

DOUBLE TRACK LOW HEADROOM (LHR) CONVERSION KIT
FOR USE WITH STEEL DOORS ONLY

INSTALLATION INSTRUCTIONS

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DOUBLE TRACK LOW HEADROOM (LHR) CONVERSION KIT

This Double Track Low Headroom (LHR) Conversion Kit is designed to modify the minimum headroom clearance required.

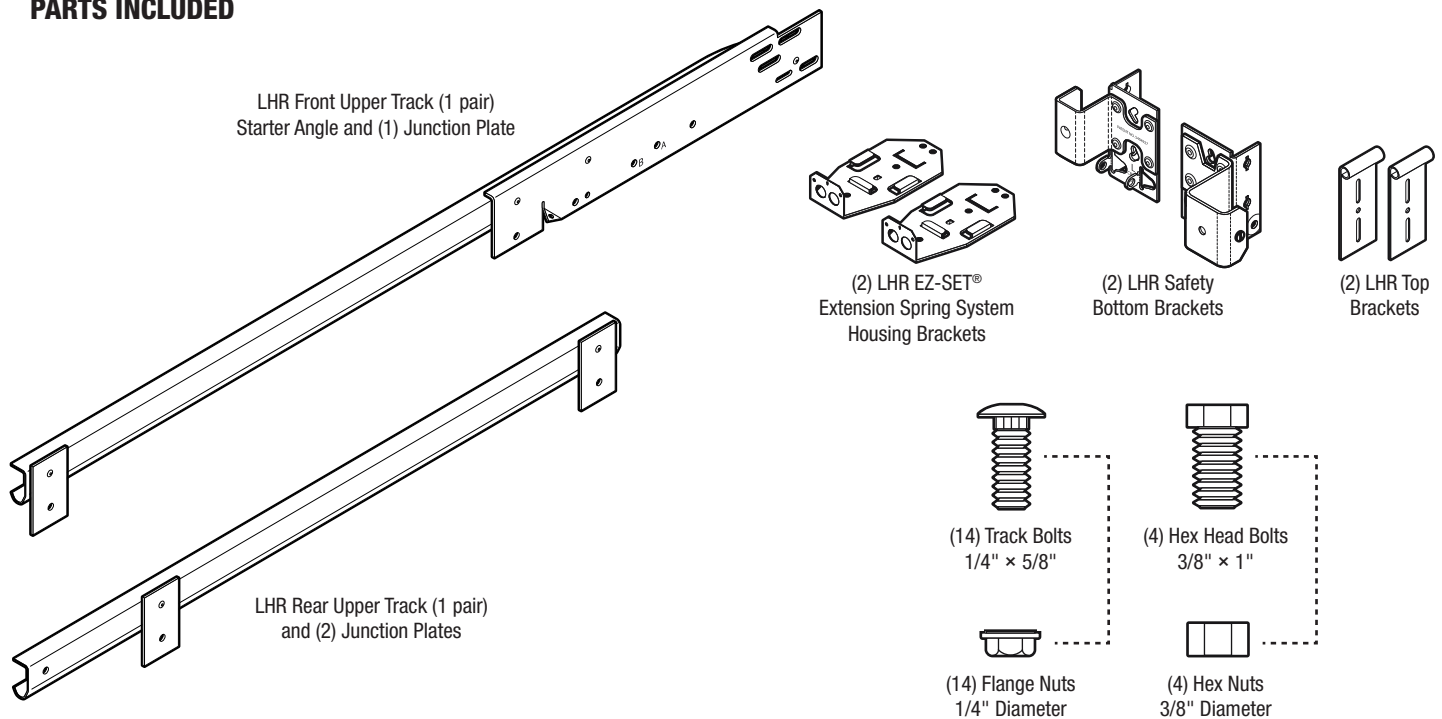
- Reduces headroom requirements to 4-1/2" for extension springs and EZ-SET® extension spring system
- Reduces headroom requirement to 9-1/2" for EZ-SET® torsion spring system

⚠ CAUTION

Carefully read the following instructions before beginning installation of the Double Track Low Headroom Conversion Kit. Installation of this kit should be done by a person with reasonable mechanical aptitude.

PARTS, MATERIALS AND TOOLS

PARTS INCLUDED



MATERIALS NEEDED (NOT INCLUDED)

Angle Punch Iron

TOOLS NEEDED (NOT INCLUDED)

Measuring Tape
Square
Hacksaw
Marker
Drill
Drive Bit
1/4" Drill Bit

9/16" Socket
9/16" Wrench
Adjustable Wrench
Gloves
Safety Glasses
Ladder
Rope

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DETERMINE TRACK RADIUS

Step 1 - Determine Track Radius

- This kit is designed to modify the minimum headroom clearance required (see chart below). This kit works with both 12" and 15" radius horizontal track. To determine track radius, measure from the center point of the radius to the bottom of the track as shown by dimension "R" (Fig. 1).

	EZ-SET® Extension Spring System	Extension	EZ-SET® Torsion Spring System
Minimum Headroom	4-1/2"	4-1/2"	9-1/2"

- If dimension "R" measures 11" to 12", then the track radius is 12". If "R" measures 14" to 15", then the track radius is 15".
- Also measure and check the headroom distance, which is the space above the top of the opening (Fig. 2).

Fig. 1

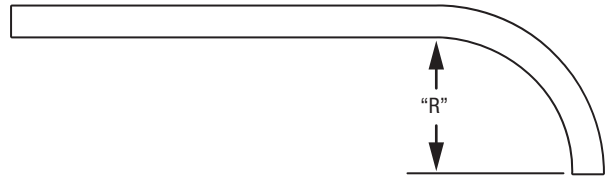
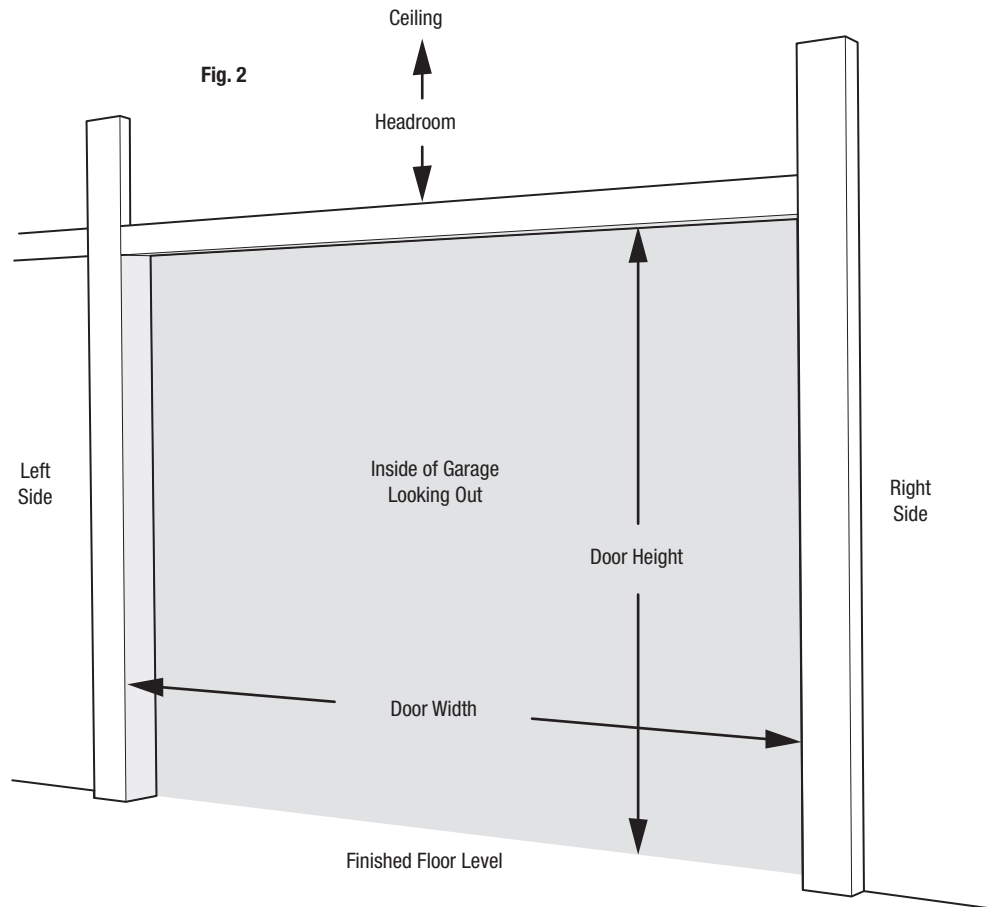


Fig. 2



Step 2-A Determine Reduced Vertical Track Length

- Refer to Table 1 to determine reduced vertical track length.

Table 1

Door Height	Reduced Vertical Track Length	
	12" Radius	15" Radius
6'6"	65"	61-1/2"
7'0"	71"	67-1/2"
7'6"	77"	73-1/2"
8'0"	83"	79-1/2"

NOTE: For door heights with 4-1/2" of headroom not listed in Table 1, take height of door in inches and subtract 12" for 12" radius or 15-1/2" for 15" radius to get reduced vertical track length.

NOTE: Actual opening (vehicle) clearance is opening height minus 6" (e.g.: 7' high doors installed with double track low headroom hardware will have an opening clearance of 6'6").

Step 2-B Cut Vertical Track

- Measure correct length to be removed and mark using marker and square (Fig. 3A).
- Using a hacksaw, remove excess length from top of vertical track, ensuring a square cut (Fig. 3B).

Step 2-C Drill Vertical Track

NOTE: Drilled holes **MUST** be in correct position to ensure proper alignment.

- Two 1/4" diameter holes need to be re-drilled at the top of the vertical track. Measure correct position or use the cutoff track from the opposite side – flip over, align and use as a template. These two holes are used to attach the vertical track to the flag bracket (Fig. 3C).

Step 2-D Check Flag Bracket Clearance

- Hold flag bracket in position on reduced vertical track to check clearance.

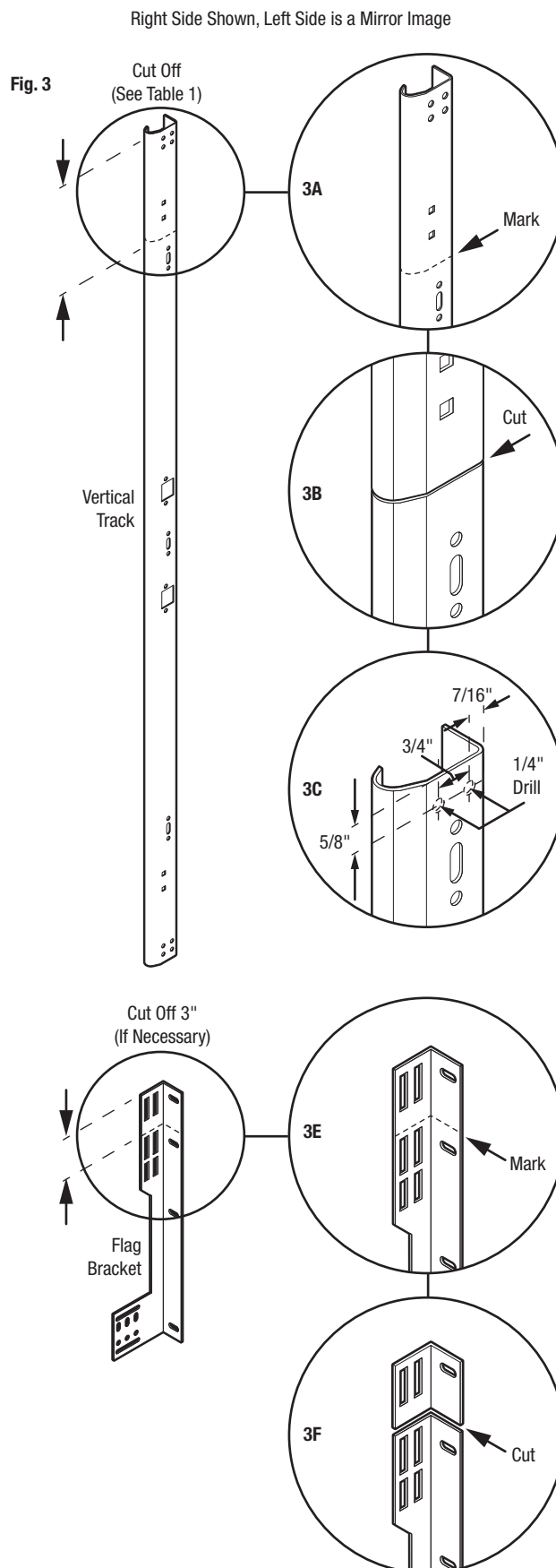
Step 2-E Cut Flag Bracket

NOTE: DO NOT cut flag bracket if your door is using the EZ-Set Torsion Spring System.

- If there is a clearance problem, cut 3" off the top of the flag bracket.
- Measure and mark with marker (Fig. 3E).
- Cut off top of flag bracket using a hacksaw (Fig. 3F).

Step 2-F Re-attach Flag Bracket

- Re-attach flag bracket to top of vertical track using track bolts in the bottom row of holes.



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ATTACH SAFETY BOTTOM BRACKETS

For Extension and EZ-SET® Extension Spring Systems Only

Step 3-A Attach Safety Bottom Brackets

⚠ WARNING

Heavy-duty bottom brackets (not provided) are required for doors over 250 lbs. Using standard bottom brackets for doors over 250 lbs. can result in severe injury when spring tension is applied. Call the toll free number provided with the main instruction manual if your door weighs over 250 lbs.

- Safety bottom brackets are positioned with ears located on bottom. “L” and “R” letters stamped on brackets designate left-hand and right-hand brackets (inside looking out) (Fig. 4).
- Mount right-hand LHR safety bottom bracket to right side of bottom door section by inserting the safety bottom bracket locking tabs into end stile key slots. Push inward, then up, to fully engage bottom bracket in end stile.
- Fasten the safety bottom bracket to the door using (2) #14 × 5/8" sheet metal screws provided in the standard door hardware (Fig. 5).
- Repeat procedure for opposite side.

⚠ WARNING

Failure to properly engage locking tabs on bottom bracket into key slots on edge of door can result in severe injury when spring tension is applied.

Step 3-B EZ-SET® Extension Spring System and Extension Springs Only

Hook looped ends of lift cable over buttons on safety bottom brackets (Fig. 6).

NOTE: DO NOT attach looped ends of lifting cables to bottom brackets at this time if using the EZ-SET® torsion spring system.

For EZ-SET® Torsion Spring System Only

Step 3-C Attach Safety Bottom Brackets

The safety bottom brackets that came with the door, NOT the safety bottom brackets in this kit, are to be used for this setup. Follow standard installation for safety bottom brackets. (See instruction manual).

⚠ WARNING

Heavy-duty bottom brackets (not provided) are required for doors over 250 lbs. Using standard bottom brackets for doors over 250 lbs. can result in severe injury when spring tension is applied. Call the toll free number provided with the main instruction manual if your door weighs over 250 lbs.

Fig. 4

“L” Designates Left-Hand Bracket

“R” Designates Right-Hand Bracket

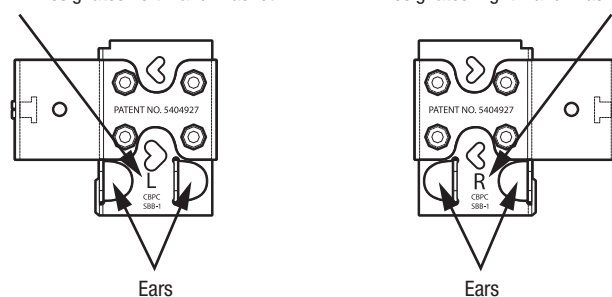


Fig. 5

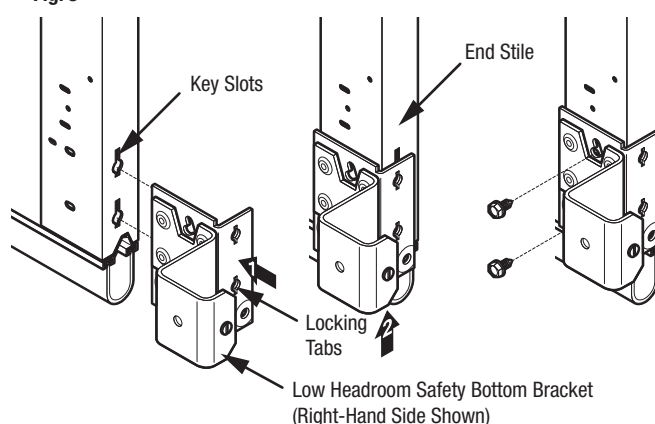
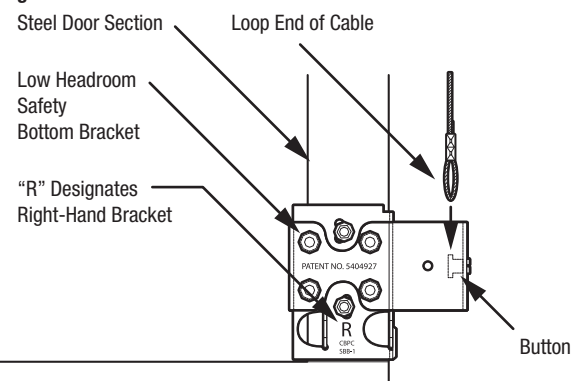


Fig. 6



⚠ WARNING

Failure to properly engage locking tabs on bottom bracket into key slots on edge of door can result in severe injury when spring tension is applied.

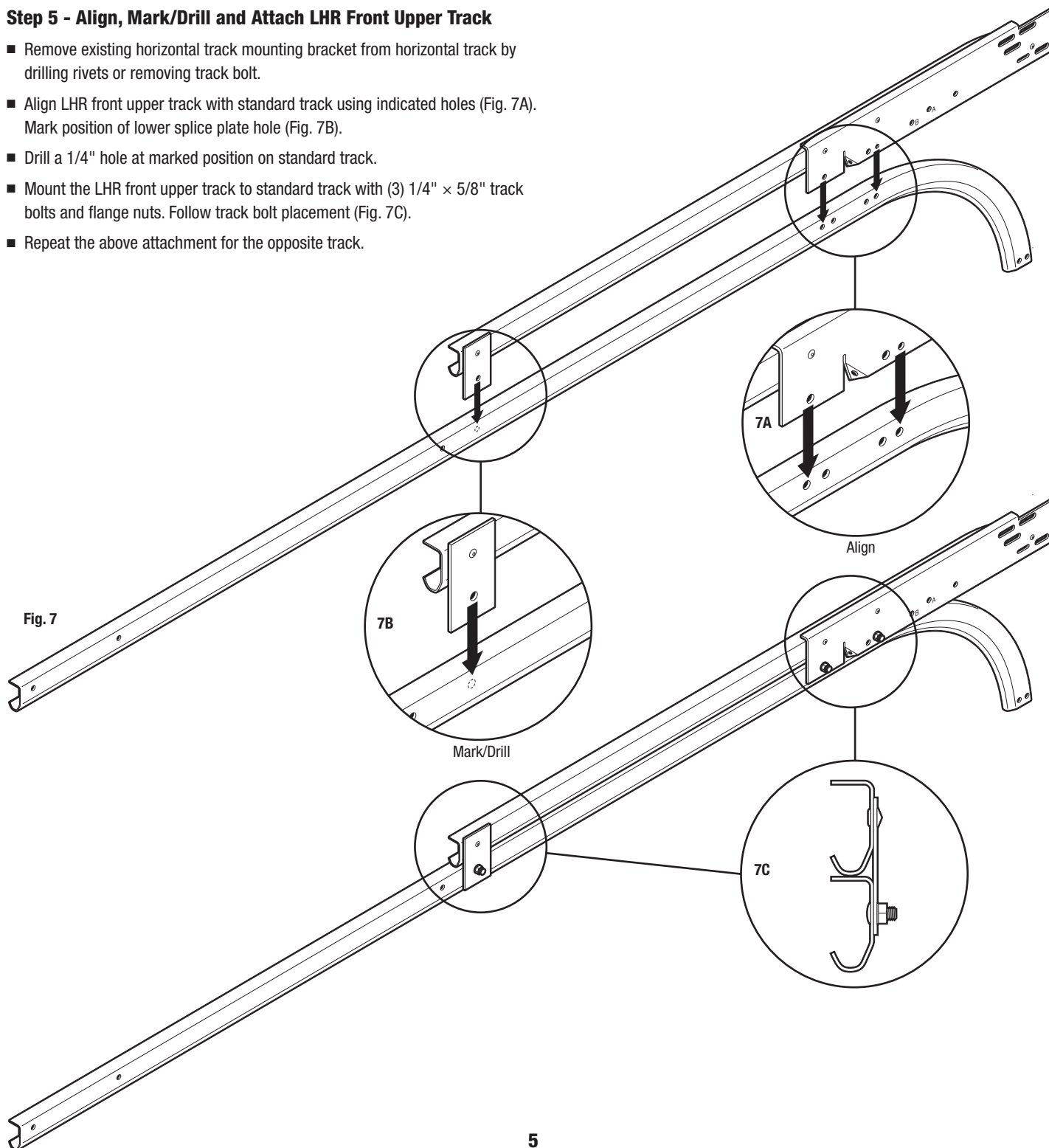
Step 4 - Reference Main Installation Instructions

Using the instruction manual supplied with the door, complete Steps 4 through 12 of the "Installing the New Door" section. Once completed, proceed to Step 5.

ATTACH LHR FRONT UPPER TRACK

Step 5 - Align, Mark/Drill and Attach LHR Front Upper Track

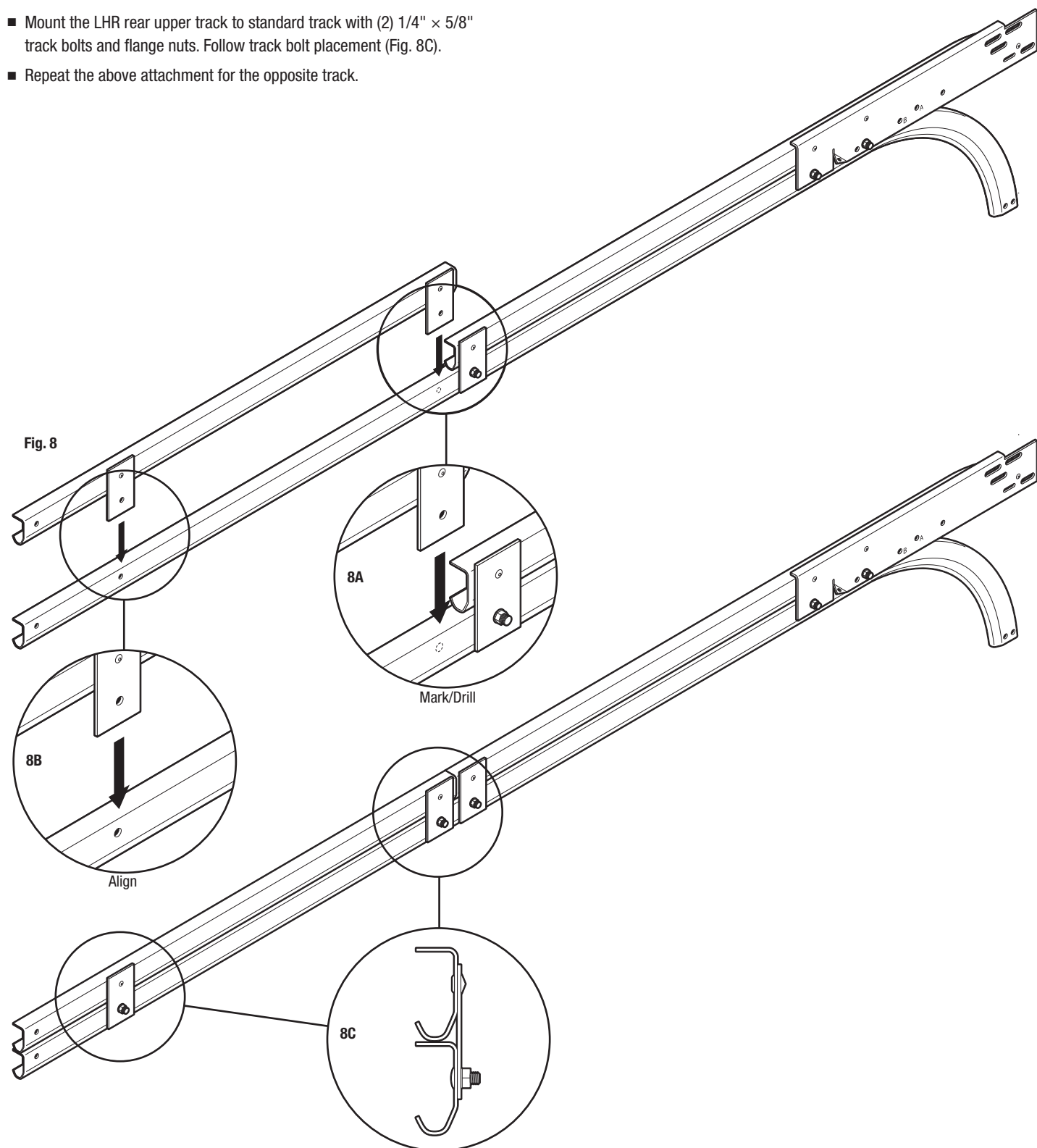
- Remove existing horizontal track mounting bracket from horizontal track by drilling rivets or removing track bolt.
- Align LHR front upper track with standard track using indicated holes (Fig. 7A). Mark position of lower splice plate hole (Fig. 7B).
- Drill a 1/4" hole at marked position on standard track.
- Mount the LHR front upper track to standard track with (3) 1/4" × 5/8" track bolts and flange nuts. Follow track bolt placement (Fig. 7C).
- Repeat the above attachment for the opposite track.



Step 6 - Align, Mark/Drill and Attach LHR Rear Upper Track

- Align LHR rear upper track with standard track so that the gap between the LHR front track and LHR rear upper track is not greater than 1/8" (Fig. 8A). Mark position of lower front splice plate hole (Fig. 8B).
- If existing holes do not align, drill a 1/4" hole at marked position on standard track.
- Mount the LHR rear upper track to standard track with (2) 1/4" × 5/8" track bolts and flange nuts. Follow track bolt placement (Fig. 8C).
- Repeat the above attachment for the opposite track.

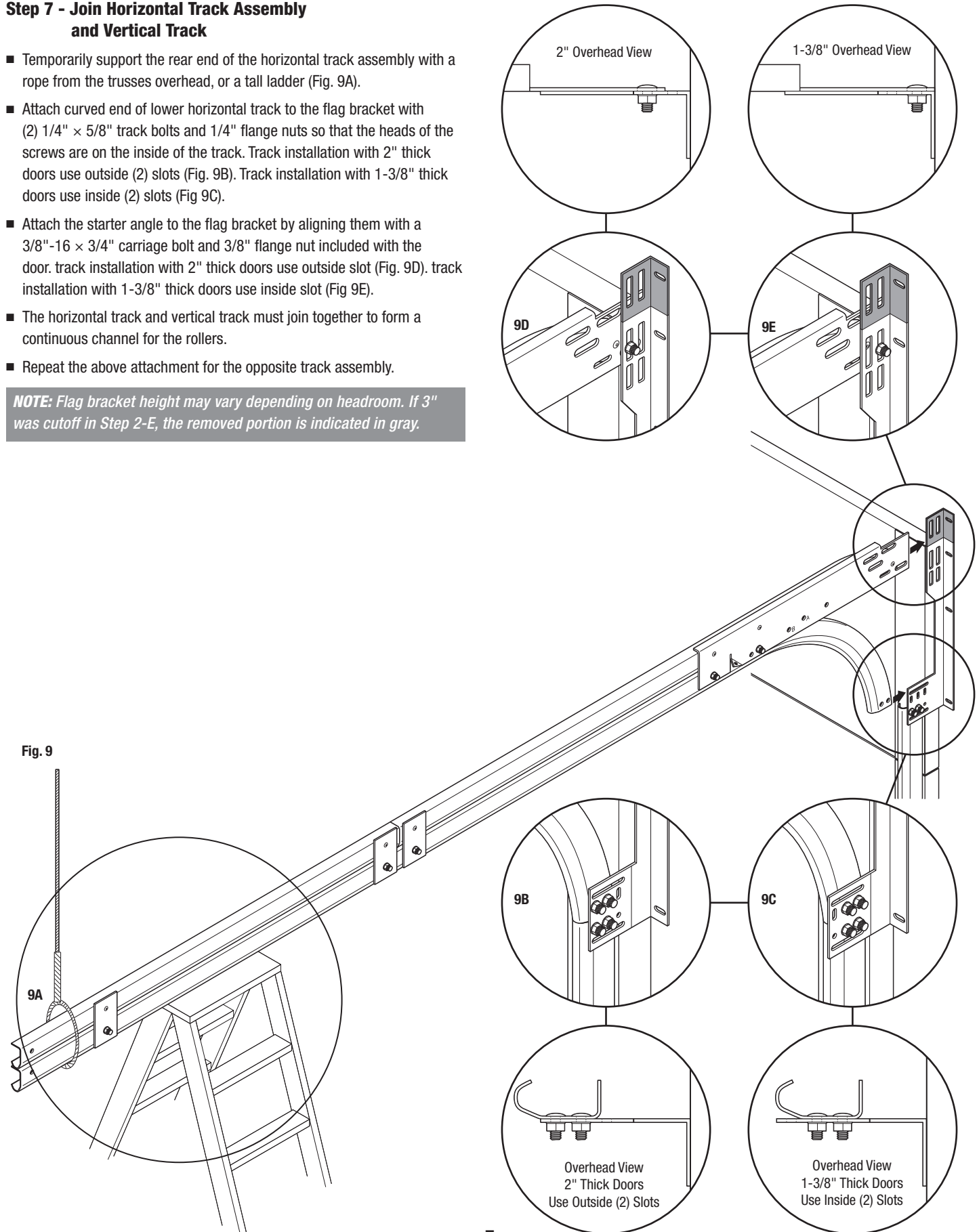
NOTE: To correctly position the LHR rear upper track, the back of the LHR rear upper track has a vertical slot on it. Align to this slot.



Step 7 - Join Horizontal Track Assembly and Vertical Track

- Temporarily support the rear end of the horizontal track assembly with a rope from the trusses overhead, or a tall ladder (Fig. 9A).
- Attach curved end of lower horizontal track to the flag bracket with (2) $1/4" \times 5/8"$ track bolts and $1/4"$ flange nuts so that the heads of the screws are on the inside of the track. Track installation with 2" thick doors use outside (2) slots (Fig. 9B). Track installation with 1-3/8" thick doors use inside (2) slots (Fig. 9C).
- Attach the starter angle to the flag bracket by aligning them with a $3/8"-16 \times 3/4"$ carriage bolt and $3/8"$ flange nut included with the door. track installation with 2" thick doors use outside slot (Fig. 9D). track installation with 1-3/8" thick doors use inside slot (Fig. 9E).
- The horizontal track and vertical track must join together to form a continuous channel for the rollers.
- Repeat the above attachment for the opposite track assembly.

NOTE: Flag bracket height may vary depending on headroom. If 3" was cutoff in Step 2-E, the removed portion is indicated in gray.



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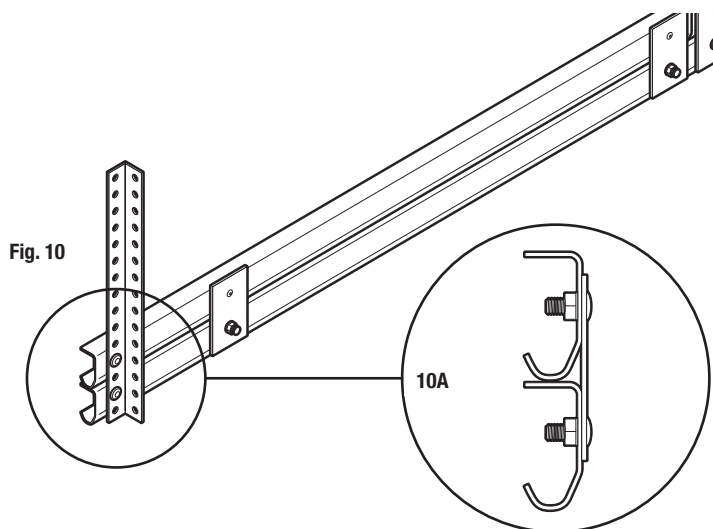
FASTEN REAR OF HORIZONTAL TRACK ASSEMBLY TO REAR TRACK HANGER

Step 8 - Fasten Rear of Horizontal Track Assembly to Rear Track Hanger

Proceed to the "Assembling and Installing the Track" section of the installation manual included with the door for reference on attaching rear track hanger to your joists.

NOTE: If door is less than 8' tall than upper horizontal track will extend 12", match length by cutting to match bottom horizontal track length. Drill 1/4" mounting hole in upper horizontal track if needed.

- The horizontal track assembly must be fastened to the rear track hanger with a 3/8" × 1" hex head bolt and nut in upper and lower horizontal tracks (Fig. 10). Follow track bolt placement (Fig. 10A).
- Repeat the above attachment for the opposite track assembly.



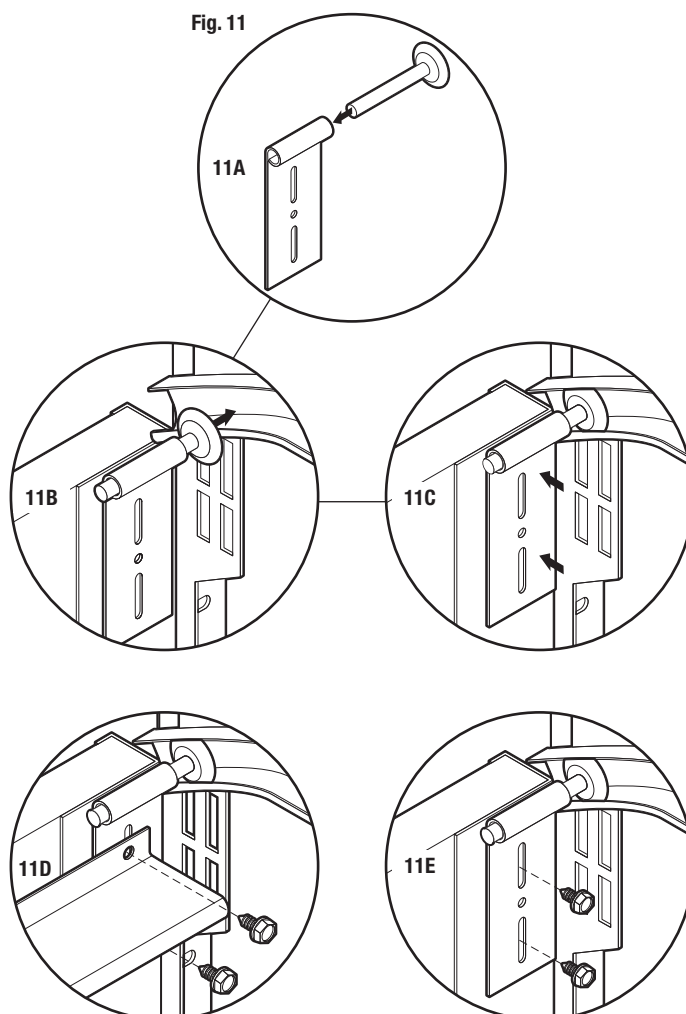
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ATTACH LOW HEADROOM TOP BRACKET TO TOP DOOR SECTION

Step 8 - Attach Low Headroom Top Bracket to Top Door Section

- Insert stand-alone roller into low headroom top bracket (Fig. 11A).
- Insert roller/low headroom top bracket assembly into top horizontal track (Fig. 11B).
- Slide low headroom bracket toward top section until low headroom bracket is tight against the end stile (Fig. 11C). If a top strut has been installed on the section, the top roller bracket will go between the strut and the section, with the roller above the strut (Fig. 11D).
- Line up low headroom top bracket with the side of the top section. Using both slots in each low headroom bracket as a guide, drill 5/32" pilot holes in the center of each slot.
- Attach top bracket to end stile using (2) #14 × 5/8" sheet metal screws for steel doors or (2) 1/4"-20 × 1-7/8" Carriage bolts and nuts (wood doors) (Fig. 11E).
- Repeat the above attachment for the opposite top bracket.

NOTE: Do not tighten fasteners for top brackets until springs are installed and door is ready to be used. This will allow for final adjustments later, if needed.



10 ATTACH THE SPRING SYSTEM

Step 10 - For Standard Extension Spring (Step 10-1) For EZ-SET® Extension Spring System (Step 10-2) For EZ-SET® Torsion Spring System (Step 10-3)

Step 10-1 - For Standard Extension Spring

NOTE: Cable will extend to bottom bracket on *OUTSIDE* of track.

Complete Step 1 of the Extension Spring Installation instructions found in the instruction manual provided with the door.

- For 12" radius track use hole labeled "A". For 15" radius track use hole labeled "B" (Fig. 12A).
- Insert a 3/8" × 1-1/4" bolt through the inside of the starter angle. Place stationary sheave over bolt, followed by a 3/8" washer and a 3/8" nut then tighten. (Fig. 12B).

Complete Steps 3 through 6 of the Extension Spring Installation instructions section in the original instruction manual.

- Tie the lift cable to the three hole adjusting clip (Fig. 13A).
- Hook the three hole adjusting clip to the bent out flange on the starter angle with an "S" hook (Fig. 13B).
- Adjust the knot at the three hole adjusting clip. Adjust so that all spring tension is relieved and the cable holds the spring almost horizontal (Fig. 13C).

NOTE: Attach the warning tag found in the white envelope with orange print to the spring assembly (this tag may already be attached). See instruction manual at the end of the extension spring installation section for a placement drawing.

- Proceed to the instruction manual beginning with "Installing Safety Containment Kit" section.
- Repeat the above attachment instructions for the opposite spring. The spring should be adjusted the same on both sides of the door.

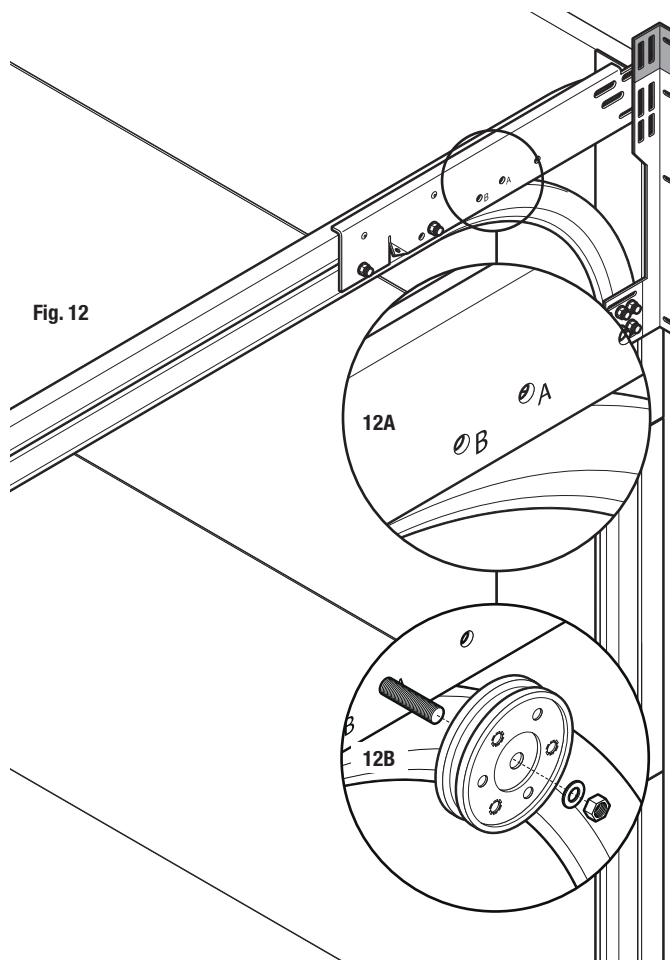


Fig. 12

NOTE: Flag bracket height may vary depending on headroom. If 3" was cutoff in Step 2-E, the removed portion is indicated in gray.

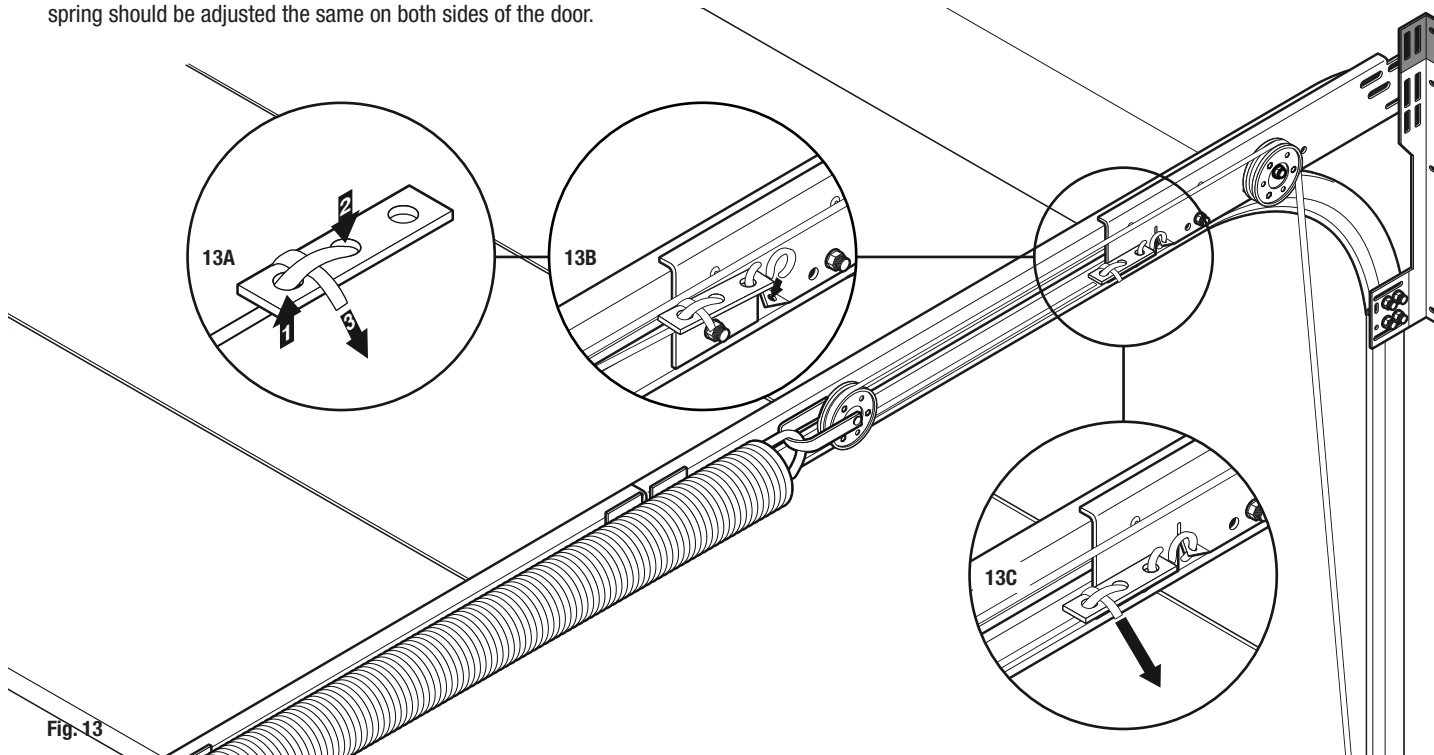


Fig. 13

10-2 - For EZ-SET® Extension Spring System

Complete Step 1 from the EZ-SET® Extension Spring System instructions to assemble sheaves to extension springs.

Follow the Double Track Low Headroom instructions for EZ-SET® Spring Section in the EZ-SET® Extension Spring System instructions provided with the spring system. The low headroom housing bracket is provided with this kit.

10-3 - For EZ-SET® Torsion Spring System

Follow standard EZ-SET® Torsion Spring System instructions that are included in the EZ-SET® torsion spring system box.

The only exception is that (Fig. 2) in the standard EZ-SET® Torsion Spring System instructions is not correct for the attachment of the winding unit bracket to the flag bracket. The winding unit bracket is to be attached to the flag bracket as shown with a $\frac{3}{8}$ " \times 1-1/4" carriage bolt and nut which are included in the EZ-SET® torsion spring system box (Fig. 15).

Left Side Shown

EZ-SET® Torsion Spring System
Housing Bracket Attachment to Flag Bracket

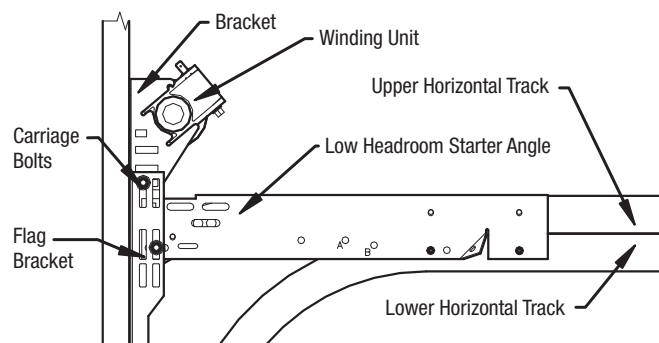


Fig. 15

