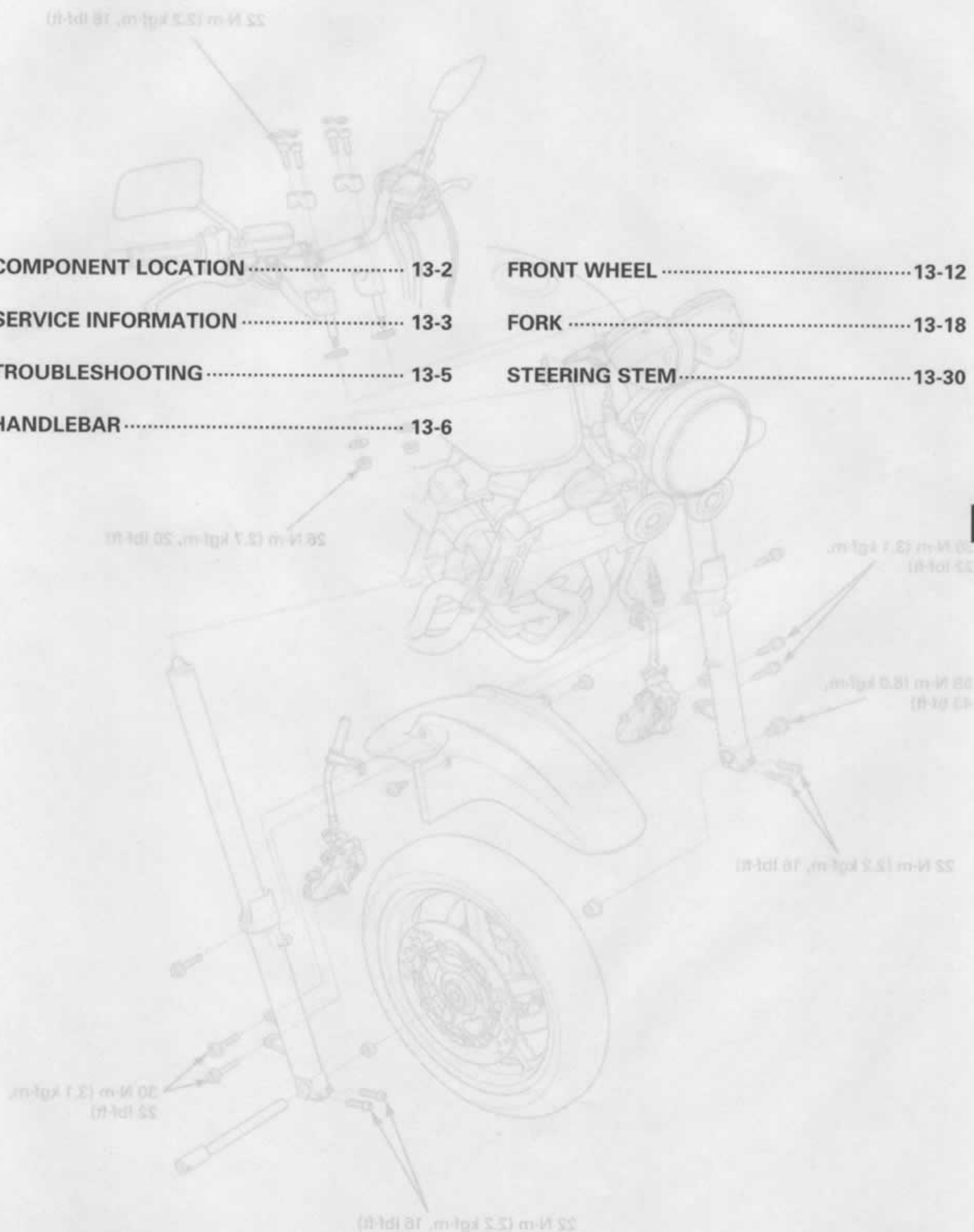


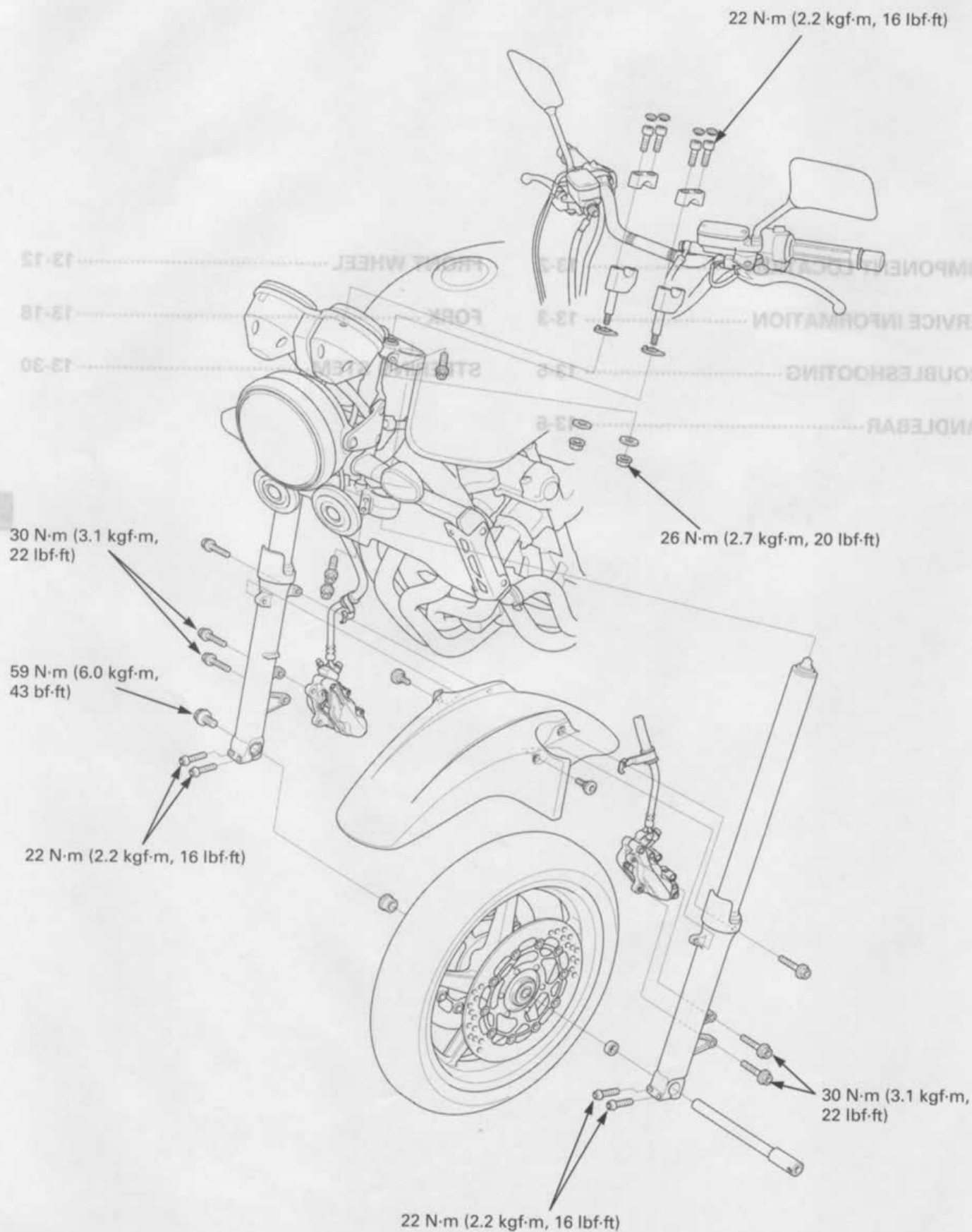
13. FRONT WHEEL/SUSPENSION/STEERING

COMPONENT LOCATION

COMPONENT LOCATION	13-2	FRONT WHEEL	13-12
SERVICE INFORMATION	13-3	FORK	13-18
TROUBLESHOOTING	13-5	STEERING STEM	13-30
HANDLEBAR	13-6		



COMPONENT LOCATION



SERVICE INFORMATION

GENERAL

- When servicing the front wheel, fork or steering stem, support the motorcycle using a safety stand or hoist.
- A contaminated brake disc or pad reduces stopping power. Discard contaminated pads and clean a contaminated disc with a high quality brake degreasing agent.
- After the front wheel installation, check the brake operation by applying the brake lever.
- Refer to the brake system information (page 15-4).
- Use only tires marked "TUBELESS" and tubeless valves on rim marked "TUBELESS TIRE APPLICABLE".

SPECIFICATIONS

ITEM		STANDARD	SERVICE LIMIT
Minimum tire tread depth		—	1.5 (0.06)
Cold tire pressure	Driver only	250 kPa (2.50 kgf/cm ² , 36 psi)	—
	Driver and passenger	250 kPa (2.50 kgf/cm ² , 36 psi)	—
Axle runout		—	0.2 (0.01)
Wheel rim runout	Radial	—	2.0 (0.08)
	Axial	—	2.0 (0.08)
Wheel balance weight		—	60 g (2.1oz) max.
Fork	Spring free length	348.7 (13.73)	341.7 (13.45)
	Tube runout	—	0.20 (0.008)
	Recommended fork fluid	Honda Ultra Cushion Oil 10W or equivalent	—
	Fluid level	160 (6.3)	—
	Fluid capacity	500 ± 2.5 cm ³ (16.9 ± 0.08 US oz, 17.6 ± 0.09 Imp oz)	—
	Pre-load adjuster initial setting	14 mm (0.6 in) from top/4th groove	—
Rebound adjuster initial setting		1 - 1/2 turn out from full hard	—
Steering head bearing pre-load		1.0 - 1.5 kgf (2.2 - 3.3 lbf)	—










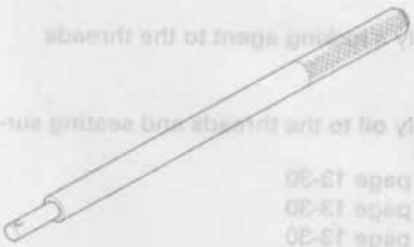
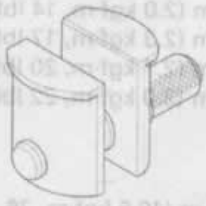

Unit: mm (in)

TOEQUE VALUES

Handlebar weight mounting screw	10 N·m (1.0 kgf·m, 7 lbf·ft)	ALOC screw; replace with a new one
Handlebar upper holder socket bolt	22 N·m (2.2 kgf·m, 16 lbf·ft)	
Handlebar lower holder nut	26 N·m (2.7 kgf·m, 20 lbf·ft)	
Front brake master cylinder holder bolt	12 N·m (1.2 kgf·m, 9 lbf·ft)	
Clutch master cylinder holder bolt	12 N·m (1.2 kgf·m, 9 lbf·ft)	
Front brake caliper mounting bolt	30 N·m (3.1 kgf·m, 22 lbf·ft)	ALOC bolt; replace with a new one
Front axle bolt	59 N·m (6.0 kgf·m, 43 lbf·ft)	
Front axle holder flange bolt	22 N·m (2.2 kgf·m, 16 lbf·ft)	
Front brake disc bolt	20 N·m (2.0 kgf·m, 14 lbf·ft)	ALOC bolt; replace with a new one
Fork bolt	23 N·m (2.3 kgf·m, 17 lbf·ft)	
Fork socket bolt	20 N·m (2.0 kgf·m, 14 lbf·ft)	
Fork top bridge pinch socket bolt	23 N·m (2.3 kgf·m, 17 lbf·ft)	Apply a locking agent to the threads
Fork bottom bridge pinch flange bolt	26 N·m (2.7 kgf·m, 20 lbf·ft)	
Steering bearing adjusting nut	29 N·m (3.0 kgf·m, 22 lbf·ft)	Apply oil to the threads and seating surface
Steering bearing adjusting nut lock nut	—	See page 13-30
Steering stem nut	103 N·m (10.5 kgf·m, 76 lbf·ft)	See page 13-30

FRONT WHEEL/SUSPENSION/STEERING

TOOLS

<p>Bearing remover shaft 07GGD-0010100</p> 	<p>Bearing remover head, 20 mm 07746-0050600</p> 	<p>Driver 07749-0010000</p> 
<p>Attachment, 42 X 47 mm 07746-0010300</p> 	<p>Pilot, 20 mm 07746-0040500</p> 	<p>Slider weight 07947-KA50100</p> 
<p>Seal driver attachment 07947-KA40200</p> 	<p>Steering stem socket 07916-3710101</p> 	<p>Driver attachment 07953-MJ10100</p> 
<p>Driver handle 07953-MJ10200</p> 	<p>Bearing race remover 07946-3710500</p> 	<p>Attachment, 52 X 55 mm 07746-0010400</p> 

Attachment, 30 mm
07746-0030300

GRIP END



TROUBLESHOOTING

Hard steering

- Steering head bearing adjustment nut too tight
- Worn or damaged steering head bearings
- Bent steering stem
- Insufficient tire pressure

Steers to one side or does not track straight

- Damaged or loose steering head bearings
- Bent forks
- Bent axle
- Bent axle
- Bent frame
- Worn or damaged wheel bearings
- Worn or damaged swingarm pivot bearings

Front wheel wobbling

- Bent rim
- Worn or damaged front wheel bearings
- Faulty tire
- Unbalanced front tire and wheel

Front heel turns hard

- Faulty front wheel bearing
- Bent front axle
- Front brake drag

Soft suspension

- Insufficient fluid in fork
- Incorrect fork fluid weight
- Weak fork springs
- Insufficient tire pressure

Hard suspension

- Bent fork pipes
- Too much fluid in fork
- Incorrect fork fluid weight
- Clogged fork fluid passage

Front suspension noise

- Insufficient fluid in fork
- Loose fork fasteners

SCREWS

HOLDER

BOLTS

HANDLEBAR

REMOVAL

Hold the handlebar weight and remove the mounting screw and the weight.

Remove the right rearview mirror.

Disconnect the front brake switch wire connectors from the switch.

Remove the master cylinder holder bolts, holder and master cylinder assembly.

Keep the master cylinder and master cylinder assembly straight to prevent the hydraulic oil from leaking out.

Remove the right handlebar switch/wire housing screws.

Remove the left rearview mirror.

Disconnect the clutch switch wire connectors from the switch.

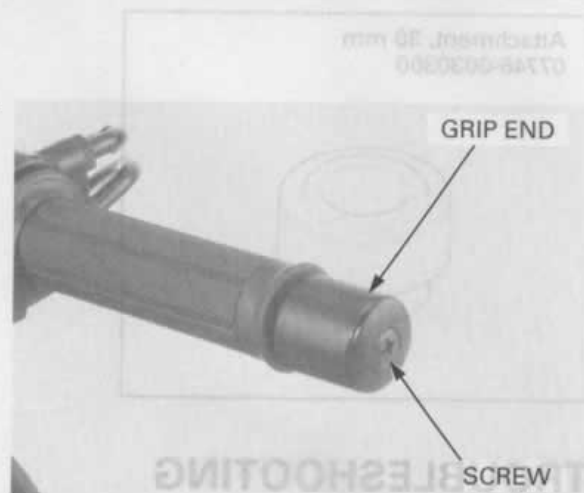
Remove the master cylinder holder bolts, holder and master cylinder assembly.

Keep the clutch master cylinder and master cylinder assembly straight to prevent the hydraulic oil from leaking out.

HANDLEBAR

REMOVAL

Hold the handlebar weight and remove the mounting screw and the weight.

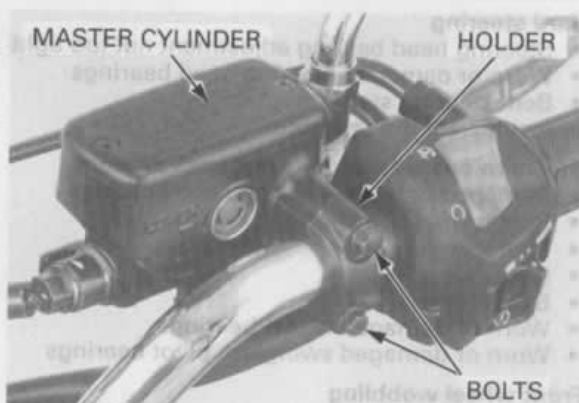


Remove the right rearview mirror.

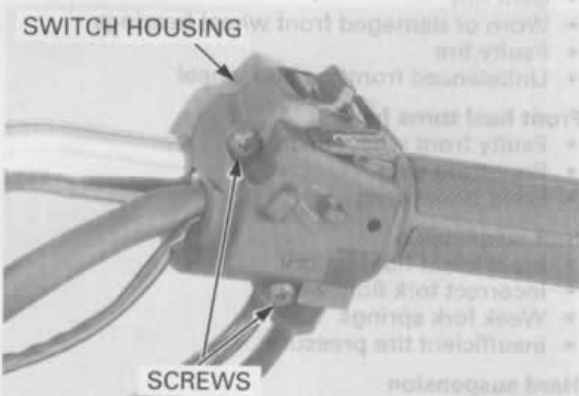
Disconnect the front brake switch wire connectors from the switch.

Keep the brake master cylinder upright to prevent air from entering the hydraulic system

Remove the master cylinder holder bolts, holder and master cylinder assembly.



Remove the right handlebar switch/throttle housing screws.

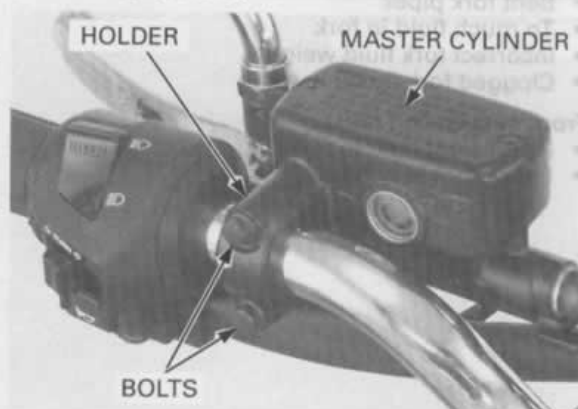


Remove the left rearview mirror.

Disconnect the clutch switch wire connectors from the switch.

Keep the clutch master cylinder upright to prevent air from entering the hydraulic system

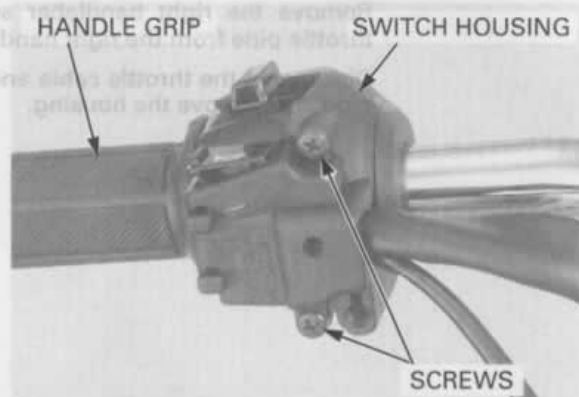
Remove the master cylinder holder bolts, holder and master cylinder assembly.



Remove the screws and left handlebar switch housing.

Remove the handle grip from the handlebar.

Remove the left handlebar switch end cover.

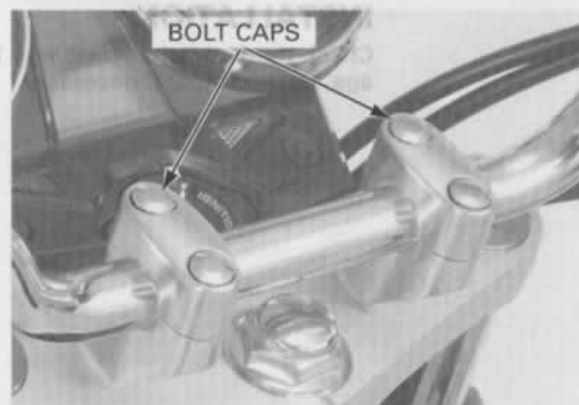


Do not remove the lower holder nuts.

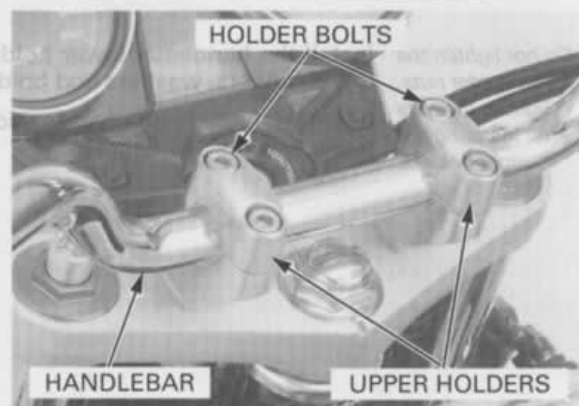
If you will be remove the handlebar lower holder, loosen the lower holder nuts before removing the upper holder bolts.



Remove the handlebar upper holder bolt caps.



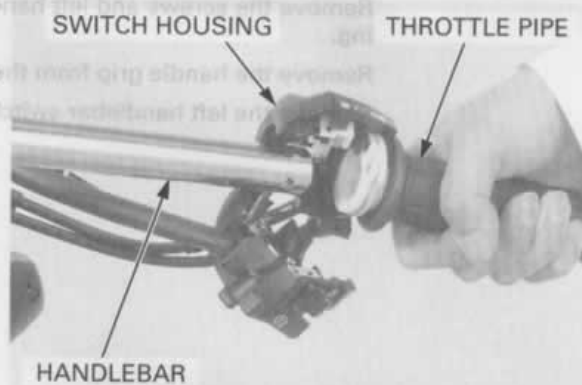
Remove the handlebar upper holder bolts, upper holders and handlebar.



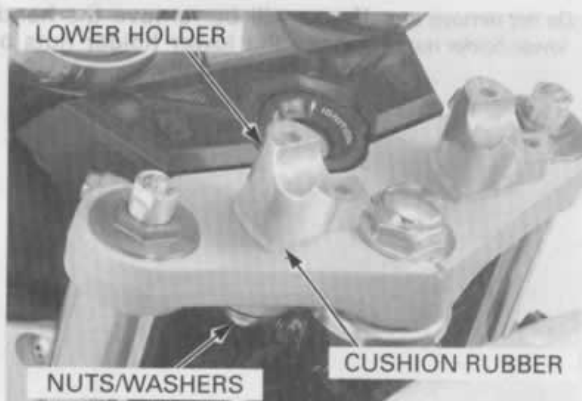
FRONT WHEEL/SUSPENSION/STEERING

Remove the right handlebar switch housing and throttle pipe from the right handlebar.

Disconnect the throttle cable ends from the throttle pipe and remove the housing.

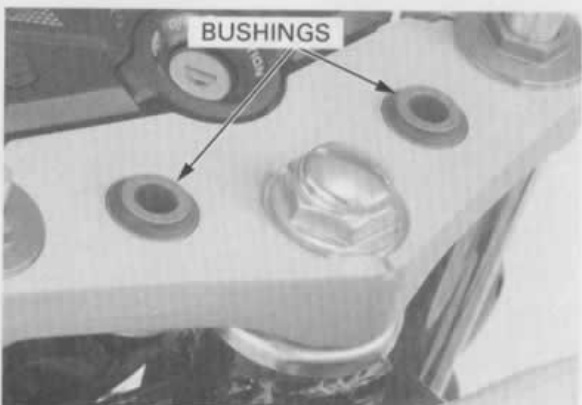
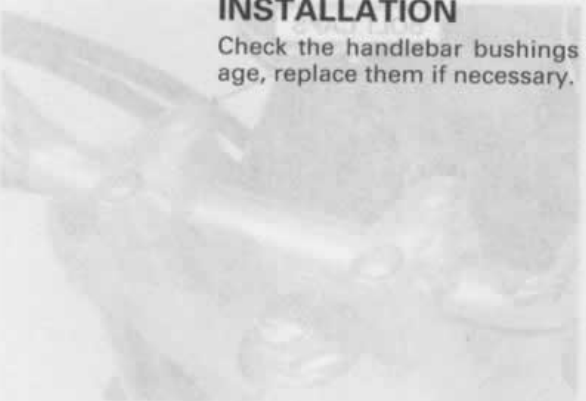


Remove the lower holder nuts and washers, then remove the handlebar lower holders and cushion rubbers.



INSTALLATION

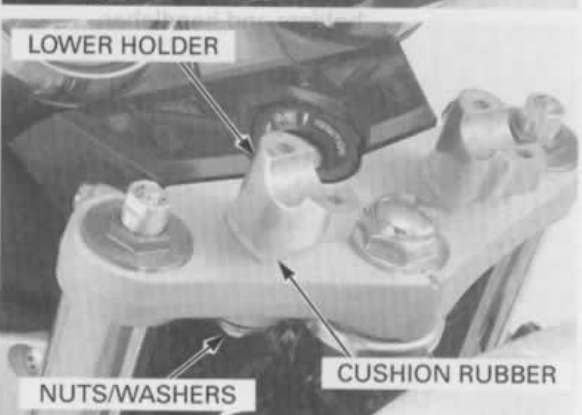
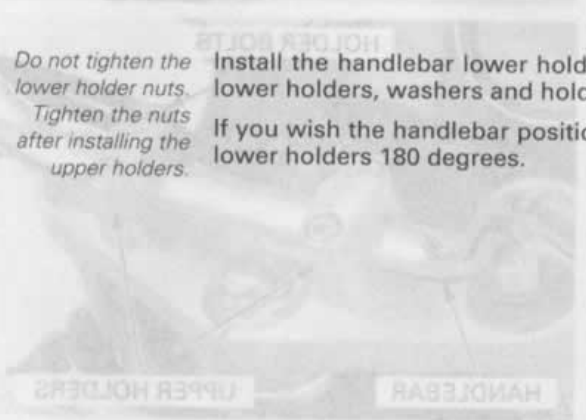
Check the handlebar bushings for fatigue or damage, replace them if necessary.



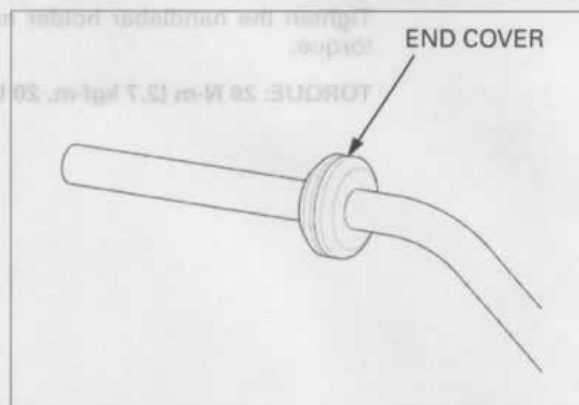
Do not tighten the lower holder nuts. Tighten the nuts after installing the upper holders.

Install the handlebar lower holder cushion rubbers, lower holders, washers and holder nuts.

If you wish the handlebar position forward, turn the lower holders 180 degrees.



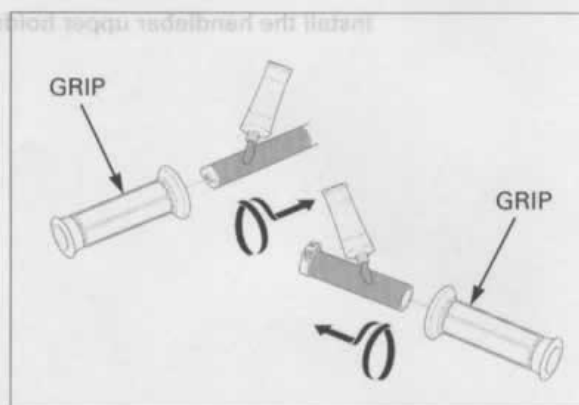
Install the left handlebar switch end cover onto the handlebar.



Apply Honda Bond A or equivalent adhesive to the inside of the grip and to the clean surfaces of the left handlebar and throttle grip.

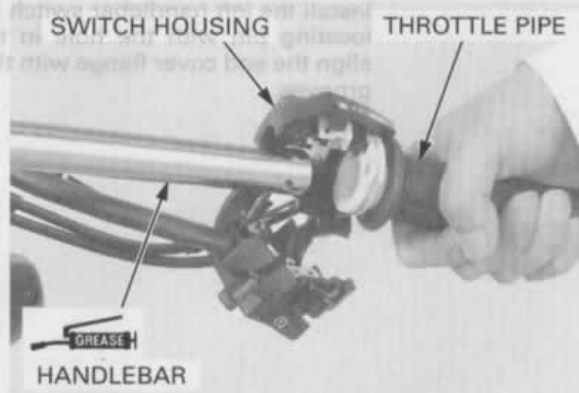
Wait 3 – 5 minutes and install the grip.

Rotate the grip for even application of the adhesive.



Allow the adhesive to dry for an hour before using.

Connect the throttle cable ends to the throttle pipe. Apply grease to the sliding surface of the throttle pipe. Install the throttle pipe into the handlebar.

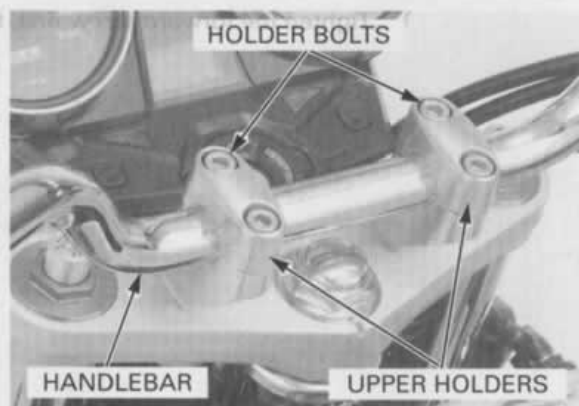


Install the handlebar onto the lower holder.

Install the handlebar upper holders with their punch mark facing forward, then install the holder bolts.

Tighten the forward bolt first, then tighten the rear bolts to the specified torque.

TORQUE: 22 N·m (2.2 kgf·m, 16 lbf·ft)

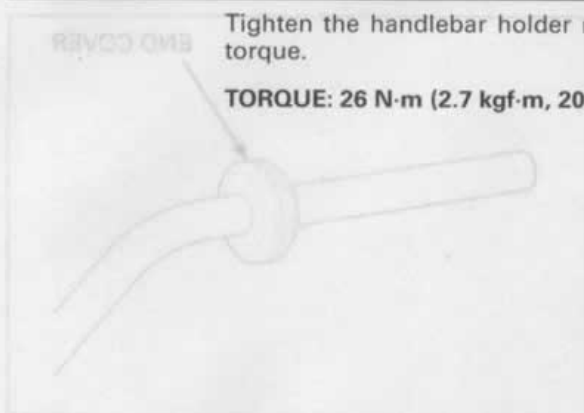


Align the punch marks on the handlebar with the mating surface of the upper and lower holders.

FRONT WHEEL/SUSPENSION/STEERING

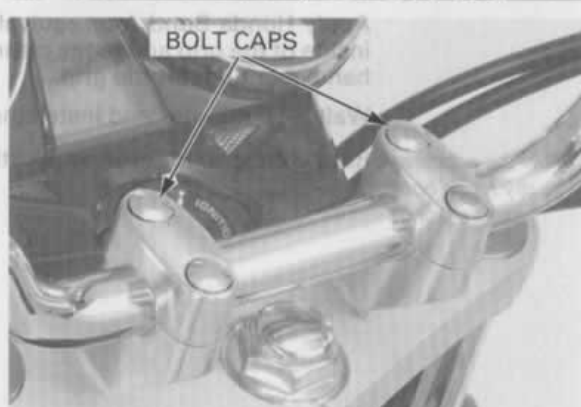
Tighten the handlebar holder nuts to the specified torque.

TORQUE: 26 N·m (2.7 kgf·m, 20 lbf·ft)



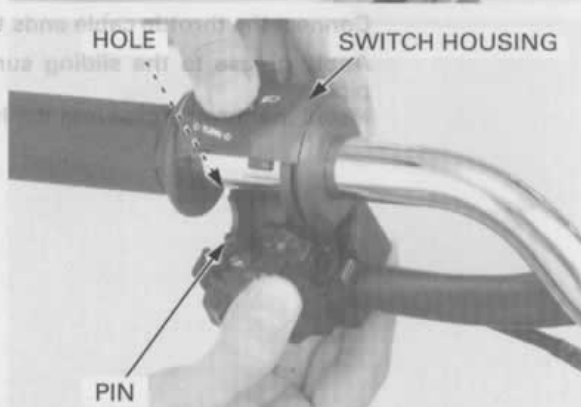
LOWER HOLDER NUTS

Install the handlebar upper holder bolt caps.



BOLT CAPS

Install the left handlebar switch housing aligning its locating pin with the hole in the handlebar, also align the end cover flange with the handlebar switch grooves.

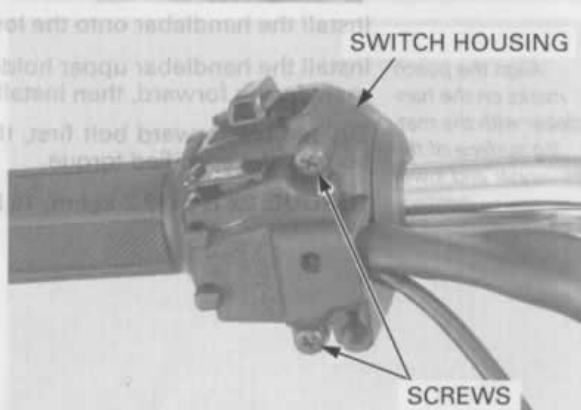


HOLE

SWITCH HOUSING

PIN

Tighten the forward screw first, then the rear screw.



SWITCH HOUSING

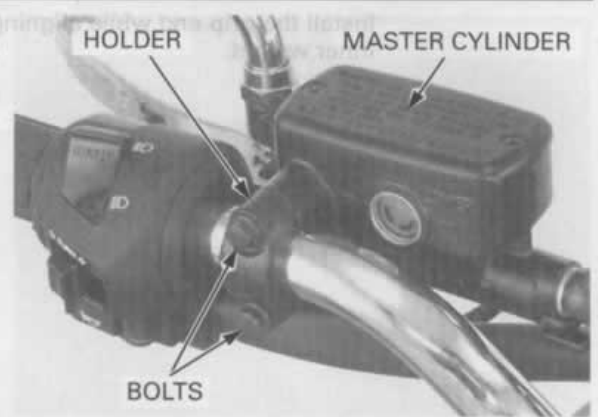
SCREWS



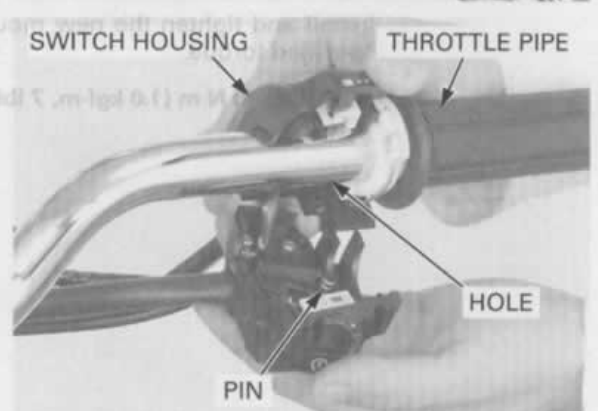
Install the clutch master cylinder by aligning the end of the master cylinder with the punch mark on the handlebar.
Install the master cylinder holder with the "UP" mark facing up.
Tighten the upper bolt first, the lower bolt.

TORQUE: 12 N·m (1.2 kgf·m, 9 lbf·ft)

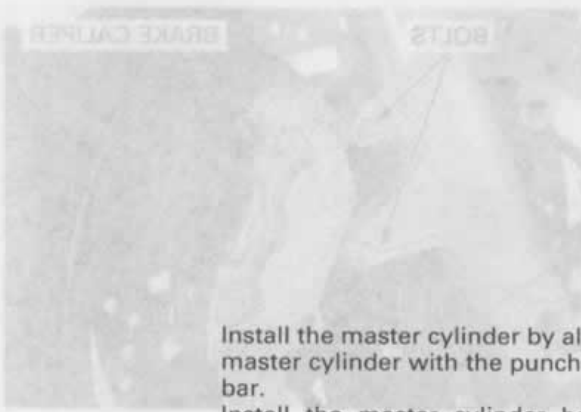
Connect the clutch switch wire connectors.
Install the left rearview mirror.



Install the right handlebar switch/throttle housing by aligning its locating pin with the hole in the handlebar.



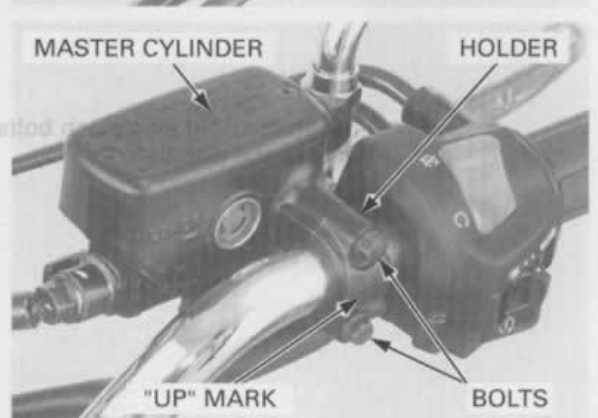
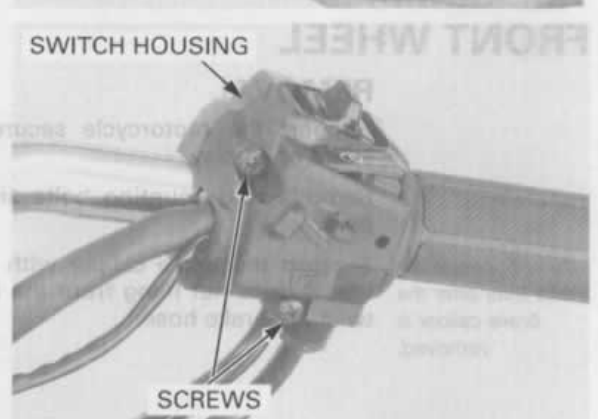
Tighten the forward screw first, then the rear screw.



Install the master cylinder by aligning the end of the master cylinder with the punch mark on the handlebar.
Install the master cylinder holder with the "UP" mark facing up.
Tighten the upper bolt first, the lower bolt.

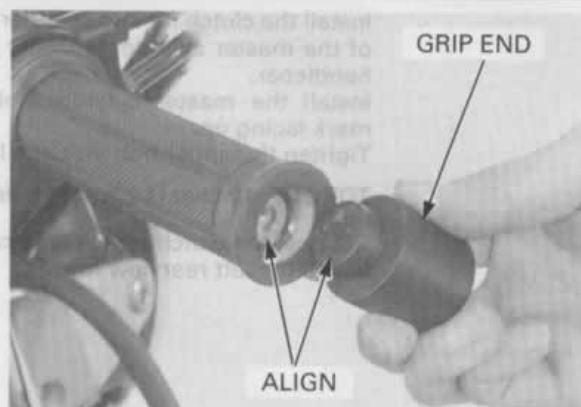
TORQUE: 12 N·m (1.2 kgf·m, 9 lbf·ft)

Connect the brake switch wire connectors.
Install the right rearview mirror.



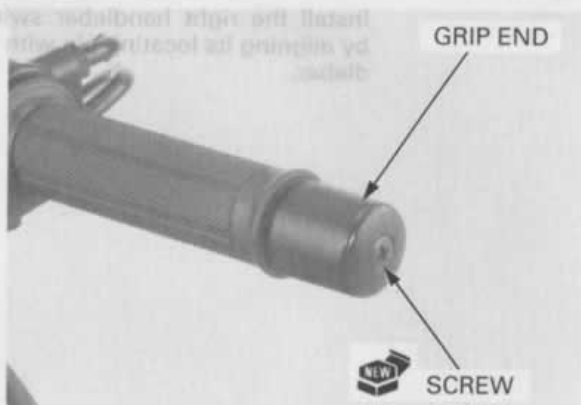
FRONT WHEEL/SUSPENSION/STEERING

Install the grip end while aligning it cut-out with the inner weight.



Install and tighten the new mounting screw to the specified torque.

TORQUE: 10 N·m (1.0 kgf-m, 7 lbf-ft)



FRONT WHEEL

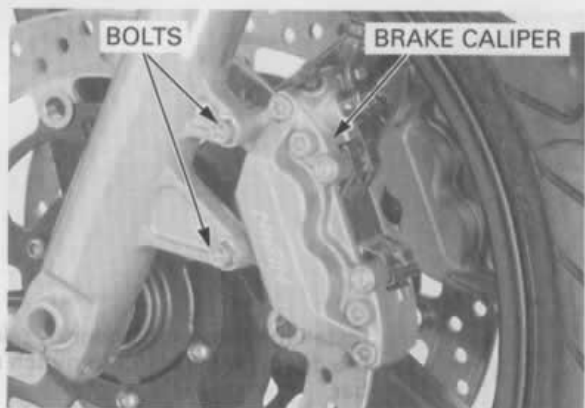
REMOVAL

Support the motorcycle securely using a safety stand or a hoist.

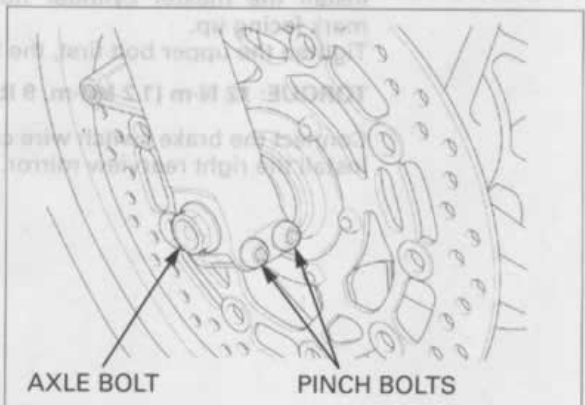
Remove the mounting bolts and both brake calipers.

Do not operate the brake lever after the brake caliper is removed.

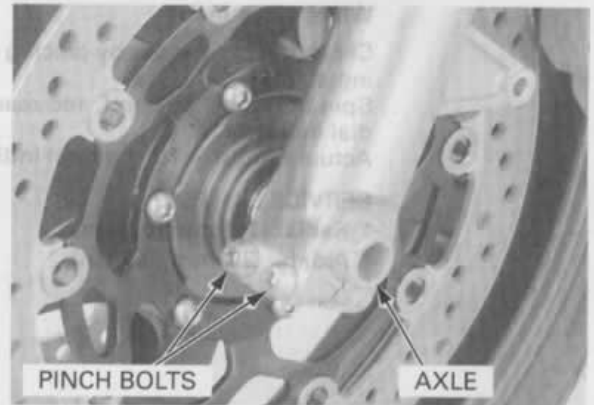
Support the brake caliper with a piece of wire so that it does not hang from the brake hose. Do not twist the brake hose.



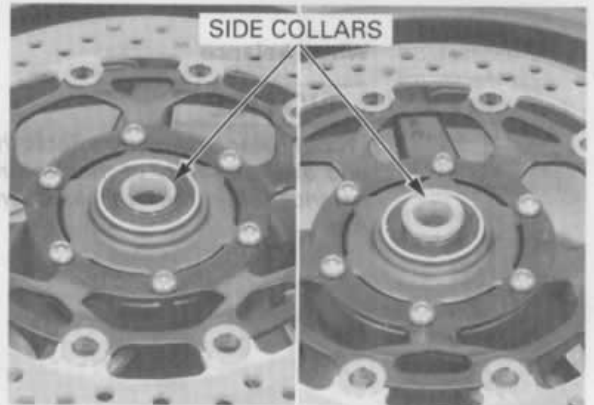
Loosen the right axle pinch bolts.
Remove the axle bolt.



Loosen the left axle pinch bolts.
Remove the axle and the front wheel.



Remove the side collars.

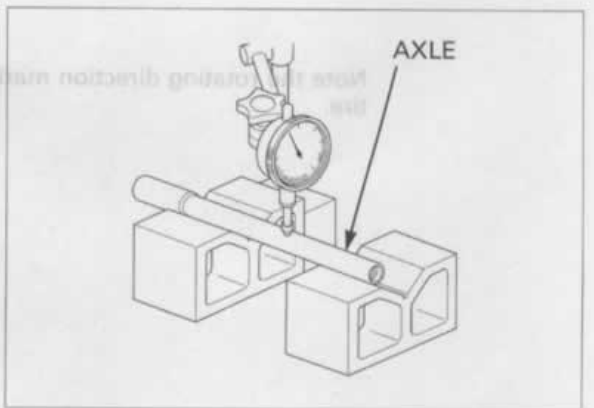


INSPECTION

Axle

Set the axle in V-block and measure the runout. Actual runout is 1/2 the total indicator reading.

SERVICE LIMIT: 0.2 mm (0.01 in)



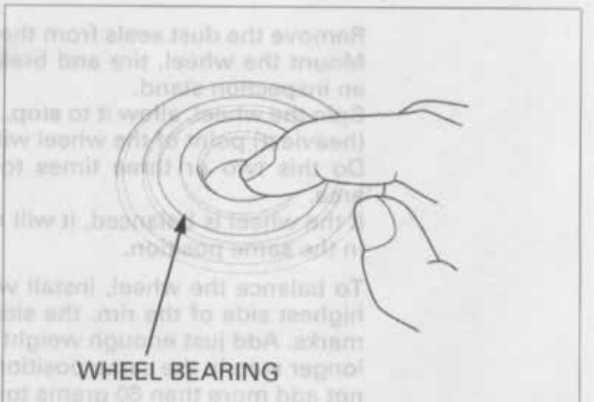
Wheel bearing

Turn the inner race of each bearing with your finger. The bearings should turn smoothly and quietly. Also check that the bearing outer race fits tightly in the hub.

Replace the bearings in pairs.

Remove and discard the bearings if they do not turn smoothly, quietly, or if they fit loosely in the hub.

Replace the new bearings, if necessary (page 13-15).



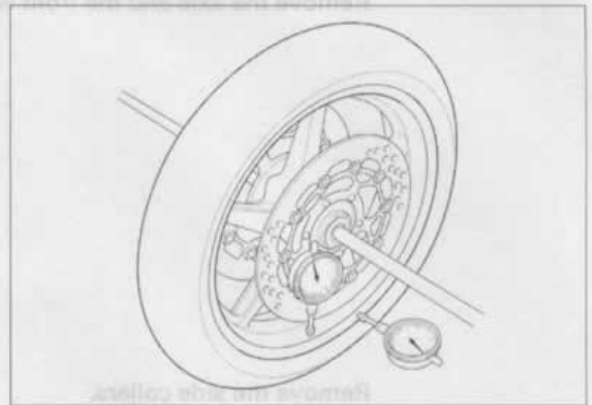
Wheel rim runout

Check the rim runout by placing the wheel in a turning stand.
Spin the wheel by hand, and read the runout using a dial indicator.
Actual runout is 1/2 the total indicator reading.

SERVICE LIMITS:

Radial: 2.0 mm (0.08 in)

Axial: 2.0 mm (0.08 in)

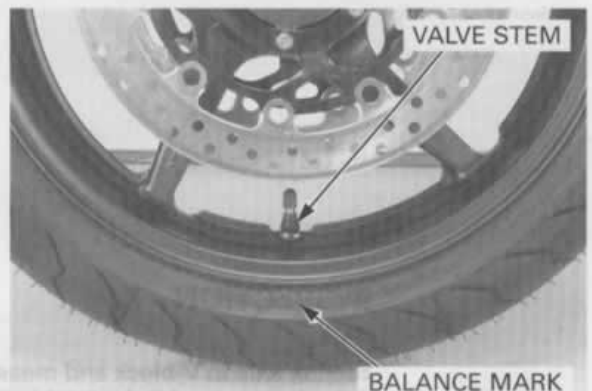


For optimum balance, the tire balance mark (a paint dot on the side wall) must be located next to the valve stem. Remount the tire if necessary.

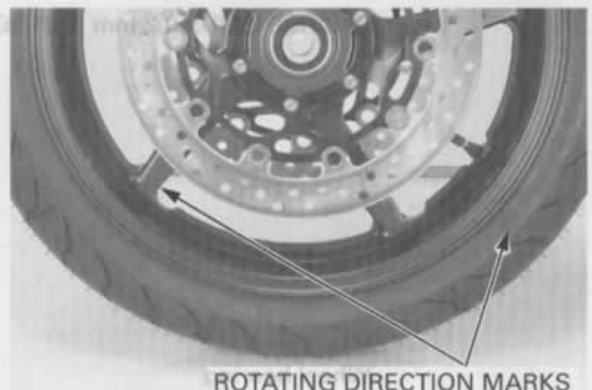
Wheel balance

NOTICE

Wheel balance directly affects the stability, handling and over all safety of the motorcycle. Always check balance when the tire has been removed from the rim.

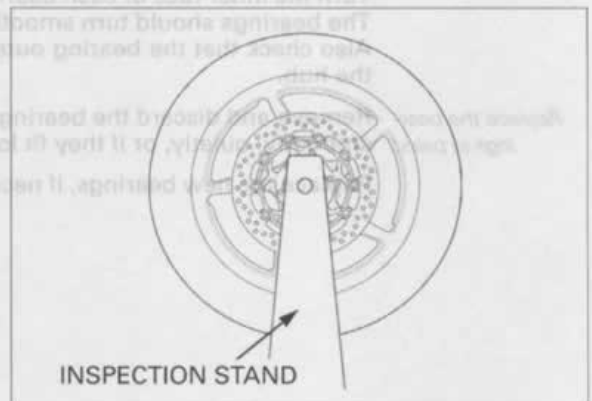


Note the rotating direction marks on the wheel and tire.



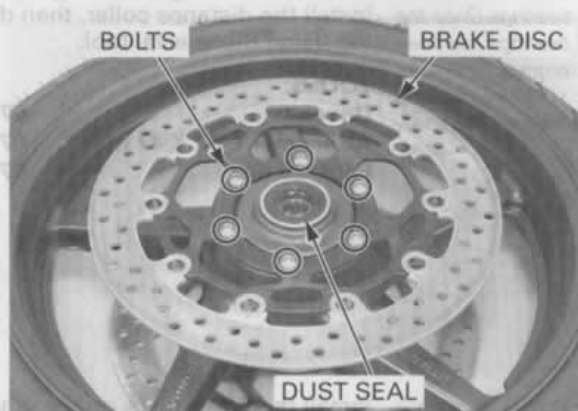
Remove the dust seals from the wheel.
Mount the wheel, tire and brake discs assembly in an inspection stand.
Spin the wheel, allow it to stop, and mark the lowest (heaviest) point of the wheel with a chalk.
Do this two or three times to verify the heaviest area.
If the wheel is balanced, it will not stop consistently in the same position.

To balance the wheel, install wheel weights on the highest side of the rim, the side opposite the chalk marks. Add just enough weight so the wheel will no longer stop in the same position when it is spun. Do not add more than 60 grams to the wheel.



DISASSEMBLY

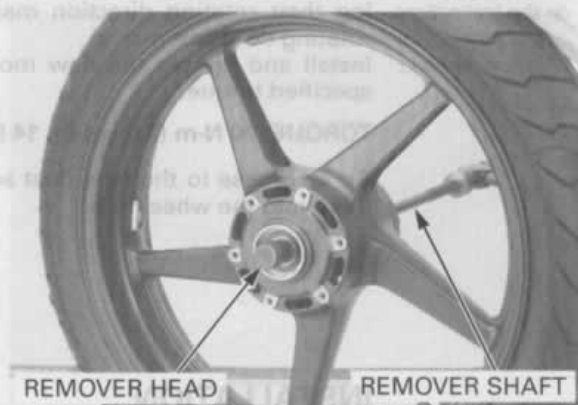
Remove the bolts and brake discs.
Remove the dust seals.



Install the bearing remover head into the bearing.
From the opposite side, install the bearing remover shaft and drive the bearing out of the wheel hub.
Remove the distance collar and drive out the other bearing.

TOOLS:

Bearing remover head, 20 mm 07746-0050600
Bearing remover shaft 07GGD-0010100



ASSEMBLY

RIGHT BRAKE DISC

RIGHT WHEEL BEARING

RIGHT DUST SEAL

DISTANCE COLLAR

LEFT WHEEL BEARING

LEFT BRAKE DISC

LEFT DUST SEAL

20 N·m (2.0 kgf·m, 14 lbf·ft)

FRONT WHEEL/SUSPENSION/STEERING

Never install the old bearings. Once the bearings have been removed, the bearing must be replaced with new ones.

Drive in a new right bearing squarely. Install the distance collar, then drive in the left bearing using the special tool.

TOOLS:

Driver
Attachment, 42 X 47 mm
Pilot, 20 mm

07749-0010000
07746-0010300
07746-0040500

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

Install the brake discs on the wheel hub while aligning their rotating direction marks with the wheel rotating direction marks. Install and tighten the new mounting bolts to the specified torque.

TORQUE: 20 N·m (2.0 kgf·m, 14 lbf·ft)

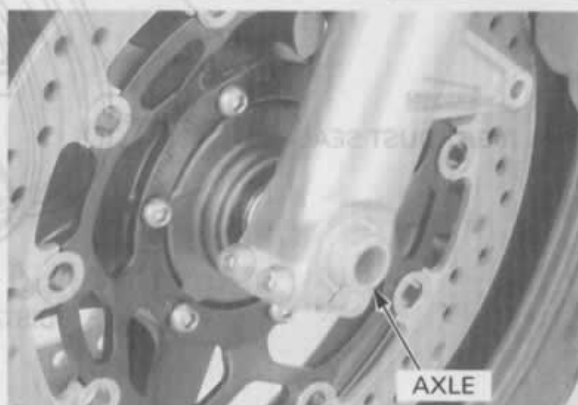
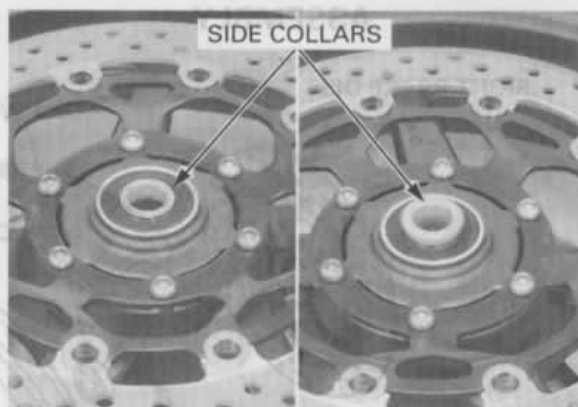
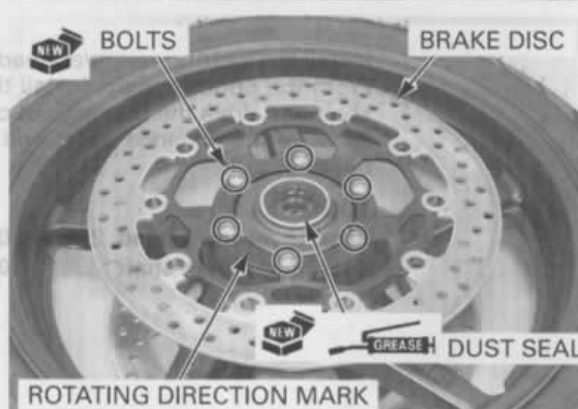
Apply grease to the new dust seal lips, then install them into the wheel hub.

INSTALLATION

Install the side collars.

Install the front wheel between the fork legs.

Apply thin layer of grease to the front axle surface. Install the front axle from the left side.

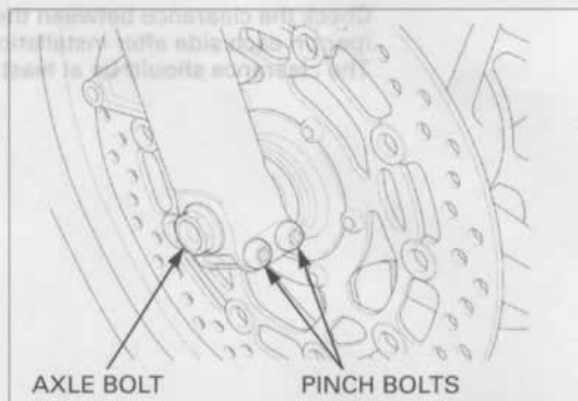


Hold the axle and tighten the axle bolt to the specified torque.

TORQUE: 59 N·m (6.0 kgf·m, 43 lbf·ft)

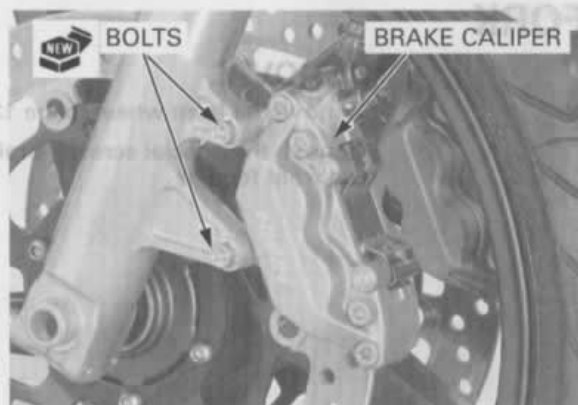
Tighten the right axle pinch bolts to the specified torque.

TORQUE: 22 N·m (2.2 kgf·m, 16 lbf·ft)



Install the both brake caliper and tighten the new mounting bolts to the specified torque.

TORQUE: 30 N·m (3.1 kgf·m, 22 lbf·ft)

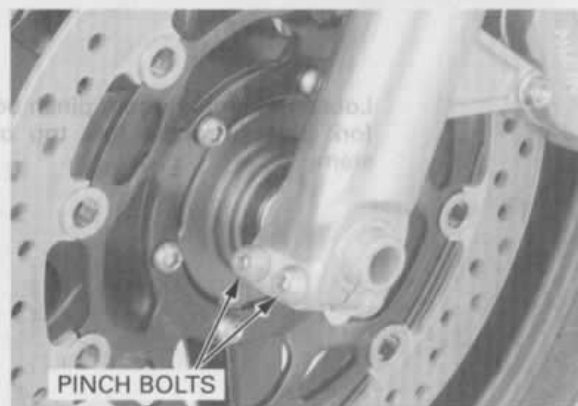


With the front brake applied, pump the fork up and down several times to seat the axle and check brake operation by applying the brake lever.



Tighten the left axle pinch bolts to the specified torque.

TORQUE: 22 N·m (2.2 kgf·m, 16 lbf·ft)



FRONT WHEEL/SUSPENSION/STEERING

Check the clearance between the brake disc and caliper on each side after installation.
The clearance should be at least 0.7 mm (0.03 in).



FORK

REMOVAL

Remove the front wheel (page 13-12)

Remove the special screws, brake hose clamp bolts and front fender.

FRONT FENDER

SPECIAL SCREW

CLAMP BOLT

Loosen the top bridge pinch bolt.
When the fork leg will be disassembled, loosen the fork bolt, but do not remove it yet.

TOP BRIDGE PINCH BOLT

FORK BOLT

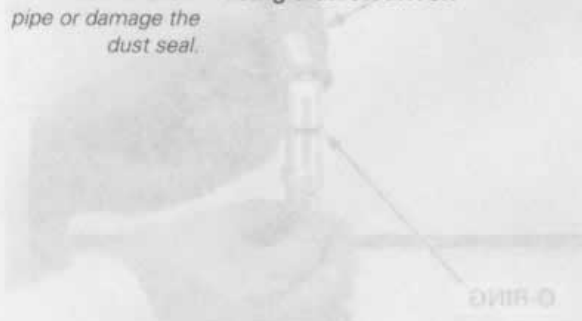
Loosen the fork bottom pinch bolts and remove the fork pipe from the fork top bridge and steering stem.

BOTTOM BRIDGE PINCH BOLTS

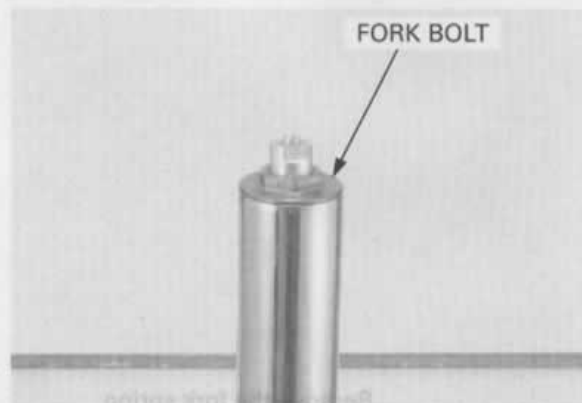
DISASSEMBLY

Be careful not to scratch the fork pipe or damage the dust seal.

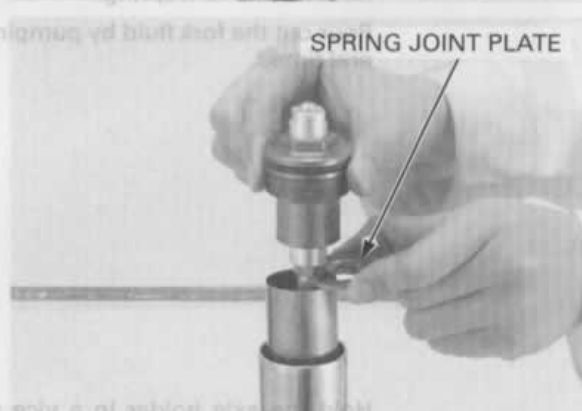
Remove the fork protector by prying it carefully using a screwdriver.



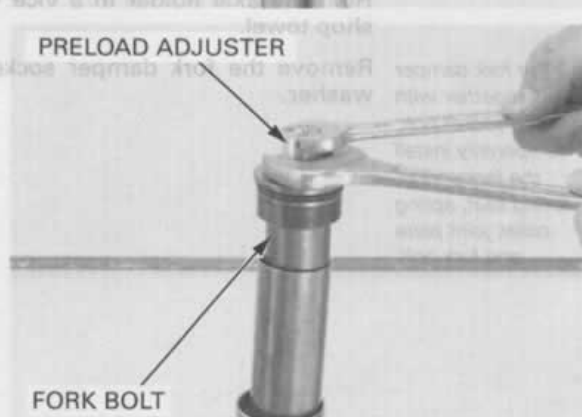
Remove the fork bolt from the fork pipe.



Remove the spring joint plate.



Hold the preload adjuster with a spanner, loosen the fork bolt.

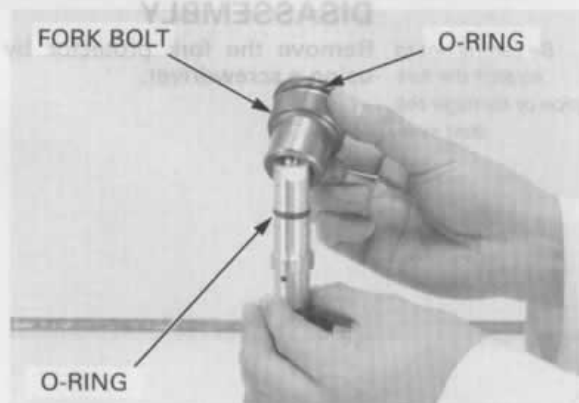


FRONT WHEEL/SUSPENSION/STEERING

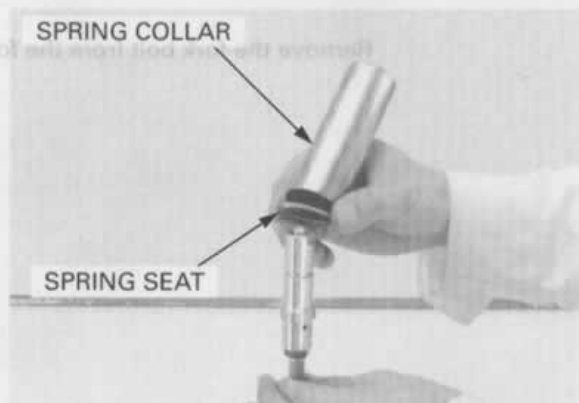
Remove the fork bolt.

Remove the O-ring from the fork bolt.

Remove the O-ring from the preload adjuster.



Remove the spring collar and spring seat.



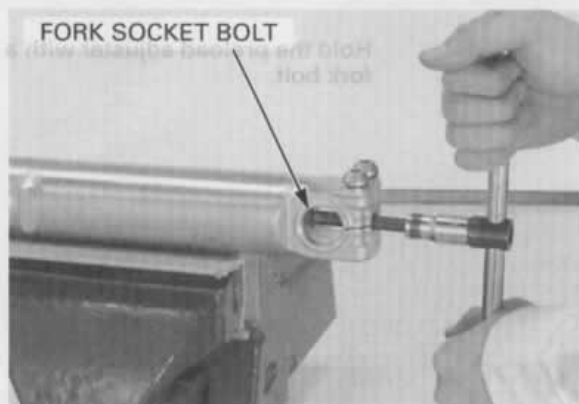
Remove the fork spring.

Pour out the fork fluid by pumping the fork pipe several times.



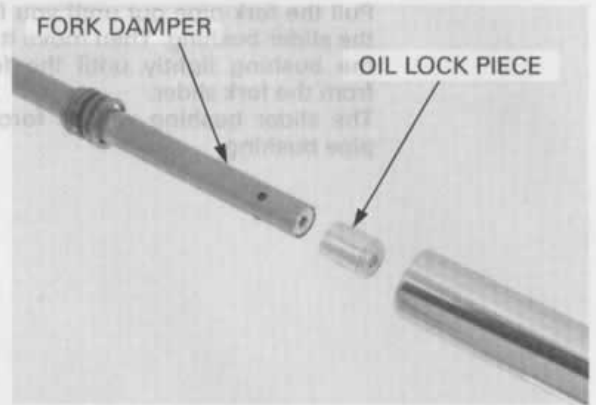
Hold the axle holder in a vice with soft jaws or a shop towel.

Remove the fork damper socket bolt and sealing washer.



If the fork damper turns together with the socket bolt, temporarily install the fork spring, spring seat, spring collar, joint plate and fork bolt.

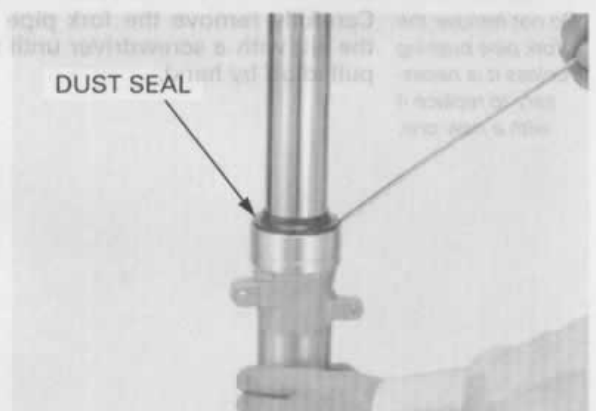
Remove the fork damper assembly and oil lock piece from the fork pipe.



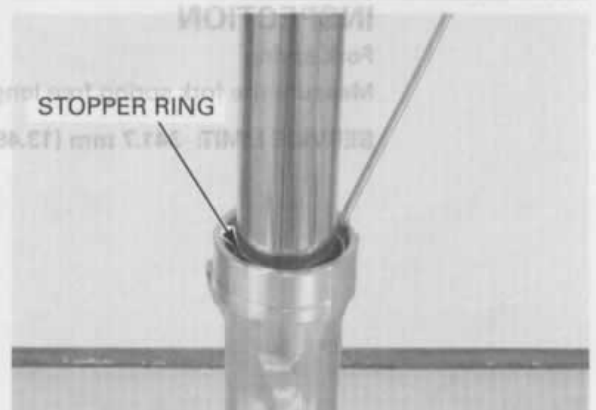
Pour out the fork fluid from the fork damper by pumping the damper rod several times.



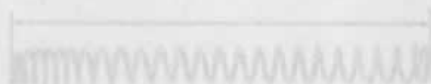
Remove the dust seal.



Remove the oil seal stopper ring.

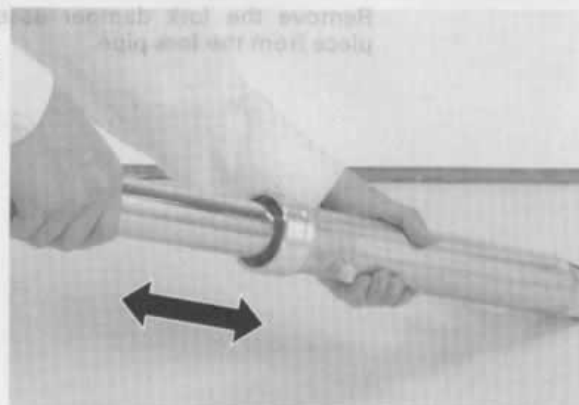


Do not scratch the fork pipe sliding surface.

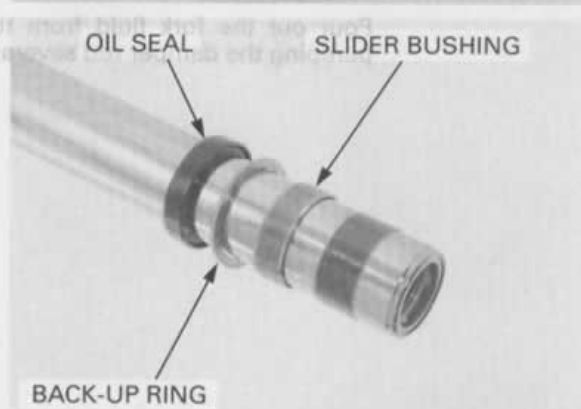


FRONT WHEEL/SUSPENSION/STEERING

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



Remove the oil seal, back-up ring and slider bushing from the fork pipe.



Do not remove the fork pipe bushing unless it is necessary to replace it with a new one.

Carefully remove the fork pipe bushing by prying the slit with a screwdriver until the bushing can be pulled off by hand.

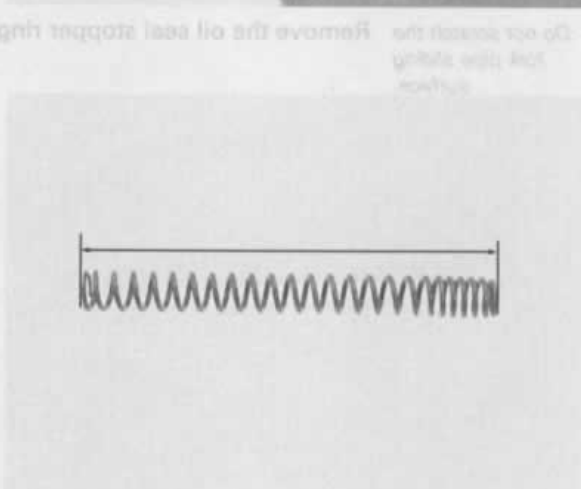


INSPECTION

Fork spring

Measure the fork spring free length.

SERVICE LIMIT: 341.7 mm (13.45 in)



Fork pipe/slider/damper

Check the fork pipe and fork slider for score marks, scratches, or excessive or abnormal wear.
Replace any components which are worn or damaged.

Replace the fork damper assembly, if any component are damaged.

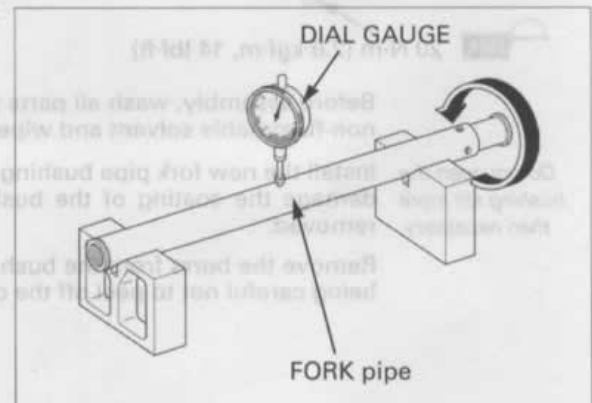
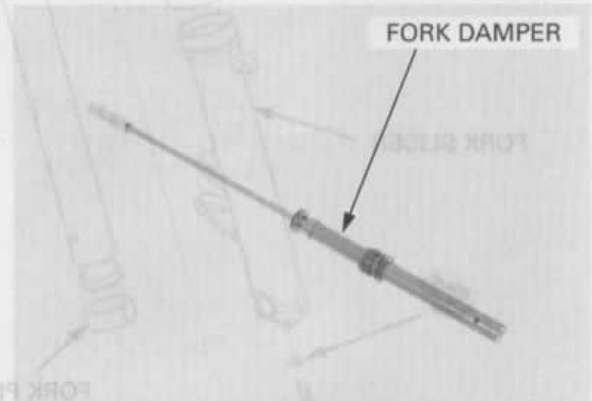
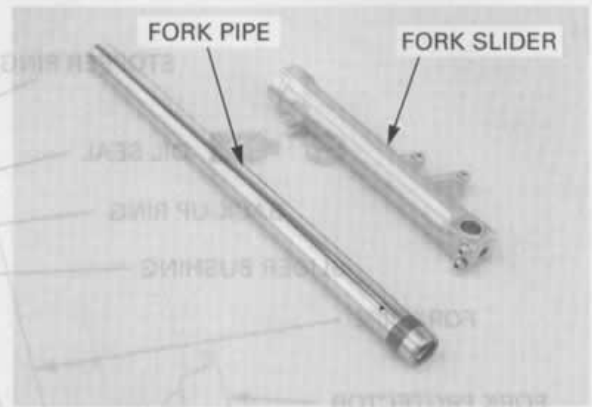
Check the fork damper for wear or damage.
Check the fork damper rod for bend.
Check the rebound spring for fatigue or damage.
Check the oil lock valve for wear or damage.

Replace the fork damper assembly if any component is damaged.

Place the fork pipe in V-block and measure the runout.

Actual runout is 1/2 the total indicator reading.

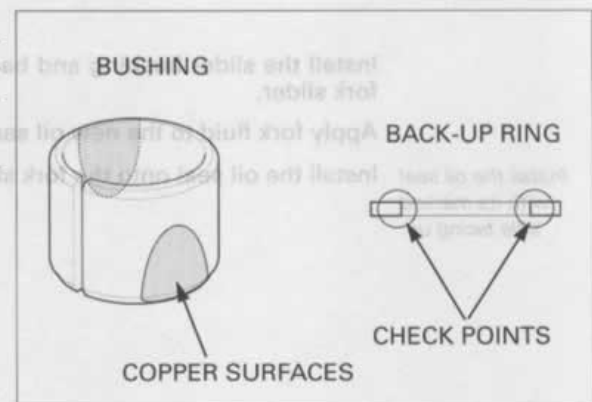
SERVICE LIMIT: 0.20 mm (0.008 in)



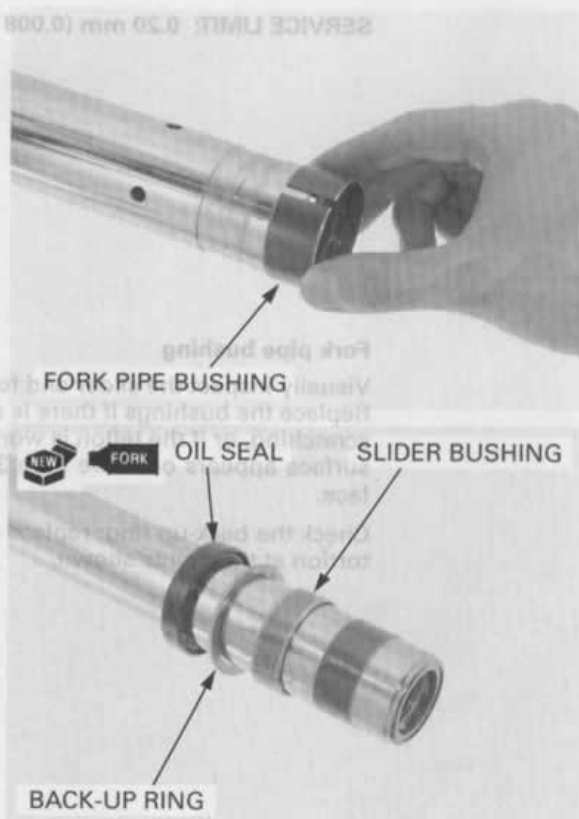
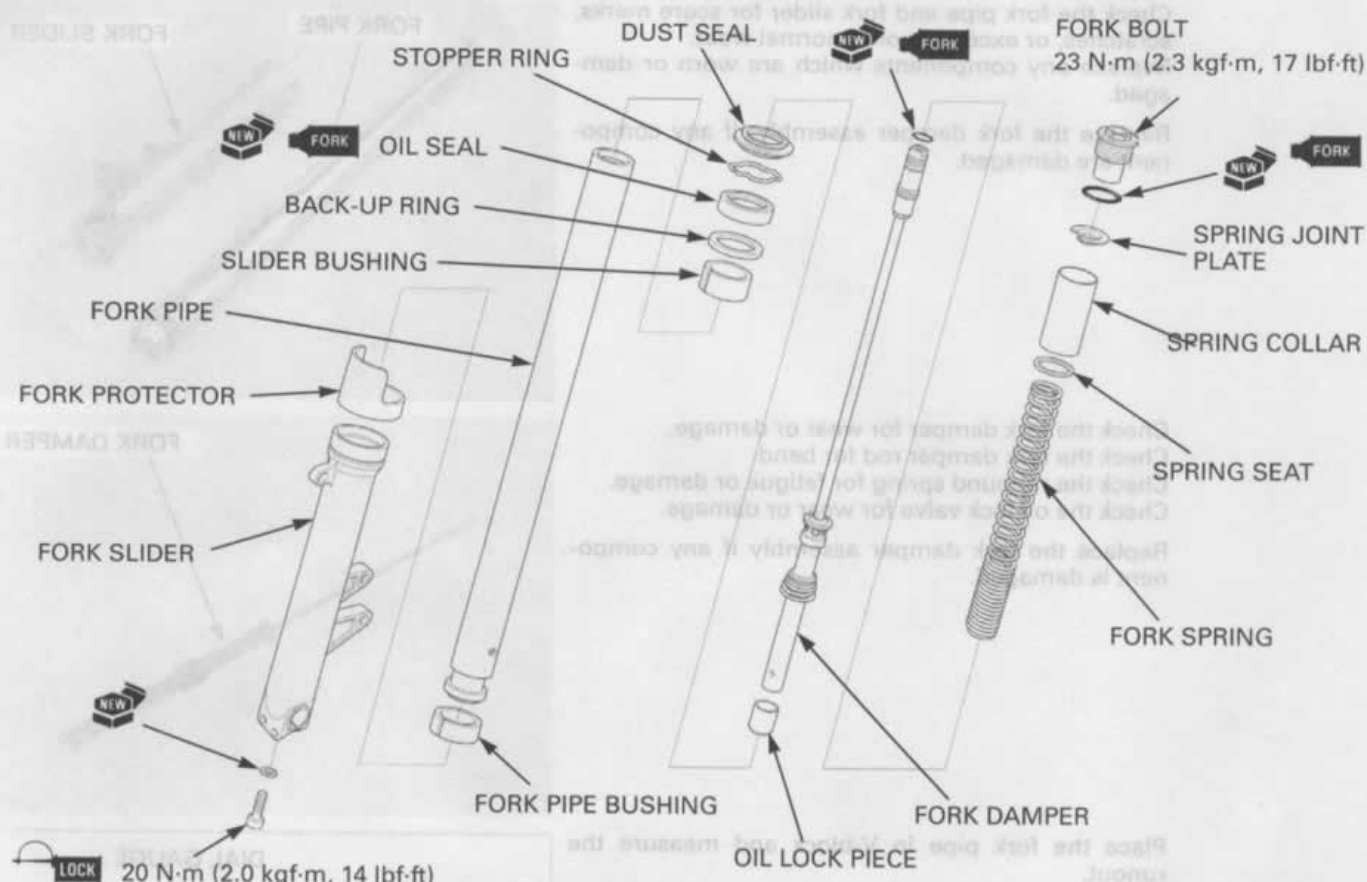
Fork pipe bushing

Visually inspect the slider and fork pipe bushings.
Replace the bushings if there is excessive scoring or scratching, or if the teflon is worn so that the copper surface appears on more than 3/4 of the entire surface.

Check the back-up ring; replace it if there is any distortion at the points shown.

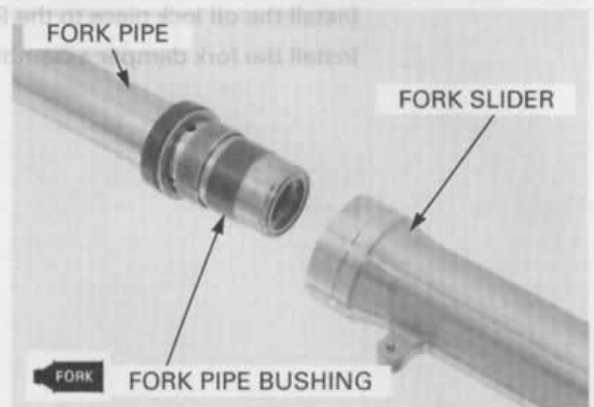
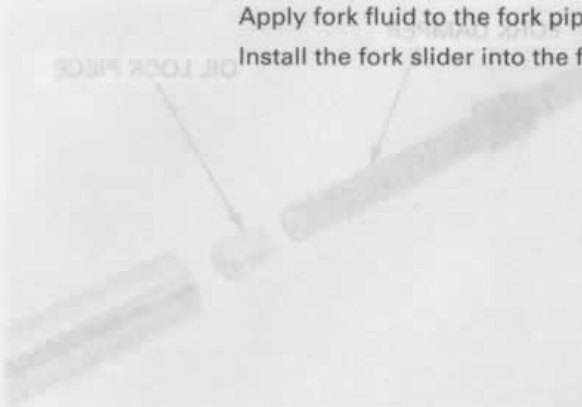


ASSEMBLY



Apply fork fluid to the fork pipe bushing.

Install the fork slider into the fork pipe.



Drive the oil seal in using the special tool.

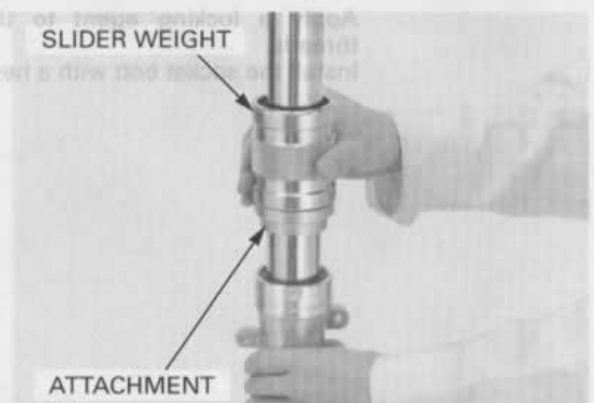
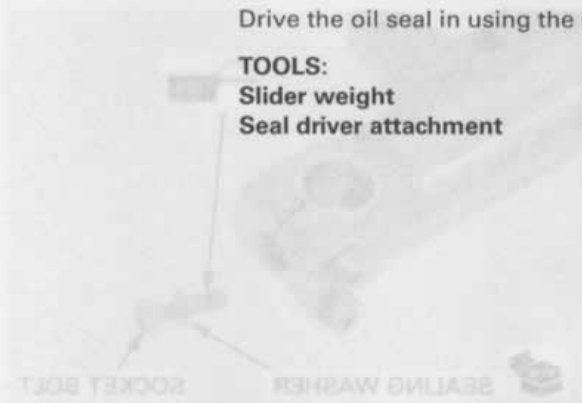
TOOLS:

Slider weight

07947-KA50100

Seal driver attachment

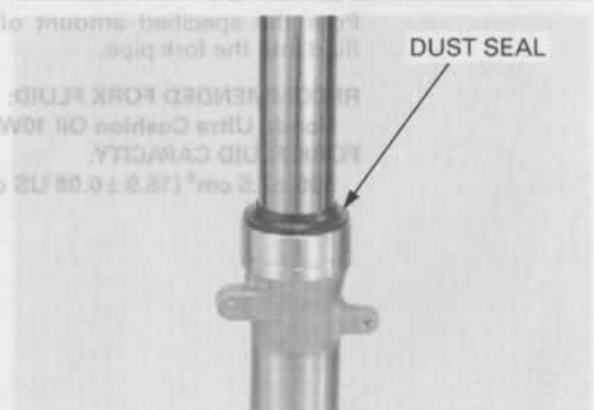
07947-KA40200



Install the stopper ring into the fork slider groove securely.

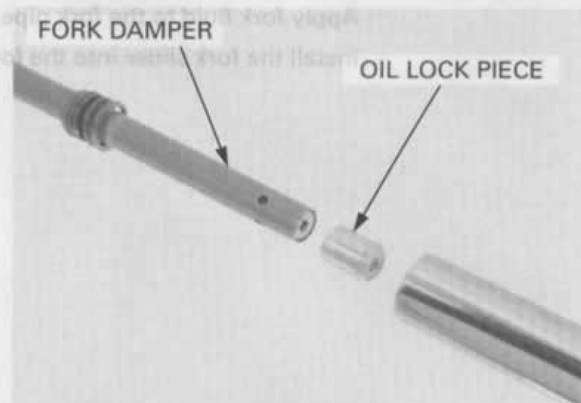


Install the dust seal.



FRONT WHEEL/SUSPENSION/STEERING

Install the oil lock piece to the fork damper.
Install the fork damper assembly into the fork slider.



Apply a locking agent to the fork socket bolt threads.
Install the socket bolt with a new sealing washer.

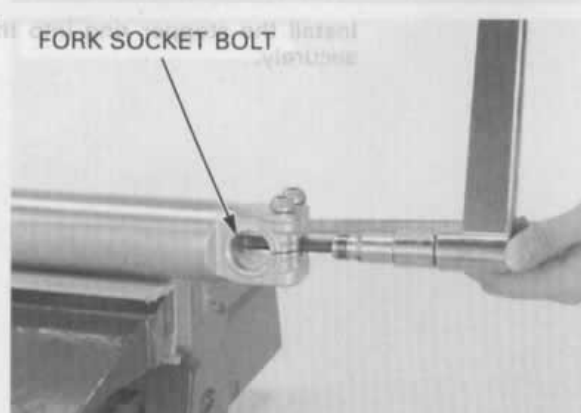


Hold the axle holder in a vise with soft jaws or a shop towel.

Tighten the fork socket bolt to the specified torque.

TORQUE: 20 N·m (2.0 kgf·m, 14 lbf·ft)

If the fork damper turns together with the socket bolt, temporarily install the fork spring, spring seat, spring collar, joint plate and fork bolt.



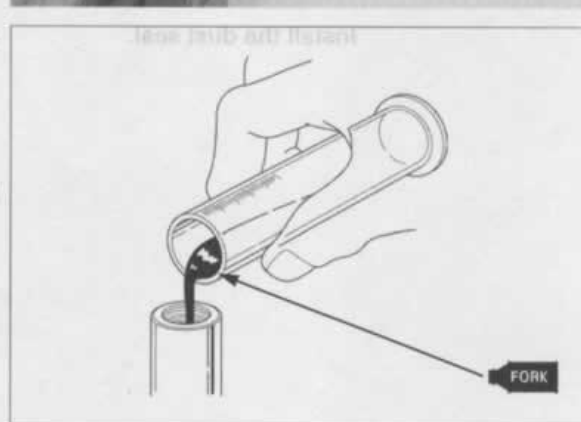
Pour the specified amount of recommended fork fluid into the fork pipe.

RECOMMENDED FORK FLUID:

Honda Ultra Cushion Oil 10W or equivalent

FORK FLUID CAPACITY:

500 ± 2.5 cm³ (16.9 ± 0.08 US oz, 17.6 ± 0.09 Imp oz)



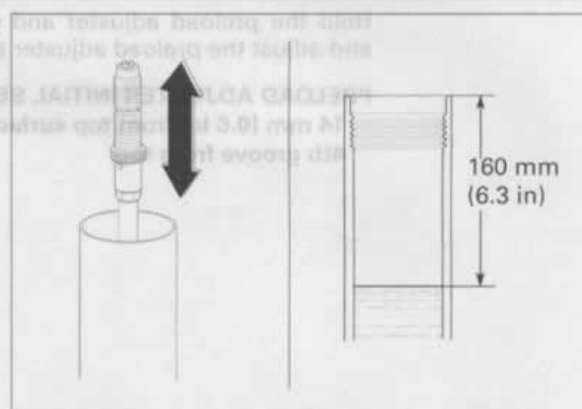
Pump the damper rod several times until the fork fluid flows out of the oil hole in the rebound damping adjuster.
Slowly pump the fork pipe several times to remove the trapped air.

Compress the fork pipe slowly.

Measure the oil level from the top of the fork pipe.

FORK OIL LEVEL: 160 mm (6.3 in)

Be sure the oil level is the same in the both forks.



Extend the fork damper fully.

Install the fork spring with the tapered end facing down.

FORK SPRING

TAPERED END

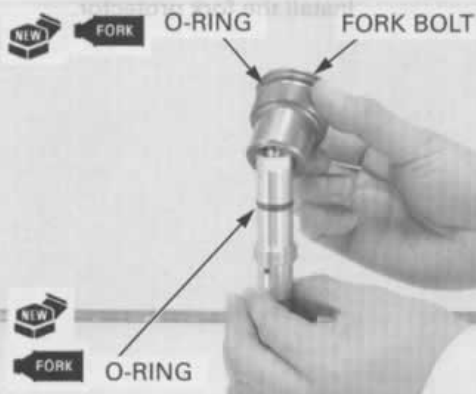
Install the spring seat and spring collar.

SPRING COLLAR

SPRING SEAT

Apply fork fluid to the new O-ring and install it into the preload adjuster groove.
Apply fork fluid to the new O-ring and install it into the fork cap groove.

Install the fork cap onto the preload adjuster.

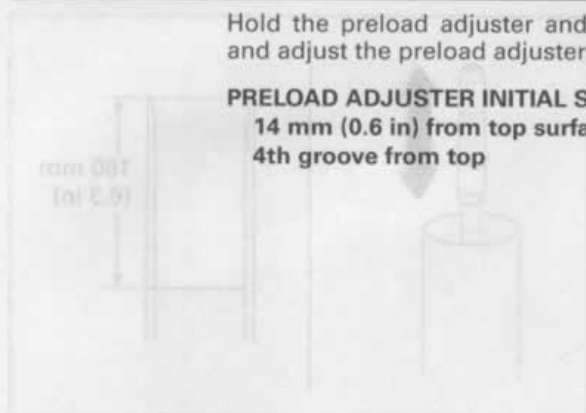


FRONT WHEEL/SUSPENSION/STEERING

Hold the preload adjuster and screw the fork bolt and adjust the preload adjuster as shown.

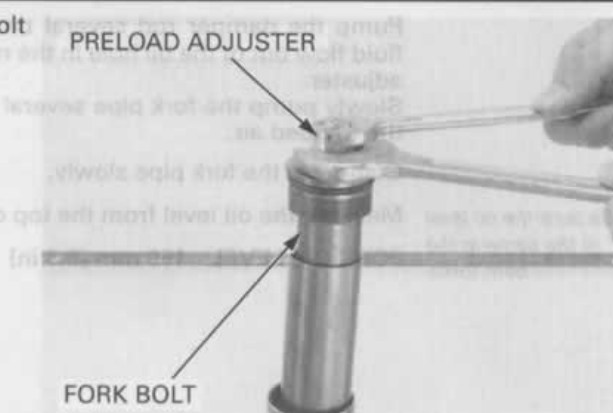
PRELOAD ADJUSTER INITIAL SETTING:

**14 mm (0.6 in) from top surface of fork cap
4th groove from top**



PRELOAD ADJUSTER

FORK BOLT



Install the spring joint plate.



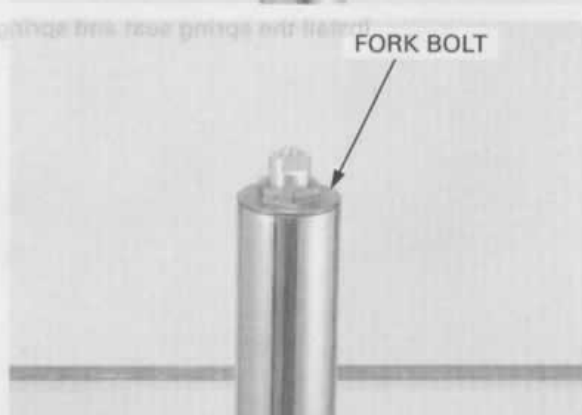
SPRING JOINT PLATE



Screw the fork bolt into the fork pipe.



FORK BOLT

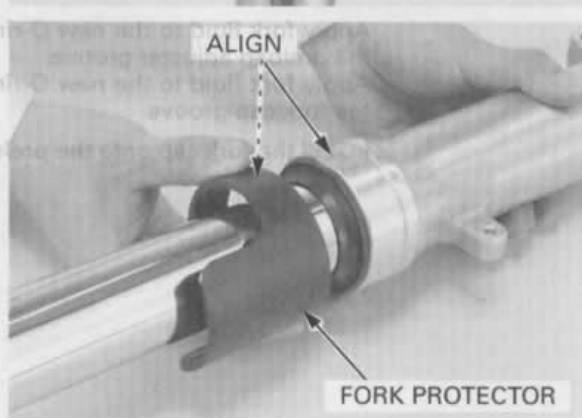


Install the fork protector.



ALIGN

FORK PROTECTOR

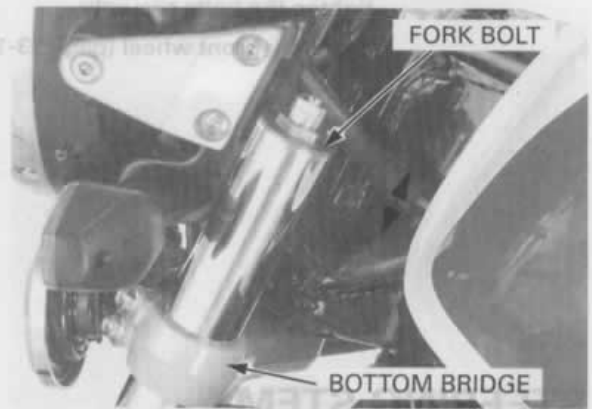


INSTALLATION

Install the fork leg through the bottom bridge, temporarily tighten the bottom bridge pinch bolt.

Tighten the fork bolt to the specified torque.

TORQUE: 23 N·m (2.3 kgf·m, 17 lbf·ft)

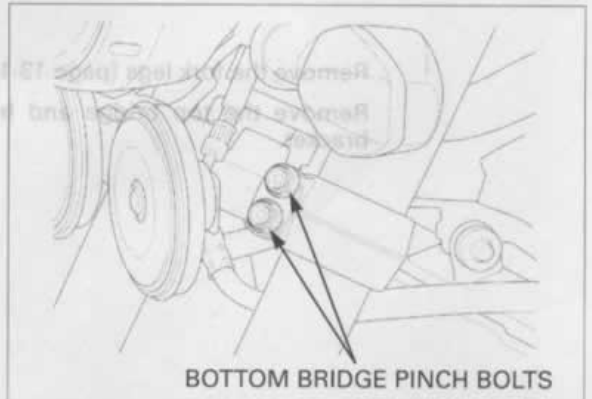


Loosen the bottom bridge pinch bolts and pull up the fork leg so that the top surface end of the fork pipe flush with the top bridge upper surface.



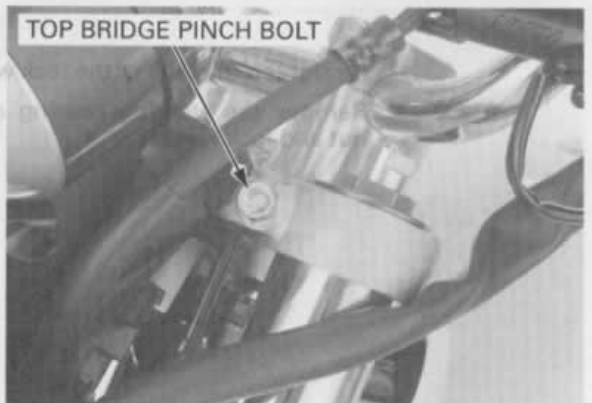
Tighten the bottom bridge pinch bolts to the specified torque.

TORQUE: 26 N·m (2.7 kgf·m, 20 lbf·ft)



Tighten the top bridge pinch bolt to the specified torque.

TORQUE: 23 N·m (2.3 kgf·m, 17 lbf·ft)



FRONT WHEEL/SUSPENSION/STEERING

Install the front fender and brake hose clamps, tighten the bolts securely.

Install the front wheel (page 13-16).

FRONT FENDER

SPECIAL SCREW

CLAMP BOLT

STEERING STEM

REMOVAL

Remove the following:

- Handlebar (page 13-6)
- Front wheel (page 13-12)
- Headlight case (page 19-7)
- Combination meter (page 19-11)
- Horn (page 19-27)

Remove the stem nut.

STEM NUT

Remove the fork legs (page 13-18).

Remove the top bridge and headlight/turn signal bracket.

TOP BRIDGE

BRACKET

FORK LEGS

Straighten the tabs of the lock washer.

Remove the steering bearing adjustment nut lock nut and lock washer.

LOCK NUT

LOCK WASHER TAB

Remove the steering stem bearing adjusting nut using the special tool.

TOOL:

Steering stem socket

07916-3710101

STEERING STEM SOCKET

ADJUSTING NUT

Remove the following:

- Upper dust seal
- Upper bearing inner race
- Upper bearing

DUST SEAL

INNER RACE

UPPER BEARING

Remove the following:

- Steering stem
- Lower bearing

Check the bearings and races for wear or damage.

STEERING STEM

LOWER BEARING

BEARING OUTER RACE REPLACEMENT

Always replace the bearings and races as a set.

Remove the upper bearing outer races using the special tool.

TOOLS:

Driver handle

Driver attachment

07953-MJ10200

07953-MJ10100

ATTACHMENT

DRIVER HANDLE

FRONT WHEEL/SUSPENSION/STEERING

Remove the lower bearing outer race using the special tool.

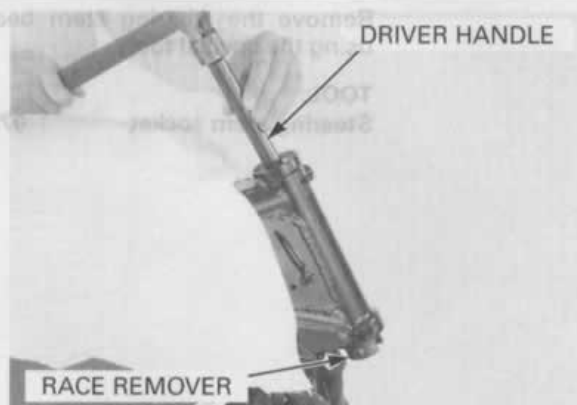
TOOLS:

Driver handle

07953-MJ10200

Bearing race remover

07946-3710500



Temporarily install the steering stem nut onto the stem to prevent the threads from being damaged when removing the lower bearing inner race from the stem.

Remove the lower bearing inner race with a chisel or equivalent tool, being careful not to damage the stem.

Remove the dust seal.



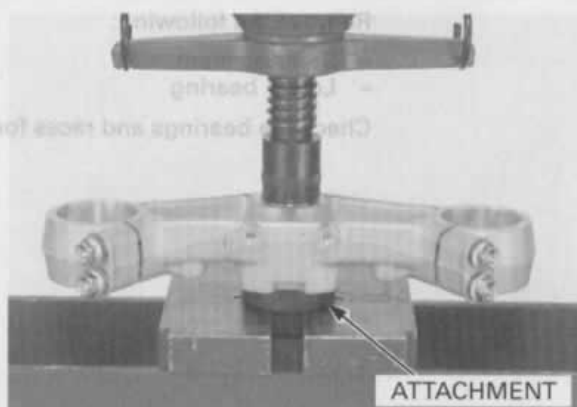
Apply grease to a new dust seal lips and install it over the steering stem.

Install a new lower bearing inner race using a special tool and a hydraulic press.

TOOL:

Attachment, 30 mm

07746-0030300



Drive the new lower bearing outer races into the steering head pipe using the special tools.

TOOLS:

Driver

07749-0010000

Attachment, 52 X 55 mm

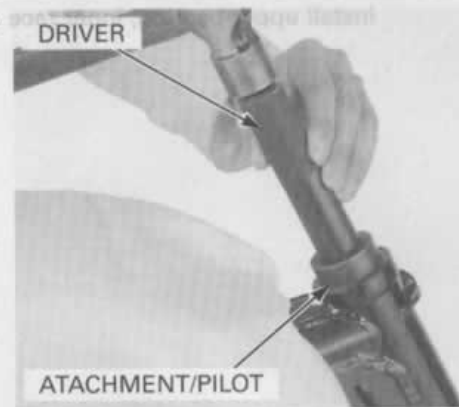
07746-0010400



Drive the new upper bearing outer races into the steering head pipe using the special tools.

TOOLS:

Driver 07749-0010000
Attachment, 37 X 40 mm 07746-0010300



INSTALLATION

SPECIFIED : BEARINGS
GREASE : BEARING RACE
(PAGE 1-22) : DUST SEAL

STEM NUT
103 N·m (10.5 kgf·m, 76 lbf·ft)

LOCK NUT

LOCK WASHER

TOP THREAD

UPPER DUST SEAL

UPPER INNER RACE

UPPER BEARING

UPPER OUTER RACE

LOWER INNER RACE

LOWER DUST SEAL

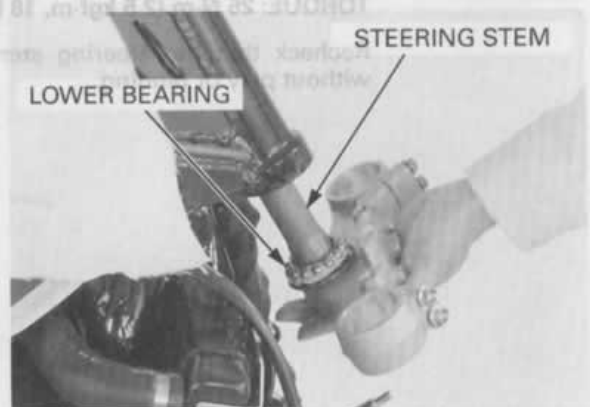
STEERING STEM

LOWER OUTER RACE

LOWER BEARING

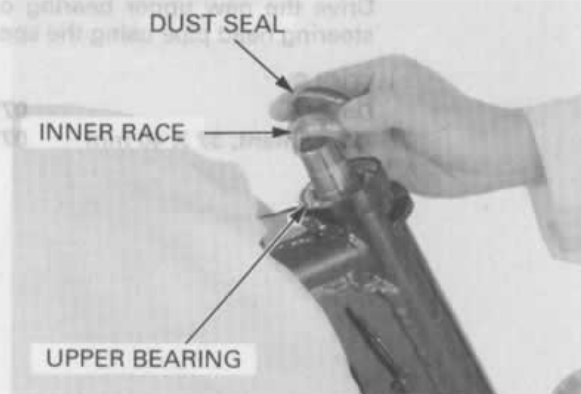
Apply specified grease (page 1-22) to upper and lower bearings and bearing races.

Install the lower bearing onto the steering stem.
Insert the steering stem into the steering head pipe.



FRONT WHEEL/SUSPENSION/STEERING

Install upper bearing, inner race and dust seal.

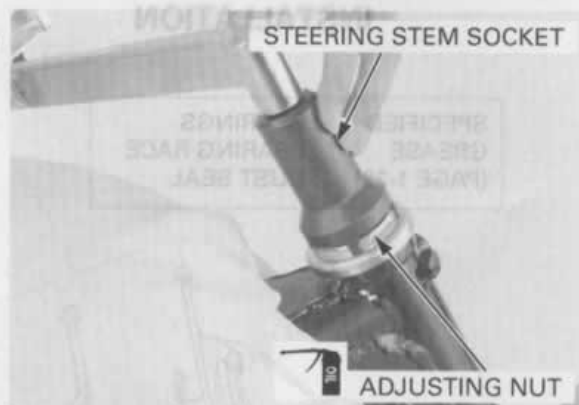


Apply oil to the bearing adjustment nut threads. Install and tighten the stem bearing adjusting nut to the initial torque.

TOOL:

Steering stem socket 07916-3710101

TORQUE: 25 N·m (2.5 kgf·m, 18 lbf·ft)



Move the steering stem right and left, lock-to-lock, five times to seat the bearings.

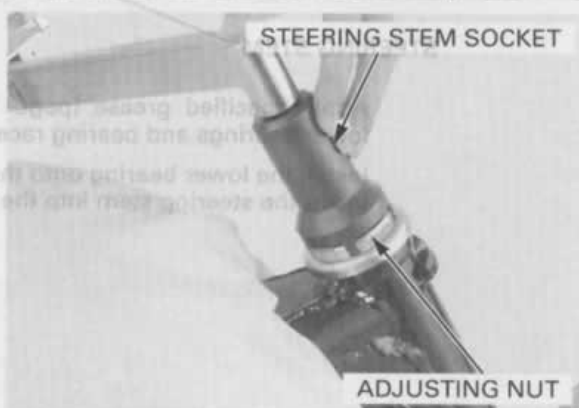
Make sure that the steering stem moves smoothly, without play or binding; then loosen the bearing adjusting nut.



Retighten the bearing adjusting nut to the specified torque.

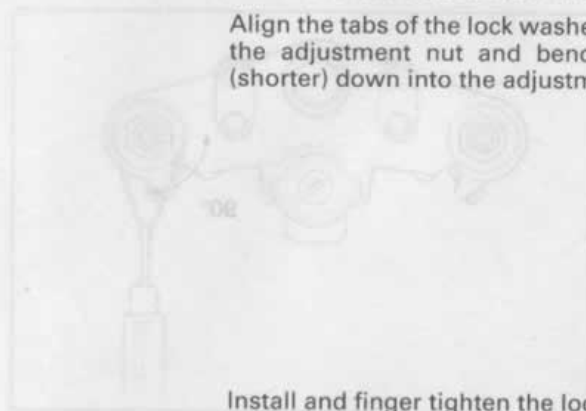
TORQUE: 25 N·m (2.5 kgf·m, 18 lbf·ft)

Recheck that the steering stem moves smoothly without play or binding.



Install the new lock washer onto the steering stem.

Align the tabs of the lock washer with the grooves in the adjustment nut and bend two opposite tabs (shorter) down into the adjustment nut groove.



Install and finger tighten the lock nut.

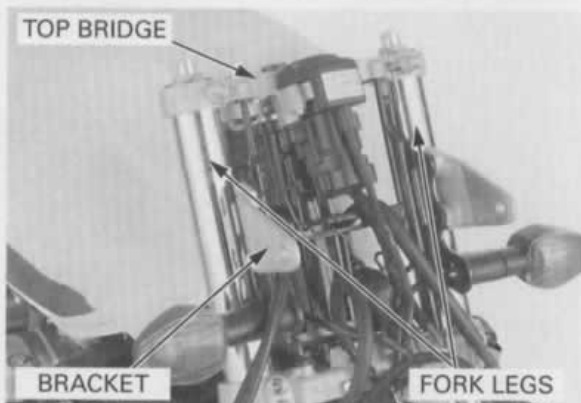
Hold the adjusting nut and further tighten the lock nut within 1/4 turn (90°) enough to align its grooves with the lock washer tabs.

Bend the lock washer tabs up into the lock nut groove.



Install the headlight/front turn signal bracket and top bridge.

Install the fork legs (page 13-29).



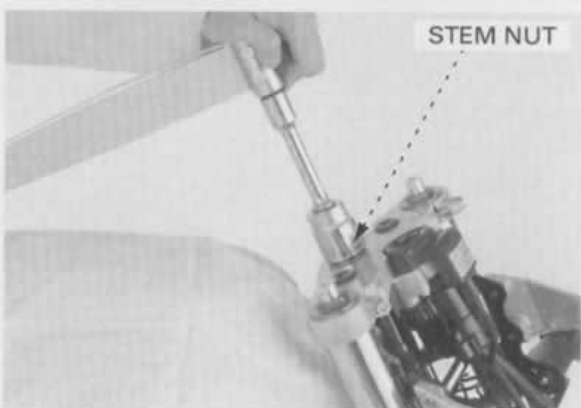
Install the steering stem nut.

Tighten the steering stem nut to the specified torque.

TORQUE: 103 N·m (10.5 kgf·m, 76 lbf·ft)

Install the following:

- Horn (page 19-27)
- Combination meter (page 19-11)
- Headlight case (page 19-7)
- Front wheel (page 13-16)
- Handlebar (page 13-8)



STEERING HEAD BEARING PRE-LOAD

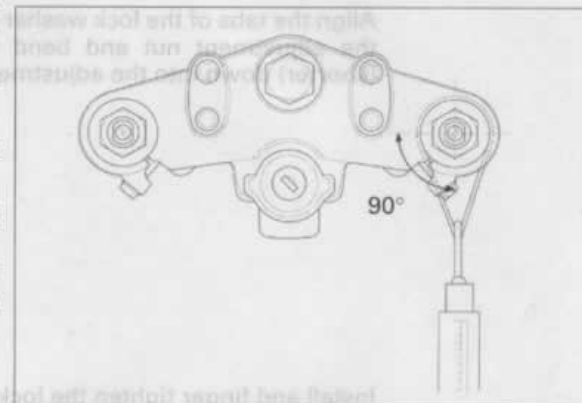
Jack-up the motorcycle to raise the front wheel off the ground.

Position the steering stem to the straight ahead position.

Hook a spring scale to the fork pipe and measure the steering head bearing pre-load.

The pre-load should be within 1.0 – 1.5 kgf (2.2 – 3.3 lbf).

If the readings do not fall within the limits, lower the front wheel to the ground and adjust the steering bearing adjusting nut.



Make sure that there is no cable or wire harness interference.



Install and finger tighten the lock nut.
Hold the adjusting nut and further tighten the lock nut within 1/4 turn (90°) enough to align its grooves with the lock washer tabs.
Bend the lock washer tabs up into the lock nut groove.

Install the headlight front turn signal bracket and top bridge.
Install the fork legs (page 13-28).

Install the steering stem nut.
Tighten the steering stem nut to the specified torque.

TORQUE: 103 N·m (10.5 kgf-m, 75 ft-lb)

Install the following:

- Horn (page 13-27)
- Combination meter (page 13-11)
- Headlight case (page 13-7)
- Front wheel (page 13-16)
- Handbrake (page 13-8)