Owner's manual

XDIAVEL

XDIAVEL S

Owner's manual

ENGLISH

XDIAVEL
XDIAVEL S

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 Chapter “Routine maintenance record”.

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.

Attention

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

Attention
This motorcycle was designed for both road use and for light off-road and dirt road use. Heavy duty off-road use is not advised and can result in the rider losing control of the vehicle, thereby increasing the risk of accidents.

Attention
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.

Attention
The total weight of the motorcycle in running order including rider, passenger, luggage and additional accessories should not exceed 440kg/ 970lb.

Attention
The passenger seat must only be used for short distances and at moderate speeds. For continued use of the bike with a passenger, always use the passenger comfort seat from the passenger backrest kit that comes standard with the bike instead of the passenger seat.

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.



Attention

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.



Attention

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.



Attention

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.



Attention

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.



Attention

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



Attention

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

Attention

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.

Attention

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 10; 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.

Attention

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 284).

Attention

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

Attention

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.

Attention
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.

Fuel label
Fuel identification label

Attention

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



Fig 1

Attention

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 eyes, thoroughly flush with water; in case of contact with skin, immediately clean with water and soap.

Attention

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.

Attention

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.

Attention

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

Refer to paragraph "Tyres" on page 318.

Dangerous products - warnings

Used engine oil

Attention
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

Attention
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.

Attention
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.

Attention
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

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

Vehicle identification number

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

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

Frame number

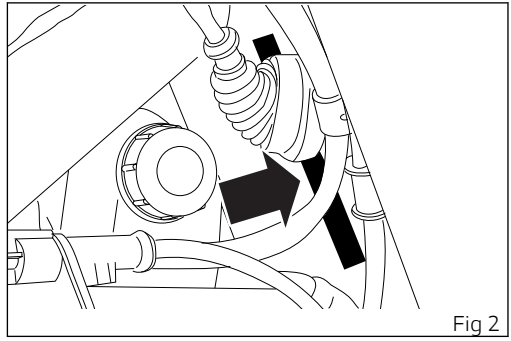


Fig 2

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

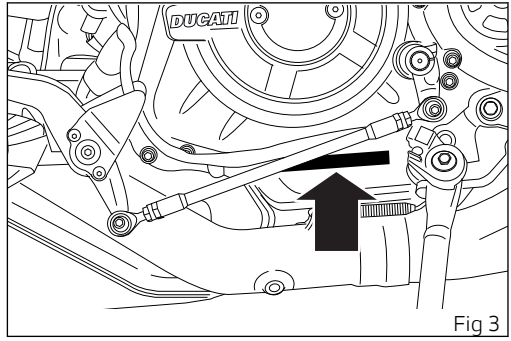


Fig 3

Instrument panel (Dashboard)

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 (BLUE).
It turns on to indicate that the high beam lights are on and when the flasher is activated.
5) FUEL WARNING LIGHT (AMBER YELLOW).
Comes on when fuel is low (see chapter "Top-ups")
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.

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

8) DTC LIGHT (AMBER YELLOW).
This light indicates DTC system enabling/disabling status.

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

9) "ENGINE DIAGNOSIS - MIL" LIGHT (AMBER YELLOW).
It turns on in the case of "engine" errors and in some cases will lock the engine.

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

Speed below 5 Km/h (3 mph)		
Light OFF	**Light flashing**	**Light steady on**
-	ABS enabled but not yet functioning since initialisation is in progress or there is a fault of the IMU control unit	ABS disabled and not functioning 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) OVER REV / DTC INTERVENTION / IMMOBILIZER SYSTEM (RED).

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

	Over rev
No intervention	Light OFF
First threshold (N RPM before the limiter 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

13) DRL LIGHT (GREEN)
Only for the X Diavel S model (except for China, Japan and Canada versions).
Indicates DRL light status.

	DRL
Function not active	Light OFF
Function active	Light steady ON
Function active but with an error	Light ON flashing

Important
If the display shows the message "TRANSPORT MODE", immediately contact your Ducati Dealer that will delete this message and ensure the full operation of the motorcycle.

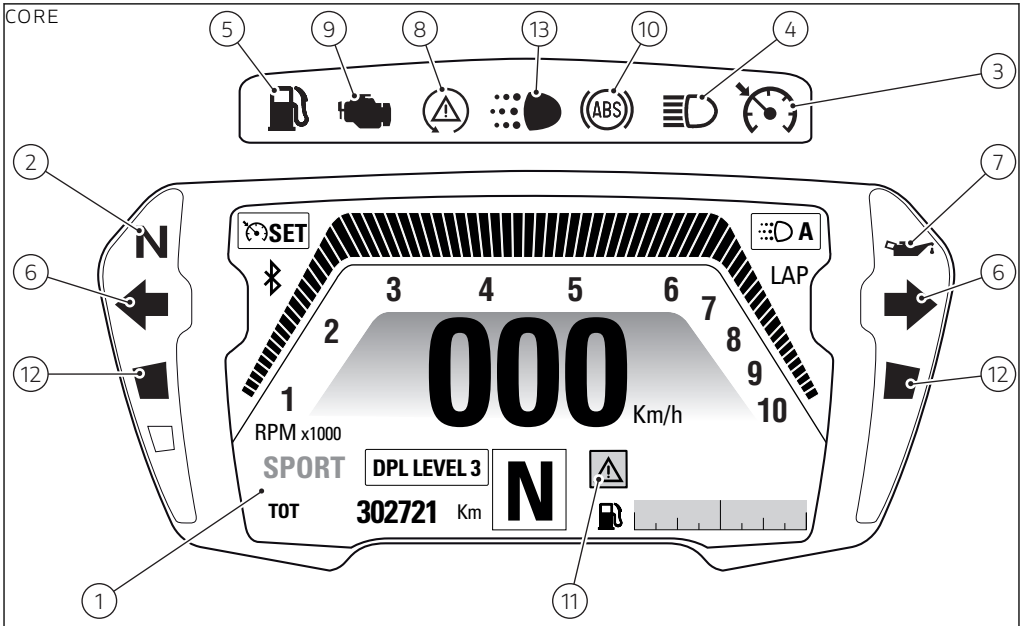

CORE
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9
10
000
Km/h
RPM x1000
SPORT
DPL LEVEL 3
N
TOT
302721
Km

Fig 4

Acronyms and abbreviations used in the Manual

ABS
Antilock Braking System
BBS
Black Box System
CAN
Controller Area Network
ECU
Engine Control Unit
DPL
DUCATI Power Launch
DRL
Daytime Running Light
DSB
Dashboard
DTC
DUCATI Traction Control
IMU
Inertial Measurement Unit
LIN
Local Interconnect Network

Technological Dictionary

Riding Mode

The rider can choose from 3 different preset bike configurations (Riding Modes) and pick the one that best suits his/her riding style or ground conditions. The Riding Modes allow the user to instantly change the engine power delivery (Power Mode) and the ABS and DTC settings.
Available Riding Modes: Sport, Touring and Urban. 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 off-road use and very expert riders because it is less sensitive to slipping and intervention is hence softer.

Anti-lock Braking System (ABS)

The ABS system fitted to the X Diavel is a safety system preventing wheel lockup while riding with the motorcycle not leaning over. The X Diavel 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 X Diavel ABS implements rear wheel lift-up control in order to ensure not only smaller stopping distance under braking, but also the best possible stability.
These functions are divided into 3 different levels, each associated with a Riding Mode. ABS can be disabled.

Inertial Measurement Unit (IMU)

The X Diavel 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 signals, thereby optimising the efficiency of all these systems, regardless of motorcycle position.

Ducati Cruise Control

X Diavel 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).

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.

Ducati Power Launch (DPL)

The Ducati Power Launch (DPL) helps the rider in the delicate sport starting phase from a standstill to control the power delivered by the vehicle.
The DPL system works with three intervention levels, each calibrated to offer a different start assist degree.

Information statement on UE directive 2014/53/UE

Simplified EU declaration of conformity

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/DSB	**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
Hands free	**ASHAI DENSO** 6-2-1 Somejidai, Hamakita-ku, Hamamatsu, Shizuoka 434-0046 Japan
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.l.** Via dell'Elettricità, 3/d 30175 - Venezia Marghera (VE) Italy

DSB	**MAE** Via Presolana 31/33 24030 - Medolago – Bergamo - Italy
DSB	**EGICON** Via Posta Vecchia, 36, Mirandola (MO) - Italy
TPMS	**LDL Technology S.A.S.** Parc Technologique du Canal, 3 rue Giotto 31520 Ramonville - France
TPMS	**PACIFIC Industrial Co., Ltd.** 1300-1 Yokoi, Godo-cho, Anpachi-gun, Gifu 503-2397, JAPAN
Anti-theft system	**PATROLLINE** Via Cesare Cantù, 15/C Albavilla (CO) - Italy

Radio equipment	Frequency band	Max. transmission power
Bluetooth	2,402 MHz ÷ 2,480 MHz	4.4 mW
Hands free unit	134.2 KHz (AD) 134.5 KHz (Zadi) (129.6 – 135 kHz)	73dBμV/m (10m) <66 dBμA/m (10m)
Hands free key	868.35 MHz (Zadi) (868 – 868.5 MHz) 434 MHz (AD)	<25mW e.r.p. -20 dBm (3m)
D|air®	868 MHz 2.4 GHz	+10 dB +3 dB
E-Lock	134.5 KHz (129.6 – 135 kHz)	<66 dBμA/m (10m)
GPS	1575.4 MHz	
DSB	134.2 KHz 120 KHz – 140 KHz	178.5 dBμA/m <66 dBμA/m (10m)
TPMS	868.35 MHz (LDL) 433.05 ÷ 434.79MHz (Pacific)	-7 dBm +/- 4 dB 100 dBμV/m
Anti-theft system	433.92 MHz (±75 Khz)	<0.6 mA

Function buttons

1) UP CONTROL SWITCH " ▲ "
Button used to display and set instrument panel parameters with the position " ▲ ".
2) DOWN CONTROL SWITCH " ▼ "
Button used to display and set instrument panel parameters with the position " ▼ ".
3) ON/OFF AND LIGHT BUTTON (LOW BEAMS / HIGH BEAMS) (Fig 6)
The high-beam flash button may also be used for LAP functions.
4) CONFIRM MENU / SETTING MENU ENTRY BUTTON
Button used to confirm and to navigate the MENU.
5) CRUISE CONTROL BUTTON - ON/OFF
Button used to switch the Cruise Control function on/off.

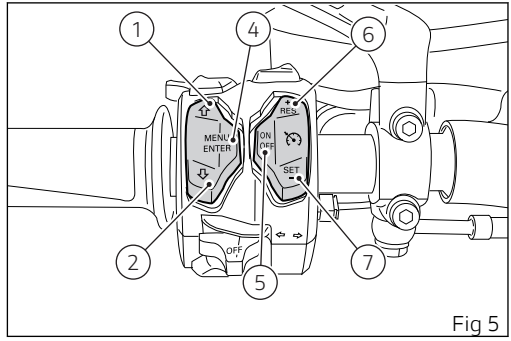


Fig 5

6) CRUISE CONTROL BUTTON - RES (Resume) / + (more) (Fig 5)
Button used to increase set cruise speed for the Cruise Control.
7) CRUISE CONTROL BUTTON - SET (Setup) / - (less) (Fig 5)
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) DRL BUTTON (X Diavel S)
Button used to enable/disable the DRL lights (only for X Diavel S, excluded China, Japan and Canada versions).

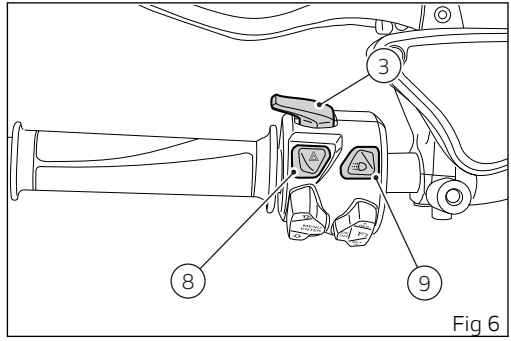


Fig 6

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").
At the end of the check, the instrument panel shows the main screen in the CORE mode which is the default one for all riding styles.
It is possible to change the display mode with the INFO MODE function in the Setting Menu.

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.

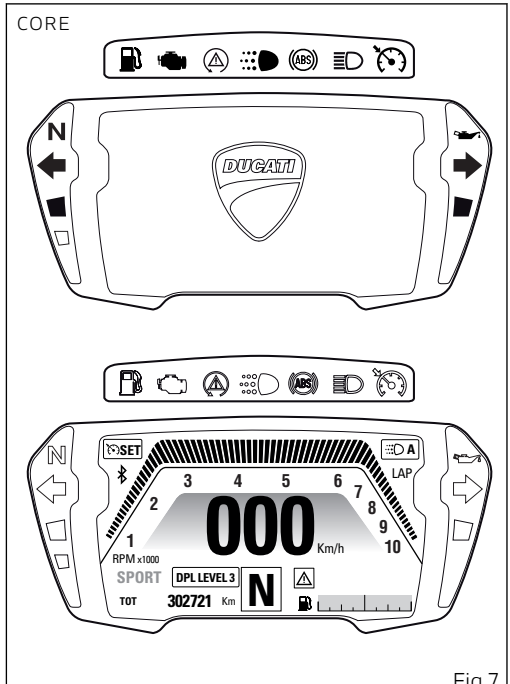


Fig 7

The main screen can have four different layouts: CORE, TRACK, FULL and CITY.

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

1) Rev counter (RPM).
2) Motorcycle speed.
3) Gear indication.
4) Set Riding Mode.
5) Fuel level.
6) Menu 1: Odometer, Engine coolant temperature, Trip meter 1, Trip meter 2, Range, Average consumption, Instant fuel consumption, Average speed, Trip time, Ambient air Temperature.
7) Bluetooth indication.
8) DRL light status (Auto / Manual).
9) DPL level indication (assisted start): active only during an assisted launch.
10) Cruise Control indication.
11) LAP.

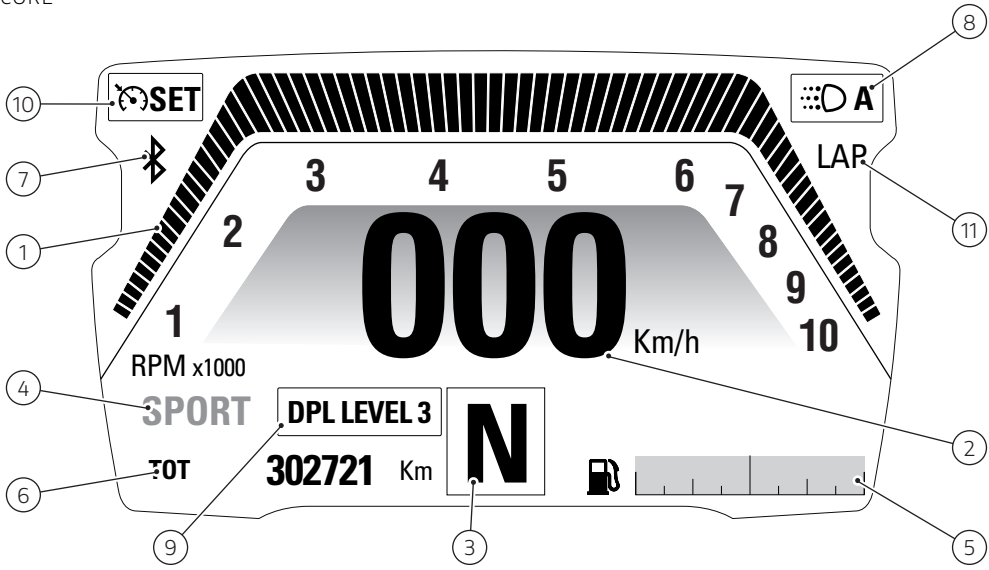

SET
A
LAP
1
2
3
4
5
6
7
8
9
10
000
Km/h
RPM x1000
SPORT
DPL LEVEL 3
N
302721
Km
TOT

Fig 8

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

1) Rev counter (RPM).
2) Motorcycle speed.
3) Gear indication.
4) Set Riding Mode.
5) DTC level.
6) ABS level.
7) Menu 1: Odometer, LAP Time (only if active), Engine coolant temperature, Trip meter 1, Trip meter 2, Range, Average consumption, Instant fuel consumption, Average speed, Trip time, Ambient air Temperature.
8) Cruise Control indication.
9) Bluetooth indication.
10) DRL light status (Auto / Manual).
11) DPL level indication (assisted start): active only during an assisted launch.
12) LAP.

TRACK

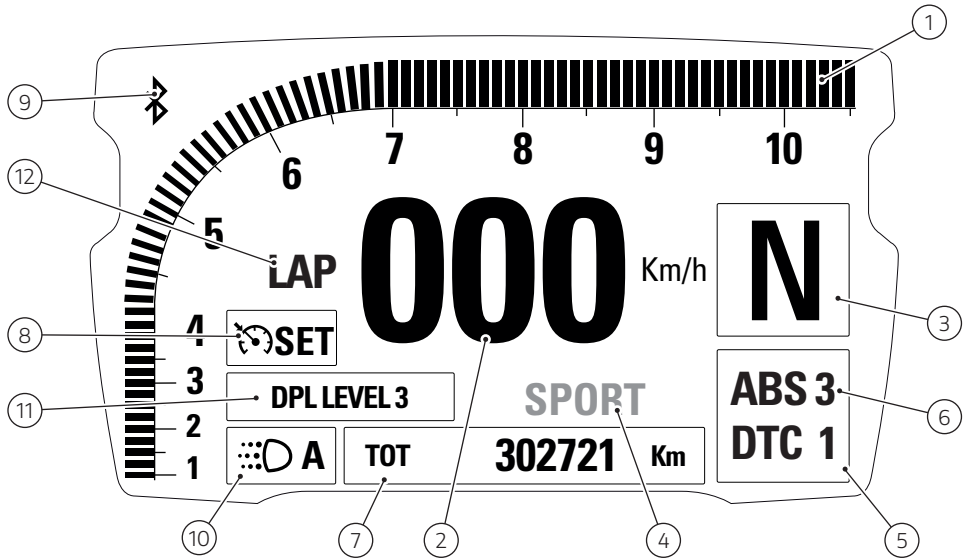

1
9
12
6
7
8
9
10
5
LAP
000
Km/h
N
3
8
4
SET
3
DPL LEVEL 3
11
2
1
A
TOT
302721
Km
SPORT
ABS 3
DTC 1
6
10
7
2
4
5

Fig 9

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

1) Rev counter (RPM).
2) Motorcycle speed.
3) Gear indication.
4) Set Riding Mode.
5) Fuel level.
6) Clock.
7) Menu 1: Odometer, Engine coolant temperature, Player On / Off (active only if the Bluetooth module is available and at least one Smartphone is connected), Range, Trip meter 1, Trip meter 2.
8) Menu 2: Average consumption, Instant fuel consumption, Average speed, Trip time, Ambient air temperature).
9) Cruise Control indication.
10) Bluetooth indication.
11) Infotainment: Smartphone connected, Helmet 01 connected, Helmet 02 connected, Navigator connected.
12) DRL light status (Auto / Manual).
13) DPL level indication (assisted start): active only during an assisted launch.
14) Infotainment: received message/s, missed call.
15) LAP.

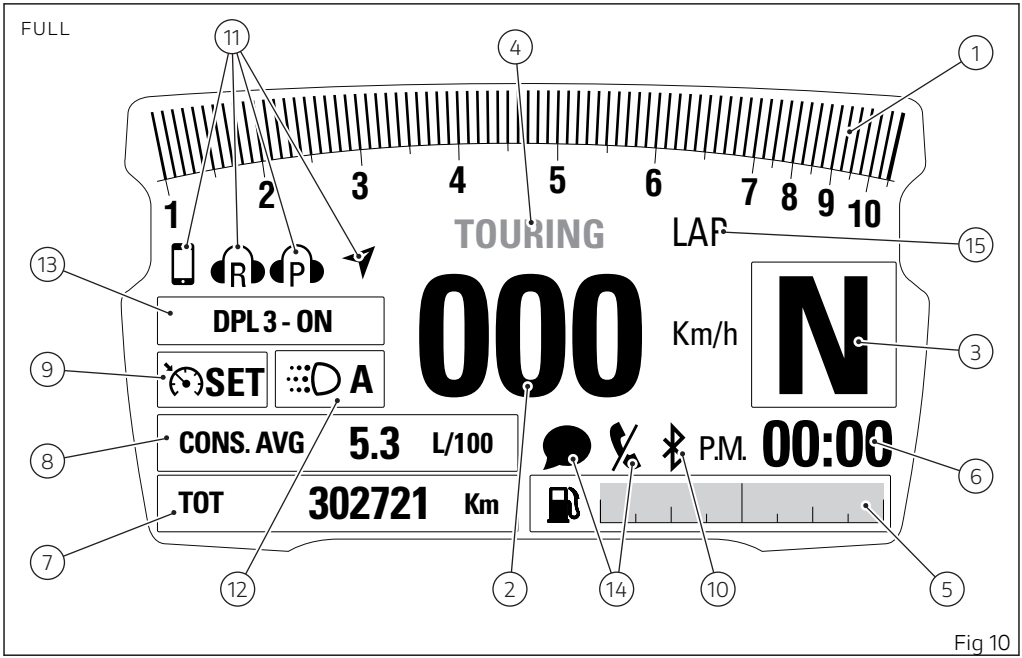

FULL
1
2
3
4
5
6
7
8
9
10
TOURING
LAP
R
P
DPL 3 - ON
SET
A
000
Km/h
N
CONS. AVG
5.3
L/100
TOT
302721
Km
P.M.
00:00
11
4
1
15
13
3
9
8
6
7
12
2
14
10
5

Fig 10

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

1) Motorcycle speed.
2) Gear indication.
3) Set Riding Mode.
4) Fuel level.
5) Clock.
6) Menu 1: Odometer, Engine coolant temperature, Player On / Off (active only if the Bluetooth module is available and at least one Smartphone is connected), Trip meter 1, Trip meter 2, Range, Average consumption, Instant fuel consumption, Average speed, Trip time, Ambient air temperature.
7) Bluetooth indication
8) Infotainment: Smartphone connected, Helmet 01 connected, Helmet 02 connected, Navigator connected, received message/s, missed call, Player + volume, incoming call, track name.
9) DRL light status (Auto / Manual).
10) Cruise Control indication.
11) LAP.

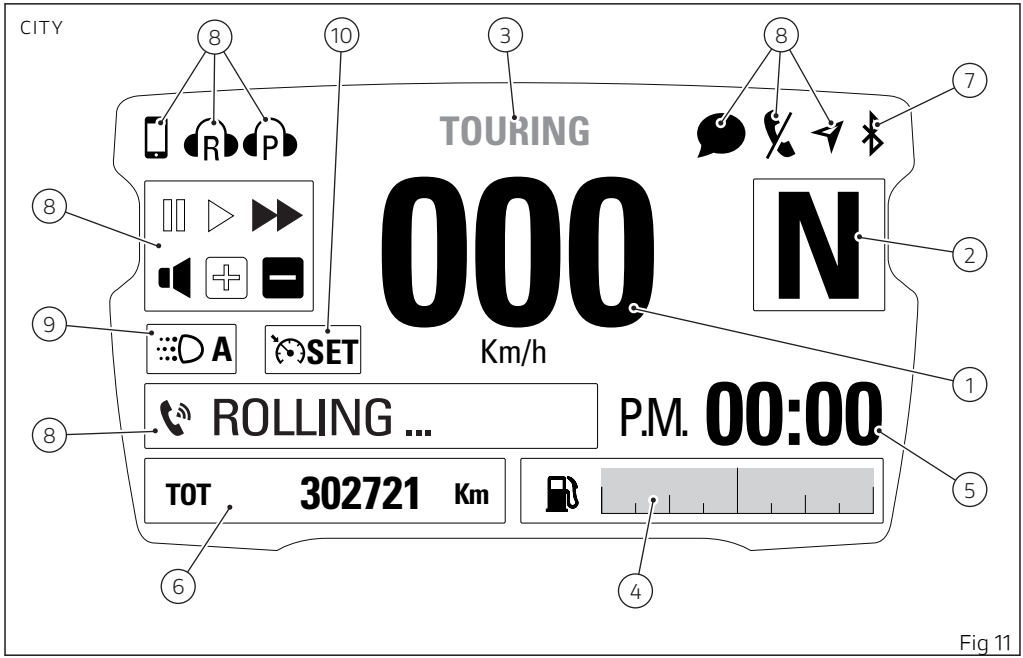

CITY
8
10
3
8
7
TOURING
R
P
000
N
8
2
9
A
SET
Km/h
1
8
ROLLING ...
P.M. 00:00
5
TOT
302721
Km
6
4

Fig 11

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

- Odometer;
- Engine coolant temperature;
- TRIP 1;
- TRIP 2;
- RANGE;
- Average Fuel Consumption (CONS AVG);
- Instant fuel consumption (CONS);
- Average speed (SPEED AVG);
- Trip time (TRIP TIME);
- Air temperature (T-AIR).

CORE

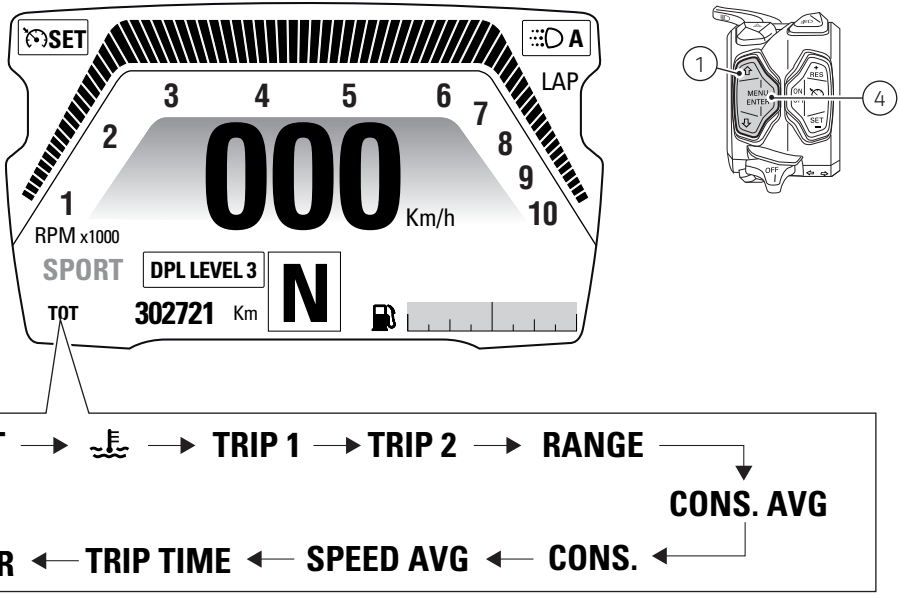

SET
A
LAP
1
2
3
4
5
6
7
8
9
10
000
Km/h
RPM x1000
SPORT
DPL LEVEL 3
N
TOT
302721
Km
1
4
MENU
ENTER
RES
SET
OFF
TOT
TRIP 1
TRIP 2
RANGE
CONS. AVG
CONS.
SPEED AVG
TRIP TIME
T AIR

Fig 12

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

- Odometer;
- LAP time (only if active);
- Engine coolant temperature;
- TRIP 1;
- TRIP 2;
- RANGE;
- Average Fuel Consumption (CONS AVG);
- Instant fuel consumption (CONS);
- Average speed (SPEED AVG);
- Trip time (TRIP TIME);
- Air temperature (T-AIR).

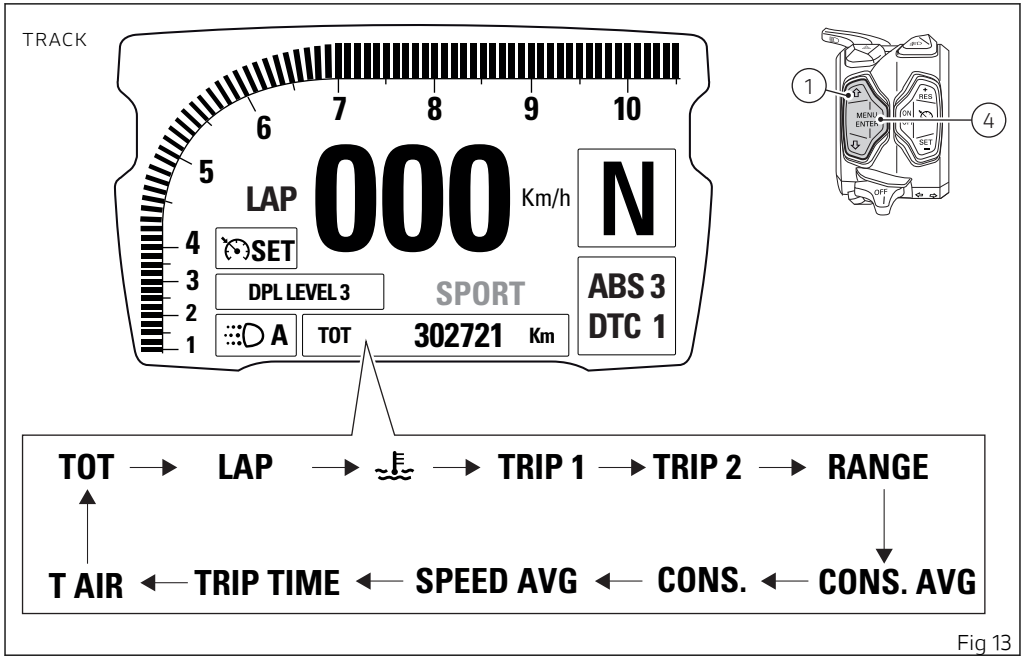

TRACK
6
7
8
9
10
5
4
3
2
1
LAP
000
Km/h
N
SET
DPL LEVEL 3
SPORT
ABS 3
DTC 1
A
TOT
302721
Km
1
4
MENU
ENTER
RES
ON
SET
OFF
TOT
LAP
TRIP 1
TRIP 2
RANGE
CONS. AVG
CONS.
SPEED AVG
TRIP TIME
T AIR

Fig 13

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

- Odometer;
- Engine coolant temperature;
- PLAYER ON/OFF (active only with connected Smartphone);
- RANGE;
- TRIP 1;
- TRIP 2.

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

- Average fuel consumption (CONS. AVG);
- Instant fuel consumption (CONS.);
- Average speed (SPEED AVG);
- TRIP TIME;
- Air temperature (T-AIR).

FULL

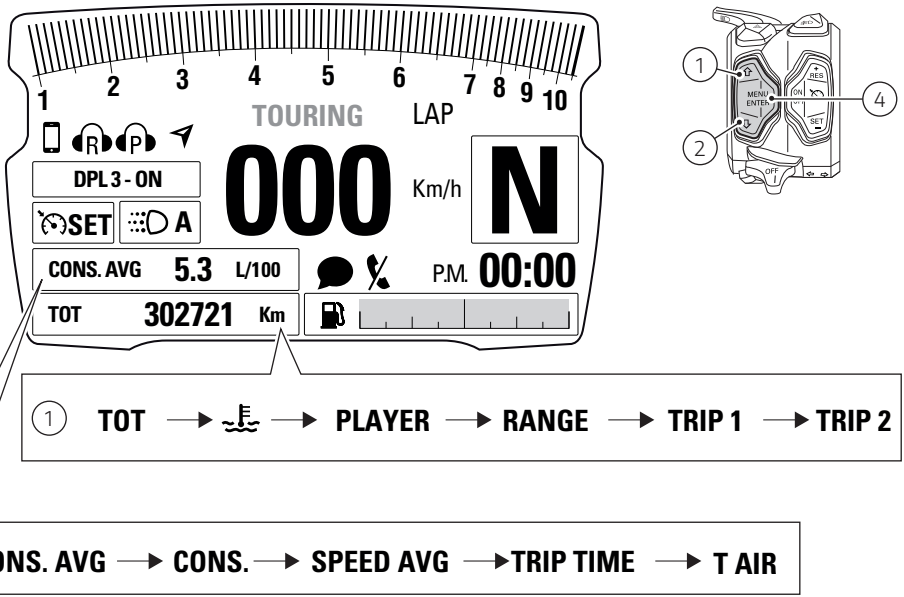

1 2 3 4 5 6 7 8 9 10
TOURING
LAP
R P
DPL 3 - ON
SET
A
000
Km/h
N
CONS. AVG 5.3 L/100
P.M. 00:00
TOT 302721 Km
1
2
4
MENU ENTER
RES
SET
OFF
① TOT → PLAYER → RANGE → TRIP 1 → TRIP 2
② CONS. AVG → CONS. → SPEED AVG → TRIP TIME → T AIR

Fig 14

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

- Odometer;
- Engine coolant temperature;
- Player On / Off (active only if the Bluetooth module is available and at least one Smartphone is connected)
- TRIP 1;
- TRIP 2;
- RANGE;
- Average Fuel Consumption (CONS AVG);
- Instant fuel consumption (CONS);
- Average speed (SPEED AVG);
- Trip time (TRIP TIME);
- Air temperature (T-AIR).

CITY

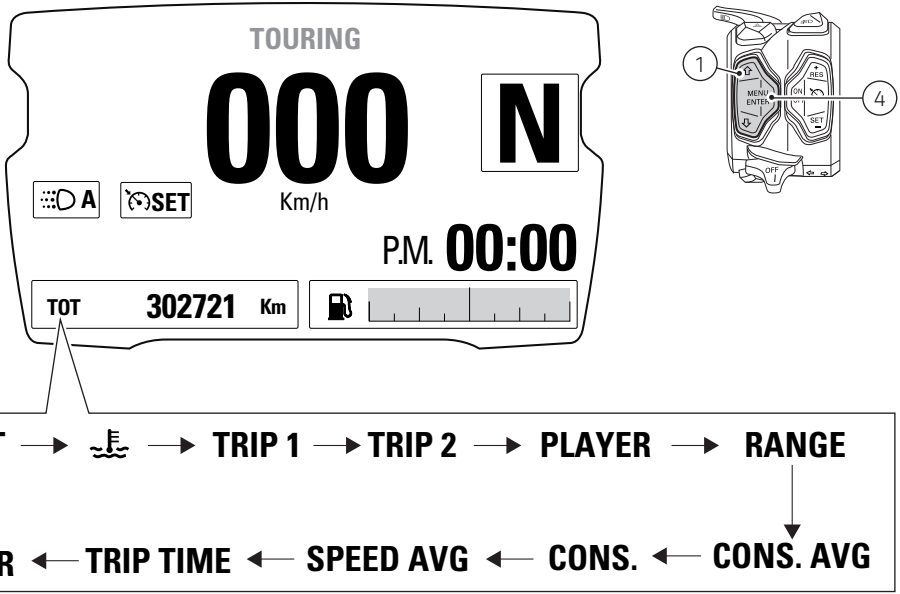

TOURING
000
N
A
SET
Km/h
P.M. 00:00
TOT 302721 Km
1
4
MENU ENTER
RES
ON
SET
OFF
TOT
TRIP 1
TRIP 2
PLAYER
RANGE
CONS. AVG
CONS.
SPEED AVG
TRIP TIME
T AIR

Fig 15

For the FULL display mode, 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 = TOT (Odometer);
- Menu 2 default page = RANGE.

For the CORE, TRACK and CITY display modes, the instrument panel stores Menu 1 settings in use upon KEY-OFF. On the following KEY-ON, previously stored Menu 1 page is displayed.
In case of sudden and unexpected power OFF, the instrument panel displays the default settings for Menu 1 upon the following KEY-ON; in particular:

- Menu 1 default page = TOT (Odometer).

When the standard screen of set layout is displayed, hold button (4) for 2 seconds to enter the Setting menu, where you can set any function.

Note

You can enter the SETTING MENU only if vehicle actual speed is <= (lower than or equal to) 5 km/h (3.1 mph). Within the SETTING MENU, if vehicle actual speed exceeds 5 km/h (3.1 mph), the instrument panel automatically quits the menu and shows the Standard Screen.

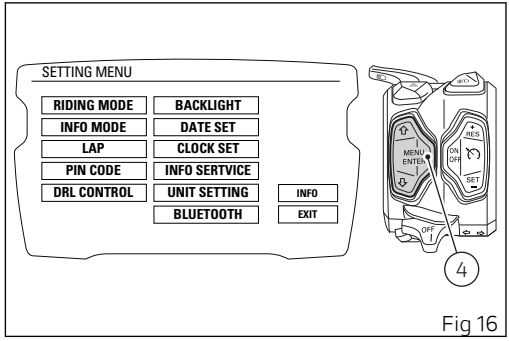


Fig 16

If the key is not acknowledged upon Key-On and once the check routine is over, if the PIN CODE function is active the instrument panel shows a screen where it is possible to enter the release PIN CODE. Use button (1) and button (2) to enter the code digit and confirm by pressing button (4).

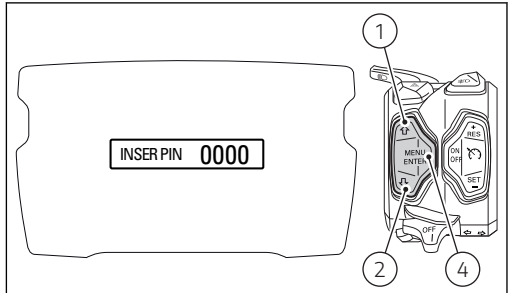


Fig 17

Main functions

Information displayed in the standard screen of the selected display layout (CORE, TRACK, FULL or CITY) are the following:

Main information

- Engine rpm indication (RPM)
- Motorcycle speed
- Fuel level
- Riding Mode
- ABS
- DTC
- Gear
- Clock
- the menus display the following functions:
  - Odometer (TOT)
  - Engine coolant temperature
  - 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
  - LAP time
  - LAP time (only if active)
  - Player On / Off (active only if the Bluetooth module is available and at least one Smartphone is connected)

Additional information

- DRL status
- DPL level
- Infotainment — Bluetooth
- Cruise Control
- Service indication (SERVICE)
- Warnings/Alarms

Engine rpm indication (RPM)

The instrument panel receives the engine rpm information and displays it on the relevant bargraph (in TRACK, FULL and CORE 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 9000 and 10000 rpm (pre-warning area) is displayed in orange both for the bargraph filling and for the indication of value "9" (orange area).

The range between 10000 and 10500 rpm (warning area) is displayed in red both for the bargraph filling and for the indication of value "10" (red area).

CORE

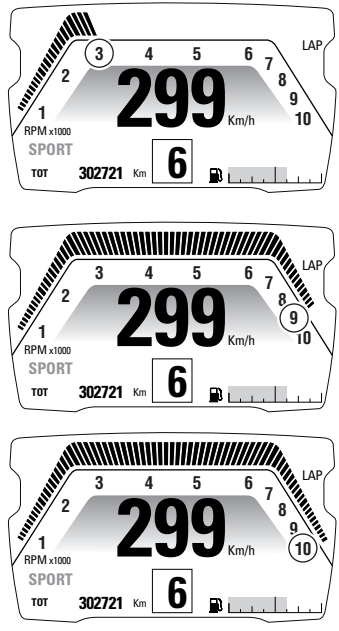


Fig 18

CORE layout indicates rpm in a different way
compared to TRACK and FULL layouts.
CITY layout does not provide for rpm indication.

FULL



TRACK

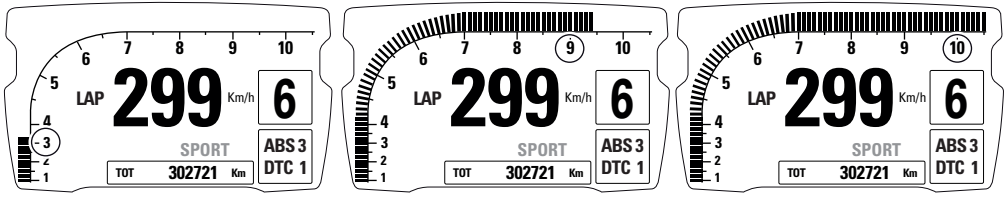


Fig 19

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

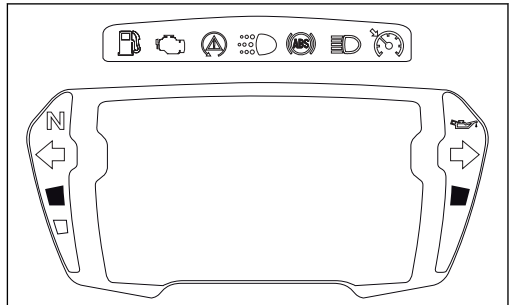


Fig 20

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

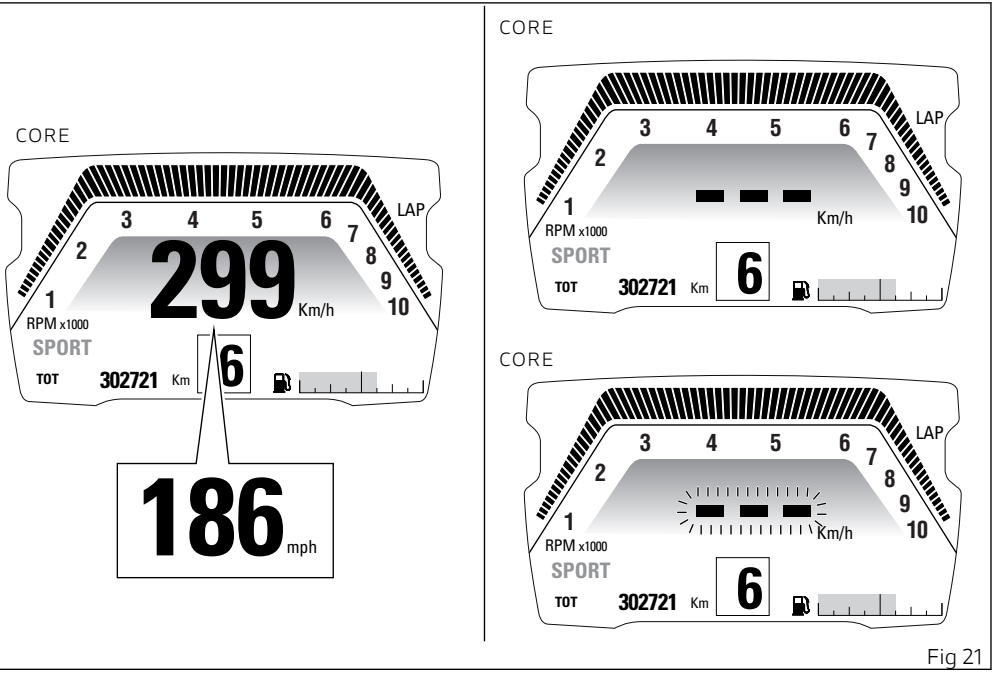

CORE
1
2
3
4
5
6
7
8
9
10
LAP
RPM x1000
299
Km/h
SPORT
TOT
302721
Km
6
186
mph
CORE
Km/h
CORE

Fig 21

Riding Mode (RIDING MODE)

The Riding Mode can be selected from the instrument panel. Three preset riding modes are available: SPORT, TOURING and URBAN.
The selected and active riding mode is displayed on the instrument panel 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 ABS calibration (1, 2, 3, OFF);
- a specific engine power that will change throttle behaviour (HIGH, MED, LOW).

For each riding mode there are four information display layouts (TRACK, FULL, CORE and CITY) that can be set by the user in the setting function pages: the layout set by default by Ducati is CORE.

Attention

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).

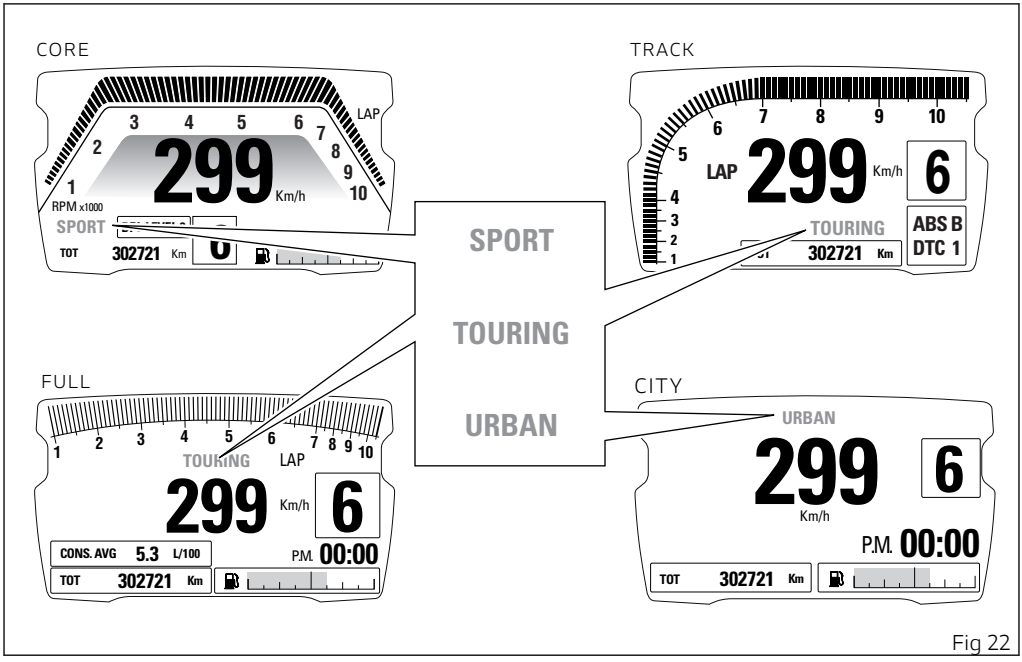

CORE
LAP
299
Km/h
RPM x1000
SPORT
TOT
302721
Km
TRACK
LAP
299
Km/h
6
TOURING
ABS B
DTC 1
302721
Km
SPORT
TOURING
URBAN
FULL
TOURING
LAP
299
Km/h
6
CONS. AVG
5.3
L/100
P.M.
00:00
TOT
302721
Km
CITY
URBAN
299
Km/h
6
P.M.
00:00
TOT
302721
Km

Fig 22

Selecting the Riding Mode

Press CONFIRM MENU button (4) to view 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

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

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

- engine power (ENGINE): ENGINE lettering followed by set engine power (HIGH, MED, 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.

Any time CONFIRM MENU button (4) is pressed, the selected riding mode is highlighted together with the associated parameters (A, Fig 23).

Once the desired riding mode (A, Fig 23) 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 23) 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.

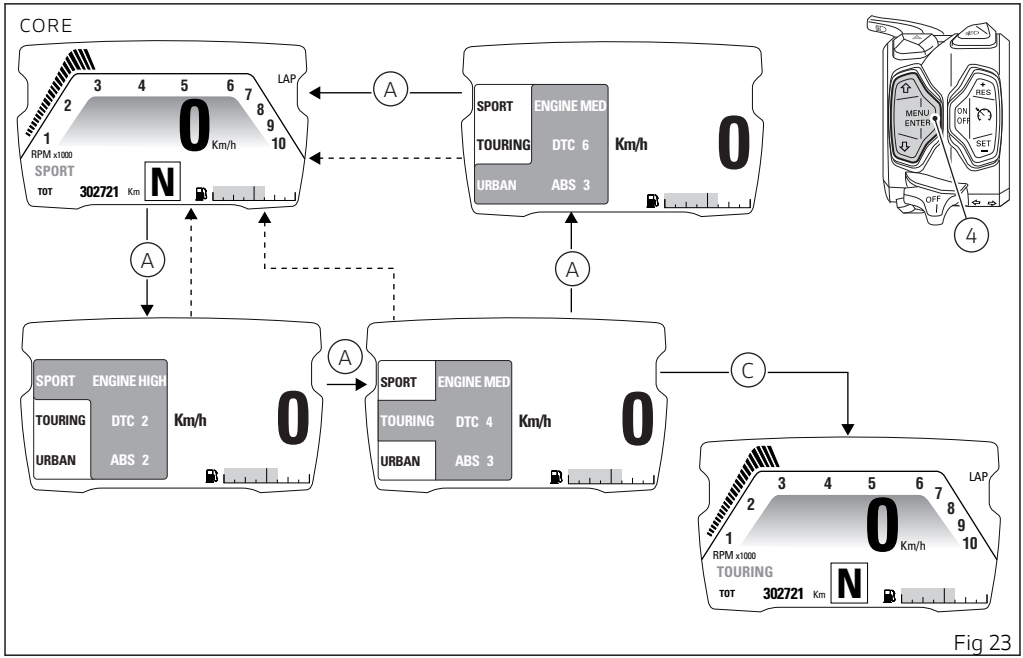

CORE
LAP
RPM x1000
SPORT
TOT
302721
Km
N
Km/h
SPORT
TOURING
URBAN
ENGINE MED
DTC 6
ABS 3
ENGINE HIGH
DTC 2
ABS 2
DTC 4
MENU ENTER
RES
ON OFF
SET
OFF
A
C
4

Fig 23

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.

In the screen that allows changing the Riding Mode, the instrument panel, besides displaying information concerning each riding mode (ENGINE, DTC and ABS) shows other information regarding functions that are active but could not be shown in the set display mode: for example in the TRACK display mode the fuel level is not shown as it is in the Riding mode change screen.
Available information:

- fuel level (L);
- DRL light status (D): indication displayed if the DRL lights are active; available only in the X Diavel S model, excluded the China, Japan and Canada versions;
- Cruise Control (E) status: indication shown only if the Cruise Control function is active;
- Service (F) indication: shown only if one Service function is active (OIL SERVICE, ANNUAL SERVICE or DESMO SERVICE);
- Infotainment indication (Call/Track) (G): shown only if the Bluetooth function is available;
- Infotainment indication (paired devices) (H): shown only if the Bluetooth function is available.

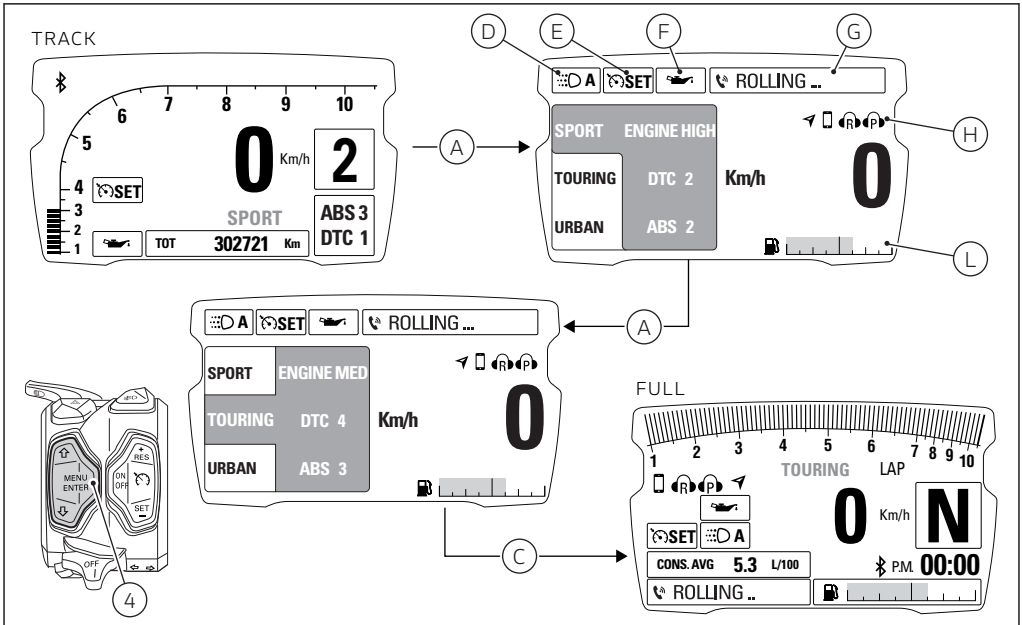

TRACK
0
Km/h
2
SET
SPORT
ABS 3
DTC 1
TOT
302721
Km
A
D
E
F
G
H
L
SPORT
ENGINE HIGH
TOURING
DTC 2
URBAN
ABS 2
Km/h
0
ROLLING ...
ENGINE MED
DTC 4
ABS 3
FULL
TOURING
LAP
N
CONS. AVG
5.3
L/100
P.M.
00:00
C
MENU
ENTER
RES
ON
OFF
SET
4

Fig 24

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.



Fig 25

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 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.

The DTC function status is shown only in the TRACK display mode.

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

Attention

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

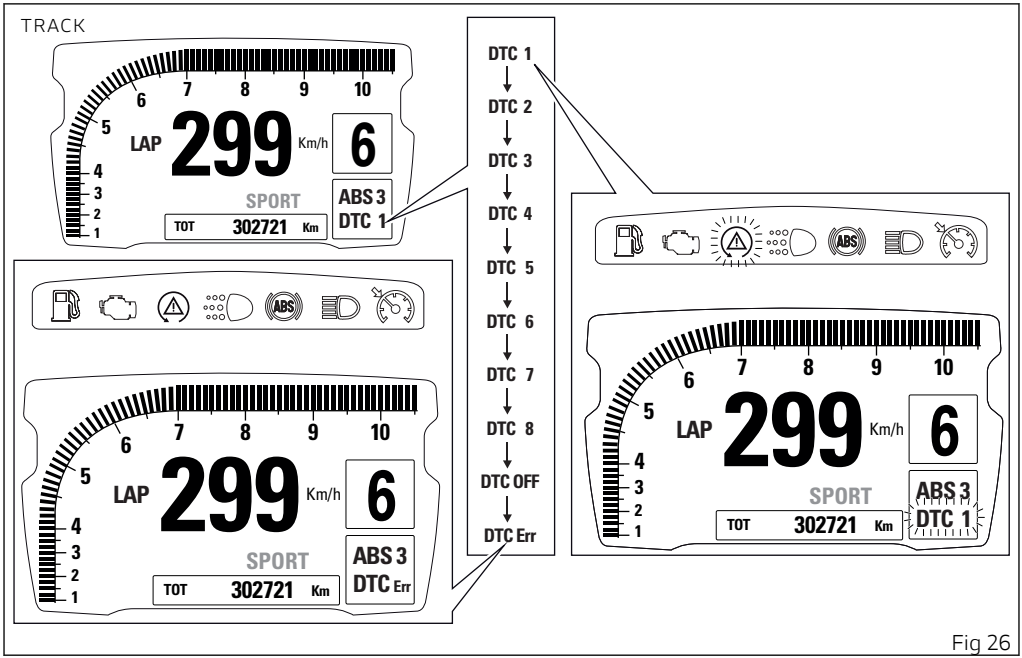

TRACK
LAP
299
Km/h
6
SPORT
TOT
302721
Km
ABS 3
DTC 1
DTC 1
DTC 2
DTC 3
DTC 4
DTC 5
DTC 6
DTC 7
DTC 8
DTC OFF
DTC Err
ABS 3
DTC Err

Fig 26

Attention

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
1	SPORT	Sports style for very expert riders. System permits sliding sideways.	NO
2	SPORT	Sports style for expert riders. System permits sliding sideways.	It is the default level for the "SPORT" Riding Mode
3	SPORT	Sports style for medium-expert riders. System permits sliding sideways.	NO
4	TOURING	Fast touring style.	It is the default level for the "TOURING" Riding Mode
5	TOURING	Touring style.	NO
6	URBAN	"Very safe" style on any kind of path.	It is the default level for the "URBAN" Riding Mode
7	RAIN	For riding on slightly wet or moist road. ENGINE LOW setting recommended.	NO
8	HEAVY RAIN	For riding on wet road. ENGINE LOW setting recommended.	NO

Tips on how to select the sensitivity level

Attention
All levels of the DTC system of your vehicle have been calibrated with original equipment tyres (Pirelli TL Diablo Rosso II 120/70 - 17 front and Pirelli TL Diablo Rosso II 240/45 - 17 rear). The use of tyres of different size and characteristics to the original tyres may alter the operating characteristics of the system.

In the case of minor differences, such as for example, tyres of a different make and/or model than the OE ones, but with the same size (front = 120/70 - 17, rear = 240/45 - 17), it may be sufficient to simply select the suitable level setting from those available in order to restore optimal system operation. If tyres of a different size class are used or if the tyre size differs significantly from the original tyres, it may be that the system operation is affected to the point where none of the 8 available level settings will give satisfactory results. In this case it is advisable to deactivate the traction control system.

If level 8 is selected, the DTC system will kick in at the slightest hint that the rear wheel is starting to spin. Between level 8 and level 1 there are intermediate levels. DTC intervention decreases from level 8 to level 1. Levels 1, 2 and 3 allow both spinning and skidding of the rear wheel out of a corner: these levels are recommended only for expert riders.

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

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

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 road).

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 dry road

Activate the DTC, select level 6 and ride the motorcycle in your usual style; if the level of DTC sensitivity seems excessive, try levels 5, 4, etc., until you find the one 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 5 the DTC intervention seems excessive, switch to level 4; alternatively, if on level 5 you cannot perceive any DTC intervention, switch to level 6).

Tips for use on wet road

Level 7 is recommended when road is slightly wet or damp and level 8 on wet road. It is also recommended to select ENGINE LOW in these conditions.

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.

The ABS function status is shown only in the TRACK display mode.

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

Attention

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.

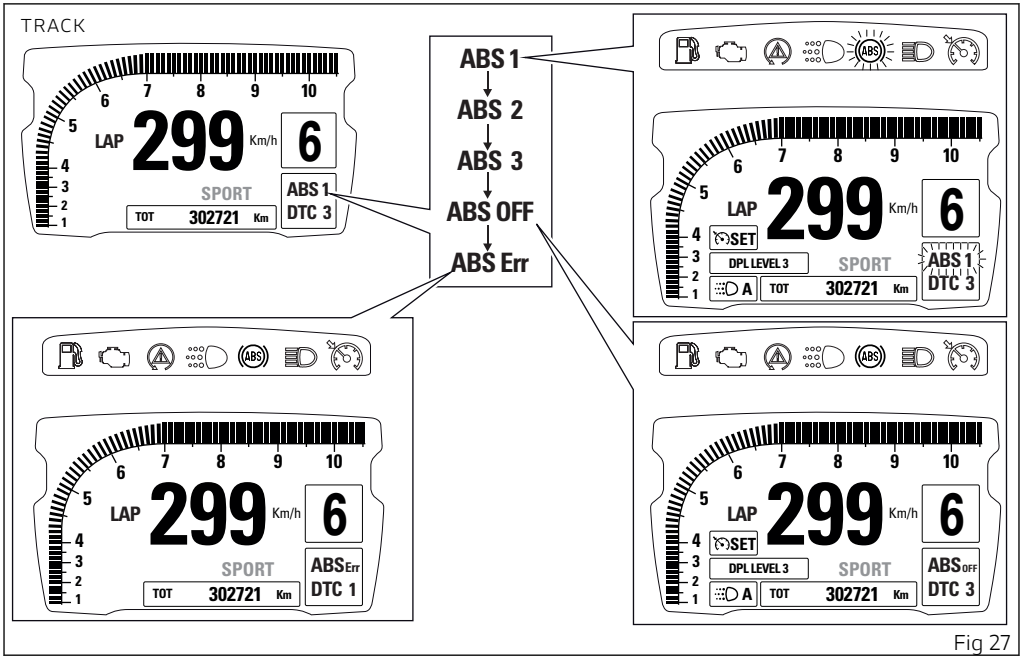

TRACK
LAP
299
Km/h
6
SPORT
ABS 1
DTC 3
TOT
302721
Km
ABS 1
ABS 2
ABS 3
ABS OFF
ABS Err
SET
DPL LEVEL 3
A
ABS Err
DTC 1
ABS OFF
DTC 3

Fig 27

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 electro-hydraulic 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 use separate control systems.
The X Diavel 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.

Attention
Using the two brake controls separately reduces the motorcycle braking power.

Never use the front brake control harshly or suddenly as you may cause rear wheel lift-up and lose control of the motorcycle (if the ABS is enabled). 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 as well as a possible generation of vapour lock (brake fluid boiling) with a considerable reduction of the braking power. 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	FEATURE	DEFAULT
OFF		The ABS is disabled	NO
1	EXPERT	This level is thought for extremely expert users. ABS in this level only controls the front wheel, and thus allows rear wheel lockup. The system in this level does NOT control lift-up and the cornering feature is NOT active.	
2	SPORT	This level is designed for use with good grip conditions. ABS in this level controls both wheels and the cornering function is active. In this level the system does NOT control the lift-up: this setting focuses on braking power.	It is the default level for the "SPORT" Riding Mode
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 and the cornering and anti-lift-up functions are active.	It is the default level for the "TOURING" and "URBAN" riding modes.

Tips on how to select the sensitivity level

Attention

Excellent operation of the ABS system, for all available levels, is ensured only with the OE brake system and with OE tyres and/or with the ones recommended by Ducati. In particular, OE tyres for this motorcycle are TL PIRELLI Diablo Rosso II D in the following sizes: front 120/70 ZR17 M/C (58W), rear 240/45 ZR17 M/C (82W). The use of tyres of different size and characteristics to the original tyres may alter the operating characteristics of the system thus making it unsafe. It is recommended not to install tyres of different size than the ones approved for your vehicle.

Selecting level 3, the ABS will ensure a very stable braking thanks to lift-up control, 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 and lift-up control, which is disabled in level 2. ABS level 2 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.

ABS level 1 is conceived for very expert riders and ABS is active only on the front wheel to help performance. In this level there is no lift-up control nor cornering feature.

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

1) 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.

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

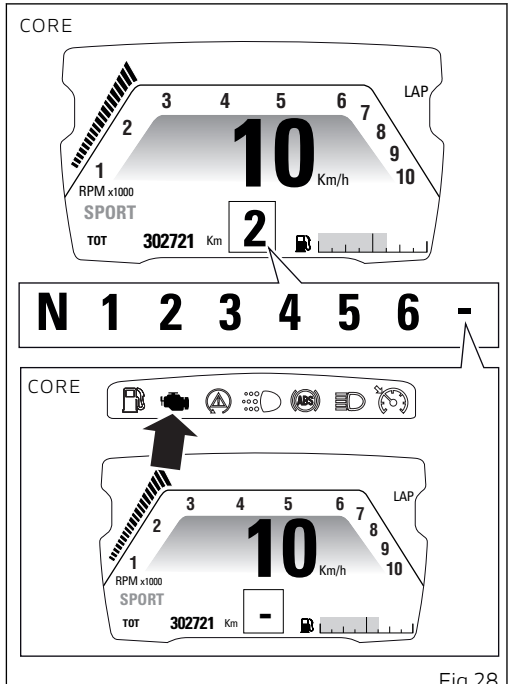


Fig 28

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.
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 and CITY layouts show the values for this function in a similar way to the CORE layout, the example shown depicts the function in CORE layout. In the TRACK mode, this function is not shown.

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.

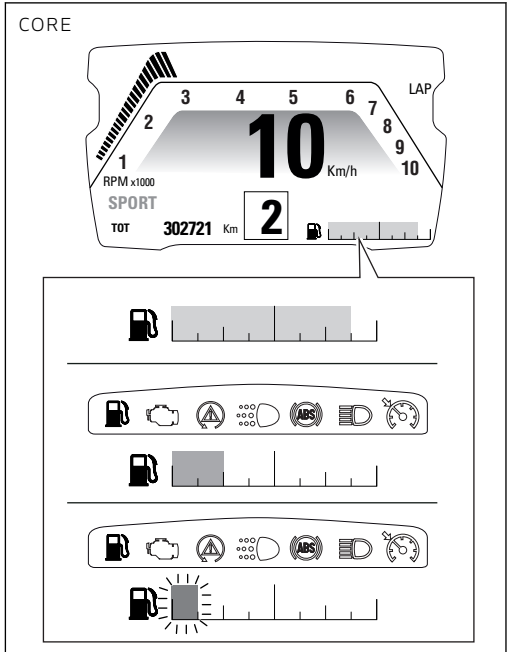


Fig 29

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 CITY layout shows the values for this function in a similar way to the FULL layout, the example shown depicts the function in FULL layout. This function is not displayed in the CORE and TRACK modes.

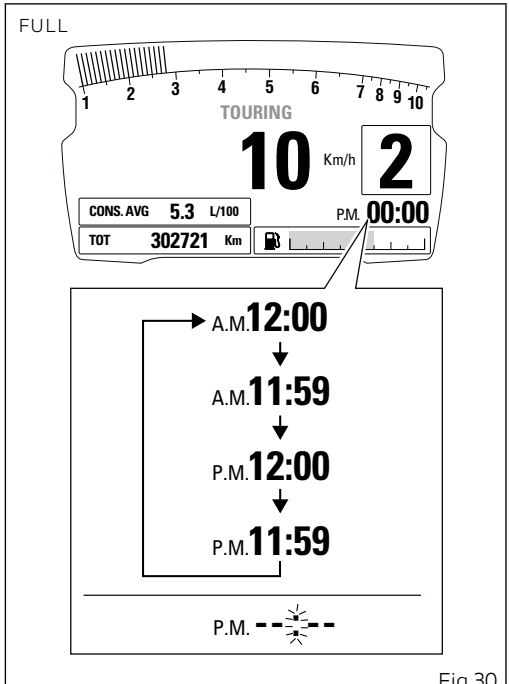


Fig 30

Menu functions

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

- CORE;
- TRACK;
- FULL;
- CITY.

Available functions are:

- Odometer (TOT);
- Engine Coolant temperature
- 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);
- LAP time (only if active)
- Player On / Off (active only if the Bluetooth module is available and at least one Smartphone is connected).

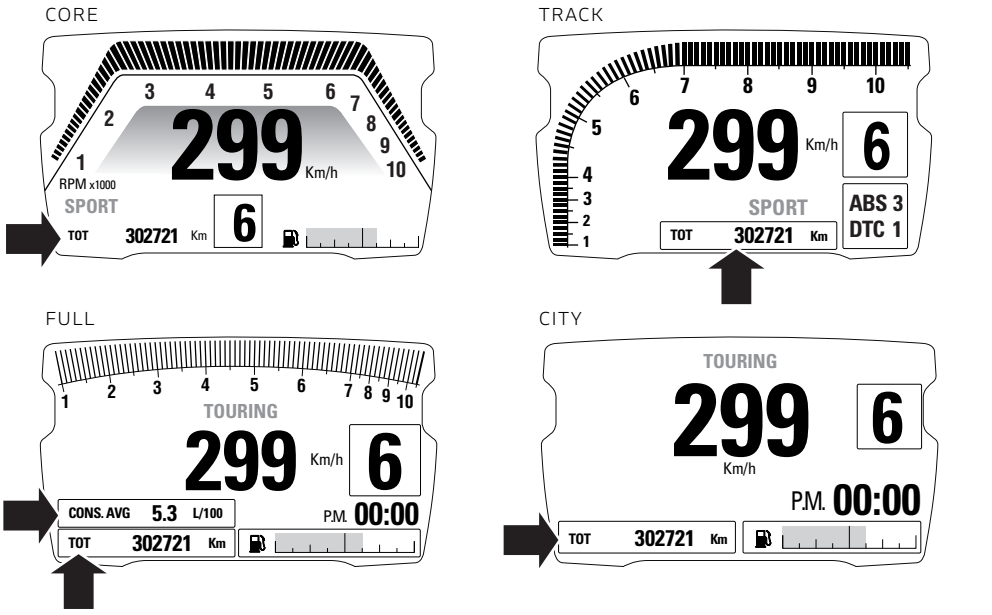

CORE
1
2
3
4
5
6
7
8
9
10
299
Km/h
RPM x1000
SPORT
TOT
302721
Km
6
TRACK
1
2
3
4
5
6
7
8
9
10
299
Km/h
6
SPORT
ABS 3
DTC 1
TOT
302721
Km
FULL
1
2
3
4
5
6
7
8
9
10
TOURING
299
Km/h
6
CONS. AVG
5.3
L/100
P.M.
00:00
TOT
302721
Km
CITY
TOURING
299
Km/h
6
P.M.
00:00
TOT
302721
Km

Fig 31

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

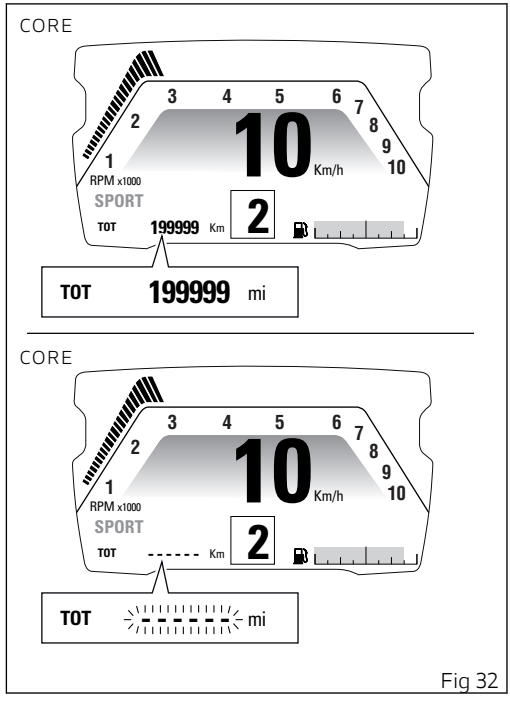


Fig 32

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 ÷ +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.

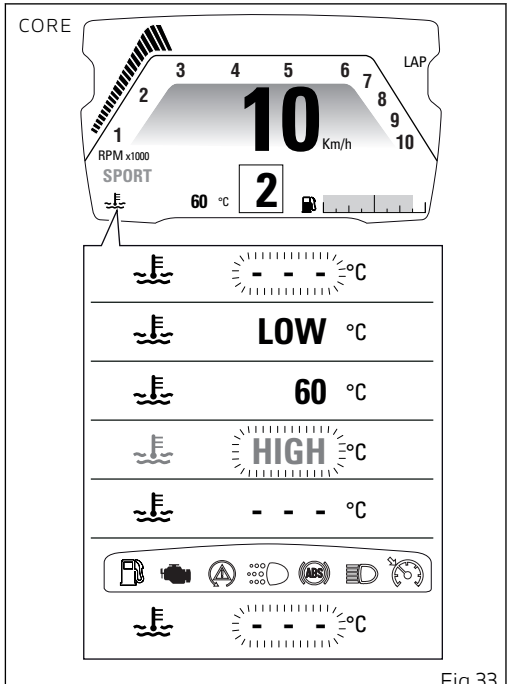


Fig 33

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

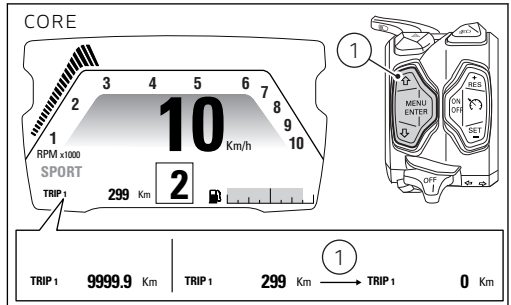


Fig 34

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

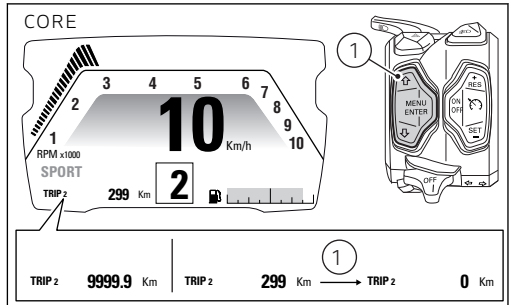


Fig 35

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.

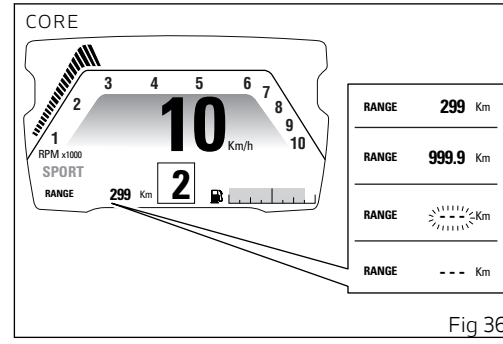


Fig 36

Note

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

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

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.

Note

It is possible to change the units of measurement for "Consumption" (both average and instantaneous together) from L/100 to km/L or mpg UK or mpg US 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 US).
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).

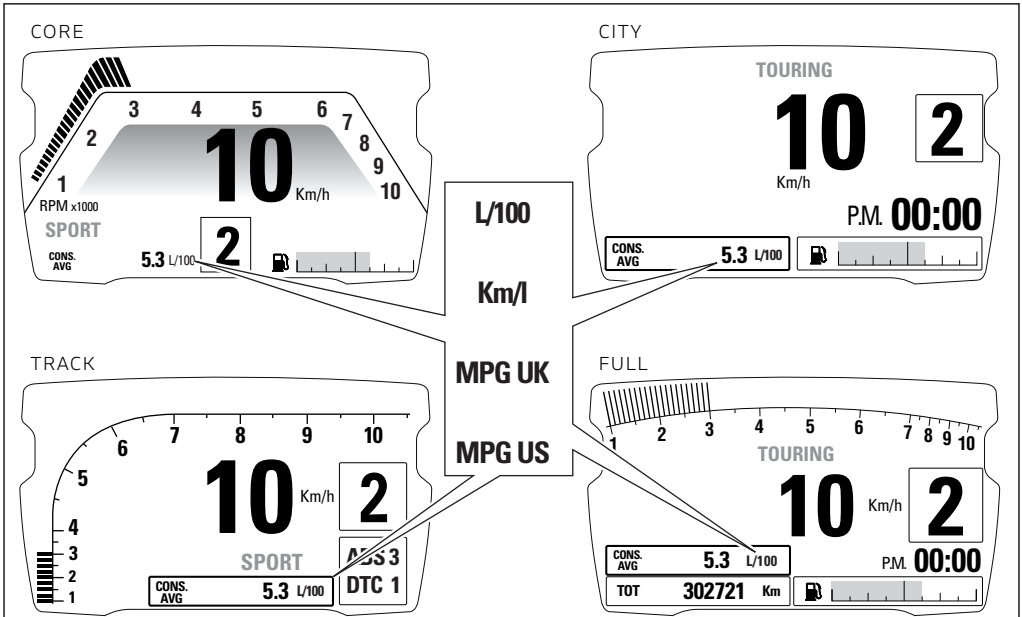

CORE
CITY
TRACK
FULL
L/100
Km/l
MPG UK
MPG US
RPM x1000
SPORT
CONS. AVG
5.3 L/100
Km/h
TOURING
P.M. 00:00
TOT
302721 Km
DTC 1

Fig 37

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 US.
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.

Note

It is possible to change the units of measurement for "Consumption" (both average and instantaneous together) from L/100 to km/L or mpg UK or mpg US through the SETTING MENU, using the UNITS SETTING function.

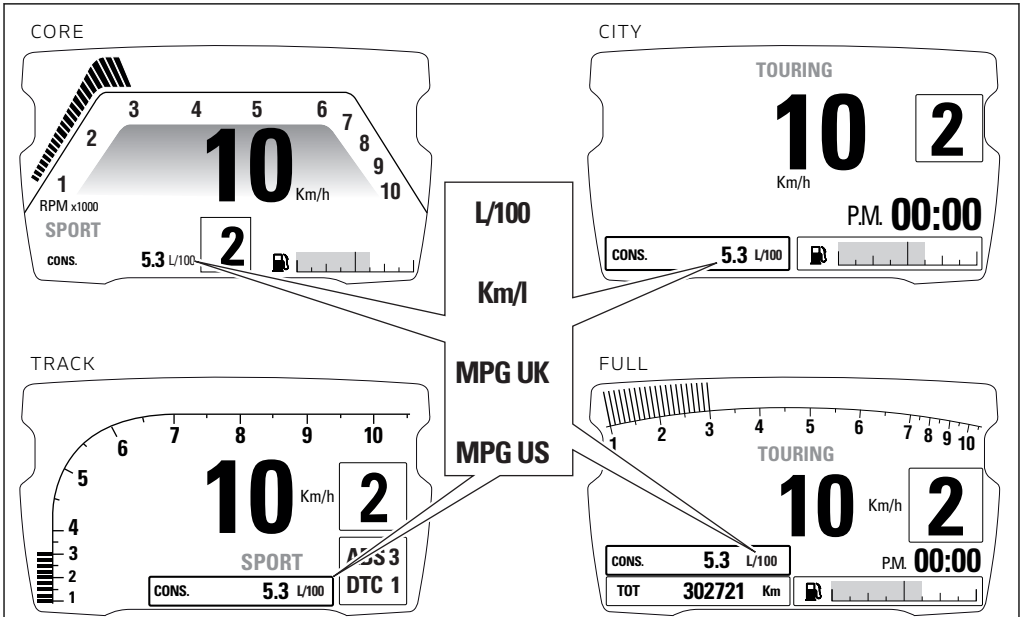

CORE
1
2
3
4
5
6
7
8
9
10
RPM x1000
10
Km/h
SPORT
CONS.
5.3 L/100
2
CITY
TOURING
10
Km/h
2
P.M. 00:00
CONS.
5.3 L/100
L/100
Km/l
MPG UK
MPG US
TRACK
10
Km/h
2
SPORT
CONS.
5.3 L/100
DTC 1
FULL
TOURING
10
Km/h
2
CONS.
5.3 L/100
P.M. 00:00
TOT
302721
Km

Fig 38

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.

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).

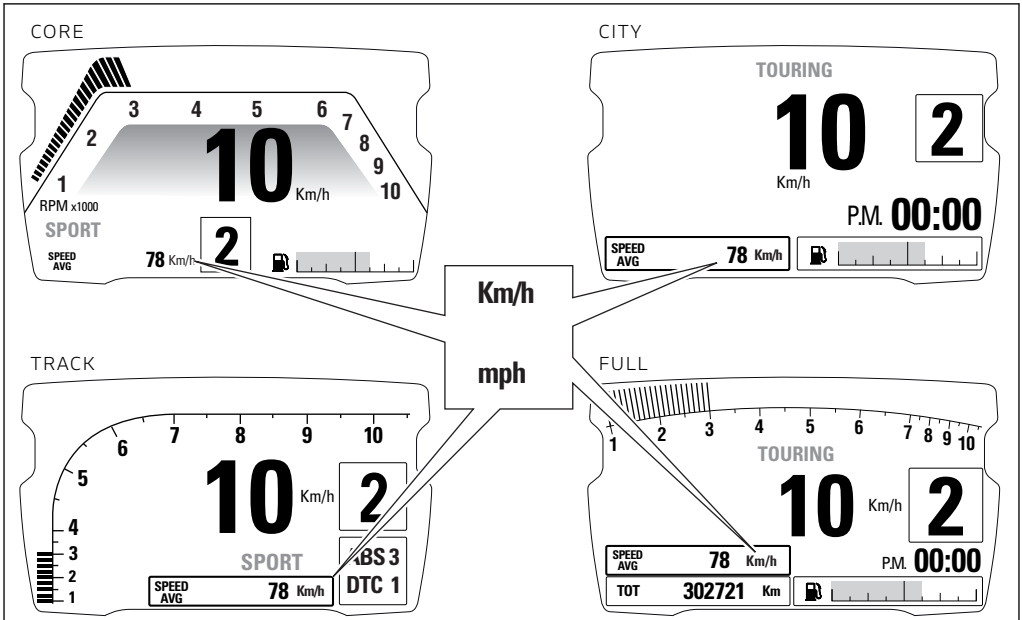

CORE
1
2
3
4
5
6
7
8
9
10
RPM x1000
10
Km/h
SPORT
SPEED AVG
78 Km/h
2
CITY
TOURING
10
Km/h
2
P.M. 00:00
SPEED AVG
78 Km/h
Km/h
mph
TRACK
10
Km/h
2
SPORT
ABS 3
DTC 1
SPEED AVG
78 Km/h
FULL
TOURING
10
Km/h
2
P.M. 00:00
SPEED AVG
78 Km/h
TOT
302721 Km

Fig 39

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.

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.

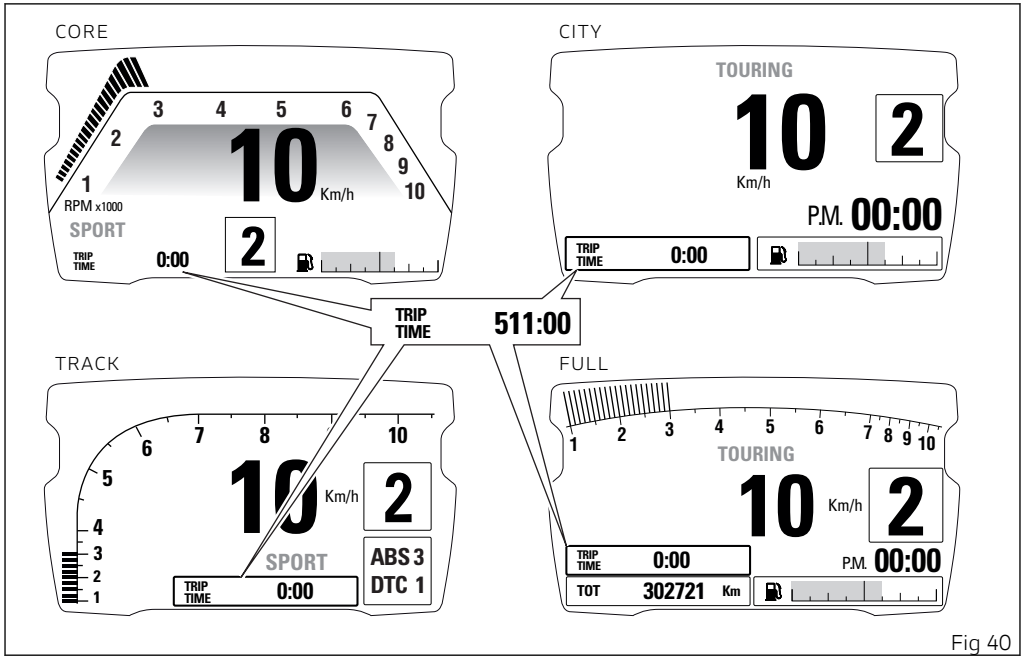

CORE
1
2
3
4
5
6
7
8
9
10
10
Km/h
RPM x1000
SPORT
TRIP
TIME
0:00
2
CITY
TOURING
10
Km/h
2
P.M. 00:00
TRIP
TIME
0:00
TRIP
TIME
511:00
TRACK
10
Km/h
2
SPORT
ABS 3
DTC 1
TRIP
TIME
0:00
FULL
TOURING
10
Km/h
2
TRIP
TIME
0:00
P.M. 00:00
TOT
302721
Km

Fig 40

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 ÷ +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.



Note

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

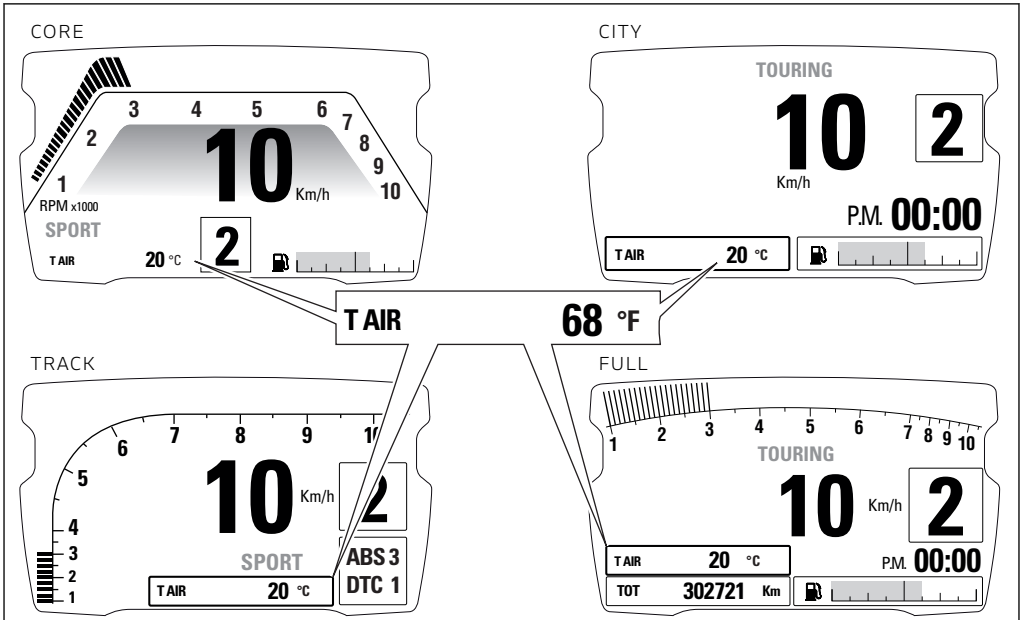

CORE
CITY
TRACK
FULL
10
Km/h
SPORT
TOURING
T AIR
20 °C
68 °F
ABS 3
DTC 1
P.M. 00:00
TOT
302721 Km
RPM x1000

Fig 41

LAP TIME

The LAP function is visible only 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).

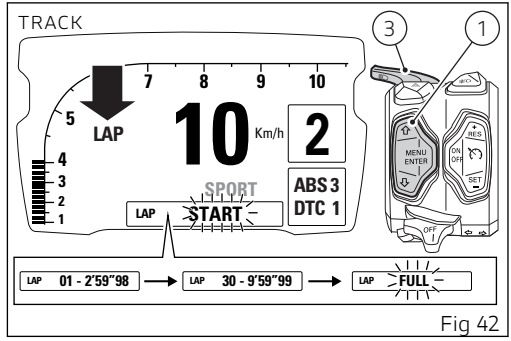


Fig 42

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 8 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).

Auxiliary functions

LAP

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 CITY layouts show the values for this function in a similar to the TRACK layout, the example shown depicts the function in TRACK layout.

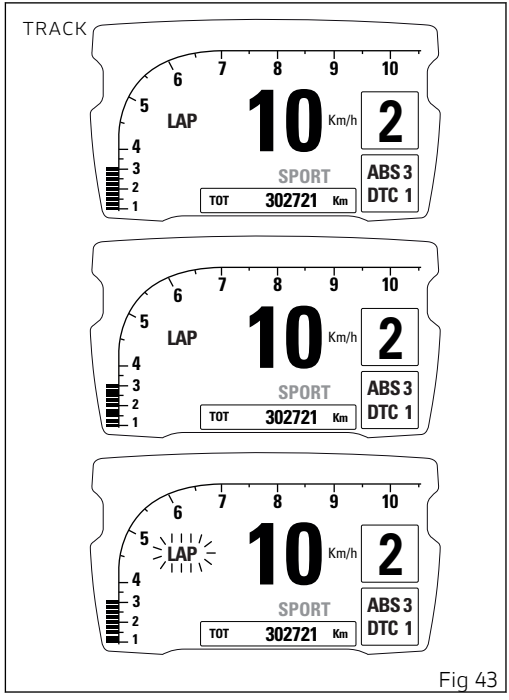


Fig 43

Infotainment

X Diavel 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).
In the FULL and CITY modes all Infotainment functions are displayed; in the CORE and TRACK modes none of these functions is displayed but it is nevertheless possible to answer/reject/terminate calls using the relevant function buttons.

Attention

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

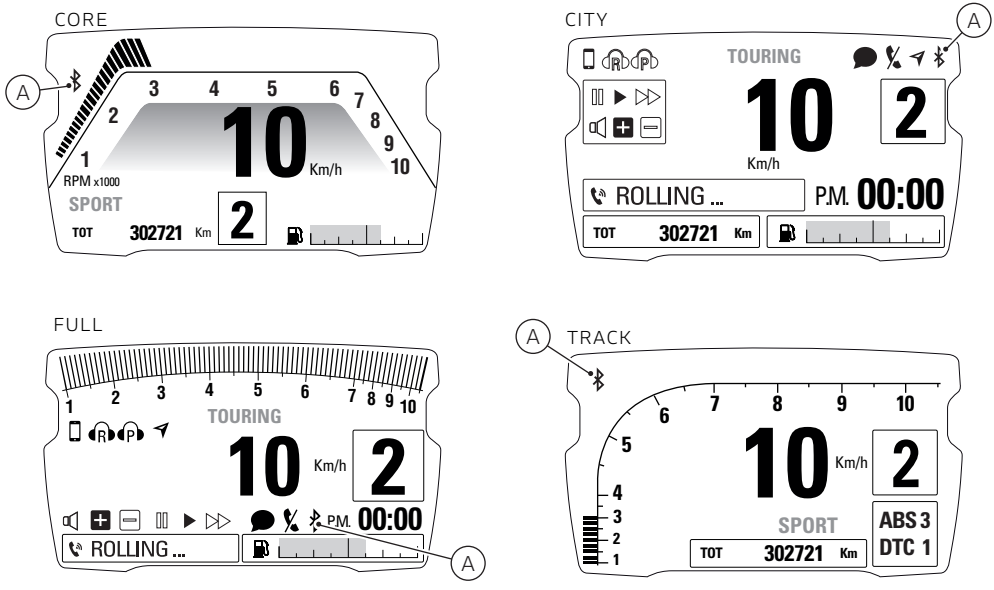

CORE
A
1
2
3
4
5
6
7
8
9
10
RPM x1000
10
Km/h
SPORT
TOT
302721
Km
2
CITY
A
TOURING
10
Km/h
2
ROLLING ...
P.M. 00:00
TOT
302721
Km
FULL
1
2
3
4
5
6
7
8
9
10
TOURING
10
Km/h
2
P.M. 00:00
ROLLING ...
A
A
TRACK
1
2
3
4
5
6
7
8
9
10
10
Km/h
2
SPORT
ABS 3
DTC 1
TOT
302721
Km

Fig 44

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 CORE layouts, when there is an incoming call, the instrument panel will not display the caller's name or number. The rider will hear the

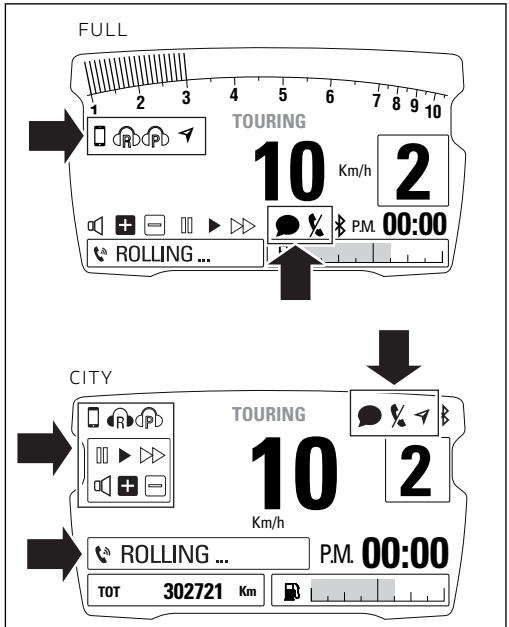


Fig 45

ringing tone through Bluetooth earphones upon any incoming call.
If there is an incoming call while the Player (E) 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 CITY layout, during 5 seconds after hang-up, the rectangle corresponding to the Recall function is activated to allow the recall. After this 5 second time, the rectangle for the recall function is disabled.
To activate the Recall function within the 5 seconds, press button (2).
In TRACK and CORE layouts, no recall function is provided.

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 (timed) (C). 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 (timed) (D). The number of unread messages is not displayed.

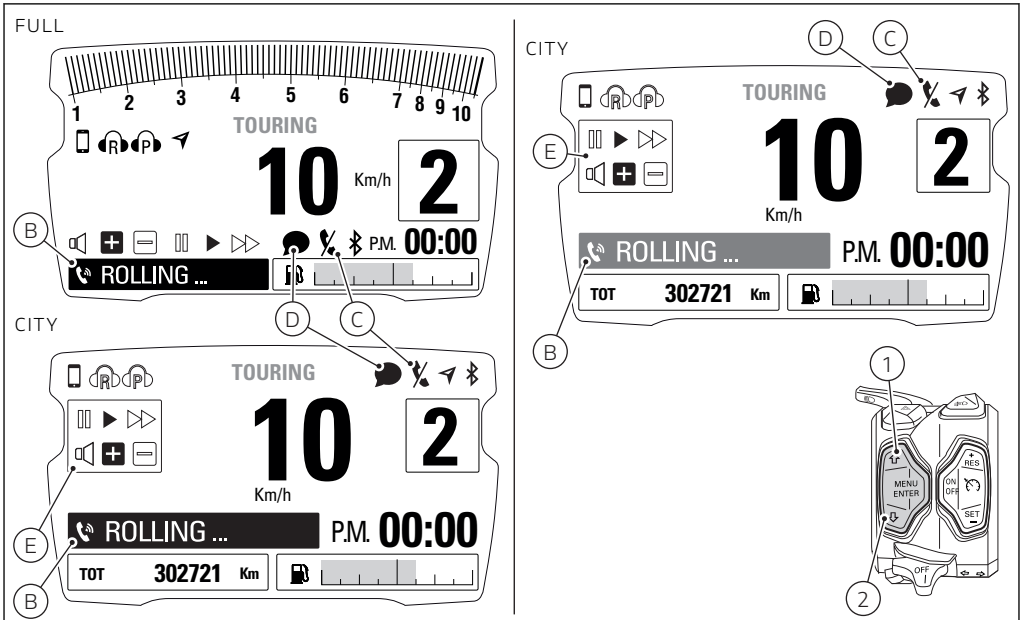

FULL
1 2 3 4 5 6 7 8 9 10
TOURING
10
Km/h
2
P.M. 00:00
ROLLING ...
B
D
C
CITY
TOURING
10
Km/h
2
ROLLING ...
P.M. 00:00
TOT 302721 Km
E
B
CITY
D
C
TOURING
10
Km/h
2
E
ROLLING ...
P.M. 00:00
TOT 302721 Km
B
1
MENU ENTER
RES
ON OFF
SET
OFF
2

Fig 46

Player

The Player can be activated in the FULL and CITY modes. If at least one Smartphone device is connected (blue icon on main screen), Menu 1 will include PLAYER OFF (F) option.
Only in the CITY display mode, press button (1) for 2 seconds to activate the Player, in correspondence of the PLAYER OFF item shown upon activation.
The instrument panel shows the PLAYER ON item in Menu 1. The Player graphics is activated for both FULL and CITY modes: dedicated control panel and track name (E). 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 automatically pauses the track being played and the message NOT AVAILABLE is displayed instead of the track name.

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 two seconds.
It is possible to skip to next track, pressing button (4): system will skip forward once every time button is pressed.
Press button (2) for two seconds to quit Player controls, although maintaining Player ON, in the current status.
The Player can be turned off by quitting the player control and pressing, within three seconds, button (1) for two seconds in correspondence of the PLAYER ON item: Menu 1 will show PLAYER OFF option.

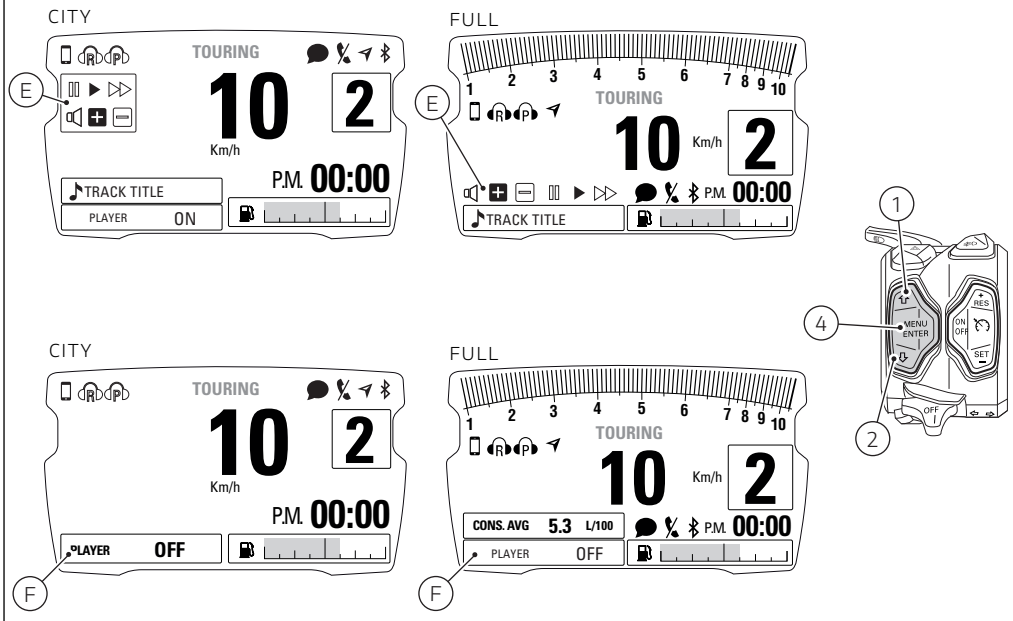

CITY
TOURING
10
Km/h
2
P.M. 00:00
TRACK TITLE
PLAYER ON
E
FULL
1 2 3 4 5 6 7 8 9 10
TOURING
10
Km/h
2
P.M. 00:00
TRACK TITLE
E
CITY
TOURING
10
Km/h
2
P.M. 00:00
PLAYER OFF
F
FULL
1 2 3 4 5 6 7 8 9 10
TOURING
10
Km/h
2
CONS. AVG 5.3 L/100
P.M. 00:00
PLAYER OFF
F
1
2
4
MENU ENTER
ON OFF
RES
SET
OFF

Fig 47

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

X Diavel is equipped with a system for maintaining the cruise speed: Ducati Cruise Control.

This function displays Cruise Control status and "target" speed.
The Cruise Control can be turned on/off by pressing the ON/OFF button (5). When the system is on, the Cruise Control light (A) on the instrument panel turns on.
Upon first activation, the Ducati Cruise Control system is in stand-by mode and is ready to receive the target speed value to be maintained automatically if the operating conditions are met (see below).
Considering that the TRACK, FULL and CITY layouts show the values for this function in a similar way to the CORE layout, the example shown depicts the function in CORE layout.

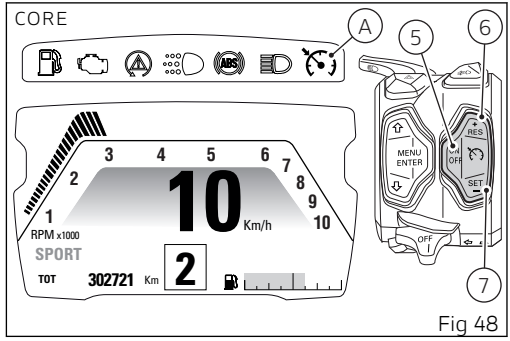


Fig 48

Once the system is on, it is possible to set the current speed as target speed by pressing the SET button (7). If no target speed had been previously set, it will be possible to set the current speed as target also by pressing the RES button (6) instead of button SET (7).
In this case, the system saves the vehicle current speed and keeps it without having to work on the twistgrip.
To confirm correct setting of cruise speed, the target speed is shown on the instrument panel for 5 seconds then followed by the SET icon.
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. Also in this case the instrument panel shows the target speed for 5 seconds.

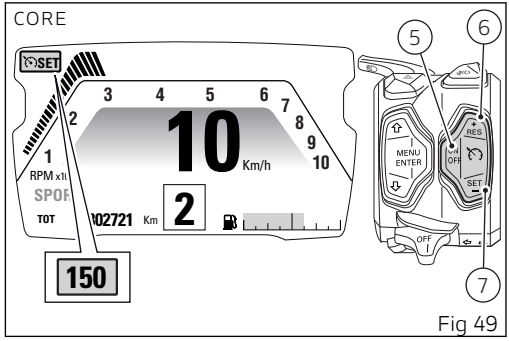


Fig 49

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 (0.62 mph).
By keeping the RES button (6) pressed, the target speed increases progressively.
By keeping the SET button (7) pressed, the target speed decreases progressively.
Each time the target speed is modified, this is shown for 5 seconds instead of the SET icon.

Important
In case of a long DTC (Traction Control) event, the Cruise Control will automatically turn off.

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 Ducati Cruise Control can be disabled as follows:

1) by pressing button (5);
2) by pulling the front brake lever;
3) by pressing the rear brake pedal;
4) by pulling the clutch lever.

Conditions 2-3-4 bring the system in stand-by mode: the Cruise Control light remains on.
Condition 1 brings the system in OFF condition: the Cruise Control is switched off.
The Ducati Cruise Control system controls the vehicle speed only between 50 Km/h (30 mph) and 200 Km/h (125 mph).

Assisted start (LAUNCH CONTROL - DPL)

This Function allows activating the assisted start function (called DPL - Ducati Power Launch).

By pressing button (12) it is possible to access the Launch Control menu only if the vehicle speed is ≤ (equal to or less than) 5 Km/h (3.1 mph).

In the Launch Control menu, it is possible to select the desired DPL level (1, 2, 3) by pressing buttons (1) and (2), and to set the selected level by keeping button (4) pressed for two seconds.

Note

If no change is made in this menu within ten seconds, the instrument panel will set DPL to OFF and go back to the previous screen.

Once the DPL level is set, the instrument panel shows the wait screen for two seconds: during this time, if you press button (4) the wait phase is interrupted and the instrument panel displays the main screen and sets the DPL to OFF.

Once the two seconds of wait screen are over, the instrument panel shows the "assisted start" screen.

After the assisted start, the instrument panel sets the DPL to OFF and shows the "main screen" again. The DPL is set to OFF by default by Ducati.

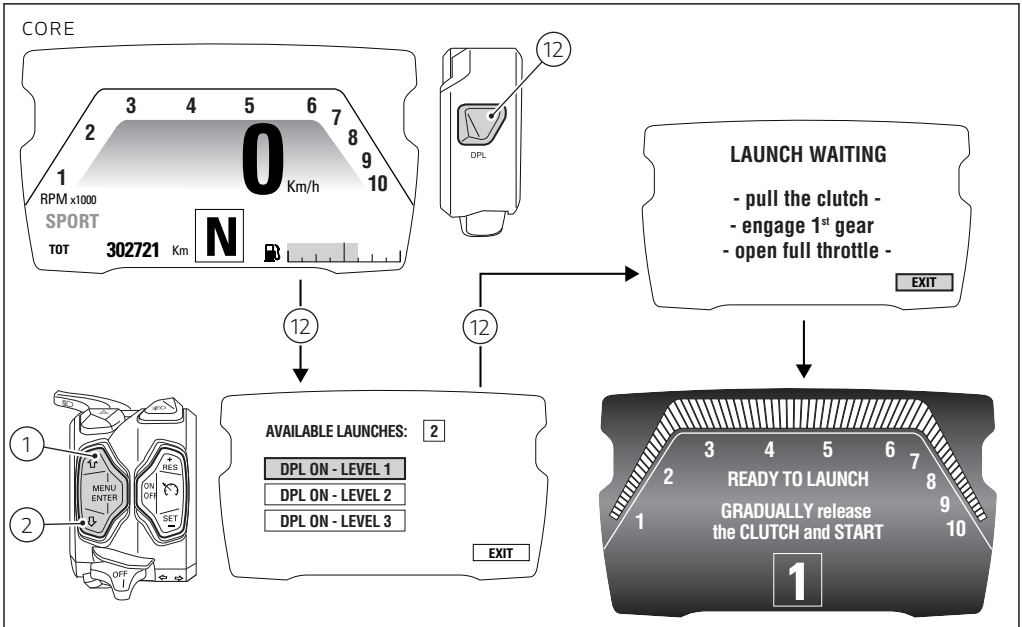

CORE
3
4
5
6
7
2
8
9
1
10
0
Km/h
RPM x1000
SPORT
TOT
302721
Km
N
12
DPL
LAUNCH WAITING
- pull the clutch -
- engage 1st gear
- open full throttle -
EXIT
12
12
1
2
MENU
ENTER
ON
OFF
RES
SET
OFF
AVAILABLE LAUNCHES: 2
DPL ON - LEVEL 1
DPL ON - LEVEL 2
DPL ON - LEVEL 3
EXIT
3
4
5
6
7
2
8
9
1
10
READY TO LAUNCH
GRADUALLY release
the CLUTCH and START
1

Fig 50

Note
If the DTC is set to "OFF", the DPL function can not be activated.

If the DTC is set to OFF and you press button (12), the instrument panel shows for five seconds the indication DTC OFF – DPL NOT AVAILABLE; when the five seconds are over, the instrument panel goes back to the main screen.

Note
If the instrument panel detects a control unit error when entering the DPL menu, regardless of the currently set display mode, it will show the blinking message LAUNCH CONTROL ERROR for three seconds and then again the main screen.

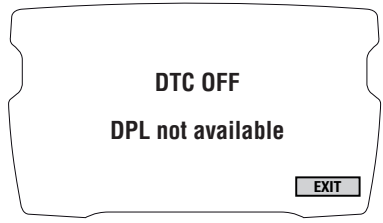


Fig 51



Fig 52

Note
If the available launches are finished, the instrument panel shows the message NO LAUNCHES AVAILABLE.



Fig 53

The Ducati Power Launch (DPL) helps the rider in the delicate sport starting phase from a standstill to control the power delivered by the vehicle.
The DPL system works with three intervention levels, each calibrated to offer a different start assist degree. The following table indicates the most suitable DPL intervention level depending on the various starting types. All levels are to be intended optimised for OEM (Original Equipment Manufactured) tyres.

DPL level	Performance	Use
1	High	Use focused on the best performance for very expert riders. The system allows the wheelie and the rear wheel slipping, but reduces the speed at which these two situations take place.
2	Medium	Use for expert riders. The system reduces the tendency to wheelie and rear wheel slipping, besides intervening considerably in case these two situations take place.
3	Medium	Use for all kinds of riders. The system minimises the tendency to wheelie and rear wheel slipping, besides intervening considerably in case these two situations take place.

Attention

The DPL system is to be used exclusively on straight and level paths, on optimal grip conditions of the road.
The DPL system is conceived to be used within a controlled environment or in a closed circuit. For safety reasons it must not be used in unsuitable places.

Starting procedure

The starting procedure basically consists of two phases:

- The first: with completely released clutch so that the torque transmitted to the ground depends on the clutch position and slipping;
- The second: with clutch not released so that the torque transmitted to the ground depends on the torque delivered by the engine.

The DPL system helps the rider to start from a standstill and during the first phase by automatically adjusting the torque delivered by the engine to keep the engine rpm at the ideal value to start. This allows the rider to concentrate only on the clutch release that must be progressive and "smooth" instead of fast or abruptly. The engine torque is adjusted also in the second phase, by maximising the delivered power and limiting the vehicle wheeling or rear wheel slipping.
To preserve the clutch, the DPL system calculates in real time and shows in the dedicated menu on the instrument panel the number of starts that can be performed consecutively by decreasing it by one unit every time a start is completed. The DPL system increases the value by one unit according to the distance covered by the vehicle and the time during which the vehicle engine was on and off.
The DPL system allows performing other assisted starts only when the number of remaining starts is higher than zero.

Attention

Using the DPL system could reduce the useful life of the engine and transmission mechanical parts. The DPL system should be used only when the engine has reached the operating temperature.

To perform an assisted start with the DPL, the rider must first of all set the vehicle in the following condition:

- vehicle speed at zero;
- vertical position;
- engine on;
- DTC set to ON.

If the count of the residual assisted starts is above zero, the rider can select on the instrument panel the desired DPL level by accessing the DPL level menu by pressing button (12).
After selecting the level, the rider must pull the clutch, engage the first gear and fully open the throttle twistgrip.

If all operations indicated above have been performed, the DPL system will show a confirmation screen on the instrument panel indicating that the system is ready to start.
The rider must then release the clutch progressively by keeping the throttle twistgrip fully open.
When the vehicle speed exceeds 20 km/h (12.4 mph), the instrument panel shows the standard screen while keeping the indication of the selected DPL system level for the entire duration of the start phase.

The DPL system is switched off when one of the following conditions is met after completely releasing the clutch:

- vehicle speed higher than 120 km/h (74.6 mph);
- third gear engaged.

The DPL system is switched off also if, after releasing the clutch, the rider decides to interrupt the start phase by closing the throttle and bringing the vehicle speed under 5 km/h (3.1 mph).

Attention
The system manages the power delivered by the engine but not the clutch lever release that remains under the control of the rider.
During the starting phase, an abrupt release of the clutch will prevent an optimal behaviour of the vehicle. Likewise, a prolonged activation of the clutch may overheat and thus damage it.

Attention
The rider position on the bike may influence the system behaviour.

Tips on how to select the intervention level

If level 3 is set, the DPL system intervenes by reducing the tendency to wheelie or rear wheel slipping during the starting phase. Levels 2 and 1 provide a limited intervention of the system.

To identify the DPL level most suitable to your riding style we recommend to activate the system, select level 3 and perform a start to become familiar with the system. Then we recommend to try levels 2 and 1 in sequence until finding the best intervention.

If non-OEM tyres of a different size class are used or if the tyre size differs significantly from the original tyres, it may be that the system operation is compromised.

Attention

The DPL is a rider assist system. 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.

Service indication (SERVICE)

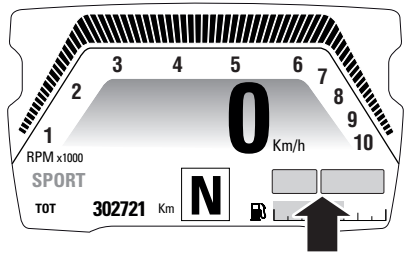
This indication shows the user that the motorcycle is due for service and must be taken to a Ducati Authorised Service Centre.
The service warning indication can be reset only by the Authorised Ducati Service Centre during servicing.
There are 3 types of scheduled maintenance interventions:

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

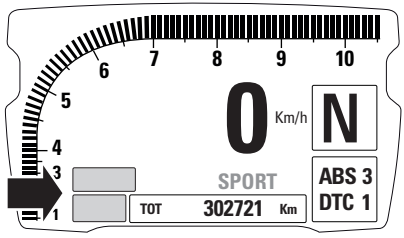
Attention

The ANNUAL SERVICE function is available (active) only if the date has been set.

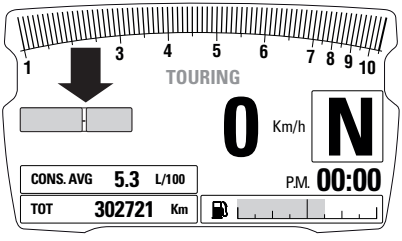
CORE



TRACK



FULL



CITY

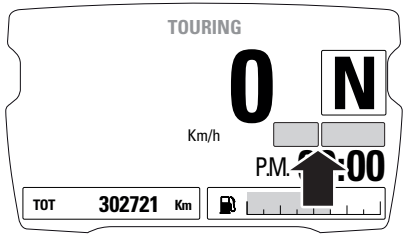


Fig 54

OIL SERVICE zero warning

The first service warning is the Oil Service (OIL) 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.

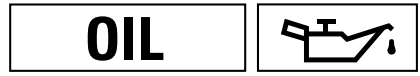


Fig 55

OIL SERVICE or ANNUAL SERVICE 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 ANNUAL SERVICE (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.

To know exactly the kilometres missing until the service threshold or maintenance date, it is possible to access the Setting menu and select the "INFO SERVICE" function page 193.

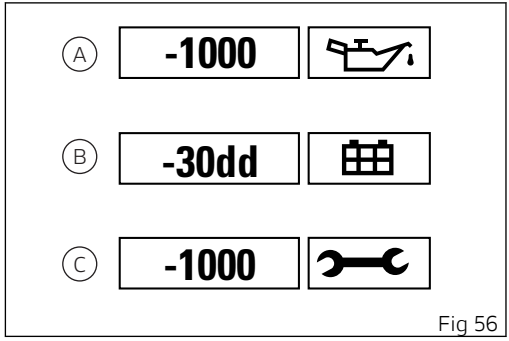


Fig 56

OIL SERVICE or ANNUAL SERVICE or DESMO SERVICE indication

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

- Oil Service (A):
- Annual Service (B);
- Desmo Service (C).

To know the kilometres missing until the service threshold or maintenance date, access the Setting menu and select the "INFO SERVICE" function page 193.
Required service warning is triggered and displayed in red until "Reset" by the Ducati authorised service centre, during maintenance.

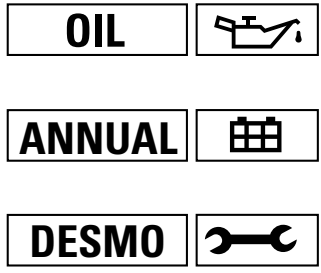


Fig 57

Warnings/Alarms (WARNING)

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.

Attention

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.

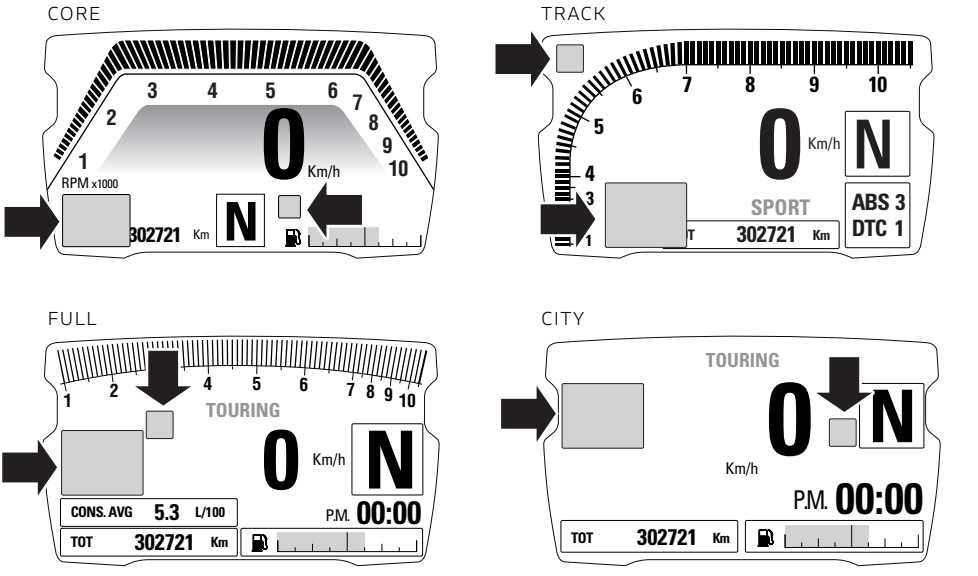

CORE
1
2
3
4
5
6
7
8
9
10
RPM x1000
0
Km/h
302721
Km
N
TRACK
5
6
7
8
9
10
4
3
1
0
Km/h
N
SPORT
ABS 3
DTC 1
T
302721
Km
FULL
1
2
4
5
6
7
8
9
10
TOURING
0
Km/h
N
CONS. AVG
5.3
L/100
P.M.
00:00
TOT
302721
Km
CITY
TOURING
0
N
Km/h
P.M.
00:00
TOT
302721
Km

Fig 58

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).

Attention

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



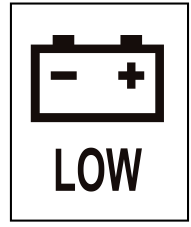


Fig 59

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 approx. 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.



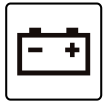


Fig 60

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.

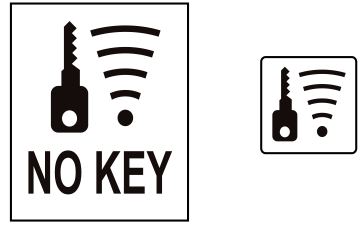


Fig 61

"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 233.

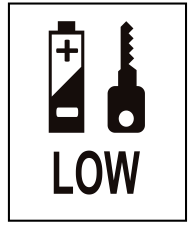




Fig 62

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 "DATESET".





Fig 63

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.

Attention

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.

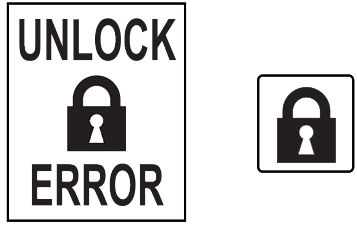


Fig 64

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 (B) or the Generic Error light (A).

Attention

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

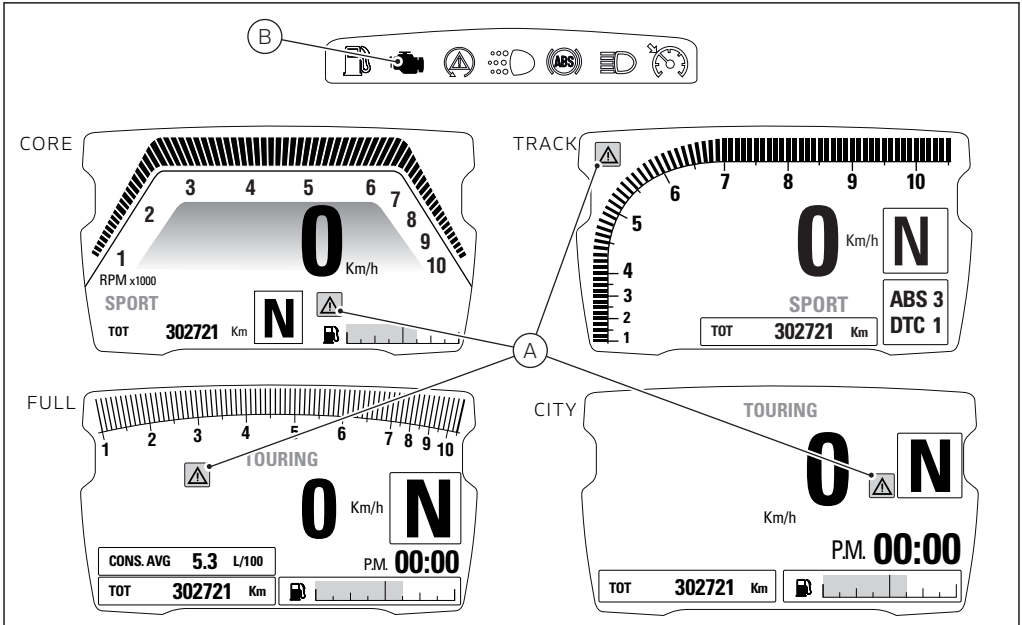

B
CORE
RPM x1000
SPORT
TOT 302721 Km
N
0 Km/h
A
TRACK
0 Km/h
N
SPORT
TOT 302721 Km
ABS 3
DTC 1
FULL
TOURING
0 Km/h
N
CONS. AVG 5.3 L/100
TOT 302721 Km
P.M. 00:00
CITY
TOURING
0 Km/h
N
P.M. 00:00
TOT 302721 Km

Fig 65

Viewing side stand status

The instrument panel shows the 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.

Note

With side stand down and gear engaged it is not possible to start the motorcycle. If you start with gearbox in neutral and then engage a gear with side stand down, the motorcycle turns off.

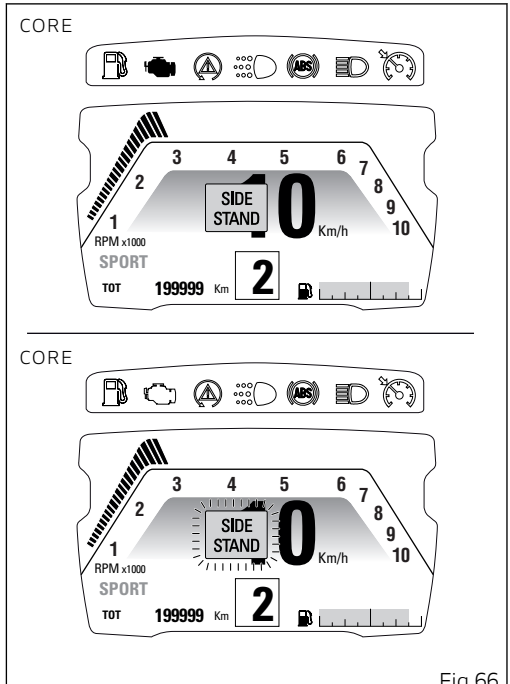


Fig 66

Light mode indication (DRL)

The instrument panel indicates if the DRL control is set to AUTO or MANUAL by showing the relevant icon.

When the DRL lights are in AUTO mode, the instrument panel shows the green icon with letter "A".

When the DRL lights are in MANUAL mode, the instrument panel shows the amber icon with letter "M".

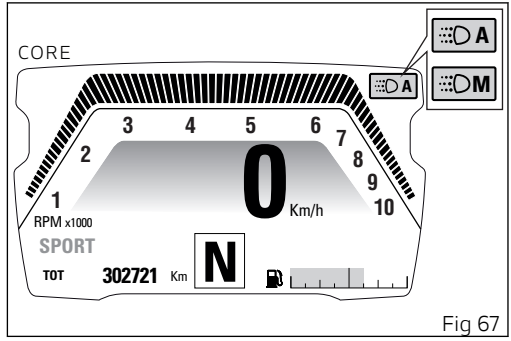


Fig 67

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) 5 km/h (3.1 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
- LAP
- PIN CODE
- DRL CONTROL (active only if the DRL function is available)
- BACK LIGHT
- DATE SET
- CLOCK SET
- INFO SERVICE
- UNIT SETTING
- BLUETOOTH (only if the Bluetooth module is available)
- INFO
  - BATTERY
  - RPM
  - BLUETOOTH version (active only for X Diavel S)

Important

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

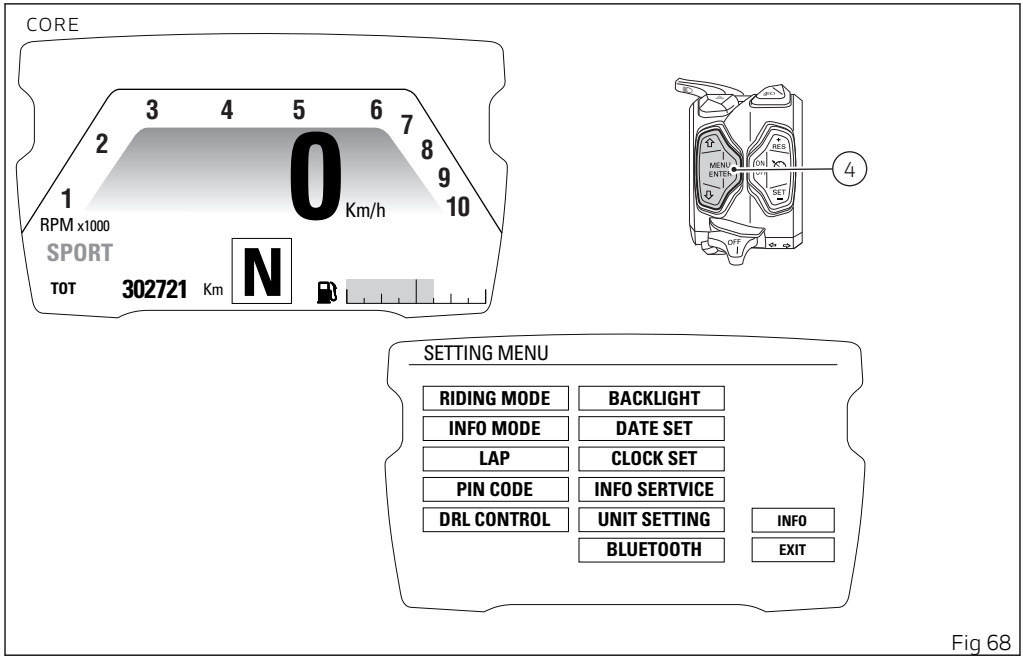

CORE
1
2
3
4
5
6
7
8
9
10
0
Km/h
RPM x1000
SPORT
TOT
302721
Km
N
4
SETTING MENU
RIDING MODE
INFO MODE
LAP
PIN CODE
DRL CONTROL
BACKLIGHT
DATE SET
CLOCK SET
INFO SERTVICE
UNIT SETTING
BLUETOOTH
INFO
EXIT

Fig 68

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

The functions 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)
  - ABS setting (ABS)
  - Reset to default settings (DEFAULT)
- Display mode setting (INFO MODE)
- LAP (LAP activation/display/deletion)
- PIN CODE (enter/change)
- DRL CONTROL (AUTO/ MANUAL setting) (active only if the DRL lights are available)
- Display backlighting (BACK LIGHT)
- Date setting (DATE SET)
- Clock setting (CLOCK SET)
- Service information indication (INFO SERVICE): distance or time until next Oil Service, Desmo Service and Annual Service
- Unit setting (Speed - Temperature - Fuel consumption) (UNITS SETTING)
- Bluetooth setting (pairing/deleting any paired devices) (active only if Bluetooth is available).

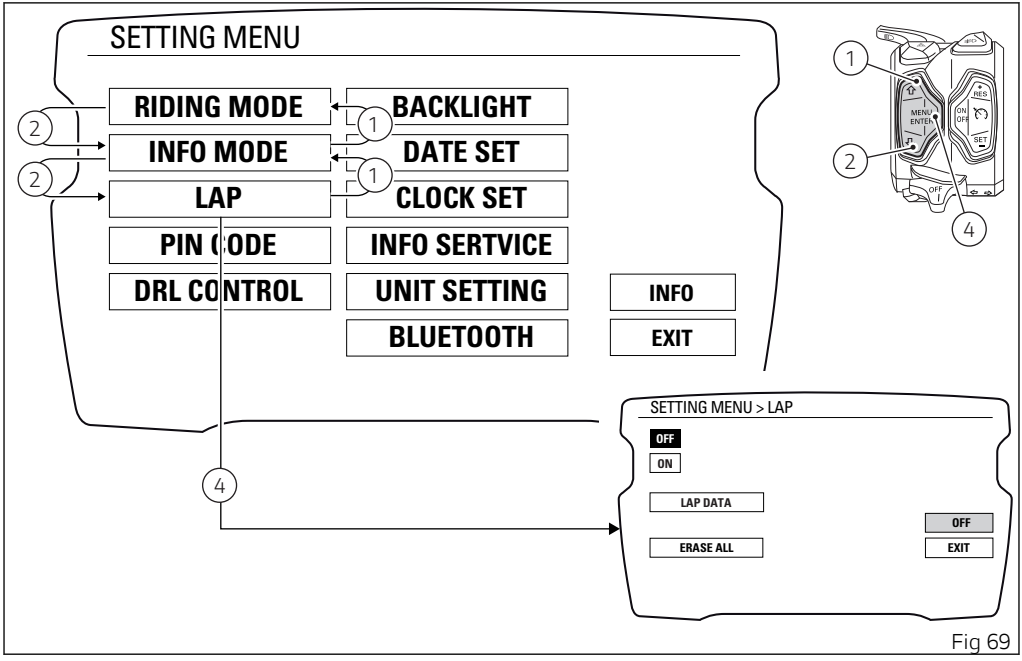

SETTING MENU
RIDING MODE
INFO MODE
LAP
PIN CODE
DRL CONTROL
BACKLIGHT
DATE SET
CLOCK SET
INFO SERTVICE
UNIT SETTING
BLUETOOTH
INFO
EXIT
1
2
2
1
1
2
4
MENU ENTER
RES
ON OFF
SET
OFF
SETTING MENU > LAP
OFF
ON
LAP DATA
ERASE ALL
OFF
EXIT
4

Fig 69

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), 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 quit the sub-menu and go back to previous page.

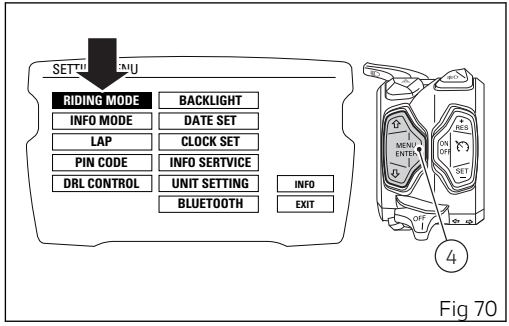


Fig 70

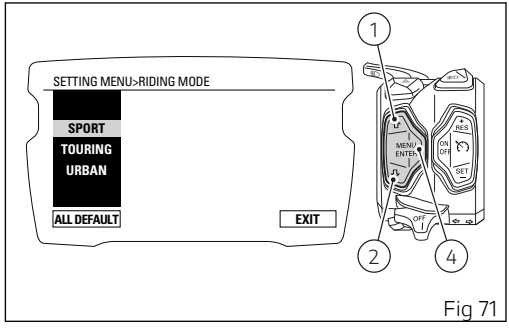


Fig 71

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

- ENGINE
- DTC
- ABS

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.

Attention
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 or ALL DEFAULT function to restore factory settings.

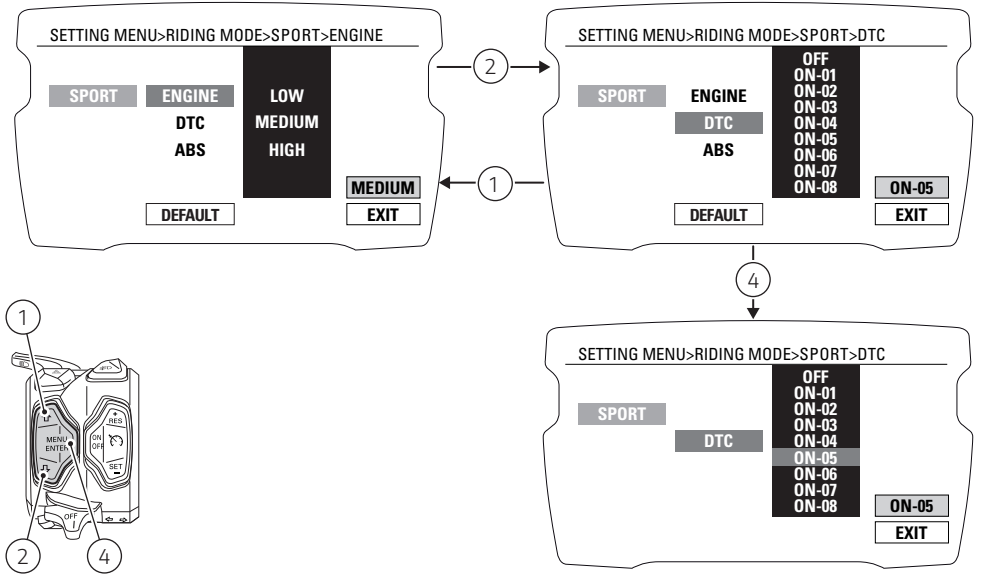

SETTING MENU>RIDING MODE>SPORT>ENGINE
SPORT
ENGINE
DTC
ABS
LOW
MEDIUM
HIGH
DEFAULT
MEDIUM
EXIT
2
1
SETTING MENU>RIDING MODE>SPORT>DTC
SPORT
ENGINE
DTC
ABS
OFF
ON-01
ON-02
ON-03
ON-04
ON-05
ON-06
ON-07
ON-08
DEFAULT
ON-05
EXIT
4
SETTING MENU>RIDING MODE>SPORT>DTC
SPORT
DTC
OFF
ON-01
ON-02
ON-03
ON-04
ON-05
ON-06
ON-07
ON-08
ON-05
EXIT
1
2
4

Fig 72

Customizing the Riding Mode: engine adjustment

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, or URBAN) 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).

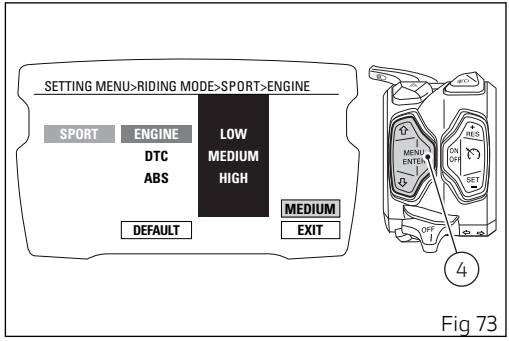


Fig 73

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

- LOW
- MEDIUM
- HIGH

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).

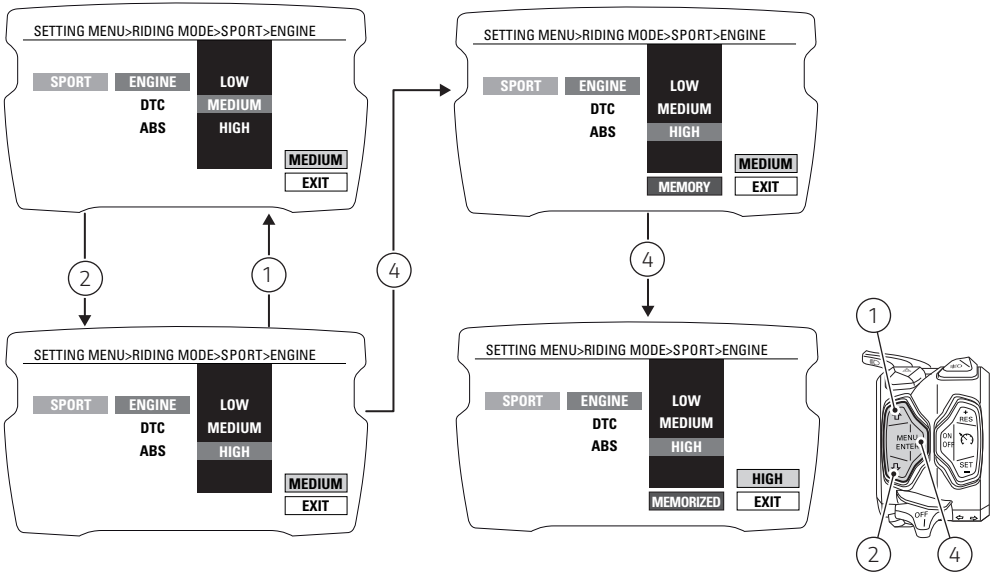

SETTING MENU>RIDING MODE>SPORT>ENGINE
SPORT
ENGINE
DTC
ABS
LOW
MEDIUM
HIGH
MEDIUM
EXIT
SETTING MENU>RIDING MODE>SPORT>ENGINE
SPORT
ENGINE
DTC
ABS
LOW
MEDIUM
HIGH
MEDIUM
EXIT
SETTING MENU>RIDING MODE>SPORT>ENGINE
SPORT
ENGINE
DTC
ABS
LOW
MEDIUM
HIGH
MEMORY
MEDIUM
EXIT
SETTING MENU>RIDING MODE>SPORT>ENGINE
SPORT
ENGINE
DTC
ABS
LOW
MEDIUM
HIGH
MEMORIZED
HIGH
EXIT
1
2
4
4
1
2
4

Fig 74

Customizing the Riding Mode: setting the DTC level

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, or URBAN) 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).

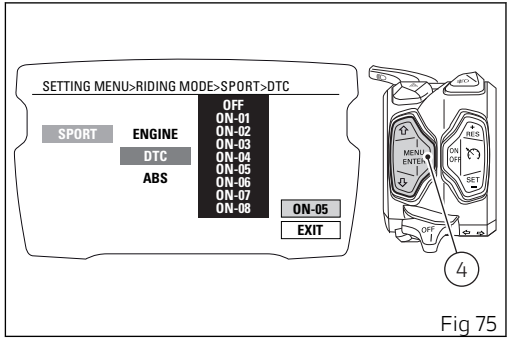


Fig 75

When entering the function, the currently set DTC level or status is indicated on the right (above the word EXIT) (e.g.: ON - 05, i.e. level 05).
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).

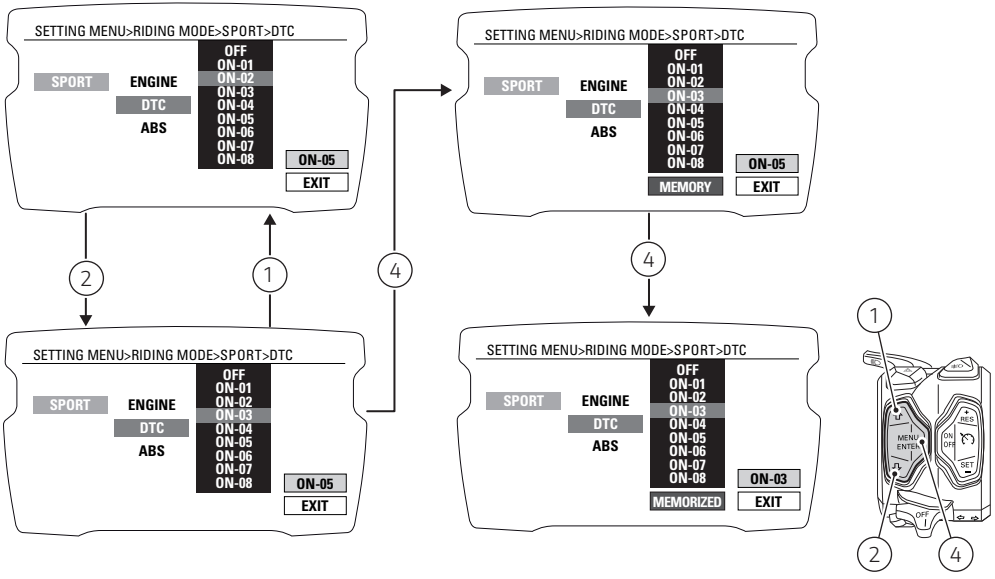

SETTING MENU>RIDING MODE>SPORT>DTC
SPORT
ENGINE
DTC
ABS
OFF
ON-01
ON-02
ON-03
ON-04
ON-05
ON-06
ON-07
ON-08
ON-05
EXIT
MEMORY
MEMORIZED
ON-03
1
2
4
MENU ENTER
RES
SET
OFF

Fig 76

Customizing the Riding Mode: ABS adjustment

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, or URBAN) 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).

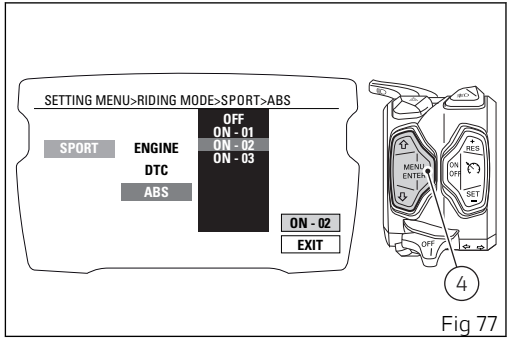


Fig 77

When entering the function, the currently set ABS level or status is indicated on the right (above the word EXIT) (e.g.: ON - 03, i.e. level 03).
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 can require up to 6 seconds.

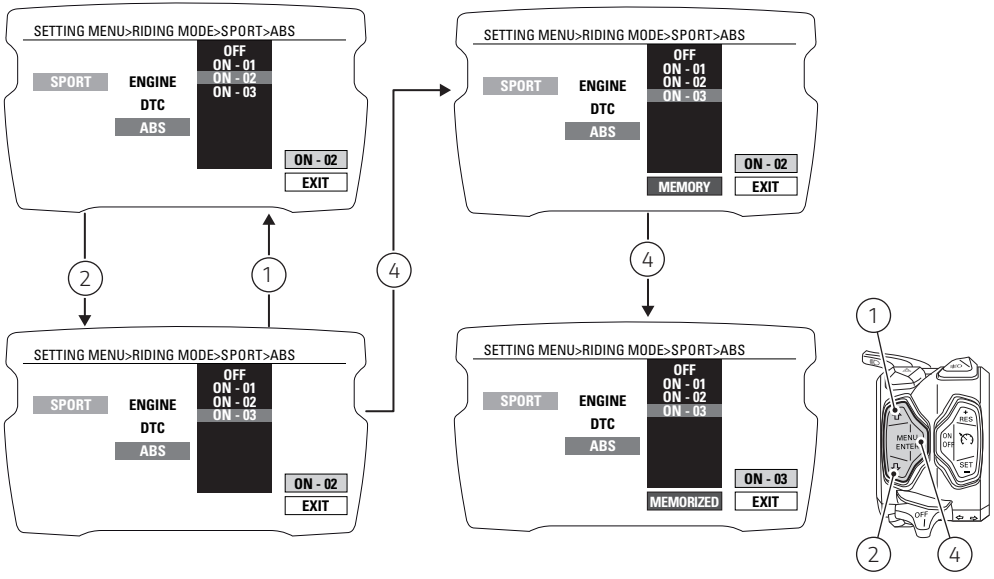

SETTING MENU>RIDING MODE>SPORT>ABS
SPORT
ENGINE
DTC
ABS
OFF
ON - 01
ON - 02
ON - 03
ON - 02
EXIT
SETTING MENU>RIDING MODE>SPORT>ABS
SPORT
ENGINE
DTC
ABS
OFF
ON - 01
ON - 02
ON - 03
MEMORY
ON - 02
EXIT
SETTING MENU>RIDING MODE>SPORT>ABS
SPORT
ENGINE
DTC
ABS
OFF
ON - 01
ON - 02
ON - 03
ON - 02
EXIT
SETTING MENU>RIDING MODE>SPORT>ABS
SPORT
ENGINE
DTC
ABS
OFF
ON - 01
ON - 02
ON - 03
MEMORIZED
ON - 03
EXIT
1
2
4
4
1
2
4

Fig 78

Customising Riding Mode: restore 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, or URBAN) 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.

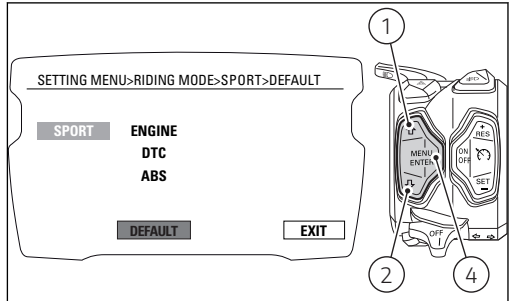


Fig 79

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

Note
If the DEFAULT option cannot be selected, it means that all parameters of the riding mode are already in the "Default" condition.

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.

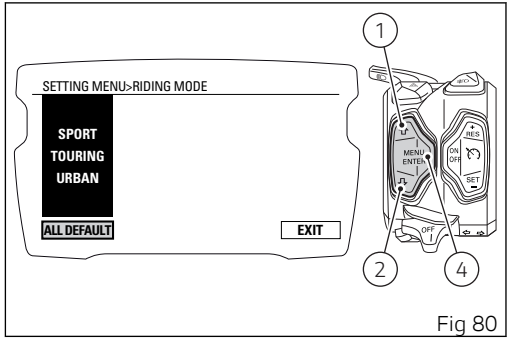


Fig 80

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: TRACK, FULL, CITY and CORE.
The default mode set by Ducati is CORE.

It is possible to select a mode different from the set one.
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).

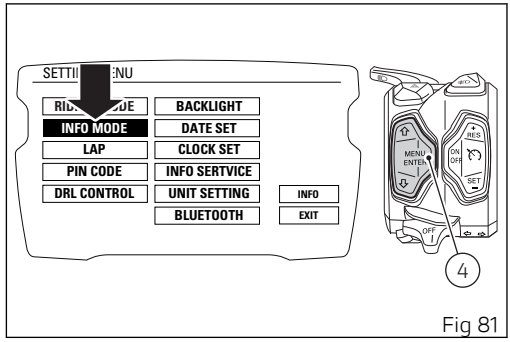


Fig 81

Enter the INFO MODE menu.
To select a layout, 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.

By selecting DEFAULT, the display mode of all Riding modes becomes the CORE mode.
By selecting RIDING MODE, the display mode becomes:

- the TRACK one for the SPORT Riding mode;
- the FULL one for the TOURING Riding mode;
- the CITY one for the URBAN Riding mode.

By selecting TRACK, the display mode of all Riding modes becomes the TRACK mode.
By selecting FULL, the display mode of all Riding modes becomes the FULL mode.
By selecting CITY, the display mode of all Riding modes becomes the CITY mode.

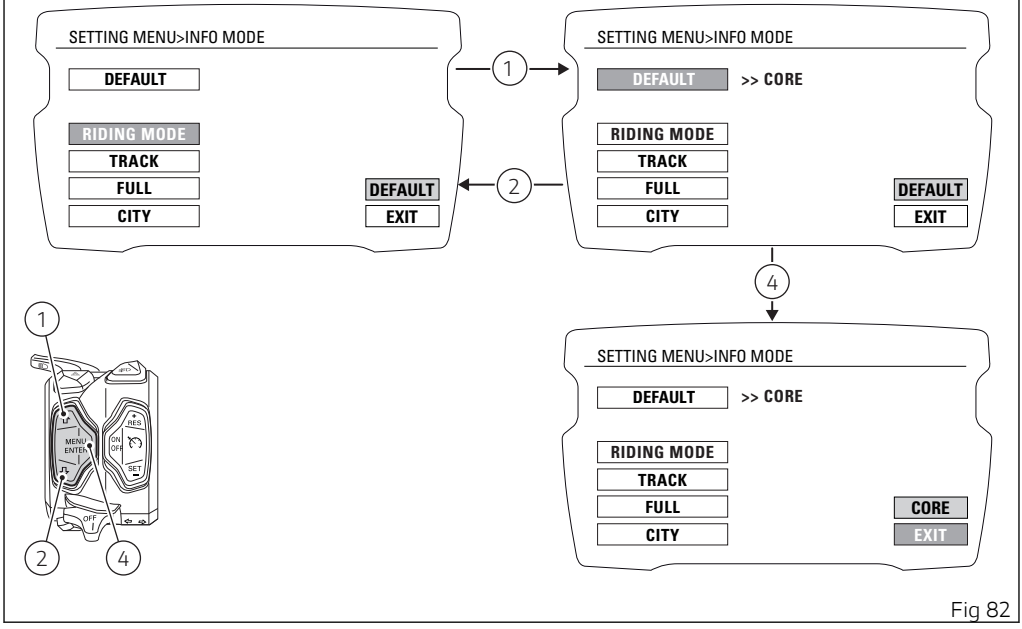

SETTING MENU>INFO MODE
DEFAULT
RIDING MODE
TRACK
FULL
CITY
DEFAULT
EXIT
1
2
SETTING MENU>INFO MODE
DEFAULT
>> CORE
RIDING MODE
TRACK
FULL
CITY
DEFAULT
EXIT
4
SETTING MENU>INFO MODE
DEFAULT
>> CORE
RIDING MODE
TRACK
FULL
CITY
CORE
EXIT
MENU ENTER
ON OFF
RES
SET
OFF
1
2
4

Fig 82

Light mode setting (DRL)

This function, active only if the DRL is available, allows the user to choose the DRL status: AUTO or MANUAL.
You enter the Setting Menu. Select "DRL CONTROL" option, by pressing button (1) or (2). Once function is highlighted, press button (4).
Enter the "DRL CONTROL" menu.

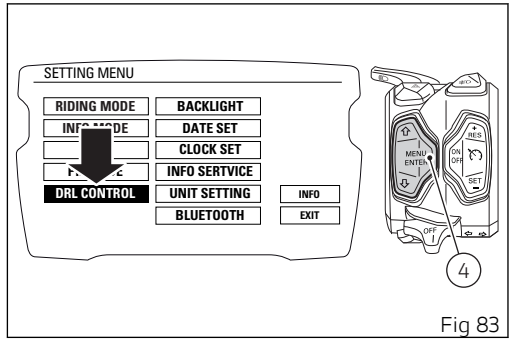


Fig 83

When entering the function on the left, the display will show the DRL settings: AUTO, MANUAL whereas on the right (above the word EXIT) the currently set mode.
Press buttons (1) and (2) to highlight the available DRL status: in particular, use button (2) to highlight the following item and button (1) to highlight the previous item. Once the desired mode is selected, press button (4) to confirm. The instrument panel activates the selected mode and highlights the corresponding name.
When choosing the AUTO mode of the DRL lights, the high and/or low beams are automatically switched from the DAY mode to the NIGHT mode and vice versa according to the ambient light.
To exit the menu and go back to previous page, select EXIT and press button (4).

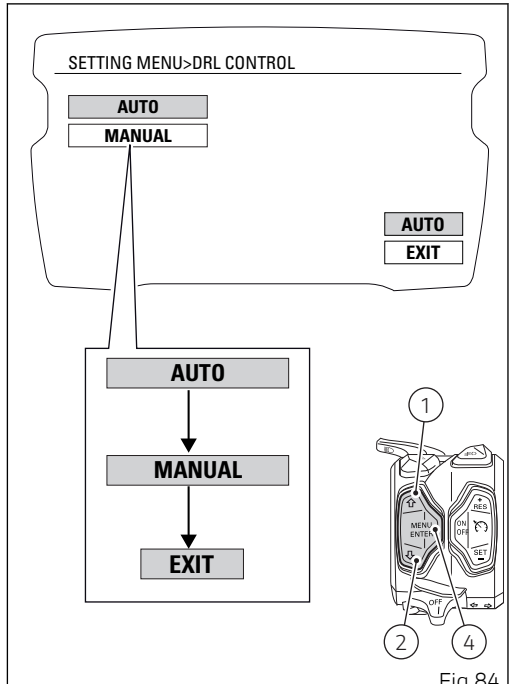


Fig 84

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.

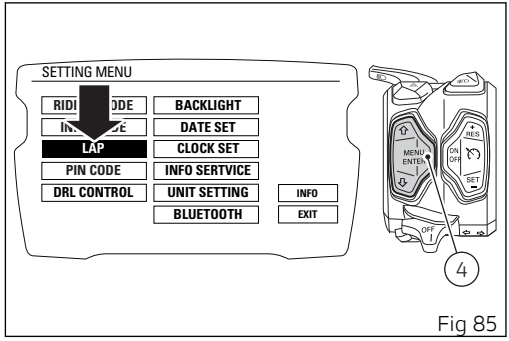


Fig 85

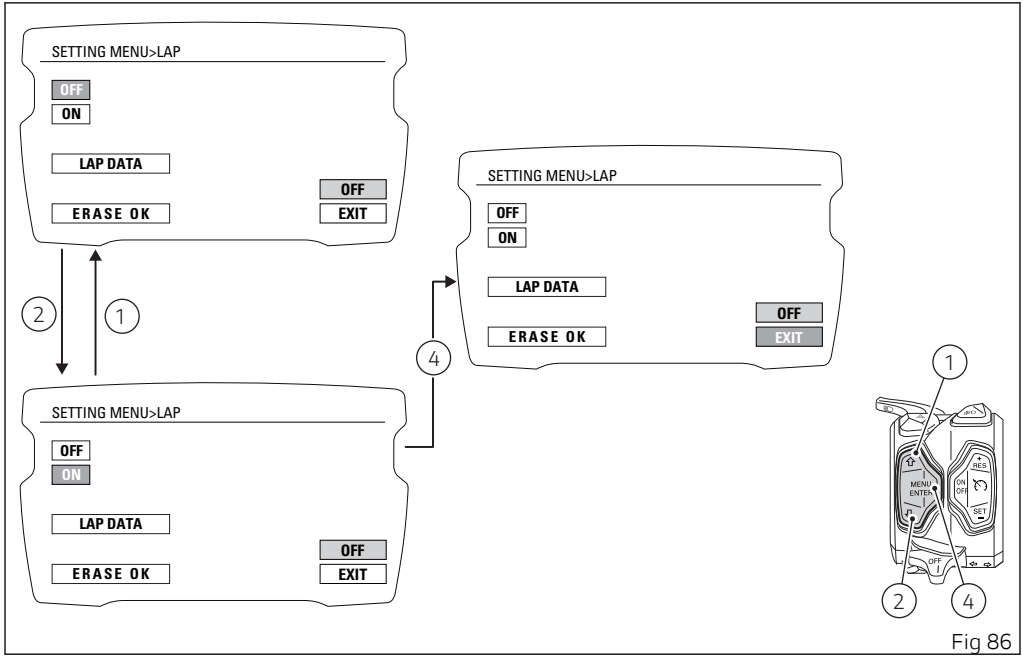

SETTING MENU>LAP
OFF
ON
LAP DATA
ERASE OK
OFF
EXIT
2
1
SETTING MENU>LAP
OFF
ON
LAP DATA
ERASE OK
OFF
EXIT
4
SETTING MENU>LAP
OFF
ON
LAP DATA
ERASE OK
OFF
EXIT
1
2
4

Fig 86

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 = -----.

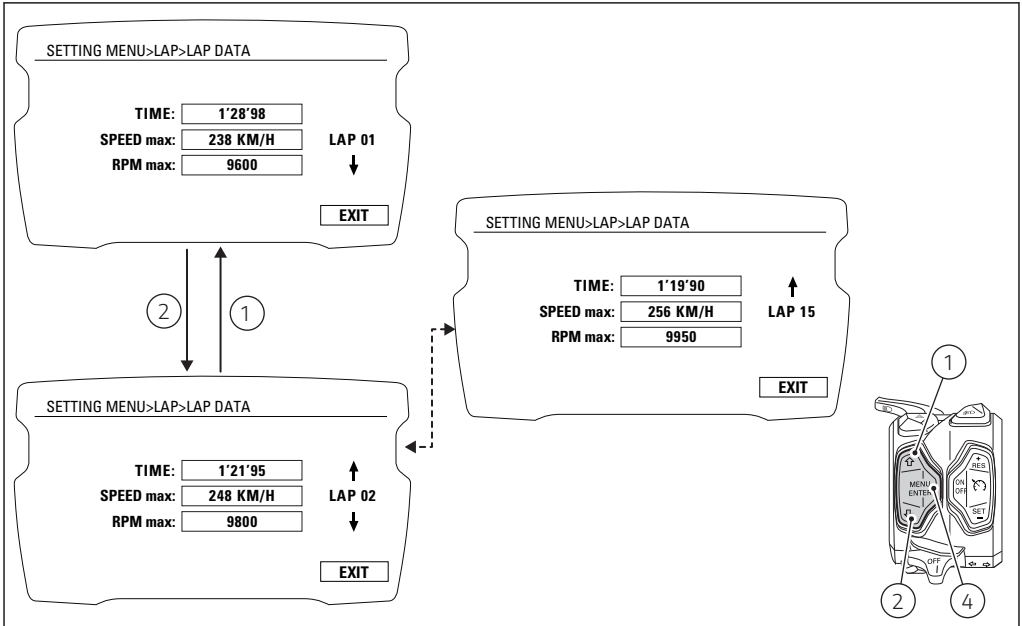

SETTING MENU>LAP>LAP DATA
TIME: 1'28'98
SPEED max: 238 KM/H
RPM max: 9600
LAP 01
EXIT
2
1
SETTING MENU>LAP>LAP DATA
TIME: 1'21'95
SPEED max: 248 KM/H
RPM max: 9800
LAP 02
EXIT
SETTING MENU>LAP>LAP DATA
TIME: 1'19'90
SPEED max: 256 KM/H
RPM max: 9950
LAP 15
EXIT
1
MENU ENTER
RES
ON OFF
SET
OFF
2
4

Fig 87

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.

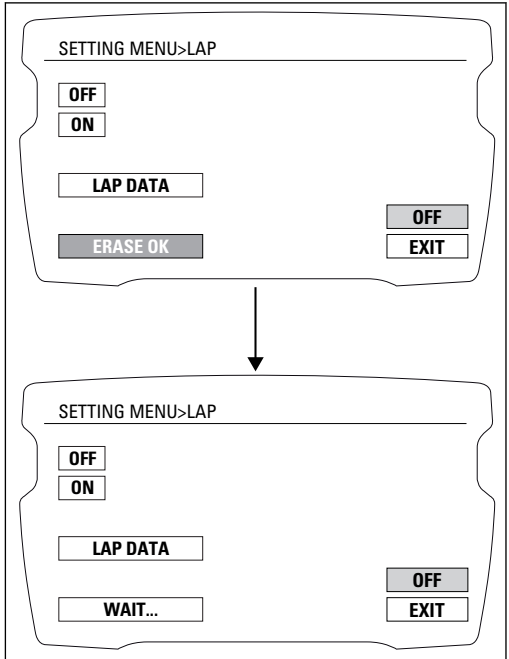


Fig 88

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).

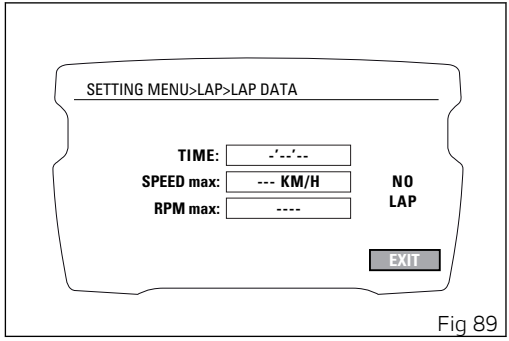


Fig 89

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 CODE" procedure.
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 238.

Attention

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.

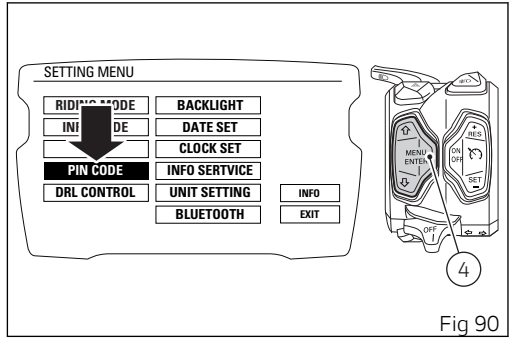


Fig 90

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:

1) 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.

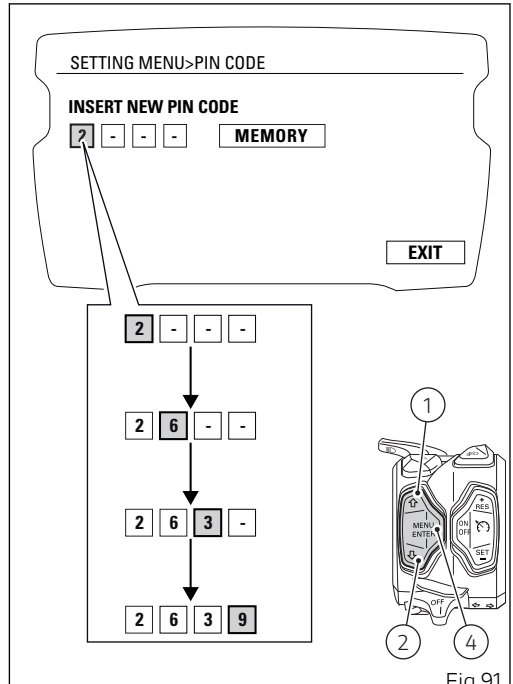


Fig 91

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).

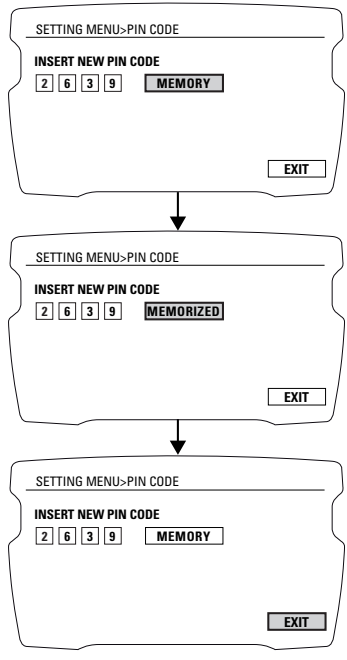


Fig 92

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:

1) 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:

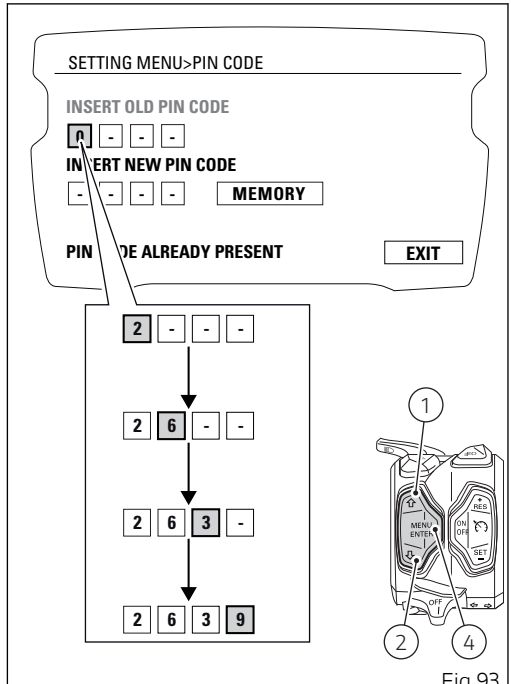


Fig 93

- 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.

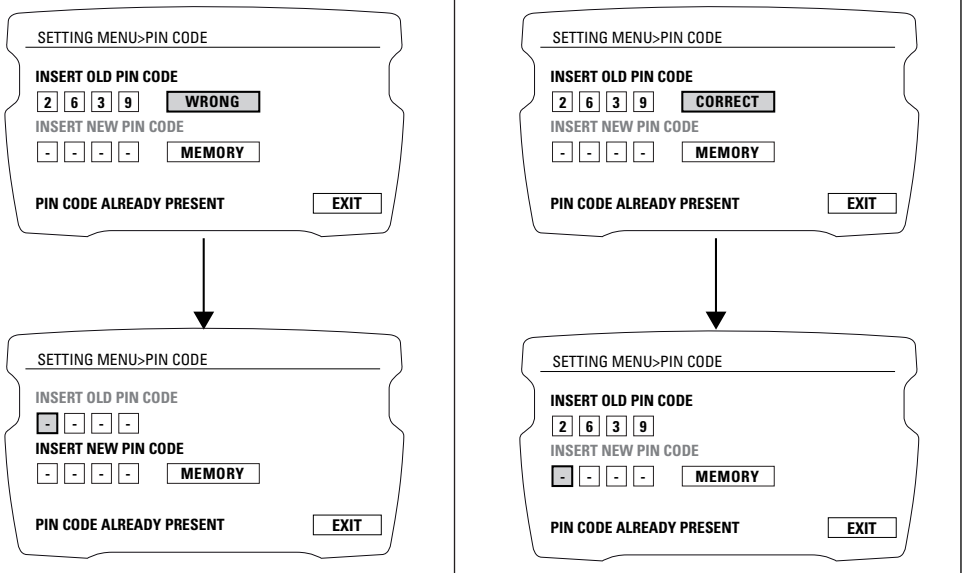

SETTING MENU>PIN CODE
INSERT OLD PIN CODE
2 6 3 9
WRONG
INSERT NEW PIN CODE
- - - -
MEMORY
PIN CODE ALREADY PRESENT
EXIT
SETTING MENU>PIN CODE
INSERT OLD PIN CODE
- - - -
INSERT NEW PIN CODE
- - - -
MEMORY
PIN CODE ALREADY PRESENT
EXIT
SETTING MENU>PIN CODE
INSERT OLD PIN CODE
2 6 3 9
CORRECT
INSERT NEW PIN CODE
- - - -
MEMORY
PIN CODE ALREADY PRESENT
EXIT
SETTING MENU>PIN CODE
INSERT OLD PIN CODE
2 6 3 9
INSERT NEW PIN CODE
- - - -
MEMORY
PIN CODE ALREADY PRESENT
EXIT

Fig 94

Entering the "new" code:

1) 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.

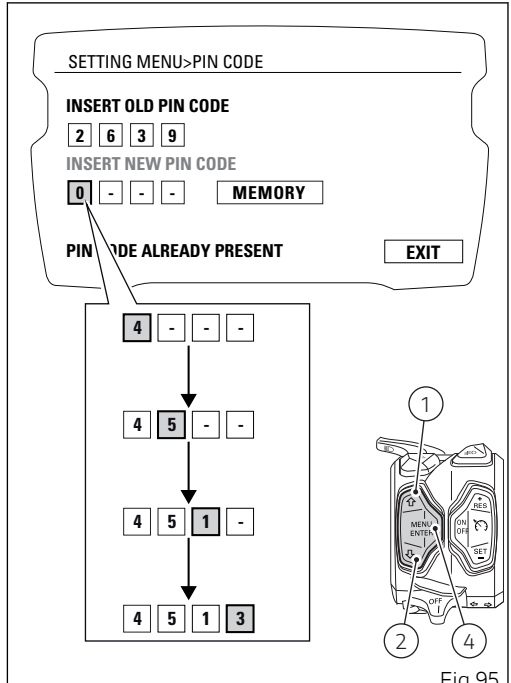


Fig 95

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.

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

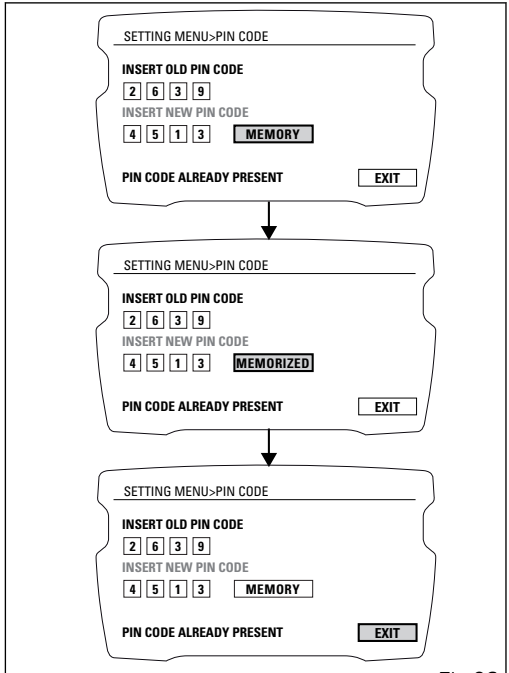


Fig 96

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.

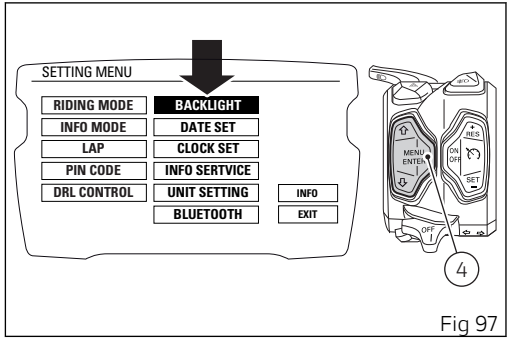


Fig 97

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

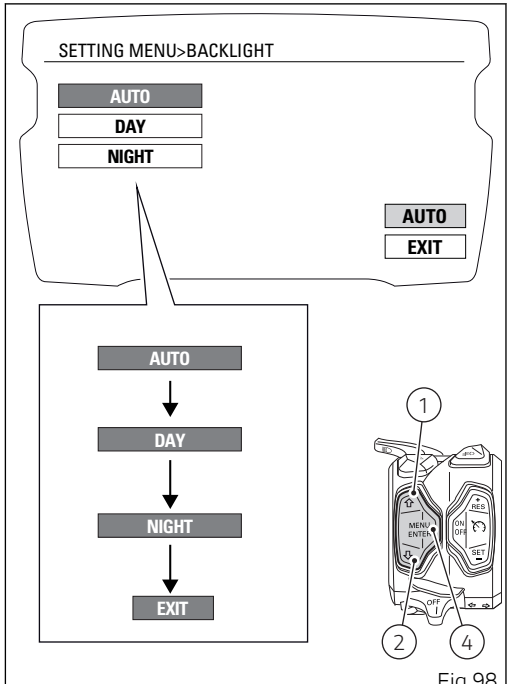


Fig 98

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 date is reset and must be set again.

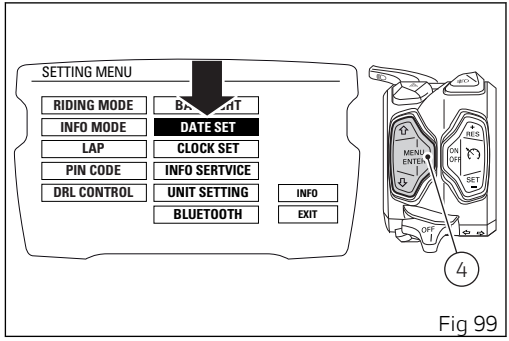


Fig 99

When entering the function, available settings are indicated on the left: YEAR, MONTH, DAY, while current date is indicated on the right (e.g.: 2014/08/02).

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.

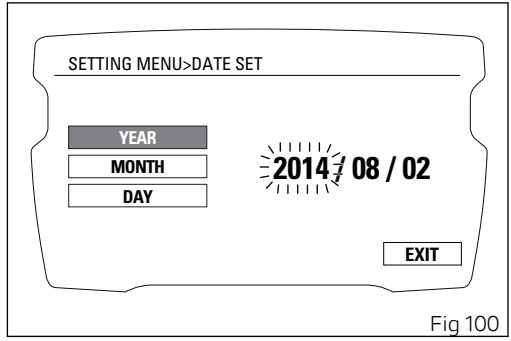


Fig 100

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.

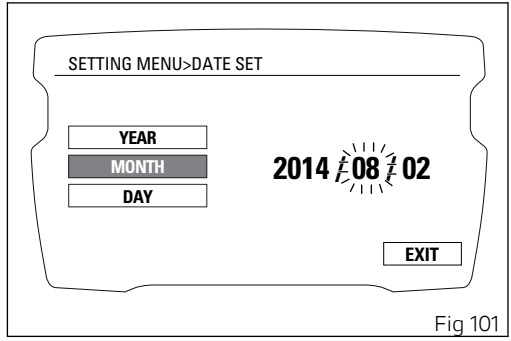


Fig 101

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, ... 31, 01.
Once you reach the value to be set, press button (4) and the set day will stop flashing.

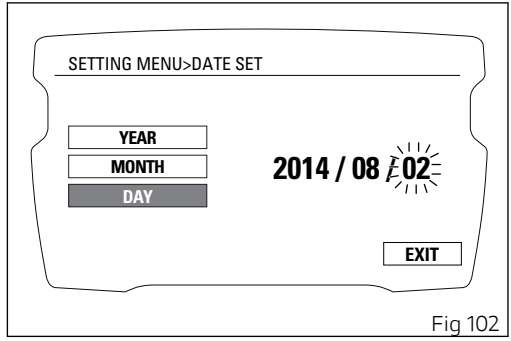


Fig 102

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.

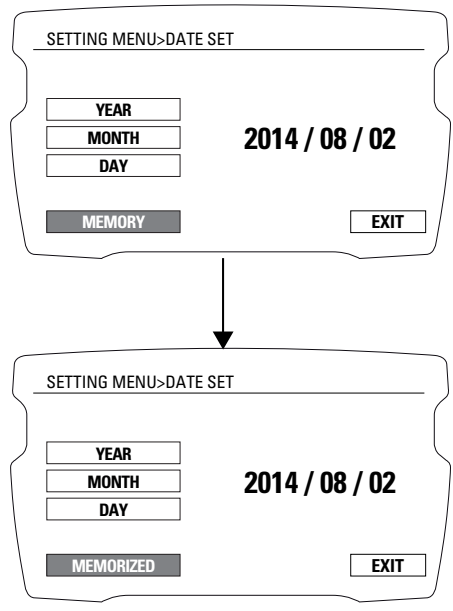


Fig 103

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.

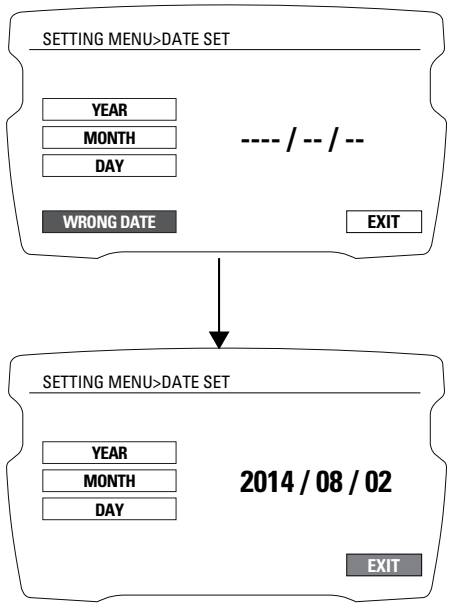


Fig 104

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.

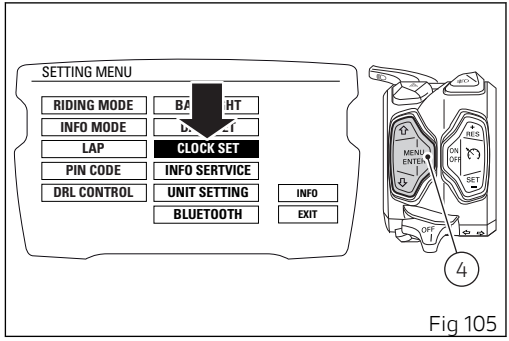


Fig 105

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

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

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.

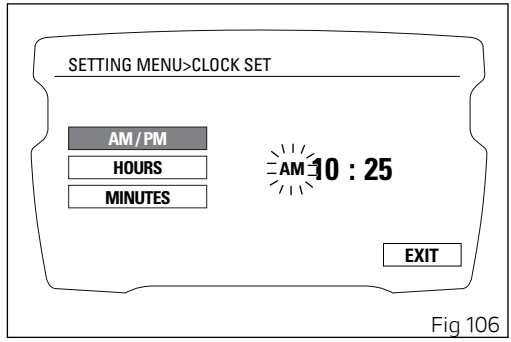


Fig 106

Setting the hours

Select "HOURS" 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.

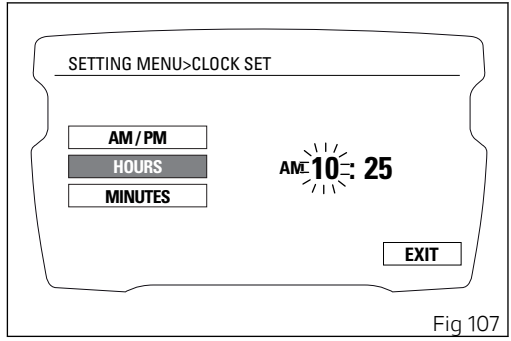


Fig 107

Setting the minutes

Select "MINUTES" 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.

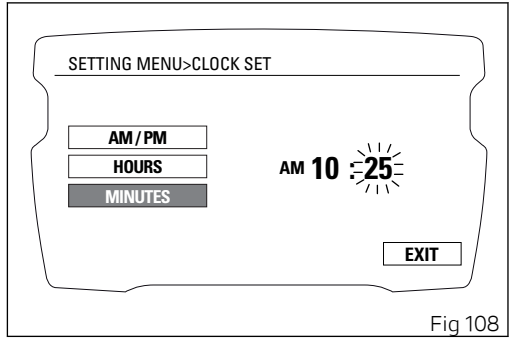


Fig 108

Service information

This Function allows viewing information about the remaining time or mileage until the next Oil Service, Desmo Service and Annual Service.
To view them, enter the Setting Menu, use button (1) or (2) to select INFO SERVICE and press button (4). Available information:

- DESMO SERVICE: indicates the km (or mile) count-down to the next DESMO SERVICE;
- OIL SERVICE: indicates the km (or mile) count-down to the next OIL SERVICE;
- ANNUAL SERVICE: indicates the ANNUAL SERVICE expiration date.

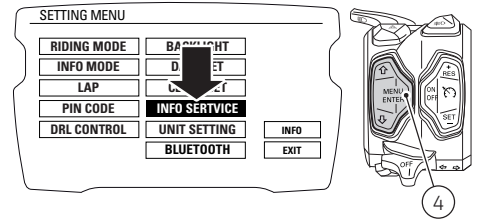


Fig 109

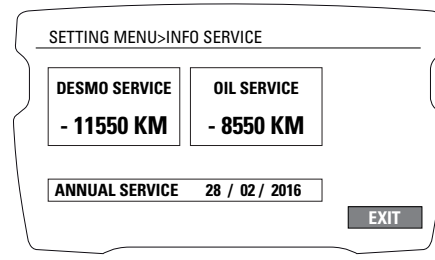


Fig 110

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.

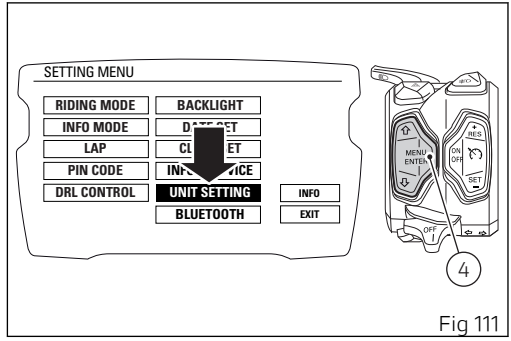


Fig 111

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).

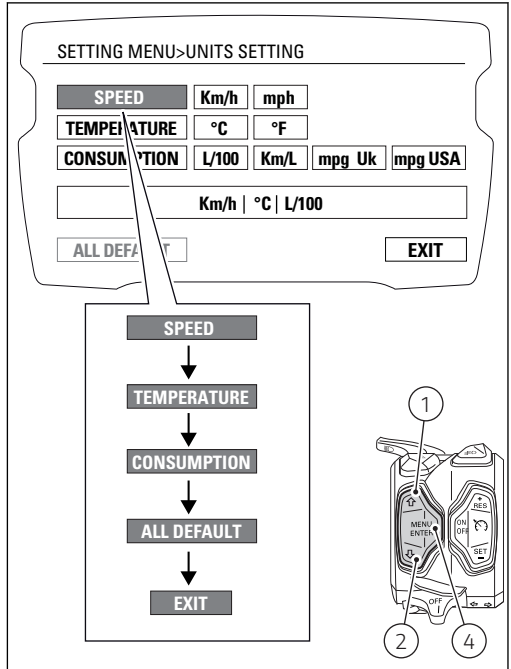


Fig 112

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);

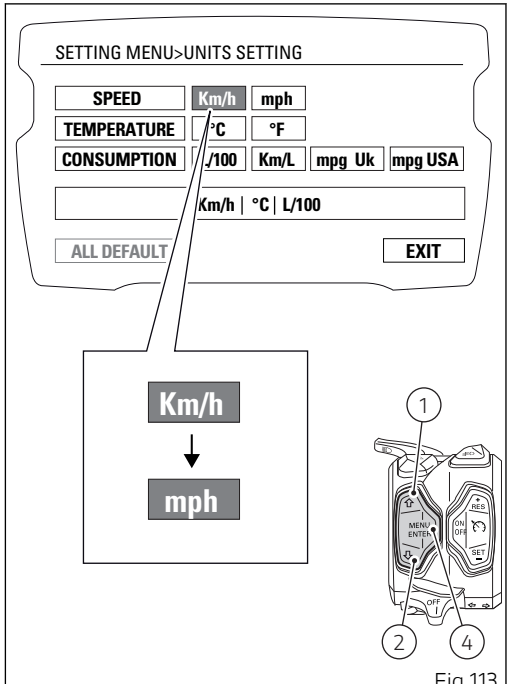


Fig 113

- Odometer, Trip1, Trip2 and Range (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:

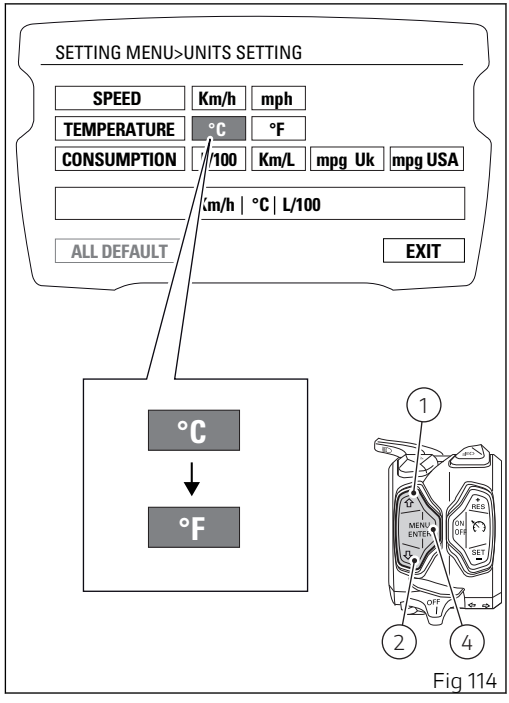


Fig 114

- 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:

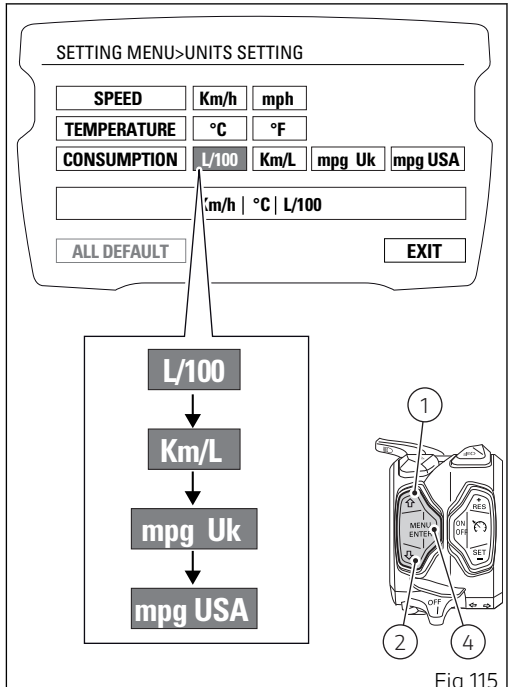
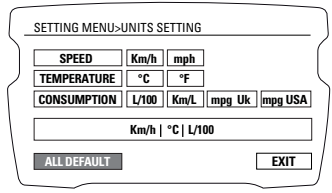


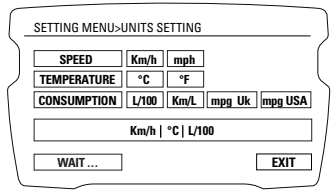
Fig 115

- 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 "ALL DEFAULT" option, by pressing button (1) or (2).
Once function is highlighted, press CONFIRM MENU button (4) for two 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).





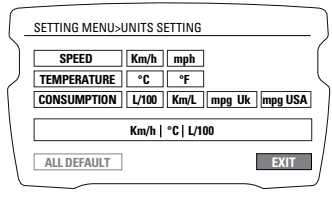


Fig 116

Bluetooth device setting

This function allows pairing and/or deleting any paired Bluetooth devices (XDiavel S).
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 being used, 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".

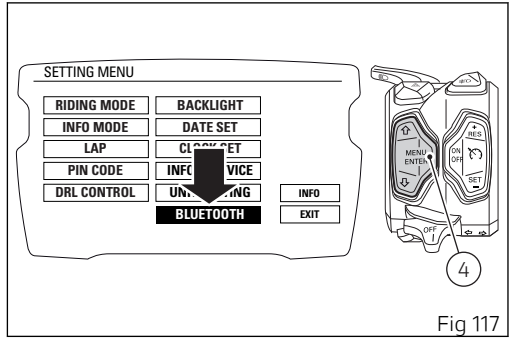


Fig 117

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 X Diavel S is equipped with a Bluetooth control unit that works as a hub between the various supported electronic devices relying on a Bluetooth communication interface.

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

Attention
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").

Attention
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.

Upon the first access to the BLUETOOTH Setting Menu, the first default displayed label will be "PAIRING" and on the left side the list of the device already paired.
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 and shown in the list on the right.
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 the device list on the right.
The list of devices found within the range during the Pairing stage does not include already paired devices, that are displayed in the list on the left.
If two or more Bluetooth devices have the same name, the list of the 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 it is possible to scroll through the device list on the right by pressing buttons (1) and (2).
In correspondence of the device that is to be paired, select "CONNECT" and press button (4) to pair it.
To quit the Pairing stage, select EXIT and press button (4).

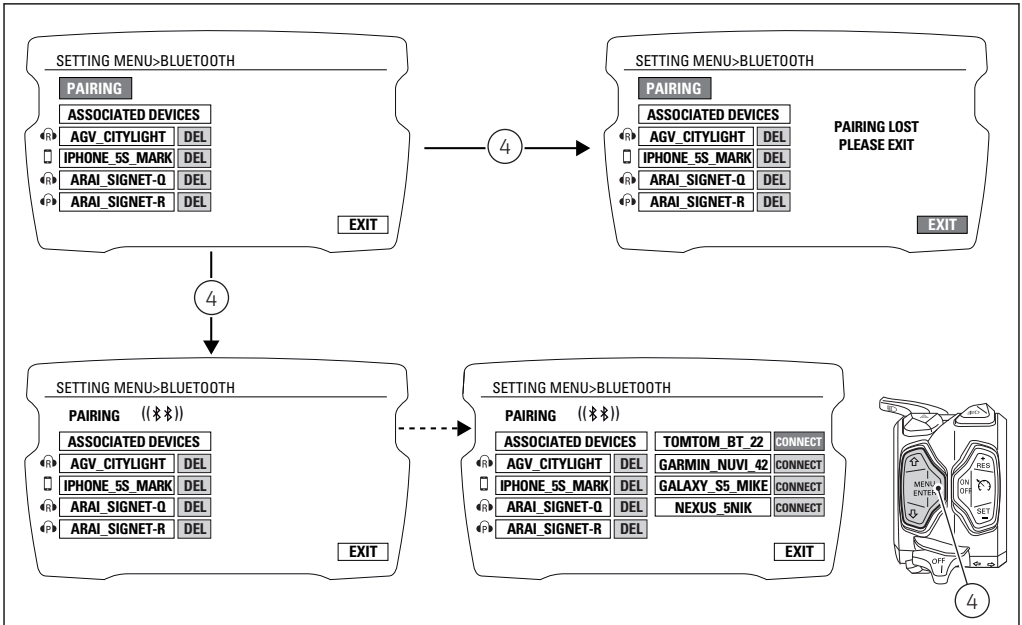

SETTING MENU>BLUETOOTH
PAIRING
ASSOCIATED DEVICES
AGV_CITYLIGHT DEL
IPHONE_5S_MARK DEL
ARAI_SIGNET-Q DEL
ARAI_SIGNET-R DEL
EXIT
4
SETTING MENU>BLUETOOTH
PAIRING
ASSOCIATED DEVICES
AGV_CITYLIGHT DEL
IPHONE_5S_MARK DEL
ARAI_SIGNET-Q DEL
ARAI_SIGNET-R DEL
PAIRING LOST
PLEASE EXIT
EXIT
4
SETTING MENU>BLUETOOTH
PAIRING
ASSOCIATED DEVICES
AGV_CITYLIGHT DEL
IPHONE_5S_MARK DEL
ARAI_SIGNET-Q DEL
ARAI_SIGNET-R DEL
EXIT
SETTING MENU>BLUETOOTH
PAIRING
ASSOCIATED DEVICES
AGV_CITYLIGHT DEL
IPHONE_5S_MARK DEL
ARAI_SIGNET-Q DEL
ARAI_SIGNET-R DEL
TOMTOM_BT_22 CONNECT
GARMIN_NUVI_42 CONNECT
GALAXY_S5_MIKE CONNECT
NEXUS_5NIK CONNECT
EXIT
MENU ENTER
ON OFF
RES
SET
OFF
4

Fig 118

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 quit the Bluetooth Setting Menu, by pressing EXIT.

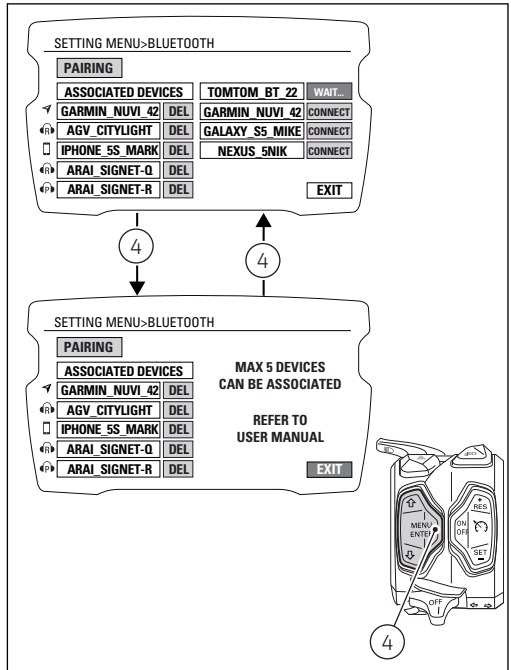


Fig 119

When the device to be paired has been selected, the label in correspondence of that device replaces the word "CONNECTED" with "WAIT" and it is necessary to select the type of device to be paired. The display shows four icons that represent the available types. Types of devices can be:

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

Use buttons (1) and (2) to select the type and press button (4) to confirm.

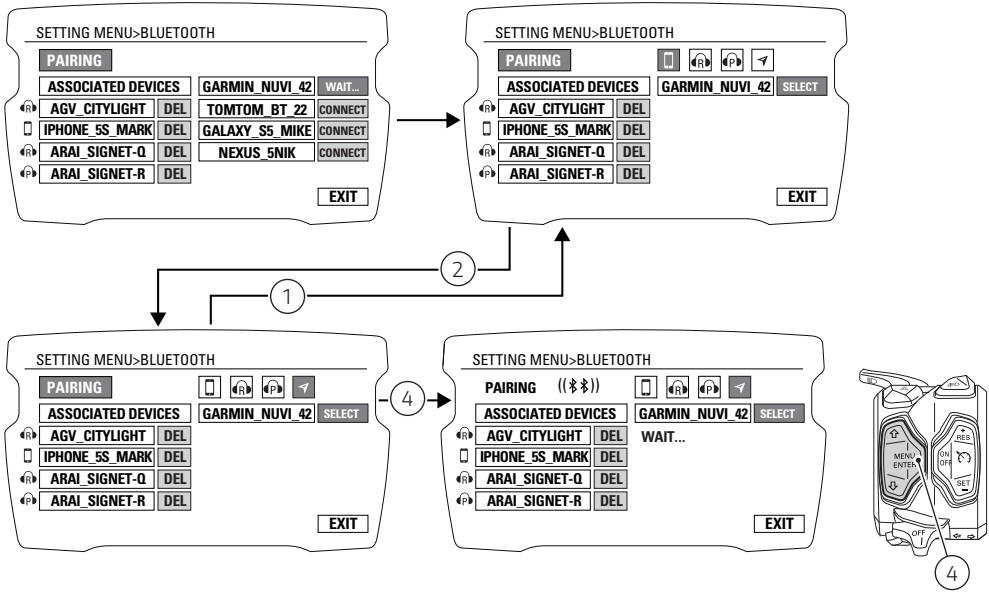

SETTING MENU>BLUETOOTH
PAIRING
ASSOCIATED DEVICES
AGV_CITYLIGHT DEL
IPHONE_5S_MARK DEL
ARAI_SIGNET-Q DEL
ARAI_SIGNET-R DEL
GARMIN_NUVI_42 WAIT...
TOMTOM_BT_22 CONNECT
GALAXY_S5_MIKE CONNECT
NEXUS_5NIK CONNECT
EXIT
SETTING MENU>BLUETOOTH
PAIRING
ASSOCIATED DEVICES
AGV_CITYLIGHT DEL
IPHONE_5S_MARK DEL
ARAI_SIGNET-Q DEL
ARAI_SIGNET-R DEL
GARMIN_NUVI_42 SELECT
EXIT
2
1
SETTING MENU>BLUETOOTH
PAIRING
ASSOCIATED DEVICES
AGV_CITYLIGHT DEL
IPHONE_5S_MARK DEL
ARAI_SIGNET-Q DEL
ARAI_SIGNET-R DEL
GARMIN_NUVI_42 SELECT
EXIT
4
SETTING MENU>BLUETOOTH
PAIRING
ASSOCIATED DEVICES
AGV_CITYLIGHT DEL
IPHONE_5S_MARK DEL
ARAI_SIGNET-Q DEL
ARAI_SIGNET-R DEL
GARMIN_NUVI_42 SELECT
WAIT...
EXIT
MENU ENTER
ON OFF
RES
SET
OFF
4

Fig 120

Smartphone

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, during the pairing the display shows the PIN to be entered "INSERT PIN ON SMARTPHONE: 0000".
As soon as the user enters the PIN on the Smartphone, the device is paired and indicated in the list on the left.

GPS navigation system

If you wish to pair a Bluetooth Navigator, the pairing procedure is completed on the navigator, by selecting on the latter the connection with the motorcycle Bluetooth control unit.
In this case, during the pairing the display shows the message "CONNECT ON NAVI" that disappears when the connection between the control unit and the navigator is completed, and the name of the navigator is indicated in the list on the left.



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.

If the navigator pairing is active for more than 90 seconds and so there have been errors in the procedure, it is not possible to select the detected devices. It is only possible to press on EXIT to abort the procedure if deemed necessary.

Once the pairing is completed, the name of the paired device is shown in the device list on the left: only the first characters of the device name are displayed.
Pairing deactivation takes place when quitting the Bluetooth Setting Menu or when no more Bluetooth devices are detected.

Attention

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.

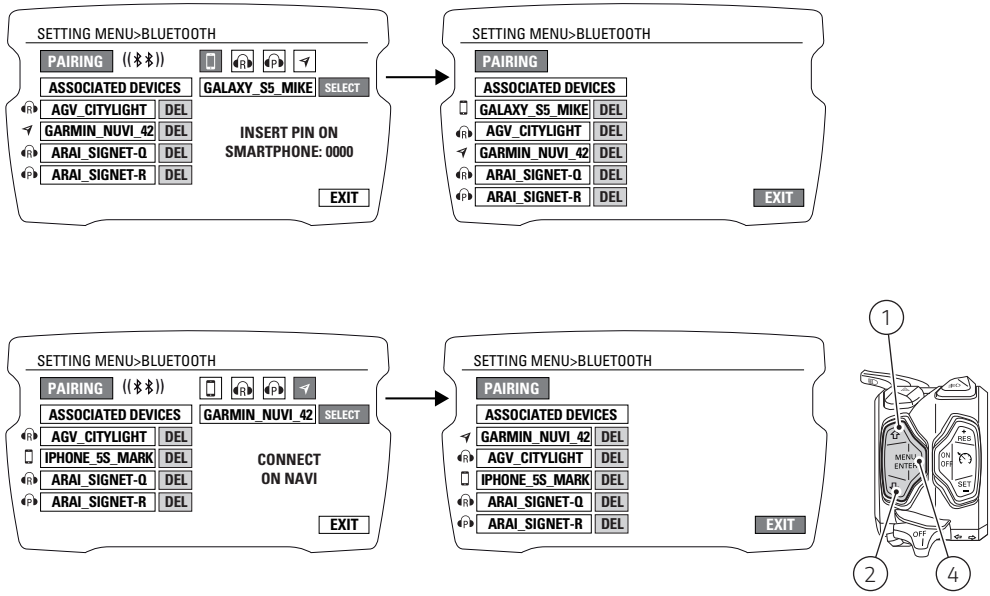

SETTING MENU>BLUETOOTH
PAIRING
ASSOCIATED DEVICES
GALAXY_S5_MIKE
SELECT
AGV_CITYLIGHT
GARMIN_NUVI_42
ARAI_SIGNET-Q
ARAI_SIGNET-R
DEL
INSERT PIN ON
SMARTPHONE: 0000
EXIT
SETTING MENU>BLUETOOTH
PAIRING
ASSOCIATED DEVICES
GALAXY_S5_MIKE
AGV_CITYLIGHT
GARMIN_NUVI_42
ARAI_SIGNET-Q
ARAI_SIGNET-R
DEL
EXIT
SETTING MENU>BLUETOOTH
PAIRING
ASSOCIATED DEVICES
GARMIN_NUVI_42
SELECT
AGV_CITYLIGHT
IPHONE_5S_MARK
ARAI_SIGNET-Q
ARAI_SIGNET-R
DEL
CONNECT
ON NAVI
EXIT
SETTING MENU>BLUETOOTH
PAIRING
ASSOCIATED DEVICES
GARMIN_NUVI_42
AGV_CITYLIGHT
IPHONE_5S_MARK
ARAI_SIGNET-Q
ARAI_SIGNET-R
DEL
EXIT
1
2
4
MENU ENTER
ON OFF
RES
SET
OFF

Fig 121

Deleting associated devices

From the Bluetooth setting menu it is possible to access the list of the paired devices on the left. From the list of paired devices, user can select the device to be deleted by pressing button (1) or button (2). When the device is selected and the relevant DEL label is green, press button (4) for at least two seconds to eliminate the device from the paired device list.
Select EXIT by pressing button (1) or (2) and pressing button (4) you quit the Bluetooth Setting Menu and go back to the main Setting Menu screen.

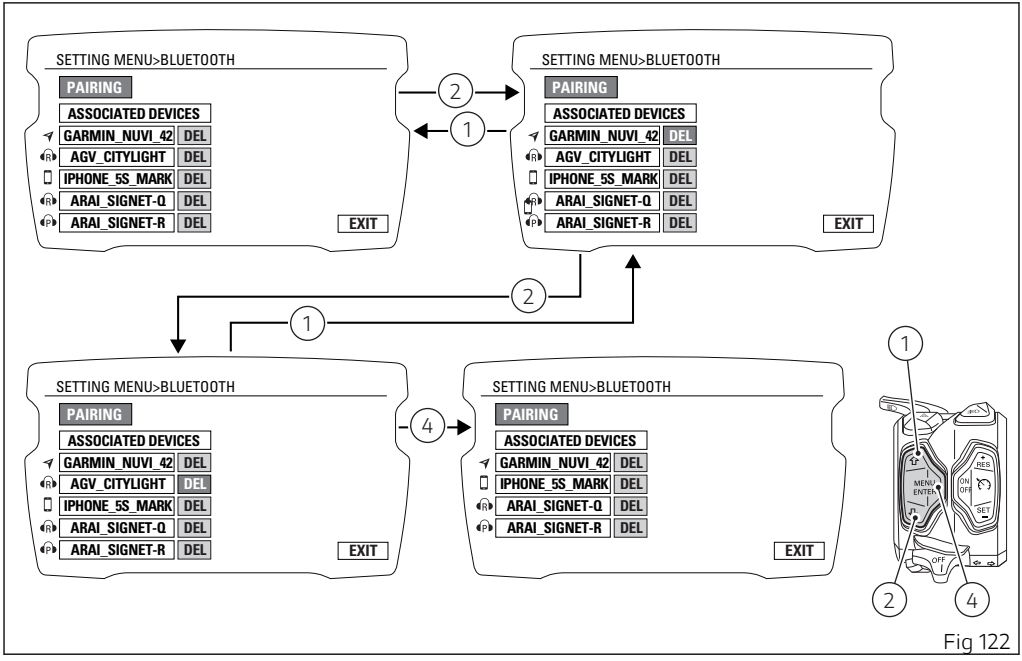

SETTING MENU>BLUETOOTH
PAIRING
ASSOCIATED DEVICES
GARMIN_NUVI_42 DEL
AGV_CITYLIGHT DEL
IPHONE_5S_MARK DEL
ARAI_SIGNET-Q DEL
ARAI_SIGNET-R DEL
EXIT
2
1
4
MENU ENTER
RES
ON OFF
SET
OFF

Fig 122

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 (with Bluetooth module) (X Diavel S).

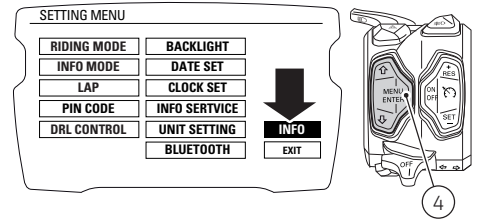


Fig 123

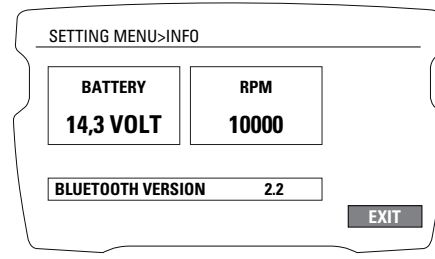


Fig 124

Light control

Low/high beam (version without DRL)

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 automatically turned on; it is possible to switch from low beam to high beam and vice versa by pressing 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 within 60 seconds from the "manual" switching on of the low / high beam the engine is not started, the lights are disabled again (off).

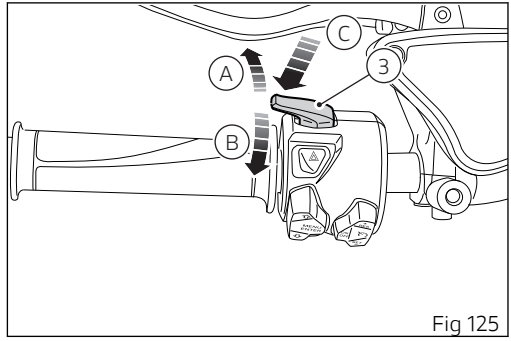


Fig 125

Low/high beam (version with DRL)

At Key-On, the high beam and low beam lights are OFF: only the parking lights and the DRL light are turned on.
After starting the engine the high beam is automatically turned on if the AUTO mode is set and the instrument panel detects poor ambient light (NIGHT): if, on the other hand, the instrument panel detects good light conditions (DAY), the DRL light remains on and the low beam remains off; it is possible to switch the DRL light to low beam (and vice versa) with button (9).
It the low beam is activated, it is possible to switch on the high beam with button (3), position (A). 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 within 60 seconds from the "manual" switching on of the low / high beam the engine is not started, the lights are disabled again (off).

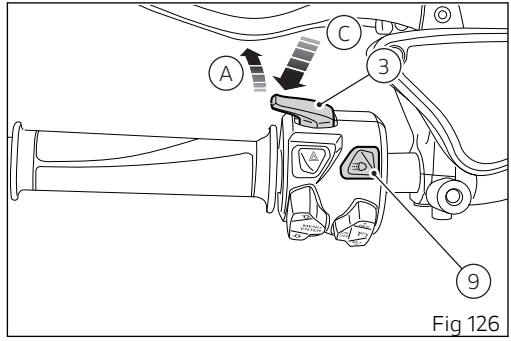


Fig 126

High/low beam switching off during vehicle start (version without DRL light).

To preserve the motorcycle battery, if when starting the engine the high/low beams are ON, the headlight is automatically switched off and then on again when the engine is started.

High/low beam switching off during vehicle start (version with DRL lights).

To preserve the motorcycle battery, if when starting the engine the high/low beams or the DRL lights are ON, the headlight is automatically switched off and then on again when the engine is started.

DRL (Daytime Running Light) — only for version with DRL lights

Upon each Key-On, the DRL lights are turned on. It is possible to switch off the DRL lights by means of button (9) on the left-hand switch. By pressing button (9) again, the DRL lights are switched on again.

Note

Every time button (9) is pressed, the DRL light automatically switches to MANUAL mode. To go back to the AUTO mode, turn the Key Off and On or set the AUTO mode by means of the DRL CONTROL function in the Setting Menu.

By pressing button (3), the high and low beams are turned on whereas the DRL light is turned off. Upon releasing the light button (3), the DRL light is automatically switched on again.

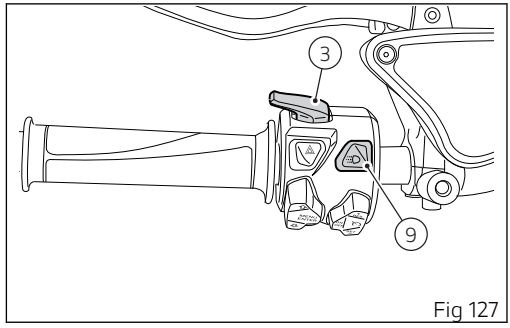


Fig 127

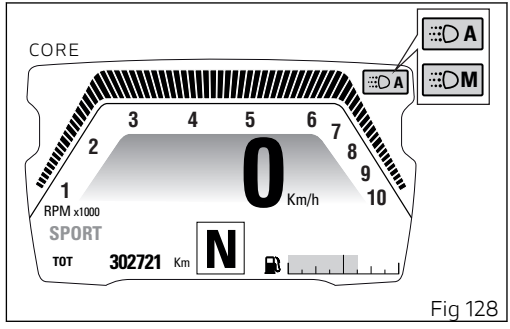


Fig 128

DRL in AUTO mode
If the DRL is in this mode, when starting the engine it automatically switches off and the low beam is activated if the instrument panel detects poor light conditions (NIGHT). If the instrument panel detects good light conditions (DAY), the DRL remains on and the low beam off: in this mode, the instrument panel automatically switches from the DRL light to the low beam and vice versa, according to the detected ambient light conditions. The display shows the green logo with letter A.

Attention
Using the DRL light in AUTO (automatic) mode in case of poor light conditions, especially in case of fog or clouds, could impair safety: in this case DUCATI recommends to manually activate the low beam.

DRL in MANUAL mode
If the DRL light is in this mode, it does not change status when starting the engine. To switch on or off the DRL light it is necessary to press button (9). The display shows the yellow logo with letter M.

Attention
Using the DRL light in poor light conditions (dark) could compromise the riding visibility and dazzle who is coming on the opposite lane.

Note
Using the DRL light during the day improves visibility as it is easier to perceive by those coming on the opposite side compared with the low beam.

Turn indicators

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.

Automatic switch-off

The turn indicators switch off automatically after the turn, as calculated based on vehicle speed, lean angle and in general according to the analysis of vehicle dynamic conditions.
This means that automatic switch-off is triggered when vehicle speed exceeds 20 km/h (12.4 mph) after the turn indicator button was pressed.

Turn indicators also switch off automatically if they remained on for a long mileage (which can range between 200 and 2000 metres (656-6562 feet), depending on vehicle speed when the turn indicator button was pressed).
If the turn indicator switch is again operated, while turn indicator is still on, automatic switch-off feature is re-initialised.

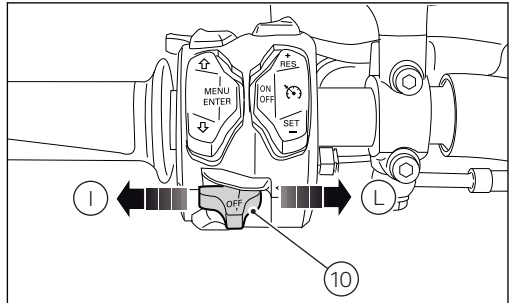


Fig 129

Attention
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).

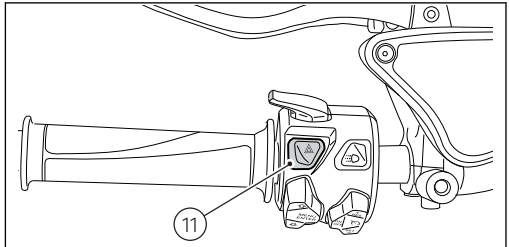
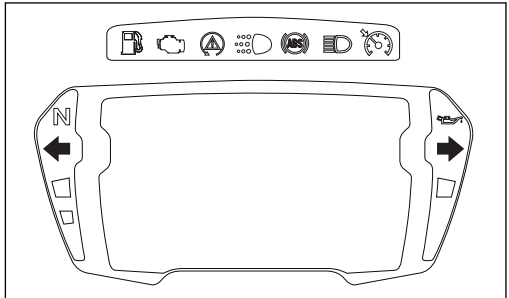


Fig 130


Fig 131

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

When turning the vehicle key ON with "Hazard" function still active, the function remains active.



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.



Fig 132

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.



Fig 133

Indication of No Key Detected (upon Key-Off)

This function informs that it is not possible to engage the steering lock since the key is not detected.
The display shows "NO KEY DETECTED".



Fig 134

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.

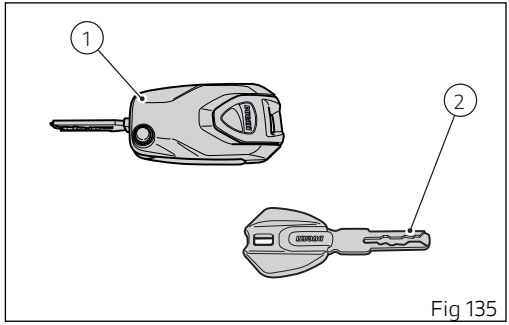


Fig 135

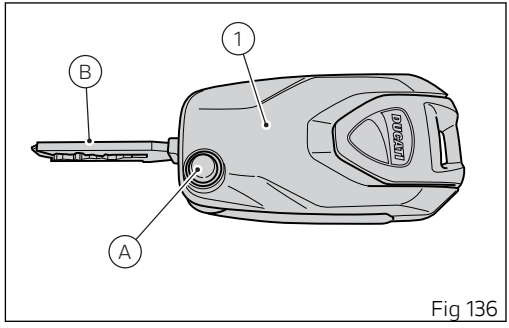


Fig 136

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.

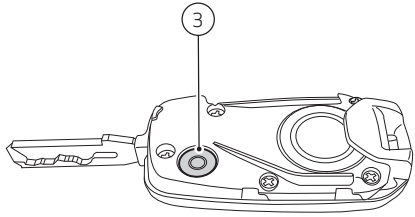


Fig 137

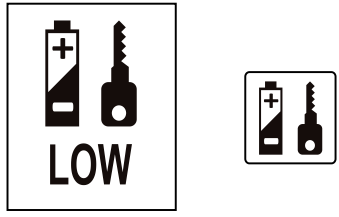


Fig 138

Attention

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.

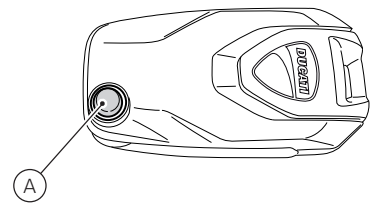


Fig 139

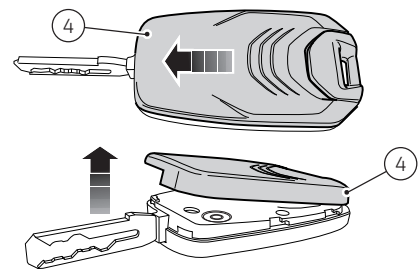


Fig 140

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.

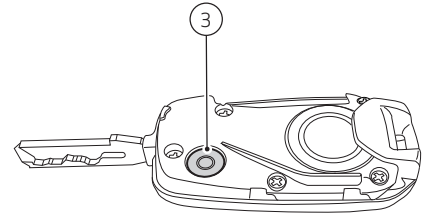


Fig 141

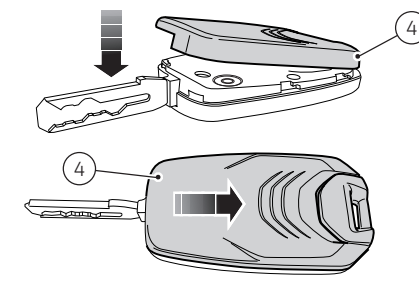


Fig 142

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.

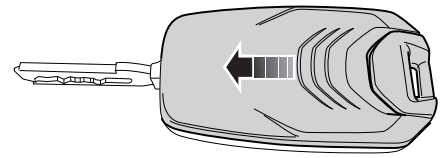


Fig 143

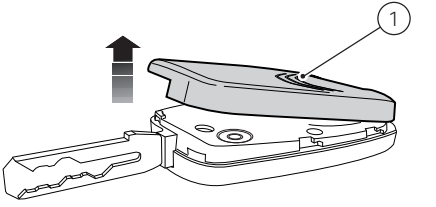


Fig 144

After separating the plastic shells, remove the battery protection cap (2).
Remove battery (3) and install a new one.

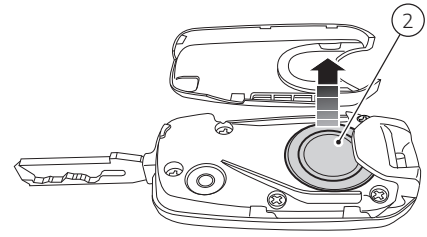


Fig 145

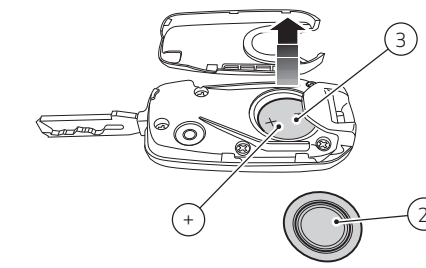


Fig 146

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

Important
Only use the required type of battery.

Refit protection cap (2) on the battery.

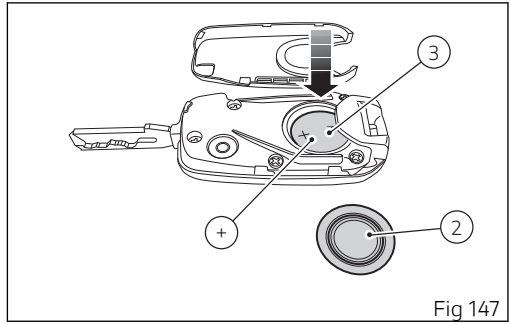


Fig 147

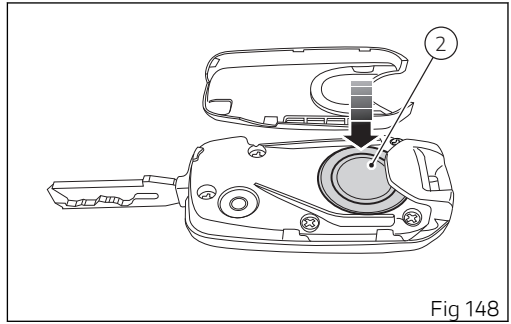


Fig 148

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.

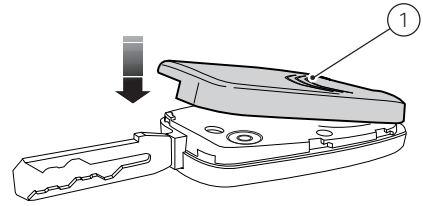


Fig 149

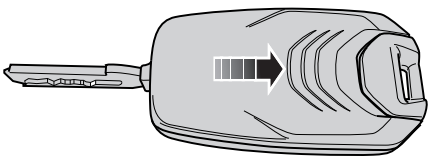


Fig 150

Key duplication

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.

Immobilizer unlock procedure

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 shows the message "INSER PIN" and four zeros ("0") to enter the release PIN CODE.

Entering the code:

1) Press button (4), only one digit indicating "0" is highlighted;
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 digits of the PIN CODE.

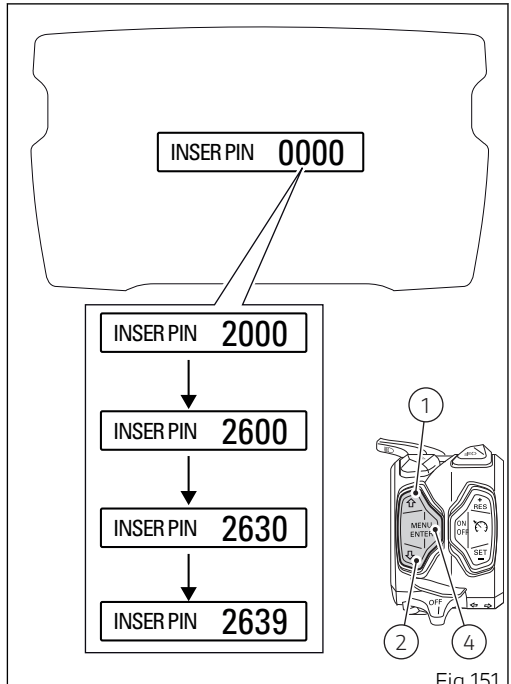


Fig 151

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

- if the PIN code is not correct, the instrument panel displays PIN CODE WRONG for three seconds and then highlights the string of four zeros ("0") to allow you to try again. The number of possible attempts is determined by a preset time-out of two minutes.
- if the PIN CODE is correct, the instrument panel shows PIN CODE CORRECT for three 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.

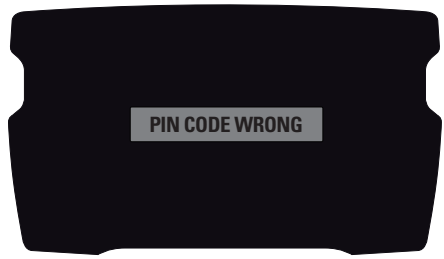


Fig 152

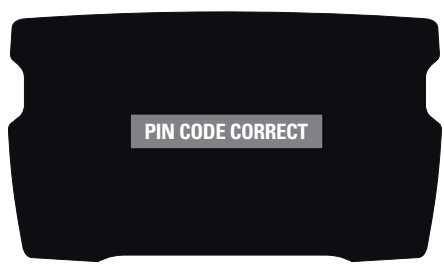


Fig 153

Controls

Position of motorcycle controls

Attention
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 on handlebar.
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.

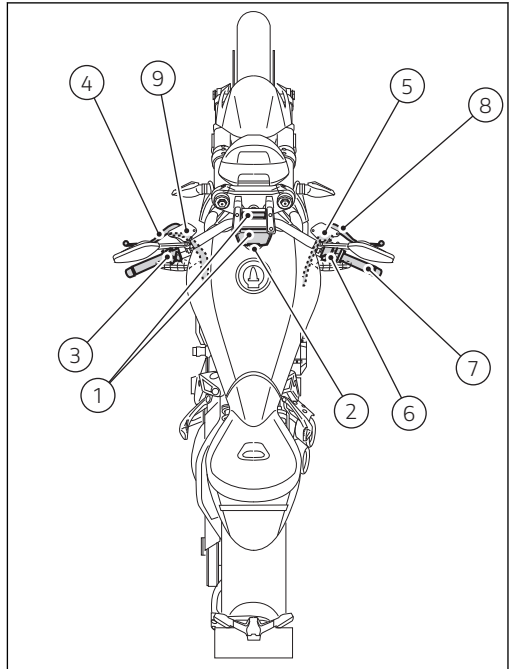


Fig 154

"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).

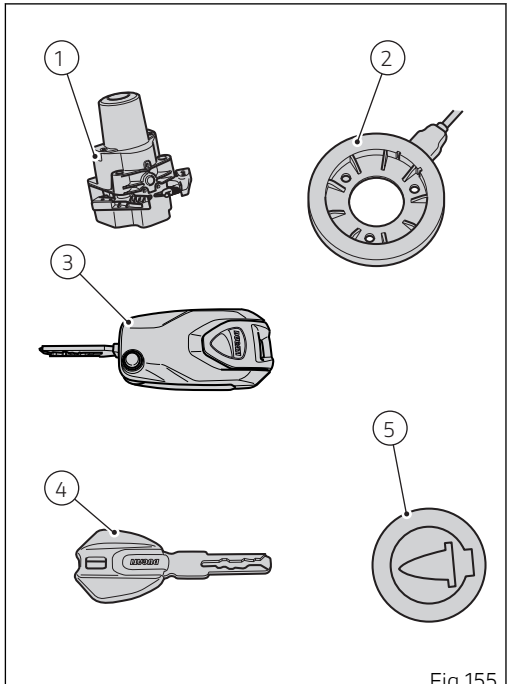


Fig 155

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 156) indicates the position of the Hands Free block (1) and (Fig 157) indicates the position of the antenna (2) under the left-hand tail guard (9).

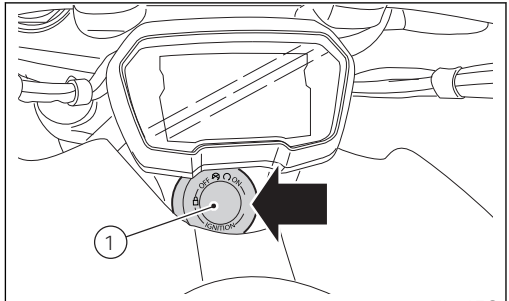


Fig 156

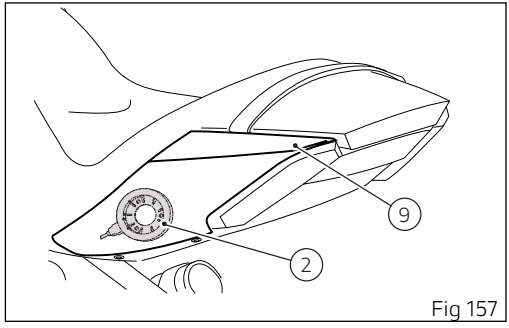


Fig 157

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

Key-On consists in turning on the hands free system and all electronic devices.
Key-On is done using button (6) on the right switch on the handlebar or using the emergency button on the Hands free unit (1).

Key-Off consists in turning off the hands free system and all electronic devices, and ensures engine is turned off.
Key-Off is done using button (6) on the right switch on the handlebar or using the button on the Hands free unit (1).

Note
The use of one of the two buttons, (6) on handlebar or (1) on hands free, does not exclude the other; e.g., if you use one for switch-on, you can switch off with the other and vice versa.

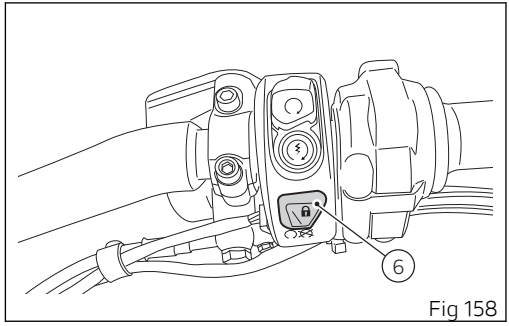


Fig 158

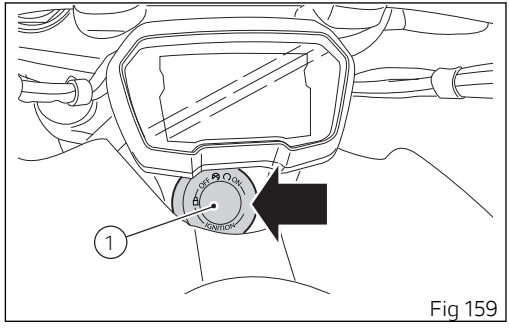


Fig 159

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 the speed of the motorcycle is equal to zero, by pressing button (6, Fig 158) on the handlebar or by pressing the Hands free button (1).
When speed is not equal to zero, perform key-off by pressing the Hands free button (1).

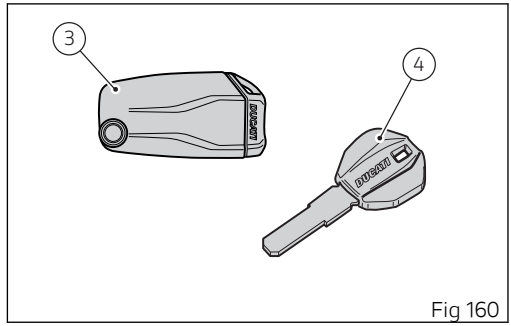


Fig 160

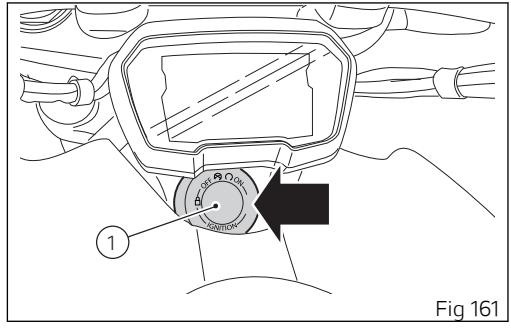


Fig 161

Attention

The passive key (4) has a range of a few cm (in), therefore it must be positioned close to the left-hand tail guard (9), close to the antenna (2), as indicated.

Important

If active key battery is flat, the key works as a passive key so its range is reduced to a few inches (cm) from antenna (2). Instrument panel shows when battery is flat. If active key battery is flat, the key can still be used as a passive key.

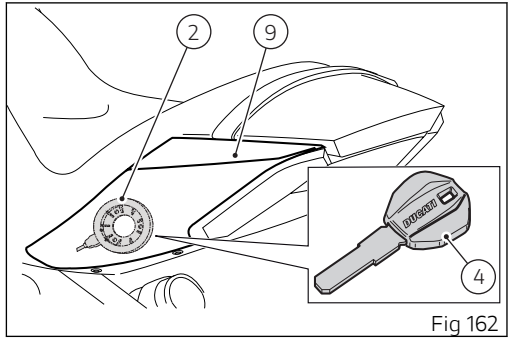


Fig 162

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 fifteen consecutive seconds, the motorcycle will turn off automatically without any action by the rider.

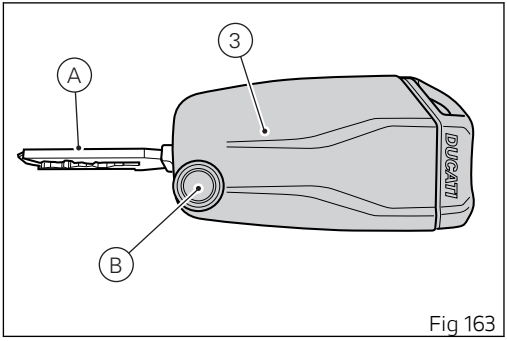


Fig 163

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

Key-On can be performed by pressing button (6) on the handlebar and with the presence of the active key (3, Fig 163).

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 163) only if motorcycle speed is equal to zero.

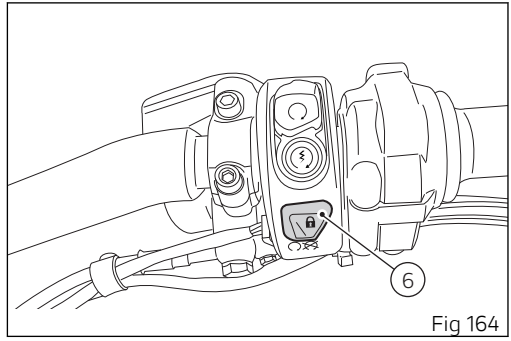


Fig 164

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

Key-On can be performed by pressing button (7) on the Hands free lock (1, Fig 156) and with the presence of the active key (3, Fig 163).

Note
The active key (3) has a range of approx. 1.5 m (4.92 ft), 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 156), also without the key (4, Fig 160).

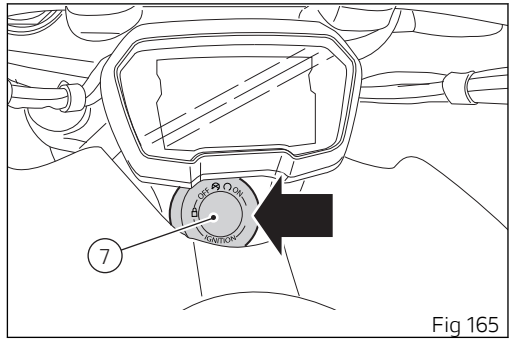


Fig 165

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

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

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

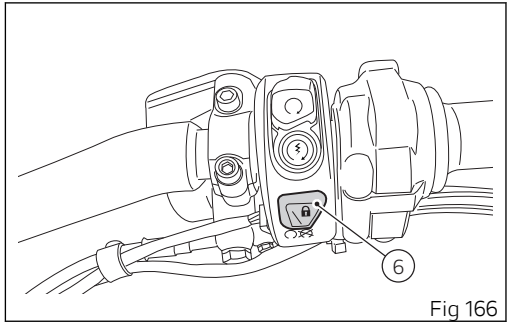


Fig 166

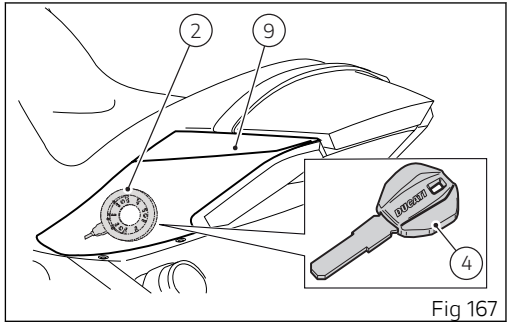


Fig 167

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 171).

Attention

The passive key (4) has a range of a few cm (in), therefore it must be positioned close to the left-hand tail guard (9), close to the antenna (2), as indicated.

Key-Off can be performed by pressing button (7) on the Hands free lock (1, Fig 159), also without the key (4, Fig 171).

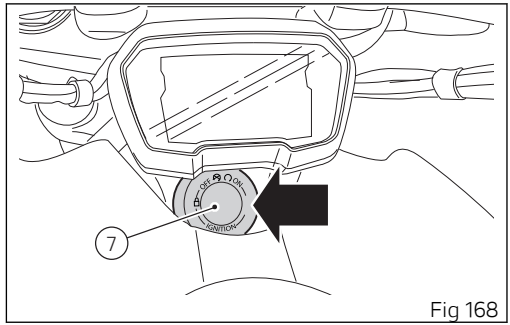


Fig 168

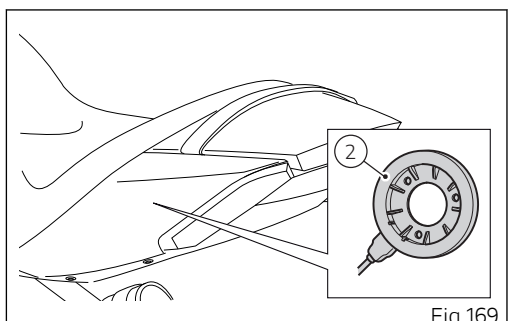


Fig 169

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 156) without the presence of the keys (3) and (4) and entering the pin code on the instrument panel.
Key-Off can be performed by pressing button (6) on the handlebar.
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 allows entering the four-digit pin code. Pin code must be entered within 120 seconds, after which a Key-Off occurs automatically.

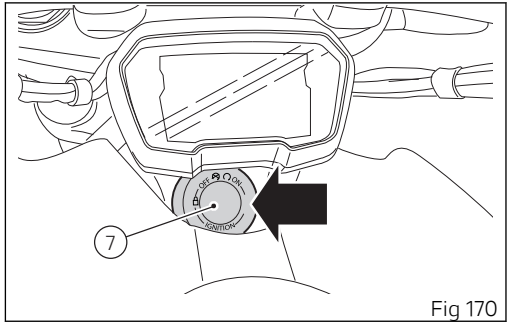


Fig 170

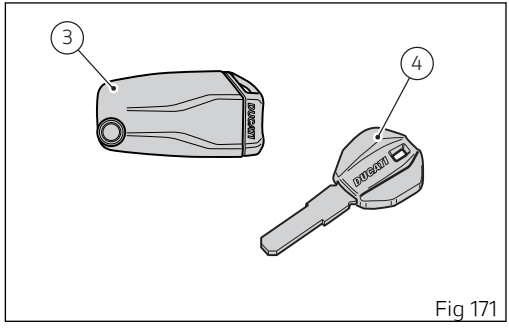


Fig 171

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) to activate the function.
After pressing the button, the instrument panel activates the page for entering the override code.
Refer to the “Restoring motorcycle operation via the pin code” procedure.

Left-hand switch

1) Dip switch, two-position light selector switch:
- pushed up (A): high beam ON ( ), back to its initial position (B): low beam ON ( );
- (C) pushed down: high-beam flasher ( );
- (FLASH), "Start-Stop lap" function.

2) 4 turn indicators (Hazard) on/off button.

3) Button for enabling/disabling the DRL function (only for X Diavel S, excluded China, Japan and Canada versions).

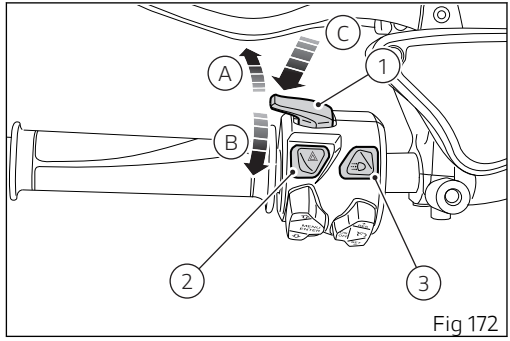


Fig 172

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 (⌓) = warning horn.

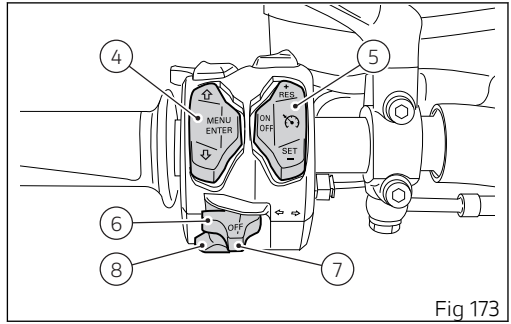


Fig 173

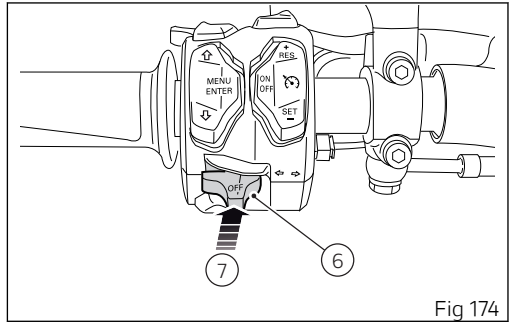


Fig 174

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;

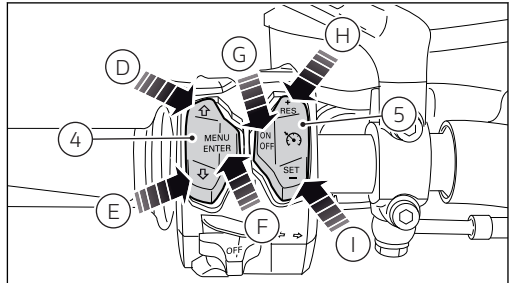


Fig 175

Key

A) Low beam.
B) High beam.
D) Menu UP
E) Menu DOWN.
F) Confirm display menu.
G) Cruise Off, On.
H) Speed +.
I) Speed -.
2) Hazard.
3) DRL (Only for the X Diavel S model; except for China, Japan and Canada versions).
5) Cruise.
6) Turn indicator.
7) Turn indicator off.
8) Horn.

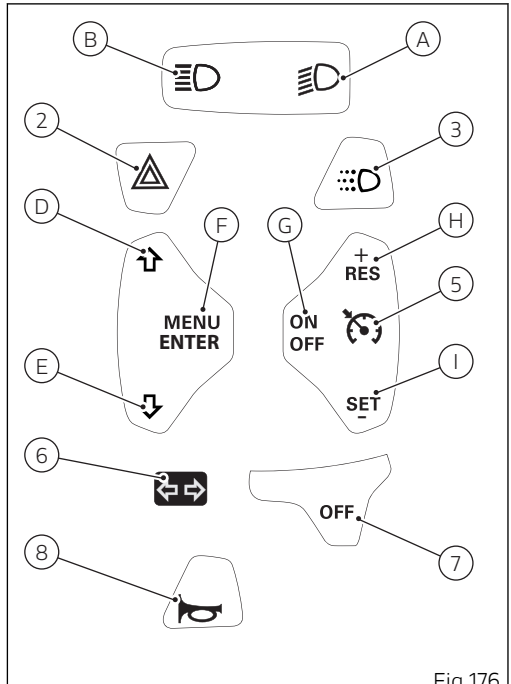


Fig 176

Clutch lever

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

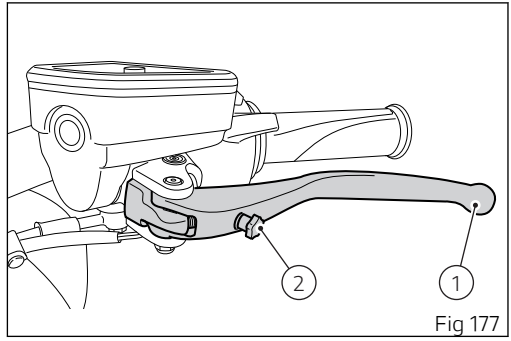


Fig 177

Attention

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) LAUNCH CONTROL button (DPL).

The switch (1) has two positions:

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

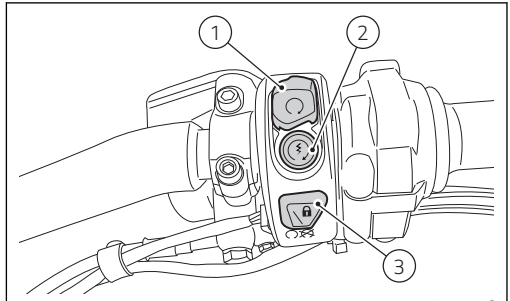


Fig 178

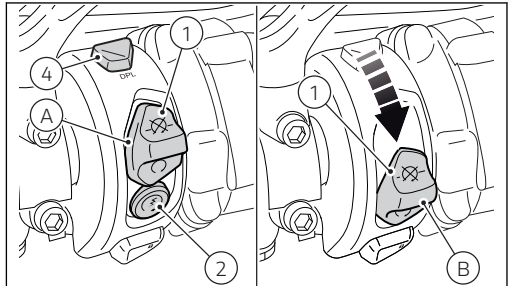


Fig 179

Key

2) Engine starting.
3) Electronic steering lock.
4) Launch Control (DPL).
A) Run ON.
B) Run OFF.
C) Key-on.
D) Key-off.

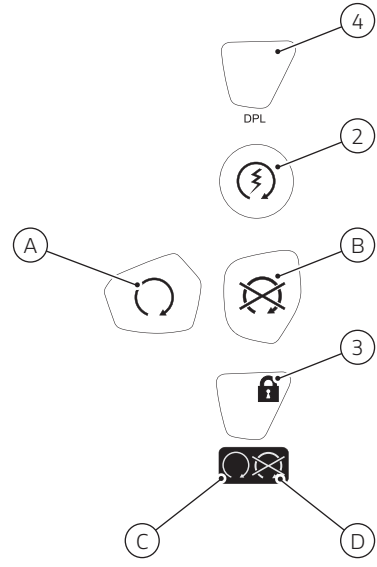


Fig 180

Throttle twistgrip

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

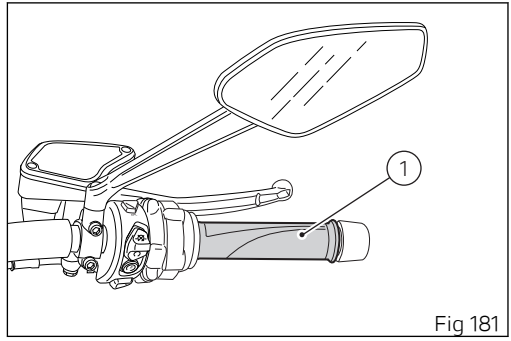


Fig 181

Front brake lever

Pull in the lever (1) towards the twistgrip to operate the front brake. The system is hydraulically operated and you just need to pull the lever gently.
The brake lever (1) has a dial (2) for adjusting the distance between lever and twistgrip on the handlebar.
The lever distance can be adjusted through 10 clicks of the dial (2).
Turn clockwise to increase lever distance from the twistgrip. Turn the adjuster counter clockwise to decrease lever distance.

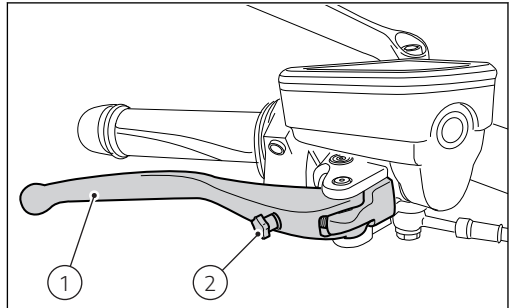


Fig 182

Rear brake pedal

Press pedal (1) down with your foot to operate the rear brake.
The control system is of the hydraulic type.

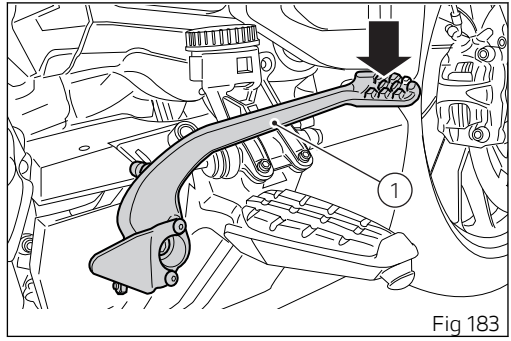


Fig 183

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

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

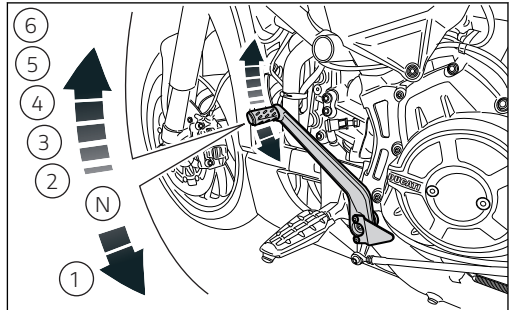


Fig 184

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 adjustment

Hold the linkage (1) and slacken the lock nuts (2) and (3).

Note
Nut (2) has a left-hand thread.

Fit an open-end wrench to hexagonal element of linkage (1) and rotate until setting pedal in the desired position.
Tighten both lock nuts onto linkage.

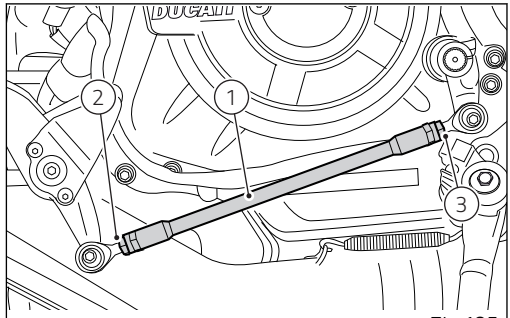


Fig 185

Note
Gear change pedal position can also be adjusted with respect to the motorcycle: please contact a Dealer or Ducati authorised service centre to have this adjustment performed.

Rear brake pedal adjustment

Loosen lock nut (4). Turn pedal stroke adjusting screw (5) until pedal is in the desired position.
Tighten the lock nut (4).
Operate the pedal by hand to check that there is 3 ÷ 6 mm (0.12 ÷ 0.24 in) of free play before the brake bites.
If not, adjust the length of the master cylinder control rod by loosening the lock nut (6) on master cylinder control rod.
Screw the rod (7) into the fork (8) to decrease the free play, or screw it out to increase it.
Tighten lock nut (6) and check play again.

Note
Rear brake pedal position can also be adjusted with respect to the motorcycle: please contact a Dealer or Ducati authorised service centre to have this adjustment performed.

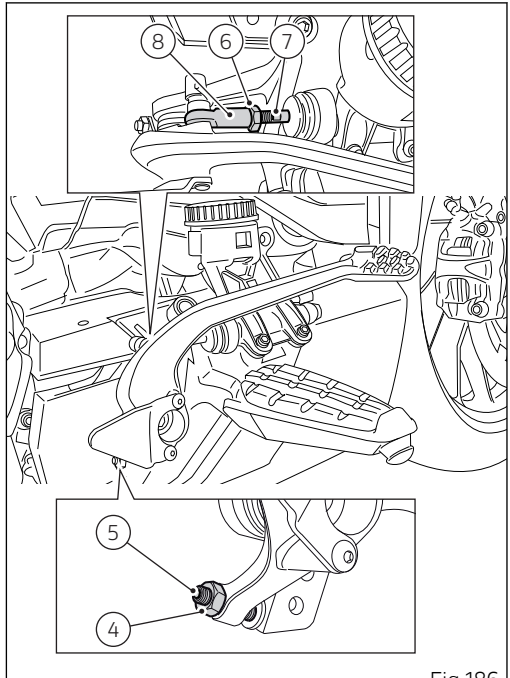


Fig 186

Main components and devices

Position on the vehicle

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

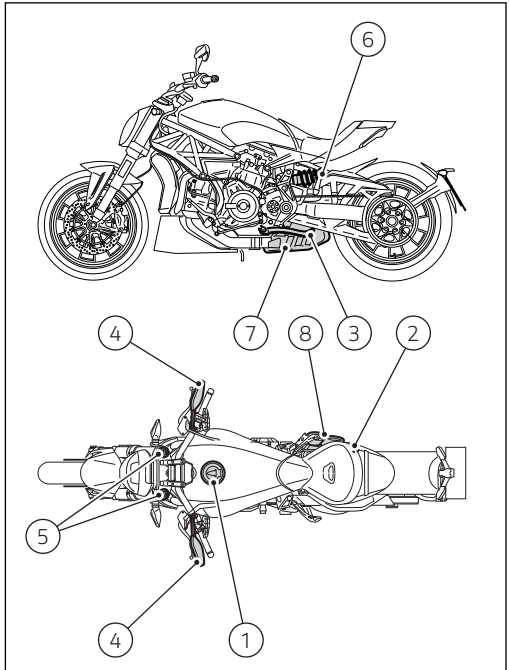


Fig 187

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.

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

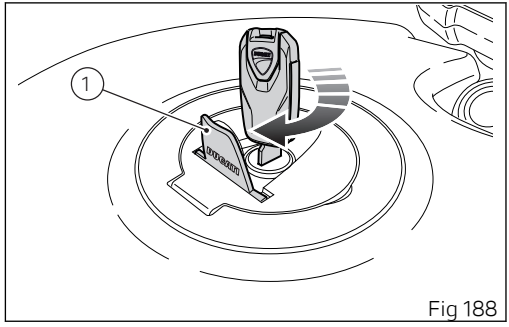


Fig 188

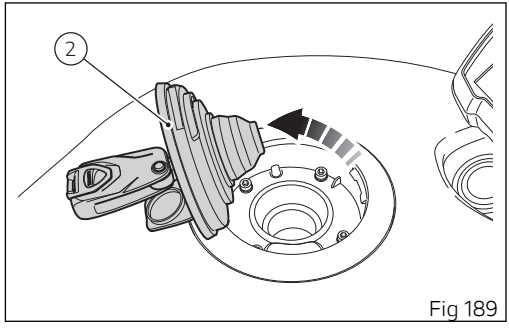


Fig 189

Seat lock

By working on the lock (1), it is possible to remove the rider seat, to reach the devices placed below it, as well as the passenger seat.

Attention

The passenger seat must only be used for short distances and at moderate speeds. For continued use of the bike with a passenger, always use the passenger comfort seat from the passenger backrest kit that comes standard with the bike instead of the passenger seat.

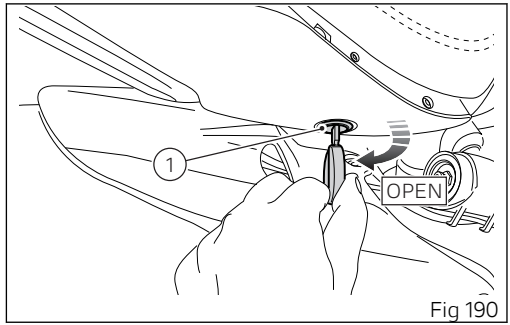


Fig 190

Removing the seats

Insert the active or passive key into the catch (1) and turn it clockwise (OPEN) until the rider seat latch disengages with an audible click.
To remove the rider seat (2), lift it up by sliding its front side from tank pin (3).

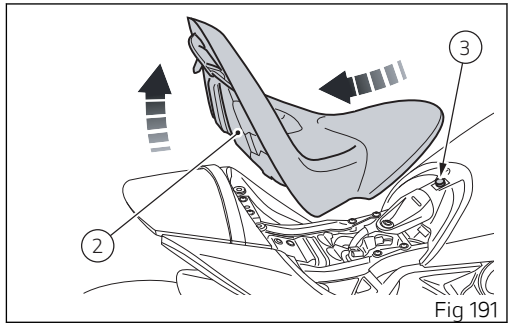


Fig 191

Remove the passenger seat (4) by sliding it from the motorcycle front side.

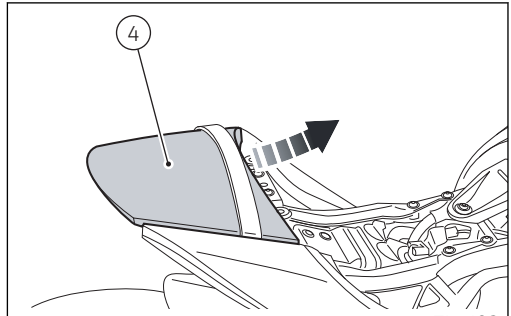


Fig 192

Refitting the seats

Fit the passenger seat (4) by positioning it under belt (5) making it slide to the motorcycle's rear side, and insert tab (6) in the relevant seat (7).

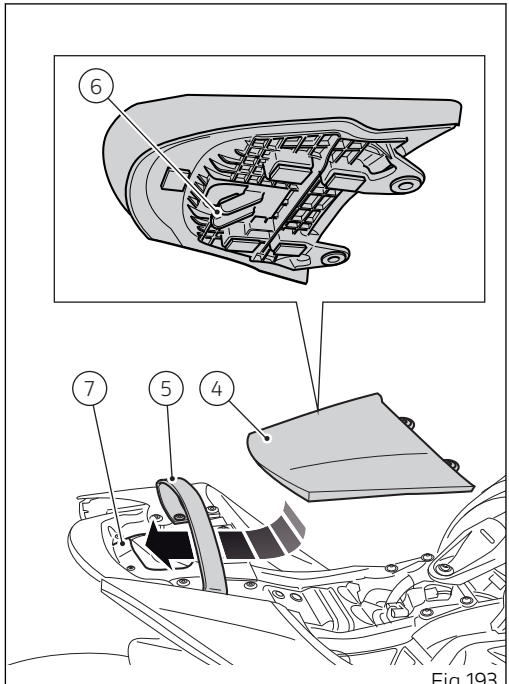


Fig 193

Position the rider seat (2) by making it slide to the motorcycle's front side: make sure that tank pin (3) is in seat slot (10).
Slide the seat onwards until fully home and on the rear side insert pin (13) in hole (14) and the lateral pins (11) in the vibration damping pads (12) by pressing down until latch clicks in place. Make sure the rider seat is properly fastened by moderately pulling it up. Take key out of the lock.

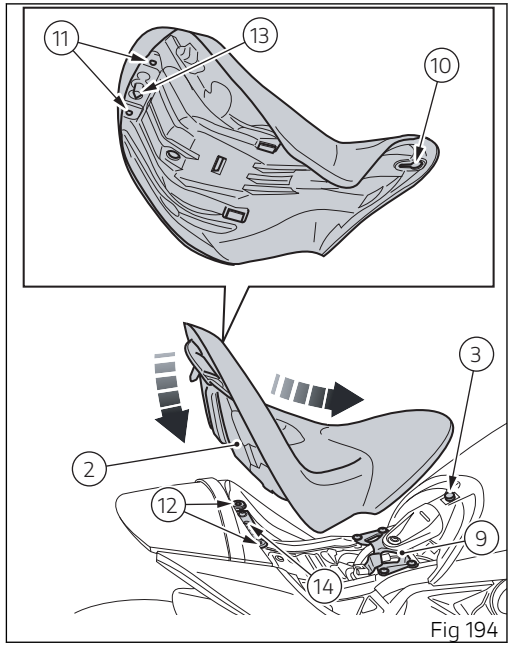


Fig 194

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.

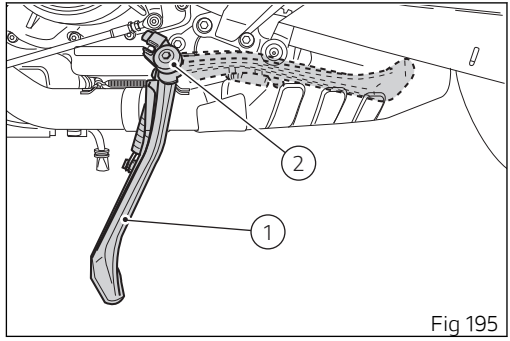


Fig 195

Attention
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 (X Diavel S) is equipped with a Bluetooth control unit that works as a hub between the various supported electronic devices relying on a Bluetooth communication interface.

Attention

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

Attention

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").

Attention

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.

Attention
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.

Front fork adjusters

The front fork used on this motorcycle has rebound (return), compression and spring preload adjustment.
It is possible to adjust the spring preload and compression on the left leg whereas the rebound can only be adjusted on the right leg.
Adjustment is done by external screw adjusters:

1) for rebound adjustment;
2) for inner spring preload adjustment;
3) for compression adjustment.

Put the motorcycle on the side stand and make sure it is stable. Turn adjuster (1) at the top end of the RH fork leg with a flat-blade screwdriver to adjust rebound. Turn adjuster (3) at the top end of the LH fork leg with a flat-blade screwdriver to adjust compression. By turning adjuster screws (1) and (3) you will hear some clicks; each click corresponds to a damping setting.

The stiffest damping setting is obtained with the adjuster turned fully clockwise to the "0" position. By turning counter clockwise starting from this position, count the clicks that will correspond to positions "1", "2" etc.

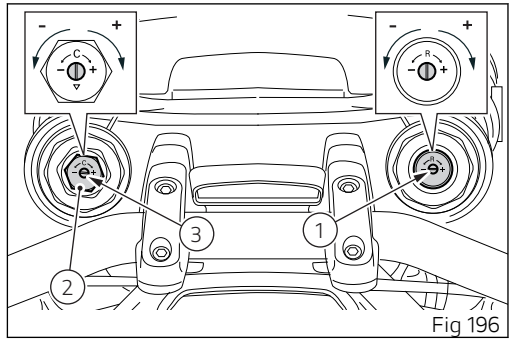


Fig 196

STANDARD settings are as follows:

- compression: -2 turns from max. (fully closed);
- rebound: -2 turns from max. (fully closed);
- spring preload: +5 turns from min. (fully uncompressed).

Important

Calibration with RIDING WITH PASSENGER AND AT FULL LOAD:

Use the following adjustments for the fork:

- compression: Max (fully closed);
- rebound: Max (fully closed);
- spring preload: +5 turns from min. (fully uncompressed).

Rear shock absorber adjusters

The rear shock absorber has adjusters that enable you to suit the setting to the load on the motorcycle. Adjuster (1), located on the swinging arm, adjusts the damping during the rebound phase (return). Turn adjuster (1) clockwise to stiffen the damping, or counter clockwise to soften it. The two ring nuts (2), located in the shock absorber upper side, adjust the external spring preload. To change spring preload, slacken the upper locking ring nut. Then TIGHTEN or SLACKEN the lower ring nut to INCREASE or DECREASE spring preload.

STANDARD setting from the fully closed position (clockwise):

- rebound: loosen adjuster (1) by -1.5 turns from fully screwed position;
- spring preload: 31 mm (1.22 in).

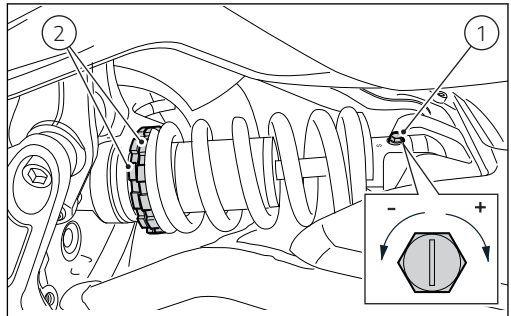


Fig 197

Important

Calibration with RIDING WITH PASSENGER AND AT FULL LOAD:

Use the following adjustments for the rear shock absorber:

- rebound: loosen adjuster (1) by -0.5 turns from fully screwed position;
- spring preload: Max (ring nut fully screwed).

Attention
To turn the preload adjuster ring nut use a pin wrench. Pay attention to avoid hand injuries by hitting motorcycle parts in case the wrench tooth suddenly slips on the ring nut groove while moving it.

Attention
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.

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 (621 mi);
2) From 1000 km (621 mi) to 2500 km (1553 mi).

Up to 1,000 Km (621 mi)

During the first 1000 km (621 mi), 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 (61 mi) 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.
We further recommend to check the drive chain often.

From 1000 (621 mi) to 2500 km (1553 mi)

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

Attention

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. Refuel if necessary (see “Refuelling”).
- ENGINE OIL LEVEL
  Check the level in the sump through the sight glass; top-up if necessary (see “Checking the engine oil level”).
- BRAKE AND CLUTCH FLUID
  Check liquid level in the corresponding reservoirs (see "Checking brake and clutch fluid level").
- COOLANT
  Check the level of coolant in the expansion reservoir; top up if necessary (see "Checking and topping up the coolant level").
- TYRE CONDITION
  Check tyre pressure and condition (see “Tubeless tyres”).
- CONTROLS
  Work the brake, clutch, throttle and gear change controls (levers, pedals and twistgrip) and check for proper operation.
- LIGHTS AND INDICATORS
  Make sure lights, indicators and horn work properly. Replace any burnt-out bulbs (see “Replacing headlight light bulbs”).
- KEY LOCKS
  Check the tightening of the filler plug (see “Filler plug”).
- STAND
  Make sure side stand operates smoothly and is in the correct position (see “Side stand”).

ABS light

After Key-ON, the ABS light (warning light 10, see “Instrument panel”) stays ON.
When the motorcycle speed exceeds 5 km/h (3.12 mph), the warning light switches OFF to indicate the correct operation of the ABS system.

Attention

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.

Attention
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.

Attention
Prolonged wheelies could deactivate the ABS system.

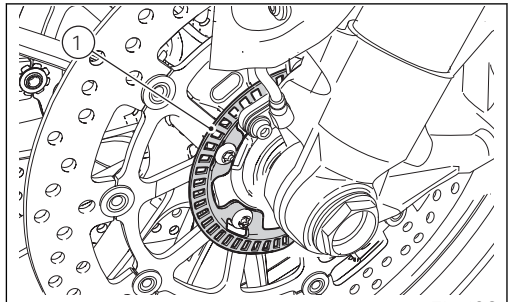


Fig 198

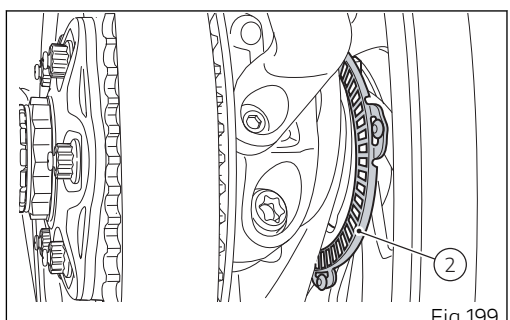


Fig 199

Engine start/stop

Attention

Before starting the engine, become familiar with the controls you will need to use when riding.

Attention

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.

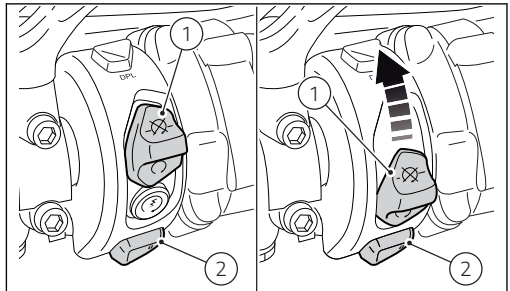


Fig 200

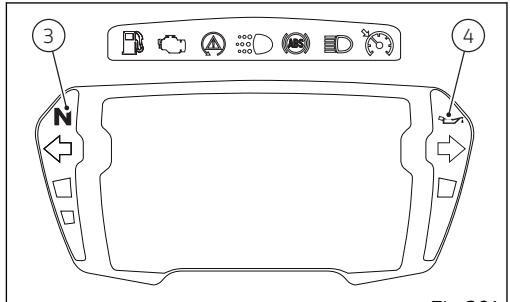


Fig 201

Attention

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.

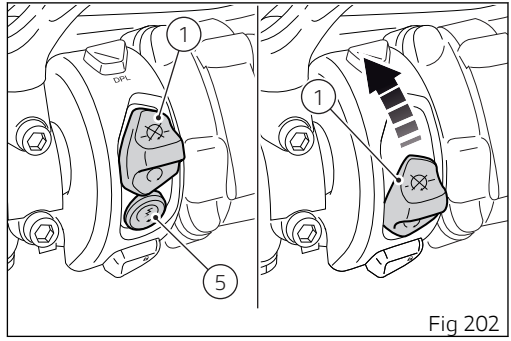


Fig 202

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 201) 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 242 "Hands Free System".

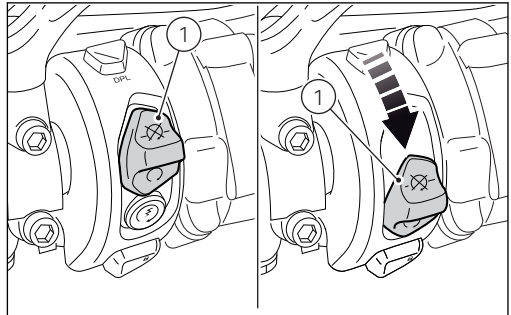


Fig 203

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 204) indicates the position of the Hands Free block (7) and (Fig 205) indicates the position of the antenna (6).

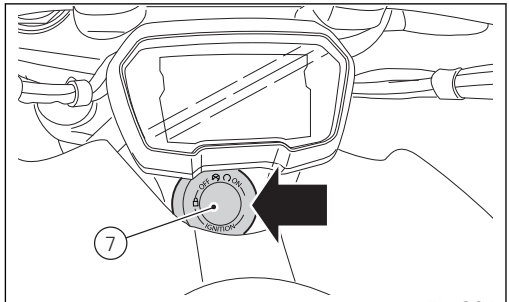


Fig 204

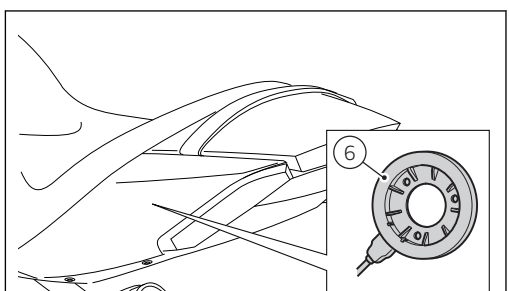


Fig 205

Moving off

1) Squeeze the control lever to disengage the clutch.
2) Push down on gear change lever sharply with the tip of your foot to engage the first gear.
3) 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.

Attention

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.

Attention

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 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 electro-hydraulic 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 use separate control systems.

The X Diavel 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.

Attention

Using the two brake controls separately reduces the motorcycle braking power.
Never use the front brake control harshly or suddenly as you may cause rear wheel lift-up and lose control of the motorcycle (if the ABS is enabled).
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 as well as a possible generation of vapour lock (brake fluid boiling) with a considerable reduction of the braking power.
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.

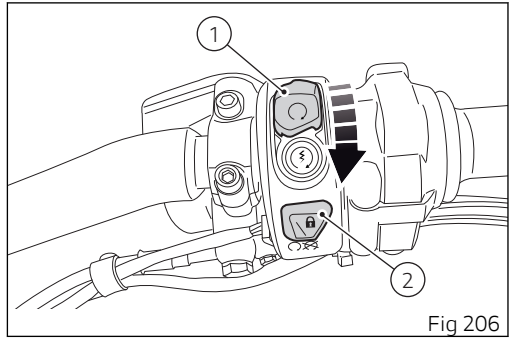


Fig 206

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.

Attention

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.).

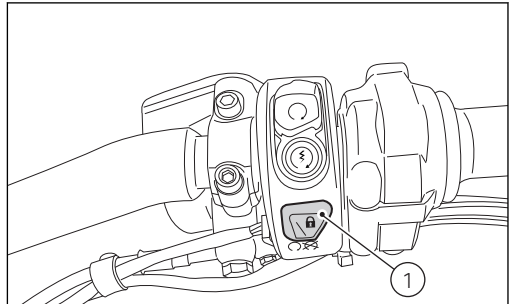


Fig 207

Attention

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

The fuel pressure inside the tank may, in extreme cases, cause fuel to “spray” when opening the fuel cap.

Always open the fuel cap slowly and carefully during the refill.

If you hear an audible hiss from the cap while opening it, wait until the stop of the hissing before opening it completely.

The sound is residual pressure escaping from the fuel tank, therefore the stop of the hiss indicates that there is no more residual pressure.

The situation described above is more likely in hot weather conditions.

Attention

Use fuel with low lead content and an original octane number of at least 95.

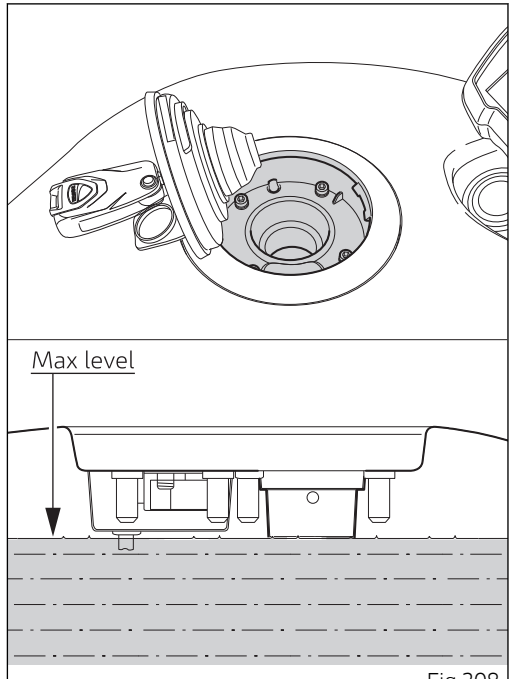


Fig 208

Attention

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.

Fuel label
The label identifies the fuel recommended for this vehicle.

1) The E5 reference inside the label indicates the use of fuel with a maximum oxygen content of 2.7% by weight and a maximum ethanol content of 5% by volume, according to EN 228.

2) The E10 reference inside the label indicates the use of fuel with a maximum oxygen content of 3.7% by weight and a maximum ethanol content of 10% by volume, according to EN 228.

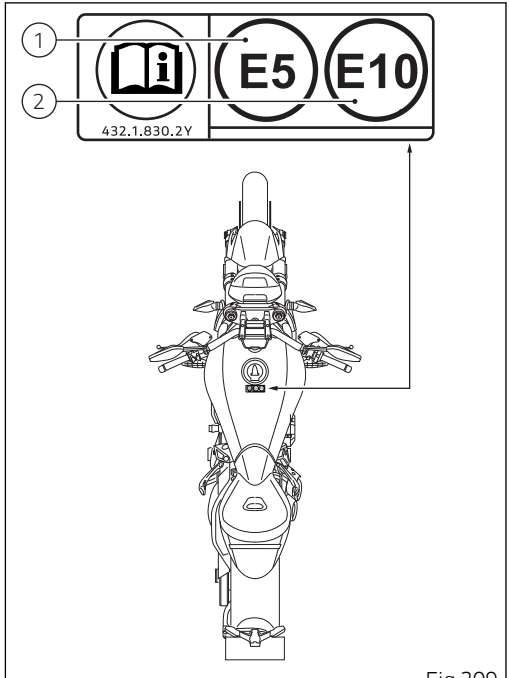


Fig 209

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:

- fuse pliers;
- one helmet anti-theft system cable;
- screwdriver;
- screwdriver handgrip;
- box wrench 14/16 mm (0.55/0.63 in);
- fixed wrench 8/10 mm (0.31/0.39 in);
- Allen wrench 3 mm (0.12 in);
- Allen wrench 5 mm (0.20 in);
- Allen wrench 6 mm (0.24 in).

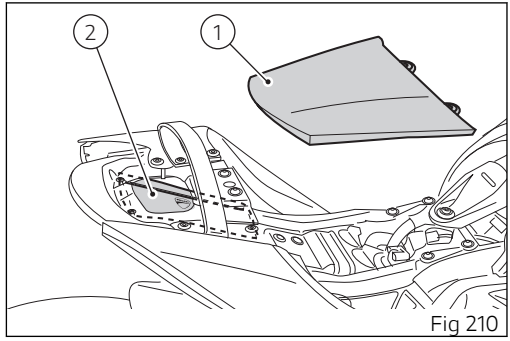


Fig 210

To access the compartment remove the seats.

Have the following part, supplied as standard, installed by a Ducati Dealer or authorised Service Centre:

- passenger back kit.

Main use and maintenance operations

Changing the air filter

Important
Have the air filter maintenance performed at a Ducati Dealer or Authorised Service Centre.

Checking coolant level and topping up, if necessary

Check that the coolant level is between the MIN and MAX notches on the expansion reservoir side, on the motorcycle's left side.
Top up if the level is below the MIN mark.
Position the motorcycle in vertical position, perfectly flat. Unscrew the filler plug (1) of the expansion reservoir, on the motorcycle's right side, 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) (0.66 gal).

Attention

This operation must be performed with cold engine. Failure to observe the above recommendation may lead to coolant or hot vapour leakage with possible consequent severe burns.

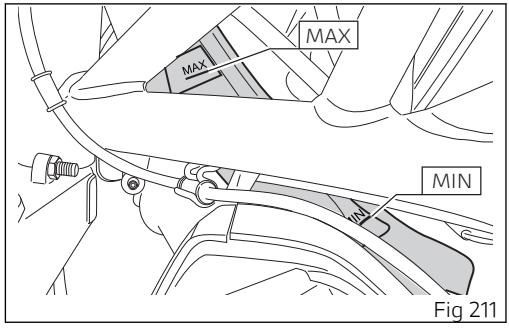


Fig 211

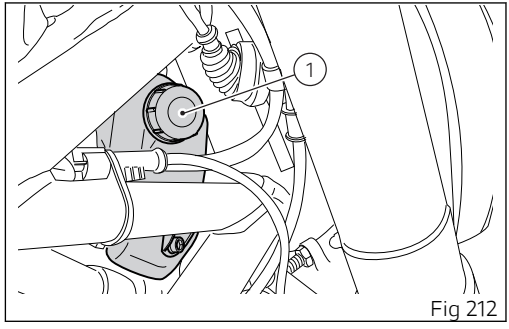


Fig 212

Check clutch and brake fluid level

The level must not fall below the MIN marks on the respective reservoirs.
The clutch and front brake fluid tanks are represented in (Fig 213).
The rear brake tank is represented in (Fig 214).
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.

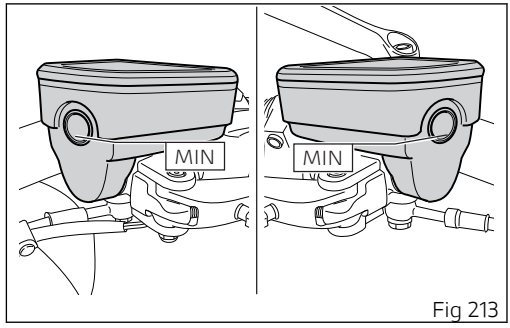


Fig 213

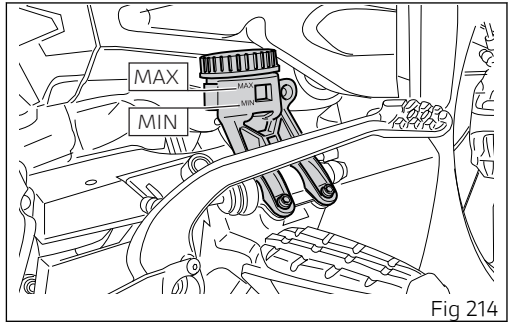


Fig 214

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.

Attention
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.

Attention
Clutch fluid level will increase as clutch plate friction material wears down. Do not exceed the specified level (3 mm - 0.12 in above the minimum level).

Checking brake pads for wear

Check brake pads wear through the inspection hole in the callipers.
Change both pads if friction material thickness of even just one pad is about 1 mm (0.04 in).

Attention

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.

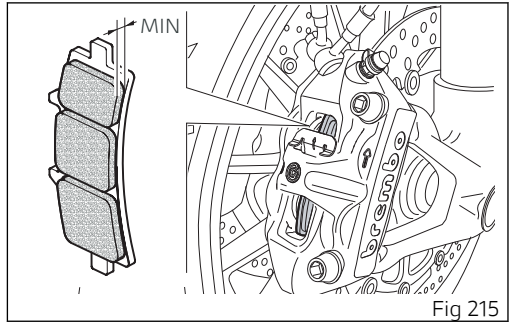


Fig 215

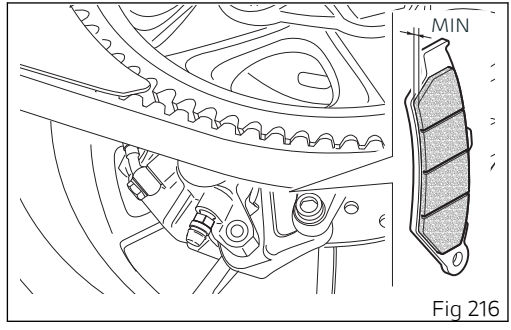


Fig 216

Charging the battery

Before charging the battery, it is best to remove it from the motorcycle.

Important

The battery is located under the cowling; to remove it, ALWAYS contact a Ducati Dealer or authorised Service Centre.

Remove the right cowling (1) by loosening:

- the side screw (2) securing it to the electrical components compartment;
- the three screws (3) for lower securing to the central cowling;
- screw (4) securing central cowling to right cowling;

Remove quick-release fastener (12).

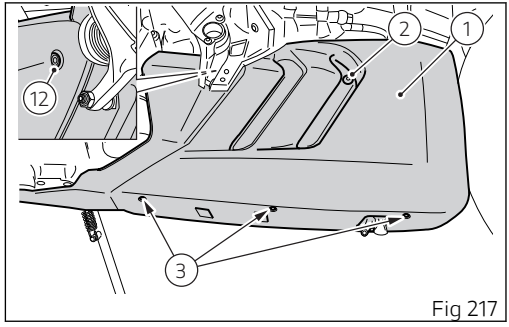


Fig 217

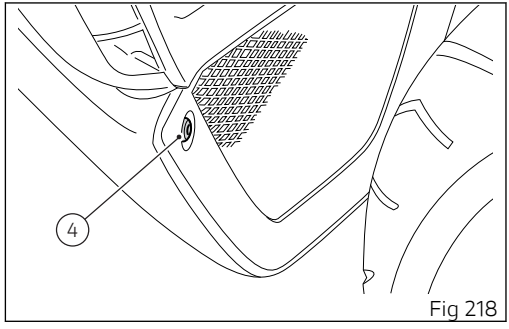


Fig 218

Then, loosen two screws (5) and remove the battery support bracket (6).
Slide out the battery (7) from its housing and, always starting from the negative terminal (-), loosen the two screws (8).
Remove the positive cable (9), the ABS positive cable (10) from the positive terminal and the negative cable (11) from the negative terminal.

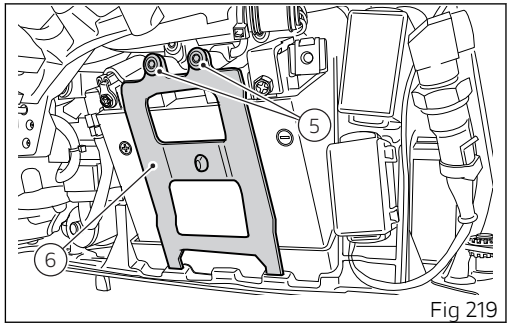


Fig 219

Attention
The battery produces explosive gases: keep it away from heat sources

Attention
Keep the battery out of the reach of children.

Charge the battery at 0.9 A for 5÷10 hours.
Charge the battery in a ventilated room.

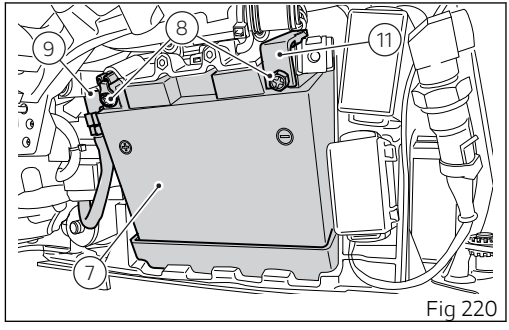


Fig 220

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.

Lay down the ABS positive cable (10), onto positive cable (9) and start screw (8) on these cables.
Connect the positive cable (9), previously assembled to ABS cable (10), to battery positive terminal, and negative cable (11) to battery negative terminal, by starting the other screw (8).
Tighten the terminal two screws (8) to a torque of 4 Nm ±10% and apply grease onto the battery terminals to prevent oxidation.

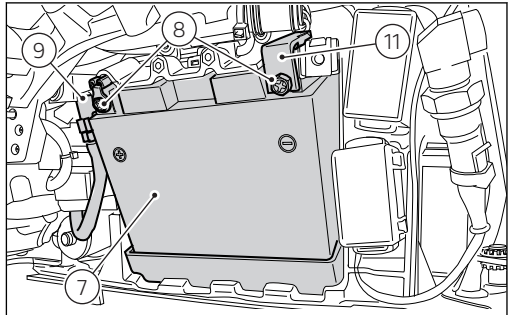


Fig 221

Refit the battery support bracket (6) by inserting the bracket end in the relevant seats (A) on the electric component support.
Start and tighten the two screws (5) to a torque of 5 Nm ± 10%.

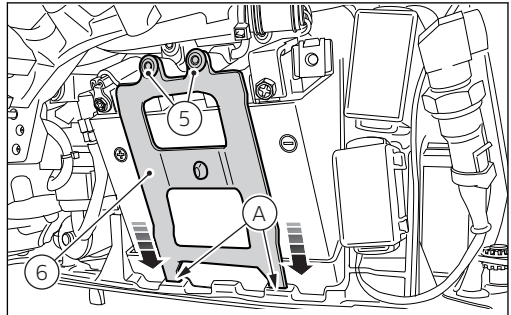


Fig 222

Reposition the right cowling (1) on the motorcycle by fixing it as explained below:

- start the side screw (2) securing it to the electrical components compartment;
- start the three screws (3) for lower securing to the central cowling;
- start screw (4) securing central cowling to right cowling.

Tighten screws (2) and (3) to a torque of 4 Nm ± 10%.
Tighten screw (4) to a torque of 4 Nm ±10%.
Fit quick-release fastener (12).

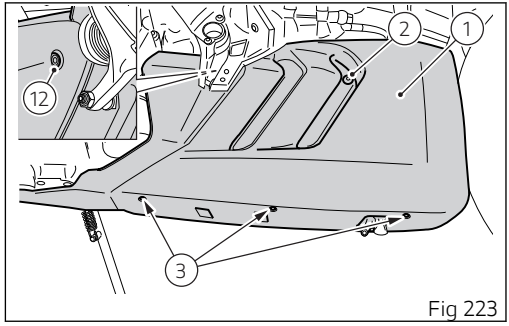


Fig 223

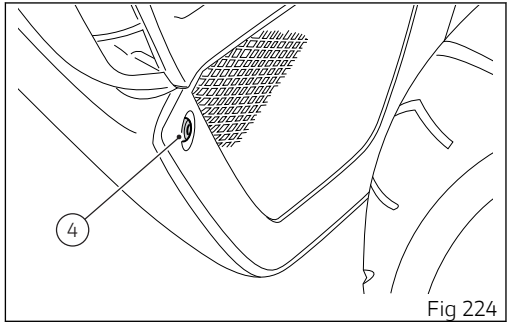


Fig 224

Charging and maintenance of the battery during winter storage

Your motorcycle is equipped with a connector (1) to which you can connect a special battery charger (2) (Battery maintainer kit part no. 69924601A - various countries; Battery maintainer kit part no. 69924601AX - for Japan, China and Australia only) available from our sales network.

Note

The electric system of this model is designed so as to ensure there is a very low power drain when the motorcycle is OFF. Nevertheless, the battery features a certain self-discharge rate that is normal and depends on ambient conditions as well as on "non-use" time.

Important

If battery is not kept at a minimum charge level by a suitable battery charge maintainer, sulphation may occur and this is an irreversible phenomenon causing decreasing battery performance.

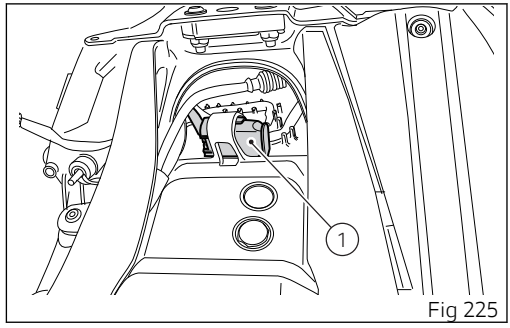


Fig 225

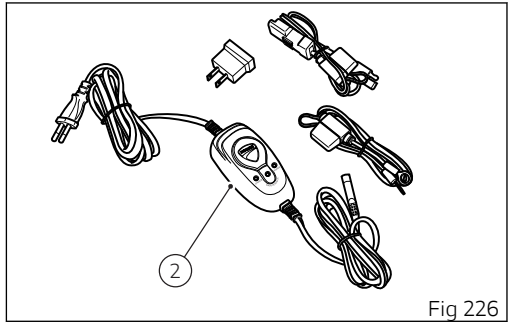


Fig 226

Note
When the motorcycle is left unused (approximately for more than 30 days). We recommend owners to use the Ducati battery charge maintainer (Battery maintainer kit part no. 69924601A - various countries; Battery maintainer kit part no. 69924601AX - for Japan, China and Australia only) since its electronics monitors the battery voltage and features a maximum charge current of 1.5 Ah. Connect the maintainer to the diagnostics socket located in the rear side of the motorcycle.

Note
Using charge maintainers not approved by Ducati could damage the electric system; motorcycle warranty does not cover the battery if damaged due to failure to comply with the above indications, since it is considered as wrong maintenance.

Drive belt tension check

Important
Have drive belt tension adjusted by a Ducati Dealer or authorised Service Centre.

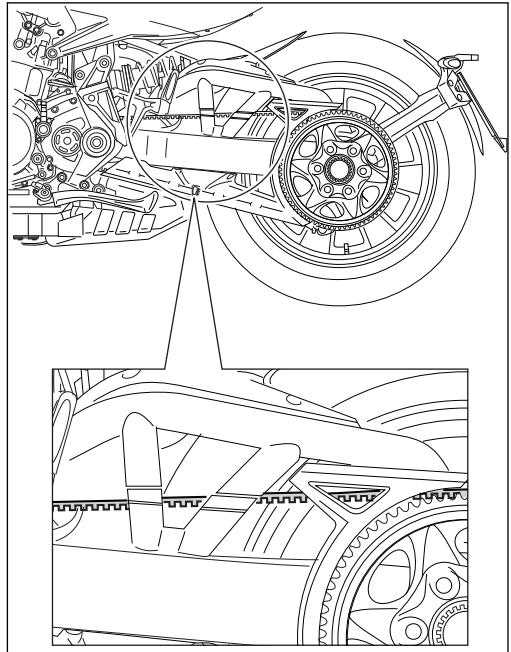


Fig 227

Replacing the high and low beam bulbs

Headlight

The headlight is a full LED unit.

Figure shows the locations of the low beam (LO), high beam (HI) and parking lights (1).
The light voltage and power values are indicated in paragraph "Electric System" page 342.

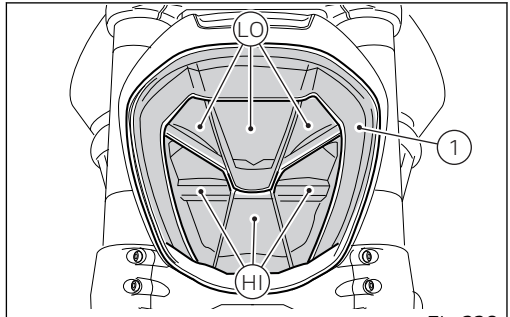


Fig 228

Important

Have the headlight lights replaced by a Ducati Dealer or an Authorised Service Centre.

Attention

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.

Aligning the headlight

Check correct headlight aiming. Position the motorcycle 10 metres (32.8 foot) from a wall or a screen, the motorcycle must be perfectly upright with the Tyres 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.
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.

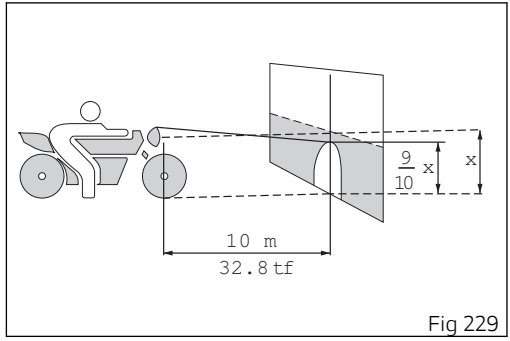


Fig 229

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.

To vertically align the low beam, turn the screws (1).
To vertically align the high beam, turn the screw (2).

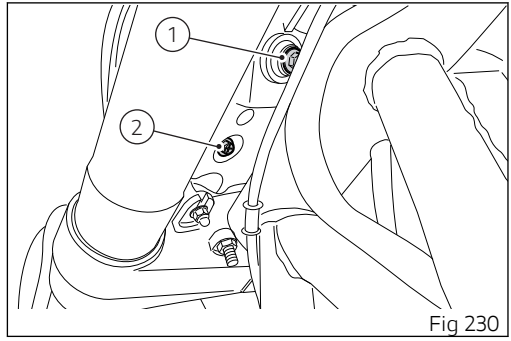


Fig 230

Adjusting the rear-view mirrors

Manually adjust the rear-view mirror by pushing at points (A).

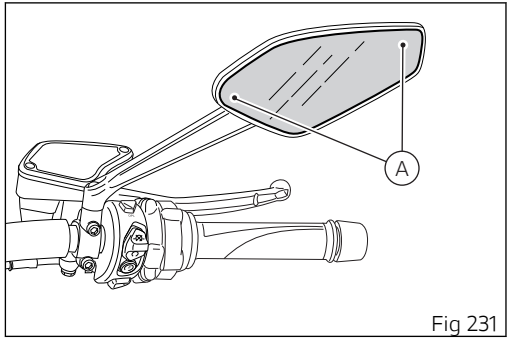


Fig 231

Tyres

Front tyre pressure:
2.50 bar (250 kPa - 36.26 PSI) (rider only)
2.6 bar (260 kPa - 37.71 PSI) (with passenger and/or bags).
Rear tyre pressure:
2.50 bar (250 kPa - 36.26 PSI) (rider only)
2.9 bar (290 kPa - 42 PSI) (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 (2.9÷4.35 PSI).

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.

Attention

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.

Attention

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.

Minimum tread depth

Measure tread depth (S, Fig 232) at the point where tread is most worn down: it should not be less than 2 mm (0.08 in), and in any case not less than the legal limit.

Important

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

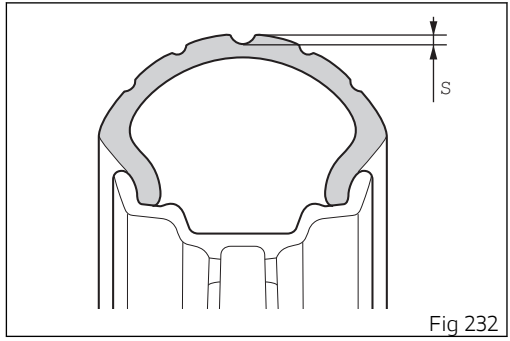


Fig 232

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.

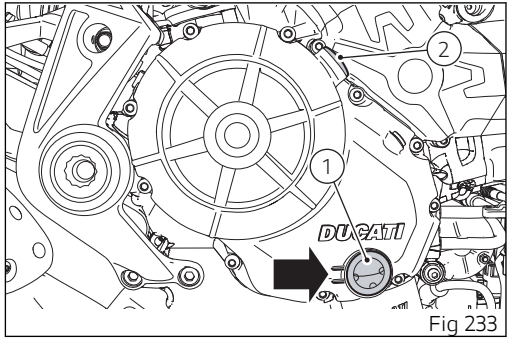


Fig 233

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.

Attention
Never exceed the MAX mark.

Attention
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 (American standard) and JASO (Japanese standard) standards specify oil characteristics.

Cleaning and replacing the spark plugs

Spark plugs are essential to smooth engine running and should be checked at regular intervals.
This operation allows checking the engine operating conditions.
Have the spark plug checked and replaced by a Ducati Dealer or an authorised Service Centre.

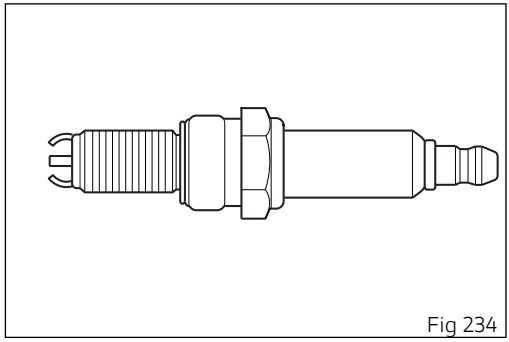


Fig 234

Cleaning the motorcycle



Note

To preserve the finish of metal parts and paintwork, wash and clean your motorcycle at regular intervals, anyway according to road conditions. Use specific products only. Prefer biodegradable products. Avoid aggressive detergents or solvents.
Use only water and neutral soap to clean the Plexiglas and the seat.
Periodically clean by hand all aluminium components. Use special detergents, suitable for aluminium parts. Do NOT use abrasive detergents or caustic soda.



Note

Do not use sponges with abrasive parts or steel wool: only use soft cloths.

However, the warranty does not apply to motorcycles whenever poor maintenance status is ascertained.



Important

Do not wash your motorcycle right after use. When the motorcycle is still hot, water drops will evaporate faster and spot hot surfaces.
Never clean the motorcycle using hot or high-pressure water jets.
Cleaning the motorcycle with a high pressure water jet may lead to seizure or serious faults in forks, wheel hubs, electric system, headlight (fogging), fork seals, air inlets or exhaust silencers, with consequent loss of compliance with the safety requirements.
Clean off stubborn dirt or exceeding grease from engine parts using a degreasing agent. Be sure to avoid contact with drive parts (chain, belt rollers, etc.).

Rinse with warm water and dry all surfaces with chamois leather.

Attention
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.

Attention
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.

Attention
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.

Pay special attention when cleaning the wheel rims since they have parts in machined aluminium; clean and dry them every time you use the motorcycle.

Attention
To clean the side panniers, sue warm water, neutral soap and a soft cloth. Soap and soft brushes are suitable to clean the zips; rinse them with clean water. Do not use aggressive detergents and too hard cleaning tools. Zips that prove hard to be moved can be loosened using a bit of talcum powder.

Important
To clean and lubricate the drive chain, refer to the paragraph “Lubricating the drive chain”.

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 intervention [set mileage (km/mi) or time interval *]	Km. x1,000	1	15	30	45	60	Time (months)
	mi. x1,000	0.6	9	18	27	36	
Reading of the error memory with DDS 2.0 and check of software version update on control units		●	●	●	●	●	12
Check the presence of any technical updates and recall campaigns		●	●	●	●	●	12
Change engine oil and filter		●	●	●	●	●	12
Clean the engine oil mesh filter assembly		●					-
Check and/or adjust valve clearance				●		●	-
Change timing belts				●		●	60
Change water pump belt				●		●	60
Change spark plugs			●	●	●	●	-
Clean plugs with metal mesh filters on heads						●	-
Clean air filter			●		●		-
Change air filter				●		●	-

List of operations and type of intervention [set mileage (km/mi) or time interval *]	Km. x1,000 mi. x1,000	1 0.6	15 9	30 18	45 27	60 36	Time (months)
Check brake and clutch fluid level		●	●	●	●	●	12
Change brake and clutch fluid							36
Check brake disk and pad wear. Change if necessary		●	●	●	●	●	12
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 silentblocks on driven pulley				●		●	-
Check final drive driven and driving pulley nut tightening		●	●	●	●	●	12
Check final drive wear (belt, driven and driving pulley)			●	●	●	●	12
Check final drive belt tension		●	●	●	●	●	12
Check steering bearings and lubricate, if necessary				●		●	-
Change front fork fluid				●		●	-

List of operations and type of intervention [set mileage (km/mi) or time interval *]	Km. x1,000 mi. x1,000	1 0.6	15 9	30 18	45 27	60 36	Time (months)
Visually check the front fork and rear shock absorber seals		●	●	●	●	●	12
Check the freedom of movement and tightening of the side and central stand (if any)		●	●	●	●	●	12
Visually check the fuel lines			●	●	●	●	12
Check rubbing points, clearance, freedom of movement and positioning of hoses and electric wiring in view		●	●	●	●	●	12
Lubricate the levers at the handlebar and pedal controls			●	●	●	●	12
Change coolant					●		48
Visually check the coolant level and sealing of the circuit		●	●	●	●	●	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 lighting, turn indicators, horn and controls		●	●	●	●	●	12
Reset the Service indication through the DDS 2.0		●	●	●	●	●	-

List of operations and type of intervention [set mileage (km/mi) or time interval *]	Km. x1,000	1	15	30	45	60	Time (months)
	mi. x1,000	0.6	9	18	27	36	
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-board documentation (Service Booklet)		●	●	●	●	●	12

* Service operation to be carried out in accordance with the specified distance or time intervals (km, miles or months), whichever occurs first.

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.

List of operations and type of intervention [set mileage (km/mi) or time interval *]	Km. x1000	1
	mi. x1,000	0.6
	Months	6
Check engine oil level		●
Check brake fluid level		●
Check tyre pressure and wear		●
Visual check for wear of final drive belt		●
Check brake pads. If necessary, contact your dealer to replace pads		●

* Service operation to be carried out in accordance with the specified distance or time intervals (km, miles or months), whichever occurs first.

Technical data

Weights

Overall weight (in running order with 90% of fuel - 44/2014/EU Annex XI): 247 Kg (544 lb).
Total weight (kerb weight without fuel): 237 Kg (522 lb).
Overall weight (dry conditions, without fluids and battery): 220 Kg (485 lb).
Maximum allowed weight (carrying full load): 440 kg (970 lb).

Attention

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.

Dimensions

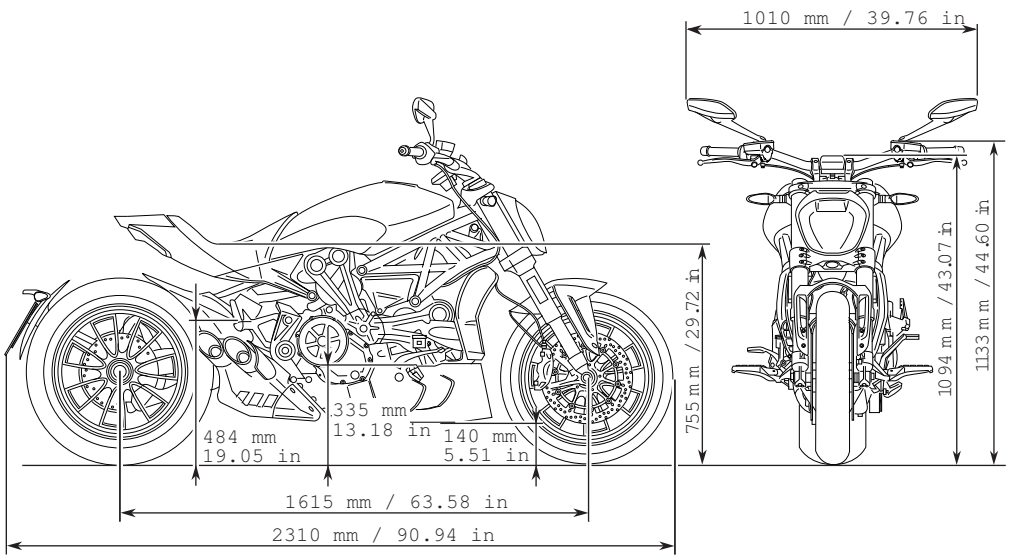


Fig 235

Fuel, lubricants and other fluids

TOP-UPS	TYPE	
Fuel tank, including a reserve of 4 litres (0.88 UK gal)	Ducati recommends SHELL V-Power unleaded premium fuel with a minimum of octane rating of RON 95	18 litres (3.96 UK gal)
Oil sump and filter	Ducati recommends you use SHELL Advance 4T Ultra 15W-50 oil (JASO: MA2, API: SN)	4.2 litres (0.92 UK gal)
Front/rear brake and clutch circuits	DOT 4	-
Protectant for electric contacts	Protective spray for electric systems.	-
Front fork	SHELL Donax TA	835 cc (per leg)
Cooling circuit	ENI Agip Permanent Spezial antifreeze (do not dilute, use pure)	2.5 litres (0.55 UK gal)

Important

Do not use any additives in fuel or lubricants. Using them could result in severe damage of the engine and motorcycle components.

Attention

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.

Important

These references indicate the fuel recommended for this vehicle as specified by the European regulation EN228.



Engine

Ducati Testastretta "L" twin-cylinder engine with DVT system ("Desmodromic Variable Timing"), 4 valves per cylinder, Dual Spark, liquid-cooled.

Bore: 106 mm (4.17 in).

Stroke: 71.5 mm (2.82 in).

Total displacement: 1262 cu. cm (77.01 cu in).

Compression ratio: 13.1±0.5:1.

Maximum power at crankshaft (EU) Regulation no. 134/2014, Annex X, kW/HP:
112 kW/152 HP at 9500 rpm.

Max. power at crankshaft Regulation (EU) no. 134/2014 Annex X kW, for France version only:
73 kW/98 HP at 6750 rpm.

Maximum torque at crankshaft (EU) Regulation no. 134/2014 Annex X:
126 Nm/12.8 kgm at 5000 rpm

Max. torque at crankshaft Regulation (EU) no. 134/2014 Annex X, for France version only:
125 Nm/12.7 kgm at 4750 rpm

Max. rotation speed: 10300 rpm.

Max. rotation speed, for France version only: 10250 rpm.

Important

Do not exceed the specified rpm limits in any running conditions.

Note

The indicated power/torque values have been measured with a static test bench according to type-approval standards and match with the data detected during type-approval process; they are indicated in the vehicle registration document.

Timing system

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

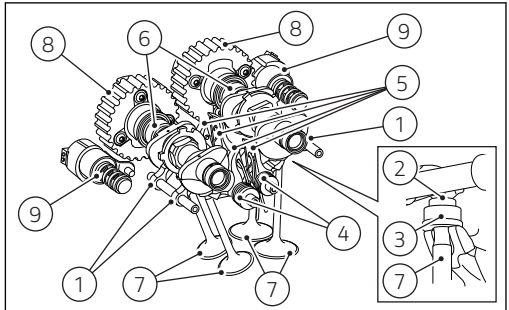


Fig 236

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.
9) 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: MAR10A-J.

Fuel system

BOSCH electronic injection.
Type of throttle body: DEQ 56 elliptical with full Ride-by-Wire system.
Diameter of throttle body: 56 mm (2.20 in).
Injectors per cylinder: 1.
Firing points per injector: 10.
Fuel supply: 95-98 RON.

Attention

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, equipped also with "cornering" function, 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: stainless steel
Disc diameter: 320 mm (12.59 in).
Hydraulically operated by a control lever on handlebar right-hand side.
Brake calliper make: BREMBO.
Front brake type: M4.32B.
Friction material make: TOSHIBA.

Friction material: TT 2182 FF.
Brake master cylinder type: PR18/19.

REAR

With fixed drilled steel disc.
Disc diameter: 265 mm (10.43 in).
Hydraulically operated by a pedal on RH side.
Brake calliper make: BREMBO, floating, with 4 pistons.
Rear brake type: PF 30/32A.
Friction material make: TOSHIBA.
Friction material: TT 2182 FF.
Fixed, 32 mm (1.26 in) diameter 4-piston calliper.

Attention

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/progressive 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.

Driven pulley/driving pulley ratio: Z28/Z80.
Total gear ratios:
1st gear 15/37
2nd gear 17/30
3rd gear 20/27
4th gear 22/24
5th gear 24/23
6th gear 25/22

Drive belt from gearbox to rear wheel.
Toothed belt: Z173 L35

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.

Attention
If the rear pulley 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.
Steering head angle: 30°.
Steering angle: 34° LH side / 34° RH side.
Trail: 130 mm (5.11 in).

Wheels
Front

Light alloy cast rims.
Size: MT3.50x17".

Rear

Light alloy cast rims.
Size: MT8.00x17".

Tyres
Front

"Tubeless", radial tyre.
Size: 120/70-ZR17
Make and type: Pirelli Diablo Rosso II.

Rear

"Tubeless", radial tyre.
Size: 240/45-ZR17
Make and type: Pirelli Diablo Rosso II.

Suspension
FRONT

Front
Make: Marzocchi
Hydraulic fork with steel legs, preload and compression adjuster (left leg) and rebound adjuster (right leg).
Stanchion diameter:
50 mm (1.96 in).

Rear

Make: Sachs
The shock absorber (TBC) features adjustable preload and rebound damping, with remote tank; it pivots onto frame at the top and on the 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 (2.34 in).
Rear wheel travel: 120 mm (4.72 in).

Exhaust system

"2 into 1 into 2" manifolds layout with 2 lambda sensors and 2 catalytic converters.
Split absorption tail pipe.
Stainless steel silencer with double elliptical outlets.

Available colours

X Diavel S

DARK STEALTH
Primer (Primer 2 K Black) code 873.A002 (PALINAL).
Primer (Black Stealth - Black 94) code 929.R223 (PALINAL).
Clear coat (Matt Clear Coat 2K) code 923I.2176 (PALINAL).
Mineral Grey frame code 37321 (INVER SPA).
Monocoque Grey rear subframe code 86176 (INVER SPA).
Mineral Grey rims - varnish code SC-BK-15047 (Akzo nobel).

THRILLING BLACK
Primer 2 K Black code 873.A002 (Palinal).
Primer, Black Stealth (Black 94) code 929.R223 (Palinal).
Clear coat code 923M1598 (Palinal).
Mineral Grey frame code 37321 (INVER SPA).
Wrinkled Mineral Grey rear subframe code 37418 (INVER SPA).
Glossy Black Base wheel rims code 43NL0007 (Akzo Nobel) Clear coat Acrymine HP Clear (Peter Lacke).

X Diavel

LIQUID CONCRETE GREY MATT
Primer (Primer 2 K Black) code 873.A002 (Palinal).
Clear coat - Acrymine HP Clear (Peter Lacke).
Basecoat (Liquid Concrete Grey) code 929.K079/2 (Palinal).
Clear coat - Matt Clear Coat code 923I2105 (Palinal).
Frame, Carbon Black code 44974 (INVER SPA).
Wrinkled Mineral Grey rear subframe code 37418 (INVER SPA).
Glossy Black Base wheel rims code 43NL0007 (Akzo Nobel) Clear coat Acrymine HP Clear (Peter Lacke).

Electric system

Basic electric items are:

Headlight

LED low beam light type: No. 4 LEDs (13.5V - 24.3W);
LED high beam light type: No. 5 LEDs (13.5V - 18.9W);
LED parking light type: No. 5 LEDs (13.5V - 6.2W).

Turn indicators

Front turn indicators: LED (13.5V - 4.7W).
rear turn indicators: LED (13.5V - 2.06W).
Electrical switches on handlebar.

Tail light

Parking light: (13.5V - 0.3W);
LED stop light: (13.5V - 1.4W);
Number plate light: LED (13.5V - 0.7W).

Fuses

There are thirteen fuses that protect the electric components, located inside the upper and lower fuse boxes, and one on the solenoid starter. There is a spare fuse (S) in every box.
Refer to the table below to identify the circuits protected by the various fuses and their ratings.
The upper (A) and lower (B) fuse boxes are located on the right side of the electric component support, next to the battery.
To reach the fuse boxes, remove the right cowling, see procedure described in page 306.
To expose the fuses, lift the box protective cover.
Mounting position and ampere capacity are marked on box cover.

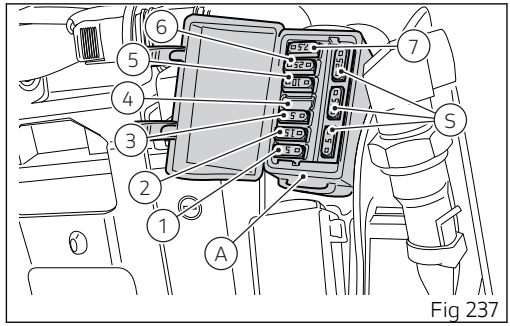


Fig 237

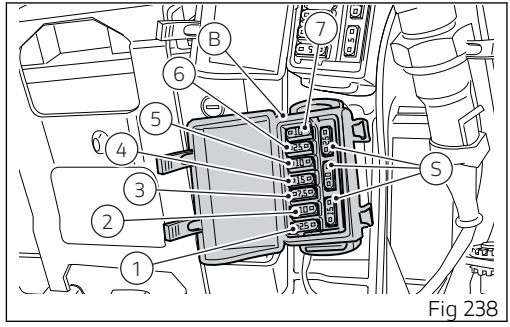


Fig 238

Upper fuse box key (A)		
Pos	El. item	Rat.
1	KEY EMS / ABS / IMU	5 A
2	KEY DSB / BBS	15 A
3	KEY Lights	5 A
4	-	-
5	KEY Accessories	10 A
6	+30 Hands Free	25 A
7	+30 Diagnosis / charge	7.5 A

Lower fuse box key (B)		
Pos	El. item	Rat.
1	+30 EMS LOAD RELAY	25 A
2	+30 FUEL PUMP RELAY	10 A
3	+30 Starter RELAY	7.5 A
4	+30 Instrument panel	15 A

Lower fuse box key (B)		
5	+30 Black Box System (BBS)	10 A
6	+30 ABS UBMR	25 A
7	+30 ABS UBVR	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.

Attention

Never use a fuse with a rating other than specified. Failure to observe this rule may damage the electric system or even cause fire.

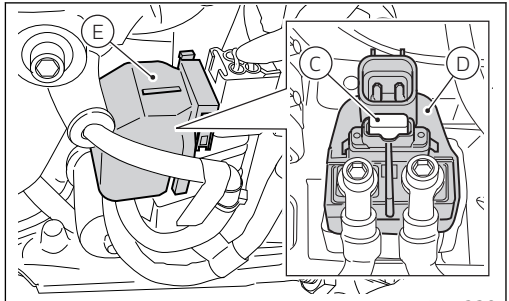


Fig 239

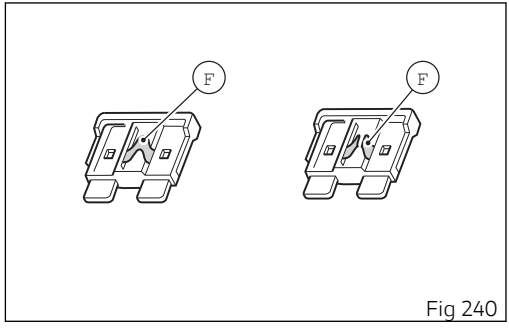


Fig 240

Injection/electric system diagram key

1) Front stop light
2) Bluetooth
3) Left-hand switch
4) Right-hand switch
5) Inertial sensor
6) Immobilizer
7) Hands free
8) Hands Free Relay
9) Battery
10) Wiring ground
11) Fused solenoid
12) LH fan
13) RH fan
14) Generator
15) Rectifier
16) Data Acquisition / Diagnosis
17) Anti-theft system alarm
18) Right tail light
19) Left tail light
20) Rear right turn indicator
21) Rear left turn indicator
22) Rear wiring
23) Number plate light
24) Temperature sensor
25) LH heated handgrip connector (optional)
26) RH heated handgrip connector (optional)
27) Exhaust valve motor
28) Vehicle control unit (BBS)
29) Fuel level
30) Fuse box (2)
31) Fuse box (1)
32) ABS
33) Rear speed sensor
34) Front speed sensor
35) Fuel pump
36) Main control unit relay
37) Fuel pump relay
38) Starter relay
39) Injection control unit connector A (EMS)
40) Injection control unit connector B (EMS)
41) Gear sensor
42) Throttle twistgrip position sensor (APS)
43) Vertical ETV
44) Horizontal ETV
45) Main vertical injector
46) Main horizontal injector
47) Vertical lambda sensor
48) Horizontal lambda sensor
49) Timing/rpm sensor
50) Vertical cylinder secondary coil

51) Vertical cylinder main coil
52) Horizontal cylinder secondary coil
53) Horizontal cylinder main coil
54) Oil pressure sensor
55) Purge valve
56) Oil temperature
57) Clutch switch
58) Side stand switch
59) Engine temperature sensor
60) Air temperature sensor
61) Vertical MAP sensor
62) Horizontal MAP sensor
63) Vertical cylinder knock sensor
64) Horizontal cylinder knock sensor
65) Secondary air sensor
66) Vertical cylinder EX timing sensor
67) Vertical cylinder IN timing sensor
68) Horizontal cylinder EX timing sensor
69) Horizontal cylinder IN timing sensor
70) Vertical cylinder EX timing connector
71) Vertical cylinder IN timing connector
72) Horizontal cylinder EX timing connector
73) Horizontal cylinder IN timing connector
74) Front left turn indicator
75) Instrument panel
76) Front right turn indicator
77) Headlight
78) Horn
79) Rear stop light

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

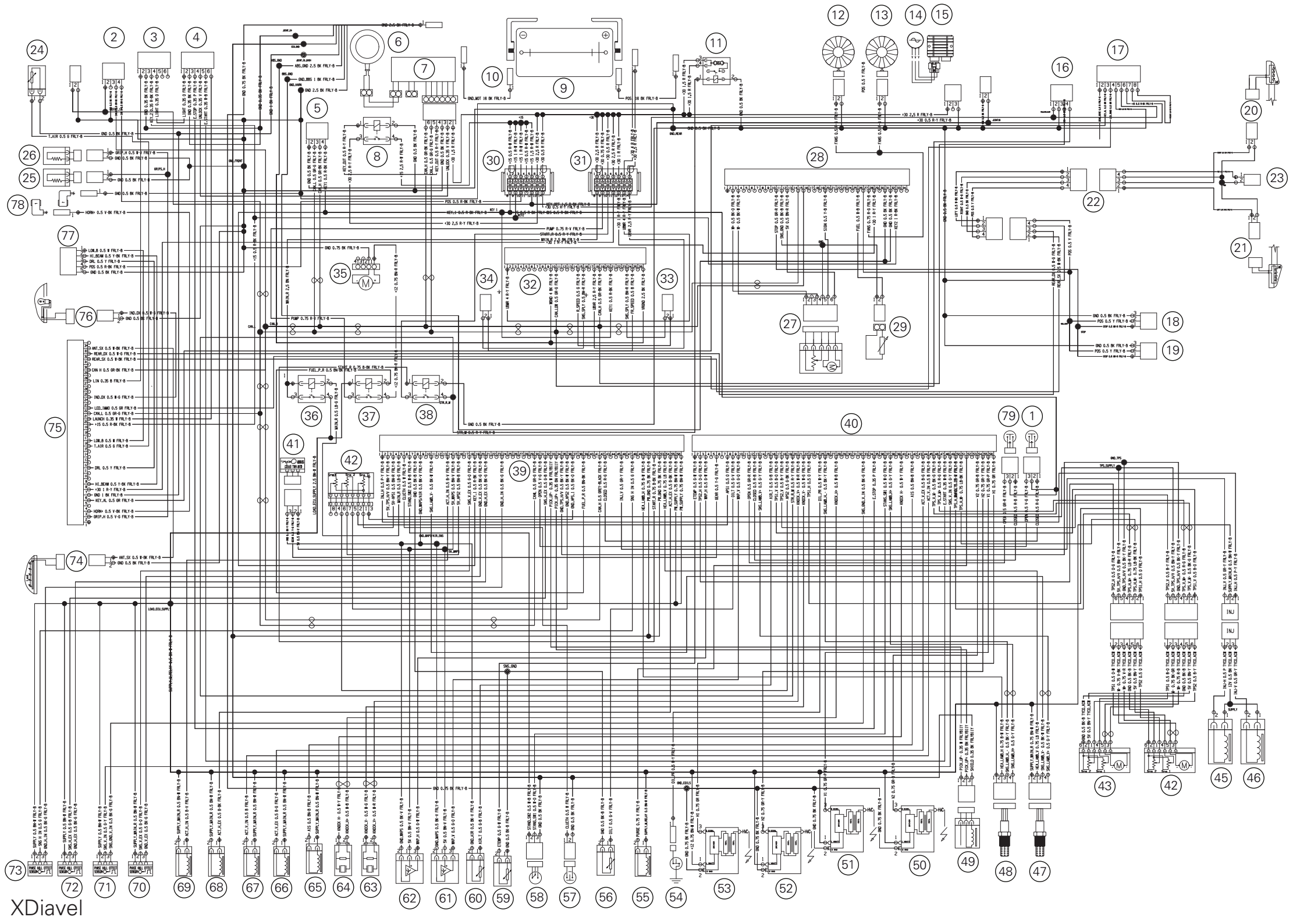
Note
The electric system wiring diagram is at the end of this manual.

Routine maintenance record

Routine maintenance record

KM	NAME DUCATI SERVICE	MILEAGE	DATE
1000			
15000			
30000			
45000			
60000			

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XDiavel

cod. 913.7.439.1A

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A Company subject to the Management
and Coordination activities of AUDI AG