Owner's manual

MONSTER

M696

20TH ANNIVERSARY



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ENGLISH

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

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

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Enjoy your ride!

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Introduction

Safety guidelines

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

Your motorcycle is the result of Ducati Motor Holding S.p.A.'s on-going research and development efforts. It is important that you preserve its quality standard by strictly observing the maintenance plan and using genuine spare parts. This manual provides instructions on minor maintenance operations. Major maintenance operations are described in the 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 146.

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 Booklet.
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.

Warning symbols used in the manual

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

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



Warning

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



Important

Possibility of damaging the motorcycle and/or its components.



Note

Additional information concerning the job being carried out.

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

Intended use

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

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

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

This motorcycle carries the rider and can carry a passenger.

Warning
The total weight of the motorcycle in running order including rider, passenger, luggage and additional accessories should not exceed 390 kg/859 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 who do not hold a valid licence use your motorcycle.

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

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

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

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

Some states require vehicle insurance.

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

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

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

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

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

Rider's training

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

Warning

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

Apparel

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

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

- The helmet must have the requirements listed in page 8; if your helmet does not have a visor, use suitable eye wear;
- Use five-finger gloves made from leather or abrasion-resistant material;
- Riding boots or shoes must have non-slip soles and offer ankle protection;
- Jacket, pants or riding suit must be made from leather or abrasion-resistant material and have high-visibility colours and inserts;.

Important

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

Important

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

Important

Have your passenger wear proper protective clothing.

Safety “Best Practices”

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

Important

During the whole running-in period, the indications recommended in section "Riding the Motorcycle" shall 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.

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 11).

Warning

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

Warning

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

Important

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

Important

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

Important

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

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

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

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

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

Important
Visually inspect the tyres at regular intervals for 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
The engine, exhaust pipes and silencers remain hot for a long time after engine is switched off; pay particular attention not to touch exhaust system with any body part and do not park the vehicle next to inflammable material (wood, leaves etc.).

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

Refuelling

Refuel outdoors with the engine turned off.
Do not smoke or use open flames when refuelling.
Be extremely careful not to spill fuel on the engine or on the exhaust pipe.
Never fill the tank completely. Fuel should never be touching the rim of filler recess.
While refuelling, avoid inhaling fuel vapours and avoid contact with eyes, skin or clothing.

Warning

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

Warning

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

Warning

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

Carrying the maximum load allowed

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

Warning

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

Information about carrying capacity

Important

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

Important

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

Important

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

Important

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

Warning

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

Please, refer to paragraph "Tyres" in page 137.

Dangerous products - warnings

Used engine oil

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

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

Brake fluid

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

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

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

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

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

Vehicle identification number

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

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

Frame number

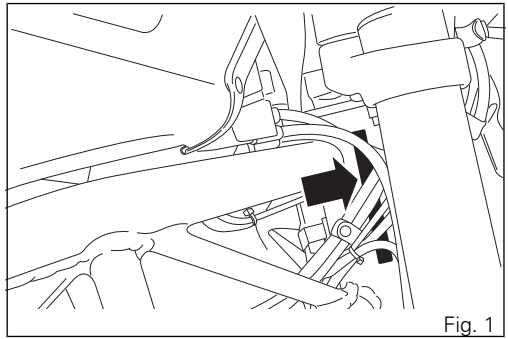


Fig. 1

Engine identification number

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

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

Frame number

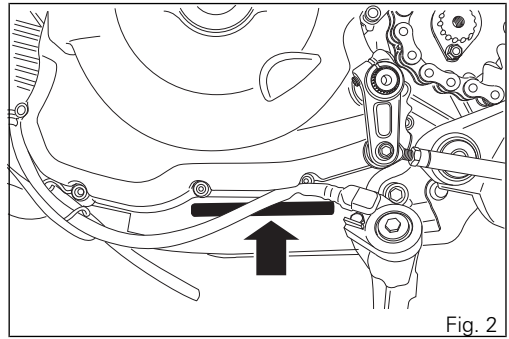


Fig. 2

Instrument panel (Dashboard)

Instrument panel

1) LCD.

2) REV COUNTER (rpm).

Shows the engine rotation speed/minute (rpm).

3) NEUTRAL LIGHT N (GREEN).

Comes on when in neutral position.

4) LOW FUEL LIGHT (AMBER YELLOW).

Comes on when fuel is low and there are about 3.5 litres of fuel left in the tank.

5) TURN INDICATOR LIGHTS (GREEN).

Illuminates and flashes when the turn indicator is in operation.

If a turn signal does not work (ex. burnt out bulb) its incorrect operation is signalled by making the light flash twice as fast as in comparison to correct operation.

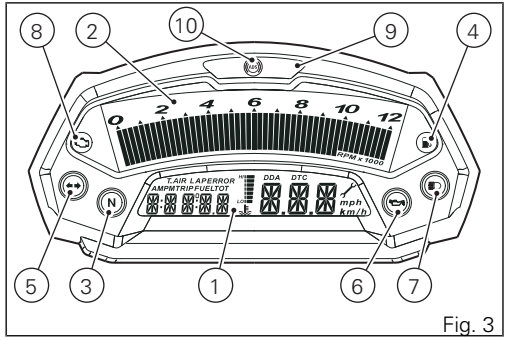


Fig. 3

Important

If this light (6) stays on, stop the engine or it may suffer severe damage.

6) ENGINE OIL PRESSURE LIGHT (RED).

Comes on when engine oil pressure is too low. This light should come on when the ignition is switched to ON and normally goes out a few seconds after engine starts.

It may shortly come on when the engine is hot, however, it should go out as the engine revs up.

7) HIGH BEAM LIGHT (BLUE) (Fig. 3).

Comes on when high beam is on.
8) "VEHICLE/ENGINE DIAGNOSIS - EOBD" LIGHT
(AMBER YELLOW) (Fig. 3).
It turns on in the case of an engine or motorcycle error; in some cases the engine will be locked.
9) OVER REV LIMITER WARNING LIGHTS (Fig. 3).
It comes on steady when the first rev limiter threshold (*) is reached. Starts flashing when the rev limiter is reached.

10) ABS WARNING LIGHT (AMBER YELLOW) (for ABS version only) (Fig. 3).

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

(*) depending on the model, each calibration of the Engine Control Unit may have a different "setting" for the thresholds that precede the rev limiter and regarding the rev limiter itself.
(**) The ABS should be considered actually disabled only if the light continues to flash after starting the engine.

11) CONTROL BUTTON
Button used to display and set instrument panel parameters. It has two positions: A " ▲ " and B " ▼ ".
12) HIGH-BEAM FLASH BUTTON FLASH
The high beam headlight flasher switch is also used for the LAP and USB data acquisition functions.

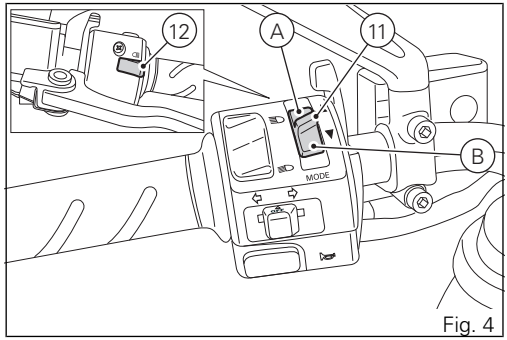


Fig. 4

LCD - Main functions

Warning

Stop the motorcycle before using the instrument panel controls. Never operate the instrument panel controls while riding.

1) SPEEDOMETER.
Gives road speed.
2) ODOMETER.
Gives total distance covered.
3) TRIP METER.
Indicates distance covered since the meter (TRIP) was last reset.
4) TRIP FUEL METER.
Gives total distance travelled on fuel reserve.
5) CLOCK.
6) AIR TEMPERATURE INDICATOR.
7) LAP TIMER.
8) ENGINE RPM INDICATOR (RPM).
9) LAP TIME (LAP).

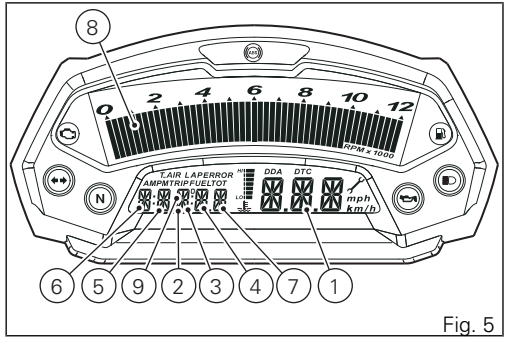


Fig. 5

10) SERVICE WARNING
This indication shows the user that the bike is due for scheduled service.
It stays on until it is reset at a Ducati Dealer or authorised Service Centre as part of the service procedure.
11) LAP FUNCTION. Indicates activation of the LAP function.
12) DDA FUNCTION. Indicates the activation of the DDA data logger.

Important
The instrument panel allows the diagnosis of the electronic ignition/injection system. Never use the menus reserved for trained personnel for any reason. If this function is accidentally accessed, turn the key to OFF and contact a Ducati Dealer or Authorised Service Centre for the necessary checks.

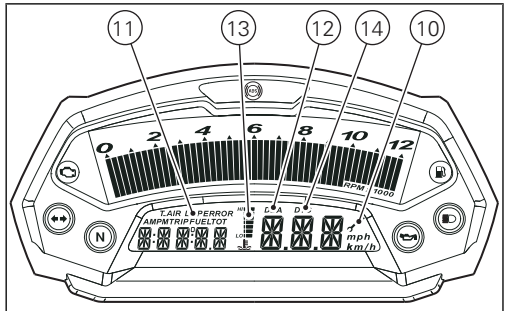


Fig. 6

13) ENGINE OIL TEMPERATURE INDICATOR

Important
Never use the vehicle when the temperature reaches max. value or the engine might be damaged.

14) TRACTION CONTROL (DTC)
Indicates activation of the DTC system control unit (preset).

LCD - How to set/display parameters

At key-on (key turned from OFF to ON) the instrument panel activates all the digits of the LCD for 1 second and switches on the indicator lights in sequence.

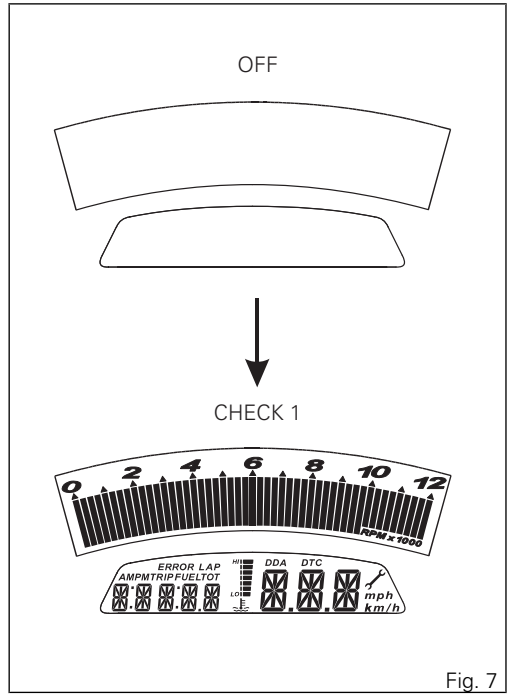


Fig. 7

It then reverts to “normal” mode and, in place of the motorcycle speed, shows the model and, for 2 seconds, also the version (EU, UK, USA, CND, FRA, JAP).
Model is displayed as "scrolling" text just once.

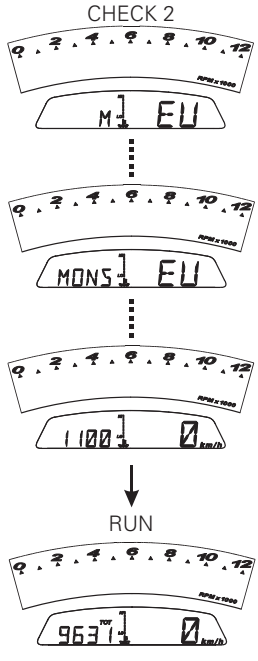


Fig. 8

At Key-On, the instrument panel always shows the following information (de-activating any previously activated functions):
ODOMETER
SPEED
RPM BARGRAPH
ENGINE OIL TEMPERATURE BARGRAPH

With the switch (1,Fig. 9) in position B " ▼ " the Odometer readout (TOT) will cycle through the following functions:
TRIP
TRIP FUEL (only if active)
CLOCK
T AIR
before returning to Odometer display.

Pressing switch (1,Fig. 9) in position A " ▲ " gives access to the MENU and the following functions are displayed one after another:
ERROR (only if active)
BATT
RPM
LIGHT SET
LAP (OFF or ON)
LAP MEM

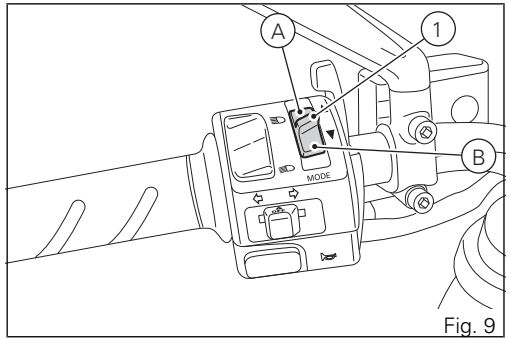


Fig. 9

DDA (OFF or ON)
ERASE DDA
DISAB ABS
CLOCK SETTING
CODE (only if active)

Important
This menu is active only if the speed of the motorcycle is less than 20 km/h If this MENU is open and the speed of the motorcycle exceeds 20 km/h, the instrument panel automatically exits the menu and returns to the initial display.

It is possible to exit the menu at any time by pressing switch (1,Fig. 9) in position A " ▲ " for 3 seconds.

“Odometer” total mileage indicator

This function shows the total distance covered by the vehicle.
Upon Key-On, the system automatically enters this function.
The reading is saved permanently and cannot be reset under any circumstances.
If the distance travelled exceeds 99999 km (or 99999 miles), the value “99999” will be displayed permanently.

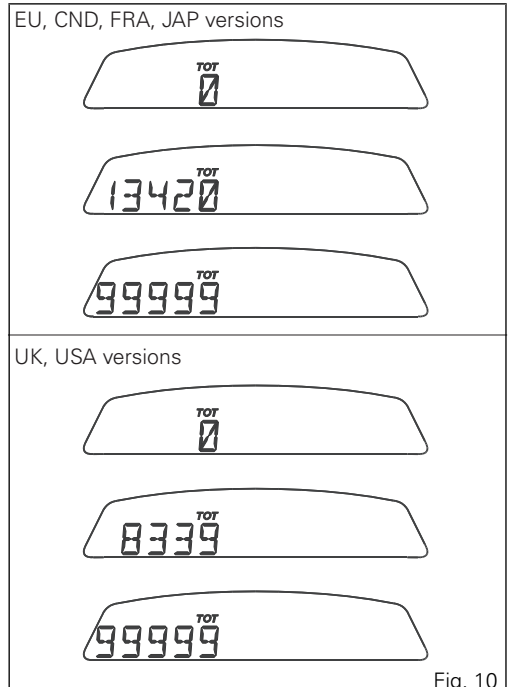


Fig. 10

“Speed” indicator

This function shows vehicle speed.
The dashboard receives the actual speed value (expressed in km/h) from the ECU and displays the value increased by 8%.
Maximum speed displayed is 299 km/h (186 mph).
Over 299 km/h (186 mph) the display will show a series of dashes “- - -“ (not flashing).

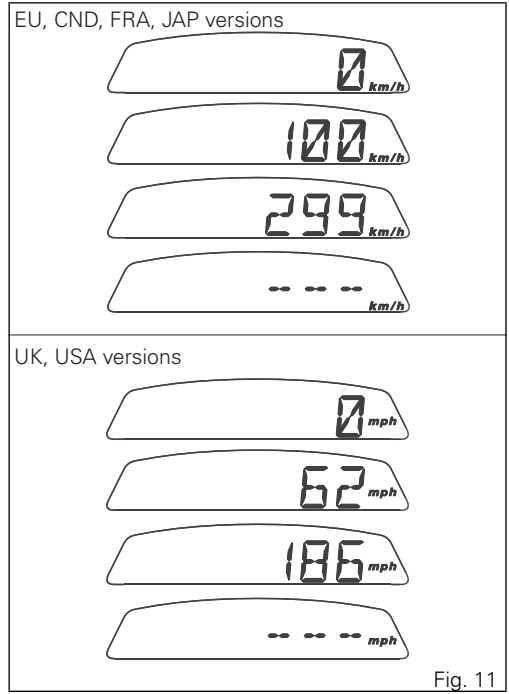


Fig. 11

“TRIP” mileage indicator

This function shows the distance travelled since the trip meter was last reset.
Holding button (1,Fig. 9) pressed in position B “ ▼ “ for 3 seconds when this function is displayed resets the trip meter.
When the reading exceeds 999.9, distance travelled is reset and the meter automatically starts counting from 0 again.

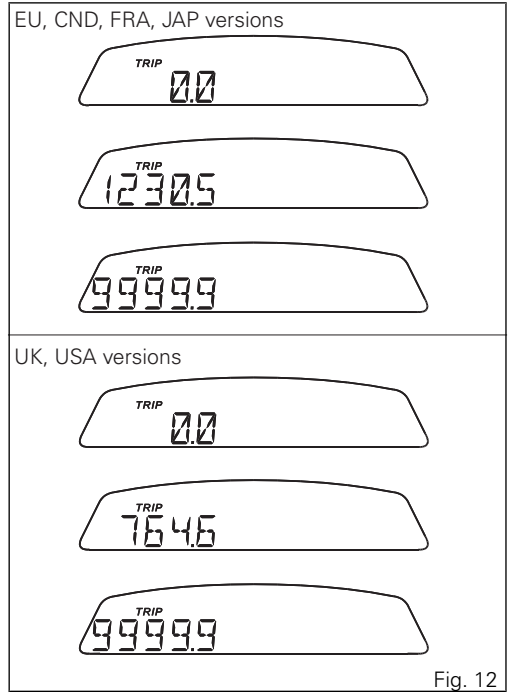


Fig. 12

"TRIP FUEL" mileage on reserve indicator

This function shows the distance travelled on fuel reserve.
When the low fuel light comes on, the TRIP FUEL meter is activated automatically, regardless of the function displayed. Trip fuel reading remains stored even after Key-Off until the vehicle is refuelled.
Count is interrupted automatically as soon as fuel is topped up to above minimum level.
When the reading exceeds 999.9, distance travelled is reset and the meter automatically starts counting from 0 again.

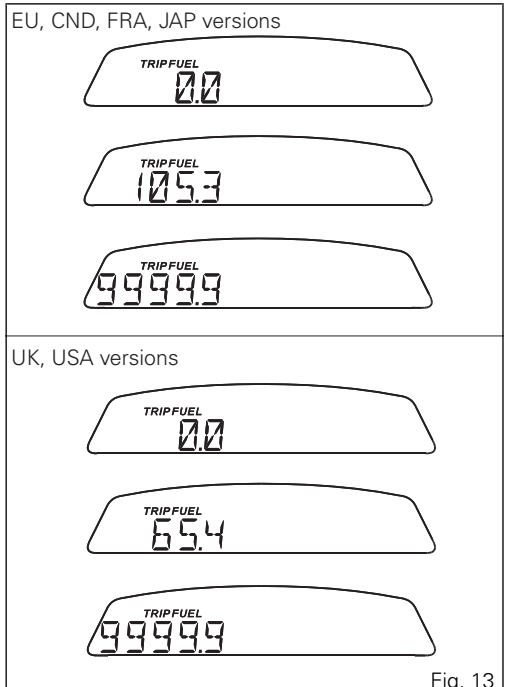


Fig. 13

Clock indicator

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

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

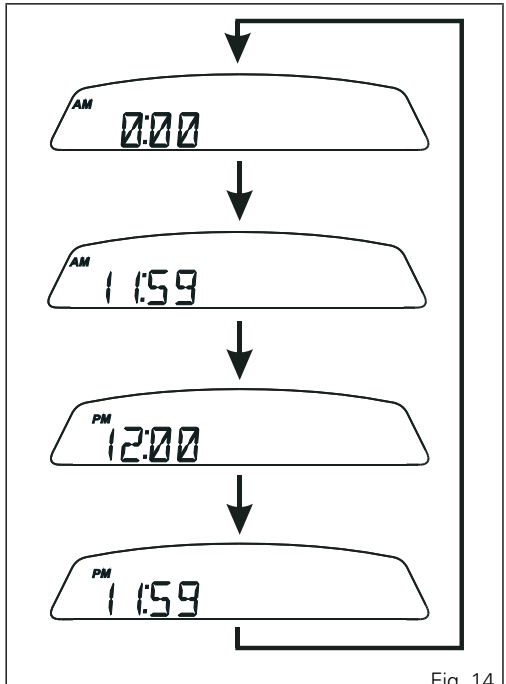


Fig. 14

Air temperature indicator

Shows the outside air temperature.
Display limits: -39°C ÷ +124°C.
In the event of a sensor FAULT (-40°C,+125°C or disconnected), a string of dashes "- - -" (not flashing) is displayed and the "Vehicle/Engine diagnosis - EOBD" light comes on (8,.

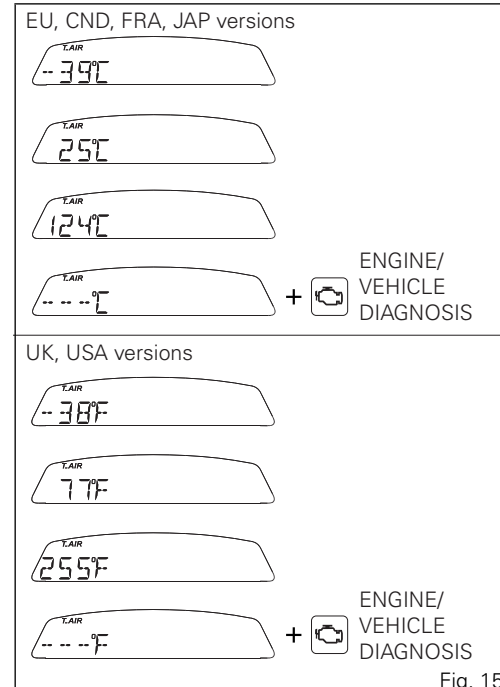


Fig. 15

Engine oil temperature indicator

This function describes the engine oil temperature indicator.

Indications:

- if the temperature is between -40°C and +80°C the display shows “STATUS 2”;
- if the temperature is between +81°C and +110°C the display shows “STATUS 3”;
- if the temperature is between +111°C and +135°C the display shows “STATUS 4”;

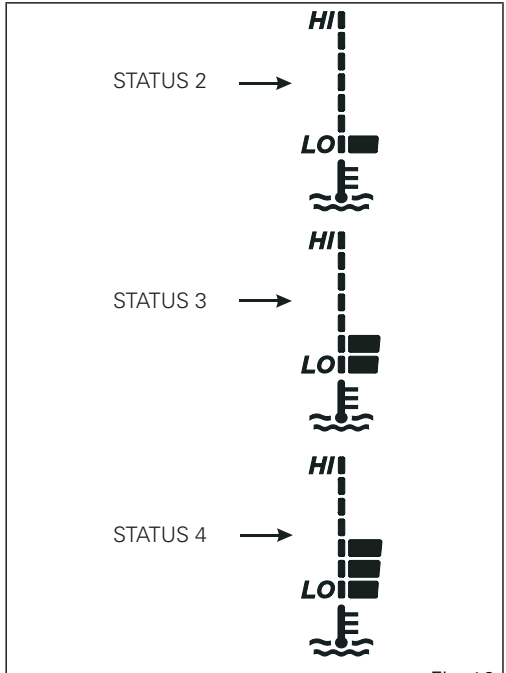


Fig. 16

- if the temperature is between +136°C and +160°C the display shows “STATUS 5”;
- if the temperature is between +161°C and +175°C the display shows “STATUS 6”;
- if the temperature is between +176°C and +190°C the display shows “STATUS 7”;

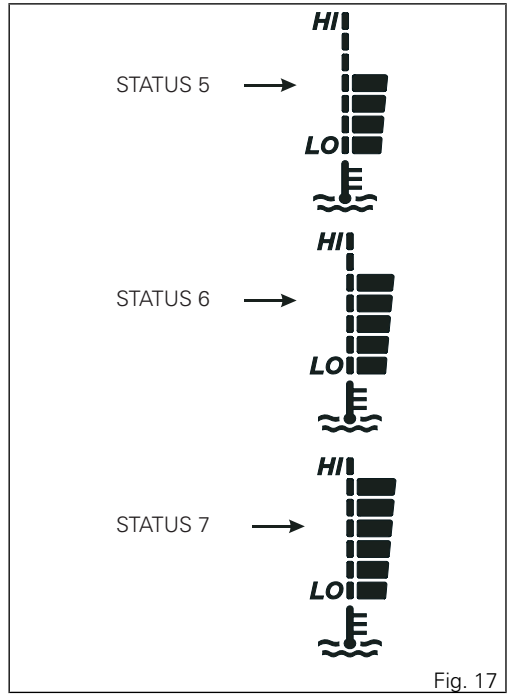


Fig. 17

- if the temperature is between +191°C and +200°C the display shows “STATUS 8”;
- if the temperature is ≥201 °C the display shows “STATUS 9” with the series of flashing marks;
- In case of sensor FAULT, “STATUS 1” is displayed and blinks.

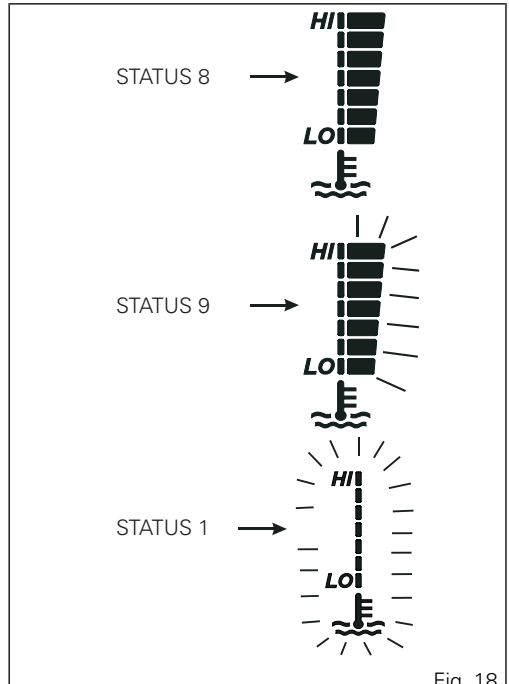


Fig. 18

Service indicator

It shows service intervals (service).
This indication ( ) shows the user that the bike is due for scheduled service.
The display shows the service reminder at the following intervals:

- after the first 1000 km on the odometer;
- every 12000 km on the odometer.
  The service indicator will remain on the display until reset.

Warning

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

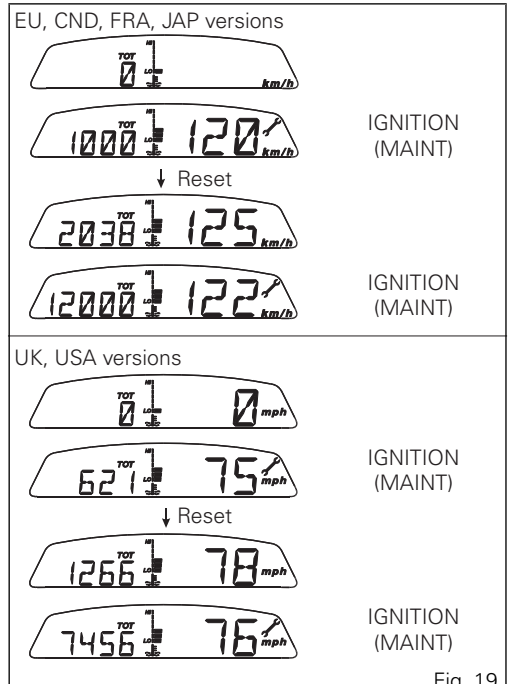


Fig. 19

Battery voltage indicator (BATT)

This function describes the battery voltage indicator. To view this function, access the "BATT" page of the menu.
The battery voltage reading is displayed as follows:
if voltage is between 12.1 and 14.9 Volt, the reading is on steady;
if voltage is between 10.0 and 12.0 Volt or between 15.0 and 16.0 Volt, the reading will be flashing.

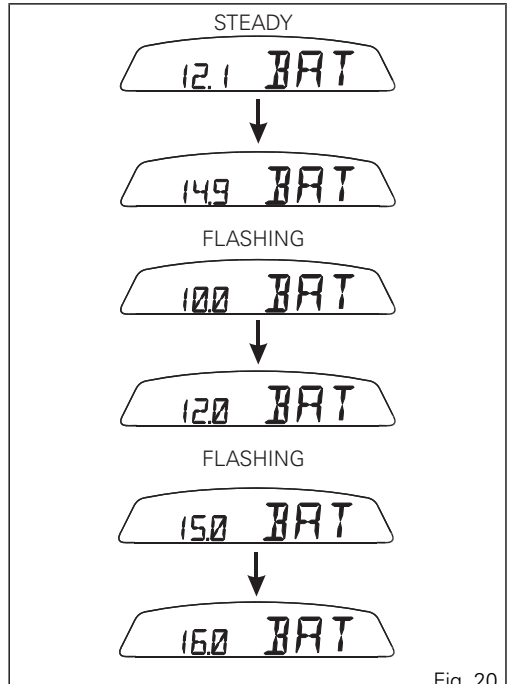


Fig. 20

if voltage is 9.9 Volt or less, the word " LO " is shown flashing and the "Vehicle/Engine diagnosis - EOBD" light (8, comes on;
if voltage is 16.1 Volt or higher, the word " HI " is shown flashing and the "Vehicle/Engine diagnosis - EOBD" light (8, comes on.

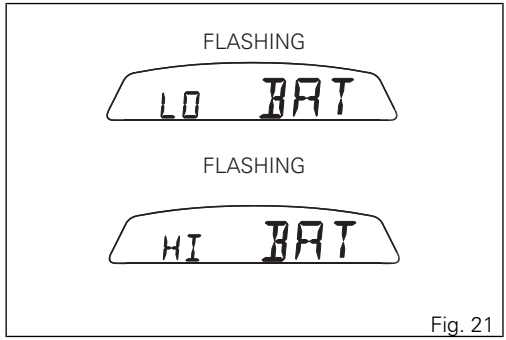


Fig. 21

Engine idling setting (RPM)

This function describes engine idle setup.
To display the function, go into the menu and call up the “RPM” page.
In addition to the upper rev counter scale, the display also shows engine rpm numerically so that you can adjust the idle speed more precisely.

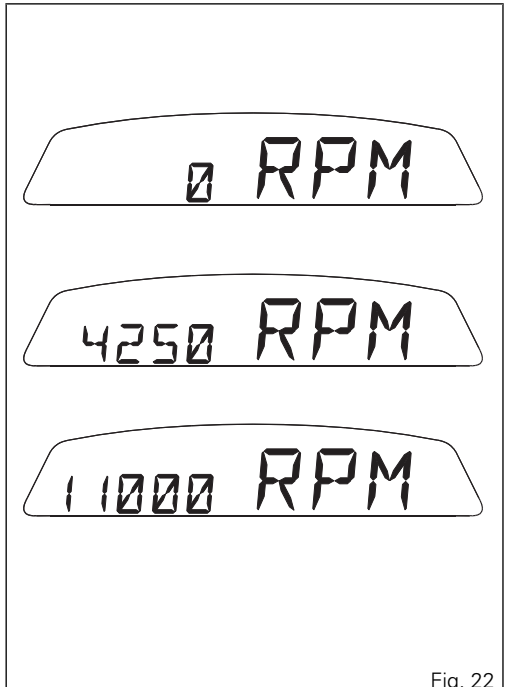


Fig. 22

Back-lighting setting

This function allows dashboard backlighting power setting.

To set the backlighting, access the "LIGHT SET" page of the menu.

Press the switch (1,Fig. 9), in position B " ▼ " for 3 seconds in this page to access the setup mode and the following pages will be displayed in sequence:

- page 1 - "LIGHT MAX" setting:
  This page sets backlighting to maximum brightness; press switch (1Fig. 9), in position B " ▼ " to go to page 2.
- page 2 - "LIGHT MID" setting:
  This page reduces the backlighting by approximately 30% relative to maximum brightness; press switch (1Fig. 9), in position B " ▼ " to go to page 3.
- page 3 - "LIGHT MIN" setting:
  This page reduces the backlighting by approximately 70% relative to maximum brightness; press switch (1Fig. 9), in position B " ▼ " to go to page 1.

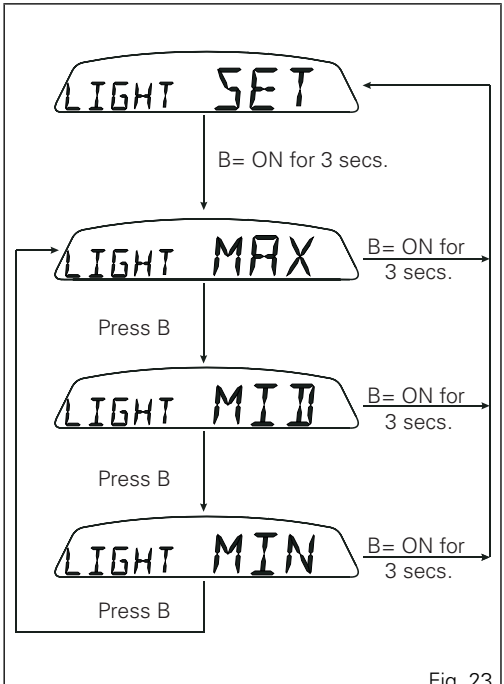


Fig. 23

If you press the switch (1,Fig. 9), in position B " ▼ " for 3 seconds in one of these three pages, the instrument panel goes back to the "LIGHT SET" page and stores the selected backlighting setup.

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

Lap timer display (LAP)

This function lets you display lap times.
To enable this function, enter the menu and set the "LAP" function to "On" by holding switch (1,Fig. 9), pressed in position B " ▼ " for 3 seconds.
The timer is started and stopped using the high-beam flasher button FLASH (12,Fig. 4), on the LH switch.
When the LAP function is active, each time you press the FLASH button, the display will show the lap time for 10 seconds, before reverting to normal mode.
Up to 30 lap times can be stored. If the memory is full, each time you press the FLASH button, no more lap times can be saved and the display will show the flashing message "FULL" for 3 seconds until the memory is reset.

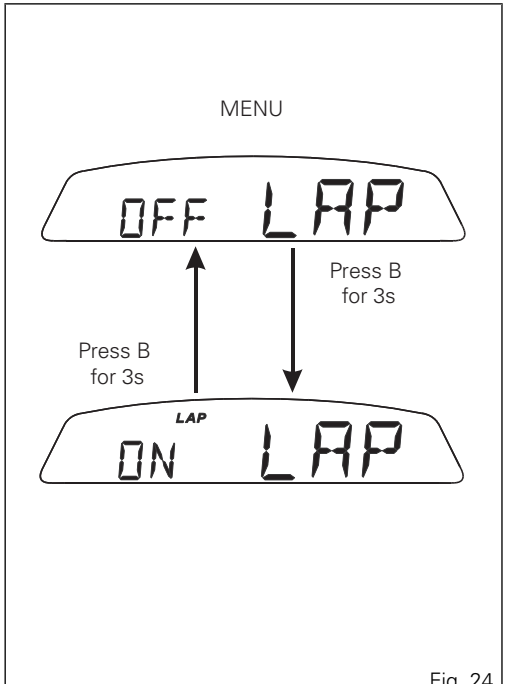


Fig. 24

When the LAP function is set to Off in the menu, the current "lap" is not stored.
If the LAP function is active and the display is suddenly switched off (Key-Off), the LAP function is switched off automatically (even if the timer was ON, the lap in progress is not saved). If the timer is not stopped, when it reaches 9 minutes, 59 seconds and 99 hundredths, it restarts from 0 (zero) and continues until the function is switched off. If the LAP function is enabled without resetting the "memory" and there are less than 30 laps stored in the memory (for instance: 18 laps), the display will store any remaining laps until the memory is full (in this case, it will store an additional 12 laps). This function only displays lap times once; however, lap times are saved for subsequent display in the Lap Memory function.

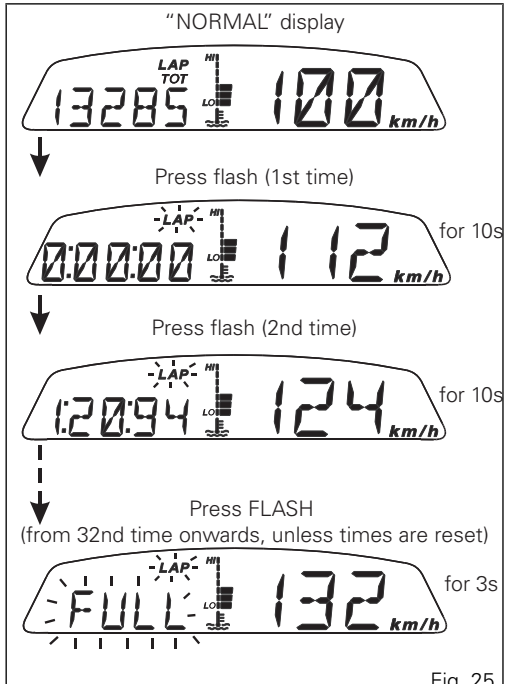


Fig. 25

Saved data display (LAP Memory)

It displays data stored using the LAP function: lap number and time.

To view stored lap times, enter the menu and go to page "LAP MEM".

Holding switch (1,Fig. 9), pressed in position B " ▼ " for 3 seconds in this menu page accesses the "1st lap" view mode The display will show the lap number, lap time, MAX speed and the MAX rpm reached for the lap in question.

Press switch (1Fig. 9), in position B " ▼ " to scroll through the 30 laps stored until returning to the 1st lap.

If you press switch (1Fig. 9), in position B " ▼ " for 3 seconds while the saved times are displayed, the display immediately resets all the saved times; in this case, if the LAP function was active, it is switched off automatically.

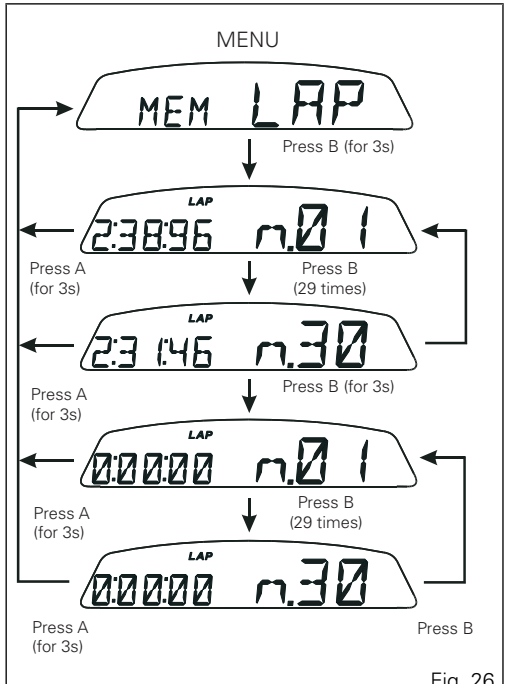


Fig. 26

The MAX speed saved is the maximum speed indicated on the display in Lap function.
To exit display of the lap times memory press switch (1Fig. 9), in position A " ▲ ".
If no lap times are saved in memory, all 30 lap times will be displayed as "0.00.00".
If the engine trips the rev limiter during a lap, the "REV LIMITER- OVER REV."(9Fig. 3), light will come on during the display of the lap time.

DDA data logger

This function allows activating the DDA (Ducati Data Analyser): data logger must be connected to vehicle wiring.

To enable this function, enter the menu and set "DDA" data logger to "On" by holding switch (1Fig. 9), pressed in position B " ▼ " for 3 seconds. The START/STOP control for the data logger lap separator is the high-beam flash button FLASH (12,Fig. 3), on the LH switch. If the DDA function is active and the display is suddenly switched off (Key-Off), the function is switched off automatically.

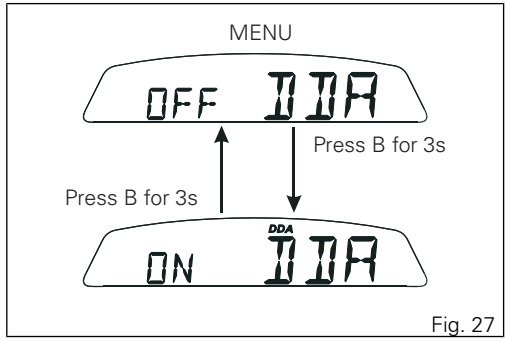


Fig. 27

Note

Online assistance is available to Ducati Data Analyser (DDA) owners (http://dda.prosa.com). This service will provide anything necessary to correctly use the DDA with your PC: both for the device and the software for analysing the recorded data.

Warning

After use, disconnect the DDA from the main wiring harness.

Erase DDA

This function deletes all data from the DDA: the data logger must be connected to vehicle wiring.
To erase data, enter the menu page "Erase DDA".
If you press switch (1,Fig. 9), in position B " ▼ " for 3 seconds and the DDA is not acquiring data, the message "WAIT…" is shown on the display for 10 seconds After 10 seconds, the message "ERASE OK" appears for 3 seconds, to confirm that the DDA data has been deleted.
If switch (1,Fig. 9) is pressed in B position " ▼ " for 3 seconds while the DDA data logger is acquiring data, the data logger memory is not erased and the display shows message "FAIL" for 3 seconds.

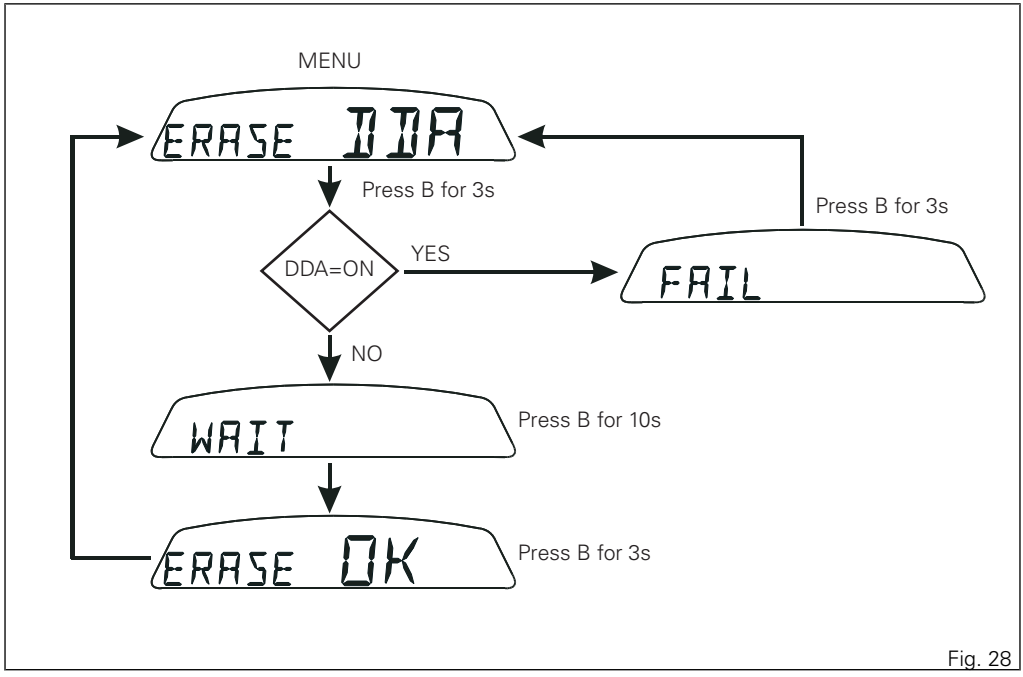

MENU
ERASE DDA
Press B for 3s
DDA=ON
YES
FAIL
Press B for 3s
NO
WAIT
Press B for 10s
ERASE OK
Press B for 3s

Fig. 28

ABS disabling

This function disables the ABS control unit (on ABS version only).

Warning

This operation must be carried out with the vehicle stopped (key ON).

To disable the ABS control unit, access the menu on the "DISAB ABS" page and hold down switch (1,Fig. 9), in position B " ▼ " for 3 seconds.
At the end of the 3 seconds, the flashing ABS light (10,Fig. 3), on the instrument panel indicates the disabling.
From this moment, the ABS control unit is disabled; it is automatically restarted at the next Key-Off / Key-On.
At the next Key-On the instrument panel indicates that it is operative by keeping the ABS light (10,Fig. 3), off.
If there are problems with the ABS system, the instrument panel indicates its malfunction by keeping the ABS light (10Fig. 3), on steady, the EOBD light (8,Fig. 3), on steady and the ABS error in the menu.

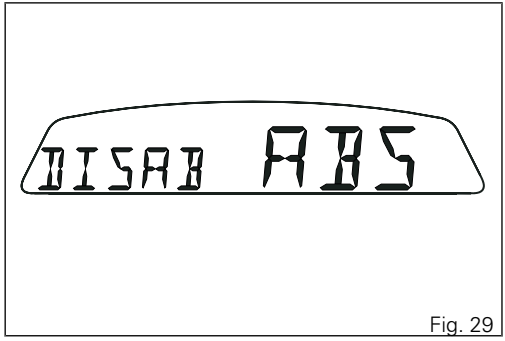


Fig. 29

Important

This indicator is activated only at a speed above or equal to 10 km/h; at a speed lower than 10 km/h the ABS control unit does not perform the diagnostics.

Clock setup

This function is used to set the clock time.
To set the clock, access the "SET" page in the menu.

SETTING THE TIME
Holding switch (1,Fig. 9), pressed in position B " ▼ " for 3 seconds in this menu page gives access to the setup mode.
On entering this mode, the message "AM" will flash; if you press switch (1,Fig. 9), in position B " ▼ " the message "PM" flashes; if you press switch (1Fig. 9), in position B " ▼ " the mode will go back to previous setting (if it is 00:00, when toggling from "AM" to "PM", 12:00 will be displayed).

- Pressing switch (1,Fig. 9), in position A " ▲ " gives access to the hour setting mode; hours start to flash. Each time you press the switch in position B " ▼ ", the count will increase cyclically in steps of one hour; If the switch is held pressed in position B " ▼ " the count will increase cyclically in steps of one hour every second (when the switch is held depressed, the hours do not flash).
- Pressing switch (1Fig. 9), in position A " ▲ " gives access to the minutes setting mode; hours start to flash. Each time you press the switch in position B " ▼ ", the count will increase cyclically in steps of one minute; If you hold the switch down in position B " ▼ ", the count will increase cyclically in steps of 1 minute every second. If the switch is held depressed in position B " ▼ " for over 5 seconds, minutes will increase by 1 minute every 100 ms (while the switch is held depressed in position B " ▼ ", seconds will not flash).
- Pressing the switch in position A " ▲ ", exits setup mode and the new time is displayed.

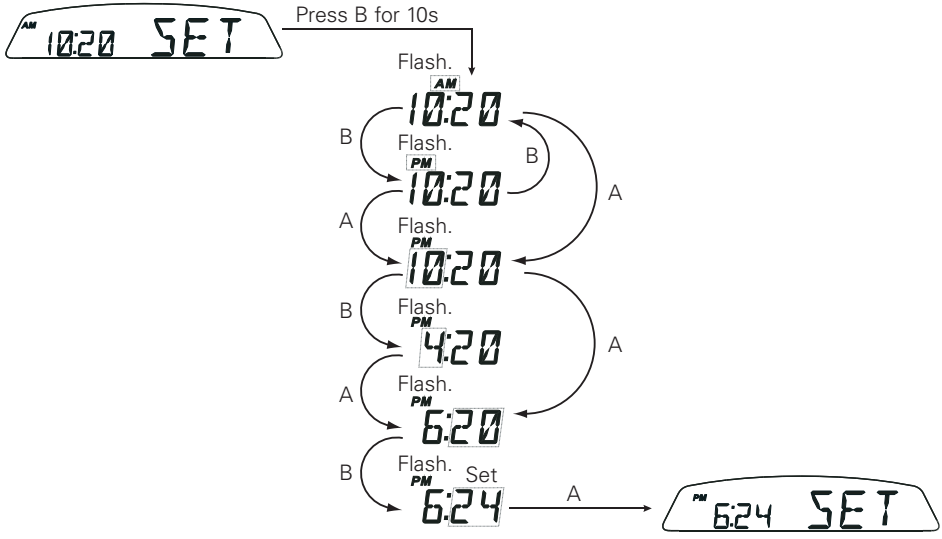

AM 10:20 SET
Press B for 10s
Flash.
AM 10:20
B
Flash.
PM 10:20
B
A
A
Flash.
PM 10:20
B
Flash.
PM 4:20
A
A
Flash.
PM 6:20
B
Flash.
Set
PM 6:24
A
PM 6:24 SET

Fig. 30

Instrument panel diagnostics

Important
The instrument panel runs system diagnostics after 60 seconds from the last Key-Off.

This function allows you to display and identify malfunctions of the motorcycle and, where possible, renew components identified as faulty.
To view this function, access the "Error" page of the menu.

This menu is only active when at least one error is present, otherwise the page will NOT appear.
If more errors are present, they are displayed one by one every 3 seconds.
In any case, a more detailed diagnosis can be obtained using the Ducati Diagnostic System.

Warning
When an error is displayed, always contact a Ducati Dealer or authorised Service Centre.

WARNING LIGHT / ERROR MESSAGE	**ERROR**	
TPS	01	Throttle position sensor short circuit Volt DC or AC
TPS	01	Throttle position sensor short circuit GND
PRESS	02	Throttle position sensor short circuit Volt DC
PRESS	02	Throttle position sensor short circuit GND or AC
OIL	03	Oil NTC sensor short circuit Volt DC or AC

WARNING LIGHT / ERROR MESSAGE	ERROR	
 OIL	03	Oil NTC sensor short circuit GND
 T AIR	04	Air temperature sensor short circuit GND or AC
 T AIR	04	Air temperature sensor short circuit Volt DC
 BATT	05	LOW battery voltage level
 BATT	05	HIGH battery voltage level
 LAMB	06	Lambda sensor (rim runout)
 LAMB	06	Lambda sensor heater short circuit Volt DC
 LAMB	06	Lambda sensor heater short circuit GND or AC
 FUEL	07	Fuel reserve NTC sensor short circuit Volt DC or AC

WARNING LIGHT / ERROR MESSAGE	ERROR	
 FUEL	07	Fuel reserve NTC sensor short circuit GND
 DTC	08	Traction Control
 COIL	09	Vertical coil (2) short circuit Volt DC
 COIL	09	Vertical coil (2) short circuit Volt DC or AC
 COIL	09	Horizontal coil (1) short circuit Volt DC
 COIL	09	Horizontal coil (1) short circuit Volt DC or AC
 INJE	10	Vertical injector (2) short circuit Volt DC
 INJE	10	Vertical injector (2) short circuit Volt DC or AC
 INJE	10	Horizontal injector (1) short circuit Volt DC

WARNING LIGHT / ERROR MESSAGE	ERROR	
 INJE	10	Horizontal injector (1) short circuit Volt DC or AC
 START	12	Solenoid starter short circuit Volt DC
 START	12	Solenoid starter short circuit GND or AC
 R INJ	13	Injection relay AC
 STEPP	14	Stepper motor AC
 STEPP	14	Stepper motor short circuit Volt DC
 STEPP	14	Stepper motor short circuit GND
 EXVL	15	Seek Fail or Position Error Exhaust Valve Motor
 EXVL	15	Position sensor short circuit GND or AC

WARNING LIGHT / ERROR MESSAGE	ERROR	
EXVL	15	Position sensor short circuit Volt DC
EXVL	15	Starter motor damaged / not functioning
ECU	16	ECU (generic error)
PKUP	17	Pick-up sensor
SPEED	18	Speed sensor
IMMO	19	Immobilizer (key missing)
IMMO	19	Immobilizer (antenna disconnected)
IMMO	19	Immobilizer (key not recognised)
CAN	20	CAN line

WARNING LIGHT / ERROR MESSAGE	ERROR	
 LIGHT	21	Light relay
 ABS	22	ABS system error

Headlight “smart” switch-off

This function helps reduce battery use by automatically switching off the headlight. The device is enabled in three instances:

- 1) When the key is turned from OFF to ON and the engine is not started within 60 seconds, the headlight is turned off and will be turned back on next time you start the engine.
- in case 2, after the vehicle has been running with the headlights on and the engine is stopped using the RUN-STOP button on the RH switch.
  In this case, 60 seconds after stopping the engine, the headlight is turned off and will be turned back on next time you start the engine.
- 3) While starting up the engine, the headlight is turned off and back on as soon as the engine is started.

Headlight “smart” switch-on

This function allows programmed activation of the headlight even with the motorcycle off (Key-Off). The instrument panel stays active for 60 seconds soon after Key-Off, and the headlight can be switched on by pressing switch (1Fig. 9), in position A " ▲ " or B " ▼ ".

During these 60 seconds, each time switch (1Fig. 9), is pressed in position A “ ▲ ” or B “ ▼ ”, the instrument panel will activate the headlight for 30 seconds; each press of the switch will add to the headlight activation time, up to a maximum of 6 presses (equivalent to a maximum activation time of 180 seconds).

After the first time you press switch (1Fig. 9), in position A “ ▲ ” or B “ ▼ ”, the period of 30 seconds starts, thus switching on the headlight Further switch-on time can be added only if you press the switch again within these 30 seconds If the 30 seconds have elapsed, no further multiples of 30 seconds can be added, and the instrument panel will switch off the headlight.

To reset this function, you must perform at least one Key-On/ Key-Off.

If the battery power is interrupted at any time while this function is active, when power is restored, the instrument panel will deactivate the function (the instrument panel does not remain active for 60 seconds).

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 B (BLACK) with the vehicle.
These keys contain the "immobilizer system code".

Note

Your Ducati dealer may ask you to produce your Code Card in order to carry out certain servicing operations.

The black keys (B) are regular ignition keys and are used to:

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

Note

The two keys have a small plate (1) attached that reports their identification number.

Warning

Separate the keys and use only one of the black keys to start the motorcycle.

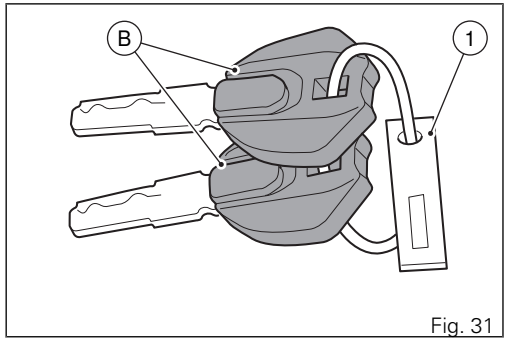


Fig. 31

Code card

One CODE CARD supplied with the keys indicates the electronic code (A,Fig. 33), to start the engine in the event it fails to start after the KEY-ON.

Warning

Keep the CODE CARD in a safe place. However, it is advisable to keep the electronic code printed on the CODE CARD handy when you ride your motorcycle, in case it is necessary to enable the engine through the procedure described below. This procedure lets you disable the “engine block” function - indicated by the amber "Vehicle/Engine diagnosis - EOBD" light, coming on - in the event of problems with the immobilizer system. This operation is only possible if the electronic code indicated on the code card is known.

Warning

Your dealer will ask you to produce the Code Card in order to reprogram or replace a key.

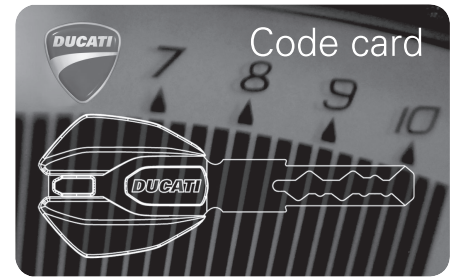


Fig. 32

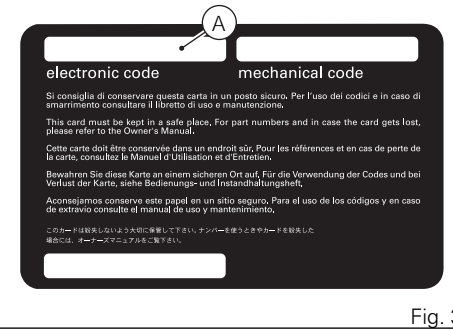


Fig. 33

Immobilizer override procedure

Should the immobilizer become locked, you can perform the “Immobilizer Override” procedure from the instrument panel by entering the relevant function as described below
Enter the menu and go to page "COD.".

Note
This menu should only be active when at least one Immobilizer error is present.

With this page selected, the initial code is always displayed as “00000” If you hold pressed switch (1Fig. 9), in position B “ ▼ “ for 3 seconds, you will access the procedure for entering the electronic code given on the Code Card.

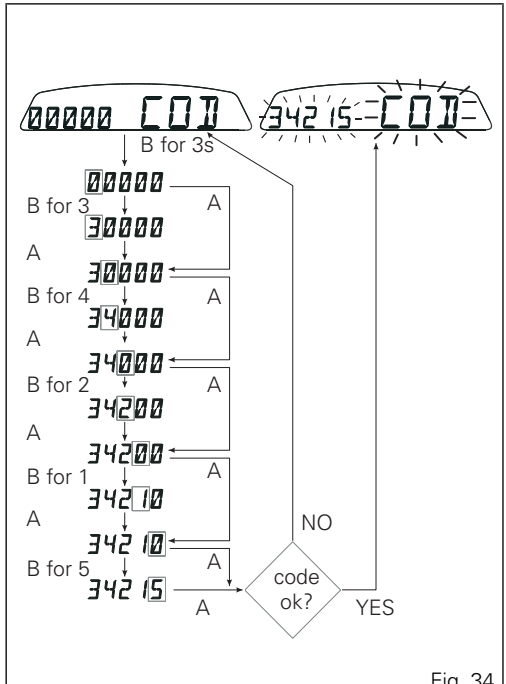


Fig. 34

Entering the code:
when you access this function, the first digit on the left will flash.
Switch (1,Fig. 9): each time you press the switch in position B " ▼ " the count will increase cyclically in steps of one digit every second; if you press the switch in position A " ▲ ", you will move to the second digit, which will start to flash. Each time you press the switch in position B " ▼ ", the count will increase cyclically in steps of one digit every second;
if you press the switch in position A " ▲ ", you can set the third digit, which will start flashing. Each time you press the switch in position B " ▼ ", the count will increase cyclically in steps of one digit every second;
if you press the switch in position A " ▲ ", you will move to the fourth digit, which will start to flash. Each time you press the switch in position B " ▼ ", the count will increase cyclically in steps of one digit every second;
if you press the switch in position A " ▲ ", you can set the fifth digit, which will start flashing. Each time you press the switch in position B " ▼ ", the count will increase cyclically in steps of one digit every second;
press in position A " ▲ " to confirm the code.

If the code has been entered correctly, the message CODE and the code itself will flash simultaneously for 4 seconds The "Vehicle/engine diagnosis EOBD" light (8,Fig. 3), will turn off; The instrument panel then automatically exits the menu, thus allowing "temporary" starting of the motorcycle.
If the error is still present, at the next Key-On the instrument panel error and the inhibited status will persist. If the code is not entered correctly, the instrument panel returns automatically to the "COD" menu, displaying code "00000".

Operation

When the ignition key is turned to OFF, the immobilizer inhibits engine operation.
When the ignition key is turned back to ON to start the engine, the following happens:
1) if the code is recognised, the immobilizer enables engine ignition. Press the START button(2,Fig. 3) to start the engine;
2) if the "Vehicle/Engine Diagnosis - EOBD" light (8,Fig. 3) comes on and the page with the "Error" message is displayed when you press switch (1,Fig. 9), in position B " ▼ " it means that the code was not recognised. When this is the case, turn the ignition key back to OFF and then to ON again. If the engine still does not start, try with another black key. If the other key does not work out either, contact the Ducati Service network.

Warning

Any important shock might damage the electronic components fitted into the key. Use only one key during the procedure. Using different keys could prevent the system from recognising the code in the key.

Duplicate keys

If you need additional keys, contact your DUCATI Service Centre with all the keys you have in your possession and your CODE CARD.
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 for any keys not present during the memory programming procedure are cancelled, to ensure that any keys that may have been lost can no longer be used to start the engine.



Note

If you sell your motorcycle, do not forget to give all keys and the CODE CARD to the new owner.

Service menu - unit of measurement (UNIT SET)

This function allows you to select the units of measurement displayed on the instrument panel. To enter the service menu press and hold switch (1,Fig. 9) in position A " ▲ " while turning the ignition key from "Off" to "On".

Note
Within this MENU all other functions are excluded and motorcycle starting is disabled.

The first function displayed is "Immobilizer Reprogramming" (00000 PRO), press switch (1,Fig. 9) in position A " ▲ " to display the other function of the service menu "UNIT SET".
Now press the switch (1Fig. 9), in position B " ▼ " for 3 seconds.
Each time you press switch (1,Fig. 9), in position B " ▼ ", the instrument panel scrolls through the following sequence of options, which flash on the display:

	UNIT OF MEASUREMENT		
Country standard	Speed	Air temperature	Odometer/ trip meters
EU	Km/h	°C	Km
EN	mph	°C	miles
USA	mph	°F	miles
CND	Km/h	°C	Km
FRA	Km/h	°C	Km
JAP	Km/h	°C	Km
ECU Id.	The instrument panel sets units of measurement according to ECU information.		

If you press the switch (1,Fig. 9), in position B " ▼ " for 3 seconds, the option currently displayed will be saved to memory and the word "MEM" will appear. Upon the following Key-On the instrument panel will be set to the new settings.

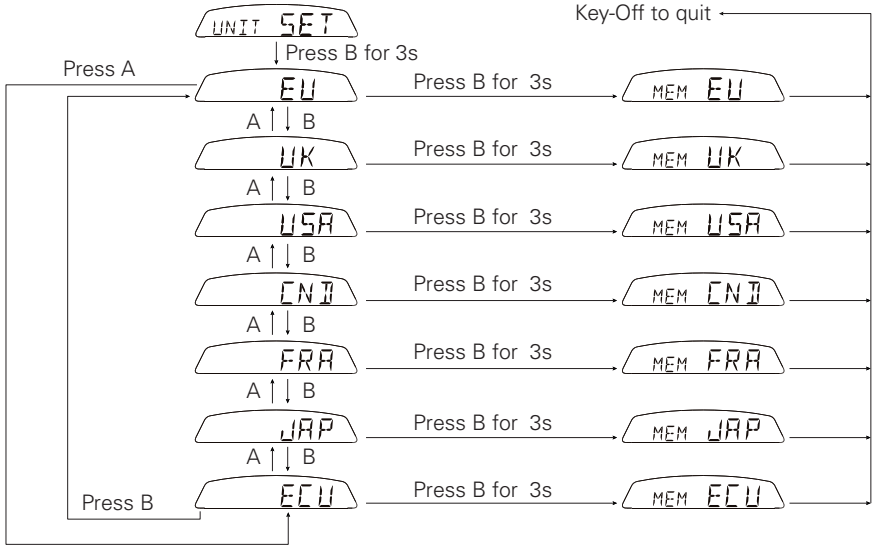

UNIT SET
Key-Off to quit
Press B for 3s
Press A
EU
Press B for 3s
MEM EU
A B
UK
Press B for 3s
MEM UK
A B
USA
Press B for 3s
MEM USA
A B
CNT
Press B for 3s
MEM CNT
A B
FRA
Press B for 3s
MEM FRA
A B
JAP
Press B for 3s
MEM JAP
A B
ECU
Press B for 3s
MEM ECU
Press B

Fig. 35

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) LH switch.
4) Clutch lever.
5) RH switch.
6) Throttle twistgrip.
7) Front brake lever.
8) Gear change pedal.
9) Rear brake pedal.

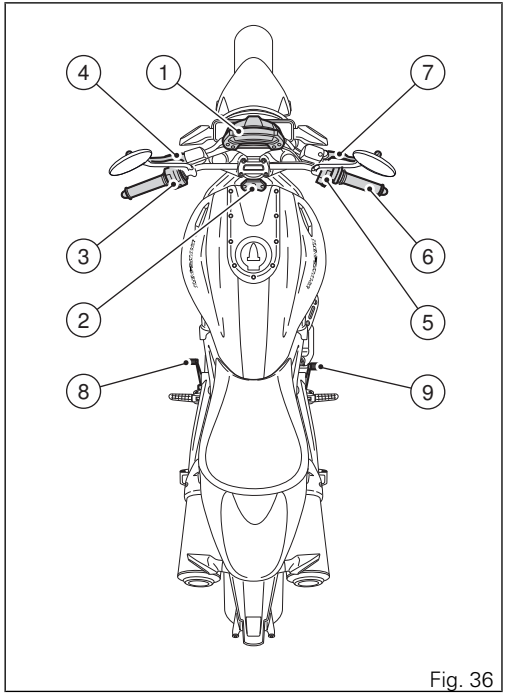


Fig. 36

Key-operated ignition switch and steering lock

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

A) ○ : enables lights and engine operation;
B) ⊠ : disables lights and engine operation;
C) 🔒 : the steering is locked;
D) ⊧≤ : parking light and steering lock.

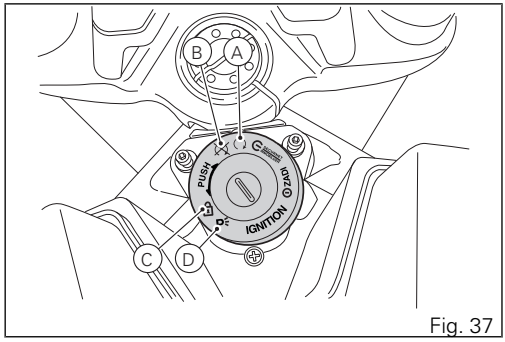


Fig. 37

Note

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

Left-hand switch

1) Dip switch, two-position light selector switch:
   position = low beam on;
   position = high beam on.
2) Switch = three-position turn indicator:
   centre position = off;
   position = left turn;
   position = right turn.
   To cancel the turn signal, press the lever once it has returned to the central position.
3) Button = warning horn.
4) Button = high beam flasher.
5) Two-position instrument panel control switch:
   position " ▲ ";
   position " ▼ ".

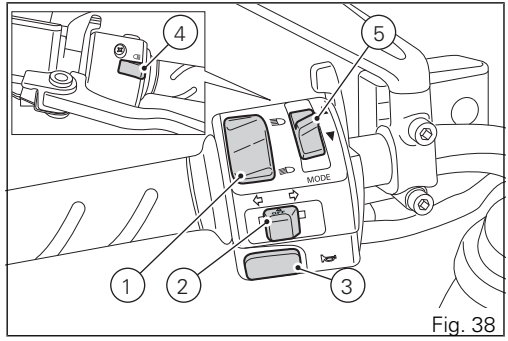


Fig. 38

Clutch lever

Lever (1) disengages the clutch. It features a dial adjuster (2) for lever distance from the twistgrip on handlebar.
To adjust it, keep lever (1) fully extended, and turn knob (2), turning it in correspondence of one of the four foreseen positions. Keep in mind that position no. 1 corresponds to the maximum distance between the lever and the twistgrip, whereas position no. 4 corresponds to the minimum 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.

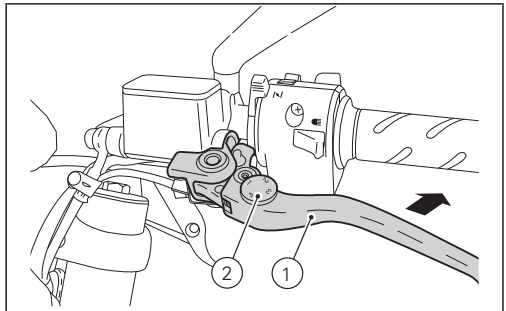


Fig. 39

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).

Cold start lever

The choke control is used to favour the engine cold start and increase the number of rpm at idle, after start-up.
Use the cold-start lever while the engine is cold (1 or max. 2 T-oil bars with the engine on). The cold-start lever is adjusted during engine warm-up so as to guarantee approximately 1500 rpm at idle.
Operating positions of the control:
A) = control not active;
B) = control fully active.
The lever may be set also at intermediate positions in order to follow the gradual warming up of the engine (see page 95).

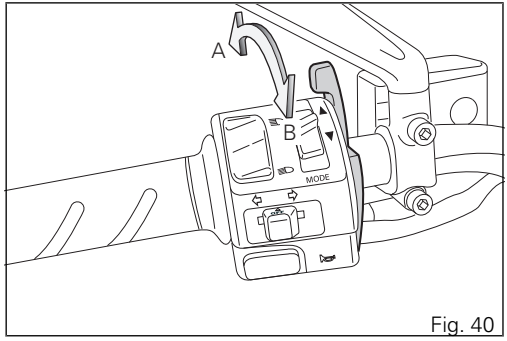


Fig. 40

Warning

Do not use this device if the engine is warm. Do not travel with the cold-start control active.

Right-hand switch

1) ENGINE STOP switch, two positions:

- position ⟳ (RUN) = run;
- position ⊠ (OFF) = stop.

Warning

This switch is mainly intended for use in emergency cases when you need to stop the engine quickly. After stopping the engine, return the switch to the ⟳ position to enable starting.

Important

Riding with the headlight on and then shutting the engine off with the switch (1) while leaving the ignition key in the ON position can cause the battery to discharge, as the headlight stays on.

2) Button ⏲ = engine start.

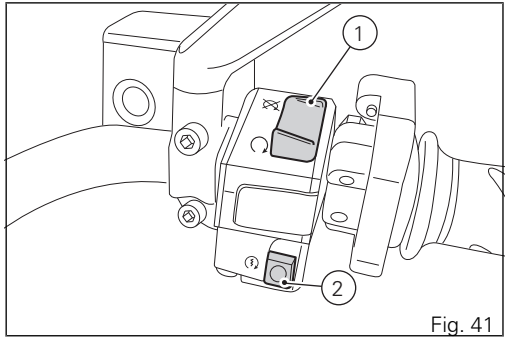


Fig. 41

Throttle twistgrip

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

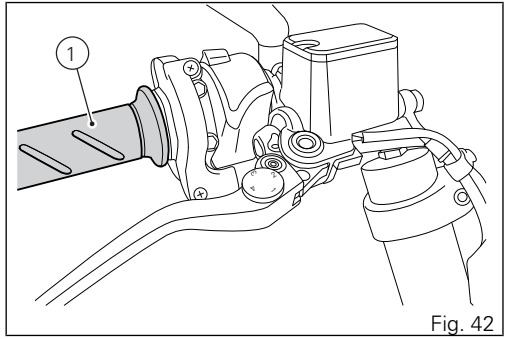


Fig. 42

Front brake lever

Pull in the lever (2) towards the twistgrip to operate the front brake. The system is hydraulically operated and you just need to pull the lever gently.
The control lever has a knob (3) for adjusting the distance between lever and twistgrip on the handlebar.
To adjust it, keep lever (2) fully extended, and turn knob (3), turning it in correspondence of one of the four foreseen positions. Keep in mind that position no. 1 corresponds to the maximum distance between the lever and the twistgrip, whereas position no. 4 corresponds to the minimum distance.

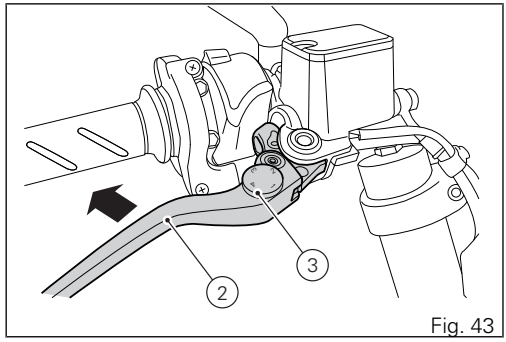


Fig. 43

Warning

Before using these controls, read the instructions in "Moving off".

Warning

The front brake lever must be adjusted when the motorcycle is stationary.

Rear brake pedal

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

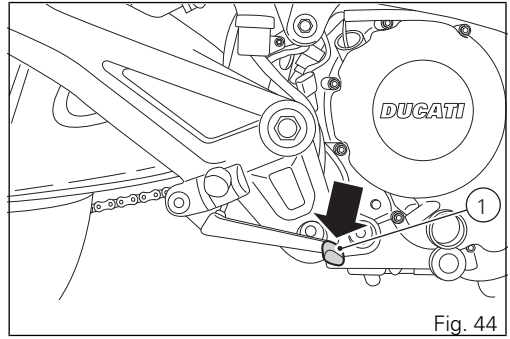


Fig. 44

Gear change pedal

The gearchange pedal has a central position N, with automatic return, and two directions of movement:

down = press down the pedal to engage the 1st gear and to shift down.

The N light will go out;

upwards= lift the pedal to engage 2nd gear and then 3rd, 4th, 5th and 6th gears.

Each time you move the pedal you engage the next gear up, one gear at a time.

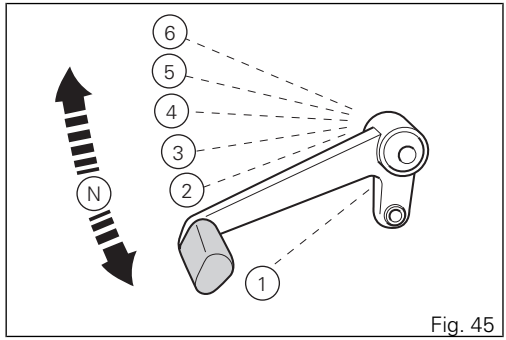


Fig. 45

Adjusting the position of the gearchange and rear brake pedals

The gear change and rear brake pedals can be adjusted to suit the preferred riding position of each rider.
To adjust the position, proceed as follows: hold the rod (1) and slacken the counter nuts (2) and (3).

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

Turn the rod (1) using an open-ended wrench on the flats to move the gear change pedal to the required position.
Tighten both counter nuts onto the rod.

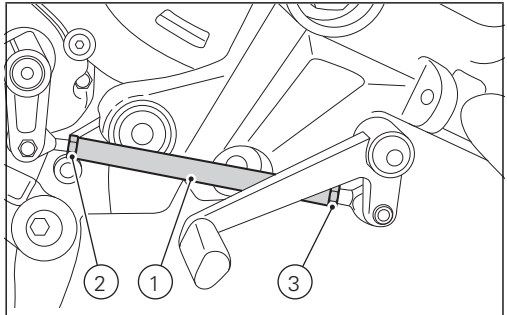


Fig. 46

To set the rear brake pedal, loosen the counter nut (4), turn the pedal stroke adjusting screw (5) until pedal is in the desired position. Tighten the counter nut (4). Operate the pedal by hand to check that there is 1.5 to 2 mm of freeplay before the brake bites.
If not, adjust the length of the master cylinder pushrod as follows.
Slacken off the counter nut (6) on the pushrod.
Tighten the pushrod into fork (7) to increase play, or unscrew it to reduce it.
Tighten the counter nut (6) and recheck the pedal freeplay.

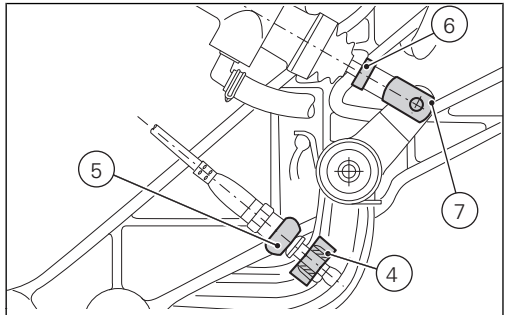


Fig. 47

Main components and devices

Position on the vehicle

1) Tank filler plug.
2) Seat lock.
3) Helmet cable pin.
4) Side stand.
5) Rear-view mirrors.
6) Rear shock absorber adjusters.
7) Catalytic converter

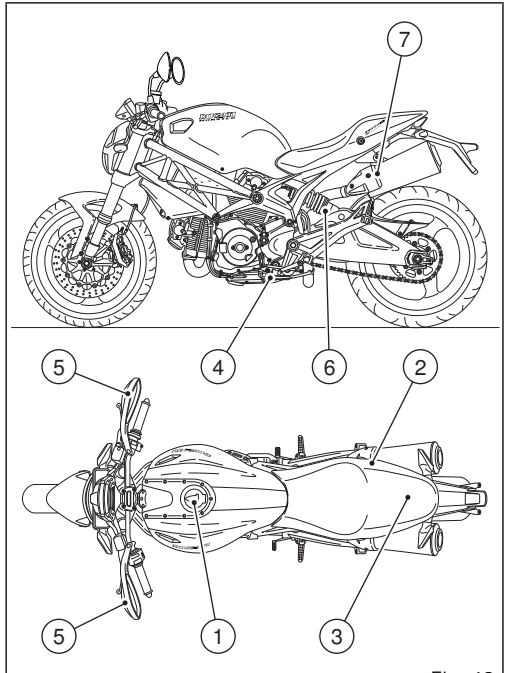


Fig. 48

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.

CLOSING

Refit the plug with the key in it and push it down into its seat. Turn the key counter-clockwise to the initial position and remove it. Close the lock protection lid (1).

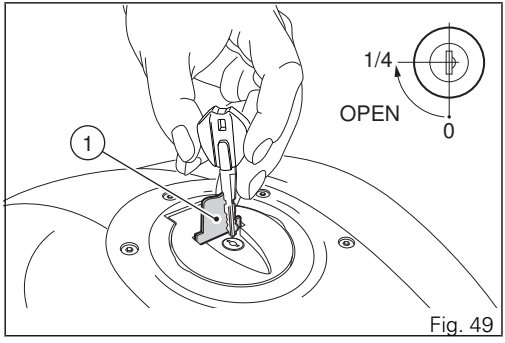


Fig. 49

Note

The plug can only be closed with the key in.

Warning

Always make sure you have properly refitted and closed the plug after refuelling.

Seat lock

OPENING

Insert the key in the lock and simultaneously apply downward pressure in the area of the catch to release the pin. Pull the seat backwards to release it from the front catches.

CLOSING

Make sure all parts are correctly arranged and secured in the underseat compartment. Insert the front ends of the seat base under the U bolt in the frame, then push the rear end of the seat until you hear the bolt in the lock click into place. Make sure that the seat is firmly secured to the frame and remove the key from the lock.

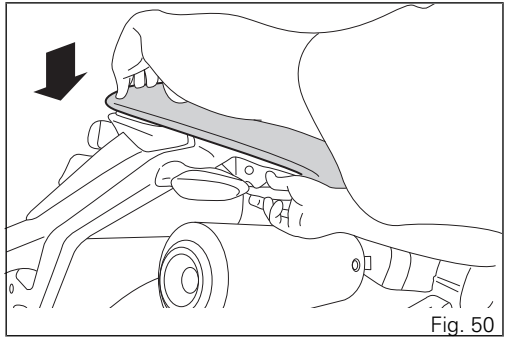


Fig. 50

Helmet holder cable

Helmet cable (1) can be found inside the tool kit, see “Tool kit and accessories” page 104. Pass the cable through the helmet and insert the end of the cable in the pin (2).

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

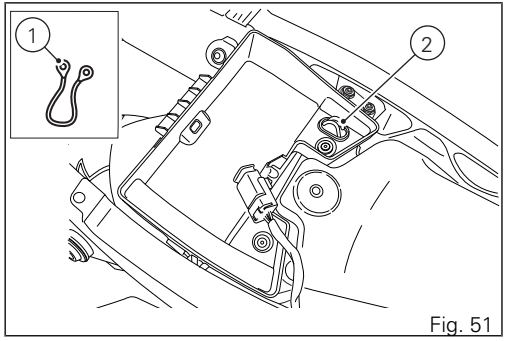


Fig. 51

Warning

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

Side stand

Warning
Before lowering the side stand, make sure that the supporting surface is hard and flat.

Do not park on soft ground, gravel or on asphalt softened by the sun etc. 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.

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

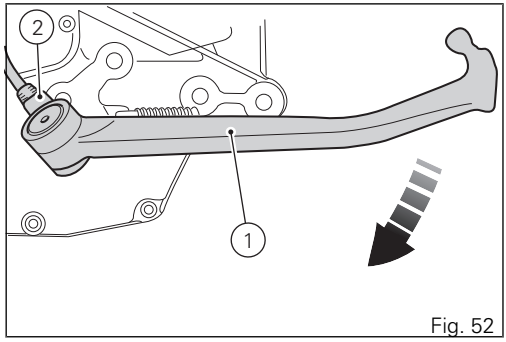


Fig. 52

To raise the side stand to rest position (horizontal position), tilt the motorcycle to the right and, at the same time, lift the stand (1) with your foot.

Note
Check for proper operation of the stand mechanism (two springs, one inside 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).

Rear shock absorber adjusters

The shock absorber has external adjusters that enable you to adjust the setup to suit the load on the motorcycle. The adjuster (1) located on the left-hand side, where the upper end of the shock absorber is attached to the rear subframe, controls rebound damping.
Turn the adjuster (1) clockwise to increase damping, or counter-clockwise to reduce damping.
Two ring nuts (2) located on the top section of the shock absorber are used to adjust the outer spring preload.
To change spring preload, slacken off the upper ring nut. Then TIGHTEN or SLACKEN the lower ring nut to INCREASE or DECREASE spring preload.

STANDARD setting from the fully closed position (clockwise):

- rebound: unscrew the adjuster (1) by 8 clicks from Max (fully closed);
- spring preload: 20 mm from Min (all unpreloaded).

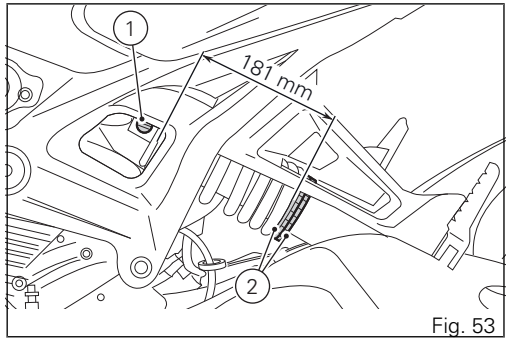


Fig. 53

Warning
When adjusting the spring preload, do not exceed a spring length of 181 mm to avoid damaging the swinging arm.

Warning
Use a specific pin wrench to turn the preload adjusting nut. Be careful when turning the nut with the wrench, as the pin may slip out of the ring nut recess and you may hurt your hand hitting motorcycle parts.

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.

Riding the motorcycle

Running-in recommendations

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

Up to 1000 km
During the first 1000 km, keep an eye on the rev counter. It should never exceed: 5,500÷6,000 rpm.
During the first hours of riding, it is advisable to run the engine at varying load and rpm, though still within recommended limit.
To this end, roads with plenty of bends and even slightly hilly areas are ideal for a most efficient running-in of engine, brakes and suspensions.
For the first 100 km, use the brakes gently. Do not brake violently or keep brake applied for too long. This will enable a correct break-in of the friction material on the brake pads 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 1000 to 2500 km
At this point, you can ask for more power from the 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 comply with these rules will release Ducati Motor Holding S.p.A. from any liability whatsoever for resulting engine damage or shorter engine life.

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

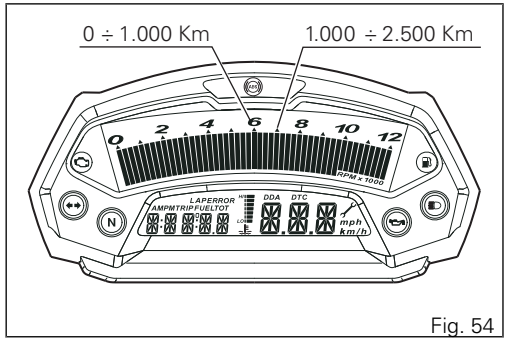


Fig. 54

Pre-ride checks

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

Before riding, perform a thorough check-up on your bike as follows:
FUEL LEVEL IN THE TANK
Check the fuel level in the tank. Fill tank if needed (page 102).
ENGINE OIL LEVEL
Check the oil level in the sump through the sight glass. Top up if needed (page 140).
BRAKE AND CLUTCH FLUID
Check fluid level in the relevant reservoirs (page 105).
TYRE CONDITION
Check tyre pressure and condition (page 137).
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 134).
KEY-OPERATED LOCKS
Ensure that fuel filler plug (page 84) and seat (page 85) are locked.
SIDE STAND
Make sure that side stand operates smoothly and is in the correct position (page 87).

ABS WARNING LIGHT (for ABS version only)
After key-on, the ABS light (10Fig. 3), remains on when the vehicle speed exceeds 5 km/h; the light turns off to indicate that the ABS system is functioning properly.

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

ABS DEVICE (for ABS version only)
Check that the front (1) and rear (2) phonic wheels are clean.

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

Warning
Prolonged rearing could deactivate the ABS system.

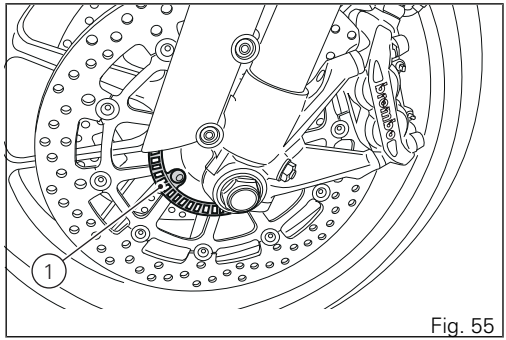


Fig. 55

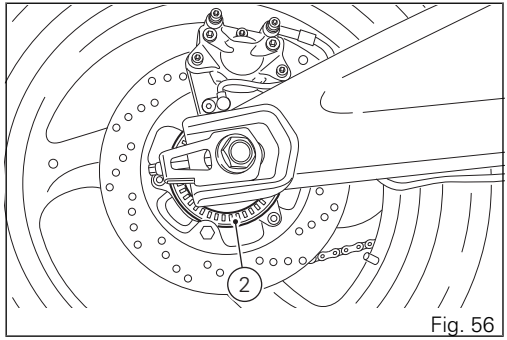


Fig. 56

Starting the engine

Warning
E Before starting the engine, familiarise yourself with the controls that you will use when riding.

NORMAL AMBIENT TEMPERATURE

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

Move the ignition switch to (1Fig. 57). Make sure that both the green light N and the red light on the instrument panel are on.

Important
The oil pressure light should go out a few seconds after the engine start.

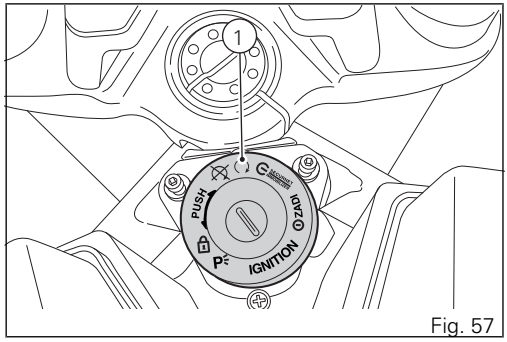


Fig. 57

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

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

Shift the cold-start lever to position (B,Fig. 59). Check that the stop switch (2Fig. 58), is positioned to ↺ (RUN), then press the starter button (3Fig. 58). Allow the engine to start on its own, without turning the throttle twistgrip.

Note
If the battery is flat, the system automatically disables operation of the starter motor.

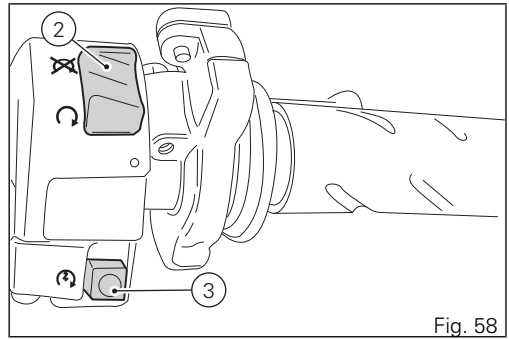


Fig. 58

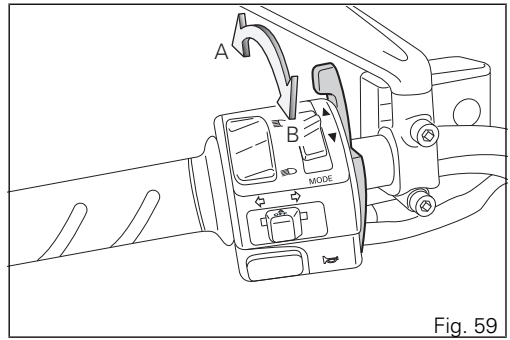


Fig. 59

Important

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

Set the cold-start lever in the vertical position (A) to reach the engine speed of approx. 1,400÷1,500 rpm. Subsequently, as the engine warms up, move the cold-start lever gradually towards its vertical position (A,Fig. 59). Once the engine is at normal running speed it should idle smoothly with the cold-start lever completely closed.

High ambient temperature (over 35 °C/95 °F).

Follow the same procedure described for "Normal ambient temperature" without using the cold-start control.

Cold ambient temperature (less than 10 °C/ 50 °F).

Follow the procedure described for "Normal ambient temperature" extending the time for engine warming up (point 5) to 5 minutes.

Moving off

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

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

Warning

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

Warning

Prolonged rearing could deactivate the ABS system.

Braking

Slow down in time, shift down to engine-brake first and then brake applying both brakes. Pull in the clutch lever before the motorcycle comes to a stop to prevent the engine stalling.

ABS system (for ABS version only)

Using the brakes correctly under adverse conditions is the hardest – and yet the most critical - skill to master for a rider. Braking is one of the most difficult and dangerous moments when riding a two wheeled vehicle: the possibility of falling or having an accident during this difficult moment is statistically higher than any other moment. A locked front wheel leads to loss of traction and stability, resulting in loss of control.
The Anti-Lock Brake System (ABS) has been developed to enable riders to use the vehicles braking force to the fullest possible amount in emergency braking or under poor pavement or adverse weather conditions.
ABS uses hydraulics and electronics to limit pressure in the brake circuit when a special sensor mounted to the wheel signals the electronic control unit that the wheel is about to lock up.
This avoids wheel lockup and preserves traction. Pressure is raised back up immediately and the control unit keeps controlling the brake until the risk of a lockup disappears.
Normally, the rider will perceive ABS operation as a harder feel or a pulsation of the brake lever and pedal.
The front and rear brakes use separate control systems, meaning that they operate independently. Likewise, the ABS is not an integral braking system and does not control both the front and rear brake at the same time.
If desired, the system can be disabled from the instrument panel, using the “ABS disabling function” (see page 52).

Warning

With the ABS system deactivated, the vehicle maintains the characteristics of the standard braking system, therefore the use of only one of the brakes reduces the motorcycle's 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 slippery surfaces, braking capacity is significantly reduced. 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. Tyre inflation pressures below the specified value will reduce braking efficiency, and compromise steering precision and roadholding on bends.

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 (2).

Important

Never leave the key in the ON position (1) when engine is stopped, or this will damage the electric components.

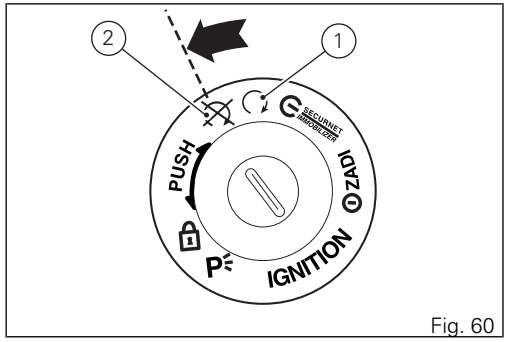


Fig. 60

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

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

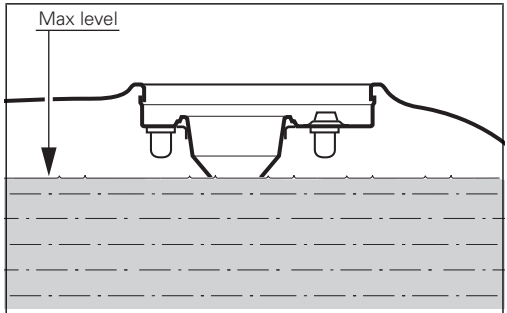


Fig. 61

Parking

Park the stopped motorcycle on the side stand (page 87).
To prevent theft, turn the handlebar fully left and turn the ignition key to (3).
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.
You may leave the parking lights on by turning the key to (4).

Important

Do not leave the key turned to position (4) for long periods or the battery will run down. Never leave the ignition key in the switch when you are leaving your bike unattended.

Warning

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

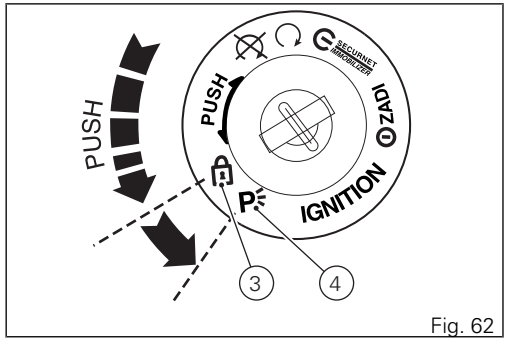


Fig. 62

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.

Tool kit and accessories

The tool kit for normal check and maintenance operations is located in the underseat compartment. To access the underseat compartment, remove the seat (page 85).
The tool kit includes:

- fuse pliers;
- 8/10 double-ended wrench;
- helmet lock cable;
- screwdriver;
- screwdriver handle;
- 16 mm box wrench;
- 8 mm rod;
- 3 mm Allen wrench;
- 5 mm Allen wrench;
- 6 mm Allen wrench.

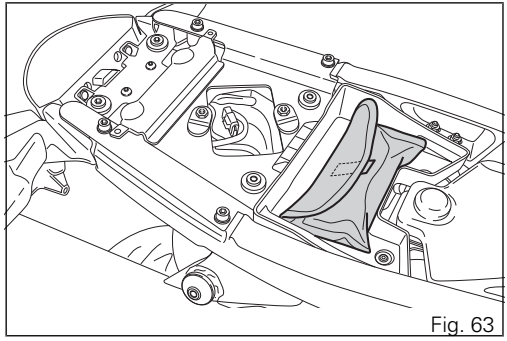


Fig. 63

Main maintenance operations

Changing the air filter

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

Checking brake and clutch fluid level

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

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

CLUTCH SYSTEM
If the control lever has excessive play and the transmission snatches or jams when engaging a gear, this indicates that air is 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).

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

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

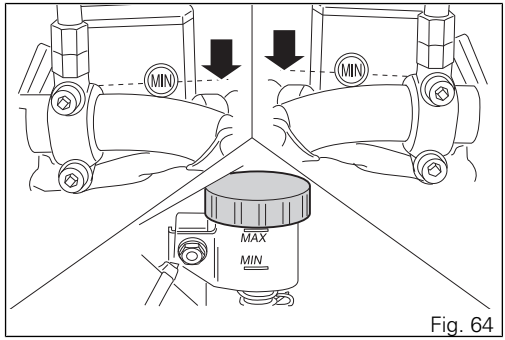


Fig. 64

Checking brake pads for wear

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

Warning

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

Important

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

Warning

Close the twistgrip housing carefully, inserting the cable in the race.

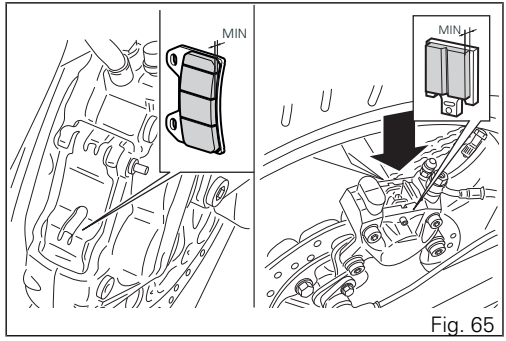


Fig. 65

Lubricating joints

The condition of the throttle cables and choke cable sheaths should be checked at regular intervals. There should be no signs of pinching or cracking on the outer plastic sheath. Operate the controls to make sure the inner cable slide smoothly inside the outer sheath: if you feel any friction or catching, have the cable replaced by a Ducati Dealer or Authorised Service Centre.

To avoid this kind of problem, periodically lubricate the ends of each control cable with SHELL Advance Grease or Retinax LX2.

Concerning the throttle cable, it is advised to open the housing, unscrewing the two fastening screws (1) and then grease the cable end and the pulley.

Warning

Close the twistgrip housing carefully, inserting the cable in the race.

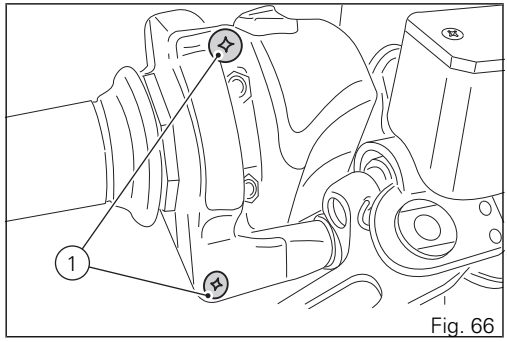


Fig. 66

Refit the housing and tighten the screws (1) to 1.8 Nm.

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

Adjusting the throttle cable

In all steering positions, the throttle twistgrip should have about 2 to 4 mm of free travel, measured at the outer edge of the twistgrip housing.
If necessary, adjust it with the adjuster (1) located on the twistgrip.

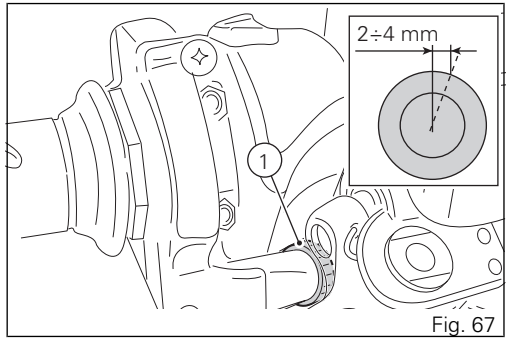


Fig. 67

Charging and maintenance of the battery during winter storage

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

Important

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

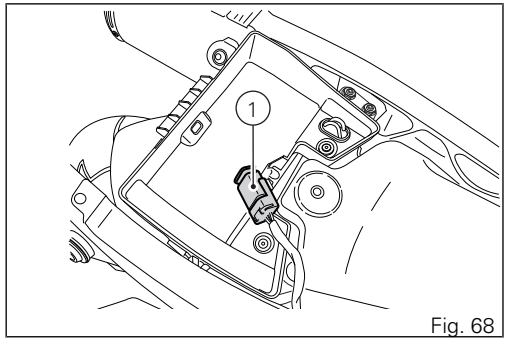


Fig. 68

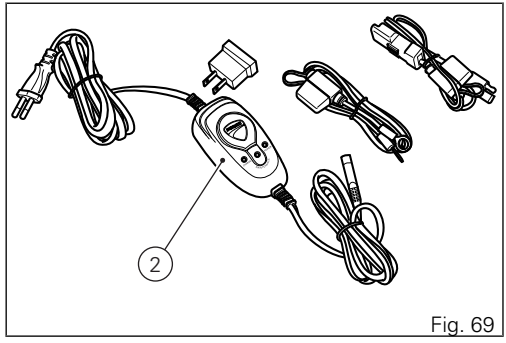


Fig. 69



Note

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



Note

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

Removing the battery

Important
For battery removal, ALWAYS contact a Ducati Dealer or authorised Service Centre.

Remove the seatpage 85.

Unscrew the screws (1) and (2) securing the front tank cover (3) but do not remove the cover.
Unscrew the screws (4) and (5) and recover the nylon washers (7).

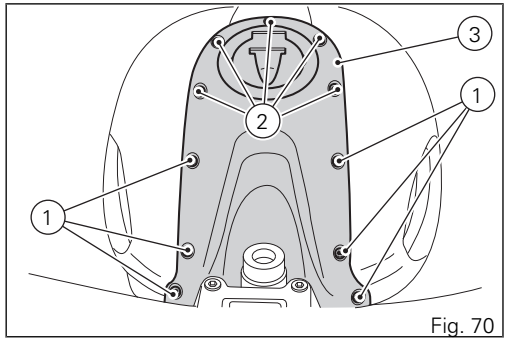


Fig. 70

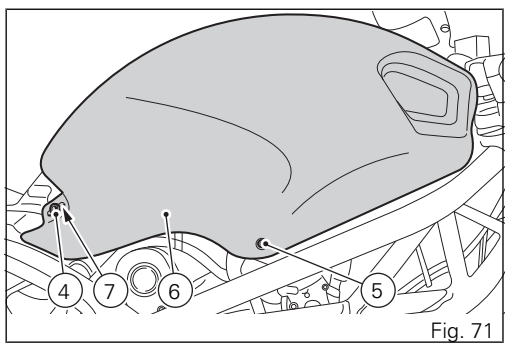


Fig. 71

Slide off the right-hand tank cover (6), releasing the tabs (A) in the corresponding slots (B) in the rear cover.
Repeat the above operations to remove the left-hand tank A cover.
Remove the front tank cover (3) and recover the bushes (C) and the spacers (D).

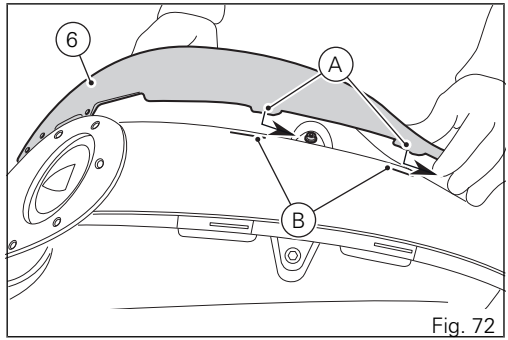


Fig. 72

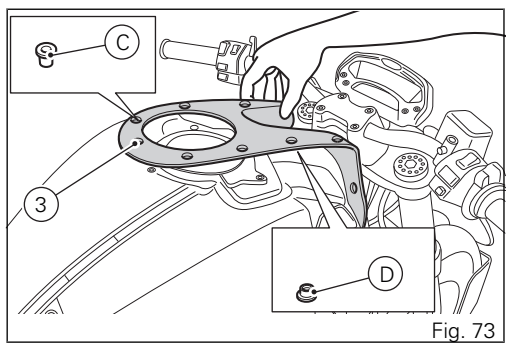


Fig. 73

Unscrew the two retaining screws (9) and release the cover (8).
Withdraw the breather hose (10) from the cover (8).

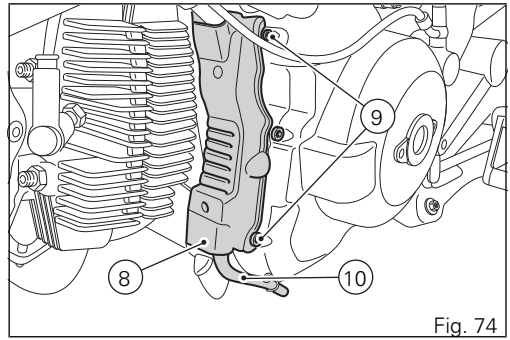


Fig. 74

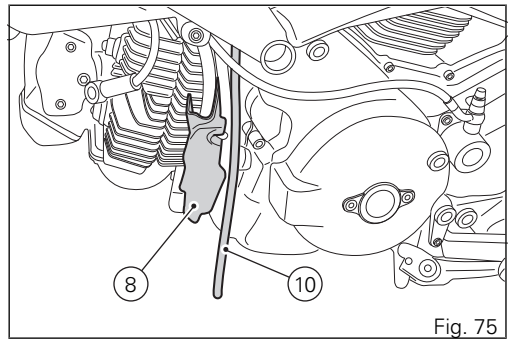


Fig. 75

Withdraw the hose (10) upwards, leaving it attached to the tank breather and drain hose unions.

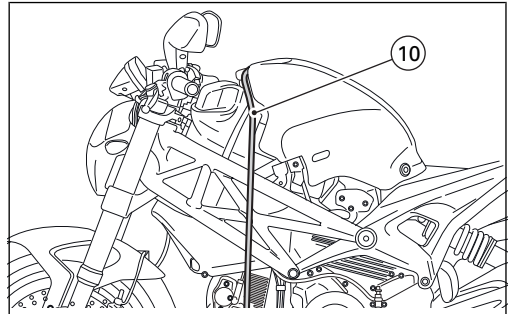


Fig. 76

Working on the right-hand side of the motorcycle, disconnect the wiring connector (11) of the fuel level sensor from the main wiring harness, unscrew the screw (12) securing the side of the tank to the frame and recover the washer (13).

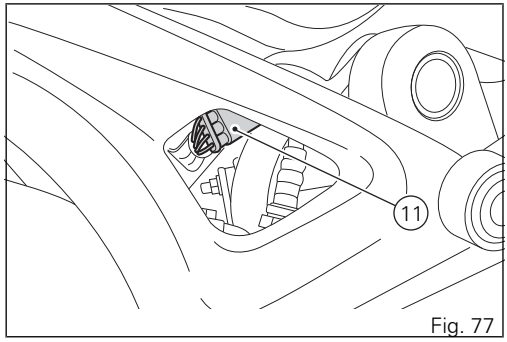


Fig. 77

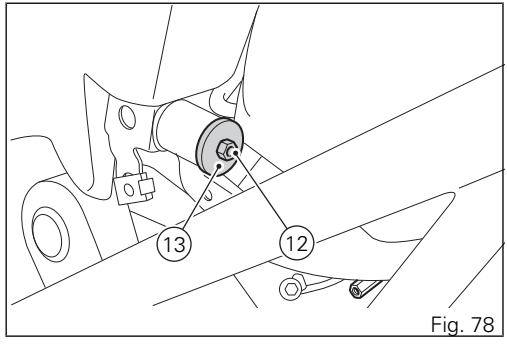


Fig. 78

Unscrew the screw (14) and recover the washer (15).
Release the fuel hoses (G) from the clips (H).

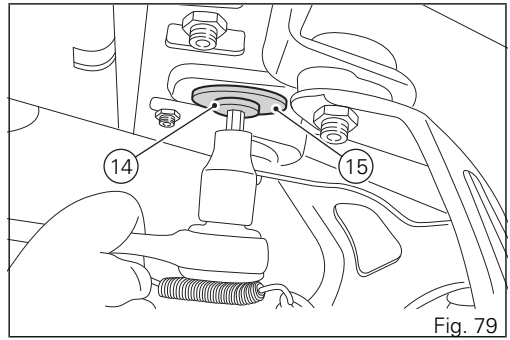


Fig. 79

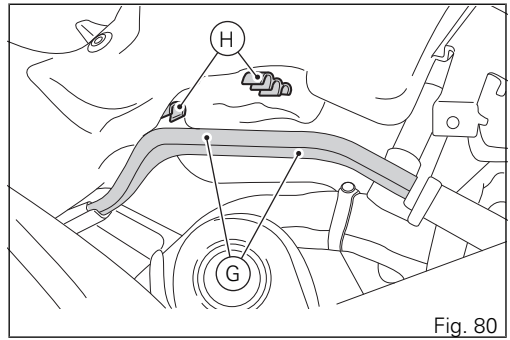


Fig. 80

Release the lambda sensor cable (L) from the tab (M) on the tank flange cover.

Warning
Before removing the flange cover (16), make sure the tank is empty and position a rag to collect any spilt fuel.

Hold the fuel tank in a raised position and remove the flange cover (16) by unscrewing the nuts (17).

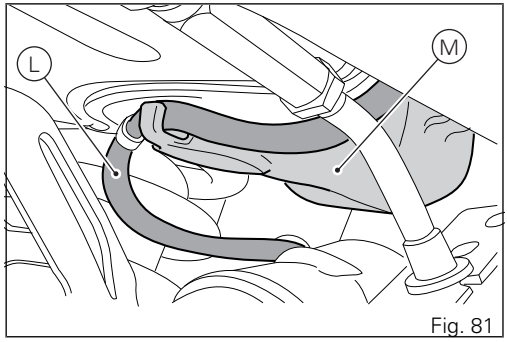


Fig. 81

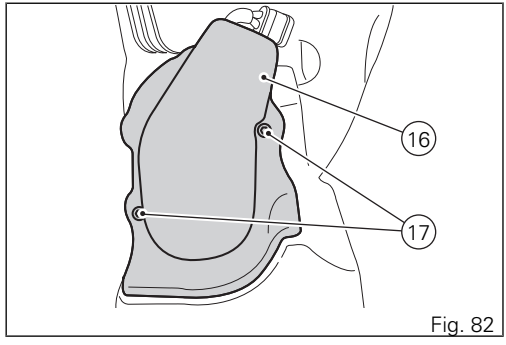


Fig. 82

Disconnect the quick-release fittings (18) from the flange.
Remove the elastic retaining strap (19), remove the caps from the terminals, unscrew the screws (22) on terminal clamps (20) and (21), always starting with the negative terminal, then remove the battery from its seating.

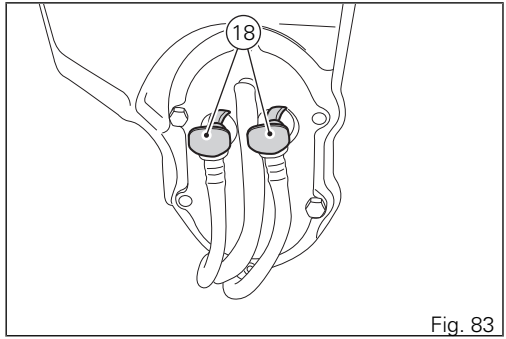


Fig. 83

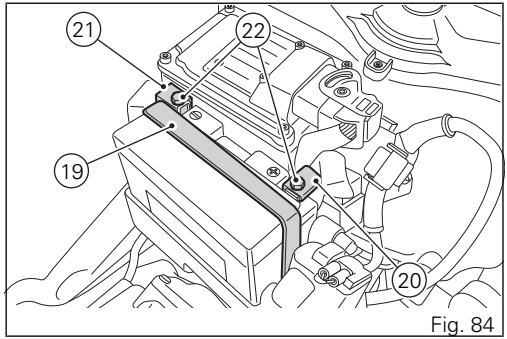


Fig. 84

Refitting the battery

Important
For battery reassembly, ALWAYS contact a Ducati Dealer or authorised Service Centre.

Install the battery in the battery support and secure it with the elastic retaining strap (19).

Warning
Connect the positive lead (20) to the positive terminal and the negative lead (21) to the negative terminal, as shown in the figure

Insert the screws (22) in the terminals (20) and (21), always starting with the positive terminal (red lead).

Warning
Position the leads (20) and (21) as shown in the photo.

Tighten the screws (22) to a torque of 10 Nm ± 10%. Apply grease around the battery terminal clamps to prevent oxidation.

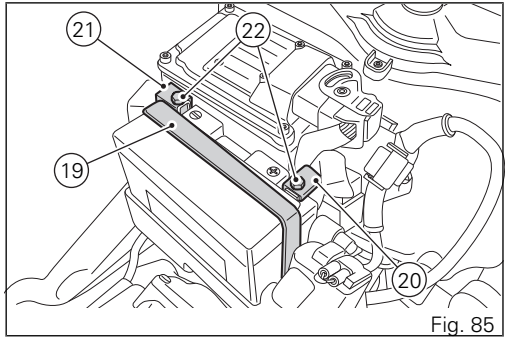


Fig. 85

Warning
If it was necessary to remove the tank from the vehicle, refit it by inserting the front pins (N) into their seats in the frame.

Warning
To refit the tank, ALWAYS contact a Ducati Dealer or authorised Service Centre.

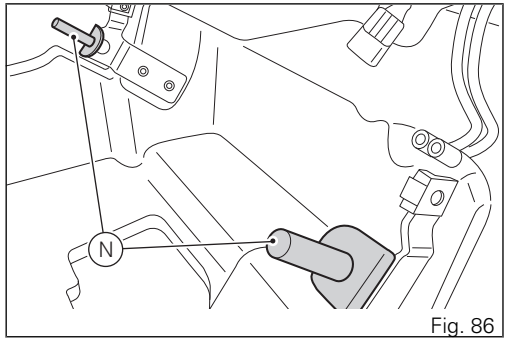


Fig. 86

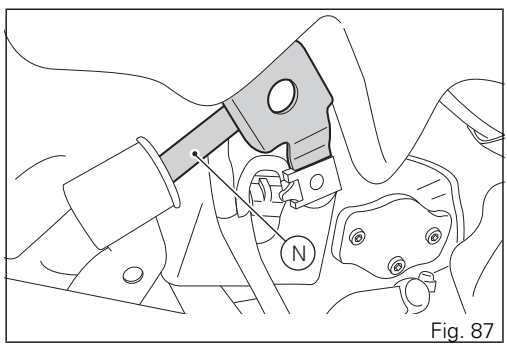


Fig. 87

While holding the tank in the raised position, connect the quick–release fittings (18) to the flange and refit the flange cover (16) inserting and tightening the nuts (17) to a torque of 3 Nm ± 0.3%.

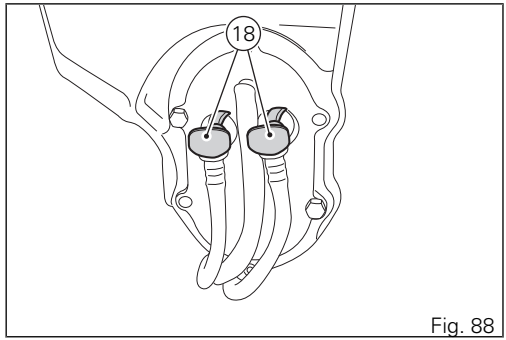


Fig. 88

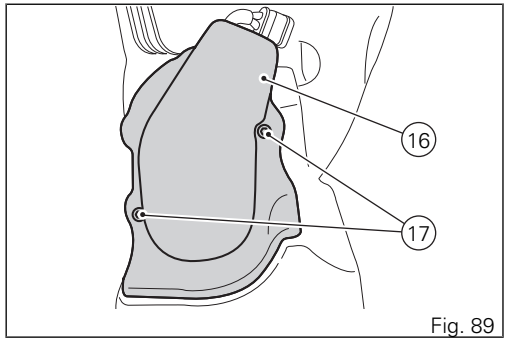


Fig. 89

Connect the fuel sensor (11) to the main wiring harness.
Position the lambda sensor cable (L) in the specific tab (M) on the tank flange cover and secure it with a clamp.

Important
With the fuel tank lowered, the fuel level sensor connector (11) should rest on the vertical cylinder head, as shown in the figure.

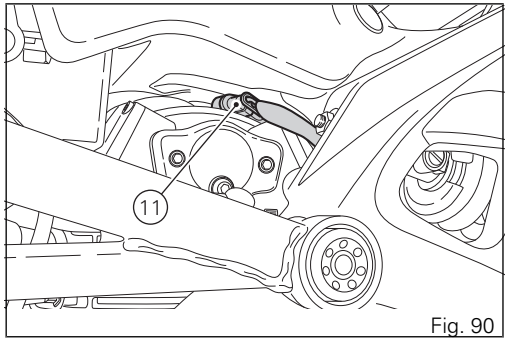


Fig. 90

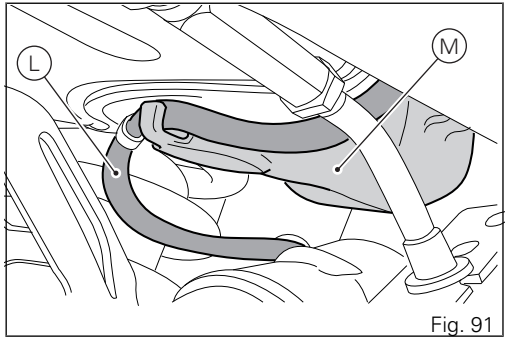


Fig. 91

Attach the fuel hoses (G) to the clips (H).
Secure the tank to the frame with the screw (12) and the washer (13).
Tighten the screw (12) to a torque of 10 Nm ± 10%.

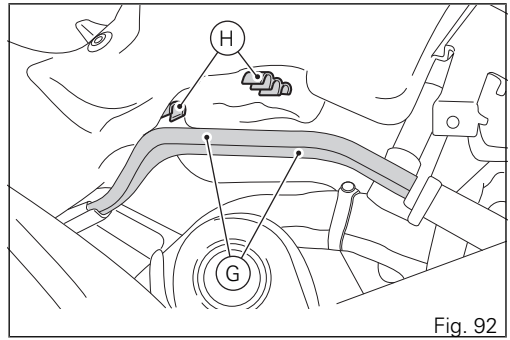


Fig. 92

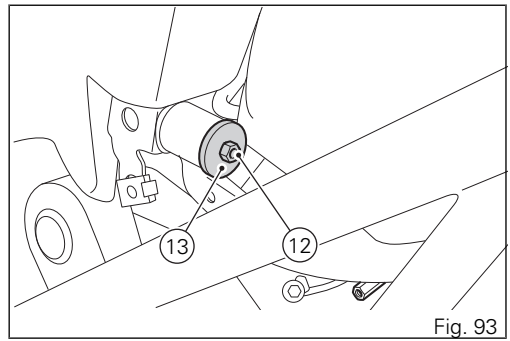


Fig. 93

Secure the tank to the subframe starting the screw (14) and the washer (15).
Tighten the screw (14) to a torque of 10 Nm ± 10%, using a 5 mm Allen wrench to counterhold the threaded insert (P) located on the upper part of the tank.

Important
The threaded insert (P) is not present in the USA version.

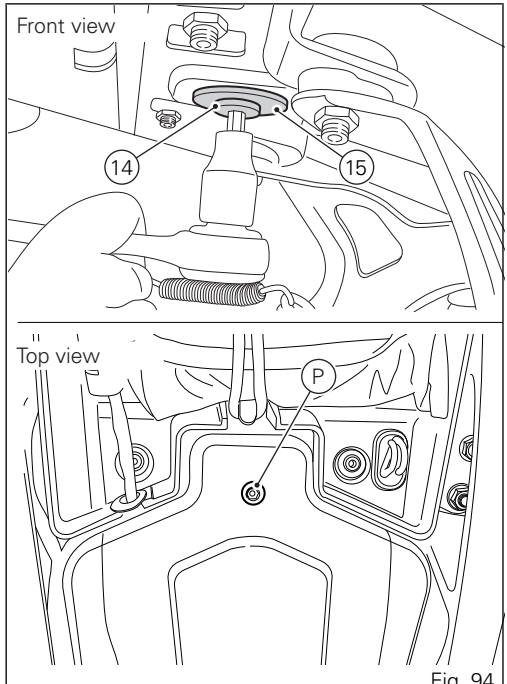


Fig. 94

Locate the breather/drain hose (10) on the motorcycle and secure it in position by refitting the cover (8). Fit the two screws (9), remembering to fit the longest screw in the lower hole, and tighten to a torque of 10 Nm.

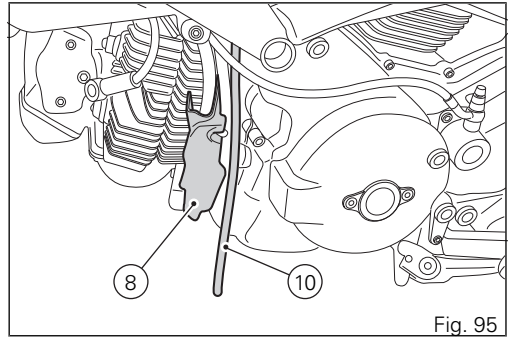


Fig. 95

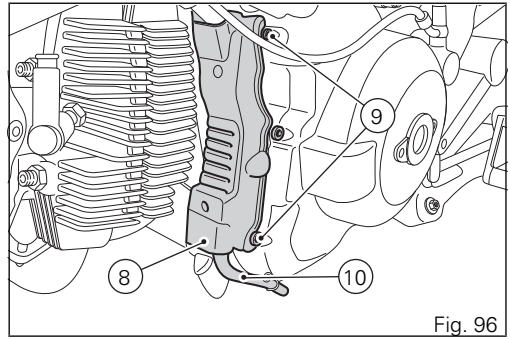


Fig. 96

Check that the four bushes (C) are installed on the front tank cover (3) with the larger diameter side facing upwards and the spacers (D).

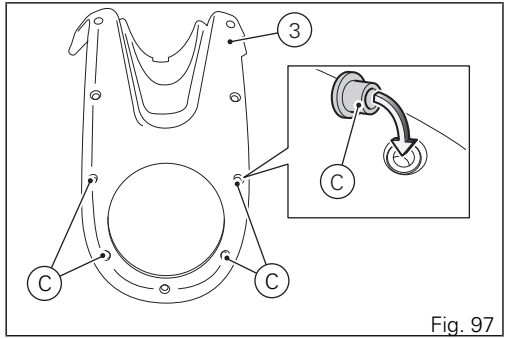


Fig. 97

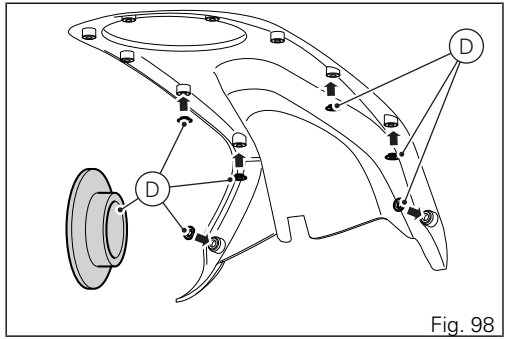


Fig. 98

Locate the front tank cover (3) on the fuel tank. Insert the spacer (23) in the holes in the right tank cover (6).

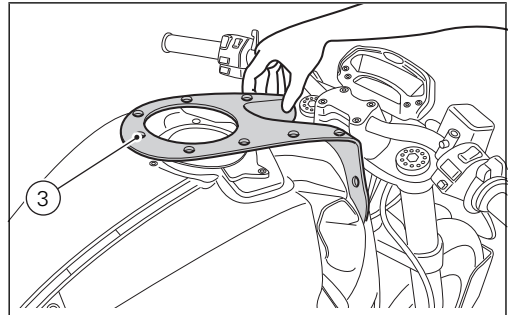


Fig. 99

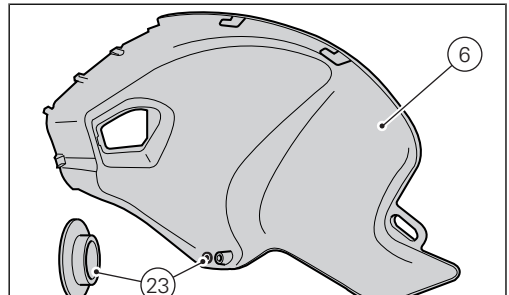


Fig. 100

Refit the right-hand tank cover (6), inserting the tabs (A) in the corresponding slots (B) in the rear cover.

Note
Insert the lugs (O) under the front tank cover (3).

Repeat the above operations to refit the left-hand tank cover.
Insert the screws (1) and (2) in the front tank cover (3), starting with the front screws (1).

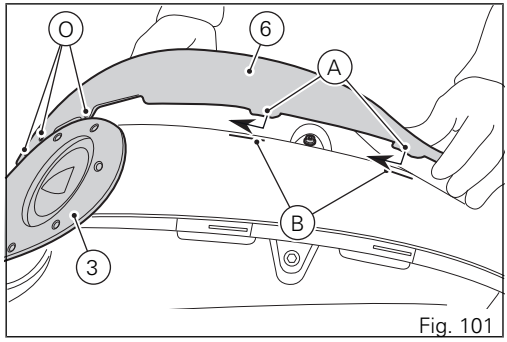


Fig. 101

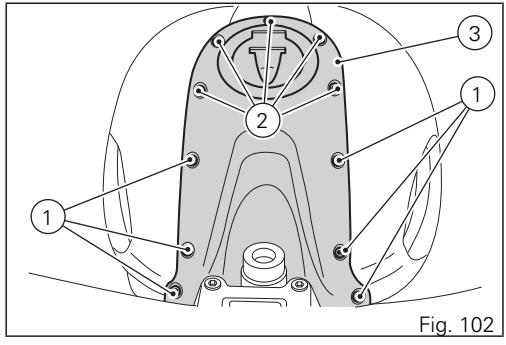


Fig. 102

Insert the right (6) and left tank retaining screws (4), with nylon washers (7), and (5).
Tighten the screws (1) and (2) to a torque of 2 Nm ±10%, starting from the screws (2) around the cap.
Tighten the screws (4) and (5) to a torque of 2 Nm ±10%.
Refit the seatpage 85.

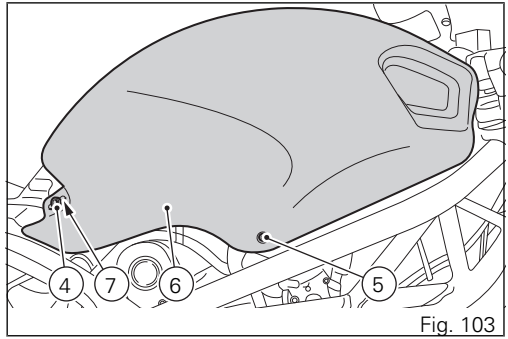


Fig. 103

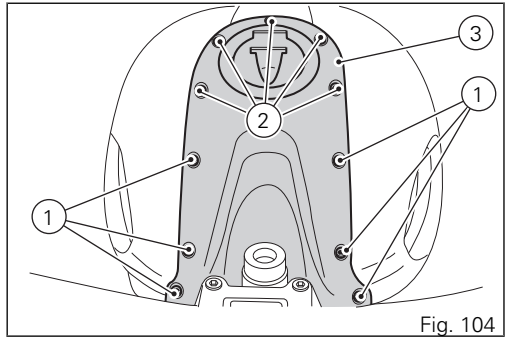


Fig. 104

Checking drive chain tension

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

Turn the rear wheel slowly to find the position at which the chain is at its most taut. With the motorcycle on its side stand, press with a finger in the centre of the bottom run of the chain and measure the distance between the centres of chain link pins and the aluminium swingarm. The distance should be within 46 to 48 mm.

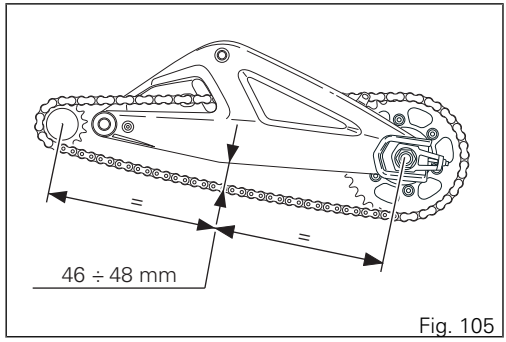


Fig. 105

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

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.

Check the positioning marks on both sides of the swingarm, to guarantee the perfect wheel alignment. Grease the nut (1) thread of the wheel shaft with SHELL Retinax HDX2 and tighten it to 145 Nm. Grease the adjusting screws (2) thread with SHELL Alvania R3 and tighten them to 10 Nm.

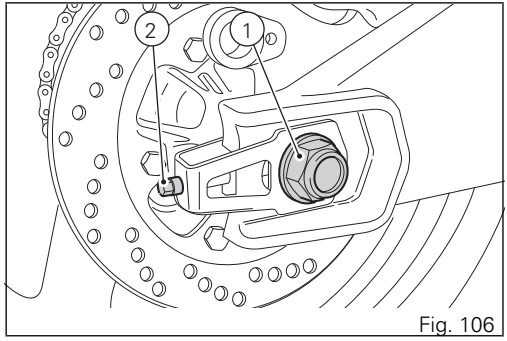


Fig. 106

Chain lubrication

The chain fitted on your motorcycle has O-rings to protect its moving parts from dirt, and to hold the lubricant inside.
So as not to damage these seals when cleaning the chain, use special solvents and avoid aggressive washing with high-pressure steam cleaners. After cleaning, blow the chain dry or dry it using absorbent material and apply SHELL Advance Chain or Advance Teflon Chain on each link.

Important

Using non-specific lubricants may cause severe damage to the chain and the front and rear sprocket.

Replacing the bulbs

Before replacing a burnt-out bulb, make sure that the new one matches the voltage and wattage specifications in paragraph "Electric System" page 159.

Important

Have the bulbs changed at a Ducati Dealer or authorised Service Centre.

Loosen the screw (1) and detach the lens (2) from the turn signal support.
The bulb is of the bayonet-type: press and rotate anticlockwise to remove. Fit the spare bulb by pressing and turning clockwise until it clicks. Refit the cup by inserting the tab into the corresponding slot in the turn signal support. Refit and tighten the screw (1).

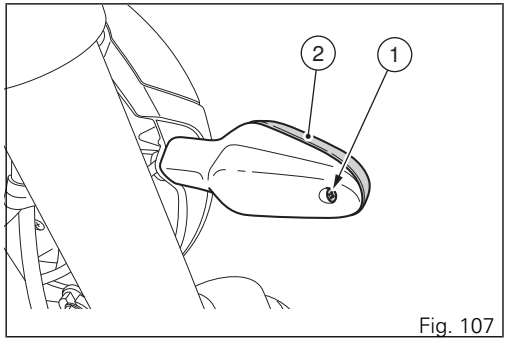


Fig. 107

Beam setting

To check the headlight aim, place the motorcycle upright with the tyres inflated to the correct pressure and one person sitting astride the motorcycle. The motorcycle should be perfectly vertical, with its longitudinal axis at right angles to a wall or screen at a distance of 10 metres. Draw a horizontal line at the height of the centre of the headlamp and a vertical one at the longitudinal axis of the motorcycle. If possible, perform this check in dim light. Switch on the low beam. The height of the upper limit between the dark area and the lit area must not be more than nine tenths of the height of the centre of the headlight from the ground.

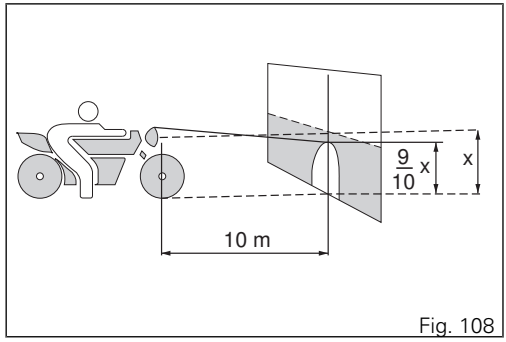


Fig. 108

Note

This is the procedure specified by Italian regulations for checking the maximum height of the light beam. Owners in other countries will adapt said procedure to the provisions in force in their countries.

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

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

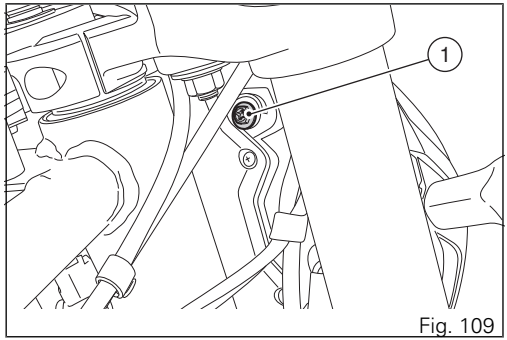


Fig. 109

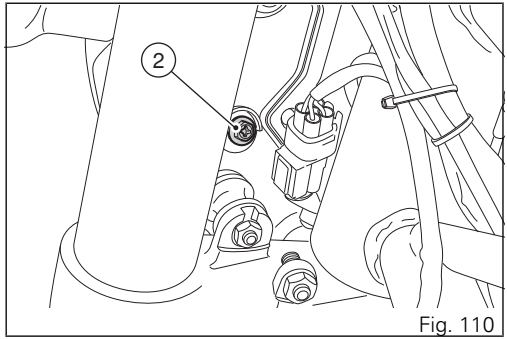


Fig. 110

Tyres

Front tyre pressure:

2.25 bar - 2.29 kg/sq. cm

Rear tyre pressure:

2.50 bar - 2.55 kg/sq. cm

As tyre pressure is affected by changes in temperature and altitude; check and adjust them whenever you are riding in areas where there are large variations in temperature or altitude.

Important

Check and adjust the pressures with the tyres cold. To avoid front wheel rim distortion, when riding on bumpy roads, increase tyre pressure by 0.2 - 0.3 bar.

REPAIRING OR REPLACING TYRES

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

Warning

Punctured tyres must be replaced. Replace tyres with recommended standard tyres only. Be sure to tighten the valve caps securely to avoid leaks when riding. Never use tube type tyres. Failure to heed this warning may lead to sudden tyre bursting and to serious danger to rider and passenger.

After replacing a tyre, the wheel must be balanced.

Warning

Do not remove or shift the wheel balancing weights.



Note

Have the tyres replaced at a Ducati Dealer or authorised Service Centre. Correct removal and installation of the wheels is essential,. Some parts of the ABS (such as sensors and phonic wheels) are mounted to the wheels and require specific adjustment.

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

Important

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

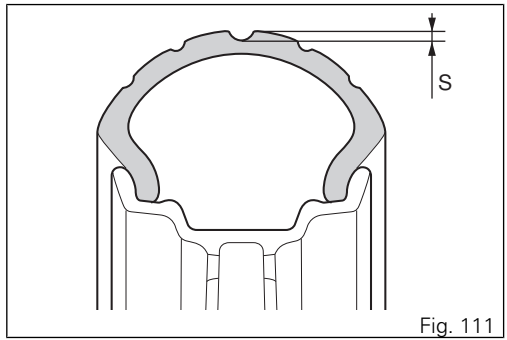


Fig. 111

Check engine oil level

Check the engine oil level through the sight glass (1) on the clutch cover.
Oil level must be checked with the motorcycle perfectly upright and the engine cold.
Oil level should be between the marks near 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 filler plug (2).

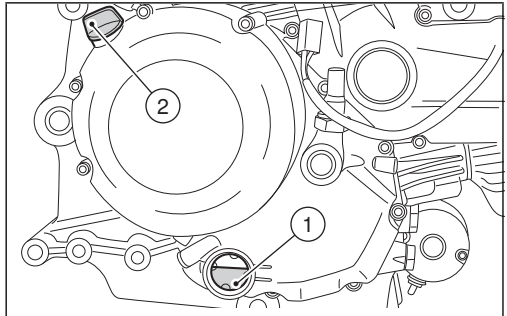


Fig. 112

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 table reported in the Warranty Booklet.

VISCOSITY

SAE 15W-50

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

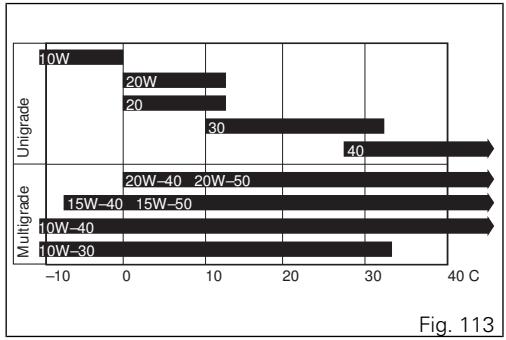


Fig. 113

Cleaning and replacing the spark plugs

Spark plugs are essential to smooth engine running and should be checked at regular intervals.
Have the spark plug replaced at a Ducati Dealer or authorised Service Centre.

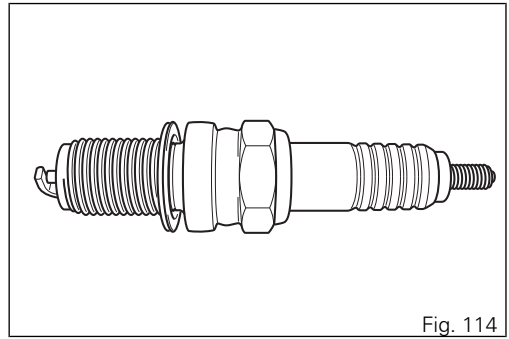


Fig. 114

Cleaning the motorcycle

To preserve the finish of metal parts and paintwork, wash and clean your motorcycle at regular intervals, anyway according to the road conditions you ride in. Use specific products only. Prefer biodegradable products. Avoid aggressive detergents or solvents. Only use water and neutral soap to clean the Plexiglas and the seat. Periodically manually clean all aluminium components. Use special detergents, suitable for aluminium parts FREE of abrasives or caustic soda.

Note

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

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

Important

Do not wash your motorcycle immediately after use, as marks can form due to evaporation of the water on hot surfaces.
Never clean the motorcycle using hot or high-pressure water jets.
Cleaning the motorcycle with a high pressure water jet may lead to seizure or serious faults in the front fork, wheel hub assembly, electric system, headlight (fogging), front fork seals, air inlets or exhaust silencers, with consequent loss of safety.
If parts of the engine are unusually dirty or greasy, use a degreasing agent, avoiding contact with transmission components (chain, front and rear 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 as this would cause loss of braking effectiveness. Clean the discs with an oil-free solvent.

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

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

Storing the motorcycle

If the motorcycle is to be left unridden over long periods, it is advisable to carry out the following operations before storing it away:

- clean the motorcycle;
- empty the fuel tank;
- pour a few drops of engine oil into the cylinders through the spark plug bores, then turn the engine over by hand a few times to form a protective film of oil on the inner walls of the cylinder;
- place the motorcycle on the service stand;
- disconnect and remove the battery.

If the motorcycle has been left unused for more than a month, the battery should be checked and re-charged if necessary.
Protect the motorcycle with a suitable canvas. This will protect paintwork and let condensate breathe out. The canvas is available from Ducati Performance.

Important notes

The legislation in some countries (France, Germany, Great Britain, Switzerland, etc.) sets certain noise and pollution standards.
Periodically carry out the required checks and replace parts as necessary, using Ducati original spare parts, in compliance with the regulations in the country concerned.

Maintenance

Scheduled maintenance chart: operations to be performed by the Dealer

List of operations and type of intervention [set mileage (km/mi) or time interval *]	Km. x1000	1	12	23	36	48	60
	mi. x1000	0.6	7.5	15	22.5	30	37.5
	Months	6	12	24	36	48	60
Change engine oil		●	●	●	●	●	●
Change engine oil filter		●	●	●	●	●	●
Clean engine oil filter at intake					●		
Check the engine oil pressure				●		●	
Check/adjust the valve clearances (1)			●	●	●	●	●
Check the tension of the timing belts (1)			●		●		●
Replace the timing belts				●		●	
Check and clean the spark plugs. Replace if necessary				●		●	
Check and clean air filter (1)			●		●		●
Change the air filter				●		●	
Check throttle body synchronisation and idling (1)			●	●	●	●	●
Check brake and clutch fluid level		●	●	●	●	●	●
Change brake and clutch fluid					●		

List of operations and type of intervention [set mileage (km/mi) or time interval *]	Km. x1000	1	12	23	36	48	60
	mi. x1000	0.6	7.5	15	22.5	30	37.5
	Months	6	12	24	36	48	60
Check and adjust brake and clutch controls			●	●	●	●	●
Check / lubricate throttle / cold start controls			●	●	●	●	●
Check tyre pressure and wear		●	●	●	●	●	●
Check brake pads. Replace if necessary		●	●	●	●	●	●
Check steering bearings				●		●	
Check chain tension, alignment and lubrication		●	●	●	●	●	●
Check clutch plates pack. Change, if necessary (1)			●	●	●	●	●
Check rear wheel flexible coupling				●		●	
Check wheel hub bearings				●		●	
Check the indicators and lighting			●	●	●	●	●
Check tightening of nuts securing engine-to-frame screws			●	●	●	●	●
Check the side stand			●	●	●	●	●
Check front wheel nut tightening			●	●	●	●	●
Check rear wheel nut tightening			●	●	●	●	●
Check external fuel lines			●	●	●	●	●

List of operations and type of intervention [set mileage (km/mi) or time interval *]	Km. x1000	1	12	23	36	48	60
	mi. x1000	0.6	7.5	15	22.5	30	37.5
	Months	6	12	24	36	48	60
Change the front fork fluid					●		
Check front fork and rear shock absorber for leakage			●	●	●	●	●
Check front sprocket fasteners			●	●	●	●	●
Lubricate and grease			●	●	●	●	●
Check battery and recharge			●	●	●	●	●
Road test of the motorcycle		●	●	●	●	●	●
Cleaning the motorcycle			●	●	●	●	●

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

(1) Operation to be performed only if set distance interval is reached

Scheduled maintenance chart: operations to be performed by the customer

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

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

Technical data

Weights

Dry weight in running order without fluids and battery:
161 kg (696);
163 kg (696 ABS);
Carrying full load: 390 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 (mm)

696

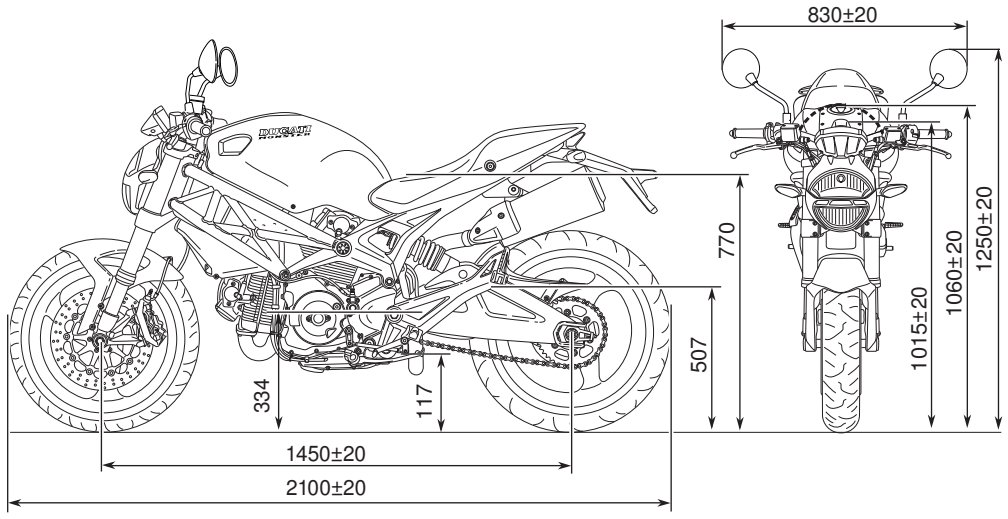


Fig. 115

696 ABS

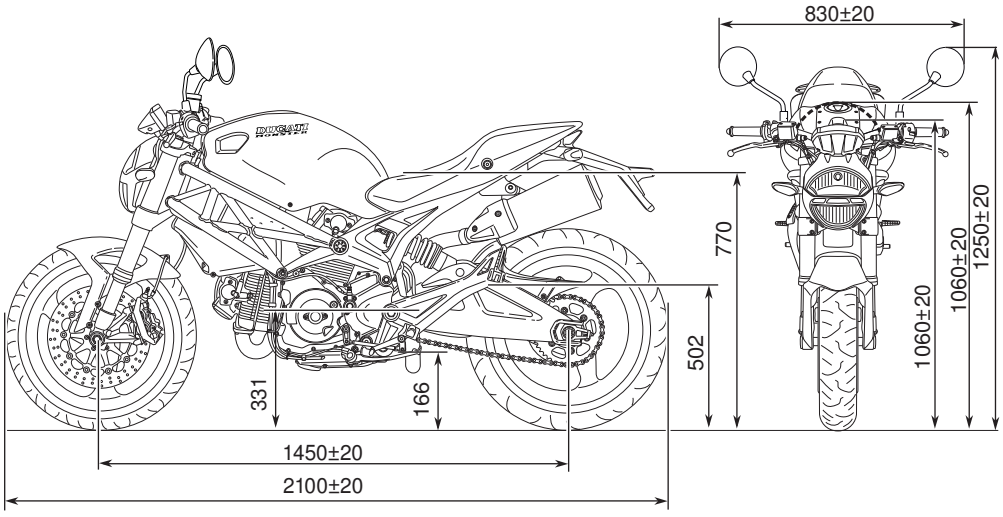


Fig. 116

TOP-UPS	TYPE	CU. DM (LITRES)
Fuel tank, including a reserve of 3.5 cu. dm (litres)	Unleaded fuel with a minimum octane rating of RON 95.	13.5 (696 ABS) 15 (696)
Sump and filter	SHELL - Advance 4T Ultra	3,7
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	474 cu. cm (right leg) 349 cu. mm (left leg)



Important

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



Warning

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

Engine

Longitudinal 90° "L" twin cylinder, four-stroke.
Bore, mm: 88
Stroke, mm: 57.2
Total displacement cu. cm: 696
Compression ratio: 10.7±0.5:1
Max power at crankshaft (95/1/EC):
58.8 kW - 80 HP at 9,000 rpm
Max torque at crankshaft (95/1/EC):
69 Nm - 7 Kgm at 7,750 rpm.

Timing system

DESMODROMIC with two valves per cylinder, operated by four rocker arms (two opening rockers and two closing rockers) and one overhead camshaft. It is operated by the crankshaft through spur gears, belt rollers and toothed belts.
Desmodromic timing system

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

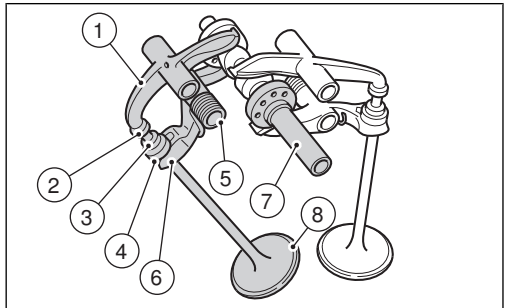


Fig. 117

Performance data

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

Important

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

Spark plugs

Make: NGK
Type: DCPR8E.

Fuel system

SIEMENS indirect electronic injection.
Throttle body diameter: 45 mm
Injectors per cylinder: 1
Firing points per injector: 8
Fuel specifications: 95-98 RON.

Warning

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

Brakes

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

Front
Type: with drilled steel disc.
2 discs.
Disc diameter: 320 mm.
Hydraulically operated by a control lever on handlebar right-hand side.
Differential bore brake callipers.
Make and type: BREMBO P4.32 K 4 Pistons.
Friction material: FERIT I/D 450 FF.
Pump type: PS 16/22 (696 ABS) - PS 15 (696).

Rear
Type: with fixed drilled steel disc.
Disc diameter: 245 mm.
Hydraulically operated by a pedal on RH side.
Brake calliper: cylinder Ø 34 mm.
Make and type: P 34 C
Friction material: SBS S40 GF + sheet (696 ABS) - FERIT I/D 450 FF (696).
Master cylinder type: PS 11.

Warning

Brake fluid can dissolve paintwork.
In the event of accidental contact with eyes or skin, wash the affected area with abundant running water.

Transmission

Wet clutch controlled by the lever on left-hand side of the handlebar.
Drive is transmitted from engine to gearbox main shaft via spur gears.
Engine sprocket/clutch gearwheel ratio: 33/61
6-speed gearbox ; with constant mesh gears, gearchange pedal on left.

Gearbox output sprocket/rear chain sprocket ratio: 15/39
Total gear ratios:
1st gear 13/32
2nd gear 18/30
3rd gear 21/28
4th gear 23/26
5th gear 22/22
6th gear 26/24

Drive chain from gearbox to rear wheel:.
Make: DID
Type: 620 V6
Size: 5/8" x 1/4"
Links: 107+ 1 open

Important

The above gear ratios are the homologated ones and under no circumstances must they be modified.

Warning

If the rear sprocket needs replacing, contact a Ducati Dealer or authorised Service Centre. Incorrect replacement of this component could seriously endanger rider and passenger safety and cause irreparable damage to the motorcycle.

Frame

Chromium-molybdenum tubular trellis frame, cast aluminium rear subframe
Steering angle (on each side): 32°
Steering head angle: 24°
Trail mm: 87

Wheels

Three-spoke, light-alloy rims.

Front
Size: MT 3.50x17"

Rear
Size: MT 4.50x17"

Both wheels have removable axles.

Tyres

Front
Radial tubeless tyre.
Size: 120/60-ZR17

Rear
Radial tubeless tyre.
Size: 160/60-ZR17

Suspensions

Front

Hydraulic upside-down fork:
Stanchion diameter: 43 mm.
Travel along leg axis: 120 mm.

Rear
Progressive monoshock with adjustable rebound, compression and spring preload:
Shock absorber stroke: 59.5 mm.
Rear wheel travel: 148 mm.

Exhaust system

Equipped with catalytic converter.

Available colours

Ducati Anniversary red 473.101 (PPG);
Clear lacquer, cod. 228.880 (PPG);
Gold-colour frame and black wheel rims.

Electrical system

The main components of the electric system are:
HEADLIGHT:
high beam type: H7 (12 V-55 W).
low beam type: H1 (12 V-55 W).
parking light type: LED 13.5V 3.2W/0.1W.
Electrical controls on handlebars:
Turn indicators:
bulbs type: 12 V-10 W.
Horn.
Stop light switches.
Battery, 12 V-10 Ah.
Generator 12V-480W.
ELECTRONIC VOLTAGE RECTIFIER, protected with a 30 A fuse located to the side of the control unit (11,Fig. 119) - (11,Fig. 120).
Starter motor, 12 V-0.7 kW.
Tail light and brake signal: LED.
Number plate light
bulb type: C5W (12 V-5W).



Note

To replace the bulbs, refer to the paragraph “Changing bulbs”.

Fuses

The electrical system components are protected by eight fuses located in the fusebox. Only six fuses are connected to the system, two are spares.
Refer to the table below to identify the circuits protected by the various fuses and their ratings.

Key to the fusebox

Pos	El. item	Rat.
1	Key ON	10 A
2	Side lights, high/low beam	15 A
3	El. item	15 A
4	Dashboard	5 A
5	Injection	20 A
6	ECU	5 A
7	Spare	20 A
8	Spare	15 A

The main fuse box (9) is located on the right side of the frame.
Remove the protective cover (A) to access the fuses. In addition to the fuse box, the two ABS fuses (10) are located near the regulator fuse.

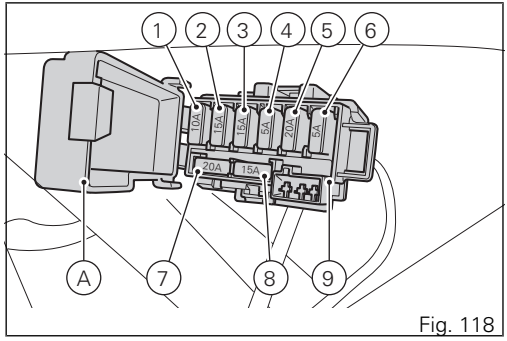


Fig. 118

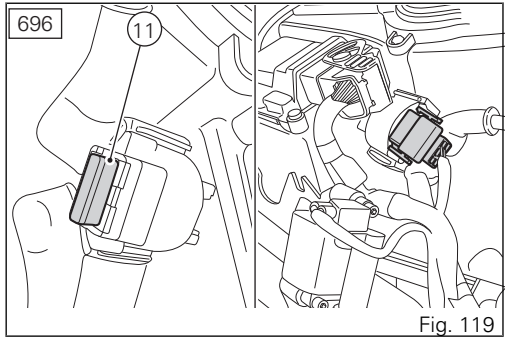


Fig. 119

A blown fuse is identified by a broken filament (12).

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.

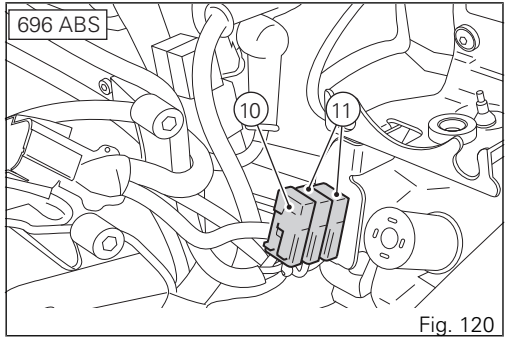


Fig. 120

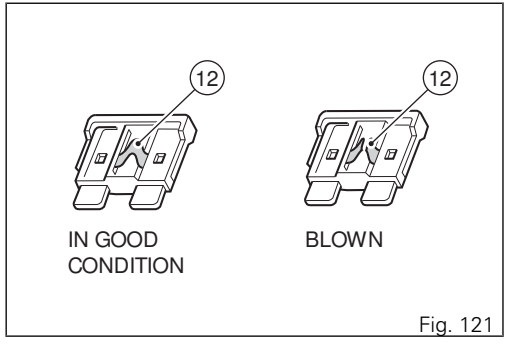


Fig. 121

Injection /electric system diagram key - 696

1) Right-hand switch
2) Ignition switch
3) Horizontal cylinder spark plug
4) Vertical cylinder spark plug
5) Starter motor
6) Solenoid starter
7) Battery
8) Main fuse
9) Regulator
10) Generator
11) RH rear turn indicator
12) Tail light
13) Number plate light
14) LH rear turn indicator
15) Fuel tank
16) Horizontal cylinder exhaust lambda sensor
17) Injection relay
18) Self-diagnosis/DDA
19) Horizontal cylinder coil
20) Vertical cylinder coil
21) Headlight
22) MAP sensor
23) Horizontal cylinder injector
24) Vertical cylinder injector
25) Throttle position sensor
26) Timing/rpm sensor
27) Cylinder temperature sensor
28) Speed sensor
29) Side stand
30) Horn
31) Neutral switch
32) Oil pressure switch
33) Rear stop switch
34) ECU
35) Fuses
36) Clutch switch
37) Front stop switch
38) Left-hand switch
39) Transponder antenna
40) Air temperature sensor
41) Vertical cylinder exhaust lambda sensor
42) Dashboard
43) Light relay
44) LH front turn indicator
45) RH front turn indicator

Injection /electric system diagram key - 696 ABS

1) Right-hand switch
2) Ignition switch
3) Horizontal cylinder spark plug
4) Vertical cylinder spark plug
5) Starter motor
6) Solenoid starter
7) Battery
8) Main fuse
9) Regulator
10) Generator
11) RH rear turn indicator
12) Tail light
13) Number plate light
14) LH rear turn indicator
15) Fuel tank
16) Horizontal cylinder exhaust lambda sensor
17) Injection relay
18) Self-diagnosis/DDA
19) Horizontal cylinder coil
20) Vertical cylinder coil
21) Headlight
22) MAP sensor
23) Horizontal cylinder injector
24) Vertical cylinder injector
25) Throttle position sensor
26) Timing/rpm sensor
27) Cylinder temperature sensor
28) Speed sensor
29) Side stand
30) Horn
31) Neutral switch
32) Oil pressure switch
33) Rear stop switch
34) ECU
35) Fuses
36) Clutch switch
37) Front stop switch
38) Left-hand switch
39) Transponder antenna
40) Air temperature sensor
41) Vertical cylinder exhaust lambda sensor
42) Dashboard
43) Light relay
44) LH front turn indicator
45) RH front turn indicator
46) Front speed sensor
47) ABS ECU
48) ABS fuses

Wire colour code

B Blue
W White
V Violet
Bk Black
Y Yellow
R Red
Lb Light blue
Gr Grey
G Green
Bn Brown
O Orange
P Pink



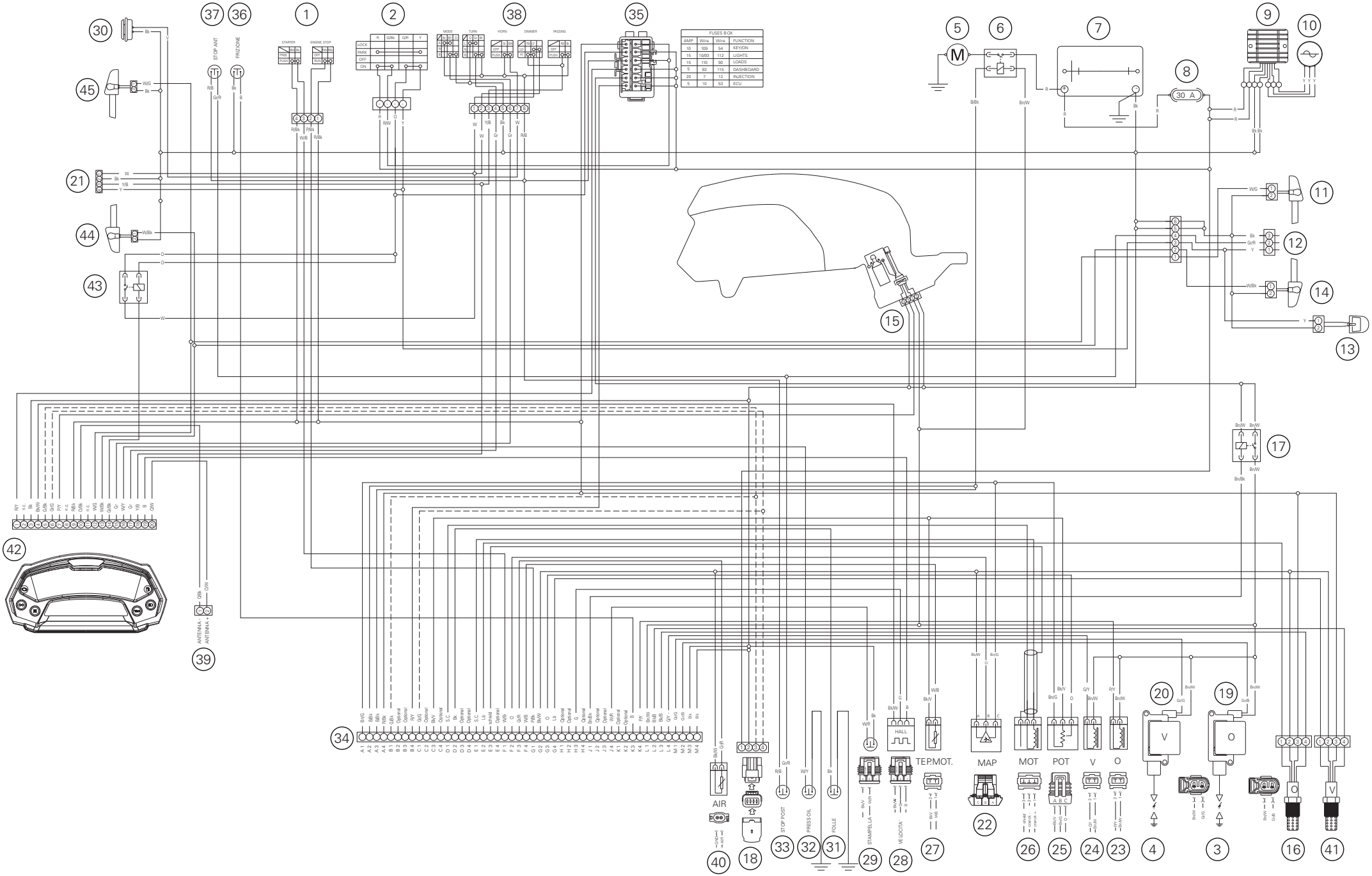
Note

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

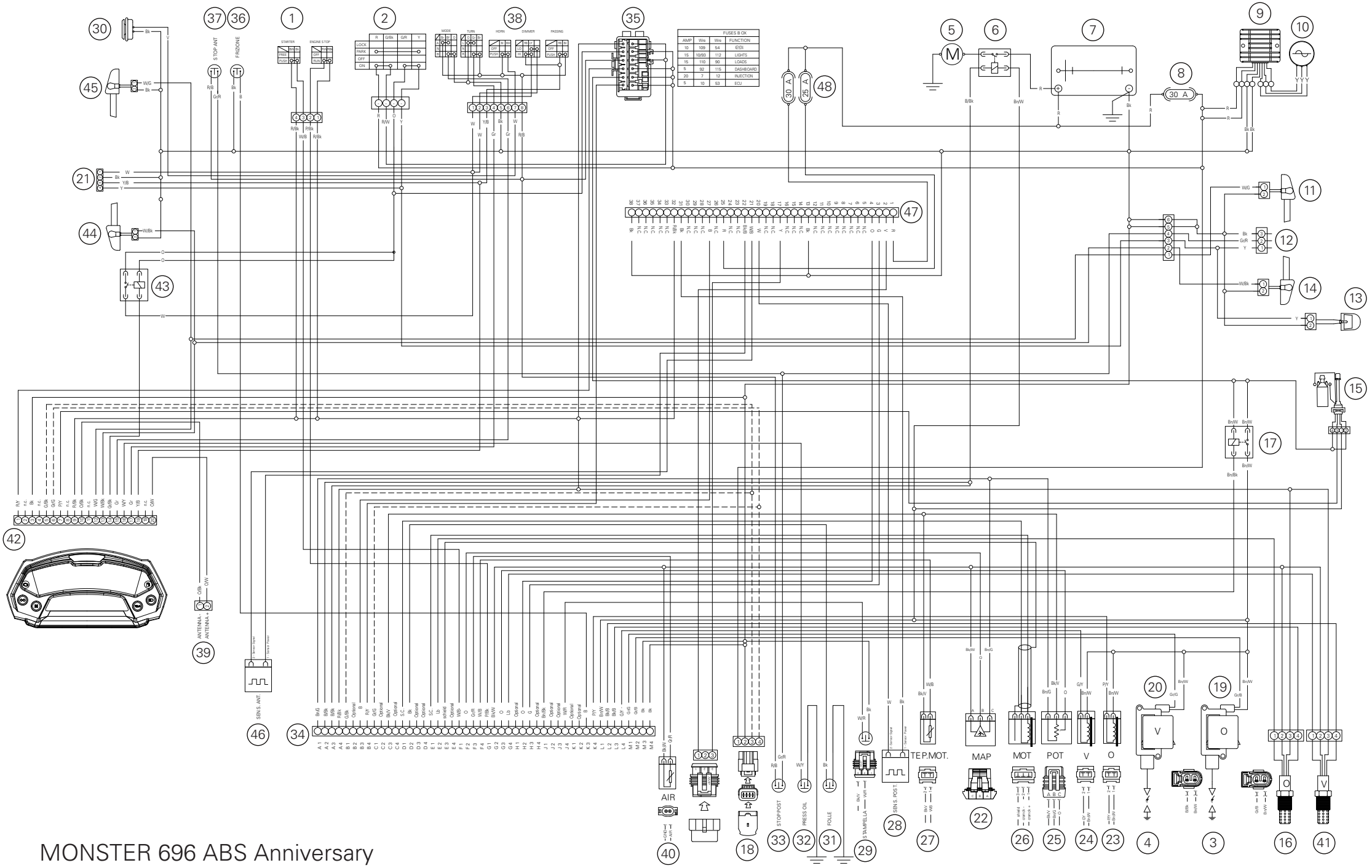
Routine maintenance record

Routine maintenance record

KM	NAME DUCATI SERVICE	MILEAGE	DATE
1000			
12000			
24000			
36000			
48000			
60000			



MONSTER 696 Anniversary



MONSTER 696 ABS Anniversary

Stampato 10/2012 Cod. 913.7.228.1A

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