

HONDA VT250-FII

OWNER'S MANUAL

- ALL INFORMATION, ILLUSTRATIONS, DIRECTIONS AND SPECIFICATIONS INCLUDED IN THIS PUBLICATION ARE BASED ON THE LATEST PRODUCT INFORMATION AVAILABLE AT THE TIME OF APPROVAL FOR PRINTING. HONDA MOTOR CO., LTD. RESERVES THE RIGHT TO MAKE CHANGES AT ANY TIME WITHOUT NOTICE AND WITHOUT INCURRING ANY OBLIGATION WHATEVER. NO PART OF THIS PUBLICATION MAY BE REPRODUCED WITHOUT WRITTEN PERMISSION.

IMPORTANT NOTICE

- **OPERATOR AND PASSENGER**

This motorcycle is designed to carry the operator and one passenger. Never exceed the vehicle capacity load as shown on the loading and accessories warning label.

- **ON-ROAD USE**

This motorcycle is designed to be used only on the road.

- **READ THIS OWNER'S MANUAL CAREFULLY**

Pay special attention to statements preceded by the following words:

WARNING:

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

CAUTION:

Indicates 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 motorcycle and should remain with the motorcycle when resold.

PREFACE

This booklet is your guide to the basic operation and maintenance of your new motorcycle.

Please take the time to read the Owner's Manual carefully. As with any fine machine, proper care and maintenance are essential for trouble-free operation and optimum performance.

Your authorized Honda dealer will be glad to provide further information or assistance and is fully equipped to handle your future service needs.

Thank you for selecting a Honda. We wish you many miles of continued riding pleasure in the years ahead.

CONTENTS

| | | | |
|------------------------------------|----|--|----|
| MOTORCYCLE SAFETY | 3 | Crankcase breather | 38 |
| SAFE RIDING RULES | 3 | Front brake | 39 |
| PROTECTIVE APPAREL | 4 | Rear brake | 41 |
| MODIFICATIONS | 4 | Side stand | 42 |
| LOADING AND ACCESORIES | 4 | Front and rear suspension inspection | 43 |
| TIRE: TUBELESS | 7 | Front wheel removal | 44 |
| SUSPENSION | 10 | Rear wheel removal | 49 |
| EQUIPMENT AND CONTROLS | 13 | Drive chain | 50 |
| FUEL AND OIL | 23 | Side cover removal | 53 |
| PRE-RIDING INSPECTION | 24 | Battery care | 53 |
| STARTING THE ENGINE | 25 | Fuse replacement | 54 |
| STARTING PROCEDURE | 26 | Radiator servicing | 56 |
| BRAKE-IN PROCEDURE | 27 | Stoplight switch adjustment | 60 |
| RIDING THE MOTORCYCLE | 28 | Tool kit | 60 |
| MAINTENANCE SCHEDULE | 29 | Serial Numbers | 61 |
| MAINTENANCE | 31 | Color Label | 62 |
| Engine oil | 31 | STORAGE GUIDE | 63 |
| Spark plugs | 34 | NOISE EMISSION | 64 |
| Air cleaner servicing | 35 | SPECIFICATIONS | 65 |
| Throttle operation | 37 | WIRING DIAGRAM | |
| Engine idle speed adjustment | 37 | | |
| Clutch | 38 | | |

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 24) before you start the engine. You may prevent an accident or equipment damage.
2. Many accidents involve inexperienced riders. Most countries require a special motorcycle riding test or license. Make sure you are qualified before you ride. NEVER lend your motorcycle to an inexperienced rider.
3. Many car/motorcycle accidents happen because the car driver does not "see" the motorcyclist. Make yourself conspicuous to help avoid the accident that is not your fault:
 - * Wear bright or reflective clothing.
 - * Don't drive in another motorist's "blind spot".
4. Obey all national, and local laws and regulations.
 - * Excessive speed is a factor in many accidents. Obey the speed limits, and NEVER travel faster than conditions warrant.
 - * Signal before you make a turn or lane change. Your size and maneuverability can surprise other motorists.
5. Don't let other motorists surprise you. Use extra caution at intersections, parking entrances and exits and driveways.
6. Keep both hands on the handlebars and both feet on the footrest while riding. A passenger should hold on to the motorcycle or the rider with both hands, and keep both feet on the passenger footrests.

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; boots gloves, and protective clothing. A passenger needs the same protection.
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, footrests, or wheels.

MODIFICATIONS

WARNING: Modification of the motorcycle, or removal of original equipment may render the vehicle unsafe or illegal. Obey all national and local equipment regulations.

LOADING AND ACCESSORIES

WARNING: To prevent an accident, use extreme care when adding and riding with accessories and luggage. The addition of accessories and luggage can reduce a motorcycle's stability, performance and safe operating speed. Remember these performances may be reduced by installation of non-Honda accessories, improper loading, poor road or weather conditions, etc.

These general guidelines may help you decide whether or how to equip your motorcycle, and how to load it safely.

Loading

The combined weight of the rider, passenger, luggage and additional accessories must not exceed 167 kg (366 lbs), the vehicle capacity load. Luggage weight alone should not exceed 9 kg (20 lbs).

1. **Keep luggage and accessory weight low and close to the center of the motorcycle. Load weight equally on both sides to minimize imbalance. As weight is located farther from the motorcycle's center of gravity, handling is proportionally affected.**
2. **Adjust tire pressure (TIRES, page 7), front fork air pressure and rear shockabsorber air pressure (SUSPENSION, page 10) to suit load weight and riding conditions.**
3. **Luggage racks are for light weight items. Bulky items too far behind the rider can cause wind turbulence that impairs handling.**
4. **All cargo and accessories must be secure for stable handling. Re-check cargo security and accessory mounts frequently.**
5. **Do not attach large, heavy items 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 above, and these:

1. Carefully inspect the accessory to make sure it does not obscure any lights, reduce ground clearance and banking angle, or limit suspension travel, steering travel or control operation.
2. Large fork-mounted fairings or large handlebar-mounted windshields, or poorly designed or improperly mounted fairings or windshields can produce aerodynamic forces that cause unstable handling.
3. Accessories which alter your riding position by moving hands or feet away from controls may increase reaction time in an emergency.
4. Do not add electrical equipment that will exceed the motorcycle's electrical system capacity. A blown fuse could cause a dangerous loss of lights or engine power at night or in traffic.
5. Any modification of the cooling system may cause overheating and serious engine damage. Do not modify the radiator shrouds or install accessories which block or deflect air away from the radiator.

TIRES: TUBELESS

This motorcycle is equipped with tubeless tires, valves, and wheel rims. Use only tires marked "TUBELESS TIRE APPLICABLE".

Proper air pressure will provide maximum stability, riding comfort and tire life.

Check tire pressure frequently and adjust if necessary.

NOTE:

- Tire pressure should be checked when the tires are "cold", before you ride.
- Tubeless tires have some degree of selfsealing ability if they are punctured, and leakage is often very slow. Inspect very closely for punctures, especially if the tire is not fully inflated.

| | | Front | Rear |
|--|--------------------------|----------------|----------------|
| Tire size | | 100/90-16 54S | 110/90-17 60S |
| Cold tire pressures kPa (kg/cm ² , psi) | Driver only | 225 (2.25, 32) | 225 (2.25, 32) |
| | Driver and one passenger | 225 (2.25, 32) | 250 (2.5, 36) |
| Tire brand TUBELESS ONLY BRIDGESTONE DUNLOP | | G511 K527A | G510 K898 |

Check the tires for cuts, imbedded nails or other sharp objects. Check the rims for dents or deformation. If there is any damage, see your authorized Honda dealer for repair, replacement, and balancing.

WARNING:

- **Improper tire inflation will cause abnormal tread wear and create a safety hazard. Underinflation may result in the tire slipping on, or coming off of the rim.**
- **Operation with excessively worn tires is hazardous and will adversely affect traction and handling.**

Replace tires before tread depth at the center of the tire reaches the following limit:

| Minimum tread depth | |
|---------------------|------------------|
| Front: | 1.5 mm (1/16 in) |
| Rear: | 2.0 mm (3/32 in) |

Repair:

- **Puncture of tubeless tires may be fixed externally for emergency. See your authorized Honda Dealer for the correct method before you encounter actual failure on the road.**

WARNING:

- **Do not exceed 60 km/h (40 mph) for the first 24 hours after the repair carried out, otherwise repair failure or tyre deflation may result.**
- **It is important, after a repair has been carried out to the tyres, to pay special attention when riding at high speed as the tyre performance may deteriorate.**
- **If you wish to have temporary repair or you have any doubt regarding a repair, please consult HONDA dealers or your local tubeless tyre specialist.**

Replacement:

See your authorized Honda Dealer.

WARNING:

- The use of tires other than those listed on the tire information label may adversely affect handling.
- Do not install tube-type tires on tubeless rims. The beads may not seat and the tires could slip on the rims, causing the deflation.
- Proper wheel balance is necessary for safe, stable handling of the motorcycle. Do not remove or change any wheel balance weights. When wheel balancing is required, see your authorized Honda dealer. Wheel balancing is required after tire repair or replacement.
- Foreign object intrusion of tire face will reduce the performance of any tire. Subsequent repair may not restore original safety factor.

CAUTION:

- If the tire sidewall is punctured or damaged, the tire must be replaced.
- Do not try to remove tubeless tires without special tools and rim protectors. You may damage the rim sealing surface or disfigure the rim.

SUSPENSION

The front and rear suspension of this motorcycle can provide the desired ride under various rider/cargo weights and driving conditions through adjustment of the air pressure.

The recommended pressures under normal conditions are:

Front: 20—40 kPa (0.2—0.4 kg/cm², 3—6 psi)

Rear: 50—300 kPa (0.5—3.0 kg/cm², 7—44 psi)

Low air pressure settings provide a softer ride and are for light loads and smooth road conditions. High air pressure settings provide a firmer ride and are for heavy loads and rough road conditions.

| Front Air Pressure | Rear Air Pressure | Conditions | |
|---|---|--------------------------------|---------------------------------|
| | | Rider/Load | Driving Conditions |
| 20 kPa (0.2 kg/cm ² , 3 psi) | 50 kPa (0.5 kg/cm ² , 7 psi) | One | Ordinary or city road riding |
| ↕ | ↕ | ↕ | ↕ |
| 40 kPa (0.4 kg/cm ² , 6 psi) | 300 kPa (3.0 kg/cm ² , 44 psi) | Up to vehicle capacity load | Rough road riding |

Check and adjust air pressure when the front fork tubes and rear shock absorbers are cold before riding.

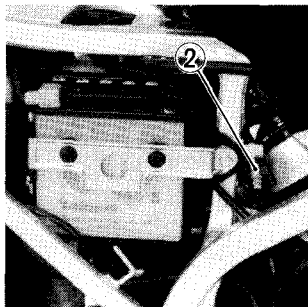
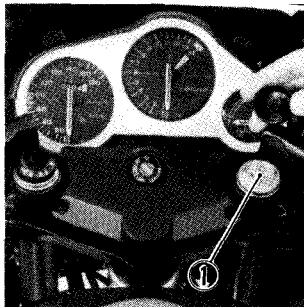
1. Place the motorcycle on its center stand. Do not use the side stand or you will get false pressure readings.
2. Remove the front fork air valve (1) cap and rear shock absorber air valve (2) cap.
3. Check the air pressure.

NOTE:

- * **Some pressure will be lost when removing the gauge from the valve. Determine the amount of loss and compensate accordingly.**
4. Add air to the recommended pressure.

NOTE:

- * **We recommend that you do not exceed recommended air pressure or the ride will be harsh and uncomfortable.**

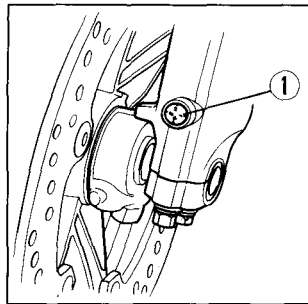


Anti-dive Adjuster

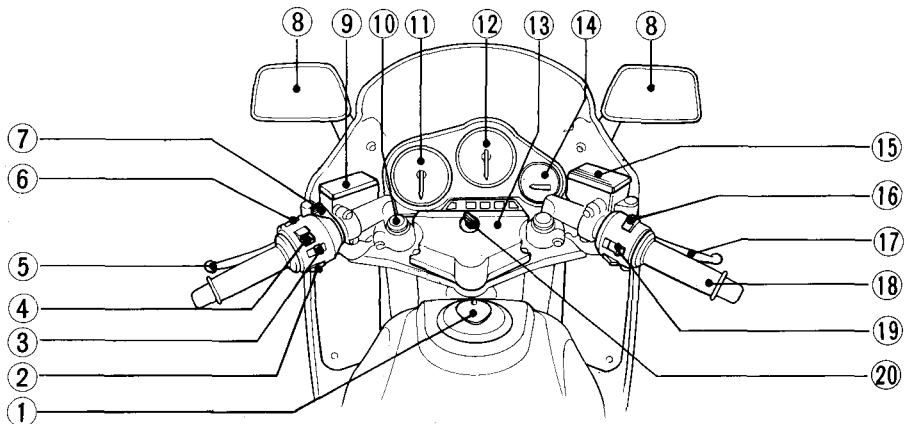
This adjuster (1) reduces nose-dive during braking and may be adjusted to the rider's choice independent of load or the rider's weight. Located on the front of the left fork, this adjuster can be set to any one of four positions.

| Position | Anti-dive damper force |
|----------|------------------------|
| 1 | LIGHT ANTI-DIVE |
| 2 | MEDIUM |
| 3 | HARD |
| 4 | MAXIMUM ANTI-DIVE |

WARNING: Do not position the adjuster between the numbered detent adjustment points.



EQUIPMENT AND CONTROLS



(1) Fuel tank cap

(2) Horn button

(3) Turn signal switch

(4) Headlight dimmer switch

(5) Clutch lever

(6) Passing light switch

(7) Choke lever

(8) Rear view mirror

(9) Clutch fluid reservoir

(10) Air valve

(11) Speedometer

(12) Tachometer

(13) Fuse box

(14) Coolant temperature gauge

(15) Brake fluid reservoir

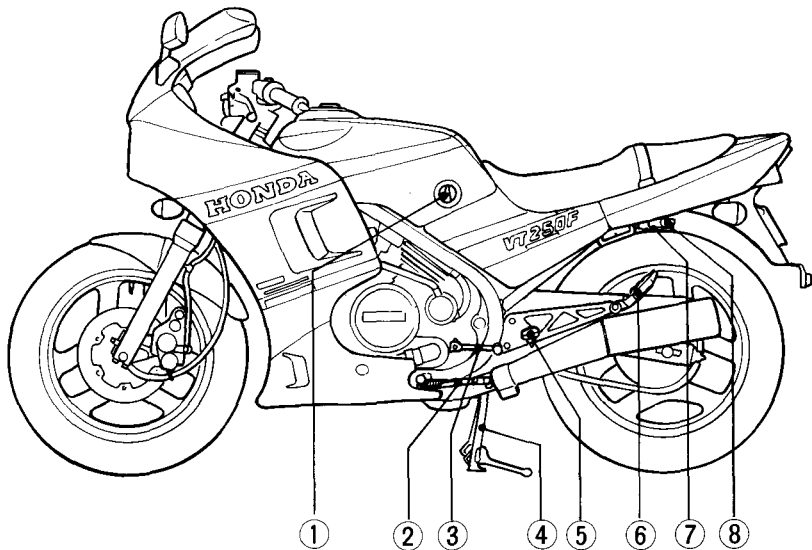
(16) Engine stop switch

(17) Brake lever

(18) Throttle grip

(19) Headlight switch

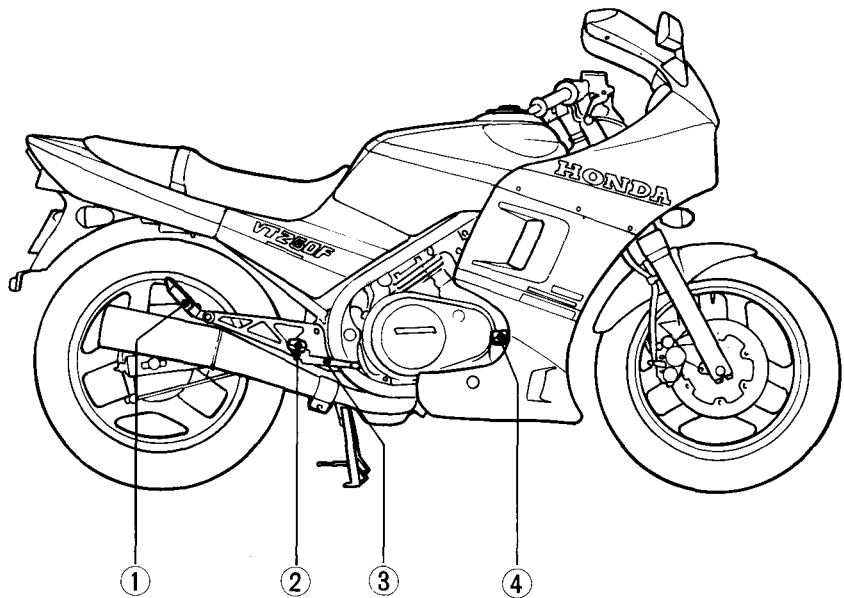
(20) Ignition switch



- (1) Fuel valve
- (2) Side stand
- (3) Gearshift pedal

- (4) Center stand
- (5) Footpeg
- (6) Passenger footpeg

- (7) Seat lever
- (8) Helmet holder



(1) Passenger footpeg

(2) Footpeg

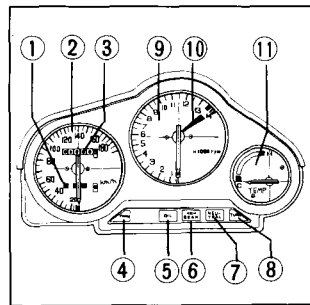
(3) Brake pedal

(4) Engine oilfiller cap/dipstick

Instruments and Indicator Lights

The instruments are grouped together above the headlight case. The indicator lights are located between the instruments.

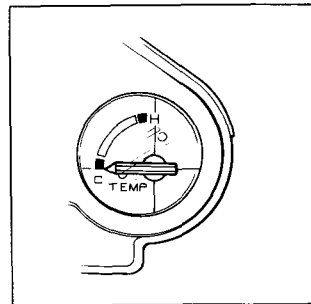
- | | |
|--------------------------------|-----------------------------------|
| (1) Tripmeter | (6) High beam indicator |
| (2) Speedometer | (7) Neutral indicator |
| (3) Odometer | (8) Right turn signal indicator |
| (4) Left turn signal indicator | (9) Tachometer |
| (5) Oil pressure warning light | (10) Tachometer red zone |
| | (11) Coolant temperature gauge |



Coolant Temperature Gauge

When the needle reaches the blue mark, the engine is warm enough to ride. Normal operating temperature is within the green band. If the needle enters the red zone, stop the engine and check the reserve tank coolant level. Read pages 56—59 and do not drive the motorcycle until the problem has been corrected.

CAUTION: Exceeding maximum running temperature may cause serious engine damage.

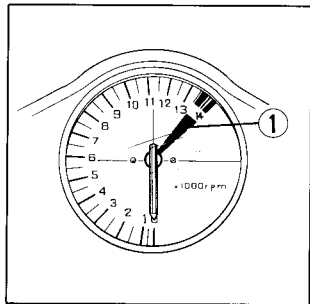


Tachometer Red Zone

CAUTION:

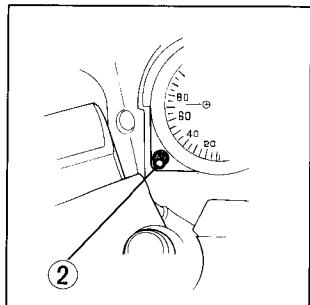
- Never allow the tachometer needle to enter the red zone (1), even after the engine has been broken in.
- Be careful when blipping or accelerating in the 1st or 2nd gear as the needle will enter the red zone easily.

The red zone indicates the maximum engine speed limit and running the engine in this range will adversely affect its service life.



Tripmeter

Use the tripmeter to calculate mileage on trips. Reset to zero with the knob (2).



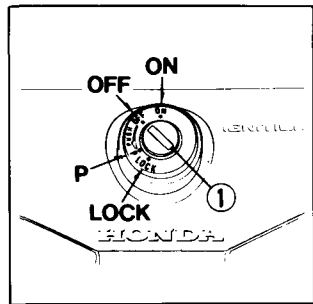
Ignition Switch

The ignition switch (1) is located directly below the indicator panel.
OFF: All electric circuits open. Engine cannot be started. Key can be removed.

ON: All electric circuits closed. Engine and light can be operated. Key cannot be removed.

P (PARKING): All electric circuits open except for taillight and position light. Key can be removed.

LOCK (STEERING LOCK): See page 21.



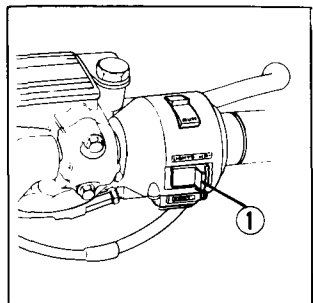
Headlight Switch

The headlight switch (1) has three positions; "H", "P" and "OFF" marked by a dot to the right of "P".

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

P: Position light, taillight and meter lights on.

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

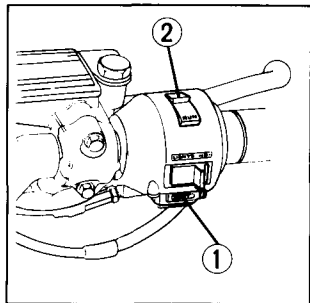


Starter Button

The starter button (1) will operate the starting motor. When you press in the button, the starter cranks the engine. The use of the button is explained on page 25.

Engine Stop Switch

Your motorcycle is equipped with an engine stop switch (2). At the "OFF" position, the ignition circuit is open. The switch should normally be placed at the "RUN" position. Do not use this switch except to stop the engine in an emergency.



Headlight Dimmer Switch (1)

Push the dimmer switch to "H" to select high beam or to "Lo" to select low beam.

Passing Light Control Switch (2)

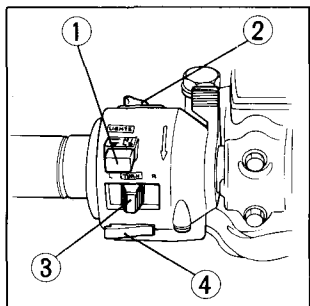
When this switch is pressed, the headlight flashes on to signal approaching cars or when passing.

Turn Signal Switch (3)

Move to L to signal a left turn, R to signal a right turn. Press to turn signal off.

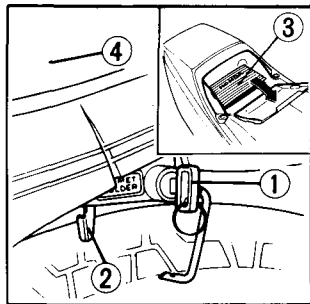
Horn Button (4)

When this button is pressed the horn sounds.



Seat/Document Bag

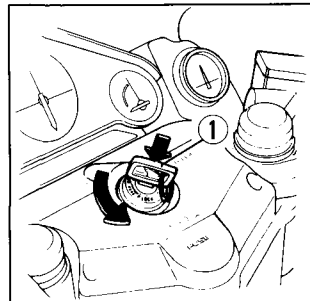
The document bag is located under the seat to store the owner's manual (3) and other documents. Release the helmet holder with the ignition key (1) and pull the seat lock levers (2) backward. Then remove the seat (4) by lifting and sliding it backward.



Steering Lock

The steering can be locked when the ignition switch (1) is in "LOCK" position.

Turn the handlebar all the way to the steering stop, either to the left or right, insert the key at the "OFF" position turn it counterclockwise to "LOCK" position while pushing in and then remove the key. To unlock, only turn the key clockwise.

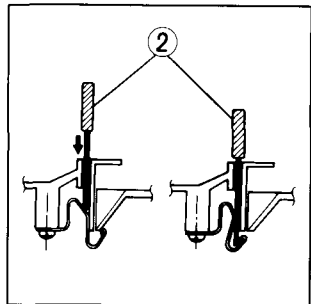
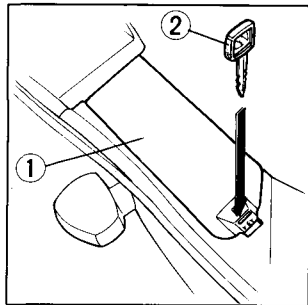


Fairing Pockets

The fairing pockets (1) can be removed with a key (2).

NOTE:

- * Do not exceed 1.0 kg (2.2 lbs) when storing in the fairing pocket.
- * Water may get into the fairing pocket. Be careful when storing valuables in the fairing pocket.

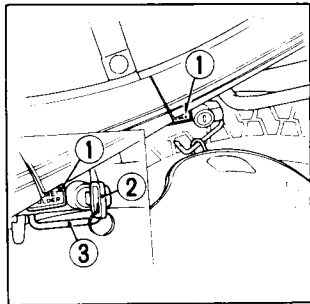


Helmet Holder

The helmet holder (1) eliminates the need for carrying your helmet after parking. The holder can be locked to help prevent theft.

1. Unlock the holder with the key (2).
2. Hang your helmet on the holder pin (3) and lock the holder pin and turn the key counterclockwise. This automatically locks the helmet holder.

WARNING: The helmet holder is designed for helmet security while parking. Do not operate the motorcycle with a helmet attached to the holder.

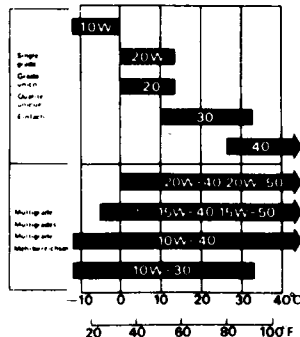


Engine Oil

Good engine oil has many desirable qualities. Use only high detergent, quality motor oil certified on the container to meet or exceed requirements for service SE or SF. It is not necessary to use additives.

Viscosity:

Viscosity grade of engine oil should be based on average atmospheric temperature in your riding area. The following provides a guide to the selection of the proper grade or viscosity of oil to be used at various atmospheric temperatures.



FUEL AND OIL

Fuel Tank

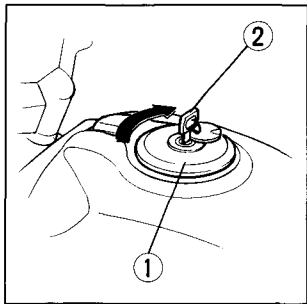
The fuel tank holds 14.0 liters (3.6 U.S. gal., 3.0 Imp. gal.) including the 2.5 liters (0.6 U.S. gal., 0.5 Imp. gal.) in the reserve supply. To open the fuel tank cap (1), insert the key (2) and turn it clockwise. The cap is hinged and will lift up. Use low-lead gasoline with an Octane number of 91 or higher.

FOR NEW SOUTH WALES ONLY:

Use unleaded fuel with a research octane number of 91 or higher.

WARNING:

- Do not overfill the tank (there should be no fuel in the filler neck). After refueling, make sure the tank cap is closed securely and the cap latch is locked.
- Gasoline is extremely flammable and is even explosive under certain conditions. Whenever the tank cap is open, be sure the engine is stopped and that there are no lighted cigarettes or flames nearby.

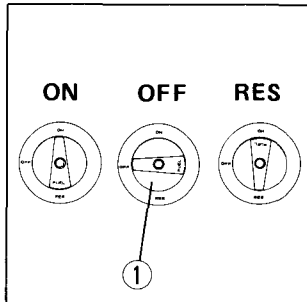


Fuel Valve

The fuel valve (1) is located under the left side of the fuel tank. With the valve set in the "OFF" position, fuel supply is cut off. The valve should be set in this position when the motorcycle is not in use.

Turn to the "ON" (straight down) position for normal riding (gasoline will flow to the carburetors).

Turning the fuel valve to the "RES" position allows fuel to flow from the reserve supply.



PRE-RIDING INSPECTION

Prior to starting your motorcycle, perform a general inspection as a matter of habit to make sure that the motorcycle is in good, safe riding condition.

Check the following items and if adjustment or servicing is necessary, refer to the appropriate section in the manual.

Engine oil level – Check the level and add if necessary.

Fuel level – Fill fuel tank when necessary.

Radiator reserve tank coolant level – Check the level and add if necessary.

Brakes – Check the brake lines for leaks, check brake fluid level.

Tires – Check the air pressure and the tires for wear or damage.

Battery electrolyte – Check the level and add if necessary.

Throttle operation – Check throttle operation, cable routing and free play.

Correct or replace if necessary.

Lighting – See if all lights operate properly.

STARTING THE ENGINE

WARNING: Never run the engine in a closed area. The exhaust contains poisonous carbon monoxide gas.

NOTE:

- * Do not use the electric starter for more than 5 seconds at a time. Release the starter button for approximately 10 seconds before pressing it again.
- * The electric starter will work when the transmission is in gear with the clutch disengaged.
- * Do not flood the engine by twisting the throttle repeatedly with the ignition switch ON.

PREPARATION

Make sure the transmission is in neutral, the engine stop switch is at RUN, and the fuel valve is ON.

Insert the key and turn the ignition switch ON.

Check that the red oil pressure and fuel system warning light come on.

CAUTION: The fuel system warning light should go off 1—2 seconds after the ignition switch comes ON. *If the light remains on, the motorcycle must be inspected by your authorized Honda dealer.*

STARTING PROCEDURE

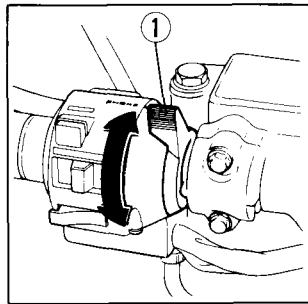
Follow the procedure below for all temperature starting:

1. Pull the choke lever (1) all the way down.
2. Start the engine, leaving the throttle closed.

NOTE: Do not open the throttle when starting the engine with the choke lever down. This will lean the mixture, resulting in hard starting.

CAUTION: The red oil pressure warning light should go off a few seconds after the engine starts. If the light stays on, stop the engine immediately and check engine oil level. Do not operate the engine with insufficient oil pressure.

3. Immediately after the engine starts, operate the choke lever (1) to keep the engine speed at 1,500—2,500 rpm.
4. About a half minute after the engine starts, push the choke lever (1) all the way up.

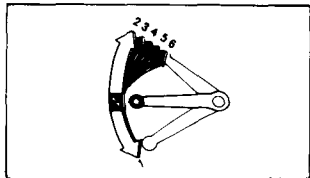


BREAK-IN PROCEDURE

1. Maximum continuous engine speed during the first 1,000 km (600 miles) must not exceed 5,000 min^{-1} (rpm).
2. Increase the maximum continuous engine speed by 2,000 min^{-1} (rpm) between odometer readings of 1,000 and 1,600 km (600 and 1,000 miles). Do not exceed 7,000 min^{-1} (rpm). Vary speeds frequently, and use full throttle for short spurts only.
3. Never lug the engine with excessive throttle at low engine speeds. This rule is applicable not only during break-in but at all times.
4. Upon reaching an odometer reading of 1,600 km (1,000 miles), you can subject the motorcycle to full throttle operation, however, do not exceed 10,000 min^{-1} (rpm) at any time.

RIDING THE MOTORCYCLE

1. Warm up the engine.
2. With the engine idling, squeeze the clutch lever and shift into low (1st) by depressing the gear shift pedal.
3. Slowly release the clutch lever while gradually picking up speed. Coordination of these two operations will assure a smooth start.
4. When the motorcycle attains smooth forward motion, slow down the engine, squeeze the clutch again and shift into 2nd by raising the shift-pedal. Do the same for the other gears.
5. Coordinate the throttle and brakes for smooth deceleration.
6. Both front and rear brakes should be used at the same time and should not be applied strongly enough to lock the wheel, or braking effectiveness may be greatly reduced and control of the motorcycle be difficult.



MAINTENANCE SCHEDULE

Perform the Pre-ride Inspection at each scheduled maintenance period.

I: Inspect and Clean, Adjust, Lubricate or Replace if necessary.

C: Clean R: Replace A: Adjust L: Lubricate

| ITEM | FREQUENCY | WHICHEVER COMES FIRST ↓ ↘ | ODOMETER READING [NOTE (3)] | | | | | | | PAGE |
|------------------------------|------------|---------------------------------------|-----------------------------|------------------------|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|------|
| | | | 1,000 km (600 mi) | 6,000 km (3,750 mi) | 12,000 km (7,500 mi) | 18,000 km (11,250 mi) | 24,000 km (15,000 mi) | 30,000 km (18,750 mi) | 36,000 km (22,500 mi) | |
| * FUEL LINE | | | | | I | | I | | I | |
| * FUEL STRAINER SCREEN | | | C | C | C | C | C | C | C | |
| * THROTTLE OPERATION | | | | | I | | I | | I | |
| * CARBURETOR CHOKE | | | | | I | | I | | I | |
| AIR CLEANER | (NOTE 1) | | | | | R | | | R | 35 |
| CRANKCASE BREATHER | (NOTE 2) | | C | C | C | C | C | C | C | 38 |
| SPARK PLUG | | | I | R | I | R | I | R | R | 34 |
| * VALVE CLEARANCE | | | I | | I | | I | | I | |
| ENGINE OIL | | | R | | R | | R | | R | 31 |
| ENGINE OIL FILTER | | | R | | R | | R | | R | 32 |
| * CARBURETOR SYNCHRONIZATION | | | I | | I | | I | | I | |
| * CARBURETOR IDLE SPEED | | | I | I | I | I | I | I | I | 37 |
| RADIATOR COOLANT | 2 YEARS *R | | | | I | | I | | *R | |
| * COOLING SYSTEM | | | | | I | | I | | I | |

| ITEM | FREQUENCY | WHICHEVER COMES FIRST ↓ | ODOMETER READING [NOTE (3)] | | | | | | | PAGE |
|--------------------------|------------|----------------------------|------------------------------|------------------------|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|------|
| | | | 1,000 km (600 mi) | 6,000 km (3,750 mi) | 12,000 km (7,500 mi) | 18,000 km (11,250 mi) | 24,000 km (15,000 mi) | 30,000 km (18,750 mi) | 36,000 km (22,500 mi) | |
| DRIVE CHAIN | | EVERY | EVERY 1,000 km (600 mi) I, L | | | | | | | 50 |
| BATTERY | | | I | I | I | I | I | I | 53 | |
| BRAKE FLUID | 2 YEARS *R | | I | I | *R | I | I | *R | 39 | |
| BRAKE SHOE/PAD WEAR | | | I | I | I | I | I | I | 40, 42 | |
| BRAKE SYSTEM | | I | | I | | I | | I | 39 | |
| * BRAKE LIGHT SWITCH | | | | I | | I | | I | 60 | |
| * HEADLIGHT AIM | | | | I | | I | | I | | |
| CLUTCH SYSTEM | | | | I | | I | | I | 38 | |
| CLUTCH FLUID | 2 YEARS *R | | I | I | *R | I | I | *R | 38 | |
| SIDE STAND | | | | I | | I | | I | 42 | |
| * SUSPENSION | | | | I | | I | | I | | |
| ** NUT, BOLT, FASTENERS | | I | | I | | I | | I | | |
| ** WHEEL | | | | I | | I | | I | | |
| ** STEERING HEAD BEARING | | I | | I | | I | | I | | |

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

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

- NOTES: (1) Service more frequently when riding in dusty areas.
 (2) Service more frequently when riding in rain or at fully throttle.
 (3) For higher odometer reading, repeat at the frequency interval established here.

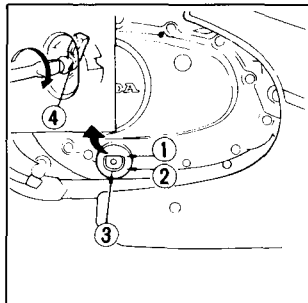
MAINTENANCE

Engine Oil

Check engine oil level each day before operating the motorcycle.

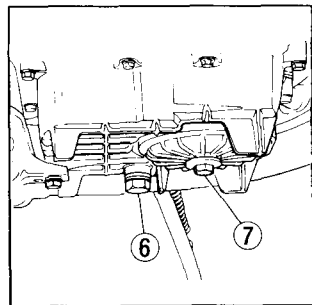
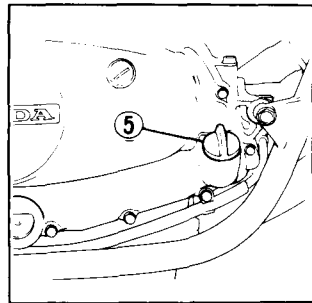
1. Put the motorcycle on its center stand on level ground.
2. Check the oil level in the oil inspection window (3) on the lower right side of the crankcase cover. The oil level should be between the upper (1) and lower (2) level marks. If the inside of the window is dirty, turn the wiper (4) to clean the window.
3. If required, remove the filler cap (5), add the specified oil up to the upper level mark, then reinstall the filler cap.

CAUTION: Running the engine with insufficient oil can cause serious engine damage.

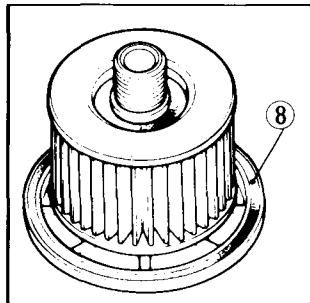


Perform the oil change in the following manner. Drain the oil while the engine is still warm.

1. **Remove the oil filler cap (5), engine bottom oil drain plug (6) and drain the oil.**
2. **Remove the lower cowling. Remove the oil filter (7) with a filter wrench and let the remaining oil drain out. Discard the oil filter.**
3. **Make sure that the sealing washers on the drain plugs are in good condition and install the plugs.**



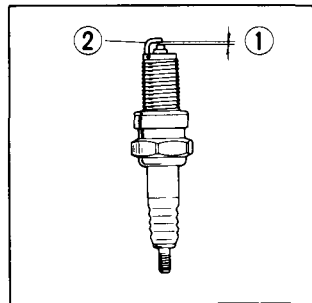
4. After completely draining the oil, apply a thin coat of engine oil to the new oil filter rubber seal (8) and install the new oil filter.
Oil filter torque: 15–20 N·m (1.5–2.0 kg·m, 11–14 ft·lb)
 5. Fill the crankcase with 2.5 liter (2.6 U.S.qt., 2.2 Imp.qt.) of the recommended oil (page 22).
 6. Start the engine and let it idle for 2–3 minutes, then stop the engine.
 7. Make sure that the oil level is at the upper level mark on the dipstick.
 8. Make sure that there are no oil leaks.
- CAUTION:** Change oil more frequently than recommended on page 29, depending upon the severity of dust conditions.



Spark Plugs

| | NGK | ND |
|---------------------------------|----------|-----------|
| Standard | DPR8EA-9 | X24EPR-U9 |
| For cold climate (Below 5°C) | DPR7EA-9 | X22EPR-U9 |
| For extended high speed driving | DPR9EA-9 | X27EPR-U9 |

1. Remove the spark plug lead and take out the plug with the special wrench provided in the tool kit.
2. Inspect the electrodes and center porcelain for deposits, erosion or carbon fouling. If the erosion or deposit is heavy, replace the plug. Clean a carbon or wet-fouled plug with a plug cleaner, otherwise use a wire brush.
3. Measure with a feeler gauge and adjust to 0.8–0.9 mm (0.031–0.035 in.) (1) by bending the side electrode (2). Do not over tighten.



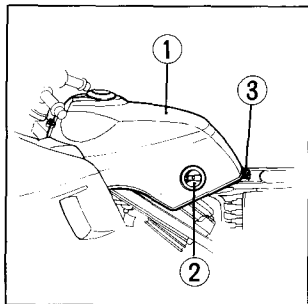
Air Cleaner Servicing

The air cleaner should be serviced at regular intervals (Page 29). When riding in dusty areas, more frequent service may be necessary.

1. Remove the lower cowling.
2. Turn the fuel valve OFF. (2)
3. Remove the seat and fuel tank mounting bolt (3).
4. Remove the bolt attaching the fuel valve and disconnect the fuel line and vacuum tube from the carburetor.

NOTE:

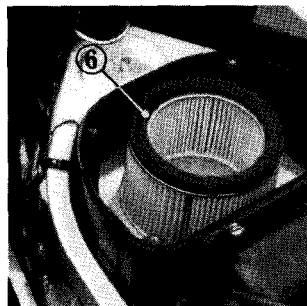
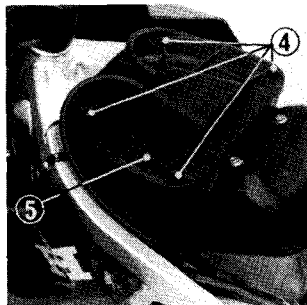
- * Do not remove the fuel line between the fuel valve (2) and fuel tank (1). Failure to do so causes the gasoline to flow out of the fuel tank.



5. Remove the three bolts (4) and the air cleaner cover (5).
6. Take out and discard the air cleaner element (6).
7. Install the new element and air cleaner cover.

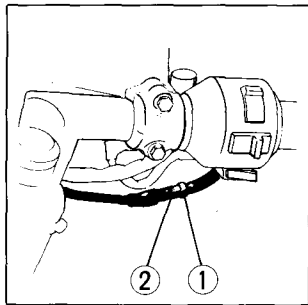
NOTE:

- * Reinstall the fuel line and vacuum tube properly.



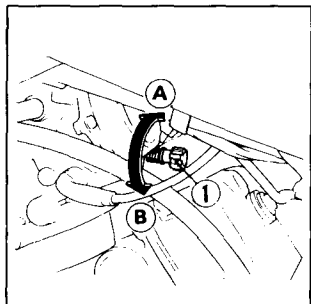
Throttle Operation

1. Check for smooth rotation of the throttle grip from the fully open to the fully closed position at both full steering positions.
2. Check the throttle grip play at the grip. Standard play is approx. 2–6 mm (0.08–0.24 in.) of the grip rotation. To adjust the play, loosen the lock nut (1) and turn the adjuster (2).



Engine Idling Speed Adjustment

1. Start and warm up the engine to normal operating temperature.
2. Set the engine idle speed to $1,300 \text{ min}^{-1}$ (rpm) by adjusting the stop screw (1). Turning the stop screw in the (A) direction will increase the rpm, and turning in the (B) direction will result in a decrease.

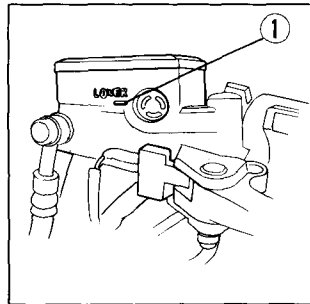


Clutch

This motorcycle has a hydraulic clutch. There are no adjustments to perform but the clutch system must be inspected periodically for fluid level and leakage. If the control lever freeplay becomes excessive and the motorcycle creeps or stalls when shifted into gear or if the clutch slips, there is probably air in the clutch system and it must be bled out. See your Honda dealer for this service.

Fluid level:

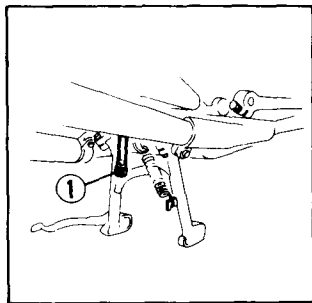
Check that the fluid level is upper the lower level mark (1). If the fluid level is near the lower level mark, it indicates the fluid is leakage. See your authorized Honda dealer for repairment.



Crankcase Breather

1. Remove the drain plug (1) from the tube, and drain deposits.
2. Reinstall the drain plug.

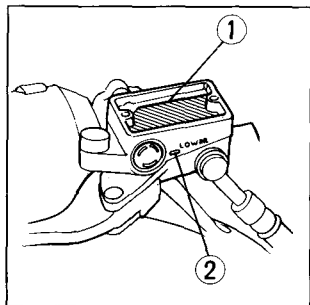
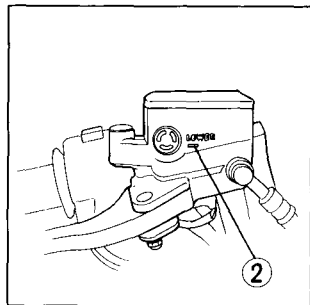
NOTE: Service more frequently when ridden in rain, at full throttle or after the motorcycle is washed or overturned. Service if the deposit level can be seen in the transparent section of the drain tube.



Front Brake Brake fluid:

The brake fluid level in the reservoir must be maintained between the upper (1) and lower (2) level marks. Whenever the level falls near the lower level mark (2), check the brake pads for wear (see page 40). If the brake pad wear does not exceed the limits, this will usually indicate a fluid leak. Consult nearest your Honda dealer.

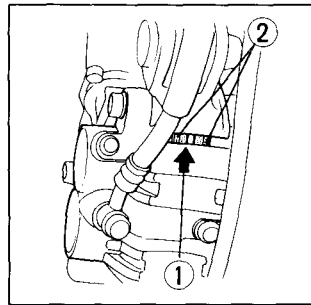
Recommended brake fluid: DOT 3 or DOT 4



Brake pads

Inspect the pads visually from the direction as indicated by the arrow (1) during all regular service intervals to determine the pad wear. If the pads wear to the wear indicator (2), both pads must be replaced. Make sure there are no fluid leaks. Check for deterioration or cracks in the hose and fittings.

NOTE: Use only genuine Honda replacement friction pads offered by authorized Honda dealers. When brake service is necessary consult your Honda dealer.



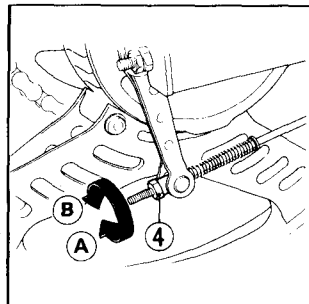
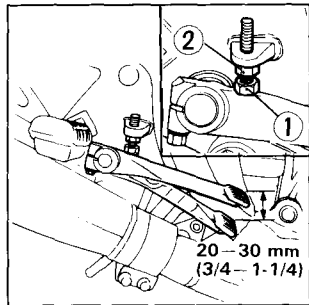
Rear Brake

Rear brake adjustment:

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.

It is important to have the free travel checked regularly. Correct free travel is 20—30 mm (3/4—1-1/4 in.).

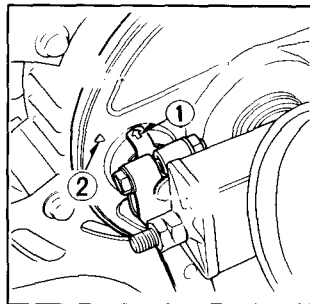
To check, rotate the wheel by hand and note the distance that the pedal can be pushed before the brake starts to engage. Adjustment is made by turning the nut (3) either in or out as necessary. Turning it clockwise decreases the free travel.



Brake wear indicator:

With the brake pedal hold down, check to see that the arrow (1) is not aligned with the reference mark (2). If the arrow (1) aligns with the mark (2), replace the brake shoes with new ones.

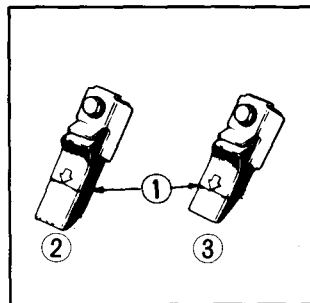
NOTE: When the brake service is necessary, see your authorized Honda dealer. Use only genuine Honda parts or its equivalent.



Side Stand

Check the rubber pad for deterioration and wear. Replace if wear extends to the wear line (1) as shown. Check the side stand spring for damage and loss of tension, and the side stand assembly for freedom of movement. See your authorized Honda dealer for replacement.

(2) CORRECT (3) REPLACE



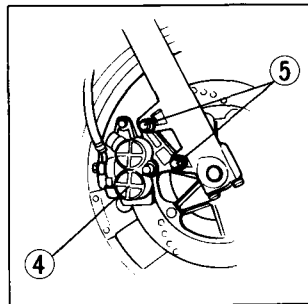
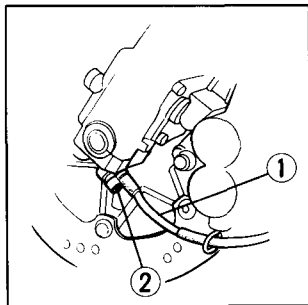
Front and Rear Suspension Inspection

1. Check the front fork assembly by locking the front brake and pumping the fork up and down vigorously. Suspension action should be smooth and there must be no oil seepage.
2. Rear fork bushing—this can be checked by pushing hard against the side of the rear wheel while the motorcycle is on the center stand and feeling for looseness of the fork bushings.
3. Carefully inspect all front and rear suspension fasteners for tightness.

Front Wheel Removal

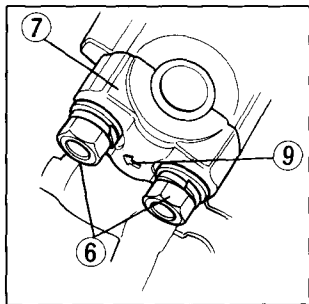
1. Raise the front wheel off the ground by placing a support block under the engine.
2. Disconnect the speedometer cable (1) by removing the speedometer cable set screw (2).
3. Remove the right caliper assembly (4) from the fork leg by removing the fixing bolts (5).

CAUTION: Support caliper assembly so that it doesn't hang on the hose. Do not twist the brake hose.



5. Remove the front axle holder nuts (6), and remove the front axle holders (7). Remove the front wheel.

NOTE: Do not depress the brake lever when the wheel is off the motorcycle. The caliper 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 authorized Honda dealer for this service.

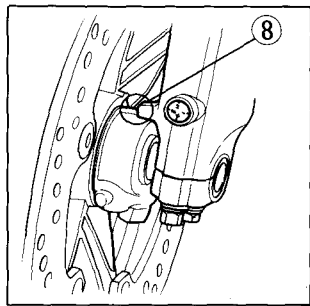


Installation Notes:

To install the front wheel assembly, position the wheel between the fork legs. Lower the forks so the hollows in the fork legs rest on top of the axle.

CAUTION: When installing the wheel, fit the left brake disc carefully between the brake pads to avoid damaging the pads.

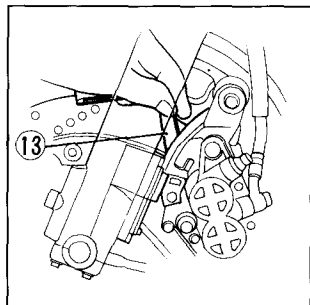
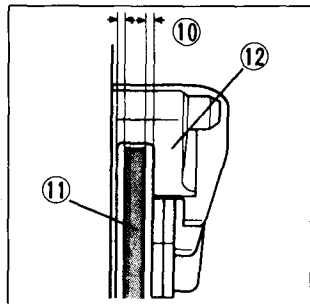
Position the lug on the speedometer gearbox against the lug (8) on the left fork leg. Install the axle holders (7) with the F mark (9) forward. Tighten the forward axle holder nuts lightly.



Fit the right caliper over the disc taking care not to damage the brake pads. Install the caliper mounting bolts and tighten to 30—40 N·m (3.0—4.0 kg·m, 22—29 ft·lb) torque.

Tighten the nuts on the right axle holder to 18—25 N·m (1.8—2.5 kg·m, 13-18 ft·lb) torque, starting with the forward nut.

Measure the clearance (10) between each surface of the left brake disc (11) and the left caliper holder (12) with a 0.7 mm (0.028 in) feeler gauge (see sketch). If gauge (13) inserts easily, first tighten the forward axle holder nut to the specified torque, then torque the rear nut.



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

If the feeler gauge cannot be inserted easily, pull the left fork outward or push inward until the gauge can be inserted and tighten the holder nuts with the gauge inserted. After rightening, remove the gauge. After installing the wheel, apply the brakes several times, then recheck both discs for caliper holder to discs clearance.

Do not operate the motorcycle without adequate clearance.

WARNING: Failure to provide adequate disc to caliper holder clearance may damage the brake disc and impair braking efficiency.

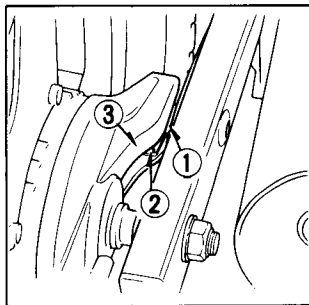
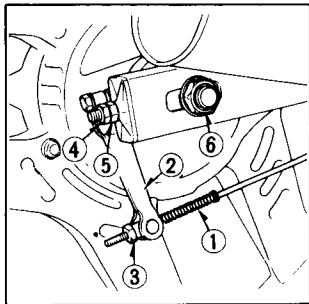
Rear Wheel Removal

1. Place the motorcycle on its center stand.
2. Remove the rear brake adjusting nut (3) and brake rod (1) from the brake arm (2).
3. Loosen the drive chain adjuster lock nuts (4) and adjusting nut (5).
4. Remove the axle nut (6) and pull out the axle.
5. Push the wheel forward and remove the chain from the rear sprocket. Pull out the wheel from the swingarm.
6. To install, reverse the removal procedure.

NOTE:

- * **Make sure the tang (1) on the swingarm is located in the slot (2) in the brake panel (3).**
- * **Adjust the right and left chain adjusters so the same index mark on both sides.**
- * **Adjust the brake and drive chain.**

Axle nut torque: 80—100 N·m (8.0—10.0 kg, 58—72 lbs-f)

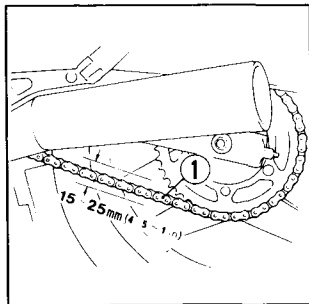
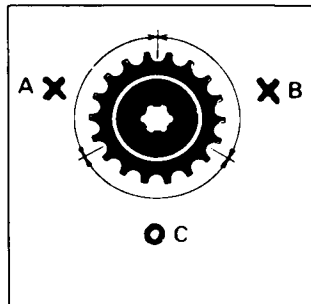


Drive Chain

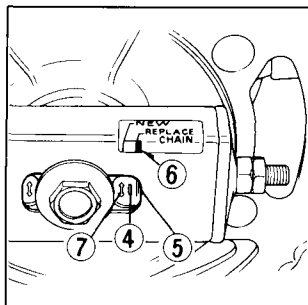
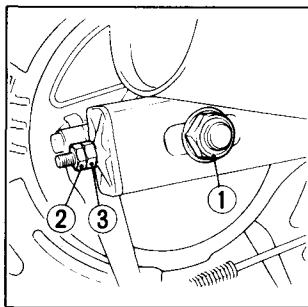
Inspection and adjustment:

1. Place the motorcycle on its center stand, with the transmission in neutral and the ignition switch off.
2. Turn the rear wheel slowly, and inspect the drive chain and sprockets for damage, wear, dry or rust. Drive chain and/or sprocket(s) with damaged or worn must be replaced. Chain that appears dry or shows signs of rust requires supplemental lubrication.
3. Move the chain (1) up and down with your fingers and measure the amount of slack. The slack should be adjusted to 15—25 mm (5/8—1 in.) and never be allowed to exceed 50 mm (2.0 in.).

(A) Damaged sprocket teeth (B) Worn sprocket teeth
(C) Normal sprocket teeth

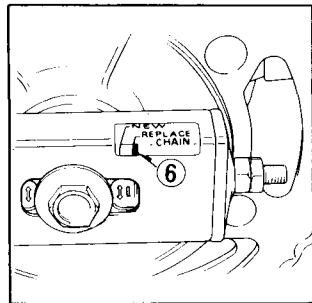


4. To adjust the slack, loosen both lock nut (2) and adjusting nut (3). Loosen the axle nut (1). Make sure that the same graduations (4) on the chain adjusters align with the rear edges (5) of the swingarm slots on both sides.
5. Check the chain wear label when adjusting the chain. If the red zone (6) on the label aligns with the arrow (7) after the chain has been adjusted to 15–25 mm (5/8-1 in.) slack, the chain is excessively worn and must be replaced.



Replacement:

When a new drive chain is installed, a new wear label must be attached according to the directions provided with the replacement chain. Since new chain lengths vary slightly, proper label placement is necessary to provide an accurate wear and replacement indication. **CAUTION: Never install a new drive chain on badly worn sprockets, or use new sprockets with a badly worn drive chain.**



Lubrication and cleaning:

The drive chain on this motorcycle is equipped with small O-rings between the link plates. The O-rings can be damaged by steam cleaner, 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.

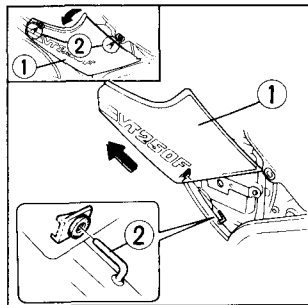
Side cover removal

Remove the side cover in the following steps.

1. Remove the seat.
2. Pull the side cover (1) forward and unhook both the front and rear hooks.
3. Pull the side cover rear ward and remove hook (2).

NOTE:

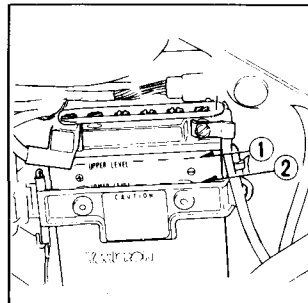
Do not pull the side cover with force as it might cause the damage to the cover.



Battery Care

Inspecting and maintaining the electrolyte level should be performed at the mileage intervals indicated in the Maintenance Schedule (page 29) and Pre-riding Inspection (page 24). The electrolyte level must be maintained between the upper (1) and lower (2) level marks. If low, add distilled water to raise the levels. Use a syringe or plastic funnel. The battery is accessible by removing the side cover.

CAUTION: When checking battery electrolyte level or adding distilled water, make sure the breather tube is connected to battery outlet.



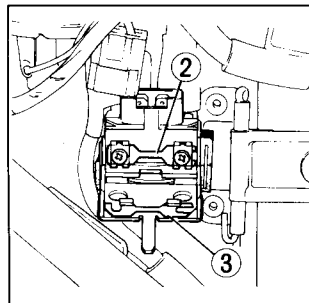
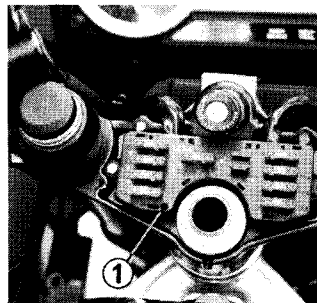
Fuse Replacement

The fuse box (1) is located between the handlebars. Main fuse (2) is installed beside the battery. When frequent failure of the fuse occurs, it usually indicates a short circuit or an overload in the electrical system. Consult your Honda dealer.

WARNING: Never use a fuse with a different rating from that specified on the fuse box and never use conductive material to replace a fuse.

CAUTION: Turn the ignition switch OFF before checking or replacing fuses to prevent accidental short-circuiting.

- (1) Fuse box
- (2) Main fuse
- (3) Spare main fuse



To replace the main fuse:

Remove the left side cover and open the fuse holder cover.

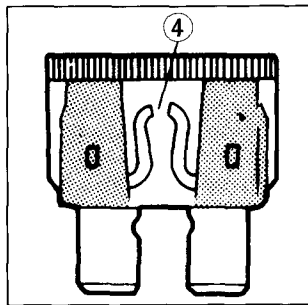
Loosen the screws and discard the old fuse.

Install the new fuse and tighten the screws securely.

To replace fuse in the fuse box:

Remove the fuse box cover and the blown fuse. Install a new fuse and the fuse box cover.

(4) Blown fuse



Radiator Servicing

Recommended coolant:

Use only a high quality ethylene glycol base anti-freeze containing inhibitors for corrosion protection and specifically recommended for use in aluminum engines. The VT250-FII cooling system has a 50/50 solution of anti-freeze and water from the factory.

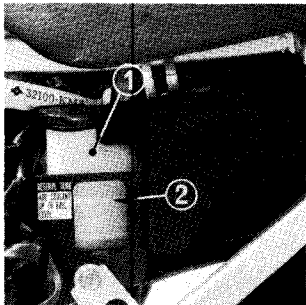
Inspection:

Check the coolant level in the reserve tank (1) when the engine is at normal operating temperature. If the level is below the UPPER mark (2), top-up with coolant. If there is no coolant in the reserve tank, check for leaks and repair as necessary.

Coolant change:

WARNING: Do not perform this operation while the engine is hot.

1. Remove the lower cowling.
2. Remove the seat, side cover and fuel tank.
3. Remove the right front side cover by removing the screw.
Remove the cap from the radiator while pressing it down by hand.



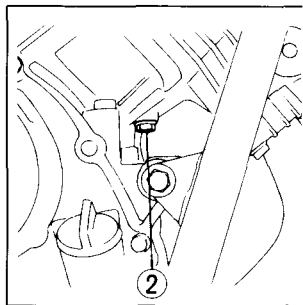
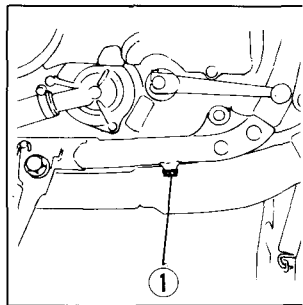
NOTE: Drain the coolant into a clean container for reuse. Scheduled coolant replacement is every 18,000 km (10,800 miles).

Drain the coolant from the radiator by removing the drain bolts on the frame (1) and engine (2).

Lean the motorcycle to the right to aid in draining of the coolant. Remove the two bolts attaching the reserve tank and drain coolant from the tank.

Fill the radiator with coolant up to the filler neck.

Install the radiator cap.



Fill the reserve tank up to the UPPER level mark (3).

CAPACITY: 1,700 cc approx.

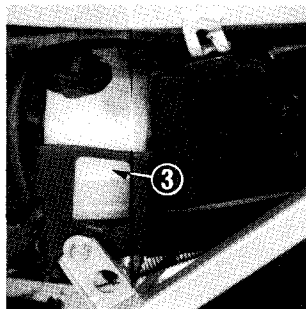
Radiator: 1,400 cc

Reserve tank: 300 cc

Bleed air from the system as follows:

- (1) Start the engine and warm it up to the operating temperature.
- (2) Check that there are no air bubbles in the coolant near the filler neck and the level stabilizes.
- (3) Stop the engine and fill the radiator up to the filler neck.
- (4) Check the level in the reserve tank and, if necessary, fill to the UPPER level mark.

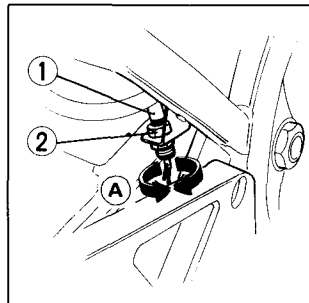
NOTE: After filling, check for leaks.



Stoplight Switch Adjustment

Check the operation of the stoplight switch (1) at the right side behind the engine from time to time.

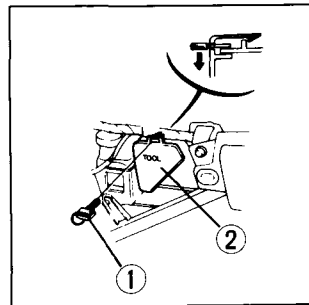
Adjustment is done by turning the adjusting nut (2). Turn the nut in the direction (B) if the switch operates too late and in direction (A) if the switch operates too soon.



Tool Kit

The tool kit is behind to left side cover. Tool kit cover can be removed with a key (1). Listed below are the items included in the tool kit (2).

- 8 × 12 mm spanner
- 10 × 12 mm spanner
- 14 × 17 mm spanner
- Pliers
- No. 2 minus screw
- No. 2 plus screwdriver
- No. 3 plus screwdriver
- Screwdriver grip
- 5 mm hex wrench
- 24 mm eye wrench
- Spark plug wrench
- Lever
- 120 mm handle eye wrench
- Tool bag



Serial Numbers

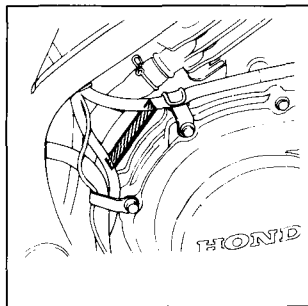
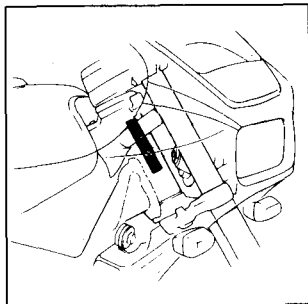
The frame and engine serial numbers are required when registering your motorcycle. They may also be required by your dealer when ordering replacement parts. Record the numbers here for your reference.

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

The engine number (2) is stamped on top of the crankcase.

FRAME NO. _____

ENGINE NO. _____

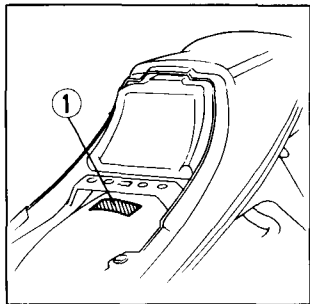


Color Label

The color label (1) is attached to the rear fender under the seat. It helps to order replacement parts. Record the model and color here for your reference.

COLOR _____

CODE _____



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 may be forgotten by the time the motorcycle is removed from storage.

1. Change the engine oil and filter.
2. Make sure the cooling system is filled with a 50/50% antifreeze solution.
3. Drain the fuel tank and carburetor. 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 cylinder. Crank the engine several times to distribute the oil, then reinstall the spark plug.

NOTE: When turning the engine over, the Engine Stop Switch should be OFF and spark plug placed in its cable cap and grounded to prevent damage to the ignition system.

5. Remove the battery. Store in an area protected from freezing temperatures and direct sunlight. Check the electrolyte level and slow charge the battery once a month.
6. Wash and dry the motorcycle. Wax all painted surfaces. Coat chrome with rust-inhibiting oil.
7. Inflate the tires to their recommended pressures. Place the motorcycle on blocks to raise both tires off the ground.
8. 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 24). Test ride the motorcycle at low speeds in a safe riding area away from traffic.

NOISE EMISSION

This motorcycle complies with the Australian Design Rule (ADR 39-2-3) requirements for noise emission regulations. And the data below is written according to the requirements.

| Sound Level of Stationary Test | Engine Speed at Maximum Power |
|--------------------------------|-------------------------------|
| 92 dB (A) | 12,500 rpm |

SPECIFICATIONS

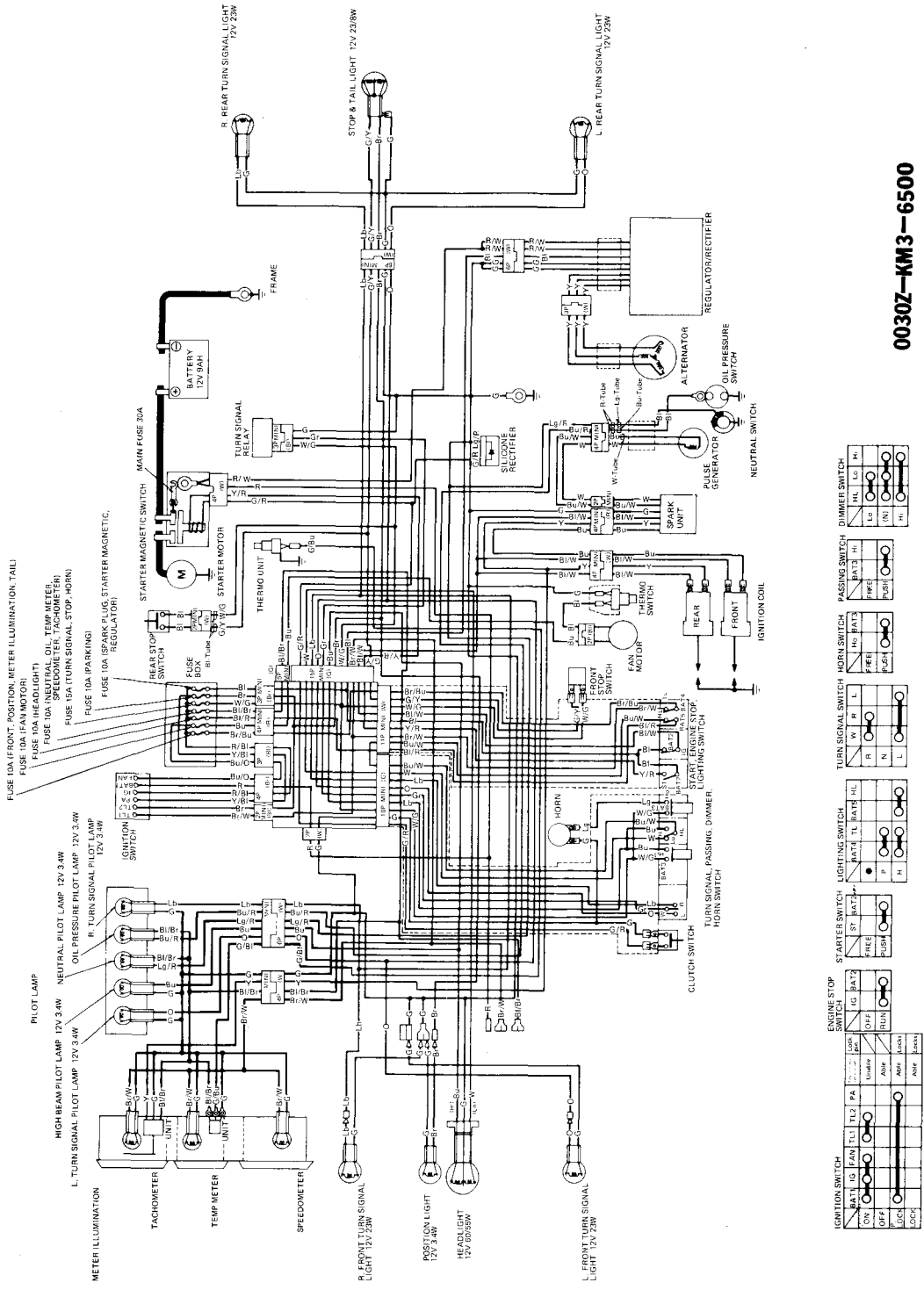
| | |
|---|---|
| DIMENSIONS Overall length Overall width Overall height Wheelbase | 2,028 mm (79.8 in) 730 mm (28.7 in) 1,185 mm (46.6 in) 1,385 mm (54.5 in) |
| WEIGHT Dry weight | 155 kg (334 lb) |
| CAPACITIES Passenger capacity Engine oil Fuel tank Cooling system capacity | Operator and one passenger 2.5 liter (2.6 U.S. qt., 2.2 Imp. qt.) 14 liter (3.6 U.S. gal., 3.0 Imp. gal.) 1.7 liter (1.9 U.S. qt., 1.4 Imp. qt.) |
| ENGINE Bore and stroke Compression ratio Displacement Spark plug gap | 60 x 44 mm (2.36 x 1.73 in) 11 : 1 248 cm ³ (15.1 cu-in) 0.8–0.9 mm (0.031 – 0.035 in) |

| | |
|---|--|
| CHASSIS AND SUSPENSION Caster Trail Tire size, front Tire size, rear | 26° 30' 97 mm (3.8 in) 100/90—16 54S 110/90-17 60S |
| POWER TRANSMISSION Primary reduction Gear ratio, 1st. 2nd. 3rd. 4th. 5th. 6th. Final reduction | 2.821 2.562 1.850 1.478 1.240 1.074 0.965 3.214 |
| ELECTRICAL Battery Generator | 12V—9AH A.C. generator |

MEMO

MEMO

VT250-FII



0030Z-KM3-6500

