

**Owner's manual**

**E**

***DUCATI*** *MULTISTRADA*   
*1000DS*



*Hearty welcome among Ducati fans! Please accept our best compliments for choosing a Ducati 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.*

*We are steadily doing our best to improve our "Technical Assistance" service. For this reason, we recommend you to strictly follow the indications given in this manual, especially for motorcycle running-in. In this way, your Ducati motorbike will surely give you unforgettable emotions. Please contact our authorised service centres to have your motorcycle repaired or if you simply need advice.*

*Enjoy your ride!*



### **Note**

*Ducati Motor Holding S.p.A. declines any liability whatsoever for any mistakes incurred in drawing up this manual. The information contained herein is valid at the time of going to print. Ducati Motor Holding S.p.A. reserves the right to make any changes required by the future development of the above-mentioned products.*

*For your safety, as well as to preserve the warranty, reliability and worth of your motorcycle, use original Ducati spare parts only.*



### **Warning**

*This manual forms an integral part of the motorcycle and - in the event the motorcycle is resold - must always be handed over to the new owner.*

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**E**

## GENERAL

### Warranty

In your own interest, and in order to guarantee product reliability, you are strongly advised to refer to a Ducati Dealer or Authorised Workshop for any servicing requiring particular technical expertise. Our highly skilled staff have access to the implements required to perform any servicing job at best, and use Ducati original spare parts only as the best guarantee for full interchangeability, smooth running and long life.

All Ducati motorcycles come with a "Warranty Card". The warranty does not apply to the motorcycles used in competitions. No motorcycle part may be tampered with, altered, or replaced with parts other than original Ducati spare parts during the warranty period, or the warranty will be automatically invalidated.

### Symbols

Ducati Motor Holding S.p.A. advises you to read this booklet carefully so as to become familiar with your motorcycle. In case of any doubts, please call a Ducati Dealer or Authorised Workshop. The information contained herein will prove useful on your trips - and Ducati Motor Holding S.p.A. wishes you smooth, enjoyable riding - and will help you keep the performance of your motorcycle unchanged for a long time.



#### Warning

Failure to comply with these instructions may put you at risk and lead to severe injury or death.



#### Important

Possibility of damaging the motorcycle and/or its components.



#### Note

Additional information on the job being carried out.

The terms **right** and **left** are referred to the motorcycle viewed with respect to the direction of travel.

## **Useful information for safe riding**



### **Warning**

Read this section before riding your motorcycle.

Accidents are frequently due to inexperience. Always make sure you have your licence with you when riding; you need a valid licence to be entitled to ride your motorcycle.

Do not lend your motorcycle to inexperienced riders or who do not hold a valid licence.

Both rider and pillion passenger must **always** wear a safety helmet.

Wear proper clothing, with no loose items or accessories that may become tangled in the controls or limit your zone of vision.

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.

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

**Always** hold handlebar firmly with both hands so you will be ready for sudden changes of direction or in the road surface. The pillion passenger should **always** hold on to the suitable grab handle at the rear seat with both hands. Ride within the law and observe national and local rules.

**Always** respect speed limits where these are posted. However, **always** adjust your speed to the visibility, road and traffic conditions you are riding in.

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

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

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.

**Always** turn off the engine when refuelling.

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

Do not smoke when refuelling.

While refuelling, you may inhale noxious fuel vapours.

Should any fuel drops be spilled on your skin or clothing, immediately wash with soap and water and change your clothing.

Always remove the key when you leave your motorcycle unattended.

The engine, exhaust pipes, and mufflers stay hot for a long time.



### **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.).

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.

### **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.

### **Information about carrying capacity**

The total weight of the motorcycle in running order including rider, pillion passenger, luggage and additional accessories should not exceed 410 Kg.

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

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

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

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

Make sure the tyres are inflated to the proper pressure indicated at page 75 and that they are in good condition.

### Identification data

All Ducati motorcycles have two identification numbers, for frame (fig. 1) and engine (fig. 2).

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Frame number

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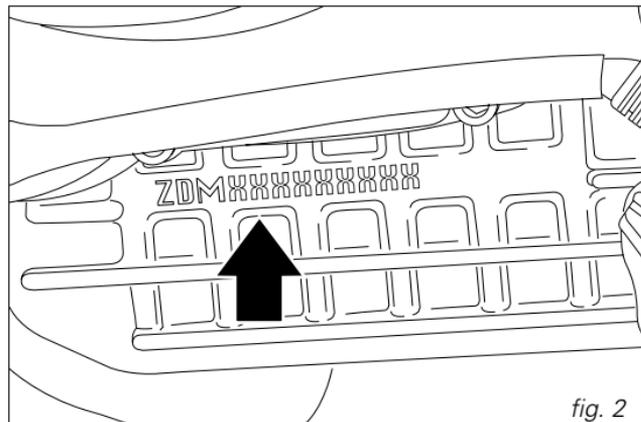
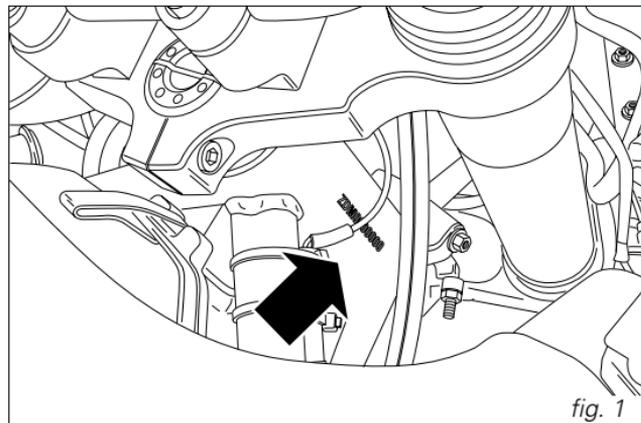
Engine number

---



### Note

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



## CONTROLS



### **Warning**

This section details the position and function of all the controls you need to drive your motorcycle. Be sure to read this information carefully before you use the controls.

### **Position of motorcycle controls** (fig. 3)

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

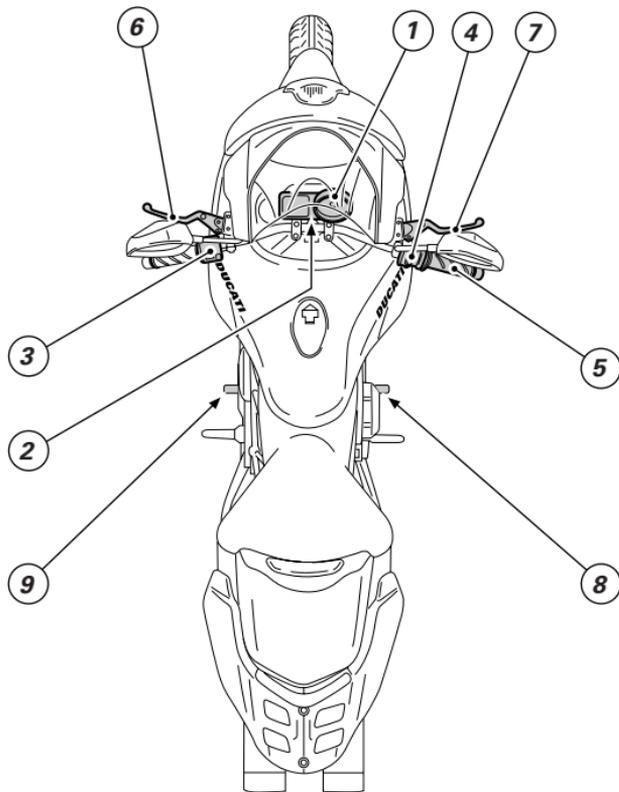


fig. 3

## Instrument panel

1) **LCD**, (see page 12).

2) **Control buttons A and B**.

Buttons used to display and set instrument panel parameters.

3) **Immobilizer IMMO** — indicator (amber).

The indicator stays on in case of wrong key code or key code not recognised; it flashes in case an immobilizer system warning was reset with the procedure to override the immobilizer with the throttle twistgrip (see page 24).

## Important

The instrument panel allows to making diagnosis on the electronic injection/ignition system.

These menus are for the trained personnel only; do not use them for any reason. Should you accidentally enter this function, turn the key to OFF and contact an authorised Ducati Service Center for the necessary inspections.

4) **Revolution counter (rpm)**.

Shows the engine rotation speed/minute.

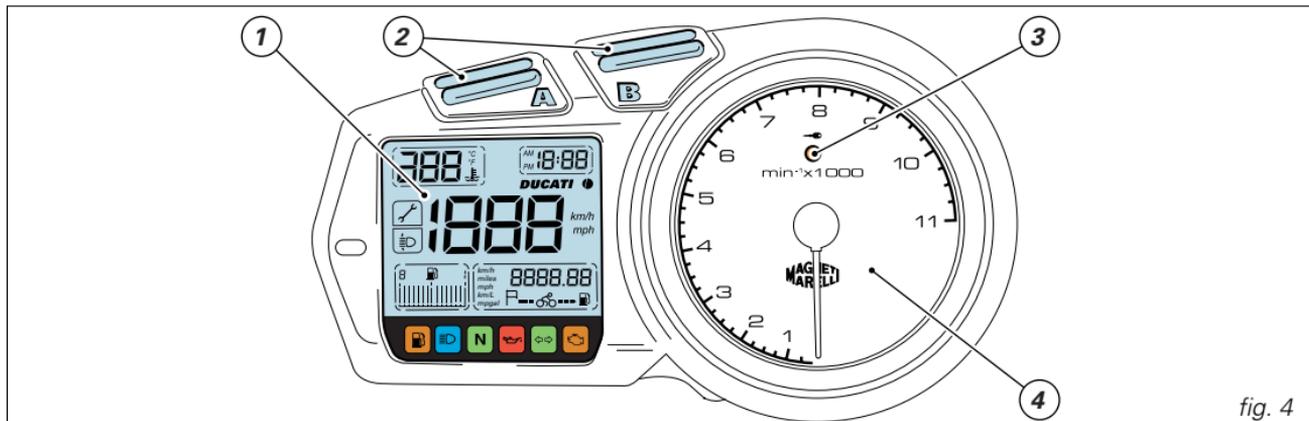


fig. 4

## **LCD unit functions**

### **Warning**

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

#### 1) **Oil temperature warning light.**

This function indicates engine oil temperature.

### **Important**

Never use the vehicle when the temperature reaches max. value or the engine might damage.

#### 2) **Clock.**

#### 3) **Tachometer.**

This function indicates vehicle speed.

#### 4) **Auxiliary display.**

This function indicates odometer, trip meter, average speed, instant fuel consumption, average fuel consumption, fuel used, range and residual fuel quantity, in this sequence.

#### 5) **EOBD light** **(amber).**

When on, this light is used by the control unit to signal the presence of errors and the consequent engine disabling.

It is also used as a reference light during the immobilizer overriding procedure with the throttle twistgrip.

If there are no errors, the light should turn on when the ignition switch is turned **ON** and should go off after a few seconds (usually 1.8 - 2 seconds).

6) **Indicators repeater light** ↔ (green).

Comes on and flashes when a turn indicator is on.

7) **Engine oil pressure light** ⚠️ (red).

Comes on when engine oil pressure is too low. It briefly comes 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 very hot, however, it should go out as the engine revs up.



**Important**

If this light (7) stays on, stop the engine or it may suffer severe damage.

8) **Neutral light N** (green).

Comes on when in neutral position.

9) **High beam light** ≡▷ (blue).

Comes on when high beam is on.

10) **Fuel warning light** ⛽ (yellow).

Comes on when there are about 6.5 liters fuel left in the tank.

11) **Fuel Display.**

This function indicates the quantity of fuel in the fuel tank. When the last bar stays on (flashing), the low fuel light (10) comes on.

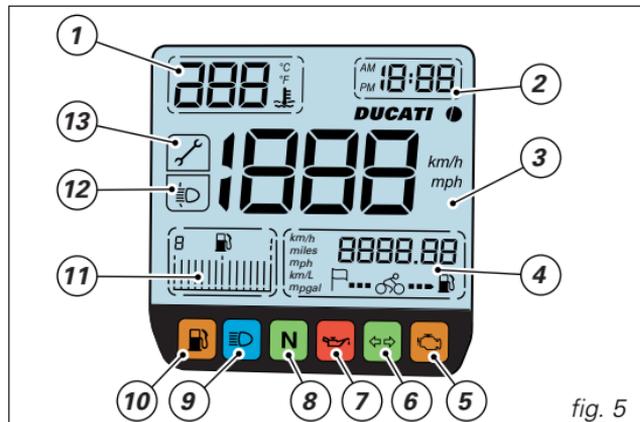


fig. 5

12) **Beam vertical adjustment indicator.**

The pilot light comes on to signal that the user has entered the beam vertical setting mode.

13) **Service warning.**

The light comes on to signal that the vehicle has covered the distance corresponding to a Scheduled Maintenance interval. The light keeps flashing until the vehicle has travelled 50 km after hitting the service interval. Then it stays on permanently. The system shall be reset by the DUCATI Authorised Service Center that has serviced the vehicle.

## LCD - Parameter setting/display

When turning the key from **OFF** to **ON (Key-ON)** the instrument panel carries out a **Check** of the whole instruments: indexes, displays and pilot lights (see fig. 6).

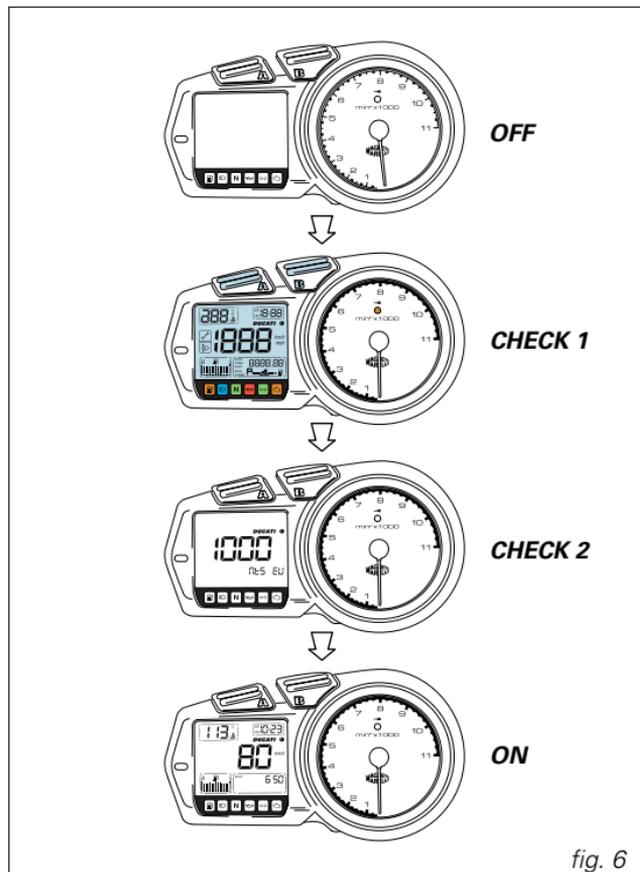
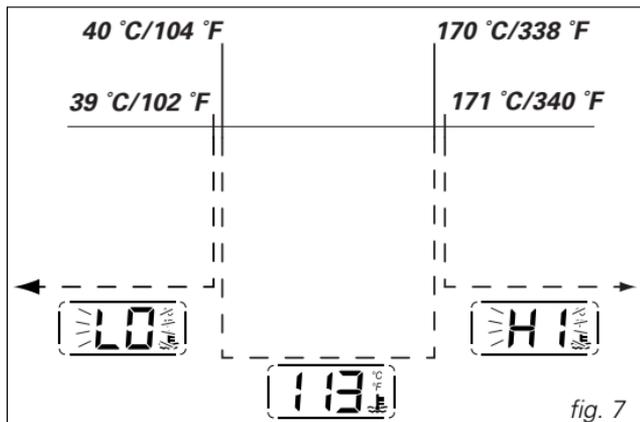
### Oil temperature (fig. 7)

This function indicates engine oil temperature.

When temperature is below 40 °C/104 °F a flashing "LO" message is displayed.

When oil temperature is between 40 °C/104 °F and 170 °C/338 °F temperature measurement is displayed.

When oil temperature goes over 170 °C/338 °F a flashing "HI" message is displayed.





### Note

If the sensor measuring the temperature is disconnected, a string of dashes "- - -" is displayed.

### Clock setting function

Hold down button **(A)**, see page 11) for 2 seconds, the wording AM begins to flash. If button **(B)** is pressed again, PM begins to flash; press button **(B)** to go back to previous step. Press button **(A)** to confirm and start setting hours that shall begin to flash.

Use button **(B)** to change hour value. If button **(B)** is pressed for more than 5 seconds, fast scroll is activated. Press button **(A)** to confirm and start setting minutes. Use button **(B)** to set minutes. Press button **(A)** to confirm and exit clock setting mode and go back to normal operation.

### Auxiliary display functions (fig. 8)

Press button **(B)** with the key on **ON** to scroll down the following functions, in sequence:

- Odometer
- TRIP meter
- Average speed
- Instant fuel consumption
- Average consumption
- Fuel used
- Range
- Digital fuel level indication

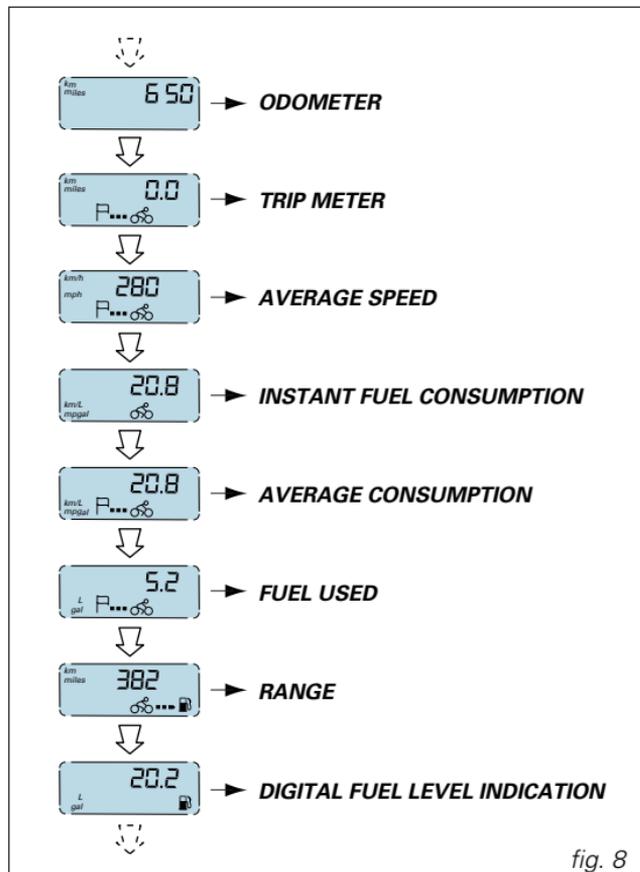


fig. 8

### **"Odometer" indication (fig. 9)**

Indicates total distance covered by the vehicle.

### **"TRIP meter" indication**

This function indicates the distance covered since the meter was last reset. It is possible to reset this indication by entering the relevant function and holding down button (A, see page 11), for at least 2 seconds. When a value of 9999.9 km (or miles) is reached, the display will automatically reset.

### **"Average speed" indication**

This function indicates vehicle average road speed. Average speed calculation is based on the distance travelled since the "TRIP meter" was last reset.

### **"Instant fuel consumption" indication**

This function indicates the instant consumption of the vehicle when in motion. When the vehicle is stopped with engine running, a string of dashes is displayed "--.-". With vehicle stopped and engine off "0.0" is displayed.

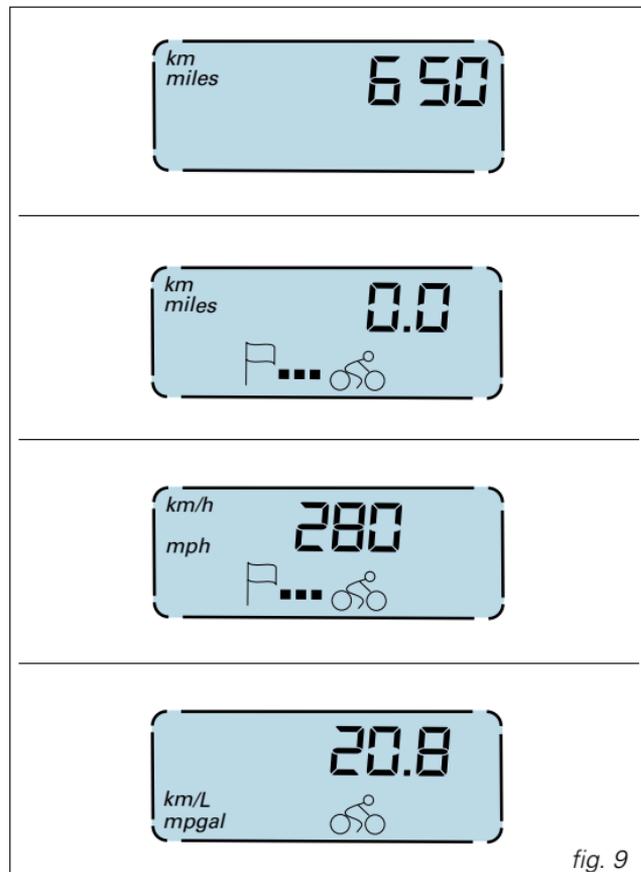


fig. 9

### **"Average consumption" indication (fig. 10)**

This function indicates the vehicle average consumption when in motion. The calculation is based on the distance travelled since the "TRIP meter" was last reset. When the vehicle is stopped, either with the engine off or running, the last value stored is displayed until indication is refreshed.

### **"Fuel used" indication**

This function indicates the fuel used by the vehicle to travel the distance. The calculation is based on the distance travelled since the "TRIP meter" was last reset. When indication exceeds 9999.9 liters (2201.9 Imp. gal. - 2641.9 US gal.), the display shows a string of dashes "- . - . -".

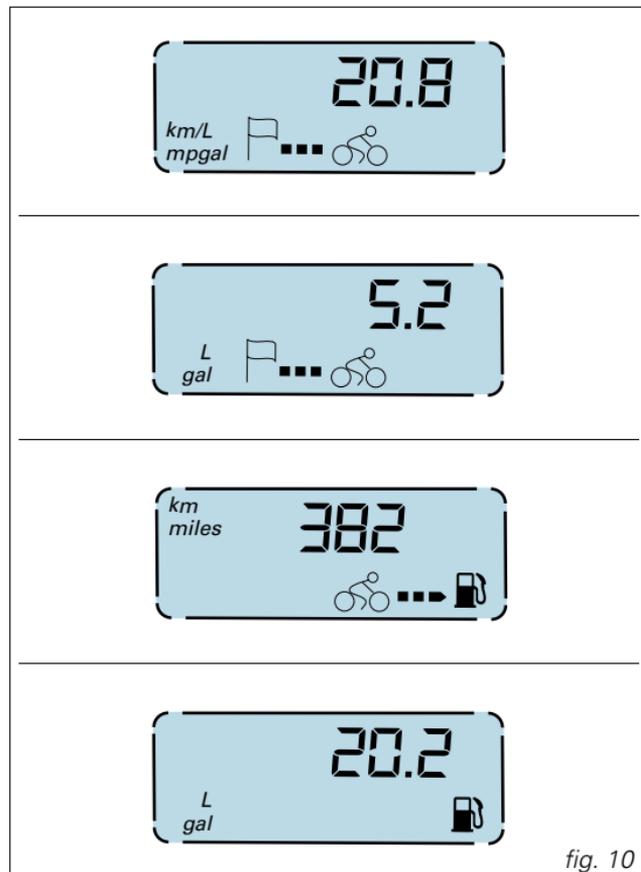


fig. 10

### **"Range" indication**

*This function indicates how far the vehicle can travel using the fuel left in the tank. When this display function is not selected, the display automatically switches to "Range" indication as soon as the LOW FUEL LIGHT (10, fig. 5) comes on and the display shows a string of dashes "- . - ." and the indication for 10 seconds. Range indication is then turned on automatically every 60 seconds while the low fuel light stays on.*

*When the vehicle is stopped, either with the engine off or running, the last value stored is displayed until indication is refreshed.*



#### **Note**

*The value is refreshed every 10 seconds, the tolerance is 0.5 km.*

### **"Digital fuel level" indication**

*This function indicates how much fuel is left in the fuel tank.*

*When the LOW FUEL LIGHT (10, fig. 5) comes on, the display shows a string of dashes "- . - ." and the fuel pump symbol begins to flash.*



#### **Note**

*This vehicle is equipped with a long fuel tank, fuel level indication might be slightly altered when riding up- or downhill for a certain period.*

### Beam vertical adjustment (fig. 11)

This function allows headlight beam height setting.

To enter this function, hold down button **(B)**, see page 11) and turn the key to **ON**; the display shows a value (fig. 11a) corresponding to beam position and the pilot light on the display (12, fig. 5) comes on.

Use buttons **(A)** and **(B)**, respectively, to lower or raise the beam. Range available is from position "3" (max. beam height) to position "-3" (min. beam height).

Turn the key to **OFF** to exit the function. While exiting setting mode, the selected beam position is stored.

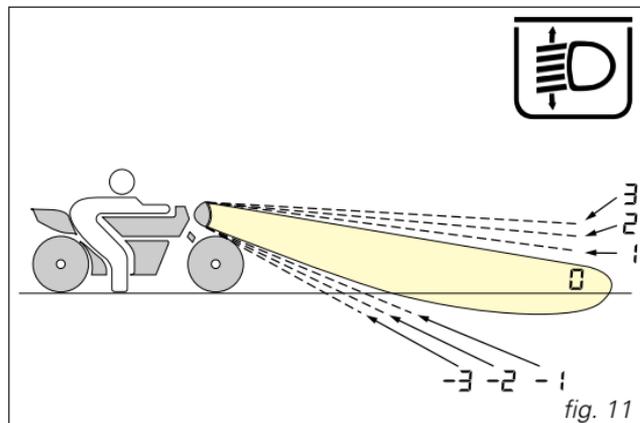
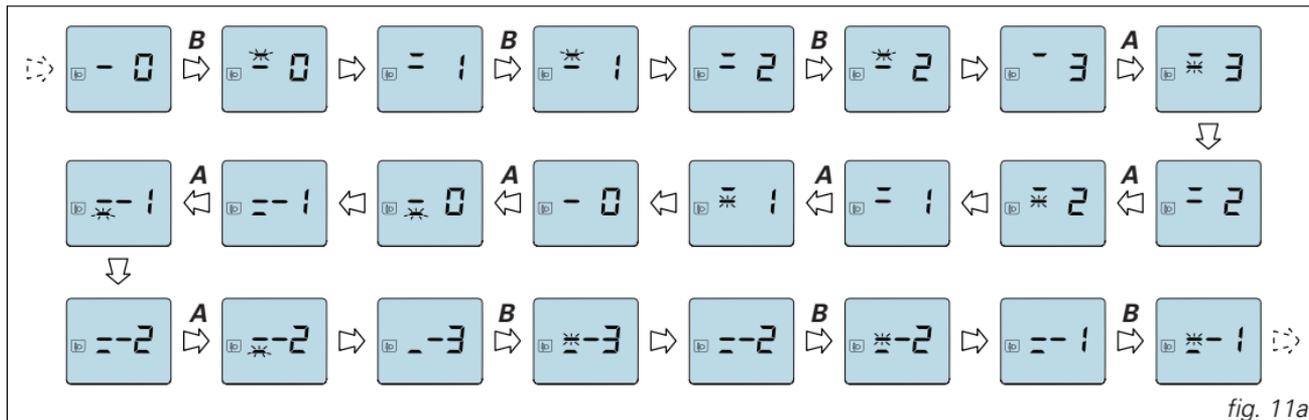


fig. 11



**Special selection function: vehicle model and unit of measurement** (fig. 12)

The control unit automatically informs the instrument panel about the vehicle model and unit of measurement to be displayed; hold down buttons **(A)** and **(B)** and turn ignition switch from **OFF** to **ON** to force the system and change these parameters. The display shows vehicle model and version in flashing mode. Press button **(B)** to display in sequence all possible settings. To save the setting chosen hold down button **(A)** for at least 5 seconds, until OFF is displayed, then turn the key to **OFF**.



**Note**

When this function is activated, vehicle ignition is inhibited.

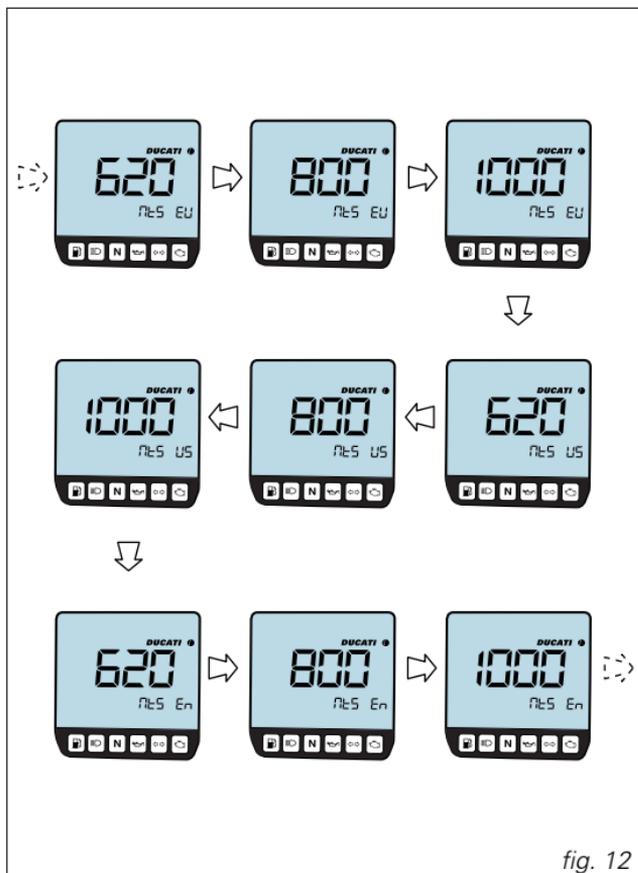


fig. 12

### **Backlighting function**

Instrument panel backlighting is active only if the parking light or the low/high beam is on.

In this case the instrument panel automatically turns on or off the backlighting, thanks to some sensors measuring light condition and ambient temperature.

### **Pilot lights brightness function**

This function is active only if the parking light or the low/high beam is on.

Pilot lights brightness is automatically adjusted by the instrument panel according to the outer light measured.

### **Auto-off headlight function**

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

The device is enabled in two instances:

- If the key is turned from **OFF** to **ON** and no attempt is made to start the engine. After 60 seconds, the headlight is switched off and will be turned on only upon the following **Key-ON**.
- After having used the bike, with headlight on, if the engine is stopped via the ENGINE KILL switch (2, fig. 19), after 60 seconds from engine stop, the headlight is turned off and will be turned on upon the following engine start-up.



### **Note**

While starting the engine, the system switches off the headlight and turns it back on again after engine has started, or anyway when the button (3, fig. 19) is released.

### **The immobilizer system**

For improved anti-theft 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. This signal is generated by a special antenna incorporated in the switch when the ignition is turned on and changes every time. The modulated signal acts as a "password" and tells the CPU that an "authorised" ignition key is being used to start up the engine. When the CPU recognises the signal, it enables engine start-up.



## Code card

A CODE CARD (fig. 14) is supplied together with the keys, it indicates the electronic code (A, fig. 15) to be used in case the engine is disabled and will not start up 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 remove engine block through the procedure that uses the throttle twistgrip (see page 24).

In case of faulty immobilizer system, this procedure gives the chance to disable "engine block" function -signalled by the orange EOBD warning light (5, fig. 5).

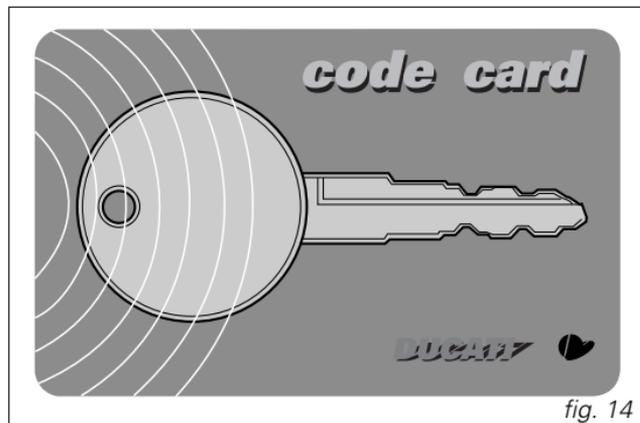


fig. 14

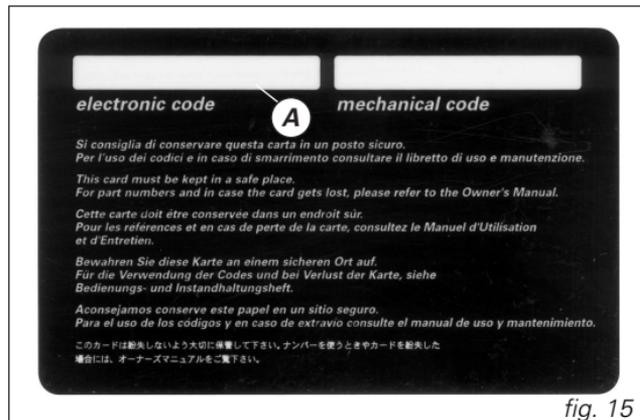


fig. 15

### **Procedure to disable immobilizer engine block through throttle twistgrip**

- 1) Turn the key to **ON** and fully open throttle. Keep it open. The EOBD warning light turns off after 8 seconds.
- 2) Release the throttle as soon as the EOBD warning light turns off.
- 3) EOBD pilot light will flash. Count a number of flashes corresponding to the first figure of the code printed on the CODE CARD, open full throttle and keep the position for 2 seconds, then release. In this way the input of one figure is acknowledged, EOBD pilot light comes on and stays on for 4 seconds. Carry out the same procedure for the following figures of the code. Failure to do so will cause the EOBD pilot light to flash 20 times, then it will stay on. This means that the procedure has been aborted. It will be necessary to turn the key to **OFF** and restart from point 1.
- 4) Repeat operations described in point 3 up to the last figure of the code.

- 5) Release the throttle twistgrip, if the code is correct the following two conditions may occur:
  - A) the EOBD warning light shall flash signalling that engine block has been disabled. The warning light turns off after 4 seconds or if engine revolutions go over the limit value of 1000 rpm.
  - B) the IMMO light (3, fig. 4) flashes until engine rpm get above 1000 rpm, or until engine is re-started.
- 6) If the code is **NOT** correct, the EOBD warning light and the IMMO light stay on and it is then possible to repeat the procedure, starting from point 2, as many times as necessary (infinite).



#### **Note**

Should the throttle twistgrip be released before the set time, the warning light turns on again. It is then necessary to bring the key to **OFF** and restart the procedure from point 1.

## 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 (**Key-ON**), the following happens:

- 1) if the CPU recognised the code, the IMMO light on the instrument panel will flash briefly. This means that the immobilizer system has recognised the key code and enabled engine ignition. When you press the  start button, the engine will start up.
- 2) If the IMMO light stays on, it means that the code has not been 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.
- 3) Should the IMMO pilot light still be flashing, it means that an immobilizer system fault was reset (e.g. with the overriding procedure through throttle grip).

## Important

Use only one key during the procedure. Failure to do so might prevent the system from recognizing the code of the key in use.

## Duplicate keys

If you need any additional key, contact the DUCATI Service network with all the keys you have left and your CODE CARD.

DUCATI Service will program new keys and re-program your original keys, up to 8 keys in total.

You may be asked to identify yourself as the legitimate owner of the motorcycle. Be sure you have any documents you might need to this end ready.

The codes of any keys not submitted will be wiped off from the memory to make those keys unserviceable in case they have been lost.



## Note

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

### **Ignition switch and steering lock** (fig. 16)

It is located in front of the steering head and has four positions:

- A) **ON**: lights and engine on;
- B) **OFF**: lights and engine off;
- C) **LOCK**: steering is locked;
- D) **P**: parking light is ON and steering is locked.



#### **Note**

To move the key to the last two positions, press it down before turning it. Switching to (B), (C) and (D), you will be able to take the key out.



#### **Important**

The motorcycle is equipped with an energy-saving CPU. If the key stays **ON** for a long period but the ignition button is not pressed within 15 seconds, the CPU will stop operating to avoid current absorption. To restore the system move the key to **OFF** and then to **ON** again.

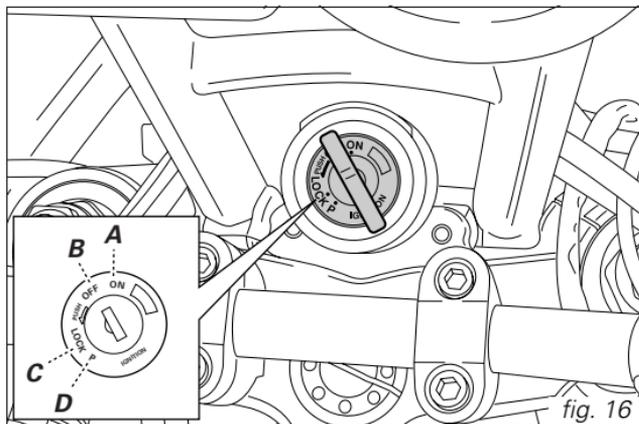


fig. 16

### Left switch (fig. 17)

1) Dip switch, light dip switch, two positions:

- position  = low beam on;
- position  = high beam on.

2) Switch  = 3-position turn indicator:

- centre position = OFF;
- position  = left turn;
- position  = right turn.

To reset turn indicators, push in when switch is back to central position .

3) Button  = warning horn.

4) Button  = high-beam flasher.

5) Button  = Emergency stop flashers

Press this button to turn on all direction indicators at the same time.

Press it again to turn them off.

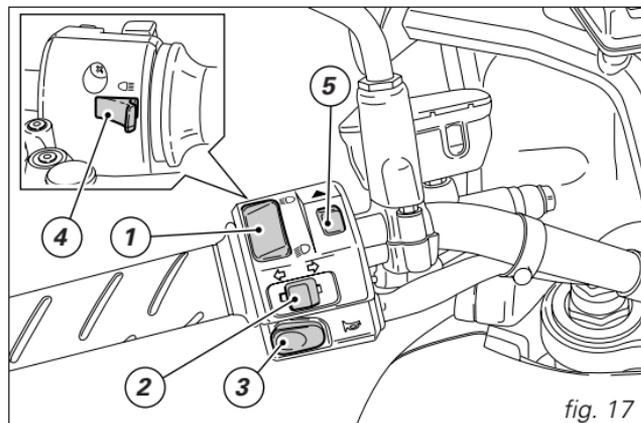


fig. 17



### Note

When devices (1), (2), (4) and (5) are activated, the relevant pilot lights on the instrument panel turn on (see page 13).

### **Clutch lever** (fig. 18)

Lever (1) disengages the clutch. It features a dial adjuster (2) for lever distance from the twistgrip on handlebar.

To set lever distance from twistgrip, push lever (1) fully forward and turn the dial adjuster (2) to one of its four positions. Remember that position no. 1 gives maximum distance between lever and twistgrip, whereas lever and twistgrip are closest when adjuster is set to position no. 4. When you pull in the lever (1), you will disengage the engine from the gearbox and therefore from the driving wheel. Using the clutch properly is essential to smooth riding, especially when moving off.

E



#### **Warning**

Set clutch lever when motorcycle is stopped.



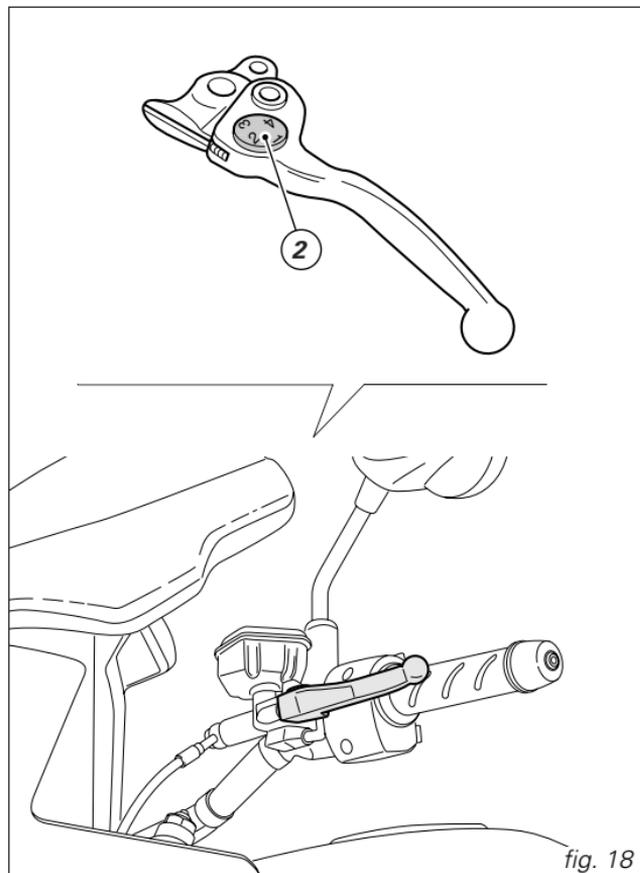
#### **Important**

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



#### **Note**

It is possible to start the engine with side stand fully 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).



### **Right switch** (fig. 19)

- 1) Switch, light switch, three positions:
  - right position **O** = lights off;
  - centre position **☉** = front and rear parking lights, number plate and instrument panel lights on;
  - left position **☼** = headlight, front and rear parking lights, number plate and instrument panel lights on.



### **Note**

This device is not fitted on the Australia and Japan versions.

- 2) Switch for engine stop, 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.

- 3) Button **Ⓢ** = engine start.

### **Throttle twistgrip** (fig. 19)

The twistgrip (4) on the right handlebar opens the throttles. When released, it will spring back to the initial position (idling speed).

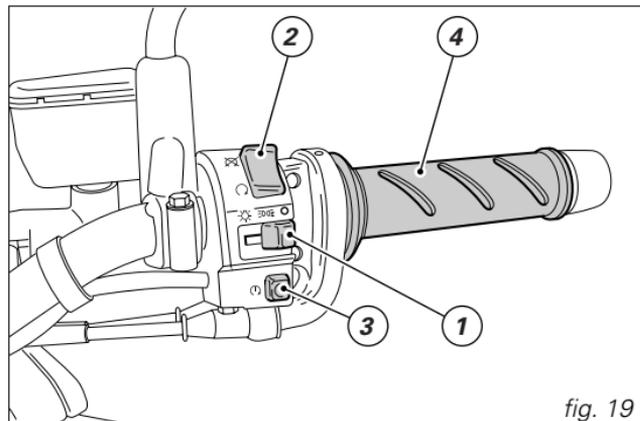


fig. 19

### **Front brake lever** (fig. 20)

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

The control lever features a dial adjuster (2) for lever distance from the twistgrip on handlebar.

To adjust, keep lever (1) completely extended, turn knob (2) and set it to one of the four available positions.

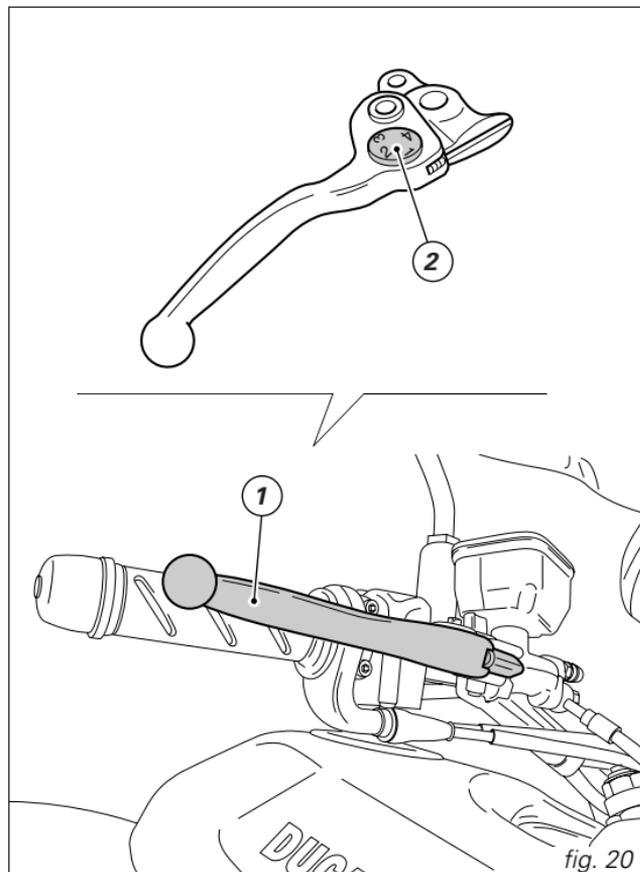
Consider that:

position no. 1 corresponds to the maximum distance between lever and twistgrip, while position no. 4 corresponds to the minimum distance.



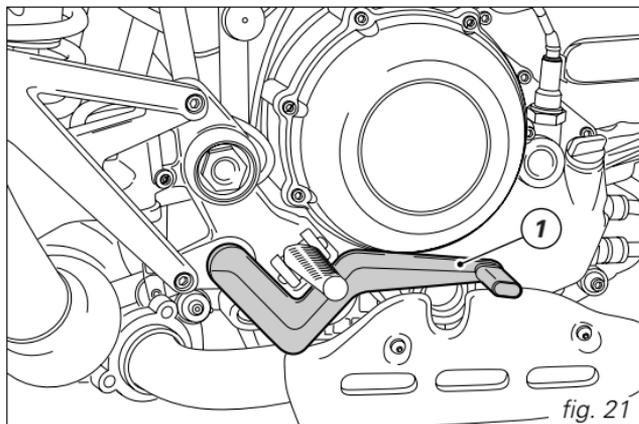
### **Warning**

Front brake lever adjustment is to be carried out when the bike is stopped.



**Rear brake pedal (fig. 21)**

Push down on the pedal (1) to apply the rear brake. The system is hydraulically operated and therefore only a minimum pressure is required.

**Gear change pedal (fig. 22)**

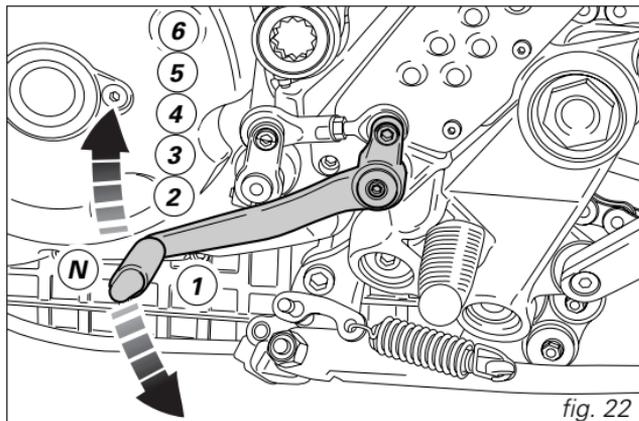
Gearchange pedal features a center rest position N, with automatic return; this condition is signalled by the pilot light N (8, fig. 5) on the instrument panel turning on.

The pedal can be moved:

down = push down on the pedal to engage 1st gear and to shift down. The N light will go out.

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

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



### **Setting the gear change and rear brake pedals**

The gear change and rear brake pedals can be adjusted to suit the preferred riding position of each rider with respect of the pertinent footpeg.

To make these adjustments, follow the procedure described.

#### **Gearchange pedal (fig. 23)**

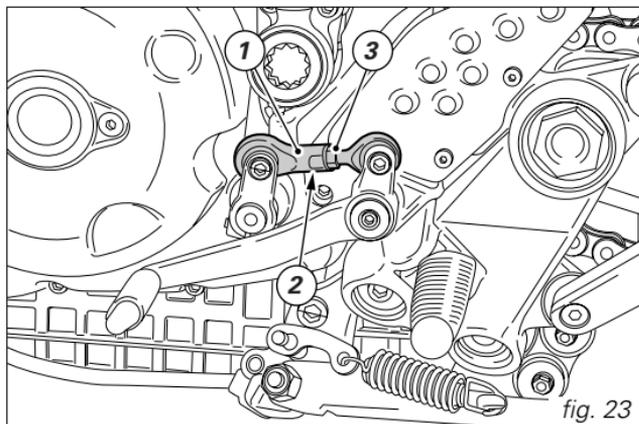
Lock rod (1) by fitting an open-end wrench to socket (2), and loosen lock nut (3).

Slacken screw (4), so to be able to remove rod (1) from the gearchange lever.

Turn rod (1) by fitting a wrench to socket (2), set pedal in the desired position.

Use screw (4) to secure the gearchange lever to rod (1).

Tighten lock nut (3) against rod (1).



**Rear brake pedal** (fig. 23a)

Loosen check nut (5).

Turn pedal travel adjusting screw (6) until pedal is in the desired position.

Tighten check nut (5).

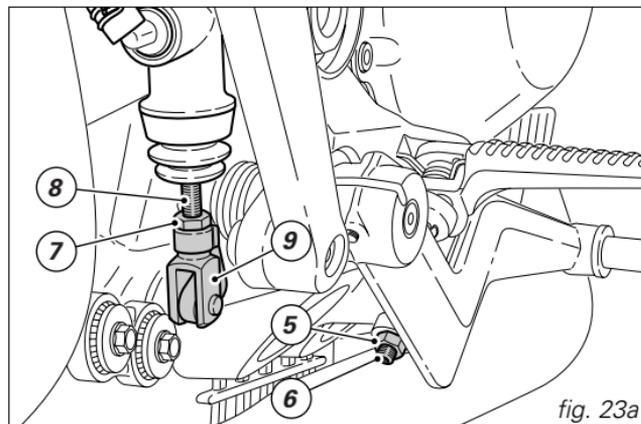
Work pedal by hand to make sure it has 1.5 - 2 mm free play before brake begins to bite.

If not so, set the length of cylinder linkage as follows.

Loosen the check nut (7) on cylinder linkage.

Tighten linkage (8) into fork (9) to increase play, or unscrew linkage to reduce it.

Tighten check nut (7) and check pedal free play again.



## MAIN COMPONENTS AND DEVICES

### Location (fig. 24)

- 1) Tank filler plug.
- 2) Pillion seat catch and helmet hooks.
- 3) Glove compartment catch.
- 4) Side stand.
- 5) Front fork adjusters.
- 6) Rear shock absorber adjusters.
- 7) Rear-view mirrors.
- 8) Silencer and exhaust pipes.
- 9) Catalyser (not on USA version).

**Warning**  
 The exhaust system can be hot even after engine has been turned off; be careful not to touch the exhaust system with any part of your body and do not park the vehicle next to flammable material (such as wood, leaves and so on).

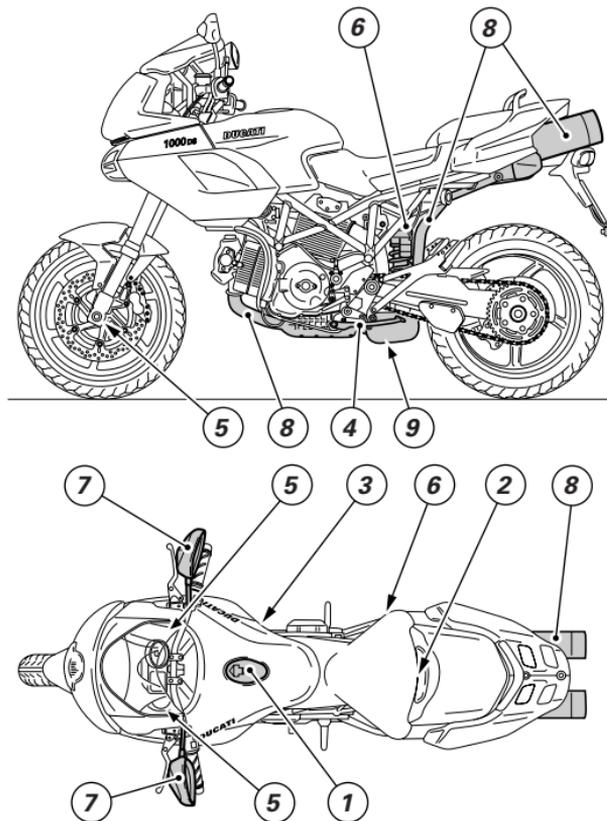


fig. 24

## **Tank filler plug** (fig. 25)

### **Opening**

Lift the protection lid (1) and fit the ignition key into the lock. Turn the key clockwise 1/4 turn to unlock. Lift the plug (2, fig. 25a).

### **Closing**

Refit the plug (2) with the key in it and push it down into its seat.

Turn the key anticlockwise to its initial position and take it out. Close the lock protection lid (1).



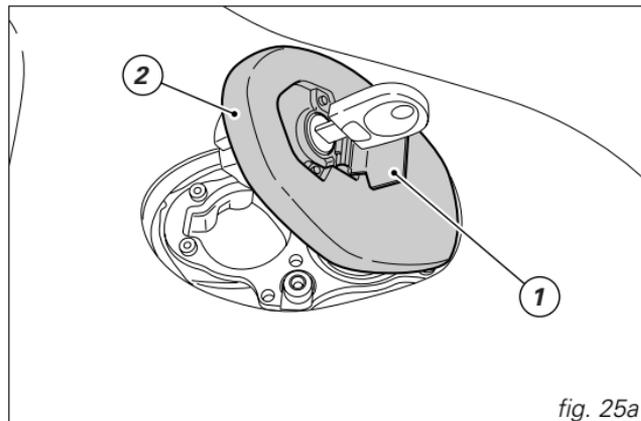
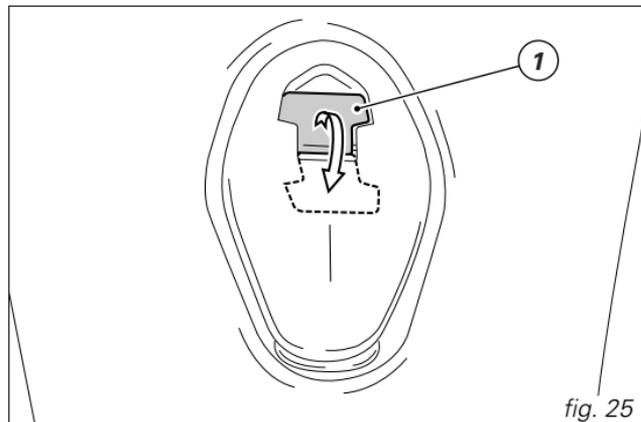
### **Note**

The plug can only be closed with the key in.



### **Warning**

Always make sure you have properly refitted (see page 51) and closed the plug after each refuelling.



## Passenger seat catch and helmet hook

### Opening (fig. 26)

Insert the key in lock (1) and turn it clockwise until you hear the seat catch click in place.

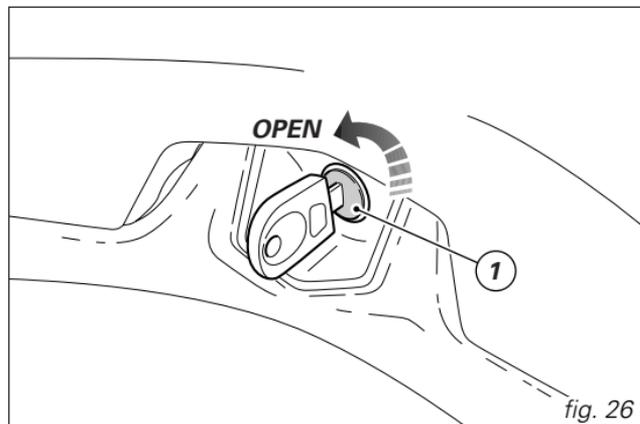
Lift the seat rear end (2) and pull it backward to slide it out from the front supports.

### Closing

Rest the seat on fuel tank retainers, pull it back until you hear it click in place.

Push on the seat rear end until hearing the catch click in place.

Make sure the seat is properly secured, try pushing the seat upward.

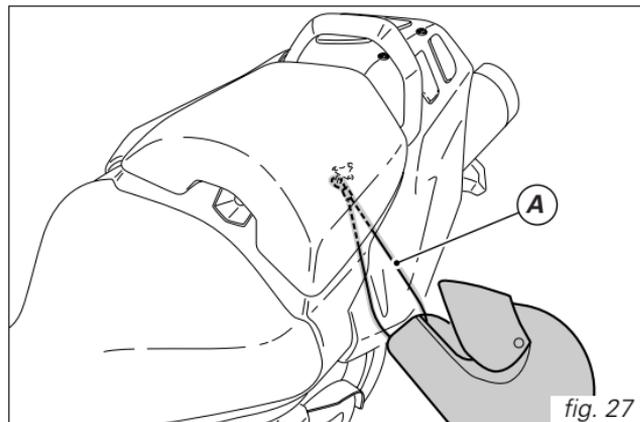


The hook for the helmet cable is located under the passenger seat. Route cable (A) in the helmet and insert the ends in the hook. Leave helmet hanging on the left side (fig. 27) and refit the seat to secure it in place.

### Warning

This system is intended to lock your helmet safely when you park your motorcycle. Never leave the helmet hanging from the hook when riding or it may get in the way and make you lose control of the motorcycle.

The cable is to be fitted on the left side. If fitted in any other position, it will prevent the seat from closing.



### **Glove compartment lock**

To open glove compartment door, insert the key into lock (1) and rotate it counterclockwise until hearing the catch unlock (fig. 28).

Open the door (fig. 28a) to gain access to the glove compartment where the Owner's manual and the tool kit are (see page 52).

### **Important**

Do not store heavy or metal parts in the glove compartment or they might move when the bike is running thus making the vehicle unstable.

Push the door at the catches to close it, until hearing a click.

Remove the key.

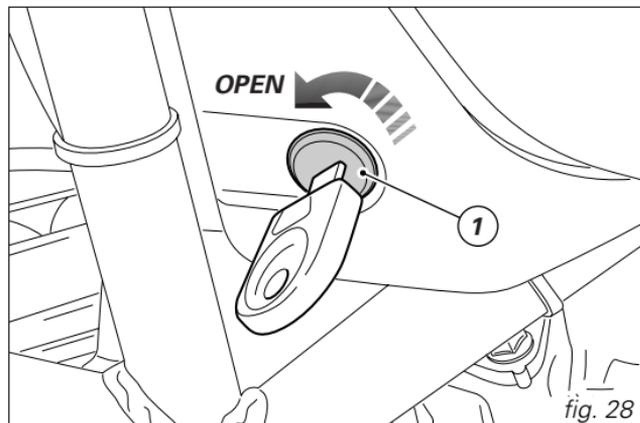


fig. 28



fig. 28a

## Side stand (fig. 29)

### **Important**

Before lowering the side stand, make sure that the bearing surface is hard and flat. Do not park on soft or pebbled ground or on asphalt melt by the sun heat and similar or the motorcycle may fall over. When parking in downhill road tracts, always park the motorcycle with its rear wheel facing downhill. To pull down the side stand, hold the motorcycle handlebar with both hands and push down on the thrust arm (1) with your foot until it is fully extended. Tilt the motorcycle to the left until the side stand end is resting on the ground.

### **Warning**

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

To move the side stand to its rest position (horizontal position), tilt the motorcycle to the right and, at the same time, lift the thrust arm (1) with your foot. Check for proper operation of the stand mechanism (two springs, one into the other) and the safety sensor (2) which communicates the stand position to the engine CPU at regular intervals. A 3A fuse fitted on the side of the battery protects this system (see page 89).



### **Note**

It is possible to start the engine with the side stand down, if the gearbox is in neutral position.

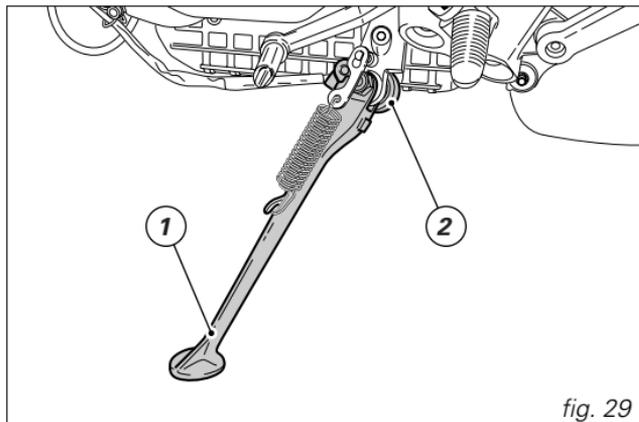


fig. 29

## Front fork adjusters

The front fork used has rebound and compression damping adjuster as well as a spring preload adjuster.

This adjustment is done using the outer adjusters:

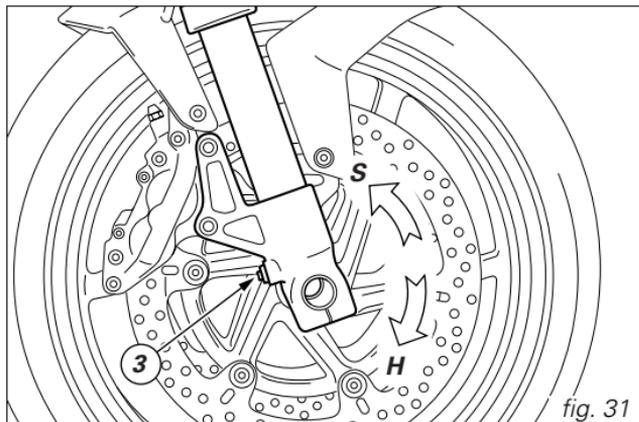
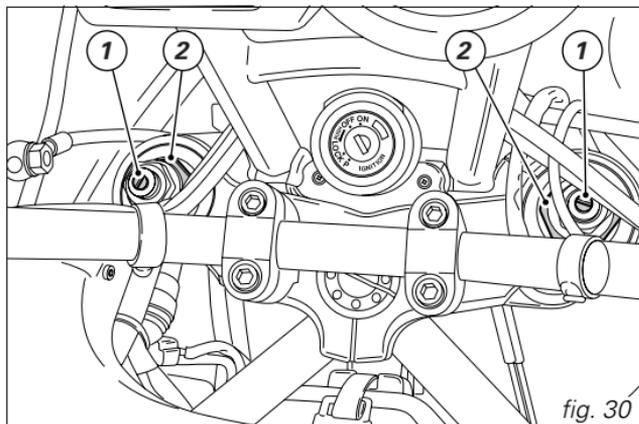
- 1) to adjust rebound damping (fig.30);
- 2) to adjust inner springs preload (fig. 30);
- 3) to adjust compression damping (fig. 31).

Make sure the vehicle is stable, on the side stand.

Use a flat screwdriver to turn adjuster (1), at the top of every fork leg, and change rebound damping.

Use a flat screwdriver to turn adjuster (3), at the back of wheel shaft pinch bolts, and change compression damping.

Adjuster (1) has click settings, every click corresponds to a different damping setting. Adjuster (3) is a screw so damping variation is continuous. Completely tighten the adjuster to reach "0" position, corresponding to max damping. Starting from this position, turn counter clockwise and count the clicks - which correspond to position "1", "2", etc. - or measure the angular rotation of the adjuster.



STANDARD factory setting is as follows:

compression: 1 turn;

rebound: 11 clicks.

To change the preload of the spring inside each fork leg turn the hex. adjusting nut (2) with a 22-mm hexagon wrench.

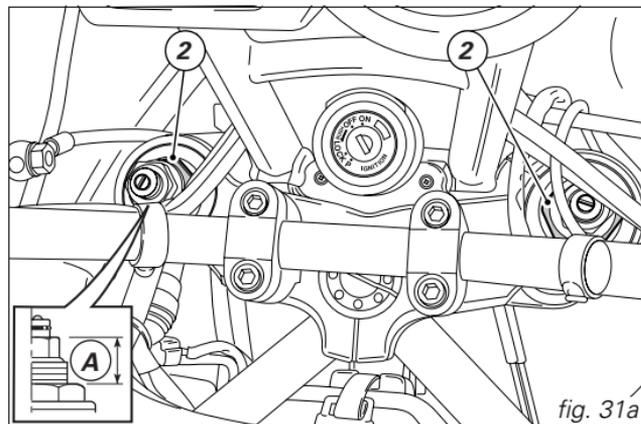
Height (A, fig. 31a) determines preload and may vary from 25 to 10 mm.

Factory setting is 20 mm.

E

**Important**

Adjust both fork legs to same settings.



### **Rear shock absorber adjusters** (fig. 32 and 32a)

The rear shock absorber features outer adjusters to set the vehicle according to load conditions.

The rebound adjuster (1) is on the right-hand side at the bottom shock absorber-to-swingarm fitting.

The compression adjuster (2) is on the shock absorber expansion reservoir.

Turn adjusters (1 and 2) clockwise to increase damping, counter clockwise to decrease it.

STANDARD setting for rebound adjuster (1):

From fully closed position (clockwise) turn out by 2 turns.

STANDARD setting for the compression adjuster (2):

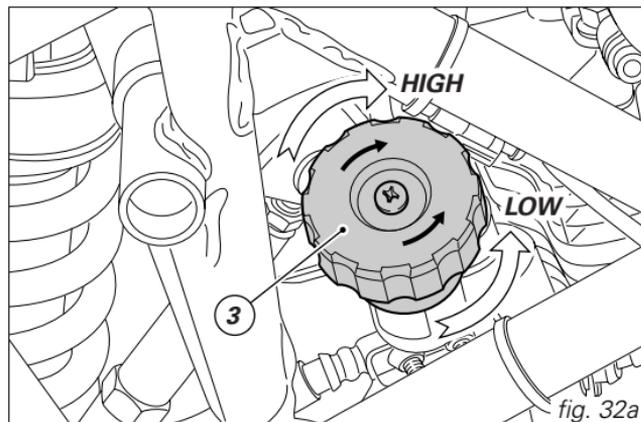
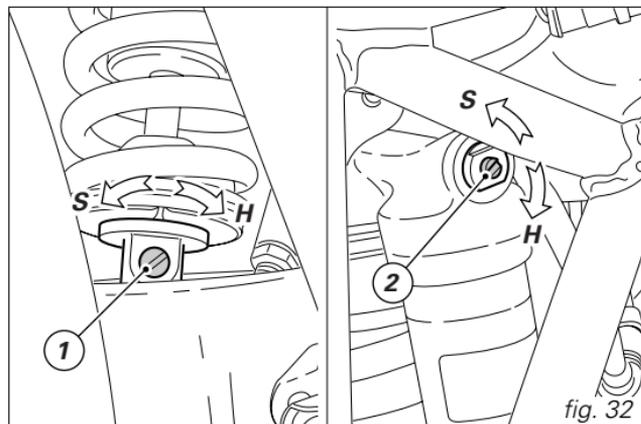
completely open position (counter clockwise).

Knob (3), on the frame right-hand side, allows adjustment of the shock absorber outer spring preload, follow instructions on the knob itself.

STANDARD setting corresponds to knob minimum position (LOW).

### **Warning**

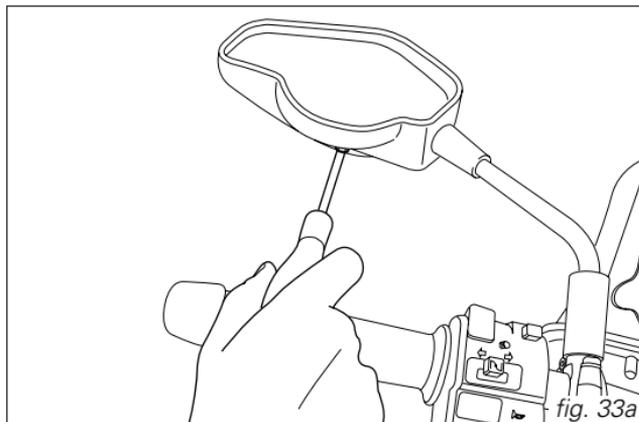
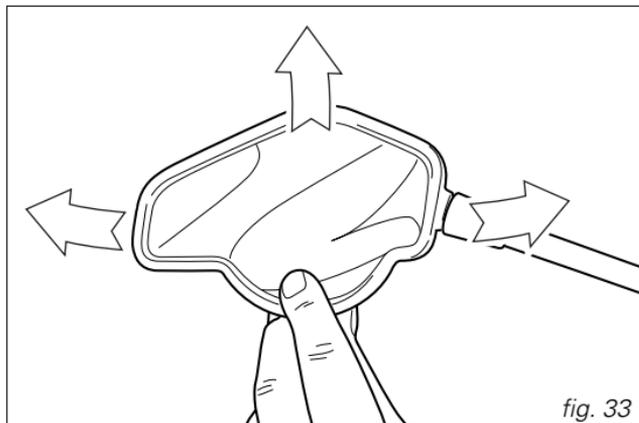
 The shock absorber is filled with gas under pressure and may cause severe damage if taken apart by unskilled persons.



### **Rear-view mirrors adjustment**

Adjustment is made by simply pushing the mirror in the direction wanted (fig. 33).

To lock the mirror in position, tighten the screw at the bottom of the support (fig. 33a).



## Motorcycle trim adjustment

Motorcycle trim is the result of many tests carried out by our engineers in the most different conditions. Changing this parameter is a very delicate operation that might prove dangerous if improperly carried out. Before changing standard setting, it is advisable to measure the reference value (H, fig. 34).

The rider can change motorcycle trim according to his/her own riding style by setting shock absorber position (fig. 34a).

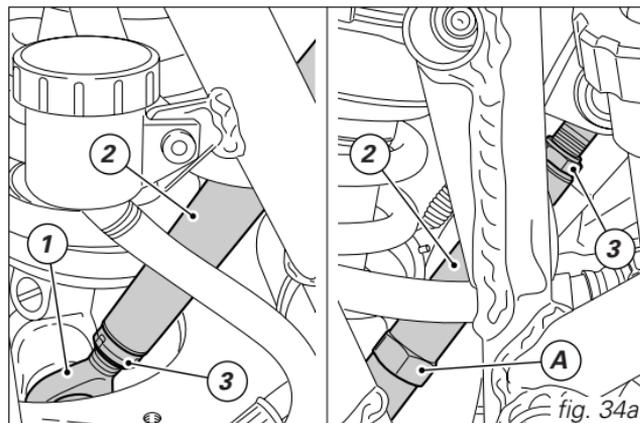
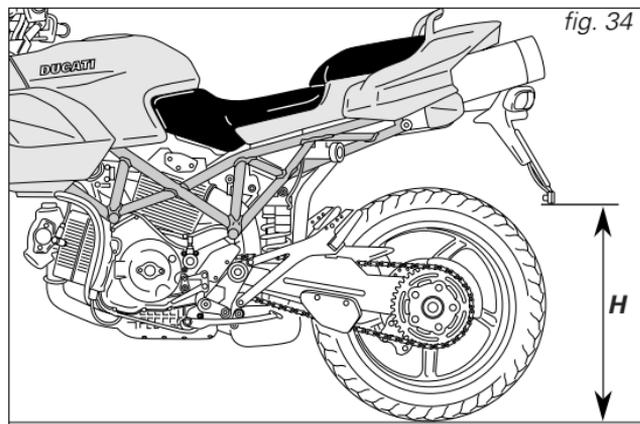
Loosen nuts (3) on ball joints (1) and use socket (A) to increase or decrease linkage (2) center distance. Once set, tighten nuts (3) to 25 Nm.

### **Note**

Be careful because lower nut (3) has a left thread.

### **Warning**

Linkage (2) length, in-between joints (1) axes, must not exceed 255 mm.



## **DIRECTIONS FOR USE**

### **Running-in recommendations**

#### **Max. rotation speed** (fig. 35)

Rotation speed (rpm) for running-in period and during standard use:

- 1) up to 1000 km;
- 2) from 1000 to 2500 km;
- 3) after 2500 km.

#### **Up to 1000 km**

During the first 1000 km, keep an eye on the revolution meter. The indicator must not 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 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 friction material on brake pads against brake discs.

For all mechanical moving parts 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 squeeze some more power out of your engine, being careful, however, to never exceed 7,000 rpm.

#### **Important**

During the whole running-in period, the maintenance and service rules recommended in this manual should be observed carefully. Have the service inspections performed as recommended in the Warranty Card. 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.

### **After 2500 km**

After running-in, never exceed the following values during the motorcycle standard use:

10,000 rpm.

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

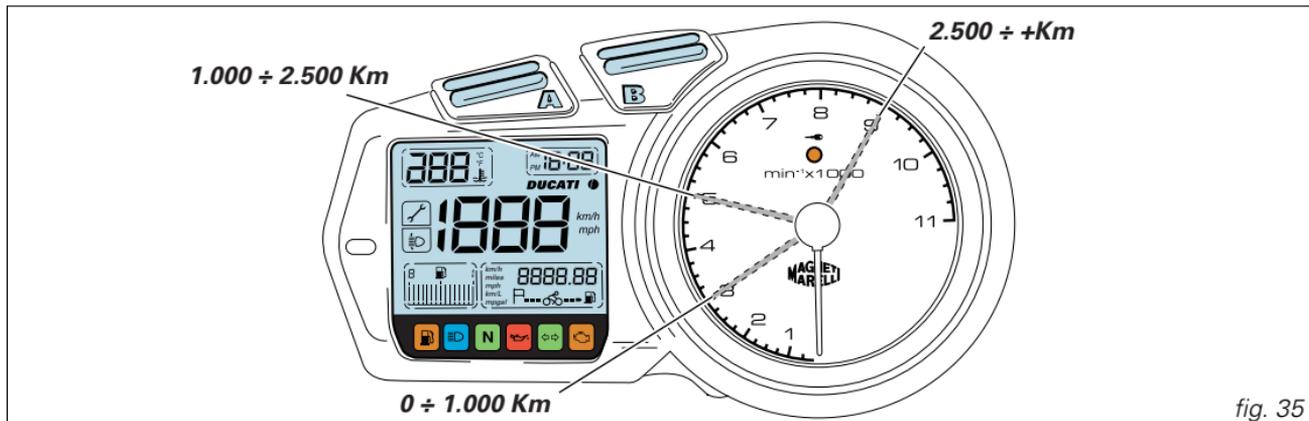


fig. 35

## **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 fuel level in the tank.

Fill tank if needed (page 51).

### **Engine oil level**

Check oil level in the sump through the sight glass. Top up if needed (page 77).

### **Brake and clutch fluid**

Check fluid level in the relevant reservoirs (page 58).

### **Tyre condition**

Check tyre pressure and condition (page 75).

### **Controls**

Work the brake, clutch, throttle and gear change controls (levers, pedals and twistgrips) and check for proper operation.

### **Lights and indicators**

Make sure lights, indicators and horn work properly.

Replace any burnt-out bulbs (page 66).

### **Key-operated locks**

Check that fuel filler plug (page 35) and pillion seat catch locks (page 36) are closed firmly.

## **Stand**

Make sure side stand operates smoothly and is in the correct position (page 38).



### **Warning**

In case of malfunctioning, do not start the motorcycle and call a DUCATI Dealer or Authorised Workshop.

## Starting the engine

### **Warning**

Before starting the engine, become familiar with the controls you will need to use when riding (see page 10).

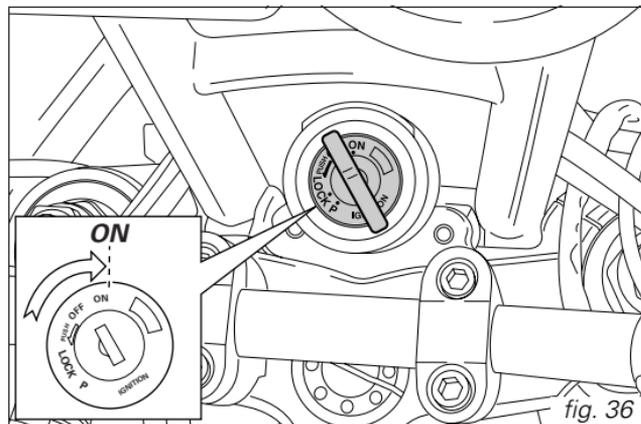
- 1) Move ignition switch to **ON** (fig. 36). Check that the green pilot light **N** (8, fig. 5) and the red one  (7, fig. 5), on the instrument panel are on.

### **Important**

The oil pressure light should go out a few seconds after the engine has started (page 13).

### **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).



- 2) Check that the stop switch (1, fig. 37) is positioned to  (**RUN**), then press the starter button (2).

This model is equipped with a servoignition system. To achieve assisted engine starting, press the button (2) and release it immediately.

Pressing the button (2) operates automatic engine starting for a maximum period of time that varies depending on engine temperature.

When the engine has started, the system prevents the starter motor from turning over.

If the engine fails to start, allow at least 2 seconds before pressing the starter button (2) again.

Let the engine start without using the throttle control.

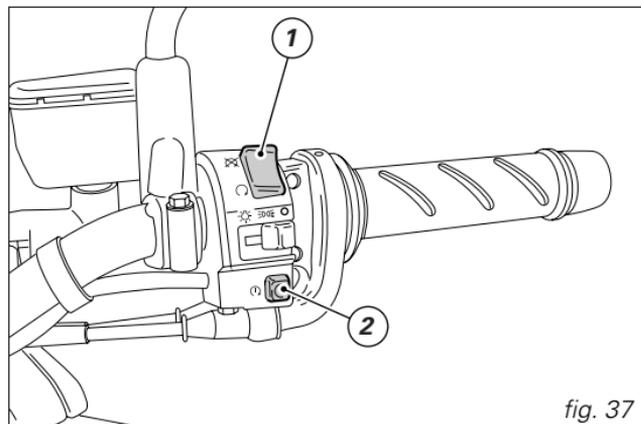


fig. 37

 **Note**

If the battery is flat, the system will automatically prevent the starter motor from turning over.

 **Important**

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

## **Moving off**

- 1) *Disengage the clutch squeezing the control lever.*
- 2) *Push down on gear change lever sharply with the tip of your foot to engage the first gear.*
- 3) *Speed up engine, by turning the throttle twistgrip and slightly releasing the clutch lever at the same time. The motorcycle will start moving off.*
- 4) *Let go of clutch lever and speed up.*
- 5) *To shift up, close the throttle to slow down engine, disengage the clutch, lift the gear change lever and let go of clutch lever.*

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

## **Important**

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

## **Braking**

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



## **Warning**

*Use both brake lever and pedal for effective braking. Using only one of the brakes will give you less braking power.*

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

## **Stopping the motorcycle**

If you let go of the throttle twistgrip, the motorcycle will slow down gradually and smoothly. Then, shift down releasing the clutch, and finally change from first to neutral. Apply brakes and you will bring the motorcycle to a complete stop.

To switch the engine off, simply turn the key to **OFF** (page 26).

### **Important**

The motorcycle is fitted with an energy-saving control unit. In order to prevent any current absorption, the control unit is disabled in case the key is left on **ON** by accident and the starter button is not pressed after 15 seconds; turn the key to **OFF** and back to **ON** to reset. However, avoid leaving the key set to **ON** with the engine stopped.

## **Parking**

Stop the motorcycle, then put it on the side stand (see page 38).

Turn the handlebar fully left and block it by pushing in the ignition key and turning it to the **LOCK** position.

If you park in a garage or other facilities, make sure that there is proper ventilation and that the motorcycle is not near a source of heat or sparks. You may leave the parking lights on by turning the key to position **P**.

### **Important**

Do not leave the key turned to **P** 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.).

### **Warning**

Using padlocks or locks that prevent motion (such as brake disc or crown sprocket locks and so on) is very dangerous and may affect motorcycle operation as well as the safety of rider and passenger.

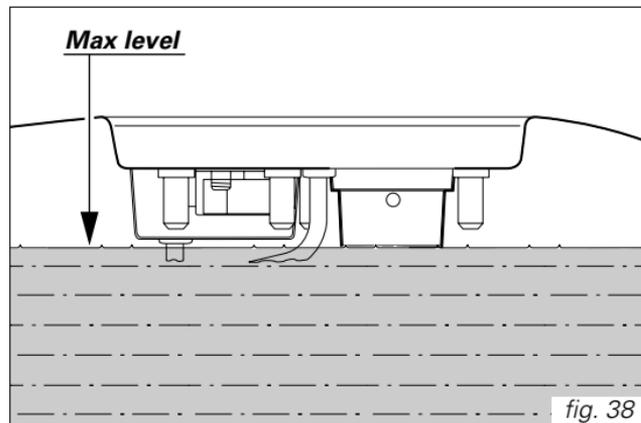
**Refuelling** (fig. 38)

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



**Warning**

Use low-lead fuel having at least 95 fuel octane rating (see table "Refuelling" page 81). Be sure there is no fuel trapped in the filler recess.



### **Tool kit and accessories** (fig. 39)

In the right-hand fairing there is a compartment that can be accessed after opening the door (see page 37), in this compartment there are:

an Owner's manual;

a helmet fastening cable;

The tool bag (fig. 40) holds:

- box wrench for spark plugs;
- tommy bar;
- double-bit screwdriver.



fig. 39

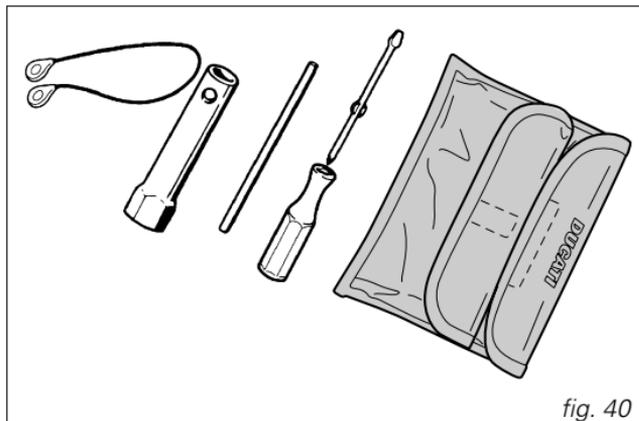


fig. 40

## **MAIN MAINTENANCE OPERATIONS**

### **Removing the fairing**

*Some servicing operations need the motorcycle fairing to be removed.*



#### **Warning**

*Firmly secure all removed parts properly when refitting them, otherwise some of them might suddenly come off when riding and you may lose control of your motorcycle.*



#### **Important**

*At reassembly always fit nylon washers when tightening fastening screws to avoid damage to painted parts and Plexiglas headlamp fairing.*

### **Mobile headlight fairing**

Loosen the four screws (1) that secure the mobile headlight fairing to the supports with seal (2).

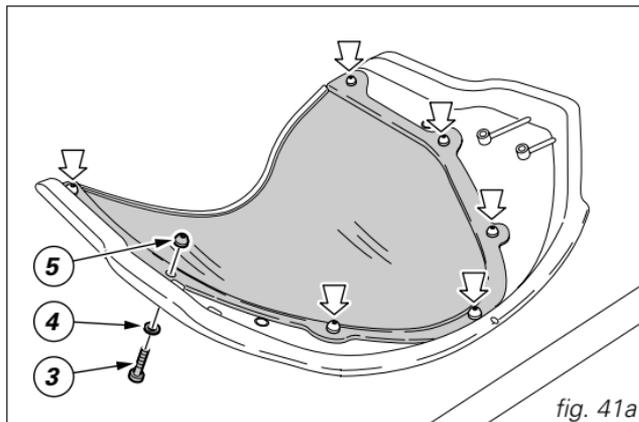
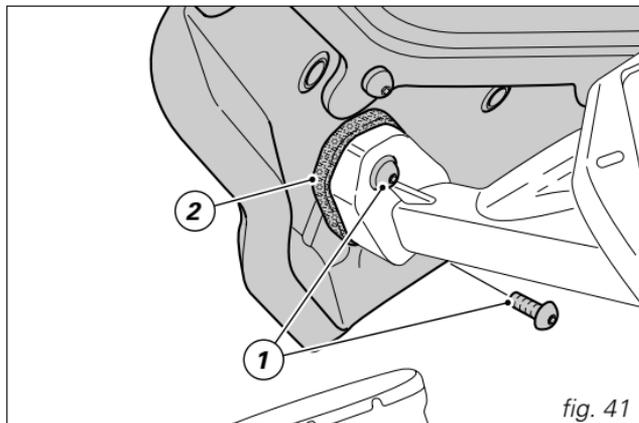
Remove the mobile headlight fairing together with windshield ( fig. 41).

To change the windshield, with the suitable torx wrench loosen the screws (3) with nylon washer (4), lock rubber-coated nuts (5) from the inside (fig. 41a).

While fitting the new windshield, tighten the screws (2) starting from the center one.

Check that the seals (2) are on the supports then position the mobile headlight fairing and secure it on either sides with screws (1).

Tighten screws (1).



### **Fixed headlight fairing**

Undo the six screws (1) securing the inner flange, on either side of the headlight fairing, then pull the inner flange upward and remove it (fig. 42).



#### **Note**

Be careful while removing the flange not to damage the paint of the headlight fairing.

Undo the six screws (2) securing the fixed headlight fairing to the headlight support (fig. 42a).

Remove the fixed headlight fairing.

When reassembling, tighten the four centre screws first then the two on the sides.

Position the inner flange on the fixed headlight fairing, make sure that the holes match.

Tighten the six screws (1), do not overtighten or the inserts on the fixed headlight fairing might damage.

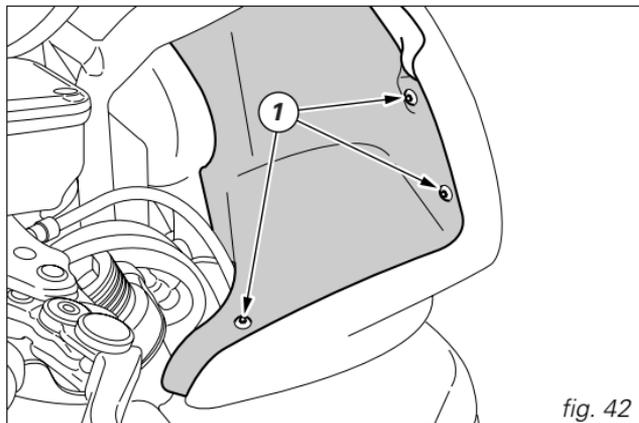


fig. 42

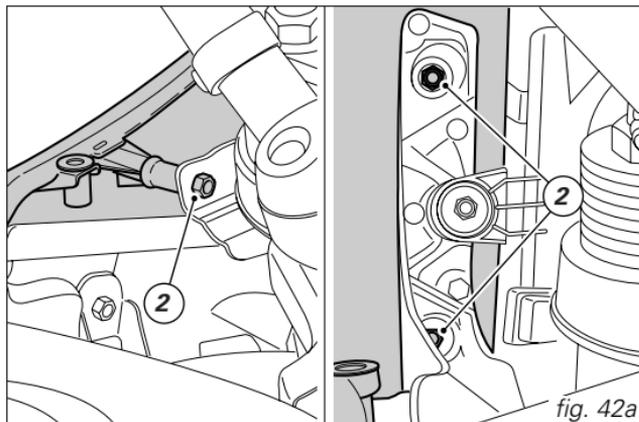


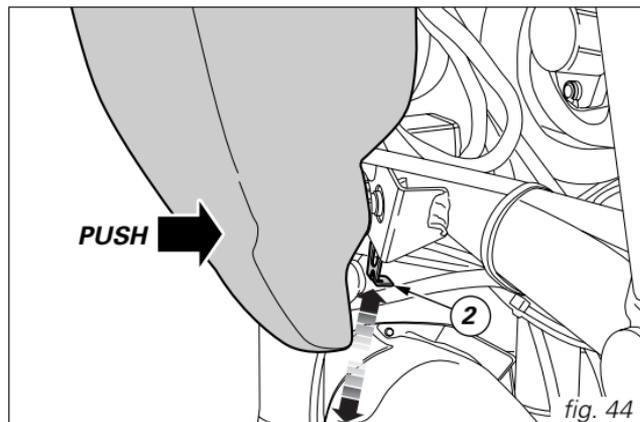
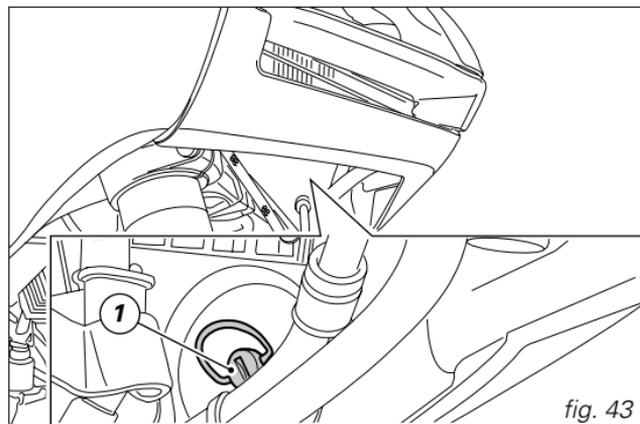
fig. 42a

### **Left side fairing**

Working on the left side, from inside the fairing, turn counter clockwise by  $\frac{1}{4}$  of a turn the quick-release fitting (1) to release the left side fairing front end (fig. 43).

Slide out tab (2) at the frame support to release the left side fairing rear end: it will be easier if you push from the outside on the fairing at the tab (fig. 44).

Slide the left side fairing out of the fuel tank retaining pins and remove it.

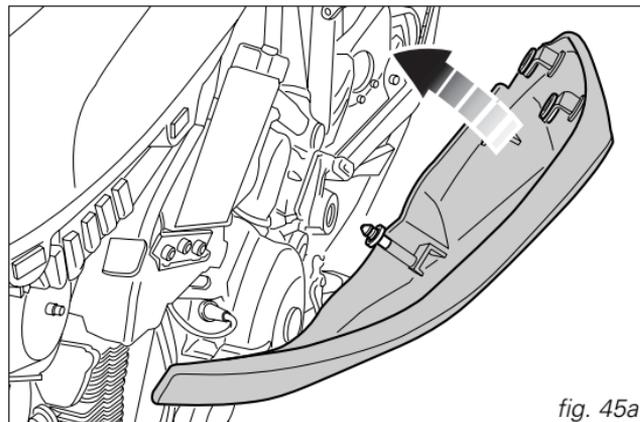
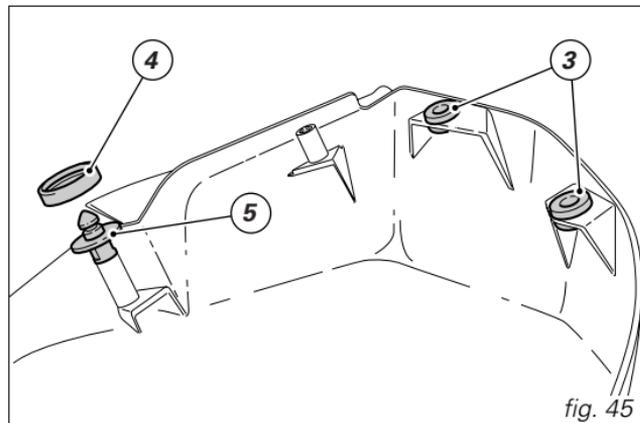


Before reassembling, make sure that rubber elements (3) and seal (4) are correctly in place on pin (5) on the inside of the fairing (fig. 45).

Fit the left side fairing, start from the rear end and fit rubber elements in fuel tank pins (fig. 45a).

Push the fairing at pin (5) to be able to engage tab (2) to the pin end.

Push front quick-release fitting (1) and turn it clockwise by  $\frac{1}{4}$  of a turn to engage it.



### **Checking brake and clutch fluid level**

Fluid level should never fall below the **MIN** mark on each reservoir (fig. 46 and 46a).

If level drops below the limit, air might get into the circuit and affect the operation of the system involved.

Brake and clutch fluid must be topped up and changed at the intervals specified in the routine maintenance chart on the Warranty Card by a Ducati Dealer or Authorised Workshop.

**E**

#### **Important**

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

#### **Brake system**

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

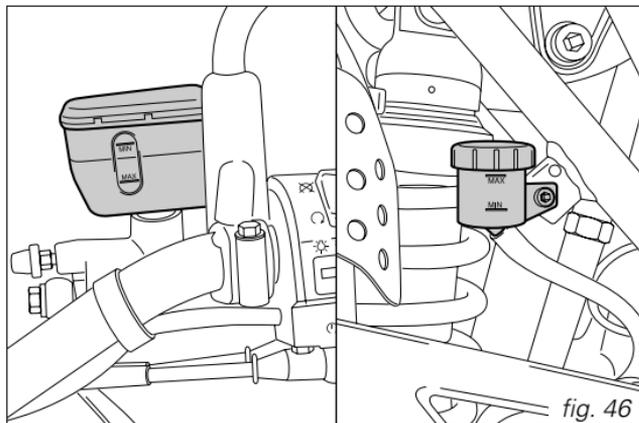
#### **Warning**

Brake and clutch fluid and will damage paintwork and plastic parts if accidentally spilled.

Hydraulic oil is corrosive; it may cause damage and lead to severe injuries.

Never mix different quality oils.

Check seals for proper sealing.



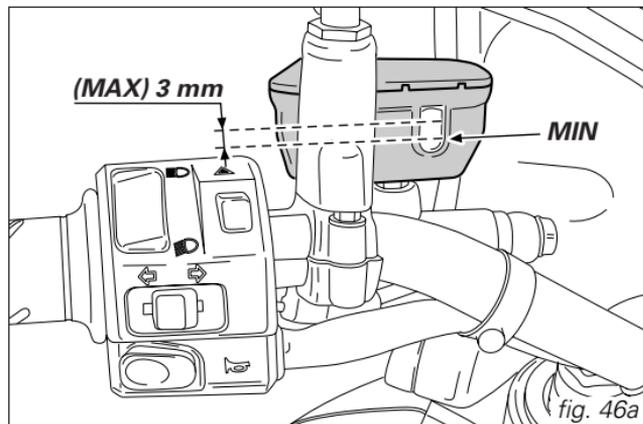
**Clutch system** (fig. 46a)

If the control lever has exceeding play and the transmission snatches or jams as you try to engage a gear, it is possible that there is air in the circuit. Contact your Ducati Dealer or Authorised Workshop 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 specified level (3 mm above minimum level).



### **Checking brake pads for wear** (fig. 47)

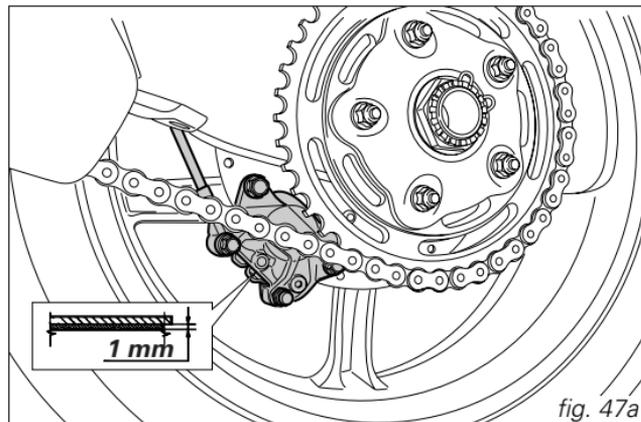
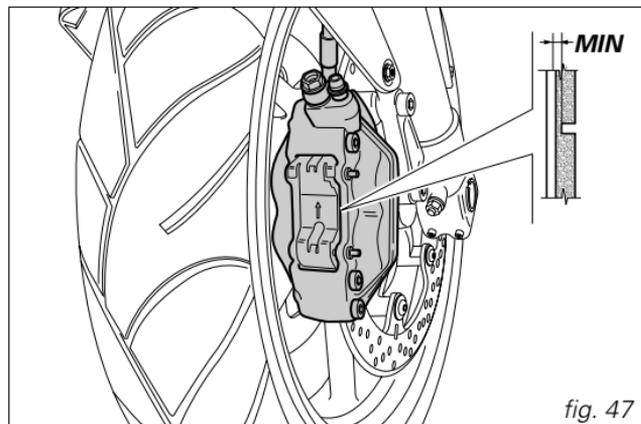
To facilitate inspection without removing the pads from the calipers, front brake pads have a wear mark. If the grooves in the friction material are still visible, the pad is still in good condition.

Rear brake pads are to be replaced when friction material is worn down to about 1 mm (fig. 47a). This can be seen through the opening in the caliper halves.

**E**

#### **Important**

Have the brake pads replaced at a *Ducati Dealer* or *Authorised Workshop*.



### **Lubricating joints**

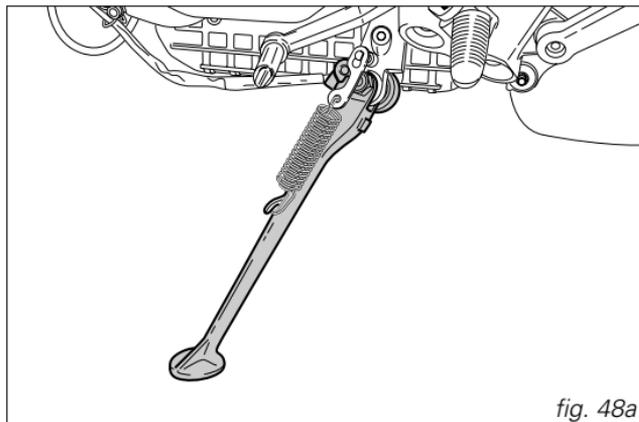
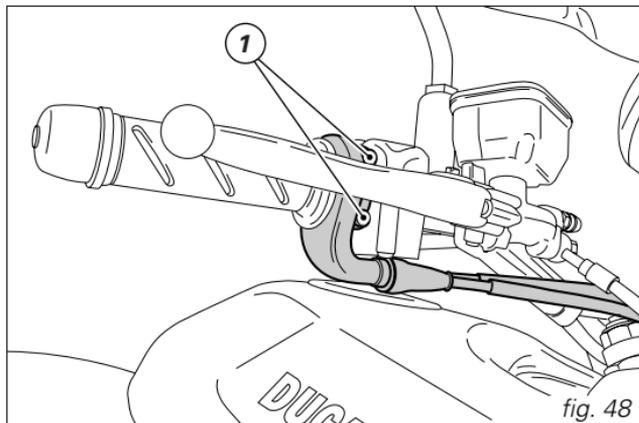
The condition of the outer sheaths of the throttle cables should be checked at regular intervals. The sheaths should show no signs of squeezing or cracking. Work the controls to make sure the cable slides smoothly inside the sheath: if you feel any friction or hard spots, have the cable replaced by your Ducati Dealer or Authorised Workshop. To prevent these failures it is best to remove the cover by unscrewing the two fastening screws (1, fig. 48) and then grease the cable end and the pulley with SHELL Advance Grease or Retinax LX2.

### **Warning**

 When refitting the cover, be sure to slide the cable properly onto the suitable pulley.

Refit the cover and tighten the screws (1).

To ensure smooth operation of side stand joint, clean off any dirt and apply SHELL Alvania R3 at all points exposed to friction (1, fig. 48a).



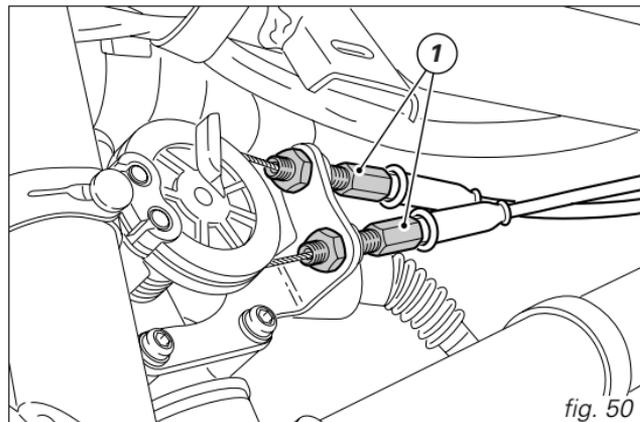
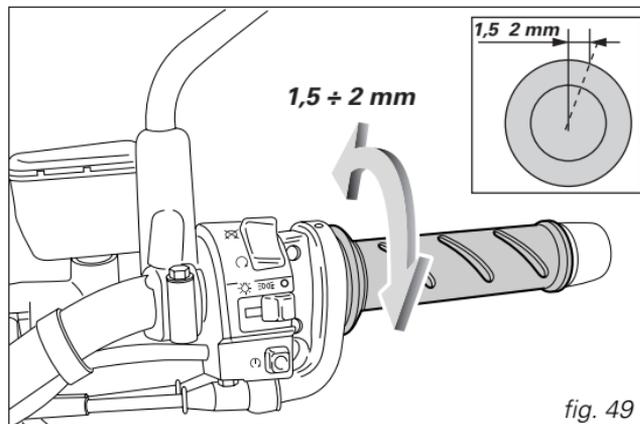
### **Throttle cable free play adjustment**

The throttle twistgrip must have a free play of 1.5 - 2.0 mm (fig. 49) measured at the edge of the twistgrip, at all positions of the handlebars.

If not so, it is necessary to adjust control travel through the relevant adjusters (1) of the throttle body (fig. 50).

#### **Important**

To adjust the free play of the throttle control, call an Authorized Dealer or Service Center.



### **Charging the battery** (fig. 51)

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

Remove the LH half-fairing (see page 56).

Always disconnect the black negative terminal (-) first, and then the red positive terminal (+).

Undo the two screws (1) on battery brackets and remove the battery.

#### **Warning**

**!** Batteries develop explosive gases: keep battery away from heat sources and flames.

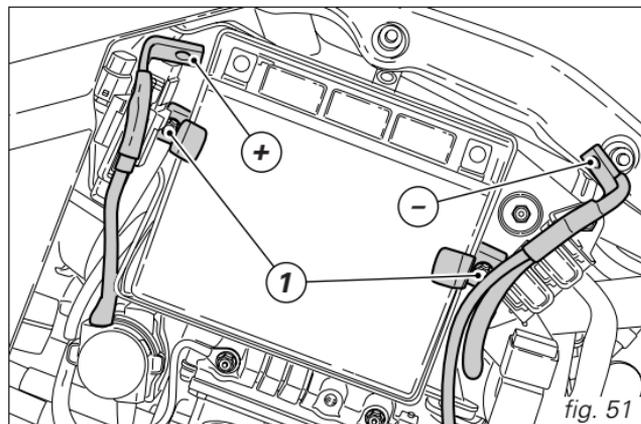
Charge the battery in a well ventilated room.

Connect battery charger red lead to battery positive terminal (+), the black lead to battery negative terminal (-).

#### **Important**

**●** Always make sure the charger is off when you connect the battery to it, or you might get sparks at the battery terminals that could ignite the gases inside the cells. Always connect the red positive terminal (+) first.

Refit battery to its mount and secure brackets with screws (1), then connect the terminals, grease the fastening screws to improve conductivity.



#### **Warning**

**!** Keep the battery out of the reach of children.

Charge the battery at 0.9 A for 5-10 hours.

### **Checking the drive chain tension** (fig. 52)

Move the motorcycle until finding the position where the chain is tightest.

Lower the side stand and rest the bike on it. At the most forward position of the side chain guard check the distance between swingarm and chain lower section links middle axis. The value must be between 38 and 42 mm as indicated on the label on the swingarm. If it is not so, it is necessary to change the chain tension.

**E**

#### **Important**

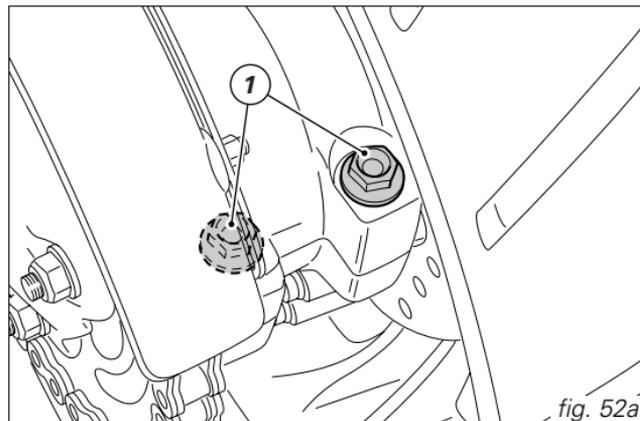
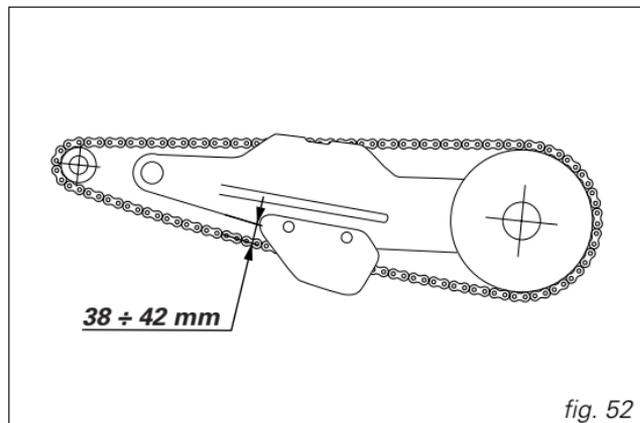
Contact an *Ducati Dealer* or *Authorised Workshop* to have the drive chain tensioned.

#### **Warning**

Proper tightening of screws (1, fig. 52a) on swingarm is fundamental for the rider and passenger safety.

#### **Important**

A chain which is not properly tensioned might cause early wear of any transmission parts.



### **Chain lubrication**

*The chain fitted on your motorcycle has O-rings that keep dirt out of and lubricant inside the sliding parts. The seals might be irreparably damaged if the chain is cleaned using any solvent other than those specific for O-ring chains or washed using steam or water jets. After cleaning, blow the chain dry or dry it using absorbent material and apply SHELL Advance Chain or Advance Teflon Chain on each link.*

#### **Important**

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

## Replacing headlamp bulbs

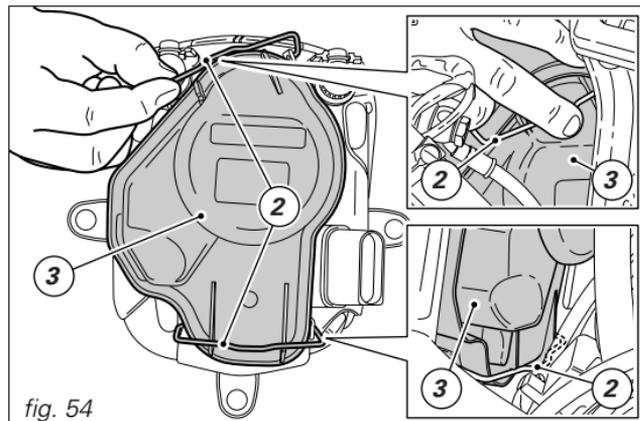
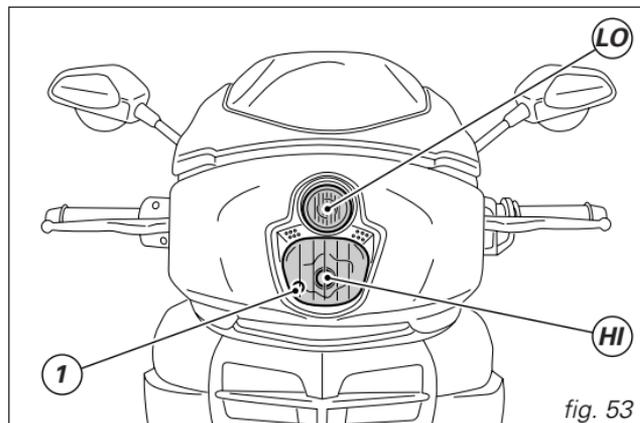
Before replacing a burnt-out bulb, make sure that the new bulb complies with voltage and wattage as specified on page 88, "Electric System", for that lighting device. Always test the new lamp before refitting the parts you have removed.

Fig. 53 shows the position of low beam (LO), high beam (HI) and parking (1) bulbs in the headlight.

Working on the sides of the fixed headlight fairing, in the area under the instrument panel (fig. 54), release upper and lower clips (2) and open cover (3) to gain access to the headlight bulbs.

### **Note**

For easier reference, the headlight shown is removed from the vehicle.



### **Low beam (upper)**

Disconnect connectors (4) from the clamps on the bulb. Release clip (5) from bulb socket by pushing down and then squeezing its ends (fig. 55).

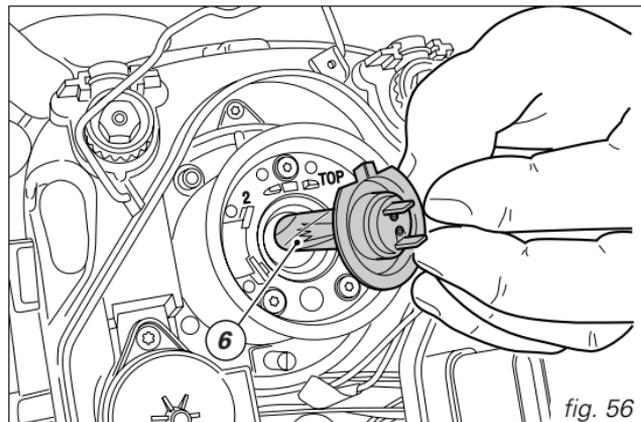
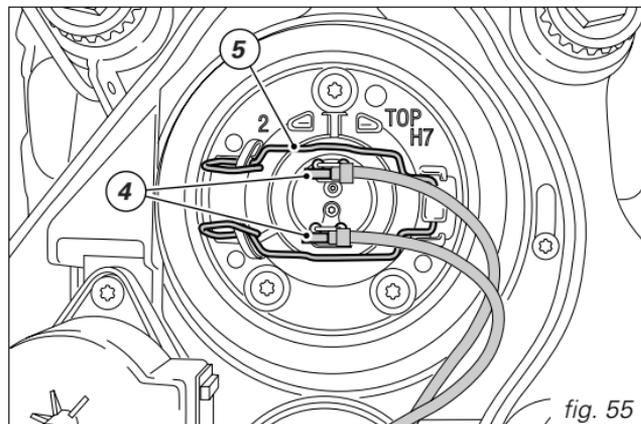
Pull the clip up (5).

Remove the burnt-out bulb (6) and replace it with a new one, do not touch the transparent body of the bulb (fig. 56).



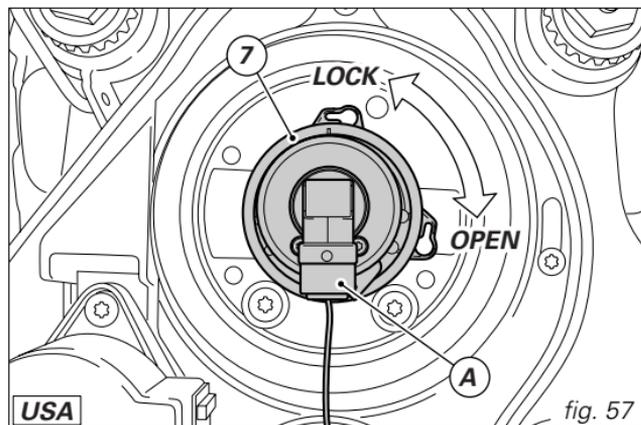
### **Note**

Be careful to hold the new bulb at the base only. Never touch the transparent body with your fingers or it will blacken resulting in reduced bulb brilliancy.



 **Note** for the USA version:

To remove the low beam bulb (7) disconnect connector (A) from the wiring then turn the bulb counter clockwise and extract the burnt-out bulb (fig. 57). Replace it with a new one with the same rating. When refitting, turn the bulb clockwise to lock it on the bulb body.

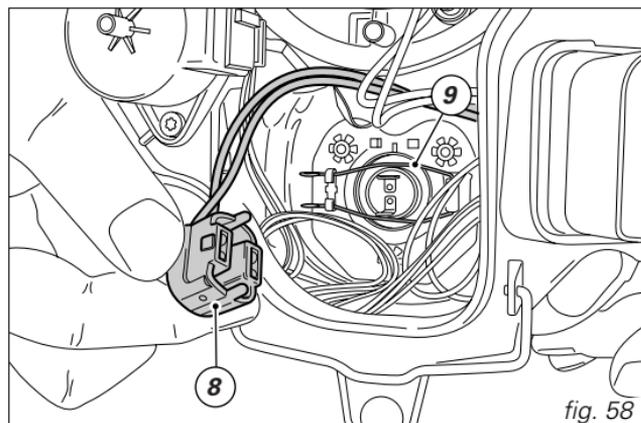


### High beam (lower)

Disconnect connector (8) from the terminals on high beam bulb (fig. 58)

Disconnect the clip (9) from the bulb socket by pushing down and then squeezing the ends.

Pull the clip up (9).



Remove the burnt-out bulb (10) and replace it with a new one, do not touch the transparent quartz (fig. 59).

### **Parking light**

Disconnect the connections (11) from terminals (fig. 60). Remove the parking light (12) from its seat and replace it with a new one with the same rating.

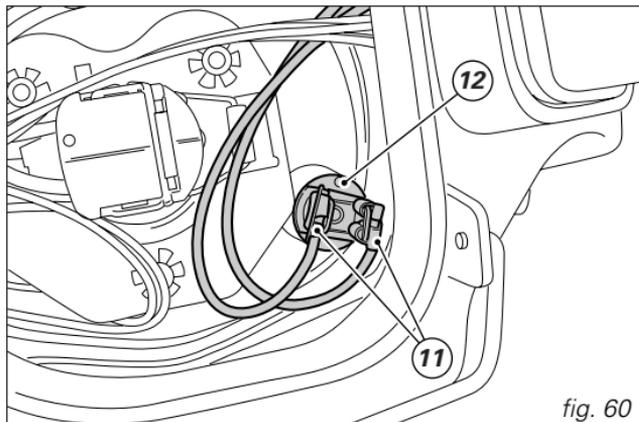
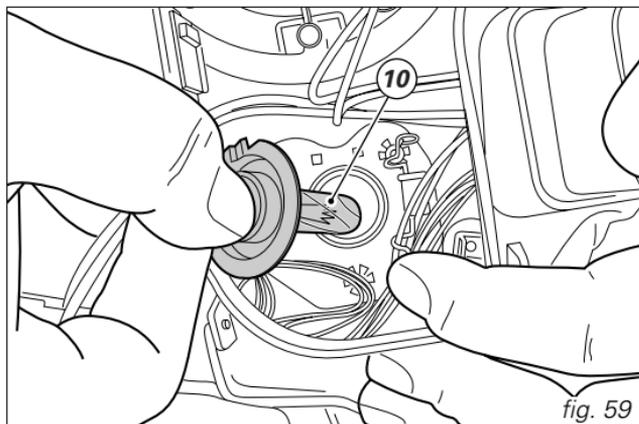
### **Refitting the bulbs**

Once you have replaced all necessary parts, reconnect cable connectors on bulb terminals, previously disconnected. Reposition headlight cover in its seat, make sure that the edges match and secure it to headlight body by tightening the clips.



### **Note**

It is possible to reverse the cables on bulb terminals.



### **Changing the front direction indicators bulbs**

Front direction indicators are integrated in the rear-view mirrors.

To change the bulb, undo the screw (1) and remove the indicator lens (2) from mirror body (fig. 61).

Bulb (3) has a bayonet-type fitting, push it and turn counter clockwise to remove it. Change the burnt-out bulb with a new one with same rating, fit it, push it and turn clockwise until it clicks in place (fig. 62).

Refit the lens (2) in the slot on indicator body, make sure that the edges match.

Secure the lens with screw (1).

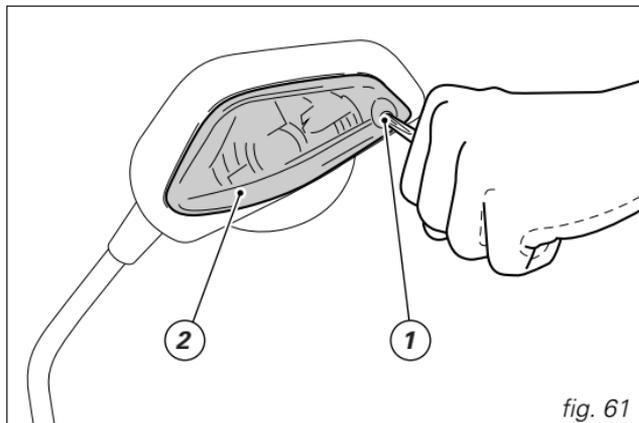


fig. 61

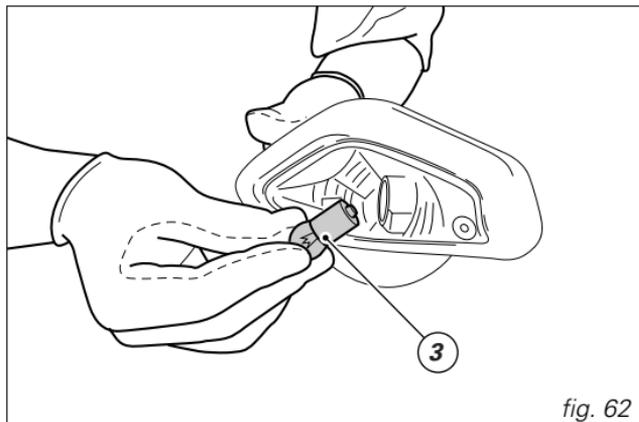


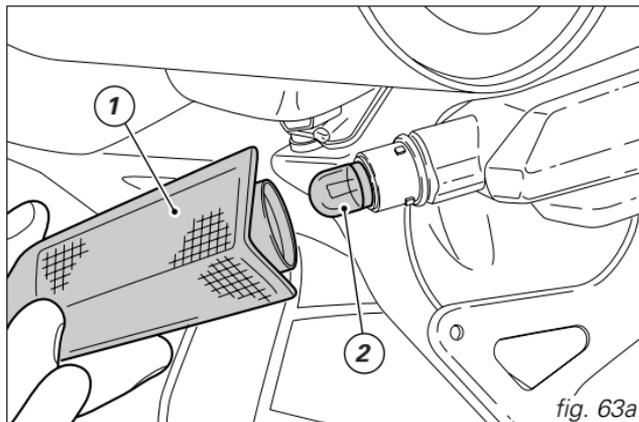
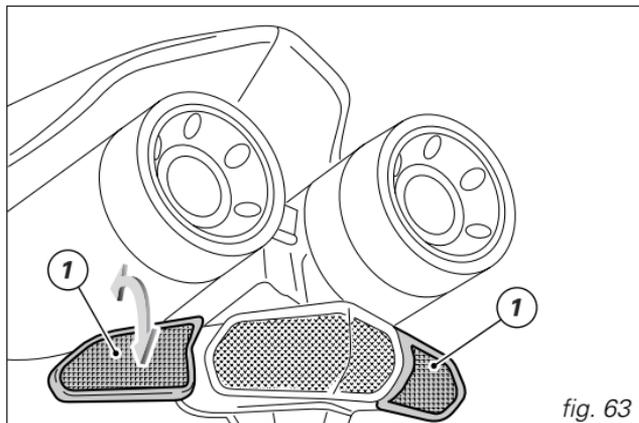
fig. 62

### **Changing the rear direction indicators bulbs**

To change rear direction indicator bulbs it is necessary to turn the indicator body (1) by one quarter of a turn, setting it with the lens up, and then remove it from tail light support (fig. 63).

The bulb (2, fig. 63a) has a bayonet-type fitting: press and rotate anti-clockwise to remove; fit the spare bulb by pressing and turning clockwise until it clicks.

Refit indicator body (1) and secure it to tail light support by turning it by one quarter of a turn.

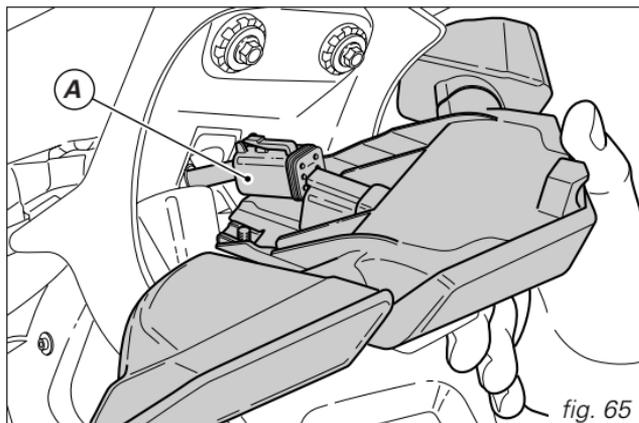
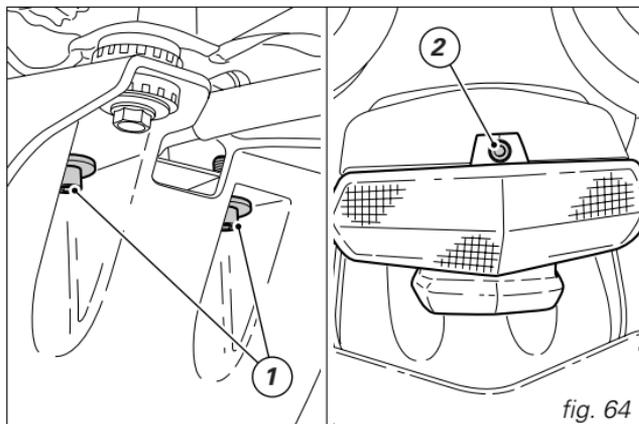


### **Changing the number plate and stop light bulbs**

Loosen the two screws (1) securing tail light support to number plate holder, on the inboard side.

Loosen screw (2) and slightly slide out tail light support (fig. 64).

Disconnect connector (A) of the rear wiring and remove tail light support (fig. 65).



Loosen the two self-tapping screws (3) securing body (4) with transparent cover for number plate light.  
Slide out the body and transparent cover and change bulb (5) for number plate light (fig. 66).

To change stop light bulb it is necessary to carry out the procedure described and remove transparent element (6) for stop light from the support.

Remove bulb (7) by pushing it and turning counter clockwise, replace it.

While refitting transparent cover (6), properly fit tabs (B) in the slots on the support.

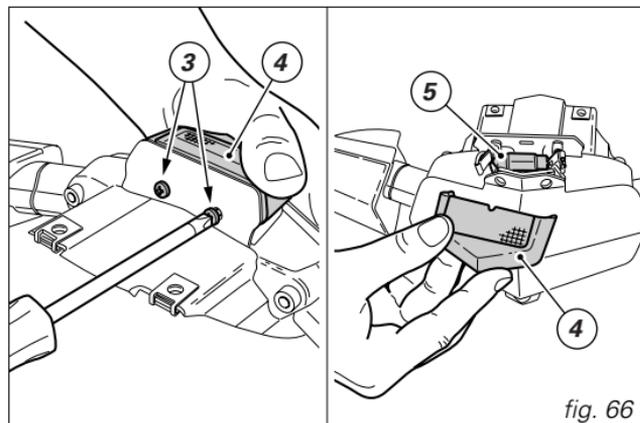


fig. 66

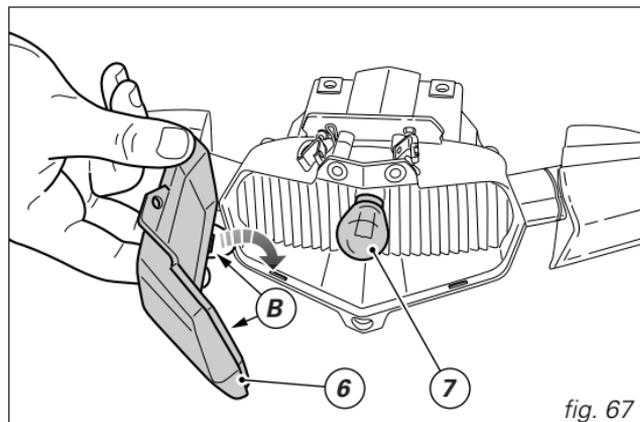


fig. 67

### Beam setting (fig. 68)

When checking beam setting, put the motorcycle upright. Tyres should be inflated at the correct pressure and one person should be sitting astride the motorcycle, keeping it at right angles to its longitudinal axis. Place the motorcycle opposite a wall or a screen, 10 meters apart from it, then draw a horizontal line dictated by headlamp centre and a vertical one in line with the longitudinal axis of motorcycle. If possible, perform this check in dim light.

Switch on the low beam. The height of the light spot (measured at the upper limit between dark and lighted-up area) should not exceed  $\frac{9}{10}$ th of the height from ground of headlamp centre.

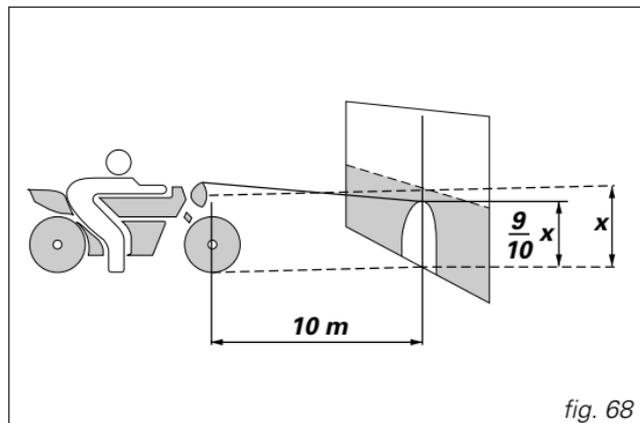


fig. 68



### Note

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

### Beam vertical adjustment (fig. 69)

This adjustment can be made with buttons (A) and (B) on the instrument panel, enter "Beam vertical setting" mode (see pag 19).

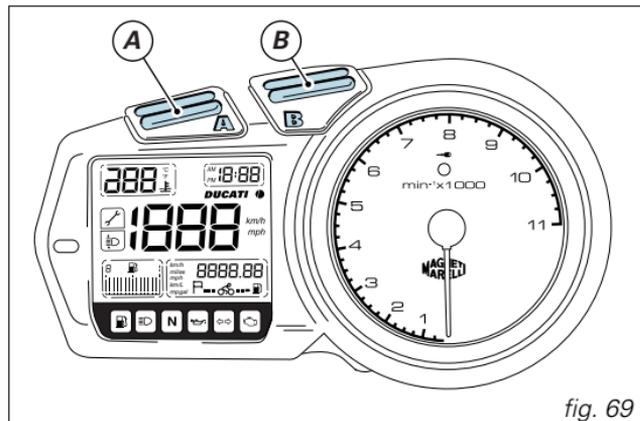


fig. 69

## **Tubeless tyre pressure**

Front tyre:

220 Kpa (2.2 bar - 32.3 psi)

Rear tyre:

240 Kpa (2.4 bar - 35.2 psi)

*As tyre pressure is affected by temperature and altitude variations, you are advised to check and adjust it whenever you are riding in areas where ample variations in temperature or altitude occur.*



### **Important**

*Check and set tyre pressure when tyres are cold.*

*To avoid front wheel rim distortion, when riding on bumpy roads, increase front tyre pressure by 0.2 - 0.3 bar.*

## **Tyre repair or replacement (Tubeless)**

*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**

*A tyre must be replaced when punctured. Only fit tyres of the same type as original-equipment tyres. 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.*



### **Important**

*Do not remove or shift the wheel balancing weights.*



### **Note**

*If tyres need replacing, contact a Ducati Dealer or Authorised Workshop to make sure wheels are removed and refitted correctly.*



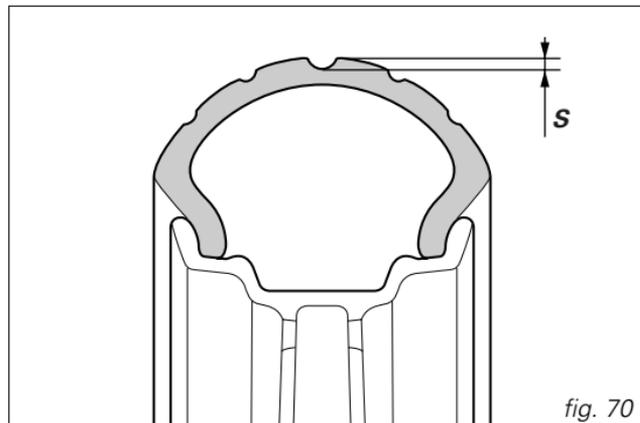
### **Minimum tread depth**

Measure tread depth ( $S$ , fig. 70) at the point where tread is most worn. It should not be less than 2 mm and anyway not below the legal limit.

### **Important**

Visually inspect the tyres at regular intervals for 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.



### Checking engine oil level (fig. 71)

Engine oil level can be checked through the sight glass (1) provided on the clutch cover on the engine right side.

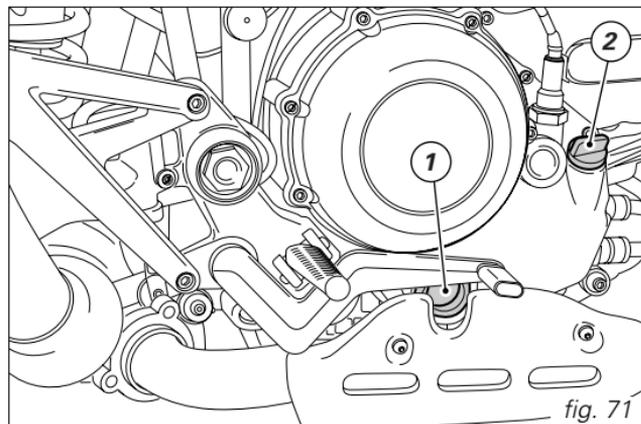
When checking oil level, the motorcycle should be upright and the engine cold.

Oil level should be between the marks near the sight glass.

Top up oil level with SHELL Advance Ultra 4, if low.

Undo the filler plug (2) and top up to correct level.

Refit the plug.



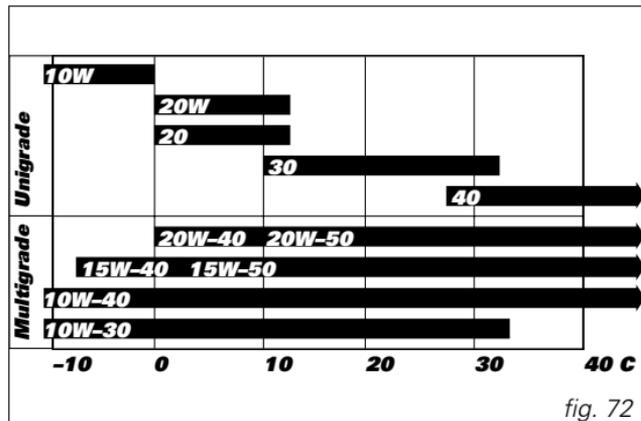
### Important

Engine oil and oil filters must be changed by a Ducati dealer or authorized workshop at regular intervals, as specified in the routine maintenance chart (see Warranty Card).

### Viscosity

#### SAE 10W-40

The other viscosity degrees indicated in the table can be used if the local average temperature is within the limits specified for that oil viscosity (fig. 72).



### **Cleaning and replacing the spark plugs** (fig. 73)

Spark plugs are essential to smooth engine running and should be checked at regular intervals. This provides a good measure of engine condition.

Contact an *Ducati Dealer* or *Authorised Workshop* to have the spark plug checked and changed, if needed. Their staff shall check the color of the ceramic insulator on the central electrode: a light brown, even colour is a sign of good engine condition.

Check wear on the central electrode and the gap: it should be 0.6-0.7 mm.

E

#### **Important**

If gap is too wide or too close, engine performance will be affected. This could also cause misfiring or irregular idling.

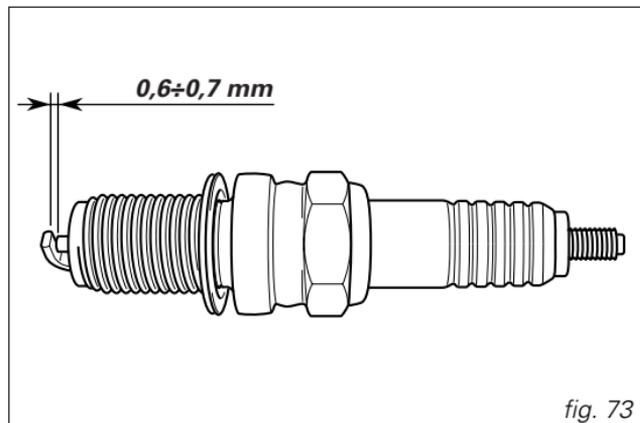


fig. 73

## **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.



### **Important**

*Do not wash your motorcycle right after use. When the motorcycle is still hot, water drops will evaporate faster and spot hot surfaces.*

*Never clean the motorcycle using hot or high-pressure water jets. Cleaning the motorcycle with water cleaners may lead to seizure or severe failure of front fork, wheel hub assembly, electric system, fork seals, air inlets or exhaust silencers and adversely affect the operation of motorcycle safety features.*

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



### **Warning**

*Loss of braking may occur immediately after washing the motorcycle.*

*Never grease or lubricate the brake discs. Loss of braking and further accidents may occur. Clean the discs with an oil-free solvent.*

## **Storing the bike away**

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

*clean the motorcycle;*

*drain all fuel from tank;*

*pour a few drops of engine oil into the cylinders through the spark plug seats, then crank the engine by hand a few times so a protective film of oil will spread on cylinder inner walls;*

*place the motorcycle on a service stand;*

*disconnect and remove the battery. Battery should be checked, charged or replaced whenever the motorcycle has been left unriden for over a month;*

*protect the motorcycle with a suitable canvas available from Ducati Performance. This will protect paintwork and let condensate breathe out.*

### **Important notes**

*Some countries, such as France, Germany, Great Britain, Switzerland, etc. have compulsory emission and noise standards that include mandatory inspections at regular intervals.*

*It is the Owner's responsibility to have any parts not in compliance with the standards in force in his/her country replaced with spare parts complying with local law.*

## TECHNICAL DATA

### Overall dimensions (mm) (fig. 74)

### Weights

Dry weight:

200 Kg

Carrying full load:

410 Kg



### Warning

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

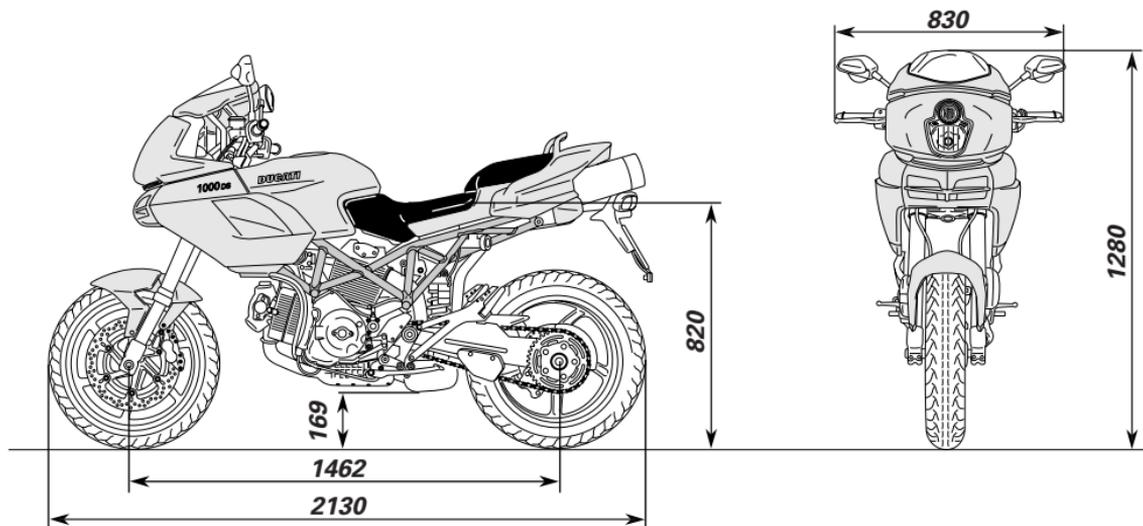


fig. 74

<b>Top-ups</b>	<b>Type of fluid</b>	<b>cu dm (litres)</b>
<i>Fuel tank, including a reserve of 6.5 cu dm (liters)</i>	<i>Unleaded fuel 95 fuel octane rating (at least)</i>	<i>20</i>
<i>Lubrication circuit</i>	<i>SHELL Advance Ultra 4</i>	<i>3.9</i>
<i>Front/Rear brake and clutch circuits</i>	<i>Special fluid for hydraulic systems SHELL-Advance Brake DOT 4</i>	<i>–</i>
<i>Protectant for electric contacts</i>	<i>Spray for electric systems SHELL-Advance Contact Cleaner</i>	<i>–</i>
<i>Front fork</i>	<i>SHELL-Advance Fork 7.5 or Donax TA</i>	<i>(each leg) 600 cu. cm.</i>

**E**

**Importante**

*Do not use any additives in fuel or lubricants.*

## Engine

Twin-cylinder 4-stroke "L" 1000cc engine with Desmodromic system, with electronic fuel injection, air-cooled.

Bore:

94 mm.

Stroke:

71.5 mm.

Total displacement:

992 c. c.

Compression ratio:

10.5 ± 0.5:1

Max. power at crankshaft (95/1/EC), kW/HP:

62 Kw (84 HP) at 8000 rpm

Max. torque at the crankshaft (95/1/EC):

84 Nm - 8.5 Kg at 5000 rpm

Max. rpm:

8700 rpm

## Importante

Do not exceed specified rotation speed limits under any running condition.

## Timing system

**Desmodromic** (type) with two valves per cylinder, operated by four rockers (2 opening rockers and 2 closing rockers) and an overhead camshaft. It is operated by the crankshaft through spur gears, belt rollers and toothed belts.

## Desmodromic timing system (fig. 75)

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

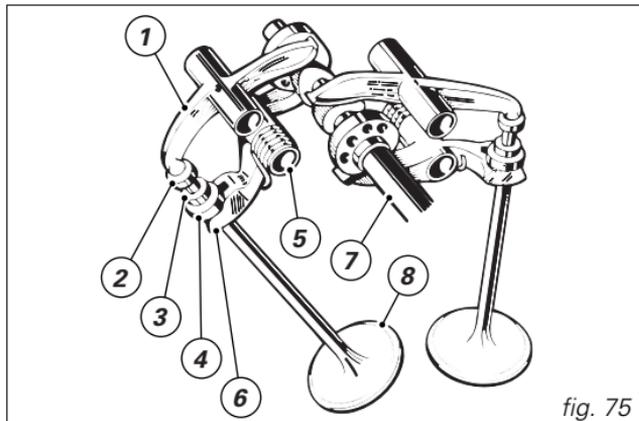


fig. 75

### **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.

Max. speed (rider alone):

208 Kph.

### **Spark plugs**

Ignition in every cylinder is performed with two spark plugs. This solution offers smoother combustion and more power, mainly at mid-range.

Make:

Champion

Type:

RA6 HC

### **Exhaust system**

Catalysed, according to Euro 2 environmental protection standards.



#### **Note**

On the USA (US) version there is no catalytic converter.

## **Transmission**

Clutch housing and plates are made of a special aluminum alloy.

Dry clutch controlled by a lever on the handlebar LH side.

Drive is transmitted from engine to gearbox main shaft via spur gears.

Engine sprocket/clutch sprocket ratio:

32/59 .

Gearbox:

6-speed with constant mesh gears, gear change pedal on left side of motorcycle.

Gear sprocket/rear sprocket ratio:

15/42.

Total gear ratios:

1st gear 15/37

2nd gear 17/30

3rd gear 20/27

4th gear 22/24

5th gear 24/23

6th gear 28/24

Drive chain from gearbox to rear wheel:

Make:

DID

Type:

525 HV.

Size:

5/8"x5/16"



### **Importante**

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

If you wish to tune up your motorcycle for competitive trials, you may refer to Ducati Motor Holding S.p.A. who will be glad to provide information about the special ratios available. Relevant instructions and original spare parts are available from your local Dealer or authorised workshop.



### **Warning**

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

## **Brakes**

### **Front brake**

*Double drilled disc, half-floating*

*Material:  
steel.*

*Disc diameter:  
320 mm*

*Hydraulically operated by a control lever on right handlebar.*

*Braking surface:  
88 sq cm.*

*Brake calipers make:  
BREMBO*

*Type:  
30/34-4 pistons*

*Friction material:  
FERIT I/D 450 FP.*

*Master cylinder type:  
PSC 16 with built-in reservoir*

### **Rear brake**

*With steel drilled disc in stainless steel.*

*Disc diameter:  
245 mm.*

*Hydraulically operated by a pedal on RH side.*

*Braking surface:  
32 sq cm.*

*Make:  
BREMBO*

*Type:  
34-2 pistons.*

*Friction material:  
FERIT I/D 450 FF*

*Master cylinder type:  
PS 11B.*



### **Warning**

*Brake fluid can dissolve paintwork and cause severe eye and skin injuries in the event of accidental spilling. Wash the affected area with abundant running water.*

## **Frame**

High-strength tubular treillis frame.

Steering angle (on each side):

35°

Steering geometry:

Headstock angle

24°

Trail:

109 mm.

**E**

## **Wheels**

### **Front wheel**

Six-spoke light alloy front wheel rim.

Dimensions:

3.50x17"

### **Rear wheel**

Five-spoke light alloy rear wheel rim.

Dimensions:

5.50x17".

Front wheel shaft can be removed, whereas the rear wheel is mounted to the hub of the single-sided swingarm.

## **Tyres**

### **Front tyre**

Tubeless, radial tyre.

Size:

120/70-ZR17.

### **Rear tyre**

Tubeless, radial tyre.

Size:

180/55-ZR17.

## **Suspensions**

### **Front**

*Hydraulic upside-down fork featuring outer adjusters for rebound and compression damping and for the preload of the springs inside fork legs.*

*Stanchion diameter:*

*43 mm.*

*Travel along leg axis:*

*165 mm.*

### **Rear**

*With progressive operation obtained by a rocker arm fitted in-between frame and shock absorber top pivot point.*

*The rear shock absorber enables the adjustment of rebound and compression damping and spring preload. At the bottom pivot point it is connected to the single-sided swinging arm made from aluminum alloy. The swinging arm hinges on a pivot pin passing through the frame and the engine. The whole system gives the bike excellent stability.*

*Travel:*

*145 mm*

### **Available in the following colors:**

*Ducati anniversary red;*

*frame: red, black;*

*rims: metal blue gray.*

*Ducati two-color gray:*

*frame: red, black;*

*rims: metal blue gray.*

## **Electric system**

Basic electric items are:

Twin, stacked halogen **headlight** made of:

Low beam unit - HB3 12V-60W;

high beam unit - HB3 12V-60W;

parking light unit - 12V-5W.

**Electrical controls** on handlebar.

**Turn indicators, 12V-10W** bulbs.

**Horn.**

**Stop light switches.**

Tight-type **battery 12V-10 Ah.**

**Generator 12V-520W.**

**Electronic voltage regulator** (rectifier), protected by a **40**

**A** fuse located on the side of the battery.

**Starter motor, 12V-0.7 kW.**

**Tail light, 12V-5/21W** double-filament bulb for stop light and parking light; **12V-5W** bulb for number plate light.



### **Note**

See "Replacing bulbs" on page 66 for relevant instructions.

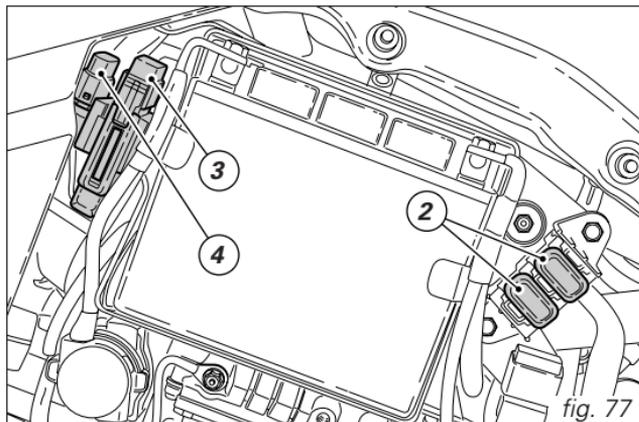
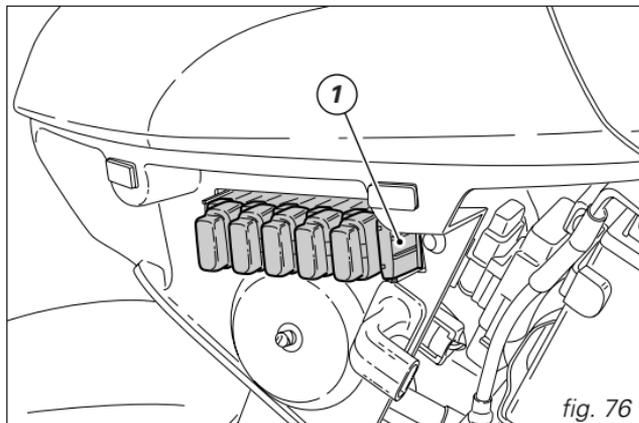
## Fuses

The main fuse carrier (1, fig. 76) is under left side fairing (see page 56). The fuses can be accessed by removing the safety gaiter.

Other than the main fuse carrier, there are other fuses that are positioned at the sides of the battery.

Two fuses (2, fig. 77) on the right-hand side of the battery protect the injection system and the ECU relay.

Fuse (3) protects the electronic regulator while fuse (4) protects the system of the side stand sensor.



Remove the fuse cap (A, fig. 78) to expose the fuse.

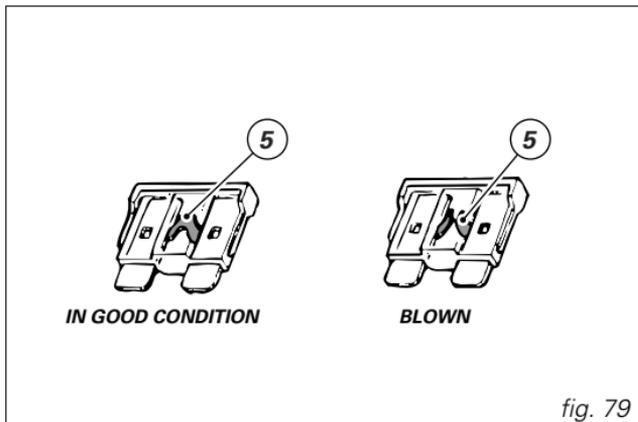
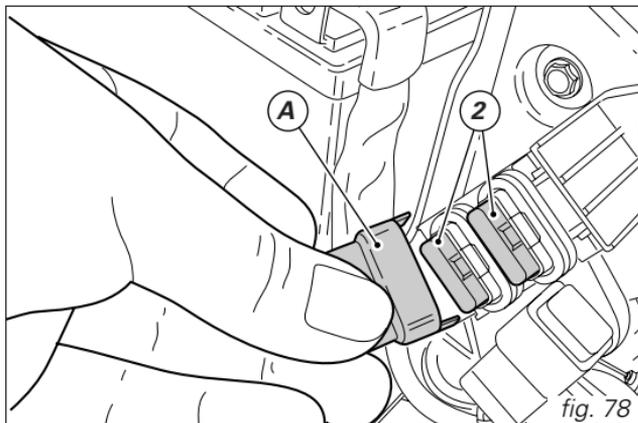
A blown fuse is identified by the interrupted inner filament (5, fig. 79).

**Importante**

Switch the ignition key to OFF before replacing a 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 lead to fire.



## **Legend of the wiring diagram of electric system/ ignition**

- 1) *RH switch*
- 2) *Key-operated switch*
- 3) *Fuse box*
- 4) *Fuses*
- 5) *Starter motor*
- 6) *Starter contactor*
- 7) *Battery*
- 8) *Regulator fuse*
- 9) *Regulator*
- 10) *Generator*
- 11) *Rear RH turn indicator*
- 12) *Tail light*
- 13) *Rear LH turn indicator*
- 14) *Number plate light*
- 15) *Fuel tank*
- 16) *Horizontal cyl. spark plug*
- 17) *Vertical cyl. spark plug*
- 18) *Injection relay*
- 19) *Self-diagnosis connection*
- 20) *Vertical cyl. coil*
- 21) *Horizontal cyl. coil*
- 22) *Horizontal cyl. spark plug*
- 23) *Vertical cyl. spark plug*
- 24) *Horizontal cyl. injector*
- 25) *Vertical cyl. injector*
- 26) *TPS*
- 27) *Rpm/timing sensor*
- 28) *Oil temperature sensor - ECU*

- 29) *Speed sensor*
- 30) *Side stand switch*
- 31) *Neutral switch*
- 32) *Oil pressure switch*
- 33) *Rear stop switch*
- 34) *Stepper motor*
- 35) *Ignition/injection unit*
- 36) *Clutch switch*
- 37) *Front stop switch*
- 38) *Oil temp. sens.-instrument panel*
- 39) *LH switch*
- 40) *Immobilizer antenna*
- 41) *Air temperature sensor*
- 42) *Instrument panel*
- 43) *Light relay*
- 44) *Front LH turn indicator*
- 45) *Headlight*
- 46) *Front RH turn indicator*
- 47) *Horn*
- 48) *Grip wiring disc.*
- 49) *Disc.connection*

### **Wiring Colour Coding**

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

**E**

### **Legend of fuse box**

<i>Pos.</i>	<i>El.items</i>	<i>Rat.</i>
A	Key-on	7.5A
B	Lights	15A
C	Horn, stop, solenoid starter, passing	20A
D	NQS	3A
E	Grip Heating	5A
F	Injection	20A
G	ECU power supply	3A
H	Side stand switch	3A



### **Note**

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

## **FOR UNITED STATES OF AMERICA VERSION ONLY**

### **Reporting of safety defects**

*If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Ducati North America. If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Ducati North America. To contact NHTSA, you may either call the Auto Safety Hotline toll-free at 1-800-424-9393 (or 366-0123 in Washington, D.C. area) or write to: NHTSA, U.S. Department of Transportation, Washington, D.C. 20590. You can also obtain other information about motor vehicle safety from the Hotline.*

### **Safety warnings**

*Traffic Rules vary from jurisdiction to jurisdiction. Know the regulations in your jurisdiction before riding this motorcycle.*



### **Warning**

*This motorcycle is designed and intended for use on streets and other smooth, paved areas only. Do not use this motorcycle on unpaved surfaces. Such use could lead to upset or other accident.*

### **Noise emission warranty**

*Ducati Motor S.p.A. warrants that this exhaust system, at the time of sale, meets all applicable U.S. EPA Federal noise standards. This warranty extends to the first person who buys this exhaust system for purposes other than resale, and to all subsequent buyers. Warranty claims should be directed to: Ducati North America, Inc., 237 West Parkway, Pompton Plains, New Jersey, 07444-1028 Tel: 001.973.839-2600 • Fax: 001.973.839-2331.*

### **Noise and exhaust emission control system information**

#### **Source of Emissions**

*The combustion process produces carbon monoxide and hydrocarbons. Control of hydrocarbons is very important because under certain conditions, they react to form photochemical smog when subjected to sunlight. Carbon monoxide does not react in the same way, but is toxic. Ducati utilizes lean carburetor settings and other systems to reduce carbon monoxide and hydrocarbons.*

### **Exhaust Emission Control System**

The Exhaust Emission Control System is composed of lean carburetor settings, and no adjustments should be made except idle speed adjustments with the throttle stop screw. The Exhaust Emission Control System is separate from the crankcase emission control system.

### **Crankcase Emission Control System**

The engine is equipped with a closed crankcase system to prevent discharging crankcase emissions into the atmosphere. Blow-by gas is returned to the combustion chamber through the air cleaner and the throttle body.

### **Evaporative Emission Control System**

California motorcycles are equipped with an evaporative emission control system which consists of a charcoal canister and associated piping. This system prevents the escape of fuel vapors from the throttle body and fuel tank.

### **Tampering warning**

*Tampering with Noise Control System Prohibited. Federal Law prohibits the following acts or causing thereof:*

(1) the removal or rendering inoperative by any person, other than for purposes of maintenance, repair, or replacement, of any device or element of design incorporated into any new vehicle for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use; or

(2) the use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

### **Among those acts presumed to constitute tampering are the acts listed below:**

(1) Removal of, or puncturing the muffler, baffles, header pipes or any other component which conducts exhaust gases.

(2) Removal or puncturing of any part of the intake system.

(3) Lack of proper maintenance.

(4) Replacing any moving part of the vehicle, or parts of the exhaust or intake system, with parts other than those specified by the manufacturer.

This product should be checked for repair or replacement if the motorcycle noise has increased significantly through use. Otherwise, the owner may become subject to penalties under state and local ordinances.

### **Problems that may affect motorcycle emissions**

If you are aware of any of the following symptoms, have the vehicle inspected and repaired by your local Ducati dealer.

Symptoms:

Hard starting or stalling after starting.

Rough idle.

Misfiring or backfiring during acceleration.

After-burning (backfiring).

Poor performance (driveability) and poor economy.

## **Riding safety**

The points given below are applicable for every day motorcycle use and should be carefully observed for safe and effective vehicle operation.

A motorcycle does not provide the impact protection of an automobile, so defensive riding in addition to wearing protective apparel is extremely important.

Do not let protective apparel give you a false sense of security.

Before changing lanes, look over your shoulder to make sure the way is clear. Do not rely solely on the rear view mirror; you may misjudge a vehicle's distance and speed, or you may not see it at all.

When going up steep slopes, shift to a lower gear so that there is plenty of power to spare rather than overloading the engine.

When applying the brakes, use both the front and rear brakes. Applying only one brake for sudden braking may cause the motorcycle to skid and lose control.

When going down long slopes, control vehicle speed by closing the throttle. Use the front and rear brakes for auxiliary braking.

Riding at the proper rate of speed and avoiding unnecessarily fast acceleration are important not only for safety and low fuel consumption but also for long vehicle life and quieter operation.

When riding in wet conditions or on loose roadway surfaces, the ability to maneuver will be reduced. All of your actions should be smooth under these conditions. Sudden acceleration, braking or turning may cause loss of control.

When the roadway is wet, rely more on the throttle to control vehicle speed and less on the front and rear brakes. The throttle should also be used judiciously to avoid skidding the rear wheel from too rapid acceleration or deceleration.

On rough roads, exercise caution, slow down, and grip the fuel tank with your knees for better stability.

When quick acceleration is necessary as in passing, shift to a lower gear to obtain the necessary power.

Do not down shift at too high an r.p.m. to avoid damage to the engine from overrevving.

Avoiding unnecessary weaving is important to the safety of both the rider and other motorists.

Do not exceed the legal speed limit or drive too fast for existing conditions. High speed increases the influence of any condition affecting stability and the loss of control.

Operate motorcycle only at moderate speed and out of traffic until you have become thoroughly familiar with its operation and handling characteristics under all conditions. This is a very high performance motorcycle, designed and intended for use by experienced careful riders only!

A new motorcycle must be operated according to a special break-in procedure (see Running in recommendations).



### **Warning**

Before starting engine, check for proper operation of brake, clutch, shifter, throttle controls, correct fuel and oil supply.

Gasoline is extremely flammable and is explosive under certain conditions. Refuel in a well ventilated area with the engine stopped. Do not smoke or allow open flames or

sparks when refuelling or servicing the fuel system. Always close the fuel petcock when the engine is not running to prevent flooding of the throttle body. Do not overfill fuel tank (see instructions page 51). Motorcycle exhaust contains poisonous carbon monoxide gas. Do not inhale exhaust gases and never run the engine in a closed garage or confined area. Use only Ducati approved parts and accessories. This motorcycle was not intended to be equipped with a sidecar or to be used to tow any trailer or other vehicle. Ducati does not manufacture sidecars or trailers and cannot predict the effects of such accessories on handling or stability, but can only warn that the effects will be adverse and any damage to motorcycle components caused by the use of such accessories will not be remedied under warranty.



### Warning

Do not ride the motorcycle with helmets attached to the hook; the helmets could cause an accident by distracting the operator or interfering with normal vehicle operation.

### Protective apparel

Always wear a helmet. Most motorcycle accident fatalities are due to head injuries. For safety eye protection, gloves, and high top, sturdy boots should also be worn.

The exhaust system becomes very hot during operation, never touch the exhaust system. Wear clothing that fully covers your legs. Do not wear loose clothing which could catch on the control levers, footrests, wheels, or chain. Any amount of alcohol will significantly interfere with your ability to safely operate your motorcycle. Don't drink and ride.

### Vehicle identification number (VIN);

Every Ducati motorcycle is identified by two identification numbers (see page 9). Figure A specifically shows the frame identification numbers.

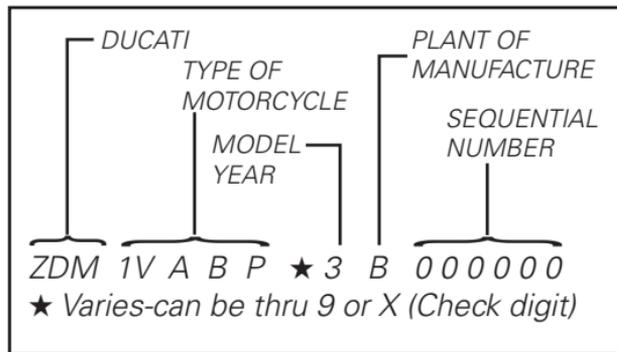


fig. A

**Label location** (fig. B)

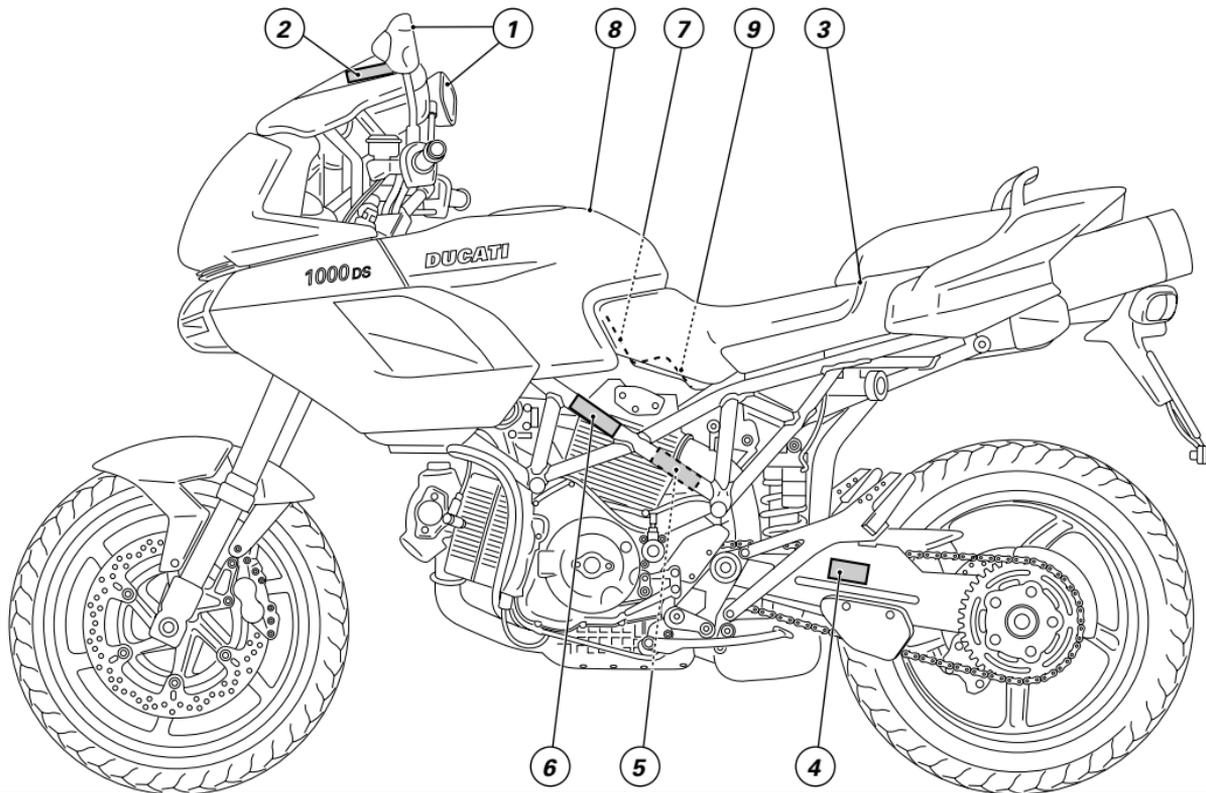


fig. B

**OBJECT IN MIRROR ARE  
CLOSER THAN THEY APPEAR**

1

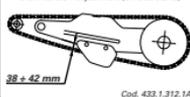
**WARNING**  
DO NOT ATTEMPT TO LOOK THROUGH THIS FAIRING. THIS IS NOT A WINDSHIELD, BUT AN AERODYNAMIC FAIRING ONLY. FAILURE TO OBSERVE THIS WARNING COULD RESULT IN A COLLISION OR UPSET AND CONSEQUENT SERIOUS BODILY INJURY.

2

**HELMET HOLDER  
UNDER THE SEAT**

3

Tensione catena (sul cavalletto laterale)  
Chain tension adjustment (on side stand)



4

**MOTORCYCLE NOISE EMISSION CONTROL INFORMATION**

THIS [REDACTED] MOTORCYCLE, [REDACTED] MEETS EPA NOISE EMISSION REQUIREMENTS OF 8 [REDACTED] BA AT 46 [REDACTED] PM BY THE FEDERAL TEST PROCEDURE.

MODIFICATIONS WHICH CAUSE THIS MOTORCYCLE TO EXCEED FEDERAL NOISE STANDARDS ARE PROHIBITED BY FEDERAL LAW. SEE OWNER'S MANUAL.

Cod. 001.120.11

5

Manufactured by **DUCATI** MOTOR spa

DAI [REDACTED] 7/97

GWWR: [REDACTED] Lbs [REDACTED] kg)

CAVWR front: [REDACTED] Lbs [REDACTED] kg) with [REDACTED] tire, [REDACTED] RIM at [REDACTED] cold.

CAVWR rear: [REDACTED] Lbs [REDACTED] kg) with [REDACTED] tire, [REDACTED] RIM at [REDACTED] cold.

This vehicle conforms to all applicable Federal Motor Vehicle Safety standards in effect on the date of manufacture shown above. Type classification: Motorcycle

Vehicle I.D. No.: ZDM1TB9PXWB000001

Cod. 001.120.11

6

**VEHICLE EMISSION CONTROL INFORMATION**

Engine displacement: 904 cc

Engine family: [REDACTED]

Engine exhaust control system: [REDACTED]

Evap family: [REDACTED]

THIS VEHICLE CONFORMS TO U.S. EPA AND CALIFORNIA REGULATIONS APPLICABLE TO 1988 MODEL YEAR NEW MOTORCYCLES AND IS CERTIFIED TO 14 HC GRM ENGINE FAMILY EXHAUST EMISSION STANDARD IN CALIFORNIA

**ENGINE TUNE-UP SPECIFICATIONS**

ITEM	SPECIFICATIONS	INSTRUCTIONS
IGNITION TIMING:	■ bTDC at idle speed	No adjustment
IDLE SPEED (RPM):	■ ± 0.12 mm	No adjustment
IDLE MIXTURE:	■	No adjustment
VALVE CLEARANCE (in & ex):	Opening [REDACTED] mm	See Service Manual
SPARK PLUG: CHAMPION R [REDACTED]	Closing [REDACTED] mm	
SPARK PLUG GAP (mm): 0.5 ± 0.6		
	OIL: SAE 20W50	
	FUEL: Unleaded gasoline	

**DUCATI** MOTOR spa - BOLOGNA - ITALY

7

**CAUTION**

NEVER FILL TANK SO FUEL LEVEL RISES INTO FILLER NECK. IF TANK IS OVERFILLED, HEAT MAY CAUSE FUEL TO EXPAND AND FLOW INTO EVAPORATIVE EMISSION CONTROL SYSTEM RESULTING IN HARD STARTING AND ENGINE HESITATION.

8

**VEHICLE EMISSION CONTROL LABEL**

ENGINE DISPLACEMENT 892 cc, ENGINE FAMILY [REDACTED]  
THIS VEHICLE CONFORMS TO U.S. EPA AND CALIFORNIA REGULATIONS APPLICABLE TO MODEL YEAR NEW MOTORCYCLES.

EVAP FAMILY: [REDACTED]



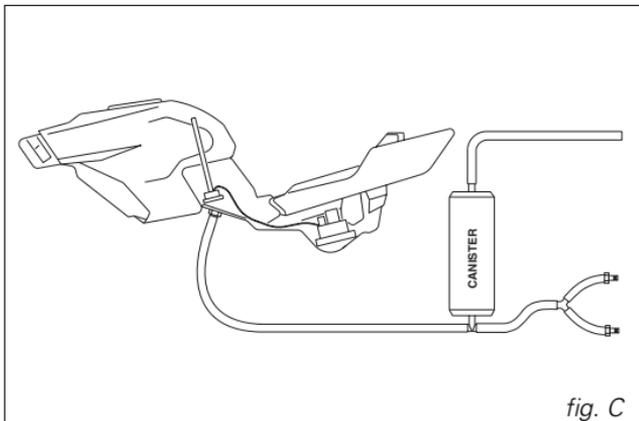
9

## California evaporation emission system

This system consists of (fig. C):

### **Important**

In the event of fuel system malfunction, contact Ducati's authorized Service Centres.



## Ducati limited warranty on emission control system

Ducati North America, Inc., 237 West Parkway, Pompton Plains, New Jersey 07444-1028 warrants that each new 1998 and later Ducati motorcycle, that includes as standard equipment a headlight, tail-light and stoplight, and is street legal:

A) is designed, built and equipped so as to conform at the time of initial retail purchase with all applicable regulations of the United States Environmental Protection Agency, and the California Air Resources Board; and  
B) is free from defects in material and workmanship which cause such motorcycle to fail to conform with applicable regulations of the United States Environmental Protection Agency or the California Air Resources Board for a period of use, depending on the engine displacement, of 12,000 kilometers (7,456 miles), if the motorcycle's engine displacement is less than 170 cubic centimeters; of 18,000 kilometers (11,185 miles), if the motorcycle's engine displacement is equal to or greater than 170 cubic centimeters but less than 280 cubic centimeters; or of 30,000 kilometers (18,641 miles), if the motorcycle's engine displacement is 280 cubic centimeters or greater; or 5 (five) years from the date of initial retail delivery, whichever first occurs.

### **I. Coverage**

Warranty defects shall be remedied during customary business hours at any authorized Ducati motorcycle dealer located within the United States of America in compliance with the Clean Air Act and applicable regulations of the

United States Environmental Protection Agency and the California Air Resources Board. Any part or parts replaced under this warranty shall become the property of Ducati. In the state of California only, emissions related warranted parts are specifically defined by that state's Emissions Warranty Parts List. These warranted parts are: carburetor and internal parts; intake manifold; fuel tank, fuel injection system; spark advance mechanism; crankcase breather; air cutoff valves; fuel tank cap for evaporative emission controlled vehicles; oil filler cap; pressure control valve; fuel/vapor separator; canister; igniters; breaker governors; ignition coils; ignition wires; ignition points, condensers, and spark plugs if failure occurs prior to the first scheduled replacement, and hoses, clamps, fittings and tubing used directly in these parts. Since emission related parts may vary from model to model, certain models may not contain all of these parts and certain models may contain functionally equivalent parts.

In the state of California only, Emission Control System emergency repairs, as provided for in the California Administrative Code, may be performed by other than an authorized Ducati dealer. An emergency situation occurs when an authorized Ducati dealer is not reasonably available, a part is not available within 30 days, or a repair is not complete within 30 days. Any replacement part can be used in an emergency repair. Ducati will reimburse the owner for the expenses, including diagnosis, not to exceed Ducati's suggested retail price for all warranted parts replaced and labor charges based on Ducati's recommended time allowance for the warranty repair and the geographically appropriate hourly labor rate. The

owner may be required to keep receipts and failed parts in order to receive compensation.

## **II. Limitations**

This Emission Control System Warranty shall not cover any of the following:

- A. Repair or replacement required as a result of
  - (1) accident,
  - (2) misuse,
  - (3) repairs improperly performed or replacements improperly installed,
  - (4) use of replacement parts or accessories not conforming to Ducati specifications which adversely affect performance and/or
  - (5) use in competitive racing or related events.
- B. Inspections, replacement of parts and other services and adjustments required for routine maintenance.
- C. Any motorcycle on which odometer mileage has been changed so that actual mileage cannot be readily determined.

## **III. Limited liability**

A. The liability of Ducati under this Emission Control Systems Warranty is limited solely to the remedying of defects in material or workmanship by an authorized Ducati motorcycle dealer at its place of business during customary business hours. This warranty does not cover inconvenience or loss of use of the motorcycle or transportation of the motorcycle to or from the Ducati dealer. Ducati shall not be liable for any other expenses, loss or damage, whether direct, incidental, consequential

*or exemplary arising in connection with the sale or use of or inability to use the Ducati motorcycle for any purpose. Some states do not allow the exclusion or limitation of any incidental or consequential damages, so the above limitations may not apply to you.*

*B. No express emission control system warranty is given by Ducati except as specifically set forth herein. Any emission control system warranty implied by law, including any warranty of merchantability or fitness for a particular purpose, is limited to the express emission control systems warranty terms stated in this warranty. The foregoing statements of warranty are exclusive and in lieu of all other remedies. Some states do not allow limitations on how long an implied warranty lasts so the above limitation may not apply to you.*

*C. No dealer is authorized to modify this Ducati Limited Emission Control Systems Warranty.*

#### **IV. Legal rights**

*This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.*

*V. This warranty is in addition to the Ducati limited motorcycle warranty.*

#### **VI. Additional information**

*Any replacement part that is equivalent in performance and durability may be used in the performance of any maintenance or repairs. However, Ducati is not liable for these parts. The owner is responsible for the performance of all required maintenance. Such maintenance may be*

*performed at a service establishment or by any individual. The warranty period begins on the date the motorcycle is delivered to an ultimate purchaser.*

Ducati North America, Inc..  
237 West Parkway  
Pompton Plains, New Jersey, 07444-1028  
001.973.839-2600

**E**

**USA**

## **ROUTINE MAINTENANCE RECORD**

<i>Km</i>	<i>Ducati Service Name</i>	<i>Mileage</i>	<i>Date</i>
1,000			
10,000			
20,000			
30,000			
40,000			
50,000			

**USA**

**USA**