

# IMPORTANT SERVICE INFORMATION FOR:

- ✓ SERVICE MANAGER
- ✓ SERVICE ADVISOR
- ✓ TECHNICIAN
- ✓ PARTS DEPARTMENT

BULLETIN NUMBER: **IB17-E-001** 

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GROUP: **STEERING** 

#### KINGPIN REPLACEMENT KIT INSTALLATION TIPS

#### **AFFECTED VEHICLES**

- 2008-2018MY Isuzu NPR HD/NPR XD/NQR/NRR 4HK1 Diesel
- 2008-2017MY Isuzu NPR/NPR Stripped Chassis (Reach) 4JJ1
   Diesel
- 2008-2017MY NPR/NPR HD Gasoline

#### **INFORMATION**

Isuzu N-Series vehicles utilize one of two different kingpin replacement kits, depending on vehicle models and the vehicle production date. It is important that the correct kingpin kit is selected and the parts within these kits are installed in the correct location and with the proper orientation.

#### **INSTRUCTIONS**

# **Choosing the Correct Kingpin Replacement Kit**

Refer to Chart 1 to select the correct kingpin replacement kit part number for the vehicle you are working on.

There are two (2) different part numbers for N-Series vehicles depending on the production date. The Stripped Chassis (Reach) utilizes one part number (5-87832-219-2) for the kingpin replacement kit for all model years.

Refer to the parts catalogue for vehicles produced prior to 2008.

Kingpin Kit Par	Kingpin Kit Part Number							
	5-87832-219-2							
	5-87832-220-4							

Series	Vehicle Production Date										
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
NRR											
NQR	Feb. 2014 Mar. 2014										
NPR XD	(2015MY) (2015MY)										
NPR HD											
NPR GAS						Feb. 2014 Mar. 2014					
NPR GAS HD		I	(2014MY) (2014MY)								
NPR Eco-Max							Oct. 2 (2015	X .	Nov. 20 (2016N		
NPR Strip Chassis											

Chart 1

## **Thrust Bearing Differences and Locations**

Vehicles that utilize the part number 5-87832-219-2 kingpin replacement kit have thrust bearings on both left and right sides that are the same thickness (13.8 mm). This kingpin replacement kit contains two new 13.8 mm thick thrust bearings.

Vehicles that utilize the part number 5-87832-220-4 kingpin replacement kit have two different thickness thrust bearings. The left (driver) side thrust bearing is 13.8 mm thick, whereas the right (passenger) side thrust bearing is 15.8 mm thick. This kingpin replacement kit contains a new 13.8 mm thick thrust bearing and a new 15.8 mm thick thrust bearing. It is imperative that the correct thickness bearings are installed on the correct side.

Refer to Chart 2 for clarification.

#### **Spacer Installation**

When installing the thinner (13.8 mm) thrust bearings, a 1.95 mm spacer *must* be installed on the top of each bearing (See Figure 1).

Vehicles that utilize part number 5-87832-219-2 (kingpin replacement kit) require two (2) 1.95mm spacers, one for each side (driver and passenger).

Vehicles that utilize part number 5-87832-220-4 (kingpin replacement kit) only need one (1) of the 1.95mm spacers. On these vehicles a spacer is not used on the right (passenger) side.

Refer to Chart 2 for clarification.

**IMPORTANT:** 1.95mm spacers (P/No. 8-94168-490-0) are not included in the kingpin kit. Dealerships must order these spacers separately.

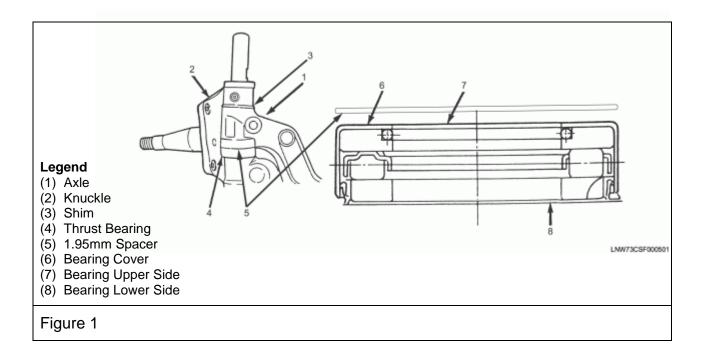




Chart 2

## **Thrust Bearing Installation Direction**

When the thrust bearings are installed, the seal on the bearing should be facing downward (See Figure 2).

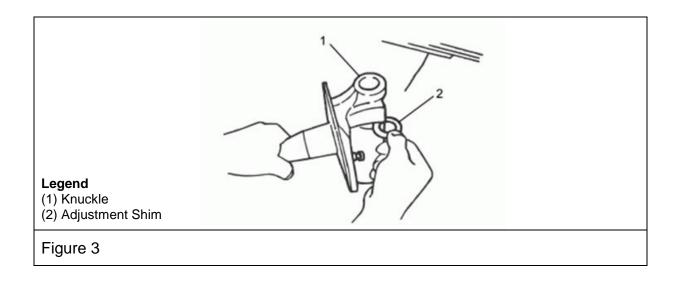


# **Shim Installation**

Shims are used to adjust the steering knuckle to axle clearance (See Figure 3). The shims are installed on the top of the axle as shown in Figure 3. Shims are available in different thicknesses. No more than two (2) shims should be installed (See figure 4 for an illustration of incorrect spacer and shim usage). Refer to the Workshop Manual (WSM) for further instructions and clearance specifications.

These shims are *not included* in the kingpin replacement kit. Isuzu recommends replacing these shims with new ones whenever the kingpin is replaced.

Refer to the parts catalogue for shim part numbers.



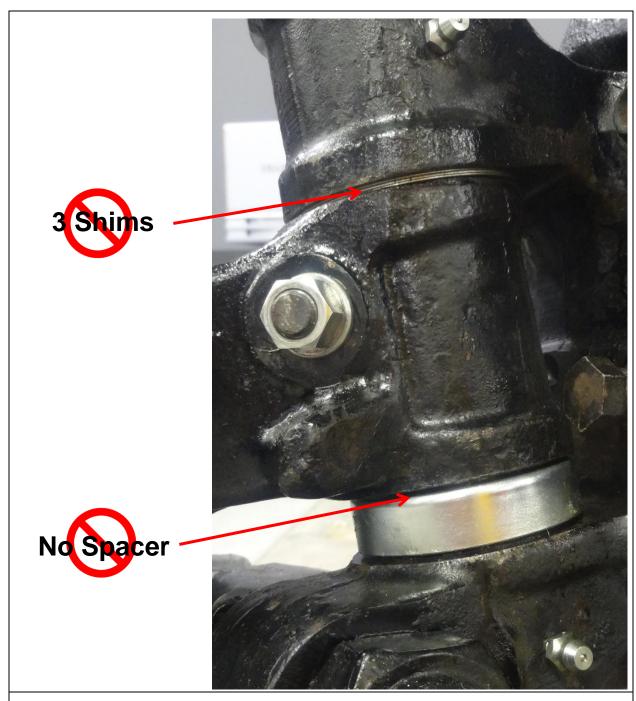
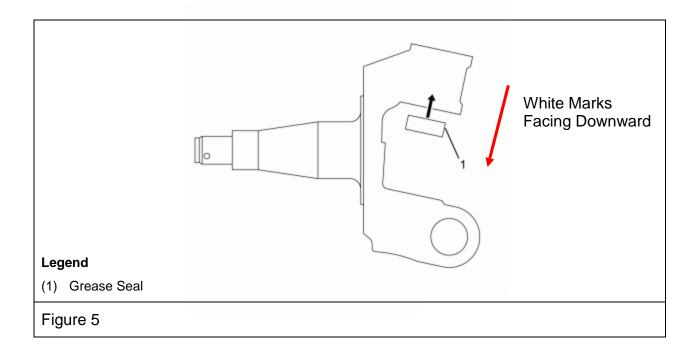


Figure 4

## **Grease Seal Installation**

The grease seals for the kingpins are installed in [GREY: "installed into" is awkward; if you want to use "into", then you probably need different phrasing – such as "...are to be inserted into"] the underside of the top flange of the steering knuckle (See Figure 5).



It is important to install these grease seals in the proper direction to allow grease to be discharged. Each seal has white marks on the downward side of the seal (See Figure 6).

**IMPORTANT:** Be sure to install these seals with the white marks facing down.



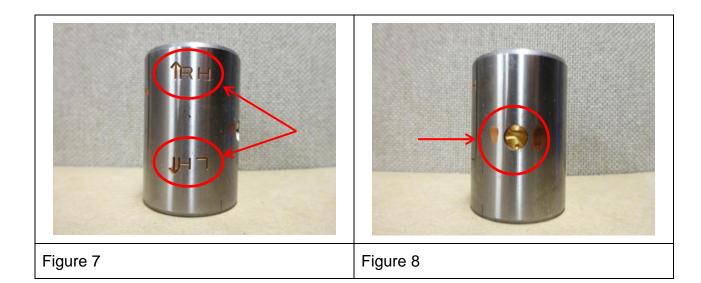
# **Kingpin Bushing Installation**

Each kingpin bushing must be installed in the proper direction. Therefore, all new bushings are clearly marked ↑ LH (for the left/driver side) and ↑ RH (for the right/passenger side) (See Figure 7). The arrows must be facing upwards for the applicable side when the bushings are installed.

Additionally, each bushing has a hole in the side (See Figure 8) that allows the entry of grease from the grease fitting installed on the steering knuckle. When installing the bushings, ensure that each hole in the bushing aligns with the grease fitting opening on the steering knuckle.

Use special tools grip CH 50439 and bushing repair tool CH 50440 (A) for removal of the kingpin bushings. Use special tools grip CH 50439 and bushing repair tool CH 50440 (A) and (B) for installation of the kingpin bushings.

Refer to the WSM for additional instructions.



### **Lower Sealing Plug Installation**

Before installing the kingpin sealing plug in the bottom of the knuckle, apply Three Bond 1215 (Isuzu Part Number 2-90067-710-0 or equivalent) to the sealing plug.

Refer to Information Bulletin IB13-E-002.

# **Grease Fittings Installation**

Over time grease fittings can become clogged with debris and dried grease. Therefore, kingpin kits all come with four (4) new grease fittings. Make sure to replace all four (two on each side) grease fittings with the new fittings.

# **Lubricating the Kingpins**

When the installation of the kingpins is completed, use a grease gun to inject grease at each of the four (4) grease fittings. Continue to inject grease until new grease is seen in a complete circle around each kingpin upper sealing plug and at each pivot point (two per side) (See Figure 9).

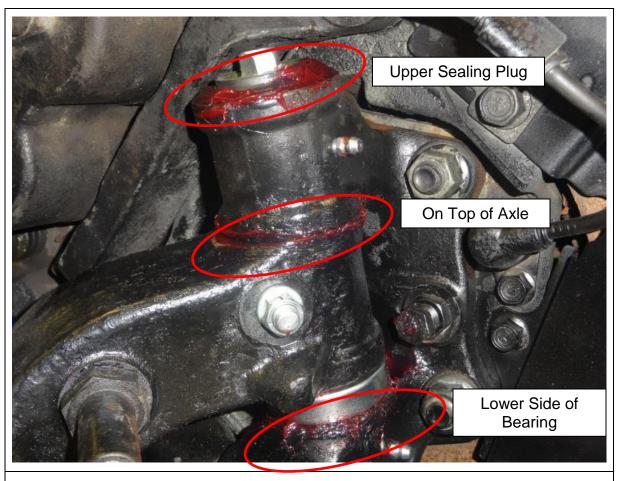


Figure 9