



Technical Service Bulletin

Technical Service Bulletin: TSB180114	Released Date: 24-Aug-2018
Campaign # 3475 -Low Coolant level (LCL) sensor Service kit for C100 D2Re	

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Warranty Statement

The information in this document has no effect on present warranty coverage or repair practices, nor does it authorize TRP or Campaign actions.

Contents

Product Affected

- C100 D2Re

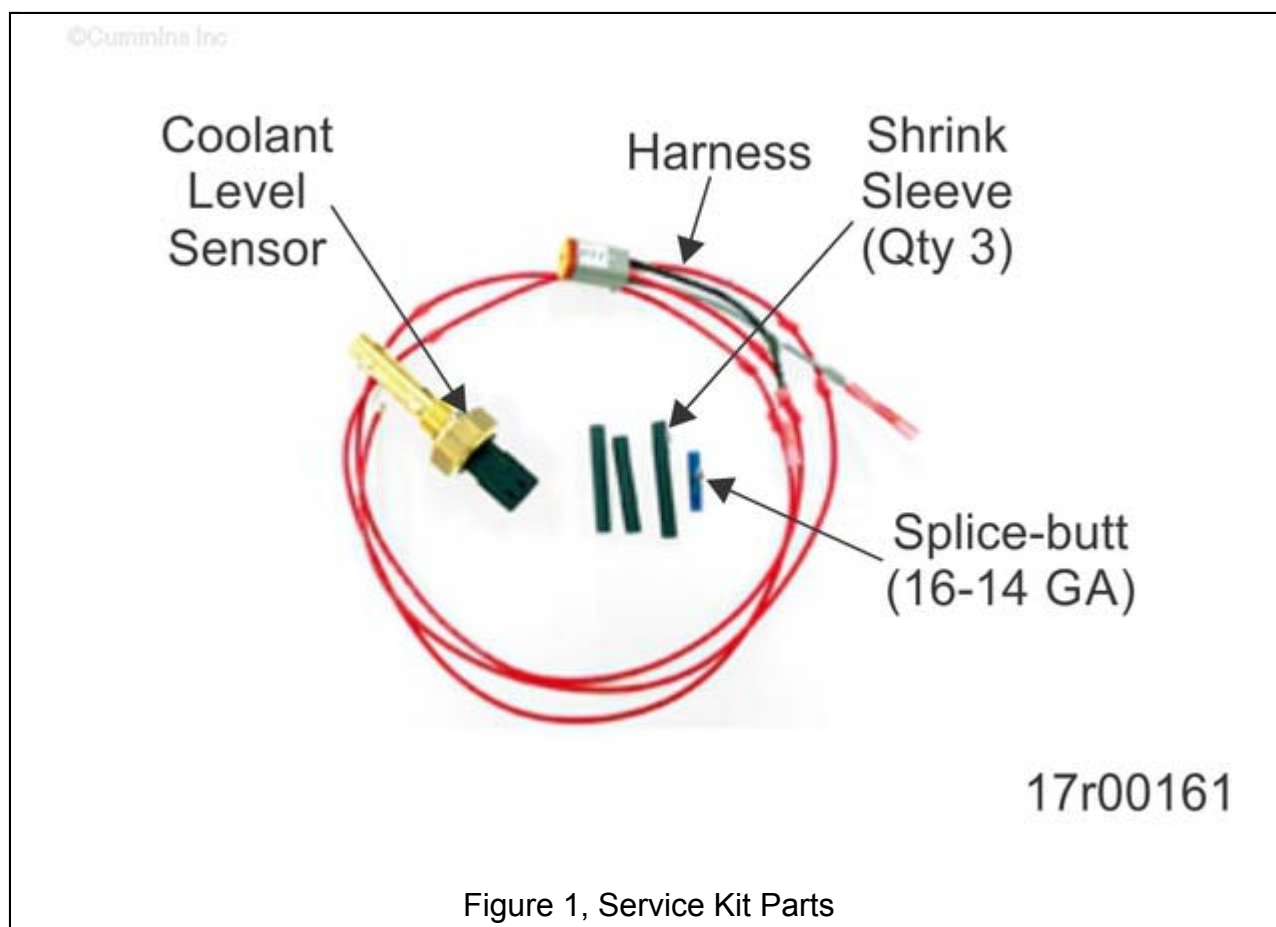
Issue

This TSB is a campaign to replace an old LCL sensor P/N A042N875 with a new re-designed LCL sensor P/N A059E699 and Service Kit for C100 D2Re P/N A060N209 by all authorized technicians.

Resolution

Service tools required for this replacement:

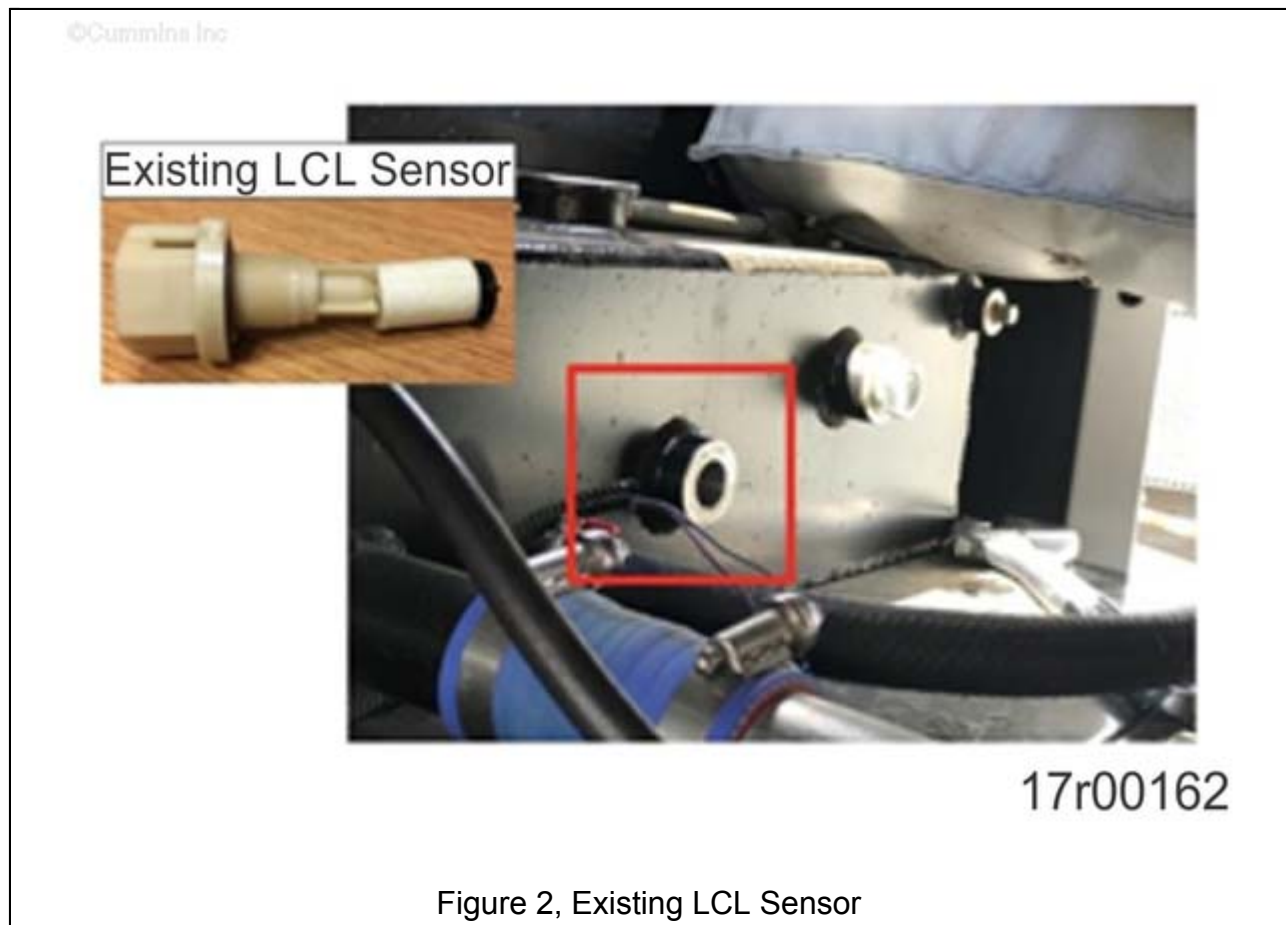
- Adjustable wrench
- Torque wrench
- Wire cutter
- Crimping tools
- Heat gun
- Zip tie



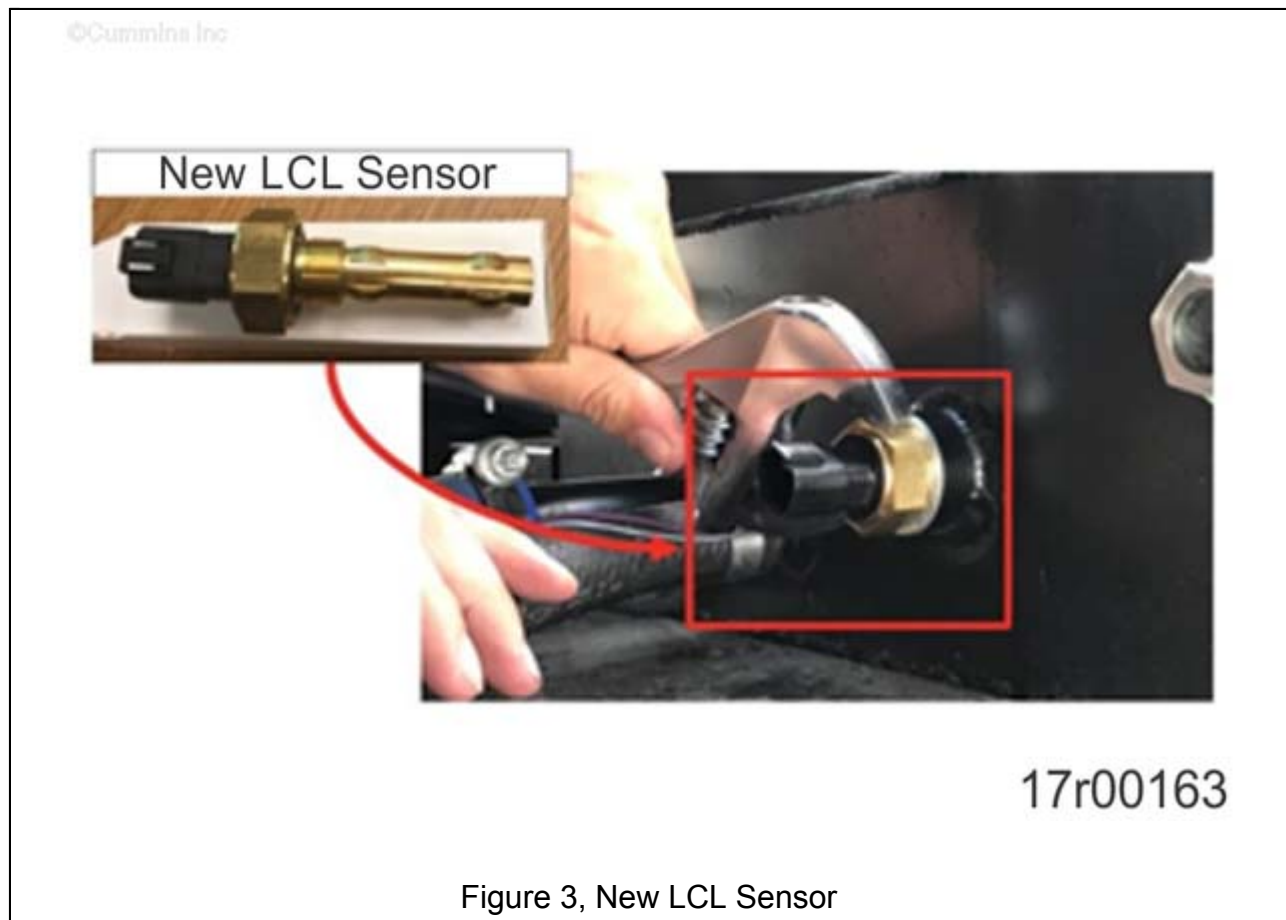
Order Service Kit A060N209 for C100 D2Re through MDC. Verify that the items shown in Figure 1 are included in the kit.

Make sure the generator set is shut down and disabled, and keep it in the same state until the coolant temperature reaches normal atmospheric temperature.

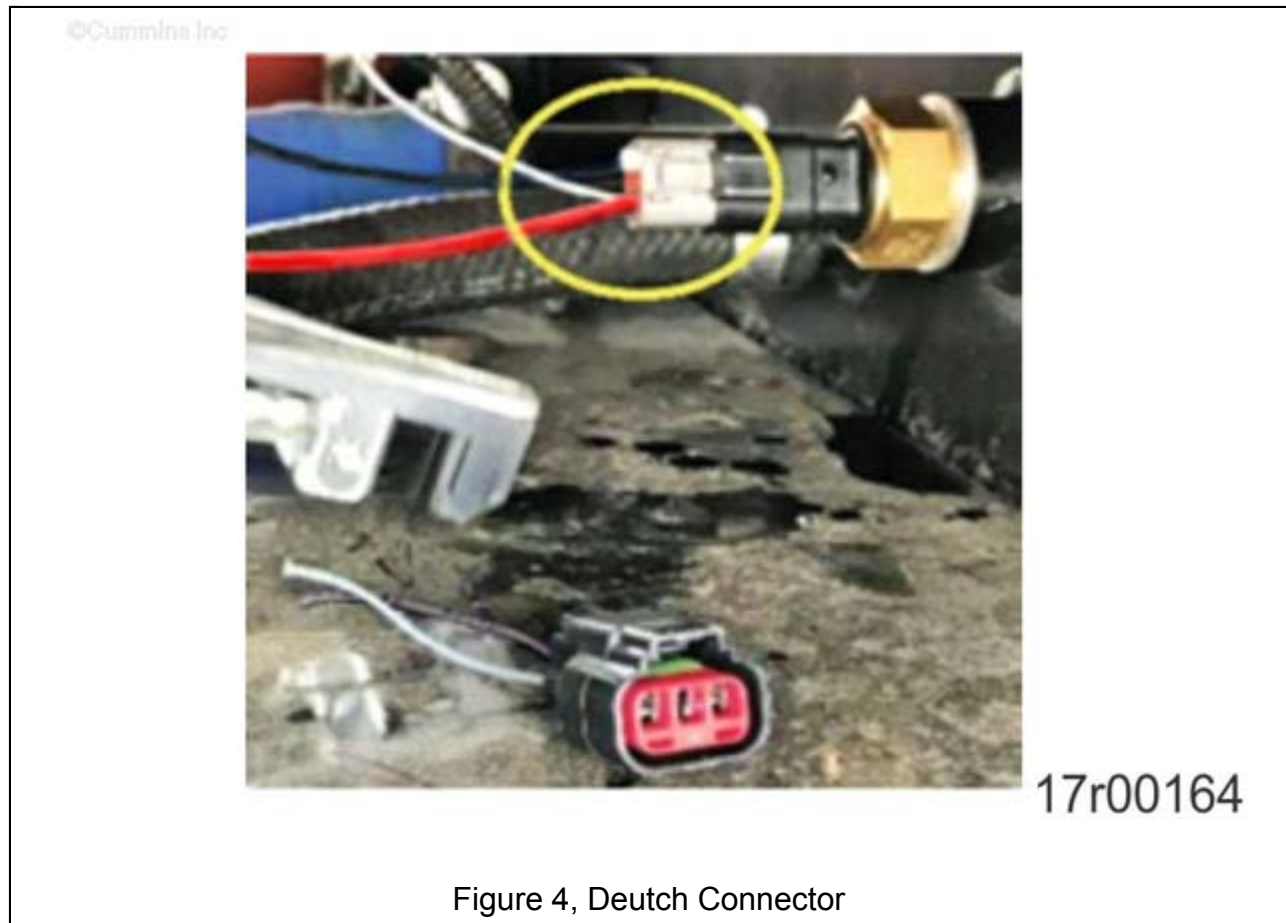
- Move the Rocker Switch to the **OFF** position to stop the generator set. Allow the generator set to be thoroughly cool to the touch.
- Turn off the battery charger. Disconnect the battery charger from the AC source before disconnecting the cables.
- Disconnect the negative (-) cable from the battery. Secure the cable so it will not contact the battery terminals to prevent accidental starting.



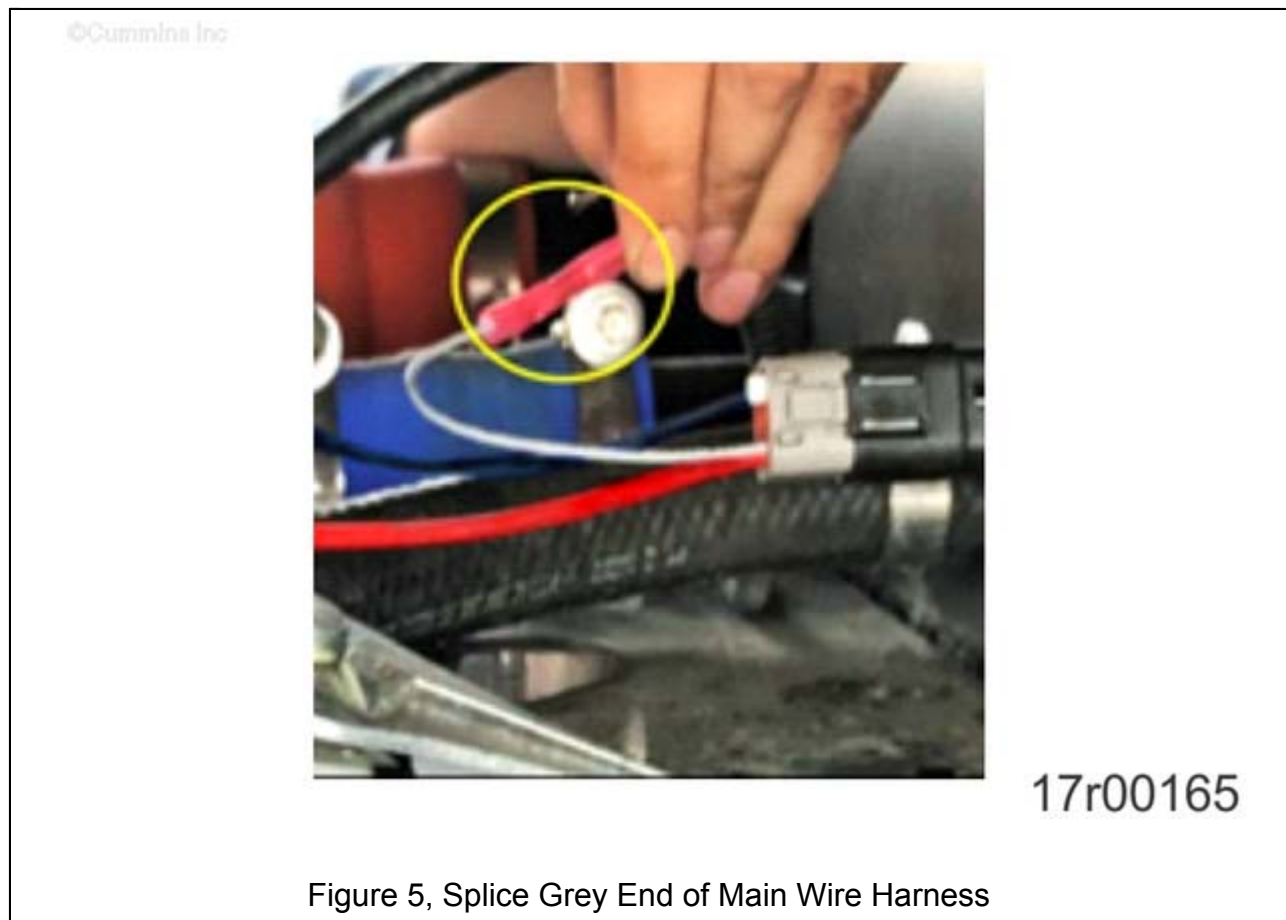
Drain system so coolant level is below the LCL sensor. Remove the existing LCL Sensor from the radiator surge tank bung.



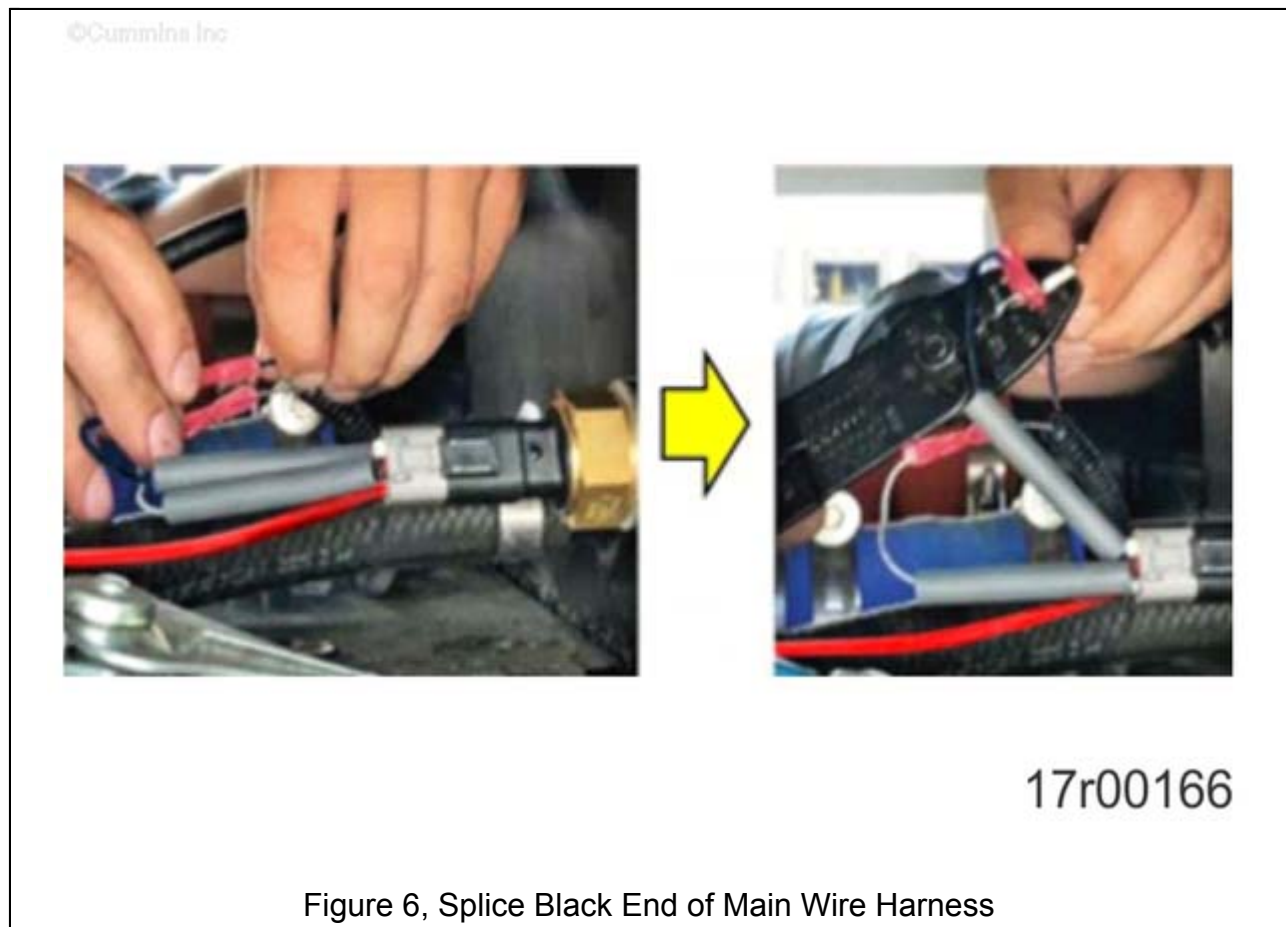
Install the new LCL sensor. Torque the sensor to 14-20 Nm (10.3-14.7 ft-lb).



Cut the Deutch connector roughly 3-5 inches from old plug on main wire harness. Insert the new kit Deutch connector into new LCL Sensor.



Splice the grey end of the main wire harness. Insert the heat shrink into the red splice from the sensor. Make sure that the two grey wires are connected and the splice is secured.



Splice the black end of the main wire harness. Insert the heat shrink into the red splice from the sensor. Make sure the black wires are connected and the splice is secured.

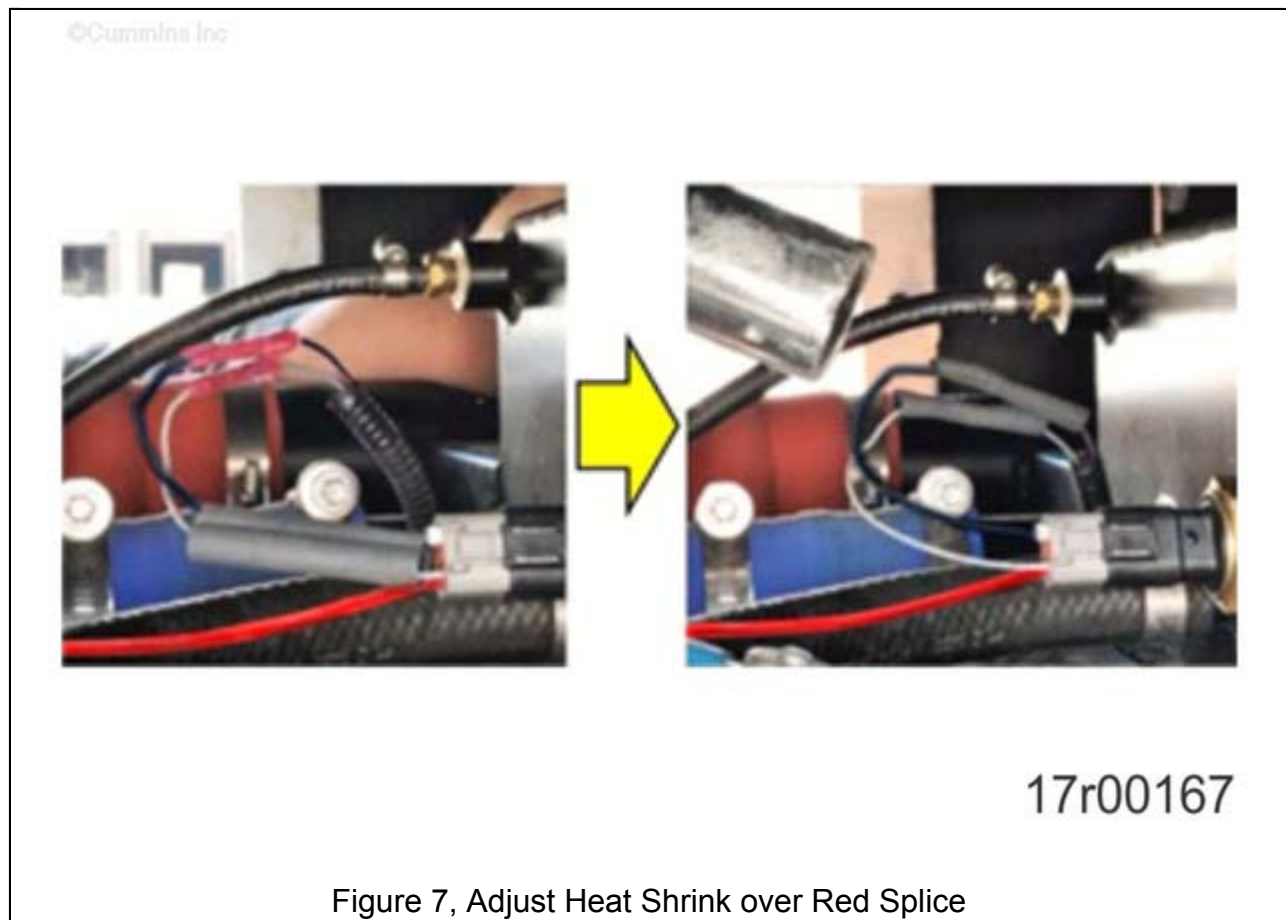


Figure 7, Adjust Heat Shrink over Red Splice

⚠ WARNING ⚠

Heat guns are hot and can cause burns. Avoid touching the hot parts of the heat gun. Wear protective gear.

Adjust the heat shrink over the red splice connector. Use a heat gun to heat and shrink the heat shrink.

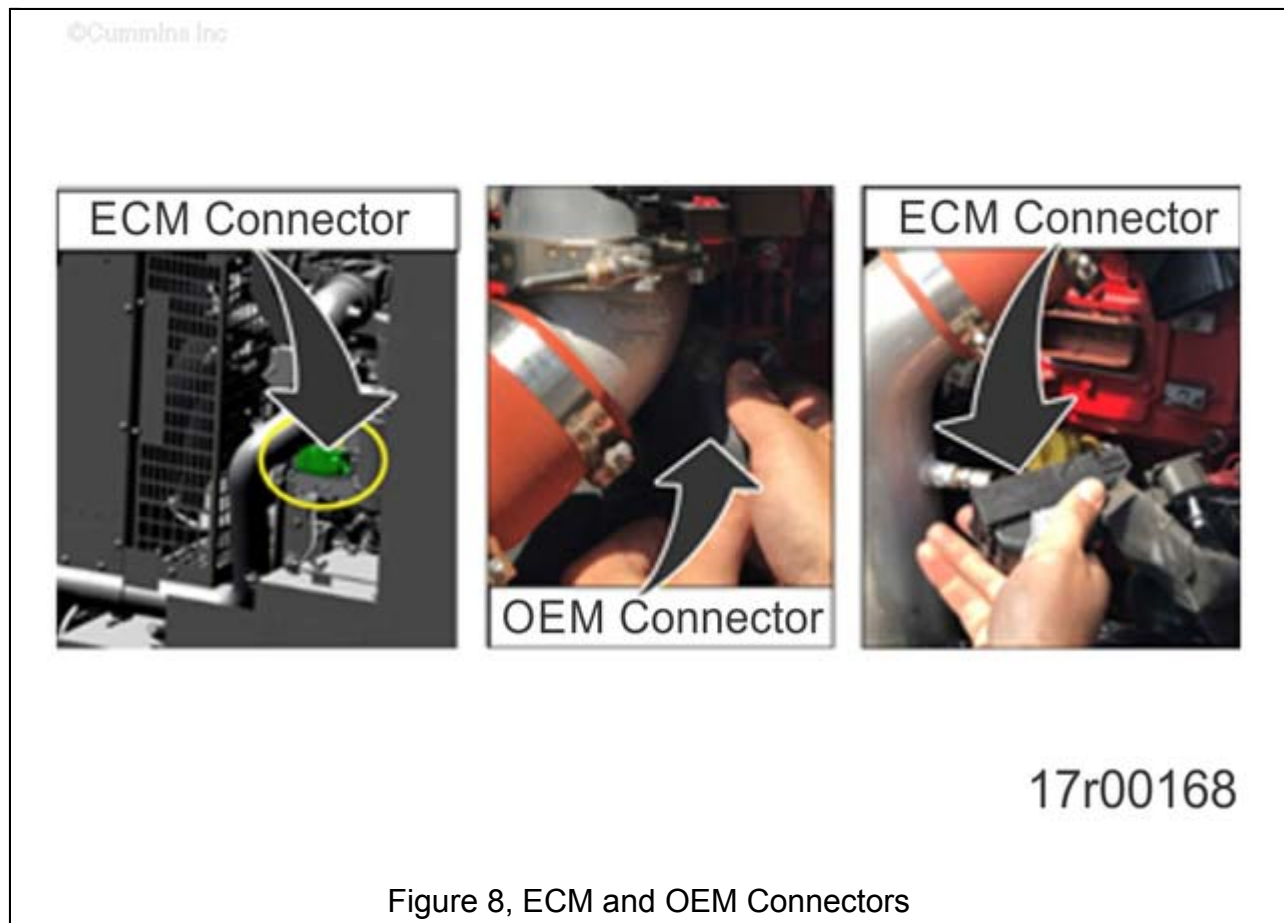
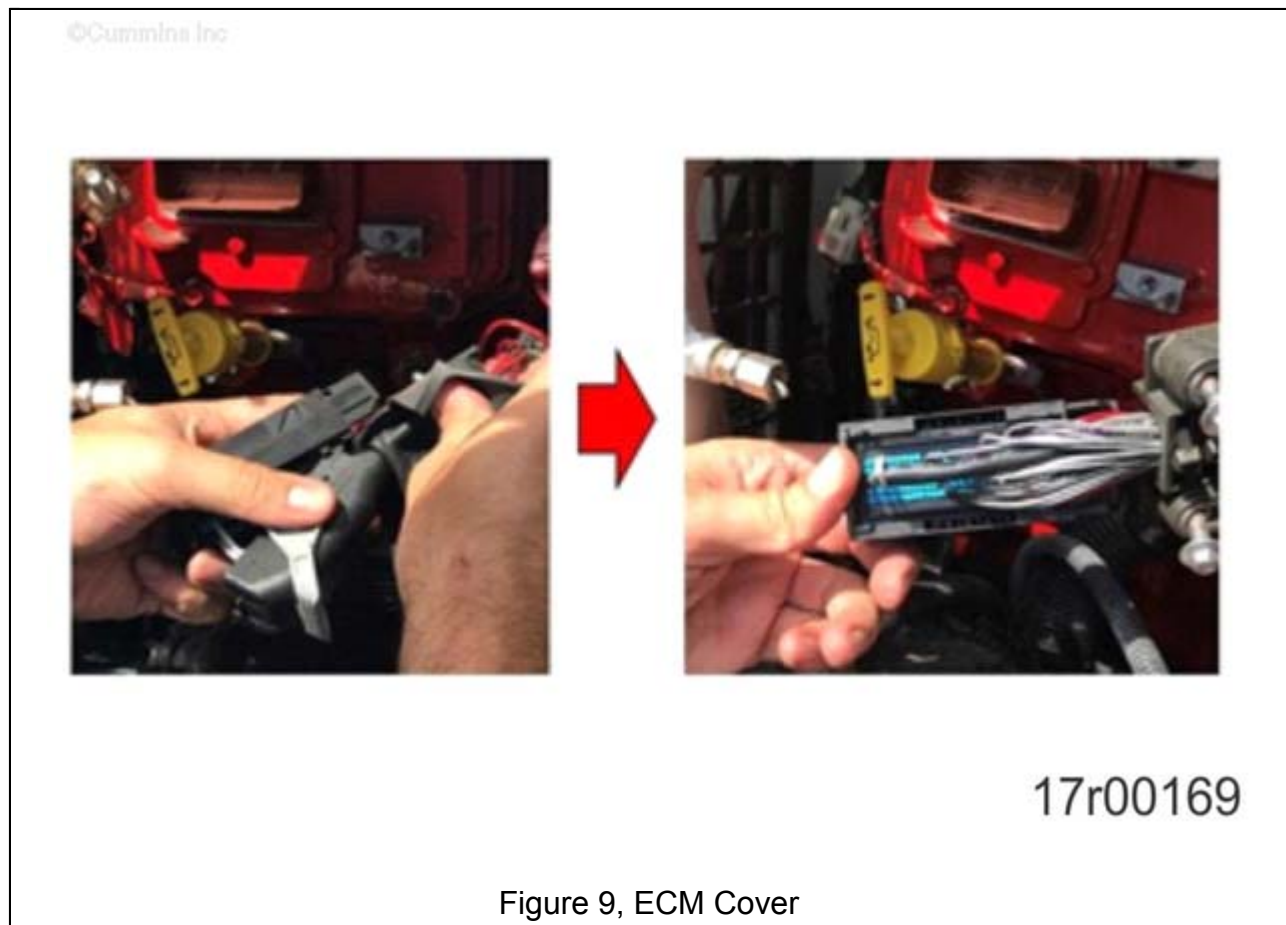
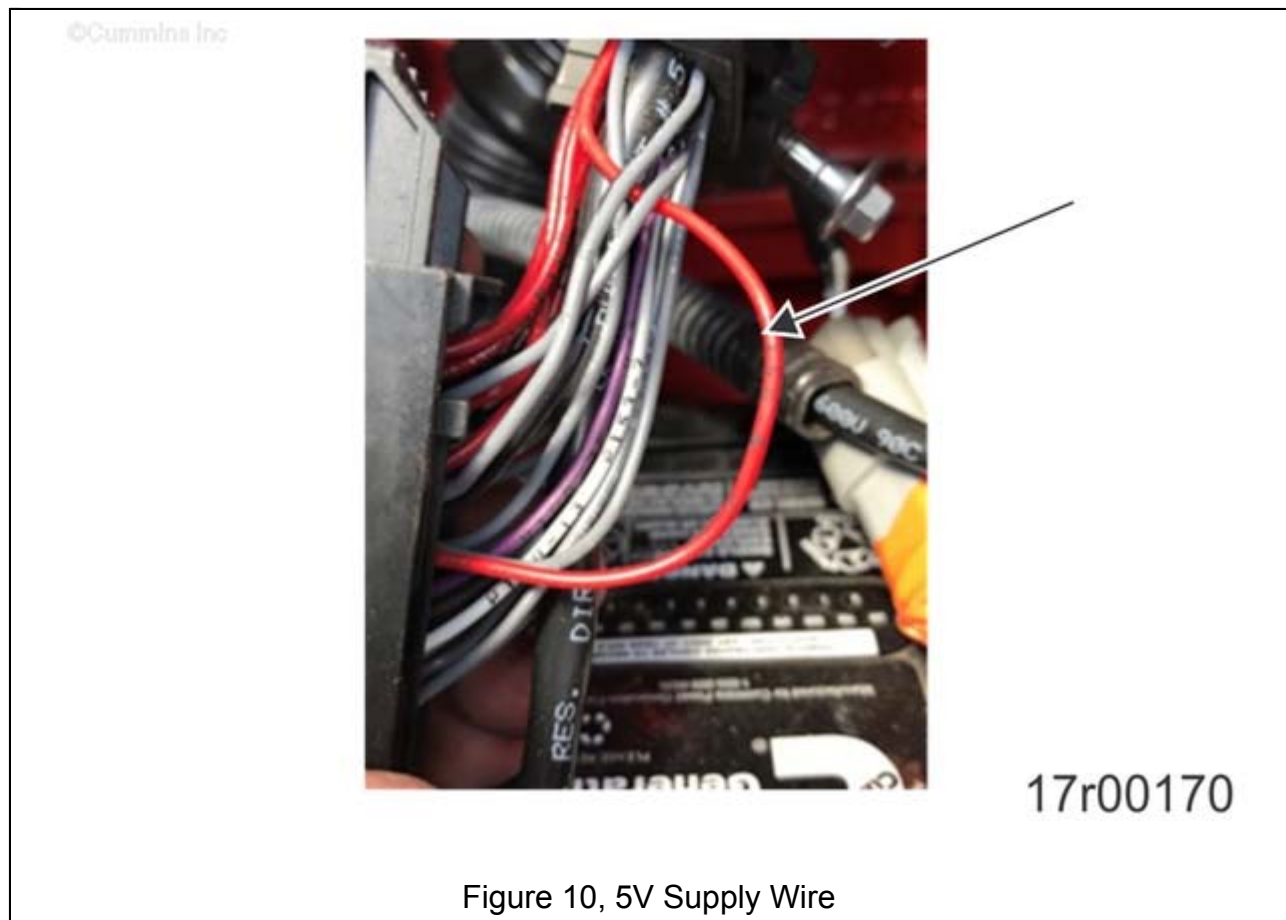


Figure 8, ECM and OEM Connectors

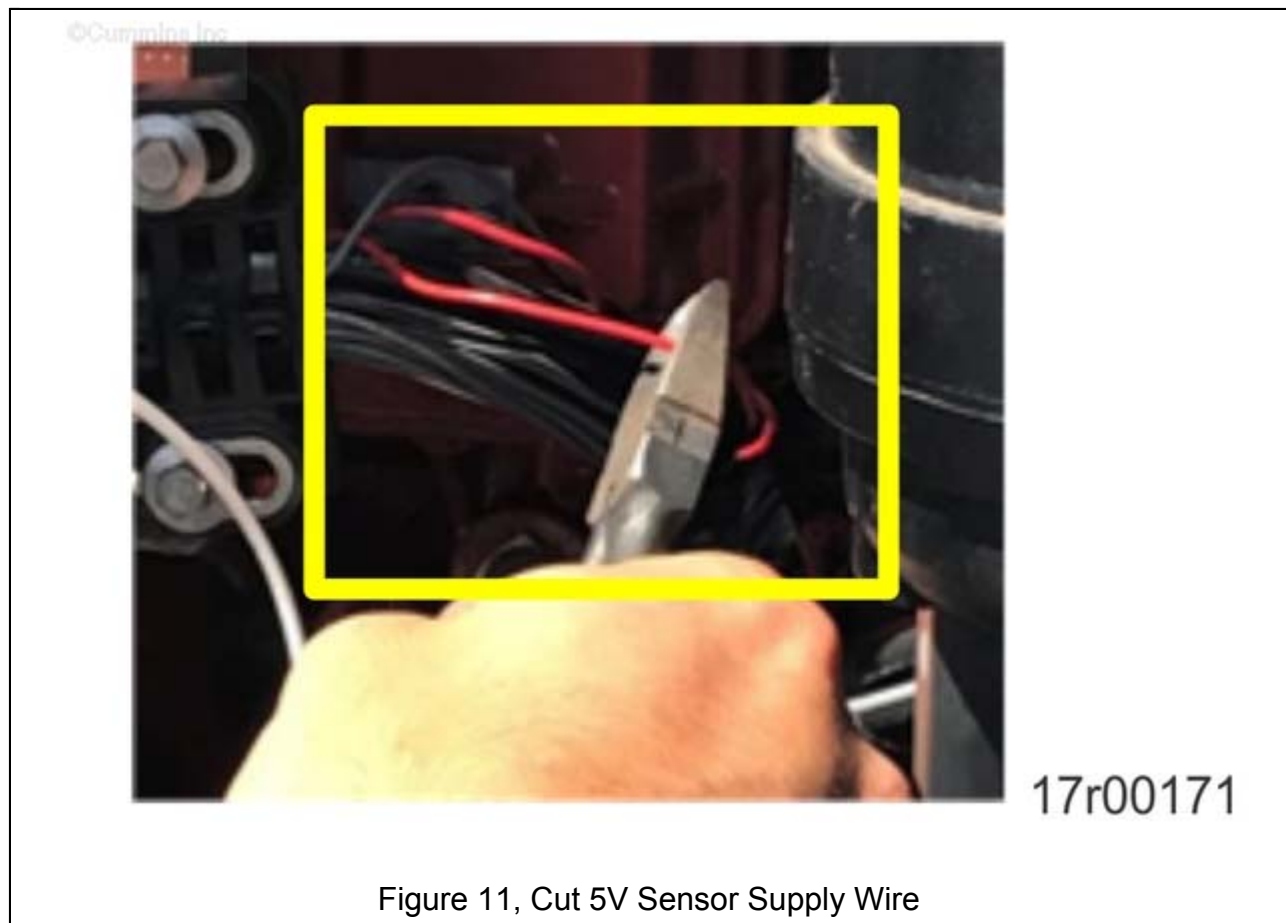
Move to the ECM connector side of the generator set. Disconnect the OEM connector (for access), Disconnect the ECM connector.



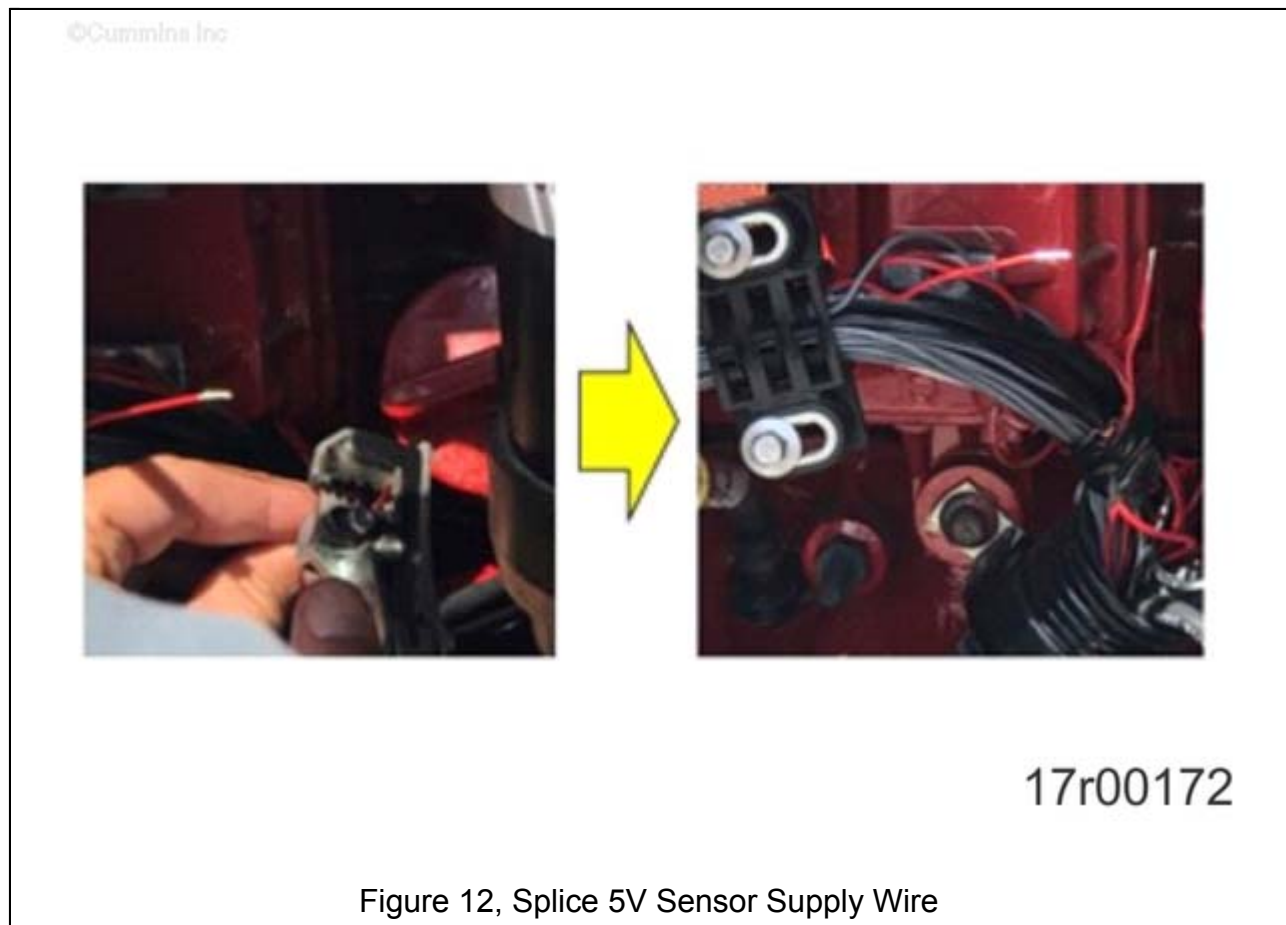
Remove the ECM Cover.



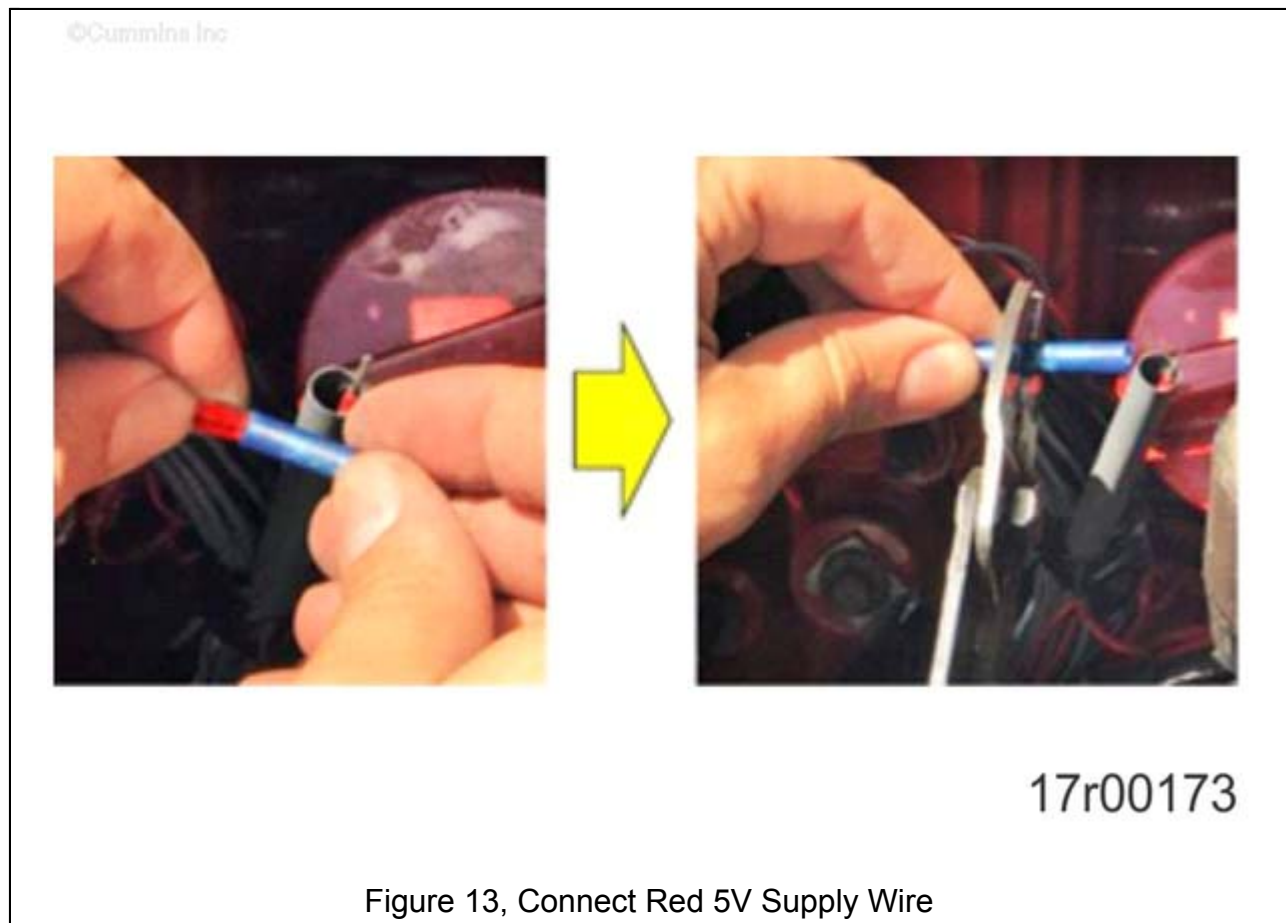
Find the 5V sensor supply wire at ECM connector pin 8. (See figure 18.)



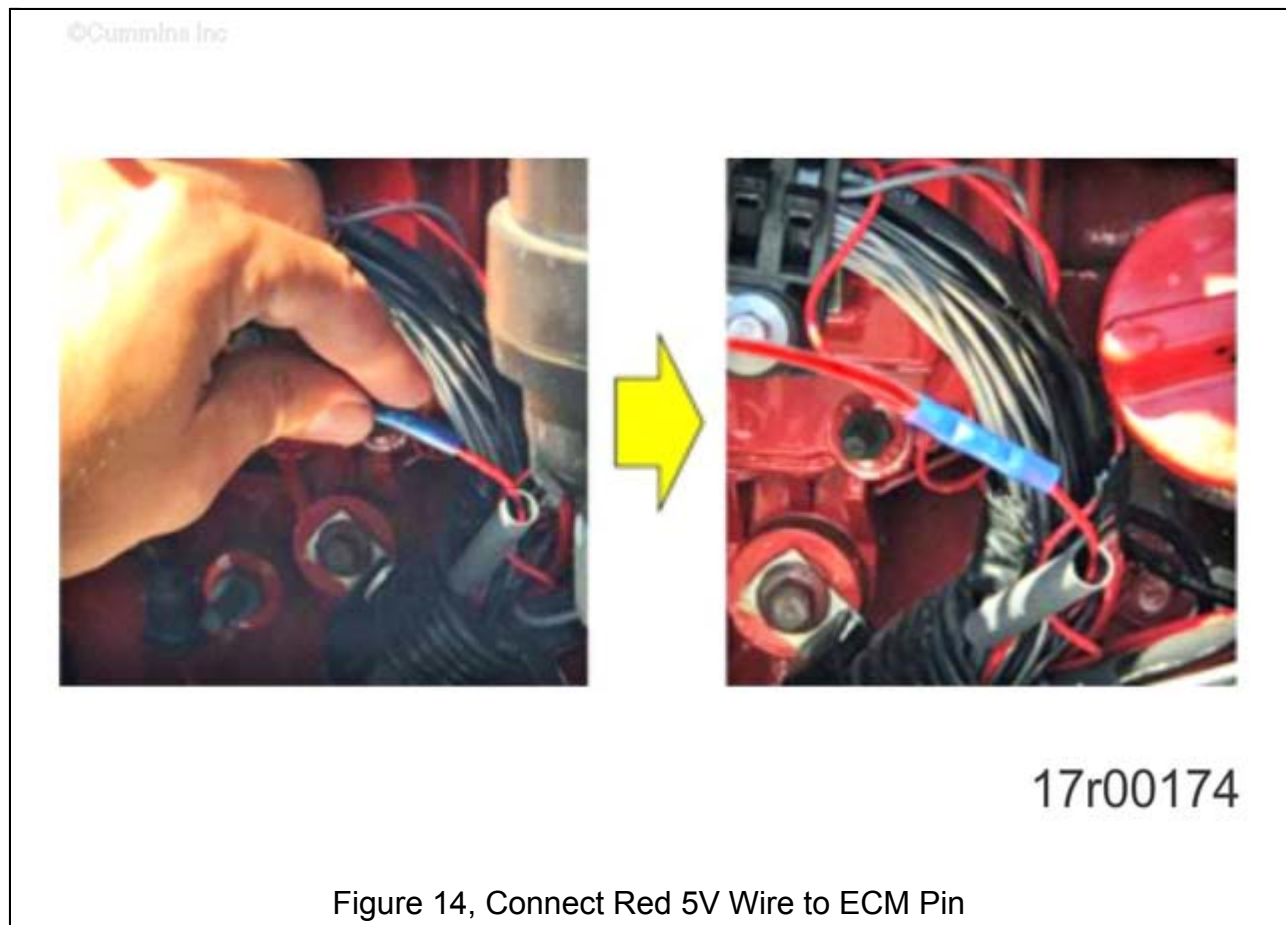
Cut 5V sensor supply wire at ECM (pin 8).



Splice ends of 5V sensor supply wire at ECM (pin 8). Insert heat shrinks.



Connect the red 5V supply wire (from sensor) to one end of the red 5V sensor supply wire at ECM (pin 8) using blue splice and secure.



Insert remaining red end from 5V sensor supply wire at ECM pin 8 to the blue splice and secure.



⚠ WARNING ⚠

Heat guns are hot and can cause burns. Avoid touching the hot parts of the heat gun. Wear protective gear.

Adjust heat shrink over blue splice connector. Use heat gun to apply heat to heat shrink.

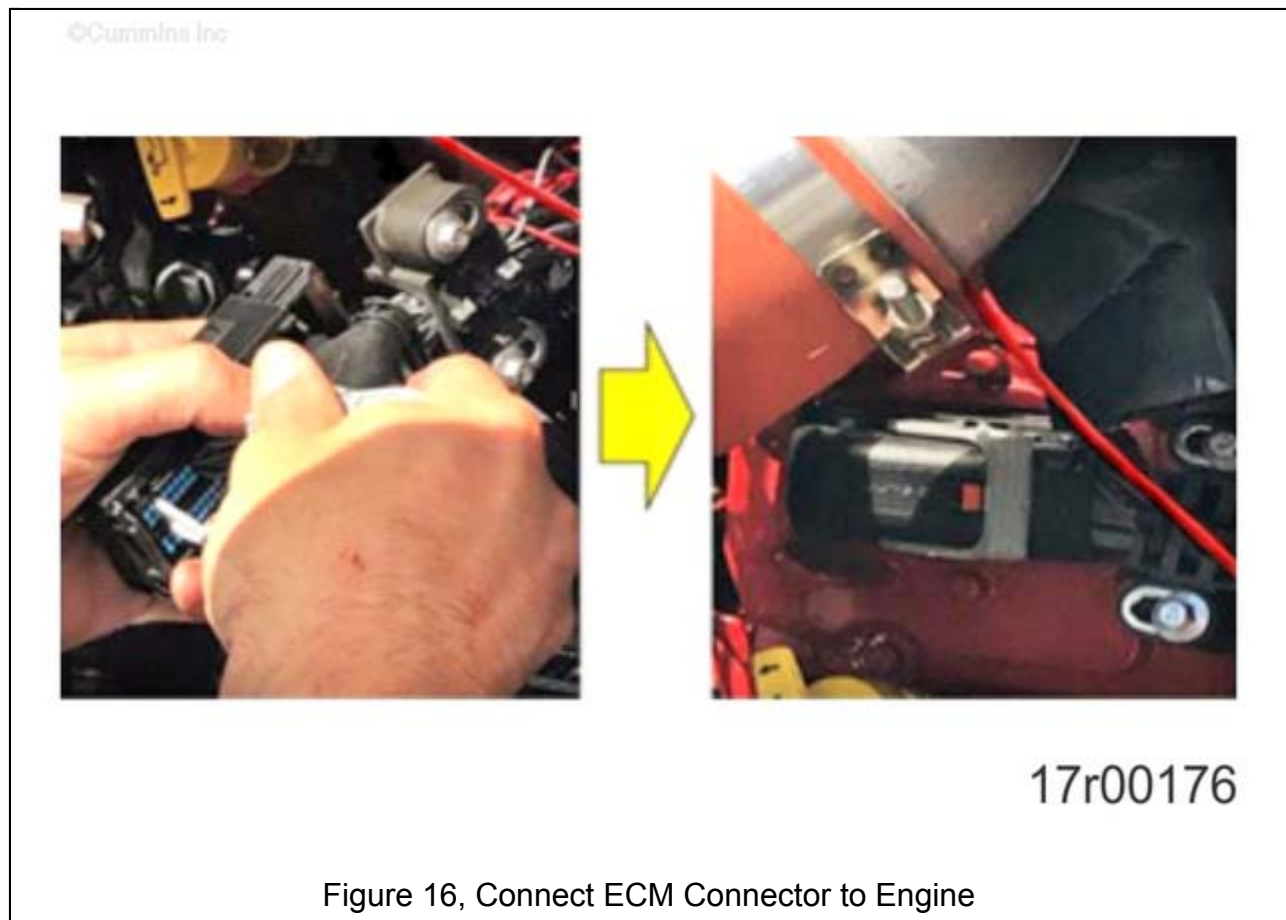
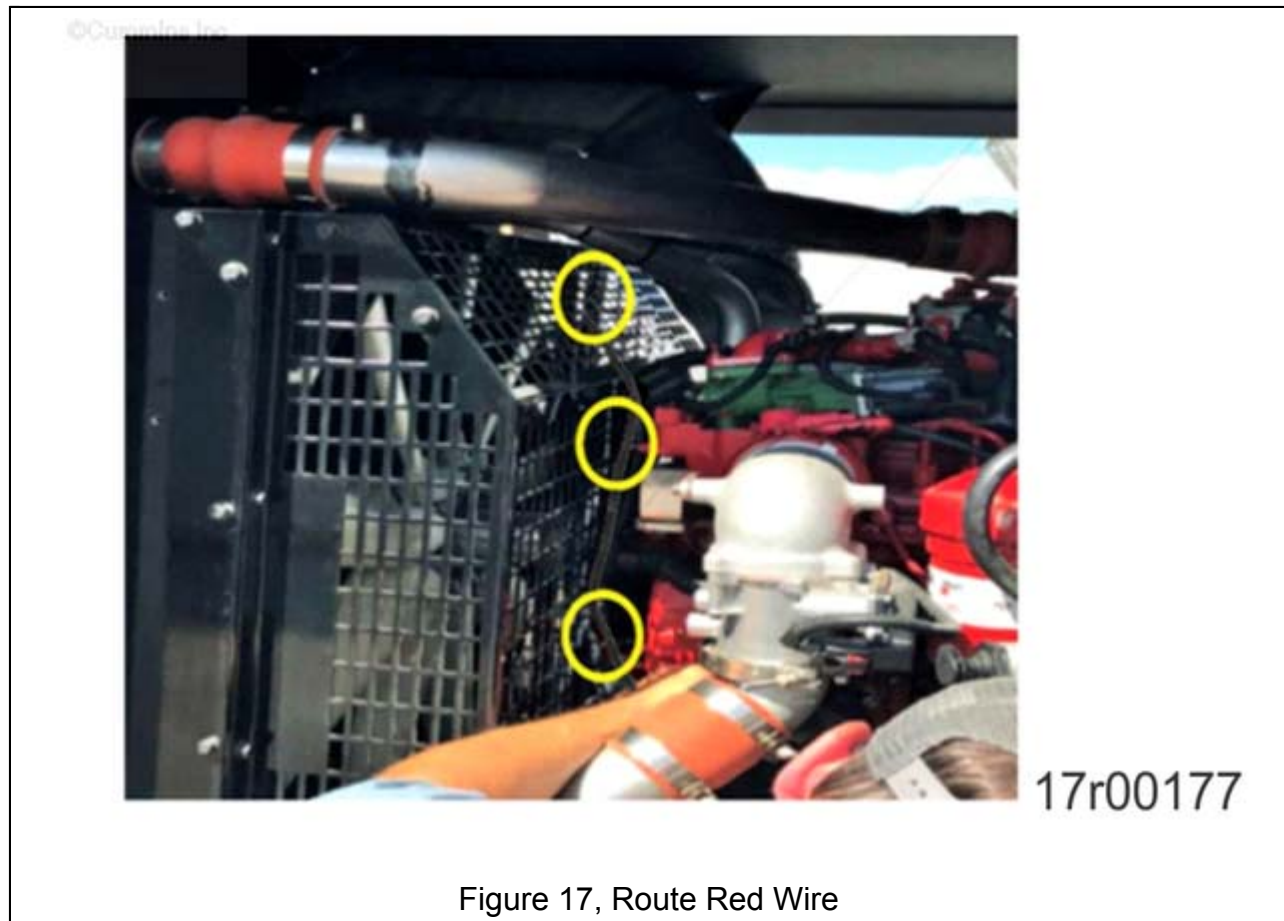


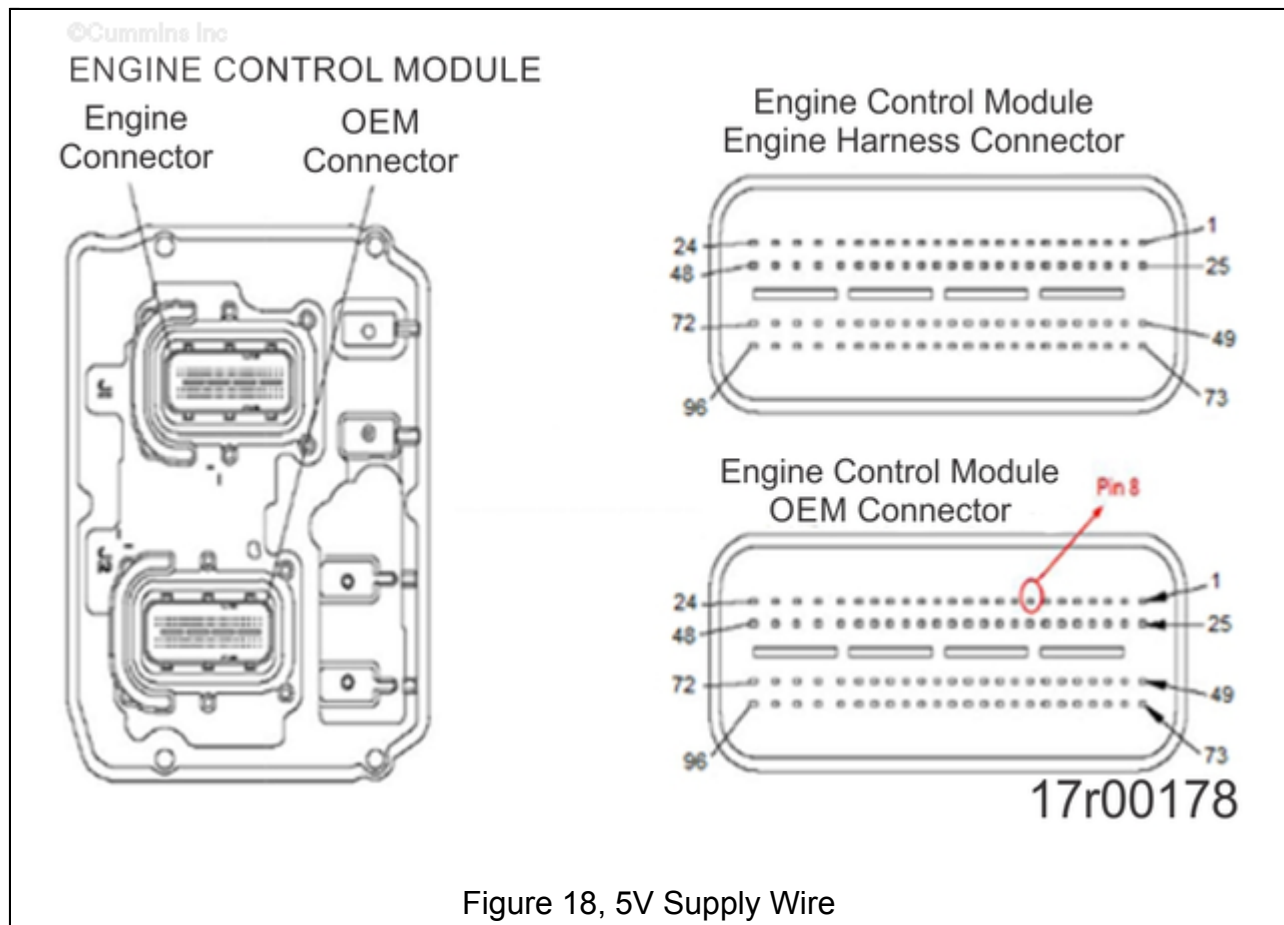
Figure 16, Connect ECM Connector to Engine

Cover the ECM connector and connect it to the engine. Also make sure that the OEM connector is connected to its original position.



Route the red wire (5V supply) inside the convoluted wire loom that is used for the existing main wire harness. Use zip ties to make sure the convoluted wire loom (5V supply) is secured along the radiator fan guard and to prevent the wires from touching any hot areas.

Refill and top off coolant system with coolant.



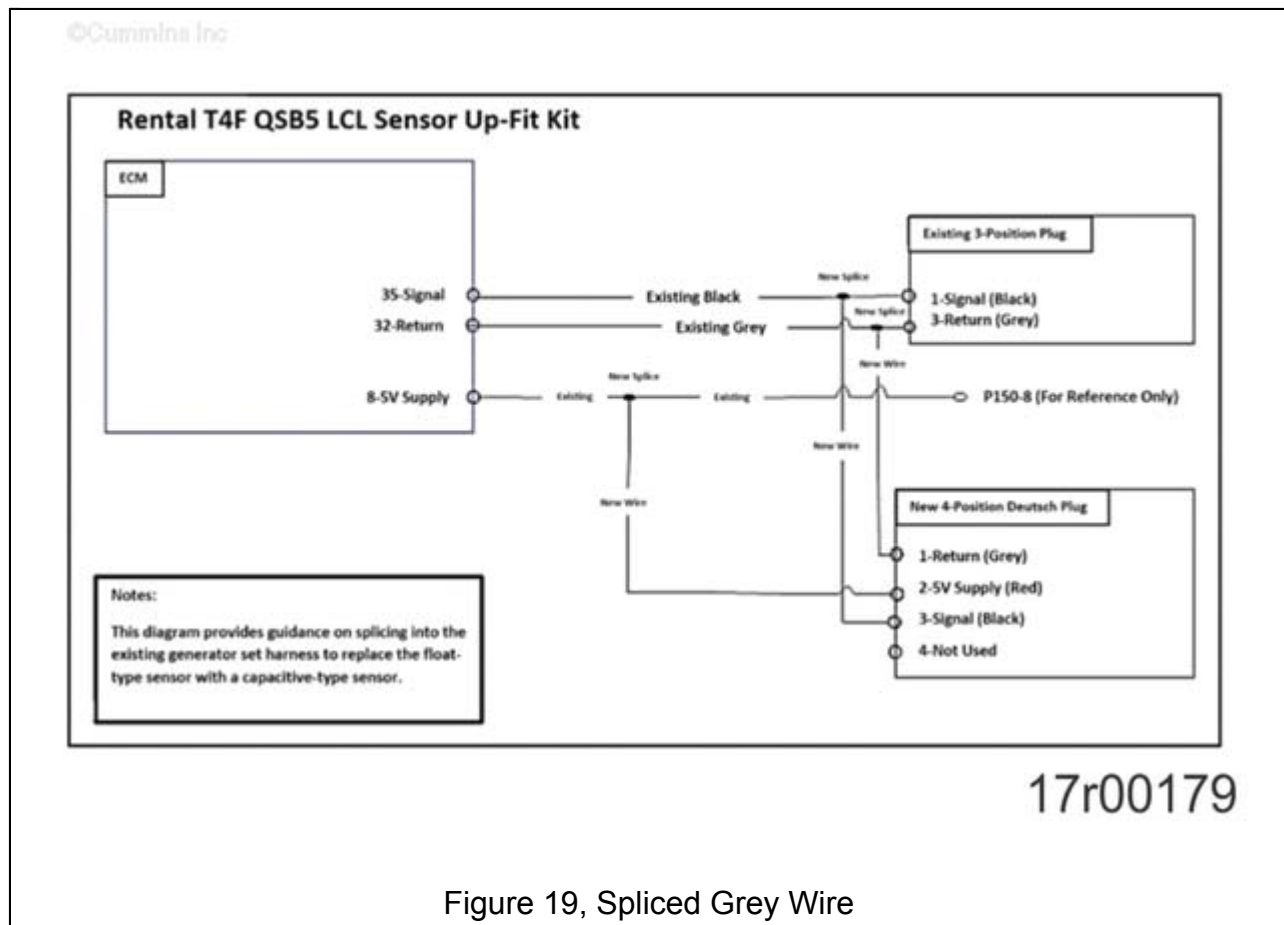


Figure 19, Spliced Grey Wire

Service Instruction

Fail Code = OC-TL-OC

Account code: 65

Authorization code: 3475

1 trip allowed

SRTs:

00-602 Administrative Time: 0.7

99-9999 Remove old sensor and install Replacement kit: 1

Fail part: scrapped

Parts:

A060N209

Expiration date: June 19, 2020

The old LCL sensor will be replaced by the new LCL sensor. The old sensor will be removed from the service manual and parts manual and replaced with the new LCL sensor and service kit. Instructions are located in QSOL literature search.

Table 1, Service Parts				
Part Description	Existing Part Number	Obsolete	Superseded	New Part Number
Low Coolant Level Sensor	A042N875	No	Yes	A059E699
Service Kit for C100 D2Re	-	-	-	A060N209

Parts Identification

Table 2, C100 D2Re Kit A060N209 Contents				
F/N	Name	Description	Legacy Name	Qty
1	A059E699	Sensor, Coolant Level	A059E699	1
2	A006L207	Splice, Butt	0332-3946-02	1
3	A059R975	Sleeve, Shrink	A059R974	3
4	A060N083	Harness, Wiring	A060N083	1
5	A060P073	Sheet, Instruction	A060P073	1

Affected Generator set Serial numbers

Table 3, Affected Generator Set Serial Numbers			
A180287414	C180339323	D180353835	E180361194
A180288358	C180341659	D180353953	E180361195
A180300973	C180341907	D180353955	E180361234
A180307780	C180342405	D180354191	E180363667
A180307781	C180345016	D180354305	E180363668
A180311216	C180345225	D180354711	E180363905
A180311217	C180345664	D180354712	E180364314

Table 3, Affected Generator Set Serial Numbers			
A180313643	D180348999	E180357326	E180364315
A180313644	D180350622	E180357721	E180368942
A180316108	D180350927	E180357885	E180368943
B180316609	D180351229	E180360471	E180369729
B180316645	D180351653	E180360473	F180369121
B180318731	D180352859	E180360474	I170229858
B180318732	D180353590	E180360719	I170230019
C180332369	D180353591	E180360720	I170230020
C180336449	D180353593	E180361193	

Document History

Date	Details
2018-8-21	Module Created

Last Modified: 24-Aug-2018
