Owner's manual

DUCATISUPERSPORT ()

Hearty welcome among Ducati fans! Please accept out 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. For any servicing or suggestions you might need, please contact our authorized service centers.

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

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 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.

A 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.

O 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 strap at the rear of the seat.

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 vapors. 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 385 Kg/851 lb.

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 indicated at page 55 and that they are in good condition.

Identification data

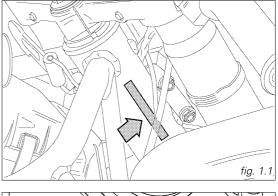
All Ducati motorcycles have two identification numbers, for frame (fig. 1.1) and engine (fig. 1.2).

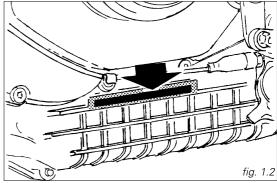
Frame number

Engine number



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





Ξ

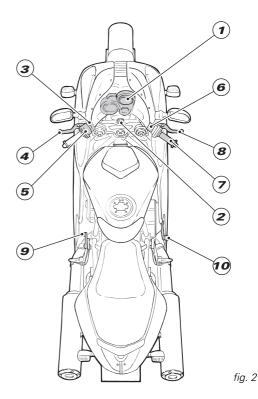
CONTROLS

Warning

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

Position of motorcycle controls (fig. 2)

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



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) Engine revolution meter (rpm)

Indicates engine rpm.

3) Green light N.

Comes on when gearbox is in neutral.

4) Yellow light **D**.

Comes on when there are about 4 liters/1.05 US Gall. fuel left in the tank

5) Green light ⇔⇒.

Comes on and flashes when a turn indicator is on.

6) Red light 10.

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.

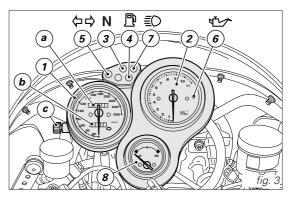
7) Blue light - ID . Comes on when high beam is on. 8) Oil temperature indicator. Shows temperature of engine oil.



Important

Stop the engine if it reaches maximum temperature or it may suffer severe damage.

When you switch on the parking light, the panel lights will come on as well.



Kevs (fia. 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.

Key-operated ignition switch and steering lock

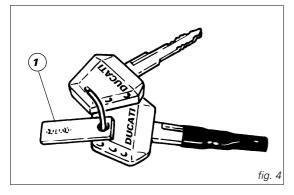
(fia. 5) It is located in front of the fuel tank and has four positions:

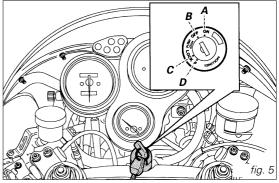
- A) **ON:** lights and engine on:
- B) OFF: lights and engine off:
- C) LOCK: steering locked;
- D) **P:** parking light and steering lock.



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.





Left switch (fig. 6)

1) Switch, light switch, 3 positions: Down $\mathbf{O} = lights off$: Centre $\mathfrak{DG} =$ front and rear parking light, number plate light and panel lights on: Up \bigotimes = headlamp, front and rear parking light, number

plate light and panel lights on.

Note

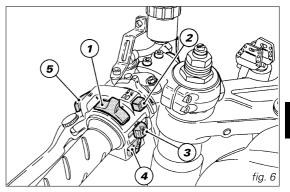
This device is not fitted on the Australia and Japan versions.

2) Dip switch, light dip switch, two positions: position $\blacksquare \blacksquare \bigcirc = low beam on;$ position \neg \blacksquare \bigcirc = high beam on.

3) Switch $\Leftrightarrow = 3$ -position turn indicator: centre position = OFF: position $\Leftrightarrow = left turn:$ position \Rightarrow = right turn. To cancel turn indicators, return switch to central position and push in.

4) Button = warning horn.

5) Button $\equiv 0 = high-beam flasher.$



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.

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.



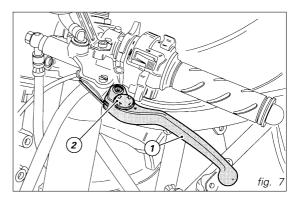
Warning

A 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. 8)

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

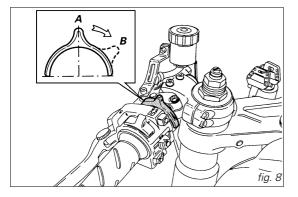
A) (vertical) = closed

B) fully open.

The lever can be opened and closed gradually to adjust speed until engine is fully warm (see page 28).

Important

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



Right switch (fig. 9) G) Switch for **ENGINE STOP**, two positions: position \cap (**RUN**) = run. position \boxtimes (**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 \bigcirc position to enable starting.

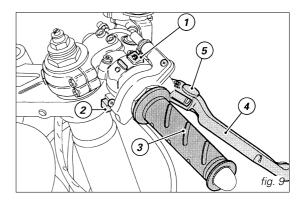
Important

Stopping the engine using switch (1) when riding with the lights on and leaving the ignition key in the **ON** position, may run the battery flat as the lights will remain on.

2) Button \mathfrak{O} = engine start

Throttle twistgrip (fig. 9)

The twistgrip (3) on the right handlebar opens the throttles. 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.

The control lever features a dial adjuster (5) for lever distance from the twistgrip on handlebar.

Warning

Please read the instructions on pages 28 / 30 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.

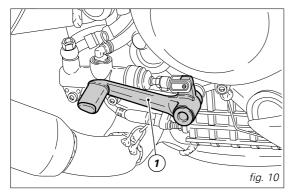
Gear change pedal (fig. 11.1)

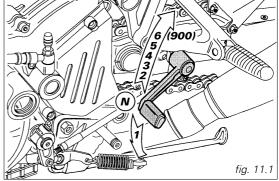
The gear change pedal is at rest when in the central position \mathbf{N} , is moved up and down to change gears and then returns to the central position.

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

up = lift the pedal to engage the 2nd gear and then the 3rd, 4th, 5th and 6th gear (6th gear: 900 only).

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





Setting the gear change and rear brake pedals

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

lock linkage (1) and loosen the check nuts (2) and (3).



Nut (2) has a left-hand thread.

F

Apply an open-end wrench to the hexagon end of linkage (1) and rotate linkage 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.

Tightenloosen check nut (4).

Work pedal by hand to make sure it has 1.5 - 2

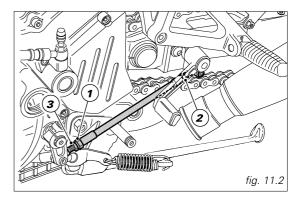
mm/0.059-0.078 in. free play before brake begins to bite.

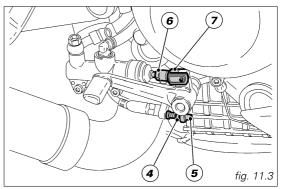
If not so, set the length of pump linkage as follows.

Loosen the check nut (6) on pump 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.

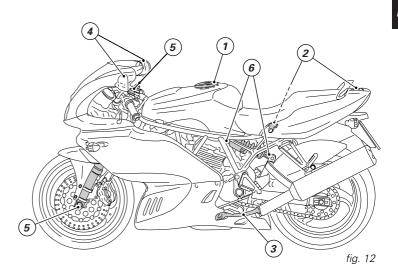




MAIN COMPONENTS AND DEVICES

Location (fig. 12)

Tank filler plug.
 Seat catch and helmet hooks.
 Side stand.
 Rear view mirrors.
 Front fork adjusters (900).
 Shock absorber adjusters.



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).



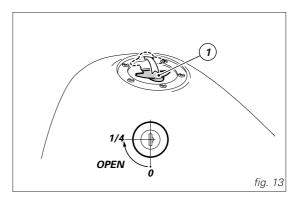
Note

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.

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Warning

Always make sure you have properly refitted (see page 32) and closed the plug after each refueling.



Seat catch and helmet hooks

Opening (fig. 14.1)

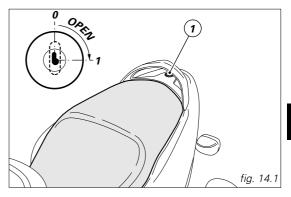
Fit the ignition key into the lock (1) and turn the key clockwise until the rear end of the seat lifts up. Pull the seat backwards to slide it off its front holders At the front end of the compartment underneath the seat. there are the helmet hooks (2. fig. 14.2) for rider and pillion rider helmets. Hook the helmet straps onto the hooks and leave the helmets hanging outside. They will be locked safely when you refit the seat.

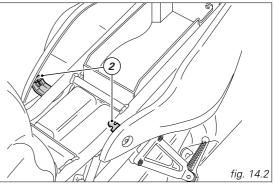
Warning

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

Closina

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-bolt and push down on the rear end of the seat until vou hear the catch click. Make sure the seat is firmly secured to the frame and take the key out of the lock (1).





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

Warning

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

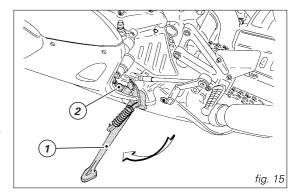
To move the side stand to its rest position (horizontal position), tilt the motorcycle to the right and, at the same time, lift the stand (1) with your foot.

O Note

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



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



Front fork adjusters

The front fork used on the 900 model has rebound and compression damping adjusters.

This adjustment is done using the outer adjusters:

1) (fig. 16.1) to adjust rebound damping;

2) (fig. 16.1) to adjust inner springs preload;

3) (fig. 16.2) to adjust compression damping.

Turn the adjuster (1) on fork leg top with a flat screwdriver to adjust rebound damping. To reach the adjuster (3), insert a screwdriver into the passing hole on the wheel spindle at fork leg axis. 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: 11 clicks;

rebound: 7 clicks.

The setting range is 14 clicks for rebound and 16 clicks for compression. The 14th and 16th clicks give the softest damping. To change the preload of the spring inside each fork leg turn the hex. adjusting nut (2) with a 22-mm hexagon wrench.

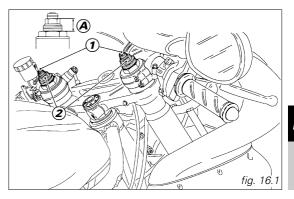
Height (A, fig. 16.1) determines preload and may vary from 25/0.98 to 10 mm/0.39 in.

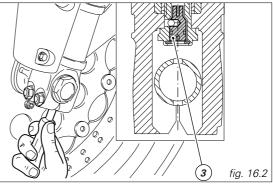
Factory setting is 18 mm/0.70 in.



Important

Adjust both fork legs to same settings.





900

Shock absorber adjusters (fig. 17.1)

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

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

The adjuster (2) on the shock absorber expansion reservoir on the left hand side of frame controls compression damping.

Turning the adjusters (1 and 2) clockwise gives harder damping **H**, turning anticlockwise gives softer damping

S.

STANDARD setting:

turn the adjusters (1 and 2) all the way in (clockwise) then slacken them 1 turn.

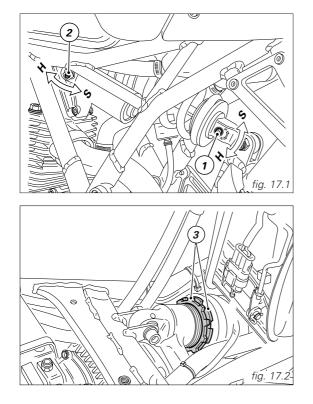
The two ring nuts (3, fig. 17.2) located on the top section of the shock absorber control outer spring preload. To change spring preload, turn the upper ring nut. Then turn the lower ring nut clockwise or anticlockwise to increase or decrease spring preload as required. STANDARD spring length: 176 mm/6.93 in.

Warning

Use a specific pin wrench only to turn the preload adjusting ring nut. Be careful when turning the nut with the wrench, as the pin may slip out of the 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 proper preload to improve motorcycle handling and keep safe clearance from the ground. You may find that rebound damping needs adjusting as well.



DIRECTIONS FOR USE

Running-in recommendations

Max. rotation speed (fig. 18)

Rotation speeds (rpm) for running-in period and during standard use 1) up to 1000 km/620 miles;

2) from 1000 to 2500 km/620 to 1550 miles; 3) after 2500 km/1550 miles.

Up to 1000 km/620 miles

During the first 1000 km/620 miles, keep an eye on the revolution meter. The indicator must not exceed: 5500-6000 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/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 and tighten chain as required.

From 1000 to 2500 km/620 to 1550 miles

At this point, you can squeeze some more power out of your engine, being careful, however, to never exceed 7000 rpm.

Important

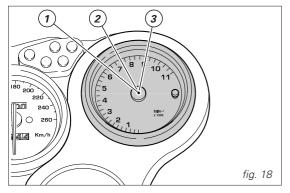
During the whole running-in period, the maintenance and service rules recommended in this manual should be observed carefully. Have the service inspections performed as recommended in the Warranty Card.

Failure to comply with these rules will release Ducati Motor S.p.A. from any liability whatsoever for resulting engine damage or shorter engine life.

After 2500 km/1550 miles

After running-in, never exceed the following values during the motorcycle standard use: 8500 rpm (750); 7500 rpm (900).

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



Pre-ride checks

Warning

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

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

Fuel level in the tank

Check fuel level in the tank Fill tank if needed (page 32).

Engine oil level

Check oil level in the sump through the sight glass. Top up if needed (page 57).

Brake and clutch fluid

Check fluid level in the relevant reservoirs

Type condition

Check tyre pressure and condition (page 55).

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 50).

Kev-operated locks

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

Stand

Make sure side stand operates smoothly and is in the correct position (page 22).

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.

Regular ambient temperature (10 to 35 °C/50 to 95 °F); 1) Move the ignition key to **ON** (fig. 19.1). Make sure both the green light **N** and the red light both the instrument panel come on.

Important

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



Warning

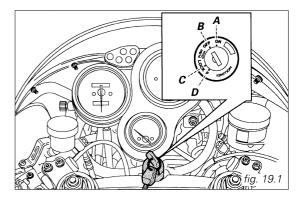
The side stand must be fully up (in a horizontal position) as its safety sensor prevents engine start when down

2) Move the cold start lever to the B position (fig. 19.2). 3) Check that the stop switch (1, fig. 19.3) is positioned to \cap (**RUN**), then press the starter button (2). Let the engine start without using the throttle control.



Important

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



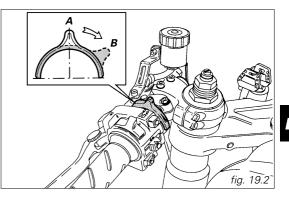
4) Move the cold start lever to the vertical position (A) to let engine idle at about 1400-1500 rpm.

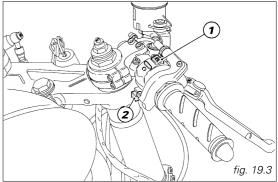
Important Do not rev up the engine when it is cold. Allow some time for oil to reach all points that need lubricating.

5) As the engine warms up, move the cold start lever gradually towards the vertical position (A). Once fully warm, the engine should hold idling rpm with the cold start shut down.

High ambient temperature (over 35 °C/95 °F): Follow the same procedure, however, do not use the cold start 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 (see 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 up, close the throttle to slow down engine,

disengage the clutch, lift the gear change lever and let go of clutch lever.

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

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

To switch the engine off, simply turn the key to **OFF** (page 12).

Important

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

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.

Parking

Stop and park the motorcycle on the side stand (see page 22).

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

Important

Do not leave the key turned to **P** for long periods or the battery will run down.

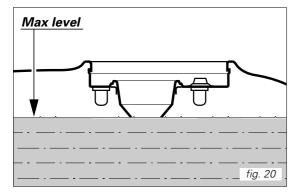
Never leave the ignition key in the switch when you are leaving vour bike unattended.

Refueling

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



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



MAINTENANCE

Tool kit and accessories (fig. 21)

Stored in the compartment under the seat is a bag (1) that holds:

an Owner's manual;

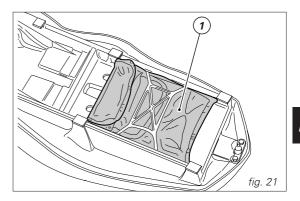
a helmet fastening cable;

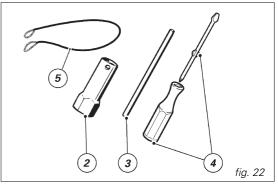
a tool kit for normal maintenance and checks to be performed by the user (placed in bag pocket).

To reach this compartment, the seat must be removed by opening the catch (page 21).

The tool bag holds (fig. 22):

Box wrench for spark plugs (2). Tommy bar (3). Double-bit screwdriver (4). Helmet fastening cable (5).





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	Pre- delivery	After 1000 km/ 620 miles or 6 months	Every 1000 km/ 620 miles	Every 10000 km/ 6200 miles	Every 20000km/ 12400 miles
Spark plugs		С		S	
Chain: tensioning and lubrication (\blacksquare)	C/L	C/L	C/L		
Timing belts ()		С		С	S
General testing	С	С		С	
Bowden cables	С	С	С		
Clutch and brake hydraulic controls (■)	С	С	С		
Cylinder compression ()				С	
Throttle body: synchronization and idling adjustment		С		С	
Wheel hub bearings (■)				С	
Steering head bearing clearance ()	С	С		С	
Air filter		С		S	
Engine oil intake filter (🔳)		Р			Р
Fuel filter (■)		S		S	
Engine oil filter (■)		S		S	

Operations	Pre- delivery	After 1000 km/ 620 miles or 6 months	Every 1000 km/ 620 miles	Every 10000 km/ 6200 miles	Every 20000km/ 12400 miles
Valve clearance (■)				С	
Rear wheel rubber cush drive damper (\blacksquare)				С	
Light system and indicators	V				
Battery fluid level		С	С		
General lubrication (■)	L	L		L	
Clutch and brake fluid (■)	С	С	С		S
Front fork oil (🔳)					S
Engine oil (■)	С	S	С	S	
Wear on brake pads (■)		С	С		
Front sprocket stop plate (■)				С	
Tyres: wear and pressure	С	С	С		
General cleaning	Р				
Fuel tank ()				Р	
Torque of nuts and bolts (■)	С	С		С	

MAIN MAINTENANCE OPERATIONS

Removing the fairing

Some servicing operations need the motorcycle fairing to be removed.



Warning

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



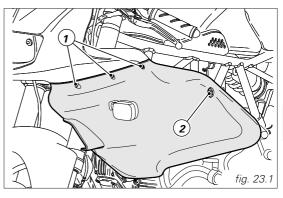
Important

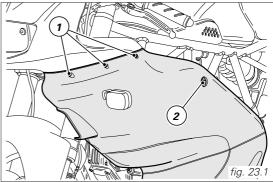
At reassembly always use nylon washers when tightening fastening screws, not to damage painted parts and Plexiglas windproof cover. Some fastening screws are of the self-tapping type; do not overtighten, otherwise threading might damage thus avoiding further use.

Side body panels

Unscrew the three screws (1, fig. 23.1) that hold each body panel to the headlamp fairing.

Unscrew the screw (2) that holds each body panel to the frame.



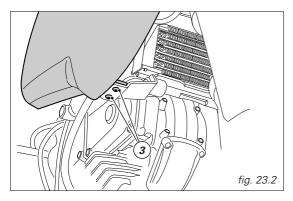


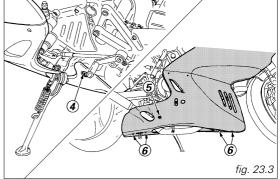
Half-faired version (fig. 23.2)

Unscrew the screw (3) that holds each body panel to the lower support bracket. Disconnect the indicator connectors and remove the body panels.

Fully-faired version (fig. 23.3)

Unscrew the screw (4) that holds the left body panel to the side stand fixing plate. Unscrew the screw (5) that holds the right body panel to the rear brake pedal shaft. Disconnect the indicator connectors. Unscrew the four screws (6) that join the body panels together at the bottom end and remove the body panels. Omit this latter step if you wish to remove both body panels together. Simply slide them off from under the motorcycle. Be sure not to force them apart to avoid damage.



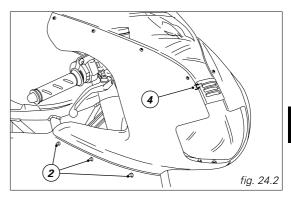


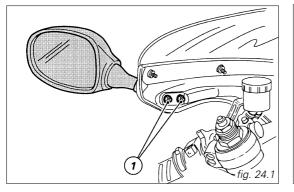
Headlamp fairing

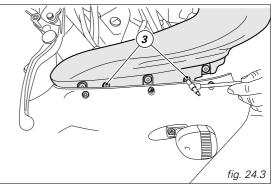
Unscrew the two nuts (1, fig. 24.1) that hold the rear view mirrors to the headlamp fairing and remove the rear view mirrors.

Unscrew the three screws (2, fig. 24.2) that hold each body panel to the headlamp fairing. Move the body panels slightly apart and unscrew the four screws (3, fig. 24.3) that fix the headlamp fairing to headlamp subframe on both sides.

Lift the headlamp off its front fastening pin (4, fig. 24.2) and over the headlamp.







Lifting the fuel tank (fig. 25.2)

Remove the seat (see page 21). Pull the clip (1, fig. 25.1) upwards to disengage it from the tank catch.

Lift the tank and unhook the service rod (2) from its retainer (3).

Place the tank onto the rod (2) fitting rod end into the hole in frame cross-member.

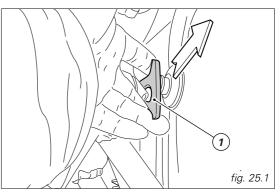
When finished, reverse the above procedure to refit all the parts you have removed.

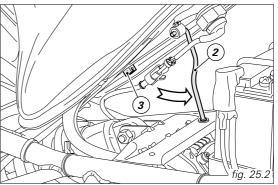
Warning

Make sure the fuel in the tank is less than 5 litres/1.32 US Gall. (the reserve light on the instrument panel should be on) or fuel may leak out through the filler plug breather.

Lift tank just enough to pull out service rod. Do not lift tank exceedingly or you may damage the fuel sensor wire and the fuel lines.

When lowering the tank, be sure the fuel lines are not squeezed and the fuel sensor wire is not pushed too close to vertical cylinder head.





Changing the air filter (fig. 26.1)

Replace air filter at the required intervals shown in the routine maintenance chart (see page 35). The air box is accessible after lifting the fuel tank.

Undo the clips (1) of the cover on both sides of the air box, then remove cover (2).

Remove the filter (3, fig. 26.2) and fit a new one.

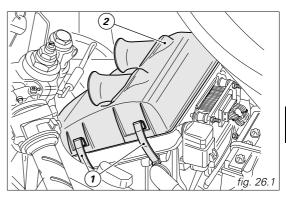
Important

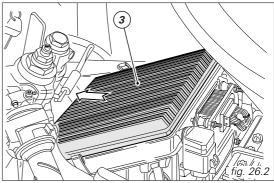
A clogged filter will reduce air intake, increase fuel consumption, reduce engine power, and foul the spark plugs. Do not use the motorcycle without filter or suspended matters could get into the engine and cause damage.

Install the filter properly into its seat in the air box as shown in figure 26.2 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

Fluid level should never fall below the **MIN** mark on each reservoir (fig. 27.1, 27.2 and 27.3). 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.

Ξ

Important

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

Brake system

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

A

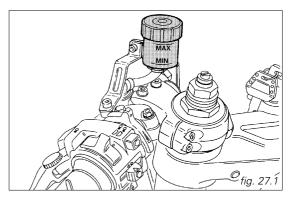
Warning

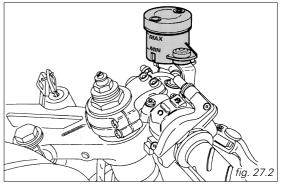
Brake and clutch fluid and will damage paintwork and plastic parts if accidentally spilled.

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. 28)

Front brake

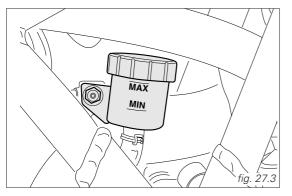
To facilitate inspection without removing the pads from the calipers, brake pads have a wear mark. If the grooves in the friction material are still visible, the pad is still in good condition.

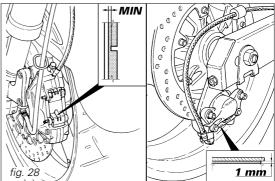
Rear brake

The friction material on each pad should be at least 1 mm/0.039 in. thick.

Important

Have the brake pads replaced at a Ducati Dealer or authorized workshop.





Lubricating cables and joints

The condition of the outer sheaths of the throttle and cold start 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 Bowden cables with SHELL Advance Grease or Retinax LX2 at regular intervals.

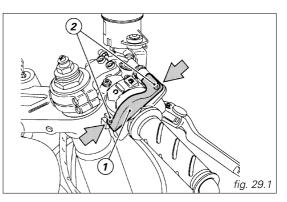
For the throttle cable, it is best to remove the cover (1, fig. 29.1) by unscrewing the two fastening screws (2) and then grease the cable end and the pulley.

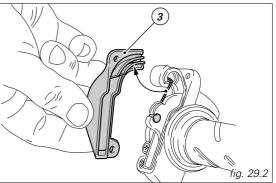
Warning

When refitting the cover, be sure to slide the cable properly onto the suitable pulley and inside the guide in the cover (3, fig. 29.2).

Refit the cover and tighten the screws (2).

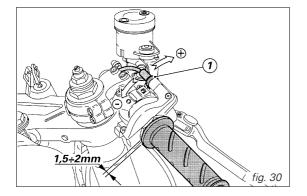
To ensure smooth operation of side stand joint, clean off any dirt and apply SHELL Alvania R3 at all points exposed to friction.





Throttle cable adjustment

The throttle twistgrip must have a free play of 1.5 - 2 mm/0.059-0.078 in. measured at the edge of the twistgrip, at all positions of the handlebars. If it needs adjusting, use the suitable adjuster (1, fig. 30) provided on the throttle control.



Checking battery electrolyte level (fig. 31)

You will need to lift the tank (page 40) before you can check battery liquid level.

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, eat some 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. 31)

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 (+).

Undo the straps (3) and remove the battery.

War

Warning

Batteries develop explosive gases: keep battery 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 **(UPPER LEVEL)**, 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, reinstall the battery on its mount and secure it with its straps (3).

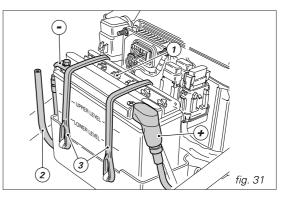
Reconnect the breather tube (2).

Connect the terminals. Use some grease on the fastening screws to improve conductive capacity.



Warning

A low battery will degrade soon if not charged promptly.



Chain adjustment

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

Put motorcycle on the side stand and push the chain up pressing with a finger at mid-length of swingarm. The lower stretch of chain must have a slack of 25 mm/0.98 in. (fig. 32.1).

On 750 models, chain tension is adjusted as follows: Slacken the nut (1, fig. 32.2) of the wheel spindle,

tighten (turn clockwise) or slacken the screw (2) on either side of the swingarm equally to increase or reduce chain tension. If you are slackening the chain, you will have to push the wheel forward.

To adjust chain tension on 900 models, slacken the nuts (1, fig. 32.3) on both sides of wheel spindle.

Slacken the check nut (2) and slacken (turn clockwise) or tighten the screw (3) on either side of the swingarm equally to increase or reduce chain tension. If you are slackening the chain, you will have to push the wheel forward.

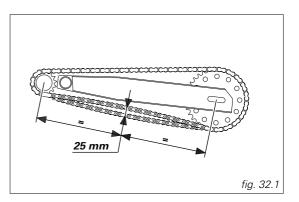
Important

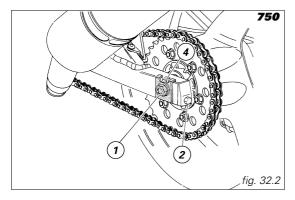
Improper chain tension will lead to early wear of transmission parts.

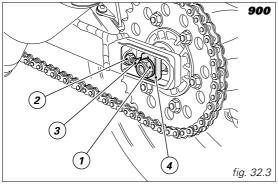
Make sure you have adjusted to the same setting marks on both sides of the swingarm. Refer to pointer on slider (4, fig. 32.2, 32.3). This will ensure perfect wheel alignment.

Grease the thread of the wheel spindle nut (1) with SHELL Retinax HDX2 grease and torque nut to 63 Nm.

Grease the threads of adjusting screws (3) with SHELL Alvania R3 grease and torque check nuts (2) 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 any solvent other than those specific for OR chains or washed using steam or water jets. After cleaning, blow the chain dry or dry it using absorbent material and apply SHELL Advance Chain or Advance Teflon Chain on each link.

Important

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

Replacing bulbs

Before replacing a burnt-out bulb, make sure that the new one complies with voltage and wattage as specified on page 68. "Electric System", for that lighting device. Always test new lamp before refitting the parts you have removed

Headlamp

To gain access to headlamp bulbs you will need to work behind the headlamp fairing. Remove connector (1, fig. 33.1) from the bulb. Pull the tab (A) to remove the protective cap. Release the clip (2, fig. 33.2) that holds the bulb in place and take the bulb out of its socket. Fit a new bulb

Note

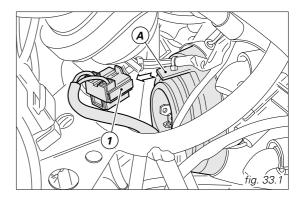
Be careful to hold the new bulb at the base only. Never touch the transparent body with your fingers or it will blacken resulting in reduced bulb brilliancy.

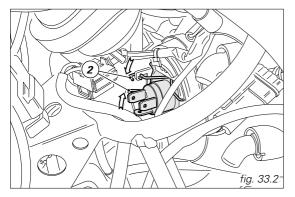
Reassembly

Insert the locating peas of the bulb base into their seats to obtain correct alignment.

Hook the clip (2) to the headlamp holders; reconnect the connector (1) you have detached previously and refit the rubber cover

The parking light bulb is fitted on the top section of the headlamp body. To change it, pull out the bulb holder (3, fig. 33.3) from headlamp body. Remove the bulb and fit a new one.



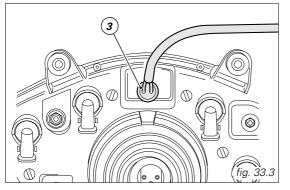


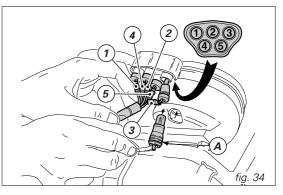
Instrument panel (fig. 34)

Remove the headlamp fairing to reach the instrument panel bulbs (see page 39). Extract the lamp holder from behind the instrument and pull out the bulb from its holder to replace it. The bulb holder cables are numbered to avoid confusion in the event more bulbs need replacing at the same time. Be sure to match the numbers marked on the connectors in the instrument panel.

Note

The bulb holders of the instrument panel lights have a tang (A) to aid removal without risking to tear the cables.





Turn indicators (fig. 35)

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

The bulb is of the banjo-type: press and rotate anticlockwise to remove; fit the spare bulb by pressing and turning clockwise until it clicks.

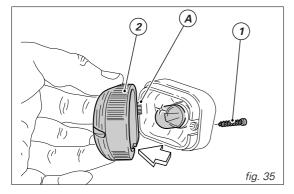
Refit the glass sliding the small tab (A) into the suitable slot in the indicator body and tighten the screw (1).

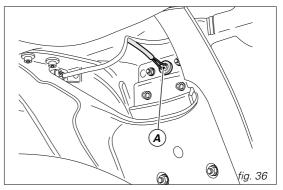
Number plate light (fig. 36)

To expose the number plate light bulb, withdraw the lamp holder from the number plate holder, then extract the bulb and replace it.

Note

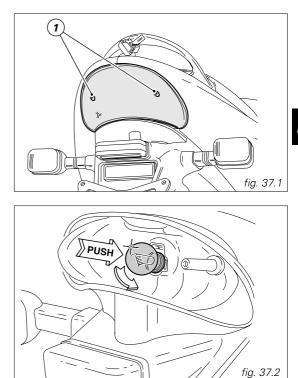
The bulb holder has a tang (A) to aid removal from number plate holder without risking to tear the cables.





Stop light

To replace the stop and parking light bulb, unscrew the two screws (1, fig. 37.1) that secure the glass and remove glass. The bulb is of the banjo-type: press and rotate anti-clockwise to remove; fit the spare bulb by pressing and turning clockwise until it clicks (fig. 37.2). Refit the glass and tighten the screws (1).

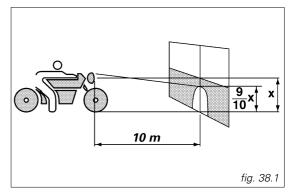


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Beam setting (fig. 38.1)

When checking beam setting, put the motorcycle upright. Tyres should be inflated at the correct pressure and one person should be sitting astride the motorcycle, keeping it at right angles to its longitudinal axis. Place the motorcycle opposite a wall or a screen, 10 meters/33 feet 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 9/10th of the height from ground of headlamp center.



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Note

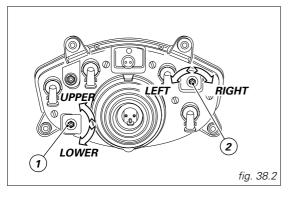
The procedure described here is in compliance with the "Italian Standard" establishing the maximum height of the light beam. Owners in other countries will adapt said procedure to the provisions in force in their countries.

The height of the light beam can be corrected using

the screw (1, fig. 38.2) on the left side of the headlamp. Turn the screw clockwise to lower the beam, anticlockwise to raise it.

The side position of the headlamp is adjusted using

the adjusting screw (2, fig. 38.2) on the right side of headlamp. Turn the screw clockwise to move the beam to the right, anticlockwise to move it to the left.



Tyre pressures

Front tyre: 2.1-2.2 bar Rear tyre: 2.1-2.3 bar

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 vou find low pressure on one tyre, check the tyre for punctures.



Warning

A tyre must be replaced when punctured. Replace tyres with recommended standard tyres only.

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

After replacing a tyre, the wheel must be balanced.

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

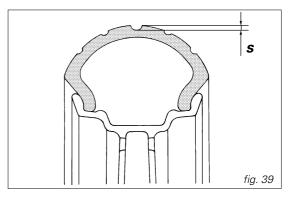
Measure tread depth (S, fig. 39) at the point where tread is most worn down. It should not be less than 2 mm/0.08 in. and anyway not below the legal limit.



Important

Visually inspect the tyres at regular intervals for cracks and cuts, especially on the side walls, bulges or large spots that are indicative of internal damage. Replace them if badly damaged.

Remove any stones or other foreign bodies caught in the tread



Checking engine oil level (fig. 40)

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.

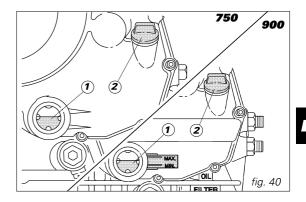
Top up oil level with SHELL Advance Ultra 4, if low. Undo the filler plug (2) and top up to correct level. Refit the plug.

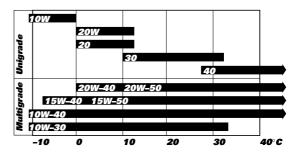
Have engine oil and oil filters changed by your Ducati Dealer or at an authorized workshop at regular intervals, as specified in the maintenance schedule.

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.





Cleaning and replacing the spark plugs (fig. 41) 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 l.h. fairing, remove the spark plug caps from the cylinder head using the wrench supplied with the bike.

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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 your 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.

Important

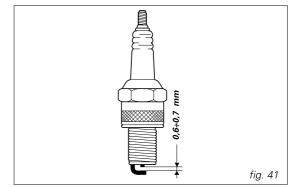
If the gap needs adjusting, be very careful when bending the side electrode. If gap is too wide or too close, engine performance will be affected. This could also cause difficult starting or irregular idling. Clean the electrode and the insulating material accurately using a small metal brush and check 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. Tighten until thread is fully into the head. Tighten the spark plug to 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 properly.



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 water jets.

Never aim the nozzle direct at wheel bearings, front fork seals, electric items, air inlets or exhaust pipe ends. If needed, clean off stubborn dirt or exceeding grease from engine parts using a degreasing agent. Be sure to avoid contact with drive parts (chain, sprockets, etc.). Rinse with warm water and dry all surfaces with chamois leather.

Warning

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

clean the motorcycle;

remove tank drain plug and seal and drain all fuel from tank;

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

place motorcycle on the supplied paddock stand; remove the battery and keep it well charged and efficient. Battery should be checked and charged whenever the motorcycle has been left unridden for over a month;

protect the motorcycle with a suitable canvas that will protect paintwork and let condensate breathe out. A special canvas cover is available from Ducati Spare Parts Department.

Important notes

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

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

TECHNICAL DATA

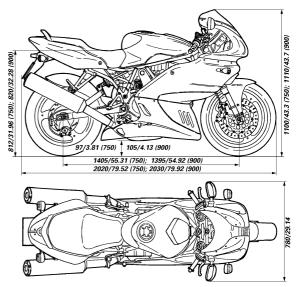
Overall dimensions (mm) (fig. 42)

Weights

Dry weight: 183 Kg/403.4 lb. (750); 188 Kg/414 lb. (900). Carrying full load: 385 Kg/848.7 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.



Top-ups	Type of fluid	cu dm (liters)/US Gall.
Fuel tank, including a reserve of 4 cu dm (liters)/1.05 US Gall.	Gasoline 95-98 RON	16/4.22
Oil sump and oil filter	SHELL-Advance Ultra 4	3.3/0.87 (750) 3.9/1.03 (900)
Front/Rear brake and clutch circuits	Special fluid for hydraulic systems SHELL-Advance Brake DOT 4	_
Protectant for electric contacts	Spray for electric systems SHELL-Advance Contact Cleaner	_
Front fork	SHELL-Advance Fork 7.5 or Donax TA	0.531/0.14 (each leg)



Additives to fuel or lubricants are not allowed.

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Engine

Twin cylinder, four-stroke, 90° "L" type, longitudinal. Bore: 88 mm/3.46 in. (750); 92 mm/3.62 in. (900). Stroke: 61.5 mm/2.42 in. (750); 68 mm/2.67 in. (900). Total displacement: 748 c.c./45.62 cu. in. (750); 904 c.c./57.58 cu. in. (900). Compression ratio: 9.0±0.5:1 (750); 9.2±0.5:1 (900). Max. power at crankshaft (95/1/CE): 45 kW - 61 HP at 8250 rpm (750); 58 kW - 79 HP at 7500 rpm (900). Max torgue at crankshaft (95/1/CE): 60 Nm at 6000 rpm (750); 75.5 Nm at 6500 rpm (900). Max. rotation speed 9000 rpm

Do not exceed specified rotation speed limits under

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.

Important

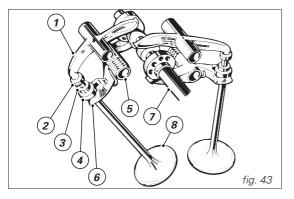
any running condition.

Desmodromic timing system (fig. 43)

- 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): 205 Km/h - 127.4 mph (750); 225 Km/h - 140 mph (900).



Spark plugs

Make: CHAMPION Type: RA 6 HC

Brakes

Front brake

With double drilled disc. Material: steel. Disc diameter: 320 mm/12.59 in. Hydraulically operated by a control lever on right handlebar. Braking surface: 88 sq cm/13.64 in. Brake calipers with separate pistons. Make: BREMBO Type: 30/34-4 pistons Friction material: FERIT I/D 450 FE Master cylinder type: PSC 16.

Rear brake

With fixed drilled disc. Material: steel. Disc diameter: 245 mm/9.64 in. Hydraulically operated by a pedal on RH side. Braking surface: 25 sq cm/3.87 sq. in.

Make[.] **BRFMRO** Tvpe: P 32 G 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. wet multi-plate clutch (750); drv multi-plate clutch (900). Clutch is operated by a control lever on left handlebar. Drive is transmitted from engine to gearbox main shaft via spur gears. Gear ratio 33/61 (750); 32/59 (900). Gearbox[.] 5-speed (750); 6-speed (900). Gearbox with constant mesh gears, gear change pedal on left side of motorcycle. Front/rear sprocket ratio: 15/40. Total gear ratios: 1st gear 16/40 (750); 15/37 (900). 2nd gear 21/36 (750); 17/30 (900). 3rd gear 24/32 (750): 20/27 (900). 4th gear 27/29 (750): 22/24 (900). 5th gear 29/28 (750); 24/23 (900). 6th aear 28/24 (900).

Drive chain from gearbox to rear wheel: Make: DID Type: 520 VL4. Size: 5/8"x1/4" Links: 98 (750); 102 (900).

Important

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

If you wish to tune up your motorcycle for competitive trials, you may refer to Ducati Motor 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 or your passenger, and cause irreparable damage to your motorcycle.

Frame

Tubular trestle frame with upper section made of highstrength steel. Steering angle (on each side): 28° Headstock angle: 24° Trail: 96 mm/3.78 in. (750); 100 mm/3.93 in. (900).

Tyres

Front tyre

Tubeless, radial tyre. Size: 120/70-ZR17.

Rear tyre

Tubeless, radial tyre. Size: 160/60-ZR17 (750); 170/60-ZR17 (900).

Wheels

Three-spoke, light-alloy rims.

Front wheel

Make: BREMBO Dimensions: 3.50x17"

Rear wheel

Make: BREMBO Dimensions: 4.50x17" (750); 5.50x17" (900). Front wheel spindle can be removed.

Suspensions

Front

Hydraulic upside-down fork. The front fork used on the 900 models features outer adjusters for rebound, compression, and preload (for inner springs of fork legs).

Stanchion diameter mm: 43 mm/1.69 in. Travel along leg axis: 120 mm/5.12 in.

Rear

The rear shock absorber enables the adjustment of rebound and compression damping and spring preload. At the bottom pivot point it is connected to the swingarm. Swingarm is made from steel (750) or light alloy (900) and hinges on a pivot pin passing through the engine. The whole system gives the bike excellent stability.

Travel: 71 mm/2.79 in. Rear wheel travel: 135 mm/5.31 in.

Electric system

Basic electric items are:

Headlamp with double filament 12V-55/60 W iodine bulb.

12V-5W parking light.

Instrument panel, 12V-3W warning lights; **12V-2W** and **3W** instrument lights.

Electrical controls on handlebar.

Turn indicators, 12V-10W bulbs.

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Horn.

Stop light switches. Battery 12V-16 Ah. Generator 12V-520W.

Electronic voltage regulator (rectifier), protected by a **40A** fuse located on the side of the battery.

Starter motor, 12V-0.7 kW.

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

Note

See "Replacing bulbs" on page 50 for relevant instructions.

Fuses

The main fuse box is located on the left side of headlamp subframe (fig. 44.1).

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

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

The fuses placed before the battery (fig. 44.2) protect the electronic regulator (2) (40A) and the injection relays. The latter fuses (3) are rated 20A and 3A respectively. Remove the fuse cap (4) to expose it.

A blown fuse is identified by the interrupted inner filament (5, fig. 44.3).

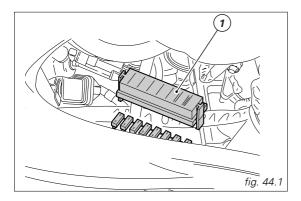
Important

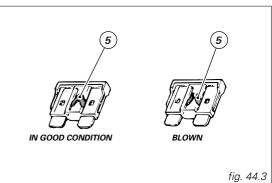
Switch the ignition key to **OFF** before replacing a fuse to avoid possible short circuits.

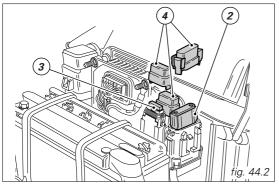
Warning

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

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Legend of the wiring diagram of electric system/ignition

- 1) Right switch
- 2) Key-operated switch
- 3) Ignition relay
- 4) Fuse box
- 5) Turn indicator flasher
- 6) Starter motor
- 7) Starter contactor
- 8) Battery
 - 9) Oil temperature sensor (instrument)
 - 10) Rear right-turn indicator
 - 11) Tail light
 - 12) Number plate light
 - 13) Rear left-turn indicator
 - 14) Fuel tank
 - 15) Diagnosis connector
 - 16) Horizontal cylinder coil
 - 17) Vertical cylinder coil
 - 18) Horizontal cylinder spark plug
 - 19) Vertical cylinder spark plug
 - 20) Horizontal cylinder injector
 - 21) Vertical cylinder injector
 - 22) Throttle position sensor
 - 23) Engine rpm/timing sensor
 - 24) Oil temperature sensor
 - 25) Stand light switch
 - 26) Injection/ignition unit
 - 27) Injection relay
 - 28) Injection relay fuses
 - 29) Horn

- 30) Regulator fuse (40A)
 31) Regulator
 32) Generator
 33) Neutral light switch
 34) Oil pressure switch
 35) Rear STOP light switch
 36) Front STOP light switch
 37) Left switch
 - 37) Left switch
 - 38) Air temperature sensor
 - 39) Instrument panel
 - 40) Front left-turn indicator
 - 41) Headlamp
 - 42) Front right-turn indicator

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 (4)

Pos.	Description	Rat.
1-9	Main switch	30 A
2-10	High and low beams	15 A
3-11	Turn indicators, warning lights, tail lights and instrument panel lig	7.5 A hts
4-12	Stop, warning horn	7.5 A
5-13	Injection	7.5 A
6-14	Diagnostics	3 A
7-15	Spare	30 A
8-16	Spare	15 A



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

FOR UNITED STATES OF AMERICA VERSION ONLY

Reporting of safety defects

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

Safety warnings

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



Warning

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

Noise emission warranty

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

Noise and exhaust emission control system information

Source of Emissions

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

Exhaust Emission Control System

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

Crankcase Emission Control System

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

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

Tampering warning

Tampering with Noise Control System Prohibited. Federal Law prohibits the following acts or causing thereof: (1) the removal or rendering inoperative by any person, other than for purposes of maintenance, repair, or replacement, of any device or element of design incorporated into any new vehicle for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use; or

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

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

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

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

(3) Lack of proper maintenance.

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

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

Problems that may affect motorcycle emissions

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

Symptoms:

Hard starting or stalling after starting.

Rough idle.

Misfiring or backfiring during acceleration.

After-burning (backfiring).

Poor performance (driveability) and poor economy.

Riding safety

The points given below are applicable for every day motorcycle use and shoud 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 guick 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 overreving.

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 32). 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

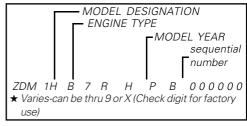
Do not ride the motorcycle with helmets attached to the hook; the helmets could cause an accident by distracting the operator or interfering with normal vehicle operation.

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 (V.I.N.);

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



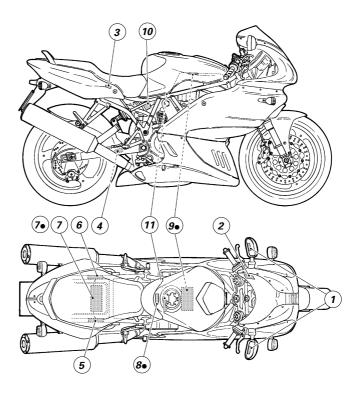




fig. B



WARNING

INCINERATE. REFER TO OWNER'S

MANUAL FOR REGULATING GAS.

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Vehicle I.D. No.: ZDM1TB9PXWB000001







CAUTION

8.

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.

VEHICLE EMISSION CONTROL LABEL ENGINE DISPLACEMENT : 904 cc. ENGINE FAMILY : THIS VEHICLE CONFORMS TO U.S. EPA AND CALIFORNIA REGULATIONS APPLICABLE TO MODEL YEAR NEW MOTORCYCLES. EVAD EAAAU V -TO HORIZONTAL MANIFOLD DUCATIMOTOR SON 40132 BOLOGNA ITAL Y TO VERTICAL MANIEOU 10 WARM AIR INLET

CONTAINS HIGHLY COM-PRESSED GAS. USE ONLY PERFECTLY DRY NITROGEN GAS. OTHER GASES MAY CAUSE EXPLOSION. DO NOT

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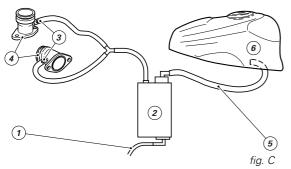
California evaporation emission system

This system consists of (fig. C): 1) Warn air inlet; 2) Canister; 3) Dell'Orto jet; 4) Intake manifolds; 5) Posteriore description

- 5) Breather pipe;
- 6) Fuel tank.

Important

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



Ducati limited warranty on emission control system

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

A) is designed, built and equipped so as to conform at the time of initial retail purchase with all applicable regulations of the United States Environmental Protection Agency, and the California Air Resources Board; and

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

I. Coverage

Warranty defects shall be remedied during customary business hours at any authorized Ducati motorcycle dealer located within the United States of America in compliance with the Clean Air Act and applicable regulations of the United States Environmental Protection Agency and the California Air Resources Board. Any part or parts replaced under this warranty shall become the property of Ducati.

In the state of California only, emissions related warranted parts are specifically defined by that state's Emissions Warranty Parts List. These warranted parts are: carburetor and internal parts; intake manifold; fuel tank, fuel injection system; spark advance mechanism; crankcase breather; air cutoff valves; fuel tank cap for evaporative emission controlled vehicles; oil filler cap; pressure control valve; fuel/vapor separator; canister; igniters; breaker governors; ignition coils; ignition wires; ignition points, condensers, and spark plugs if failure occors 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

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Routine maintenance record

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

DUCATIMOTOR spa

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