INSTALLATION INSTRUCTIONS

Single Track Low Headroom Supplemental Instructions

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These instructions are to be used in conjunction with your standard installation manual. Follow the standard manual up to “Preparing Bottom Section”. Use this supplemental instructions for installing bottom bracket and then continue using standard manual up to “Preparing Top Section”. Use this supplement to install top brackets and then continue following the standard manual for “Assembling & Installing the Track” – except replace horizontal track with Single Track Low Head Room (STLHR).

Please read and understand these instructions completely before proceeding with the installation of the Single Track Low Head Room system. Carefully follow these instructions to avoid personal injury or property damage.

Single Track Low Head Room can be used for all residential low head room applications.

Tools Needed

- Socket wrench kit
- $^{9}/_{16}$" box wrench
- $^{9}/_{16}$" diameter deep well socket
- Hammer

In the interest of safety this symbol means WARNING or CAUTION. Personal injury and/or property damage may occur unless instructions are followed carefully.

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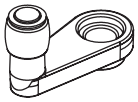
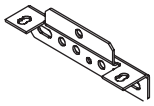
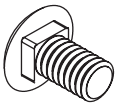
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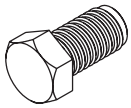
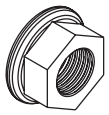
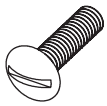
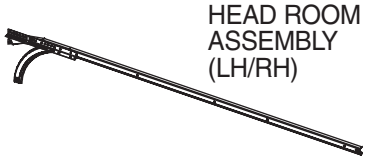
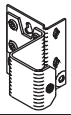
1-800-225-6729

All References To Left Hand And Right Hand Are Made Assuming That You Are Inside The Garage Looking Out (ISLO).

Covered by one or more of U.S. Patent Numbers D337,042; 5,240,216; 5,404,927; 6,047,761 and patents pending.

Parts List

DESCRIPTION	STD. EXT. & TORSION, EZ-SET EXT. QTY.	EZ-SET TORSION QTY.
 TOP BRACKET LOW HEAD ROOM	2	2
 TOP ROLLER LINKAGE ASSEMBLY	2	2
 PUSH NUT	2	2
 SHEAVE BRACKET	2	2
 3/8" - 16 x 3/4" CARRIAGE BOLT	6	0
 3" OR 4" SHEAVE	2	0

DESCRIPTION	STD. EXT. & TORSION, EZ-SET EXT. QTY.	EZ-SET TORSION QTY.
 3/8" x 3/4" HEX HEAD BOLT	4	0
 3/8" x 16 FLANGE NUT	10	0
 3/8" - 16 x 1 1/2" PAN HEAD SHEAVE BOLT	2	0
 SINGLE TRACK LOW HEAD ROOM ASSEMBLY (LH/RH)	2	2
 LOW HEAD ROOM BTM BRACKET (LH/RH)	2	2
 SPACER**	2	0

Note: Depending on spring configuration to be used, all parts required may not be shown above. Consult your standard installation manual for detailed list.

Identify which spring system is to be used with Single Track Low Head Room (STLHR) System and refer to table A below to see if you meet minimum head room and side room requirements.

**Use only with extension spring on doors with horizontal angle 82" or longer

Available Springing Systems with STLHR – Table A

Spring System	Minimum Head Room Required	Minimum Side Room Required	Sheave/ Sheave Brkt. Required	Low Head Room Bottom Bracket Required
Extension Spring Low Head Room	5 1/2"	3 3/4"	Yes	Yes
Torsion Spring Low Head Room Front Mount	9 1/2"	3 3/4"	Yes	Yes
Torsion Spring Low Head Room Rear Mount	5 1/2"	3 3/4"	Yes	Yes
EZ-Set Torsion Spring Low Head Room	9 1/2"	3 3/4"	No	*No
EZ-Set Extension Spring Low Head Room	5 1/2"	7"	Yes	Yes

*EZ-Set Torsion Spring uses standard bottom bracket

Note: Consult your standard manual under "Check Headroom/ Backroom/ Sideroom" for description.

Attaching Low Head Room Bottom Bracket(s) To Door

Step 1

For steel doors, insert low head room bottom bracket locking tabs into end stile key slot by pushing inward and then up. The “L” and “R” letters on the bracket designate left hand and right hand brackets. Attach brackets to door using #14 x 5/8" sheet metal screws. (FIG. 1A)

WARNING

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

For wood doors or steel doors weighting in excess of 250# use bottom bracket as shown in Figure 1C (call the consumer hotline to verify door weight). If door is wood, attach bottom bracket using 1/4" x 1 7/8" carriage bolt and nut as shown in Figure 1C. If using low head room safety bottom bracket, loop end of lift cable around button as shown. For residential bottom bracket, insert loop thru clevis pin. Insert cotter pin into clevis pin hole and bend out to secure into place.

If using EZ-Set Extension Spring System, **do not** attach loop end of lifting cable to bottom bracket at this time. (FIG. 1A)

Step 2

Proceed with stacking sections and attaching vertical track to jamb as detailed in your standard installation manual. Do not install STLHR horizontal system at this time.

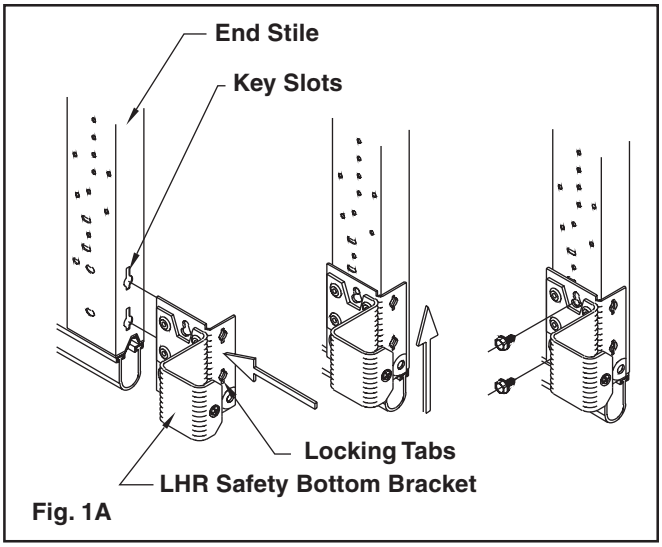


Fig. 1A

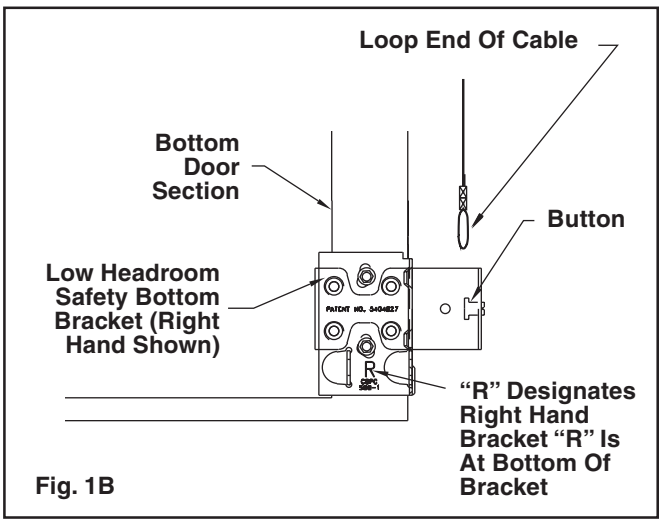


Fig. 1B

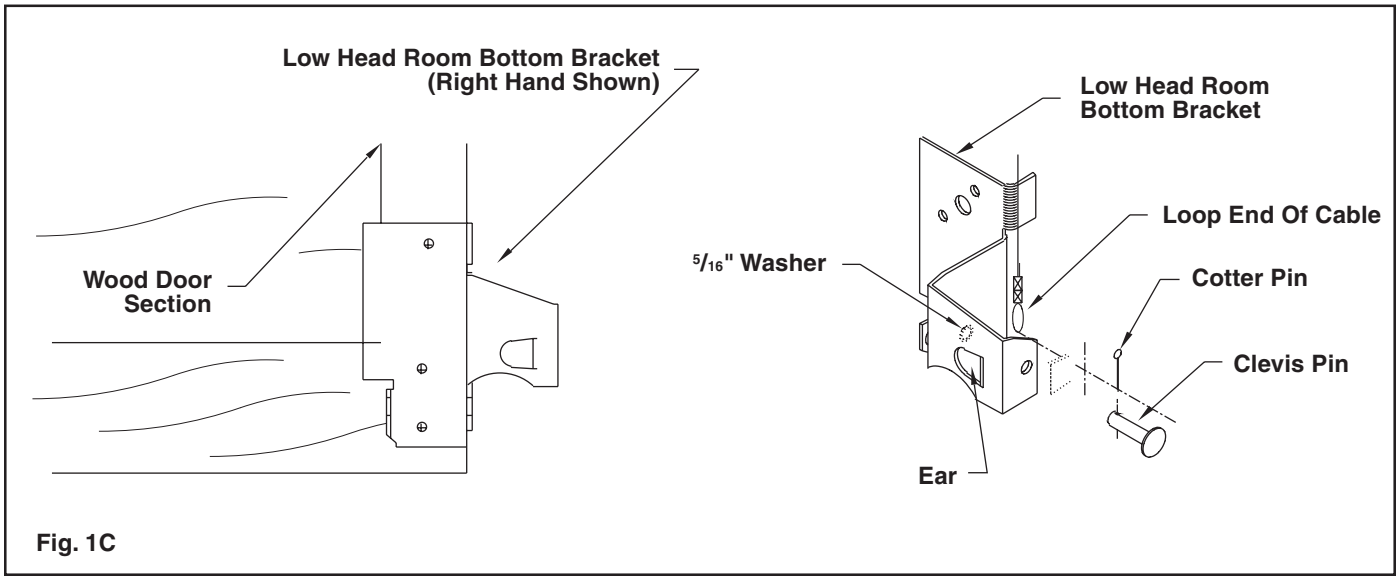


Fig. 1C

Preparing the Top Section

Step 3

If top section requires a strut, place section on sawhorses (exterior faced side down) and position strut 1" below top edge of door. Fasten using pre-punched holes in stiles and strut. If pre punched holes not provided, at each end and center stile location drill 5/32" diameter pilot hole through strut and stiles. Be careful not to drill completely through section. **At all center stile locations only,** attach strut to door section using #14 x 5/8" sheet metal screws. If strut clips are provided, use with sheet metal screws. For wood doors, use 1/4" x 1" lag screw instead of sheet metal screws to fasten strut to door.

Do not attach strut at either end stile location at this time. Stack top section in opening. Make sure top section is securely in place and will not fall out of opening. It may be necessary to temporarily secure top section to vertical jamb using 3" long nail. Refer to standard installation manual. (FIG. 2)

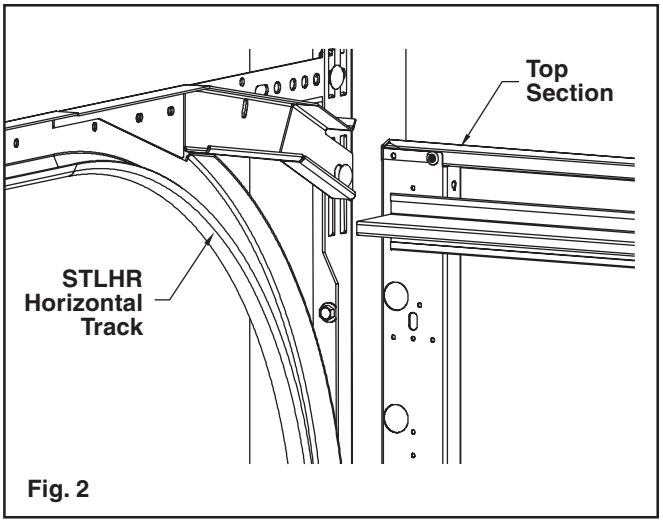


Fig. 2

Installing Single Track Low Head Room Horizontal Track

Step 4

Before attaching left hand and right hand STLHR horizontal track, bend short radius piece downward until gaps close as shown in Figure 3. Place STLHR on top of vertical track and temporarily support the rear end of the track with a rope from the trusses overhead or a tall ladder.

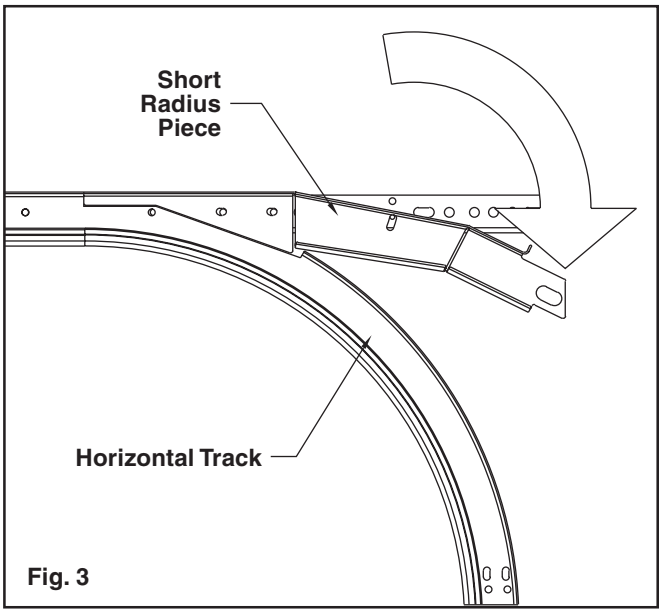


Fig. 3

Fig 3

Attach the curved end of the horizontal track to the flag bracket using two 1/4" x 5/8" track bolts and 1/4" flange nuts. Fasten short radius piece and horizontal angle to flag bracket by using 3/8" x 3/4" carriage bolts and 3/8" flange nuts as shown in Figure 4. Repeat Step 4 for other side.

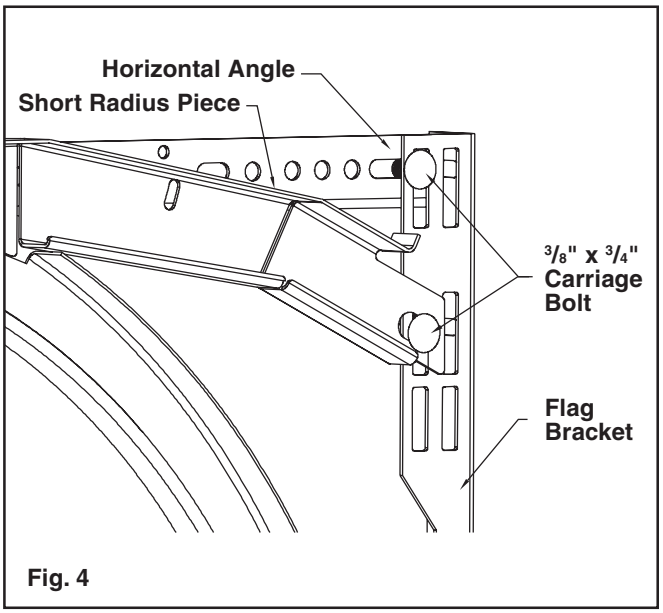


Fig. 4

Top Roller Linkage Assembly

Step 5

To assemble, place roller on flat surface such as a wood block with roller stem pointed in up-right position. Slide linkage onto stem. Make sure linkage is placed in the direction as shown in Figure 5A. Place push nut onto roller stem and force downward using $^{9}/_{16}$" diameter deep well socket and hammer. (FIG. 5B) Force push nut downward as far as it can go. Then using closed end of $^{9}/_{16}$" box wrench slide onto roller stem and continue forcing downward until it contacts linkage and will not travel any further. (FIG. 5C) Linkage to be positioned firmly against shoulder of roller as shown in Figure 6. Repeat Step 5 for other side.

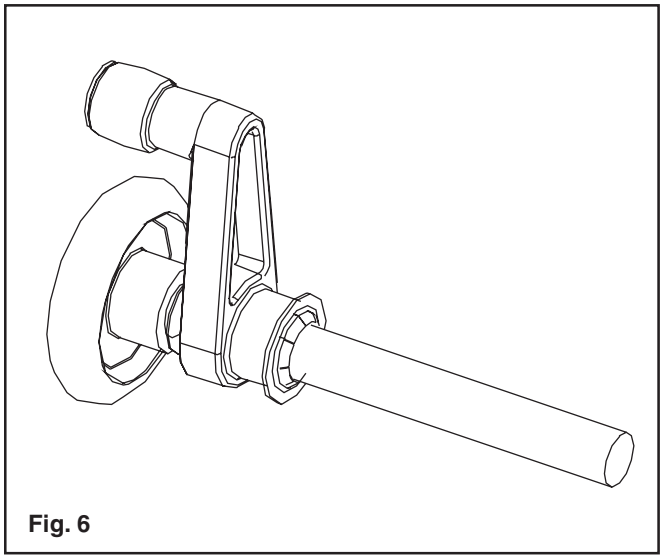


Fig. 6

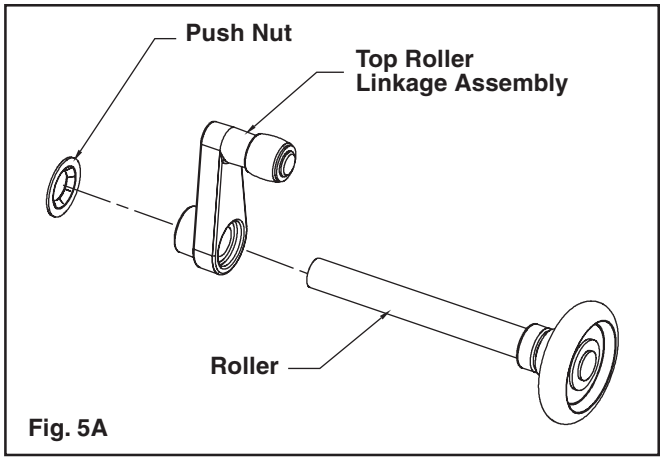


Fig. 5A

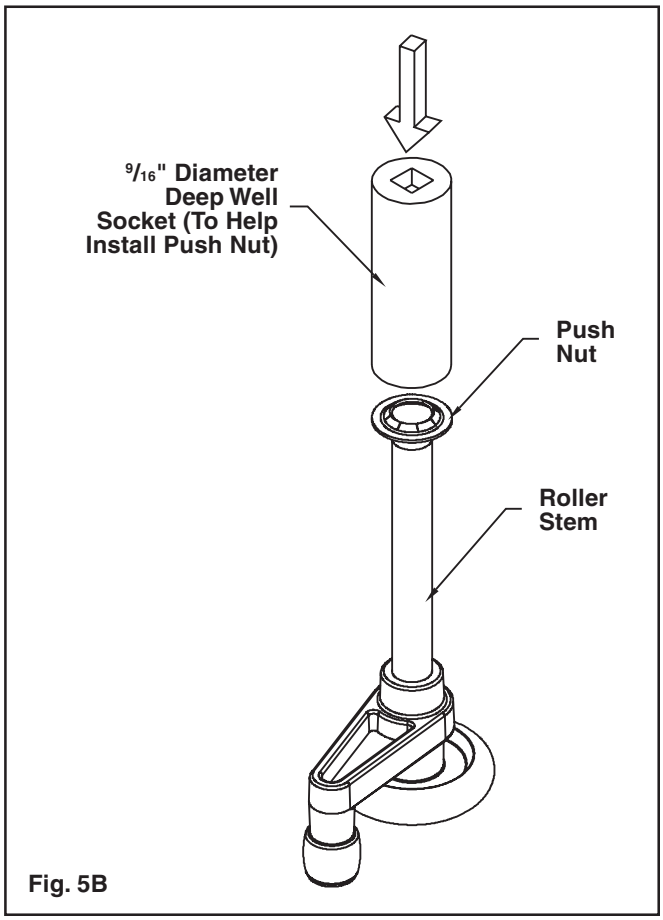


Fig. 5B

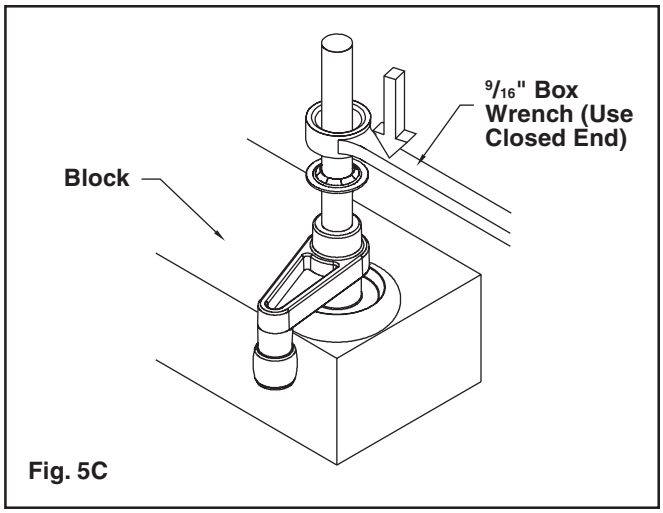


Fig. 5C

Installing Top Roller Bracket With Linkage Assembly

Step 6

Install linkage assembly into short radius piece by tilting slightly and then rotating upward. Make sure top roller linkage assembly is fully engaged in track as shown in Figure 7. Slide low head room top roller bracket onto roller stem of linkage assembly. Position top bracket at very top of door section. If pre-punched holes do not exist on end stile, use both slots in top bracket as template and drill 5/32" pilot hole. Attach top bracket to end stile using two #14 x 5/8" sheet metal screws. For wood doors, use fasteners provided.

If a top strut is installed the top roller bracket will go between the strut and section with the roller above the strut. If pre-punch holes are not available, use strut clips as shown in Figure 8A. For doors without a strut refer to Figure 8B.

Repeat Step 6 for other side. Make sure placement of left hand and right hand top roller bracket are in line with each other.

After springing system is installed, top bracket can be adjusted by sliding it slightly up or down in order to position the top section correctly.

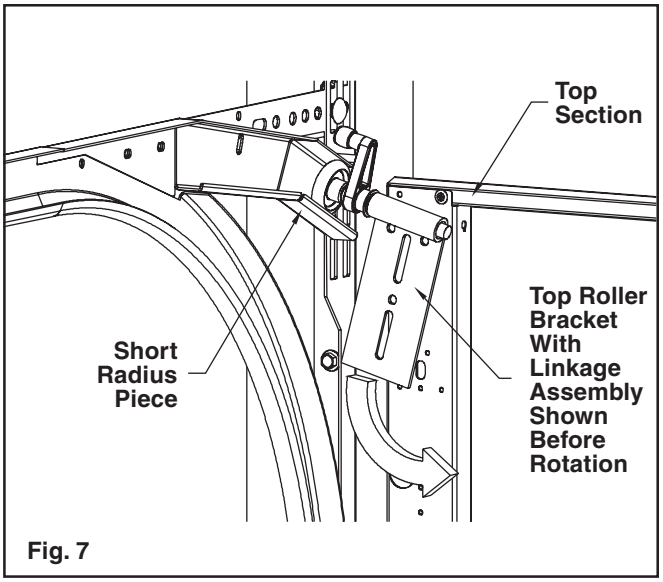


Fig. 7

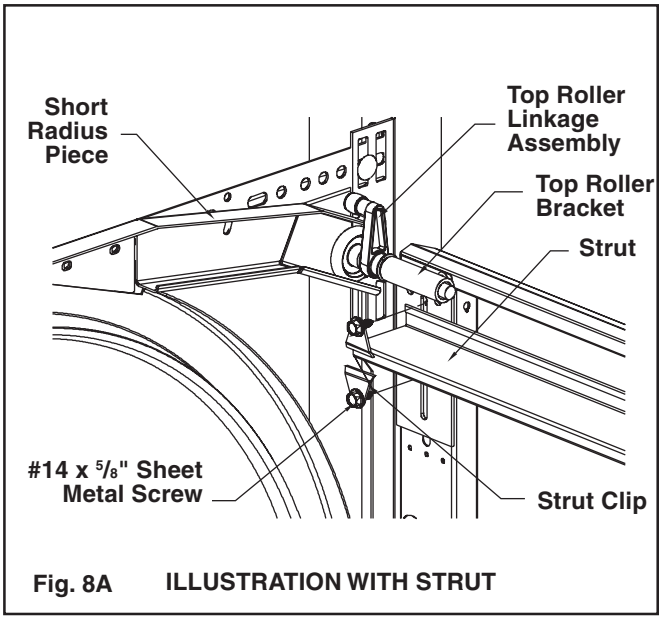


Fig. 8A ILLUSTRATION WITH STRUT

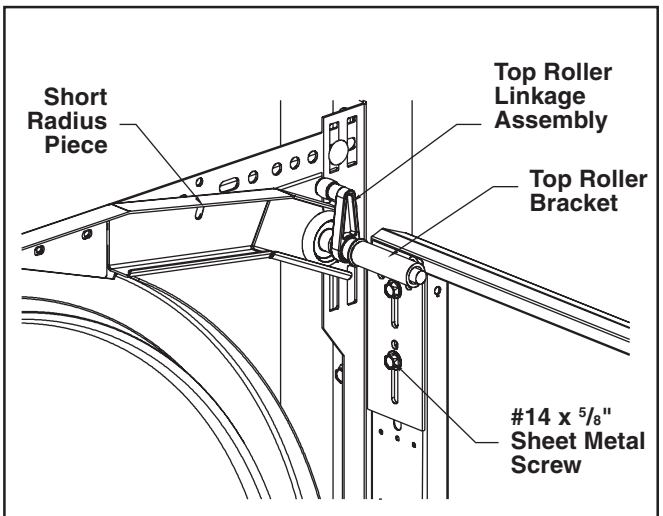


Fig. 8B ILLUSTRATION WITHOUT STRUT

Sheave Bracket Assembly

Step 7

The sheave bracket is designed to work with either 3" or 4" diameter sheave. Locate sheave provided and fasten to sheave bracket with one 3/8" x 1 1/2" pan head sheave bolt and one 3/8" flange nut. Make sure sheave bolt and nut are installed in same orientation as shown in Figure 9. Securely fasten bolt and nut. Repeat Step 7 for other side.

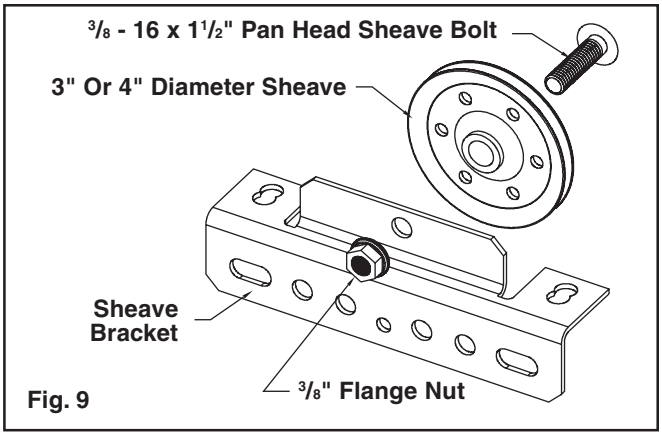


Fig. 9

Install Sheave Bracket To STLHR Horizontal Track

Step 8

Taking assembled sheave bracket, place above cut out in horizontal angle and slide downward into position. Make sure sheave is in up position as shown in Figure 10A. Fasten bracket assembly to horizontal angle using two 3/8" x 3/4" hex head bolt and 3/8" flange nut. For 3" sheave, make sure bolts are placed in holes marked with “3”. If 4" diameter sheave is used, make sure to place bolts in holes marked with “4”. Securely fasten all bolts and nuts. Repeat Step 8 for other side. (FIG. 10B & 10C)

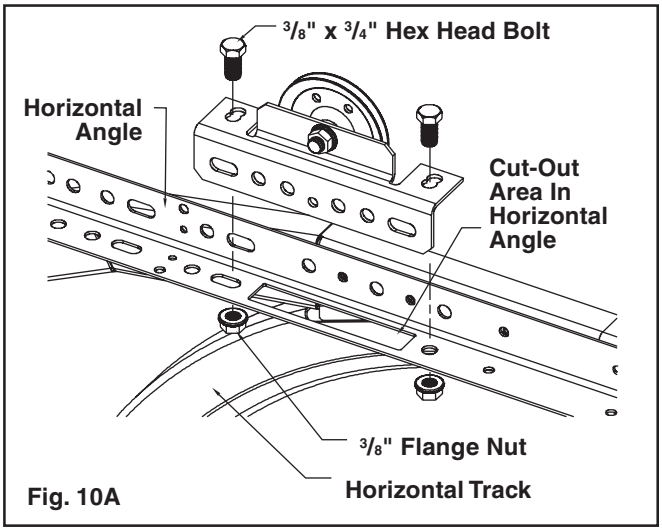


Fig. 10A

WARNING

Once spring tension is applied, do not remove sheave and/or sheave bracket. Personal injury and/or property damage may occur if removed under spring tension.

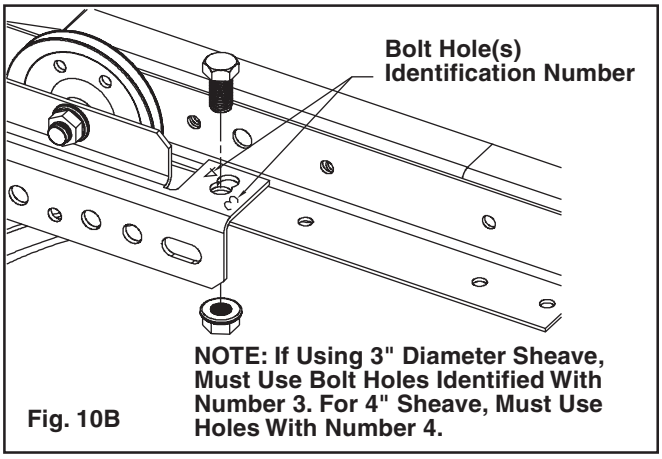


Fig. 10B

You Are Now Ready To Attach The Springing System To Your Door

- For Extension Spring Low Head Room go to section 2A.
- For Torsion Spring Low Head Room Front Mount go to section 2B.
- For Torsion Spring Low Head Room Rear Mount go to section 2C.
- For EZ-Set Extension Spring Low Head Room go to section 2D.
- For EZ-Set Torsion Spring Low Head Room go to section 2E.

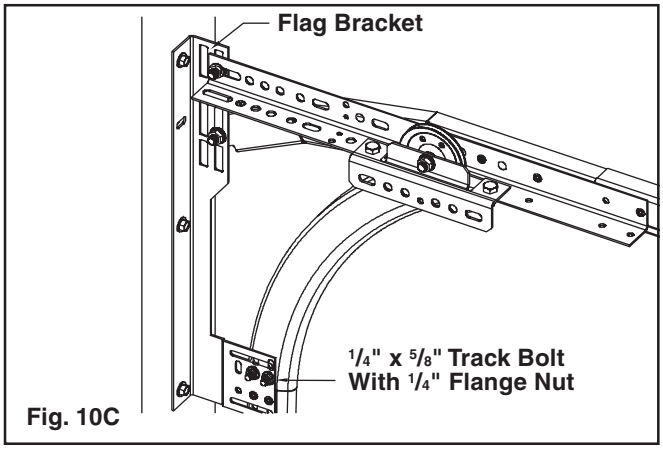


Fig. 10C

Section 2A
Extension Spring
Low Head Room

Step 1

Complete steps 1 and 3 thru 6 (skip Step 2) in the standard manual for extension spring installation. If horizontal angle 82" or longer, a spacer is used to provide clearance between the sheave fork and horizontal angle. The spacer is attached to the sheave fork as shown in FIG 11C. Make sure the extension spring is attached to the sheave fork before assembling. Repeat same assembly operation for other side.

Step 2

Tie the cable end to the three hole adjusting clip as shown in Figure 11A. Make sure cable is securely tied to clip as shown. Hook the cable and clip to the sheave bracket using the “S” hook. (FIG. 11B)

Step 3

Follow instruction in standard manual for installing extension spring. If spacer is used, make sure it is sitting on top of horizontal angle or riding in groove as shown in FIG 11D. The groove location works best on doors with duel (two) extension spring set-up per side. For this springing configuration, make sure the rear track hanger is extended 1" to 2" below the track to provide sufficient space for locating the lower spring under the horizontal angle.

Step 4

Complete installing safety containment kit installation instruction in the standard manual for extension spring installation.

WARNING

Garage door extension springs can cause serious injury and property damage if they break under tension and are not secured with safety cables.

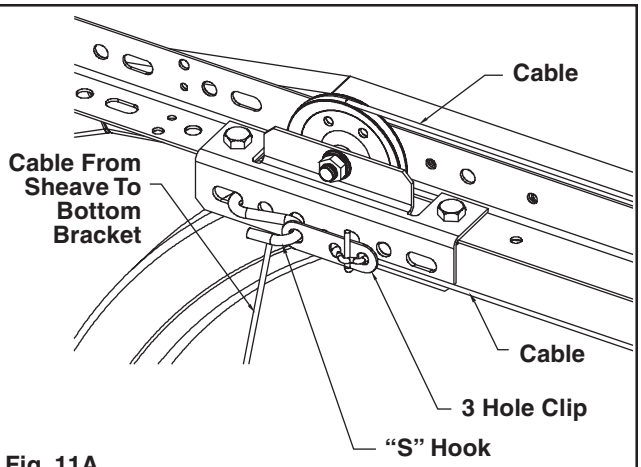


Fig. 11A

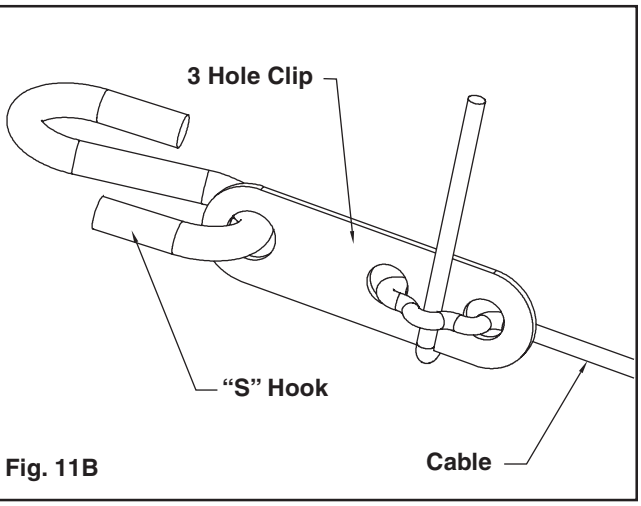


Fig. 11B

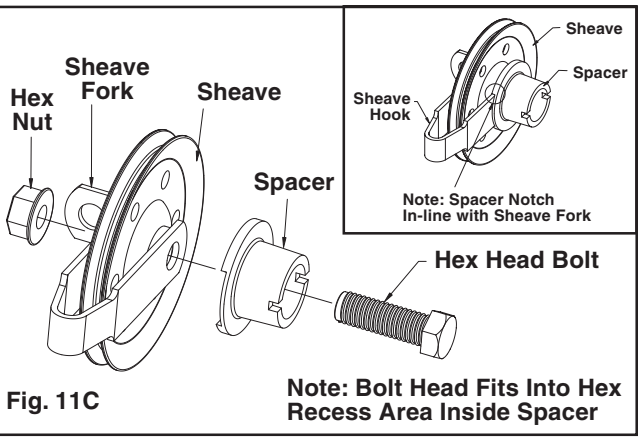


Fig. 11C

Note: Bolt Head Fits Into Hex Recess Area Inside Spacer

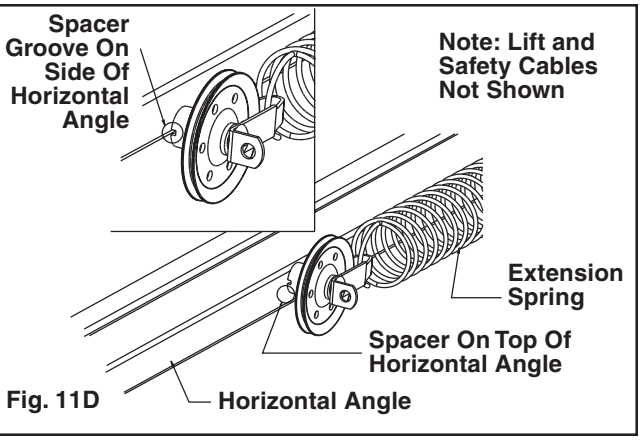


Fig. 11D

Section 2B
Torsion Spring Low Head Room Front Mount

WARNING

Torsion springs can be very dangerous if they are improperly installed or mishandled. Do not attempt to install them yourself unless 1) you have the right tools and reasonable mechanical aptitude or experience and 2) you follow these instructions very carefully.

Step 1
Compete Step 1 in the standard manual for torsion spring installation.

Step 2
Attach end bearing plate as shown in Figure 12. Fasten end bearing plate to horizontal angle following Step 3 in standard manual for torsion spring installation. In place of the 3/8" x 3/4" hex head bolts, use 3/8" x 3/4" carriage head bolts. Repeat Step 2 for other side.

Step 3
For installation of springs, shaft and cable drums according see Step 4 in standard installation instructions. Refer to Figure 13 for assembly illustration.

Step 4
For each side, loop lift cable from bottom bracket around sheave and attach to cable drum. (FIG. 13)

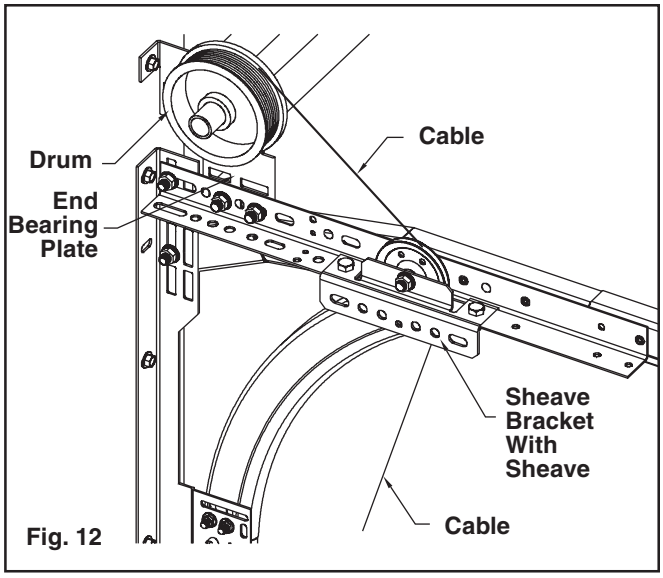


Fig. 12

IMPORTANT

For Torsion Spring Low Head Room Front Mount, the cable drums are placed outside of the end bearing plates with the set screws facing out. Also note that the "Red" drum and spring with the "Black" winding cone are on the left side (ISLO). The "Black" drum and spring with "Red" winding cone are on the right side (ISLO).

Step 5
Once both sides are assembled, follow Steps 6, 7 and 8 in the standard manual on torsion spring installation **with the exception that the torsion springs are wound downward as shown in Figure 13.**

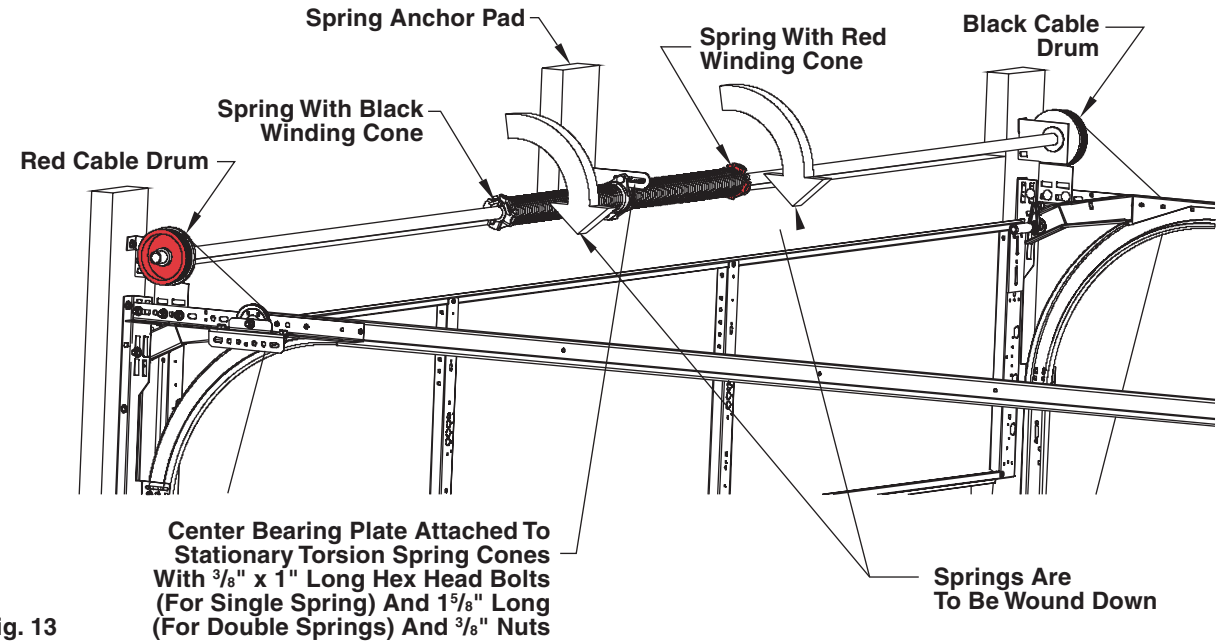


Fig. 13

Section 2C
Torsion Spring Low Head Room Rear Mount

WARNING

Torsion springs can be very dangerous if they are improperly installed or mishandled. Do not attempt to install them yourself unless 1) you have the right tools and reasonable mechanical aptitude or experience and 2) you follow these instructions very carefully.

Step 1

Attach horizontal track to flag bracket using 1/4" x 5/8" track bolts and 1/4" flange nuts. Attach horizontal angle to flag bracket using 3/8" x 3/4" carriage bolts and 3/8" flange nut. The end bearing plate attaches to the track and rear track hanger using two 3/8" x 3/4" hex head bolts and 3/8" flange nuts.

As shown in Figure 14, both bolts attach the end bearing plate to the rear track hanger with the lower bolt also securing the horizontal track.

Step 2

Rear mount torsion spring doors will require that springs to be placed at rear of track and a center support hanger(s) be provided that is strong enough to withstand the torque of the springs. For both sides, loop cable from bottom bracket to sheave to cable drum. End of horizontal tracks must be securely fastened to the rear track hanger before springs are wound or door is lifted.

Horizontal tracks should be level and backhung. Install springs and **wind all springs in downward directions.** (FIG. 14)

IMPORTANT

The "Red" drum and spring with the "Black" winding cone are on the left side (ISLO). The "Black" drum and spring with "Red" winding cone are on the right side (ISLO).

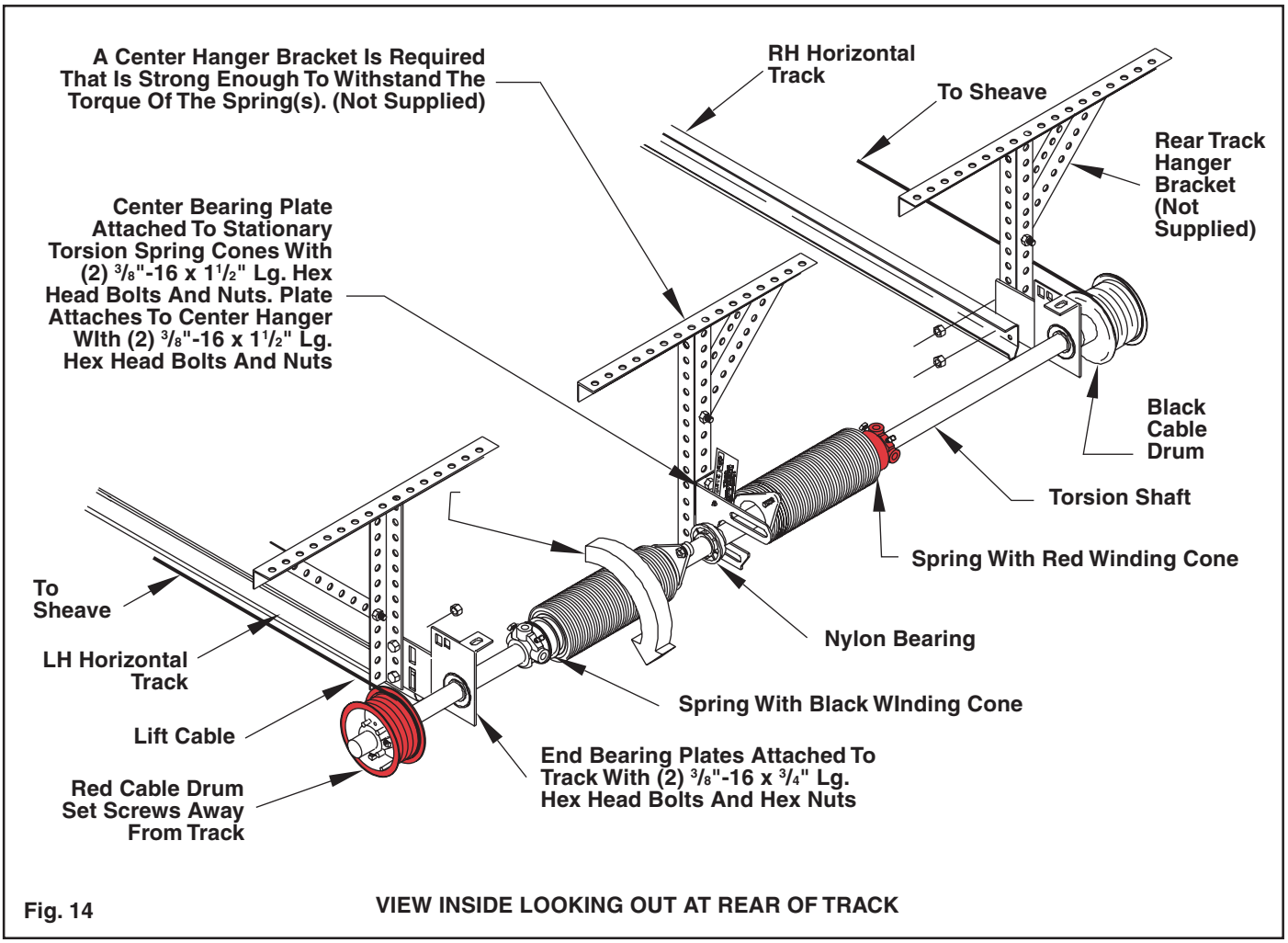


Fig. 14 VIEW INSIDE LOOKING OUT AT REAR OF TRACK

Section 2D
EZ-Set Extension Spring
Low Head Room

IMPORTANT

Do not use EZ-Set Extension Springs on doors weighing over 280 lbs.

Step 1
Refer to EZ-Set Extension Spring standard installation manual and follow Step 1.

Step 2
Remove the spring system housing from the package. Locate the housing bracket with the pre-attached sheave. Detach the sheave from the housing bracket by unscrewing the 3/8" nut and removing the bolt. (FIG. 15A) Slide the Spring System housing onto the housing bracket as shown in Figure 15B. Repeat for both sides.

Step 3
Attach housing bracket to sheave bracket as shown in Figure 16A. Using slots in upper part of housing bracket, fasten to sheave bracket using two 3/8" x 3/4" hex head bolts and 3/8" flange nuts. (FIG. 16B)

Step 4
Follow steps 4 thru 11 in EZ-Set Extension System installation instruction to complete assembly.

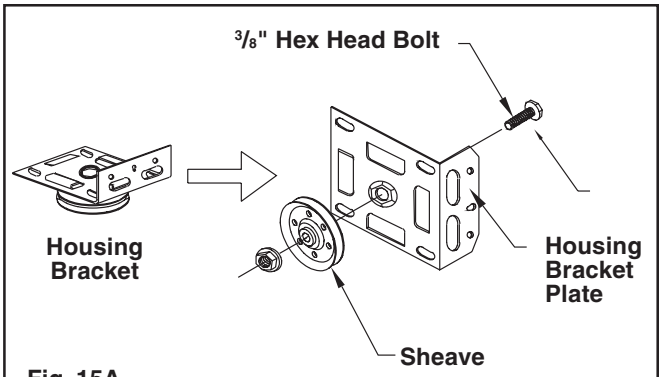
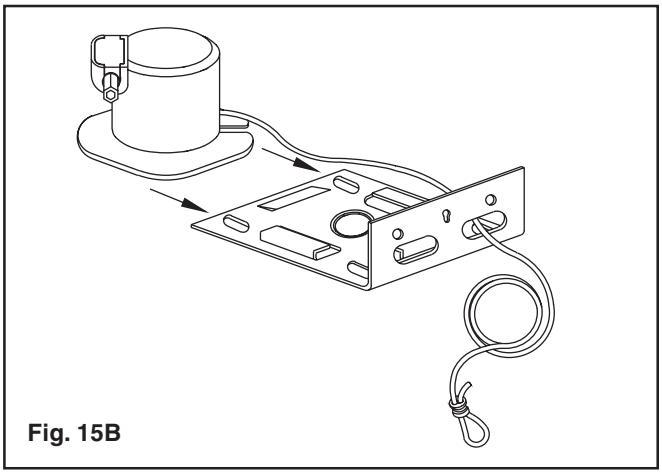


Fig. 15A


Fig. 15B

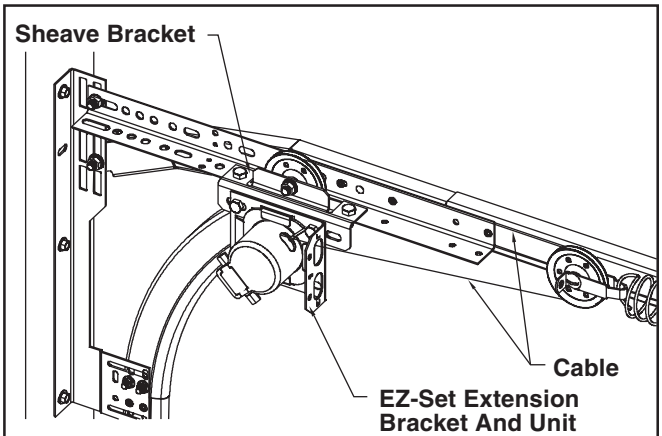


Fig. 16A

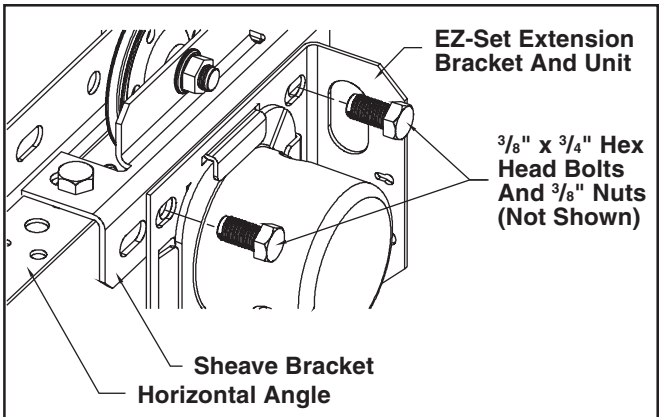


Fig. 16B

Section 2E
EZ-Set Torsion Spring Low Head Room

IMPORTANT

Use standard lift bottom brackets. Do not use low head room bottom bracket for EZ-Set Torsion Spring Low Head Room.

Step 1

Fasten EZ-Set Torsion Spring Low Head Room bracket to horizontal angle and flag bracket as shown in Figure 17. Follow Step 1 as called out in EZ-Set Torsion System standard installation manual. Use slots labeled “STD MOUNTING” to fasten to flag bracket and horizontal angle.

Step 2

Follow Steps 2 thru 11 in EZ-Set Torsion System installation instruction to complete assembly. (FIG. 17)

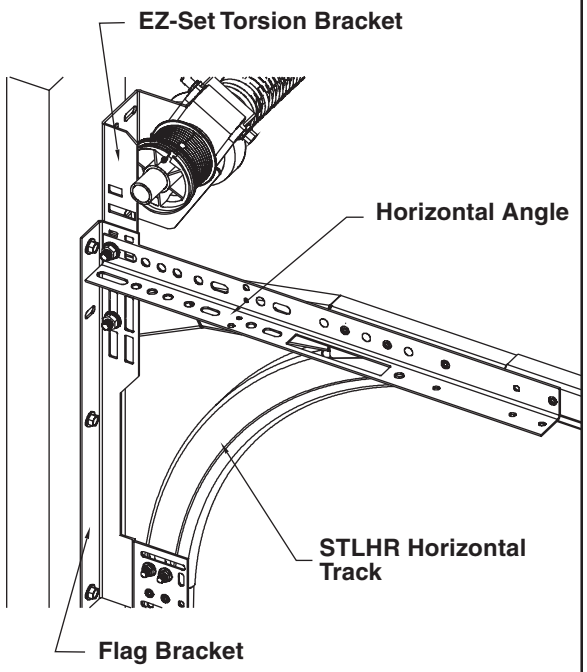


Fig. 17 **LEFT SIDE SHOWN**