104879 July 29, 2022 | D

Detex Corporation, 302 Detex Drive, New Braunfels, Texas 78130-3045
830-629-2900 / 800-729-3839 / Fax 800-653-3839 / Text photos only: 830-481-6433 / INTERNET: www.detex.com

ELECTRICAL INSTRUCTIONS FOR DETEX®
ELECTRIC DOGGING / ELECTRIC LATCH RETRACTION (weatherized)

ADVANTEX®

RIM, SVR, CVR & MORTISE

ED Electric Dogging
ER ELECTRIC LATCH RETRACTION
ERxW ELECTRIC LATCH RETRACTION (weatherized)

Dwg #:
102860 RIM (S.S.)
102880 SVR (S.S.)
104600 RIM (AL)
104690 SVR (AL)
103350 MORTISE (S.S.) (not-weatherized)
104695 MORTISE (AL) (not-weatherized)
105260 CVR (60) (not-weatherized)
105280 CVR (70/80) (not-weatherized)

VALUE SERIES®

RIM & SVR

ED Electric Dogging
ER Electric Latch Retraction
ERxW ELECTRIC LATCH RETRACTION (weatherized)

Dwg #: 102870 RIM
102890 SVR

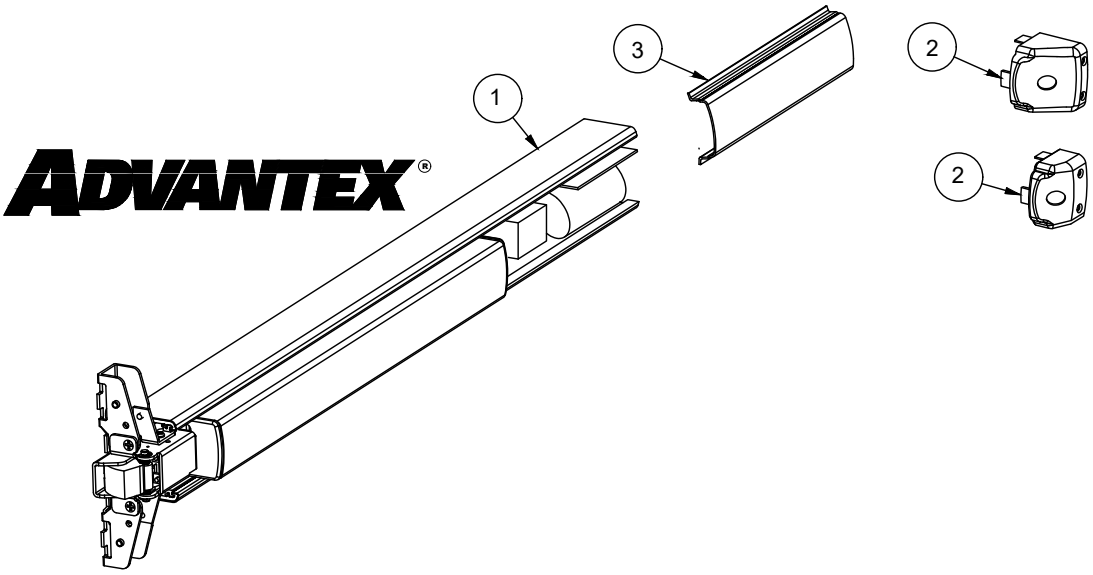
Table of Contents

Should you have a Question/Problem with your Detex device please call Detex Technical Support from the job site at 1-800-729-3839 and choose option 2 on our menu. Please do not return the product to the distributor.

For WARRANTY information, scan code below or go to www.detex.com/warranty

For device installation videos, scan code below or go to www.detex.com/videos

Owner's Copy



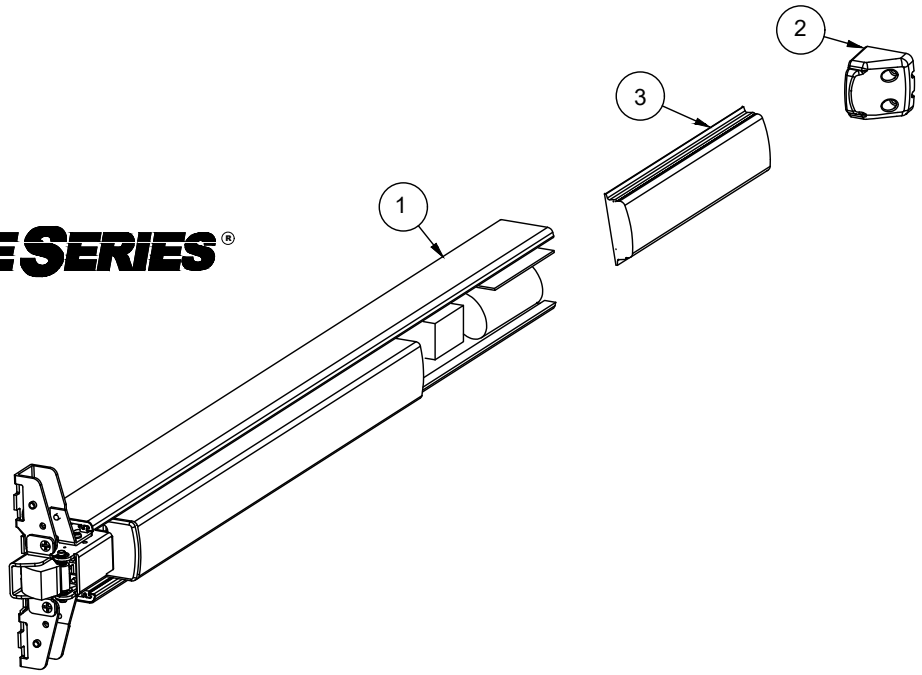
PARTS BREAKDOWN		
Item	**Order Part #**	**Description**
1	105500-10	Centercase/Pushpad SubAssembly, 10 series, ER, 36", 630 finish
	105500-35	Centercase/Pushpad SubAssembly, 10 series, ER, 48", 630 finish
	105500-8	Centercase/Pushpad SubAssembly, RHR 20 series, ER, 36", 630 finish
	105500-32	Centercase/Pushpad SubAssembly, RHR 20 series, ER, 48", 630 finish
2	102095-9	EC1 Endcap, Advantex (630 finish prepped for conduit)
	104686-1	EC2 Endcap, Advantex, Aluminum (Aluminum painted 628 finish prepped for conduit)
	104317-9	EC2 Endcap, Advantex Stainless Steel (630 finish prepped for conduit)
3	100860-59	Filler, 10 series, 36" device, 630 finish
	100860-60	Filler, 10 series, 48" device, 630 finish
	100860-146	Filler, 20 series, 36" device, 630 finish
	100860-147	Filler, 20 series, 48" device, 630 finish

Detex Power Supply Catalog No:
(not weatherized)
90-800 ED Single Door application
80-800 ED Single Door application
81-800 ER Single Door application
82-800 ER Double Door application
83-800 ER Double Door Independent Operation application

Power Supply / Controller sold separately

Your particular part or configuration may not be shown:
Contact Detex technical support at 800-729-3839 (option 2)

VALUE SERIES®



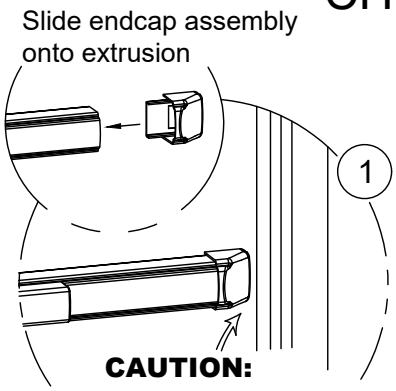
PARTS BREAKDOWN		
Item	**Order Part #**	**Description**
1	106900-3	Centercase/Pushpad SubAssembly, V40 series, ER-EX, 36"
	106900-4	Centercase/Pushpad SubAssembly, V40 series, ER-EX, 48"
	106900-5	Centercase/Pushpad SubAssembly, RHR V50 series, ER-EX, 36"
	106900-6	Centercase/Pushpad SubAssembly, RHR V50 series, ER-EX, 48"
2	101822	Endcap, Value Series
3	100408-11	Filler, Value Series, 36" device
	100408-17	Filler, Value Series, 48" device

Detex Power Supply Catalog No:
(not weatherized)
90-800 ED Single Door application
80-800 ED Single Door application
81-800 ER Single Door application
82-800 ER Double Door application
83-800 ER Double Door Independent Operation application

Power Supply / Controller sold separately

Your particular part or configuration may not be shown:
Contact Detex technical support at 800-729-3839 (option 2)

CHECKING FOR DEVICE CLEARANCE
(Cut-Off procedure if required)

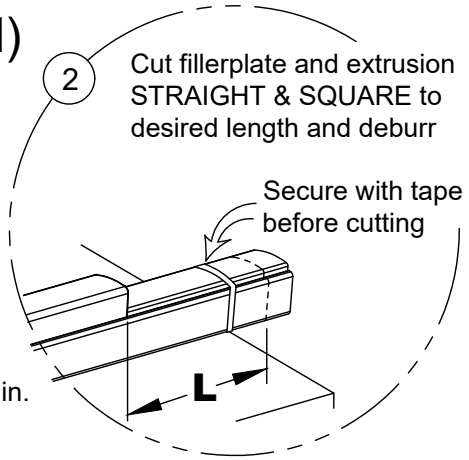


CAUTION:
Check for device and door frame clearance. If no cut-off needed, proceed to the next page.

(Advantex device shown)

Minimum Fillerplate Length	
Value Series Length (L)	**Advantex Length (L)**
9"	**9"**

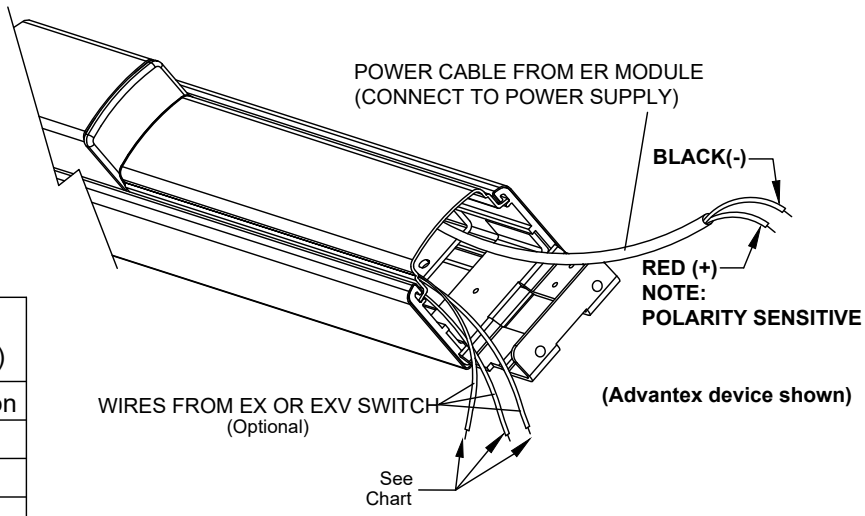
For aluminum Advantex finish cutdown applications: After cutting, the baseplate extrusion can be reversed to place the cut end inside the head cover. To do so, loosen the setscrew inside the aluminum baseplate extrusion and slide extrusion out, reverse, & slide back in. Tighten setscrew.



ER CONFIGURATION

DETEX ER UNITS REQUIRE A 24VDC FILTERED & REGULATED 1 AMP MINIMUM POWER SUPPLY.
DETEX POWER SUPPLY/CONTROLLER: DETEX P/N 81-800-X, 82-800-X, OR 83-800-X.
SEE POWER SUPPLY INSTALLATION INSTRUCTIONS(PACKAGED WITH POWER SUPPLY) FOR COMPLETE INSTALLATION PROCEDURE.

	Amperage	Wire Color	Switch Position
ERxEX	50mA max.	Grey	Closed
		Brown	Common
		Yellow	Open
ERxEXV	3A max.	Grey/Red	Closed
		Brown/Red	Common
		Yellow/Red	Open



WEATHERIZED DEVICES (The EXxW / EXVxW switch is located in the pushpad)			
	Amperage	Wire Color	Switch Position
ERxEXxW	50mA max.	Yellow/White	Closed
		Brown/White	Common
		Grey/White	Open
ERxEXVxW	3A max.	Yellow/Black	Closed
		Brown/Black	Common
		Grey/Black	Open

CONNECTIONS FOR THE ER MODEL
The red and black wires should be connected to the power supply control board (81-800, 82-800 or 83-800, depending on the door configuration). See power supply instructions 101339 or 101340 as appropriate for typical connections.

RETRACTING THE LATCH
The ER device must be connected to a Detex power supply/controller, 81-800, 82-800 or 83-800. With all the connections made according to the power supply instructions, closing the contact will retract the latch. The pushpad will be pulled down as the latch is retracted. The latch is held by an internal dogging assembly until the contact is released/opened.

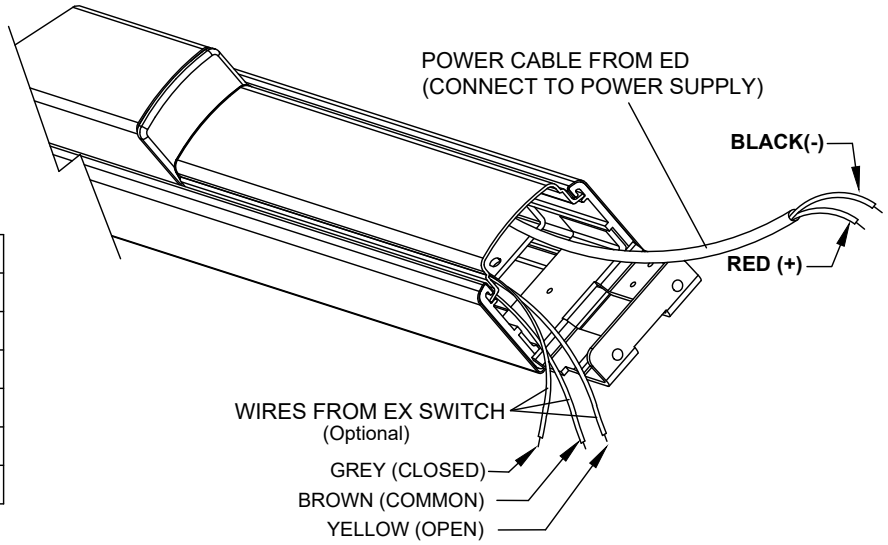
HOLDING THE LATCH RETRACTED
ER model holds the latch retracted as long as the control switch is maintained(closed).

RELEASING THE LATCH
ER is an electronically dogged latch. Opening the control input switch (or contacts) causes the latching mechanism to release. When an 81-800, 82-800 or 83-800 series Detex power supply is used, there is a slight delay from the opening of the switch contacts to the release of the latch. This delay is intended for external signaling and is described in the power supply instructions.

ED CONFIGURATION

DETEX ED UNITS MAY BE OPERATED FROM A 24 V AC OR DC SOURCE OR WITH A DETEX POWER SUPPLY
(NOTE: FIRE RATED DEVICES MUST USE 80-800-X OR 90-800 POWER SUPPLY)
(24VDC@180mA current draw)

	Amperage	Wire Color	Switch Position
EX	50mA max.	Grey	Closed
		Brown	Common
		Yellow	Open
EXV	3A max.	Grey/Red	Closed
		Brown/Red	Common
		Yellow/Red	Open



CONNECTIONS FOR THE ED MODEL

The ED device can use a transformer or power supply. Use Detex part number PP-5152-2 transformer or approved 24 volt Class 2 equivalent rated at 40 VA or higher. An appropriate switch must be used to control the power to the device. Detex power supply 80-800 or 90-800 may also be used. See ED Connection Diagrams page for a typical installation. Fire rated doors must use the 80-800 or 90-800 power supply. This is because transformers cannot be controlled by the building's fire system. Connections to the building's fire system are described in the power supply instructions.

RETRACTING THE LATCH

The ED model is electrically dogged, but has no mechanism to retract the latch. Once the switch is activated/closed and power is supplied to the device, press the pushpad to open the door. As the pushpad reaches the proper amount of travel, it will maintain the latch retracted. The pushpad will be held in this position as long as the control switch is maintained (closed).

HOLDING THE LATCH RETRACTED

ED model holds the latch retracted as long as the control switch is maintained (closed).

RELEASING THE LATCH

ED is an electronically dogged latch. Opening the control switch (or contacts) causes the latching mechanism to release the lock.

Typical ED Connection Diagrams

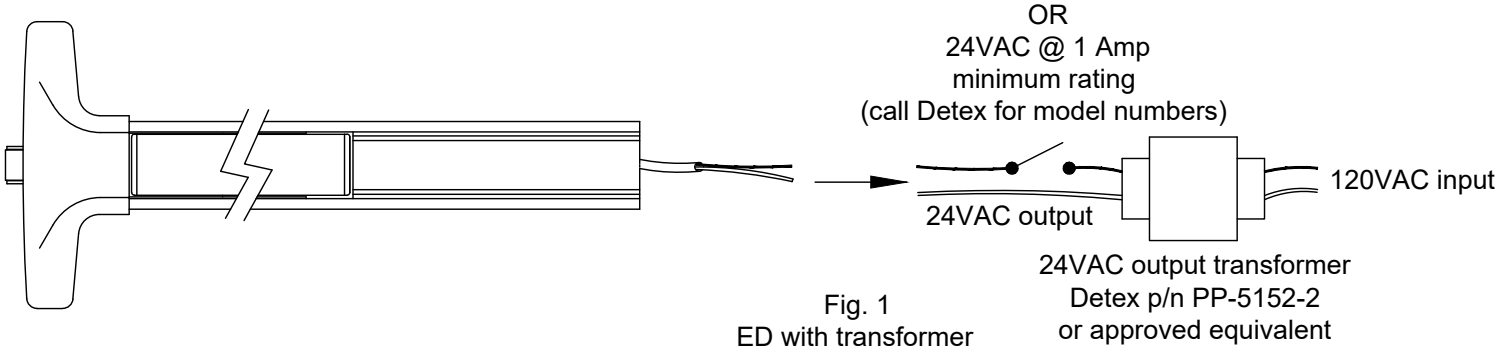
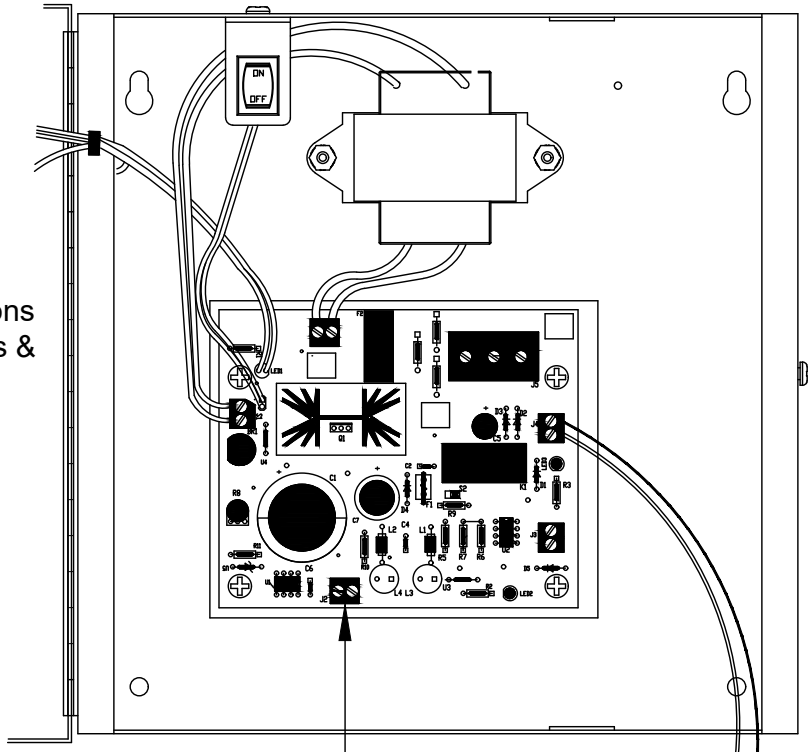


Fig. 1
ED with transformer



See 90-800-X instructions for fire loop connections & voltage selection

Fire loop input

Maintain switch
24VDC @ 1 Amp
OR
24VAC @ 1 Amp
minimum rating
(call Detex for model numbers)

Red to Positive
Black to Negative

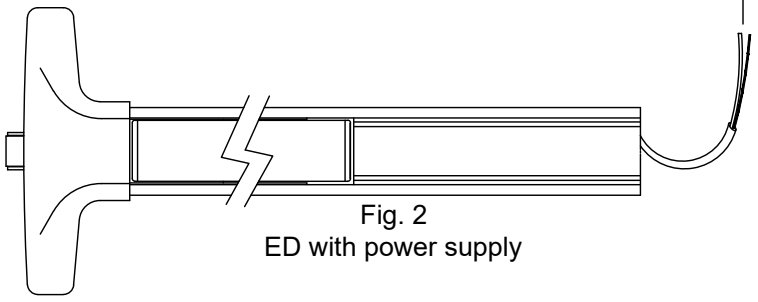
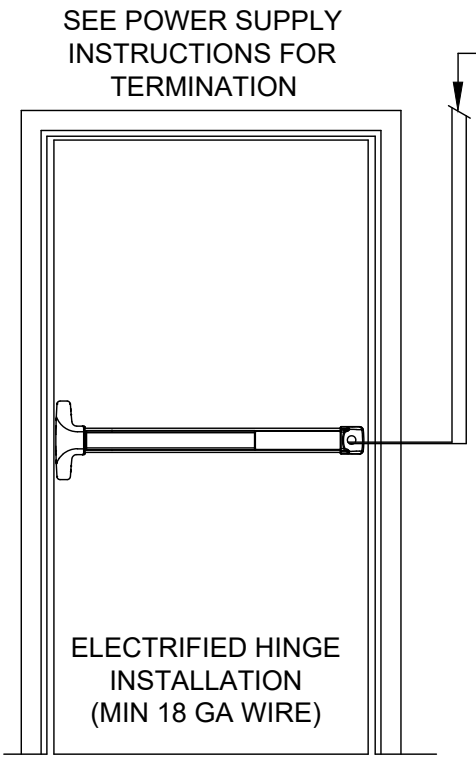
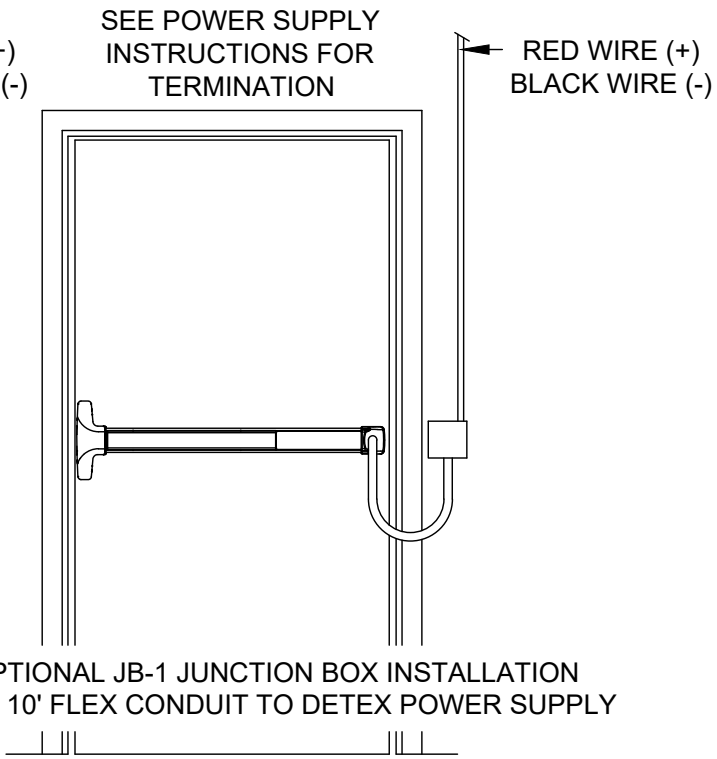


Fig. 2
ED with power supply

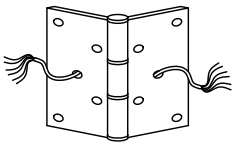
RISER DIAGRAMS AND HARDWIRE TRANSFER OPTIONS

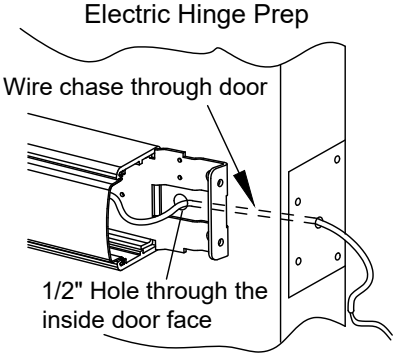




HARDWIRE TRANSFER DETAIL

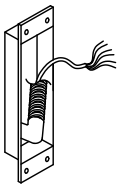
Electric Hinge
p/n: EWH8-626

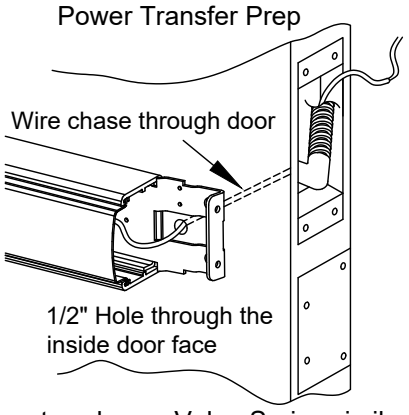




(Advantex shown, Value Series similar)

Power Transfer
p/n: PT-5 or PT-56C

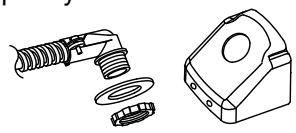




(Advantex shown, Value Series similar)

Flex Conduit/End Cap Kit

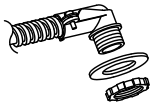
p/n: FC3EC1 or FC3EC2 for **Advantex**
(specifiy finish when ordering)



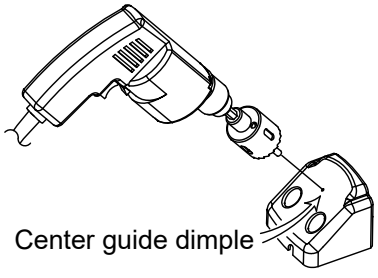
(EC1 shown)

or

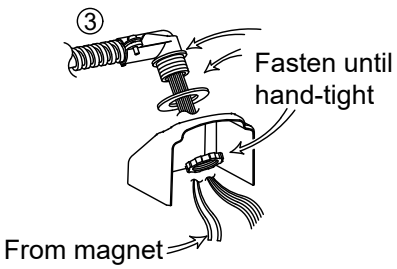
p/n: FC3 for **Value Series**
(endcap not included)



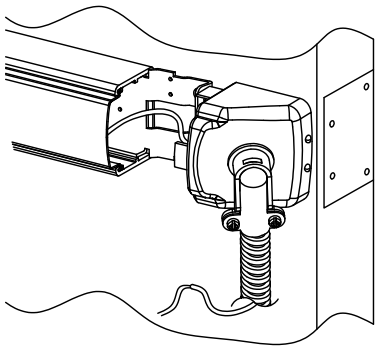
① **For Value Series only**:
Drill 7/8" hole through.



② **All devices:**
Adjust for handing
(LHR shown)



Flex Conduit Endcap Prep



Note: For high traffic areas an electric through-wire hinge or power transfer is recommended.

TROUBLE SHOOTING - **RIM DEVICE** ER & ED LATCH RETRACTION

Problem	**Probable cause & remedy**
Latch drags on the strike when pushpad is manually depressed.	**Rim device:** Panic bar is aligned slightly to close to the strike. Remove the shim plate from the strike.
Latch drags on the strike after removing shim, does not dog unlocked.	Eye bolt needs to be adjusted. See Fig B below.

For further assistance, contact Detex Technical Support at 1-800-729-3839

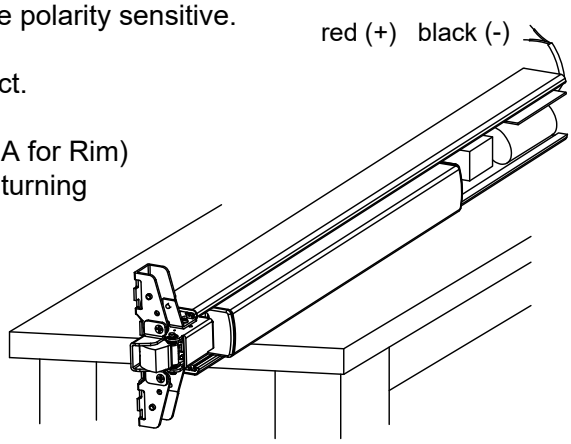
EYEBOLT ADJUSTMENT & TEST PROCEDURE

EQUIPMENT NEEDED: Detex Controller (see instructions for connection locations) or 24VDC power supply with leads.

PLACE DEVICE ON TABLE ON IT'S SIDE WITH CENTERCASE TO THE LEFT TO TEST.

1. Attach power supply to red(+) and black(-) wires on ER module. Wires are polarity sensitive.
2. Keep hands clear of pushpad assembly.
3. Turn power supply ON. Pushpad should pull down and latch should retract.
4. Verify that latch in CENTERCASE is fully retracted.
   Latch should not stick out past deadlatch bolt more than 1/16". (See Fig. A for Rim)
   If latch protrudes more than 1/16", remove pin & re-adjust the eyebolt by turning only 1/2 turn at a time (Fig B). Repeat test until 1/16" is achieved.

Turn power supply OFF. This should release the pushpad and latch.
TEST IS COMPLETED.



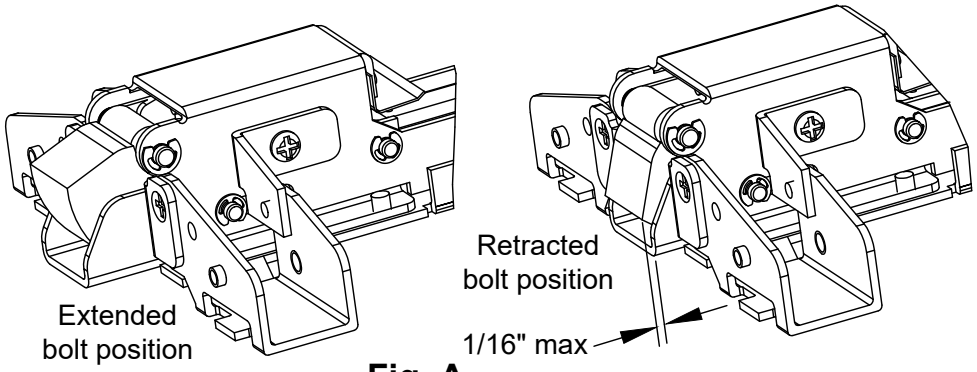


Fig. A
Bolt Position
(Rim only)

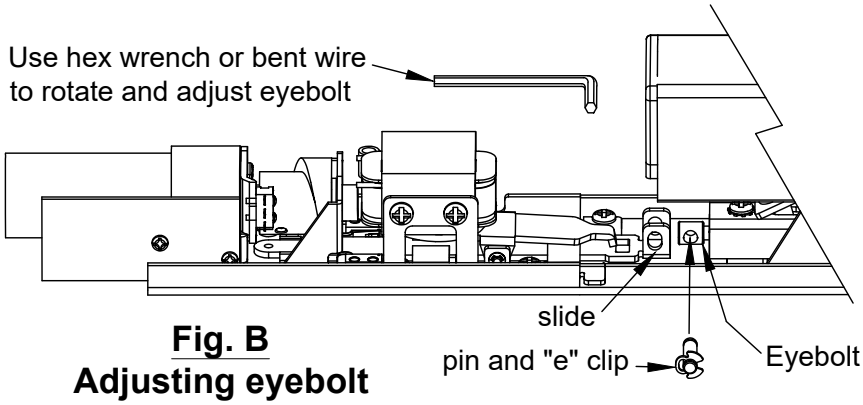


Fig. B
Adjusting eyebolt

NOTE: Fig. B adjustment should not be required on a new device as they are tested before shipping. Adjustments on replacement modules is to be expected.

TROUBLE SHOOTING - **SVR DEVICE** ER & ED LATCH RETRACTION

Problem	**Probable cause & remedy**
Latch drags on the strike when pushpad is manually depressed.	Top bolt is too long. Remove shim plate or adjust bolt length. See Fig A-2 below.
Latch drags on the strike after removing shim or adjusting Top bolt, does not dog unlocked.	Eye bolt needs to be adjusted. See Fig B below.
During ER operation the holdbacklever catches the latch at a position that is more extended than during manual operation.	Top rod is too short. Screw bolt out to lengthen rod. Recommend only 1/2 turn at a time. See Fig A-2.
During ER operation the motor stalls.	The rod length is too long and is causing the top latch mechanism to jam. Screw bolt in to shorten rod. Recommend 1/4 to 1/2 turn at a time. See Fig A-2 below.

For further assistance, contact Detex Technical Support at 1-800-729-3839

EYEBOLT ADJUSTMENT & TEST PROCEDURE

EQUIPMENT NEEDED: Detex Controller (see instructions for connection locations) or 24VDC power supply with leads.

TEST DEVICE ON DOOR.
1. Attach power supply to red(+) and black(-) wires on ER module. Wires are polarity sensitive.
2. Keep hands clear of pushpad assembly.
3. Turn power supply ON. Pushpad should pull down and latch should retract.
4. Verify that latch in CENTERCASE is fully retracted.

Turn power supply OFF. This should release the pushpad and latch. TEST IS COMPLETED.

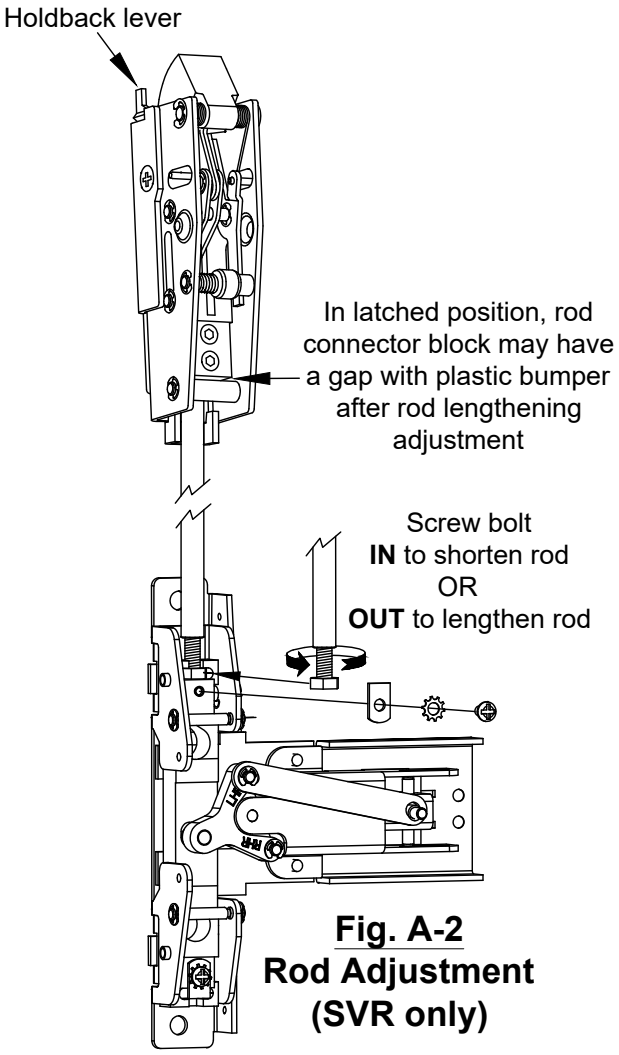


Fig. A-2
Rod Adjustment (SVR only)

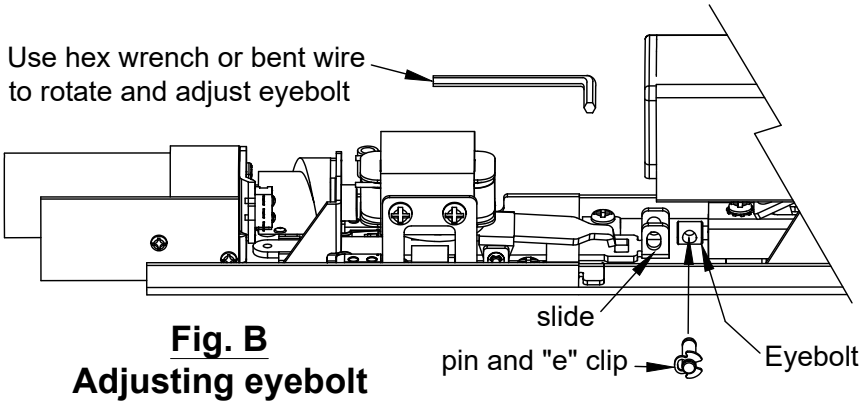


Fig. B
Adjusting eyebolt

NOTE: Fig. B adjustment should not be required on a new device as they are tested before shipping. Adjustments on replacement modules is to be expected.