



# Installation Instructions

**DC-to-DC Converter**  
**6009393 – 24/36V to 12V**  
**6007579 – 48/60V to 12V**  
**6009394 – 72/80/96V to 12V**

This Sheet contains a general description, installation and application information for DC-to-DC Converters for electric powered lift trucks.

## General Description and Use

A DC-to-DC converter is required on electric trucks to step down the truck's motive power source to provide a low voltage, 12-Volt power source for Cascade electrical accessories. It is recommended that the Cascade Power Bus/Relay be used in conjunction with the DC-to-DC converter. Good practice is to connect the Power Bus/Relay so that the circuit(s) are energized when the truck key is on and deenergized when the key is off.

The Converter is a solid state unit with internal overvoltage and thermal overload protection, and a fused output.

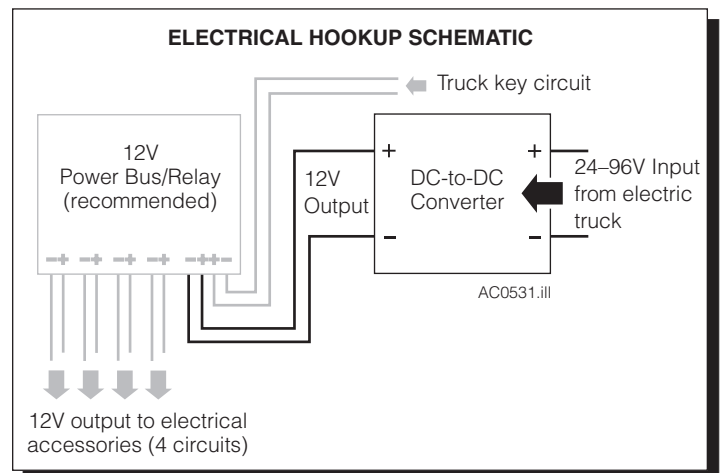
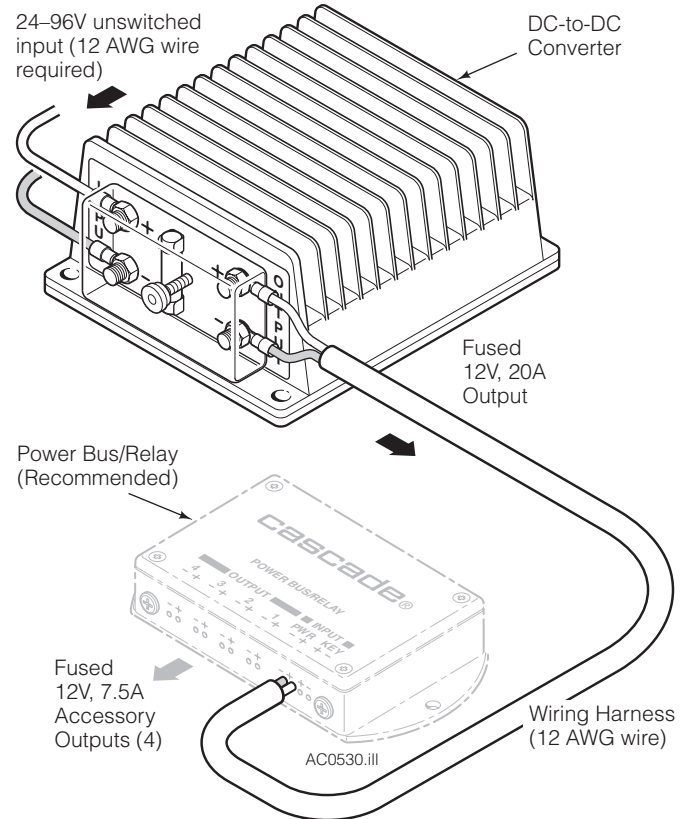
## Installation

- 1 Determine a suitable mounting location for the DC-to-DC Converter where it will be accessible for wiring connections and changing fuses. Mount the unit using sheet metal screws to a metal surface for maximum heat transfer and dissipation.
- 2 Use the 12 AWG output wiring harness provided to connect the Converter to electrical accessories, or the Power Bus/Relay (recommended). **NOTE:** See Installation Instructions 6019876 to install the Power Bus/Relay.
- 3 Test the electrical circuits to assure correct accessory operation before operating the truck.

## Applications

Use the DC-to-DC Converter on electric trucks to provide 12-Volt power to the following electrical accessory products:

- Adaptive Force Control (AFC)
- Force Control 250
- Electronic Rotational Control (ERC)
- Tilt Control
- Clamp Open Guard™
- Light Bar Kits
- Electronic Stop Groups
- Solenoid Adaption



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### For Technical Support . . .

Call: 1-800-227-2233 Fax: 1-888-329-8207  
Internet: [www.cascorp.com](http://www.cascorp.com)  
Write: Cascade Corporation, PO Box 20187, Portland, OR 97294

### To Order Parts . . .

Call: 1-888-227-2233 Fax: 1-888-329-0234  
Internet: [www.cascorp.com](http://www.cascorp.com)  
Write: Cascade Corporation, 2501 Sheridan Ave., Springfield, OH 45505