

EXTERNAL DISCONNECT ENCLOSURE INSTALL

The intent and purpose of the EXD enclosure is to:

- 1) Isolate the primary power supply.
- 2) Initiate appropriate PPE for entry.
- 3) Prevent unauthorized entry, disconnect power before entry, and requiring the primary door latch or closed, latched and engaged before the Disconnect is restored.

-For installation of EXD to an HD Free Standing enclosure (XM enclosure) you will need the following tools:

Phillips screwdriver



7/16", 11/32", 3/8" wrench



3-32", 3mm hex-head wrench



Wire cutters



Scissors

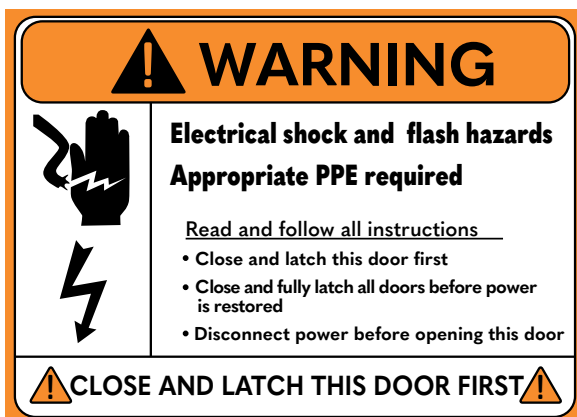


- First drill the mounting pattern into the right side of the enclosure with the disconnect cutout of the heavy duty freestanding in line with that of the EXD, and the interlock rod guide in the top flange. Only 1 rod guide is required directly above the door rod on a 72" high enclosure.

- The exd is flush with the main enclosure and requires 2 rod guides on 84" / 90" high enclosures.



- Apply gasket to the left side of the EXD enclosure and install the EXD and rod guides with fasteners provided.



Label part number 130130



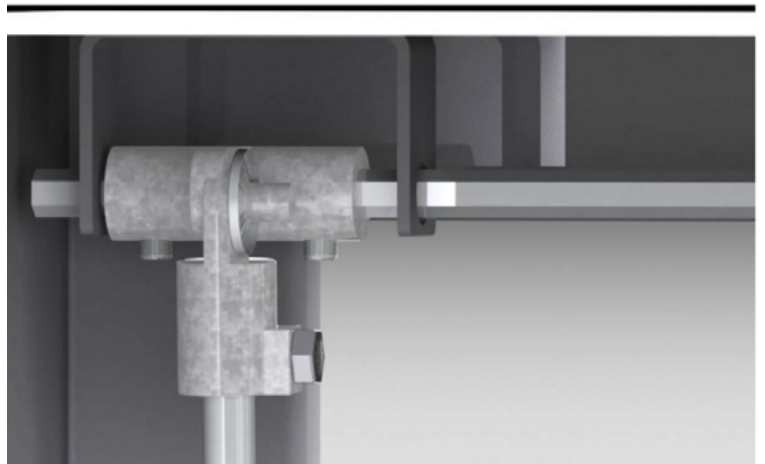


With the EXD now installed onto the main enclosure, you can install the mechanical interlock linkage inside.

- Insert hex rod overhead through the wall of the enclosure into the rod guide, and hex rod adapter. With the round rod adapter facing the rear of the enclosure, you will want to first install the round rod adapter to the hex rod adapter with the push nut.



- Insert the round rod into the top and bottom round rod adapters. Position the hex rod so that it's parallel with the top. Then tighten the set screws to hold rod in place.



The EXD door needs to be in the open position for the next step.

- Inside the main enclosure, slide the short hex rod and interlock pivot arm into a hex rod adapter, then tighten the set screws. (Pivot arm will be parallel to the front flange when EXD door is in the open position in the next step)

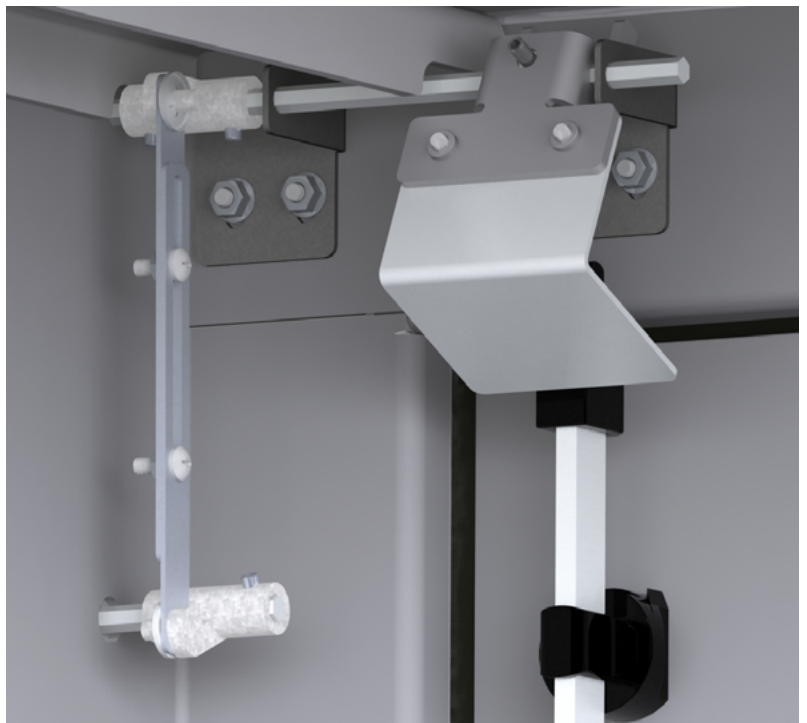
- For the 84" and 90" high enclosures the adjustable rod will be installed down the main interlock hex rod.



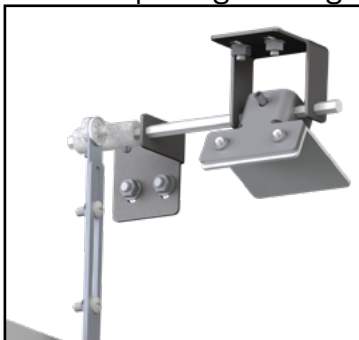
-Install and adjust the stop plate so it is against the flange when the EXD enclosure door is open.

*When installed on an enclosure with a smaller than 3.5" top flange the stop plate will be installed inverted. See image below.

-This feature prevents the main enclosure door from being closed until the EXD enclosure door is first closed.

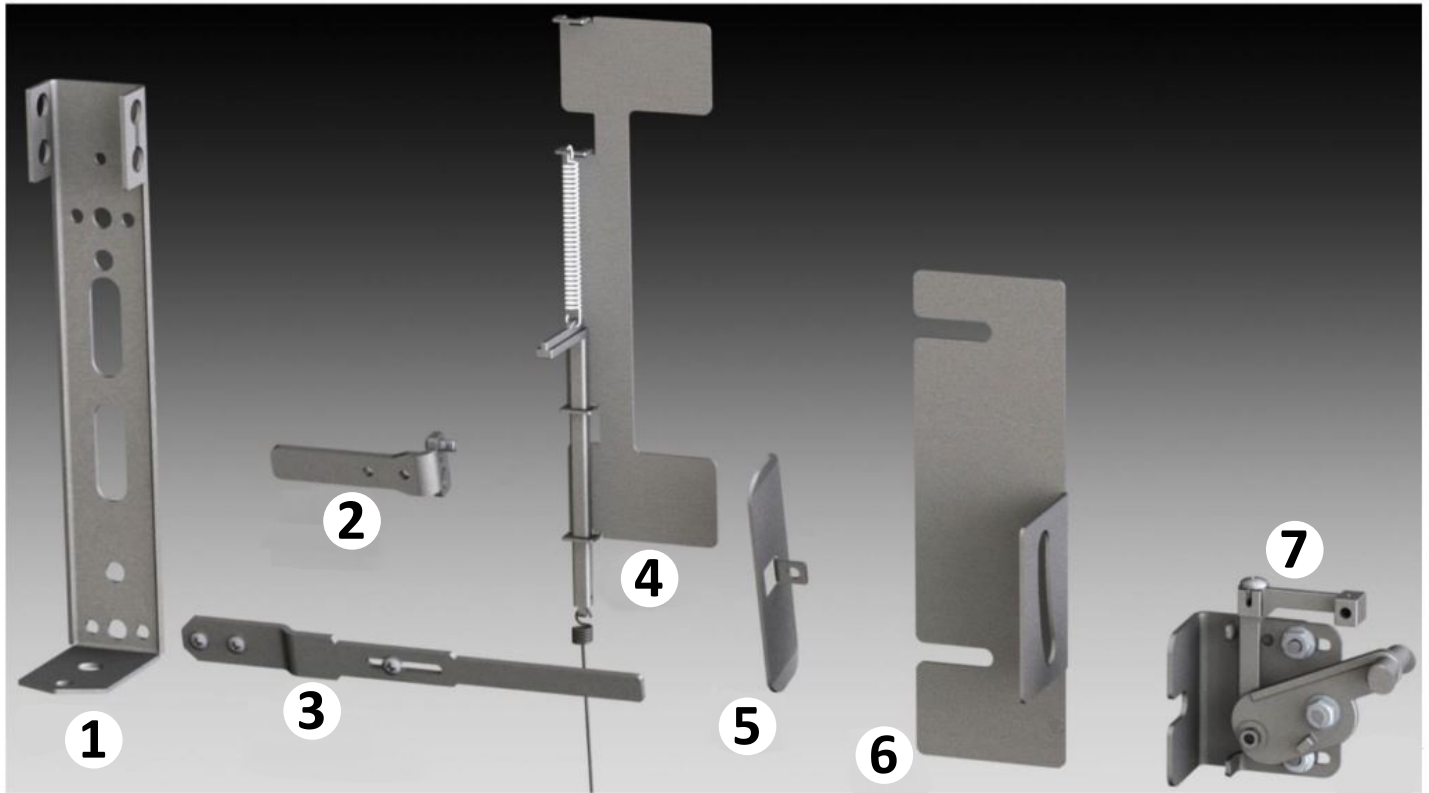


<3.5" top flange config.



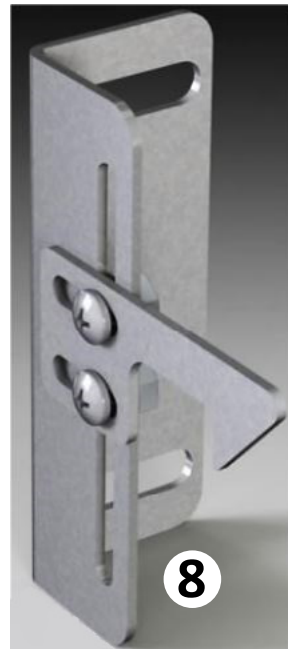
This feature is achieved by a mechanical device called and MDV that is installed on the inside of the enclosure flange.

All of the parts necessary for the installation are included in the MDV kit provided with your disconnect enclosure or with your disconnect operator handle.



MDV kit includes:

- 1 - Defeater Bracket**
(Provided with Disconnect handle)
- 2 - Primary Defeater**
(Provided with bolt pack # 128030)
- 3 - Extended Defeater**
(Provided with bolt pack # 128266)
- 4 - Upper Assembly: (Mdv Kit)**
(Provided with bolt pack # 128030)
- 5 - Defeater Retention Bracket**
(Provided with bolt pack # 128266)
- 6 - Defeater Guide Bracket**
(Provided with bolt pack # 128266)
- 7 - Lower Assembly: (Mdv Kit)**
(Provided with bolt pack # 128030)
- 8 - Single Defeater Hook**
(Provided with bolt pack # 128030)
- 9 - Double Defeater Hook**
(Provided with bolt pack # 128030)



-In order to install the MDV you will need to install the disconnect handle and mounting plate as shown.



-The disconnect operating handle must have a defeater with both up and down motion of the defeater. Such as "Square D", "Allen Bradley", and some "Eaton/Cutler Hammer" operating handles.



- Install extended defeater (# 3) to the primary defeater (# 2) and install the operating handle.

- Install double defeater hook (# 9) on the EXD enclosure door. With the disconnect operating handle in the off position. Adjust the defeaters so that they do not engage the top or bottom hook.



Extended length defeater hook
#129050

Side view- focus on hook length (highlighted red)

- From inside the main enclosure, install the defeater retention bracket (# 5) to the extended defeater (# 3). Slide up the enclosure wall and tighten the fastener and make sure the defeater can still move freely.



- Install the single defeater hook (# 8) to the main enclosure door, and adjust again with the disconnect operating handle in the "off" position. So there is about 1/8 inch clearance when the door is pushed shut.

- Install upper assembly (# 4) of the MDV kit and defeater guide bracket (# 6) to the flange and tighten the fasteners. Making sure that the MDV lever moves freely up and down.



- For EXD enclosure being added to heavy duty free standing enclosures (XM enclosure) use "SCE-DCP" to close off existing disconnect cutout, and create provisions for the MDV, and defeater guide bracket.

- XD enclosure designed with an EXD installed are provided with studs on inside flange for installation of a MDV and defeater guide bracket.

- Use second L bracket, included in bolt pack, to assist as door rod guide, as pictured in image to the right. The L brackets share the same studs and nuts.



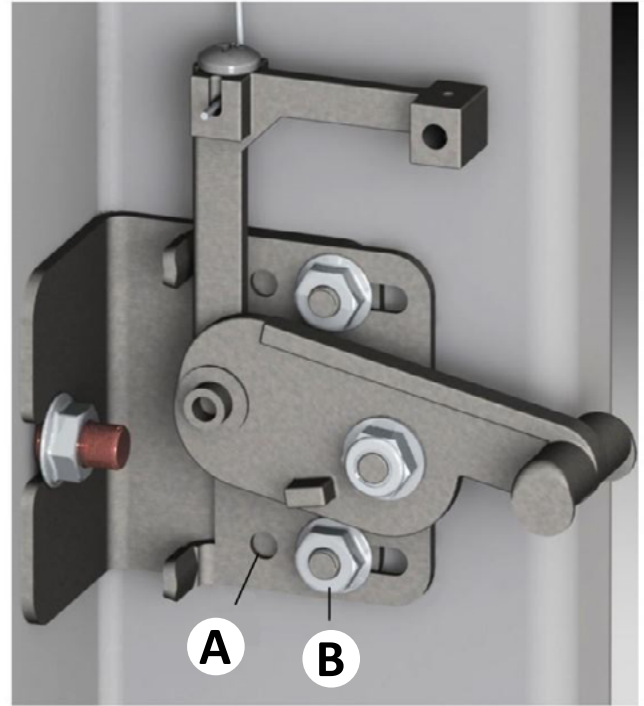
Adjust the MDV to your flange size

A- 3.50 inch flange is found on freestanding enclosures that are 3 doors and larger. Remove the 8-32 nuts, and position at the outer holes.

B- 3.00 inch flange is found on most freestanding enclosures, and is the pre set location.

- Install lower assembly (# 7) of the MDV kit with 1/4-20 nut on the stud adjacent to the door handle. Slide it all the way to the flange and tighten.

- Now you can adjust the MDV. With the disconnect operating handle still in the "off" position simply pull the cable drawing defeater strike down so that there is about 3/8 inch gap between the defeater strike, and tighten the screw to lock it in place.



- Close the door and door handle fully. The operating handle should be defeated first in order to turn the disconnect to the "on" position. Verify then that the door engages the hook, when you try to open the door.



Opening the main enclosure door and EXD enclosure door with the power "on"

1. Defeat the operator handle per the device manufacturer's instructions.
2. Open the control enclosure door.



Opening the main enclosure door and EXD enclosure door with the power "off"

1. Open the master door on the main enclosure, defector will be released.
2. Open the EXD enclosure door.

