

Fig. 4.57 Removing the air cleaner

- ① Air cleaner element
- ② Air cleaner mounting bolt
- ③ 5mm cross screw

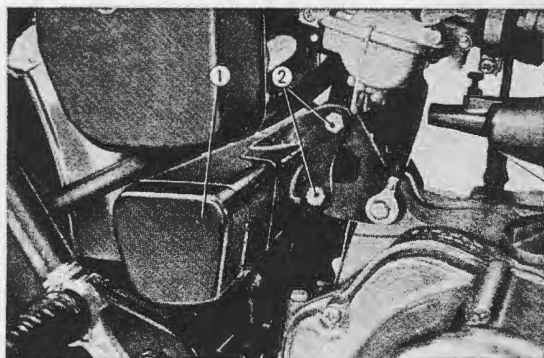


Fig. 4.58 Removing the tool box

- ① Tool box
- ② 8mm hex bolt

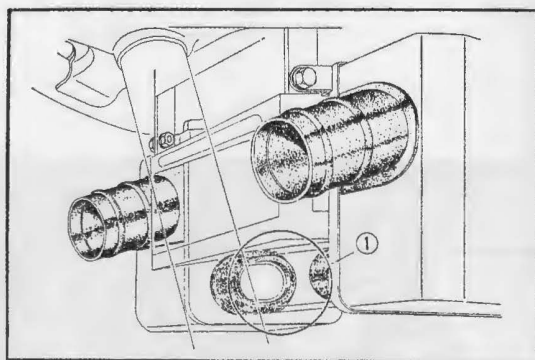


Fig. 4.59 Check of left and right connection

- ① Check this point

## B. Disassembly

1. Remove the air cleaner case.
2. Remove the air cleaner cover mounting bolt and separate the air cleaner cover.
3. Air cleaner element can be separated from the frame by removing the air cleaner connecting tube clamp and the air cleaner mounting bolt. (Fig. 4.57)

4. The tool box can be removed from the frame by unscrewing the 8mm nut on the rear engine hanger plate and pulling out the 8mm hex bolts. (Fig. 4.58)

## C. Inspection

1. Dust on the air cleaner element can be removed by tapping lightly and blowing off the loose dust particles with compressed air.
2. Inspect the filter element to make sure that it is not damaged or clogged by soilage.
3. Also inspect the bonded section to make sure that the joints are not cracked or open.

## D. Reassembly

1. After locating the position of the tool box, insert the engine hanger plate between frame and tool box, insert two 8mm bolts from the right side and torque the nuts.
2. Mount the air cleaner with the 6mm bolts, install the air cleaner connecting tube on the carburetor with the clamp.

### NOTE :

After completing the installation of the air cleaner, check to make sure that the right and left air cleaners are interconnected. If there are any leaks in the system, unfiltered air will be drawn into the cylinder and causing rapid wear to the cylinder walls. (Fig. 4.59)

3. Install the air cleaner case.

4.11 Rear Fork and Rear Fender

A. Construction

One end of the rear fork is fitted to a section on the frame and the other end is fitted to the frame through the rear cushion. When the rear wheel moves in the vertical direction, the section which is fitted to the frame becomes the pivot point and the rear wheel moves in an arc.

The close proximity of the pivot point to the drive sprocket poses negligible effect on the chain tension. (Fig. 4.60 and 4.61)

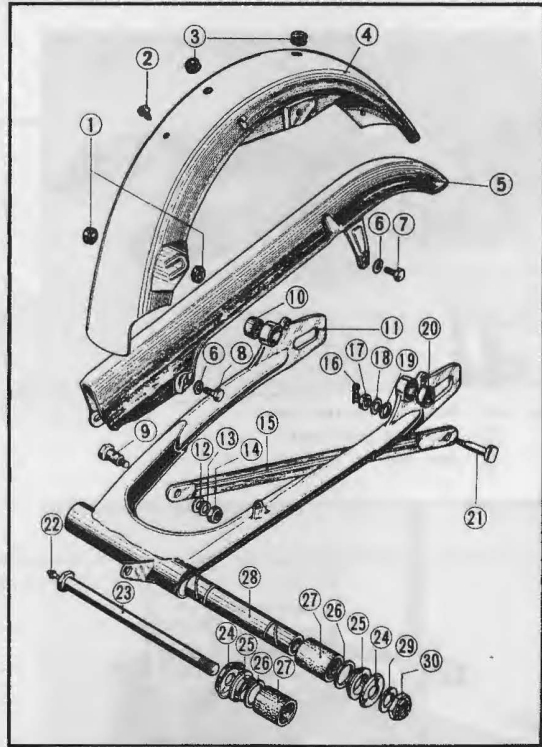


Fig. 4.60 Exploded view of rear fork and rear fender

- |                                     |                                     |
|-------------------------------------|-------------------------------------|
| ① Front fuel tank cushion           | ⑩ Rear cushion under rubber bushing |
| ② Wire cord grommet                 | ⑪ Rear fork                         |
| ③ Wire cord grommet                 | ⑫ 10mm spring washer                |
| ④ Rear fender                       | ⑬ Flat washer                       |
| ⑤ Drive chain case                  | ⑭ 8mm self lock nut                 |
| ⑥ 6mm flat washer                   | ⑮ Rear brake stopper arm            |
| ⑦ 6×16 hex bolt                     | ⑯ 8mm lock pin                      |
| ⑧ 6×12 hex bolt                     | ⑰ 8mm hex nut                       |
| ⑨ Rear brake stopper arm bolt       | ⑱ Rear fork thrust bushing          |
| ⑲ 10mm spring washer                | ⑳ Rear cushion under rubber bushing |
| ⑳ Rear cushion under rubber bushing | ㉑ Rear brake panel stopper bolt     |
| ㉑ Rear brake panel stopper bolt     | ㉒ Grease nipple                     |
| ㉒ Grease nipple                     | ㉓ Rear fork pivot bolt              |
| ㉓ Rear fork pivot bolt              | ㉔ Rear fork dust-seal cap           |
| ㉔ Rear fork dust-seal cap           | ㉕ Rear fork thrust bushing          |
| ㉕ Rear fork thrust bushing          | ㉖ Rear fork felt ring               |
| ㉖ Rear fork felt ring               | ㉗ Rear fork pivot bushing           |
| ㉗ Rear fork pivot bushing           | ㉘ Rear fork center collar           |
| ㉘ Rear fork center collar           | ㉙ Rear fork pivot bolt washer       |
| ㉙ Rear fork pivot bolt washer       | ㉚ 14mm self lock nut                |
| ㉚ 14mm self lock nut                |                                     |

B. Disassembly

1. Remove the rear wheel in accordance with section 4.14 B.
2. Disassemble the rear cushion in accordance with section 4.12 B.
3. Remove the 14mm self locking nut from the rear fork pivot bolt and extract the pivot bolt; the rear fork can be separated from the frame.
4. Lightly tap to remove the rear fork center collar from the rear fork.
5. Separate the drive chain cover and the rear brake stopper arm from the rear fork.
6. Raise or remove the seat, separate the taillight.
7. Then unscrew the rear fender mounting bolts (rear turn signal is also mounted together) and remove the rear fender.

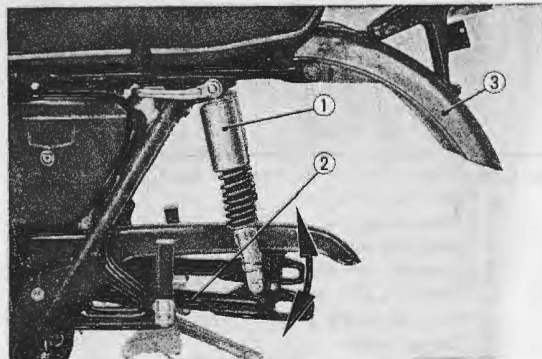


Fig. 4.61

- |                         |             |
|-------------------------|-------------|
| ① Rear cushion assembly | ② Rear fork |
| ③ Rear fender           |             |



Fig. 4.62 Removing the rear fork

- ① Rear fork pivot bolt
- ② Rear fork

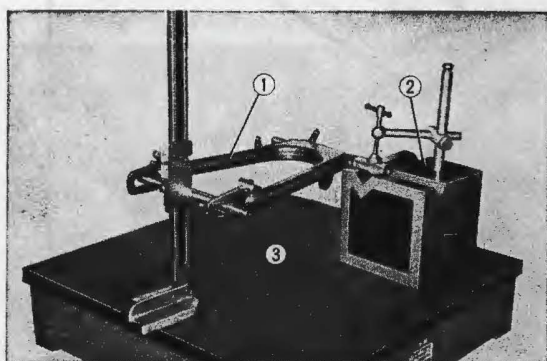


Fig. 4.63

- ① Rear fork
- ② Square block
- ③ Surface plate

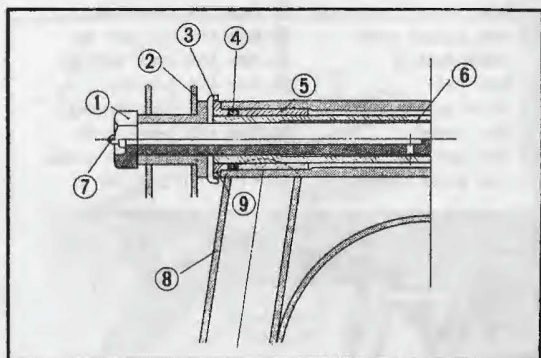


Fig. 4.64 Cross-section of the rear fork pivot portion

- ① Rear fork pivot bolt
- ② Frame body
- ③ Rear fork dust seal cap
- ④ Rear fork felt ring
- ⑤ Rear fork pivot bushing
- ⑥ Rear fork center collar
- ⑦ Grease nipple
- ⑧ Rear fork
- ⑨ Rear fork thrust bushing

### C. Inspection

#### 1. Rear fork center collar

Item	Standard value	Serviceable limit
Overall length	201.75~201.95 mm (7.9429~7.9508 in)	
Inside diameter	14.0~14.027 mm (0.5518~0.5522 in)	Replace when more than 14.1 mm (0.5551 in)
Outside diameter	21.472~21.493 mm (0.8454~0.8462 in)	Replace when less than 21.4 mm (0.8425 in)

#### 2. Rear fork pivot bushing

Item	Standard value	Serviceable limit
Inside diameter	21.5~21.533 mm (After pressing in) (0.8465~0.8478 in)	Replace when more than 21.6 mm (0.85039 in)
Inside width	42.8~42.9 mm (1.6850~1.6890 in)	

#### 3. Rear fork pivot bolts

Item	Standard value	Serviceable limit
Outside diameter	13.925~13.968 mm (0.54822~0.54992 in)	—
Bending	0.01/100 mm (0.0004/3.9370 in)	0.02/100 mm (0.0008/3.9370 in)

#### 4. Rear fork (Fig. 4.63)

##### NOTE:

Measurement should be made with the rear fork pivot bushing and the center collar inserted into the rear fork.

5. Inspect the rear fender and the drive chain case for dents and other defects.

### D. Reassembly

1. Install the rear fender together with the turn signal light.
2. Drive in the pivot bushing and the center collar. Insert the rear fork seal cap. (Fig. 4.64)
3. Insert the pivot bolt through the side bracket and assemble the rear fork to the frame.
4. Install the rear wheel.
5. Install the drive chain.
6. When the assembly is completed, adjust the rear brake pedal and the chain tension.
7. Install the drive chain case.

4.12 Rear Cushion

A. Construction

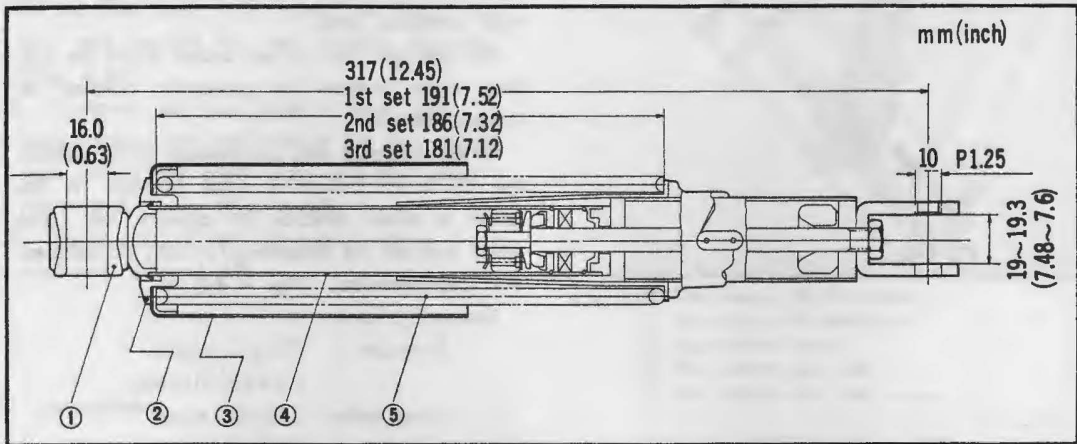


Fig. 4.65 Sectional view of rear cushion

- |                           |                       |
|---------------------------|-----------------------|
| ① Joint rubber            | ④ Rear damper assy    |
| ② Spring seat stopper     | ⑤ Rear cushion spring |
| ③ Rear cushion upper case |                       |

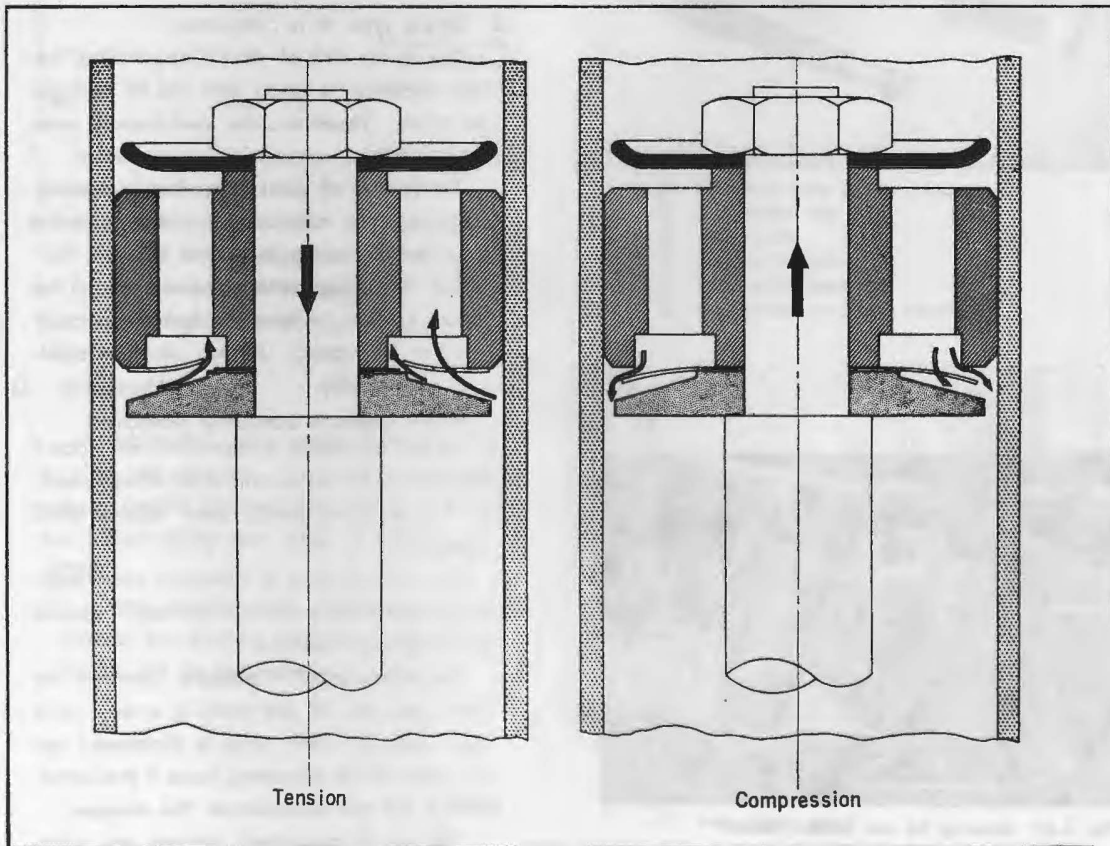


Fig. 4.66



A Do Carbon type rear damper is employed on the 450 which is of a single cylinder double acting type in contrast to the double cylinder single acting type commonly used.

Nitrogen gas and oil are sealed within the cylinder under pressure to constantly maintain an internal pressure.

During extension and compression of the cushion, the oil flows through a small passage in the piston in either direction to operate the valve which controls the dampening for both the compression and extension. (Fig. 4. 65)

Dampening force :

Extension	70 kg/0.5 m/sec (154 lbs/20 in/sec)
Compression	16 kg/0.5 m/sec (35 lbs/20 in/sec)

#### Feature and Performance

##### a. Simple type of a construction

Due to the lack of outside tubular shell, the heat radiation is good and the oil changes are small. Therefore, the performance does not degrade.

The number of parts have been reduced, simplifying the construction; minimizing valve noise and increasing its service life.

The dampening force is dependent upon the piston speed; performance being especially good at low speed. Further, vibration stabilizes very quickly.

##### b. Internal pressure constantly maintained

Air and oil mixture (eration) will not occur; function will not deteriorate even when operated for extended period over adverse road condition.

Since the oil seal is constantly under pressure, there is no problem with leak; service life is greatly extended.

The difference in pressure between the front and rear of the valve is small; since foam does not form, noise is minimized; deterioration of the dampening force is prevented.

**NOTE: Do not disassemble the damper.**

The use of pressurized nitrogen gas eliminates any havard.

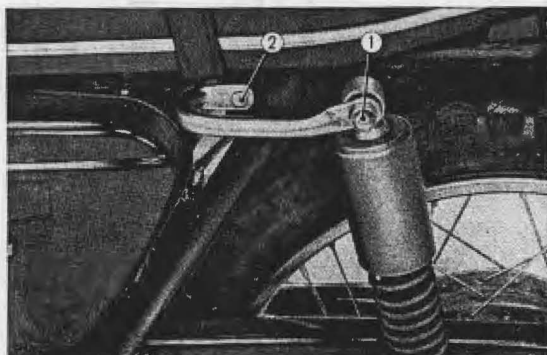


Fig. 4. 67 Removing the rear cushion assembly

- ① 10mm cap nut
- ② 6mm bolt