AXLE AND DIFFERENTIAL STEERING KNUCKLE INSTALLATION

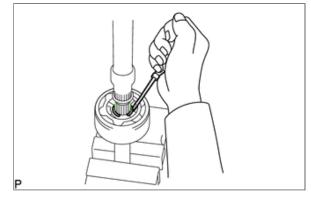
CAUTION / NOTICE / HINT

PROCEDURE

1.INSTALL FRONT AXLE OUTER SHAFT SUB-ASSEMBLY

43405

a.



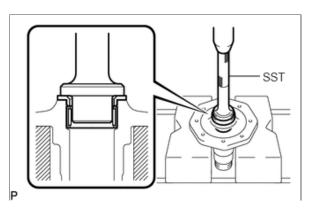
Hold the front axle outer shaft in a vise and while compressing a new snap ring, install the front axle inner shaft to the front axle outer shaft.

b. Make sure that the front axle inner shaft cannot be pulled out.

2.INSTALL STEERING KNUCKLE BUSHING

43211R





Using SST and a press, install a new needle roller bearing and new steering knuckle bushing into the steering knuckle spindle.

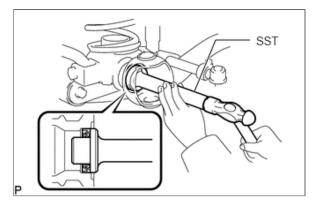
SST

09618-60010

■ 3.INSTALL FRONT DRIVE SHAFT TYPE T OIL SEAL

43411D

a.



Using SST and a hammer, install a new front drive shaft type T oil seal into the front axle housing assembly.

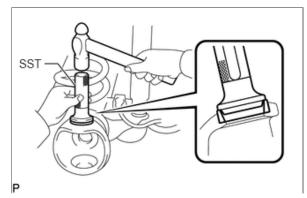
09618-60010

b. Coat the seal lip with MP grease.

4.INSTALL STEERING KNUCKLE ARM BEARING

45611F

a.



Using SST and a hammer, carefully install 2 new bearing outer races.

SST

09605-60010

- **b.** Place MP grease in the palm of your hand.
- c. Pack grease into the steering knuckle arm bearing, continuing until the grease oozes out from the other side.
- **d.** Do the same around the bearing circumference.

5.INSTALL STEERING KNUCKLE LH

43212

- a. Place the 2 steering knuckle arm bearings in positions on the steering knuckle and front axle housing.
- **b.** Install the steering knuckle to the front axle housing assembly.

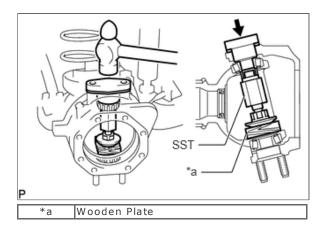
6.INSTALL STEERING KNUCKLE OIL SEAL SUB-ASSEMBLY

43204

a. Install a new steering knuckle outer oil seal, new steering knuckle inner oil seal and new steering knuckle oil seal inner ring to the steering knuckle.

7.TEMPORARILY INSTALL STEERING KNUCKLE BEARING CAP

43232



a. Using SST and wooden plate, support the upper bearing inner race.

SST

09606-60020

- **b.** Install the steering knuckle bearing cap over the used No. 1 steering knuckle adjust shim.
- **c.** Using a hammer, install the bearing cap into the bearing inner race.

8.TEMPORARILY INSTALL NO. 1 STEERING KNUCKLE ARM

45611G

a. Install a new steering knuckle king pin dust or ring seal to the No.1 steering knuckle arm.

b. *a *sst

Using SST and wooden plate, support the lower bearing inner race.

SST

09606-60020

- c. Using a hammer, install the No. 1 steering knuckle arm into the bearing inner race.
- d. Remove SST from the steering knuckle.

Wooden Plate

9.TEMPORARILY INSTALL NO. 2 STEERING KNUCKLE ARM

45612A

HINT:

Use the same procedure described for the No. 1 steering knuckle arm.

■ 10.INSTALL STEERING KNUCKLE BEARING CAP

43232

Install the steering knuckle bearing cap with the 2 bolts.

Torque:

96.1 N*m (980 kgf*cm, 71 ft.*lbf)

a. Install the No. 1 steering knuckle arm with the 4 cone washers and 4 nuts.

Torque:

123 N*m (1254 kgf*cm, 91 ft.*lbf)

■ 12.INSTALL NO. 2 STEERING KNUCKLE ARM

45612A

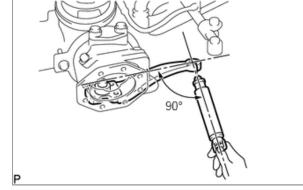
HINT:

Use the same procedure described for the No. 1 steering knuckle arm.

13.MEASURE BEARINGS PRELOAD

45611F

a.



Using a spring tension gauge, measure the preload.

Preload (at starting):

25 to 44 N (3 to 4 kgf, 5.6 to 9.9 lbf)

□ 14.ADJUST BEARINGS PRELOAD

45611F

- a. Remove the steering knuckle bearing cap and No. 1 steering knuckle adjust shim.
- **b.** Select the No. 1 steering knuckle adjust shim.

Adjusting Shim Thickness

Aaj	lajusting Snim i nickness:				
Th	nickness mm (in.)				
0.	1 (0.004)				
0.	2 (0.008)				
0.	5 (0.020)				
1.	0 (0.039)				

c. Install the steering knuckle bearing cap with the 2 bolts.

Torque:

96.1 N*m (980 kgf*cm, 71 ft.*lbf)

15.INSTALL STEERING KNUCKLE OIL SEAL COVER

43241

a. Install the 2 steering knuckle oil seal covers to the steering knuckle with the 6 bolts.

Torque:

5.4 N*m (55 kgf*cm, 48 in.*lbf)

a. Connect the tie rod end to the No. 1 steering knuckle arm with the nut.

Torque:

90.7 N*m (925 kgf*cm, 67 ft.*lbf)

NOTICE:

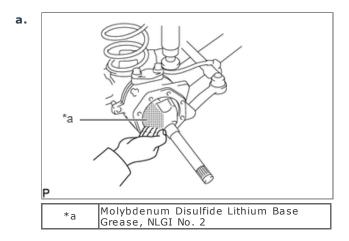
Tighten the nut up to an additional 60° if the holes for the cotter pin are not aligned.

b. Install a new cotter pin.

■ 17.INSTALL FRONT AXLE SHAFT ASSEMBLY

a. Position one flat part of the outer shaft upward and install the front axle shaft assembly.

18.PACK STEERING KNUCKLE WITH GREASE



Pack molybdenum disulfide lithium base grease, NLGI No. 2 into the steering knuckle to about 3 fourths of the steering knuckle.

19.INSTALL STEERING KNUCKLE SPINDLE SUB-ASSEMBLY

43401

- a. Place a new knuckle spindle gasket in position on the steering knuckle and install the knuckle spindle.
- **b.** Place the front disc brake dust cover, new front axle hub dust seal and a new knuckle spindle oil retainer gasket on the steering knuckle spindle.
- c. Install the 8 bolts.

Torque:

46.6 N*m (475 kgf*cm, 34 ft.*lbf)

20.CONNECT FRONT SPEED SENSOR LH (w/ ABS)

Connect the front speed sensor LH to the steering knuckle with the bolt.

Torque:

12.8 N*m (131 kgf*cm, 9 ft.*lbf)

21.INSTALL FRONT AXLE HUB SUB-ASSEMBLY LH

43502C

Click hereDrivetrain>AXLE AND DIFFERENTIAL>FRONT AXLE HUB>INSTALLATION

Click hereSuspension>ALIGNMENT / HANDLI	NG DIAGNOSIS>FRONT	I WHEEL ALIGNME	NI>ADJUSTMENT
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