

SB-10054984-3962

Countries: CANADA, UNITED STATES, MEXICO, PUERTO RICO

Availability: ISIS

Major System: ENGINES

Current Language: English

Other Languages: [Français](#), [Español](#),

Viewed: 768

Document ID: IK1200458

Revision: 2

Created: 2/15/2010

Last Modified: 1/22/2014

Author: Jon Pierce

[Less Info](#)

Hide Details

Coding Information

Copy Link	Copy Relative Link	Bookmark	Add to Favorites	Print	Provide Feedback	Helpful	Not Helpful
		 View My Bookmarks				 140	 120

Title: Cummins code 1117 or 434

Applies To: All Cummins ISM and ISX engines

DESCRIPTION

Check engine light will be on and the engine ecm will log a fault code 434 or code 1117

SYMPTOMS

- Engine may die
- Extended cranking

POSSIBLE DIAGNOSTIC TROUBLE CODES

DTC	MODULE	DESCRIPTION
434	Engine	Power supply lost with ignition on
1117	Engine	power supply lost with ignition on

PARTS INFORMATION

Part Number	Description	Qty.
500398c1	terminal power connector	1

DIAGNOSTICS

Check with Insite for active or inactive code 434 or 1117

TROUBLESHOOTING

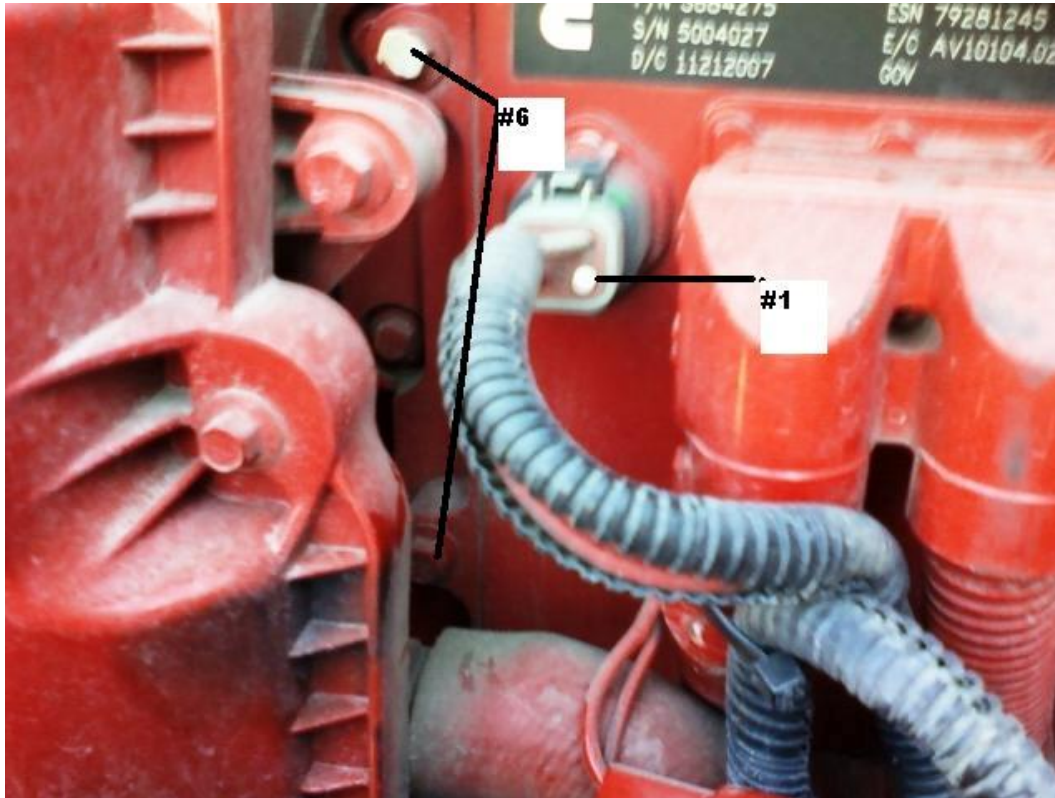
1. Inspect engine ground stud next to the starter motor and make sure the cables are clean and tightly clamped.
2. Inspect starter ground and jumper cable to the frame. Make sure frame ground is tightly clamped and the terminal is clean and mated to bare metal.
3. Check and clean the battery grounds if needed.
4. Inspect cab grounds on both sides of the engine compartment. Make sure that the terminals are tightly clamped, clean, and mating bare metal.
5. Inspect engine ECM power connector and make sure that the harness is not putting tension on the connector. If the harness is putting tension on the connector, tie strap the harness to the L-bracket directly above the ECM power connector.

RESOLUTION or SERVICE PROCEDURE

Ground the ECM by performing the following procedure. {Cummins engines built after 7-8-03 have this ground installed}

1. Remove the plug in the unused ground terminal of the four pin unswitched power connector of the engine ecm
2. Install a 7" 12 gauge ground lead by using terminal p/n 500398C1 **[Note total length or wire should not exceed 7 inches and must be 12 gauge]**
3. Strip insulation from the other wire end and crimp a heavy gauge ring terminal to the wire.
4. Install the finished wire into position #2 of the four pin power/ground connector.
5. Remove one of the left side ECM mounting bolts and clean with sandpaper or suitable abrasive.
6. Connect the ring terminal to the clean ECM mounting surface with the removed capscrew and a suitable star toothed lock washer. Torque screw to 13 ft lbs.

OTHER RESOURCES



 Hide Details

Feedback Information

Viewed: 767

Helpful: 140

Not Helpful: 120

No Feedback Found