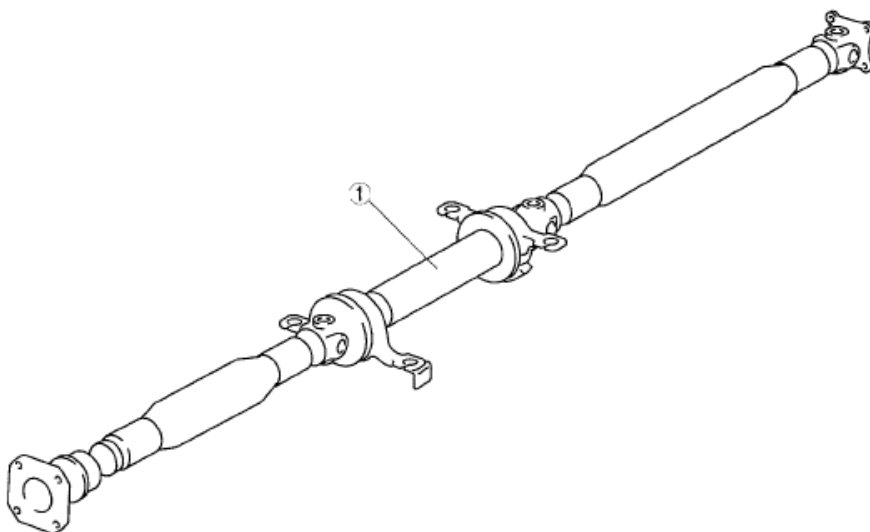


2008 DRIVELINE/AXLE

Propeller Shaft - Mazda CX-9

PROPELLER SHAFT LOCATION INDEX



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1	Propeller shaft (See 03-15-2 PROPELLER SHAFT ON-VEHICLE INSPECTION.) (See 03-15-2 PROPELLER SHAFT REMOVAL/INSTALLATION.) (See 03-15-4 PROPELLER SHAFT INSPECTION.)
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Fig. 1: Identifying Propeller Shaft

Courtesy of MAZDA MOTORS CORP.

PROPELLER SHAFT ON-VEHICLE INSPECTION

JOINT AREA EXCESSIVE PLAY INSPECTION

1. Shake the universal joint by hand and verify that there is no excessive play.
2. If there is any excessive play, replace the propeller shaft. (See **PROPELLER SHAFT REMOVAL/INSTALLATION.**)

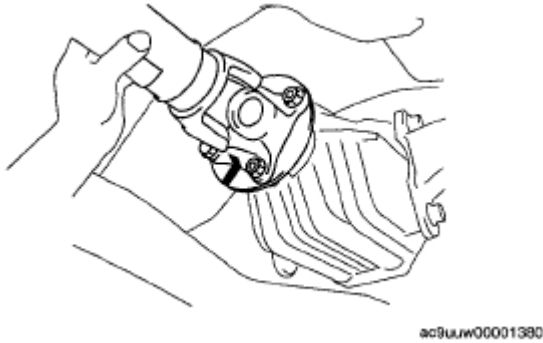


Fig. 2: Shaking Universal Joint
Courtesy of MAZDA MOTORS CORP.

PROPELLER SHAFT RUNOUT INSPECTION

CAUTION: • Do not rotate the propeller shaft using engine force when inspecting.

1. Shift to neutral position and release the parking brake.
2. Rotate the rear wheel by hand and inspect the propeller shaft runout at the three locations shown in the figure.
 - If it exceeds the standard specification, replace the propeller shaft.

Standard propeller shaft runout (on-vehicle) 0.8 mm {0.031 in}

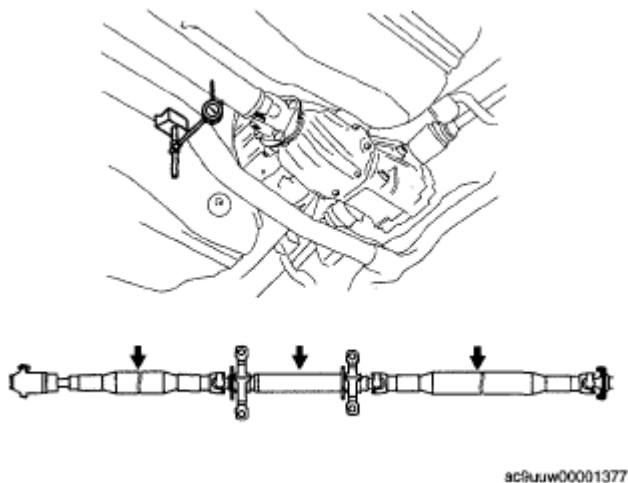


Fig. 3: Checking Propeller Shaft Runout
Courtesy of MAZDA MOTORS CORP.

PROPELLER SHAFT REMOVAL/INSTALLATION

1. Remove the presilencer installation nuts. (Middle pipe side) (See **EXHAUST SYSTEM REMOVAL/INSTALLATION [MZI-3.7]** .)
2. Disconnect the hanger rubber as shown in the figure.
3. Suspend the presilencer using a cable.
4. Remove the presilencer insulator.
5. Remove in the order indicated in the figure.

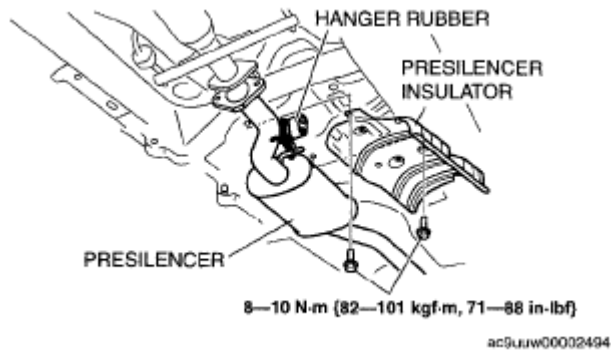
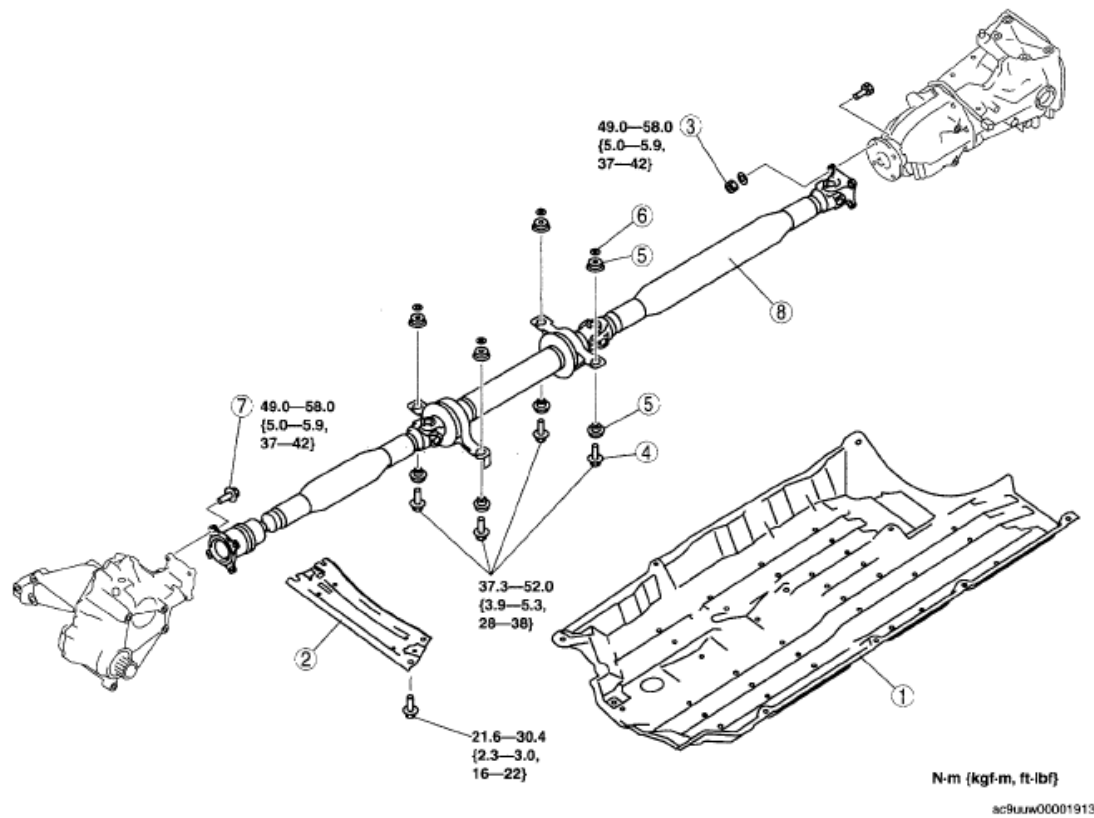


Fig. 4: Identifying Presilencer Insulator And Presilencer
Courtesy of MAZDA MOTORS CORP.

6. Install in the reverse order of removal.

2008 Mazda CX-9 Grand Touring

2008 DRIVELINE/AXLE Propeller Shaft - Mazda CX-9



1	Under guard (LH) (See 01-16-7 CHARCOAL CANISTER, CANISTER VENT (CV) SOLENOID VALVE, AIR FILTER COMPONENT REMOVAL/INSTALLATION [MZI-3.7].)
2	Member
3	Nut (See 03-15-3 Bolt and Nut Removal Note.)

4	Bolt
5	Bush
6	Spacer
7	Bolt (See 03-15-3 Bolt and Nut Removal Note.)
8	Propeller shaft (See 03-15-4 Propeller Shaft Installation Note.)

Fig. 5: Identifying Propeller Shaft Components & Torque Specifications
Courtesy of MAZDA MOTORS CORP.

BOLT AND NUT REMOVAL NOTE

CAUTION: • Do not mark with a punch to prevent imbalance.

1. Before removing the nut, place alignment marks on the companion flange (front) and constant velocity joint, and on the companion flange (rear) and yoke.

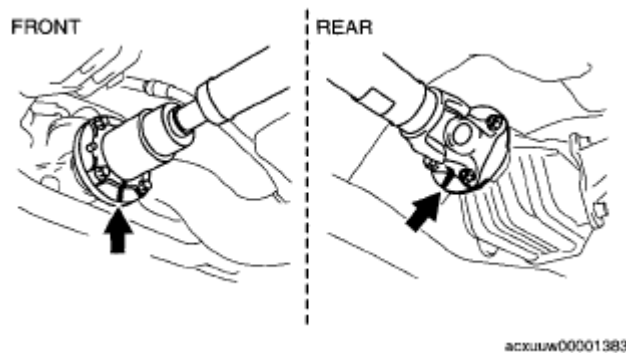


Fig. 6: Locating Alignment Marks On Companion Flange (Front) And Constant Velocity Joint
Courtesy of MAZDA MOTORS CORP.

PROPELLER SHAFT INSTALLATION NOTE

1. Align the alignment marks and install the propeller shaft.

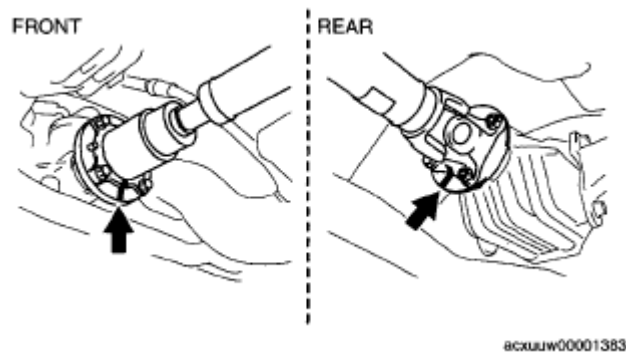


Fig. 7: Aligning Alignment Marks
Courtesy of MAZDA MOTORS CORP.

2. When installing a new propeller shaft, align the rear differential companion flange mark with the tag on the propeller shaft so that they are at the nearest position, and assemble.
3. Perform a road test and verify that there is no abnormal vibration or noise.

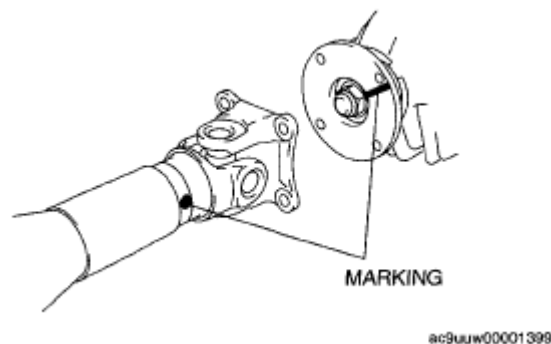


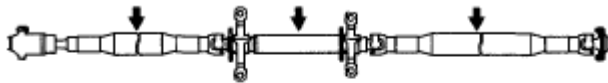
Fig. 8: Aligning Rear Differential Companion Flange Mark

Courtesy of MAZDA MOTORS CORP.

PROPELLER SHAFT INSPECTION

1. Measure the propeller shaft center runout using the dial gauge.
 - If it exceeds the maximum specification, replace the propeller shaft as a single component.

Propeller shaft maximum runout 0.8 mm {0.031 in}

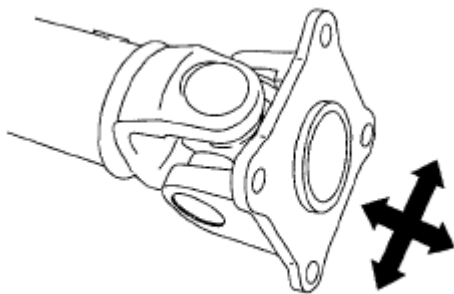


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Fig. 9: Measuring Propeller Shaft Center Runout
Courtesy of MAZDA MOTORS CORP.

2. Inspect the play and rotation of the joint by turning the universal joint in the directions shown by the arrows.
 - If it is not within the specification, replace the the propeller shaft.

Propeller shaft starting torque 0.29-1.47 N.m {3.0-14.9 kgf.cm, 2.6-13.0 in.lbf}



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Fig. 10: Inspecting Play And Rotation Of Joint
Courtesy of MAZDA MOTORS CORP.