

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 is attached to the frame near the left side cover. (USA ONLY)



(1) Vehicle Emission Control Information label

MAINTENANCE SCHEDULE

Perform the Pre-ride Inspection (Page 28) 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
				600mi (1,000km)	4,000mi (6,400km)	8,000mi (12,800km)	12,000mi (19,200km)	16,000mi (25,600km)	20,000mi (32,000km)	
		EVERY								
EMISSION RELATED ITEMS	* FUEL LINES				I	I	I	I	I	
	* FUEL STRAINER			C	C	C	C	C	C	
	* THROTTLE OPERATION			I	I	I	I	I	I	
	* CARBURETOR-CHOKE				I	I	I	I	I	
	AIR CLEANER	NOTE (1)			C	R	C	R	C	Page 55
	CRANKCASE BREATHER	NOTE (2)			C	C	C	C	C	Page 56
	SPARK PLUGS				R	R	R	R	R	Page 53
	* VALVE CLEARANCE			I	I	I	I	I	I	
	ENGINE OIL	YEAR		R	R	R	R	R	R	Page 51
	ENGINE OIL FILTER	YEAR		R	R	R	R	R	R	Page 52
	* CAM CHAIN TENSION			A	A	A	A	A	A	
	* CARBURETOR-SYNCHRONIZE			I	I	I	I	I	I	
* CARBURETOR-IDLE SPEED			I	I	I	I	I	I	Page 54	

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			EVERY	600mi (1,000km)	4,000mi (6,400km)	8,000mi (12,800km)	12,000mi (19,200km)	16,000mi (25,600km)		20,000mi (32,000km)
				I, L EVERY 300 mi (500 km)						
NON-EMISSION RELATED ITEMS	DRIVE CHAIN		I, L EVERY 300 mi (500 km)						Pages 63-67	
	BATTERY	MONTH	I	I	I	I	I	I	Pages 68-69	
	BRAKE FLUID (FRONT)	MONTH 1 2 YEARS *R	I	I	I	*R	I	I	Pages 59-60	
	BRAKE PAD/SHOE WEAR			I	I	I	I	I	Pages 60-62	
	BRAKE SYSTEM		I	I	I	I	I	I		
	* BRAKE LIGHT SWITCH		I	I	I	I	I	I		
	* HEADLIGHT AIM		I	I	I	I	I	I		
	CLUTCH		I	I	I	I	I	I	Pages 57-58	
	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) 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	HONDA OF AUSTIN 3280 MILES	PLUGS / VALVES / OIL	DEC 10 1982
7,000 → 8,000	NEW FRONT + REAR K&F TIRES 5/83		
	OIL CHANGE + NEW PLUGS (ADDED ENGINE GUARD)		6-9-83
9,000 → 12,000	VALVES + TUNE UP + OIL	JULY-83	
	NEW BATTERY		9.22.83
16,000			
20,000			

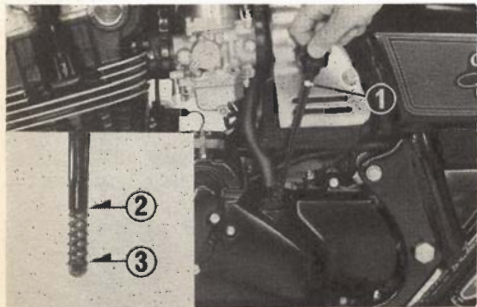
- Make sure that whoever performs the maintenance completes this record. All scheduled maintenance, including the 600 mile (1,000 km) break-in maintenance, is considered a normal owner operating cost and will be charged for by your dealer.
- Detailed receipts verifying the performance of required maintenance 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 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, crankcase drain plug and oil filter cover.



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

- 2. After the oil is completely drained check that the sealing washer on the drain plug is in good condition and install the plug.

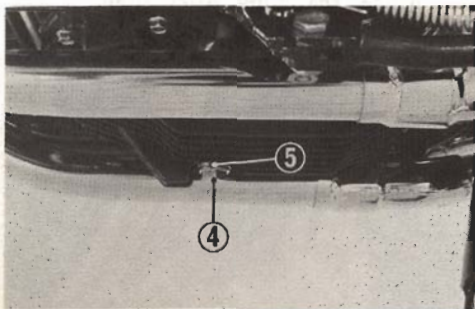
Drain Plug Torque:

35–40 N·m (3.5–4.0 kg-m, 25–28 ft-lb)

- 3. Check that the oil filter bolt 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)



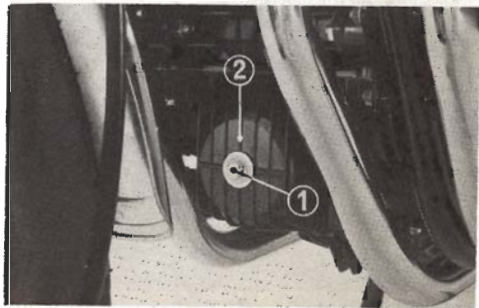
(4) Oil drain plug
(5) Sealing washer

4. Fill the crankcase with approximately 3.5 liters (3.7 US qt) of the recommended oil.
5. Install the oil filler cap.
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 on the dipstick. Make sure there are no oil leaks.

Engine Oil Filter

NOTE:

* Change the filter after draining the



(1) Oil filter bolt (2) Oil filter cover

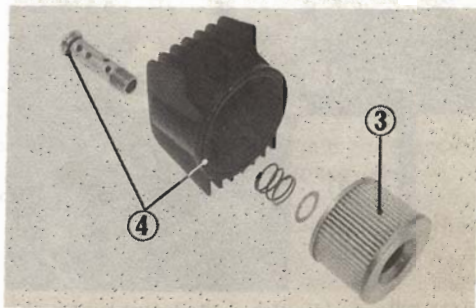
engine oil.

1. Remove the oil filter element from the cover.
2. Check that the O-rings 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.



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

Spark Plugs

Recommended spark plugs:

Standard:

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

For cold climate (Below 5°C, 41°F):

X22ESR-U (ND), DR7ES (NGK)

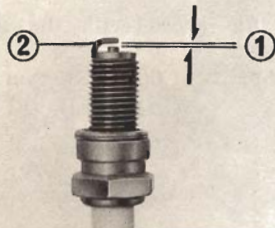
For extended high speed driving:

X27ESR-U (ND), DR8ES (NGK)

1. Disconnect the spark plug caps.
2. Clean any dirt from around the spark plug base. Remove and discard the plugs.
3. 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.
4. With the plug washers attached, thread the new spark plugs in by hand to prevent cross-threading.
5. Tighten the spark plugs 1/2 turn with a spark plug wrench to compress the washer.
6. Reinstall 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

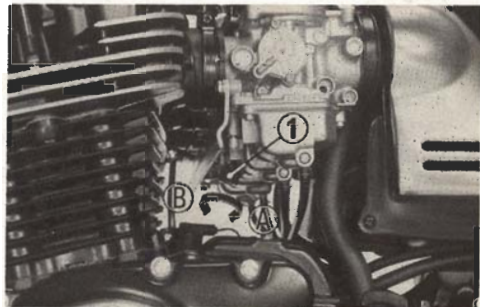
The idle speed adjustment procedure given here should only be used when changes in altitude affect normal idling speed as set by your dealer. See your authorized Honda dealer for regularly scheduled carburetor adjustment, including individual carburetor adjustment and synchronization.

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: $1,000 \pm 100$ rpm
(In neutral)



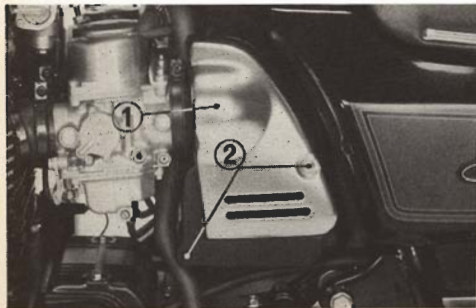
(1) Throttle stop screw (A) Increase
(B) Decrease

Air Cleaner

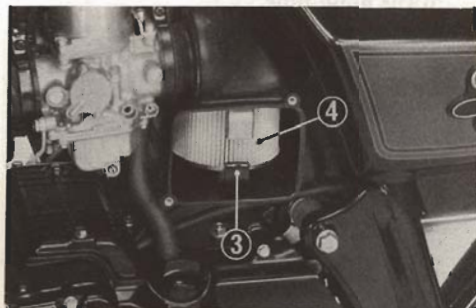
The air cleaner should be serviced at regular intervals (page 48). Service more frequently when riding in dusty areas.

1. Remove the two screws (2) and the air cleaner cover (1). Pull out the set spring (3) and element (4).

2. Clean the element by tapping it lightly to loosen dust. Blow away the remaining dust by applying compressed air to the inside of the element. **Replace** the element if it is **excessively dirty**, torn or damaged.
3. Reinstall the element, set spring and air cleaner cover.



(1) Air cleaner cover
(2) Screws



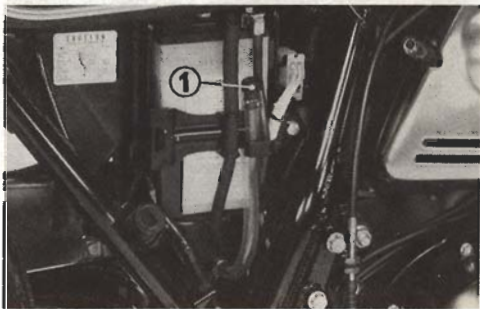
(3) Set spring
(4) Air cleaner element

Crankcase Breather

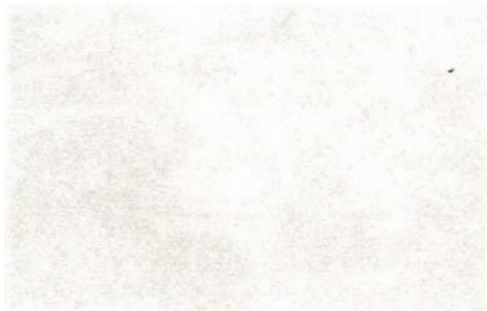
1. Remove the right side cover and remove the drain tube from the clip on the battery holder.
2. Remove the drain plug (1) from the tube, and drain the deposits.
3. Reinstall the drain plug (1).

NOTE:

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



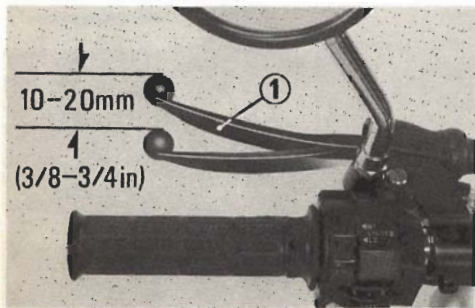
(1) Drain plug



Clutch

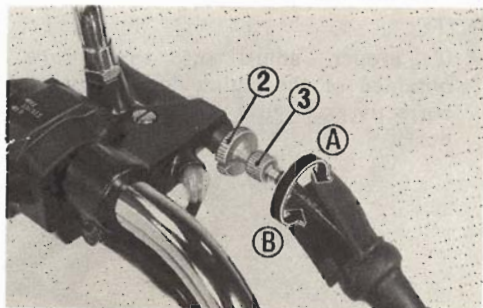
Clutch adjustment may be required if the motorcycle stalls when shifting into gear, or tends to creep; or if the clutch slips, causing acceleration to lag behind engine speed.

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



(1) Clutch lever

1. Pull back the rubber dust cover. Loosen the lock nut (2) and turn the adjuster (3). Tighten the lock nut (2), 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 (2) and turn in the cable adjuster (3) completely. Tighten the lock nut (2) and pull on the dust cover.



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

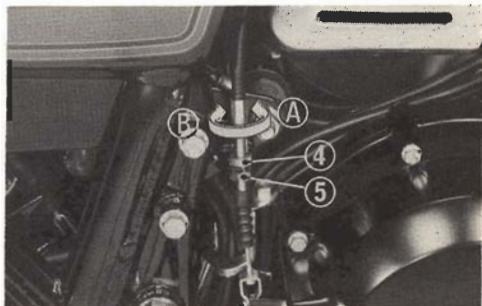
3. At the lower end of the cable, loosen the lock nut(5). Turn the adjusting nut (4) to obtain the specified free play. Tighten the lock nut (5), and check adjustment.
4. Start the engine, pull in the clutch lever and shift into gear. Make sure the engine does not stall, and the motorcycle does not creep.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



(4) Adjusting nut
(5) Lock nut

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

Front Brake

This model has hydraulic disc front brakes. As the brake pads wear, the brake fluid level drops in the reservoir.

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 travel becomes excessive and the friction pads are not worn beyond the recommended limit (page 60), there is probably air in the brake system and it must be bled. See your authorized Honda dealer.

Brake fluid level:

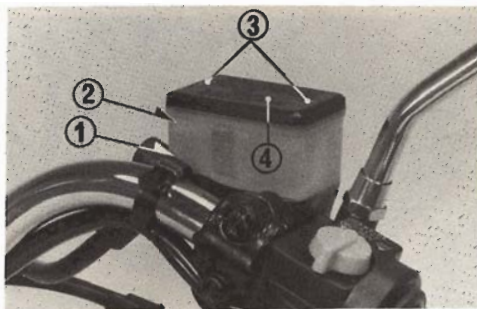
WARNING

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

CAUTION:

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



(1) Lower level mark

(2) Upper level mark

(3) Screws

(4) Reservoir cover

CAUTION:

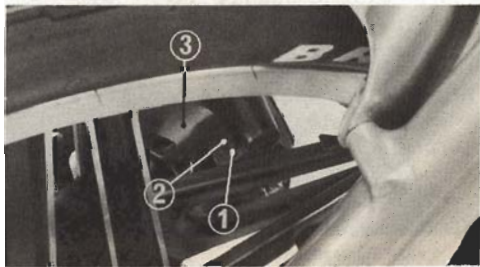
- * Use only DOT 3 brake fluid from a sealed container.
- * Handle brake fluid with care because it can damage paint and instrument lenses.
- * Never allow contaminants (dirt, water, etc.) to enter the brake fluid reservoir.

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 from the direction indicated by the arrow (1) during all regular service intervals to determine the pad wear. If either pad wears to the line (2), both pads must be replaced.

Other Checks:

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



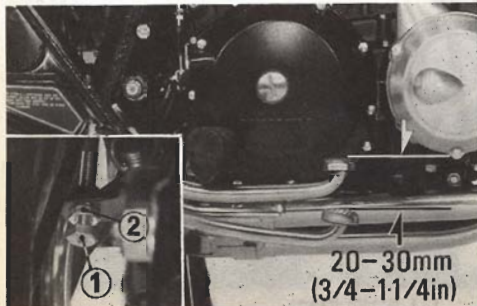
(1) Arrow
(2) Line

(3) Brake disc

Rear Brake

Adjustment:

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



(1) Stopper bolt
(2) Lock nut

(3) Rear brake pedal

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

NOTE:

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



(4) Adjusting nut

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

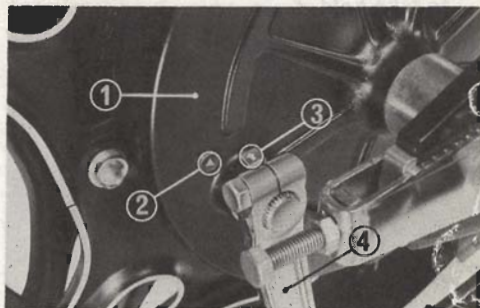
Other Checks:

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

Wear Indicator:

When the brake is applied, an arrow (3), attached to the brake arm (4), moves toward a reference mark (2) on the brake panel (1).

If the arrow aligns with the reference mark on full application of the brake, the brake shoes must be replaced.



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

Drive Chain

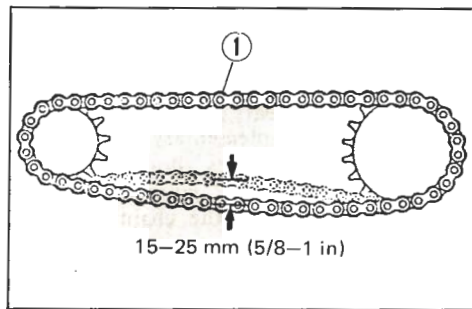
The service life of the drive chain is dependent upon proper lubrication and adjustment. Poor maintenance can cause premature wear or damage to the drive chain and sprockets.

The drive chain should be checked and lubricated as part of the Pre-ride Inspection (page 28). 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 approximately 15–25 mm (5/8–1.0 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:

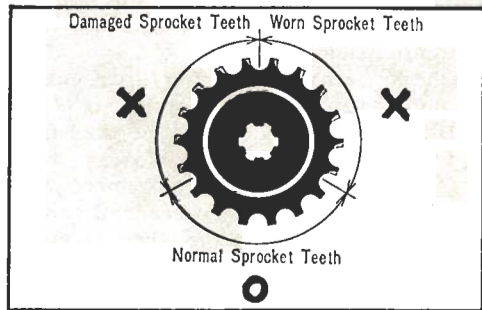
DRIVE CHAIN

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

SPROCKETS

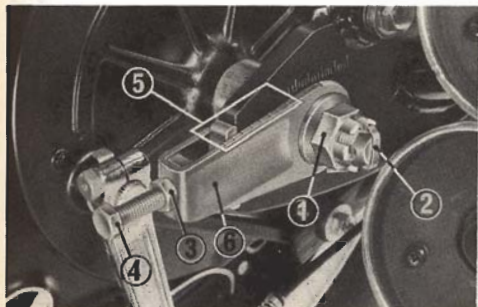
- * Excessively Worn Teeth
- * Broken or Damaged Teeth

A drive chain with damaged rollers, loose pins, or missing O-rings must be replaced. A chain which appears dry, or shows signs of rust, requires supplementary lubrication. Kinked or binding links should be thoroughly lubricated and worked free. If links cannot be freed the chain must be replaced.



Adjustment:

Drive chain slack should be checked and adjusted if necessary, every 300 miles (500 km). When operated at sustained high speeds, or under conditions of frequent rapid acceleration, the chain may require more frequent adjustment.



- | | |
|----------------|--------------------------------|
| (1) Axle nut | (4) Drive chain adjusting bolt |
| (2) Cotter pin | (5) Index marks |
| (3) Lock nut | (6) Chain adjuster plate |

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

1. Place the motorcycle on its center stand, with the transmission in neutral and the ignition switch off.
2. Remove the cotter pin (2) from the rear axle nut (1), and loosen the nut.
3. Loosen the lock nuts (3) on both adjusting bolts (4).
4. Turn both adjusting bolts an equal number of turns until the correct drive chain slack is obtained. Turn adjusting bolts clockwise to tighten the chain, or counterclockwise to provide more slack.

Adjust to provide 15–25 mm (5/8–1.0 in) of chain slack at a point midway between the drive sprocket and the rear wheel sprocket. Rotate the rear wheel and recheck slack at other sections of the chain.

5. Check rear axle alignment with the index marks (5) on the chain adjuster plate (6) and swingarm.

Both left and right marks should correspond. If the axle is misaligned, turn the left or right adjusting bolt until the marks correspond on both sides of the chain adjuster plate, and recheck chain slack.

6. Tighten both adjusting bolt lock nuts.
7. Tighten the axle nut and install a new cotter pin. Torque the axle nut to 80–100 N·m (8.0–10.0 kg·m, 58–73 ft·lb).
8. Rear brake pedal free play is affected when repositioning the rear wheel to adjust drive chain slack. Check rear brake pedal free play and adjust as necessary.

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.*

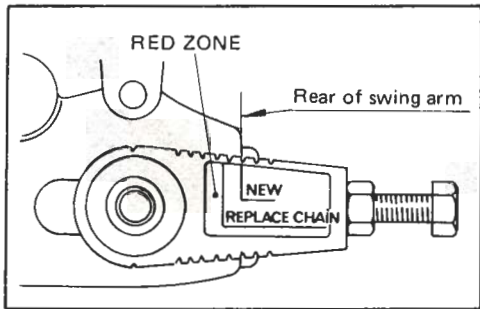
* *Always replace used cotter pins with new ones.*

Wear inspection:

Check the chain wear label when adjusting the chain. If the red zone on the label aligns with the rear of the swing arm 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:

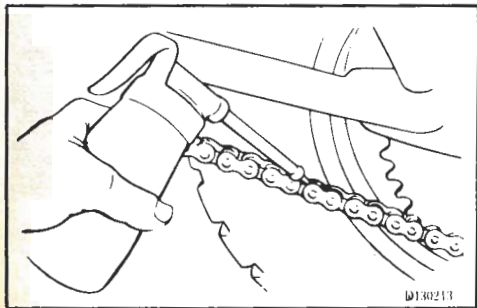
* *Excessive chain slack, 50 mm (2 in) or more, may damage the bottom part of the frame.*



Lubrication and cleaning:

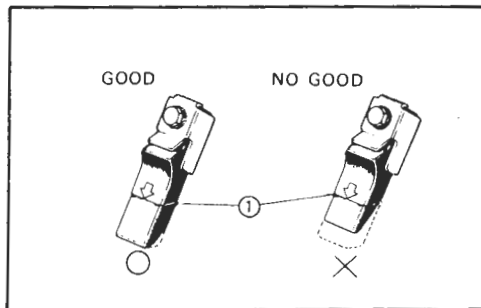
Lubricate every 300 miles (500 km) or sooner if chain appears dry.

The O-rings in this chain can be damaged by steam cleaning, high pressure washers, and certain solvents. Clean the chain with kerosene. Wipe dry and lubricate only with SAE 80 or 90 gear oil. Commercial chain lubricants may contain solvents which could damage the rubber O-rings. Replacement Chain: D.I.D. 50V or RK 50MO



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

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 covers. Disconnect the negative (-) terminal lead (2) from the battery. Disconnect the positive (+) terminal lead from the main fuse box. Disconnect the ACG wire connector (3). Disconnect the battery breather tube (4) from the battery. Remove the bolt (5). Pull out the battery and check the electrolyte. The electrolyte level must be maintained between the upper (7) and lower (8) level marks on the side of the battery. If the electrolyte level is low, remove the battery filler caps (9)

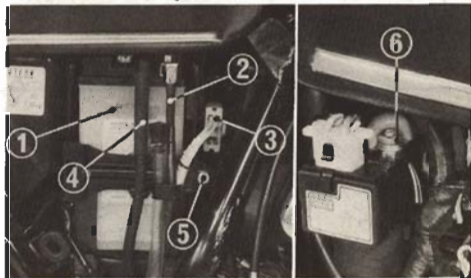
Carefully add distilled water to the upper level mark, using a small syringe or plastic funnel.

CAUTION:

When checking the battery electrolyte level or adding distilled water, make sure the breather tube (4) is connected to the battery breather outlet.

NOTE:

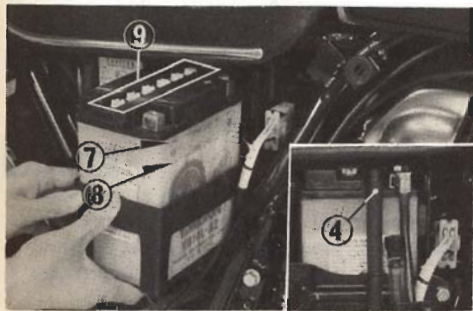
* Use only distilled water in the battery. Tap water will shorten the service life of the battery.



- (1) Battery
- (2) Negative (-) terminal lead
- (3) ACG wire connector
- (4) Battery breather tube
- (5) Bolt
- (6) Positive (+) terminal of the fuse box

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*



(7) Upper level mark
(8) Lower level mark

(9) Filler caps

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.*

