

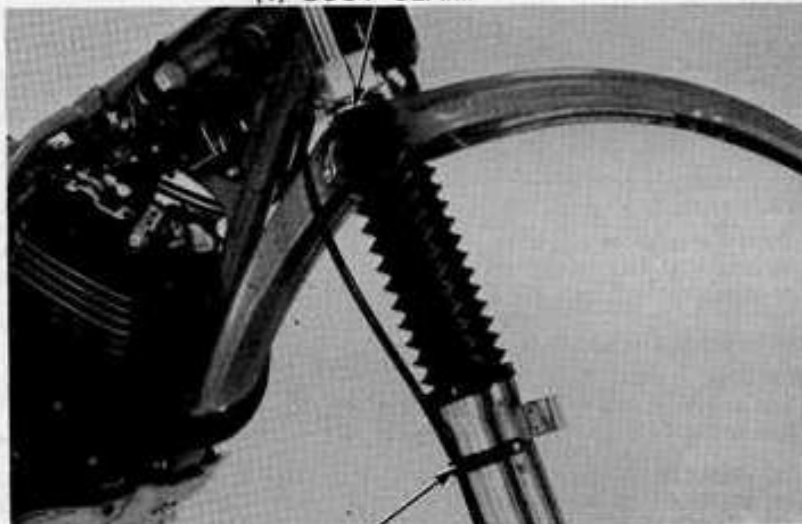
● FRONT FORK

Removal:

Remove the front wheel.
Loosen the fork boot clamp screws.

Remove the speedometer cable from the clamp on the right fork.

(1) BOOT CLAMP



(2) SPEEDOMETER CABLE CLAMP

Loosen the upper and lower fork pinch bolts.
Remove the front forks.
Remove the fork boot.

(1) FORK PINCH BOLTS



Disassembly:

Release the air from each fork tube by pressing the air valve core.

WARNING

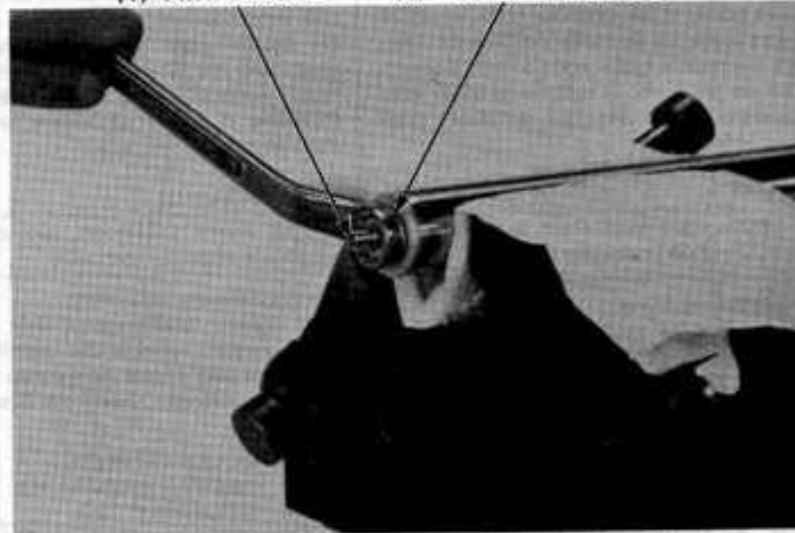
Be sure to release front fork air pressure before disassembling to prevent parts from becoming projectiles.

Hold the tube in a vise with soft jaws or a shop towel, avoiding the sliding surface.
Remove the fork cap bolt.

WARNING

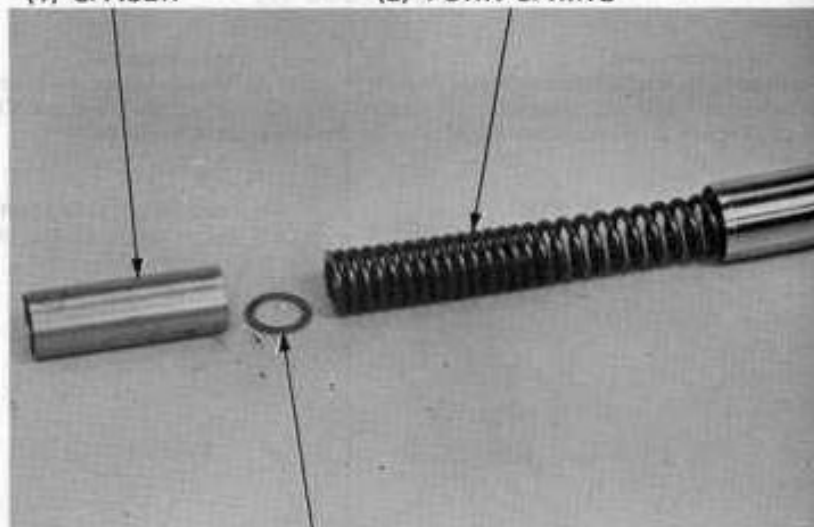
The cap bolts are under spring pressure. Use care when removing and wear eye and face protection.

(1) AIR VALVE (2) FORK CAP BOLT



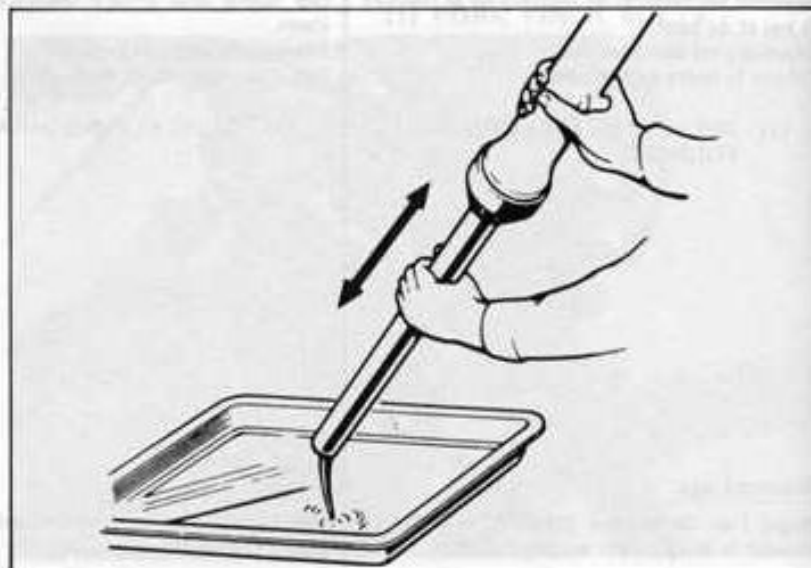
Remove the spacer, seat washer and fork spring from the fork tube.

(1) SPACER (2) FORK SPRING



(3) SEAT WASHER

Pour out any remaining fork fluid by pumping the fork several times.



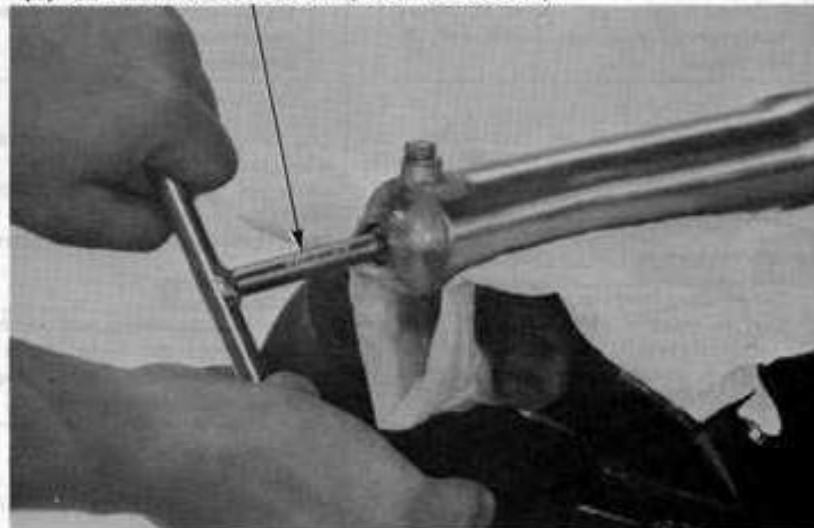
Hold the fork slider in a vise with soft jaws or a shop towel and hold the fork piston with a holder.

Remove the hex bolt.

CAUTION

Do not distort the fork slider in a vise.

(1) 6 mm HEX WRENCH (07917-3230000)

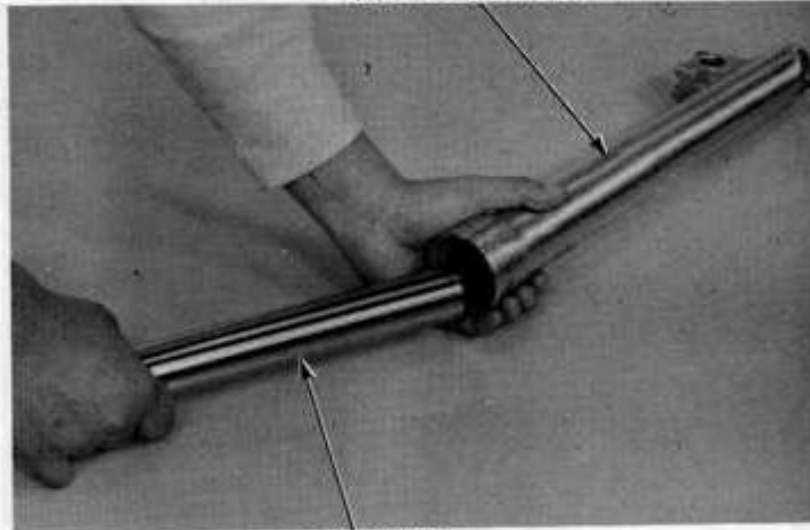




XL400R·XL500R ADDENDUM

(1) FORK SLIDER

Pull the fork tube out of the slider.
Remove the fork piston from the fork tube.
Remove the oil lock piece from the fork slider.

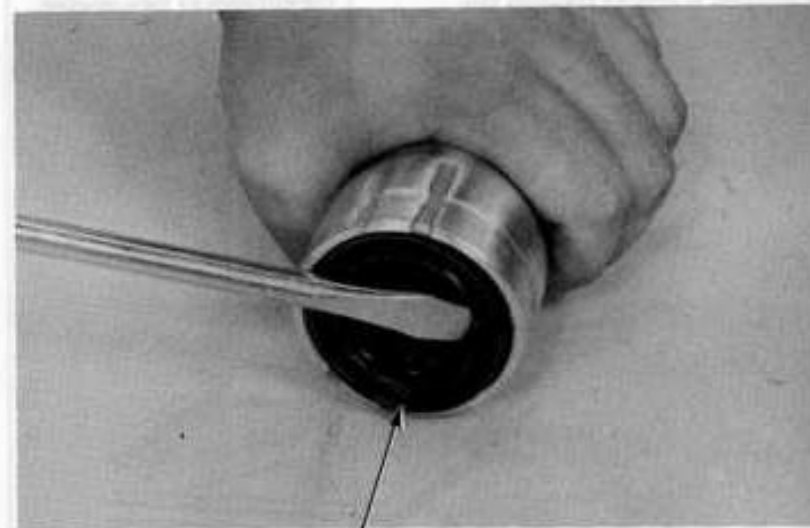


(2) FORK TUBE

Remove the dust seal using a screwdriver with a dull or rounded edge.

NOTE

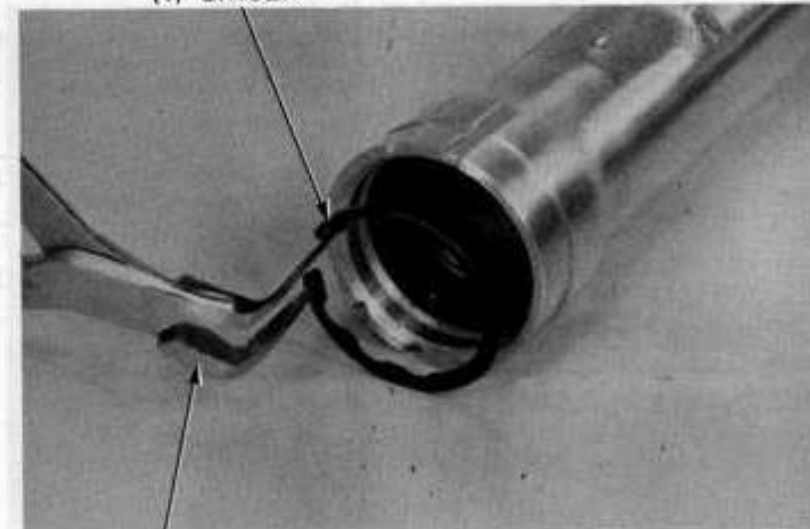
- Avoid damage the inner and outer surfaces of the fork slider when removing the oil seal.
- If the dust seal is removed, replace it with new one.



(1) DUST SEAL

(1) CIRCLIP

Remove the circlip with snap-ring pliers.



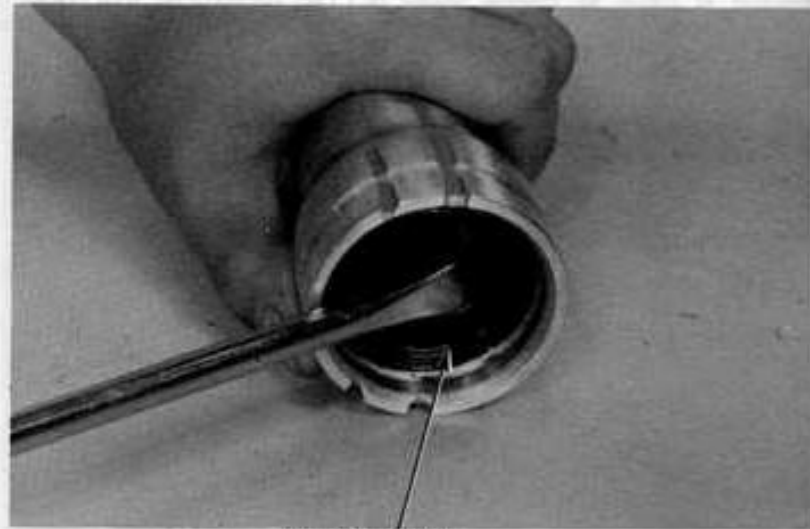
(2) CIRCLIP PLIERS (07914-3230001)

Remove the oil seal using a screwdriver with a dull or rounded edge.

NOTE

- Avoid damaging the inner and outer surfaces of the fork slider when removing the oil seal.
- The oil seal must be, replaced with new seal during assembly.

Remove the back-up ring.

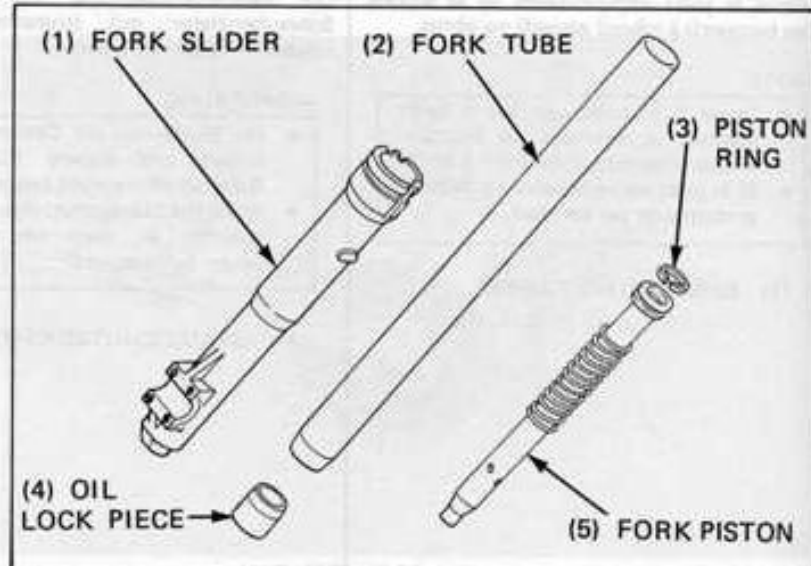


(1) OIL SEAL

Inspection:

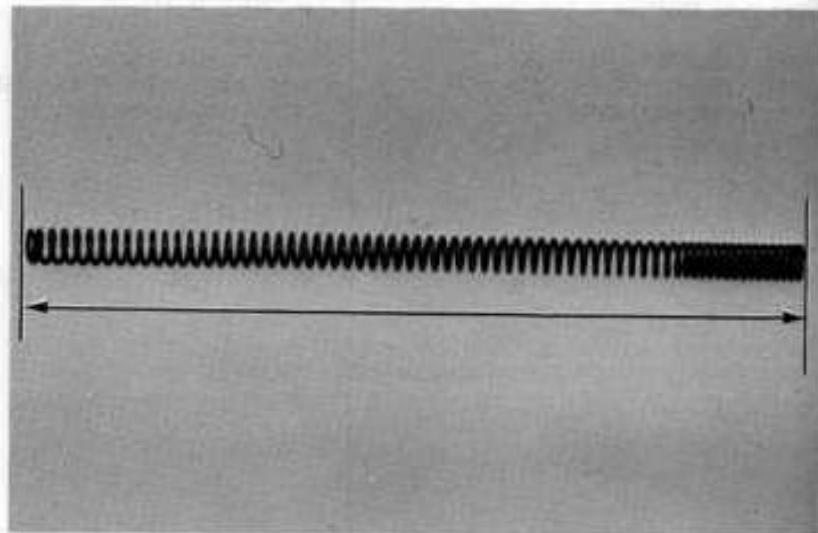
Check the fork tube, fork slider, piston and oil lock piece for score marks, scratches, or excessive or abnormal wear.

Replace any damaged or badly worn parts.
Check the fork piston ring for wear or damage.
Check the rebound spring for fatigue or damage.



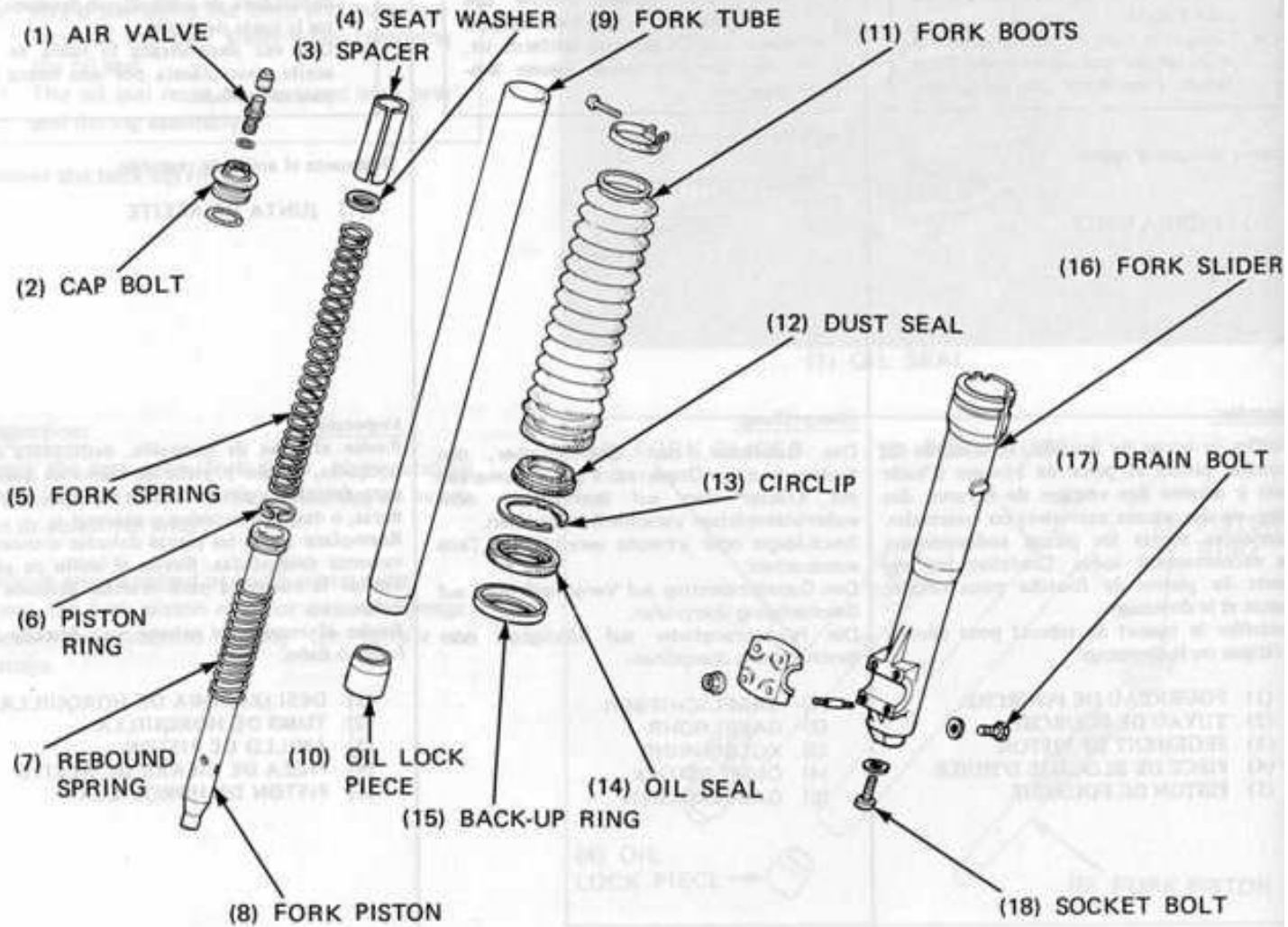
Measure the fork spring free length.

SERVICE LIMIT: 568.8 mm (22.39 in)

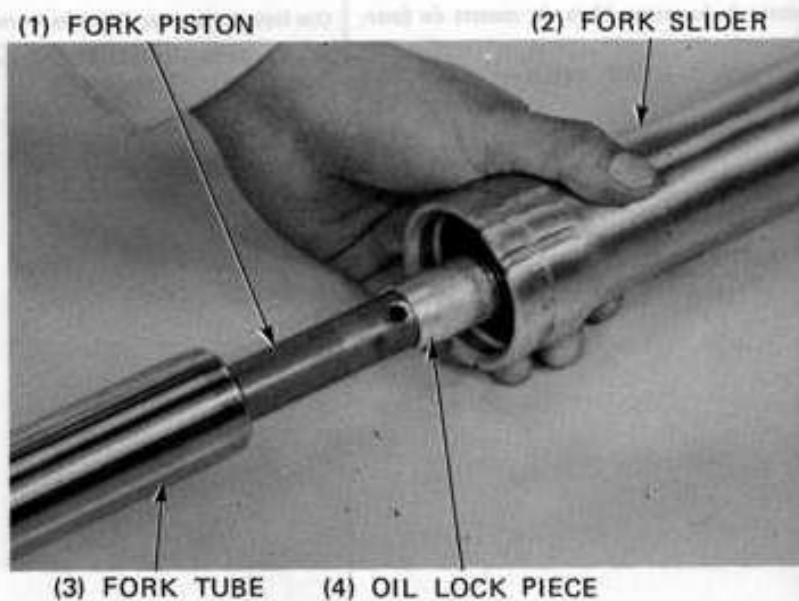


Assembly:

Clean all parts with non-flammable or high flash point solvent and wipe them off thoroughly before assembly.



Install the fork piston and rebound spring into the fork tube from top.
Place the oil lock piece on the end of the piston.
Insert the fork tube into the slider.





Apply a locking agent to the socket bolt threads and underside of the bolt and torque the bolt.

TORQUE: 15–25 N·m
(1.5–2.5 kg-m, 11–18 ft-lb)

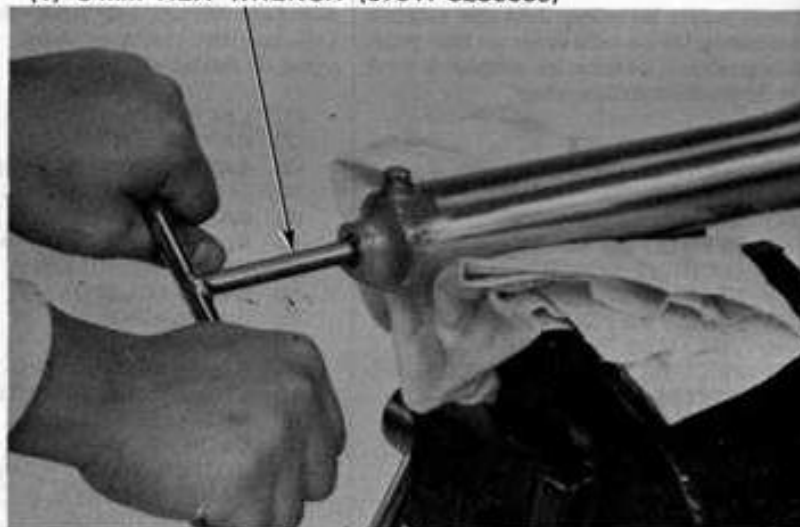
CAUTION

Excessive vise pressure can damage the fork slider.

NOTE

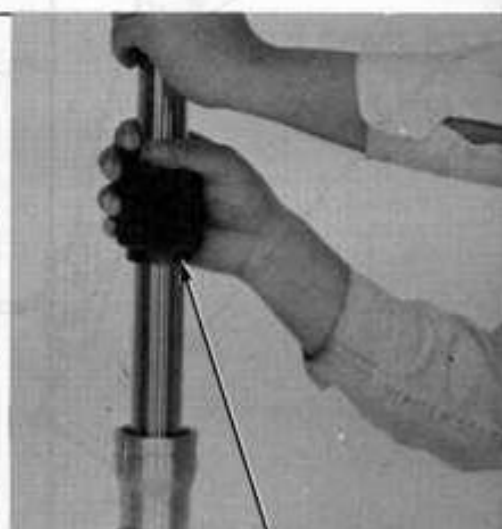
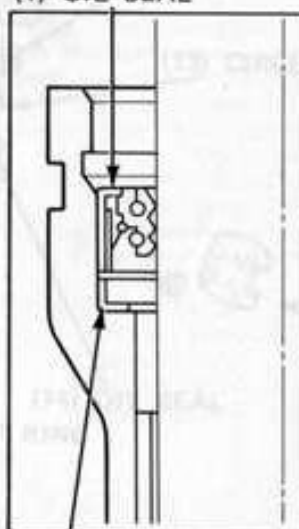
Temporarily install the spring, spacer and fork bolt if difficulty is encountered in moving the socket bolt.

(1) 6 mm HEX WRENCH (07917-3230000)



Install the back-up ring.
Coat a new oil seal with ATF and install it with the seal markings facing up.
Drive the seal in with the seal driver.

(1) OIL SEAL

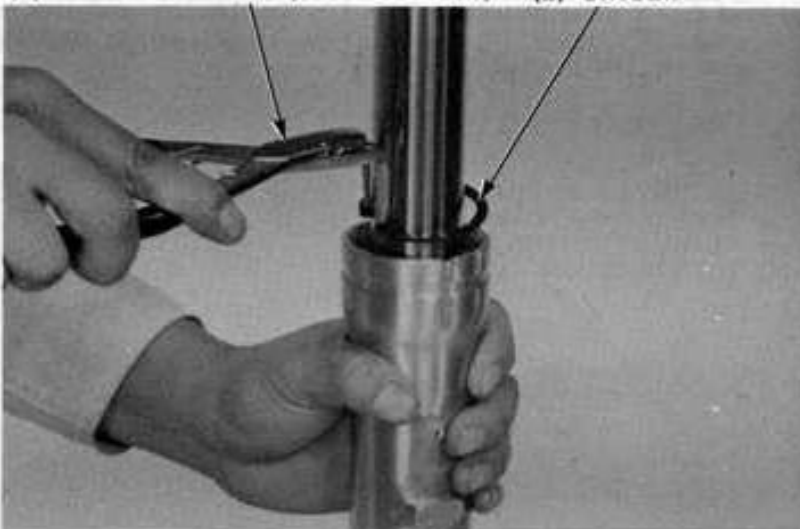


(2) BACK-UP RING

(3) FORK SEAL DRIVER
(07947-3710101)

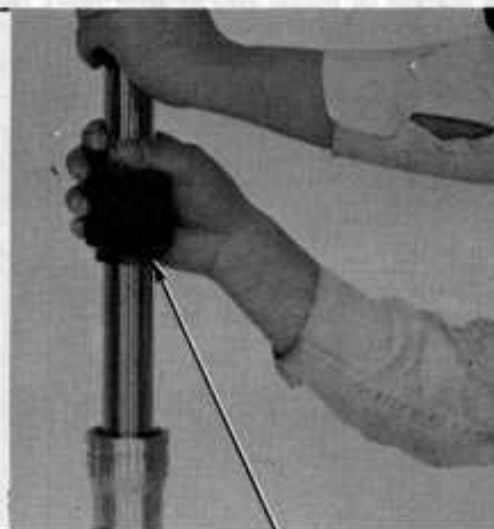
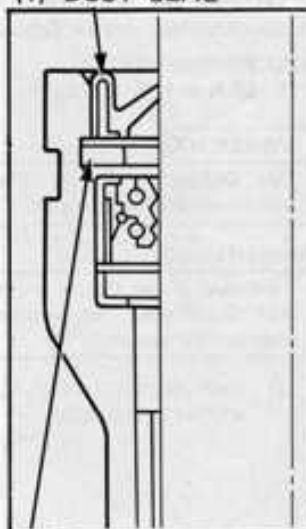
Install the circlip into groove of the slider with sharp edge facing upward.

(1) CIRCLIP PLIERS (07914-3230001) (2) CIRCLIP



Install the dust seal with the seal markings facing down and drive the seal in with the seal driver.

(1) DUST SEAL



(2) CIRCLIP

(3) FORK SEAL DRIVER
(07947-3710101)

Pour in the specified amount of ATF.

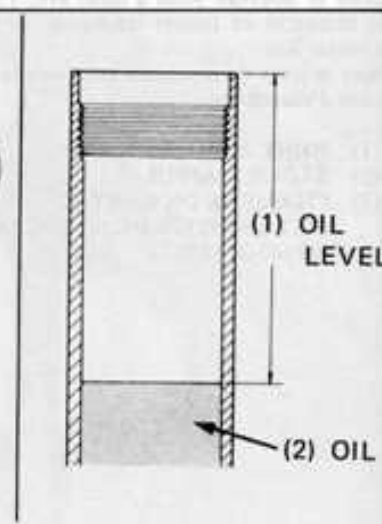
CAPACITY: 376.0–381.0 cc (12.71–12.88 oz)

Compress the front fork all the way and measure the oil level from the top of the tube.

NOTE

Be sure the oil level is the same in both fork tubes.

STANDARD OIL LEVEL: 163.0 mm (6.42 in)



Wipe all oil from the fork spring and install it into the fork tube with the narrow coils facing down.

Install the spring seat washer and spacer and install the fork cap bolt.

CAUTION

Be careful not to cross-thread the fork cap bolts.

Tighten the fork cap bolt.

TORQUE: 15–30 N·m
(1.5–3.0 kg·m, 11–22 ft·lb)

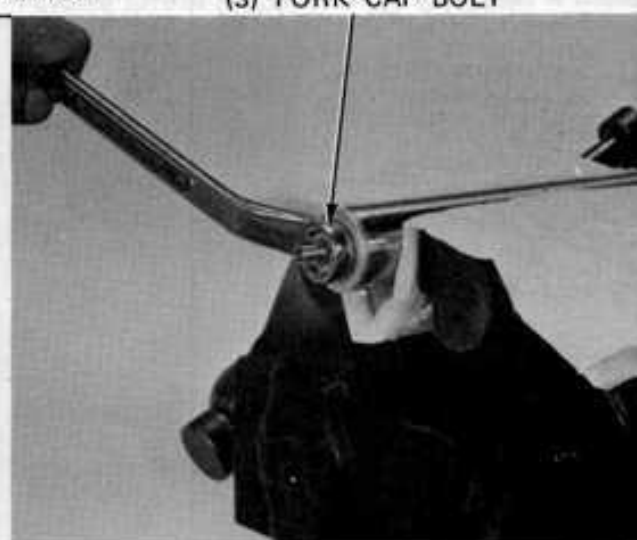
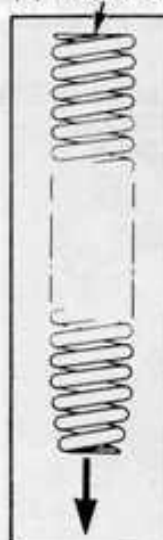
Install the fork boot and boot clamp.

NOTE

Do not tighten the clamps until the forks are properly installed on the vehicle.

(1) FORK SPRING

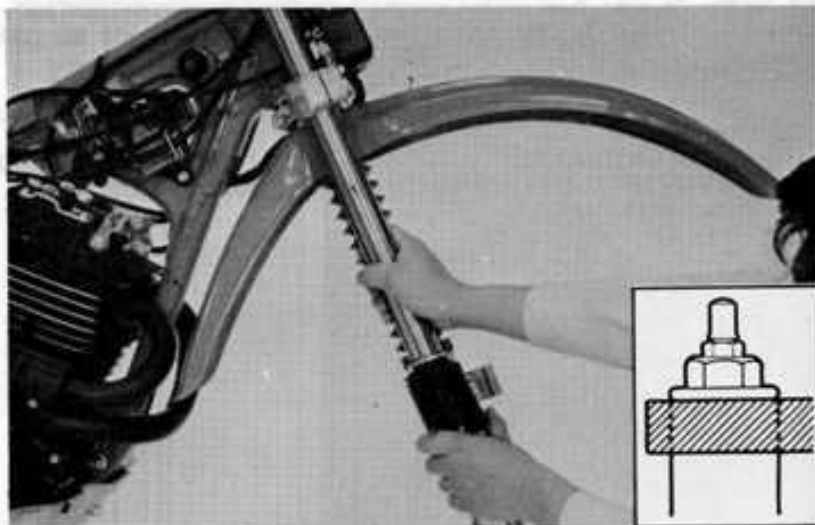
(3) FORK CAP BOLT



Installation:

Install the fork tubes in the fork bridge and steering stem while rotating them by hand.

Align the top surface of fork tube with the top surface of the fork bridge.



(1) FORK PINCH BOLTS

Tighten the upper and lower fork pinch bolts.

TORQUE:

- Upper : 18–23 N.m
(1.8–2.3 kg-m, 13–17 ft-lb)
- Lower : 30–35 N.m
(3.0–3.5 kg-m, 22–25 ft-lb)



(1) FORK BOOT CLAMP

Bring the top of each fork boot into contact with the steering stem and tighten the clamp.

Install the speedometer cable in the clamps on the left fork slider.

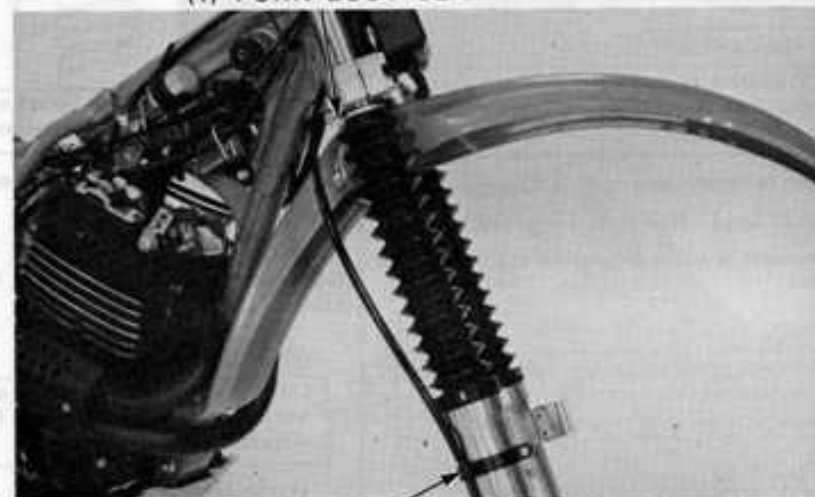
Install the front wheel (Page 22-41).

Make sure all weight is off the front wheel, and charge the forks with air.

STANDARD PRESSURE: 0–20 kPa
(0–0.2 kg/cm², 0–2.8 psi)

CAUTION

Use a low-volume low-pressure pump to charge the forks with air.

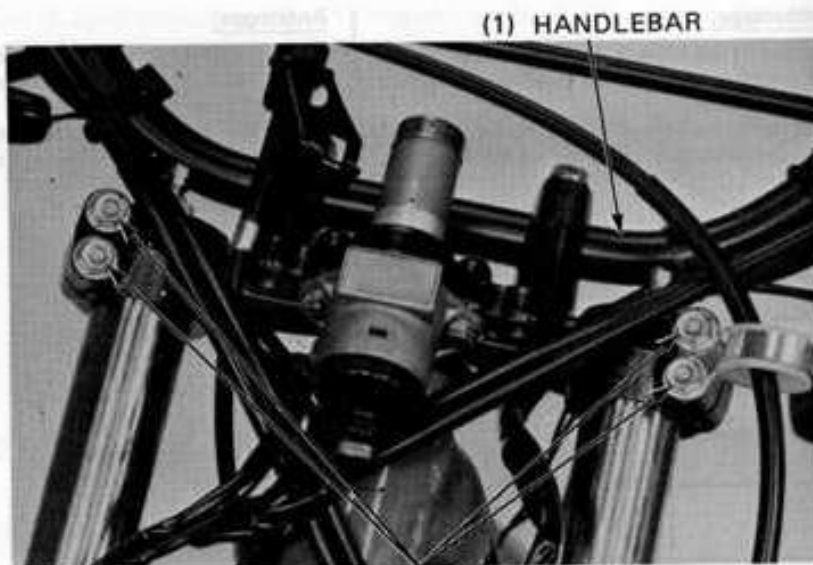


(2) SPEEDOMETER CABLE CLAMP

● STEERING STEM

Disassembly:

- Remove the instrument (Page 22-38).
- Remove the front wheel (Page 22-39).
- Remove the front fender.
- Remove the horn bracket from the steering stem.
- Remove the handlebar.
- Loosen the upper fork pinch bolts.



(2) UPPER FORK PINCH BOLTS

(1) FORK BRIDGE (2) EXTENSION (07716-0020500)

Remove the stem nut and remove the fork bridge.

Remove the front fork legs by loosening the lower fork pinch bolts.



(3) SOCKET WRENCH, 30 x 32 mm (07716-0020400)

(1) STEERING STEM ADJUSTER NUT

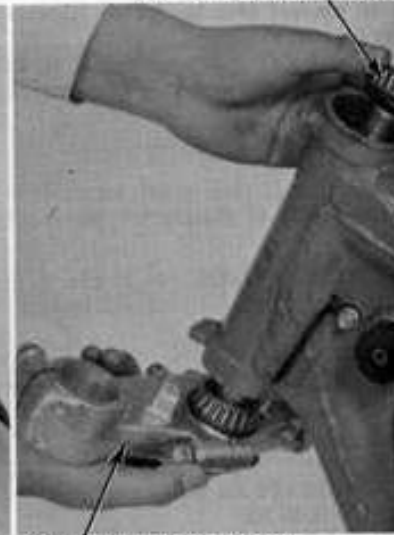
(2) UPPER BEARING

Remove the steering stem adjuster nut.

NOTE

Hold the steering stem to prevent it from falling.

Remove the steering stem.
Remove the upper bearing.



(3) STEERING STEM

Check the bearings for operation and replace if necessary.

Check the bearing races for wear or damage and replace if necessary.

NOTE

Replace the bearings and races as a set.

Remove the bearing race with a bearing race remover.

Drive in the new races with a steering race driver.

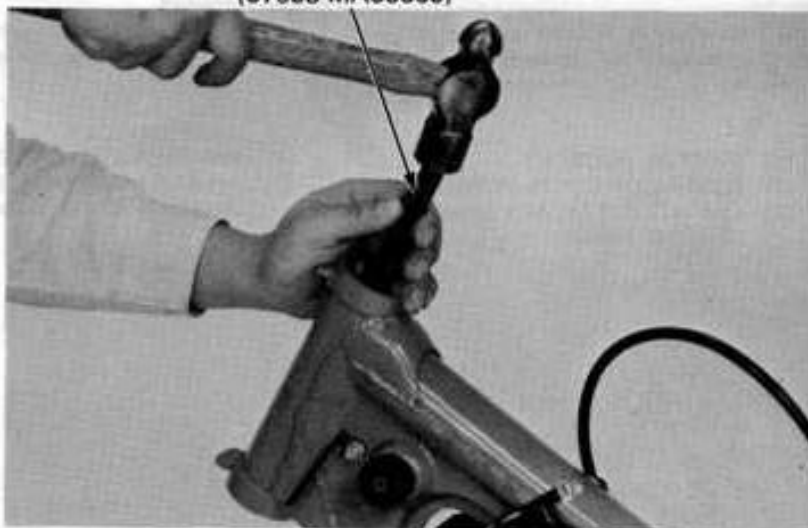
NOTE

Drive the races in squarely until they seat.

(1) BEARING



(2) BEARING RACE
(1) BEARING RACE REMOVER
(07953-MA00000)



(1) DRIVER (07749-0010000)



(2) ATTACHMENT (07746-0010300 or 07946-4300200)

To remove the lower bearing, remove the steering stem pipe pinch bolt.

Remove the lower bearing using a hydraulic press.

NOTE

Set the blocks near the center of the steering stem.

Install new dust seal.
Press the new bearing onto the stem pipe with a hydraulic press and steering stem driver.

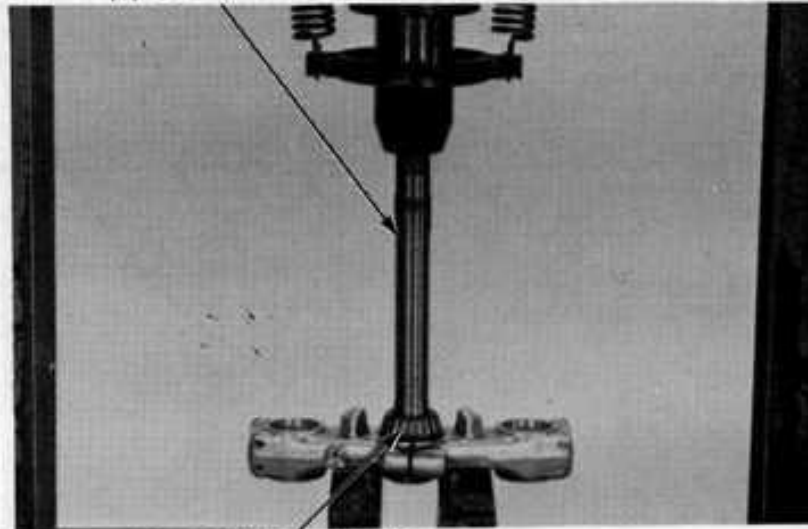
Install and torque the steering stem pipe pinch bolt.

TORQUE: 40–50 N·m
(4.0–5.0 kg·m, 29–36 ft·lb)

Installation:

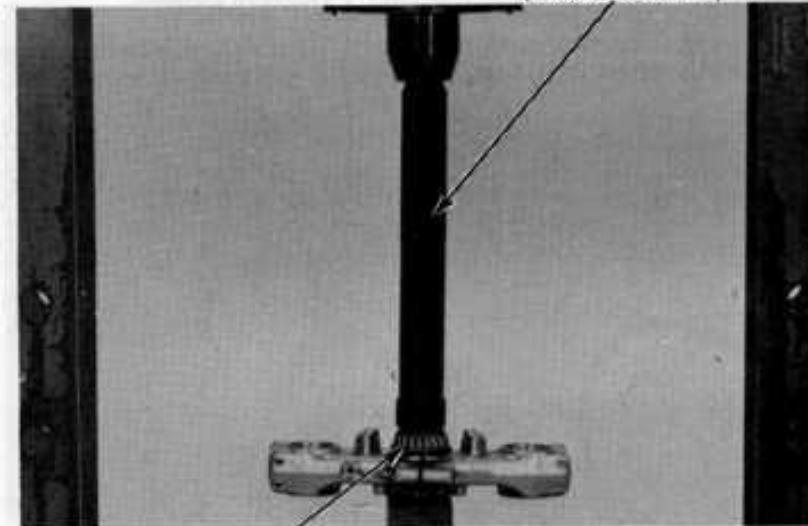
Clean the races and apply grease to the bearings.
Slide the steering stem through the steering head from the bottom.

(1) STEM PIPE

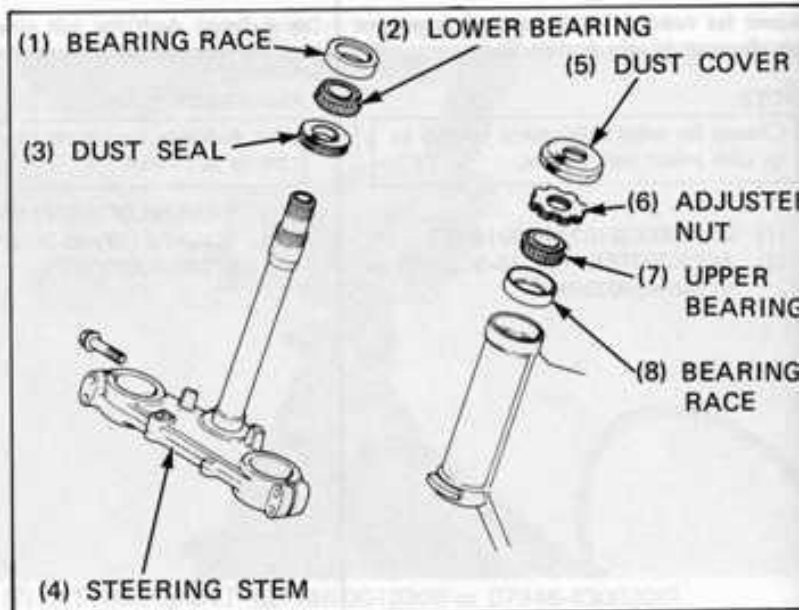


(2) LOWER BEARING

(1) STEERING STEM DRIVER
(07946-4300101)



(2) LOWER BEARING



(1) STEERING STEM SOCKET /
(07916-3710100)

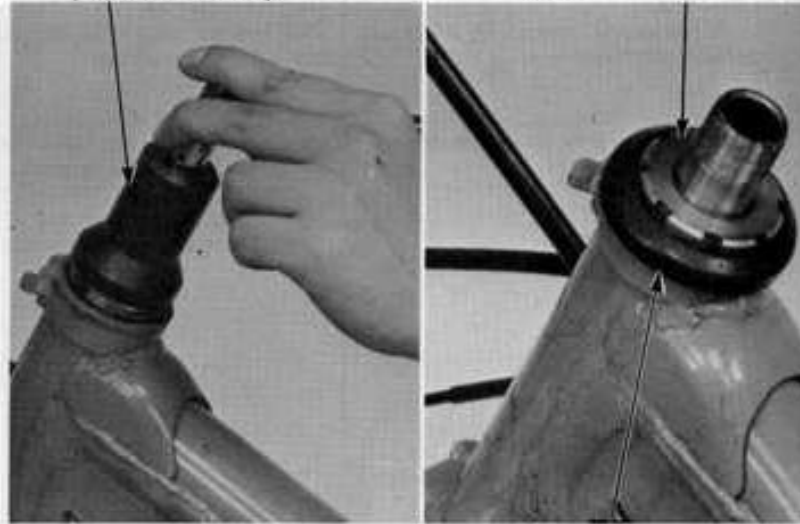
(2) STEERING ADJUSTER
NUT

Remove the dust cover from the steering adjuster nut.

Tighten the steering adjuster nut until the stem rotates freely, but without play.

TORQUE: 1–2 N·m
(0.1–0.2 kg·m, 0.7–1.5 ft·lb)

Reinstall the dust cover on the steering adjuster nut.



(3) DUST COVER

Temporarily hold the front fork legs by tightening the fork pinch bolts.

Install the fork bridge onto the front fork tubes and tighten the stem nut.

TORQUE: 80–120 N·m
(8.0–12.0 kg·m, 58–87 ft·lb)

Loosen the lower pinch bolts. Then align the fork tube top surface with the upper edge of the fork bridge.

Tighten upper and lower fork pinch bolts.

TORQUE:
Upper : 18–23 N·m
(1.8–2.3 kg·m, 13–17 ft·lb)
Lower : 30–35 N·m
(3.0–3.5 kg·m, 22–25 ft·lb)

(1) EXTENSION (07716-0020500)

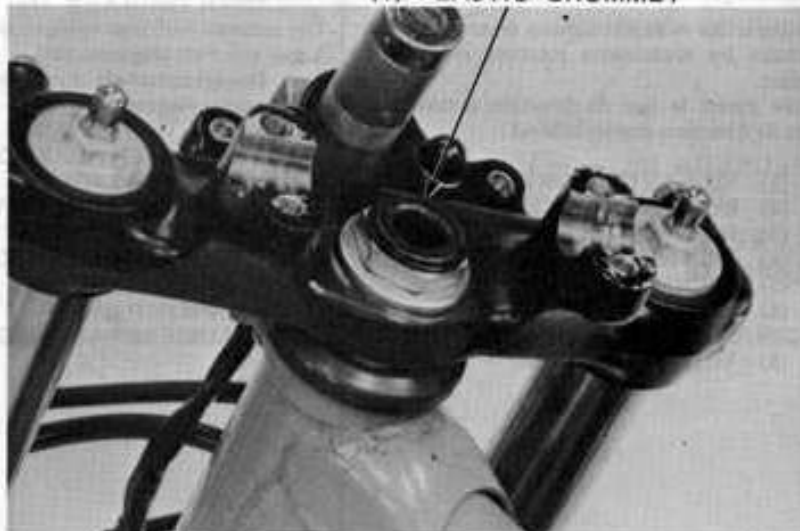


(2) SOCKET WRENCH, 30 x 32 mm (07716-0020400)

Install the plastic grommet in the steering stem nut.

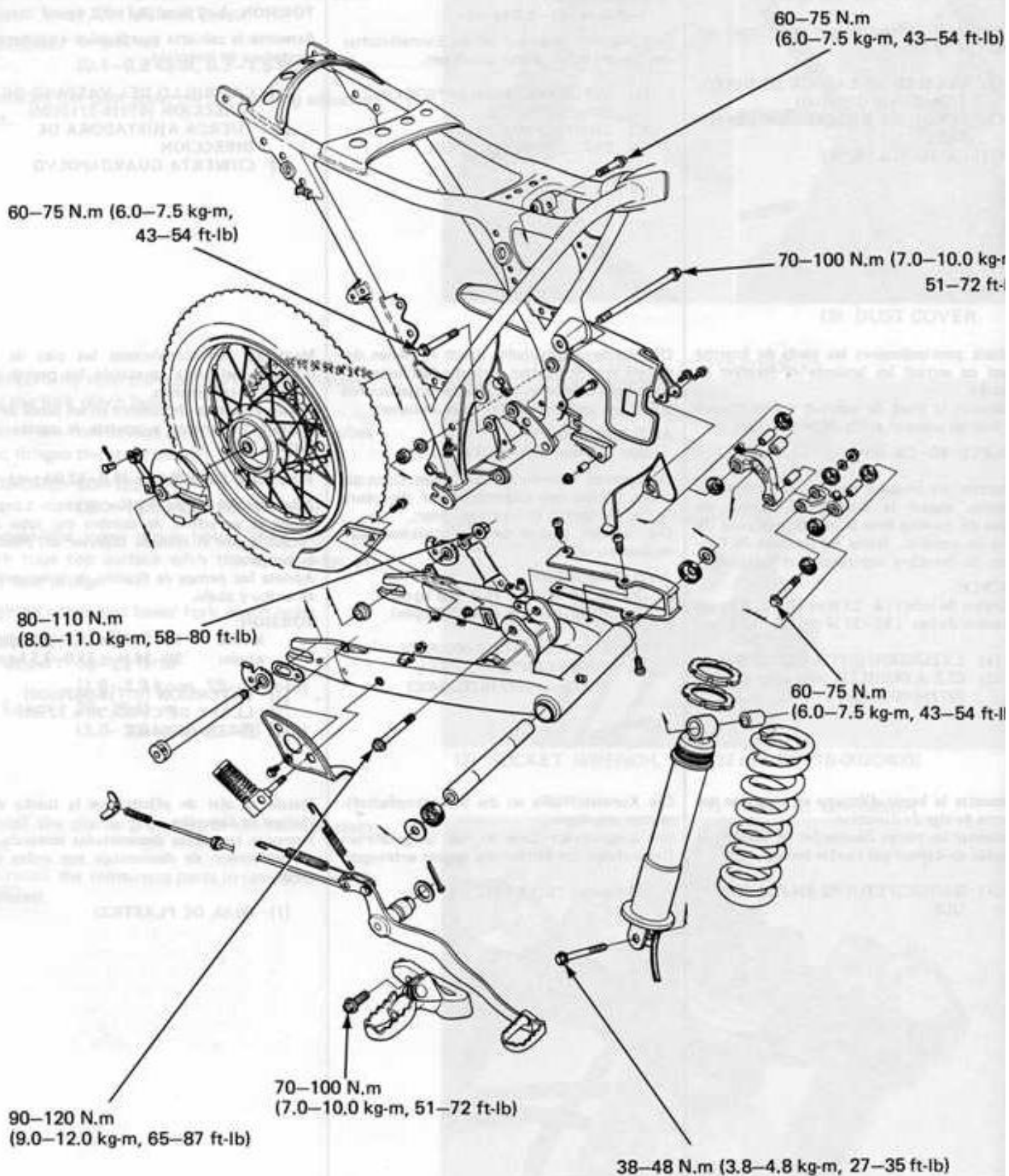
Reinstall the remaining parts in reverse order of removal.

(1) PLASTIC GROMMET





REAR WHEEL/SUSPENSION





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SERVICE INFORMATION

● **GENERAL INSTRUCTIONS**

WARNING

- Brake dust may contain asbestos which can be harmful to your health. Do not use compressed air to clean the brake drum or brake panel. Use a vacuum with a sealed dust collector. Wear a protective face mask and thoroughly wash your hands when finished.
- Use only genuine rear suspension linkage and shock absorber pivot/mount bolts. Others may not have adequate strength. Note the installation direction of the bolts.

● **TOOLS**

Special

- Bearing remover set 07936-3710000 or Handle 07936-3710100
 Weight 07936-3710200
 Remover, 23 mm 07936-37106000

- Needle bearing driver 07946-KA50000

Common

- Retainer wrench body 07710-0010401 } or Retainer wrench 07910-3600000
 Retainer wrench attachment 07710-0010201 }
 Attachment, 37 x 40 mm 07746-0010200 } or { Driver 07949-3000000
 Pilot, 17 mm 07746-0040400 } or { Attachment 07946-3000100
 Attachment, 42 x 47 mm 07746-0010300 or
 Pilot, 20 mm 07746-0040500
 Driver 07749-0010000

Optional

- Pin spanner 89201-KA4-810
 Pin spanner 89202-KA4-810

● **SPECIFICATIONS**

ITEM	STANDARD	SERVICE LIMIT
Rear shock absorber spring free length	251.0 mm (9.88 in)	248.5 mm (9.78 in)
Rear brake drum I.D.	130.0 mm (5.12 in)	131.0 mm (5.16 in)
Rear brake lining thickness	4 mm (0.16 in)	2 mm (0.08 in)
Rear shock absorber damper compression force	28-38 kg (62-84 lb)	28 kg (62 lb)
Swingarm pivot center collar O.D.	19.987 - 20.000 mm (0.7869 - 0.7874 in)	19.915 mm (0.7840 in)

● **TORQUE VALUES**

- Rear shock absorber mount bolt (upper) 60-75 N.m (6.0-7.5 kg-m, 43-54 ft-lb)
 (lower) 38-48 N.m (3.8-4.8 kg-m, 27-35 ft-lb)
 Rear axle nut 80-110 N.m (8.0-11.0 kg-m, 58-80 ft-lb)
 Swingarm pivot bolt 70-100 N.m (7.0-10.0 kg-m, 51-72 ft-lb)
 Shock arm pivot bolt (Swingarm side) 90-120 N.m (9.0-12.0 kg-m, 65-87 ft-lb)
 (Shock link side) 60-75 N.m (6.0-7.5 kg-m, 43-54 ft-lb)
 Shock link pivot bolt 60-75 N.m (6.0-7.5 kg-m, 43-54 ft-lb)

