

# Technical Bulletin

**Bulletin number:** 09-001 **Date:** July 2, 2009  
**Attention:** Installation Manager, Service Manager  
**Topic:** Incorrect sensor installed in LSSM geared or LSSM gearless kit  
**Criticality:** Recommendation – This action is required for LSSM to operate properly  
**Equipment type:** Traction control systems (V900, Prodigy) using LSSM-5 board.

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**Description:** The Low Speed Safety Monitoring device (LSSM) is provided in two form factors: The LSSM-GL assembly and the LSSM-GD kit. Each of these devices uses a magnetic sensor manufactured by Honeywell. The correct sensor for these devices is Honeywell part number 103SR13A-1.

In some cases, Honeywell sensor 103SR12A-1 may have been installed instead of the 103SR13A-1. The difference between these parts is the voltage range. The -13A has a voltage range of 4.5vdc to 24vdc while the -12A range is 6.0vdc to 24vdc.

If the controller and LSSM device have been installed and are operating correctly, then the sensor installed is the correct one.

One way to determine that an incorrect sensor may have been used (on an LSSM device that has already been installed) is to inspect the behavior of the Hall Pulse LED on the LSSM-5 board in the controller. This LED should glow brightly when a magnet is detected, and turn **completely off** when a magnet is not detected. When an incorrect sensor is loaded, the LED never turns off completely (it **glows dimly** when no magnet is detected). If you observe this type of behavior, you will need to check the sensor part number.

**Recommended action:** For LSSM-GD kit (05-101-001):

1. If kit has not been installed, open the kit bag and read the part number on the sensor bag. It should read 103SR13A-1.
2. If already installed, look at the sensor end that faces the magnets. The part number is printed on the end of the sensor.

If the sensor is not the 103SR13A-1 then contact ECC technical support for a replacement.

For LSSM-GL kit (05-101-005, 05-101-006, 05-101-008, or 05-101-009):  
Loosen the retaining nut and remove the sensor to look at the sensor end, the part number printed should be 103SR13A-1. If correct then reinstall the sensor keeping a 1/8" gap between the sensor and the magnet wheel. If the sensor is not the 103SR13A-1, contact ECC technical support.