

TECHNICAL INSTRUCTIONS
FOR
SAFETY RECALL CAMPAIGN E0Y
2014 MODEL YEAR FJ CRUISER
TRAIL TEAMS ULTIMATE EDITION
EQUIPPED WITH TRD SUSPENSION KIT
TRD SUSPENSION KIT FASTENER TORQUE CONFIRMATION

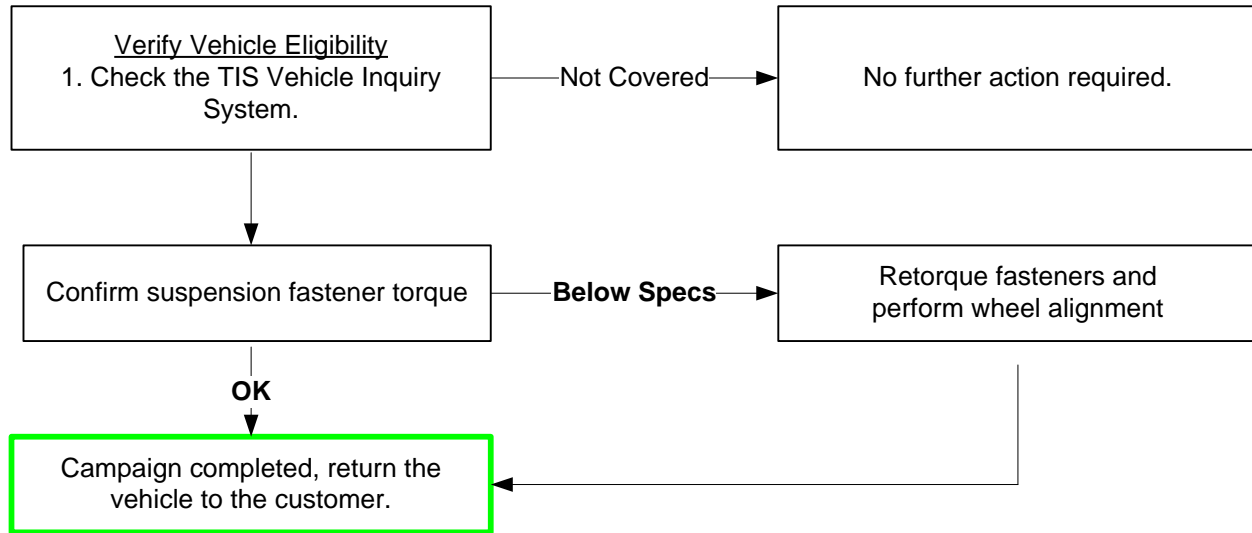
Updated 10/15/14

- Condition description updated and part list updated.

All dealership associates involved in the campaign process are required to successfully complete E-Learning course SC13A. 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 certifications levels:

- **Toyota Certified Chassis**
- **Toyota Expert Chassis**
- **Master**
- **Master Diagnostic Technicians**

I. OPERATION FLOW CHART



II. IDENTIFICATION OF AFFECTED VEHICLES

NOTE:

- Check the TIS Vehicle Inquiry System to confirm the VIN is involved in this SSC and that the campaign has not already been completed prior to dealer shipment or by another dealer.
- **TMS warranty will not reimburse dealers for repairs conducted on vehicles that are not affected or were completed by another dealer.**

III. PREPARATION

A. PARTS

Part Number	Part Description	Part Location	Quantity
90105-16053	BOLT	Ball Joint (Lower)	As Needed
48409-60040	CAM SUB-ASSY, TOE ADJUST	Control Arm (Lower)	As Needed
48452-60020	PLATE, TOE ADJUST, NO.2		As Needed
48190-60040	CAM ASSY, CAMBER ADJUST		As Needed
48198-60020	CAM, CAMBER ADJUST, NO.2		As Needed
90178-16007	NUT, FLANGE		As Needed
90119-16005	BOLT, W/WASHER		As Needed

Toyota anticipates a very limited number of vehicles may require a new lower ball joint bolt or front suspension lower arm bolt and related hardware. Parts should only be replaced if found missing.

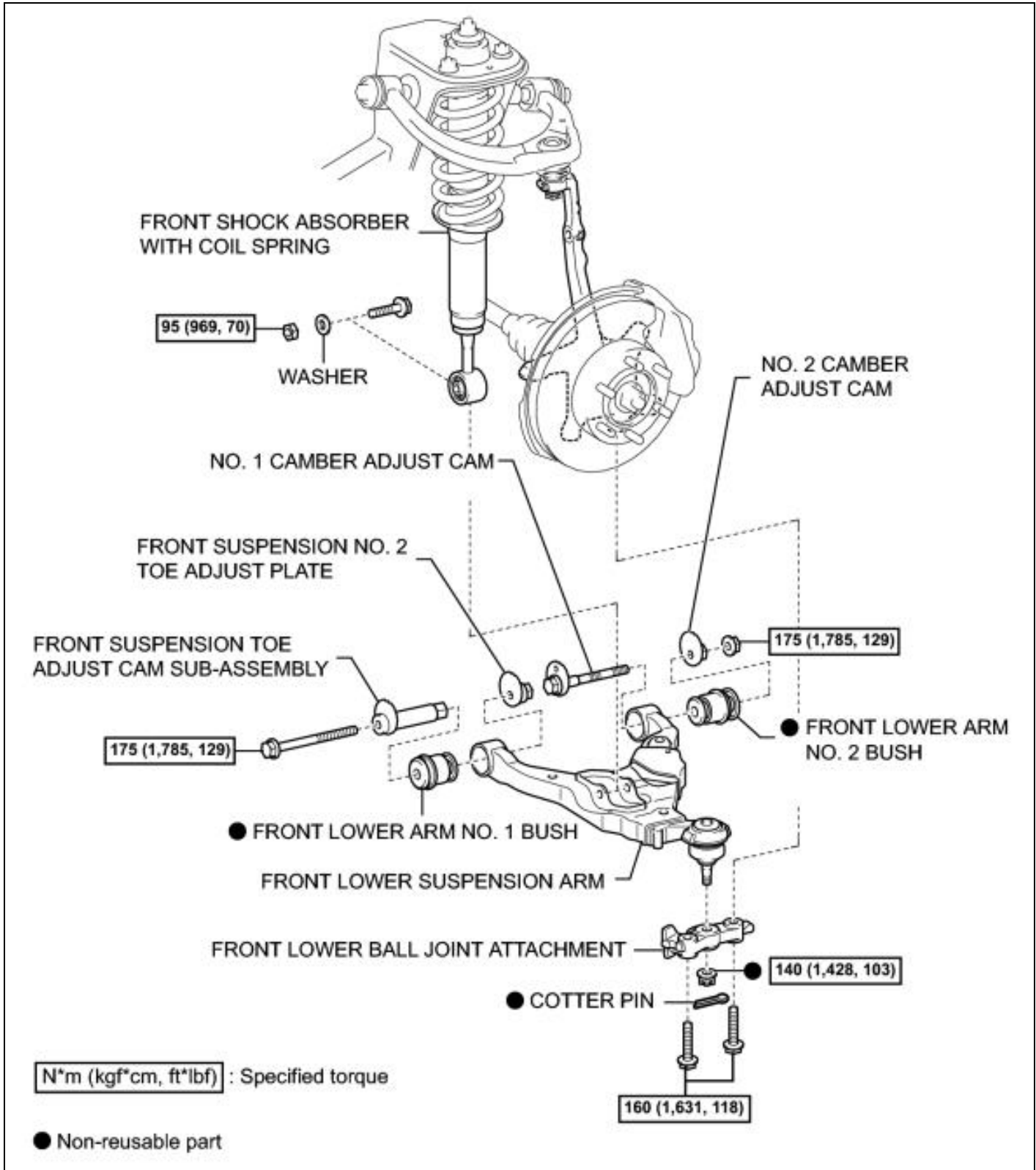
B. TOOLS & EQUIPMENT

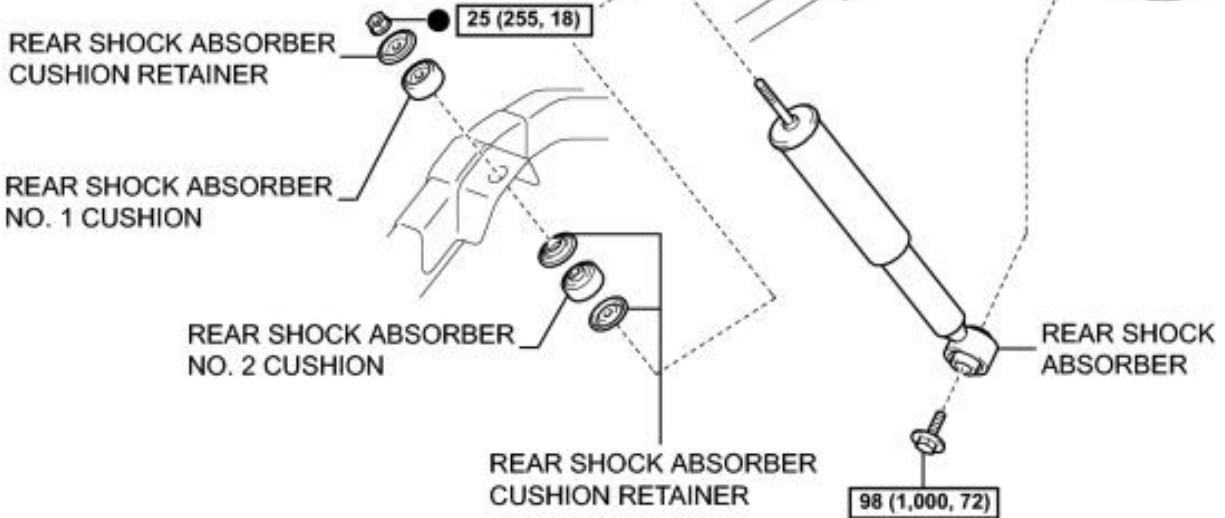
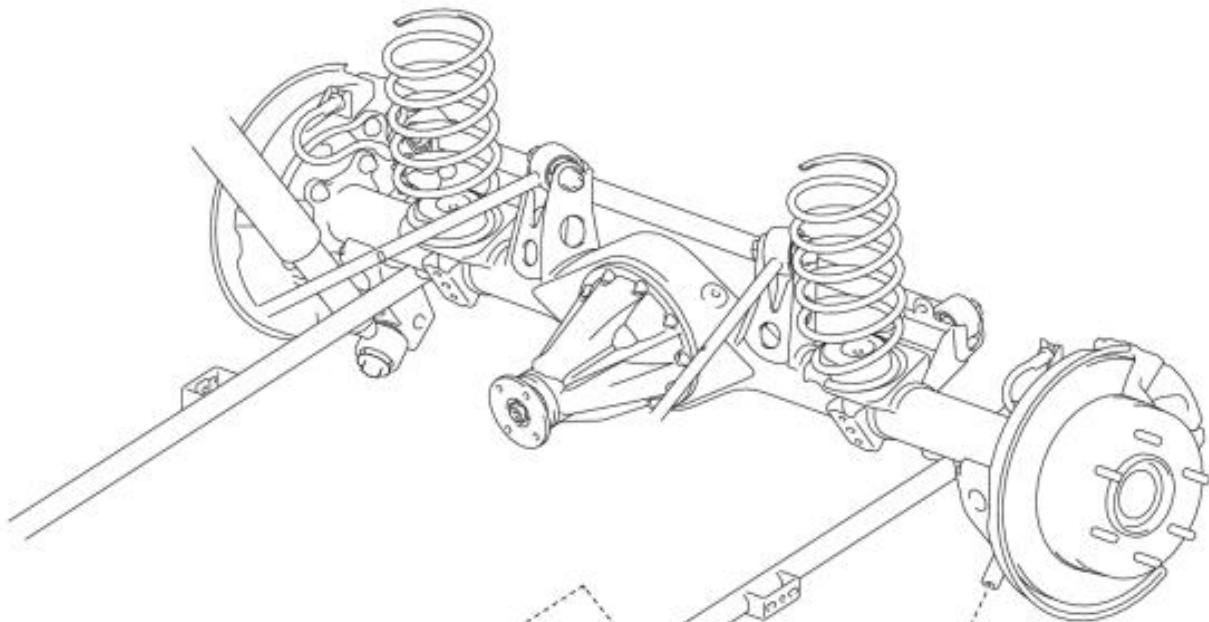
- Standard Hand Tools
- Torque Wrench

IV. BACKGROUND

Certain FJ Cruiser vehicles are equipped with an optional "Trail Teams Ultimate Edition" package, in which the front shock absorbers and springs were replaced at Vehicle Processing Centers. In some of these vehicles, the bolts which secure the front lower ball joint to the steering knuckle and/or the front suspension lower arm to the front cross member assemblies might have been tightened with insufficient torque when the front shock absorbers and springs were replaced during the installation process. In this condition, one or more bolts could become loose during driving and fall out. If both bolts fall out from the front lower ball joint or the front suspension lower arm, these components could detach from the steering knuckle or the front cross members, causing a loss of steering control, which could increase the risk of a crash.

V. COMPONENTS





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

● Non-reusable part

VI. WORK PROCEDURE

1. PLACE VEHICLE ON LIFT

- a) Lift vehicle to a height to safely remove the wheels.
- b) Remove all 4 wheels.

2. CONFIRM THE TORQUE OF THE FOLLOWING COMPONENTS

- a) Upper front shock retaining nut.
Torque: 25 Nm (255 kgf cm, 18 ft lbf)

NOTE: It may be necessary to hold the shock stem with an adjustable wrench.

- b) Front shock assembly upper bolts.
Torque: 64 Nm (653 kgf cm, 47 ft lbf)

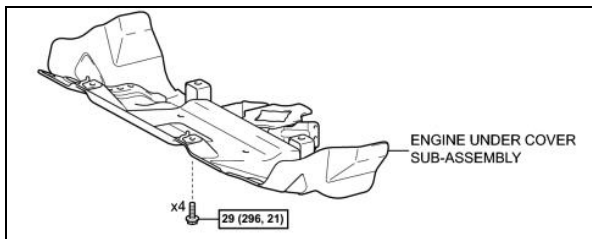
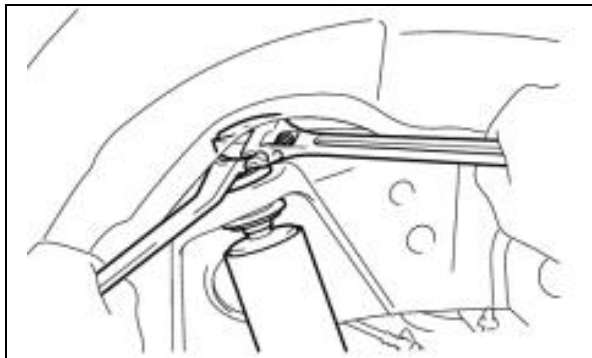
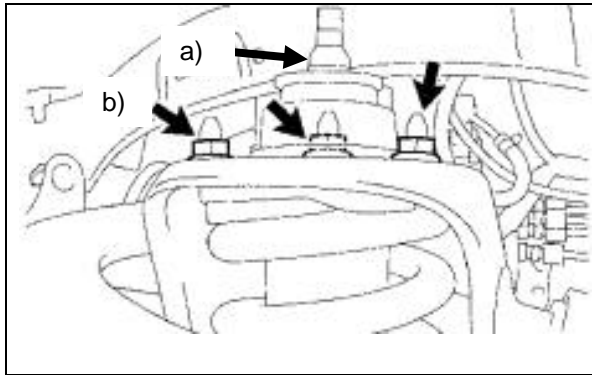
- c) Rear shock upper nut.
Torque: 25 Nm (255 kgf cm, 18 ft lbf)

- d) Repeat **STEPS a) to c)** on opposite side of vehicle.

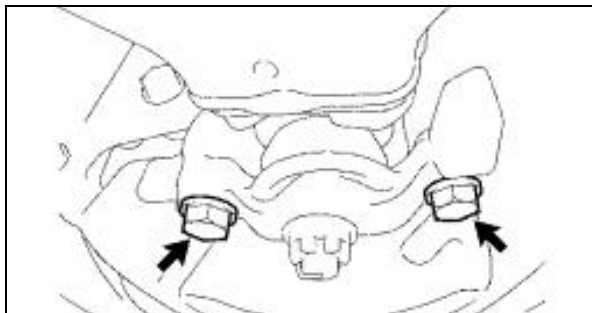
- e) Lift vehicle to access the undercarriage.

- f) Remove the engine under cover sub-assembly.

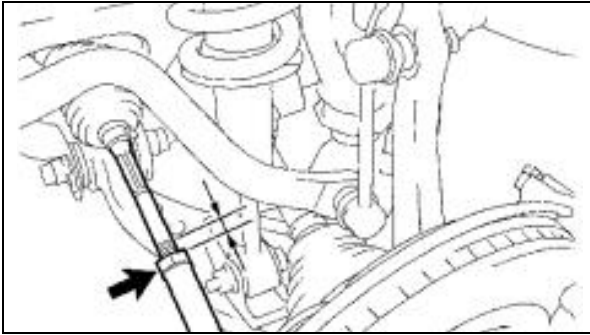
- 1) Remove the 4 bolts for the engine under cover.
- 2) Remove the engine under cover.



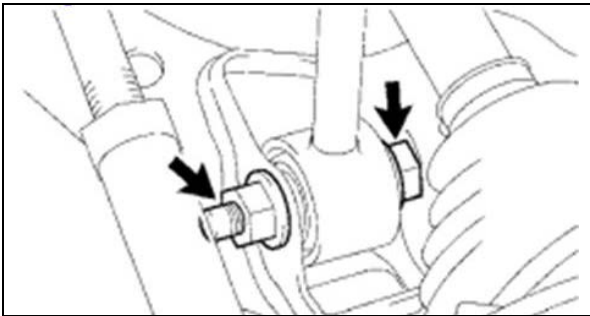
Confirming the torque of the lower ball joint bolts and lower control arm bolts/nuts is a critical step to the completion of this campaign.



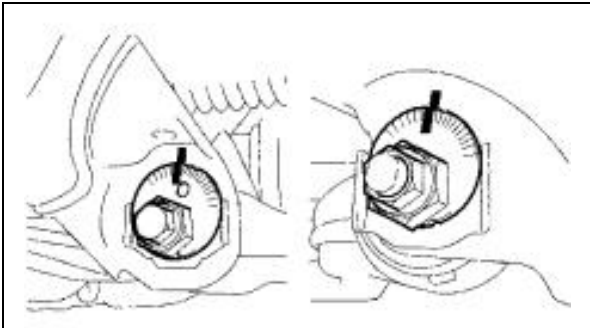
- g) Lower Ball Joint bolts.
Torque: 160 Nm (1631 kgf cm, 118 ft lbf)



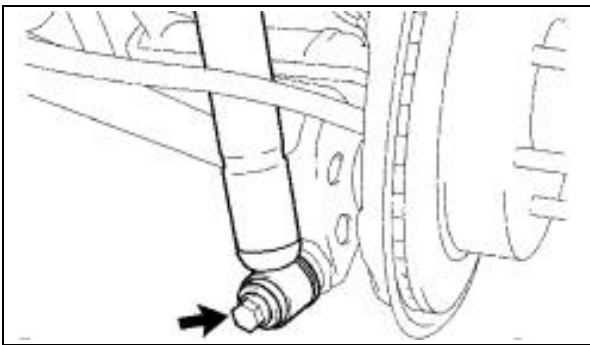
- h) Tie rod lock nut.
Torque: 88 Nm (897 kgf cm, 65 ft lbf)
- i) Repeat **STEPS g) and h)** on opposite side of vehicle.



- j) Lower vehicle and reinstall all 4 wheels.
Torque: 113 Nm (1152 kgf cm, 83 ft lbf)
- NOTE: The following fasteners must be torqued with the full weight of the vehicle on the wheels.**



- k) Lower front shock mount.
Torque: 95 Nm (969 kgf cm, 70 ft lbf)
- l) Lower control arm bolts/nuts.
Torque: 175 Nm (1785 kgf cm, 129 ft lbf)



- m) Rear lower shock bolt.
Torque: 98 Nm (1000 kgf cm, 72 ft lbf)
- n) Repeat **STEPS k) to m)** on opposite side of vehicle.
- o) If any fasteners are found not fully torqued to specifications proceed to **STEP 3**.
- p) If all fasteners are found fully torqued to specifications campaign complete.
Proceed to **STEP 4**.

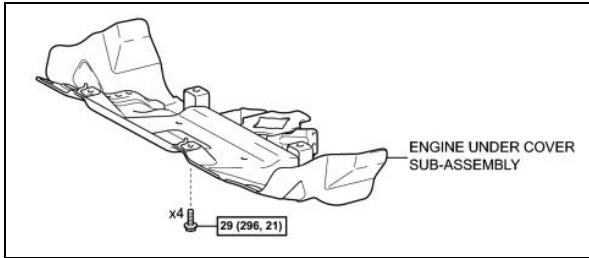
3. PREFORM VEHICLE ALIGNMENT

Refer to TIS for vehicle alignment procedure details.

FRONT WHEEL ALIGNMENT

Alignment specifications for vehicles with the TRD Suspension Kit are different than for the standard FJ Cruiser refer to the chart below.

Caster	$3.25^{\circ} \pm 0.5^{\circ}$
Camber	$0.00^{\circ} \pm 0.5^{\circ}$
Toe	$0.0 \text{ mm} \pm 4.0 \text{ mm}$ $0.0 \text{ in.} \pm 0.16 \text{ in.}$



4. REINSTALL ENGINE UNDER COVER

- Reinstall the engine under cover sub-assembly.
- Reinstall the 4 bolts.
Torque: 29 Nm (296 kgf cm, 21 ft lbf)

◀ VERIFY REPAIR QUALITY ▶

- Test drive vehicle to confirm steering wheel position and no abnormal noises are present.

If you have any questions regarding this campaign, please contact your area representative.

VII. APPENDIX

A. CAMPAIGN DESIGNATION DECODER

