

TECHNICAL SERVICE BULLETIN

Classification: Reference: Date:

RA09-004I NTB10-029I November 9, 2022

ABNORMAL NOISE, VIBRATION AND/OR BINDING FEELING FROM REAR DIFFERENTIAL

This bulletin has been amended. See AMENDMENT HISTORY on the last page.

Please discard previous versions of this bulletin.

APPLIED 2019-2023 Altima (L34) 2008-2013 Rogue (S35)

VEHICLES: 2003-2023 Murano (Z50, Z51, Z52) 2014-2015 Rogue Select (S35)

2011-2014 Murano Cross Cabriolet (Z51) 2014-2020 Rogue (T32) 2016 Murano Hybrid (Z52H) 2021-2023 Rogue (T33)

2013-2020 Pathfinder (R52) 2017-2018 Rogue Hybrid (T32H) 2022-2023 Pathfinder (R53) 2017-2022 Rogue Sport (J11)

2014-2015 Pathfinder Hybrid (R52H)

APPLIED DRIVELINES: AWD only

IF YOU CONFIRM

There is an abnormal noise, vibration and/or binding feeling from the rear differential area of the vehicle.

IMPORTANT:

- For vehicles equipped with a Drive Mode Selector: "SNOW" and "OFF-ROAD" modes will increase engagement of the AWD coupler, which increases traction. This may be described as a binding feeling and/or vibration in sharp corners when on dry roads. This is normal behavior. Confirm the drive mode prior to any repair.
- Tire size, brand or tread pattern mismatches can cause similar symptoms. To avoid tire related mismatch vibration, it is recommended that when tires need to be replaced, all tires are replaced at the same time with tires of the proper size, same brand and pattern.

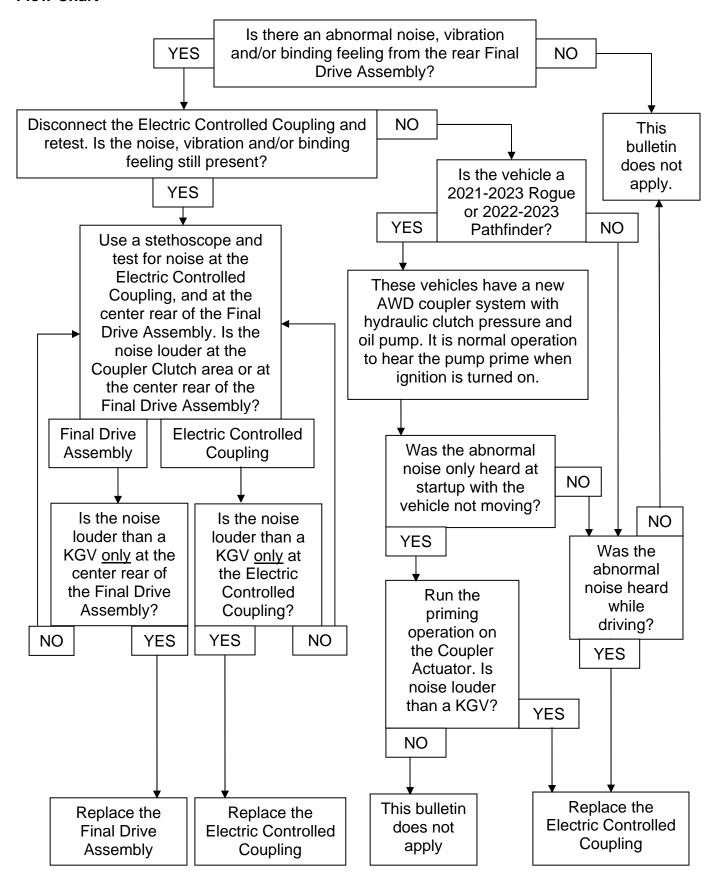
ACTION

Follow the **Flow Chart** on page 2 to assist in diagnosis.

IMPORTANT: The purpose of **ACTION** (above) is to give you a quick idea of the work you will be performing. You MUST closely follow the ESM as it contains information that is essential to successfully completing this repair.

Nissan Bulletins are intended for use by qualified technicians, not 'do-it-yourselfers'. Qualified technicians are properly trained individuals who have the equipment, tools, safety instruction, and know-how to do a job properly and safely. NOTE: If you believe that a described condition may apply to a particular vehicle, DO NOT assume that it does. See your Nissan dealer to determine if this applies to your vehicle.

Flow Chart



ELECTRIC CONTROLLED COUPLING REPLACEMENT

If diagnosis leads to replacement of the Electric Controlled Coupling for the rear final drive:

- <u>DO NOT</u> replace the entire Rear Final Drive Assembly.
- <u>DO NOT</u> remove the Rear Final Drive Assembly for this procedure. The Electric Controlled Coupling can be replaced with the Rear Final Drive Assembly in the vehicle.
- Refer to the Electronic Service Manual (ESM) for removal and installation information.
 - For 2019-2023 Altima, 2009-2023 Murano and Murano Hybrid, 2008-2020
 Rogue, Rogue Select, and Rogue Hybrid: TRANSMISSION & DRIVELINE >
 DRIVELINE > REAR FINAL DRIVE: R145 > REMOVAL AND INSTALLATION >
 ELECTRIC CONTROLLED COUPLING
 - For 2003-2007 Murano: Section RFD Rear Final Drive
 - For 2013 -2020 Pathfinder and Pathfinder Hybrid: TRANSMISSION & DRIVELINE > DRIVELINE > REAR FINAL DRIVE: R145K1 > REMOVAL AND INSTALLATION > ELECTRIC CONTROLLED COUPLING
 - For 2022-2023 Pathfinder and 2021-2023 Rogue: TRANSMISSION &
 DRIVELINE > DRIVELINE > REAR FINAL DRIVE: R145 > REMOVAL AND INSTALLATION > ELECTRO-HYDRAULIC COUPLING

REAR FINAL DRIVE ASSEMBLY REPLACEMENT

If diagnosis leads to replacement of the Rear Final Drive Assembly:

- Refer to the Electronic Service Manual (ESM) for removal and installation information.
 - For 2019-2023 Altima: TRANSMISSION & DRIVELINE > DRIVELINE > REAR FINAL DRIVE: R145 > REMOVAL AND INSTALLATION > REAR FINAL DRIVE ASSEMBLY
 - For 2003-2007 Murano: Section RFD Rear Final Drive
 - For 2009-2023 Murano and Murano Hybrid, 2008-2020 Rogue, Rogue Select, and Rogue Hybrid: TRANSMISSION & DRIVELINE > DRIVELINE > REAR FINAL DRIVE: R145 > UNIT REMOVAL AND INSTALLATION > REAR FINAL DRIVE ASSEMBLY
 - For 2013-2020 Pathfinder: TRANSMISSION & DRIVELINE > DRIVELINE > REAR FINAL DRIVE: R145K1 > UNIT REMOVAL AND INSTALLATION > REAR FINAL DRIVE ASSEMBLY
 - For 2022-2023 Pathfinder and 2021-2023 Rogue: TRANSMISSION &
 DRIVELINE > DRIVELINE > REAR FINAL DRIVE: R145 > UNIT REMOVAL
 AND INSTALLATION > REAR FINAL DRIVE ASSEMBLY
 - For 2017-2022 Rogue Sport: REPAIR > TRANSMISSION & DRIVELINE >
 DRIVELINE > REMOVAL AND INSTALLATION > REAR FINAL DRIVE
 ASSEMBLY

UNIT CHARACTERISTICS WRITING

Performing "Unit Characteristics Writing" of the Electric Controlled Coupling with CONSULT-III plus **is required** on some models when replacing the Electric Controlled Coupling or the Final Drive Assembly.

- Refer to the Electronic Service Manual (ESM) for Unit Characteristics Writing.
 - For 2019-2023 Altima: TRANSMISSION & DRIVELINE > DRIVELINE > TRANSFER: TY21D > BASIC INSPECTION > AWD SYSTEM > UNIT CHARACTERISTICS WRITING
 - For 2015-2023 Murano and Murano Hybrid, 2015-2020 Pathfinder and Pathfinder Hybrid, and 2014-2020 Rogue and Rogue Hybrid: TRANSMISSION & DRIVELINE > DRIVELINE > TRANSFER: TY21C > BASIC INSPECTION > UNIT CHARACTERISTICS WRITING
 - For 2022-2023 Pathfinder: TRANSMISSION & DRIVELINE > DRIVELINE > TRANSFER: TY92B > BASIC INSPECTION > ADDITIONAL SERVICE WHEN REPLACING AWD CONTROL UNIT (IN ELECTRO-HYDRAULIC COUPLING)
 - For 2021-2023 Rogue: TRANSMISSION & DRIVELINE > DRIVELINE > TRANSFER: TY92A > BASIC INSPECTION > ADDITIONAL SERVICE WHEN REPLACING AWD CONTROL UNIT (IN ELECTRO-HYDRAULIC COUPLING)
 - For 2017-2022 Rogue Sport: TRANSMISSION & DRIVELINE > DRIVELINE > BASIC INSPECTION > AWD SYSTEM > UNIT CHARACTERISTICS WRITING

PARTS INFORMATION

For Models:

2019-2023 Altima (L34)

DESCRIPTION	PART #	QUANTITY
BREATHER	38322-4BF2A	1 As Needed
BREATHER, FINAL DRIVE	38322-6CC0A	1 As Needed
CPLG ASSY-ELEC (Electric Controlled Coupling)	38761-(****) (1)	1 As Needed
FINAL DRIVE ASSEMBLY	38300-(****) (1)	1 As Needed
NUT (PROPELLER SHAFT)	37171-(****) (1)	4 As Needed
STUD (REAR COUPLING)	38764-(****) (1)	4 As Needed
3 BOND GSKT MKR-RTV (2) (3)	999MP-1217FPP	As Needed

- (1) Use the VIN and the Electronic Parts Catalog to look up the part number for the vehicle you are working on.
- (2) This product is considered a shop supply; do not include it on your warranty claim.
- (3) Order this item through the Nissan Maintenance Advantage program:
 Phone 877-NIS-NMA1 (877-647-6621). Website order via link on the dealer portal:
 www.NNAnet.com and click on the "Maintenance Advantage-Tire/Battery/Chemical"
 link.

2003-2007 Murano (Z50) 2009-2014 Murano (Z51) 2011-2014 Murano Cross Cabriolet (Z51) 2008-2013 Rogue (S35) 2014-2015 Rogue Select (S35)

DESCRIPTION	PART#	QUANTITY
BOLT (PROPELLER SHAFT)	37120-(*****) (1)	8 As Needed
CENTER OIL SEAL	38189-(*****) (1)	1 As Needed
COMPANION FLANGE LOCK NUT	38216-(*****) (1)	1 As Needed
CPLG ASSY-ELEC (Electric Controlled Coupling)	38761-(*****) (1)	1 As Needed
FINAL DRIVE ASSEMBLY	38300-(*****) (1)	1 As Needed
FRONT OIL SEAL	38189-(****) (1)	1 As Needed
NUT (PROPELLER SHAFT CENTER BEARING)	01223-(****) (1)	2 As Needed
NUT (PROPELLER SHAFT)	37171-(*****) (1)	8 As Needed
3 BOND GSKT MKR-RTV (2) (3)	999MP-1217FPP	As Needed

- (1) Use the VIN and the Electronic Parts Catalog to look up the part number for the vehicle you are working on.
- (2) This product is considered a shop supply; do not include it on your warranty claim.
- (3) Order this item through the Nissan Maintenance Advantage program:
 Phone 877-NIS-NMA1 (877-647-6621). Website order via link on the dealer portal:
 www.NNAnet.com and click on the "Maintenance Advantage-Tire/Battery/Chemical"
 link.

2014-2020 Rogue (T32) 2017-2022 Rogue Sport (J11)

DESCRIPTION	PART#	QUANTITY
BREATHER	38356-(****) (1)	1 As Needed
BREATHER CLIP	24225-(****) (1)	1 As Needed
BREATHER HOSE CLIP	63848-(****) (1)	1 As Needed
CPLG ASSY-ELEC (Electric Controlled Coupling)	38761-(****) (1)	1 As Needed
FINAL DRIVE ASSEMBLY	38300-(****) (1)	1 As Needed
STUD (REAR COUPLING	38764-(****) (1)	4 As Needed
NUT (PROPELLER SHAFT)	37171-(****) (1)	4 As Needed
3 BOND GSKT MKR-RTV (2) (3)	999MP-1217FPP	As Needed

- (1) Use the VIN and the Electronic Parts Catalog to look up the part number for the vehicle you are working on.
- (2) This product is considered a shop supply; do not include it on your warranty claim.
- (3) Order this item through the Nissan Maintenance Advantage program: Phone 877-NIS-NMA1 (877-647-6621). Website order via link on the dealer portal: www.NNAnet.com and click on the "Maintenance Advantage-Tire/Battery/Chemical" link.

2015-2023 Murano (Z52) 2016 Murano Hybrid (Z52H)

DESCRIPTION	PART #	QUANTITY
CPLG ASSY-ELEC (Electric Controlled Coupling)	38761-(*****) (1)	1 As Needed
DRIVE PINION OIL SEAL	38189-(*****) (1)	1 As Needed
FINAL DRIVE ASSEMBLY	38300-(*****) (1)	1 As Needed
NUT (PROPELLER SHAFT)	37171-(*****) (1)	4 As Needed
STUD (REAR COUPLING)	38764-(****) (1)	4 As Needed
3 BOND GSKT MKR-RTV (2) (3)	999MP-1217FPP	As Needed

- (1) Use the VIN and the Electronic Parts Catalog to look up the part number for the vehicle you are working on.
- (2) This product is considered a shop supply; do not include it on your warranty claim.
- (3) Order this item through the Nissan Maintenance Advantage program: Phone 877-NIS-NMA1 (877-647-6621). Website order via link on the dealer portal: www.NNAnet.com and click on the "Maintenance Advantage-Tire/Battery/Chemical" link.

For Models:

2017-2018 Rogue Hybrid (T32H)

DESCRIPTION	PART #	QUANTITY
BREATHER	38356-(****) (1)	1 As Needed
CPLG ASSY-ELEC (Electric Controlled Coupling)	38761-(****) (1)	1 As Needed
FINAL DRIVE ASSEMBLY	38300-(****) (1)	1 As Needed
NUT (PROPELLER SHAFT)	37171-(****) (1)	4 As Needed
STUD (REAR COUPLING)	38764-(****) (1)	4 As Needed
3 BOND GSKT MKR-RTV (2) (3)	999MP-1217FPP	As Needed

- (1) Use the VIN and the Electronic Parts Catalog to look up the part number for the vehicle you are working on.
- (2) This product is considered a shop supply; do not include it on your warranty claim.
- (3) Order this item through the Nissan Maintenance Advantage program:
 Phone 877-NIS-NMA1 (877-647-6621). Website order via link on the dealer portal:
 www.NNAnet.com and click on the "Maintenance Advantage-Tire/Battery/Chemical"
 link.

2013-2020 Pathfinder (R52) 2014-2015 Pathfinder Hybrid (R52H)

PART #	QUANTITY
37120-(*****) (1)	4
07 120 ()(1)	As Needed
38322-3.IA1A	1
00022 00/11/1	As Needed
17235-CA010	1
17233 071010	As Needed
38761-(****) (1)	1
30701 ()(1)	As Needed
38300-(****) (1)	1
30300 () (1)	As Needed
37171-(****) (1)	4
3/1/1 ()(1)	As Needed
37171-(****) (1)	4
37171 ()(1)	As Needed
999MP-1217FPP	As Needed
	37120-(*****) (1) 38322-3JA1A 17235-CA010 38761-(*****) (1) 38300-(*****) (1) 37171-(*****) (1)

- (1) Use the VIN and the Electronic Parts Catalog to look up the part number for the vehicle you are working on.
- (2) This product is considered a shop supply; do not include it on your warranty claim.
- (3) Order this item through the Nissan Maintenance Advantage program:
 Phone 877-NIS-NMA1 (877-647-6621). Website order via link on the dealer portal:
 www.NNAnet.com and click on the "Maintenance Advantage-Tire/Battery/Chemical"
 link.

2022-2023 Pathfinder (R53) 2021-2023 Rogue (T33)

DESCRIPTION	PART #	QUANTITY
CPLG ASSY-ELEC (Electric Controlled Coupling)	38760-(****) (1)	1 As Needed
FINAL DRIVE ASSEMBLY	38300-(****) (1)	1 As Needed
BOLT (PROPELLER SHAFT)	37120-(****) (1)	4 As Needed
NUT (PROPELLER SHAFT	37171-(*****) (1)	4 As Needed
3 BOND GSKT MKR-RTV (2) (3)	999MP-1217FPP	As Needed
AWD Coupler Fluid	999MP-LSCTRF	7/8 Quart As needed

- (1) Use the VIN and the Electronic Parts Catalog to look up the part number for the vehicle you are working on.
- (2) This product is considered a shop supply; do not include it on your warranty claim.
- (3) Order this item through the Nissan Maintenance Advantage program: Phone 877-NIS-NMA1 (877-647-6621). Website order via link on the dealer portal: www.NNAnet.com and click on the "Maintenance Advantage-Tire/Battery/Chemical" link.

CLAIMS INFORMATION

For Models:

2019-2023 Altima (L34)

2015-2023 Murano (Z52)

2016 Murano Hybrid (Z52H)

2013-2020 Pathfinder (R52)

2014-2015 Pathfinder Hybrid (R52H)

2022-2023 Pathfinder (R53)

2014-2020 Rogue (T32)

2021-2023 Rogue (T33)

2017-2018 Rogue Hybrid (T32H)

2017-2022 Rogue Sport (J11)

Submit a Primary Part (PP) type line claim using the following claims coding:

DESCRIPTION PF		OP CODE	SYM	DIA	FRT
Replace Electric Coupling Assy	(1)	LB65AA	ZL	21	(2)

- (1) Reference the Electronic Parts Catalog and use the Electric Coupling (38761-****) as the Primary Failed Part (PFP).
- (2) Reference the current Nissan Warranty Flat Rate Manual and use the indicated Flat Rate Time.

OR

For Models:

2003-2014 Murano (Z50, Z51)

2011-2014 Murano Cross Cabriolet (Z51)

2008-2013 Rogue (\$35)

2014-2015 Rogue Select (S35)

Submit a Primary Part (PP) type line claim using the following claims coding:

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Replace Electric Coupling Assy	(1)	LB88AA	ZL	21	(2)

- (1) Reference the Electronic Parts Catalog and use the Electric Coupling (38761-****) as the Primary Failed Part (PFP).
- (2) Reference the current Nissan Warranty Flat Rate Manual and use the indicated Flat Rate Time.

CLAIMS INFORMATION continued on next page.

CLAIMS INFORMATION

For All Models:

Submit a Primary Part (PP) type line claim using the following claims coding:

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
R & I Final Drive Assembly	(1)	LB01AA	71	21	(0)
Replace Final Drive	[(1)	LB021A		21	(2)

- (1) Reference the Electronic Parts Catalog and use the Final Drive (38300-****) as the Primary Failed Part (PFP).
- (2) Reference the current Nissan Warranty Flat Rate Manual and use the indicated Flat Rate Time.

AMENDMENT HISTORY

PUBLISHED DATE	REFERENCE	DESCRIPTION
February 25, 2010	NTB10-029	Original bulletin published
October 5, 2011	NTB10-029a	APPLIED VEHICLES section revised
September 24, 2015	NTB10-029b	APPLIED VEHICLES and PARTS INFORMATION sections, page 1, and Title revised
November 16, 2015	NTB10-029c	CLAIMS INFORMATION section revised.
September 28, 2018	NTB10-029d	APPLIED VEHICLES and PARTS INFORMATION sections revised
November 12, 2018	NTB10-029e	APPLIED VEHICLES and PARTS INFORMATION sections revised
September 23, 2020	NTB10-029f	APPLIED VEHICLES, PARTS INFORMATION and CLAIMS INFORMATION sections revised
March 15, 2022	NTB10-029G	Changes throughout
May 31, 2022	NTB10-029H	PARTS INFORMATION table added to page 8 for 2014-2020 Rogue and 2017-2022 Rogue Sport. AWD Coupler Fluid added to the PARTS INFORMATION for 2022 Pathfinder 2021-2022 Rogue on page 11
November 9, 2022	NTB10-029I	APPLIED VEHICLES, description of vehicle symptoms, and IMPORTANT statement in IF YOU CONFIRM section revised; model year changes made on pages 2-6, 9, 11, and 12