

## Cable Safety Guidelines

In addition to the power cable, the IV7 requires serial and antenna cables to connect it to your vehicle-mounted RFID system. As you install the cables, follow these safety guidelines:

- Make sure that the cable routing does not interfere with other equipment or vehicle controls.
- Keep cables as short as practical and route all cables to minimize exposure to damage.
- Make sure the cables will not be pinched or rubbed by moving parts on the vehicle. You may need to sheath the cable to prevent it from being pinched.
- Secure the cables every 15 cm (6 in) throughout the length of the cable run. Use the included cable ties and cable tie clips, or use other hardware appropriate for the installation.
- Use a snap-in bushing if the cables pass through a firewall or other sheet metal.



**Note:** Most vehicle manufacturers offer pulley kits for installation of wiring with risers. Intermec recommends using these manufacturer-specific kits with any installation of the IV7 on a forklift back rest assembly.



**Worldwide Headquarters**  
6001 36th Avenue West  
Everett, Washington 98203  
U.S.A.

**tel** 425.348.2600

**fax** 425.355.9551

www.intermec.com

© 2006 Intermec Technologies Corporation. All rights reserved.

IV7 Vehicle-Mount Reader DC Power Cable Kit Instructions



P/N 943-068-001



## Instructions

### IV7 Vehicle-Mount Reader DC Power Cable Kit

Use this cable to connect the IV7 Vehicle-Mount Reader to a DC power source such as a vehicle electrical supply. These instructions explain how to assemble the power cable and include guidelines for installing the cable on the vehicle.



**Note:** These instructions are intended for authorized Intermec personnel only.

This kit includes these items:

- Power cable, 12 ft (P/N 236-099-001, or 236-087-001 with right-angle connector)
- Fuse holder (P/N 315-075-003)
- Fuse, 20A/250V (P/N 315-074-003)
- Heatshrink tubing, 1/8-in x 6 in (P/N 321-649-003)
- Heatshrink tubing, 3/8-in x 6 in (P/N 321-649-006)
- Three terminal lugs (P/N 809-083-027)
- Twelve cable ties (P/N 808-002-000)
- Twelve cable clips (P/N 808-011-001)



Warning

**Before installing this equipment, contact the vehicle manufacturer to correctly identify the appropriate power connections for this equipment.**



Caution

**Electrical line filters may be required for reliable operation of the IV7.**

## Before You Begin

Before you assemble the power cable, you need to:

- Choose an appropriate mounting location for the IV7 on the vehicle. For more information, see the *IV7 Vehicle-Mount Reader Instructions* (P/N 075280-xxx). The instructions are included in the IV7 documentation packet.
- Determine where to connect the cable to the vehicle electrical supply. The IV7 requires 6-60 VDC at up to 4.5A for operation.

## Required Tools

To assemble the power cable, you need these tools:

- Wire cutters and stripper
- Crimping tool
- Heat gun

## Assembling the Power Cable

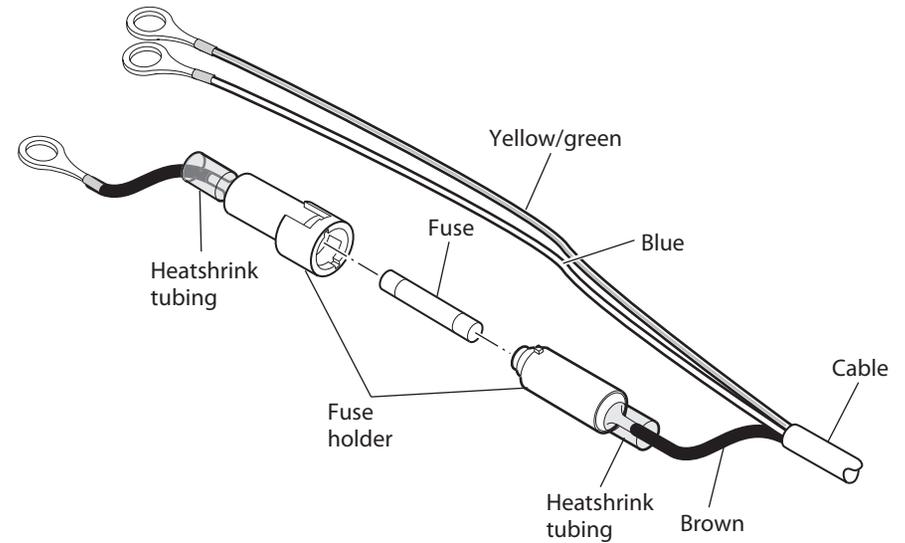
Once you have determined where to connect the power cable to the vehicle power supply, you can begin assembling the cable.

### To assemble the cable

- 1 Strip the sheath from the unterminated end of the cable as needed. If necessary, be sure to leave enough room for strain relief.
- 2 Install the fuse holder and fuse on the brown wire. Be sure to use 3/8-in heatshrink tubing on the crimp sockets. See the next illustration for details.
- 3 Slide 1/8-in heatshrink tubing onto the ends of the brown, blue, and yellow/green wires and install terminal lugs on each wire. Cover the crimped ends with the heatshrink tubing.



**Note:** Depending on your installation, you may need to use different terminal lugs (not supplied).



**Fuse Holder Installation:** This illustration shows where to install the fuse holder.

## Installing the Power Cable

After you assemble the power cable, install it on the vehicle as described in the *IV7 Vehicle-Mount Reader Instructions*.

Connect the cable to the vehicle electrical system as follows:

### Power Cable Connections

Color	Connect to
Brown	+VDC
Blue	-VDC
Yellow/Green	Ground



**Note:** The yellow/green wire in the power cable is electrically attached to the IV7 chassis ground. This line is isolated from the battery high and battery low inputs to the IV7. The line is intended to be a redundant electrical connection to the vehicle chassis, providing a return path for current if a fault is present and the battery input is inadvertently shorted to the case. If this line is not connected to the vehicle frame, the IV7 case may float to elevated voltages during fault conditions.