

**Vehicle Dock Kit** 

Intermec Technologies Corporation Worldwide Headquarters 6001 36th Ave.W. Everett, WA 98203 U.S.A.

#### www.intermec.com

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**Document Change Record**This page records changes to this document. This document was originally released as Revision A.

Revision Letter	Date	Description of Change
С	03/2007	Added pin-out information for the 3-pin notched DC power connector. Rewrote instructions to address multiple mobile computers.

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## **Installation Guidelines**

These instructions detail tasks for various installation options.

Your tasks include:

- Route and install the gray battery power cable to the vehicle battery terminals
- Install an in-line fuse holder
- Install the mounting hardware and vehicle dock
- Connect the black dock power cable to the vehicle dock and the battery power cable. Depending on your installation, this may simply involve connecting the keyed connector, or it may involve cutting the connector off and wiring directly to the fuse block.

#### **Installation Tools Required**

- Wire crimping and stripping tool
- An electric drill, #26 drill bit
- Common hand tools set of standard wrenches, flat blade screwdriver, Phillips screwdriver, wire cutter, utility knife, and small punch.

## **Vehicle Electrical Considerations**

Your vehicle's electrical system must be in good working condition.

#### Power Cables for Vehicle Battery Kit P/N 203-344-001

Description	Part Number	
Dock power cable (black)	236-105-001	
Battery cable (gray)	236-106-005	

### Power Cables for Vehicle Battery Kit P/N 203-344-002

Description	Part Number	
Dock power cable (black)	206-875-009	
Battery cable (gray)	226-325-002	

## **Installing the Vehicle Battery Power Cable**

Use cable clamps or wire-ties at least every 46 cm (18 in) when installing cables on a vehicle. This eliminates loose or sagging cables, guards against breakage and ensures that they do not pose a hazard to the vehicle operator or to other workers.

These instructions detail how to route the cable, install the in-line fuse, and make the battery connection onto a side terminal post or top terminal post type battery.

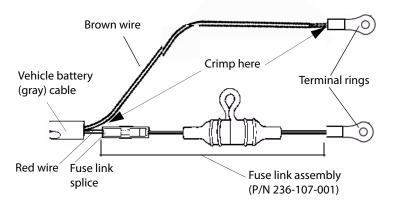
Decide the mounting location for the vehicle dock and the cables. When you are certain your arrangement works and that cables will reach from the batteries to the power converter to the dock, proceed with these steps.



**Note**: Completely install the vehicle battery (gray) cable that connects to the vehicle battery before connecting the vehicle dock power (black) cable.

#### To install the gray vehicle battery power cable

- 1 Route the gray battery power cable (P/N 236-106-00X) from the vehicle dock toward the vehicle battery area.
- **2** Cut the gray battery power cable near the battery allowing enough length to reach the battery terminals.
- **3** Strip the battery power cable jacket back 31-36 cm (12-14 in).
- **4** Shorten the red wire of the gray battery power cable if desired.
- **5** Strip 6.4 mm (0.25 in) of insulation from the red wire of the gray battery power cable.
- **6** Locate the fuse link assembly (P/N 236-107-001).
- **7** Securely crimp the fuse link splice onto the red wire.
- **8** Strip approximately 6.4 mm (0.25 in) of insulation from the brown wire on the power cable.
- **9** Crimp the 3/8" terminal ring onto this wire.



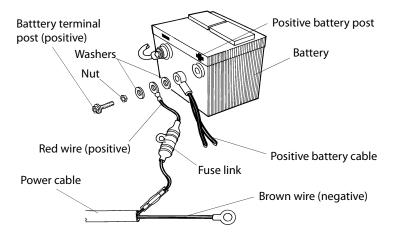
## **Connecting to the Side Battery Terminal**



It is very important to make sure that you make the correct cable to battery connections, because electrical energy from vehicle batteries can harm equipment and people.

- Remove both battery terminal side post bolts from the vehicle battery.
- 2 Screw a 3/8" nut as far as it will go onto a 3/8" x 1 1/2" post furnished in kit.
- Slip a 3/8" washer onto the battery terminal post.
- Slide the positive (red wire) fuse link terminal ring from the battery cable onto the positive (+) battery terminal post.
- Slip a second 3/8" washer onto the battery terminal post.
- Slide the vehicle positive battery cable onto the battery terminal post.
- Thread the post assembly (Steps 2-6) into the positive battery terminal. Tighten the battery terminal post securely.
- Tighten the nut installed in Step 2 to secure washers and cables firmly in place.

Repeat Steps 2 through 8 for the negative (brown) wire from the battery cable, hooking up the negative cables to the negative (-) battery terminal.



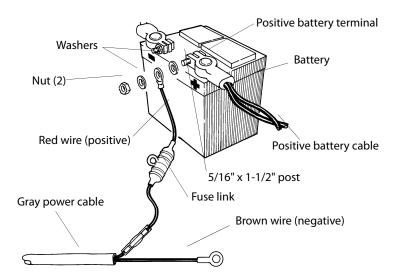
## **Connecting to the Top Battery Terminal**



Because electrical energy from vehicle batteries can harm equipment and people, it is very important to make sure that you make the correct cable to battery connections.

- 1 Remove the battery clamp posts from the vehicle battery terminals.
- Replace the battery clamp posts removed in Step 1 with 5/16"
  x 1-1/2" posts and nut furnished in the installation kit.
  Tighten nut securely.
- 3 Slip a 3/8" washer onto the extended end of each battery clamp bolt.
- **4** Slide the positive (red wire) fuse link terminal ring from the battery cable onto the positive (+) battery clamp bolt.
- **5** Slip a second 3/8" washer onto the battery clamp bolt.
- **6** Thread a second 3/8" nut onto the battery clamp bolt.
- 7 Tighten the nut.

Repeat Steps 3 through 6 for the negative (brown) wire from the battery cable, connecting the wire to the negative (-) battery terminal.



## **Fastening the Ground Strap**

The white connector on the battery power cable has a braided green wire grounding strap that you must fasten to the vehicle's sheet metal to ensure proper cable shielding.

### To fasten this ground strap

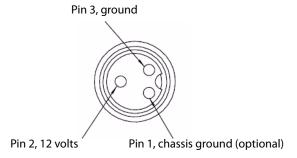
- 1 Drill a small hole into the metal where you intend to fasten the ground strap.
- **2** Use a punch to dimple and enlarge the hole. Make sure the hole is the same size as the screw.
- **3** Scrape a small circle of paint from around the hole. Make sure to expose bare metal to make a good electrical connection.
- **4** Use a #8 x 5/8" screw and flat washer to secure the green grounding strap.

## Verifying the Dock Power Cable Polarity



Use this illustration to verify that you have installed your vehicle dock power cables correctly.

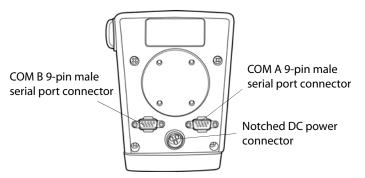
Below are the pin descriptions for the notched DC power connector on the dock power cable. Use a volt meter to verify whether +12 volts is on pin 2 before you make the final cable connection.



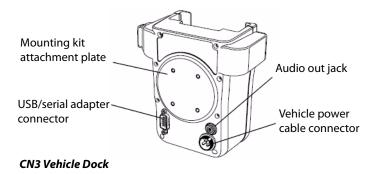
Vehicle Dock Power Cable 3-Pin Male Power Connector

## **Performing the Final Connections**

- 1 Connect the keyed rectangular connector end of the dock power cable P/N 236-105-001 to the previously installed gray battery cable.
- **2** Attach the circular notched DC power connector of the dock power cable to the installed vehicle dock.



#### 700 Color Vehicle Dock





**Note:** See your Intermec representative for information about docks that support other mobile computers not mentioned on this page, such as the CK61 or CN2.

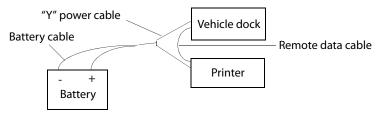
## **Installing an Optional Printer**

If you are adding a printer to your system, you need the power cables to connect the printer and vehicle dock to the vehicle battery. You must place a separate order for a remote terminal cable:

• DB 9-pin to DB 25-pin cable (P/N 226-084-002)

This cable allows you to locate the printer and the vehicle dock up to 1.83 m (6 ft) apart.

For installation in a system that includes a printer refer the following wiring diagram.



#### Cables for Vehicle Dock, Printer, and Vehicle Battery

Description	Part Number	Quantity
"Y" power cable	226-325-101	1
Battery cable (gray)	236-106-005	1

## **Installing the Vehicle Dock and Printer**

- **1** Install a printer-specific "Y" power cable to supply power to both the vehicle dock and to the printer.
- **2** Connect one end of this cable to the printer and the other end to the vehicle dock.
- **3** Connect the keyed rectangular connector on the printer-specific gray battery cable to the "Y" power cable.

You must also connect the printer-specific data cable between the vehicle dock and the printer. This cable allows the mobile computer to communicate with the printer. Plug the appropriate end of this cable into the vehicle dock and the other end into the printer.

# Installing the Vehicle Dock With Other Equipment

Have your installation team do your installation. They are experienced with a wide variety of installations. For example, you could be installing the vehicle dock with an additional in cab radio or satellite tracking device. You would need to modify the black dock cable to connect into a vehicle fuse block that the installation team would install.

#### To modify the black dock cable to connect into a vehicle fuse block

Switch to using the fuse block cable P/N 226-109-003, or

Cut off the white connector from the end of the dock power cable and wire it directly to the fuse block.



Note the difference in polarity between these two cables.

### Wiring for Fuse Block Cable and Dock Power Cable

Cable	White Wire	Black Wire
Dock power (black) P/N 236-105-001	Negative	Positive
Fuse block (gray) P/N 226-109-003	Positive	Negative

## **Jump-Starting Your Vehicle**



Failure to follow these instructions may result in damage to your mobile computer equipment.

Always disconnect the power cables from the dock and printer before attempting to jump-start your vehicle.



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

**tel** 425.348.2600 **fax** 425.355.9551 www.intermec.com

Vehicle Dock Kit Installation Instructions



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