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Service Bulletin

General Information

An MCM 21-pin jumper harness is available for repairing a damaged MCM 21-pin connector, terminals, and minor wiring. The jumper harness provides an alternative to replacing the entire harness if damage is contained within the MCM 21-pin connector, terminals and seals, or minor damage to harness wiring.

Parts

Parts	Description	Qty
A66-15770-000	HARN - SERV, REPAIR, P4 ENG	1

Table 1, Parts Required

MCM 21 Pin Service Jumper Replacement

1. Park the vehicle on a level surface, shut down the engine, and set the parking brake. Chock the tires.
2. Disconnect the batteries.
3. Remove the 21-pin connector from the MCM. See [Fig. 1](#) and [Fig. 2](#).

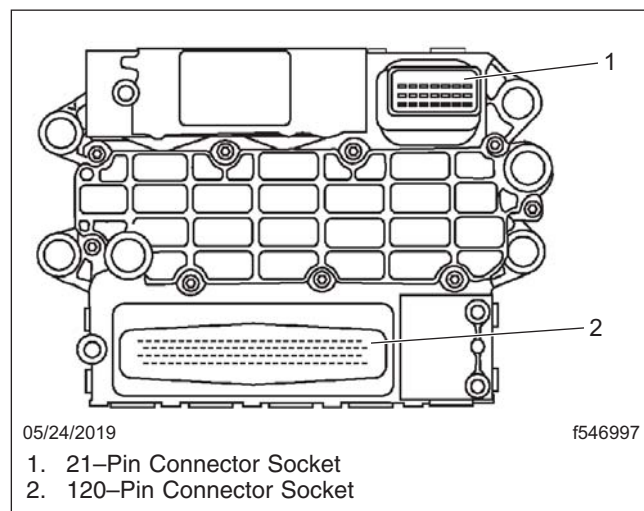


Fig. 1, Motor Control Module (MCM)

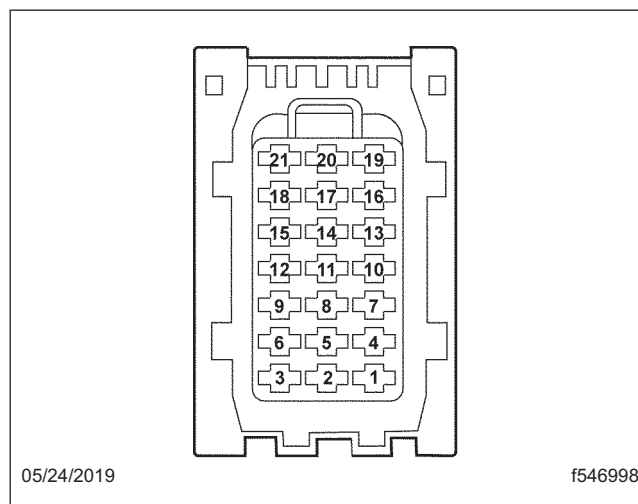


Fig. 2, MCM 21-Pin Connector

4. Remove the clamps and tie straps. As required, unclip the harness to access the harness from the MCM 21-pin connector up to the splicing point (about 15 inches). See [Fig. 3](#).



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NOTE: The splicing point should be about 15 inches from the MCM 21-pin connector.

Fig. 3, Splicing Point on the MCM 21-Pin Jumper Harness

5. Unwrap the harness and separate the wiring in order to identify the circuits (See [Fig. 4](#)), then cut, strip, and inspect the wires for splicing.

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Fig. 4, Separating the Wiring to Identify the Circuits

6. To install a new MCM 21-pin jumper harness, crimp the splices that are pre-installed on the wires of the new MCM 21-pin jumper harness (See [Fig. 5](#)) onto the respective wires from the vehicle harness. Solder the connector parts and heat shrink the splice tubes as necessary.



Fig. 5, MCM 21-Pin Jumper Harness with Pre-Installed Splices

7. Wrap the harness with a fiber tape. Make sure enough tape is used to overlap the starting point. When the required section is wrapped, secure both ends of the fiber wrap with electrical tape. See [Fig. 6](#).

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Fig. 6, Wrapping the Harness with Fiber Tape

8. Route the harness along the clipping points, connect the 21-pin connector to the MCM, and secure the harness as needed.
9. Connect the batteries.

Warranty

This procedure is warrantable only if the described condition exists and the repair is performed within the applicable base or extended coverage warranty period. If a failure is not found, this procedure is considered preventive and warranty does not apply.

Normal warranty applies. See [Table 2](#) for OWL VMRS codes and labor allowance information. Enter this service bulletin number in the *Service Bulletin #* field.

OWL VMRS Codes and Labor Allowance					
Primary Failed Part	Component Code	Cause Code	SRT Code	Description	Time: Hours
HARN,ENGINE,P4,10/OBD16/GHG17	034-004-217	24	286-5100B	ENGINE HARNESS, MCM 21-PIN JUMPER, R/R	1.6

Table 2, OWL VMRS Codes and Labor Allowance