DRIVE SHAFT, PROPELLER SHAFT, AXLE

300NT–01

PROBLEM SYMPTOMS TABLE

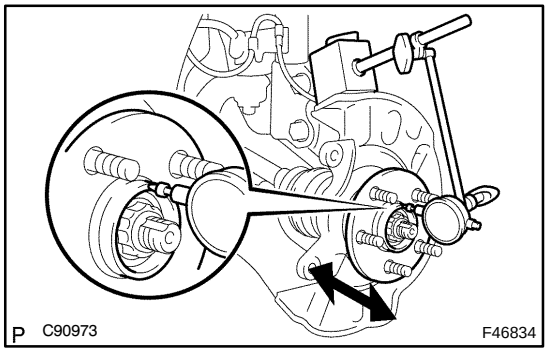
HINT:

Use the table below to help determine the cause of the problem. Check each part in order. If necessary, replace these parts.

Symptom	Suspected Area	See page
Wander	1. Tire (improper air pressure, uneven wear)	–
	2. Wheel alignment (Front)	26–6
	3. Wheel alignment (Rear)	27–3
	4. Hub bearing	30–2
	5. Front shock absorber w/ coil spring	26–12
	6. Rear shock absorber w/ coil spring	27–4
Front wheel shimmy	1. Wheel (unbalance)	–
	2. Hub bearing	30–2
	3. Front lower ball joint	26–22
	4. Front shock absorber w/ coil spring	26–12
Noise (Front)	1. Front shock absorber w/ coil spring	26–12
	2. Front drive shaft assy	30–7
	3. Hub bearing	30–21
	4. Front lower ball joint	26–22
Noise (Rear)	1. Hub bearing	30–2
	2. Rear shock absorber w/ coil spring	27–4

300NU–01

ON–VEHICLE INSPECTION



1. INSPECT FRONT AXLE HUB BEARING LOOSENESS

(a) Remove the front tire.

(b) Remove the front disc brake caliper.

(c) Remove the front disc.

HINT:

Put matchmarks on the front disc and front axle hub.

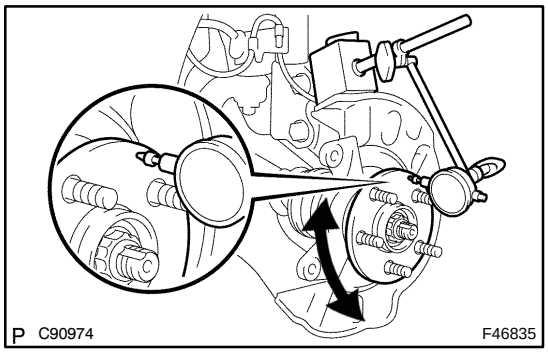
(d) Inspect the front axle hub & bearing looseness.

(1) Using a dial indicator, check for looseness from the center of the axle hub.

Maximum: 0.05 mm (0.0020 in.)

NOTICE:

If looseness exceeds the maximum, replace the axle hub assy.



2. INSPECT FRONT AXLE HUB RUNOUT

(a) Using a dial indicator, check for runout of the axle hub.

Maximum: 0.05 mm (0.0020 in.)

NOTICE:

If runout exceeds the maximum, replace the axle hub assy.

(b) Install the front disc.

HINT:

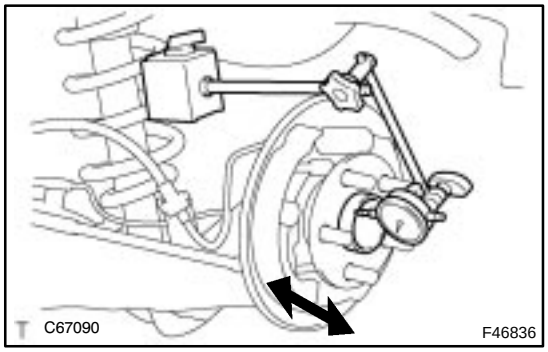
Align the matchmarks of the front disc and front axle hub before installing them.

(c) Install the front disc brake caliper.

Torque: 109 N·m (1,114 kgf·cm, 81 ft·lbf)

(d) Install the front tire.

Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)



3. INSPECT REAR AXLE HUB BEARING LOOSENESS

(a) Remove the rear tire.

(b) Remove the rear brake drum.

HINT:

Put matchmarks on the rear brake drum and hub bolt.

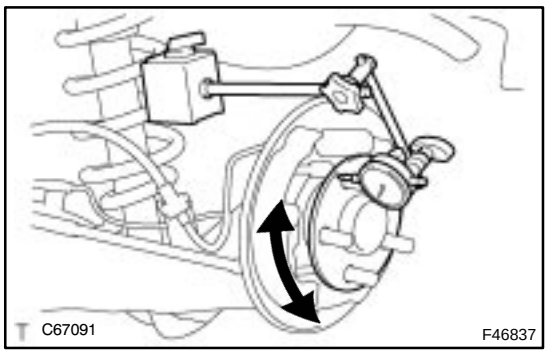
(c) Inspect the rear axle hub & bearing looseness.

(1) Using a dial indicator, check for looseness from the center of the axle hub.

Maximum: 0.05 mm (0.0020 in.)

NOTICE:

If looseness exceeds the maximum, replace the axle hub assy.



4. INSPECT REAR AXLE HUB BEARING RUNOUT

(a) Using a dial indicator, check for runout of the axle hub.
Maximum: 0.07 mm (0.0028 in.)

NOTICE:

If runout exceeds the maximum, replace the axle hub.

(b) Install the rear brake drum.

HINT:

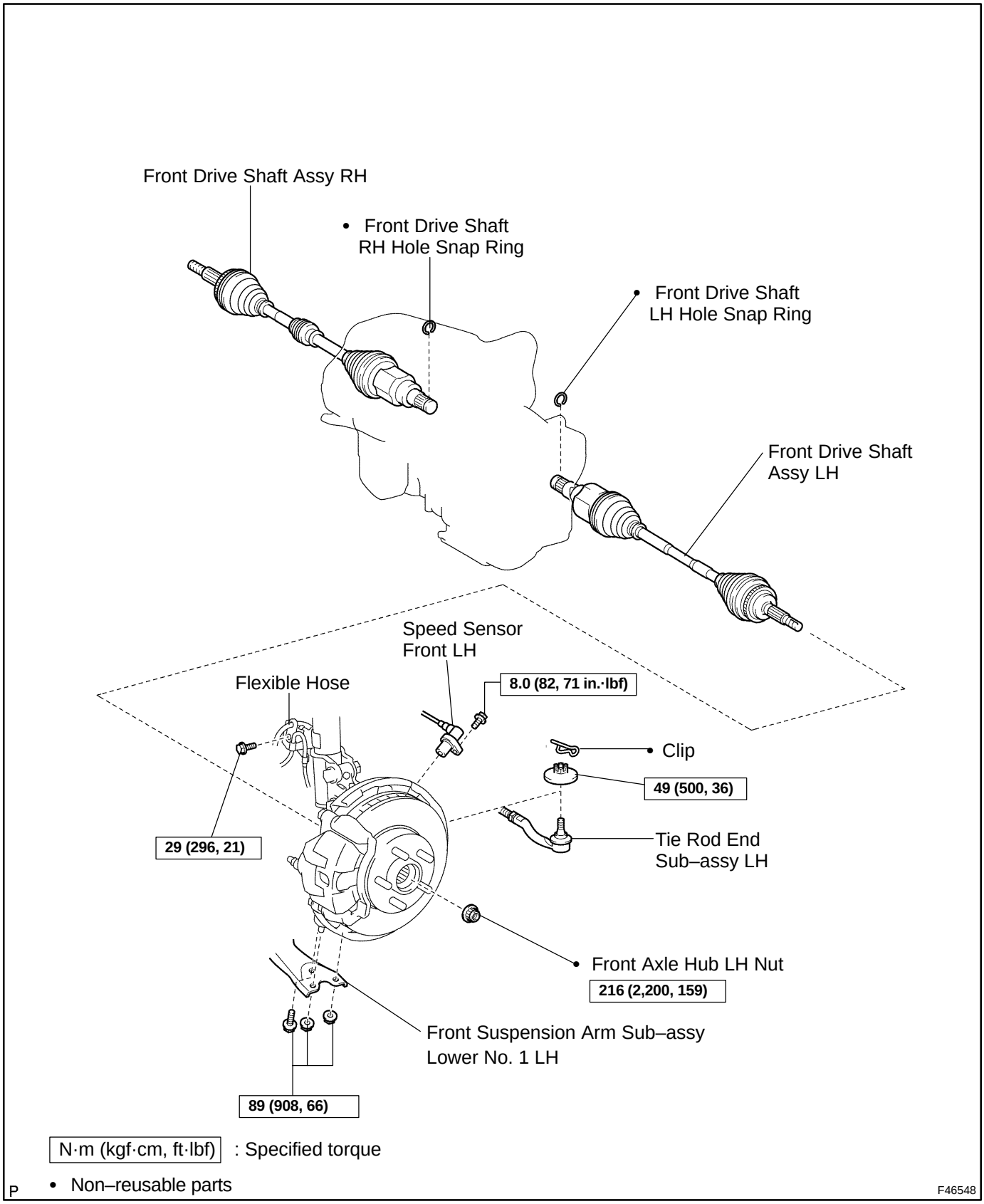
Align the matchmarks of the rear brake drum and hub bolt before installing them.

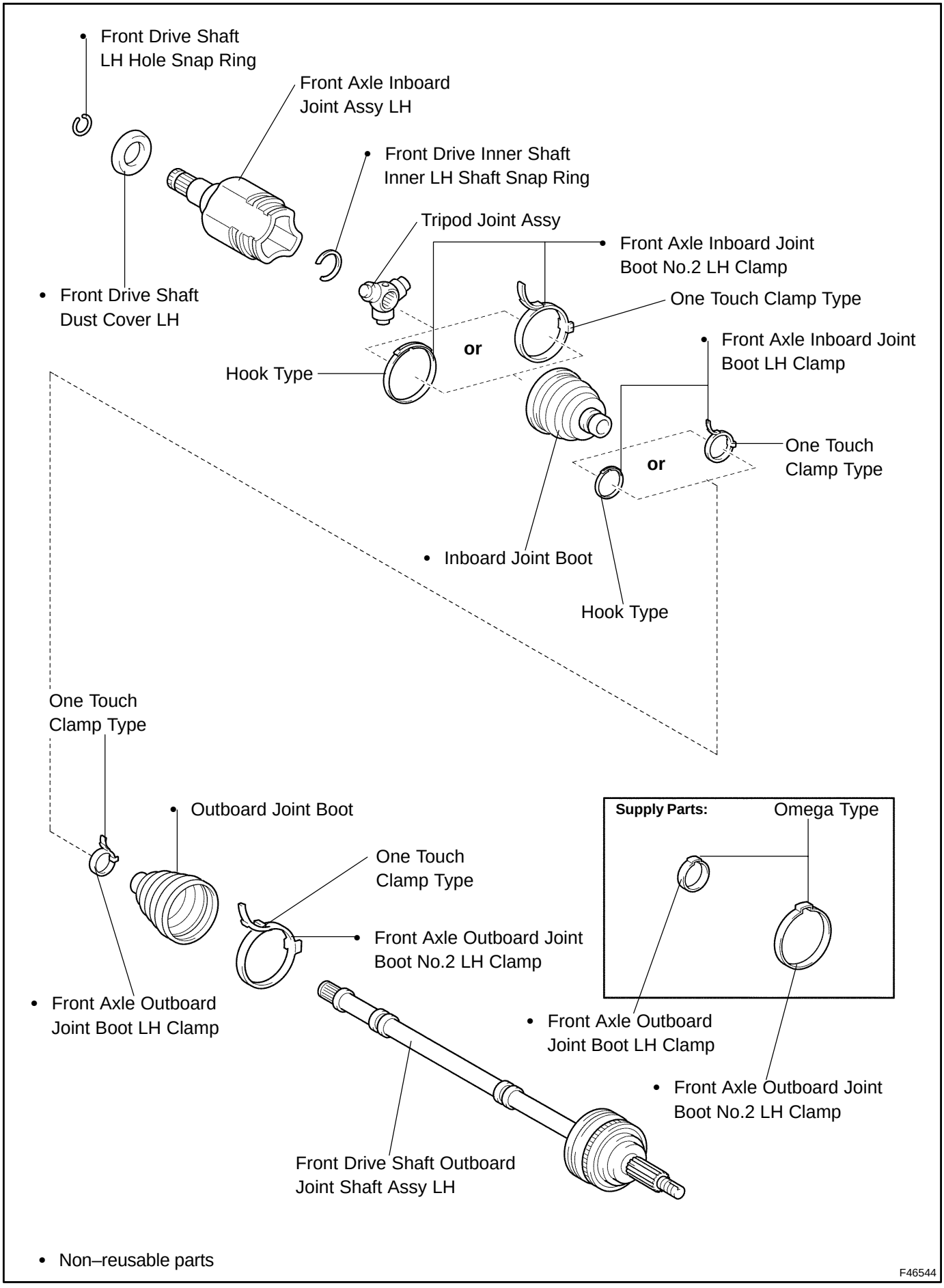
(c) Install the rear tire.
Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

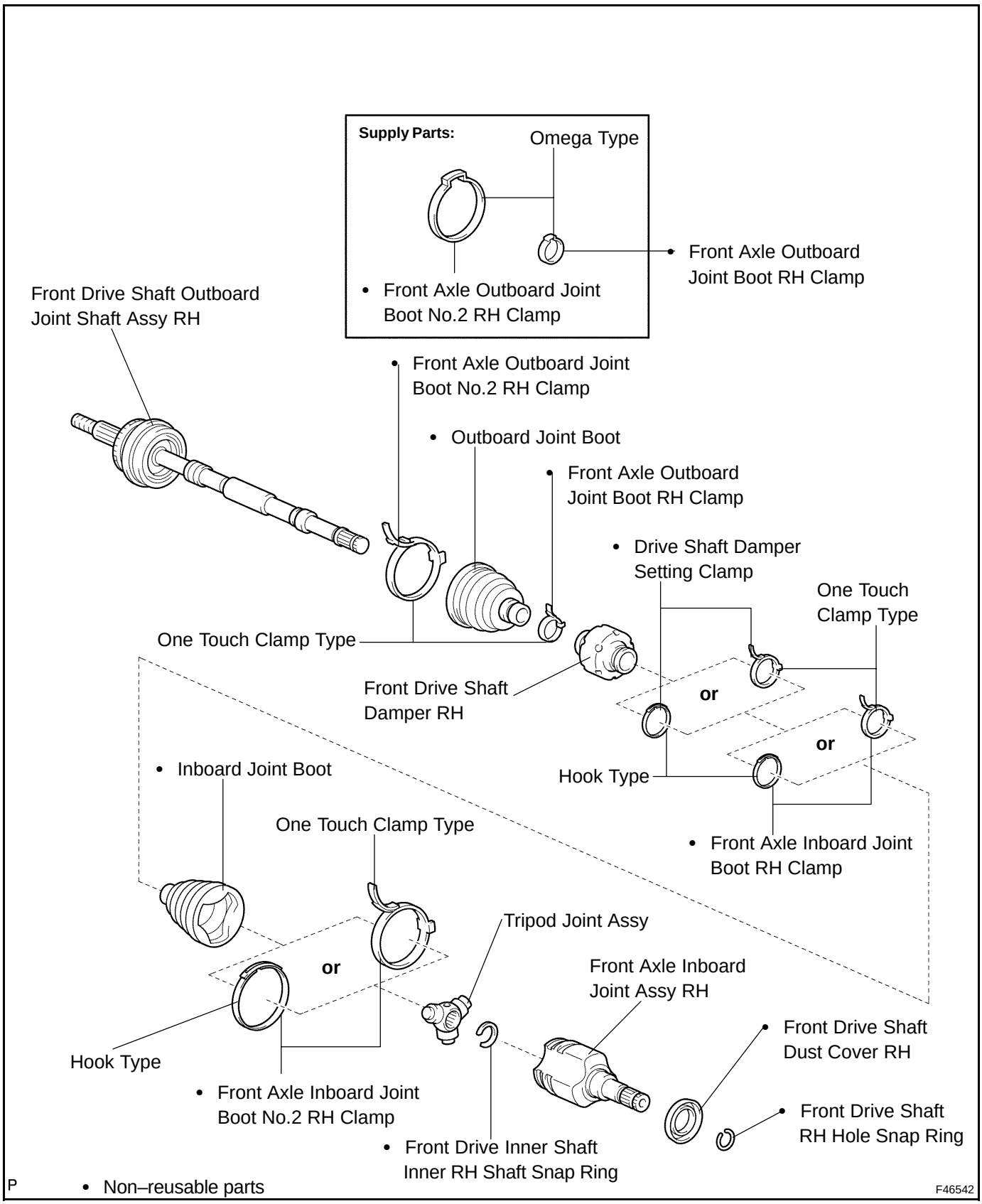
FRONT DRIVE SHAFT

COMPONENTS

300NV–01




• Front Drive Shaft LH Hole Snap Ring
Front Axle Inboard Joint Assy LH
• Front Drive Inner Shaft Inner LH Shaft Snap Ring
Tripod Joint Assy
• Front Axle Inboard Joint Boot No.2 LH Clamp
One Touch Clamp Type
• Front Drive Shaft Dust Cover LH
or
Hook Type
• Front Axle Inboard Joint Boot LH Clamp
One Touch Clamp Type
or
• Inboard Joint Boot
Hook Type
One Touch Clamp Type
• Outboard Joint Boot
One Touch Clamp Type
Front Axle Outboard Joint Boot No.2 LH Clamp
• Front Axle Outboard Joint Boot LH Clamp
Supply Parts:
Omega Type
• Front Axle Outboard Joint Boot LH Clamp
• Front Axle Outboard Joint Boot No.2 LH Clamp
Front Drive Shaft Outboard Joint Shaft Assy LH
• Non–reusable parts
F46544


Supply Parts:
Omega Type
Front Axle Outboard Joint Boot RH Clamp
• Front Axle Outboard Joint Boot No.2 RH Clamp
Front Drive Shaft Outboard Joint Shaft Assy RH
• Front Axle Outboard Joint Boot No.2 RH Clamp
• Outboard Joint Boot
• Front Axle Outboard Joint Boot RH Clamp
• Drive Shaft Damper Setting Clamp
One Touch Clamp Type
One Touch Clamp Type
Front Drive Shaft Damper RH
or
or
Hook Type
• Inboard Joint Boot
One Touch Clamp Type
• Front Axle Inboard Joint Boot RH Clamp
Tripod Joint Assy
or
Front Axle Inboard Joint Assy RH
Front Drive Shaft Dust Cover RH
Hook Type
• Front Axle Inboard Joint Boot No.2 RH Clamp
Front Drive Shaft RH Hole Snap Ring
• Front Drive Inner Shaft Inner RH Shaft Snap Ring
P • Non–reusable parts
F46542

300NW–01

OVERHAUL

HINT:

Refer to components: See page 30–4

Use the same procedures for the RH side and LH side.

The procedures listed below are for the LH side.

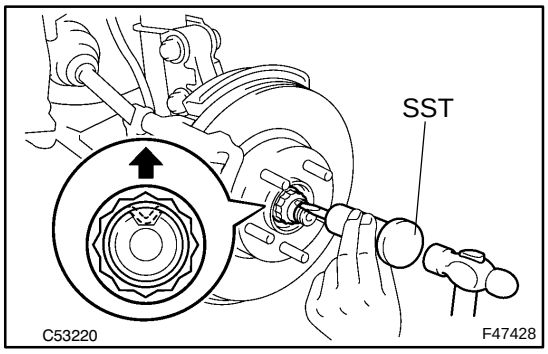
1. DRAIN TRANSAXLE OIL

(a) Using a #10 socket hexagon wrench, remove the drain plug and gasket and drain the fluid.

(b) Using a socket hexagon wrench, tighten the drain plug with a new gasket placed inside.

Torque: 39 N·m (400 kgf·cm, 29 ft·lbf)

2. REMOVE FRONT WHEEL



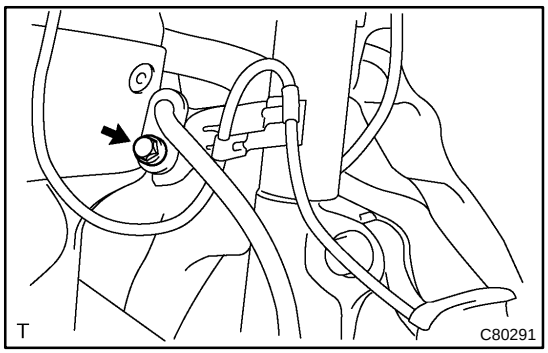
3. REMOVE FRONT AXLE HUB LH NUT

(a) Using SST and a hammer, unstake the axle hub LH nut.
SST 09930–00010

NOTICE:

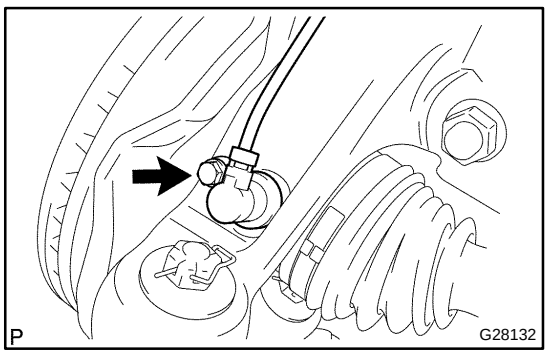
- **Set SST with the flat surface on.**
- **Do not grind the SST tip with a grinder or equivalent.**
- **Unstake completely when removing the front axle hub nut LH.**
- **Do not damage the front drive shaft assy LH threads.**

(b) Using a socket wrench (30 mm), remove the front axle hub LH nut.



4. SEPARATE SPEED SENSOR FRONT LH

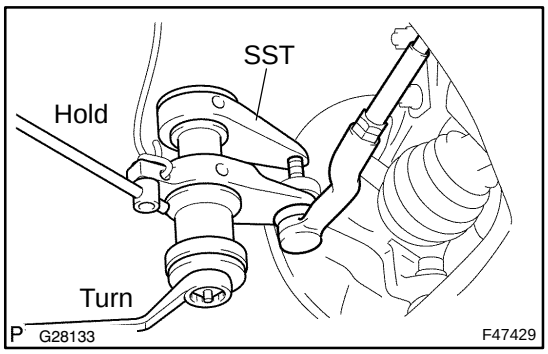
(a) Remove the bolt and disconnect the speed sensor wire and flexible hose from the shock absorber assy.



(b) Remove the bolt and separate the speed sensor FR LH from the steering knuckle.

NOTICE:

Keep both the tip and installation part of the speed sensor FR LH free of foreign matter.



5. SEPARATE TIE ROD END SUB–ASSY LH

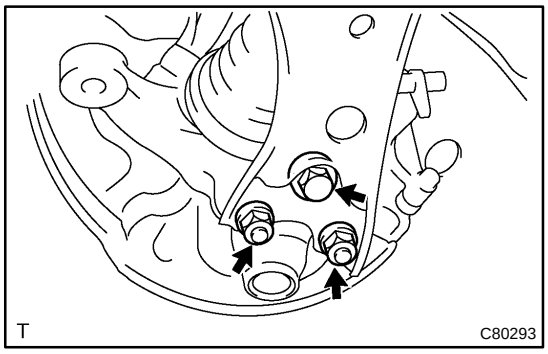
(a) Remove the clip and castle nut.

(b) Using SST, separate the tie rod end LH from the steering knuckle.

SST 09628–00011

NOTICE:

- **Do not damage the front disc brake dust cover.**
- **Be sure to hang the tie rod end with a string to prevent the SST from dropping.**
- **Do not damage the ball joint dust cover.**
- **Do not damage the steering knuckle.**
- **Securely hang the SST to the spacer of the steering knuckle.**
- **Replace the steering knuckle with a new one if the spacer comes off the steering knuckle.**



6. SEPARATE FRONT SUSPENSION ARM SUB–ASSY LOWER NO.1 LH

(a) Remove the bolt and 2 nuts.

(b) Push down the front suspension lower arm No.1 LH and separate the front lower ball joint LH.

7. SEPARATE FRONT AXLE ASSY LH

(a) Using a plastic hammer, tap the end of the front drive shaft assy LH and disengage the fitting between the front drive shaft assy LH and front axle assy LH.

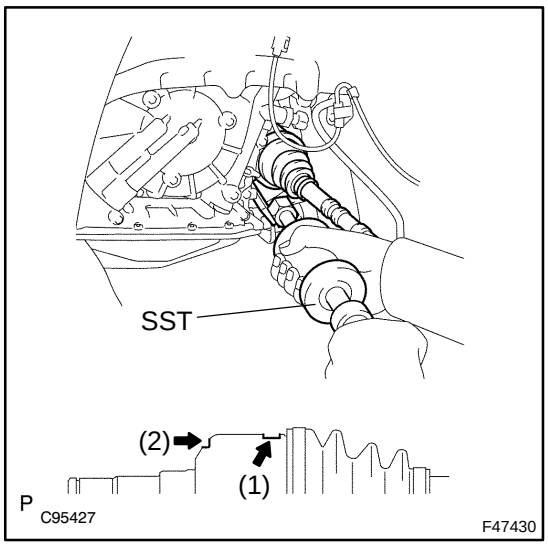
HINT:

If it is difficult to disengage, tap the end of the front drive shaft assy LH with a brass bar and a hammer.

(b) Push the front axle assy LH outward from the vehicle to remove the front drive shaft assy LH from the front axle assy LH.

NOTICE:

- **Be careful not to push the front axle assy LH outward from the vehicle more than is necessary to remove it.**
- **Be careful not to damage the front axle out board joint boot.**
- **Be careful not to damage the speed sensor rotor.**
- **Hang the front drive shaft assy LH down with a string or such.**



8. REMOVE FRONT DRIVE SHAFT ASSY LH

(a) Remove the front fender apron seal LH.

(b) Hook the SST claw at the position in illustration (1) to remove the front drive shaft assy LH.

SST 09520–01010, 09520–24010 (09520–32040)

NOTICE:

- **Be careful not to damage the oil seal.**
- **Be careful not to damage the front drive shaft assy LH boot.**
- **Be careful not to drop the front drive shaft assy LH.**

HINT:

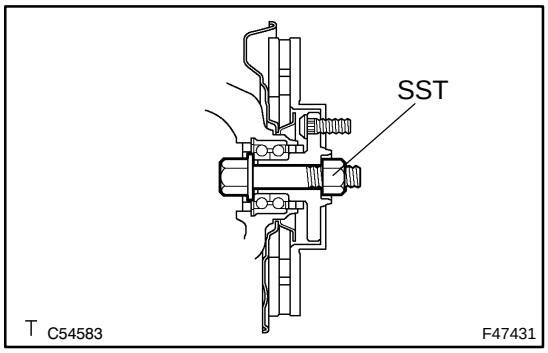
- If the front drive shaft assy LH cannot be removed at the position in the illustration (1), hook the SST claw at the position in the illustration (2) in order to remove it.

9. REMOVE FRONT DRIVE SHAFT ASSY RH

SST 09520–01010, 09520–24010 (09520–32040)

HINT:

Remove the front drive shaft assy RH following the same procedures as for the LH side.



10. FIX FRONT AXLE ASSY LH

SST 09608–16042 (09608–02021, 09608–02041)

HINT:

The hub bearing could be damaged if it is subjected to the vehicle's full weight, such as when moving the vehicle with the drive shaft removed. If it is absolutely necessary to place the vehicle's weight on the hub bearing, first support it with SST.

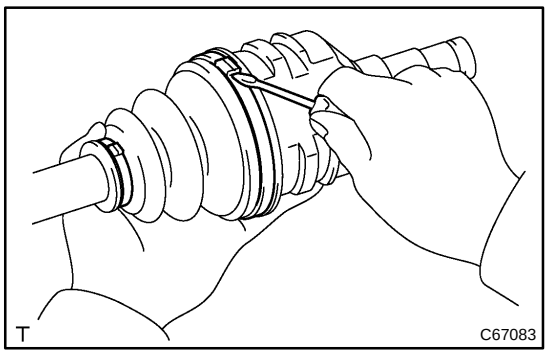
11. INSPECT FRONT DRIVE SHAFT ASSY LH

(a) Check for noticeable looseness when turning the joint up and down, left and right, and thrust direction.

(b) Check for cracks, damages or grease leaks on the joint boot.

NOTICE:

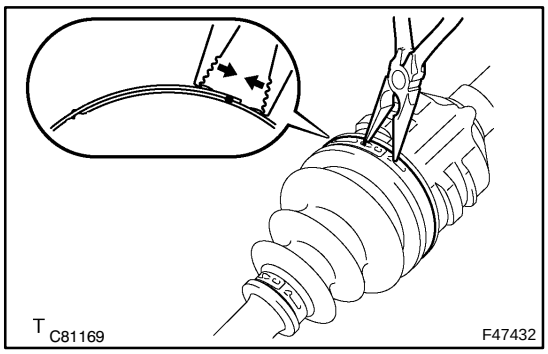
Carry the front drive shaft assy LH levelly.



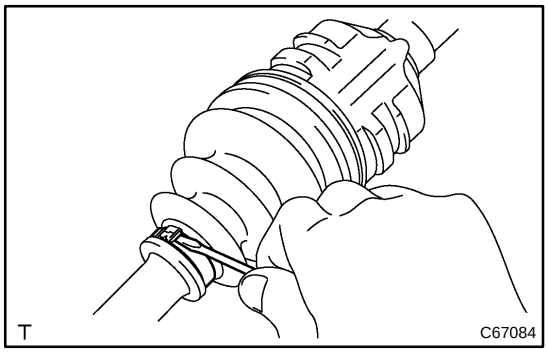
12. REMOVE FRONT AXLE INBOARD JOINT BOOT LH NO.2 CLAMP

(a) When using a one touch clamp

(1) Using a flat–head screwdriver, unstake the inboard joint boot clamp LH No.2 and separate the inboard joint boot clamp LH No.2.

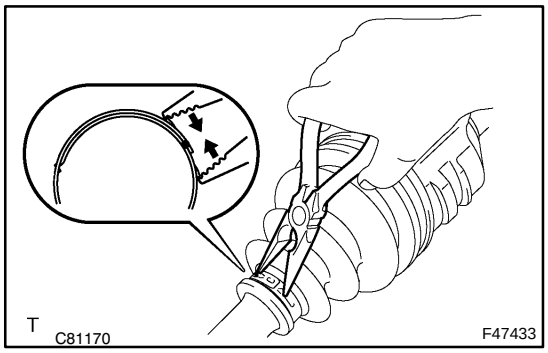


(b) When using a hook type one
(1) Using needle nose pliers, unhook and remove the inboard joint boot clamp LH No.2.



13. REMOVE FRONT AXLE INBOARD JOINT BOOT LH CLAMP

(a) When using a one touch clamp
(1) Using a flat–head screwdriver, separate the inboard joint boot clamp LH and separate the inboard joint boot clamp LH.



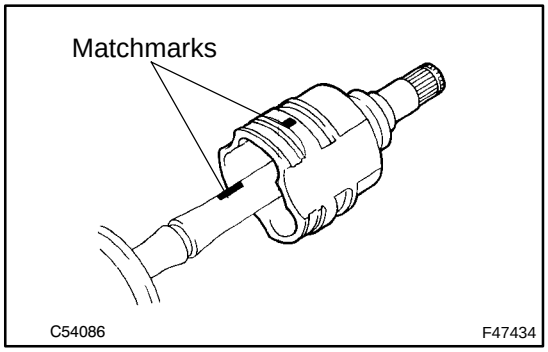
(b) When using a hook type one
(1) Using needle nose pliers, unhook and remove the inboard joint boot clamp LH.

14. SEPARATE FR AXLE INBOARD JOINT BOOT

(a) Separate the inboard joint boot from the inboard joint assy LH.

15. REMOVE FRONT DRIVE INBOARD JOINT ASSY LH

(a) Remove grease from the inboard joint.



(b) Put matchmarks on the inboard joint assy LH and outboard joint assy LH.

NOTICE:

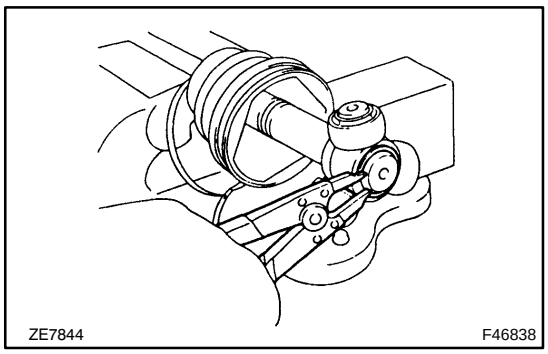
Do not make matchmarks with a punch and a hammer.

(c) Remove the inboard joint assy LH from the outboard joint assy LH.

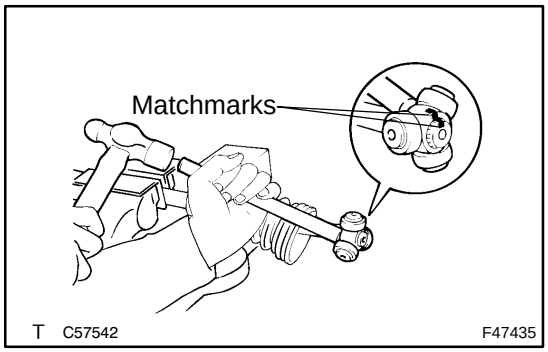
(d) Hold the outboard joint assy LH with vise aluminum plates in between.

NOTICE:

Do not overtighten the vise.


ZE7844 F46838

(e) Using a snap ring expander, remove the front drive inner shaft snap ring INN LH.



T C57542 F47435

(f) Put matchmarks on the tripod joint and outboard joint assy LH.

NOTICE:

Do not make matchmarks with a punch and a hammer.

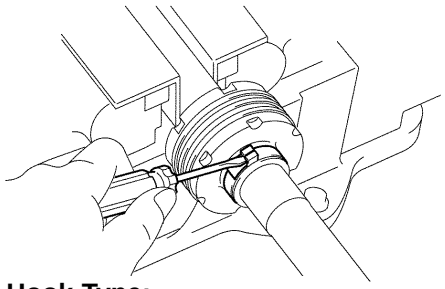
(g) Using a brass bar and a hammer, remove the tripod joint.

NOTICE:

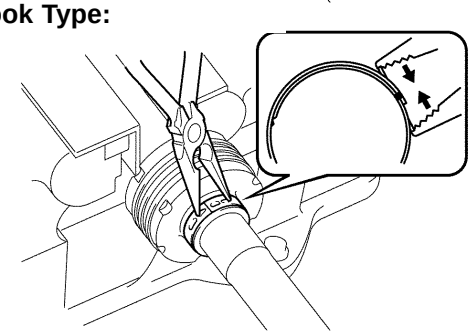
Do not hit the roller position.

(h) Remove the inboard joint boot clamp LH No.2, inboard joint boot and inboard joint boot clamp LH.

One Touch Clamp Type:



Hook Type:


P C99092 F47436

16. REMOVE DRIVE SHAFT DAMPER SETTING CLAMP

HINT:

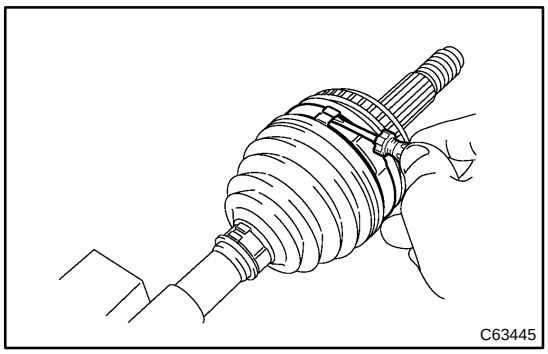
Perform this procedure only when overhauling the RH side.

(a) When using a one touch clamp
  (1) Using a flat–head screwdriver, remove the the drive shaft damper clamp.

(b) When using a hook type one
  (1) Using needle nose pliers, unhook and remove the drive shaft damper clamp.

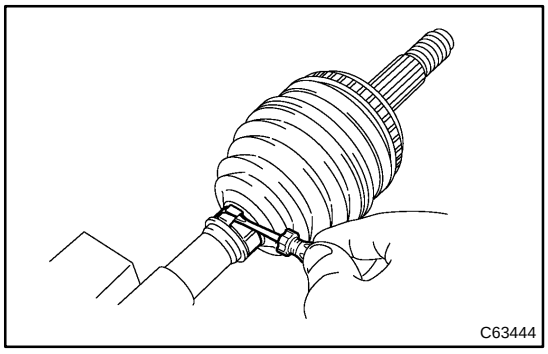
(c) Remove the drive shaft damper from the outboard joint assy LH.

17. REMOVE FRONT DRIVE SHAFT DAMPER RH



18. REMOVE FRONT AXLE OUTBOARD JOINT BOOT LH NO.2 CLAMP

(a) Using a flat–head screwdriver, remove the outboard joint boot clamp LH No.2.



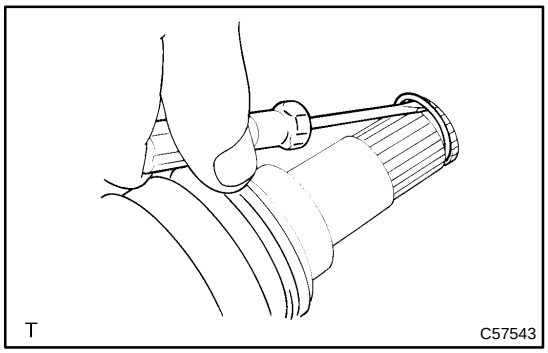
19. REMOVE FRONT AXLE OUTBOARD JOINT BOOT LH CLAMP

(a) Using a flat–head screwdriver, remove the outboard joint boot clamp LH.

20. REMOVE OUTBOARD JOINT BOOT

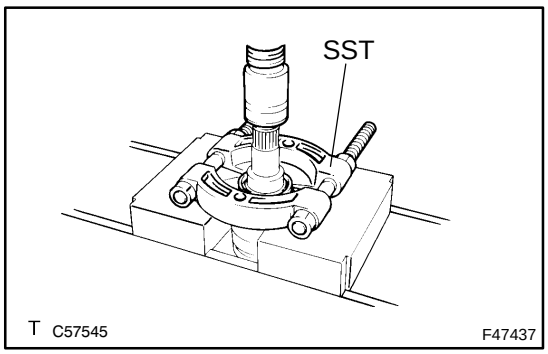
(a) Remove the outboard joint boot from the outboard joint assy LH.

(b) Remove grease from the outboard joint.



21. REMOVE FRONT DRIVE SHAFT LH HOLE SNAP RING

(a) Using a flat–head screwdriver, remove the front drive shaft hole snap ring LH.



22. REMOVE FRONT DRIVE SHAFT DUST COVER LH

(a) Using SST and a press, remove the front drive shaft dust cover LH.

SST 09950–00020

NOTICE:

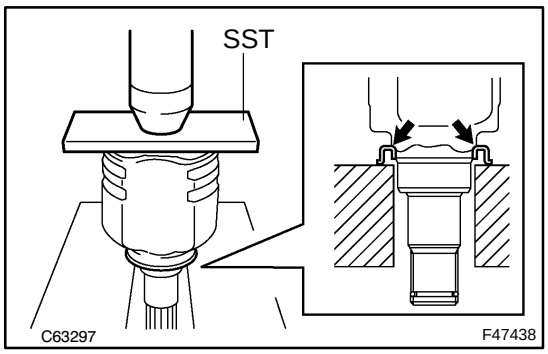
Be careful not to drop the inboard joint assy LH.

23. REMOVE FRONT DRIVE SHAFT DUST COVER RH

HINT:

Remove the front drive shaft dust cover RH following the same procedures as for the LH side.

SST 09950–00020



24. INSTALL FRONT DRIVE SHAFT DUST COVER LH

(a) Using SST and a press, install a new front drive shaft dust cover and press it in until it hits the end of the inboard joint assy.

SST 09527–10011

NOTICE:

- **Install the front drive shaft dust cover LH in the correct direction.**
- **Do not deform the front drive shaft dust cover LH.**

25. INSTALL FRONT DRIVE SHAFT DUST COVER RH

HINT:

Install the front drive shaft dust cover RH following the same procedures as for the LH side.

SST 09527–10011

26. INSTALL FRONT DRIVE SHAFT LH HOLE SNAP RING

(a) Install a new front drive shaft hole snap ring LH.

27. INSTALL OUTBOARD JOINT BOOT

(a) Wrap protective tape around the spline of the outboard joint assy LH.

(b) Install the following new parts on the outboard joint assy LH in order.

(1) Outboard joint boot clamp LH No.2
(2) Outboard joint boot
(3) Outboard joint boot clamp LH

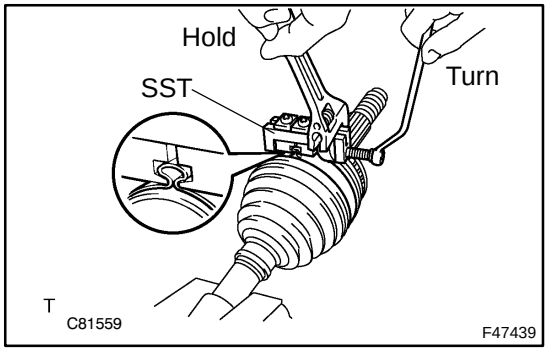
(c) Apply grease to the joint of the outboard joint assy LH and outboard joint boot.

Capacity: 125 to 135 g (4.9 to 5.3 oz.)

(d) Install the outboard joint boot into the outboard joint assy groove.

NOTICE:

Do not apply grease in the groove.



28. INSTALL FRONT AXLE OUTBOARD JOINT BOOT LH NO.2 CLAMP

(a) Hold the front drive shaft assy LH in a vice between two aluminum plates.

NOTICE:

Do not overtighten the vise.

(b) Set SST to the outboard joint boot clamp LH No.2 and slightly tighten the SST bolt while pushing the outboard joint on.

SST 09521–24010

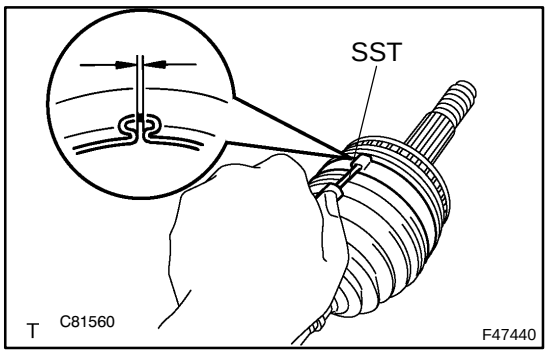
(c) Hold SST and tighten the SST bolt so that the clearance is within the specified value.

Clearance: 0.8 mm (0.031 in.) or less

NOTICE:

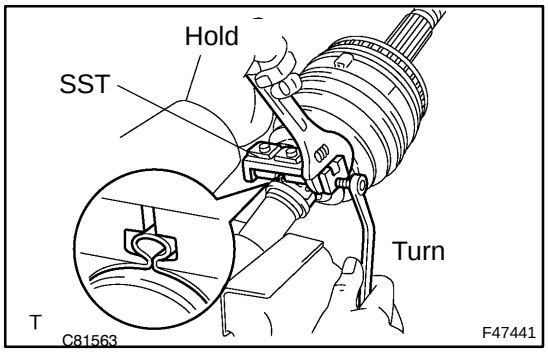
Do not damage the outboard joint.

(d) Remove the SST.



(e) Using SST, measure the clearance as to the illustration of the outboard joint boot clamp LH No.2.
SST 09240–00020
Clearance: 0.8 mm (0.031 in.) or less

NOTICE:
If the clearance exceeds the maximum, retighten it.



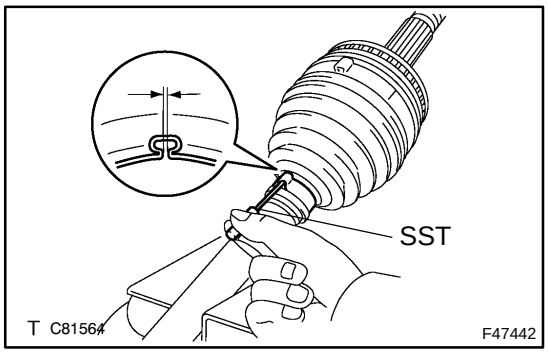
29. INSTALL FRONT AXLE OUTBOARD JOINT BOOT LH CLAMP

(a) Set SST to the outboard joint boot clamp LH and slightly tighten the SST bolt while pushing the outboard joint on.

(b) Hold SST and tighten the SST bolt so that the clearance is within the specified value.
SST 09521–24010
Clearance: 0.8 mm (0.031 in.) or less

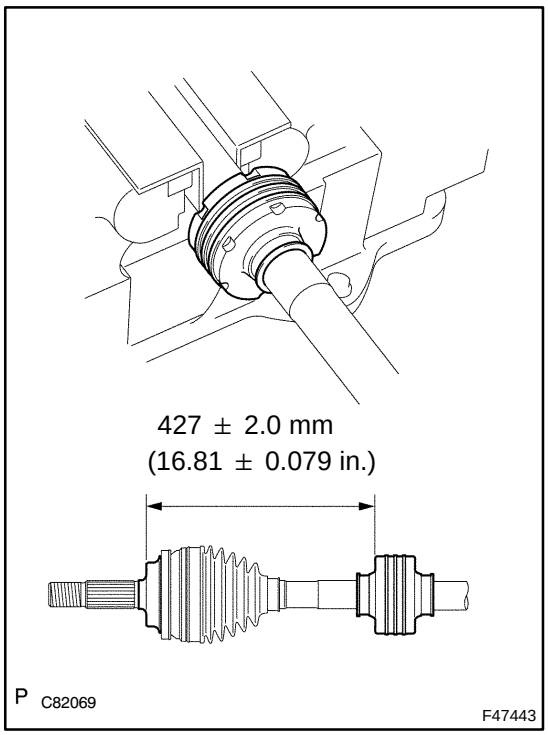
NOTICE:
Do not damage the outboard joint.

(c) Remove the SST.



(d) Using SST, measure the clearance as to the illustration of the outboard joint boot clamp LH.
SST 09240–00020
Clearance: 0.8 mm (0.031 in.) or less

NOTICE:
If the clearance exceeds the maximum, retighten it.



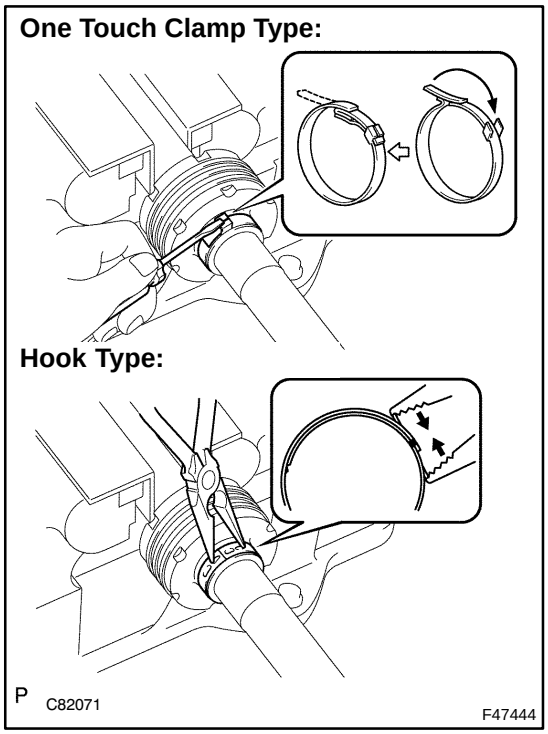
30. INSTALL FRONT DRIVE SHAFT DAMPER RH

(a) Install the drive shaft damper to the outboard joint assy LH.

Distance: 427 ± 2.0 mm (16.81 ± 0.079 in.)

NOTICE:

Install in the correct direction.



31. INSTALL DRIVE SHAFT DAMPER SETTING CLAMP

(a) When using a one touch clamp

(1) Install the drive shaft damper clamp to the drive shaft damper and stake the drive shaft damper clamp using a flat–head screwdriver.

(b) When using a hook type one

(1) Using needle nose pliers, align the concave part and protrusion of the drive shaft damper clamp.

32. INSTALL FRONT DRIVE INBOARD JOINT ASSY LH

(a) Install the following new parts on the outboard joint assy LH in order.

(1) Inboard joint boot clamp LH

(2) Inboard joint boot

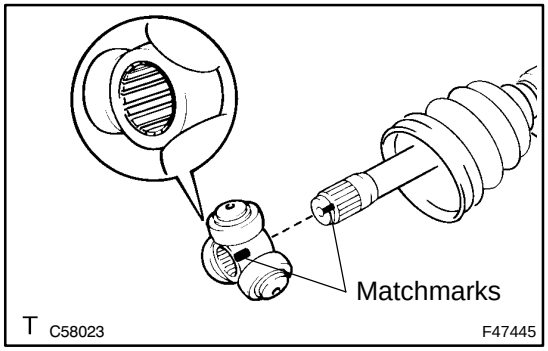
(3) Inboard joint boot clamp LH No.2

(b) Hold the front drive shaft assy LH in a vice between two aluminum plates.

NOTICE:

Do not overtighten the vise.

(c) Remove the protective tape.



(d) Align the matchmarks and install the tripod joint onto the outboard joint assy LH.

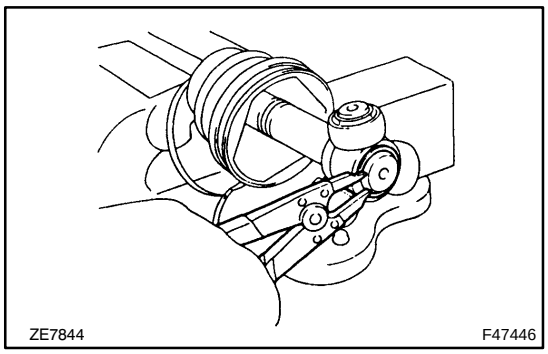
NOTICE:

Face the serration side of the tripod joint outward and install it to the outboard joint assy LH end.

(e) Using a brass bar and a hammer, drive the tripod joint in.

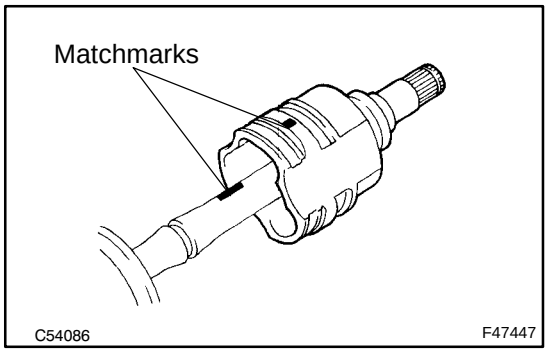
NOTICE:

- **Do not hit the roller portion.**
- **Do not attach any foreign matter on the tripod joint.**



(f) Using SST, install a new front drive inner shaft snap ring INN LH.

(g) Fill grease in the joint of the inboard joint assy LH and outboard joint boot.
Capacity: 125 to 135 g (4.9 to 5.3 oz.)

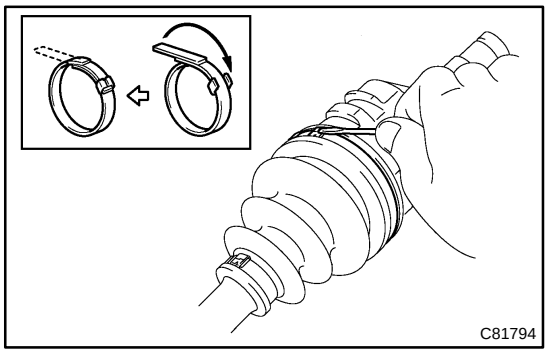


(h) Align the matchmarks and install the inboard joint assy onto the outboard joint assy LH.

33. INSTALL FR AXLE INBOARD JOINT BOOT

(a) Install the inboard joint boot into the inboard joint assy LH and outboard joint assy LH grooves.

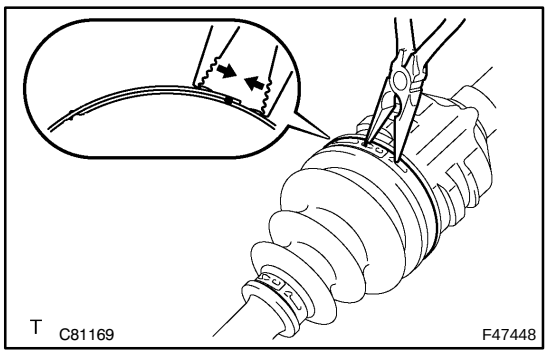
NOTICE:
Do not apply grease in the groove.



34. INSTALL FRONT AXLE INBOARD JOINT BOOT LH NO.2 CLAMP

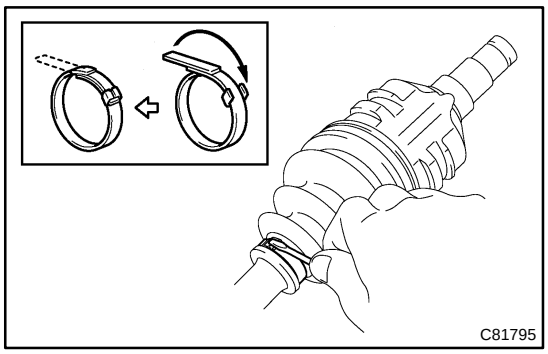
(a) When using a one touch clamp
(1) Install the inboard joint boot clamp LH No.2 to the inboard joint boot and stake the inboard joint boot clamp LH No.2 using a flat–head screwdriver.

NOTICE:
Do not scratch the inboard joint boot.



(b) When using a hook type one
(1) Using needle nose pliers, align the concave part with the protrusion of the inboard joint boot clamp LH No.2 in order to fix.

NOTICE:
- **Do not scratch the inboard joint boot.**
- **Do not deform the claw of the hook.**



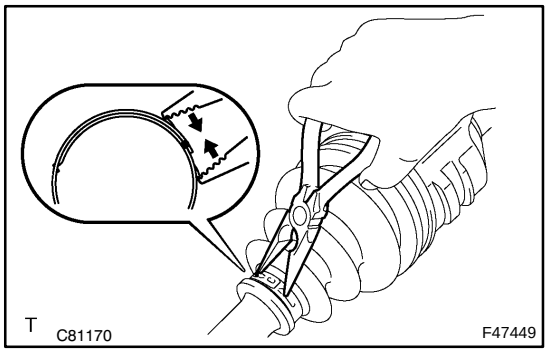
35. INSTALL FRONT AXLE INBOARD JOINT BOOT LH CLAMP

(a) When using a one touch clamp

(1) Install the inboard joint boot clamp LH to the inboard joint boot and stake the inboard joint boot clamp LH using a flat–head screwdriver.

NOTICE:

Do not scratch the inboard joint boot.

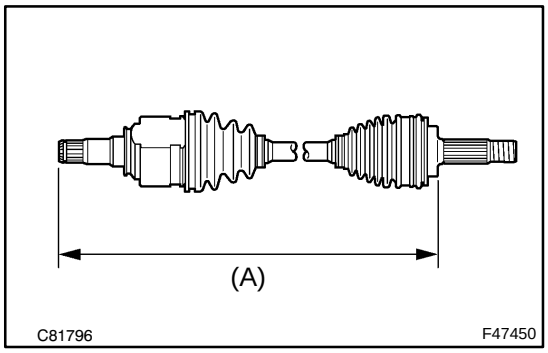


(b) When using a hook type one

(1) Using needle nose pliers, align the concave part with the protrusion of the inboard joint boot clamp LH No.2 in order to fix.

NOTICE:

- **Do not scratch the inboard joint boot.**
- **Do not deform the claw of the hook.**



36. INSPECT FRONT DRIVE SHAFT ASSY LH

(a) Check if the front drive shaft assy is within the following dimension.

HINT:

The following table shown the dimension (A) of the drive shaft.

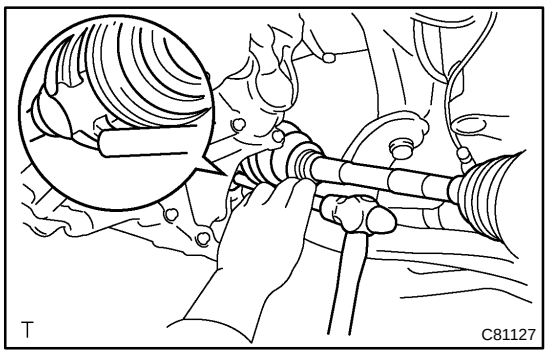
LH mm	RH mm
564.3	846.3

(b) Check for noticeable looseness when turning the joint up and down, left and right, and thrust direction.

(c) Check for cracks, damages or grease leaks on the joint boot.

NOTICE:

Carry the front drive shaft assy LH levelly.



37. INSTALL FRONT DRIVE SHAFT ASSY LH

(a) Apply ATF to the spline of the inboard joint assy LH.

(b) Align the spline of the front drive shaft and insert the front drive shaft assy LH using a brass bar and a hammer.

NOTICE:

- **Face the snap ring cut area downward.**
- **Be careful not to damage the oil seal.**
- **Be careful not to damage the front drive shaft assy LH boot.**

HINT:

Judge whether the front drive shaft assy LH is securely driven in or not according to the brass bar reaction force or sound change.

(c) Install the front fender apron seal LH.

38. INSTALL FRONT DRIVE SHAFT ASSY RH

HINT:

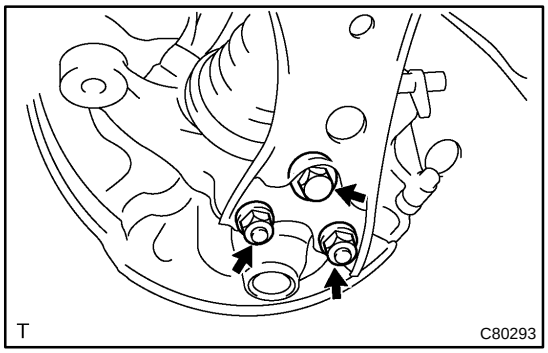
Install the front drive shaft dust cover RH following the same procedures as for the LH side.

39. INSTALL FRONT AXLE ASSY LH

(a) Push the front axle assy LH outward of the vehicle to align the spline of the front drive shaft assy LH with the front axle assy LH and insert.

NOTICE:

- **Be careful not to push the front axle assy LH outward from the vehicle more than is necessary to remove it.**
- **Be careful not to damage the oil seal.**
- **Be careful not to damage the front drive shaft assy LH boot.**
- **Be careful not to damage the speed sensor rotor.**
- **Check for any foreign matter on the speed sensor rotor and insertion part.**



40. INSTALL FRONT SUSPENSION ARM SUB–ASSY LOWER NO.1 LH

(a) Push the front suspension lower arm No.1 LH downward, install the front lower ball joint LH and tighten the bolt and 2 nuts.

Torque: 89 N·m (908 kgf·cm, 66 ft·lbf)

41. INSTALL TIE ROD END SUB–ASSY LH

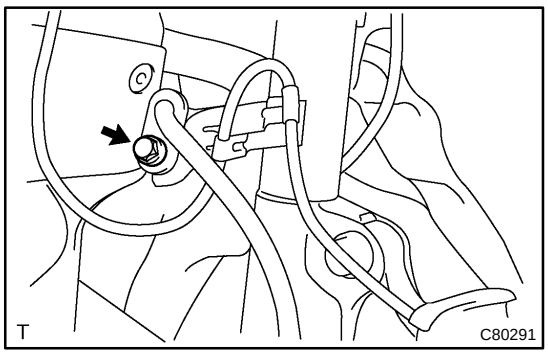
(a) Connect the tie rod end LH to the steering knuckle and install it with the castle nut.

NOTICE:

Clip hole alignment should be done after tightening the castle nut up to 60 degrees beyond torque.

Torque: 49 N·m (500 kgf·cm, 36 ft·lbf)

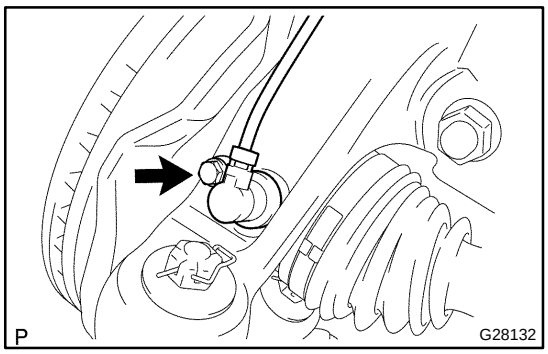
(b) Install a new clip.



42. INSTALL SPEED SENSOR FRONT LH

(a) Install the speed sensor FR LH and flexible hose clamp to the shock absorber assy with a bolt.

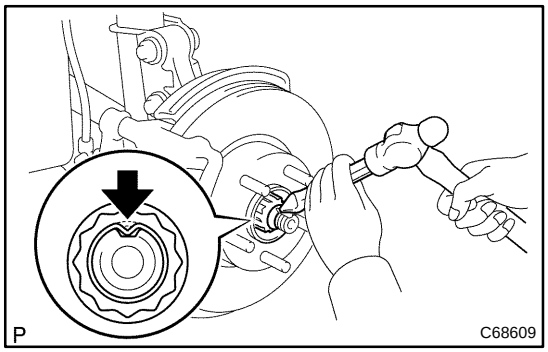
Torque: 29 N·m (296 kgf·cm, 21 ft·lbf)



(b) Install the speed sensor FR LH to the steering knuckle.
Torque: 8.0 N·m (82 kgf·cm, 71 in.·lbf)

NOTICE:

- **Do not damage the speed sensor tip when installing the speed sensor.**
- **Ensure no foreign object is caught when tightening the bolt.**
- **Do not twist the sensor wire when installing the speed sensor.**



43. INSTALL FRONT AXLE HUB LH NUT

(a) Using a 30 mm socket wrench, install a new front axle hub nut LH.
Torque: 216 N·m (2,200 kgf·cm, 159 ft·lbf)

(b) Using a chisel and a hammer, stake the front axle hub LH nut.

44. INSTALL FRONT WHEEL
Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

45. ADD TRANSAXLE OIL

46. INSPECT TRANSAXLE OIL (SEE PAGE 22–1)

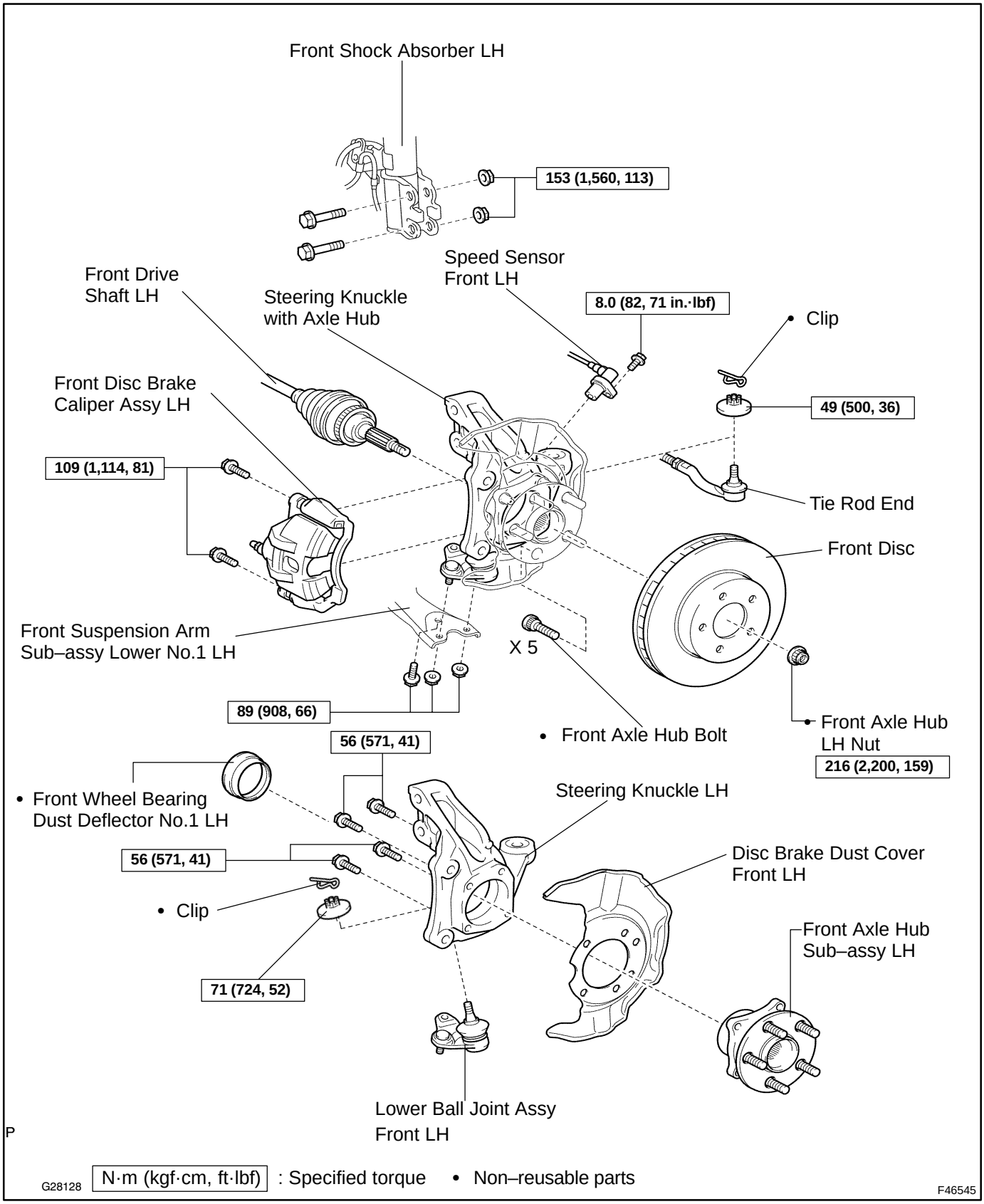
47. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT (SEE PAGE 26–6)

48. CHECK ABS SPEED SENSOR SIGNAL (SEE PAGE 05–961)

FRONT AXLE HUB SUB–ASSY LH

300NX–01

COMPONENTS



300NY–01

REPLACEMENT

HINT:

Refer to components: See page 30–20

Use the same procedures for the RH side and LH side.

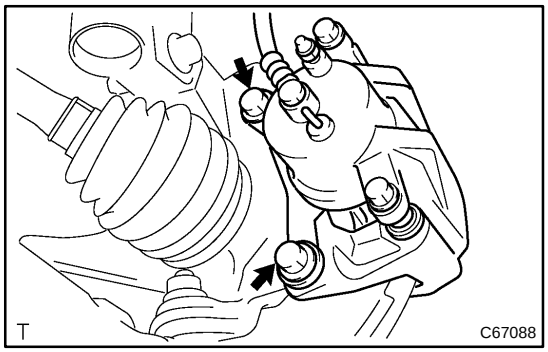
The procedures listed below are for the LH side.

1. REMOVE FRONT WHEEL

2. REMOVE FRONT AXLE HUB LH NUT (SEE PAGE 30–7)

SST 09930–00010

3. SEPARATE SPEED SENSOR FRONT LH (SEE PAGE 30–7)



4. SEPARATE FRONT DISC BRAKE CALIPER ASSY LH

(a) Remove the 2 bolts and separate the front disc brake caliper assy LH from the steering knuckle.

NOTICE:

Hang down the front disc brake caliper assy LH with a wire or such.

5. REMOVE FRONT DISC

NOTICE:

Ensure no oil attaches to the disc surface.

6. SEPARATE TIE ROD END SUB–ASSY LH (SEE PAGE 30–7)

SST 09628–62011

7. SEPARATE FRONT SUSPENSION ARM SUB–ASSY LOWER NO.1 LH (SEE PAGE 30–7)

8. REMOVE FRONT AXLE ASSY LH

(a) Using a plastic hammer, tap the end of the front drive shaft assy LH and disengage the fitting between the front drive shaft assy LH and front axle assy LH.

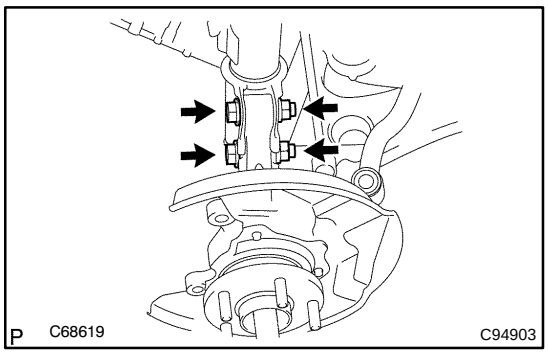
HINT:

If it is difficult to disengage, tap the end of the front drive shaft assy LH with a brass bar and a hammer.

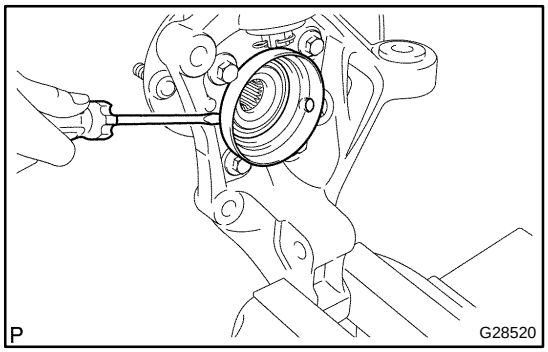
(b) Push the front axle assy LH outward from the vehicle to remove the front drive shaft assy LH from the front axle assy LH.

NOTICE:

- **Be careful not to push the front axle assy LH outward from the vehicle more than is necessary to remove it.**
- **Be careful not to damage the drive shaft outboard joint boot.**
- **Be careful not to damage the speed sensor rotor.**
- **Hang the front drive shaft assy LH down with a string or such.**



(c) Remove the 2 bolts and 2 nuts to remove the front axle assy LH from the front shock absorber.



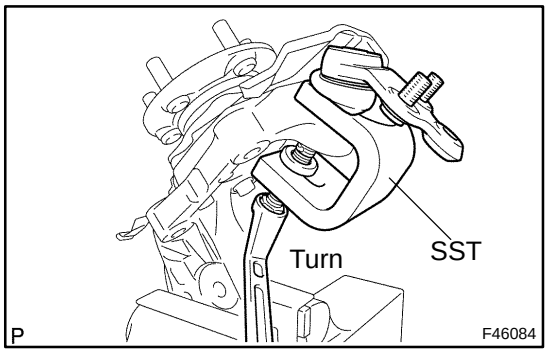
9. REMOVE FRONT WHEEL BEARING DUST DEFLECTOR NO.1 LH

(a) Mount the steering knuckle in a soft vise.

(b) Using a penetration screwdriver, remove the deflector from the steering knuckle.

NOTICE:

Be careful not to damage the steering knuckle.



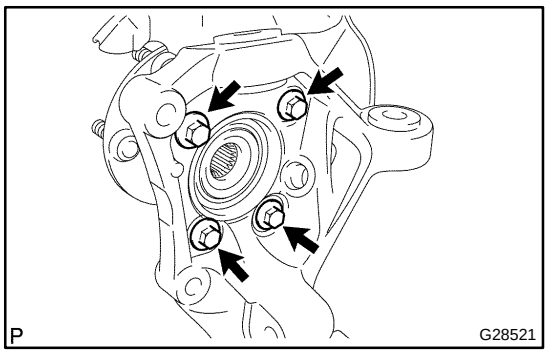
10. REMOVE JOINT ASSY, LWR BALL

(a) Remove the clip and castle nut.

(b) Using SST, remove the front lower ball joint assy LH.
SST 09611–36020

NOTICE:

- **Do not damage the steering knuckle.**
- **Securely hang the SST to the spacer of the steering knuckle.**
- **Replace the steering knuckle with a new one if the spacer comes off the steering knuckle.**



11. REMOVE FRONT AXLE HUB SUB–ASSY LH

(a) Remove the 4 bolts to dust cover and front axle hub.

12. INSTALL FRONT AXLE HUB SUB–ASSY LH

(a) Install the front axle hub and dust cover with 4 bolts.
Torque: 56 N·m (571 kgf·cm, 41 ft·lbf)

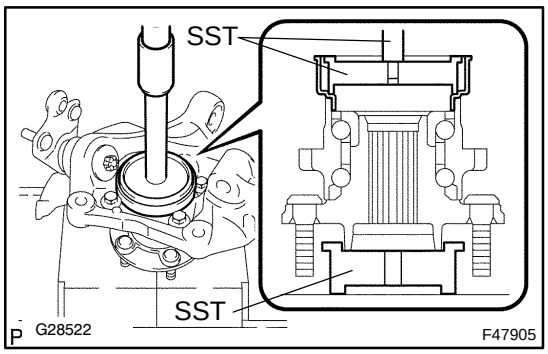
13. INSTALL JOINT ASSY, LWR BALL

(a) Install the front lower ball joint assy LH to the steering knuckle and tighten with a castle nut.
Torque: 71 N·m (724 kgf·cm, 52 ft·lbf)

NOTICE:

- **Be careful that grease does not adhere to the threads or tapered part.**
- **Clip hole alignment should be done after tightening the castle nut up to 60 degrees beyond torque.**

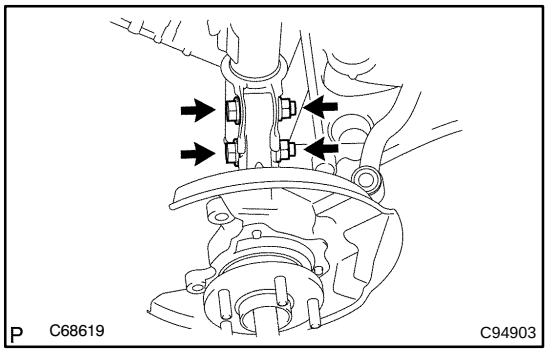
(b) Install a new clip.



14. INSTALL FRONT WHEEL BEARING DUST DEFLECTOR NO.1 LH

(a) Using SST and a press, install a new dust deflector LH.
SST 09950–70010 (09951–07150), 09608–32010, 09950–60020 (09951–00720)

NOTICE:
Align the dust deflector hole and the steering knuckle hole and install them.



15. INSTALL FRONT AXLE ASSY LH

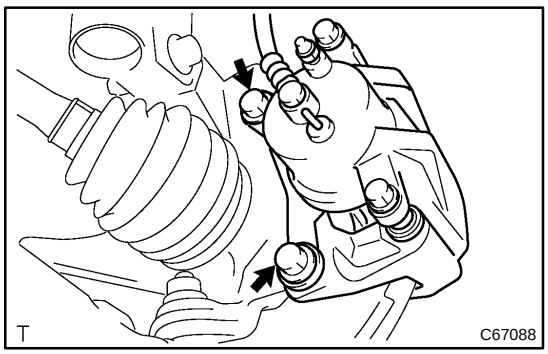
(a) Install the front axle assy LH to the shock absorber, insert 2 bolts from the front of the vehicle and tighten the 2 nuts.
Torque: 153 N·m (1,560 kgf·cm, 113 ft·lbf)

NOTICE:
Apply engine oil to the nut threads or the sitting surface, only when reuse the bolt and nuts.

(b) Push the front axle assy LH outward of the vehicle to engage the spline of the front drive shaft assy LH and insert it to the front axle assy LH.

NOTICE:
- **Be careful not to push the front axle assy LH outward from the vehicle more than is necessary to remove it.**
- **Be careful not to damage the drive shaft outboard joint boot.**
- **Be careful not to damage the speed sensor rotor.**
- **Check for any foreign matter on the speed sensor rotor and insertion part.**

16. INSTALL FRONT SUSPENSION ARM SUB–ASSY LOWER NO.1 LH (SEE PAGE 30–7)
17. INSTALL TIE ROD END SUB–ASSY LH (SEE PAGE 30–7)
18. INSTALL FRONT DISC



19. INSTALL FRONT DISC BRAKE CALIPER ASSY LH

(a) Install the front disc brake caliper assy LH to the steering knuckle with 2 bolts.
Torque: 109 N·m (1,114 kgf·cm, 81 ft·lbf)

20. INSTALL FRONT AXLE HUB LH NUT

(a) Using a 30 mm socket wrench, install a new front axle hub LH nut.
Torque: 216 N·m (2,200 kgf·cm, 159 ft·lbf)

21. SEPARATE FRONT DISC BRAKE CALIPER ASSY LH
22. REMOVE FRONT DISC

23. INSPECT AXLE HUB BEARING LOOSENESS (SEE PAGE 30–2)

24. INSPECT AXLE HUB BEARING RUNOUT (SEE PAGE 30–2)

25. INSTALL FRONT DISC (SEE PAGE 32–35)

HINT:

Select the installation position where the front disc runout becomes minimum when installing the front disc (refer to procedure)

26. INSTALL FRONT DISC BRAKE CALIPER ASSY LH

Torque: 109 N·m (1,114 kgf·cm, 81 ft·lbf)

27. INSTALL SPEED SENSOR FRONT LH (SEE PAGE 30–7)

28. INSTALL FRONT AXLE HUB LH NUT

(a) Using a chisel and a hammer, stake the front axle hub LH nut.

29. INSTALL FRONT WHEEL

Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

30. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT (SEE PAGE 26–6)

31. CHECK ABS SPEED SENSOR SIGNAL (SEE PAGE 05–961)

FRONT AXLE LH HUB BOLT

300NZ–01

REPLACEMENT

HINT:

Refer to components: See page 30–20

Use the same procedures for the RH side and LH side.

The procedures listed below are for the LH side.

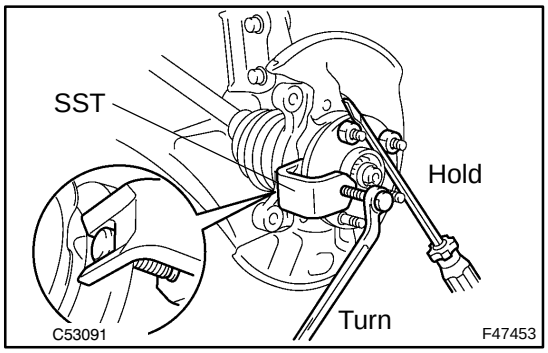
1. REMOVE FRONT WHEEL

2. SEPARATE FRONT DISC BRAKE CALIPER ASSY LH (SEE PAGE 30–7)

3. REMOVE FRONT DISC

HINT:

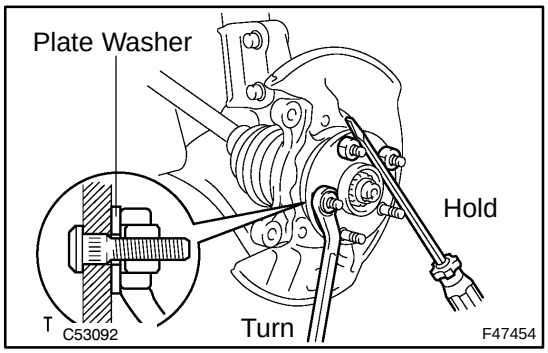
Put matchmarks on the front disc and front axle hub.



4. REMOVE FRONT AXLE LH HUB BOLT

(a) Using SST, remove the front axle hub bolt LH from the front disc brake dust cover LH and steering knuckle cut out.

SST 09628–10011



5. INSTALL FRONT AXLE LH HUB BOLT

(a) Pass a new front axle bolt through the front disc brake dust cover LH and steering knuckle cut out to the front axle hub LH.

(b) Pass the plate washer as shown in the illustration through the front axle hub nut LH and install the front axle hub bolt LH while tightening the nut (M12 × P1.5 mm).

HINT:

A plate washer of 5 mm or more in thickness is preferable.

6. INSTALL FRONT DISC

HINT:

Align the matchmarks of the front disc and front axle hub before installing them.

7. INSTALL FRONT DISC BRAKE CALIPER ASSY LH (SEE PAGE 30–7)

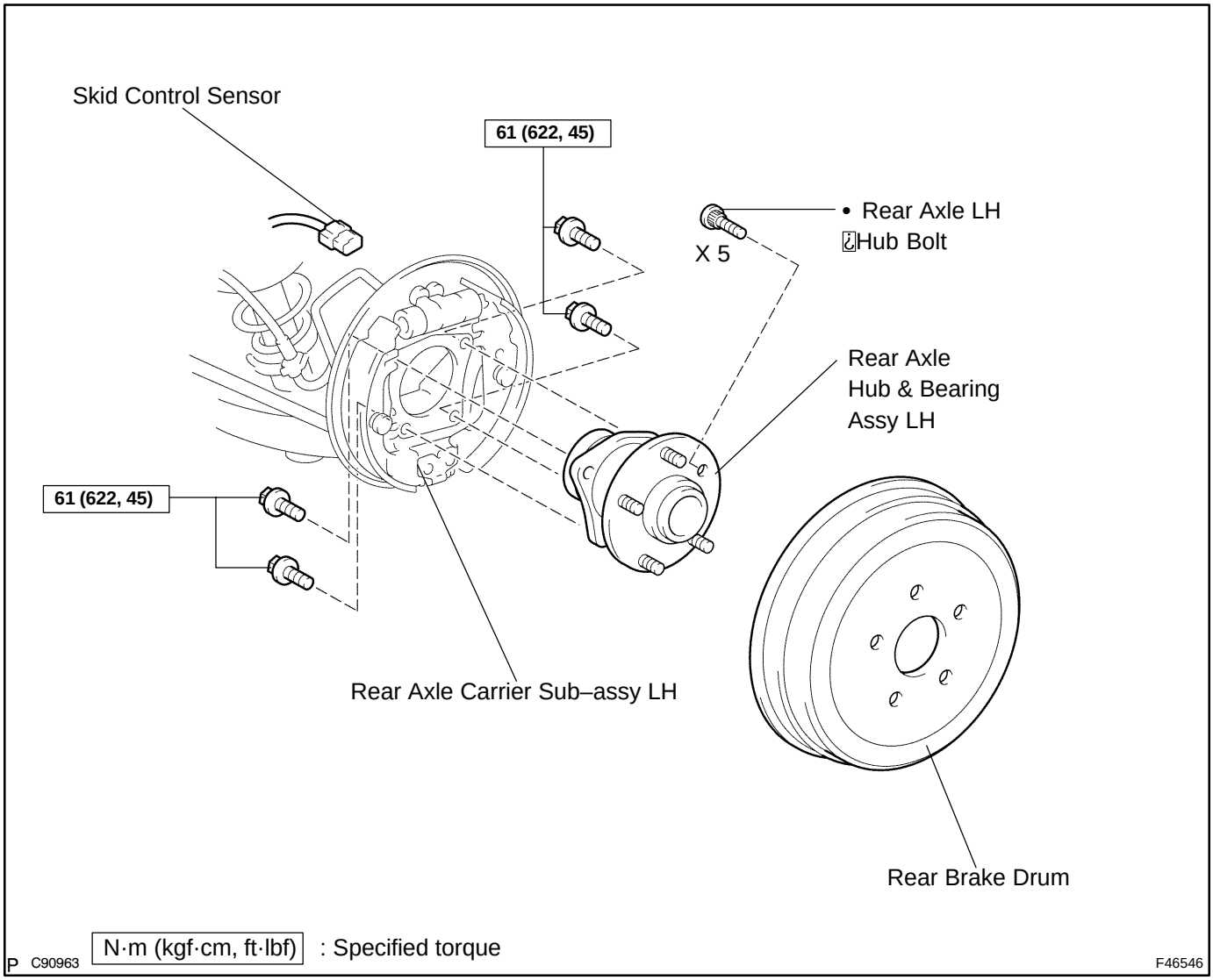
8. INSTALL FRONT WHEEL

Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

REAR AXLE HUB & BEARING ASSY LH

300O0–01

COMPONENTS



300O1–01

REPLACEMENT

HINT:

Refer to components: See page 30–26

Use the same procedures for the RH side and LH side.

The procedures listed below are for the LH side.

1. REMOVE REAR WHEEL

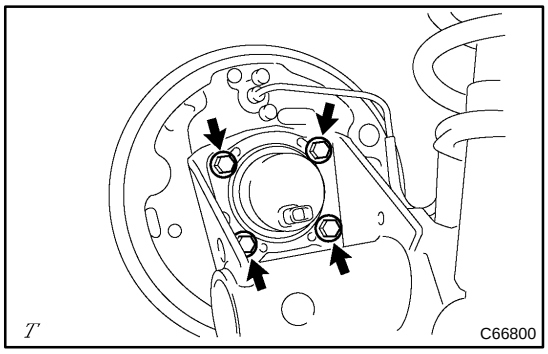
2. REMOVE REAR BRAKE DRUM SUB–ASSY

3. SEPARATE SKID CONTROL SENSOR WIRE

(a) Disconnect the skid control sensor connector.

NOTICE:

Be careful that any foreign matter do not attach inside the skid control sensor connector and on the installation portion.



4. REMOVE REAR AXLE HUB & BEARING ASSY LH

(a) Remove the 4 bolts and then remove the rear axle hub & bearing assy LH.

5. INSTALL REAR AXLE HUB & BEARING ASSY LH

(a) Install the rear axle hub & bearing assy LH on the axle beam assy with 4 bolts.

Torque: 61 N·m (622 kgf·cm, 45 ft·lbf)

6. CONNECT SKID CONTROL SENSOR WIRE

(a) Connect the skid control sensor connector.

7. INSPECT AXLE HUB BEARING LOOSENESS (SEE PAGE 30–2)

8. INSPECT AXLE HUB BEARING RUNOUT (SEE PAGE 30–2)

9. INSTALL REAR BRAKE DRUM SUB–ASSY

10. INSTALL REAR WHEEL

Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)

11. INSPECT REAR WHEEL ALIGNMENT (SEE PAGE 27–3)

12. CHECK ABS SPEED SENSOR SIGNAL (SEE PAGE 05–961)

REAR AXLE LH HUB BOLT

300O2–01

REPLACEMENT

HINT:

Refer to components: See page 30–26

Use the same procedures for the RH side and LH side.

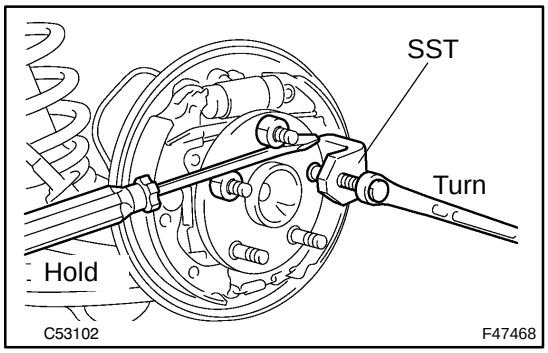
The procedures listed below are for the LH side.

1. REMOVE REAR WHEEL

2. REMOVE REAR BRAKE DRUM SUB–ASSY

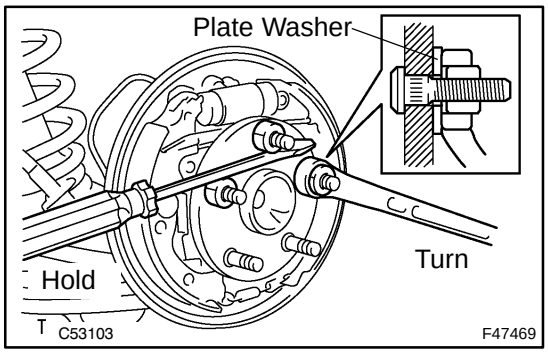
HINT:

Put matchmarks on the rear brake drum and rear axle hub.



3. REMOVE REAR AXLE LH HUB BOLT

(a) Using SST, remove the rear axle hub bolt LH.
SST 09628–10011



4. INSTALL REAR AXLE LH HUB BOLT

(a) Pass the plate washer as shown in the illustration through the rear axle hub nut LH and install the rear axle hub bolt LH while tightening the nut (M12 × P1.5 mm).

HINT:

A plate washer of 5 mm or more in thickness is preferable.

5. INSTALL REAR BRAKE DRUM SUB–ASSY

HINT:

Align the matchmarks of the rear brake drum and rear axle hub before installing them.

6. INSTALL REAR WHEEL

Torque: 103 N·m (1,050 kgf·cm, 76 ft·lbf)