

FLA COE  
FLB COE  
FLD Conventional  
Business Class

FLC 112 Conventional  
Century Class Conventional  
Argosy COE  
Cargo

Columbia  
Coronado  
Business Class M2  
> Cascadia

Freightliner  
Service Bulletin

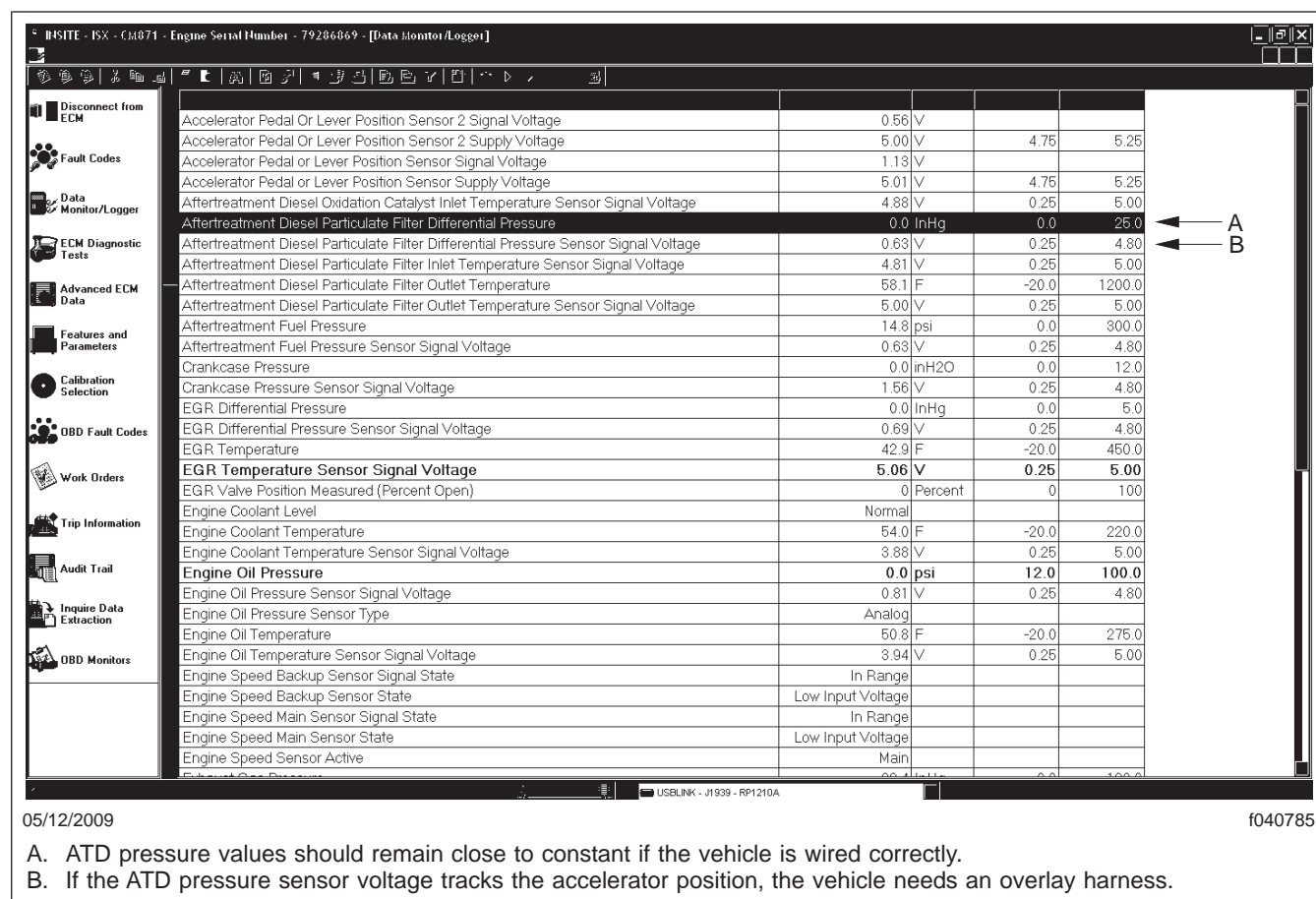
**Description of Revisions:** This bulletin replaces the version dated October 2009. The applicable build date was added to the General Information.

## General Information

This bulletin applies only to Cascadia vehicles built before December 14, 2009. Vehicles equipped with a Cummins ISX engine may have the aftertreatment device (ATD) pressure sensor in the same circuit as the accelerator, causing fault code 1993. An overlay harness should be installed to correct this problem.

## Procedure

1. Set the parking brake, shutdown the engine, chock the tires.
2. Turn the keyswitch to the run position without starting the engine and connect Cummins INSITE®.
3. With INSITE connected to the ECM, select "Data Monitor/Logger" from the left column.
4. Expand all parameters, and monitor the voltage and the value in InHg for the Aftertreatment Diesel Particulate Filter Differential Pressure. See [Fig. 1](#).



**Fig. 1, Checking Signals Using Cummins INSITE**

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5. Press the accelerator pedal to the wide open throttle position, and observe the circuit behavior on Cummins INSITE.
  - If the values for Aftertreatment Diesel Particulate Filter Differential Pressure do not track the accelerator position, the truck is wired correctly. This bulletin does not apply; see the *Cummins QuickServe Online* for finding the cause of the fault code.
  - If the values for Aftertreatment Diesel Particulate Filter Differential Pressure track the accelerator position, the vehicle needs an overlay harness. Continue with the procedure in this bulletin.
6. Create an overlay harness using half-inch diameter convolute tubing and 18-gauge wire. The overlay harness length needed varies by vehicle, but should be approximately 9 feet long. See **Fig. 2** for a circuit diagram of the necessary splice.

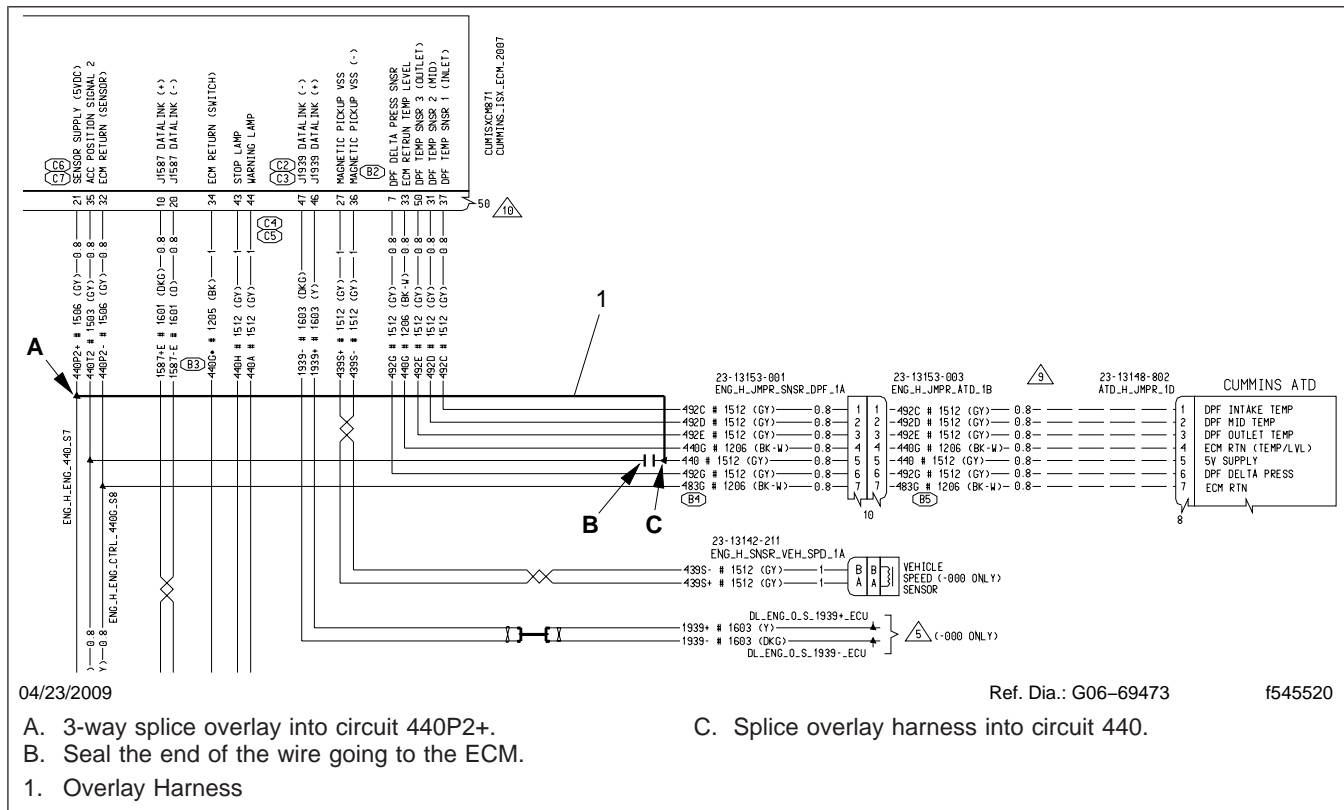


Fig. 2, Wiring Diagram Showing Overlay Harness Splices

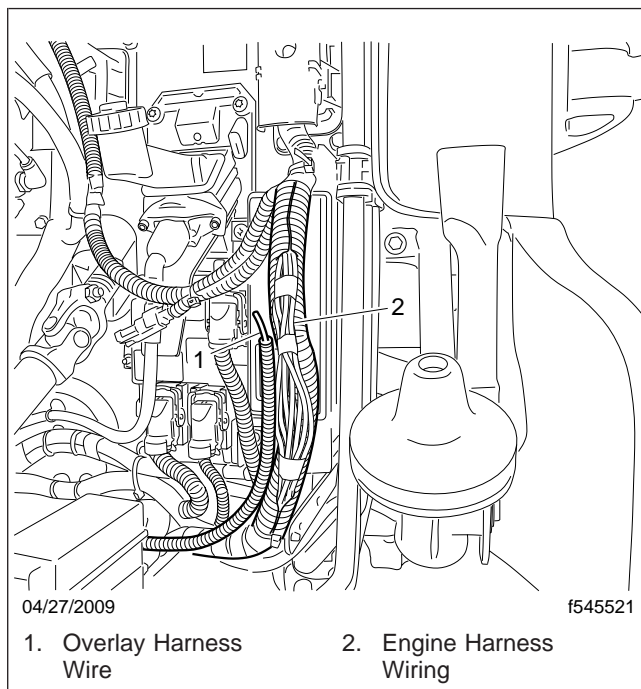
7. Open the hood, and begin routing the overlay harness from the engine harness wiring on the left of the frontwall just below the 76-way pass-through connector. See **Fig. 3**.  
Continue routing the overlay harness along the existing harness that crosses over the transmission to connector ENG\_H\_JMPR\_SNSR\_DPF\_1A. This connector is on the right frame rail, forward of the ATD. Place wire ties approximately every 12 inches, as the harness shape allows.
8. Locate the wire for circuit 440P2+ in the vertical section of the frontwall harness and splice in this overlay harness.
9. Use the U-shaped splice clip to join the wires, solder the connection, then seal with shrink tubing. See **Fig. 4**. Refer to the *Cascadia Workshop Manual Section 54.06* for complete instructions on making this splice.

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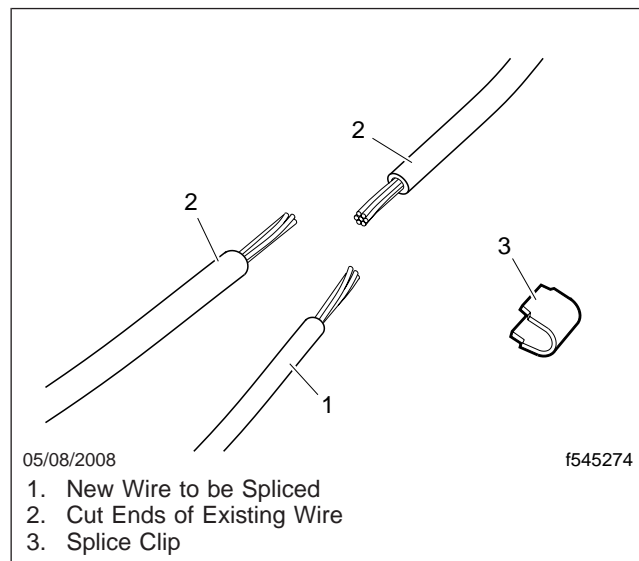
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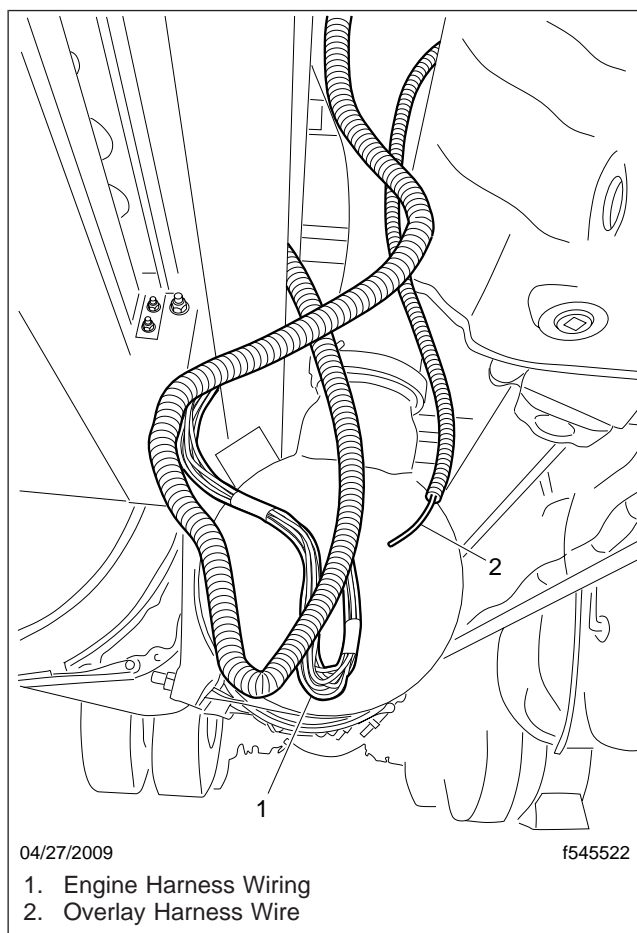
**Fig. 3, Overlay Harness and Harness Containing 440P2+**



**Fig. 4, Splicing Two Wires**

10. Replace any electrical tape and wire ties that were removed.
11. From underneath the truck, detach part of the ATD jumper harness on the left frame rail. Expose the wiring by pulling it out of the conduit. See [Fig. 5](#).
12. Locate circuit 440 in the harness. This splice will be made in the harness forward of the connector.
13. Cut circuit 440 and use shrink tubing to seal the end that runs forward to the ECM.
14. Splice the overlay harness into circuit 440 on the end that runs back to the ATD pressure sensor. Make sure that the splice is made in the harness forward of connector ENG\_H\_JMPR\_SNSR\_DPF\_1A. See [Fig. 2](#). Refer to the *Cascadia Workshop Manual Group 54* for complete instructions on making the splice as shown in [Fig. 6](#).
15. Replace any wire ties that were removed and make sure the overlay harness is secured away from any driveline and exhaust parts.
16. Use Cummins INSITE to monitor for any engine fault codes. If code 1993 is the only active fault, use INSITE to clear active engine fault codes. If any other codes are active, troubleshoot as appropriate.

**NOTE:** INSITE is the recommended method for clearing the fault code. If INSITE is not used to clear the code, the wiring change alone will not clear the code immediately. For the MCM to clear this code without INSITE, the truck will need to be driven at highway speed for a minimum of 30 seconds, usually under load.

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**Fig. 5, Engine Harness Wiring Detached from Frame Rail**

## Warranty

Normal warranty applies. Use engine wiring harness part number A06-69501-000 as the primary failed part number on the claim. See [Table 1](#) for damage code and labor allowance information, and refer to this bulletin by number in the story of the claim.

Damage Code and Labor Allowance					
VMRS CK33	VMRS CK18	Damage Code	SRT Code	Description	Time: hours
034-004-217	77	283-000021973	283-5005A	Wiring, Engine Harness, Install Overlay	1.1

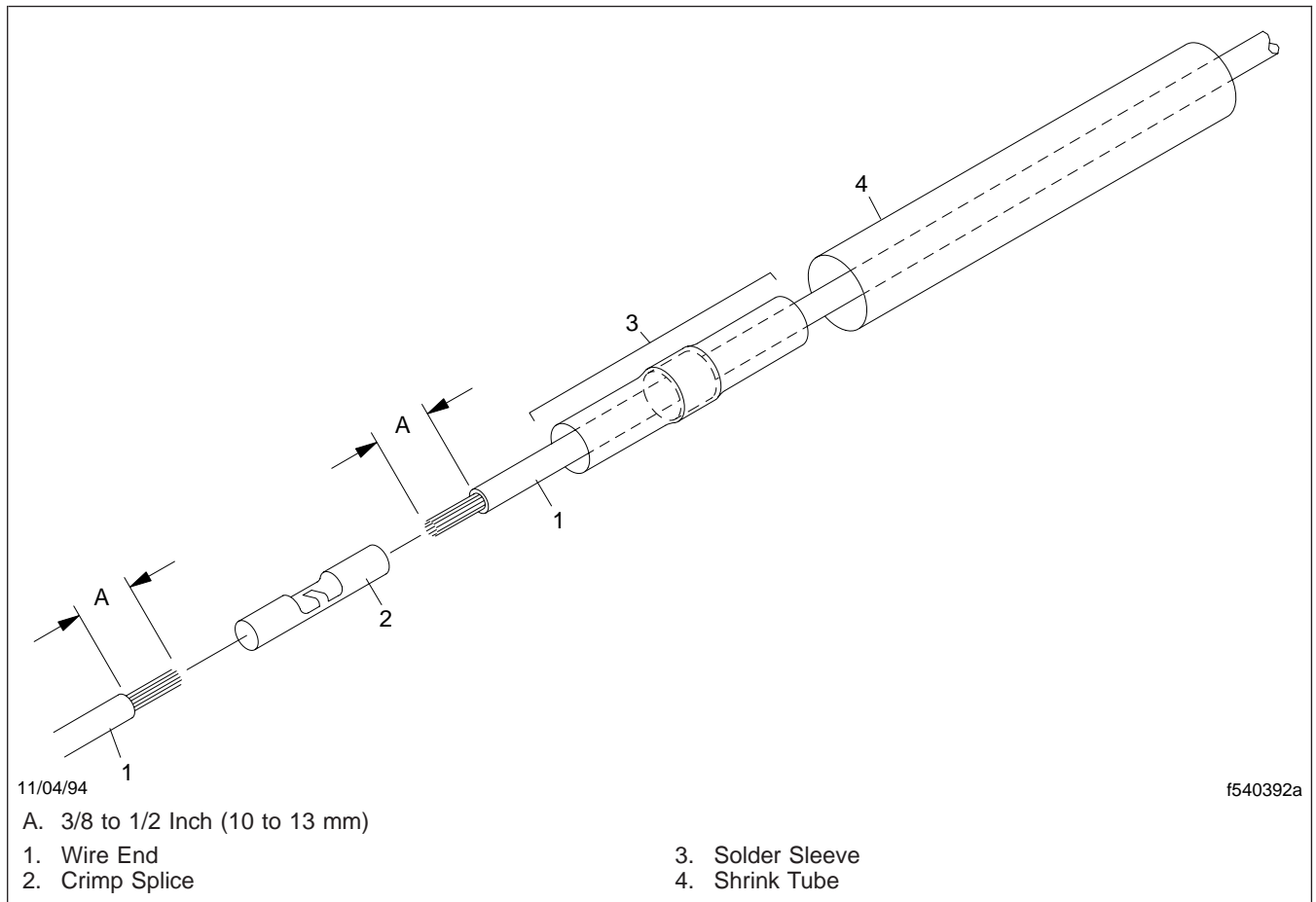
**Table 1, Damage Code and Labor Allowance**

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**Fig. 6, Splicing Two Wires**