Manufacturer Name : Tenneco Automotive Submission Date : SEP 25, 2024 NHTSA Recall No.: 24E-079 Manufacturer Recall No.: NR

#### **Manufacturer Information :**

Manufacturor Namo · T

### **Equipment Information :**

| Manufacturer Name : | Tenneco Automotive    |
|---------------------|-----------------------|
| Address :           | 500 North Field Drive |
|                     | Lake Forest IL 60045  |
| Compony phone (     | 017 100 5000          |

# Company phone : 847-482-5003

#### **Population**:

Number of potentially involved : 21,664 Estimated percentage with defect : 1 %

Brand / Trade 1: MOOG Model: K500346 Part No. : K500346 Size : NR Function : Ball Joint Descriptive Information : This recall includes certain MOOG brand ball joints that were manufactured from start of production through 6/18/2024, during which the heat treatment process at DRiV's subsupplier has been determined to be suspect. These parts are intended for aftermarket installation on MY2013 - 2019 Ford Escape vehicles. DRiV supplied the subject parts into the aftermarket only. For MOOG Part #K500346, this recall covers 6,182 parts. Production Dates : OCT 17, 2019 - JUN 18, 2024



24E-079

| Part No. : K500347<br>Size : NR<br>Function : Ball Joint<br>Descriptive Information : This recall includes certain MOOG brand ball joints that were manufactured from   | Brand / Trade 2 :<br>Model : | MOOG<br>K500347   |
|---|------------------------------|---|
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|   | Production Dates :           | OCT 17, 2019 - JUL 08, 2024   |
|   |                              |   |
|   |                              |   |
|   |                              |   |
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|   |                              |   |

|   | NAPA   |
|---|--|
|   | 2601879  |
| Part No. :  |  |
| Size :  |  |
| Function :  |  |
| Descriptive Information :   | This recall includes certain NAPA brand ball joints that were manufactured from start of production through 6/27/2024, during which the heat treatment process at DRiV's subsupplier has been determined to be suspect. These parts are intended for aftermarket installation on MY2013 – 2019 Ford Escape vehicles.   |
|   | DRiV supplied the subject parts into the aftermarket only.   |
|   | For NAPA Part #2601879 , this recall covers 5,083 parts.   |
| Production Dates :  | OCT 11, 2019 - JUN 27, 2024  |
| Description of Defect :   | : The mounting flange on some of the subject ball joints may have developed a crack during the heat treat process at a subsupplier. Under certain load   |
| Description of Defect :   | crack during the heat treat process at a subsupplier. Under certain load conditions, the affected ball joint(s) may have a separation between the  |
| Description of Defect :   | crack during the heat treat process at a subsupplier. Under certain load conditions, the affected ball joint(s) may have a separation between the mounting flange and socket.  |
| <b>Description of Defect :</b><br>Description of the Defect   | <ul><li>crack during the heat treat process at a subsupplier. Under certain load conditions, the affected ball joint(s) may have a separation between the mounting flange and socket.</li><li>: NR</li></ul>   |
| <b>Description of Defect :</b><br>Description of the Defect<br>FMVSS 1<br>FMVSS 2   | <ul><li>crack during the heat treat process at a subsupplier. Under certain load conditions, the affected ball joint(s) may have a separation between the mounting flange and socket.</li><li>: NR</li></ul>   |
| <b>Description of Defect :</b><br>Description of the Defect<br>FMVSS 1<br>FMVSS 2<br>Description of the Safety Risk                             | <ul> <li>crack during the heat treat process at a subsupplier. Under certain load conditions, the affected ball joint(s) may have a separation between the mounting flange and socket.</li> <li>NR</li> <li>NR</li> <li>A ball joint separation that occurs while the vehicle is in motion may affect</li> </ul>   |
| <b>Description of Defect :</b><br>Description of the Defect<br>FMVSS 1<br>FMVSS 2<br>Description of the Safety Risk<br>Description of the Cause | <ul> <li>crack during the heat treat process at a subsupplier. Under certain load conditions, the affected ball joint(s) may have a separation between the mounting flange and socket.</li> <li>NR</li> <li>NR</li> <li>A ball joint separation that occurs while the vehicle is in motion may affect vehicle control, increasing the risk of a vehicle crash.</li> <li>The heat treatment process at the housing subsupplier was not performed to specifications.</li> <li>g A fracture may occur without warning.</li> </ul> |

| Component Name :        | Ball Joint Housing |
|-------------------------|--------------------|
| Component Description : | -                  |
| Component Part Number : | AXC87787M          |
|                         |                    |
| Component Name :        | Ball Joint Housing |
| Component Description : | Ball Joint Housin  |
| Component Part Number : | AXC87789M          |
|                         |                    |
| Component Name :        | Ball Joint Housing |
| Component Description : | Ball Joint Housing |
| Component Part Number : | AXC87788M          |
|                         |                    |
|                         |                    |

#### **Supplier Identification :**

#### **Component Manufacturer**

Name :Zhejiang Tongshi Industrial Technology CAddress :Bingang Industrial Area<br/>Shamen Town Yuhuan, Zhejiang Foreign StatesCountry :China

#### **Chronology**:

7/15/24 – An installer reported that the housing on a Part #260-1878 ball joint fractured when the vehicle was lowered to the ground.

7/15 - 8/5/24 - An investigation into the root cause of the fracture was initiated. A visual inspection was conducted on 40 inventory samples finding no visible cracks. A third-party lab review identified a quench crack in the housing. Results were discussed with the supplier.

8/8 - 8/15/24 – Magnetic particle inspection (MPI) was performed on 50 field and inventory samples, with no defects identified. DRiV completed an on-site visit with the supplier with no significant findings. The supplier provided 100% inspection data on 1,064 parts in supplier inventory with no issues identified.

8/21/24 – A second installer reported a similar occurrence before the vehicle left shop.

8/26 -9/12/24 - MPI was performed on 30 additional parts from inventory, with two suspect samples

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identified. MPI was performed on an additional 300 parts from inventory completed with no defects found. The supplier reported a root cause as a furnace issue, which the supplier advised was limited to Part #260-1878. Because the two reports involved failures at the time of installation, failure load testing was performed to evaluate whether this issue could occur post-installation (i.e., during vehicle operation). Test results were analyzed. Testing indicated the potential for an affected part to experience fatigue propagation after installation (during operation).

9/16/24 – A third report was received alleging failure of a Part #K500347 approximately 30 miles after installation. This reported incident suggested that all parts using a similar housing shape and heat treat process may be potentially suspect.

9/18/24 – The issue was escalated to DRiV's executive management. Based upon the results of the investigation, DRiV decided to conduct a safety recall for the subject parts. There are no reports of accidents or injuries.

#### **Description of Remedy :**

|   | I 0   |  |
|---|---|--|
|   | Description of Remedy Program :                           | The recalled ball joints will be replaced with new ball joints whose housings have been properly heat treated.                       |
|   |   | DRiV will implement a recall-reimbursement plan in accordance with 49 CFR 573.13.  |
|   | How Remedy Component Differs<br>from Recalled Component : | The remedy ball joints will have a part numbers:   |
|   | nom kecaneu component.                                    | Recalled MOOG Part No. K500346: New Part No. K500482   |
|   |   | Recalled MOOG Part No. K500347: New Part No. K500482   |
|   |   | Recalled NAPA Part No. 2601878: New Part No. 2601990   |
|   |   | Recalled NAPA Part No. 2601878: New Part No. 2601990   |
|   |   | Recalled NAFA Fait No. 2001079. New Fait No. 2001991   |
|   |   | The supplier's root cause and corrective action is still ongoing. Shipments will resume when this process is completed and approved. |
| [ |   |  |
|   | Recall Schedule :   |  |
|   | Description of Recall Schedule :                          | Notification letters will be sent to DRiV's distributor/dealer customers per the "Dealer Notification" date range.                   |
|   |   | DRiV will notify owners who purchased the recalled parts directly from DRiV per the "Owner Notification" date range.                 |
|   |   | The timing of additional owner notifications is dependent upon coordination with distributors and dealers.                           |
|   |   |  |

Planned Dealer Notification Date : OCT 14, 2024 - OCT 18, 2024

Planned Owner Notification Date : OCT 21, 2024 - OCT 25, 2024

#### **Purchaser Information :**

The following manufacturers purchased this defective/noncompliant equipment for possible use or installation in new motor vehicles or new items of motor vehicle equipment:

Name : NR Address : NR NR Country : NR Company Phone : NR

\* NR - Not Reported

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