

HONDA CM250 CUSTOM

(CM250T)

OWNER'S MANUAL

— 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 tire information label.

- **ON-ROAD USE**

This motorcycle is not equipped with a spark arrester and is designed to be used only on the road. Operation in forest, brush or grass covered areas may be illegal. Obey local laws and regulations.

- **READ 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.

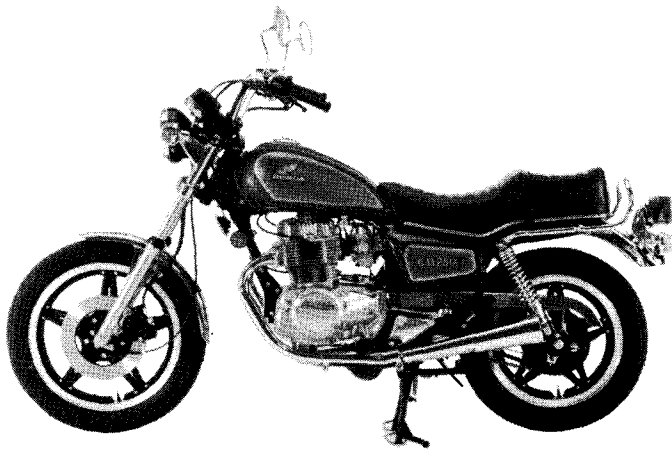
CAUTION:

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 vehicle and should remain with the vehicle when resold.

HONDA CM250T OWNER'S MANUAL



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WELCOME,

The motorcycle presents you a challenge to master the machine, a challenge to adventure. You ride through the wind, linked to the road by a vehicle that responds to your commands as no other does. Unlike an automobile, there is no metal cage around you. Like an airplane, a pre-ride inspection and regular maintenance are essential to your safety. Your reward is freedom.

To meet the challenges safely, and to enjoy the adventure fully, you should become thoroughly familiar with this owner's manual **BEFORE YOU RIDE THE MOTOR-CYCLE.**

When service is required, remember that your Honda dealer knows your motorcycle best. If you have the required mechanical "know-how" and tools, your dealer can supply you with an official Honda Shop Manual to help you perform many maintenance and repair tasks.

Pleasant riding, and thank you for choosing a Honda!

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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 25) before you start the engine. You may prevent an accident or equipment damage.
2. Many accidents involve inexperienced riders. A special motorcycle riding test or license is required. Make sure you are qualified before you ride. NEVER lend your motorcycle to an inexperienced rider.
3. Many automobile/motorcycle accidents happen because the automobile driver does not “see” the motorcyclist. Make yourself conspicuous to help avoid the accident that wasn’t 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 lot entrances and exits, and driveways.
6. Keep both hands on the handlebars and both feet on the foot pegs while riding. A passenger should hold on to the motorcycle or the operator with both hands and keep both feet on the passenger foot pegs.

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. 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, foot pegs, drive chain or wheels.

LOADING AND ACCESSORIES

WARNING

** To prevent an accident, use extreme care when adding and riding with accessories and cargo. Addition of accessories and cargo can reduce a motorcycle's stability, performance and safe operating speed. And remember that performance and safety factors may be reduced by installation of non-Honda accessories, improper loading, worn tires and overall motorcycle condition, 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

1. Keep cargo 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 5) and shock absorber springs (SHOCK ABSORBERS, page 8) to suit load weight.
3. Luggage racks are for light weight items. Bulky items too far behind the rider may 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 windshields, or poorly designed or improperly mounted fairings can produce aerodynamic forces that cause unstable handling. Do not install fairings that decrease cooling air flow to the engine.
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. This motorcycle was not designed to pull a sidecar or trailer. Handling may be seriously impaired if so equipped.

TIRES: TUBELESS

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

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

Check tire pressures frequently and adjust if necessary.

NOTE:

- * Check tire pressure when the tires are "cold," before you ride.
- * Tubeless tires have some degree of self-sealing 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		3.50S18-4PR	4.60S16-4PR
Cold tire pressures kg/cm ² (psi)	Driver only	2.0 (28)	2.0 (28)
	Driver and one passenger	2.0 (28)	2.5 (36)
Tire band TUBELESS ONLY	BRIDGE-STONE	S703	L302
	DUNLOP	F11	K127
	YOKOHAMA	Y-992	Y-987

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 run at speeds above 40 mph (60 km/h) after making an external repair. It must be followed by an internal repair at the nearest Honda dealer as soon as possible.*
- * *After tire repair, pay special attention when riding at high speeds as the tire performance may deteriorate.*
- * *If you wish to have temporary repair or you have any doubt regarding a repair, please consult your HONDA dealer or local tubeless tire specialists.*

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 tire deflation.*

- * *Do not install a tube inside a tubeless tire. Excessive heat build-up may cause the tube to burst resulting in rapid tire deflation.*
- * *Foreign object intrusion of tire face will reduce the performance of any tire. Subsequent repair may not restore original safety factor.*
- * *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.*
- * *Replace the tire if the sidewall is punctured or damaged. Sidewall flexing may cause repair failure and tire deflation.*

CAUTION:

- * *Do not try to remove tubeless tires without special tools and rim protectors. You may damage the rim sealing surface or disfigure the rim.*

MODIFICATIONS



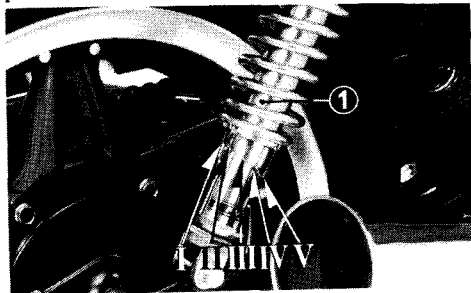
- * *Modification of the motorcycle, or removal of original equipment may render the vehicle unsafe or illegal. Obey all federal, state and local equipment regulations.*

SHOCK ABSORBERS

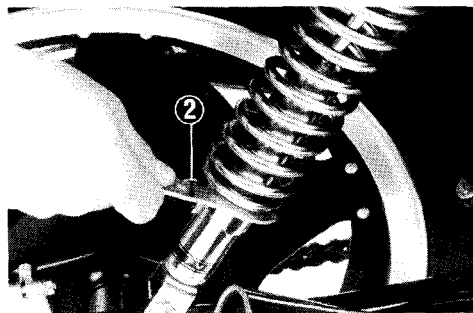
Each shock absorber (1) has five adjustment positions for different load or riding conditions.

Position II is the standard setting.

Position I is for light loads and smooth road conditions. Positions II to V increase spring preload for a stiffer rear suspension, and can be used when the motorcycle is heavily loaded. Be certain to adjust both shock absorbers to the same position.



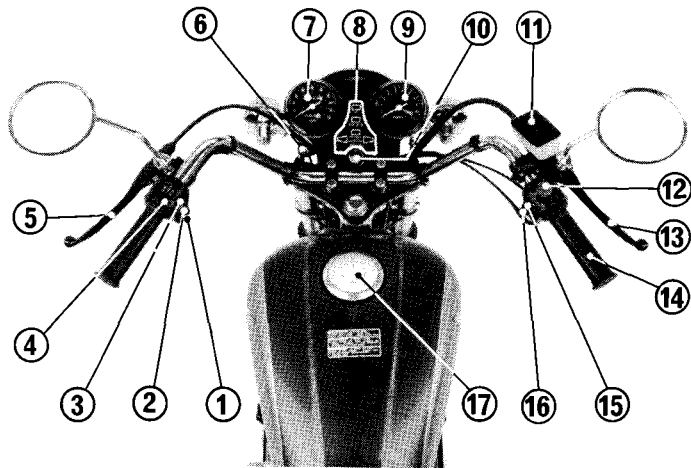
(1) Shock absorber



(2) Hook spanner

DESCRIPTION

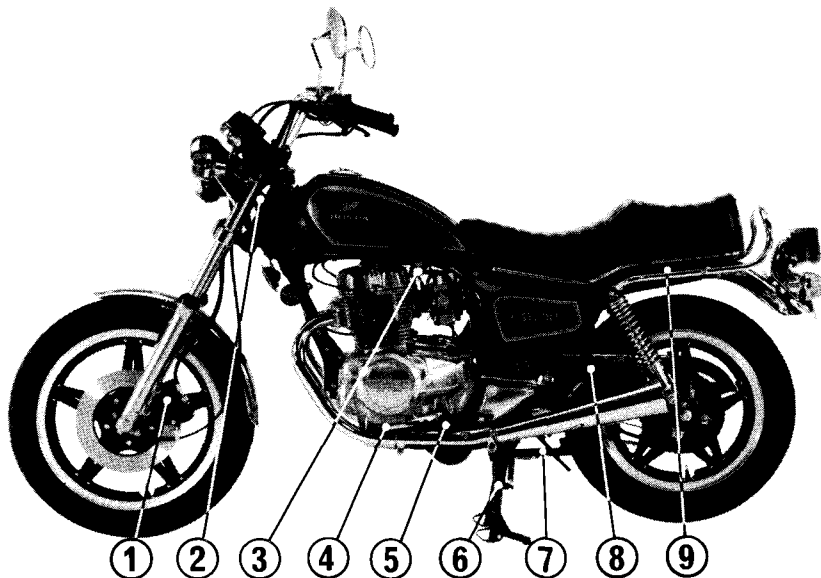
PARTS LOCATION



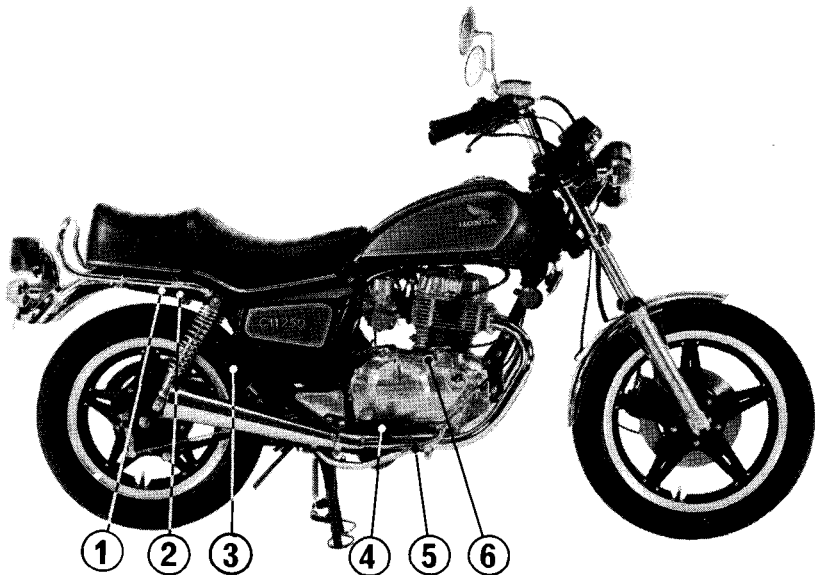
- (1) Horn button
- (2) Turn signal switch
- (3) Passing light control switch
- (4) Headlight dimmer switch
- (5) Clutch lever
- (6) Choke knob

- (7) Speedometer
- (8) Warning and indicator lights
- (9) Tachometer
- (10) Ignition switch
- (11) Front brake fluid reservoir
- (12) Engine stop switch

- (13) Front brake lever
- (14) Throttle grip
- (15) Headlight switch
- (16) Starter button
- (17) Fuel cap



- | | | | | |
|-------------------|-----------------------|------------------|------------------------|----------------|
| (1) Brake caliper | (3) Fuel valve | (5) Foot peg | (7) Side stand | (9) Seat latch |
| (2) Steering lock | (4) Gear change pedal | (6) Center stand | (8) Passenger foot peg | |



(1) Seat latch
(2) Helmet holder

(3) Passenger foot peg
(4) Foot peg

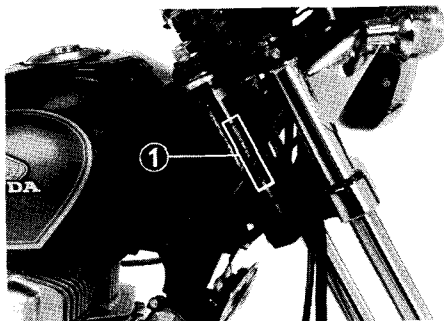
(5) Rear brake pedal
(6) Oil filler cap/dipstick

SERIAL NUMBERS

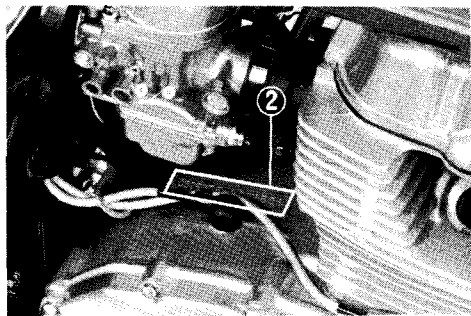
The frame and engine serial numbers are required when registering your motorcycle. They may also be required by your dealer when ordering replacement parts. Record the numbers here for your reference.

FRAME NO. _____

ENGINE NO. _____



(1) Frame number



(2) Engine number

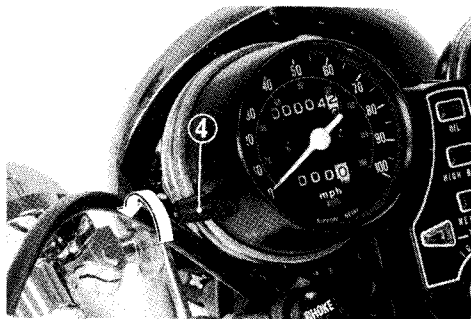
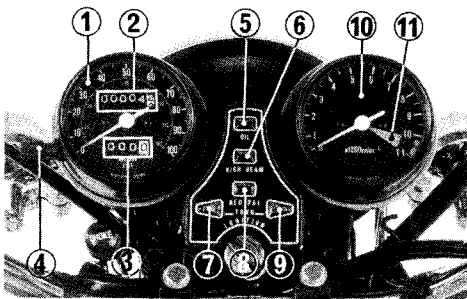
PARTS FUNCTION

Instruments and Indicators

The indicators and warning lights are grouped above the headlight. Their functions are described in the tables on the following pages.

Odometer and tripmeter read in miles.

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

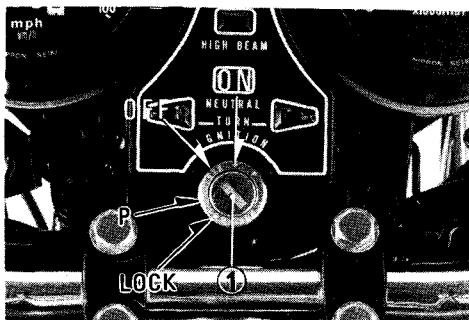


Ref. No.	Description	Function
1	Speedometer	Shows driving speed.
2	Odometer	Shows accumulated mileage.
3	Tripmeter	Shown mileage per trip.
4	Tripmeter reset knob	Resets tripmeter to zero (0). Turn knob in direction shown.
5	Oil pressure warning light (red)	Lights when engine oil pressure is below normal operating range. Should light when ignition switch is ON and engine is not running. Should go out when engine starts, except for occasional flickering at or near idling speed when the engine is warm. CAUTION: <i>* Running the engine with insufficient oil pressure will cause serious engine damage.</i>

Ref. No.	Description	Function
6	High beam indicator (blue)	Lights when headlight is on high beam.
7	Left turn signal indicator (amber)	Flashes when left turn signal operates.
8	Neutral indicator (green)	Lights when transmission is in neutral.
9	Right turn signal indicator (amber)	Flashes when right turn signal operates.
10	Tachometer	Shows engine rpm.
11	Tachometer red zone	Do not operate engine in red zone when avoidable. NEVER operate beyond red zone. CAUTION: * <i>Exceeding recommended maximum engine rpm may cause serious engine damage.</i>

Ignition Switch

The ignition switch (1) is below the indicator panel.



(1) Ignition switch

Key Position	Function	Key Removal
OFF	Engine and lights cannot be operated.	Remove the key.
ON (red dot)	Lights can be operated. The engine can be started.	Key cannot be removed.
P (Parking)	For parking the motorcycle near traffic. The tail-light will be on but all other lights will be off. The engine cannot be started.	Remove the key.
LOCK (Steering lock)	Turn the handlebar all the way to the left or right, turn the key to LOCK while pushing in. Remove the key.	Remove the key.

Engine Stop Switch

The three position engine stop switch (1) is next to the throttle grip. In RUN, the engine will operate. In either OFF position, the engine will not operate. This switch is intended primarily as a safety or emergency switch and should normally remain in RUN.

NOTE:

- * If your motorcycle is stopped with the ignition switch ON and the engine stop switch OFF, the headlight and taillight will still be on, resulting in battery discharge.

Headlight Switch

The headlight switch (2) has three positions: H, P and OFF marked by a green dot to the right of P.

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

P: Position light, taillight and meter lights on.

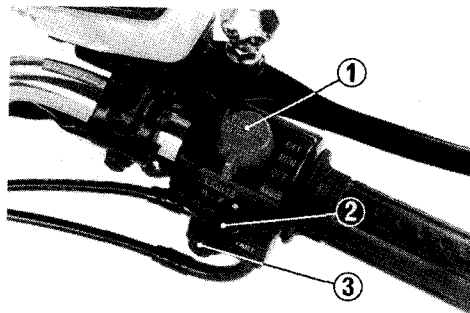
OFF (green dot): Headlight, taillight, position light and meter lights off.

Starter Button

The starter button (3) is below the headlight switch (2).

When the starter button is pressed the starter motor will crank the engine and the headlight will automatically go out, but the taillight will stay on.

See pages 26–28 for the starting procedure.



(1) Engine stop switch (3) Starter button
(2) Headlight switch

The four controls next to the left handle-bar grip are:

Headlight Dimmer Switch (1)

Select HI for high beam, LO for low beam.

Passing Light Control Switch (2)

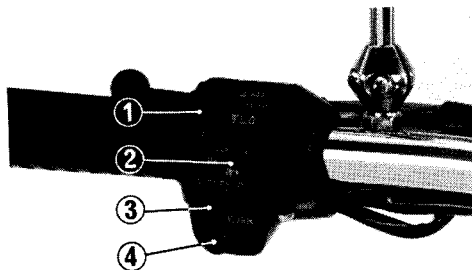
When this switch (2) is pressed, the headlight flashes on to signal approaching cars or when passing.

Turn Signal Switch (3)

Move to L to signal a left turn, R to signal a right turn. Return to the center (off) when finished.

Horn Button (4)

Press the button to sound the horn.



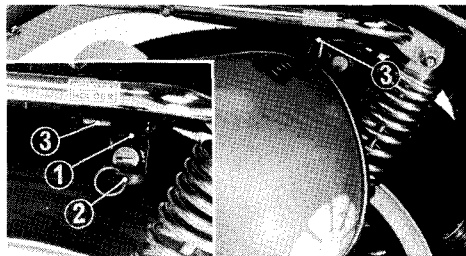
- (1) Headlight dimmer switch
- (2) Passing light control switch
- (3) Turn signal switch
- (4) Horn button

Helmet Holder

The helmet holder (1) is on the right side below the seat. Insert the ignition key (2) and turn it counterclockwise to unlock. Hang your helmet on the lock and push in the holder pin (3).

WARNING

** The helmet holder is designed for use while parking. Do not operate the motorcycle with a helmet attached to the holder. The helmet may interfere with the rear wheel, possibly stopping the wheel.*



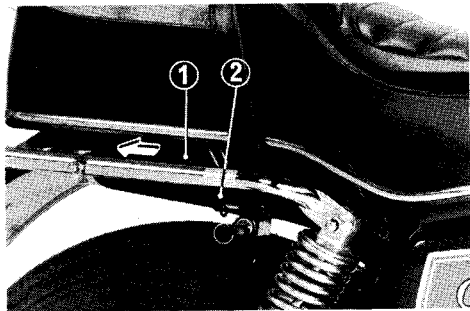
(1) Helmet holder
(2) Ignition key

(3) Holder pin

Seat Removal

The seat is secured by a latch (1) on each side of the seat, at the rear. Pull both latches to remove the seat. When replacing the seat, push down firmly.

Lift the seat to make sure the latches are secure. The ring (2) can be used to lock the seat to the helmet holder.

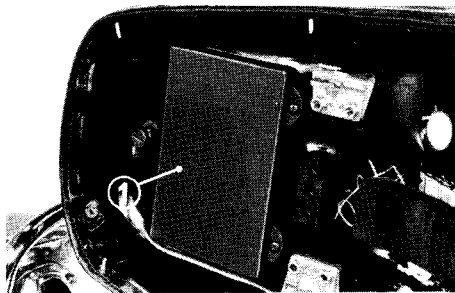


- (1) Seat latch
- (2) Ring

Document Compartment

The document compartment (1) is under the seat.

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



- (1) Document compartment

FUEL

Fuel Valve

The three way fuel valve (1) is on the left underneath the fuel tank.

OFF

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

ON

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

RES

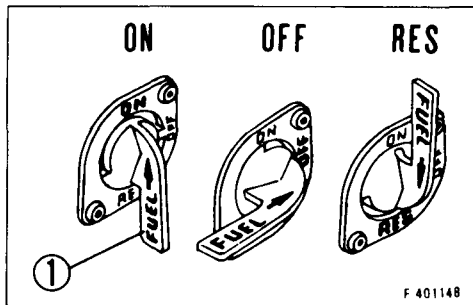
At RES, fuel will flow from the reserve fuel supply to the carburetors. Use the reserve fuel only when the main supply is gone. Refill the tank as soon as possible after switching to RES. The reserve fuel supply is 2.0 l (0.5 US gal, 0.4 Imp. gal).

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 machine with the fuel valve in the RES position after refueling. You may run out of fuel, with no reserve.



(1) Fuel valve

Fuel Tank

Fuel tank capacity is 13.0ℓ (3.4 US gal, 2.9 Imp gal) including 2.0ℓ (0.5 US gal, 0.4 Imp gal) in the reserve supply. To remove the fuel cap (1), insert the ignition key (2) and turn it clockwise. The cap will pop up and can be lifted off. Any automotive gasoline with a pump octane number $\left(\frac{R+M}{2}\right)$ of 86 or higher, or a

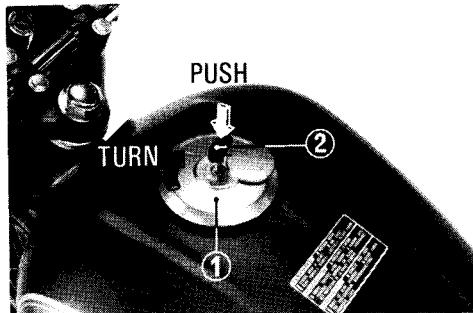
research octane number of 91 or higher may be used. If “knocking” or “pinging” occurs, try a different brand of gasoline or a higher octane grade.

To attach the fuel cap, align the tab on the underside of the cap with the slot in the filler neck.

Push the cap in the filler neck until it snaps closed and locks. Remove the key and close the lock cover.

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 refueled or where gasoline is stored.*
- * *Do not overfill the tank. After refueling, make sure the fuel cap is closed securely.*



(1) Fuel cap (2) Ignition key

ENGINE OIL

Engine Oil Level Check

Check engine oil level each day before operating the motorcycle.

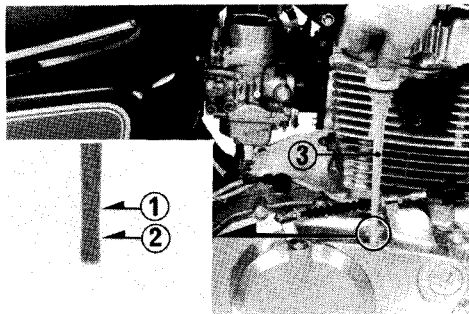
Oil level must be maintained between the upper (1) and lower (2) oil level marks on the dipstick (3).

1. Run the engine and let it idle for few minutes. Make sure the red oil pressure warning light goes off. If the oil pressure warning light remains on, stop the engine immediately.
2. Stop the engine and place the motorcycle on its center stand.
3. After a few minutes, remove the oil filler cap/dipstick (3), wipe it clean, and reinsert the dipstick without screwing it in. The oil level should be between the upper (1) and lower (2) marks on the dipstick.

4. Add the specified oil up to the upper level mark, if required.
5. Replace the filler cap/dipstick. Check for oil leaks.

CAUTION:

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



(1) Upper level mark
(2) Lower level mark

(3) Oil filler cap/dipstick

Engine Oil Recommendation

USE HONDA 4-STROKE OIL OR AN EQUIVALENT.

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

Motor oils intended for Service SE will show this designation on the container.

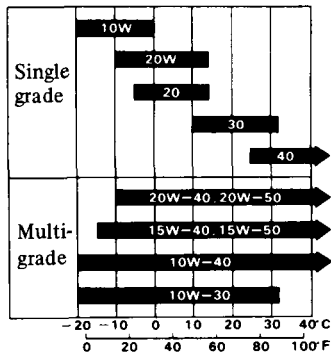
The use of special oil additives is unnecessary and will only increase operating expenses.

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 10W-40

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



PRE-RIDE INSPECTION



** 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, and in the long run they can save time, expense and possibly your life.

1. Engine oil level—add engine oil if required (pages 23–24). Check for leaks.
2. Fuel level—fill fuel tank when necessary (page 22). Check for leaks.
3. Front and rear brakes—check operation; make sure there is no brake fluid leakage. Adjust free play if necessary (pages 58–61).
4. Tires—check condition and pressure (pages 5–7).

5. Drive chain—check condition and slack (pages 62–65). Adjust and lubricate if necessary.
6. Throttle—check for smooth opening and closing in all steering positions (page 55).
7. Lights and horn—check that headlight, tail/stoplight, turn signals, indicators and horn function properly.
8. Engine stop switch—check for proper function (page 17).

Correct any discrepancy before you ride. Contact your authorized 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.*

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.

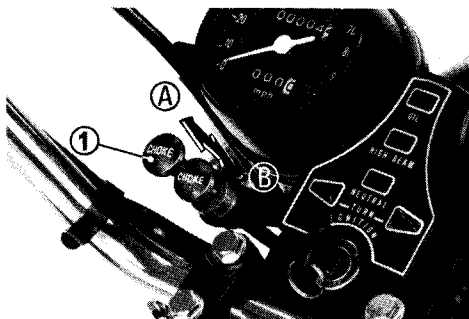
Preparation

Make sure the transmission is in neutral, and 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 warning light comes on.

Starting Procedure

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



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

Normal Air Temperature

10°–35°C (50°–95°F)

1. Pull the choke knob (1) up all the way to Fully Closed (A).
2. Start the engine, leaving the throttle closed.

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 knob to keep fast idle at 1,500–2,500 rpm.
 4. About a half minute after the engine starts, push the choke knob down all the way to Fully Open (B).
 5. If idling is unstable, open the throttle slightly.

High Air Temperature—

35°C (95°F) or above

1. Do not use the choke.
2. Open the throttle slightly.
3. Start the engine.

Low Air Temperature—

10°C (50°F) or below

1. Follow steps 1 thru 2 under “Normal Air Temperature.”
2. Warm up the engine by opening and closing the throttle slightly while gradually pushing down the choke knob.
3. Continue warming up the engine until it will idle smoothly with the choke knob pushed down all the way to Fully Open (B).

CAUTION:

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

Flooded Engine

If the engine fails to start after repeated attempts, it may be flooded with excess fuel. To clear a flooded engine, turn the engine stop switch OFF and push the choke knob down to Fully Open (B). Open the throttle fully and crank the engine for 5 seconds with the electric starter. Turn the engine stop switch ON and follow the "High Air Temperature" Starting Procedure.

BREAK-IN

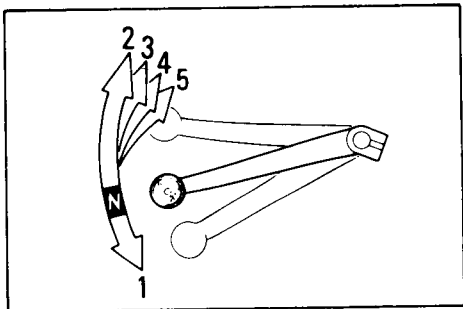
During the first 600 miles (1,000 km), do not operate the motorcycle at more than 80% of the maximum speed in any gear. Avoid full throttle operation, and do not operate for a long time at one speed.

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 600 miles (1,000 km) is designed to compensate for this 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 1–8) 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.*



Shifting pattern

Proper shifting will provide better fuel economy. When changing gears under normal conditions, use the shifting points recommended by Honda as follows:

Shifting Up:

From 1st to 2nd:	12 mph (20 km/h)
From 2nd to 3rd:	19 mph (30 km/h)
From 3rd to 4th:	25 mph (40 km/h)
From 4th to 5th:	31 mph (50 km/h)

Shifting Down:

From 5th to 4th:	19 mph (30 km/h)
From 4th to 3rd:	12 mph (20 km/h)

Disengage the clutch when speed drops below 9 mph (15 km/h), when engine roughness is evident, or when engine stalling is imminent; and shift down to 1st gear for acceleration.

 WARNING

- * *Do not downshift when traveling 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.*

NOTE:

- * The battery will not charge while the engine speed is below 1,200 rpm. Avoid idling for prolonged periods, or continuous operation below 1,200 rpm.

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 maneuver 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, turn the fuel valve OFF and turn the ignition switch OFF.
2. Use the side or center stand to support the motorcycle while parked.

CAUTION:

- * *Park the motorcycle on firm, level ground to prevent overturning*
3. Lock the steering to help prevent theft (page 19).

NOTE:

- * When stopping for a short time near traffic at night, the ignition switch may be turned to P and the key removed. This will turn on the taillight to make the motorcycle more visible to traffic.
The battery will discharge if the ignition switch is left at P for too long a time.

ANTI-THEFT TIPS

1. Always lock the steering and never leave the key in the ignition switch. This sounds simple but people do forget.
2. Be sure the registration information for your motorcycle is accurate and current.
3. Park your motorcycle in a locked garage whenever possible.
4. Use an additional anti-theft device of good quality.
5. 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: _____

SPECIAL PROCEDURES

These special procedures are intended to help you out in case of trouble on the road: a flat tire, or a blown fuse. In case of a flat tire, you can remove the entire wheel and take it to a qualified repair facility. Refer to "TIRES" on pages 5-7. Because of the critical nature of wheel attachment, you should proceed to an authorized Honda dealer as soon as possible after repair to verify proper assembly.

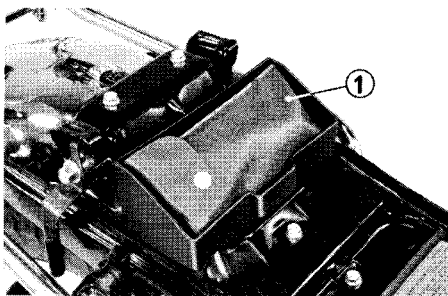
WARNING

- * *Stop the engine and support the motorcycle securely on a level surface before performing these procedures.*

Tool Kit

The tool kit (1) is in the compartment under the seat. Some roadside repairs, minor adjustments and parts replacement can be performed with the tools contained in the kit.

- Hook spanner
- 10 X 12mm open end wrench
- 14 X 17mm open end wrench
- Pliers
- No. 2 screwdriver (—)
- No. 2 phillips screwdriver (+)
- No. 3 phillips screwdriver (+)
- Screwdriver grip
- Spark plug wrench
- Handle for 19 and 22mm wrenches
- 19mm wrench
- 22mm wrench
- Tool bag



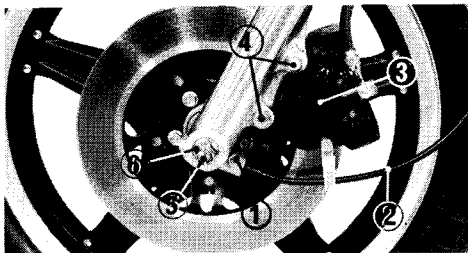
(1) Tool kit

Front Wheel Removal

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

CAUTION:

* *Support the caliper assembly so that it*



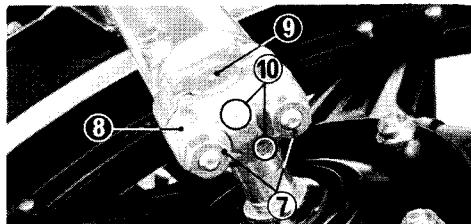
- | | |
|-----------------------|--------------------------|
| (1) Set screw | (4) Caliper fixing bolts |
| (2) Speedometer cable | (5) Cotter pin |
| (3) Caliper assembly | (6) Axle nut |

does not hang from the brake hose. Do not twist the brake hose.

4. Pull out the cotter pin (5) and remove the axle nut (6).
5. Remove the front axle holder nuts (7) and the front axle holder (8).
6. Remove the axle (9). Remove the 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.



- | | |
|-----------------|----------------|
| (7) Holder nuts | (9) Axle |
| (8) Axle holder | (10) "F" Arrow |

Installation Notes:

- Reverse the removal procedure.
- Insert the axle through the wheel hub and the left fork leg. When tightening the axle nut, keep the handlebar and the wheel straight ahead. Be sure to set the speedometer gearbox so there are no sharp bends in the speedometer cable.

Axle nut torque:

5.0–8.0 kg-m (36–58 ft-lb)

- Install the axle holder (8) with the F arrow (10) forward and tighten the forward holder nut (7) to the specified torque first, then tighten the rear nut to the same torque.

Axle holder nut torque:

1.8–2.5 kg-m (13–18 ft-lb)

- Fit the caliper over the disc taking care not to damage the brake pads. Install the caliper mounting bolts and tighten to the recommended torque (3.0–4.0 kg-m, 22–29 ft-lb).
- After installing the wheel, apply the brake several times and check for free wheel rotation when released.

WARNING

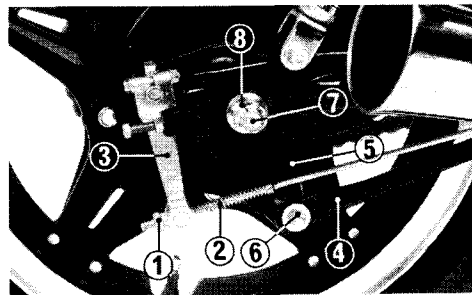
- * *If a torque wrench was not used for installation, see your dealer as soon as possible to verify proper assembly.*

CAUTION:

- * *Always replace used cotter pins with new ones.*

Rear Wheel Removal

1. Place the motorcycle on its center stand.
2. Remove the rear brake adjusting nut (1). Disconnect the brake rod (2) from the brake arm (3). Disconnect the stopper arm (4) from the brake panel (5) by removing the cotter pin, stopper arm nut (6), washer and rubber grommet.



- | | |
|-------------------|---------------------|
| (1) Adjusting nut | (5) Brake panel |
| (2) Brake rod | (6) Stopper arm nut |
| (3) Brake arm | (7) Cotter pin |
| (4) Stopper arm | (8) Axle nut |

3. Remove the cotter pin (7) from the axle.
4. Remove the axle nut (8) and pull out the rear axle. Push the wheel forward and derail the drive chain from the rear sprocket. Tilt the motorcycle to one side so that the wheel can be removed.

Installation Notes:

- To install the rear wheel, reverse the removal procedure.

Axle nut torque:

8.0–10.0 kg-m (58–72 ft-lb)

Stopper arm nut torque:

1.8–2.5 kg-m (13–18 ft-lb)

- Adjust the brake (page 60) and drive chain (page 62).
- 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.*

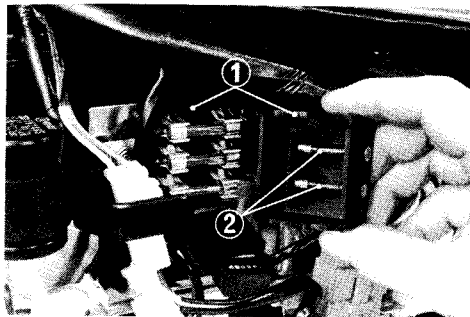
CAUTION:

- * *Always replace used cotter pins with new ones.*

Fuse Replacement

The fuse box (1) is inside the left side cover.

The specified fuses are 15A and 7A. When frequent fuse failure occurs, it usually indicates a short circuit or an overload in the electrical system. See your authorized Honda dealer for repair.



(1) Fuse box (2) Spare fuses

CAUTION:

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

To replace the fuses in the fuse box, remove the fuse box cover. Pull the old fuse out of the clips; or slide it lengthwise until one end comes out, then lift it out with your fingers. Push a new fuse into the clips and install the fuse box cover.

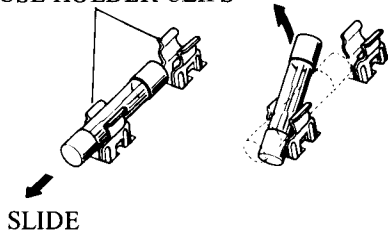
WARNING

- * *Never use a fuse with a different rating from that specified. Serious damage to the electrical system or a fire may result, causing a dangerous loss of lights or engine power at night or in traffic.*
- * *Do not pry the clips open to get a fuse out; you could bend them and cause poor contact with the new fuse. A loose fuse could cause damage to the electrical system and even start a fire.*

REMOVAL

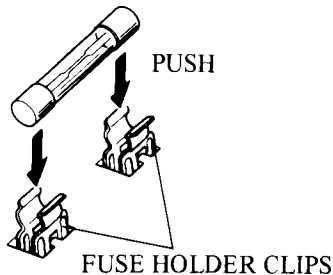
FUSE HOLDER CLIPS

REMOVE



INSTALLATION

PUSH



MAINTENANCE

- When service is required, remember that your authorized Honda dealer knows your motorcycle best and is fully equipped to maintain and repair it. The scheduled maintenance may also 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 and have the proper tools and service data.
- These instructions are based on the assumption that the motorcycle will be used exclusively for its designed purpose. Sustained high speed operation, or operation in unusually wet or dusty conditions will require more frequent service than specified in the MAINTENANCE SCHEDULE. Consult your authorized Honda dealer for recommendations applicable to your individual needs and use.

 WARNING

- * If your motorcycle is overturned or involved in a collision, inspect control levers, cables, brake hose, caliper, accessories, and other vital parts for damage. Do not ride the motorcycle if damage impairs safe operation. Have your Honda dealer inspect the major components including frame, suspension, and steering parts for misalignment and damage that you may not be able to detect.*
- * 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.*

MAINTENANCE SCHEDULE

Perform the Pre-ride Inspection (page 25) 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]						Refer to
			600 miles (1,000 km)	3,600 miles (6,000 km)	7,200 miles (12,000 km)	10,800 miles (18,000 km)	14,400 miles (24,000 km)	18,000 miles (30,000 km)	
		EVERY							
* FUEL LINES			I	I	I	I	I		
* THROTTLE OPERATION			I	I	I	I	I		Page 55
* CARBURETOR-CHOKE/ FAST IDLE			I	I	I	I	I		
AIR CLEANER	NOTE 1		C	C	C	C	C		Page 54
SPARK PLUGS			I	R	I	R	I		Pages 49-50
* VALVE CLEARANCE			I	I	I	I	I		Pages 52-53
ENGINE OIL	YEAR	R	REPLACE EVERY 1,800 miles (3,000 km)						Page 47
ENGINE OIL FILTER	YEAR	R	R	R	R	R	R		Page 48
** BALANCER CHAIN TENSION					A				
* CAM CHAIN TENSION		A	A	A	A	A	A		Page 50
* CARBURETOR-SYNCHRONIZE		I	I	I	I	I	I		
* CARBURETOR-IDLE SPEED		I	I	I	I	I	I		Page 51

ITEM		FREQUENCY	WHICHEVER COMES FIRST ↓	ODOMETER READING [NOTE 3]							Refer to
				600 miles (1,000 km)	3,600 miles (6,000 km)	7,200 miles (12,000 km)	10,800 miles (18,000 km)	14,400 miles (24,000 km)	18,000 miles (30,000 km)		
		EVERY		I EVERY 600 miles (1,000 km)							
	DRIVE CHAIN	NOTE 2								Pages 62-65	
	BATTERY	MONTH		I	I	I	I	I	I	Pages 68-69	
	BRAKE FLUID (FRONT)	MONTH I 2 YEARS R		I	I	I	*R	I	I	Pages 58-59	
	BRAKE SHOE/PAD WEAR				I	I	I	I	I	Pages 59, 61	
	BRAKE SYSTEM (REAR)			I	I	I	I	I	I	Pages 60-61	
*	BRAKE LIGHT SWITCH			I	I	I	I	I	I	Page 67	
*	HEADLIGHT AIM			I	I	I	I	I	I		
	CLUTCH			I	I	I	I	I	I	Pages 56-57	
	SIDE STAND				I	I	I	I	I	Page 67	
*	SUSPENSION			I	I	I	I	I	I		
*	NUTS, BOLTS, FASTENERS			I	I	I	I	I	I		
**	WHEELS			I	I	I	I	I	I		
**	STEERING HEAD BEARING			I		I		I			

* 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.

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

NOTE: 1. Service more frequently when riding in dusty areas.

2. Initial service period: 180 miles (300 km)

3. For higher odometer readings, repeat at the frequency interval established here.

MAINTENANCE RECORD

Miles	Performed By	Odometer	Date
600			
3,600			
7,200			
10,800			
14,400			
18,000			

- Make sure that whoever performs the maintenance completes this record.
All scheduled maintenance, including the 600 mile (1,000 km) break-in maintenance, is considered a normal owner operating cost and will be charged for by your dealer.
- Detailed receipts verifying the performance of required maintenance should be retained.
These receipts should be transferred with the motorcycle to the new owner if the motorcycle is sold.

Engine Oil

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

NOTE:

* Change the engine oil with the engine at normal operating temperature and the motorcycle on its center 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. Remove the oil filter bolt (2) and the cover (3).
4. After the oil is completely drained, make sure the sealing washer (4) on the drain plug is in good condition.
5. Install the drain plug.

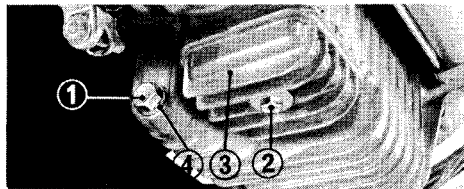
Drain plug torque:

2.5–3.5 kg-m (18–25 ft-lb)

6. Make sure the oil filter bolt and cover O-rings are in good condition. Install the cover and tighten the oil filter bolt. Oil filter bolt torque:

2.8–3.2 kg-m (20–23 ft-lb)

7. Fill the crankcase with approximately 2.5 liters (2.6 US quarts) of the recommended grade oil.
8. Install the oil filler cap/dipstick.
9. Start the engine and let it idle for a few minutes.
10. Stop the engine. Make sure the oil level is at the upper level mark with the motorcycle upright, and there are no oil leaks.



(1) Oil drain plug
(2) Oil filter bolt

(3) Oil filter cover
(4) Sealing washer

Oil Filter

NOTE:

* Change the oil filter after draining the engine oil

1. Remove the oil filter bolt (2), and pull the oil filter element (5) out of the oil filter cover (3).

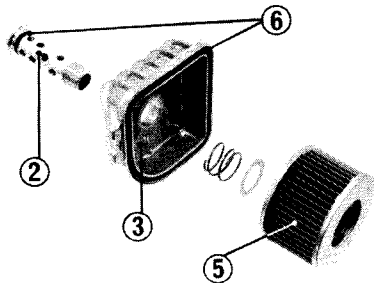
2. Insert a new oil filter element.
Check that the O-rings (6) are in good condition and that all parts are installed as shown.

3. Tighten the oil filter cover with the oil filter bolt.

Oil filter bolt torque:

2.8–3.2 kg-m (20–23 ft-lb)

4. Perform steps 7–10 of Engine Oil Change.



(2) Oil filter bolt

(3) Oil filter cover

(5) Oil filter element

(6) O-rings

Spark Plugs

Recommended spark plugs:

Standard:

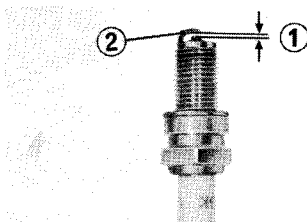
X27ESR-U (ND) or DR8ES (NGK)

For cold climate (Below 5°C, 41°F):

X24ESR-U (ND) or DR8ES-L (NGK)

1. Clean any dirt from around the spark plug base.
2. Disconnect the spark plug caps and remove the spark plugs.
3. Visually inspect the spark plug electrodes for wear. The center electrode should have square edges and the side electrode should not be eroded. Discard the spark plugs if there is apparent wear or if the insulator is cracked or chipped. If the spark plug deposits can be removed by sandblasting or wire brushing, the plugs can be reused. The spark plugs must be dry before sandblasting, and all grit must be removed before installation.

4. Make sure the spark plug gap (1) is 0.6–0.7 mm (0.024–0.028 in) using a feeler gauge. If the adjustment is necessary, bend the side electrode (2) carefully.
5. With the plug washer attached, thread the spark plug in by hand to prevent crossthreading.
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 1/8–1/4 turn after the plug seats.
7. Connect the plug caps.



(1) Spark plug gap

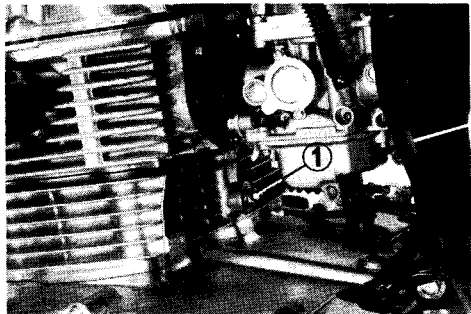
(2) Side electrode

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.*

Cam Chain

1. Start the engine and let it idle.
2. Loosen the cam chain tensioner lock nut (1). When the cam chain tensioner lock nut is loosened, the tensioner will automatically position itself to provide the correct tension.
3. Retighten the lock nut securely.



(1) Lock nut

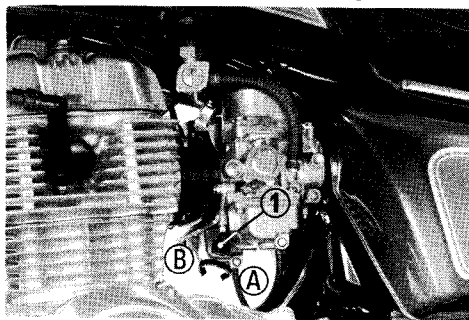
Idle Speed

The idle speed adjustment procedure given here should only be used when changes in altitude affect normal idling speed as set by your dealer. See your authorized Honda dealer for regularly scheduled carburetor adjustment, including individual carburetor adjustment and synchronization.

NOTE:

- * The engine must be warm for accurate idle speed adjustment. Ten minutes of stop-and-go riding is sufficient.
- 1. Warm up the engine, shift to neutral and place the motorcycle on its side stand.
- 2. Adjust idle speed with the throttle stop screw (1).

Idle Speed: $1,200 \pm 100$ rpm



(1) Throttle stop screw

(A) Increase rpm

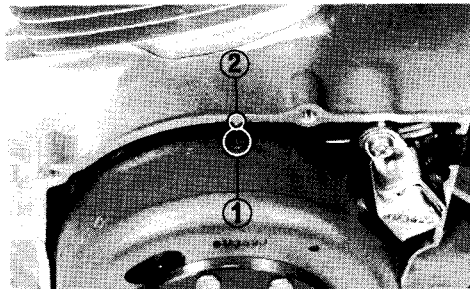
(B) Decrease rpm

Valve Clearance

Excessive valve clearance will cause noise, and 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:

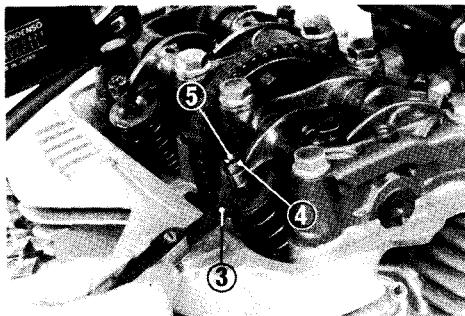
- * Checking or adjusting of the tappet clearance should be performed while the engine is cold. The clearance may tend to increase as the engine temperature rises.



(1) T mark

(2) Index mark

1. Turn the fuel valve to OFF, remove the fuel line from the fuel valve body and remove the fuel tank.
2. Remove the generator cover and cylinder head cover.
3. Rotate the generator rotor counter-clockwise and align the T mark (1) with the index mark (2). Make sure the left piston is at the top of the compression stroke by feeling the tappets with your fingers. If the left



(3) Feeler gauge

(4) Lock nut

(5) Adjusting screw

cylinder tappets are free, it is an indication that the left cylinder is at the top of the compression stroke. If the tappets are tight, rotate the crankshaft 360° and re-align the marks.

4. Check the clearance of both valves by inserting the feeler gauge (3) between the tappet adjusting screw (5) and valve stem.

Standard tappet clearance:

Intake 0.10 mm (0.004 in)

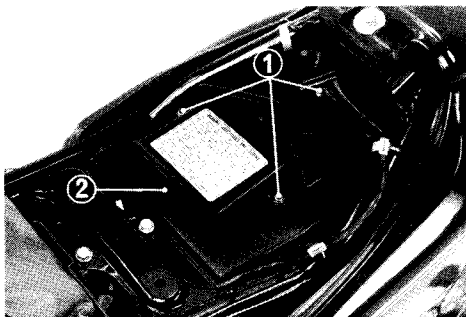
Exhaust 0.14 mm (0.006 in)

5. To adjust, loosen the lock nut (4) and turning the screw (5). After tightening the lock nut (4), recheck the clearance.
6. Turn the generator rotor counterclockwise 360° and align the T mark (1) with the index mark (2).
7. Valve tappet adjustment for right cylinder can be performed as in steps 4 and 5.

Air Cleaner

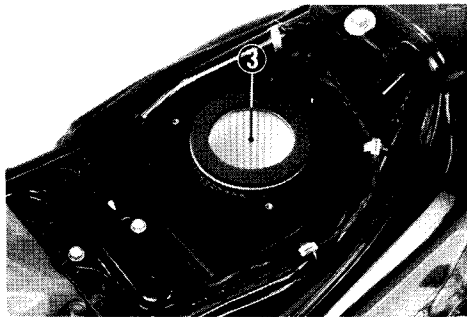
The air cleaner should be serviced at regular intervals (page 44). Service more frequently when riding in dusty areas.

1. Remove the seat (page 20).
2. Remove the air cleaner cover screws (1) and the cover (2). Remove the element (3).



(1) Screws (2) Air cleaner cover

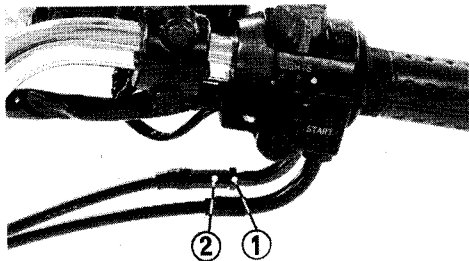
3. Tap the element lightly to loosen dust.
4. Blow away remaining dust by applying compressed air from the outside. Replace the element if it is excessively dirty, torn, or damaged.
5. Install the air cleaner parts in reverse order of removal.



(3) Air cleaner element

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 free play at the grip. Standard free play should be approx. $10-15^{\circ}$ of the grip rotation. To adjust the play, loosen the lock nut (1) and turn the adjuster (2).



(1) Lock nut

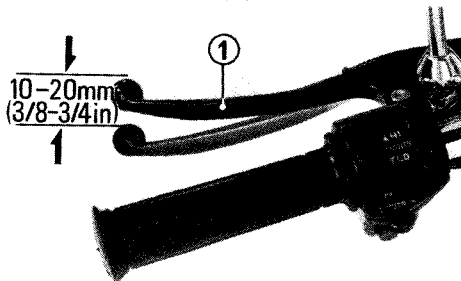
(2) Adjuster

Clutch

Adjustment:

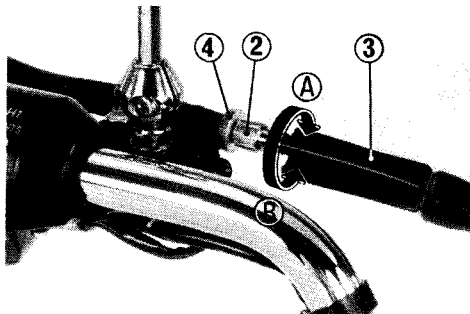
Clutch adjustment may be required if the motorcycle stalls when shifting into gear, or tends to creep; or if the clutch slips, causing acceleration to lag behind engine speed.

Normal clutch lever free play should be 10–20 mm (3/8–3/4 in) at the lever (1). Minor adjustments can be made with the clutch cable adjuster (2) at the lever.



(1) Clutch lever

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



(2) Clutch cable adjuster

(3) Dust cover

(4) Lock nut

(A) Increase free play

(B) Decrease free play

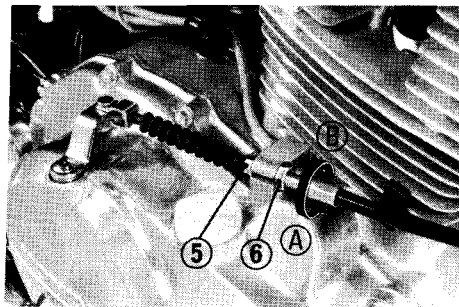
3. Major adjustments can be made with the adjuster at the lower end of the cable. Loosen the lock nut (5). Turn the adjusting nut (6) to obtain the specified free play. Tighten the lock nut (5), and check adjustment.
4. Start the engine, pull in the clutch lever and shift into gear. Make sure the engine 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, see your authorized 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) Lock nut | (A) Increase free play |
| (6) Adjusting nut | (B) Decrease free play |

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 friction pads are not worn beyond the recommended limit (page 59), there is probably air in the brake system and it must be bled. See your authorized Honda dealer.

Brake Fluid Level:

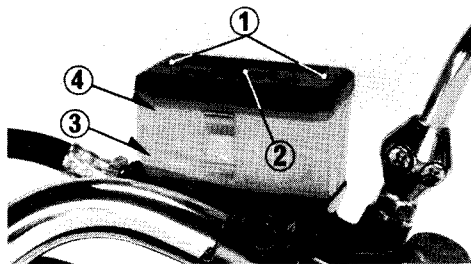
WARNING

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

Remove the screws (1), the reservoir cover (2) and diaphragm. Whenever the level is lower than the lower level mark (3) on the front reservoir, fill the reservoir with DOT 3 BRAKE FLUID from a sealed container, up to the upper level mark (4). Reinstall the diaphragm and reservoir cover. Tighten the screws (1) securely.

CAUTION:

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



(FRONT) (1) Screws (3) Lower level mark
(2) Cover (4) Upper level mark

CAUTION:

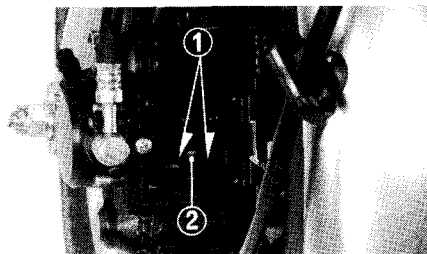
- * *Use only DOT 3 brake fluid from a sealed container.*
- * *Handle brake fluid with care because it can damage paint and instrument lenses.*
- * *Never allow contaminants (dirt, water, etc.) to enter the brake fluid reservoir.*

Brake Pads:

Brake pad wear will depend upon the severity of usage, type of driving, and condition of the roads. The pads will wear faster on dirty and wet roads. Inspect the pads visually during all regular service intervals to determine the pad wear. Remove the inspection hole cap. If the pads wear to the red lines (1), both pads must be replaced.

Other Checks:

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



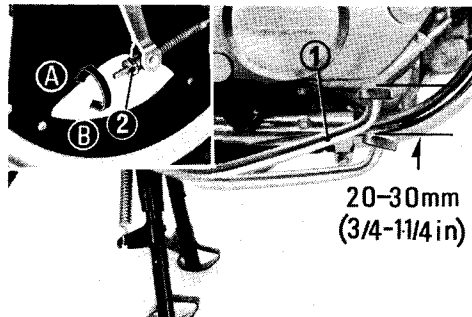
(1) Red lines (2) Brake disc

Rear Brake

Adjustment:

1. Measure the distance the rear brake pedal (1) 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 (2).



- (1) Rear brake pedal
(2) Adjusting nut

- (A) Increase free play
(B) Decrease free play

NOTE:

- * Make sure that the cut-out on the adjusting nut is seated on the brake arm pin.
- 2. Apply the brake several times and check for free wheel rotation when released.

NOTE:

- * If proper adjustment cannot be obtained by this method, see your authorized Honda dealer.

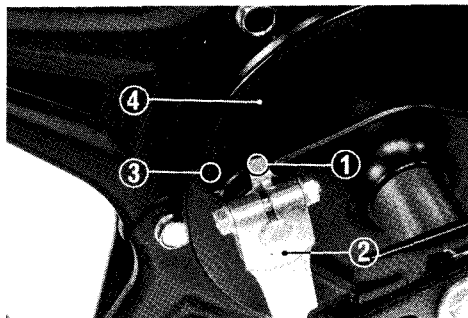
Other Checks:

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

Wear Indicator:

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 | (3) Reference mark |
| (2) Brake arm | (4) Brake panel |

Drive Chain

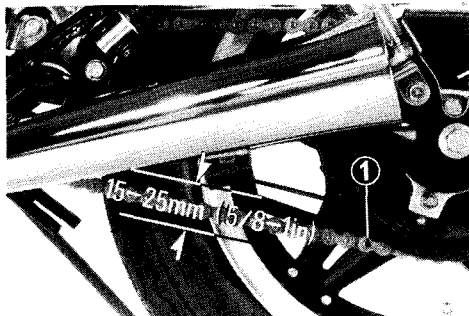
The service life of the drive chain is dependent upon proper lubrication and adjustment. Poor maintenance can cause premature wear or damage to the drive chain and sprockets.

The drive chain should be checked and lubricated as part of the Pre-ride Inspection (page 25). 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, place the motorcycle on the center stand and shift the transmission into neutral.
2. Check slack in the lower drive chain run midway between the sprockets. Drive chain slack should be adjusted to allow 15–25 mm (5/8–1 in) vertical movement by hand. Rotate the rear wheel and check drive chain slack as the wheel rotates. 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. Binding can frequently be eliminated by lubrication.



(1) Drive chain

3. Turn the rear wheel slowly, and inspect the drive chain and sprockets for any of the following conditions:

DRIVE CHAIN

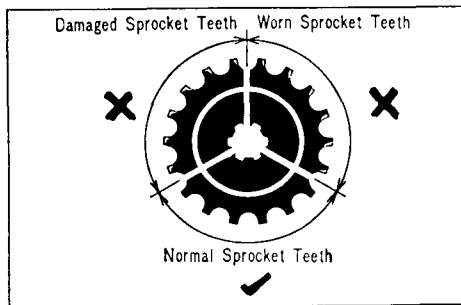
- * Damaged Rollers
- * Loose Pins
- * Dry or Rusted Links
- * Kinked or Binding Links
- * Excessive Wear
- * Improper Adjustment
- * Missing O-rings

SPROCKETS

- * Excessively Worn Teeth
- * Broken or Damaged Teeth

A drive chain with damaged rollers, loose pins, or missing O-rings must be replaced. If the drive chain requires replacement, see your authorized Honda dealer.

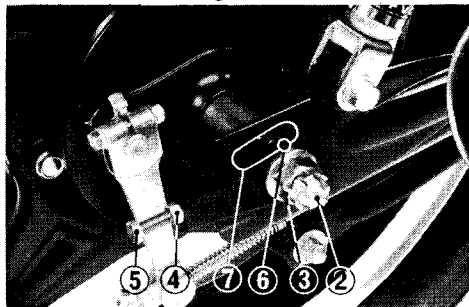
A chain which appears dry, or shows signs of rust, requires supplemental lubrication. Kinked or binding links should be thoroughly lubricated and worked free. If links cannot be freed the chain must be replaced.



Adjustment:

To adjust the drive chain:

1. Remove the cotter pin (2) and loosen the rear axle nut (3).
2. Loosen the lock nuts (4) and turn the adjusting bolts (5) on both the right and left chain adjusters to increase or decrease chain slack. Align the chain adjuster index marks (6) with corresponding scale (7) graduations on both sides of the swingarm.



(2) Cotter pin

(5) Adjusting bolt

(3) Axle nut

(6) Index mark

64 (4) Lock nut

(7) Graduated scale

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.
3. Tighten the rear axle nut and secure the nut with new cotter pin.
Rear axle nut torque:
7.0–10.0 kg-m (51–72 ft-lb)
 4. Tighten the lock nuts.
 5. Check drive chain slack.
 6. Brake pedal free play is affected when repositioning the rear wheel to adjust drive chain slack. Check free play and adjust as necessary (page 60).

CAUTION:

- * *The drive chain on this motorcycle is equipped with small O-rings between the link plates. These O-rings retain grease inside the chain to improve its service life. However, special precautions must be taken when adjusting, lubricating, washing and replacing the chain.*
- * *Always replace used cotter pins with new ones.*

Wear Inspection:

Check the chain wear label when adjusting the chain. If the red zone on the label aligns with the rear of the swingarm after the chain has been adjusted to 15–25 mm (5/8–1 in) slack, the chain is excessively worn and must be replaced.

CAUTION:

- * *Excessive chain slack, 50 mm (2 in) or more, may damage the bottom part of the frame.*

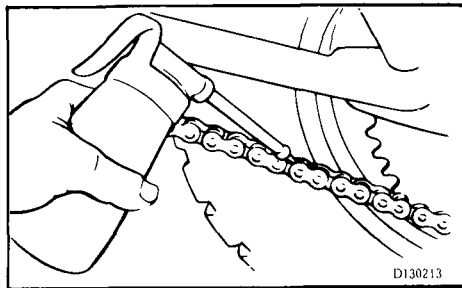
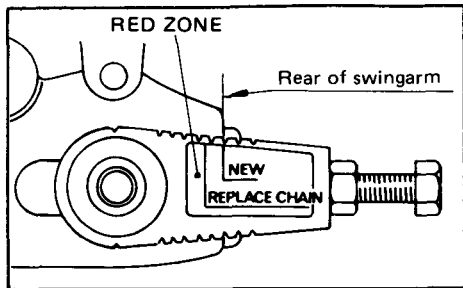
Lubrication and Cleaning:

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.

Lubricate the drive chain every 600 miles (1,000 km) or sooner if it appears dry.

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. Saturate each chain link joint so the lubricant penetrates between the link plates, pins, bushings, and rollers. For maximum penetration, lubricate when the chain is warm after riding. Replacement chain: D.I.D. 520 V or RK 520SM



D130213

Front and Rear Suspensions

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 from 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.

WARNING

- * If any suspension components appear worn or damaged, consult your Honda dealer for further inspection. The suspension components are directly safety related 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.*

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

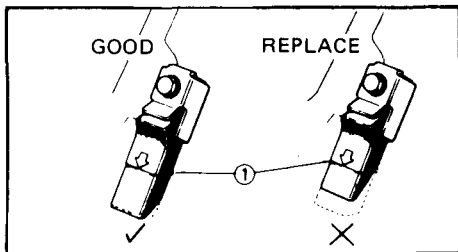
1. Swingarm bushings—check by pushing hard against the side of the rear wheel. Free play indicates worn bushings.
2. Check all suspension component attaching points for security of their respective fasteners.
3. Check for oil leaks in the shock absorber units.

NOTE:

- * If any of the above components appear damaged or worn, consult your Honda dealer for further inspection.

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.

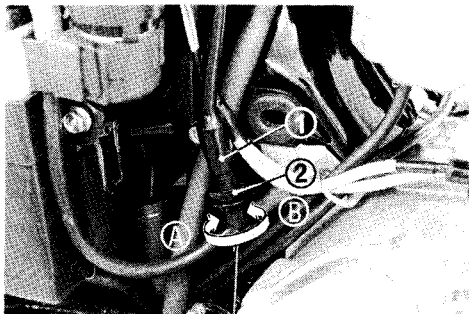


(1) Wear line

Stoplight Switch

Regularly check the operation of the stoplight switch (1) at the right side behind the engine.

To adjust, turn the adjusting nut (2) in the direction (A) if the switch operates too late and in the direction (B) if the switch operates too soon.



(1) Stoplight switch
(2) Adjusting nut

Battery

If the motorcycle is operated with insufficient battery electrolyte, sulfation and battery plate damage will occur.

If rapid loss of electrolyte is experienced, or if your battery seems to be weak, causing slow starting or other electrical problems, see your authorized Honda dealer.

Battery electrolyte:

The battery (1) is behind the right side cover. Remove the side cover. Remove the terminal leads (2) from the battery (1). Remove the bolt. Pull out the battery and check the electrolyte.

The electrolyte level must be maintained between the upper (3) and lower (4) level marks on the side of the battery. If the electrolyte level is low, remove the battery filler caps (5).

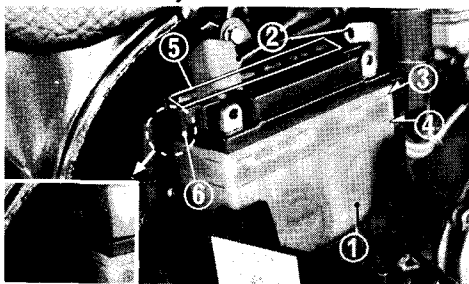
Carefully add distilled water to the upper level mark using a small syringe or plastic funnel.

CAUTION:

- * When checking the battery electrolyte level or adding distilled water, make sure the breather tube is connected to the battery breather outlet (6).

NOTE:

- * Use only distilled water in the battery. Tap water will shorten the service life of the battery.



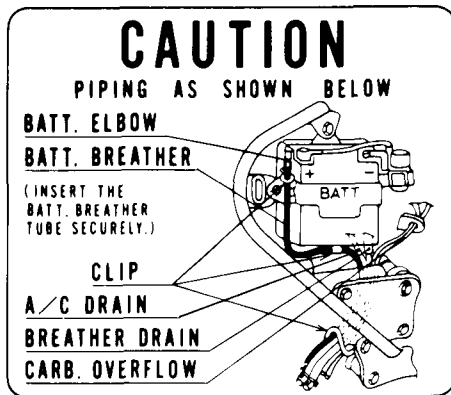
- | | |
|----------------------|----------------------|
| (1) Battery | (4) Lower level mark |
| (2) Terminal leads | (5) Filler caps |
| (3) Upper level mark | (6) Breather outlet |

WARNING

- * *The battery contains sulfuric acid. Avoid contact with skin, eyes or clothing. Antidote: EXTERNAL-Flush with water. INTERNAL-Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg or vegetable oil. Call physician immediately. Eyes: Flush with water and get prompt medical attention.*
- * *Batteries produce explosive gases. Keep sparks, flames and cigarettes away. Ventilate when charging or using in enclosed space. Always shield eyes when working near batteries.*
- * **KEEP OUT OF REACH OF CHILDREN.**

CAUTION:

- * *The battery breather tube must be routed as shown on the label. Do not bend or twist the breather tube. A bent or kinked breather tube may pressurize the battery and damage its case.*



447-130

CLEANING

Clean your motorcycle regularly to protect the surface finish 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 area:*

<i>Wheel Hubs</i>	<i>Ignition Switch</i>
<i>Muffler Outlets</i>	<i>Steering Lock</i>
<i>Under Fuel Tank</i>	<i>Drive Chain</i>
<i>Under Seat</i>	<i>Handlebar Switches</i>
<i>Carburetors</i>	
<i>Instruments</i>	
<i>Hydraulic Brake Master Cylinder</i>	

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.

3. Test the brakes before riding the motorcycle in traffic. Several applications may be necessary to restore normal braking performance.

WARNING

- * *Braking performance may be impaired immediately after washing the motorcycle.*
4. Lubricate the drive chain immediately after washing and drying the motorcycle.

STORAGE

Storage for more than a month, or winter storage requires maintenance to prevent deterioration of the fuel, tires, battery, and corrosion.

See your authorized Honda dealer for this service.

SPECIFICATIONS

DIMENSIONS Overall length Overall width Overall height Wheelbase	2,125 mm (83.7 in) 870 mm (34.3 in) 1,155 mm (45.5 in) 1,425 mm (56.1 in)
WEIGHT Dry weight	171 kg (377 lbs)
CAPACITIES Engine oil Fuel tank Fuel reserve tank Passenger capacity Front fork oil capacity	3.0 ℓ (3.2 US qt, 2.2 Imp. qt.) After draining 13.0 ℓ (3.4 US gal, 2.9 Imp. gal) 2.0 ℓ (0.5 US gal, 0.4 Imp. gal) Operator and one passenger 190 cc (5.4 oz)

ENGIEN Bore and stroke Compression ratio Displacement Spark plugs Spark plug gap Valve clearance Idle speed	62.0 x 41.4 mm (2.44 x 1.63 in) 9.3 : 1 249 cc (15.2 cu in) Standard: X27ESR-U (ND) or DR8ES (NGK) For cold climate (Below 5°C, 41°F): X24ESR-U (ND) or DR8ES-L (NGK) 0.6 – 0.7 mm (0.024 – 0.028 in) Intake: 0.10 mm (0.004 in) Exhaust: 0.14 mm (0.006 in) 1,200 ± 100 rpm in neutral
CHASSIS AND SUSPENSION Caster Trail Tire size, front Tire size, rear	29°30' 108 mm (4.3 in) 3.50S18-4PR TUBELESS 4.60S16-4PR TUBELESS

POWER TRANSMISSION

Primary reduction

3.125 : 1

Final reduction

2.187 : 1

Gear ratio, 1st.

2.733 : 1

2nd.

1.850 : 1

3rd.

1.416 : 1

4th.

1.148 : 1

5th.

0.965 : 1

ELECTRICAL

Battery

12 V – 12 AH

Generator

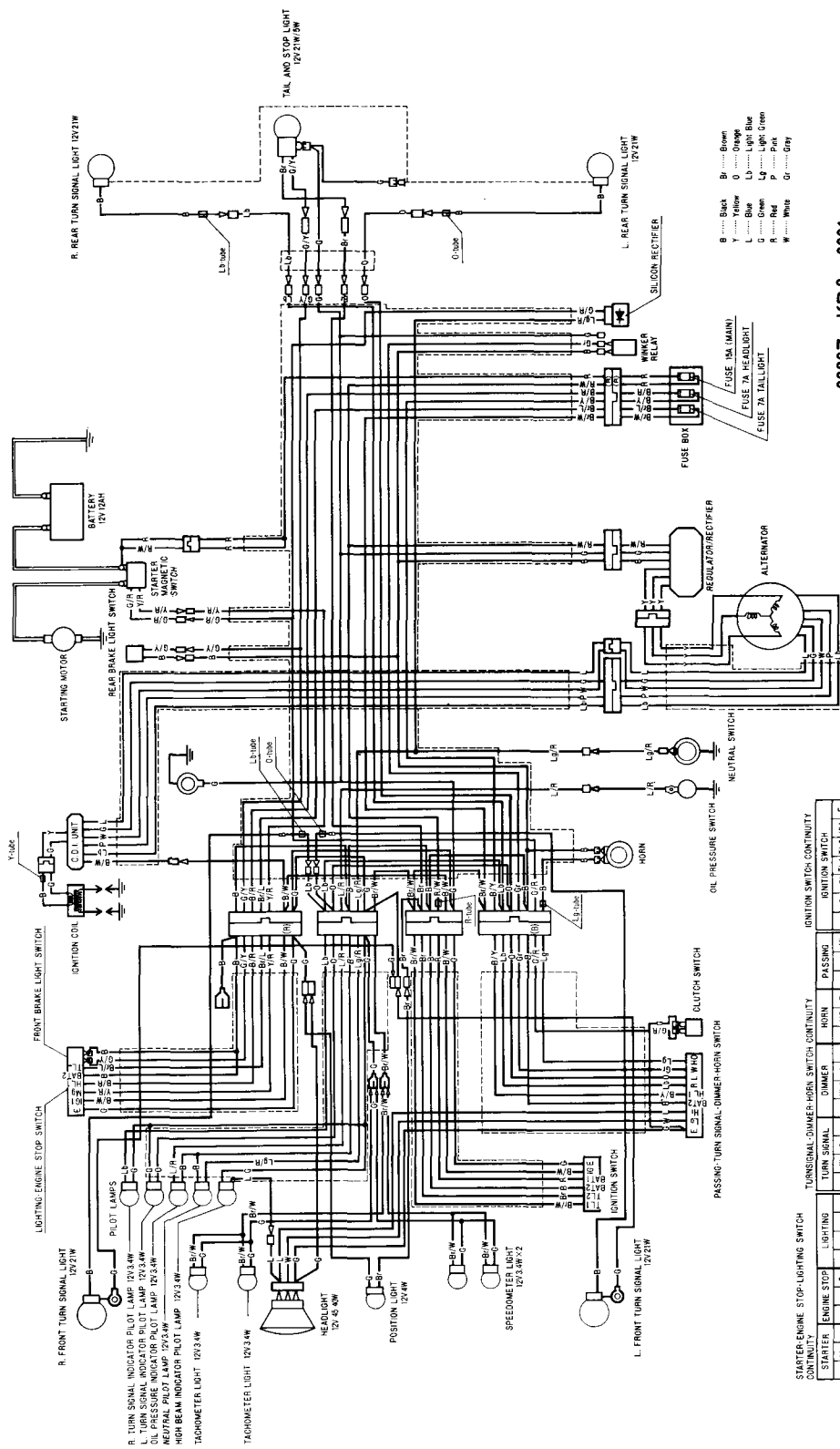
A.C. Generator 0.13 kw/5,000 rpm

LIGHTS Headlight (High/Low) Tail/stoplight Front turn signal Rear turn signal light Meter lights Neutral indicator light Turn signal indicator light High beam indicator light Oil pressure warning indicator Position light	45/40 W 5/21 W 21 W 21 W 3.4 W 3.4 W 3.4 W 3.4 W 3.4 W 4 W
FUSE	15 A (for main) 7 A (for headlight and taillight)

MEMO

MEMO

CM 250 T



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