

DTNA Solutions > Service Solutions > Freightliner
 > SS 1033047 M2 Battery Drain Problem – Mismatched I...

SS 1033047 M2 Battery Drain Problem – Mismatched INDICATOR and SENSE Circuits

APPLICABLE VEHICLE

- Business Class M2 Chassis circa 2015 build date
- Cascadia and New Cascadia

Ring terminal style pins on the alternator

CASE STUDY: With Delco Remy 36SI Alternator and ring-terminal style connectors

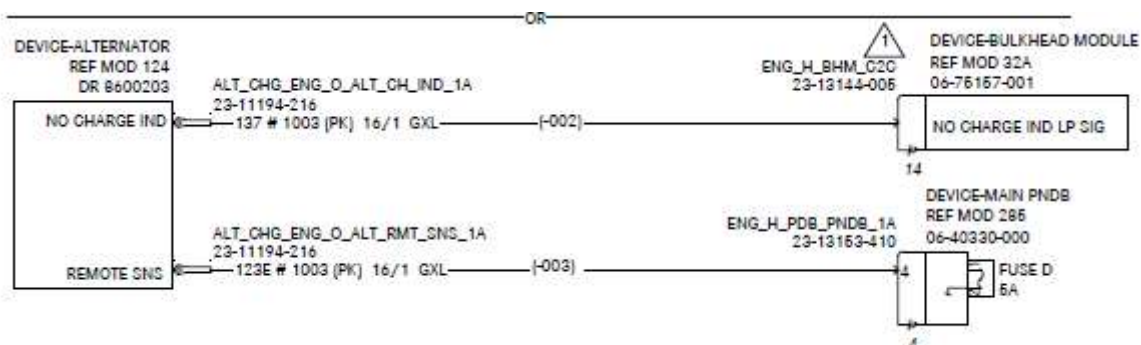
SYMPTOMS

Batteries drain after two to three [2-3] days of off-time

ISSUE

Some M2s that were built with ring-terminal type wires for both the INDICATOR and SENSE circuits are installed incorrectly to the alternator.

This causes the voltage sense wire to remain drawing off the batteries and the rotor of the alternator active to ground



Connector B2Engine Harness Pinouts		
Connector Pin	Signal Name	Signal Type
B2-A	J1587+DataLink	DataLink
B2-B	J1939+DataLink	DataLink
B2-C	J1587+DataLink	DataLink
B2-D	J1587/DataLink	DataLink
B2-E	--	--
B2-F	--	--
B2-G	BackupSwitch(sparedigitalinput3)	DigitalInput
B2-H	J1587/DataLink	DataLink
B2-J	J1939/DataLink	DataLink
B2-K	EngineECU/IgnitionPower	DigitalOutput
B2-L	TransmissonE CUIgnitionPower	DigitalOutput
B2-M	A/Cclutch	DigitalOutput
B2-N	--	--
B2-P	AlternatorCharging	DigitalInput

B2 Engine Harness

A
B
C
D
E
F
G
H
J
K
L
M
N
P



B7 Dash

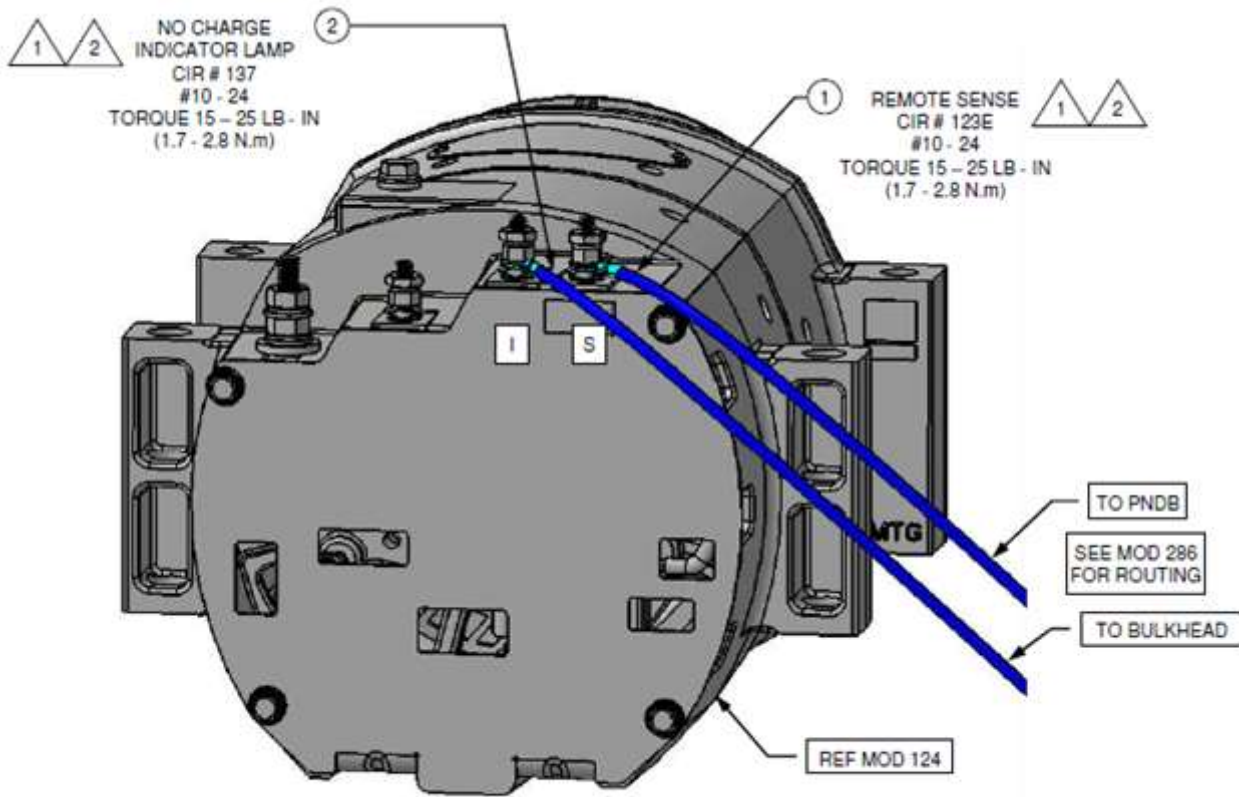
CASE STUDY:

2015 M2106 built w/DR36SI alternator

How the unit was found:



How it's supposed to be:



DR 36SI

After it's been verified with continuity check of the INDICATOR (notice we marked the INDICATOR circuit with a piece of tape and "I" marked on the tape):



Corrective action applied to the alternator (note the indicator is now on the proper terminal as per drawing):



SOLUTION:

- Measure truck voltage at idle
 - Should get 14.2 volts roughly @ idle and no excessive loads
 - If deviation of 14.6 volts and higher, then possible INDICATOR and SENSE are swapped
- Verify the INDICATOR circuit has continuity to the BHM-C2.P by disconnecting the BHM connector and one of the wires on the alternator
- Mark the verified INDICATOR circuit with tape and "I" marked on it
- Install correctly as described in MOD 12C and the installation diagram

Labels :

Business Class M2

Cascadia

Freightliner

New Cascadia

Power | Electrical | Harnesses | and Wiring

battery drain

dead battery indicator m2 remote sense sense

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