



Installation Instructions

Power Bus/Relay 6020665

This Sheet contains a general description, application and installation information for the Electrical Power Bus/Relay.

General Description and Use

The Power Bus/Relay provides a common point to supply electrical power to all Cascade electrical accessories.

The unit provides circuit protection from electrical problems and hazards, and simplifies wiring connections. Wire terminals and fuses are located inside the protective enclosure. The Power Bus/Relay uses the truck ignition key to control the high current needs of up to four(4) accessories powered from the truck battery or converter. Circuits are energized when the truck key is on and deenergized when the truck key is off.

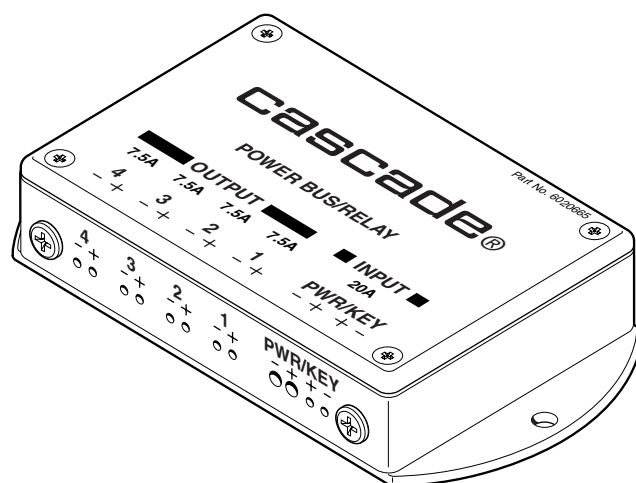
The unit includes a fused 20 Amp input circuit, four 7.5 Amp fused output circuits (20 Amps total), solid state relays, and system protecting diodes. Input and output wiring is connected to the unit using screw terminals for ease of installation. Wire runs may be cut to the proper length with no wire-end terminal required.

CAUTION: The combined maximum output amperage for the Power Bus/Relay's four output circuits must not exceed 20 Amps total.

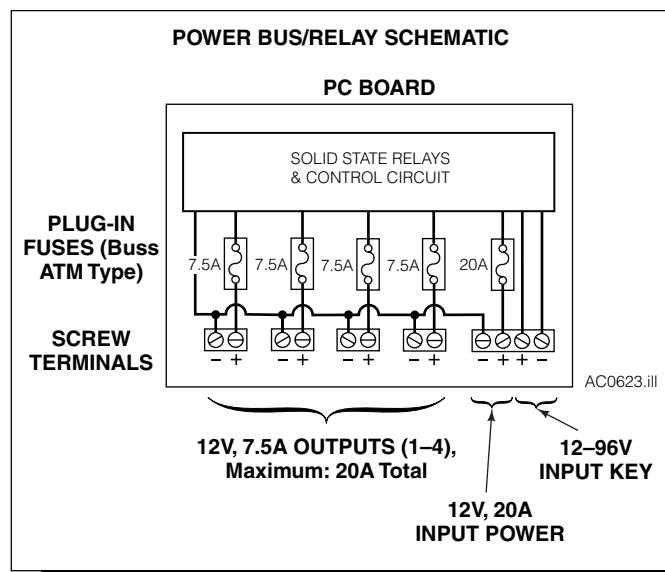
Applications

The Power Bus/Relay can be used to provide a fused, relay protected electrical supply for the following electrical accessory products:

- Adaptive Force Control (AFC)
- Electronic Rotational Control (ERC)
- Tilt Control
- Clamp Open Guard™
- Light Bar Kits
- Electronic Stop Kits
- Solenoid Adaption
- Strobe Lights
- Any other lift truck accessory requiring a 12V power source of less than 7.5A.



AC0532.iii



Part No. 6019876-R1

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Call: 1-800-CASCADE (227-2233)

OR

Write: Cascade Corporation, PO Box 20187, Portland, OR 97294-0187

To Order Parts . . .

Call: 1-888-CASCADE (227-2233)

OR

Write: Cascade Corporation, 2501 Sheridan Ave., Springfield, OH45505

Installation

1 Determine a suitable mounting location for the Power Bus/Relay where it will be easily accessible for wiring connections and changing fuses. Mount unit securely to a metal panel if possible, away from any heat sources such as engine drivetrain, exhaust manifold, etc.

2 Truck Key Circuit Wires – Route 18 AWG wires (user-supplied) from the truck key circuit to the Power Bus/Relay INPUT KEY.

3 Power Wires – Route 12 AWG power wiring (user-supplied) from the truck battery or converter to the Power Bus/Relay INPUT PWR as shown. **NOTE:** On electric trucks, the 12 AWG ground wire must come from a suitable capacity DC-to-DC converter.

4 Accessory Wires – Route the 18 AWG wiring harness from each accessory to one of the OUTPUTS (1-4)

5 Determine the proper wire lengths and cut and strip the wire ends as shown. **IMPORTANT:** Do not strip wire more than 3/8 in. (10 mm) maximum. Tin wire end for good electrical connection, and apply silicone lubricant to wire to ease installation.

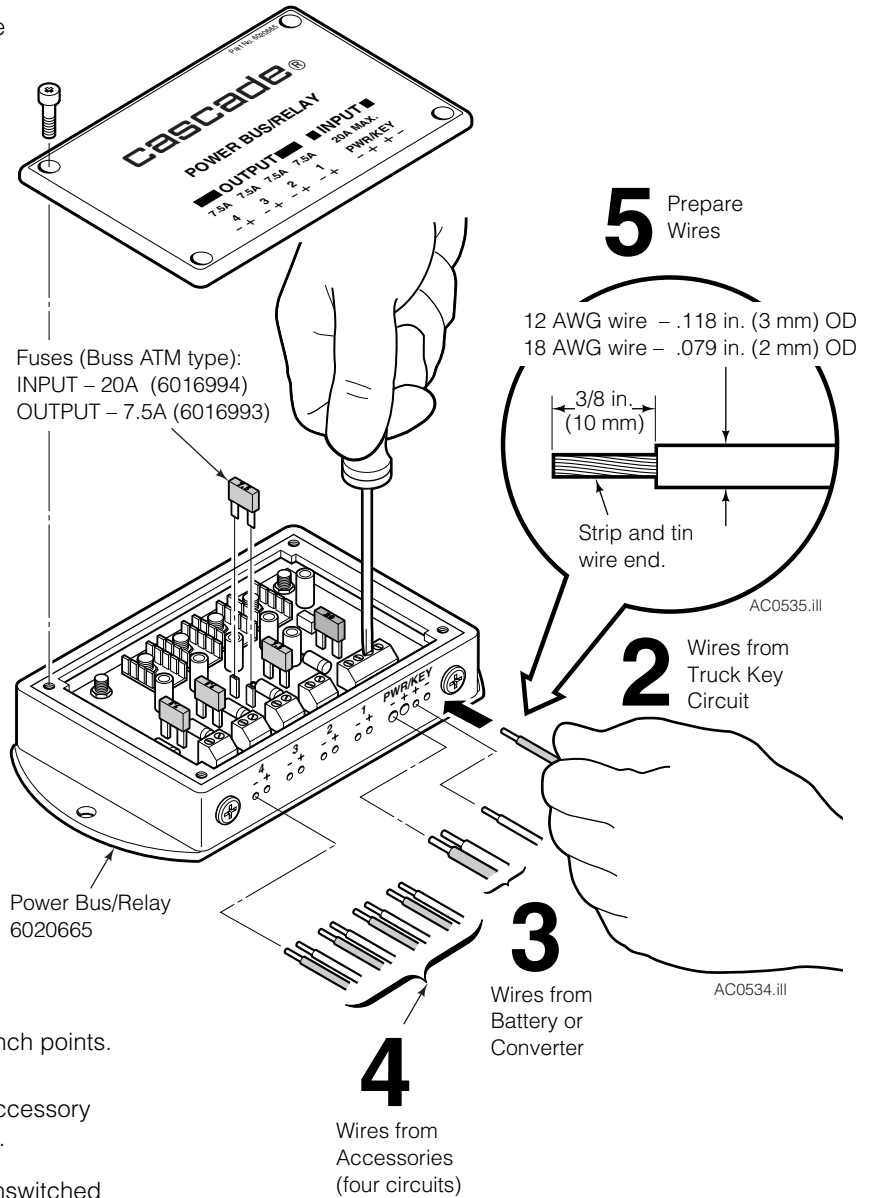
6 Push the wires through the water-resistant seal behind the hole and guide into the screw terminal. With the wire fully seated, tighten the screw securely. **IMPORTANT:** Outside diameter of the wire must be as follows for the seal to function properly:

- 12 AWG wire – .118 in. (3 mm) OD
- 18 AWG wire – .079 in. (2 mm) OD

7 Secure all wiring with cable ties or wire clamps as necessary to avoid chafing and pinch points. Cover unused holes with electrical tape.

8 Test the electrical circuits to assure correct accessory operation before returning the truck to the job.

CAUTION: On electric trucks, assure that the unswitched power source into the Power Bus/Relay, including ground, comes from a suitable capacity DC-to-DC converter. **Do not use the truck chassis as ground.**



Electrical Hookup

The Power Bus/Relay must be connected to a 12V battery, or a DC-to-DC converter supplying 12V. The truck key input will accept any truck voltage.

