



## TECHNICAL SERVICE BULLETIN

### Torque-On-Demand (TOD) Transfer Case - Grinding/Clicking/Ratcheting Noise From Front Wheel Area

**20-2307**15 October  
2020**Model:**

<b>Ford</b> 2003-2020 Expedition
2006-2020 F-150
<b>Lincoln</b> 2003-2020 Navigator

**Issue:** Some 2003-2020 Expedition/Navigator and 2006-2020 F-150 non-Raptor vehicles equipped with a TOD transfer case may exhibit grinding/clicking/ratcheting noise from the front wheel area. This may be due to partial engagement of the integrated wheel ends (IWE). To correct this condition, follow the Service Procedure steps to remove and cap the vacuum supply line.

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

- One of the following vehicles:
  - 2003-2020 Expedition/Navigator
  - 2006-2020 F-150 except Raptor
- Equipped with TOD transfer cases
- Grinding/clicking/ratcheting noise from the front axle area

**NOTE:** Part quantity refers to the number of that service part number required, which may be different than the number of individual pieces. Service part numbers contain 1 piece unless otherwise stated. "As Needed" indicates the part is required but the number may vary or is not a whole number; parts can be billed out as non-whole numbers, including less than 1.

**Parts**

Part Number	Description	Quantity
W716372-S300	Package Contains 4 Pieces, 2 Pieces Required Vacuum Line Cap	1

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

**Labor Times**

Description	Operation No.	Time
2006-2020 F-150 4X4 Except Raptor, 2003-2020 Expedition 4X4/Navigator 4X4: Modify The Vacuum Supply Line Following The Service Procedure (Do Not Use With Any Other Labor Operations)	202307A	0.3 Hrs.

**Repair/Claim Coding**

Causal Part:	3C247
Condition Code:	42

## Service Procedure

**NOTE:** This procedure permanently engages the IWEs without affecting any other functions.

1. Does the vehicle have a mode select switch (MSS) that includes a 4-wheel auto (4A) option?  
(Figure 1)
  - (1). Yes - proceed to Step 2.
  - (2). No - this article does not apply. Refer to the Workshop Manual (WSM) for normal diagnostics.

Figure 1 - Example of MSS with 4A selection



2. Locate the vacuum supply line between the source vacuum and the IWE check valve. Refer to WSM, Section 308-07A. (Figures 2-3)

Figure 2

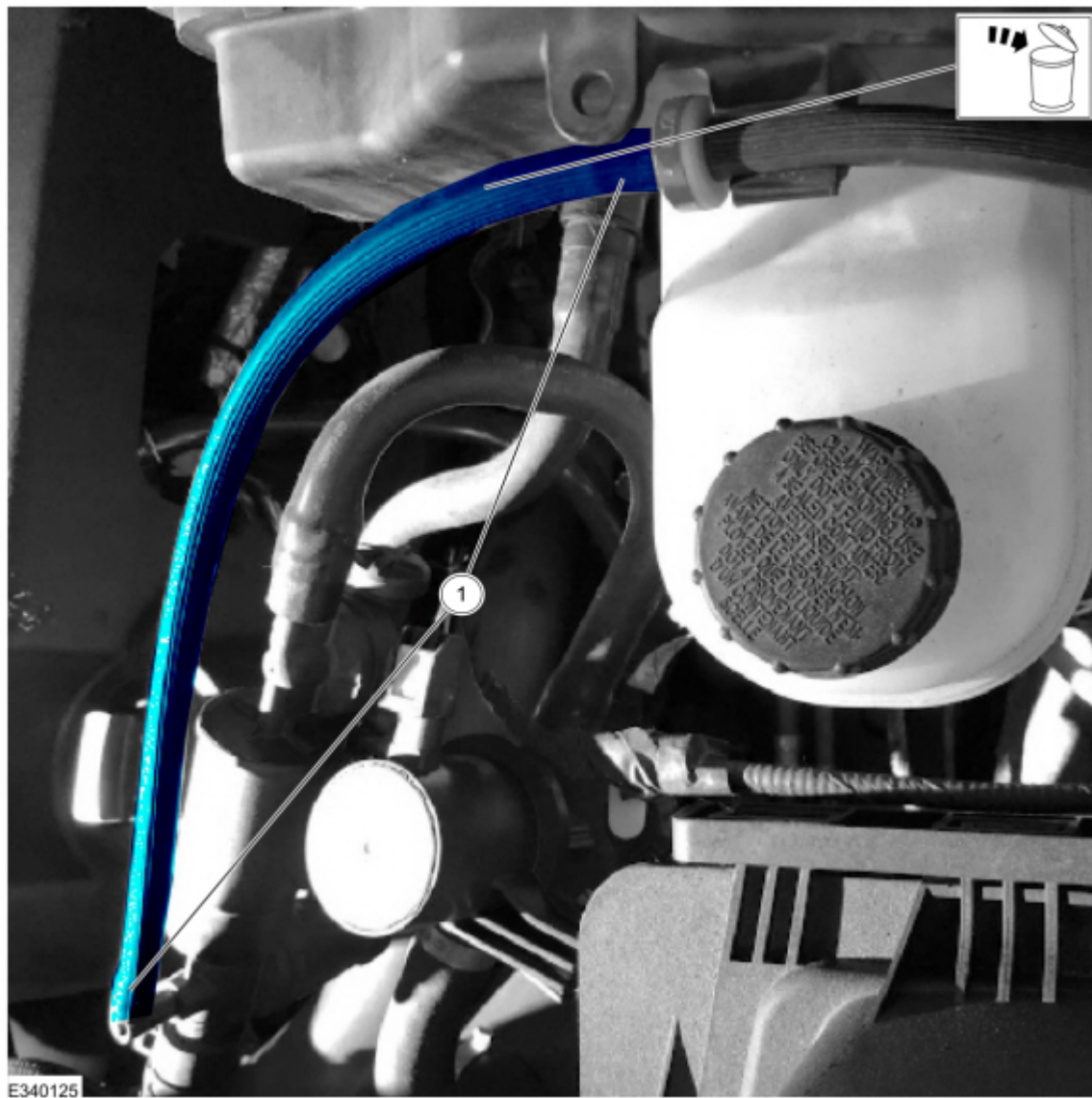
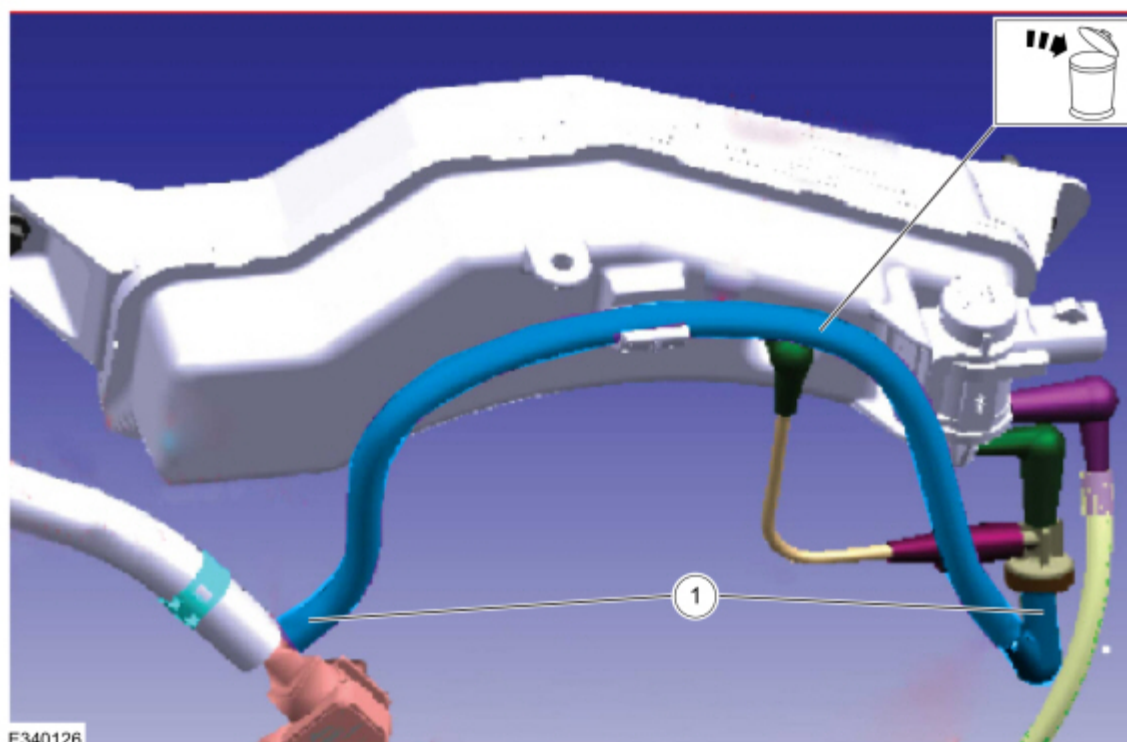


Figure 3



**3.** Remove the vacuum supply line.

**4.** Install the vacuum caps at the IWE check valve and the vacuum source.

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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.