

	Regulatory Recall Method-Sheet		RRM0004
	19V728 Possible Tie-Rod Separation Remedy Instructions		Rev: 0
Author: RA RCE	PO: Dir Q&RA	Appr: Dir Q&RA	Date: 10/16/2019

1 PURPOSE

Safety Recall Remedy Instructions: Tie-Rod Inadequate Thread LoE vs Alignment Specs

2 AFFECTED VEHICLES

Model Year	Model	VIN Range (last 8 digits)
2019	FUV Evergreen	KER00000 - KER00009

3 BACKGROUND

Due to uncontrolled changes to vehicle alignment, there may be inadequate thread length of engagement (LoE) between inner and outer tie-rods. If the LoE between inner and outer tie-rods is inadequate, certain forces may cause the separation of the tie-rod assembly, which would make the vehicle more difficult to control and increase the likelihood of a crash.

4 OWNER NOTIFICATION

Owners of affected vehicles will be sent a notification of this campaign.

5 CORRECTIVE ACTION


The defect will be remedied using current BOM items by reworking various parts, including: (i) shimming upper control-arm rearward, (ii) shimming lower control-arm forward, (iii) tapping the upper control-arm approximately 10mm deeper for the upper ball-joint, (iv) implementing a revised method of alignment, (v) measuring resultant caster angle to verify specified target, and (vi) measuring resultant relationship between outer tie-rod and inner tie-rod to verify adequate LoE.

6 PARTS INFORMATION

No new parts are required to complete the remedy action.

7 RELATED DOCUMENTS AND RESOURCES


- [002100F1](#)
- [002101F1](#)
- [STR-225 Vehicle Alignment Specifications \(JC/CA\)](#)
- [003005C1](#)

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- [001162C1](#)
- [001170B1](#)

8 SERVICE PROCEDURE

- 8.1 Safely elevate the FUV.
- 8.2 Remove both left and right front wheels.
- 8.3 Remove both left and right upper ball joints from steering knuckles.
- 8.4 Remove both left and right ball joint housings from upper control-arms.
- 8.5 Tap both left and right upper control-arms 15 mm deeper (for a new total thread depth of 65 mm) for the upper ball-joints, per [001162C1](#) and [001170B1](#), respectively.
- 8.6 Ensure correct outer tie-rods are installed, APN 002656 and APN 002657, per [003005C1](#).
- 8.7 Reinstall both left and right ball joint housings per [002100F1](#) and [002101F1](#), respectively. Process details are outlined in [STR-225 Vehicle Alignment Specifications \(JC/CA\)](#).
- 8.8 Reinstall both left and right upper ball joints into steering knuckles per [002100F1](#) and [002101F1](#), respectively.
- 8.9 Reinstall both left and right front wheels. Torque all lug nuts to 80 ft-lbs (108.5 Nm).
- 8.10 Align vehicle per [002100F1](#) and [002101F1](#). Check both left and right caster angles are within the specification outlined, and record measurement values on the Product Support (Service) Work Order.
- 8.11 Check that the measurement between the inboard edge of the groove on the inner tie rod and the inboard face of the jam-nut are within the specification outlined in [003005C1](#). Record both left and right measurement values on the Product Support (Service) Work Order.
- 8.12 END.

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9 REVISION HISTORY

Function	Role	Name	Signature	Date
Author	RA RCE	Corey Z	<insert name>	10/16/2019
PO	Dir Q&RA	Pete Z	<insert name>	10/16/2019
Approver	Dir Q&RA	Pete Z	<insert name>	10/16/2019
Checker	Dir Q&RA	Pete Z	<insert name>	10/16/2019

Revision		Reason for change;
#	Date Issued	Summary of change from prior Revision
0	10/16/2019	Initial Issue Safety Recall Remedy Instructions: Tie-Rod Inadequate Thread LoE vs Alignment Specs.