip.
- 8) Front brake lever.
- 9) Gear change pedal.



#### "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).



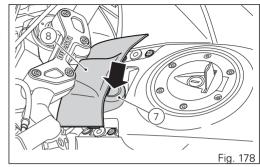
#### Important

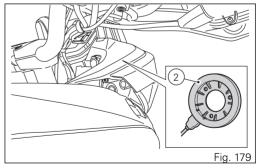
## Conditions affecting the correct operation of the Hands Free system.

The wireless control operation could be impaired in the following situations.

- Near a TV tower, radio station, electric power plant, airport, gas station or other facility that generates strong radio waves.
- When carrying a portable radio, cellular phone or another wireless communication device.
- When multiple wireless keys are nearby.
- When a wireless key comes into contact with or is covered by a metallic object.
- When a wireless key (that emits radio waves) is being used nearby.
- When a wireless key is left near an electrical appliance such as a Personal Computer.

(Fig. 178) indicates the position of the Hands Free block (7) and (Fig. 179) indicates the position of the antenna (2).



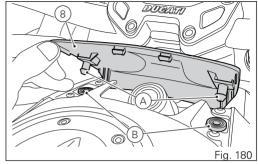


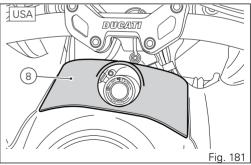
#### Hands free lid opening and closing

The "Hands free" unit (1, Fig. 177) is located on tank front side and can be accessed by pulling up and removing lid (8).

Close lid (8), making sure to engage pins (A) into rubber blocks (B) and push onto tabs until they lock in place.

In the US version, the emergency switch on the Hands free unit can be reached without removing the lid (8).





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

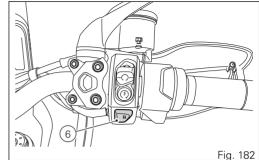
Key-On consists in turning on the hands free system and all electronic devices. Key-Off consists in turning off the hands free system and all electronic devices, and ensures engine is turned off. Key-On is done using button (6) on the right switch on the handlebar or using the emergency button (7) on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

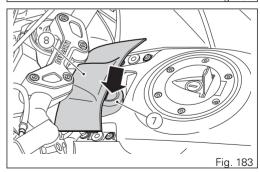
#### Warning

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

### Note

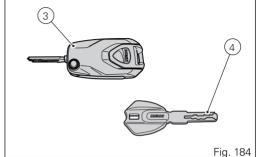
Using one of the two buttons (6) or (7) does not exclude using the other one, namely if one is pressed for switching on, the other one can be used for switching off, and vice versa

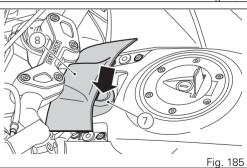




Key-On can only occur in the presence of one of the two keys (3) or (4) or using the pin code. Key-Off can also occur without any key (3) or (4). Key-Off occurs when motorcycle speed is equal to zero, by pressing button (6) on the handlebar or by pressing the Hands free button (7). When speed other than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

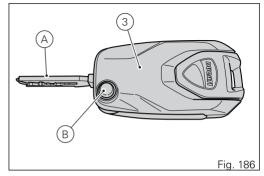




The mechanical part (A) of the key (3) is used to open the fuel filler cap, the seat latch and bag locks. The metal part (A) of the key (3) remains hidden inside its housing, you can take it out by pressing button (B).

#### 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.



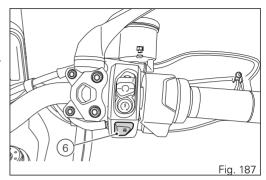
Key-On/Key-Off using the button on the handlebar with the active key

Key-On can be performed by pressing button (6) on the handlebar and with the presence of the active key (3, Fig. 184).

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 button (6) on the handlebar. It can also be performed without the key (3, Fig. 184) only if motorcycle speed is equal to zero



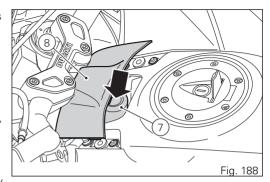
Key-On/Key-Off using the button on the Hands free lock with the active key

Key-On can be performed by pressing button (7) on the Hands free unit (1, Fig. 177) and with the presence of the active key (3, Fig. 184).

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. 177), also without the key (3, Fig. 184).



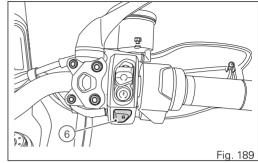
## Key-On/Key-Off using the button on the handlebar with the passive key

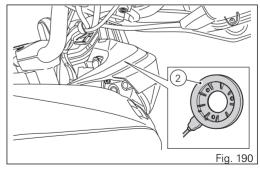
Key-On can be performed by pressing the grey button (6) on the handlebar and with the presence of the passive key (4, Fig. 184).

#### 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 grey button (6) on the handlebar. It can also be performed without the key (4, Fig. 184) only if motorcycle speed is equal to zero.





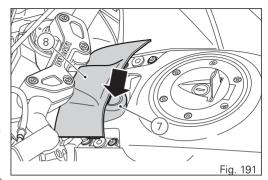
Key-On/Key-Off using the button on the Hands free lock with the passive key

Key-On can be performed by pressing button (7) on the Hands free lock and with the presence of the passive key (4, Fig. 184).

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. 177), also without the key (4, Fig. 184).

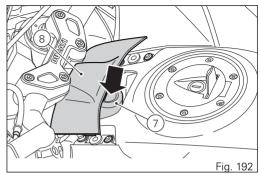


Key-On/Key-Off using the pin code (immobilizer override)

Key-On can be performed by pressing button (7) on the hands free lock (1, Fig. 177) without the presence of the keys (3, Fig. 184) and (4, Fig. 184) 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.

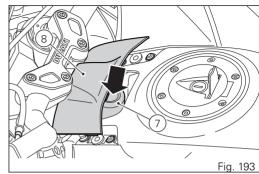
After each Key-Off, if the key is not present upon next Key-On, the pin code must be entered. The pin code is set by the customer upon delivery of the motorcycle. The function is not enabled unless a pin code has been set. When the Hands Free button (7) is pressed, the instrument panel activates the 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.



## 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".

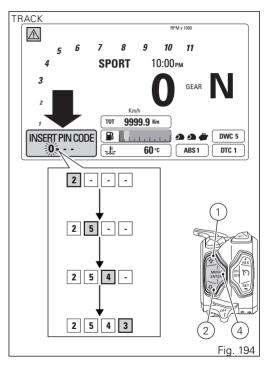
If the motorcycle cannot be turned on using the normal starter button, press the "emergency" Hands Free button (7), lifting lid (8), to activate the function. After pressing the button, the instrument panel activates the page for entering the code and displays the message INSERT PIN CODE with a string of four green dashes " - - - - " under it.



#### Entering the code:

- Press button (4), only one digit indicating "0" turns green;
- each time you press the button (2) the displayed number increases by one (+ 1) up to "9" and then starts back from "0":
- 3) each time you press the button (1) the displayed number decreases by one (- 1) up to "1" and then starts back from "0":
- 4) to confirm the number, press the button (4).

Repeat the procedures until you confirm all the 4 digits of the PIN CODE.

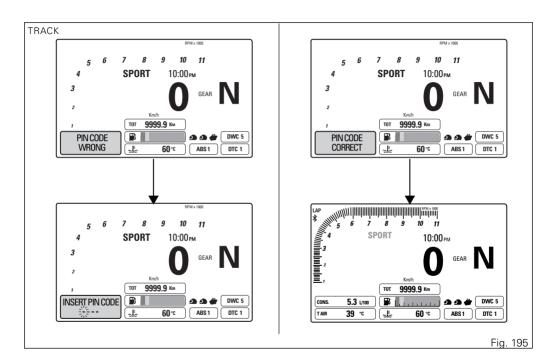


When you press button (4) to confirm the fourth and last digit:

- if the PIN code is not correct, the instrument panel displays WRONG for 3 seconds and then highlights the string of four dashes "----" to allow you to try again. The number of possible attempts is determined by a preset time-out of 2 minutes.
- if the PIN CODE is correct, the instrument panel shows CORRECT for 3 seconds, and then displays the "standard screen".

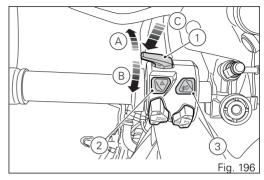
# **Important**

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.

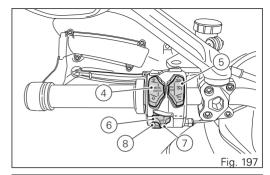


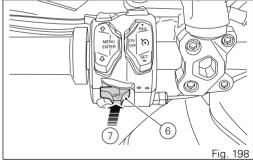
#### Left-hand switch

- 1) Dip switch, two-position light selector switch:
- pushed up (A): high beam ON (  $\boxtimes$  D), back to its initial position (B): low beam ON (  $\boxtimes$  D);
- (C) pushed down: high-beam flasher ( ≣D );
- (FLASH), "Start-Stop lap" function.
- 2) 4 turn indicators (Hazard) on/off button.
- 3) Fog lights (option) on/off button.



- 4) Menu navigation button.
- 5) Cruise Control button.
- 6) 3-position turn indicator switch ( ⇔ ):
- centre position = OFF;
- position ( ⇔ ) = left turn;
- position ( ⇒ ) = right turn;
- 7) Turn indicators cancel button.
- 8) Button ( $\triangleright$ ) = warning horn.



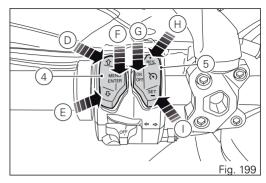


Button (4) for menu navigation features three positions:

- (D) for scrolling menu functions (UP);
- (E) for scrolling menu functions (DOWN);
- (F) for confirming menu functions.

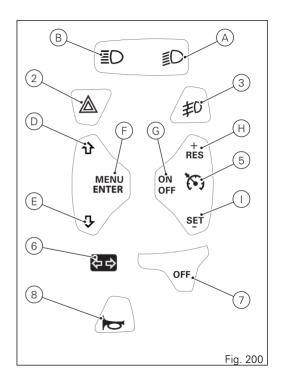
Button (5) for Cruise Control features three positions:

- (G) Cruise Control on/off;
- (H) increase cruise speed or resume previous speed;
- (I) decrease cruise speed or set a new speed;



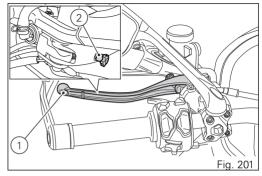
#### Key

- A) Low beam.
- B) High beam.
- D) Menu UP
- E) Menu DOWN.
- F) Menu confirm.
- G) Cruise Off, On.
- H) Speed +.
- I) Speed set.
- 2) Hazard.
- 3) Fog lights.
- 5) Cruise.
- 6) Turn indicator.
- 7) Turn indicator off.
- 8) Horn.



#### 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 handgrip. 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).

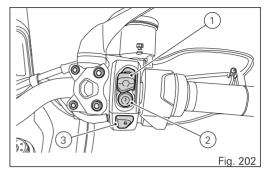
#### Right-hand switch

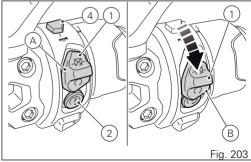
- 1) Red ENGINE OFF switch.
- 2) ENGINE START button.
- 3) System SWITCH-ON/OFF (key-on/key-off) and steering lock engagement.
- 4) HEATED HANDGRIP button.

The switch (1) has two positions:

B) pushed down: KILL ENGINE.

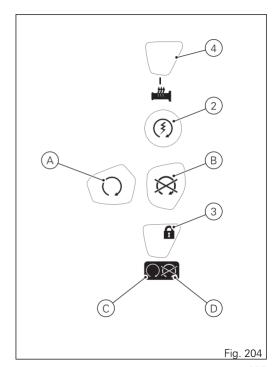
A) pushed up: RUN ON. The engine can only be started in this position, pushing the button (2).





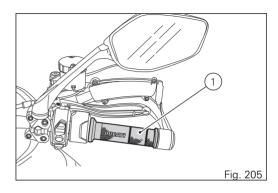
#### Key

- 2) Engine starting.
- 3) Electronic steering lock.
- 4) Heated handgrips control.
- A) Run ON.
- B) Run OFF.
- C) Key-on.
- D) Key-off.



### Throttle twistgrip

The twistgrip (1) on the right handlebar opens the throttles. When released, it will spring back to the initial position (idling speed).



#### Front brake lever

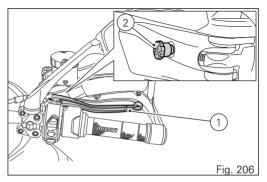
Pull in the lever (1) towards the twistgrip to operate the front brake. The system is hydraulically operated and you just need to pull the lever gently.

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.

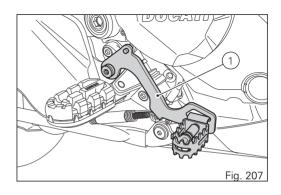
When high pressure is applied to the front brake lever and the conditions for the VHC system activations are fulfilled, the Vehicle Hold Control (VHC) is activated as described in paragraph page 148.



#### Rear brake pedal

Press pedal (1) down with your foot to operate the rear brake.

The control system is of the hydraulic type. When a high pressure is applied to the rear brake lever and the conditions for the VHC system activations are fulfilled, the Vehicle Hold Control (VHC) is activated as described in paragraph page 148.

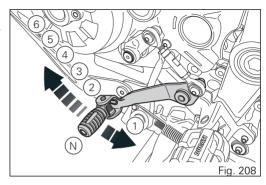


#### Gear change pedal

When released, the gear change pedal automatically returns to rest position N in the centre. This is indicated by the instrument panel N light coming on. The pedal can be moved:

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

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



## Adjusting the position of the gearchange pedal and rear brake pedal

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

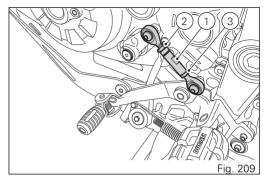
Block rod (1) using an open key in the flat, and loosen lock nuts (2) and (3).



Nut (2) has a left-hand thread

Turn rod (1), setting the gearchange pedal to the required position.

Tighten both lock nuts onto linkage.

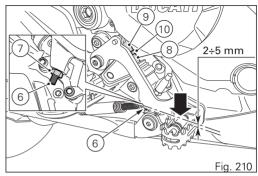


#### Rear brake pedal

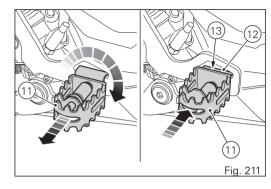
Loosen lock nut (7).

Turn pedal stroke adjusting screw (6) until pedal is in the desired position. Tighten the lock nut (7). Operate the pedal by hand to check that there is 2 to 5 mm of free play before the brake bites. If not, adjust the length of the master cylinder control rod as follows.

Loosen lock nut (10) on master cylinder rod. Screw the rod (8) into the fork (9) to increase the free play, or screw it out to reduce it. Tighten lock nut (10) and check play again.



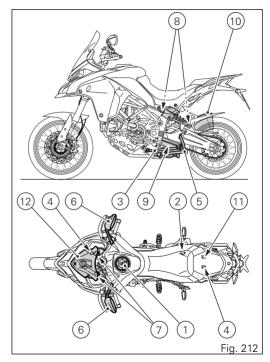
It is furthermore possible to adjust in two positions the footpeg (11) of the rear brake control. Pull footpeg (11) outwards and rotate it by 180°. Release the footpeg, ensuring that bracket (12) correctly engages in seat (13) on the rear brake control lever.



# 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) USB socket.
- 11) Windscreen.



## Tank filler plug Opening

Lift flap (1) and insert the active or passive key in the lock. Turn the key clockwise by 1/4 of a turn to release the lock

Lift the plug (2).

#### Closing

Close the plug (2) with the key inserted and push it down into its seat. Remove the key and close flap (1) protecting the lock.



#### Note

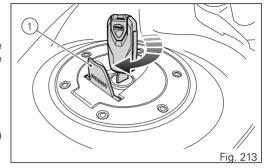
Plug can only be closed when key is inserted.

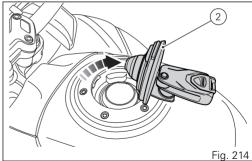
# Warning

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

#### Electric filler plug opening (option)

The electric plug (2, Fig. 214) opens after every key-off for 60 seconds, after working lever (1, Fig. 213) present on plug.





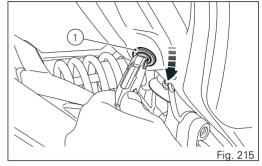
#### Seat lock

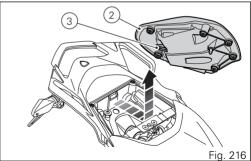
Working lock (1) you can remove the passenger seat, to reach the tool box, and the rider seat, to reach the battery and other devices.

#### Removing the passenger seat

Insert the active or passive key into the catch (1) and turn it clockwise until the passenger seat latch disengages with an audible click.

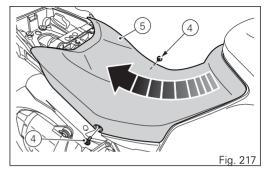
Remove the passenger seat (2) by lifting the front end and pull forward to release the seat rear fastener (3).

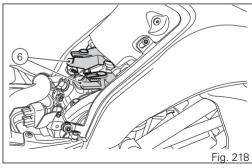




#### Removing the rider seat

Remove the two screws (4) on the rider seat sides (5). Pull the seat backwards and upwards at the same time to slide it out of the guides (6).



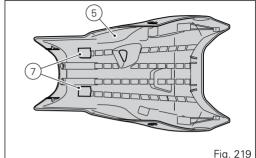


#### Refitting the rider seat

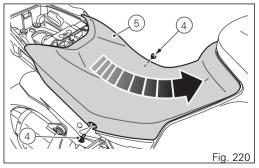
Position the front side of the rider seat (5) with tabs (7) in guides (6, Fig. 218).

Check that the seat is positioned correctly on the rear subframe, then start the two screws (4).

Tighten the two screws (4) to a torque of 5 Nm ± 10%.







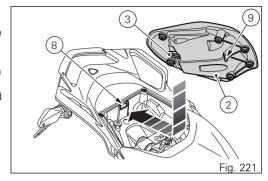
#### Refitting the passenger seat

Position the passenger seat (2) on the rear subframe by inserting tab (3) into seat (8) inside of the tool compartment.

Push the passenger seat (2) downwards to block pin (9) into the seat lock.

Make sure the passenger seat (2) is properly fastened by moderately pulling it up.

Take key out of the lock.



#### Side stand

# Important

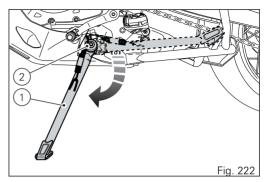
Place the motorcycle on the side stand only when you are not going to use it for short periods of time. Before lowering the side stand, make sure that the bearing surface is hard and flat.

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 handlebar 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.

To ensure trouble-free operation of the side stand joint, thoroughly clean it and then use SHELL Alvania R3 grease to lubricate all friction points.



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).

#### Bluetooth control unit

The motorcycle is equipped with a Bluetooth control unit that works as a hub between the various supported electronic devices relying on a Bluetooth communication interface.

# Warning

Bluetooth Headset device manufacturers may incorporate certain changes within the standard protocols over the course of the lifecycle of the device (Smartphones and Earphones).

# Warning

These changes are outside the control of Ducati and may result in Bluetooth Headset devices functionality becoming impaired (sharing Music, multimedia player, etc.) and may equally affect some types of Smartphones (depending on supported Bluetooth profiles). This is why Ducati cannot guarantee multimedia player proper operation for:

- any earphones not coming with the "Ducati Kit part no. 981029498";
- any Smartphones not supporting the required Bluetooth profiles (even though paired to earphones coming with the "Ducati Kit part no. 981029498").

# Warning

In case of interference or noise due to particular conditions of the external environment, the Ducati earphone kit part no. 981029498 also allows sharing the music being played directly from rider helmet to passenger helmet (for further details please refer to the manual of the earphones coming with the Ducati kit part no. 981029498).

Note
The Ducati kit part no. 981029498 can be purchased separately at a Ducati Dealer or Authorised Service Centre.

Check that your Smartphone supports the following profiles:

- MAP profile: for a correct display of SMS and MMS notifications;
- PBAP profile: for a correct display of the Smartphone contact list.

# Warning Ducati does not ensure a correct connection to the Ducati Multimedia System of Bluetooth navigators that are not provided in the following kits:

- Kit of Ducati Zumo satellite navigator 350
- Kit of Ducati Zumo satellite navigator 390
- Kit of Ducati Zumo satellite navigator 395

The Ducati kits mentioned above can be purchased separately at a Ducati Dealer or Authorised Service Centre

#### Power outlet

The motorcycle is equipped with two 12V power outlets protected by a fuse located in the rear fuse box.

This fuse protects against any line overloads:

- power socket (1, Fig. 223);
- power socket (2, Fig. 224);
- fog lights (if any);
- USB socket;
- Bluetooth control unit (if any).

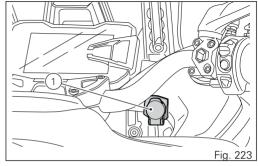
The following is the maximum current that can be drawn from the power outlets (meant as the current on socket (1) + current on socket (2)):

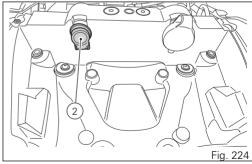
- 5A, if fog lights are installed;
- 9A, if fog lights are not installed.

Connecting higher loads will blow the line fuse.

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.

The power outlets are located at the front LH side (1) on instrument panel and at the rear end, under the passenger seat (2).





#### Centre stand

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

# Warning

Before lowering the centre stand, make sure that the bearing surface is hard and flat.

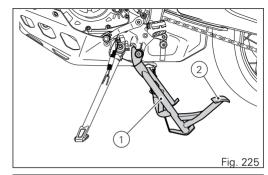
Push with your right foot onto central stand bearing surface (2), until it touches the ground; meanwhile pull the motorcycle up and back.

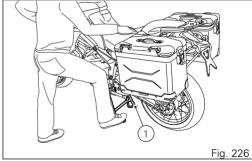
To bring central stand at rest, just push motorcycle forward, holding it at the handlebar, until the rear wheel touches the ground. Stand will automatically go back in place.

## Warning

Before moving off, always make sure that the central stand is at its rest position.

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



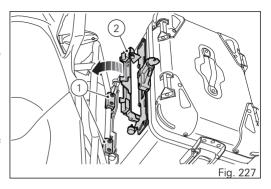


# Assembling the Ducati side panniers Installing the pannier on the subframe

Position the side pannier by inserting hooks (1) in the lower part of the subframe.

Push the side pannier towards the subframe while checking that the engagement system (2) is fixed correctly on the subframe until the lock clicks in place. Make sure the pannier is fixed correctly by pulling it gently.

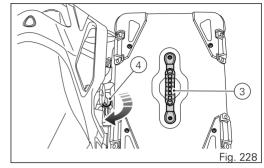
Only this operation ensures the correct installation of the pannier in its engagement points.

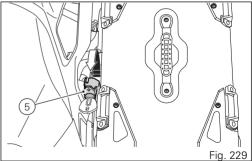


#### Removing the pannier from the subframe

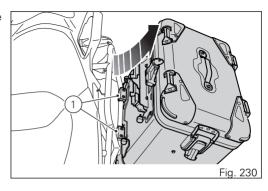
Keep the pannier by the handle (3), insert the key in the lock (4) of the engagement system and rotate it clockwise.

Lift the pannier engagement lever (5) to open the locking mechanism.



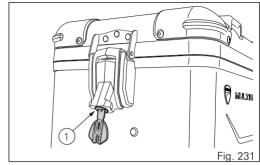


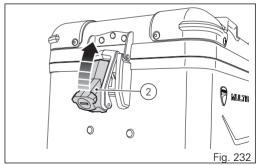
Lift up the pannier to release both hooks (1) from the subframe.



# Using the side panniers Opening

Open the side pannier as follows. Insert the key in pannier lock (1) and turn it clockwise. Lift the cover closing lever (2).



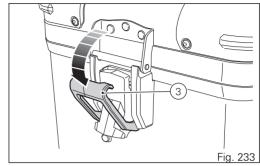


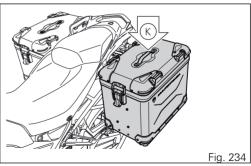
#### Release retainer (3)

Warning
The side panniers are only for light luggage: each pannier can hold a maximum weight of 5 kg (K). Excessive load might compromise control of the motorcycle.

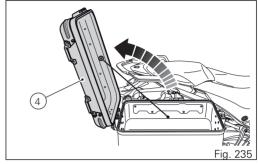
Warning

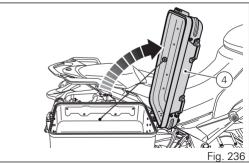
Arrange luggage evenly and keep the heaviest items to the inside of the bag, so as to avoid unexpected unbalance of the vehicle.





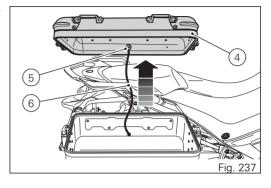
Cover (4) can be opened on both sides of the pannier. By releasing the retainer, located on the pannier front side, the cover can be opened towards the motorcycle rear or front end, whereas by releasing the rear retainer, the cover can be opened towards the front side.





It is then possible to completely remove cover (4) by loosening knob (5) that retains the supporting cable (6).

Then, release both retaining systems on the pannier sides.

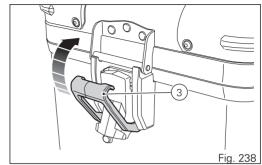


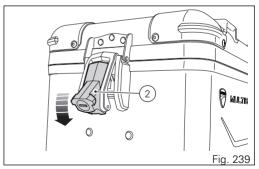
### Closing

Close the side pannier as follows.

Close the pannier cover, position retainer (3) on the relevant seat and push down the cover closing lever (2) until the lock clicks in place.

Repeat the same operation on the other side of the pannier if the cover has been removed completely.





### USB connection

The motorcycle is equipped with a USB 5V connection. Loads up to 1A can be connected to the USB connection.

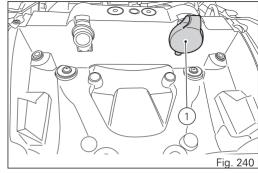
USB connection (1) is located under the passenger seat and is protected by a flap: lift flap to use connection.

Important

When the engine is off and key set to ON, do not leave accessories connected to the USB socket for a long period of time as the motorcycle battery could run flat.

Warning
When not in use, ALWAYS keep USB socket closed with its cap.

Warning
NEVER use the USB socket if it is raining.

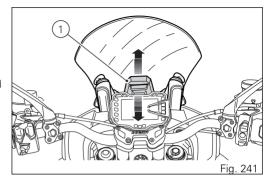


### Adjusting windscreen height

Adjust windscreen height using lever (1). Push up to lift the windscreen, or down to lower it.

### Warning

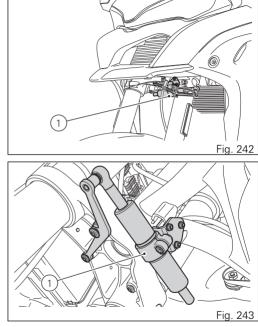
Adjusting windscreen height while riding could cause an accident. Adjust the windscreen only with motorcycle at a standstill.



### Steering damper

The steering damper (1) is located under the front fork bottom yoke.

It provides stable and accurate steering, improving the motorcycle's handling response under any conditions.



### Adjusting the front fork

The front fork used on this motorcycle has rebound (return), compression and spring preload adjustment. Fork rebound and compression damping is adjusted by electric impulses sent by the instrument panel to the adjusters inside the fork legs; spring preload is adjusted manually through adjuster (1) on RH fork leg.

### Warning

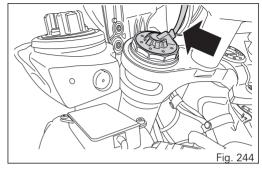
Have the spring preload adjusted at a Ducati Dealer or authorised Service Centre.

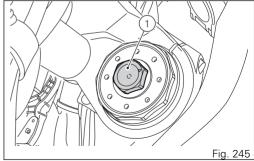
For fork adjustment, follow the description on page 185 "Customising Riding Mode: DSS suspension setting".

For further details on the operating principle of the fork and the DSS (Ducati SkyHook System) please refer to page 37.

Spring preload initial setting:

10 turns (fully open);





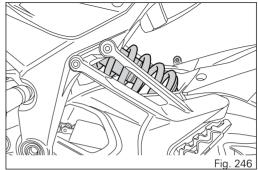
### Adjusting the rear shock absorber

The rear shock absorber has adjusters that enable you to suit the setting to 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.

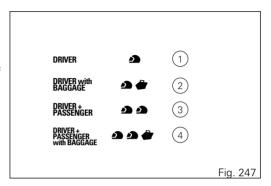
When carrying a passenger and luggage, set the rear shock absorber spring to proper preload to improve motorcycle handling and keep safe clearance from the ground. You may find that rebound damping needs adjusting as well. The shock absorber is adjusted by electric impulses sent by the instrument panel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



Motorcycle track alignment variation Motorcycle track alignment is the optimum setup, that resulted from the tests carried out by our engineers under the most diverse use conditions. The rider can use the instrument panel and set one of the four available setup options:

- Rider only (DRIVER) (1);
- Rider with luggage (DRIVER + BAGGAGE) (2);
- Rider and passenger (DRIVER + PASSENGER)
   (3);
- Rider and passenger with luggage (DRIVER + PASSENGER + BAGGAGE) (4).

For each of these settings, user can select either of the four available riding modes (SPORT, TOURING, URBAN and ENDURO) and, within each one, change the initial setting for the traction control (DTC), wheelie control (DWC), engine power, suspension damping and ABS level. To change the setting following the instruction underpage 70 "Changing motorcycle Load Mode".



### 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.

### Pre-ride checks

## A

### 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 motorcycle as follows:

- FUEL LEVEL IN THE TANK
  Check the fuel level in the tank. Fill tank if needed
  (page 347).
- ENGINE OIL LEVEL
   Check oil level in the sump through the sight glass. Top up if needed (page 368).
- BRAKE AND CLUTCH FLUID
   Check fluid level in the relevant reservoirs (page 350).
- COOLANT
   Check coolant level in the expansion reservoir.
   Top up if needed (page 349).
- TYRE CONDITION Check tyre pressure and condition (page 364).

### 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. In case of light malfunction, contact a Ducati Dealer or Authorised Service Centre.
- KEY LOCKS

Ensure that tank filler plug (page 306) and seat (page 307) are properly locked.

- STAND

Make sure side stand operates smoothly and is in the correct position (page 311).

### ABS light

After Key-ON, the ABS light (10, Fig. 7) stays ON. When the motorcycle 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

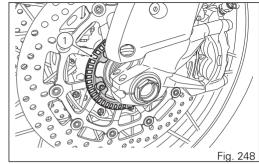
Check that the front (1) and rear (2) phonic wheels are clean.

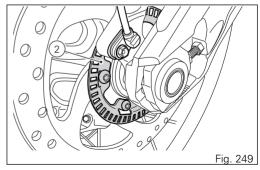
### Warning

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 wheelies could deactivate the ABS system.





### Engine start/stop

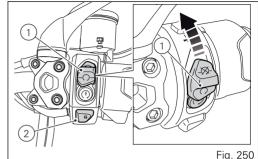
### Warning

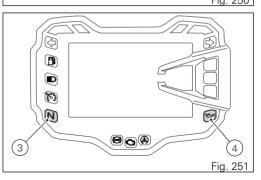
Before starting the engine, become familiar with the controls you will need to use when riding.

### 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 taking the red switch (1), on the right side of the handlebar, upward and pressing button (2). 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 (3) and the red light (4) must remain on.





### Warning

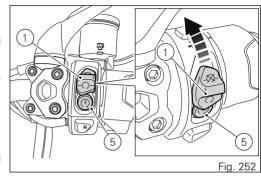
The side stand must be fully up (in a horizontal position) as its safety sensor prevents engine starting when down.

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.

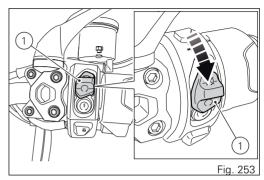
# Note

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 button (5). Push the button (5) to start the engine.



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 (4, Fig. 251) should go out a few seconds after the engine has started. The engine will shut off by turning the red button (1) on the handlebar to RUN OFF. To turn on the "Hands free" system and all electronic onboard systems, refer to page 276 "Hands Free System".

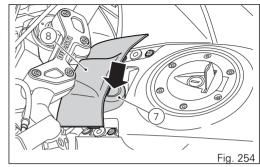
### Important

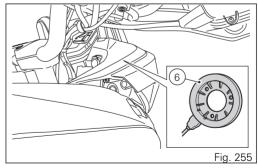
# Conditions affecting the correct operation of the Hands Free system.

The wireless control operation could be impaired in the following situations.

- Near a TV tower, radio station, electric power plant, airport, gas station or other facility that generates strong radio waves.
- When carrying a portable radio, cellular phone or another wireless communication device.
- When multiple wireless keys are nearby.
- When a wireless key comes into contact with or is covered by a metallic object.
- When a wireless key (that emits radio waves) is being used nearby.
- When a wireless key is left near an electrical appliance such as a Personal Computer.

(Fig. 254) indicates the position of the Hands Free block (7), with protective cover (8) and (Fig. 255) indicates the position of the antenna (6).





### Moving off

- Squeeze the control lever to disengage the clutch.
- Push down on gear change lever sharply with the tip of your foot to engage the first gear.
- Speed up the engine by turning the throttle twistgrip while gradually releasing the clutch lever; the motorcycle will start moving off.
- 4) Let go of clutch lever and speed up.
- 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 acceleration, 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 wheelies could deactivate the ABS system.

### Braking

Slow down in time, shift down to use engine brake and then brake by operating both front and rear brakes. Pull the clutch before the motorcycle stops to avoid engine from suddenly stalling.

### Anti-Lock Braking System (ABS)

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 motorcycle: 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 motorcycle 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 informs 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 do not use separate control systems: the ABS on this bike provides for a combined braking action that connects the rear brake system to the front one when the rider uses only the front brake. The contrary is not true: the rear brake control will not affect the front brake.

If desired, the system can be deactivated from the instrument panel, setting the level to OFF within the Riding Mode for which you wish to disable it.

Warning
Although combined braking is available (rear brake activation when rider uses only the front brake). using the two brake controls separately reduces the motorcycle braking power.

Never use the brake controls harshly or suddenly as you may cause rear wheel lift-up and lose control of the motorcycle.

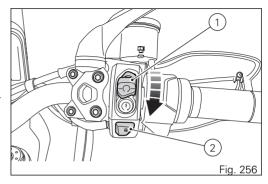
When riding in the rain or on slipperv surfaces. braking will become less effective. Always use the brakes very gently and carefully when riding under these conditions. Any sudden manoeuvres may lead to loss of control. When tackling long, high-gradient downhill road tracts, shift down gears to use engine 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 and 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.

Stop the engine by pushing the red switch (1) down. Press button (2) for Key-off.



### Parking

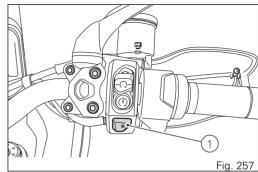
Stop the motorcycle, then put it on the side stand. Fully steer handlebar to the left or to the right. If this operation is performed within 60 seconds from engine stop it will be possible to engage the steering lock.

If you wish to engage the steering lock, during this interval press button (1) and hold it depressed for 3 seconds with steering turned completely to the left or to the right. After 1 second, the message "KEEP PRESSED TO LOCK" will be displayed on instrument panel and will stay on for 2 seconds; steering lock will be engaged after this time. After this 3 second time, if steering lock is properly engaged, the message "STEERING LOCKED" will be displayed on instrument panel.

In case of failed engagement of steering lock, contact a Ducati Authorised Service Centre

Warning

The exhaust system might be hot, even after engine is switched OFF; pay particular attention not to touch the 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

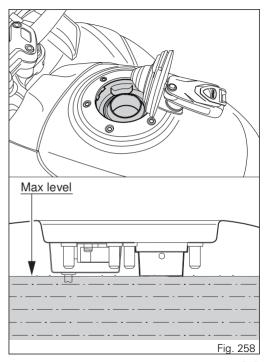
Never overfill the tank when refuelling. Fuel should never be touching the rim of filler recess.

Warning

Use fuel with low lead content and an original octane number of at least 95.

Warning

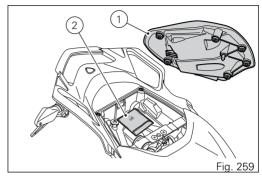
The motorcycle is only compatible with fuel having a maximum content of ethanol of 10% (E10). Using fuel with ethanol content over 10% is forbidden. Using it could result in severe damage of the engine and motorcycle components. Using fuel with ethanol content over 10% will make the warranty null and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



### Tool kit and accessories

The compartment under the passenger seat (1) houses an owner's manual and a tool kit (2), which includes the following:

- Flat-blade/Phillips simple screwdriver.
- Screwdriver handgrip.
- 8 mm Allen wrench.
- 5 mm Allen wrench.
- Fuse pliers.
- 8/10 fixed wrench.
- Handgrip for 6 mm box wrench.
- Box wrench for spark plug.
- Inflate and Repair kit consisting in:
  - repair tool (handgrip, 70 mm internal repair needle, 70 mm external repair needle, 70 mm reamer);
  - 53x50 mm compressed air dosing union;
  - 40x20 mm bead trimming blade;
  - three compressed air cylinders, length 90 mm, diameter 20 mm;
  - three Safety Seal repairs, length 100 mm, diameter 3 mm;
  - chalk.



To access the compartment remove the passenger seat.

# Main use and maintenance operations

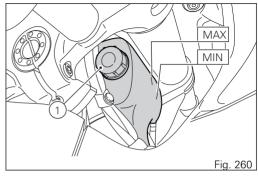
# Checking coolant level and topping up, if necessary

Check coolant level in the expansion reservoir on the right side of the steering tube.

Steer 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 (do not dilute, use pure), until reaching the MAX level. Screw plug (1) into seat.

This type of mixture ensures the best operating conditions (the coolant starts to freeze at -20 °C/-4 °F). Cooling circuit capacity: 2.5 cu. dm (litres).



### Warning

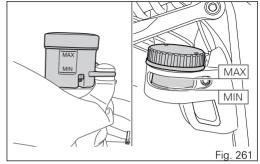
Make sure the engine is cold before proceeding. Attempting to change the coolant with the engine hot could lead to burns from hot coolant or scalding steam.

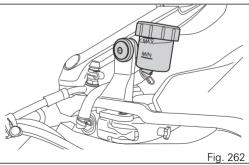
### Checking brake and clutch fluid level

The level must not go below the MIN mark shown on the respective reservoirs ((Fig. 261) shows the front and rear brake fluid reservoirs, while (Fig. 262) 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





### Brake system

If you find exceeding clearance 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

Clutch fluid level will increase as clutch plate friction material wears down. Do not exceed the specified level (3 mm above the minimum level).

### Warning

Brake and clutch fluid can damage paintwork and plastic parts, so avoid contact.
Hydraulic fluid 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 clearance 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.

### Checking brake pads for wear

Check brake pads wear through the inspection hole in the callipers.

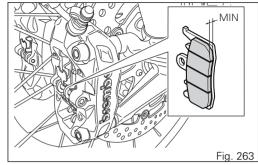
Change both pads if friction material thickness of even just one pad is about 1 mm.

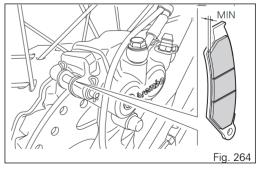
### Warning

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.





### Charging the battery

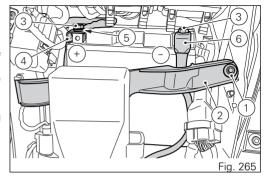
Before charging the battery, it is best to remove it from the motorcycle.

Remove the rider seat, loosen screw (1) and remove the mounting bracket (2). Loosen the screws (3), remove the positive cable (4) and (ABS) positive cable (5) from the positive terminal and the negative cable (6) from the negative terminal always starting from the negative one (-) then remove the battery by pulling it up.

### 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.

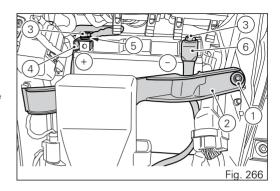
### Grease the screws (3).

Fit the battery on its mount, connect the positive cable (4) and ABS positive cable (5) to the positive terminal, and the negative cable (6) to the negative terminal of the battery, always starting from the positive one (+), and start the screws (3). Fit the battery mounting bracket (2) and tighten the screw (1).



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

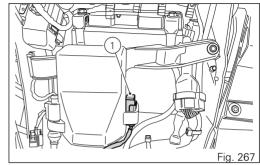
Your motorcycle is equipped with a connector (1), under the seat, to which you can connect a special battery charger (2) (Battery maintenance kit part no. 69924601A - various countries; Battery maintainer kit part no. 69924601AX - for Japan, China and Australia only) available from our sales network.

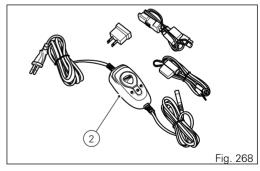
### Note

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.

### **Important**

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.

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

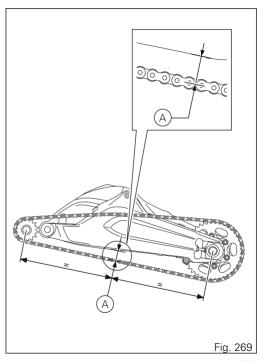
Make the rear wheel turn until you find the position where chain is tightest. Set the motorcycle on the side stand. With just a finger, push down the chain at the point of measurement and release.

Measure the distance (A) between the centre of the chain pins and the aluminium section of the swinging arm. It must be: A=56÷58 mm.

This only applies to the motorcycle STANDARD settings, available upon delivery.

### Important

If drive chain is too tight or slack, adjust tension so as to bring values back to the specified range.

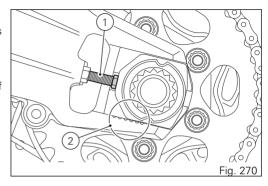


transmission parts.

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

Check the correspondence of the positioning marks (2) on both sides of the swinging arm to ensure a perfect wheel alignment.



### Lubricating the drive chain

The chain fitted on your motorcycle has O-rings that keep dirt out of and lubricant inside the sliding parts. 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 with compressed air or wipe it with an absorbent material, then lubricate each link with SHELL Advance Chain or Advance Teflon Chain

### Important

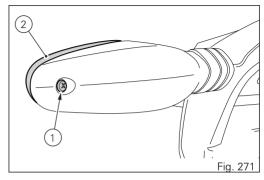
Using non-specific lubricants may cause severe damage to the chain and the front and rear sprockets.

#### Rear turn indicators

Undo the screw (1) and detach the lens (2) from the turn indicator support.

The bulb has a bayonet joint: press and twist counter clockwise to remove it.

Remove the bulb, then fit the new one by pressing and turning clockwise until it clicks into its seat. Refit the lens (2) by inserting the tab in the corresponding slot in the turn indicator support. Tighten the screw (1).

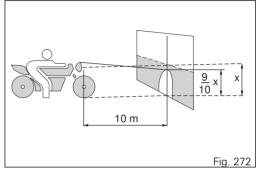


## Aligning the headlight

Note

Headlight features two adjusters, one for the RH beam and one for the LH beam.

Check correct headlight aiming. Position the motorcycle 10 metres from a wall or a screen, the motorcycle must be perfectly upright with the tires inflated to the correct pressure and with a rider seated, perfectly perpendicular to the longitudinal axis. On the wall or surface, draw a horizontal line at the same height from the ground as the centre of the headlight and a vertical line aligned with the longitudinal axis of the motorcycle. If possible, perform this check in dim light. Switch on the low beam and adjust right and left beams. The height of the upper limit between the dark area and the lit area must not be more than 9/10 of the height from the ground of the headlight centre.



Note

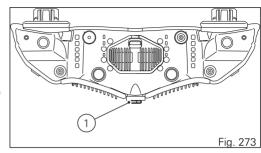
This is the procedure specified by Italian regulations for checking the maximum height of the light beam. Please adapt said procedure to the provisions in force in your own country.

Procedure for adjusting low beam/high beam along the vertical axis

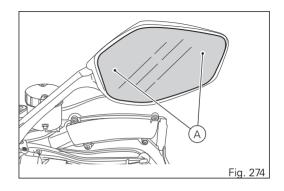
- 1) Switch low beam on.
- Adjust the beam vertically by working on the adjusting screw (1). Turn screw (1) clockwise to move beam down, or counter clockwise to move beam up.

The high beam will be already adjusted as it is connected to low beam.

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.



## Adjusting the rear-view mirrors Manually adjust the rear-view mirror by pushing at points (A).



#### Tubeless tyres

Motorcycle equipped with Scorpion Rally tyres

Front tyre pressure:

1.6 bar (rider only) - 1.8 bar (with passenger and/or bags).

Rear tyre pressure:

1.6 bar (rider only) - 2.2 bar (with passenger and/or bags).

Motorcycle equipped with Scorpion Trail II tyres

Front tyre pressure:

2.4 bar (rider only) - 2.4 bar (with passenger and/or bags).

Rear tyre pressure:

2.5 bar (rider only) - 2.9 bar (with passenger and/or bags).

As tyre pressure is affected by ambient 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 set tyre pressure when tyres are cold. To avoid front wheel rim 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.

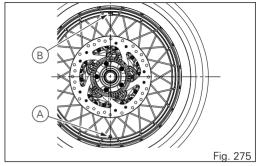
Note
Have the tyres replaced at a Ducati Dealer or authorised Service Centre. Correct removal and installation of the wheels is essential. Some parts of the ABS (such as sensors and phonic wheels) are mounted to the wheels and require specific adjustment.

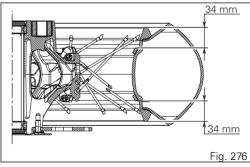
Warning
In case of replacement of the front wheel, the Ducati Dealer or authorised Service Centre must follow the instructions specified in the Workshop Manual concerning removal and refitting of the front wheel shaft

## Warning

Counterweights for dynamic balancing of the rear wheel must be positioned in the areas indicated in the figure.

Position counter-weights (B) on the rim in line with valve (A), as indicated in (Fig. 275). Respect the value indicated in (Fig. 276).



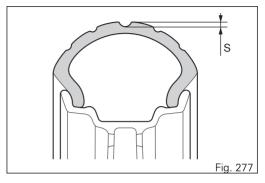


#### Minimum tread depth

Measure tread depth (S, Fig. 277) 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.



#### Check engine oil level

Engine oil level can be checked through the sight glass (1) located onto clutch cover.

Oil level should be between the marks on the sight glass. If the level is low, top up with engine oil. Ducati recommends you use Shell Advance 4T Ultra 15W-50 oil (JASO: MA2 and API: SN).

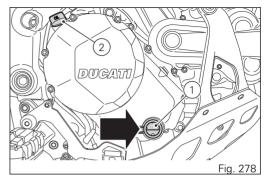
Remove the oil filler cap (2) and top up until the oil reaches the required level. Refit the plug.

## 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.

To check the oil level correctly, carefully follow the instructions below.

1) The level must be checked with warm engine, so if it is not performed after riding for at least 20/30 minutes you will need to warm up the engine. If, on the other hand, the engine is cold, start it and let it warm up until the cooler fans start two consecutive times (the engine oil must be perfectly warm to flow along the lines and reach the engine sump).



During this warming up phase, the bike can be left on the side stand.

- 2) Turn off the engine and wait 10\15 minutes to allow the oil to flow completely inside the sump.
- 3) Position the bike with both wheels on a flat ground and in straight position.
- 4) Then, check the engine oil through the sight glass. 5) If the oil level is below the middle line between the MIN and MAX marks, add oil until reaching the maximum level indication.



(American standard) and JASO (Japanese standard) standards specify oil characteristics.

## Warning

In engines equipped with timing variators it may happen that a certain quantity of engine oil remains in the cylinder heads when the engine is off and requires a certain amount of time to flow completely into the oil sump. This could lead to an incorrect measurement of the oil level.

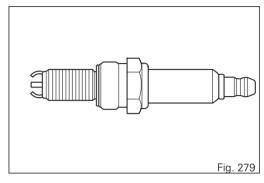
#### Recommendations concerning oil

It is recommended to use oil complying with the following specifications:

- viscosity grade SAE 15W-50;
- standard API: SN;
- standard JASO: MA2.

SAE 15W-50 is an alphanumerical code identifying oil class based on viscosity: two figures with a W ("winter") in-between; the first figure indicates oil viscosity at low temperature; the second figure indicates its viscosity at high temperature. API

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 by a Ducati Dealer or an 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

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 help and 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.

## Warning

Avoid direct contact between instrument panel lens and oils/fuels that may stain or damage it thereby impairing information readability. To clean such parts, do not use alcohol-based detergents, containing solvent or abrasive agents; do not use sponges or cloths featuring hard or rough areas since they might scratch the surface.

#### Note

Clean instrument panel lens using soft cloths with water and mild soap or detergents specific for cleaning clear plastic parts.

#### Storing the motorcycle

If the motorcycle is to be left unridden 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 seats, then crank the engine by hand a few times so a protective film of oil will spread on cylinder inner walls;
- 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 unridden 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

Some countries, such as France, Germany, Great Britain, Switzerland, etc. have compulsory emission and noise standards that include mandatory inspections at regular intervals.

Periodically carry out the required checks and renew 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 carried out by the dealer

List of operations and type of interven- Km. x100	0 1	15	30	45	60	Time
tion [set mileage (km/mi) or time interval *] mi. x1000	0.6	9	18	27	36	(months)
Reading of the error memory with DDS 2 and check of software version update on control units	•	•	•	•	•	12
Check of the presence of any technical updates and reca campaigns	•	•	•	•	•	12
Change engine oil and filter	•	•	•	•	•	12
Clean the engine oil mesh filter assembly	•					-
Check and/or adjust valve clearance			•		•	-
Replace the timing belts			•		•	60
Replace the spark plugs			•		•	-
Clean plugs with metal mesh filters on heads					•	-
Clean air filter		•		•		-
Change air filter			•		•	-
Check of the brake and clutch fluid level	•	•	•	•	•	12
Change brake and clutch fluid						36
Check brake disc and pad wear. Change, if necessary	•	•	•	•	•	12

List of operations and type of interven- Km. x1000	1	15	30	45	60	Time
tion [set mileage (km/mi) or time interval *] mi. x1000	0.6	9	18	27	36	(months)
Check the proper tightening of brake calliper bolts and brake disc flange screws	•	•	•	•	•	12
Check front and rear wheel nuts tightening	•	•	•	•	•	12
Check frame-to-engine fasteners tightening		•	•	•	•	-
Check wheel hub bearings			•		•	-
Check and lubricate the rear wheel shaft			•		•	-
Check the cush drive damper on rear sprocket			•		•	-
Check the proper tightening of final drive front and rear sprocket nuts		•	•	•	•	12
Check of final drive (chain, front and rear sprocket) and sliding shoe wear		•	•	•	•	12
Check of final drive chain tension and lubrication	•	•	•	•	•	12
Check steering bearings and lubricate, if necessary			•		•	-
Check spoked wheels as specified in the workshop man- ual		•	•	•	•	-
Change front fork fluid			•		•	-
Visual check of the front fork and rear shock absorber seals	•	•	•	•	•	12

List of operations and type of interven- Km. x1000	1	15	30	45	60	Time
tion [set mileage (km/mi) or time interval *] mi. x1000	0.6	9	18	27	36	(months)
Check the freedom of movement and tightening of the side and central stand (if installed)	•	•	•	•	•	12
Visual check of the fuel lines		•	•	•	•	12
Check of rubbing points, clearance, freedom of movement and positioning of hoses and electric wiring in view	,	•	•	•	•	12
Lubrication of the levers at the handlebar and pedal controls	-	•	•	•	•	12
Change coolant				•		48
Visually check the coolant level and sealing of the circuit	t •	•	•	•	•	12
Check tyre pressure and wear	•	•	•	•	•	12
Check the battery charge level	•	•	•	•	•	12
Check the operation of all electric safety devices (side stand sensor, front and rear brake switches, engine kill switch, gear/neutral sensor)	•	•	•	•	•	12
Check of lighting, turn indicators, horn and controls		•	•	•	•	12
Activate LED front lighting (if any) through DDS 2.0		•	•	•	•	12
Reset the Service indication through the DDS 2.0	•	•	•	•	•	-

	Km. x1000	1	15	30	45	60	Time
tion [set mileage (km/mi) or time interval *]	mi. x1000	0.6	9	18	27	36	(months)
Final test and road test of the motorcycle, testing safety devices (ex. ABS and DTC), Cruise Control device, electric fans and idling		•	•	•	•	•	12
Softly clean the motorcycle		•	•	•	•	•	12
Fill out that the service was performed in on- umentation (Service Manual)	board doc-	•	•	•	•	•	12

<sup>\*</sup> Service operation to be carried out in accordance with the specified distance or time intervals (km, miles or months), whichever occurs first.

When riding the bike off-road it is necessary to have shorter service intervals compared to those specified.

#### Scheduled maintenance chart: operations to be carried out by the Customer

**Important** 

Using the motorcycle under extreme conditions, such as very damp and muddy roads or dusty and dry environment, could cause above-average wear of components like the drive system, the brakes or the air filter. If the air filter is dirty, the engine could get damaged. Therefore, this might translate in required service or replacement of the wear parts earlier than specified in the scheduled maintenance chart.

	Km. x1000	1
List of operations and type of intervention [set mileage (km/mi) or time interval *1	mi. x1,000	0.6
interval 1	Months	6
Check engine oil level		•
Check brake fluid level		•
Check tyre pressure and wear		•
Check the drive chain tension and lubrication		•
Check brake pads. If necessary, contact your dealer to replace pads		•

<sup>\*</sup> Service operation to be carried out in accordance with the specified distance or time intervals (km, miles or months), whichever occurs first.

In case of off-road use, it is necessary to perform the maintenance operations more frequently than scheduled.

## Technical data

#### Weights

Overall weight (in running order with 90% of fuel - 93/93/EC): 254 Ka.

Overall weight (in running order without fluids and battery): 225 Kg.

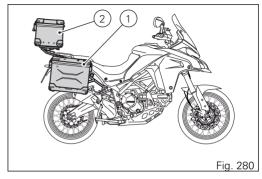
Maximum allowed weight (carrying full load): 465 kg.

## 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 speed permitted with the side panniers, the top case and the tank bag fitted must not exceed 180 km/h (112 mph) and at any rate it must comply with the applicable statutory speed limits.



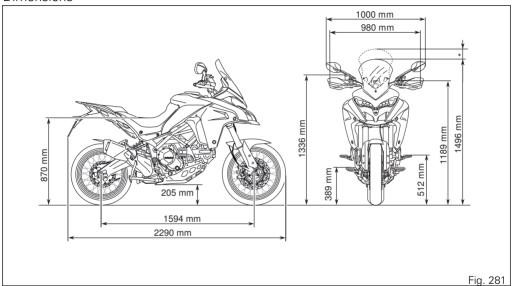
## Warning

The maximum weight permitted for the side panniers and the top case must never exceed 15 kg (33 lb), divided as follows:

5 kg (11 lb) max. per side pannier (1);

5 kg (11 lb) max. for the top case (2).

#### **Dimensions**



<sup>\* 1496</sup> mm (headlight fairing all down), 1515 mm (headlight fairing first position), 1534 mm (headlight fairing second position), 1552 mm (headlight fairing last position).

## Fuel, lubricants and other fluids

FUEL, LUBRICANTS AND OTHER FLUIDS	ТҮРЕ	
Fuel tank, including a reserve of 4 cu. dm (litres)	Ducati recommends SHELL V-Power unleaded premium fuel with a minimum of octane rating of RON 95	30.0 cu. dm (litres)
Oil sump and filter	Ducati recommends you use SHELL Advance 4T Ultra 15W-50 oil (JASO: MA2, API: SN)	4.10 cu. dm (litres)
Front/rear brake and clutch circuits	DOT 4	-
Protectant for electric contacts	Protective spray for electric systems	-
Front fork	SHELL Donax TA	active leg: $280 \pm 5$ gr (321 $\pm 5$ cc). passive leg: $660 \pm 5$ gr (757 $\pm 5$ cc).
Cooling circuit	ENI Agip Permanent Spezial antifreeze (do not dilute, use pure)	2.5 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

Ducati Testastretta "L" twin-cylinder engine with DVT system ("Desmodromic Variable Timing"), 4 valves per cylinder, Dual Spark, liquid-cooled.

Bore, mm: 106. Stroke, mm: 67.9.

Total displacement, cu. cm: 1198.4. Compression ratio: 12.5±0.5:1

Maximum power at crankshaft (EU) Regulation no.

134/2014, Annex X, kW/HP: 117.7 kW/160 HP at 9.500 rpm.

74 kW/100.6 HP at 7,500 rpm (for the French market only)

Maximum torque at crankshaft (EU) Regulation no.

134/2014 Annex X:

13.9 kgm/136 Nm at 7500 rpm

11.5 kgm/113 Nm at 4,000 rpm (for the French market only).

Maximum rpm:

10,700.

10,250 (for the French market only).

# Important

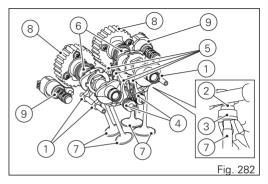
Do not exceed the specified rpm limits in any running conditions.

# Desmodromic timing system with variable timing (DVT)

DESMODROMIC system with four valves per cylinder controlled by eight rocker arms (four opening and four closing ones) and two overhead camshafts with variable valve timing (DVT) both for the exhaust and intake side. This system is driven by the crankshaft through spur gears, pulleys and toothed belts.

#### Desmodromic timing system

- 1) Opening (or upper) rocker arm;
- 2) Upper rocker arm shim;
- 3) Closing (or lower) rocker arm shim;
- 4) Return spring for lower rocker arm;
- 5) Closing (or lower) rocker arm;
- 6) Camshaft:
- 7) Valve.
- 8) Timing Variator.
- Actuators.



#### 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 releases
Ducati Motor Holding S.p.A. from any liability
whatsoever for any engine damage or shorter engine
life.

Spark plugs Make: NGK. Type: MAR9A-J.

## Fuel system

BOSCH electronic injection.

Type of throttle body: elliptical with full Ride-by-Wire

system.

Diameter of throttle body: 56 mm.

Injectors per cylinder: 1. Firing points per injector: 10. Fuel supply: 95-98 RON.

## **Marning**

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 braking 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: stainless steel.

Carrier material: painted stainless steel, black colour.

Disc diameter: 320 mm.

Hydraulically operated by a control lever on handlebar

right-hand side.

Brake calliper make: BREMBO, radially-mounted

monobloc callipers. Disc thickness: 4.5 mm.

Front brake type: M4.32B (4x32).

Friction material: BRM11E HH.

Brake master cylinder type: PR18/19 with cornering ABS as standard

#### **REAR**

With fixed drilled steel disc.

Disc diameter: 265 mm.

Hydraulically operated by a pedal on RH side. Brake calliper make: BREMBO, floating 2-piston calliper with cornering ABS as standard.

Rear brake type: PF 2x28 D.

Friction material: Toshiba TT 2181 FF. Brake master cylinder type: PS 13. Fixed. 28 mm diameter 2-piston calliper.

Disc thickness: 6 mm.

## 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**

Hydraulically-controlled slipper/self-servo wet multiplate clutch.

Drive is transmitted from engine to gearbox primary shaft via spur gears.

Front chain 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: 15/43.

Total gear ratios:

1<sup>th</sup> gear 15/37

2<sup>th</sup> gear 17/30

3th gear 20/27

4<sup>th</sup> gear 22/24

5<sup>th</sup> gear 24/23

6<sup>th</sup> gear 25/22

Drive chain from gearbox to rear wheel.

Make: REGINA. Size: 5/8" x 1/16" Links: 114.

## **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

Steel tubular trellis.

Rear steel tubular trellis sub-frame.

Light alloy die-cast side plates, pivoted on engine.

Steering head angle: 25°.

Trail: 110 mm.

Steering angle: 40° LH side / 40° RH side.

#### Wheels

Front

Spoked wheels with light alloy channel

Size: MT 3"x19".

#### Rear

Spoked wheels with light alloy channel Size: MT 4 50"x17"

#### Tyres Front

"Tubeless", radial tyre. Size: 120/70-ZR19. Make and type: Pirelli Scorpion Trail II. Pirelli Scorpion Rally.

#### Rear

"Tubeless", radial tyre. Size: 170/60-ZR17. Make and type: Pirelli Scorpion Trail II. Pirelli Scorpion Rally.

## Suspension

**FRONT** 

Front

Hydraulic upside-down fork

Front fork is adjusted by means of electric impulses output by the instrument panel to adjusters. Only the RH fork leg is equipped with an external adjuster for setting the preload of the inner spring

Stanchion diameter:

48 mm.

Wheel travel: 200 mm.

Make: SACHS.

#### Rear

The shock absorber features adjustable rebound and compression damping, a spring preload remote adjuster; it pivots onto a frame at the top and onto an aluminium swinging arm at the bottom. The swinging arm is connected to the pivot shaft going through the frame and the engine. The whole system gives the motorcycle excellent stability.

Suspension travel: 59.5 mm.

Rear wheel travel: 200 mm.

Make: SACHS.

#### Note

Front fork and rear shock absorber are adjusted by means of electric impulses output by the instrument panel to adjusters.

#### Exhaust system

Layout of two manifolds, primary tubes directly reach the mono-silencer with two chambers.

Tailpipe with two outlets and aluminium alloy external sleeve.

#### Available colours

Ducati Anniversary Red

Primer, Antiflex White code L0040652 (Lechler); Varnish, Acriplast Red Stoner SF code LMC06017 (Lechler);

Frame, Racing Black; Subframe, Mercury Grey.

#### Star White Silk

Primer code 873.AC001 (Palinal); Base coat code 928.T948 (Palinal); Clear coat code 96.598 (Lechler); Frame, Racing Grey code YY233VBD (Akzo Nobel); Subframe, Mercury Gray cod. 79086 (Inver).

#### Phantom Grey

Primer code DS20052 (Lechler); Base coat code L2909051 (Lechler); Clear coat code 96.216 (Lechler); Frame, Racing Grey code YY233VBD (Akzo Nobel); Subframe, Mercury Gray cod. 79086 (Inver).

#### Electric system

Basic electric items are:

#### Headlight

LED low beam: No. 2 LEDs Ostar LE UW D1W4 01-5O6O-GMKM-T01:

LED high beam: No. 8 LEDs Oslon Square LCW

CQAR.PC-MUNQ-5F7G-1-700-R18;

LED cornering light: No. 2 LEDs Oslon Square LCW

CQAR.PC-MUNQ-5F7G-1-700-R18;

LED parking light: No. 2 SEOUL STW9Q14C LEDs.

#### Turn indicators

Front ones (Europe / USA), LED units: No. 11 Dominant Primax 150 nazy-bhg-mn3-1; Rear ones (Europe / Usa), bulb units: No. 1 bulb RY10W 12V - 10W amber.

#### Tail light

BBCB-24-1.

LED parking light: No. 4 Osram LA-W5SM-JYKY-24-1 LEDs; LED stop light: No. 10 Osram LA-E6SF-BBCB-24-1 LEDs. LED number plate light: No. 10 LEDs Osram LA-E6SF-

#### Fog lights

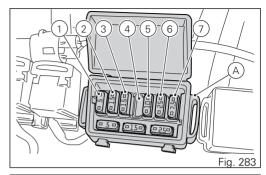
LED fog lights (Enduro customisation): No. 1 LED Altilon LAFL - C4L - 850 (each).

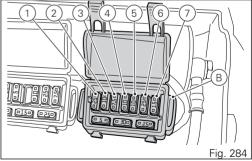
#### Fuses

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. 283) 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 fuse box (B, Fig. 284) is 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 307. To expose the fuses, remove box protective cover. Mounting position and ampere capacity are marked on box cover.





Front fuse box key (A)					
Pos	El. item	Rat.			
1	1 KEY EMS / ABS / IMU				
2	KEY DSB / BBS	15 A			
3	KEY Lights	15 A			
4	-	-			
5 KEY Accessories		10 A			
6 +30 Hands Free		25 A			
7	+30 Diagnosis / charge	7.5 A			

Rear fuse box key (B)					
5	+30 Black Box Sys- tem (BBS)	10 A			
6	+30 ABS UBMR	25 A			
7	+30 ABS UBVR	15 A			

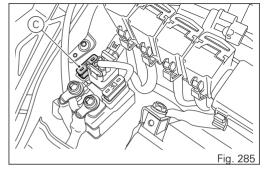
Rear fuse box key (B)					
Pos	El. item	Rat.			
1	+30 EMS LOAD RE- LAY	25 A			
2	+30 FUEL PUMP RE- LAY	10 A			
3	+30 Starter RELAY	7.5 A			
4	+30 Instrument panel	10 A			

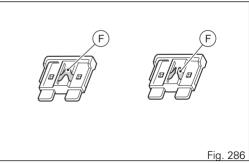
The main fuse (C) is positioned on the solenoid starter. Remove the fuse cap to reach it. A blown fuse can be identified by breakage of the inner filament (F).

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 25) Number plate light 26) Temperature sensor LH heated handgrip connector (optional) 1) Front 12V power socket 27) RH heated handgrip connector (optional) 2) GPS navigation system 28) 3) Bluetooth 29) Rear suspension adjustment sensor 4) Left-hand switch 30) Exhaust valve motor 5) Right-hand switch 31) Rear stop light 6) Inertial sensor 32) Vehicle control unit (BBS) 7) Immobilizer 33) Front accelerometer (wheel) 8) Hands free 34) Front accelerometer (body) Hands Free Relay 9) 35) Front fork adjustment Rear suspension adjustment (compression/ 10) Battery 36) 11) Wiring ground rebound) 12) Fused solenoid 37) Fuel level 13) I H fan 38) Rear suspension adjustment (preload) 14) RH fan 39) Fuse box (2) Fuse box (1) 15) Generator 40) 16) Rectifier 41) ABS USB socket 17) 42) Rear speed sensor Rear 12V power outlet 43) Front speed sensor 18) 19) Data Acquisition / Diagnosis 44) Fuel pump 20) Anti-theft system alarm Main control unit relay 45) 21) Tail light 46) Fuel pump relay 22) Rear right turn indicator 47) Starter relay 23) Rear left turn indicator 48) Injection control unit connector A (EMS)

49)

Injection control unit connector B (EMS)

24)

Rear wiring

50) Gear sensor

51) Throttle twistgrip position sensor (APS)

52) Vertical ETV

53) Horizontal ETV

54) Main vertical injector

55) Main horizontal injector

56) Vertical lambda sensor

57) Horizontal lambda sensor

58) Timing/rpm sensor

59) Vertical cylinder secondary coil

60) Vertical cylinder main coil

61) Horizontal cylinder secondary coil

62) Horizontal cylinder main coil

63) Oil pressure sensor

64) Purge valve

65) Oil temperature

66) Brake switch 67) Clutch switch

68) Side stand switch

69) Engine temperature sensor

70) Air temperature sensor71) Vertical MAP sensor

71) Vertical MAP sensor72) Horizontal MAP sensor

73) Vertical cylinder knock sensor

74) Horizontal cylinder knock sensor

75) Secondary air sensor

76) Vertical cylinder EX timing sensor

77) Vertical cylinder IN timing sensor

78) Horizontal cylinder EX timing sensor

79) Horizontal cylinder IN timing sensor

80) Vertical cylinder EX timing connector

81) Vertical cylinder IN timing connector

82) Horizontal cylinder EX timing connector

83) Horizontal cylinder IN timing connector

84) Front left turn indicator

85) Instrument panel

86) Front right turn indicator

87) Headlight

88) Horn

89) Fog lights (option)

#### Wire colour coding

B Blue

W White

V Violet

Bk Black

Y Yellow

R Red

Lb Light blue

Gr Grey

G Green

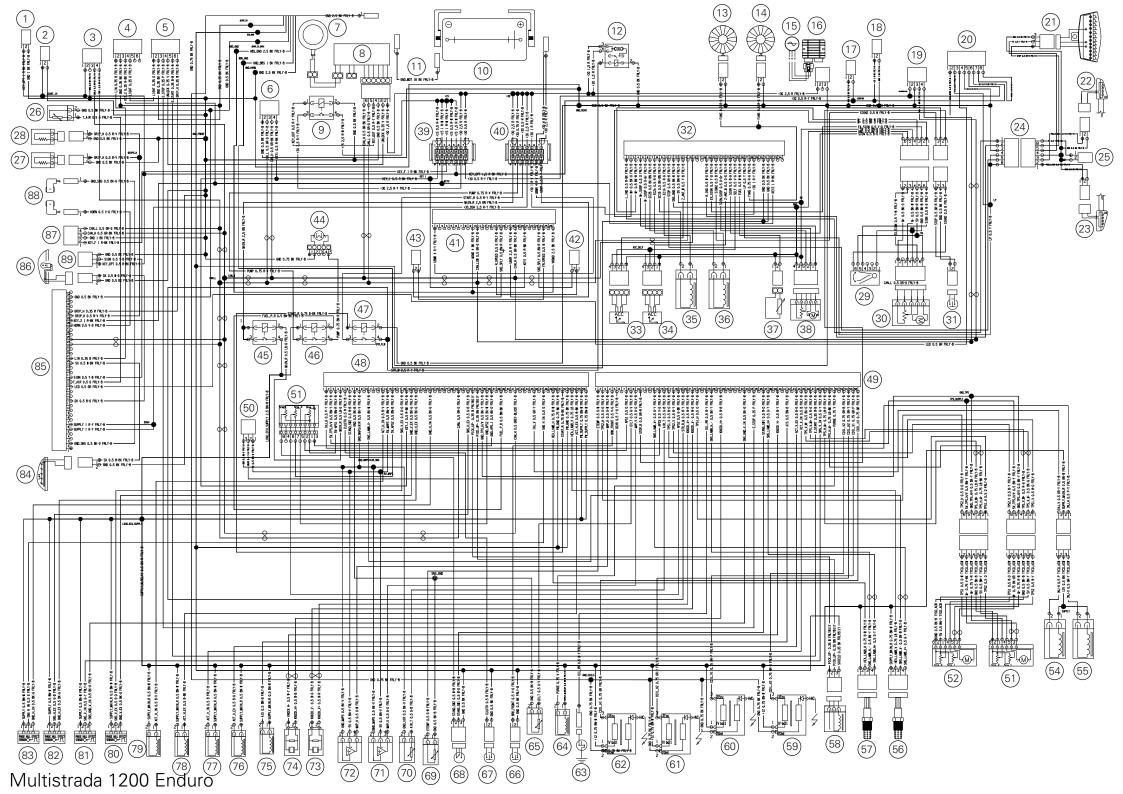
Bn Brown O Orange P Pink

Note
The electric system wiring diagram is at the end of this manual.

## Routine maintenance record

## Routine maintenance record

KM	NAME DUCATI SERVICE	MILEAGE (KM)	DATE
1000			
15000			
30000			
45000			
60000			



Ducati Motor Holding spa

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