

Table 100 Fork Oil

upper chamber grows smaller, forcing the oil through the cylinder upper orifices since the oil cannot return the way it came through the non-return valve. These small holes restrict the oil flow into the inner tube, damping fork extension. Near the end of the extension stroke both the cylinder spring and the arrangement of the cylinder upper orifices provide further resistance to extension. As the collar rises, reducing the size of the upper chamber, the cylinder upper orifices are eliminated and an oil lock forms, finishing the extension stroke.

Either too much or too little oil in the shock absorbers will adversely affect shock damping. Too much oil or too heavy an oil makes action too stiff; too little oil or too light an oil makes the action soft, decreases damping potential, and may cause noise during fork movement.

Contaminated or deteriorated oil will also affect shock damping and, in addition, will accelerate internal wear. The fork oil should be changed periodically (Pg. 195) or sooner if the oil appears dirty.

A bent, dented, scored, or otherwise damaged inner tube will damage the oil seal, causing oil leakage. A badly bent inner tube may cause poor handling.

Fork oil

To check the fork oil level, first place a jack or stand under the engine so that the front wheel is raised off the ground. Remove the top bolt from the inner tube. Insert a rod down into the tube, and measure the dis-

Filling fork oil Capacity

tance from the top of the inner tube to the After disas- oil level. ssembly and If the oil is below the correct level, add completely dry enough oil to bring it up to the proper level, taking care not to overfill.

Type

Oil Level

SAE 10W20

about 140 cc

171-180 cc

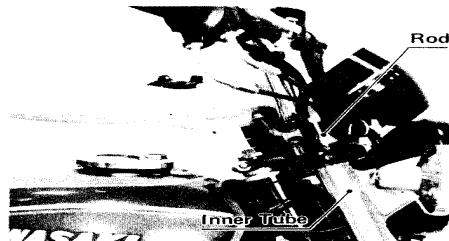
Free Length

When changing oil

Spring tension

Since the spring becomes shorter as it weakens, check its free length to determine its condition. If the spring of either shock absorber is shorter than the service limit, it must be replaced. If the length of a replacement spring and that of the remaining spring vary greatly, the remaining spring should also be replaced in order to keep the shock absorbers balanced for motorcycle stability.

Standard	Service Limit
479.5 mm	469.5 mm



To drain out the old oil, remove the drain screw from the lower end of the outer tube. With the front wheel on the ground and the front brake fully applied, push down on the handlebar a few times to pump out the oil. Install the drain screw, remove the top bolt, from the inner tube, and pour in the type and amount of oil specified in Table 100. Then replace the top bolt and check the oil level. If the oil is below the specified level, add oil and re-check the oil level.

NOTE: After the front fork oil is changed, before checking the oil level, pump the forks several times to expel air from the upper and lower chambers.