

Foot Switch Kit (75-20)

The Foot Switch Kit is a pre-packaged and pre-wired electrical signalling assembly that can be installed on a Dorner 2100 or 3100 Series Conveyor.

This Kit includes instructions, Foot Switch assembly, Cabling, Tools and Meteric Mounting Hardware to aid in the installation and inter-connection with a Dorner *impac* Conveyor Controller.



Figure 1: Foot Switch Kit (75-20) Components



Figure 2: Foot Switch Kit Installed (75-20)

Additional Tools Needed for Installation

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

Foot Switch Specifications

Manufacturer: Square D UL/CSA Approved

Type: Class 9002

Output Configuration: 1 N.O. & 1 N.C. Contact Contact Type: Momentary Contact Rating: 15 Ampere (Continuous), 600 volts A.C. Housing: NEMA 12/IP65

Foot Switch Installation/Testing/Operation





Accessory Setup & Installation Guide

- 1. Verify all kit parts are present.
- Refer to Figure 2 and select the desired location for placing the Foot Switch (A) on the floor. To facilitate Cable routing, place the Foot Switch on same side of conveyor that *impac* Conveyor Controller is mounted.
- 3. Route the cable from the Foot Switch to the *impac* Conveyor Controller.
 - 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 (F) (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 the Cable, use the Zip Tie Mounts (C) and Single Drop-in Tee Bars (D), (Figure 4). Secure each Zip Tie Mount with an M6 x 10 mm Button Head Cap Screw (B). Tighten the Screws with the 4 mm Hex Key Wrench (H) provided.
- e. Figure 5 shows a typical wire routing of a Foot Switch connection to an *impac* Conveyor Controller using the Conveyor's Support Stand Leg T-slot with both T-slot Cover Strips and Zip Ties (E).



Figure 4: Zip Tie Mounting Detail



RNU

Figure 5: Foot Switch Cable Routing to impac Conveyor Controller

4. Install the Cable into the *impac* Conveyor Controller:

- a. Using a flat-bladed screwdriver, remove the knock-out plug from bottom of *impac* Conveyor Controller.
- b. Remove the Locknut (Figure 7), 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.
- 5. Label both ends of the Foot Switch Kit Cable using the blank Labels (G) provided (Figure 6) and a permanent marking pen.

The Label should be wrapped around the Cable near the Foot Switch and inside the *impac* Conveyor Controller to identify the Cable. When multiple Kits are used, make sure all Cables are uniquely labelled. (i.e., K1 for Kit #1, K2 for Kit #2,... etc.).



Figure 6: Cable Labeling (Detail provided only on Foot Switch End of Cable)





Accessory Setup & Installation Guide

NOTE:

The following connections are for a sample application that requires the conveyor to run when Foot Switch is depressed. **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.

6. Wire the Foot Switch to the *impac* Conveyor Controller Terminal Block (Figure 7).

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.

- a. Remove factory jumper from between terminals RR1 and RR2.
- b. Insert wire #3 (Green) into the terminal RR1.
- c. Insert wire #4 (Brown) into the terminal RR2.
- d. Wires #2 (Black), #1 (Red) and #5 (White) should be individually taped-off since they are not used in this application.



Figure 7: Sample Foot Switch to impac Wiring Connections





Accessory Setup & Installation Guide

7. Test operation as follows:

- a. Be sure the impac On/Off Switch is OFF and that Conveyor is ready to run. Then, begin the test by re-connecting power to the *impac*. Do not, however, turn on power at this time. Keep the impac On/Off Switch OFF.
- b. Operation of the Conveyor may vary depending on the chosen application. Consult the impac Application Guide for your particular application.
- c. Shown here is an application using a Foot Switch to start and stop a Conveyor (Figure 8).
- d. Turn impac On/Off Switch to ON.
- e. Test Foot Switch on/off operation by depressing and releasing the foot pedal. When Pedal is depressed, Conveyor should run and when Pedal is released, Conveyor should stop running.
- f. After correct operation is exhibited, normal operation processes can be continued.



Figure 8: Sample impac & Foot Switch Application

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)



Dorner Mfg. Corp. reserves the right to change or discontinue products without notice. All products and services are covered in accordance with our standard warranty. All Rights reserved.

Catalog 7520MI-ENG-0.0 PD 03/96

- - 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)

DORNER Manufacturing Corp 580 Industrial Drive, PO Box 20 Hartland, WI 53029-0020 USA TEL 1-800-397-8664 USA ONLY FAX 1-800-369-2440 USA ONLY Outside the USA: TEL 1-414-367-7600, FAX 1-414-367-5827

DORNER

Arnold-Sommerfeld-Ring 2 D-52499 Baesweller Germany

TEL (02401) 80 52 90 FAX (02401) 80 52 93

[©]Dorner Mfg. Corp. 1996

851-116 Printed in U.S.A.