

## R02GK

September 30, 2002

Dear Blue Bird Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

Blue Bird Body Company has determined that a defect which relates to motor vehicle safety exist in certain 1998 model year Blue Bird TC/2000 front engine school and transit buses equipped with Cummins ISB engines. Blue Bird is conducting a recall to correct this defect.

The defect involves the routing of the power cable from the alternator to the starter. The alternator power cables may not have been routed properly on subject buses. Improper routing of the alternator power cables could result in the cable abrading against the motor mount.

Blue Bird Body Company's evaluation of the risk to motor vehicle safety reasonably related to this defect is the potential for fire hazard in the event a short to ground occurs in the alternator power cable.

Your Blue Bird bus(es) affected by recall R02GK are identified by body serial number(s) on the enclosed reply sheets. Your buses should be inspected immediately for proper battery cable routing.

If you no longer own the subject bus(es), please complete the appropriate section of the yellow reply sheet and return to Blue Bird in the enclosed pink postage prepaid envelope.

You may perform this modification yourself or have the work done by a qualified repair facility convenient to you. You may contact your Blue Bird distributor for assistance. Parts will be shipped "No Charge" via UPS.

Upon completion of the recall, the owner should complete and return the pink reply sheet in the postage prepaid envelope provided. The owner may request reimbursement of labor costs by completing the appropriate section of the pink reply sheet. If repair is performed by other than the owner or a Blue Bird distributor, attach a copy of the paid work order/invoice to the reply sheet. Time required to perform recall R02GK is 2.5 hours per bus.

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Important: Your prompt return of the pink reimbursement sheet, complete with the correct Body Serial Numbers, permits Blue Bird to update the record indicating recall has been completed and prevents the mailing of a second notice. This is much appreciated. We regret any inconvenience this may have caused.

If Blue Bird Body Company should fail to or is unable to remedy this condition without charge to you, you may contact:

**ADMINISTRATOR  
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION  
WASHINGTON, D.C. 20590**

or you may call The National Highway Traffic Safety Administration toll free at:

1-888-327-4236

Questions regarding this recall campaign should be directed to me at (478) 822-2242.

Thank you,

Bill Coleman  
Recall Administrator

**BLUE BIRD BODY COMPANY**

**RECALL R02GK  
TC/2000 FRONT ENGINE ALTERNATOR POWER CABLE  
ROUTING INSTRUCTIONS**

**Inspection of Cable for Vehicles Without Ammeter**

***\*\*NOTE\*\* The following inspection procedure is to be used for vehicles not having the alternator output cable clamped at three points to the flywheel housing.***

Park unit on level surface and set park brake.

Disconnect positive cable(s) from battery post(s).

Remove air intake tubing to gain access to alternator, clamps, and wire cable.

Cover air intake at turbo to prevent contamination from entering turbo.

Disconnect alternator output cable (positive) from alternator terminal.

Remove the cables (alternator positive and negative) from the insulated clamps on the right hand frame rail that support the hydraulic lines.

Remove alternator output cable (positive) from starter. Pull cable through remaining clamps and remove from bus for inspection.

Inspect asphaltum outer cable covering and the wire cable insulation for any cuts or chafing to rear engine mount, frame rail, transmission, and other components on chassis.

If no damage is found to wire cable insulation through asphaltum loom and cable length measures approximately 96 inches, proceed with routing instructions.

If damage to cable insulation is found or if cable length measures approximately 74 inches, replace cable with B.B. Part # 0000022 and route per instructions for vehicles without ammeter.

Inspect the battery cable and power distribution cable for wear and/or abrasion starting at the terminal post on the starter. Both cables must be routed from the starter through the support bracket and clamp at the flywheel housing under the engine mount. Cables must clear the edge of the frame rail before being clamped. Replace if necessary.

**For buses without ammeter: (continued)**

***Routing Instructions for Vehicles Without Ammeter / Read instructions carefully and refer to drawing number 0020256 before beginning work.***

Apply protective polyester sleeving over cable assembly starting approximately 6 inches from the alternator terminal end and secure with nylon cable tie at ends of sleeving.

Direct cable assembly through cable clamp located on standoff bracket at the engine mount which supports hydraulic lines for transmission cooler and route along frame rail towards alternator. Ensure that the electrical cables are not in contact with the hydraulic fittings at the transmission.

Check that the nut securing the positive terminal to the alternator is torqued to 120 in-lbs. Attach positive cable to the output terminal of alternator. Do not tighten nut for the alternator cable.

> Refer to drawing number 0020256 for cable routing and clamp location.

Secure both alternator cables to frame rail at position (1) using hardware as illustrated. Position clamp and cables above mounting bolt.

Secure both alternator cables to frame rail at position (2) using hardware as illustrated. Position bracket and clamp to support cables under top of frame rail.

Reassemble loop clamp to secure hydraulic lines and small electrical wiring.

Reassemble loop clamp for small electrical wires to oil pressure sender.

Mount short end of a 3" support bracket to transmission with hardware as noted at position (3). Do not tighten.

Attach cable to the backside of the support bracket using a 1" diameter clamp facing downward and hardware as noted at position (3). Do not tighten.

Mount the side of the short support bracket with the larger hole to the transmission facing upward and to the rear of the bus as noted at position (4). Do not tighten.

Attach cable to the backside of the support bracket with the clamp facing upwards. Do not tighten.

**For buses without ammeter: (continued)**

Route the alternator positive cable under the engine mount, through the clamp along with the battery positive cable and power distribution cable. See detail E-E on drawing 0020256.

Clean the cable terminal ends for a good electrical connection and attach terminal ends to the positive terminal on the starter and torque to 12 -15 ft-lbs.

Coat terminal assembly with Glyptal 1201 or equivalent and cover with boot from battery cable.

Adjust cable for proper fit ensuring that the cables are not pulled tight or passing over sharp corners. Adjust by rotating or bending cable support bracket at position (3) on transmission to clear hydraulic fittings and tighten support bracket hardware to transmission.

Tighten nut on positive terminal of alternator to 120 in-lbs.

Tighten both alternator cable clamps and support brackets to transmission at positions 1,2,3 and 4.

Clamp cables as necessary to provide additional frame assembly support.

Remove cover over air intake duct at turbo. Reinstall air intake tube. Tighten clamp.

**Parts list for buses without ammeter: Kit Number 0018087**

Quantity	Part Number	Description
2	0616037	Capscrew, hex head, 5/16-18x1 1/2, grade 5
4	0829390	Nut, hex head, 5/16-18, serrated washer
4	0854406	Capscrew, hex head, 5/16-18x1, grade 5
4	1039486	Clamp, loop, 1.5 in.
2	1517168	Clamp, loop, .937 in.
2	2001048	Washer, flat, 11/32x11/16x1/16
8 feet	0020676	Oversleeve, Expando, DM red
2 feet	0020677	Oversleeve, Expando, DM red
2	1317247	Bracket, attaching, brake line to frame
1	1341304	Angle, mounting, clamp

### Inspection of Cable for Vehicles With Ammeter

***\*\*NOTE\*\* The following inspection procedure is to be used for vehicles not having the alternator output cable clamped at three points to the flywheel housing.***

Park unit on level surface and set park brake.

Disconnect positive cable(s) from battery post(s).

Remove air intake tubing to gain access to alternator, clamps, and wire cable.

Cover air intake at turbo to prevent contamination from entering turbo.

Disconnect alternator output cable (positive) from alternator terminal.

Remove the cables (alternator positive and negative) from the insulated clamps on the right hand frame rail that support the hydraulic lines.

Remove cover of PDU (Power Distribution Unit) electrical panel assembly from left-hand wheelhouse opening.

Remove alternator output cable from ammeter shunt and the sealing boot threaded fitting from PDU to allow the cable to exit the PDU assembly.

Loosen clamp on rear platform outrigger supporting the cable.

Apply heat to sealing boot to allow it to be removed from cable.

Pull cable through remaining clamps and remove from vehicle for inspection.

Inspect asphaltum outer cable covering and the wire cable insulation for any cuts or chaffing to underside of platform, rear engine mount, frame rail, transmission, and other components on chassis.

If no damage is found to insulation of wire cable through asphaltum loom and cable length measures approximately 130 inches, proceed with routing instructions.

If damage to cable insulation is found or if cable length measures approximately 102 inches, replace cable with part # 0012138 and route per instructions for vehicles with ammeter.

**For buses with ammeter: (continued)**

Inspect the battery cable and power distribution cable for wear and/or abrasion starting at the terminal post on the starter. Both cables must be routed from the starter through the support bracket and clamp at the flywheel housing under the engine mount. Cables must clear the edge of the frame rail before being clamped. Replace if necessary.

***Routing Instructions for Vehicles With Ammeter / Read instructions carefully and refer to drawing 0020256 before beginning work.***

Apply protective polyester sleeving over cable assembly starting approximately 6 inches from the alternator terminal end and secure with nylon cable tie at ends of sleeving.

Direct cable assembly through cable clamp on standoff bracket at the engine mount, which supports transmission cooler hydraulic lines and route cable along frame rail towards alternator. Ensure that the electrical cables are not in contact with the hydraulic fittings on transmission.

Check that the nut securing the positive terminal to the alternator is torqued to 120 in-lbs. Attach positive cable to the output terminal of alternator. Do not tighten nut for the alternator cable.

> Refer to drawing 0020256 for cable routing and clamp location.

Secure both alternator cables to frame rail at position (1) using hardware as illustrated. Position clamp and cables above mounting bolt.

Secure both alternator cables to frame rail at position (2) using hardware as illustrated. Position bracket and clamp to support cables under the top of frame rail.

Reassemble loop clamp to secure hydraulic lines and small electrical wiring.

Reassemble loop clamp for small electrical wires to oil pressure sender.

Mount short end of a 3" support bracket to transmission with hardware as noted at position (3). Do not tighten.

Attach cable to the back side of the support bracket using a 1" diameter clamp facing downward and hardware as noted at position (3). Do not tighten.

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**For buses with ammeter: (continued)**

Mount the long end of a 3" support bracket facing downward and to the rear of the bus to the transmission as noted at position (4). Do not tighten.

Attach cable to the back side of the support bracket with the clamp facing upwards. Do not tighten.

Direct the cable over the engine mounting bracket, through the frame rail opening, and through the opening in the steering gear bracket.

Install new sealing boot in panel assembly opening with washer on the exterior surface of the panel assembly. Tighten threaded fitting of sealing boot.

Route cable through sealing boot and secure cable terminal to ammeter shunt.

Adjust cable for proper fit ensuring that the cables are not pulled tight or passing over sharp corners. Adjust by rotating or bending cable support bracket at position (1) on transmission to clear hydraulic fittings and tighten support bracket hardware to transmission.

Secure cable to platform rear outrigger behind center relay with cable clamp allowing cable to pass with adequate clearance under the metal edge surface.

Tighten both alternator cable clamps and support brackets to transmission at position 1,2,3 and 4.

Tighten nut on positive terminal of alternator to 120 in.-lbs.

Clamp all work as necessary to provide additional assembly framework.

Apply heat from airgun evenly around sealing boot.

Remove cover over air intake at turbo then reinstall air intake tube.

Tighten clamp.



**For buses with ammeter: (continued)**

**Parts list for buses with ammeter: Kit Number 0019070**

<b>Quantity</b>	<b>Part Number</b>	<b>Description</b>
2	0616037	Capscrew, hex head, 5/16-18x1 1/2, grade 5
4	0829390	Nut, hex head, 5/16-18, serrated washer
4	0854406	Capscrew, hex head, 5/16-18x1, grade 5
4	1039486	Clamp, loop, 1.5 in.
2	1517168	Clamp, loop, .937 in.
2	2001048	Washer, flat, 11/32x1 1/16x1/16
10 feet	0020675	Oversleeve, Expando, DM red
2 feet	0020677	Oversleeve, Expando, DM red
2	1317247	Bracket, attaching, brake line to frame
1	1341304	Angle, mounting, clamp