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FSC 22-13-2008 Niehoff Voltage Regulator Relocation

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Title
FSC 22-13-2008 Niehoff Voltage Regulator Relocation

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FSC-22-13-2008-Niehoff-Voltage-Regulator-Relocation

Issue Description
Smart Niehoff Voltage Regulators may fail prematurely due to heat and vibration

Symptoms
Bus exhibits Fault Code indicating Charging issue. This issue may occur intermittently dependent on temperature in area of the voltage regulator.

Tools Required:
Basic Hand Tools

Parts Required:

Parts are being auto shipped to customer location at no charge.

Qty	Part Number	Desc.
1	50-77964-004	Replacement Harness
1	50-36981-048	J1939 Extension Harness
4	54-13112-032	Washer, #10 SSTL
4	54-14275-03Z	Screw, Machine UNF, 10-32x3/8 Pan Head

Diagnostic Steps
N/A

Repair Steps

1. Locate and remove the alternator voltage regulator shown in Figure 1 Disconnect all related harnesses and cables.

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Figure 1

2. Re-mount the voltage regulator below the flag panel behind the curb side rear wheel using the existing mounting holes on both the regulator and the mounting panel as shown in Figure 2.

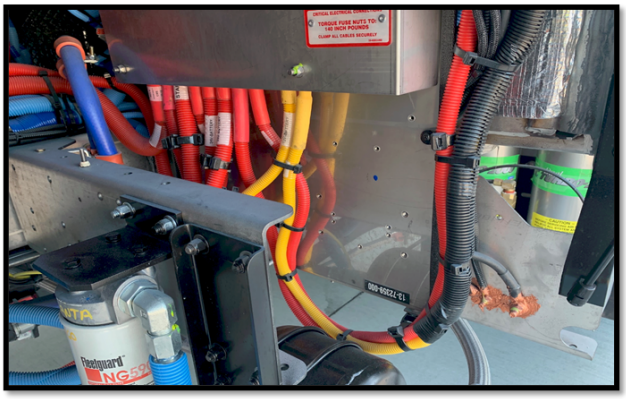


Figure 2

3. Re-Route the cable C2 to the regulator (contains J1939 and battery/temp sense wires). The cable should route along the curb side frame rail with the other existing harnesses. Connect the black circular connector to the regulator see Figure 3.

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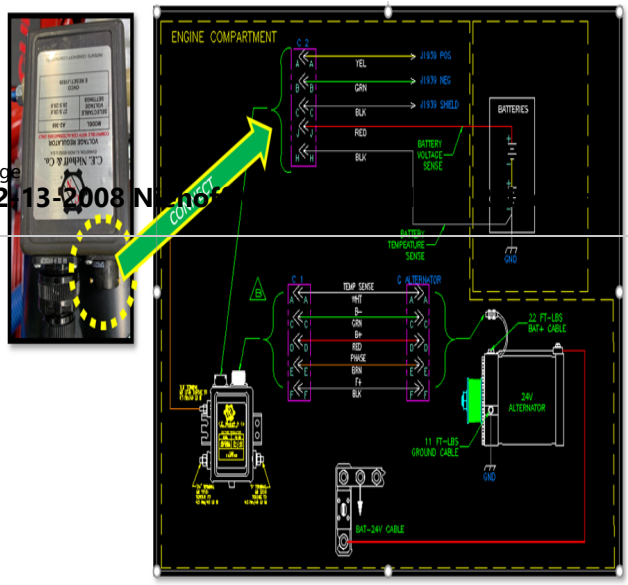


Figure 3

4. If 1939 Harness is to short to reach the regulator in new location use 50-36981-048 as shown in Figure 4.

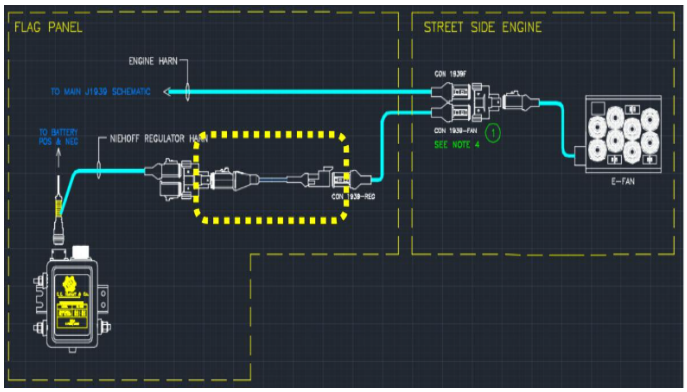


Figure 4

5. If Con Alternator Connection is to short to reach regulator use the new regulator extension harness 50-77964-004 as shown in figure 5.

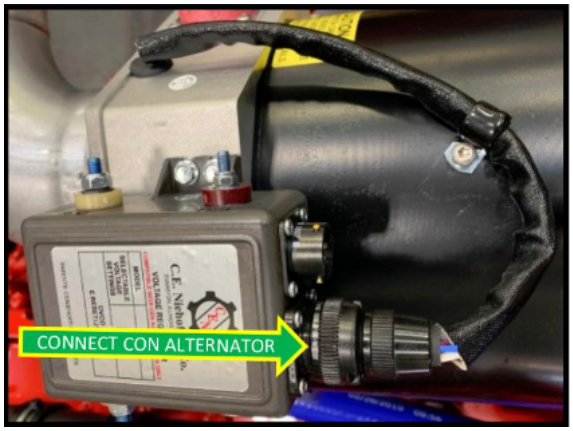


Figure 5

6. Connect CON Alt (Weather Pack Single Silo) to CON ALT/REG that was disconnected from the bulkhead harness previously .

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7. Connect the CHARGE-ON Ring Lug to the RED Stud marked “IGN” on the side of the regulator. Torque nut to 40 lb/in as shown in Figure 6.

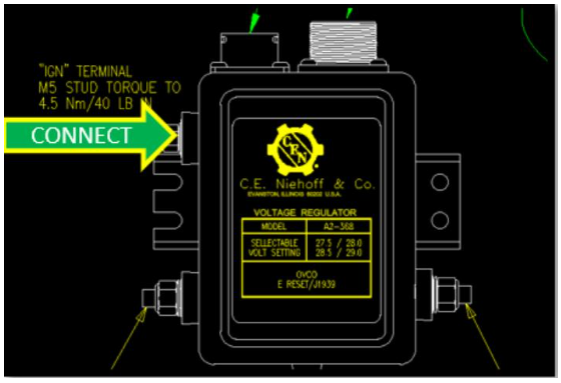


Figure 6

8. Connect CON REGULATOR into the 6 way circular connector on the regulator as shown in Figure 7.

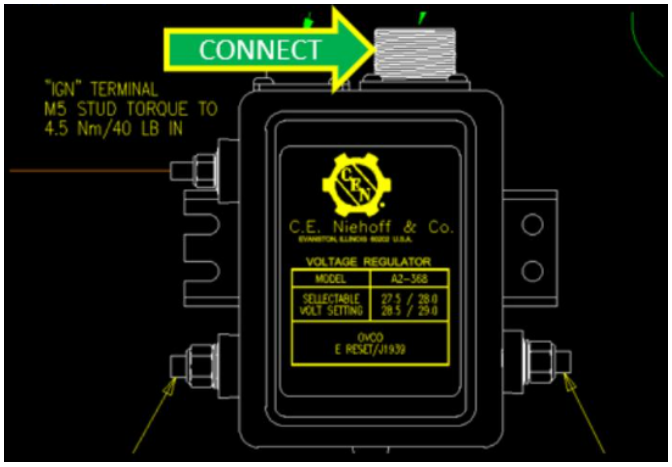


Figure 7

9. Final routing and dressing

Make sure all connections are tight

Secure the harness along the routing path using tie wraps/clamps.

10. Turn on the main power and verify that the charging system is operating properly.

Parts Return Disposition

Scrap Locally

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