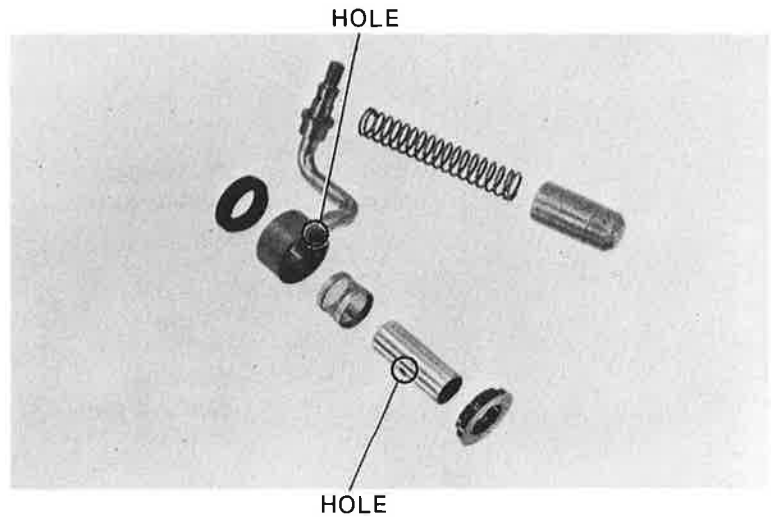




PRIMARY CHAIN TENSIONER ASSEMBLY

Before installing the oil pipe, check the holes for blockage.

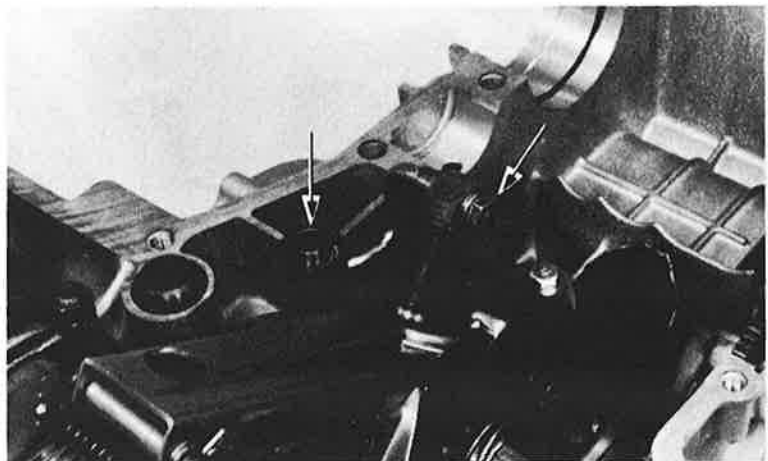


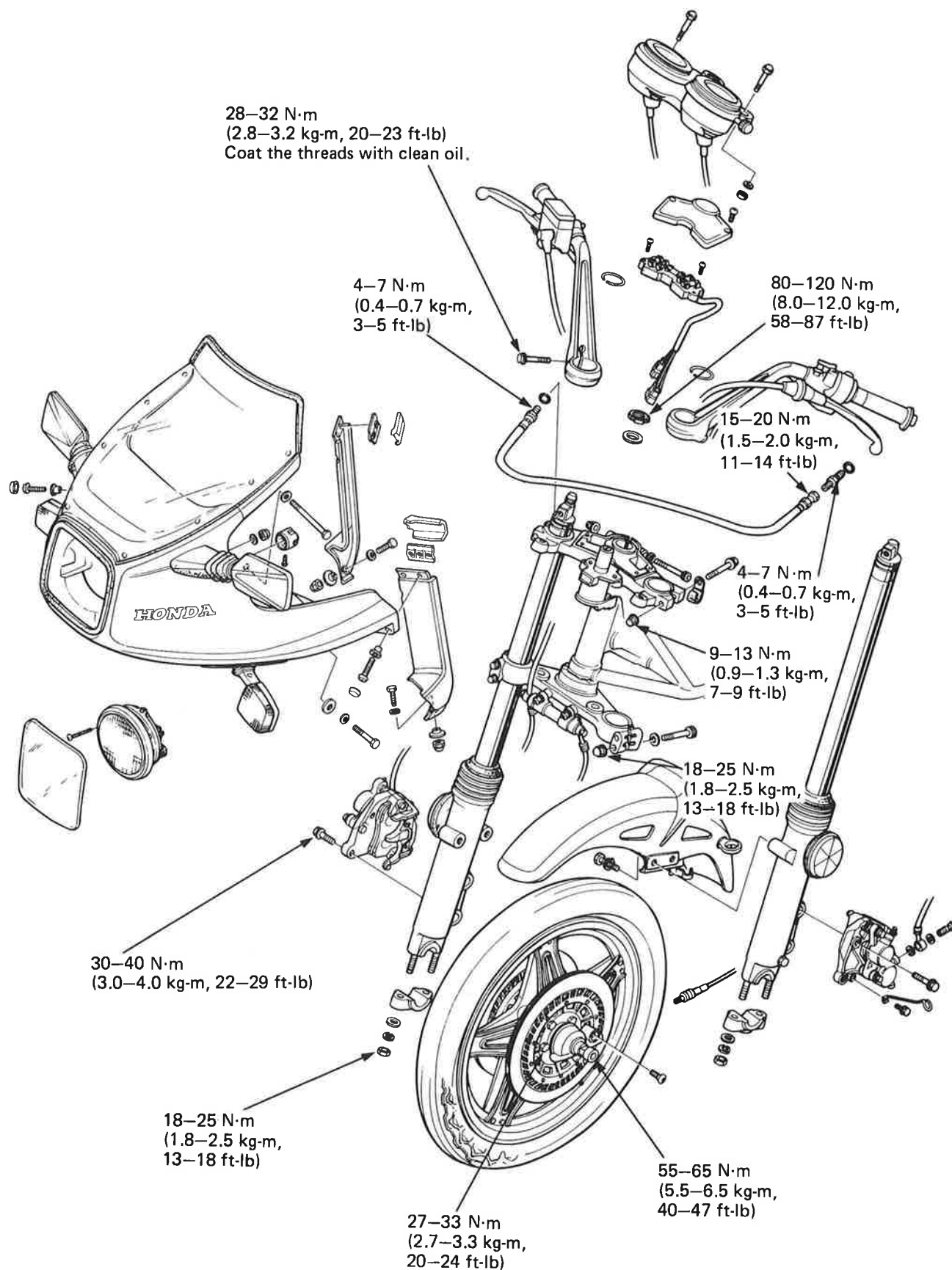
Assemble the primary chain tensioner as shown.
Tighten the nut loosely.



Insert the oil pipe into the oil opening.
Tighten the nut securely.

Install the oil supply nozzle.
Install the transmission (Section 11).
Assemble the crankcase (Section 10).







SERVICE INFORMATION	13-1
TROUBLESHOOTING	13-2
HEADLIGHT	13-4
INSTRUMENTS	13-6
HANDLEBAR SWITCH/HANDLEBAR	13-8
FAIRING	13-18
FRONT WHEEL	13-23
FRONT FORK	13-28
STEERING STEM	13-37

SERVICE INFORMATION

GENERAL INSTRUCTIONS

- The front wheel uses a tubeless tire. For tubeless tire repairs, refer to the TUBELESS TIRE MANUAL, code No. 6141550. (In U.S.A., H/C 068216)
- Do not remove rivets, nut and pins from the rim, spoke plate and hub.
- Never ride on the rim or try to bend the wheel.
- Avoid damaging the aluminum alloy rim.
- The front suspension uses an air assisted fork front suspension. The front fork preload can be changed by adjusting the amount of air pressure in each fork.
- The fairing is designed for the CBX'81 model only. Do not try to install it on any other motorcycle.

TORQUE VALUES

Front brake disc	27–33 N·m (2.7–3.3 kg-m, 20–24 ft-lb)	
Front axle nut	55–65 N·m (5.5–6.5 kg-m, 40–47 ft-lb)	
Front caliper bracket	30–40 N·m (3.0–4.0 kg-m, 22–29 ft-lb)	
Front caliper	15–20 N·m (1.5–2.0 kg-m, 11–14 ft-lb)	
Front axle holder nut	18–25 N·m (1.8–2.5 kg-m, 13–18 ft-lb)	
Front fork cap bolt	15–30 N·m (1.5–3.0 kg-m, 11–22 ft-lb)	
Air valve	4– 7 N·m (0.4–0.7 kg-m, 3– 5 ft-lb)	
Air hose connector	4– 7 N·m (0.4–0.7 kg-m, 3– 5 ft-lb)	
Front fork socket bolt	15–25 N·m (1.5–2.5 kg-m, 11–18 ft-lb)	
Handlebar mounting bolt	28–32 N·m (2.8–3.2 kg-m, 20–23 ft-lb)	Apply clean oil to the thread.
Steering stem bolt	18–25 N·m (1.8–2.5 kg-m, 13–18 ft-lb)	
Fork bridge	9–13 N·m (0.9–1.3 kg-m, 7– 9 ft-lb)	
Steering stem nut	80–120 N·m (8.0–12.0 kg-m, 58–87 ft-lb)	
Steering stem adjusting nut	11–13 N·m (1.1–1.3 kg-m, 8– 9 ft-lb)	Apply clean oil to the thread.
Air hose right	15–20 N·m (1.5–2.0 kg-m, 11–14 ft-lb)	
left	4– 7 N·m (0.4–0.7 kg-m, 3– 5 ft-lb)	



TOOLS

Special

Steering stem socket	07916-3710100	
Hollow set wrench 6 mm	07917-3230000	or commercially available tool.
Bearing race remover	07946-371050	
Steering stem driver	07946-3710600	
Bearing driver attachment	07946-3710700	
Bearing race remover	07953-4250001	

Common

Retainer wrench attachment	07710-0010200	
Retainer wrench body	07710-0010401	or 07910-3230101
Attachment 42 x 47 mm	07746-0010300	
Pilot 15 mm	07746-0040300	or 07946-9350200
Front fork seal driver body	07747-0010100	
Fork seal driver attachment E	07747-0010600	or 07947-4630100
Lock nut wrench socket 30 x 32 mm	07716-0020400	or commercially available tool.
Driver A	07749-0010000	or 07949-6110000
Extension bar	07716-0020500	or commercially available tool.

SPECIFICATION

		STANDARD	SERVICE LIMIT
Axle shaft runout		_____	0.2 mm (0.01 in)
Front wheel rim runout	Radial	_____	2.0 mm (0.08 in)
	Axial	_____	2.0 mm (0.08 in)
Fork spring free length	Spring	569.4 mm (22.42 in)	559.3 mm (22.02 in)
Fork tube runout		_____	0.2 mm (0.01 in)
Fork slider bushing O.D.		39.95-39.98 mm (1.573-1.574 in)	39.86 mm (1.569 in)
Fork guide bushing I.D.		38.98-39.11 mm (1.535-1.540 in)	39.23 mm (1.544 in)
Fork tube O.D.		38.950-38.975 mm (1.5335-1.5344 in)	38.90 mm (1.531 in)
Fork slider I.D.		40.04-40.08 mm (1.576-1.578 in)	40.2 mm (1.58 in)
Front fork fluid capacity	(after draining)	345 cc (11.7 oz)	_____
	(after disassembly)	305 cc (10.3 oz)	_____
Front fork air pressure		50-90 kPa (0.5-0.9 kg/cm ² , 7-13 psi)	_____



TROUBLESHOOTING

Hard steering

1. Steering stem nut too tight
2. Faulty steering stem bearings
3. Damaged steering stem bearings
4. Insufficient tire pressure

Steers to one side or does not track straight

1. Unevenly adjusted right and left shock absorbers
2. Bent front forks
3. Bent front axle; wheel installed incorrectly

Front wheel wobbling

1. Distorted rim
2. Worn front wheel bearing
3. Faulty tire
4. Axle not tightened properly

Soft suspension

1. Weak fork spring
2. Insufficient fluid in front forks
3. Front fork air pressure incorrect

Head suspension

1. Incorrect fluid weight in front forks
2. Fork air pressure incorrect

Front suspension noise

1. Worn slider or guide bushings
2. Insufficient fluid in forks
3. Loose front fork fasteners
4. Lack of grease in speedometer gear box



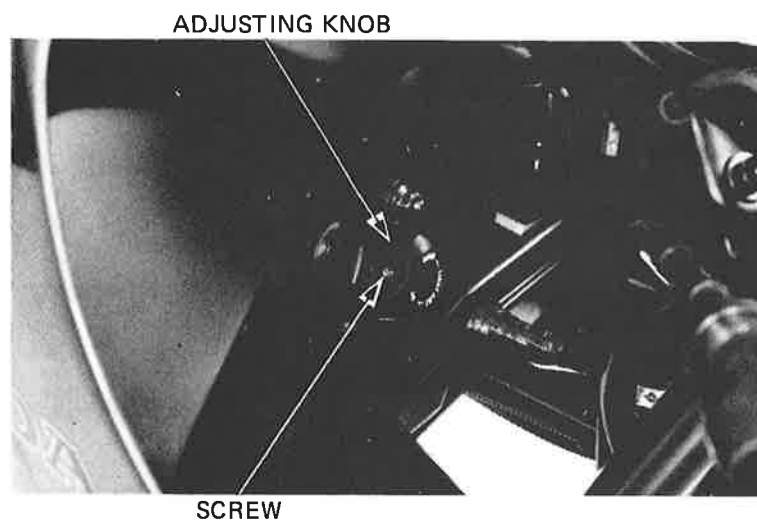
HEADLIGHT

HEADLIGHT REMOVAL

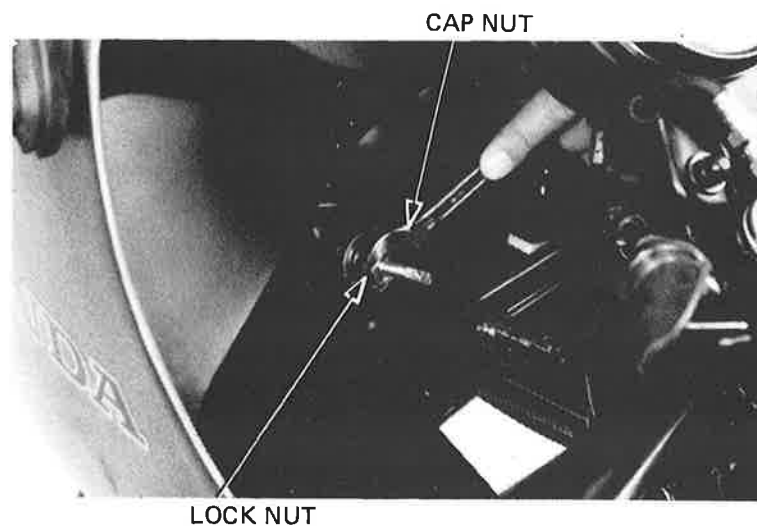
Remove the front fairing headlight cover.



Remove the headlight aim adjusting knob by removing the attaching screw.

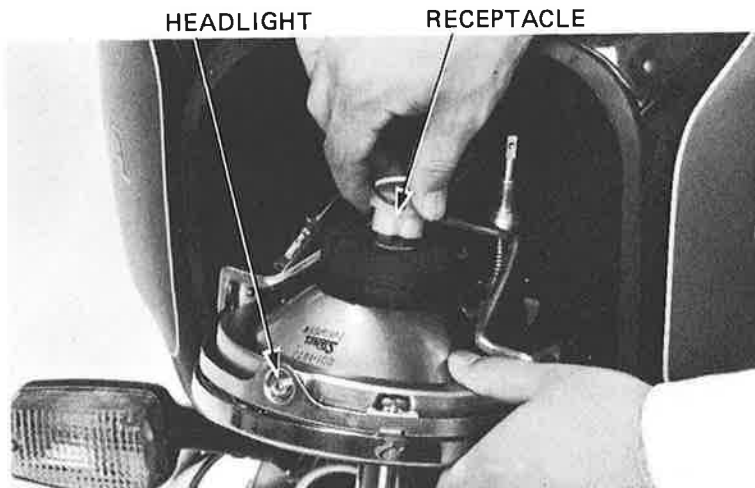


Remove the lock nut and cap nut.

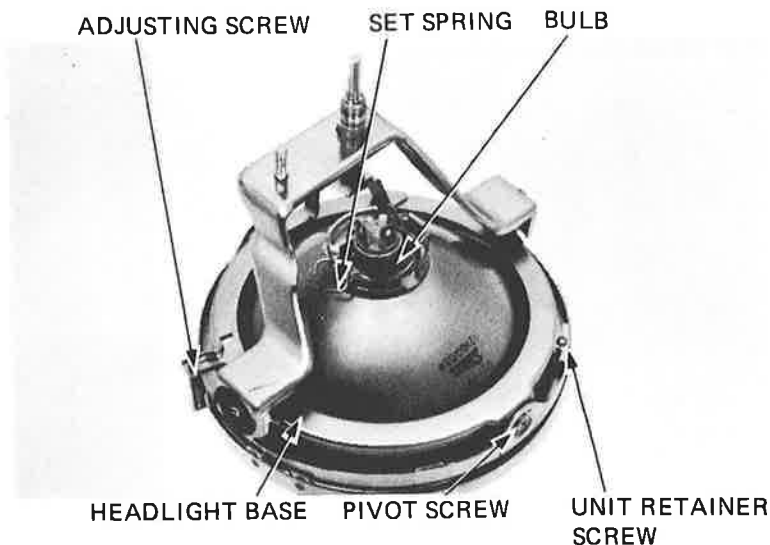




Pull the headlight out and disconnect the receptacle.



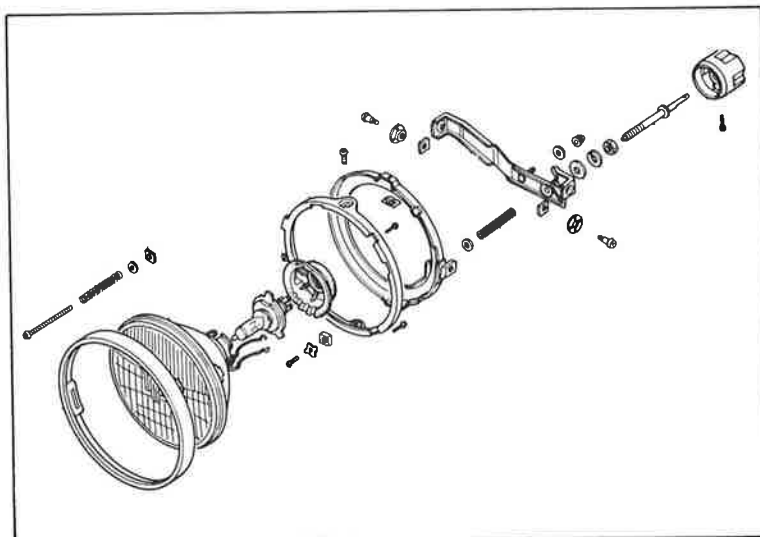
Remove the bulb cover.
Remove the set spring and bulb.
Remove the horizontal adjustment pivot screws.
Remove the horizontal adjusting screw.
Remove the headlight unit retaining screws and headlight unit.
Remove the headlight base.



Assembly is essentially the reverse of disassembly.
After assembly, adjust headlight beam (Page 3-19).

NOTE

Wear clean gloves when installing the halogen bulb. If you touch the bulb with your bare hands, clean it with a clean cloth moistened with alcohol to prevent its early failure.



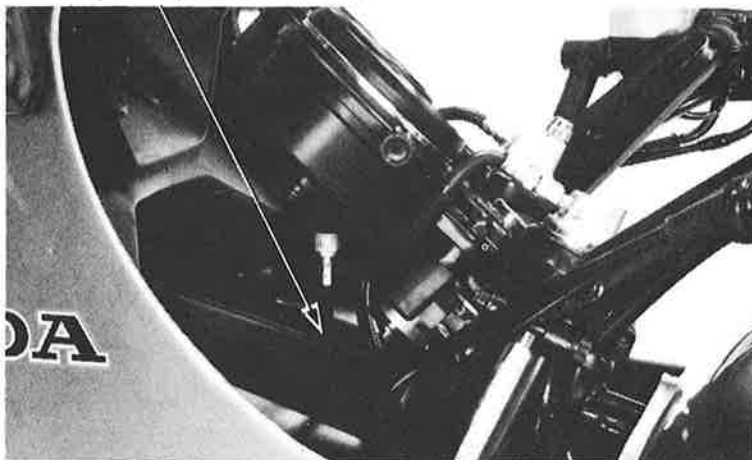


INSTRUMENTS

CLUSTER DISASSEMBLY

Disconnect the speedometer and tachometer cables.

SPEEDOMETER CABLE



Remove the instrument mounting bolts.

INSTRUMENT

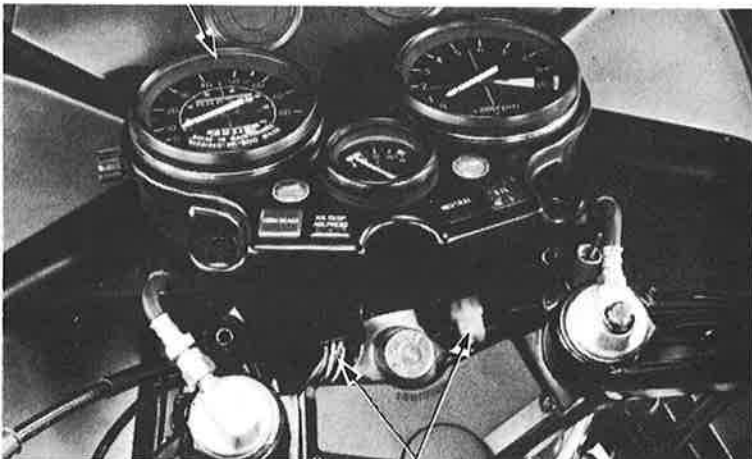


BOLTS/WASHERS

Disconnect the couplers from the instrument cluster.

Remove the instrument cluster.

INSTRUMENT



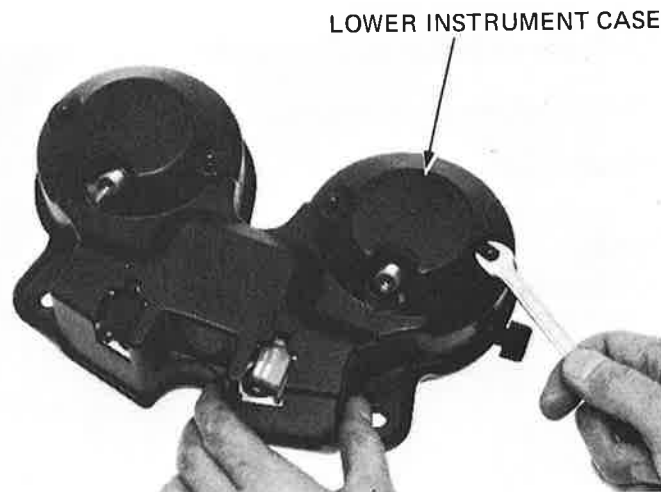
COUPLERS



Remove the lower instrument case by removing four cap nuts.

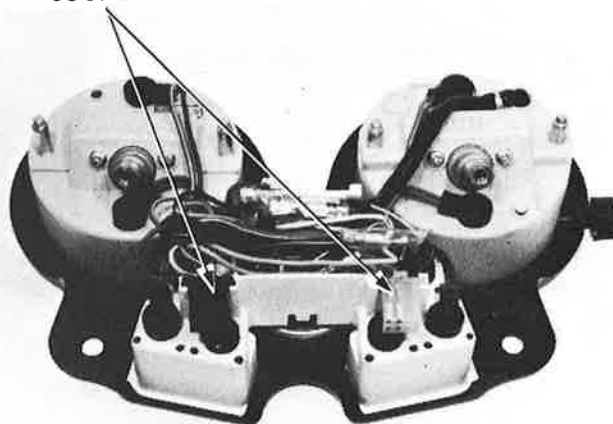
CAUTION

Do not leave the instruments upside down for a long time or damping fluid will leak onto the lens.



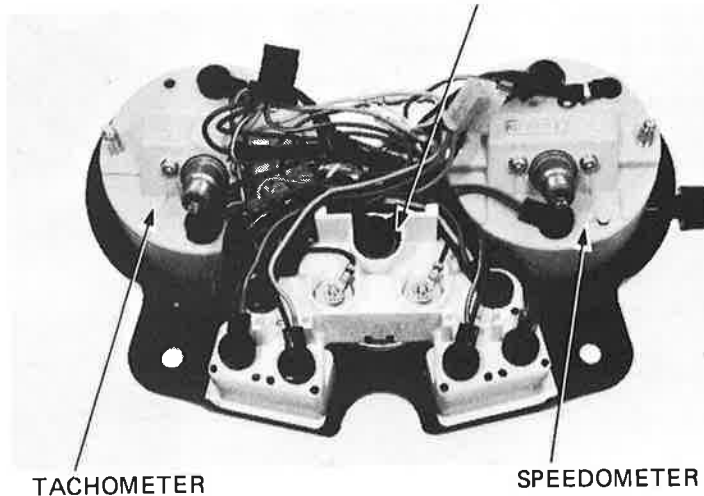
Remove the couplers from the holder on the indicator lamp case.

COUPLERS



Remove the volt meter.
Remove the bulbs and speedometer and tachometer by pushing them out.
Check the meters if the needle swings abnormally.

VOLTMETER





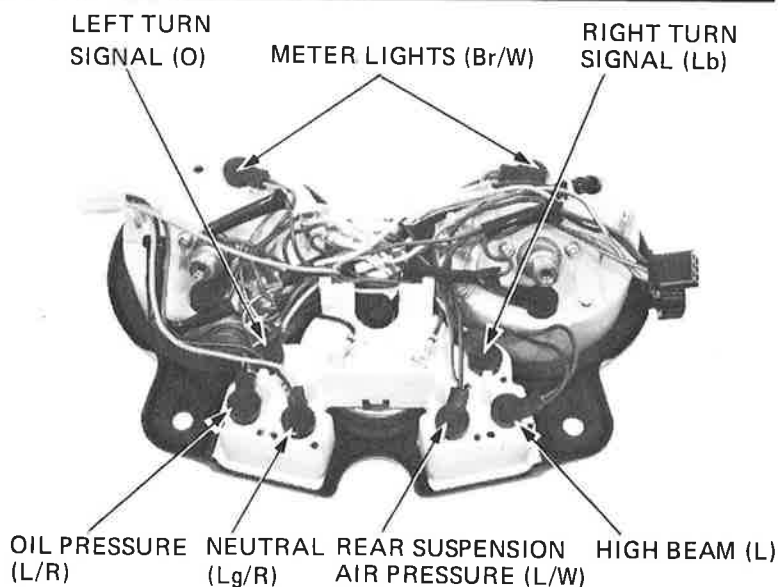
CLUSTER ASSEMBLY

Install the indicator and meter bulbs.

Connect the wires color-to-color.

NOTE

After installing new bulbs, inspect the wiring for open or short circuits if the bulbs do not light.



HANDLEBAR SWITCH/HANDLEBAR

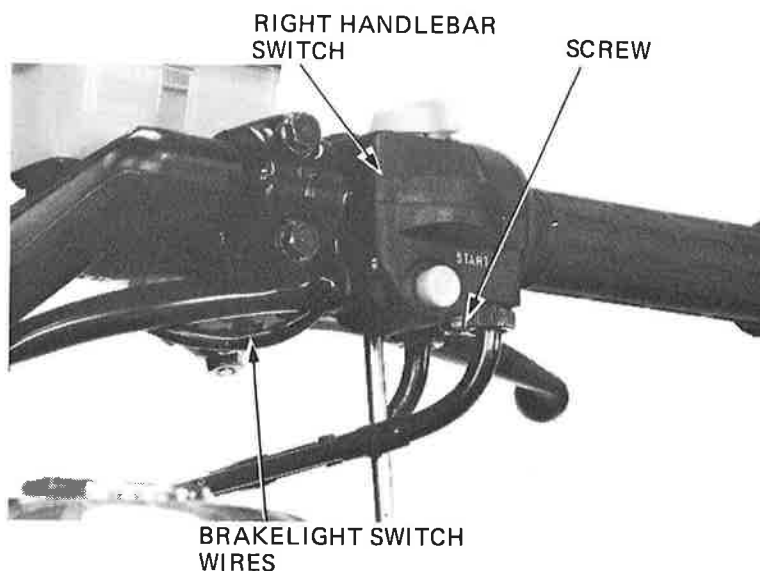
RIGHT HANDLEBAR SWITCH REPLACEMENT

Remove the fuel tank.

Remove the screws holding the upper and lower switch housing.

Disconnect the throttle cables from the throttle grip. Remove the throttle cables.

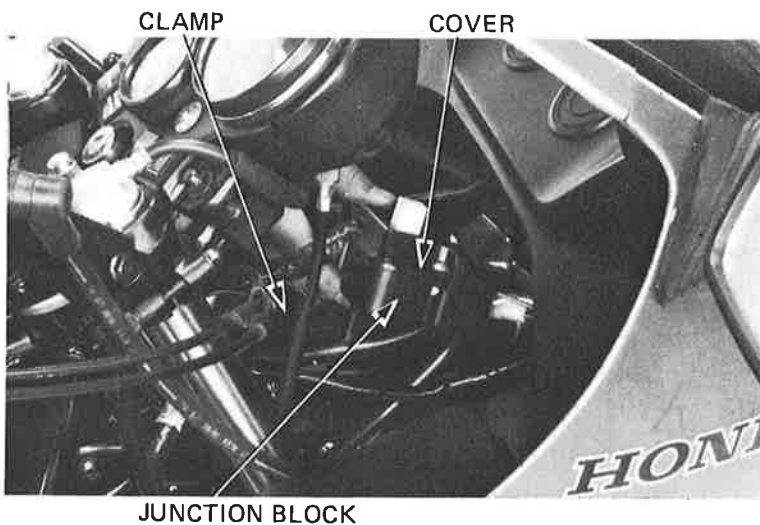
Disconnect the front brakelight switch wires from the switch.



Remove the clamps.

Disconnect the fairing wire connector.

Remove the junction block cover and disconnect the right handlebar switch couplers.





Install a new handlebar switch, aligning the location pin of the switch lower housing with the hole in the handlebar.

Reinstall the throttle cables. Install the throttle grip and connect the throttle cables.

Tighten the forward screw first, then tighten the rearward screw.

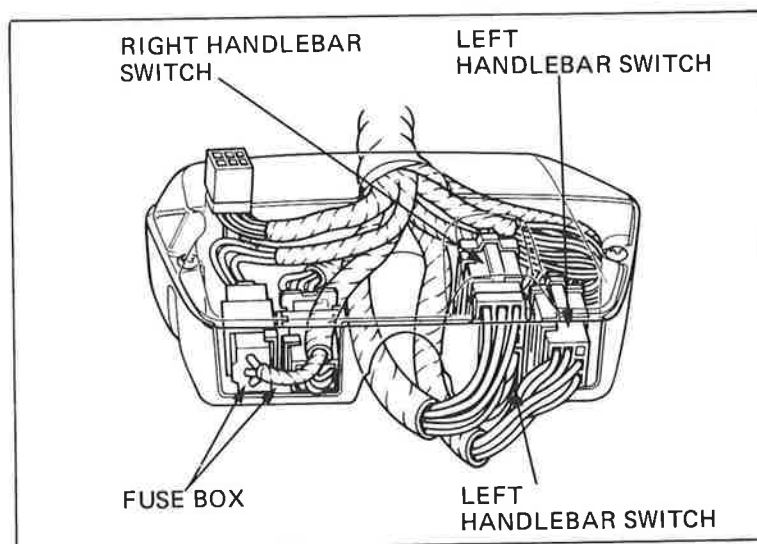
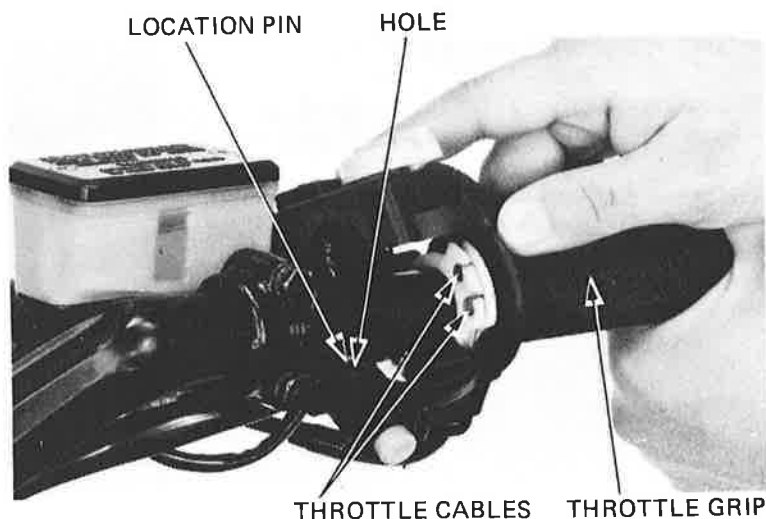
Check the switch operation.

NOTE

- Before tightening the throttle cable lock nut, turn the handlebar all the way to the right and pull the throttle cables to the right.
- Make sure there is clearance between the switch housing and throttle grip.

After installing, adjust throttle cable free play. (Page 3-6)

Install the couplers in the junction block as shown. Install the junction block cover and screws. Connect the fairing wire connector and install the wire band.

**LEFT HANDLEBAR SWITCH REPLACEMENT**

Remove the screws holding the upper and lower switch housings.

Disconnect the clutch switch wires.

Remove the wire band. Remove the junction block cover and disconnect the switch couplers.

Replace the left handlebar switch.





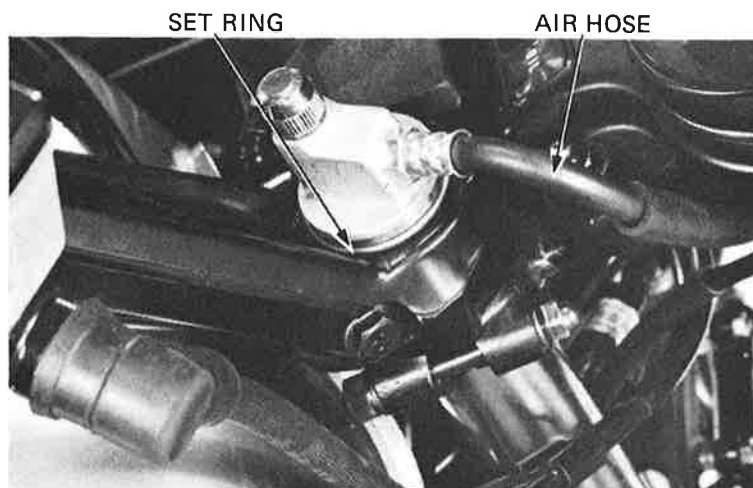
RIGHT HANDLEBAR REMOVAL

Remove the right handlebar switch (page 13-8).
Remove the front brake master cylinder (page 15-7).

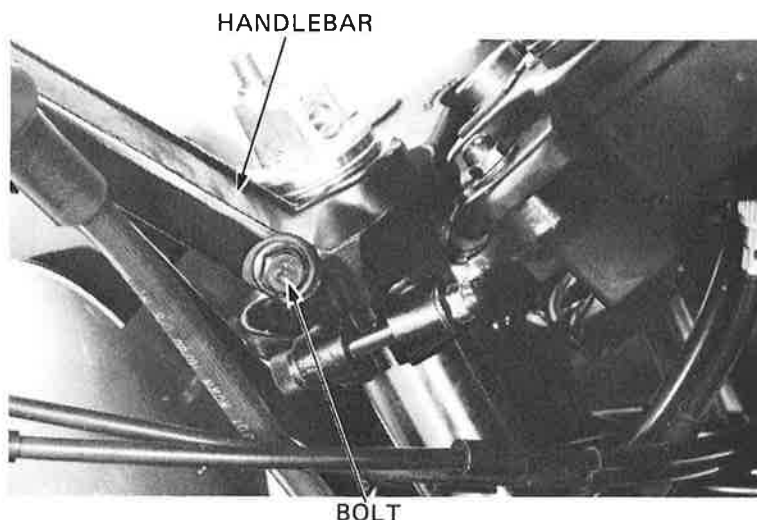
Disconnect the front fork air hose at the left fork connector, after releasing the air pressure from the front forks.

Remove the air hose from the right fork.

Remove the set ring.



Loosen the handlebar setting bolt and remove the right handlebar.



RIGHT HANDLEBAR INSTALLATION

Install the right handlebar on the right fork tube, inserting the location lug into the cutout of the fork bridge.

Apply clean oil to the thread of the handlebar setting bolt and install it.

Push the handlebar forward and tighten the bolt to the specified torque.

TORQUE:

28-32 N·m (2.8-3.2 kg·m, 20-23 ft·lb)

Coat the throttle grip area of the handlebar with grease.

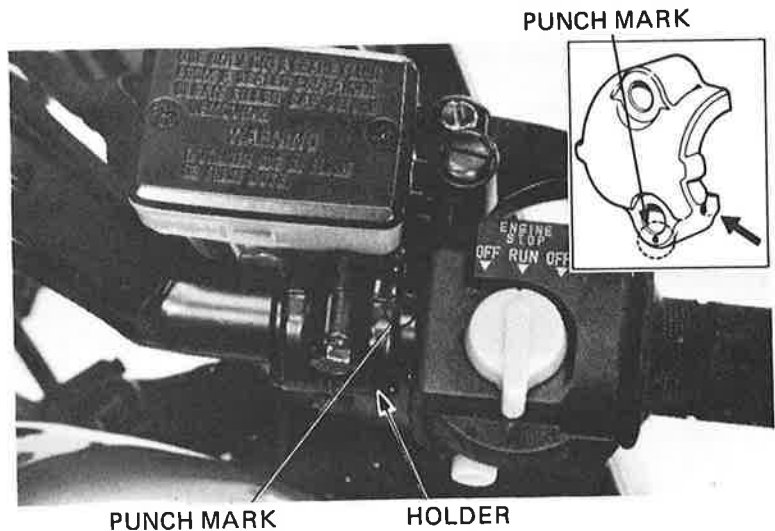
Install the throttle grip and right handlebar switch.





Install the front brake master cylinder on the handlebar with the end of the holder aligned with the punch mark and wire relief facing down. Tighten the upper bolt first then tighten the lower bolt.

After assembly, check that the brake lever does not touch the switch housing when it is pulled in. Install the set ring on the fork tube groove.



Apply grease to a new o-ring and install it on the air hose joint.

Connect the air hose to the right fork and tighten it to specified torque.

TORQUE: 4–7 N·m (0.4–0.7 kg-m, 3–5 ft-lb)

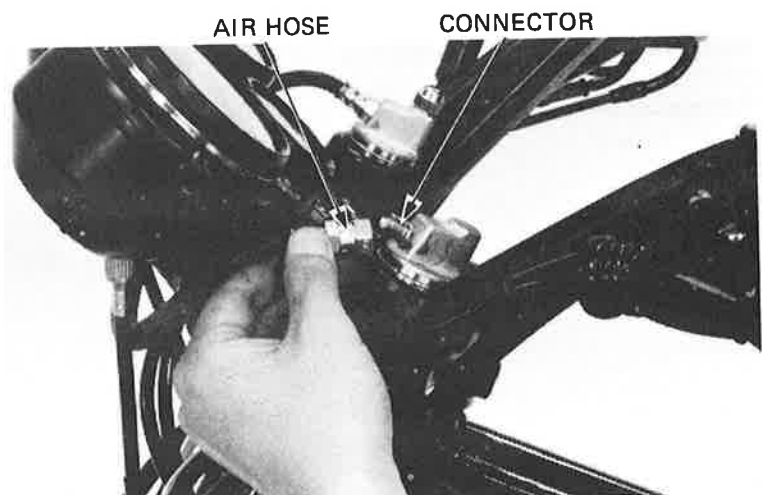


Route the air hose properly and connect the air hose to the left fork hose connector and tighten to specified torque.

TORQUE:

15–20 N·m (1.5–2.0 kg-m, 11–14 ft-lb)

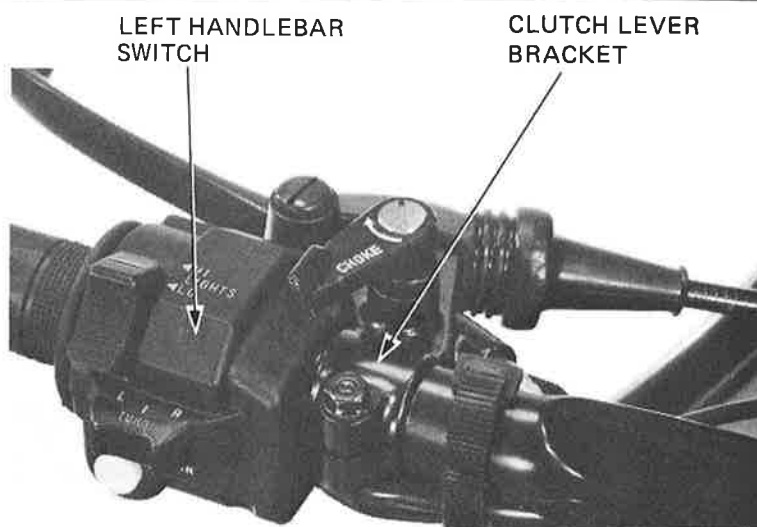
Fill the fork tube with air to the specified pressure.



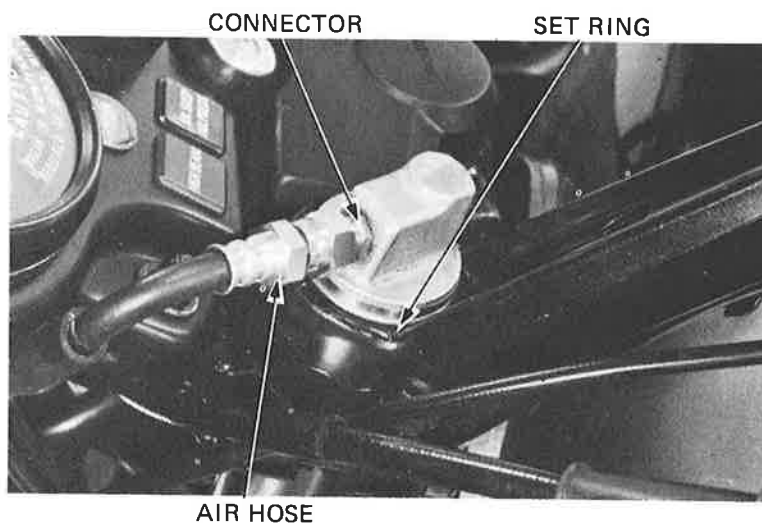


LEFT HANDLEBAR REMOVAL

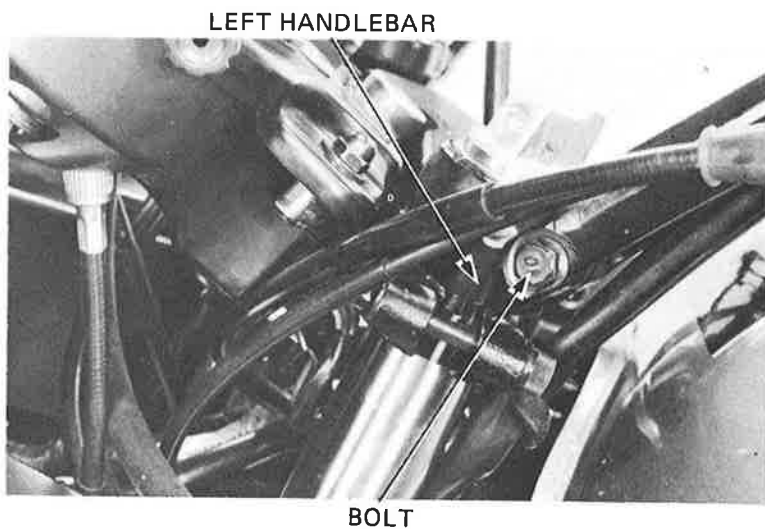
Remove the left handlebar switch (page 13-9).
Remove the left grip.
Loosen the clutch lever bracket bolt.



Depress the air pressure of the front forks.
Disconnect the air hose from the left fork.
Remove the air hose connector.
Remove the set ring.



Loosen the handlebar setting bolt and remove the left handlebar.
Remove the clutch lever bracket.





LEFT HANDLEBAR INSTALLATION

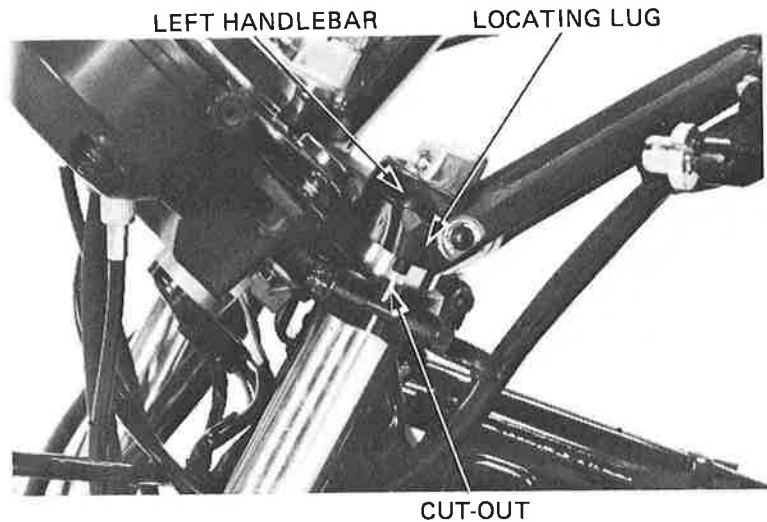
Attach the left handlebar to the left fork tube, installing the locating lug into the cutout of the fork bridge.

Coat clean oil to the thread of the handlebar setting bolt and install it.

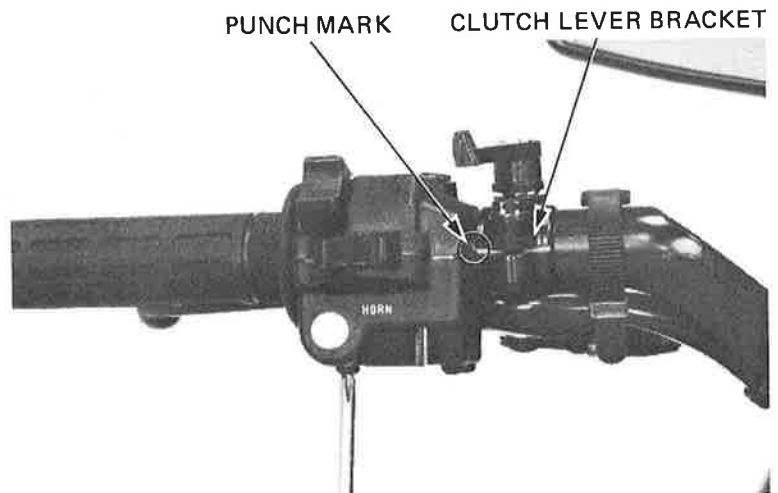
Tighten the handlebar setting bolt to the specified torque while pushing the handlebar forward.

TORQUE:

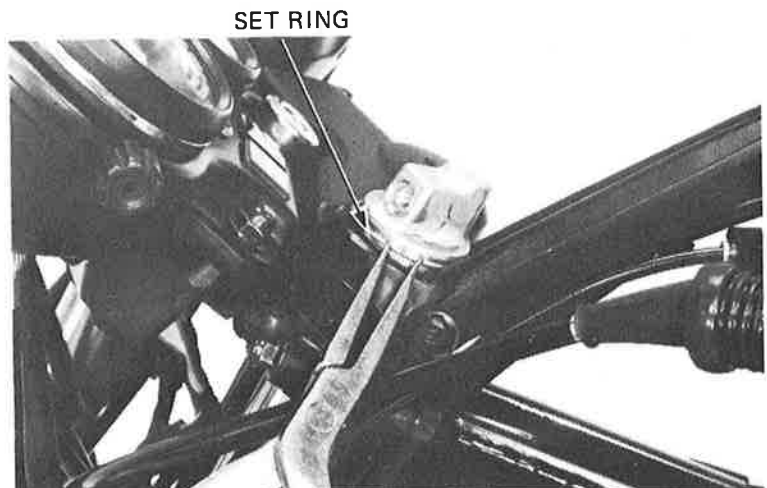
28–32 N·m (2.8–3.2 kg·m, 20–23 ft·lb)



Install the clutch lever bracket with the split aligned with the punch mark on the handlebar.
Install the left handlebar switch and grip.



Install the set ring.

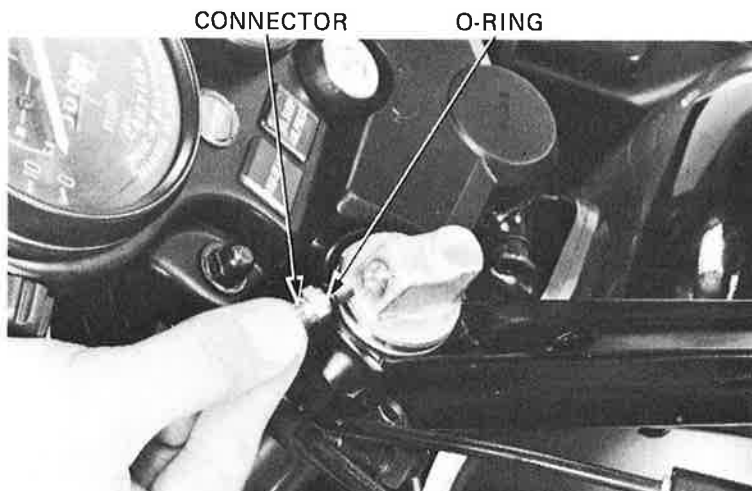




Apply grease to a new o-ring and install it on the connector.

Tighten the connector to specified torque.

TORQUE: 4–7N·m (0.4–0.7 kg-m, 3–5 ft-lb)



Connect the air hose to the left fork and tighten it to the specified torque.

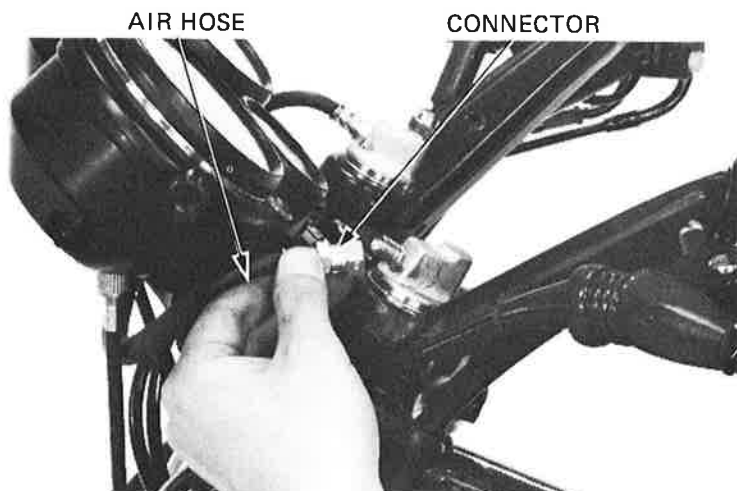
TORQUE:

15–20N·m (1.5–2.0 kg-m, 11–14 ft-lb)

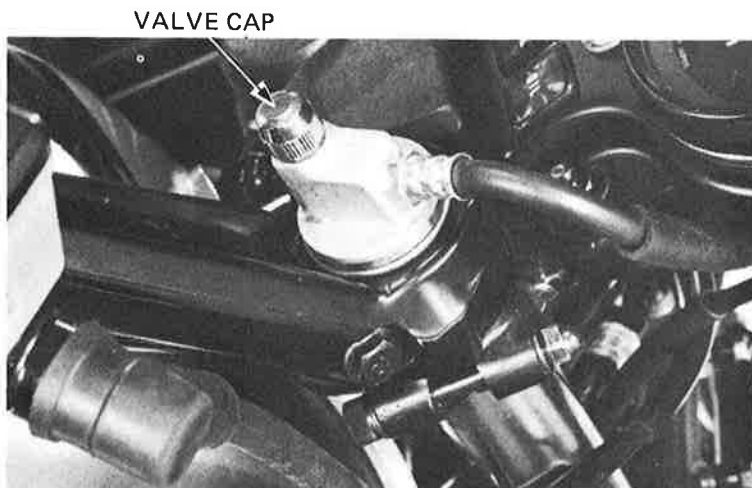
Fill the front forks with air to the specified pressure.

PRESSURE:

50–90 kPa (0.5–0.9 kg/cm², 7–13 psi)



Install the air valve cap on the right fork cap bolt.



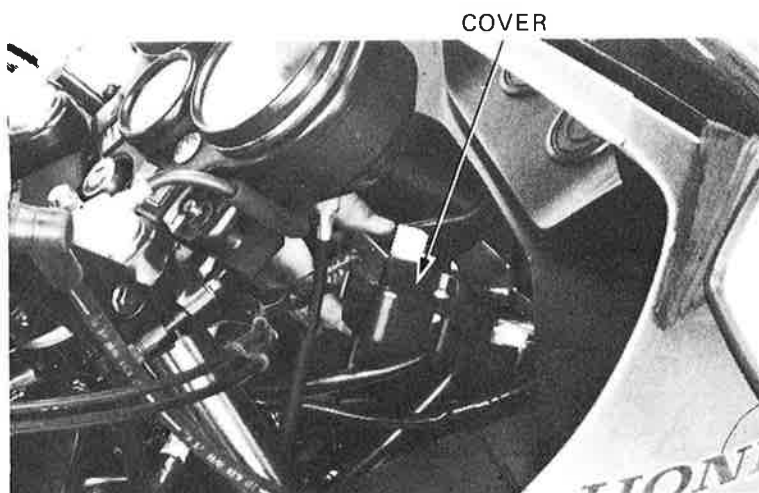


FUSE HOLDER REPLACEMENT

Remove the fuse cover.
Unscrew the screws holding the fuse holder.



Remove the wire band and junction block cover.

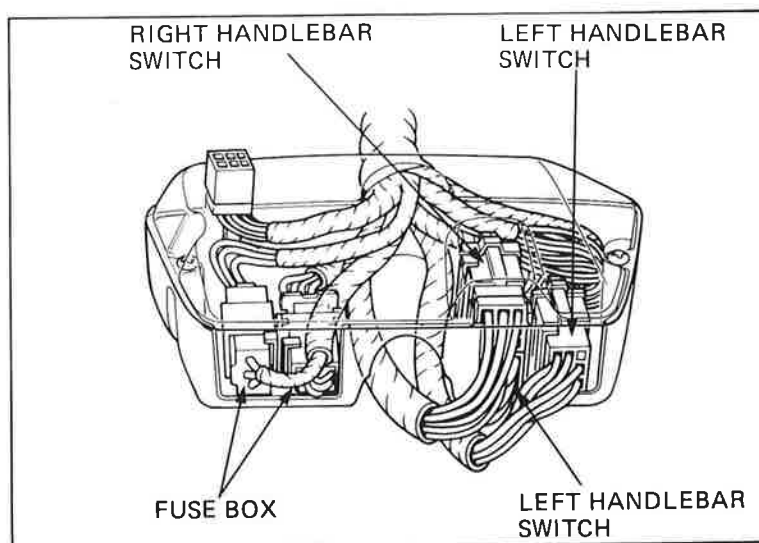


Disconnect the wire coupler.
Remove the fuse holder.

NOTE

Route the fuse holder wires as shown.

Install a new fuse holder in the reverse of removal.



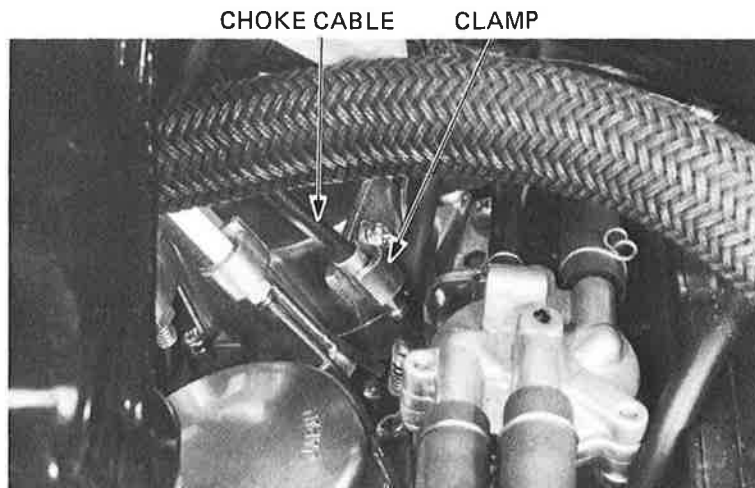


CHOKE CABLE REPLACEMENT

Remove the fuel tank.

Disconnect the choke cable from the lower choke cable clamp.

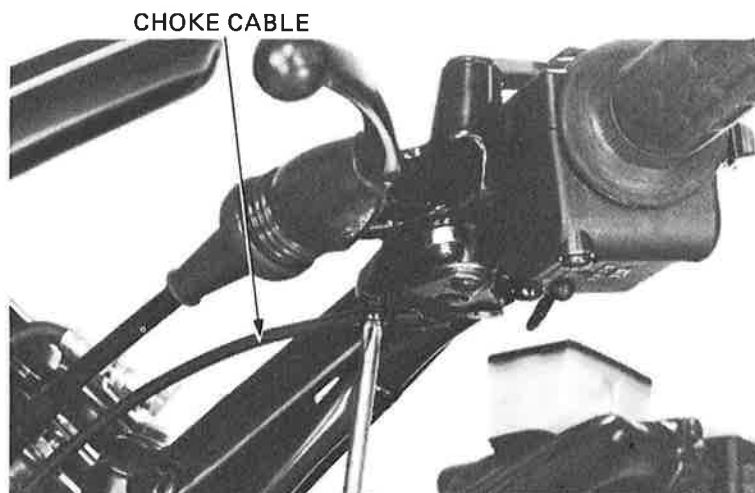
Remove the cable end from the choke lever.



Remove the choke cable from the choke lever on the handlebar.

NOTE

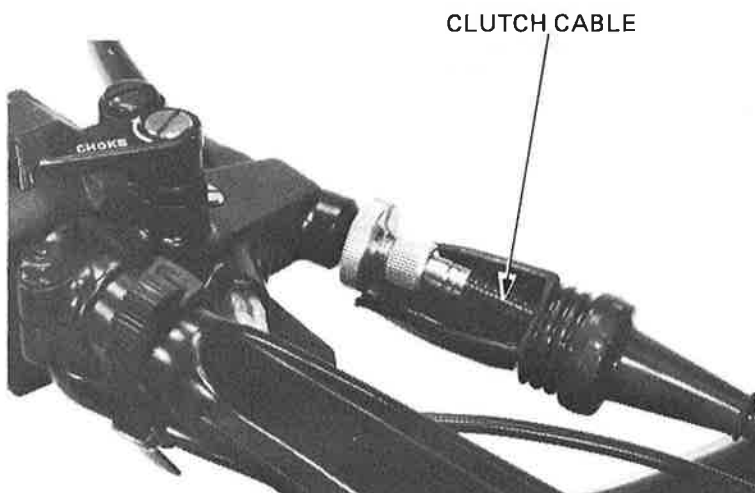
Before removing the cable, tie a string to the cable end. This string can be used as a draw cord when installing a new choke cable.



CLUTCH CABLE REPLACEMENT

Remove the fuel tank.

Remove the clutch cable from the lever.



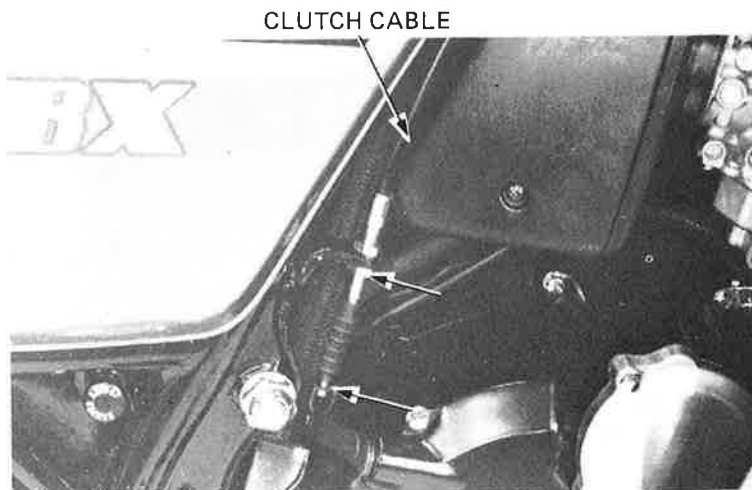


Loosen the lock nut on the engine and remove the clutch cable from the clutch lever.

NOTE

Before removing the clutch cable, connect a string to the end of the cable so that a new cable can be installed easily by using this string as a draw cord.

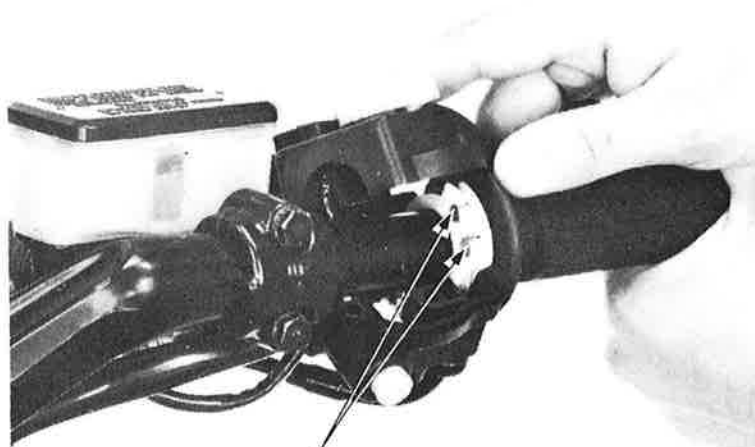
Adjust the clutch cable after replacement (Page 3-19).



THROTTLE CABLE REPLACEMENT

Remove the fuel tank.

Remove the right handlebar switch/throttle housing.
Remove the throttle cables from the throttle housing.

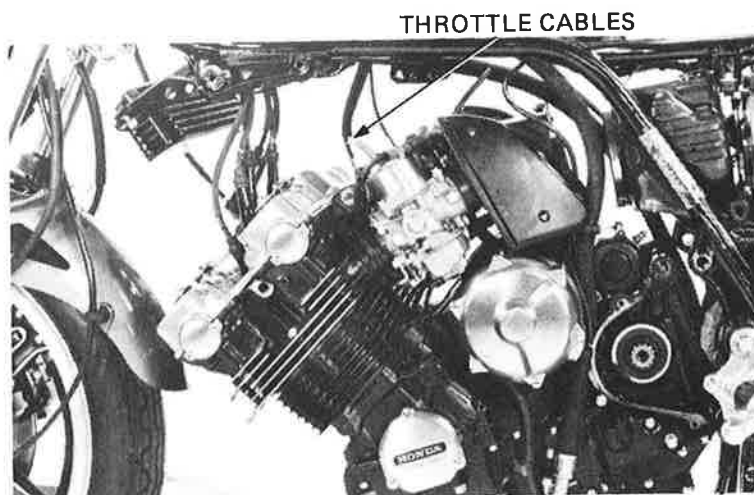


THROTTLE CABLES

Tilt the engine forward (Page 5-1).

Remove the throttle cables from the carburetors.

Adjust throttle cable free play (Page 3-6)



THROTTLE CABLES



FAIRING

FAIRING REMOVAL

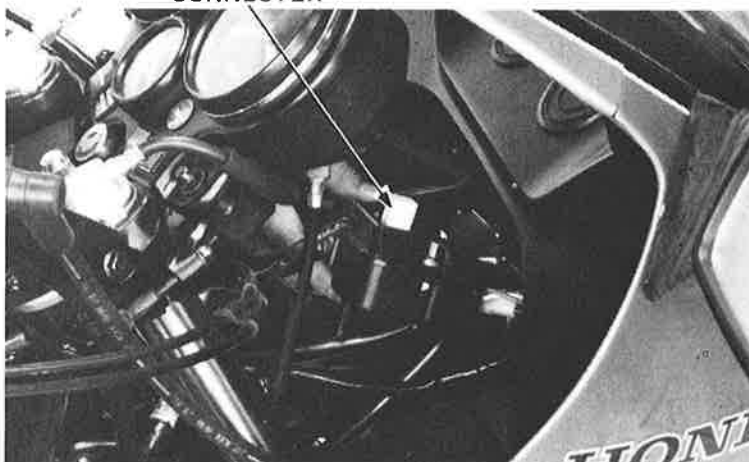
Remove the left and right leg shields.

LEG SHIELD



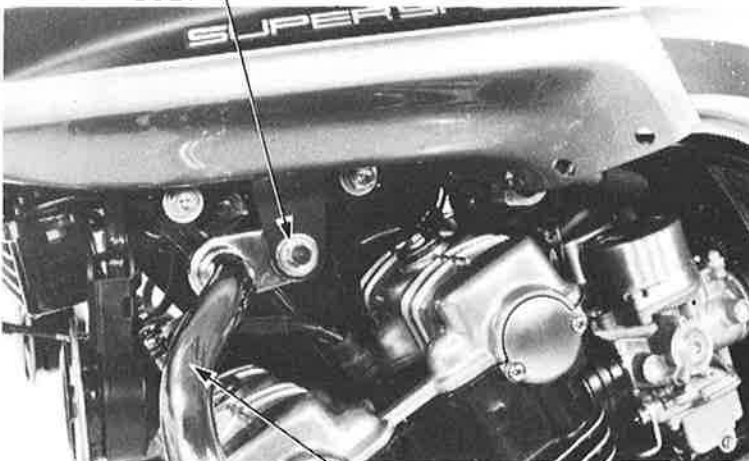
Disconnect the fairing wire connector.
Remove the fairing mount bolt.
Remove the wire band.
Disengage the wires from the fairing bracket.

CONNECTER



Remove the fairing side mount bolts.
Remove the fairing.
Remove the engine guards.

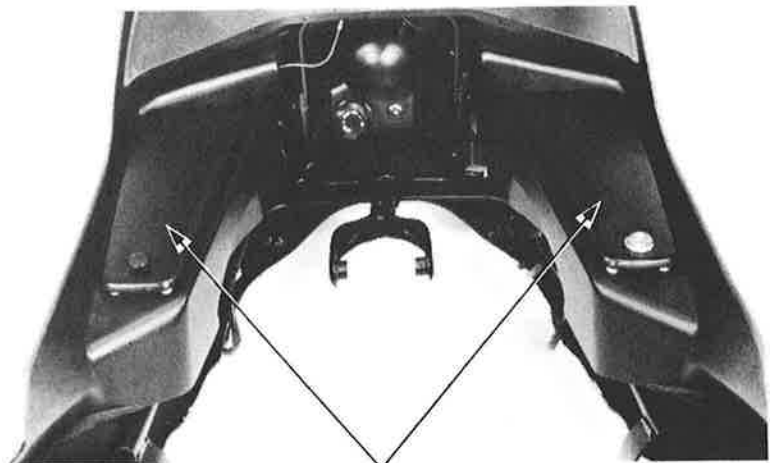
FAIRING MOUNT
BOLT



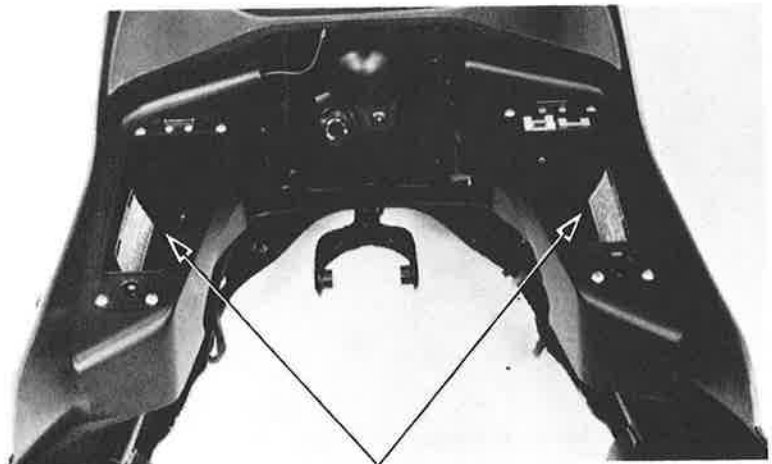
ENGINE GUARD

**FAIRING DISASSEMBLY**

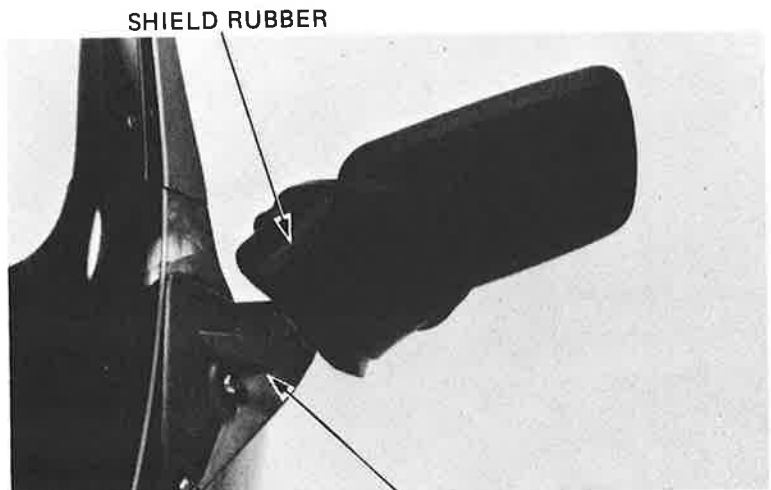
Remove the fairing (Page 13-18).
Remove the headlight (Page 13-4) and turn signals (Page 13-22).
Remove the windshield (Page 13-22).
Remove the left and right fairing pocket covers.

**FAIRING POCKET COVERS**

Remove the fuse holder from the right fairing pocket.
Remove the left and right fairing pockets.

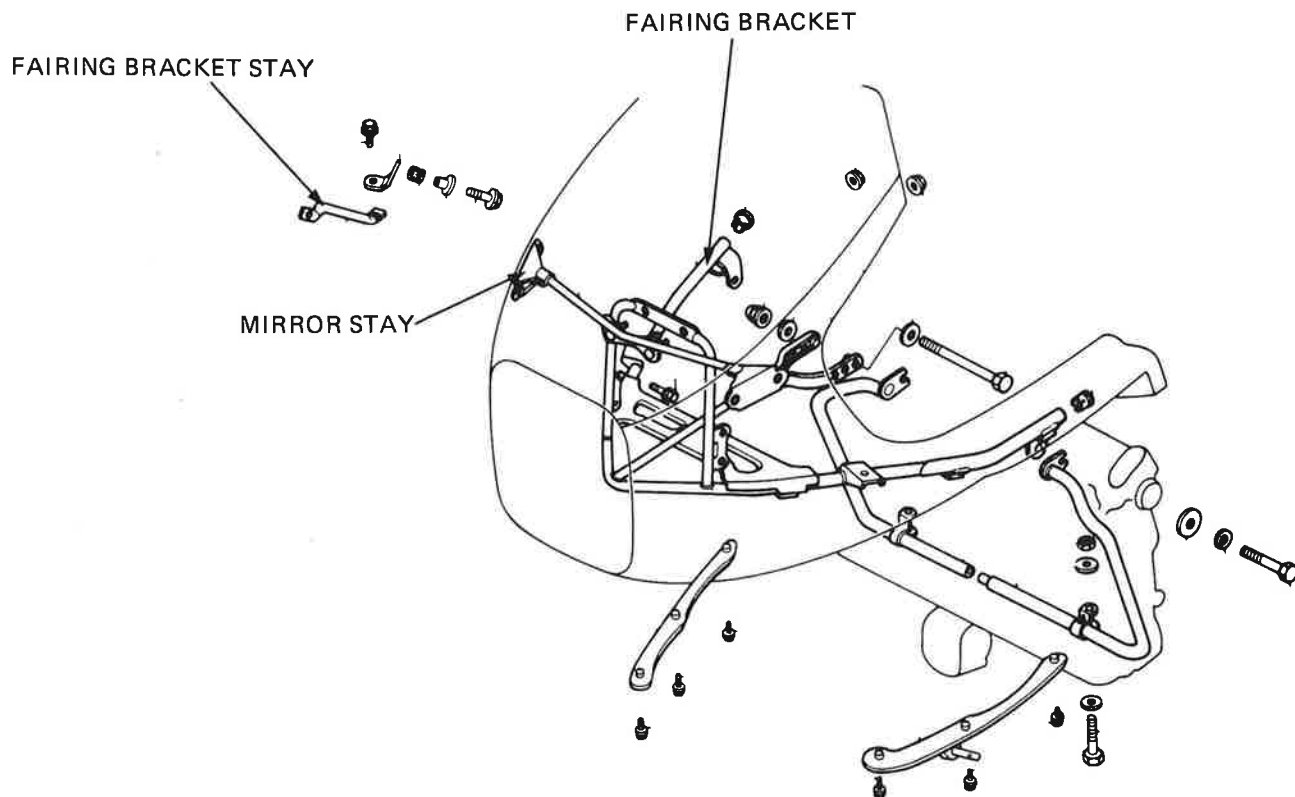
**FAIRING POCKETS**

Remove the left and right rear view mirrors.

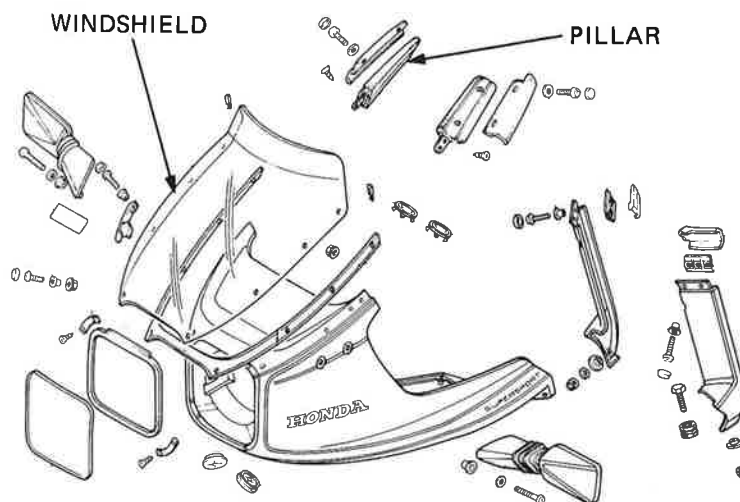
**SHIELD RUBBER****REAR VIEW MIRROR**



Remove the mirror stay mounting cap nuts.
Remove the fairing bracket stays.
Remove the mirror bracket setting screws.
Remove the mirror bracket.
Remove the fairing bracket from the fairing assembly.



Disassemble the fairing as shown if necessary.



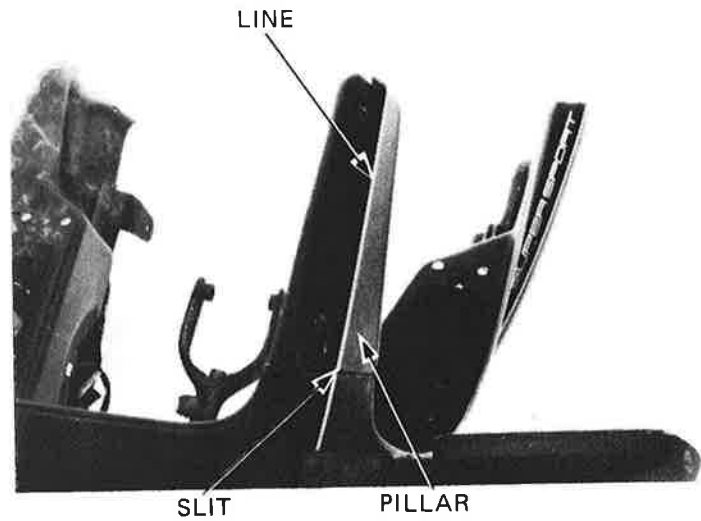


FAIRING ASSEMBLY

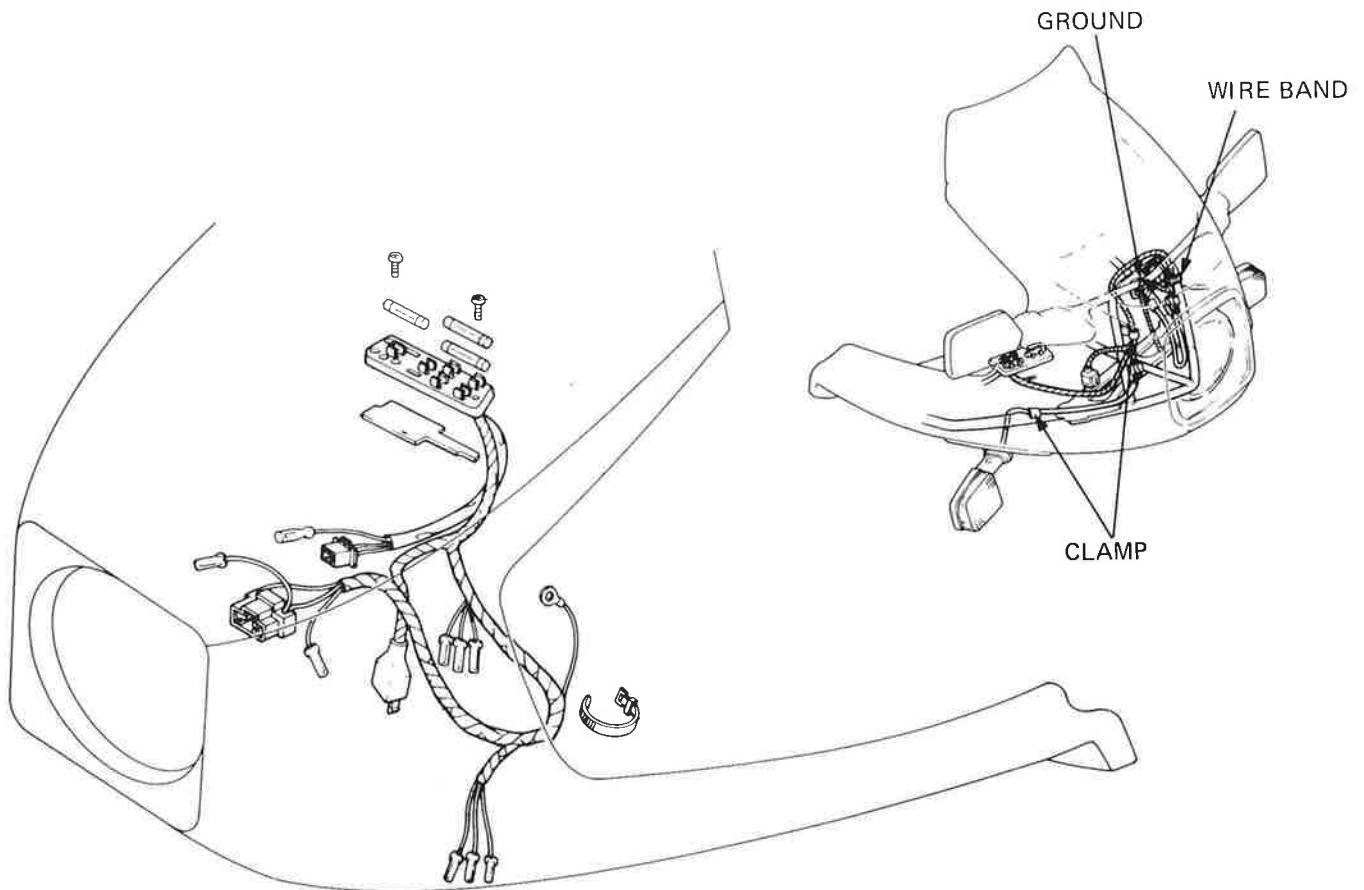
Assemble the fairing in the reverse order of disassembly.

NOTE

Tighten the pillars by aligning the line of pillar and slit of pillar.



Route the fairing wire harness as shown.



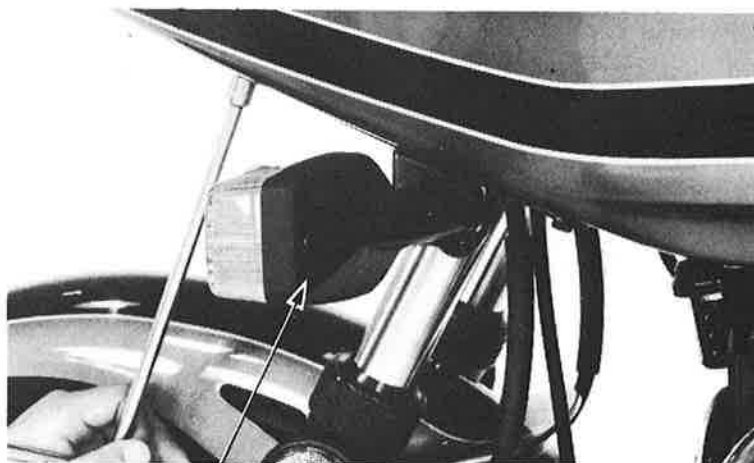


TURN SIGNAL REMOVAL

Disconnect the turn signal wire connectors.
Remove the turn signals by removing the turn signal mounting bolts.

NOTE

The left turn signal has an orange tube wire, and the right turn signal has a light-blue tube wire.



TURN SIGNAL

WINDSHIELD REPLACEMENT

Remove the windshield screw caps.
Remove the left and right fairing pockets.



SCREW CAP

Remove the screws.
Remove the windshield.

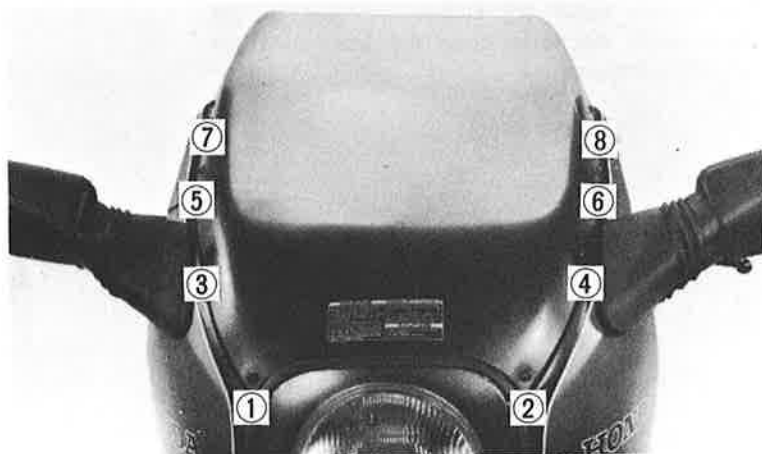
NOTE

Do not let the nuts and nut plates fall when removing the two lower right and left screws.





Install the weatherstrips on the fairing by aligning the screw holes.
Install the windshield.
Tighten the windshield screws in the sequence shown.

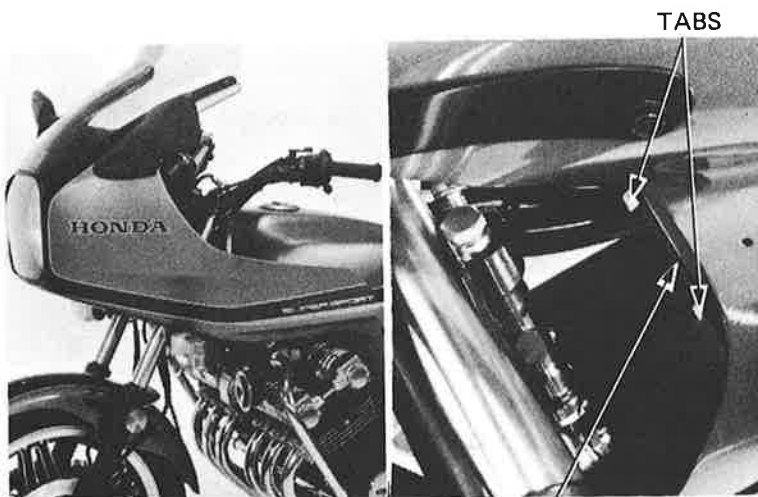


FAIRING INSTALLATION

Install the fairing in the reverse order of removal.

NOTE

Set the tabs of the junction block to the fairing bracket as shown.



FAIRING BRACKET

FRONT WHEEL

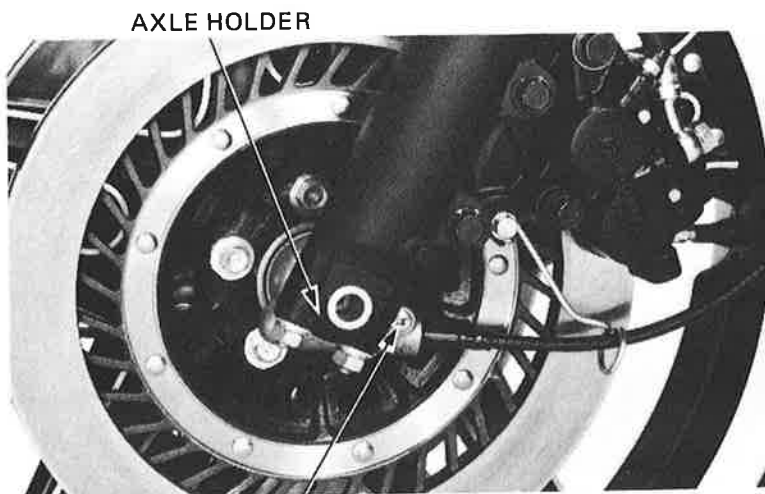
REMOVAL

Remove the speedometer cable set screw and speedometer cable.

Remove the left and right calipers.

NOTE

Do not operate the front brake lever after removing the front wheel. To do so will cause difficulty in fitting the brake disc between the brake pads.

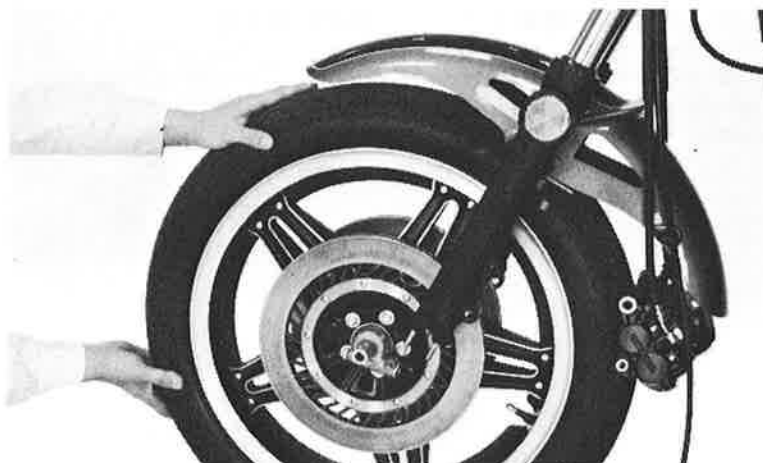


SCREW

Remove the left and right axle holders.

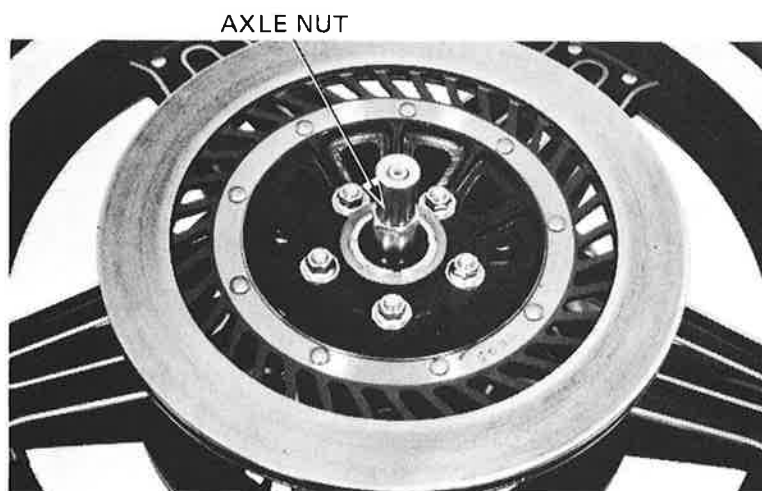


Place a jack under the engine and jack up the engine until the forks clear the front axle and remove the front wheel.



DISASSEMBLY

Remove the axle nut, speedometer gear box, axle and collar.

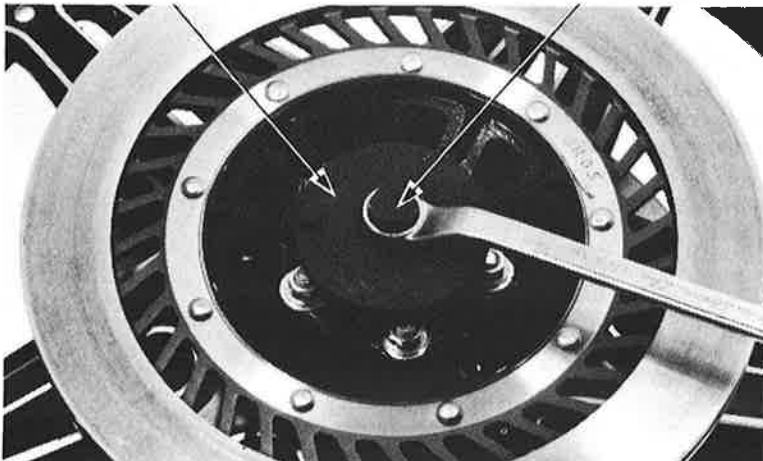


Remove the retainer.
Remove the bearings and the distance collar from the hub.

NOTE

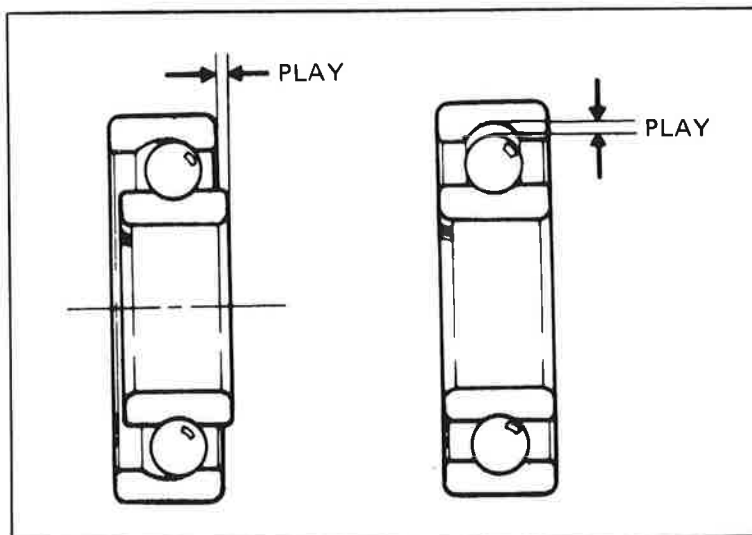
If the bearings are removed, they should be replaced with new ones.

RETAINER WRENCH ATTACHMENT 07710-0010200
RETAINER WRENCH BODY 07710-0010401



**INSPECTION****WHEEL BEARING**

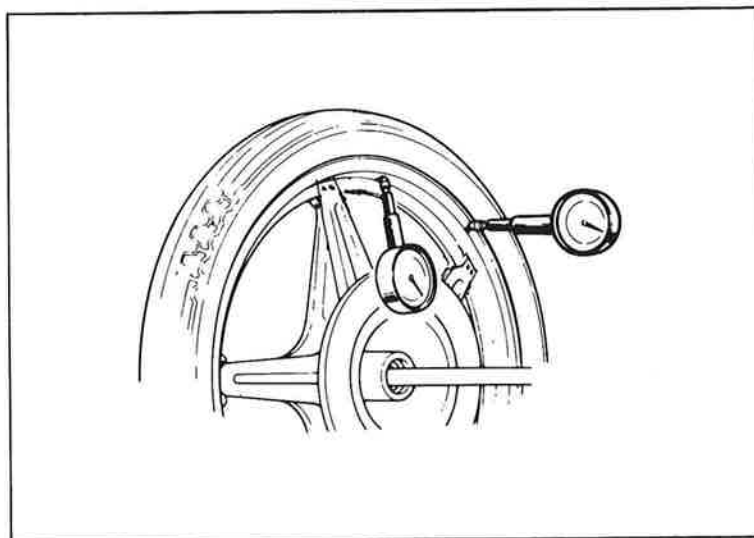
Check wheel bearing play by placing the wheel in a truing stand and spinning the wheel by hand. Replace the bearings with new ones if they are noisy or have excessive play.

**WHEEL**

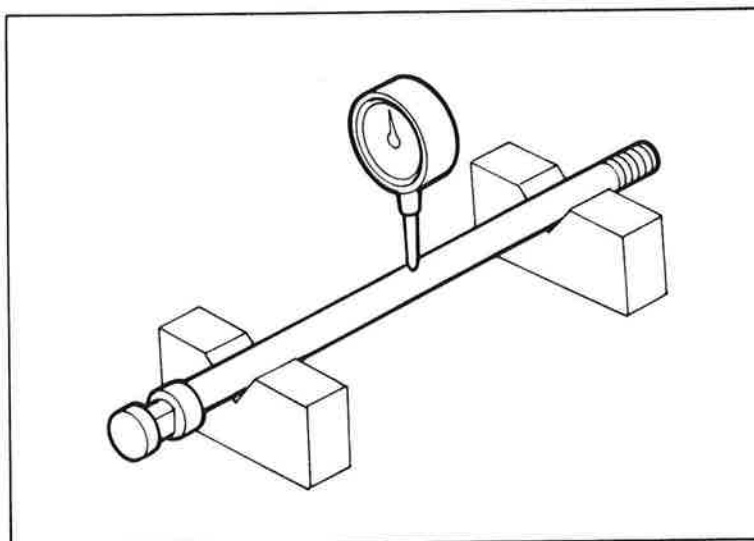
Check the rim runout by placing the wheel in a truing stand. Spin the wheel slowly and read the runout using a dial indicator gauge.

SERVICE LIMITS:**RADIAL RUNOUT:** 2.0 mm (0.08 in)**AXIAL RUNOUT:** 2.0 mm (0.08 in)

The COMSTAR TM WHEEL cannot be repaired and must be replaced with a new one if the service limits are exceeded.

**AXLE INSPECTION**

Set the axle in V blocks and measure the runout. The actual runout is 1/2 of total indicator reading.

SERVICE LIMIT: 0.20 mm (0.008 in)



ASSEMBLY

NOTE

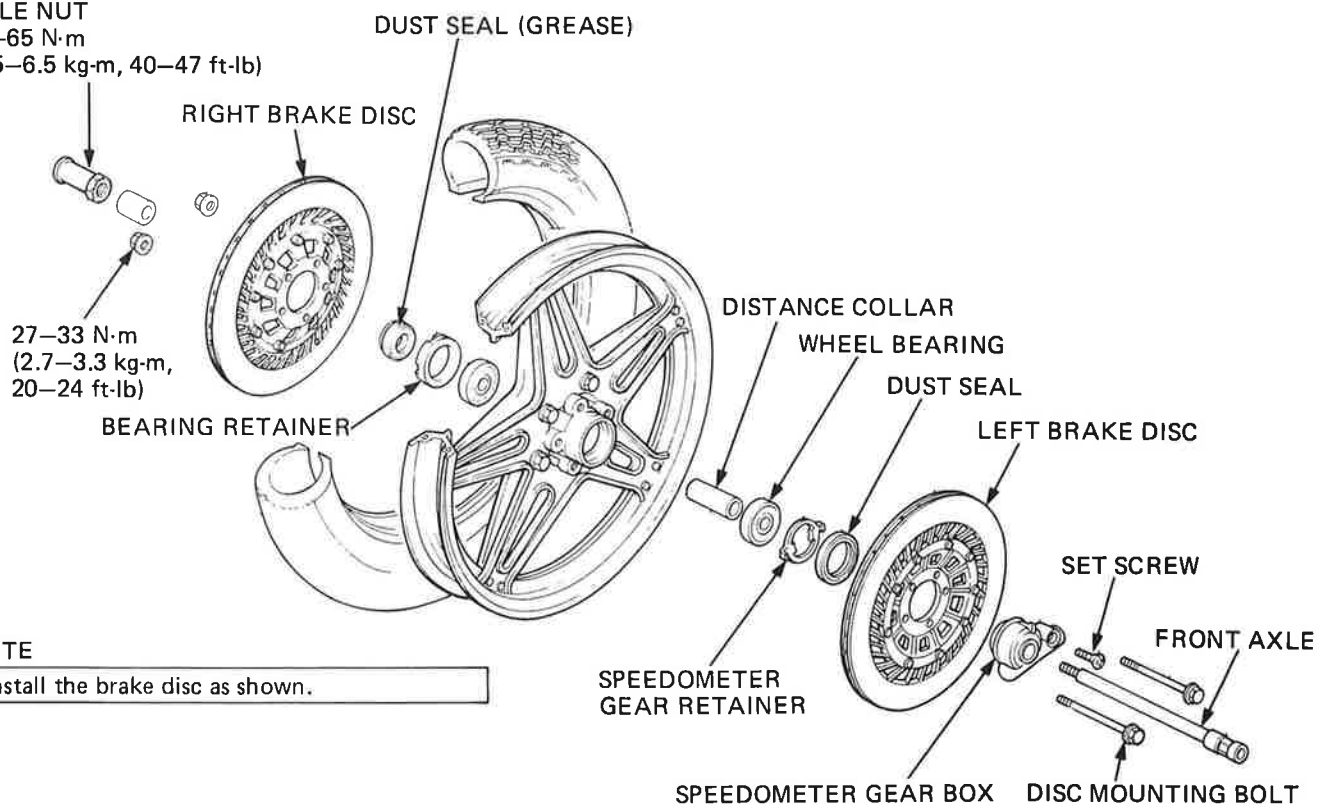
- The COMSTAR™ WHEEL has no rim band.
- The front wheel uses a tubeless tire. For tubeless tire repair, refer to the TUBELESS TIRE MANUAL (Code No. 6141500, H/C 068216 in U.S.A.).

WARNING

Do not get grease on the brake disc or stopping power will be reduced.

AXLE NUT

55–65 N·m
(5.5–6.5 kg·m, 40–47 ft·lb)



NOTE

Install the brake disc as shown.

Pack all bearing cavities with grease.
Drive in the right bearing first.
Press the distance collar into place.

NOTE

Be certain the distance collar is in position before installing the bearings.

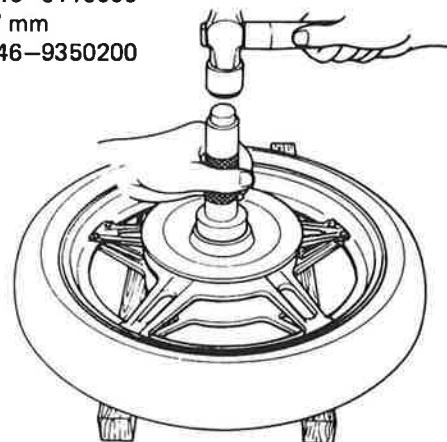
Drive in the left bearing.

NOTE

- Drive the bearing squarely.
- Drive the bearing into position, making sure that it is fully seated and that the sealed side is facing out.

DRIVER

07749–0010000 or 07949–6110000
ATTACHMENT 42 X 47 mm
07746–0010300 or 07946–9350200
PILOT 15 mm
07746–0040300





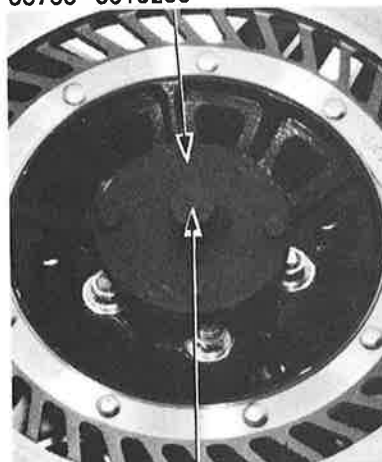
Install the bearing retainer with the tool used to remove it.

NOTE

Inspect the retainer. If the threads are damaged, it should be replaced.

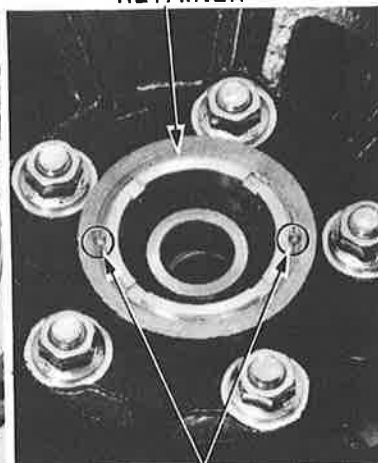
Install the seal and the bearing retainer and peen the edge of the retainer.

RETAINER WRENCH ATTACHMENT
00700-0010200



RETAINER WRENCH BODY
07710-0010401

RETAINER



PEEN THE RETAINER

NOTE

The spoke plate bolts and nuts require no retightening since they are secured with lock pins. Do not remove the pins.

Install the speedometer gear retainer.
Lubricate the inside of the oil seal and install it.

Install the speedometer gear in the wheel hub, aligning the tangs with the slots.

SPEEDOMETER GEAR



SPEEDOMETER GEAR
RETAINER

Install the left and right discs.

TORQUE:

27-33 N·m (2.7-3.3 kg-m, 20-24 ft-lb)

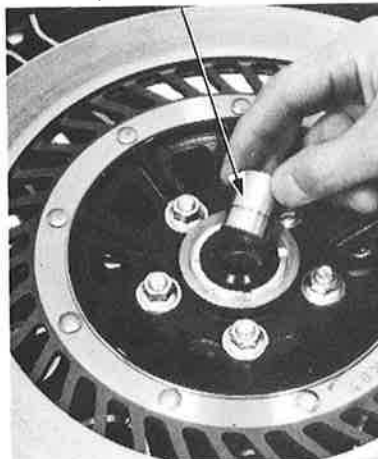
Install the left side collar and axle.
Install the axle nut.

TORQUE:

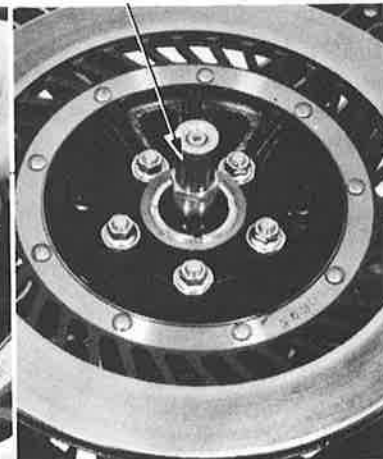
55-65 N·m (5.5-6.5 kg-m, 40-47 ft-lb)

Clean the brake discs with a high quality degreasing agent.

SIDE COLLAR



AXLE NUT





INSTALLATION

Fit the calipers over the discs, taking care not to damage the brake pads. Install the caliper mounting bolts.

TORQUE:

30–40 N·m (3.0–4.0 kg-m, 22–29 ft-lb)

Install the axle holders with the "F" arrow forward. Tighten the forward axle holder nuts lightly.

Tighten the right axle holder nuts to the specified torque, starting with the forward nuts.

TORQUE:

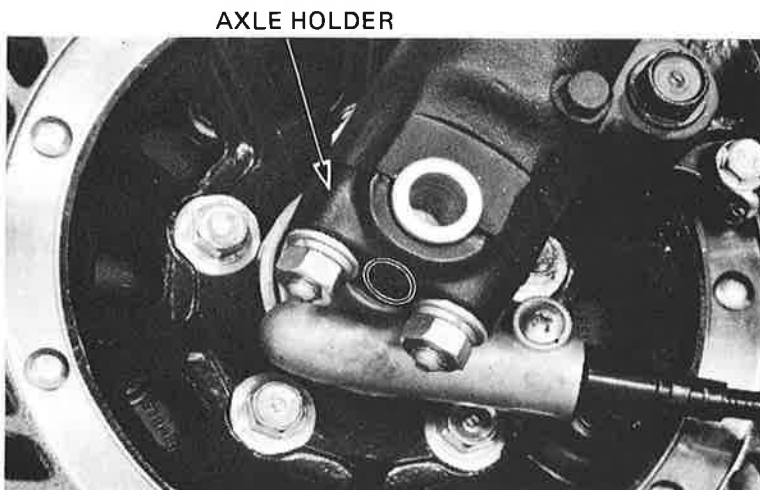
18–25 N·m (1.8–2.5 kg-m, 13–18 ft-lb)

Measure the outside surface of the left brake disc and the rear of the left caliper holder with a 0.7 mm (0.028 in) feeler gauge.

If the gauge cannot be inserted, pull the left fork out until the gauge can be inserted.

Tighten the left holder nuts.

There should be at least 0.7 mm (0.028 in) clearance between the caliper holder and disc.



CAUTION

After installing the wheel, apply the brakes several times and recheck the clearance on both sides. Failure to provide clearance will damage the brake discs and affect braking efficiency.

FRONT FORK

REMOVAL

Remove the front wheel (page 13-26).

Remove the brake calipers.

NOTE

Do not loosen the brake hose unless necessary.

Remove the front fender.



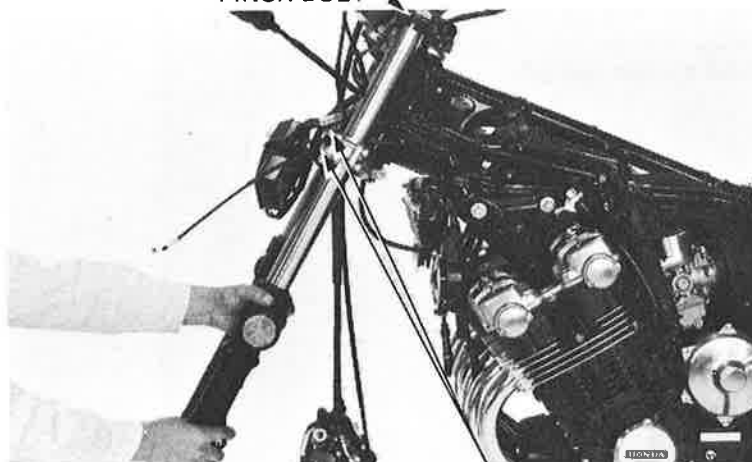


Remove the fairing (page 13-18).



Remove the handlebar (Page 13-10).
Loosen the fork bridge and steering stem pinch bolts.
Remove the front fork by rotating the fork tube.
Before removing the front forks, loosen the fork cap bolts to ease front fork disassembly.

FORK TOP BRIDGE
PINCH BOLT



STEERING BOTTOM BRIDGE
PINCH BOLTS

DISASSEMBLY

Fork Seal Removal

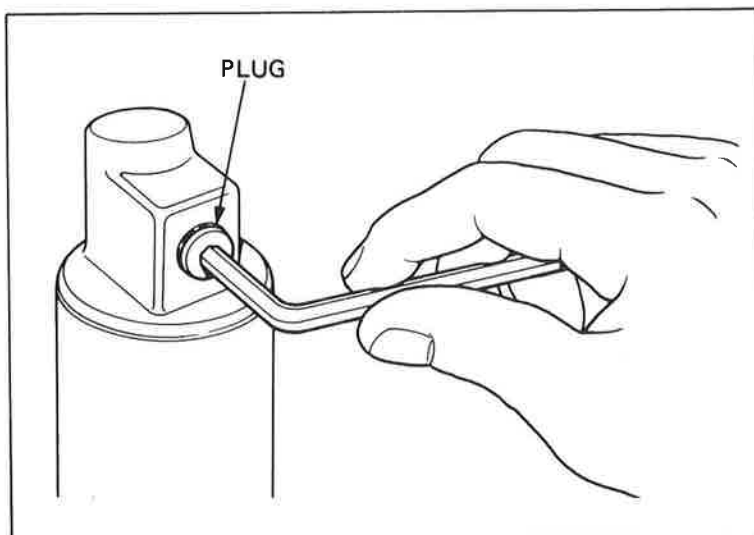
WARNING

The fork tube caps are under spring pressure. Care must be used when removing the fork tube caps to prevent them from becoming projectiles. Wear eye and face protection.

NOTE

- Fork seal replacement does not require inner fork tube and slider separation.
- This procedure is for air assisted forks only.

Remove the air valve from the right fork cap bolt. Install a special plug into the fork cap bolt. (See service Bulletin 900 # 2, 1100 # 3).



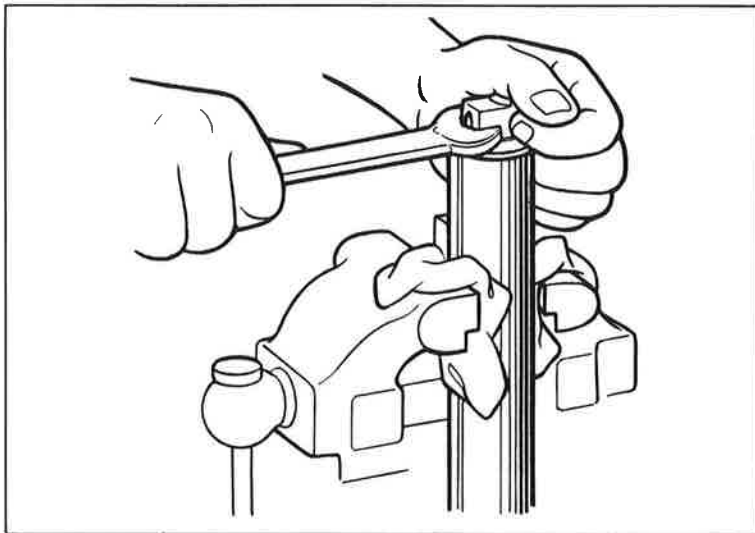


Place the fork tube into a vise with soft jaws or a shop towel. Loosen the fork cap bolt.

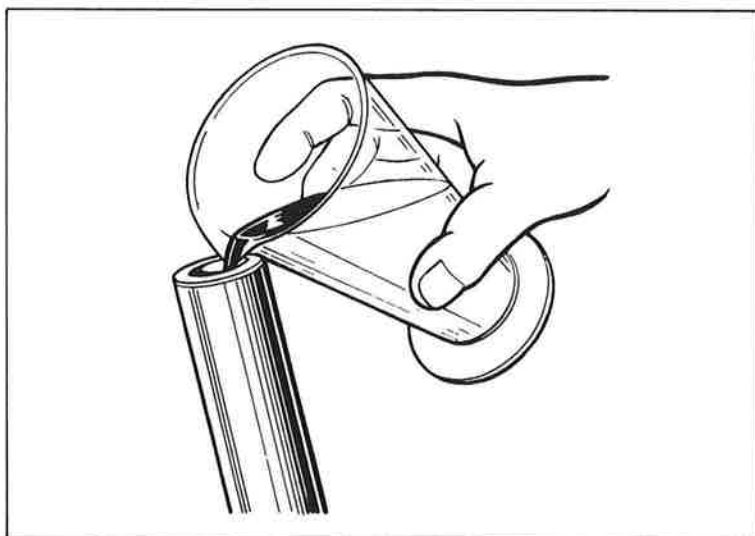
NOTE

Avoid damaging the sliding surface of the fork tube.

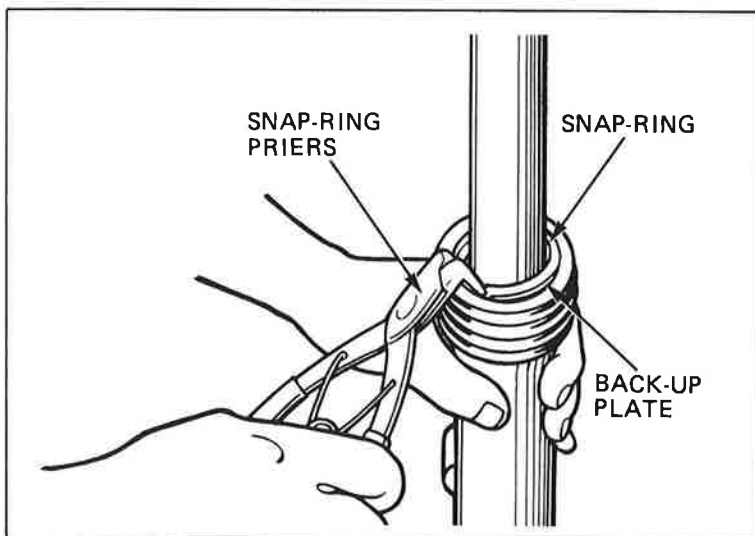
Remove the fork cap bolt.



Extend the fork tube.
Pour ATF into the fork tube up to the bottom of the cap threads.
Install the fork cap bolt.

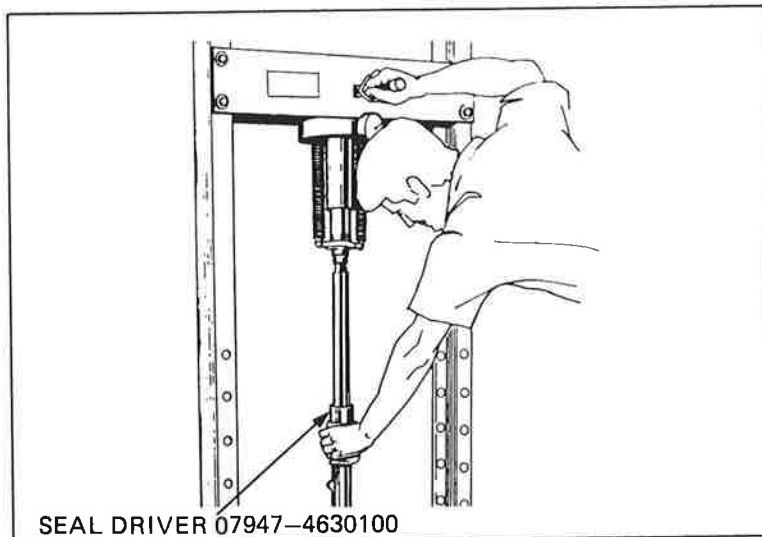


Remove the dust cover and circlip.
Remove the back-up plate with a magnet.





Place the seal driver over the fork tube.
Wrap a shop towel around the seal area.
Compress the fork tube with a hydraulic press until the fork seal is forced out.
Hold the driver against the seal during removal to keep the seal from tilting.
Remove the fork cap bolt, tool and seal and pour the fork oil out.
Remove the back-up ring with a magnet.

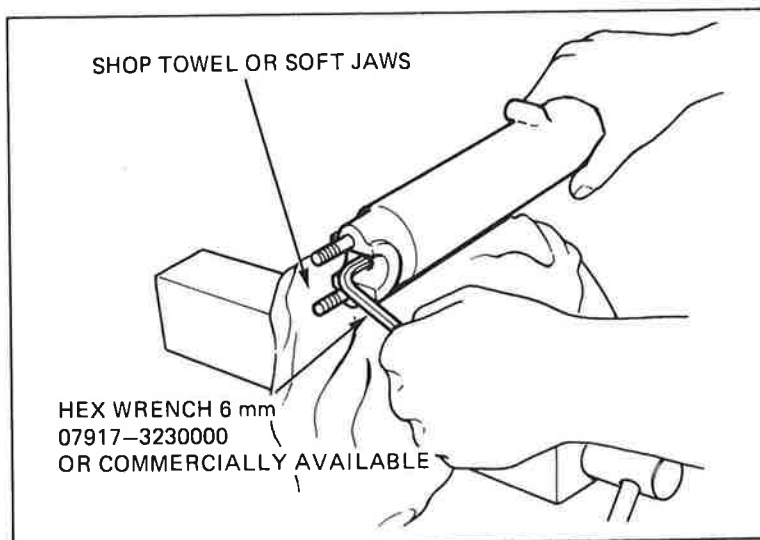


Fork Tube and Slider Separation.

Hold the fork slider in a vise with soft jaws or a shop towel.
Remove the socket bolt with a hex wrench and pump the remaining ATF out through the socket bolt hole.

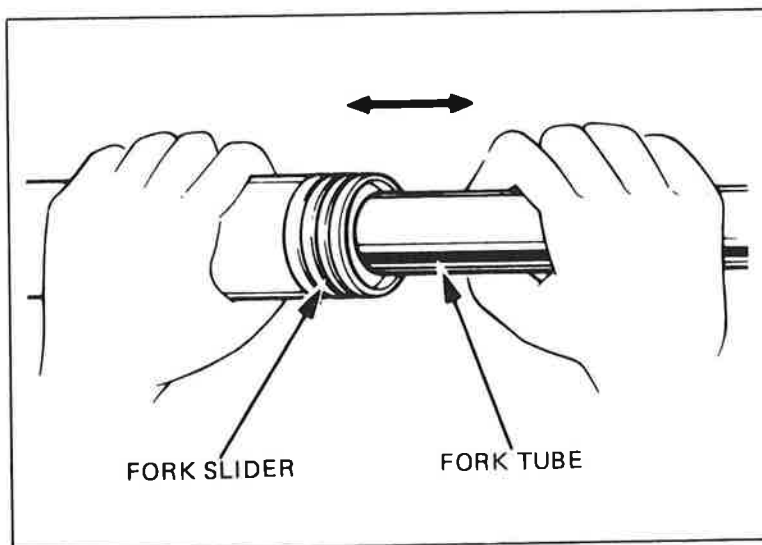
CAUTION

Do not distort the slider in the vise.



Pull the fork tube out until resistance from the slider bushing is felt. Then move it in and out, tapping the bushing lightly until the fork tube separates from the slider. The slider bushing will be forced out by the fork tube bushing.

Remove and discard the oil seal.
Do not remove the fork tube bushing unless required after inspection (Page 13-32).
Remove the slider bushing from the fork tube.

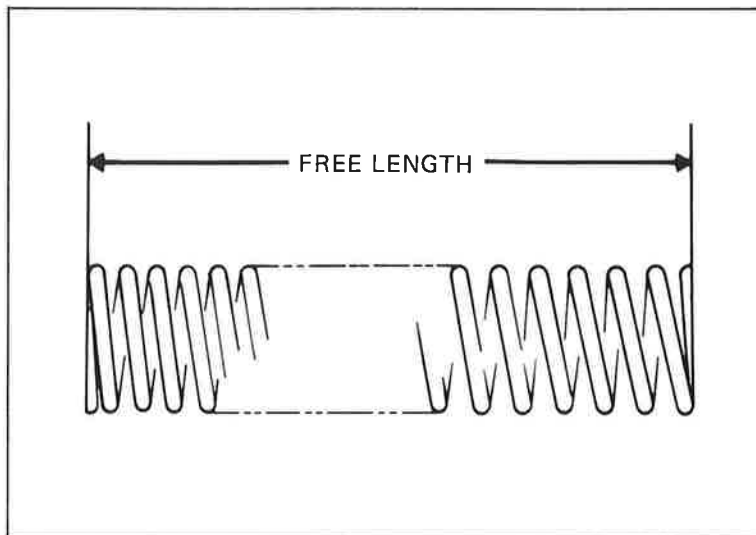




INSPECTION

Check the fork spring free lengths and replace the springs if shorter than the service limit.

SERVICE LIMIT:
559.3 mm (22.02 in)



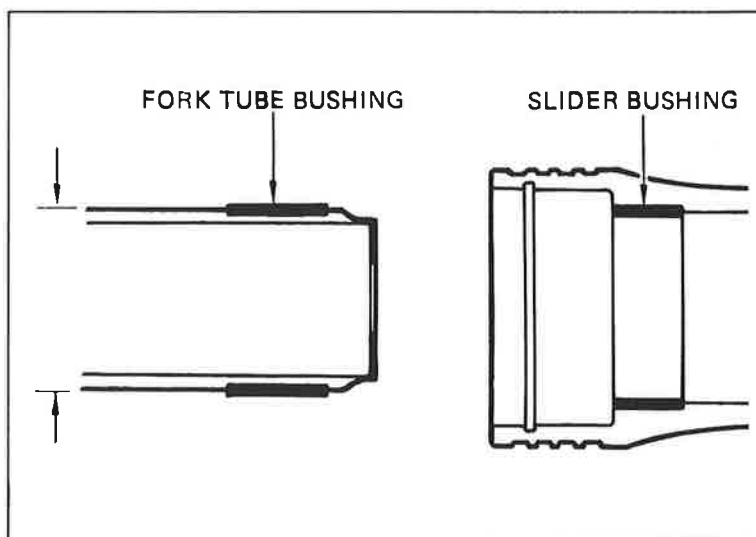
Check the fork tubes, fork sliders and pistons for score marks, scratches, excessive or abnormal wear. Replace those which cannot be reused.

Measure the outside diameter of the fork tube and bushing.

SERVICE LIMIT:
FORK TUBE O.D. : 38.90 mm (1.531 in)
SLIDER BUSHING O.D. : 39.86 mm (1.569 in)

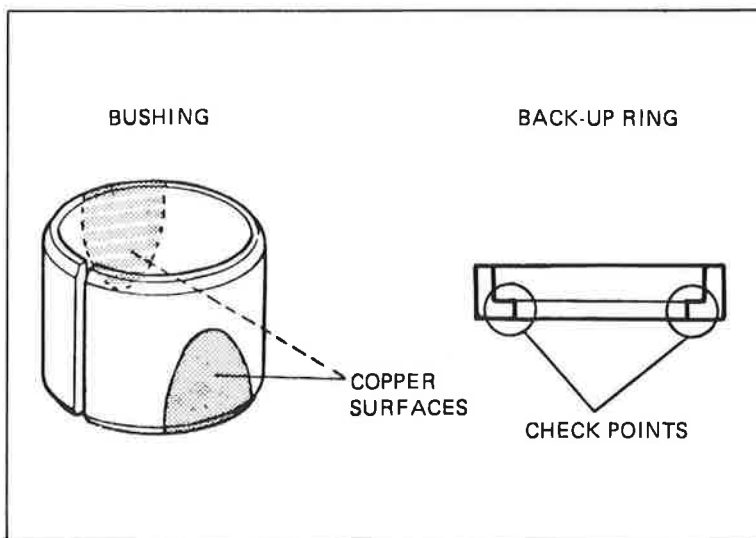
Measure the inside of the slider and bushing.

SERVICE LIMIT:
FORK SLIDER I.D. : 40.2 mm (1.58 in)
GUIDE BUSHING I.D. : 39.23 mm (1.544 in)



Visually inspect the slider and fork tube bushings. Replace if there are excessive scores or scratches, or worn so that copper appears over more than 3/4 of the total surface.

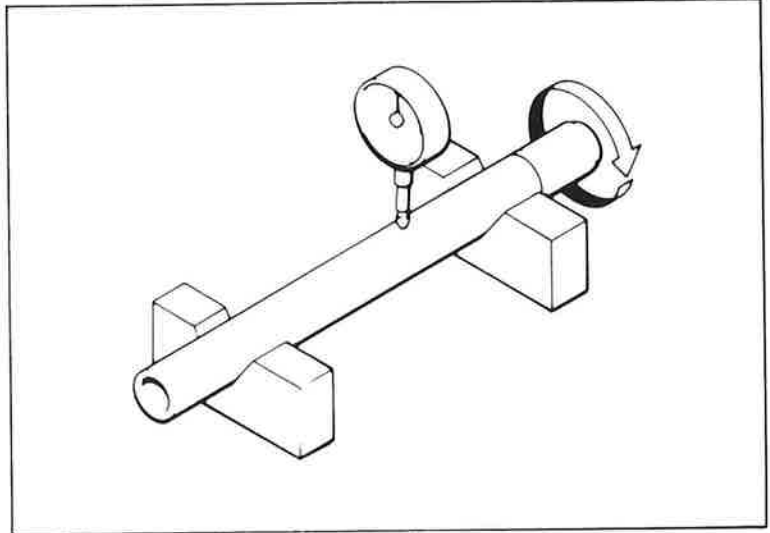
Replace the back-up ring if there is distortion at the points shown.



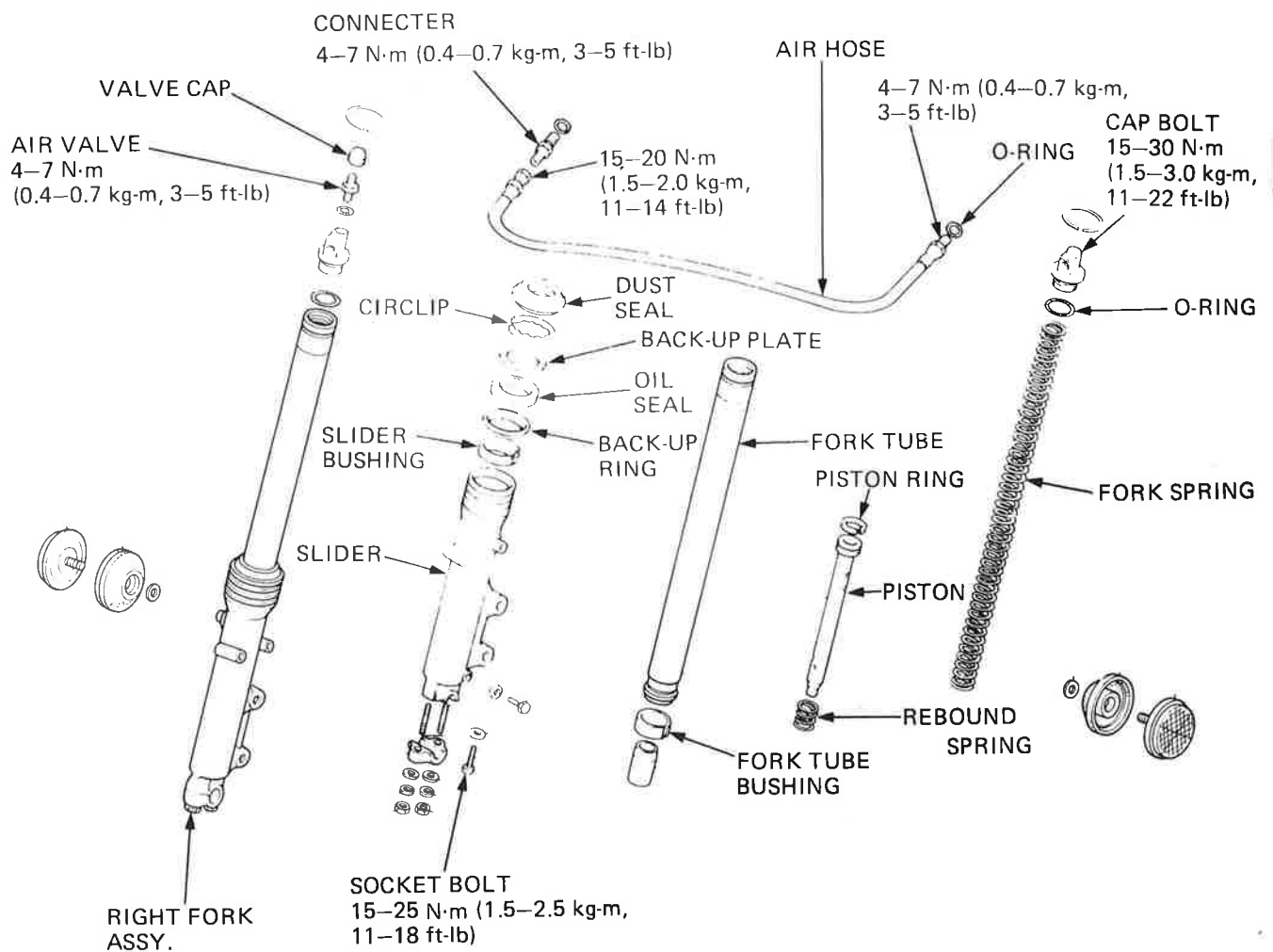


Set the fork tube in V blocks and measure the runout. The actual runout is 1/2 of total indicator reading.

RUN OUT SERVICE LIMIT: 0.2 mm
(0.01 in)



FRONT FORK ASSEMBLY



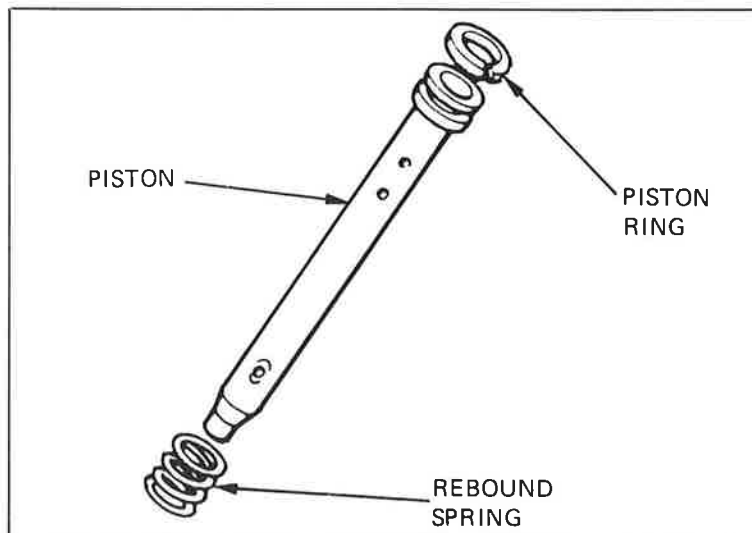


Clean all disassembled parts.

Install a new bushing onto the fork tube if necessary. Install the rebound spring and piston into the fork tube.

Place the oil lock piece over the piston end and insert the fork tube into the slider.

Install the fork spring. Install the fork cap bolt loosely.



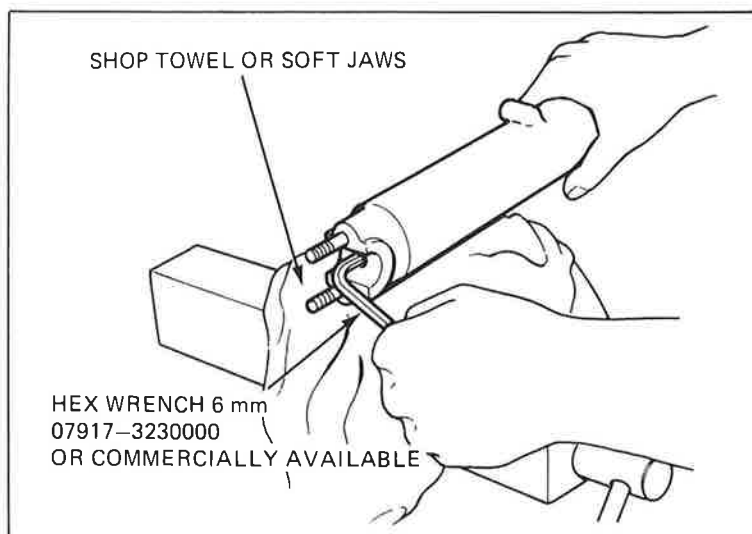
Place the fork slider in a vise with soft jaws or a shop towel.

Apply a locking agent to the socket bolt and thread it into the piston. Tighten with a hex wrench.

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

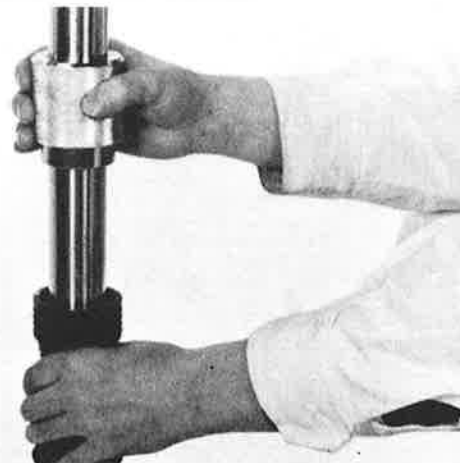
CAUTION

Do not distort the slider in the vise.



SEAL DRIVER 07947-4630100

Place a new slider bushing over the fork tube and rest it on the slider. Put the back-up ring and old bushing or equivalent tool on top. Drive the new bushing into place with the seal driver. Remove the old bushing.





SEAL INSTALLATION

Wrap a piece of tape around the grooves at the top of the fork tube.
This will prevent the oil seal from being damaged when it is installed.

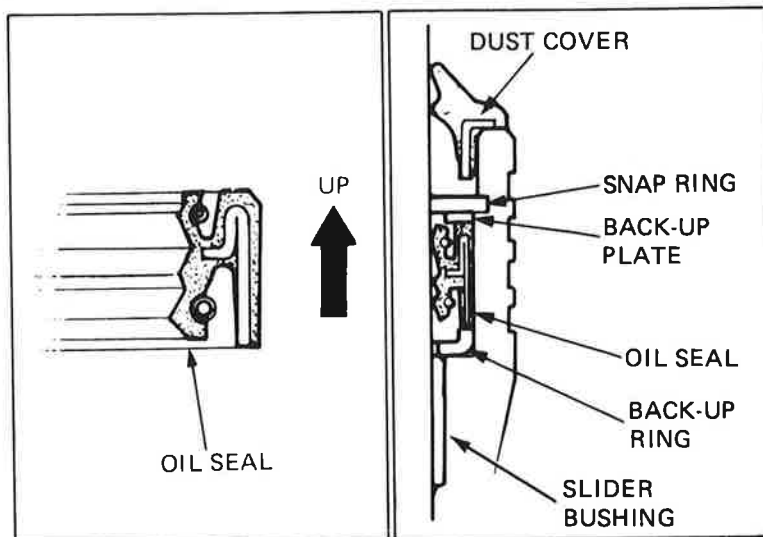
Coat the oil seal with ATF and slide the seal over the fork tube.

Drive the seal in with the seal driver until the tool bottoms against the slider.

Install the back-up plate, snap ring and dust cover.

NOTE:

Install the snap ring with its radiused edge facing down.

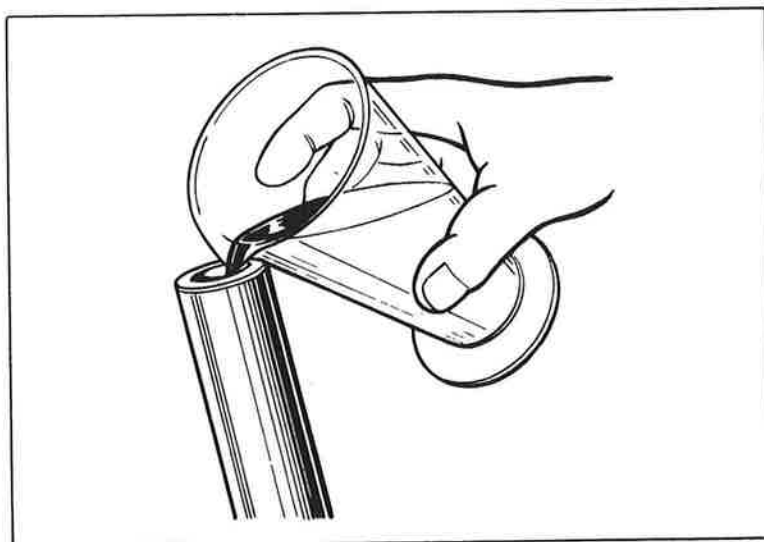


Remove the fork tube cap and pour the specified amount of ATF into the fork tube.

CAPACITY:

345 cc (11.7 oz) (Reassembly)

305 cc (10.3 oz) (after draining)



Remove the special plugs from cap bolts.
Install a new o-ring on the cap bolt.
Install the fork tube cap.

NOTE

Place the fork tube in a vise with soft jaws or a shop towel to avoid damaging the sliding surface.

Tighten the fork cap bolt to the specified torque.

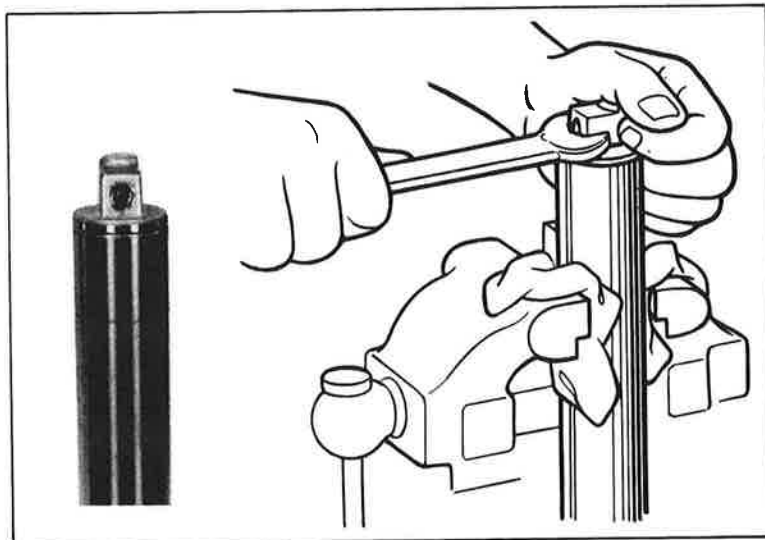
TORQUE:

15–30 N·m (1.5–3.0 kg·m, 11–22 ft·lb)

Install the air valve into the right fork cap bolt.

TORQUE:

4–7 N·m (0.4–0.7 kg·m, 3–5 ft·lb)





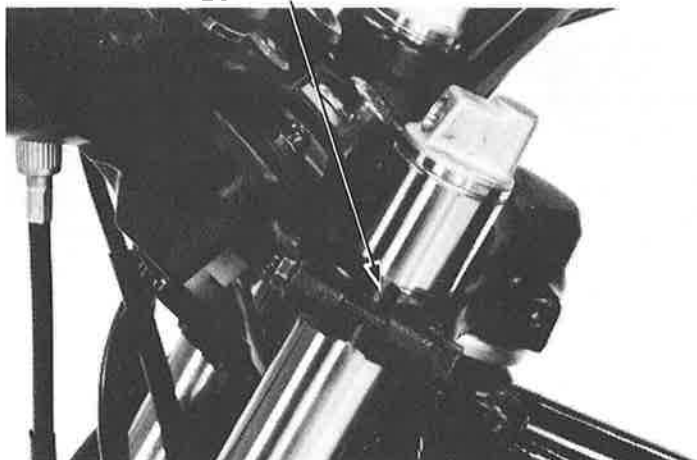
INSTALLATION

Slide the front forks into the fork bridge with the air fitting hole facing forward.

Loosely tighten the bridge pinch bolts.

Align the lower groove with the top surface of the fork top bridge.

LOWER GROOVE



Install the left and right handlebars (Page 13-10).

Install the set rings onto the fork tubes.

Loosen the bridge pinch bolts and align the set ring with the top of the handlebars.

Tighten the bridge and steering stem pinch bolts to specified torque.

TORQUE:

Bridge: 9–13N·m (0.9–1.3 kg-m, 7–9 ft-lb)

Steering stem:

18–25N·m (1.8–2.5 kg-m, 13–18 ft-lb)

Install the front fender.

UPPER PINCH BOLT



LOWER PINCH BOLTS

Install the front fender.

Install the fairing and front wheel (Page 13-20 and 13-22).





STEERING STEM

LOCK NUT WRENCH 26 x 30 mm

STEM REMOVAL

Remove the fairing (Page 13-18), left and right handlebars (Page 13-10) and instruments (Page 13-6).

Loosen the fork bridge pinch bolts.

Remove the steering stem nut.

Remove the front wheel (Page 13-22) and front forks (Page 13-27).

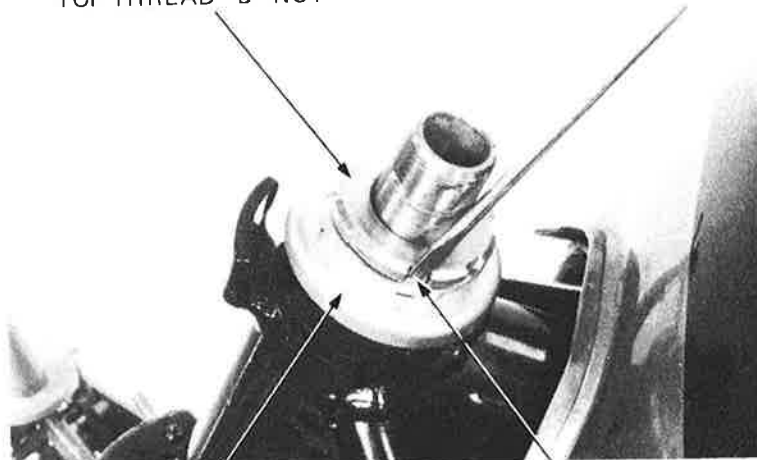


Remove the top thread "B" nut, lockwasher and stem bearing adjusting nut.

Remove the steering stem and bearings.

Check the steering stem bearing for damage or wear.

TOP THREAD "B" NUT



ADJUSTING NUT

LOCKWASHER

BEARING REPLACEMENT

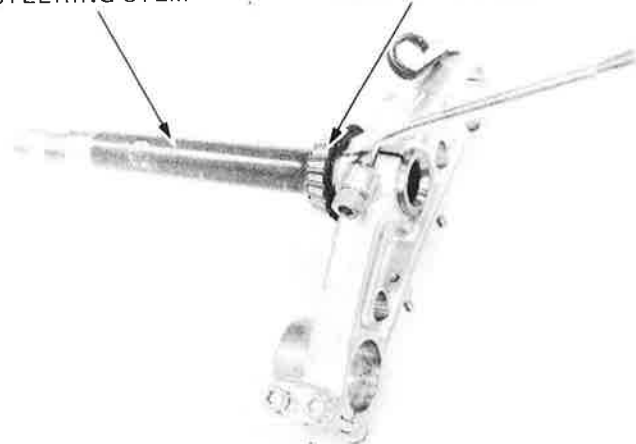
Remove the bearing if necessary.

NOTE

Replace the bearing and bearing race as a set.

STEERING STEM

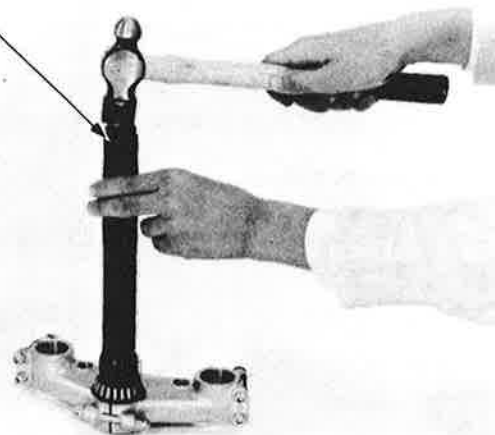
LOWER BEARING





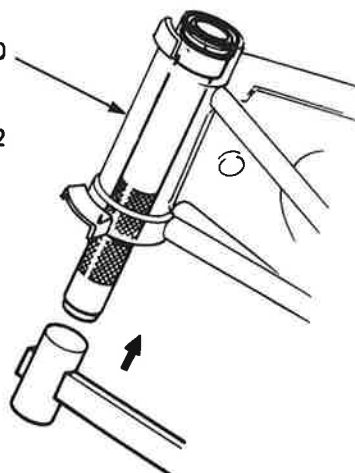
Install the dust seal on the steering stem and drive the lower bearing inner race over the stem.

STEERING STEM DRIVER
07946-3710600



Remove the upper bearing outer race.

DRIVER
07946-3710600
or
REMOVER
07953-4250002

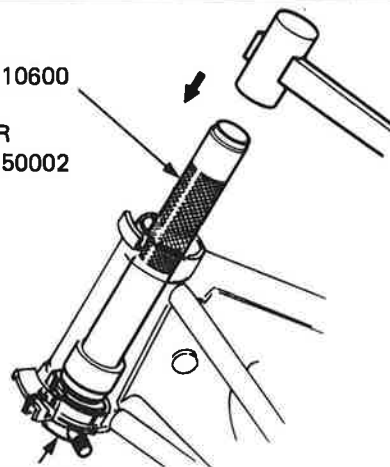


Remove the lower bearing outer race.

NOTE

If the motorcycle has been involved in an accident, examine the areas around the steering head for cracks.

DRIVER
07946-3710600
or
REMOVER
07953-4250002



RACE REMOVER
07946-3710500



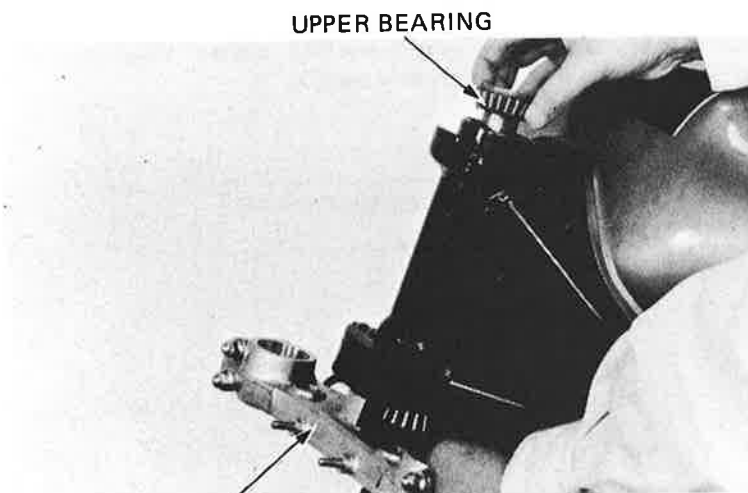
Drive the upper bearing outer race into the head pipe.
Drive the lower bearing outer race into the head pipe.



**BEARING DRIVER
ATTACHMENT**
07946-3710700

INSTALLATION

Pack the bearing cavities with bearing grease.
Install the steering stem into the head pipe.
Install the grease plate on the stem pipe.
Install the upper bearing outer race on the steering stem.



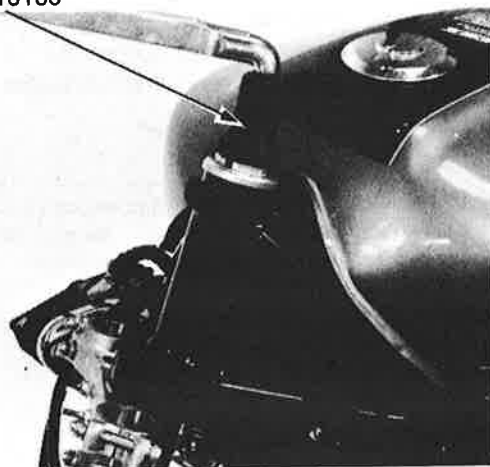
STEERING STEM

STEERING STEM SOCKET
07916-3710100

Install and tighten the adjusting nut.

TORQUE:

11-13N·m (1.1-1.3 kg-m, 8-9 ft-lb)



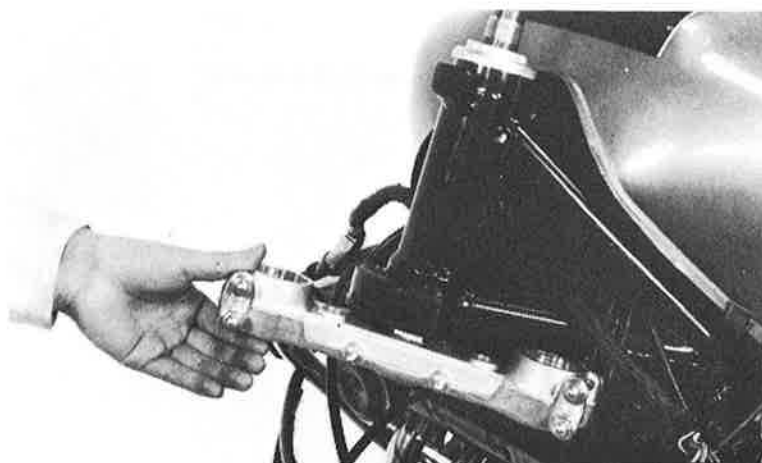


Turn the steering stem left lock-to-right lock 5 times to seat the bearings.

Install the front forks and front wheel and lower the front wheel to ground.

Repeat the bearing tightening and steering stem turning sequence twice.

If the nut does not tighten after turning the steering stem the first or second time, remove the nut and inspect it and the steering stem threads for dirt or burrs.

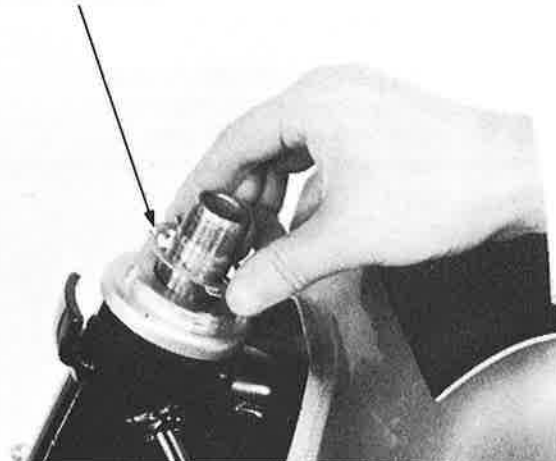


Install a new bearing adjustment nut lock washer aligning the tabs with the grooves in the nut.

NOTE

DO NOT install a used bearing adjustment nut lock washer.

LOCK WASHER



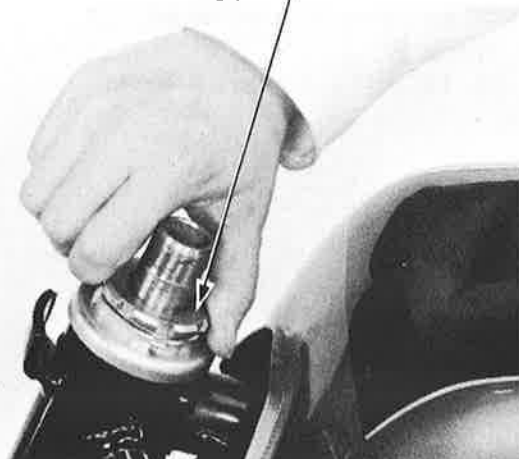
Hand tighten the top thread "B" nut. Hold the adjustment nut and further tighten the "B" nut only to align its grooves with the lock washer tabs.

NOTE

If the top thread "B" nut grooves cannot be easily aligned with the lock washer tabs, remove the nut, turn it over and reinstall.

Bend the other two lock washer tabs up into the top thread "B" nut grooves.

TOP THREAD "B" NUT





Install the front forks (Page 13-35) and bridge.
Tighten the steering stem nut.

TORQUE:

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

Tighten the bridge pinch bolts.

TORQUE:

7 mm bolt: 9–13 N·m
(0.9–1.3 kg·m, 7–9 ft·lb)

8 mm bolt: 30–40 N·m
(3.0–4.0 kg·m, 22–29 ft·lb)

LOCKNUT WRENCH 26 x 30 mm



8 mm BOLT

7 mm BOLT

