

# Lithium Base Wheel Bearing Grease, NLGI No. 2 Z15221

#### INSTALLATION

#### 1. INSTALL OIL SEAL TO AXLE HOUSING

Using SST and a hammer, install a new oil seal into the axle housing.

SST09618 -60010

#### TEMPORALLY INSTALL OIL SEAL SET TO AXLE 2. HOUSING

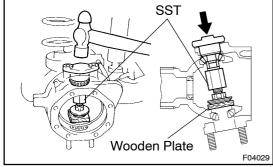
Place the felt dust seal, rubber seal and steel ring to the axle housing.

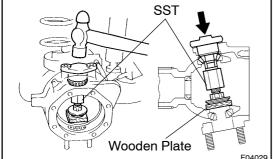
### 3. PACK BEARINGS WITH LITHIUM BASE WHEEL **BEARING GREASE, NLGI NO. 2**

- Place lithium base wheel bearing grease, NLGI No. 2 on your hand.
- (b) Pack grease into the bearing until the grease oozes out from the outer side.
- Do the same around the bearing circumference. (c)

#### **INSTALL STEERING KNUCKLE AND BEARINGS**

- (a) Place the bearings in positions on the knuckle and axle housing.
- (b) Install the knuckle on the axle housing.





Wooden Plate

SŠT

#### INSTALL KNUCKLE ARM AND BEARING CAP 5.

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

SST 09606 -60020

#### HINT:

Use the SST with a collar.

- Install the bearing cap over the used shim.
- Using a hammer, install the bearing cap into the bearing (c) inner race.
- Using SST and wooden plate, support the lower bearing (d) inner race.

SST 09606 -60020

#### HINT:

F04030

Use the SST with a collar.

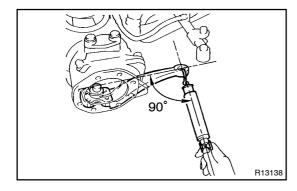
- Using a hammer, tap the knuckle arm and shim into bearing inner race.
- Remove the SST from the knuckle. (f)

(g) Install the 4 cone washers and nuts.

Torque: 96 N·m (980 kgf·cm, 7 1 ft·lbf)

(h) Install the 2 plate washers and bolts.

Torque: 96 N·m (980 kgf·cm, 7 1 ft·lbf)



#### 6. MEASURE BEARINGS PRELOAD

Using a spring tension gauge, measure the preload.

Preload (at starting):

25 - 44 N (2.5 - 4.5 kgf, 5.6 - 9.9 lbf)

- 7. ADJUST BEARING PRELOAD
- (a) Remove the bearing cap and knuckle arm.
- (b) Select the adjusting shim.

#### Adjusting shim thickness

Thickness mm (in.)	Thickness mm (in.)
0.1 (0.004)	0.5 (0.020)
0.2 (0.008)	1.0 (0.039)

(c) Install the bearing cap and knuckle arm.

#### 8. CONNECT TIE ROD TO KNUCKLE ARM

Torque the nut and secure it with a new cotter pin.

Torque: 9 1 N·m (925 kgf·cm, 67 ft·lbf)

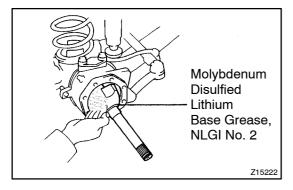
### 9. INSTALL OIL SEAL END RETAINER TO KNUCKLE ARM

Install the steel ring, rubber seal, felt dust seal and oil seal end retainer to steering knuckle with the 6 bolts.

Torque: 5.4 N·m (55 kgf·cm, 48 in.·lbf)

#### 10. INSTALL AXLE SHAFT

Position one flat part of the outer shaft upward and install the shaft.



## 11. PACK MOLYBDENUM DISULFIDE LITHIUM BASE GREASE, NLGI NO. 2

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

#### 12. INSTALL KNUCKLE SPINDLE, DUST COVER WITH **GASKETS AND DUST SEAL**

- Place a new gasket in position on the knuckle and install (a) the spindle.
- (b) Place the dust cover, dust seal and a new gasket on the spindle.
- Torque the 8 bolts. (c)

Torque: 47 N·m (475 kgf·cm, 34 ft·lbf)

13. w/ ABS:

#### **CONNECT ABS SPEED SENSOR**

Connect the ABS speed sensor and 2 bolts to the steering knuckle.

Torque: 8.0 N·m (82 kgf·cm, 71 in.·lbf)

- **INSTALL FRONT AXLE HUB (See page SA-18)**
- 15. CHECK FRONT WHEEL ALIGNMENT (See page SA-7)

16. w/ABS:

**CHECK ABS SPEED SENSOR SIGNAL** (See page DI-312)