



MAN-AL



**Ferndale**  
**Safety**

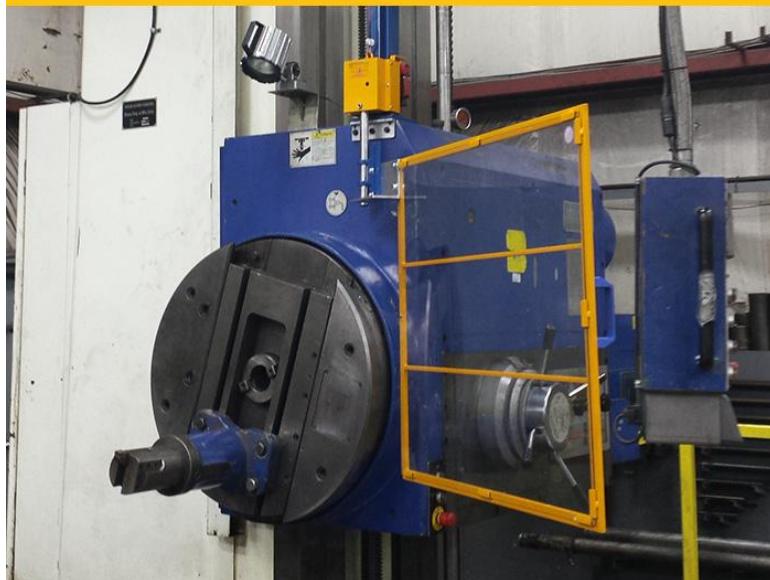
Toll-Free: 855-326-1243  
<https://www.ferndalesafety.com>

**APPLIES TO MODELS:**  
**AL**

**BORING MILL SAFETY SHIELD**

**INSTALLATION GUIDE.**

## Boring Mill Shields



# **WARNING**

**Do not wire the included interlock switches directly into the motor power circuit!**

The interlock switches cannot handle motor load currents!

Maximum Contact Rating  
3A @ 240VAC, 0.1A @ 240VDC

Wire the safety guard interlock switch into the control circuit only.  
MAXIMUM 240 VOLTS

## **DANGER: HIGH VOLTAGE**

PLEASE USE PROPER LOCKOUT/TAGOUT PROCEDURES.  
MAKE SURE TO SHUT OFF ALL POWER TO THE MACHINE BEFORE SERVICING.

Only qualified personnel with the necessary skills should perform these modifications.

Please get in touch with Ferndale Safety if you require any assistance.  
**855-326-1243**

Thank you for purchasing our boring mill safety shield. You now have the highest quality safety shield available. Ferndale Safety designed this safety shield to be easy to install and provide years of trouble-free service. The polycarbonate shield protects against flying chips and coolants and prevents access to rotating parts.

## Mounting and Installation

Tools required for installation (Not Included):

- Drill
- 'F' drill bit
- 5/16-18 tap, tap wrench, and hex bolts
- Set of metric and SAE hex keys

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 ensure that everything is included in your shipment. Remove all packing material from the arm assembly and shield.

1x Vertical mounting post

1x Shield (Size varies with model)

## Step 1: Clearance

You will mount this safety shield on the headstock of your boring mill. First, ensure there is sufficient clearance above the machine. Be mindful that when the headstock is fully raised, it may interfere with the ceiling, gantry cranes, and light fixtures.

The image on the right shows the mounting post in its topmost position.



## EXAMPLE OF BAD CLEARANCE

Here is an example of insufficient clearance above the machine; this Product is **NOT safe to use** in this situation. If you move the headstock to its highest position, the safety shield could impact the crane, causing damage to both the crane and the machine and posing a significant risk of injury or death.



This is the **overhead gantry crane**. The crane is shown nearly in contact with the black-and-yellow striped section of the machine.

**Black-and-yellow striped section.**  
(Top of the machine)

**The headstock** is shown in its lowest position in this photo. During operation, the headstock can travel upward to the black-and-yellow striped section of the machine.

When installed on this machine, the **Model AL safety shield post** will extend into this travel zone, creating a risk of equipment damage and personal injury.

## Step 2: Mounting Surface

You will need to ensure that there is a flat mounting surface. You will need a 6" x 6" flat surface and rest the vertical post on it.

You may need to fabricate a flat mounting surface with a plate and brackets.

Examples of installation:



## Step 3: Mounting

Use four 5/16-18 screws to secure the post to the flat surface.

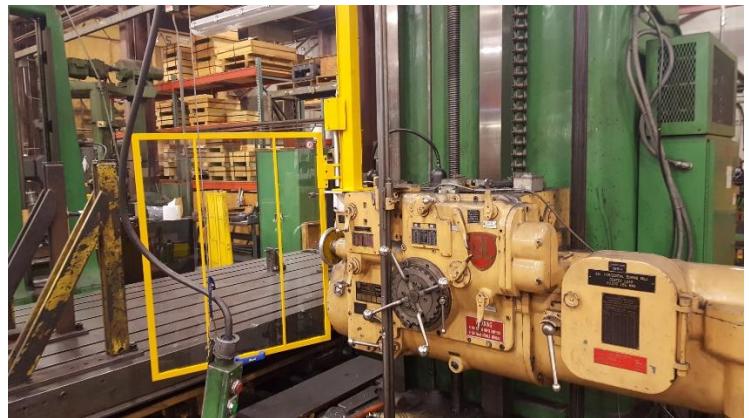
## Step 4: Remove the counterweight locking screw

Remove the counterweight locking screw; it is used only for shipping. Locate the hole on the side of the vertical tube on the mounting post and unscrew it to release the internal counterweight.

## Step 5: Shield Mounting

Mount the shield by sliding it into the shield clamp located on the chrome tube. Loosen the three screws, mount the shield to your liking, then retighten the screws.

## Photos of example installations



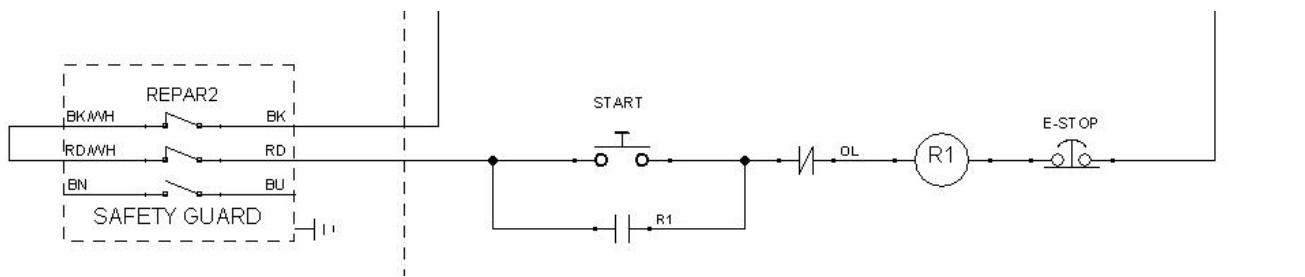
# Electrical Connection

Technical specifications:

- Manufacturer: Telemecanique
- Metal enclosure switch, IP65-rated degree of protection conforming to IEC 60529
- Operational characteristics: 3A @ 240VAC, 0.1A @ 240VDC
- Two switches (model FB, FA, BF, AF) or three switches (model FBB, FAB, BBF, BAF) wired in series
- Seven-wire system (2x NC and 1x NO electrical contacts plus one ground wire)
- Mechanical durability: 100000 operating cycles
- Ambient air temperature conditions: -25 .... +70 °C

Wire color chart

Black	Black/White stripe	Contact Normally Closed #1
Red	Red/Red stripe	Contact Normally Closed #2
Brown	Blue	Contact Normally Open
Green		Ground



The above diagram gives an example of an electrical connection to the machine. The dotted square box indicates internal switches inside your Repar2 milling machine safety shield. The area between the two dotted lines represents the internal wiring inside your machine, which may differ.

## Danger! High Voltage

**Voltages of up to 600 volts are present. When any machine panel is open, there is a risk of injury, electrocution, and death. A qualified technician must make electrical connections.**

# **Operation**

Block any flying debris, chips, or coolant when the shield is properly adjusted and maintained.

You can swing or lift the shield. The spindle motor is disabled if the safety interlock switch is wired correctly.

# **Maintenance**

All non-polycarbonate portions of this safety shield may be wiped or washed clean with soap and water.

The polycarbonate shield has been selected 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. 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.
- Paste wax may be used to erase minor scratches and help with cleaning.

# **Spare parts**

Spare polycarbonate shields, electrical components, hardware, and other parts can be obtained by calling our toll-free line at 1-855-326-1243. Please have the model number of the safety shield when you call.

Spare parts available:

- Polycarbonate shield
- Frame for polycarbonate shield
- Electrical switches
- Plastic hole plugs
- Set screws and bolts
- Felt pads for the rotation brake

## **WARRANTY**

### **Ferndale Safety's Commitment:**

Ferndale Safety ("FERNDALE") guarantees that its products are free from material and workmanship defects for one year from the date of purchase. Custom-made products carry a three-month (90 days) warranty from the date of purchase.

### **Exclusions:**

This limited warranty does not cover, and FERNDALE shall have no obligation or liability with respect to, any damage, injuries, or problems resulting from:

- Non-FERNDALE authorized installations.
- Insufficient maintenance, including failure to remove chips and coolant.
- Misuse, negligence, or accidents.
- Unauthorized alterations, modifications, or repairs.
- Claims on products beyond their warranty period or used contrary to their intended purpose.
- Damage due to chemical contamination or foreign objects.
- Use of FERNDALE products for "hot work"

### **Disclaimer:**

FERNDALE MAKES NO WARRANTY OR REPRESENTATION, EXPRESSED OR IMPLIED, REGARDING NON-INFRINGEMENT, MERCHANTABILITY, OR FITNESS FOR THE PARTICULAR PURPOSE OF THE PRODUCTS; ANY BUYER OR USER ACKNOWLEDGES THAT THE BUYER OR USER ALONE HAS DETERMINED THAT THE PRODUCTS WILL SUITABLY MEET THE REQUIREMENTS OR THEIR INTENDED USE. FERNDALE DISCLAIMS ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED.

### **Limitation of Liability:**

FERNDALE will not be liable for any indirect, incidental, or consequential damages, including loss of profits or commercial loss, regardless of the cause. Liability for any claim shall not exceed the purchase price of the Product in question. Claims related to warranty, repair, or other concerns will only be considered if FERNDALE's evaluation confirms proper handling, storage, installation, maintenance, and absence of misuse or inappropriate modifications.

By purchasing Our Products, you agree not to use them for "**hot work**" (e.g., grinding, welding, soldering, cutting) due to fire risk. Misuse is forbidden, and following all safety guidelines is required. Non-compliance means you accept full responsibility for any resulting harm or damage. For your safety and the effectiveness of Our machine guarding, remain within the "Safe Work Zone" directly in front of the shield or guard. Standing to the side increases injury risk and breaches our usage policy. Adhering to this rule ensures your safety and the Product's optimal performance. For detailed safety and operational guidelines, please see our Terms and Conditions here: <https://www.ferndalesafety.com/terms-and-conditions/>.

### **Product Returns & Exchanges:**

#### **Return Policy:**

If dissatisfied, contact us within 30 days of receipt for a refund, excluding shipping costs, subject to inspection. Custom or special-order items are non-returnable. Returns must be in original packaging, unused, and in sellable condition, subject to a 35% restocking fee. The restocking fee is waived if the item is exchanged.

#### **Return Authorization:**

Before returning, obtain a Return Merchandise Authorization (RMA) by calling 514-326-1243. FERNDALE reserves the right to refuse returns on damaged or non-resalable items.

#### **After 30 Days:**

Upon authorization, returns initiated after 30 days from invoice date are subject to a 35% restocking fee and future purchase credit only.

#### **Shipping Charges:**

Customers bear return shipping costs, which are non-refundable. Use traceable and insured shipping methods. Customers are responsible for freight charges on canceled orders shipped before the cancellation notice.