

4. When installing the spark plug, it should be screwed finger tight and then torqued with the wrench a further  $1/2$  to  $3/4$  turn to compress the washer.

**CAUTION:**

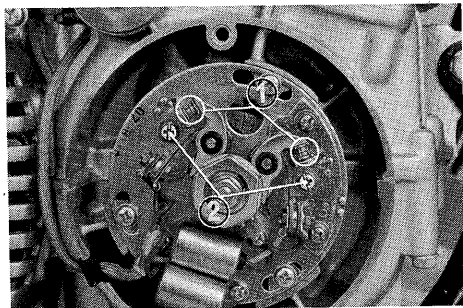
- \* Spark plugs must be securely tightened. An improperly tightened plug can become very hot and possibly cause damage to the engine.
- \* Never use a spark plug with a heat range that is not recommended for this motorcycle.
- \* Do not attempt to dry or remove soot from the spark plug by burning the tip.

## Ignition Timing Adjustment

Contact breaker point gap must be adjusted before the ignition timing adjustment is performed. Any change in gap will affect ignition timing.

### Contact Breaker Point Gap Adjustment:

1. Remove the point cover.
2. Open contact points (1) with finger or small screw driver blade and examine for pitting. If pitted or burned, the points should be replaced and the condensers checked. A gray discoloration is normal and can be removed with a point file. Filing should be done carefully. Clean the point contacts after filing with a clean piece of unwaxed paper, such as a business card, or with chemical point cleaner.
3. Rotate the crankshaft in the clockwise direction to find the position where each breaker point gap is at maximum and check using a feeler gauge.
4. The standard gap is 0.3–0.4 mm (0.012–0.016in.).
5. When adjustment is necessary, loosen the contact breaker plate locking screws (2) and move the contact breaker plate to achieve correct gap. When properly adjusted, retighten locking screws (2).

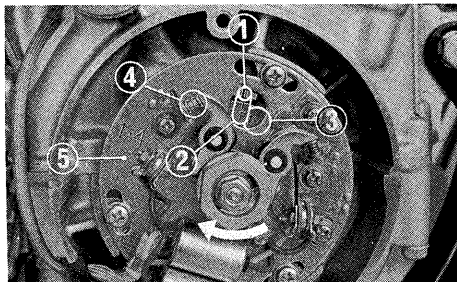


(1) Contact breaker points  
(2) Contact breaker plate locking screws

## Ignition Timing Adjustment:

Do not perform this operation until point gaps have been adjusted.

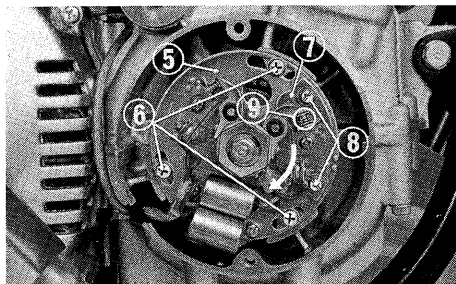
1. Rotate the crankshaft in the clockwise direction and align the "F" timing mark (2) [1-4 cylinder (3)] to the timing index mark (1). At this time the contact breaker points (4) should just start to open. To determine accurately the exact moment of point



- (1) Index mark      (2) "F" mark  
(3) Cylinder number  
(4) 1-4 cylinder breaker points  
(5) Contact breaker base plate

opening, a timing light should be connected across the 1-4 cylinder breaker points (4).

2. If the timing of the breaker point opening is incorrect (too early or too late), adjustment is made by loosening the three base plate locking screws (6) and carefully rotating the base plate (5) until the timing light flickers. Tighten base plate locking screws.



- (6) Base plate locking screws  
(7) Contact breaker right base plate  
(8) Right base plate locking screws  
(9) 2-3 cylinder breaker points

**NOTE:**

Rotating the base plate clockwise will retard ignition timing. Counterclockwise rotation will advance ignition timing. Time the ignition to the "F" mark as advanced or retarded timing may cause engine damage.

3. Next, connect the timing light to 2-3 cylinder breaker points (9). Rotate the crankshaft  $180^{\circ}$  ( $1/2$  turn) in the clockwise direction and align the "F" (2-3 cylinder) timing mark to the index mark (1). If the timing light flickers or goes off when these marks come into perfect alignment, no adjustment is necessary. If the moment of point opening is incorrect, loosen the two (2-3 cylinder) right base plate locking screws (8) and adjust in the same manner as described in section "2".

4. Recheck the contact breaker point gaps and the ignition timing. This static timing procedure is relatively accurate if done with care, however, for best results a stroboscopic timing light should be used to check both retarded and advanced engine ignition timing. Your Honda dealer has this equipment and can perform this operation for you.

**CAUTION:**

This ignition timing adjustment procedure must be made with care as advanced or retarded timing may cause engine damage. For best results, consult your Honda Dealer.

## Valve Tappet Clearance Adjustment

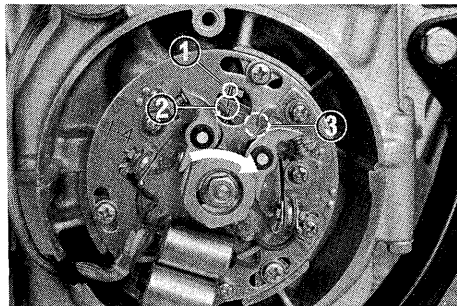
Excessive valve clearance will cause tappet noise, and negative clearance will prevent valve from closing and cause valve damage and power loss. Therefore, valve tappet clearance should be maintained properly. Perform the valve tappet clearance check at the specified intervals.

### NOTE:

- \* The check or adjustment of the tappet clearance should be performed while the engine is cold. The clearance may tend to increase as the temperature rises.
  - \* The cylinders are numbered 1 to 4 from the left side of the rider's position.
1. Turn fuel valve to the "OFF" position, remove both fuel lines from the fuel valve body. Carefully disconnect the fuel gauge leads. Raise the seat and pull the rear fuel tank rubber mounting away from the rear tank mount. Raise the back of the fuel tank

slightly and pull the tank back until it clears the forward tank mounts. Remove and set tank aside.

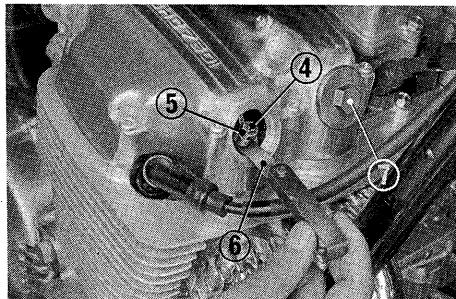
2. Remove the contact breaker point cover and the eight tappet adjusting hole caps (7).
3. While slowly rotating the crankshaft clockwise with the kick pedal, watch the No. 1 cylinder intake valve tappet.



(1) Index mark  
(2) "T" mark

(3) 1-4 cylinder mark

When the tappet goes down all the way and starts to lift, you must then watch for alignment of the index mark (1) and the "T" mark (2). Check the 1-4 cylinder mark (3). In this position, the piston in No. 1 cylinder will be at T.D.C. (top-dead-center) of the compression stroke. The intake and exhaust valves in the cylinder should be fully closed.



(4) Tappet adjusting screw  
(5) Lock nut            (7) Hole cap  
(6) Feeler gauge

4. Check the clearance of both valves by inserting the feeler gauge (6) between the tappet adjusting screw (4) and the valve stem. If clearance is correct there will be slight drag or resistance as the gauge is inserted. Adjustment is necessary if the clearance is too small or excessive.

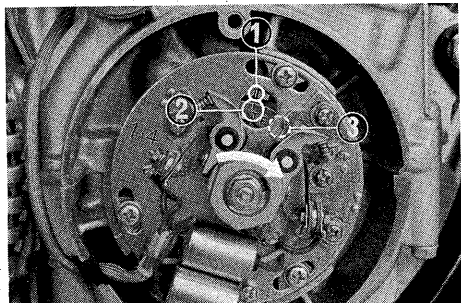
The standard tappet clearance is:

In : 0.05 mm (0.0019 in.)

Ex : 0.08 mm (0.0031 in.)

5. Adjustment is made by loosening the tappet screw lock nut (5) and turning screw (4) until there is slight drag on the feeler gauge (6). Hold the tappet adjusting screw in this position and tighten the lock nut (5). Recheck the clearance with the gauge.
6. To check or adjust clearance of No. 4 cylinder valves, rotate the crankshaft clockwise one full turn ( $360^{\circ}$ ) and align the marks as in step "3" above, then follow steps "4" and "5".

7. Valve tappet adjustment for 2-3 cylinder can be performed as in steps "3" through "5". However, the 2-3 cylinder mark (3) must show (not 1-4 mark) when the index mark (1) and "T" mark (2) are aligned. The No. 2 cylinder intake tappet should be watched (not No. 1).



(1) Index mark  
(2) "T" mark

(3) 2-3 cylinder mark

8. To check or adjust No. 3 cylinder tappets, rotate the crankshaft one full turn ( $360^{\circ}$ ) and align the marks (2) as in step "7" above then follow steps "4" and "5".
9. Install all tappet adjusting hole caps. Do not overtighten.

**WARNING:**

Check the fuel tank over flow tube for clogging, bending and cracking.

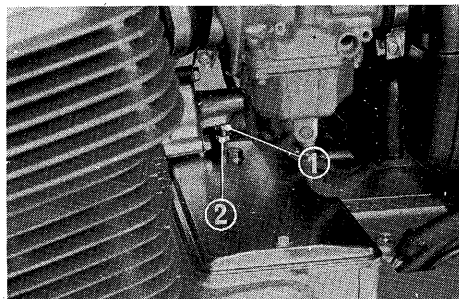
## Cam Chain Adjustment

A loose cam chain will cause the valve timing to change, resulting in poor engine performance. It will cause a drop in power output and also produce excessive noise.

1. Start the engine and set the idle speed.
2. Loosen the tensioner lock nut (1) and the tensioner bolt (2).

When these are loosened, the cam chain tensioner will automatically position itself to provide the correct cam chain tension.

3. Retighten the tensioner bolt and lock nut.



(1) Tensioner lock nut

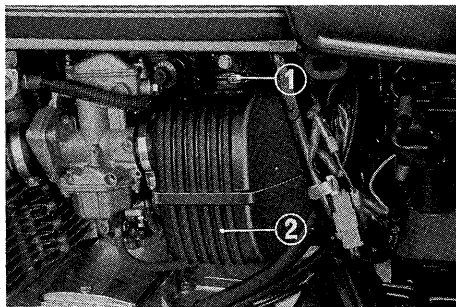
(2) Tensioner bolt



## Air Cleaner Maintenance

Air cleaner element cleaning and/or replacement intervals depend on motorcycle operating conditions. Your Honda dealer can help you to determine the frequency of cleaning or replacing the element.

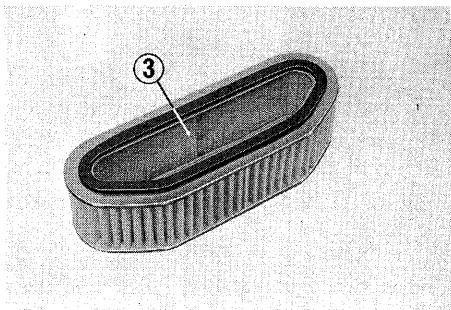
A device is built behind the air cleaner case to separate oil or water from the crankcase breather tube vapor. Clean the



(1) Air cleaner mounting bolt  
(2) Air cleaner lower case

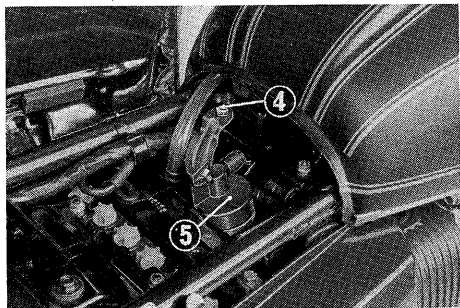
breather element when cleaning the air cleaner element.

1. Remove the two air cleaner mounting bolts (1) and remove the air cleaner lower case (2).
2. Clean the air cleaner element by tapping it lightly to loosen dust. The remaining dust can be brushed from the outer element surface or blown away by applying compressed air from the inside of the element.



(3) Air cleaner element

3. Open the seat. Remove the 6 mm breather element case mounting bolt (4), disconnect the tubes and remove the breather element case (5).
4. Remove the breather element (7) from the breather element case.
5. Wash the breather element (7) in clean



(4) Breather element case mounting bolt  
(5) Breather element case

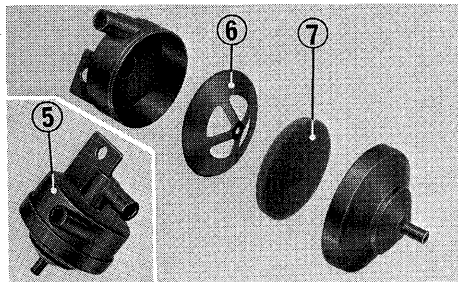
solvent. Squeeze out excess solvent and then dry the element thoroughly.

**WARNING:**

Gasoline or low flash point solvents are explosive and highly flammable and must not be used to clean the breather element. Fire or explosion could result.

**CAUTION:**

\* Do not use acid, alkali or organic solvent for washing the breather element (7).

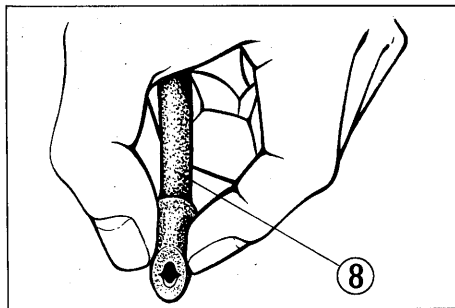


(6) Element retaining plate  
(7) Breather element

6. Squeeze to open lower end of the drain tubes (8), and remove any oil or water which may have accumulated.
7. To reinstall the air cleaner, reverse the removal procedure.

**CAUTION:**

Check the drain tube for clogging and routing.



(8) Drain tube

**Side Stand Check**

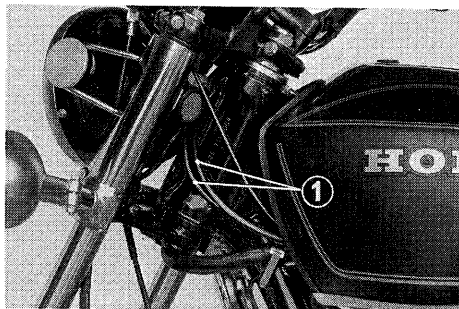
Be sure that the neutral indicator light comes on when the side stand is set. If not, contact the authorized Honda dealer.

## Throttle Cable Inspection

### WARNING:

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

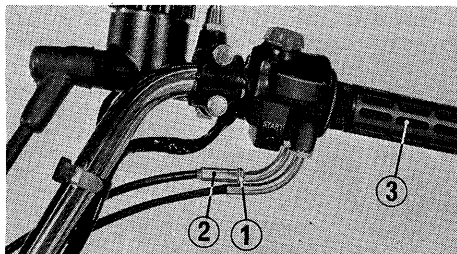
1. Check for smooth rotation of the throttle grip from the fully open to the fully closed positions. Check at full left and full right steering positions.
2. Inspect the condition of the throttle cables from the throttle grip down to each of the carburetors. If the cables are kinked, chafed or improperly routed, they should be replaced and/or rerouted. Recheck cables for tension or stress at both full left and full right steering positions.



(1) Throttle cable

## Throttle Grip Play Adjustment

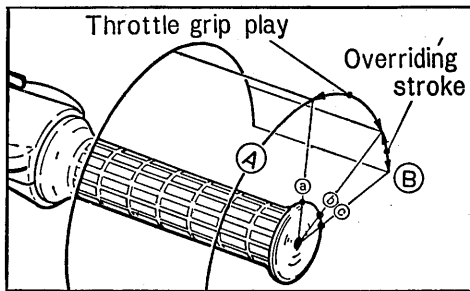
1. The standard throttle grip play is 2–4 mm (0.08–0.16 in.) measured at the throttle grip flange. This measurement is made from the throttle grip in the closed position to the point the engine rpm starts to increase as the throttle grip is twisted (A). If adjustment is necessary, loosen the throttle grip adjuster lock nut (1) and turn the throttle grip adjuster (2). Tighten the lock nut after adjustment.



- (1) Throttle grip adjuster lock nut  
(2) Throttle grip adjuster  
(3) Throttle grip

2. Next, twist the throttle grip outward (B) until a resistance is felt and then measure the travel of the grip from the point of resistance to the full stop position. This travel is called the "overriding stroke" and should be 3.2–6.4 mm (1/8–1/4 in.).

If the overriding stroke is less than the standard specified, have the adjustment performed by an authorized Honda dealer.



- (a) Engine rpm starts to increase from idling rpm  
(b) Point resistance is felt  
(c) Throttle full closed position

## Carburetor Adjustment

### NOTE:

- \* Carburetor adjustment requires the use of special instruments and should be performed by an authorized Honda dealer.
- \* Before making adjustments to the carburetor, be sure the ignition system is functioning properly and the engine has good compression. Do not attempt to compensate for other faults by carburetor adjustment.

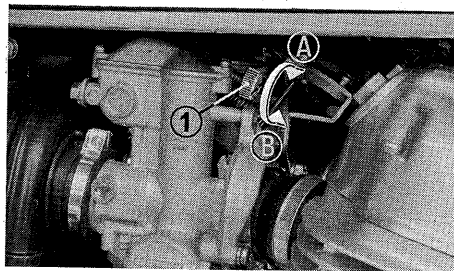
A carburetor which is out of adjustment will adversely affect the performance of the engine; therefore, it is important that the carburetors always be maintained in perfect adjustment.

1. Place the motorcycle on the center stand.
2. Apply the parking brake.
3. Shift the pedal into "N" (Neutral) position.

### CAUTION:

Do not adjust in other than "N" position.

4. Attach a suitable tachometer.
5. Start and warm up the engine to normal operating temperature (oil temperature is about 60°C/140°F).
6. Set the idling speed to 950–1,000 rpm by turning the throttle stop screw (1). Turning the stop screw in the (A) direction will increase the rpm, and turning in the (B) direction will result in a decrease.



(1) Stop screw

## **Fuel Filter Maintenance**

The fuel filter is incorporated in the fuel valve which is mounted on the bottom of the fuel tank at the left side. Accumulation of dirt in the filter will restrict the flow of fuel; therefore, the fuel filter should be serviced periodically by your authorized Honda dealer.

## Drive Chain Maintenance

The service life of the drive chain is dependent upon proper lubrication and adjustment. Proper maintenance will help to extend service life and ensure smooth power transmission to the rear wheel. Poor maintenance can cause premature wear or damage to the drive chain and sprockets.

The drive chain must be checked and serviced as necessary, every 1,000 km (500 miles). If your CB750A is operated at sustained high speeds, or under conditions of frequent rapid acceleration, the drive chain must be serviced more often.

### Inspection:

Place the motorcycle on its center stand, with transmission in neutral and the engine off.

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

Drive chain with damaged rollers or loose pins, or missing O-rings must be replaced. 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.

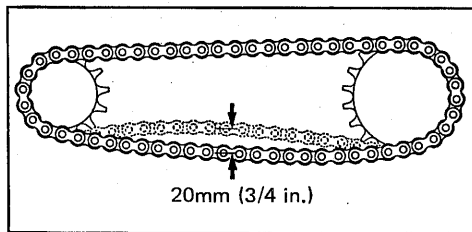


### Measuring drive chain tension:

Check drive chain tension at a point midway between the drive sprocket and the rear wheel sprocket. Move the chain up and down with your fingers, and measure the amount of slack. Drive chain tension should be adjusted to 20 mm (3/4 in.) and never be allowed to exceed 50 mm (2 in.). Slack becomes greater as the chain wears. If chain slack is found to exceed the above limit, the drive chain must be readjusted.

### **CAUTION:**

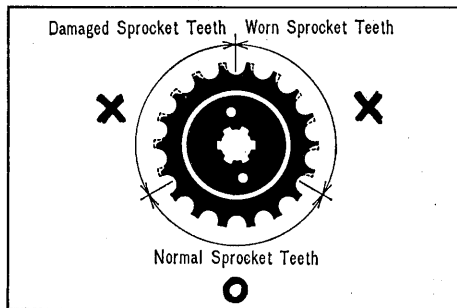
Excessive chain slack may cause crankcase damage.



Drive chain tension should remain fairly constant as the wheel is turned. If slack increases or decreases markedly in certain sections of the chain, this indicates that some of the links are either kinked or have worn pins.

### Inspecting the sprocket:

Inspect the drive sprocket and rear wheel sprocket for damage or wear. The left rear crankcase cover must be removed for access to the drive sprocket. Excessively worn sprocket teeth have a hooked and



asymmetric appearance. Replace any sprocket which is damaged or excessively worn.

### Recommended Sprocket Sizes

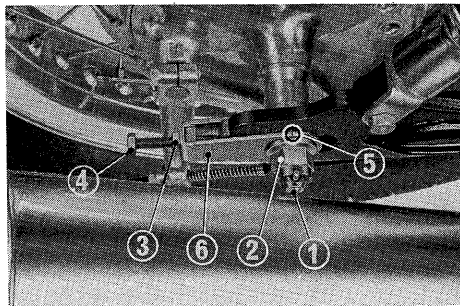
Drive sprocket (engine)	Driven Sprocket (rear wheel)
15 Tooth	42 Tooth

### CAUTION:

Never install a new drive chain on badly worn sprockets, or use new sprockets with a badly worn drive chain. Both chain and sprockets must be in good condition, or the new replacement chain or sprocket will wear rapidly.

### Adjustment:

Drive chain slack should be checked and adjusted as necessary, every 1,000 km (500 miles). CB750A motorcycle operated at sustained high speeds, or under conditions of frequent rapid acceleration, may require more frequent adjustment. The procedure for drive chain adjustment is as follows.



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

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

Adjust to provide 20 mm (3/4 in.) of chain slack at a point midway between the drive sprocket and the rear wheel sprocket. Rotate the rear wheel and recheck tension at other sections of the chain.

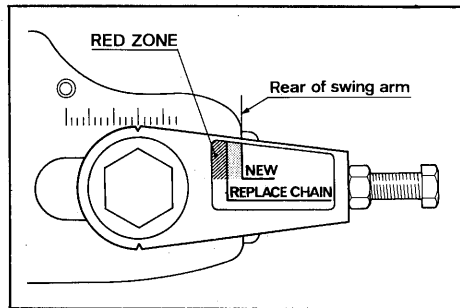
5. Check rear axle alignment with the index marks (5) on the rear swinging arm. Both left and right marks should correspond. If the axle is misaligned, turn the left or right adjusting bolt

until marks correspond on both sides of the rear swinging arm, and recheck chain tension.

6. Tighten both adjusting bolt lock nuts.
7. Tighten the axle nut and install a new cotter pin.

## 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.
- \* **WEAR INSPECTION**  
Check the chain wear label when adjusting the chain. If the red zone on



the label aligns with the rear of swing arm after the chain has been adjusted to 20 mm (3/4 in.) slack, the chain is excessively worn and must be replaced.

## \* CHAIN REPLACEMENT

When a new drive chain is installed, a new wear label must be attached according to the directions provided with the replacement chain. Since new chain lengths vary slightly, proper label placement is necessary to provide an accurate wear and replacement indication.

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

Lubrication and cleaning:

Lubricate every 1,000 km (500 miles) 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: DID630DL or RK630SO chain.

## Front Brake

The CB750A front brake is a hydraulic disc type.

When pressure is applied to the brake lever, brake fluid transmits the pressure to the brake piston in the caliper, pressing the friction pads against the disc.

Brake fluid is a medium for transmitting pressure and plays a vital role in the brake system. Therefore, when scheduled brake maintenance is performed, it is imperative that the front brake system is inspected to ensure that there is no fluid leakage. As the friction pads wear, additional fluid is taken into the system from the fluid reservoir to compensate for the friction pad wear. Because of this feature, the disc brake is self-adjusting and the brake control lever free travel will remain constant once it has been established, providing the hydraulic system is free of air.

If the control lever free travel becomes excessive and the friction pads are not worn beyond the recommended limit

(page 74), there is probably air in the brake system and it must be bled.

### Brake Fluid:

#### **WARNING:**

Brake fluid may be harmful if swallowed. It may cause irritation. Avoid contact with skin or eyes. If swallowed induce vomiting by giving an emetic such as two tablespoonfuls of table salt in a glass of warm water and call a physician. In case of contact with skin or eyes, flush with plenty of water. Get medical attention for eyes. **KEEP OUT OF REACH OF CHILDREN.**

#### **CAUTION:**

- \* Before removing the reservoir cap always clean around it.
- \* When replenishing the brake fluid, keep the reservoir horizontally against the ground by turning the handlebar to the left. Do not remove the reservoir cap with the handlebar turned to the right as the brake fluid may spill out.

The brake fluid level in the reservoir should be checked at regular intervals. Clean around the reservoir cap. Remove the cap, washer and diaphragm. Whenever the level is lower than the level mark (1) engraved inside the reservoir, fill the reservoir with **DOT 3 BRAKE FLUID** from a sealed container, up to the level mark. Reinstall the diaphragm and washer, and tighten the reservoir cap securely.

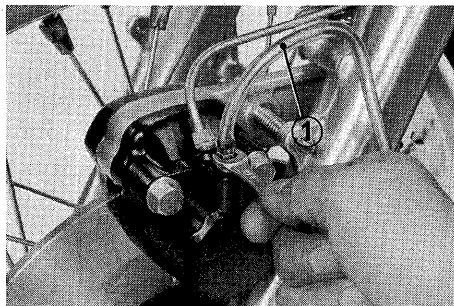


(1) Level mark

### Bleeding the brake system:

The brakes must be bled with great care subsequent to work performed on the brake system, when the lever becomes soft or spongy, or when lever travel is excessive. The procedure is best performed by two mechanics.

- Remove the dust cap from the bleeder valve and attach bleeder hose (1).



(1) Bleeder hose

- b. Place the free end of the bleeder hose into a glass container which has some hydraulic brake fluid in it so that the end of the hose can be submerged.
- c. Fill the reservoir using only the recommended brake fluid. Screw the cap partially on the reservoir to prevent entry of dust.
- d. Pump the brake lever several times until pressure can be felt. Hold the lever tight, open the bleeder valve about one-half turn and squeeze the lever all the way down.  
Do not release the lever until the bleeder valve has been closed again. Repeat this procedure until bubbles cease to appear in the fluid at the end of the hose.
- e. Remove the bleeder hose, tighten the bleeder valve and install the bleeder valve dust cap.
- f. Do not allow the fluid reservoir to become empty during the bleeding operation as this will allow air to enter

the system again. Fill the reservoir as often as necessary while bleeding.

- g. Check for absence of leaks in the front brake lines while holding pressure against the brake lever. Fill the reservoir when bleeding is completed. Reinstall the diaphragm, washer and reservoir cap and tighten.

When the hydraulic brake system has been drained, fill as outlined below:

- a. Fill the fluid reservoir.
- b. Open the bleeder valve one-half turn, squeeze the brake lever, close the valve and release the brake lever. This procedure must be repeated in this sequence until hydraulic fluid begins to flow through the bleeder hose. After filling the hydraulic system with fluid, proceed with the actual bleeding operation.



### CAUTION:

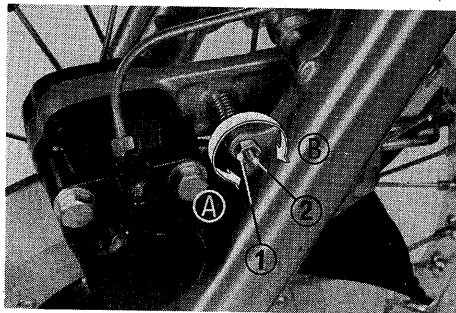
- \* Use only DOT 3 brake fluid from a sealed container.
- \* Do not mix brake fluid brands and never re-use the contaminated fluid which has been pumped out during brake bleeding, because this will impair the efficiency of the brake system.
- \* Brake fluid must be handled with care because it will damage paint and instrument lenses.

### Brake caliper adjustment:

Whenever the brake pads are replaced, the brake caliper must be adjusted. This adjustment is made in the following manner:

- a. Raise the front wheel off the ground by placing a support block under the engine.
- b. Loosen the caliper stopper bolt lock nut (1).

- c. Using a suitable screw driver, turn the stopper bolt (2) in direction (A) until the friction pad contacts the brake disc. When the wheel is rotated, slight drag should be noticed.
- d. While rotating the front wheel, turn the stopper bolt in direction (B) until the front wheel rotates freely.
- e. Turn the stopper bolt in direction (B) 1/2 turn further and tighten the lock nut.



(1) Stopper bolt lock nut

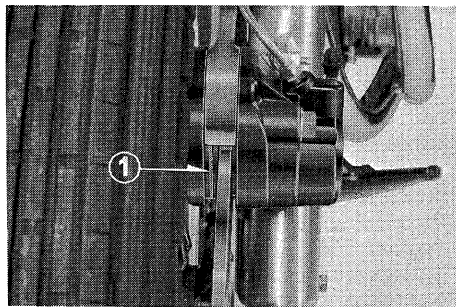
(2) Stopper bolt

### Brake pads:

Brake pad wear will depend upon the severity of usage, type of driving, and condition of the roads. It may be expected that the pads will wear faster on dirty and wet roads. Inspect the pads visually during all regular service intervals to determine the pad wear. If the pad wears to the red line (1), replace both pads with a new set.

#### **NOTES:**

- \* Use only genuine Honda replacement friction pads or their equivalent offered by authorized Honda dealers. When service is necessary on the brakes, consult your Honda dealer.
- \* When brake service is necessary, see your authorized Honda dealer, who has been properly trained to perform such service. Use only high quality genuine Honda parts or their equivalent.

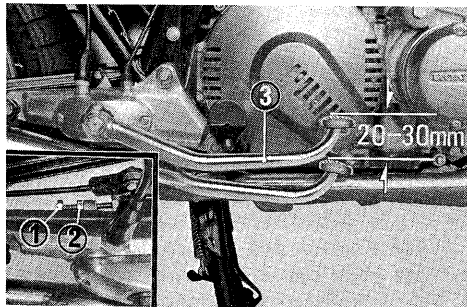


(1) Red line

## Rear Brake

### Rear brake adjustment (Engine off):

1. Raise the rear wheel off the ground by placing the motorcycle on its center stand.
2. The stopper bolt (1) is provided to allow adjustment of the pedal height. To adjust the rear brake, loosen the lock nut (2), and turn the stopper bolt.



(1) Pedal stopper bolt

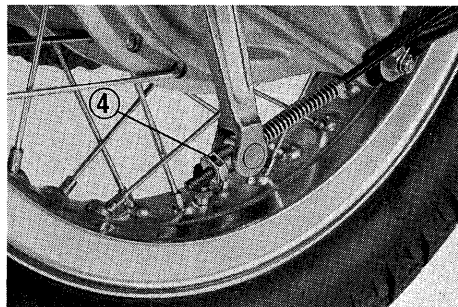
(3) Rear brake pedal

(2) Lock nut

3. Free play is 20–30 mm (0.8–1.2 in.). If adjustment is necessary, make the adjustment by turning the rear brake adjusting nut (4). Turn clockwise for less free play, counterclockwise for more free play.

### NOTES:

- \* Make sure that the cutout on the adjusting nut is seated on the brake arm pin after the final adjustment has been made. If the rear wheel assembly



(4) Rear brake adjusting nut