## **TECHNICAL INSTRUCTIONS**

## FOR

## SAFETY RECALL 23TA05

## POTENTIAL LOSS OF VEHICLE CONTROL

## CERTAIN 2023 MODEL YEAR CAMRY AND CAMRY HV

The repair quality of covered vehicles is extremely important to Toyota. All dealership technicians performing this repair 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 repair are required to have currently completed the following courses:

• T4535 – Steering, Suspension & Handling

Always check which technicians can perform the repair by logging on to <u>https://www.uotdealerreports.com</u>. It is the dealership's responsibility to select technicians with the above certification level or greater to perform this repair. Carefully review your resources, the technician's 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

The flow chart is for reference only. DO NOT use it in place of the full technical instructions. Follow ALL steps as outlined in the full technical instructions to confirm the campaign is completed correctly.



# **II. IDENTIFICATION OF AFFECTED VEHICLES**

## 1. CHECK VEHICLE FOR CAMPAIGN ELIGIBILITY

- a) Compare the vehicle's 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 Campaign, and that it has not already been completed.

### NOTICE:

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. TOOLS, SUPPLIES & EQUIPMENT

Standard Hand Tools
Torque Wrench

### **B. MATERIALS**

Protective Gloves
Protective Glasses

### **IV. BACKGROUND**

The subject vehicles may have significantly under-tightened wheel nuts that may loosen and detach, causing a wheel to detach from the vehicle after low-mileage use. A wheel detaching from a moving vehicle can result in a loss of vehicle control, increasing the risk of a crash. No one should drive these vehicles until the remedy is performed.

## **V. COMPONENTS**



# VI. CHECK WHEELS FOR FREE PLAY

- 1. RAISE THE VEHICLE ON THE LIFT TO ALLOW THE WHEELS TO BE AT CHEST HEIGHT <u>Refer to TIS for instructions on GENERAL / REPAIR INSTRUCTION / VEHICLE LIFT AND SUPPORT</u> <u>LOCATIONS.</u>
- 2. CHECK FOR LOOSENES OR FREE PLAY IN WHEELS.

Click on the video below for reference:



- a) Confirm by individually rocking all four wheels left and right.
- b) If looseness or free play is not present, proceed to step 3.
- c) If looseness or free play in the wheel *is present*, proceed to *step 4*.



### 3. RE-TORQUE ALL WHEEL NUTS TO SPECIFICATION

a) Using a torque wrench, re-torque wheel nuts on **all four wheels** to specification: 103 N $\cdot$ m {1050 kgf $\cdot$ cm, 76 ft·lbf} in the order shown in the illustration below.



b) Confirm all wheel nuts are torqued properly and confirm quality confirmation at the end of the procedure.

c) Campaign is now complete.

### 4. REMOVE THE TIRE w / WHEEL

Refer to TIS for instructions on Suspension / TIRE / WHEEL / TIRE AND WHEEL / REMOVAL.

a) Visually inspect hub assembly bolt threads for damage on all four wheels.



b) Visually inspect all four wheels for damage to the wheel nut mounting surface.





- Check wheel hub bolt threads for any damage.
- Check wheel nut threads for any damage.
  - Check for any damage to the wheel assembly mounting surface area.
- c) If no damage is found continue to step 5.
- d) If damage is found, document all damaged items with photographs and create a TAS case. Consult with TAS agent and FTS if necessary and determine appropriate replacement parts for the vehicle based on the damage present. Replace parts according to the Repair Manual, then go to **step 5**.

### 5. INSTALL THE TIRE w/ WHEEL

- Check that there is no foreign matter or rust on the axle hub bolt-hole threads and the contact surfaces of the wheel, brake disc, axle hub, etc. Clean the contact surfaces and axle hub bolts if necessary. If a wheel assembly is installed with foreign matter or rust between the contact surfaces, the foreign matter or rust may work loose. This may result in a reduction of the fastening force (axial force) leading to looseness or loss of one or more axle hub bolts.
  - When installing the axle hub bolts, check that the axle hub bolts rotate smoothly by hand. If the axle hub bolts do not rotate smoothly, check that there is no foreign matter or rust and clean if necessary.
  - a) While aligning the wheel assembly with the center of the axle hub, install the axle hub nuts by hand.
  - b) Temporarily tighten the axle hub nuts to seat the wheel against the hub assembly in the order shown in the below illustration.



c) Lower the vehicle then fully tighten the axle hub nuts in the order shown in the above illustration. **Torque:** 

103 N·m {1050 kgf·cm, 76 ft·lbf}

### ◄ VERIFY REPAIR QUALITY ►

- Confirm all hub wheel nuts are torqued properly to: 103 N·m {1050 kgf·cm, 76 ft·lbf}
- Have a second technician inspect that all wheel nuts on all four wheels have been properly torqued to specification.

## VII. APPENDIX

#### A. PARTS DISPOSAL

As required by Federal Regulations, 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 DECODER**



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