



May 23, 2007

Dear Blue Bird Owner,

You will find enclosed a copy of Service Bulletin S07LS regarding relocating the starter power cable at the junction block on the firewall on your 2003-08 model year Blue Bird "Vision" buses equipped with Caterpillar engines and optional ammeter shunt.

The starter cable on your bus is connected to the power junction block on the firewall. It should be connected to the ammeter junction block. The current draw across the shunt with the starter cable located on the power junction block may result in slow starter cranking speeds which could be misdiagnosed as a faulty starter. The starter cable must be relocated from the power junction block to the ammeter junction block according to the instructions provided in Service Bulletin S07LS.

No parts are required to perform this modification.

Your buses affected by Service Bulletin S07LS are identified by Blue Bird body number on the enclosed cover sheet.

Time required to relocate the starter power cable is 0.4 hours (24 minutes) per bus. A qualified repair technician should perform Service Bulletin S07LS.

Service Bulletin S07LS expires one (1) year from date of issue.

Should you have any questions concerning this bulletin, please contact your Blue Bird distributor or factory service representative.

Sincerely,



Bill Coleman  
Blue Bird Corporation  
478-822-2242  
wpcolema@blue-bird.com



# Starter Cable Connection

MODELS AFFECTED: Certain 2003 thru 2008 BBCV Visions

## ISSUE

With ammeter option, the starter cable may not be connected directly to the battery cable to provide adequate power to the starter during cranking..

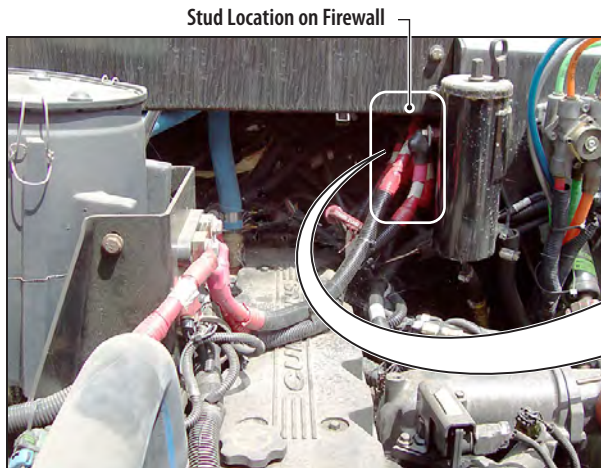
## CORRECTIVE ACTION

Determine build type, then relocate either the starter cable or the battery cable to provide the correct connection for the starter.

**WARNING** Always follow all Federal, State, Local, and Shop safety standards and use proper safety equipment when performing these procedures.

## DETERMINING BUILD TYPE

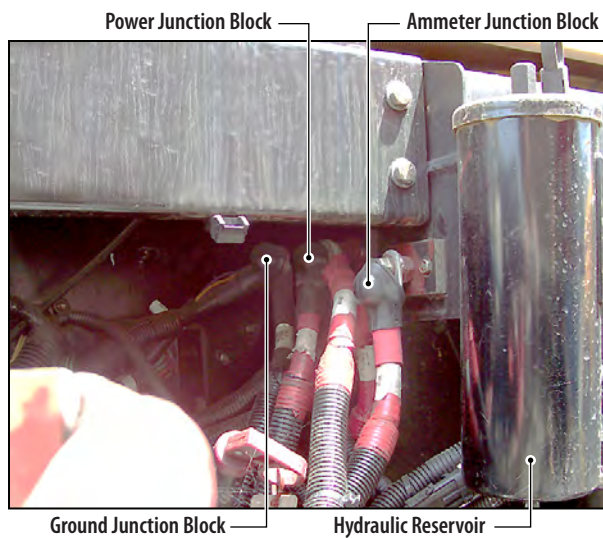
- 1 Park vehicle on a level surface, apply parking brake, turn engine off and remove ignition key.
- 2 Open the engine hood and locate the three power studs on the firewall.



- 3 If the studs indicated are present, proceed to **MODIFICATION 1**.
- 4 If the studs indicated are not present, proceed to **MODIFICATION 2**.

## MODIFICATION 1 PROCEDURE

- 1** Park vehicle on a level surface, apply parking brake, turn engine off and remove ignition key.
- 2** Disconnect the batteries.
- 3** Locate the three junction blocks on the firewall inside the engine compartment, behind the hydraulic reservoir.



- 4** Remove and retain the nut from the power (center) junction block.

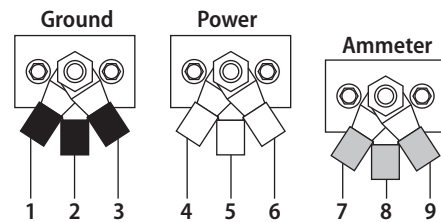
- 5** Locate the cable that comes from the starter to the center junction block and remove it from the stud:

- 6** Reinstall the nut on the power (center) junction block and tighten. **NOTE:** The three cables on the stud should be spread as shown below before tightening the nut:

- 7** Remove and retain the nut from the ammeter (right) junction block.

- 8** Connect the starter cable to the ammeter (right) junction block and tighten. **NOTE:** The three cables on the stud should be spread as shown below before tightening the nut:

- 9** Check and recoat all exposed electrical connections with a corrosion protection such as red glyptal.



### Ground Stud

1. PDU Ground
2. Alternator Ground
3. Starter Ground

### Power Stud

4. PDU Power
5. Alternator Power
6. Load Side of Shunt

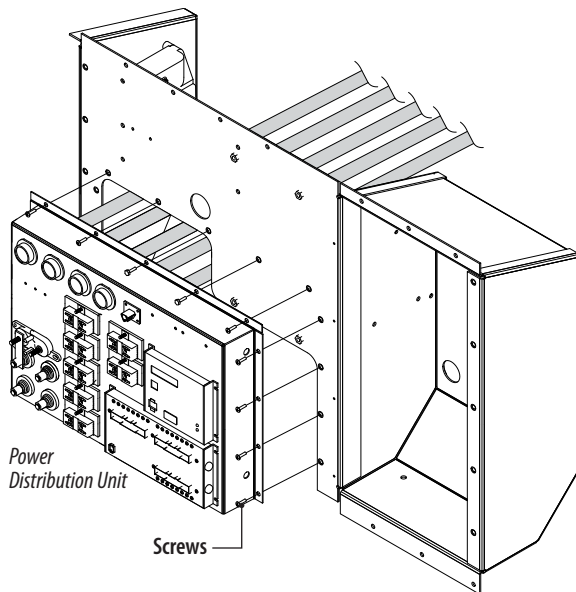
### Ammeter Stud

7. Battery Power
8. Starter Cable
9. Shunt Power

- 10** Reconnect the batteries.

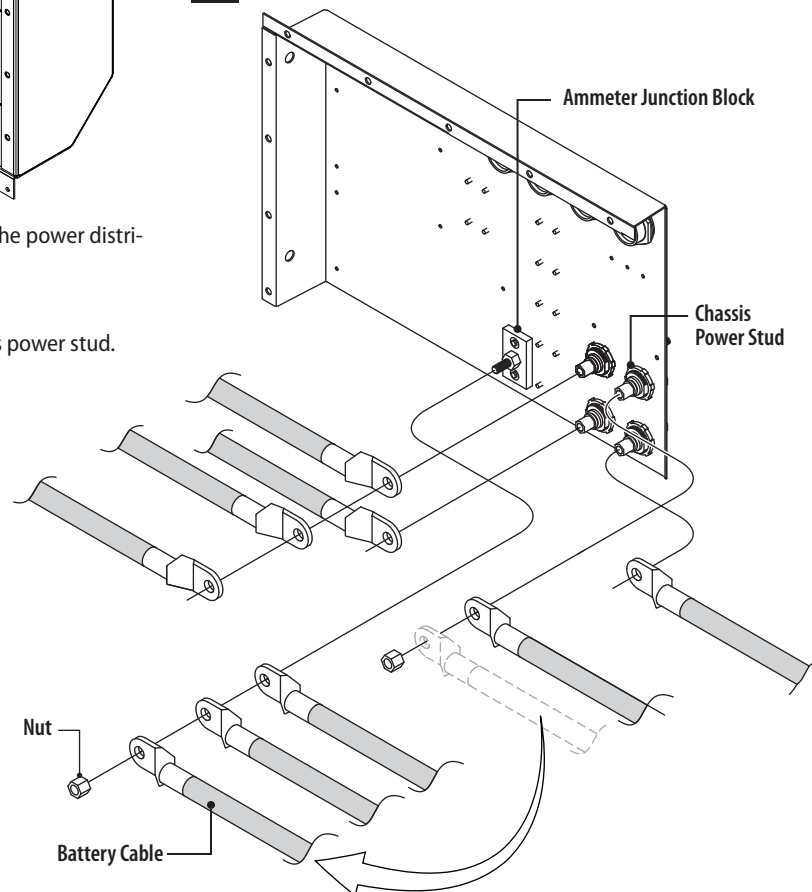
## MODIFICATION 2 PROCEDURE

- 1** Park vehicle on a level surface, apply parking brake, turn engine off and remove ignition key.
- 2** Disconnect the batteries.
- 3** Locate the power distribution unit inside the vehicle and remove the cover.



- 4** Remove the screws from the perimeter of the power distribution unit to gain access to the rear.
- 5** Remove and retain the nut from the chassis power stud.

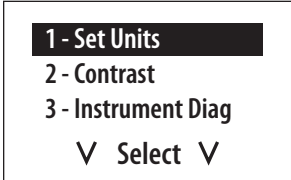
- 6** Remove battery cable from the chassis power stud.
- 7** Reinstall the nut on the chassis power stud and tighten, securing only one cable to the stud.
- 8** Remove and retain the nut from the ammeter junction block.
- 9** Re-locate and connect battery cable to the ammeter junction block. Reinstall the nut and tighten. **NOTE:** There should be three cables attached to the ammeter junction block.
- 10** Replace PDU and tighten the mounting screws.
- 11** Check and recoat all exposed electrical connections with a corrosion protection such as red glyptal.
- 12** Reconnect the batteries.



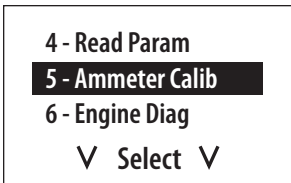


## AMMETER CALIBRATION

**1** With the park brake set and the ignition on, press and hold the left (M) button on the speedometer head for more than 5 seconds to bring up the following screen:

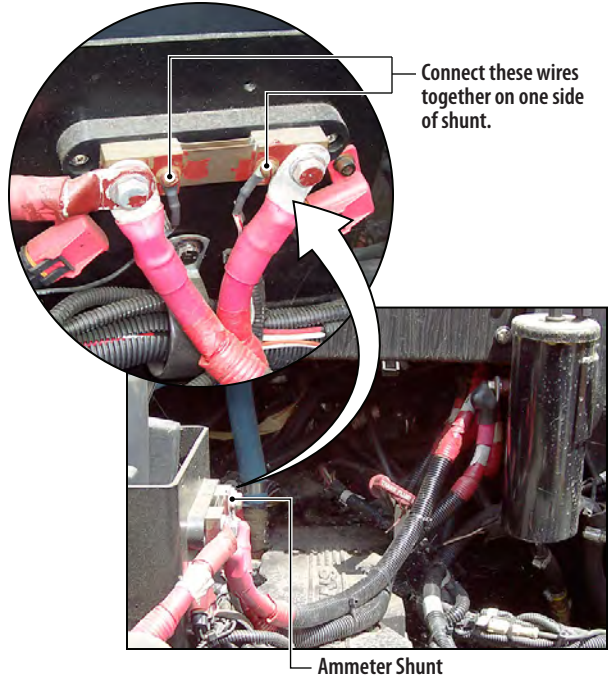
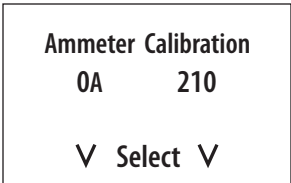


**2** Press either left or right button on speedometer head to scroll to and highlight number **5-Ammeter Calib.**



**3** Depressing both the left and right buttons together will select the highlighted area.

**4** When the following screen appears::



**5** Verify all connections and return bus back to service.

- 4.1 Connect both ammeter shunt wires together on one side of the shunt.
- 4.2 Use the up and down arrows to change the calibration factor until you read **0A** on the display.
- 4.3 Verify that the gauge reading closely coordinates with the display.
- 4.4 Press both buttons to save the calibration.
- 4.5 Reconnect ammeter shunt wires to the original configuration.