

### 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 **B** pushes up the free valve and flows into the space **A** freely.

At the same time, oil in the chamber **B** also flows through orifices in the lower end of the spring under seat into the space **C** 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 **A**. This high pressure then forces the oil out and into the space **C** 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.

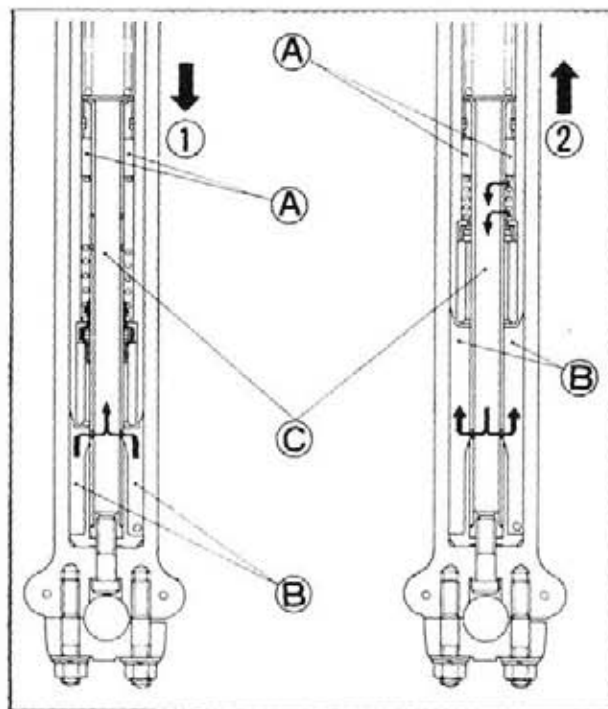


Fig. 20-75 ① Compression ② Extension

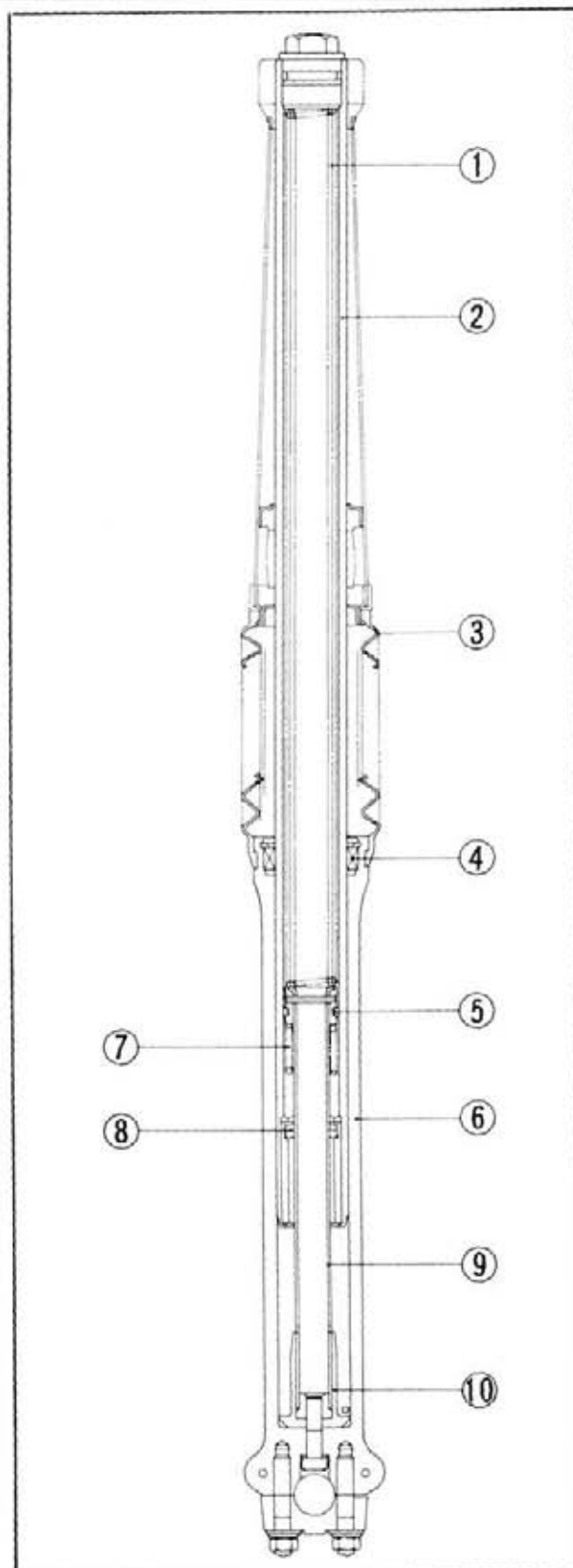


Fig. 20-76 ① Front spring ⑦ Front rebound spring  
 ② Front fork pipe ⑧ Free valve  
 ③ Front fork dust seal ⑨ Bottom pipe  
 ④ Oil seal ⑩ Oil lock piece  
 ⑤ Piston ring  
 ⑥ Front fork bottom leg