

LOW HEADROOM EXTENSION

Supplemental insert

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Part No. 301629

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This supplemental installation instruction is to be used as a supplement to the main Installation Instruction and Owner's Manual provided with the door. The instructions included in this document are ONLY those which deviate from the standard installation. All WARNINGS and CAUTIONS listed in the main manual are applicable to this supplemental instruction as well.

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INSTALLATION

1

Quick Install Jamb Brackets

For 9100/9405/9600/5120/5145/6100 doors use the illustrations shown in **FIG. 1.1** to determine the placement of the jamb brackets for your door. Locate the proper jamb brackets by the corresponding holes in the vertical track. To install the jamb brackets, align the twistlock tab on the quick install jamb bracket with the quick install feature in the track and turn the bracket perpendicular to the track so the mounting flange is toward the back (flat) leg of the track, as shown in **FIG. 1.1**.

NOTE: Jamb brackets are stamped for identification.

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Windload Jamb Brackets

NOTE: If you do not have windload jamb brackets, skip this step and complete step bottom bracket installation on page 2.

NOTE: Windload specification 0356 only uses the (QI) jamb bracket schedule.

NOTE: The following (JB) denotes a slotted jamb bracket.

Measure the length of the vertical track. Using the windload jamb bracket schedule, determine the placement of the jamb brackets for your door height and track type.

Loosely fasten the (JB) jamb bracket to the track with a 1/4" - 20 x 9/16" track bolt and 1/4" - 20 flange hex nut, as shown in **FIG. 2.1**.

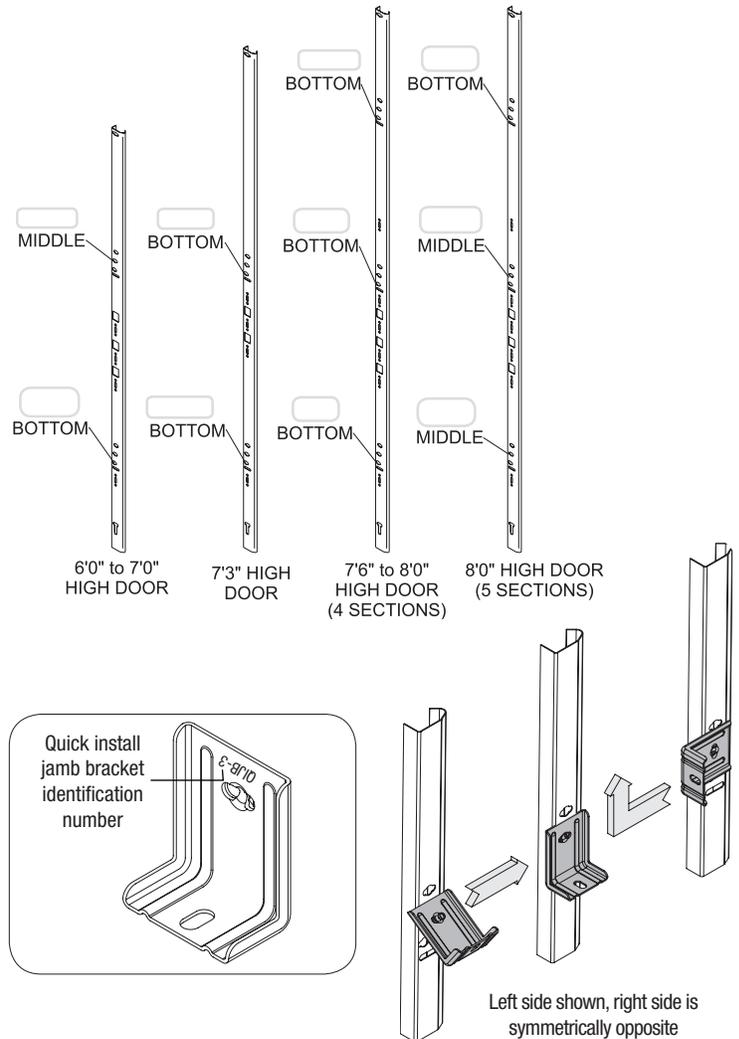


FIG. 1.1

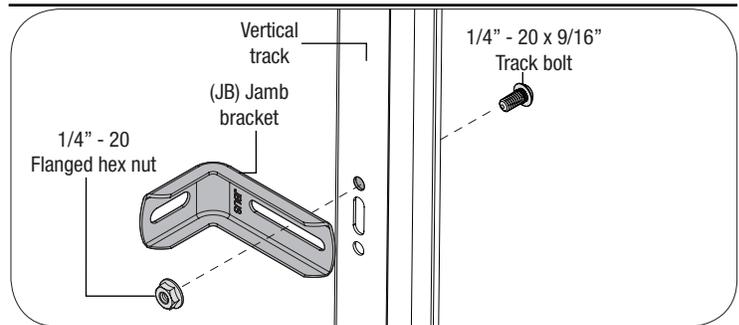


FIG. 2.1

WINDLOAD (JB) JAMB BRACKET SCHEDULE

| DOOR HEIGHT | NO. OF SECTIONS | NO. OF JAMB BRACKETS (EACH JAMB) | TRACK TYPE | LOCATION OF CENTER LINE OF JAMB BRACKETS MEASURED FROM BOTTOM OF TRACK (ALL DIMENSIONS ± 2") |
|--|-----------------|----------------------------------|------------|---|
| WINDLOAD SPECIFICATION 0228 | | | | |
| 7'-0" or Less | 4 | 1 | Q.I. | 2" (JB), 63" (JB) |
| | | | F.A.T. | 2" (JB), 42" (JB), 63 1/4" (JB) |
| 7'-1" to 8'-0" | 4 or 5 | 1 | Q.I. | 2" (JB), 34" (JB) |
| | | | F.A.T. | 2" (JB), 10" (JB), 29 3/4" (JB), 48" (JB), 66" (JB) |
| WINDLOAD SPECIFICATION 0229, 0600, & 0602 | | | | |
| 7'-0" or Less | 4 | 2 | Q.I. | 25 1/2" (JB), 63" (JB) |
| | | | F.A.T. | 10" (JB), 21 3/4" (JB), 42" (JB), 63 1/4" (JB) |
| 7'-1" to 8'-0" | 4 or 5 | 2 | Q.I. | 23" (JB), 34" (JB) |
| | | | F.A.T. | 10" (JB), 21 3/4" (JB), 29 3/4" (JB), 48" (JB), 66" (JB) |
| WINDLOAD SPECIFICATION 0230, 0232, 0233, 0234, 0601, 0603, 0607, & 0608 | | | | |
| 7'-0" or Less | 4 | 4 | Q.I. | 2" (JB), 25 1/2" (JB), 34" (JB), 63" (JB) |
| | | | F.A.T. | 2" (JB), 10" (JB), 21 3/4" (JB), 29 3/4" (JB), 42" (JB), 63 1/4" (JB) |
| 7'-1" to 8'-0" | 4 or 5 | 5 | Q.I. | 2" (JB), 23" (JB), 34" (JB), 58" (JB), 75" (JB) |
| | | | F.A.T. | 2" (JB), 10" (JB), 21 3/4" (JB), 29 3/4" (JB), 48" (JB), 57 1/4" (JB), 66" (JB), 75 1/2" (JB) |
| WINDLOAD SPECIFICATION 0605 | | | | |
| 7'-0" or Less | 4 | 4 | Q.I. | 2" (JB), 23" (JB), 34" (JB), 58" (JB), 75" (JB) |
| 7'-1" to 8'-0" | 4 or 5 | 5 | F.A.T. | 2" (JB), 10" (JB), 21 3/4" (JB), 29 3/4" (JB), 48" (JB), 57 1/4" (JB), 66" (JB), 75 1/2" (JB) |

Bottom Bracket Installation

Identify the low-headroom bottom brackets provided with your door (**A, B or C**). Place them, left and right onto the bottom corners of the section. Seat the bottom brackets against the edge of the section, as shown in **FIG. 3.1** and **3.2**.

FOR LOW HEADROOM BOTTOM BRACKET (A):

Secure the low headroom bottom bracket to the section with (3) 1/4" - 20 x 11/16" self drilling screws (RED HEAD) and (2) 1/4" - 20 x 11/16" self drilling screws, as shown in **FIG. 3.1**.

IMPORTANT: THE 1/4" - 20 X 11/16" RED HEAD SELF DRILLING SCREWS MUST BE MUST BE INSTALLED THROUGH THE HOLES OF THE BOTTOM CORNER BRACKETS, AS SHOWN.

Place roller into holes of each bottom bracket, as shown in **FIG. 3.1**.

FOR LOW HEADROOM BOTTOM BRACKET (B):

Secure the low headroom bottom bracket to the section with four 1/4" - 20 x 2 1/2" carriage bolts, 1/4" - 20 flange hex nuts (RED HEAD) and 1/4" - 20 flange hex nut, as shown in **FIG. 3.2**.

IMPORTANT: THE CARRIAGE BOLTS AND THE 1/4" - 20 RED HEAD FLANGE HEX NUTS MUST BE MUST BE INSTALLED ON THE BOTTOM CORNER BRACKETS, AS SHOWN.

Place roller into holes of each bottom bracket, as shown in **FIG. 3.2**.

FOR LOW HEADROOM BOTTOM BRACKET (C):

Secure the low headroom bottom bracket to the section with (3) 1/4" - 20 x 11/16" self drilling screws (RED HEAD) and (2) 1/4" - 20 x 11/16" self drilling screws, as shown in **FIG. 3.3**.

IMPORTANT: THE 1/4" - 20 X 11/16" RED HEAD SELF DRILLING SCREWS MUST BE MUST BE INSTALLED THROUGH THE HOLES OF THE BOTTOM CORNER BRACKETS, AS SHOWN.

Attach the counter balance cable to the low-headroom bottom brackets using clevis pins. Secure the clevis pins to bottom brackets using a 5/16" flat washer and cotter pin, as shown in **FIG. 3.4**.

NOTE: Place roller into the factory attached bottom brackets, as shown in **FIG. 3.5**.

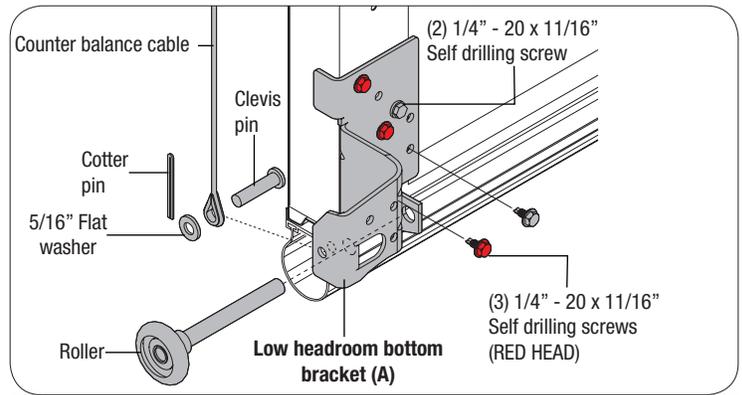


FIG. 3.1

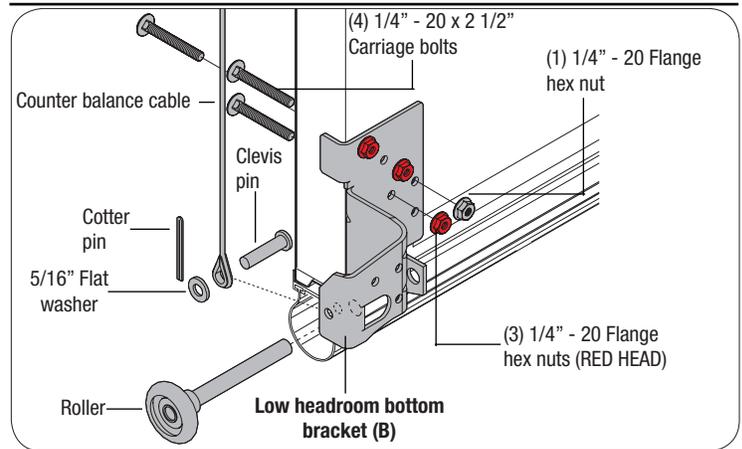


FIG. 3.2

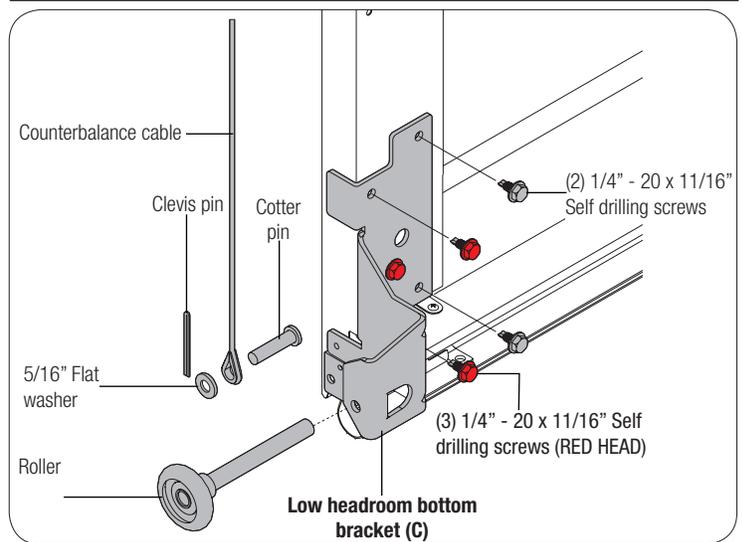


FIG. 3.3

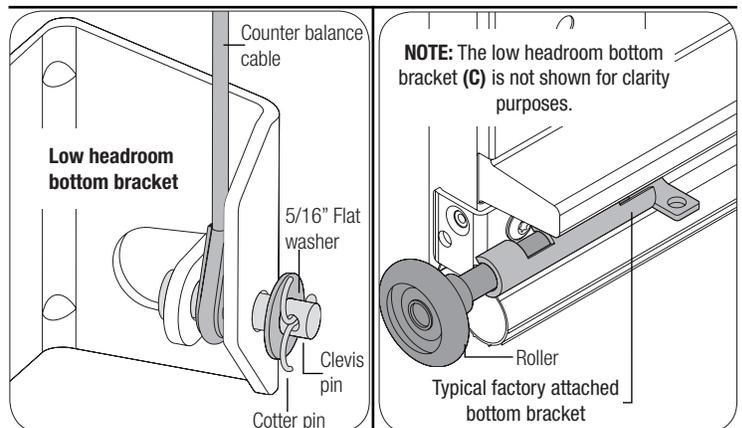


FIG. 3.4

FIG. 3.5

Low Headroom Top Bracket

Identify the low-headroom top brackets provided with your door (**A, B, C or D**). Push the top section of door out against the jamb until the section is parallel with the other sections of the door. Starting with the left hand side, align the edge of top bracket with the edge of section.

NOTE: When installing the top brackets, the top section must be vertically aligned with the rest of the sections from the side view. If needed reposition top bracket(s) to achieve vertical alignment.

FOR LOW HEADROOM TOP BRACKET (A):

Secure the low headroom top bracket to the section by placing one 1/4" - 20 x 11/16" self drilling screw through the lower slot of bracket. Adjust the low headroom top bracket if necessary and secure two more 1/4" - 20 x 11/16" self drilling screws through the top holes, as shown in **FIG. 4.1**.

Repeat the same process for the other side.

FOR LOW HEADROOM TOP BRACKET (B) OR (C):

NOTE: The LHR top bracket comes pre-assembled, as shown in **FIG. 4.3** or **FIG. 4.4**. Locate the edge of the top section and seat the top bracket on male part of the top section, as shown in **FIG. 4.2**.

Attach the top bracket to the top section (B):

1. Attach one 1/4" - 20 x 11/16" self-drilling screw to the top bracket assembly.
2. Attach two 1/4" - 20 x 11/16" self-drilling screws to the top bracket assembly.
3. Attach two #12 x 1/2" phillips head screws on the opposite side of top bracket assembly.

Insert a roller into the top bracket slide, as shown in **FIG. 4.3**. Repeat the same process for the other side.

Attach the top bracket to the top section (C):

1. Attach one 1/4" - 14 x 5/8" self-tapping screw to the top bracket assembly.
2. Attach two 1/4" - 20 x 11/16" self-drilling screws to the top bracket assembly.
3. Attach two #12 x 1/2" phillips head screws on the opposite side of top bracket assembly.

Insert a roller into the top bracket slide, as shown in **FIG. 4.4**. Repeat the same process for the other side.

REVERSING THE TOP SLIDE (B) OR (C), IF NEEDED:

NOTE: Depending on your application, you may need to reverse the top bracket slide for more adjustment, if needed, prior to securing it to the top bracket base.

Remove the top bracket slide by removing the two 1/4" - 20 x 5/8" carriage bolts, two retention washers and two 1/4" - 20 flanged hex nuts. Flip the top bracket slide in the opposite direction. Loosely fasten the top bracket slide to the bracket using two 1/4" - 20 x 5/8" carriage bolts, two retention washers and two 1/4" - 20 flanged hex nuts, as shown in **FIG. 4.5** or **FIG. 4.6**.

NOTE: The retention washers must be fully seated against the top bracket base to ensure the anti-twist feature on the top bracket slide engages in the slotted hole in the top bracket base.

FOR LOW HEADROOM HORIZONTAL TRACK (D):

NOTE: This is a traditional low headroom windload top bracket.

Vertically align the flat portion of roller slide with the endcap and u-bar at the top of top section. Fasten roller slide using (2) 1/4" - 14 x 7/8" self drilling screws, as shown in **FIG. 4.7**. Repeat the same process for the other side.

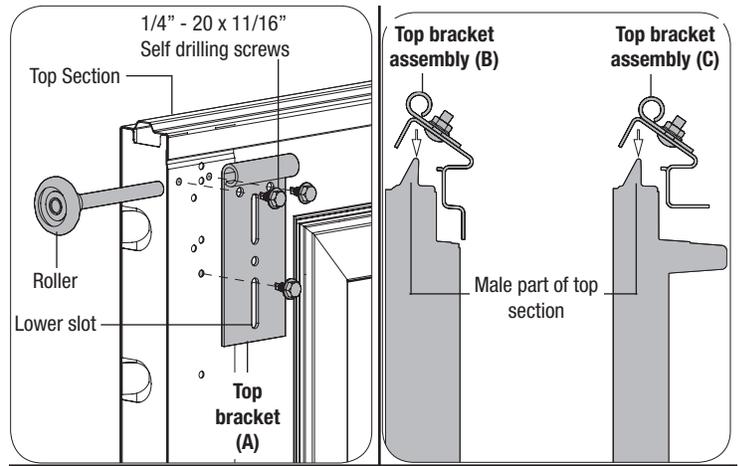


FIG. 4.1

FIG. 4.2

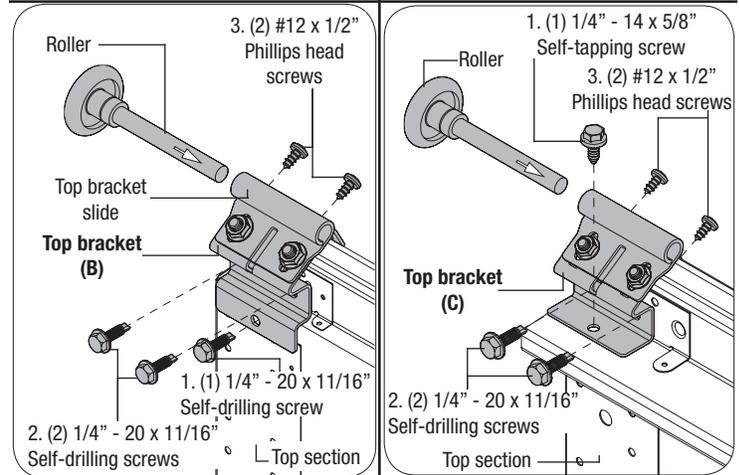


FIG. 4.3

FIG. 4.4

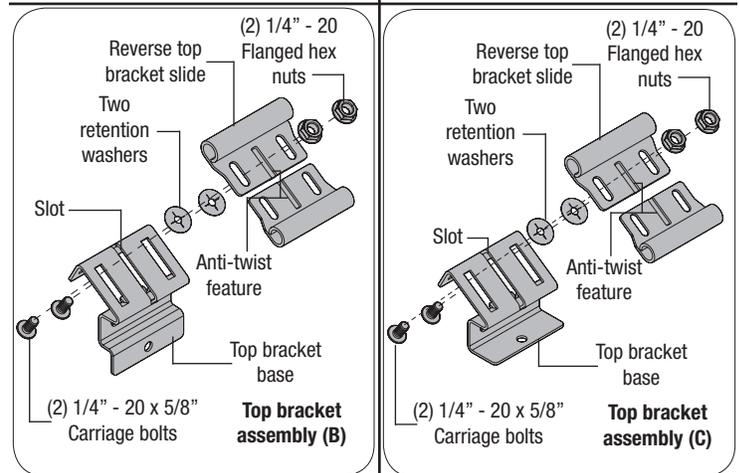


FIG. 4.5

FIG. 4.6

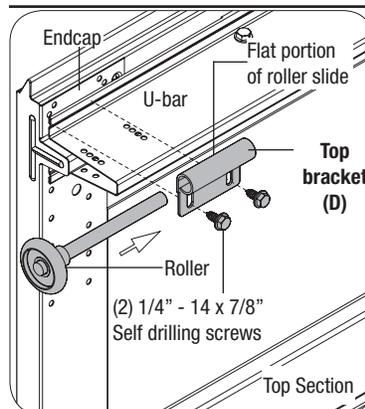


FIG. 4.7

WARNING

DO NOT RAISE DOOR UNTIL HORIZONTAL TRACKS ARE SECURED AT REAR, AS OUTLINED IN REAR SUPPORT INSTALLATION, OR DOOR COULD FALL FROM OVERHEAD POSITION CAUSING SEVERE OR FATAL INJURY.

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Quick Install Horizontal Track Installation

Place the horizontal tracks over the top of the previously installed vertical tracks as shown. Locate the keyslot in the track over the Twistlock tabs on the flagangles. Hold the parts together and tap down on the track to lock into place.

Place (1) 1/4-20 x 9/16" track bolt through the slot in the end of the top curve and the appropriate slot in the flagangle, then secure with a 3/8" flat washer and flanged hex nut (do not fully tighten). Level the horizontal track, then tighten the bolt in the top curve, as shown in FIG. 5.1.

For 1" x 4" x 23" angles, refer to that specified step.

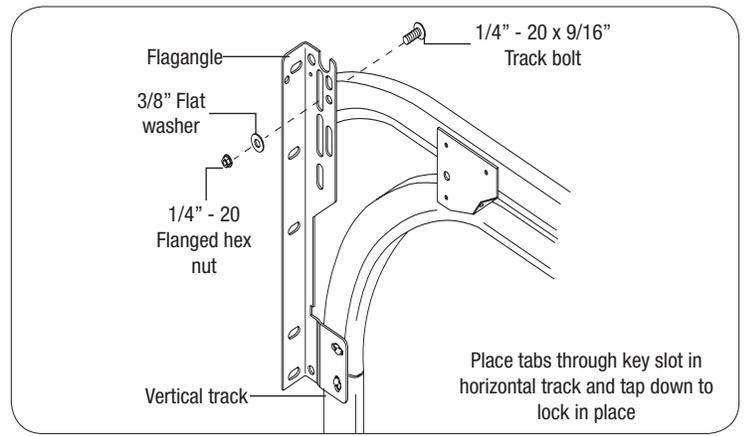


FIG. 5.1

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Universal Horizontal Track Installation

Place the horizontal tracks over the top of the previously installed vertical tracks as shown. Attach the bottom of the lower curve to the flagangle using (2) 1/4-20 x 9/16" track bolts and (2) nuts.

Place (1) 1/4-20 x 9/16" track bolt through the slot in the end of the top curve and the appropriate slot in the flagangle, then secure with a 5/16" flat washer and flanged hex nut (do not fully tighten). Level the horizontal track, then tighten the bolt in the top curve, as shown in FIG. 6.1.

For 1" x 4" x 23" angles, refer to that specified step.

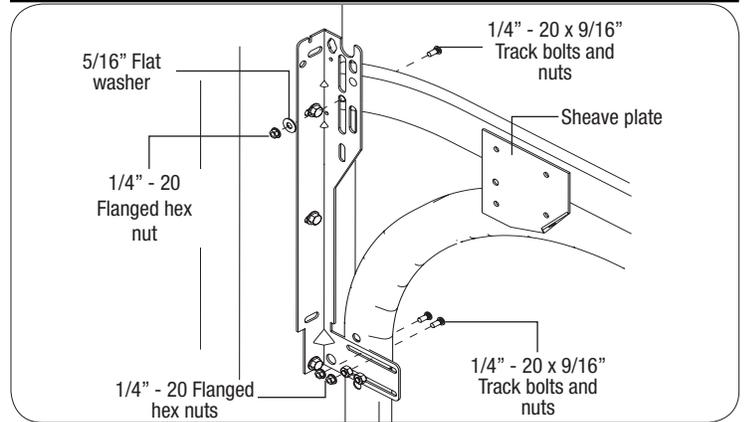


FIG. 6.1

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Quick Install and Universal Horizontal Track Installation for 1" x 4" x 23" Angle

Place the horizontal tracks over the top of the previously installed vertical tracks shown in the Quick Install Horizontal Track Install step. Locate the keyslot in the track over the Twistlock tabs on the flagangles. Hold the parts together and tap down on the track to lock into place.

Place the horizontal tracks over the top of the previously installed vertical tracks shown in the Universal Horizontal Track Install step. Attach the bottom of the lower curve to the flagangle using (2) 1/4-20 track bolts and nuts. Secure the upper curve to the flagangle using (1) 1/4-20 x 9/16" track bolt, 3/8" flat washer and flanged hex nut as illustrated.

Secure 1" x 4" x 23" horizontal angle to the flag angle with (1) 3/8 x 3/4" truss head bolt and nut, as shown in FIG. 7.1.

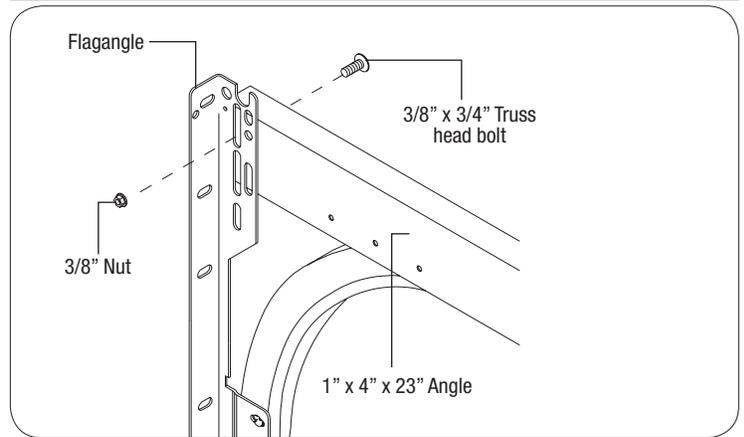


FIG. 7.1

8

Cable Sheave Installation

Secure the studded sheave to the hole shown using (1) 3/8" hex nut. Repeat for the other side, then loop the counterbalance cables over each sheave, as shown in FIG. 8.1.

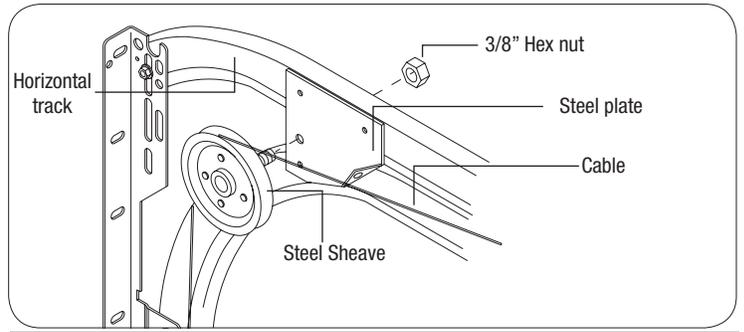


FIG. 8.1

9

Back Hanger Installation

With assistance, raise the door until 1-1/2 sections are in the horizontal track. Clamp a pair of locking pliers (below the bottom rollers) onto the straight leg of both vertical tracks to prevent the door from falling. Move the horizontal track until it is parallel with the edge of the door, then secure the lower horizontal track to the rear support drop angle using a 5/16"-18 x 1-1/4" bolt and nut. Drill a 5/16" hole through the top horizontal track and secure with a 5/16"-18 x 1-1/4" bolt and nut to be used as a roller stop, as shown in FIG. 9.1.

REAR SUPPORTS SUPPLIED BY OTHERS (**NOTE:** LATERAL BRACE MUST ALWAYS BE USED TO PREVENT SWAYING OF THE HORIZONTAL TRACK.)

NOTE: With assistance, raise the door into the horizontal track until the bottom section is even with the header and clamp a pair of locking pliers (below the bottom rollers) securely onto the back leg of both horizontal tracks to prevent the door from falling.

Place a 5/16" hex nut over the end of each eye hook. Locate the 5/16" x 4" eye hooks through the holes in the extension spring brackets at the rear of the horizontal track. Secure the eye hooks with a second 5/16" hex nut. Secure the snubber cables to the hanger angle using (1) 3 hole clip and a 5/16-18 x 1-1/4" hex head bolt and nut on each side. Hook one end of each extension spring over the eye hooks. Feed the snubber cables through the extension springs and secure the loose ends to the jamb using a 3 hole clip and 5/16" x 1-5/8" lag bolt as shown. Place a sheave fork through the loose end of each spring and secure a steel sheave to it using (1) 3/8"-16 hex head bolt and hex nut each. Feed the counterbalance cables over the steel sheaves as shown. Secure the cables to the track by tying a 3 hole clip to the end of the cables and hooking an "S" hook into the 3 hole clip and the sheave plate of the horizontal track, as shown in FIG. 9.2.

NOTE: SEE THE PROVIDED INSTALLATION MANUAL FOR INFORMATION ON ADJUSTING THE CABLES.

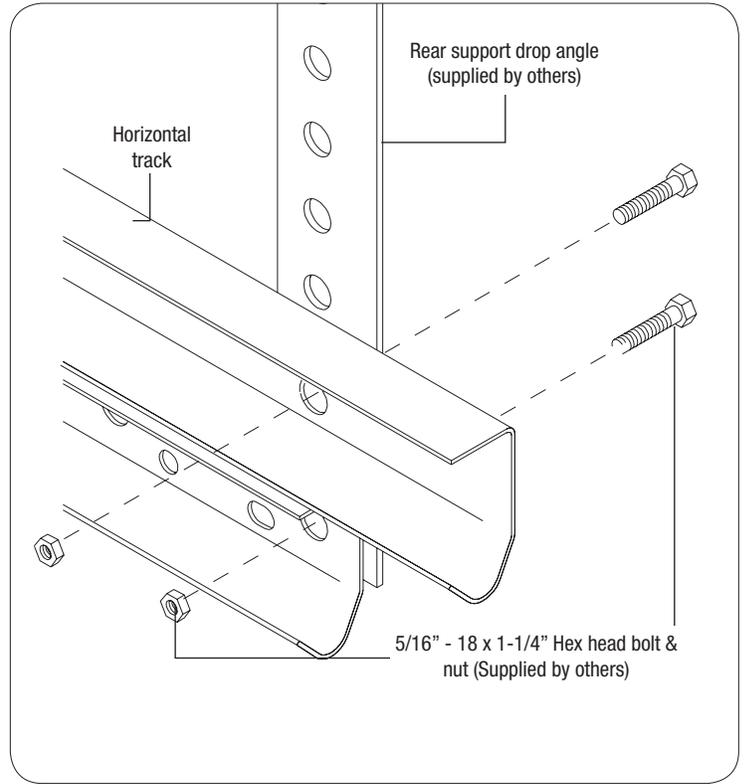


FIG. 9.1

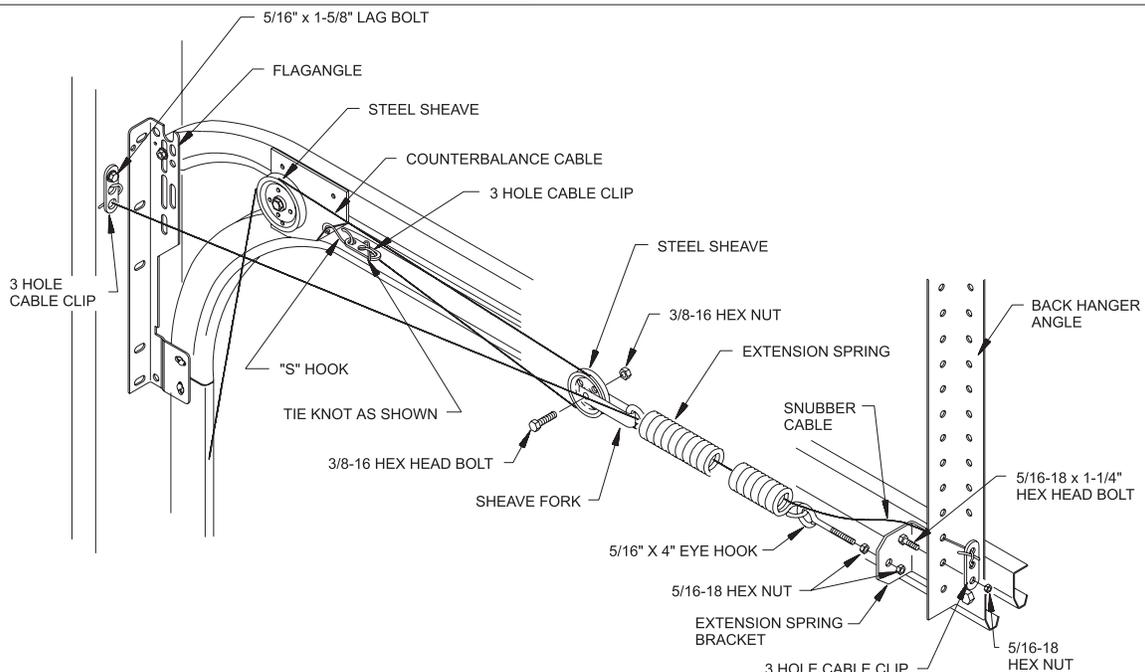


FIG. 9.2