Installation Instructions

IEEE 1284 Parallel Interface Kit

(for EasyCoder PF2i, PF4i, PF4i Compact Industrial, and PM4i)

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Introduction

This Installation Instructions booklet describes how to install an IEEE 1284 Parallel interface board in an EasyCoder PF2i, PF4i, PF4i Compact Industrial, or PM4i printer.

The installation instructions describes how to physically install the interface board in a printer and how to configure the two serial communication ports.

This interface kit must only be physically installed by an authorized service technician. Intermec assumes no responsibility for personal injury or damage to the equipment if the installation in performed by an unauthorized person.

Take precautions against electrostatic discharges, for example by wearing grounded bracelets.

Printer Firmware

The printer must be fitted with Intermec Fingerprint v8.00 (or later) or IPL v2.00 (or later). In Intermec Fingerprint, the parallel port is addressed as "centronics:" (communication channel #4).

Installation Kit

The IEEE 1284 Parallel Interface Kit contains:

- One IEEE 1284 parallel interface board.
- One hexagonal spacer (only used for two interface boards on a PM4i)
- Two flat cables
- One Installation Instruction booklet

The only tools required for the installation are #T10 and #T20 Torx screwdrivers plus a small wrench.

1 Physical Installation

This chapter describes how to physically install the IEEE 1284 parallel interface kit in a PF2/4i- or PM4i-series printer.

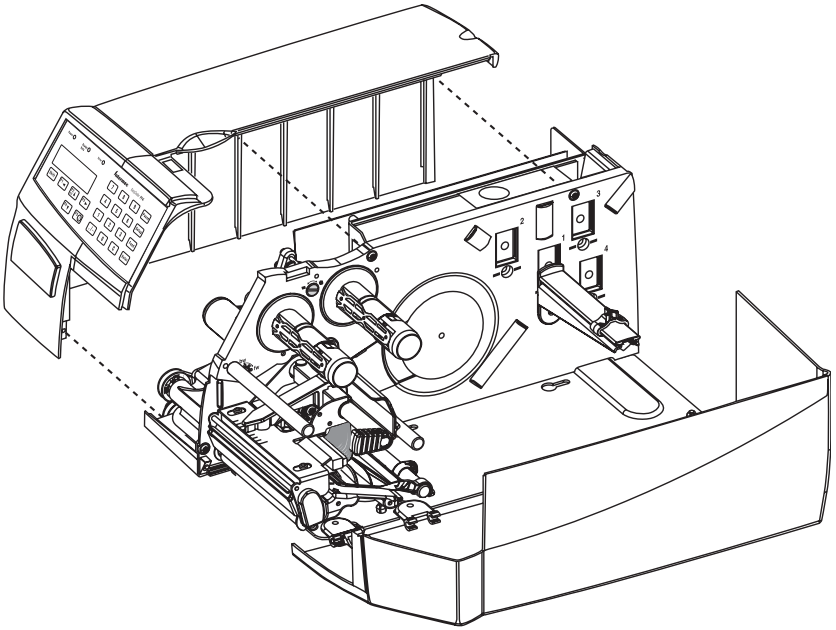
EasyCoder PF2/4i Printers

- Switch off the printer and disconnect the power cord.
- Disconnect all communication cables.
- Remove the front/left-hand cover as follows.

Warning

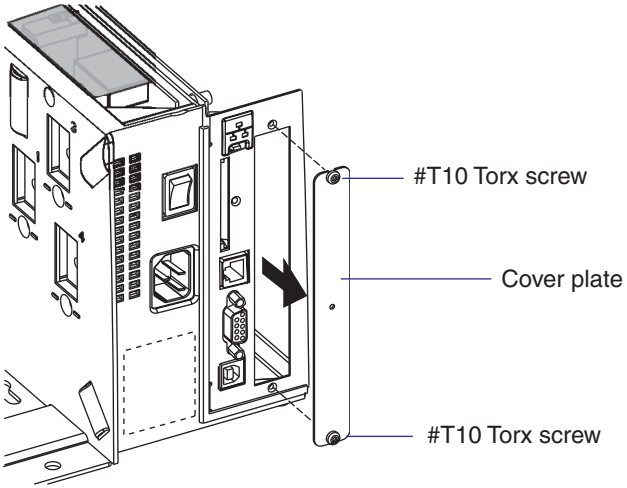
The electronic compartment contains wires and components with dangerous voltage (up to 380V). Make sure that the printer is switched off and the power cord is disconnected before the left-hand cover is removed.

- Open the right-hand door.
- Using a #T20 Torx screwdriver, remove the three screws and lift the cover up so it disengages the bottom plate.



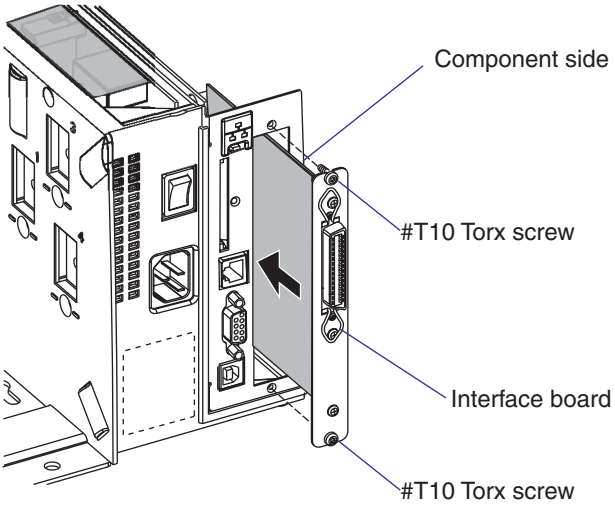
- Swing out the rear part of the cover so you can disconnect the console cable from the CPU board.
- Put the cover aside on a soft cloth or similar to avoid scratches.

- Remove the two #T10 Torx screws that hold the interface cover plate. Remove the cover plate.

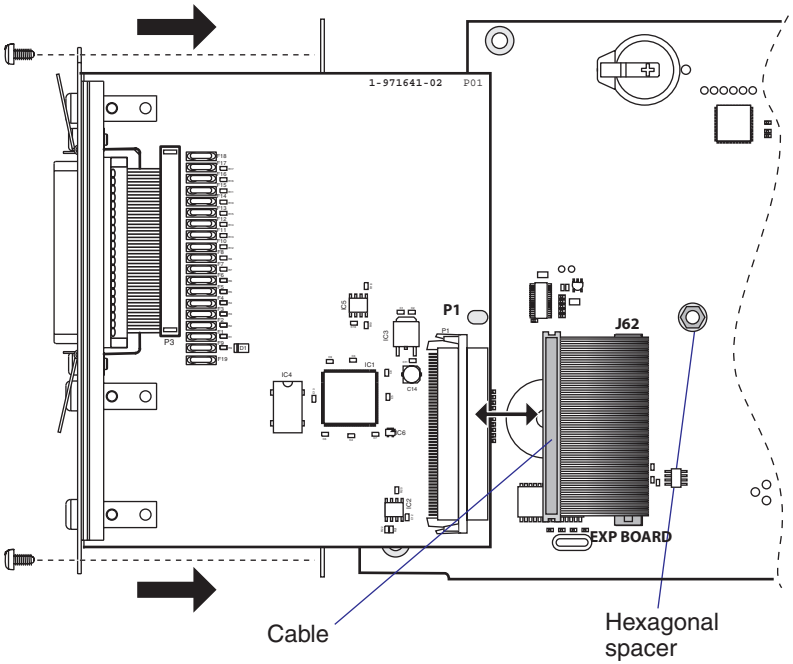


- Save the cover plate for possible later use. Keep the screws.
- Remove the #T20 Torx screw fitted on the hexagonal spacer at the center of the CPU board. Keep the screw.
- Attach the flat cable included in the kit to connector J62 (marked "EXP BOARD") on the CPU board (see page 5).

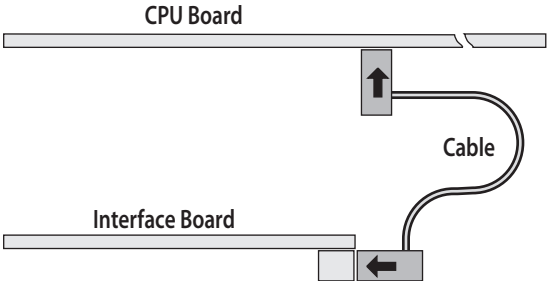
- Insert the interface board with the component side facing right, as seen from behind.



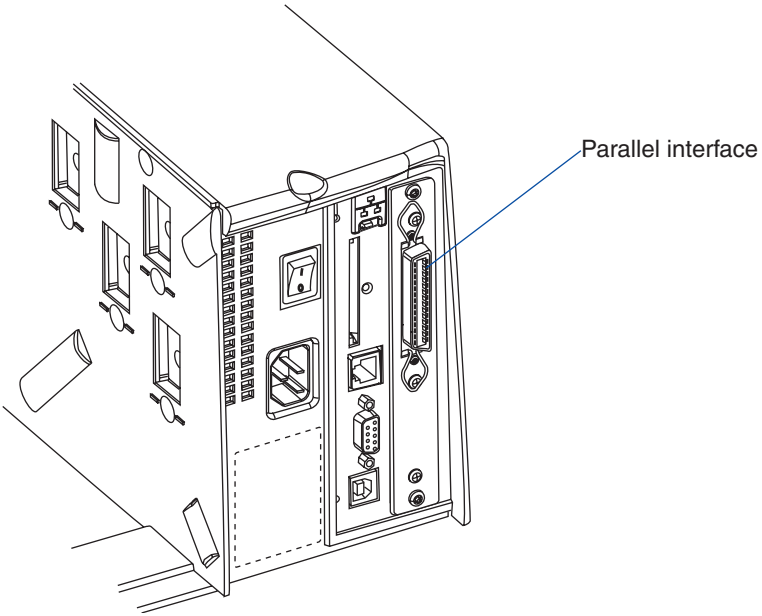
- Attach the interface board to the printer's rear plate using the two screws left over when you removed the original cover plate.
- Using the #T20 Torx screw you previously removed, attach the interface board to the hexagonal spacer you fitted on the CPU board.
- The kit contains two flat cables. Connect the flat cable with two connectors to P1 on the interface board, see the next page.



- The flat cable should run as illustrated below.



- Connect the console cable to J50 on the CPU board and put back the cover over the electronics compartment. Take care so the console cable runs above the ribbon motor (if any) and does not become entangled in the headlift mechanism.
- Connect the communication cables to the connectors on the printer's rear plate.
- Connect the power cord and switch on the power.

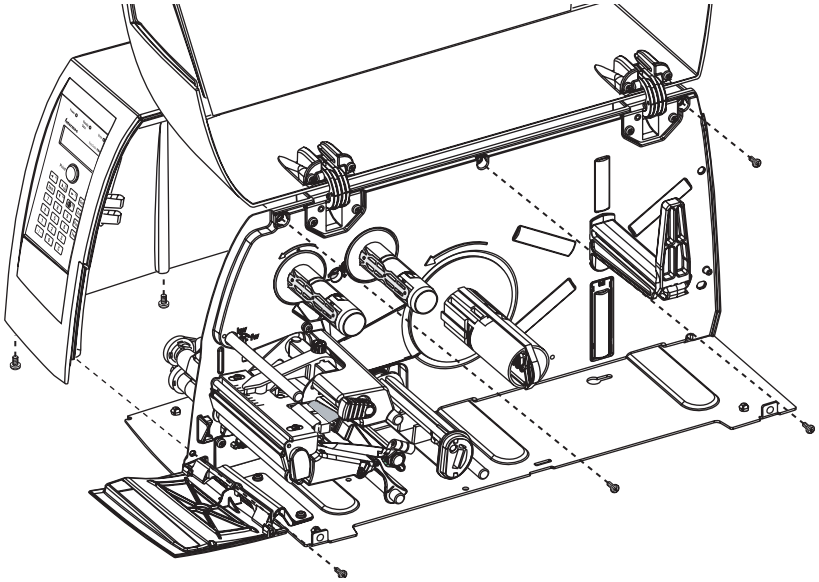


EasyCoder PM4i Printers

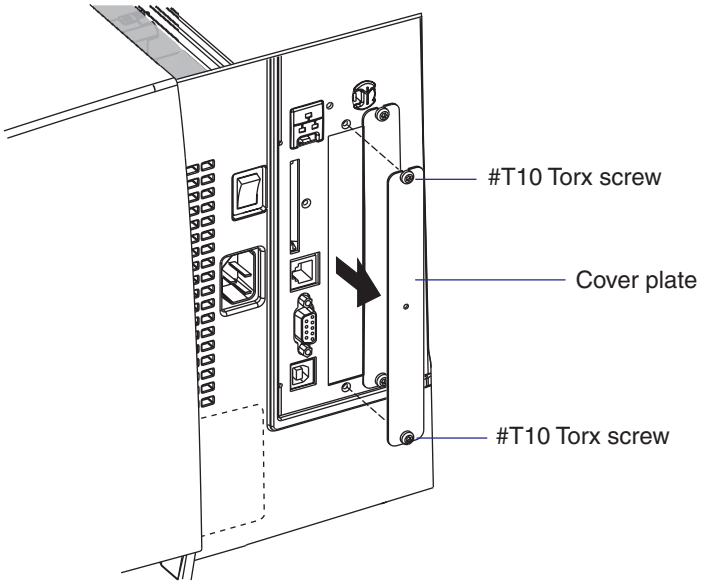
- Switch off the printer and disconnect the power cord.
- Disconnect all communication cables.
- Turn the printer over so it rests on its left-hand cover. Use a soft cloth or similar to avoid scratches.
- Open the right-hand door.
- Using a #T20 Torx screwdriver, remove the four screws that hold the cover along the lower left edge of the bottom plate and the four screws that hold the cover to the center section.
- Put the printer back on its feet and remove the cover while disconnecting the console cable from the CPU board.

The electronic compartment contains wires and components with dangerous voltage (up to 380V). Make sure that the printer is switched off and the power cord is disconnected before the cover is removed.

- Put the cover aside taking care to avoid scratches.

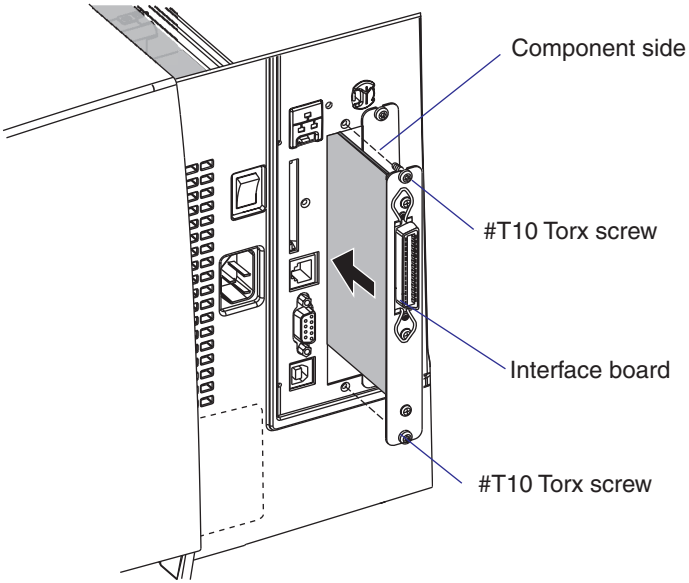


- Remove the two #T10 Torx screws that hold the inner interface cover plate. Remove the cover plate.

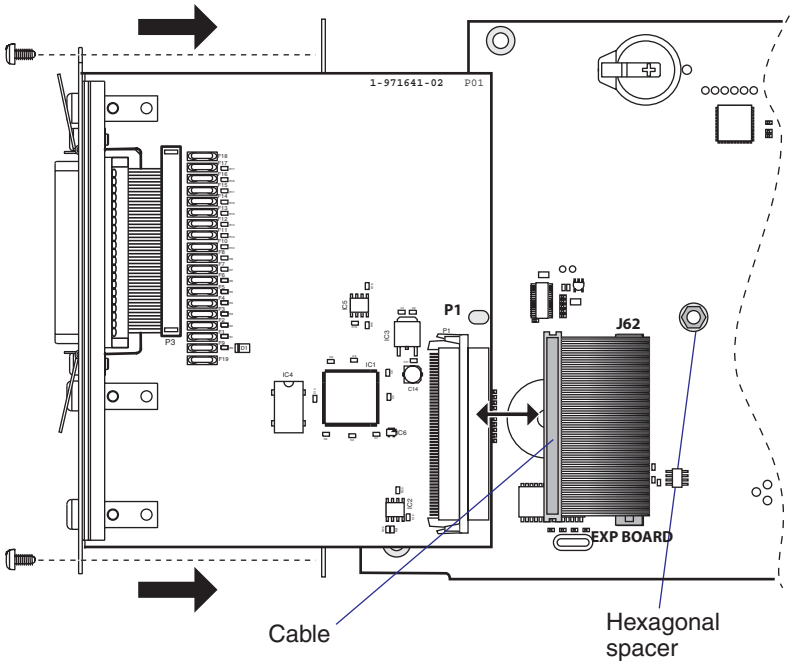


- Save the cover plate for possible later use. Keep the screws.
- Remove the #T20 Torx screw fitted on the hexagonal spacer at the center of the CPU board. Keep the screw.
- Attach the flat cable included in the kit to connector J62 (marked "EXP BOARD") on the CPU board (see illustration on page 10).

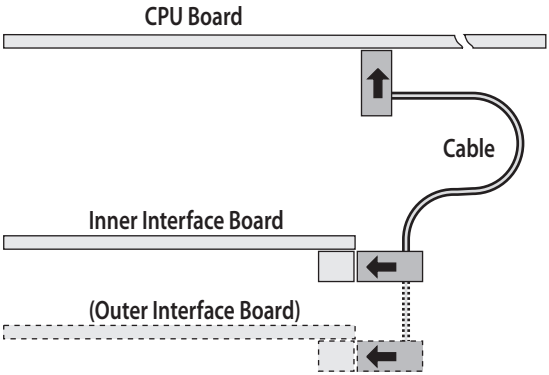
- Insert the interface board with the component side facing right, as seen from behind.



- Attach the interface board to the printer's rear plate using the two screws left over when you removed the original cover plate.
- Using the #T20 Torx screw you previously removed, attach the interface board to the hexagonal spacer you fitted on the CPU board.
- The kit contains two flat cables, one with two connectors for use with a single interface board and one with three connectors for use with double interface boards. Connect the appropriate flat cable to connector P1 on the interface board, also see the next page.

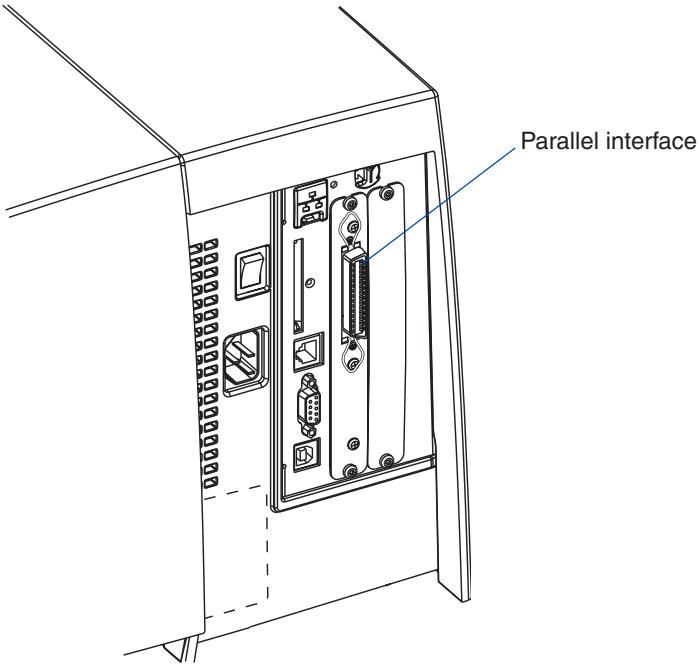


- The flat cable should run as illustrated below.



- Put back the cover over the electronics compartment.

- Connect the console cable to J50 on the CPU board and put back the cover over the electronics compartment. Take care so the console cable runs above the ribbon motor and does not become entangled in the headlift mechanism.
- Connect the power cord and switch on the power.



Double Interface Boards

If you need to install two interface boards, first install the inner board, then the outer one using the same flat cable from one of the kits. Put the hexagonal spacer included in the kit between the inner and the outer interface board. The list below shows which combinations are allowed and how the ports will be designated in Fingerprint.

Allowed interface combinations (Fingerprint only)

Left-hand slot	Ports	Right-hand slot	Ports
Double Serial	uart2: + uart3:	–	–
Double Serial	uart2: + uart3:	**IEEE 1284**	**centronics:**
Serial/Industrial	uart2:	–	–
Serial/Industrial	uart2:	Serial/Industrial	uart3:
Serial/Industrial	uart2:	**IEEE 1284**	**centronics:**
IEEE 1284	**centronics:**	–	–
IEEE 1284	**centronics:**	Double Serial	uart2: + uart3:
IEEE 1284	centronics:	Serial/Industrial	uart2:

Remarks:

- The left-hand slot is the slot closest to the center section.
- Always start by fitting an interface board in the left-hand slot.
- RS-485 is only supported by "uart2:"
- IPL does not support double interface boards. Always install the IEEE 1284 parallel interface board in the innermost slot.

2 Parallel Interface

This chapter describes the signals on the connector of the IEEE 1284 interface board.

Note: Nibble, byte, ECP, and EPP modes from printer to host are presently not supported.

Connector Configuration

The IEEE 1284 board has a standard 36pin IEEE 1284 B socket with the following configuration:

Pin	Signal	Remark
1	DSTROBE	
2	DATA 0	
3	DATA 1	
4	DATA 2	
5	DATA 3	
6	DATA 4	
7	DATA 5	
8	DATA 6	
9	DATA 7	
10	ACK	
11	BUSY	
12	PE	
13	SELECT	
14	AF	
15	N/C	Not connected
16	GND	
17	SCREEN	
18	·	External +5VDC max 500 mA (automatic switch-off at overload, short-circuit protected)
19-30	GND	
31	INIT	
32	ERROR	
33-35	N/C	Not connected
36	SELECTIN	

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