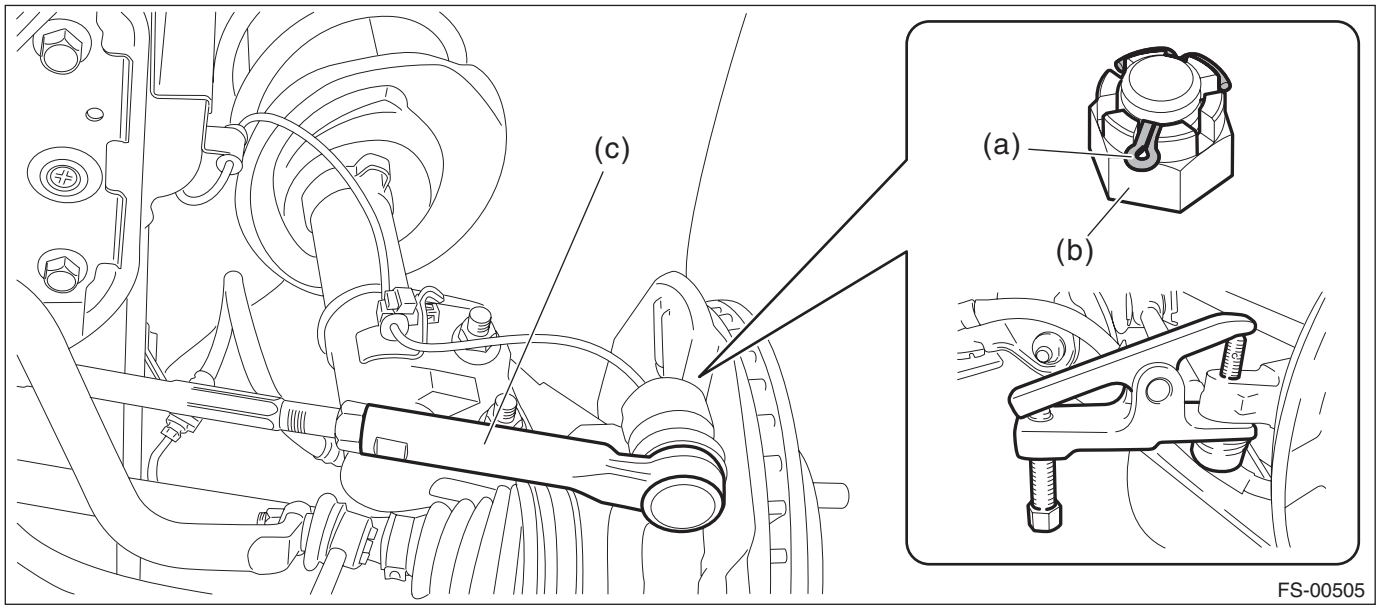
6. Steering Gearbox

A: REMOVAL

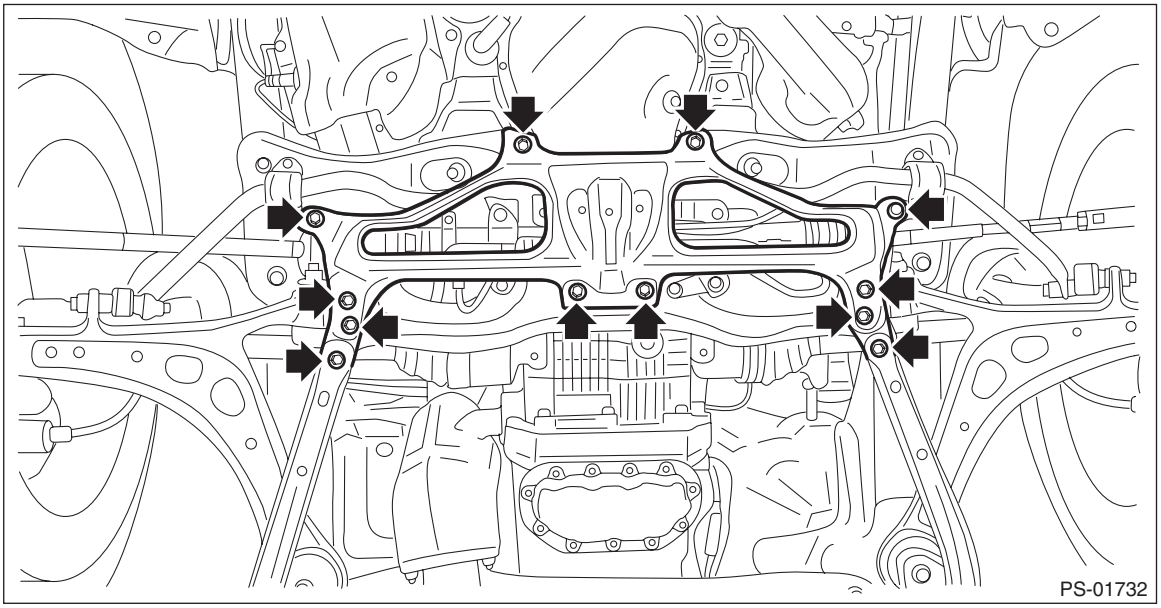
1) Lift up the vehicle, and then remove the front wheels.
2) Remove the under cover - front. <Ref. to EI-21, REMOVAL, Front Under Cover.>
3) Disconnect the tie-rod end.
   (1) Pull out the cotter pin (a).
   (2) Remove the castle nut (b).
   (3) Using a tie-rod end puller, remove the tie-rod end (c).

CAUTION:
Be careful not to damage the boot of the joint.

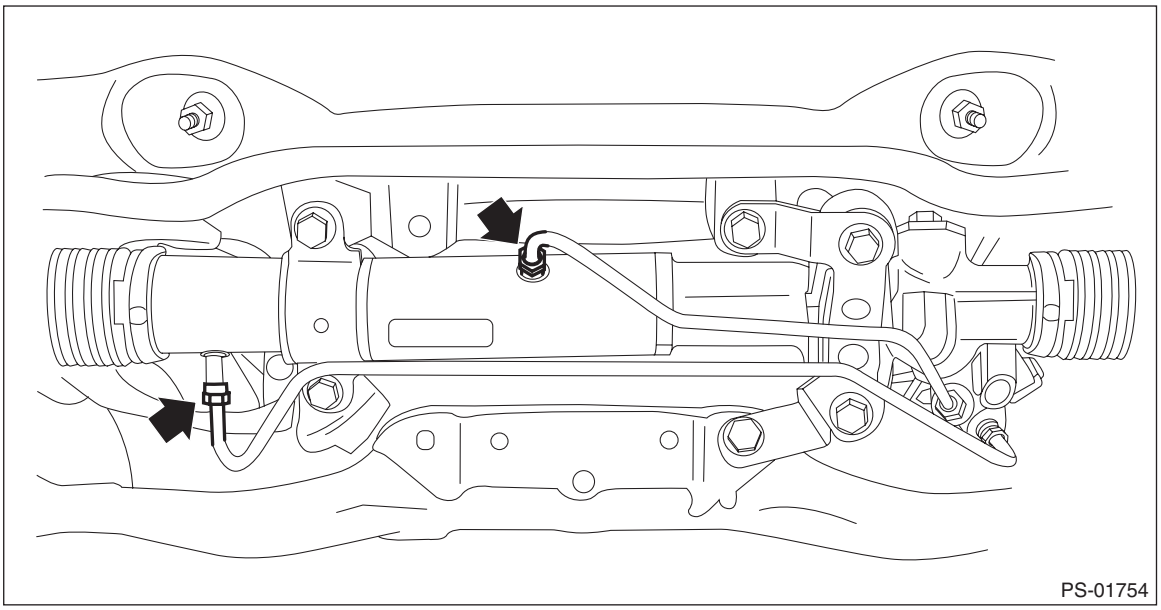
Preparation tool:
Tie-rod ball joint puller



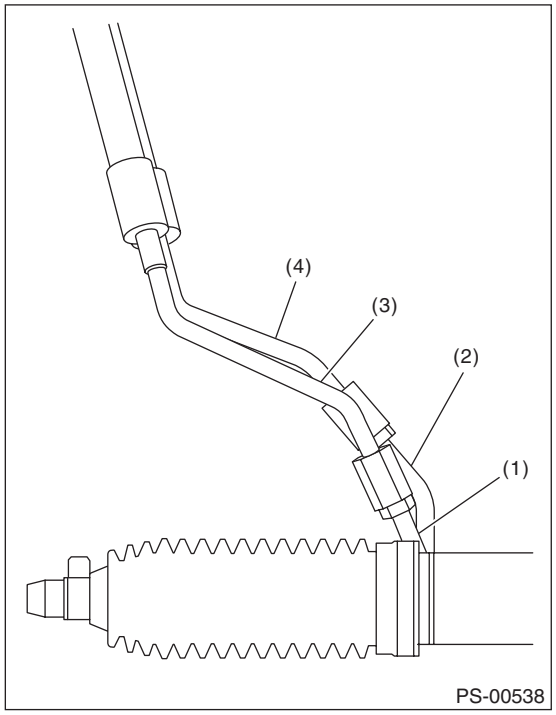
4) Remove the bolt, and remove the front crossmember support.



5) Remove the front stabilizer. <Ref. to FS-31, REMOVAL, Front Stabilizer.>
6) Drain the power steering fluid.
(1) Remove the pipe joint of the gearbox, and connect the vinyl hose to the pipe and the joint.

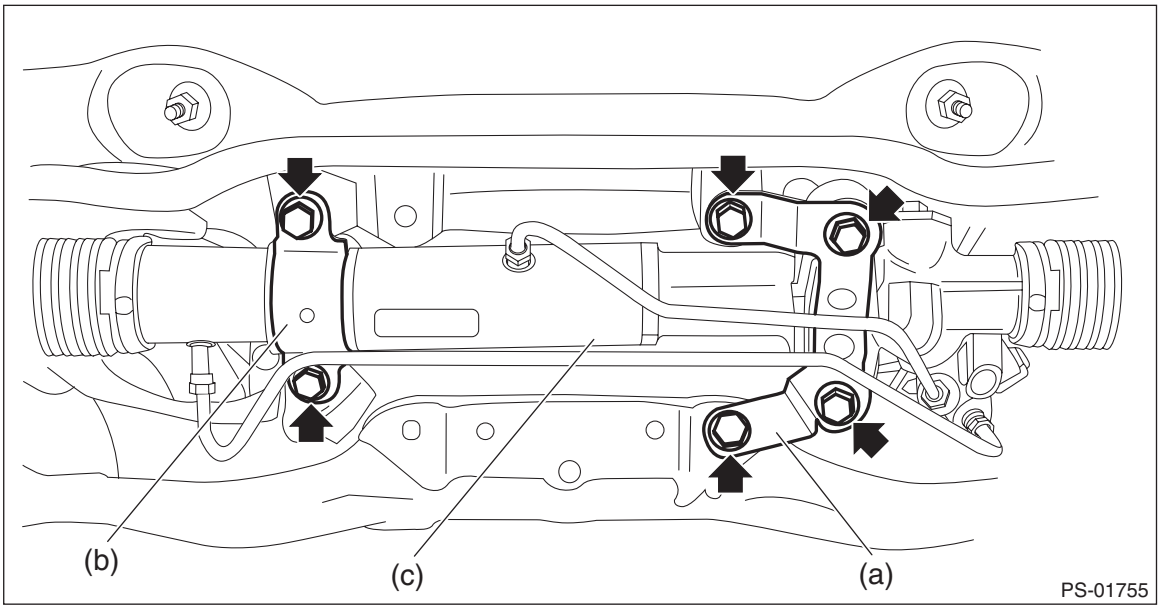


(2) Discharge the fluid by turning the steering wheel fully clockwise and counterclockwise.
(3) Discharge the fluid similarly from other pipes.
7) Remove the universal joint assembly - steering. <Ref. to PS-21, REMOVAL, Universal Joint.>
8) Disconnect the ground cable from battery. <Ref. to NT-5, BATTERY, NOTE, Note.>
9) Disconnect the feed pipe from the pressure hose first, then disconnect the return pipe from the hose - return.



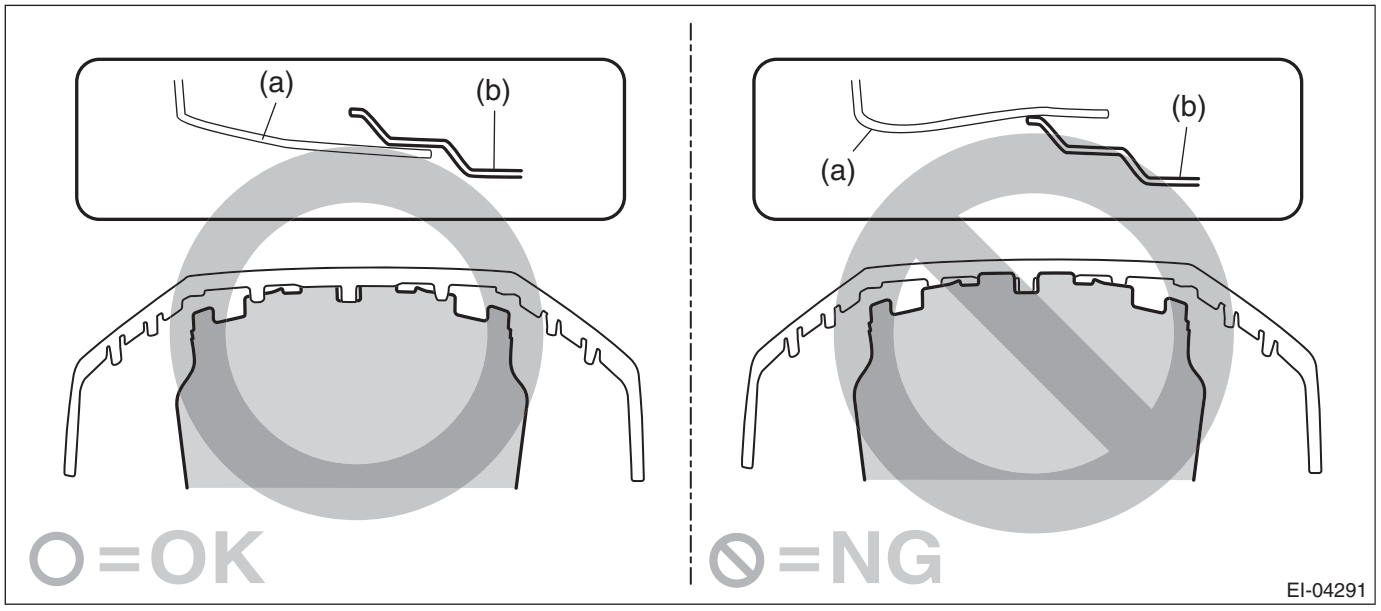
(1) Feed pipe
(2) Return pipe
(3) Pressure hose
(4) Hose - return

10) Remove the bolts securing the gearbox, and remove the stiffener (a), clamp (b) and gearbox (c).



B: INSTALLATION

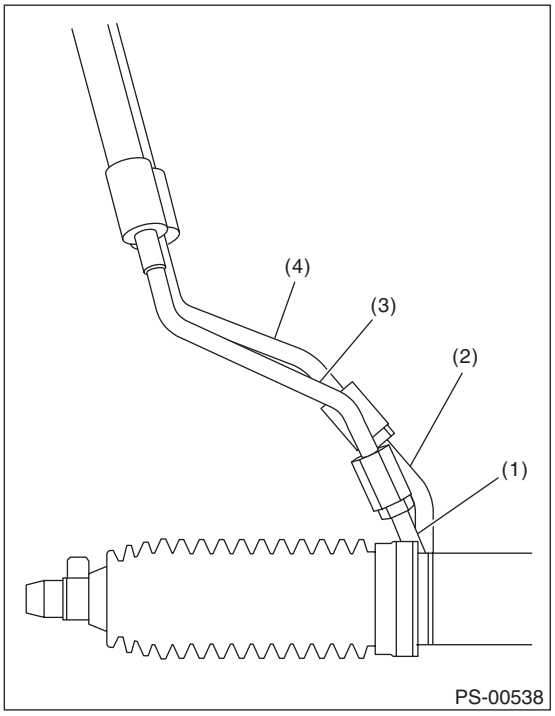
CAUTION:
Install the under cover - front so that the front end of the under cover (b) comes inside the bumper face - front (a).



1) Insert the gearbox into crossmember, being careful not to damage gearbox boot.
2) Install the gearbox to the crossmember through the clamp and stiffener.

Tightening torque:
60 N·m (6.1 kgf-m, 44.3 ft-lb)

3) Connect the return pipe to the hose - return and then connect the feed pipe to the pressure hose.



(1) Feed pipe
(2) Return pipe
(3) Pressure hose
(4) Hose - return

Tightening torque:
15 N·m (1.5 kgf-m, 11.1 ft-lb)

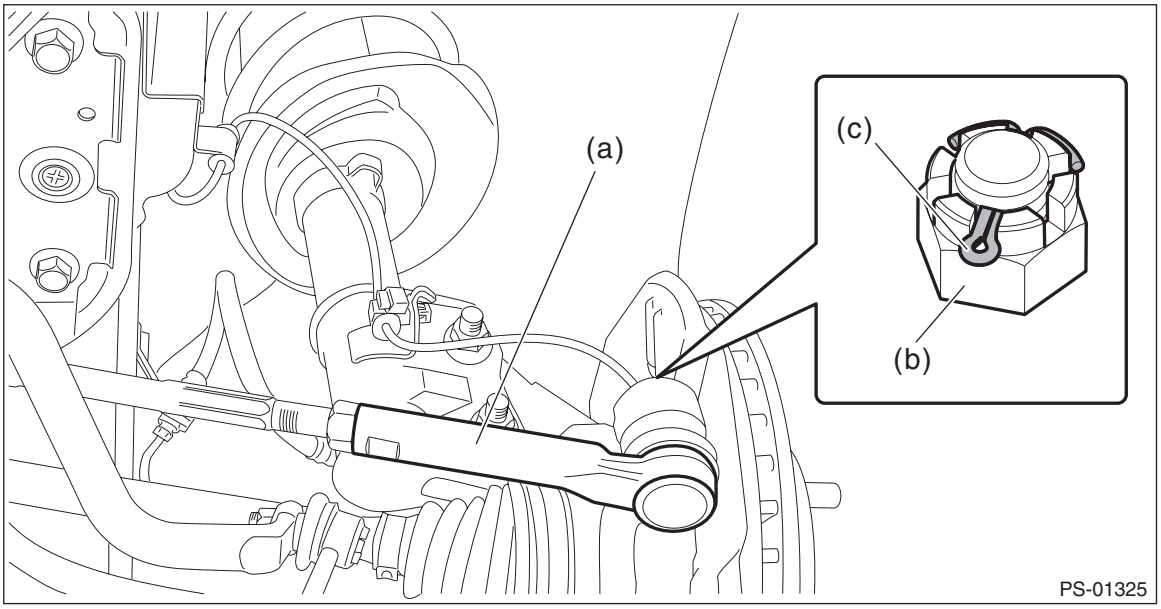
4) Install the universal joint assembly - steering. <Ref. to PS-22, INSTALLATION, Universal Joint.>

5) Connect the tie-rod ends.
   (1) Connect the tie-rod end (a) to the housing assembly - front axle.
   (2) Tighten the castle nuts (b) to the specified torque.

CAUTION:
When connecting the tie-rod, do not hit the cap at bottom of tie-rod end with a hammer.

Tightening torque:
27 N·m (2.8 kgf-m, 19.9 ft-lb)

   (3) Tighten within the range of 60° so that the cotter pin hole and cutout portion of the castle nut (b) are aligned.
   (4) Insert the cotter pin (c), and bend the tip of the pin to fix it.



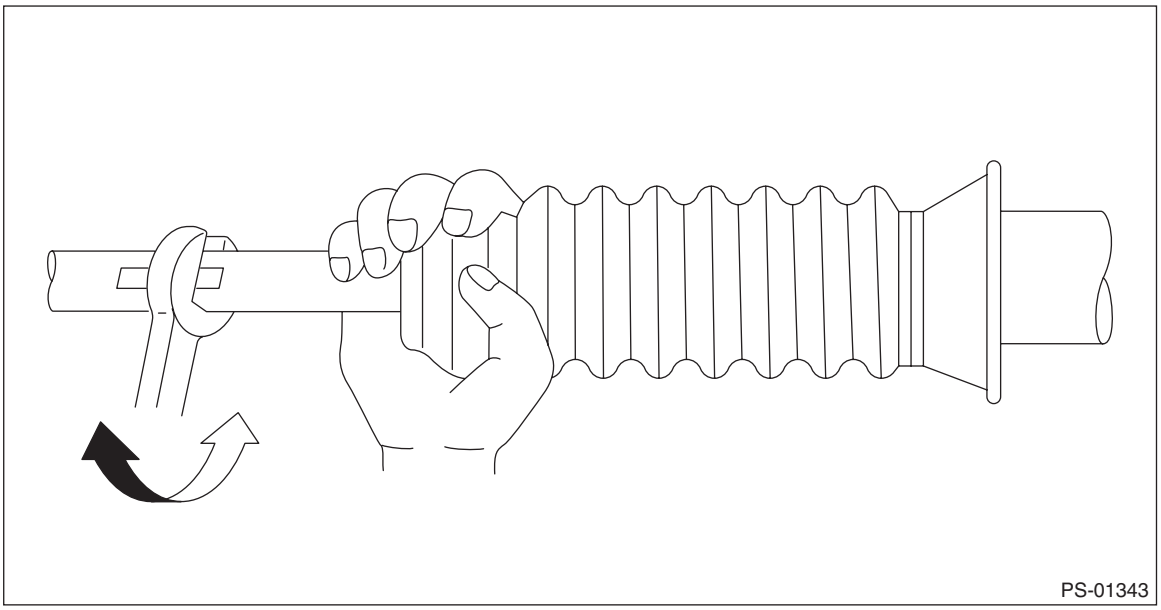
6) Install the front stabilizer. <Ref. to FS-31, INSTALLATION, Front Stabilizer.>
7) Install the front crossmember support.

Tightening torque:
Front suspension parts: <Ref. to FS-4, FRONT SUSPENSION, COMPONENT, General Description.>
8) Install the under cover - front. <Ref. to EI-22, INSTALLATION, Front Under Cover.>
9) Install the front wheels.
10) Lower the vehicle.
11) Tighten the wheel nuts to the specified torque.

Tightening torque:
120 N·m (12.2 kgf-m, 88.5 ft-lb)
12) Connect the battery ground terminal. <Ref. to NT-5, BATTERY, NOTE, Note.>
13) Pour fluid into the oil tank, and bleed air. <Ref. to PS-83, Power Steering Fluid.>
14) Check for fluid leaks.
15) Check the fluid level in oil tank.

16) Adjust the toe-in and steering angle. <Ref. to FS-17, FRONT WHEEL TOE-IN, ADJUSTMENT, Wheel Alignment.>

NOTE:
When adjusting toe-in, hold the boot as shown to prevent it from being rotated or twisted. If it becomes twisted, straighten it.



17) Tighten the tie-rod end lock nut.

Tightening torque:
85 N·m (8.7 kgf-m, 62.7 ft-lb)

C: DISASSEMBLY

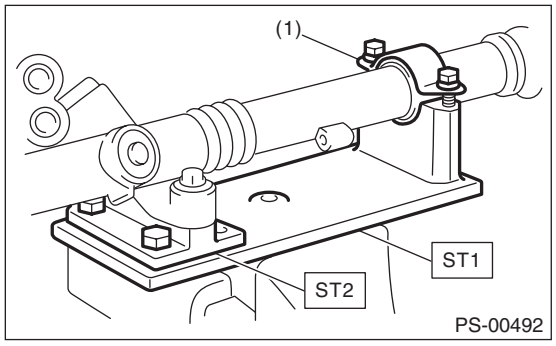
1. RACK HOUSING ASSEMBLY

1) Disconnect the four pipes from gearbox.

NOTE:
Remove the pipes C and D, which are fixed to clamp plate, as a unit.
2) Secure the gearbox removed from vehicle in a vise using ST.

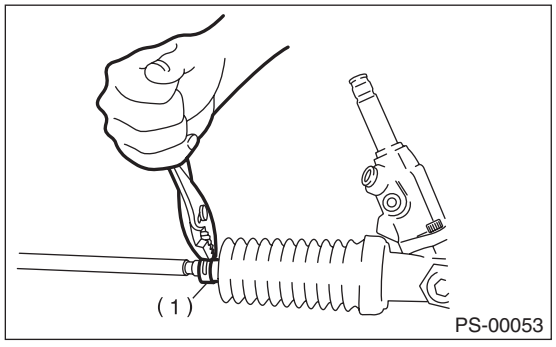
CAUTION:
Using the ST, secure the gearbox assembly in a vise as shown in the figure. Do not secure the gearbox without this ST.

Preparation tool:
ST1: STAND (926200000)
ST2: BOSS D (34199AG000)



(1) Clamp

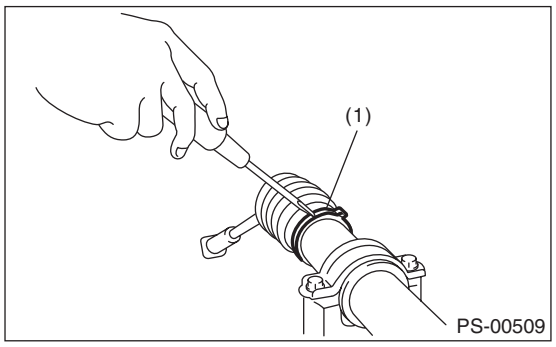
3) Remove the tie-rod end and lock nut from gearbox.
4) Remove the small clip from the boot using pliers, and then move the boot to tie-rod end side.



(1) Clip

5) Using a flat tip screwdriver, remove the band from boot.

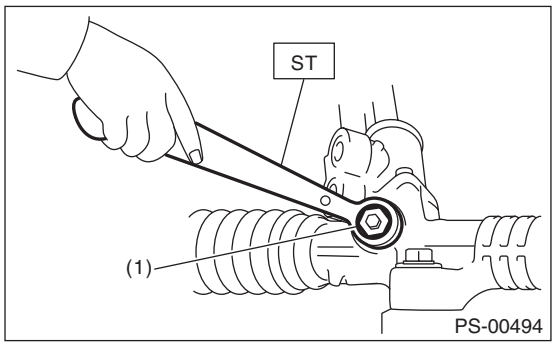
NOTE:
Replace the boot if there is damage, cracks or deterioration.



(1) Band

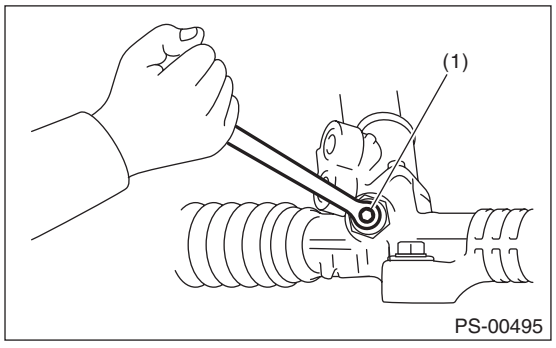
6) Using the ST, loosen the lock nut.

Preparation tool:
ST: SPANNER (926230000)



(1) Lock nut

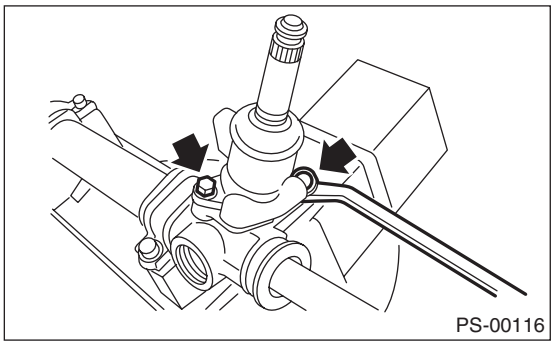
7) Tighten the adjusting screw until it can no longer be tightened.



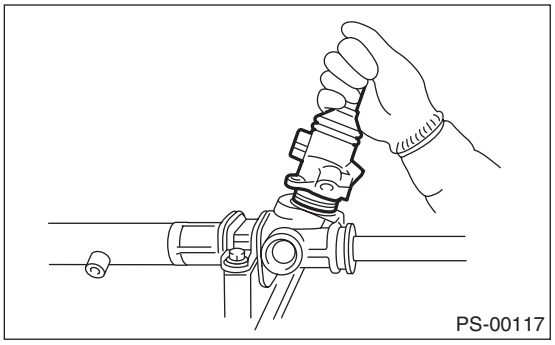
(1) Adjusting screw

8) Remove the tie-rod.
9) Loosen the adjusting screw, and remove the spring and sleeve.

10) Remove the two bolts securing valve assembly.

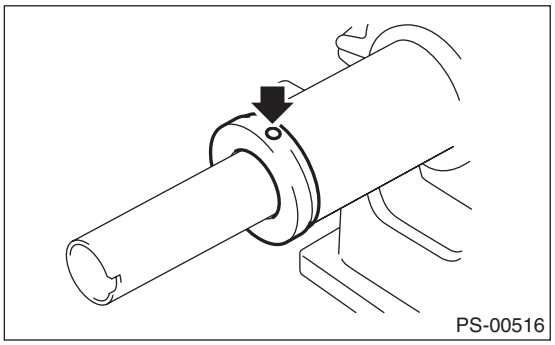


11) Carefully draw out the input shaft and remove the valve assembly.



12) Using a drill, release the crimping of holder.

CAUTION:
Make a hole of 2 mm (0.08 in) depth using a drill with 3 mm (0.12 in) diameter.

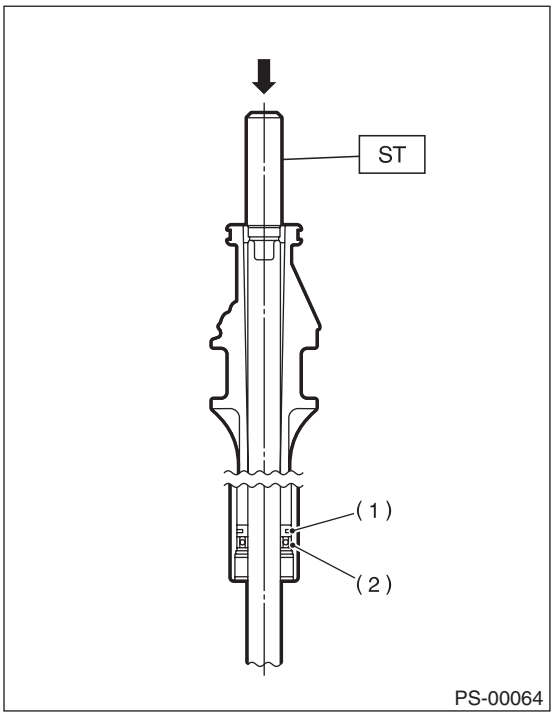


13) Remove the holder.

14) Attach the ST on the valve side of rack, and press out the outer side oil seal and rack while taking care that the rack and the steering body inner surface do not come into contact with each other.

Preparation tool:
ST: INSTALLER & REMOVER (34199XA030)

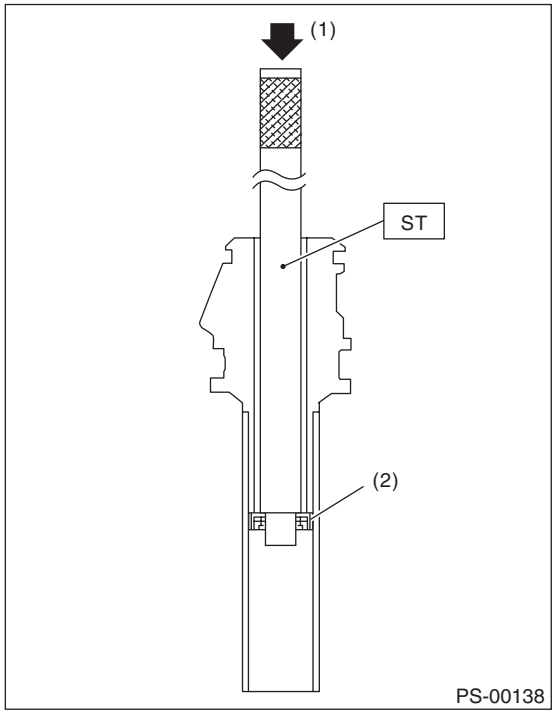
NOTE:
Block the pipe connection of steering body to prevent fluid from flowing out.



(1) Rack piston
(2) Outer side oil seal

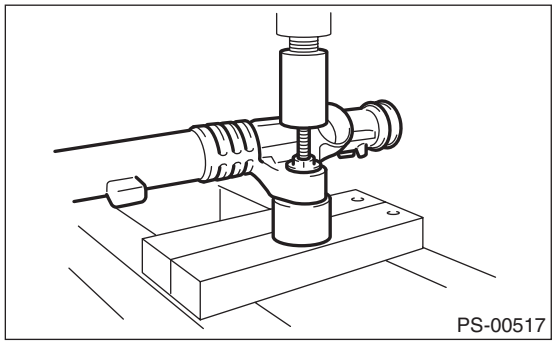
15) Insert the ST from pinion housing side and remove the oil seal and back-up ring using a press.

Preparation tool:
ST: OIL SEAL REMOVER (34099PA010)



(1) Press
(2) Oil seal

16) Using a press, remove the bushing of gearbox installation portion.

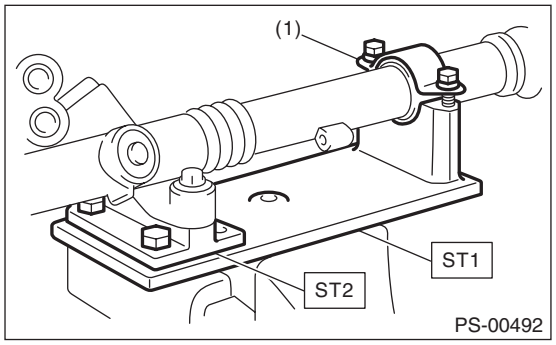


2. CONTROL VALVE

1) Disconnect the four pipes from gearbox.
2) Secure the gearbox removed from vehicle in a vise using ST.

CAUTION:
Using the ST, secure the gearbox assembly in a vise as shown in the figure. Do not secure the gearbox without this ST.

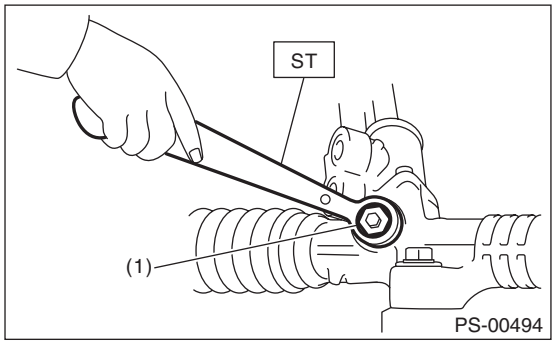
Preparation tool:
ST1: STAND (926200000)
ST2: BOSS D (34199AG000)



(1) Clamp

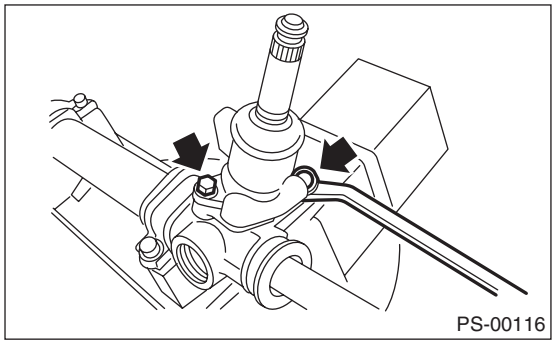
3) Using the ST, loosen the lock nut.

Preparation tool:
ST: SPANNER (926230000)

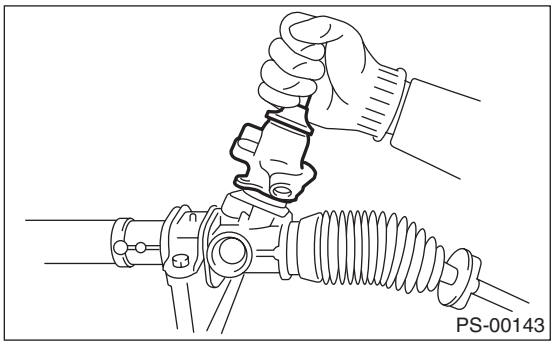


(1) Lock nut

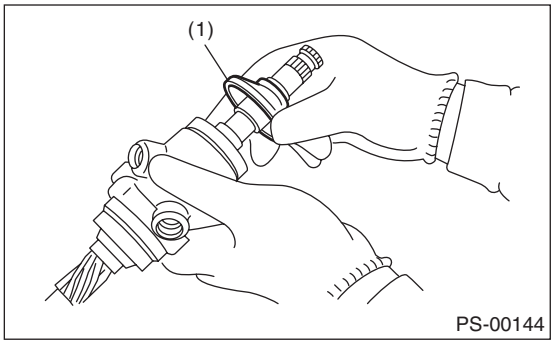
4) Loosen the adjusting screw, and remove the spring and sleeve.
5) Remove the two bolts securing valve assembly.



6) Carefully draw out the input shaft and remove the valve assembly.

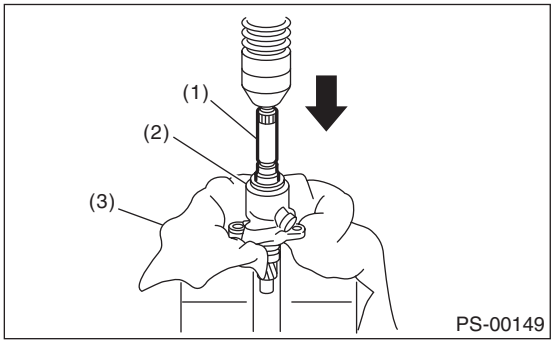


7) Put a vinyl tape around the spline portion, and slide the dust cover to remove.



(1) Dust cover

8) Using a press, remove the pinion & valve assembly from valve housing.

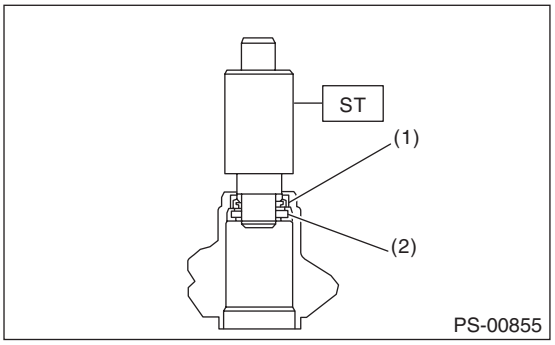


(1) Pinion & valve ASSY
(2) Valve housing
(3) Cloth

9) Using the ST and a press, remove the bushing and oil seal from the valve housing.

CAUTION:
• Do not apply a force to the end surface of valve housing.
• Do not reuse the oil seal after removal.

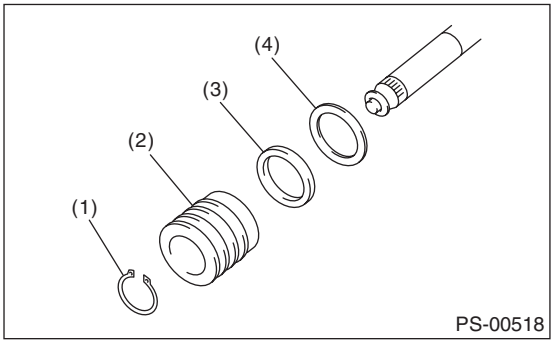
Preparation tool:
ST: INSTALLER & REMOVER (34199AG090)



(1) Oil seal
(2) Bushing

10) Using a snap ring pliers, remove the snap ring, valve, oil seal and back-up washer.

CAUTION:
Be careful not to scratch the pinion and valve assembly.

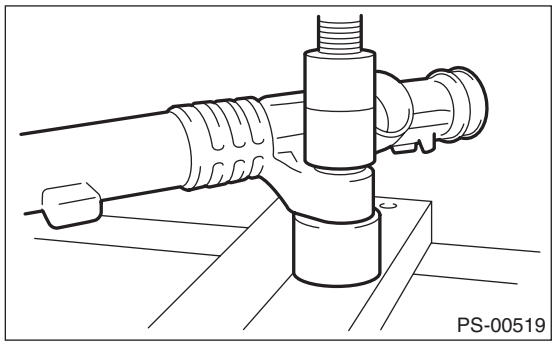


(1) Snap ring
(2) Valve
(3) Oil seal
(4) Back-up ring

D: ASSEMBLY

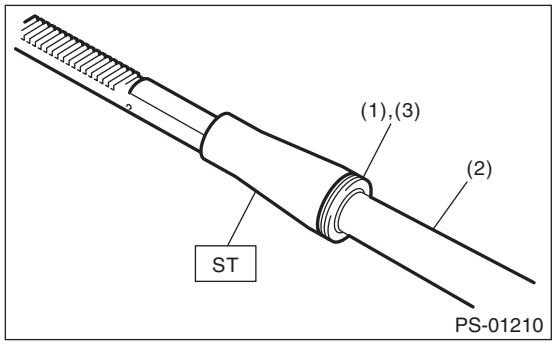
1. RACK HOUSING ASSEMBLY

1) Using a press, install the bushing to gearbox installation portion.



2) Insert the ST to rack.

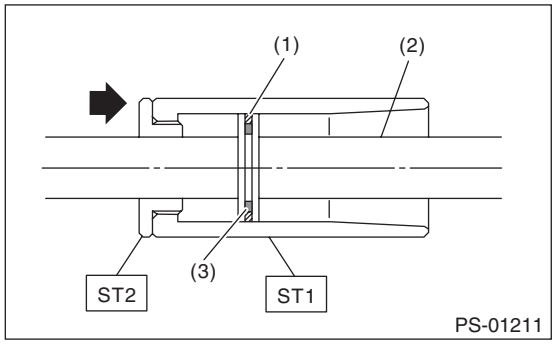
Preparation tool:
ST: GUIDE (34199AG040)



(1) Seal ring
(2) Rack
(3) O-ring

3) Install the seal ring and O-ring to piston portion of rack.
4) Using the ST, form the seal ring properly.

Preparation tool:
ST1: FORMER PISTON (34199AG080)
ST1: GUIDE G (26) (34199AG060)

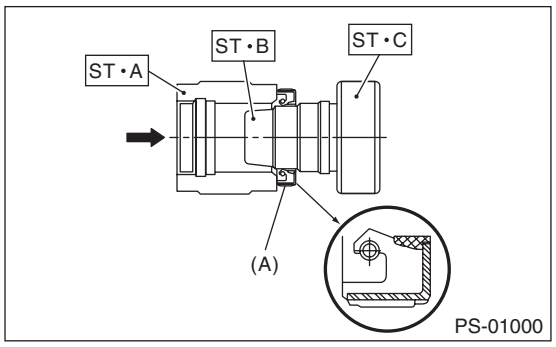


(1) Seal ring
(2) Rack
(3) O-ring

5) Using the ST-A and ST-B, attach the oil seal to ST-C.

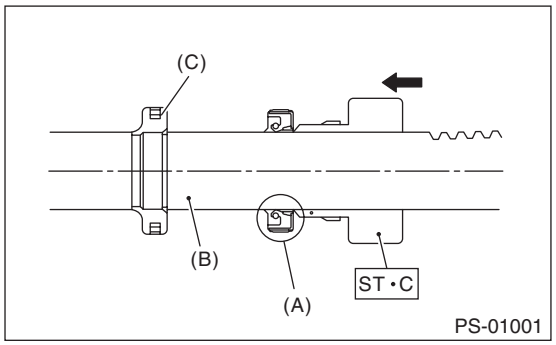
Preparation tool:
ST-A: INSTALLER A (34199FE070)
ST-B: INSTALLER B (34199FE080)
ST-C: INSTALLER C (34199FE090)

NOTE:
Face the oil seal in the direction as shown in the figure.



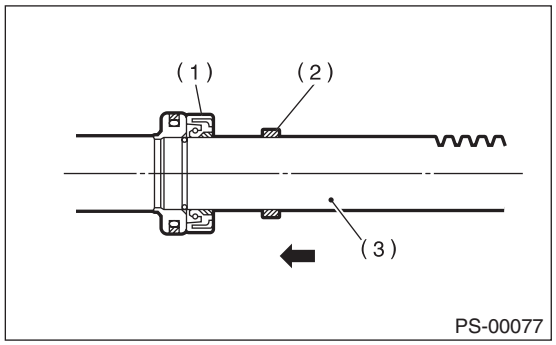
(A) Oil seal

6) Insert the ST-C with oil seal assembled from the gear side of rack. Remove the oil seal from ST-C near piston, and then remove the ST-C from rack.



(A) Oil seal
(B) Rack
(C) Piston

7) Install the back-up ring from the gear side of rack.

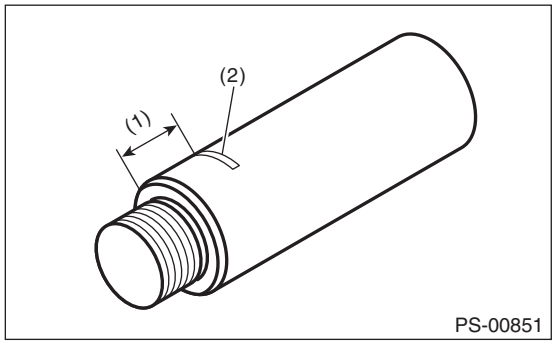


(1) Oil seal
(2) Back-up ring
(3) Rack

8) Check the threaded end of holder and gearbox cylinder end for burrs, damage, etc. Correct if faulty.
9) Apply a coat of grease to the grooves in rack, sliding surface of sleeve and sealing surface of piston. Then insert the rack into steering body from cylinder side.
10) Temporarily tighten a new holder to the gearbox cylinder.
11) Put a mark at the specified position measured from the end surface of ST as shown in the figure.

Specified position:
15 mm (0.59 in)

Preparation tool:
ST: INSTALLER & REMOVER (34199XA030)

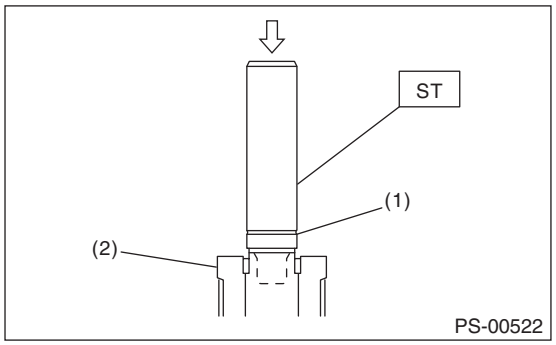


(1) 15 mm (0.59 in)
(2) Place a mark

12) Set the ST to the end of rack.

Preparation tool:
ST: INSTALLER & REMOVER (34199XA030)

13) Using a press, press-fit until the mark on the ST is aligned with the end surface of the holder.



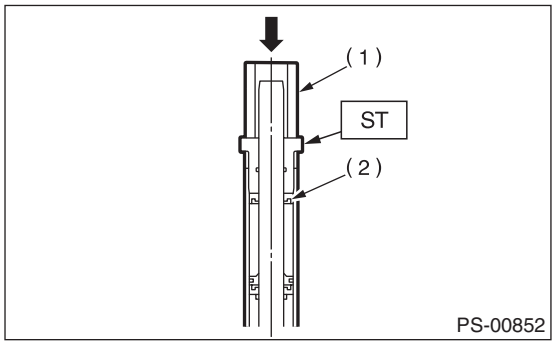
(1) Mark
(2) Holder

14) Remove the ST and holder.
15) Insert the outer side oil seal into the rack using the same procedure as steps 5) and 6).

Preparation tool:
ST-A: INSTALLER A (34199FE070)
ST-B: INSTALLER B (34199FE080)
ST-C: INSTALLER C (34199FE090)

16) Put the ST and pipe through the rack, and press-fit the outer side oil seal using a press.

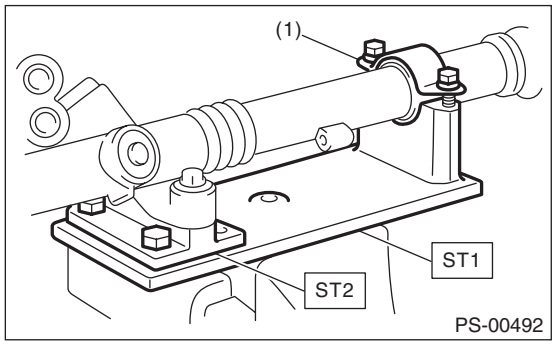
Preparation tool:
ST: INSTALLER (34199AG010)



(1) Pipe
(2) Outer side oil seal

17) Secure the gearbox in a vise using ST.

Preparation tool:
ST1: STAND (926200000)
ST2: BOSS D (34199AG000)



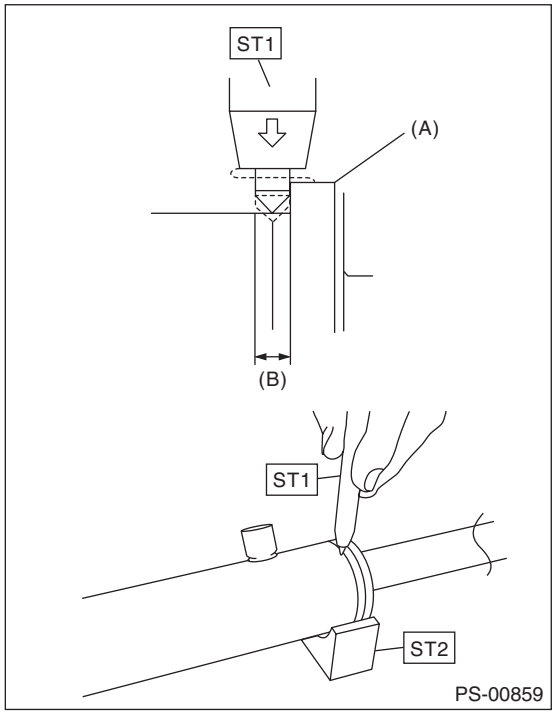
(1) Clamp

18) Tighten the holder.

Tightening torque:
70 N·m (7.1 kgf-m, 51.6 ft-lb)

19) Using the ST, crimp so that the diameter of punch hole is 2 — 2.5 mm (0.08 — 0.10 in) and is aligned to the position of 2 mm (0.08 in) from gearbox cylinder end surface.

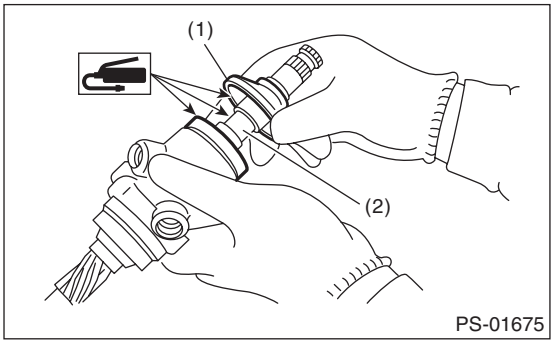
Preparation tool:
ST1: PUNCH HOLDER (34099FA060)
ST2: BASE (34199FE020)



(A) Holder
(B) 2 mm (0.08 in)

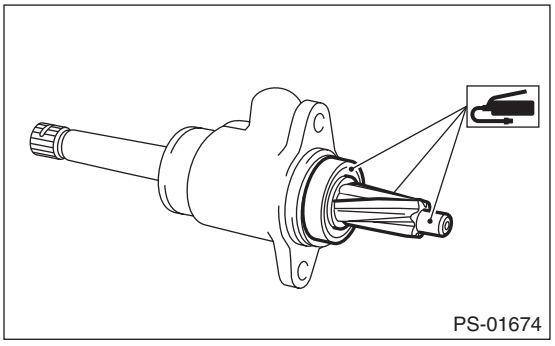
20) Put a vinyl tape around the spline portion and apply genuine grease to the dust cover and fill it to the clearance between pinion shaft and housing, then install the valve assembly.

CAUTION:
Be sure to install the dust cover to groove of shaft.



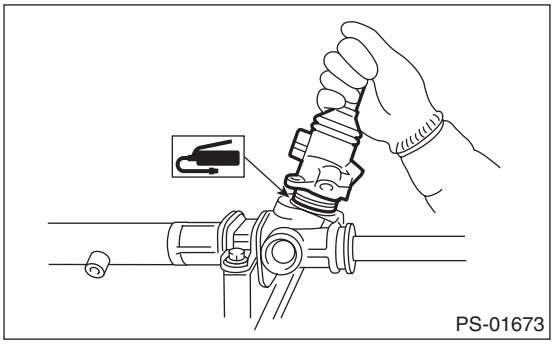
(1) Dust cover
(2) Groove

21) Apply the genuine grease to the edge and body of pinion gear and bearing of valve assembly.



22) Apply grease to a new O-ring and attach it to the valve assembly. Insert the valve assembly into the given place while facing the rack teeth toward pinion.

CAUTION:
Check that the needle bearing is not damaged. Replace with a new steering gearbox if damage is found.



23) Tighten the bolts alternately to secure the valve assembly.

CAUTION:
Be sure to alternately tighten the bolts.

Tightening torque:
20 N·m (2.0 kgf-m, 14.8 ft-lb)

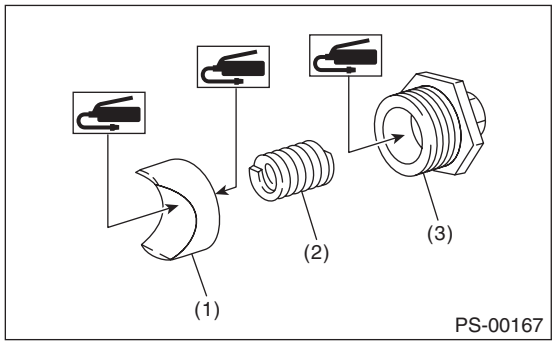
24) Temporarily tighten the tie-rod to the rack end, and then operate the rack from lock to lock for two or three times to make it fit in.

CAUTION:
Operating the rack from lock to lock without installing tie-rods may damage the oil seal. Always install the left and right tie-rods.

25) Apply liquid gasket to 1/3 or more of entire perimeter of adjusting screw thread.

Liquid gasket:
THREE BOND 1102

26) Apply a coat of grease to the sliding surface of sleeve and seating surface of spring, and then insert the sleeve into steering body.
Charge the adjusting screw with grease, and then insert the spring into adjusting screw. Then install on the steering body.



(1) Sleeve
(2) Spring
(3) Adjusting screw

27) Tighten the adjusting screw to the specified torque, then loosen it.

Tightening torque:
25 N·m (2.5 kgf-m, 18.4 ft-lb)

28) Tighten the adjusting screw to the specified torque, then loosen it 5°.

Tightening torque:
5.9 N·m (0.6 kgf-m, 4.4 ft-lb)

29) Remove the tie-rod.
30) Adjust the turning resistance of gearbox so that it is within specification using adjusting screw. <Ref. to PS-50, LIMIT, INSPECTION, Steering Gearbox.>
31) Attach the lock nut into adjusting screw, and while holding the adjusting screw with wrench, tighten the lock nut using ST.

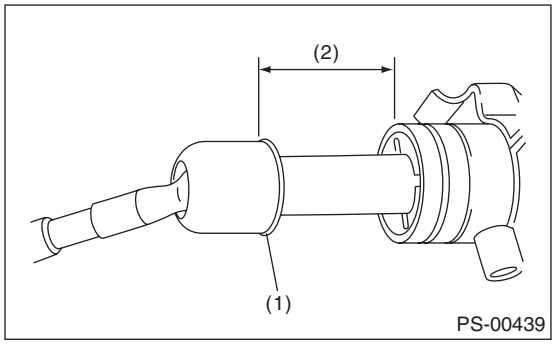
Preparation tool:
ST: SPANNER (926230000)

Tightening torque:
25 N·m (2.5 kgf-m, 18.4 ft-lb)

NOTE:
Hold the adjusting screw with a wrench to prevent it from turning while tightening lock nut.

32) Extend the rack approx. 40 mm (1.57 in) from steering body.
33) Install the tie-rod and new lock washer into rack.

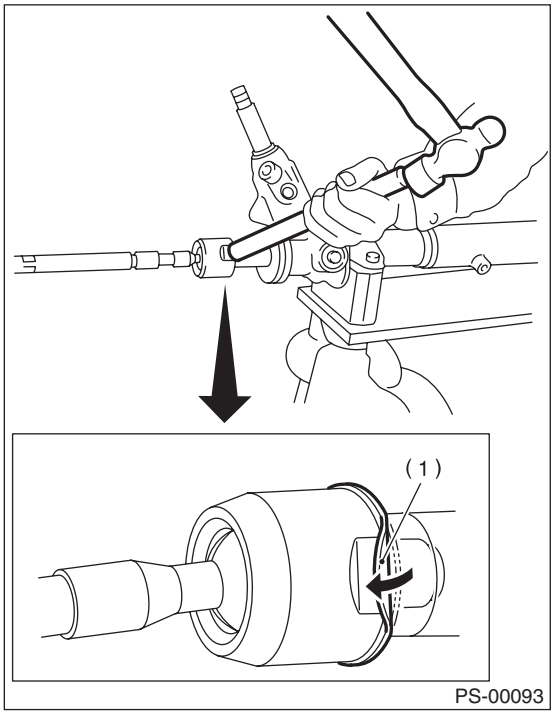
Tightening torque:
93 N·m (9.5 kgf-m, 68.6 ft-lb)



(1) Lock washer
(2) Approx. 40 mm (1.57 in)

34) Bend the lock washer and crimp it.

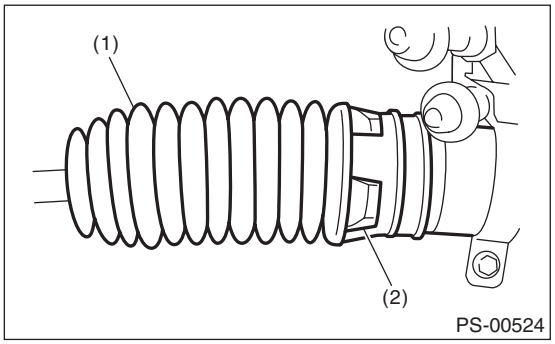
CAUTION:
Be careful not to scratch the rack when crimping lock washer.



(1) Lock washer

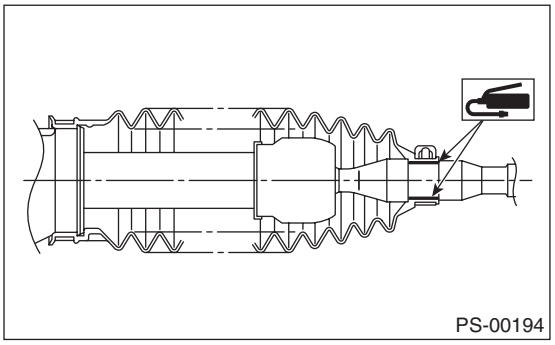
35) Apply a coat of grease to the tie-rod groove, and then install the boot to the housing.

CAUTION:
Right side boot has groove for identification, be sure to install the right and left of boot.

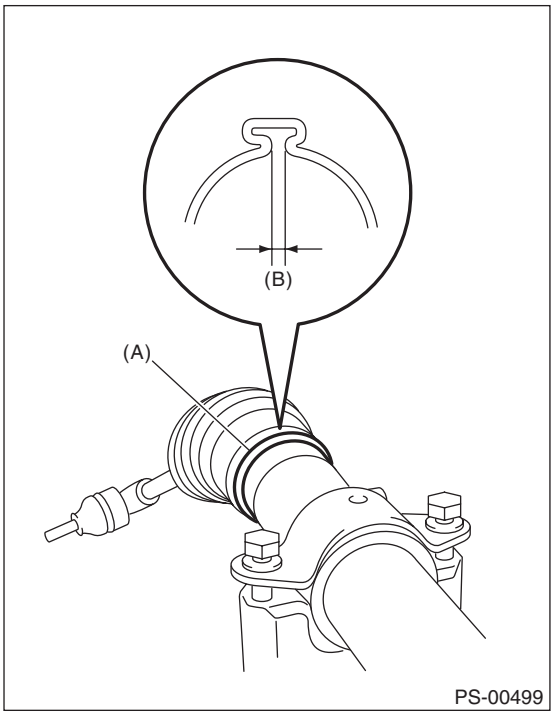


(1) Right side boot
(2) Groove for identification

NOTE:
Make sure that the boot is installed without unusual inflation or deflation.

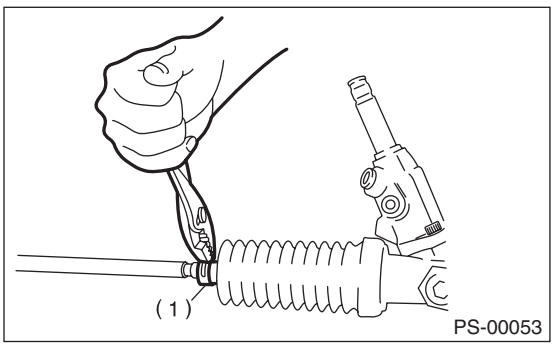


36) Install a new boot band. Using band clamp pliers, crimp it so that the clearance of crimping portion becomes 2 mm (0.079 in) or less.



(A) Boot band
(B) 2 mm (0.079 in) or less

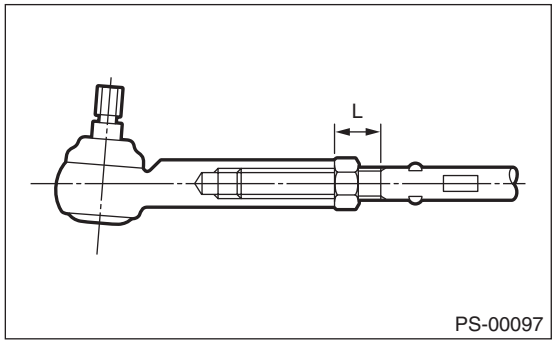
37) Fix the boot end with small clip.



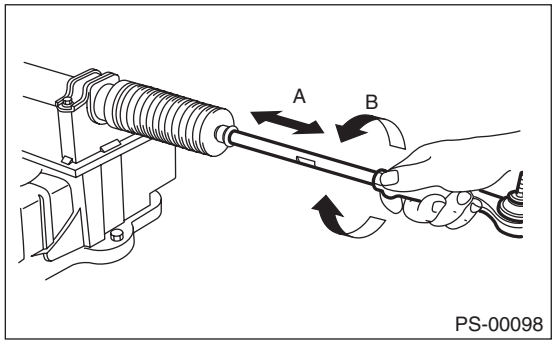
(1) Clip

38) After installing, check that the boot end is installed to the groove of the tie-rod.
39) If the tie-rod end has been removed, screw in lock nut and tie-rod end to the screwed portion of tie-rod, and tighten the lock nut temporarily in a position as shown in the figure.

Installed tie-rod length L:
28 mm (1.1 in)



40) Inspect the gearbox as follows:
"A" Holding the tie-rod end, repeat lock to lock several times as quickly as possible.
"B" Holding the tie-rod end, turn it slowly at a radius several times as large as possible.
Finally, make sure that the boot is installed in the specified position without inflating.



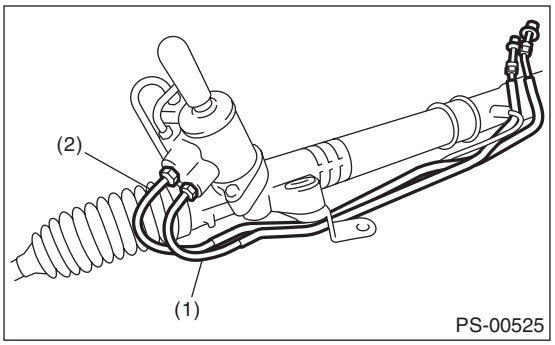
41) Remove the gearbox from ST.

Preparation tool:
ST1: STAND (926200000)
ST2: BOSS D (34199AG000)

42) Install the four pipes on gearbox.
(1) Connect the pipes A and B to the four pipe joints of gearbox.

Tightening torque:
Cylinder side: 27 N·m (2.8 kgf-m, 19.9 ft-lb)
Gear housing side: 17 N·m (1.7 kgf-m, 12.5 ft-lb)
(2) Connect the feed pipe and return pipe to the gearbox.

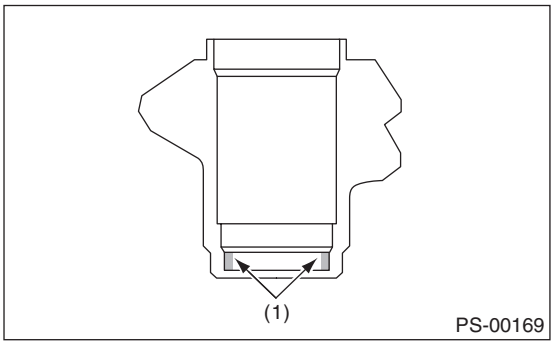
Tightening torque:
Feed pipe: 37 N·m (3.8 kgf-m, 27.3 ft-lb)
Return pipe: 29 N·m (3.0 kgf-m, 21.4 ft-lb)



(1) Feed pipe
(2) Return pipe

2. CONTROL VALVE ASSEMBLY

Specified steering grease:
VALIANT GREASE M2
1) Clean all parts and tools before reassembling.
2) Apply a coat of specified power steering fluid to the inner wall of valve housing.

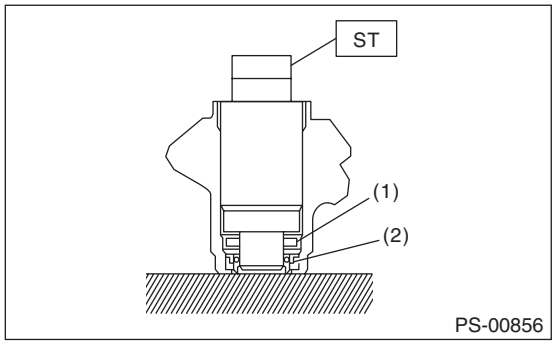


(1) Apply fluid.

3) Apply grease to the oil seal.
4) Verify the direction of oil seal.

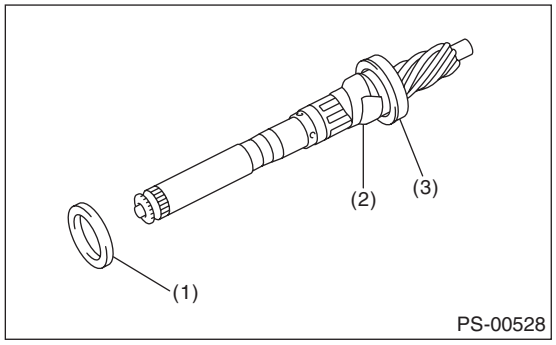
5) Using the ST and a press, install the oil seal and the bushing in valve housing.

Preparation tool:
ST: INSTALLER & REMOVER (34199AG090)



(1) Bushing
(2) Oil seal

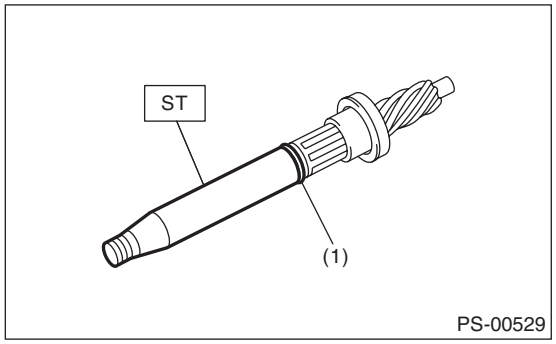
6) Apply vinyl tape to the groove of pinion.
7) Install the wave washer and oil seal to pinion, and then remove the vinyl tape.



(1) Oil seal
(2) Vinyl tape
(3) Wave washer

8) Attach the ST to pinion, and install the seal ring and O-ring.

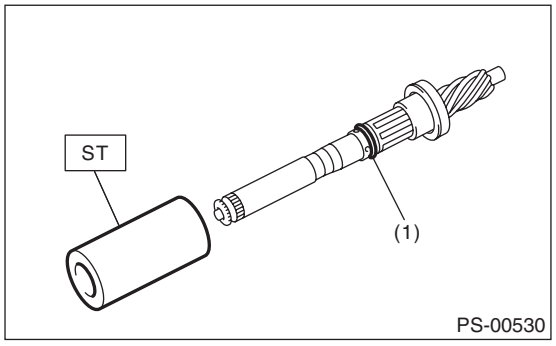
Preparation tool:
ST: GUIDE (34199AG020)



(1) Seal ring and O-ring

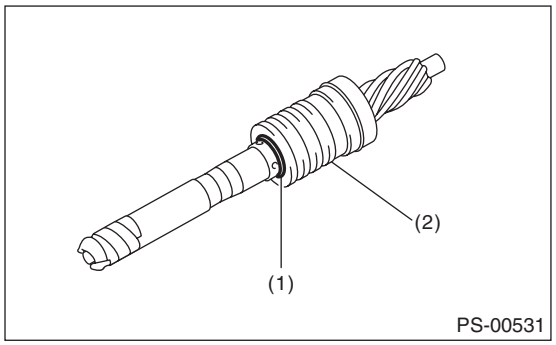
9) Remove the ST GUIDE, and form the seal ring properly using ST FORMER.

Preparation tool:
ST: FORMER (34199AG070)



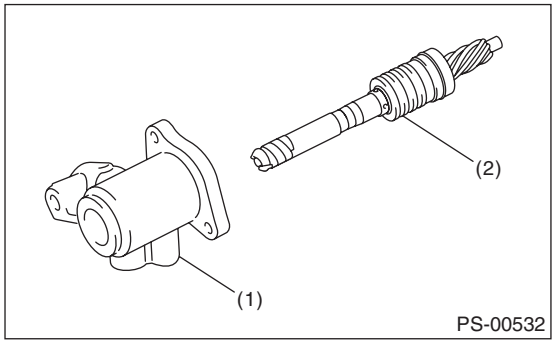
(1) Seal ring

10) Put vinyl tape around pinion shaft spline to protect oil seal from damage.
11) Install the valve to pinion, and install the snap ring.



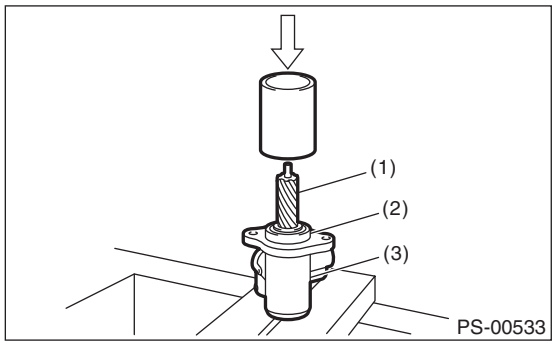
(1) Snap ring
(2) Valve

12) Attach the pinion & valve assembly into the valve housing.



(1) Valve housing
(2) Pinion & valve ASSY

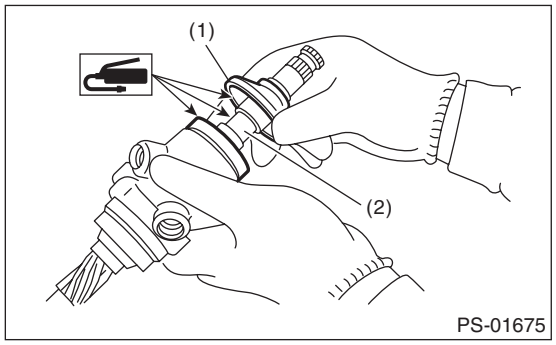
13) Using a press, push the outer race of bearing and press-fit the pinion & valve assembly into housing.



(1) Pinion & valve ASSY
(2) Bearing
(3) Housing

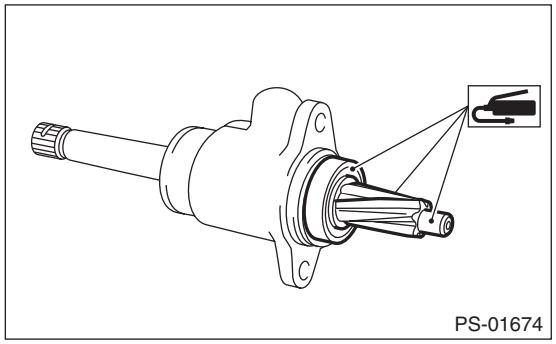
14) Apply the specified grease to the dust cover and fill it to the clearance between pinion shaft and housing.
15) Install the dust cover on valve assembly.

CAUTION:
Be sure to install the dust cover to groove of shaft.

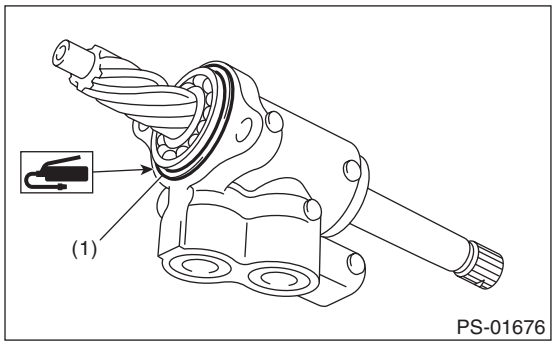


(1) Dust cover
(2) Groove

16) Apply the genuine grease to the edge and body of pinion gear and bearing of valve assembly.



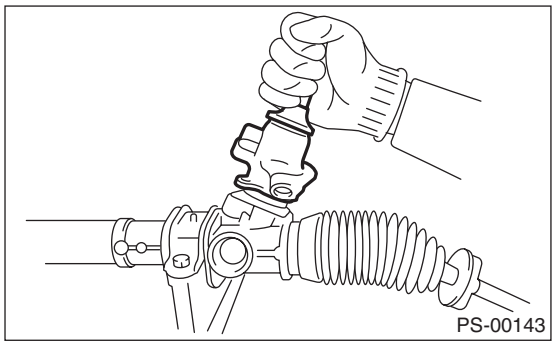
17) Apply grease to a new O-ring and attach it to the valve assembly.



(1) O-ring

18) Insert the valve assembly into the given place while facing the rack teeth toward pinion.

CAUTION:
Check that the needle bearing is not damaged. Replace with a new steering gearbox if damage is found.



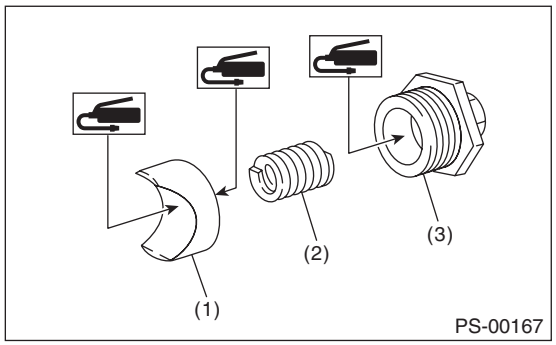
19) Tighten the bolts alternately to secure the valve assembly.

CAUTION:
Be sure to alternately tighten the bolts.

Tightening torque:
20 N·m (2.0 kgf-m, 14.8 ft-lb)
20) Apply liquid gasket to 1/3 or more of entire perimeter of adjusting screw thread.

Liquid gasket:
THREE BOND 1102

21) Apply a coat of grease to the sliding surface of sleeve and seating surface of spring, and then insert the sleeve into steering body.
Charge the adjusting screw with grease, and then insert the spring into adjusting screw. Then install on the steering body.



(1) Sleeve
(2) Spring
(3) Adjusting screw

22) Tighten the adjusting screw to the specified torque, then loosen it.

Tightening torque:
25 N·m (2.5 kgf-m, 18.4 ft-lb)

23) Tighten the adjusting screw to the specified torque, then loosen it 5°.

Tightening torque:
5.9 N·m (0.6 kgf-m, 4.4 ft-lb)

24) Adjust the turning resistance of gearbox so that it is within specification using adjusting screw. <Ref. to PS-50, LIMIT, INSPECTION, Steering Gearbox.>

25) Attach the lock nut into adjusting screw, and while holding the adjusting screw with wrench, tighten the lock nut using ST.

Preparation tool:
ST: SPANNER (926230000)

Tightening torque (lock nut):
25 N·m (2.5 kgf-m, 18.4 ft-lb)

NOTE:
Hold the adjusting screw with a wrench to prevent it from turning while tightening lock nut.

26) Remove the gearbox from ST.

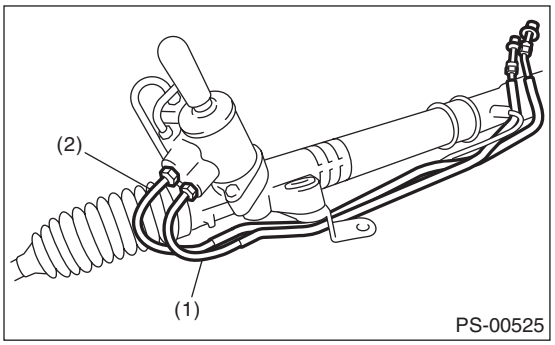
Preparation tool:
ST1: STAND (926200000)
ST2: BOSS D (34199AG000)

27) Install the four pipes on gearbox.
(1) Connect the pipes A and B to gearbox.

Tightening torque:
Cylinder side: 27 N·m (2.8 kgf-m, 19.9 ft-lb)
Gear housing side: 17 N·m (1.7 kgf-m, 12.5 ft-lb)

(2) Connect the feed pipe and return pipe to the gearbox.

Tightening torque:
Feed pipe: 37 N·m (3.8 kgf-m, 27.3 ft-lb)
Return pipe: 29 N·m (3.0 kgf-m, 21.4 ft-lb)



(1) Feed pipe
(2) Return pipe

E: INSPECTION

1. BASIC INSPECTION

1) Clean all the disassembled parts, and check for wear, damage or any other faults, then repair or replace as necessary.
2) When disassembling, check the inside of gearbox for water. If any water is found, carefully check the boot for damage, input shaft dust seal, adjusting screw and boot clips for poor sealing. If faulty, replace with new parts.

No.	Parts	Inspection	Corrective action
1	Input shaft	(1) Bent input shaft (2) Damage on serration	If the bend or damage is excessive, replace the entire gearbox.
2	Dust seal	(1) Crack or damage (2) Wear	If the outer wall slips, the lip is worn out or damage is found, replace it with a new part.
3	Rack and pinion	Poor mating of rack with pinion	(1) Adjust the backlash properly. By measuring the turning torque of the gearbox and sliding resistance of rack, check if the rack & pinion engage uniformly and smoothly with each other. (Refer to “Service limit”.) (2) Pull out the entire rack to allow viewing of the teeth, and check for damage. When abnormality is found in either (1) or (2), replace the entire gearbox.
4	Gearbox unit	(1) Bending of the rack shaft (2) Bending of the cylinder portion (3) Crack or damage on the aluminum portion	Replace the gearbox with a new part.
		(4) Wear or damage on rack bushing	If the free play of rack shaft in radial direction is out of the specified range, replace the gearbox with new part. (Refer to “Service limit”.)
		(5) Wear on input shaft bearing	If the free play of input shaft in radial and axial direction is out of the specified range, replace the gearbox with a new part. (Refer to “Service limit”.)
5	Boot	Crack, damage or deterioration	Replace.
6	Tie-rod	(1) Looseness of ball joint (2) Bend of tie-rod	Replace.
7	Tie-rod end	Damage or deterioration of dust seal	Replace.
8	Adjusting screw spring	Deterioration	Replace.
9	Boot clip	Deterioration	Replace.
10	Sleeve	Damage	Replace.
11	Pipe	(1) Damage to flared surface (2) Damage to flare nut (3) Damage to pipe	Replace.

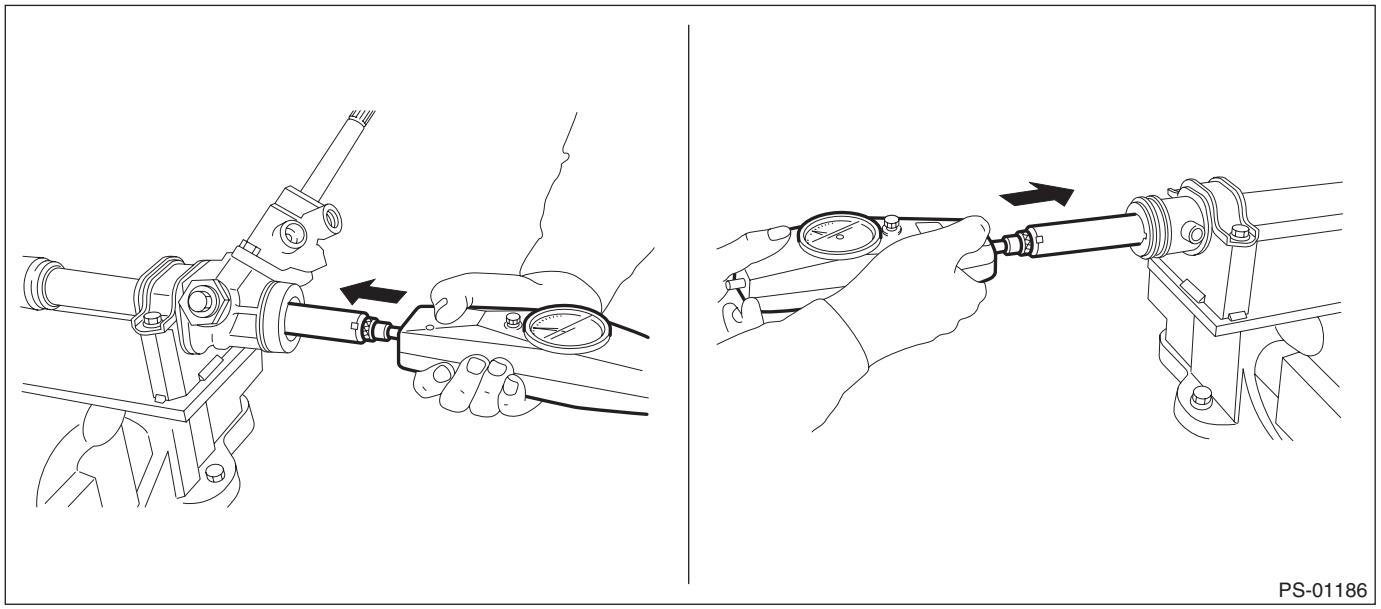
2. LIMIT

Make a measurements as follows. If it exceeds the specified service limits, adjust or replace.

CAUTION:
- **When making a measurement, secure the gearbox in a vise using ST.**
- **When fixing the gearbox in a vise, apply a wooden piece on the flange portion.**

Preparation tool:
ST1: STAND (926200000)
ST2: BOSS D (34199AG000)

Rack shaft sliding resistance

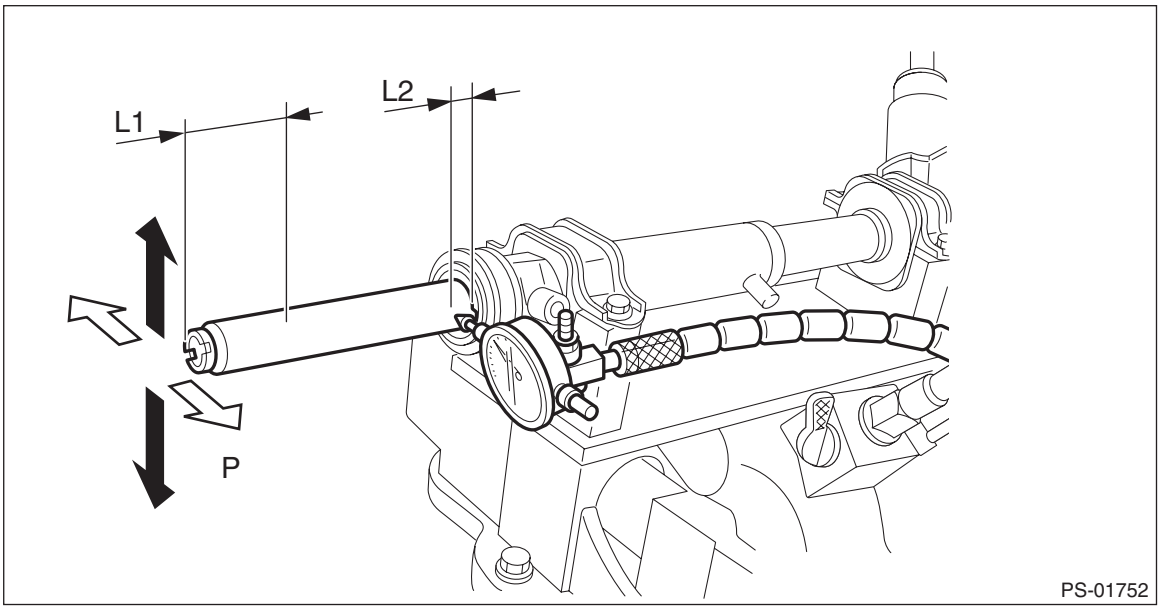


Limit: 343 N (35.0 kgf, 77 lbf) or less

Left/right differential of sliding resistance: 20% or less

Rack shaft play in the radial direction

- **Right-turn steering**



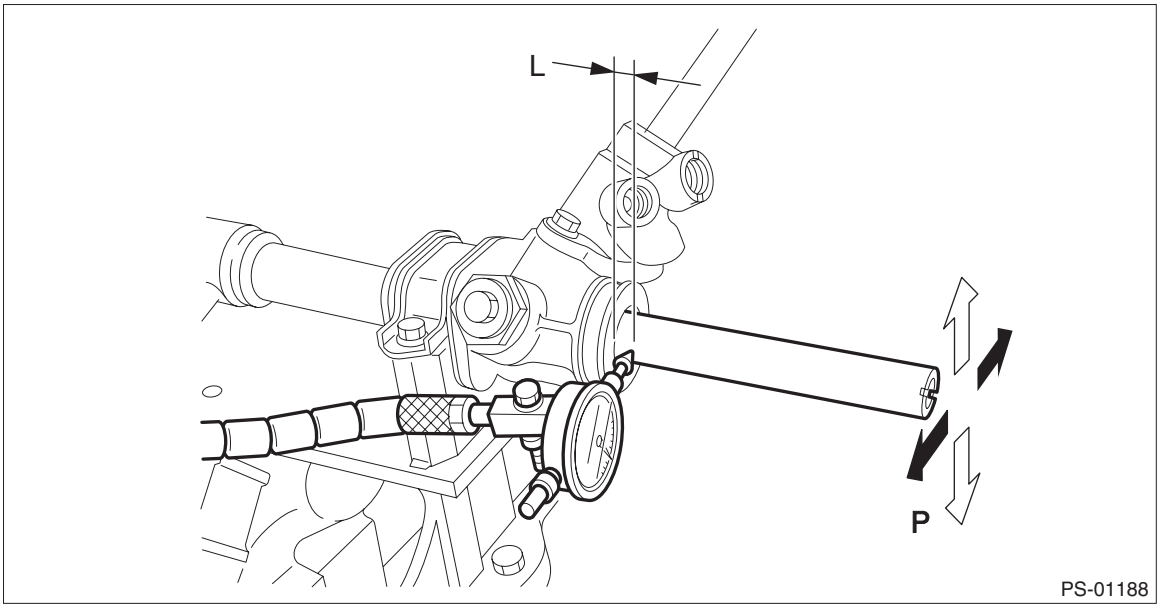
Limit

Direction ⬅ ➡ : 0.4 mm (0.016 in) or less
Direction ⇦ ⇨ : 0.4 mm (0.016 in) or less

Condition

Weighting point
L1: 10 mm (0.39 in)
P: 98 N (10 kgf, 22 lb)
Measuring point
L2: 5 mm (0.2 in)

- **Left-turn steering**

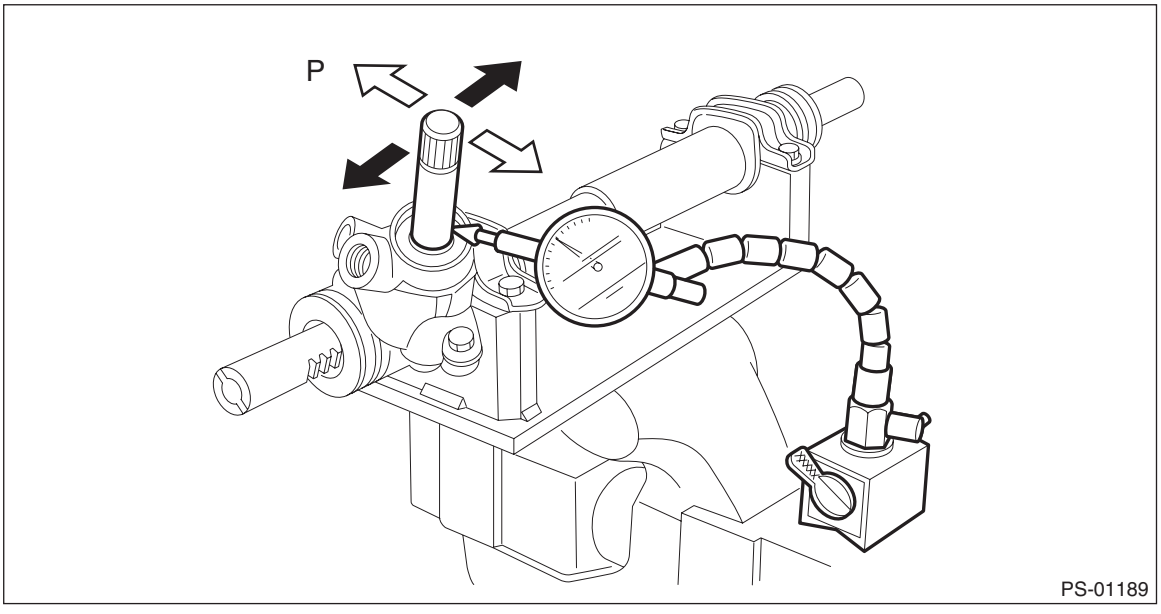


Service limit:
Direction ⇦ ⇨ : 0.4 mm (0.016 in) or less
Direction ⬅ ➡ : 0.6 mm (0.024 in) or less

Condition
L: 5 mm (0.20 in)
P: 98 N (10 kgf, 22 lbf)

Input shaft play

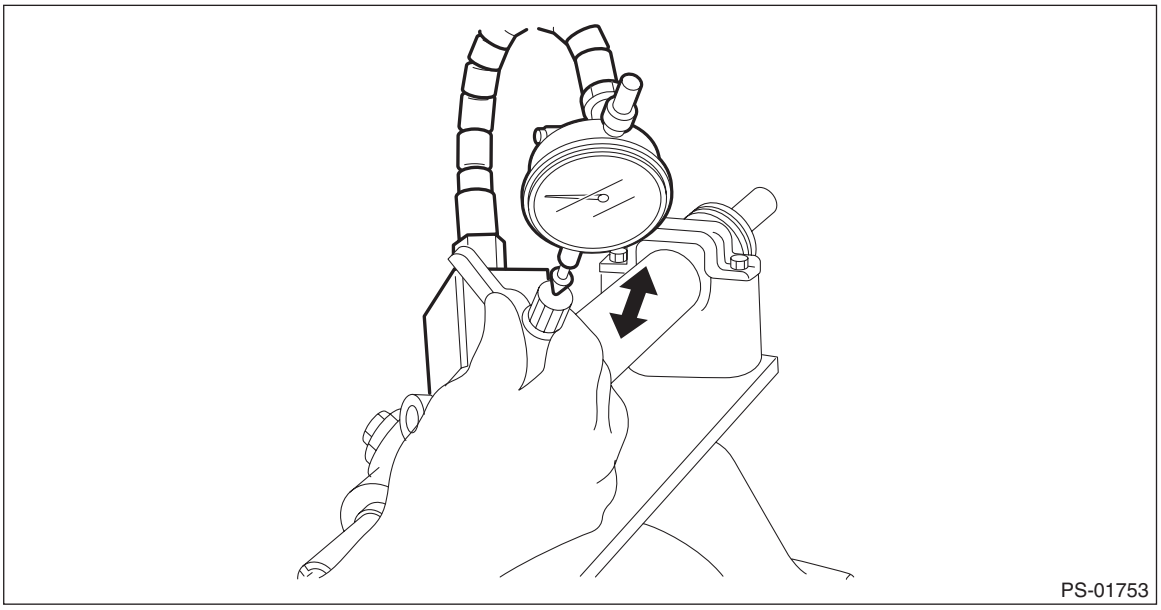
- **In radial direction**



Limit
0.26 mm (0.0102 in) or less

Condition
P: 98 N (10 kgf, 22 lbf)

- **In axial direction**

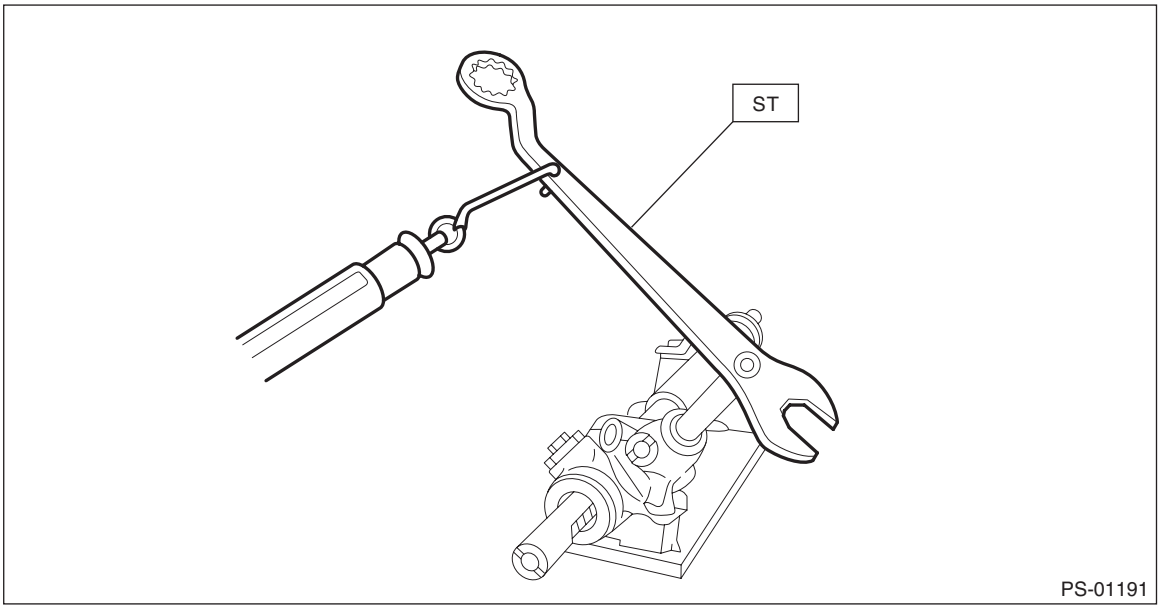


Limit
Without play

Rotational resistance of gearbox

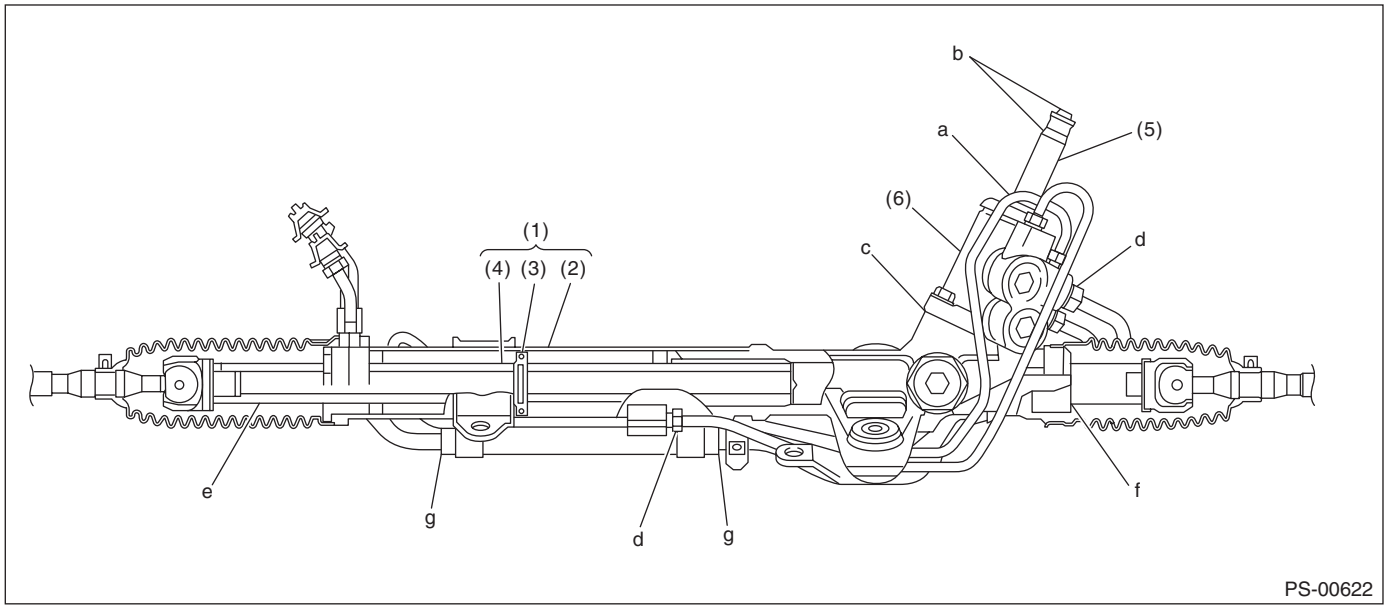
Using the ST, measure the gearbox turning resistance.

Preparation tool:
ST: SPANNER (34099PA100)



Service limit:
Maximum allowable resistance: 21 N (2.14 kgf, 4.7 lbf) or less
Difference between right and left rotational resistance: 20% or less

3. FLUID LEAKAGE



(1)	Power cylinder	(3)	Rack piston	(5)	Input shaft
(2)	Cylinder	(4)	Rack axle	(6)	Valve housing

1) Lift up the vehicle.
2) If a fluid leak is found, clean the fluid completely from the suspect area, and turn the steering wheel 30 to 40 times to the left and right from lock to lock, with the engine running, and check again for leaks immediately, and also after a few hours have passed.
3) Cause and solution for oil leakage from “a”
The oil seal is damaged. Replace the valve assembly or valve housing side oil seal assembly with a new part.
4) Cause and solution for oil leakage from “b”
The torsion bar O-ring is damaged. Replace the valve assembly with a new part.
5) Cause and solution for oil leakage from “c”
The oil seal is damaged. Replace the valve assembly or pinion side oil seal with a new part.
6) Cause and solution for oil leakage from “d”
The pipe is damaged. Replace the faulty pipe or O-ring.
7) Cause and solution for oil leakage from “g”
The hose is damaged. Replace the hose with a new part.
8) If leak is other than a, b, c, d or g, or if oil is leaking from gearbox, move the right and left boots toward tie-rod end side, respectively, with the gearbox mounted to the vehicle, and remove fluid from surrounding portions. Then, turn the steering wheel from lock to lock about 30 to 40 times with the engine running, then re-inspect the leaking area immediately after and several hours after this operation.

(1) Leakage from “e”
The cylinder seal is damaged. Replace the oil seal.
(2) Leakage from “f”
There are two possible causes. Perform the following step first. Remove the pipe assembly B from the valve housing, and close the circuit using ST.

Preparation tool:
ST: PLUG (926420000)

Turn the steering wheel from lock to lock approx. 30 to 40 times with the engine running, then inspect the leaked portion immediately after and several hours after this operation.

- If leakage from “f” is noted again:

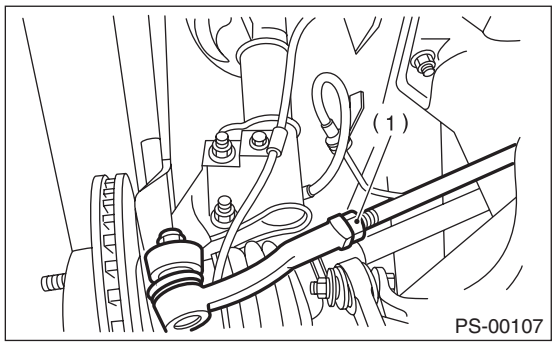
The oil seal of pinion and valve assembly is damaged. Replace the pinion & valve assembly with a new part. Or, replace the oil seal.

- If oil stops leaking from “f”:

The oil seal of rack housing is damaged. Replace the oil seal and back-up ring.

F: ADJUSTMENT

1) Adjust the front toe.
<Ref. to FS-13, FRONT WHEEL TOE-IN, INSPECTION, Wheel Alignment.>



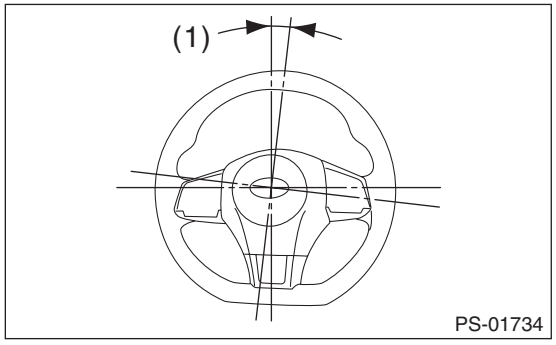
(1) Lock nut

2) Check the steering angle of the wheels.

Standard of steering angle:

Inner wheel	Outer wheel
36.3°±1.5°	32.0°±1.5°

3) If the steering wheel spokes are not horizontal when wheels are set in the straight ahead position, or error is more than 5° on the periphery of the steering wheel, correctly re-install the steering wheel.



(1) 5° or less

4) If the steering wheel spokes are not horizontal with vehicle set in the straight ahead position after this adjustment, correct it by turning the right and left tie-rods in the opposite direction from each other by the same angle.