

Owner's manual

E

DUCATI *MONSTER400*

E

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 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 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 S.p.A. reserves the right to make any changes required by the future development of the above-mentioned products.

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



Warning

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

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GENERAL

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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 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 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 at the rear of 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 370 Kg/816 lb.

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 47) 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).

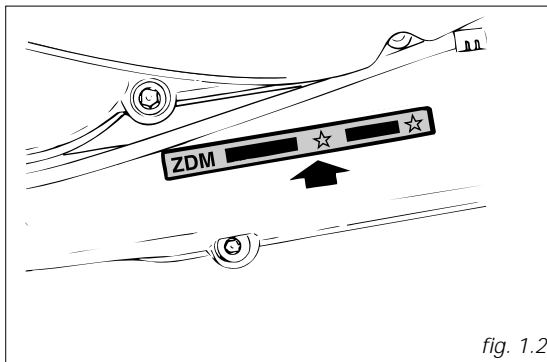
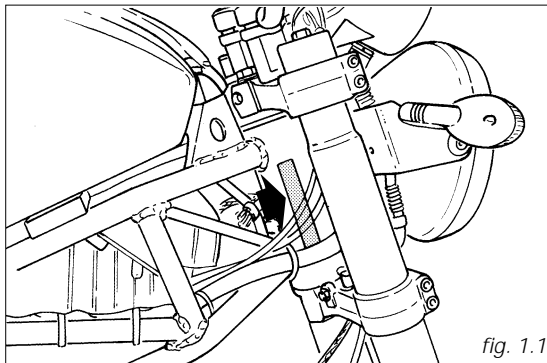
Frame number

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.

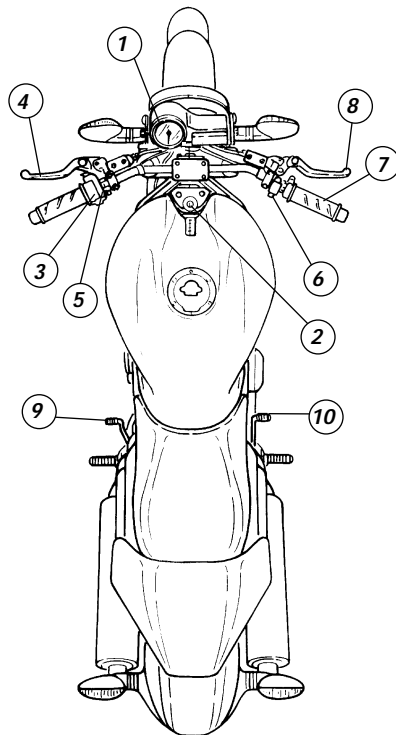


fig. 2

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 N**.

Comes on when gearbox is in neutral.

3) **Yellow light** .

Comes on when there are about 3.5 liters/0.8 U.S. Gallons 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.

 **Important**

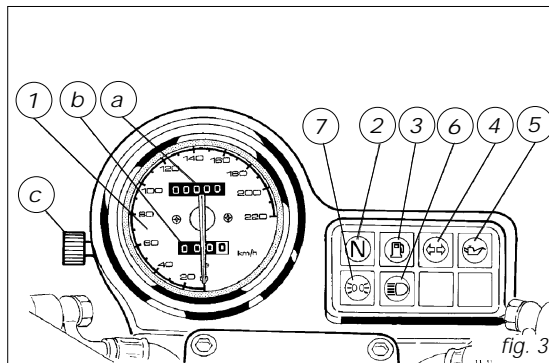
If this light stays on, stop the engine or it may suffer severe damage.

6) **Blue light** .

Comes on when high beam is on.

7) **Green light** .

Comes on when parking lights are on.



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Keys (fig. 4)

Your Ducati was delivered with two universal keys for ignition, steering lock and seat catch and a key identification plate (1).



Note

Separate the two keys and keep the identification plate in a safe place.

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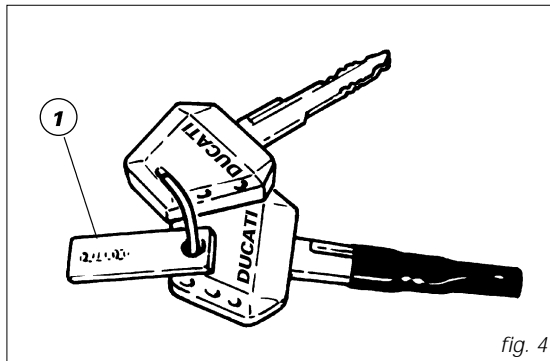


fig. 4

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.



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.

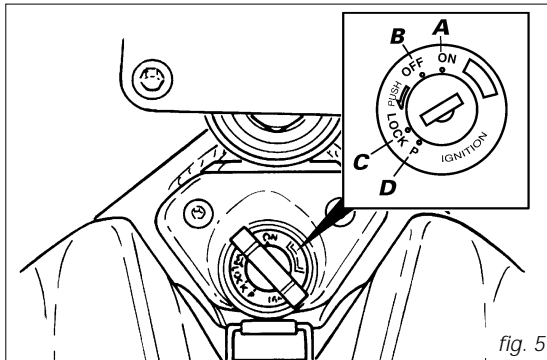





fig. 5

Left switch (fig. 6)

1) Switch, light switch, 3 positions:

Down  = light off;

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


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





Note

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

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


position  = low beam on;

position  = high beam on.


3) Switch  = 3-position turn indicator:


centre position = OFF;

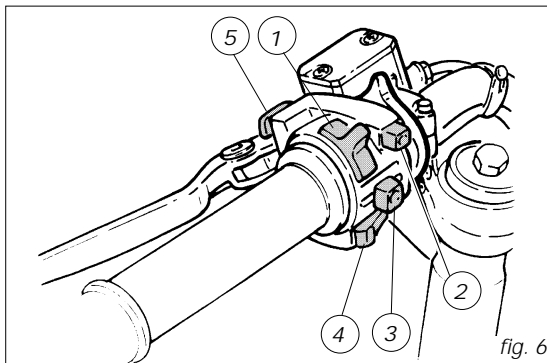
position  = left turn;

position  = right turn.

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

4) Button  = warning horn.

5) Button  = high-beam flasher.



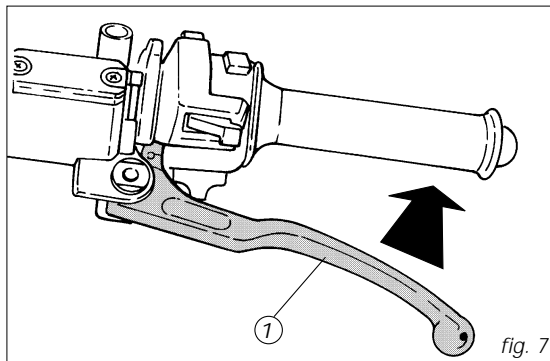
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Clutch lever (fig. 7)

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.

Important

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



Cold start lever (fig. 8)

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

Lever positions:

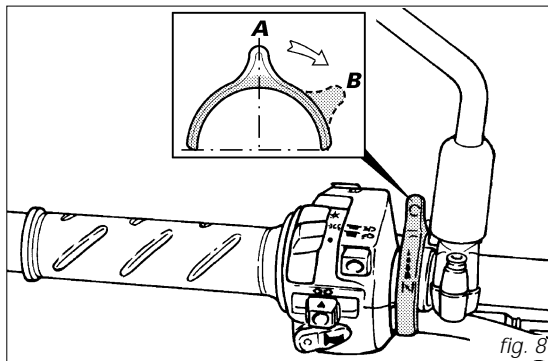
A) (vertical) = closed

B) fully open.

The lever can be opened and closed gradually to adjust speed until engine is fully warm (see page 26).


Important


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




Right switch (fig. 9)

1) 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 (1) and leaving the ignition key in the **ON** position, may run the battery flat as the lights will remain on.

2) Button  = engine start.

Throttle twistgrip (fig. 9)

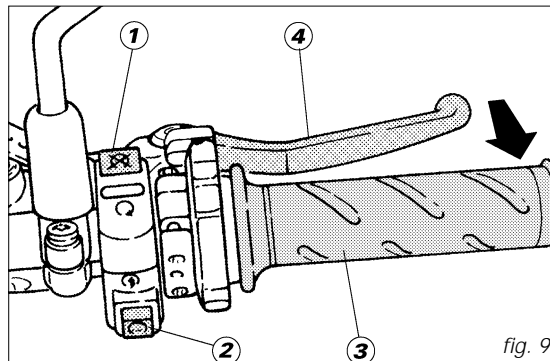
The twistgrip (3) on the right handlebar opens carburettor shutter. When released, it will spring back to the initial position (idling speed).

Front brake lever (fig. 9)

Pull in the lever (4) towards the twistgrip to operate the front brake. The system is hydraulically operated and you just need to pull the lever gently.

Warning

Please read the instructions on pages 26 and 28 before using these controls.



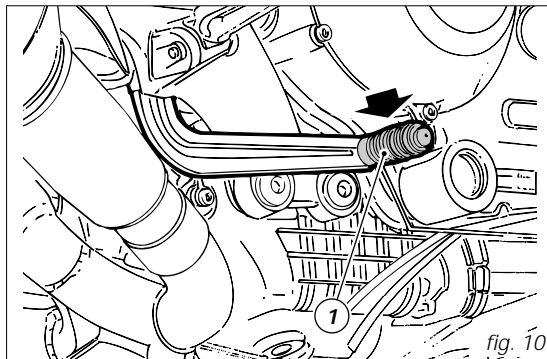
*Rear brake pedal (fig. 10)**Push down on the pedal (1) to apply the rear brake.**The system is hydraulically operated.*

fig. 10

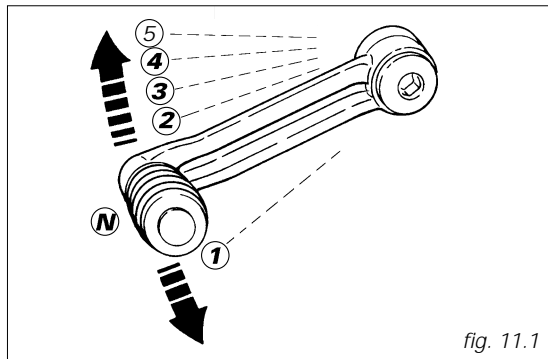

*Gear change pedal (fig. 11.1)**The gear change pedal is at rest when in the central position **N**, is moved up and down to change gears and then returns to the central position.**down = push down on the pedal to engage 1st gear and to shift down. The **N** light will go out.**up = lift the pedal to engage the 2nd gear and then the 3rd, 4th, 5th.**Each time you move the pedal you will engage the next gear.*

fig. 11.1

Setting the gear change and rear brake pedals (fig. 11.2, 11.3)

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).

 **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.

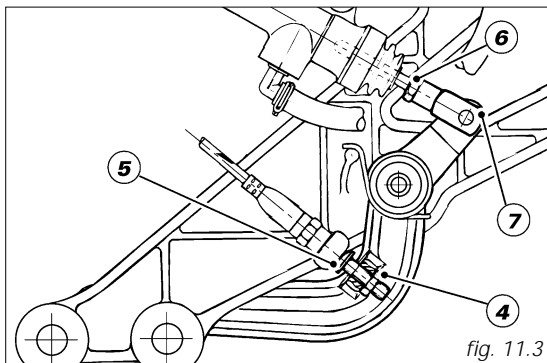
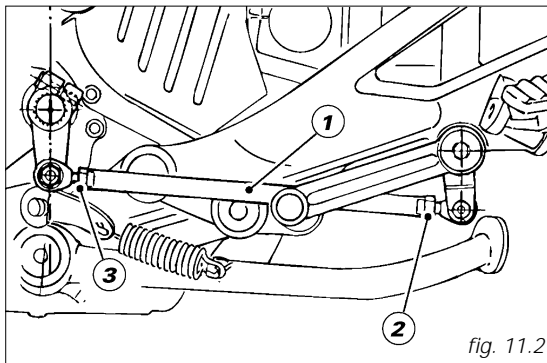
Tighten check nut (4).

Work pedal by hand to make sure it has 1.5 - 2 mm/0.059-0.078 in. 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.



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MAIN COMPONENTS AND DEVICES

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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) Fuel tank lifting rod.
- 9) Seat cover.
- 10) Fuel tank clip.

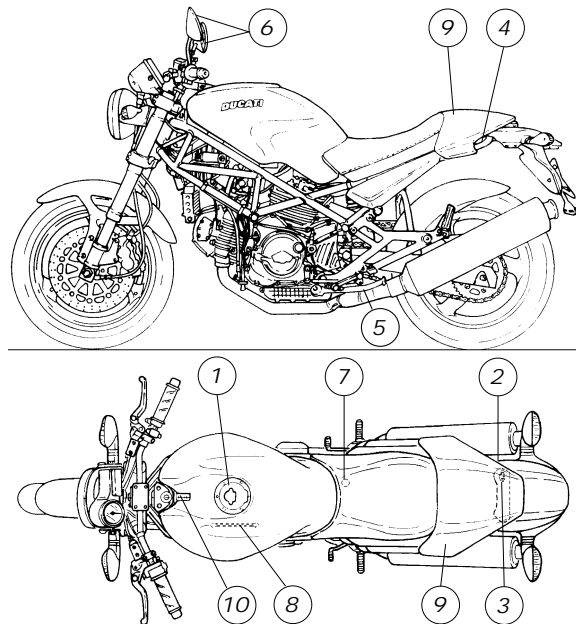


fig. 12

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).



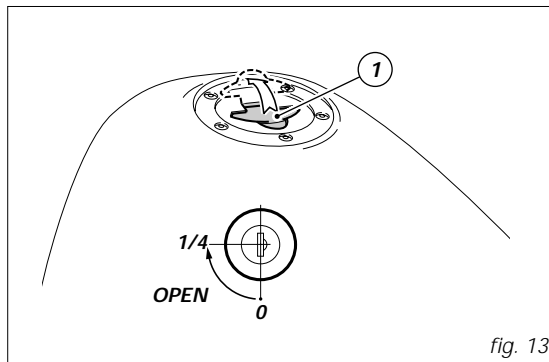
Note

The plug can only be closed with the key in. In turn, the key can only be taken out after the plug has been closed.



Warning

Always make sure you have properly refitted (see page 29) and closed the plug after each refueling.



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 31). Insert the cable into the helmet, slide the end of the cable onto the pin (2). Leave helmet hanging outside and refit the seat.

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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.

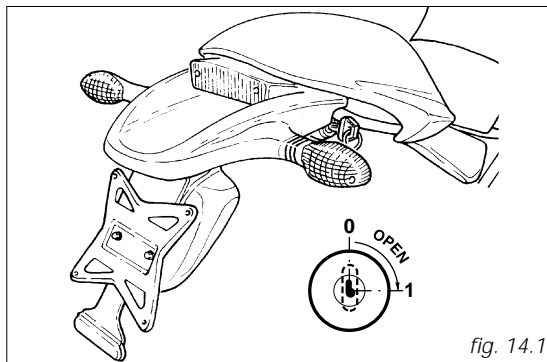


fig. 14.1

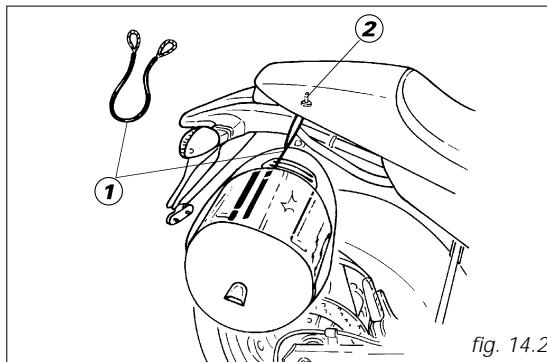


fig. 14.2

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.

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.

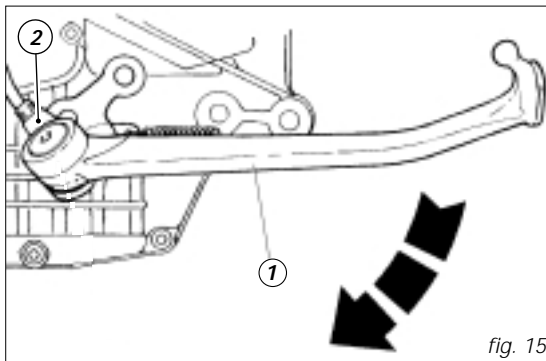


fig. 15

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.

Turn the adjuster (1) clockwise to increase damping (**H**), anticlockwise to reduce it (**S**).

STANDARD setting:

turn the adjuster (1) all the way in (clockwise) then slacken it 8 clicks.

Two ring nuts (2), 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.

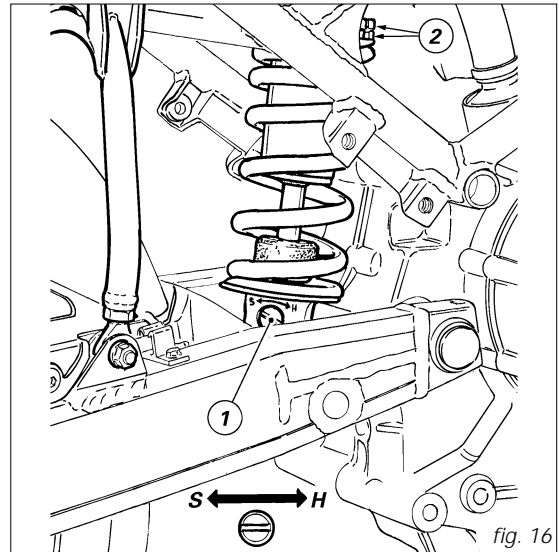
Then tighten or slacken the lower ring nut to increase or decrease spring preload as required.

⚠ 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.

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.



DIRECTIONS FOR USE

Running-in recommendations

Max. rotation speed

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

- 1) up to 1000 km - 621 miles;
- 2) from 1000 to 2500 km - 621 to 1553 miles;
- 3) after 2500 km - 1553 miles.

Up to 1000 km/621 miles

During the first 1000 km/621 miles, keep the revolution meter under control. The indicator must not exceed: speed as indicated for the each gear (fig. 17.1).

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/62 miles, 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/621 to 1553 miles

At this point, you can squeeze some more power out of your engine, being careful, however, never exceed: speed as indicated for the each gear (fig. 17.2).

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 S.p.A. from any liability whatsoever for resulting engine damage or shorter engine life.

After 2500 km/1553 miles

After running-in, never exceed the following values during the motorcycle standard use:
max. speed allowed for each gear (see page 55).

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

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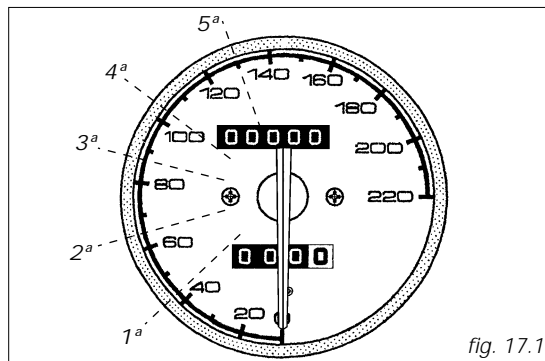


fig. 17.1

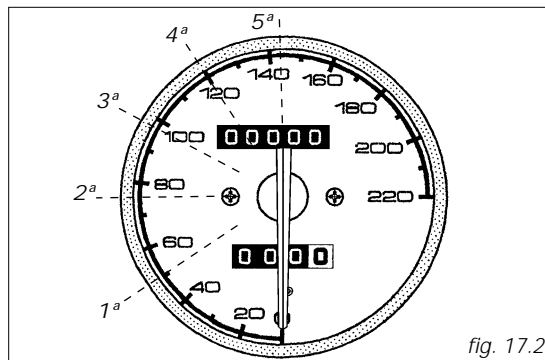


fig. 17.2

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 29).

Engine oil level

Check oil level in the sump through the sight glass. Top up with recommended oil if needed (page 48).

Brake and clutch fluid

Check fluid level in the relevant reservoirs.

Tyre condition

Check tyre pressure and condition (page 47).

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 43).

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 21).



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 (page 27).




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.

Regular ambient temperature

(10 to 35 °C/50 to 95 °F):

1) Move the ignition key to **ON** (fig. 18.1). 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. 18.2).

3) Check that the stop switch (1, fig. 18.3) 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. 18.2) until obtaining the engine speed: idle speed.



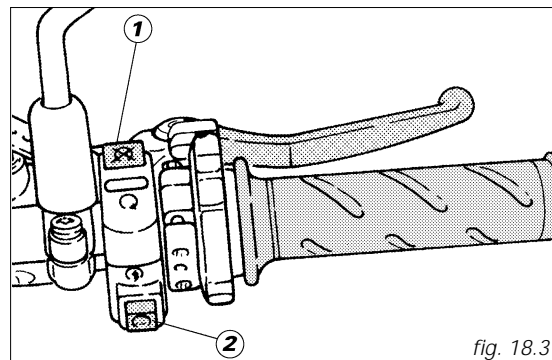
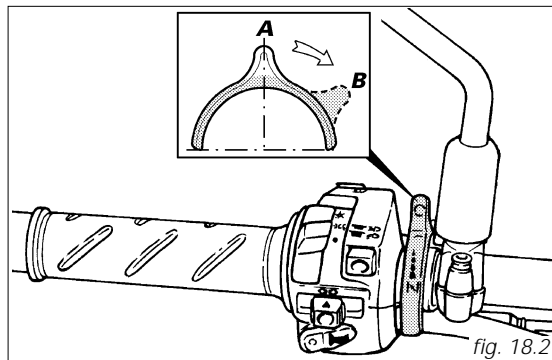
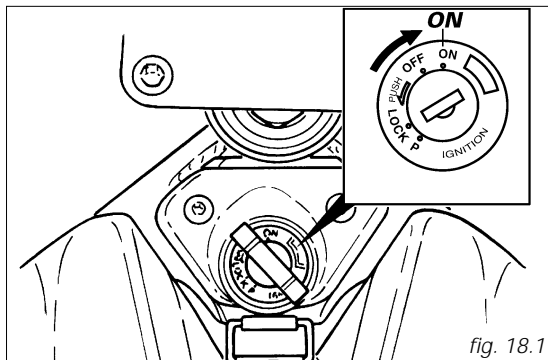
Important

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/95 °F):
Follow the same procedure, however, do not use the fast-idle device.

Cold ambient temperature (below 10 °C/50 °F):
Follow the procedure for "Regular ambient temperature", however allow 5 minutes for the engine to warm up (step 5).
In addition, the carburettor floating chambers are electrically heated through an automatic system.



E

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. 19).



Important

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

Refueling

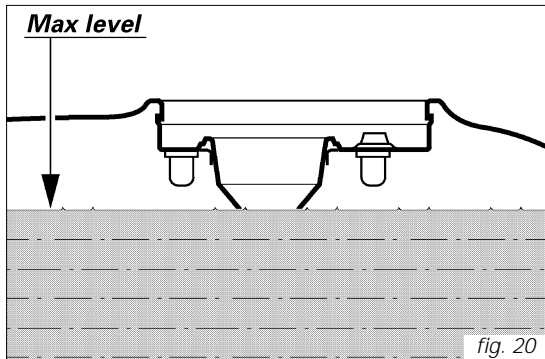
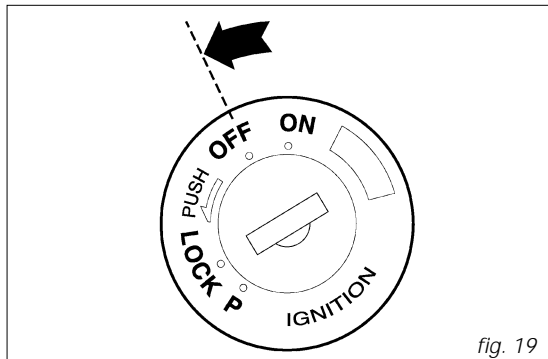
Never overfill the tank when refueling. Fuel should never be touching the rim of filler recess (fig. 20).



Warning

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

E



Parking

Stop the motorcycle, then put it on the side stand to park it (see page 21).

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. 21).

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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.

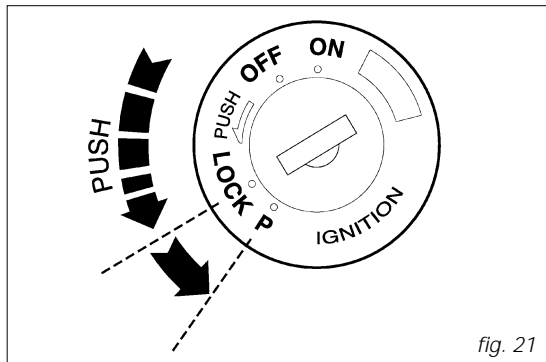


fig. 21

MAINTENANCE

Tool kit and accessories (fig. 22.1)

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 20) then the protective cover (1). Use a coin to unscrew its special screw (2).

The tool bag holds (fig. 22.2)

3) box wrench for spark plugs;
4) tommy bar;
5) double-bit screwdriver;
6) helmet fastening cable.

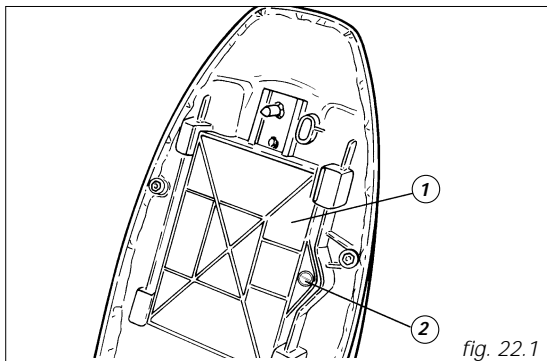


fig. 22.1

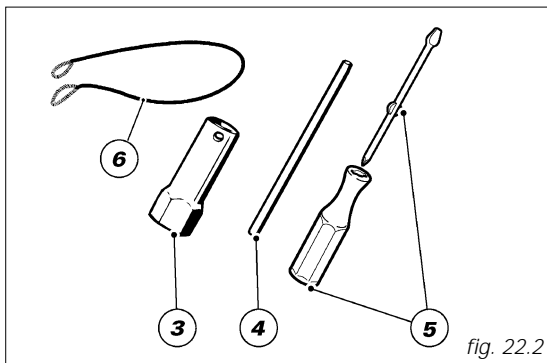


fig. 22.2

Routine maintenance

*The maintenance schedule below specifies maintenance operations to be carried out at regular intervals according to **time (months)** or **distance covered (km or miles)**. It also shows the motorcycle parts requiring special care. Proper maintenance, as specified in the maintenance schedule, ensures long life to your motorcycle, top performance, good reliability and safe riding. The maintenance intervals indicated here are for motorcycles that are not used in demanding conditions, such as riding in town traffic, on dusty ground, long trips on mountain roads, long trips on motorways at high speed, riding in bad weather, and so on. In these cases, maintenance work should be carried out more frequently. Call your local Ducati Dealer or an authorized workshop to obtain more information on your special needs.*

Operation identification symbols:

■) This symbol indicates that the job in question should be entrusted to a Ducati Dealer or authorized workshop where highly trained personnel and special equipment are available.

C) Check and adjust

L) Lubricate and/or grease

P) Clean

S) Replace

V) Check with engine running

Operations	<i>Pre-delivery</i>	<i>After 1000 km/ 621 miles or 6 months</i>	<i>Every 1000 km/ 621 miles</i>	<i>Every 10000 km/ 6,214 miles</i>	<i>Every 20000 km/ 12,427 miles</i>
<i>Spark plugs</i>		<i>C</i>		<i>S</i>	
<i>Carburettor: synchronization and idling adjustment (■)</i>		<i>C</i>		<i>C</i>	
<i>Chain: tensioning and lubrication (■)</i>	<i>C/L</i>	<i>C/L</i>	<i>C/L</i>		
<i>Timing belts (■)</i>		<i>C</i>		<i>C</i>	<i>S</i>
<i>General testing</i>	<i>C</i>	<i>C</i>		<i>C</i>	
<i>Flexible cables</i>	<i>C</i>	<i>C</i>	<i>C</i>		
<i>Clutch and brake hydraulic controls (■)</i>	<i>C</i>	<i>C</i>	<i>C</i>		
<i>Cylinder compression (■)</i>				<i>C</i>	
<i>Wheel hub bearings (■)</i>				<i>C</i>	
<i>Steering head bearing clearance (■)</i>	<i>C</i>	<i>C</i>		<i>C</i>	
<i>Air filter</i>		<i>C</i>		<i>S</i>	
<i>Engine oil intake filter (■)</i>		<i>P</i>			<i>P</i>
<i>Fuel filter (■)</i>		<i>S</i>		<i>S</i>	
<i>Engine oil filter (■)</i>		<i>S</i>		<i>S</i>	

Operations	<i>Pre-delivery</i>	<i>After 1000 km/ 621 miles or 6 months</i>	<i>Every 1000 km/ 621 miles</i>	<i>Every 10000 km/ 6,214 miles</i>	<i>Every 20000 km/ 12,427 miles</i>
<i>Valve clearance (■)</i>				<i>C</i>	
<i>Rear wheel rubber cush drive damper (■)</i>				<i>C</i>	
<i>Signaling and light system</i>	<i>V</i>				
<i>Battery liquid level</i>		<i>C</i>	<i>C</i>		
<i>General lubrication (■)</i>	<i>L</i>	<i>L</i>		<i>L</i>	
<i>Clutch and brake control oil (■)</i>	<i>C</i>	<i>C</i>	<i>C</i>		<i>S</i>
<i>Front fork oil (■)</i>					<i>S</i>
<i>Engine oil (■)</i>	<i>C</i>	<i>S</i>	<i>C</i>	<i>S</i>	
<i>Wear on brake pads (■)</i>		<i>C</i>	<i>C</i>		
<i>Sprocket stop plate (■)</i>				<i>C</i>	
<i>Tyres: wear and pressure</i>	<i>C</i>	<i>C</i>	<i>C</i>		
<i>General cleaning</i>	<i>P</i>				
<i>Fuel tank (■)</i>				<i>P</i>	
<i>Torque of nuts and bolts (■)</i>	<i>C</i>	<i>C</i>		<i>C</i>	

E

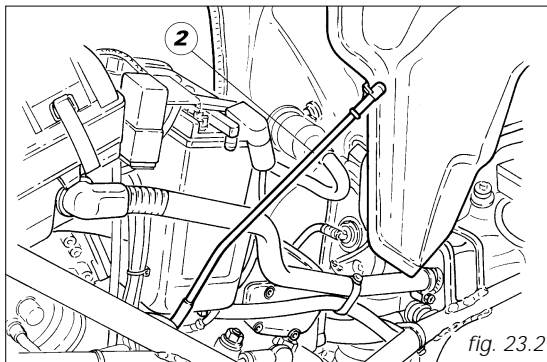
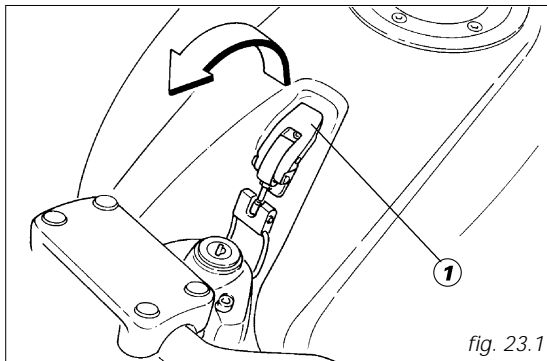
MAIN MAINTENANCE OPERATIONS

Lifting the fuel tank (fig. 23.1)

⚠ Warning Make sure the fuel in the tank is less than 5 litres/1.3 US.Gal. or fuel may leak out through the filler plug breather.

Remove the seat (page 20) and lift the hook (1). Lift the tank and unhook the service rod (2, fig. 23.2) 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.



Changing air filter (fig. 24.1)

Replace the air filter at the required intervals shown in the routine maintenance chart. The air box is accessible after lifting the fuel tank as described on page 35.

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. 24.2) and fit a new one.

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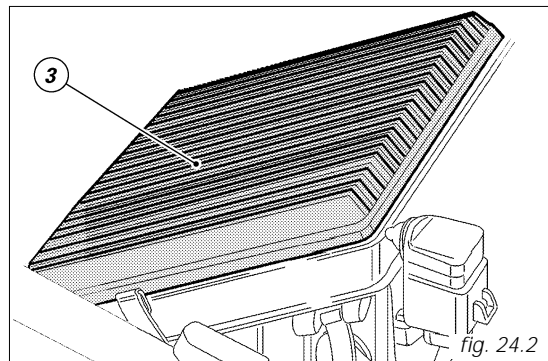
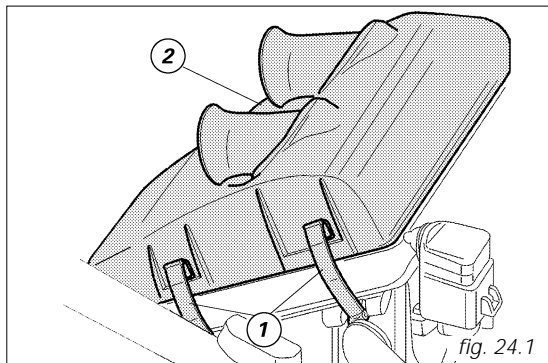
Important

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.



Checking brake and clutch fluid level (fig. 25)

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 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.

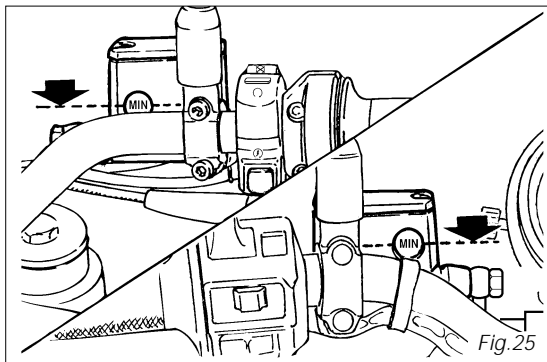
Check seals for proper sealing.

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/0.12 in. above minimum level).



Checking brake pads for wear (fig. 26)

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/0.039 in. thick.

Important

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

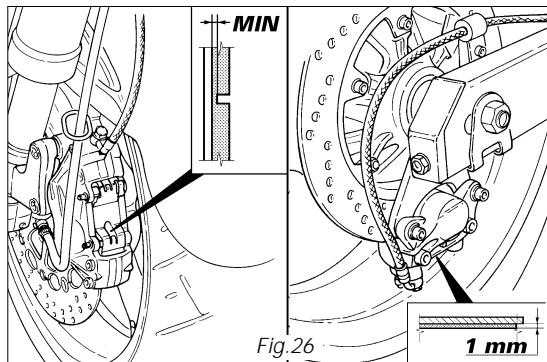


Fig. 26

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. 27) and then grease the cable ends and the pulley.

⚠ Warning
Carefully close the device by sliding the cables onto the 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.

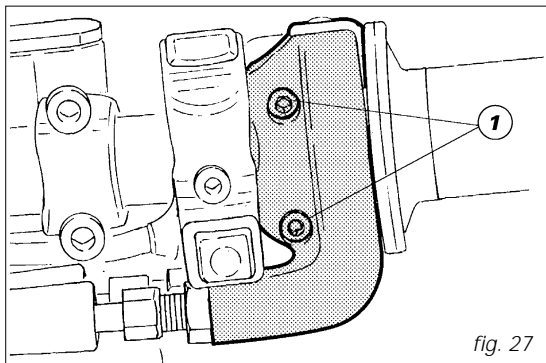


fig. 27

Throttle cable adjustment

The throttle twistgrip must have a free play of 2 - 4 mm/0.08-0.16 in., measured at the edge of the twistgrip and at all positions of the handlebars. If it needs adjusting, use the suitable adjusters (1, fig. 28) provided on the throttle control.

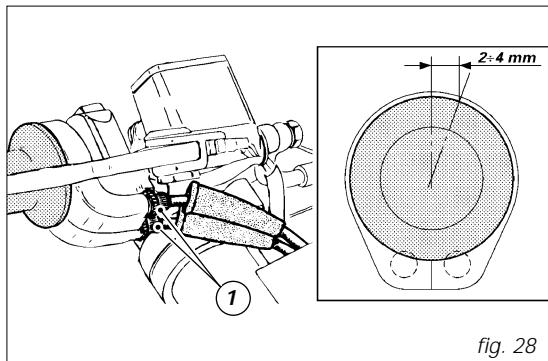


fig. 28

Checking battery liquid level (fig. 29)

Lift the tank to carry out such operation (page 35). Battery liquid level must be maintained between the maximum (**UPPER LEVEL**) and minimum (**LOWER LEVEL**) marks on battery front.

If battery liquid level is too low, remove the caps (1) and top up carefully with distilled water up to the upper level line, using a small syringe or a plastic funnel. When adding distilled water, make sure the breather tube (2) is connected to battery breather outlet. The breather tube must be so placed that it does not kink or twist.

Important

Add only distilled water to the battery. Tap water may shorten battery life.

A kinked or twisted breather tube may lead to overpressure and damage the battery.

Warning

The battery contains sulphuric acid (electrolyte). Avoid contact with skin and eyes as it may cause severe burns. If you spill some electrolyte on your skin, wash the affected area with abundant water and seek medical advice. Electrolyte is poisonous: if you swallow it accidentally, drink abundant milk or water, then eat magnesia, scrambled eggs or drink vegetable oil and seek medical advice without delay.

Always wear adequate protective clothing and a visor when handling the battery. Never switch on a lighter or light a match and so on to check battery fluid level. Do not reverse terminal polarity.

Charging the battery (fig. 29)

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

Disconnect the breather tube (2). Always disconnect the black negative terminal (-) first, and then the red positive terminal (+).

Release the retainers (3) and take the battery out of its mount.

Warning

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

Charge the battery in a ventilated room.

Check the battery liquid level in each cell. If level is low in any of the cells, top up. Note that level should not exceed the maximum line, as it will rise during charging. 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.

Charge the battery at 1.5 A.

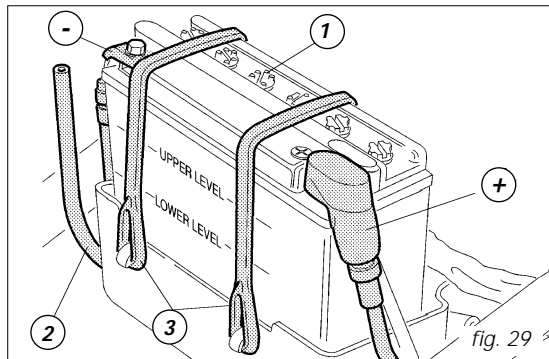
When battery is charged, check electrolyte level in each cell. If it has dropped, top up with distilled water until reaching the upper level.

Refit the caps (1) on the cells and reinstall the battery on its mount and clamp the retainers (3).

Reconnect the breather tube (2) and connect the terminals. Use some grease on the fastening screws to improve conductive capacity.

Warning

Keep the battery out of the reach of children. A low battery will degrade soon if not charged promptly.



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. 30.1):

20-25 mm/0.79-0.99 in.

To adjust chain tension, slacken the nut (1, fig. 30.2) 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.

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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.

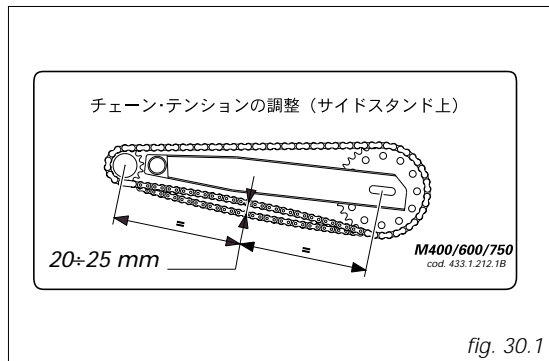


fig. 30.1

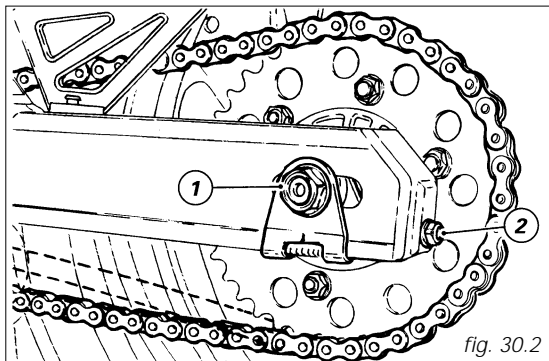


fig. 30.2

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.

Important

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

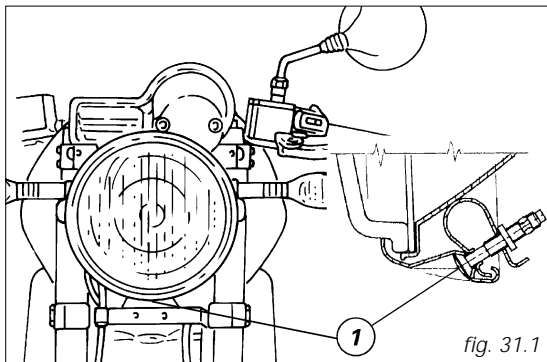
Replacing bulbs

Before replacing a burnt-out bulb, make sure that the new one complies with voltage and wattage as specified on page 58 - "Electric System".

Headlamp (fig. 31.1)

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. 31.2) from the headlamp. Release the clip (3, fig. 31.2) that secures the bulb and remove it from the socket.

Replace the bulb.





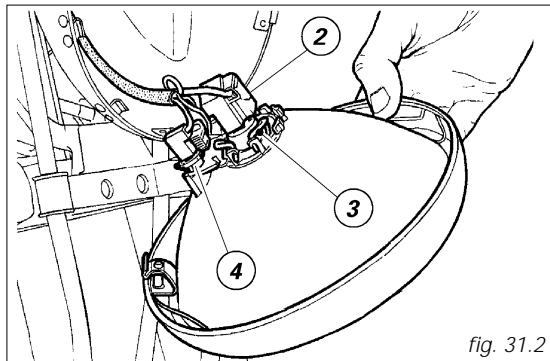
Note

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.

E To change the parking light bulb, withdraw the bulb holder (4, fig. 31.2). 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.



Instrument panel (fig. 32)

Disassemble the instrument panel by unscrewing the two fastening screws (1) with washer (2).

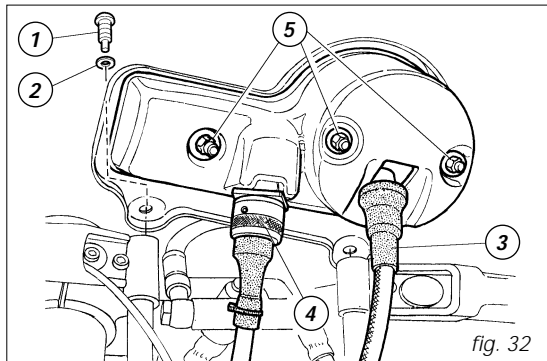
Disconnect the odometer cable (3) and the main wiring connector (4). Undo the three cap nuts (5) fastening the rear cover.

Remove the instrument panel and the rear cover. Replace the burnt bulb with one with equal rating.



Note

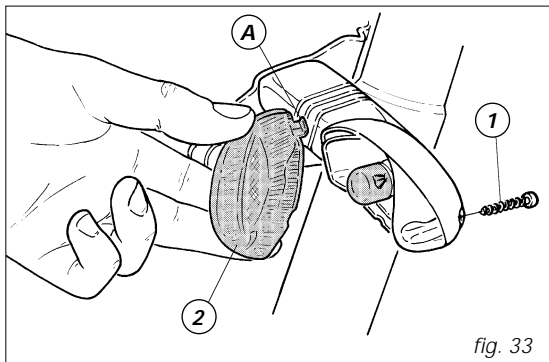
Test the new bulb before refitting the instrument panel elements.



Turn indicators (fig. 33)

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).

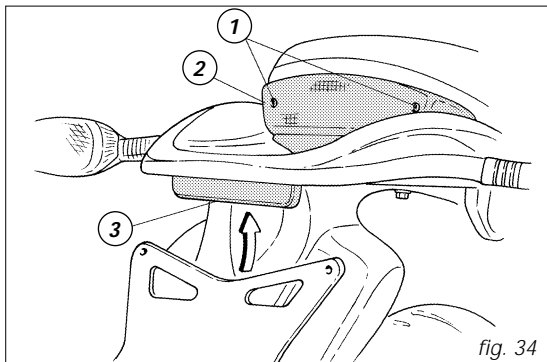


Stop light (fig. 34)

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. 34)

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



Headlamp alignment (fig. 35.1)

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/393.7 in. 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:

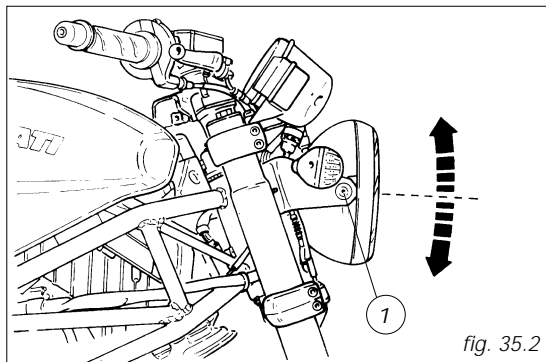
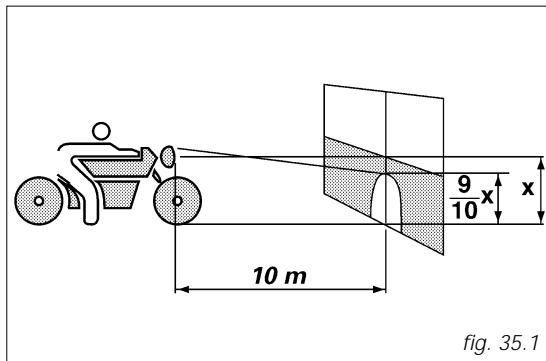
the height of the light spot (measured at the upper limit between dark and lighted-up area) should not exceed $9/10^{\text{th}}$ of the height from ground of headlamp center.

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. 35.2) that secure the headlamp to the side supports.



Tyres

Front pressure

2.1 bar - 2.3 Kg/sq cm (5.07 lb/sq cm)

Rear pressure:

2.2 bar - 2.4 Kg/sq cm (5.29 lb/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.

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. 36) at the point where tread is most worn down. It should not be less than 2 mm/0.078 in. 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.

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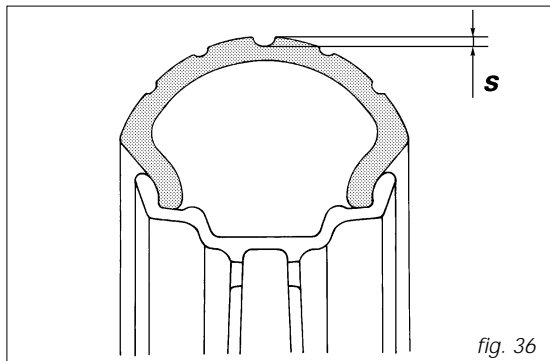


fig. 36

Checking engine oil level (fig. 37)

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 warm. 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 schedule.

Viscosity

SAE 20W-50

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

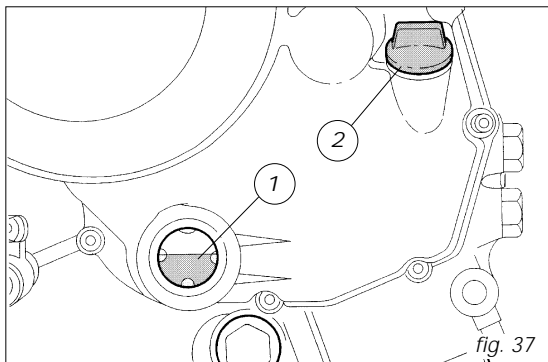


fig. 37

Cleaning and replacing the spark plugs (fig. 38)
 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 caps 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/0.023-0.027 in.

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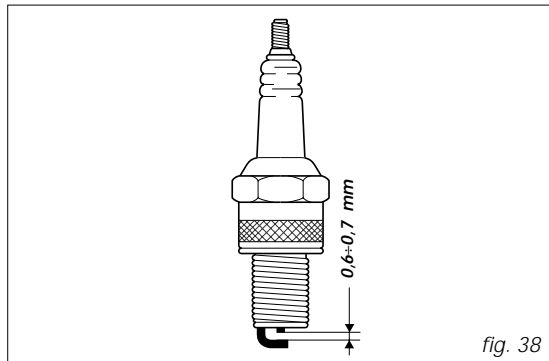
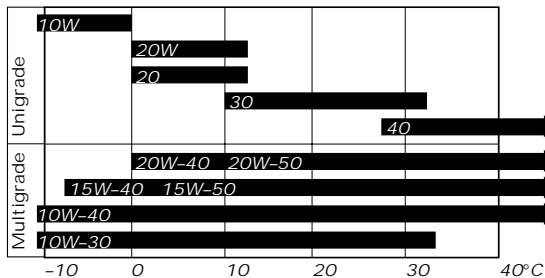


fig. 38

● 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.

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.

Do not use high-pressure or hot water jets. Using water cleaners could cause certain parts - such as front fork, wheel hubs, electric system, front fork seals, air scoops and exhaust silencers - to seize or malfunction and impair the safety features of the motorcycle.

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.

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;

plug with its seal and 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:

174 Kg / 384 lb.

Carrying full load:

318 Kg / 701 lb.

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/in.) (fig. 39)

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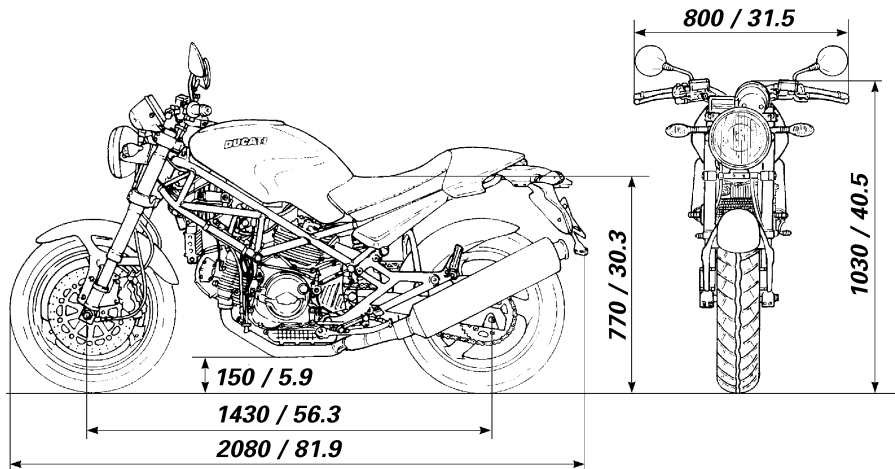


fig. 39

<i>Top-ups</i>	<i>Type of fluid</i>	<i>cu. dm. (liters)/ US Gall.</i>
<i>Fuel tank, including a reserve of 3.5 cu dm (liters) / 0.92 US Gall.</i>	<i>Gasoline 95-98 RON</i>	<i>16.5</i>
<i>Oil sump and oil filter</i>	<i>SHELL Advance Ultra 4</i>	<i>3.1 / 0.82</i>
<i>Front/Rear brake and clutch circuits</i>	<i>SHELL-Advance Brake DOT 4</i>	<i>-</i>
<i>Protectant for electric contacts</i>	<i>SHELL-Advance Contact Cleaner</i>	<i>-</i>
<i>Front fork</i>	<i>SHELL-Advance Fork 7.5 or Donax TA</i>	<i>0.440 / 0.116 (each leg)</i>

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Important

Additives to fuel or lubricants are not allowed.

Engine

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

Bore mm/in.:

70.5 / 2.78

Stroke mm/in.:

51 / 2

Total displacement cu.cm./cu. in.:

398 / 24.29

Compression ratio $\pm 0.5:1$:

10.

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

31.6 kW - 43HP at 10500 rpm.

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

33 Nm at 7500 rpm.

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Important

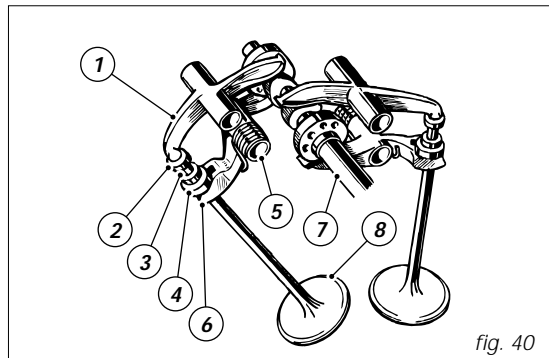
Do not exceed specified speed limits (see page 55) under any running condition.

Timing system

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

Desmodromic timing system (fig. 40)

- 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.



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):
160 Km/h/ - 99 mph;

Speed limits for individual gears (fig. 41)

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

● Important

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

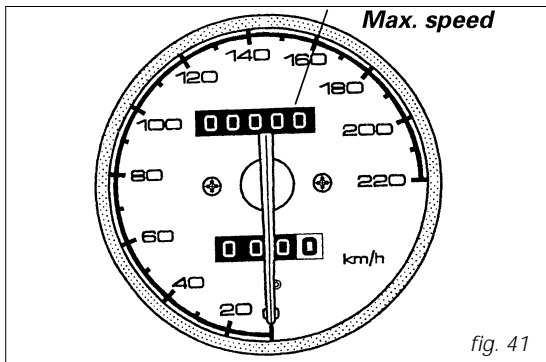


fig. 41

Spark plugs

Make:
CHAMPION
Type:
RL 82 HC

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Brakes

Front brake

Type:

drilled steel disc.

1 disc, left side.

Disc diameter: 320 mm/12.6 in.

Hydraulically operated by a control lever on right handlebar.

Braking surface: 44 sq cm/6.8 sq in.

Brake calipers with separate pistons.

Make and type: BREMBO 30/34-4 pistons.

Friction material: FERIT I/D 450 FF

Master cylinder type: PS 13.

Rear brake

Type: fixed drilled steel disc

Disc diameter: 245 mm/9.64 in.

Hydraulically operated by a pedal on R.H. side

Braking surface: 25 sq cm/3.88 sq in.

Brake caliper: cylinder Ø 32 mm/1.26 in.

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

Multiple-disk clutch in oil-bath;

operated by a control lever on left handlebar.

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

Ratio: 32/73.

Gearbox: 5-speed;

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

Front/rear sprocket ratio: 14/46.

Total gear ratios:

1st gear 16/40

2nd gear 21/36

3rd gear 24/32

4th gear 27/29

5th gear 29/28

Drive chain from gearbox to rear wheel:

Make: DID

Type: 520 VL2.

Size: 5/8"x1/4"

Links: 102.



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 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): 29°

Steering head angle: 23°

Trail mm/in.: 94/3.7.

Wheels

Three-spoke, light-alloy rims.

Front wheel

Make: BREMBO

Dimensions: 3.50x17"

Rear wheel

Make: BREMBO

Dimensions: 4.50x17".

Both wheel spindles can be removed.

Tyres

Front tyre

Tubeless, radial tyre.

Size: 120/60-VR17.

Rear tyre

Tubeless, radial tyre.

Size: 160/60-VR17.

Suspensions

Front suspension

Hydraulic upside-down fork.

Stanchion diameter: 43 mm / 1.7 in.

Travel along leg axis: 120 mm / 4.72 in.

Rear

Of the progressive type, thanks to a rocker arm connecting frame and upper pivot point of the shock absorber and an arch connected at the bottom to swingarm. The lozer part of shock absorber is connected via a pivot pin to a steel floating swingarm. The swingarm hinges on a pivot pin passing through the engine. The whole system gives the bike excellent stability.

Travel: 65 mm / 2.55 in.

Rear wheel travel: 144 mm / 5.67 in.



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-16 A**.

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 43 for relevant instructions.

Fuses

The fuse box is located under the seat.

To expose the fuses, take off the box protective cover (1, fig. 42.1). Mounting position and ampere capacity are marked on it.

Only 6 of the fuses are connected. There are two spare fuses.

The fuse located on a side of the battery (fig. 42.3) protects the electronic regulator.

Remove the fuse cap (2) to expose it.

A blown fuse is identified by the interrupted inner filament (3, fig. 42.2).



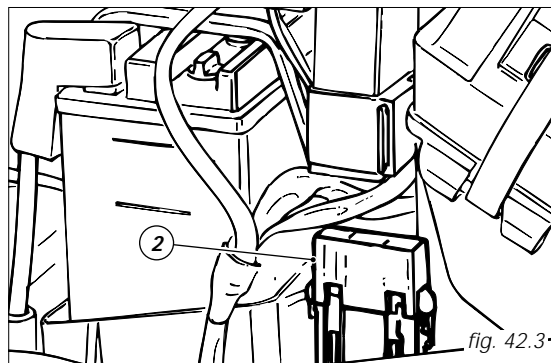
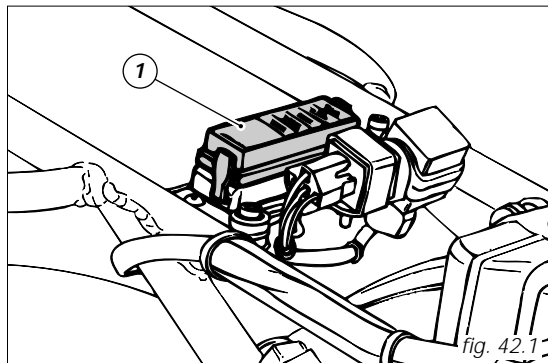
Important

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

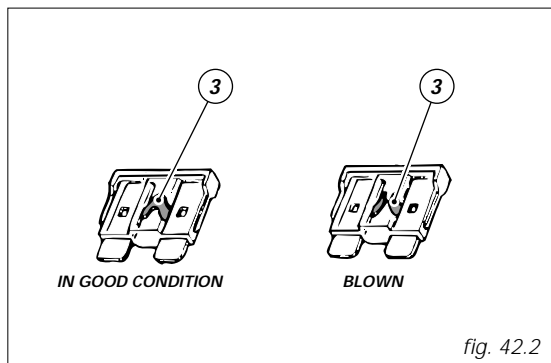


Warning

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.



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Legend of the wiring diagram of electric system/ignition

- 1) Headlamp
- 2) Front right-turn indicator
- 3) Front left-turn indicator
- 4) Horn
- 5) Number plate light
- 6) Odometer
- 7) Instrument panel warning lights
- 8) Regulator
- 9) Key-operated switch
- 10) R.H. twistgrip switch
- 11) L.H. light switch
- 12) Front STOP light switch
- 13) Rear STOP light switch
- 14) Neutral light switch
- 15) Oil pressure sensor
- 16) Side stand switch
- 17) Fuel level indicator
- 18) Rear, left-turn indicator
- 19) Rear, right-turn indicator
- 20) Flasher
- 21) Generator
- 22) Ignition pick-up
- 23) Ignition module
- 24) Tail light
- 25) Fuse holder
- 26) Horizontal cylinder coil
- 27) Vertical cylinder coil
- 28) Horizontal cylinder spark plug
- 29) Vertical cylinder spark plug
- 30) Fuse box

- 31) Starter motor
- 32) Starter solenoid
- 33) Battery
- 34) Main relay
- 35) Heater
- 36) Thermal cutout

Wire color coding

P Pink

GR-Bk Grey-Black

Y-G Yellow-Green

G Green

R-G Red-Green

W-R White-Red

O-Bk Orange-Black

V-Bk Violet-Black

Y Yellow

W-B White-Blue

BN Brown

G-W Green-White

O-W Orange-White

R-Bk Red-Black

R-B Red-Blue

GR-R Grey-Red

R Red

G-Bk Green-Black

V Violet

Y-Bk Yellow-Black

GR Grey

G-B Green-Blue

Lb Light blue

Bk Black

Legend of fuse box (30)

<i>Pos.</i>	<i>Description</i>	<i>Rat.</i>
1-9	Main switch	30 A
2-10	Ignition, regulator	7.5 A
3-11	High and low beams	15 A
4-12	Turn indicators, warning lights, tail lights and instrument panel lights	7.5 A
5-13	Stop, warning horn	7.5 A
6-14	Carburetor heater	7.5 A
7-15	Spare fuse	30 A
8-16	Spare fuse	7.5 A

**Note**

Wiring diagram is at the end of this manual.

MONSTER VERSIONS

400

Available in the following colors:

Ducati red 473.101;

yellow 473.201;

metallized grey 291.601;

metallized black 291.500;

metallized blue 291.800.

Golden frame and wheel rims.

Metallic

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

- front mudguard painted matt black, not varnished;
- frame, arch and wheel rims come in black.
- footpegs feature no rubber pads;
- seat cover not supplied;
- fuel tank comes in:
 - metallic grey;
 - metallic black;
 - metallic dark blue;
 - metallic purple;
 - metallic red;
 - metallic blue.

Routine maintenance record

<i>km/miles</i>	<i>Ducati Service Name</i>	<i>Mileage</i>	<i>Date</i>
<i>1,000/621</i>			
<i>10,000/6,214</i>			
<i>20,000/12,427</i>			
<i>30,000/18,641</i>			
<i>40,000/24,855</i>			
<i>50,000/31,068</i>			

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