Owner's manual
Anleitungs-und Instandhaltungsheft

DIAVEL

DIAVEL CARBON ABS

DIAVEL ABS

Owner's manual

ENGLISH

DIAVEL

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This manual forms an integral part of the motorcycle and must be kept with it whole its service life.
If the motorcycle is resold, the manual must always be handed over to the new owner.
This manual must be preserved with care.
If it lost or becomes damaged, contact a Ducati Dealer or authorised Service Centre without delay to obtain a new copy of the manual.

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

Foreword

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

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

In your own interest, for your safety and in order to guarantee product reliability, you are strongly advised to refer to our authorised Dealers and Service Centres for any operations listed in the scheduled maintenance chart, see 191.

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.

Table of contents

Safety guidelines

Your safety and that of other road users are very important. Ducati Motor Holding S.p.A. recommends that you ride responsibly. Before using your motorcycle for the first time, read this entire manual carefully and closely follow the guidelines outlined in it. The manual provides full information on proper motorcycle operation and maintenance. In case of any doubts, please call a Dealer or Authorised Service Centre.

Safety alerts

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

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

Warning

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

Important

Possibility of damaging the motorcycle and/or its components.

Note

Additional information concerning the job being carried out.

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

Permitted use

This motorcycle must be used only on asphalted roads or on level, regular pavement.
This motorcycle may not be used for riding on dirt trails or for off-road riding.

Warning
Off-road riding may lead to loss of control, resulting in severe damage to vehicle, injury or death.

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

Warning
The total weight of the motorcycle in running order including rider, passenger, luggage and additional accessories should not exceed 400 kg.

Rider's obligations

All riders must hold a valid licence.

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

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

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

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

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

Some states require vehicle insurance.

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

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

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

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

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

Rider training

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

Warning

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

Riding gear

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

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

- The helmet must 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, pants 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 proper protective gear, regardless of season and weather.

Important

Have your passenger wear proper protective clothing.

Best practices for motorcycle safety

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

Important

Closely follow the indications provided at page 148 during the running-in period. Failure to follow these instructions releases Ducati Motor Holding S.p.A. from any liability whatsoever for any engine damage or shorter engine life.

Warning

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

Perform the checks recommended in this manual before each ride (see page 150).

Warning

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

Warning

Start the engine outdoors or in a well ventilated area. The engine should never be started or run indoors.
Exhaust gases are poisonous and may lead to loss of consciousness or even death within a short time.
Use proper body position while riding and ensure your passenger does the same.

Important

Rider must hold the handlebars with both hands AT ALL TIMES while riding.

Important

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

Important

The pillion passenger should always hold on to the grab handle (foldaway-type, see page 141) placed inside the tail guard with both hands.

Important
Be very careful when tackling road junctions, or when riding in the 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 hit 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 cracks and cuts, especially on the side walls, and bulges or large stains that indicate internal damage. Replace them if badly damaged.
Remove any stones or other foreign bodies caught in the tread.

Warning
The engine, exhaust pipes, and silencers stay hot for a long time after the engine is stopped; take special care not to touch the exhaust system with any part of your body and do not park the motorcycle next to inflammable material (wood, leaves, etc.).

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

Refuelling

Refuel outdoors with the engine turned off.

Do not smoke or use open flames when refuelling.

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

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

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

Warning

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

Warning

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

Warning

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

Carrying the maximum load allowed

Your motorcycle is designed for long-distance riding, carrying the maximum load allowed in full safety.

Even weight distribution is critical to preserving these safety features and avoiding trouble when performing sudden manoeuvres or riding on bumpy roads.

Warning

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

Secure the luggage firmly to the motorcycle structure. Luggage incorrectly secured may cause the motorcycle to become unstable.

Important

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

Warning

Make sure the tyres are inflated to the proper pressure indicated at page 185 and that they are in good condition.

Dangerous products - warnings

Used engine oil

Warning
Prolonged or repeated contact with used engine oil may cause skin cancer. If exposed to used engine oil on a daily basis, make it a rule to wash your hands thoroughly with soap immediately after use. Keep away from children.

Brake lining debris

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

Brake fluid

Warning
Avoid spilling brake fluid onto plastic, rubber or painted parts of the motorcycle to avoid the risk of damage. Protect these parts with a clean shop cloth before proceeding to service the motorcycle. Keep away from children.

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

Coolant

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

Warning
Take care not to spill engine coolant on the exhaust system or engine parts. These parts may be hot and ignite the coolant, which will subsequently burn with invisible flames.

Coolant (ethylene glycol) is an irritant and is poisonous when ingested. Keep away from children. Never remove the radiator cap when the engine is hot. The coolant will be scalding hot and is under high pressure.

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

Battery

Warning
The battery produces explosive gases; keep it away from any source of ignition such as sparks, flames and cigarettes. Charge the battery in a well-ventilated area.

Vehicle identification number

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

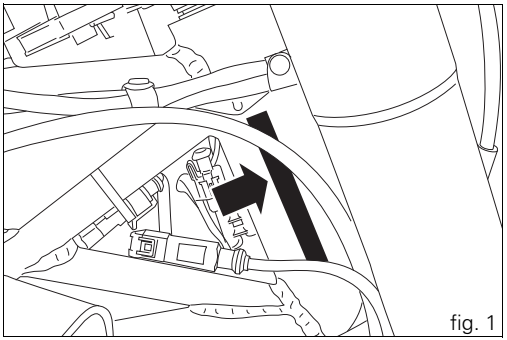


fig. 1

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

Frame number

Engine identification number

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

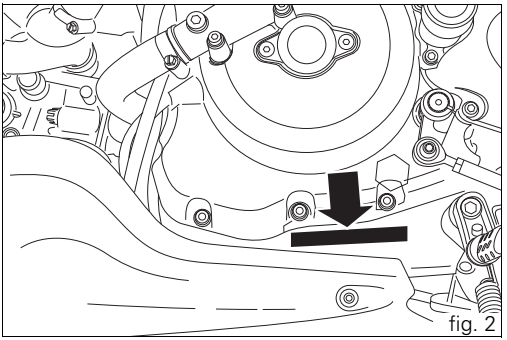


fig. 2

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

Engine number

Blank page

Instrument panel (Dashboard)

The vehicle is equipped with two instrument panels: an LCD (1, fig. 3) located on the handlebar containing the key indications (speed, rpm, coolant temperature and clock) and a TFT colour display (2, fig. 3) located in the tank fairing displaying trip information (riding style set, odometer, consumption, average speed, etc.) and the setting menu for activating and setting the various functions.

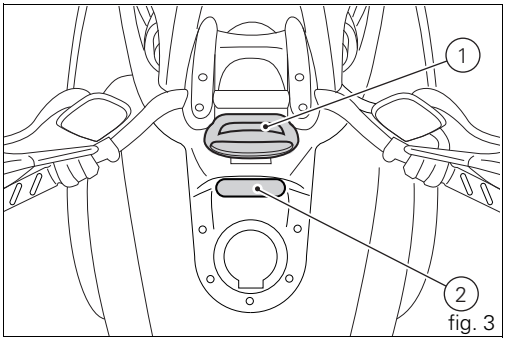


fig. 3

Instrument panel on handlebar

1) LCD.
2) NEUTRAL LIGHT N (GREEN).
Comes on when in neutral position.
3) HIGH BEAM LIGHT (BLUE).
It turns on to indicate that the high beam lights are on.
4) 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 this light (4) stays on, stop the engine or it may suffer severe damage.

5) FUEL WARNING LIGHT (AMBER YELLOW).
Comes on when fuel is low and there are about 4 litres of fuel left in the tank.
6) TURN INDICATOR LIGHTS (GREEN).
Illuminates and flashes when the turn indicator is in operation.

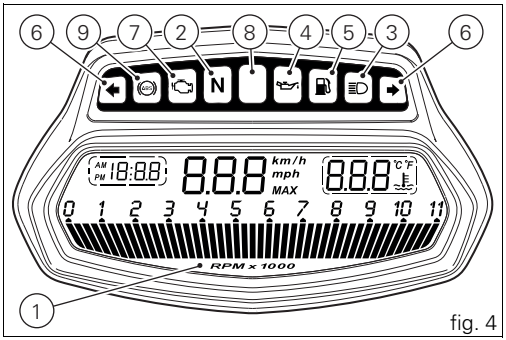


fig. 4

7) "ENGINE/VEHICLE DIAGNOSIS - EOBD" LIGHT (AMBER YELLOW).
It turns on in the case of "engine" and/or "vehicle" errors and in some cases will lock the engine.

8) Limiter light "Over rev"/ traction control light "DTC" (RED) (fig. 4):

	Over rev light
No limiter	Off
1st threshold - no. RPM before the limiter threshold (*)	On - STEADY
Rev limiter (limiter engaged due to overrevving) (*)	On - Flashing

(*) depending on the model, 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.

	DTC intervention lights
No intervention	Off
DTC intervention	On - Flashing

Note
If the Over rev function light and the DTC intervention light should both come on at the same time, the instrument panel gives priority to the Over rev function.

9) ABS LIGHTS (ABS)(AMBER YELLOW) (fig. 4).
This turns on to indicate that ABS is disabled or not functioning.

Engine off / speed below 5 Km/h		
Light off	Light flashing	Light steady
-	ABS disabled with the menu function "ABS"	ABS enabled but not yet operating
Engine on / speed below 5 Km/h		
Light off	Light flashing	Light steady
-	ABS disabled with the menu function "ABS"	ABS enabled but not yet operating
Engine on / speed above 5 Km/h		
Light off	Light flashing	Light steady
ABS enabled and functioning	ABS disabled with the menu function "ABS"	ABS disabled and not functioning due to a problem.

LCD unit functions

1) SPEEDOMETER.
Gives road speed
2) REV COUNTER.
Indicates engine revs per minute.
3) CLOCK.
4) WATER TEMPERATURE INDICATOR.
Indicates engine coolant temperature.

Important
Stop riding if the temperature reaches the maximum value, otherwise the engine might be damaged.

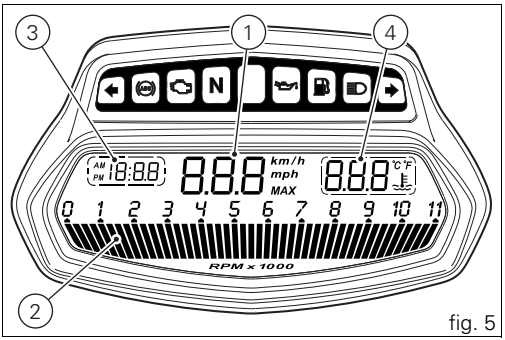


fig. 5

Vehicle speed indicator

This function displays vehicle speed (Km/h or mph depending on the set measurement system).
The instrument panel receives information about the actual speed and displays the number increased by 5%.
Maximum speed displayed is 299 km/h (186 mph).
Over 299 km/h (186 mph) a series of dashes will be displayed "- - -" (not flashing).

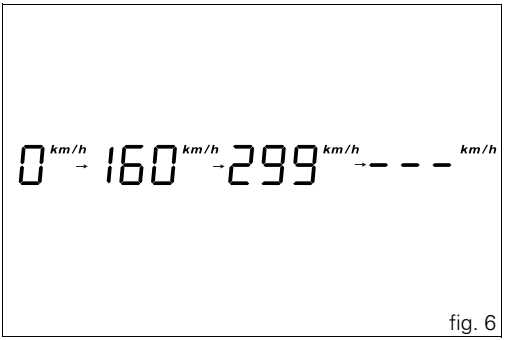


fig. 6

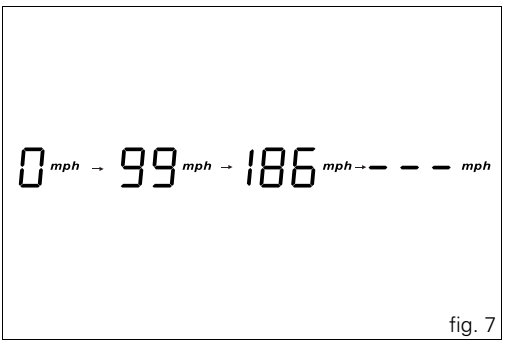


fig. 7

Engine rpm indicator (RPM)

This function displays the rpms.
The instrument panel receives the engine rpm information and displays it.
This information is displayed progressively from the left to the right, identifying the rpms.

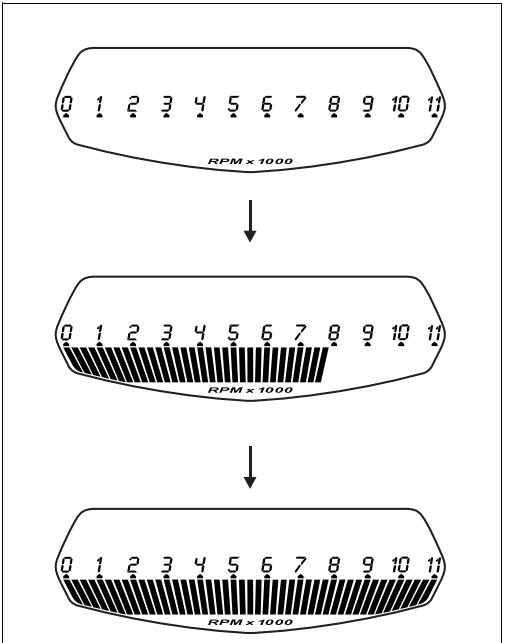


fig. 8

Clock

This function shows the time.
Time is always displayed as follows:
AM from 0:00 to 11:59
PM from 12:00 to 11:59

If battery power is suddenly cut off (Battery OFF), when battery power is restored and upon next Key-On, the clock is reset and restarts operating from "0:00".

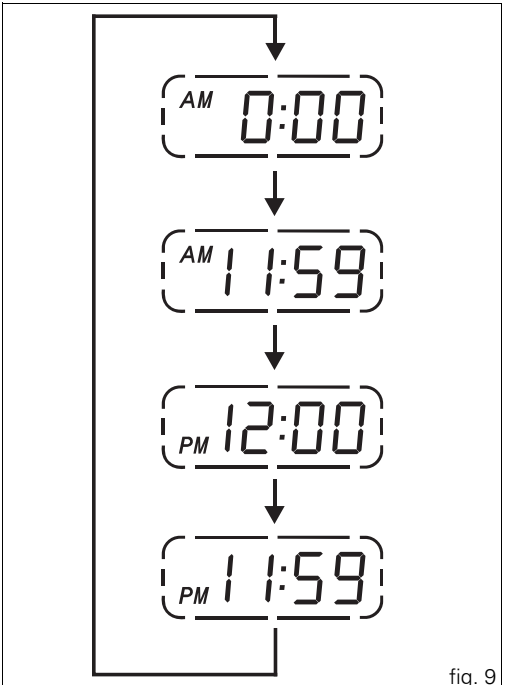


fig. 9

Coolant temperature

This function indicates coolant indication state.
The temperature unit of measure can be selected (°C or °F).
The reading is indicated as follows:

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

Note
In the event of a sensor "error", a string of flashing dashes ("---") is shown and the "Engine/ vehicle diagnosis - EOBD" light (7, fig. 4) comes on.

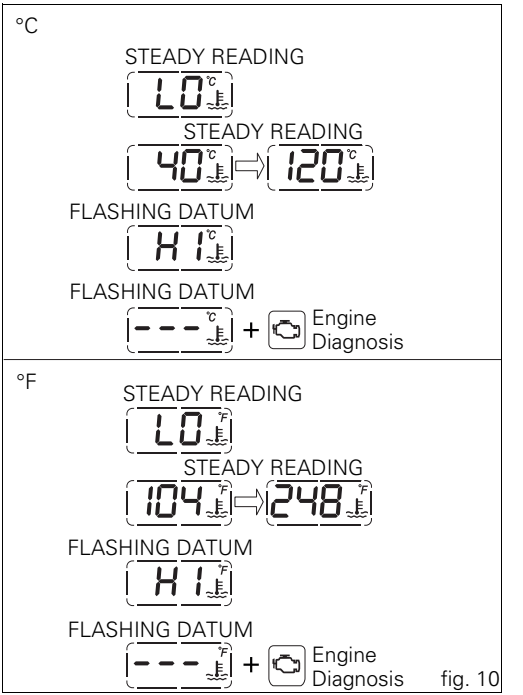


fig. 10

Display background colour (Automatic adjustment)

Instrument panel background colour is set automatically according to exterior lighting conditions.
When sensor detects "poor lighting" (night), it switches to black background mode; vice versa when a "significant" lighting is detected (day), it switches to white background mode.
It is nevertheless possible to customise this function through the "setting" menu function "BACK LIGHT - DASHBOARD 1", on page 78, and possibly set one of the two modes available, NIGHT or DAY, as permanent setting (or go back to AUTO mode).

Instrument panel on tank

1) Menu 1 (TOT, TRIP1, TRIP2, TRIP FUEL).
2) Menu 2 (CONS.AVG., CONS., SPEED AVG, AIR and TRIP TIME) if active.
3) Gear / Neutral Indication.
4) Icon referred to the function below from Menu 1.
5) Indication of Engine setting for the currently set riding style.
6) Currently set Riding Style (Riding Mode).
7) Indication of the intervention level of the DTC (Traction Control) for the currently set riding style.
8) Icon referred to the function below from Menu 2.

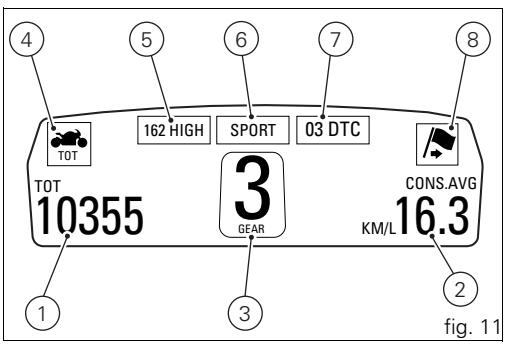


fig. 11

9) CONTROL BUTTON(fig. 12)

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

10) CONTROL SWITCH (fig. 12)

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

11) HIGH-BEAM FLASH BUTTON FLASH (fig. 12)

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

12) RESET BUTTON (fig. 12)

The turn indicators off button may also be used for the RESET/CONFIRM function on the instrument panel and for activating the "Riding Style".

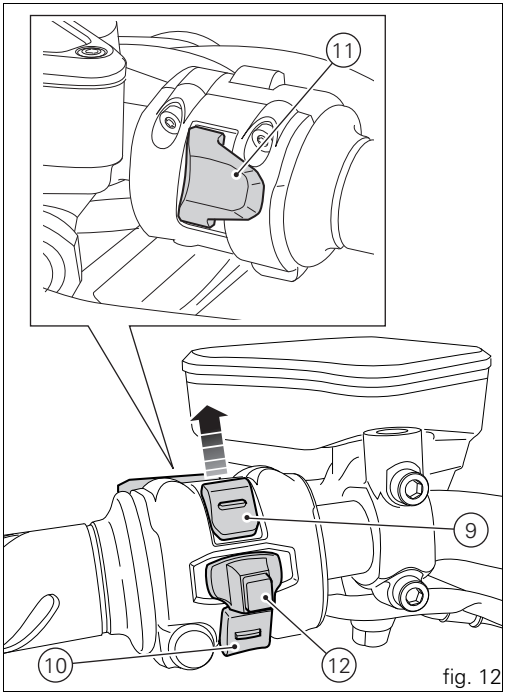


fig. 12

TFT - Parameter setting/display

Warning
Any adjustments to the instrument panel must only be carried out when the motorcycle is stationary. Never operate the instrument panel controls while riding the motorcycle.

At the end of the check, the instrument panel always displays as the "main" indication the Odometer (TOT) on the left and the Average Fuel Consumption on the right (unless Menu 2 was disabled).

At the end of the initial check, the instrument panel will always show the "main" display, indicating the following information:

- Set "Riding Style" (Riding Mode);
- Gear indication (GEAR);
- Menu 1: Odometer (TOT);
- Menu 2: Average Fuel Consumption (CONS. AVG).

By pressing the (1, fig. 14) "▲" button it is possible to switch to the following functions of menu 1:
- TRIP1 - Trip meter 1;
- TRIP2 - Trip meter 2;

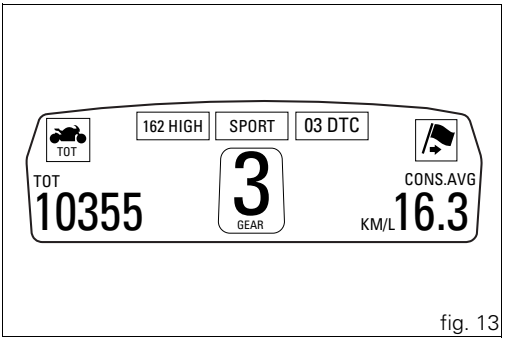


fig. 13

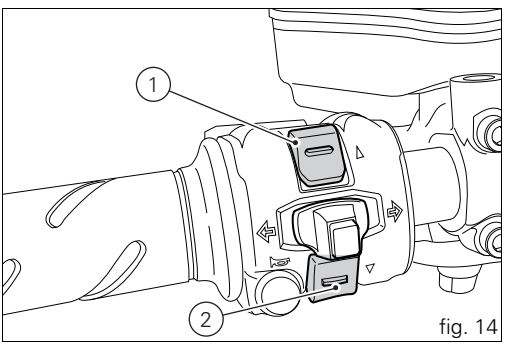


fig. 14

- TRIP FUEL - Distance travelled on fuel reserve (only if active).

By pressing the (2, fig. 14) "▼" button it is possible to switch to the following functions of menu 2:
- CONS. - Current fuel consumption;
- SPEED AVG - Average speed;
- TRIP TIME - Trip time;
- AIR - Air temperature.

Note
Menu 2 viewing can be disabled through the "MENU 2" Function of the Setting menu.

Total distance covered indicator: "Odometer"

This function shows the total distance covered by the vehicle (in Km or miles depending on the specific application).
At Key-On the system automatically enters this function.
The odometer reading is stored permanently and cannot be reset.
If the distance travelled exceeds 199999 km (or 199999 miles), the value "199999" will be displayed permanently.

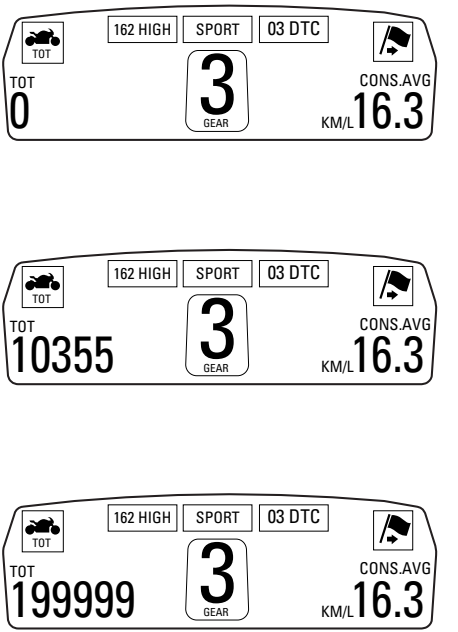


fig. 15

"Trip 1" meter

This function shows the distance travelled since the Trip meter was last reset (in Km or miles depending on the specific application).
Holding the button (1, fig. 14) "▲" pressed for 3 seconds when this function is displayed resets the trip meter.
When the reading exceeds 9999.9, distance travelled is reset and the meter automatically starts counting from 0 again.
If the system measurement units are changed at any moment through the "SET UNITS" function of the Setting menu, or if there is an interruption in the power supply (Battery Off), the distance travelled is reset and the count starts from zero (considering the newly set unit of measurement).

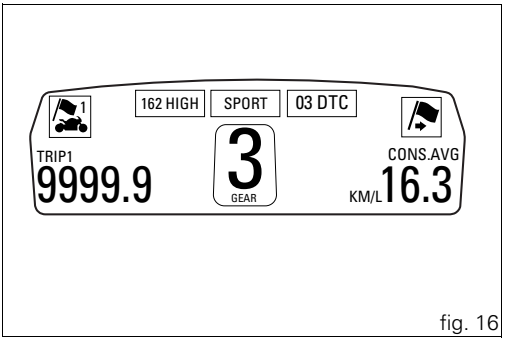


fig. 16

Note
When this value is reset, also the "Average fuel consumption", "Average speed" and "Trip time" functions are reset.

"Trip 2" meter

This function shows the distance travelled since the Trip meter was last reset (in Km or miles depending on the specific application).
Holding the button (1, fig. 14) "▲" pressed for 3 seconds when this function is displayed resets the trip meter.
When the reading exceeds 9999.9, distance travelled is reset and the meter automatically starts counting from 0 again.
If the system measurement units are changed at any moment through the "SET UNITS" function of the Setting menu, or if there is an interruption in the power supply (Battery Off), the distance travelled is reset and the count starts from zero (considering the newly set unit of measurement).

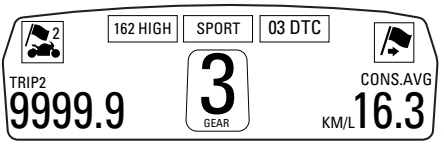


fig. 17

Distance travelled on fuel reserve: "TRIP FUEL"

This function shows the distance travelled on fuel reserve (in Km or miles depending on the specific application).
When the fuel light comes on, the display automatically switches to the "TRIP FUEL" indicator.
Trip fuel reading remains stored even after Key-Off until the vehicle is refuelled.
Count is interrupted automatically as soon as fuel is topped up to above minimum level.
When the reading exceeds 9999.9, it is reset and the count restarts automatically.

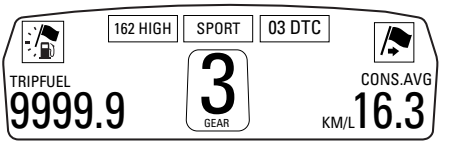


fig. 18

Indicator "CONS. AVG" - Average fuel consumption

This function indicates the "average" fuel consumption.

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

the datum is expressed in "l / 100" (litres / 100 Km); it is possible to change the units of measurement for "Consumption" (both average and instantaneous together) from L/100 to Km/L through the "SET UNITS" Function of the Setting menu.

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

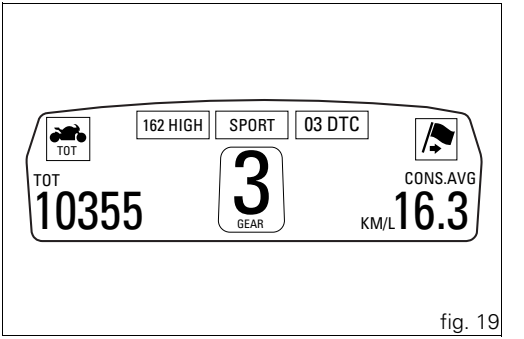


fig. 19

Indicator "CONS." - Instantaneous fuel consumption

This function indicates the "instantaneous" fuel consumption.
The calculation is made considering the quantity of fuel used and the distance travelled during the last second. the datum is expressed in "l / 100" (litres / 100 Km); it is possible to change the units of measurement for "Consumption" (both average and instantaneous together) from L/100 to Km/L through the "SET UNITS" Function of the Setting menu.
The active calculation phase only occurs when the engine is running and the vehicle is moving (moments when the vehicle is not moving when speed is equal to 0 and/or when the engine is off are not considered). Dashes "- -.-" are shown on the display when the calculation is not made.

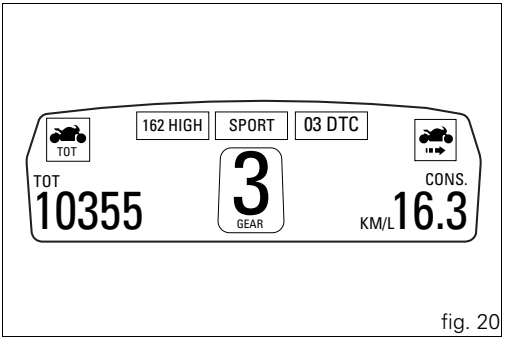


fig. 20

Indicator “SPEED AVG” - Average speed

This function shows the average speed of the motorcycle.

The calculation considers the distance and time since Trip 1 was last reset. When Trip 1 is reset, the value is reset and the first value available is displayed 10 seconds after the reset. Dashes “- -.-” are shown on the display during the first 10 seconds when the value is not yet available.

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

The calculated value is displayed increased by 5% to align it with the vehicle indicated speed.

It is possible to change the units of measurement of “speed” (and “distance travelled”) from Km/h (and Km) to mph (and miles) through the “SET UNITS” function of the Setting menu.

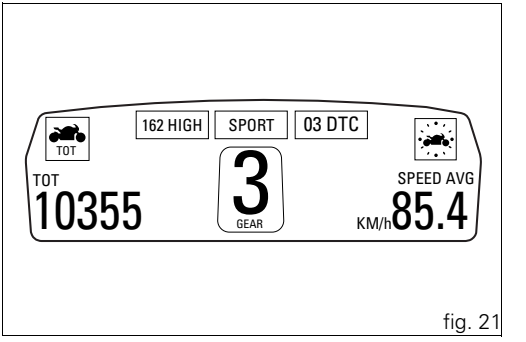


fig. 21

Indicator "TRIP TIME" - Trip time

This function shows the vehicle trip time.
The calculation considers the time since Trip 1 was last reset. When Trip 1 is reset, this value is reset as well.
The active phase calculation occurs when the engine is running and the vehicle is stopped (when the vehicle is not moving and the engine is off the time is automatically stopped and restarts when the counting active phase starts again).
When the reading exceeds 511:00 (511 hours and 00 minutes), the meter is reset and automatically starts counting from 0 again.

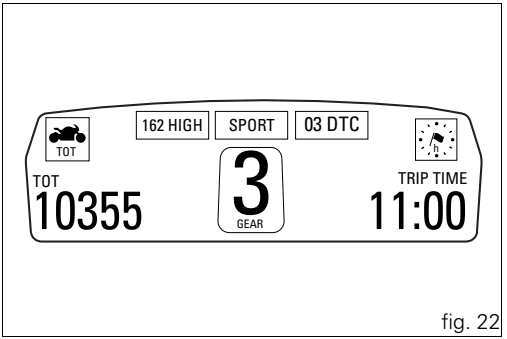


fig. 22

Indicator "AIR" - Air temperature

This function shows the external temperature.
Display limits: -39°C ÷ +124°C
In the event of a sensor FAULT (-40°C,+125°C or disconnected), a string of dashes "---" (not flashing) is displayed and the "Engine/Vehicle Diagnosis - EOBD" light (7, fig. 4) comes on.

Note

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

When the detected temperature drops to 4°C (39°F), the display warns that the formation of ice is possible. The indication turns off when the temperature rises to 6°C (43°F).

Warning

This warning does not exclude the possibility of icy road sections even at temperatures above 4°C (39°F); when external temperatures are "low" it is always recommended to ride carefully, particularly on sections that are not exposed to the sun and/or on bridges.

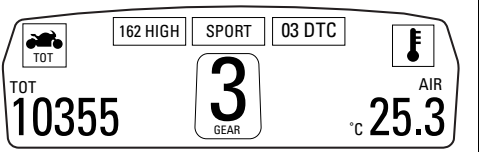


fig. 23

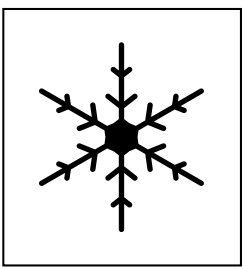


fig. 24

Engaged gear indicator

This function displays the gears (1, fig. 25).
The instrument panel receives information and indicates the engaged gear or "N" for neutral.

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

"Riding Mode set" indication

This function indicates the "Riding Style" set for the vehicle.
THREE "Riding Modes" are available: SPORT, TOURING and URBAN.
Each riding mode can be changed using the "RIDING MODE" function.

Note
The background of the riding mode (SPORT, TOURING or URBAN) is blue (1, fig. 26) if currently set riding mode parameters are the default ones (Ducati factory setting) or yellow if one or more parameters have been modified (customised) by means of the "RIDING MODE" function of the Setting menu.

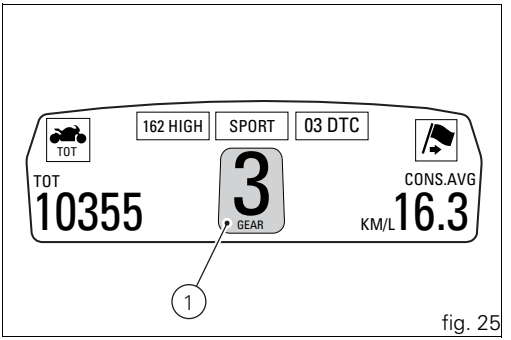


fig. 25

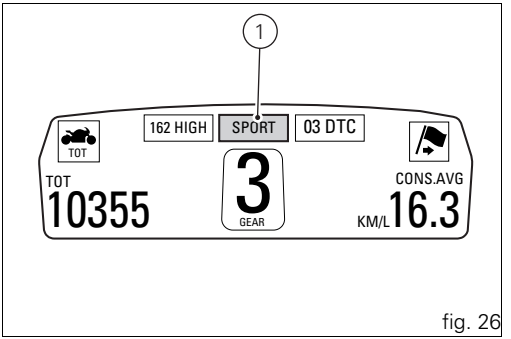


fig. 26

Indication if the “LAP” function is active/not active

This function indicates if “LAP” function (Lap number) is active.
When “LAP” is not lit up, this means that the function has been switched off.
The “LAP” function can be activated using the “LAP” Function of the Setting menu.

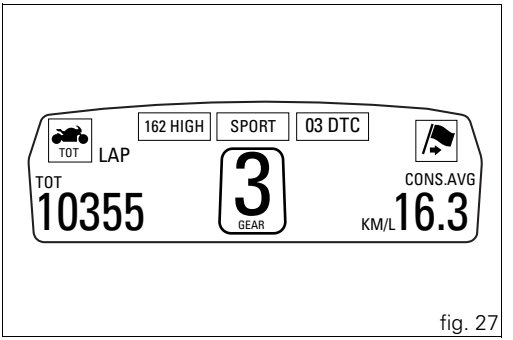


fig. 27

"Riding Style" function (riding style change)

This function changes the motorcycle riding style. Each riding style is associated with a different intervention level of the traction control (DTC - Ducati Traction Control) and different engine power and output.

To change the motorcycle riding mode, press the reset button once

(12, fig. 12) and the "RIDING MODE" menu will appear on the display.

The desired riding style can be selected by pressing the same reset button multiple times (12, fig. 12).

Press the same button for 3 seconds to confirm the riding style.

If the twistgrip is closed (vehicle stopped) the riding style change will occur immediately; if the twistgrip grip is open (vehicle moving) the message "CLOSE THROTTLE TO ACTIVATE" will appear on the display, which means that the throttle must be closed; this message will appear for 5 seconds, during which the gas must be closed in order to activate the new riding style.

If the twistgrip is not closed after 5 seconds, the procedure is aborted (no change is made).

If the "RIDING MODE" menu is activated and the reset button is not pressed (12, fig. 12) for 10 consecutive seconds, the instrument panel will automatically exit the display mode without making any change.

Warning

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

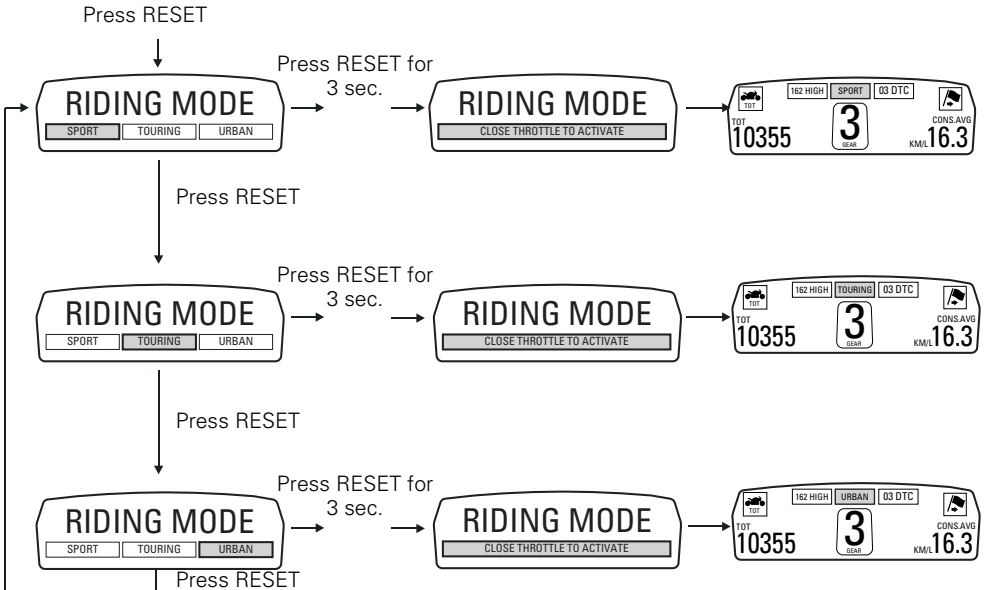

Press RESET
RIDING MODE
SPORT
TOURING
URBAN
Press RESET for
3 sec.
RIDING MODE
CLOSE THROTTLE TO ACTIVATE
162 HIGH
SPORT
03 DTC
TOT
10355
3
GEAR
CONS.AVG
KM/L 16.3
Press RESET
Press RESET for
3 sec.
RIDING MODE
SPORT
TOURING
URBAN
RIDING MODE
CLOSE THROTTLE TO ACTIVATE
162 HIGH
TOURING
03 DTC
TOT
10355
3
GEAR
CONS.AVG
KM/L 16.3
Press RESET
Press RESET for
3 sec.
RIDING MODE
SPORT
TOURING
URBAN
RIDING MODE
CLOSE THROTTLE TO ACTIVATE
162 HIGH
URBAN
03 DTC
TOT
10355
3
GEAR
CONS.AVG
KM/L 16.3
Press RESET

fig. 28

Maintenance indicator

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

Maintenance table

Indicator	Mileage covered	countdown -1000 DESMO SERVICE	countdown -1000 OIL SERVICE	DESMO SERVICE	OIL SERVICE
1	1000				●
2	11000		●		
	12000				●
3	23000	●			
	24000			●	
4	35000		●		
	36000				●
5	47000	●			
	48000			●	
6	59000		●		
	60000				●
7	71000	●			
	72000			●	
8	83000		●		
	84000				●
9	95000	●			
	96000			●	

First warning - OIL SERVICE 1000 Km

The first warning is activated at 1000 Km (600 miles) of odometer reading.
The (red) warning is activated as a large icon for 10 seconds upon every Key-On (1, fig. 29) then as a small warning that remains displayed (2, fig. 30) until it is reset.

Warning

This message can only be reset by the Ducati Dealer or Authorised Service Centre that performs the maintenance.

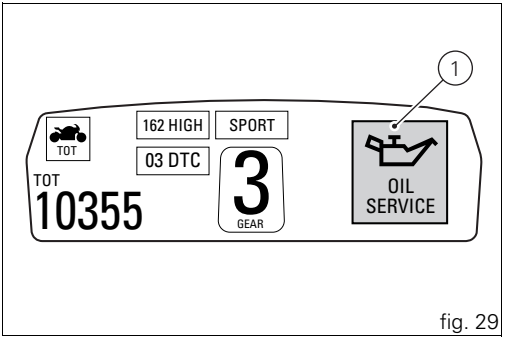


fig. 29

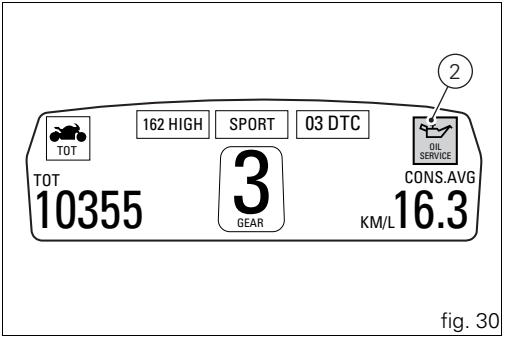


fig. 30

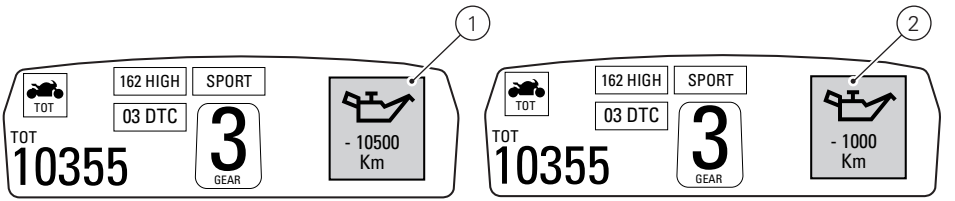
Residual range indication when the SERVICE is due

After resetting the first OIL SERVICE warning (triggered at 1000 Km), upon every Key-On the system displays the indication of which type of service should be performed next (OIL SERVICE or DESMO SERVICE) and the residual range.
A (green) warning (1, fig. 31) is activated for 2 seconds on every Key-On; while 1000 Km before the threshold an (amber yellow) warning (2, fig. 31) is activated for 5 seconds upon every Key-On.

Warning

This message can only be reset by the Ducati Dealer or Authorised Service Centre that performs the maintenance.

OIL SERVICE (Countdown)



DESMO SERVICE (Countdown)

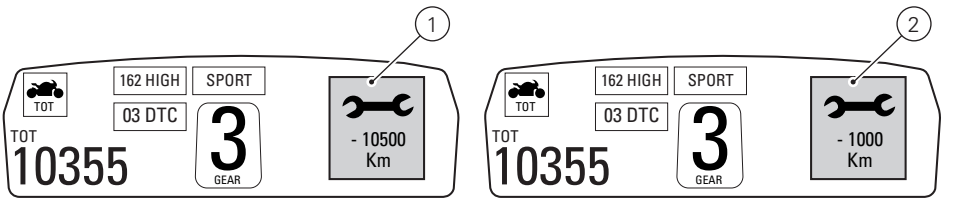


fig. 31

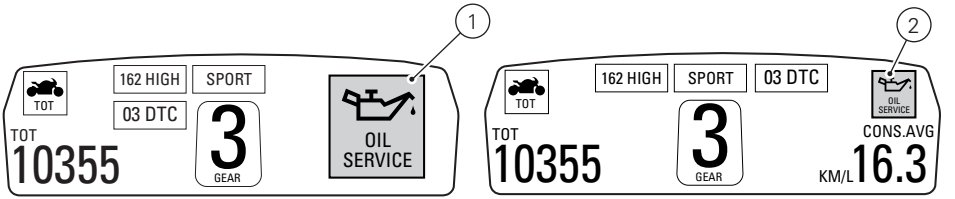
Indication of range reached for SERVICE

When service coupon threshold is achieved, upon every Key-On the system displays the indication of the type of intervention that is required (OIL SERVICE or DESMO SERVICE).
The (red) warning is activated as a large icon for 10 seconds upon every Key-On (1, fig. 32) then as a small warning that remains displayed (2, fig. 32) until it is reset.
After reset, the system will display again the type of intervention required next and the residual range (as described in the previous paragraph).

Warning

This message can only be reset by the Ducati Dealer or Authorised Service Centre that performs the maintenance.

OIL SERVICE



DESMO SERVICE

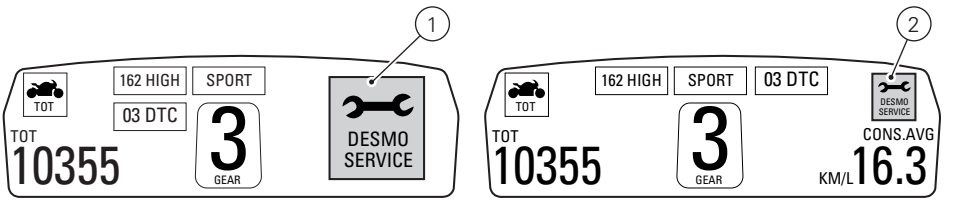


fig. 32

Warning indication (Alarms/Signals)

The instrument panel activates in real-time some warnings / malfunction that are not dangerous for the correct operation of the vehicle.
At Key-On (at the end of the check) one or more "warnings" are displayed if they are active. When a "warning" is triggered, the indication (amber yellow) remains well visible for 10 seconds (1, fig. 33) then becomes smaller (2, fig. 33).
If there are multiple indicators, they will scroll automatically every 3 seconds.

Note
No signal lights turn on if one or more "warnings" are activated.

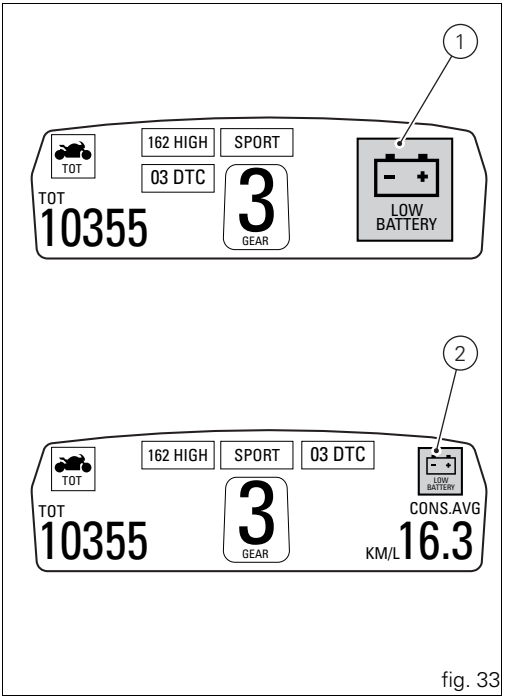


fig. 33

The following “warnings” could be displayed:
- “Low” battery level (LOW BATTERY);
- Traction Control “deactivated” (DTC OFF);
- Hands Free key (HF) “not recognised”;
- “Low” Hands Free key (HF) battery level;
- “High” Engine coolant temperature (HIGH TEMP);
- Steering release error - Steering still locked (Unlock error).

When one or more “warnings” are active, it is possible to go to other functions by pushing button (2, fig. 14) “▼”.

“Low” battery level

The activation of this (amber yellow) “warning” indicates that the status of the battery vehicle is low. It is activated when the battery voltage is ≤ 11.0 Volt.

Note
In this case, Ducati recommends charging the battery as soon as possible with the specific device, as it is possible that the vehicle will not start.

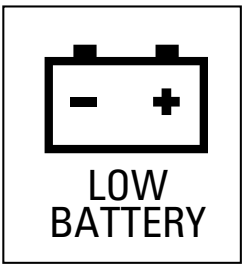


fig. 34

Traction Control (DTC) deactivated

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

Note
In this case, Ducati recommends being very careful when riding as the vehicle behaviour will be different in comparison to when operating with the Traction Control activated.

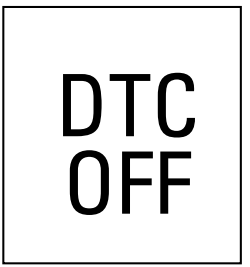


fig. 35

Hands Free key (HF) not recognised

The activation of this (amber yellow) "warning" indicates that the Hands Free system does not detect the active key (1, fig. 61) near the vehicle.

Note

In this case, Ducati recommends checking that the active key (1, fig. 61) is near the vehicle (and has not been lost) and that it functions properly.

fig. 36

"Low" Hands Free key (HF) battery level

The activation of this (amber yellow) "warning" indicates that the Hands Free system has detected that the battery that permits the active key (1, fig. 61) to communicate and turn the vehicle on is almost discharged.

Note

In this case, Ducati recommends replacing the battery as soon as possible as described in the paragraph "Replacing the active key battery" (page 104).

fig. 37

"High" engine coolant temperature

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

Note

In this case, Ducati recommends stopping and shutting off the engine immediately; make sure that the fans are working.

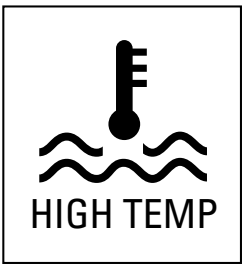


fig. 38

Steering release error - Steering still locked

The activation of this (amber yellow) “warning” indicates that the Hands Free System was not able to extract the steering lock.

Warning

In this case, Ducati recommends turning the vehicle off and on (Key-Off / Key-On) holding the handlebar pressed down to the end stop. If the signal remains (and the steering does not “release”) contact a Ducati Dealer or Authorised Service Centre.

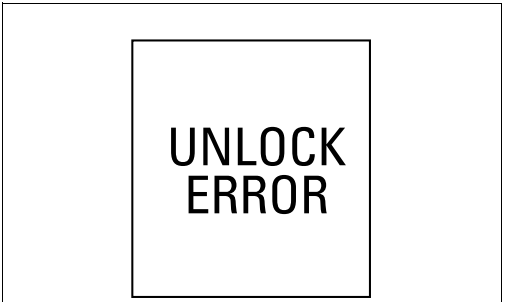


fig. 39

Instrument panel diagnosis

This function identifies any abnormal vehicle behaviours.
The instrument panel activates any abnormal vehicle behaviours in real time (ERRORS).
At Key-On (at the end of the check) one or more "ERRORS" are displayed in red (only if they are active).
When an "error" is triggered, the indication (red) remains well visible for 10 seconds (1, fig. 40) then becomes smaller (2, fig. 40).
If there are multiple errors, they will scroll automatically every 3 seconds. The "Engine/vehicle diagnosis - EOBD" light on instrument panel located on handlebar (7, fig. 4) always turns on when one or more errors are activated.
The table below shows the errors that can be displayed.

Warning

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

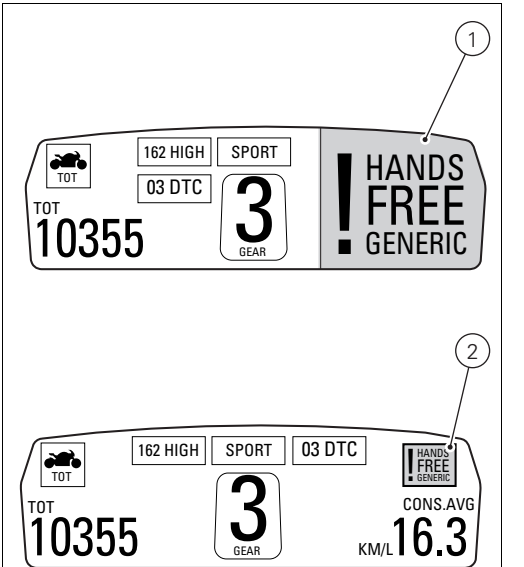


fig. 40

WARNING LIGHT	ERROR MESSAGE	ERROR
	BBS/DTC	Black Box / Traction Control control unit
	GEAR SENSOR	Gear sensor
	FUEL SENSOR	Fuel Level Sensor
	SPEED SENSOR	Speed sensor
	EXVL SYSTEM	Exhaust valve starter motor
	UNKNOW DEVICE	Unknown control unit
	DEVICE ECU	ECU control unit not functioning
	DEVICE DSB SLAVE	Instrument panel on handlebar not functioning
	DEVICE HANDS FREE	Hands Free control unit not functioning
	DEVICE BBS DTC	Black Box / Traction Control control unit not functioning
	THROTTLE POSITION	Incorrect throttle position

WARNING LIGHT	ERROR MESSAGE	ERROR
	ACCELER. POSITION	Incorrect accelerator position
	ETV	Motor relay or Throttle Motor not functioning
	DEVICE DBS MASTER	Instrument panel on tank not functioning
	PRESSURE SENSOR	Atmospheric pressure sensor
	ENGINE TEMP.	Engine Temperature Sensor
	T-AIR SENSOR	Air Temperature Sensor
	FUEL INJECT.	Injection relay
	COIL	Coil
	INJECTOR	Injector
	PICK UP	Timing/rpm sensor
	LAMBDA	Lambda sensor

WARNING LIGHT	ERROR MESSAGE	ERROR
	FAN RELAY	Fan relay
	CAN LINE	CAN communication line
	BATTERY	Battery voltage (HIGH or LOW)
	DEVICE ABS	ABS control unit not functioning
	STOP LIGHT	Rear stop light
	ECU GENERIC	ECU error
	KEY	HF communication problem
	HANDS FREE GENERIC	Hands Free ECU error

"Setting" menu

This menu is used to enable/disable and set some motorcycle functions.
To access the "setting menu" press the button (2, fig. 14) "▼" for 3 seconds.

Note

When within this menu no other function can be displayed.

Important

For safety reasons, the setting menu can only be accessed when motorcycle speed is lower than or equal to 20 Km/h. If this menu is open and the speed of the motorcycle exceeds 20 km/h, the instrument panel automatically exits the menu and returns to the "main" display.

The setting menu contains the following "items":

- RIDING MODE
- MENU 2
- BACK LIGHT
- RPM
- PIN CODE
- LAP
- BATTERY
- CLOCK
- SET UNITS
- ABS
- EXIT

To quit the setting menu, use button (1, fig. 14) "▲" or button (2, fig. 14) "▼" to select the "EXIT" indication and press the reset button (12, fig. 12).

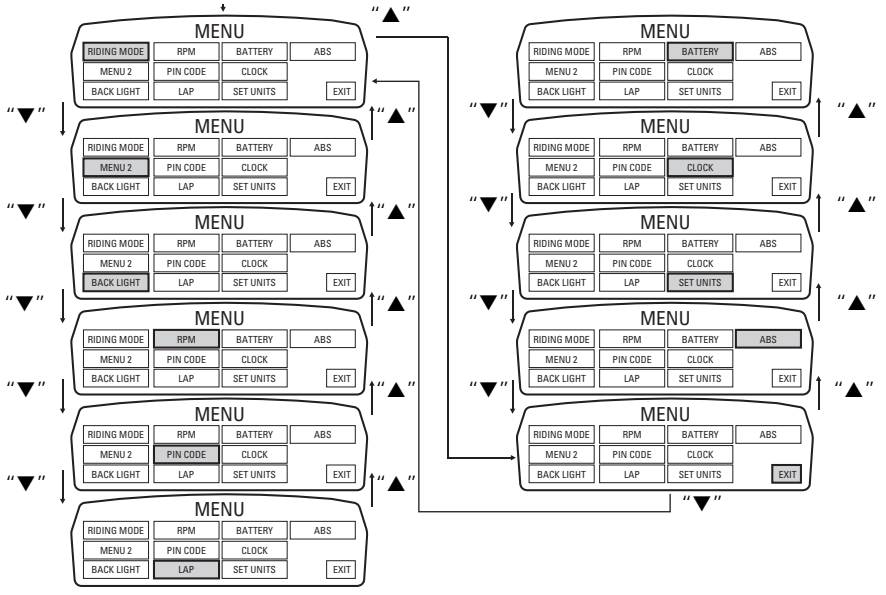

Press "▼" for 3 sec.
MENU
RIDING MODE
RPM
BATTERY
ABS
MENU 2
PIN CODE
CLOCK
BACK LIGHT
LAP
SET UNITS
EXIT
"▲"
"▼"

fig. 41

"Riding Mode" customisation

This function customises each riding style.
To access the function it is necessary to view the "setting" menu page 62, using button (1, fig. 14) "▲" or (2, fig. 14) "▼" select the "RIDING MODE" function and press the reset button (12, fig. 12) to go to next page. When accessing the function, the three riding modes appear on the display; to customise the parameters, use button (1, fig. 14) "▲" or (2, fig. 14) "▼" to select the riding mode to be changed and press the reset button (12, fig. 12) to confirm. The parameters that can be "customised" are "DTC" (Ducati Traction Control) and '"ENGINE". Any parameter change made is saved in the memory also after a Battery-Off. To change the DTC parameters see the "DTC (Ducati Traction Control)" paragraph page 66.
To change the Engine parameters see the "ENGINE (engine power control)" paragraph page 72.
The parameters set by Ducati for each individual riding style can be restored with the "DEFAULT" function.
To reset the "default" parameters see the "DEFAULT (Resetting Ducati default parameters)" paragraph page 74.

Note

If the parameters have not been modified (customised) or are reset using the "DEFAULT" function, when you quit the Setting menu, in the "main" screen, the "background" indicating the riding style (SPORT, TOURING or URBAN) becomes blue (1, fig. 42).

Warning

Changes should only be made to the parameters by people who are experts in motorcycle setup; if the parameters are changed accidentally, use the "DEFAULT" function to reset the parameters.

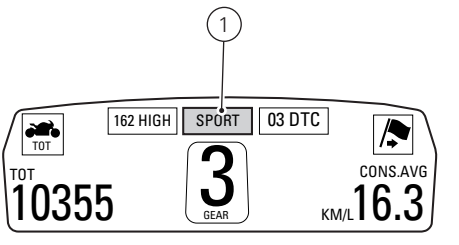


fig. 42

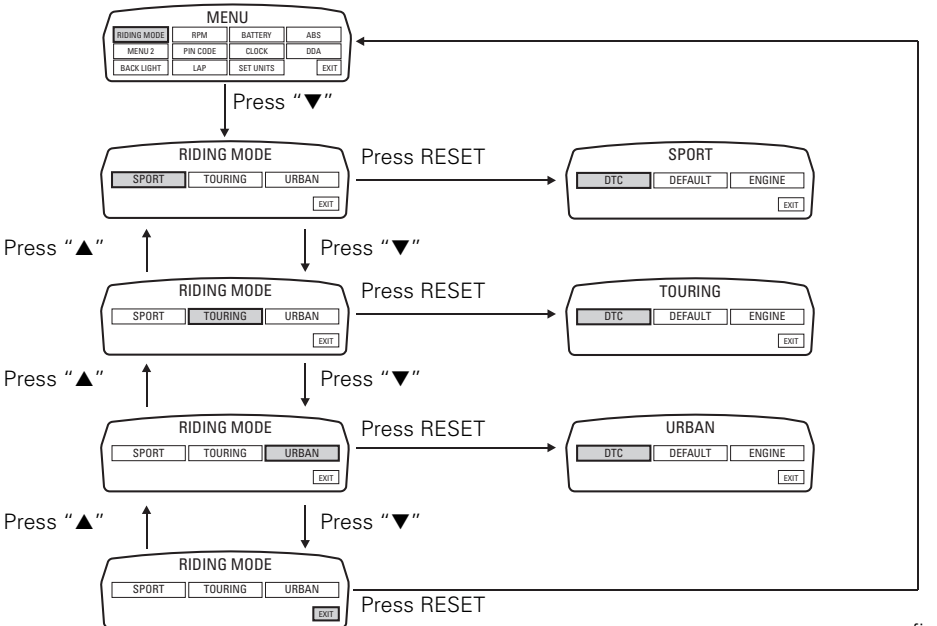

MENU
RIDING MODE
RPM
BATTERY
ABS
MENU 2
PIN CODE
CLOCK
DDA
BACK LIGHT
LAP
SET UNITS
EXIT
Press "▼"
RIDING MODE
SPORT
TOURING
URBAN
EXIT
Press RESET
SPORT
DTC
DEFAULT
ENGINE
EXIT
Press "▲"
Press "▼"
RIDING MODE
SPORT
TOURING
URBAN
EXIT
Press RESET
TOURING
DTC
DEFAULT
ENGINE
EXIT
Press "▲"
Press "▼"
RIDING MODE
SPORT
TOURING
URBAN
EXIT
Press RESET
URBAN
DTC
DEFAULT
ENGINE
EXIT
Press "▲"
Press "▼"
RIDING MODE
SPORT
TOURING
URBAN
EXIT
Press RESET

fig. 43

DTC (Ducati Traction Control) setting function

This function allows you to customise the level of DTC intervention (Ducati Traction Control) or disable it for every riding mode.
To access the function it is necessary to view the "setting" menu page 62, using button (1, fig. 14) "▲" or (2, fig. 14) "▼" select the "RIDING MODE" function and press the reset button (12, fig. 12) to go to next page.
Use button (1, fig. 14) "▲" or (2, fig. 14) "▼" to select the riding style to change and press the reset button (12, fig. 12).
To go to next page use button (1, fig. 14) "▲" or (2, fig. 14) "▼" to select the "DTC" indication and press the reset button again (12, fig. 12) to confirm selection.
When accessing the function, the currently set DTC level appears at the left-hand side of the display, inside a rectangle (ex.: DTC 1).
Use button (1, fig. 14) "▲" or (2, fig. 14) "▼" to select the new intervention level (1 to 8) or OFF to disable the Traction Control; after selecting the new setting, press the reset button (12, fig. 12) to highlight "MEMORY" indication.
At this point, store the new setting by pressing and holding the reset button (12, fig. 12) for 3 seconds with "MEMORY" displayed. If the setting has been stored successfully, the display will show "MEMORIZED" in green for 2 seconds and the EXIT option will be highlighted automatically.
To exit the setting function, press the reset button (12, fig. 12) when "EXIT" is highlighted.

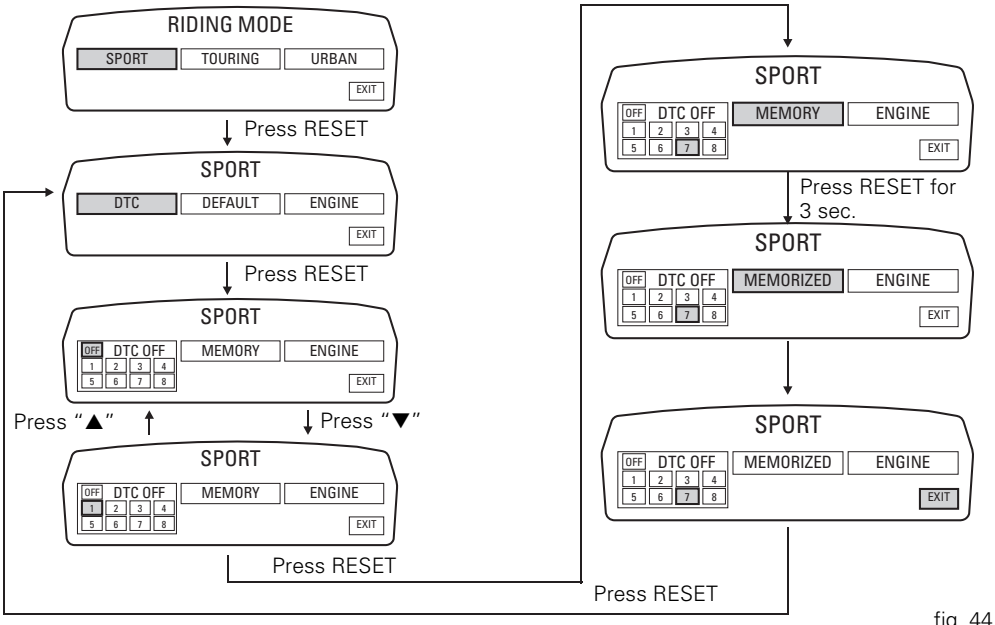

RIDING MODE
SPORT
TOURING
URBAN
EXIT
Press RESET
SPORT
DTC
DEFAULT
ENGINE
EXIT
Press RESET
SPORT
OFF
DTC OFF
1 2 3 4
5 6 7 8
MEMORY
ENGINE
EXIT
Press "▲"
Press "▼"
SPORT
OFF
DTC OFF
1 2 3 4
5 6 7 8
MEMORY
ENGINE
EXIT
Press RESET
SPORT
OFF
DTC OFF
1 2 3 4
5 6 7 8
MEMORY
ENGINE
EXIT
Press RESET for
3 sec.
SPORT
OFF
DTC OFF
1 2 3 4
5 6 7 8
MEMORIZED
ENGINE
EXIT
SPORT
OFF
DTC OFF
1 2 3 4
5 6 7 8
MEMORIZED
ENGINE
EXIT
Press RESET

fig. 44

The DTC intervention increases, passing from level 1 to level 8.
The following table indicates the most suitable level of DTC intervention for the various riding types as well as the default settings in the "RIDING MODE" that can be selected by the rider:

DTC level	Riding type	Use	Default?
1	Sport	Sporty riding on a road for expert users and on track	It is the default setting of the SPORT RIDING MODE
2	Sport-Touring	Riding on a road for expert users	/
3	Touring	Normal riding on a road	It is the default setting of the TOURING RIDING MODE
4	Touring 2	Normal riding on a road for less expert users	/
5	Urban	Riding in town	It is the default setting of the URBAN RIDING MODE
6	Urban 2	Riding in town for less expert users	/
7	Wet	Riding with damp ground	/
8	Rain	Riding with wet ground	/

Tips on how to select the sensitivity level

Warning

The 8 level settings of the DTC were calibrated using tyres of the same make, model and size as those originally fitted to the motorcycle.
The use of tyres of different size to the original tyres may alter the operating characteristics of the system.
In the case of minor differences, such as for example, tyres of a different make and/or model than the original, but with the same dimensions (rear = 240/45-17; front = 120/70-17), it may be sufficient to simply select the most suitable level setting from those available to restore optimal system operation.
If tyres of a different size class are used or if the tyre dimensions differ significantly from the original tyres, it may be that the system operation is affected to the point where none of the 8 available level settings will give satisfactory results.
In this case is it is advisable to deactivate the traction control system.

If level 8 is selected, the DTC control unit will kick in at the slightest hint that the rear wheel is starting to spin.
Between level 8 and level 1 there are a further 6 intermediate levels. The level of DTC intervention decreases in equal steps from level 8 to level 1.
Level 1 allows considerable spinning and requires constant and good grip to operate correctly; Level 1 is thus recommended for expert users only and with excellent road conditions.
The choice of the correct level depends on 3 main variables:

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

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

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

The relation of the DTC intervention level to riding mode:
The DTC will tend to kick in more with a "smooth" riding style, where the bike is leaned over further, rather than with a "rough" style, where the bike is straightened up as quickly as possible when exiting a turn.

Tips for use on the track

We recommend level 8 be used for a couple of full laps (to allow the tyres to warm up) in order to get used to the system. Then try levels 7, 6, etc., in succession until you identify the DTC intervention level that suits you best (always try each level for at least two laps to allow the tyres to warm up).
Once you have found a satisfactory setting for all the corners except one or two slow ones, where the system tends to kick in and control too much, you can try to modify your riding style slightly to a more "rough" approach to cornering i.e. straighten up more rapidly on exiting the corner, instead of immediately trying a different level setting.

Tips for use on the road

Activate the DTC, select level 8 and ride the motorcycle in your usual style; if the level of DTC intervention seems excessive, try reducing the setting to levels 7, 6, etc., until you find the level that suits you best.

If changes 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 as described above to determine the best setting (e.g. if with level 7 the DTC intervention seems excessive, switch to level 6; alternatively, if on level 7 you cannot perceive any DTC intervention, switch to level 8).

ENGINE setting function (Engine Power Control)

This function customises engine power and output.
To access the function it is necessary to view the "setting" menu page 62, using button (1, fig. 14) "▲" or (2, fig. 14) "▼" select the "RIDING MODE" function and press the reset button (12, fig. 12) to go to next page.
Use button (1, fig. 14) "▲" or (2, fig. 14) "▼" to select the riding mode to be changed and press the reset button (12, fig. 12) to access the next page.
Now use button (1, fig. 14) "▲" and (2, fig. 14) "▼" to select the "ENGINE" indication and press the reset button again (12, fig. 12) to confirm selection.
When accessing the function, the engine setting (ENGINE 162 HIGH, 162 LOW or 100 HP) appears at the right-hand side of the display, inside a rectangle.

Note

In Japan and France versions, the display displays the settings (ENGINE HIGH, MIDDLE or LOW).

Using button (1, fig. 14) "▲" or (2, fig. 14) "▼" select one of the three available engine settings; after selecting the new setting, press the reset button (12, fig. 12) to highlight "MEMORY" indication.

At this point, store the new setting by pressing and holding the reset button (12, fig. 12) for 3 seconds with "MEMORY" displayed. If the setting has been stored successfully, the display will show "MEMORIZED" in green for 2 seconds and the EXIT option will be highlighted automatically.
To exit the setting function, press the reset button (12, fig. 12) when "EXIT" is highlighted.

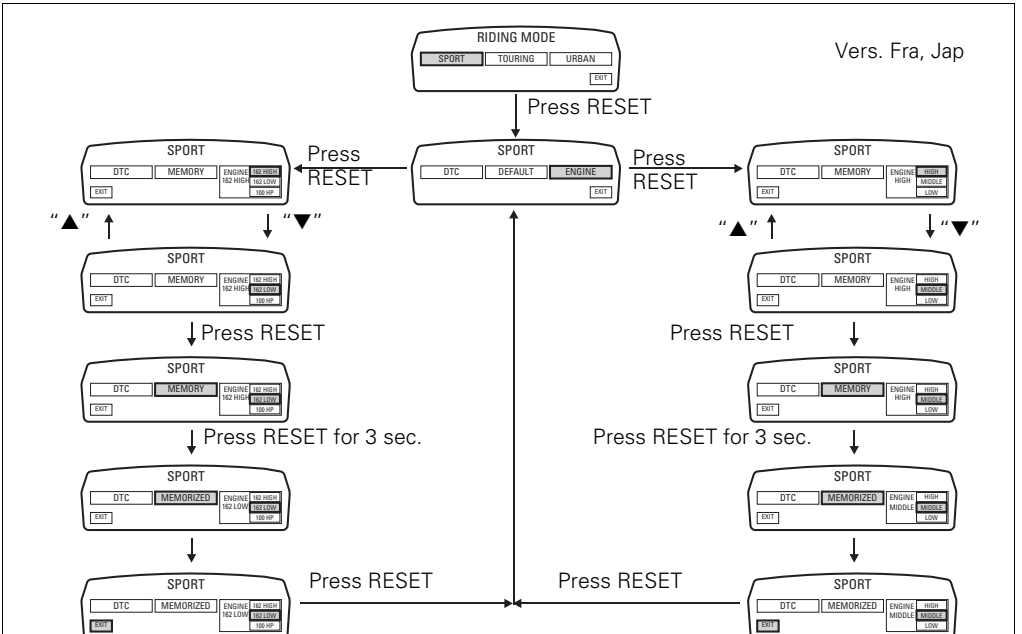

RIDING MODE
SPORT
TOURING
URBAN
EXIT
Vers. Fra, Jap
Press RESET
SPORT
DTC
DEFAULT
ENGINE
EXIT
Press RESET
SPORT
DTC
MEMORY
ENGINE
162 HIGH
162 LOW
100 HP
EXIT
Press RESET
"▲"
"▼"
SPORT
DTC
MEMORY
ENGINE
HIGH
MIDDLE
LOW
EXIT
Press RESET
SPORT
DTC
MEMORY
EXIT
Press RESET for 3 sec.
SPORT
DTC
MEMORIZED
EXIT
Press RESET
Press RESET

fig. 45

DEFAULT function (Resetting Ducati default parameters)

This function resets the parameters set by Ducati for each riding style.

To access the function it is necessary to view the "setting" menu page 62, using button (1, fig. 14) "▲" or (2, fig. 14) "▼" select the "RIDING MODE" function and press the reset button (12, fig. 12) to go to next page. Use button (1, fig. 14) "▲" or (2, fig. 14) "▼" to select the riding mode to be reset to default (initial) parameters and press the button (12, fig. 12) to access the next page. Now, using button (1, fig. 14) "▲" or (2, fig. 14) "▼" select "DEFAULT" indication.

To restore original default parameters, press and hold the reset button (12, fig. 12) for 3 seconds.

For the parameter reset, approx. 3 seconds are needed during which "PLEASE WAIT…" will appear on the display; at the end of the procedure, "DEFAULT OK" will appear on the display to indicate that the parameters were reset.

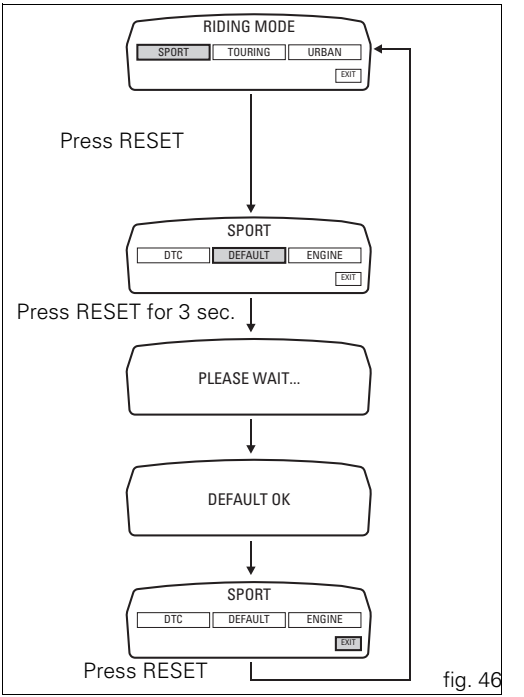


fig. 46

Important
This procedure restores the parameters for all riding styles.

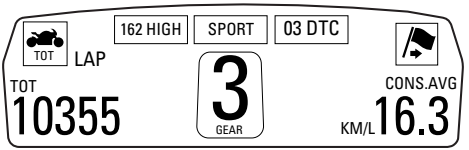
To exit the setting function, press the reset button (12, fig. 12) when "EXIT" is highlighted.

Menu 2 On/Off function

This function turns off and back on the Menu 2.
If Menu 2 is disabled, the functions for average fuel consumption (CONS.AVG), instantaneous fuel consumption (CONS.), average speed (SPEED AVG), trip time (TRIP TIME) and air temperature (AIR) will no longer be displayed in the "main screen". Nevertheless, all these functions will keep on their counters so that when Menu 2 is re-enabled data will be updated and consistent.

To access the function it is necessary to view the "setting" menu page 48, using button (1, fig. 14) "▲" or (2, fig. 14) "▼" select the "MENU 2" function and press the reset button (12, fig. 14) to go to next page.
Function state is highlighted on the display (ON in green or OFF in yellow); use button (1, fig. 14) "▲" or (2, fig. 14) "▼" to shift the arrow on the left onto the new setting and confirm by pressing the reset button (12, fig. 12).
To exit the setting function, press the reset button (12, fig. 12) when "EXIT" is highlighted.

Menu 2 "ON"



Menu 2 "OFF"

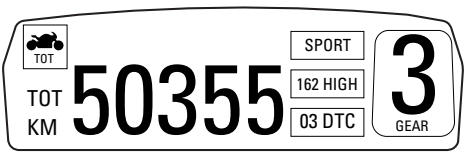


fig. 47

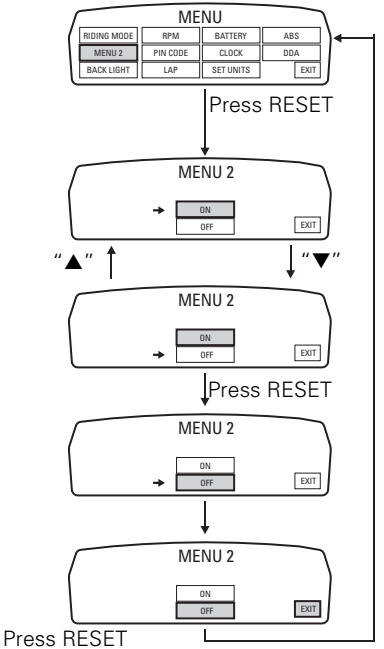

MENU
RIDING MODE
RPM
BATTERY
ABS
MENU 2
PIN CODE
CLOCK
DDA
BACK LIGHT
LAP
SET UNITS
EXIT
Press RESET
MENU 2
ON
OFF
EXIT
"▲"
"▼"
MENU 2
ON
OFF
EXIT
Press RESET
MENU 2
ON
OFF
EXIT
MENU 2
ON
OFF
EXIT
Press RESET

fig. 48

Background setting function for the instrument panel on tank - DASHBOARD 1

This function allows setting the "background" of the instrument panel on tank.
To access the function it is necessary to view the "setting" menu page 48, using button (1, fig. 14) "▲" or (2, fig. 14) "▼" select the "BACK LIGHT" function and press the reset button (12, fig. 12) to go to next page.
Use button (1, fig. 14) "▲" or (2, fig. 14) "▼" to select the "DASHBOARD 1" function and confirm by pressing the reset button (12, fig. 12).
Once you enter the "DASHBOARD 1" function, setting is highlighted on the display (DAY, NIGHT or AUTO in green); use button (1, fig. 14) "▲" or (2, fig. 14) "▼" to shift the arrow on the left onto the new setting and confirm by pressing the reset button (12, fig. 12).
To exit the setting function, press the reset button (12, fig. 12) when "EXIT" is highlighted.

"DAY" setting: instrument panel background becomes permanently "white" to improve readout view - recommended with bright exterior lighting.
"NIGHT" setting: instrument panel background becomes permanently "black" for a more dimmed visibility - recommended with poor exterior lighting and/or dark.

"AUTO" setting: instrument panel background is set automatically according to exterior lighting conditions (detected by a sensor) and will be "black" for a more dimmed visibility with poor exterior lighting and "white" for an improved readout view with bright exterior lighting.

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

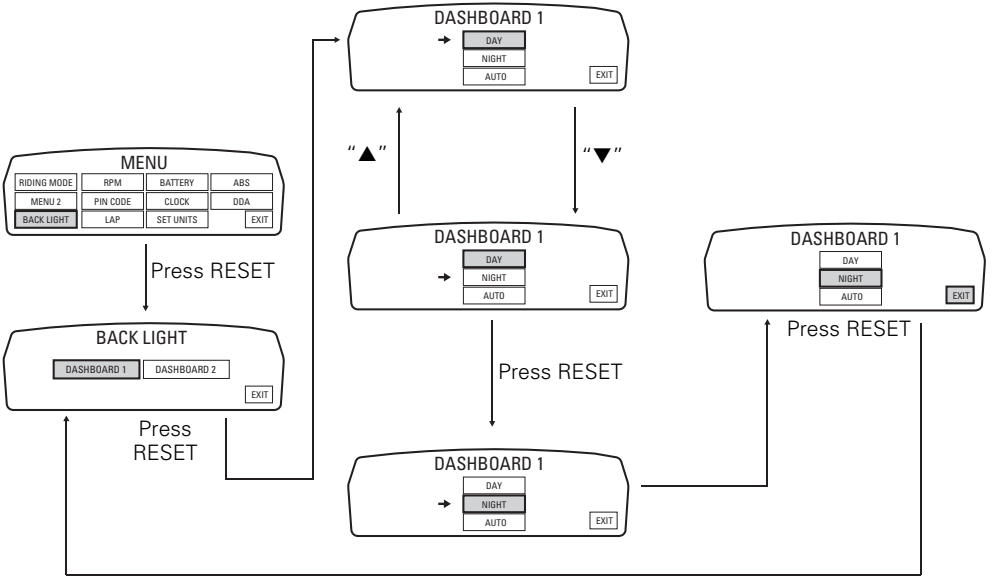

MENU
RIDING MODE
RPM
BATTERY
ABS
MENU 2
PIN CODE
CLOCK
DDA
BACK LIGHT
LAP
SET UNITS
EXIT
Press RESET
BACK LIGHT
DASHBOARD 1
DASHBOARD 2
EXIT
Press RESET
DASHBOARD 1
DAY
NIGHT
AUTO
EXIT
"▲"
"▼"
DASHBOARD 1
DAY
NIGHT
AUTO
EXIT
Press RESET
DASHBOARD 1
DAY
NIGHT
AUTO
EXIT
DASHBOARD 1
DAY
NIGHT
AUTO
EXIT
Press RESET

fig. 49

Backlighting setting function for the instrument panel on handlebar - DASHBOARD 2

This function allows backlighting setting of the instrument panel on handlebar.
To access the function it is necessary to view the "setting" menu page 48, using button (1, fig. 14) "▲" or (2, fig. 14) "▼" select the "BACK LIGHT" function and press the reset button (12, fig. 12) to go to next page.
Use button (1, fig. 14) "▲" or (2, fig. 14) "▼" to select the "DASHBOARD 2" function and confirm by pressing the reset button (12, fig. 12).
Once you enter the "DASHBOARD 2" function, setting is highlighted on the display (MAX, MIDDLE or MIN in green); use button (1, fig. 14) "▲" or (2, fig. 14) "▼" to shift the arrow on the left onto the new setting and confirm by pressing the reset button (12, fig. 12).
To exit the setting function, press the reset button (12, fig. 12) when "EXIT" is highlighted.

Select "MAX" setting and the background of the instrument panel on handlebar permanently sets backlighting to maximum power to improve readout view - recommended with bright exterior lighting.
Select "MIDDLE" setting and the background of the instrument panel on handlebar permanently sets reduced backlighting to 30% of its maximum power for dimmed visibility - recommended with poor exterior lighting.

Select "MIN" setting and the background of the instrument panel on handlebar permanently sets reduced backlighting to 50% of its maximum power for dimmed visibility - recommended with very poor exterior lighting and/or dark.

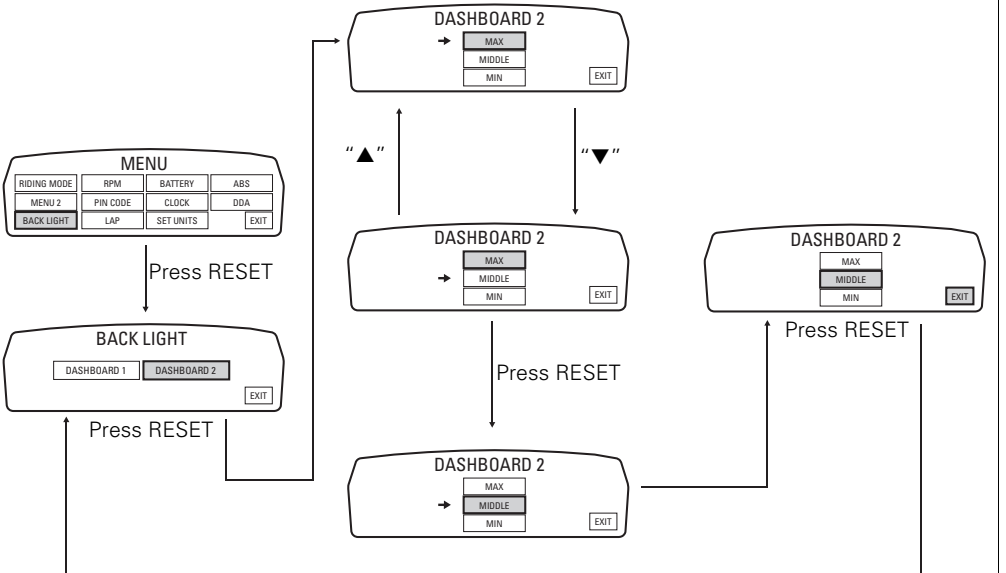

MENU
RIDING MODE
RPM
BATTERY
ABS
MENU 2
PIN CODE
CLOCK
DDA
BACK LIGHT
LAP
SET UNITS
EXIT
Press RESET
BACK LIGHT
DASHBOARD 1
DASHBOARD 2
EXIT
Press RESET
DASHBOARD 2
MAX
MIDDLE
MIN
EXIT
"▲"
"▼"
DASHBOARD 2
MAX
MIDDLE
MIN
EXIT
Press RESET
DASHBOARD 2
MAX
MIDDLE
MIN
EXIT
DASHBOARD 2
MAX
MIDDLE
MIN
EXIT
Press RESET

fig. 50

Digital RPM indication function

This function displays the number of RPMs for improved accuracy when setting idle rpm.
To access the function it is necessary to view the "setting" menu page 48, using button (1, fig. 14) "▲" or (2, fig. 14) "▼" select the "RPM" function and press the reset button (12, fig. 12) to confirm. The display shows the numerical value of the RPM with a precision of 50 rpm.

To exit the setting function, press the reset button (12, fig. 12) when "EXIT" is highlighted.

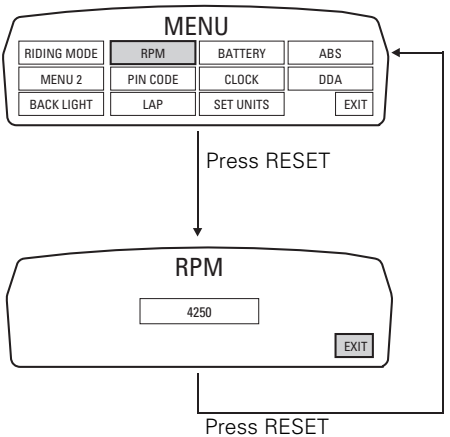

MENU
RIDING MODE
RPM
BATTERY
ABS
MENU 2
PIN CODE
CLOCK
DDA
BACK LIGHT
LAP
SET UNITS
EXIT
Press RESET
RPM
4250
EXIT
Press RESET

fig. 51

LAP Activation/Deactivation function (lap time)

This function activates and deactivates the LAP function (lap time).
To access the function it is necessary to view the "setting" menu page 48, using button (1, fig. 14) "▲" or (2, fig. 14) "▼" select the "LAP" function and press the reset button (12, fig. 12) to go to next page.
Function state is highlighted on the display (ON in green or OFF in yellow); use button (1, fig. 14) "▲" or (2, fig. 14) "▼" to shift the arrow on the left onto the new setting and confirm by pressing the reset button (12, fig. 12).
To exit the setting function, press the reset button (12, fig. 12) when "EXIT" is highlighted.

Storing the "OFF" condition disables the LAP function.
Storing the "ON" condition enables the LAP function (see "LAP registration" paragraph).

Note

When the "LAP" function is active, the flash button (11. fig. 12) takes on the dual function of high beam headlight "flash" and lap time Start / Stop.

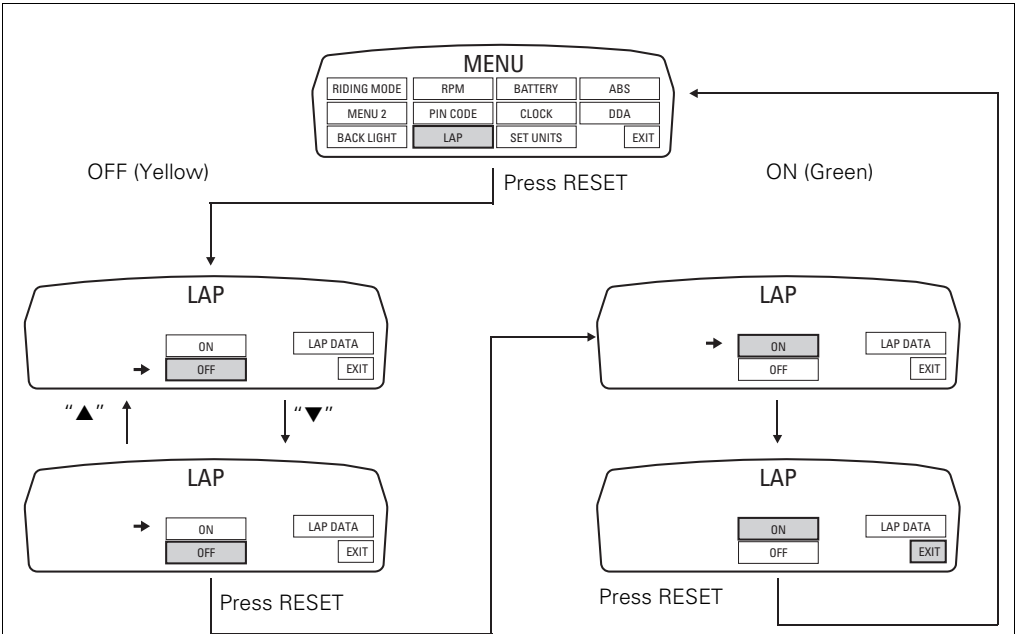

MENU
RIDING MODE
RPM
BATTERY
ABS
MENU 2
PIN CODE
CLOCK
DDA
BACK LIGHT
LAP
SET UNITS
EXIT
OFF (Yellow)
Press RESET
ON (Green)
LAP
ON
OFF
LAP DATA
EXIT
"▲"
"▼"
LAP
ON
OFF
LAP DATA
EXIT
Press RESET
LAP
ON
OFF
LAP DATA
EXIT
LAP
ON
OFF
LAP DATA
EXIT
Press RESET

fig. 52

LAP registration function

This function describes the "LAP" time registration. If the function is activated (see "LAP activation/ deactivation description), the lap time can be registered as follows:

- pressing the flash headlight button (11, fig. 12) the first time starts the "lap timer" for the first lap, and the instrument panel shows the message "LAP-START" flashing for 4 seconds, and then returns to the previous display;
- from this moment, each time that the flash is pressed (11, fig. 12) the display automatically shows the lap number and lap time for 10 seconds and then returns to the "previous" display.

You can save a maximum of 30 laps in the memory. Once the memory is full, the instrument panel no longer stores lap times when the flash headlight button (11, fig. 12) is pressed, and the flashing message "LAP-FULL" is shown on the display for 4 seconds until the times are reset.
When the LAP function is set disabled, the current "lap" is not stored.
If the LAP function is active and suddenly the motorcycle is suddenly turned off (Key-Off), the function will be automatically disabled (even if the lap timer was active, the current "lap" is not stored).
If the time is never "stopped", it will roll over upon reaching 9 minutes, 59 seconds and 99 hundredths; the lap timer starts counting from 0 (zero) and will keep running until the function is disabled.
If however the LAP function is switched on and the memory has not been cleared, but fewer than 30 laps have been saved (e.g. 18 laps), the instrument panel will store any remaining laps until the memory is full (in this case, it will store an additional 12 laps).
This function only displays the times for the lap being registered; but other data are also saved (MAX speed and MAX rpm) for viewing at a later date in the "LAP DATA" function (stored LAP display).

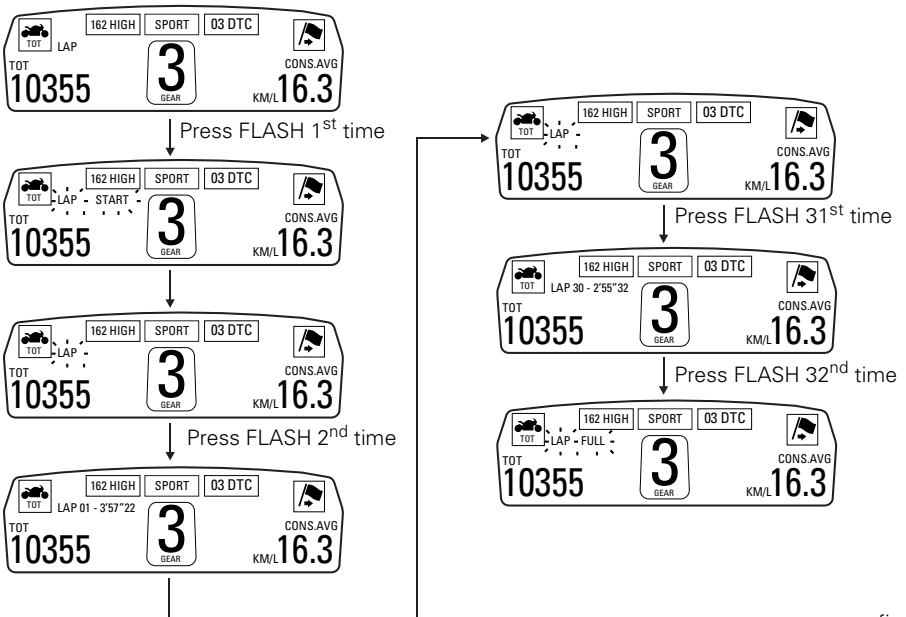

162 HIGH
SPORT
03 DTC
TOT
LAP
TOT
10355
3
GEAR
CONS.AVG
KM/L 16.3
Press FLASH 1st time
LAP - START -
Press FLASH 2nd time
LAP 01 - 3'57"22
Press FLASH 31st time
LAP 30 - 2'55"32
Press FLASH 32nd time
LAP - FULL -

fig. 53

Stored LAP display function

This function displays the stored LAPs.
To access the function it is necessary to view the "setting" menu page 48, using button (1, fig. 14) "▲" or (2, fig. 14) "▼" select the "LAP" function and press the reset button (12, fig. 12) to go to next page. Use button (1, fig. 14) "▲" or (2, fig. 14) "▼" to select "LAP DATA" indication and press the reset button again (12, fig. 12) to enter the page showing the previously recorded lap times.

The instrument panel displays the information as follows:

- at top left, the number of the displayed lap (ex.: LAP N.01);
- at bottom left, a rectangle inside which is the lap time (TIME), top speed in that lap (SPEED MAX) and top rpm in the same lap (RPM MAX);
- on the right, use button (1, fig. 14) "▲" or (2, fig. 14) "▼" to select "NEXT" (so that every time the reset button is pressed (12, fig. 12) the next lap is displayed) or "PREV" (so that every time the reset button is pressed (12, fig. 12) the previous lap is displayed);

To exit, select "EXIT" and press the reset button (12, fig. 12).

Note
The MAX stored speed is indicated on the display (increased by 5%).

If no lap times are saved in memory, "NO LAP" indication is displayed and lap timer will indicate "-.--.--", MAX rpm will be = - - - - - - and MAX speed = - - - - -.

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

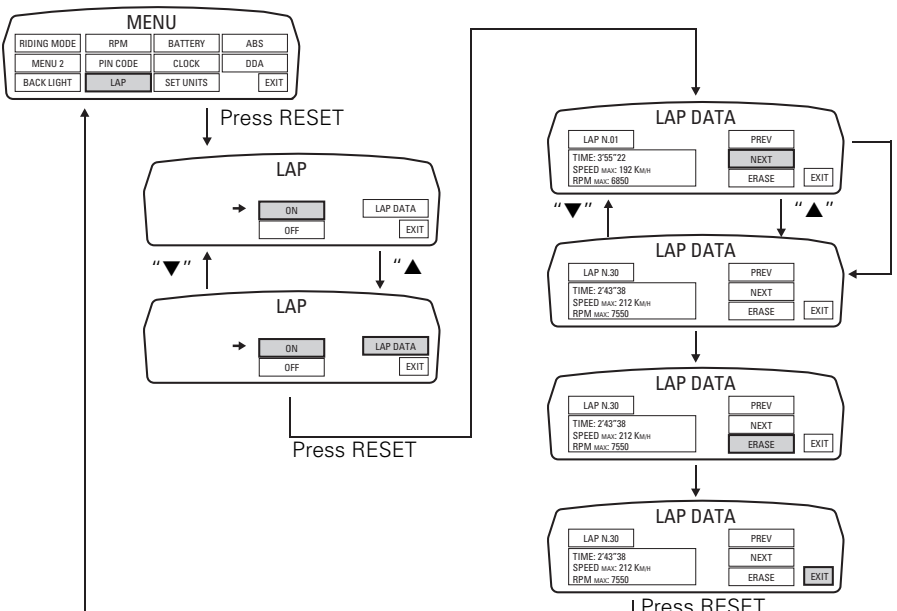

MENU
RIDING MODE
RPM
BATTERY
ABS
MENU 2
PIN CODE
CLOCK
DDA
BACK LIGHT
LAP
SET UNITS
EXIT
Press RESET
LAP
ON
OFF
LAP DATA
EXIT
"▼"
"▲"
LAP
ON
OFF
LAP DATA
EXIT
Press RESET
LAP DATA
LAP N.01
TIME: 3'55"22
SPEED MAX: 192 KM/H
RPM MAX: 6850
PREV
NEXT
ERASE
EXIT
"▼"
"▲"
LAP DATA
LAP N.30
TIME: 2'43"38
SPEED MAX: 212 KM/H
RPM MAX: 7550
PREV
NEXT
ERASE
EXIT
LAP DATA
LAP N.30
TIME: 2'43"38
SPEED MAX: 212 KM/H
RPM MAX: 7550
PREV
NEXT
ERASE
EXIT
LAP DATA
LAP N.30
TIME: 2'43"38
SPEED MAX: 212 KM/H
RPM MAX: 7550
PREV
NEXT
ERASE
EXIT
Press RESET

fig. 54

Stored LAP erase function

This function erases the stored LAPs.
To access the function it is necessary to view the "setting" menu page 48, using button (1, fig. 14) "▲" or (2, fig. 14) "▼" select the "LAP" function and press the reset button (12, fig. 12) to go to next page.
Use button (1, fig. 14) "▲" or (2, fig. 14) "▼" to select "LAP DATA" indication and press the reset button again (12, fig. 12) to enter the page showing the previously recorded lap times.
Highlight the "ERASE" item, use button (1, fig. 14) "▲" or (2, fig. 14) "▼" to scroll through the stored LAPs to erase and press the reset button (12, fig. 12) for 3 seconds. Now, on the left-hand side of the display you have "PLEASE WAIT…" and then, to confirm deletion, "ERASE OK" appears for 2 seconds.
You will notice that no stored data will be present any more and "NO LAP" message will be displayed.
To exit, select "EXIT" and press the reset button (12, fig. 12).

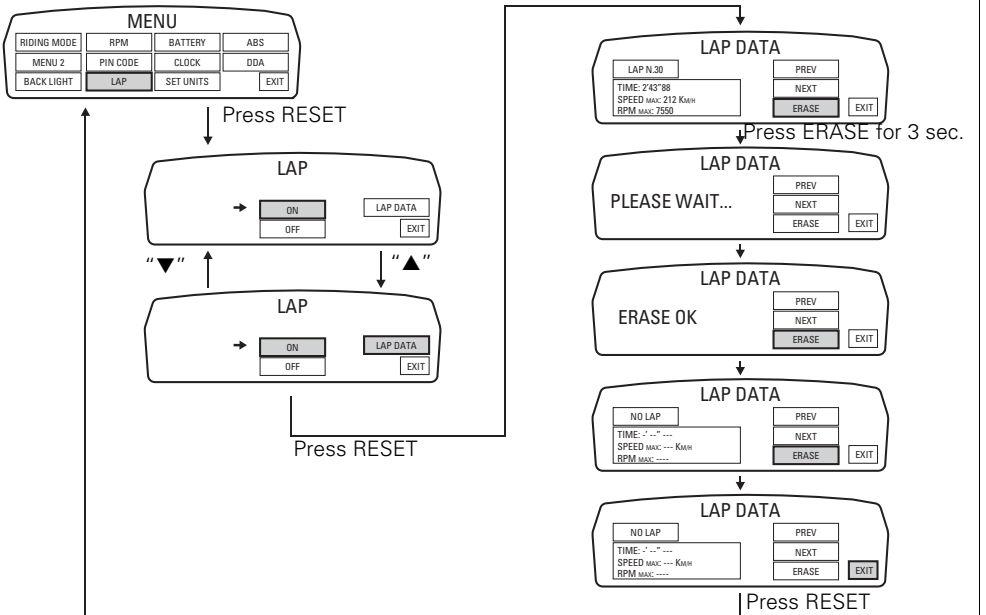

MENU
RIDING MODE
RPM
BATTERY
ABS
MENU 2
PIN CODE
CLOCK
DDA
BACK LIGHT
LAP
SET UNITS
EXIT
Press RESET
LAP
ON
OFF
LAP DATA
EXIT
"▼"
"▲"
LAP
ON
OFF
LAP DATA
EXIT
Press RESET
LAP DATA
LAP N.30
TIME: 2'43"88
SPEED MAX: 212 KM/H
RPM MAX: 7550
PREV
NEXT
ERASE
EXIT
Press ERASE for 3 sec.
LAP DATA
PLEASE WAIT...
PREV
NEXT
ERASE
EXIT
LAP DATA
ERASE OK
PREV
NEXT
ERASE
EXIT
LAP DATA
NO LAP
TIME: -'--"---
SPEED MAX: --- KM/H
RPM MAX: ----
PREV
NEXT
ERASE
EXIT
LAP DATA
NO LAP
TIME: -'--"---
SPEED MAX: --- KM/H
RPM MAX: ----
PREV
NEXT
ERASE
EXIT
Press RESET

fig. 55

Battery voltage indicator (BATTERY)

This function describes the battery voltage indicator. To access the function it is necessary to view the "setting" menu page 48, using button (1, fig. 14) "▲" or (2, fig. 14) "▼" select the "BATTERY" function and press the reset button (12, fig. 12) to confirm.
The information will be displayed as follows:

- if battery voltage is between 11.8 and 14.9 Volt the reading will be displayed steady;
- if battery voltage is between 11.0 and 11.7 Volt the reading will be displayed flashing;
- if battery voltage is between 15.0 and 16.0 Volt the reading will be displayed flashing;
- if battery voltage is equal to or less than 10.9 Volt, "LOW" is shown flashing and the "Vehicle/ Engine Diagnosis - EOBD" light (7, fig. 4) comes on;
- if battery voltage is equal to or greater than 16.1 Volt, "HIGH" is shown flashing and the " Vehicle/ Engine Diagnosis - EOBD" light (7, fig. 4) comes on.


Note
Dashes
"- - -" appear if the reading is not available.

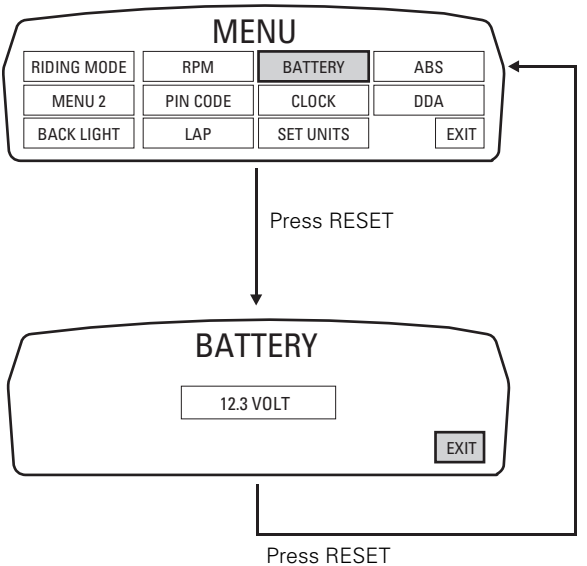

MENU
RIDING MODE
RPM
BATTERY
ABS
MENU 2
PIN CODE
CLOCK
DDA
BACK LIGHT
LAP
SET UNITS
EXIT
Press RESET
BATTERY
12.3 VOLT
EXIT
Press RESET

fig. 56

Clock setting function

This function sets the clock.
To access the function it is necessary to view the "setting" menu page 48, using button (1, fig. 14) "▲" or (2, fig. 14) "▼" select the "CLOCK" function and press the reset button (12, fig. 12) to confirm.
In the following screen the message "SETTING" is highlighted in green (3, fig. 57); now, press the reset button (12, fig. 12) for 3 seconds to edit the time displayed on the instrument panel on handlebar, and the "SETTING" indication highlighting becomes grey (4, fig. 57).

Clock setting

On entering this mode, the message "AM" will flash; if you press the button (2, fig. 14) "▼" "PM" flashes; if you press the button (2, fig. 14) "▼" you will return to the previous step (if it is 00:00, when switching between "AM" to "PM", 12:00 will be displayed).
pressing button (1, fig. 14) "▲" accesses the hour setting mode; the hours start to flash.
each time you press the button (2, fig. 14) "▼", the digit will increase by 1 hour; if the button is held pressed down (2, fig. 14) "▼" the digit will increase by 1 hour every second (when the button is held depressed, the hours do not flash).
pressing button (1, fig. 14) "▲" gives access to the minute setting mode; minutes start to flash.
each time you press the button (2, fig. 14) "▼", the digit will increase by 1 minute; holding down the button (2, fig. 14) "▼", the digit will increase by 1 minute each second;
if the button is held depressed (2, fig. 14) "▼" for over 5 seconds, minutes will increase by 1 minute every 100 m (while the button is held depressed (2, fig. 14) "▼", the seconds will not flash).
If you press button (1, fig. 14) "▲" setting is completed and the instrument panel on tank display "SETTING" item is again highlighted in green (5, fig. 57).
To exit, select "EXIT" and press the reset button (12, fig. 12).

Note

In case of a battery is cutoff, when the voltage is restored and at the next Key-On, the clock is always reset (it starts automatically from 00:00).

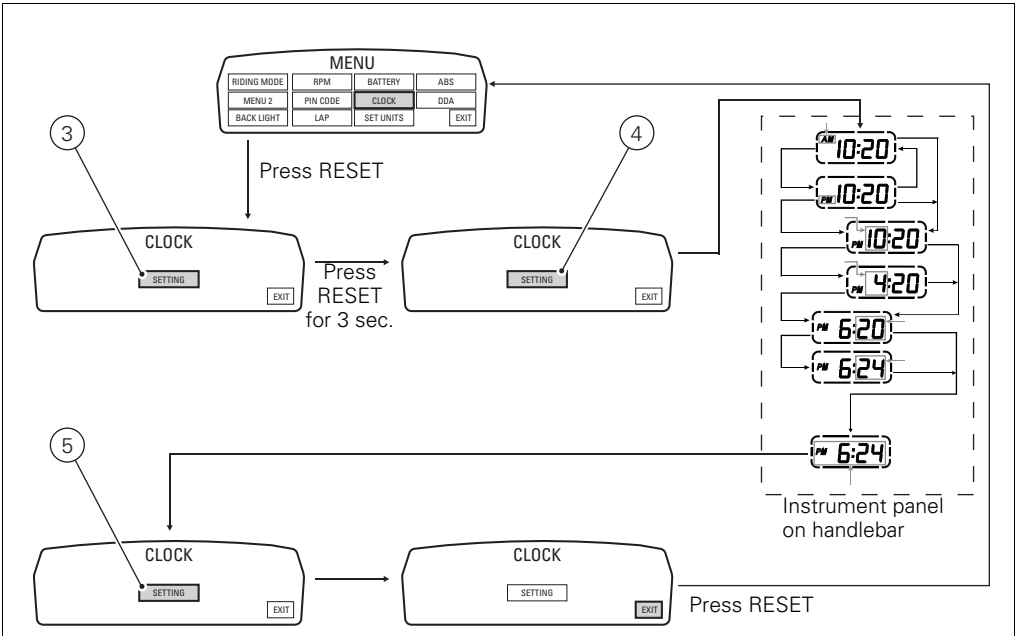

MENU
RIDING MODE
RPM
BATTERY
ABS
MENU 2
PIN CODE
CLOCK
DDA
BACK LIGHT
LAP
SET UNITS
EXIT
3
Press RESET
CLOCK
SETTING
EXIT
Press
RESET
for 3 sec.
4
CLOCK
SETTING
EXIT
AM 10:20
PM 10:20
PM 10:20
PM 4:20
PM 6:20
PM 6:24
PM 6:24
Instrument panel
on handlebar
5
CLOCK
SETTING
EXIT
CLOCK
SETTING
EXIT
Press RESET

fig. 57

Units of measurement modification function

This function allows you to change the units of measurement of the displayed values.
To access the function it is necessary to view the "setting" menu page 48, using button (1, fig. 14) "▲" or (2, fig. 14) "▼" select the "SET UNITS" function and press the reset button (12, fig. 12) to go to next page.
Use button (1, fig. 14) "▲" or (2, fig. 14) "▼" to select the value relative to the unit of measurement to be changed and press the reset button again (12, fig. 12).
The instrument panel displays the values that can be modified; Use button (1, fig. 14) "▲" or (2, fig. 14) "▼" to select the value to modify and press the reset button (12, fig. 12) again.

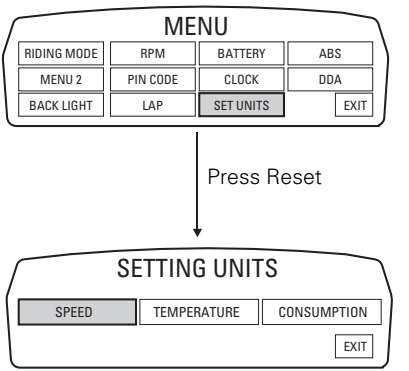


fig. 58

"SPEED" setting

This function allows to change the units of measurement of speed (and hence even the ones of distance travelled).
Currently set unit of measurement is highlighted in green on the display; use button (1, fig. 14) "▲" or (2, fig. 14) "▼" to shift the arrow on the left onto the new setting and confirm by pressing the reset button (12, fig. 12).
Save the setting and, when coming back to main screen, any new unit of measurement set will be present.

1) Km/h: by setting this condition the following values will have the same units of measurement:
- TOT, TRIP1, TRIP2, TRIP FUEL: Km
- Vehicle speed and AVERAGE speed (SPEED AVG): Km/h

2) mph: by setting this condition the following values will have the same units of measurement:
- TOT, TRIP1, TRIP2, TRIP FUEL: miles
- Vehicle speed and AVERAGE speed (SPEED AVG): mph.

To exit the setting function, press the reset button (12, fig. 12) when "EXIT" is highlighted.

"TEMPERATURE" setting

This function allows you to change the units of measurement of the temperature.
Currently set unit of measurement is highlighted in green on the display; use button (1, fig. 14) "▲" or (2, fig. 14) "▼" to shift the arrow on the left onto the new setting and confirm by pressing the reset button (12, fig. 12).

Save the setting and, when coming back to main screen, any new unit of measurement set will be present.

3) °C: by setting this condition the following values will have the same units of measurement:
- Engine coolant temperature and T_AIR: °C

4) °F: by setting this condition the following values will have the same units of measurement:
- Engine coolant temperature and T_AIR: °F

To exit the setting function, press the reset button (12, fig. 12) when "EXIT" is highlighted.

"CONSUMPTION" setting

This function allows to change the units of measurement of the Average and Instantaneous fuel consumption.
Currently set unit of measurement is highlighted in green on the display; use button (1, fig. 14) "▲" or (2, fig. 14) "▼" to shift the arrow on the left onto the new setting and confirm by pressing the reset button (12, fig. 12).
Save the setting and, when coming back to main screen, any new unit of measurement set will be present.

5) Km/L: by setting this condition the following values will have the same units of measurement:
- CONS. and CONS. AVG. : Km/l
6) L/100: by setting this condition the following values will have the same units of measurement:
- CONS. and CONS. AVG: L/100
7) mpgal UK : by setting this condition the following values will have the same units of measurement:
- CONS. and CONS. AVG: mpgal UK
8) mpgal USA : by setting this condition the following values will have the same units of measurement:
- CONS. and CONS. AVG: mpgal USA

To exit the setting function, press the reset button (12, fig. 12) when "EXIT" is highlighted.

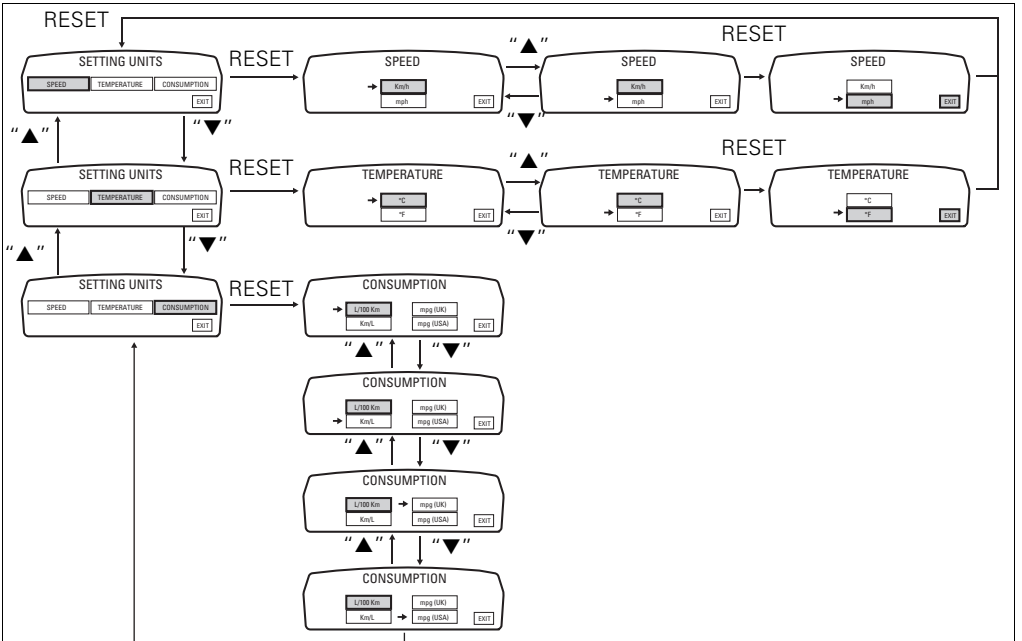

RESET
SETTING UNITS
SPEED
TEMPERATURE
CONSUMPTION
EXIT
RESET
SPEED
Km/h
mph
EXIT
"▲"
"▼"
SPEED
Km/h
mph
EXIT
RESET
SPEED
Km/h
mph
EXIT
SETTING UNITS
SPEED
TEMPERATURE
CONSUMPTION
EXIT
RESET
TEMPERATURE
°C
°F
EXIT
"▲"
"▼"
TEMPERATURE
°C
°F
EXIT
RESET
TEMPERATURE
°C
°F
EXIT
SETTING UNITS
SPEED
TEMPERATURE
CONSUMPTION
EXIT
RESET
CONSUMPTION
L/100 Km
Km/L
mpg (UK)
mpg (USA)
EXIT
"▲"
"▼"
CONSUMPTION
L/100 Km
Km/L
mpg (UK)
mpg (USA)
EXIT
"▲"
"▼"
CONSUMPTION
L/100 Km
Km/L
mpg (UK)
mpg (USA)
EXIT
"▲"
"▼"
CONSUMPTION
L/100 Km
Km/L
mpg (UK)
mpg (USA)
EXIT

fig. 59

ABS disabling function

This function disables or enables the ABS.
To access the function it is necessary to view the "setting" menu page 48, using button (1, fig. 14) "▲" or (2, fig. 14) "▼" select the "ABS" function and press the reset button (12, fig. 12) to go to next page.
Function state is highlighted on the display (ON in green or OFF in yellow); Use button (1, fig. 14) "▲" or (2, fig. 14) "▼" to shift the arrow on the left onto the new setting and confirm by pressing the reset button (12, fig. 12) for 3 seconds.
After these 3 seconds the system checks whether the request was actually complied with; during the check the display will show the message "PLEASE WAIT…".
The new condition will be displayed after check time.

Note

If the disabling request was not met, it is recommended to repeat the procedure. If the problem persists, contact your Ducati dealer or Authorised Service Centre.

To exit the setting function, press the reset button (12, fig. 12) when "EXIT" is highlighted.

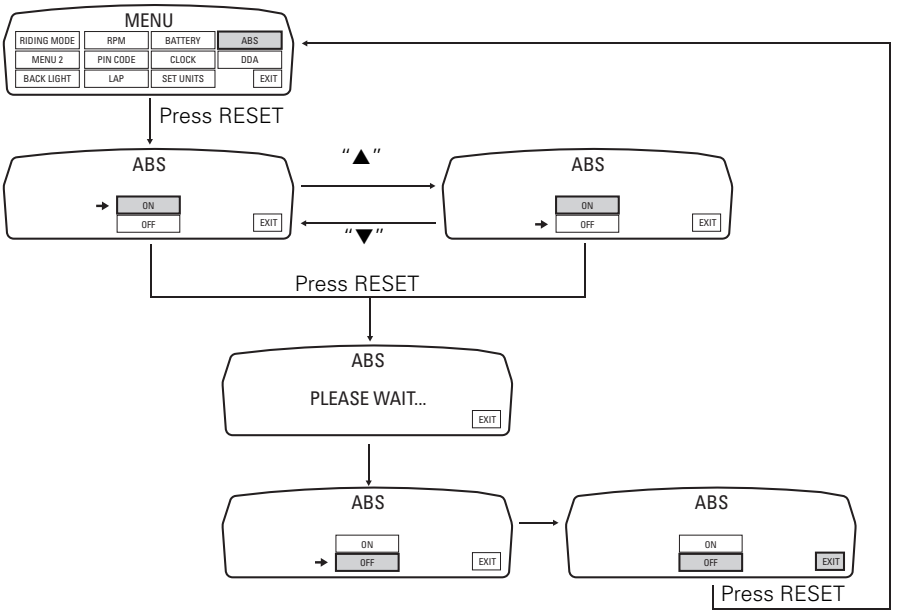

MENU
RIDING MODE
RPM
BATTERY
ABS
MENU 2
PIN CODE
CLOCK
DDA
BACK LIGHT
LAP
SET UNITS
EXIT
Press RESET
ABS
ON
OFF
EXIT
"▲"
"▼"
ABS
ON
OFF
EXIT
Press RESET
ABS
PLEASE WAIT...
EXIT
ABS
ON
OFF
EXIT
ABS
ON
OFF
EXIT
Press RESET

fig. 60

The Immobilizer system

For improved antitheft protection, the motorcycle is equipped with an IMMOBILIZER, an electronic system that inhibits engine operation whenever the ignition switch is turned off.
The grip of each ignition key contains an electronic device that modulates the output signal from a special antenna located under the seat when the ignition is switched On. The modulated signal acts as a password (which is different at each start-up) and tells the ECU that an "authorised" ignition key is being used to start up the engine. When the ECU recognises the signal, it enables engine start-up.

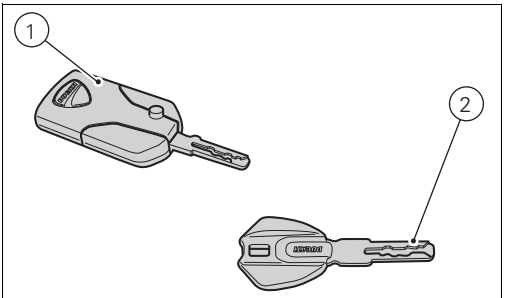


fig. 61

Keys (fig. 61)

The Owner receives a set of keys comprising:
- 1 active key (1, fig. 61)
- 1 passive key (2, fig. 61)

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

The active key (1, fig. 62) is the one that is normally used: press button (A, fig. 62) to fully open the metal part, i.e. position (B, fig. 62). Hold depressed button (A, fig. 62) you to move the metal part and set it to the middle position (C, fig. 62); once in place, release button to lock.

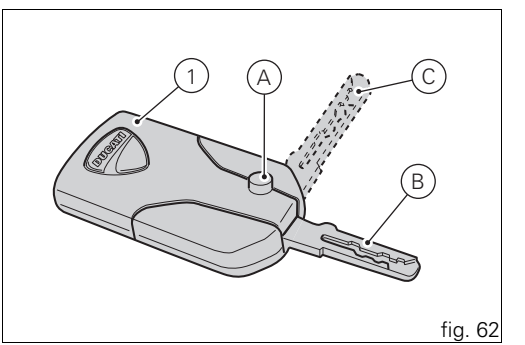


fig. 62

The metal part returns inside the grip by pushing it in. The key contains a battery that must be replaced when the low key battery "warning" is displayed as soon as the instrument panel is turned on (fig. 63).

Note
In this case, replace the battery as soon as possible (page 104).

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. 63

Warning
Do not ride with the key (1 or 2, fig. 61) 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.

Warning
Also riding in poor weather conditions with the key inserted could cause damage to its integrated circuit.
Do not leave the key on the motorcycle when washing it as it could be damaged, not being watertight.

Replacing the battery in the active key

Only use 3 Volt CR 2032 lithium ion batteries.

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

Remove the metal part of the battery.
Use a large sized coin to pry open the shells of the plastic grip (2€ coin) as shown in fig. 64.

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

Once the plastic shells have been separated, remove the printed circuit board (1, fig. 65) prying it up GENTLY with a small flat screwdriver, as shown in the figure.

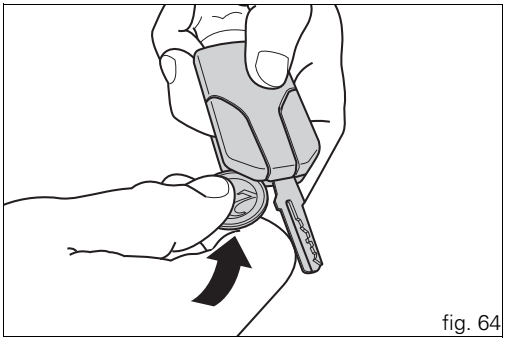


fig. 64

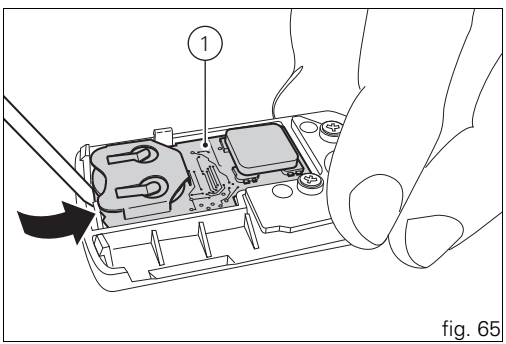


fig. 65

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

Remove the battery (2, fig. 66) from the printed circuit board (1, fig. 66) and replace it with a new one. Pay attention to polarity: the positive pole (+) must face upward.

Important
Only use the required type of battery.

Reinsert the printed circuit board (1, fig. 67) from the side with the battery (2, fig. 67) into the plastic shell.

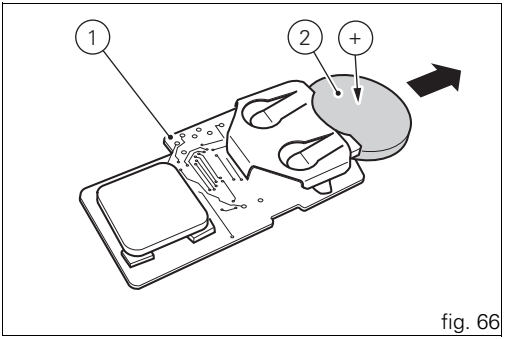


fig. 66

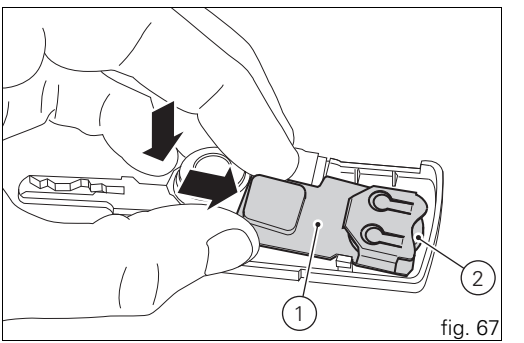


fig. 67

Apply slight pressure on the antenna (3, fig. 68) of the printed circuit board until you hear a click.

Align the two shells of the grip and press on the area indicated by the arrows (fig. 69) to reclose them. Make sure that you hear a “click” upon closing and that the key is well closed.

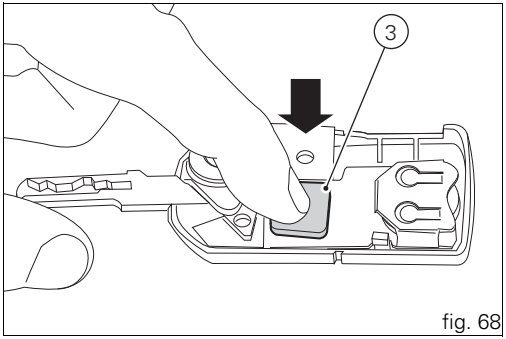


fig. 68

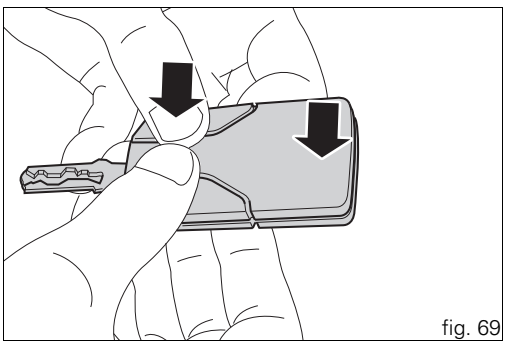


fig. 69

Duplicate keys

If you need any duplicate keys, contact the Ducati Service network with all the keys you have left.
The Ducati Service Centre will program all the new keys as well as any keys you already have.
You may be asked to provide proof that you are the legitimate owner of the motorcycle.
The codes of any keys not submitted will be wiped off from the memory to make those keys unserviceable in case they have been lost.

Immobilizer override procedure

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

Note

The PIN CODE function must be activated by entering your 4 digit PIN in the instrument panel, otherwise the vehicle cannot be turned on temporarily in the case of a malfunction.

Warning

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

PIN CODE activation function

To access the function it is necessary to view the "setting" menu page 62, using button (1, fig. 14) "▲" or (2, fig. 14) "▼" select the "PIN CODE" function and press the reset button (12, fig. 12) to go to next page.

Note

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

When accessing the function, "INSERT NEW PIN CODE" with four dashes "----" in the bottom line will appear on the display highlighted in green; now enter a 4 digit code.

Entering the code:
press the reset button (12, fig. 12).
each time you press the button (2, fig. 14) "▼" the displayed number increases from "0" to "9" and then returns to "0";
to confirm the number, press the reset button (12, fig. 12).
Repeat the procedure until inserting the fourth digit.
To highlight the "MEMORY" indication, press the reset button (12, fig. 12) again.

To store the entered PIN, press the reset button (12, fig. 12) for 3 seconds with "MEMORY" indication highlighted in green.
As a confirmation of PIN storage, the display will show the message "MEMORIZED" for about 2 seconds and then automatically highlight "EXIT" option.
From this moment, "MODIFY PIN CODE" will be displayed when accessing the "PIN CODE" function and the PIN can be changed again as many times as necessary (without limits).
To exit the setting function, press the reset button (12, fig. 12) when "EXIT" is highlighted.

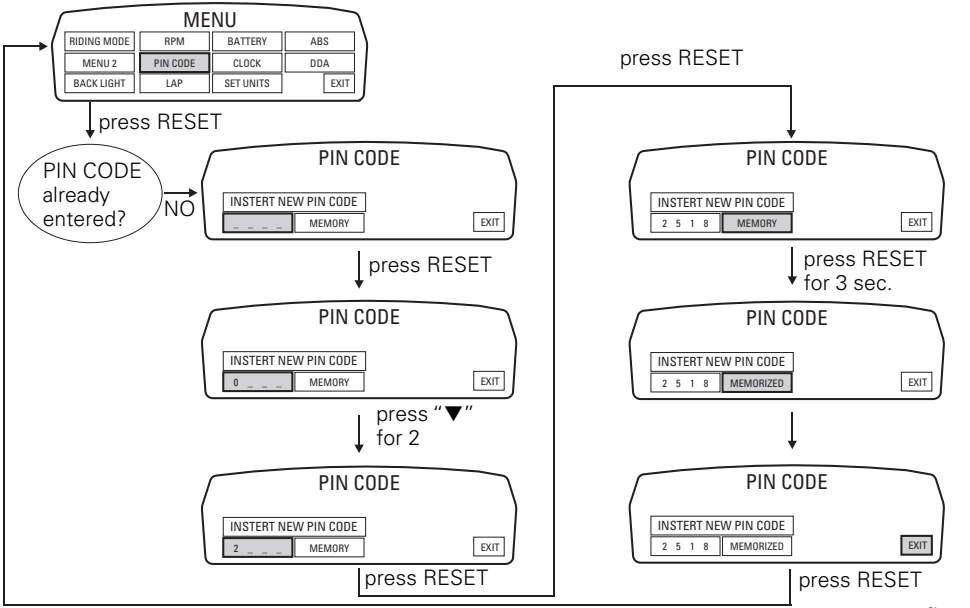

MENU
RIDING MODE
RPM
BATTERY
ABS
MENU 2
PIN CODE
CLOCK
DDA
BACK LIGHT
LAP
SET UNITS
EXIT
press RESET
PIN CODE already entered?
NO
PIN CODE
INSTERT NEW PIN CODE
_ _ _ _
MEMORY
EXIT
press RESET
PIN CODE
INSTERT NEW PIN CODE
0 _ _ _
MEMORY
EXIT
press "▼" for 2
PIN CODE
INSTERT NEW PIN CODE
2 _ _ _
MEMORY
EXIT
press RESET
press RESET
PIN CODE
INSTERT NEW PIN CODE
2 5 1 8
MEMORY
EXIT
press RESET for 3 sec.
PIN CODE
INSTERT NEW PIN CODE
2 5 1 8
MEMORIZED
EXIT
PIN CODE
INSTERT NEW PIN CODE
2 5 1 8
MEMORIZED
EXIT
press RESET

fig. 70

PIN CODE change function

This function changes your four number PIN CODE. To access the function it is necessary to view the "setting" menu page 62, using button (1, fig. 14) "▲" or (2, fig. 14) "▼" select the "PIN CODE" function and press the reset button (12, fig. 12) to go to next page.

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

When accessing the function, "MODIFY PIN CODE", "OLD PIN" with four dashes "----" in the bottom line will appear on the display highlighted in green; now enter the 4 digit code.

Note
To change the PIN, you must know the currently stored PIN.

Now you shall enter the "old" PIN code (OLD PIN). Press the reset button (12, fig. 12); each time you press the button (2, fig. 14) "▼" the displayed number increases from "0" to "9" and then returns to "0"; to confirm the number, press the reset button (12, fig. 12). Repeat the procedure until inserting the fourth digit. Press the reset button (12, fig. 12) again to confirm.
If the entered code is incorrect, the instrument panel will return to the four dashes " ---- " in order to enter the code again.
If the entered code is correct, "CORRECT" is automatically highlighted in green for about 2 seconds and then the four dashes " ---- " next to "NEW PIN" indication are automatically highlighted; now enter the "new" 4 digit code.
Press the reset button (12, fig. 12); each time you press the button (2, fig. 14) "▼" the displayed number increases from "0" to "9" and then returns to "0"; to confirm the number, press the reset button (12, fig. 12). Repeat the procedure until inserting the fourth digit. Press the reset button (12, fig. 12) again to confirm.
Item "MEMORY" is automatically highlighted.

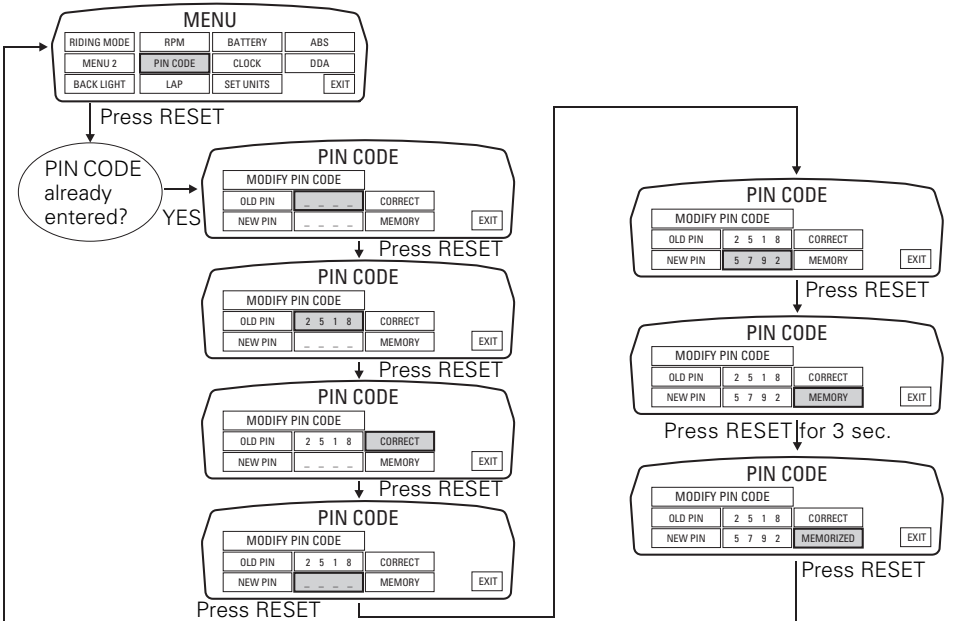

MENU
RIDING MODE
RPM
BATTERY
ABS
MENU 2
PIN CODE
CLOCK
DDA
BACK LIGHT
LAP
SET UNITS
EXIT
Press RESET
PIN CODE already entered?
YES
PIN CODE
MODIFY PIN CODE
OLD PIN
NEW PIN
CORRECT
MEMORY
EXIT
Press RESET
2 5 1 8
5 7 9 2
MEMORIZED
Press RESET for 3 sec.

fig. 71

To store the entered new PIN, press the reset button (12, fig. 12) for 3 seconds with “MEMORY” indication highlighted in green.
As a confirmation of the new PIN storage, the display will show message “MEMORIZED” for about 2 seconds and then “EXIT” is automatically highlighted.
To exit the setting function, press the reset button (12, fig. 12) when “EXIT” is highlighted.

Note
There is no limit to the amount of times you can change your PIN CODE.

Light control

Headlight control

This function allows you to reduce current consumption from the battery, by automatically managing headlight switching-off.
At Key-On, the high beam and low beam lights are off.
When the engine is started, the low beam lights turn on automatically; from this moment, "normal" operation is activated: it will be possible to switch from low beam to high beam (using button 11, fig. 12) or operate the "FLASH" signal (using button 11, fig. 12). If engine is not started upon key-on, it is anyway possible to switch the lights on by pushing the button on the LH high/low beam switch (button 11, fig. 12); the low beam lights are turned on the first time it is pressed; from this moment, the same button can be used to switch on (and off) the high beam light (if the engine is not started within 60 seconds, the low beam or high beam light that was turned on will turn off).
If the headlight was turned on before starting the engine with the procedure described above, the headlight turns off automatically when starting the vehicle and will turn on again when the engine has been completely started.

Turn indicators (automatic reset)

The instrument panel controls the automatic reset of the turn indicators.
After activating one of the two turn indicators, they can be deactivated using the RESET button (12, fig. 12).
If the turn indicator is not "reset" manually, the instrument panel will automatically switch it off after the motorcycle has travelled 500 m (0.3 miles) from when the turn indicator was activated.
The counter for the distance travelled for automatic deactivation is activated at speeds below 80 Km/h (50 mph).
If the calculation of the distance for automatic deactivation is activated and then the motorcycle exceeds a speed of 80 km/h (50 mph), the calculation is interrupted and will restart when the speed returns below the indicated threshold.

"Parking" function

This function activates the "PARKING" mode.
The "PARKING" function activates the front and rear parking lights when the vehicle is turned off so it is visible when parked.
The function is activated by pressing the button (2, fig. 14) "▼" for 3 seconds during the first 60 seconds after the motorcycle was turned off.
Once the function is activated, the indication will remain on the circular display for 5 seconds and the lights will remain on for 2 hours. After 2 hours, then will turn off automatically.

To interrupt the function, turn the vehicle on and off (Key-On / Key-Off).

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

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

fig. 72

"Steering in position for being locked" indication

This function informs that the steering is in position for turning on the steering lock.

The sensors detect that the steering is in position during the first 60 seconds after turning off the vehicle and the instrument panel activates the indication on the display for max. 5 consecutive seconds.

"Steering lock" on indication

This function informs that the steering lock was turned on.
The steering lock can be turned on during the first 60 seconds after turning off the vehicle by pressing down on the "RUN" button.
If the steering lock was enabled correctly, the instrument panel will show the indication in the display for 5 seconds.

Note
The steering lock can only be turned on when the steering is in position.

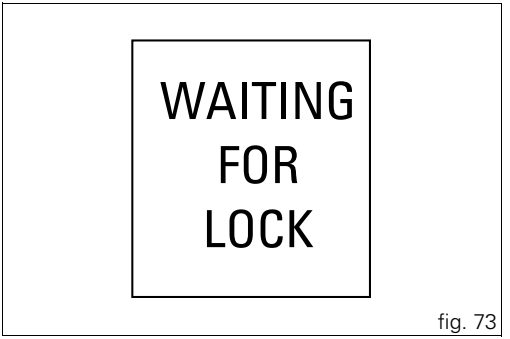


fig. 73

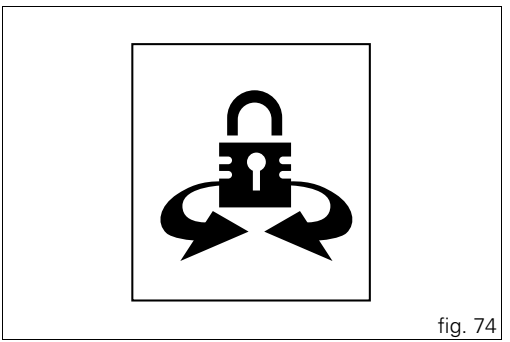


fig. 74

Indication of incorrect position of the red starter button

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

Important
This could lead to battery discharge in a short time.

Any incorrect position is detected within the first 60 seconds after vehicle switch-off (Key-Off).
If you press the starter button (1, fig. 76) for over 1 second to switch off (Key-Off), system activates the warning "RED SWITCH NOT RELEASED" as a flashing message (fig. 75).

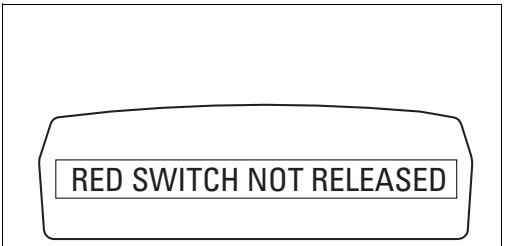


fig. 75

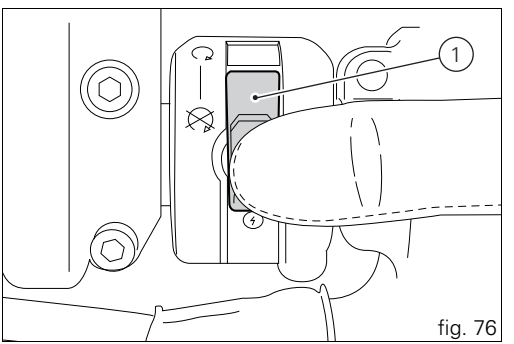


fig. 76

If the warning remains active once button (1, fig. 77) is no longer depressed, you shall take button (1, fig. 78) to "top" position.
In this case, report the fault to Dealer or Authorised Service Centre.

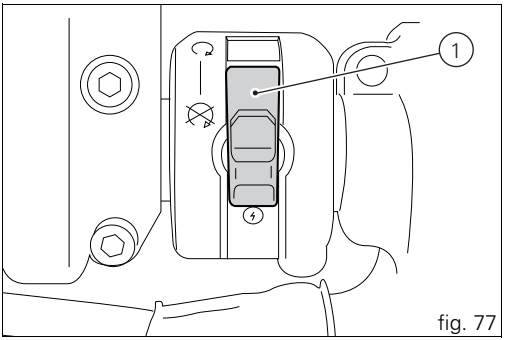


fig. 77

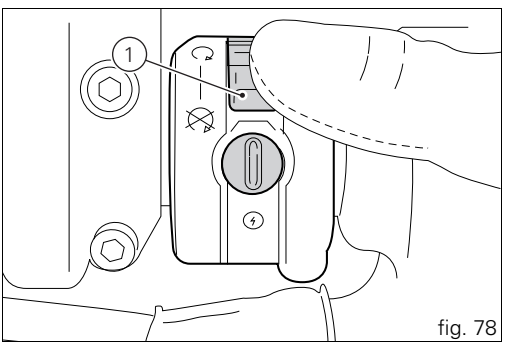


fig. 78

Controls

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

Position of motorcycle controls (fig. 79)

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

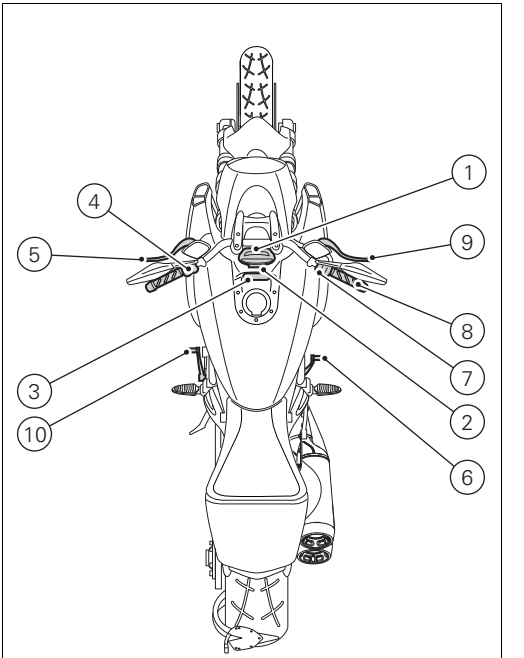


fig. 79

“Hands free” system

The Hands free system consists of:

1) Hands free lock;
2) Antenna;
3) Active key;
4) Passive key;
5) Electric cap (optional).

The “Hands free” button (7, fig. 82) is located on tank front end.

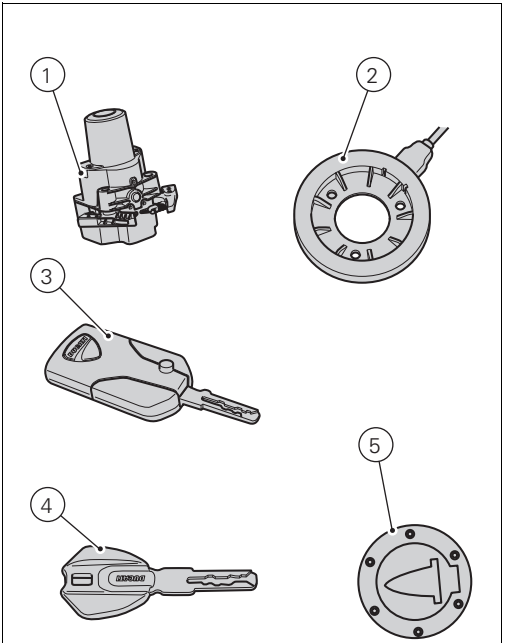


fig. 80

Hands free system Key-On and Key-Off

Key-On consists in turning on the hands free system and all of its electronic devices.
Key-Off consists in turning off the hands free system and all electronic devices, and makes sure the engine is turned off.
Key-On is done using the button (6) on the handlebar on the right switch or using the emergency button (7) on the Hands free lock (1, fig. 80).
Key-Off is done using the button (6) on the handlebar on the right switch or using the button (7) on the Hands free lock (1, fig. 80).

Note

The use of one of the two buttons (6) or (7) does not exclude the other, ex.: if you turn it on with one, you can turn it off with the other and vice versa.

Key-On can only occur in the presence of one of the two keys (3, fig. 80) or (4, fig. 80) or using the pin code.
Key-Off can also occur without a key (3, fig. 80) or (4, fig. 80).
Key-Off occurs when the speed of the motorcycle is equal to zero, pressing the button (6) on the handlebar or by pressing the Hands free button (7); at a speed other than zero, only by pressing the Hands free button (7).

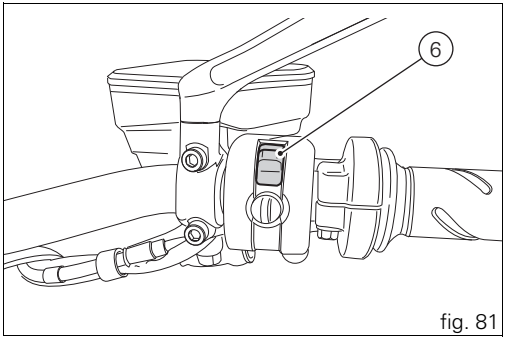


fig. 81

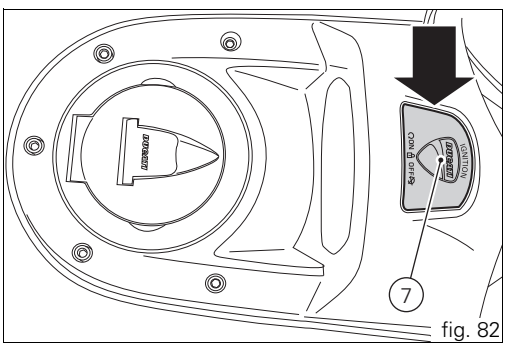


fig. 82

Note
When the battery is discharged, the active key (3, fig. 80) acts like a passive key (4, fig. 80). The instrument panel displays the discharged battery status.

The mechanical part of the key (3) is used to open the fuel cap and the seat lock.
The key (3) metal part is hidden inside the key: press button (A, fig. 83) to fully open the metal part, i.e. position (B, fig. 83). Hold depressed button (A, fig. 83) you to move the metal part and set it to the middle position (C, fig. 62); once in place, release button to lock.

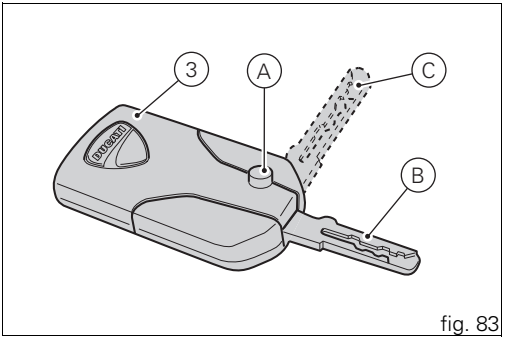


fig. 83

Note
With the vehicle in Key-On and "engine off", if the presence of the active key (3, fig. 83) is not detected for thirty consecutive seconds, the motorcycle will turn off automatically without any action by the rider.

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

A Key-On can be performed by pressing the red key (6) on the handlebar in the HANDS FREE ON/OFF position and in the presence of the active key (3, fig. 80).

Note
The active key (3, fig. 80) has a range of approx. 1.5 m, therefore it must be located within this range.

Key-Off can be performed by pressing the red key (6) on the handlebar in the HANDS FREE ON/OFF position. It can be done also without the key (3, fig. 80) only if the motorcycle speed is equal to zero.

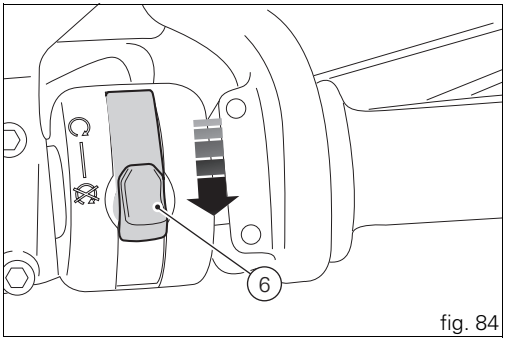


fig. 84

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

Key-On can be performed by pressing the button (7) on the Hands free lock (1, fig. 80) and with the presence of the active key (3, fig. 80).

Note
The active key (3, fig. 80) has a range of approx. 1.5 m, therefore it must be located within this range.

Key-Off can be performed by pressing the button (7) on the Hands free lock (1, fig. 80), also without the key (3, fig. 80).

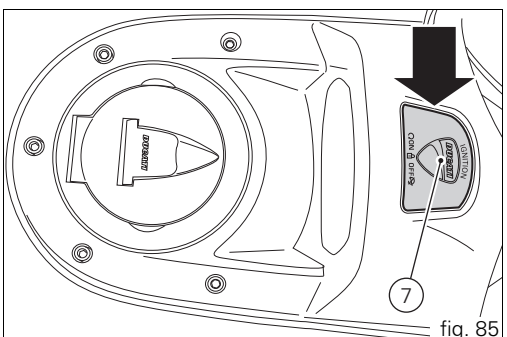


fig. 85

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

A Key-On can be performed by pressing the red button (6) on the handlebar in the HANDS FREE ON/OFF position and in the presence of the passive key (4, fig. 80).

Note

The passive key (4, fig. 80) has a range of a few cm, therefore the key (4, fig. 80) must be positioned near the antenna (2). Remove the seat (see "Removal of the seat" on page 137) to access the antenna (2).

Key-Off can be performed by pressing the red button (6) on the handlebar in the HANDS FREE ON/OFF position. It can be done also without the key (4, fig. 80) only if the motorcycle speed is equal to zero.

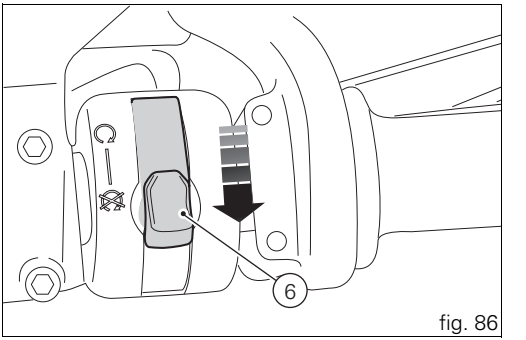


fig. 86

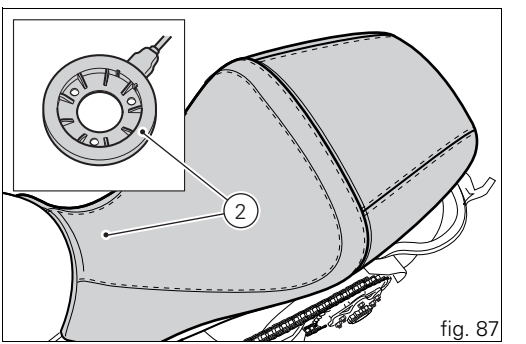


fig. 87

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

Key-On can be performed by pressing the button (7) on the Hands free lock and with the presence of the passive key (4, fig. 80).

Note

The passive key (4, fig. 80) has a range of a few cm, therefore the key (4, fig. 80) must be positioned near the antenna (2). Remove the seat (see "Removal of the seat" on page 137) to access the antenna (2).

Key-Off can be performed by pressing the button (7) on the Hands free lock (1, fig. 80), also without the key (4, fig. 80).

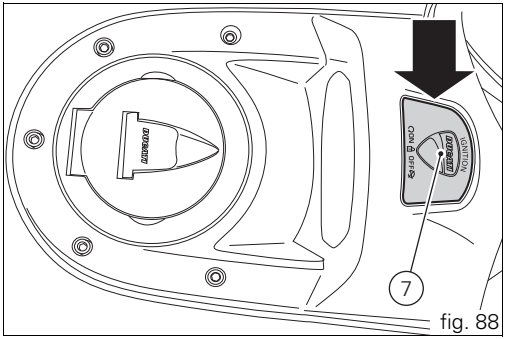


fig. 88

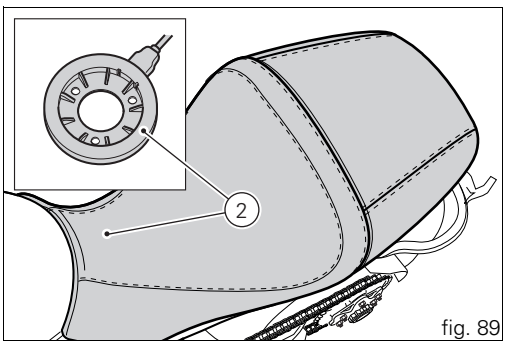


fig. 89

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

Key-On can be performed by pressing the button (7) on the hands free lock (1, fig. 80) without the presence of the keys (3, fig. 80) and (4, fig. 80) and entering the pin code on the dashboard.
Key-Off can be performed by pressing the button (6) on the handlebar / Hands Free key (7) / engine off no key.
After each Key-Off, at the next Key-On if the key is not present the pin code must be entered.
The pin code is entered by the customer when receiving the motorcycle.
The function is not enabled without the pin code.
When the Hands Free button is pressed (7) the instrument panel activates the backlighting and the circular display to be able to enter the four digit pin code. Entering the correct pin turns on the instrument panel and enables engine starting.
The pin must be entered within 120 sec, after which a Key-Off occurs automatically.

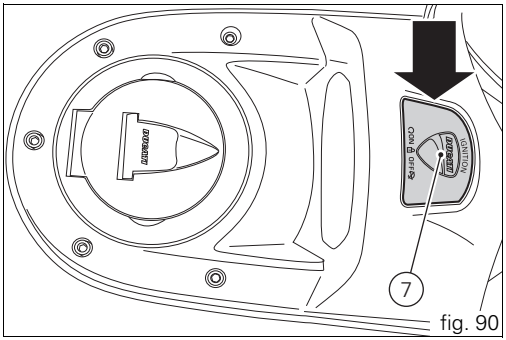


fig. 90

Entering PIN CODE function for vehicle release

This function turns on the motorcycle "temporarily" in the case of HF (Hands Free) system "malfunctions".
To activate the function, press the "emergency" Hands Free button (7, fig. 90) if the motorcycle cannot be turned on using the normal starter button.

After pressing the button, the instrument panel activates the "INSERT PIN CODE" indication on the display with four dashes "----" in the bottom line highlighted in green to enter the 4 digit PIN code.

Entering the code:
press the reset button (12, fig. 12).
each time you press the button (2, fig. 14) "▼" the displayed number increases from "0" to "9" and then returns to "0";
to confirm the number, press the reset button (12, fig. 12);
repeat the procedure until inserting the fourth digit;
Press the reset button (12, fig. 12) again to confirm.
If the code is incorrect, the instrument panel will return to the four dashes " - - - - " indication in order to enter the code again.

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

If the entered code was correctly, the message "CORRECT" will flash on the display for 3 seconds. After 3 seconds, the instrument panel will return to the "normal" view (with all indications active). From this moment, the vehicle can be started using the start button (Key-On).

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

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

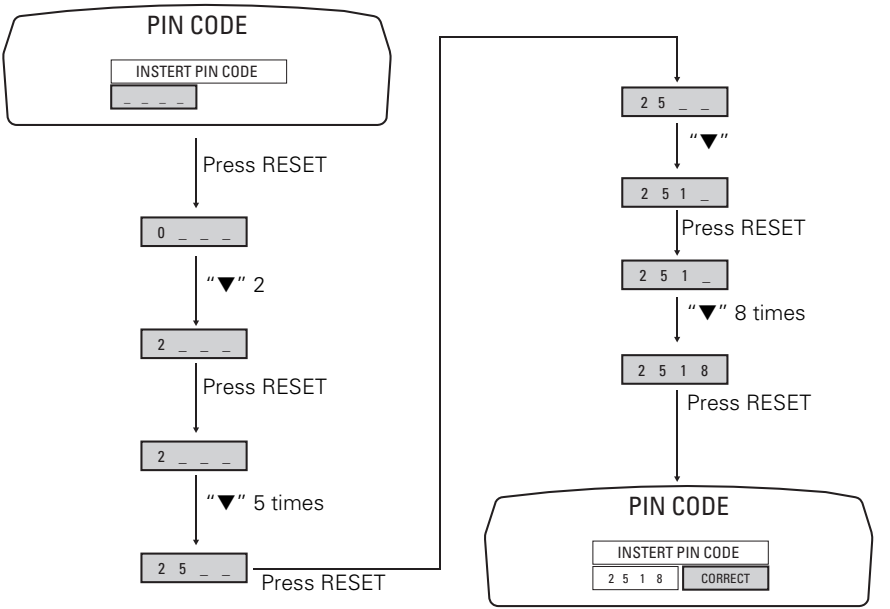

PIN CODE
INSTERT PIN CODE
_ _ _ _
Press RESET
0 _ _ _
"▼" 2
2 _ _ _
Press RESET
2 _ _ _
"▼" 5 times
2 5 _ _
Press RESET
2 5 _ _
"▼"
2 5 1 _
Press RESET
2 5 1 _
"▼" 8 times
2 5 1 8
Press RESET
PIN CODE
INSTERT PIN CODE
2 5 1 8
CORRECT

fig. 91

LH switch (fig. 92)

1) Dip switch, light dip switch, two positions (fig. 92):
   (A) every time it is pressed down the light switches from low beam on to low beam and high beam on .
   (B) pushed to the side = high beam flasher (FLASH), "Start-Stop lap" function.

2) Button = three-position turn indicator (fig. 92):
   central position = off;
   position = left turn;
   position = right turn.

3) Turn indicator off, "Riding mode" activation and menu navigation button.

4) Button = warning horn.

5) Navigation menu, display scroll and TRIP1 and TRIP2 reset button.

6) Navigation menu, display scroll button.

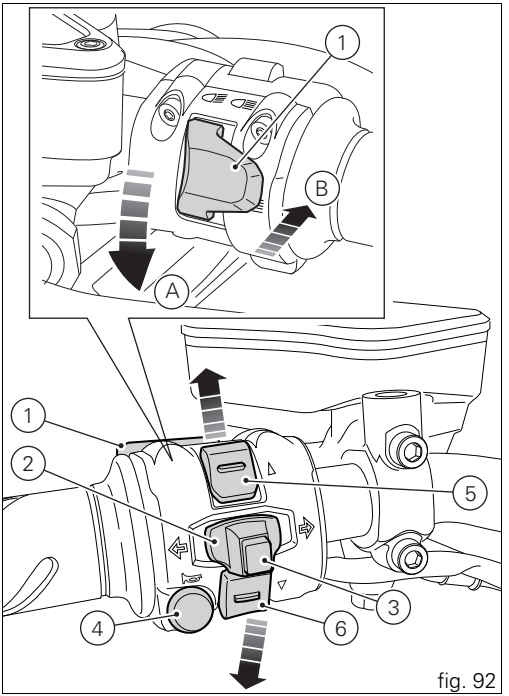


fig. 92

Clutch lever (fig. 93)

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.

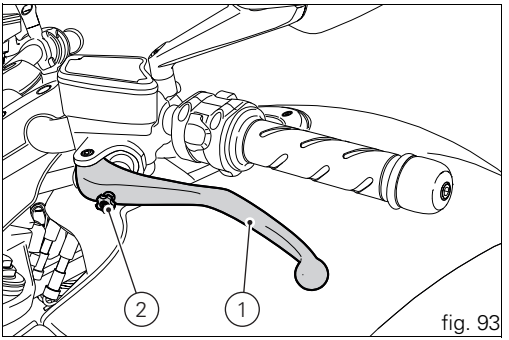


fig. 93

Warning

Set clutch lever when motorcycle is stopped.

Important

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

Note

It is possible to start the engine with the side stand down and the gearbox in neutral. When starting the bike with a gear engaged, pull the clutch lever (in this case the side stand must be up).

RH switch (fig. 94)

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

The switch (1) has three positions:

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

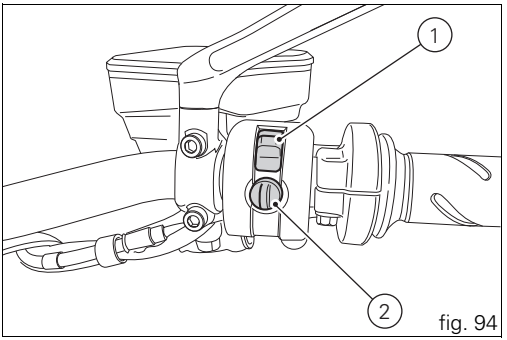


fig. 94

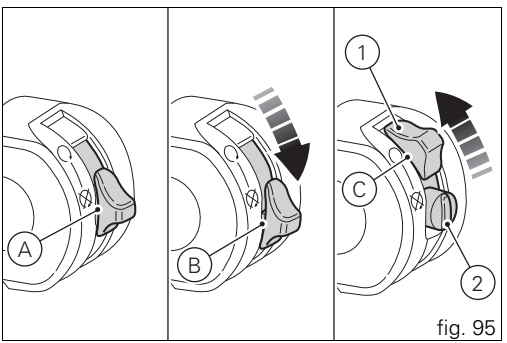


fig. 95

Throttle twistgrip (fig. 96)

The twistgrip (1, fig. 96) on the right handlebar opens the throttles. When released, it will spring back to the initial position (idling speed).

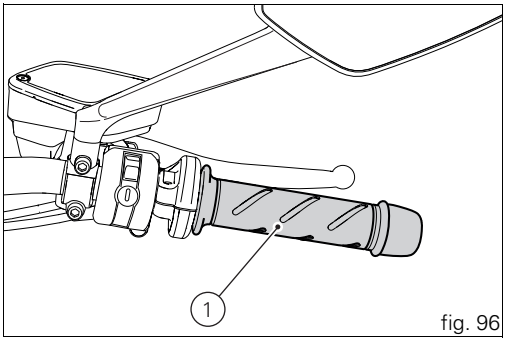


fig. 96

Front brake lever (fig. 97)

Pull the lever (1, fig. 97) towards the twistgrip to operate the front brake. The system is hydraulically operated and you just need to pull the lever gently. The control lever (1, fig. 97) features a dial adjuster (2, fig. 97) for lever distance from the twistgrip on handlebar adjustment.

The lever distance can be adjusted through 10 clicks of the dial (2, fig. 97). Turn clockwise to increase lever distance from the twistgrip. Turn the adjuster counter clockwise to decrease lever distance.

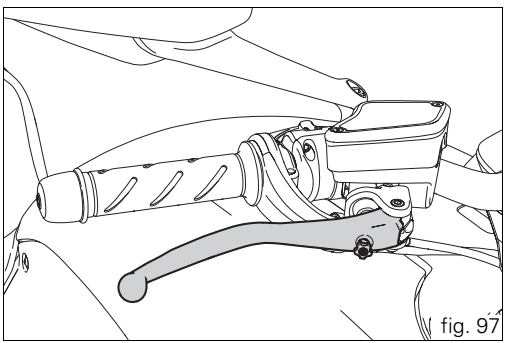


fig. 97

Rear brake pedal (fig. 98)

Push down the pedal (1, fig. 98) to operate the rear brake.
The system is hydraulically operated.

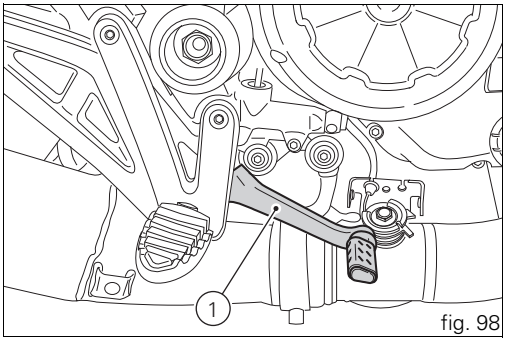


fig. 98

Gear change pedal (fig. 99)

When released, the gear change pedal (1, fig. 99) automatically returns to rest position N in the centre. This is indicated by the instrument panel light N (2, fig. 4) coming on.
The pedal can be moved:
down = press down the pedal to engage the 1st gear and to shift down. The N light will go out;
upwards= lift the pedal to engage 2nd gear and then 3rd, 4th, 5th and 6th gears.
Each time you move the pedal you will engage the next gear.

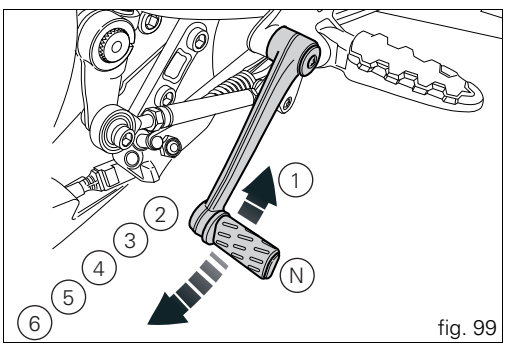


fig. 99

Adjusting the position of the gearchange and rear brake pedals

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

Gear change pedal (fig. 100)

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 check nuts onto linkage.

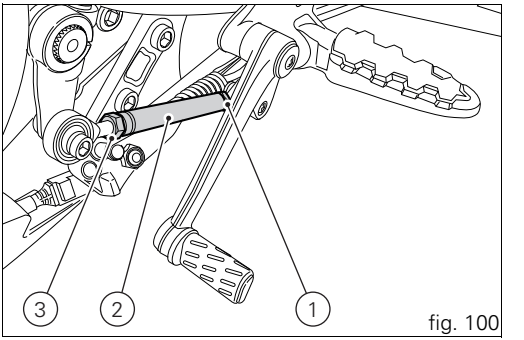


fig. 100

Rear brake pedal (fig. 101)

Loosen counter nut (7).
Turn pedal stroke adjusting screw (6) until pedal is in the desired position.
Tighten the counter nut (7).
Operate the pedal by hand to check that there is 3 to 6 mm of freeplay before the brake bites.
If not, adjust the length of the master cylinder pushrod as follows.
Slacken off the counter nut (10) on the pushrod.
Screw the pushrod (8) into the front fork (9) to increase the freeplay, or screw it out to reduce it.
Tighten the counter nut (10) and recheck the pedal freeplay.

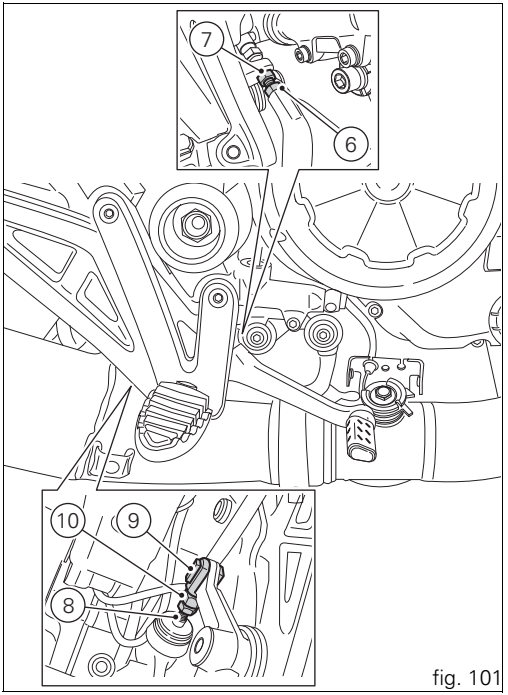


fig. 101

Main components and devices

Position on the vehicle (fig. 102)

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 (see “Warning” on page 157).

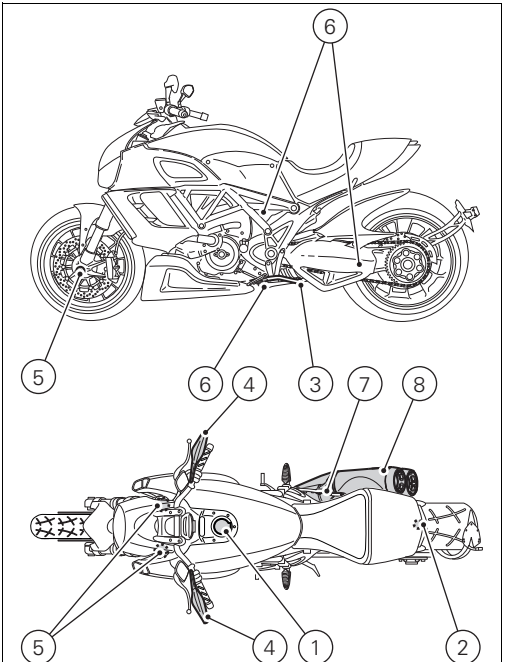


fig. 102

Tank filler plug

Note
To open or close the tank filler plug using the active key, set the metal part in the middle position, as shown on page 102.

Opening

Lift the cover (1, fig. 103) and insert the active or passive key into the lock. Turn the key clockwise 1/4 turn to unlock.
Lift the plug (2, fig. 104).

Closing

Close the cap (2, fig. 104) with the key inserted and press it into its seat. Remove the key and replace the lock cover (1, fig. 103).

Note
The plug can only be closed with the key in.

Warning
Always make sure you have properly refitted (see page 161) and closed the plug after refuelling.

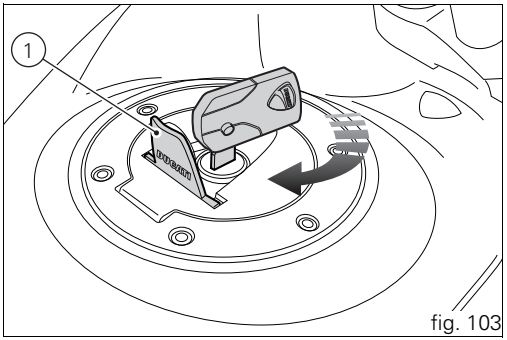


fig. 103

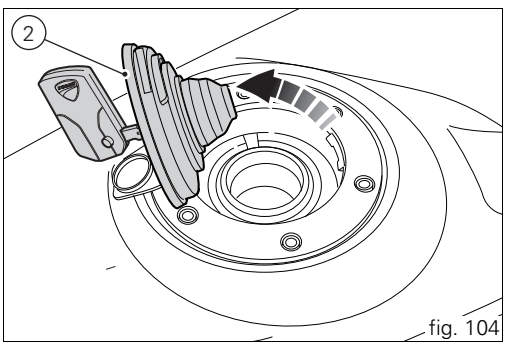


fig. 104

Seat lock

Work latch (1, fig. 105) to remove the seat and access to the underseat compartment and any other device under it.

Removal of the seat

Insert the active or passive key in the lock (1, fig. 105), turn it clockwise and simultaneously apply downward pressure in the area of the catch to release the pin. Pull the seat backwards to release it from the front catches.

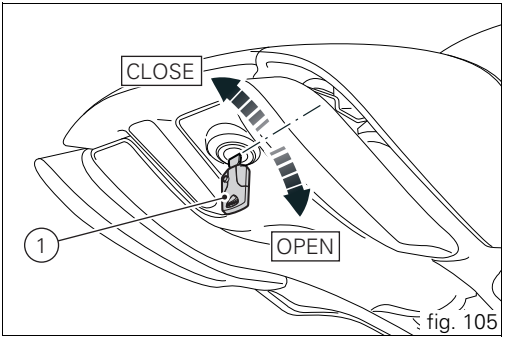


fig. 105

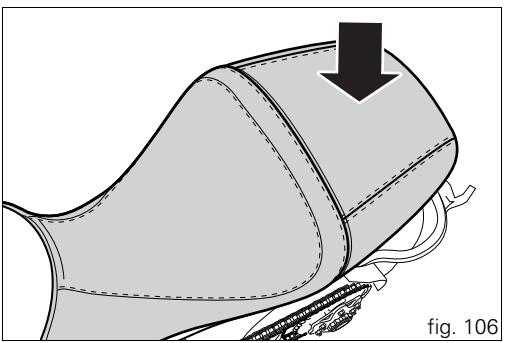


fig. 106

Helmet cable

Note
Helmet cable (2, fig. 107) can be found inside the tool kit, see “Tool kit and accessories,” on page 162.

Pass the cable through the helmet and insert the end of the cable in the pin (3, fig. 107). Leave the helmet hanging and refit the seat to hold it in place.

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

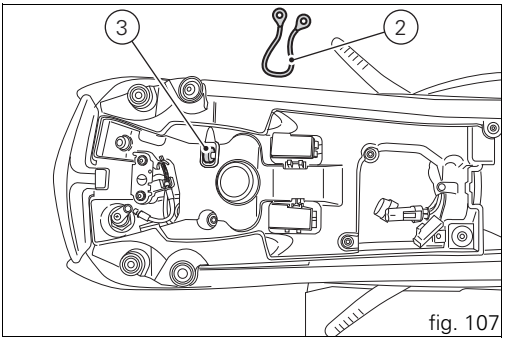


fig. 107

Refitting the seat

Make sure all parts are correctly arranged and secured in the underseat compartment. Insert the mounts (4) of the seat base in the projecting parts (5) of the frame, then push the rear end of the seat until you hear the bolt in the lock click into place. Make sure that the seat is firmly secured to the frame and remove the key from the lock.

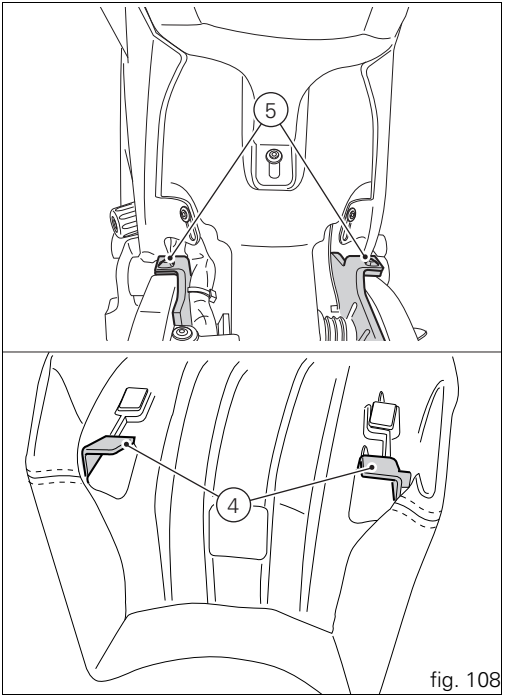


fig. 108

Side stand (fig. 109)

Important
Before lowering the side stand, make sure that the bearing surface is hard and flat.

Do not park on soft or pebbled ground or on asphalt melt by the sun heat and similar or the motorcycle may fall over.
When parking in downhill road tracts, always park the motorcycle with its rear wheel facing downhill.
To pull down the side stand, hold the motorcycle handlebars with both hands and push down on the side stand (1) with your foot until it is fully extended. Tilt the motorcycle until the side stand is resting on the ground.

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

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

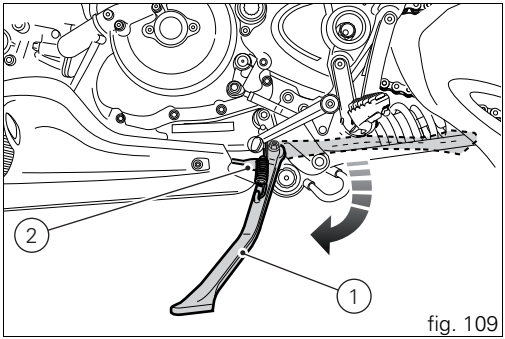


fig. 109

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).

Passenger grabhandle

Passenger grabhandle (1, fig. 110) is located inside the tail guard; to take it out, remove the seat (see "Removal of the seat" on page 137), pull the knob (2, fig. 110) while taking out the grabhandle (1, fig. 110) from its housing until it is fully extended.

Warning

Before use, pull back and forth to ensure that it is locked in the correct position.

To withdraw it, pull knob (2, fig. 110), push grabhandle (1, fig. 110) in its housing until it is completely flush with the tail guard (fig. 111) and refit the seat (see "Refitting the seat" on page 139).

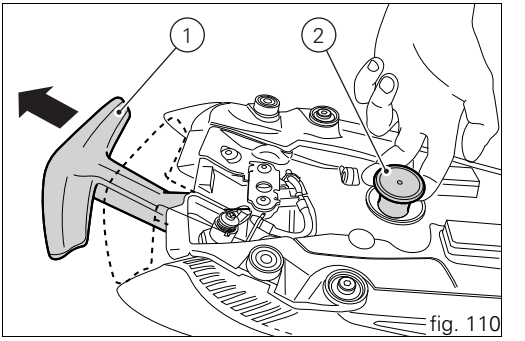


fig. 110

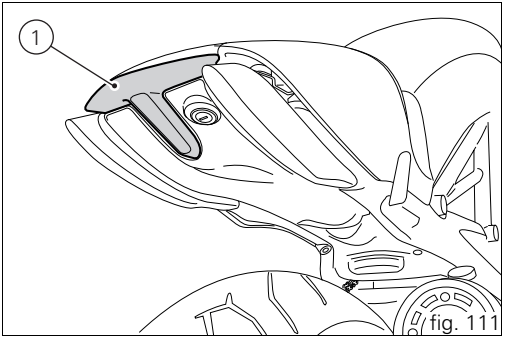


fig. 111

Adjusting the front fork

The front fork used on this motorcycle has rebound, compression and spring preload adjustment. Adjustment is done by external screw adjusters.

1) for rebound adjustment (fig. 112);
2) for spring preload adjustment (fig. 112);
3) for compression adjustment (fig. 113).

Put the motorcycle on the side stand and make sure it is stable.

Turn the knob (1) on every fork leg top with a suitable wrench to adjust rebound damping.

Turn the adjuster (3) on fork leg bottom with a flat screwdriver to adjust compression damping. Turn the knob (1) and the adjusting screws (3) to adjust the dampening. The stiffest damping setting is obtained with the adjuster turned fully clockwise to the "0" position. Starting from this position, turning counter clockwise, you can count the turns.

To change preload of the spring inside each fork leg, turn the hex. adjuster (2, fig. 112) with a 22 mm hexagon wrench, starting from the fully open (clockwise) position. From reference (A, fig. 112), every full turn clockwise corresponds to 1 mm of preload of the spring, up to a maximum of 15 mm, corresponding to 15 full turns.

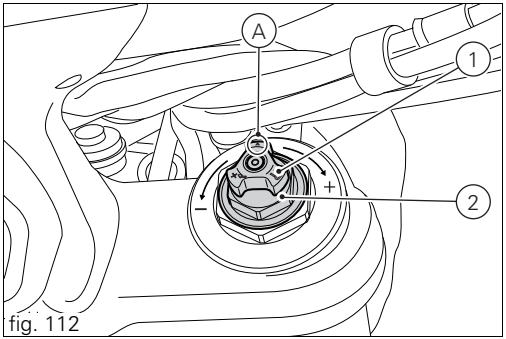


fig. 112

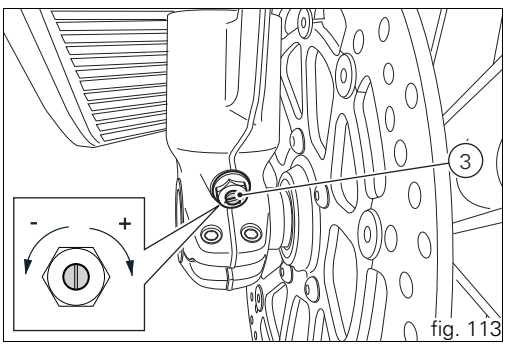


fig. 113

STANDARD settings, from fully closed position, are as follows:
Compression:
1 and a half turns;
Rebound:
1 and a half turns.
Spring preload: FULLY OPEN (counter clockwise).

Important
Adjust both fork legs to same settings.

Adjusting the rear shock absorber

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

The adjuster (1, fig. 114) located on the lower connection holding the shock absorber to the swingarm adjusts the damping during the rebound phase (return).

The knob (2, fig. 115), located on the left side of the motorcycle, adjusts the preload of the shock absorber external spring.

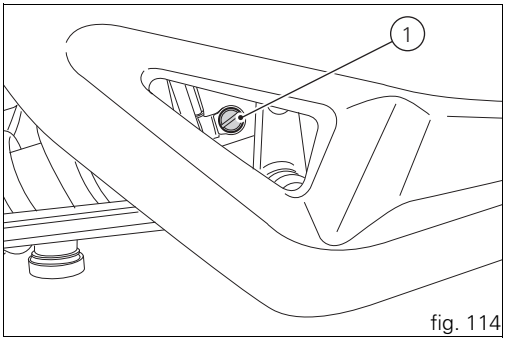


fig. 114

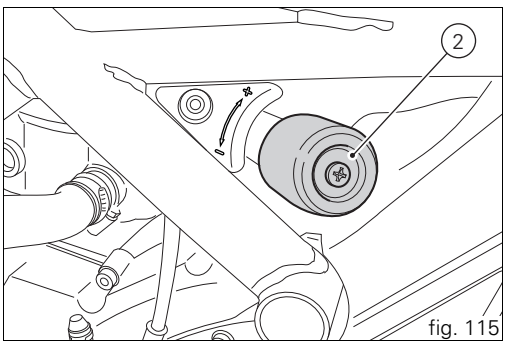


fig. 115

The knob (3, fig. 116) located on the expansion reservoir of the shock absorber adjusts the damping during the compression phase.
Turning the adjusters (1) or the knobs (2) and (3) clockwise to increase preload damping; they decrease turning them in the opposite direction.
STANDARD setting; from fully closed (clockwise) loosen:
adjuster (1, fig. 114) by 12 clicks;
knob (2, fig. 115) FULLY OPEN (counter clockwise);
adjuster (3, fig. 116) by 25 clicks.

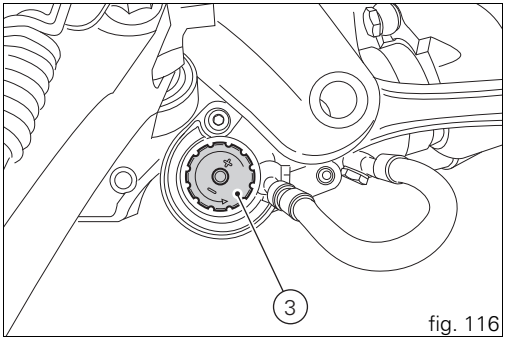


fig. 116

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

When carrying a passenger and luggage, set the rear shock absorber spring to proper preload to improve motorcycle handling and keep safe clearance from the ground. You may find that rebound damping needs adjusting as well.

Values specified in the table are indicative and refer to a rider weighing (with clothes on) 80-90kg and a passenger weighing (with clothes on) 70-80kg.

		Range	Default	Sport	Touring	Urban
Front fork						
Rider only	Compression	0 ÷ 3	1.5	0.5	1	1.5
	Rebound	0 ÷ 3	1.5	1	1.5	1.5
	Preload	0 ÷ 15	0	4	1	0
Rider and passenger	Compression	0 ÷ 3	1.5	0	0.5	1
	Rebound	0 ÷ 3	1.5	1.5	1.5	2.5
	Preload	0 ÷ 15	0	7	4	2
Rear shock absorber						
Rider only	Compression	0 ÷ 40	25	6	15	25
	Rebound	0 ÷ 24	12	4	9	12
	Preload	0 ÷ 28	0	20	10	0
Rider and passenger	Compression	0 ÷ 40	25	4	6	15
	Rebound	0 ÷ 24	12	6	8	10
	Preload	0 ÷ 28	0	28	20	15

Spring for customised setting

Note
To make the rear shock absorber spring better suit the user, it is possible to order two types of spare springs:

- spring part no. 36640321A is recommended for a user weight of about 120 Kg;
- spring part no. 36640331A is recommended for a user weight of about 150 Kg.

Recommended assembly setting for the above customisation is always with preload knob/press set to zero, so as to have another 10 mm preload available, if required.

Warning
Please contact a Ducati Dealer to order and install these springs.

Riding the motorcycle

Running-in recommendations

Maximum rpm (fig. 117)

Rotation speed for running-in period and during standard use (rpm):
1) up to 1000 km;
2) from 1000 to 2500 km.

Up to 1000 km

During the first 1000 km, keep an eye on the rev counter. It should never exceed
5500÷6000 rpm.
During the first hours of riding, it is advisable to run the engine at varying load and rpm, though still within recommended limit.
To this end, roads with plenty of bends and even slightly hilly areas are ideal for a most efficient running-in of engine, brakes and suspensions.

For the first 100 km use the brakes gently. Avoid sudden or prolonged braking. This will allow the friction material on the brake pads to bed in against the brake discs. For all mechanical parts of the motorcycle to adapt to one another and above all not to adversely affect the life of basic engine parts, it is advisable to avoid harsh accelerations and not to run the engine at high rpm for too long, especially uphill. Furthermore, the drive chain should be inspected frequently. Lubricate as required.

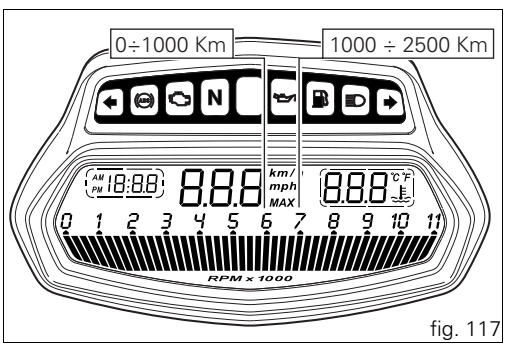


fig. 117

From 1000 to 2500 km

At this point, you can squeeze some more power out of your engine. However never exceed 7,000 rpm.

Important

During the whole running-in period, the maintenance and service rules recommended in the Warranty Card should be observed carefully. Failure to follow these instructions releases Ducati Motor Holding S.p.A. from any liability whatsoever for any engine damage or shorter engine life.

Strict observance of running-in recommendations will ensure longer engine life and reduce the likelihood of overhauls and tune-ups.

Pre-ride checks

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

Before riding, perform a thorough check-up on your bike as follows:
FUEL LEVEL IN THE TANK
Check the fuel level in the tank. Fill tank if needed (page 161).
ENGINE OIL LEVEL
Check oil level in the sump through the sight glass. Top up if needed (page 187).
BRAKE AND CLUTCH FLUID
Check fluid level in the relevant reservoirs (page 164).
COOLANT
Check coolant level in the expansion reservoir. Top up if needed (page 163).
TYRE CONDITION
Check tyre pressure and condition (page 185).
CONTROLS
Work the brake, clutch, throttle and gear change controls (levers, pedals and twistgrip) and check for proper operation.
LIGHTS AND INDICATORS
Make sure lights, indicators and horn work properly. Replace any burnt-out bulbs (page 181).

KEY LOCKS
Ensure that fuel filler plug (page 136) and seat (page 137).
SIDE STAND
Make sure side stand operates smoothly and is in the correct position (page 140).

ABS light

After Key-On, the ABS light (9, fig. 4) stays on. When the vehicle speed exceeds 5 km/h; the light turns off to indicate that the ABS system is functioning properly.

Warning
In case of malfunction, do not ride the motorcycle and contact a Ducati Dealer or authorised Service Centre.

ABS device

Check that the front (1, fig. 118) and rear (2, fig. 119) phonic wheels are clean.

Warning
Clogged reading slots would compromise system proper operation.
It is recommended to disable ABS system in case of muddy road surface because under this condition the system might be subject to sudden failure.

Warning
Prolonged rearing could deactivate the ABS system.

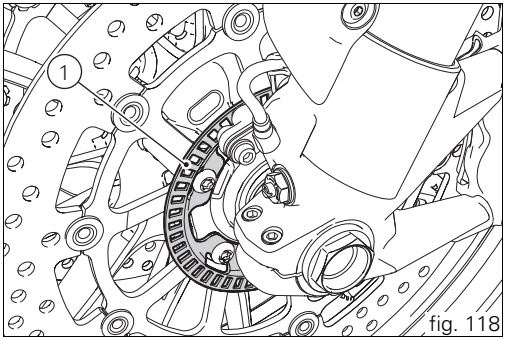


fig. 118

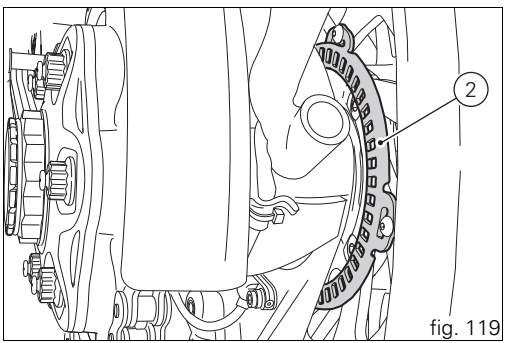


fig. 119

Engine on/off

Warning
Before starting the engine, become familiar with the controls you will need to use when riding (page 118).

Warning
Never start or run the engine indoors. Exhaust gases are poisonous and may lead to loss of consciousness or even death within a short time.

In the presence of the active or passive key, perform a Key-On (turning on the "Hands free" system and all on-board electronic devices) by pushing the red switch (1, fig. 120), on the right side of the handlebar, downward.
The instrument panel on handlebar will perform the initialisation and will control the onboard systems, turning on all lights in sequence, from outside to inside, for a few seconds.
After this control, only the green light (2, fig. 121) and the red light (3) must remain on.

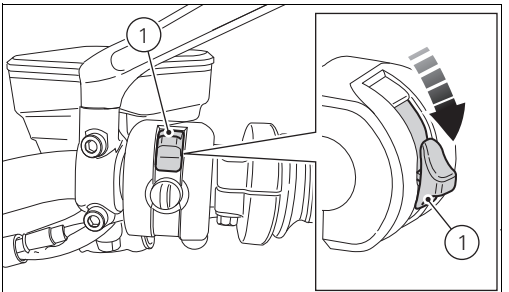


fig. 120

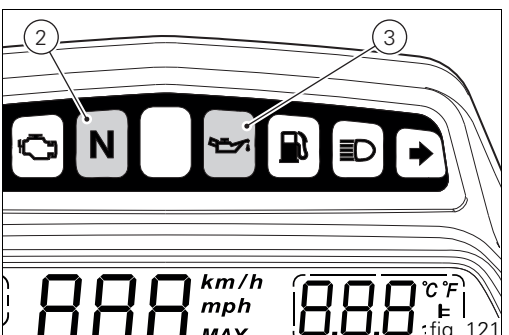


fig. 121

Warning
The side stand must be fully up (in a horizontal position) as its safety sensor prevents engine start when down.

After Key-On, but with the engine not yet started, the system will perform a Key-Off automatically if the presence of the active key is not detected within 10 seconds.

Note
It is possible to start the engine with side stand down and the gearbox in neutral. When starting the bike with a gear engaged, pull the clutch lever (in this case the side stand must be up).

Move the red switch (1) up to uncover the black button (4, fig. 122).
Push the button (4) to start the engine.

Important
Do not rev up the engine when it is cold. Allow some time for the oil to warm up and reach all points that need lubricating.

The red oil pressure warning light should go out a few seconds after the engine has started.

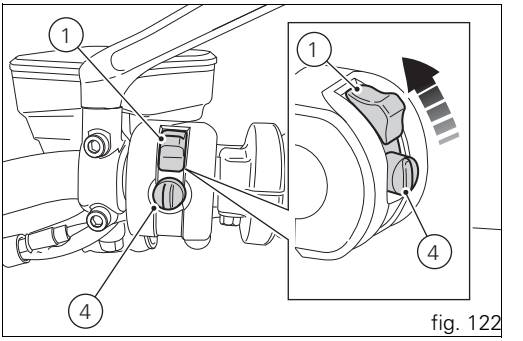


fig. 122

The engine will shut off by turning the red key (1, fig. 122) on the handlebar to RUN OFF.

Note
To turn on the “Hands free” system and all electronic onboard systems, refer to page 119 “Hands Free System”.

Moving off

1) Disengage the clutch by squeezing the clutch lever.
2) Push down the gear change lever firmly with the tip of your foot to engage first gear.
3) Raise the engine revs by turning the throttle twistgrip while gradually releasing the clutch lever. The motorcycle will start moving.
4) Release the clutch lever completely and accelerate.
5) To shift up, close the throttle to slow down engine, disengage the clutch, lift the gear change lever and let go of clutch lever.

To shift down, proceed as follows: release the twistgrip, pull the clutch lever, shortly speed up to help gears synchronise, shift down (engage next lower gear) and release the clutch.
The controls should be used correctly and timely: when riding uphill do not hesitate to shift down as soon as the motorcycle tends to slow down, so you will avoid stressing the engine and the motorcycle abnormally.

Important

Avoid harsh accelerations, as this may lead to misfiring and transmission snatching. The clutch lever should not be pulled longer than necessary after gear is engaged, or friction parts may overheat and wear out.

Warning

Prolonged rearing could deactivate the ABS system.

Braking

Slow down in time, shift down to engine-brake first and then brake applying both brakes. Pull the clutch lever before stopping the motorcycle, to avoid sudden engine stop.

ABS system

Using the brakes correctly under adverse conditions is the hardest – and yet the most critical - skill to master for a rider. Braking is one of the most difficult and dangerous moments when riding a two wheeled vehicle: the possibility of falling or having an accident during this difficult moment is statistically higher than any other moment. A locked front wheel leads to loss of traction and stability, resulting in loss of control. The Anti-Lock Brake System (ABS) has been developed to enable riders to use the vehicles braking force to the fullest possible amount in emergency braking or under poor pavement or adverse weather conditions. ABS uses hydraulics and electronics to limit pressure in the brake circuit when a special sensor mounted to the wheel signals the electronic control unit that the wheel is about to lock up. This avoids wheel lockup and preserves traction. Pressure is raised back up immediately and the control unit keeps controlling the brake until the risk of a lockup disappears.

Normally, the rider will perceive ABS operation as a harder feel or a pulsation of the brake lever and pedal. The front and rear brakes use separate control systems, meaning that they operate independently. Likewise, the ABS is not an integral braking system and does not control both the front and rear brake at the same time. If desired, the system can be deactivated from the instrument panel, using the “ABS disabling function”.

Warning

Use both brake lever and pedal for effective braking. Using only one of the brakes will give you less braking power. Never use the brake controls harshly or suddenly as you may lock the wheels and lose control of the motorcycle. When riding in the rain or on slippery surfaces, braking will become less effective. Always use the brakes very gently and carefully when riding under these conditions. Any sudden manoeuvres may lead to loss of control. When tackling long, high-gradient downhill road tracts, shift down gears to use engine braking. Apply one brake at a time and use brakes sparingly. Keeping the brakes applied all the time would cause the friction material to overheat and reduce braking power dangerously. Underinflated or overinflated tyres reduce braking efficiency, handling accuracy and stability in a bend.

Stopping the motorcycle

Reduce speed, shift down and release the throttle twistgrip. Shift down to engage first gear and then neutral. Apply the brakes and bring the motorcycle to a complete stop. Turn off the engine moving the red switch downward (1, fig. 124).

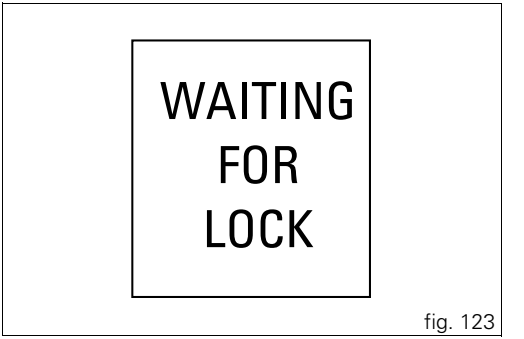


fig. 123

Parking

Park the stopped motorcycle on the side stand. Turn the handle completely to the left or right. If this operation is performed within 60 seconds after the engine stop, the message "Waiting for lock" (fig. 123) will appear on the display of the instrument panel for approx. 5 seconds.

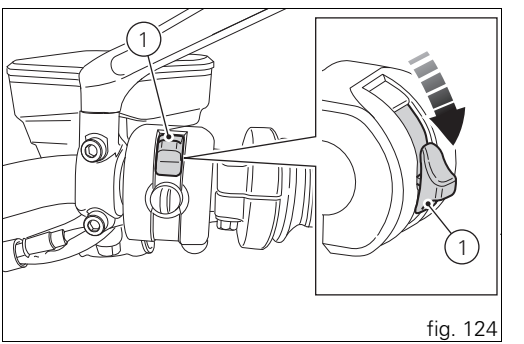


fig. 124

If you want to enable the steering lock, move the red switch (1, fig. 124) downward during this interval.
If the steering lock was enabled correctly, the locked steering indication (fig. 125) will appear on the display of the instrument panel on tank for 5 seconds.
The steering lock disables at Key-On.
If the "Hands free" system was not able to release the steering, an error message (fig. 126) will appear on the display.
In this case, it is recommended to turn the vehicle off and on (Key-Off / Key-On) holding the handlebar pressed down to the end stop. If the signal remains (and the steering does not "release") contact an Authorised Ducati Service Centre.

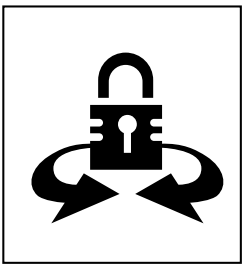


fig. 125

In order to make the motorcycle visible at night or in poorly illuminated areas, the "Parking" function can be activated within 60 seconds of turning off the vehicle by turning on the front and rear parking lights.

fig. 126

Press (2, fig. 127) for at least 3 seconds: the indication of the activated function (fig. 128) will appear on the display of the instrument panel on tank for 5 seconds and the lights will remain on for 2 hours. After this period of time, they will turn off automatically.

Note
If there is a sudden interruption in the battery voltage during the "Parking" function, the instrument panel will disable this function when the voltage is restored.

Important
The frequent use of this function can considerably reduce the battery charge; it is recommended to use this function only when necessary.

Warning
The exhaust system may still be hot even after engine is switched off; take special care not to touch the exhaust system with any part of your body and do not park the motorcycle next to inflammable material (wood, leaves, etc.).

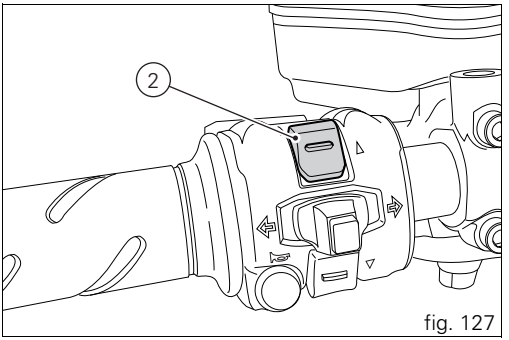


fig. 127

fig. 128

Warning
Using padlocks or other locks designed to prevent motorcycle motion, such as brake disc locks, rear sprocket locks, and so on is dangerous and may impair motorcycle operation and affect the safety of rider and passenger.

Refuelling (fig. 129)

Never overfill the tank when refuelling. Fuel should never be touching the rim of filler recess.

Warning

Use low-lead fuel with min. RON 95 octane rating at origin minimum (see "Top-ups" table, page 196).

Be sure there is no fuel trapped in the filler recess.

Warning

The vehicle is only compatible with fuel having a maximum content of ethanol of 10% (E10). Using fuel with ethanol content over 10% is forbidden. Using them 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.

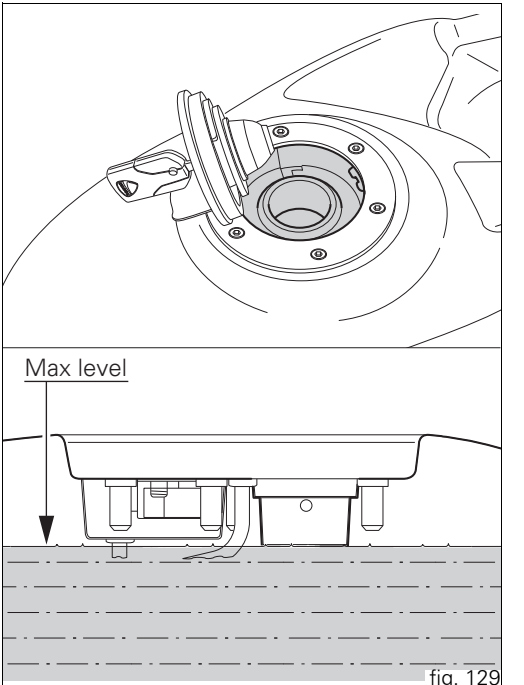


fig. 129

Tool kit and accessories (fig. 130)

The tool kit (2) is located under the seat (1) while the Owner's manual is housed in the compartment under the seat.

The tool kit includes:

- fuse pliers;
- two helmet anti-theft cables;
- screwdriver;
- screwdriver handle;
- 14/16 mm box wrench;
- 6 mm rod;
- 3 mm Allen wrench;
- 4 mm Allen wrench;
- 5 mm Allen wrench.

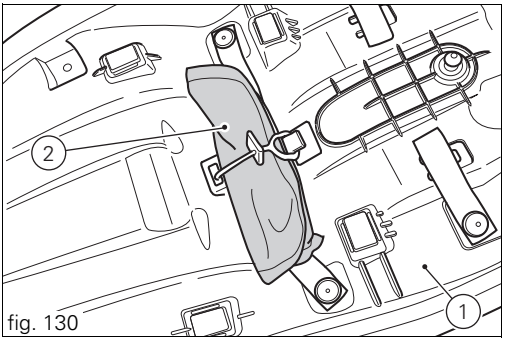


fig. 130

To access the underseat compartment, remove the seat (see "Removal of the seat" on page 137).

Cooling circuit capacity: 2.5 cu. dm (litres).

Warning
Place the motorcycle upright on a flat surface and make sure the engine is cold before proceeding.

Change the air filter

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

Checking and topping up coolant level

Check coolant level in the expansion tank on the right side of the vehicle. Steer the handlebar completely to the left and check that the level is between the MIN and MAX marks on the side of the expansion reservoir. Top up if the level is below the MIN mark. Loosen filler plug (1) and top up with antifreeze ENI Agip Permanent Spezial up to MAX level without diluting it.
Refit the plug (1).
This type of mixture ensures the best operating conditions (the coolant starts to freeze at -20 °C/-4 °F).

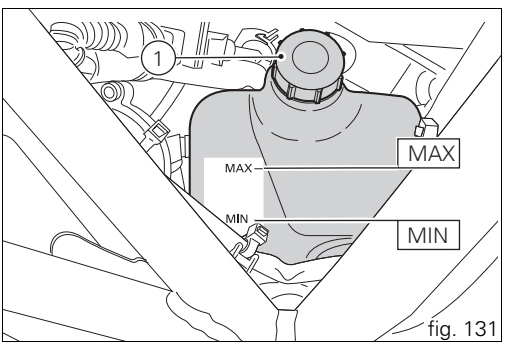


fig. 131

Checking brake and clutch fluid level

The levels should not fall below the MIN marks on the respective reservoirs.
If level drops below the limit, air might get into the circuit and affect the operation of the system involved.
Brake and clutch fluid must be topped up and changed at the intervals specified in the scheduled maintenance table reported in the Warranty Booklet; please contact a Ducati Dealer or authorised Service Centre.

Important

It is recommended all brake and clutch lines be changed every four years.

Brake system

If you find exceeding play on brake lever or pedal and brake pads are still in good condition, contact your Ducati Dealer or authorised Service Centre to have the system inspected and any air drained out of the circuit.

Warning

Brake and clutch fluid can damage paintwork and plastic parts, so avoid contact.

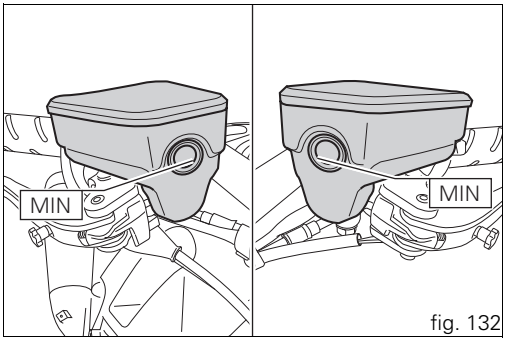


fig. 132

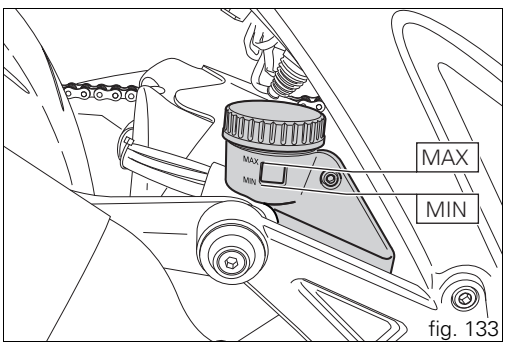


fig. 133

Warning
Hydraulic oil is corrosive; it may cause damage and lead to severe injuries. Never mix fluids of different qualities.
Check seals for proper sealing.

Clutch system

If the control lever has exceeding play and the transmission snatches or jams as you try to engage a gear, it means that there might be air in the circuit. Contact your Ducati Dealer or authorised Service Centre to have the system inspected and air drained out.

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

Checking brake pads for wear (fig. 134 and fig. 135)

Check brake pads wear through the inspection hole in the callipers.

Change both pads if friction material thickness of even just one pad is about 1 mm.

Warning

Friction material wear beyond this limit would lead to metal support contact with the brake disc thus compromising braking efficiency, disc integrity and rider safety.

Important

Have the brake pads replaced at a Ducati Dealer or authorised Service Centre.

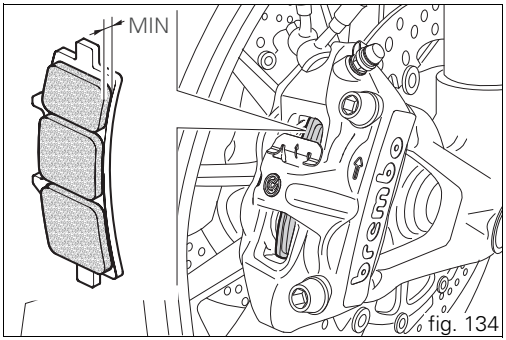


fig. 134

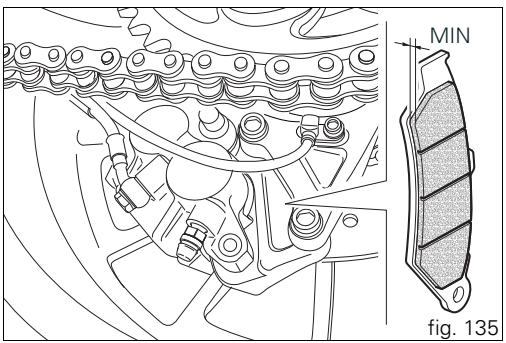


fig. 135

Lubricating cables and joints

Check the outer sheath of the throttle control cables for damage at regular intervals. The outer plastic cover should not be flattened or cracked. Operate the controls to make sure the inner cables slide smoothly inside the outer sheath: if you feel any friction or catching, have the cable replaced by a Ducati Dealer or Authorised Service Centre.
To avoid this kind of problem with the throttle cable, unscrew the two retaining screws (1, fig. 136) to open the case and then the grease cable ends and pulley (2, fig. 137) with SHELL Advance Grease or Retinax LX2 grease.

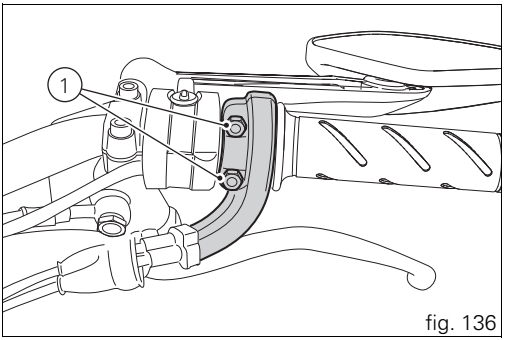


fig. 136

Warning
Close the twistgrip housing carefully, inserting the cable in the pulley.

Refit the housing and tighten the screws (1) to 10 Nm.

To ensure smooth operation of the side stand pivot, remove dirt and apply SHELL Alvania R3 grease to all friction points.

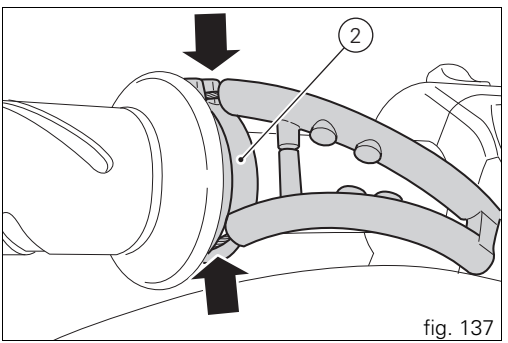


fig. 137

Adjusting throttle control free play

In all steering positions, the throttle twistgrip must have a freeplay of 1.5÷2.0 mm measured on the outer edge of the twistgrip. If necessary, adjust it using the adjusters (1 and 2, fig. 138) located on the steering tube on the right-hand side of the vehicle.

Adjuster (1) is for throttle opening, and adjuster (2) is for throttle closing.

Slip the rubber gaiters off the adjusters and loosen the counter nuts (3). Adjust both adjusters by the same amount: turn clockwise to increase free play and anticlockwise to reduce free play. When finished, tighten the counter nuts (3) and refit the rubber gaiters to the adjusters.

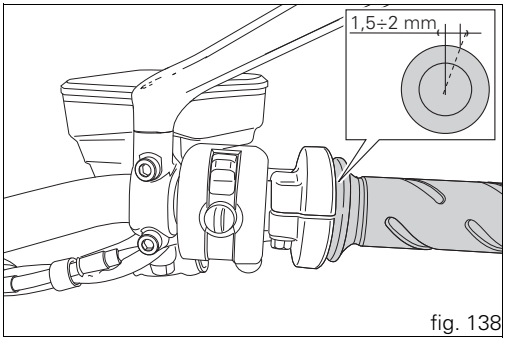


fig. 138

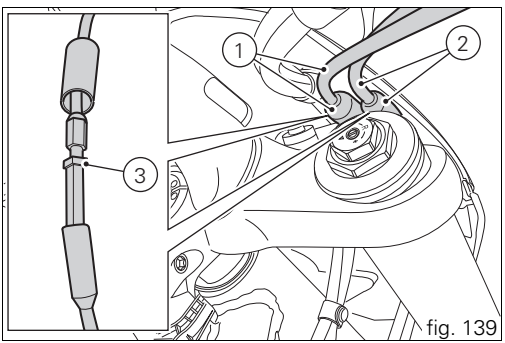


fig. 139

Charging the battery

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

Important

The battery is housed in the cowling, ALWAYS contact a Ducati Dealer or an authorised Service Centre for its removal.

Remove the left cowling (1, fig. 140) loosening:
side screw (2, fig. 140) retaining the electrical parts box;
top screw (3, fig. 140) retaining the electrical parts box;
bottom screw (4, fig. 140) retaining the central cowling;

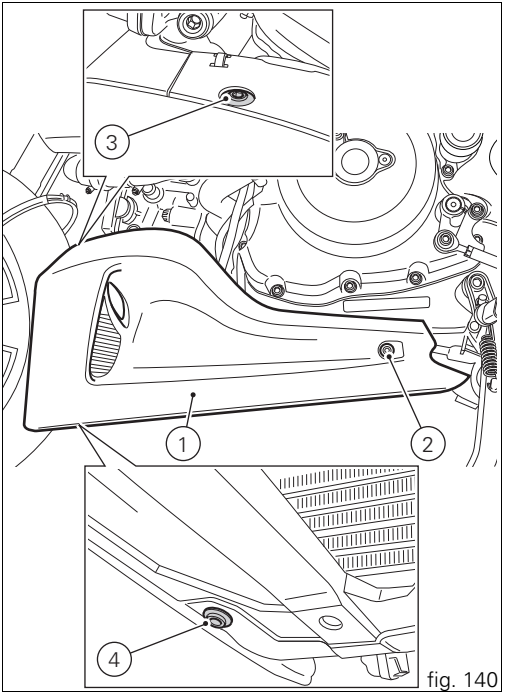


fig. 140

screw (5, fig. 141) retaining the central cowling to left cowling.
Unscrew the screws (6, fig. 142) and remove the battery mounting cover (7, fig. 142).

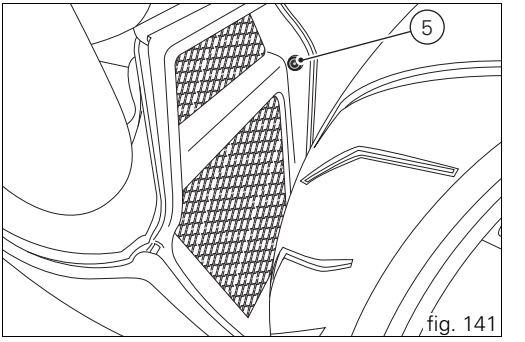


fig. 141

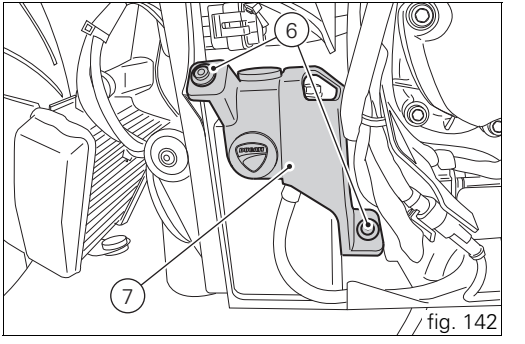


fig. 142

Slide out the battery (8, fig. 143) from its housing and, always starting from the negative terminal (-), loosen the screws (9, fig. 143).
Remove the positive cable (10, fig. 143), the ABS positive cable (11, fig. 143) from the positive terminal and the negative cable (12, fig. 143) from the negative terminal.

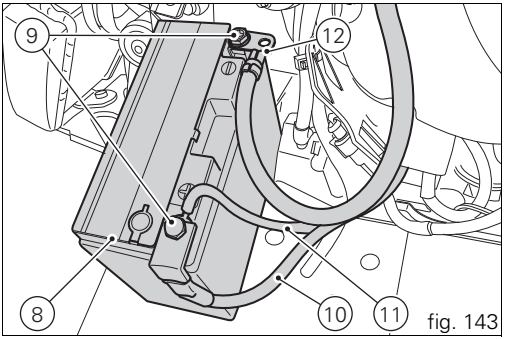


fig. 143

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

Warning
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.
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 (11, fig. 144), onto positive cable (10, fig. 144) and start screw (9, fig. 144) in its thread on these cables.

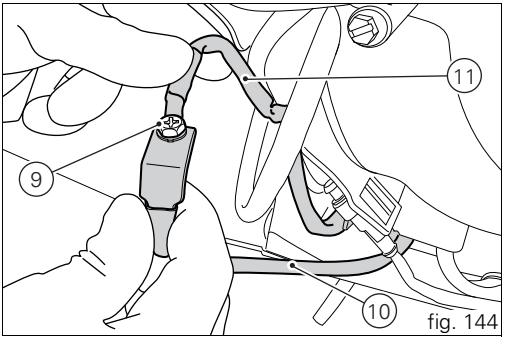


fig. 144

Connect the positive cable (10, fig. 145), previously assembled to ABS cable (11, fig. 145), to battery positive terminal, and negative cable (12, fig. 145) to battery negative terminal, by starting the other screw (9, fig. 145) in its thread.
Tighten the terminal clamp screws (9, fig. 145) to a torque of 5 Nm ±10% and apply grease onto the battery terminals to prevent oxidation.
Reposition the battery (8, fig. 146) in the support, positioning the cables (10, fig. 146) and (11, fig. 146) as shown in fig. 146.

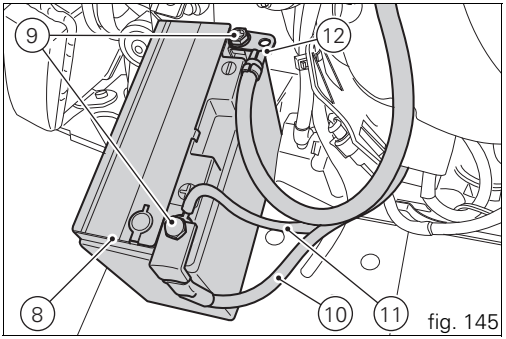


fig. 145

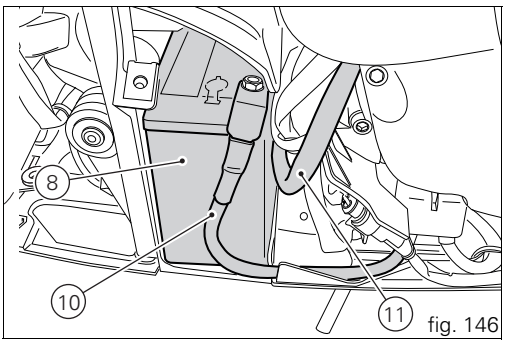


fig. 146

Refit battery mounting cover (7, fig. 147) and fasten tightening the screws (6, fig. 147) to a torque of 10 Nm ±10%.

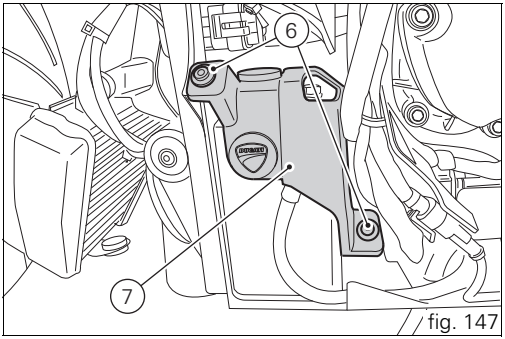


fig. 147

Refit the left cowling (1, fig. 148) as follows:
start the side screw (2, fig. 148) retaining the electrical parts box in its thread;
start the top screw (3, fig. 148) retaining the electrical parts box in its thread;
start the bottom screw (4, fig. 148) retaining the central cowling in its thread;

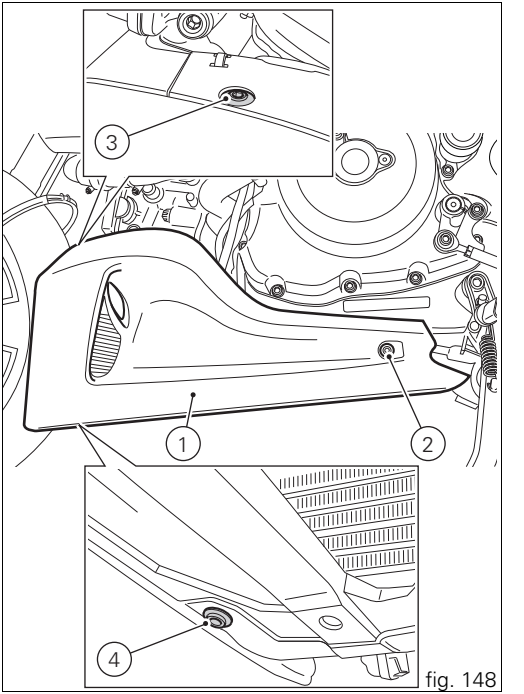


fig. 148

start the screw (5, fig. 149) retaining the central cowling to left cowling in its thread.
Tighten the screws (2, fig.149), (3, fig. 148), (4, fig. 148) and (5, fig. 149) to a torque of 10 Nm ±10%.

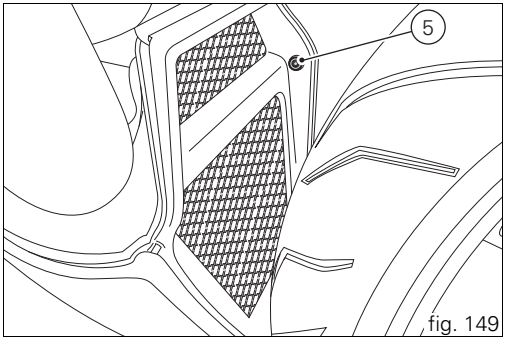


fig. 149

Charging and maintenance of the battery during winter storage

Your motorcycle is equipped with a connector (1, fig. 151) 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 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.

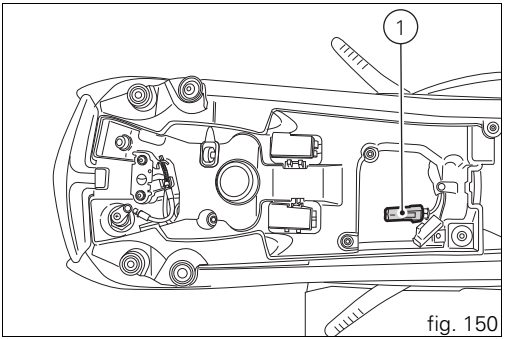


fig. 150

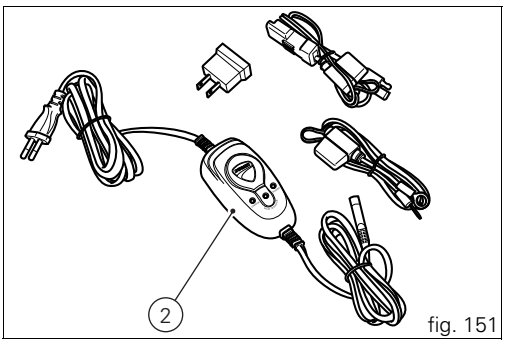


fig. 151

Note
When the motorcycle is left used (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 end of the bike.

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

Checking drive chain tension (fig. 152)

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

Make the rear wheel turn until you find the position where chain is tightest.
Set the vehicle on the side stand. Push down the chain at the point of measurement and release.
Measure the distance between the "aperture" upper profile and pin centre.
The read distance must be: 9 ÷ 11 mm.

Important
If the drive chain is too tight or too slack, adjust it so that tension reading will fall within specified range.

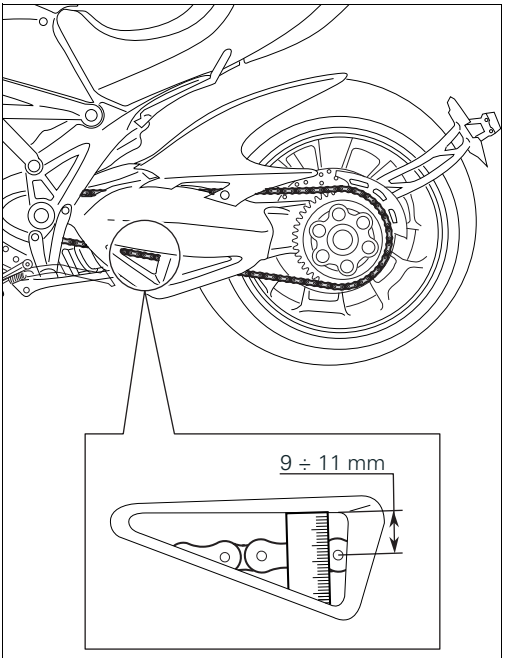


fig. 152

Warning
Correct tightening of screws (1, fig. 153) is critical to rider and passenger safety.

Important
Improper chain tension will lead to early wear of transmission parts.

Chain lubrication

The chain fitted on your motorcycle has O-rings to protect its moving parts from dirt, and to hold the lubricant inside.
The seals might be irreparably damaged if the chain is cleaned using any solvent other than those specific for O-ring chains or washed using steam or water cleaners.
After cleaning, blow the chain dry or dry it using absorbent material and apply SHELL Advance Chain or Advance Teflon Chain on each link.

Important
Using non-specific lubricants may lead to severe damage to chain, front and rear sprocket.

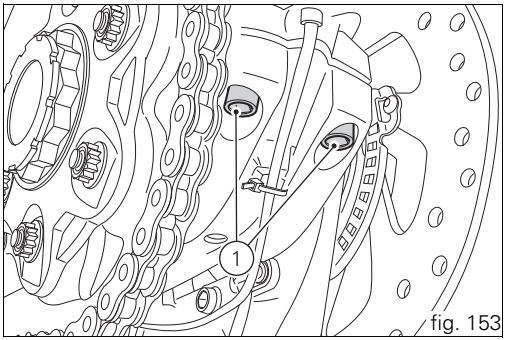


fig. 153

Replacing the high and low beam bulbs

Before replacing a burnt out light bulb, ensure that the replacement bulb has the same voltage and power rating as specified on page 203 under "Electrical system". Always ensure that the new bulb you have installed operates properly before refitting any parts you have removed.
fig. 154 shows the locations of the low beam bulbs (LO), high beam bulbs (HI) and the parking light LED light unit (1).

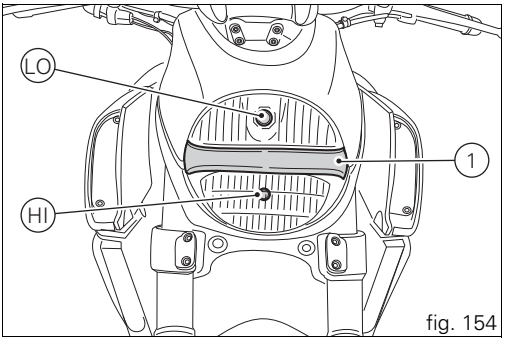


fig. 154

Headlight

Important
Have the high and low beam bulbs replaced by a Ducati Dealer or an authorised Service Centre.

Warning
The headlight might fog up if the vehicle is used under the rain or after washing.
Switch headlight on for a short time to dry up any condensate.

Beam setting (fig. 155)

To check the headlight aim, place the motorcycle upright with the tyres inflated to the correct pressure and one person sitting astride the motorcycle. The motorcycle should be perfectly vertical, with its longitudinal axis at right angles to a wall or screen at a distance of 10 metres. Then draw a horizontal line dictated by headlamp centre and a vertical one in line with the longitudinal axis of motorcycle.
If possible, perform this check in dim light.
Switch on the low beam.
The height of the light spot (measured at the upper limit between dark and lighted-up area) should not exceed 9/10th of the height from ground of headlamp centre.

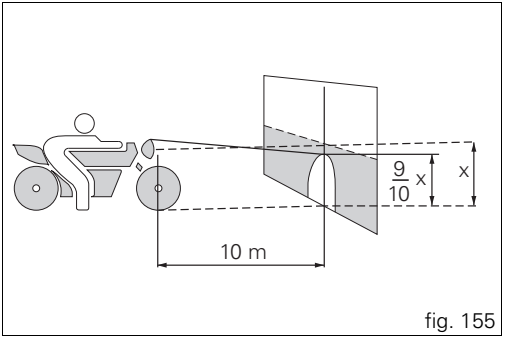


fig. 155

Note

The procedure described here is in compliance with the Italian Standard establishing the maximum height of the light beam.
Owners in other countries will adapt said procedure to the provisions in force in their countries.

To adjust the headlight beam vertically, turn the screws (1), for horizontal adjustment, turn the screw (2).

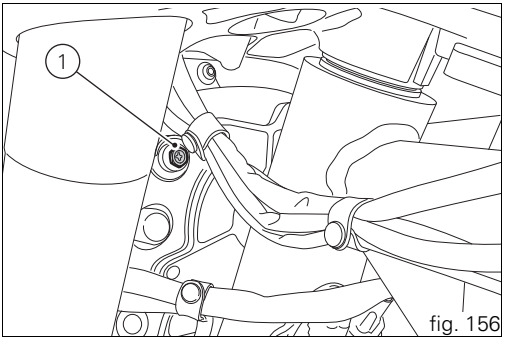


fig. 156

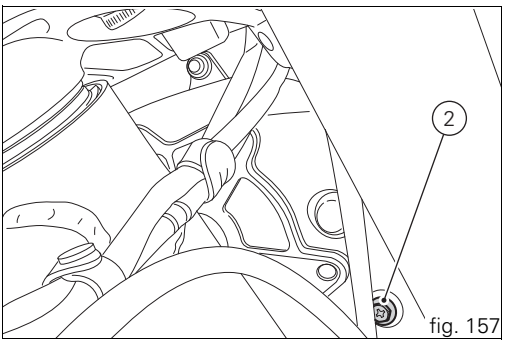


fig. 157

Rear-view mirror adjustment (fig. 158)

The rear-view mirror can be adjusted manually by pressing points (A).

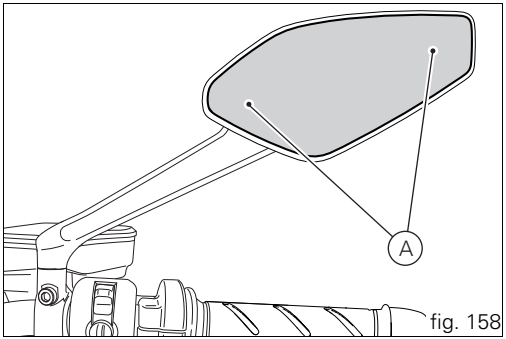


fig. 158

Tubeless tyres

Front tyre pressure:
2.50 bar (rider only) - 2.6 bar (with passenger and/or bags)
Rear tyre pressure:
2.50 bar (rider only) - 2.6 bar (with passenger and/or bags)
As tyre pressures are affected by changes in temperature and altitude; check and adjust them whenever you are riding in areas where there are large variations in temperature or altitude.

Important

Check and set tyre pressure when tyres are cold.
To prevent distortion of the front wheel rim, increase tyre pressure by 0.2 ÷ 0.3 bar when riding on bumpy roads.

Tyre repair or change (Tubeless tyres)

In the event of a tiny puncture, tubeless tyres will take a long time to deflate, as they tend to keep air inside. If you find low pressure on one tyre, check the tyre for punctures.

Warning

Punctured tyres must be replaced.
Replace tyres with recommended standard tyres only.
Be sure to tighten the valve caps securely to avoid leaks when riding. Never fit tyres with inner tubes, as these can cause the tyre to burst suddenly, with possibly serious consequences for the rider and passenger.

After replacing a tyre, the wheel must be balanced.

Important

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. 159) at the point where tread is most worn down.
It should not be less than 2 mm, and in any case not less than the legal limit.

Important

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

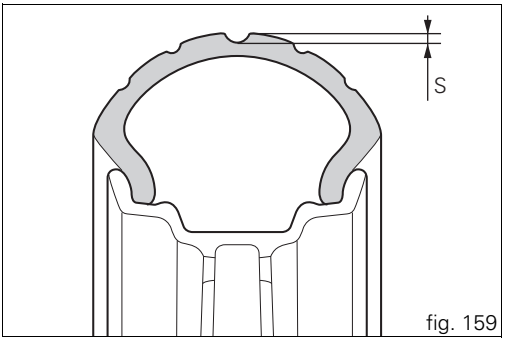


fig. 159

Checking engine oil level (fig. 160)

Engine oil level can be checked through the sight glass (1) provided on the clutch cover. Oil level must be checked with the motorcycle perfectly upright and the engine cold. Oil level should be between the marks on the sight glass. If the level is low, top up with SHELL Advance 4T Ultra engine oil. Remove the oil filler cap (2) and top up until the oil reaches the required level. Refit the plug.

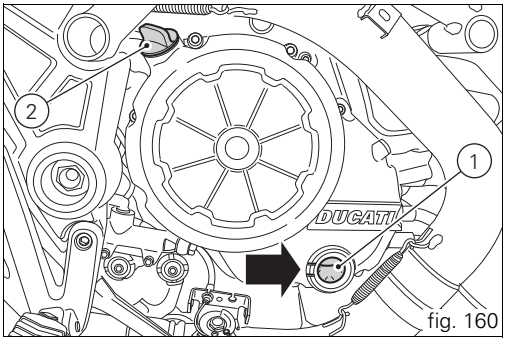


fig. 160

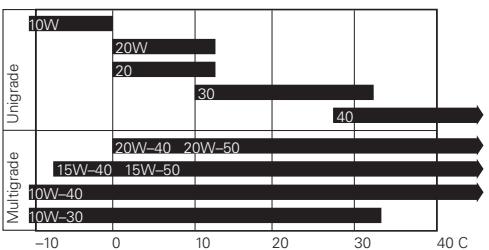
Important

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 Booklet.

Viscosity

SAE 15W-50

The other viscosity degrees indicated in the table can be used if the local average temperature is within the limits specified for that oil viscosity.



Cleaning and replacing the spark plugs

(fig. 161)

Spark plugs are essential to smooth engine running and should be checked at regular intervals.

The condition of the spark plugs provides a good indication of how well the engine is running.

Have the spark plug inspected and replaced at a Ducati Dealer or authorised Service Centre.

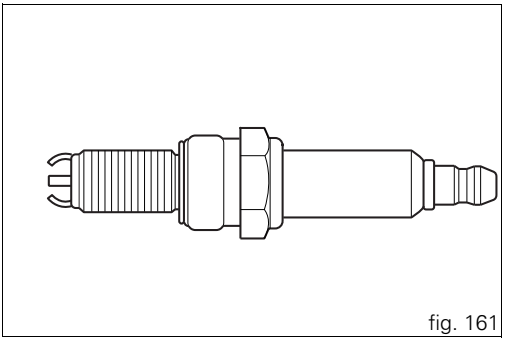


fig. 161

Cleaning the motorcycle

To preserve the finish of metal parts and paintwork, wash and clean your motorcycle at regular intervals, anyway according to the road conditions you ride in. Use specific products only. Prefer biodegradable products. Avoid aggressive detergents or solvents. Only use water and neutral soap to clean the Plexiglas and the seat.
Periodically manually clean all aluminium components. Use special detergents, suitable for aluminium parts FREE of abrasives 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 the front fork, wheel hub assembly, electric system, headlight (fogging), front fork seals, air inlets or exhaust silencers, with consequent loss of compliance with the safety requirements.

Clean off stubborn dirt or exceeding grease from engine parts using a degreasing agent. Be sure to avoid contact with drive parts (chain, sprockets, etc.) Rinse with warm water and dry all surfaces with chamois leather.

Warning

Braking performance may be impaired immediately after washing the motorcycle. Never grease or lubricate the brake discs. Loss of braking and further accidents may occur. Clean the discs with an oil-free solvent.

Warning

The headlight might fog up due to washing, rain or moisture.
Switch headlight on for a short time to dry up any condensate.

Carefully clean the phonic wheels of the ABS so to ensure system efficiency. Do not use aggressive products so to avoid damaging the phonic wheels and the sensors.

Note

Do not use alcohol or alcohol-derived products to clean the instrument panel.

Pay special attention to regularly clean the wheel rims since they feature some machined aluminium parts; clean and dry them any time you use the motorcycle.

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 bores, then turn the engine over by hand a few times to form a protective film of oil on the inner walls of the cylinder;
place the motorcycle on a service stand;
disconnect and remove the battery.

If the motorcycle has been left unused for more than a month, the battery should be checked and recharged if necessary.
Protect the motorcycle with a specific motorcycle cover that will not damage the paintwork or retain moisture.
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 replace parts as necessary, using Ducati original spare parts, in compliance with the regulations in the country concerned.

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. x1000**	**1**	**12**	**24**	**36**	**48**	**Time (months)**
	mi. x1000	**0.6**	**7.5**	**15**	**22.5**	**30**	
Read the error memory with DDS and check whether any update is available for control unit software versions		●	●	●	●	●	12
Check whether there are technical updates and recall campaigns		●	●	●	●	●	12
Change engine oil and filter		●	●	●	●	●	12
Clean engine oil filter at intake		●					-
Check and/or adjust valve clearance				●		●	-
Replace the timing belts				●		●	60
Replace the spark plug				●		●	-
Change the air filter				●		●	-

List of operations and type of intervention [set mileage (km/mi) or time interval *]	km. x1000	1	12	24	36	48	Time (months)
	mi. x1000	0.6	7.5	15	22.5	30	
Check brake and clutch fluid level		●	●	●	●	●	12
Change brake and clutch fluid							36
Check brake discs and pad wear. Replace, if necessary		●	●	●	●	●	12
Check tightening of the safety components (brake disc flange screws, brake calliper screws, front/rear wheel nuts, sprocket and final drive sprocket nuts)		●	●	●	●	●	12
Check and lubricate the rear wheel shaft				●		●	-
Check the drive chain tension and lubrication		●	●	●	●	●	12
Check final drive wear (chain, front/rear sprocket) and chain sliders			●	●	●	●	12
Visually check the front fork and rear shock absorber seals		●	●	●	●	●	12
Change the front fork fluid					●		-
Check the freedom of movement and tightening of side and central stand (if installed)		●	●	●	●	●	12
Check rubbing points, clearance, freedom of movement and routing of the flexible cables and electric wiring in view		●	●	●	●	●	12
Check the coolant level		●	●	●	●	●	12
Change coolant						●	48

List of operations and type of intervention [set mileage (km/mi) or time interval *]	km. x1000	1	12	24	36	48	Time (months)
	mi. x1000	0.6	7.5	15	22.5	30	
Check electric fan operation		●	●	●	●	●	12
Check tyre pressure and wear		●	●	●	●	●	12
Check the battery charge level		●	●	●	●	●	12
Check idling		●	●	●	●	●	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 the indicators and lighting		●	●	●	●	●	12
Reset the Service indication through the DDS		●	●	●	●	●	-
Road test of the motorcycle, testing the safety devices (ex. ABS and DTC)		●	●	●	●	●	12
Softly clean the vehicle		●	●	●	●	●	12
Fill out that the service was performed in on-board documentation (Service Manual)		●	●	●	●	●	12

Operations to be carried out by the customer

List of operations and type of intervention [set mileage (km/mi) or time interval *]	**km. x1000**	**1**
	mi. x1000	**0.6**
	Months	**6**
Check engine oil level		•
Check brake and clutch fluid level		•
Check tyre pressure and wear		•
Check the drive chain tension and lubrication		•
Check brake pads. If necessary, contact your dealer to replace pads		•

Technical data

Overall dimensions (mm) (fig. 162)

Weights

Weight in running order without fluids and battery:
210 kg (Diavel ABS, Diavel Abs Dark Stealth);
205 kg (Diavel Carbon ABS).
Carrying full load: 400 kg.

Warning
Failure to observe weight limits could result in poor handling and impair the performance of your motorcycle, and you may lose control of the motorcycle.

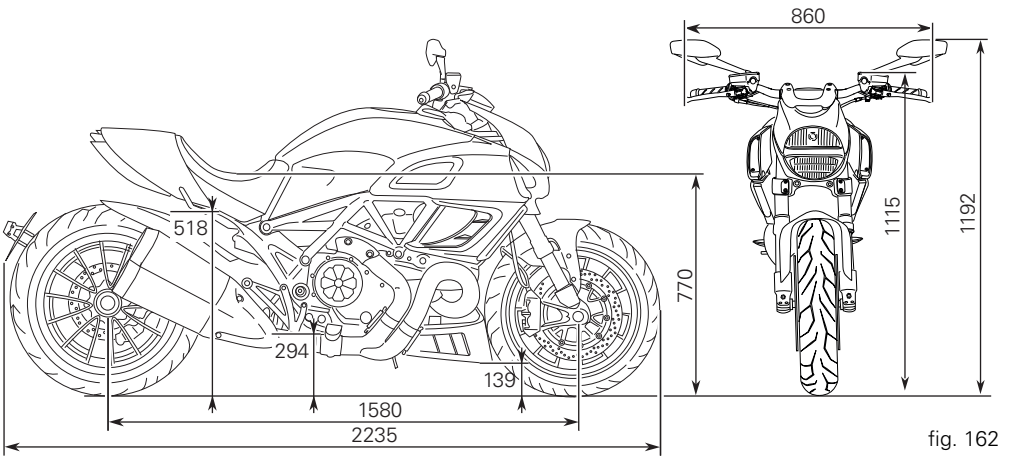


fig. 162

Top-ups	Type	
Fuel tank, including a reserve of 4 cu. dm (litres)	Unleaded fuel with a minimum octane rating of RON 95	17 cu. dm (litres).
Lubrication circuit	SHELL - Advance 4T Ultra	4 cu. dm (litres)
Front/rear brake and clutch circuits	Special hydraulic fluid SHELL Advance Brake Dot 4	—
Protectant for electric contacts	SHELL - Advance Contact Cleaner spray for electric systems	—
Front fork	SHELL - Advance Fork 7.5 or Donax TA	720 cc (per leg)
Cooling circuit	Antifreeze ENI Agip Permanent Spezial (not to be diluted)	2.5 cu. dm (litres)

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

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

Engine

Twin cylinder, four-stroke, 90° "L" type, longitudinal, with deep sump die-cast crankcase.
Bore, mm:
106
Stroke, mm:
67.9
Total displacement, cu. cm:
1198
Compression ratio:
11.5±0.5:1
Max crankshaft power (95/1/EC), kW/HP:
119 kW/162 HP at 9,500 rpm
Max torque at crankshaft (95/1/EC):
13 kgm/128 Nm at 8,000 rpm
Maximum rpm:
10,800

Important

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

Timing system

DESMODROMIC (type) with four valves per cylinder, operated by eight rocker arms (4 opening rockers and 4 closing rockers) and two overhead camshafts. It is operated by the crankshaft through spur gears, belt rollers and toothed belts.

Desmodromic timing system (fig. 163)

1) Opening (or upper) rocker.
2) Opening rocker shim.
3) Closing (or lower) rocker shim.
4) Return spring for lower rocker.
5) Closing (or lower) rocker.
6) Camshaft.
7) Valve.

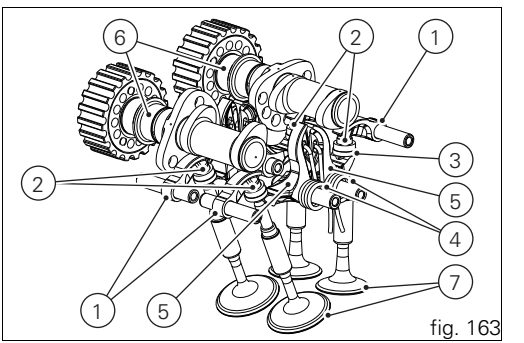


fig. 163

Performance data

Maximum speed in any gear should be reached only after a correct running-in period with the motorcycle properly serviced at the recommended intervals.

Important

Failure to follow these instructions will release Ducati Motor Holding S.p.A. from any liability for any engine damage or shortened engine life.

Spark plugs

Make:
NGK
Type:
MAR9A-J

Fuel system

MITSUBISHI indirect electronic injection.
Oval throttle body (corresponding diameter):
56 mm
Injectors per cylinder: 1
Firing points per injector: 12
Fuel specifications: 95-98 RON.

Warning

The vehicle 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.

Brakes

Separate-action anti-lock brake system operated by hall-type sensors mounted to each wheel with phonic wheel detection: ABS can be disabled.

Front

Semi-floating drilled twin-disc.
Braking material:
steel.
Carrier material:
aluminium.
Disc diameter:
320 mm.
Hydraulically operated by a control lever on handlebar right-hand side.
Brake calliper make:
BREMBO.
Type:
M4.34a (calliper with 4 Ø 34 pistons)
Friction material:
TT 2182 FF
Master cylinder type:
PR18/19.

Rear

With fixed drilled steel disc.
Disc diameter:
265 mm.
Hydraulically operated by a pedal on RH side.
Make:
BREMBO
Type:
PF 30/32a (floating calliper with 2 Ø 30 / Ø 32 pistons).
Friction material:
Toshiba TT2182 FF.
Master cylinder type:
PS 13.

Warning

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

Transmission

Wet clutch controlled by the lever on left-hand side of the handlebar.
Drive is transmitted from engine to gearbox main shaft via spur gears.
Front chain sprocket/clutch gearwheel ratio:
33/61
6-speed gearbox with constant mesh gears, gear change pedal on left side of motorcycle.
Gearbox output sprocket/rear chain sprocket ratio:
15/43
Total gear ratios:
1st gear 15/37
2nd gear 17/30
3rd gear 20/27
4th gear 22/24
5th gear 24/23
6th gear 25/22

Drive chain from gearbox to rear wheel:
Make:
DID
Type:
HV2 525
Dimensions:
5/8"x1/16"
Links: 118

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. Please contact a Ducati Dealer or Authorised Service Centre.

Warning

If the rear sprocket needs replacing, contact a Ducati Dealer or authorised Service Centre. If improperly replaced, this component could seriously endanger your safety and cause irreparable damage to your motorcycle.

Frame
ALS450 steel tubular trellis frame.
Aluminium cast rear subframe.
Steering head angle: 28°.
Steering angle: 34° on the left / 34° on the right.
Trail: 130 mm

Wheels
Nine-spoke, light-alloy rims (Diavel Carbon).
Fourteen-spoke, light-alloy rims (Diavel ABS, Diavel Abs Dark Stealth).

Front
Dimensions:
MT 3.50x17".

Rear
Dimensions:
MT 8.00x17".

Tyres

Front
Tubeless, radial tyre.
Size:
120/70-ZR17

Rear
Tubeless, radial tyre.
Size:
240/45-ZR17

Suspensions

Front

Hydraulic upside-down fork provided with external adjusters for rebound and compression damping and preload (for inner springs of fork legs).
Stanchion diameter:
50 mm, coated.
Wheel travel:
120 mm.

Rear

The shock absorber is adjustable for rebound and compression, with remote control for spring preload and is adjustable. Its upper section is pivot connected to the frame and the lower section is pivot connected to a light alloy single-sided swingarm. The swingarm hinges on a pivot shaft that passes through the frame and engine.
The whole system gives the bike excellent stability.
Shock absorber stroke:
59.5 mm.
Wheel travel:
120 mm.

Exhaust system

One-piece stainless steel silencer with aluminium terminals.
Catalytic converter built into the silencer and lambda sensors on the exhaust pipes at the head output.

Available colours

Diavel ABS

Ducati red paint part no. 54D234015 (AKZO);
Red frame and black wheel rims.

Diamond Black part no. 57E22714 (AKZO);
Paint part no. 54M22705 (AKZO);
Clear lacquer part no. 228.880 (PPG);
Racing Black frame black wheel rims.

Diavel Carbon ABS

Red and Matt Carbon;
Ducati red paint part no. 54D234015 (AKZO);
Red frame and black wheel rims.

Glossy and Matt Carbon;
Pearl White Silk paint part no. 53E23102 (AKZO);
Racing Black frame and black wheel rims.

Diavel Abs Dark Stealth

Primer, black 2K primer code 873.A002 (Palinal).
Base coat, Black Stealth (Black 94) code 929.R223 (Palinal).
Clear coat, matte 2K clear coat code 9231.2176 (Palinal).

Electrical system

Basic electric items are:
Headlight:
low beam bulb type: 1xH7 blue vision (12V-55W);
high beam bulb type: 1xH1 (12V-55W);
parking light type: LED (12V-2.4W).
Electrical controls on handlebars.
Turn indicators:
front: LED (13.5V-2.9W).
Horn.
Brake light switches.
Sealed battery, 12V-10 A.
GENERATOR 12V-430W.
MASTER FUSE, protected by a 30A fuse located on the solenoid starter, behind the battery (C, fig. 166).
Starter motor: 12V-0.7 kW.
Tail light, brake light and rear turn indicators:
parking light: (13.5V-0.6W);
stop light: LED (13.5V-2.8W);
rear turn indicators: LED (13.5V-2.06W).
Number plate light: LED (13.5V-0.67W).

Note

For bulb replacement instructions, please read on page 181 under “Replacing the high and low beam bulbs”.

Fuses

There are twelve fuses that protect the electric components located inside the front and rear fuse boxes, and one on the electric solenoid starter. There is a spare fuse in every box.

Refer to the table below to identify the circuits protected by the various fuses and their ratings.

The rear left fuse box (A, fig. 164) and the rear right one (B, fig. 165) are located under the seat, inside the underseat compartment.

To access the fuses, remove the seat (see "Removal of the seat" on page 137).

To expose the fuses, lift the box protective cover.

Mounting position and ampere capacity are marked on box cover.

Rear left fuse box key (A, fig. 164)		
Pos.	El. item	Rat.
1	-	-
2	Instrument panel	10 A
3	ECU	5 A
4	Key-sense	15 A
5	Injection relay	20 A
6	Throttle opening relay (ETV)	15 A

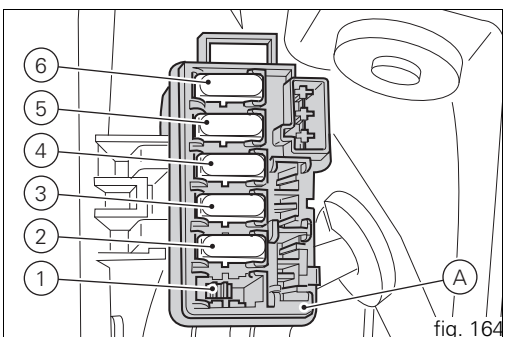


fig. 164

REAR right fuse box key (B, fig. 165)

Pos.	El. item	Rat.
1	Black Box System (BBS)	7.5 A
2	Navigator/Alarm	7.5 A
3	ABS 2	25 A
4	ABS 1	30 A
5	Fans	10 A
6	Diagnosis/Recharge	7.5 A

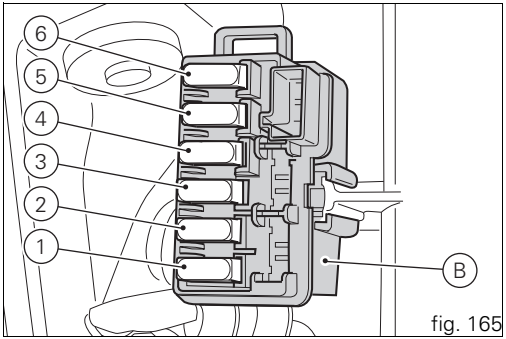


fig. 165

Note
Remove the left cowling to reach the main fuse (see "Charging the battery" on page 169).

The main fuse (C, fig. 166) is positioned next to the battery, on the solenoid starter (D). Remove the fuse cap (E) to reach it.
A blown fuse is identified by the interrupted centre link (F,fig. 167).

Important
To prevent short circuits, replace the fuse after the Key-Off.

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

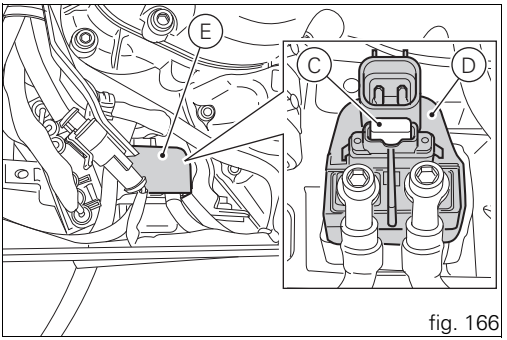


fig. 166

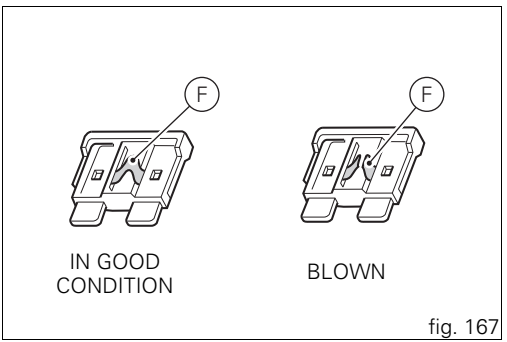


fig. 167

Injection /electric system diagram key

1) Right-hand switch
2) Immobilizer
3) Hands Free relay
4) Hands free
5) Front fuse box
6) Right fan
7) Left fan
8) Fan relay
9) Fuel pump relay
10) Ride-by-wire relay (ETV)
11) Injection control unit (EMS)
12) Rear fuse box
13) Data Acquisition/Diagnosis
14) Starter motor
15) Fused solenoid
16) Battery
17) Wiring ground
18) Regulator
19) Generator
20) Fuel pump
21) Fuel level
22) Rear right turn indicator
23) Rear light
24) Rear left turn indicator
25) Vehicle control unit (BBS)
26) Antitheft alarm
27) Exhaust valve starter motor
28) Gear sensor
29) Rear speed sensor
30) ABS control unit
31) Throttle twistgrip position sensor (APS)
32) Starter motor - position sensor / ride-by-wire (TPS/ETV)
33) Timing/rpm sensor
34) Vertical MAP sensor
35) Horizontal MAP sensor
36) Engine temperature
37) Air temperature sensor
38) Vertical lambda sensor
39) Horizontal lambda sensor
40) Oil pressure switch
41) Rear stop
42) Side stand switch
43) Clutch switch
44) Front stop
45) Main vertical injector
46) Main horizontal injector
47) Horizontal coil
48) Vertical coil
49) Left-hand switch
50) Horn
51) Front speed sensor
52) Front left turn indicator
53) Instrument panel on handlebar
54) Instrument panel on tank
55) Front right turn indicator
56) Navigator
57) High / Low beam
58) Parking light

Wire colour coding

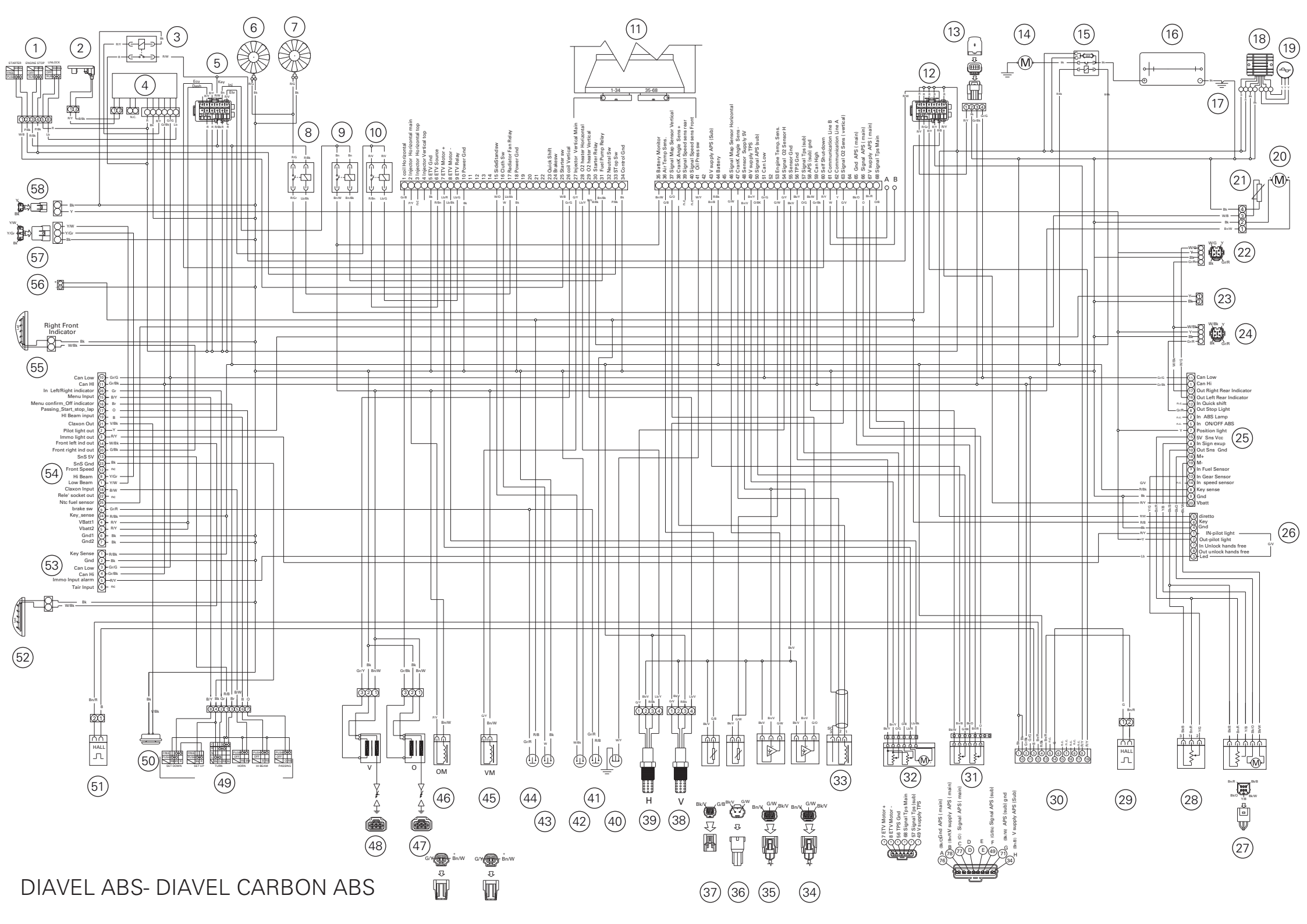
B Blue
W White
V Violet
BK Black
Y Yellow
R Red
LB Light blue
GR Grey
G Green
BN Brown
O Orange
P Pink

Note

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

Routine maintenance record

KM	DUCATI SERVICE	MILEAGE	DATE
1000			
12000			
24000			
36000			
48000			
60000			



DIAVEL ABS- DIAVEL CARBON ABS

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