INSTALLATION INSTRUCTIONS
COMMERCIAL STEEL DOORS

Amarr GARAGE DOORS
P.O. Box 288
Winston-Salem, NC 27102-0288
www.amarr.com

⚠ DANGER ⚠

High Spring Tension can cause severe injury or death. Do not attempt to remove, repair or adjust torsion or extension spring assemblies, rod-coated fasteners,or the hardware to which the rod-coated fasteners are attached. Removal, adjustment or repair must be made by a professional door repair person.

⚠ WARNING ⚠

Failure to comply with these instructions invalidates the warranty.

MODEL 1000 - 2" EPS
MODEL 1380 - 1-3/8" EPS
MODEL 2000 - 20 GAUGE
MODEL 2400 - 24 GAUGE
MODEL 2500 - 25 GAUGE
MODEL 3500 - ALUMINUM

IMPORTANT INFORMATION

Before you begin installation, please read all instructions thoroughly.

Figure 1 illustrates a typical commercial installation. This door is a 5-section (high), 3-panel (wide) door. Depending upon opening sizes, the number of sections and the number of panels may vary on your door, but the basic instructions remain the same.

Damage to the garage door due to improperly installed or adjusted electric operators is not covered by Amarr's warranty.

Disconnect and remove all locks and pull ropes when an electric opener is installed.

In the event that an electric operator is installed, the top section must be reinforced with either a strut or with 14-gauge angle iron spanning the length of the top section.

Be sure all warning labels and tags are properly affixed to door, as illustrated in Figure 1.

WE RECOMMEND THAT INSTALLATION AND/OR REPAIR OF GARAGE DOORS BE PERFORMED BY A QUALIFIED GARAGE DOOR INSTALLER.

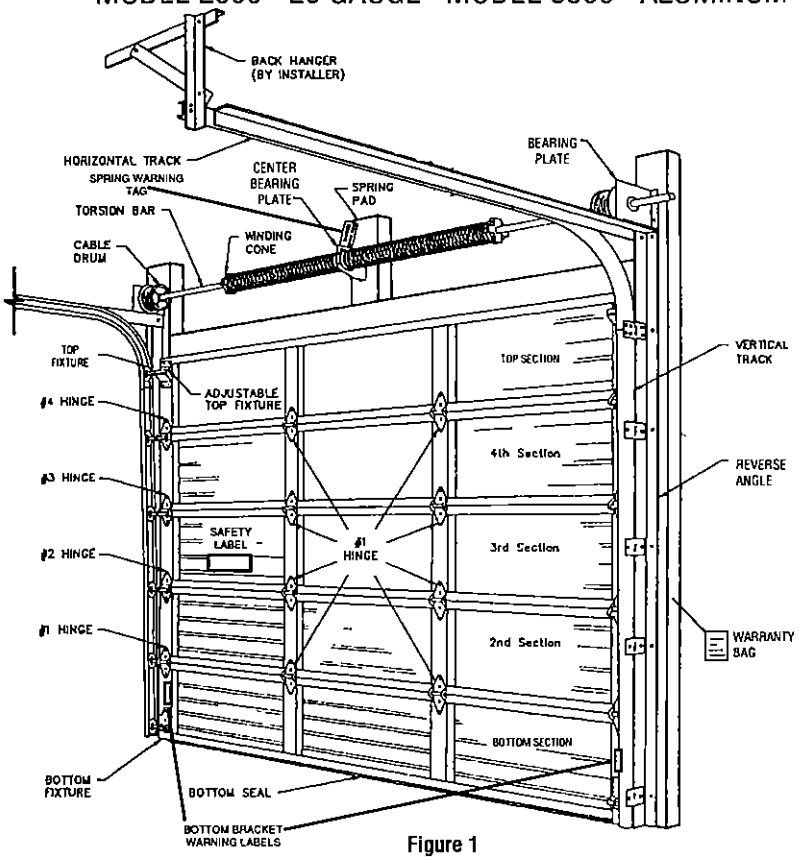

Figure 1

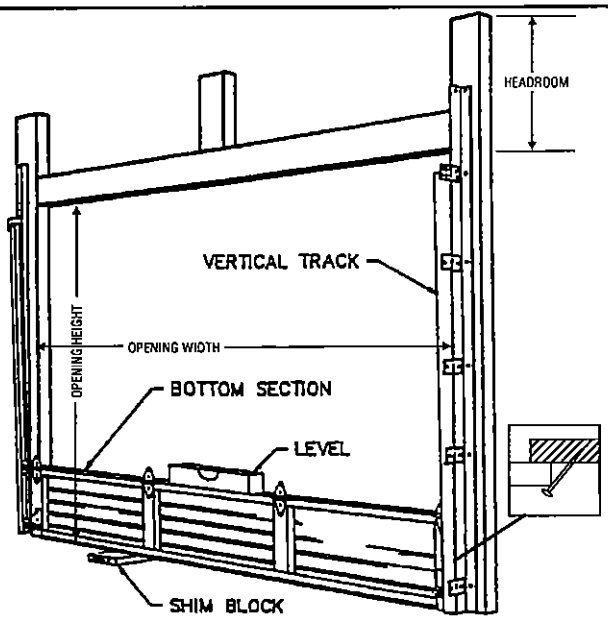

Figure 2

The following steps will assist and instruct you on the proper installation procedures of an Amarr Commercial Garage Door.

STEP 1 — Evaluating and Preparing Garage Door Openings

There are several opening preparation possibilities, depending on the type of building construction and the particular door ordered to suit your needs:

A. Wood Jambs - Bracket Mount
Correct opening dimensions are 2" narrower and 1" shorter than door width and height. Prepare jambs as shown below in Figure A, making sure that jambs are plumb and header is level. Recommended material for wood jambs is 2x6's.

B. Steel Jambs - Reverse Angle Mount
Correct opening dimensions are 2" narrower and 1" shorter than door width and height. Prepare jambs as shown in Figure B, making sure that angles or channel that may be used are plumb and header is level.

C. Wood Jambs - Continuous Angle
Correct opening dimensions are 2" narrower and 1" shorter than actual door width and height. Continuous angle mount utilizes angle in the opposite direction from conventional steel jambs. This type of installation may be used as a matter of preference on wood jambs. Prepare jambs as illustrated in Figure C, making sure that jambs are plumb and header is level.
Note: All back jambs, regardless of type, must extend to top of headroom requirement.

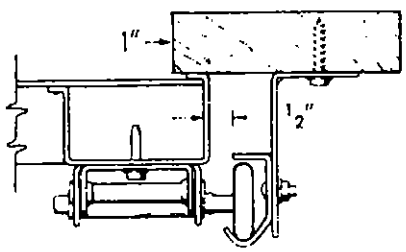

Figure A - Bracket Mount

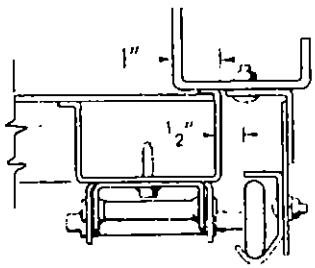

Figure B - Reverse Angle Mount

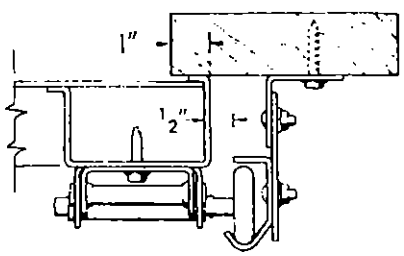

Figure C - Continuous Angle Mount

STEP 2 — Preparing the Bottom Section

Lay bottom section on saw horses face down. Install astragal in holder (if not already done). Install lift handles (for models 2000,2400, 2500. 3500) as shown in Figure 3; for models 1000 & 1380 install step/lift plate in center of door as shown in Figure 4. Attach the left and right hand bottom brackets, using 3 (1/4" x 5/8") Red universal screws and insert rollers as illustrated in (Figure 5 area A.) Next, attach the bottom leaf of the #1 roller hinges, using 2 (1/4" x 5/8") universal screws to the top of the end stiles and insert rollers (Figure 5 area B). Attach the bottom leaves of intermediate hinges to the top of intermediate stiles (Figure 5 area C), (Intermediate hinges are identical to #1 roller hinges), with 2 (1/4 x 5/8") universal screws to all intermediate stiles. In the event that your door requires struts, please refer to the **Strut Note** shown below. Install cables over lifting studs on bottom brackets as illustrated in (Figure 5 area A). (Note: some bottom brackets may require lifting pins and cotters not shown).

Note: Hinges have numbers stamped on them for identification and placement. Hinge numbers are located on the bottom half of the hinge.

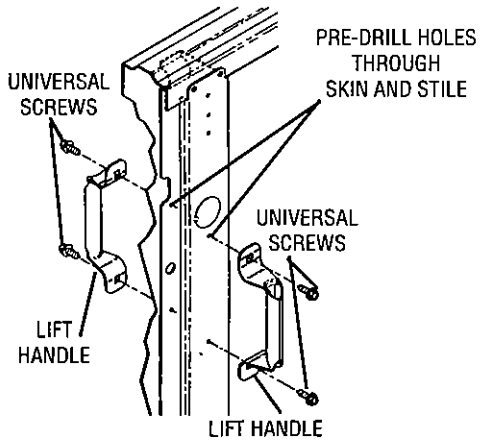

FIGURE 3 LIFT HANDLE
MODELS 2000, 2400, 2500, 3500

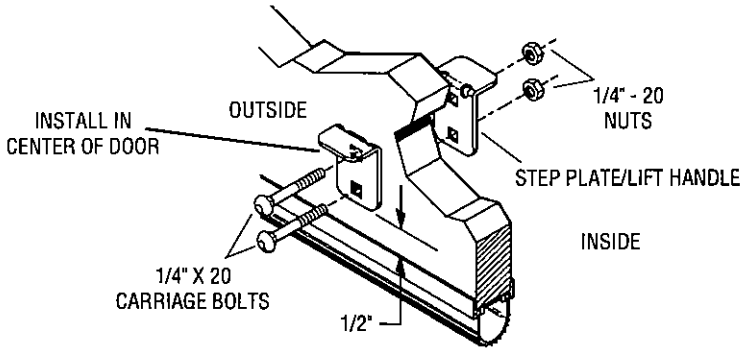

FIGURE 4 STEP PLATE/ LIFT HANDLE
MODELS 1000, 1380

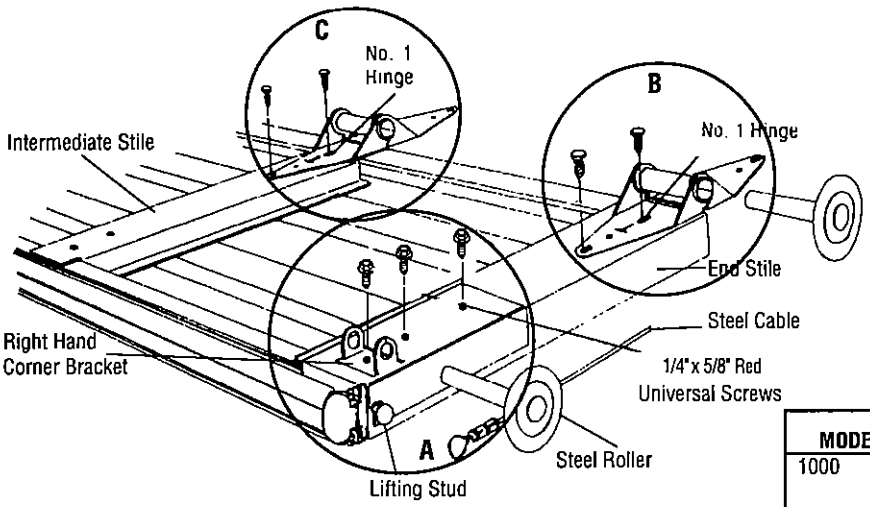

FIGURE 5 BOTTOM SECTION

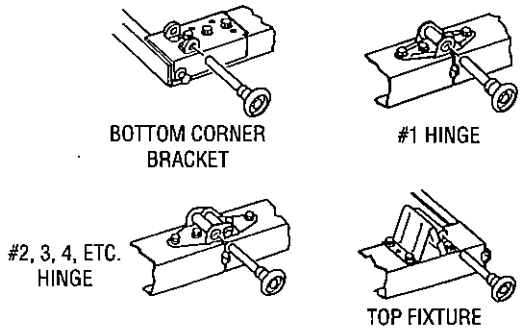

FIGURE 6

STRUT NOTE

If your door requires struts they must be attached according to Figures 8a and 8b (Models 2000, 2400, 2500, 3500) and according to Figure 8a & 9 (Models 1000 & 1380). See strut schedule on Table 1.

TABLE 1: STRUT SCHEDULE

MODEL NUMBER		DOOR WIDTH	NUMBER OF STRUTS
1000	Insulated	8² - 12² up to 16¹ Tall	No (0) Struts
		14² up to 16¹ Tall	Three (3) Struts
		16² up to 10¹ Tall	Three (3) Struts
		16² - 11¹-14¹ Tall	Four (4) Struts
		16² - 15¹ & 16¹ Tall	Five (5) Struts
		18² - 7¹ & 8¹ Tall	Three (3) Struts
		18² - 9¹-16¹ Tall	One (1) Strut Per Section
		20² - 22² up to 16¹ Tall	One (1) Strut Per Section
		24² up to 16¹ Tall	One (1) Strut Per Section
1380	Insulated	16² x 7¹ Thru 16² x 10¹	Three (3) Struts
		16² x 11¹ & 12¹	Four (4) Struts
2000	20 Ga	16² - 24² up to 16¹	One (1) Strut Per Section
2400	24 Ga	↓	↓
2500	25 Ga		
3500	Aluminum		

STEP 3 — Positioning the Bottom Section in the Opening

With hardware attached, place the bottom section temporarily in opening, allowing equal distance from each side and proper spacing for vertical track. Level section and if necessary, put shims under it so it is perfectly level, regardless of the condition of the floor. Temporarily hold section in place either by driving nails into jambs and bending them over at each end, for wood jambs as illustrated in Figure 2 (inset) or by any convenient method, such as vice grip pliers or other suitable restraining device for steel jambs.

STEP 4 — Aligning Vertical Track

With bottom section positioned in opening and secured, install vertical track according to the following instructions:

Wood Jambs - Bracket and Continuous Angle Mounting

Loosely attach brackets to the vertical tracks as shown in Figure 11. Start with the lowest numbered brackets at the bottom and proceed upward with the higher numbered brackets. Secure brackets to the track with 1/4"-20 x 5/8" track splice bolts and nuts. Place the right and left hand vertical track assemblies in position over the rollers as seen in Figure 11a. Loosely secure each jamb bracket to the jamb with 1 (5/16" x 1-5/8") lag bolt, making absolutely sure they are plumb, parallel, set with proper clearance and that the tops of the vertical tracks are level with each other. (If not, raise the other track.) When properly aligned, tighten all fasteners.

IMPORTANT: For proper installation a 3/8" clearance between track and sections needs to be maintained as illustrated in (Figures A, B, and C, page 1).

Steel Jambs - Reverse Angle Mounting
Loosely attach track clips to reverse angle and verticals as shown in Figure 12. Start with the lowest numbered track clips at the bottom and proceed upward with the higher numbered track clips. Secure track clips with 1/4"-20 x 5/8" track splice bolts and nuts. Place the right and left hand vertical track assemblies in position over the rollers as seen in (Figure 11a). Anchor reverse angle to the jambs permanently using either 1/4" x 3/4" Tex screws or spot welding the angle to the jamb, making absolutely sure they are plumb, parallel, set with proper clearance, and that the tops of the vertical tracks are level with each other. (If not, raise the other track.) When properly aligned, tighten all fasteners. Anchors furnished by installer.
IMPORTANT: For proper installation, a 3/8" clearance between track and sections needs to be maintained as illustrated in (Figures A, B, and C, page 1).

STEP 5 — Preparing 2nd or Locking Section

With the bottom section in place, hinges and rollers attached, stack the second section and temporarily hold section in place either by driving nails into jambs and bending them over at each end, for wood jambs as illustrated in Figure 2 (inset) or by any convenient method, such as vice grip pliers or other suitable restraining device for steel jambs. Attach bottom leaf of #2 roller hinges to the top of the end stiles with 2 (1/4" x 5/8") universal screws, inserting rollers in the outer tube as illustrated in Figure 6 and placed in position in track. Attach bottom half of #1 hinges to all intermediate stiles using 2 (1/4" x 5/8") universal screws. Next, locate end stile locking mechanism on end stile by attaching with 3 (1/4" x 5/8") universal screws as shown in Figure 7. **IMPORTANT** - Locate lock so when in the unlocked position, lock bar throw rod does not extend beyond end stile. Attach the top leaf of the hinges from the bottom section to the bottom of the second section using 2 (1/4" x 5/8") universal screws.

STEP 6 — Preparing Remaining Sections

Continue to stack and install remaining sections in the same manner as described in **Step 5** until all but the top section is properly in place.

STEP 7 — Preparing and Positioning Top Section

Place top section face down on saw horses and install top fixtures using 2 (1/4" x 5/8") universal screws as illustrated in Figure 8. In the event that your door requires struts please refer to Figure 8a (All Models). Insert rollers as illustrated in Figure 6. With hardware attached, stack top section in opening. Temporarily hold section in place either by driving nails into jambs and bending them over at each end, for wood jambs as illustrated in Figure 2 (inset) or by any convenient method, such as vice grip pliers or other suitable restraining device for steel jambs. Attach the top leaf of the hinges from the previous section to the bottom of the top section using 2 (1/4" x 5/8") universal screws.

STEP 8 — Vertical Track Spacing

Check alignment of vertical track **(Maintain 3/8" Clearance Between Track and Sections).** Secure and tighten all fasteners.

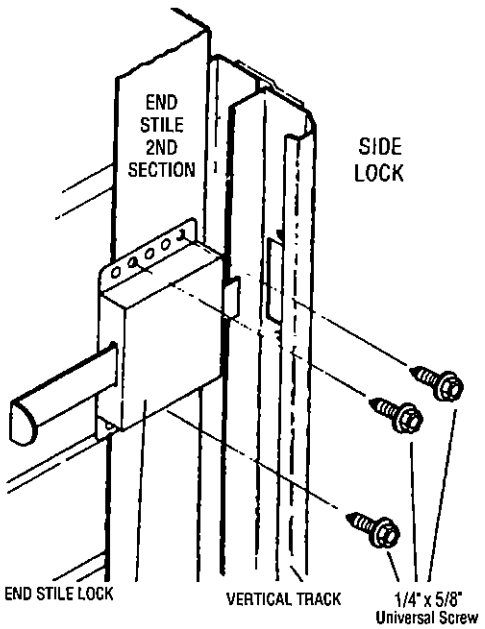

FIGURE 7 END STILE LOCK

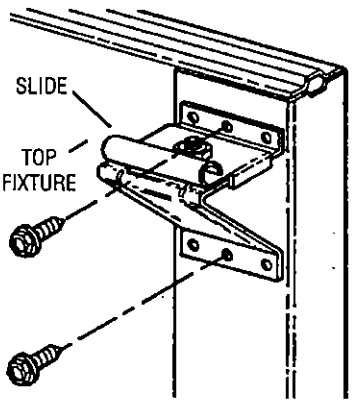

FIGURE 8 TOP SECTION - NO STRUT

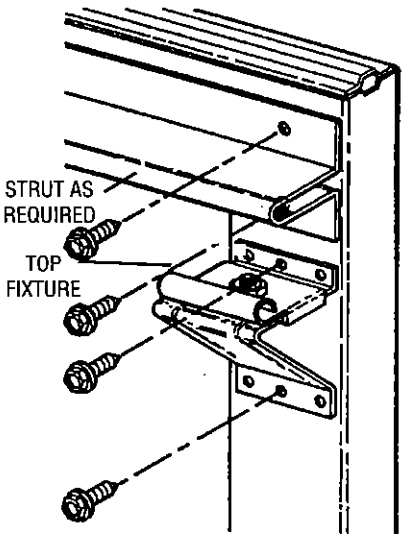

FIGURE 8A STRUT ON TOP SECTION (ALL MODELS)

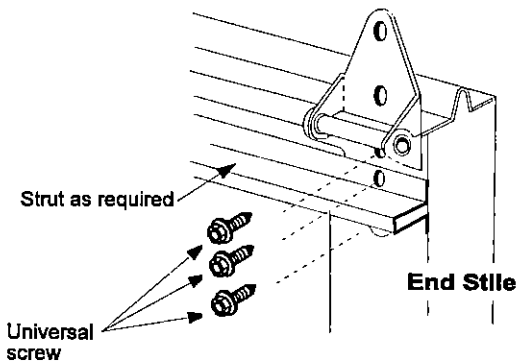

FIGURE 9 STRUT PLACEMENT (MODELS 1000 & 1380 INSULATED DOORS)

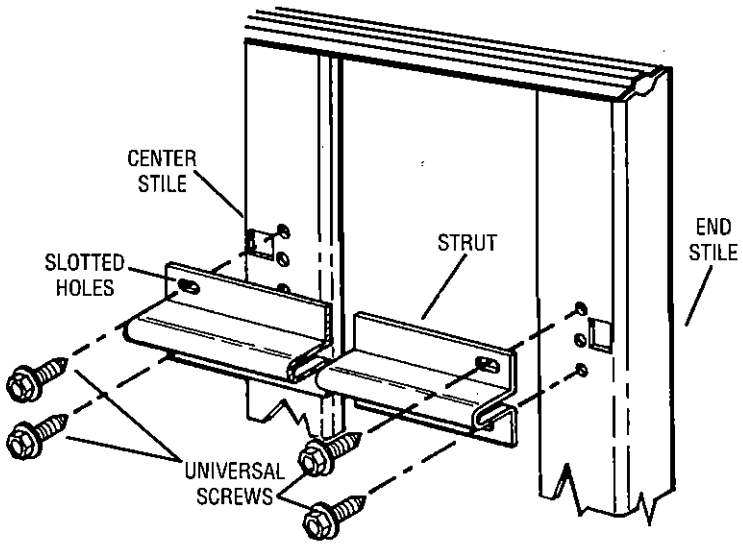

FIGURE 8B STRUT ON INTERMEDIATE AND BOTTOM SECTIONS (MODEL 2000, 2400, 2500, AND 3500)

STEP 9 — Installing Horizontal Track

With all sections positioned in opening, install horizontal track according to the following instructions:

Wood Jambs - Bracket and Continuous Angle Mounting

Attach the horizontal angle, if not already done, to the horizontal track with 1/4"-20 x 5/8" track splice bolts and nuts. Attach the bottom portion of the horizontal track radius to the top of the vertical track using either a flag bracket or a 19" vertical angle with splice plate and secure together loosely with 4 (1/4"-20 x 5/8") track splice bolts and nuts per side as illustrated in Figure 11 area A. Attach the horizontal angle to the flag bracket or 19" vertical angle with 1 (3/8" x 3/4") low shoulder carriage bolt and nut as shown in Figure 11 area B.

Steel Jambs - Reverse Angle Mounting

Attach the horizontal angle, if not already done, to the horizontal track with 1/4"-20 x 5/8" track splice bolts and nuts. Attach the splice plate to the reverse angle using 2 (1/4"-20 x 5/8") track splice bolts and nuts per side. Attach the bottom portion of the horizontal track radius to the top of the vertical track using the splice plate and secure together loosely with 4 (1/4"-20 x 5/8") track splice bolts and nuts per side as illustrated in Figure 12 area A. Attach the horizontal angle to the reverse angle with 1 (3/8" x 3/4") low shoulder carriage bolt and nut as shown in Figure 12 area B.

STEP 10 — Securing Horizontal Track

Form rope loops around back of horizontal track and secure to overhead structure so that the track is parallel with the floor as illustrated in Figure 11 area C. **IMPORTANT - Maintain Alignment with Vertical Track (3/8" Clearance Spacing).** Replace support rope with metal angle hangers (supplied by installer, minimum 14 ga.). Make sure track is level and square with opening as illustrated in Figure 10. **IMPORTANT - Make sure clearance at the bottom of the vertical track is the same as the clearance at the joining of the horizontal and vertical and also at the back of the horizontals. CAUTION - Maintain 3/8" clearance as specified in steps 4 and 8, to prevent door from falling out of track.**

STEP 11 — Assemble and install the torsion spring power unit in accordance with the spring assembly sheet enclosed.

STEP 12 — Completed Installation

Your installation is now complete; however, as a final check refer back to Figure 1 and review the entire procedure, making sure that all fasteners are securely tightened and that all critical dimensions are as specified.

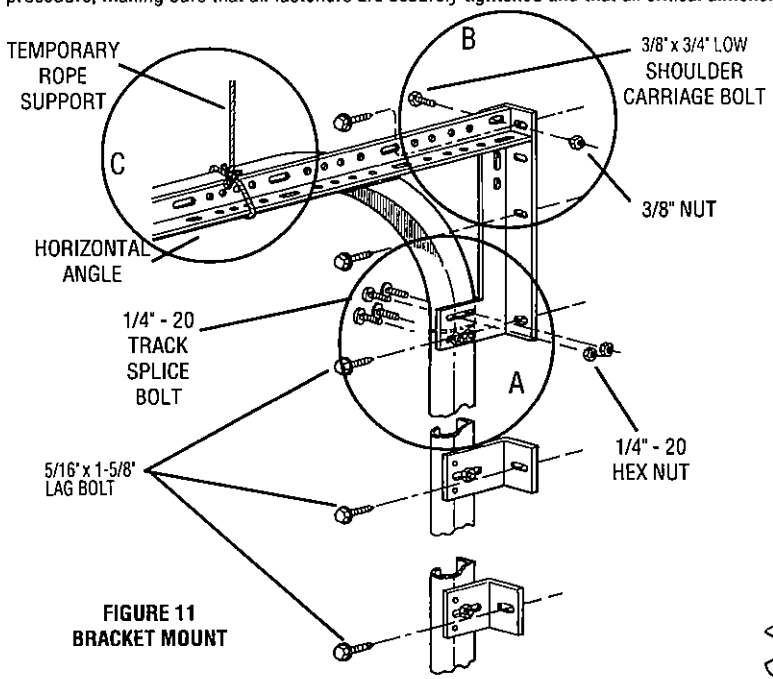

FIGURE 11 BRACKET MOUNT

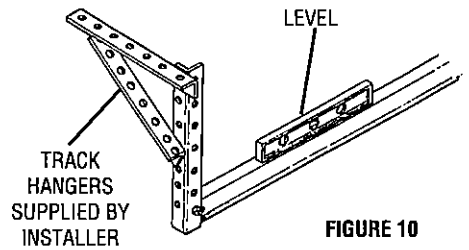

FIGURE 10

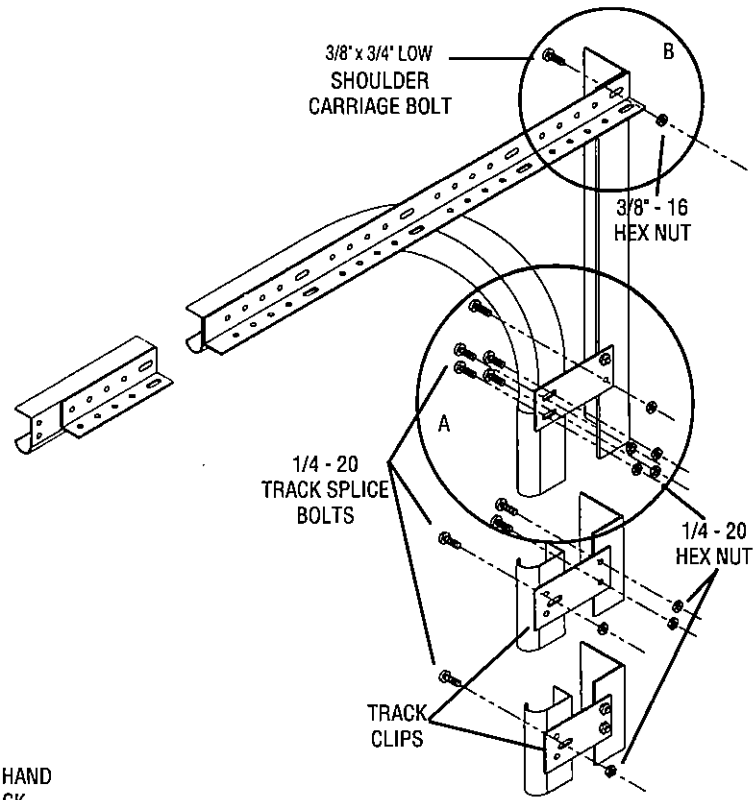

FIGURE 12 REVERSE ANGLE

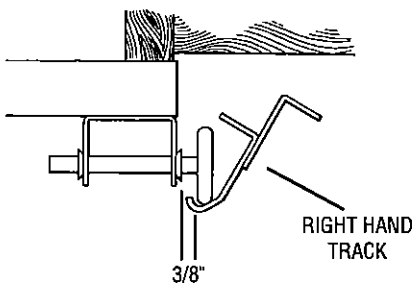

FIGURE 11a

Amarr Company
Limited Warranty Available

Amarr Company and sellers of its garage doors, or parts thereof, provide a LIMITED WARRANTY, WHICH IS IN LIEU OF ALL OTHER WARRANTIES, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE. A complete copy of the Limited Warranty is available from the sellers or Amarr Company upon request. In no event shall the Company or sellers be liable for incidental or consequential damages, whether direct or indirect. Amarr Company's Limited Warranty is the only warranty of the Company. No seller nor any other person has any authority to amend or add to Amarr Company Limited Warranty.

Your door was delivered with a finished coat of paint. For proper repainting procedures please contact your installer or Amarr Door center.

COMMERCIAL DOORS ARE DESIGNED FOR PROFESSIONAL INSTALLERS

FINAL ADJUSTMENTS:

1. RE-ADJUST SPRING TENSION, IF NECESSARY. ALWAYS CLOSE DOOR AND LATCH BEFORE ADJUSTING.
2. LUBRICATE ALL MOVING PARTS.
3. MAKE SURE DOOR IS SQUARE WITH OPENING.
4. IF DOOR DOES NOT WORK EASILY, RE-CHECK INSTALLATION TO MAKE SURE SPACING OF TRACK IS CORRECT AND THAT DOOR IS NOT BINDING IN ANY PLACE.