

The following chart describes the function of each wire of the onboard computer.

OBC WIRE	FUNCTION
Red (18-gauge)	Main power supply for the onboard computer. The vehicle batteries provide +48 volts to the onboard computer.
White (18-gauge)	The Tow/Run switch provides +48 volts to the OBC through the white wire when the switch is in the RUN position. When the Tow/Run switch is in the TOW position, the OBC locks out the speed controller by not sending a +48 volt signal through the light blue OBC wire.
Yellow (18-gauge)	Enables the OBC to power-up (brings the OBC out of sleep mode) when the accelerator pedal is pressed. The MCOR limit switch provides +48 volts to the OBC when the accelerator pedal is pressed.
Brown/White (18-gauge)	Controls the battery warning light by providing a ground to the light through a transistor inside the OBC.
Light Blue (18-gauge)	Solenoid lockout circuit – the OBC provides a +48 volt signal to the speed controller when the battery charger is disconnected.
Gray (18-gauge)	Provides a ground for the charger relay when the battery charger is connected to the vehicle. Also enables the OBC to power-up (brings the OBC out of sleep mode).
Black (10-gauge) to battery charger receptacle	Battery charging current is controlled by the SCR (silicon-controlled rectifier) inside the onboard computer.
Black (10-gauge) to B– terminal of speed controller	
Black (6-gauge) through onboard computer	Allows the hall-effect sensor inside the OBC to measure the amount of current passing through this wire.

Battery Warning Light Assembly

The dash-mounted battery warning light performs two functions for the vehicle's electrical system:

Warning Light: The battery warning light alerts the operator to any problems with the batteries or charging system. The battery warning light will illuminate under the following conditions:

1. Battery no-load voltage drops below 48 volts.
2. Batteries have discharged more than 75% of rated capacity.
3. AC power is interrupted during the charge cycle (DC plug is still connected).
4. Charge cycle times out at 16 hours.
5. When the DC cord is unplugged before the charge cycle is completed, the battery warning light will illuminate for 10 seconds if the charge is less than 90% complete.

LED Light: In addition to the battery warning light, there is an infrared LED in the dash light assembly, which transmits an infrared signal from the OBC. When this signal is received by the optional Communication Display Module, the CDM will display information on the condition of the vehicle and batteries. **See Communication Display Module (CDM) on page 11-42.**

Solid State Speed Control Circuit

The Solid State Speed Control Circuit performs the following functions:

1. Monitors vehicle ground speed through the motor speed sensor.
2. Regulates vehicle ground speed by using the MCOR to determine accelerator pedal position.
3. Activates the reverse buzzer when the Forward/Reverse rocker switch is in REVERSE.
4. Regulates direction of vehicle movement through the Forward/Reverse switch.