

# **Motor Control Accessories**

### **Installation and Parts Manual**



Jog Button Kit



**Control Stop Kit** 



**Emergency Stop Kit** 



Photo Eye Kit



**Photo Eye Bracket Kit** 

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## Introduction

### **A** CAUTION

Some illustrations may show guards removed. DO NOT operate equipment without guards.

Upon receipt of shipment:

- Compare shipment with packing slip. Contact factory regarding discrepancies.
- Inspect packages for shipping damage. Contact carrier regarding damage.
- Accessories may be shipped loose. See accessory instructions for installation.

The Dorner Limited Warranty applies.

Dorner reserves the right to make changes at any time without notice or obligation.

Dorner has convenient, pre-configured kits of Key Service Parts for all conveyor products. These time saving kits are easy to order, designed for fast installation, and guarantee you will have what you need when you need it. Key Parts and Kits are marked in the Service Parts section of this manual with the Performance Parts Kits logo

## Warnings – General Safety

#### WARNING

The safety alert symbol, black triangle with white exclamation, is used to alert you to potential personal injury hazards.

#### **A** DANGER



#### **SEVERE HAZARD!**

KEEP OFF CONVEYORS. Climbing, sitting, walking or riding on conveyor will cause severe injury.

#### **A** DANGER



#### **EXPLOSION HAZARD!**

- DO NOT OPERATE CONVEYORS IN AN EXPLOSIVE ENVIRONMENT. The electric gearmotor generates heat and could ignite combustible vapors.
- Failure to comply will result in death or serious injury.

#### **A** WARNING

Controller must be properly grounded. Failure to properly ground controller may cause injury to personnel.

#### **A** DANGER



#### **SEVERE HAZARD!**

Hazardous voltage will cause severe injury or death. LOCKOUT POWER BEFORE WIRING.

#### **A** WARNING



#### **SEVERE HAZARD!**

Exposed moving parts can cause severe injury. DO NOT ATTEMPT ADJUSTMENTS WITH CONVEYOR RUNNING. LOCK OUT POWER before removing guards or performing maintenance.

#### **A** WARNING



#### **SEVERE HAZARD!**

- Dorner cannot control the physical installation and application of conveyors.
  Taking protective measures is the responsibility of the user.
- When conveyors are used in conjunction with other equipment or as part of a multiple conveyor system, CHECK FOR POTENTIAL PINCH POINTS and other mechanical hazards before system startup.
- Failure to comply could result in serious injury.

# **Accessories Specifications**

Model Number	Description
75M-ES-1	Emergency Stop Kit
75M-CS-1	Control Stop Kit
75M-JG-1	Jog Push Button Kit
75M-PE-1	Photo Eye Kit with 2" Height Adjustment
75M-PE-2	Photo Eye Kit with 5" Height Adjustment
75M-PM-1	Reflective Photo Eye Bracket Kit with 2" Height Adjustment
75M-PM-2	Reflective Photo Eye Bracket Kit with 5" Height Adjustment
75M-PM-3	Through Beam Photo Eye Bracket Kit with 2" Height Adjustment
75M-PM-4	Through Beam Photo Eye Bracket Kit with 5" Height Adjustment
75M-PM-5	Convergence Photo Eye Bracket Kit with 2" Height Adjustment
75M-PM-6	Convergence Photo Eye Bracket Kit with 5" Height Adjustment
75M-LC-1	Linking Cable Kit 6 ft. (1.83 m) long
75M-LC-2	Linking Cable Kit 15 ft. (4.57 m) long

## **Product Description**

#### **Emergency Stop Kit**

Refer to (Figure 1) for typical components.

#### **Typical Components**

- 1 Emergency Stop Box
- 2 Drop in T-Bars (x2)
- 3 .50" Spacers (x2)
- 4 M6-1.00 x 20mm Low Head Cap Screws (x2)
- 5 M6-1.00 x 12mm Low Head Cap Screws (x2)



Figure 1

## **Control Stop Kit**

Refer to (Figure 2) for typical components.

#### **Typical Components**

- 1 Control Stop Box
- 2 Drop in T-Bars (x2)
- 3 .50" Spacers (x2)
- 4 M6-1.00 x 20mm Low Head Cap Screws (x2)
- 5 M6-1.00 x 12mm Low Head Cap Screws (x2)

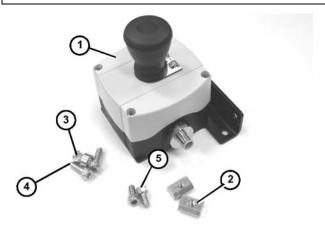


Figure 2

#### **Jog Push Button Kit**

Refer to (Figure 3) for typical components.

#### **Typical Components**

- 1 Jog Push Button Box
- 2 Drop in T-Bars (x2)
- 3 .50" Spacers (x2)
- 4 M6-1.00 x 20mm Low Head Cap Screws (x2)
- M6-1.00 x 12mm Low Head Cap Screws (x2)



Figure 3

## **Photo Eye Kit**

Refer to (Figure 4) for typical components.

#### **Typical Components**

- 1 Photo Eye Assembly
- 2 Reflector Assembly
- 3 M6-1.00 x 12mm Low Head Cap Screws (x4)
- 4 Drop in T-Bars (x2)

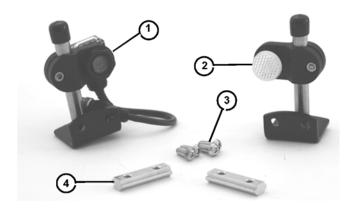


Figure 4

### **Photo Eye Bracket Kit**

Refer to (Figure 5) for typical components.

#### **Typical Components**

- 1 Photo Eye Bracket Assembly
- 2 Reflector Assembly
- 3 M6-1.00 x 12mm Low Head Cap Screws (x4)
- 4 Drop in T-Bars (x2)

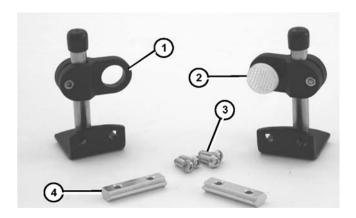


Figure 5

## **Linking Cable Kit**

Refer to (Figure 6) for typical components.

#### **Typical Components**

- 1 Cable 4P Micro Connect
- 2 Wire Ties (x3)
- 3 Drop in T-Bars (x2)
- 4 M6-1.00 x 20mm Low Head Cap Screws (x3)
- 5 Mounting Cable Ties (x3)
- 6 T-Slot Strip Closures (x3)
- 7 Hex Key



Figure 6

## **Accessories Installation**

## **Required Tools**

• 6 mm hex head wrench

# **Button Box Kits - Vertical Mounting to Conveyor**

1. Install t-bars (Figure 7, item 1) into conveyor t-slot.

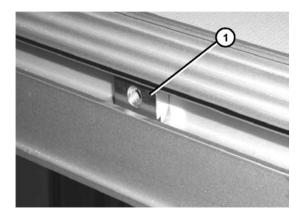


Figure 7

2. Attach button box kit (Figure 8, item 1) to conveyor with screws (Figure 8, item 2).

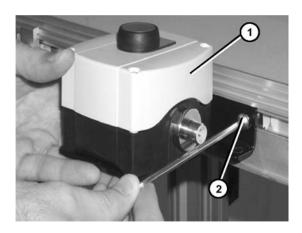


Figure 8

3. Slide button box kit to its desired mounting location along conveyor and tighten both screws.

# **Button Box Kits - Horizontal Mounting to Conveyor**

1. Install t-bars (Figure 9, item 1) into conveyor t-slot.

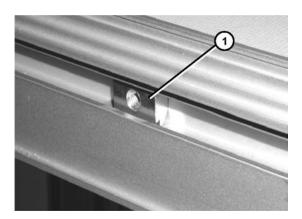


Figure 9

2. Attach button box kit (Figure 10, item 1) to conveyor with spacers (Figure 10, item 2) and screws (Figure 10, item 3).

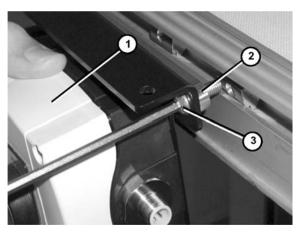


Figure 10

3. Slide button box kit to its desired mounting location along conveyor and tighten both screws.

## **Accessories Installation**

#### **Button Box Kits - Stand Mount**

- 1. Install t-bar into t-slot.
- 2. Partially thread controller lower mounting bar (Figure 11, item 1) to t-bar with screw (Figure 11, item 2).

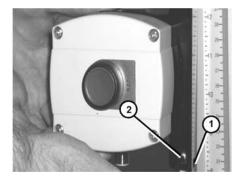


Figure 11

- 3. Install second t-bar into stand t-slot
- Partially thread controller top mounting bar to t-bar with screw.
- 5. Slide controller to its desired mounting location and tighten both screws.

# Photo Eye and Bracket Kits - Mounting to Conveyor

1. Install t-bars (Figure 12, item 1) into conveyor t-slot.

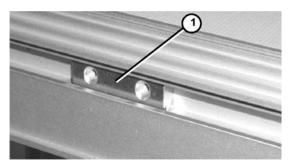


Figure 12

2. Attach photo eye assembly (Figure 13, item 1) to conveyor with screws (Figure 13, item 2).

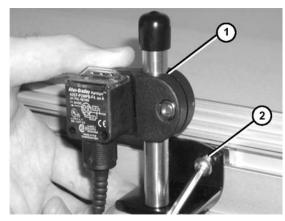


Figure 13

- 3. Slide photo eye to its desired mounting location along conveyor and tighten both screws.
- 4. Repeat steps 1-3 for the reflector assembly on opposite side on the conveyor.

### **Linking Cable Kit**

1. To contain a long run of wiring cable in the conveyor t-slot, use several short lengths of t-slot strip closures (Figure 14, item 1).

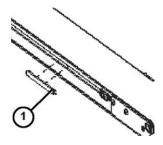




Figure 14

To route cable over a previously mounted component or to anchor the cable, use the mounting cable ties (Figure 15, item 1) and single drop-in t-bars (Figure 15, item 2). Secure with screws (Figure 15, item 3).

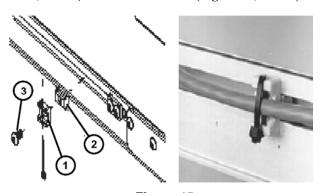


Figure 15

# Wiring and Operation

## Wiring

- 1. Plug in accessory to M12 port.
- 2. Verify P100 is set to 1.
  - a. Press M.
  - b. Scroll to P100 and press M.
  - c. Set value to 1 and press M.

## **Operation**

- 1. Power VFD.
- 2. If fault message appears, trigger accessory.
- 3. Run conveyor using designed accessory application.

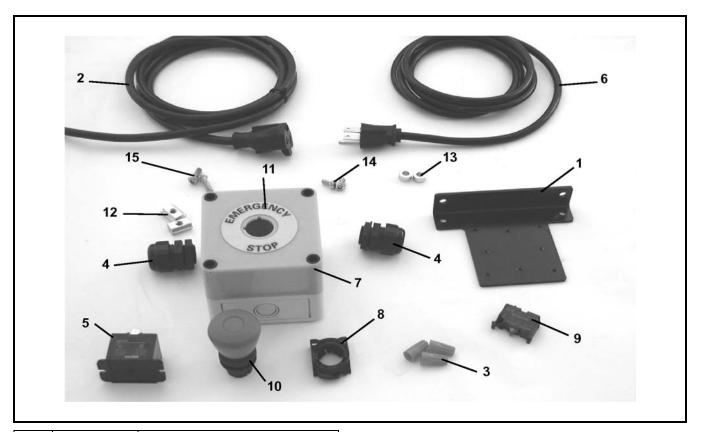
#### **NOTE**

Key pad Green "Run" button will display "ERR" when pressed with P100 = 1. The Red "Stop" button will always work. To reset after Red "Stop" button is pressed, trigger the accessory.

### **NOTE**

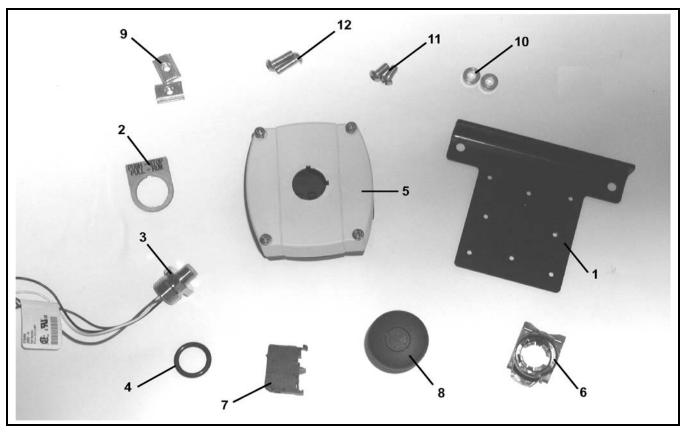
For replacement parts other than those shown in this section, contact an authorized Dorner Service Center or the factory. Key Service Parts and Kits are identified by the Performance Parts Kits logo . Dorner recommends keeping these parts on hand.

# **Emergency Stop Kit**



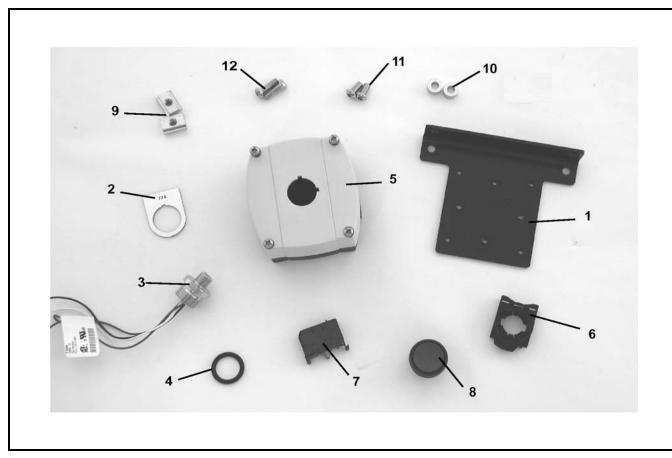
Item	Part Number	Description				
1	201103	Mounting Bracket				
2	805-053	Receptacle Cord				
3	805-057	Wire Nut				
4	805-1005	Cord Grip				
5	805-655	Surface Mounted Relay				
6	805-805	Power Cord				
7	817-243	Push Button Box				
8	830-210	Button Latch				
9	830-212	Contact Block Switch				
10	830-216	Red Push Button				
11	830-217	Push Button Nameplate				
12	639971M	Single Drop-In T-bar				
13	807-1572	Spacer				
14	950612M	Low Head Cap Screw M6-1.00 x 12mm				
15	950620M	Low Head Cap Screw M6-1.00 x 20mm				

## **Control Stop Kit**



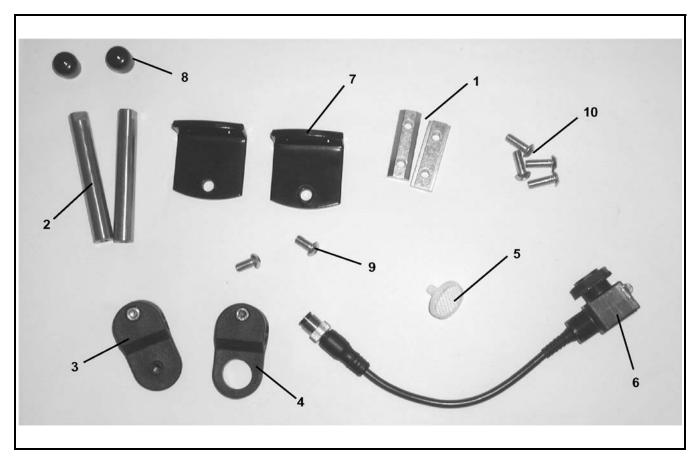
Item	Part Number	Description					
1	201103	Mounting Bracket					
2	201105	Legend Plate					
3	809-314	Male Micro Connector					
4	812-067	O-Ring					
5	807-239	Push Button Box					
6	830-210	Button Latch					
7	830-212	Contact Block Switch-Normally Closed					
8	830-214	Control Stop Button					
9	639971M	Single Drop-In T-bar					
10	807-1572	Spacer					
11	950612M	Low Head Cap Screw M6-1.00 x 12mm					
12	950620M	Low Head Cap Screw M6-1.00 x 20mm					

# Jog Push Button Kit



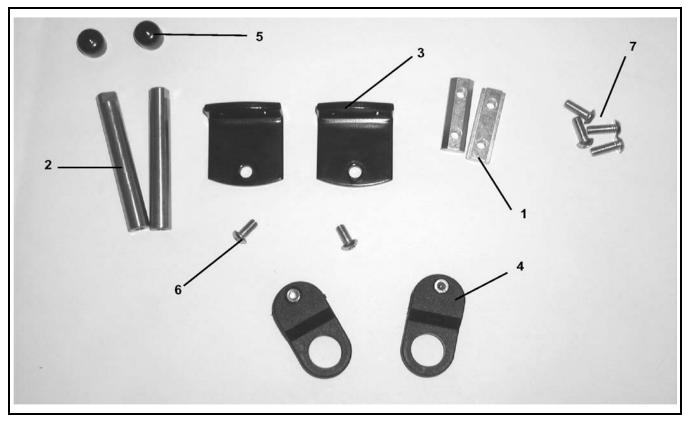
Item	Part Number	Description					
1	201103	Mounting Bracket					
2	677785P	Legend Plate					
3	809-314	Male Micro Connector					
4	812-067	O-Ring					
5	807-239	Push Button Box					
6	830-210	Button Latch					
7	830-211	Contact Block Switch-Normally Open					
8	830-213	Push Button					
9	639971M	Single Drop-In T-bar					
10	807-1572	Spacer					
11	950612M	Low Head Cap Screw M6-1.00 x 12mm					
12	950620M	Low Head Cap Screw M6-1.00 x 20mm					

# Photo Eye Kit



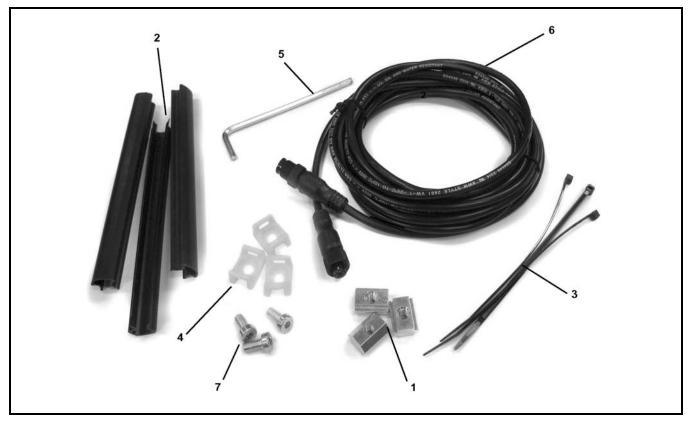
Item	Part Number	Description				
1	200830M	Drop-In T-bar				
2	201104	2" Mounting Sensor Shaft				
	202027M	5" Mounting Sensor Shaft				
3	807-1390	Reflector Mount Clamp				
4	807-1391	Photo Eye Mount Clamp				
5	809-289	Reflector Sensor				
6	809-315	Photo Eye Sensor				
7	202004	Mounting Bracket				
8	807-948	Shaft Cap				
9	950612M	Low Head Cap Screw M6-1.00 x 12mm				
10	950616M	Low Head Cap Screw M6-1.00 x 16mm				

## Photo Eye Bracket Kit - Through Beam



Item	Part Number	Description				
1	200830M	Drop-In T-bar				
2	201104	2" Mounting Sensor Shaft				
	202027M	5" Mounting Sensor Shaft				
3	202004	Mounting Bracket				
4	807-1391	Photo Eye Mount Clamp				
5	807-948	Shaft Cap				
6	950612M	Low Head Cap Screw M6-1.00 x 12mm				
7	950616M	Low Head Cap Screw M6-1.00 x 16mm				

# Linking Kit



Item	Part Number	Description					
1	639971M	Single Drop-In T-bar					
2	675232	T-Slot Strip Closure					
3	805-063	Wire Tie					
4	805-608	Mounting Cable Tie					
5	807-565	Hex Key					
6	809-312	2 ft. Meter Cable					
	809-313	5 ft. Meter Cable					
7	950612M	Low Head Cap Screw M6-1.00 x 12mm					

## **Notes**

## **Return Policy**

Returns must have prior written factory authorization or they will not be accepted. Items that are returned to Dorner without authorization will not be credited nor returned to the original sender. When calling for authorization, please have the following information ready for the Dorner factory representative or your local distributor:

- Name and address of customer.
- Dorner part number(s) of item(s) being returned. 2.
- 3. Reason for return.
- Customer's original order number used when ordering the item(s). 4.
- Dorner or distributor invoice number (if available, part serial number).

A representative will discuss action to be taken on the returned items and provide a Returned Goods Authorization (RMA) number for reference. RMA will automatically close 30 days after being issued. To get credit, items must be new and undamaged. There will be a return charge on all items returned for credit, where Dorner was not at fault. It is the customer's responsibility to prevent damage during return shipping. Damaged or modified items will not be accepted. The customer is responsible for return freight.

	Product Type								
	Standard Products						Engineered to order parts		
Product Line	Conveyors	Gearmotors & Mounting Packages	Support Stands	Accessories	Spare Parts (non-belt)	Spare Belts - Standard Flat Fabric	Spare Belts - Cleated & Specialty Fabric	Spare Belts - Plastic Chain	All equipment and parts
1100						I.		J	
2200									
2200 Modular Belt									
2200 Precision Move									
2300									
2300 Modular Belt									
3200		30% return	turn fee fo	or all products	except:				
3200 LPZ		cle	ated belt	or all products nveyors with r or specialty b	elts		non-ret	urnable	case-by-case
3200 Precision Move									
4100									
5200									
5300									
6200									
Controls									
7200 / 7300	50% return fee for all products								
7350									
7360	non-returnable								
7400									
7600									

Returns will not be accepted after 60 days from original invoice date. The return charge covers inspection, cleaning, disassembly, disposal and reissuing of components to inventory. If a replacement is needed prior to evaluation of returned item, a purchase order must be issued. Credit (if any) is issued only after return and evaluation is complete.

Dorner has representatives throughout the world. Contact Dorner for the name of your local representative. Our Customer Service Team will gladly help with your questions on Dorner products.

For a copy of Dorner's Warranty, contact factory, distributor, service center or visit our website at www.dorner.com.

For replacement parts, contact an authorized Dorner Service Center or the factory.



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. © Dorner Mfg. Corp. 2014

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