Accessory Setup & Installation Guide

Controller to Controller Linking Cable Kit (75-80)

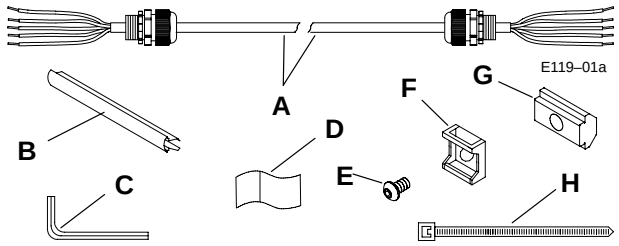
The Controller to Controller Linking Cable Kit is a pre-configured cabling package that enable the ***impac*** Conveyor Controller to be interconnected to another ***impac*** Conveyor Controller or a PLC/PC/Process Machine for coordinated control.

The kit includes instructions, a 30 ft (9 m) Cable (consisting of five color-coded #18 AWG wires), 1/2 NPT Cord Grip assemblies, Tools and Metric Mounting Hardware to aid in the installation and inter-connection with a Dorner ***impac*** Conveyor Controller.

Additional Tools Needed for Installation

- Small flat-bladed screwdriver
- Adjustable wrench
- Permanent marking pen
- Electrical tape

Covered under patent numbers 156,260 & 174,435 and corresponding patents and patent applications in other countries.



E119–01b

Item	Qty.	Description
A	1	Cord & Cord Grip Assembly (677733)
B	5	T-slot Cover Strip (675232)
C	1	4 mm Hex Key Wrench (807-564)
D	2	Label (823-107)
E	5	M6 x 10 mm Button Head Screw (910610M)
F	5	Zip Tie Mount (805-608)
G	5	Single Drop-In T-bars (639971M)
H	5	Zip Tie (805-063)

Figure 1: Linking Cable Kit Components (75-80)

Figure 2: Linking Cable Kit (75-80)

Controller to Controller Linking Cable Installation/Testing/Operation

WARNING

Disconnect power to the Conveyor and to the *impac* Conveyor Controller. Due to the wide variety of setups & applications, guarding is the responsibility of the end user.

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1. **Verify all kit parts are present.**
2. **Route the Linking cable from the first *impac* Conveyor Controller to the second *impac* Conveyor Controller (or PLC/PC/Process Controller) as follows:**
   a. Cable routing should not run near any moving conveyor parts, where it could possibly be damaged or cause damage to the conveyor.
   b. The conveyor T-slots or optional 6 ft (1829 mm) or 12.5-ft (3810 mm) Wire Troughs (Dorner #75-85-6 or #75-85-12) can be used to route wiring cable. For additional Wire Trough information, refer to separate Setup & Installation Guide (not provided).
   c. To contain a long run of wiring cable in the conveyor T-slot channel, use several short lengths of T-slot Cover Strips (B) (Figure 3). Or, to completely contain a long run of cable, purchase T-slot Cover Strip (645656P) at length required.

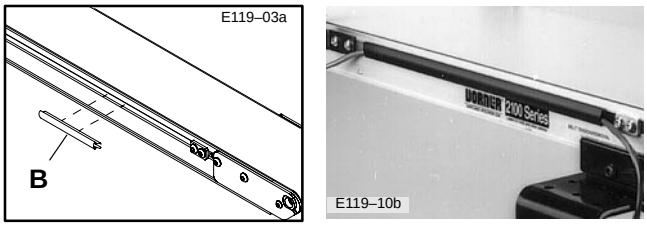

Figure 3: T-slot Cover Strip Mounting Detail

   d. To route Cable over a previously mounted component or to anchor Cable, use Zip Tie Mounts (F) and Single Drop-in T-bars (G), (Figure 4). Secure each Zip Tie Mount (F) with an M6 x 10 mm Button Head Cap Screw (E). Tighten the Screws with the 4 mm Hex Key Wrench (C) provided.

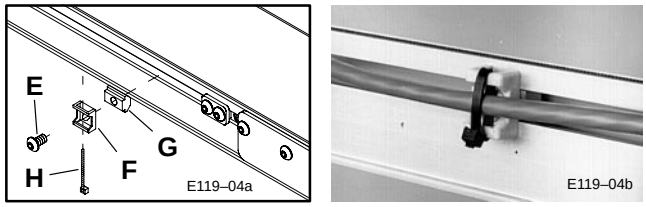

Figure 4: Zip Tie Mounting Detail

   e. Figure 5 shows a typical wire routing of two ***impac*** Conveyor Controllers using the conveyor's T-slot with both T-slot Cover Strips and Zip Ties (H).
3. **Install the Linking Cable into an *impac* Conveyor Controller.**
   a. Using a flat-bladed screwdriver, remove the knock-out plug from bottom of ***impac*** controller.
   b. Remove the Locknut (Figure 6), from the Cord Grip, and insert the Cord Grip through the hole at the bottom of the controller cabinet. Attach and tighten the Locknut with an adjustable wrench.
   c. Extra Cable should be neatly and securely coiled up behind the ***impac*** Conveyor Controller cabinet. Mount a Zip Tie Mount to one of the tapped holes on the mounting brackets on the rear of the ***impac*** Conveyor Controller. Then, use a Wire Tie to anchor the extra Cable to the Zip Tie Mount.
4. **Label both ends of the Controller to Controller Linking Cable using blank Labels (D) provided and marked with a permanent marking pen.**
   The Label should be wrapped around the Cable inside the point where the Cable enters each ***impac*** Conveyor Controller. When multiple Kits are used, make sure Labels for each Kit are unique (i.e., K1, K2, ...).

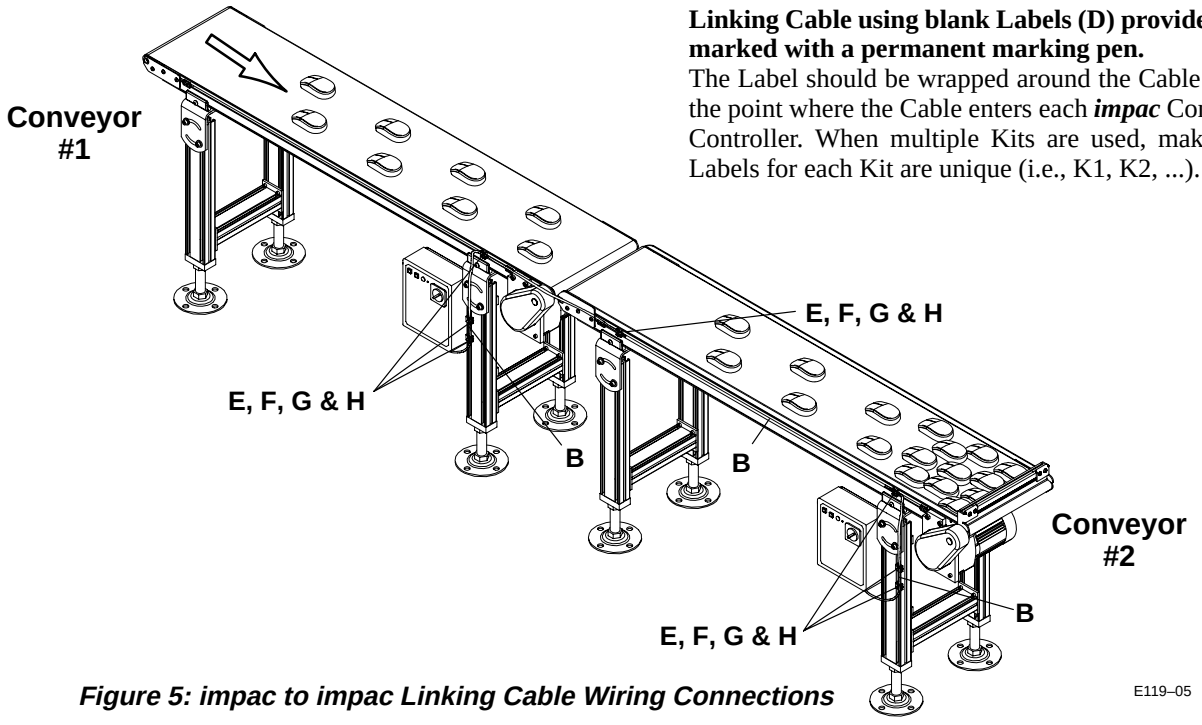

Figure 5: impac to impac Linking Cable Wiring Connections

NOTE:

The following connections are for a sample application that requires Conveyor #1 to follow the operation of Conveyor #2. When #2 runs, #1 is allowed to run. When #2 stops, #1 must stop. **Refer to the *impac* Application Guide for details on other application designs and wiring connections.**

In addition, when inserting a wire into a Terminal Block termination, be sure to tightly anchor the wire by tightening the screw and double-check that wire has been fully secured by giving it a light tug.

5. **Wire the Linking Cable to the *impac* Conveyor Controller Terminal Block (Figure 6).**
   Use the flat-bladed screwdriver furnished with the ***impac*** Conveyor Controller kit. As necessary, use the wiring diagram shown in the ***impac*** Application Guide for your particular application.

For Conveyor #2 *impac* Conveyor Controller Terminal Block:

a. Insert wire #3 (Green) into the terminal MR1.

b. Insert wire #4 (Brown) into the terminal MR2.

c. Wires #2 (Black), #1 (Red) and #5 (White) should be individually taped-off since they are not used in this application.

For Conveyor #1 *impac* Conveyor Controller Terminal Block:

d. Remove factory jumper from between terminals RR1 and RR2.

e. Insert wire #3 (Green) into the terminal RR1.

f. Insert wire #4 (Brown) into the terminal RR2.

g. Wires #2 (Black), #1 (Red) and #5 (White) should be individually taped-off since they are not used in this application.

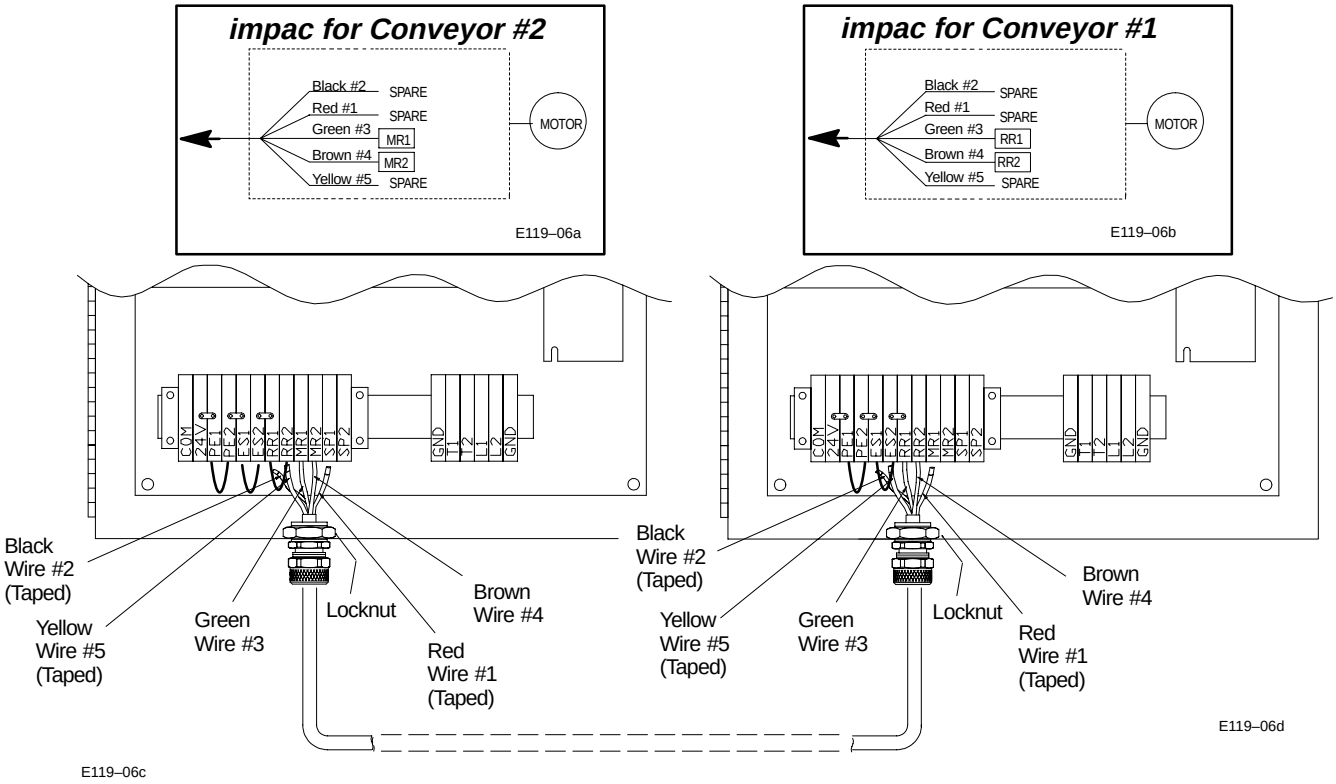

Figure 6: Sample impac to impac Wiring Linking Cable Connections

6. Test operation as follows:

a. Be sure both ***impac*** Conveyor Controller On/Off Switches are OFF and that conveyor is ready to run. Then, begin the test by re-connecting power to both ***impac*** Conveyor Controllers. Do not turn on power at this time. Keep both ***impac*** On/Off Switches OFF.

b. Operation of the conveyor may vary depending on the chosen application. Consult the ***impac*** Application Guide for your particular application.

c. The sample application of Figure 5 requires that Conveyor #1 follows operation of Conveyor #2. When #2 runs, #1 is allowed to run. When #2 stops, #1 must stop.

d. Turn the ***impac*** ON/OFF switch, for Conveyor #1 ON. Conveyor #1 should not run. Now, turn the ***impac*** ON/OFF Switch, for Conveyor #2 ON. Now, both Conveyors should run.

e. After correct operation is exhibited, normal operation processes can be continued.

Standard Available IMPAC Accessory Kits

- Standard Photo-Eye Kit, Fixed Mount (75-30)
- Standard Photo-Eye Kit, Adjustable Mount (75-31)
- Timing Photo-Eye Kit, Fixed Mount (75-32)
- Timing Photo-Eye Kit, Adjustable Mount (75-33)
- Emergency Stop Kit, Illuminated (75-40)
- Emergency Stop Kit, Non-Illuminated (75-41)
- Emergency Stop Kit, Pull Cord (75-42)
- Jog Kit (75-10)
- Foot Switch Kit (75-20)
- Start/Stop Kit (75-70)
- Electric Clutch/Brake Kit (75-60)
- Controller to Controller Linking Cable Kit (75-80)
- Wire Way Trough Kits
  6-ft (1829 mm) (75-85-6)
  12.5-ft (3810 mm) (75-85-12)
- T-slot Extension Kit (307000M)
- Light Duty End Stop Kits
  2100 Series (215502M – 215524M)
  3100 Series (315504M – 315540M)
- Adjustable Stop Kits
  (307602M – 307640M)

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