














LOW HEADROOM CONVERSION KIT

(Reduces headroom requirement to 4-1/2" – extension spring only)

PARTS CONTAINED:			
(2) Quick Turn Brackets (Left & Right)		(4) Carriage Head Bolts 5/16" x 3/4"	
(2) Cam Tracks (Left & Right)		(4) Hex Nuts 5/16" diameter	
(2) Sheave brackets (Left & Right)		(2) Plain Washers 5/16" diameter	
(2) LHR Bottom Brackets (Left & Right)		(2) Clevis Pins & Cotter Pins	
(4) Hex Head Bolts 3/8" x 1/2"		(2) Round Head Bolts 1/4" x 3/4"	
(4) Hex Nuts 3/8" Diameter		(2) Hex Flange Nuts 1/4" Diameter	
(2) Containment Clips			

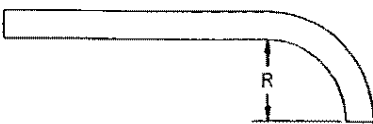


IMPORTANT: Please carefully read the following instructions before you begin installing the low headroom kit. Installing this kit should be done by a person with reasonable mechanical aptitude.

Step 1

The Low Headroom (LHR) Conversion Kit is designed to modify the track of extension spring doors to a 4-1/2" minimum headroom clearance. This kit works with both 12" and 15" radius horizontal track. To determine the radius of your track, measure from the center point of the radius to the bottom of the track as shown by dimension "R" in Figure 1. If dimension "R" measures 11" to 12", then you have 12" radius track. If "R" measures 14" to 15", then you have 15" radius track. Also measure and check your headroom distance, which is the space above the top of the opening. See Figure 2.

Figure 1



If you have 12" radius track, go to Step 2 Part A. If you have 15" radius track, go to Step 2 Part B.

Figure 2

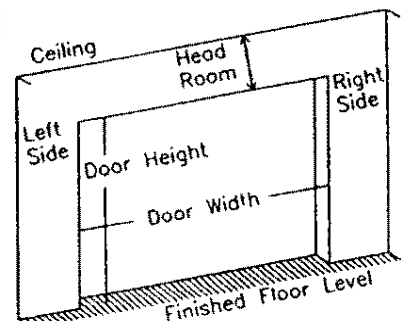


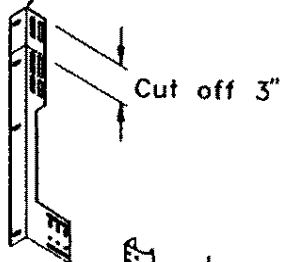
Figure 3

FLAG BRACKET

Step 2

Part A - 12" Radius Track Only

Refer to Table 1 to determine the reduced vertical track length. Measure and remove excess length from the top of the vertical track as shown in Figure 3. Two 1/4" diameter holes need to be redrilled at the top of the vertical track. These two holes are used to attach the vertical track to the flag bracket. If there is a clearance problem, it may be necessary to cut 3" off the top of the flag bracket. See Figure 3. Proceed to Step 3.



Part B - 15" Radius Track Only

Determine from Table 1 the reduced vertical track length for a 15" radius track. Refer to Figure 3.

Cut off area

(2) 1/4" Holes
Customer to Drill

Table 1

Door Height	Head-room	Reduced Vertical Track Length	
		12" Radius	15" Radius
6'-6"	4-1/2"	66"	62-1/2"
7'-0"	4-1/2"	72"	68-1/2"
7'-6"	4-1/2"	78"	74-1/2"
8'-0"	4-1/2"	84"	80-1/2"

LONG TRACK BRACKET

VERT. TRACK

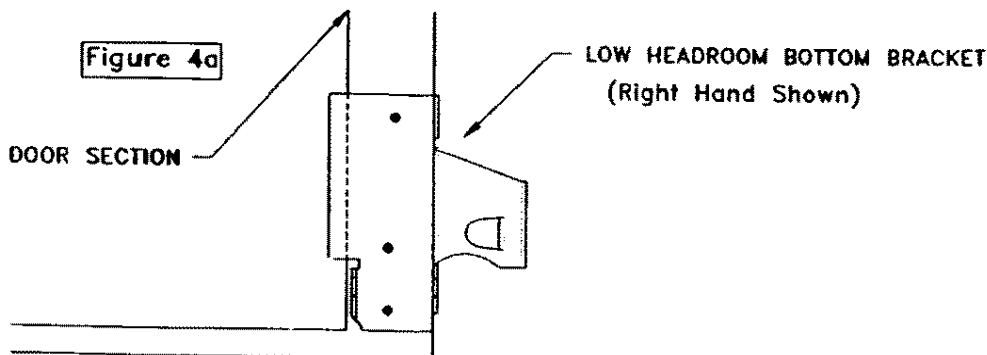
SHORT TRACK BRACKET

Note: For door height with 4-1/2" headroom not listed, 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.

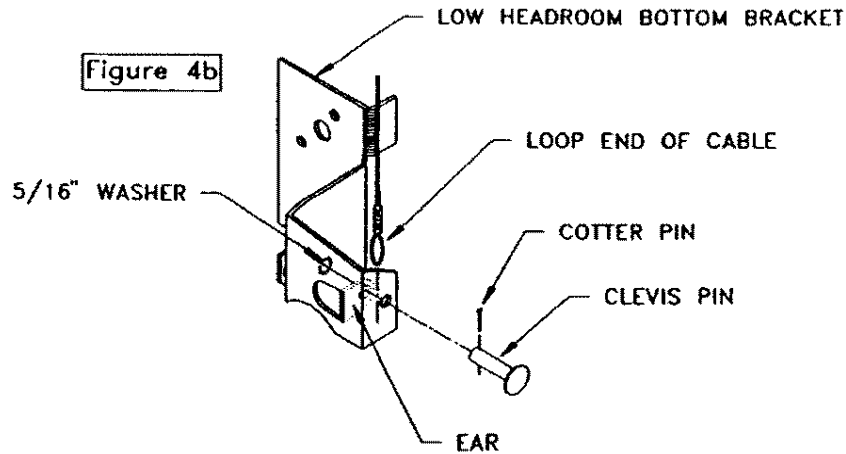
Step 3

Mount right hand LHR bottom bracket to right side of bottom door section using holes and door fasteners provided with the standard door hardware. If pre-drilled holes do not line up or if not provided, drill your own holes using a minimum of 3 screws per bracket as shown in Figure 4a. Repeat procedure for left side.

Figure 4a



Insert clevis pin through bottom bracket hole, through loop end of cable and finally through the ear. Secure clevis pin by using 5/16" washer and inserting cotter pin into hole and bending the two ends of the cotter pin outward. See figure 4b.

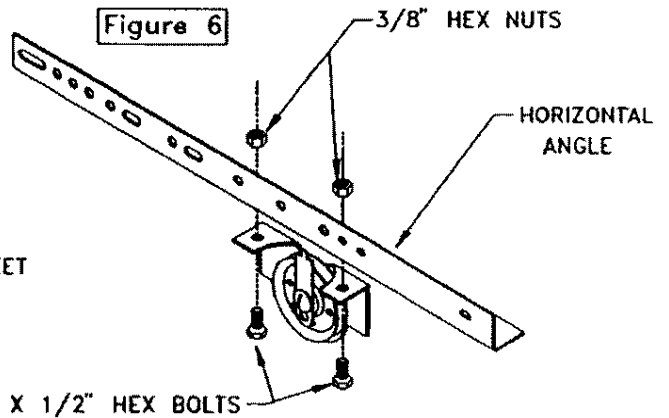
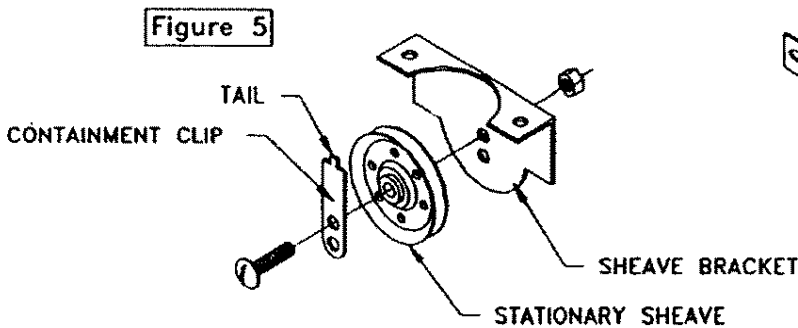


Step 4

Proceed with standard installation instructions until the point where the extension spring hardware is attached.

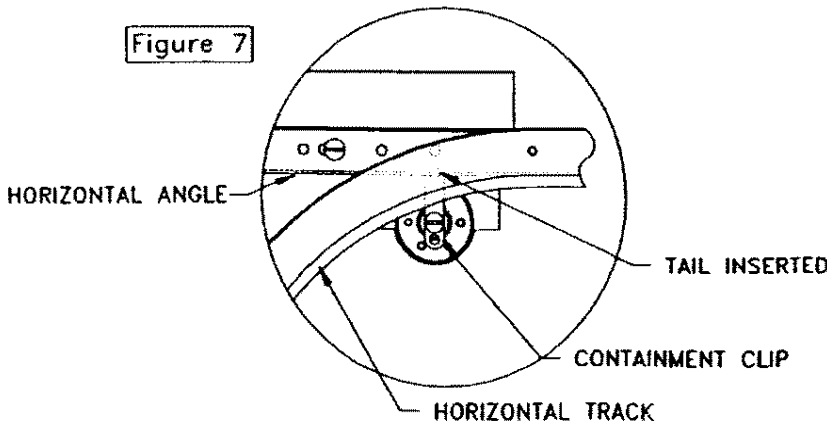
Step 5

Bolt the containment clip together with the stationary sheave and sheave brackets as shown in figure 5.



Step 6

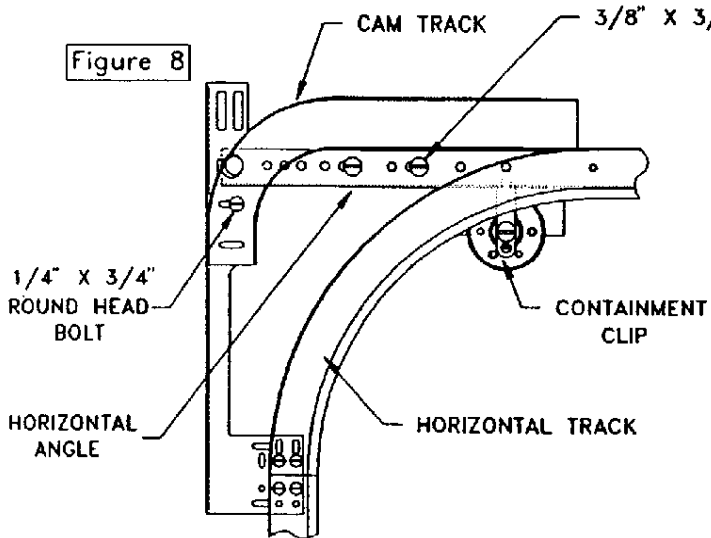
Before installation of the spring hardware, install sheave bracket underneath the horizontal angle. Center the sheave bracket 12-1/2" from the front end of the horizontal angle and fasten bracket using two 3/8" x 1/2" hex head bolts and 3/8" nuts. Repeat procedure for other side. See Figure 6 above. The tail of the containment clip must be inserted into the horizontal angle as shown in Figure 7.



WARNING: FAILURE TO ATTACH THE CONTAINMENT CLIP AS SHOWN CAN RESULT IN THE LOSS OF SPRING TENSION, ALLOWING THE DOOR TO FALL, WHICH CAN RESULT IN PERSONAL INJURY OR DAMAGE TO PROPERTY.

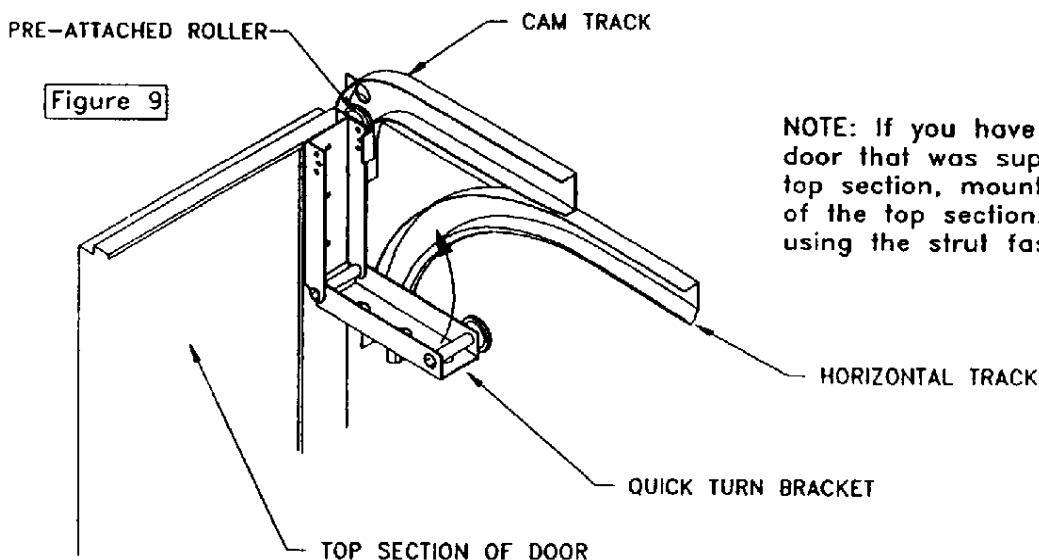
Step 7

Mount right hand cam track to horizontal angle. Make sure that there is enough space between the door and vertical track so that the cam track can fit. Adjust vertical track outward away from door if fit is a problem. Using two 3/8" x 3/4" carriage head bolts and 3/8" hex nuts attach the cam track to the horizontal angle. The cam track is fastened to the flag bracket by using one 1/4" x 3/4" round head bolt and 1/4" hex flange nut. Refer to Figure 8. Repeat procedure for other side.



Step 8

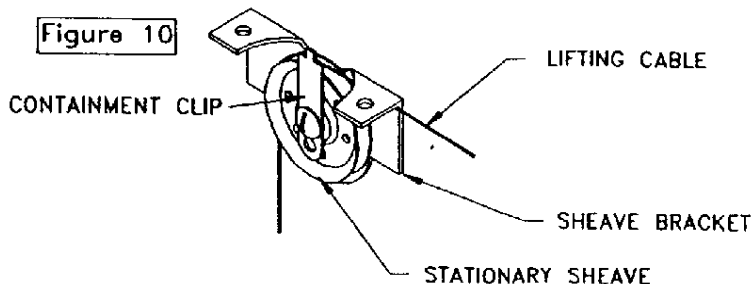
Place the roller that is pre-attached to the quick turn bracket into the cam track. Attach this half of the quick turn bracket to the top door section keeping it relatively flush with the top of the door so that the top of the door is against the header. Attach the quick turn bracket to the top section of the door (using the (3) holes punched in the bracket) with the fasteners provided with the standard door hardware. If the pre-drilled holes in the door do not line up, drill your own 5/32" holes in the door using the holes in the quick turn bracket as a template. Insert roller into lower portion of quick turn bracket and swing up to snap roller into horizontal track. Repeat procedure for other side. See Figure 9.



NOTE: If you have a steel or sandwich steel door that was supplied with a strut for the top section, mount this strut at the bottom of the top section, across the row of hinges using the strut fasteners provided.

Step 9

String the lifting cable over the stationary sheave and between the sheave bracket and containment clip. See Figure 10.



Step 10 - Proceed with standard installation instructions to complete spring assembly.