

Owner's manual

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DUCATI MONSTERS4

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.

Enjoy your ride!

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.

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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 - if the motorcycle is resold - must always be handed over to the new owner.

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GENERAL



Warranty

In your own interest, and in order to guarantee product reliability, you are strongly advised to refer to our authorized Dealers and workshops 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". However, warranty does not apply to the motorcycles used in competitions or competitive trials. 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 right 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 authorized 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. The text is supplemented with schematic illustrations for quick reference and better understanding of the subjects concerned.

This manual contains some special remarks:



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 concerning the job being carried out.

The terms **right** and **left** are referred to the motorcycle viewed from the riding position.

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 the handlebars 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 handles under the 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 refueling.

Be extremely careful not to spill gasoline on the engine or on the exhaust pipe when refueling.

Do not smoke when refueling.

While refueling, you may inhale noxious gasoline vapours. Should any gasoline 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.

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 390 Kg.

Try to 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 mud guard 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 (see page 48) and that they are in good condition.

Identification data

All Ducati motorcycles have two identification numbers, for frame (fig. 1.1) and engine (fig. 1.2).

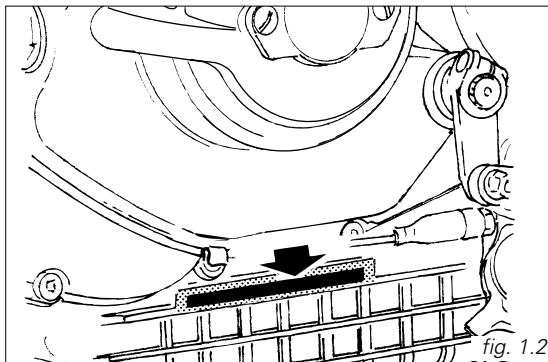
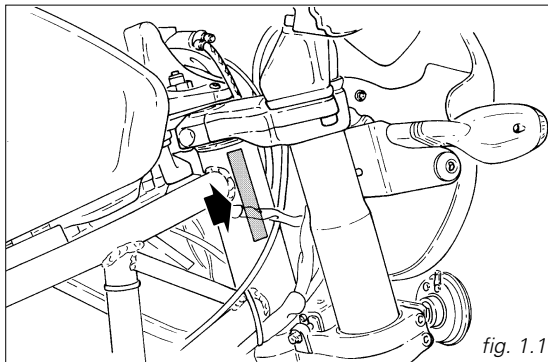
Frame number

Engine number



Note

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



CONTROLS

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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. 2)

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

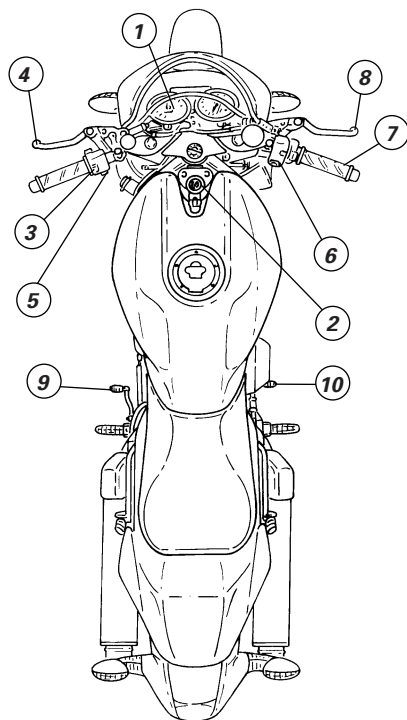


fig. 2

Instrument panel (fig. 3)

1) **Speedometer** (km/h or mph).

Gives road speed.

a) **Odometer** (km or miles).

Gives total distance covered.

b) **Trip meter** (km or miles).

Gives distance covered since last resetting.

c) Trip meter **resetting knob**.

Turn to reset trip meter to "0000".

2) **Green light** .

Comes on when gearbox is in neutral.

3) **Yellow light** .

Comes on when there are about 3.5 liters fuel left in the tank.

4) **Green light** .

Comes on and flashes when a turn indicator is on.

5) **Red light** .

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 hot, however, it should go out as the engine revs up.

Important

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

6) **Blue light** .

Comes on when high beam is on.

7) **Red light** .

Comes on when coolant temperature is too high.

8) **Revolution counter**.

Shows the engine rotation speed/minute.

9) **Red light**.

Comes on and flashes when the motorcycle is parked (Immobilizer on).



Note

When the immobilizer is active, the light keeps flashing for 48 hours and then goes out (Immobilizer still on).

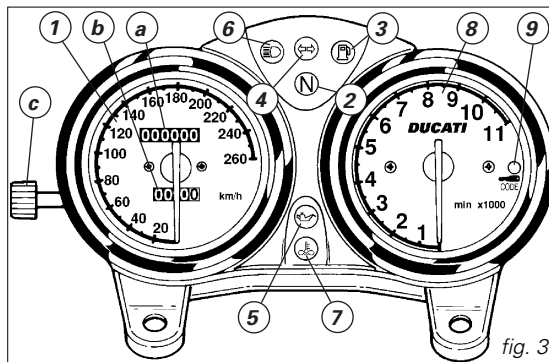


fig. 3

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.

Keys (fig. 4.1)

The Owner receives a set of keys comprising:

- 1 RED key A
- 2 BLACK keys B

The keys B are regular ignition keys and are used to:

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

The key A performs the same functions as the keys B, and is also used to wipe off and re-program other black keys, if needed.



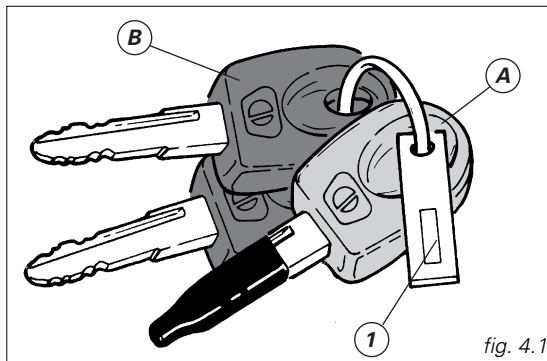
Note

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



Important

Keep the keys in different places. Store the plate (1) and the key A in a safe place.



Code card

The keys come with a CODE CARD that reports:

A) (fig. 4.3) the electronic code to be used to start the engine in the event of an emergency;

B) (fig. 4.3) the part no. code for the keys to be reported to the DUCATI Service network when you are ordering any duplicate keys.



Important

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, so you will be able to start the engine in the event of an emergency.

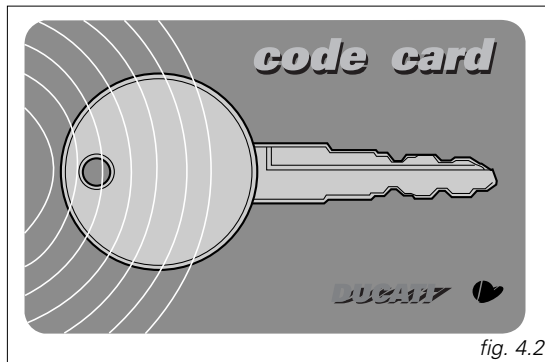


fig. 4.2

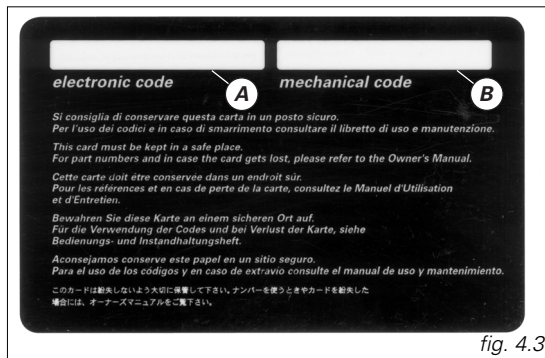


fig. 4.3

Operation

When the ignition key is turned to OFF, the immobilizer inhibits engine operation.

When the ignition key is turned back to ON to start the engine, the following happens:

1) if the CPU recognised the code, the CODE 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 CODE 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 key. If the other key does not work out either, contact the DUCATI Service network.



Warning

The keys accommodate electronic components inside. If dropped or hit, they might damage.

Duplicate keys

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

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

You may be asked to identify yourself as the legitimate owner of the motorcycle. Be sure 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. 5)

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

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



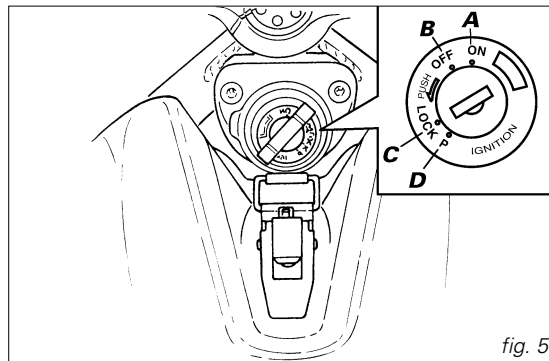
Warning

This vehicle 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. Move the key to **OFF** and then to **ON** again.




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.

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Left switch (fig. 6)


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;

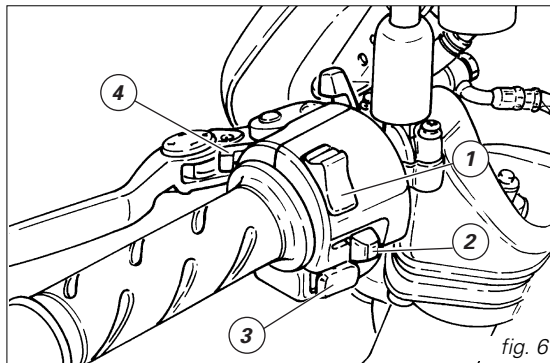
position  = left turn;

position  = right turn.

To cancel turn indicators, return switch to central position and push in.

3) Button  = warning horn.

4) Button  = high-beam flasher.



Clutch lever (fig. 7)

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.



Warning

Set clutch lever when motorcycle is stopped.



Important

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

Cold start lever (fig. 7)

Use this device (3) to start the engine from cold. It will increase the engine idling speed after starting.

Lever positions:

A) (vertical) = closed

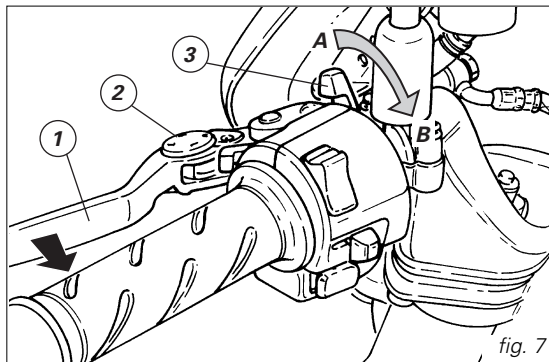
B) = fully open.

The lever can be opened and closed gradually to adjust speed until engine is fully warm (see page 30).



Important

Never use the cold start lever when the engine is warm or leave it open when riding.



Right switch (fig. 8)

1) Switch, light switch, 3 positions:

Right ○ = light off;

Centre ☸ = front and rear parking light, number plate light and panel lights on;

Left ☸ = headlamp, front and rear parking light, number plate light and panel lights on.

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.



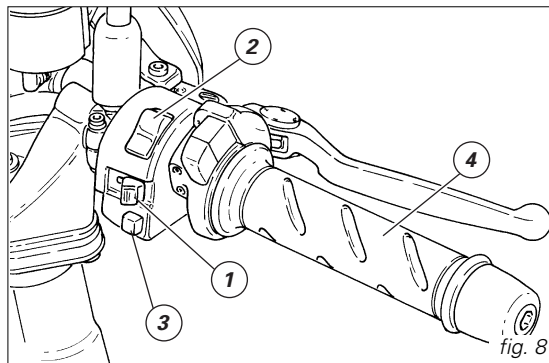
Important

Riding with the lights on, stopping the engine using switch (2) and leaving the ignition key in the **ON** position, may run the battery flat as the lights will remain on.

3) Button Ⓢ = engine start.

Throttle twistgrip (fig. 8)

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

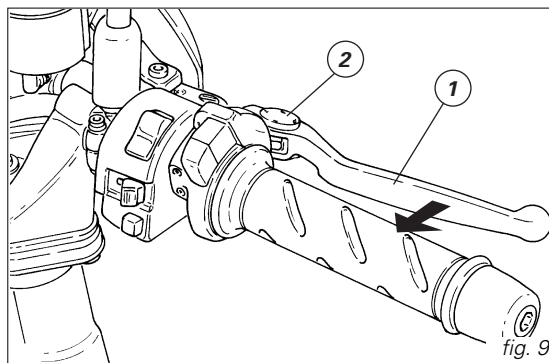
**Front brake lever** (fig. 9)

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 is provided with a dial adjuster (2) for lever distance adjustment from twistgrip on handlebar (see clutch lever adjustment page 16).

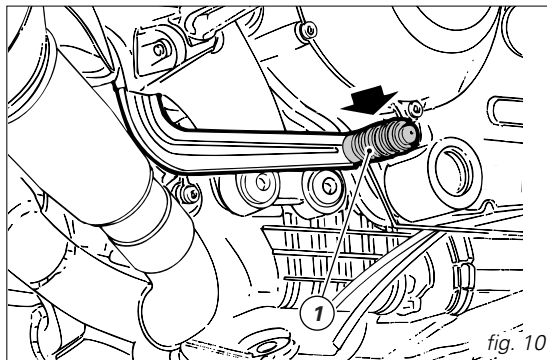
**Warning**

Please read the instructions on pages 30 and 32 before using these controls.

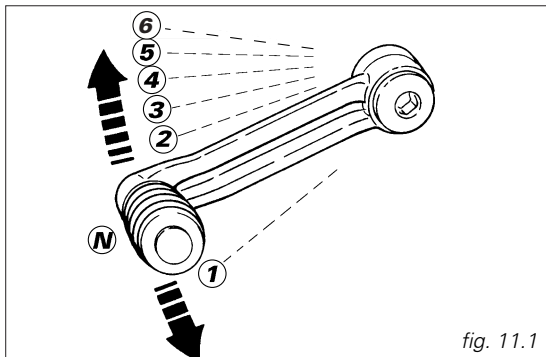


Rear brake pedal (fig. 10)

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

**Gear change pedal** (fig. 11.1)

The gear change pedal is at rest when in the central position **N**, is moved up and down to change gears and then returns to the central position.
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 (fig. 11.2)

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

To set the gear change pedal,
lock linkage (1) and loosen the check nuts (2) and (3).

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Note

Nut (2) has a left-hand thread.

Rotate linkage (1) until setting pedal in the desired position.

Tighten both check nuts onto linkage.

To set the rear brake pedal,
loosen check nut (4).

Turn pedal travel adjusting screw (5) until pedal is in the desired position.

Tighten check nut (4).

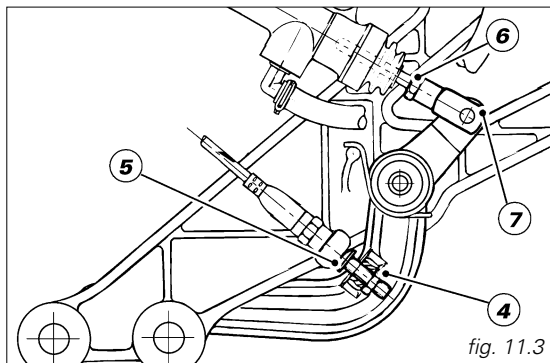
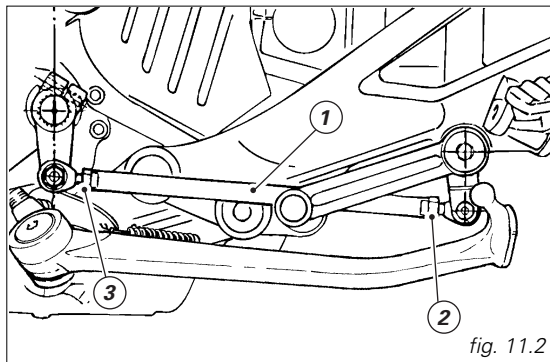
Work pedal by hand to make sure it has 1.5 - 2 mm free play before brake begins to bite.

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

Loosen the check nut (6) on cylinder linkage.

Tighten linkage into fork (7) to increase play, or unscrew linkage to reduce it.

Tighten check nut (6) and check pedal free play again.



MAIN COMPONENTS AND DEVICES

Location (fig. 12)

- 1) Tank filler plug.
- 2) Seat catch.
- 3) Hook for helmet fastening cable.
- 4) Passenger grab handle.
- 5) Side stand.
- 6) Rear view mirrors.
- 7) Shock absorber adjusters.
- 8) Front fork adjusters.
- 9) Fuel tank lifting rod.
- 10) Seat cover.
- 11) Seat cover.
- 12) Fuel tank clip.

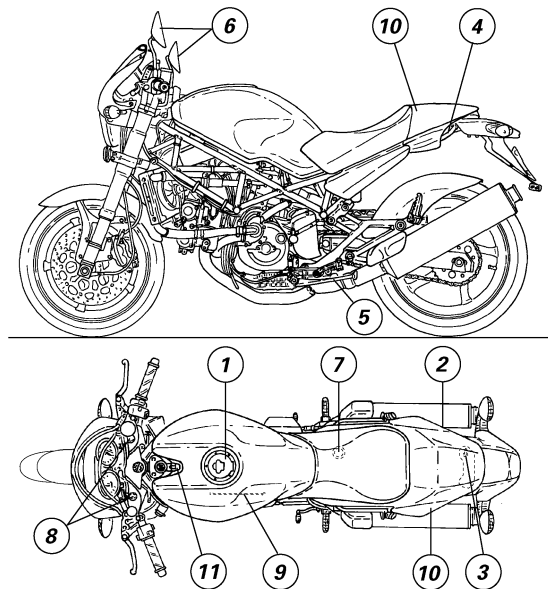


fig. 12

Tank filler plug (fig. 13)

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.

Closing

Refit the plug 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 33) and closed the plug after each refueling.

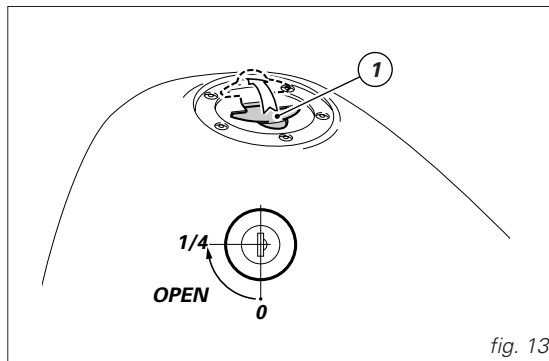


fig. 13

Seat catch and helmet pin

Opening

Fit the ignition key into the lock. Turn the key clockwise to detach seat from frame. Pull the seat backwards to slide it off its front holders.

On the rear end of the compartment underneath the seat, there is the helmet fastening cable (1) (see page 35). Insert the cable into the helmet, slide the end of the cable onto the pin (2). Leave helmet hanging outside and refit the seat.



Warning

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

Closing

Make sure that all parts are arranged and secured properly inside the compartment under the seat. Slide the front ends of the seat bottom underneath the frame U-tube and push down on the rear end of the seat until you hear the catch click. Make sure the seat is firmly secured to the frame and take the key out of the lock.

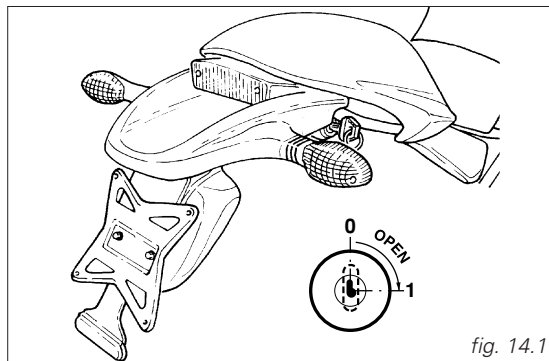


fig. 14.1

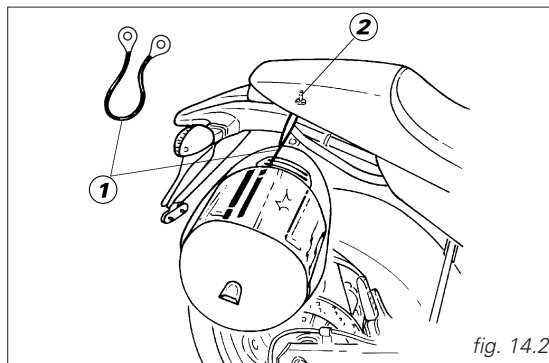


fig. 14.2

Side stand (fig. 15)

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.

E 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 stand (1) with your feet until it is fully extended. Tilt the motorcycle until the side stand is resting on the ground.

Warning

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

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



Note

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



Warning

The motorcycle can be started only if the side stand is in "rest" position as it is equipped with a safety device preventing engine start if the stand is down.

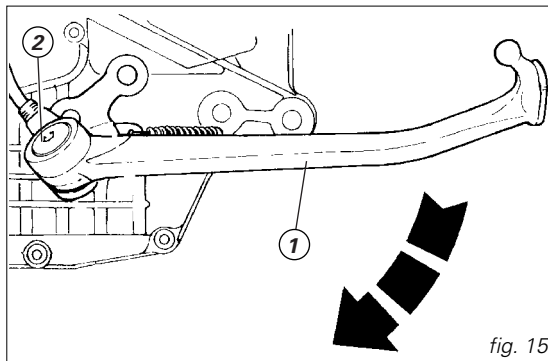


fig. 15

Shock absorber adjusters (fig. 16)

The shock absorber has outer adjusters that enable you to adjust your motorcycle to the load.

The adjuster (1) located on the right side, on the connection holding the shock absorber to the swingarm, controls rebound damping.

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

Turn the adjusters (1 and 2) clockwise to increase damping, anticlockwise to reduce it.

STANDARD setting:


turn the adjuster (1) all the way in then slacken it 19 clicks. Slacken the adjuster (2) 2 clicks .

Two ring nuts (3), located on the top section of the shock absorber is used to adjust the outer spring preload.

To change spring preload, slacken the upper ring nut.

Then **tighten** or **slacken** the lower ring nut to **increase** or **decrease** spring preload as required.

Warning

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

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

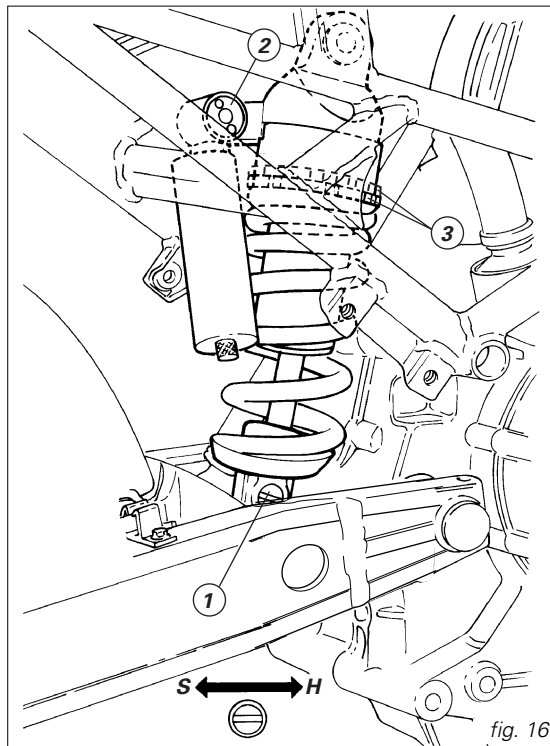


fig. 16

When carrying a passenger and a load, set the rear shock absorber spring to maximum preload to improve motorcycle handling and keep safe clearance from the ground. You may find that rebound damping needs readjusting.

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Front fork adjusters

The front fork of 900S models has rebound and compression damping adjusters.

This adjustment is done using the outer adjusters:

- 1) (fig. 17) to adjust rebound damping;
- 2) (fig. 17) to adjust spring preload;
- 3) (fig. 18) to adjust compression damping.

Use a flat screwdriver and turn the adjuster (1) at the top of each fork leg to adjust rebound damping. Insert a screwdriver on the wheel shaft through hole, on the fork leg axle, and turn the adjuster (3, fig. 18).

As you turn the adjusting screws (1 and 3), you will hear them click. Each click identifies a setting.

Turn the screw all the way in to set the hardest damping (position 0). This will be your starting point.

Now turn the screw anticlockwise and listen for the clicks that identify setting positions no. "1", "2" and so on.

Standard factory setting is as follows:

compression: 12 clicks;

rebound: 11 clicks.

The max. setting range is 14 clicks (rebound) and 14 clicks (compression) that ensure the softest damping.

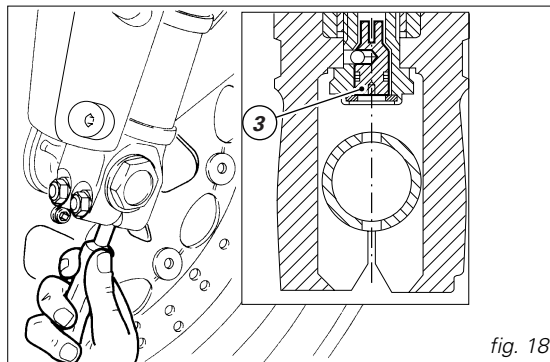
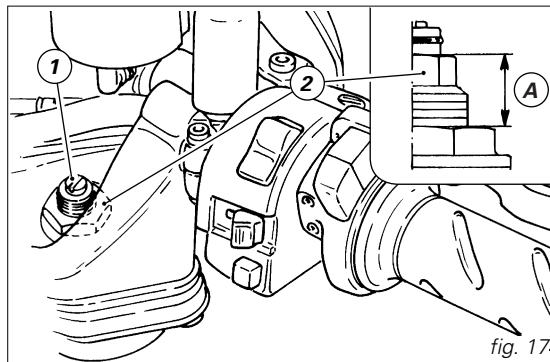
To change the preload of the spring inside each fork leg, turn the adjusting nut (2) with a 22-mm hexagon wrench.

Preload setting range (A) is from 25 to 10 mm

Factory setting is 16 mm.

Important

Adjust both fork legs to same settings.



DIRECTIONS FOR USE

E

Running-in recommendations

Max. rotation speed

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

- 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 the revolution meter under control. The indicator must not exceed:

6000 rpm.

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

To this end, roads with plenty of bends and even slightly hilly areas are ideal for a most efficient running-in of engine, brakes and suspensions.

For the first 100 km, use the brakes gently. 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 parts of the motorcycle to adapt to one another and above all not to adversely affect the life of basic engine parts, it is advisable to avoid harsh accelerations and not to run the engine at high rpm for too long, especially uphill.

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

From 1000 to 2500 km

At this point, you can squeeze some more power out of your engine, being careful, however, never exceed: 7500 rpm.

Important

During the whole running-in period, the maintenance and service rules recommended in this manual should be observed carefully.

Compliance with the above instructions is a prerequisite for Warranty validity. 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: 9000 rpm.

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

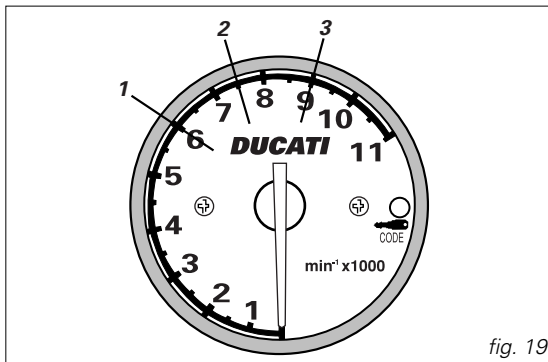


fig. 19

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 33).

Engine oil level

Check oil level in the sump through the sight glass. Top up with recommended oil if needed (page 49).

Brake and clutch fluid

Check fluid level in the relevant reservoirs.

Tyre condition

Check tyre pressure and condition (page 48).

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 44).

Key-operated locks

Check that fuel filler plug and seat catch locks are closed firmly.

Side stand

Make sure side stand operates smoothly and is in the correct position (page 24).



Warning

In case of malfunctioning, do not start the motorcycle and call a Ducati dealer or authorized workshop.

Starting the engine



Note

Follow the “High ambient temperature” procedure to start the engine when it is warm.




Warning

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

E

Regular ambient temperature

(10 to 35° C):

1) Move the ignition key to **ON** (fig. 20). Make sure both the green light **N** and the red light  on the instrument panel come on.



Important


The oil pressure light should go out a few seconds after the engine has started (page 11).



Warning

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

2) Move the fast-idle lever to position (B) (fig. 21.1).

3) Check that the stop switch (1, fig. 21.2) is positioned to  (**RUN**), then press the starter button (2). Let the engine start without using the throttle control.



Important

Never operate the starter more than 5 seconds at a time. If needed, allow 10 seconds before attempting to restart the engine.

4) Move the fast-idle lever towards its vertical position (A, fig. 21.1) until obtaining the engine speed: approx. 1400-1500 rpm.



Important

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

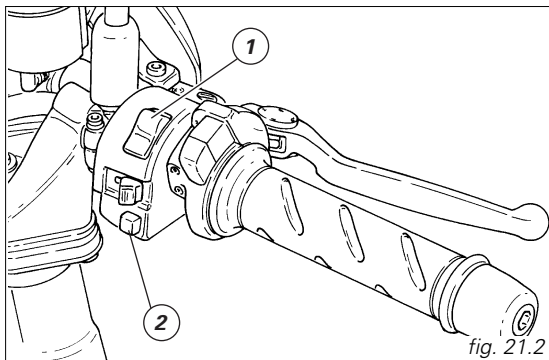
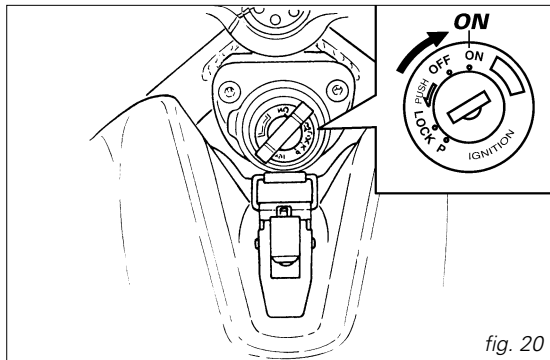
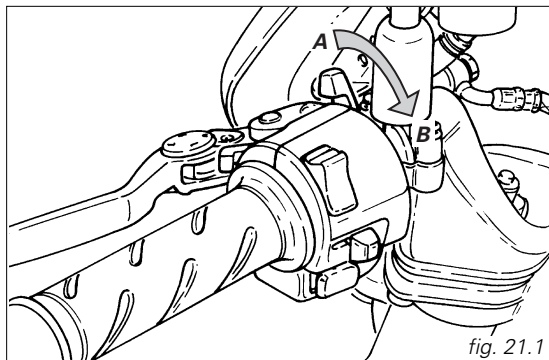
5) Then, as the engine warms up, gradually move the fast-idle lever until bringing it in a vertical position (A). When fully warm, the engine should hold idling speed with the fast-idle device fully closed.

High ambient temperature (over 35° C):

Follow the same procedure, however, do not use the fast-idle device.

Cold ambient temperature (below 10° C):

Follow the procedure for "Regular ambient temperature", however allow 5 minutes for the engine to warm up (step 5).



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 to second gear, close the throttle to slow down engine, disengage the clutch right away, lift the gear change lever and let go of clutch lever. Repeat the same procedure to shift to 3rd, 4th, 5th and 6th.

To shift down, release the twistgrip, pull the clutch control lever, shortly speed up to help gears synchronize, 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 lugging the engine and stressing the motorcycle abnormally.



Important

Avoid harsh accelerations, as this may lead to carburettor flooding 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 reduce braking power dangerously. Underinflated tyres reduce braking efficiency, handling accuracy and stability in a bend.

Stopping the motorcycle

Slow down gradually, then shift down and release the throttle twistgrip. 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** (fig. 22).



Important

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

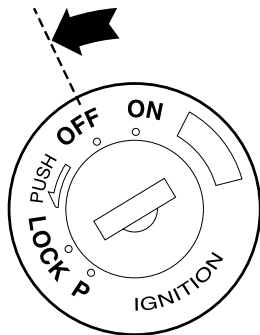


fig. 22

Refueling

Never overfill the tank when refueling. Fuel should never be touching the rim of filler recess (fig. 23).



Warning

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

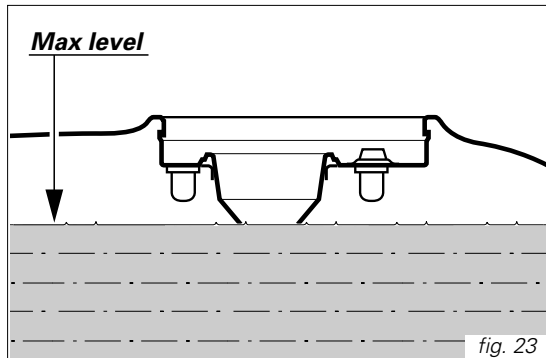


fig. 23

Parking

Stop the motorcycle, then put it on the side stand to park it (see page 24).

To avoid theft, turn the handlebar fully left and turn the key to **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.

If needed, you may leave the parking lights on by turning the key to position **P** (fig. 24).

E



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

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

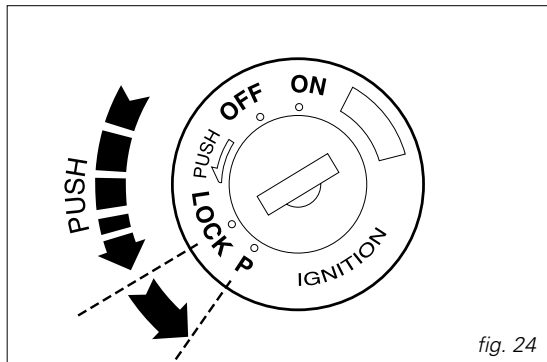


fig. 24

Tool kit and accessories (fig. 25.1)

The compartment under the seat holds:

an Owner's manual;

a helmet fastening cable;

a tool bag for normal maintenance and checks to be performed by the user.

To reach this compartment, remove the seat first (page 23) then the protective cover (1). Use a coin to unscrew its special screw (2).

The tool bag holds (fig. 25.2):

3) box wrench for spark plugs;

4) tommy bar;

5) double-bit screwdriver;

6) helmet fastening cable.

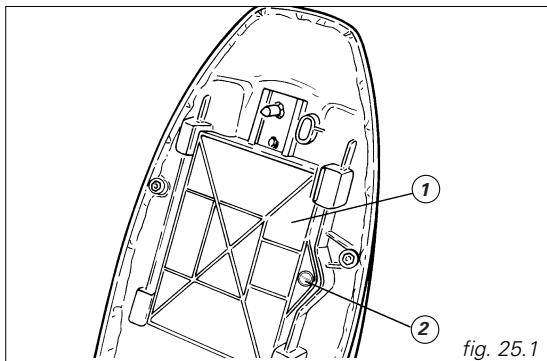


fig. 25.1

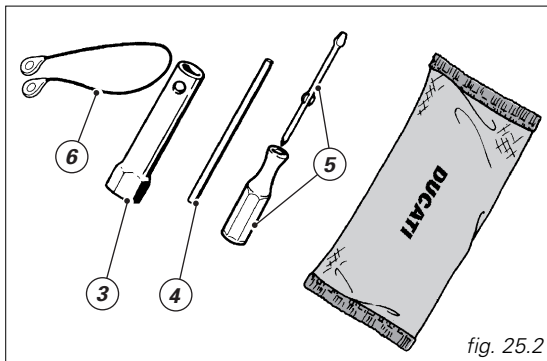


fig. 25.2

MAIN MAINTENANCE OPERATIONS

E

Lifting the fuel tank (fig. 26.1)



Warning

Make sure the fuel in the tank is less than 5 litres or fuel may leak out through the filler plug breather.

Remove the seat (page 23) and lift the hook (1).
Lift the tank and unhook the service rod (2, fig. 26.2) from the support. Place the tank onto the rod.
When you have finished, reverse the above procedure to refit.



Warning

When lowering the tank, make sure lines are properly routed to avoid squeezing.

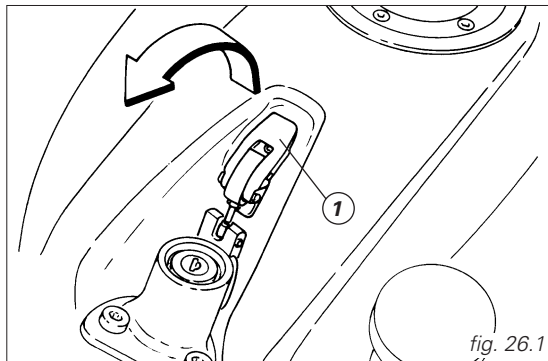


fig. 26.1

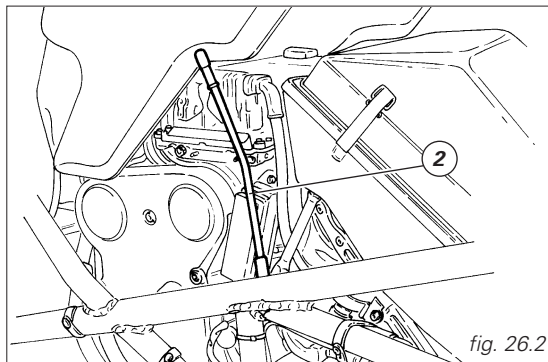


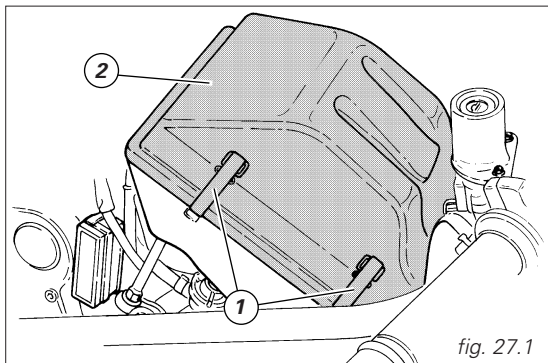
fig. 26.2

Changing air filter (fig. 27.1)

Replace the air filter at the required intervals shown in the routine maintenance chart (see Warranty Card) . The air box is accessible after lifting the fuel tank as described on page 36.

To remove the filter, release the cover clips (1) on both sides of the air box and take off the cover (2).

Remove the filter cartridge (3, fig. 27.2) and fit a new one.



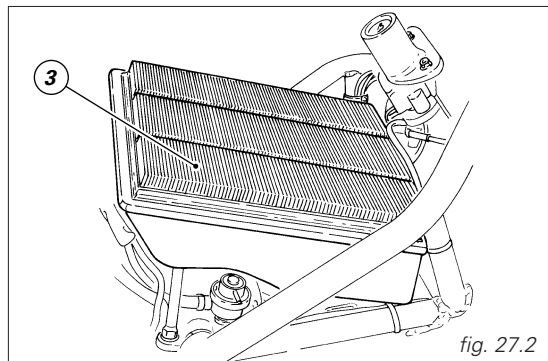
Important

A clogged filter will reduce air intake, increase fuel consumption, reduce engine power, and foul the spark plugs. Do not use the motorcycle without filter or suspended matters could get into the engine and cause damage.

Install the filter into the seat in the air box as shown in the figure and refit all the parts you have removed.

Important

If you are using the motorcycle on dusty or very wet roads, replace filter more frequently than recommended intervals shown in the routine maintenance chart (see Warranty Card).



Checking the coolant level (fig. 28)

Check the coolant level in the expansion reservoir on the RH side of the motorcycle. The coolant level must be between the **MAX** and **MIN** marks.

Top up if the level is too low.

Unscrew the filler (1, fig. 28) and add a mixture consisting of water and antifreeze SHELL Advance Coolant or Glycoshell (35-40% of the volume) up to **MAX** mark.

E

Refit the filler (1).

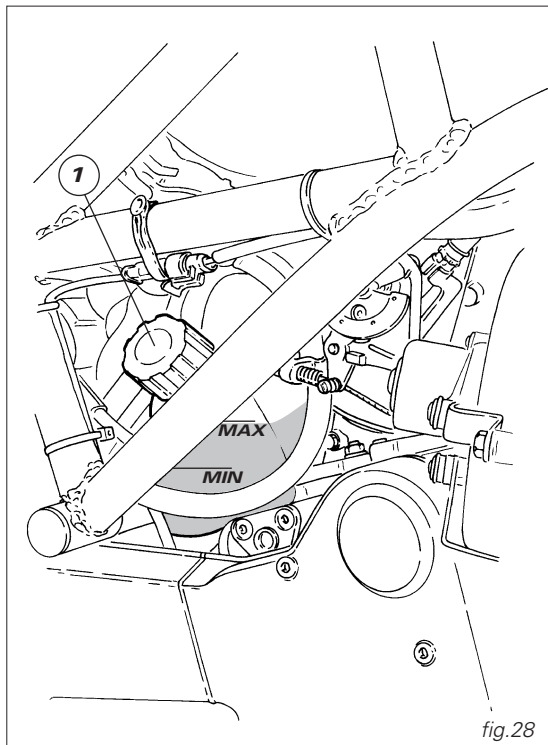
This mixture improves operating conditions (coolant will start freezing at -20°C).

Coolant circuit capacity: 3.5 cu dm (liters).



Warning

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



Checking brake and clutch fluid level (fig. 29)

Fluid level should never fall below the **MIN** mark on each reservoir.

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 - refer to the warranty card - by a Ducati dealer or authorized workshop.

Important

It is recommended all brake and clutch tubes 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 an authorized workshop to have the system inspected and any air drained out of the circuit.

Warning

Brake and clutch fluid will damage paintwork and plastic parts if accidentally spilled. Hydraulic oil is corrosive; it may cause damages and lead to severe injuries. Never mix different quality oils. Check seals for proper sealing.

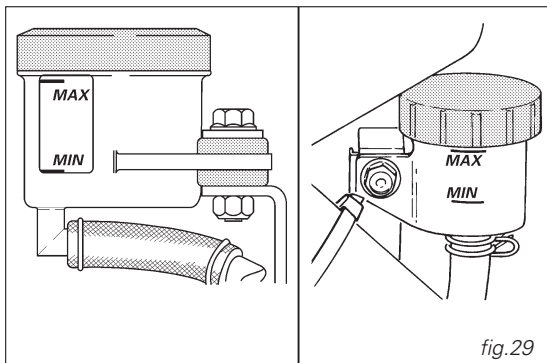
Clutch system

If the control lever has exceeding play and the transmission snatches or jams as you try to engage a gear, it means that there is air in the circuit. Contact your Ducati dealer or an authorized workshop to have the system inspected and air drained out.

Warning

Brake 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. 30)

Front brake

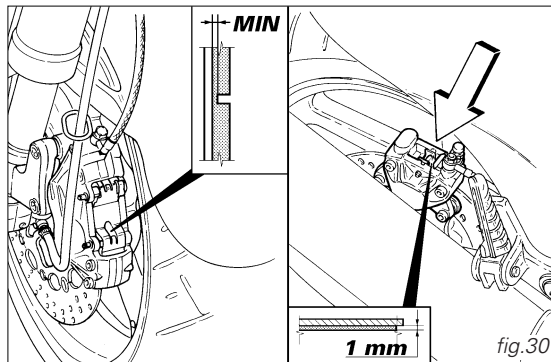
To facilitate inspection without removing the pads from the calipers, brake pads have a wear mark. If the grooves in the friction material are still visible, the pad is still in good condition.

Rear brake

Friction material on each pad must be at least 1 mm thick.

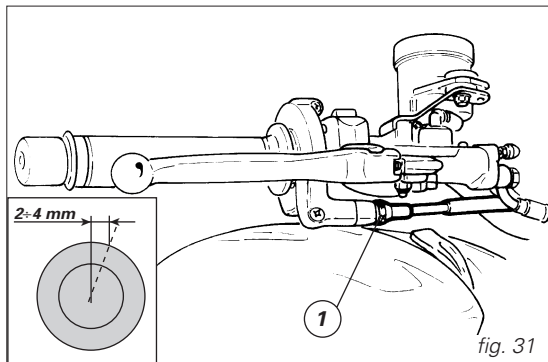
Important

Have the brake pads replaced at your Ducati dealer's shop or authorized workshop.



Throttle cable adjustment

The throttle twistgrip must have a free play of 2 - 4 mm, measured at the edge of the twistgrip and at all positions of the handlebars. If it needs adjusting, use the suitable adjuster (1, fig. 31) provided on the throttle control.

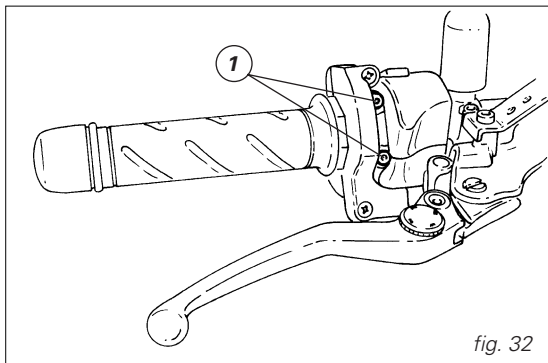


Lubricating cables and joints

The condition of the outer sheaths of the throttle and fast-idle 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 authorized workshop.

To prevent these failures, smear the ends of the flexible cables with SHELL Advance Grease or Retinax LX2 at regular intervals.

For the throttle cable, it is best to open the device by unscrewing the two fastening screws (1, fig. 32) and then grease the cable ends and the pulley.



Warning

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

Refit the cover and tighten the screws (1).

To ensure smooth operation of the side stand joint, clean off any dirt and apply SHELL Alvania R3 at all points exposed to friction.

Charging the battery (fig. 33)

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

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

Undo the strap (1) and remove the battery.



Warning

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

E

Charge the battery in a well ventilated room.

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



Important

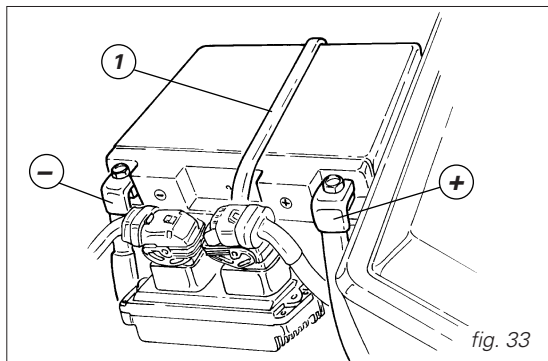
Make sure the charger is off when you connect the battery to it, or you might get sparks at the battery terminals that could ignite the gases inside the cells.

Always connect the red positive (+) terminal first.



Warning

Keep the battery out of the reach of children.
Charge the battery at 1 A for 5-10 hours.



Chain tensioning

Turn the rear wheel slowly until you find the position where chain tension is highest.

With the motorcycle on the side stand, push the chain up pressing with a finger at the point where it intersects with swing arm centerline. The lower portion of the chain should have a slack as follows (fig. 34.1):

25-27 mm.

To adjust chain tension, slacken the nut (1, fig. 34.2) of the wheel spindle. Then tighten similarly the screw (2) clockwise on both sides of the swing arm to increase or reduce chain tension. If you are slackening the chain, you will have to push the wheel forward.

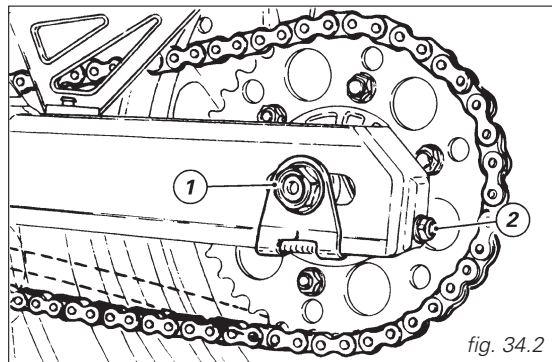
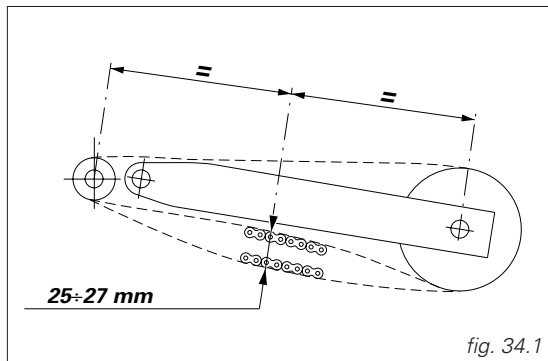
Important

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

Make sure you have adjusted to the same setting marks on both sides of the swing arm. This will ensure perfect wheel alignment.

Grease threading of wheel spindle nut (1) with SHELL Retinax HDX2 and torque up to 72 Nm.

Grease threading of adjuster screws (2) with SHELL Alvania R3 and torque up to 8 Nm.



Chain lubrication

The chain fitted on your motorcycle has OR seals that keep dirt out of and lubricant inside the sliding parts. The seals might be irreparably damaged if the chain is cleaned using non-specific solvents or washed using steam or water jets. Dry the chain using compressed air or absorbent material and apply SHELL Advance Chain or Advance Teflon Chain on each link.

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

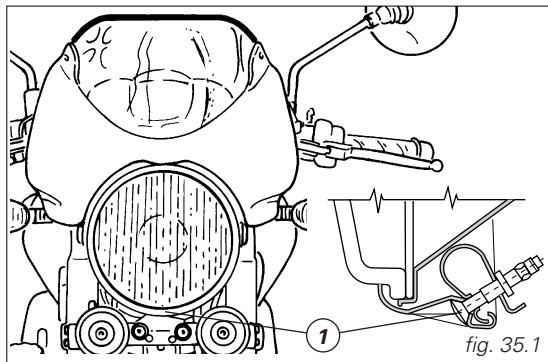
Replacing bulbs

Before replacing a burnt-out bulb, make sure that the new one complies with voltage and wattage as specified on page 59 - "Electric System".

Headlamp (fig. 35.1)

To gain access to headlamp bulbs, slacken the lower screw (1) holding the rim-reflector assembly to the body and disconnect the connector (2, fig. 35.2) from the headlamp. Release the clip (3, fig. 35.2) that secures the bulb and remove it from the socket.

Replace the bulb.



**Note**

Never touch the transparent body of the new bulb with your fingers or it will blacken resulting in reduced bulb brilliancy.

Insert the locating pegs of the bulb base into their seats to obtain correct alignment; hook the clip (3) to the headlamp holders.

Reconnect the cables.

To change the parking light bulb, withdraw the bulb holder (4, fig. 35.2). The bulb is of the bayonet-type: press and rotate anti-clockwise to remove. Fit the spare bulb by pressing and turning clockwise until it clicks. Fit the bulb holder again and assemble the rim-reflector assembly.

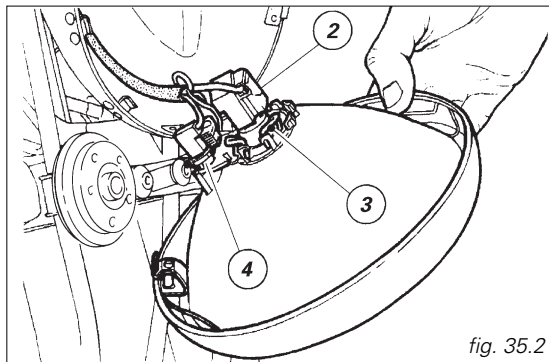


fig. 35.2

Instrument panel (fig. 36)

Disassemble the instrument panel by unscrewing the two fastening screws with washer.

Disconnect the odometer cable (1) and the main wiring connector (2). Undo the four cap nuts (3) fastening the rear cover.

Remove the instrument panel and the rear cover.

Replace the burnt bulb with one with equal rating.

**Note**

Test the new bulb before refitting the instrument panel elements.

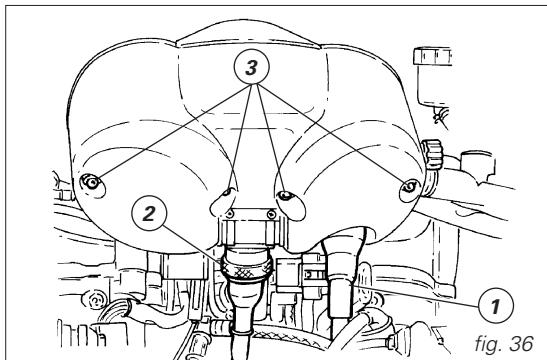
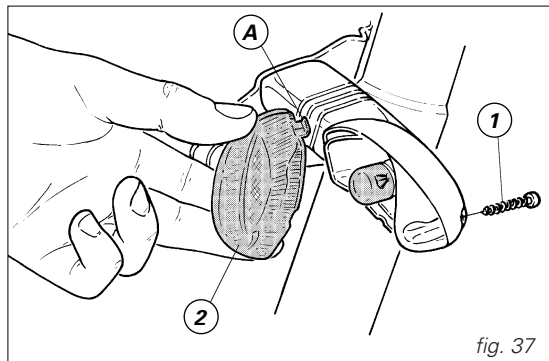


fig. 36

Turn indicators (fig. 37)

Remove the screw (1) and detach the glass (2) from the body.

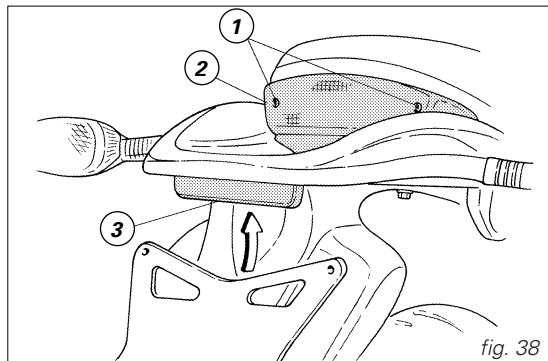
The bulb is of the bayonet-type: press and rotate anti-clockwise to remove. Fit the spare bulb by pressing and turning clockwise until it clicks. Refit the glass sliding the small tab (A) into the suitable slot in the indicator body. Tighten the screw (1).

**Stop light** (fig. 38)

To replace the stop and parking light bulb, unscrew the two screws (1) that secure the glass (2). Remove the glass. The bulb is of the bayonet-type: press and rotate anti-clockwise to remove. Fit the spare bulb by pressing and turning clockwise until it clicks. Refit the glass.

Number plate light (fig. 38)

To expose the number plate bulb, withdraw the lamp holder from inside (3), then extract the bulb and replace it.



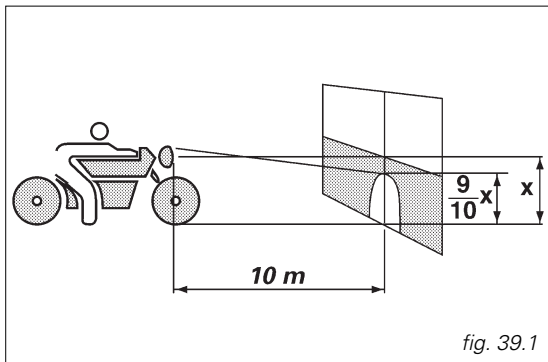
Headlamp alignment (fig. 39.1)

When checking headlamp alignment, 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 and opposite a wall or a screen, 10 meters apart from it. Then draw a horizontal line dictated by headlamp center 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 center.

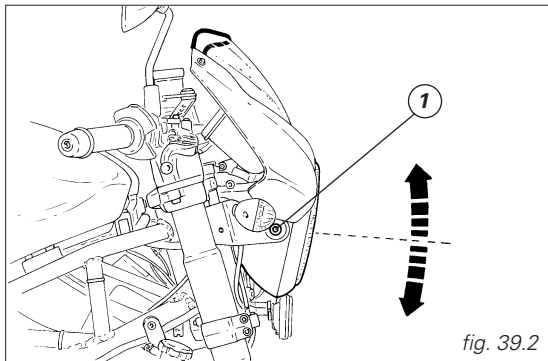


Note

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.

The height of the light beam can be corrected using the screws (1, fig. 39.2) that secure the headlamp to the side supports.



Tyres

Front pressure

2.1 bar - 2.3 Kg/sq cm

Rear pressure:

2.2 bar - 2.4 Kg/sq cm

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.

E



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

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

After replacing a tyre, the wheel should be balanced.



Important

Do not remove or shift the wheel balancing weights.



Note

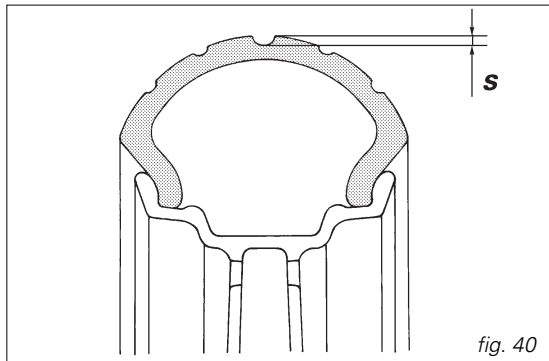
If tyres need replacing, contact a Ducati Dealer or authorized workshop to make sure wheels are removed and refitted correctly.

Minimum tread depth

Measure tread depth (S, fig. 40) at the point where tread is most worn down. It should not be less than 2 mm and anyway not below the legal limit.

Important

Visually inspect the tyres at regular intervals for detecting cracks or cuts, on the side walls especially, 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.



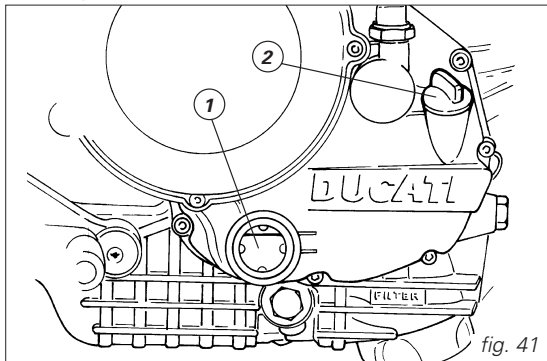
Checking engine oil level (fig. 41)

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

When checking oil level, the motorcycle should be upright and the engine cold. Allow a few minutes for oil to settle to a steady level after stopping the engine. 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

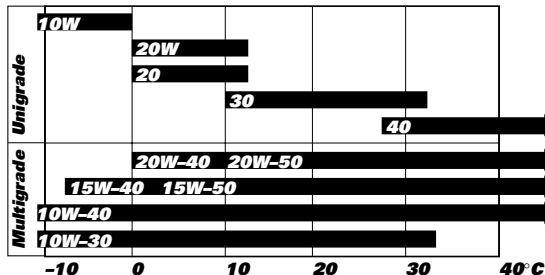
Engine oil and oil filters must be changed by a Ducati dealer or authorized workshop at regular intervals, as specified in the routine maintenance chart (see Warranty Card).



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.



Cleaning and replacing the spark plugs (fig. 42)

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

This is done quite easily and quickly and provides a good measure of engine condition.

Remove the spark plug coils from the cylinder head using the wrench supplied with the bike.

Check the color of the insulating ceramic material of the central electrode: a light brown, even color is a sign of good engine condition. If color has altered or you find any dark deposits, change the spark plug and report this to a Ducati dealer or authorized workshop.

Check wear on the central electrode. If it looks worn out or has a vitreous appearance, change the spark plug.

Check electrode gap: it should be 0.6-0.7 mm.

Important

If the gap needs adjusting, be very careful when bending the side electrode. If gap is too wide or too close, engine performance will be affected. This could also cause difficult starting or irregular idling. Clean the electrode and the insulating material accurately using a small metal brush and check seal condition. Clean the seat in the cylinder head. Be careful not to let any foreign matters fall into the combustion chamber.

Refit spark plug into cylinder head. Snug it finger-tight until it is fully seated into the head. Tighten the spark plug at 20 Nm. If you do not have a torque wrench, you can use the wrench supplied with the tool kit to tighten the spark plug an additional 1/2 turn.

Important

Never use spark plugs with a heat rating other than recommended or a thread length other than standard. Spark plugs should be tightened firmly.

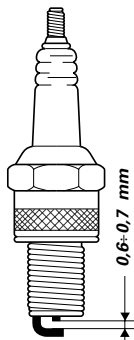


fig. 42

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 forks, wheel shafts, electric system, fork seals, air inlets and exhaust silencers and adversely affect the operation of motorcycle safety features.

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

Warning

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

Monster S4 Cromo tank

Clean the tank with special (non-abrasive) products for chromium-plated surfaces at least once a month. This will keep your tank bright and shiny.

E

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;

empty the fuel tank;

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

place the motorcycle on the supplied service stand; disconnect and remove the battery. Battery should be checked and charged whenever the motorcycle has been left unriden for over a month;

protect the motorcycle with a suitable canvas available from Ducati Spare Parts Department. This will protect paintwork and let condensate breathe out.

Important notes

Some countries - such as France, Germany, Great Britain, Switzerland and so on - have compulsory emission and noise standards.

Carry out any required inspection at regular intervals and replace any parts using Ducati original spare parts complying with local law.

TECHNICAL DATA

Weights

Dry weight:

190 kg.

Carrying full load:

390 kg.



Warning

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

Overall dimensions (mm) (fig. 43)

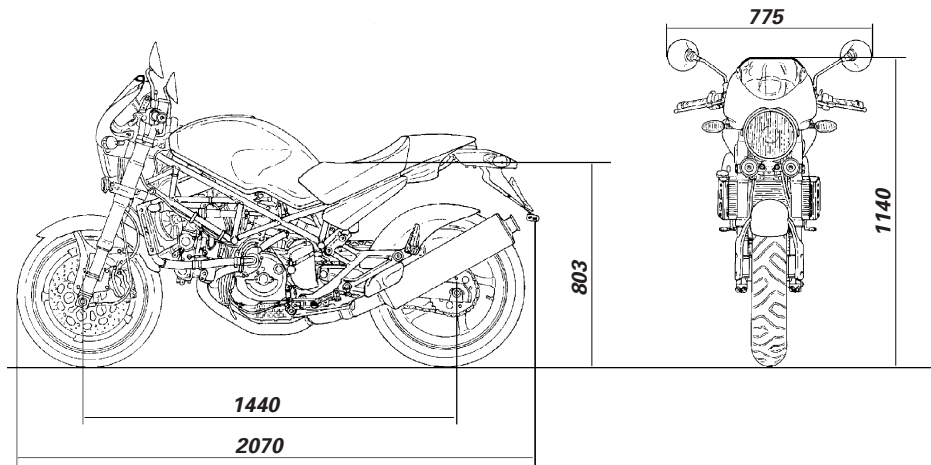


fig. 43

Top-ups	Type of fluid	cu. dm. (liters)
Fuel tank, including a reserve of 3.5 cu dm (liters)	Gasoline 95-98 RON	16.5
Oil sump and oil filter	SHELL Advance Ultra 4	3.8
Front/Rear brake and clutch circuits	SHELL-Advance Brake DOT 4	–
Protectant for electric contacts	SHELL-Advance Contact Cleaner	–
Front fork	SHELL-Advance Fork 7.5 or Donax TA	0.492 (each leg)
Cooling circuit	Antifreeze SHELL - Advance Coolant or GLYCO SHELL 35-40% + water	3.5


Important

Additives to fuel or lubricants are not allowed.

Engine

Twin cylinder, four-stroke, 90° "L" type, longitudinal.

Bore mm:

94.

Stroke mm:

68.

Total displacement cu.cm.:

916.

Compression ratio:

11±0.5:1.

Max. power at crankshaft (95/1/CE):

74 kW - 101 HP at 8750 rpm.

Max torque at crankshaft (95/1/CE):

92 Nm at 7000 rpm.

Important

Do not exceed specified speed limits (see page 56) under any running condition.

Timing system

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

Desmodromic timing system (fig. 44)

- 1) Opening (or upper) rocker;
- 2) opening rocker shim;
- 3) split rings;
- 4) closing (or lower) rocker shim;
- 5) return spring for lower rocker;
- 6) closing (or lower) rocker;
- 7) camshaft;
- 8) valve.

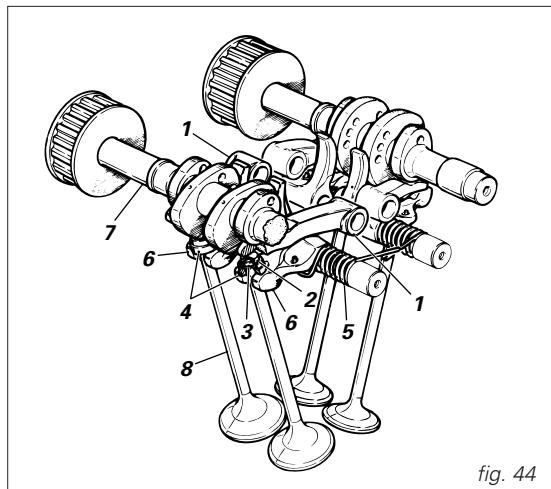


fig. 44

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):
225 Km/h.

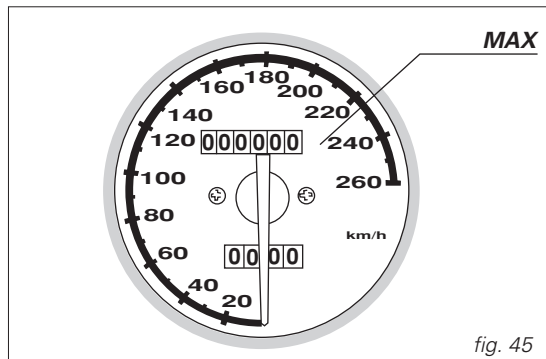
Speed limits (fig. 45)

The figure shows the maximum speed limits that can be reached after the running-in period.

E

Important

Failure to comply with these limits releases Ducati Motor Holding S.p.A. from any liability whatsoever for resulting engine malfunction.



Spark plugs

Make:

CHAMPION

Type:

RA 59 GC.

Brakes

Front brake

Type:

drilled steel disc.

No. 2 discs.

Disc diameter:

320 mm

Hydraulically operated by a control lever on right handlebar.

Braking surface, sq cm:

88.

Brake calipers with separate pistons.

Make and type:

BREMBO 30/34-4 pistons.

Friction material:

TOSHIBA TT 2802

Master cylinder type:

PSC 16.

Rear brake

Type:

fixed drilled steel disc

Disc diameter:

245 mm

Hydraulically operated by a pedal on R.H. side

Braking surface:

25 sq cm

Brake caliper:

cylinder Ø 32 mm

Make and type:

BREMBO P 2.105N.

Friction material:

FERIT I/D 450 FF.

Master cylinder type:

PS 11.



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.

Transmission

Clutch:

multiple-disk dry clutch;

operated by a control lever on left handlebar.

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

Ratio:

32/59.

Gearbox:

6-speed;

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

Front/rear sprocket ratio:

15/37.

Total gear ratios:

1st gear 15/37.

2nd gear 17/30.

3rd gear 20/28.

4th gear 22/26.

5th gear 23/24.

6th gear 24/23.

Drive chain from gearbox to rear wheel:

Make:DID

Type: 525 HV.

Size: 5/8"x5/16"

Links:100.

E



Important

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

However, if you wish to tune up your motorcycle for 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 authorized workshop.



Warning

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

Frame

Tubular trellis frame with upper section made of high-strength steel.

Steering angle (on each side): 30°

Steering head angle: 24°

Trail mm: 102.

Wheels

Five-spoke, light-alloy rims.

Front wheel

Make: MARCHESINI

Dimensions: 3.50x17"

Rear wheel

Make: MARCHESINI

Dimensions: 5.50x17".

Both wheel spindles can be removed.

Tyres

Front tyre

Tubeless, radial tyre.

Size:120/70-ZR17.

Rear tyre

Tubeless, radial tyre.

Size:180/55-ZR17.

Suspensions

Front suspension

Hydraulic upside-down fork.

The fork is provided with outer adjuster for rebound, compression, and preload (for inner springs of fork legs).

Stanchion diameter:

43 mm

Travel along leg axis:

120 mm

Rear

Of the progressive type, thanks to a rocker arm connecting frame and upper pivot point of the shock absorber. The shock absorber enables the adjustment of rebound and compression damping and spring preload.

At the bottom pivot point it is connected to the swingarm, which is made of steel.

The swingarm hinges on a pivot pin passing through the engine. The whole system gives the bike excellent stability.

Travel:

65 mm

Rear wheel travel:

144 mm



Note

Never modify settings which may alter those technical features which are essential for the motorcycle homologation.

Electric system

Basic electric items are:

Round headlamp with iodine double filament bulb, **12V-55/60W bulb**.

Parking light with **12V-5W bulb**.

Instrument panel, **12V-1.2W** bulbs for warning lights and **12V-2W** bulbs for instrument lights.

Electric controls on handlebar.

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

Warning horn.

Stop light switches.

Battery, **12V-10 Ah**.

Generator, **12V-520W**.

Electronic voltage regulator, protected by a **40 A** fuse.

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

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



Note

See "Replacing bulbs" on page 44 for relevant instructions.

Fuses

The main fuse box is located under the fuel tank. To expose the fuses, take off the box protective cover (1, fig. 46.1). Mounting position and ampere capacity are marked on it.

The fuse located near the battery (fig. 46.3) protects the electronic regulator.

Remove the fuse cap (2) to expose it.

E A blown fuse is identified by the interrupted inner filament (3, fig. 46.2).

Important

Switch the ignition key to **OFF** before replacing the fuse to avoid possible short circuits.

Warning

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

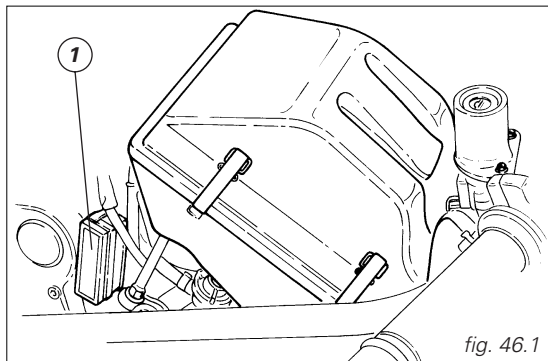


fig. 46.1

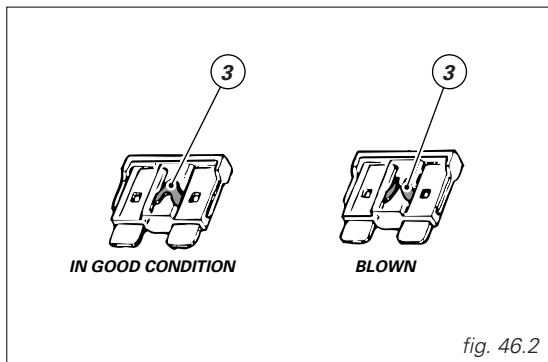
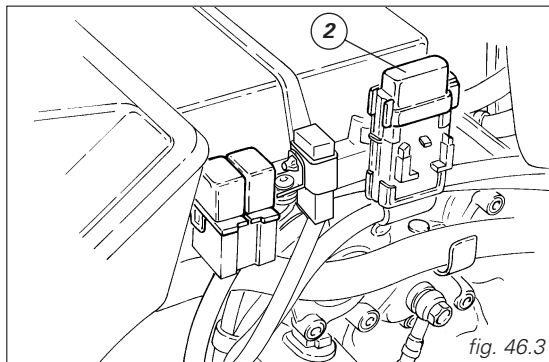


fig. 46.2



Legend of the wiring diagram of electric system/injection

- 1) R.H. switch
- 2) Transponder aerial
- 3) Key-operated switch
- 4) Ignition relay
- 5) Fuse box
- 6) Flasher
- 7) L.H. power fan
- 8) R.H. power fan
- 9) Starter motor
- 10) Starter solenoid
- 11) Battery
- 12) Regulator protection fuse
- 13) Regulator
- 14) Generator

- 15) Rear, right-turn indicator
- 16) Tail light
- 17) Number plate light
- 18) Rear, left-turn indicator
- 19) Fuel tank
- 20) Self-diagnosis connector
- 21) Horizontal cylinder coil
- 22) Vertical cylinder coil
- 23) Horizontal cylinder spark plug
- 24) Vertical cylinder spark plug
- 25) Horizontal cylinder injector
- 26) Vertical cylinder injector
- 27) Throttle position sensor
- 28) Timing/engine rpm pick up
- 29) Water temperature sensor
- 30) Side stand switch
- 31) Injection/ignition unit
- 32) Injection relay
- 33) Neutral light switch
- 34) Oil pressure sensor
- 35) Rear STOP light switch
- 36) Front STOP light switch
- 37) L.H. switch
- 38) Air temperature/pressure sensor
- 39) Instruments
- 40) Front left-turn indicator
- 41) R.H. horn
- 42) Headlamp
- 43) Front right-turn indicator
- 44) Immobilizer decoder
- 45) L.H. horn
- 46) Fan relay

Wire color coding**W-Y** White-Yellow**P** Pink**W** White**Y-G** Yellow-Green**G** Green**G-R** Green-Red**W-R** White-Red**W-G** White-Green**V-Bk** Violet-Black**Y** Yellow**W-Bk** White-Black**Br** Brown**G-W** Green-White**Br-W** Brown-White**R-Bk** Red-Black**R-B** Red-Blue**GR-R** Grey-Red**R** Red**B** Blue**Y-Bk** Yellow-Black**Gr-Bk** Grey-Black**Bk-V** Black-Violet**Bk** Black**Y-B** Yellow-Blue**Br-R** Brown-Red**G-Gr** Green-Grey**O-W** Orange-White**Gr-G** Grey-Green**Gr-B** Grey-Blue**O-B** Orange-Blue**O** Orange**R-Y** Red-Yellow**R-W** Red-White**V** Violet**Y-R** Yellow-Red**B-W** Blue-White**Br-Bk** Brown-Black**G-Bk** Green-Black**O-Bk** Orange-Black**W-B** White-Blue**P-Bk** Pink-Black**G-Bk** Green-Black**P-Y** Pink-Yellow**G-Y** Green-Yellow

Legend of fuse box (5)

Pos.	Description	Rat.
1-9	Main switch	30 A
2-10	Fuel pump, injectors, coils	20 A
3-11	Key sense	7.5 A
4-12	CPU power supply	3 A
5-13	Passing	7.5 A
6-14	Turn indicators, warning lights, tail lights and instrument panel lights	15 A
7-15	Stop, warning horn	10 A
8-16	Power fans	7.5 A



Note

The wiring diagram is at the end of this manual.

MONSTER S4 VERSIONS

MONSTER S4

Available colors:

Metal frame and wheel rims matching the following colors:

Ducati anniversary red - part no. PPG 473.101;
Ducati metallized yellow - part no. PPG 473.201;
Ducati metallized black - part no. PPG 291.500.

Metal frame and red wheel rims matching the following colors:

Ducati Senna grey - part no. Salchi 653.6047.

MONSTER S4 CROMO

This version differs from the basic version in the following features:

- chromium-plated fuel tank;
- black windproof cover and seat cowl;
- metal wheel rims and frame.

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. Refuell 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 33). 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.

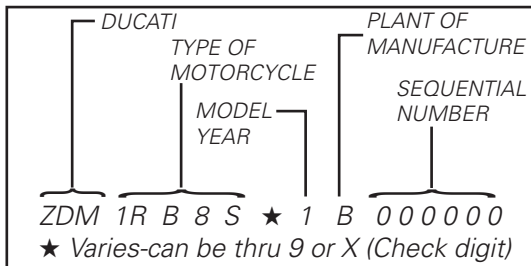


fig. A

Label location (fig. B)

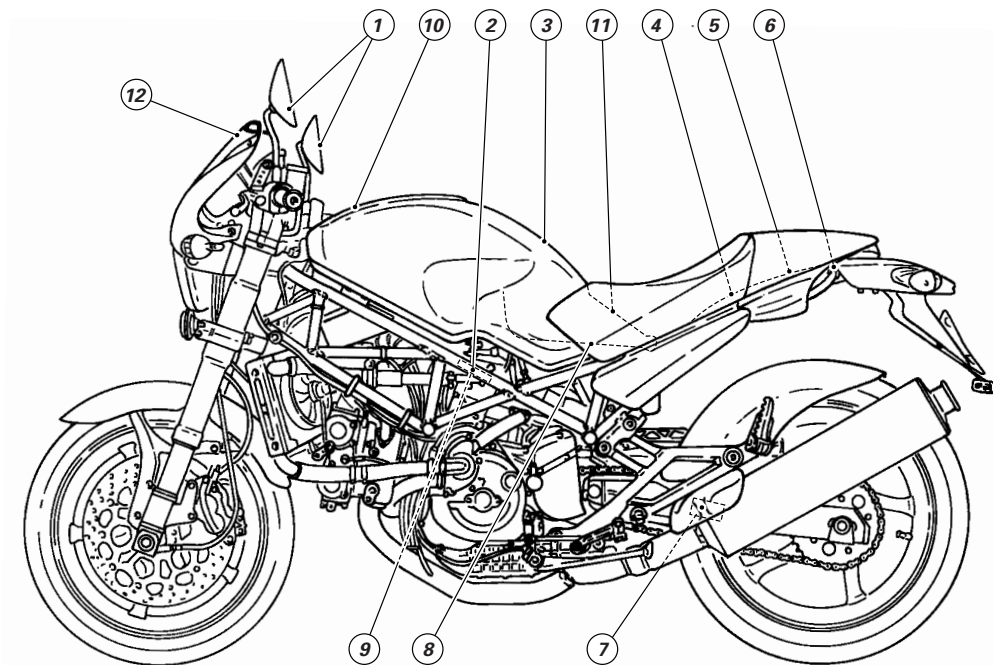


fig. B

OBJECT IN MIRROR ARE
CLOSER THAN THEY APPEAR

1

Manufactured by **DUCATI MOTOR spa**

DATE: ■ / ■ / ■

GVWR: ■ Lbs (■ kg)
GAWR front: ■ Lbs (■ kg) with ■ tire, ■ RIM at ■ PSI cold.
GAWR rear: ■ Lbs (■ kg) with ■ tire, ■ RIM at ■ PSI cold.
This vehicle conforms to all applicable Federal Motor Vehicle Safety standards in effect on the date of manufacture shown above. Type classification: Motorcycle

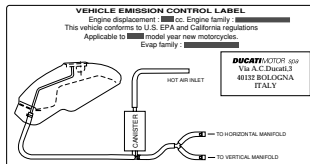
Vehicle I.D. No.: ■■■■■■■■■■

GM 102-120-16

WARNING YOUR DUCATI MOTORCYCLE IS EQUIPPED WITH A WARNING LIGHT FLASHING WHEN THE SIDE STAND IS LOWERED (ON).
NEVER, IT IS THE RIDER'S RESPONSIBILITY TO INSURE THAT THE SIDE STAND IS STOWED COMPLETELY BEFORE STARTING OUT. FAILURE TO OBSERVE THIS WARNING COULD RESULT IN AN UPSET AND CONSEQUENT SERIOUS BODILY INJURY.

3

2



4

VEHICLE EMISSION CONTROL INFORMATION		
Engine displacement: ■	THIS VEHICLE CONFORMS TO U.S. EPA	
Engine family: ■	REGULATIONS APPLICABLE TO 1998	
Engine exhaust control system: ■	MODEL YEAR NEW MOTORCYCLES	
ENGINE TUNE-UP SPECIFICATIONS		
ITEM	SPECIFICATIONS	INSTRUCTIONS
IGNITION TIMING: ■	bTDC at idle speed ■ mm	No adjustment
IDLE SPEED (RPM): ■	■ mm	No adjustment
IDLE MIXTURE: ■	■ mm	No adjustment
VALVE CLEARANCE (in & ex):	Opening ■ mm Closing ■ mm	See Service Manual
SPARK PLUG: CHAMPION ■		
SPARK PLUG GAP (mm): 0.5 0.6		
	OIL: SAE 20W50 FUEL: Unleaded gasoline	
DUCATI MOTOR 529 - BOLOGNA - ITALY		

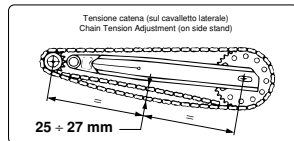
5

VEHICLE EMISSION CONTROL INFORMATION		
Engine displacement: ■	THIS VEHICLE CONFORMS TO U.S. EPA AND CALIFORNIA REGULATIONS APPLICABLE TO 1998 MODEL YEAR NEW MOTORCYCLES AND IS CERTIFIED TO 1.4 HC/G KM ENGINE FAMILY EXHAUST EMISSION STANDARD IN CALIFORNIA	
Engine family: ■		
Engine exhaust control system: ■		
Evap family: ■		
ENGINE TUNE-UP SPECIFICATIONS		
ITEM	SPECIFICATIONS	INSTRUCTIONS
IGNITION TIMING: ■	bTDC at idle speed ■ mm	No adjustment
IDLE SPEED (RPM): ■	■ mm	No adjustment
IDLE MIXTURE: ■	■ mm	No adjustment
VALVE CLEARANCE (in & ex):	Opening ■ mm Closing ■ mm	See Service Manual
SPARK PLUG: CHAMPION ■		
SPARK PLUG GAP (mm): 0.5 0.6		
	OIL: SAE 20W50 FUEL: Unleaded gasoline	
DUCATI MOTOR S.p.A. - BOLOGNA - ITALY		

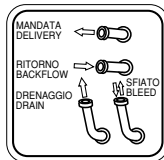
5

HELMET HOLDER
UNDER THE SEAT

6



7



8

ATTENZIONE! Per evitare perdite di carburante dal tubo di sfogo, evitare di sollevare il serbatoio quando questo è pieno oltre la metà.

ATTENTION! To avoid fuel leaks from the breather pipe, do not lift the tank when it is more than half full.

11

MOTORCYCLE NOISE EMISSION CONTROL INFORMATION
THIS ■ MOTORCYCLE. ■ MEETS EPA NOISE EMISSION REQUIREMENTS OF ■ dBA AT ■ RPM BY THE FEDERAL TEST PROCEDURE.
MODIFICATIONS WHICH CAUSE THIS MOTORCYCLE TO EXCEED FEDERAL NOISE STANDARDS ARE PROHIBITED BY FEDERAL LAW.
SEE OWNER'S MANUAL.

GM 102-120-16

9

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.

10

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.

12

USA

California evaporation emission system

(fig. C):



Important

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

E

USA

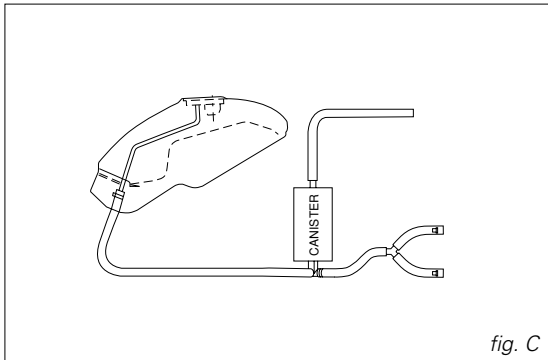


fig. C

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

ROUTINE MAINTENANCE RECORD

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



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