



INFINITI

TECHNICAL SERVICE BULLETIN

Classification: RA12-003I	Reference: ITB12-072I	Date: November 9, 2022
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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 VEHICLES: 2013 JX35 (L50)
 2019-2023 QX50 (J55)
 2022-2023 QX55 (FJ55)
 2014-2020 QX60 (L50)
 2022-2023 QX60 (L51)
 2014-2019 QX60 Hybrid (L50H)

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" mode 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.

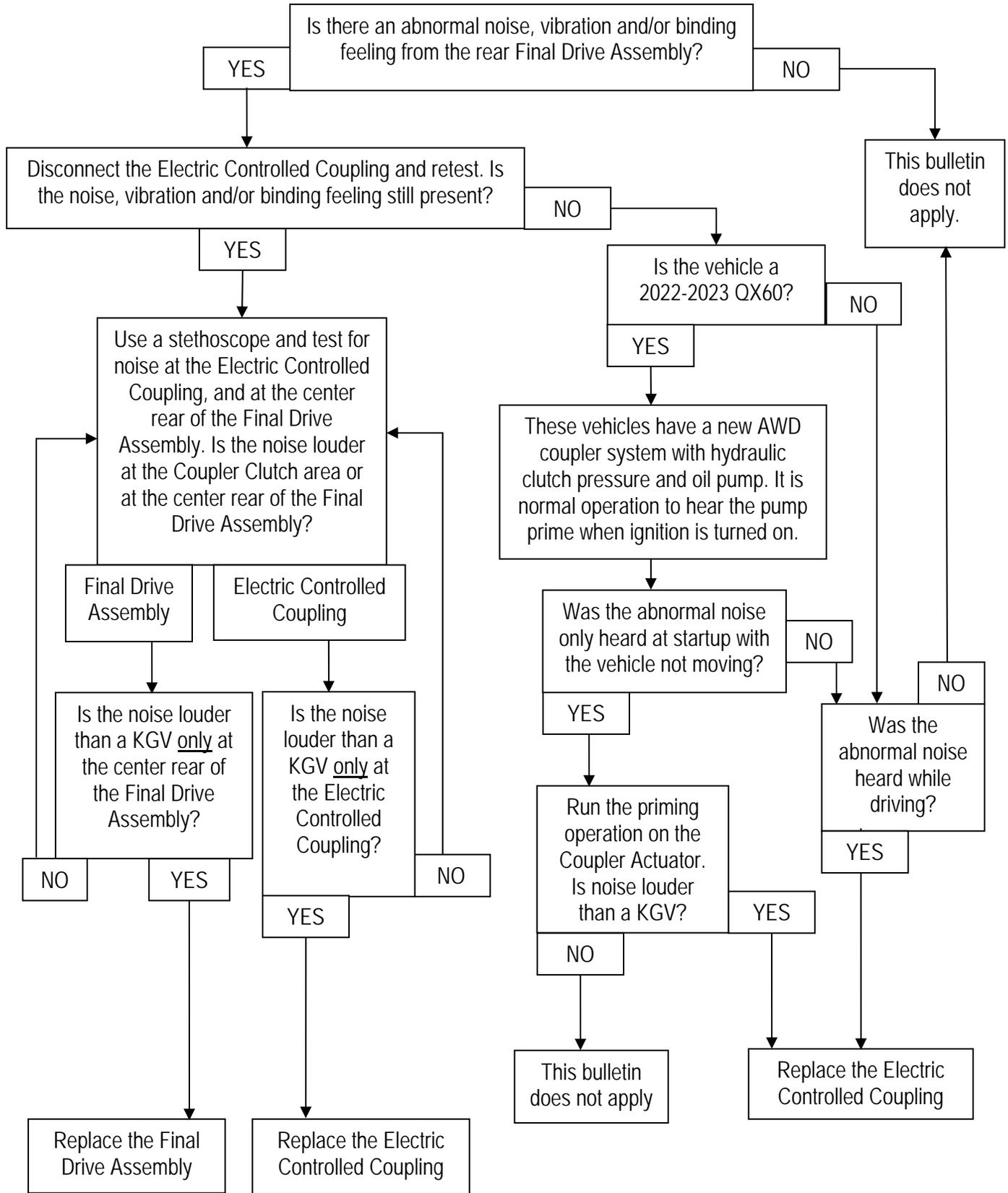
ACTION

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.

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 Infiniti retailer 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:

- **DO NOT** replace the entire Rear Final Drive Assembly.
- **DO NOT** 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 QX50 and QX55: **TRANSMISSION & DRIVELINE > DRIVELINE > REAR FINAL DRIVE: R145 > REMOVAL AND INSTALLATION > ELECTRIC CONTROLLED COUPLING**
 - For 2022-2023 QX60: **TRANSMISSION & DRIVELINE > DRIVELINE > REAR FINAL DRIVE: R145 > REMOVAL AND INSTALLATION > ELECTRO-HYDRAULIC COUPLING**
 - For 2013 JX, 2014-2020 QX60 and QX60 Hybrid: **TRANSMISSION & DRIVELINE > DRIVELINE > REAR FINAL DRIVE: R145K1 > REMOVAL AND INSTALLATION > ELECTRIC CONTROLLED 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 QX50, QX55, and 2022-2023 QX60: **TRANSMISSION & DRIVELINE > DRIVELINE > REAR FINAL DRIVE: R145 > UNIT REMOVAL AND INSTALLATION > REAR FINAL DRIVE ASSEMBLY**
 - For 2013 JX, 2014-2020 QX60 and QX60 Hybrid: **TRANSMISSION & DRIVELINE > DRIVELINE > REAR FINAL DRIVE: R145K1 > UNIT 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 QX50 and QX55: **TRANSMISSION & DRIVELINE > DRIVELINE > TRANSFER: TY21D > BASIC INSPECTION > UNIT CHARACTERISTICS WRITING**
 - For 2022-2023 QX60: **TRANSMISSION & DRIVELINE > DRIVELINE > TRANSFER: TY92B > BASIC INSPECTION > ADDITIONAL SERVICE WHEN REPLACING AWD CONTROL UNIT (IN ELECTRIC-CONTROLLED COUPLING)**
 - For 2013 JX, 2014-2020 QX60 and QX60 Hybrid: **TRANSMISSION & DRIVELINE > DRIVELINE > TRANSFER: TY21C > BASIC INSPECTION > UNIT CHARACTERISTICS WRITING**

PARTS INFORMATION

For Models:

2013 JX35 (L50)

2014-2020 QX60 (L50)

2014-2019 QX60 Hybrid (L50H)

2019-2023 QX50 (J55)

2022-2023 QX55 (FJ55)

DESCRIPTION	PART NUMBER	QUANTITY
BOLT (PROPELLER SHAFT)	37120-(*****) (1)	4 As Needed
BREATHER	38322-(*****) (1)	1 As Needed
CONNECTOR, BREATHER	17235-(*****) (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
NUT (TORSIONAL DAMPER)	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 Infiniti Maintenance Advantage program: Phone 877-INF-IMA1 (877-463-4621).
Website order via link on the dealer portal: www.NNAnet.com and click on the "Maintenance Advantage-Tire/Battery/Chemical" link.

PARTS INFORMATION continued on next page

For Models:
2022-2023 QX60 (L51)

DESCRIPTION	PART NUMBER	QUANTITY
BOLT (PROPELLER SHAFT)	37120-(*****) (1)	4 As Needed
CPLG ASSY-ELEC (Electric Controlled Coupling)	38760-(*****) (1)	1 As Needed
FINAL DRIVE ASSEMBLY	38300-(*****) (1)	1 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 Infiniti Maintenance Advantage program: Phone 877-INF-IMA1 (877-463-4621).
Website order via link on the dealer portal: www.NNAnet.com and click on the "Maintenance Advantage-Tire/Battery/Chemical" link.

CLAIMS INFORMATION

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

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Rpl Electronic Controlled Coupling	(1)	LB65AA	ZL	21	(2)

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

OR

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	ZL	21	(2)
Replace Final Drive		LB021A			

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

AMENDMENT HISTORY

PUBLISHED DATE	REFERENCE	DESCRIPTION
October 29, 2012	ITB12-072	Original bulletin published
November 1, 2012	ITB12-072a	PARTS INFORMATION section revised
December 3, 2012	ITB12-072b	CLAIMS INFORMATION section revised
September 24, 2015	ITB12-072c	APPLIED VEHICLES section revised, and SERVICE PROCEDURE section removed
September 28, 2018	ITB12-072d	APPLIED VEHICLES section revised
November 12, 2018	ITB12-072e	PARTS INFORMATION section revised
September 23, 2020	ITB12-072f	Title, APPLIED VEHICLES and PARTS INFORMATION sections revised
March 15, 2022	ITB12-072G	Changes throughout
May 31, 2022	ITB12-072H	AWD Coupler Fluid added to the PARTS INFORMATION for 2022 QX60 on page 6
November 9, 2022	ITB12-072I	APPLIED VEHICLES , description of vehicle symptoms, and IMPORTANT statement in IF YOU CONFIRM section revised; model year changes made on pages 2-6