



**Clopay**®

**COOKSON**°

## **READ ME FIRST!**

# SUPPLEMENTAL INSTALLATION MANUAL

CORNELL

This Supplemental Installation Manual must be used – as necessary and applicable – in conjunction with the Commercial & Industrial Sectional Doors Installation & Maintenance Manual.

Installers are required to follow and heed all applicable safety instructions and warnings contained in this Manual and the Commercial & Industrial Sectional Doors Installation & Maintenance Manual.



Thank you for your purchase. For questions, contact Customer Service at 800-277-2576 or email extremeseries@clopay.com

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PLEASE CAREFULLY REVIEW AND FOLLOW ALL WARNINGS AND INSTRUCTIONS IN THE CHAMBERLAIN HPH1 HIGH PERFORMANCE HOIST INSTALLATION MANUAL FOR DOOR OPERATOR INSTALLATION.

## **ITEMS TO CONSIDER**

#### NOTICE

Never reuse old track or hardware when installing a new door, as it may cause installation problems or the door to fall, resulting in serious injury or property damage. Any old track must be removed prior to installation. Failure to use new track installed in accordance with this Manual will result in damage to the door.

- TRACK AND HARDWARE: Express warranties apply only to doors installed using original, factory-supplied sections, parts and hardware and in strict adherence with these instructions.
- **DRILLING:** Take care not to drill through the outside steel skin unless otherwise instructed.
- PAINTING THE DOOR: If you plan to paint the door, be sure to follow directions described in the COMMERCIAL AND INDUSTRIAL DOOR INSTALLATION AND MAINTENANCE. We recommend painting the door and allowing it to dry completely before beginning installation.

## **EXTREME SERIES MINIMUM CLEARANCE REQUIREMENTS<sup>3</sup>**

		Headroom <sup>1</sup>		Operator Sideroom <sup>2</sup>	
		2" Track	3" Track	2" Track	3" Track
Standard Lift - 15" Radius		20-3/4"	22"	19-3/4"	
High Lift		High Lift + 13-3/4"	High Lift + 14-1/2"		
Vertical Lift	Breakaway	Opening Height + 14"			
	Straight Incline	Contact Factory			

(1) Vertical lift doors with straight incline track require additional headroom. Contact Customer Service at 800-277-2576 with any questions.

(2) Adequate sideroom clearance is needed in order to slide the operator onto shaft. Refer to THE CHAMBERLAIN HPH1 HIGH PERFORMANCE HOIST INSTALLATION MANUAL for recommended operator and controller placement and minimum shaft extension beyond the operator.

(3) Refer to COMMERCIAL AND INDUSTRIAL DOORS INSTALLATION & MAINTENANCE MANUAL for all other clearances.

#### **A** WARNING

To protect yourself from injury, carefully read the following safety information and warnings before you install or attempt to repair your new EXTREME Series door system.

EXTREME Series door systems use springs to counterbalance the load. Attempting to remove a torsion spring assembly and/or any red colored fasteners without proper training or tools may result in an uncontrolled release of spring forces which can cause serious or fatal injury.

▲ **DO NOT** use any substitutes for the track and hardware specified and supplied with the door system. Use of unapproved substitute components may result in severe injury.

▲ **DO NOT** attempt to loosen any bracket fasteners and/or any red colored fasteners except when and as directed in detail in the following instructions. Otherwise, the components bracket could suddenly release spring forces with dangerous force and risk severe injury.

▲ **DO NOT** use wood labeled as Spruce-Pine-Fir (or SPF). Four (4) 3/8" [10 mm] masonry anchors can be used on concrete or block walls. Use of unapproved substitute components may result in severe injury. If the wood splits once the torsion spring is in place, it should be replaced by a professional installer. Otherwise, you could suddenly release spring forces with dangerous force and risk severe injury.

▲ **DO NOT** attempt to loosen any fasteners on spring or cable components. You could suddenly release spring forces with dangerous force and risk severe injury.

▲ **DO NOT** use screwdrivers or any substitutes for solid steel winding bars when installing a door with torsion springs. Use of substitutes for solid steel winding bars may result in sudden release of spring forces with dangerous force and risk severe injury. See "Spring Winding" section of the COMMERCIAL & INDUSTRIAL SECTIONAL DOORS INSTALLATION & MAINTENANCE MANUAL for further safety instructions regarding winding bars.

▲ **DO NOT** place hands or fingers in the door section joints, track or any other door parts when the door is opening and closing as finger pinch, crush or amputation will result.

▲ **DO NOT** install door operator on an unbalanced or non-lubricated door, as this may result in a failure for the door to reverse causing severe injury or death.

**DO NOT** install an operator below 8' [2.44 m] from the floor.

▲ **DO NOT** wear watches, rings or loose clothing while installing or servicing a door or an operator, as these items may be caught in the door or operator mechanisms and cause severe injuries.

▲ **DO NOT** install a control station and/or controller out of sight of the door, as failure to view door during operation may result in damage to the door and severe injuries.

▲ **DO NOT** install a control station and/or controller below 5' [1.5 m] above floors, landings, steps or any other adjacent walking surface, as this may result in damage to the door and severe injury.

▲ **DO NOT** install the control station at a location where the user operating the controls may come into contact with the door while in operation, resulting in severe injuries.

▲ **DO NOT** install the control station near any of the moving parts of the door, as the user may come into contact with the door during operation resulting in severe injuries.

▲ **DO NOT** permit children to operate or play beneath any EXTREME Series door at any time, and ensure that children are clear of the door's path while in operation at all times. Failure to do so may result in severe injury or death.

▲ **DO NOT** connect a door operator to a power source until instructed to do so in the provided installation instructions. PLEASE CONSULT THE CHAMBERLAIN HPH1 HIGH PERFORMANCE HOIST INSTALLATION MANUAL FOR DOOR OPERATOR INSTALLATION.

▲ **DO NOT** attempt to make any adjustments or perform maintenance while a power source is connected to a door operator. PLEASE CONSULT THE CHAMBERLAIN HPH1 HIGH PERFORMANCE HOIST INSTALLATION MANUAL FOR DOOR OPERATOR INSTALLATION.



#### A WARNING

Hazardous voltage. (120V) Contact may cause electrical shock and injury. Disconnect all power before servicing.

**D0** D0 carefully review all warnings on and instructions for the door and operator, and make sure you have ALL parts and tools before starting any installation. If any warnings or parts are missing/incorrect or you need help with any maintenance/installation steps, please contact your professional installing dealer or contact Customer Service at 800-277-2576.

**DO** install the entrapment warning placard on the wall next to the control station in a prominent location visible from the door.

**D0** use proper connection structures for the torsion spring assembly by using a wooden pad  $(2" \times 6" \times 12" [51 \text{ mm} \times 152 \text{ mm} \times 305 \text{ mm}]$ minimum) or steel plate  $(1/4" \times 10" \times 12" [6 \text{ mm} \times 254 \text{ mm} \times 305 \text{ mm}]$ minimum) per spring anchor bracket that must be of good quality and firmly attached to the wall. Four (4)  $3/8" \times 3" [10 \text{ mm} \times 76 \text{ mm}]$  lag screws should be used to attach to a wood structure. The wood needs to be made of a Grade 2 or better Southern Yellow Pine (also known as Southern Pine or Yellow Pine).

**DO** disable all locks and remove all ropes connected to a door before installing an operator.

DO test the entrapment protection device(s) upon completion of installation.

**DO** instruct the end user on the operation of the manual release of the operator from the door.

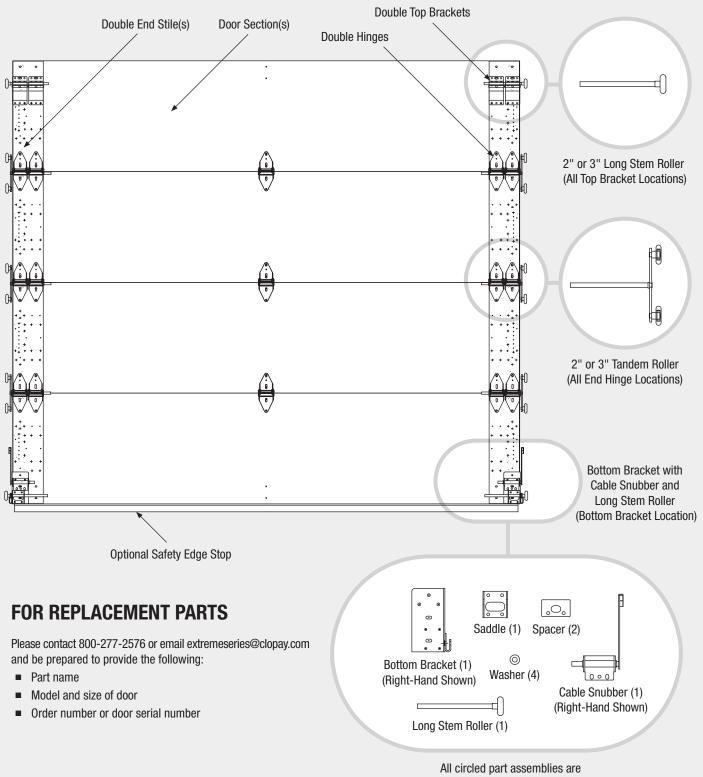
**DO** SAVE ALL INSTALLATION AND MAINTENANCE MANUALS.

**DO** check all parts and contents to ensure you have the correct parts and number of components. Contact Customer Service at 800-277-2576 if you need assistance.

The manufacturer disclaims all liability for any installation which is not in compliance with applicable state, county or local building codes.

# **EXTREME SERIES - DOOR ASSEMBLY**

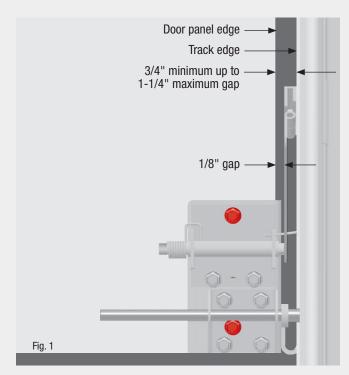
## **DOOR ASSEMBLY - INSIDE LOOKING OUT (ISLO)**



mirrored on opposite side of door.

#### **DISTANCE BETWEEN DOOR PANEL AND TRACK**

 Distance or gap between door panel edge and track edge is 3/4" minimum on RH and LH sides of door. See Fig. 1.



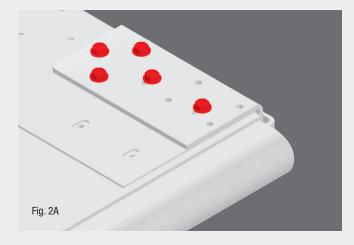
#### **INSTALLATION OF SNUBBER(S)**

#### **STEP 1**

 Install bottom bracket with cable attached using red-headed fasteners. See Fig. 2A and refer to COMMERCIAL & INDUSTRIAL SECTIONAL DOORS INSTALLATION & MAINTENANCE MANUAL, Page 6.

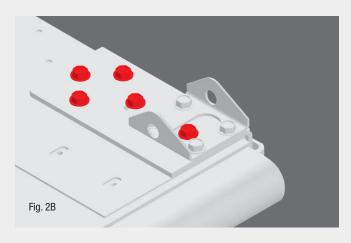
## **A** WARNING

**DO NOT** remove red-headed fasteners on bottom bracket when torsion spring is under tension. You could suddenly release spring with dangerous force and risk severe injury.



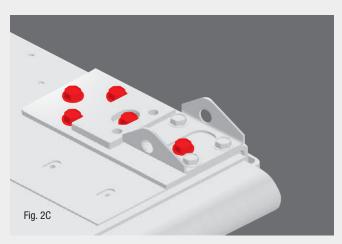
#### STEP 2

 Install saddle in proper orientation as shown. See Fig. 2B and refer to COMMERCIAL & INDUSTRIAL SECTIONAL DOORS INSTALLATION & MAINTENANCE MANUAL (See Step 1).



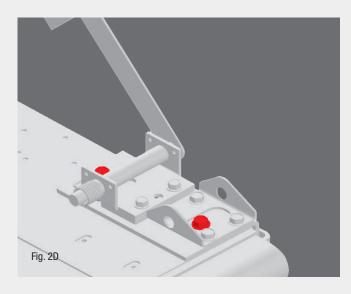
#### **STEP 3**

Place metal spacers, two per bottom bracket, above saddle with the centered red-headed fastener inside the slot as shown. See Fig. 2C.



#### **STEP 4**

- Place Cable Snubber on top of metal spacers as shown.
- Ensure arm is no more than 1/8" away from edge of door. See Fig. 1.
- Align slots in Cable Snubber with holes in spacer.
- Mark with pencil onto bottom bracket and predrill 3/16" holes through the bottom bracket and end stile.
- Fasten Cable Snubber using two self tapping screws provided in kit.
- The screws use a 3/8" driver. See Fig. 2D and refer to Cable Safe Installation Instructions.



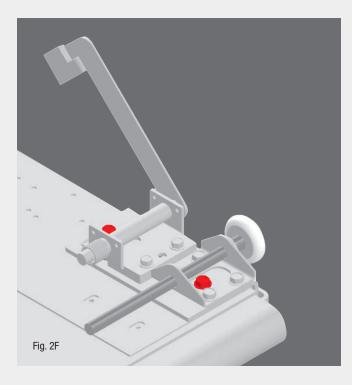
#### **STEP 5**

Place four (4) washers onto long roller stem shaft. See Fig. 2E.



#### **STEP 6**

Install roller with washers into saddle. See Fig. 2F.



#### **STEP 7**

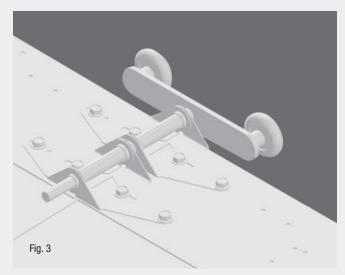
■ Repeat steps 1 – 6 for the LH side.

#### **STEP 8**

- After springs are wound, remove the cotter pin holding Cable Snubber arm in place.
- Remove the small screw from the swivel U arm and hook U arm around cable.
- DO NOT RE-INSTALL THE SMALL SCREW SET.

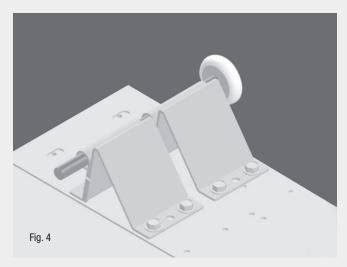
#### **INSTALLATION OF TANDEM ROLLER(S)**

Insert tandem long roller stem into dual end hinges. Repeat for all end hinge locations. See Fig. 3.



#### **INSTALLATION OF TOP BRACKET ROLLER(S)**

 Place long roller stem into dual top bracket carriers. No washers required. Repeat for LH top bracket. See Fig. 4.



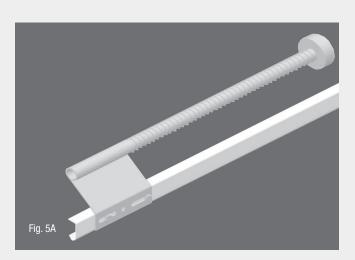
#### INSTALLATION OF 27" PUSHER SPRING (REQUIRED FOR STANDARD LIFT AND HIGH LIFT LESS THAN OR EQUAL TO 27" ONLY)

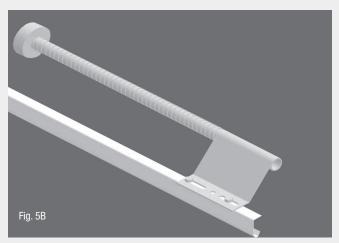
**NOTE:** Installation of pusher springs should be performed following your specific lock-out-tag-out procedures.

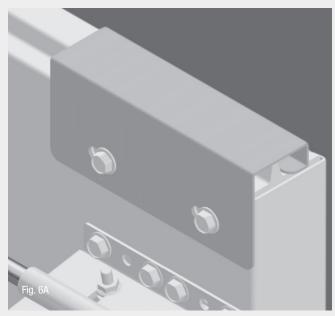
- Manually open door to full open position desired and mark location of top section edge on track.
- Taking 4" to 6" of compression into account, determine location of bracket.
- Mark holes with pencil and pre-drill two 3/8" holes.
- Fasten pusher spring to track using two 3/8" × 1" bolts and nuts.
  Pusher spring foot pad should hit squarely and be centered on section.
- Fig. 5A is traditional side mount location.
- Fig. 5B flange mount is an alternative location and the only location available for 3" track.

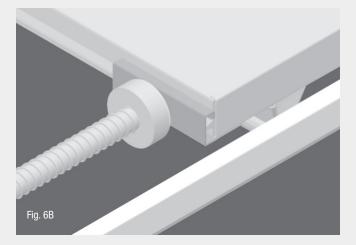
#### INSTALLATION OF TOP SECTION TOP RAIL REINFORCING BRACKETS FOR THE 27" PUSHER SPRING REQUIRED ON EPS DOOR MODELS ONLY (EX3200, EX3211, EX3213, EX3208, EX3209, EX3220, EX3150, EX3158, EX3159 INCLUDES L OR N SUFFIX)

- Place bracket over top panel tongue and position slots over matching double end stile slots.
- Fasten to door using two #14 × 5/8 TEK screws. See Fig. 6A.
- If strut is required, place bracket underneath of strut then fasten strut and bracket to door. See Fig. 6B.
- Repeat on LH side (RH side shown). See Fig. 6A and 6B.





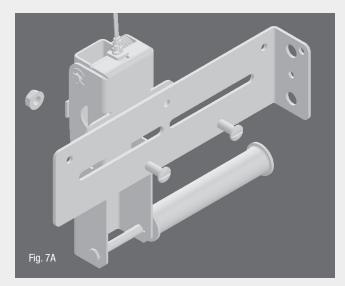




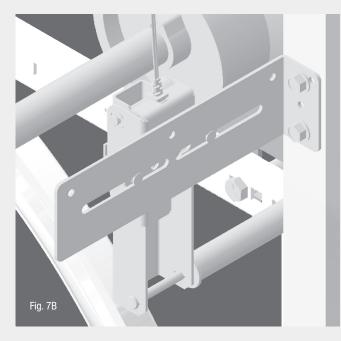
## INSTALLATION OF MOUNTING BRACKET FOR THE CABLE TENSION MONITOR.

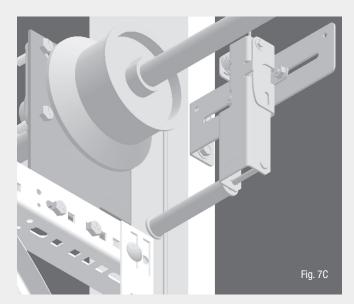
NOTE: Cable tension monitors must be installed on all doors.

- If optional mounting bracket is used, insert 1/4" x 5/8" track bolts into slots and cable tension monitor holes as shown. See Fig. 7A. Loosely thread 1/4-20 nuts on each bolt – do not tighten down yet.
- Left hand assembly shown. See Fig. 7A.



- Place bracket flange on inner side wall of jamb as shown. See Fig. 7B.
- Make sure location of cable tension monitor and bracket do not interfere with drum, track bolts or door.
- Refer to HPH1 Installation Manual for recommended positioning of cable tension monitor.

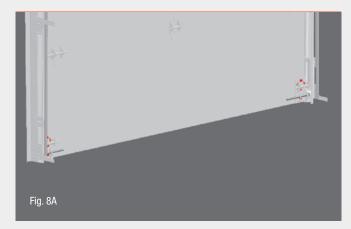




- Fasten bracket flange to side wall of jamb using two (2) 5/16" lag screws.
- Depending on jamb type used different fasteners maybe required.
- Slide cable tension monitor towards cable until the plastic sleeve rim edge catches cable.
- Make sure plastic sleeve is on the outside of the cable as shown and tighten down nuts using 7/16" socket. See Fig. 7C.
- Repeats steps for right hand bracket cable tension monitor assembly and installation.

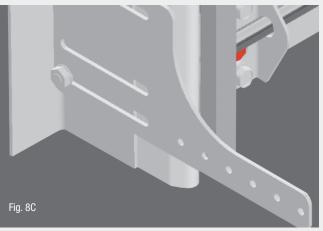
#### INSTALLATION OF TRACK MOUNTING BRACKET FOR LIGHT CURTAIN (ALL DOORS REQUIRE LIGHT CURTAIN)

- Mount track bracket to vertical continuous or reverse angle and/or track clip using two (2) 1/4" × 5/8" track bolts for each bracket.
- Use existing slot in track clip where possible and/or pre-drill 9/32" hole in continuous or reverse angle if needed.
- Fasten track mounting bracket to track or angle using 1/4-20 nuts. Two (2) fasteners per mounting bracket. See Fig. 8A, 8B and 8C.
- Mount light curtain as close to track as possible without interfering with protruding door hardware.









# **EXTREME SERIES - HPH1 INSTALL**

See THE CHAMBERLAIN HPH1 HIGH PERFORMANCE HOIST INSTALLATION MANUAL for instructions on installation and setup.

# NOTES

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