



# TECHNICAL SERVICE BULLETIN

## Front End Noise (Clink/Clunk) - Front Differential Mount Frame Bracket Cracked Or Broken

**24-2408**

09 December  
2024

**Model:**

<b>Ford</b>	Engine: 2.3L
2021-2024 Bronco	Engine: 2.7L

**Markets:** North American markets only

**Issue:** Some 2021-2024 Bronco vehicles equipped with a 2.3L/2.7L engine may exhibit a loud front end clink/clunk noise that leads to the identification of a cracked or broken front differential frame mount bracket. This may be due to flexing of the front differential from driving in 4L for extended periods of time. To correct this concern, repair the mounting bracket using the frame bracket repair kit and update the AWD module to the latest level of software using the latest software version of the FDRS scan tool.

**NOTE:** Advise the customer that 4L/Rock Crawl drive mode should only be used when necessary, as using 4L when not necessary can cause damage to the vehicle. Refer to the Owner's Manual for additional information.

**Action:** Follow the Service Procedure to correct the condition on vehicles that meet all of the following criteria:

- 2021-2024 Bronco
- 2.3L or 2.7L engine
- One of the following symptoms:
  - Clink/clunk noise from the front end
  - Cracked or broken front differential frame mount bracket

**Parts**

Service Part Number	Claim Quantity	Package Order Quantity	Number in Package	Description
NB3Z-3D171-P	1	1	1	Frame Bracket Repair Kit
W720940-S440	2	1	4	Stabilizer Bar Link Nut
W719869-S439	4	1	4	Stabilizer Bar Undershield Bolt
W721449-S439	2	1	4	Stabilizer Bar Bolt
W520214-S440	2	1	2	Stabilizer Bar Nut
W721041-S439	2	1	4	Stabilizer Bar Stud
JB3Z-4B496-B	6	1	6	Cup Bolt And Retaining Straps
KB3Z-3B477-B	2	1	2	Axle Nut (Vehicles Built On Or After 23-Aug-2023)
KB3Z-3B477-A	2	1	2	Axle Nut (Vehicles Built On Or Before 22-Aug-2023)
W717938-S439	4	1	4	Caliper Bracket Bolts
W719491-S439	8	2	4	Hub Bolts (Vehicles Built On Or Before 16-May-2022)
W720861-S439	8	2	4	Hub Bolts (Vehicles Built On Or After 17-May-2022)
W716883-S440	2	2	1	Tie Rod Nut
W720110-S440	2	1	4	Upper Ball Joint Nut

JB3Z-3B498-A	2	2	1	CV Shaft Retainer
W720110-S440	2	1	4	Lower Ball Joint Nut
E8UZ-4N282-A	1	1	1	Drain Plug
W500590-S439	1	1	1	Front Axle Mount Bolt
W716126-S442	1	1	1	Axle Extension Bolt And Washer Assembly
KB3Z-7A443-A	1	1	1	Front Axle Mount Bolt
W717969-S440	2	1	2	Ball Joint Nut
W717376-S439B	6	2	4	Shield Bolt

#### Parts - Parts To Inspect And Replace Only If Necessary

Service Part Number	Claim Quantity	Package Order Quantity	Number in Package	Description
MB3Z-5482-B	Only If Necessary (1 Possible)	Only If Necessary	1	Stabilizer Bar
MB3Z-5484-A	Only If Necessary (2 Possible)	Only If Necessary	1	Stabilizer Bar Bushing
MB3Z-4B416-A	Only If Necessary (2 Possible)	Only If Necessary	1	Axle Seal
YL8Z-4B413-AA	Only If Necessary (1 Possible)	Only If Necessary	1	Thrust Bearing
XY-75W85-QL	Only If Necessary	Only If Necessary		Motorcraft® SAE 75W-85 Premium Synthetic Hypoid Gear Lubricant

**Claim Quantity** refers to the total number of individual pieces required to repair the vehicle.

**Package Order Quantity** refers to the amount of the service part number package(s) required to repair the vehicle.

**Number In Package** refers to the number of individual pieces included in a service part number package.

**Only If Necessary** indicates the part is not mandatory. Refer to the Service Procedure to determine the inspection/inclusion criteria.

**Warranty Status:** Eligible under provisions of New Vehicle Limited Warranty (NVLW)/Service Part Warranty (SPW)/Service Part New Vehicle (SPNV)/Extended Service Plan (ESP) coverage. Limits/policies/prior approvals are not altered by a TSB. NVLW/SPW/SPNV/ESP coverage limits are determined by the identified causal part and verified using the OASIS part coverage tool.

#### Labor Times

Description	Operation No.	Time
2021-2024 Bronco: Inspect (PASS), Program The AWD Module, Includes Road Test (Do Not Use With Any Other Labor Operations)	242408A	0.6 Hrs.
2021-2024 Bronco Equipped Without Part Time Engagement: Inspect (FAIL), Repair The Differential Mount Bracket Following The Service Kit Instructions, Program The AWD Module, Includes Road Test (Can Be Claimed With Operation F Or G) (Do Not Use With Any Other Labor Operations Outside Of This Article)	242408B	5.5 Hrs.
2021-2024 Bronco Equipped Without Part Time Engagement And With Sway Bar Disconnect: Inspect (FAIL), Repair The Differential Mount Bracket Following The Service Kit Instructions, Program The AWD Module, Includes Road Test (Can Be Claimed With Operation F Or G) (Do Not Use With Any Other Labor Operations Outside Of This Article)	242408C	6.1 Hrs.
2021-2024 Bronco Equipped With Part Time Engagement: Inspect (FAIL), Repair The Differential Mount Bracket Following The Service Kit Instructions, Program The AWD Module, Includes Road Test (Can Be Claimed With Operation F Or G) (Do Not Use With Any Other Labor Operations Outside Of This Article)	242408D	5.6 Hrs.

2021-2024 Bronco Equipped With Part Time Engagement And With Sway Bar Disconnect: Inspect (FAIL), Repair The Differential Mount Bracket Following The Service Kit Instructions, Program The AWD Module, Includes Road Test (Can Be Claimed With Operation F Or G) (Do Not Use With Any Other Labor Operations Outside Of This Article)	242408E	6.2 Hrs.
Additional Time To Adjust Front Camber And Front Toe (Can Be Claimed With Operation B, C, D Or E)	242408F	1.1 Hrs.
Additional Time To Adjust Front Camber And Front Toe Equipped With Lane Departure (Can Be Claimed With Operation B, C, D Or E)	242408G	1.2 Hrs.

**Repair/Claim Coding**

Causal Part:	3D171
Condition Code:	01

**Service Procedure**

- Using a mirror, inspect the front differential frame mount bracket (Figure 1). Is the front differential frame mount bracket cracked similar to Figure 2?

Figure 1

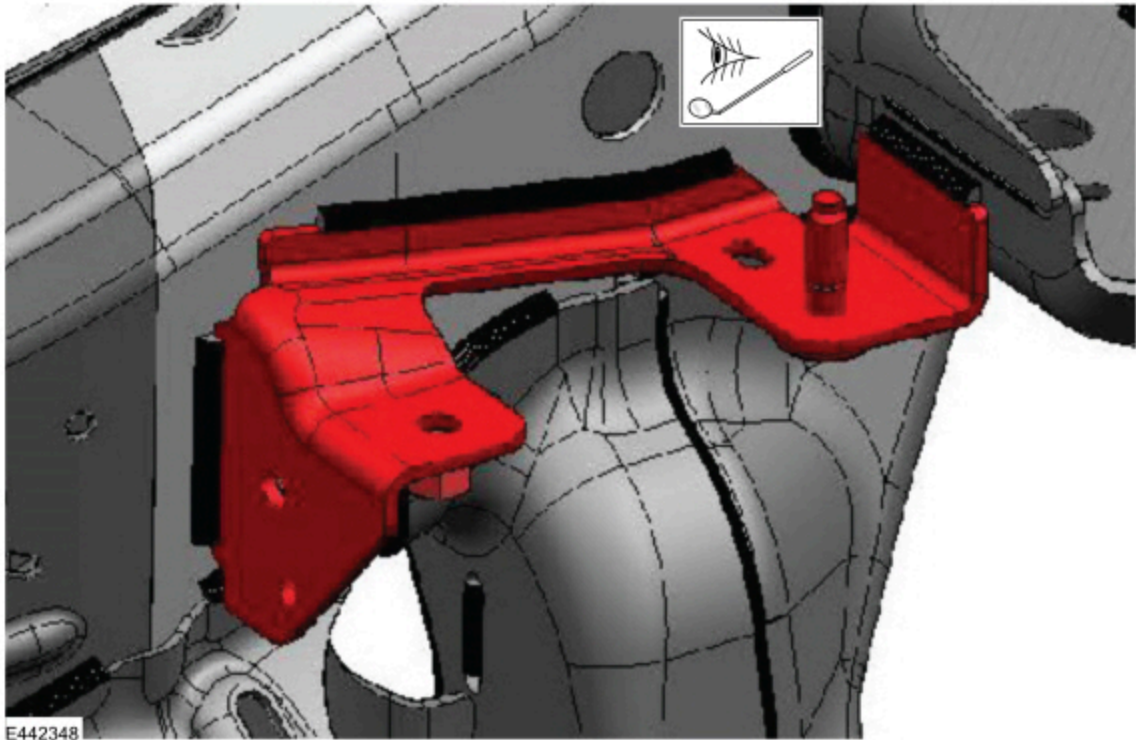


Figure 2



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- (1). Yes - proceed to Step 2.
  - (2). No - proceed to Step 3.
2. Repair the front differential frame mount bracket using the frame bracket repair kit. Refer to the installation instruction sheet included with the frame bracket repair kit.
  3. Update the AWD module to the latest software level using the latest software version of the FDRS scan tool.

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NOTE: The information in Technical Service Bulletins is intended for use by trained, professional technicians with the knowledge, tools, and equipment to do the job properly and safely. It informs these technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by "do-it-yourselfers". Do not assume that a condition described affects your car or truck. Contact a Ford or Lincoln dealership to determine whether the Bulletin applies to your vehicle. Warranty Policy and Extended Service Plan documentation determine Warranty and/or Extended Service Plan coverage unless stated otherwise in the TSB article. The information in this Technical Service Bulletin (TSB) was current at the time of printing. Ford Motor Company reserves the right to supersede this information with updates. The most recent information is available through Ford Motor Company's on-line technical resources.