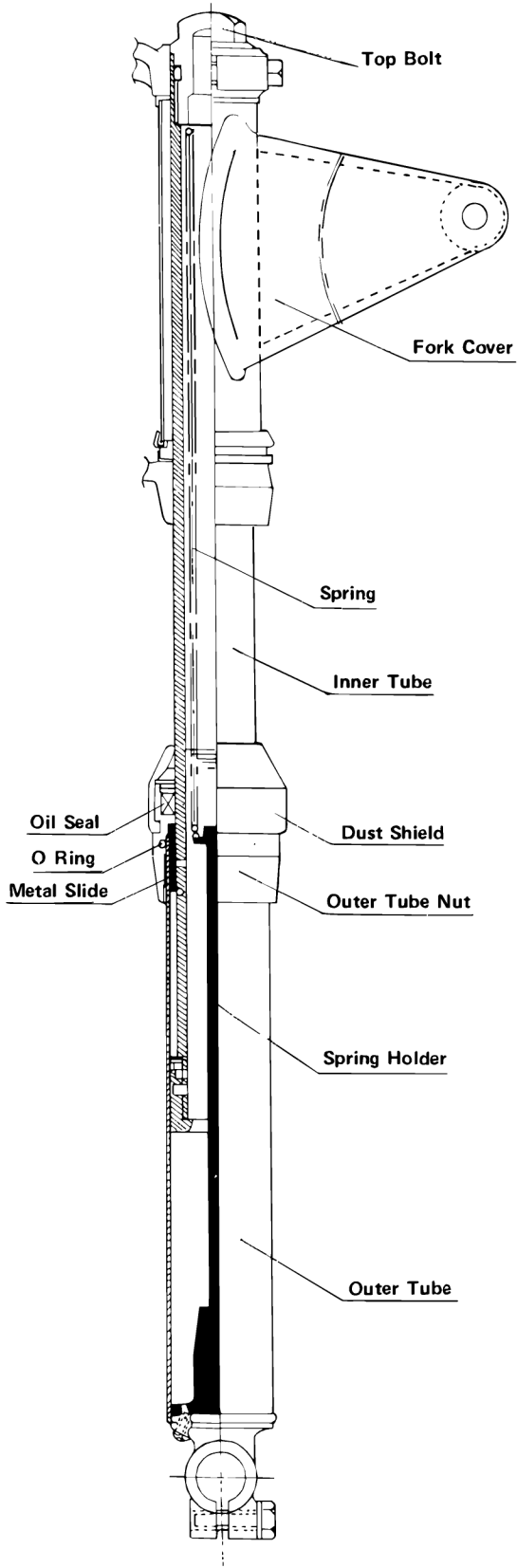


Front Shock Absorber

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As illustrated, the inner tube is fitted into the outer tube, and the spring is positioned between the seat on the upper part of the spring holder (which is fixed to the outer tube) and the inner tube top bolt.

A nut containing an oil seal is screwed onto the outer tube, and this nut serves as the seal between the inner and outer tubes.

b. Fork Operation

(1) Compression

When the front fork receives a load and is compressed, the spring inside it is also compressed. At this time, due to the outer tube being pushed up, the air in the top of the inner tube is compressed, while oil in the outer tube is forced to flow up into the inner tube through the piston orifice in the bottom of the inner tube. A small amount of oil also flows through the hole in the side of the inner tube and through the non-return valve openings in the side of the lower end of the tube, into the space between the inner and outer tubes.

The resistance to the flow of oil through these apertures, in addition to the air and the spring resistance to compression, constitutes the buffering action until just before the end of the compression stroke. At this time the tapered portion of the spring holder begins to enter the bottom orifice of the inner tube, cutting down the cross-sectional area of the opening and causing a sharp increase in flow resistance. The taper gradually fills the opening until just before the stroke end when the opening is completely closed, forming an oil lock and stopping all movement.

Front Shock Absorber

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