



April 19, 2007

Dear Blue Bird Owner,

You will find enclosed a copy of Service Bulletin S07LN regarding the routing of the alternator power cable on your Blue Bird All American model bus(es).

The alternator power cable is routed too close to the charge air cooler (CAC). This results in melting of the shrink wrap at the power cable connector exposing it to the elements.

Instructions and parts requirements for relocating the alternator power cable are provided in Service Bulletin S07LN.

Parts are available in limited quantities from your usual Blue Bird service parts source.

Your buses affected by Service Bulletin S07LN are identified by Blue Bird body number on the enclosed cover sheet.

Time required to relocate the alternator power cable is 0.6 hours per bus, if the cable is not damaged. Time required to repair and relocate alternator power cable is 1.5 hours per bus. A qualified repair technician should perform Service Bulletin S07LN.

Service Bulletin S07LN expires one (1) year from date of issue.

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

Sincerely,



Bill Coleman  
Blue Bird Corporation



# Alternator Cable Routing

MODELS AFFECTED: 2007 A3FE All American

## ISSUE

The positive battery cable leading from the rear of the alternator to the Power Distribution Unit (PDU) may contact the charge air cooler tube.

## CORRECTIVE ACTION

This procedure examines the cable routing and secures the cable against contact with the charge air cooler tube.

## PROCEDURE FOR A3FE

**WARNING** Always follow all federal, state, local, and shop safety standards and use proper safety equipment when performing this procedure.

**1** Secure the vehicle and prepare it for access to the needed areas:

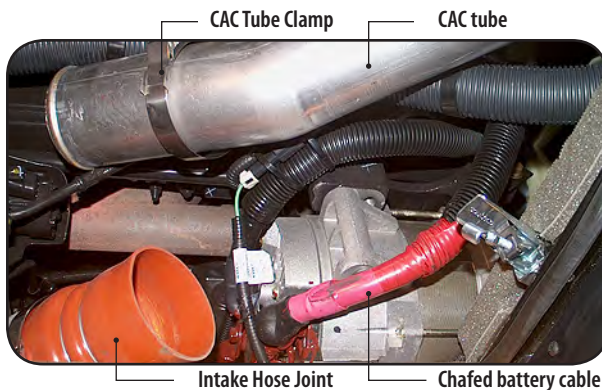
1.1 Park vehicle on level surface. Apply the parking brake. Remove key and chock wheels. Disconnect both positive and negative battery cables.

1.2 On the inside of the bus, open the engine cover door. Remove the nut and screw attaching the engine cover door to the engine cover cable. Unlatch and remove the engine cover assembly.

**2** Remove the charge air cooler (CAC) tube:

2.1 Loosen the clamp which connects the CAC tube to the orange flexible intake hose. Push the clamp forward along the CAC tube. Pull the end of the CAC tube out of the hose, and set the open end of the CAC tube on top of the engine valve cover.

**WARNING** Cover the open ends of both the CAC tube and the rubber hose joint to prevent contamination. Debris allowed to enter the system can cause severe engine damage.



**3** Inspect the alternator cable for damage:

3.1 If the cable shows signs of contacting the CAC tube, such as scrub marks on or chafing of the insulation, proceed to step 4 to correct the condition.

3.2 If no signs of cable damage are evident, loosen the terminal nut on the back of the alternator, but do not remove it. Then proceed to step 5.

**4** Repair the cable insulation damage:

4.1 Remove the nut on the positive alternator cable.

4.2 Remove the cable end from the terminal stud. Remove and retain the black rubber boot from the cable.

4.3 Trim away the damaged red heat shrink insulation.

4.4 Measure the damaged insulation area. Cut a length of red heat shrink insulation tubing long enough to cover the damaged area, plus approximately 1/2" on each side of the damaged area. Install the heat shrink over the lug terminal, slide it into position, and use a heat gun to shrink the tubing.

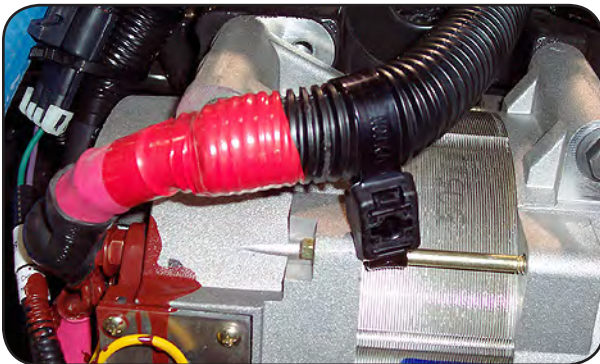
4.5 Reinstall the black rubber boot removed in step 4.2.

4.6 Reconnect the positive cable to the alternator and install the nut loosely.

4.7 Proceed to step 5 to secure the cable.

**5** Secure the cable end to prevent future damage due to contact with the CAC tube:

4.1 With the terminal nut which secures the battery power cable to the back of the alternator loose, press the cable toward the right side of the alternator. Secure in place using the dual cable tie assembly looped around the cable and the bolt shaft of the alternator.



4.2 Tighten the connector nut to 17-22 ft lb.

4.3 Proceed to step 6 to finish the procedure.

**6** Finish the procedure:

6.1 Remove the covers from the ends of the CAC tube and the intake hose. Reinsert the CAC tube, and install and tighten the clamp.



*Before: Cable contacting CAC tube.*



*After: Cable secured to prevent contact with CAC tube.*

6.2 Reinstall the engine cover assembly.

6.1 Reconnect the battery cables. The procedure is complete and the bus may be returned to normal service.

### TOOLS REQUIRED

- 7/16 deep well socket
- 1/2" socket
- Ratchet and extension
- Razor knife (or scissors)
- Cutting pliers
- Torque wrench

### PARTS

PART NUMBER	QUANTITY	DESCRIPTION
0024043	1	Cable Tie, Dual
0001130	12"	Red Heat Shrink Tubing