

Technical Service Bulletin

Mazda North American Operations
Irvine, CA 92618-2922



Subject: WHINING NOISE FROM AUTOMATIC TRANSAXLE	Bulletin No.: 05-005/20
	Last Issued: 11/03/2020

BULLETIN NOTES

This bulletin supersedes the previously issued bulletin(s) listed below. The changes are noted in red text.

Previous TSBS:	Issued Dates:
05-002/19	03/27/19
05-008/16	12/07/16
05-005/15	11/17/15 and 04/08/15
05-004/14	05/05/14, 03/19/14 and 03/05/14

APPLICABLE MODEL(S)/VINS

- 2012-2013 Mazda3 (SKYACTIV A/T)
- 2014-2018 Mazda3 (SKYACTIV A/T)
- 2013-2016 CX-5 (SKYACTIV A/T)
- 2017-2019 CX-5 (SKYACTIV A/T except 2.5T engine) with VINS lower than JM3KF*****515940 (produced before November 1, 2018)
- 2014-2017 Mazda6 (SKYACTIV A/T)
- 2018 Mazda6 (SKYACTIV A/T except 2.5T engine) with VINS lower than JM1GL*****330038 (produced before November 1, 2018)
- 2016-2019 CX-3 (SKYACTIV A/T) with VINS lower than JM1DK*****427352 (produced before October 31, 2018)

DESCRIPTION

Some customers may complain of a whining noise from the automatic transaxle when driving at 10 mph and above. The noise:

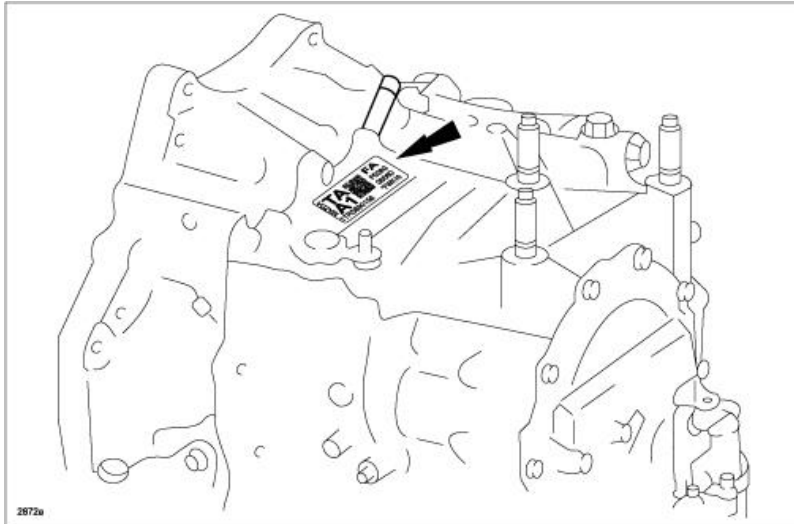
- Depends on the vehicle's speed only (the more speed, the more noise)
- Occurs with all types of driving (acceleration, deceleration, steady speed)
- Does not depend on rpm, gear, or ATF temperature

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This is caused by a damaged bearing in the transaxle due to improper configuration of the transaxle case. A modification has now been implemented on automatic transaxles with the following serial numbers:

- 7TN0820364 and higher (CX-3) / 8TN1090104 and higher (except CX-3)
- 8TR1008883 and higher
- 8TD1003276 and higher
- 8T50331192 and higher (CX-3) / 8T50329705 and higher (except CX-3).

The serial number can be found on top of the transaxle case near the manual shaft lever.



The following table shows how to decipher the serial number. Example 8TN1090104 means Oct., 2018 production.

8 Year	TN Production line	10 Month	90104 Serial Number
3=2013	TN TR TD T5	01 / 51=Jan	XXXXX
4=2014		02 / 52=Feb	
...		...	
6=2016		10 / 60=Oct	
7=2017		11 / 61=Nov	
8=2018		12 / 62=Dec	

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

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REPAIR PROCEDURE

1. Verify customer concern.
2. Replace the 6AT assembly with a new one according to MGSS online instructions.

NOTE: MASH authorization IS required for A/T replacement on 2017 and later models and IS NOT required for 2016 and earlier models still under warranty.

- 2012-2013 Mazda3: (AUTOMATIC TRANSAXLE REMOVAL/INSTALLATION)
- 2014-2018 Mazda3: (AUTOMATIC TRANSAXLE REMOVAL/INSTALLATION)
- 2014-2017 Mazda6: (AUTOMATIC TRANSAXLE REMOVAL/INSTALLATION)
- 2018 Mazda6: (AUTOMATIC TRANSAXLE REMOVAL/INSTALLATION)
- 2013-2016 CX-5: (AUTOMATIC TRANSAXLE REMOVAL/INSTALLATION)
- 2017-2019 CX-5: (AUTOMATIC TRANSAXLE REMOVAL/INSTALLATION)
- 2016-2019 CX-3: (AUTOMATIC TRANSAXLE REMOVAL/INSTALLATION)

3. Verify repair.

PARTS INFORMATION

Description	Vehicle	Engine	Part Number	Qty.	Notes
6AT SKYACTIV Assembly	2012-13 Mazda3	2.0L	FWK1-03-000	1	
	2013 CX-5 (FWD)	2.0L	FWL1-03-000		-9/6/2012 w/out kickdown switch
	2013 CX-5 (AWD)	2.0L	FW7A-03-000		
	2013 CX-5 (FWD)	2.0L	FWLC-03-000		9/7/12-11/19/12 w/ kickdown switch
	2013 CX-5 (AWD)	2.0L	FW78-03-000		
	2014 CX-5 (FWD)	2.0L	FWL7-03-000		
	2014 CX-5 (AWD)	2.0L	FW7F-03-000		
	2014 CX-5 (FWD)	2.5L	FWH4-03-000		
	2014 CX-5 (AWD)	2.5L	FW7L-03-000		
	2014 Mazda6	2.5L	FWH3-03-000		w/out i-ELOOP
			FWH9-03-000		w/ i-ELOOP
	2014 Mazda3 (VIN JM1)	2.0L	FWB2-03-000		
	2014 Mazda3 (VIN JM1)	2.5L	FWH1-03-000		
	2014 Mazda3 (VIN 3MZ)	2.0L	FWT6-03-000		
	Others		FW**-03-000		Refer to GEPC

NOTE: MASH authorization IS required for A/T replacement on 2017 and later models and IS NOT required for 2016 and earlier models still under warranty.

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Non-reusable Parts
Mazda3 (BL)

Part Number	Part Name	Qty	Notes
T060-26-169A	Pin, Snap	2	For Tie-rod End
D651-33-042A	Nut	2	For Drive Shaft
G054-25-421	Clip	1	For Drive Shaft
FU31-19-423	Plug	1	Pressure Detection Square Head Plug (for line pressure check)
L2Y1-33-247	Grease	1	For Knuckle (one tube will do 10 vehicles) Use 5555-20-004A For 1/10th of tube reimbursement on claim.
0000-FZ-113E-01	ATF-FZ	9	8.2 qt (7.8 L, 6.9 Imp qt) max.

Mazda3 (BM/BN)

Part Number	Part Name	Qty	Notes
B455-32-099B	Bolt, Shaft	1	Joint Bolt A (Lower), Intermediate Shaft
T060-26-169A	Pin, Snap	2	For Tie-rod End
D651-33-042A	Nut	2	For Drive Shaft
G054-25-421	Clip	1	For Drive Shaft (2.0L)
H010-25-421	Clip	1	For Drive Shaft (2.5L)
9YA2-80-603A	Bolt	4	Set Bolt for PCM Cover (2.0L/2.5L, with set bolt)
FU31-19-423	Plug	1	Pressure Detection Square Head Plug (for line pressure check)
L2Y1-33-247	Grease	1	For Knuckle (one tube will do 10 vehicles) Use 5555-20-004A For 1/10th of tube reimbursement on claim.
0000-FZ-113E-01	ATF-FZ	9	8.2 qt (7.8 L, 6.9 Imp qt) max.

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Mazda6 (GJ/GL)

Part Number	Part Name	Qty	Notes
B455-32-099B	Bolt, Shaft	1	Joint Bolt A (Lower), Intermediate shaft
PYFB-15-169	Gasket, Water Outlet	1	For Lower radiator Hose Component (GL with coolant control valve)
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
9YA2-80-603A	Bolt	2	Set Bolt for PCM Cover (with set bolt)
FU31-19-423	Plug	1	Pressure Detection Square Head Plug (for line pressure check)
L2Y1-33-247	Grease	1	For Knuckle (one tube will do 10 vehicles) Use 5555-20-004A For 1/10th of tube reimbursement on claim.
0000-FZ-113E-01	ATF-FZ	9	8.2 qt (7.8 L, 6.9 Imp qt) max.

CX-3 (DK)

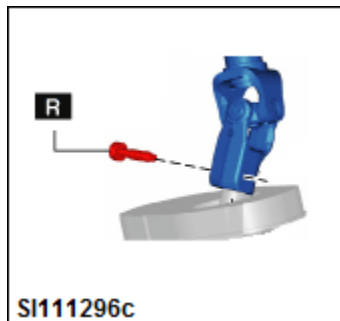
Part Number	Part Name	Qty	Notes
B455-32-099B	Bolt, Shaft	1	Joint Bolt A (Lower), Intermediate Shaft
PYFB-15-169	Gasket, Water Outlet	1	For Lower Radiator Hose Component (with coolant control valve)
T060-26-169A	Pin, Snap	2	For Tie-rod End
D651-33-042A	Nut	2	For Drive Shaft
H010-25-421A	Clip	1	For Drive Shaft
CN01-27-397	Seal, Oil	1	Transfer oil seal (RH) No.1 (AWD)
KN01-27-398	Seal, Oil	1	Transfer oil seal (RH) No.3 (AWD)
9YA2-80-603A	Bolt	4	Set Bolt for PCM Cover (2.0L with set bolt)
FU31-19-423	Plug	1	Pressure Detection Square Head Plug (for line pressure check)
L2Y1-33-247	Grease	1	For Knuckle (one tube will do 10 vehicles) Use 5555-20-004A For 1/10th of tube reimbursement on claim.
0000-FZ-113E-01	ATF-FZ	9	8.2 qt (7.8 L, 6.9 Imp qt) max.

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CX-5 (KE/KF)

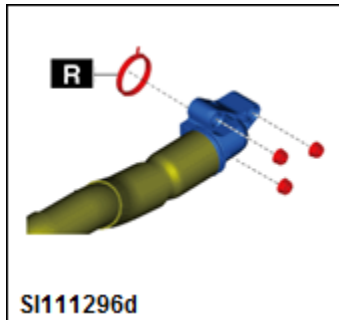
Part Number	Part Name	Qty	Notes
B455-32-099B	Bolt, Shaft	1	Joint Bolt A (Lower), Intermediate Shaft
PYFB-15-169	Gasket, Water Outlet	1	For Lower Radiator Hose Component (KF with coolant control valve)
T060-26-169A	Pin, Snap	2	For Tie-rod End
D651-33-042A	Nut	2	For Drive Shaft
H010-25-421A	Clip	1	For Drive Shaft
CN01-27-397	Seal, Oil	1	Transfer Oil Seal (RH) No.1 (AWD)
KN01-27-398	Seal, Oil	1	Transfer Oil Seal (RH) No.3 (AWD)
PE17-13-460	Gasket	1	For Exhaust Manifold (2.0L AWD)
PY01-13-460	Gasket	1	For Exhaust Manifold (2.5L AWD)
PE23-40-305	Gasket	1	For TWC (AWD)
9994-61-000	Nut	2	For TWC (AWD)
9YA2-80-603A	Bolt	2	Set Bolt for PCM Cover (with set bolt)
FU31-19-423	Plug	1	Pressure Detection Square Head Plug (for line pressure check)
L2Y1-33-247	Grease	1	For Knuckle (one tube will do 10 vehicles) Use 5555-20-004A For 1/10th of tube reimbursement on claim.
0000-FZ-113E-01	ATF-FZ	9	8.2 qt (7.8 L, 6.9 Imp qt) max.

- Joint Bolt A for Intermediate Shaft

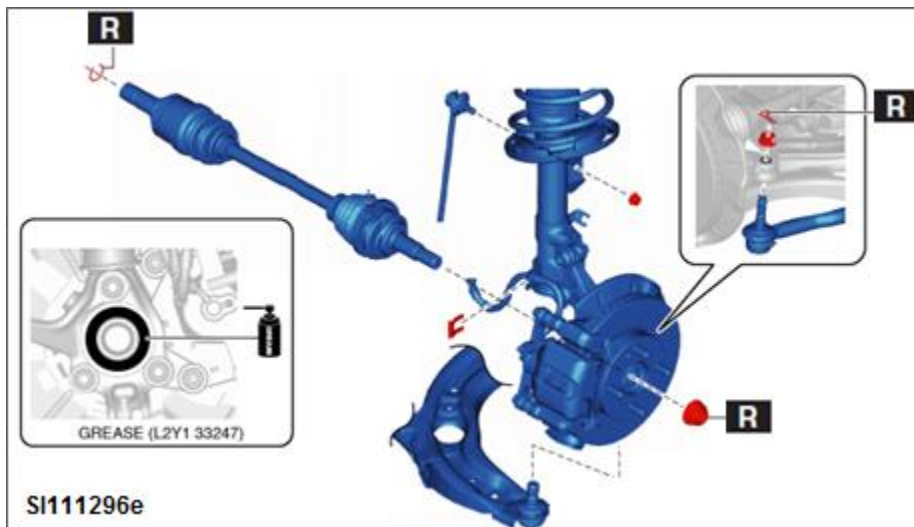


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- Lower Radiator Hose Component (DK/GL/KF with coolant control valve)

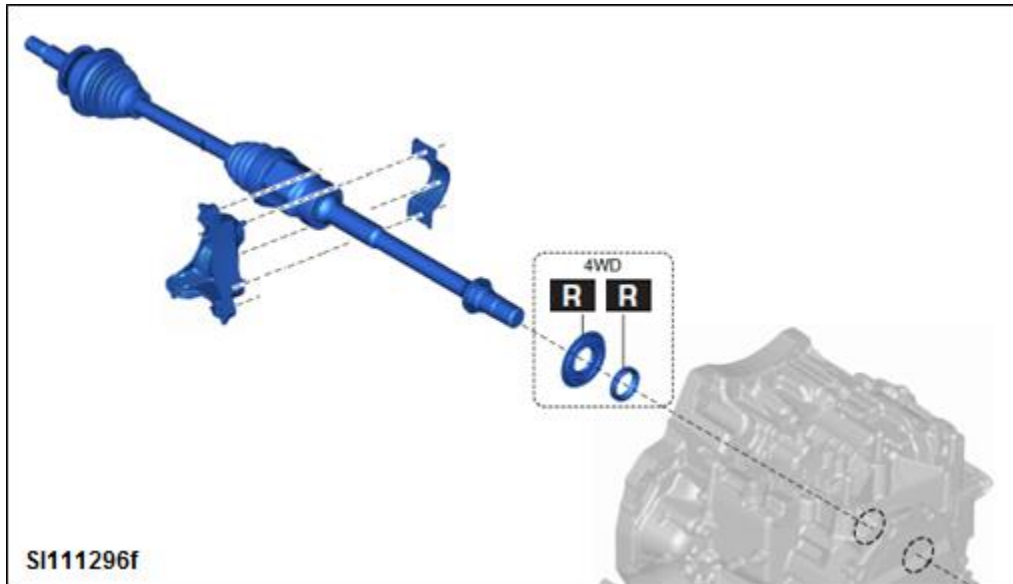


- Snap Pin for Tie-rod End
- Lock Nut for Driveshaft
- Clip for Drive Shaft (LH)
- Grease (L2Y1-33-247) for knuckle



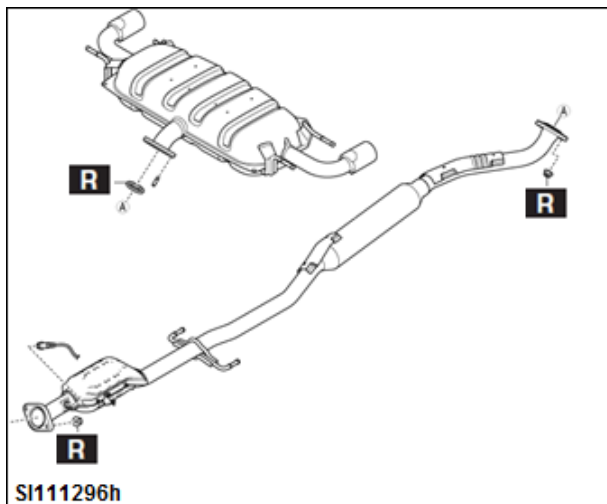
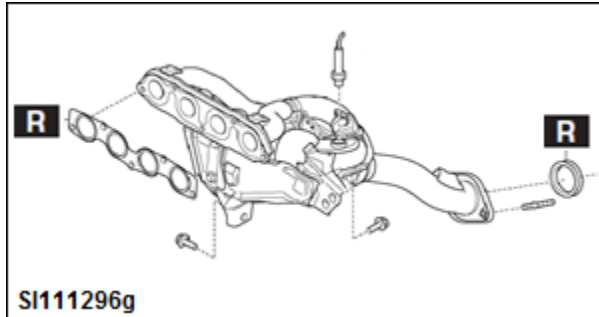
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- Transfer Oil Seals (RH/AWD)

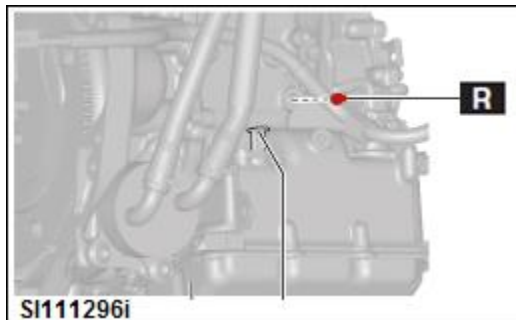


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- Gasket for Exhaust Manifold (AWD)
- Gasket for TWC (AWD)
- Nut for TWC (AWD)



- Pressure Detection Square Head Plug



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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	9G
Part Number Main Cause	****-03-000*
Quantity	1
Operation Number / Labor Hours:	XXR1XBRX / 4.6 Hrs. (2012-2018 Mazda3) XXR1XCRX / 4.6 Hrs. (2014-2017 Mazda6) XXR1XDRX / 4.9 Hrs. (2018 Mazda6) XXR1XFRX / 4.8 Hrs. (2016-2019 CX-3 FWD) XXR1XHRX / 6.8 Hrs. (2016-2018 CX-3 AWD) XXR1XJRX / 7.0 Hrs. (2019 CX-3 AWD) XXR1XMRX / 4.9 Hrs. (2013-2016 CX-5 FWD) XXR1XNRX / 6.9 Hrs. (2013-2016 CX-5 AWD) XXR1XPRX / 5.2 Hrs. (2017-2019 CX-5 FWD) XXR1XRRX / 7.1 Hrs. (2017-2018 CX-5 AWD) XXR1XSRX / 7.5 Hrs. (2019 CX-5 AWD)
	Front Wheel Alignment Check and Adjust - using wired type 4-wheel alignment tester XXR1SAAX / 1.3 Hrs. - using wireless type 4-wheel alignment tester XXR1SBAX / 0.8 Hrs.

NOTE: For grease reimbursement use 5555-20-004A (qty 1) which will pay 1/10th the price of the L2Y1-33-247 tube of grease.

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