HONDA **XR250R**

OWNER'S MANUAL

IMPORTANT NOTICE

- **OPERATOR ONLY. NO PASSENGER.**

  This motorcycle is designed and constructed as an operator only model. The seating configuration does not safely permit the carrying of a passenger. Do not exceed the vehicle capacity load.

- **ON/OFF-ROAD USE**

* This motorcycle is designed and manufactured for both "ON ROAD" and "OFF ROAD" use.
* For "ON ROAD" use we recommend the fitting of ON ROAD TYPE TYRES.
* To comply with Local Laws Regulations it may be necessary to fit additional equipment.
* Parts for "ON ROAD" user are available from your dealer.

- **READ OWNER'S MANUAL CAREFULLY**

Pay special attention to statements preceded by the Following words:



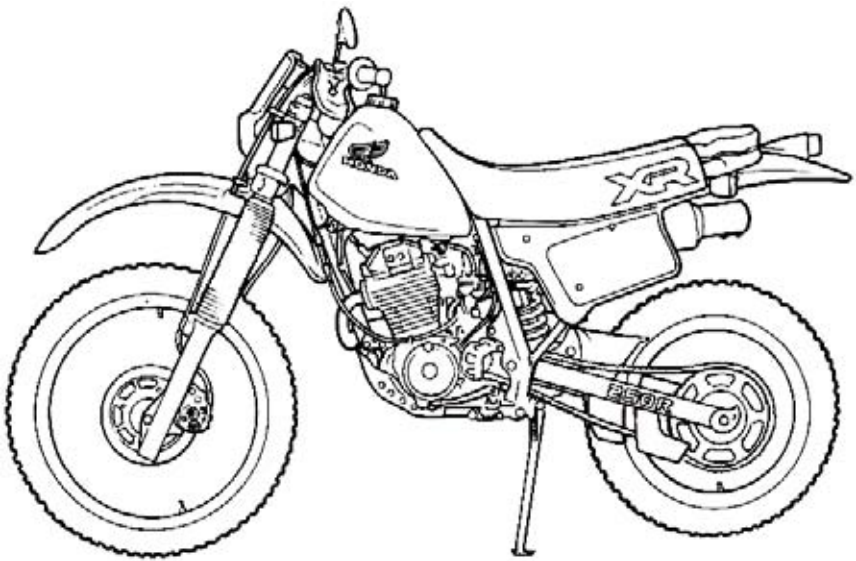
Indicates a strong possibility of severe personal injury or loss of life if instructions are not followed.

CAUTION:
Indicated a possibility of personal injury or equipment damage if instructions are not followed.

NOTE:
Gives helpful information.

This manual should be considered a permanent part of the vehicle and should remain with the vehicle when resold.

HONDA XR250R
OWNER'S MANUAL



Complete XR250R OEM parts & online schematics

OPERATION

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MOTORCYCLE SAFETY

WARNING

- ***Motorcycle riding requires special efforts on your part to ensure your safety. Know these requirements before you ride.***

SAFE RIDING RULES

1. Always make a pre-ride inspection (page 35) before you start the engine. You may prevent an accident or equipment damage
2. Learn to ride in an uncongested off-road area free or obstacles before venturing into unfamiliar terrain.
3. Always obey local off-road riding laws and regulations.
4. Obtain permission to ride on private property. Avoid posted areas and obey "no trespassing" signs.
5. Ride with a friend on another motorcycle so that you can assist each other in case of trouble.
6. Familiarity with your motorcycle is critically important should a problem occur far from help.
7. Never ride beyond your ability and experience or faster than conditions warrant.
8. If you are not familiar with the terrain, ride cautiously. Hidden rocks holes, or ravines could spell disaster.
9. Spark arresters and mufflers are required in most areas. Don't modify your exhaust system. Remember that excessive noise bothers everyone and creates a bad image for motorcycling.
10. This motorcycle is not legally equipped to be ridden on the highway. Remember to walk an off-road motorcycle when crossing public highways, roads or streets.

PROTECTIVE APPAREL

1. Most motorcycle accident fatalities are due to head injuries: ALWAYS wear a helmet. You should also wear a face shield or goggles as well as boots, gloves, and protective clothing.
2. The exhaust system becomes very hot during operation, and it remains hot after operation. Never touch any part of the hot exhaust system. Wear clothing that fully covers your legs.
3. Do not wear loose clothing which could catch on the control levers, kickstarter, footpegs, drive chain, or wheels.

MODIFICATIONS

WARNING

* ***Modification of the motorcycle, or removal of original equipment, may render the vehicle unsafe or illegal. Obey all federal, state and local equipment regulations.***

LOADING AND ACCESSORIES

WARNING

* ***A motorcycle is sensitive to changes in weight distribution. Addition of accessories or cargo can impair the motorcycle's stability and performance. To prevent an accident, use extreme care when adding and riding with cargo and accessories. These general guidelines may help you decide whether, or how to equip your motorcycle.***

Loading

The vehicle capacity load is 220 pounds. The combined weight of the rider, cargo, and all accessories must not exceed this limit.

1. Keep cargo and accessory weight low and close to the centre of the motorcycle. Load weight equally on both sides to minimise imbalance. As weight is located father from the motorcycle's centre of gravity, handling is proportionally affected.
2. Luggage racks are for lightweight items. Bulky items may snag on a tree or other nearby objects causing loss of control.
3. All cargo and accessories must be secure for stable handling. Recheck cargo security and accessory mounts frequently.
4. Do not attach large or heavy items (such as a sleeping bag or tent) to the handlebars, front forks, or fender. Unstable handling or slow steering response may result.

Accessories

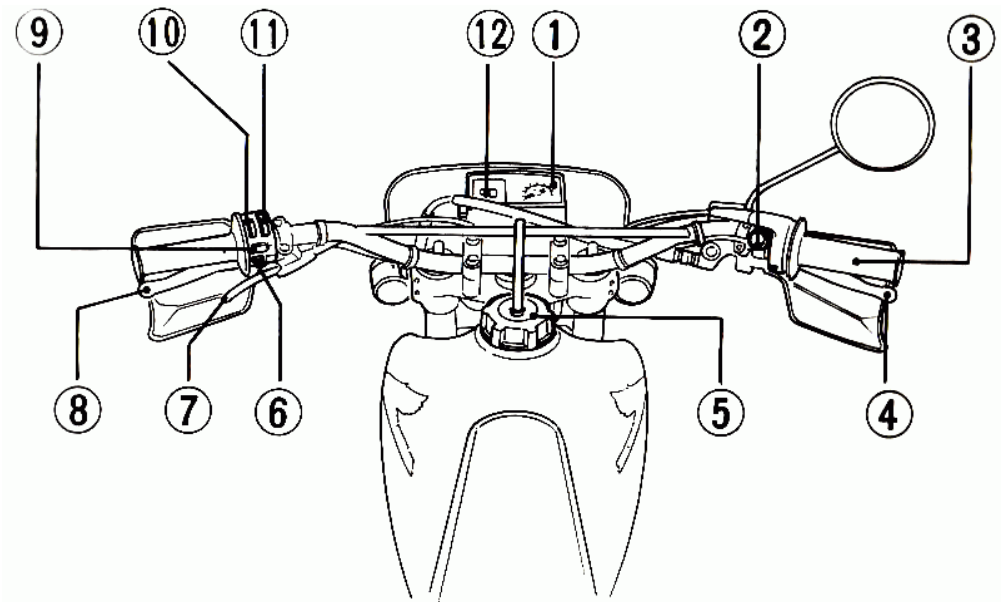
Genuine Honda accessories have been specifically designed for and tested on this motorcycle.

Because the factory cannot test all other accessories, you are personally responsible for proper selection, installation, and use of non-Honda accessories. Always follow the guidelines under Loading, and these:

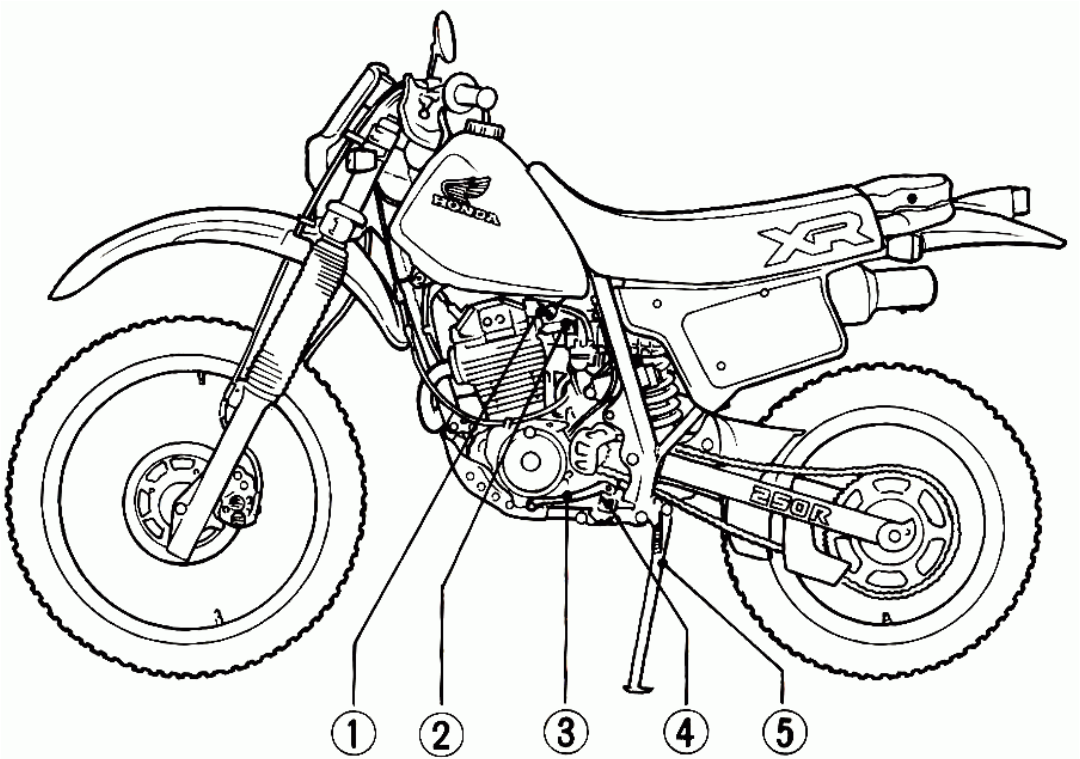
1. Carefully inspect the accessory to make sure it does not reduce ground clearance, or limit suspension travel, steering travel or control operation.
2. Do not add electrical equipment that will exceed the motorcycle's electrical system capacity. An electrical failure could cause a dangerous loss of lights or engine power at night, far from help.

DESCRIPTION

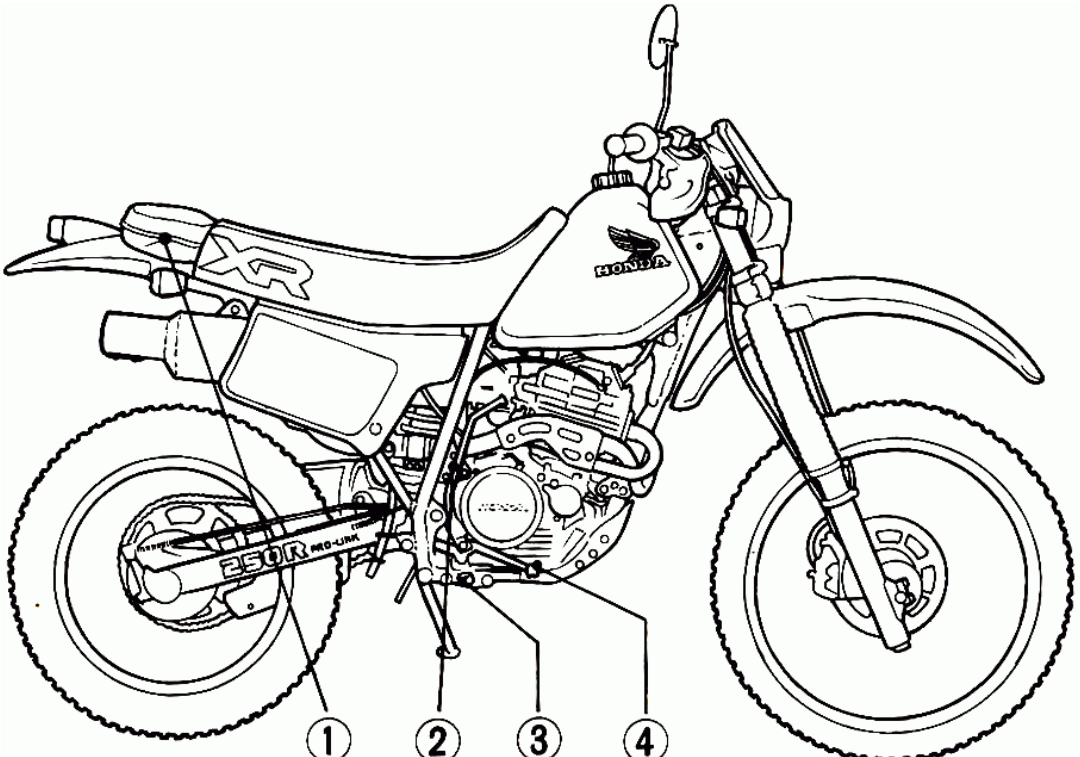
PARTS LOCATION



(1) Speedometer (2) Engine stop button (3) Throttle grip (4) Front brake lever
(5) Fuel tank cap (6) Horn button (7) Starter decompressor lever (8) Clutch lever
(9) Turn signal switch (10) Headlight dimmer switch (11) Headlight switch (12) Trip meter



(1) Fuel valve (2) Choke lever (3) Gearshift pedal (4) Foot peg (5) Side stand



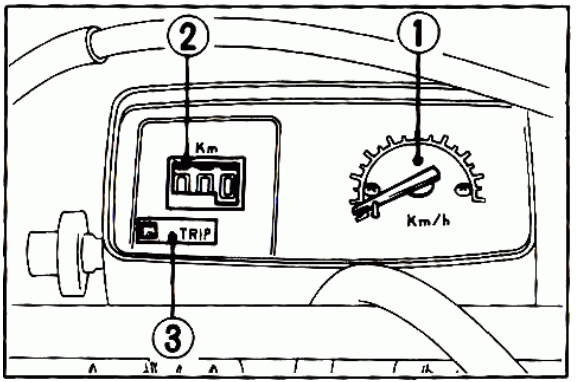
(1) Tool bag (2) Kickstarter (3) Foot peg (4) Rear brake pedal

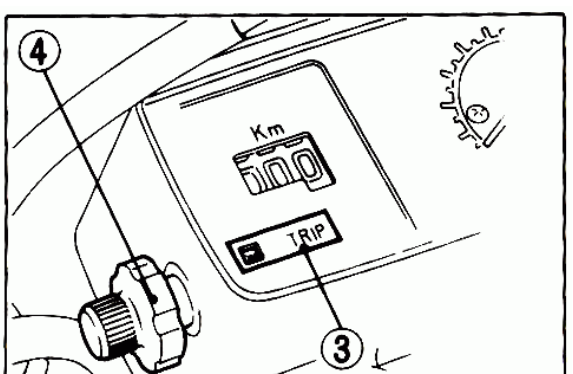
PARTS FUNCTION

Instruments and Indicators

The indicators are in the speedometer, above the headlight. Their functions are described in the table on the following page.

(1) Speedometer
(2) Tripmeter
(3) Trip ON-OFF indicator
(4) Tripmeter reset knob





Ref. No.	Description	Function
1	Speedometer	Shows riding speed.
2	Tripmeter	Shows mileage per trip or section of route.
3	Trip ON-OFF indicator	Verifies tripmeter reset knob position.
4	Tripmeter reset knob	Pull knob to OFF and turn to zero (0). Push knob to ON to begin counting.

MAJOR COMPONENTS

(Information you need to operate this motorcycle)

FRONT SUSPENSION

The front suspension system uses air assisted front forks. Though the standard air pressure is 0 psi (0 kPa, 0 kg/cm^2), the forks may be adjusted for the rider's weight and riding conditions by adjusting the air pressure and oil volume. Use the chart below to determine the correct adjustment for you.

Condition	Air pressure	Oil volume
The entire range of travel is too hard	Lower	-
The entire range of travel is too soft (bottoming).	Increase	-
Initial travel is good, but the final stages of travel are too soft (bottoming).	-	Increase
The initial stages of travel are good but the final stages are hard	-	Reduce
The initial stages of travel are too soft, but the final stages are good	Increase	Reduce
The initial stages of travel are too hard, but the final stages are good	Reduce	Increase

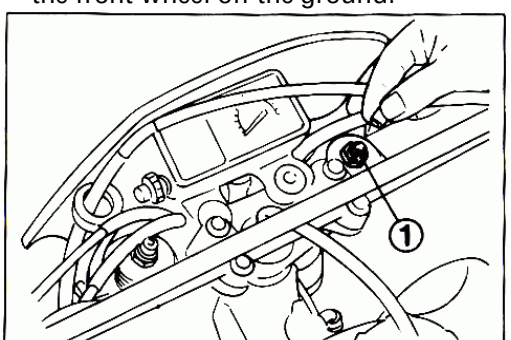
Air Pressure Adjustment

Low air pressure settings provide a soft ride and are for light loads and smooth riding conditions.

High air pressure settings provide a firm ride and are for heavy loads and rough riding conditions.

For accurate pressure readings, check and adjust air pressure when the fork tubes are cold and with the front wheel off the ground.

1. Place a support under the engine to raise the front wheel off the ground.



(l) Air valve caps

2. Remove the air valve caps (1) and check the air pressure with a pressure gauge.
   Standard air pressure: 0 psi (0 kPa,0 kg/cm2)
3. If air pressure is insufficient, add air with a bicycle air pump. To decrease air pressure, depress the valve core. Some air will be lost when using pressure gauge. Determine the amount of loss and compensate accordingly. Also, be sure that the air pressure in both fork tubes is equal.

NOTE:

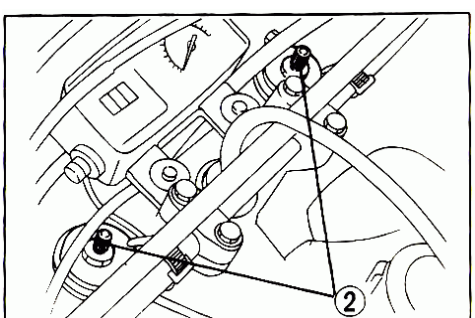
* Do not add a lot of air pressure at one time.
* Use of more than 15 psi (100 kpa, 1.0 kg/cm2)is not recommended because fork action becomes very stiff.

4. Install the air valve caps.

Oil Volume Adjustment:

Low oil levels provide a soft ride and are for light loads and smooth riding conditions. Height oil levels provide a firm ride and are for heavy loads and rough riding conditions.

1. Place a support under the engine to raise the front wheel off the ground.
2. Remove the air valve caps and release all air pressure.
3. Remove the fork cap bolts (2) and springs from the fork tubes.



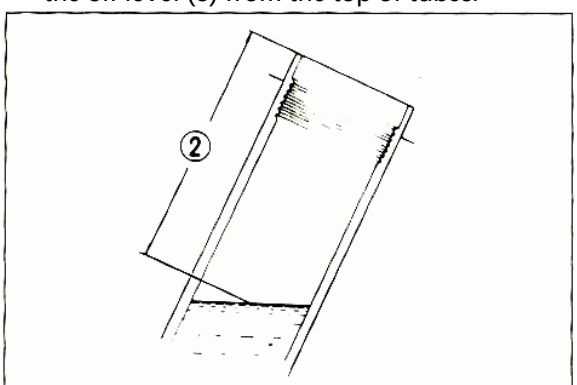
(2) Fork cap bolts

Inspect the O-ring on the cap bolts and replace if they are damaged.

WARNING

* ***The fork cap bolts are under extreme spring pressure. Use care when removing the cap bolts and wear eye and face protection.***

4. Compress the forks all the way and measure the oil level (3) from the top of tubes.



(3) Oil level

Standard oil level: 150 mm (5.9 in)

To lower the oil level (decrease volume), use a syringe. Add oil with a graduated beaker for accurate measurements.

The recommended oil level range is 150 mm (5.9 in) to 190 mm (7.5 in).

NOTE:

* Increase or decrease oil in increments of 5 cc (0.17 oz).
* To prevent fork damage, do not fill past the recommended maximum level. Do not use a level lower than the recommended minimum to prevent poor performance.

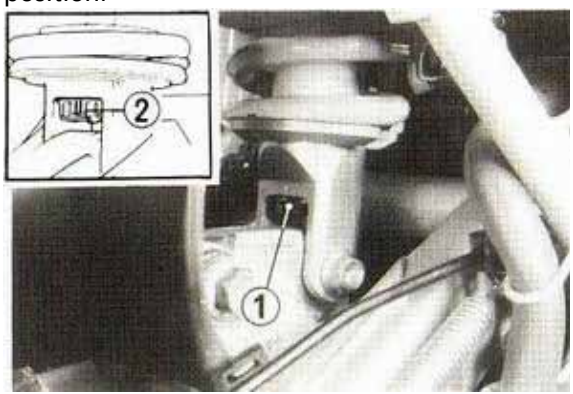
5. Be sure the oil level is the same in both fork tubes.
6. Clean and dry the fork spring with a lint free cloth. Install the fork spring and fork cap bolt. Torque the fork cap bolt to 15-30 Nm (1.5-3.0 kg-m, 11-22 ft-lb).

REAR SUSPENSION

The rear shock rebound damping and spring preload can be adjusted for rider weight and riding conditions.

Rebound damping:

There are four detent rebound damping adjustment positions. Turn the damping adjuster (1) at the lower end of the shock for rider weight and riding conditions. The adjuster is marked (2) for each adjustment position.



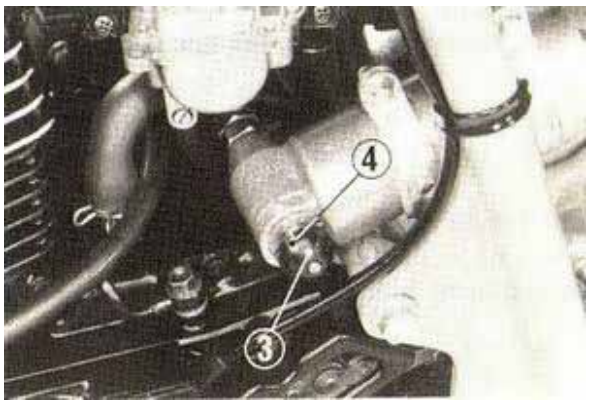
(1) Damping adjuster (2) Marking

NOTE:

* Be sure the damping adjuster is not between positions but is located in a detent.

Compression damping:

The compression damping adjuster has 16 positions or more. Turning the adjuster knob (3) one full turn clockwise advances the adjuster four positions. To adjust the adjuster to the standard position, proceed as follows:



(3) Compression damping adjusting knob
(4) Dots

1. Turn the adjuster knob counter clockwise until it will no longer go.
2. Check that the yellow dots (4) on the knob and reservoir are aligned. If they are not aligned, turn the knob clockwise until they are aligned.
3. The adjuster is set in the standard position when the knob is turned clockwise 12 positions (3 rotations) from the above position.

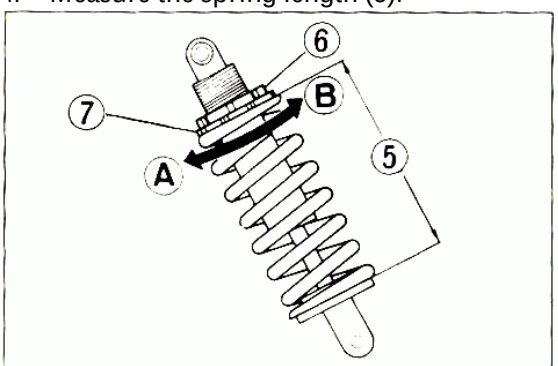
Spring preload:

1. Remove the left and right side covers.
2. Remove the seat, exhaust muffler and air cleaner box.

CAUTION:

* *Be careful not to allow dust into the carburettor.*

3. Place a support under the engine to raise the rear wheel off the ground.
4. Measure the spring length (5).

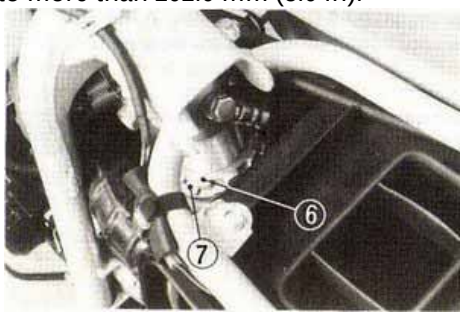


(5) Spring length
(6) Lock nut
(7) Adjusting nut
(A) Increase Preload
(B) Decrease Preload

Spring length;

Standard:	199.5 mm (7.9 in)
Minimum:	189.5 mm (7.5 in)
Maximum:	202.0 mm (8.0 in)

5. To increase spring preload; Loosen the lock nut (6) with the optional pin spanner and turn the adjusting nut (7) to shorten the spring length. Do not shorten to less than 189.5 mm (7.5 in).
   To decrease spring preload; Loosen the lock nut (6) and turn the adjusting nut (7) to increase the spring length. Do not increase to more than 202.0 mm (8.0 in).



(6) Lock nut (7) Adjusting nut

WARNING

- ***The rear shock absorber damper body contains pressurised nitrogen 142 psi (1,000 kpa, 10 kg/cm2). Do not attempt to disassemble the shock body.***
- ***Do not disconnect the reservoir hose, or disconnect and refill the reservoir.***
- ***Keep fire and heat away from the shock and its reservoir.***
- ***If the shock absorber must be replaced, take the old unit to your authorised Honda dealer for proper disposal.***

NOTE:

- Each turn of the adjuster equals 1.5 mm (0.06 in) of spring length and 15.6 kg (34.4 lb) of spring preload.
- An optional pin spanner is available for turning the lock nut and adjusting nut.

6. Tighten the lock nut and install the removed parts.

Condition and adjustment:

1. Always begin with Step I, then test ride the motorcycle. If the condition still exists, proceed to Stop II and again test ride the motorcycle. If necessary, proceed to Step III.

Step / Condition	I	II	III
Bottoming	Shorten the spring length (to increase the pre-load)	Turn the compression adjuster to a stiffer position (to increase the damping force)	
Soft	Turn the compression adjuster to a stiffer position (to increase the damping force)	Shorten the spring length (to increase pre-load)	Turn the rebound adjuster to a stiffer position (to increase the damping force)
Hard	Increase the spring length (to decrease pre-load)	Turn the compression adjuster to a softer position (to decrease damping force)	Turn the rebound adjuster to softer position (to decrease damping force)
Excessive sinking	Shorten the spring length (to increase the pre-load)		

FRONT BRAKE

This model has a hydraulic disc front brake. As the brake pads wear, brake fluid level drops, automatically compensating for wear.

There are no adjustments to perform, but fluid level and pad wear must be inspected periodically. The system must be inspected frequently to ensure there are no fluid leaks. If the control lever free play becomes excessive and the brake pads are not worn beyond the recommended limit (page 18), there is probably air in the brake system and it must be bled. See your authorised Honda dealer.

Brake Fluid Level:

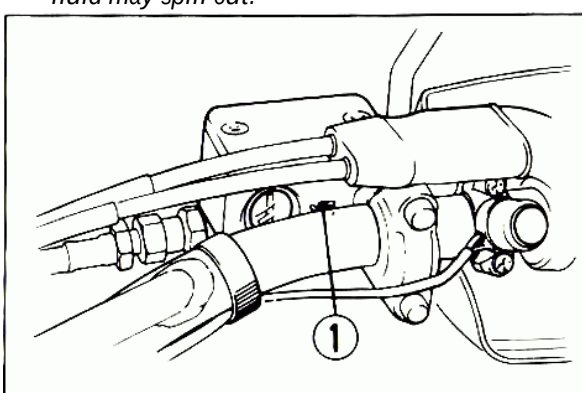
WARNING

* ***Brake fluid may cause irritation. Avoid contact with skin or eyes. !n case of contact, flush thoroughly with water and call a doctor if your eyes were exposed.***

Remove the screws, reservoir cap and diaphragm. Whenever the level is near the lower level mark (1) on the front reservoir, fill the reservoir with DOT 4 BRAKE FLUID from a sealed container. Reinstall the diaphragm and reservoir cap. Tighten the screws securely.

CAUTION:

* *When adding brake fluid be sure the reservoir is horizontal before the cap is removed or brake fluid may spill out.*



(1) Lower level mark

CAUTION:

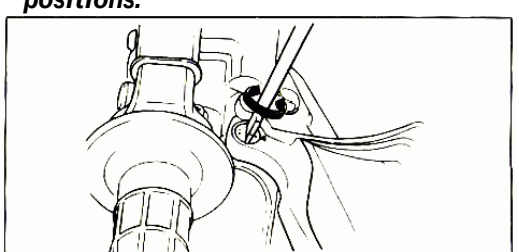
* Use only DOT 4 brake fluid from a sealed container.
* Handle brake fluid with care because it can damage paint and instrument lenses.
* Never allow contaminants (dirt, water, etc.) to enter the brake fluid reservoir.

Front brake lever adjuster:

The front brake lever adjuster has two positions. To increase free play, align the mark "•" with the arrow on the brake lever bracket. To decrease free play, align the mark "••" with the arrow.

WARNING

* ***Do not leave the adjuster between the two positions.***

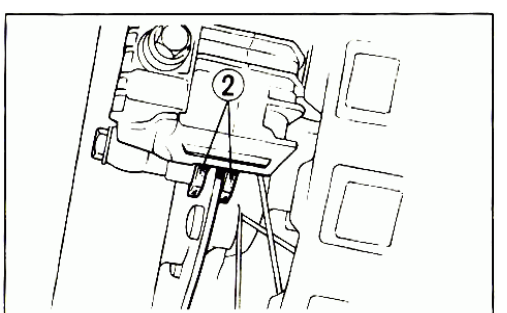


Brake pads:

Brake pad (2) wear will depend upon the severity of usage, type of riding, and condition of the roads. The pads will wear faster on dirty and wet roads. Inspect the pads visually from under the calliper during all regular service intervals to determine the pad wear. If either pad wears to wear limit both pads must be replaced.

Other Checks:

Make sure there are no fluid leaks. Check for deterioration or cracks in the hose and fittings.



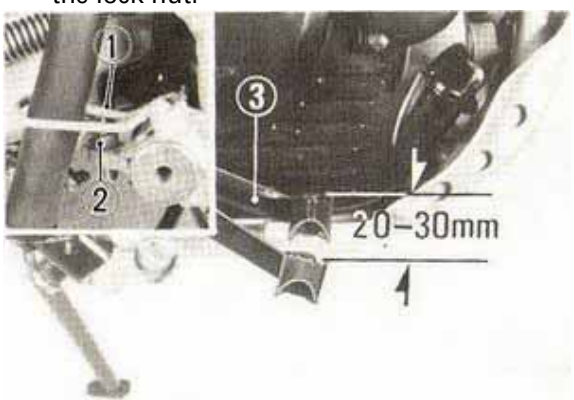
(2) Pad

REAR BRAKE

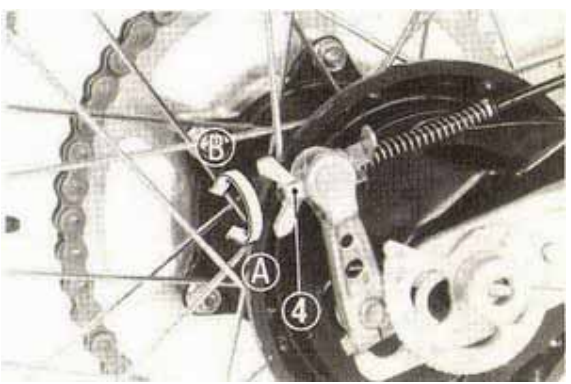
Adjustment:

1. Place the motorcycle on its side stand.
2. The stopper bolt (1) is provided to allow adjustment of the pedal height.
   To adjust the pedal height, loosen the lock nut (2) and turn the stopper bolt. Tighten the lock nut.
3. Measure the distance the rear brake pedal (3) moves before the brake starts to take hold.

   Free play should be 20-30 mm (3/4 - 1-1/4 in). If adjustment is necessary, turn the rear brake adjusting nut (4).



(1) Stopper bolt (3) Rear brake pedal
(2) Lock nut



(4) Adjusting nut (A) Decrease free play
(B) Increase free play

NOTE:

* Make sure the cut-out on the adjusting nut is seated on the brake arm pin.
* If proper adjustment cannot be obtained by this method, see your authorised Honda dealer.

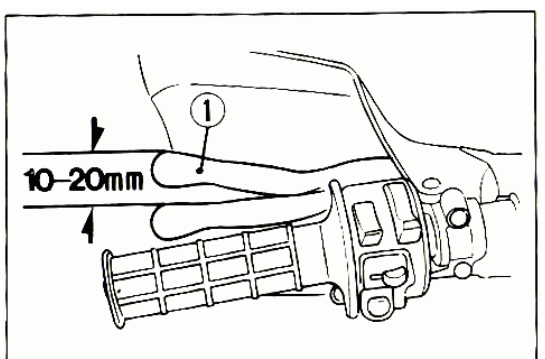
4. Apply the brake several times and check for free wheel rotation when released.

Other Checks:

Make sure the brake rod, spring and fasteners are in good condition.

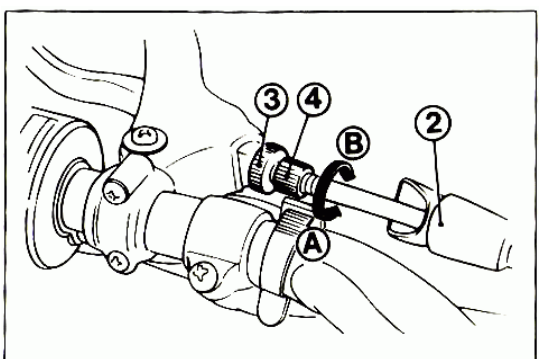
CLUTCH

Clutch adjustment may be required if the motorcycle stalls when shifting into gear or tends to creep; or if the clutch slips, causing acceleration to lag behind engine speed. Normal clutch lever free play is 10-20 mm (3/8 - 3/4 in) at the lever (1). Minor adjustments can be made with the clutch cable adjuster (4) at the lever.



(1) Clutch lever

1. Pull back the rubber dust cover (2). Loosen the lock nut (3) and turn the adjuster (4). Tighten the lock nut (3) and check the adjustment.
2. If the adjuster is threaded out near its limit or if the correct free play cannot he obtained, loosen the lock nut (3) and turn in the cable adjuster (4) completely. Tighten the lock nut (3) and pull on the dust cover.



(2) Dust cover (A) Increase free play
(3) Lock nut (B) Decrease free play
(4) Clutch cable adjuster

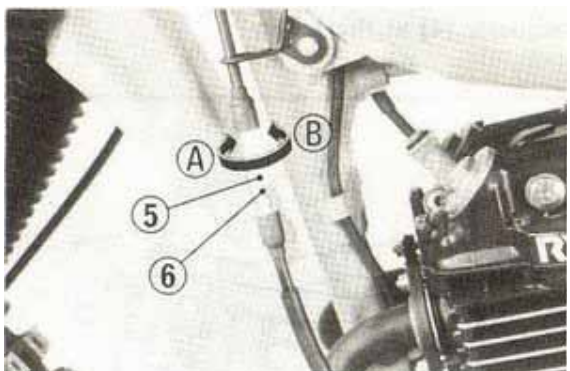
3. At the middle part of the cable, loosen the lock nut (6). Turn the adjusting nut (5) to obtain the specified tree play. Tighten the lock nut (6) and check the adjustment.
4. Start the engine, pull in the clutch lever and shift into gear. Make sure the engine does not stall and the motorcycle does not creep. Gradually release the clutch lever and open the throttle. The motorcycle should start smoothly and accelerate gradually.

NOTE:

* If proper adjustment cannot be obtained or the clutch does not work correctly, the cable or clutch friction discs may be worn. Refer to the official Honda shop manual or see your authorised Honda dealer.

Other Checks:

Check the clutch cable for kinks or signs of wear that could cause sticking or failure. Lubricate the clutch cable with a commercially available cable lubricant to prevent premature wear and corrosion.



(5) Adjusting nut
(6) Lock nut
(A) Increase free play
(B) Decrease free play

FUEL

Fuel Valve

The three way fuel valve (1) is on the left side near the carburettor.

OFF

At OFF, fuel cannot flow from the tank to the carburettors. Turn the valve OFF whenever the motorcycle is not in use.

ON

At ON, fuel will flow from the main fuel supply to the carburettors.

RES

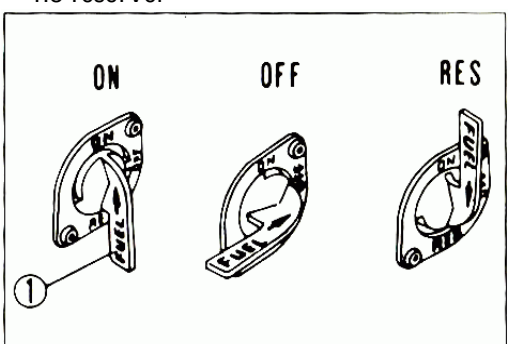
At RES, fuel will flow from the reserve fuel supply to the carburettors. Use the reserve fuel only when the main supply is gone. The reserve fuel supply is 1.5L (0.4 US gal). Refill the tank as soon as possible after switching to RES.

WARNING

* ***Know how to operate the fuel valve while riding the motorcycle. You may avoid a sudden stop in traffic.***
* ***Be careful not to touch any hot engine parts while operating the fuel valve.***

NOTE:

* Do not operate the motorcycle with the fuel valve in the RES position after refuelling. You may run out of fuel with no reserve.



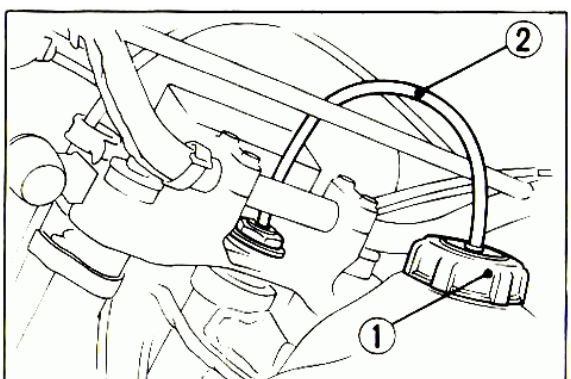
(1) Fuel valve

Fuel Tank

Fuel tank capacity is 9.0L (2.4 US gal) including 1.5L (0.4 US gal) in the reserve supply.

To open the fuel tank cap (1), pull out the breather tube (2) from the steering stem nut. Then turn the fuel tank cap counter clockwise.

Any automotive gasoline with a pump octane number (R + M / 2) of 86 or higher, or a research octane number of 91 or higher may be used. If "knocking" or "pinging" occurs, try a different brand of gasoline or a higher octane grade.



(1) Fuel tank cap (2) Breather tube

After refuelling, be sure to tighten the fuel tank cap firmly by turning it clockwise. Insert the breather tube into the steering stem nut.

WARNING

* ***Gasoline is extremely flammable and is explosive under certain conditions. Refuel in a well-ventilated area with the engine stopped. Do not smoke or allow flames or sparks in the area where the motorcycle is refuelled or stored.***
* ***Do not overfill the tank (there should be no fuel in the filler neck). After refuelling, make sure the tank cap is closed securely.***

ENGINE OIL

Engine Oil Level Check

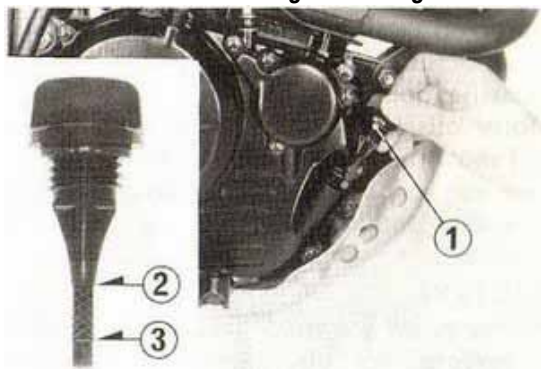
Check engine oil level each day before operating the motorcycle.

The oil filler cap (1) is at the front of the right crankcase cover and contains a dipstick for measuring the oil level. Oil level must be maintained between the upper (2) and lower (3) level marks on the dipstick (1).

1. With the motorcycle upright on level ground, remove the oil filler cap / dipstick, wipe it clean, and reinsert the dipstick without screwing it in.
2. If required, add the specified oil up to the upper level mark. Do not overfill.
3. Reinstall the filler cap / dipstick.
   Check for oil leaks.

CAUTION:

* ***Running the engine with insufficient oil can cause serious engine damage.***



(1) Filler cap / dipstick (3) Lower level mark
(2) Upper level mark

Engine Oil Recommendation

USE HONDA 4-STROKE OIL OR AN EQUIVALENT

Use only high detergent, premium quality motor oil certified to meet US automobile manufacturers' requirements for Service Classification SE or SF.

Motor oils intended for Service SE or SF will show this designation on the container. The use of special oil additives is unnecessary and will only increase operating expenses.

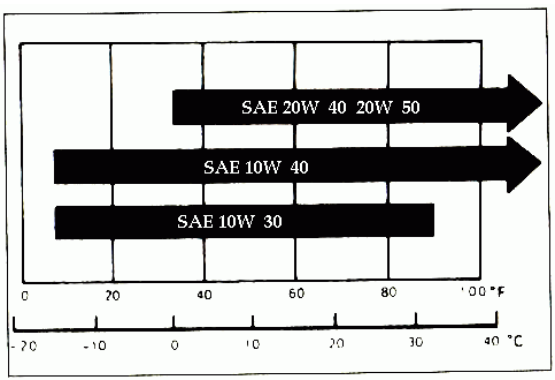
CAUTION:

* *Engine oil is a major factor affecting the performance and service life of the engine. Non-detergent, vegetable or castor based racing oils are not recommended.*

Recommended Oil Viscosity

SAE low-40/SAE 20W-50

Other viscosities shown in the chart below may be used when the average temperature in your riding area is within the indicated range.



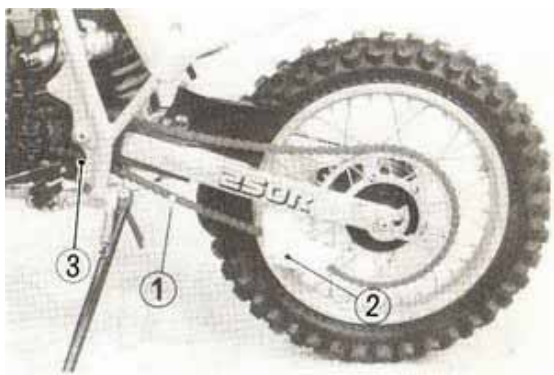
DRIVE CHAIN

The service life of the drive chain is dependent upon proper lubrication and adjustment. Poor maintenance can cause premature wear or damage to the drive chain and sprockets.

The drive chain (1) should be checked and lubricated as part of the Pre-ride Inspection (page 34). Under severe usage, or when the motorcycle is ridden in unusually dusty areas, more frequent maintenance will be necessary.

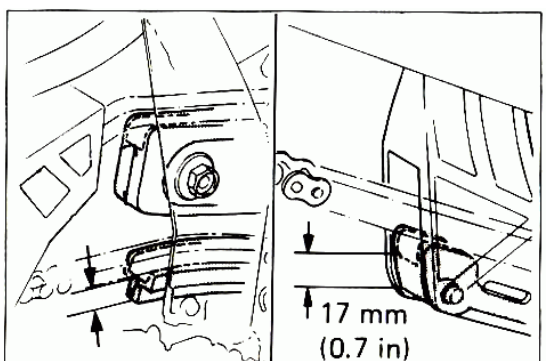
Inspection:

1. Turn the engine off, raise the rear wheel off the ground by placing a support under the engine, and shift the transmission into neutral.
2. Check slack in the upper drive chain run midway between the sprockets. Drive chain slack should be adjusted to allow 35-45 mm (1-3/8 - 1-3/4 in) vertical movement by hand.
3. Rotate the wheel and check drive chain slack as the wheel turns. Drive chain slack should remain constant as the wheel rotates. If the chain is slack in one section and taut in another, some links are kinked and binding. Kinks and binding can frequently be eliminated by lubrication.



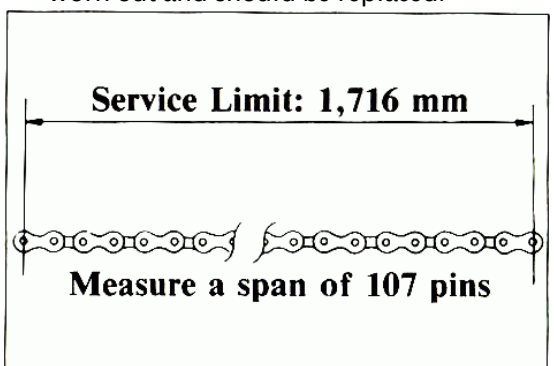
(1) Drive chain
(2) Chain guide slider
(3) Chain slider

4. Check the chain slider (3) and guide slider (2) for wear.
   Replace the chain guide chain if the depth of the groove exceeds these limits
   FRONT: 15 mm (0.6 in)
   REAR: 17 mm (0.7 in)

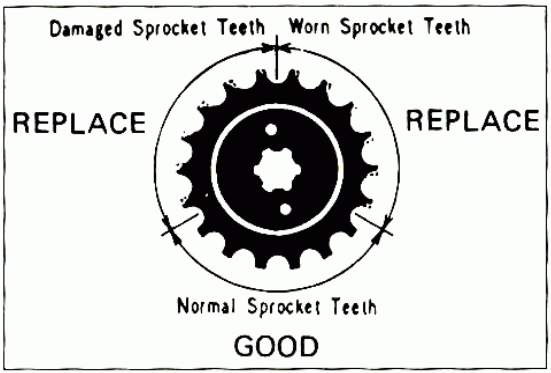


(FRONT) (REAR)
(3) Chain slider (2) Chain guide slider

5. Measure a section of the drive chain to determine whether the chain is worn beyond its service limit. Remove the drive chain and measure the distance between a span of 107 pins from pin centre to pin centre. In a new chain, this distance will measure 1,699 mm (66.9 in). If the distance exceeds 1,716 mm (67.6 in), the chain is worn out and should be replaced.



6. Inspect the sprocket teeth for wear or damage.



Standard sprocket sizes:

Drive sprocket (engine)	Driven sprocket (rear wheel)
13 teeth	50 teeth

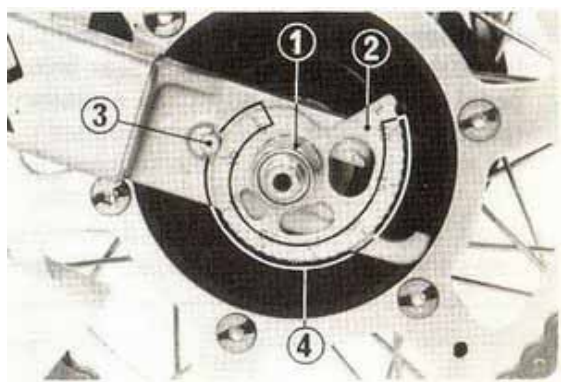
NOTE:

* If the drive chain or sprockets are excessively worn or damaged, they should be replaced. Never use a new chain with worn sprockets; rapid chain wear will result.

Adjustment:

If the drive chain requires adjustment, the procedure is as follows:

1. Loosen the rear axle nut (1).
2. Turn both right and left adjusters (2) equally to increase or decrease chain slack.
3. After adjusting, be sure the same adjuster index marks (4) align with the pins (3) on both sides of the swingarm.



(1) Axle nut
(2) Chain adjuster
(3) Stopper pin
(4) Index mark

NOTE:

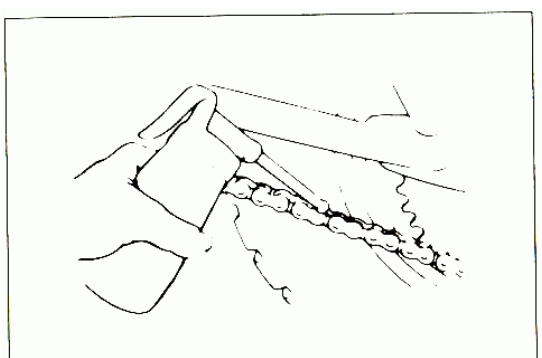
* If drive chain slack is excessive when the rear axle is moved to the furthest limit of adjustment, the drive chain is worn and must be replaced.

4. Turn the axle end bar to the lower edge of swing arm.
   Tighten the rear axle nut to 80-110 N-m (8-11 kg-m, 58-80 ft-lb) torque.
5. Recheck chain slack.
6. Rear brake pedal free travel is affected when repositioning the rear wheel to adjust drive chain slack. Check rear brake pedal free play and adjust as necessary (page 19).

Lubrication and cleaning:

Lubricate every 300 miles (500 km) or sooner if chain appears dry.

The O-rings in this chain can be damaged by steam cleaning, high pressure washers, and certain solvents. Clean the chain with kerosene. Wipe dry and lubricate only with SAE 80 or 90 gear oil. Commercial chain lubricants may contain solvents which could damage the rubber O-rings. Replacement Chain: D.I.D.520VC3 or RK520MO



TYRES

Proper air pressure will provide maximum stability, riding comfort and tyre life. Check tyre pressures frequently and adjust if necessary.

NOTE:

* Tyre pressure should be checked when the tyres are "cold," before you ride.

Off-road tyres are standard on this model. Select the right replacement tyres in accordance with the following specifications:

Cold tyre pressures psi (kPa, kg/cm2)	Front: 15 (100, 1.0) Rear: 15 (100, 1.0)
Vehicle capacity load	100 kg (220 lbs)
Tyre size	Front: 3.00-21-6 PR Rear: 4.60-17-6 PR

Check the tyres for cuts, imbedded nails, or other sharp objects. See your authorised Honda Dealer for replacement of damaged tyres or punctured inner tubes.

WARNING

* ***Do not attempt to patch a damaged tyre or inner tube. Wheel balance and tyre reliability may be impaired.***
* ***Improper tyre inflation will cause abnormal tread wear and create a safety hazard. Under inflation may result in the tyre slipping on, or coming off the rim.***
* ***Operation with excessively worn tyres is hazardous and will adversely affect traction and handling.***

Replace tyres before tread depth at the centre of the tyre reaches the following limit:

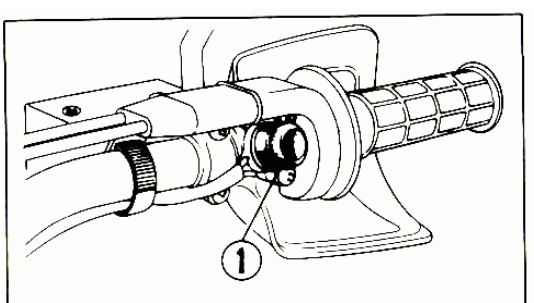
Minimum tread depth
3mm (1 /8 in)

ESSENTIAL INDIVIDUAL COMPONENTS

ENGINE STOP BUTTON

The engine stop button (1) is next to the right handlebar grip.

Push the button until the engine stops completely.



(1) Engine stop button

SWITCHES

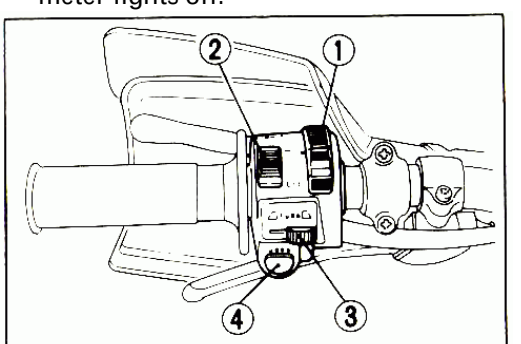
The four controls next to the left handlebar grip are:

Headlight Switch (1)

The headlight switch has two positions: "H", and "OFF" marked by a orange dot.

H: Headlight taillight, position light and meter lights on.

OFF (orange dot): Headlight, taillight and meter lights off.



(1) Headlight switch (3) Turn signal switch
(2) Headlight dimmer switch (4) Horn button

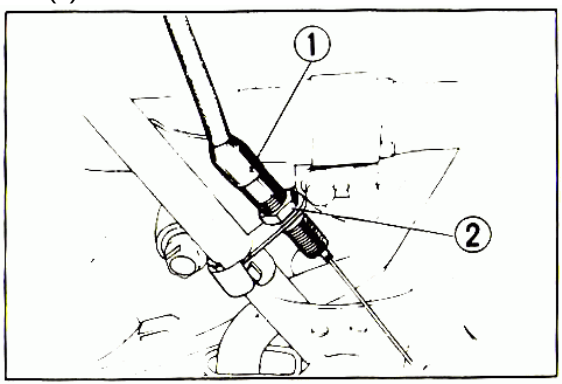
Headlight Dimmer Switch (2)
Select Hi for high beam, Lo for low beam.

Turn Signal Switch (3)
Move to L to signal a left turn, R to signal a right turn. Return to the centre (off) when finished.

Horn Button (4)
Press the button to sound the horn.
NOTE:

* The lights and horn will be dim when the engine is idling.

Stoplight Switch
Check the operation of the stoplight switch (1) at the right side behind the engine from time to time.
Adjustment is done by turning the adjusting nut (2).



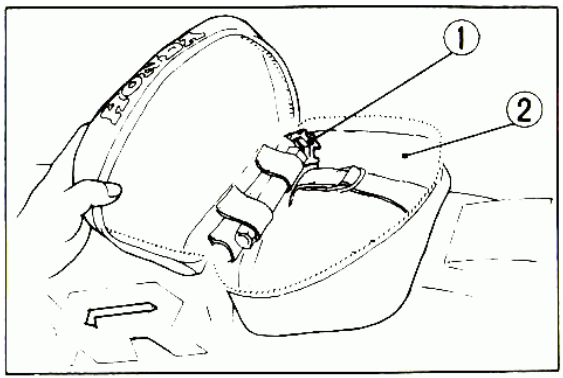
(1) Stoplight switch (2) Adjusting nut

FEATURES (Not required for operation)

TOOL BAG

A multi-purpose wrench (1) is in the tool bag (2) at the rear of the seat. Some repairs, minor adjustments and parts replacement can be performed with this tool.

This owner's manual and other documents should be stored in the tool bag. When washing your motorcycle, be careful not to flood this area with water.



(1) Multi-purpose wrench (2) Tool bag

OPERATION

PRE-RIDE INSPECTION

WARNING

* ***If the Pre-ride Inspection is not performed, serious damage or an accident may result.***

Inspect your motorcycle every day before you start the engine. The items listed here will only take a few minutes to inspect, and in the long run they can save time, expense, and possibly your life.

1. Engine oil level-add engine oil if required (page 25). Check for leaks.
2. Fuel level-fill fuel tank when necessary (page 24). Check for leaks.
3. Brakes-check operation; make sure there is no brake fluid leakage. Adjust free play if necessary (pages 17-20).
4. Tyres-check condition and pressure (page 31).
5. Spokes and rim locks-check and tighten if necessary (page 71).
6. Drive chain-check condition and slack (pages 27-30). Adjust and lubricate if necessary.
7. Chain guide sliders-check slider wear (page 27-28).
8. Throttle-check for smooth opening and closing in all steering positions (page 57-58).
9. Clutch-check operation, and adjust if necessary (pages 21-22).
10. Spark plug and high tension terminal-check for looseness.
11. Headlight-check for proper operation.
12. Engine stop button-check for proper function (page 32).
13. Nuts, Bolts, Fasteners-check front wheel to see that axle nut and axle holder nuts are tightened securely. Check rear wheel to see that axle nuts are tightened securely. Make sure cotter pins are installed. Check security of all other nuts, bolts, and fasteners.

Correct any discrepancy before you ride. Contact your authorised Honda dealer for assistance if you cannot correct the problem.

STARTING THE ENGINE

WARNING

* ***Never run the engine in a closed area. The exhaust contains poisonous carbon monoxide gas.***
* ***Attempting to start the engine with the transmission in gear and the clutch engaged may result in injury or damage.***

NOTE:

1. This motorcycle can be kickstarted with the transmission in gear by disengaging the clutch before operating the kickstarter.

PREPARATION

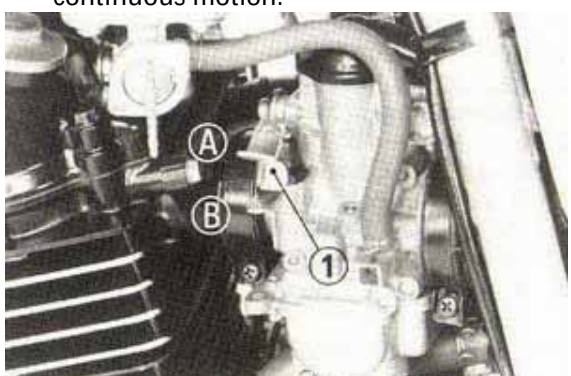
Make sure that the transmission is in neutral. Turn the fuel valve ON.

STARTING PROCEDURE

To restart a warm engine, follow the procedure for "High Air Temperature."

Normal Air Temperature
10° - 35°C (50°-95°F)

1. Pull the choke lever up all the way to "Fully Open" (A).
2. Keep the throttle closed.
3. Operate the kickstarter to start the engine. Starting from the top of the stroke, kick through to the bottom with a rapid, continuous motion.



(1) Choke lever (B) Fully Closed
(A) Fully Open

CAUTION:

* *Do not allow the kickstarter to snap back against the pedal stop, as engine case damage could result.*

1. About a half minute after the engine starts, push the choke lever down all the way to "Fully Closed" (B).
2. If idling is unstable, open the throttle slightly.

High Air Temperature

35°C (95°F) or above

1. Do not use the choke.
2. Keep the throttle closed.
3. Start the engine (See step 3 under "Normal Air Temperature").

NOTE:

If the engine fails to restart, follow the procedure described below:

* Pull the decompression lever in, open the throttle fully, and operate the kickstarter pedal several times to clear the engine.
* Release the decompression lever. Start the engine (See step 3 under "Normal Air Temperature").

Low Air Temperature

1O°C (50°F) or below

1. Follow steps 1-3 under "Normal Air Temperature."
2. Warm up the engine by opening and closing the throttle slightly.
3. Continue warming up the engine until it will idle smoothly with the choke lever pushed down all the way to "Fully Closed" (B).

CAUTION:

* *Extended use of the choke may impair piston and cylinder wall lubrication.*

MANUAL STARTER DECOMPRESSOR

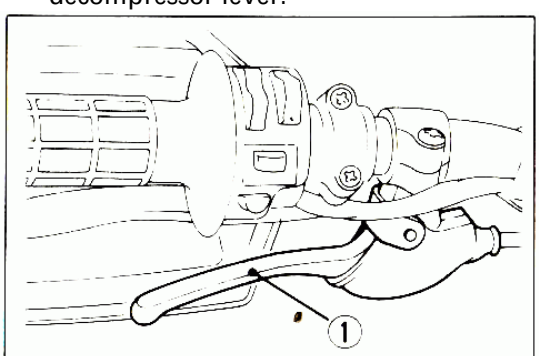
Although an engine decompression system is interlocked with the kickstarter, the manual starter decompressor can also be used if you experience starting difficulties.

To operate:

1. Push down lightly on the kickstarter until you feel some resistance.
2. Pull the decompressor lever (I) and push the kickstarter down again slowly about 1/4 to 1/2 of a full stroke.
3. Release the decompressor lever and kickstart the motorcycle in the usual manner.

The manual starter decompressor can also help restart the engine in an off-road situation where the motorcycle is rolling down a hill.

1. Close the throttle, disengage the clutch and shift into 2nd or 3rd gear.
2. With the motorcycle rolling, release the clutch.
3. If the rear tyre skids instead of turning over the engine, pull the decompressor lever. Releasing compression allows the rear wheel to roll while turning the engine over.
4. Release the decompressor lever. If the engine does not start, pull the decompressor lever again. Wait until the motorcycle gains speed and release the decompressor lever.



(1) Decompressor lever

FLOODED ENGINE

If the engine fails to start after repeated attempts, it may be flooded with excess fuel. To clear a flooded engine, stop the engine by pressing the engine stop button and push the choke lever down to the Fully closed position (B). Open the throttle fully and pull the manual decompression lever and crank the engine several times with the kickstarter while pushing the engine stop button. Release the engine stop button and follow the "High Air Temperature" starting procedure.

BREAK-IN

During the first 200 miles (350 km), avoid full throttle use and never lug the engine. Do not operate at any one speed for prolonged periods.

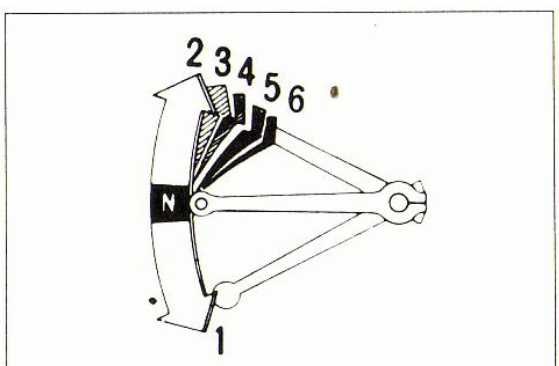
During initial break-in, newly machined surfaces will be in contact with each other and these surfaces will wear in quickly. Break-in maintenance at 200 miles (350 km) is designed to compensate for this initial minor wear. Timely performance of the break-in maintenance will ensure optimum service life and performance from the engine.

RIDING

WARNING

* ***Review Motorcycle Safety (pages 1-4) before you ride.***
* ***Make sure the side stand is fully retracted before riding the motorcycle. If the stand is extended, it may interfere with control during a left turn.***

1. After the engine has been warmed up, the motorcycle is ready for riding.
2. While the engine is idling, pull in the clutch lever and depress the gearshift pedal to shift into 1st (low) gear.
3. Slowly release the clutch lever and at the same time gradually increase engine speed by opening the throttle. Coordination of the throttle and clutch lever will assure a smooth positive start.
4. When the motorcycle attains a moderate speed, close the throttle, pull in the clutch lever and shift to 2nd gear by raising the gearshift pedal.
5. This sequence is repeated to progressively shift to 3rd, 4th, 5th and 6th (top) gears.
6. Raise the pedal to shift to a higher gear and depress the pedal to down shift. Each stroke of the pedal engages the next gear in sequence. The pedal automatically returns to the horizontal position when released.



Shifting pattern

WARNING

* ***Do not downshift when travelling at a speed that would force the engine to overrev in the next lower gear, or cause the rear wheel to lose traction.***

CAUTION:

* *Do not shift gears without disengaging the clutch and closing the throttle. The engine and drive train could be damaged by overspeed and shock.*
* ** Do not tow the motorcycle or coast for long distances while the engine is off. The transmission will not be properly lubricated and damage may result.*

HIGH ALTITUDE RIDING

When operating this motorcycle at high altitude the air-fuel mixture becomes overly rich. Driveability and performance may he reduced and fuel consumption increased. The carburettor can be modified to compensate for this high altitude richness. However, the carburettor must be returned to standard factory specifications when lower altitude riding is desired. See your authorised Honda dealer for this high altitude modification.

CAUTION:

* *Sustained operation at lower altitude's with high altitude carburettor modifications may cause engine overheating and damage.*

BRAKING

1. For normal braking, gradually apply both front and rear brakes while downshifting to suit your road speed.
2. For maximum deceleration, close the throttle and apply the front and rear brakes firmly. Disengage the clutch before the motorcycle stops.

WARNING

* ***Independent use of only the front or rear brake reduces stopping performance. Extreme braking may cause either wheel to lock, reducing control of the motorcycle.***
* ***When possible, reduce speed or brake before entering a turn; closing the throttle or braking in mid-turn may cause wheel slip. Wheel slip will reduce control of the motorcycle.***
* ***When riding in wet or rainy conditions, or on loose surfaces, the ability to manoeuvre and stop will be reduced. All of your actions should be smooth under these conditions. Sudden acceleration, braking or turning may cause loss of control. For your safety, exercise extreme caution when braking, accelerating or turning.***
* ***When descending a long, steep grade, use engine compression braking by downshifting, with intermittent use of both brakes. Continuous brake application can overheat the brakes and reduce their effectiveness.***

PARKING

1. After stopping the motorcycle, shift the transmission into neutral and turn the fuel valve OFF. Press the engine stop button until the engine stops completely.
2. Use the side stand to support the motorcycle while parked.

CAUTION:

* Park the motorcycle on firm, level ground to prevent it from falling over.

ANTI-THEFT TIPS

1. Be sure the registration information for your motorcycle is accurate and current.
2. Park your motorcycle in a locked garage whenever possible.
3. Use an additional anti-theft device of good quality.
4. Put your name, address, and phone number in this Owner's Manual and keep it on your motorcycle at all times. Many times stolen motorcycles are identified by information in the Owner's Manuals which are still with them.

NAME:_____

ADDRESS:_____

_____

_____

PHONE NO.:_____

MAINTENANCE

- When service is required, remember that your authorised Honda dealer knows your motorcycle best and is fully equipped to maintain and repair it. The scheduled maintenance may be performed by a qualified service facility that normally does this kind of work; or you may perform most of the work yourself if you are mechanically qualified.
- The maintenance intervals shown in the following schedule are based upon average riding conditions. Machines subjected to severe use, or ridden in unusually muddy or dusty areas require more frequent servicing.
- Consult your authorised Honda dealer for recommendations applicable to your individual needs and use.
- If your motorcycle is involved in a collision, have your Honda dealer inspect the major components including frame, suspension and steering parts for misalignment or damage.

WARNING

* ***Stop the engine and support the motorcycle securely on a level surface before performing any maintenance.***
* ***Use new, genuine Honda parts or their equivalent for maintenance and repair. Parts which are not of equivalent quality may impair the safety of your motorcycle.***

COMPETITION INSPECTION-Check all items before each race

No.	ITEMS	INSPECT FOR	ACTION	PAGE
1	All Pre-ride Inspection items			Page 35
2	Engine oil	Contaminants	Change	Pages 52-53
3	Fuel line	Deterioration, damage or leakage	Replace	Page 51
4	Valve clearance	Correct clearance	Adjust	Pages 61-62
5	Carburettor-idle speed	Correct idle speed	Adjust	Page 56
6	Carburettor-choke	Proper operation	-	-
7	Decompression mechanism	Proper free play	Adjust	Pages 59-60
8	Clutch discs	Proper operation	Replace	-
9	Air cleaner element	Contamination or tears	Clean or replace	Page 50
10	Spark plug	Tightness, proper heat range, and high-tension terminal security	Tighten, replace or secure	Pages 54-55
11	Steering head	Free rotation of handlebars and steering stem nut tightness	Adjust or retighten	-
12	Front suspension	Smooth operation, no oil leaks, good boot condition, air pressure and oil volume	Replace or adjust	Pages 10-12, 62
13	Rear suspension	Smooth operation, no oil leaks and spring height	Replace or adjust	Pages 13-15, 69
14	Swingarm bearings	Smooth operation	Replace	-
15	Rear suspension linkage brushings	Wear	Replace	-
16	Brake pads / shoes	Wear beyond service limit	Replace	Pages 18, 70
17	Drive chain	Length: 1716mm (66-15 / 16 in) / 107 pins max.	Replace	Pages 27-30
18	Sprockets	Wear and secure installation	Replace or tighten	Page 29
19	Seat	Security	Tighten	-
20	Headlight	Proper beam aim	Adjust	Page 73
21	Speedometer / tripmeter	Proper operation	Replace	Page 8
22	Control cables	Smooth operation, kinks and correct routing	Lubricate or replace	-
23	Engine mounting bolts	Tightness	Tighten	-

MAINTENANCE SCHEDULE

MAINTENANCE SCHEDULE I: Inspect and Clean, Adjust, Lubricate or replace if necessary. C: Clean. R: Replace. A: Adjust. L:Lubricate.		BREAK-IN MAINT 200 mi 350 km	REGULAR SERVICE INTERVAL 1,000 mi 1,600 km	REFER TO PAGE
*	FUEL LINE		I	51
*	FUEL FILTER	C	C	51
*	THROTTLE OPERATION	I	I	57
*	CARBURETTOR CHOKE	I	I	-
	AIR CLEANER SEE NOTE 1	C	C. every 500mi (800km)	50
	SPARK PLUG	I	I	53
*	VALVE CLEARANCE	I	I	61
	ENGINE OIL SEE NOTE 1	R	R	52
*	ENGINE OIL FILTER	R	R	53
*	ENGINE OIL FILTER SCREEN		C	-
*	STARTER DECOMPRESSOR	A	I	59
*	CARBURETTOR IDLE SPEED	I	I	56

* SHOULD BE SERVICED BY AN AUTHORISED HONDA DEALER. UNLESS THE OWNER HAS PROPER TOOLS AND IS MECHANICALLY QUALIFIED. REFER TO THE OFFICIAL HONDA SHOP MANUAL.

* IN THE INTEREST OF SAFETY, WE RECOMMEND THESE ITEMS BF SERVICED ONLY BY AN AUTHORISED HONDA DEALER.

	MAINTENANCE SCHEDULE I: Inspect and Clean, Adjust, Lubricate or replace if necessary. C: Clean. R: Replace. A: Adjust. L:Lubricate.	BREAK-IN MAINT 200 mi 350 km	REGULAR SERVICE INTERVAL 1,000 mi 1,600 km	REFER TO PAGE
	DRIVE CHAIN SEE NOTE 1	I, L	I, L every 300mi (500km)	63
	DRIVE CHAIN GUIDE SLIDER	I	I	28
	DRIVE CHAIN SLIDER	I	I	28
	BRAKE FLUID	I	I (2 YEARS * R)	17
	BRAKE SHOE/PAD WEAR		I	18,70
	BRAKE SYSTEM SEE NOTE 1	I	I	-
*	HEADLIGHT AIM	I	I	73
	CLUTCH SYSTEM	I	I	21
	SIDE STAND			72
*	SUSPENSION	I	I	68,69
	SWINGARM BEARING	I, L	I, L	69
	REAR SUSPENSION LINKAGE	I, L	I, L	69
*	NUTS, BOLTS, FASTENERS SEE NOTE 1	I	I	-
**	WHEELS/SPOKES SEE NOTE 1	I	I	71
**	STEERING HEAD BEARING	I	I	-

NOTE 1: Service more frequently when ridden in wet or dusty conditions.

SERIAL NUMBERS

The frame and engine serial numbers are required when registering your motorcycle. They may also be required by your dealer when ordering replacement parts. Record the numbers here for your reference.

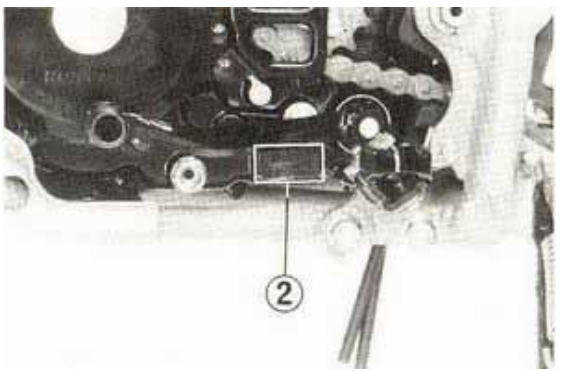
FRAME NO. _____



(1) Frame number

The frame number (1) is stamped on the right side of the steering head. The engine number (2) is stamped on top the crankcase.

ENGINE NO. _____



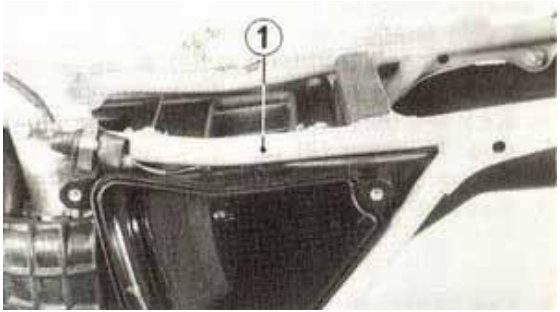
(2) Engine number

COLOUR LABEL

The colour label (1) is attached to the frame behind the left side cover. It is helpful when ordering replacement parts. Record the model and colour here for your reference.

MODEL_____

COLOUR_____

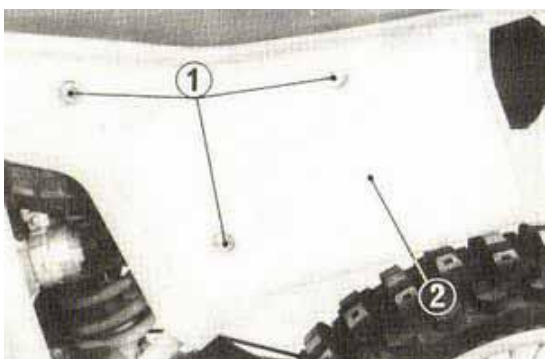


(1) Colour label

AIR CLEANER

The air cleaner should be serviced at regular intervals (page 45). When riding in dusty areas, more frequent service may be necessary.

1. Remove the air cleaner cover screws (1) and the cover (2).
2. Remove the wing nut (3).
3. 3. Remove the air cleaner element (4).



(1) Screws (2) Air cleaner cover

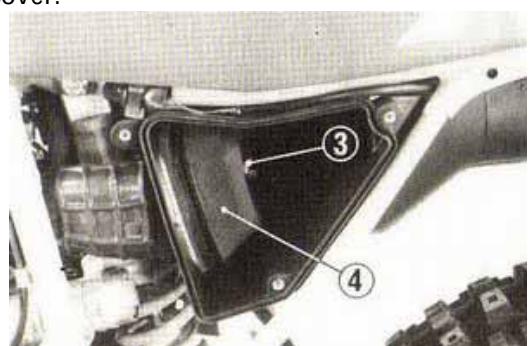
4. Wash the element in clean non-flammable or high flash point solvent and dry it thoroughly.

WARNING

* ***Never use gasoline or low flash point solvents for cleaning the air cleaner element. A fire or explosion could result.***

5. Soak the element in clean gear oil (SAE80-90) until saturated, then squeeze out the excess oil.

6. Install the element, and install the air cleaner cover.



(3) Wing nut (4) Air cleaner element

FUEL FILTER AND FUEL LINE

The fuel filter is incorporated in the fuel valve. An accumulation of dirt in the filter will restrict the flow of fuel and therefore, the fuel filter should be serviced periodically.

1. Drain the fuel from the fuel tank.
   Disconnect the fuel line.
   Remove the seat and the fuel tank.

WARNING

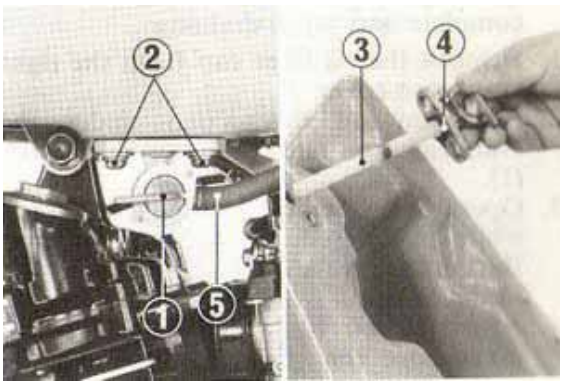
* ***Gasoline is extremely flammable and is explosive under certain conditions. Perform this operation in a well-ventilated area. Do not smoke or allow flames or sparks in the area.***

2. Remove the fuel valve (1) by removing the mounting screws (2) and collar. Remove the fuel filter (3) and wash it in clean non-flammable or high flash point solvent.

WARNING

* ***Never use gasoline or low flash point solvents for cleaning the fuel filter. A fire or explosion could result.***

3. Make sure the O-ring (4) on the fuel filter pipe is in good condition. Reinstall the fuel filter and fuel valve in the reverse order of removal and turn the fuel valve ON. Check for leaks.
4. Check the fuel line (5) for deterioration, damage or leakage. Replace it if necessary.



(1) Fuel valve
(2) Mounting screws
(3) Fuel filter
(4) O-ring
(5) Fuel line

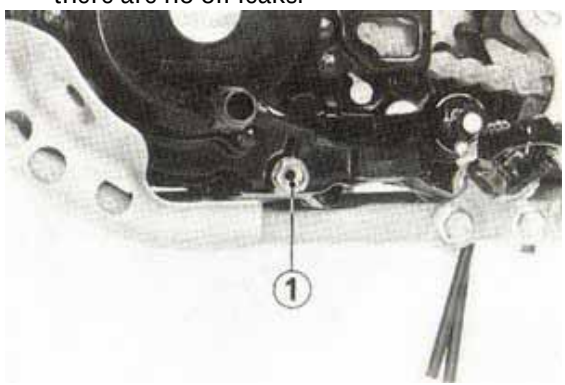
ENGINE OIL CHANGE

Engine oil quality is the chief factor affecting engine service life. Change the engine oil when specified by the maintenance schedule.

NOTE:

1. Change the engine oil with the engine at normal operating temperature and the motorcycle on its side stand to assure complete and rapid draining.

1. Remove the oil filler cap from the right crankcase cover.
2. Place an oil drain pan under the crankcase and remove the oil drain plug (1).
3. Operate the kickstarter several times while pushing down the Engine Stop Button to drain any oil which may be left in the engine.
4. After the oil has completely drained, make sure the sealing washer on the drain plug is in good condition.
5. Reinstall the drain plug.
   Drain plug torque:
   20-30 N m (2.0-3.0 kg-m, 14-21 ft-lb)
6. Fill the crankcase with approximately 1.1L (1.2 US qt) of the recommended grade oil.
7. Reinstall the oil filler cap.
8. Start the engine and let it idle for a few minutes.
9. Stop the engine. Make sure that the oil level is at the upper level mark with the motorcycle in an upright position, and that there are no oil leaks.

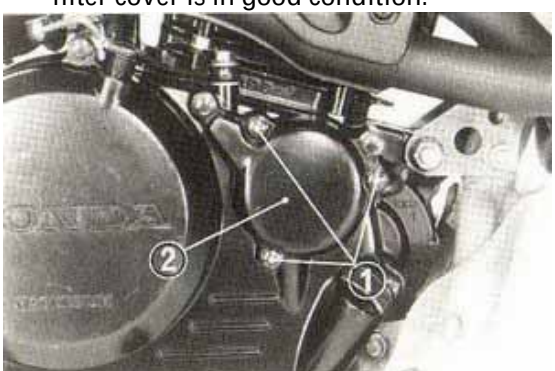


(1) Oil drain plug

ENGINE OIL FILTER

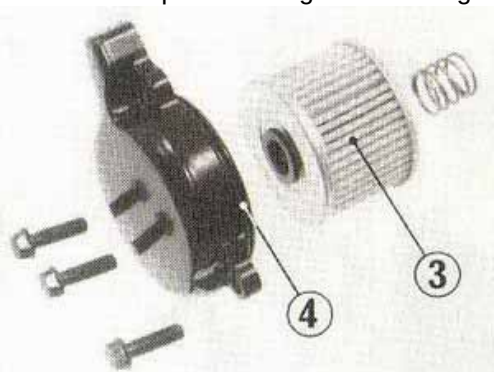
NOTE:

2. Change the filter after draining the engine oil
1. Remove the oil filter bolts (1) and cover (2).
2. Remove the oil filter element (3) from the cover.
3. 3. Check that the O-ring (4) on the oil filter cover is in good condition.



(1) Oil filter bolts (2) Cover

4. Insert a new oil filter element. Check that all parts are installed as shown.
5. Install the oil filter cover.
   Oil Filter Bolt Torque: 8-12 N m (0.8-1.2 kg-m, 5-9 ft-lb)
6. Perform steps 6-9 of Engine oil Change.



(3) Oil filter element (4) O-rings

SPARK PLUG

Recommended plugs:
Standard:

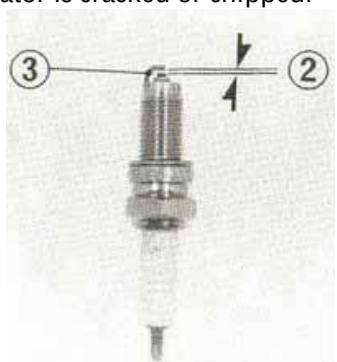
DPR9Z (NGK) or X27GPR-U (ND)

For most riding conditions this spark plug heat range number is satisfactory. However, if the motorcycle is going to be operated for extended periods at high speeds or near maximum power in hot climates, the spark plug should be changed to a colder heat range number.



(1) Multi-purpose wrench

1. Clean any dirt from around the spark plug base.
2. Disconnect the spark plug cap and remove the spark plug with the multipurpose wrench (1) provided in the tool bag.
3. Visually inspect the spark plug electrodes for wear. The centre electrode should have square edges and the side electrode should not be eroded. Discard the spark plug if there is apparent wear of if the insulator is cracked or chipped.



(2) Spark plug gap (3) Side electrode

4. Make sure that the spark plug gap (2) is 0.6-0.7 mm (0.024-0.028 in) using a wire-type feeler gauge. If adjustment is necessary, bend the side electrode (3) carefully. Make sure the plug washer is in good condition.
5. With the plug washer attached, thread the spark plug in by hand to prevent cross-threading.
6. Tighten a new spark plug 1/2 turn with a spark plug wrench to compress the washer. If you are reusing a plug, it should only take I/8-1/4 turn after the plug seats.

CAUTION:

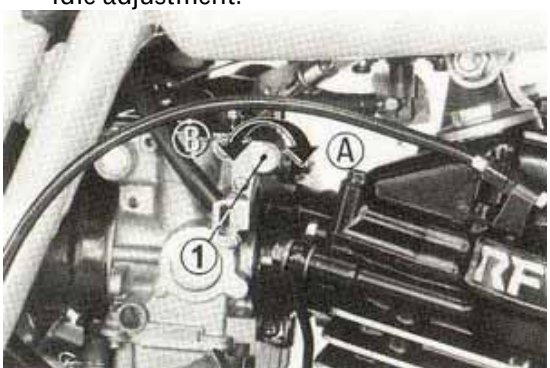
* *The spark plug must be securely tightened. An improperly tightened plug can become very hot and possibly damage the engine.*
* *Never use a spark plug with an improper heat range.*

CARBURETTOR

Idle Speed:

NOTE:

* Do not attempt to compensate for faults in other systems by carburettor adjustment. See your authorised Honda dealer for regularly scheduled carburettor adjustments.
* The engine must be warm for accurate idle adjustment.



(1) Throttle stop screw (A) Increase rpm
(B) Decrease rpm

1. Warm up the engine and hold the motorcycle upright. Shift to neutral.
2. Adjust the idle speed with the throttle Stop Screw (1).
   IDLE SPEED: 1,300 +/- 100 rpm

Idle Mixture:

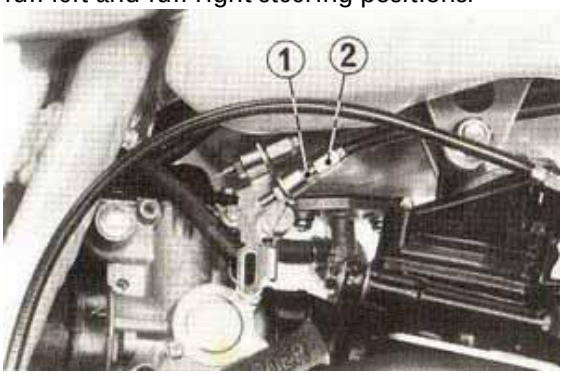
1. Turn the air screw clockwise until the engine misses or decreases in speed, then counter clockwise until the engine again misses or decreases in speed. Set the screw exactly between these two extreme positions to adjust the fuel mixture. Usually the correct setting will be found to be 1-1/4 turns open from the fully closed position.
2. If the idle speed changes after adjusting fuel mixture, readjust the idle speed by turning the throttle stop screw.

THROTTLE OPERATION

Cable Inspection:

Check for smooth rotation of the throttle grip from the fully open to the fully closed position. Check at full left and full right steering positions. Inspect the condition of the throttle cables from the throttle grip down to the carburettor. If the cables are kinked, chafed or improperly routed, they should be replaced or rerouted.

Check the cables for tension or stress at both full left and full right steering positions.



(1) Lower lock nut (2) Lower adjuster

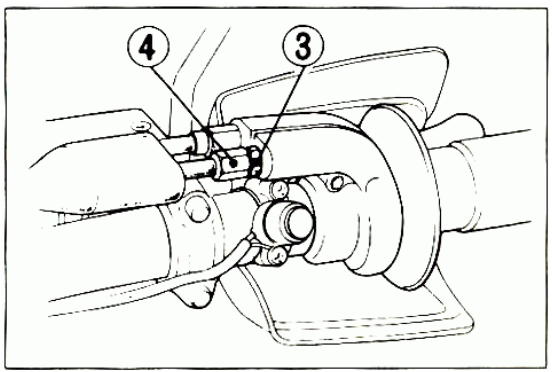
Lubricate the throttle cables with a commercially available cable lubricant to prevent premature wear and corrosion.

WARNING

* ***For safe operation and positive engine response, the throttle cable must be properly adjusted.***

Free Play Adjustment:

Standard throttle grip free play is approximately 2-6 mm (1/8-1/4 in) of grip rotation. Major free play adjustments, such as



(3) Upper lock nut (4) Upper adjuster

after replacing the throttle cables or removing the carburettor, are made with the lower adjuster (2). Minor free play adjustments are made with the upper adjuster (4). To adjust free play, loosen the lock nut (1) or (3), and turn the adjuster (2) or (4). Tighten the lock nut after adjustment.

STARTER DECOMPRESSOR

Excessive decompressor lever free plan will cause hard starting, and insufficient free play may cause erratic idling and valve burning.

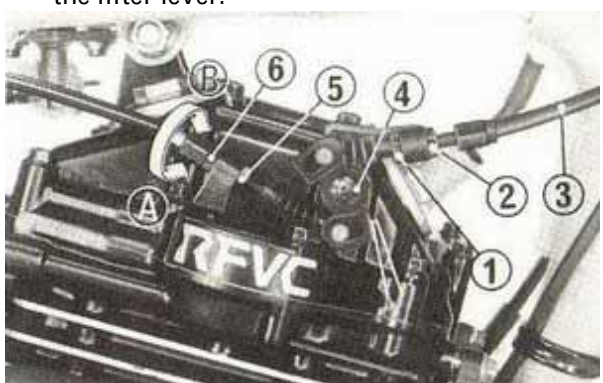
CAUTION:

* *Adjustment must be made for both manual and kickstarter decompressor.*

NOTE:

Adjust the decompressor linkage after adjusting the valve clearance.

1. Loosen the manual decompressor lock nut (1) and the manual decompressor adjusting nut (2).
2. Disconnect the manual decompressor cable (3) at the decompressor valve lifter lever (4).
3. 3. Be sure the piston is at the top of the compression stroke and the T mark is aligned with the index mark.
4. Measure the tree play at the tip of the decompression lifter lever. To adjust, loosen the lock nut (5) and turn the adjusting nut (6).
   Free play: 1-3 mm (1/32-1/8 in)
5. Install all parts in the reverse order of disassembly.
6. Connect the manual decompressor cable to the lifter lever.

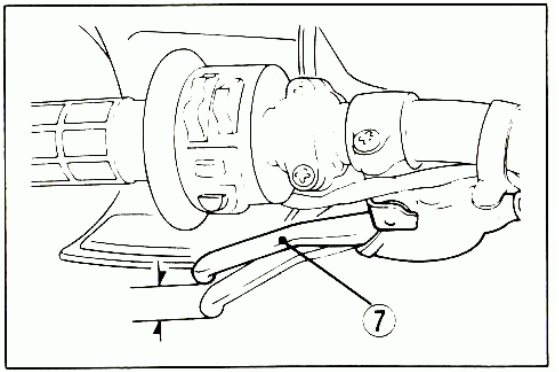


(1) Decompressor lock nut (4) Lifter lever
(2) Decompressor adjusting nut (5) Lock nut
(3) Manual decompressor cable (6) Adjusting nut
(A) Increase freeplay (B) Decrease free play

7. Measure the free play at the top of the manual decompressor lever (7).
   Free play: 5-8 mm (3/16 - 5/16 in)
   To adjust: Loosen the manual decompressor lock nut (2) and turn the adjusting nut (1).

Other Checks:

Check the decompression cable for kinks or signs of wear that could cause sticking or failure. Lubricate the decompression cable with a commercially available cable lubricant to prevent premature wear and corrosion.



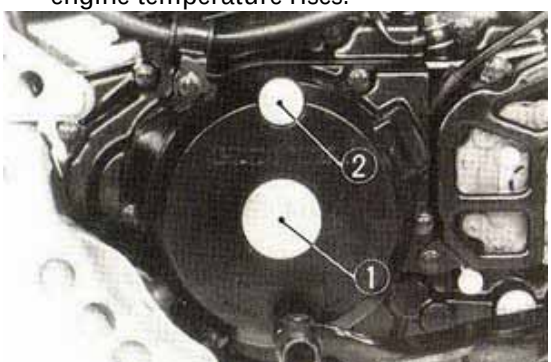
(7) Manual decompressor lever

VALVE CLEARANCE

Excessive valve clearance will cause noise. Little or no clearance will prevent the valve from closing and cause valve damage and power loss. Check valve clearance at the specified intervals.

NOTE:

* Checking or adjusting valve clearance should be performed while the engine is cold. The clearance may to increase as the engine temperature rises.



(1) Crankshaft hole cap
(2) Timing mark hole cap

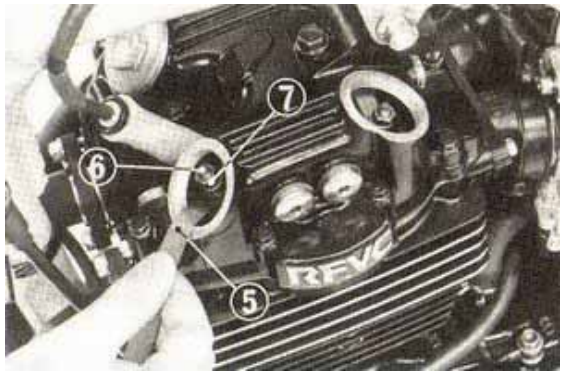
1. Turn the fuel valve OFF and remove the seat and fuel tank.
2. Remove the crankshaft hole cap (1) and timing mark hole cap (2).
3. Remove the valve adjuster covers.
4. Rotate the crankshaft counter clockwise and align the T mark (3) with the index mark (4). Make sure the piston is at the



(3) “T” mark
(4) Index mark

top of the compression stroke by jiggling the rocker arms with your fingers, If they are free, the piston is at the top of-the compression stroke. If they are tight, rotate the crankshaft 360° and realign the marks.

5. Check the clearance by inserting the feeler gauge (5) between the adjusting screw (6) and valve stem.
   Standard clearance:
   In.0.05mm (0.002 in)
   Ex.0.08mm (0.003 in)
   Adjust the valves by loosening the lock nut (7) and turning the adjusting screw (6) until there is a slight drag on feeler gauge. After tightening the lock nut (7), recheck the clearance.
6. Adjust the starter decompressor (see page 59).
7. Install all parts in the reverse order of disassembly.



(5) Feeler gauge (7) Lock nut
(6) Adjusting screw

DRIVE CHAIN

Removal and Cleaning:

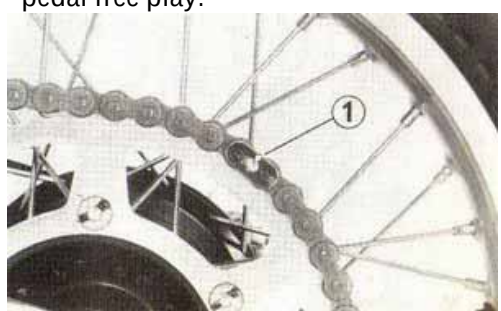
When the drive chain becomes dirty, it should be removed and cleaned prior to lubrication.

1. Carefully remove the master link retaining clip with a pliers. Do not bend or twist the clip. Remove the master link. Remove the drive chain from the motorcycle.
2. Clean the drive chain in clean non-flammable or high flash point solvent and allow to dry. Inspect the drive chain and clip for possible wear or damage. Replace any chain that has damaged rollers, loose fitting links, or otherwise appears unserviceable.

WARNING

* ***Never use gasoline or low flash point solvents for cleaning the drive chain. A fire or explosion could result.***

3. Inspect the sprocket teeth for possible wear or damage. Replace if necessary.
4. Lubricate the drive chain (see page 30).
5. Pass the chain over the sprockets and join the ends of the chain with the master link. For ease of assembly, hold the chain ends against the rear sprocket teeth while inserting the master link. Install the master link retaining clip (1) so that the closed end of the clip will face the direction of forward wheel rotation. The master link is the most critical part affecting the security of the drive chain. It is recommended that a new master link retaining clip be installed whenever the drive chain is reassembled.
6. Adjust the drive chain and rear brake pedal free play.



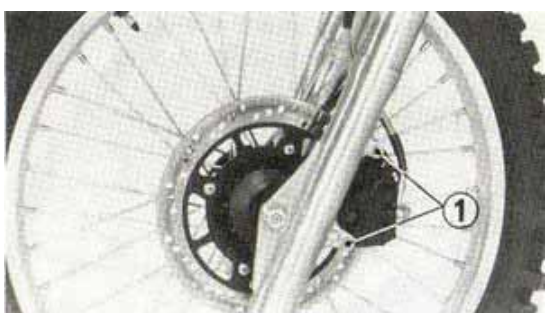
(1) Retaining clip

FRONT WHEEL REMOVAL

1. Raise the front wheel off the ground by placing a support under the engine.
2. Remove the speedometer cable set screw (2) and disconnect the speedometer cable (3).
3. Remove the brake hose guide.
   Remove the calliper assembly from the fork leg by removing the mount bolts (1).

CAUTION:

* *Support the calliper assembly so that it does not hung from the brake hose. Do not twist the brake hose.*

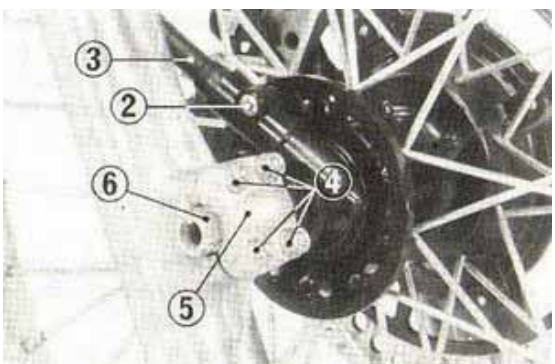


(1) Mount bolts

4. Remove the front axle holder nuts (4) and the front axle holder (5).
5. Unscrew the axle (6). Remove the wheel.

NOTE:

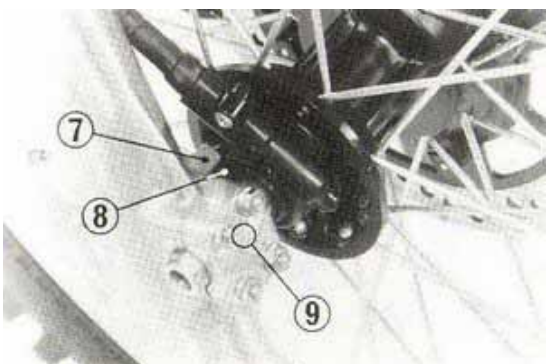
* Do not depress the brake lever when the wheel is off the motorcycle. The calliper piston will be forced out of the cylinder with subsequent loss of brake fluid. If this occurs, servicing of the brake system will be necessary. See your authorised Honda dealer.



(2) Screw
(3) Speedometer cable
(4) Axle holder nuts
(5) Axle holder
(6) Front axle

Installation Notes:

- Reverse the removal procedure.
- Insert the axle through the wheel hub and left fork leg.
- Make sure that the tang (7) on the fork leg is located in the slot (8) in the brake panel.
- Tighten the axle.
  Axle torque:
  50-80 N-m (5.0-8.0 kg-m, 36-58 ft-lb)



(7) Tang
(8) Slot
(9) "UP" mark

- Install the axle holder with the "UP" mark (9) upward and tighten the upper holder nuts to the specified torque first, then tighten the lower holder nuts to the same torque.

Axle holder nut torque:
10-14 N m (1.0-1.4 kg-m, 7-10 ft-lb)

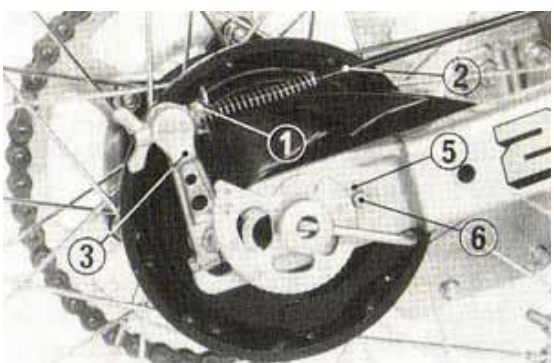
- Fit the calliper over the disc taking care not to damage the brake pads. Install the calliper fixing bolts (1) and tighten to the recommended torque 20-30 N.m (2.0-3.0 kg-m, 15-22 ft-lb)
- After installing the wheel, apply the brake several times and check for free wheel rotation when released.

WARNING

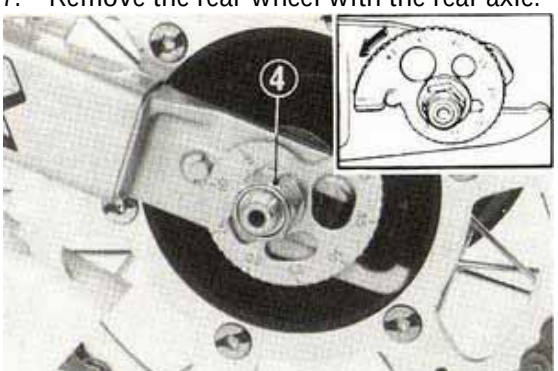
* ***If a torque wrench was not used for installation, see your dealer as soon as possible to verify proper assembly.***

REAR WHEEL REMOVAL

1. Raise the rear wheel off the ground by placing a support under the engine.
2. Pull the brake arm pin holder (1) forward and lift the brake rod (2) up to disconnect it from the rear brake arm (3).
3. Loosen the rear axle nut (4).
4. Pull the stopper plate (5) to the right until it is detached from the chain adjuster stopper pin (6).
5. Turn both adjusters so the rear wheel can be moved all the way forward for maximum drive chain slack.
6. Move the rear wheel forward and "hook" the adjusters over the stopper pins (6) on the swingarm. Derail the drive chain from the driven sprocket.
7. Remove the rear wheel with the rear axle.



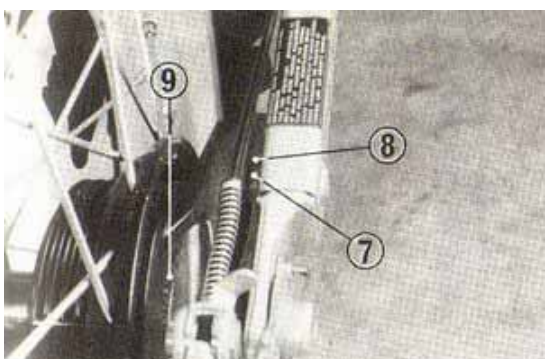
(1) Brake arm pin holder
(2) Brake rod
(3) Brake arm
(5) Stopper plate
(6) Stopper pin



(4) Axle nut

Installation Note:

- To install the rear wheel, reverse the removal procedure.
- Make sure that the tang (7) on the swingarm is located in the slot (8) in the brake panel (9).
  Tighten the axle nut to 80-110 N-m (8.0-11.0 kg-m, 58-80 ft-lb) torque.

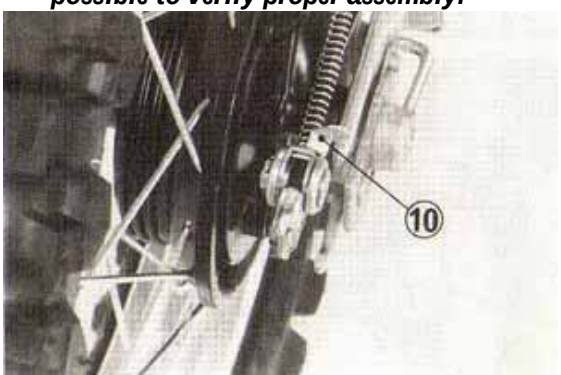


(7) Tang (9) Brake panel
(8) Slot

- Position the brake arm pin holder (10) correctly.
- Adjust the rear brake (page 19) and drive chain (pages 27-30).
- Apply the brake several times and check for free wheel rotation when released.

WARNING

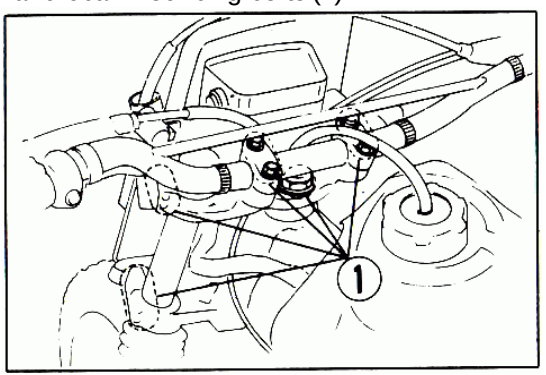
* ***If a torque wrench was not used for installation, see your dealer as soon as possible to verify proper assembly.***



(10) Brake arm pin holder

FRONT SUSPENSION

Check front fork action by locking the front brake and pumping the forks up and down several times. The suspension should function smoothly, with no oil leakage front the fork legs. Damaged, binding, or leaking front forks should be repaired before the motorcycle is operated. Check security of all front fork and handlebar mounting bolts (1).



(1) Mounting bolts

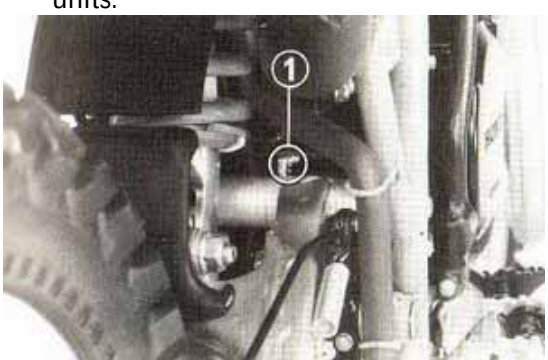
WARNING

* ***If any suspension components appear worn or damaged, consult your Honda dealer for further inspection. The suspension components are directly related to safety and your Honda dealer is qualified to determine whether or not replacement parts or repairs are needed.***
* ***Do not operate the motorcycle with loose, worn, or damaged steering or front suspension components, as handling will be adversely affected.***

REAR SUSPENSION

Check the rear suspension periodically by careful visual examination. Note the following items.

1. Swingarm bearings should be checked by pushing hard against the side of the rear wheel. Free play indicates worn bearings.
2. Check all suspension component attaching points for security of their respective fasteners.
3. Check for oil leaks in the shock absorber units.



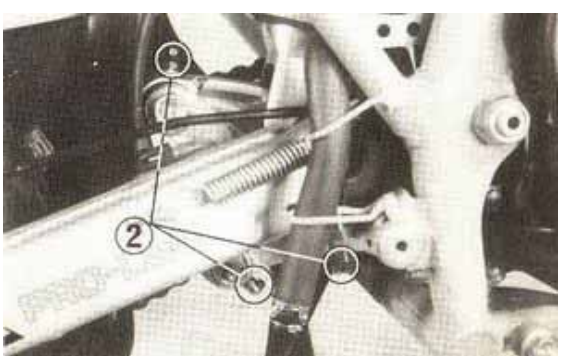
(1) Swingarm grease fitting

NOTE:

1. If any of the before mentioned components appear damaged or worn, consult your Honda dealer for further inspection.

Lubrication:

There are grease fittings at the swingarm pivot (1) and suspension linkage pivots (2). The swingarm pivot and linkage should be lubricated at the specified intervals with lithium based multipurpose grease with molybdenum disulfide additive.

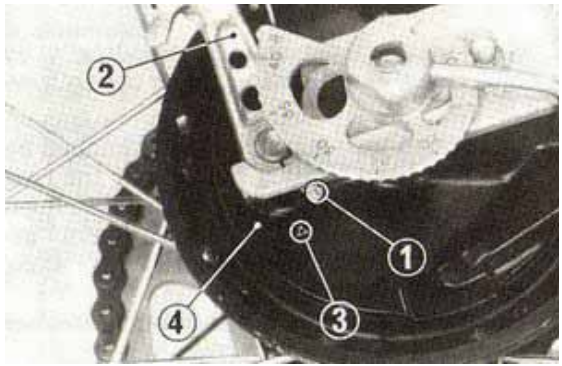


(2) Linkage grease fittings

BRAKE WEAR INDICATORS

The rear brake is equipped with brake wear indicators.

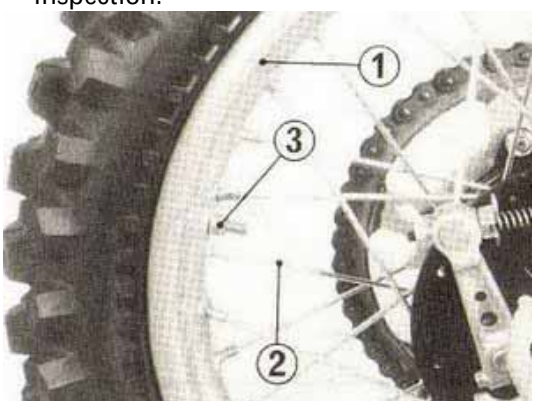
When the brake is applied, an arrow (1) attached to the brake arm (2) moves toward a reference mark (3) on the brake panel (4). If the arrow aligns with the reference mark on full application of the brake, the brake shoes must be replaced.



(1) Arrow
(2) Brake arm
(3) Reference mark
(4) Brake panel

WHEEL RIMS AND SPOKES

1. Inspect the wheel rims (1) and spokes (2) for damage.
2. Tighten any loose spokes and rim locks (3).
3. Check wheel rim turnout. If runout is noticeable, see your Honda dealer for inspection.



(1) Wheel rim (3) Rim lock
(2) Spoke

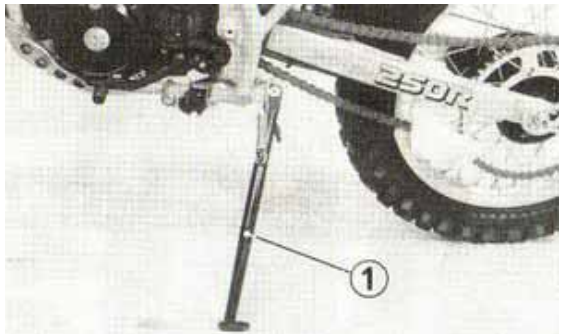
WARNING

* ***Maintenance of spoke tension and wheel trueness are critical to safe motorcycle operation. During the first 200 miles (350 km), spokes will loosen more rapidly due to initial seating of parts. Excessively loose spokes may result in high speed instability and possible loss of control.***

SIDE STAND

Check the side stand spring for damage and loss of tension, and the side stand assembly for freedom of movement.

If the side stand (1) is squeaky or stiff, clean the pivot area and lubricate the pivot bolt with engine oil.

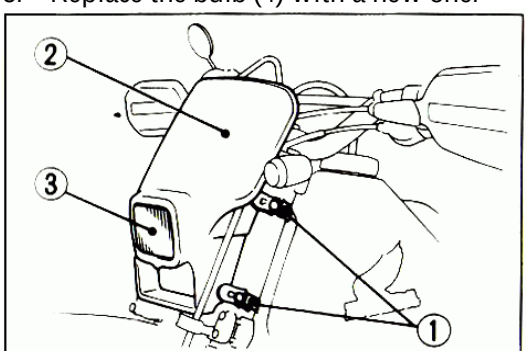


(1) Side stand

HEADLIGHT TAILLIGHT AND TURNSIGNAL

Headlight Bulb:

1. Remove the three headlight mounting bands (1) and remove the front number plate (2).
2. Disengage retaining pawl at valve socket from headlight case (3). Remove the bulb from the socket (5).
3. Replace the bulb (4) with a new one.



(1) Headlight mount bolts bands
(2) Number plate
(3) Headlight

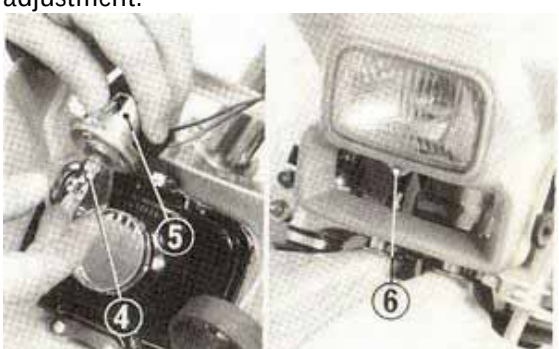
1. To install the headlight, reverse the removal procedure.

NOTE:

* When installing the bulb, align the tab on the bulb with the groove on the headlight case.

Headlight Aim:

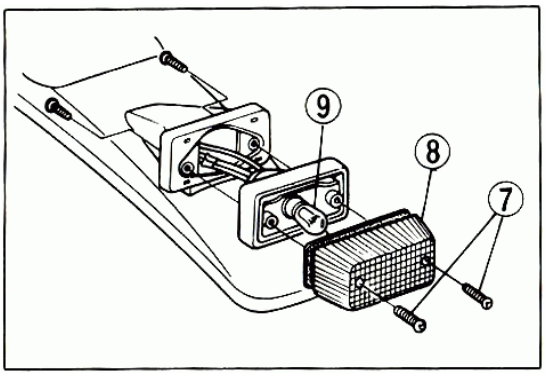
The headlight beam can be raised or lowered. Turn the adjusting screw (6) to move the headlight up or down to the proper adjustment.



(4) Headlight bulb
(5) Socket
(6) Adjusting screw

Taillight Bulb Replacement:

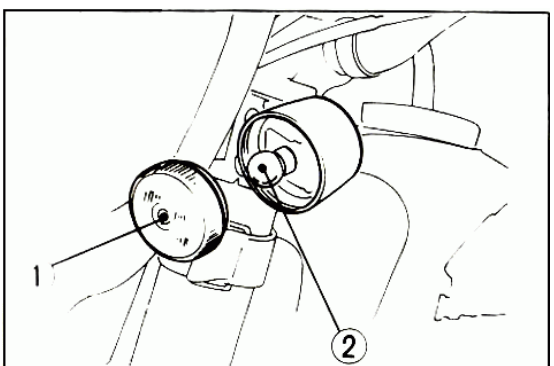
1. Remove the two screws (7) and remove the taillight lens (8).
2. Replace the bulb (9) with a new one.
3. Reinstall the lens.



(7) Screws (8) Taillight lens (9) Taillight bulb

Turn Signal Bulb

1. Remove the turn signal light lens (1) by pulling it forward.
2. Press the bulb (2) inward and twist to the left and the bulb can be removed.
3. Replace with a new bulb.
4. Install the turn signal light lens by pressing it.

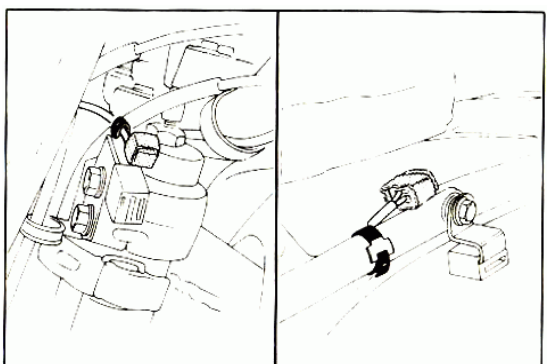


(1) Turn signal light lens
(2) Bulb

Turn Signal Removal

When you ride your XR250R with the turn signals removed, observe the following to prevent entry of mud and water into the connectors:

Front turn signals/ Rear turn signals - Wrap the wire harness connector with tape.



CLEANING

Clean your motorcycle regularly to protect the surface finishes and inspect for damage, wear, and oil or hydraulic fluid seepage.

CAUTION:

* *Avoid spraying high pressure water (typical in coin-operated car washes) at the following areas:*

Wheel Hubs	*Ignition Switch*
Carburettors	*Brake Master Cylinders*
Instruments	*Muffler Outlets*
Under Seat	*Under Fuel Tank*
Drive Chain	

1. After cleaning, rinse the motorcycle thoroughly with plenty of clean water. Strong detergent residue can corrode alloy parts.
2. Dry the motorcycle, start the engine, and let it run for several minutes.

WARNING

* ***Braking performance may be impaired immediately after washing the motorcycle.***

3. Test the brakes before riding the motorcycle. Several applications may be necessary to restore normal braking performance.
4. Lubricate the drive chain immediately after washing the motorcycle.

STORAGE GUIDE

STORAGE

Extended storage, such as for winter, requires that you take certain steps to reduce the effects of deterioration from non-use of the motorcycle. In addition, necessary repairs should be made BEFORE storing the motorcycle; otherwise, these repairs my be forgotten by the time the motorcycle removed from storage.

1. Change the engine oil and filter.
2. Lubricate the drive chain.
3. Drain the fuel tank and carburettor. Spray the inside of the tank with an aerosol rust-inhibiting oil. Reinstall the fuel cap on the tank.

WARNING

* ***Gasoline is flammable and is explosive under certain conditions. Do not smoke or allow flames or sparks near the equipment while draining fuel.***

4. Remove the spark plug and pour a tablespoon (15-20 cc) of clean engine oil into the cylinder. Crank the engine several times to distribute the oil, then reinstall the spark plug.

NOTE:

* When turning the engine over, the Engine Stop button should be pushed.

5. Wash and dry the motorcycle. Wax all painted surfaces. Coat chrome with rust inhibiting oil.

6. Inflate the tyres to their recommended pressures. Place the motorcycle on blocks to raise both tyres off the ground.
7. Cover the motorcycle (don't use plastic or other coated materials) and store in an unheated area, free of dampness with a minimum of daily temperature variation. Do not store the motorcycle in direct sunlight.

REMOVAL FROM STORAGE

1. Uncover and clean the motorcycle. Change the engine oil if more than 4 months have passed since the start of storage.
2. Check the battery electrolyte level and charge the battery as required. Install the battery.
3. Drain any excess aerosol rust-inhibiting oil from the fuel tank. Fill the fuel tank with fresh gasoline.
4. Perform all Pre-ride Inspection checks (page 34). Test ride the motorcycle at low speeds in a safe riding area away from traffic.

SPECIFICATIONS

DIMENSIONS

Overall length	2,035 mm (80.1 in)
Overall width	880 mm (34.6 in)
Overall height	1,180 mm (46.5 in)
Wheel base	1,365 mm (53.7 in)

WEIGHT

Dry weight	105 kg (231 lb)

CAPACITIES

Engine oil	1.3L (1.4 US qt) After disassembly 1.1L (1.2 US qt) After draining
Fuel tank	9.0L (2.4 US gal)
Fuel reserve tank	1.5L (0.4 US gal)
Passenger capacity	Operator Only
Vehicle capacity load	100 kg (220 lb)
Front fork oil capacity	397 cc (13.4 Oz)

ENGINE

Bore and stroke	75 x 56.5 mm(2.9x2.2in)
Compression ratio	10.2 : 1
Displacement	249 cc (15.2 cu. in)
Spark plug	
Standard	DPR 9Z(NGK) or X27GPR-U(ND)
For cold climate	DPR 8Z(NGK) or X24GPR-U(ND)
Spark plug gap	0.6-0.7 mm (0.024-0.028 in)
Valve clearance	Intake: 0.05 mm (0.002 in) Exhaust: 0.08 mm (0.003 in)
Idle speed	1300±100 rpm

CHASSIS AND SUSPENSION

Caster	64°
Trail	105 mm (4.1 in)
Tyre size, front	3.00-21 (6 PR)
Tyre size, rear	4.60-17 (6 PR)

POWER TRANSMISSION

Primary reduction		3,100
Final reduction		3,846
Gear ratio,	1st	2,769
	2nd	1,941
	3rd	1,450
	4th	1,174
	5th	0.960
	6th	0.815



ELECTRICAL

Alternator	0.0595 kw / 5,000 rpm

LIGHTS

Headlight (Low / High)	12V - 25 / 25W
Taillight	12V - 5W
Stoplight	12V - 18W
Turn signal light (Front / Rear)	12V - 10 / 10W

PARTS & ACCESSORIES

Click On Link Below

OEM parts & online schematics (US)

OEM parts & online schematics (EU)

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