

COMPARISON OF CB750K1 to CB750

ENGINE MECHANICAL

LUBRICATION SYSTEM

DRIVE CHAIN OILER

The oil which lubricates the chain is fed from the center of the shaft, through the porous sintered oil reserve element ⑦, along the outer surface of the rubber orifice ⑤, out the oil passage ④ and along the surface of the drive sprocket.

To simplify the procedure for regulating the feed of the lubricant, it is performed by the adjusting screw ① in the chain oiler. Turning the screw clockwise (A direction) will force the rubber orifice against the oil reserve element, causing it to expand and restricting the flow of oil around the rubber orifice. Turning the adjusting screw counter clockwise (B direction) will permit the rubber orifice to shrink toward its normal size and allow greater oil flow. In other words, the change in the diameter of the rubber orifice regulates the amount of oil to lubricate the drive chain.

ADJUSTMENT PROCEDURE

1. Remove the rear crankcase.
2. Wipe the oil on the drive chain thoroughly with a rag.
3. The adjusting screw is adjusted to maximum oil flow on all motorcycles leaving the factory. After riding for a short period, if excessive oil is noticed by indication of chain oil on the rim, fender, spokes etc., turn the adjusting screw about 1/4 turn in the clockwise direction and recheck the oil flow condition after riding for one minute at 50~70 mph (80~110 kph). The adjustment is proper if the chain link plates and rollers are

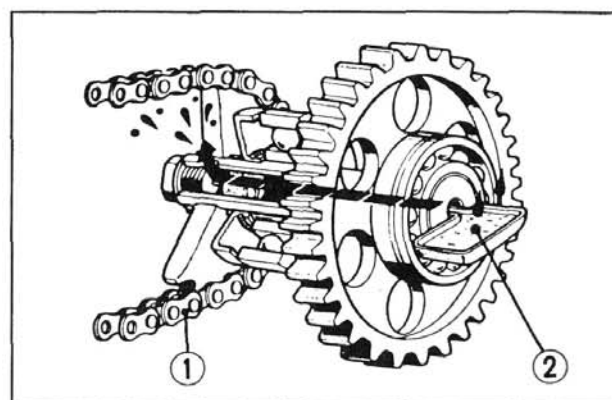


Fig. 20-1 ① Drive chain
② Oil guide

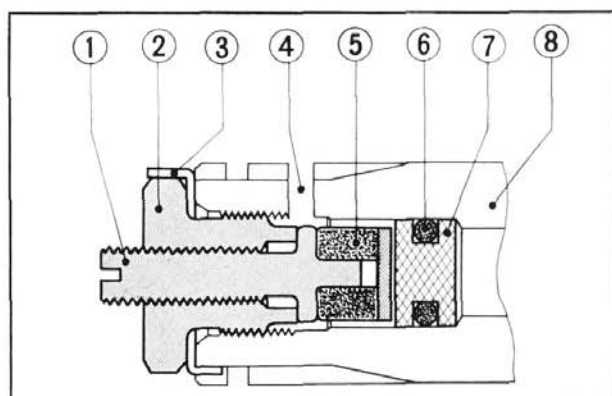


Fig. 20-2 ① Adjusting screw
② Final shaft plug
③ 14 mm lock washer
④ Oil passage
⑤ Rubber orifice
⑥ 6.5x3 O-Ring
⑦ Oil reserve element
⑧ Final driven shaft

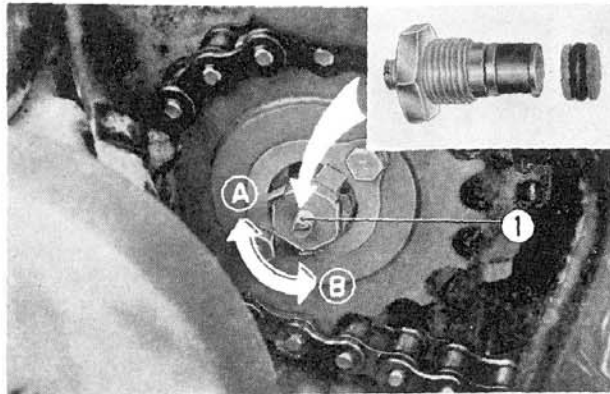


Fig. 20-3 ① Adjusting screw

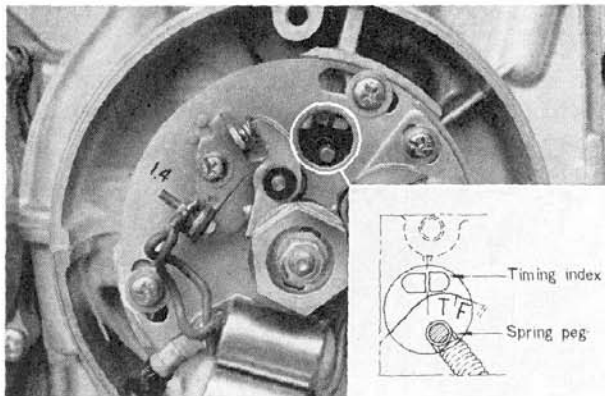
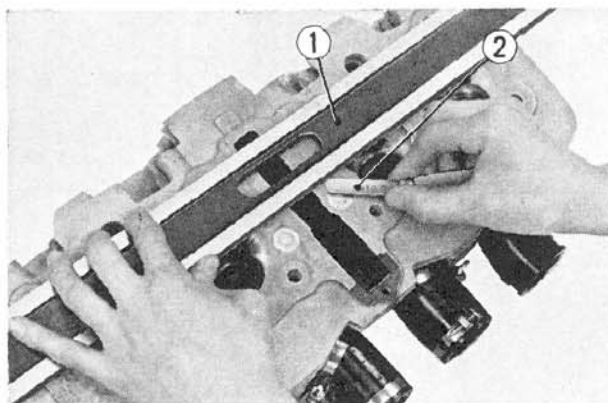


Fig. 20-4 Point cam position at 15° ATDC

2. Remove the point cover, and use a 23 mm box wrench to rotate the crankshaft to the "T" position for cylinders #1 and #4 (1.4).
3. Check the both valves of #1 cylinder. If both valves are free, proceed to next step: if either or both of the valves are tight, rotate the crankshaft 360°, and then proceed with the next step.
4. Rotate the crankshaft clockwise until the spring peg on the advancer assembly at the 1.4 position is just to the right of a line from the timing index. (Fig. 9) This position is 15° ATDC 1.4.
At this point, the slack in the cam chain will be on the tensioner side, thus assuring effective tensioner operation.
5. Loosen the cam chain tensioner lock nut, and back out the setting screw until the tensioner arm is released and moves in to take up the slack.

Note: The tensioner is automatic. Do not use additional pressure to remove the tensioner arm.

6. Retighten the setting screw and lock nut, re-install point cover and tappet covers.

Fig. 20-5 ① Stretch
② Thickness gauge

wet with oil and the other areas are free from excessive oil.

4. Readjust the screw if necessary until the proper oiling condition is obtained.

SUPPLEMENT LUBRICATION

Drive chain rollers and side plates must be properly lubricated at all times. Sustained high-speed driving or improper adjustment of the chain oiler may cause inadequate lubrication. If the rollers or side plates are dry or show evidence of rust, apply a high-quality chain lubricant according to the manufacturer's instructions.

CAM CHAIN TENSIONER

A loose cam chain causes a loud clattering noise. It may also affect valve timing, resulting in performance loss.

A recommended crankshaft position for adjusting the cam chain tensioner is that when the crankshaft is rotated to 15° ATDC of cylinders #1 and #4, immediately after cylinder #1 has fired.

Adjustment

1. Remove the tappet covers from the #1 cylinder.

CYLINDER HEAD

When measuring the flatness of the cylinder head, place a straight across the measuring surface of the cylinder head.

Check the clearance with a thickness gauge at several points and make sure the head not to be warped.

Item	Standard value	Serviceable limit
Clearance	0.002 in. (0.05 mm max.)	0.009 in. (0.25 mm max.)

Rework the cylinder head or replace with new one if beyond the serviceable limit.

FUEL SYSTEM

CARBURETOR (link type)

The quadruple piston type carburetors are mounted on the cylinder head with a stay plate. Choke lever is a link type which operates all four choke valves simultaneously.

To simplify the idle adjustment and synchro-

nization of the carburetors, the throttle cables from the four carburetors are joined to operate from a single linkage.

Fig. 11 shows the construction details of the carburetor.

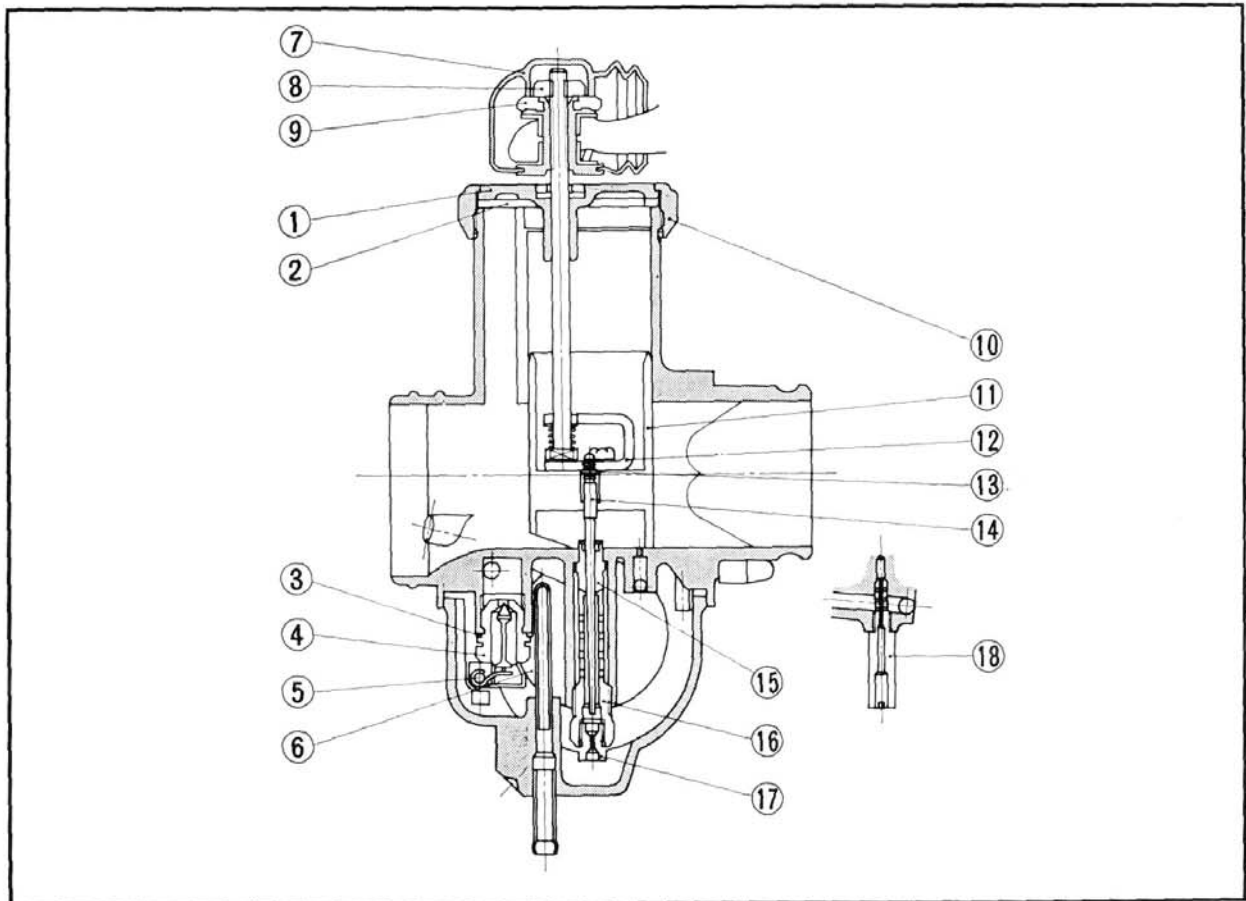


Fig. 20-6

- | | |
|------------------|---------------------|
| ① Carburetor top | ⑩ Cap |
| ② Top washer | ⑪ Throttle valve |
| ③ Flat washer | ⑫ Needle set plate |
| ④ Valve seat | ⑬ Clip |
| ⑤ Float arm pin | ⑭ Jet needle |
| ⑥ Float | ⑮ Needle jet |
| ⑦ Rubber cap | ⑯ Needle jet holder |
| ⑧ Lock nut | ⑰ Main jet |
| ⑨ Adjuster screw | ⑱ Slow jet |

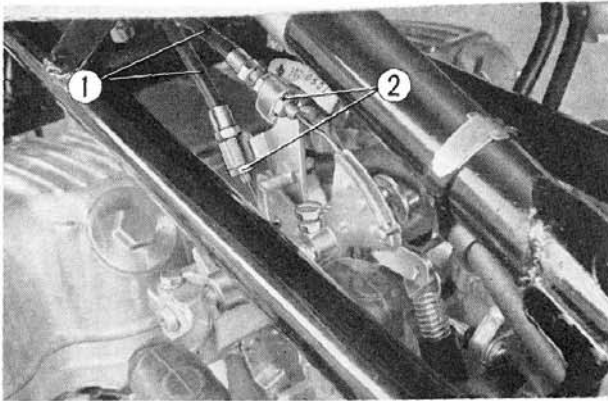


Fig. 20-7 ① Throttle cable
② Lock nuts

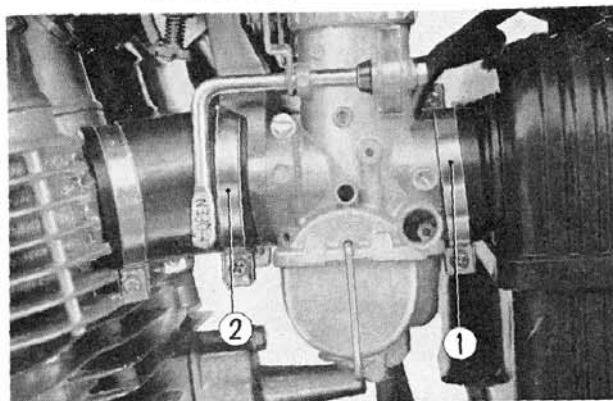


Fig. 20-8 ① Air cleaner connecting band
② Carburetor insulator band

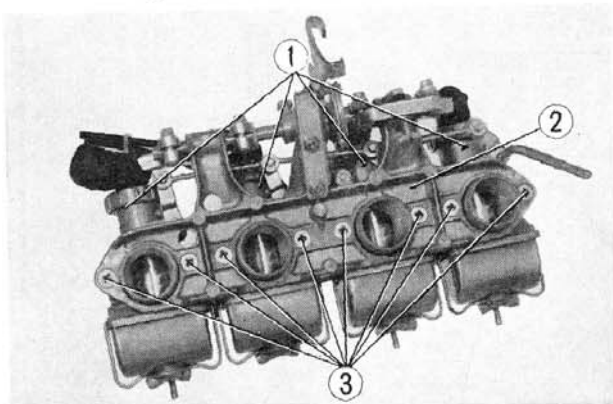


Fig. 20-9 ① Carburetor ③ Setting screws
② Carburetor stay plate

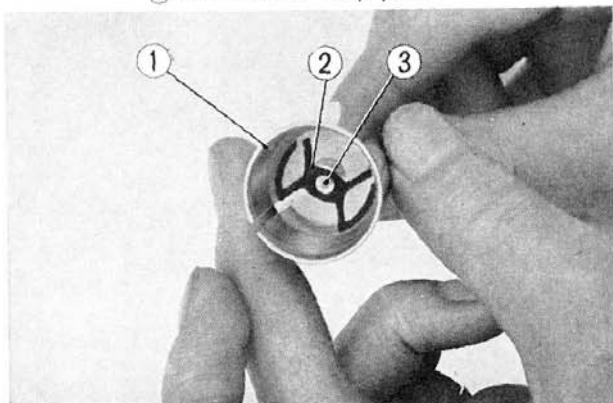


Fig. 20-10 ① Throttle valve ③ Jet needle
② Needle set plate

DISASSEMBLY

1. Turn the fuel tank valve to the "STOP" position, remove the fuel lines from the fuel valve body, raise the seat and pull the rear tank rubber mounting away from the rear tank mount. Remove the fuel tank.
2. Disconnect the throttle cables from the link lever, loosen the air cleaner connecting tube and insulator bands and then remove the carburetors as an assembly.
3. Unscrew two 6 mm screws and dismount the respective carburetor from the stay plate. Disconnect the individual choke rod and separate the carburetors.
4. In order to remove the needle jet from the throttle valve, remove the needle set plate.

5. Remove the float chamber retightening clip and remove the following carburetor components with a small screwdriver.

* Slow jet	* Float
* Main jet	* Float valve set
* Needle jet holder	

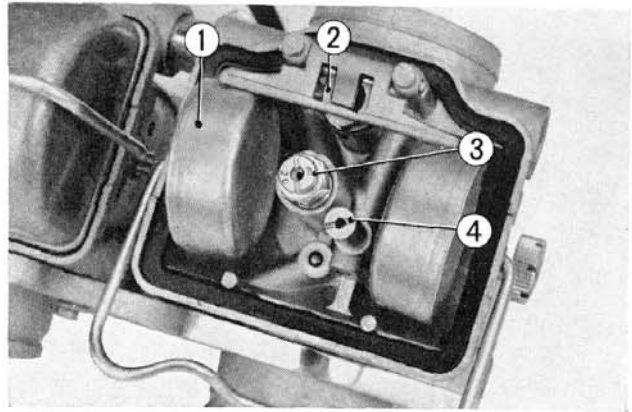


Fig. 20-11 ① Float
② Float valve set
③ Main jet
④ Slow jet

INSPECTION

1. Carburetor adjustment should be made in accordance with the description on page 186.

2. Fuel level check

Remove the float chamber and set the float arm as shown in the Fig. 20-12 so that it just barely touches the valve and in this position, check the position of the float with the gauge set vertically. At a standard setting, the float should just barely come in contact with the gauge. If there is clearance between the gauge and float or if the float is interfering with the gauge, adjustment should be made. The height of float above the carburetor body, which should be **1.023 in. (26 mm)** can be adjusted by bending the float arm using a narrow screwdriver.

3. Jet needle, float valve

The jet needle is constantly moving and if it is found to be excessively worn, it should be replaced. Further, check the wear of the valve and the valve seat and if it is defective, part should be replaced. (Fig. 20-13)

4. The clogging of the respective jet should be cleaned by blowing out the jets with compressed air followed by properly torquing the jets.

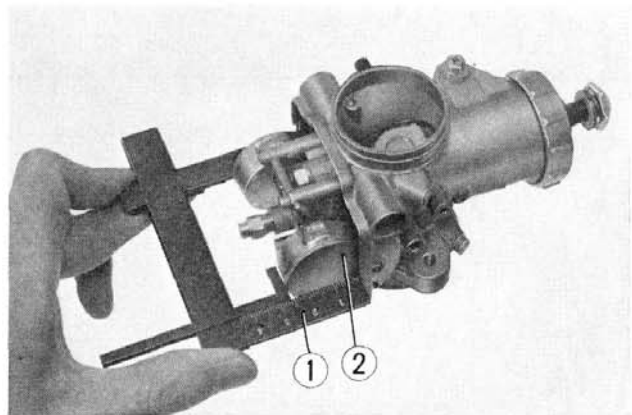


Fig. 20-12 ① Float
② Float level gauge

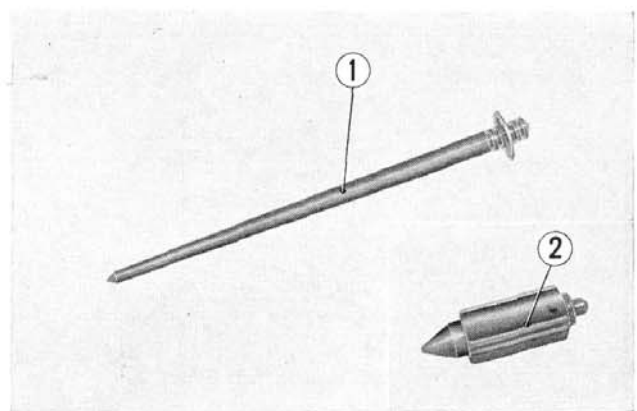


Fig. 20-13 ① Jet needle
② Float valve

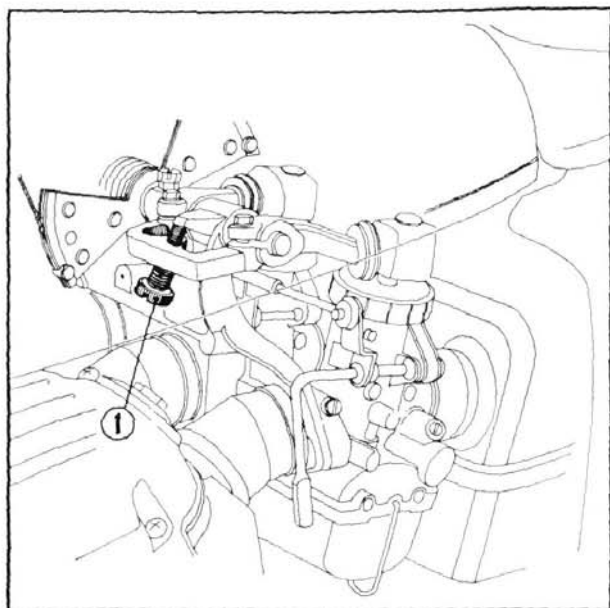


Fig. 20-14 Idle adjustment
① Throttle stop screw

ADJUSTMENT

Adjustment is normally performed after the engine has been warmed up to operating oil temperature of 140° to 157°F (60 to 70°C).

Idle adjustment

Set the engine idle speed to 900–1,000 rpm with the throttle stop screw. (Fig. 20-14)

- * Turning the stop screw in the clockwise direction will decrease the idle speed.
- * Turning in the counter clockwise direction will increase the idle speed.

Carburetor synchronization

1. Remove the fuel tank from the frame and position it approximately 20 in. (50 cm) higher than motorcycle, and then reconnect the tank and the carburetor system with a rubber tube.
2. Remove the rubber boot from the link arm.
3. Connect up the vacuum gauges. Remove the carburetor plugs and connect the longer size adapters to the two inside carburetors, and the shorter size adapters to the outside carburetors.

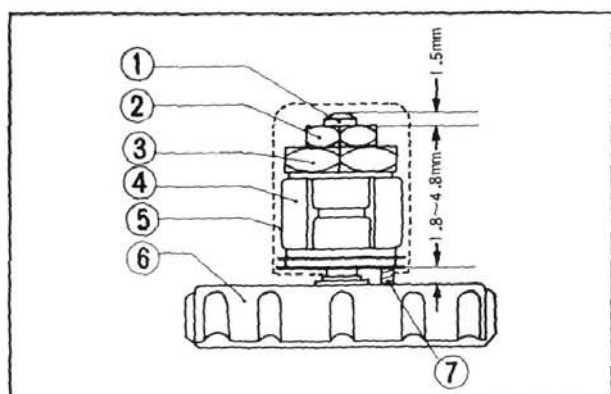


Fig. 20-15 Link component

- | | |
|------------------|---------------|
| ① Rod | ⑤ Rubber boot |
| ② Lock nut | ⑥ Top |
| ③ Adjuster screw | ⑦ Gauge |
| ④ Link arm | |

4. Start the engine, loosen the adjuster screw lock nut and turn the adjuster screws so that the vacuum gauges connected to the carburetors are all indicating uniformly (within 3.0 cmHg) between 16 to 24 cmHg. (Fig. 20-15)

- Turning the adjuster screw in the clockwise direction will raise the vacuum pressure.
- Turning the screw in the counter clockwise direction will lower the vacuum pressure.

Note:

Before synchronizing the carburetor with the vacuum gauge, make sure that all the rods are extending at least one thread above the lock nut. (Fig. 20-16)

If there is insufficient thread extension, the following preadjustment must be made before adjusting the synchronization.

- ① Turn the throttle stop screw until there is a slight clearance between the stopper and the screw.
 - ② Adjust the adjuster screw so that there is a **0.070-0.189 in. (1.8-4.8 mm)** clearance between the adjuster screw and the top. (Fig. 20-15)
 - ③ Turn the throttle stop screw in the counter clockwise direction back to the original position.
5. When all the carburetors are indicating uniform vacuum pressure, adjust the throttle stop screw to obtain the specified idle speed.
6. Snap the throttle several times to verify the idle stability before tightening the lock nut.
- Torque lock nut to: **0.86-1.44 ft-lbs (12-20kg-cm)**

Carburetor air screw adjustment

Adjust the respective air screw so that the engine rpm is smoothest with maximum vacuum pressure. The standard adjustment which gives best performance is $3/4$ to $1\frac{1}{4}$ turns open from the full close position.

Note:

After the adjustment is completed, make sure that the rubber boots is not pinched or rolled under.

Overcross stop adjustment

Loosen the lock nut and turn the eccentric link pin to provide a clearance of **0.08-0.12 in. (2-3 mm)** between the throttle lever and link pin. (Fig. 20-17, 20-18)

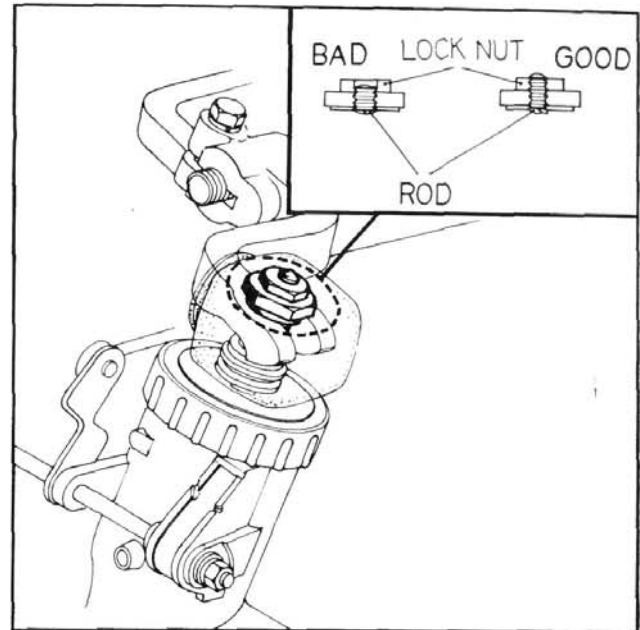


Fig. 20-16 Lock nut

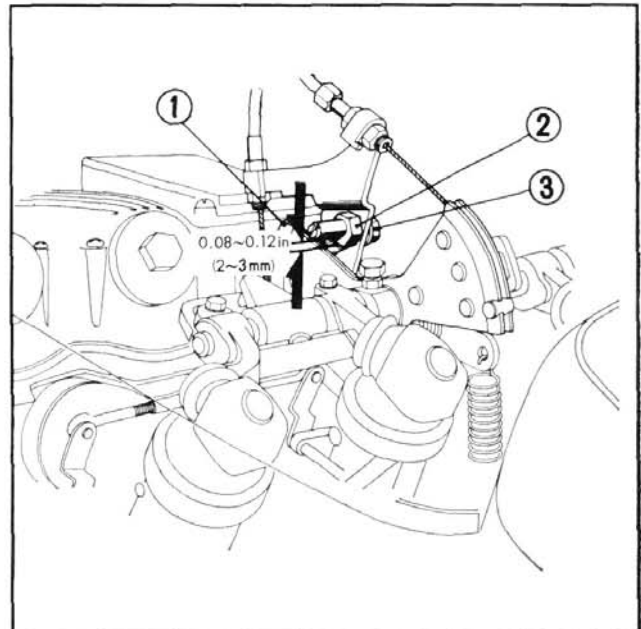


Fig. 20-17 Overcross stop adjustment

- ① Throttle lever ③ Lock nut
② Eccentric link pin

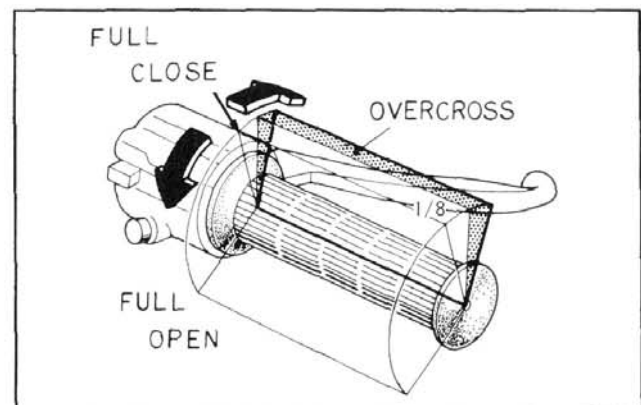


Fig. 20-18 Overcross part

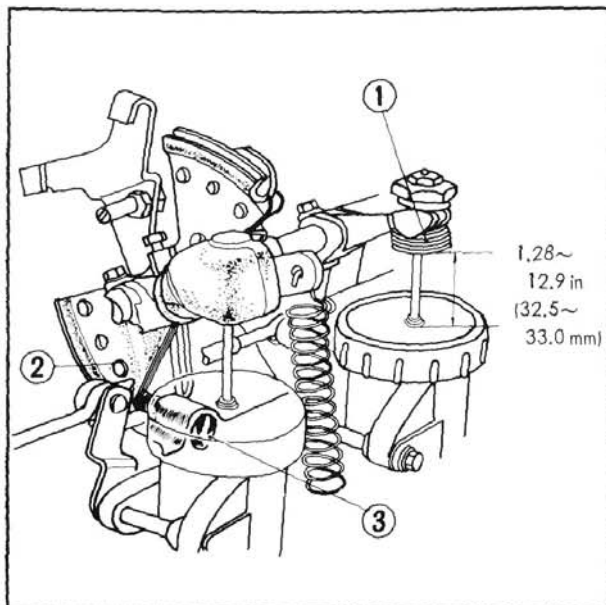


Fig. 20-19 Full open stopper adjustment

- ① Adjuster screw
- ② Throttle lever
- ③ Full open stopper screw

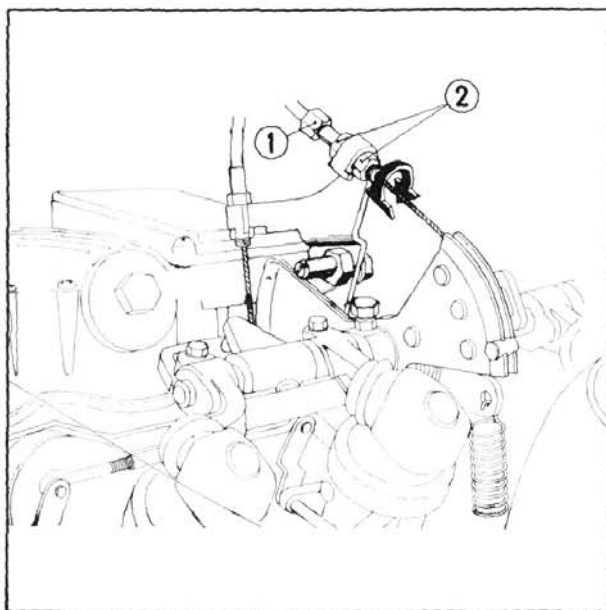


Fig. 20-20 Throttle cable adjustment

- ① Adjust nut
- ② Lock nut

Full open stopper adjustment

Adjust the stopper screw so that there will be a distance of 1.28–1.29 in. (32.5–33.0 mm) between the top and the adjuster screw with the throttle grip in the full open position. (Fig. 20-19)

Throttle cable adjustment

1. Turn the adjuster counter clockwise on the handle end to increase the play in the cable. To permit fine adjustment with the adjuster screw, leave about a 0.12 in. (3 mm) play in the cable.
2. Turn the adjuster nut at the carburetor end to provide a 0.12–0.16 in. (3–4 mm) play at the grip flange. (Fig. 20-20)

Note:

The throttle lever should hit the link pin when the grip is forced to the full close position.

If this does not occur, the throttle cable must be replaced.

STEERING AND FRONT SUSPENSION

FRONT SUSPENSION

The front fork is assembled into a complete unit by the fork bottom bridge, axle and the fork top bridge and their respective mounting bolts. This three-point mounting

design provides a highly rigid unit for good stability. The front suspension is a telescoping oil damper type with an aluminum fork bottom case used for lightness.

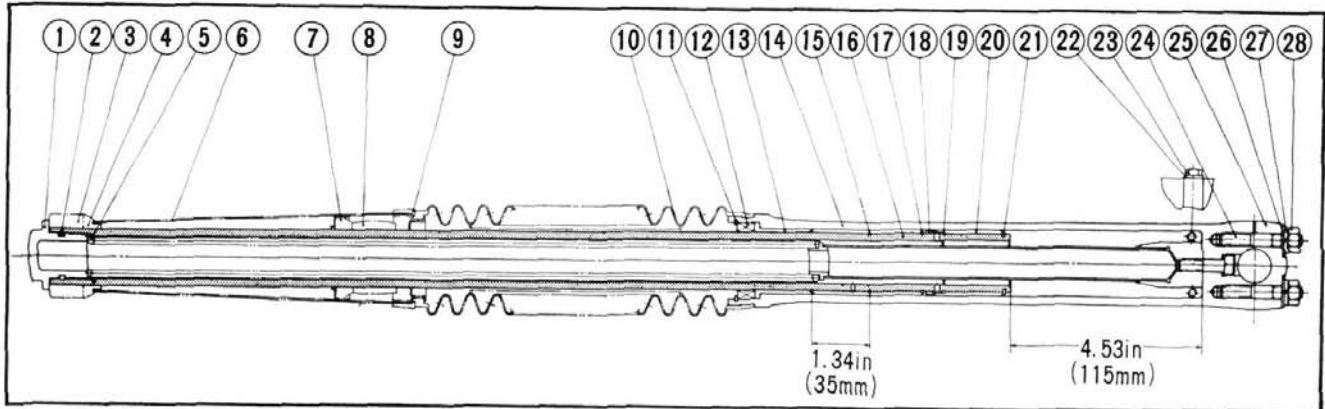


Fig. 20-21

- | | | |
|----------------------------|---------------------------|-------------------------|
| ① Front fork bolt | ⑪ 50 mm circlip | ⑳ Fork piston snap ring |
| ② 23×28 "O" ring | ⑫ 354811 oil seal | ㉑ Drani cock packing |
| ③ Fork top dridge | ⑬ Front fork pipe guide | ㉒ 6 mm hex bolt |
| ④ Fork cover upper cushion | ⑭ Front fork bottom case | ㉓ 8 mm stud bolt |
| ⑤ Front cushion spring | ⑮ Fork pipe stoper ring | ㉔ Front axle holder |
| ⑥ Front fork cover | ⑯ Front fork pipe | ㉕ 8 mm flat washer |
| ⑦ Fork cover lower cushion | ⑰ Fork valve stopper ring | ㉖ 8 mm spring washer |
| ⑧ Steering stem | ⑱ Front damper valve | ㉗ 8 mm hex nut |
| ⑨ Front fork rib | ㉑ Piston stopper ring | |
| ⑩ Front fork boot | ㉒ Front fork piston | |

As the outside diameter of oil seal 354811 is 0.08 in. (2 mm) larger than previous model to prevent the deformation of oil seal and oil leakage, the diameter (50 mm) of circlip is also larger than previous one (47 mm).

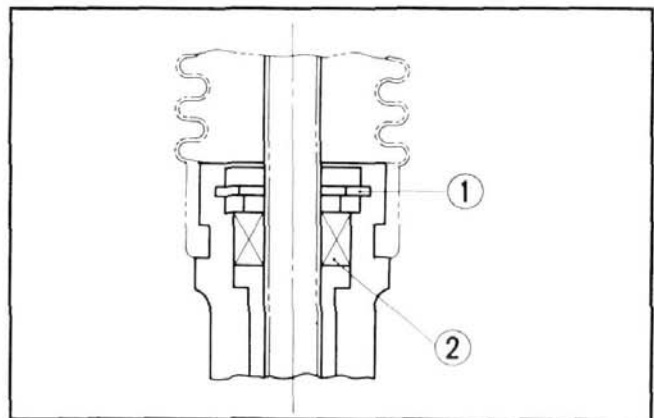


Fig. 20-22 ① 50 mm circlip
② 354811 oil seal

REAR SUSPENSION

REAR SHOCK ABSORBER

A De Carbon type damper containing nitrogen gas under high pressure is contained within the cylinder to maintain a pressure against the oil. This prevents the bubbles from being produced in the oil during compression. It assures positive

damping action. The spring force can be adjusted to the three positions according to carrying load and riding condition. The stroke of the rear shock absorber is **3.4 in. (87 mm)**.

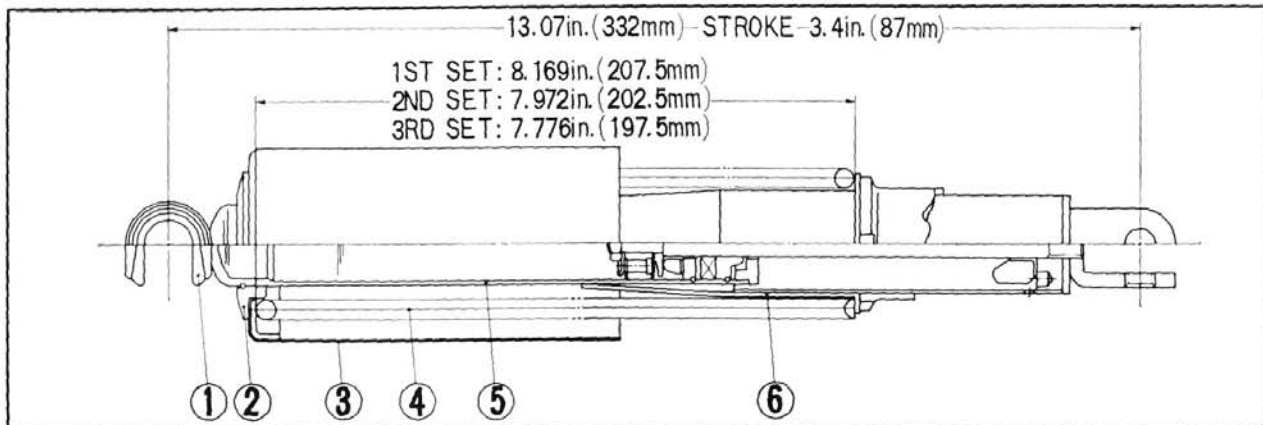


Fig. 20-23 ① Joint rubber
② Spring seat stopper
③ Rear cushion upper cover
④ Rear cushion spring
⑤ Rear damper assembly
⑥ Rear cushion spring guide

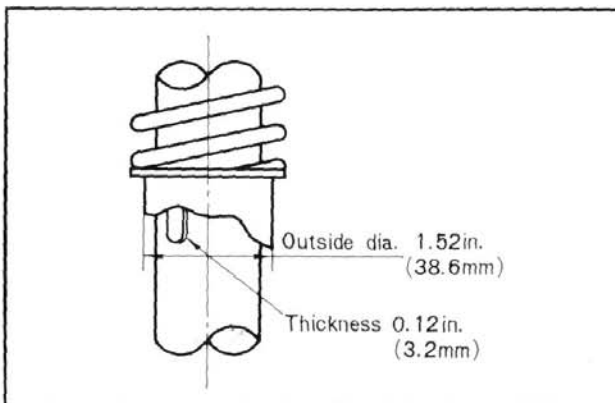


Fig. 20-24

The stopper was changed 0.09 in. (2.3 mm) to 0.12 in. (3.2 mm) thickness and the outside diameter 1.52 in. (38.6 mm) of shock absorber is 0.08 in. (2 mm) larger than previous one. Consequently, the spring diameter is 0.15 in. (4 mm) larger than previous model. The modifications described above provide a highly rigid.

Inspection

Damping force cannot be measured, therefore, the test is performed by compressing the shock absorber unit by hand. Normal operating condition is indicated by a greater resistance on the extension stroke than on the compression stroke.

When replacing the shock absorber spring, make sure that the new and previous spring are not interchangeable.

Item	Standard value	Serviceable limit
Shock absorber spring		
Spring inner diameter	1.56~1.86 in. (39.7~40.3 mm)	—
Free length	8.58 in. 218 mm	8.346 in. (212 mm)
Coil diameter	(0.276 in. 7 mm)	—
Installation load	7.98 in./66.6 lbs (202.9 mm/30.2 kg)	—
Tilt	within 1.5°	Over 2.5°

WHEELS, TIRES AND FINAL DRIVE

FRONT WHEEL HUB AND MOUNTING BOLTS

As the width of the front wheel hub was made 0.157 in. (4 mm) narrow in width, the length of the mounting bolts was changed from 4.17 to 4.02 in. (106 to 102 mm) shortened by 0.157 in. (4 mm).

Whenever replacing these parts, make sure that the proper length bolts are used. Using the old longer bolts on the new hub will cause the disc plate to loosen during riding. When the front hub is replaced, the associated parts corresponding to this hub must be replaced in set. Old and new parts are not interchangeable.

REAR WHEEL DAMPER

The shape of both side wheel dampers which was changed as shown in figure, absorb the shock when the rear wheel was turned by the drive chain and it makes the the drive chain to prolong the service life.

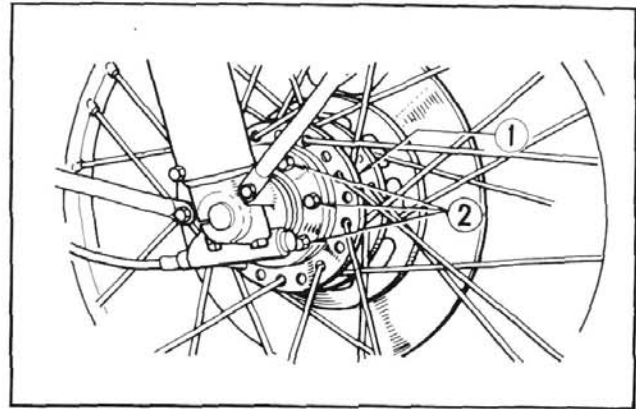


Fig. 20-25 ① Front wheel hub
② Disc plate mounting bolts

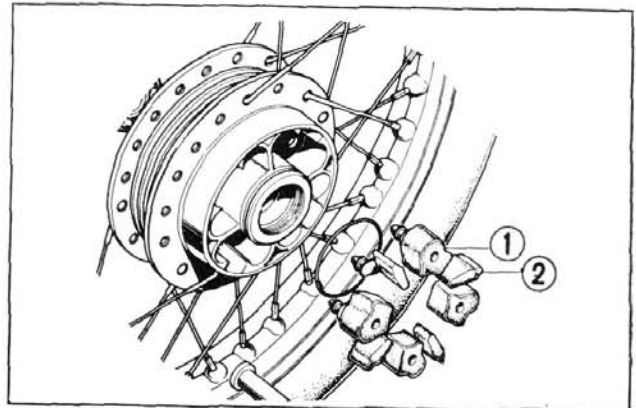


Fig. 20-26 ① R. rear wheel damper
② L. rear wheel damper

BODY, OIL TANK, AIR CLEANER AND EXHAUST SYSTEM

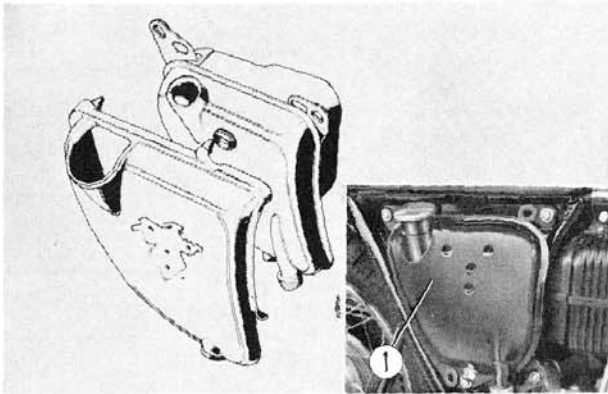


Fig. 20-27 ① Oil tank

OIL TANK AND OIL COVER

The oil tank mounted on the right side center of the motorcycle is connected to the engine with two oil hoses. Since the oil tank was made narrow in width, the oil tank cover was designed sporty shape and narrow in width.

Note:

Both new and old are not interchangeable.

AIR CLEANER COVER, SEPARATOR CASE AND CLEANER CASE

The air cleaner mounted at the center of the motorcycle under the fuel tank which was made narrow in width and the material was improved against chemical reaction and vibration shock when travelling on rough roads. The air cleaner cover was designed 0.08 in. (2 mm) narrow in width with concave parts on both side of it. The height of knobs on separator case was made 0.13 in. (3.5 mm) higher and the air cleaner case was designed as shown in Fig. 20-29.

Note:

If the air cleaner cover, separator case, cleaner cover and battery cover are replaced in set, new and old are interchangeable.

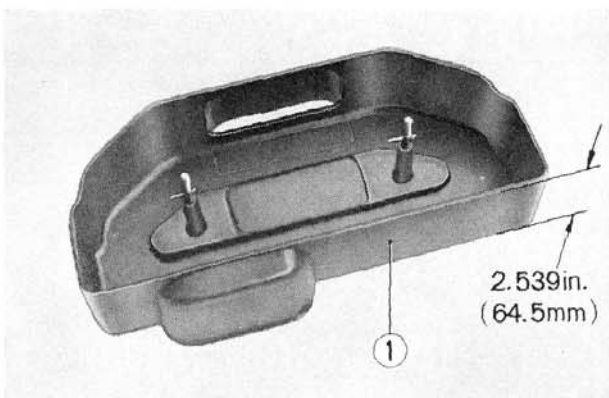


Fig. 20-28 ① Air cleaner cover

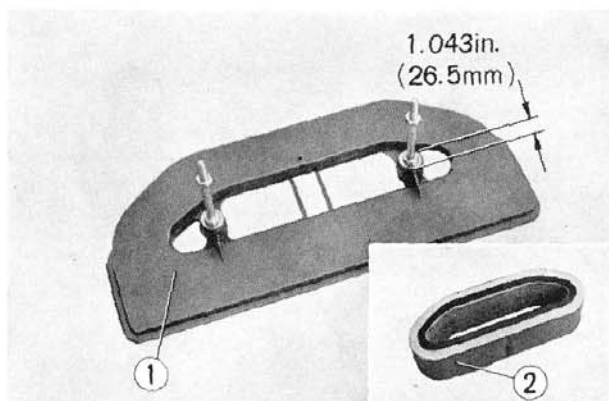


Fig. 20-29 ① Air cleaner separator case
② Air cleaner element

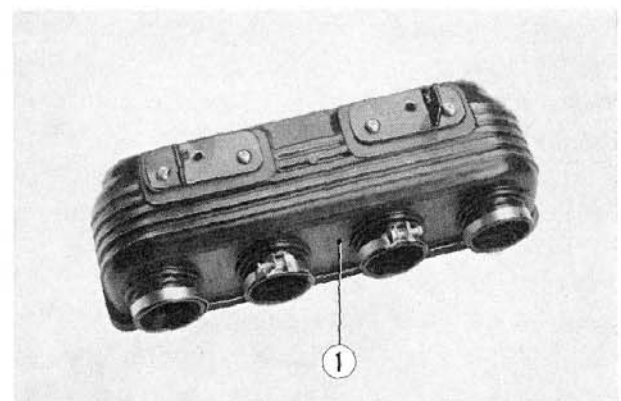


Fig. 20-30 ① Air cleaner case

BATTERY COVER

The battery cover was narrowed in width and its shape was designed sporty looking with alluring emblems. Therefore, there are not interchangeability.

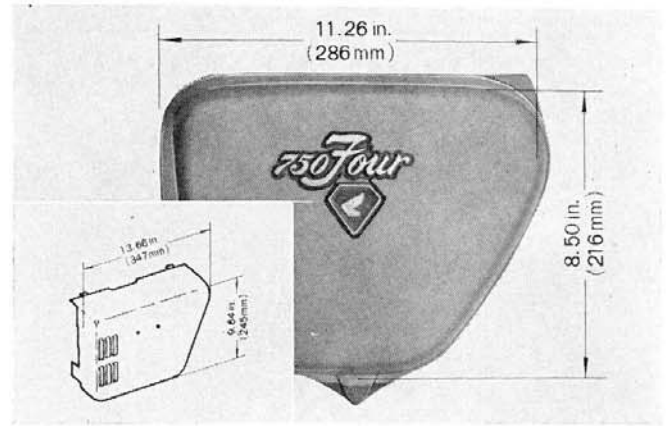


Fig. 20-31

SEAT AND SEAT LATCH

The front part of the seat was made narrow and the seat was designed into the double seat type covered with vinyl leather. A seat latch of flip motion type was equipped to simply lock or unlock the seat.

Note:

If the seat latch, hook and seat are replaced at the same time, new and old are interchangeable.

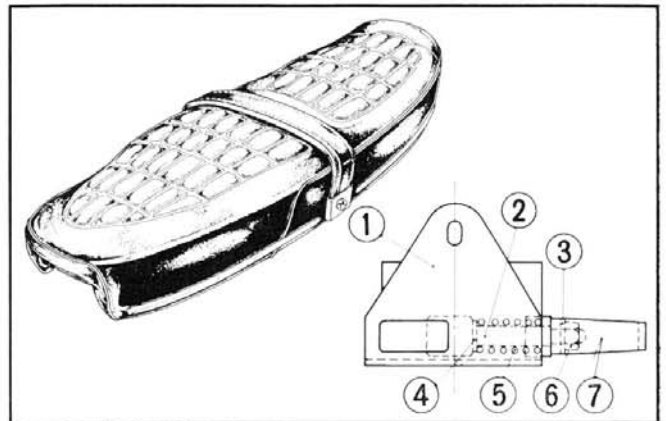


Fig. 20-32

- ① Seat catch plate
- ② Seat catch slider
- ③ 6 mm, washer
- ④ 8 mm, washer
- ⑤ Seat catch spring
- ⑥ 6 mm nut
- ⑦ Seat catch lever

MAIN STAND

The welded metal sheet shown in Fig. 51 was made 0.4 in. (10 mm) wider for providing the stability when the main stand was operated.

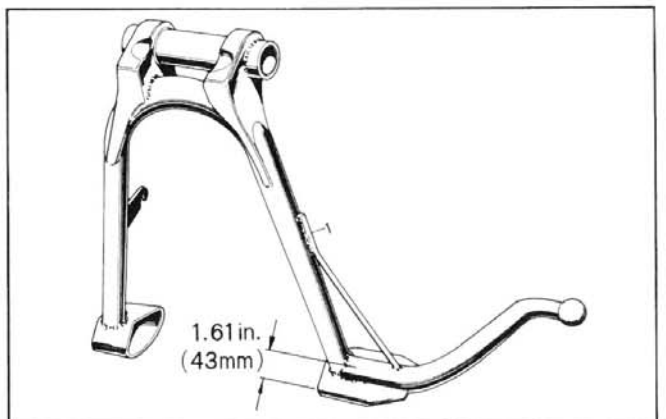


Fig. 20-33

BODY ELECTRICAL AND INSTRUMENTS

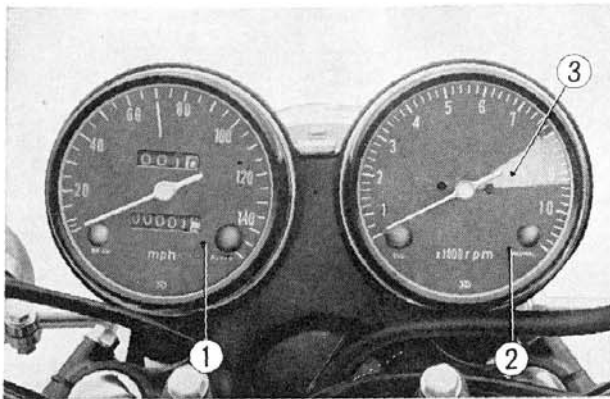


Fig. 20-34 ① Speedometer
② Tachometer
③ Red zone

SPEEDO/TACHOMETER

The speedometer and tachometer cases were painted flat black to prevent annoying reflection. Further, to provide the superior quality against the brake fluid reaction, the material of both windows was changed to the glass from the acrylic resin, and the tachometer red zone is 8,000~9,500 rpm.

DRIVE CHAIN CONNECTOR AND DISCONNECTOR OPERATION

On the models CB 750, it is necessary to cut the endless chains. To cut the chains, proceed as follows:

A. Disconnection of Drive Chain

1. Position chain link pin to be cut on chain holder in place as shown in Fig. 20-35. Screw in pressure bolt until pressure holder holds chain in position. Back off adjuster bolt so that it does not interfere with chain.
2. By use of handlebar, screw in pressure bolt B until before joint pin is just pushed off joint plate.
3. Position adjacent chain link pin on chain holder and repeat step 1 and 2. screw in pressure bolt B until joint pin is completely pushed off joint plate.
4. Reposition original chain link pin on chain holder and disconnect chain by pushing off joint pin in the same way as in step 3.

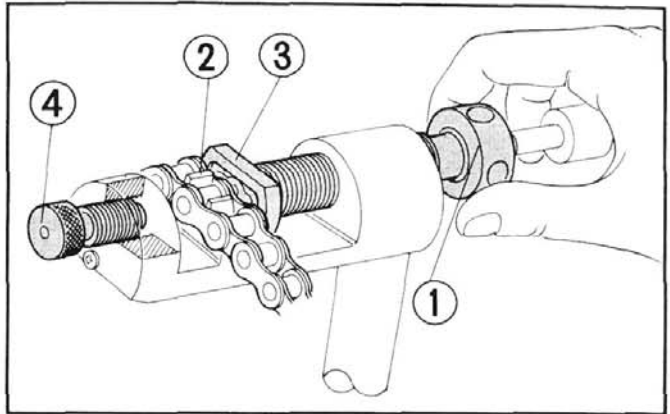


Fig. 20-35 ① Pressure bolt ③ Pressure holder
② Chain holder ④ Adjuster bolt

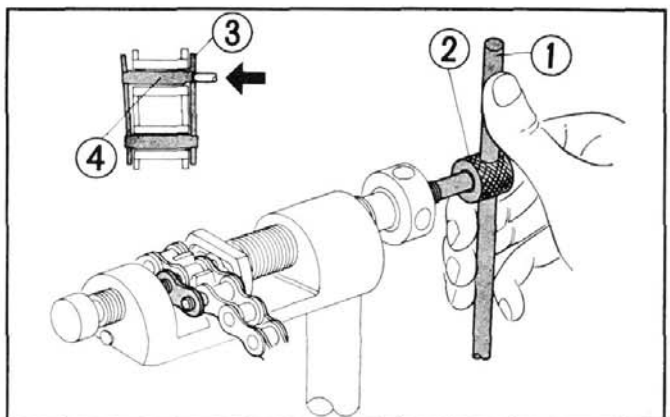


Fig. 20-36 ① Handlebar ③ Joint plate
② Pressure bolt B ④ Joint pin

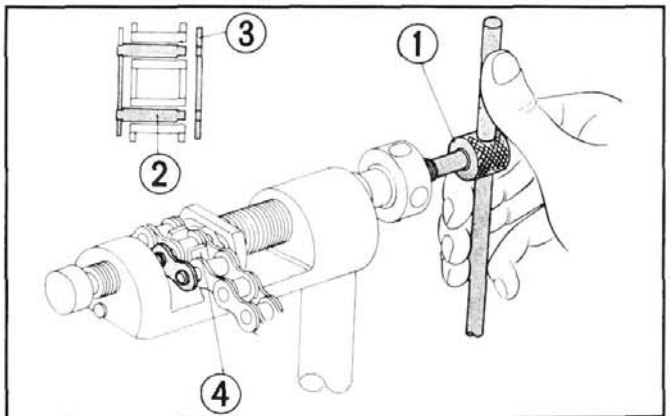


Fig. 20-37 ① Pressure bolt B ③ Joint plate
② Joint pin ④ Chain holder

B. Press-in Connection of Drive Chain

Newly improved chain joints and plates are of a pressfitted type. Only press-fitted type chain joint and plate require this procedure.

1. Join new drive chain by inserting joint pin from side toward enter of motorcycle.

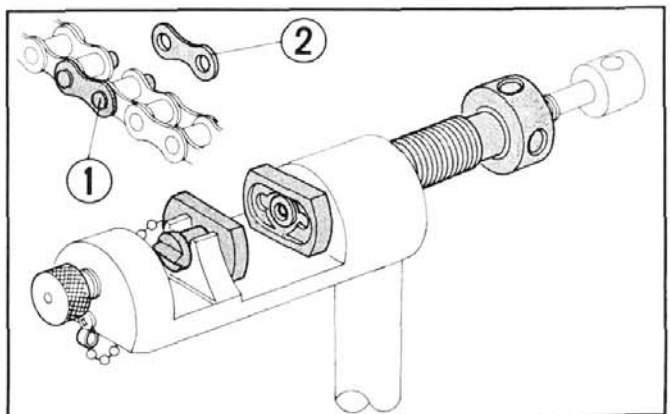


Fig. 20-38 ① Joint pin
② Joint plate

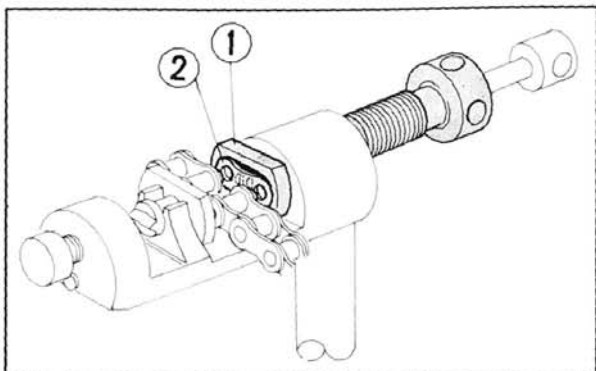


Fig. 20-39 ① Pressure holder
② Joint plate

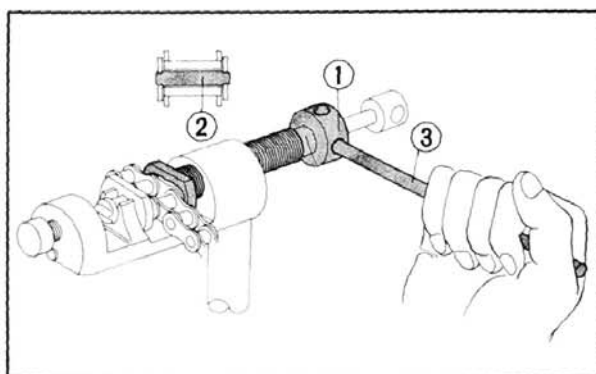


Fig. 20-40 ① Pressure bolt A
② Joint pin ③ Handle bar

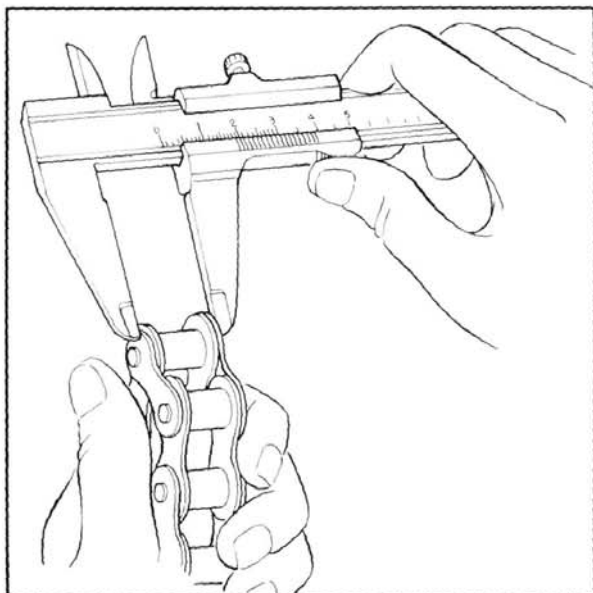


Fig. 20-41

2. Apply a thin coat of grease in recess of pressure holder. Set joint plate in recess of pressure holder with chamfered side (side with chain code stamped on it) inward, exercising care not to drop it.

3. Position chain portion to be connected between chain holder and pressure holder. Hold chain in position by screwing in pressure bolt A. After making sure that two pins of joint pin align with corresponding two holes in joint plate. By turning in pressure bolt A with handlebar, press-fit until it goes no longer because of steps on pins.

4. Measure distance between two joint plates to make sure if correctly press-fitted.

Specified distance between two plates:

DID50HDS.....19.7mm

DID50DS19.0mm

If reading exceeds specifications as above, repeat steps.

C. Staking of Drive Chain

1. Position drive chain joint portion to be staked on chain holder in place and also place wedge holder between chain holder and pressure holder as shown in Fig. 20-42. So that tip of wedge is in line with center of joint pin.
By tightening finger-tight, move forward pressure bolt A until it stops.

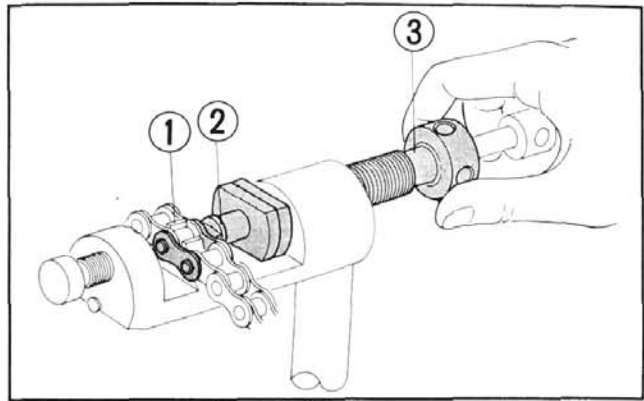


Fig. 20-42 ① Chain holder
② Joint pin
③ Pressure bolt A

2. Screw in adjuster bolt until opposite end of joint pin is forced against it.

NOTE:

Screw in adjuster bolt until finger-tight.

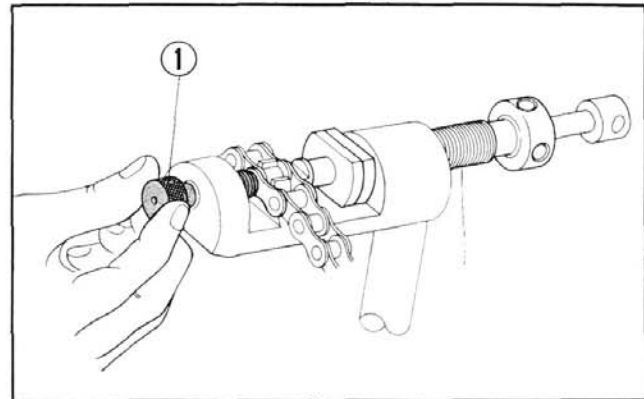


Fig. 20-43 ① Adjuster bolt

3. By use of handlebar, stake end of joint pin by turning pressure bolt B 3/4 turn.

NOTE:

Never exceed 3/4 turn.

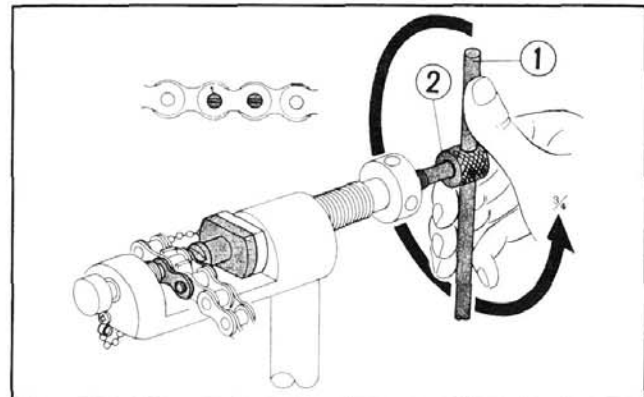


Fig. 20-44 ① Handle bar
② Pressure bolt B

4. After backing off pressure bolt A approx. two turns, back off wedge pin 1/4 turn (90 degrees) and repeat steps 1 thru 3 so that end of joint pin is staked in a cross pattern. Repeat entire steps on opposite end.

NOTE:

Be sure that cross patterned stakings be performed at 90° angles.

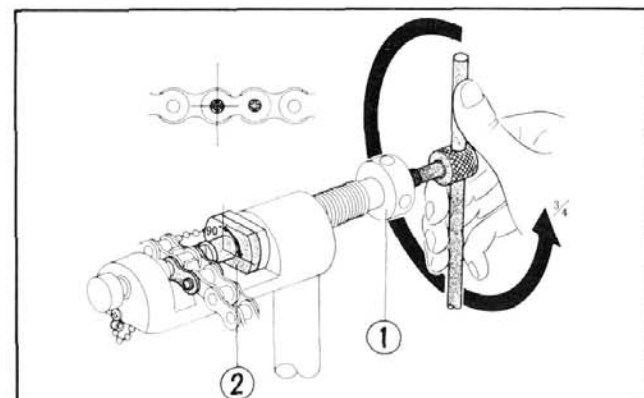


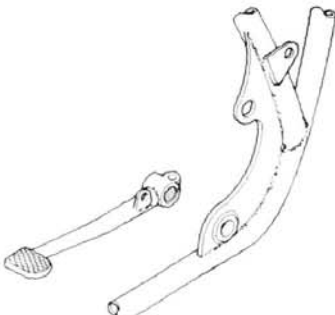
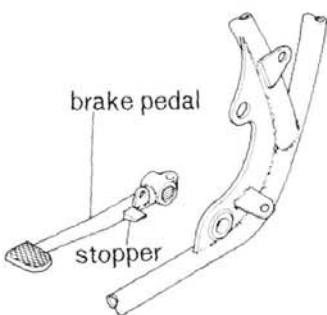
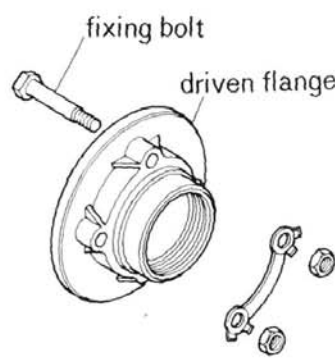
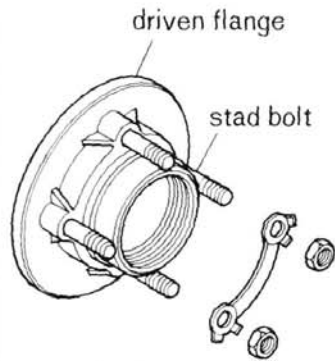


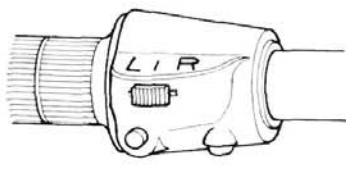
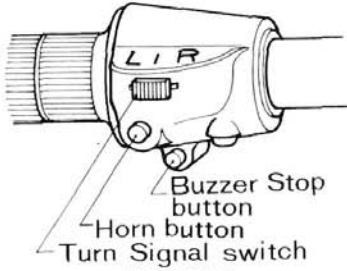
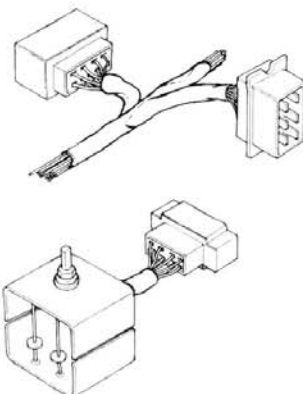
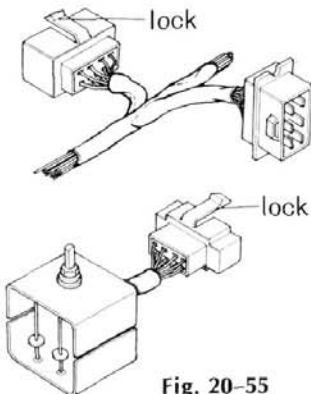
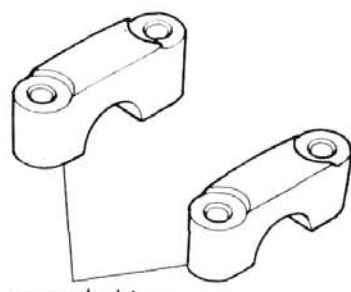
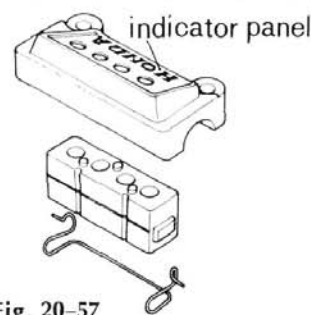
Fig. 20-45 ① Pressure bolt A
② Wedge pin

SUPPLEMENT TO CB750K1~K4

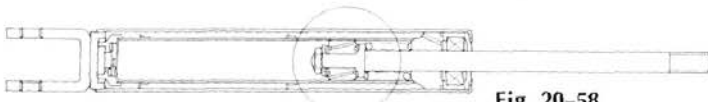
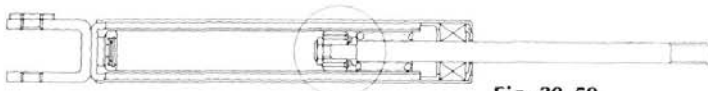

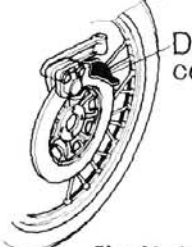
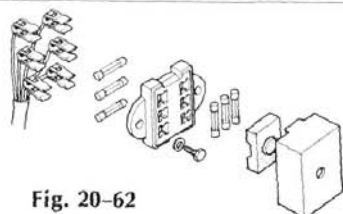
K2

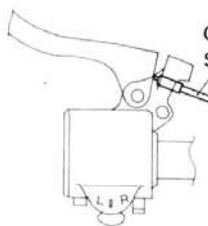
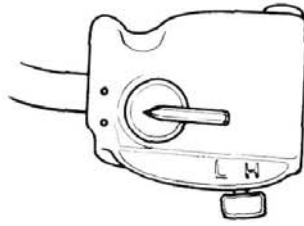
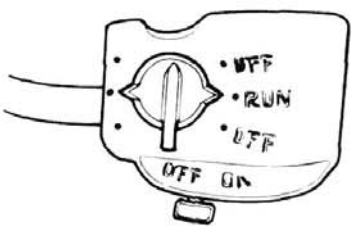
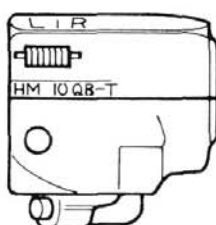
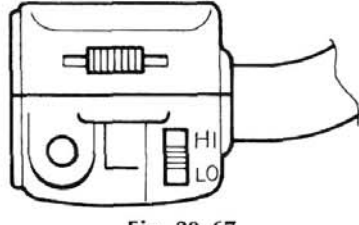
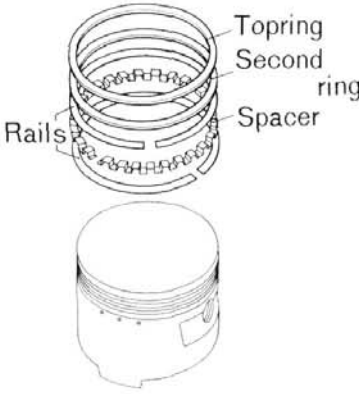
COMPARISON OF CB750K2 TO CB750K1

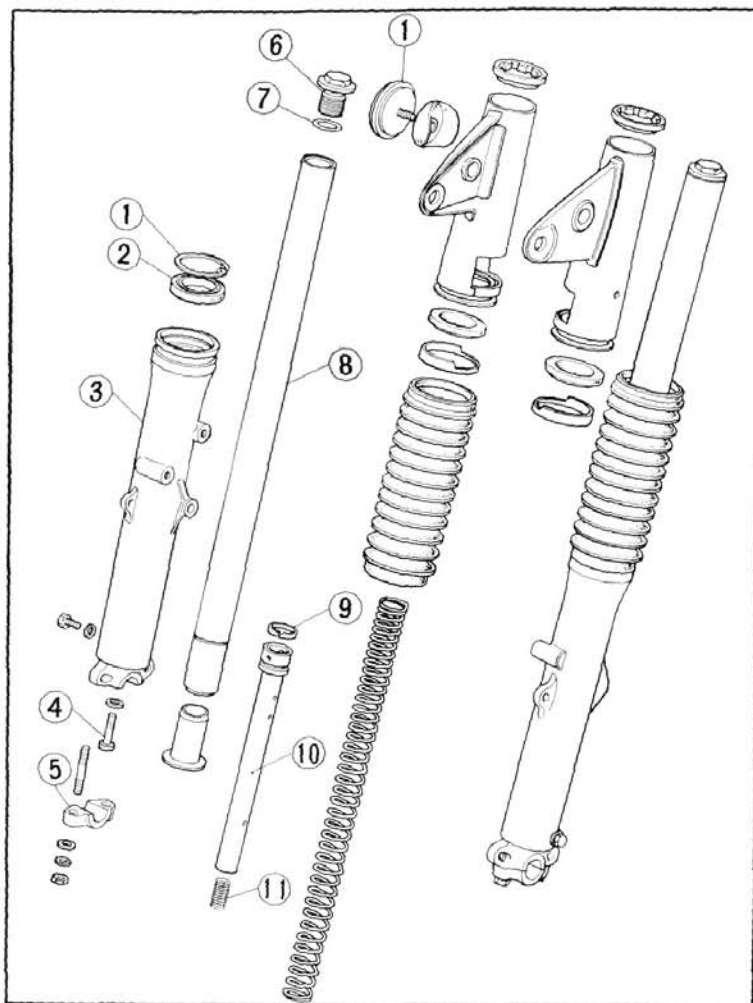
Part of item	CB 750 K1	CB 750 K2	Modified part
seat seat catch seat lock	 <p style="text-align: center;">Fig. 20-46</p>	 <p style="text-align: center;">Fig. 20-47</p> <p>The seat was changed in pattern and partially in shape. The seat catch was changed as down.</p>	seat catch seat lock
brake pedal	 <p style="text-align: center;">Fig. 20-48</p>	 <p style="text-align: center;">Fig. 20-49</p> <p>A stop was added to the brake pedal, returning the pedal properly.</p>	
driven flange	 <p style="text-align: center;">Fig. 20-50</p>	 <p style="text-align: center;">Fig. 20-51</p> <p>The fixing bolt was changed from the removable type to the press-in type.</p>	

Part of item	CB 750 K1	CB 750 K2	Modified part
turn signal Buzzer switch	 <p>Fig. 20-52</p>	 <p>Fig. 20-53</p> <p>A turn signal buzzer was newly installed. Correspondingly a buzzer stop button was provided and the operation is described below.</p> <p>A warning buzzer which starts sounding when the switch is moved to either position is provided to prevent a rider from forgetting to return the switch after completing a turn. When a turn signal has to be kept flashing for any length of time at a crossing or the like, the buzzer can be stopped by pushing the buzzer stop button.</p>	<ul style="list-style-type: none"> • Buzzer stop switch • Turn signal buzzer
Wire harness and rectifier coupler lock	 <p>Fig. 20-54</p>	 <p>Fig. 20-55</p> <p>The employment of a coupler lock-assures a complete locking.</p>	
Indicator panel	 <p>upper holder</p> <p>Fig. 20-56</p>	 <p>indicator panel</p> <p>Fig. 20-57</p> <p>An indicator panel of the same type used in the model CB 500 was employed, grouping various control lamps for improved serviceability.</p>	

K3**COMPARISON OF CB750 K3 TO CB750 K2**

Part of item	CB 750 K2	CB 750 K3	Modified part
Rear shock absorbers	<p>(Cross valves) Number of rear shock absorber adjusting positions increased</p> <p>Shock absorber spring adjusting positions: 3</p>  <p>Fig. 20-58</p>  <p>Fig. 20-59</p>	<p>(One-way valves) Shock absorber spring adjusting positions: 5 The valves were changed from the cross type to the one-way type. For the details see page 213.</p>	<p>• Shape of valves</p>
Front forks	<p>Valve in front shock absorber and its specifications changed</p> <p>Piston type valve</p> <p>Damping force: 39.5-40.5 Kg/0.5 m/sec. Stroke: 143 mm Oil capacity: 220-230 cc</p>	<p>Free valve</p> <p>Specifications</p> <p>Damping force: 34-46 Kg/0.5 m/sec. Stroke: 141.5 mm Oil capacity: 155-160 cc The valves were changed from the piston type to the free type. For the construction and function see page 212.</p>	
Disc cover	<p>Disc cover newly installed</p>  <p>Fig. 20-60</p>	 <p>Fig. 20-61</p>	
Fuses		 <p>Fig. 20-62</p> <p>The fuses were installed separately for lights such as headlight, taillight, etc. for a quick troubleshooting.</p>	

Part of item	CB 750 K2	CB 750 K3	Modified part
Safety unit Clutch switch	none	 <p>clutch switch</p> <p>Fig. 20-63</p> <p>A safety unit and a clutch switch were added to prevent the motorcycle from running out as soon as the engine starts. For the operation see page 215.</p>	
Lighting kill switch	 <p>Fig. 20-64</p>	 <p>Fig. 20-65</p> <p>The kill switch was changed in operating pattern from the up-down motion to the right-left motion.</p>	
Horn switch Dimmer switch	 <p>Fig. 20-66</p>	 <p>Fig. 20-67</p> <p>The switches were changed in shape and installation positions. The turn signal knob is of an automatic return type.</p>	
Oil ring	 <p>Topring Second ring Spacer Rails</p> <p>Fig. 20-68</p>	<p>The three-piece type oil ring was changed reg.</p> <ul style="list-style-type: none"> • The key points of assembling procedure are described below. <ol style="list-style-type: none"> When installing the oil ring, first place the spacer the spacer and then the rails in position. The spacer and rail gaps must be staggered above 2~3cm (0.787~1.18in.). <p>Note: The gap of the oil refers to that of the spacer.</p>	<ul style="list-style-type: none"> • Rails • Spacer



In the model CB750K3 front shock absorbers, the valves were changed to free valves.

As its damping force can be adjusted by changing its stroke to meet a driver's preference of conditions of a road or surfaces, it always provides a comfortable ride even under severe driving conditions.

The disassembly and operation are as follows:

Fig. 20-69 ① 48 mm Internal circlip
② 354811 oil seal
③ Front fork bottom case
④ 8 mm socket bolt
⑤ Front axle holder
⑥ Front fork bolt
⑦ 23×2.3 O ring
⑧ Front fork pipe
⑨ Piston ring
⑩ Bottom pipe
⑪ Front rebound spring

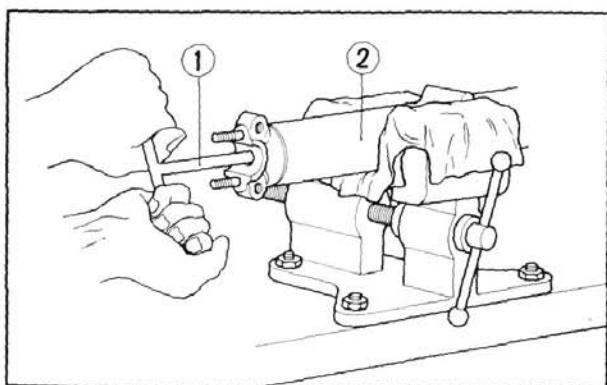


Fig. 20-70 ① Allen head wrench
② Front fork bottom case

Disassembly

To disassemble the front forks, see page 120.

1. Remove the front forks by referring to page 120
2. Remove the front fork bolts and drain front shock absorber oil.
3. With each front fork bottom pipe held in a vice, remove the socket bolt using the Allen head wrench (Tool No. 0717-3230000) and separate the pipe from the bottom base.

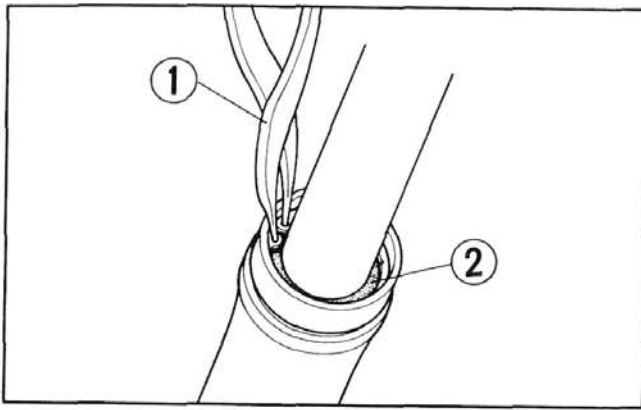


Fig. 20-71 ① 48 mm internal snap ring
② dust seal

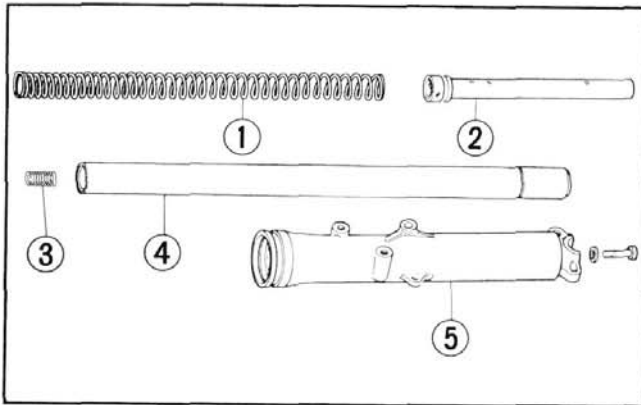


Fig. 20-72 ① Front suspension ② Bottom pipe
③ Front rebound spring
④ Front fork pipe
⑤ Front bottom case

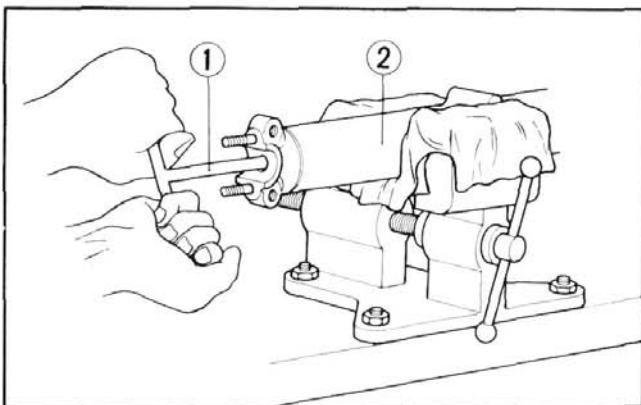


Fig. 20-73 ① Allen head wrench
② Front fork bottom case

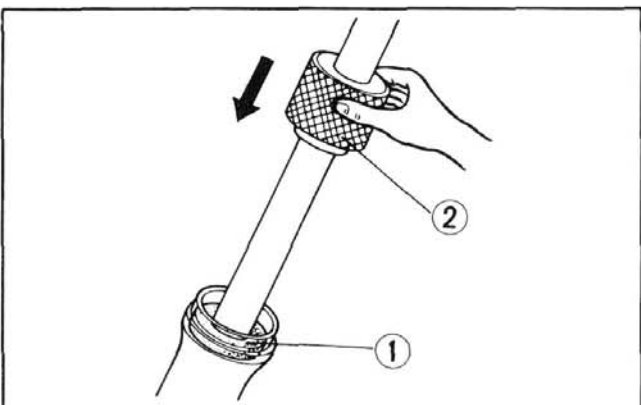


Fig. 20-74 ① Oil seal ② Fork seal driver

4. Remove the front fork dust seal, 48 mm internal circlip and oil seal.

Inspection

1. Measure the front shock absorber spring free length. Check the spring tension.
2. Check the front fork piston rings for wear.
3. Check the front fork pipe-to-bottom case clearance.
4. Check the oil seals for scores, scratches or breakage.
5. Check the sliding surfaces of the front fork pipes for scores or scratches.

Assembly

To assemble, reverse the disassembly procedures, paying attention to the following:

1. Position each fork pipe in the bottom case. Apply a coat of locking sealant to the socket bolt and tighten it with the Allen head wrench used at the time of disassembly.

2. Apply a coat of high quality ATF to the inside and outside circumferences of the oil seal and install it using the fork seal driver (Tool No. 07947-3330000).

Note:

Use a new oil seal.

3. Fill the fork pipes with high quality ATF up to the specified level.
Capacity (each fork pipe):
150~155 cc (5.3~5.5 ozs.) at the time of fork disassembly.

Operation

- When the wheel meets holes or bumps in the road, it moves up and down. This up-and-down movement of the wheel is transmitted to the bottom leg. Since the bottom leg is integrated with a pipe, the pipe also moves up and down. With either action, two springs on the pipe flux and rebound, absorbing the road to the motorcycle.

In this case, oil in the chamber ⑥ pushes up the free valve and flows into the space ① freely.

At the same time, oil in the chamber ⑥ also flows through orifices in the lower end of the spring under seat into the space ③ by the amount by which the pipe is moved up.

Extension

As the wheel has passed the bump or hole, it moves down. To eliminate excessive up-and-down motion of the spring and wheel, there will be a restraint on the spring and wheel action.

In operation, as the wheel moves down, the free valve is closed, introducing high pressure in the space ①. This high pressure then forces the oil out and into the space ③ through the orifices in the spring under seat.

Since the oil encounters a restraint as it passes through the orifices, excessive wheel and spring movement as well as spring oscillation are prevented.

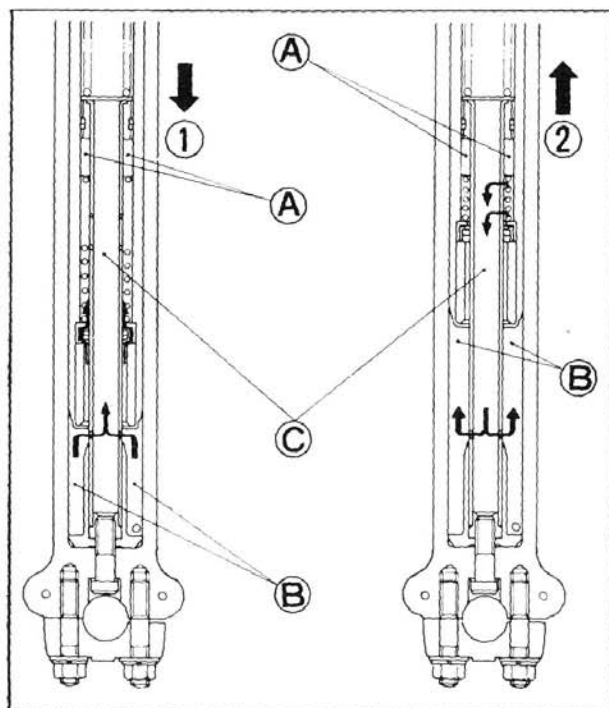


Fig. 20-75 ① Compression ② Extension

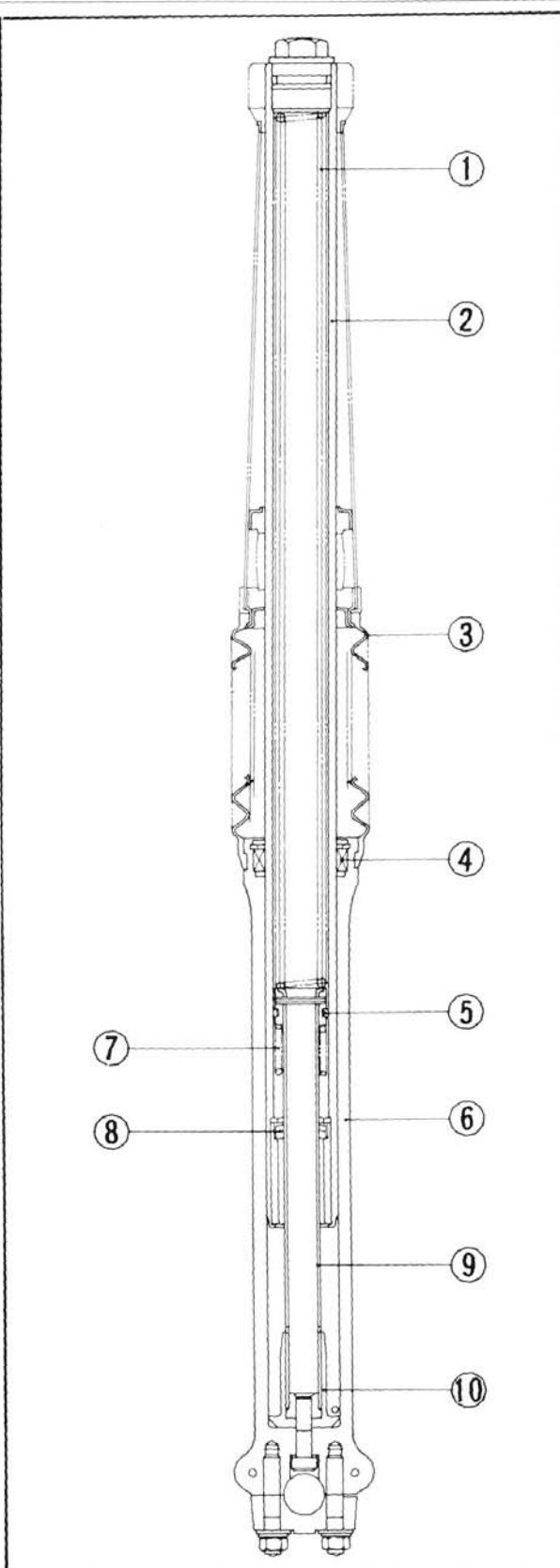


Fig. 20-76 ① Front spring ② Front fork pipe ③ Front fork dust seal ④ Oil seal ⑤ Piston ring ⑥ Front fork bottom leg ⑦ Front rebound spring ⑧ Free valve ⑨ Bottom pipe ⑩ Oil lock piece

Rear Shock Absorbers (closs valve)

Each rear shock absorber uses a double-cylinder, cross type oil damper a bottom valve, preventing occurrence of air bubbles to provide a constant damping force. On both the extension and compression sides, the characteristic of damping force is excellent and the damping efficiency is higher.

Operation

Each oil damper is equipped with piston valves A and B and a bottom valve. The damping force is provided by means of the valve A on the extension side, and the resistances on the bottom valve side and in the passage II on the compression side.

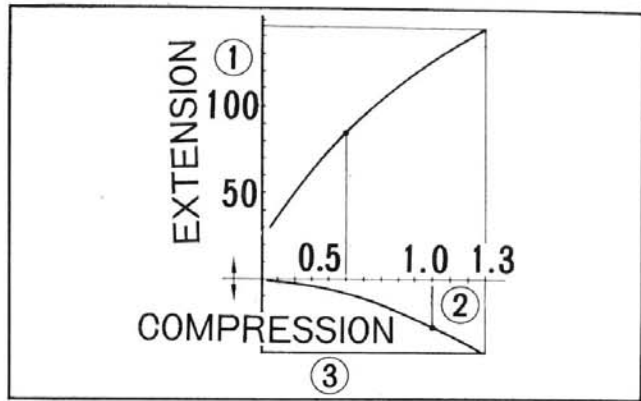


Fig. 20-77 ① Damping force (kg)
② Piston speed (m/s)
③ Characteristic of damping force

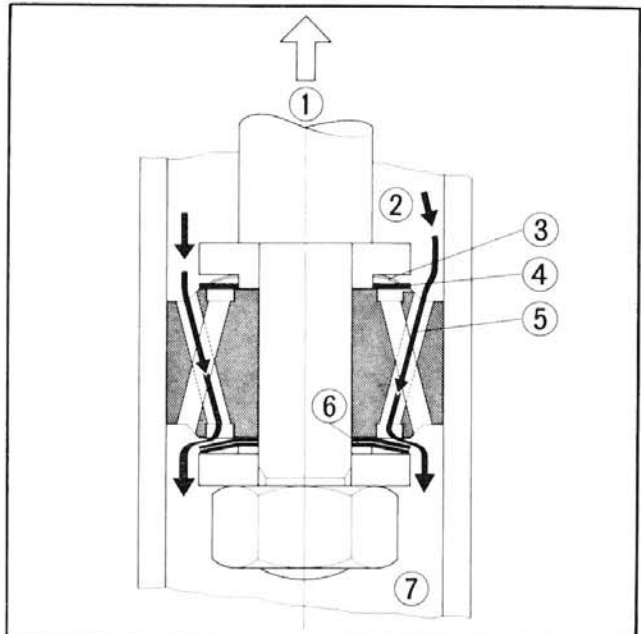


Fig. 20-78 ① Extension side ⑤ Passage I
② Chamber "a" ⑥ Valve B
③ Valve spring ⑦ Chamber "b"
④ Valve B

• Extension side

When oil attempts to flow from the chamber "a" to the chamber "b", the valve B is closed. Then the oil passes through the passage I to force the valve A to open, and the damping force is provided by the resistance of the valve. (Fig. 20-79) At this time the bottom valve is open, and the oil passes through the chamber "c" and passage III to lift up the bottom valve spring and flows into the chamber "b" from the bottom of the valve. (Fig. 20-81)

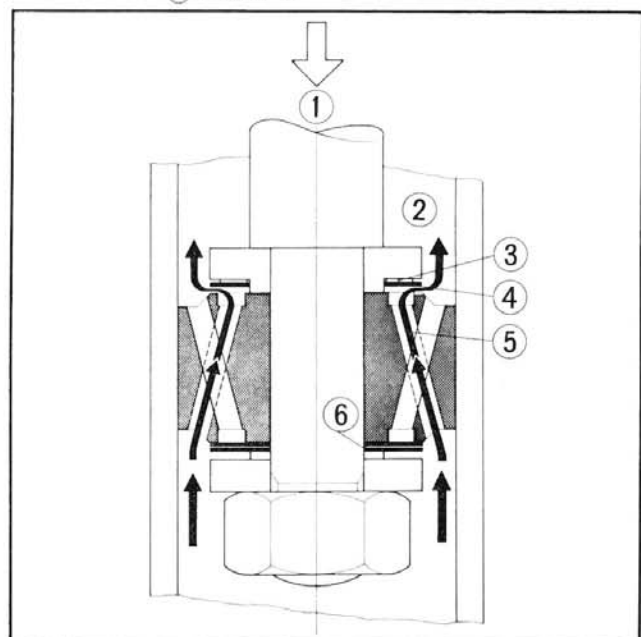


Fig. 20-79 ① Compression side ④ Valve B
② Chamber "a" ⑤ Passage II
③ Valve spring ⑥ Valve A

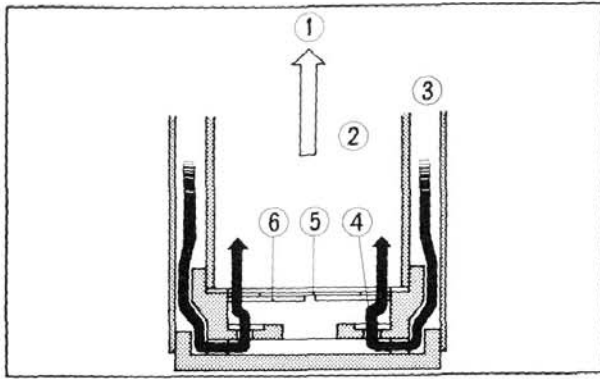


Fig. 20-80 ① Extension side ⑤ Bottom valve spring
② Chamber "b" ⑥ Bottom valve
③ Chamber "c" ④ Passage III

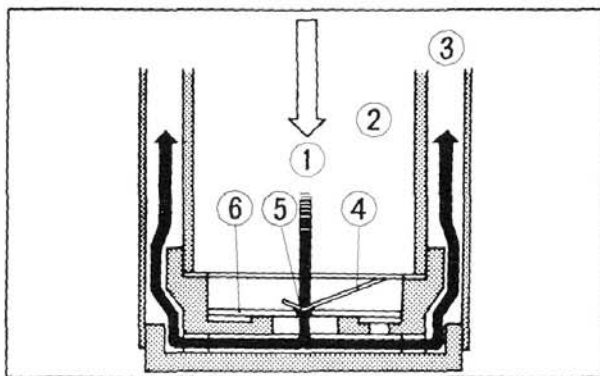


Fig. 20-81 ① Compression side ④ Bottom valve spring
② Chamber "b" ⑤ Orifice
③ Chamber "c" ⑥ Bottom valve

• Compression side

When oil attempts to flow from the chamber "b" to the chamber "a", the valve A is closed. Then the oil passes through the passage II to cause the valve B to lift up the valve spring and flows into the chamber "a" from the bottom of the valve. (Fig. 20-80)

A small quantity of damping force may be provided by the resistance of the valve spring, but a large quantity of the force can be provided by the resistance on the bottom valve side. The oil in the chamber "b" flows by the amount corresponding to the volume of rod into the chamber "c" through the orifice I and the damping force is provided by the resistance at this time. (Fig. 20-81)

2. STARTING MOTOR SAFETY UNIT

• Description

The starting motor safety unit operates in the way that the starting motor functions only when the transmission is in neutral or while the clutch lever is being squeezed in any gear position, assuring rider safety and preventing damage of the motor and transmission gears.

• Circuits and operations

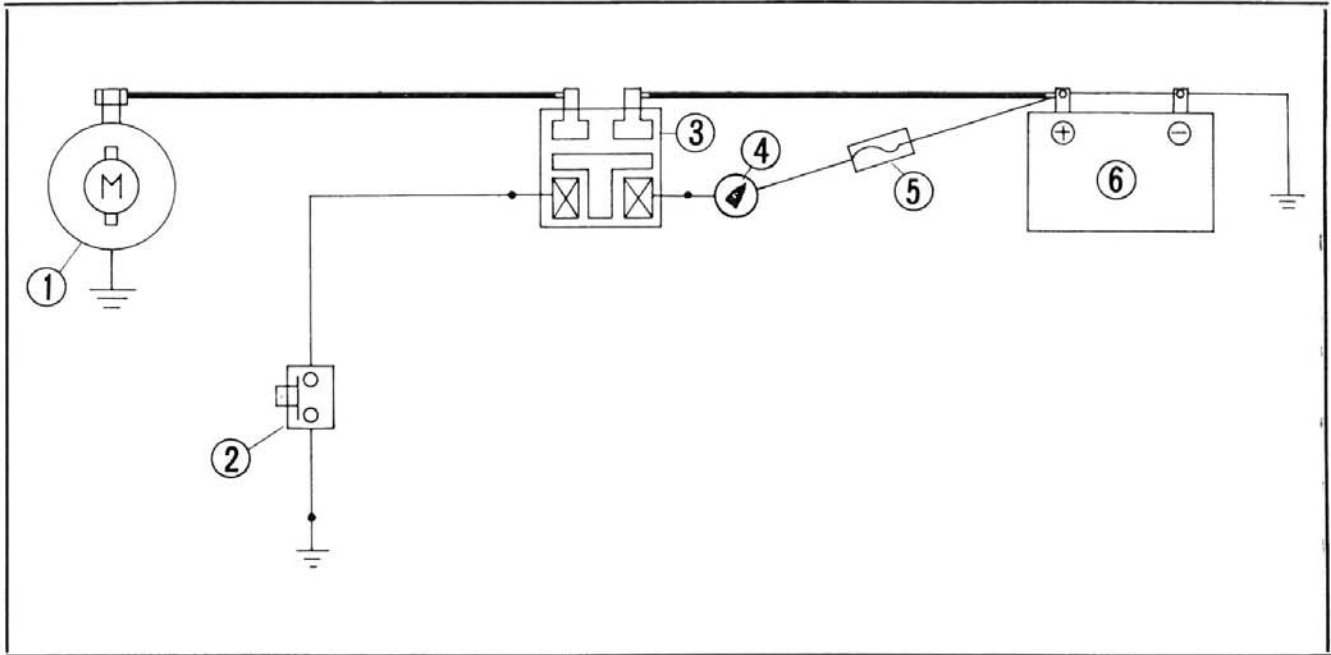


Fig. 20-82 Circuit of models without safety unit

- | | |
|---------------------------|---------------|
| ① Starting motor | ④ Main switch |
| ② Starter button switch | ⑤ Fuse |
| ③ Starter magnetic switch | ⑥ Battery |

When the engine switch is turned on, some amount of electricity is usually applied to the starter magnetic switch coil. If the starter button switch is then turned on, the starter magnetic switch will operate to cause the starting motor to turn. In other words, the motorcycle begins to move when the main switch and starter button switch are turned on with the transmission in gear.

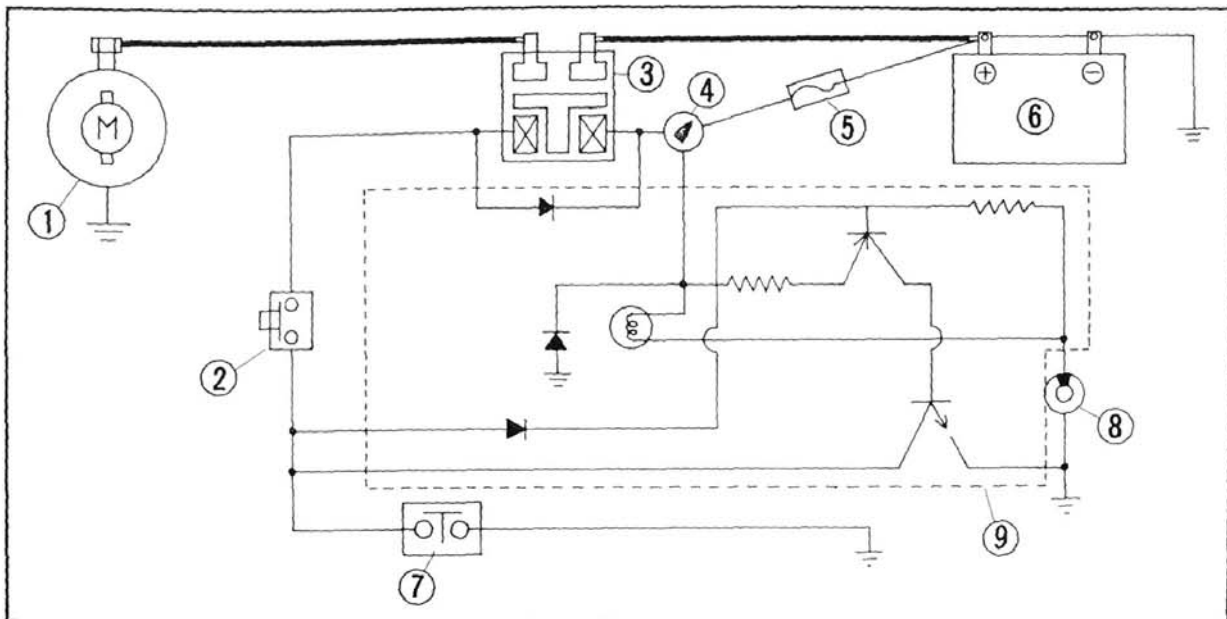


Fig. 20-83 Circuit of model (CB 750) with safety unit

- | | |
|---------------------------|-----------------------|
| ① Starting motor | ⑥ Battery |
| ② Starter button Switch | ⑦ Clutch lever switch |
| ③ Starter magnetic switch | ⑧ Neutral switch |
| ④ Main switch | ⑨ Safety unit |
| ⑤ Fuse | |

The ground side of the starter button switch is connected to the body through the clutch lever switch and neutral switch. When the clutch lever switch or the neutral switch is turned on the starter magnetic switch will operate to cause the starting motor to turn.

(1) Clutch lever switch

The clutch lever switch is designed to be turned on when the clutch lever is squeezed to cause the clutch to be disengaged only. (This switch has the same construction and function as those of the front stop switch.)

3. 3-CIRCUIT FUSES

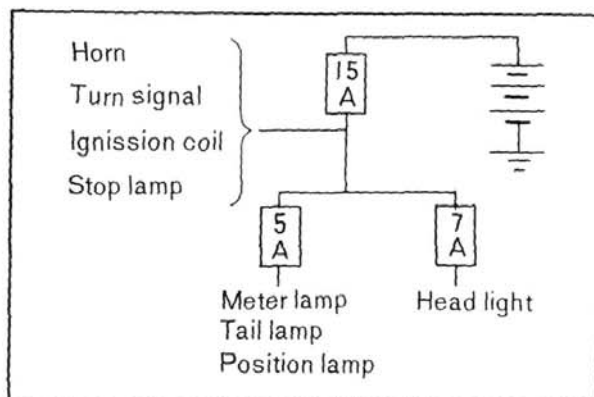


Fig. 20-84

In a conventional 1-circuit fuse, if it burns out, the engine cannot be started.

The 3-circuit fuses contain a 15A main fuse and two 7A and 5A subfuses, one for the headlight and the other for the position lamp, taillight and meter lamp. Even if the 7A fuse or 5A fuse or both burn out, the horn, turn signals, ignition switch and stop-light operate properly. However, it is wise to locate the cause of trouble and replace a damaged fuse with new one as soon as possible. The fuses are set in the fuse box which is taken out by opening the seat.

4. BRAKE LINING WEAR INDICATOR

Discription

The brake lining wear indicator is provided to check the wear condition of the brake linings visually from outside. As shown in the figure below, the indicator plate is attached to the brake cam. As the brake lining has worn, brake cam moves excessively. Such a movement of the cam is checked by the arrow on the periphery of the indicator. Further the brake panel cam boss is provided with the "wear limit" mark to make it possible to check the service limit (replacement time) of the lining easily with the brake panel installed.

Descriptive illustration

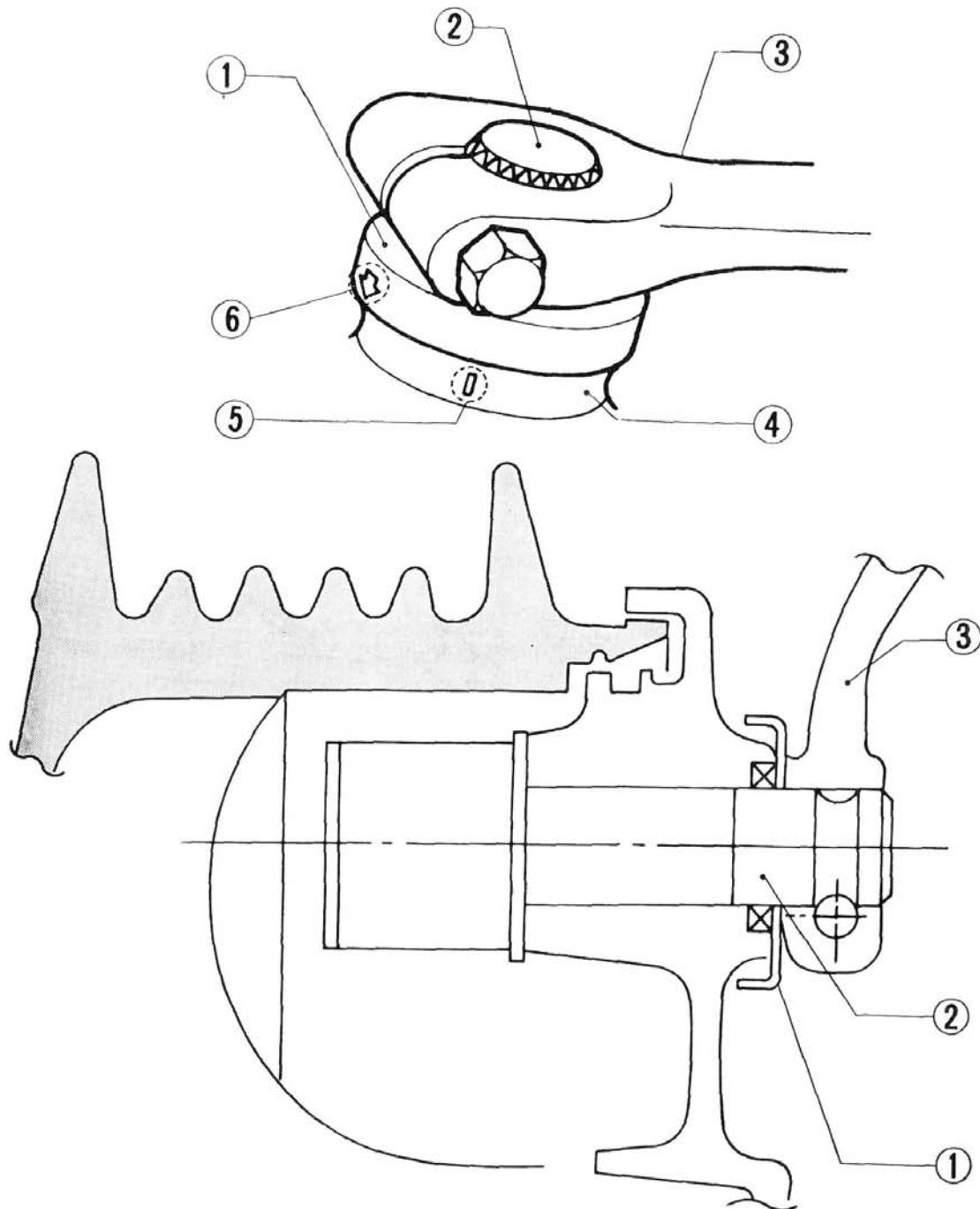


Fig. 20-85 ① Indicator plate
② Brake cam
③ Brake arm
④ Brake panel cam boss
⑤ "Wear limit" mark
⑥ Arrow

5. REAR SHOCK ABSORBER ASSEMBLIES

(K4 to K2 model)

The rear shock absorber assemblies feature the telescopic type oil dampers with bottom valve to give an optimum damping performance under all bumping and rebounditions. The damping performance on the extension side is well matched with that on the compression side, providing maximum damping.

Stroke of rear shock absorber: 86.3 mm (3.39 in.)

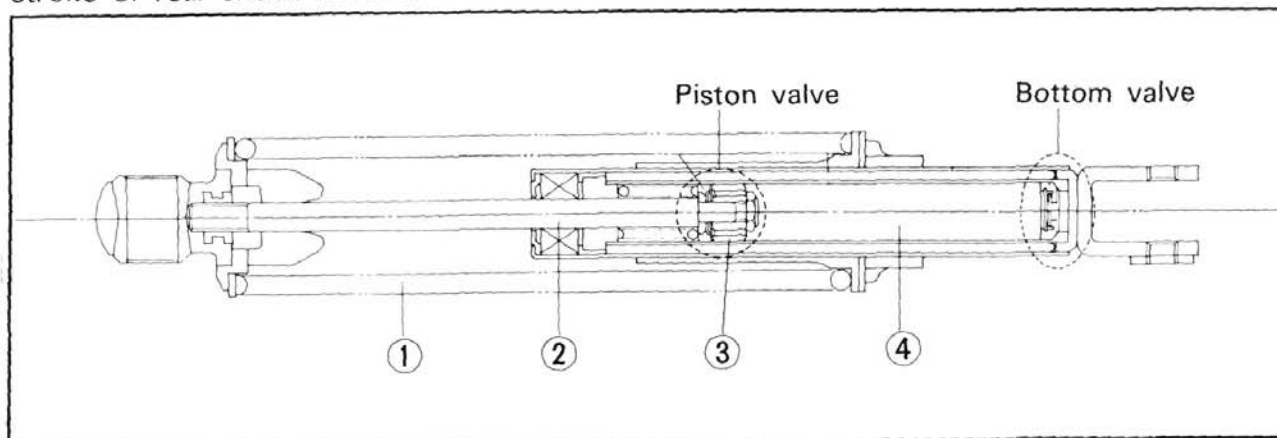


Fig. 20-86 ① Rear shock absorber spring ② Damper rod
③ Damper piston ④ Damper cylinder

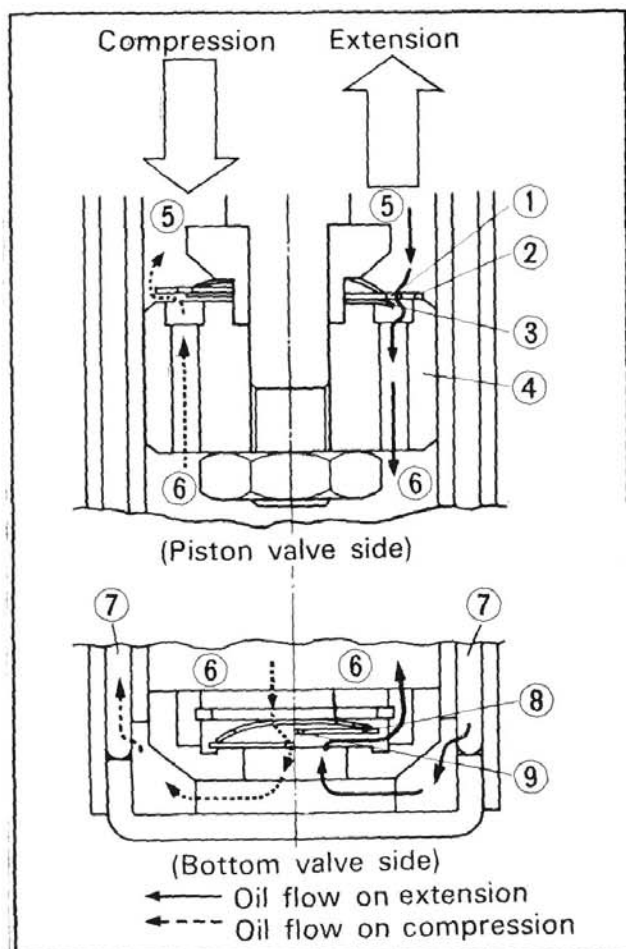


Fig. 20-87 ① Orifice (I) ② Valve "A"
③ Valve "B" ④ Piston
⑤ Chamber "a" ⑥ Chamber "b"
⑦ Chamber "c" ⑧ Bottom valve
⑨ Orifice (II)

Operation

Each oil damper is equipped with the piston valves A and B and bottom valve. On the extension side, the damping action is provided by means of the piston valves. While, on the compression side, the damping action is provided by means of the bottom valve.

On extension side:

The oil in the chamber [a] flows into the chamber [b] through the orifice (I) in the valve A (sheet metal). By the resisting force of this oil, the damping action is provided. The valve A is overlapped with the valve B (leaf spring) which covers the half of the orifice. The damping action is regulated by the deflection of the valve B. Under such a condition, the bottom valve is opened and the oil in the chamber [c] flows into the chamber [b] smoothly to prevent air bubbles from being produced.

On compression side:

The oil in the chamber [b] flows by amount of oil equivalent to the volume of damper rod into the chamber [c] through the orifice in the bottom valve. By the resisting force of this oil, the damping action is provided. At this time the piston valves are opened and the oil flows from the chamber [b] into the chamber [a] smoothly.

K4**COMPARISON OF CB750 K3 TO CB750 K4**

Part of item	CB 750 K3	CB 750 K4	Modified part
		The stripes on the fuel tank are changed.	

SUPPLEMENT TO CB750K5

GROUP

21

1. FUEL COCK

The fuel cock is new for the revised model. Concurrent with this change, the indication marks and their positions on fuel cock was changed. It was also relocated from the right to the left side of the fuel tank.

Inspection and cleaning

1. Place the fuel lever in the "OFF" position; disconnect the fuel tube. Take out the fuel tank.
2. Drain the fuel tank thoroughly.
3. Loosen the fuel cock fixing nut and then remove the fuel cock and fuel filter from the fuel tank.
4. Check the gasket to see if it is not damaged. Replace with a new one, if found to be damaged too badly beyond use.
5. Wash the fuel filter in solvent and dry with compressed air. Any slightest damage cannot be tolerated here. Also replace the filter with a new one if found to be clogged.
6. Install the fuel filter to the fuel cock with the fixing nut. Do not forget to install the gasket into the groove of the fixing nut.
7. Install the fuel cock to the fuel tank with the fixing nut.
8. Install the fuel tank in place on the frame; connect tube and secure with the clip.
9. Fill the tank with fuel. With the fuel cock lever in the "ON" position, check for any leakage past the tube joints or connections.

2. THROTTLE GRIP

The throttle grip adjuster, Fig. K5-3, hitherto offered, was discontinued.

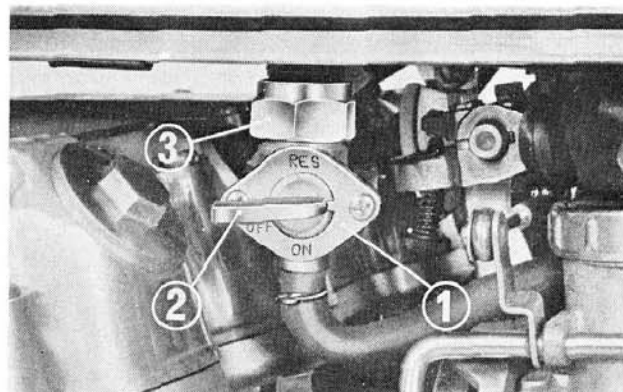


Fig. K5-1 ① Fuel cock ② Lever ③ Fuel cock fixing nut

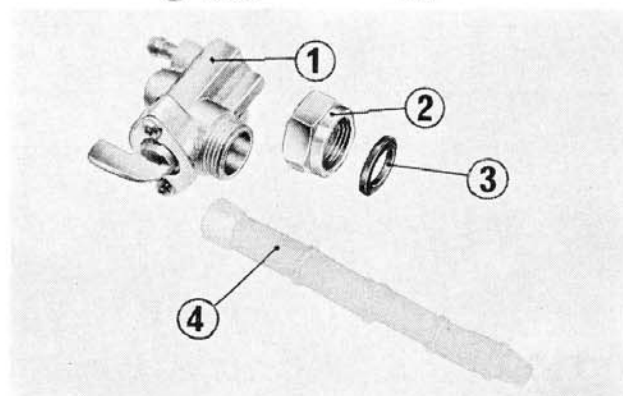


Fig. K5-2 ① Fuel cock ② Fixing nut ③ Gasket ④ Fuel filter

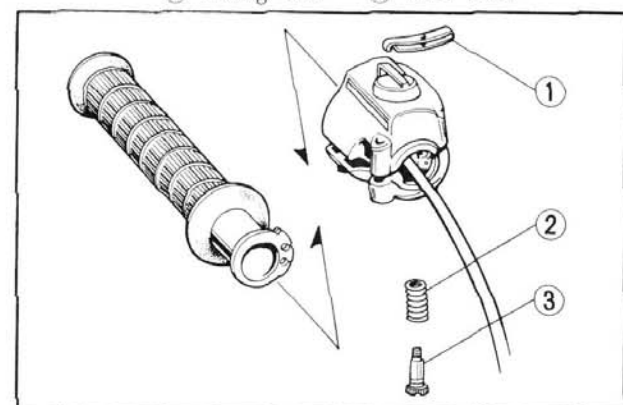


Fig. K5-3 ① Throttle grip adjuster ② Spring ③ Adjusting bolt

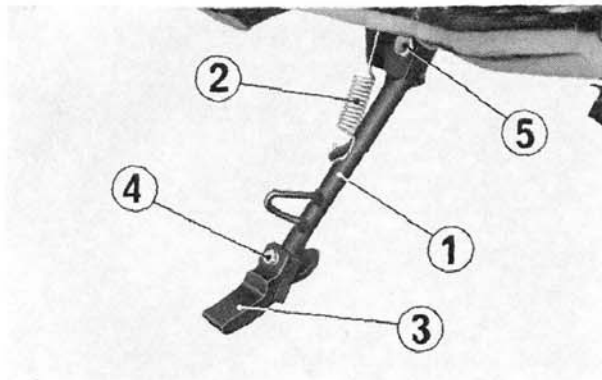


Fig. K5-4 ① Side stand bar
② Spring
③ Rubber pad
④ 6mm bolt
⑤ Side stand pivot bolt

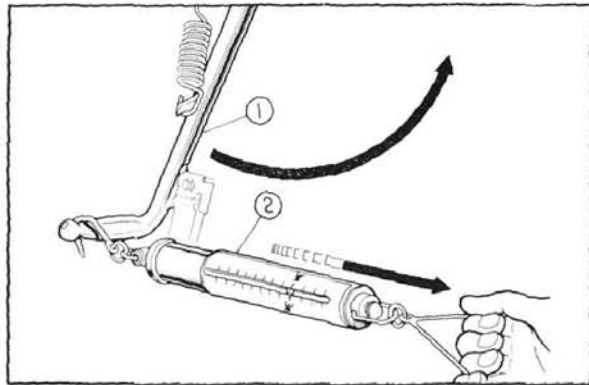


Fig. K5-5 ① Side stand bar
② Spring scale

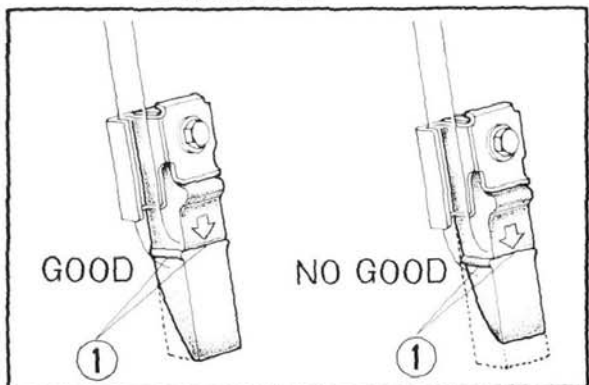


Fig. K5-6 ① Wear line

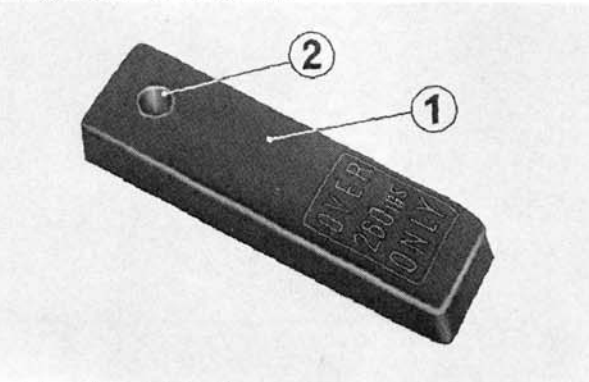


Fig. K5-7 ① Rubber pad
② Collar

3. SIDE STAND

The side stand was changed to a new type with a shock absorbing rubber pad. The stand must be inspected periodically to determine that it is in good condition.

Inspection

1. Check the entire stand assembly (side stand bar, bracket and rubber pad) for installation, deformation or otherwise excessive damage.
2. Check the spring for freedom from damage or other defects.
3. Check the side stand for proper return operation:
 - a. With the side stand applied, raise the stand off the ground by using the main stand.
 - b. Attach a spring scale to the lower end of the stand and measure the force with which the stand is returned to its original position.
 - c. The stand condition is correct if the measurement falls within 2-3 kg (4.4-6.6 lbs.).

If the stand requires force exceeding the above limit, this might be due to neglected lubrication, overtightened side stand pivot bolt, worn stand bar or bracket, or otherwise excessive tension. Repair as necessary.

4. Check the rubber pad for deterioration or wear.

When the rubber pad wear is excessive so that it is worn down to the wear line, replace it with a new one.

Rubber pad replacement

1. Remove the 6mm bolt; separate the rubber pad from the bracket at the side stand.
2. After making sure the collar is installed, put a new rubber pad in place in the bracket with the arrow mark out.

NOTE: Use rubber pad having the mark "OVER 260 lbs. ONLY".

3. Secure the rubber pad with the 6mm bolt.

4. TURN SIGNAL LIGHT

The front and rear turn signal lights were changed to new, larger types See Figs. K5-8 and K5-9.

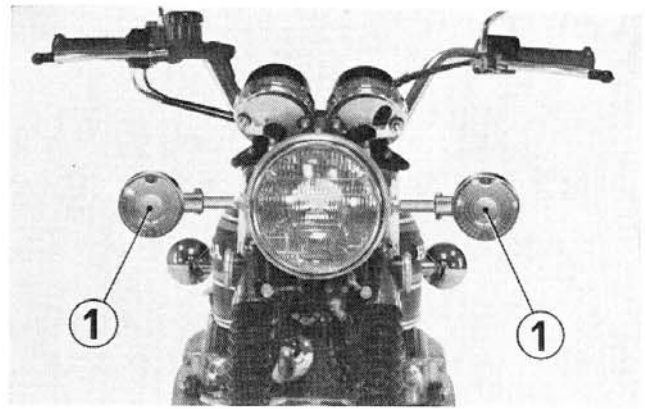


Fig. K5-8 ① Front turn signal light

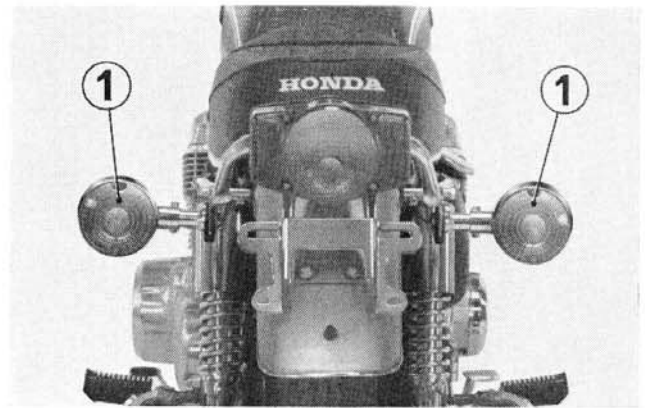


Fig. K5-9 ① Rear turn signal light

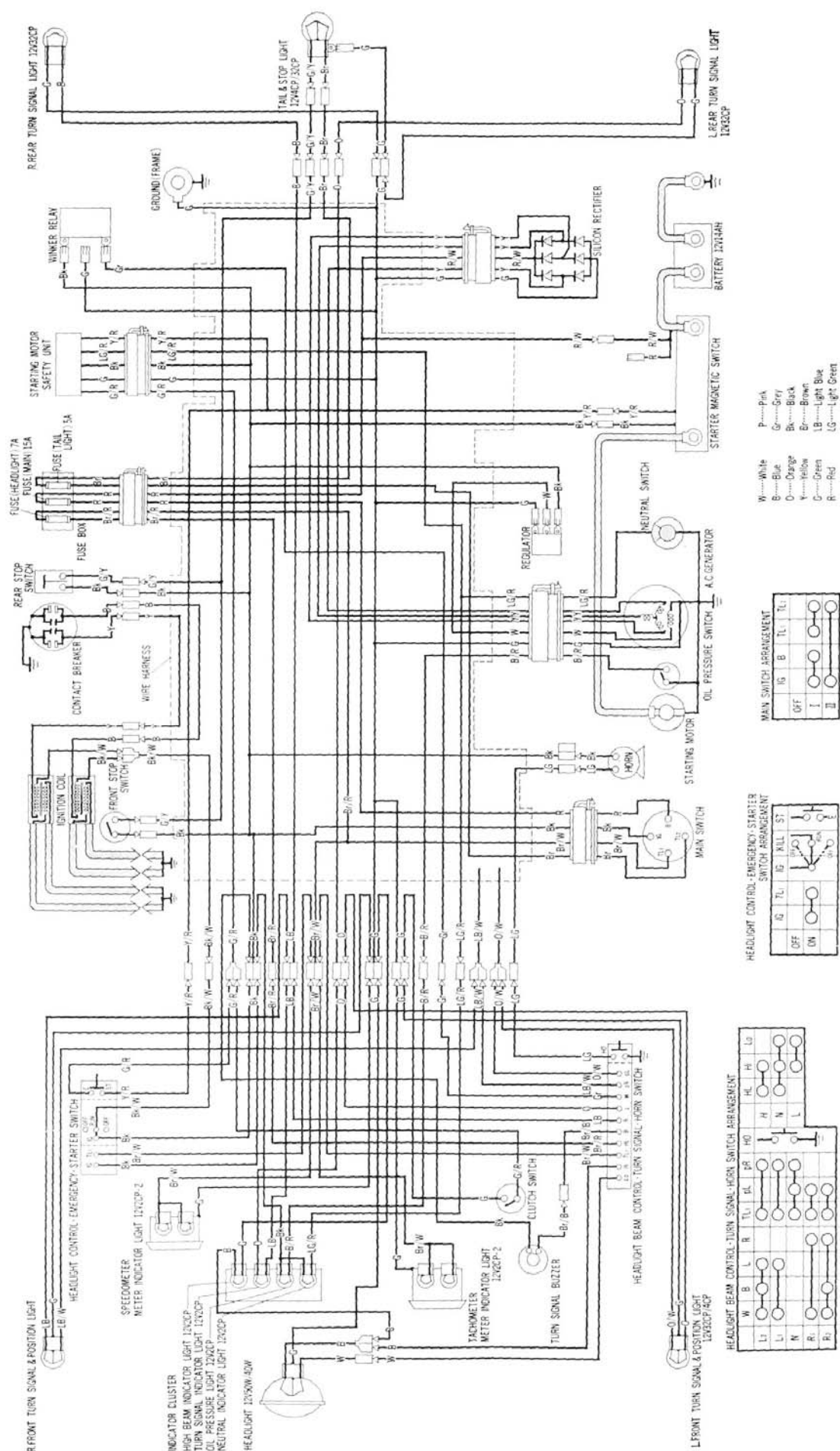
5. MAINTENANCE SCHEDULE

Some additions occurred in the MAINTENANCE SCHEDULE, of which details are as shown immediately below:

MAINTENANCE SCHEDULE This maintenance schedule is based upon average riding conditions. Machines subjected to severe use, or ridden in unusually dusty areas, require more frequent servicing.	INITIAL SERVICE PERIOD	REGULAR SERVICE PERIOD Perform at every indicated month or mileage interval, whichever occurs first.			
		1 month	3 months	6 months	12 months
	500 miles	500 miles	1,500 miles	3,000 miles	6,000 miles
*SIDE STAND—Check installation, operation, deformation, damage and wear.				○	

Items marked * should be serviced by an authorized Honda dealer, unless the owner has proper tools and is mechanically proficient. Other maintenance items are simple to perform and may be serviced by the owner.

6. WIRING DIAGRAM



1. LUBRICATION SYSTEM

The drive chain lubricating mechanism, page 189, was discontinued. Concurrent with this change, the final drive system will incorporate a new, modified driven shaft as shown.

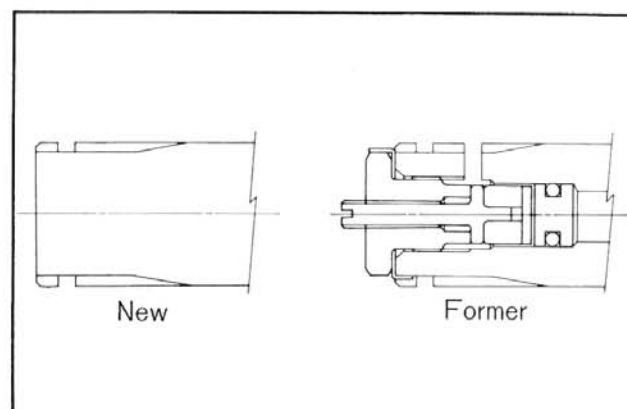


Fig. K6-1 Final driven shaft

2. CLUTCH

Effective with the subject machine serial number, all CB750 will include a 40mm snap ring to retain the clutch outer on the primary driven sprocket.

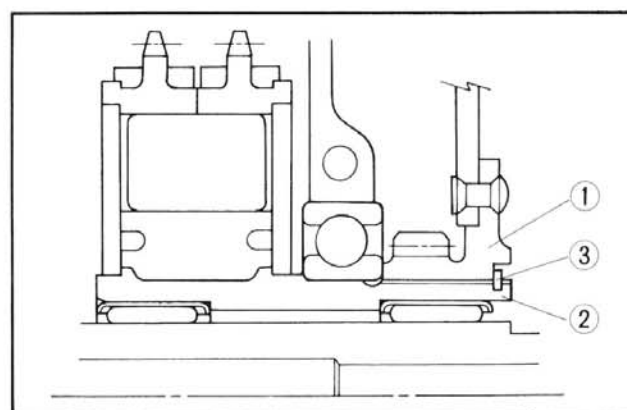


Fig. K6-2 ① Clutch outer ③ 40mm snap ring
② Primary driven sprocket

3. CARBURETOR

The carburetor will be a continuation from the previous type with the exception that the throttle stop screw is relocated from the left to the right side. Specifications of the revised carburetor are as shown immediately below:

Setting No.	086A
Main jet	#105
Slow jet	#40
Air screw opening	$1 \pm 1/8$
Float height	26 mm (1,024 in.)

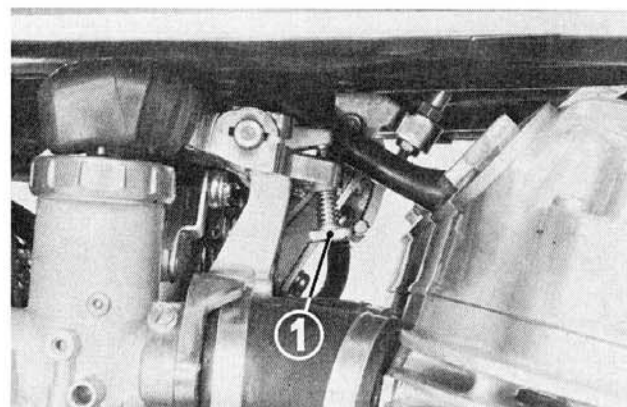


Fig. K6-3 ① Throttle stop screw

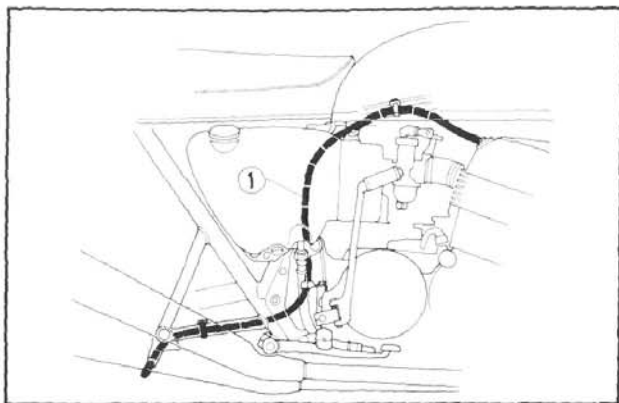


Fig. K6-4 ① Breather tube

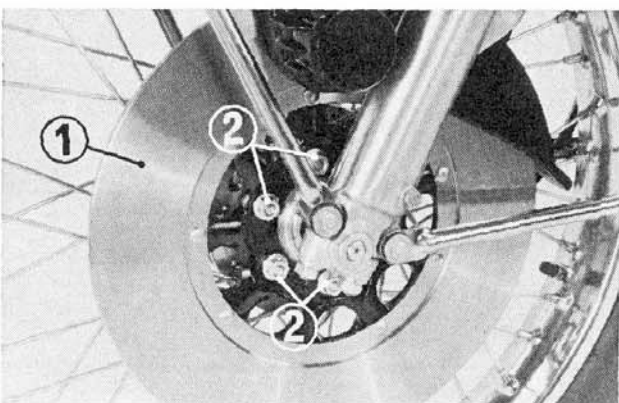
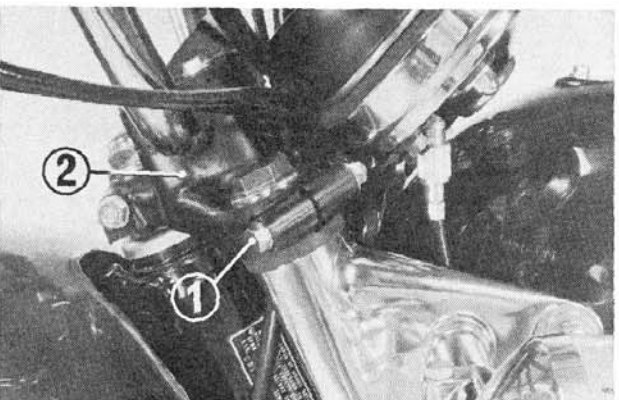
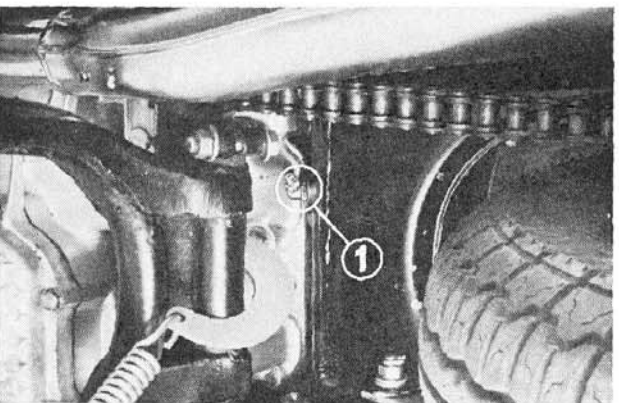
Fig. K6-5 ① Front brake disc
② USB nutFig. K6-6 ① 7mm flange bolt
② Fork top bridge

Fig. K6-7 ① Grease nipple

4. BREATHER TUBE

The breather tube has been rerouted. The tube will extend down along the right rear fork arm as shown. The end of the tube will be kept more than 50mm (2 in.) away from the rear wheel.

5. FRONT WHEEL

The front brake will no longer use the tanged washer and nut arrangement for the attachment of the brake disc to the wheel hub. The disc is now tightened with USB nuts.

Tightening torque: 270-230 kg-cm
(20-24 lbs-ft)

6. FORK TOP BRIDGE

The flanged bolts used for tightening the fork top bridge will be changed in size from 8mm to 7mm.

Tightening torque: 180-250 kg-cm
(13-18 lks-ft)

7. DRIVE CHAIN

CB750 now use a new, improved drive chain in place of the one formerly used. For maintenance service tips, see page 230. Use new Drive Chain Joint Tool Set (Tool No. 07975-3000002) when replacing the drive chain.

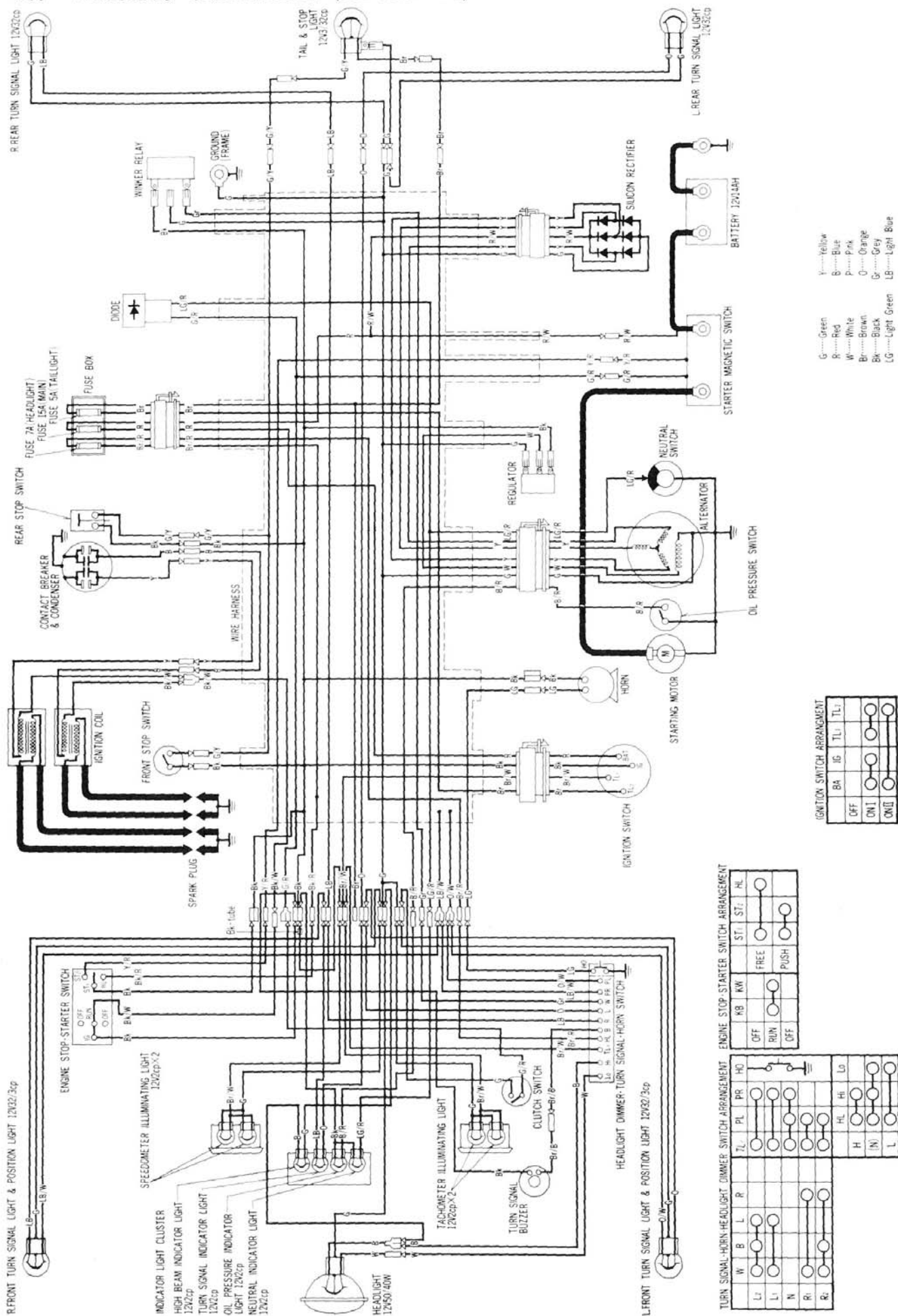
8. REAR FORK

The rear fork pivot pipe now has a grease nipple at its center. The grease nipples formerly located at both ends of the rear fork pivot bolt were discontinued.

9. SPECIFICATIONS (CB750 '76)

Item	
DIMENSION	
Overall Length	2,175 mm (85.6 in.)
Overall Width	870 mm (34.3 in.)
Overall Height	1,170 mm (46.1 in.)
Wheel Base	1,455 mm (57.3 in.)
Seat Height	810 mm (31.9 in.)
Foot Peg Height	310 mm (12.2 in.)
Ground Clearance	140 mm (5.5 in.)
Dry Weight	218 kg (479 lb.)
FRAME	
Type	Double Cradle
F. Suspension, Travel	Telescopic fork, travel 143 mm (5.6 in.)
R. Suspension, Travel	Swing arm, travel 85 mm (3.3 in.)
F. Tire Size, Type	3.25-19-4 PR Rib, tire air pressure 2.0/2.25 kg/cm ² (28/32 psi)
R. Tire Size, Type	4.00-18-4 PR Block, tire air pressure 2.0/2.8 kg/cm ² (28/40 psi)
F. Brake	Disk Brake
R. Brake	Internal expanding shoe
Fuel Capacity	17 lit. (4.5 U.S. gal. 3.7 Imp. gal.)
Fuel Reserve Capacity	5 lit. (1.3 U.S. gal. 1.1 Imp. gal.)
Caster Angle	63°
Trail Length	95 mm (3.7 in.)
Front Fork Oil Capacity	155~160 cc (5.3~5.4 ozs.)
ENGINE	
Type	Air cooled 4 stroke O.H.C. engine
Cylinder Arrangement	4 cylinder in line
Bore and Stroke	61.0×63.0 mm (2.402×2.480 in.)
Displacement	736 cc (44.9 cu in.)
Compression Ratio	9.0 : 1
Carburetor, Venturi Dia.	Four piston valve type, venturi dia. 28 mm (1.102 in.)
Valve Train	chain driven over head cam shaft
Oil Capacity	3.5 lit. (3.7 U.S. qt 3.1 Imp. qt)
Lubrication System	Forced pressure and dry sump
Fuel Required	Low-lead gasoline with 91 octane number or higher
Air Filtration	Paper filter
Valve Tappet Clearance	IN 0.05 EX 0.08 mm (IN: 0.002, EX 0.003 in.)
Air Screw Opening	1
Idle Speed	950 rpm
DRIVE TRAIN	
Clutch	wet multi plate type
Transmission	5-speed constant mesh
Primary Reduction	1.708
Gear Ratio I	2.500
II	1.708
III	1.333
IV	1.097
V	0.939
Final Reduction	2.667, drive sprocket 18 T, driven sprocket 48 T
Gear Shift Pattern	Left foot operated return system
ELECTRICAL	
Ignition	Battery and ignition coil
Starting System	Starting motor or kick starten
Alternator	Three phase AC Generator 0.21 kw/5,000 rpm
Battery Capacity	12 V-14 AH
Fuse Capacity	15 amp.
Spark plug	NGK D8ES-L NDX 24ES

10. WIRING DIAGRAM (CB750 '76)



SUPPLEMENT TO CB 750 K7 '77

Engine No. CB 750 E—2700001 and
subsequent

Frame No. CB 750—2700002 and
subsequent

GROUP

24

1. CARBURETOR

A. Removal and installation

1. Turn the fuel valve lever to the "OFF" position and disconnect the fuel tube at the fuel valve.
2. Open the seat and remove the fuel tank.
3. Remove the air cleaner lower case by loosening the two mounting bolts. Loosen the air cleaner connecting bands and remove the two air cleaner hanger bolts. Remove the air cleaner upper case from the carburetors.
4. Remove the throttle and choke cables from the cable holder and disconnect them from the shaft levers.
5. Loosen the carburetor insulator bands and take out the carburetor assembly.
6. To install the carburetor assembly, reverse the removal procedure.

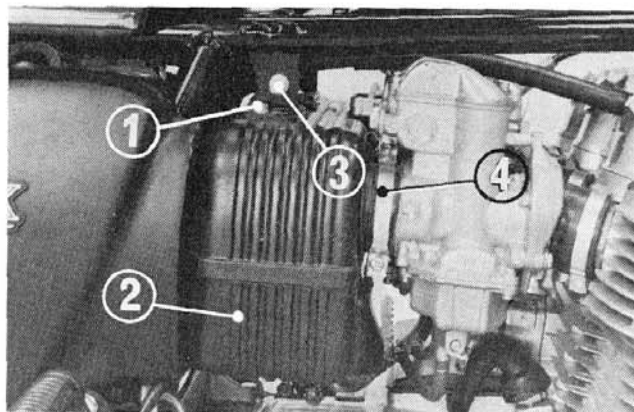


Fig. K7-1 ① Air cleaner mounting bolt
② Lower case
③ Hanger bolt
④ Connecting band

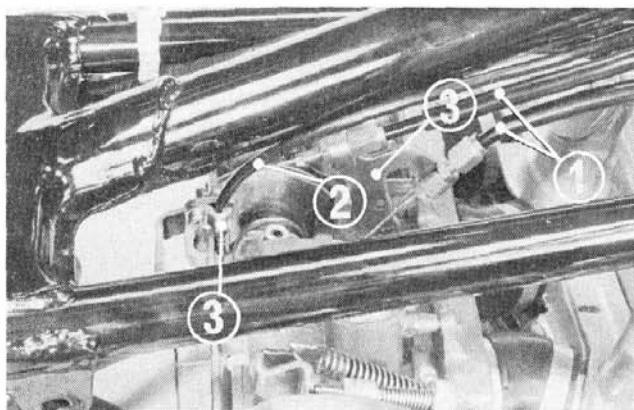


Fig. K7-2 ① Throttle cable
② Choke cable
③ Cable holder

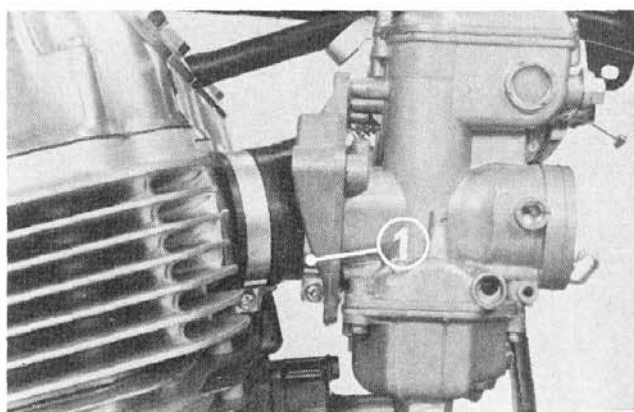


Fig. K7-3 ① Carburetor insulator band

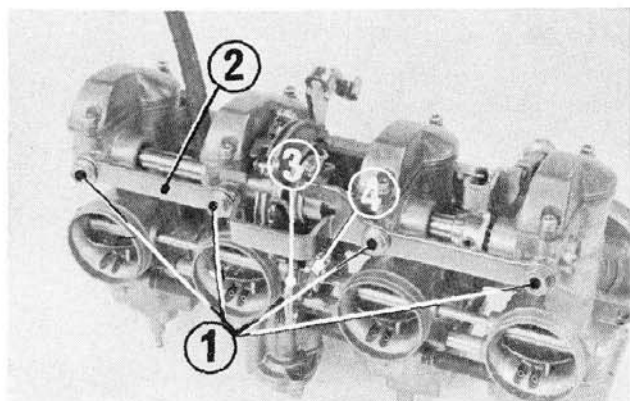


Fig. K7-4 ① Bolt ③ Choke relief spring
② Rear stay ④ Choke lever

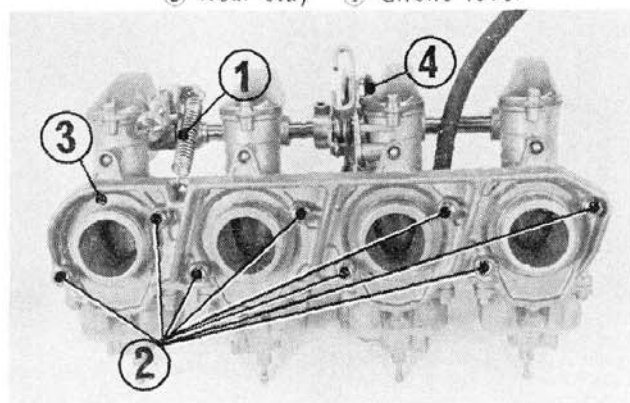


Fig. K7-5 ① Throttle return spring
② Screw ③ Stay plate
④ Accelerator pump spring

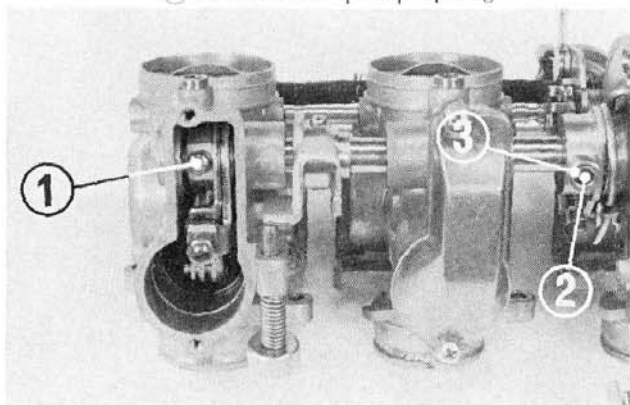


Fig. K7-6 ① Link arm fixing screw
② Set screw ③ Lock nut

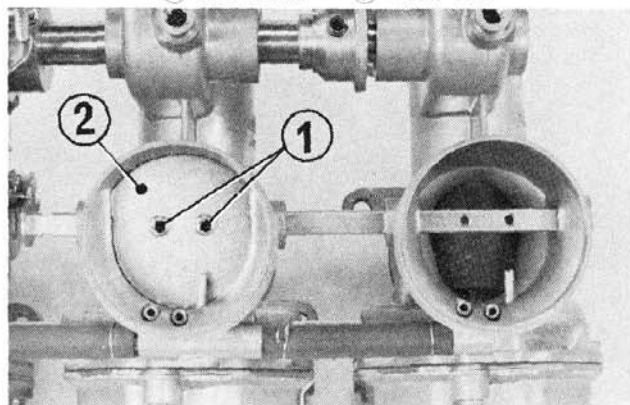


Fig. K7-7 ① Screws ③ Tube
② Choke valve

B. Disassembly

Carburetor, throttle valve and jet needle:

1. Remove the carburetor assembly from the engine.
2. Remove the rear stay from the carburetor assembly by loosening the four bolts.
3. Unhook the throttle return spring from the stopper arm. Remove the stay plate by loosening the eight screws. Remove the accelerator pump spring. Unhook the choke relief spring at the choke lever.
4. Remove the carburetor top by loosening the two screws.
5. Loosen the link arm fixing screw. Loosen the lock nut and remove the throttle lever set screw.
6. Remove the choke valve from the choke shaft by loosening the two screws. Remove the accelerator pump fuel tubes.
7. Separate the carburetors.

8. Remove the link arm assembly from the carburetor.
9. Loosen the two screws and remove the throttle valve and jet needle from the link arm.

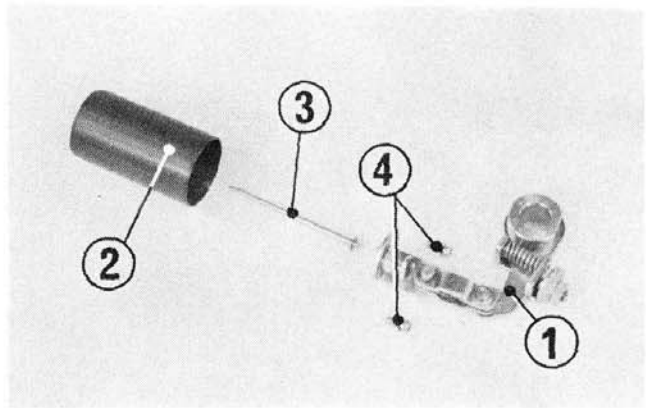


Fig. K7-8 ① Link arm
② Throttle valve
③ Jet needle
④ Screw

Float, main jet, slow jet and accelerator pump:

1. Remove the carburetor assembly from the engine.
 2. Remove the float chamber body from the carburetor by loosening the three screws.
 3. Pull out the float arm pin and remove the float.
 4. Remove the main jet and slow jet.
5. Remove the accelerator pump from the No. 2 carburetor by unscrewing the three screws.

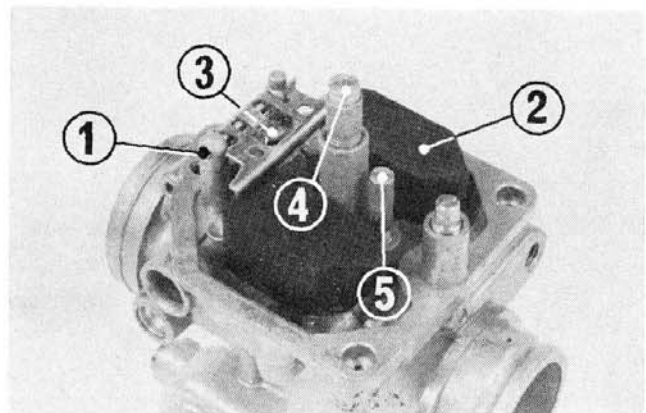


Fig. K7-9 ① Float arm pin
② Float
③ Float valve
④ Main jet
⑤ Slow jet

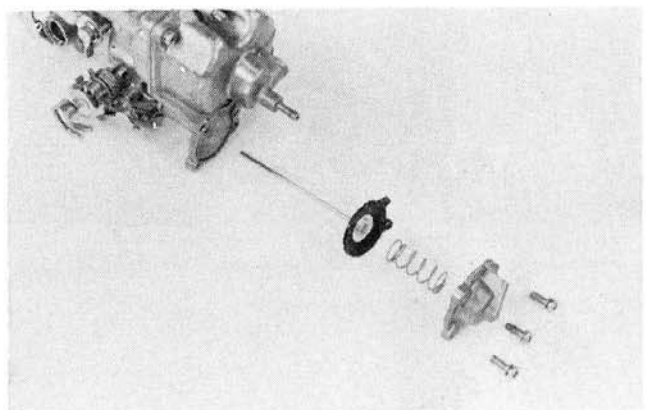


Fig. K7-10 Accelerator pump

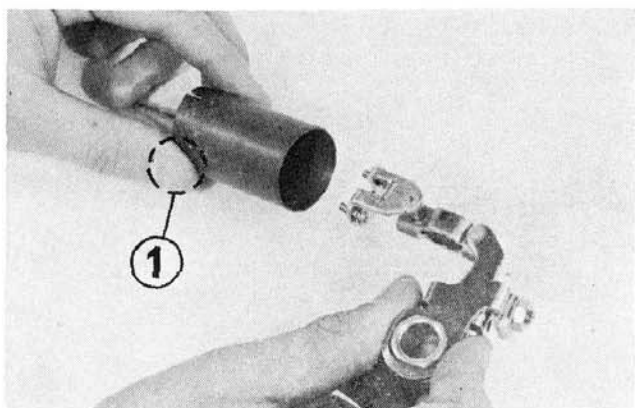


Fig. K7-11 ① Throttle valve cutaway

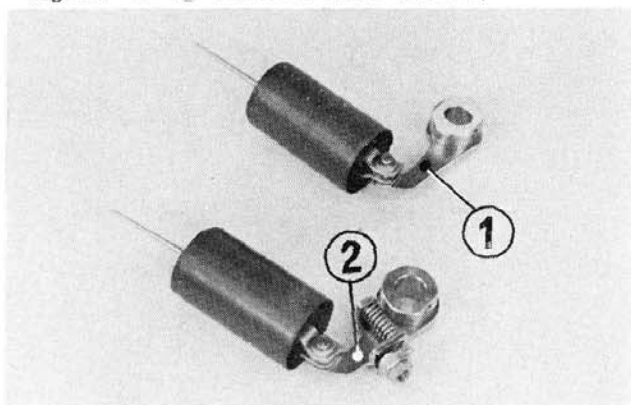


Fig. K7-12 ① Link arm for No. 2 carburetor
② Link arm for No. 1, 3 and 4 carburetor

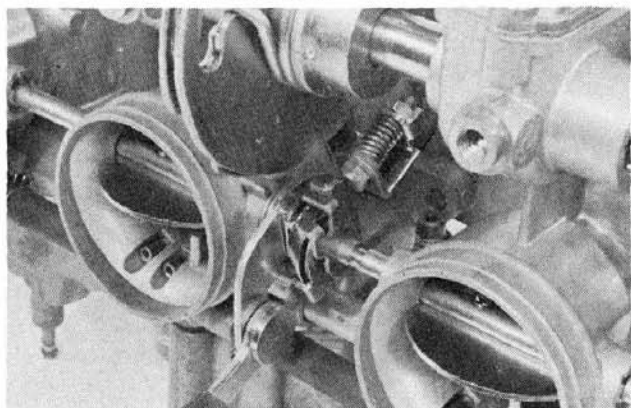


Fig. K7-13

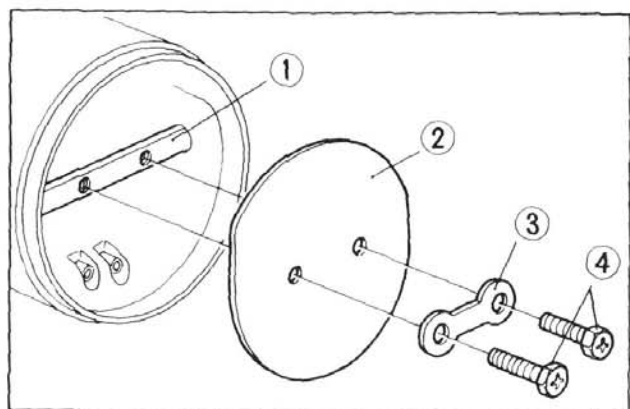


Fig. K7-14 ① Choke shaft
② Choke valve
③ Lock washer
④ Hex. head screw

C. Assembly

To assemble the carburetor, reverse the disassembly procedure. Observe the following notes:

1. Install the throttle valve to the link arm so that the throttle valve cutaway is toward the choke valve when it is installed in the carburetor body.
2. The link arm which is not equipped with the adjusting screw should be installed in the No. 2 carburetor.
3. Install the choke shaft levers and springs properly as shown in Fig. K7-13.
4. Install the choke valve to the choke shaft by using the lock washer and hex. head screws and bend the lock washer to lock the screws.

NOTE: The choke valve securing screws are peened when assembling the carburetor at the factory. Discard the used screws.

D. Carburetor setting table

Item	
Main jet No.	#115
Air jet No.	#150
Slow jet No.	#35
Slow air jet No.	#150
Jet needle setting	F2D51E-1
Float height	12.5 mm (0.492 in.)

E. Adjustment

Idle speed:

Make the adjustment after warming up the engine.

1. Adjust the idle stop screw to allow the engine to run at the idle speed of 950 to 1,050 rpm.
2. Turn the pilot screw either in or out to obtain the highest idle speed. Usually the correct setting will be found to be $1\frac{1}{2}$ turns open from a fully closed position.
3. If idle speed changes after adjusting the pilot screw, readjust the idle stop screw.

Synchronizing carburetors:

1. Remove the fuel tank. Position the fuel tank higher than the carburetors and reconnect with a longer fuel tube.
2. Connect the vacuum gauge set to the carburetors.
3. Run the engine at the specified idle speed and read the vacuum. The vacuum gauge readings should be the same on all four gauges.
4. To adjust, proceed as follows:
 - a. Remove the carburetor tops from the No. 1, 3 and 4 carburetors.
 - b. Loosen the lock nut and turn the adjusting screw until the vacuum reading becomes the same as the No. 2 carburetor reading.

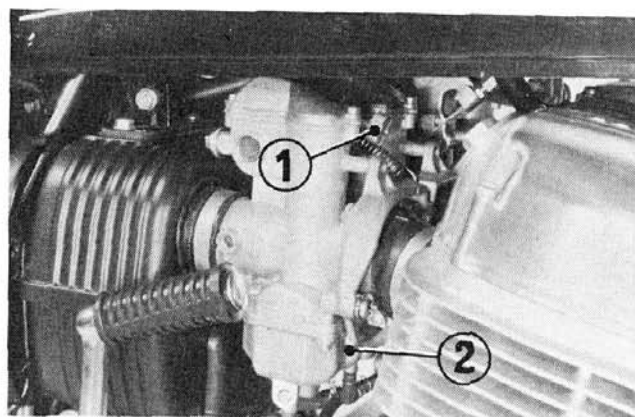


Fig. K7-15 ① Idle stop screw
② Pilot screw

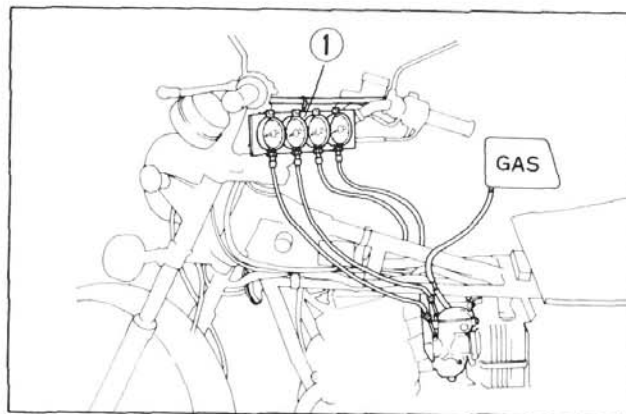


Fig. K7-16 ① Vacuum gauge set

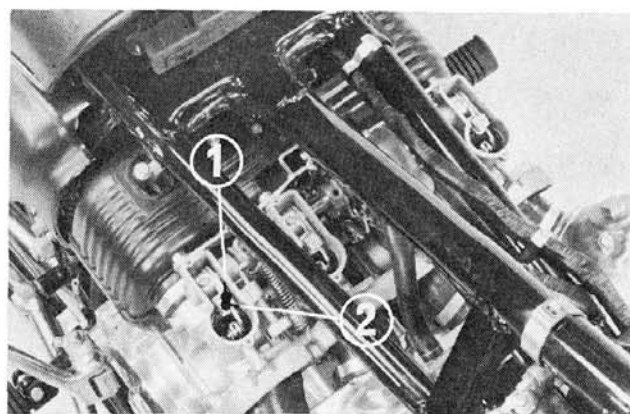


Fig. K7-17 ① Lock nut
② Adjusting screw

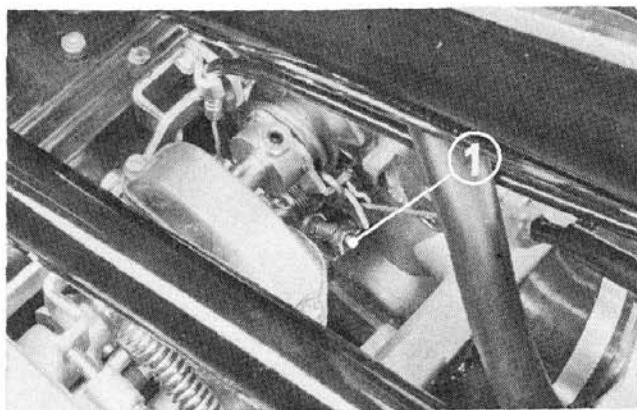


Fig. K7-19 ① Adjusting screw

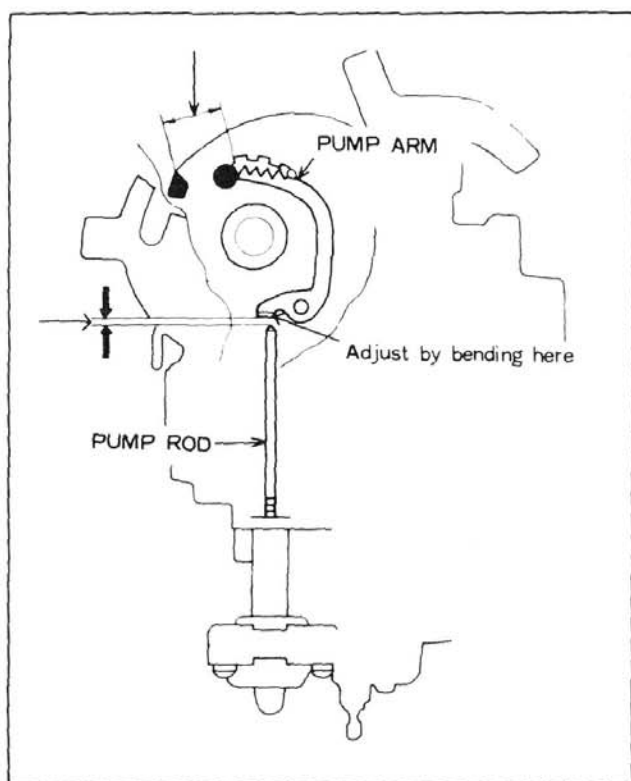


Fig. K7-20

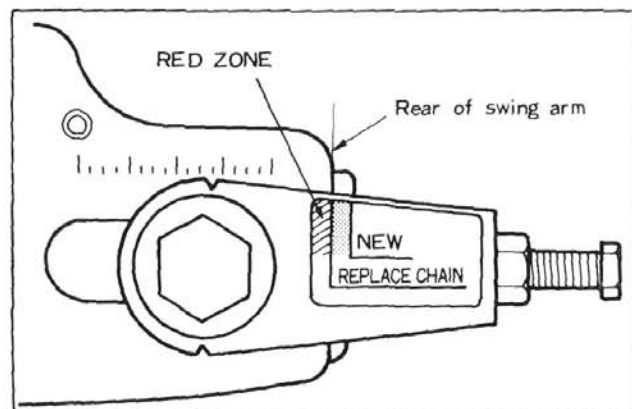


Fig. K7-21

Fast idle:

1. Remove the fuel tank.
 2. Pull the choke knob out fully and turn the adjusting screw until it touches the stopper.
 3. Push the choke knob in and turn the adjusting screw in 2 1/2 turns.
- Fast idle speed: 3,000~4,000 rpm

Accelerator pump:

1. Remove the carburetor assembly from the engine.
2. Measure the pump rod-to-pump arm clearance with the throttle valve closed. The clearance should be 0 to 0.2 mm (0 to 0.008 in.). To adjust, bend the pump arm tang.
3. Measure the pump arm-to-carburetor stay clearance with the throttle valve closed. The clearance should be 9.5 to 10.5 mm (0.374 to 0.413 in.). To adjust, bend the pump arm.

2. DRIVE CHAIN**A. Inspection**

1. Check for damaged rollers, loose pins, or missing O-rings. Replace if necessary.
2. Check for kinked, binding, dry, or rusted links. Lubricate only with SAE 80 or 90 gear oil, if necessary.

B. Adjustment

To adjust the drive chain, perform in the same manner described on page 186. Observe the following notes:

1. Drive chain tension: 20 mm (3/4 in.)
2. 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 20 mm (3/4 in.) slack, the chain is excessively worn and must be replaced.

C. Lubricating and cleaning

The drive chain is equipped with O-rings. The O-rings 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.

D. Replacement

The drive chain cannot be replaced by using a drive chain joint tool. Replace using the following procedure.

1. Remove the drive chain case and rear wheel.
2. Loosen the two 10 mm bolts that secure the rear shock absorbers to the rear swing arm.
3. Unscrew the rear fork pivot nut and pull out the rear fork pivot bolt. Remove the rear fork from the frame.

4. Remove the gear change pedal, transmission cover and left crankcase rear cover.

5. Remove the drive sprocket by loosening the 8 mm bolt. Remove the drive chain.

Replacement chain:

DID630DL or designation of RK630SD chain.

6. To install the drive chain, reverse the removal procedure described above.

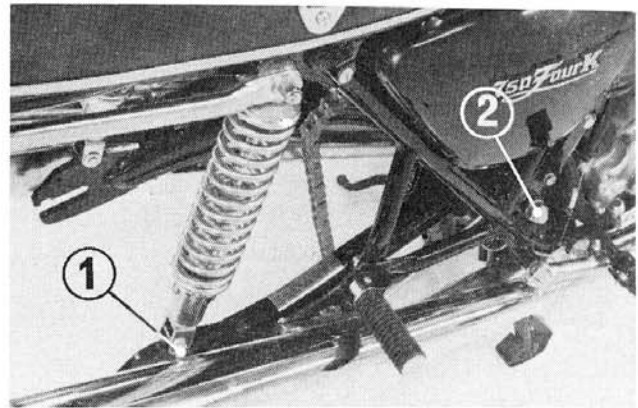


Fig. K7-22 ① 10 mm bolt
② Rear fork pivot nut

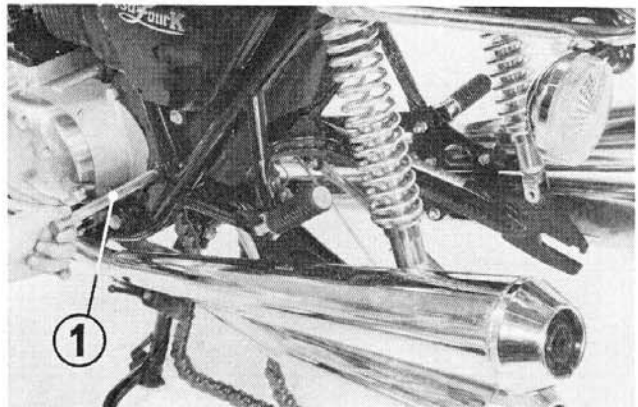


Fig. K7-23 ① Rear fork pivot bolt

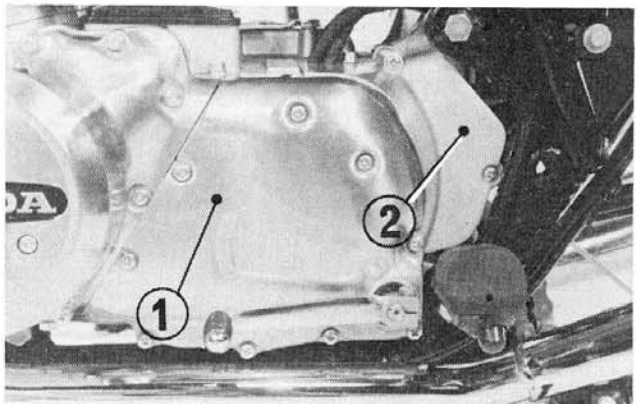


Fig. K7-24 ① Transmission cover
② Left crankcase rear cover

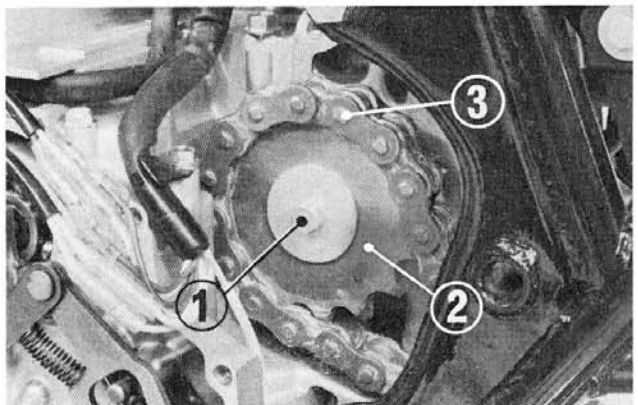


Fig. K7-25 ① 8 mm bolt
② Drive sprocket
③ Drive chain

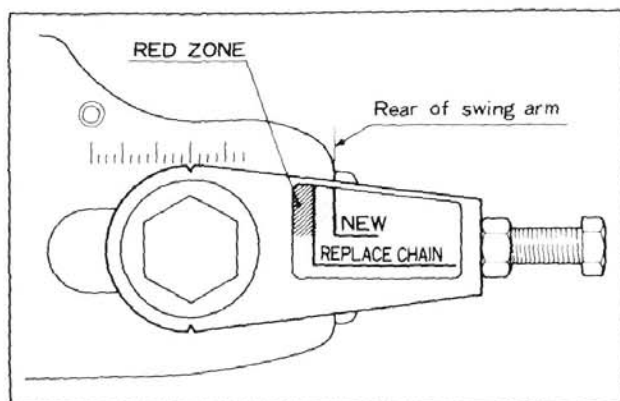


Fig. K7-26

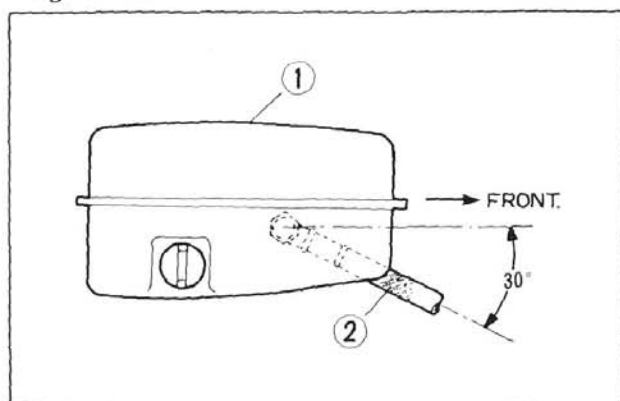
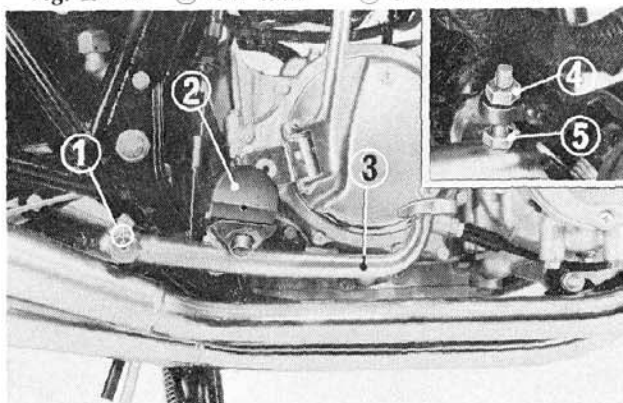
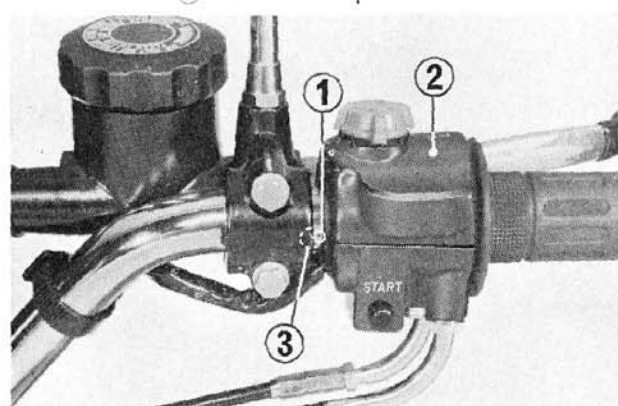


Fig. K7-27 ① Oil tank ② Suction hose

Fig. K7-28 ① Punch marks ④ Lock nut
② Foot peg ⑤ Stopper bolt
③ Rear brake pedalFig. K7-29 ① Punch mark
② Switch housing
③ Aligning mark on holder

7. Adjust the chain tension properly.

Attach a new label to the left drive chain adjuster so that the right side end of the green zone aligns with the rear of the swing arm as shown in Fig. K7-26.

3. ENGINE OIL TANK

Connect the suction hose to the oil tank as shown in fig. K7-27 to prevent interference of the rear brake middle arm and the suction hose when the brake is applied.

4. REAR BRAKE PEDAL

A. Installation

Install the brake pedal so that the punch mark on the pedal is aligned with the punch mark on the rear brake spindle.

B. Adjustment

1. Adjust the brake pedal height so that the foot peg-to-pedal distance is 10 mm (0.4 in.). To adjust, loosen the lock nut and turn the stopper bolt in or out.
2. Adjust the pedal free play by turning the rear brake adjusting nut.

Free play: 20–30 mm (0.8–1.2 in.)

5. SWITCH HOUSING

When installing the right or left switch housing, align the mating edges of the housing with the punch mark on the handlebar and tighten the two screws securely.

The aligning mark on the brake lever bracket holder should be also lined up with the punch mark.

5. SERVICE DATA

A. Service data

	Standard value	Service limit
Front shock absorber spring free length	504.3 mm	480 mm
Rear shock absorber spring free length	232.9 mm	220 mm
Front brake: Caliper cylinder I.D.	42.85–42.90 mm	42.91 mm
Caliper piston O.D.	42.82 mm	42.81 mm

B. Torque specifications

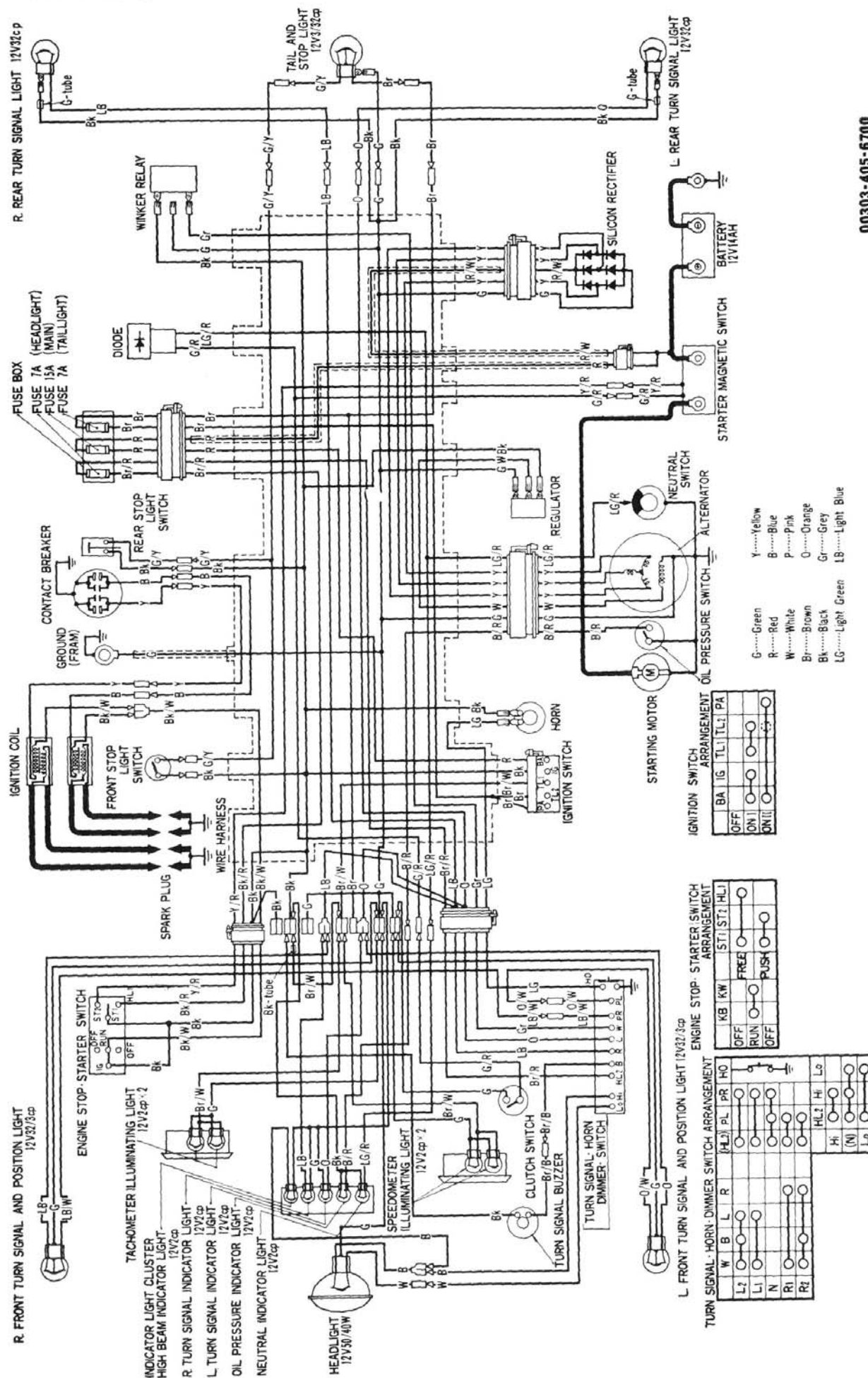
Connecting rod cap	7 mm	1.8– 2.2 kg-m	(13.0–15.9 lb-ft)
Cylinder head	8 mm	2.0– 2.5 kg-m	(14.5–18.1 lb-ft)
Flywheel	12 mm	10.0–12.0 kg-m	(72.3–86.7 lb-ft)
Drive sprocket	8 mm	1.8– 2.2 kg-m	(13.0–15.9 lb-ft)
Clutch center	16 mm	4.0– 4.2 kg-m	(28.9–30.4 lb-ft)
Upper crankcase	8 mm	2.0– 2.5 kg-m	(14.5–18.1 lb-ft)
Lower Crankcase	8 mm	2.0– 2.5 kg-m	(14.5–18.1 lb-ft)
Cam sprocket	7 mm	1.8– 2.2 kg-m	(13.0–15.9 lb-ft)

6. SPECIFICATION (CB750K '77)

Item	
DIMENSION	
Overall Length	2,280 mm (89.8 in.)
Overall Width	880 mm (34.6 in.)
Overall Height	1,185 mm (46.7 in.)
Wheel Base	1,495 mm (58.9 in.)
Seat Height	810 mm (31.9 in.)
Foot Peg Height	330 mm (13.0 in.)
Ground Clearance	150 mm (5.9 in.)
Dry Weight	231 kg (508 lb.)
FRAME	
Type	Double Cradle
F. Suspension, Travel	Telescopic fork, travel 141.5 mm (5.6 in.)
R. Suspension, Travel	Swing arm, travel 101.6 mm (4.0 in.)
F. Tire Size, Type	3.50 H-19-4 PR Rib, tire air pressure 2.0/2.0 kg/cm ² (28/28 psi)
R. Tire Size, Type	4.50 H-17A-4 PR Block, tire air pressure 2.25/2.8 kg/cm ² (32/40 psi)
F. Brake	Disk Brake
R. Brake	Internal expanding shoe
Fuel Capacity	19 lit. (5.0 U.S. gal. 4.2 Imp. gal.)
Fuel Reserve Capacity	4 lit. (1.1 U.S. gal. 0.9 Imp. gal.)
Caster Angle	62°
Trail Length	115 mm (4.5 in.)
Front Fork Oil Capacity	145~155 cc (5.3~5.4 ozs.)
ENGINE	
Type	Air cooled 4 stroke O.H.C. engine
Cylinder Arrangement	4 cylinder in line
Bore and Stroke	61.0×63.0 mm (2.402×2.480 in.)
Displacement	736 cc (44.9 cu in.)
Compression Ratio	9.2 : 1
Carburetor, Venturi Dia.	Four piston valve type, venturi dia. 28 mm (1.102 in.)
Valve Train	Chain driven over head cam shaft
Oil Capacity	3.5 lit. (3.7 U.S. qt 3.1 Imp. qt)
Lubrication System	Forced pressure and dry sump
Fuel Required	Low-lead gasoline with 91 octane number or higher
Air Filtration	Paper filter
Intake Valve: Opens	0° BTDC
Closes	40° ATDC
Exhaust Valve: Opens	40° BBDC
Closes	0° ATDC
Valve Tappet Clearance	IN: 0.05 EX: 0.08 mm (IN: 0.002, EX: 0.003 in.)
Pilot Screw Opening	Fixed by idle limiter (1-1/2±1/2)
Idle Speed	1,000 rpm

Item	
DRIVE TRAIN	
Clutch	Wet multi plate type
Transmission	5-speed constant mesh
Primary Reduction	1.708
Gear Ratio I	2.500
II	1.708
III	1.333
IV	1.133
V	0.969
Final Reduction	2.733, drive sprocket 15 T, driven sprocket 41 T
Gear Shift Pattern	Left foot operated return system
ELECTRICAL	
Ignition	Battery and ignition coil
Ignition Advance:	
"F" mark	10° BTDC
Max. advance	35°
RPM from "F" to max. advance	1,200–2,500 rpm
Dwell Angle	190° ± 5°
Starting System	Starting motor or kick starter
Alternator	Three phase AC Generator 0.21 kW/5,000 rpm
Battery Capacity	12 V–14 AH
Fuse Capacity	Main: 15 amp. Head: 7 A Tail: 5 A
Spark plug	NGK D8ES–L ND X24ES (U.S.A. model) NGK DR8ES–L ND X24ESR (Canadian model)
Condenser Capacity	0.20–0.24 μ F

7. WIRING DIAGRAM



00303-405-6700

SUPPLEMENT TO CB750K8 ('78)

Engine No. CB750E—3000001 and
subsequent

Frame No. CB750K—2800001 and
subsequent

GROUP
26

1. AIR CLEANER

Breather Element Cleaning

1. Remove the left side cover, chain protector and diode rectifier. Remove the 6 mm breather element case mounting bolt, disconnect the breather tubes and remove the breather element case.
2. Loosen the four screws and remove the case cover.
3. Remove the retaining plate and breather element from the case.

CAUTION

Be careful not to damage the retaining plate.

4. Wash the breather element in clean solvent and 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.

NOTE: When installing the case cover, position it as shown in Fig. K8-3.

2. CARBURETOR

Carburetor Setting Table

Setting number	PD 42B
Main jet	No. 110
Slow jet	No. 35
Pilot screw opening	1-1/2
Float height	14.5 mm (0.571 in.)

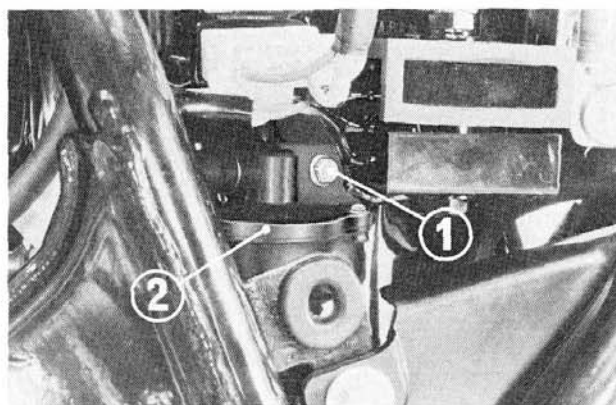


Fig. K8-1 ① Mounting bolt
② Breather element case

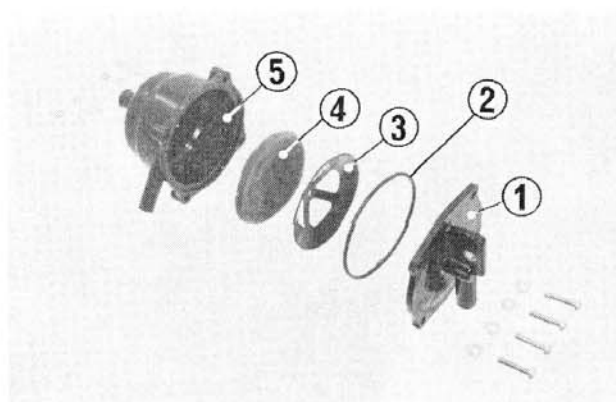


Fig. K8-2 ① Case cover
② O-ring
③ Retaining plate
④ Breather element
⑤ Element case

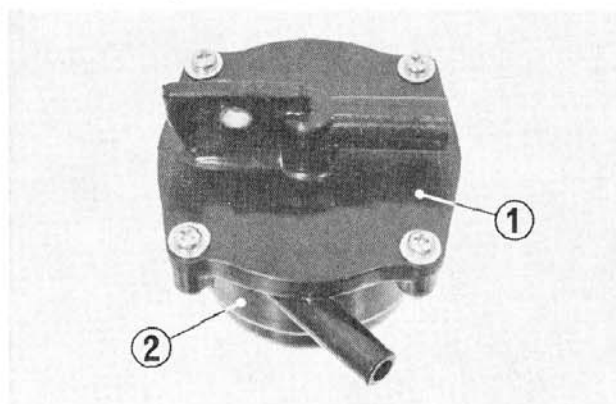


Fig. K8-3 ① Case cover
② Element case

3. MAINTENANCE

Perform the Pre-Ride Inspection described in the Owner's Manual at each maintenance period.

I: INSPECT, CLEAN, ADJUST, OR REPLACE IF NECESSARY.

C: CLEAN

R: REPLACE

A: ADJUST

ITEM		FREQUENCY	WHICHEVER COMES FIRST ↓ EVERY	ODOMETER READING [NOTE (3)]						REFER TO
				600 mi (1,000 km)	3,600 mi (6,000 km)	7,200 mi (12,000 km)	10,800 mi (18,000 km)	14,400 mi (24,000 km)	18,000 mi (30,000 km)	
	ENGINE OIL	YEAR	R	PEPLACE EVERY 1,800 mi (3,000 km)						Page 178
	ENGINE OIL FILTER	YEAR	R	R	R	R	R	R	Page 178	
*	ENGINE OIL SCREEN					C			Page 179	
	CRANKCASE BREATHER	NOTE (1)		C	C	C	C	C	Page 274	
	AIR CLEANER	NOTE (2)		C	R	C	R	C	Page 226	
*	FUEL LINES			I	I	I	I	I	Pages 181, 221	
	SPARK PLUGS			I	R	I	R	I	Pages 89, 179	
*	VALVE CLEARANCE		I	I	I	I	I	I	Page 181	
*	CONTACT BREAKER POINTS		I	I	I	I	I	I	Page 180	
*	IGNITION TIMING		I	I	I	I	I	I	Page 180	
*	CAMCHAIN TENSION		A	A	A	A	A	A	Page 181	
*	THROTTLE OPERATION		I	I	I	I	I	I	Page 196	
*	CARBURETOR IDLE SPEED		I	I	I	I	I	I	Pages 257, 274	
*	CARBURETOR CHOKE/ (FAST IDLE)			I	I	I	I	I	Page 258	
*	CARBURETOR SYNCHRONIZE			I	I	I	I	I	Page 257	
	DRIVE CHAIN			INSPECT EVERY 600 mi (1,000 km)						Page 258
	BATTERY ELECTROLYTE	MONTH	I	I	I	I	I	I	Page 184	
	BRAKE FLUID LEVEL	MONTH	I	I	I	I	I	I		
*	BRAKE FLUID	2 YEARS				R			Pages 146~147	
	BRAKE SHOE/PAD WEAR			I	I	I	I	I	Page 217	
	BRAKE FREE PLAY		I	I	I	I	I	I	Pages 149, 217	
*	BRAKE LIGHT SWITCH		I	I	I	I	I	I	Page 188	
*	HEADLIGHT AIM		I	I	I	I	I	I	Page 187	
	CLUTCH FREE PLAY		I	I	I	I	I	I	Page 183	
	SIDE STAND			I	I	I	I	I	Page 222	
*	SUSPENSION		I	I	I	I	I	I	Pages 184~185, 250	
*	NUTS, BOLTS, FASTENERS		I	I	I	I	I	I		
**	WHEELS/SPOKES		I	I	I	I	I	I	Pages 133, 135, 138	
**	STEERING HEAD BEARING		I		I		I		Page 118	

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

* SHOULD BE SERVICED BY AN AUTHORIZED HONDA DEALER, UNLESS THE OWNER HAS PROPER TOOLS AND SERVICE DATA, AND IS MECHANICALLY QUALIFIED.

NOTES: (1) More frequent service may be required when riding in rain, or at full throttle.

(2) More frequent service may be required when riding in dusty areas.

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

4. SPECIFICATIONS

Item	
DIMENSION	
Overall Length	2,280 mm (89.8 in.)
Overall Width	880 mm (34.6 in.)
Overall Height	1,185 mm (46.7 in.)
Wheel Base	1,495 mm (58.9 in.)
Seat Height	810 mm (31.9 in.)
Foot Peg Height	330 mm (13.0 in.)
Ground Clearance	150 mm (5.9 in.)
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R. Suspension, Travel	Swing arm, travel 101.6 mm (4.0 in.)
F. Tire Size, Type	3.50 H-19-4PR Rib, tire air pressure 2.0/2.0 kg/cm ² (28/28 psi)
R. Tire Size, Type	4.50 H-17A-4PR Block, tire air pressure 2.25/2.8 kg/cm ² (32/40 psi)
F. Brake	Disk Brake
R. Brake	Internal expanding shoe
Fuel Capacity	19.5 lit. (5.1 U.S. gal., 4.3 Imp. gal.)
Fuel Reserve Capacity	4.0 lit. (1.1 U.S. gal., 0.9 Imp. gal.)
Caster Angle	62°
Trail Length	115 mm (4.5 in.)
Front Fork Oil Capacity	145~155 cc (5.3~5.4 ozs.)
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Valve Train	Chain driven over head cam shaft
Oil Capacity	3.5 lit. (3.7 U.S. qt., 3.1 Imp. qt.)
Lubrication System	Forced pressure and dry sump
Fuel Required	Low-lead gasoline with 91 octane number or higher
Air Filtration	Paper filter
Intake Valve: Opens	0° BTDC
Closes	40° ATDC
Exhaust Valve: Opens	40° BBDC
Closes	0° ATDC
Valve Clearance	IN: 0.05 EX: 0.08 mm (IN: 0.002, EX: 0.003 in.)
Pilot Screw Opening	Fixed by idle limiter (1.1/2±1/2)
Idle Speed	1,000 rpm

Item	
DRIVE TRAIN	
Clutch	Wet multi plate type
Transmission	5-speed constant mesh
Primary Reduction	1.986
Gear Ratio I	2.500
II	1.708
III	1.333
IV	1.133
V	0.969
Final Reduction	2.733, drive sprocket 15T, driven sprocket 41T
Gear Shift Pattern	Left foot operated return system
ELECTRICAL	
Ignition	Battery and ignition coil
Ignition Advance:	
"F" mark	10° BTDC
Max. advance	35°
RPM from "F" to max. advance	1,200-2,500rpm
Dwell Angle	190° ± 5°
Starting System	Starting motor or kick starter
Alternator	Three phase AC Generator 0.21kW/5,000rpm
Battery Capacity	12V-14AH
Fuse Capacity	Main: 15amp. Head: 7A Tail: 5A
Spark plug	NGK D8EA ND X24ES-U (U.S.A. model) NGK DR8ES-L ND X24ESR-U (Canadian model)
Condenser Capacity	0.20-0.24 μ F

