



Toll-Free: 855-326-1243 https://www.ferndalesafety.com

APPLIES TO MODELS: FER-LRV1, FER-LRV2

### **VERTICAL LATHE SAFETY GUARDING**

### **INSTALLATION GUIDE**



Thank you for your purchase of our vertical lathe safety guard. You now have the highest quality safety guard available. Ferndale Safety designed this guard to be easy to install and provide years of trouble-free service. The polycarbonate shield protects flying objects like chips and coolants and prevents access to rotating parts.

## **Mounting and Installation**

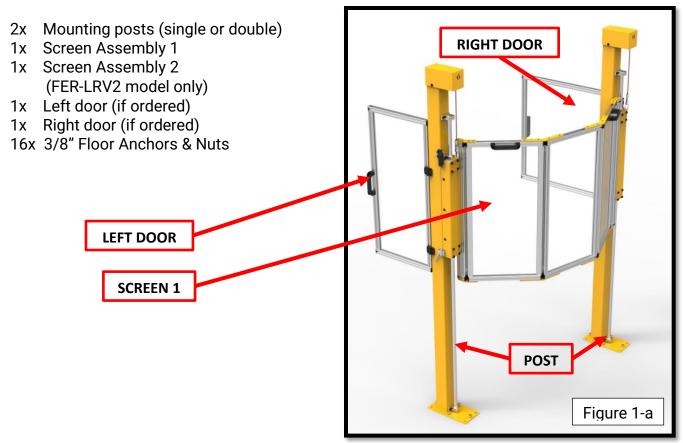
Tools required for installation (Not Included):

- Rotary hammer & 3/8" concrete drill bit
- Set of SAE hex keys
- Crane or forklift

For an electrical connection, you may need one or more of the following (Not Included).

- Wire strippers
- Utility knife
- Screwdrivers
- Hole saw or step drill
- Cable glands
- Cable connectors

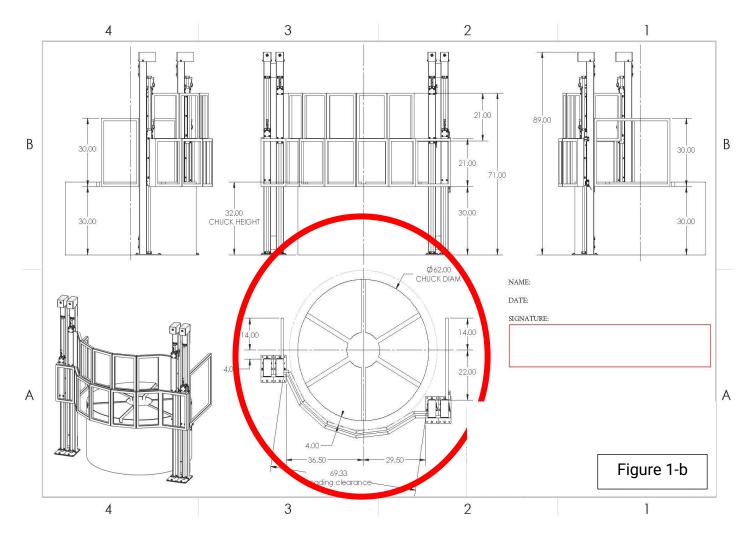
Please make sure that you have everything included in your shipment. Open the crate and check the items following the next list:



#### Warning: Heavy components. Please use a forklift or crane to lift components. We recommend having at least two people perform the installation.

#### Step 1 - Layout

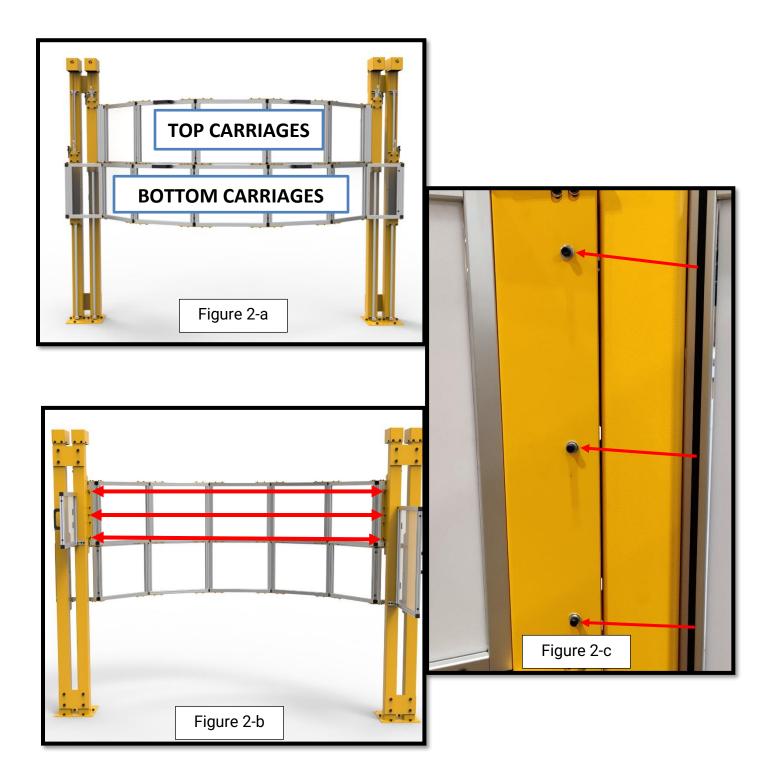
Lay the posts to an approximate position where you will install the guard (*figure 1-a*). Use the validation drawing (*figure 1-b*) as a reference.



#### Step 2 – Mount Screen 1.

Unscrew the three ¼"-20 screws located on each post. (figure 2-b and 2-c)

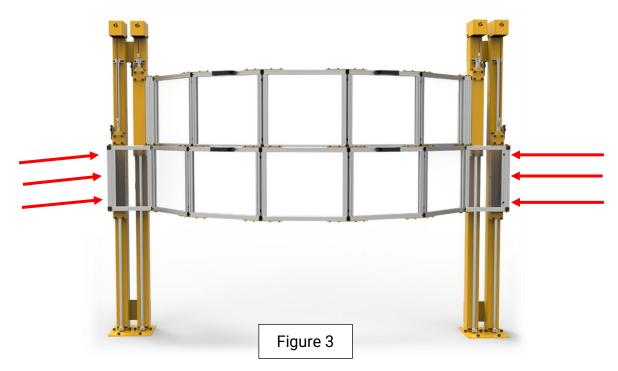
Place screen 1 in front of the top carriages (*figure 2-a*) and use the six screws to secure the shield in place.



### Step 3 – Mount Screen 2.

(Only applies to the model FER-LRV2)

Repeat the same process with screen 2. Mount the  $2^{nd}$  screen on the bottom carriages. Note that the screws are on the outside (*figure 3*).

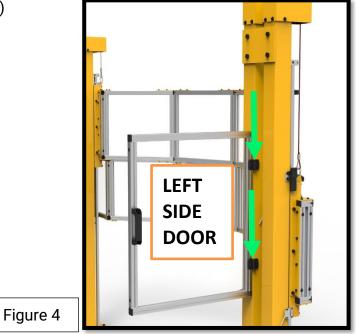


### Step 4 – (Mount the optional side doors)

(Only applies if you have ordered the optional side doors)

Mount the door(s) on the provided hinges. (Figure 4)

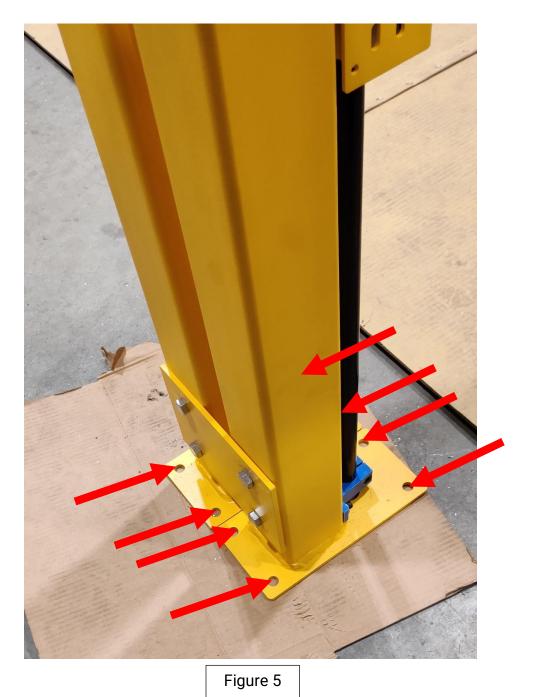
Make sure that the handle is facing you when installing the door(s).



#### Step 5 – Anchoring in place

Adjust the final position of the guard and check for any interferences that could occur while operating the machine, such as control levers. Anchor the posts to the floor using all the holes on the footplates (*Figure 5*). Using a 3/8" concrete bit, drill holes in the floor using a rotary hammer drill. Hammer in the floor anchors and secure the footplates tightly to the floor anchors.

#### **! IMPORTANT !** FOR MODEL <u>FER-LRV1</u>: YOU MUST INSTALL ALL <u>4 FLOOR ANCHORS PER POST</u> FOR MODEL <u>FER-LRV2</u>: YOU MUST INSTALL ALL <u>8 FLOOR ANCHORS PER POST</u>

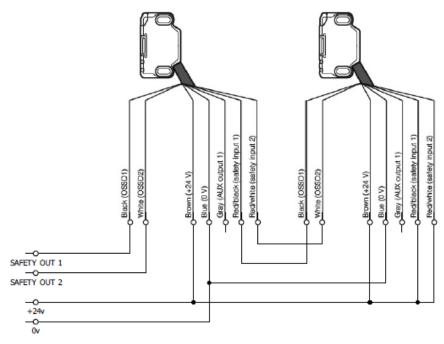


## **Electrical Connection**

At least two non-contact RFID switches are used, which can be cascaded to simplify wiring. We recommend using a safety relay or a similar device that accepts OSSD inputs when interfacing these switches with your machinery.

#### Model Keyence GS-11PC

**Example Electrical Schematic** 



Standard type (loose wires or M12 connector, 8 pins)

Pin number	Wire color	Function
1	Gray	AUX output1
2	Brown	+24 V
3	Light blue	Not used
4	Red/white	Safety input 2
5	Black	OSSD1
6	White	OSSD2
7	Blue	0 V
8	Red/black	Safety input 1

Switching voltage 24 V DC, Max load current 150mA

For more information, and to download the full Keyence GS-11PC instructions visit https://www.ferndalesafety.com/shop/vertical-boring-mill-safety-shield/

# Operation

This guard will block any flying debris, chips, or coolant when the shield is properly adjusted and maintained.

The spindle motor or chuck clutch should turn off and disable when the front shield(s) are not at their highest position.

## Maintenance

You may wipe or wash all non-polycarbonate portions of this safety guard with soap and water.

We have selected the polycarbonate shield for its ability to resist direct impact and flying debris. Do not clean or contact the polycarbonate shield with brake cleaner or any carbon-based oil or cleaning products, as this will void the warranty and deteriorate the polycarbonate material.

In addition to the above indications,

- Remove chips regularly
- Wash with mild soap and water using a clean cloth.
- You may use paste wax to erase minor scratches and help with cleaning.

# Spare parts

You can obtain spare parts, such as polycarbonate shields, electrical components, hardware, etc., by calling our toll-free line at 1-855-326-1243. Please have the model number of the safety guard when you call.