

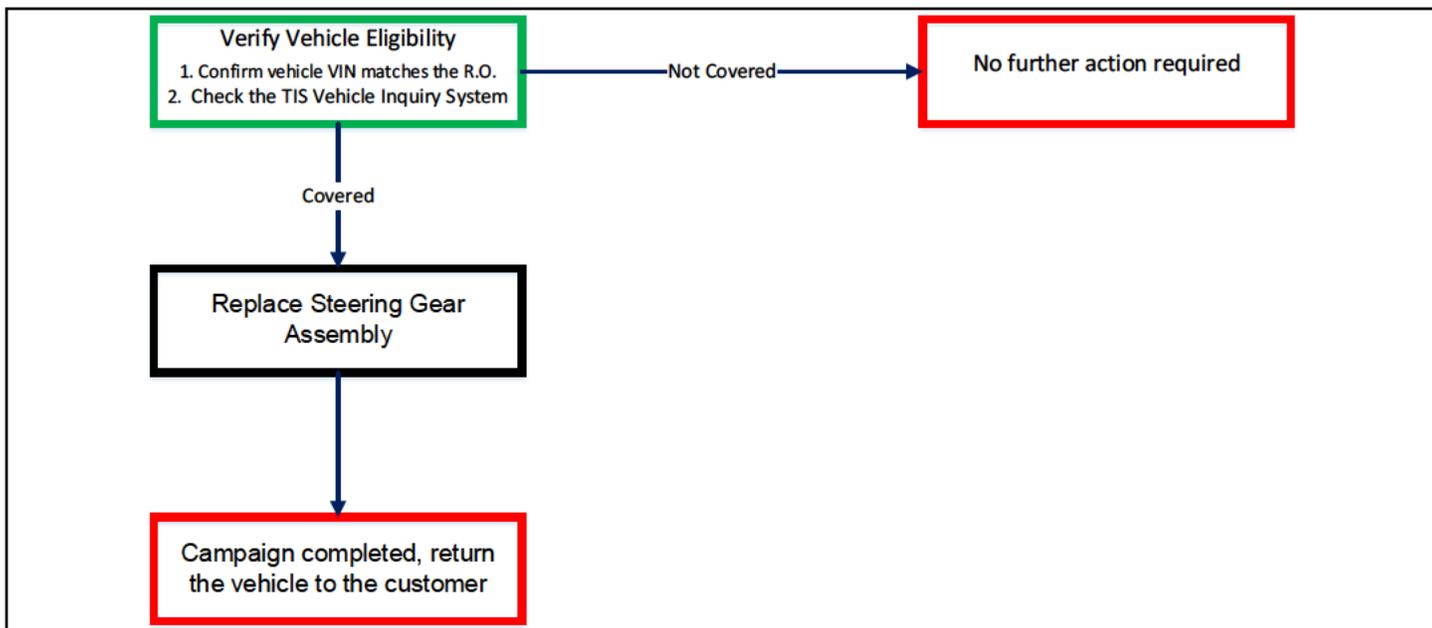
TECHNICAL INSTRUCTIONS
FOR
SAFETY RECALL 20TA11
POTENTIAL LOSS OF POWER STEERING ASSIST
CERTAIN 2019 – 2020 RAV4
CERTAIN 2020 RAV4 HV

The repair quality of covered vehicles is extremely important to Toyota. All dealership technicians performing this recall are required to successfully complete the most current version of the E-Learning course “Safety Recall and Service Campaign Essentials”. To ensure that all vehicles have the repair performed correctly; technicians performing this recall repair are required to currently hold at least one of the following certification levels:

- Certified Technician (Chassis)
- Expert Technician (Chassis)
- Master Technician
- Master Diagnostic Technician

It is the dealership’s responsibility to select technicians with the above certification level or greater to perform this recall repair. Carefully review your resources, the technician skill level, and ability before assigning technicians to this repair. It is important to consider technician days off and vacation schedules to ensure there are properly trained technicians available to perform this repair at all times.

I. OPERATION FLOW CHART



II. IDENTIFICATION OF AFFECTED VEHICLES

1. CHECK VEHICLE FOR CAMPAIGN ELIGIBILITY

- a. Compare the vehicles VIN to the VIN listed on the Repair Order to ensure they match.
- b. Check the TIS Vehicle Inquiry System to confirm the VIN is involved in this Recall, and that it has not already been complete

Note: TMNA warranty will not reimburse dealers for repairs completed on vehicles that are not affected or were previously completed, even by another dealer.

III. PREPARATION

A. PARTS

Part Number	Part Description	Original Equipped Wheel Size	Quantity
44250-0R011	GEAR ASSY, ELECTRIC POWER STEERING	17" / 18" Wheel	1
44250-0R021		19" Wheel	
95381-03025	PIN, COTTER	-	2
90177-A0012	NUT, LOCK	-	4

NOTE: See Appendix C. at the end of this document for a VIN to Replacement Part Decoder

B. TOOLS & EQUIPMENT

- Techstream
- Standard Hand Tools
- Torque Wrench
- Engine Support Bar
- Engine Hangers (12281-25030 and 12282-25010)

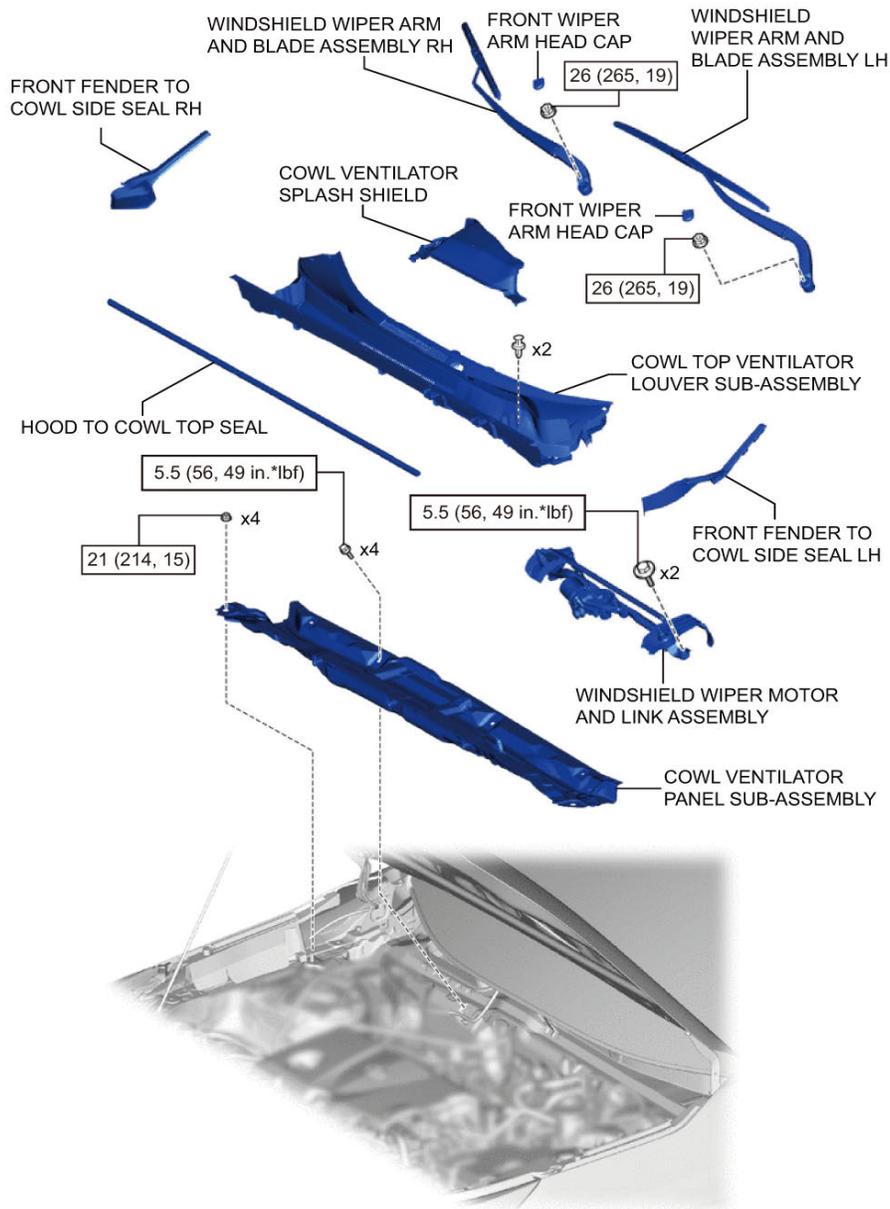
SST – These Special Service Tools required for this repair:

Part Number	Tool Name	Quantity
09960-20010 or 09961-02060	SET,BALL JOINT PULLER	1

IV. BACKGROUND

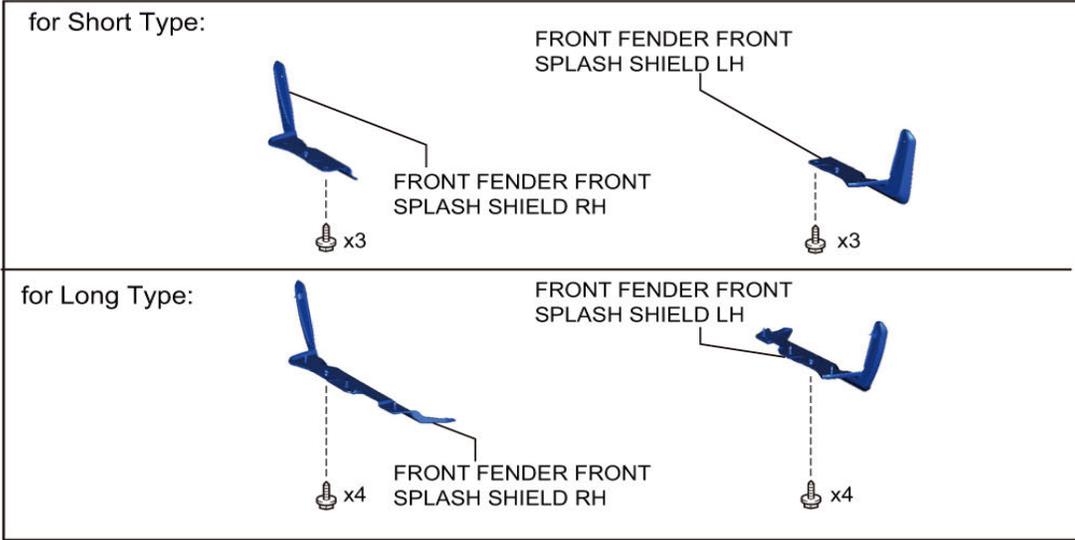
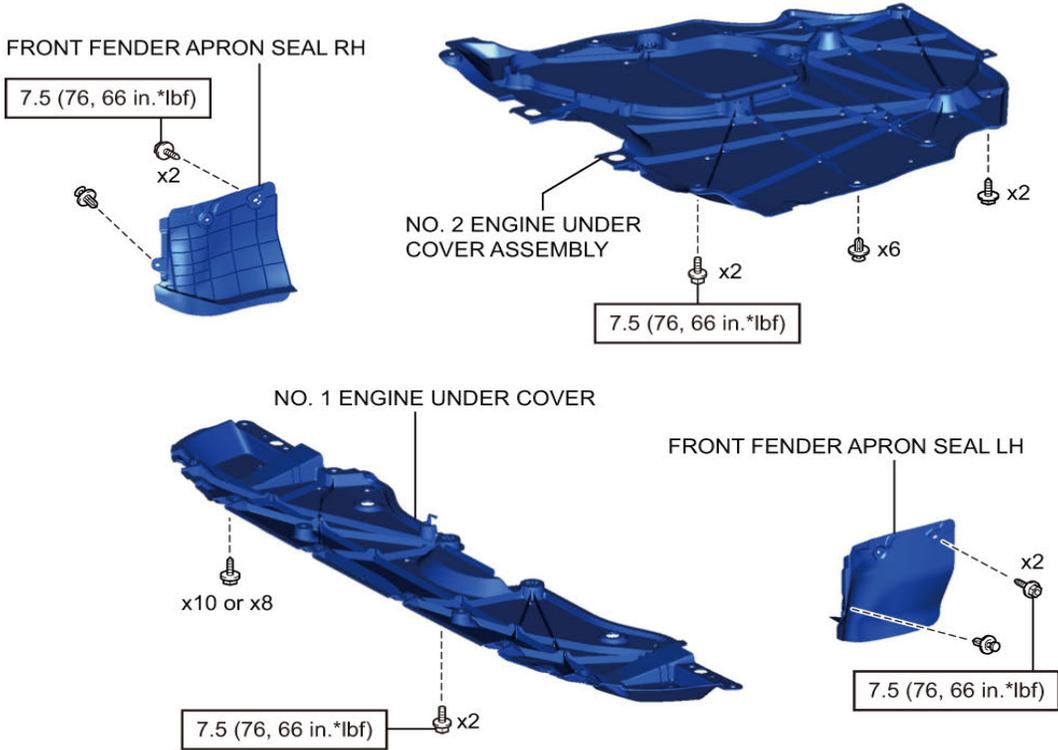
A screw attaching the cover to the electric power steering gear may not have been installed or properly tightened. A loose or missing screw could allow water to enter and, over time, damage the steering gear, causing a loss of power steering assist. This can result in increased steering effort at low vehicle speeds and increases the risk of a crash.

V. COMPONENTS



N*m (kgf*cm, ft.*lbf) : Specified torque

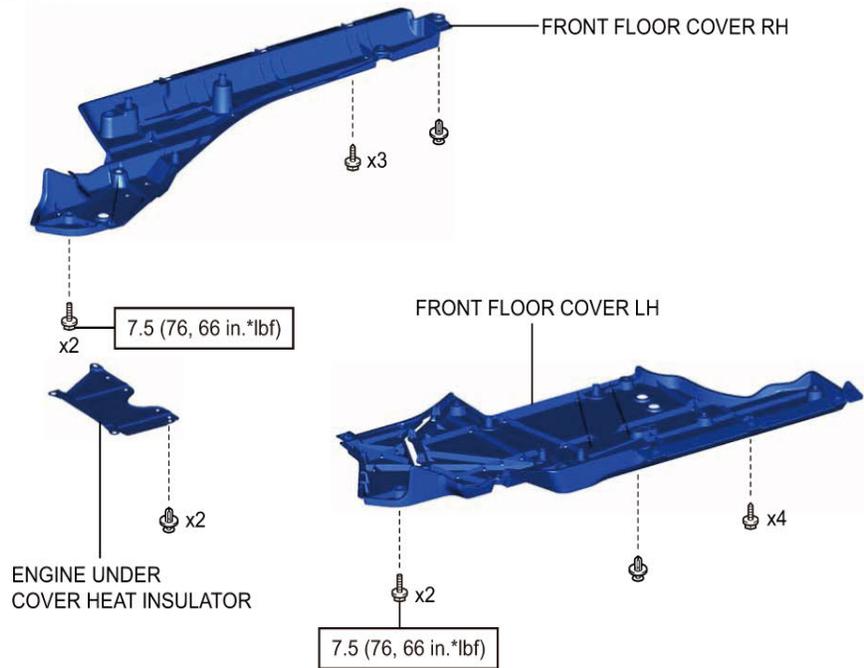
R2006080001



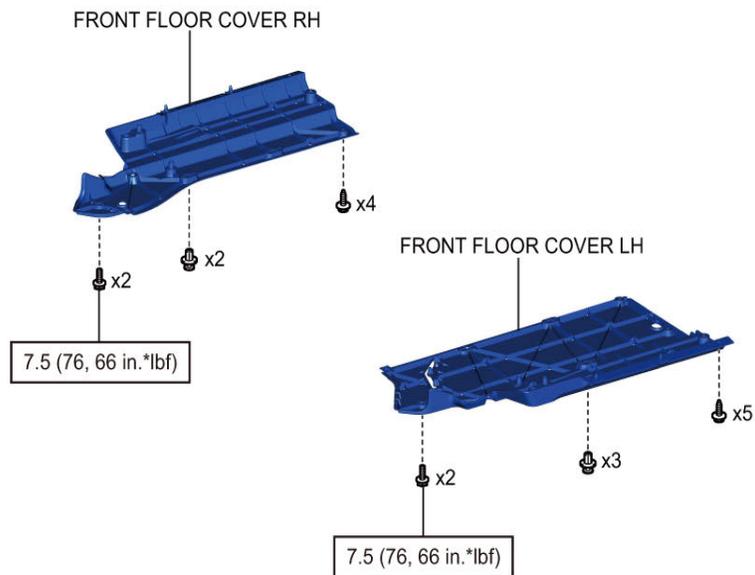
N*m (kgf*cm, ft.*lbf) : Specified torque

R2006050012

for HV :

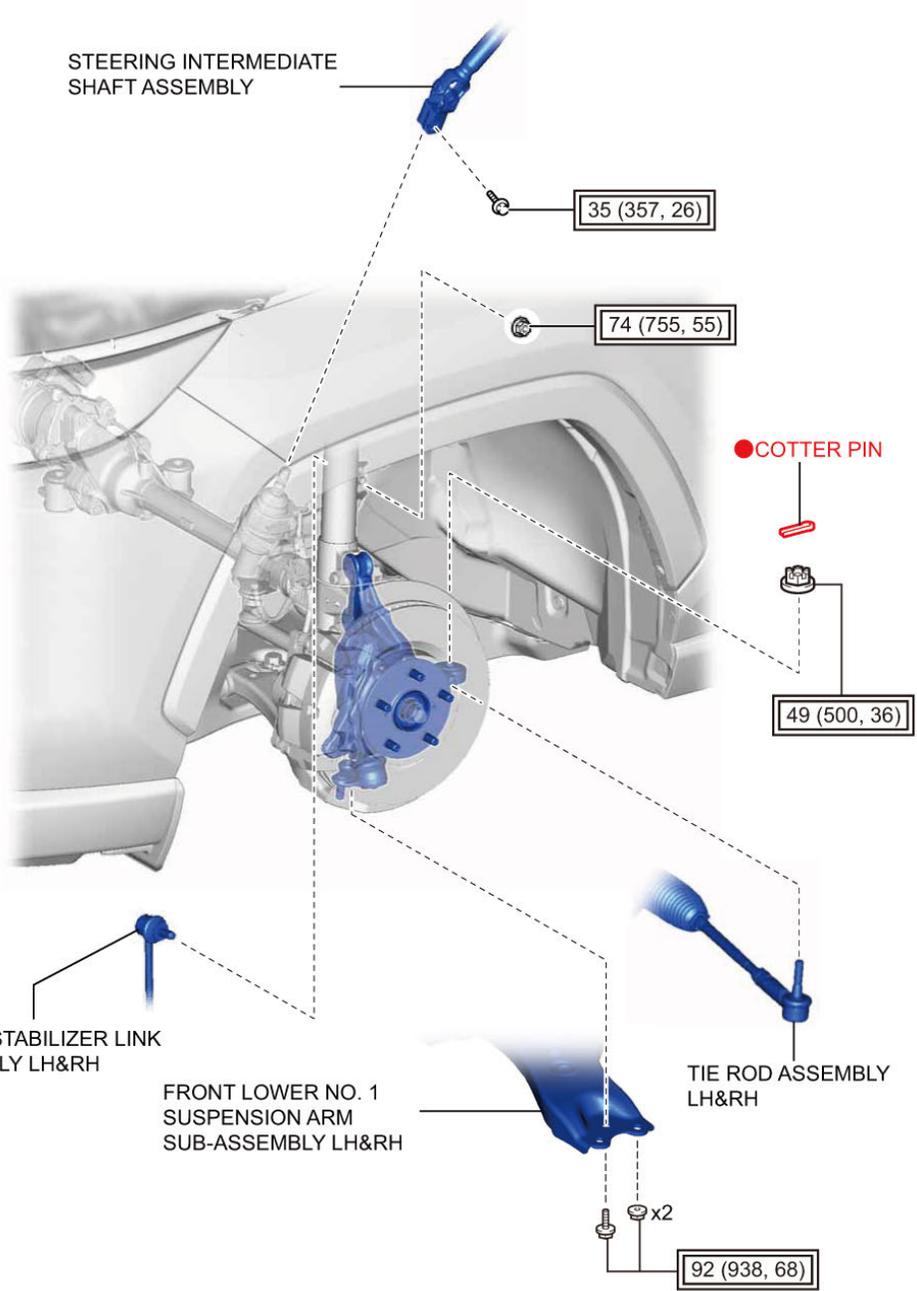


for Gasoline and Cover equipped :



N*m (kgf*cm, ft.*lbf) : Specified torque

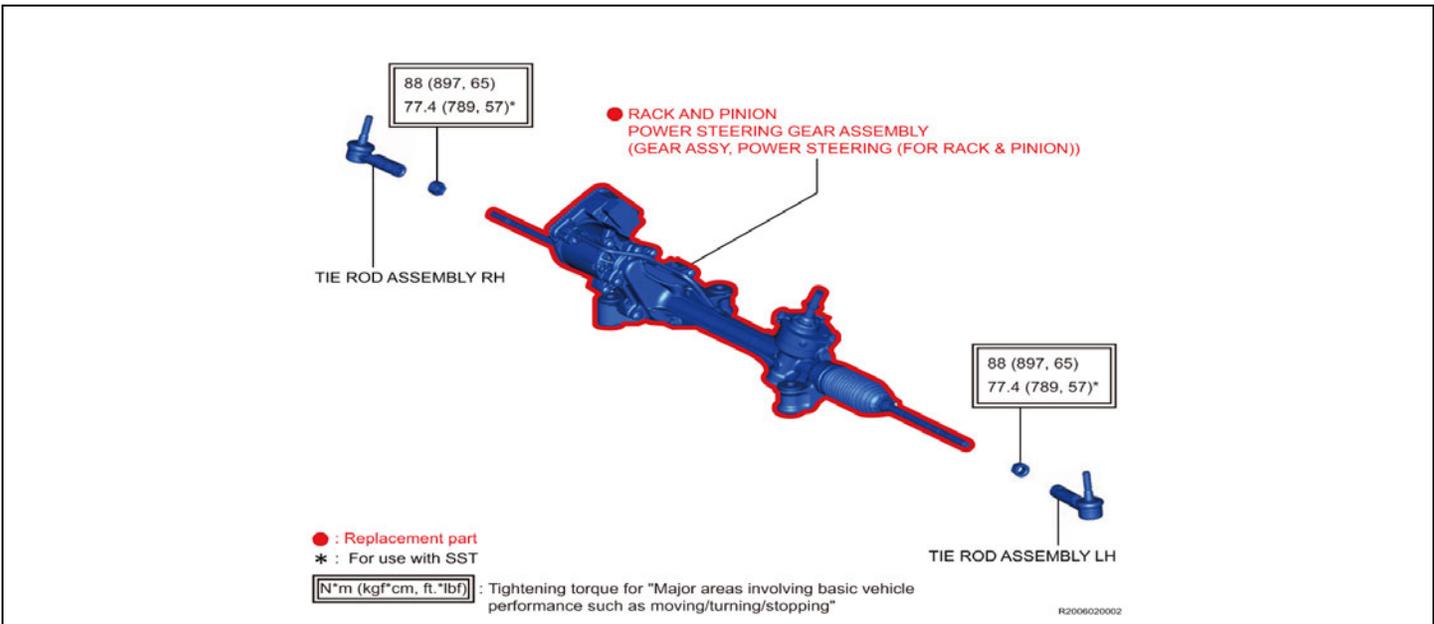
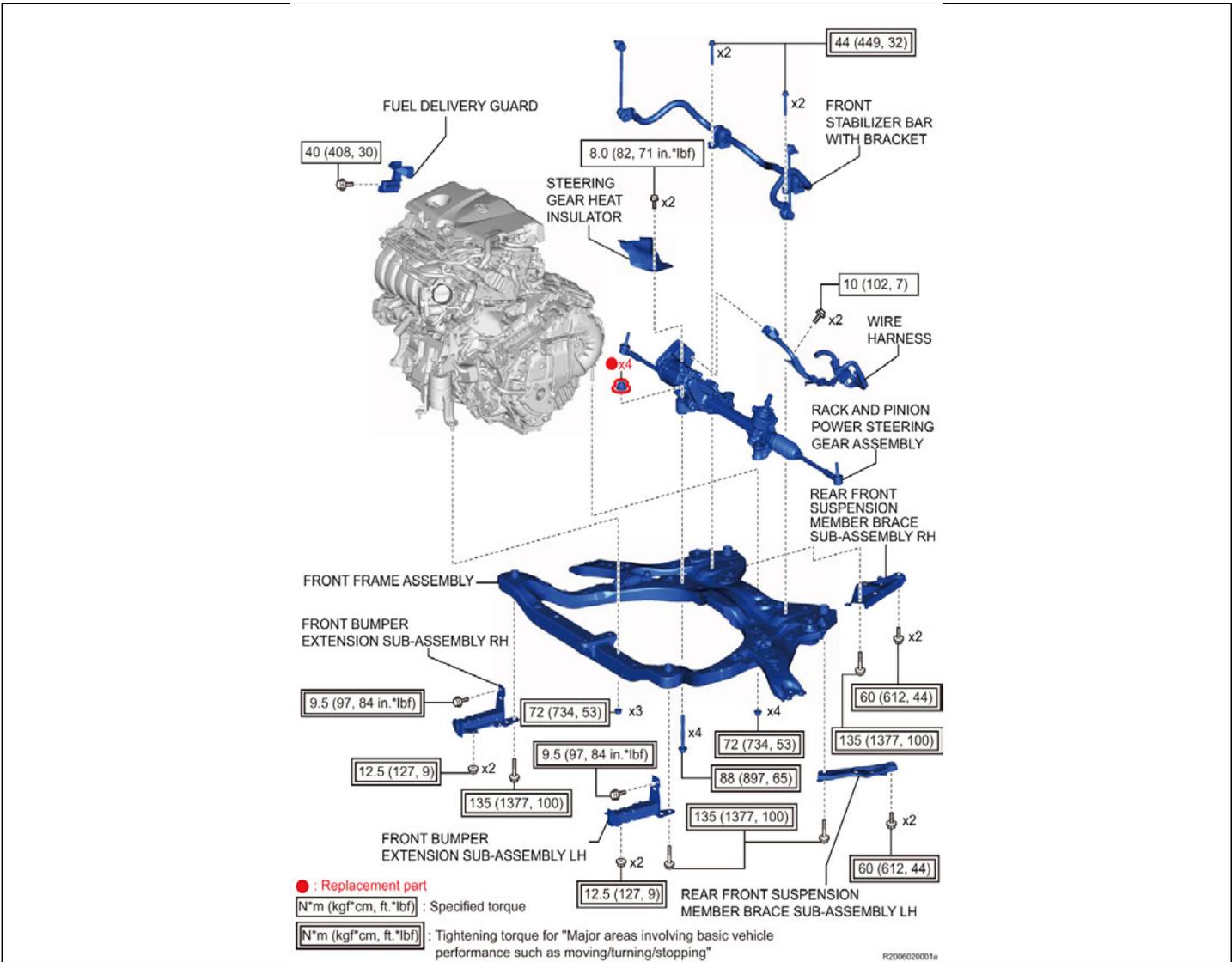
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● : Replacement part

[N*m (kgf*cm, ft.*lbf)] : Tightening torque for "Major areas involving basic vehicle performance such as moving/turning/stopping"

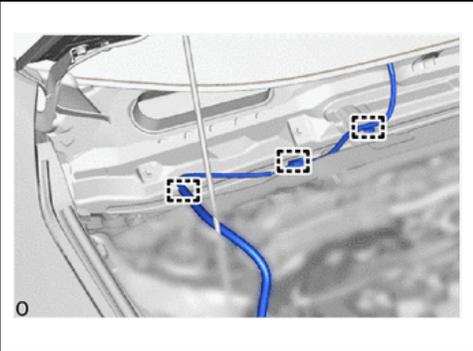
R2006080004



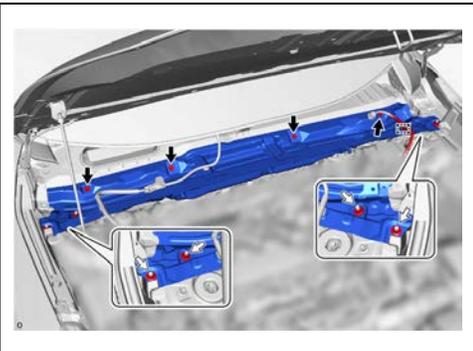
VI. STEERING GEAR REMOVAL

1. REMOVE COWL VENTILATOR PANEL SUB-ASSEMBLY

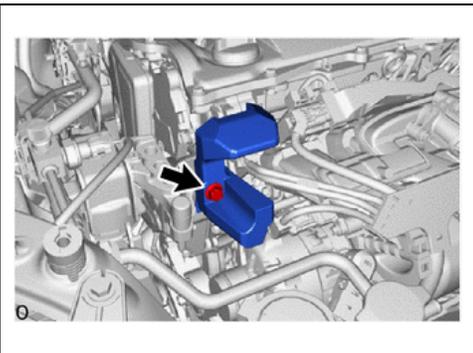
- a. Click the link below to access TIS for instructions on how to remove the front wiper motor
[WIPER / WASHER: FRONT WIPER MOTOR: REMOVAL; 2019 - 2020 MY RAV4 RAV4 HV](#)
 (Doc ID RM100000001E3D3)



- b. Detach the clamps (with Windshield deicer system equipped only)

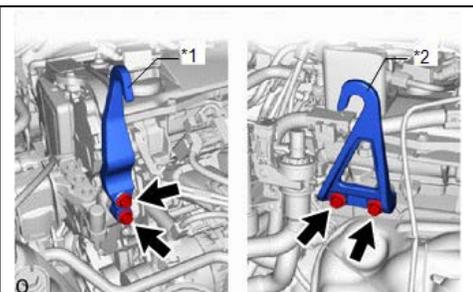


- c. Detach the clamp
 d. Remove the 4 bolts, 4 nuts and cowl ventilator panel sub-assembly



2. REMOVE FUEL DELIVERY GUARD

- a. Remove the bolt and fuel delivery guard from the engine mounting bracket RH.



3. INSTALL ENGINE HANGERS

- a. Install the No. 1 engine hanger and No. 2 engine hanger with the 4 bolts as shown in the illustration.

Torque:

43 N·m {438 kgf·cm, 32 ft·lbf}

*1	No. 1 Engine Hanger
*2	No. 2 Engine Hanger

No. 1 Engine Hanger	12281-25030
No. 2 Engine Hanger	12282-25010
Bolt	91552-F1040

4. INSTALL ENGINE SUPPORT BAR

- a. Assemble the engine support bar according to the instructions in the link below.

[Engine Bar Assembly Instructions](#)

Note: follow the instructions in the section “Installation for Other OE Vehicles” for this repair



Picture of final Engine Support Bar assembly for reference

5. REMOVE STEERING GEAR ASSEMBLY

- a. Click one of the links below to access TIS for instructions on how to remove the Steering Gear.

[STEERING GEAR / LINKAGE: STEERING GEAR: REMOVAL; 2019 MY RAV4](#)

(Doc ID: RM100000001HYFG)

[STEERING GEAR / LINKAGE: STEERING GEAR: REMOVAL; 2020 MY RAV4 RAV4 HV](#)

(Doc ID: RM100000001LRH6)

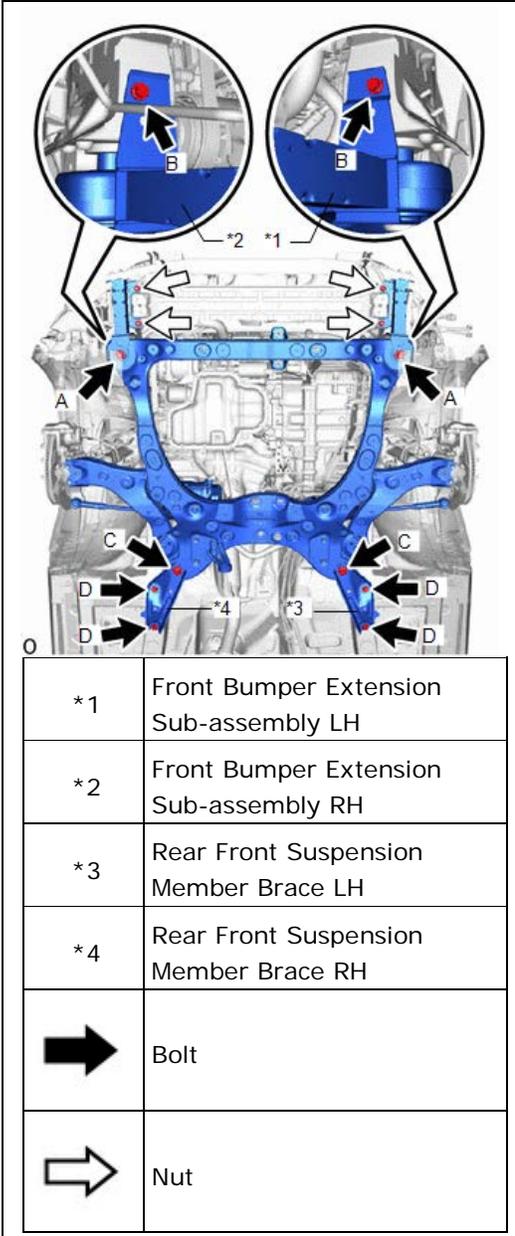


*The steps listed below in the repair manual should **NOT** be followed.*

8. REMOVE ENGINE ASSEMBLY WITH TRANSAXLE

NOTE: At step 8. REMOVE ENGINE ASSEMBLY WITH TRANSAXLE the following process must be performed.

- b. Remove the No.1 Engine Under Cover
- c. Remove the No. 2 Engine Under Cover
- d. Separate the Front Stabilizer Link Assembly LH and RH from the Sway Bar Assembly
- e. Disconnect the Front Lower No.1 Suspension Arm Sub-assembly LH and RH from the Front Lower Ball Joint Assembly LH and RH
- f. Disconnect the Front and Rear Engine Mount from the Front Frame assembly



NOTE: At step 8. REMOVE ENGINE ASSEMBLY WITH TRANSAXLE the following process must be performed.

- g. Remove the 2 bolts (A), 2 bolts (B), 4 nuts, front bumper extension sub-assembly LH and the front bumper extension sub-assembly RH from the frame assembly and vehicle body
- h. Remove the 2 bolts (C), 4 bolts (D), the rear front suspension member brace LH, and rear front suspension brace RH from the front frame assembly and body of the vehicle.
- i. After removing the front frame assembly continue on to step 9. **REMOVE STEERING GEAR HEAT INSULATOR** of the repair manual to continue the removal of the steering gear assembly

VII. STEERING GEAR INSTALLATION

1. INSTALL **NEW** STEERING GEAR ASSEMBLY

- Click the link below to access TIS for instructions on how to install the **NEW** Steering Gear.



Before installing the steering gear assembly, confirm you have the correct part by referencing the VIN to Part decoder on the next page.

[STEERING GEAR / LINKAGE: STEERING GEAR: INSTALLATION; 2019 - 2020 MY RAV4 RAV4 HV](#)
(Doc ID: RM100000001HYFG)

NOTE: The labor for this repair only includes front toe adjustment. Front camber and caster adjustments, as well as rear alignment adjustments are not covered

◀ VERIFY REPAIR QUALITY ▶

- Check the steering wheel is aligned properly while driving
- Confirm there is no interference between the tire and body when turning
- Check the power steering assist system is operational, there are no DTC's, and the EPS warning indicator is OFF

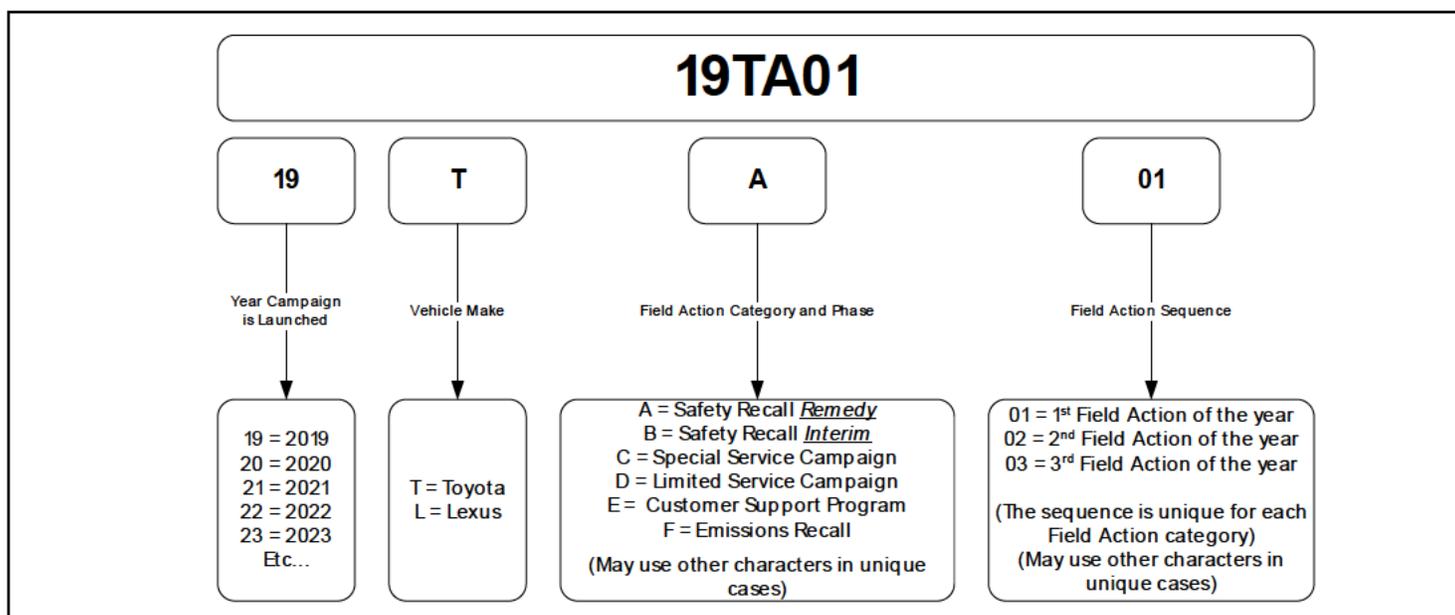
If you have any questions regarding this recall, please contact your regional representative.

VIII. APPENDIX

A. PARTS DISPOSAL

In accordance with Federal law, please make sure all recalled parts (original parts) removed from the vehicle are disposed of in a manner in which they will not be reused, **unless requested for parts recovery return.**

B. CAMPAIGN DESIGNATION DECORDER



Examples:

19TA01 = Launched in 2019, Toyota, Safety Recall Remedy Phase, 1st Safety Recall Launched in 2019
20TC02 = Launched in 2020, Special Service Campaign, 2nd Special Service Campaign Launched in 2020
21TE05 = Launched in 2021, Customer Support Program, 5th Customer Support Program Launched in 2021

C. VIN TO REPLACEMENT PART DECODER



Confirm you are installing the correct part by referencing the tables below.

It is critical that the correct part is installed, as either part will fit on any vehicle included in this recall. If the incorrect part is installed, the tire may interfere with the body.

VIN	Replacement P/N
[REDACTED]	442500R021
[REDACTED]	442500R011
[REDACTED]	442500R021
[REDACTED]	442500R011
[REDACTED]	442500R021
[REDACTED]	442500R011
[REDACTED]	442500R021

VIN	Replacement P/N
[REDACTED]	442500R021
[REDACTED]	442500R011
[REDACTED]	442500R021
[REDACTED]	442500R021
[REDACTED]	442500R021