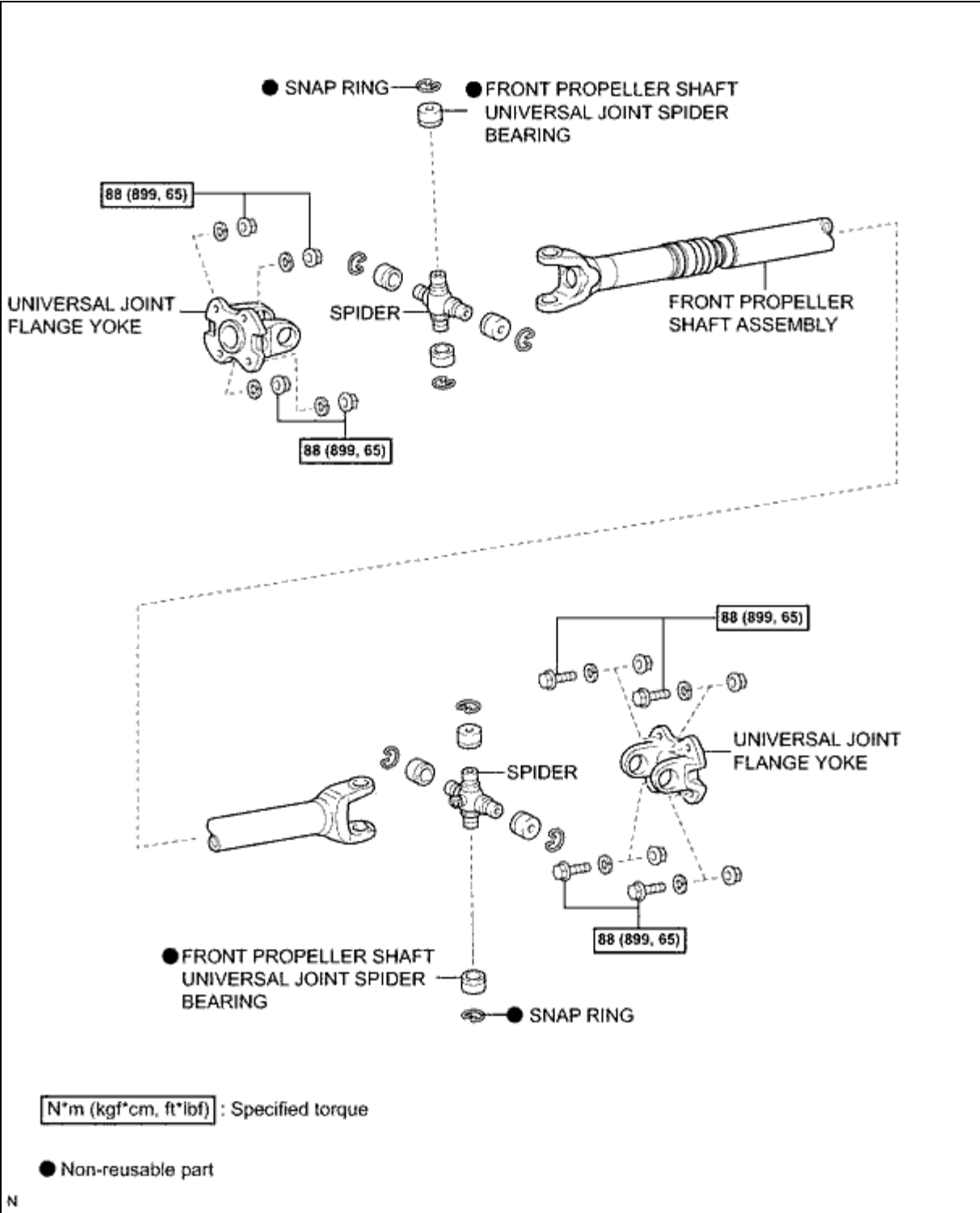


|                                                                                                                         |                      |                                          |
|-------------------------------------------------------------------------------------------------------------------------|----------------------|------------------------------------------|
| <b>Last Modified:</b> 11-13-2015                                                                                        | 6.6 K                | <b>Doc ID:</b> RM0000016SJ00AX           |
| <b>Model Year Start:</b> 2016                                                                                           | <b>Model:</b> Tacoma | <b>Prod Date Range:</b> [08/2015 -     ] |
| <b>Title:</b> PROPELLER SHAFT: FRONT PROPELLER SHAFT ASSEMBLY (for 4WD): COMPONENTS; 2016 MY Tacoma<br>[08/2015 -     ] |                      |                                          |

COMPONENTS

ILLUSTRATION





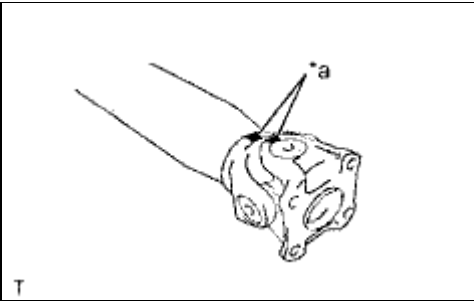
|                                                                                                                          |                      |                                          |
|--------------------------------------------------------------------------------------------------------------------------|----------------------|------------------------------------------|
| <b>Last Modified:</b> 11-13-2015                                                                                         | 6.6 A                | <b>Doc ID:</b> RM0000016SL00AX           |
| <b>Model Year Start:</b> 2016                                                                                            | <b>Model:</b> Tacoma | <b>Prod Date Range:</b> [08/2015 -     ] |
| <b>Title:</b> PROPELLER SHAFT: FRONT PROPELLER SHAFT ASSEMBLY (for 4WD): DISASSEMBLY; 2016 MY Tacoma<br>[08/2015 -     ] |                      |                                          |

DISASSEMBLY

1. INSPECT FRONT PROPELLER SHAFT UNIVERSAL JOINT SPIDER BEARING

- (a) Check the spider bearings for wear and damage.
- (b) Check each spider bearing's axial play by turning the yoke while holding the shaft tightly.  
Maximum bearing axial play:  
0 to 0.05 mm (0 to 0.002 in.)

2. REMOVE FRONT PROPELLER SHAFT UNIVERSAL JOINT SPIDER BEARING

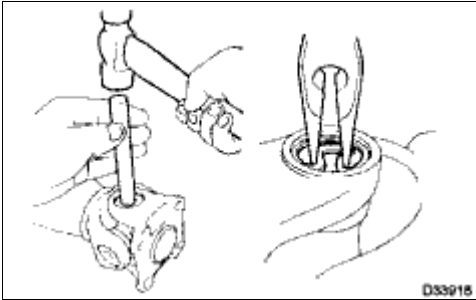


- (a) Place matchmarks on the propeller shaft and flange yoke.

Text in Illustration

|    |           |
|----|-----------|
| *a | Matchmark |
|----|-----------|

- (b) Using a brass bar and a hammer, slightly tap in the spider bearing outer races.

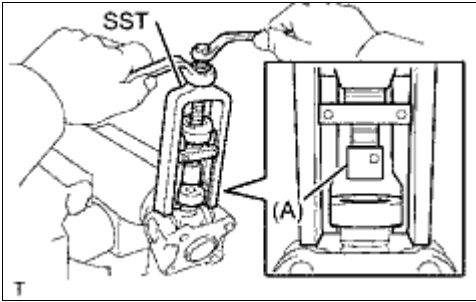


- (c) Using needle-nose pliers, remove the 4 snap rings from the grooves.

- (d) Using SST, push the spider bearing out of the propeller shaft.

SST: 09332-25010

**HINT:**  
Sufficiently raise the part indicated by (A) so that it does not come into contact with the spider bearing.



- (e) Clamp the spider bearing outer race in a vise and tap off the propeller shaft with a hammer.

**HINT:**

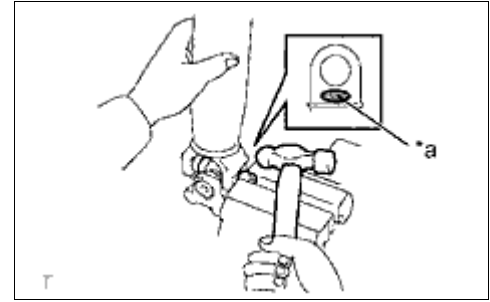
Remove the bearing on the opposite side in the same procedure.

**Text in Illustration**

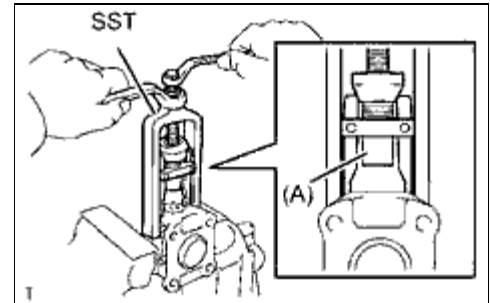
|    |                 |
|----|-----------------|
| *a | Hammering Point |
|----|-----------------|

**NOTICE:**

Do not tap the shaft.



- (f) Install the 2 removed spider bearing outer races onto the spider, and clamp them in a vise.



- (g) Using SST, push the bearing out of the yoke.

**SST: 09332-25010**

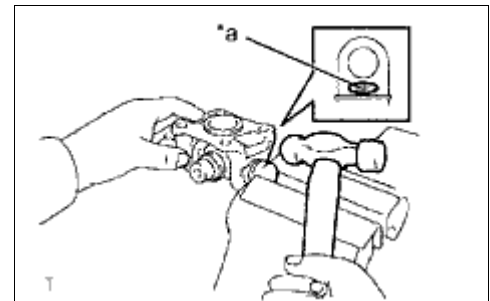
**HINT:**

Sufficiently raise the part indicated by (A) so that it does not come into contact with the bearing.

- (h) Clamp the outer bearing race in a vise and tap off the flange yoke with a hammer.

**Text in Illustration**

|    |                 |
|----|-----------------|
| *a | Hammering Point |
|----|-----------------|



- (i) Remove the spider.



|                                                                                                                         |                      |                                          |
|-------------------------------------------------------------------------------------------------------------------------|----------------------|------------------------------------------|
| <b>Last Modified:</b> 11-13-2015                                                                                        | 6.6 G                | <b>Doc ID:</b> RM0000016SI00AX           |
| <b>Model Year Start:</b> 2016                                                                                           | <b>Model:</b> Tacoma | <b>Prod Date Range:</b> [08/2015 -     ] |
| <b>Title:</b> PROPELLER SHAFT: FRONT PROPELLER SHAFT ASSEMBLY (for 4WD): INSPECTION; 2016 MY Tacoma<br>[08/2015 -     ] |                      |                                          |

**INSPECTION**

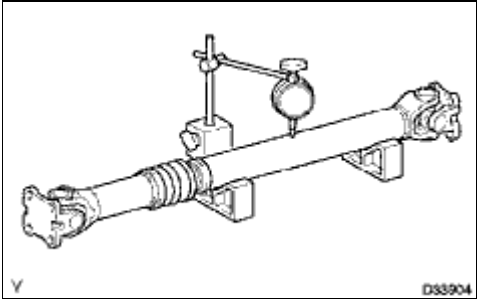
**1. INSPECT FRONT PROPELLER SHAFT ASSEMBLY**

(a) Using a dial indicator, check the propeller shaft runout.

Maximum runout:

0.6 mm (0.024 in.)

If the shaft runout is greater than the maximum, replace the propeller shaft.

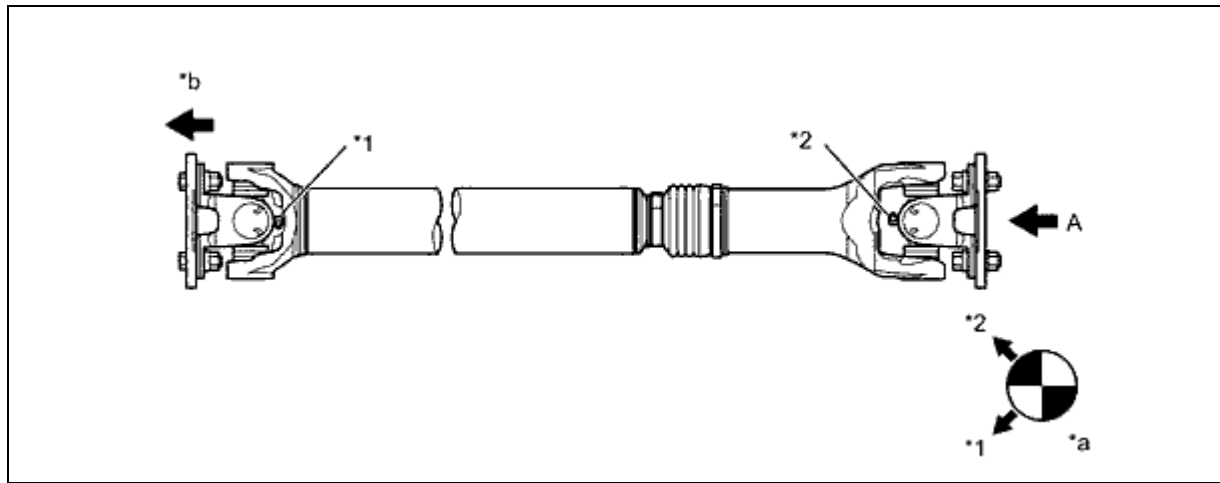


|                                                                                                                        |                      |                                          |
|------------------------------------------------------------------------------------------------------------------------|----------------------|------------------------------------------|
| <b>Last Modified:</b> 11-13-2015                                                                                       | 6.6 A                | <b>Doc ID:</b> RM0000016SH00AX           |
| <b>Model Year Start:</b> 2016                                                                                          | <b>Model:</b> Tacoma | <b>Prod Date Range:</b> [08/2015 -     ] |
| <b>Title:</b> PROPELLER SHAFT: FRONT PROPELLER SHAFT ASSEMBLY (for 4WD): INSTALLATION; 2016 MY Tacoma [08/2015 -     ] |                      |                                          |

INSTALLATION

1. INSPECT FRONT PROPELLER SHAFT ASSEMBLY

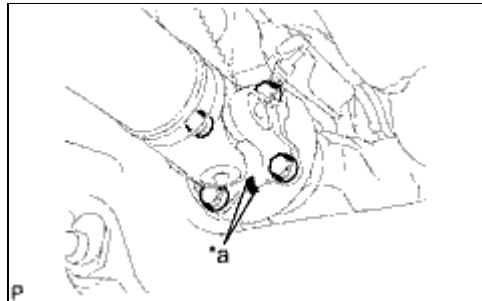
**HINT:**  
When replacing the spider bearing, make sure that the grease fitting assembly hole is facing in the direction shown in the illustration.



Text in Illustration

|    |                      |    |                      |
|----|----------------------|----|----------------------|
| *1 | No. 1 Grease Fitting | *2 | No. 2 Grease Fitting |
| *a | View A               | *b | Front Side           |

2. INSTALL FRONT PROPELLER SHAFT ASSEMBLY



(a) Align the matchmarks on the propeller shaft flange and differential flange.

Text in Illustration

|    |           |
|----|-----------|
| *a | Matchmark |
|----|-----------|

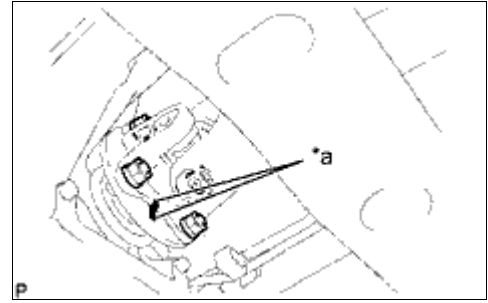
(b) Install the propeller shaft with the 4 bolts, 4 nuts and 4 washers.

**Torque:**  
88 N·m {899 kgf·cm, 65ft·lbf}

- (c) Align the matchmarks on the propeller shaft flange and transfer flange.

**Text in Illustration**

|    |           |
|----|-----------|
| *a | Matchmark |
|----|-----------|



- (d) Install the propeller shaft with the 4 nuts and 4 washers.

**Torque:**

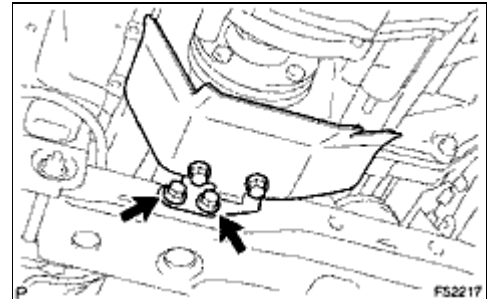
**88 N·m {899 kgf·cm, 65ft·lbf}**

**3. INSTALL PROPELLER SHAFT HEAT INSULATOR BRACKET SUB-ASSEMBLY**

- (a) Install the propeller shaft heat insulator bracket with the 2 bolts.

**Torque:**

**16 N·m {160 kgf·cm, 12ft·lbf}**



**4. INSTALL FRONT NO. 2 EXHAUST PIPE ASSEMBLY (for 2GR-FKS)**

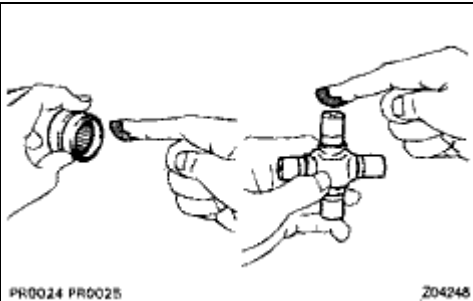
INFO



|                                                                                                                  |                      |                                      |
|------------------------------------------------------------------------------------------------------------------|----------------------|--------------------------------------|
| <b>Last Modified:</b> 11-13-2015                                                                                 | 6.6 A                | <b>Doc ID:</b> RM0000016SM00AX       |
| <b>Model Year Start:</b> 2016                                                                                    | <b>Model:</b> Tacoma | <b>Prod Date Range:</b> [08/2015 - ] |
| <b>Title:</b> PROPELLER SHAFT: FRONT PROPELLER SHAFT ASSEMBLY (for 4WD): REASSEMBLY; 2016 MY Tacoma [08/2015 - ] |                      |                                      |

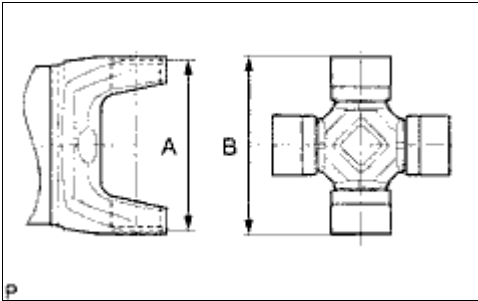
REASSEMBLY

1. INSTALL FRONT PROPELLER SHAFT UNIVERSAL JOINT SPIDER BEARING



- (a) Apply MP grease to a new spider and spider bearing.
- (b) Fit the spider into the flange yoke.

- (c) Measure dimension A between the snap ring grooves.



- (d) Insert the spider bearing into the spider journal portion, and then measure dimension B of the universal joint.

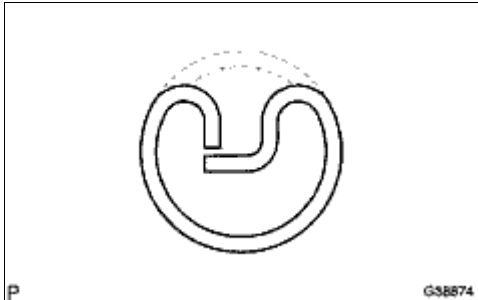
NOTICE:

When measuring dimension B, fix the spider and needle roller bearings in a vise and hold them firmly together.

- (e) Select snap rings to make dimensions A and B the same.

Snap Ring Type:

| COLOR  | THICKNESS MM (IN.) |
|--------|--------------------|
| Green  | 1.384 (0.0545)     |
| Red    | 1.435 (0.0565)     |
| Black  | 1.486 (0.0585)     |
| Copper | 1.511 (0.0595)     |
| Silver | 1.537 (0.0605)     |
| Yellow | 1.588 (0.0625)     |



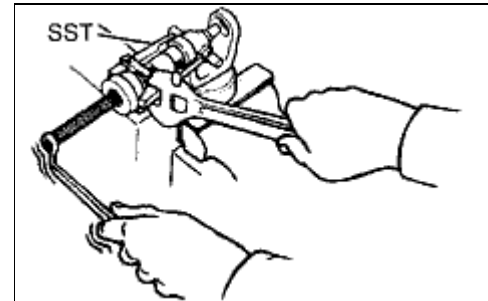
| COLOR | THICKNESS MM (IN.) |
|-------|--------------------|
| Blue  | 1.638 (0.0645)     |

**NOTICE:**

- Use new snap rings.
- If possible, use snap rings of the same thickness for both edges.

- (f) Insert the spider into the yoke, and then using SST, press in the spider bearing into the snap ring groove.

**SST: 09332-25010**

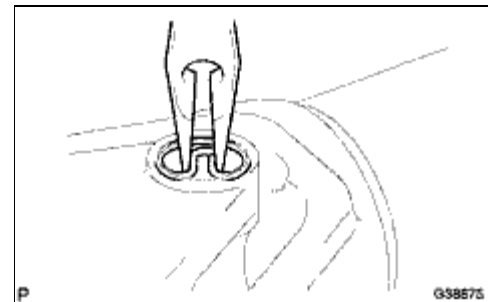


- (g) Press in the spider bearing on the opposite side in the same way.

**NOTICE:**

When pressing in the spider bearing, be careful not to damage its lip.

- (h) Using needle-nose pliers, install new snap rings into the grooves of the yoke.



## 2. INSPECT FRONT PROPELLER SHAFT UNIVERSAL JOINT SPIDER BEARING

- (a) Check the spider bearings for wear and damage.
- (b) Check each spider bearing's axial play by turning the yoke while holding the shaft tightly.

Maximum bearing axial play:  
0 to 0.05 mm (0 to 0.002 in.)



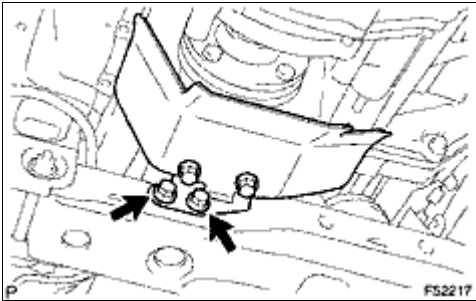
|                                                                                                                  |                      |                                      |
|------------------------------------------------------------------------------------------------------------------|----------------------|--------------------------------------|
| <b>Last Modified:</b> 11-13-2015                                                                                 | 6.6 A                | <b>Doc ID:</b> RM0000016SK00AX       |
| <b>Model Year Start:</b> 2016                                                                                    | <b>Model:</b> Tacoma | <b>Prod Date Range:</b> [08/2015 - ] |
| <b>Title:</b> PROPELLER SHAFT: FRONT PROPELLER SHAFT ASSEMBLY (for 4WD): REMOVAL; 2016 MY Tacoma<br>[08/2015 - ] |                      |                                      |

REMOVAL

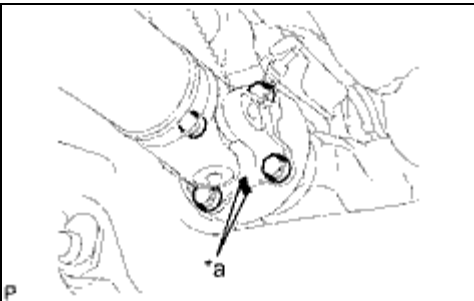
1. REMOVE FRONT NO. 2 EXHAUST PIPE ASSEMBLY (for 2GR-FKS) INFO

2. REMOVE PROPELLER SHAFT HEAT INSULATOR BRACKET SUB-ASSEMBLY

- (a) Remove the 2 bolts and propeller shaft heat insulator bracket.



3. REMOVE FRONT PROPELLER SHAFT ASSEMBLY



- (a) Place matchmarks on the propeller shaft flange and differential flange.

Text in Illustration

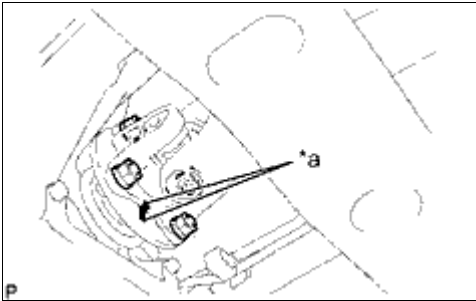
|    |           |
|----|-----------|
| *a | Matchmark |
|----|-----------|

- (b) Remove the 4 nuts, 4 bolts, 4 washers and front propeller shaft.

- (c) Place matchmarks on the propeller shaft flange and transfer flange.

Text in Illustration

|    |           |
|----|-----------|
| *a | Matchmark |
|----|-----------|



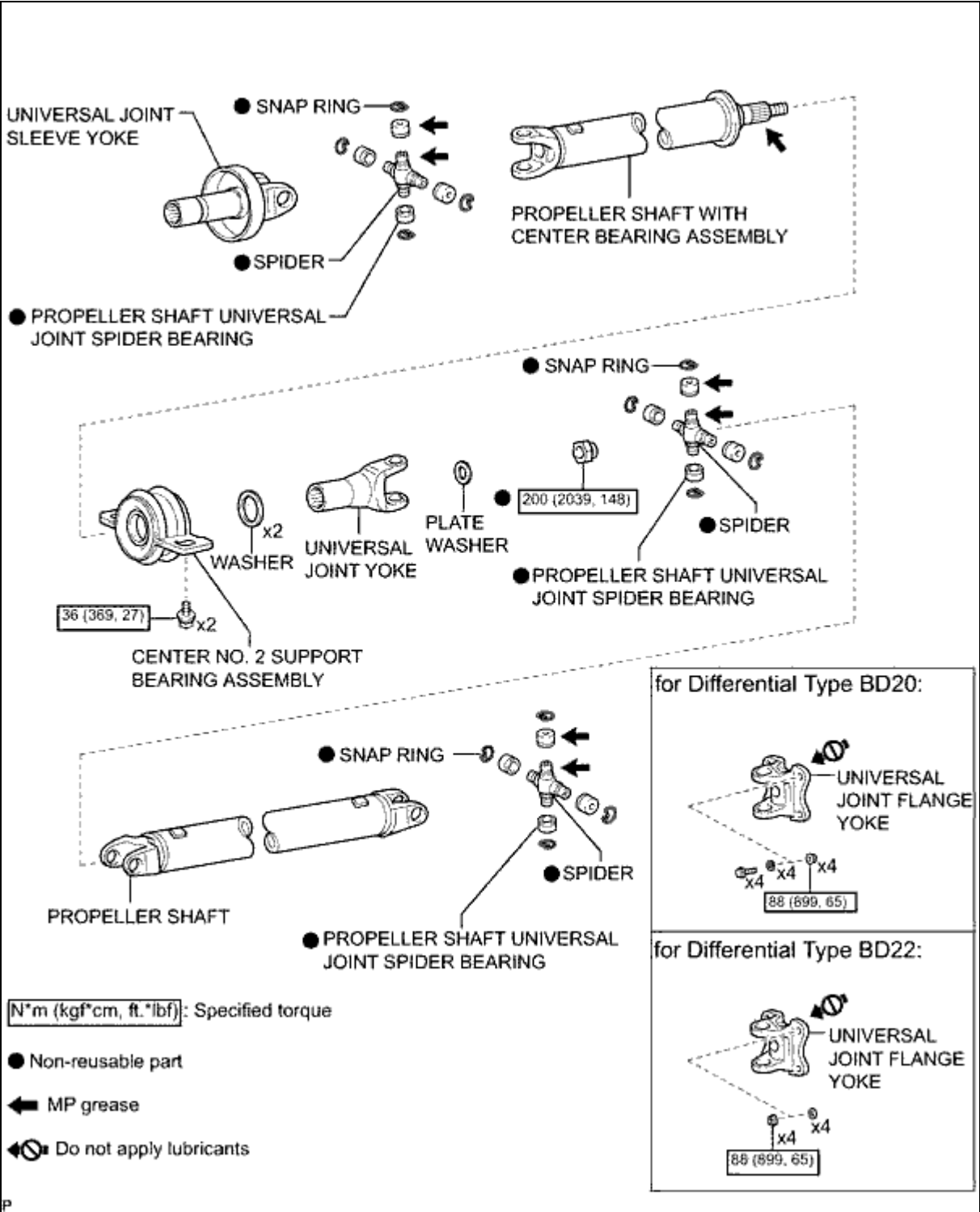
- (d) Remove the 4 nuts, 4 washers and front propeller shaft.



|                                                                                                                |                      |                                          |
|----------------------------------------------------------------------------------------------------------------|----------------------|------------------------------------------|
| <b>Last Modified:</b> 11-13-2015                                                                               | 6.6 K                | <b>Doc ID:</b> RM0000016SV00CX           |
| <b>Model Year Start:</b> 2016                                                                                  | <b>Model:</b> Tacoma | <b>Prod Date Range:</b> [08/2015 -     ] |
| <b>Title:</b> PROPELLER SHAFT: PROPELLER SHAFT ASSEMBLY (for 2WD): COMPONENTS; 2016 MY Tacoma [08/2015 -     ] |                      |                                          |

COMPONENTS

ILLUSTRATION





|                                                                                                             |                      |                                      |
|-------------------------------------------------------------------------------------------------------------|----------------------|--------------------------------------|
| <b>Last Modified:</b> 11-13-2015                                                                            | 6.6 A                | <b>Doc ID:</b> RM0000016SX00CX       |
| <b>Model Year Start:</b> 2016                                                                               | <b>Model:</b> Tacoma | <b>Prod Date Range:</b> [08/2015 - ] |
| <b>Title:</b> PROPELLER SHAFT: PROPELLER SHAFT ASSEMBLY (for 2WD): DISASSEMBLY; 2016 MY Tacoma [08/2015 - ] |                      |                                      |

## DISASSEMBLY

### 1. INSPECT PROPELLER SHAFT UNIVERSAL JOINT SPIDER BEARING

- (a) Check the spider bearings for wear and damage.
- (b) Check each spider bearings axial play by turning the yoke while holding the shaft tightly.

Maximum bearing axial play:  
0 to 0.05 mm (0 to 0.00197 in.)

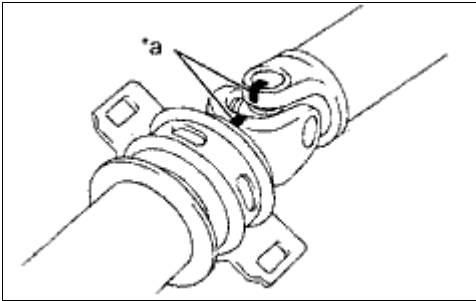
If the bearing axial play is greater than the maximum, replace the spider bearing.

### 2. REMOVE PROPELLER SHAFT UNIVERSAL JOINT SPIDER BEARING

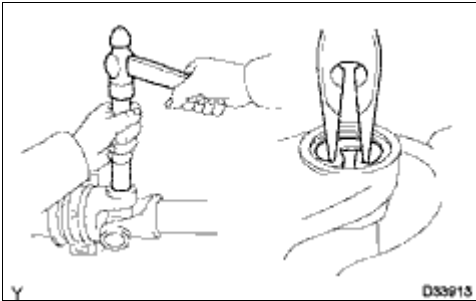
- (a) Place matchmarks on the propeller shaft and universal joint yoke.

#### Text in Illustration

|    |           |
|----|-----------|
| *a | Matchmark |
|----|-----------|



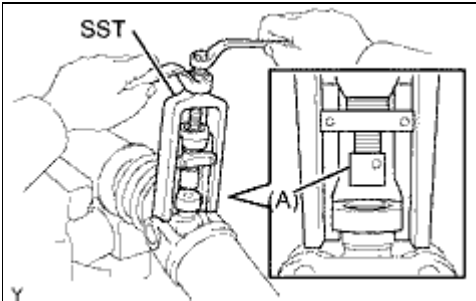
- (b) Using a brass bar and hammer, slightly tap in the spider bearing outer races.



- (c) Using needle-nose pliers, remove the 4 snap rings from the grooves.

- (d) Clamp the propeller shaft in a vise between aluminum plates.

**NOTICE:**  
Do not overtighten the vise.



- (e) Using SST, push the spider bearing out of the propeller shaft.

**SST: 09332-25010**

**HINT:**

Sufficiently raise the part indicated by (A) so that it does not come into contact with the spider bearing.

- (f) Clamp the pushed out spider bearing outer race in a vise and tap the propeller shaft to remove the spider bearing.

**Text in Illustration**

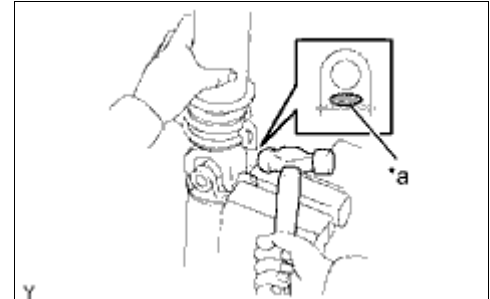
|    |                 |
|----|-----------------|
| *a | Hammering Point |
|----|-----------------|

**NOTICE:**

Do not tap the shaft.

**HINT:**

Remove the spider bearing from the opposite side of the spider using the same procedure.

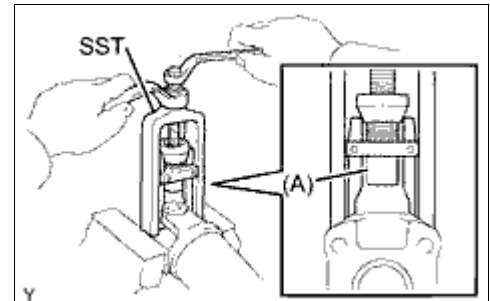


- (g) Separate the propeller with center No. 2 support bearing assembly from the propeller shaft assembly.

- (h) Reinstall the 2 removed spider bearings to the spider and clamp the spider bearings in a vise.

**NOTICE:**

Do not overtighten the vise.



- (i) Using SST, push the spider bearing out of the yoke.

**SST: 09332-25010**

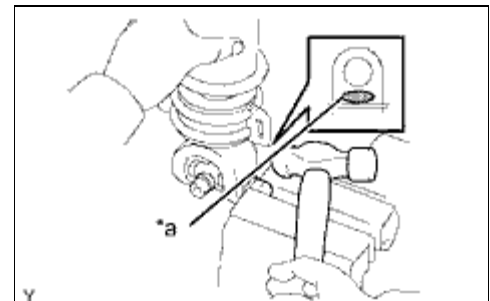
**HINT:**

Sufficiently raise the part indicated by (A) so that it does not come into contact with the spider bearing.

- (j) Clamp the pushed out spider bearing outer race in a vise and tap off the yoke with a hammer.

**Text in Illustration**

|    |                 |
|----|-----------------|
| *a | Hammering Point |
|----|-----------------|



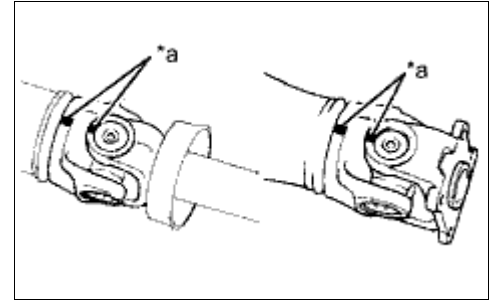
- (k) Remove the spider.

**3. REMOVE PROPELLER SHAFT UNIVERSAL JOINT SPIDER BEARING**

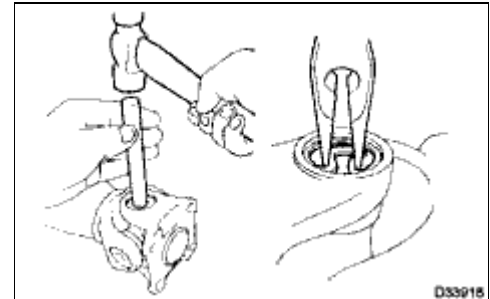
(a) Place matchmarks on the flange yoke and sleeve yoke.

**Text in Illustration**

|    |           |
|----|-----------|
| *a | Matchmark |
|----|-----------|



(b) Using a brass bar and hammer, slightly tap in the spider bearing outer races.

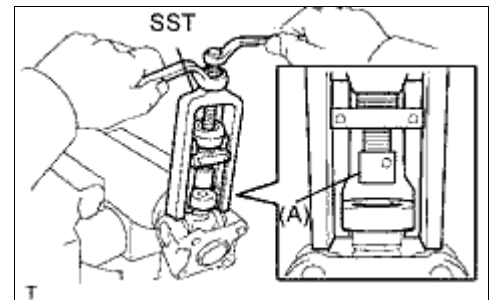


(c) Using needle-nose pliers, remove the 4 snap rings from the grooves.

(d) Clamp the propeller shaft in a vise between aluminum plates.

**NOTICE:**

Do not overtighten the vise.



(e) Using SST, push the spider bearing out of the propeller shaft.

**SST: 09332-25010**

**HINT:**

Sufficiently raise the part indicated by (A) so that it does not come into contact with the spider bearing.

(f) Clamp the pushed out spider bearing outer race in a vise and tap the propeller shaft to remove the spider bearing.

**Text in Illustration**

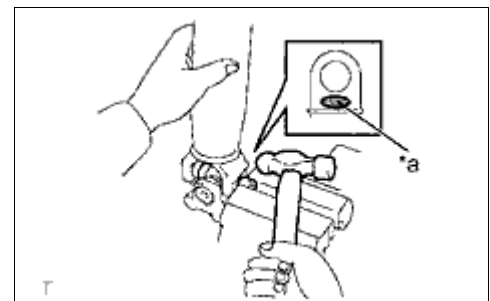
|    |                 |
|----|-----------------|
| *a | Hammering Point |
|----|-----------------|

**NOTICE:**

Do not tap the shaft tube.

**HINT:**

Remove the spider bearing from the opposite side of the spider using the same procedure.

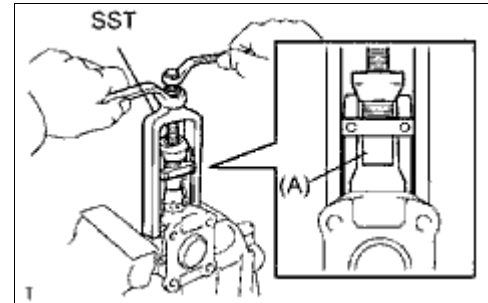


(g) Separate the flange yoke and spider from the propeller shaft.

- (h) Reinstall the 2 removed spider bearings to the spider and clamp the spider bearings in a vise.

**NOTICE:**

Do not overtighten the vise.



- (i) Using SST, push the spider bearing out of the yoke.

**SST: 09332-25010**

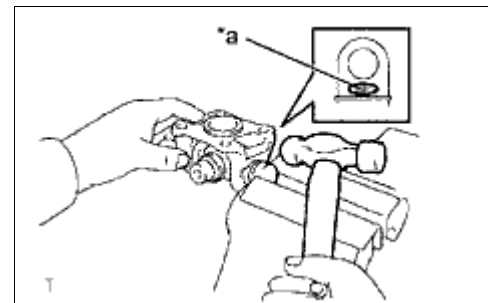
**HINT:**

Sufficiently raise the part indicated by (A) so that it does not come into contact with the spider bearing.

- (j) Clamp the pushed out spider bearing outer race in a vise and tap off the yoke with a hammer.

**Text in Illustration**

|    |                 |
|----|-----------------|
| *a | Hammering Point |
|----|-----------------|



- (k) Remove the spider.

**4. REMOVE CENTER NO. 2 SUPPORT BEARING ASSEMBLY**

- (a) Fix the yoke at the center No. 2 support bearing assembly section in a vise between aluminum plates.

**NOTICE:**

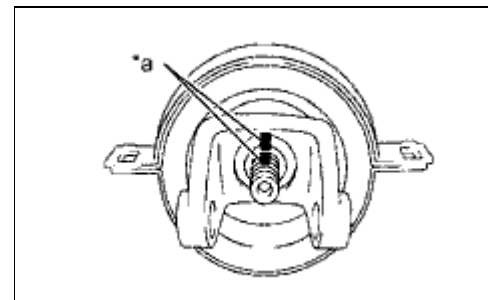
Do not overtighten the vise.

- (b) Using a chisel and a hammer, loosen the staked part of the lock nut.  
(c) Remove the lock nut and plate washer.

- (d) Place matchmarks on the universal joint yoke and propeller shaft with center bearing assembly.

**Text in Illustration**

|    |           |
|----|-----------|
| *a | Matchmark |
|----|-----------|



- (e) Using a brass bar and hammer, remove the universal joint yoke, washer and center No. 2 support bearing assembly from the propeller shaft with center bearing assembly.



|                                                                                                            |                      |                                      |
|------------------------------------------------------------------------------------------------------------|----------------------|--------------------------------------|
| <b>Last Modified:</b> 11-13-2015                                                                           | 6.6 G                | <b>Doc ID:</b> RM0000016SU00CX       |
| <b>Model Year Start:</b> 2016                                                                              | <b>Model:</b> Tacoma | <b>Prod Date Range:</b> [08/2015 - ] |
| <b>Title:</b> PROPELLER SHAFT: PROPELLER SHAFT ASSEMBLY (for 2WD): INSPECTION; 2016 MY Tacoma [08/2015 - ] |                      |                                      |

## INSPECTION

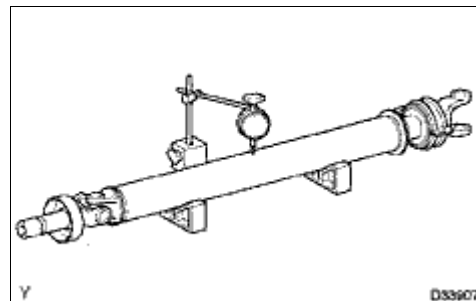
### 1. INSPECT PROPELLER SHAFT WITH CENTER BEARING ASSEMBLY

- (a) Using a dial indicator, check the propeller shaft with center bearing assembly runout.

Maximum runout:

0.6 mm (0.0236 in.)

If the propeller shaft with center bearing assembly runout is greater than the maximum, replace the propeller shaft with center bearing assembly.



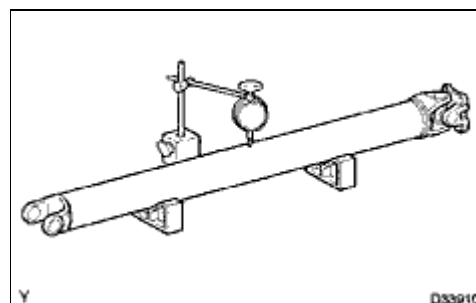
### 2. INSPECT PROPELLER SHAFT

- (a) Using a dial indicator, check the propeller shaft runout.

Maximum runout:

0.6 mm (0.0236 in.)

If the propeller shaft runout is greater than the maximum, replace the propeller shaft.



|                                                                                                                  |                      |                                          |
|------------------------------------------------------------------------------------------------------------------|----------------------|------------------------------------------|
| <b>Last Modified:</b> 11-13-2015                                                                                 | 6.6 A                | <b>Doc ID:</b> RM0000016ST00CX           |
| <b>Model Year Start:</b> 2016                                                                                    | <b>Model:</b> Tacoma | <b>Prod Date Range:</b> [08/2015 -     ] |
| <b>Title:</b> PROPELLER SHAFT: PROPELLER SHAFT ASSEMBLY (for 2WD): INSTALLATION; 2016 MY Tacoma [08/2015 -     ] |                      |                                          |

**INSTALLATION**

**1. INSTALL PROPELLER SHAFT WITH CENTER BEARING ASSEMBLY**

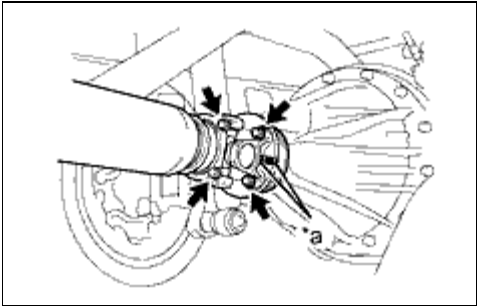


- (a) Remove SST from the extension housing.
- (b) Install the propeller shaft to the extension housing.
- (c) Completely remove any oil or the like and clean the contact surfaces of the propeller shaft flange and differential flange.

- (d) Align the matchmarks on the propeller shaft flange and differential flange.

**Text in Illustration**

|    |           |
|----|-----------|
| *a | Matchmark |
|----|-----------|



- (e) for Differential Type BD20:
  - (1) Install the propeller shaft with the 4 bolts, 4 washers and 4 nuts.

**Torque:**  
**88 N·m {899 kgf·cm, 65ft·lbf}**

- (f) for Differential Type BD22:
  - (1) Install the propeller shaft with the 4 washers and 4 nuts.

**Torque:**  
**88 N·m {899 kgf·cm, 65ft·lbf}**

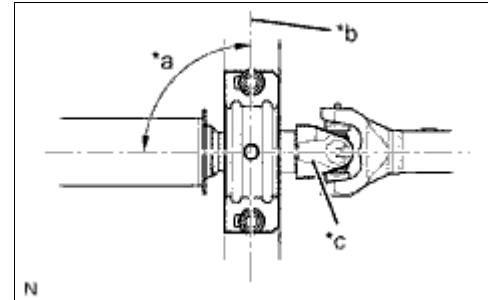
- (g) Temporarily install the center No. 2 support bearing assembly with the 2 bolts.

#### Text in Illustration

|    |                       |
|----|-----------------------|
| *a | 90°                   |
| *b | Bracket Center Line   |
| *c | Shaft Axial Direction |

#### HINT:

Make sure the bearing is installed with the drain hole facing downwards.



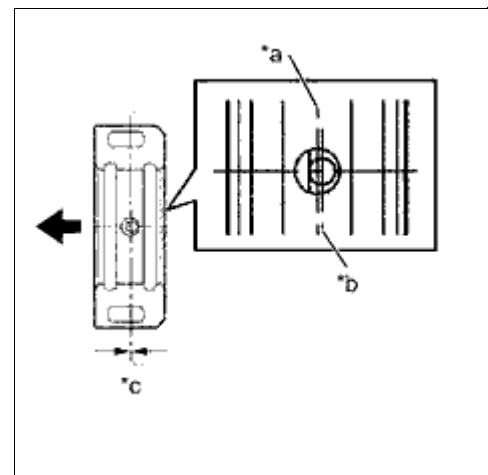
- (h) Adjust the center No. 2 support bearing assembly.

#### Text in Illustration

|    |                                        |
|----|----------------------------------------|
| *a | Center Bearing Center Line             |
| *b | Center Bearing Housing Center Line     |
| *c | -1.0 to 1.0 mm (-0.0394 to 0.0394 in.) |

#### HINT:

- With the vehicle unladen, adjust the center No. 2 support bearing assembly to keep the intervals, as shown.
- In the same condition, check the center line in the axial direction. Adjust the bearing if necessary.
- The center bearing center line and center bearing housing center line must be adjusted to within -1.0 to 1.0 mm (-0.0394 to 0.0394 in.) of each other in the vehicle's longitudinal direction when the vehicle is unladen.



- (i) Tighten the 2 bolts.

#### Torque:

**36 N·m {369 kgf·cm, 27ft·lbf}**

## 2. INSPECT FOR TRANSMISSION OIL LEAK

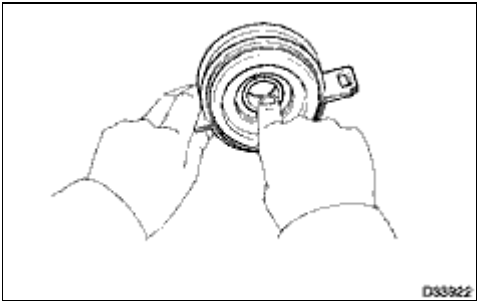


|                                                                                                                |                      |                                          |
|----------------------------------------------------------------------------------------------------------------|----------------------|------------------------------------------|
| <b>Last Modified:</b> 11-13-2015                                                                               | 6.6 A                | <b>Doc ID:</b> RM0000016SY00CX           |
| <b>Model Year Start:</b> 2016                                                                                  | <b>Model:</b> Tacoma | <b>Prod Date Range:</b> [08/2015 -     ] |
| <b>Title:</b> PROPELLER SHAFT: PROPELLER SHAFT ASSEMBLY (for 2WD): REASSEMBLY; 2016 MY Tacoma [08/2015 -     ] |                      |                                          |

**REASSEMBLY**

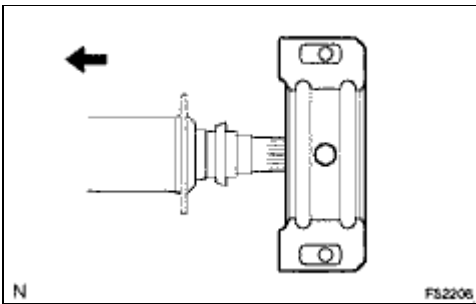
**1. INSPECT CENTER NO. 2 SUPPORT BEARING ASSEMBLY**

- (a) When turning the center No. 2 support bearing assembly with your hand, check that it turns smoothly without catching and that there are no cracks or damage.  
If there are any defects, replace it.



**2. INSTALL CENTER NO. 2 SUPPORT BEARING ASSEMBLY**

- (a) Install the center No. 2 support bearing assembly to the propeller shaft with center bearing assembly.



**Text in Illustration**

|                                                                                     |       |
|-------------------------------------------------------------------------------------|-------|
|  | Front |
|-------------------------------------------------------------------------------------|-------|

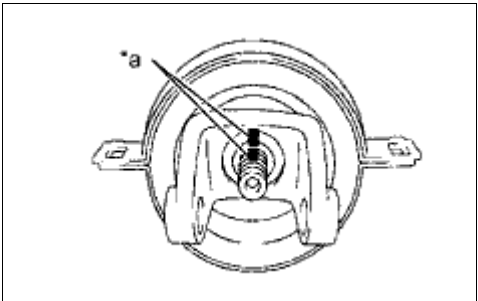
- (b) Coat the splines of the propeller shaft with center bearing assembly with MP grease.
- (c) Install the 2 washers.
- (d) Align the matchmarks on the universal joint yoke and propeller shaft with center bearing assembly.

**Text in Illustration**

|    |           |
|----|-----------|
| *a | Matchmark |
|----|-----------|

**HINT:**

If replacing either the universal joint yoke or propeller shaft with center bearing assembly, assemble them so that the front side yoke of the propeller shaft with center bearing assembly and the universal joint yoke are facing in the same direction.



- (e) Install the plate washer.

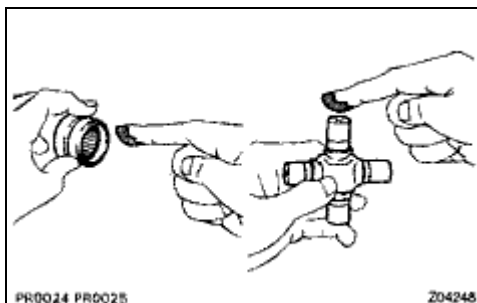
(f) Clamp the universal joint yoke in a vise, and press the bearing into position by tightening a new nut.

**Torque:**

**200 N·m {2038 kgf·cm, 148ft·lbf}**

(g) Using a chisel and hammer, stake the lock nut.

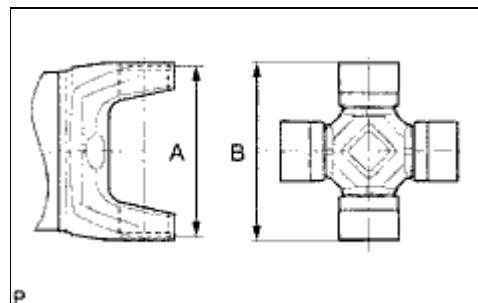
### 3. INSTALL PROPELLER SHAFT UNIVERSAL JOINT SPIDER BEARING



(a) Apply MP grease to a new spider and bearings.

(b) Fit the spider into the flange yoke.

(c) Measure dimension A between the snap ring grooves.



(d) Insert the spider bearing into the spider journal portion, and then measure dimension B of the universal joint.

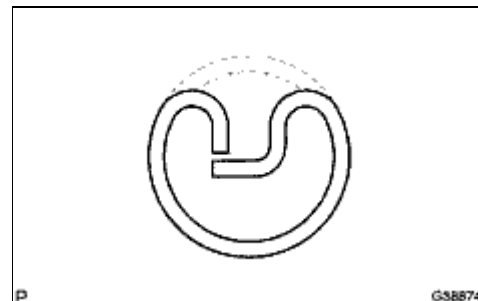
**NOTICE:**

When measuring dimension B, fix the spider and spider bearings in a vise and hold them firmly together.

(e) Select snap rings to make dimensions A and B the same.

Snap Ring Type:

| COLOR  | THICKNESS MM (IN.) |
|--------|--------------------|
| Green  | 1.384 (0.0545)     |
| Red    | 1.435 (0.0565)     |
| Black  | 1.486 (0.0585)     |
| Copper | 1.511 (0.0595)     |
| Silver | 1.537 (0.0605)     |
| Yellow | 1.588 (0.0625)     |
| Blue   | 1.638 (0.0645)     |



**NOTICE:**

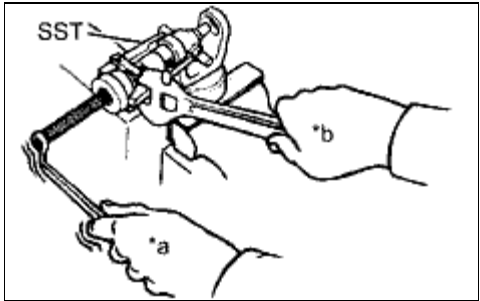
- Use new snap rings.
- If possible, use snap rings of the same thickness on both ends.

(f) Insert the spider into the yoke, and then using SST, press the spider bearing into the snap ring groove.

**Text in Illustration**

|    |      |
|----|------|
| *a | Turn |
| *b | Hold |

**SST: 09332-25010**

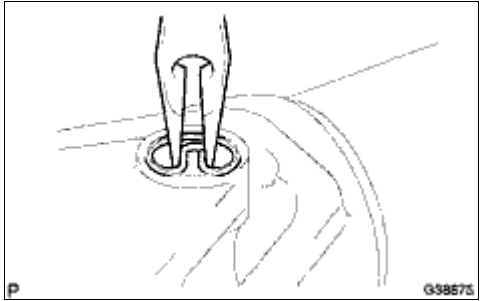


(g) Press in the spider bearing on the opposite side in the same way.

**NOTICE:**

When pressing in the spider bearing, be careful not to damage its lip.

(h) Using needle-nose pliers, install 4 new snap rings into the grooves of the yoke.



**4. INSPECT PROPELLER SHAFT UNIVERSAL JOINT SPIDER BEARING**

- (a) Check the spider bearings for wear and damage.
- (b) Check each spider bearing's axial play by turning the yoke while holding the shaft tightly.

Maximum bearing axial play:  
0 to 0.05 mm (0 to 0.00197 in.)



|                                                                                                         |                      |                                      |
|---------------------------------------------------------------------------------------------------------|----------------------|--------------------------------------|
| <b>Last Modified:</b> 11-13-2015                                                                        | 6.6 A                | <b>Doc ID:</b> RM0000016SW00CX       |
| <b>Model Year Start:</b> 2016                                                                           | <b>Model:</b> Tacoma | <b>Prod Date Range:</b> [08/2015 - ] |
| <b>Title:</b> PROPELLER SHAFT: PROPELLER SHAFT ASSEMBLY (for 2WD): REMOVAL; 2016 MY Tacoma [08/2015 - ] |                      |                                      |

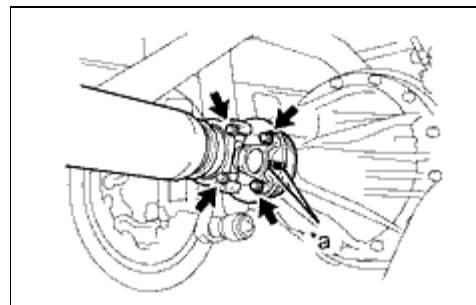
## REMOVAL

### 1. REMOVE PROPELLER SHAFT WITH CENTER BEARING ASSEMBLY

- (a) Place matchmarks on the propeller shaft flange and differential flange.

#### Text in Illustration

|    |           |
|----|-----------|
| *a | Matchmark |
|----|-----------|



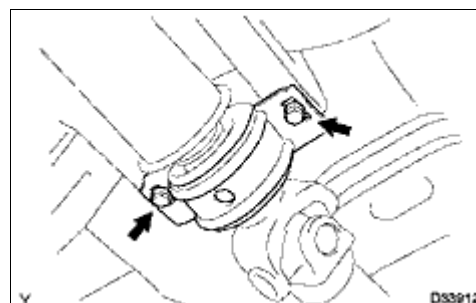
- (b) for Differential Type BD20:

(1) Remove the 4 nuts, 4 bolts and 4 washers to disconnect the propeller shaft.

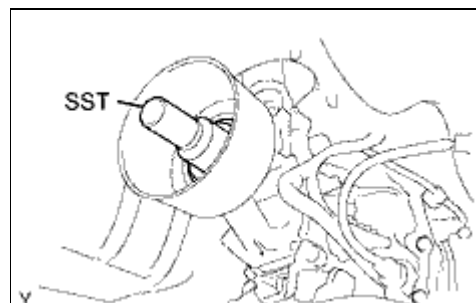
- (c) for Differential Type BD22:

(1) Remove the 4 nuts and 4 washers to disconnect the propeller shaft.

- (d) Remove the 2 bolts to separate the center No. 2 support bearing assembly from the frame crossmember.



- (e) Pull out the propeller shaft.



- (f) Insert SST to the extension housing to prevent oil leakage.

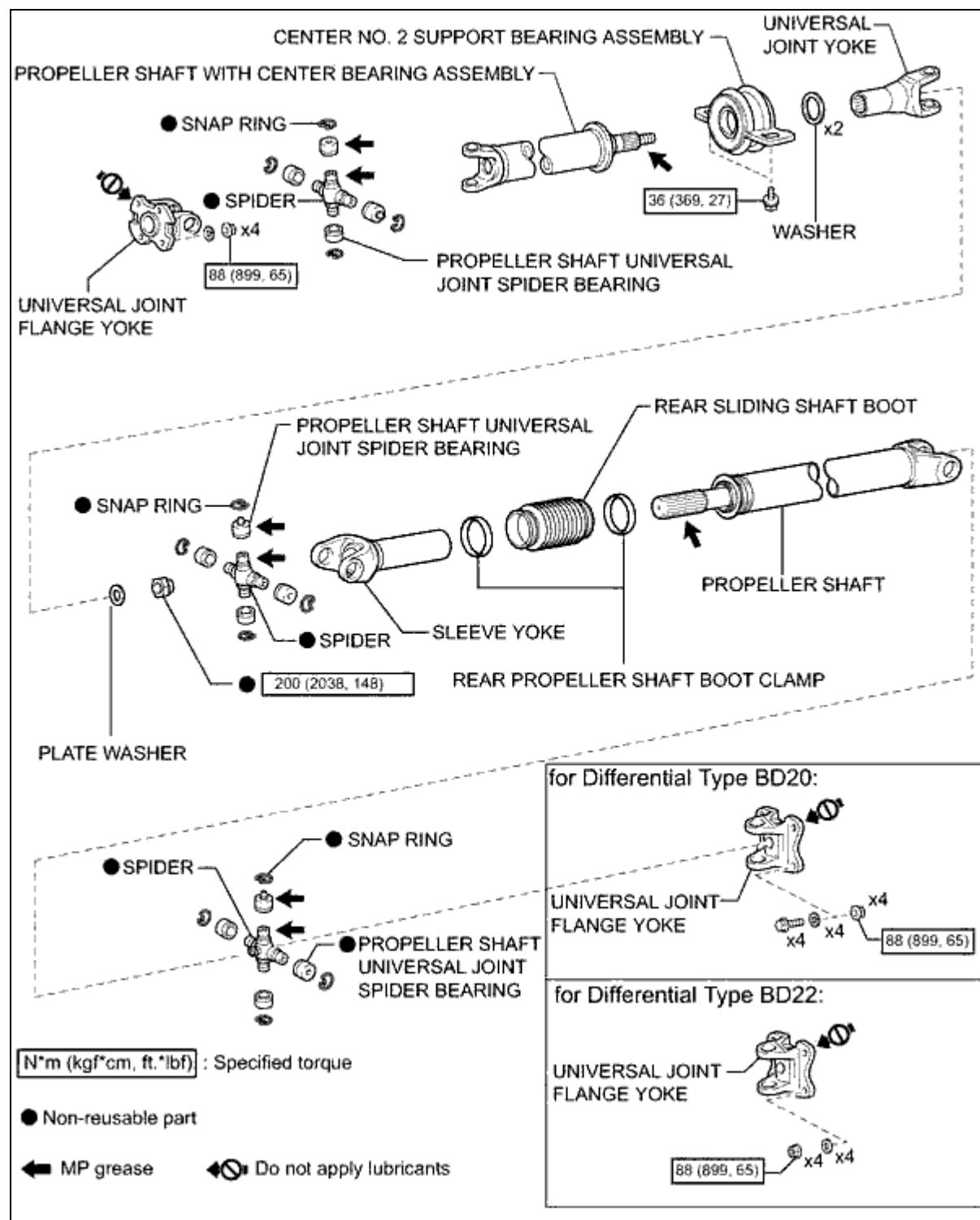
**SST: 09325-40010**



|                                                                                                            |                      |                                      |
|------------------------------------------------------------------------------------------------------------|----------------------|--------------------------------------|
| <b>Last Modified:</b> 11-13-2015                                                                           | 6.6 K                | <b>Doc ID:</b> RM0000016SP00AX       |
| <b>Model Year Start:</b> 2016                                                                              | <b>Model:</b> Tacoma | <b>Prod Date Range:</b> [08/2015 - ] |
| <b>Title:</b> PROPELLER SHAFT: PROPELLER SHAFT ASSEMBLY (for 4WD): COMPONENTS; 2016 MY Tacoma [08/2015 - ] |                      |                                      |

## COMPONENTS

## ILLUSTRATION





|                                                                                                             |                      |                                      |
|-------------------------------------------------------------------------------------------------------------|----------------------|--------------------------------------|
| <b>Last Modified:</b> 11-13-2015                                                                            | 6.6 A                | <b>Doc ID:</b> RM0000016SR00AX       |
| <b>Model Year Start:</b> 2016                                                                               | <b>Model:</b> Tacoma | <b>Prod Date Range:</b> [08/2015 - ] |
| <b>Title:</b> PROPELLER SHAFT: PROPELLER SHAFT ASSEMBLY (for 4WD): DISASSEMBLY; 2016 MY Tacoma [08/2015 - ] |                      |                                      |

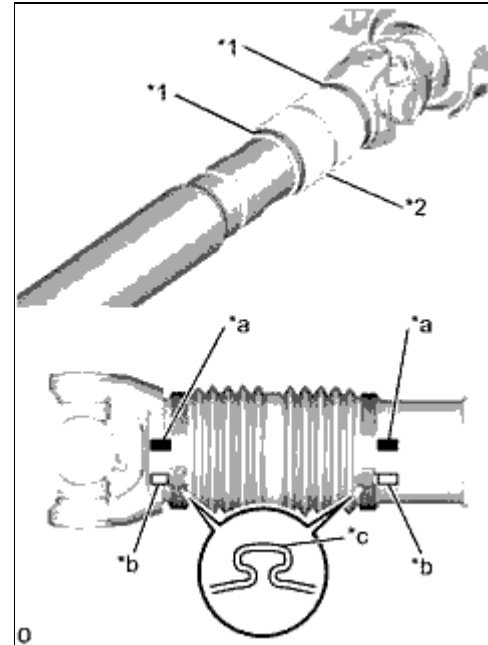
## DISASSEMBLY

### 1. REMOVE REAR PROPELLER SHAFT BOOT CLAMP

(a) Place matchmarks on the propeller shaft and sleeve yoke.

#### Text in Illustration

|    |                                                                  |
|----|------------------------------------------------------------------|
| *1 | Rear Propeller Shaft Boot Clamp                                  |
| *2 | Rear Sliding Shaft Boot                                          |
| *a | Matchmark of Propeller Shaft and Sleeve Yoke                     |
| *b | Matchmark of Pinching Portion of Rear Propeller Shaft Boot Clamp |
| *c | Pinching Portion                                                 |



(b) Apply matchmarks at the pinching portions of the rear propeller shaft boot clamps of the propeller shaft and sleeve yoke.

#### HINT:

- Make sure to place matchmarks to clearly identify the location of the pinching portions of the propeller shaft boot clamps.

If the pinching portions are installed at different locations than where they were located before disassembly, the rotational balance of the propeller shaft cannot be ensured, which may result in vibrations and noise.

- Make sure that the matchmarks are different enough so that they cannot be confused with each other.
- The locations of the pinching portions may differ from those shown in the illustration, so make sure to confirm and properly place matchmarks in each vehicle.

(c) Using a side cutter or pliers, disconnect the 2 rear propeller shaft boot clamps.

(d) Disconnect the 2 rear propeller shaft boot clamps from the sleeve yoke.

(e) Remove the sleeve yoke, and then remove the rear sliding shaft boot and 2 rear propeller shaft boot clamps from the propeller shaft.

### 2. INSPECT PROPELLER SHAFT UNIVERSAL JOINT SPIDER BEARING

(a) Check the spider bearings for wear and damage.

(b) Check each spider bearing's axial play by turning the yoke while holding the shaft tightly.

Maximum bearing axial play:

0 to 0.05 mm (0 to 0.00197 in.)

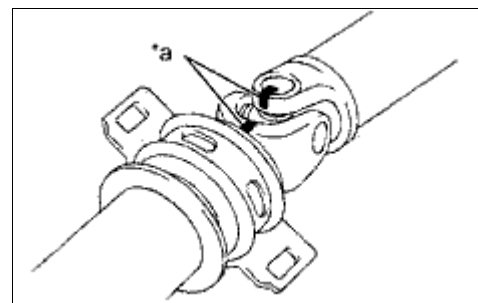
If the bearing axial play is greater than the maximum, replace the spider bearing.

### 3. REMOVE PROPELLER SHAFT UNIVERSAL JOINT SPIDER BEARING

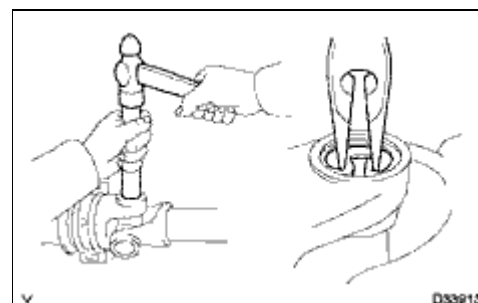
- (a) Place matchmarks on the propeller shaft and universal joint yoke.

#### Text in Illustration

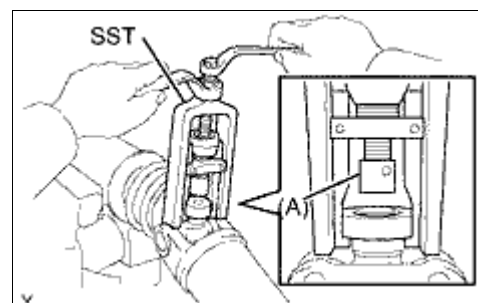
|    |           |
|----|-----------|
| *a | Matchmark |
|----|-----------|



- (b) Using a brass bar and hammer, slightly tap in the spider bearing outer races.



- (c) Using needle-nose pliers, remove the 4 snap rings from the grooves.



- (e) Using SST, push the spider bearing out of the propeller shaft.

**SST: 09332-25010**

#### HINT:

Sufficiently raise the part indicated by (A) so that it does not come into contact with the spider bearing.

- (f) Clamp the pushed out spider bearing outer race in a vise and tap the propeller shaft to remove the spider bearing.

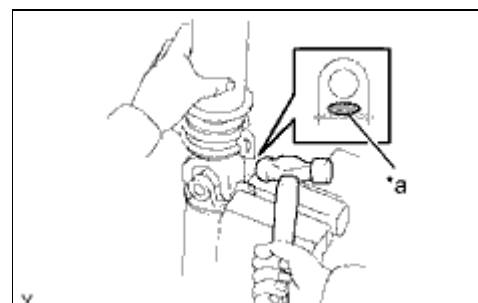
#### Text in Illustration

|    |                 |
|----|-----------------|
| *a | Hammering Point |
|----|-----------------|

#### NOTICE:

Do not tap the shaft tube.

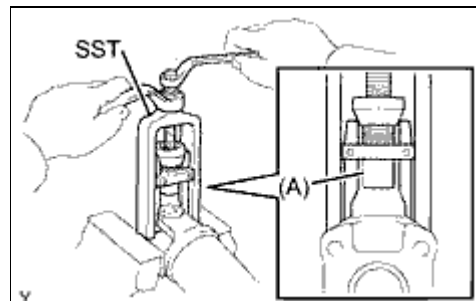
#### HINT:



Remove the spider bearing from the opposite side of the spider using the same procedure.

(g) Separate the propeller shaft with center bearing assembly.

(h) Reinstall the 2 removed spider bearings onto the spider and clamp the spider bearings in a vise.



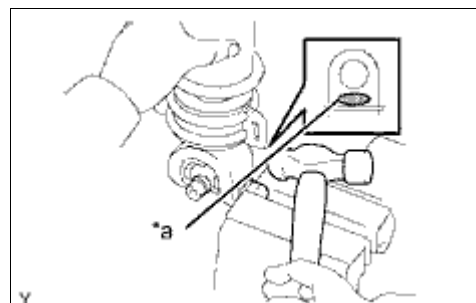
(i) Using SST, push the bearing out of the yoke.

**SST: 09332-25010**

**HINT:**

Sufficiently raise the part indicated by (A) so that it does not come into contact with the bearing.

(j) Clamp the pushed out outer bearing race in a vise and tap off the yoke with a hammer.



**Text in Illustration**

|    |                 |
|----|-----------------|
| *a | Hammering Point |
|----|-----------------|

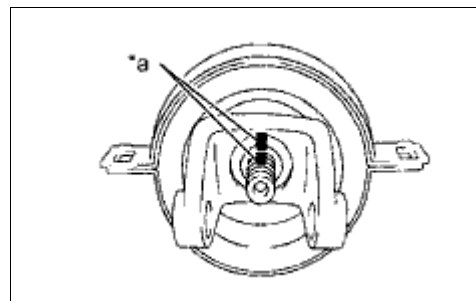
(k) Remove the spider.

**4. REMOVE CENTER NO. 2 SUPPORT BEARING ASSEMBLY**

(a) Fix the yoke at the center bearing section in a vise.

**Text in Illustration**

|    |           |
|----|-----------|
| *a | Matchmark |
|----|-----------|



(b) Using a chisel and a hammer, loosen the staked part of the lock nut.

(c) Place matchmarks on the yoke and shaft.

(d) Using a brass bar and hammer, remove the center yoke, spacer and center support bearing from the propeller shaft with center bearing assembly.



|                                                                                                            |                      |                                      |
|------------------------------------------------------------------------------------------------------------|----------------------|--------------------------------------|
| <b>Last Modified:</b> 11-13-2015                                                                           | 6.6 G                | <b>Doc ID:</b> RM0000016SO00AX       |
| <b>Model Year Start:</b> 2016                                                                              | <b>Model:</b> Tacoma | <b>Prod Date Range:</b> [08/2015 - ] |
| <b>Title:</b> PROPELLER SHAFT: PROPELLER SHAFT ASSEMBLY (for 4WD): INSPECTION; 2016 MY Tacoma [08/2015 - ] |                      |                                      |

## **INSPECTION**

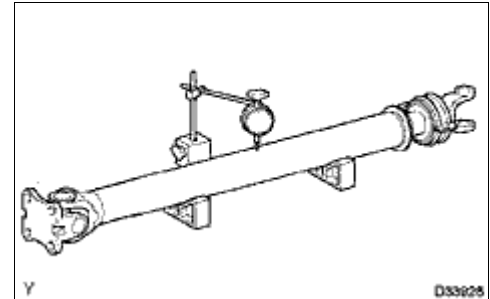
### **1. INSPECT PROPELLER SHAFT WITH CENTER BEARING ASSEMBLY**

(a) Using a dial indicator, check the propeller shaft runout.

Maximum runout:

0.6 mm (0.0236 in.)

If the shaft runout is greater than the maximum, replace the shaft.



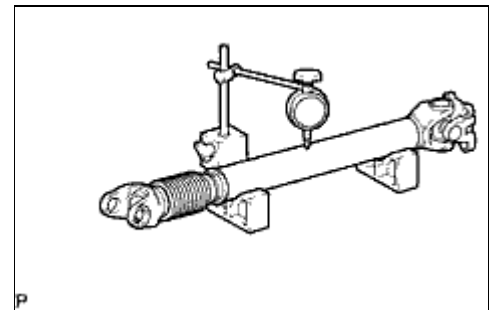
### **2. INSPECT PROPELLER SHAFT**

(a) Using a dial indicator, check the propeller shaft runout.

Maximum runout:

0.6 mm (0.0236 in.)

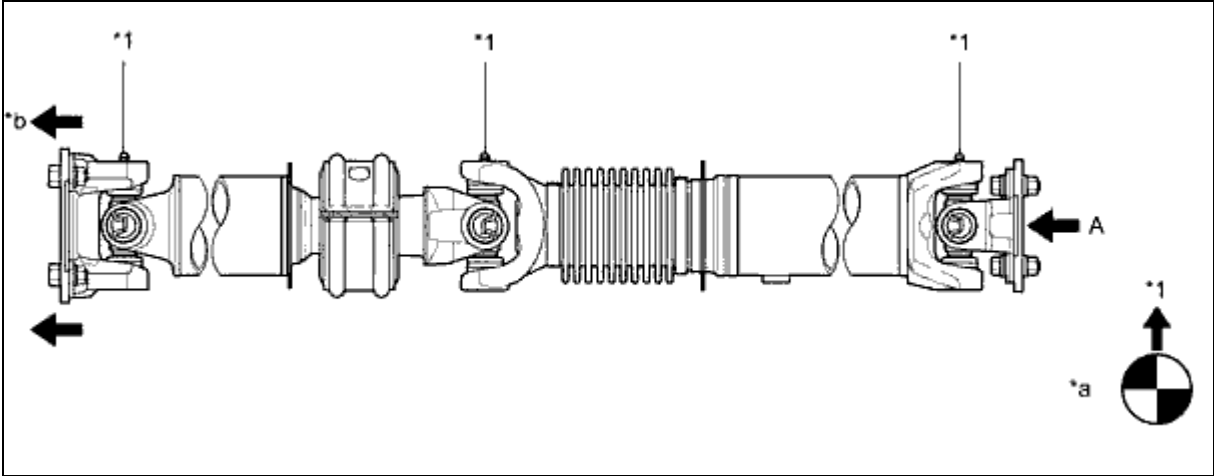
If the shaft runout is greater than the maximum, replace the shaft.



|                                                                                                              |                      |                                      |
|--------------------------------------------------------------------------------------------------------------|----------------------|--------------------------------------|
| <b>Last Modified:</b> 11-13-2015                                                                             | 6.6 A                | <b>Doc ID:</b> RM0000016SN00AX       |
| <b>Model Year Start:</b> 2016                                                                                | <b>Model:</b> Tacoma | <b>Prod Date Range:</b> [08/2015 - ] |
| <b>Title:</b> PROPELLER SHAFT: PROPELLER SHAFT ASSEMBLY (for 4WD): INSTALLATION; 2016 MY Tacoma [08/2015 - ] |                      |                                      |

INSTALLATION

1. INSPECT PROPELLER SHAFT WITH CENTER BEARING ASSEMBLY



Text in Illustration

|    |                |    |            |
|----|----------------|----|------------|
| *1 | Grease Fitting | -  | -          |
| *a | View A         | *b | Front Side |

**HINT:**

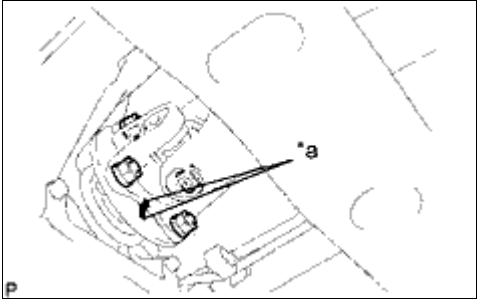
When replacing the spider bearing, make sure that the grease fitting assembly hole is facing in the direction shown in the illustration.

2. INSTALL PROPELLER SHAFT WITH CENTER BEARING ASSEMBLY

- (a) Align the matchmarks on the propeller shaft flange yoke and transfer flange.

Text in Illustration

|    |           |
|----|-----------|
| *a | Matchmark |
|----|-----------|



- (b) Install the propeller shaft with the 4 nuts and 4 washers.

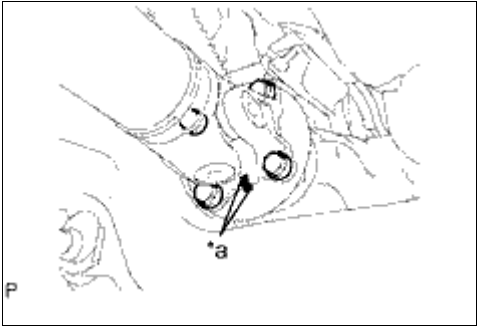
**Torque:**

88 N·m {899 kgf·cm, 65ft·lbf}

(c) Align the matchmarks on the propeller shaft flange yoke and differential flange.

**Text in Illustration**

|    |           |
|----|-----------|
| *a | Matchmark |
|----|-----------|



(d) for Differential Type BD20:

(1) Install the propeller shaft with the 4 bolts, 4 washers and 4 nuts.

**Torque:**

**88 N·m {899 kgf·cm, 65ft·lbf}**

(e) for Differential Type BD22:

(1) Install the propeller shaft with the 4 washers and 4 nuts.

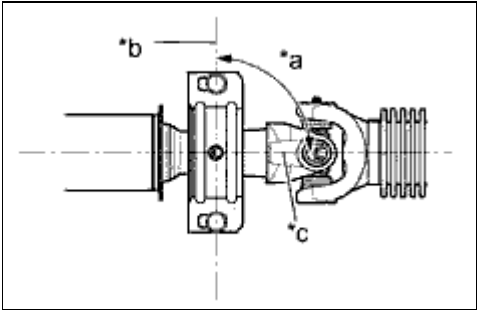
**Torque:**

**88 N·m {899 kgf·cm, 65ft·lbf}**

(f) Provisionally install the center support bearing with 2 mounting bolts.

**Text in Illustration**

|    |                       |
|----|-----------------------|
| *a | 90°                   |
| *b | Bracket Center Line   |
| *c | Shaft Axial Direction |



**HINT:**

Make sure the bearing is installed with the drain hole facing downwards.

(g) Tighten the 2 bolts.

**Torque:**

**36 N·m {369 kgf·cm, 27ft·lbf}**

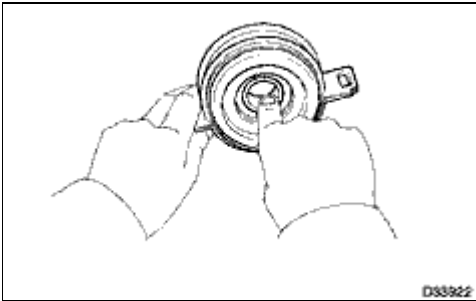


|                                                                                                                |                      |                                          |
|----------------------------------------------------------------------------------------------------------------|----------------------|------------------------------------------|
| <b>Last Modified:</b> 11-13-2015                                                                               | 6.6 A                | <b>Doc ID:</b> RM0000016SS00AX           |
| <b>Model Year Start:</b> 2016                                                                                  | <b>Model:</b> Tacoma | <b>Prod Date Range:</b> [08/2015 -     ] |
| <b>Title:</b> PROPELLER SHAFT: PROPELLER SHAFT ASSEMBLY (for 4WD): REASSEMBLY; 2016 MY Tacoma [08/2015 -     ] |                      |                                          |

REASSEMBLY

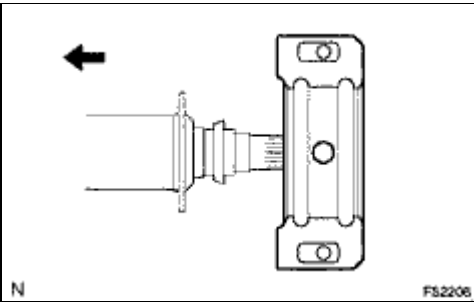
1. INSPECT CENTER NO. 2 SUPPORT BEARING ASSEMBLY

- (a) Turn the center bearing by hand, check that it turns smoothly without catching and that there are no cracks or damage.
- If there are any defects, replace it.



2. INSTALL CENTER NO. 2 SUPPORT BEARING ASSEMBLY

- (a) Install the center support bearing onto the propeller shaft with center bearing assembly.



Text in Illustration

|                                                                                     |       |
|-------------------------------------------------------------------------------------|-------|
|  | Front |
|-------------------------------------------------------------------------------------|-------|

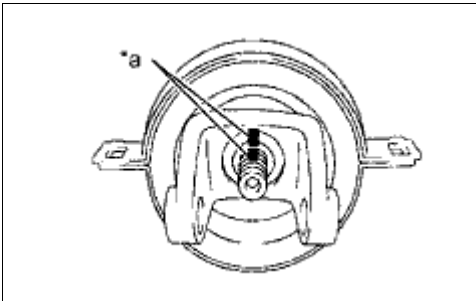
- (b) Coat the splines of the intermediate shaft with MP grease.
- (c) Install the 2 washers.
- (d) Align the matchmarks on the center yoke and propeller shaft with center bearing assembly.

Text in Illustration

|    |           |
|----|-----------|
| *a | Matchmark |
|----|-----------|

**HINT:**

If replacing either the center yoke or propeller shaft with center bearing assembly, reassemble them so that the front side yoke of the intermediate shaft and the center yoke are facing in the same direction.



- (e) Install the spacer.

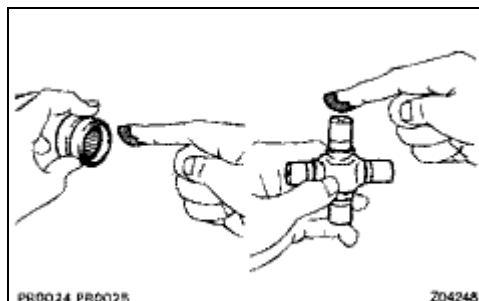
- (f) Fix the yoke at the center bearing section in a vice.
- (g) Clamp the yoke in a vise, and press the bearing into position by tightening a new nut.

**Torque:**

**200 N·m {2039 kgf·cm, 148ft·lbf}**

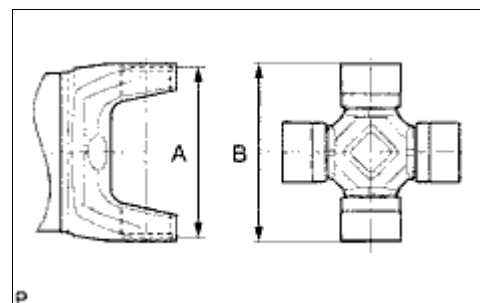
- (h) Using a chisel and hammer, stake the lock nut.

### 3. INSTALL PROPELLER SHAFT UNIVERSAL JOINT SPIDER BEARING



- (a) Apply MP grease to a new spider and bearings.
- (b) Fit the spider into the flange yoke.

- (c) Measure dimension A between the snap ring grooves.



- (d) Insert the spider bearing into the spider journal portion, and then measure dimension B of the universal joint.

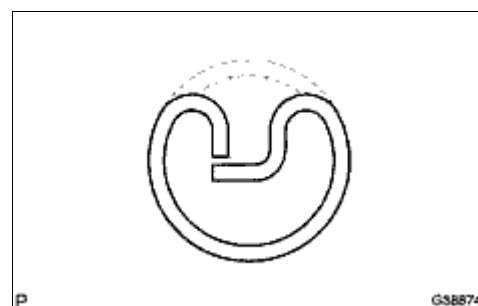
**NOTICE:**

When measuring dimension B, fix the spider and needle roller bearings in a vise and hold them firmly together.

- (e) Select snap rings to make dimensions A and B the same.

Snap Ring Type:

| COLOR  | THICKNESS MM (IN.) |
|--------|--------------------|
| Green  | 1.384 (0.0545)     |
| Red    | 1.435 (0.0565)     |
| Black  | 1.486 (0.0585)     |
| Copper | 1.511 (0.0595)     |
| Silver | 1.537 (0.0605)     |
| Yellow | 1.588 (0.0625)     |
| Blue   | 1.638 (0.0645)     |



**NOTICE:**

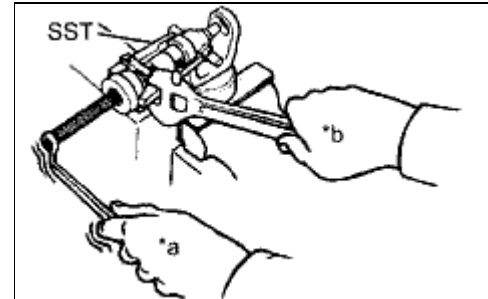
- Use new snap rings.
- If possible, use snap rings of the same thickness on both ends.

- (f) Insert the spider into the yoke, and then using SST, press the spider bearing into the snap ring groove.

**Text in Illustration**

|    |      |
|----|------|
| *a | Turn |
| *b | Hold |

**SST: 09332-25010**

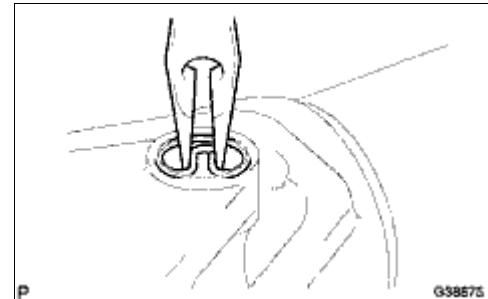


- (g) Press in the spider bearing on the opposite side in the same way.

**NOTICE:**

When pressing in the spider bearing, be careful not to damage its lip.

- (h) Using needle-nose pliers, install new snap rings into the grooves of the yoke.

**4. INSPECT PROPELLER SHAFT UNIVERSAL JOINT SPIDER BEARING**

- (a) Check the spider bearings for wear and damage.
- (b) Check each spider bearing's axial play by turning the yoke while holding the shaft tightly.

Maximum bearing axial play:

0 to 0.05 mm (0 to 0.00196 in.)

**5. INSTALL REAR PROPELLER SHAFT BOOT CLAMP**

- (a) Temporarily install a new rear sliding shaft boot to the propeller shaft with 2 new rear propeller shaft boot clamps.
- (b) Coat the splines of the propeller shaft with grease.
- Standard grease capacity:  
7.0 to 10.0 g (0.2 to 0.4 oz.)
- (c) Align the matchmarks on the propeller shaft and sleeve yoke.
- (d) Install the sleeve yoke to the propeller shaft and connect the rear sliding shaft boot.
- (e) Align the matchmarks on the propeller shaft, sleeve yoke and the pinching portions of the 2 rear propeller shaft boot clamps.

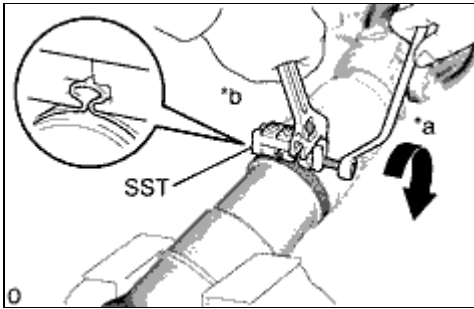
**HINT:**

Make sure to align the matchmarks of the propeller shaft boot clamp.

If the pinching portions are installed at different locations than where they were located before

disassembly, the rotational balance of the propeller shaft cannot be ensured, which may result in vibrations and noise.

(f) Secure one of the rear propeller shaft boot clamps to the rear sliding shaft boot.



**HINT:**

- Use the same procedure for each rear propeller shaft boot clamp.
- Make sure that the matchmarks of the pinching portion of the rear propeller shaft boot clamp are aligned.

**Text in Illustration**

|    |      |
|----|------|
| *a | Turn |
| *b | Hold |

(1) Install SST to the rear propeller shaft boot clamp, and then while pressing the rear sliding shaft boot, slightly tighten the SST bolt.

**SST: 09521-24010**

**NOTICE:**

- Correctly set the rear propeller shaft boot clamp to the guide groove.
- Do not damage the rear sliding shaft boot.

(2) Tighten SST so that the rear propeller shaft boot clamp is pinched.

Standard clearance:

3.8 mm (0.150 in.) or less

**NOTICE:**

- When tightening SST, make sure the clearance of the rear propeller shaft boot clamp is within the standard clearance.
- Do not damage the rear sliding shaft boot.

(3) Remove SST from the rear propeller shaft boot clamp.

(4) Using SST, measure the clearance of the rear propeller shaft boot clamp.

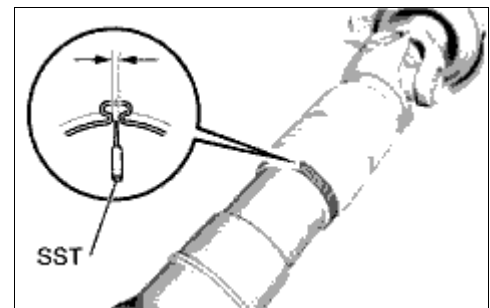
**SST: 09240-00020**

Standard clearance:

3.8 mm (0.150 in.) or less

**NOTICE:**

If the measured value exceeds the specified value, retighten the rear propeller shaft boot clamp.



|                                                                                                             |                      |                                          |
|-------------------------------------------------------------------------------------------------------------|----------------------|------------------------------------------|
| <b>Last Modified:</b> 11-13-2015                                                                            | 6.6 A                | <b>Doc ID:</b> RM0000016SQ00AX           |
| <b>Model Year Start:</b> 2016                                                                               | <b>Model:</b> Tacoma | <b>Prod Date Range:</b> [08/2015 -     ] |
| <b>Title:</b> PROPELLER SHAFT: PROPELLER SHAFT ASSEMBLY (for 4WD): REMOVAL; 2016 MY Tacoma [08/2015 -     ] |                      |                                          |

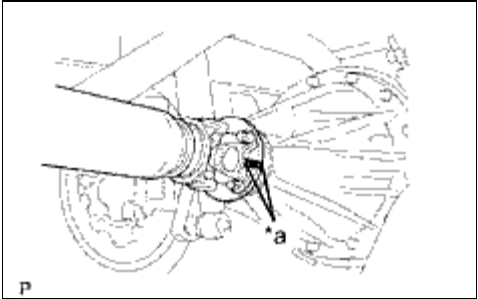
## REMOVAL

### 1. REMOVE PROPELLER SHAFT WITH CENTER BEARING ASSEMBLY

- (a) Place matchmarks on the propeller shaft flange yoke and differential flange.

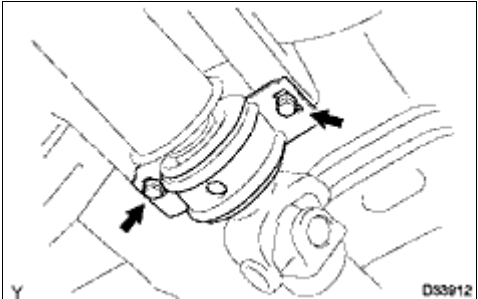
**Text in Illustration**

|    |           |
|----|-----------|
| *a | Matchmark |
|----|-----------|



- (b) for Differential Type BD20:
  - (1) Remove the 4 nuts, 4 bolts and 4 washers to disconnect the propeller shaft.
- (c) for Differential Type BD22:
  - (1) Remove the 4 nuts and 4 washers to disconnect the propeller shaft.

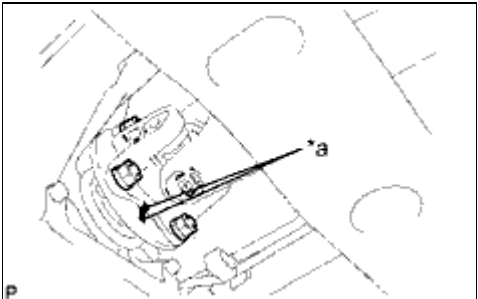
- (d) Remove the 2 bolts to separate the center No. 2 support bearing assembly from the frame crossmember.



- (e) Place matchmarks on the propeller shaft flange yoke and transfer flange.

**Text in Illustration**

|    |           |
|----|-----------|
| *a | Matchmark |
|----|-----------|



- (f) Remove the 4 nuts, 4 washers and propeller shaft.



|                                                                                                            |                      |                                      |
|------------------------------------------------------------------------------------------------------------|----------------------|--------------------------------------|
| <b>Last Modified:</b> 11-13-2015                                                                           | 6.6 T                | <b>Doc ID:</b> RM0000016TB00AX       |
| <b>Model Year Start:</b> 2016                                                                              | <b>Model:</b> Tacoma | <b>Prod Date Range:</b> [08/2015 - ] |
| <b>Title:</b> PROPELLER SHAFT: PROPELLER SHAFT SYSTEM: PROBLEM SYMPTOMS TABLE; 2016 MY Tacoma [08/2015 - ] |                      |                                      |

## PROBLEM SYMPTOMS TABLE

### HINT:

Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.

| SYMPTOM   | SUSPECTED AREA                                             | SEE PAGE             |
|-----------|------------------------------------------------------------|----------------------|
| Noise     | Propeller shaft universal joint spider bearing (2WD)       | <a href="#">INFO</a> |
|           | Front propeller shaft universal joint spider bearing (4WD) | <a href="#">INFO</a> |
|           | Propeller shaft universal joint spider bearing (4WD)       | <a href="#">INFO</a> |
| Vibration | Propeller shaft (Runout) (2WD)                             | <a href="#">INFO</a> |
|           | Front propeller shaft (Runout) (4WD)                       | <a href="#">INFO</a> |
|           | Rear propeller shaft (Runout) (4WD)                        | <a href="#">INFO</a> |
|           | Propeller shaft (Imbalance)                                | -                    |

