

OPERATION MANUAL

**Fire Door
Hand Chain Operator – Medium
(FHCM)
&
Hand Crank Operator – Medium
(FHKM)**

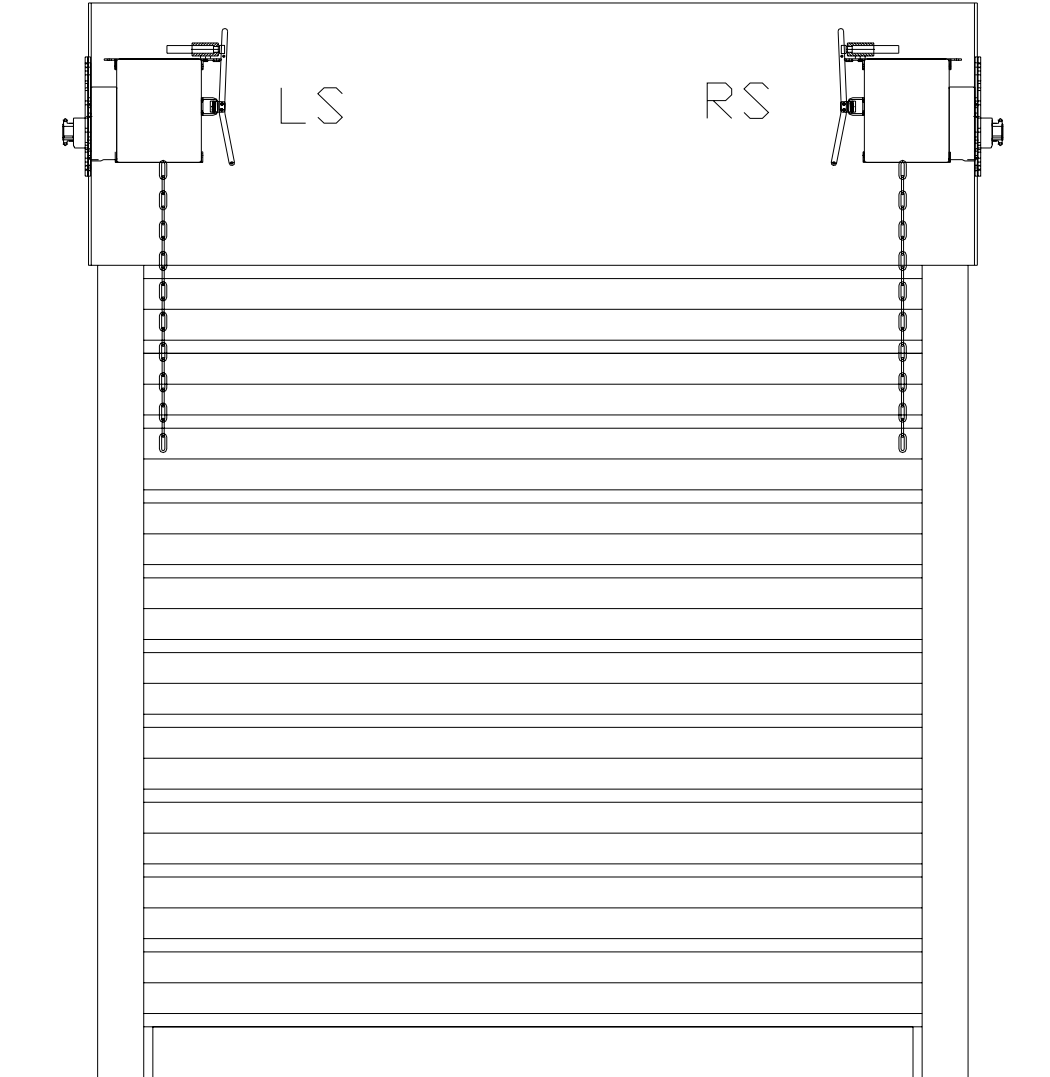
GENERAL NOTES

WARNING – TO REDUCE THE RISK OF SEVERE INJURY OR DEATH, READ AND FOLLOW ALL INSTALLATION INSTRUCTIONS

- ❖ The door is under extreme spring tension. Have qualified door mechanics make all necessary adjustments and repairs to the door.
- ❖ The operator must be installed by qualified door mechanics using proper tools and equipment.
- ❖ Make sure the available alarm power supply to be connected to the operator is of the same voltage, frequency, phase and wattage as indicated on the nameplate of the alarm box. (If provided.)
- ❖ Read and understand this manual before installing the operator.
- ❖ Read and understand the wiring diagram of the alarm box (if applicable), and any other equipment to be connected to the operator.
- ❖ The operator is intended to be installed eight (8) feet or more above the floor. It must be covered or sprockets and roller chains must be guarded when installed less than eight (8) feet above the floor.
- ❖ Always disconnect alarm power whenever installing or servicing the door operator or door.
- ❖ Any change in mounting position may result in change of operator rotation and consequently in change of control functions. Consult factory for any changes.

INSTALLATION INSTRUCTIONS

INSTALLATION POSITIONS



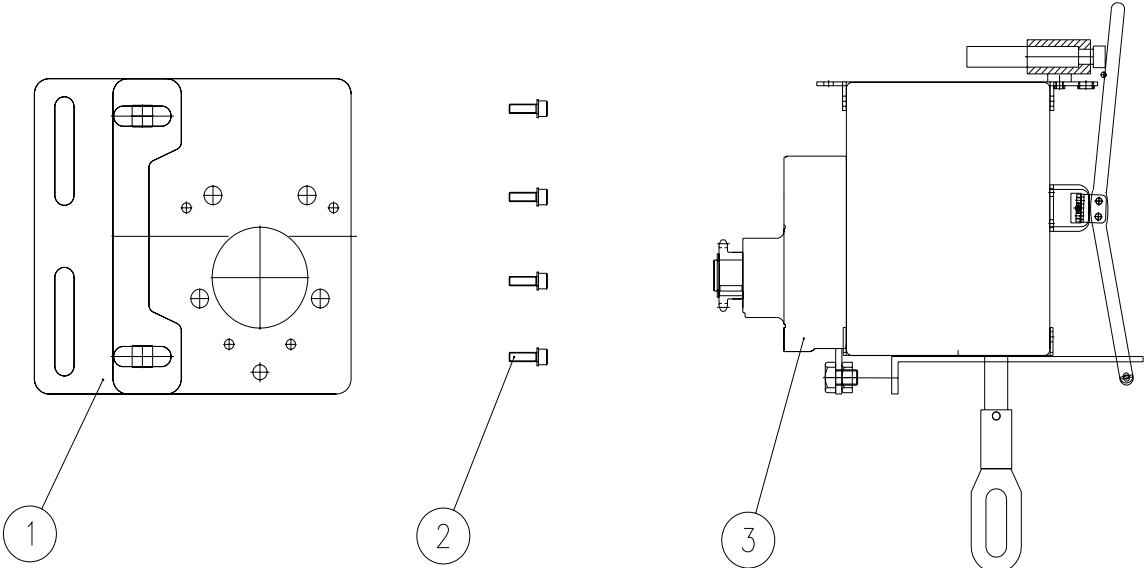
Consult factory for changes in installation positions.

NOTE: Any change in mounting position may result in change of operator rotation.
Consult factory for any changes. (LH=LS, RH=RS)

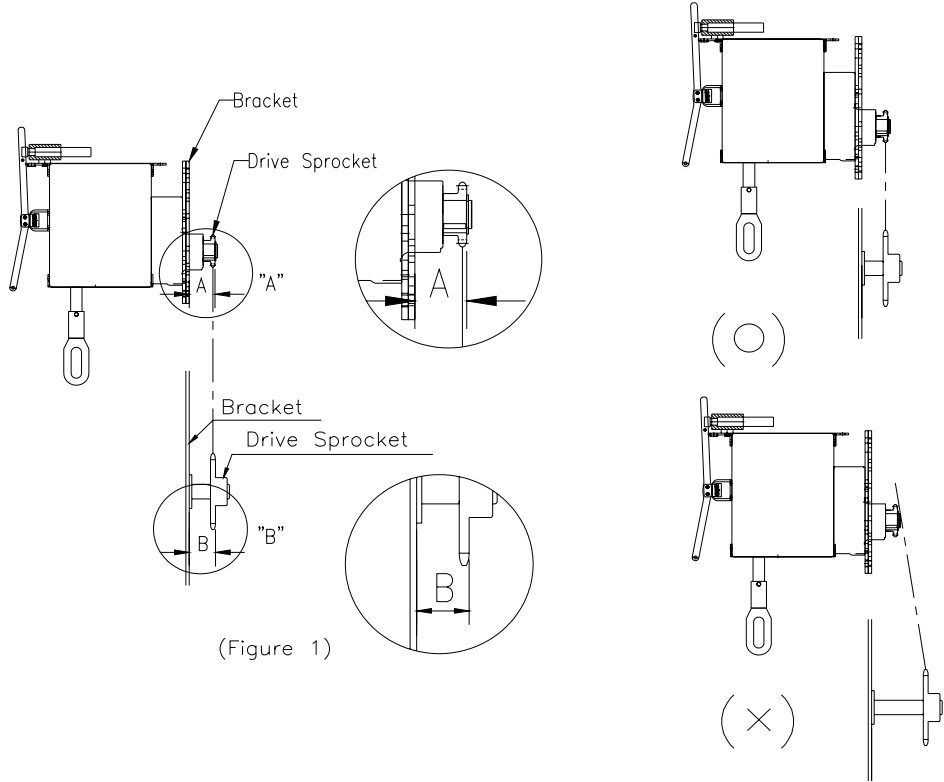
OPERATOR MOUNTING

❖ **CONSULT SHOP DRAWINGS FOR OPERATOR LOCATION**

- 1. Before the operator is installed, verify that the door is properly operating and balanced.
- 2. Mount the mounting bracket (1) to the door end plate.
- 3. Using 4-screws (2) to mount the operator (3) to the mounting bracket (1).



- 5. When the operator is mounted on the bracket, be sure the door sprocket is properly aligned with the operator drive sprocket before securing to the shaft. The clearance (B) must be the same as the height (A). (See figure 1)
- 6. The shelf or bracket must provide adequate support for the operator. Prevent play between operator and door shaft. Permit operator to be fastened securely and with the drive shaft parallel to the door shaft.

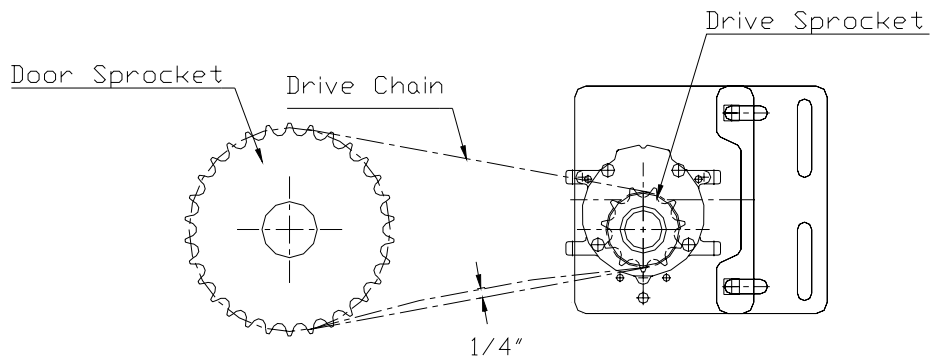
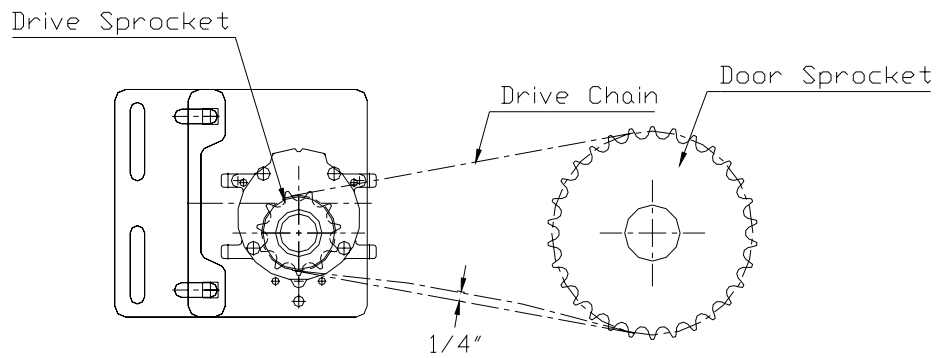


* Hand crank (FHKM) shown. Chain hoist (FHCM) similar.

ADJUSTING THE DRIVE CHAIN

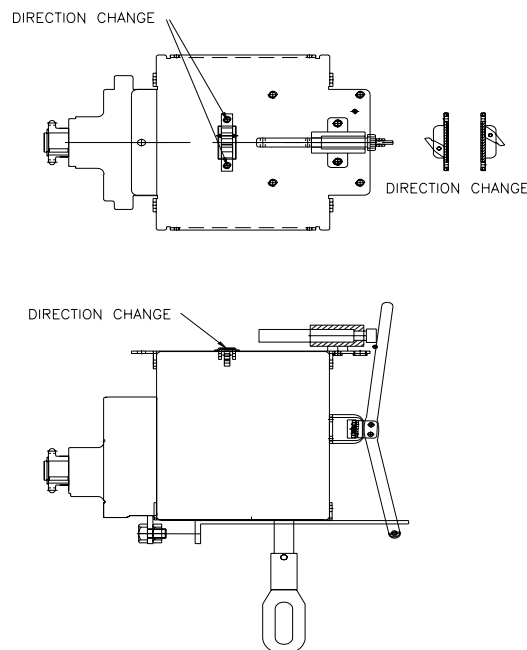
NOTE: Use correct type, size and proper length of roller chain.

1. Adjust the drive chain so that there is about 1/4" of slack when the chain is depressed.
2. Use the mounting bracket (1) to adjust the tightness of drive chain.



CHANGING HOIST OR CRANK DIRECTION (Changing Rotation)

1. Use the operating chain or crank to verify correct direction (rotation). If pulling the chain or turning the crank opens the door, then the direction is correct. If pulling the chain or turning the crank closes the door, the direction ***IS NOT*** correct. By reversing the internal direction control, the hoist or the crank can be changed from right hand to left hand or left hand to right hand.
2. To reverse hoist or crank direction, **make sure the door is in the closed position**. Remove the 2 screws. Remove the small direction control plate, rotate it end-for-end, and reattach the plate. Pull the operating chain or turn the crank to verify the direction is correct.



ADJUSTING OPERATING CHAIN AND CABLE LENGTH

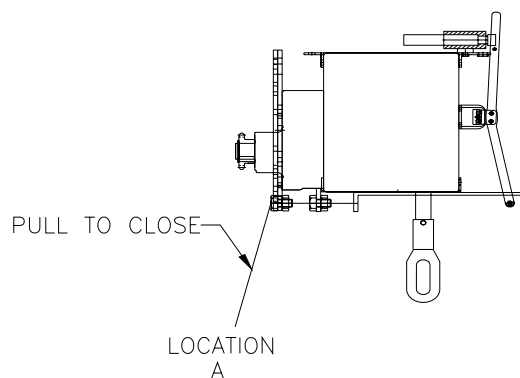
Operating chain and cable are provided in standard length. Depending on door height, the chain and cable may need to be shortened or lengthened. A DIFFERENT COLOR connecting link can be found in the chain hoist. Use this link for breaking.

NOTE: Before adjusting the operating cable length, run the cable through eye bolt(s) installed in the mounting plate (or alternate location) to route the cable back towards the wall. (See next page for possible cable installation options.)

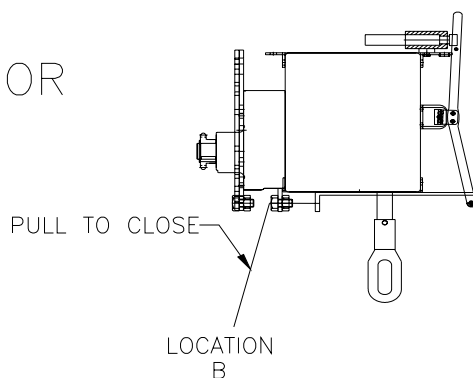
OPERATING INSTRUCTIONS

Pull operating chain or turn crank to open door. Pull down on operating cable to close door. To stop door closing, let go of the cable.

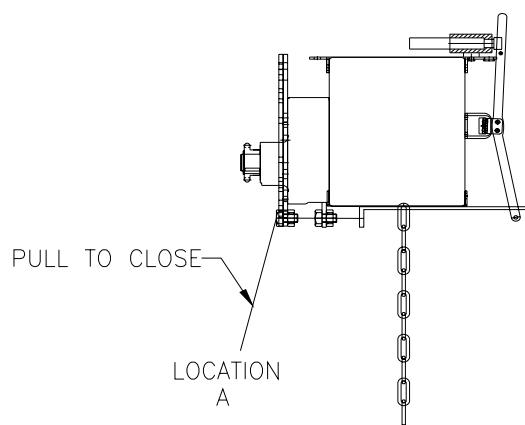
TURN CRANK TO OPEN THE DOOR. PULL CABLE TO CLOSE.



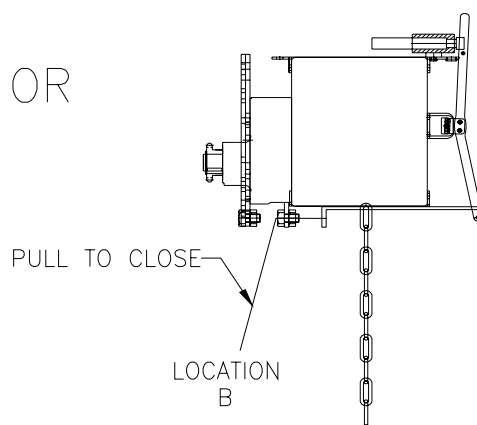
OR



PULL CHAIN TO OPEN THE DOOR. PULL CABLE TO CLOSE.



OR

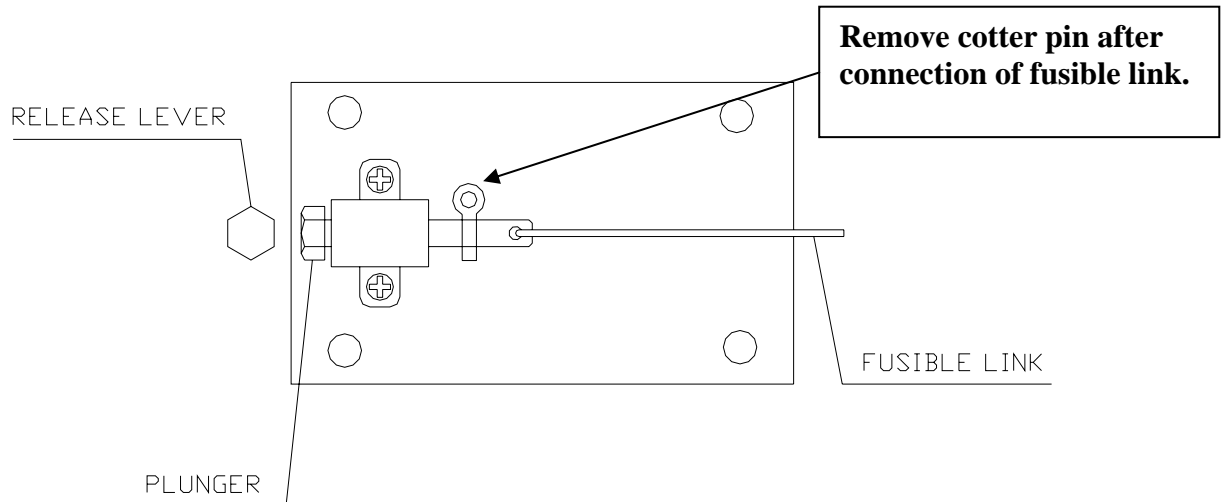


*Change close cable location to A or B as needed.

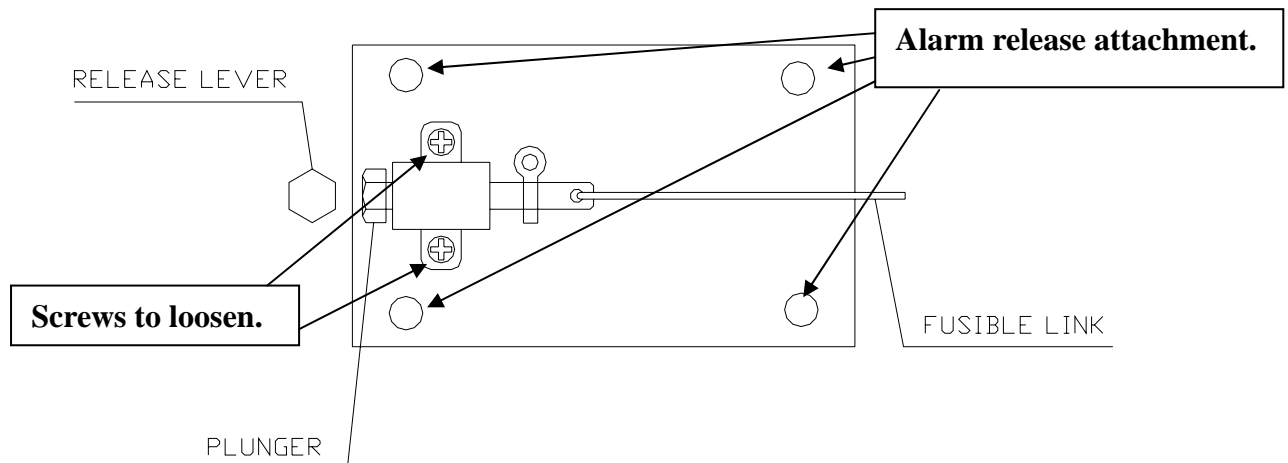
FUSIBLE LINK CONNECTIONS

❖ REMOVE COTTER PIN FROM RELEASE ASSEMBLY.

Consult NFPA-80 and the authority having jurisdiction for fusible link location(s) and method.



NOTE: Fusible link release can be substituted by alarm release box. Fusible link release can be removed by loosening the 2 screws. Alarm release can be attached by using the 4 screws.



*Alarm release box can be used as a substitute for standard fusible link release. Consult factory for details.

MAINTENANCE INSTRUCTIONS

The brake is a self-adjusting brake. It is maintenance free. The brake assembly requires no additional adjustment for its lifetime.



Disconnect alarm power supply to the operator before servicing.

Check the following items at the intervals listed:

CHECK LIST	DESCRIPTION	EVERY 3 MONTHS	EVERY 6 MONTHS	EVERY 12 MONTHS
Drive Chain	Check for excessive slack. Check & adjust as required Lubricate.			
Sprockets	Check set screw tightness			
Fasteners	Check & tighten as required			
Bearings & Shafts	Check for wear & lubricate			
Drop-test	Inspect door, drop-test for proper operation and full closure per NFPA-80			

- ❖ Inspect and service whenever a malfunction is observed or suspected.
- ❖ Before servicing, always disconnect power supply and alarm power to the operator.
- ❖ All replacement parts must be obtained from the door manufacturer per NFPA-80.



Do not place hands or tools in or near the operator when the door is opening or closing or when testing control or safety devices.

IT IS REQUIRED TO DROP TEST THE DOOR WITH THE RELEASE OF THE FUSIBLE LINK AT LEAST ONCE A YEAR. THIS DROP TEST WILL ENSURE THE PROPER FUNCTIONING OF THE FUSIBLE LINK MECHANISM.