

ROPE BRAKE

Part No. 60-200

INSTALLATION INSTRUCTIONS

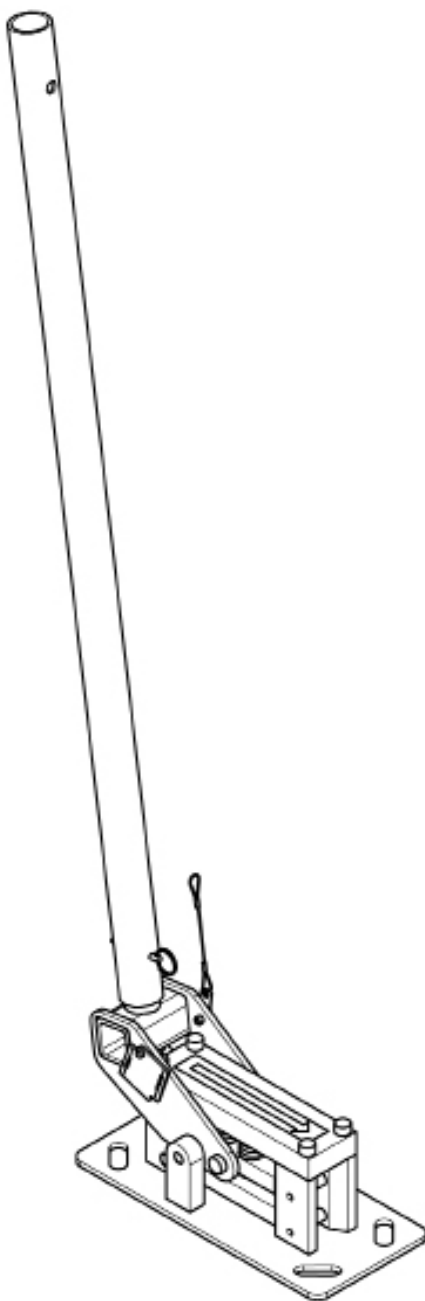


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PRODUCT INFORMATION & SAFETY WARNINGS

PRODUCT WARRANTY & INFORMATION



Scan the QR code to view detailed warranty information at wurtec.com. For questions or product support, contact Wurtec Customer Service at 1-800-837-1066. If a Declaration of Conformity is available for this product, it can be downloaded from its product page on wurtec.com.

EQUIPMENT DESCRIPTION & INTENDED USE

The rope brake is a mechanical braking device engineered to control the descent of wire rope during elevator roping and re-roping operations within the hoistway. It provides controlled, repeatable braking force through compression die springs and friction brake pads, allowing the operator to precisely regulate lowering speed via handle actuation. The system is designed to engage braking force only when the handle is pulled, with additional stopping force achievable by forward handle input.

Reversible brake pads extend service life, and the device is suitable for use across a range of wire rope diameters and installation conditions. Optional mounting brackets, extended handles, and auxiliary descent control tools support varied installation and modernization configurations where floor anchoring may be limited or increased leverage and load control are required.

PRODUCT INFORMATION & SAFETY WARNINGS

WARNING

EXCLUSION OF LIABILITY

This equipment should only be installed and serviced by trained personnel. This manual is a guide, not a substitute for formal training, and may not cover every scenario or condition of use. Wurtec reserves the right to change product design and specifications without notice.

FAILURE TO COMPLY WITH THE FOLLOWING GUIDELINES COULD RESULT IN DEATH OR SERIOUS INJURY:

- Never use the Rope Brake to lower people, materials, or equipment down the hoistway.
- Never operate the Rope Brake unless it is properly anchored to the building and used only with wire rope diameters and lengths specified in the manual.
- Brake pads must be inspected for wear before each use and rotated or replaced if required, since worn pads can cause loss of rope control.
- Carefully read and follow the instructions for brake pad verification and replacement.
- Only trained operators may actuate the Rope Brake handle and must maintain full control of rope descent at all times, ensuring the rope can be stopped at any point.
- Do not allow the rope to exit the Rope Brake until it is properly secured.

REQUIRED TOOLS

Rope Brake Adjustment

- Clamp
- Crescent Wrench
- 4, 6, and 8 mm hex key
- 4, 6, and 8 sockets and extension
- Impact Driver

Concrete Anchoring - Rope Brake

- Hammer
- Hammer drill with appropriate masonry bits
- Wrench or sockets for 5/8 in. (16 mm) concrete anchors
- (4) 5/8 in. × 3-1/2 in. concrete anchors

TOOLS FOR INSTALLING ROPE BRAKE ACCESSORIES

Concrete Anchoring - Rope Guide

- Wrenches for 1/2 in. concrete anchors
- (4) 1/2 in. × 3-1/2 in. concrete anchors

Concrete Anchoring - Re-Roping Bracket

- Section of 3/4 in. thick plywood
- Wrenches for 5/8 in. (16 mm) concrete anchors
- (4) 5/8 in. × 3-1/2 in. concrete anchors

Concrete Anchoring - Mounting Angles

- Wrenches for 1/2 in. concrete anchors
- (4) 1/2 in. × 3-1/2 in. concrete anchors

SPECIFICATIONS

Maximum Rope Length per Rope Diameter

Rope Size (mm)	Rope Size (in)	Single Wrap		Double Wrap	
		Max Estimated Rope Length* (m)	Max Estimated Rope Length* (ft)	Max Estimated Rope Length** (m)	Max Estimated Rope Length** (ft)
10	3/8	310	1015	465	1525
11	7/16	690	2260	1040	3410
13	1/2	460	1510	690	2260
16	5/8	330	1080	495	1620
19	3/4	335	1100	500	1640
22	7/8	170	555	250	820

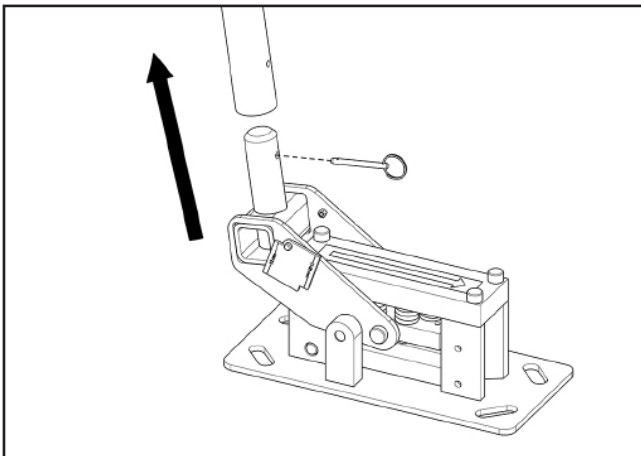
*Based on test data using new brake pads

DO NOT attempt to interpolate data to other rope sizes

**Calculated based on 1.5x Single Wrap test data

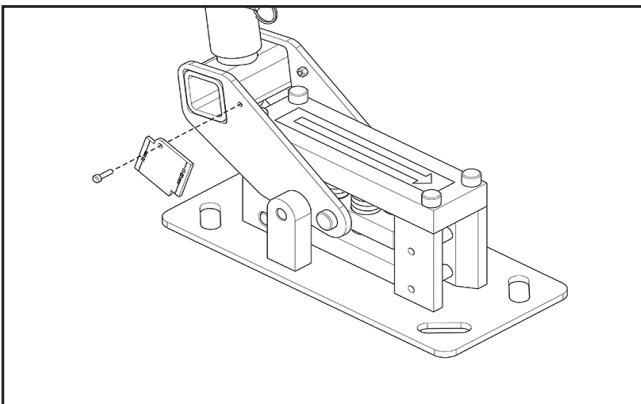
NOTE: Use the 11 mm hole locations for 10 mm or 11 mm wire ropes

ADJUSTING BRAKE PADS



Step 1: Remove the Handle

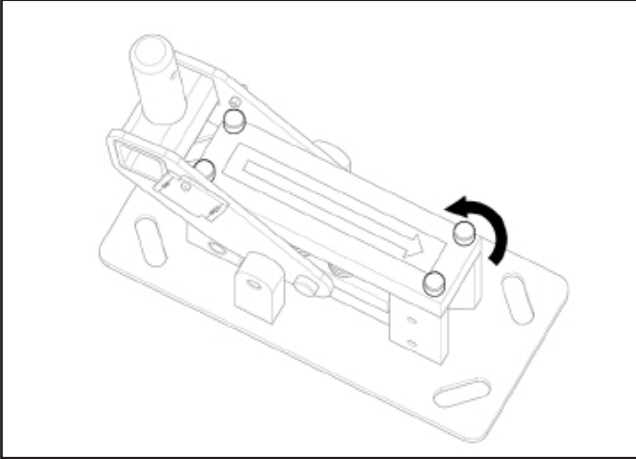
- The brake pads must be adjusted whenever a different wire rope diameter is used with the Rope Brake.
- To begin the adjustment place the Rope Brake flat on a tabletop. Pull the pin connecting the handle, then remove the handle.
- This Rope Brake is intended for use only with wire rope diameters specified in this manual.



Step 2: Remove the Rope Brake Height Gauge

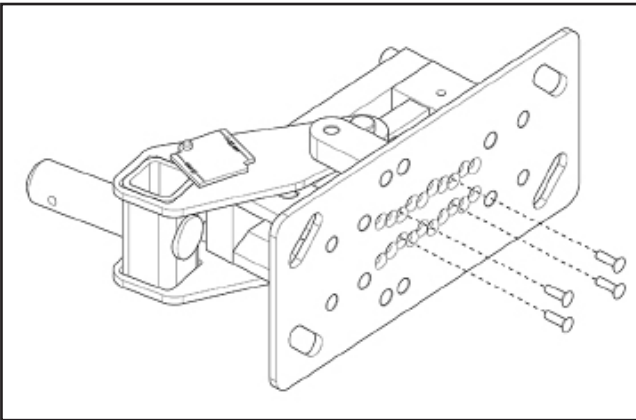
- Use a 3 mm Allen wrench to remove the Rope Brake Height Gauge.
- Set gauge and screw aside for later.

ADJUSTING BRAKE PADS



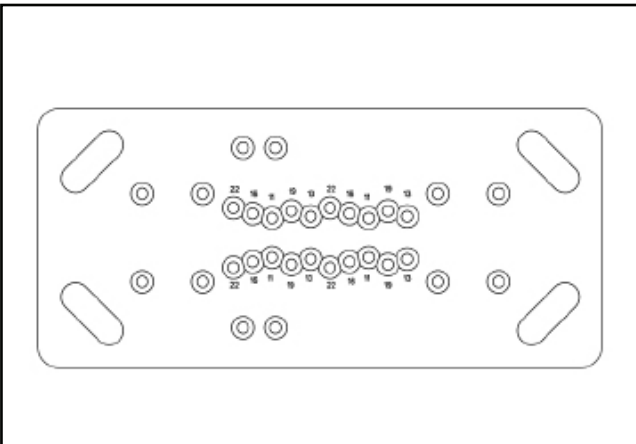
Step 3: Loosen the Top Screws

- Carefully loosen the four upper M10 socket head screws to relieve spring compression. Loosen the screws incrementally in a crisscross pattern to ensure the spring pressure is released evenly.
- *NOTE: Full removal of the screws is not required.



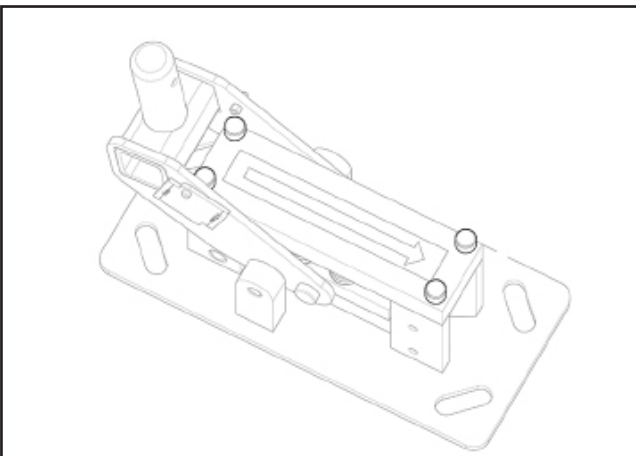
Step 4: Remove the Brake Pad Screws

- Lay the rope brake on its side.
- Remove the four flat head screws that hold the brake pads to the base.



Step 5: Reposition the Brake Pads

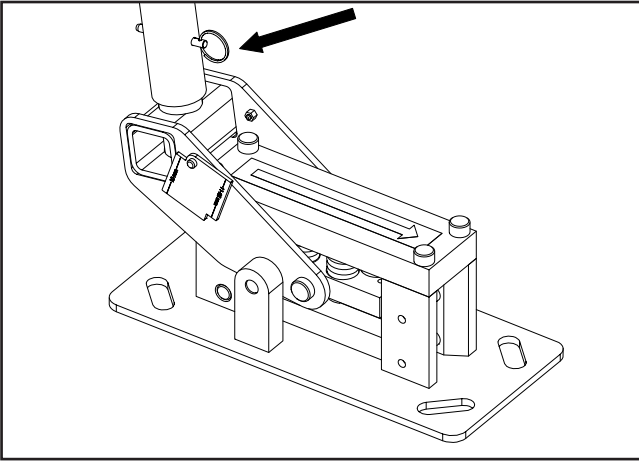
- Select the number pair corresponding to the wire rope diameter (mm) being used.
- Position the brake pad so the holes on the underside of the pad align with the selected number pair.
- Install and tighten the two flat head screws through the base plate and into the brake pad. Repeat this procedure for the opposite brake pad.



Step 6: Tighten the Top Screws

- Once both pads are secured, tighten the four upper socket head screws in a crisscross pattern to ensure even clamping force.

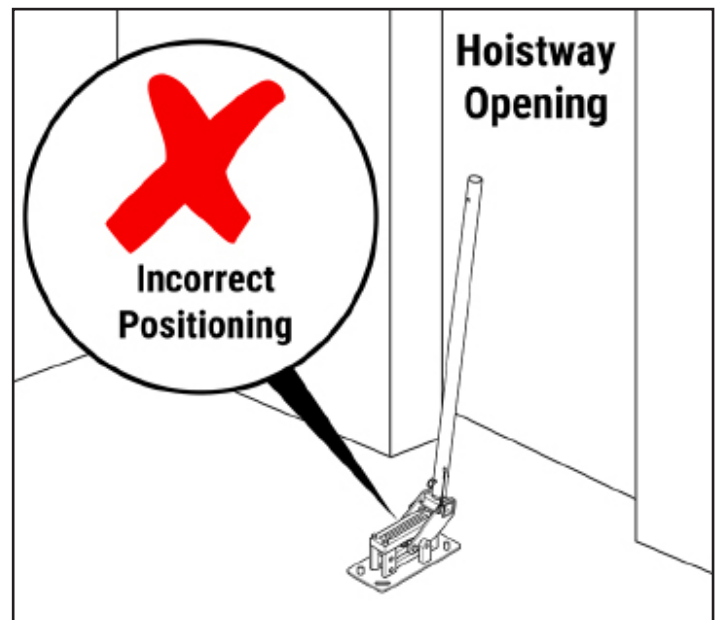
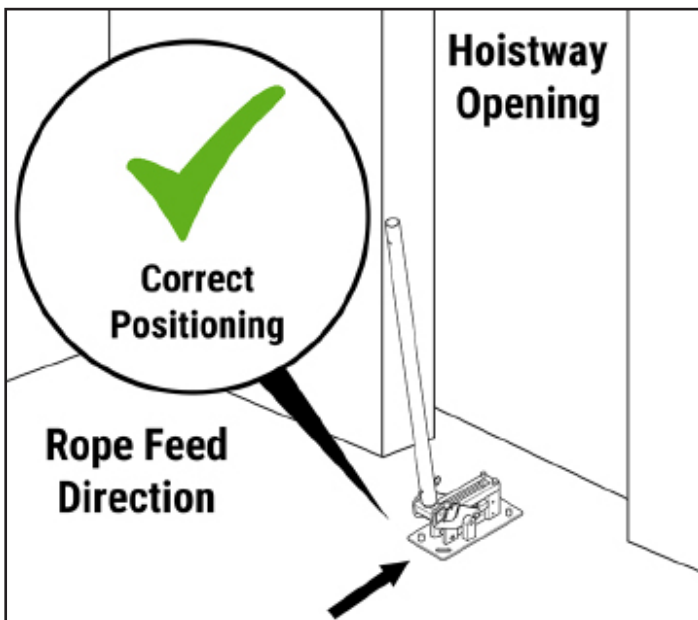
ADJUSTING BRAKE PADS



Step 7: Connect the Handle

- Slide the handle onto the lever rod, aligning the hole in the handle with the hole in the lever rod.
- Insert the quick-release pin fully through the aligned holes, then tug on the pin to make sure it's fully secure and visible on the opposite side of the handle.

ROPE BRAKE ORIENTATION

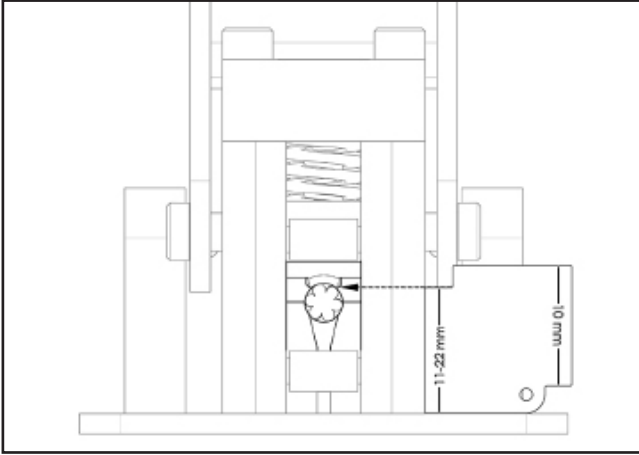


WARNING

Step 1: Orient the Rope Brake

- Orient the Rope Brake handle away from the hoistway opening so the brake is released by pulling the handle hard, nearly horizontal, **away from the hoistway**.
- **Never mount the Rope Brake in a configuration that requires the handle to be pulled toward the hoistway opening to release the brake.**

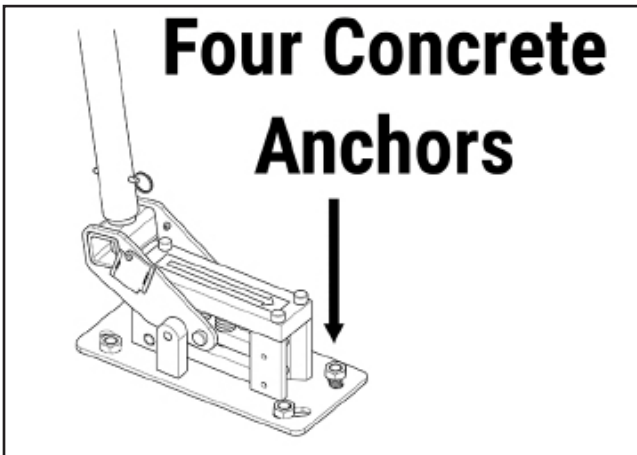
BRAKE PAD TEST



Step 1: Test the Brake Pads

- Before installing the concrete anchors, the brake pads will need tested. To test, insert the wire rope through both sides of the rope brake.
- Take the gauge removed in the previous step, then select the side of the gauge that is the same diameter as the rope.
- Place the rope brake height gauge between the brake plate and base plate of the rope brake.
- If the gauge DOES NOT FIT: Reverse the vee groove brake pads if the outside of the brake pads has not been before using the rope brake.
- Reassemble and re-test using the gauge. If it still doesn't fit, replace the upper brake pad.
- Re-attach the gauge to the rope brake when testing is completed.

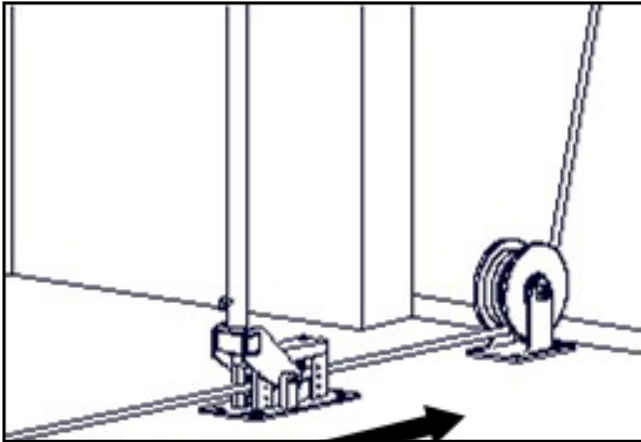
ANCHORING



Step 1: Anchoring the Rope Brake

- Use 5/8 in. (16 mm) diameter anchors with a minimum embedment of 2-3/4 in. (70 mm) to secure the unit to the building structure.
- Install the anchors in accordance with the anchor manufacturer's installation instructions.

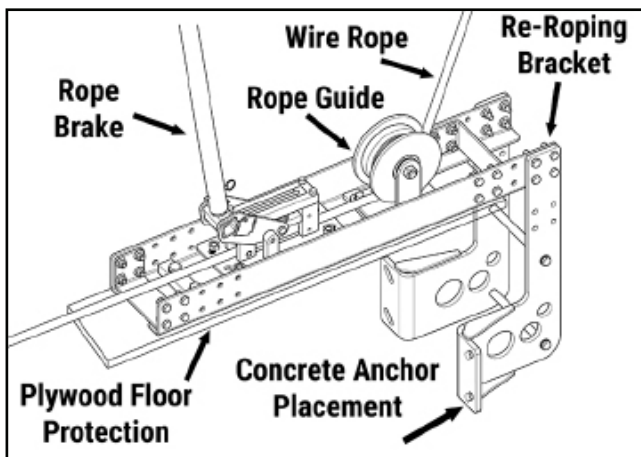
OPTIONAL: ROPE GUIDE INSTALLATION



Step 1: Installing the Rope Guide (Optional)

- If required, install the optional rope guide assembly to redirect the wire rope at the hoistway entrance.
- After the rope brake is anchored to the floor, position the rope guide so the wire rope passes smoothly from the rope brake, through the rope guide, and onto the next sheave in the rigging system.
- Secure the rope guide to the building structure using four 1/2 in. (12 mm) diameter anchors with a minimum embedment of 2-1/4 in. (57 mm).
- Install the anchors in accordance with the anchor manufacturer's installation instructions.

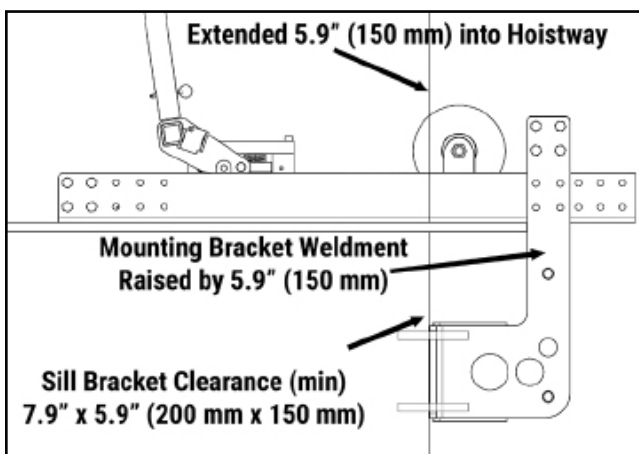
OPTIONAL: RE-ROPING BRACKET INSTALLATION



Step 1: Installing the Re-Roping Bracket (Optional)

- The optional re-roping bracket provides an alternate mounting location for the Rope Brake and rope guide when anchoring directly to the finished floor is not feasible.
- This configuration is typically used for Existing Installations (EI) and modernization (MOD) applications.
- Mount the re-roping bracket to the concrete hoistway wall below the sill brackets.
- Place a durable, non-marking protective material—such as 3/4 in. (19 mm) plywood—on the finished floor beneath the re-roping bracket frame to prevent surface damage.

OPTIONAL: RE-ROPING BRACKET ALTERNATE CONFIGURATIONS

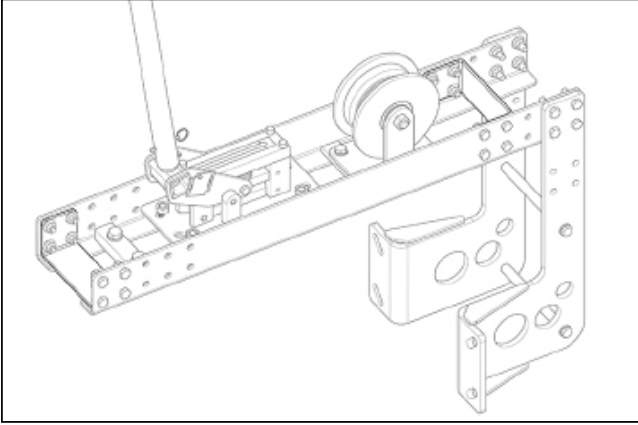


Step 1: Re-Roping Bracket Alternate Configurations (Optional)

- Extend the frame into the hoistway up to a maximum of 5.9 in (150 mm). The extension may be adjusted in 2 in (50 mm) increments as required.

The mounting bracket weldments are shown in the raised position (5.9 in / 150 mm) to accommodate shorter sill brackets. This position should be used by default, unless additional clearance is needed for taller sill brackets.

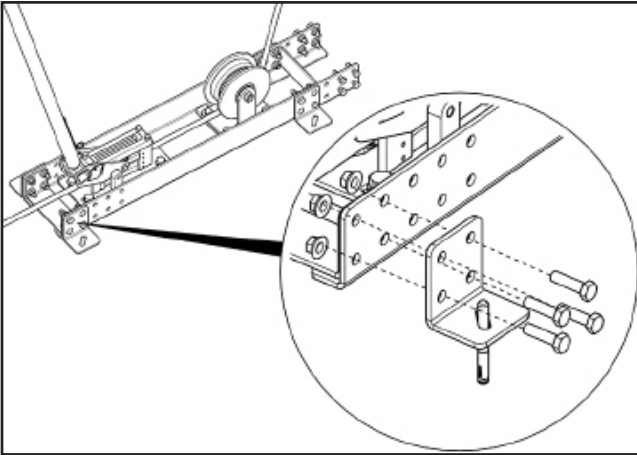
OPTIONAL: CROSS TIES ALTERNATE CONFIGURATIONS



Step 1: Cross Tie Alternate Configurations (Optional)

- The cross ties at both ends of the re-roping bracket frame may be relocated to alternate hole patterns or rotated as needed.
- One (1) cross tie is required at each end of the frame; however, the exact position and orientation may be adjusted to meet hoistway requirements.

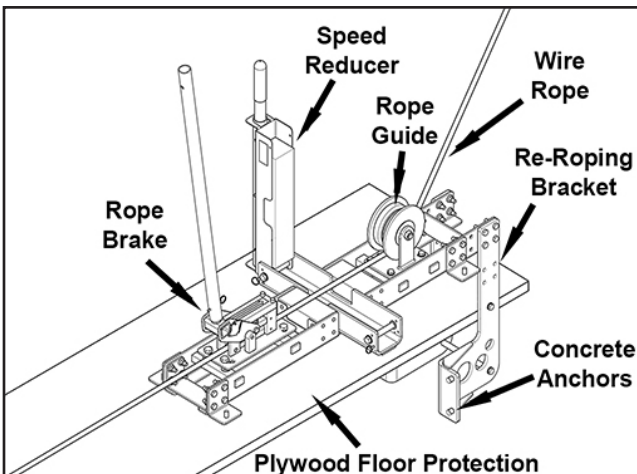
OPTIONAL: MOUNTING ANGLES



Step 1: Installing the Mounting Angles (Optional)

- Optional mounting angles may be used to attach the re-roping bracket directly to the concrete when mounting bracket weldments are not required.
- Secure each mounting angle to the re-roping bracket using two (2) M12-1.75 x 45-mm hex head cap screws.
- When mounting with angles, anchor the unit to the building using four (4) 1/2 in (12-mm) diameter anchors with a minimum embedment of 2-1/4 in (57 mm).
- Install anchors in accordance with the anchor manufacturer's instructions.

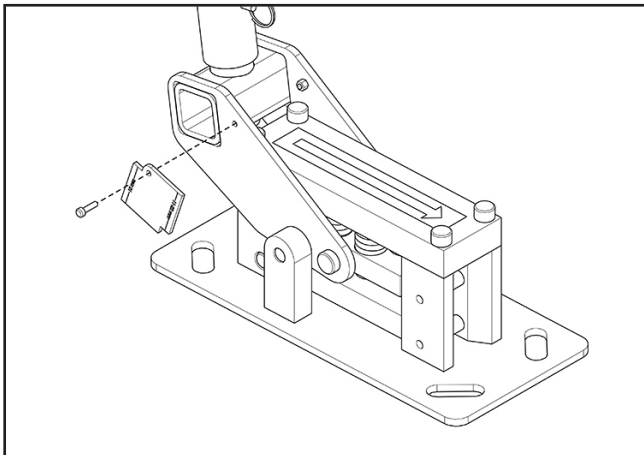
OPTIONAL: ROPE BRAKE MOUNT WITH SPEED REDUCER



Step 1: Installing Rope Brake Mount with Speed Reducer (Optional)

- The optional Rope Brake with Speed Reducer provides a mounting location for the rope brake, rope speed reducer, and rope guide. It may also be used in applications where floor anchoring is not permitted.
- The assembly is anchored to the walls using the same method as the re-roping bracket.
- Leg alternation and cross-tie alternate positioning, as previously described, also apply to the Rope Brake with Speed Reducer.

BRAKE PAD INSPECTION



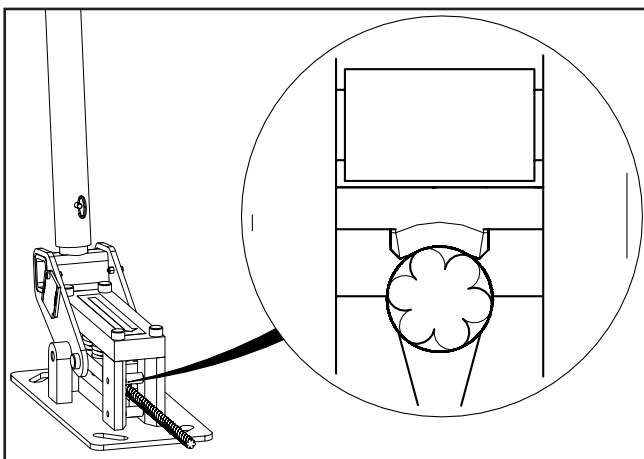
WARNING

The Rope Brake brake pads *MUST* be inspected for wear before each use.

Failure to inspect the brake pads may result in loss of control of the wire rope, which could cause serious injury or death.

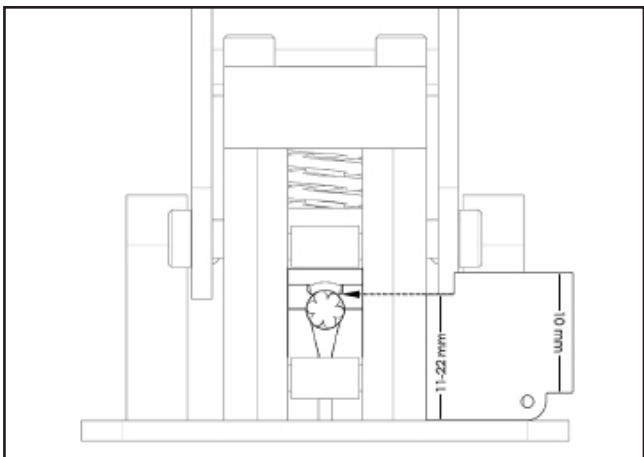
Step 1: Remove the Rope Brake Height Gauge

- Use a 3 mm Allen wrench to remove the Rope Brake Height Gauge.



Step 2: Seat the Wire Rope

- Insert the wire rope through both ends of the rope brake.
- Verify that the wire rope is seated in the wear groove created by the wire rope.



Step 3: Test the Brake Pads

- Select the side of the gauge that is the same diameter as the rope.
- Place the rope brake height gauge between the brake plate and base plate of the rope brake.
- If is gauge DOES NOT FIT: Reverse the vee groove brake pads if the outside of the brake pads has not been before using the rope brake.
- Reassemble and re-test using the gauge. If it still doesn't fit, replace the upper brake pad.
- Re-attach the gauge to the rope brake when testing is completed.

DAILY CHECKS AND MAINTENANCE

Brake Pad Inspection

- Inspect brake pads for excessive wear.
- Use a section of the wire rope to be installed during inspection to properly measure brake pad wear.
- Inspect brake pads before use.
- Verify the brake pad and wire rope are fully seated by checking with the height gauge.

Die Spring Inspection

- Inspect all die springs for damage or failure.
- Verify the condition of (6) outer springs and (6) inner springs.
- Ensure no springs are broken, cracked, or fractured.
- Replace any damaged springs before returning the unit to service.

Roller Tube Inspection

- Inspect all roller tubes for proper operation and wear.
- Verify the rollers rotate smoothly without binding.
- Ensure roller surfaces show minimal wear.
- Replace the roller tube if rotation is poor or restricted, or if surface wear reduces the roller diameter by 1/16" or more.

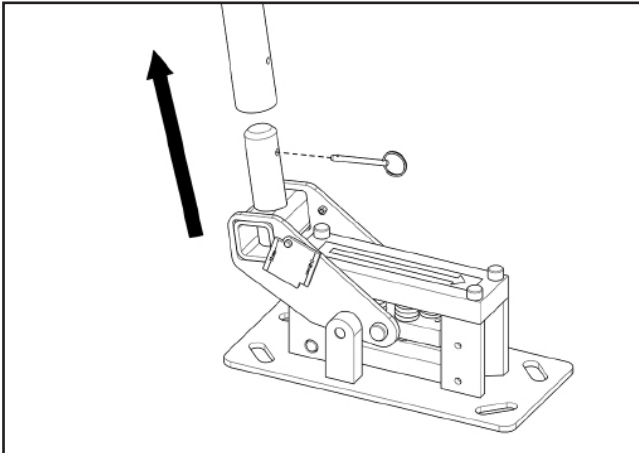
Fastener Inspection

- Inspect all fasteners to ensure they are securely tightened and free from excessive corrosion or damage.
*NOTE: All replacement fasteners must be class 8.8 or higher, as specified on the BOM.
- Pay special attention to the following critical fasteners:
 - (4) upper M10 socket head cap screws
 - (2) M12 shoulder bolts attaching the lever weldment to the brake plate

Handle and Pivot Inspection

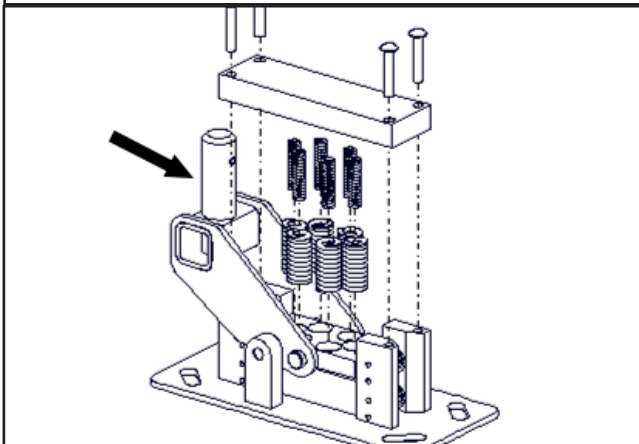
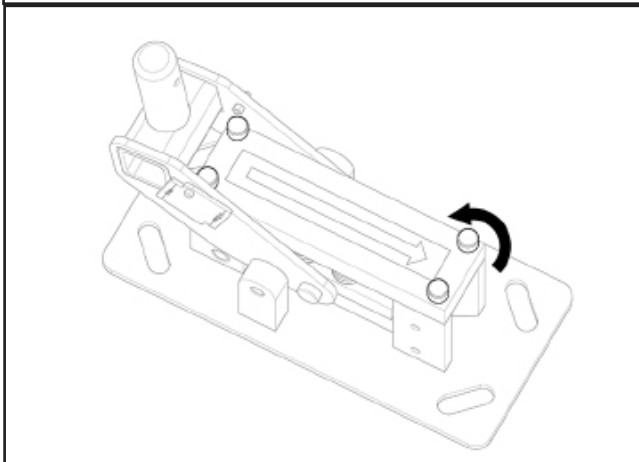
- Verify the handle moves smoothly through its full range of motion without binding or catching.
If operation is not smooth, clean pivot points to remove concrete dust and debris, then re-lubricate with silicone spray lubricant.

REPLACEMENT OF WEAR PARTS



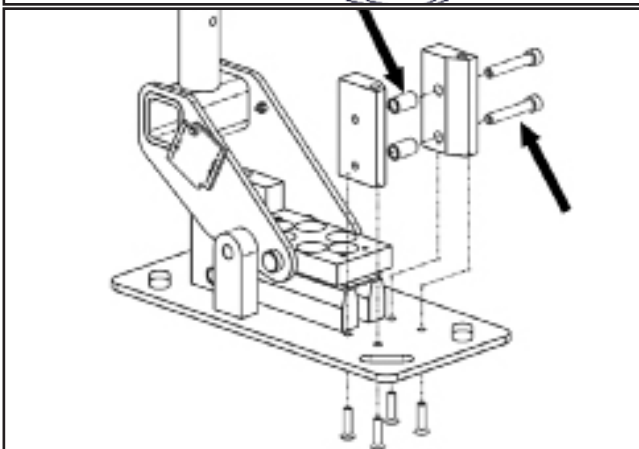
Accessing Wear Components

- To replace the brake pads place the Rope Brake flat on a tabletop. Pull the pin connecting the handle, then remove the handle.
- Carefully loosen the four upper M10 socket head screws to relieve spring compression. Loosen the screws incrementally in a crisscross pattern to ensure the spring pressure is released evenly.
- Remove the (4) screws while supporting the lever weldment to prevent it from rotating suddenly.
- Remove the top plate and (12) springs.

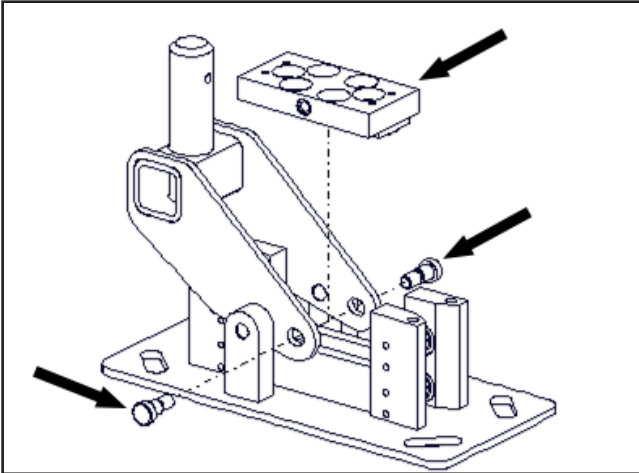


Replacing the Roller Tubes

- Remove the (2) M8 socket head cap screws holding the left and right blocks together.
- Remove the (4) M6 flat head screws holding the blocks to the base plate.
- Replace with new tubes and bolts as required.

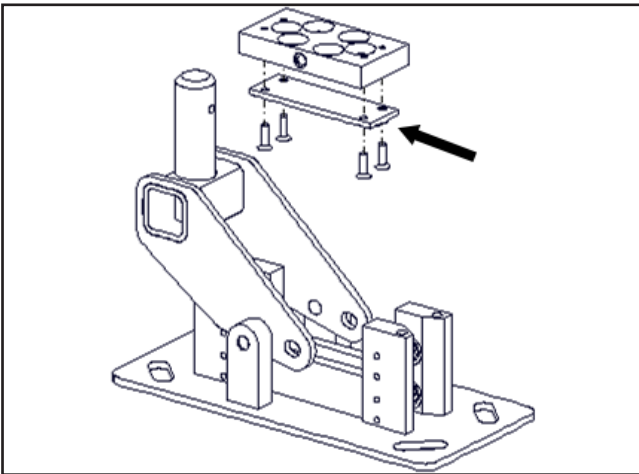


REPLACEMENT OF WEAR PARTS

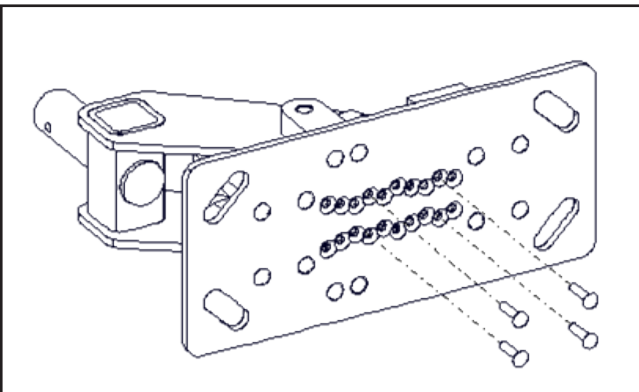


Removing the Moving Brake

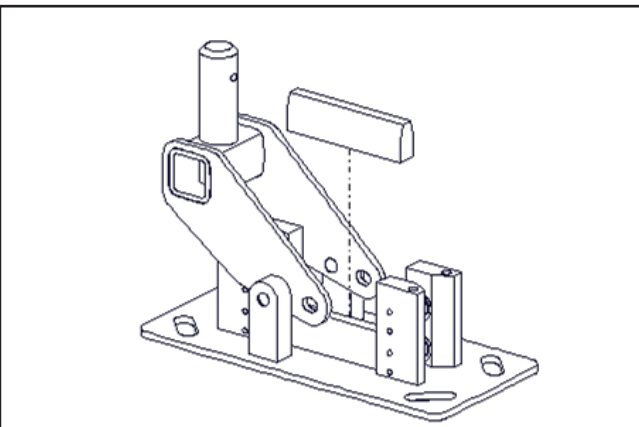
- Remove the (2) shoulder bolts attaching the moving brake to the pivot plate.



- Remove the (4) M6 flat head screws holding the brake pad to the brake plate.
- Replace the worn brake pad with a new one.
- If the vee groove brake pads are in good condition, reassemble the rope brake.
- If the vee groove brake pads also need replacing, continue on to the next step.



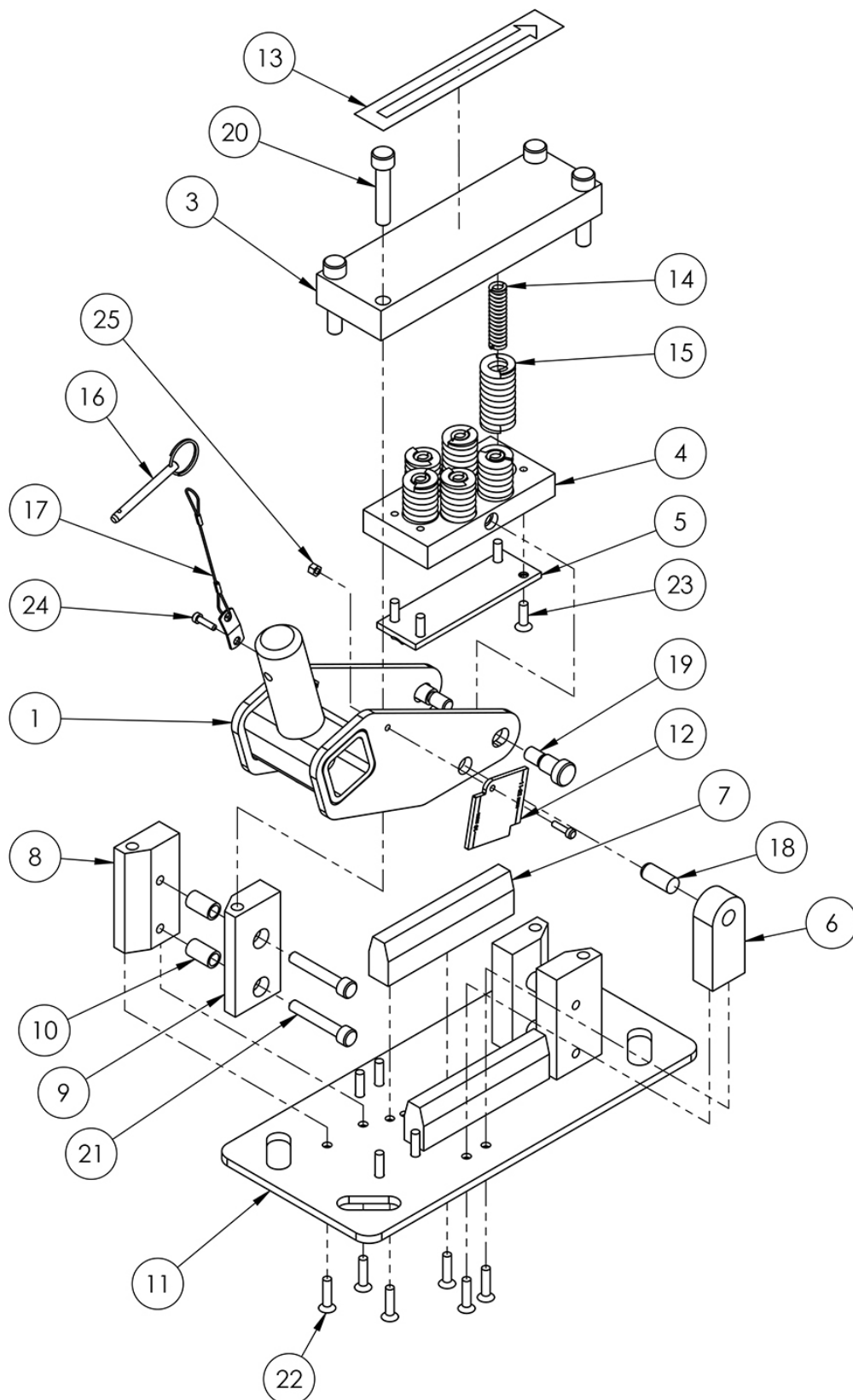
- Lay the rope brake on its side.
- Remove the four flat head screws that hold the brake pads to the base.



Removing the Lower Brake Pad

- If one side of each of the vee groove brake pads is worn, but the other side has sufficient brake material, rotate the brake pad 180 degrees and reinstall.
- If both sides of both of the vee groove brake pads have been used, replace with new brake pads.

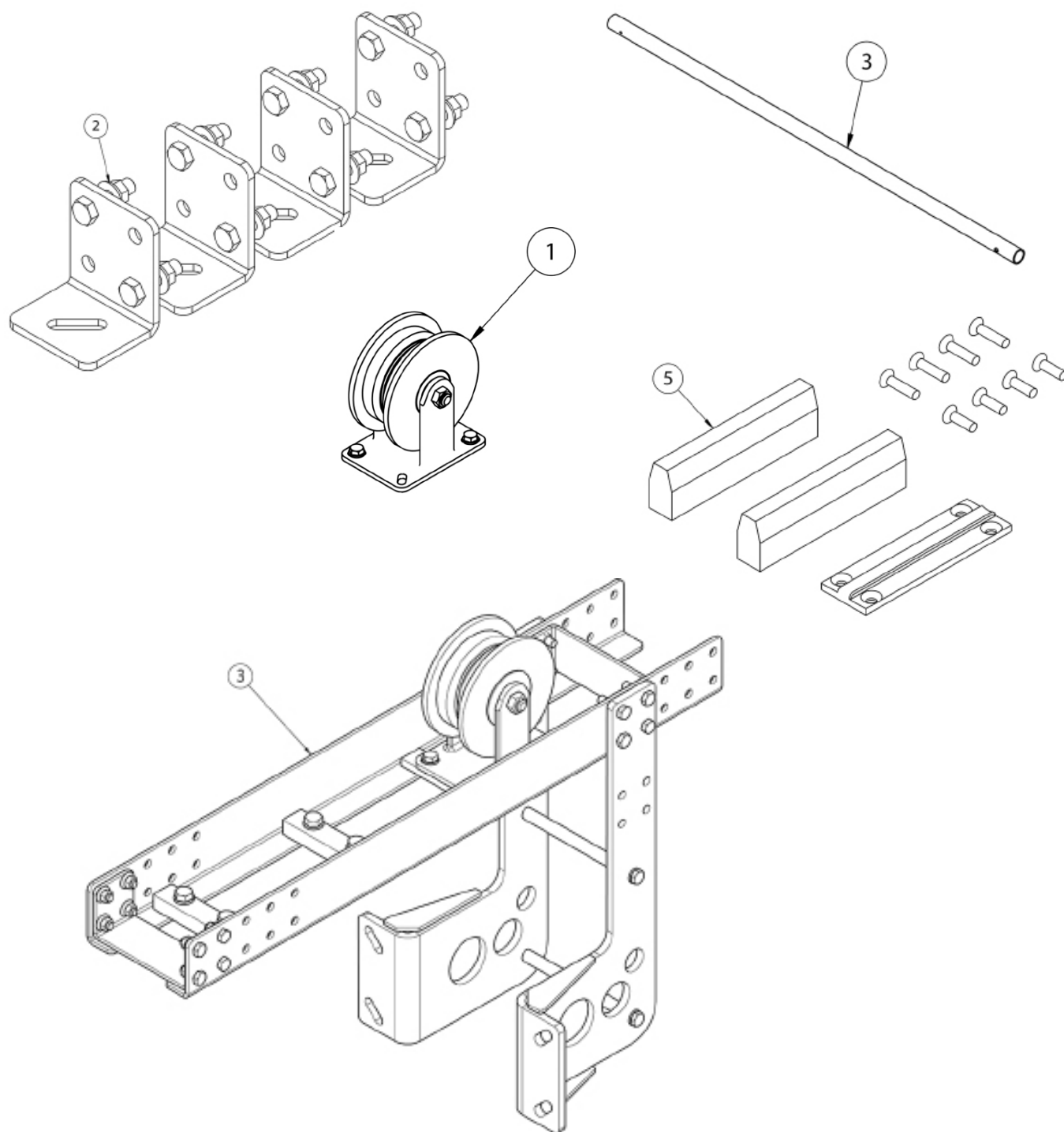
BILL OF MATERIALS - 60-200



BILL OF MATERIALS - 60-200

Item	Qty	Part No.	Description	Size	Length
1	1	60-10001035	LEVER WELDMENT	-	-
2	1	60-10001038	HANDLE	-	-
3	1	60-10001045	TOP PLATE	-	-
4	1	60-10001050	BRAKE PLATE	-	-
5	12	60-10001051	BRAKE PAD	-	-
6	2	60-10002165	PIVOT BLOCK	-	-
7	2	60-10014605	VEE GROOVE BRAKE PAD	-	-
8	2	60-10051167	FAIRLEAD BLOCK L	-	-
9	2	60-10051168	FAIRLEAD BLOCK R	-	-
10	4	S24-10036266-000846P	ROUND TUBING	0.5" OD X 0.065" WALL	.846"
11	1	60-10014811	BASE	-	-
12	1	60-10015650	ROPE BRAKE HT. GAUGE	-	-
13	1	16055T234	STICKER - ARROW PIPE MARKER	1-1/8"	7"
14	6	10079624	DIE SPRING	1/2" HOLE, .281" ROD.	2"
15	6	10079625	DIE SPRING	1" HOLE, 1/2" ROD	2"
16	1	95335A145	QUICK RELEASE PIN	M6	50 MM
17	1	30345T545	18-8 STAINLESS STEEL LANYARD - NOT FOR LIFTING	-	-
18	2	40089	OVERSIZED DOWEL PIN	M12	30 MM
19	2	11135538	SOCKET HEAD SHOULDER SCREW	12 MM	15 MM
20	4	11507849	METRIC SOCKET HEAD CAP SCREW	M10-1.5	50 MM
21	4	ZS2580050ZP0000	METRIC SOCKET HEAD CAP SCREW	M8-1.25	50 MM
22	16	0141393	METRIC FLAT HEAD SCREW	M6-1.0	25 MM
23	4	0141392	METRIC FLAT HEAD SCREW	M6-1.0	20 MM
24	2	ZS2530016ZP0000	METRIC SOCKET HEAD CAP SCREW	M4-0.7	16 MM
25	2	40147	NYLON INSERT HEX NUT	M4-0.7	-
26	1	60-10093081	ROPE BRAKE STICKER - QR CODE	-	-

BILL OF MATERIALS - ACCESSORIES



Item	Qty	Part No.	Description	Size	Length
1	1	60-10034432	ROPE GUIDE ASSEMBLY	-	-
2	1	60-215	ROPE BRAKE MOUNTING ANGLE KIT	-	-
3	1	60-10029684	HANDLE - LONG	-	-
4	1	60-210	ROPE BRAKE RE-ROPING BRACKET	-	-
5	1	60-201	ROPE BRAKE PAD REPLACEMENT KIT	-	-