

<b>Subject:</b>  FRONT DIFFERENTIAL OIL LEAK REPAIR PROCEDURE	<b>Service Alert No.:</b> SA-075/23
	<b>Last Issued :</b> 11/08/2023

## BULLETIN NOTES

### APPLICABLE MODLE(S)/VINS

2024 CX-90 (PHEV and H3T)

## DESCRIPTION

Some vehicles may experience an oil leak from the front differential, vehicles having this concern should be repaired using the repair information below.

## REPAIR PROCEDURE

1. Verify the customer concern.
2. Drain front differential oil according to the instructions in MGSS ([FRONT DIFFERENTIAL OIL REPLACEMENT])
3. Remove the front differential according to the instructions in MGSS:
  - PHEV [FRONT DIFFERENTIAL REMOVAL/INSTALLATION]
  - H3T [FRONT DIFFERENTIAL REMOVAL/INSTALLATION]
4. Replace front oil seal (Side Gear (LH)).
  - a. Remove the front oil seal (Side Gear) from the front differential carrier using a flathead screwdriver.  
**CAUTION:** To prevent damaging the inside of the front differential casing, wrap a cloth on the end of the screwdriver.

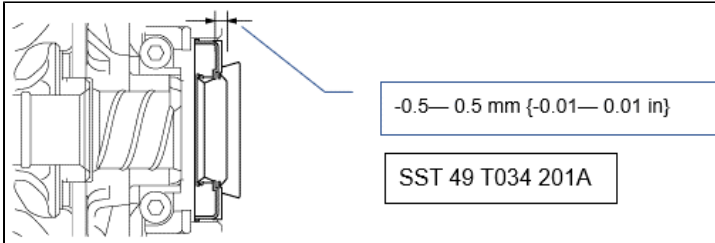


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b. Install the new front oil seal (side gear) using the SST and a hammer.

**NOTE:**

- Make sure to install the front oil seals (side gear) straight.
- Apply the front differential oil to the lip of the new front oil seals (side gear).



5. Replace front oil seal (Side Gear (RH, Oil pan side)).

a. Remove the front oil seal (side gear) from the front differential carrier using a flathead screwdriver.

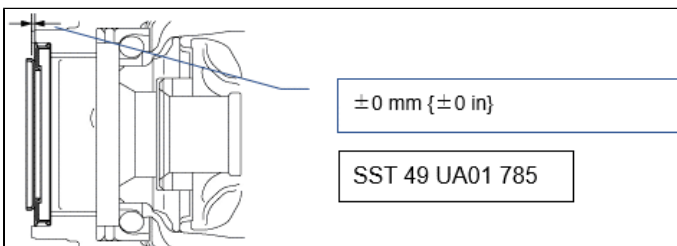
**CAUTION:** To prevent damaging the inside of the front differential casing, wrap a cloth on the end of the screwdriver.



b. Install the new front oil seal (side gear) using the SST and a hammer.

**NOTE:**

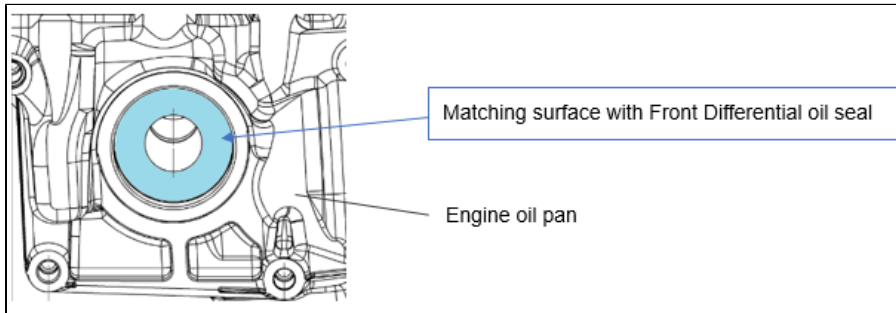
- Make sure to install the front oil seals (side gear) straight.
- **DO NOT** insert the seal until it stops moving, otherwise there could be a risk of oil leakage due to decreased surface pressure.
- If the SST is not available, the seal can be installed manually by hand. Make sure the seal is installed straight in the bore.



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6. Clean any oil residue from oil pan to differential mating surface (blue section).

**NOTE:** If there is any dirt, silicone or oil residue on the mating surface, oil could leak from the differential seal.



7. Apply small amount of grease to engine oil pan matching surface with front differential.

**NOTE:**

- This procedure is to prevent deformation of the differential oil seal lip during installation.
- Any one of the three options of grease listed in the parts list below can be used.



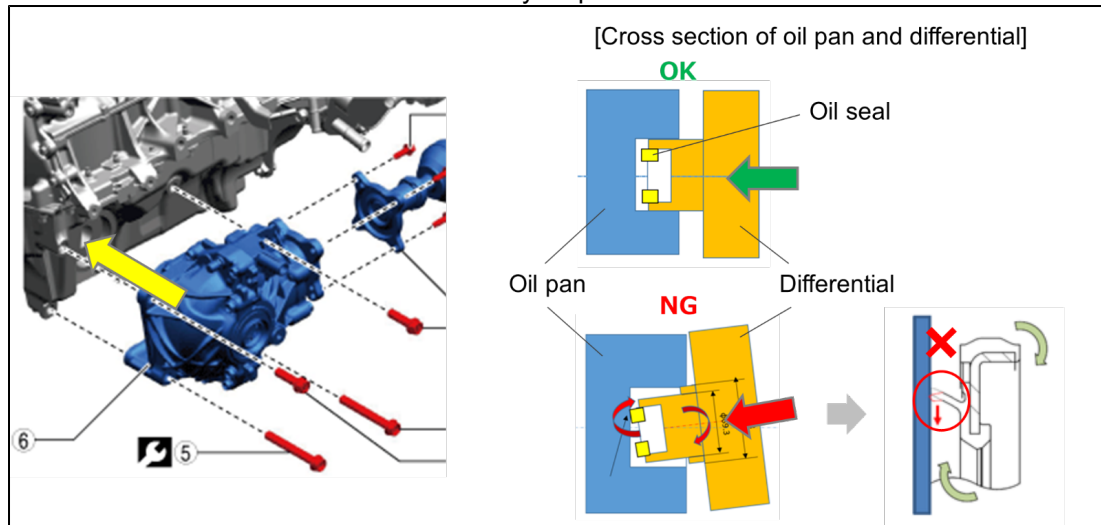
a. Apply a small amount of grease on your finger.

b. Apply thin layer of grease all around.

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8. Install the front differential to the oil pan.

**NOTE:** Install the differentuial as horizontally as possible.



9. Install all the parts in the reverse order of removal.

10. Install the front differential according to the instructions in MGSS:

- PHEV [FRONT DIFFERENTIAL REMOVAL/INSTALLATION]
- H3T [FRONT DIFFERENTIAL REMOVAL/INSTALLATION]

11. Verify the repair.

**PARTS INFORMATION**

Part Number	Description	Qty.
TAA1-27-238A	SEAL, OIL (LH SIDE)	1
TAA1-27-397A	SEAL, OIL (RH SIDE)	1

Lubricant Type	Description/Manufacturer	Qty.	Notes
CENTOPLEX 2	KLUBER LUBRICATION	1	LOCALLY SOURCE VIA LOCAL VENDOR OR AMAZON
BRAKE CYLINDER PASTE	BRAKE CYLINDER PASTE WURTH	1	LOCALLY SOURCE VIA LOCAL VENDOR OR AMAZON
GRANVILLE RED RUBBER GREASE	GRANVILLE RED RUBBER GREASE GRANVILLE	1	LOCALLY SOURCE VIA LOCAL VENDOR OR AMAZON

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SST Part Number	Description	Qty.	Notes
49 UA0 1785	SEAL INSTALLER	1	---
49 T034 201A	MRT / DUST BOOT SEAL INSTALLER	1	ORDER VIA Mazda Tools and Equipment Website

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