

IDEAL Door® Carriage House Premium Steel SUPPLEMENTAL INSTALLATION INSTRUCTIONS

(For Use with the Insulated Steel Residential Garage Door Instruction Manual)

This is a supplement to the **Insulated Steel Residential Garage Door Instructions** (referred to as the MANUAL). It covers information unique to IDEAL Door Steel Carriage House Premium Steel Doors. For all other information and safety warnings concerning your IDEAL Door Steel Carriage House Premium Steel garage door, see the MANUAL. Read the information in both manuals before beginning installation.

These instructions will cover the following areas where IDEAL door installation differs from standard insulated steel door installation:

1. Painting
2. Window Grille Removal
3. Section Stacking
4. Strut Requirements
5. Operator Reinforcement and Attachment
6. Lift Handle Installation
7. Flag Bracket ("AG" and "MX" Models only)
8. Warranty Information

Painting

Paint: Your garage door can be painted with a high quality 100% acrylic latex (flat, satin, or semigloss) exterior grade paint. Before painting the door it must be free of dirt, oil, caulk, waxes and mildew.

Do not use any type of oil based paint or Alkyd modified acrylic latex paint. These paints will void the warranty of your door.

Surface Preparation: Before painting your door, both the steel and overlay surfaces must be suitably prepared and cleaned. Before cleaning the door, thoroughly scuff the entire exposed surface of the overlay overlays, window grilles, and window frames with medium sandpaper.

NOTE: Sanding could remove rust-inhibiting compounds from the steel portion of the door, therefore, sanding should be done only to the composite overlays and to damaged areas where bare metal has been exposed (refer to the "Repair" section of these instructions).

Cleaning: Prior to painting, clean surface with a diluted solution of Trisodium Phosphate. The recommended concentration is 1/3 cup of powder to 1-1/2 to 2 gallons of water. A cleaning pad (3M Synthetic steel wool GRAY not green) should be used saturated with this cleaning solution. Rub with even pressure to lightly scuff the surface while applying the cleaning solution over all surfaces to be painted. A final wipe and rinse with clean water and sponge should be done to remove any loose material. Change water often to ensure clean rinse and allow to dry. Pre test your paint on a small area. If the paint shows signs of poor adherence, there may be a problem with the paint or the surface preparation. **DO NOT PROCEED!** A new paint or further preparation of the surface is called for.

Alternate cleaning compounds: Areas of the country that do not carry Trisodium Phosphate can use a biodegradable cleaner with the cleaning pad above. Follow above directions to rinse completely and pre test paint.

If the door has ever been waxed, the wax must be removed before painting (doors are not waxed during the manufacturing process). Wax can be removed by wiping the door with a rag saturated with Xylene available at most paint or hardware

stores. Wiping should be done at moderate pressure and Xylene must not be allowed to sit on the door for an extended period of time. Damage to your door's paint system can occur if overexposed to this or other solvents.

After de-waxing the door, clean with trisodium phosphate as stated previously.

Repair: Should your door's paint finish become damaged, exposing the bare metal, it will become necessary to repair this area to prevent rust from forming. The damaged area should be lightly sanded with a medium to fine sandpaper making sure to remove all visible red and white rust. Wipe this area with a dry, clean rag. Coat the sanded area with a high quality, rust inhibiting, zinc enriched primer. This type of primer can be found at most paint or hardware stores, and should be labeled for covering bare and galvanized steel. Once the primer is applied, wait the time specified on the primer's instructions before you finish painting your door.

IMPORTANT: This door and overlays can be painted dark colors. Any paint that has a LRV (Light Reflective Value) of 8 or higher can be used to paint this door. Using a paint that has an LRV of less than 8 will void the door's warranty.

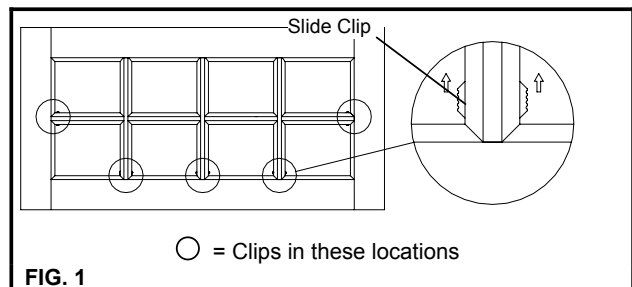
For more information more information call our Consumer Services Hotline at 1-800-621-3667.

Since all paints are not created equal, the following test needs to be performed: paint should be applied on a small area of the door (following the instructions on the paint container), allowed to dry, and evaluated prior to painting the entire door. Paint defects to look for are blistering and peeling. An additional test is to apply a strip of masking tape over the painted area and peel back, checking to see that the paint adheres to the door and not to the tape. After satisfactorily testing a paint, follow the directions on the container and apply to the door. Be sure to allow adequate drying time should you wish to apply a second coat.

NOTE: Do not apply paint when door surface temperature is different from manufacturer's suggested temperature range for application.

Window Grille Removal

The decorative window grilles on your IDEAL door can be removed for cleaning or painting purposes. The grille is held in place with plastic clips located at the bottom of the vertical grille sticks and the ends of the horizontal grille sticks. To remove grille, slide clips towards the center of the window (Fig. 1). Rotate bottom of grille out from the door and remove from top notches. Reverse the process to re-install grilles.



Stacking of IDEAL Door Sections

Since are custom assembled one door at a time, it is important that matching sections stay together and that the sections are stacked in the correct order. IDEAL Door Steel Carriage House Premium Steel Doors sections are labeled on the inside upper left hand corner of the section (See Figure 2). All sections for each IDEAL Door Steel Carriage House Premium Steel door should have the same four digit identification number, and sections should be stacked in sequence, with #01 being the bottom section, the next section is #02, etc. Place the sections in this order until all sections are installed. Also there is an Alignment Label across section joints. To ensure proper alignment of the door, this label must line up between joining sections.

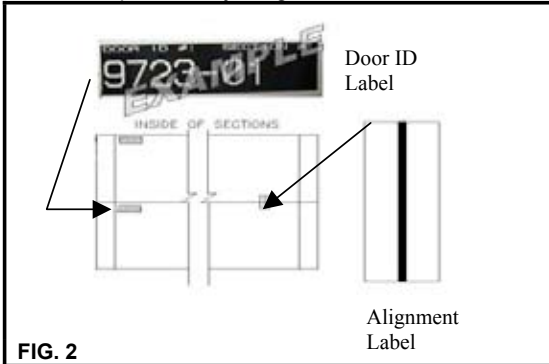


FIG. 2

Strut Requirements

The table below shows the strut requirements for IDEAL Door Steel Carriage House Premium Steel doors.

Door Width	Strut Requirement	
	2" Thick End Stile ("AD", "MF" Models)	2-5/8" Thick End Stile ("AG", "MX" Models)
Up to 9'	No Struts Required	No Struts Required
10', 12'	(1) 2-1/4" Strut on Top Section	(1) 2-1/4" Strut on Top Section
16'	(1) 2-1/4" Strut per Section*	(1) 2-1/4" Strut on Top Section
18'	(1) 3" Strut per Section*	(1) 2-1/4" Strut per Section*

* Note: Window Lite section on double car doors may be packaged with two struts attached. Remove strut from bottom of window section and place on top of section #3.

Reinforcing the Top Section for Opener Attachment

To avoid damage to your door, you must reinforce the top section of the door in order to provide a mounting point for the opener to be attached. **Failure to reinforce the door as illustrated will void your Clopay Warranty.**

Attachment of Operator Reinforcement Bracket to Door:

Figures 4 through 6 show the installation of the operator reinforcement bracket. Each illustration corresponds to a specific door width. At locations where the bracket is attached to the hinge, the hinge screws must be removed, the bracket installed, and the hinge screws then replaced.

For opener arm attachment instructions refer to the **MANUAL**.

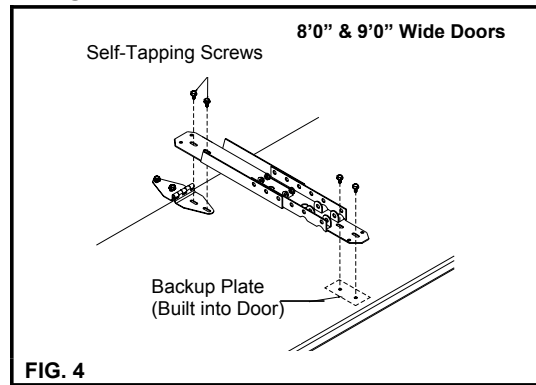


FIG. 4

Materials required:

- (1) operator reinforcement bracket
- (2) sheet metal screws

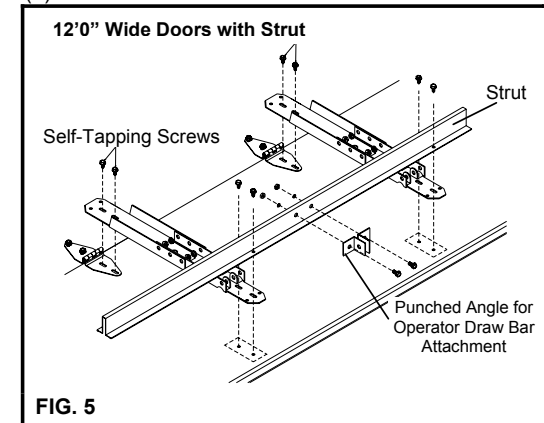


FIG. 5

Materials required:

- (2) operator reinforcement brackets
- (2) 2" pieces of 1/4" x 1/4" punched angle,
- (2) 1/4"x1" bolts,
- (2) 1/4" lock washers,
- (2) 1/4" nuts,
- (4) 1/4" x 3/4" self-tapping screws

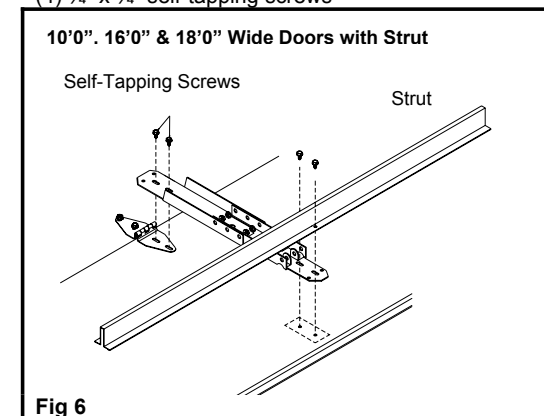


Fig 6

Materials required:

- (1) operator reinforcement bracket
- (2) 1/4" x 3/4" self-tapping screws

Installing Lift Handles

Step 1: Center the horizontal ornamental lift handle horizontally on the outside of the bottom door section. Using the handle as a template, mark the holes to be drilled. The holes must be located exactly 2" from the bottom of the section (See Fig. 7).

Step 2: Drill two 1/4" holes straight through the door at the marks.

Step 3: From the outside, enlarge the two 1/4" holes using a 3/8" drill, being careful not to drill through the inside skin of the door. Remove any excess foam from the 3/8" holes.

Step 4: Insert a 3/8" diameter spacer into each hole from the outside of the door. **Caution: Failure to install spacers may result in damage to the door.**

Step 5: Attach the black ornamental handle (outside) and the steel roll grip handle (inside) to the door using two 1/4"-20 x 2 1/4" black painted hex head bolts, and two 1/4" hex flange nuts (See Fig. 8).

Step 6: Take the two vertical ornamental handles and position on the 2nd section. Using the handles as a template, mark the holes to be drilled. With the sections stacked, the lower hole on each vertical handle must lie between 20" and 30" vertically from the holes on the bottom handle. The holes on each vertical handle should be centered 5-1/2" horizontally from each other. The holes on both vertical handles should line exactly with the holes on the bottom horizontal handle. No hole may be closer than 2" to the top or bottom of the section (See Fig. 7).

Step 7: Drill four 1/4" holes straight through the door at the marks.

Step 8: From the outside, enlarge the four 1/4" holes using a 3/8" drill, being careful not to drill through the inside skin of the door. Remove any excess foam from the 3/8" holes.

Step 9: Insert a 3/8" diameter spacer into each hole from the outside of the door. **Caution: Failure to install spacers may result in damage to the door.**

Step 10: Attach each vertical ornamental handle (outside) and one steel horizontal roll grip handle (inside) to the door using two 1/4"-20 x 2 1/4" black painted hex head bolts, and two 1/4" hex nuts. Use a set of hex head bolts and hex flange nuts to fasten the vertical handles to the door through the remaining holes. The inside handle may be matched with either set of holes so long as it is no closer than 4" to the top or bottom of the section (See Fig. 9).

Flag Bracket ("AG" & "MX" Models Only)

Because of the overall door thickness of the "AG" & "MX" models, a commercial style flag bracket is used to splice the vertical and horizontal tracks together. An illustration of this bracket is shown in Fig. 10.

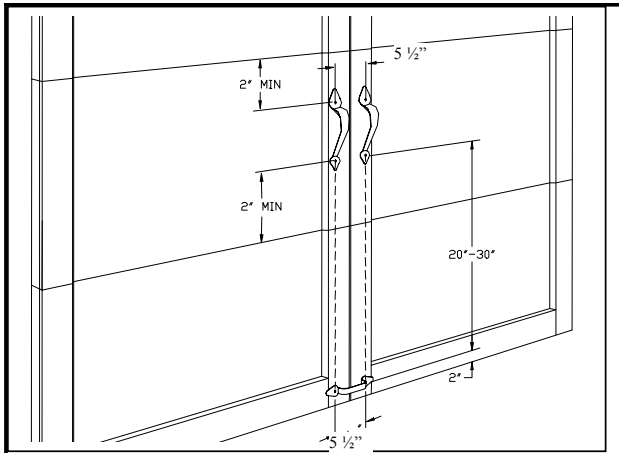


FIG. 7 – Outside Lift Handle Placement

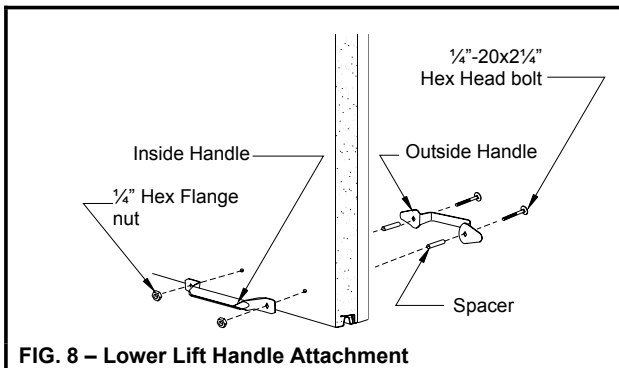


FIG. 8 – Lower Lift Handle Attachment

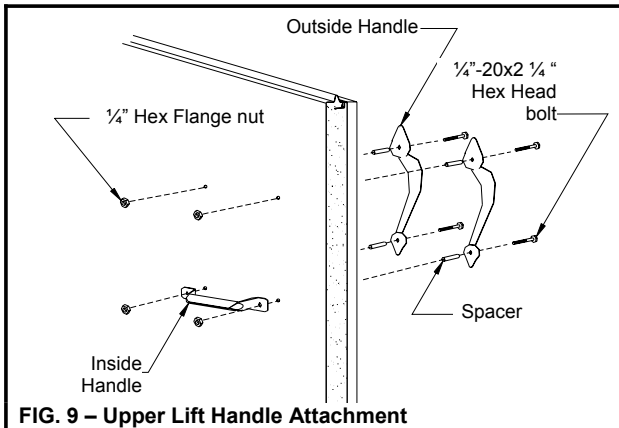


FIG. 9 – Upper Lift Handle Attachment

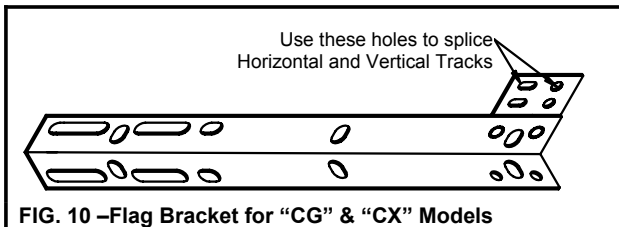


FIG. 10 –Flag Bracket for "CG" & "CX" Models