



Volvo Car USA LLC

Technical Journal

Technical Journal Title		Ref. No.	
ERAD (Electric Rear Axle Drive) Noise Fault Tracing		TJ 33358.9.0	
Issuer (Dept.)		Issue Date	Status Date
Technical Service		7/7/23	7/14/23
Car Market	Partner	Function Group	
United States and Canada	3 US 7510 Volvo Car USA	4632	
Function Description		Page	
Electrical rear axis drive		Page 1 of 2	

Attachment

File Name	File Size
TJ 33358 Faulty Motor Bearing Noise.mp4	0.7789 MB
TJ 33358 Normal Sound.mp4	0.7451 MB
TJ 33358 Sensor Disk Noise.mp4	5.9175 MB

Rows beginning with * are modified

Note! If using a printed copy of this Technical Journal, first check for the latest online version.

DESCRIPTION:

* Updated in its entirety.

If a customer experiences noise from the ERAD (Electrical Rear Axle Drive), please follow the instructions under "Service."

CSC Customer Symptom Codes

Code	Description
DL	Warning lights and chimes/Malfunction Indicator Light ("Check engine" light) indication/no indication
8N	Driving/Unusual noise/Unsure when/at all times
D2	Front/rear axle/Unusual noise

DTC Diagnostic Trouble Codes

Vehicle Type

Type	Eng	Eng Desc	Sales	Body	Gear	Steer	Model Year	Plant	Chassis range	Struc Week Range
224	BK	B1LPHEV					2020-9999		-	201920-209952
224	BR	B1FPHEV					2019-9999		-	201850-209952
225	BK	B1LPHEV					2020-9999		-	201920-209952
225	BR	B1FPHEV					2019-9999		-	201850-209952
235	BR	B1FPHEV					2019-9999		-	201817-209952
238	BC	B1BPHEV					2018-9999		-	201726-209952
238	BK	B1LPHEV					2020-9999		-	201920-209952
238	BR	B1FPHEV					2018-9999		-	201746-209952
246	BK	B1LPHEV					2020-9999		-	201920-209952

Type	Eng	Eng Desc	Sales	Body	Gear	Steer	Model Year	Plant	Chassis range	Struc Week Range
246	BR	B1FPHEV					2018-9999		-	201717-209952
256	BC	B1BPHEV					2016-9999		-	201526-209952
256	BK	B1LPHEV					2020-9999		-	201920-209952
256	BR	B1FPHEV					2018-9999		-	201717-209952

SERVICE:

Use the information below and the attached videos as a guideline to determine the correct repair.

The ERAD (Electrical Rear Axle Drive) consists of two main parts, a transmission, and an electrical motor.

An instructional repair video is included as an attachment (TJ 33358 Repair Video.mp4).

Baseline:

First please watch the baseline video (TJ 33358 Normal Sound.mp4) for an example of a **normal** ERAD sound. Use a headset or earphones to hear the sound clearly.

Noises:

- If the customer is driving in electric mode and experiences abnormal noise from the rear of the vehicle that increases with vehicle speed (see example video TJ 33358 Faulty Motor Bearing Noise.mp4) it is most likely an electrical motor bearing issue. No DTCs (Diagnostic Trouble Codes) will be stored and no messages will appear in the DIM (Driver Information Module). In this case, follow **Technical Journal 36665**.
- If the customer experiences an abnormal noise when the vehicle is standing still after driving, it might be the ERAD sensor disc causing the problem. Use video (TJ 33358 Sensor Disk Noise.mp4) as a reference. In this case, follow **Technical Journal 35567**.

Warranty claim info:

No warranty claim is accepted for a job described in this Technical Journal.

VEHICLE REPORT:

Yes, please submit a Vehicle Report if the service instruction described in this TJ has no effect. Use the concern area "Vehicle Report" and sub-concern area "Support Needed," use function group 4632.

This has three sound files.