#### **IMPORTANT UPDATE**

# TECHNICAL INSTRUCTIONS FOR

# SAFETY (NONCOMPLIANCE) RECALL K0I FUEL MAY LEAK FROM FUEL FILLER PIPE CONNECTION CERTAIN 2019 MODEL AVALON HV AND CAMRY HV

**UPDATE 2-20-2019** 

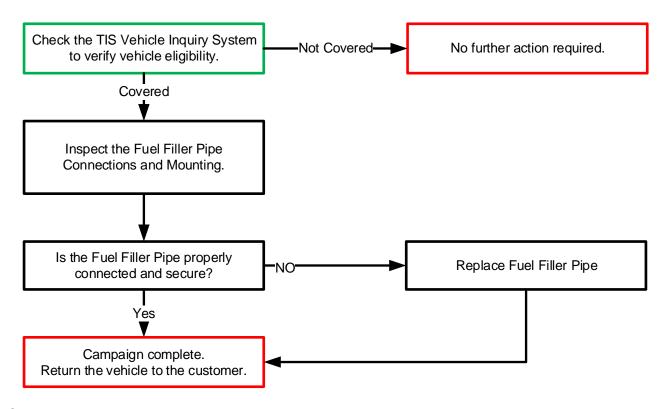
- Updated charcoal cannister connection inspection pictures for clarity
- Updated install instructions for fuel filler pipe connection for clarity

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 (any specialty)
- Expert Technician (any specialty)
- 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



#### I. CONDITION

During a quality confirmation activity, there was a possibility that the fuel filler pipe may not have been properly reconnected to the fuel tank. In this condition, the vehicles could leak fuel and may not meet certain U.S. federal motor vehicle safety standard requirements. In the presence of an ignition source, a fuel leak could increase the risk of a fire.

#### II. PREPARATION

#### A. PARTS

If repair is required based on inspection reference the dealer letter for parts information and further direction.

Note: A photo of the condition will be required.

#### **B. TOOLS & EQUIPMENT**

- Standard hand tools
- Torque wrench\*
- Shop Light

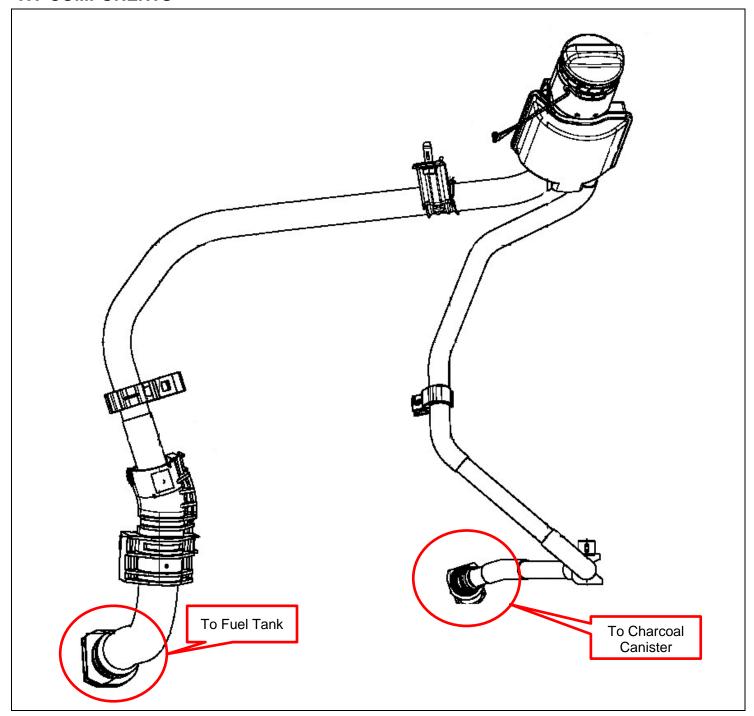
\*Note: Ensure the torque wrench being used is properly calibrated.

#### III. IDENTIFICATION OF AFFECTED VEHICLES

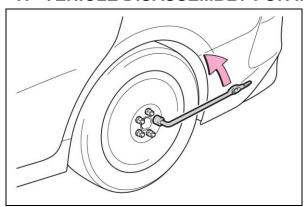
#### NOTE:

- Check the TIS Vehicle Inquiry System to confirm the VIN is involved in this Safety Recall, 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.

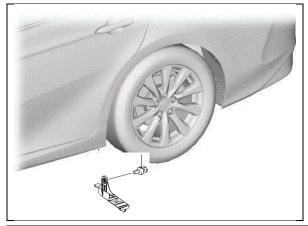
#### **IV. COMPONENTS**



#### V. VEHICLE DISASSEMBLY FOR INSPECTION



1. LIFT VEHICLE AND REMOVE LH REAR WHEEL

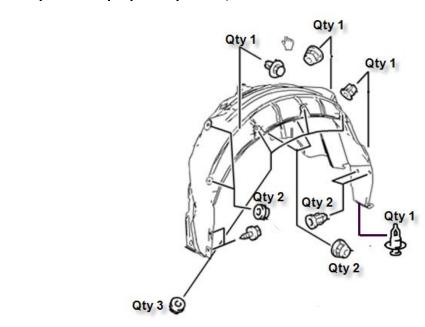


#### 2. REMOVE THE LH REAR INNER FENDER LINER

a) Remove the clip from the Rocker Panel Molding End Cover to disconnect it from the fender liner.

b) Remove the clips and screws shown below and remove the inner fender liner.

Note: To perform a proper inspection, the entire fender liner needs to be removed.



#### VI. FUEL TANK PIPE INSPECTION



1. OK= No Gap

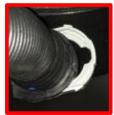


**NG= Gap Found** 



2. OK= Clip Seated NG = Clip Up







**OK= Clip Down & Fully inserted** (Tabs visible behind collar)

NG = Clip up or Not fully inserted (Tabs not visible)





#### 1. INSPECT THE FUEL TANK PIPE FOR PROPER CONNECTIONS

a) Inspect the fuel tank pipe connection at the fuel tank.

- 1. Confirm the fuel pipe is fully seated against tank with no gap.
- 2. Confirm that the retaining clip is fully seated by visual and touch feel.
- 3. Perform a pull check on the fuel pipe to confirm it cannot be removed from the tank and no gap is created.

**OK= Inspection items 1-3 pass inspection** 

NG = If any inspection items 1 - 3 fail take a picture of the condition and replace the Fuel Tank Pipe Assembly (Section VIII Fuel Filler Pipe Replacement)

Note: Reference the parts section in dealer letter for specific directions for obtaining repair parts.

b) Inspect the fresh air pipe connections at the charcoal cannister.

- 1. Confirm the fresh air pipe is fully seated and the locking tab is behind the collar.
- 2. Confirm that the retaining clip is fully seated.
- 3. Perform a pull check on the pipe to confirm it cannot be removed from the charcoal canister.

**OK= Inspection items 1-3 pass inspection** 

NG = If any inspection items 1 - 3 fail take a picture of the condition and replace the Fuel Tank Pipe Assembly (Section VIII Fuel Filler **Pipe Replacement)** 

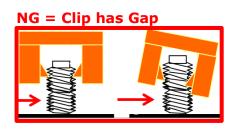
Note: Reference the parts section in dealer letter for specific directions for obtaining repair parts.





a) Confirm the clips are fully seated on the vehicle body studs.





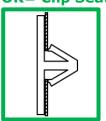
Note: If gap is present reseat clip(s).

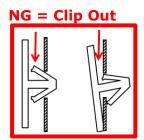
b) Confirm the bracket is installed and the bolt is torqued to spec.

Torque: Bolt: 18 lbf (24 N-m, 240 kgf-cm)



OK= Clip Seated





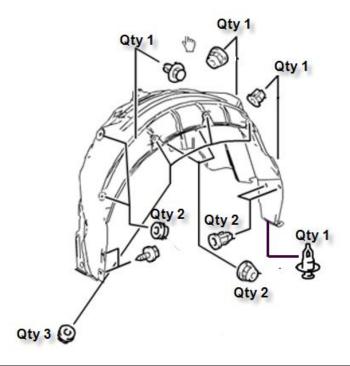
c) Confirm the Fuel Tank Vent Hose clip is properly seated in body hole and secure.

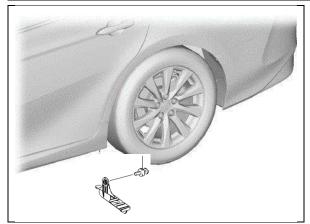
Note: If gap is present reseat clip.

#### VII. VEHICLE REASSEMBLY

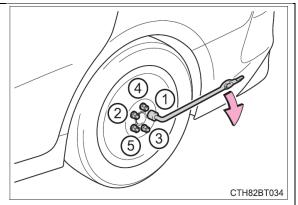
#### 1. REINSTALL REAR INNER FENDER LINER

a) Reinstall the rear inner fender liner and secure with the bolts and clips shown below.





b) Reinstall the rocker panel molding end cover to the fender liner and secure it with clip.



#### 2. REINSTALL LH REAR WHEEL

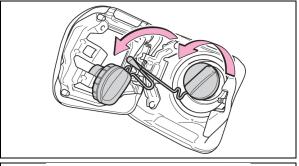
- a) Install the rear wheel.
- b) Install the rear wheel lug nuts and torque to spec in proper pattern.

Torque: Bolt: 76 ft lbf (103 N-m, 10.5 kgf-m)

#### VIII. FUEL FILLER PIPE REPLACEMENT

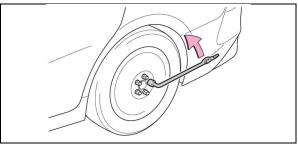
#### 1. CONFIRM THE FUEL LEVEL IS BELOW HALF TANK.

Note: If fuel tank is above half tank fuel can spill out of tank when removing filler pipe. In these cases, gas will need to be emptied from tank.

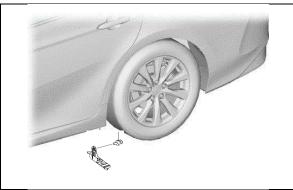


#### 2. OPEN FUEL DOOR AND REMOVE GAS CAP

Note: This will allow the fuel filler pipe to slip through the fuel door grommet.



3. LIFT VEHICLE AND REMOVE LH REAR WHEEL

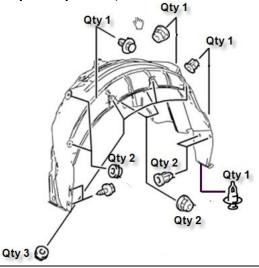


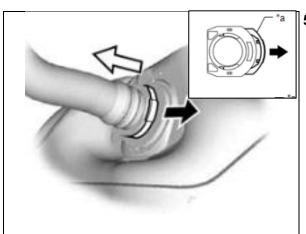
#### 4. REMOVE THE LH REAR INNER FENDER LINER

a) Remove the clip from the Rocker Panel Molding End Cover to disconnect it from the fender liner.

b) Remove the clips and screws shown below and remove the inner fender liner.

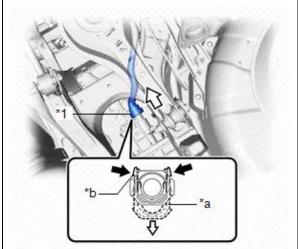
Note: To perform a proper inspection, the entire fender liner needs to be removed.





#### 5. REMOVE FUEL FILLER PIPE FROM TANK

- a) Pullout retainer on fuel filler pipe to disengage the locking claws.
- b) Pull off fuel filler pipe from tank.



# 6. REMOVE THE FRESH AIR PIPE FROM CHARCOAL CANISTER

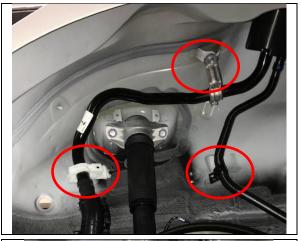
- a) Pullout retainer on charcoal canister connection to disengage the locking claws.
- b) Pull off fresh air pipe from charcoal canister.





#### 7. DISCONNECT PIPE ASSEMBLY FROM BODY

- a) Remove the bolt securing the bracket.
- b) Remove the clips securing pipe to body.
- c) Pull assembly down and out of vehicle.



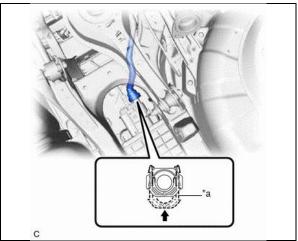
#### 8. INSTALL PIPE ASSEMMBLY

- a) Insert fuel filler pipe through fuel door grommet.
- b) Insert clips onto stude and body.
- c) Install bolt and torque to specification.

Torque: Bolt: 18 lbf (24 N-m, 240 kgf-cm)

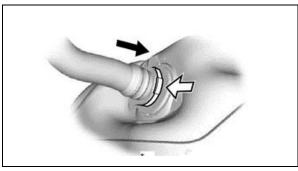


d) Secure clip to underside of body.



## 9. INSTALL THE QUICK DISCONNECT OF FRESH AIR PIPE TO CHARCOAL CANISTER.

- a) Prior to installation, clean the charcoal canister connecting surface with a clean cloth to remove potential debris.
- b) Push the connector onto the canister and listen for click of primary locking tabs.
- c) Confirm the fresh air pipe is fully seated and the locking tab is behind the collar.
- d) Fully seat locking retainer and listen for a clicking sound.
- e) Perform a pull check on the pipe to confirm it cannot be removed from the charcoal canister.



#### 10. INSTALL FUEL FILLER PIPE ONTO TANK

- a) Prior to installation, clean the fuel tank neck connecting surface with a clean cloth to remove potential debris.
- b) Push the fuel pipe onto the fuel tank and listen for a clicking sound.
- c) Confirm it is fully seated onto the tank neck.
- d) Push the retainer in to lock the pipe to tank, it should create clicking sound when seated.
- e) Perform a pull check to ensure it is fully connected.

### **Second Technician Secondary Check**

The following inspection needs to be performed by a second technician after the fuel filler pipe has been replaced and prior to the fender liner being reinstalled. The operation code for repair includes time for the second technician inspection.



1. OK= No Gap



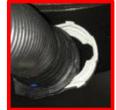
NG= Gap Found



2. OK= Clip Seated



NG = Clip Up

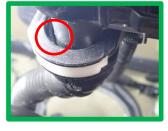


- 1. INSPECT THE FUEL FILLER PIPE FOR PROPER CONNECTIONS
  - a) Inspect the fuel filler pipe connection at the fuel tank.

- 1. Confirm the fuel filler pipe is fully seated against tank with no gap.
- 2. Confirm that the retaining clip is fully seated by visual and touch feel.
- Perform a pull check on the fuel filler pipe to confirm it cannot be removed from the tank and no gap is created.



OK= Clip Down & Fully inserted (Tabs visible)



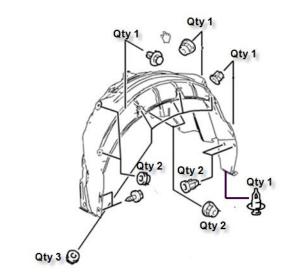
NG = Clip up or Not fully inserted (Tabs not visible)

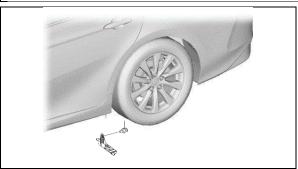


- 2. INSPECT THE FRESH AIR PIPE CONNECTIONS AT THE CHARCOAL CANNISTER.
  - 1. Confirm the fresh air pipe is fully seated and the locking tab is behind the collar.
  - Confirm that the retaining clip is fully seated.
  - 3. Perform a pull check on the fuel pipe to confirm it cannot be removed from the charcoal canister.

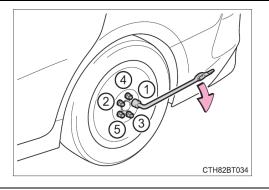
#### 11. REINSTALL REAR INNER FENDER LINER

a) Reinstall the rear inner fender liner and secure with the bolts and clips shown below.





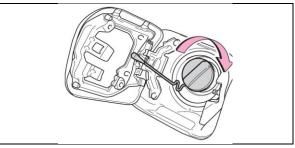
b) Reinstall the rocker panel molding end cover to the fender liner and secure it with clip.



#### 12. REINSTALL LH REAR WHEEL

- a) Install the rear wheel.
- b) Install the rear wheel lug nuts and torque to spec in proper pattern.

Torque: Bolt: 76 ft lbf (103 N-m, 10.5 kgf-m)



13. REINSTALL GAS CAP AND CLOSE FUEL DOOR.

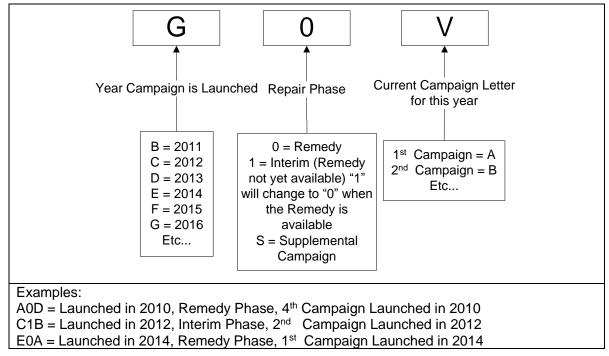
#### **◄ VERIFY REPAIR QUALITY** ►

- Confirm ALL inspection steps are followed EXACTLY as described in these instructions
- Confirm the fuel tank pipe is properly secured to the fuel tank and charcoal canister
- Confirm vehicle fender liner is properly installed and secured

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

#### IX. APPENDIX

#### A. CAMPAIGN DESIGNATION DECODER



#### **B. CAMPAIGN PARTS DISPOSAL**

Make sure all campaign 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.*