

Source: Leece-Neville Heavy Duty Systems Division - Arcade, NY USA  
Date: July 7, 2017  
Bulletin No: TSB-1149  
Models: MCI alternator 07-03-1250, Leece-Neville BLP3250H-MP  
Subject: Alternator Test Procedure

### Step 1 - Battery Test

In the battery compartment place a voltmeter across the 24 volt set of batteries.

If the reading is above 26 volts this is surface charge and must be removed to obtain the true state of charge. Remove the surface charge by turning on the head lights for 15 to 20 minutes on bright or by placing a carbon pile load bank across the 24 volt batteries set at 25% of the total CCA rating for 15 seconds. Then let batteries set for 1 minute before reading the voltage.

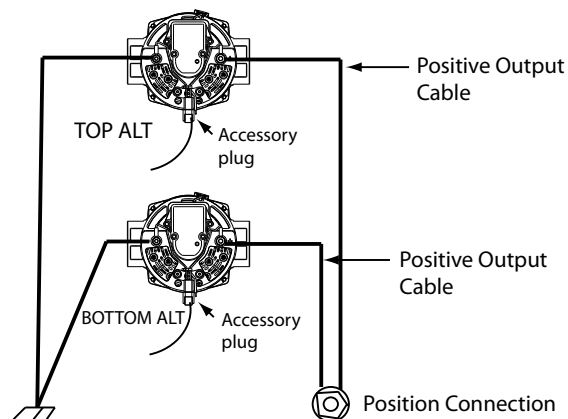
The voltage needs to be 24.8 volts or greater. If the voltage is less than 24.8 volts, charge or replace the batteries before you proceed any further.

### Step 2 - Alternator Performance

With the voltmeter still on the batteries turn off all of the bus loads and start the bus. If the voltage is above 28.4 volts stop and proceed to step 3. If the voltage is between 28.0 to 28.4 volts, the alternators are operating properly. Proceed to step 4 which would verify if they are sharing the loads equally.

### Step 3 - Alternator Test

If the voltage is above 28.4 volts at the batteries this is an indication that either one or both of the alternators may be defective. To determine which alternator is bad, after disconnecting the batteries, disconnect the accessory plug and the positive output cable from the bottom alternator and protect positive cable from shorting during test. Place a voltmeter across the output terminals of the top alternator and an amp clamp around the positive



Important: The information contained in this bulletin is intended for use by trained, professional technicians who have the proper tools, equipment, and training to perform the required maintenance described above. This information is NOT intended for 'do-it-yourselfers'; and you should not assume that this information applies to your equipment. If you have any questions regarding this information please visit our website at [www.prestolite.com](http://www.prestolite.com), or contact our technical service department at:

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### Step 3 - Alternator Test (continued)

output cable on the top alternator. Reconnect the batteries and start the bus with all the loads turned off.

If the top alternator is operating correctly the voltage should be between 28.0 to 28.4 volts and the current clamp should be reading less than 50 amps depending on the condition and state of charge of the batteries.

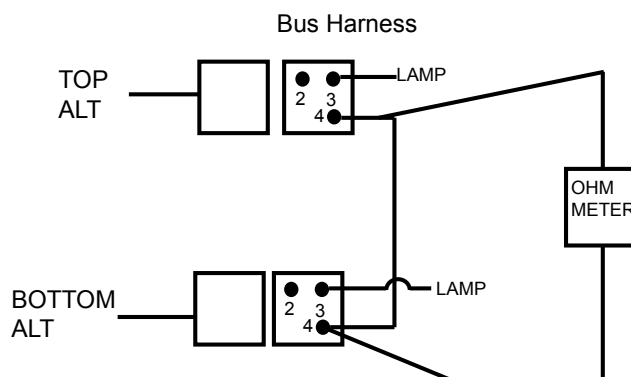
Repeat the same test on the bottom alternator, after disconnecting and protecting cables, by connecting the output cable and accessory plug on the bottom alternator, then disconnect them on the top alternator and take the same readings with the voltmeter and amp clamp placed on the bottom alternator.

### Step 4 - TxRx- Load Sharing

Measure the output current with an amp clamp placed on the positive output cable of each alternator with the engine at an idle with all of the loads turned off. Each alternator should be sharing within 10 amps of each other.

Raise the engine speed to 1500 RPM's and start turning on the loads. As each alternator current raises the sharing capability gets closer to the same amounts when the individual load surpasses 50 amps.

If the sharing capability exceeds 10 amps, the TxRx wire between the two alternators should be checked. This wire is pin #4 in the accessory plug and only connects the TxRx terminals of the two alternators. Disconnect both accessory plugs and verify all pins are in place on both sides. If so, run a resistance test between pin #4 on both plugs on the bus harness side to ensure continuity between the two terminals.



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