

NJT Remove Constant Power from Intake Heater Solenoid



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Property and TopBus Number:
NABI 318500 – 6326 - 6549

Issue: Intake Heater Solenoid Powered up While Battery Switch is Off

Reason/ cause: Cummins 2013 Engine Wiring Change Caused Intake Heater Solenoid to be powered up at all Times

Solution: Remove Constant Power from Intake Heater Solenoid

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Number of affected buses: 225

Estimate repair hours/bus: 2 Hours

Necessary parts:

Item	Description	PN	Qty
01	Ring Terminal, #8 Hole – 12-10 HTSHRNK	803-1685-018	2
02	Wire, 10GA, SXL, RED	3010RD	6”
03	Base, CB, 2 Pos Screw Term	700-1685-006	1
04	Screw, 8-32 x ½ PH, SS F410	270143	2

Necessary Tools / Supplies:

Basic Hand Tools
Crimpers for Ring Terminals

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SAFETY PRECAUTIONS MUST BE FOLLOWED ACCORDING TO ACCEPTED INDUSTRY STANDARDS AND LOCAL/PROPERTY REQUIREMENTS

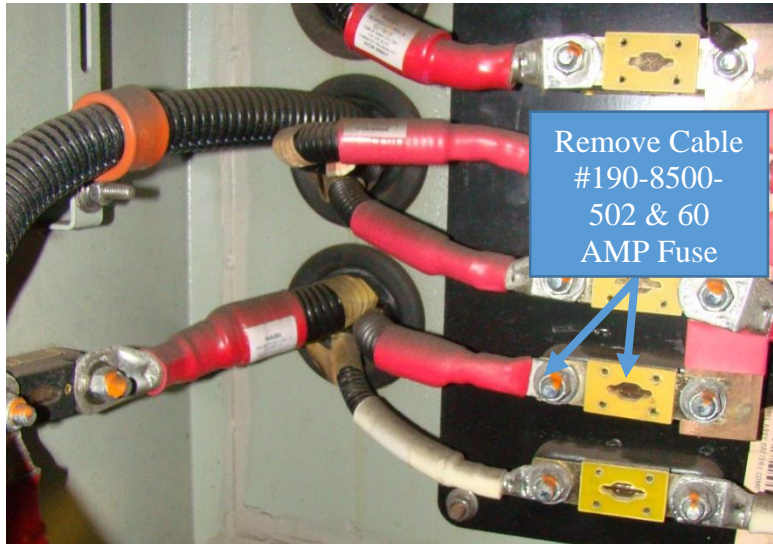
1. Park the bus on level surface and apply parking brake. Turn engine off.
2. Turn the main battery disconnect switch off.
3. Remove the ground cable from the batteries.
4. In the battery compartment, remove cable #190-8500-501 & 250 AMP fuse (see below). Do not discard fuse, it will be reused later.



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5. In the battery compartment, remove cable #190-8500-502 & 60 AMP fuse (see below). Do not discard fuse, it will be reused later.



6. Install cable #190-8500-501 & 250 AMP fuse to the location that 190-8500-502 was removed (see below). Install cable #190-8500-502 & 60 AMP fuse to the location that #190-8500-501 was removed (see below). Tighten hardware securely.

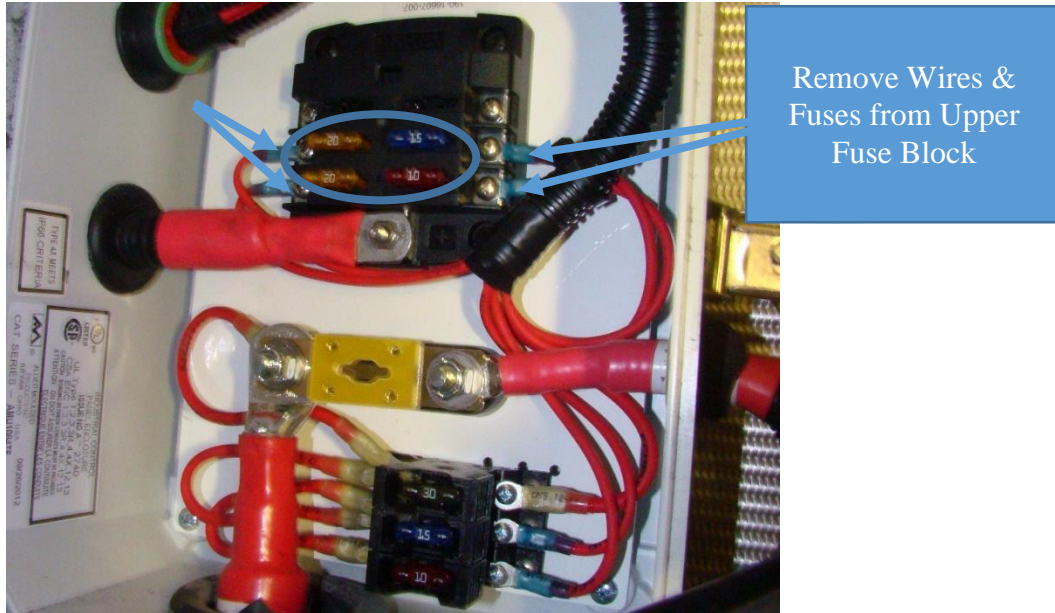


7. In the curbside rear engine compartment locate & open the power distribution box.

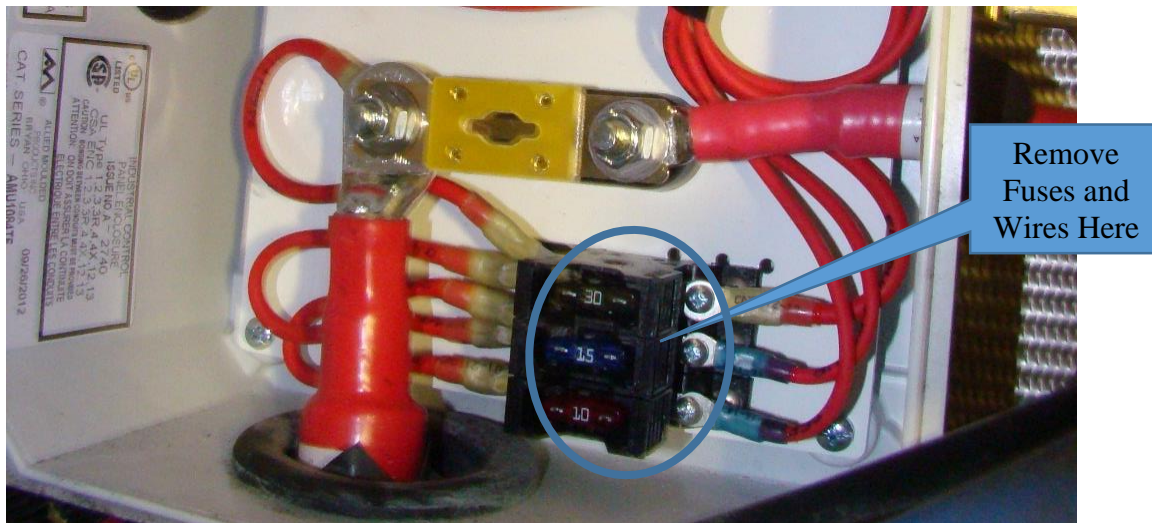
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8. Remove the wires & fuses from all locations at the upper fuse block (see below).

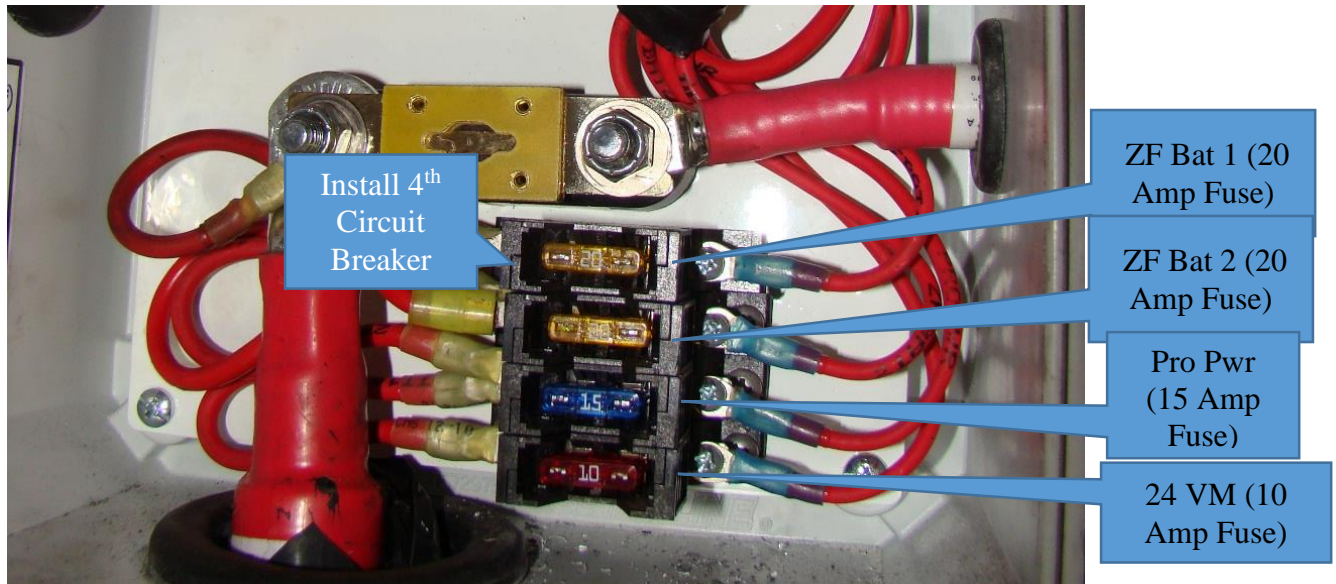


9. Remove the wires & fuses from all locations at the lower fuse block (see below).

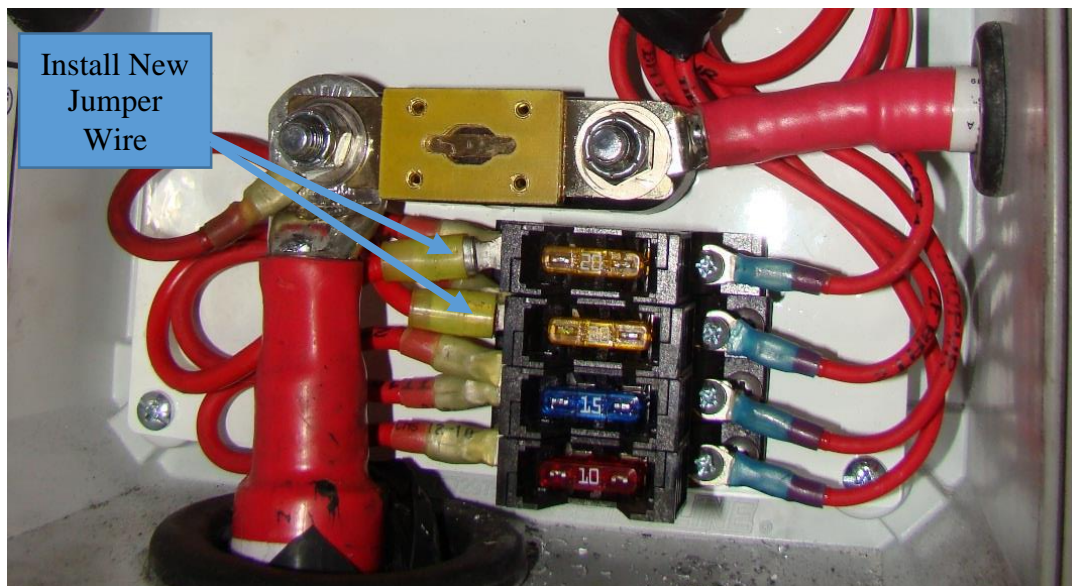


10. Install the wires & fuses removed in step 8 to the lower fuse blocks (see below). Add additional circuit breaker for the 4th wire that was removed in step 9 (see below).

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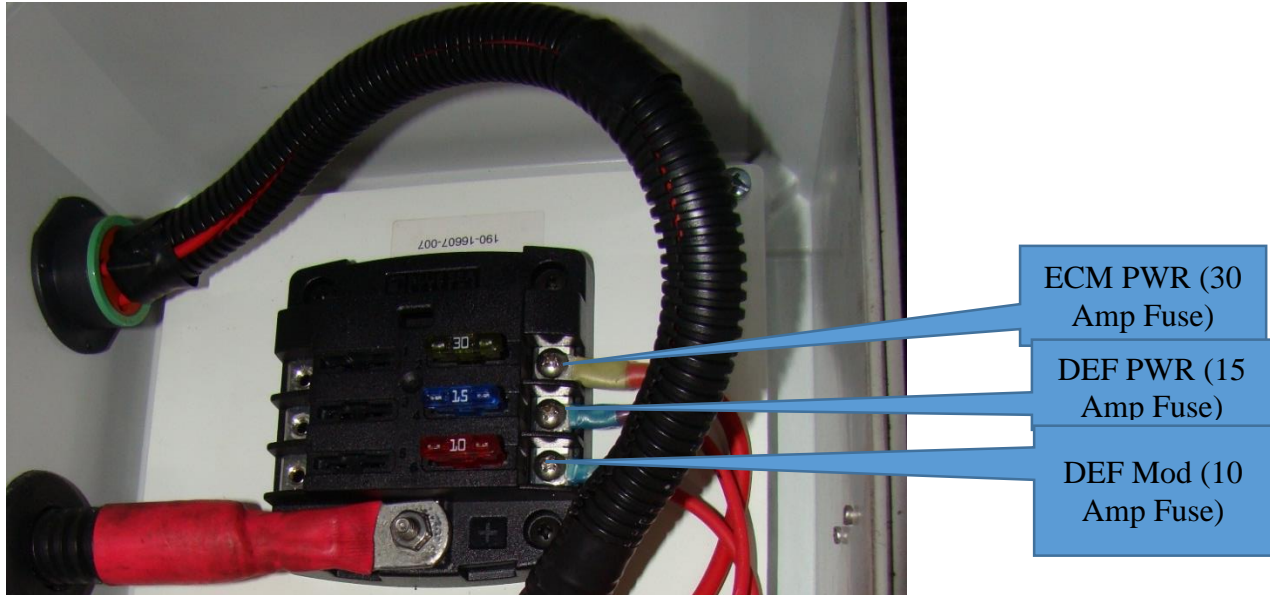


11. Install jumper wire to the new fuse block installed in step 10 & install the opposite end to the fuse block below it (see below).



12. Install the wires & fuses removed in step 9 & install to the upper fuse block (see below).

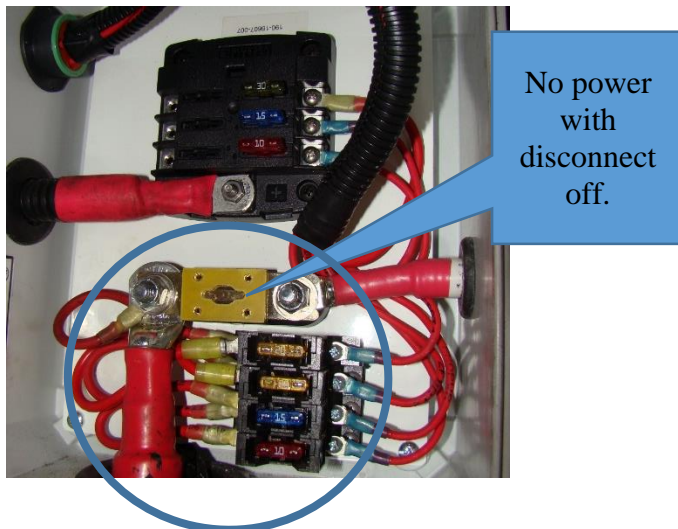
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13. Clean up any debris caused from performing this retrofit.

14. Reconnect the ground cable to the batteries.

15. Verify there is no power to the 4 lower fuse blocks while the battery switch is off.



16. Turn the main battery switch on.

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17. Close all exterior compartment doors & latch.

18. Record bus number, mileage and date of completion; return form to Field Service Manager