Owner's manual







Owner's manual

ENGLISH

# SUPERBIKE



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

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

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Enjoy your ride!

# Table of contents

Introduction 7 Safety guidelines 7 Safety alerts 8 Permitted use 9 Rider's obligations 10 Rider training 12 Riding gear 12 Best practices for motorcycle safety 13 Refuelling 15 Carrying the maximum load allowed 16 Dangerous products - warnings 17 Vehicle identification number 19 Engine identification number 20

Instrument panel (Dashboard) 21 Instrument panel 21 Acronyms and abbreviations used in the Manual 26 Technological Dictionary 26 Function push-buttons 29 How to set/display parameters 30 Main functions 37 Riding Mode 44 DOS 49 DTC 51 FBC 58 DWC 63 ABS 70 Menu 1 functions 78 Menu 1: Odometer (TOT) 79 Menu 1: Trip meter 1 (TRIP 1) 81 Menu 1: Trip meter 2 (TRIP 2) 83 Menu 1. Partial fuel reserve counter (TRIP FUEL) 85 Menu 1: Lap time (LAP time) 87 Menu 1: LEAN ANGLE 91 MENU 2 functions 92 MENU 2: Coolant temperature 93 MENU 2: Instantaneous fuel consumption 95 MENU 2: Average fuel consumption 96 MENU 2: Average speed 98 MENU 2: Trip time 100

MENU 2: Air temperature 101 Auxiliary functions 103 CLOCK 104 Service warning (SERVICE) 105 Zero OIL SERVICE warning 106 OIL SERVICE or DESMO SERVICE warning 108 Warnings/Alarms (Warning) 109 Error indication 113 Displayed error description 115 Side stand status display 120 Setting MENU 121 Customising Riding Modes 124 Riding mode customisation: ABS adjustment 127 Customising Riding Modes: Display setting 130 Customising Riding Modes: DQS enable/ disable 133 Customising Riding Modes: DTC level setting 136 Customising Riding Modes: Engine setting 139 Customising Riding Modes: EBC level setting 142 Riding style customisation: DWC level setting 144 Customising Riding Modes: Restore default settings 147 Engine rpm digital indication (RPM) 149

Battery voltage 150 DDA 152 Pin Code 157 Changing the PIN CODE 161 Clock setup 165 Setting the date 169 Setting the display background 174 LAP 176 Setting the unit of measurement 182 Tyre Set-Up 182 Display background colour 198 Light control 200 The Immobilizer system 205 Kevs 206 Operation 207 Duplicate keys 208 Vehicle release through PIN CODE 209

Controls 213 Position of motorcycle controls 213 Ignition switch and steering lock 214 Left-hand switch 215 Clutch lever 216 Right-hand switch 217 Throttle twistgrip 218 Front brake lever 219 Rear brake pedal 220 Gear change pedal 221 Adjusting the position of the gearchange and rear brake pedals 222

Main components and devices 224 Position on the vehicle 224 Tank filler plug 225 Seat lock 226 Side stand 228 Steering damper 230 Adjusting the front fork 231 Adjusting the rear shock absorber 233 Motorcycle setting adjustment 235

Riding the motorcycle 237 Running-in recommendations 237 Pre-ride checks 240 Starting the engine 243 Moving off 245 Braking 245 ABS system 245 Stopping the motorcycle 247 Parking 247 Refuelling 248 Tool kit and accessories 249

Main maintenance operations 250 Remove the fairing 250 Side fairings 251 Change the air filter 252 Check and top up the coolant level 253 Check brake and clutch fluid level 255 Check brake pads for wear 257 Charge the battery 258 Charge and maintenance of the battery during winter storage 261 Check drive chain tension 263 Chain lubrication 265 Replace the high and low beam bulbs 266 Rear turn indicators 267 Beam setting 268 Adjust rear-view mirrors 270 Tubeless tyres 271 Check engine oil level 273 Clean and replace the spark plugs 275 Clean the motorcycle 276 Storing the motorcycle 277

Important notes 278

Scheduled maintenance chart 279 Scheduled maintenance chart: operations to be performed by the Dealer 279 Scheduled maintenance chart: operations to be performed by the customer 283

Technical data 284 Weights 284 Overall dimensions 285 Top-ups 286 Engine 287 Timing system 288 Performance data 289 Spark plugs 289 Fuel system 289 Brakes 289 Transmission 290 Frame 291 Wheels 291 Tyres 291 Suspensions 291 Exhaust system 292

Routine maintenance record 299 Routine maintenance record 299

292

293

Available colours

Electrical system

# Introduction

### Safety guidelines

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

Your motorcycle is the result of Ducati Motor Holding S.p.A.'s on-going research and development efforts. It is important that you preserve its quality standard by strictly observing the maintenance plan and using genuine spare parts.

This manual provides instructions on minor maintenance operations. Major maintenance operations are described in the Service Manual available to Ducati Authorised Service Centres.

In your own interest, for your safety and in order to guarantee product reliability, you are strongly advised to refer to our authorised Dealers and Service Centres for any operations listed in the scheduled maintenance chart, see page 279. Our highly skilled staff have access to special implements and appropriate equipment required to perform any servicing job at best, and use Ducati original spare parts only as the best guarantee for full interchangeability, smooth running and long life. All Ducati motorcycles come with a Warranty Card. The warranty does not apply to motorcycles used in racing competitions. Tampering with or altering any components, even partially, will make the warranty null and void effective immediately. Improper or poor maintenance, using other than original spare parts or parts not expressly approved by Ducati may invalidate your warranty rights and lead to damage or loss of performance.

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

Before using your motorcycle for the first time, read this entire manual carefully and closely follow the guidelines outlined in it. The manual provides full information on proper motorcycle operation and maintenance. In case of any doubts, please call a Dealer or Authorised Service Centre.

### 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 could lead to severe injury or even death of the rider or other persons.

### Important

Possibility of damaging the motorcycle and/or its components.



Additional information about the current operation.

The terms **BIGHT** 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 and result in vehicle damage, personal injuries or even 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.

This motorcycle is designed to carry the rider and may carry a passenger when the supplied kit is installed. The kit may only be installed at a Ducati Dealer or authorised Service Centre.

# Warning

The total weight of the motorcycle in running order including rider, passenger, luggage and additional accessories load should not exceed: 370 kg/816 lb. Rider's obligations All riders must hold a valid licence.

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

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

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

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



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.

# **M**Warning

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

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

# Warning

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

# Warning

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

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

### Rider training

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

# Warning

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

### Riding gear

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

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

- The helmet must meet the requirements listed at page 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 suitable 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 chapter "Riding the motorcycle" during the running-in period.

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

# Warning

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

Perform the checks recommended in this manual before each ride (see page page 245).

# **Warning**

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



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

Exhaust gases are poisonous and may lead to loss of consciousness or even death within a short time. Use proper body position while riding and ensure your passenger does the same.

# Important

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

# Important

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

# Important

The pillion passenger should always hold on to the strap onto passenger seat with both hands.

# Important

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

### Important

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

# Important

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

# Important

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

# Important

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

# Warning

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

# Warning

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

### Refuelling

Refuel outdoors with the engine turned off.

Do not smoke or use open flames when refuelling. Be extremely careful not to spill fuel on the engine or on the exhaust pipe.

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

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

# Warning

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

## Warning

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



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

### Carrying the maximum load allowed

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

# Warning

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

Information about carrying capacity

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

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



Important

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

# Important

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

## Warning

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

Refer to paragraph "Tyres" on page 271.

Dangerous products - warnings Used engine oil

## **Warning**

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

### Brake lining debris

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

Brake fluid

▲ Warning

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



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

### Coolant

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

# Marning

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

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

#### Battery

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

### Vehicle identification number

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

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

Frame number



### Engine identification number

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

The engine identification number is located in the motorcycle front side on the horizontal head cylinder lower side, near the starter motor and the generator cover.

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

Engine number



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

5) FUEL WARNING LIGHT 🗈 (AMBER YELLOW).

### 9) ABS LIGHTS () (AMBER YELLOW). The light indicates ABS system status.

Speed below 5 Km/h				
Light OFF	Light flashing slowly	Light flashing quickly	Light steady on	
ABS enabled and func- tioning	ABS enabled but not yet functioning since initialisa- tion is in progress or there is a fault of the IMU control unit	transient status of the ABS from enabled to disabled and vice versa	ABS disabled and not func- tioning due to a fault in the ABS control unit	
Speed above 5 Km/h				
Light OFF	Light flashing slowly	Light flashing quickly	Light steady on	
ABS enabled and func- tioning	ABS enabled but a fault is detected by the IMU control unit	transient status of the ABS from enabled to disabled and vice versa	ABS disabled and not func- tioning due to a fault in the ABS control unit	

10) DTC / DWC INTERVENTION (AMBER YE	ELLOW).
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	DTC
No intervention	Light OFF
Intervention	Light steady ON

	DWC	
No intervention	Light OFF	
Throttle cut	Light steady ON	

11) OVER REV / IMMOBILIZER / ANTI-THEFT SYSTEM (RED)

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



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

	Immobilizer
Key-ON status	Light OFF
Key-OFF status	Light ON flashing
Key-OFF status for over 12 hours	Light OFF

12) GENERIC ERROR WARNING LIGHT (AMBER YELLOW).

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

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

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

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



Acronyms and abbreviations used in the Manual

ABS Antilock Braking System BBS Black Box System CAN Controller Area Network ΔΠΩ **DUCATI** Data Acquisition DSB Dashboard DTC **DUCATI Traction Control** DOS DUCATI Quick Shift DW/C DUCATI Wheelie Control FBC **DUCATI Engine Brake Control** FCU **Engine Control Unit** F-LOCK Electronic Main Switch Set IMU

Inertial Measurement Unit

Technological Dictionary Engine Brake Control (EBC)

The engine brake control system (EBC) works together with the slipper clutch to avoid and control the rear wheel lock-up during aggressive downshifting.

If the system detects wheel slipping, it sends a signal to the engine control unit to slightly increase engine rpm until the rear wheel speed is again consistent with vehicle speed.

EBC features a three-tiered operating system and is integrated in the three Riding Modes.

### Riding Mode

The rider of an 1299 Panigale can choose from 3 different preset motorcycle configurations (Riding Modes) and pick the one that best suits his/her riding style or ground conditions. The Riding Modes allow user to instantly change the engine power delivery (Power Mode), ABS, DTC, DQS, EBC and DWC settings and instrument panel graphics. The Riding Modes available for the 1299 Panigale are: Race, Sport and Wet. Within every Riding Mode, the rider can customise any settings.

#### Power Mode

The Power Modes are the different engine maps the rider can select to change power level and delivery to suit his/her own riding style and surface conditions. For the 1299 Panigale there are three Power Modes, one for each Riding Mode:

- 120 HP with 'soft' power delivery;
- 195 HP with 'soft' power delivery;
- 195 HP with 'instant' power delivery.

#### Ride by Wire (RbW)

The Ride by Wire system is the electronic device that controls throttle opening and closing. Since there is no mechanical connection between the throttle twistgrip and the throttle bodies, the ECU can adjust power delivery by directly affecting throttle opening angle.

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

Ducati Traction Control (DTC)

The Ducati Traction Control system (DTC) supervises the rear wheel slipping control and settings vary through eight different levels that are programmed to offer a different tolerance level to rear wheel slipping. Each Riding Mode features a pre-set intervention level.

Level eight indicates system intervention whenever a slight slipping is detected, while level one is for very expert riders because it is less sensitive to slipping and intervention is hence softer.

#### Anti-lock Braking System (ABS) 9MP

The ABS 9ME system fitted to the 1299 Panigale is a safety system preventing wheel lockup while riding with the motorcycle not leaning over. The 1299 Panigale ABS also features a "cornering" function that widens ABS functionality to the conditions where the motorcycle is leaning over, thus preventing wheel lockup and slipping as much as possible, within the physical limits allowed by the vehicle and by the road conditions. The 1299 Panigale ABS implements rear wheel lift-up control and combined braking (from front to rear) in order to ensure not only smaller stopping distance under braking, but also the best possible stability. ABS 9MP system is specifically calibrated for sport use and features 3 different levels of intervention, one per Riding Mode. In RACE mode the system only works on the front discs to ensure top performance for track use.

#### Ducati Quick Shift (DQS)

The Ducati Quick Shift (DQS) is the electronic shifter control system used for racing purposes that allows the rider to shift up under acceleration without using the clutch and keeping the throttle open: this results in lower shifting time and hence faster lap time.

#### Ducati Wheelie Control (DWC)

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

DDA+ is the latest generation of the Ducati Data Analyzer, with built-in GPS signal to create a "virtual finish line". The system automatically detects lap end and stops the lap timer, without the rider needing to do anything. Thanks to the built-in GPS signal, it also shows the trajectories on track map and the key motorcycle parameters: throttle opening, speed, rpm, gear engaged, engine temperature, DTC intervention. Function push-buttons

1) UP CONTROL SWITCH " 🔺 "

Button used to display and set instrument panel

parameters with the position "  $\blacktriangle$  ".

2) DOWN CONTROL SWITCH " 🔻 "

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

3) HIGH-BEAM FLASH BUTTON FLASH

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

4) TURN INDICATOR CANCEL BUTTON

The turn indicators cancel button may also be used for the CONFIRM MENU function, for selecting the riding style. Press this button for 3 seconds to the left side to activate the "Hazard" function (all 4 turn indicators).



### How to set/display parameters

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

After this routine, the instrument panel displays the main screen in ROAD or TRACK layout (depending on the one in use before last Key-Off).

If the key is properly acknowledged and configuration for enabling engine starting is verified, instrument panel initialisation routine will carry on and:

- Check warning lights and display; this part is identified as "initial check";
- Display the "standard screen".



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

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

### Note

When turning the key to OFF, motorcycle power is cut only after 70 seconds and not immediately.

The main screen can have two different layouts: ROAD and TRACK.

Data displayed on the main screen are as follows:

- 1) Rpm bargraph.
- 2) Motorcycle speed.
- 3) Gear engaged.
- 4) Menu 1 (Odometer, Trip 1, Trip 2, Trip Fuel, Lap time only if active).

- Menu 2 (Engine coolant temperature, Instantaneous fuel consumption, Average fuel consumption, Average speed, Trip time, External ambient air temperature).
- 6) Set Riding Mode.
- 7) DTC level indication (ON) or DTC OFF indication.
- 8) EBC level indication (ON) or EBC OFF indication.
- 9) DWC on indication or DWC off indication.
- 10) ABS ON/OFF indication.
- 11) "DDA ON" indication.
- 12) "GPS receiving" indication (if fitted).
- 13) Clock.
- SERVICE indication (only if active) Alarm / Warning indication (only if there is any) - Error indication (only if there is any).
- Indication for: DQS active for upshifting (U), DQS active for upshifting and downshifting (U/ D) or DQS disabled.
- 16) Side stand indication Indication for ABS active only on front wheel.



Press button (1) to display MENU 1 information. Following are the information displayed in sequence, both in the ROAD and TRACK mode:

- Odometer (TOT);
- TRIP 1;
- TRIP 2;
- TRIP FUEL (when function is active);
- LAP time for TRACK mode only;
- Leaning angle (LEAN ANGLE) only for TRACK mode.

Press button (2) to display MENU 2 information. Following are the information displayed in sequence, both in the ROAD and TRACK mode:

- Coolant temperature;
- Instant fuel consumption (CONS.);
- Average fuel consumption (CONS. AVG);
- Average speed (SPEED AVG);
- Trip time (TRIP TIME);
- Air temperature.

Upon Key-ON, the data displayed for MENU 1 and MENU 2 are the ones displayed upon the previous Key-OFF.



Both in the ROAD and TRACK mode, the factory set default parameter (Odometer - TOT) is displayed for 10 seconds upon Key-ON for MENU 1 and then the parameter from last Key-OFF is displayed.

# Note

In case of sudden and unexpected power OFF, the instrument panel displays the default settings upon the following Key-ON;

in particular:

- for MENU 1 Odometer (TOT);
- for MENU 2 Engine coolant temperature.



When the Standard Screen is displayed, hold the button (2) for 3 seconds, when actual motorcycle speed is <= (lower than or equal to) 20 km/h, to enter the Setting MENU, where you can set any function.

### Important

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


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

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



## Main functions

The functions displayed in the Standard screen are the following:

Main functions

- Engine rpm indication (RPM)
- Motorcycle speed
- Gear
- Riding Mode
- DQS
- DTC
- EBC
- DWC
- ABS
- MENU 1 displays the following functions:
  - Odometer (TOT)
  - Trip meter 1 (TRIP1)
  - Trip meter 2 (TRIP2)
  - Partial fuel reserve counter (TRIP FUEL)
  - LAP time only if active and in TRACK mode
  - Leaning angle (LEAN ANGLE) only if active and
  - in TRACK mode

- MENU 2 displays the following functions:
  - Engine coolant temperature
  - Instantaneous fuel consumption (CONS.)
  - Average Fuel Consumption (CONS. AVG)
  - Average speed (SPEED AVG)
  - Trip time (TRIP TIME)
  - Ambient air temperature

Auxiliary functions

- DDA (only if present)
- GPS (only if present)
- CLOCK

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- Service indication (SERVICE)
- Warnings/Alarms
- "ERROR" indication

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

- Riding mode customisation (RIDING MODE): this menu allows customisation of:
  - ABS setting (ABS)
  - Display setting (DISPLAY)
  - DQS ON/OFF (DQS)
  - DTC level setting (DTC)
  - Engine setting (ENGINE)
  - EBC level setting (EBC)
  - Reset to default settings (DEFAULT)
- Engine rpm digital indication (RPM)
- Battery voltage (BATTERY)
- DDA (ON/OFF view delete)
- PIN CODE (enter/change)
- Clock setting (CLOCK)
- Date setting (DATE)
- Display backlighting (BACK LIGHT)
- Unit setting (Speed Temperature Fuel consumption) UNIT
- LAP (view/delete/reset automatic settings)
- System recalibration in case the motorcycle fits tyres different from OE tyres (TIRE SET\_UP)

The range between 10500 and 11500 rpm (prewarning area) is displayed in orange both for the bargraph filling and for the indication of value 11 ("orange area").

The range between 11500 and 12000 rpm (warning area) is displayed in red both for the bargraph filling and for the indication of value 12 ("red area").

# Important

During the first 1000 km (running-in period), i.e. when the Odometer displays a value <= (lower than or equal to) 1000 km, the pre-warning area, indicated in orange (orange area), both for the bargraph filling and the display of the relevant number, is displayed when reaching 6000 rpm. During the running-in period we recommend not to exceed 6000 rpm, thus the instrument panel will not display the bargraph "Orange area".

After the running-in period, the "orange area" displays the message that prompts to ride the bike at lower rpm when the engine is cold. The "orange area" changes according to the engine temperature, as indicated below:

- from 8000 rpm and engine temperature of 40 °C or lower;
- from 9000 rpm and engine temperature of 50  $^{\circ}\text{C}$  or lower;
- from 10500 rpm and engine temperature lower than 50  $^{\circ}\mathrm{C}.$

the rev limiter thresholds are divided into two groups:  $1^{st}$  threshold 10500 rpm (A).

2<sup>nd</sup> threshold 10800 rpm (B).





### Motorcycle speed

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

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

- speed is equal to 299 km/h or 186 mph or if instrument panel is not receiving the speed value ("---" steady ON);
- the rear speed sensor is in fault (flashing "---", Generic Error warning light ON and SPEED SENSOR error displayed).



## Gear

The instrument panel receives information about the gear engaged and displays the corresponding value. If a gear is engaged, the displayed value may range from 1 to 6, while if in neutral N is displayed. Letter C is displayed when system requires you to shift gear.

"--" is displayed if:

- gear teach-in has not been carried out yet ("--" flashing and Neutral light (A) blinking);
- the gear sensor is in fault (flashing "--", Generic Error warning light (B) ON and GEAR SENSOR error displayed);
- the instrument panel is not receiving the gear data ("--" steady ON).



## **Riding Mode**

The Riding Mode can be selected from the instrument panel. Three preset riding modes are available: RACE, SPORT, WET.

The selected and active riding mode is displayed at the bottom of the instrument panel display, inside a green rectangle if the Riding Mode-related parameters are the default ones, or inside an orange rectangle if said parameters have been customised. Riding Mode indication is flashing, regardless of the background colour, if one or several of the set parameters have not been properly received by the relevant control unit.

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

- a specific level of intervention for the DTC traction control (1, 2, 3, 4, 5, 6, 7, 8, OFF);
- a specific engine power that will change throttle behaviour (195Hi, 195Lo, 120);



- a specific ABS calibration (1, 2, 3, OFF);
- a specific level of intervention of the EBC engine brake control system (1, 2, 3, OFF);
- a specific level of intervention for the DWC wheelie control (1, 2, 3, 4, 5, 6, 7, 8, OFF);
- the activation or deactivation of the quick shifter DQS (DQS UP, DQS UP & DOWN, DQS off).

A different standard screen (ROAD, TRACK) is associated to every riding mode; it is set by Ducati or customised by the user from the setting pages.

# **Warning**

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

### Selecting the Riding Mode

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

- RACE
- SPORT
- WET

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

## ▲ Warning

It is not possible to open the menu for selecting the riding mode, if button (4) is in the position for activating the turn indicators (to the left or right) For the marked Riding Mode, instrument panel displays information concerning some of the associated parameters:

- DTC system: DTC lettering followed by the set level (1, 2, 3, 4, 5, 6, 7, 8) in case DTC is active or followed by OFF in case DTC is disabled;
- EBC system: EBC lettering followed by the set triggering level (1, 2, 3) in case EBC is active, or followed by OFF in case EBC is disabled;
- DQS system: DQS lettering followed by the UP, U-D indication in case of activated DQS system or OFF in case of deactivated DQS;
- ABS system: ABS lettering followed by the set calibration level (1, 2, 3) in case ABS is active or followed by OFF in case ABS is disabled;
- DWC system: DWC lettering followed by the set level (1, 2, 3, 4, 5, 6, 7, 8) in case DWC is active or followed by OFF in case DWC is disabled.

Displayed information includes the values stored for each single Riding Mode. The stored settings may be the factory ones (Ducati default settings) or the ones customised by the owner. Any time CONFIRM MENU button (4) is pressed, the selected riding mode is highlighted together with the associated parameters (A, Fig. 15).

Once the desired riding mode is highlighted, confirm the selection by holding down the CONFIRM MENU button (4) for 2 seconds: the new riding mode selection is stored and the Standard Screen (B, Fig. 15) is displayed.

Once the desired riding mode is highlighted, if the CONFIRM MENU button (4) is not pressed within 10 seconds, the new riding mode selection is not stored and the Standard Screen (C, Fig. 15) is displayed.



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

 the throttle twistgrip is open, brakes are activated and the motorcycle is not still; in this case "CLOSE THROTTLE AND RELEASE BRAKES" warning is displayed. If throttle is not closed or brakes are not released or vehicle is not taken to zero speed within 5 seconds, the riding mode change procedure will not be completed and the display will go back to Standard Screen.

## Note

If the change of riding mode is associated with the ABS change of state from "ON" to "OFF" or viceversa, the instrument panel also starts the procedure for disabling or activating the ABS, respectively, upon confirmation of the selected riding mode.



# DQS

The instrument panel displays DQS status as follows:

- if DQS is enabled, DQS indication followed by U (upshifting) or U-D (both upshifting and downshifting);
- if DQS is disabled, DQS OFF indication;
- if DQS is in fault or the control unit is in fault, DQS
  indication; the EOBD light turns on as well and the corresponding error is displayed;
- if the DQS is not present on the motorcycle, the symbol ---- is shown.



The DQS with up/down feature allows the rider to upshift and downshift without using the clutch lever. It includes a two-way microswitch - built in the lever mechanism - that outputs a signal to the engine control unit whenever the gearchange is operated. The system works in a separate way for upshifting and downshifting, and combines the action on ignition advance and injection, available in the upshift system, with controlled throttle opening for operation during downshifting. Extent and duration of these actuations aim at ensuring excellent engagement smoothness under any riding condition; system works in synergy with slipper clutch and EBC during downshifting.

When downshifting, according to the EBC level set by the rider, the DQS strategy changes the extent and duration of throttle opening so as to modulate engine brake exactly when a lower gear is engaged. With EBC set to OFF and 1, rider obtains maximum engine brake; medium engine brake in level 2 and the least engine brake in level 3.

For further details on level selection, refer to paragraph page 58 concerning the EBC system.

The user can decide whether to activate only the upshift feature or both up and down features of the

DQS, using the relevant menu on the instrument panel.

# DTC

The instrument panel displays DTC status as follows:

- if DTC is active, DTC lettering and the Traction Control intervention level number (1 to 8) (steadily);
- if DTC is active, but system is in degraded operation due to a fault, DTC lettering and the DTC intervention level number, 1 to 8 (flashing); also the DTC/DWC warning light starts flashing;
- if DTC is disabled, DTC OFF lettering and DTC/ DWC warning light steady on: if DTC is disabled, also DWC feature is disabled;
- if DTC or the Black Box control unit features an error, the message DTC —; the DTC/DWC warning light and EOBD warning light or Generic Error warning light turn on and the relevant error is displayed.

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



The Ducati Traction Control system (DTC) supervises the rear wheel slipping control and settings vary through eight different levels that are calibrated to offer a different tolerance level to rear wheel slipping. Each Riding Mode features a pre-set intervention level. Level 8 indicates system intervention whenever a slight slipping is detected, while level 1 is for track use and very expert riders because it is less sensitive to slipping and intervention is hence softer

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

The rider must always be aware that active safety systems have a preventive function. The active elements help the rider control the motorcycle.

making it as easy and safe to ride as possible. The presence of an active safety system should not encourage the rider to ride at speeds beyond the reasonable limits, not in accordance with the road conditions, the laws of physics, good riding standards and the requirements of the road traffic code. The following table indicates the most suitable level of DTC intervention for the various riding modes as well as the default settings in the "Riding Modes" that can be selected by the rider.

DTC	RIDING MODE	USE	DEFAULT
OFF		The DTC is disabled.	NO
1	TRACK Professional	This level is designed for exclusive track use and for very expert riders. It is opti- mised for Pirelli tyres with SC2 com- pound. In this mode, the DTC allows sideslipping.	NO
2	TRACK	This level is designed for exclusive track use and for very expert riders. It is opti- mised for OEM tyres. In this mode, the DTC allows sideslipping.	NO
3	SPORT / TRACK	This level is designed for track use and for expert riders. In this mode, the DTC allows sideslipping.	It is the default level for the "RACE" Riding Mode
4	SPORT / TRACK	This level is designed for track use (and road use, for expert riders).	NO
5	SPORT	This level is designed for riding on the road or on the track, consistent with EN- GINE 195cv LOW setting (maximum power 195HP, with Smooth delivery).	It is the default level for the "SPORT" Riding Mode
6	SAFE & STABLE	This level is designed for use in any rid- ing conditions, on the road with good grip.	NO

DTC	RIDING MODE	USE	DEFAULT
7	RAIN	This level is designed for track use, ex- clusively with Rain tyres when surface is wet.	NO
8	HEAVY RAIN	This level is designed for road use, when surface is wet and very slippery.	It is the default level for the "WET" Riding Mode

Tips on how to select the sensitivity level

Warning Excellent operation of the DTC system, for all available levels, is ensured only with OE tyres and/or with the ones recommended by Ducati and with the OE final drive ratio. In particular, OE tyres for this motorcycle are Pirelli Diablo Supercorsa SP in the following sizes: 120/70ZR17 at the front, 200/55ZR17 at the rear. The use of tyres of different size and characteristics to the original tyres may alter the operating characteristics of the system thus making it unsafe. It is recommended not to install tyres of different size than the ones approved for your vehicle.

As far as tyres are concerned, in the case of minor differences such as, for example, tyres of a different make and/or model than the OE ones, it is necessary to use the relevant automatic calibration function in order to restore correct system operation.

As far as the final ratio is concerned, when using a different ratio (which only possible for tracing use) than the original equipment one, it is recommended to use the relevant automatic calibration function n order 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, even after using the automatic calibration function. In this case it is advisable to deactivate the traction control system. If level 8 is selected, the DTC will kick in at the slightest hint that the rear wheel is starting to spin. Between level 8 and level 1 there are other 6 intermediate levels. DTC intervention decreases regularly from level 8 to level 1.

Level 1 is specifically designed for track use with SC1 compound tyres (Pirelli Diablo Supercorsa SC1) that are not the OE ones for this motorcycle. The use of this level with tyres having different characteristics may alter the operating characteristics of the system. 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).

 The riding mode (whether the rider has a "smooth" or a "rough" style).

#### Level depends on grip conditions

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

#### Level depends on type of track/path

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

### Level depends on riding style

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

Tips for use on the track

We recommend that level 6 is used for a couple of full laps in order to heat the tyres and get used to the system. Then try levels 6, 5, 4, etc., in succession until you identify the DTC sensitivity level that suits you best.

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

### Tips for use on the road

We recommend level 8 be used in order to get used to the system. If the level of DTC intervention seems aggressive, try reducing the setting to levels 5, 4, etc., until you find the level that suits you best. If changes occur in the grip conditions and/or circuit characteristics and/or your riding style, and the level setting is no longer suitable, switch to the next level up or down and proceed to determine the best setting (e.g. if with level 7 the DTC intervention seems excessive, switch to level 6; alternatively, if on level 7 you cannot perceive any DTC intervention, switch to level 8).

# EBC

The instrument panel displays EBC status as follows:

- if the EBC is active, the message "EBC" with the set intervention level number (1 to 3);
- if EBC is not active, EBC OFF warning;
- if EBC or the control unit features an error, the message EBC —; the EOBD warning light turns on and the relevant error is displayed.



The Engine Braking Control (EBC) system controls engine braking when riding with throttle control completely closed (both when downshifting and in a normal cut-off with the same gear engaged, while braking or not). This system independently adjusts the throttles to ensure a consistent torque goes back from the wheel to engine during these stages. The system allows the rider to set "engine brake", the range being from a maximum engine braking with system set to OFF and progressively decreasing as level increases

System is particularly sensitive at high rpm and sensitivity gradually decreases as soon as engine rpm decrease

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

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

EBC	CHARACTERISTIC	DEFAULT
OFF	The EBC is disabled. The engine delivers maximum engine brake.	NO
1	In this level the engine delivers a considerable engine brake, but lower than the one that can be obtained with EBC OFF.	NO
2	In this level the engine delivers a poor engine brake. This level is recommended to any rider requiring re- duced engine braking in deceleration.	It is the default level for the RACE and SPORT Riding Modes.
3	In this level the engine delivers the least engine brake. This level is recommended to any rider requiring very low engine braking in deceleration.	It is the default level for the WET Riding Mode.

Tips on how to select the sensitivity level

## Warning

Excellent operation of the EBC system, for all available levels, is ensured only with OE tyres and/or with the ones recommended by Ducati and with the OE final drive ratio. In particular, OE tyres for this motorcycle are Pirelli Diablo Supercorsa SP in the following sizes: 120/70ZR17 at the front, 200/55ZR17 at the rear. The use of tyres of different size and characteristics to the original tyres may alter the operating characteristics of the system thus making it unsafe. It is recommended not to install tyres of different size than the ones approved for your vehicle.

As far as tyres are concerned, in the case of minor differences such as, for example, tyres of a different make and/or model than the OE ones, it is necessary to use the relevant automatic calibration function in order to restore correct system operation. As far as the final ratio is concerned, when using a different ratio (which only possible for tracing use) than the original equipment one, it is recommended to use the relevant automatic calibration function n order to restore optimal system operation. Selecting level 3, the EBC will kick in to ensure the minimum engine brake possible. Between level 3 and level 1 the engine brake is increasing progressively; with EBC OFF you set the maximum engine brake possible.

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

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

### Level depends on grip conditions

The choice of level setting depends greatly on the grip conditions of the track/path.

Level depends on type of track/path

If the track/path requires consistent braking (always aggressive or always smooth), it will be easier to find a level suitable for all braking instances; while a track/ path requiring different braking power will require an EBC level setting that is the best compromise for all instances.

## DWC

The instrument panel displays DWC status as follows:

- if DWC is active, DWC lettering and the currently set Wheelie Control intervention level number (1 to 8) (steadily);
- if DWC is active, but system is in degraded operation due to a fault, DWC lettering and the DWC intervention level number, 1 to 8 (flashing); also the DTC/DWC warning light starts flashing;
- if DWC is disabled, DWC OFF lettering and DTC/ DWC warning light steady on: if DWC is disabled, also DTC feature is disabled;
- if DWC or the Black Box control unit features an error, the message DWC ---; the DTC/DWC warning light and EOBD warning light or Generic Error warning light turn on and the relevant error is displayed.

# Warning

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



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

## **Warning**

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

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

elements help the rider control the motorcycle, making it as easy and safe to ride as possible. The presence of an active safety system should not encourage the rider to ride at speeds beyond the reasonable limits, not in accordance with the road conditions, the laws of physics, good riding standards and the requirements of the road traffic code. The following table indicates the most suitable level of DWC intervention for the various riding types as well as the default settings in the "Riding Mode" that can be selected by the rider:

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

DWC	USE		DEFAULT
6	SPORT	Level for all kinds of riders. The system reduces the motorcycle's proneness to do wheelies and sensitively intervenes in case of wheelie.	NO
7	MEDIUM SAFE & STA- BLE	Level for all kinds of riders. The system reduces the motorcycle's proneness to do wheelies and sensitively intervenes in case of wheelie.	NO
8	HIGH SAFE & STABLE	Level for all kinds of riders. The system reduces the motorcycle's proneness to do wheelies to a minimum level and sensitively intervenes in case of wheel- ie.	It is the default level for the "WET" Riding Mode

Tips on how to select the sensitivity level

# **Warning**

Excellent operation of the DWC system, for all available levels, is ensured only with the OE final drive ratio and with OE tyres and/or with the ones recommended by Ducati. In particular, OE tyres for this motorcycle are Pirelli Diablo Supercorsa SP in the following sizes: 120/70ZR17 at the front, 200/55ZR17 at the rear. The use of tyres of different size and characteristics to the original tyres may alter the operating characteristics of the system thus making it unsafe. It is recommended not to install tyres of different size than the ones approved for your vehicle.

The DWC level 1 setting has been optimised using the tyres with SC1 compound (Pirelli Diablo Supercorsa SC1) that are not those originally supplied with your motorcycle. The use of this level with tyres having different characteristics may alter the operating characteristics of the system. As far as tyres are concerned, in the case of minor differences, such as for example, tyres of a different make and/or model than the OE ones, but with the same size (rear = 200/55 ZR17; front = 120/70 ZR17),

it is necessary to use the relevant automatic calibration function in order to restore correct system operation.

As far as the final ratio is concerned, when using a different ratio (which only possible for tracing use) than the original equipment one, it is recommended to use the relevant automatic calibration function n order to restore optimal system operation. At level 8 the DWC system reduces the motorcycle's proneness to do wheelies to a minimum level and sensitively intervenes in case of wheelie. Between level 8 and level 1 there are further intermediate levels of intervention for the DWC. Levels 1, 2 and 3 allow easier wheelies, but reduce their speed: these levels are recommended only for track use and for expert riders who can control wheelies on their own and exploit the system feature that reduces the speed at which the front wheel tends to lift. The choice of the correct level mainly depends on the following parameters:

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

The rider's experience

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

Level depends on type of track/path

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

Tips for use on the track

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

Tips for use on the road

Activate the DWC, select level 8 and ride the motorcycle in your usual style; if the level of DWC sensitivity seems excessive, try levels 7, 6, etc., until you find the one that suits you best.

If changes occur in the circuit characteristics, and the level setting is no longer suitable, switch to the next

level up or down and proceed to determine the best setting (e.g. if with level 7 the DWC intervention seems excessive, switch to level 6; alternatively, if on level 7 you cannot perceive any DWC intervention, switch to level 8).

# ABS

The motorcycle is equipped with ABS, the instrument panel displays the rectangle with ABS status. The instrument panel displays:

- if the ABS is active, the message ABS with the \_ set intervention level number (1 to 3) (steadily):
- if ABS is active, but system is in degraded operation due to a fault (no "cornering" feature"), ABS lettering and the ABS intervention level number, 1 to 8 (flashing); also the ABS warning light starts flashing:
- if ABS is disabled, ABS OFF indication and ABS light turns steady on;
- if ABS is in fault, ABS --- message; ABS (steadily) and Generic Error lights turn on and the corresponding error is displayed.

# Note

The ABS 1 indication is always displayed together with the ABS FRONT ONLY icon on amber background. Such indication is displayed in the side stand status indication with the latter having the priority.



Warning

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


Using the brakes correctly under adverse conditions is the hardest – and yet the most critical - skill to master for a rider. Braking is one of the most difficult and dangerous moments when riding a two wheeled motorcycle: the possibility of falling or having an accident during this difficult moment is statistically higher than any other moment. A locked front wheel leads to loss of traction and stability, resulting in loss of control.

The Anti-Lock Braking System (ABS) has been developed to enable riders to use the motorcycle braking force to the fullest possible amount in emergency braking or under poor pavement or adverse weather conditions.

ABS is an electro-hydraulic device that controls the pressure in the brake circuit when the control unit, by processing information from wheel sensors, determines that one or both wheels are about to lock up. In this case, pressure decrease in the brake circuit allows the wheel to carry on turning, thereby preserving grip. After that, the control unit restores the pressure in the brake circuit, to resume the braking action. This cycle is repeated many times until the problem is completely eliminated. Normally, the rider will perceive ABS operation as a harder feel or a pulsation of the brake lever and pedal. The front and rear brakes use separate control systems. The Panigale R ABS also features a "cornering" function that widens ABS functionality to the conditions where the motorcycle is leaning over, thus controlling the front and rear brake systems depending on the vehicle lean angle with the purpose of preventing wheel lockup and slipping as much as possible, within the physical limits allowed by the vehicle and by the road conditions.

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

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

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

ABS	RIDING MODE	CHARACTERISTIC	DEFAULT
OFF		The ABS is disabled	NO
1	TRACK	This level is designed exclusively for track use, for expert riders (not recommended for road use). ABS in this level only controls the front wheel, and thus allows rear wheel lockup. The system in this level does NOT control lift-up and the cornering feature is NOT active.	It is the default level for the "RACE" Riding Mode
2	SPORT	This level is designed for use when riding on the road and on the track, with good grip conditions. ABS in this level controls both wheels and the cornering function is active. In this level system does NOT control lift- up: this calibration focuses on braking pow- er and wheel lift-up should be managed by the rider.	It is the default level for the "SPORT" Riding Mode

ABS	RIDING MODE	CHARACTERISTIC	DEFAULT
3	SAFE & STABLE	This level is designed for use in any riding conditions to provide a safe and consistent braking action. ABS in this level controls both wheels and the cornering and anti-lift- up functions are active.	It is the default level for the "WET" Riding Mode

Tips on how to select the sensitivity level

#### Warning

Excellent operation of the ABS system, for all available levels, is ensured only with the OE brake system and with OE tyres and/or with the ones recommended by Ducati. In particular, OE tyres for this motorcycle are Pirelli Diablo Supercorsa SP in the following sizes: 120/70ZR17 at the front, 200/55ZR17 at the rear. The use of tyres of different size and characteristics to the original tyres may alter the operating characteristics of the system thus making it unsafe. It is recommended not to install tyres of different size than the ones approved for your vehicle.

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

Selecting level 2, the ABS will privilege more and more the braking power rather than stability and lift-

up control, which is disabled in level 2. ABS level 2 features active cornering function which, with vehicle leaning over, prevents wheel lockup and slipping as much as possible, within the physical limits allowed by the vehicle and by the road conditions.

ABS level 1 is specific for track use and ABS is active only on the front wheel to help performance. In this level there is no lift-up control nor cornering feature.

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

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

#### Menu 1 functions

For each of the three riding modes (Race, Sport and Wet) MENU 1 functions can be displayed in one of the following two layouts or modes:

- ROAD;
- TRACK.

Available functions are:

- Odometer (TOT);
- Trip meter 1 (TRIP1);
- Trip meter 2 (TRIP2);
- Partial fuel reserve counter (TRIP FUEL);
- LAP time (if active) only for TRACK mode;
- Leaning angle (LEAN ANGLE) (if active) only for TRACK mode.



### Menu 1: Odometer (TOT)

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

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

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

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

# Note

Upon Key-ON, the instrument panel always shows the Odometer indication for 10 seconds, then shows the user's settings page.

# Note

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



#### Menu 1: Trip meter 1 (TRIP 1)

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

The TRIP1 number (in km or miles) is displayed with the message TRIP1 and the indication of the unit of measurement.

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

While the trip meter is displayed, press button (1) for 3 seconds to reset TRIP 1. When TRIP1 is reset, the average fuel consumption, average speed and trip time data are reset as well.

The TRIP1 counter is automatically reset in case the system unit of measurement is changed manually: the counter will then start back from zero, considering the new units of measurement.



#### Menu 1: Trip meter 2 (TRIP 2)

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

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

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

While the trip meter is displayed, press button (1) for 3 seconds to reset TRIP 2.

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



Menu 1: Partial fuel reserve counter (TRIP FUEL)

The fuel trip meter counts and displays the distance covered by the motorcycle on reserve (since the low fuel light turns on) with the set unit of measurement (km or mi).

When the Low Fuel Light turns on, the display automatically shows the TRIP FUEL function, regardless of the currently displayed function; then, it is possible to toggle through the other Menu functions.

Trip fuel reading remains stored even after Key-Off until the motorcycle is refuelled. Count is interrupted automatically as soon as fuel is topped up to above minimum level.

The number (km or miles) is displayed with the message "TRIP FUEL" and the indication of the unit of measurement.

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

When the TRIP FUEL function is not active, the corresponding value will not be displayed in the Menu.



Menu 1: Lap time (LAP time)

The LAP function is only available for the displaying with the standard screen in TRACK mode. LAP function information is available when the function is active. When selecting screen view in TRACK mode, the LAP function is displayed automatically: it is always possible to later view the other Menu 1 options. Upon activation of the LAP function, the display shows the timer with the first indication "0'00''00" and the LAP number with the first indication "LAP – –".

Upon the first press on FLASH button (3) the timer starts with a resolution of one tenth of a second ("0'00''0") and the screen displays the current LAP number. Upon any further press on the FLASH button (3), the just ended lap number and time are displayed temporarily followed by current lap timer and number: even if the "LAP" function is not displayed, the lap is displayed for 5 seconds all the same and then the selected function will be displayed (e.g. LEAN).

If lap timer is active but motorcycle is at standstill, lap timer is temporarily stopped after 5 seconds and it is displayed with the initial indication "0'00"'00" and the LAP number "LAP – ". The next time rider pushes the FLASH button (3), lap timer is reactivated.



#### Note

When the LAP function is active, the FLASH button takes on the dual function of high beam "FLASH" and LAP timer start / stop (new lap start indication).

#### O Note

The TRIP FUEL function always has top priority over the LAP function: in case of activation of the TRIP FUEL function with active LAP function, the LAP timer view is automatically removed and TRIP FUEL information is displayed instead.

#### LAP recording

If the LAP function is active, it is possible to record the lap time, for a total of 30 consecutive laps. Operation:

- When the FLASH button (3) is pressed for the first time, the instrument panel displays the timer with resolution of a tenth of a second (0'00''0);

- upon any further press on the FLASH button (3), the just ended lap number and time are displayed for 5 seconds with a resolution of one hundredth of a second: even if the "LAP" function is not displayed, the lap is displayed for 5 seconds all the same and then the selected function will be displayed (e.g. LEAN);
- after these 5 seconds, the instrument panel goes back to lap timer page referred to the new current lap.
- the next time rider pushes the FLASH button (3) or any equivalent command, lap timer is reactivated.

If the time is never stopped, it will roll over upon reaching 9 minutes, 59 seconds and 99 hundredths; the lap timer starts counting from zero and will keep running until the lap is stopped or the recording function is disabled.

Laps are numbered from 01 to 30 and are in a loop: after the first 30 laps the instrument panel will overwrite information starting from Lap 01. If the LAP function is interrupted (switching to ROAD screen or temporary disabling or key-off) and then reactivated (going back to TRACK screen or reactivation or key-on), but memorised laps are not deleted, lap information will be recorded by overwriting data of the oldest Lap. Example: if you rode 34 laps without deleting data, the instrument panel stores the first 30 laps and then overwrites the first 4 laps. Upon the following Key-ON or reactivation of the LAP function, if no data were deleted, the instrument panel will continue storing data from Lap 05.

During every lap, the following data are stored:

- no. 30 lap times (time between consecutive start and stop);
- no. 30 values for max. RPM (maximum RPM value reached in every lap);
- no. 30 values for max. speed (maximum speed value reached in every lap);
- no. 30 values for lean angle (maximum lean angle reached on the right and on the left).

#### Menu 1: LEAN ANGLE

The LEAN ANGLE function is only available for the displaying with the standard screen in TRACK mode. The information about the LEAN ANGLE function, if active, is available under Menu 1. Thanks to the LEAN ANGLE function, the instrument panel can display the real-time lean angle of the motorcycle. Negative reading corresponds to lean angle on the left (from riding position) and positive reading corresponds to lean angle on the right.

## Note

The TRIP FUEL function always has top priority over the LEAN ANGLE function: in case of activation of the TRIP FUEL function with active LEAN ANGLE function, the LEAN ANGLE view is automatically removed and TRIP FUEL information is displayed instead.



#### MENU 2 functions

For each of the three riding modes (Race, Sport and Wet) MENU 2 functions can be displayed in one of the following two layouts or modes:

- ROAD
- TRACK

Available functions are:

- Engine Coolant temperature
- Instantaneous fuel consumption (CONS.)
- Average fuel consumption (CONS. AVG)
- Average speed (SPEED AVG)
- Trip time (TRIP TIME)
- Ambient air temperature



#### MENU 2: Coolant temperature

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

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

- <= (lower than or equal to) -40 °C, a string of flashing dashes " - - - " is displayed;
- within the range -39 °C to +39 °C, "LOW" is displayed steadily;
- within the range +40 °C to +120 °C, the value is displayed steadily;
- >= (higher than or equal to) +121 °C, "HIGH" is displayed flashing.



If engine coolant temperature exceeds:

- 100 °C, temperature value is immediately displayed in MENU 2, regardless of any other function displayed in MENU 2; it is still possible to view the other MENU 2 functions;
- 121 °C, temperature value is immediately displayed in MENU 2, regardless of any other function displayed in MENU 2; it is not possible to view the other MENU 2 functions. The alarm icon is also displayed.

If the coolant temperature sensor is in fault, a string of flashing dashes "---" is displayed with the set unit of measurement; the EOBD light turns on together with the error ENGINE TEMP. SENSOR. If the instrument panel is not receiving coolant temperature value, a string of steady dashes "---" is displayed, followed by the unit of measurement.



#### MENU 2: Instantaneous fuel consumption

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

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

#### 

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



#### MENU 2: Average fuel consumption

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

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

When TRIP1 is reset, the value is reset and the first value available is displayed 10 seconds after the reset.

During the first 10 seconds, when the value is not yet available, the display will show a string of three

dashes "--.-" steadily as average fuel consumption. Value is expressed in the set unit of measurement (litres / 100 km or mpg UK or mpg USA).

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



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

#### MENU 2: Average speed

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

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

When TRIP1 is reset, the value is reset and the first value available is displayed 10 seconds after the reset.

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

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

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



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

#### MENU 2: Trip time

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

When the reading exceeds 720:00 (720 hours and 00 minutes), the meter is reset and automatically starts counting from 0 again.



#### Note

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



#### MENU 2: Air temperature

The instrument panel displays the ambient temperature in the set unit of measurement (°C or °F), followed by the set unit of measurement, the message AIR and the thermometer symbol. The temperature value is displayed when ranging from -39 °C to +124 °C (or -38 °F  $\div$  +255 °F). For any different temperature (below -39 °C or above +124 °C) a string of three dashes "---" is steadily displayed, followed by the unit of measurement.

### Note

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



If the air temperature sensor is in fault, the instrument panel will show three flashing dashes " --- " as air temperature value, followed by the unit of measurement, the EOBD light will turn on and the corresponding error (T AIR SENSOR) is displayed. If the instrument panel is not receiving air temperature value, a string of three steady dashes "- - -" is displayed, followed by the unit of measurement.



# Auxiliary functions DDA

The instrument panel indicates DDA status only if the motorcycle fits the DDA.

If the message "DDA" is displayed it means that the DDA is active and recording.

If the message "DDA" is not displayed it means that the DDA is not active.



## CLOCK

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

Time is indicated in the top left-hand corner of the display.

The instrument panel shows the time in the following format:

hh (hours) : mm (minutes)

followed by a.m. (from 0:00 to 11:59) or p.m. (from 12:00 to 12:59 and from 1:00 to 11:59).

If the instrument panel does not receive current time information, it displays "--:--a.m." steadily.



#### Service warning (SERVICE)

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

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

Icon display follows the displaying procedure of Warnings/Alarms (refer to "page 109").



#### Zero OIL SERVICE warning

The first service warning is the OIL SERVICE zero and is triggered as soon as the odometer reaches the first 1,000 km. Warning is displayed in the "large" size and then continues being displayed in the small size until "Reset" by the Ducati authorised service centre, during maintenance.

Icon display follows the displaying procedure of Warnings/Alarms (refer to "page 109").



# The message "OIL SERVICE" or "DESMO SERVICE" countdown

After OIL SERVICE zero first reset (at 1,000 km), the instrument panel activates the countdown of the kilometres (or miles) left before the following service operation (OIL SERVICE or DESMO SERVICE). The green "large" indication is shown upon Key-ON for 2 seconds; when there are 1,000 km left before the next service operation, the indication turns yellow and is enabled upon every Key-ON for 5 seconds. Icon display follows the displaying procedure of Warnings/Alarms (refer to "page 109").


# OIL SERVICE or DESMO SERVICE warning

When the service threshold is reached, the warning for the type of service required is triggered (OIL SERVICE or DESMO SERVICE).

The service warning is triggered upon every Key-On for 5 seconds and is displayed in the "large" size, and then continues being displayed in the small size until "Reset" by the Ducati authorised service centre, during maintenance.

Icon display follows the displaying procedure of Warnings/Alarms (refer to "page 109").



#### Warnings/Alarms (Warning)

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

Upon Key-On, if there are any active warnings, the instrument panel displays the present warnings.

During normal use, whenever a warning is triggered, the instrument panel automatically displays the warning. Whenever a warning is triggered, it is displayed for 5 seconds in a (well-visible icon) "large" size and then continues being displayed in the small size ("small" icon).

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

When warnings are activated, no warning light will come on.

High engine coolant temperature (High temperature)

This function warns the rider when engine coolant temperature reaches 121°C (250°F).



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



#### DDA memory full (DDA full)

This function warns the rider when DDA memory is full and no more trip data can be stored.



#### lce

This function warns the rider when there might be ice on the road, due to the low external temperature. This warning turns on when temperature drops to  $4^{\circ}C$  ( $39^{\circ}F$ ) and turns off when temperature raises to  $6^{\circ}C$  ( $43^{\circ}F$ ).

# Warning

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



#### Error indication

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

Upon Key-On, in case of errors, the instrument panel displays any errors present and turns on the EOBD light (Fig. 47) (in case of errors directly connected to the engine control unit) or the Generic Error light (Fig. 48) (in case of any other errors).

During normal operation, when an error is triggered, the instrument panel automatically displays the error present and turns on the EOBD light or the Generic Error light.

Whenever an error is triggered, it is displayed for 5 seconds in a (well-visible icon) "large" size and then continues being displayed in the small size ("small" icon).



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

When an error is triggered, the EOBD light or the Generic Error light turns on as well: the table below specifies the warning light corresponding to each error.

## Warning

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



### Displayed error description

Displayed error	Description	Warning light
CAN LINE	N LINE BUS Off	
BBS	BBS/DTC operation generic failure	Generic error
	EXVL driver error	Generic error
	EXVL potentiometer error	Generic error
BBS + FAN	CAN node malfunction	Generic error
	CAN node absent	Generic error
GEAR SENSOR Gear sensor operation failure		Generic error
FUEL SENSOR Reserve NTC sensor operation failure		Generic error
SPEED SENSOR	Rear speed sensor operation failure	Generic error
	Front speed sensor operation failure	Generic error
BATTERY	High or low battery voltage	Generic error
UNKNOWN DEVICE	CAN node not compatible	Generic error
DSB	CAN node absent or malfunction	Generic error
ABS	CAN node absent or malfunction	Generic error
STOP LIGHT	Stop light failure	Generic error
ENGINE	Throttle position sensor failure	EOBD
	Throttle grip position sensor failure	EOBD

Displayed error	Description	Warning light
	Throttle motor or relay failure	EOBD
	Pressure sensor failure	EOBD
	Engine coolant temperature sensor failure	EOBD
	Intake duct air temperature sensor failure	EOBD
	Injection relay failure	EOBD
	Ignition coil failure	EOBD
	Injector failure	EOBD
	Engine rpm sensor failure	EOBD
	Lambda sensor or Lambda sensor heater failure	EOBD
	ECU operation generic failure	EOBD
	Motorcycle starting relay failure	EOBD
	Secondary air sensor operation failure	EOBD
	Quick shift device switch operation failure	EOBD
	CAN node absent or malfunction	EOBD
	Atmospheric pressure sensor failure	EOBD
FAN	Electric cooling fan failure	Generic error
E-LOCK	E-Lock operation generic failure	Generic error
	(Immobilizer) key-antenna operation failure	Generic error

Displayed error	Description	Warning light
	CAN node absent or malfunction	Generic error
SIDE STAND	Side stand sensor operation failure Generic	
INERTIAL SENSOR	CAN node absent or malfunction	Generic error
	Inertial platform control unit operation failure	Generic error
DEVICE DDA	CAN node malfunction Generic erro	

Note The message "FAN" can be displayed also in case of BBS control unit malfunction and its faulty com-

Error icons table

WARNING LIGHT / ERROR MESSAGE		ERROR
	ABS	ABS control unit
	BBS	Black-Box control unit
	DSB	Instrument panel control unit
	E-LOCK	E-LOCK control unit
	CAN LINE	Can Bus OFF
	UNKNOWN DEVICE	Software compatibility
	FUEL SENSOR	Low fuel sensor
	INERTIAL SENSOR	Inertial Measurement Unit
	GEAR SENSOR	Gear sensor
	SIDE STAND	Side stand sensor

WARNING LIGHT / ERROR MESSAGE		ERROR
	STOP LIGHT	Rear stop light
	BATTERY	Battery voltage
Ö	ENGINE	Engine control unit
	SPEEDSENSOR	Speed sensor
	FAN	Cooling fan



Note The message "FAN" can be displayed also in case of BBS control unit malfunction and its faulty com-

#### Side stand status display

The instrument panel receives information on side stand status and if side stand is down/open, the message "SIDE STAND" is displayed on a red background.

If side stand Sensor error is present, the instrument panel displays stand down/open warning, turns on the Generic Error light and displays the corresponding error "Side stand sensor".

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



# Setting MENU

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

To enter the Setting MENU it is necessary to hold button (2) for 3 seconds, with Key-ON and motorcycle actual speed (lower than or equal to) 20 km/h: within this menu, it is no longer possible to view any other function.

The Setting MENU displays the following functions:

- RIDING MODE
- RPM
- BATTERY
- DDA
- PIN CODE
- CLOCK
- DATE
- BACK LIGHT
- UNITS
- LAP (only active for "TRACK" display layout)



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

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

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

To quit the Setting MENU you shall highlight "EXIT" and press CONFIRM MENU button 4.



#### **Customising Riding Modes**

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

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

Enter the "RIDING MODE" Menu. Select the desired riding mode (RACE, SPORT or WET), by pressing button (1) or (2). Once the desired mode is highlighted, press CONFIRM MENU button (4). You open the selected riding mode customisation Menu. It is also possible to restore Ducati factory settings for all the Riding Modes, using the DEFAULT button. While if you highlight "EXIT" and press button (4) you quit the sub-menu and go back to previous page.





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

- ABS
- EBC
- DWC (active only when DTC is not set to OFF)
- DISPLAY
- DQS
- DTC
- ENGINE
- DEFAULT

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

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

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

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

# Marning

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

### Important

DES parameter is not active in the versions of this motorcycle.



# Riding mode customisation: ABS adjustment

This function disables or sets ABS level for the selected riding mode. You enter the Setting MENU. Select "RIDING MODE" option, by pressing button (1) or (2).

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

Enter the "RIDING MODE" Menu. Select the desired riding mode (RACE, SPORT or WET), by pressing button (1) or (2).

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



When entering the function, the currently set ABS level or status is indicated on the left (e.g.: ABS 1). Customisation options are indicated on the right: levels 1 to 3 and status OFF.

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

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



To save the new setting, hold button (4) for 3 seconds while the message MEMORY is highlighted in orange. If storage is successful, MEMORIZED will be highlighted in green for 1 second, level number or status will be refreshed (update is indicated in green) and then EXIT will be highlighted in green. To exit the menu and go back to previous page, select

EXIT and press button (4).

# Note

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



# Customising Riding Modes: Display setting

This function allows the rider to select the main screen layout associated with every riding mode.

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

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

Enter the "RIDING MODE" Menu. Select the desired riding mode (RACE, SPORT or WET), by pressing button (1) or (2).

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

You open the selected riding mode customisation Menu.

Select the parameter to be customised (DISPLAY), by pressing button (1) or (2).

Once the desired parameter is highlighted, press CONFIRM MENU button (4).



When entering the function, currently set layout is indicated on the left. Customisation options are listed on the right: ROAD and TRACK.

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

Once the desired main screen layout is highlighted, press CONFIRM MENU button (4) to highlight MEMORY.

To save the new setting, hold button (4) for 3 seconds while the message MEMORY is highlighted in orange.

If storage is successful, MEMORIZED will be highlighted in green for 1 second, main screen layout will be refreshed (update is indicated in green) and then EXIT will be highlighted in green.

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



Customising Riding Modes: DQS enable/ disable

DQS customisation page is only available on motorcycles fitted with DQS.

This function disables or enables the DQS for the selected riding mode.

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

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

Enter the "RIDING MODE" Menu. Select the desired riding mode (RACE, SPORT or WET), by pressing button (1) or (2).

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

You open the selected riding mode customisation

Menu. Select the parameter to be customised (DQS), by pressing button (1) or (2).

Once the desired parameter is highlighted, press CONFIRM MENU button (4).



When entering the function, the currently set DQS status is indicated on the left (e.g.: DQS ON).

On the right-hand side is the list of possible customisation options: status UP, status UP-DOWN and status OFF.

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

Once the desired status is highlighted, press CONFIRM MENU button (4) to highlight MEMORY.

To save the new setting, hold button (4) for 3 seconds while the message MEMORY is highlighted in orange.

If storage is successful, MEMORIZED will be highlighted in green for 1 second, set status will be refreshed (update is indicated in green) and then EXIT will be highlighted in green.

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



Customising Riding Modes: DTC level setting

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

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

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

Enter the "RIDING MODE" Menu. Select the desired riding mode (RACE, SPORT or WET), by pressing button (1) or (2).

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

You open the selected riding mode customisation Menu.

Select the parameter to be customised (DTC), by pressing button (1) or (2).

Once the desired parameter is highlighted, press CONFIRM MENU button (4).



When entering the function, the currently set DTC level or status is indicated on the left (e.g.: DTC 3). Customisation options are indicated on the right: levels 1 to 8 and status OFF.

Press buttons (1) and (2) to highlight the levels one by one: in particular, use button (1) to highlight the following item and button (2) to highlight the previous item. Once the desired level is highlighted, press CONFIRM MENU button (4) to highlight MEMORY. To save the new setting, hold button (4) for 3 seconds while the message MEMORY is highlighted in orange.

If storage is successful, MEMORIZED will be highlighted in green for 1 second, level number or status will be refreshed (update is indicated in green) and then EXIT will be highlighted in green. To exit the menu and go back to previous page, select EXIT and press button (4).



## Customising Riding Modes: Engine setting

This function customises engine power associated with each riding mode.

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

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

Select the desired riding mode (RACE, SPORT or WET), by pressing button (1) or (2). Once the desired mode is highlighted, press CONFIRM MENU button (4).

You open the selected riding mode customisation Menu.

Select the parameter to be customised (ENGINE), by pressing button (1) or (2). Once the desired parameter is highlighted, press CONFIRM MENU button (4).



When entering the function, currently set engine power is indicated on the left (e.g.: ENGINE HIGH). Customisation options are listed on the right:

- HIGH, MED, LOW.



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

Once the desired power level is highlighted, press CONFIRM MENU button (4) to highlight MEMORY. To save the new setting, hold button (4) for 3 seconds while the message MEMORY is highlighted in orange.

If storage is successful, MEMORIZED will be highlighted in green for 1 second, power level will be refreshed (update is indicated in green) and then EXIT will be highlighted in green.

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



Customising Riding Modes: EBC level setting

This function disables or sets the rear wheel antilocking system (EBC) level for every single riding mode.

You enter the Setting MENU.

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

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

Enter the "RIDING MODE" Menu.

Select the desired riding mode (RACE, SPORT or WET), by pressing button (1) or (2).

Once the desired mode is highlighted, press

CONFIRM MENU button (4). You open the selected riding mode customisation Menu. Select the

parameter to be customised (EBC), by pressing

button (1) or (2). Once the desired parameter is

highlighted, press CONFIRM MENU button (4).



When entering the function, the currently set EBC level or status is indicated on the left (e.g.: EBC 1). Customisation options are indicated on the right: levels 1 to 3 and status OFF. Press buttons (1) and (2) to highlight the levels one by one: in particular, use button (1) to highlight the following item and button (2) to highlight the previous item. Once the desired level is highlighted, press CONFIRM MENU button (4) to highlight MEMORY.

To save the new setting, hold button (4) for 3 seconds while the message MEMORY is highlighted in orange. If storage is successful, MEMORIZED will be highlighted in green for 1 second, level number or status will be refreshed (update is indicated in green) and then EXIT will be highlighted in green.

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


Riding style customisation: DWC level setting

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

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

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

Enter the "RIDING MODE" Menu. Select the desired riding mode (RACE, SPORT or WET), by pressing button (1) or (2).

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

You open the selected riding mode customisation Menu.

Select the parameter to be customised (DWC), by pressing button (1) or (2).

Once the desired parameter is highlighted, press CONFIRM MENU button (4).



Note If DTC is set to OFF, also the DWC is automatically disabled and it will not be possible to gain access to the corresponding setup page.

When entering the function, the currently set DWC level or status is indicated on the left (e.g.: DWC 3). Customisation options are indicated on the right: levels 1 to 8 and status OFF.

Press buttons (1) and (2) to highlight the levels one by one: in particular, use button (1) to highlight the following item and button (2) to highlight the previous item. Once the desired level is highlighted, press CONFIRM MENU button (4) to highlight MEMORY. To save the new setting, hold button (4) for 3 seconds while the message MEMORY is highlighted in orange.

If storage is successful, MEMORIZED will be highlighted in green for 1 second, level number or status will be refreshed (update is indicated in green) and then EXIT will be highlighted in green.

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



# Customising Riding Modes: Restore default settings

This function allows restoring the default values set by Ducati for the parameters relating to each riding mode. You enter the Setting MENU. Select "RIDING MODE" option, by pressing button (1) or (2). Once function is highlighted, press CONFIRM MENU button (4). Enter the "RIDING MODE" Menu. Select the desired riding mode (RACE, SPORT or WET), by pressing button (1) or (2). Once the desired mode is highlighted, press CONFIRM MENU button (4). You open the selected riding mode customisation Menu. Select the parameter to be customised (DEFAULT), by pressing button (1) or (2). Once the desired parameter is highlighted, press CONFIRM MENU button (4).



It will take 3 seconds to restore parameters, during which PLEASE WAIT... will appear on the display. Once procedure is completed, DEFAULT OK will appear for 2 seconds to confirm that default parameters have been restored.

The display then automatically goes back to riding mode customisation menu first page, with EXIT option highlighted.

To quit the menu and go back to Setting Menu main page, select EXIT and press button (4).

# Engine rpm digital indication (RPM)

This function displays the number of RPM in digital format (recommended for improved accuracy when setting idle rpm).

You enter the Setting MENU.

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

You open the "RPM" Menu. The display shows the numerical value of the engine rpm with a precision of 50 rpm.

If the instrument panel is not receiving RPM value, a string of five steady dashes "----" is displayed to indicate an undefined reading.

To quit the menu and go back to Setting Menu main page, select EXIT and press button (4).





#### Battery voltage

This function allows you to check the motorcycle battery voltage. You enter the Setting MENU. Select "BATTERY" option, by pressing button (1) or (2). Once function is highlighted, press CONFIRM MENU button (4). You open the "BATTERY" Menu. The information will be displayed as follows:

- if battery voltage is below 11.0 V, a flashing message LOW is displayed with the battery icon on a red background;
- if battery voltage is between 11.0 V and 11.7 V the reading will be displayed flashing with the battery icon on a red background;
- if battery voltage is between 11.8 V and 14.9 V the reading will be displayed steadily with the battery icon on a standard background;
- if battery voltage is between 15.0 V and 16.0 V the reading will be displayed flashing with the battery icon on a red background;
- if battery voltage is over 15.0 V, a flashing message HIGH is displayed with the battery icon on a red background.



If the battery voltage error is present, the instrument panel will show three flashing dashes "---" as voltage value, followed by the unit of measurement, the Generic Error light will turn on and the corresponding error (BATTERY) is displayed.

If the instrument panel is not receiving battery voltage value, a string of three steady dashes "- - -" is displayed, followed by the unit of measurement. To quit the menu and go back to Setting MENU main page, select "EXIT" and press button (4).



# DDA

This function allows you to enable and disable the DDA, view the percentage of memory used and to delete data stored in the DDA memory.

The page for the DDA is only available when the device is fitted to the motorcycle.

You enter the Setting MENU. Select "DDA" option, by pressing button (1) or (2).

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

You open the "DDA" Menu.



#### DDA enabling/disabling

When entering the function, the currently set DDA status is indicated on the left (e.g.: DDA ON). Below this indication is the list of possible customisation options: status ON and status OFF. Press buttons (1) and (2) to highlight the available statuses one by one: in particular, use button (1) to highlight the following item and button (2) to highlight the previous item.

Once the desired status is highlighted, press CONFIRM MENU button (4) to confirm

The status indication will be refreshed with the newly set status (update is indicated in green).

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



#### Note

The DDA is automatically disabled by the instrument panel upon every Key-OFF.



#### Viewing/deleting the DDA memory

When entering the function, the current DDA memory status is indicated on the right as a percentage:

- when bar is empty and reads EMPTY, DDA memory is empty;
- when bar is partially coloured and a percentage is specified, DDA memory is full by the indicated percentage;
- when bar is completely coloured and reads FULL, DDA memory is completely full.

With DDA OFF, you can delete the memory. Select "ERASE" option, by pressing button (1) or (2).

Press CONFIRM MENU (4) for at least 3 seconds to confirm.

After 3 seconds, the instrument panel will show "PLEASE WAIT..." for as long as the deletion is completed (depending on the quantity of data to be deleted).

If deletion is successful, the instrument panel will read ERASE OK for 2 seconds and refresh the memory status displayed. If deletion is not successful, the instrument panel will still show memory used status. To exit the menu and go back to previous page, select "EXIT" and press button (4).

# Marning

If the DDA is set to "ON" the deletion is inhibited and you can not even select the ERASE option.



# Pin Code

This function makes it possible to "temporarily" turn on the motorcycle if the E-Lock system is not working (if steering lock is disengaged and the ELock system is in fault).

The PIN CODE is initially not present in the motorcycle, it must be activated by the user by entering his/her 4-digit PIN in the instrument panel, otherwise the motorcycle cannot be started temporarily in the case of a malfunction. To activate this function, refer to "Entering the PIN CODE" procedure.

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

In order to temporarily start the motorcycle in case of malfunction of the E-LOCK system, please refer to the "Vehicle Release" procedure.

## **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. Entering the PIN CODE

To activate the PIN CODE function and enter your own PIN CODE you must open the Setting MENU. Select "PIN CODE" option, by pressing button (1) or (2).

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

You open the "PIN CODE" menu.



When entering the function, the display shows the message INSERT PIN CODE followed by four green dashes "- - - -".

Entering the code:

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

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



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

To save the new setting, hold button (4) for 3 seconds while the message MEMORY is highlighted in orange.

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

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



# Changing the PIN CODE

To change the existing PIN CODE and activate a new one, you must open the Setting MENU. Select "PIN CODE" option, by pressing button (1) or (2). Once function is highlighted, press CONFIRM MENU button (4). You open the "PIN CODE" menu. When entering the function, the display reads OLD CODE with four dashes in green "----" and NEW CODE below that.

Entering the "old" code:

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

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



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

- if the PIN is not correct, the instrument panel displays WRONG for 3 seconds and then highlights the string of four dashes "----" for the OLD PIN to allow you to try again;
- if there is a problem during the PIN code check, the instrument panel displays ERROR for 3 seconds and then highlights the message EXIT;
- if the PIN code is correct, the instrument panel displays CORRECT for 3 seconds and then highlights the four dashes "----" of the NEW PIN.



Entering the "new" code:

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

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



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

To save the new setting, hold button (4) for 3 seconds while the message MEMORY is highlighted in orange.

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

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



# Clock setup

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

Once function is highlighted, press CONFIRM MENU button (4). You enter the "CLOCK SETTING" menu. When entering the function, available settings are indicated on the left: HOUR, MINUTE, AM / PM, while current time is indicated on the right (e.g.: 10 : 30 a.m.).



Setting the hours

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

Press button (1) to decrease hour value by 1 unit: 0,

11, ... 1, 0 for AM - 12, 11, .... 1, 12 for PM.

Press button (2) to increase hour value by 1 unit: 11, 0, 1... 11 for AM - 12, 1, ... 12 for PM.

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



Setting the minutes

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

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

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

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



#### Setting am/pm

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

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

Once you reach the value to be set, press CONFIRM MENU button (4) and the set value will stop flashing. To exit the menu and go back to previous page, select EXIT and press button (4).



## Note

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



CLO	OCK SETTING
HOUR	and the second sec
MINUTE	11:57 a.m.
AM/PM	
	(EXIT>>>)
	Fig. 90

## Setting the date

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

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

You enter the "DATE SETTING" Menu.

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

2012/01/27).



Year setting

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

Press button (1) to decrease year value by 1 unit: 2250, 2249, ... 2000, 2250.

Press button (2) to increase year value by 1 unit: 2000, 2001, ... 2250, 2000.

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



Month setting

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

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

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

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



Day setting

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

Once highlighted, press CONFIRM MENU button (4). Day value starts flashing.

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

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

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



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



Note

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

D	ATE SETTING
YEAR	
MONTH	2010/09/30
DAY	
	EXIT>>>
	Fig. 95

# Setting the display background

This function allows selecting the instrument panel backlighting.

You enter the Setting MENU. Select "BACKLIGHT" option, by pressing button (1) or (2). Once function is highlighted, press CONFIRM MENU button (4). You open the "BACKLIGHT" Menu. When entering the function, available backlighting options are indicated on the left: DAY, NIGHT, AUTO, and current option is highlighted.

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



Select DAY (day mode) to permanently set display "white" background for improved readability -

recommended in conditions of strong ambient light. Select NIGHT (night more) to permanently set display black background for dimmed visibility -

recommended in case of poor ambient light and/or at night.

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

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

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



# LAP

The LAPs previously stored using the "LAP

Recording" function (function of MENU 1, ref. to page 87) can be viewed on the display.

The information displayed is lap time, maximum rpm and top speed. Saved LAPs can also be deleted.



Displaying the stored Laps

To view the stored LAPs, you must enter the Setting  $\ensuremath{\mathsf{MENU}}$  .

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

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

You open the "LAP DATA".

When you enter the function, the following is displayed:

- The message LAP followed by the number of the LAP (e.g.: LAP 01);
- TIME followed by the recorded lap time;
- SPEEDMAX followed by the top speed reached during the lap;
- RPMMAX followed by the maximum RPM value reached during the lap;
- LEANMAX followed by L and maximum lean angle on the left, and by R and maximum lean angle on the right.

Press the buttons (1) and (2) to highlight stored LAPS one by one; in particular: use button (2) to view the next lap (laps are displayed in increasing order, i.e. LAP 01 ... LAP 02 ... LAP 03 ... LAP 30); and then highlight EXIT; use button (1) to view the previous lap

(laps are displayed in decreasing order, i.e. LAP 30 ... LAP 29 ... LAP 28 ... LAP 01); and then highlight EXIT. To exit the menu and go back to previous page, select EXIT and press button (4).

# 

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

# Note

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



Erasing stored Laps

To delete the stored LAPs, you must enter the Setting MENU.

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

The display shows the "LAP DATA" Menu with the stored LAPs.

Press button (4) to highlight the message ERASE ALL.

User must confirm deletion by pressing button (4) for 3 seconds.

After 3 seconds, the instrument panel display shows:

- ERASE LAP PLEASE WAIT... for 3 seconds;
- ERASE OK for 2 seconds to inform about the result of the deletion process.


Deletion is one single command that erases all stored laps.

After deletion, the Laps 01 to 30 are displayed with all parameters showing an indefinite value "-" (time = -' --'' -- , rpm = ---- , speed = ---, angles = L --° R --°).

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



# Setting the unit of measurement

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

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

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

You enter the "UNITS SETTING" Menu.



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

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

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



Setting the units of measurement: Speed

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

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

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

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

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



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

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

Setting the units of measurement: Temperature

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

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

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

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

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

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



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

- Engine coolant temperature and ambient air temperature.

Setting the units of measurement: Fuel consumption

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

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

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

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

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

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



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

- Instantaneous fuel consumption and Average fuel consumption.

Setting the units of measurement: Reset to automatic settings

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

Once function is highlighted, press CONFIRM MENU button (4) for 3 seconds. PLEASE WAIT... will be displayed for 3 seconds, then DEFAULT OK will be displayed for 2 seconds, and then the UNITS SETTING menu page with the EXIT option highlighted.

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



# Tyre Set-Up

If owners install different tyres than original equipment ones and yet belonging to the classes specified by Ducati, this function allows them to recalibrate the system. It also allows system correct recalibration of all controls (such as DTC DWC EBC) in case the owner changed front and rear sprocket ratio, so that all motorcycle control systems can consider these changes / variants and adapt their processing parameters accordingly.

From the Setting Menu, it is possible to start the teach-in procedure of the new rolling circumference and new final drive ratio or restore the default settings as established by Ducati for OEM outfit. To do this, you must enter the Setting MENU. Select TIRE SET-UP option, by pressing button (1) or (2). Once function is highlighted, press CONFIRM MENU button (4).

You open the TIRE SET-UP Menu.



Press buttons (1) and (2) to select START or DEFAULT: the latter can be selected only if the motorcycle is currently not set to the factory default configuration.

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



#### Teach-in procedure

When entering the function, the vehicle speed and gear engaged are indicated on the right, while the instructions on the required speed range and gear to be engaged to correctly carry out the procedure are displayed at the centre.

Speed range:  $48 \div 52$  km/h (and corresponding value in mph if set unit of measurement is mph) Gear: 2

The first page indicates READY in red at the top of the display to warn the rider that the system is ready for the calibration procedure.

When the rider complies with the required conditions of vehicle speed and gear displayed, system calibration will start and an orange IN PROGRESS message will be displayed at the top.

If procedure is successfully completed,

COMPLETED message in green will come on at the top of the display, and after a few seconds it will be automatically replaced with the main screen.



If it is not possible to start the procedure when the START is confirmed, after a few seconds the instrument panel will automatically highlight the option EXIT.

If an error or malfunction occurs during the calibration procedure, FAILED message in red will come on at the top of the display, and after a few seconds it will be automatically replaced with the main screen. The rider can abort the procedure both during the READY stage and during the IN PROGRESS stage, by pressing button (1) for 3 seconds. ABORTED message in red will come on at the top of the display, and after a few seconds it will be automatically replaced with the main screen.

The values shown in the pictures as required speed range and gear are just an example and shall not be considered as binding or corresponding to the ones actually set for the vehicle.





Restoring default settings

Open the TIRE SET-UP Menu.

Then use buttons (1) and (2) to select DEFAULT and keep button (4) pressed for 3 seconds.

For a few seconds the message PLEASE WAIT... will be on the display.

If the procedure for restoring the default settings is successful, DEFAULT OK will be displayed for 2 seconds and after a few seconds it will be automatically replaced with the main screen.



While, if the procedure for restoring the default settings is not successful, ABORTED will be displayed for 2 seconds and then the instrument panel will automatically display the main screen of the TIRE SET-UP menu with highlighted EXIT item.



# Display background colour

Instrument panel can automatically adjust display background colour based on ambient light. If BACKLIGHT – AUTO function is active, when sensor detects a "low ambient light" (night) it shifts to black background mode (NIGHT); while when a "significant" ambient light (day) is detected, it shifts to white background mode (DAY).

It is possible to customise this function through the Setting MENU, select "BACKLIGHT" and open the "BACKLIGHT" menu:

- permanently set either one of the two modes NIGHT or DAY, or
- set AUTO mode.

Refer to paragraph ("Display backlighting settingpage 174").



Note If power is above 16 V, backlighting is disabled, while if power is below 8 V, backlighting is turned off.

## Light control Low / High beam

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

At Key-On, the high beam and low beam lights are OFF, only the parking lights are turned on.

Once the engine is started, the low beam is turned on; with engine running the standard operation of the lights is restored: it is possible to switch on and OFF the high beam using button (1) in position (A), or flash using button (1) in position (B). If the engine is not started after Key-ON, it is still possible to turn on the low/high beam by pressing button (1) in position (A) on the left switch; press it once to turn on the low beam; any further time you press it you switch between low and high beam.



If engine is not started within 60 seconds since the button was first pressed, the low and high beam lights are turned OFF.

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

#### Turn indicators

Turn indicators are automatically reset by the instrument panel.

After activating one of the two turn indicators, user can reset them using the button (3, Fig. 116) on the left switch.

If the turn indicator is not reset manually, the instrument panel will automatically switch it off after the motorcycle has travelled 500 m (0.3 miles) from when the turn indicator was activated. The counter for the distance travelled for automatic deactivation is only activated at speeds below 80 km/h (50 mph). If the calculation of the distance for automatic deactivation is activated and then the motorcycle exceeds a speed of 80 km/h (50 mph), the calculation will be interrupted and will restart when the speed returns below the indicated threshold.

### Parking function

#### 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.

The "Parking" function activates the front and rear parking lights when the motorcycle is turned off, so it is visible when parked. The function is activated by pressing the button (5. Fig. 116) for 3 seconds during the first 60 seconds after the motorcycle was turned off (after Key-Off).

Once the function is activated, the icon PARKING is displayed for 3 seconds and the lights stay ON as long as the battery voltage is (higher than or equal to) 12.2 V. If voltage is < (below) 12.2 V the lights turn off automatically in order to save battery charge.



To interrupt the function, turn the motorcycle ON and OFF (Key-On / Key-Off).

Important

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

#### Hazard function

The "Hazard" function turns all four turn indicators on at the same time to signal an emergency condition. The "Hazard" function is activated by taking button (3) to position (6) for 3 seconds. Activation is only possible when motorcycle is ON (i.e. when key is turned to "ON" while engine status does not matter). When the "Hazard" function is active, all four turn indicators blink at the same time as well as warning lights (7) on the instrument panel. The "Hazard" function can be disabled both with motorcycle on (key set to "ON") - by taking button (3) to position (6) or by taking button (3) to its central position - and with motorcycle off (key set to OFF) by taking button (3) to position (6).



After activating the "Hazard" function, if motorcycle is switched OFF (key set to OFF), the function stays active until manually disabled by user or as long as battery voltage is (higher than or equal to) 12.2 V. When voltage drops < (below) 12.2 V the turn indicators switch OFF automatically in order to save battery charge.

# Note

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



### Note

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



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

# 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.

Accommodated in the handgrip of each ignition key is an electronic device that modulates an output signal. When the ignition is turned on this signal is generated by a special antenna incorporated in the switch and changes every time.

The modulated signal represents the "password" (which is changed at each start-up) by which the ECU recognizes the ignition key. The ECU will only allow the engine to start if it recognises this password.

## Keys

The owner receives 2 keys with the vehicle. These keys contain the "immobilizer system code". The keys (B) are regular ignition keys and are used to:

- start up the engine;
- open the fuel tank filler plug;
- open the seat lock.

# Warning

Separate the keys and use only one of the two to ride the bike.



## Operation

When the ignition key is turned to OFF, the immobilizer inhibits engine operation. If the other key does not work out either, contact the Ducati Service network.

Warning Strong impacts could damage the electronic components inside the key. During the procedure always use the same key. Using different keys may prevent the system from acknowledging the code of the inserted key.

## 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.

Note

ote

If the motorcycle owner changes, it is necessary that the new owner is given all keys.

Vehicle release through PIN CODE In case of key acknowledgement system or key malfunction, the instrument panel allows the user to enter his/her own PIN code to temporarily restore motorcycle operation. If the PIN CODE function is not active, the instrument panel does not activate the page for entering the release code, but shows the Standard screen instead, triggers the E-LOCK error to inform the user that there is a problem with key reading/acknowledgement and disables the opportunity to enter the Setting MENU. The E-LOCK error warning must remain active until next Key-OFF. If the PIN CODE function is active, the instrument panel activates the page for entering the release code and displays the message INSERT PIN CODE with a string of four green dashes " - - - - " under it.



Entering the code:

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

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



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

- if the PIN code is not correct, the instrument panel displays WRONG for 3 seconds and then highlights the string of four dashes "----" to allow you to try again. The number of possible attempts is determined by a preset time-out of 2 minutes. After this time, the instrument panel shows the Standard screen, triggers the E-LOCK error and disables the opportunity to enter the Setting Menu.
- If there is a problem during the PIN CODE check, the instrument panel displays ERROR for 3 seconds and then responds in the same way as for the WRONG error.
- If the PIN code is correct, the instrument panel displays CORRECT for 3 seconds and then shows the "Standard screen" and triggers the E-LOCK error to still show the user that there is a problem with key reading/acknowledgement.



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

# Controls

# Position of motorcycle controls

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

- 1) Instrument panel.
- 2) Key-operated ignition switch and steering lock.
- 3) Left switch.
- 4) Clutch lever.
- 5) Right switch.
- 6) Throttle twistgrip.
- 7) Front brake lever.
- 8) Rear brake pedal.
- 9) Gear change pedal.



Ignition switch and steering lock

It is located in front of the fuel tank and has four positions:

A) ON: enables lights and engine operation;B) OFF: disables lights and engine operation;C) LOCK: the steering is locked;

# Note

To move the key to the last position, press it down before turning it. The key can be removed in positions (B) and (C).



# Left-hand switch

 Dip switch, two-position light selector switch:
(A) every time it is pressed down the light switches from low beam on ( ID ) to low beam and high beam on;

(B) pushed to the side (  ${\tt I\!E\!O}$  ) high beam flasher (FLASH), "Start-Stop lap" function.

2) 3-position turn indicator switch ( 👄 ):

centre position = off;

position (  $\Leftrightarrow$  ) = left turn;

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

4) Button (  $\blacktriangleright$  ) = warning horn.

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

6) Navigation menu, display scroll button.


#### Clutch lever

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

#### Warning

Set clutch lever when motorcycle is stopped.



#### Important

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





#### Note

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

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

The switch (1) has three positions:

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



Fig. 128

#### Throttle twistgrip

The twistgrip (1) on the right handlebar opens the throttles.

When released, it will spring back to the initial position (idling speed).



#### Front brake lever

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

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

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



#### Rear brake pedal

Push down on the pedal (1) to apply the rear brake. The system is hydraulically operated.



#### Gear change pedal

When released, the gear change pedal (1) automatically returns to rest position N in the centre. This is indicated by the instrument panel N light coming on.

The pedal can be moved:

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

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



# Adjusting the position of the gearchange 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

Hold linkage (1) using the special flat (A) and loosen nut (2).

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

Tighten nut (2) onto linkage.



#### Rear brake pedal

Loosen lock nut (7).

Turn pedal stroke adjusting screw (6) until pedal is in the desired position. Tighten the lock nut (7). Operate the pedal (8) by hand to check that there is 1.5 to 2 mm of free play before the brake bites. If not, adjust the length of the master cylinder pushrod.

▲ Warning

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





# Main components and devices

Position on the vehicle

1) Tank filler plug.

2) Seat lock.

3) Side stand.

- 4) Rear-view mirrors.
- 5) Front fork adjusters.
- 6) Rear shock absorber adjusters.
- 7) Catalytic converter (both sides).
- 8) Exhaust silencer (both sides).



#### Tank filler plug Opening

Lift the protection lid (1) and fit the ignition key into the lock. Turn the key clockwise 1/4 turn to unlock. Lift the plug (2).

#### Closing

Refit the plug (2) with the key in it and push it down into its seat. Remove the key and replace the lock cover (1).

Note Plug can only be closed when key is inserted.

#### Warning

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





#### Seat lock Opening

Insert the key into the seat lock (1) and turn it until the seat cover (2) catch disengages with an audible click. Pull the seat cover (2) towards the front end of the motorcycle until releasing it.

Warning To close the seat cover insert it from the motorcycle side and slide it towards the rear side until hearing the engagement click.





#### Closing

Before fitting the seat cover, make sure that passenger strap (3) is tensioned in the indicated direction.

Insert the seat cover (2, Fig. 140) from the side and push it towards the rear end of the motorcycle until fully home.



#### Side stand

#### Important

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

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

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

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



#### Warning

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

### Note

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

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

#### Steering damper

It is located before the handlebar and is secured to the steering head.

It provides stable and accurate steering, improving the motorcycle's handling response under any conditions.



#### Adjusting the front fork

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

- 1) For rebound adjustment (1, Fig. 144).
- 2) For spring preload adjustment (2, Fig. 144).
- 3) For compression adjustment (3, Fig. 145).

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

Turn adjuster (1) at the top end of each fork leg with a flat-blade screwdriver to adjust rebound.

Turn the adjuster (3) on the bottom of each fork leg bottom end with a flat-blade screwdriver to adjust the compression damping setting.



Turn adjusters (1 and 3) to adjust damping. 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. 144) with a 22 mm hexagon wrench, starting from the fully open (clockwise) position.

STANDARD settings from completely closed are as follows:

compression: 10 clicks from fully closed position. rebound: 10 clicks from fully closed position. Spring preload: FULLY OPEN (counter clockwise): 6 turns.



#### Warning

Adjust both fork legs to same settings.

#### Adjusting the rear shock absorber

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

The adjuster (1) located on the front connection holding the shock absorber to the crankcase half adjusts the damping during the rebound phase (return).

The adjuster (2) located on the expansion reservoir of the shock absorber adjusts the damping during the compression phase.

The two nuts (3) on the upper part of the shock absorber serve to adjust the preload of the external spring.

To change spring preload, slacken the upper locking ring nut. Then TIGHTEN or SLACKEN the lower ring nut to INCREASE or DECREASE spring preload. After setting spring preload as desired, tighten the upper locking ring nut.





STANDARD setting: from the fully closed position (clockwise), loosen as follows: compression: 10 clicks from fully closed position: rebound: 10 clicks from fully closed position; spring preload: 12 mm.

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.

#### Motorcycle setting adjustment

Motorcycle track alignment is the result of the tests carried out by our engineers under the most diverse use conditions.

Changing this parameter is a very delicate operation that, if not correctly carried out, may lead to severe hazards.

Rider can change motorcycle track alignment based on his/her riding needs, by simply changing shock absorber working position.

#### Warning

Have the track alignment changed at a Ducati Dealer or Authorised Service Centre.



Warning Riding the motorcycle in FLAT (F) position and with a pillion rider may cause motorcycle instability. Ducati strongly advises against riding the motorcycle with rear suspension in FLAT (F) position and a pillion rider.

#### Important

FLAT (F) position allows having several track alignments, such as in racing versions. PROGRESSIVE (P) position is recommended when riding with a pillion rider.



# Riding the motorcycle

#### Running-in recommendations Maximum rotation speed

Rotation speed for running-in period and during standard use (rpm): 1) up to 1,000 km;

2) from 1,000 to 2,500 km.

#### Up to 1,000 km

During the first 1000 km, keep an eye on the rev counter. It should never exceed: 5,500÷ (included) 6,000 rpm.

During the first hours of riding, it is advisable to run the engine at varying load and rpm, though still within recommended limit.

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



#### Important

During the first 1000 km (running-in period), i.e. when the Odometer displays a value <= (lower than or equal to) 1000 km, the pre-warning area, indicated in orange (orange area), both for the bargraph filling and the display of the relevant number, is displayed when reaching 6000 rpm. During the running-in period we recommend not to exceed 6000 rpm, thus the instrument panel will not display the bargraph "Orange area".

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

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

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

#### From 1,000 to 2,500 km

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

#### Important

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

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



#### Pre-ride checks

#### Warning

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

Before riding, perform a thorough check-up on your motorcycle as follows:

- FUEL LEVEL IN THE TANK Check the fuel level in the tank. Fill tank if needed (page 248).
- ENGINE OIL LEVEL Check oil level in the sump through the sight glass. Top up if needed (page 273).
- BRAKE AND CLUTCH FLUID Check fluid level in the relevant reservoirs (page 255).
- COOLANT Check coolant level in the expansion reservoir. Top up if needed (page 253).
- TYRE CONDITION Check tyre pressure and condition (page 271).

- 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 293).
- KEY LOCKS

Ensure that tank filler plug (page 225) and seat (page 226) are properly locked.

STAND

Make sure side stand operates smoothly and is in the correct position (page 228).

#### ABS light

After Key-ON, the ABS light (9) stays ON. When the motorcycle speed exceeds 5 km/h, the warning light switches OFF to indicate the correct operation of the ABS system.

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

#### ABS device

Check that the front (1) and rear (2) phonic wheels are clean.

#### **W**arning

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

#### Warning

Prolonged wheelies could deactivate the ABS system.



#### Starting the engine

#### ▲ Warning

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

### Warning

A 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.

Move the ignition key to ON. Make sure both the green light N (1) and the red light  $\checkmark$  (2) on the instrument panel come on.

Important

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



DOCAT

Fig. 155

### **Warning**

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

# 

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

#### Important

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

Check that the stop switch (3) is positioned to RUN, then press the starter button (4).



#### 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.
- Raise the engine revs by turning the throttle twistgrip while gradually releasing the clutch lever. The motorcycle will start moving off.
- 4) Release the clutch lever completely and accelerate.
- 5) To shift up, close the throttle to slow down engine, disengage the clutch, lift the gear change lever and release the clutch lever. To shift down, proceed as follows: release the twistgrip, pull the clutch lever, shortly speed up to help gears synchronise, shift down (engage next lower gear) and release the clutch.

The controls should be used correctly and timely: when riding uphill do not hesitate to shift down as soon as the motorcycle tends to slow down, so you will avoid stressing the engine and the motorcycle abnormally.

# Warning

Avoid harsh acceleration, as this may lead to misfiring and transmission snatching. The clutch lever should not be held in longer than necessary after a gear is engaged, otherwise friction parts may overheat and wear out.

## Warning

Prolonged 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 motorcycle: the possibility of falling or having an accident during this difficult moment is statistically higher than any other moment. A locked front wheel leads to loss of traction and stability, resulting in loss of control.

The Anti-Lock Braking System (ABS) has been developed to enable riders to use the motorcycle braking force to the fullest possible amount in emergency braking or under poor pavement or adverse weather conditions.

ABS uses hydraulics and electronics to limit pressure in the brake circuit when a special sensor mounted to the wheel informs the electronic control unit that the wheel is about to lock up.

This avoids wheel lockup and preserves traction. Pressure is raised back up immediately and the control unit keeps controlling the brake until the risk of a lockup disappears. Normally, the rider will perceive ABS operation as a harder feel or a pulsation of the brake lever and pedal.

The front and rear brakes 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 "Customising Riding Modes: ABS setting page 127" function.

### Warning When APP

When ABS is disabled, the motorcycle restores the standard brake system features: using the two brake controls separately reduces the motorcycle braking efficiency. 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 slipperv surfaces, braking will become less effective. Always use the brakes very gently and carefully when riding under these conditions. Any sudden manoeuvres may lead to loss of control. When tackling long, high-gradient downhill road tracts, shift down gears to use engine braking. Apply one brake at a time and use brakes sparingly. Keeping the brakes applied all the time would cause the friction material to overheat and reduce braking power dangerously. Underinflated 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.

To switch the engine off, simply turn the key to OFF (page 214).

#### Parking

Stop the motorcycle, then put it on the side stand. To prevent theft, turn the handlebar fully left and turn the ignition key to the LOCK position.

If you park in a garage or other indoor area, make sure that there is proper ventilation and that the motorcycle is not near a source of heat.

# **A** Imp

#### Important

Never leave the ignition key in the switch when you are leaving your motorcycle unattended.

# Warning

The exhaust system might be hot, even after engine is switched OFF; pay particular attention not to touch the exhaust system with any body part and do not park the motorcycle next to inflammable material (wood, leaves etc.).

## Warning

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

#### Refuelling

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

#### Warning

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

### Warning

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



#### Tool kit and accessories

The tool kit is located under the seat and includes:

- Box wrench for spark plugs;
- Tommy bar for plug wrench;
- Double-tip screwdriver;
- Allen wrench for fairings.

To access the compartment remove the seat (page 226).

Have the following parts (supplied as standard) installed by a Ducati Dealer or authorised Service Centre:

- right and left deflectors for the headlight fairing;
- passenger seat;
- right and left rear footpegs;



# Main maintenance operations

Remove the fairing Some parts of the motorcycle fairing have to be removed for certain maintenance or repair operations.

Warning Failed or incorrect refitting of one of the removed components could cause its sudden detachment while riding resulting in loss of control of the motorcycle.

At every reassembly, to avoid damaging the painted areas and the Plexiglas windscreen, always place the nylon washers at the retaining screws.

Important Have the fairings removed at a Ducati Dealer or Authorised Service Centre.

#### Side fairings

To remove the fairings, use the Allen wrench accommodated under the seat to loosen the followina:

- the two screws (1) securing the fairing panels to the brackets:
- the four screws (2) securing the fairing panels to the headlight fairing;
- the three screws (3) securing the fairing panels to the frame:
- the two screws (4) located under the fairing that \_ join the right fairing panel to the left fairing panel;
- the two screws (5) securing the fairing panels at the centre:
- the two screws (6) securing the front of the \_ fairing to the headlight fairing.

# Note

Be careful of the splash quard, which is released by the fairing panel fastening.



To refit the left fairing panel, lower the side stand and pass it through the hole in the panel.




### Change the air filter

Important Have the air filter maintenance performed at a Ducati Dealer or Authorised Service Centre. Check and top up the coolant level

Check coolant level in the expansion tank on the right side of the motorcycle.

Check that the level is between the MIN (1) and MAX

(2) marks on the side of the expansion reservoir.

Top up if the level is below the MIN mark.

Remove the right-hand side fairing (page 251).



Unscrew the filler plug (3) and add ENI Agip Permanent Spezial antifreeze (do not dilute, use pure), until reaching the MAX level.

Refit the filler plug (3) and reassemble all removed parts. This type of mixture ensures the best operating conditions (the coolant starts to freeze at -20 °C/-4 °F). Cooling circuit capacity: 2.3 cu. dm (litres).

### Warning

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

Important Have the top-up performed at a Ducati Dealer or Authorised Service Centre.



### Check 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 lines be changed every four years.





#### Brake system

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

# Warning

Brake and clutch fluid can damage paintwork and plastic parts, so avoid contact. Hydraulic fluid is corrosive; it may cause damage and lead to severe injuries. Never mix fluids of different qualities. Check seals for proper sealing.

#### Clutch system

If the control lever has exceeding 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).

### Check brake pads for wear

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

### Warning

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

### Important

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



### Charge the battery

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

Remove the left-hand side fairing (page 251).

Undo the screw (1) and remove the battery mounting cover (2).

Slide out the battery (3) from its housing and, always starting from the negative terminal (-), loosen the screws (4).

Remove the positive cable (5), the ABS positive cable (6) from the positive terminal and the negative cable (7) from the negative terminal.





### 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 (6), onto positive cable (5) and start screw (4) on these cables.





Connect the positive cable (5), previously assembled to ABS cable (6), to battery positive terminal, and negative cable (7) to battery negative terminal, by starting the other screw (4).

Tighten the terminal screws (4) to a torque of 5 Nm  $\pm 10\%$  and apply grease onto the battery terminals to prevent oxidation.

Reinstall the battery (3) in the support, positioning the cables (5) and (6) as shown in (Fig. 168).

Refit battery mounting cover (2) and fasten tightening the screw (1) to a torque of 10 Nm  $\pm$ 10%.

Refit the left-hand side fairing (page 251).





### Charge and maintenance of the battery during winter storage

Your motorcycle is equipped with a connector (1) to which you can connect a special battery charger (2) (Battery maintainer kit part no. 69924601A - various countries; Battery maintainer kit part no.

69924601AX - for Japan, China and Australia only) available from our sales network



### Note

The 1299 Panigale 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.

### O Note

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

### Note

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

### Check drive chain tension

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

Make the rear wheel turn until you find the position where chain is tightest. Set the motorcycle on the side stand. With just a finger, push down the chain at the point of measurement and release.

Measure the distance (A) between the centre of the chain pins and the aluminium section of the swinging arm. It must be:  $A = 40 \div 42$  mm.

Important

This only applies to the motorcycle STANDARD settings, available upon delivery.



Warning Correct tightening of swinging arm screws (1) is critical to rider and passenger safety.

### Important

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



### Chain lubrication

The chain fitted on your motorcycle has O-rings to protect its moving parts from dirt, and to hold the lubricant inside.

The seals might be irreparably damaged if the chain is cleaned using any solvent other than those specific for O-ring chains or washed using steam or water cleaners.

After cleaning, blow the chain dry or dry it using absorbent material and apply SHELL Advance Chain or Advance Teflon Chain on each link.

Important Using non-specific lubricants may cause severe damage to the chain and the front and rear sprockets. Replace the high and low beam bulbs Before replacing a burnt-out bulb, make sure that the new one matches the voltage and wattage specifications in paragraph "Electric System" page 293.

Always ensure that the new bulb you have installed operates properly before refitting any parts you have removed. Figure shows the locations of the low beam bulbs (LO), high beam bulbs (HI) and the parking light LED light unit (1).



### Headlight

Obtain access to the left bulb

Turn the locking ring of the upper bulb body counter clockwise and extract the burnt out bulb

Replace with a new bulb of the same type and rating. On refitting, turn the locking ring clockwise to secure the bulb in place.

Obtain access to the right bulb and follow the same procedure as for the left bulb to replace it.

# Important

To replace the headlight bulbs, it is not necessary to disconnect the main wiring harness from headlight body.



Note

Be careful to hold the new bulb at the base only. Never touch the transparent body with your fingers or it will blacken resulting in reduced bulb brilliancy.



# Warning

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

Replacing the parking light bulb

LED parking lights are maintenance-free.

Rear turn indicators

LED turn indicators are maintenance-free

### Beam setting

Check correct headlight aiming. Position the motorcycle 10 metres from a wall or a screen, the motorcycle must be perfectly upright with the tires inflated to the correct pressure and with a rider seated, perfectly perpendicular to the longitudinal axis. On the wall or surface, draw a horizontal line at the same height from the ground as the centre of the headlight and a vertical line aligned with the longitudinal axis of the motorcycle. If possible, perform this check in dim light. Switch on the low beam and adjust right and left beam. The height of the upper limit between the dark area and the lit area must not be more than 9/10 of the height from the ground of the headlight centre.



### Note

This is the procedure specified by Italian regulations for checking the maximum height of the light beam. Please adapt said procedure to the provisions in force in your own country.

To vertically align the headlight beam, turn the screws (1) located at the front of the vehicle, on both sides.

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





### Adjust rear-view mirrors

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



### Tubeless tyres

Front tyre pressure:

2.3 bar (rider only) - 2.5 bar (rider and passenger). Rear tyre pressure:

2.1 bar (rider only) - 2.5 bar (rider and passenger). As tyre pressure is affected by ambient temperature and altitude variations, you are advised to check and adjust it whenever you are riding in areas where ample variations in temperature or altitude occur.

# Important

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

Tyre repair or change (Tubeless tyres)

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

# Marning

Punctured tyres must be replaced. Replace tyres with recommended standard tyres only. Be sure to tighten the valve caps securely to avoid leaks when riding. Never use tube type tyres. Failure to heed this warning may lead to sudden tyre bursting and to serious danger to rider and passenger.

After replacing a tyre, the wheel must be balanced.

# Warning

Do not remove or shift the wheel balancing weights.

# 

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

### Important

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



### Check engine oil level

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

Important

Engine oil and oil filters must be changed by a Ducati Dealer or authorised Service Centre at the intervals specified in the scheduled maintenance chart reported in the Warranty Card.



### Viscosity

### SAE 15W-50

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



Clean and replace the spark plugs Spark plugs are essential to smooth engine running and should be checked at regular intervals. Have the spark plug replaced at a Ducati Dealer or authorised Service Centre.



### Clean 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.



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 highpressure water jets.

Cleaning the motorcycle with a high pressure water jet may lead to seizure or serious faults in forks, wheel hubs, electric system, headlight (fogging), fork seals, air inlets or exhaust silencers, with consequent loss of compliance with the safety requirements. Clean off stubborn dirt or exceeding grease from engine parts using a degreasing agent. Be sure to avoid contact with drive parts (chain, sprockets, etc.).

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

# ▲ Warning

Braking performance may be impaired immediately after washing the motorcycle. Never grease or lubricate the brake discs to avoid losing braking power. Clean the discs with an oil-free solvent.

# Warning

The headlight might fog up due to washing, rain or moisture. Switch headlight on for a short time to help and 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;
- place the motorcycle on a service stand;

- disconnect, remove the battery and periodically charge it using the battery charge maintainer (see page 261).
- Protect the motorcycle with a suitable canvas. This will protect paintwork and let condensate breathe out. The canvas is available from Ducati Performance.

#### Important notes

The legislation in some countries (France, Germany, Great Britain, Europe, Switzerland, etc.) sets certain noise and pollution standards.

Periodically carry out the required checks and replace parts as necessary, using Ducati original spare parts, in compliance with the regulations in the country concerned.

# Scheduled maintenance chart

Scheduled maintenance chart: operations to be performed by the Dealer

# Warning

This scheduled maintenance chart is designed for a road use of the 1299 Panigale. If it is used on the track, even if not during sport competitions, all parts of the motorcycle are more stressed so the routine maintenance operations must be carried out more frequently than indicated.

### Warning

Please contact a Ducati Dealer or authorised Service Centre where you can receive customised service advice according to the sport use you make of your 1299 Panigale.

List of operations and type of interven- km. x1,00	0 1	12	24	36	48	Time
tion [set mileage (km/mi) or time interval *]       mi. x1,00	0.6	7.5	15	22.5	30	(months)
Read the error memory with DDS 2.0 and check of Soft- ware version update on control units		•	•	•	•	12
Check the presence of any technical updates and recall campaigns		•	•	•	•	12
Change engine oil and filter		•	•	•	•	12
Change engine oil mesh filter assembly			•		•	-
Check and/or adjust valve clearance			•		٠	-

List of operations and type of interven-	km. x1,000	1	12	24	36	48	Time
tion [set mileage (km/mi) or time interval *]	mi. x1,000	0.6	7.5	15	22.5	30	(months)
Visual check for wear of the chain timing sy	stem					•	-
Change spark plugs				•		•	-
Clean air filter			•		•		-
Change air filter				•		•	-
Check the proper tightening of the clutch cover and clutch protection cover bolts			•	•	•	•	-
Check the proper tightening of the oil sump bolts				•		٠	-
Check brake and clutch fluid level		٠	•	•	•	•	12
Change brake and clutch fluid							24
Check brake pads. Change, if necessary		٠	•	•	•	•	12
Check the proper tightening of brake calliper bolts and brake disc flange screws		٠	•	•	•	•	12
Check front and rear wheel nuts tightening		•	•	•	•	•	12
Check wheel hub bearings				•		•	-
Check and lubricate the rear wheel shaft				•		•	-
Check the cush drive damper on rear sprock	ket			•		•	-

List of operations and type of interven- km. x1,000	1	12	24	36	48	Time
tion [set mileage (km/mi) or time interval *]	0.6	7.5	15	22.5	30	(months)
Check the proper tightening of final drive front and rear sprocket nuts		•	•	•	•	12
Check final drive chain sliders for wear	•	•	•	•	•	12
Check final drive chain tension and lubrication		•	•	•	•	12
Check tightening of water-oil heat exchanger retaining screws		•	•	•	•	-
Check steering bearings and lubricate, if necessary			•		•	24
Change front fork fluid						36
Visually check the front fork and rear shock absorber seals		•	•	•	•	12
Check for proper tightening of the frame-to-engine fas- teners and swinging arm		•	•	•	•	-
Check the freedom of movement and tightening of the side stand		•	•	•	•	12
Visually check the fuel lines		•	•	•	•	12
Check rubbing points, clearance, freedom of movement and positioning of hoses and electric wiring in view		•	•	•	•	12
Lubricate the levers at the handlebar and pedal controls		•	•	•	•	12

List of operations and type of interven-	km. x1,000	1	12	24	36	48	Time
tion [set mileage (km/mi) or time interval *]	mi. x1,000	0.6	7.5	15	22.5	30	(months)
Change coolant						•	48
Check coolant level		٠	•	•	•	•	12
Check electric fan operation		٠	•	•	•	•	12
Check tyre pressure and wear		٠	•	•	•	•	12
Check the battery charge level		٠	•	•	•	٠	12
Check idling		٠	•	•	•	٠	12
Check secondary air system operation				•		٠	-
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 2.0		٠	•	•	•	٠	-
Road test of the motorcycle, testing the safety devices (ex. ABS and DTC)		٠	•	•	•	•	12
Softly clean the motorcycle		٠	•	•	•	•	12
Fill out that the service was performed in on-board doc- umentation (Service Booklet)		٠	•	•	•	•	12

### Scheduled maintenance chart: operations to be performed by the customer

km. x1,000	1
List of operations and type of intervention [set mileage (km/mi) or time mi. x1,000 interval *]	0.6
Months	6
Check engine oil level	٠
Check brake and clutch fluid level	٠
Check tyre pressure and wear	•
Check the drive chain tension and lubrication. If necessary, contact your dealer to adjust components.	٠
Check chain and sprocket for wear. If necessary, contact your dealer to replace components.	٠
Check brake pads. If necessary, contact your dealer to replace components.	•

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

# Technical data

### Weights

Overall weight (in running order with 90% of fuel -93/93/EC): 190.5 kg. Overall weight (without fluids and battery): 166.5 kg.

Maximum allowed weight (carrying full load): 370 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.

### Overall dimensions



Top-ups

TOP-UPS	ТҮРЕ	
Fuel tank, including a reserve of 5 cu. dm (litres)	Unleaded fuel with a minimum octane rat- ing of RON 95.	17 cu. dm (litres)
Oil sump and filter	SHELL - Advance 4T Ultra	3.7 cu. dm (litres)
Front/rear brake and clutch circuits	SHELL Advance Brake DOT 4	-
Protectant for electric contacts	SHELL Advance Contact Cleaner	-
Front fork	SHELL Advance Fork 7.5 or Donax TA	155 cc, per leg
Cooling circuit	ENI Agip Permanent Spezial antifreeze (do not dilute, use pure)	2.3 cu. dm (litres)

#### ▲ Important

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

#### ▲ Warning

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

### Engine

Twin cylinder, four-stroke, 90° "L" type, longitudinal, with deep sump die-cast crankcase. Bore, mm: 116 Stroke, mm: 60.8 Total displacement, cu. cm: 1285 Compression ratio: 12.5 ± 0.5:1 Max crankshaft power (95/1/EC), kW/HP: 150.8 kW/205 HP at 10,500 rpm Max torque at crankshaft (95/1/EC): 144.6 Nm - 14.7 kgm at 8,750 rpm Maximum rpm: 12,000

Important Do not exceed the specified rpm limits in any running conditions.
## Timing system

Double overhead camshaft (DOHC) driven by chain and gearwheels, 4 valves per cylinder, desmodromic system.

Desmodromic timing system

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



## Performance data

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

## Important

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

## Spark plugs

Make: NGK Type: MAR9A-1

#### Fuel system

MITSUBISHI indirect electronic injection type: a/n / a/n. Oval throttle body (corresponding diameter): 67.5 mm

Injectors per cylinder: 2

Firing points per injector: 12

Fuel specifications: 95-98 RON.

# Warning

The motorcycle is only compatible with fuel having a maximum content of ethanol of 10% (E10). Using fuel with ethanol content over 10% is forbidden. Using it could result in severe damage 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: 330 mm. Hydraulically operated by a control lever on handlebar right-hand side. Brake calliper make: BREMBO. Type: M50 (calliper diameter: 30). Friction material: TT2910 HH. Master cylinder type: PR16/21.

REAR

With fixed drilled steel disc. Disc diameter: 245 mm. Hydraulically operated by a pedal on RH side. Make: BREMBO Type: P34c (calliper with Ø 34 pistons). Friction material: Ferodo Ferit I/D 450 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 primary shaft via spur gears.

Front chain sprocket/clutch gearwheel ratio: 30/53 6-speed gearbox with constant mesh gears, gear change pedal on left side of motorcycle.

Gearbox output sprocket/rear chain sprocket ratio: 15/39

Total gear ratios:

1<sup>st</sup> gear 15/37 2<sup>nd</sup> gear 16/30 3<sup>rd</sup> gear 18/27 4<sup>th</sup> gear 20/25 5<sup>th</sup> gear 22/24 6<sup>th</sup> gear 24/23

Drive chain from gearbox to rear wheel. Make: REGINA Links: 106

## Important

The above gear ratios are the homologated ones and under no circumstances must they be modified.

However, if you wish to tune up your motorcycle for competitions or special tracks, Ducati Motor Holding S.p.A. will be pleased to provide information about the special ratios available. Contact a Ducati Dealer or Authorised Service Centre.

# Warning

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

## Frame

Cast monocoque frame in aluminium allov. Aluminium allov rear subframe. Steering head angle: 24° Steering angle: 27° LH side /27° RH side. Trail: 96 mm

## Wheels

Front 3-spoke, light-alloy forged rims. Size: MT3 50x17"

#### Rear

3-spoke, light-alloy forged rims. Size: MT6 00x17"

#### Tyres

Front Tubeless, radial tyre.

## Size: 120/70

Rear Tubeless, radial tyre. Size: 200/55

## Suspensions

Front

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

#### Rear

The shock absorber is adjustable for rebound. compression and spring preload.

The shock absorber is connected to the crankcase at the front pivot point and to the rocker arm at the rear pivot point.

The swinging arm is connected to the pivot shafts going through the engine. The whole system gives the bike excellent stability. Wheel travel:

130 mm

## Exhaust system

Exhaust pipe layout is "2 into 1 into 2". Two stainless steel silencers with aluminium alloy external sleeve.

Two lambda sensors and two catalytic converters.

Available colours Ducati Anniversary Red Primer, Antiflex White code L00440652 (Lechler). Primer, Ducati Red code 473.101 (PPG); Clear coat code 228.880 (PPG); aluminium-colour frame and black rims. Electrical system Basic electric items are: Headlight with: no 2 bulbs H11 12V 55W (low beam). no. 2 bulbs H11 12V 55W (high beam) parking light type: no 8 SEOUL STW8014B Bin A LEDs Tail light type: no 2 REBEL LXM2-PH01-0060 LEDs LED stop lights type: no 8 | A G6SP-CBEA-24-1 | EDs LED number plate light type: no 3 CBEE CLA1A-WKW-CXAYB453 LEDs Electrical controls on handlebars LED front turn indicator type: no. 15 OSRAM LYE6SF-ABBB-45 PLCC4 | FDs LED rear turn indicator type (Europe version): no 4 CREE LEDs Horn Stop light switches. Sealed battery, 12 V - 6.5 Ah. System voltage 12 V. 12 V-380 W GENERATOR. Electronic rectifier, protected by a 30A fuse located on the solenoid starter, under the battery (C, Fig. 190).

Starter motor: 12 V-0.6 kW. Rear bulb turn indicators (USA version): RY10W (12V-10W) Amber.



For bulb replacement instructions, please see the paragraph "Replacing the high and low beam bulbs".

### Fuses

There are twelve fuses that protect the electric components, located inside the front 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 front left fuse box (A, Fig. 188) and the front right one (B, Fig. 189) are located above the battery. To access the fuses, remove the left fairing (page 251).

To expose the fuses, lift the box protective cover. Mounting position and ampere capacity are marked on box cover.





Front left fuse box key				
Pos	El. item	Rat.		
1	-	-		
2	IMU	5 A		
3	Key-sense	10 A		
4	Diagnostics	5 A		
5	Throttle opening relay (ETV)	10 A		
6	Instrument panel	10 A		
7	Spare	5 A		
8	Spare	10 A		
9	Spare	20 A		

Front right fuse box key				
Pos	El. item	Rat.		
1	ABS 2	25 A		
2	ABS 1	10 A		
3	Injection relay	20 A		
4	Lights	15 A		

Front right fuse box key					
5	Engine control unit	10 A			
6	Black Box System (BBS)	15 A			
7	Spare	20 A			
8	Spare	10 A			
9	Spare	5 A			

To access the main fuse, remove the left fairing (page 251).

The main fuse (C, Fig. 190), is located near the battery on solenoid starter (D, Fig. 190). Remove the fuse cap (E, Fig. 190)to reach it. A blown fuse can be identified by breakage of the inner filament (F, Fig. 191).

## Important

Switch the ignition key to OFF before replacing the fuse to avoid possible short-circuits.

# Warning

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





Injection/electric system diagram key

- 1) Right-hand switch
- 2) E-LOCK control unit
- 3) E-LOCK relay
- 4) Fuse box 1
- 5) Fuse box 2
- 6) Engine control unit
- 7) APS
- 8) Starter motor
- 9) Fused solenoid
- 10) Battery
- 11) Engine ground
- 12) Rectifier
- 13) Generator
- 14) Fans
- 15) Rear right turn indicator
- 16) Tail light
- 17) Rear left turn indicator
- 18) Number plate light
- 19) Diagnostics socket
- 20) Fuel pump
- 21) Fuel level
- 22) Vehicle control unit (BBS)
- 23) Ex-up drive
- 24) Gear sensor

- 25) Rear speed sensor
- 26) Front speed sensor
- 27) Vertical coil
- 28) Horizontal coil
- 29) Timing/rpm sensor
- 30) Vertical lambda sensor
- 31) Horizontal lambda sensor
- 32) Quick shifter
- 33) Oil pressure sensor
- 34) Rear stop switch
- 35) Side stand switch
- 36) Clutch switch
- 37) Front stop switch
- 38) Fuel pump relay
- 39) Vertical ETV relay
- 40) Horizontal ETV relay
- 41) Vertical MAP sensor
- 42) Horizontal MAP sensor
- 43) Water temperature sensor
- 44) Air temperature sensor
- 45) Horizontal TPS
- 46) Vertical TPS
- 47) Main horizontal injector
- 48) Upper horizontal injector
- 49) Main vertical injector
- 50) Upper vertical injector

- 51) Horizontal FTV drive
- 52) Vertical FTV drive
- 53) Secondary air actuator
- ABS control unit 54)
- 55) Left-hand switch
- 56) High beam
- 57) I ow beam
- 58) Parking lights
- 59) Horn
- 60) Inertial Measurement Unit
- 61) Front left turn indicator
- 62) Instrument panel
- 63) Front right turn indicator
- 64) I ow beam
- 65) High beam
- 66) Low beam relay
- 67) High beam relay

## Wire colour coding

B Blue W White V Violet **Bk Black** Y Yellow R Red

Lb Light blue Gr Grev G Green Bn Brown O Orange P Pink



# Note

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

# Routine maintenance record

Routine maintenance record

КМ	NAME DUCATI SERVICE	MILEAGE	DATE	
1000				
12000				
24000				
36000				
48000				
60000				

Cod. 913.7.280.1A

Stampato 03/2015



Ducati Motor Holding spa

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