

TECHNICAL INSTRUCTIONS
FOR
SSC G0G
CERTAIN 2015-2016 MY SIENNA
OXYGEN SENSOR REPLACEMENT

Updated 7-20-16

Update 7-20-16

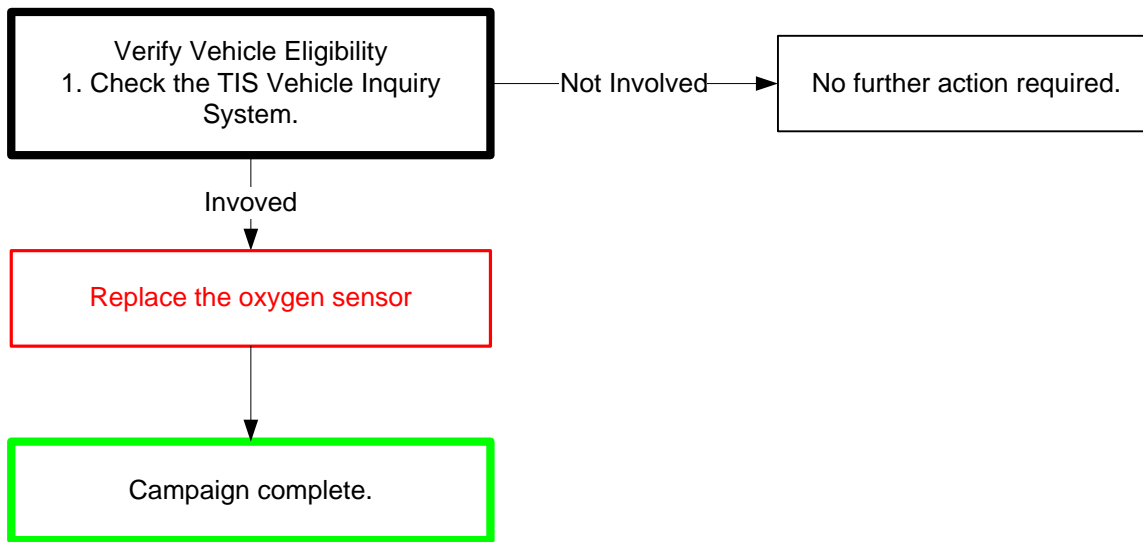
- **Additional warnings have been added to pages 3 and 4.**

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 currently hold at least one of the following certification levels:

- Certified Technician (Any specialty)
- Expert Technician (Any specialty)
- Master Technician
- Master Diagnostic Technician

Always check which technicians can perform the recall remedy by logging on to <https://www.uotdealerreports.com>. 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 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

- 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	Quantity
89465-08140	SENSOR , OXYGEN	1

B. TOOLS & EQUIPMENT

- Standard hand tools
- Torque Wrench

SST- These are essential special service tools that the dealership should have.

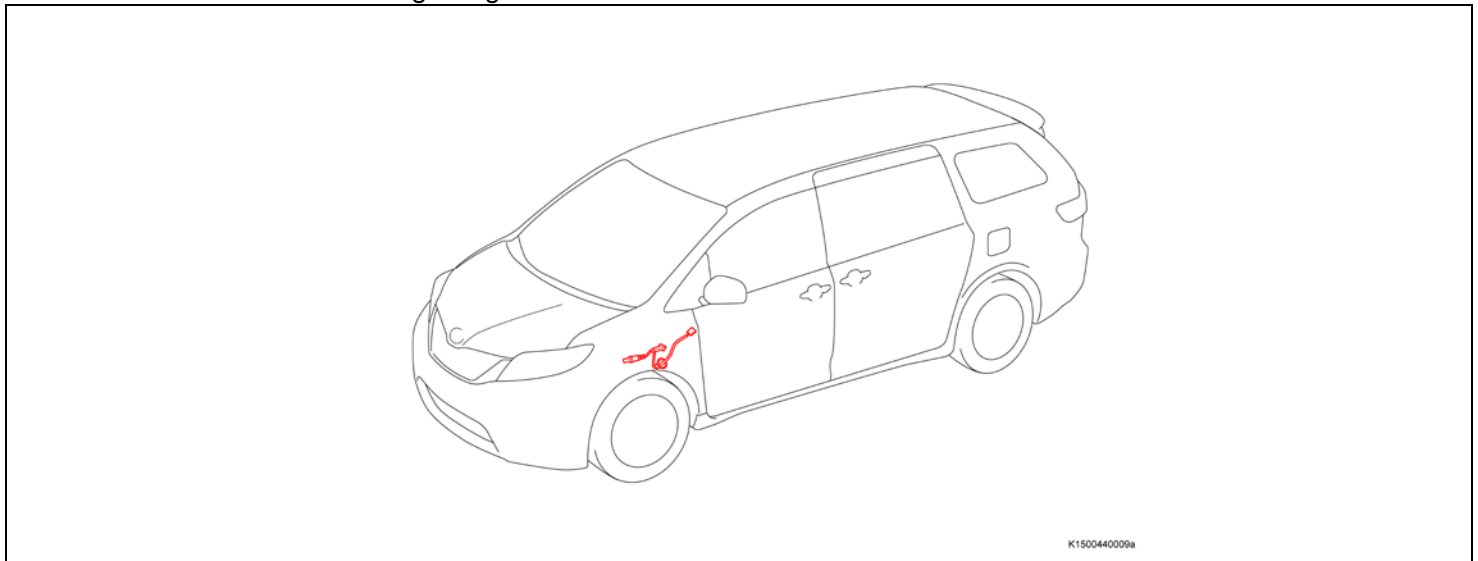
Part Number	Name	Quantity
09224-00010-01	O2 Sensor Wrench	1

C. MATERIALS

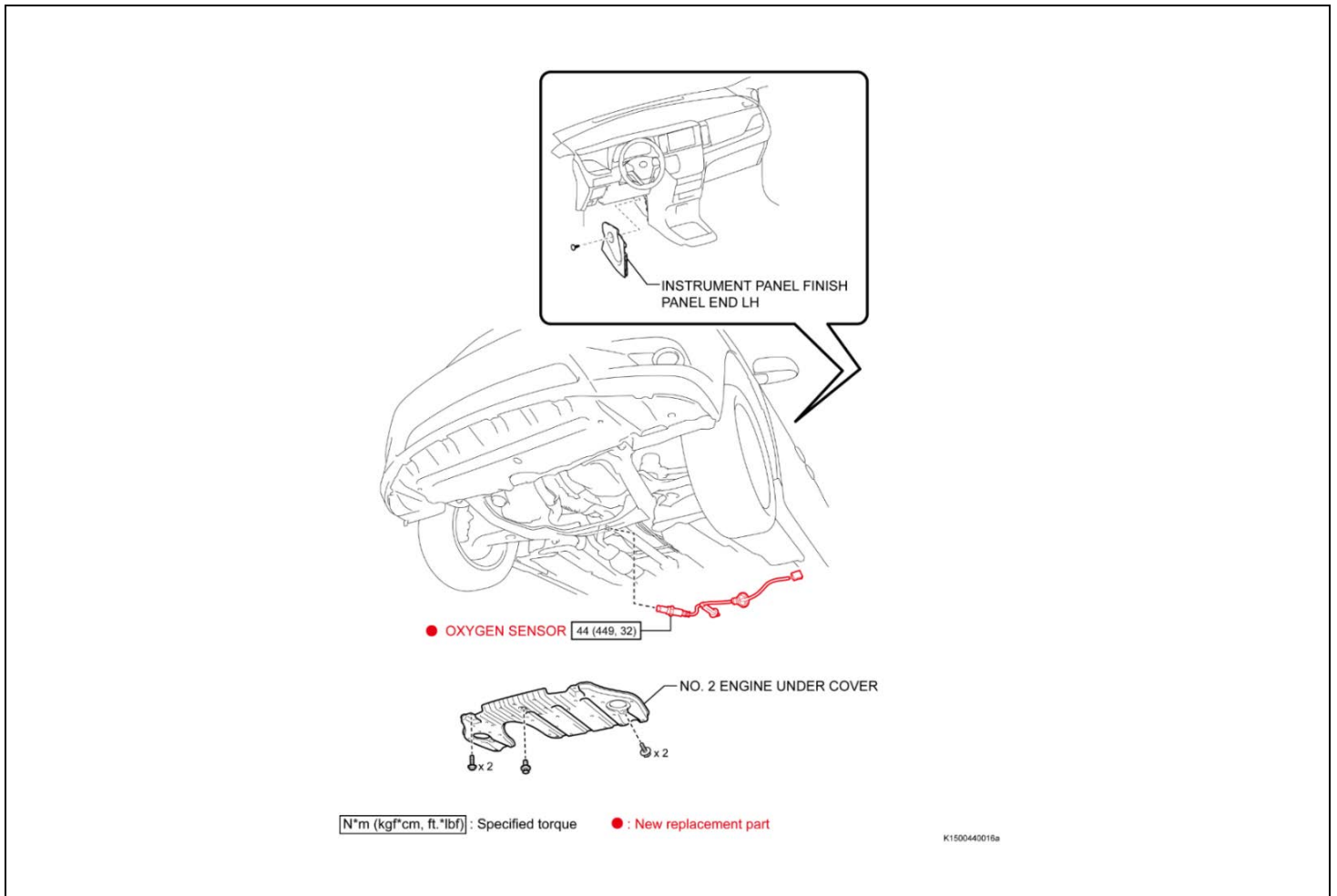
- Protective eyewear
- Protective gloves

IV. BACKGROUND

The subject vehicles are equipped with an Oxygen Sensor which could experience wire degradation inside the Oxygen Sensor wiring harness caused by vehicle vibration during normal operation. If this occurs, the vehicle will illuminate the check engine light.



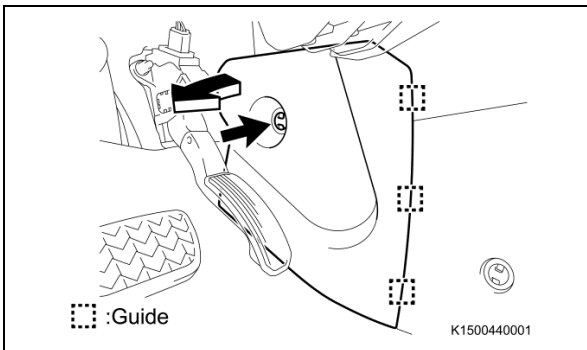
V. COMPONENTS



VI. REPLACE THE OXYGEN SENSOR

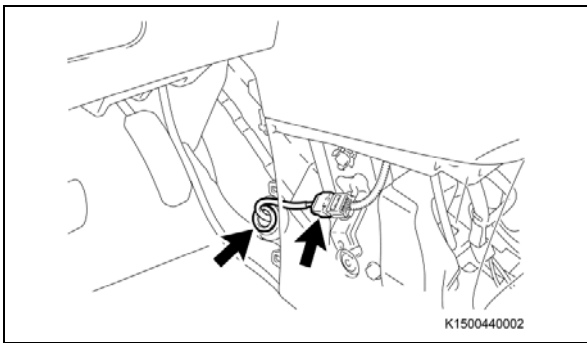


The wearing of protective eyewear and gloves when working on the exhaust system is recommended.



1. REMOVE THE LEFT INSTRUMENT FINISH PANEL

- Remove the clip.
- Disengage the 3 guides and remove the panel.

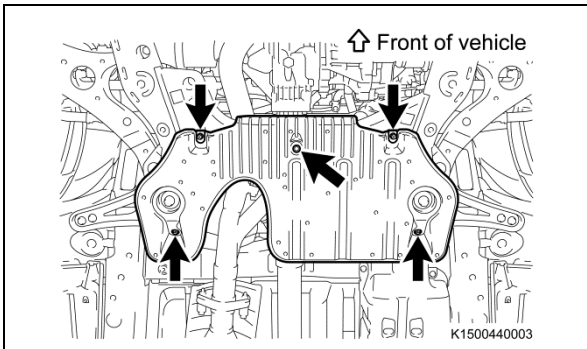


2. DISCONNECT THE OXYGEN SENSOR CONNECTOR



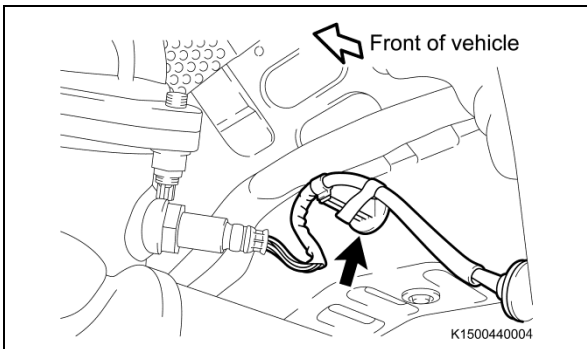
To prevent damage to the ECM *ENSURE* to disconnect the oxygen sensor.

- Disconnect the oxygen sensor connector.
- Remove the oxygen sensor wire grommet and pass the connector through the hole.



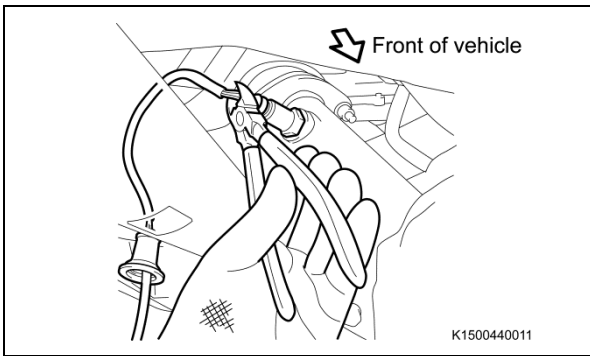
3. REMOVE THE NO. 2 ENGINE UNDER COVER

- Remove the 2 bolts.
- Remove the 2 screws.
- Remove the clip.
- Remove the cover.



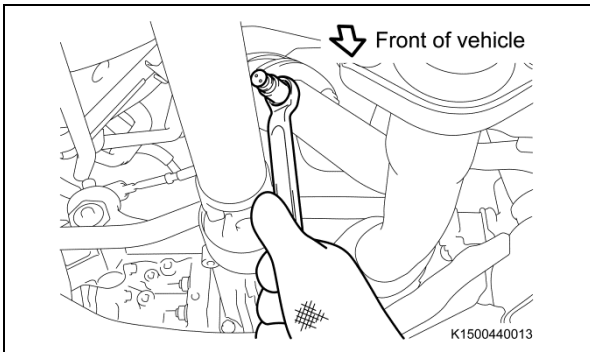
4. REMOVE THE OXYGEN SENSOR

- Disengage the harness clamp to disconnect the sensor wire.

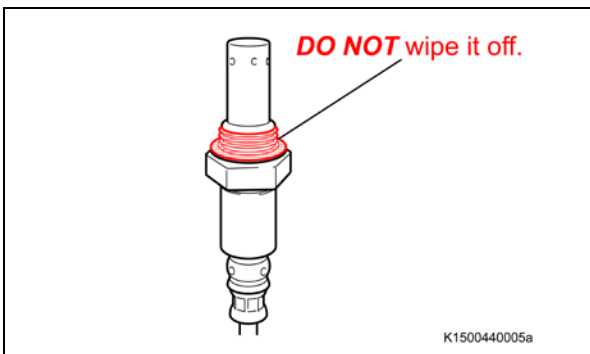


ENSURE that the oxygen sensor or battery is disconnected prior to cutting the wire or ECM damage may occur.

b) Cut the oxygen sensor wire at the sensor.



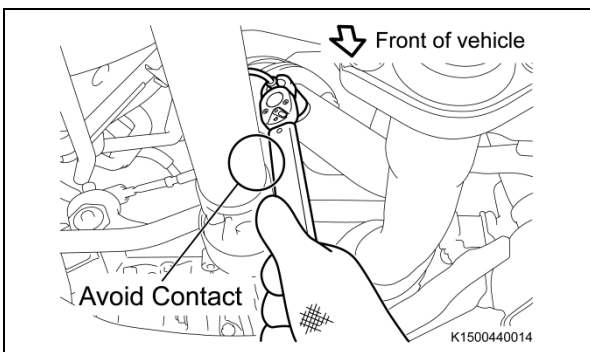
c) Remove the oxygen sensor.



5. INSTALL THE NEW OXYGEN SENSOR



DO NOT wipe off the gray anti-seizing compound applied on the **NEW** sensor threads.



a) Install the **NEW** sensor by hand until it seats.

b) Using an oxygen sensor wrench, tighten the **NEW** sensor.

SST: 09224-00010

Torque: 44 N*m (449 kgf*cm, 32 ft.*lbf)

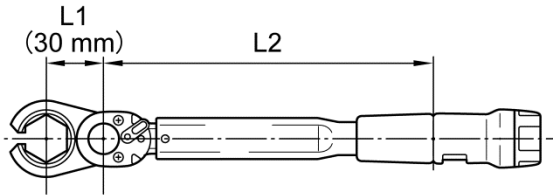


- **When tightening, avoid contacting the driveshaft shaft with the wrench.**
- **Adjust the torque wrench using the formula below if an extension is used.**

Torque extension formula

<Formula> $T' = T * L2 / (L1 + L2)$

Connect straight forward



T'	Reading of torque wrench [N*m (kgf*cm, ft.*lbf)]
T	Torque [N*m (kgf*cm, ft.*lbf)] [44 N·m (449 kgf*cm, 32 ft.*lbf)]
Extension L1	Length of SST or extension tool (oxygen sensor wrench) [mm (in.)] [30 mm (1.18 in.)]
L2	Length of torque wrench [mm (in.)]

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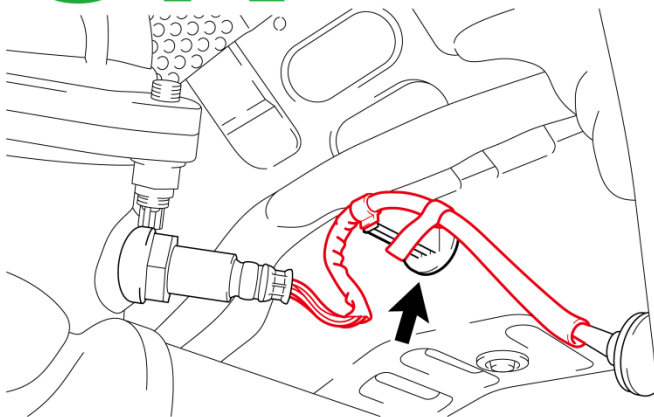
c) Engage the harness clamp to connect the oxygen sensor wire to the vehicle.



- **DO NOT** forcibly twist the harness clamp when engaging it.
- **ENSURE** that the harness is correctly routed.

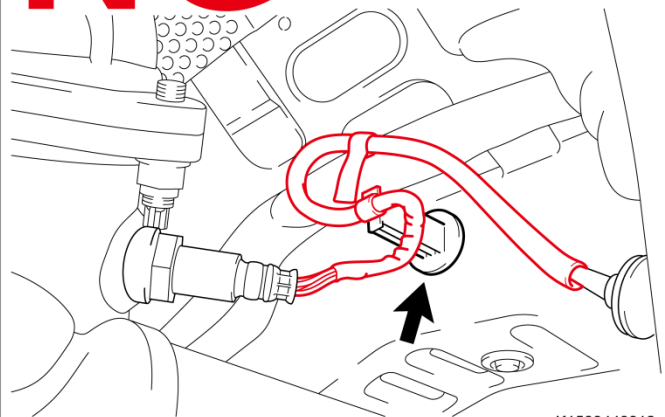
OK

↖ Front of vehicle



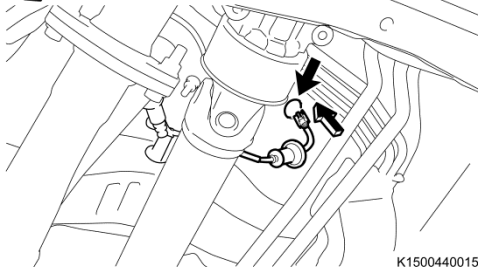
NG

↖ Front of vehicle



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↖ Front of vehicle

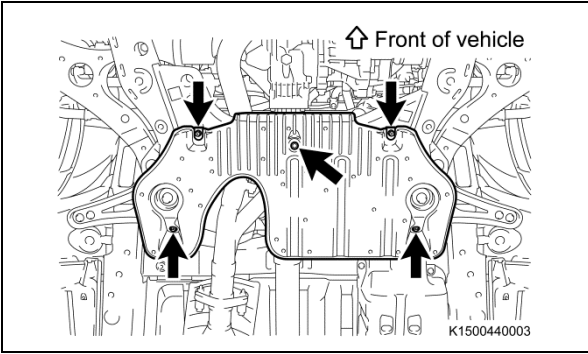


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d) Pass the connector to the inside of the vehicle and install the grommet.

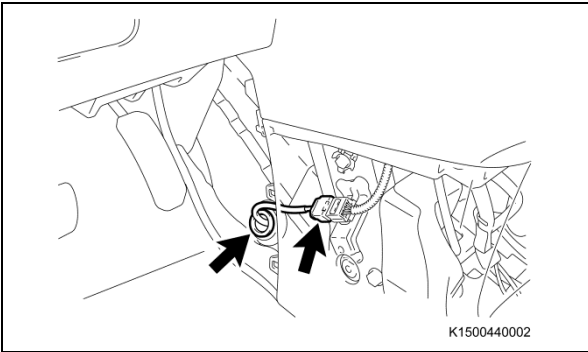


- **DO NOT** forcibly twist the oxygen sensor wire when inserting it.



6. REINSTALL THE NO. 2 ENGINE UNDER COVER

- a) Reinstall the cover.
- b) Reinstall the clip.
- c) Reinstall the 2 bolts.
- d) Reinstall the 2 screws.

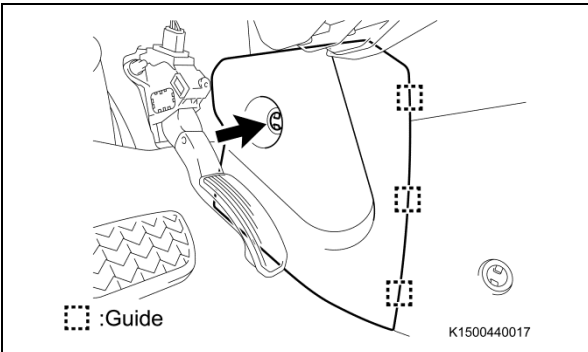


7. CONNECT THE OXYGEN SENSOR CONNECTOR

- a) Connect the oxygen sensor connector and the wire grommet.



DO NOT forcibly twist the connector and the wire grommet when connecting them.



8. REINSTALL THE LEFT INSTRUMENT FINISH PANEL

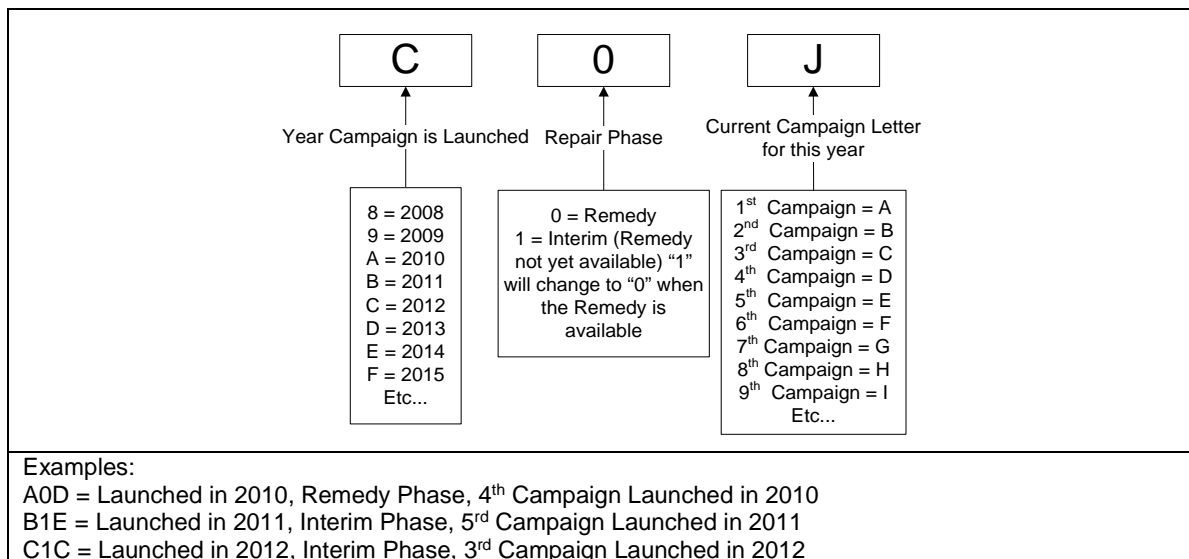
- a) Engage the 3 guides and reinstall the panel.
- b) Reinstall the clip.

◀ **VERIFY REPAIR QUALITY** ▶

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

VII. APPENDIX

A. CAMPAIGN DESIGNATION DECODER



B. CAMPAIGN PARTS DISPOSAL

As required by Federal Regulations, please 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.***