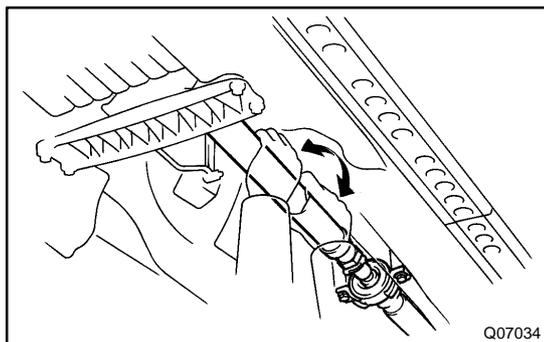


## JOINT ANGLE INSPECTION

PR02F-01

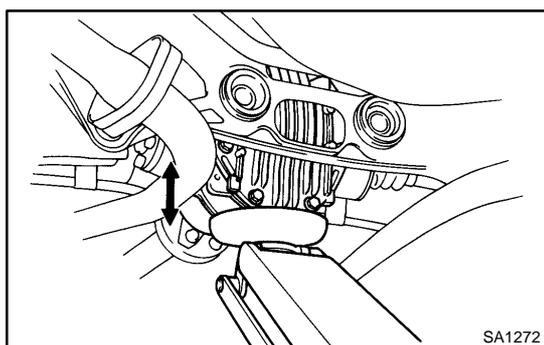
### NOTICE:

When performing operations which involve the removal and installation of the propeller shaft, always check the joint angle. Make adjustments if necessary.

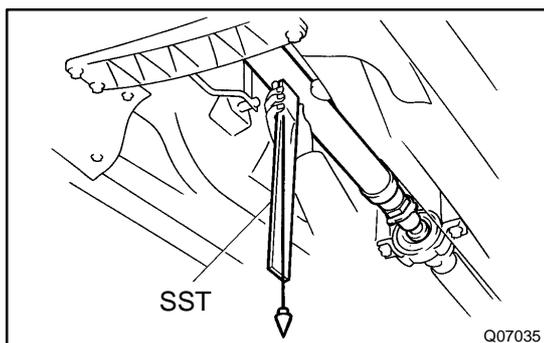


### 1. STABILIZE PROPELLER SHAFT AND DIFFERENTIAL

- (a) Turn the propeller shaft several times by hand to stabilize the center support bearing and flexible couplings.



- (b) Using a jack, raise and lower the differential to stabilize the differential mounting cushion.



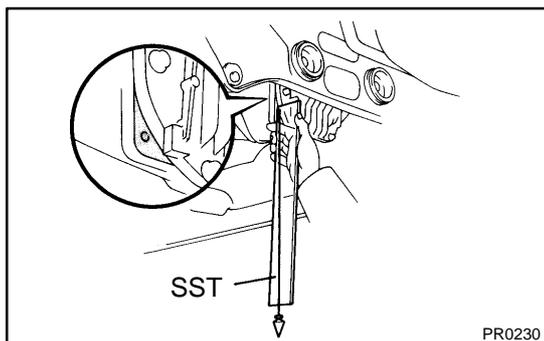
### 2. CHECK NO.2 AND NO.3 JOINT ANGLE

- (a) Using SST, measure the installation angle of the intermediate shaft and propeller shaft.

SST 09370-50010

#### HINT:

The SST should be directly underneath the tube.



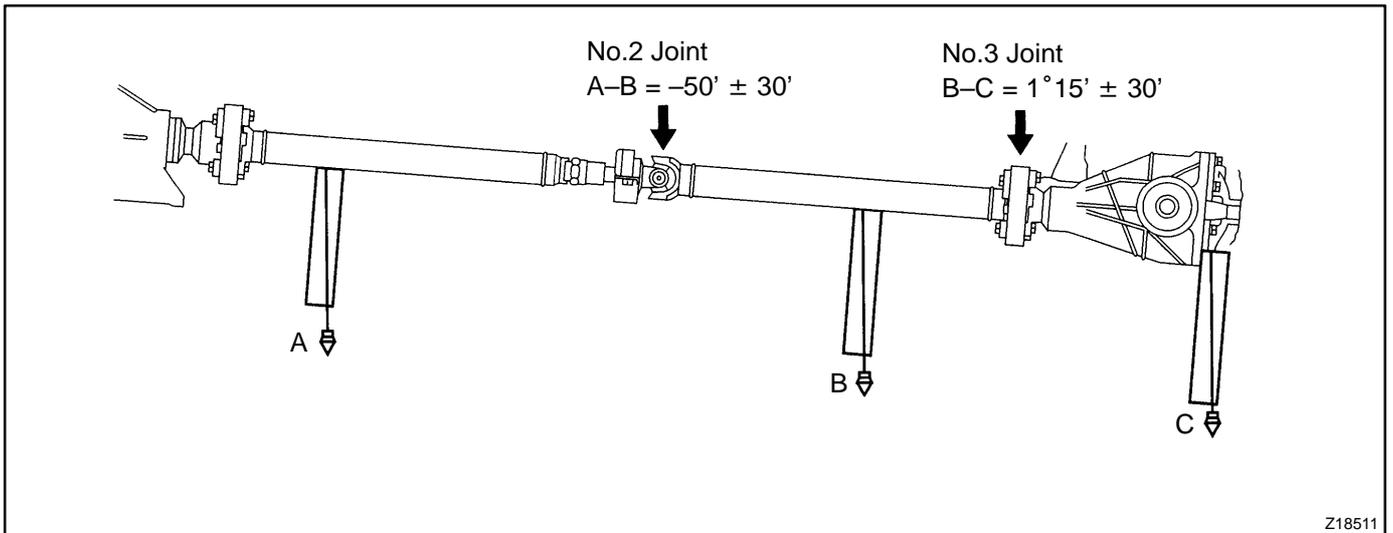
- (b) Using SST, measure the installation angle of the differential.

SST 09370-50010

#### HINT:

Measure the installation angle by placing the SST in the position, as shown in the illustration.

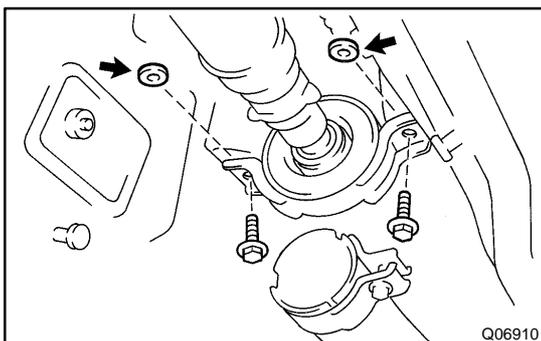
- (c) Calculate the No.2 joint angle.  
**No.2 joint angle:**  
**A-B = -50' ± 30'**  
 A: Intermediate shaft installation angle  
 B: Propeller shaft installation angle
- (d) Calculate the No.3 joint angle.  
**No.3 joint angle:**  
**B-C = 1°15' ± 30'**  
 B: Propeller shaft installation angle  
 C: Differential installation angle



If the measured angle is not within the specification, adjust the joint angle.

HINT:

Adjust joint angle using the adjustment chart, adjusting it with the center support bearing adjusting washer and differential shim.



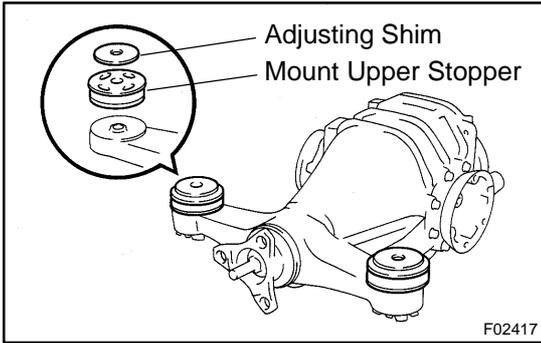
### 3. ADJUST NO.2 JOINT ANGLE

Select the proper center support bearing adjusting washer for adjustment.

Thickness mm (in.)	Thickness mm (in.)
1.0 (0.039)	4.5 (0.177)
2.0 (0.079)	6.5 (0.256)

HINT:

- Left and right washers should be the same thickness.
- 2 washers should not be assembled together.



**4. ADJUST NO.3 JOINT ANGLE**

Select the proper differential adjusting shim for adjustment.

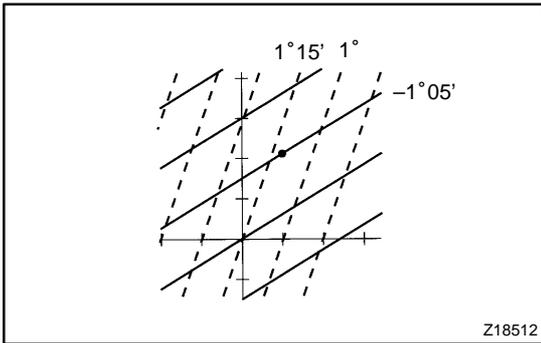
Thickness mm (in.)	Thickness mm (in.)
1.0 (0.039)	2.0 (0.079)
1.6 (0.063)	-

**HINT:**

- Left and right washers should be the same thickness.
- 2 washers should not be assembled together.
- This shim is installed on top of the mount stopper and is used for adjustment.

**5. HOW TO READ ADJUSTMENT CHART**

- Take measurements, then calculate the No.2 and No.3 joint angles.
- Mark the calculated values on the chart and read the coordinates.
- Replace the adjusting washer and shim in accordance with the coordinates read and adjust the joint angles.



**Example**

**Measurements (Installation angle):**

**Intermediate shaft: 2°00'**

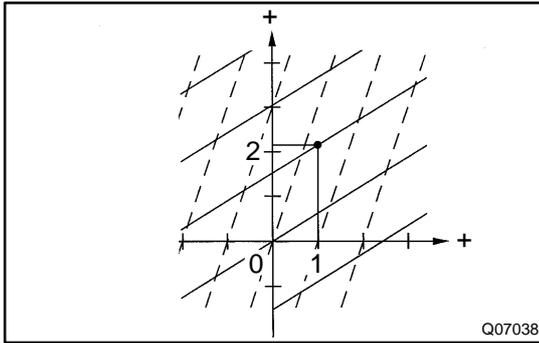
**Propeller shaft: 3°05'**

**Differential: 1°54'**

**Joint angle:**

**No.2:  $2^{\circ}00' - 3^{\circ}05' = -1^{\circ}05'$**

**No.3:  $3^{\circ}05' - 1^{\circ}54' = 1^{\circ}11'$**

**Adjustment (Center support bearing):**

Use an adjusting washer which is 2.0 mm (0.079 in.) thicker.

**Adjustment (Differential):**

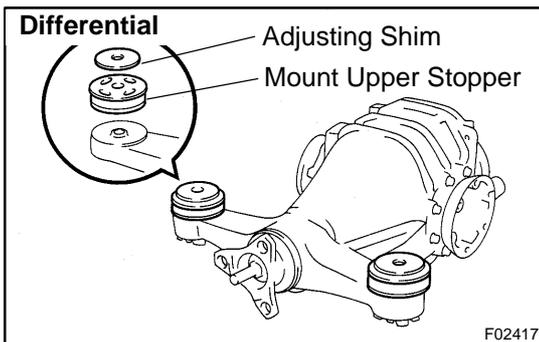
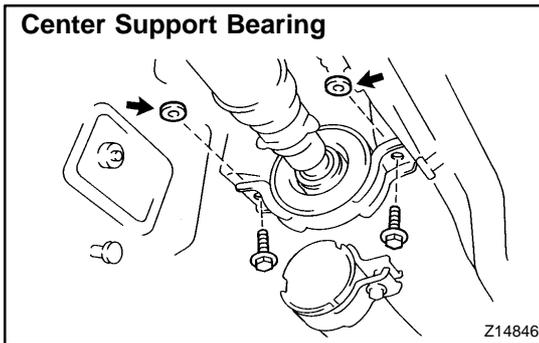
Use an adjusting shim which is 1.0 mm (0.039 in.) thicker.

**HINT:**

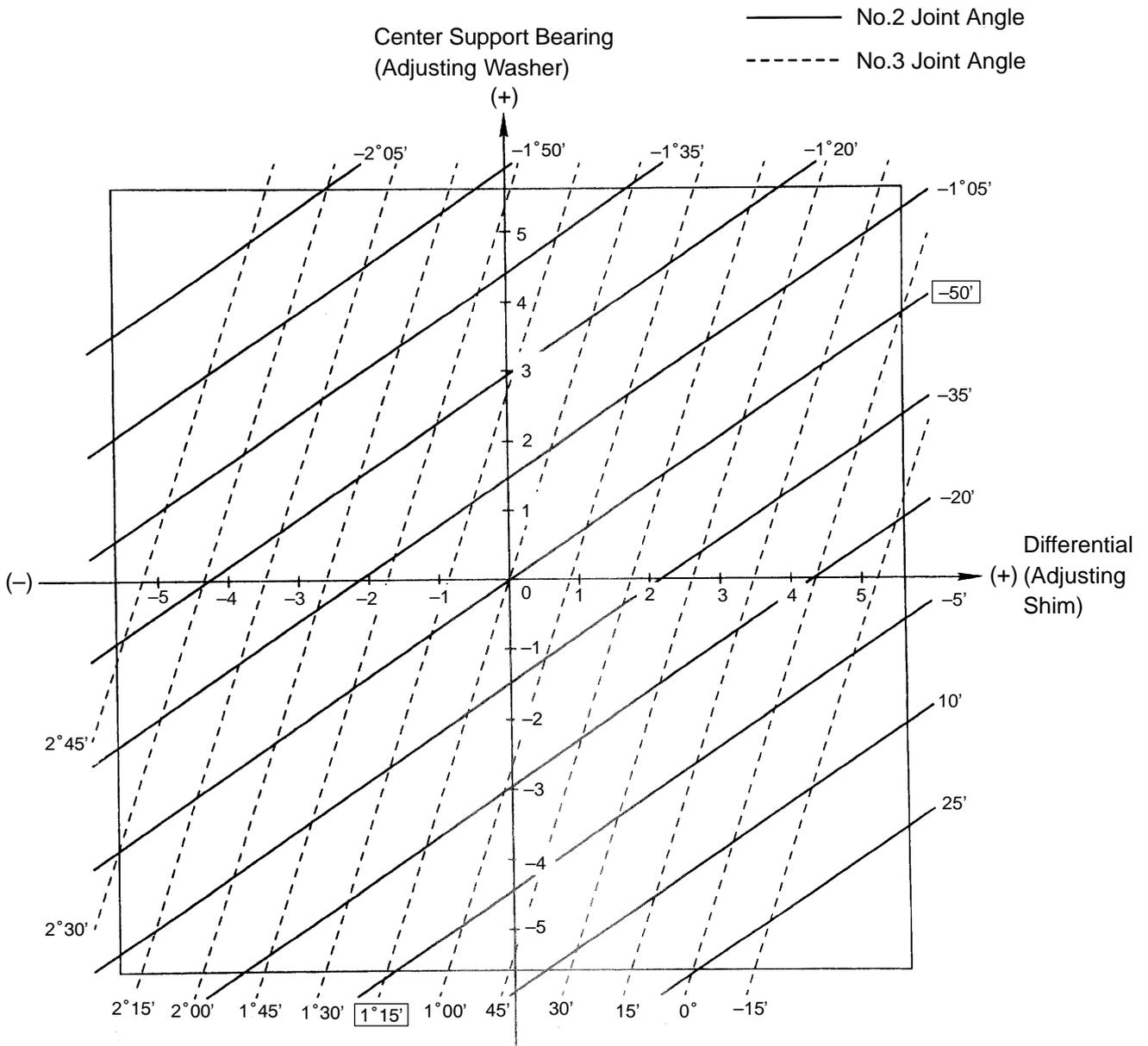
If a washer and shim of the exact thickness are not available, use the parts which are nearest in thickness.

**NOTICE:**

**Check the joint angle once again after making the adjustment.**



ADJUSTMENT CHART



Z18589