

**Description of Revisions:** *This bulletin replaces the previous version dated July 2001. The changeover start date is corrected, and a note is included in the General Information section about printed wiring diagram books.*

## General Information

**IMPORTANT:** See Sterling **SB 54-20** *Inconsistent/Incorrect Wiring I.D.s* for related information.

Starting February 27, 2001, L-Line, A-Line, and Acterra vehicles began being built with a new type of wiring system. This system is similar to the existing Acterra system and uses overlay harnesses. Wire harness circuit numbering and color-coding have changed. Circuit numbering is now in the same format as the existing Acterra system.

Wiring harness diagrams and schematics have been updated since the wiring changeover. To properly troubleshoot the new system, you must use the new diagrams and schematics. Diagrams are available on-line through EZWiring.

**NOTE:** The Sterling A-Line/L-Line/Cargo Wiring Diagram Manual (STI-388) and the Acterra Wiring Diagram Manual (STI-427.ML) include information for vehicles built **BEFORE** February 27, 2001.

**IMPORTANT:** Brake lights do not illuminate when the parking brakes are applied on L-Line and A-Line vehicles built since the changeover to the new type wiring. This is also true for Acterra vehicles built before and since the wiring changeover.

## Wiring Changeover Highlights

### Main Dash Harness

The main dash harness is wired for future use of the ICU IV (not yet released). A jumper harness attaches to the instrument cluster (Ametek) or to individual gauges.

### PLC Filter

A PLC (Power Line Carrier Communications) filter is incorporated into the trailer seven-way harness, running from the power distribution box to the seven-wire female receptacle. The ABS trailer power supply and the ABS lamp signal share a common wire. The PLC filter separates the signals, allowing one wire to perform two functions.

### Fan Control Wiring

The air fan wiring has changed. The fan override switch is no longer wired through the A/C input to the engine ECM (electronic control module). On vehicles with Caterpillar, Cummins, and Detroit Diesel engines, the override switch (if installed) is normally closed and connected in series with the fan electric/air solenoid circuit (fail-safe circuit). The electric/air solenoid is plumbed (for air) for normally open or normally closed operation, depending on fan operation. For Mercedes-engined vehicles, a different switch (normally open) sends a ground signal to the VCU (vehicle control unit).

### J1939 Datalink

The J1939 datalink connectors and terminating resistors have changed. Splice-pack connectors are not used. Instead, Y-connectors are used to extend the harnesses outward or to install terminating resistors.

## J1587 Junction Block

A J1587 junction block (similar to the Acterra) is located inside the cab on the driver's side. It is a plug-in type junction block and easier to connect to or disconnect from the datalink.

## Bulkhead Connector A

Located on the lower driver's side, the A-connector (previously a single 76-pin connector) has been replaced by two smaller 34-pin connectors. The upper connector attaches the engine harness and the lower attaches the transmission harness.

## Bulkhead Connector B

Located on the upper driver's side, the B-connector has not changed. It is a single 76-pin connector and connects half of the wires running to the power distribution box.

## Bulkhead Connector C

Located on the passenger side, the C-connector (previously a single 76-pin connector) has been replaced by two smaller 34-pin connectors. The upper connector attaches the other half of the wires running to the power distribution box (those not coming from the B-connector). The lower connector attaches the chassis harness.

## A/C Fan Cycling/High Pressure Switch

This is a four-terminal, normally closed switch providing A/C input to the ECM. The circuit loops the common (-) ECM wire through the normally closed A/C switch and then back to the ECM A/C input.

## Power Supplies

Many of the power supplies (engine, transmission, etc.) have been moved from the power distribution panel in the cab to the power distribution box, outside of the cab. This reduces the amount of wires running into and out of the cab and provides additional space around the power distribution panel.

## Allison VIM

The Allison VIM (vehicle interface module) is no longer used and has been replaced by fuses and relays in the power distribution panel.

## Warranty

This is an informational bulletin only; warranty does not apply.