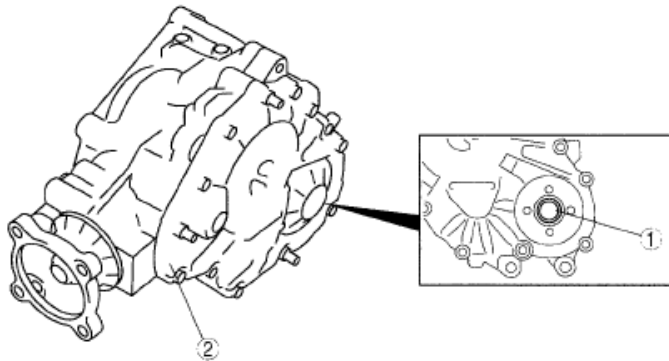


2008 DRIVELINE/AXLE

Transfer - Mazda CX-9

TRANSFER LOCATION INDEX



ac9uuw00001700

1	Transfer oil seal (See 03-16-1 TRANSFER OIL SEAL REPLACEMENT.)
---	--

2	Transfer (See 03-16-3 TRANSFER REMOVAL/ INSTALLATION.)
---	--

Fig. 1: Identifying Transfer Oil Seal And Transfer
Courtesy of MAZDA MOTORS CORP.

TRANSFER SERVICE CAUTIONS

- Do not perform overhauling and other servicing such as transfer oil inspection, adjustment, and replacement. Adjusting the oil amount leads to over-fill or under-fill, which could cause oil leakage or seizure of the transfer while driving. In addition, internal parts for overhauling are not available.
- A maintenance-free type transfer has been adopted. If there is a malfunction with the transfer unit, replace the transfer as a single component.

TRANSFER OIL SEAL REPLACEMENT

RIGHT SIDE

1. Remove the middle pipe. (See EXHAUST SYSTEM REMOVAL/INSTALLATION [MZI-3.7] .)
2. Remove the front pipe. (See EXHAUST SYSTEM REMOVAL/INSTALLATION [MZI-3.7] .)
3. Remove the joint shaft. (See JOINT SHAFT REMOVAL/INSTALLATION [AWD] .)
4. Using the **SST** , remove the deflector.

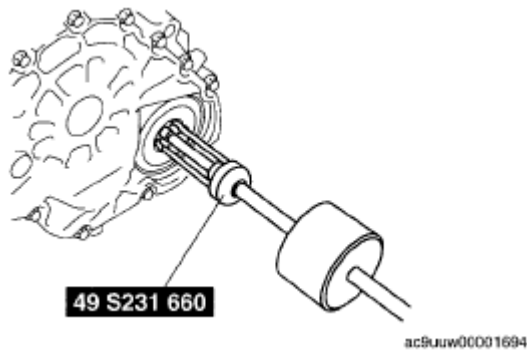


Fig. 2: Identifying SST
Courtesy of MAZDA MOTORS CORP.

- Using the SST , remove the oil seal.

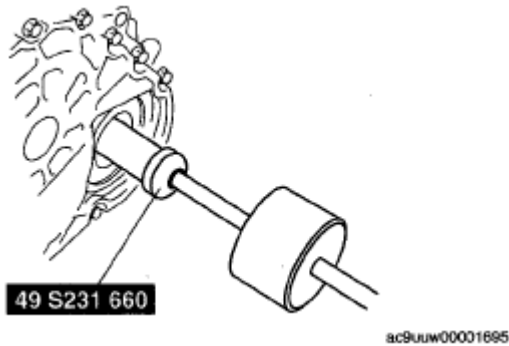


Fig. 3: Identifying SST
Courtesy of MAZDA MOTORS CORP.

- Mark the SST at position **18 mm {0.71 in}** from the end.

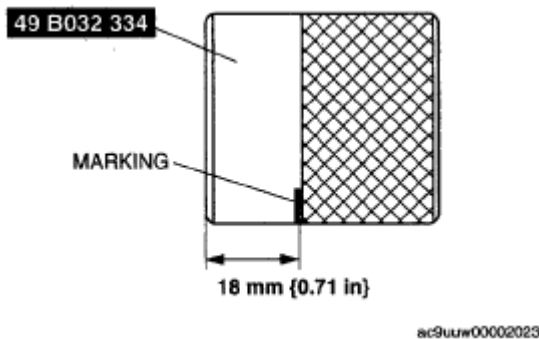


Fig. 4: Marking SST At Position
Courtesy of MAZDA MOTORS CORP.

- Using the SST and a hammer, tap new oil seal.

Substitution SST

- **49 B032 334**

Outer diameter: 38-42 mm {1.5-1.6 in}

Plate thickness: 2 mm {0.08 in} or more

8. Warm up the new deflector using a hot air blower.

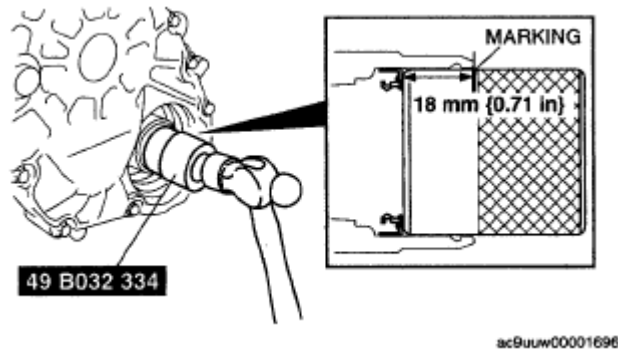


Fig. 5: Tapping Oil Seal

Courtesy of MAZDA MOTORS CORP.

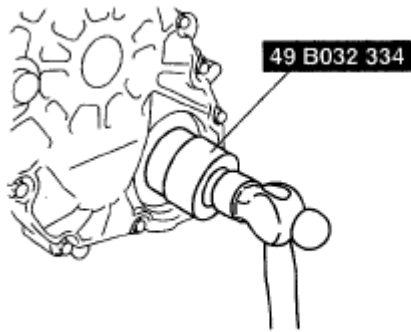
9. Within **10 s** after warming up the deflector, install the new deflector using the SST. Substitution **SST**

- **49 B032 334**

Outer diameter: 38-42 mm {1.5-1.6 in}

Plate thickness: 2 mm {0.08 in} or more

10. Install the joint shaft. (See **JOINT SHAFT REMOVAL/INSTALLATION [AWD]** .)
11. Install the front pipe. (See **EXHAUST SYSTEM REMOVAL/INSTALLATION [MZI-3.7]** .)
12. Install the middle pipe. (See **EXHAUST SYSTEM REMOVAL/INSTALLATION [MZI-3.7]** .)
13. Inspect for leakage of transfer oil.

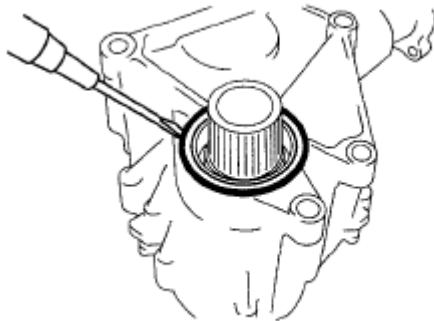


ac9uuw00001697

Fig. 6: Installing Deflector
Courtesy of MAZDA MOTORS CORP.

LEFT SIDE

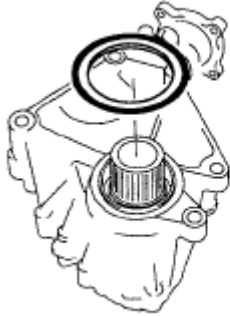
1. Remove the transfer. (See TRANSFER REMOVAL/INSTALLATION.)
2. Remove the oil seal using a screwdriver.



ac9uuw00001698

Fig. 7: Removing Oil Seal
Courtesy of MAZDA MOTORS CORP.

3. Install the new oil seal.
4. Install the transfer. (See TRANSFER REMOVAL/INSTALLATION.)
5. Inspect for leakage of transfer oil.



ac9uuw00001699

Fig. 8: Removing Oil Seal
Courtesy of MAZDA MOTORS CORP.

TRANSFER REMOVAL/INSTALLATION

1. Disconnect the negative battery cable.
2. Remove the following parts:
 1. Middle pipe (See **EXHAUST SYSTEM REMOVAL/INSTALLATION [MZI-3.7]** .)
 2. Front pipe (See **EXHAUST SYSTEM REMOVAL/INSTALLATION [MZI-3.7]** .)
 3. Stabilizer control link (See **FRONT CROSSMEMBER REMOVAL/INSTALLATION** .)
 4. Tie-rod end ball joint (right side) (See **FRONT CROSSMEMBER REMOVAL/INSTALLATION** .)
 5. Front lower arm ball joint (right side) (See **FRONT CROSSMEMBER REMOVAL/INSTALLATION** .)
 6. Front drive shaft (right side) (See **FRONT DRIVE SHAFT REMOVAL/INSTALLATION** .)
 7. Joint shaft (See **JOINT SHAFT REMOVAL/INSTALLATION [AWD]** .)
3. Disconnect the propeller shaft from the transfer side. (See **PROPELLER SHAFT REMOVAL/INSTALLATION** .)
4. Remove in the order indicated in the table.
5. Install in the reverse order of removal.
6. Warm up the engine and transaxle, inspect for oil leakage, and inspect the transfer operation.

2008 Mazda CX-9 Grand Touring

2008 DRIVELINE/AXLE Transfer - Mazda CX-9

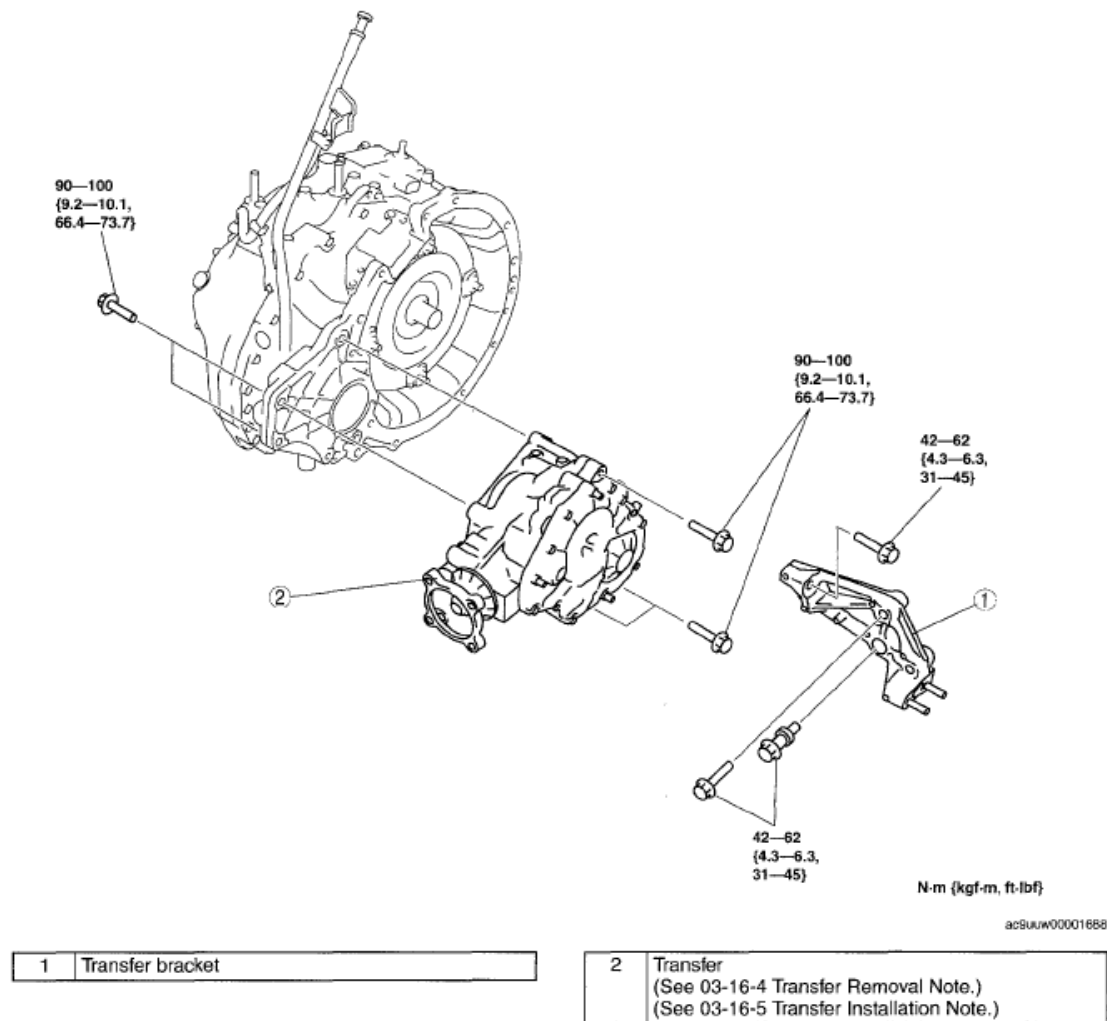
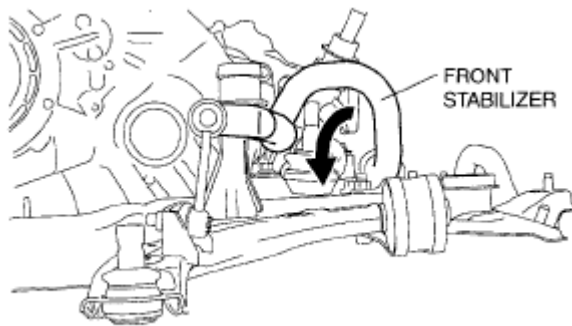


Fig. 9: Identifying Transfer Removing/Installing Components & Torque Specifications
Courtesy of MAZDA MOTORS CORP.

TRANSFER REMOVAL NOTE

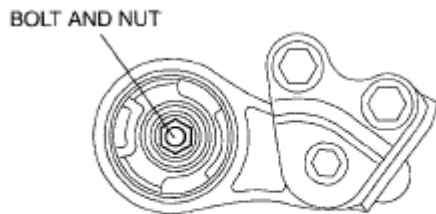
1. Disconnect the front stabilizer control link, and rotate the stabilizer to the front to secure a space from the side.



ac9uuw00001689

Fig. 10: Rotating Stabilizer To Front
Courtesy of MAZDA MOTORS CORP.

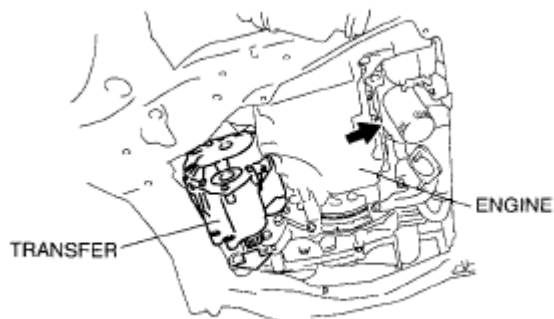
2. Remove the No.1 engine mount bolt and nut.
3. Remove the transfer installation bolts.



ac9uuw00001690

Fig. 11: Identifying No.1 Engine Mount Bolt And Nut
Courtesy of MAZDA MOTORS CORP.

4. Push the engine forward so that the front side of the transfer faces downward, then remove the transfer.



ac9uuw00001691

Fig. 12: Identifying Front Side Of Transfer Faces
Courtesy of MAZDA MOTORS CORP.

1. Push the engine forward so that the front side of the transfer faces downward, then install the transfer.
2. Install the transfer installation bolts.

Tightening torque

90-100 N.m {9.2-10.1 kgf.m, 66.4-73.7 ft.lbf}

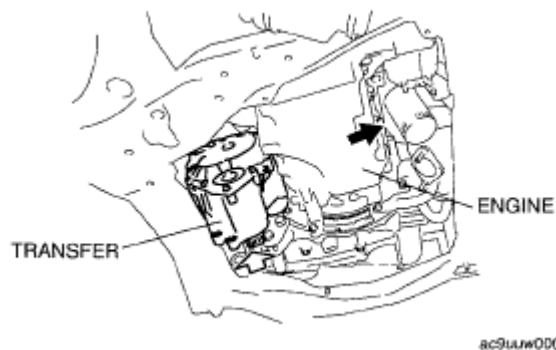


Fig. 13: Identifying Front Side Of Transfer Faces
Courtesy of MAZDA MOTORS CORP.

3. Install the No.1 engine mount bolt and nut.

Tightening torque

85.3-116.6 N.m {8.70-11.88 kgf.m, 63.0-85.9 ft.lbf}

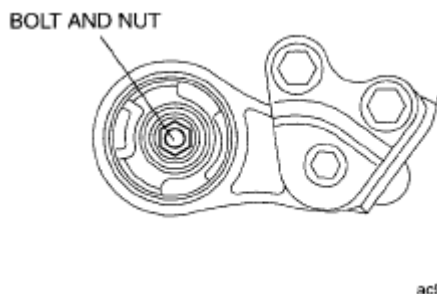
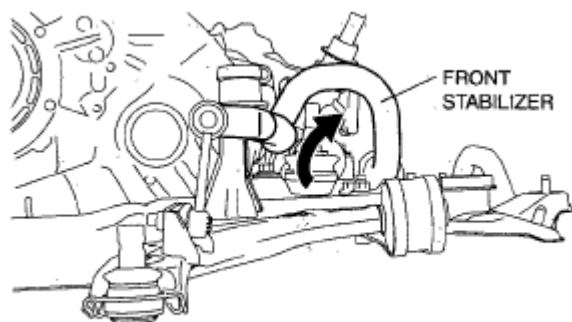


Fig. 14: Identifying No.1 Engine Mount Bolt And Nut
Courtesy of MAZDA MOTORS CORP.

4. Rotate the front stabilizer to the rear to set it in its original position.



ac9uuw00001693

Fig. 15: Rotating Front Stabilizer To Rear
Courtesy of MAZDA MOTORS CORP.

TRANSFER BRACKET INSTALLATION NOTE

1. Install the transfer bracket to the transfer, then temporarily tighten bolt C.
2. Temporarily tighten bolt A and B.
3. Tighten bolt A, B and G in the order of C-->A-->B.

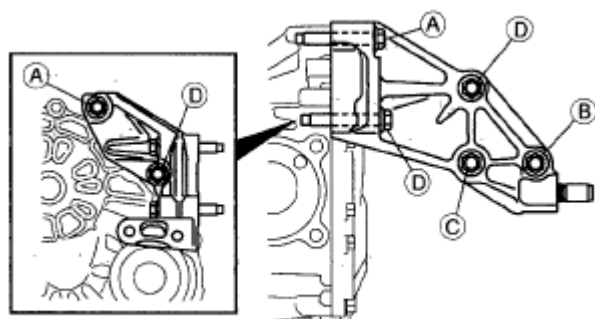
Tightening torque

Bolt A, B, C: 42-62 N.m {4.3-6.3 kgf.m, 31-45 ft.lbf}

4. Tighten bolt D.

Tightening torque

Bolt D: 42-62 N.m {4.3-6.3 kgf.m, 31-45 ft.lbf}



ac9uuw00002213

Fig. 16: Identifying Transfer Bracket Bolts
Courtesy of MAZDA MOTORS CORP.