



June 15, 2010

Dear Blue Bird Owner,

The low coolant sensor on certain 2007-2011 model year All American and Vision buses manufactured from February 15, 2007 through March 01, 2010 may leak allowing engine coolant from the surge tank to leak into the engine harness connector and wick through harness to other components such as the engine ECM. Instructions for inspecting and correcting this condition are provided in Service Bulletin S10SA.

Your buses affected by Service Bulletin S10SA are identified by body number on the attached cover sheet.

Time allowed to inspect low coolant sensor, remove seal and apply dielectric grease is 0.1 hour per bus.

Time allowed to inspect and replace low coolant sensor and replace engine harness, if needed, is 2 hours per bus. **If new sensor is installed, connector seal is not removed.**

Parts, if required, must be ordered through your Blue Bird dealer.

**You may contact your Blue Bird dealer to arrange to have this service bulletin performed.** Or, if you prefer, you may perform this service bulletin yourself or have a qualified repair facility convenient to you perform it. A qualified technician should perform this procedure.

Service Bulletin S10SA ends one (1) year from date of issue.

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

Sincerely,



Bill Coleman  
Engineering Services  
Blue Bird Corporation  
478-822-2242



**Models Affected: 2007-2010 Model Year All American, Vision**

## ISSUE

The low coolant sensor may leak allowing engine coolant from surge tank to leak into engine harness connector and wick through harness to other components such as engine ECM.

## CORRECTIVE ACTION

Inspect low coolant sensor and associated electrical connections and follow instructions provided.

## PROCEDURE

**WARNING:** Always follow all Federal, State, Local and Shop safety standards and use proper safety equipment when performing these procedures. This procedure must be performed by a qualified automotive electrical technician.

1. Secure the vehicle and prepare it for access to the needed area.
2. Park vehicle on level surface. Apply the parking brake, remove key and chock wheels. Disconnect the batteries.
3. Locate low coolant sensor installed in engine coolant surge tank (See figure 1)

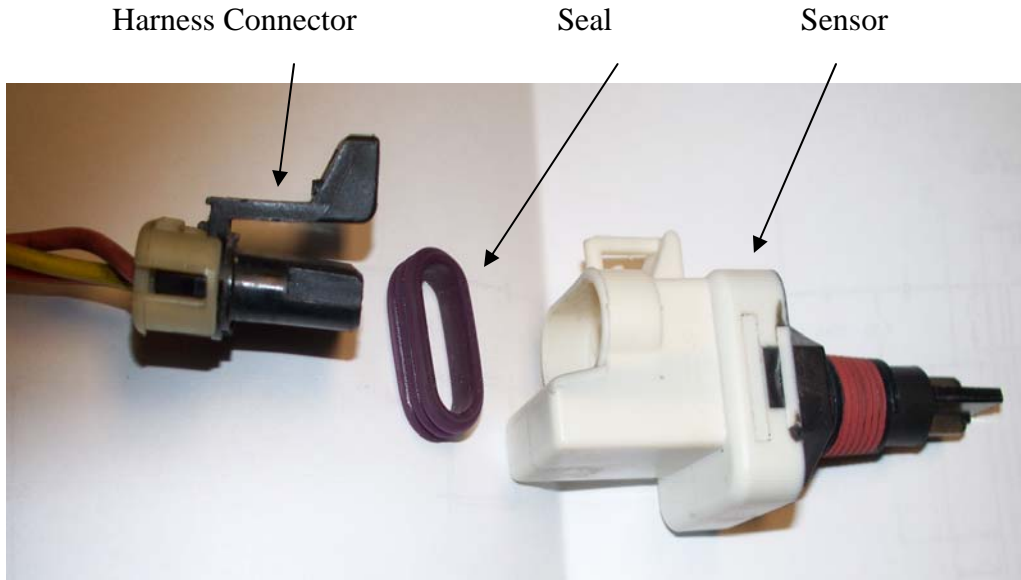


**Figure 1**

4. Disconnect the wiring harness connector from the low coolant sensor.



- 4.1 Inspect harness connector and sensor pins for signs of coolant.
- 4.2 If no sign of coolant is found, slide sensor harness connector rubber seal off connector (see seal in figure 2), apply dielectric grease to the connector pins and reconnect the low coolant sensor connector to the sensor without the seal installed and proceed to step 5. Retain harness connector rubber seal for future use if needed.



**Figure 2**

- 4.3 If sign of coolant is found in the connector or sensor pins (see figure 3), replace the leaking sensor with new sensor (10015356). When installing the new sensor, tighten the sensor using the hex nut portion of the sensor to 4.5-6 ft lbs. Clean the harness connector pins, and reconnect low coolant sensor connector to sensor. **If new sensor is installed, connector seal is not removed.**



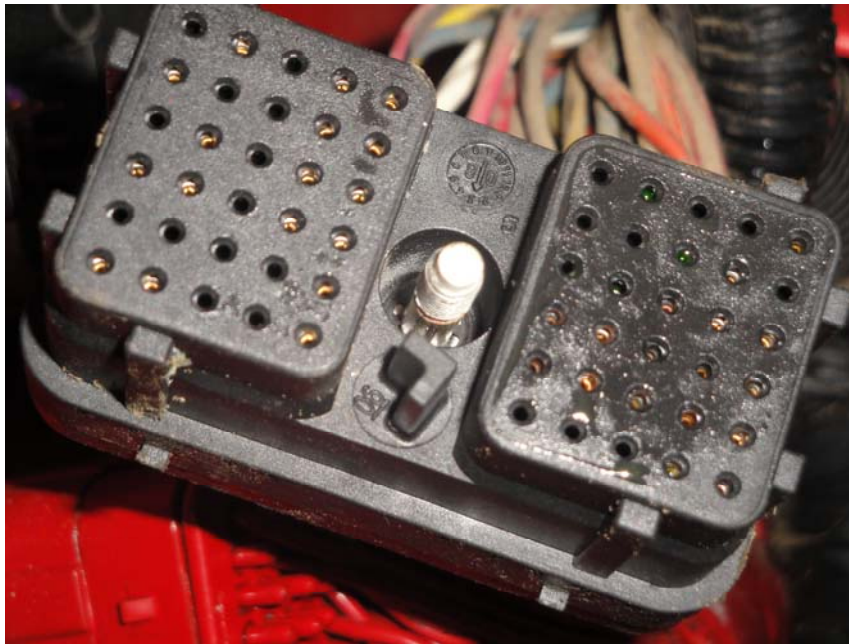
**Figure 3**



# Low Coolant Sensor Leaks *BULLETIN*

S I O S A  
S E R V I C E B U L L E T I N

- 4.4 Disconnect engine harness connector at the engine ECM and inspect for coolant.
- 4.5 If no coolant is found in the ECM connector or ECM, reconnect the engine ECM connector and torque the center retaining bolt of the ECM harness connector per the following values:
  - Caterpillar Engine- 53 in-lb +/- 9 in-lb
  - Cummins Engine- 25 in-lb +/- 2 in-lb
- 4.6 Proceed to step 5.
- 4.7 If coolant is found in the ECM connector (See Figure 4) or ECM, clean the ECM pins and replace the Blue Bird ECM harness. Reconnect the engine ECM connector and torque the center retaining bolt of the ECM harness connector per the following values:
  - Caterpillar Engine- 53 in-lb +/- 9 in-lb
  - Cummins Engine- 25 in-lb +/- 2 in-lb



**Figure 4**

5.0 The procedure is complete and vehicle may be returned to service.

**Parts List:**

Quantity	P.N.	Description
1	10015356	Sensor, Coolant, Surge Tank
1	*	Permatex 22058, dielectric grease or equivalent
1	**	Blue Bird Engine Harness

\* Purchase Locally

\*\* Contact your local Blue Bird dealer for harness specific to your bus