MAINTENANCE

- The U.S. Environmental Protection Agency requires manufacturers to certify that motorcycles built after December 31, 1977 will comply with applicable emissions standards during their useful life, when operated and maintained according to the instructions provided. Compliance with the terms of the Distributor's Warranty for Honda Motorcycle Emission Control Systems is necessary in order to keep the emissions system warranty in effect. (USA ONLY)

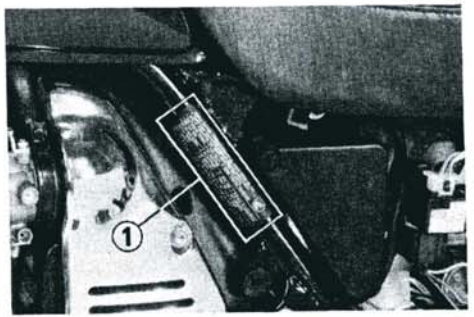
- When service is required, remember that your authorized Honda dealer knows your motorcycle best and is fully equipped to maintain and repair it. The scheduled maintenance may also be performed by a qualified service facility that normally does this kind of work; or you may perform most of the work 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 hoses, calipers, 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 and the effective operation of the emission control systems.*

The Vehicle Emission Control Information label (1) is attached to the frame behind the left side cover, near the air cleaner case. (USA ONLY)



(1) Vehicle Emission Control Information label

MAINTENANCE SCHEDULE

Perform the Pre-ride Inspection (page 33) at each scheduled maintenance period.

I: INSPECT AND CLEAN, ADJUST, LUBRICATE OR REPLACE IF NECESSARY.
C: CLEAN R: REPLACE A: ADJUST L: LUBRICATE

		ITEM	WHICHEVER COMES FIRST / EVERY	600 mi (1,000 km)	4,000 mi (6,400 km)	8,000 mi (12,800 km)	12,000 mi (19,200 km)	16,000 mi (25,600 km)	20,000 mi (32,000 km)	24,000 mi (38,400 km)	REFER TO
EMISSION RELATED ITEMS	*	FUEL LINES			I	I	I	I	I	I	
	*	FUEL STRAINER		C	C	C	C	C	C	C	
	*	THROTTLE OPERATION		I	I	I	I	I	I	I	
	*	CARBURETOR-CHOKE			I	I	I	I	I	I	
		AIR CLEANER	NOTE 1		C	R	C	R	C	R	Page 63
		CRANKCASE BREATHER	NOTE 2		C	C	C	C	C	C	Page 64
		SPARK PLUGS			R	R	R	R	R	R	Page 61
	*	VALVE CLEARANCE		I	I	I	I	I	I	I	
		ENGINE OIL	YEAR	R	R	R	R	R	R	R	Pages 57-58
		ENGINE OIL FILTER	YEAR	R	R	R	R	R	R	R	Page 58
	*	CAM CHAIN TENSION		A	A	A	A	A	A	A	
	*	CARBURETOR-SYNCHRONIZATION		I	I	I	I	I	I	I	
	*	CARBURETOR-IDLE SPEED		I	I	I	I	I	I	I	Page 62
NON-EMISSION RELATED ITEMS	*	DRIVE SHAFT JOINT				L		L		L	Pages 57-58
		DUAL RANGE TRANS OIL				I		I		R	Page 58
		FINAL DRIVE OIL				I		I		R	
		BATTERY	MONTH	I	I	I	I	I	I	I	
		BRAKE FLUID	MONTH I 2 YEARS *R	I	I	I	*R	I	I	*R	
		BRAKE PAD WEAR			I	I	I	I	I	I	Page 62
		BRAKE SYSTEM		I	I	I	I	I	I	I	
	*	BRAKE LIGHT SWITCH		I	I	I	I	I	I	I	
	*	HEADLIGHT AIM		I	I	I	I	I	I	I	
		CLUTCH		I	I	I	I	I	I	I	
		SIDE STAND			I	I	I	I	I	I	
	*	SUSPENSION		I	I	I	I	I	I	I	
	*	NUTS, BOLTS, FASTENERS		I	I	I	I	I	I	I	
	**	WHEELS		I	I	I	I	I	I	I	
	**	STEERING HEAD BEARING		I		I		I		I	

* SHOULD BE SERVICED BY AN AUTHORIZED HONDA DEALER, UNLESS THE OWNER HAS THE 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. Service more frequently when riding in rain or at full throttle.
3. For higher odometer readings, repeat at the frequency interval established here.

MAINTENANCE RECORD

Miles	Performed by	Odometer	Date
600			
4,000			
8,000			
12,000			
16,000			
20,000			
24,000			

- Make sure that whoever performs the maintenance completes this record. All scheduled 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 Filter

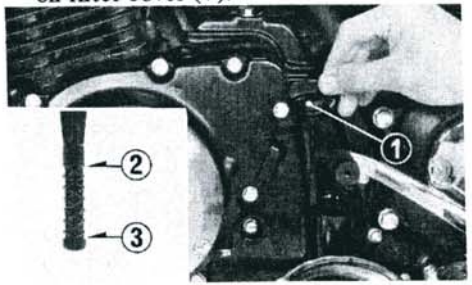
Engine Oil

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

NOTE:

* Change engine oil with the engine warm and the motorcycle on its center stand to assure complete and rapid draining.

1. To drain the oil, remove the oil filler cap (1), crankcase drain plug (4) and oil filter cover (7).



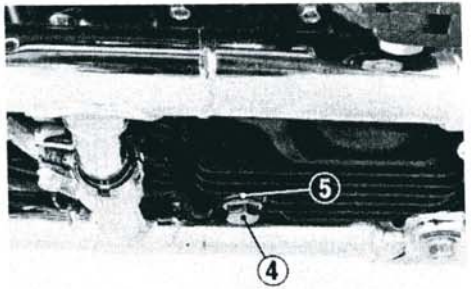
(1) Filler cap/dipstick (3) Lower level mark
(2) Upper level mark

2. After the oil has completely drained, check that the sealing washer (5) on the oil drain plug is in good condition and install the drain plug.

Drain Plug Torque:
35–40 N·m (3.5–4.0 kg-m, 25–29 ft-lb)

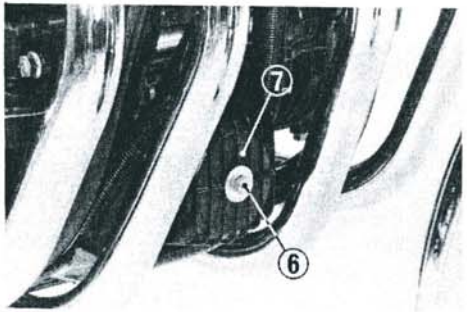
3. Check that the oil filter bolt (6) and cover O-rings are in good condition and install the cover.

Oil Filter Bolt Torque:
28–32 N·m (2.8–3.2 kg-m, 20–23 ft-lb)



(4) Oil drain plug (5) Sealing washer

4. Fill the crankcase with approximately 3.5 liters (3.7 US qt) of the recommended oil.
5. Install the oil filler cap/dipstick (1).
6. Start the engine and let it idle for 2–3 minutes.
7. Stop the engine and check that the oil level is at the upper level mark (2) on the dipstick. Make sure there are no oil leaks.



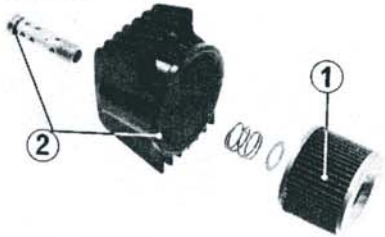
(6) Oil filter bolt (7) Oil filter cover

Engine Oil Filter

NOTE:

* Change the filter after draining the engine oil.

1. Remove the oil filter element (1) from the cover.
2. Check that the O-rings (2) on the oil filter bolt and cover are in good condition.
3. Insert a new oil filter element. Check that all parts are installed as shown. Install the oil filter cover.
   Oil Filter Bolt Torque:
   28–32 N·m (2.8–3.2 kg-m, 20–23 ft-lb)
4. Perform steps 4–7 of Engine Oil Change.



(1) Oil filter element (2) O-rings

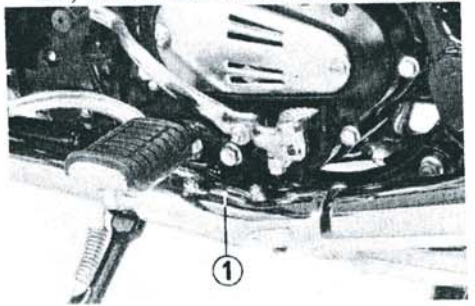
Dual Range Transmission Oil

Change the oil when specified by the maintenance schedule.

NOTE:

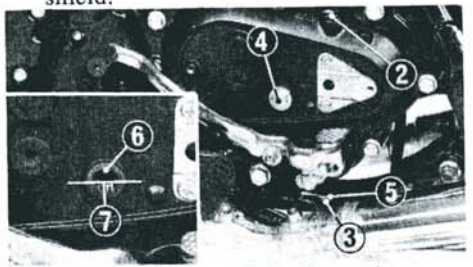
* Change the oil with the dual range transmission warm and the motorcycle on its center stand to assure complete and rapid draining.

1. To drain the oil, remove the exhaust pipe heat shield (1), oil filler cap (2), drain plug (3).
2. Remove the protector cover after shifting the dual range shift pedal to LO, and remove the oil check bolt (4).



(1) Exhaust pipe heat shield

3. After the oil has completely drained, check that the sealing washer (5) on the oil drain plug is in good condition and install the drain plug.
   Drain Plug Torque:
   16–20 N·m (1.6–2.0 kg-m, 12–14 ft-lb)
4. Fill the dual range transmission with approximately 600 cc (20.4 oz) of the recommended oil. Make sure that the recommended oil is filled up to the lower edge of the inspection hole (6).
5. Install the oil filler cap, oil check bolt, protector cover and exhaust pipe heat shield.



(2) Oil filter cap (5) Sealing washer
(3) Oil drain plug (6) Inspection hole
(4) Oil check bolt (7) Oil level

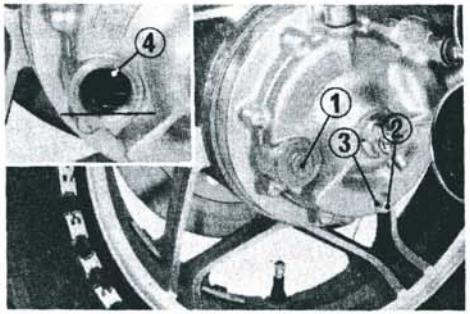
Final Drive Oil

Change the oil when specified by the maintenance schedule.

NOTE:

* Change the oil with the final drive warm and the motorcycle on its center stand to assure complete and rapid draining.

1. To drain the oil, remove the oil filler cap (1) and drain plug (2).
2. After the oil has completely drained, check that the sealing washer (3) on the oil drain plug is in good condition and install the drain plug.
   Drain Plug Torque:
   10–14 N·m
   (1.0–1.4 kg-m, 7–10 ft-lb)
3. Fill the final drive with approximately 150 cc (5.1 oz) of the recommended oil. (page 32)
   Make sure the recommended oil is filled up to the lower edge of the inspection hole (4).
4. Install the oil filler bolt and check bolt.



(1) Oil filler cap
(2) Oil drain plug
(3) Sealing washer
(4) Inspection hole

Spark Plugs

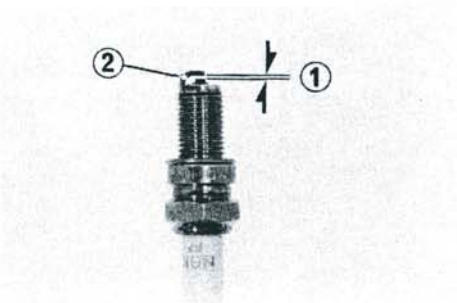
Recommended spark plugs:

Standard:
X27ESR-U (ND) or DR8ES (NGK)
For cold climate: (Below 5°C, 41°F)
X24ESR-U (ND) or DR8ES-L (NGK)

1. Disconnect the spark plug caps.
2. Clean any dirt from around the spark plug bases.
3. Remove and discard the spark plug.
4. Make sure the new spark plug gap (1) is 0.6–0.7 mm (0.024–0.028 in) using a wire-type feeler gauge. If adjustment is necessary, bend the side electrode (2) carefully.
5. With the plug washers attached, thread the new spark plugs in by hand to prevent cross-threading.
6. Tighten the spark plugs 1/2 turn with a spark plug wrench to compress the washer.
7. Connect the spark plug caps.

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.*



(1) Spark plug gap
(2) Side electrode

Idle Speed

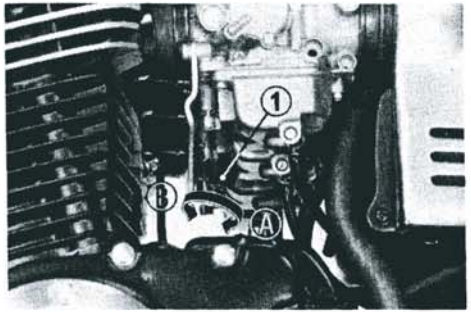
The idle speed adjustment procedure given here should only be used when changes in altitude affect normal idling speed as set by your dealer. See your authorized Honda dealer for regularly scheduled carburetor adjustment, including individual carburetor adjustment and synchronization.

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 center stand.
2. Adjust idle speed with the throttle stop screw.

   Idle Speed: 1,000 ± 100 rpm

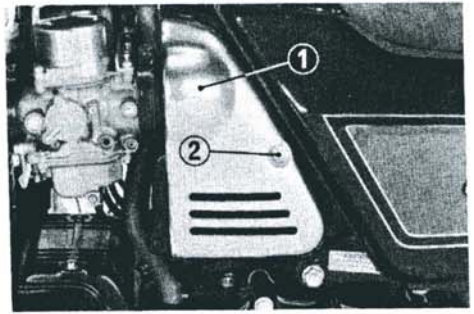


(1) Throttle stop screw (A) Increase rpm (B) Decrease rpm

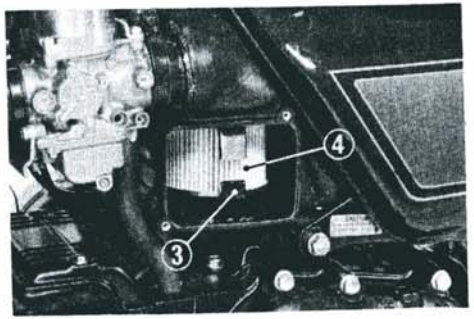
Air Cleaner

The air cleaner should be serviced at regular intervals (page 54). Service more frequently when riding in dusty areas.

1. Remove the air cleaner cover (1) by removing the two screws (2).
2. Pull the retainer (3) out and remove the air cleaner element (4).
3. Clean the element by tapping it lightly to loosen dust. Blow away the remaining dust by applying compressed air from the inside of the element. Replace the element if it is excessively dirty, torn or damaged.
4. Reinstall the element retainer and air cleaner cover.



(1) Air cleaner cover
(2) Screws



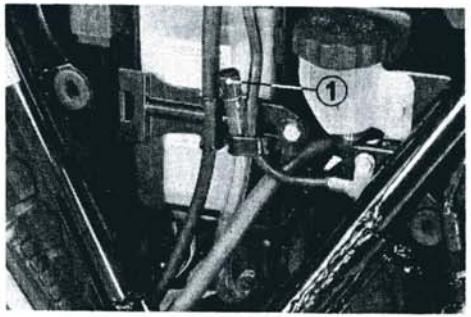
(3) Retainer
(4) Air cleaner element

Crankcase Breather

1. Remove the right side cover and remove the drain tube from the clamp on the battery holder.
2. Remove the drain plug (1) from the tube and drain the deposits.
3. Reinstall the drain plug (1).

NOTE:

* Service more frequently when riding in rain, at full throttle, or when deposits can be seen in the transparent section of the drain tube.

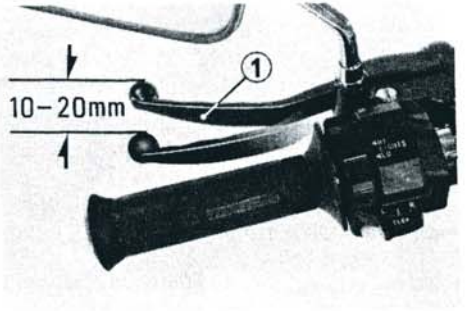


(1) Drain plug

Clutch

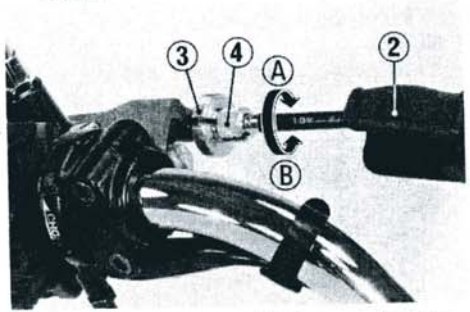
Clutch adjustment may be required if the motorcycle stalls when shifting into gear or tends to creep, or if the clutch slips, causing acceleration to lag behind engine speed.

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



(1) Clutch lever

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



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

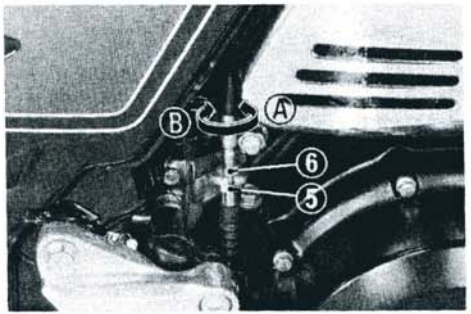
3. Loosen the lock nut (5) at the lower end of the cable. Turn the adjusting nut (6) to obtain the specified free play. Tighten the lock nut (5) and check adjustment.
4. Start the engine, pull in the clutch lever and shift into gear. Make sure the engine does not stall and the motorcycle does not creep. 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

Brakes

Both front and rear brakes are hydraulic disc types.

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 or pedal free play becomes excessive and the brake pads are not worn beyond the recommended limit (page 69), there is probably air in the brake system and it must be bled out. See your authorized Honda dealer for this service.

Front Brake Fluid Level:

WARNING

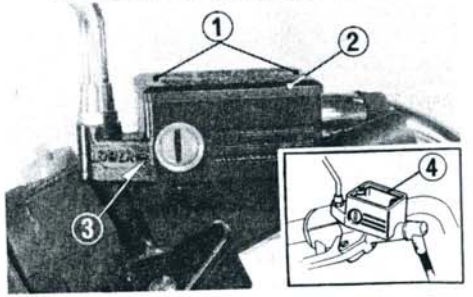
* *Brake fluid may cause irritation. Avoid contact with skin or eyes. In case of contact, flush thoroughly with water and call a doctor if your eyes were exposed.*

Remove the screws (1), the reservoir cover (2) and diaphragm. Whenever the level is near 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 cover.

Tighten the cover 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

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

Rear Brake Fluid Level:

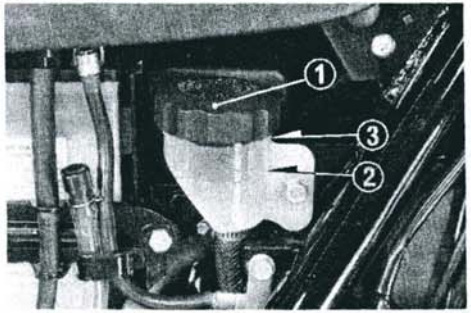
WARNING

* ***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 reservoir cap (1), washer and diaphragm. Whenever the level is near the lower level mark (2) on the rear reservoir, fill the reservoir with DOT 3 BRAKE FLUID from a sealed container, up to the upper level mark (3). Reinstall the diaphragm and washer, and tighten the reservoir cap securely.

CAUTION:

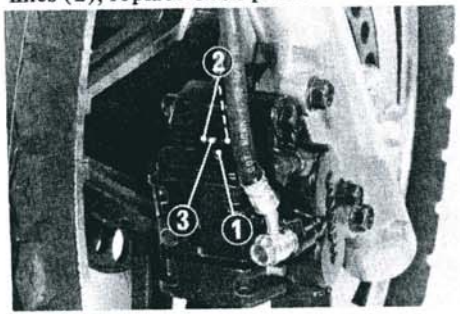
* *Use only fresh DOT 3 brake fluid from a sealed container.*
* *Handle brake fluid with care because it can damage paint and electric wires.*
* *Never allow contaminants (dirt, water, etc.) to enter the brake fluid reservoir.*



(REAR) (1) Reservoir cap
(2) Lower level mark
(3) Upper level mark

Brake pads:

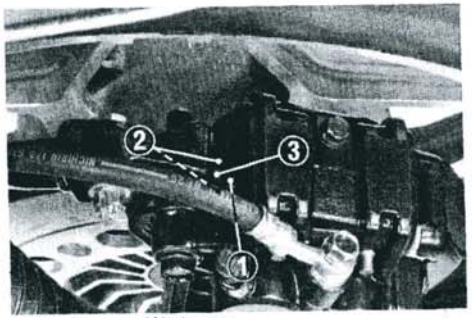
Brake pad wear will depend upon the **severity of usage, type of riding, and** condition of the roads. The pads will wear faster on dirty and wet roads. Inspect the pads visually from the direction as indicated by the arrow during all regular service intervals to determine the pad wear. If the pads wear to the wear lines (2), replace both pads.



(FRONT) (1) Arrow
(2) Wear line
(3) Brake disc

Other checks:

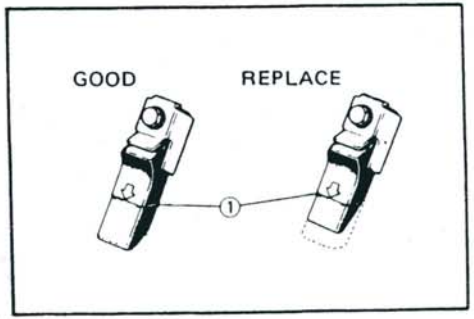
Make sure that there are no fluid leaks. Check for deterioration or cracks in the hoses and fittings.



(REAR) (1) Arrow
(2) Wear line
(3) Brake disc

Side Stand

Check the rubber pad for deterioration and wear. Replace if any 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

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:

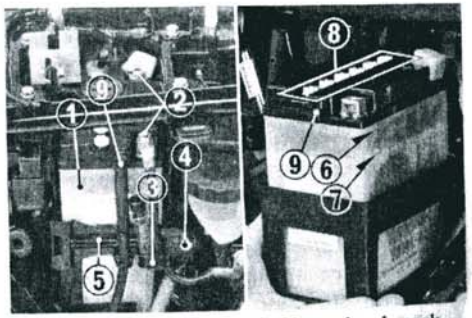
The battery (1) is behind the right side cover under the seat. Remove the seat by removing the seat bolt on each side of the seat. Disconnect the terminal leads (2) (the negative lead first, then the positive terminal lead) from the battery (1). Remove the negative (ground) cable and the crankcase breather tube from the clamp (3). Remove the battery holder bolt (4) and open the battery holder (5). Pull out the battery and check the electrolyte.

The electrolyte level must be maintained between the upper (6) and lower (7) level marks on the side of the battery. If the electrolyte level is low, remove the battery filler caps (8).

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

CAUTION:

* *When checking battery electrolyte level or adding distilled water, make sure the breather tube is connected to the battery breather outlet (9).*



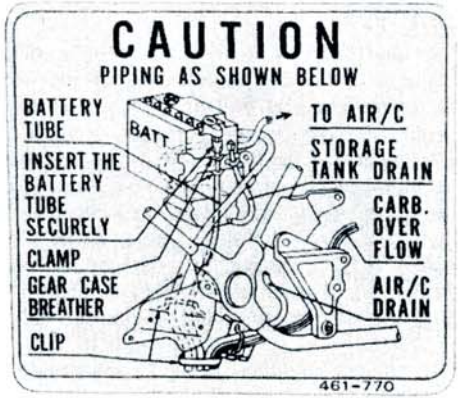
(1) Battery
(2) Terminal leads
(3) Clamp
(4) Bolt
(5) Battery holder
(6) Upper level mark
(7) Lower level mark
(8) Filler caps
(9) Breather outlet

NOTE:

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

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.***



CLEANING

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

CAUTION:

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

Wheel Hubs	*Ignition Switch*
Carburetors	*Brake Master Cylinders*
Instruments	*Muffler Outlets*
Handlebar-switches	*Under Fuel Tank*
	Under Seat

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.***