

Technical Service Bulletin

Mazda North American Operations
Irvine, CA 92618-2922



Subject: CHIRP NOISE FROM AUTOMATIC TRANSAXLE ON 3-4 UPSHIFT	Bulletin No.: 05-005/23
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BULLETIN NOTES

APPLICABLE MODEL(S)/VINS

NOTE: Vehicles with cylinder deactivation have a "M" as the 8th digit in the VIN for the 2.5L with cylinder deactivation.

2017-2024 CX-5 (2.5L with cylinder deactivation and 6AT)

2018-2021 Mazda6 (2.5L with cylinder deactivation and 6AT)

2019-2024 Mazda3 (2.5L with cylinder deactivation and 6AT)

2020-2024 CX-30 (2.5L with cylinder deactivation and 6AT)

DESCRIPTION

Some vehicles may exhibit a chirp noise (stick-slip noise) from the automatic transaxle (AT) when shifting from 3 to 4 while driving. This may be caused by the automatic transaxle fluid (ATF) being contaminated by iron powder due to excessive wearing of the lock up clutch in the torque converter.

Customers having this concern should have their vehicle repaired using the following repair procedure.

NOTE:

- **IMPORTANT:** At this time the parts to complete a torque converter repair are only available by a [MNAO PUSH order to dealers \(manual orders placed by MNAO\)](#) with an identified MASH Hotline File for 3-4 chirp noise and a transmission backorder.
- MNAO is in the process of increasing the PDC torque converter supply and will make torque converters available for Limited Parts Ordering as soon as we have sufficient supply.
- DO NOT contact the DAG to place orders for new torque converter repairs. Continue to contact Hotline for a complete transmission assembly order.
- Please click here for recent eFC released 10/25.

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REPAIR PROCEDURE

1. Verify the customer concern.

2. Remove the automatic transaxle according to the instructions on MGSS.

- 2018-2021 Mazda6 [AUTOMATIC TRANSAXLE REMOVAL/INSTALLATION [FW6A-EL]]
- 2017-2020 CX-5 (2WD) [AUTOMATIC TRANSAXLE REMOVAL/INSTALLATION [FW6A-EL]]
- 2017-2020 CX-5 (4WD) [AUTOMATIC TRANSAXLE REMOVAL/INSTALLATION [FW6AX-EL]]
- 2021-2024 CX-5 (2WD) [AUTOMATIC TRANSAXLE REMOVAL/INSTALLATION [FW6A-EL]]
- 2021-2024 CX-5 (4WD) [AUTOMATIC TRANSAXLE REMOVAL/INSTALLATION [FW6AX-EL]]
- 2019-2023 Mazda3 (2WD) [AUTOMATIC TRANSAXLE REMOVAL/INSTALLATION [EV6A-EL]]
- 2019-2023 Mazda3 (4WD) [AUTOMATIC TRANSAXLE REMOVAL/INSTALLATION [EV6AX-EL]]
- 2024 Mazda3 (2WD) [AUTOMATIC TRANSAXLE REMOVAL/INSTALLATION [EV6A-EL]]
- 2024 Mazda3 (4WD) [AUTOMATIC TRANSAXLE REMOVAL/INSTALLATION [EV6AX-EL]]
- 2020-2023 CX-30 (2WD) [AUTOMATIC TRANSAXLE REMOVAL/INSTALLATION [EV6A-EL]]
- 2020-2023 CX-30 (4WD) [AUTOMATIC TRANSAXLE REMOVAL/INSTALLATION [EV6AX-EL]]
- 2024 CX-30 (4WD) [AUTOMATIC TRANSAXLE REMOVAL/INSTALLATION [EV6AX-EL]]

3. Remove the torque converter according to the instruction on MGSS [AUTOMATIC TRANSAXLE DISASSEMBLY].

4. Install the new torque converter according to the instruction on MGSS [AUTOMATIC TRANSAXLE ASSEMBLY].

CAUTION: Make sure to check measurements of the installed torque converter as instructed in the Assembly Procedure so that it does not get damaged.

5. Install the automatic transaxle according to the instruction on MGSS.

6. Replace the automatic transaxle fluid (ATF) with new ATF according to the instructions on MGSS.

NOTE: Replace the ATF drain plug gasket after the last refill (3rd time) in step 9.

- 2018-2021 Mazda6 (AUTOMATIC TRANSAXLE FLUID (ATF) REPLACEMENT [FW6A-EL])
- 2017-2020 CX-5 (AUTOMATIC TRANSAXLE FLUID (ATF) REPLACEMENT [FW6A-EL, FW6AX-EL])
- 2021-2024 CX-5 (AUTOMATIC TRANSAXLE FLUID (ATF) REPLACEMENT [FW6A-EL, FW6AX-EL])
- 2019-2023 Mazda3 (AUTOMATIC TRANSAXLE FLUID (ATF) REPLACEMENT [EV6A-EL, EV6AX-EL])
- 2024 Mazda3 (AUTOMATIC TRANSAXLE FLUID (ATF) REPLACEMENT [EV6A-EL, EV6AX-EL])
- 2020-2023 CX-30 (AUTOMATIC TRANSAXLE FLUID (ATF) REPLACEMENT [EV6A-EL, EV6AX-EL])
- 2024 CX-30 (AUTOMATIC TRANSAXLE FLUID (ATF) REPLACEMENT [EV6A-EL, EV6AX-EL])

NOTE: For 2023-2024 Mazda3 and CX-30 and 2024 CX-5, ATF A7 is used. Verify according to the designation on the A/T dipstick.

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7. Perform Initial Learning according to the instructions on MGSS.

- 2018-2021 Mazda6 (INITIAL LEARNING [FW6A-EL])
- 2017-2020 CX-5 (INITIAL LEARNING [FW6A-EL, FW6AX-EL])
- 2021-2024 CX-5 (INITIAL LEARNING [FW6A-EL, FW6AX-EL])
- 2019-2023 Mazda3 (INITIAL LEARNING [EV6A-EL, EV6AX-EL])
- 2024 Mazda3 (INITIAL LEARNING [EV6A-EL, EV6AX-EL])
- 2020-2023 CX-30 (INITIAL LEARNING [EV6A-EL, EV6AX-EL])
- 2024 CX30 (INITIAL LEARNING [EV6AX-EL])

8. Drive the vehicle at 20 mph for 3 minutes to agitate the ATF in the torque converter, oil passage, and differential chamber that does not come out of the oil pan drain to evenly mix old and new ATF.

- If actual driving is difficult, perform the drive with the vehicle lifted up on a 2-post lift and drive at 20 mph for 3 minutes.

NOTE: In the case of a 4WD vehicle, warning lights may turn on when the vehicle is lifted up and driven, but this is not a malfunction. The fault code can be cleared after completing the work.

Approximate time: 10 minutes for initial learning (step 7) and 3 minutes for actual driving (step 8).

9. Repeat from step 6 to step 8 two more times.

NOTE:

- ATF replacement is performed 3 times in total for step 6.
- Initial Learning is performed 4 times in total for step 5 and 7 combined.
- Make sure to dispose of/recycle the used fluid in accordance with federal and local guidelines.

10. Verify the repair by checking if the chirp noise has disappeared.

- If the chirp noise occurs again, contact the Technical Hotline.

PARTS INFORMATION

NOTE:

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CONVERTER, TORQUE

Part Number	Description	Q'ty	Notes
FZC1-19-100A	CONVERTER, TORQUE	1	For FZ ATF
FZC6-19-100	CONVERTER, TORQUE	1	For A7 ATF

Replacement Parts**Mazda6**

Part Number	Description	Q'ty	Notes
B455-32-099B	BOLT, SHAFT	1	Joint Bolt A (Lower), Intermediate shaft
PE13-15-296	CONNECTOR	1	for AT Oil Cooler Hose
T060-26-169A	PIN, SNAP	2	for Tie-rod End
D651-33-042A	NUT	2	for Drive Shaft
H010-25-421A	CLIP	1	for Drive Shaft
99564-1400	GASKET	1	for ATF Drain Plug
-	GREASE	1	for Steering Knuckle

CX-5

Part Number	Description	Q'ty	Notes
B455-32-099B	BOLT, SHAFT	1	Joint Bolt A (Lower), Intermediate shaft
PE13-15-296	CONNECTOR	1	for AT Oil cooler hose
T060-26-169A	PIN, SNAP	2	for Tie-rod end
D651-33-042A	NUT	2	for Drive Shaft
H010-25-421A	CLIP	1	for Drive Shaft
PY01-13-460	GASKET	1	for Exhaust Manifold [4WD]
PE23-40-305	GASKET	1	for TWC [4WD]
99946-1000	NUT	2	for TWC [4WD]
99564-1400	GASKET	1	for ATF Drain Plug
-	GREASE	1	for Steering Knuckle

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Mazda3 and CX-30

Part Number	Description	Q'ty	Notes
B455-32-099B	BOLT, SHAFT	1	Joint Bolt A (Lower), Intermediate shaft
PE13-15-296	CONNECTOR	1	for AT Oil cooler hose
T060-26-169A	PIN, SNAP	2	for Tie-rod end
D651-33-042A	NUT	2	for Drive Shaft
H010-25-421A	CLIP	1	for Drive Shaft
PY01-13-460	GASKET	1	for Exhaust Manifold [4WD]
PE23-40-305	GASKET	1	for TWC [4WD]
99946-1000	NUT	2	for TWC [4WD]
99564-1400	GASKET	1	for ATF Drain Plug
-	GREASE	1	for Steering Knuckle

ATF and Engine Coolant

Part Number	Description	Q'ty	Notes
0000-FZ-113E-01	ATF FZ	-	Actual amount 10 L (US 1 0.6 qt)
0000-A7-115-QT	ATF A7	-	Actual amount 10 L (US 1 0.6 qt)
5555-CL-002	MAZDA COOLANT FL22	-	Actual amount 2 L (US 2 .1 qt)

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WARRANTY INFORMATION**NOTE:**

- This warranty information applies only to verified customer complaints on vehicles eligible for warranty repair.
- This repair will be covered under Mazda's Powertrain Limited Warranty term.
- Additional diagnostic time cannot be claimed for this repair.

Warranty Type	A
Symptom Code	82
Damage Code	9W
Part Number Main Cause	****-19-100
Quantity	1
Operation Number / Labor Hours:	XXWGCARX / 7.3 Hrs (Mazda6) XXWGCARX / 7.7 Hrs (CX-5 2WD) XXWGCBRX / 10.0 Hrs (CX-5 4WD) XXWGCARX / 7.5 Hrs (Mazda3 and CX-30 2WD) XXWGCBRX / 9.7 Hrs (Mazda3 and CX-30 4WD)

NOTE:

- Claim Replacement Parts, ATF and Engine Coolant as related parts.
- Labor hours include time for a front wheel alignment check and adjustment.

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