



N35 ALUMINIUM ROLL-UP DOOR INSTALLATION MANUAL



DOVER ROLLER SHUTTERS
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Dover Roller Shutters wants to THANK YOU for your purchase of the N35 Aluminum Roll-Up Door!

BEFORE INSTALLATION

- Please carefully read the instruction manual completely.
- Carefully unpack the contents with attention not to damage the door or its components. Inventory parts. (SEE FIG. 1 Exploded Assembly)
- **Please note:** Mounting hardware is not included.

TOOLS & FASTENERS NEEDED:

- Tape Measure
- Pliers / Vise Grips
- Wire cutters / Crimps
- Pop Rivet Gun
- Rubber Head Mallet
- Fine tip marker
- Screw Driver
- Drill
- Drill Bits: (7/32", 17/64", 1/8")
- Fasteners for brackets, guides & gutter

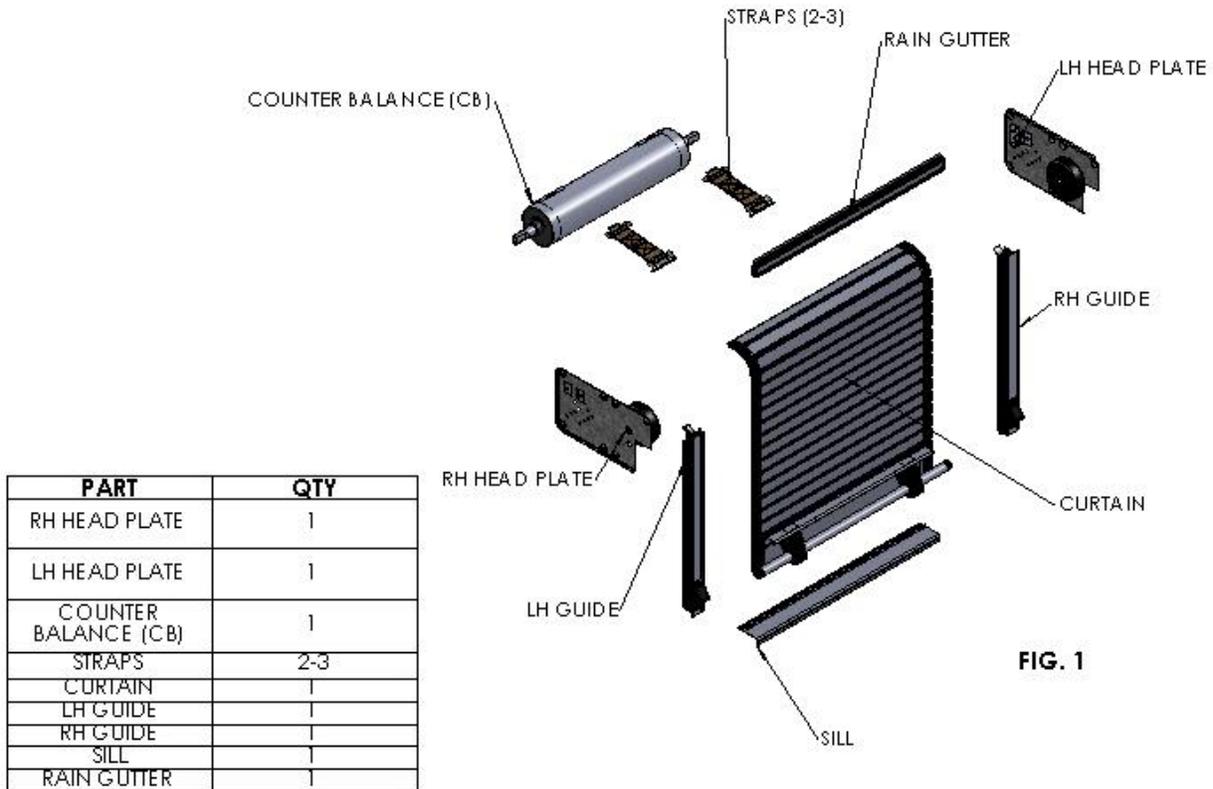


FIG. 1

➤ **Layout and Pre-Drill Mounting Holes**

Dover recommends pre-drilling all door component locations before final installation. If holes are not pre-drilled they still must be drilled as the components are installed.
(Option: Manufacture can stipulate hole mount placement.)

Inspect the door for damaged slats. If any damages are noted then remove those slats from the door and place them at the top of the curtain. The top 4-6 slats are not visible when the door is closed so this operation is acceptable.

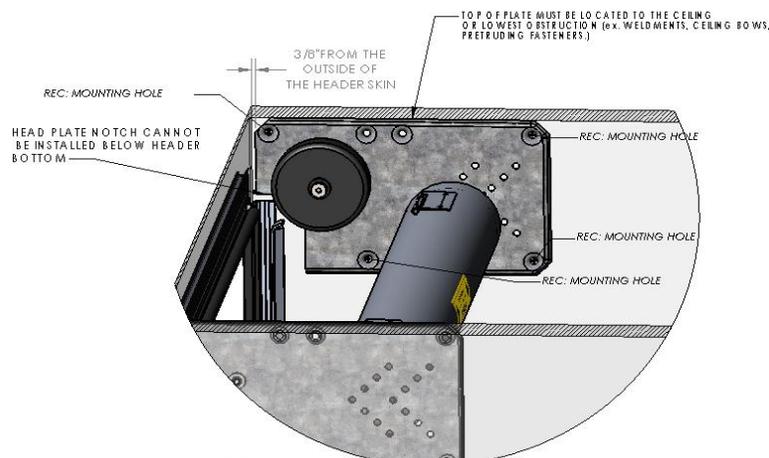
1) Install Head Plate

a. Body Mounting Bracket (supplied by the customer)

Mounting brackets must be at least 12"x7". Must be flush with the side posts of the truck body and **cannot** be smaller than the maximum clear opening width. The top of the mounting bracket must be a minimum of 3½" above the bottom of the header.

b. Locate position, mark & mount head plates.

1. Take the right hand head plate and temporarily locate it against the top of your cabinet or to the bottom of the lowest ceiling obstruction.
2. The front edge of the Head Plate must be 3/8" from the outside of the header face. Square boss slot must be up and the 4" nylon wheel to the front. (Note: the notch on the head plate typically must be flush with the bottom of the header but in some applications the head plate could be moved up to a maximum of 2½" above the bottom of the header.) (See FIG 2)
3. Hold the head plate in position where they will be mounted and mark the 4 mounting holes on the body mounting bracket.
4. Remove the right hand head plate and repeat steps 1-3 for the left side.
5. Drill holes in the body mounting bracket for the head plates using a 17/64" drill bit for (Recommended: Mono-bolt ¼" x grip range 5/8") or stainless steel screw fastening. (Optional fastening: puddle welds). **Do not use standard aluminum rivets.**
6. Securely mount the head plates in the pre-determined position.



NOTES:
1. REC. MONOBOLT 1/4"x5/8" GRIP RANGE FOR FASTENING
2. REC. ALL (4) MOUNTING LOCATIONS, BUT MIN. OF (3).
3. OTHER PRE-DILLED HOLES ARE FOR SPECIAL APPLICATIONS.

FIG. 2

2) Install Counter balance (CB) See FIG. 3

a. Take the counter balance and position into the square bosses. (Note: the arrows on the counter balance tube must be pointing up, when looking out of the compartment from the inside and the label is facing you.)



b. DO NOT REMOVE THE PIN WHICH HOLDS TENSION ON THE SPRING.

c. Place the cotter pins into the top hole of the square bosses so the roller axle cannot come out of the bosses.

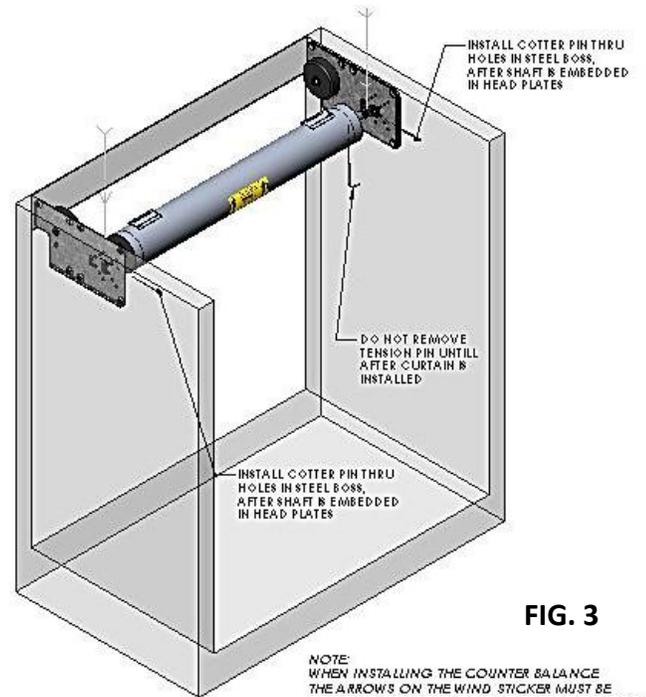


FIG. 3

3) Install Curtain (See FIG. 4)

a. Un-roll approx. the top 12” of the curtain.

b. Feed the top of the curtain over the nylon wheels.

c. Attach the nylon straps to the counter balance assembly by connecting the strap retainer section on the strap to the joining section on the tube.

d. While firmly holding the curtain, you may now remove the pin holding the spring tension with the weight of the door, which is located on the axle at the right side of the counter balance tube when looking from inside of the cabinet out. (Note: removing the pin may require rolling the counter balance forward slightly to remove the pressure from the pin.)

e. At this time the curtain will want to roll up, allow the curtain to slowly roll up onto the tube until the bottom rail is just under the header.

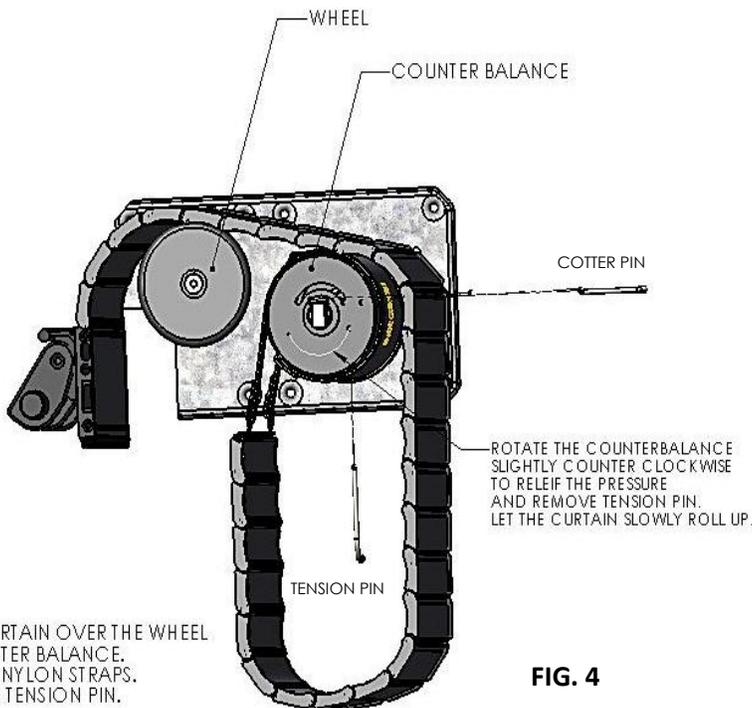


FIG. 4

4) Install Sill, Guides & Rain Gutter

a. **Sill- (IF APPLICABLE)** the guides will be used as reference for placement of the sill. (See Fig. 5 for details)

1. Carefully place the sill in the opening under the guides matching both ends of the sill to the outside edges of the guides.
2. At this time, fix the sill securely using either rivets (recommended: 3/16" x 1/2" CSK "AK64-BS") or Stainless steel screws. (Recommended double sided tape under sill, also pre-drilling on the inside of the v-step 1" from each end and in the center of the sill using a 7/32" drill bit.)

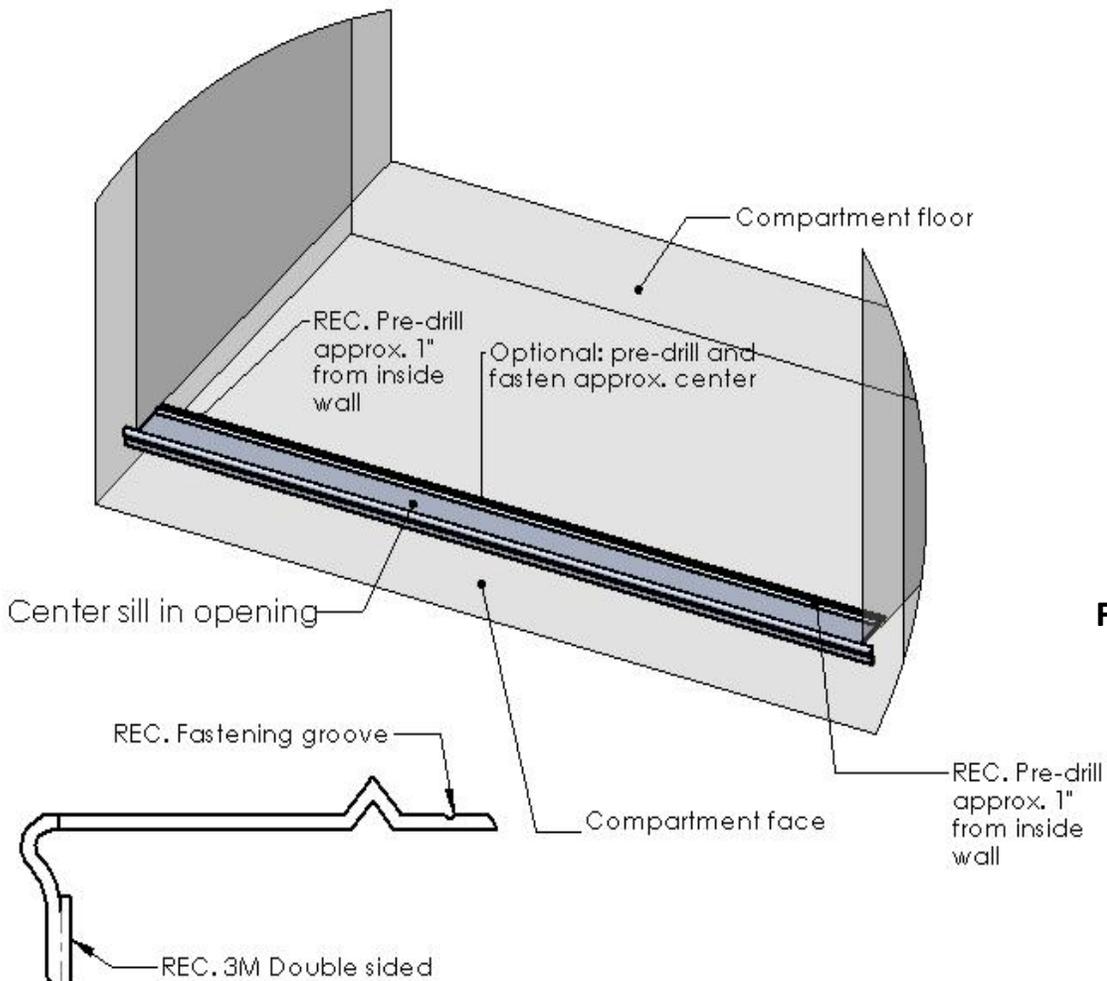
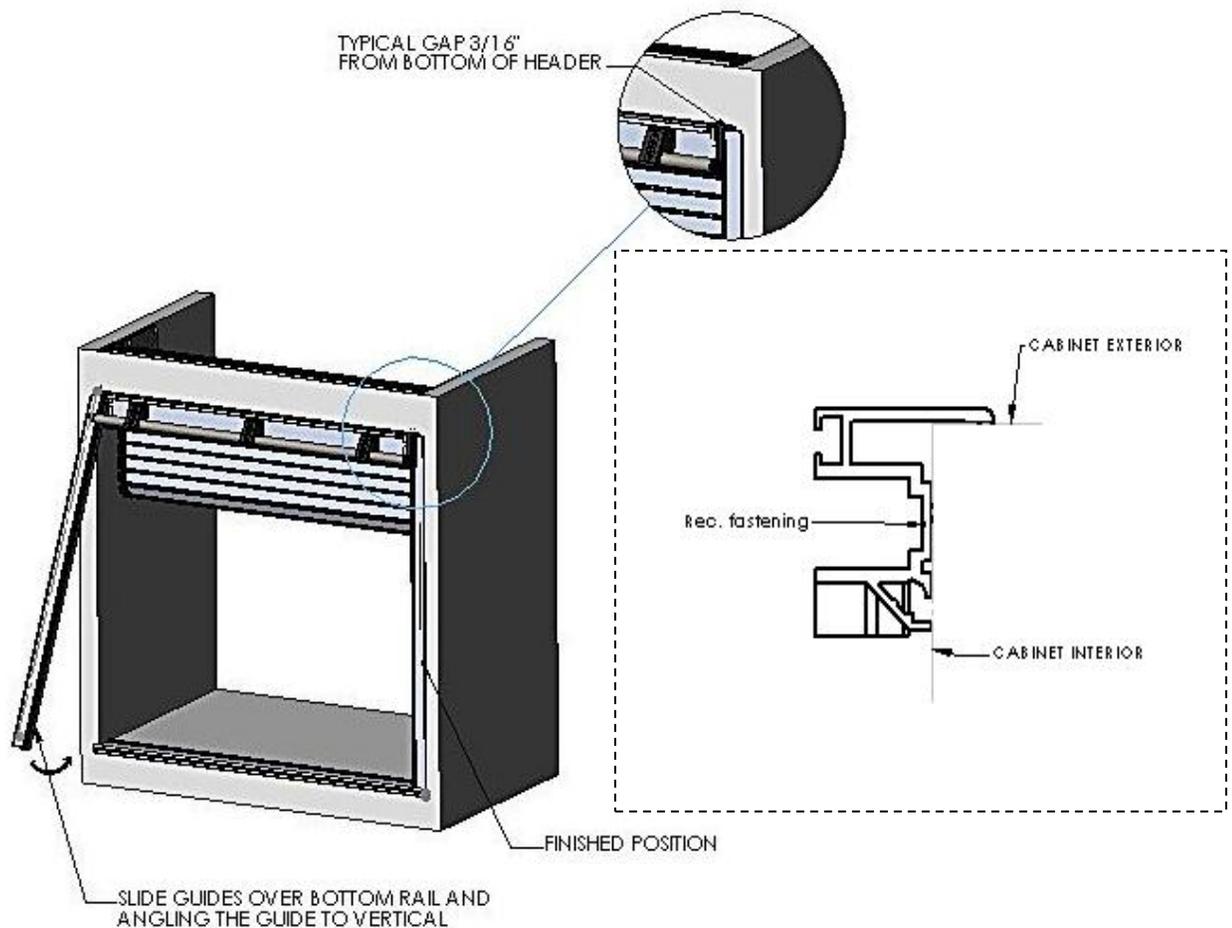


FIG. 5

- b. **Guides-** Carefully slide left & right guides over the bottom rail on to the jamb/opening, at the same time angling the guide to vertical. (This may require pulling the curtain down slightly and angling it out of the opening slightly.) See FIG. 6 the guides should have a 3/16" gap at the top to allow for rain gutter installation. At this time, pre-drill using a 7/32" drill bit & fix the guides securely using either Stainless steel bolt pre-drilled with #21 drill bit with a 10-32 NC tap or bolts (recommended: SS PPHMS 10/24" x 3/4" with a 10-24 Nylok nut). Repeat step for both sides.



At this point the door should move freely up and down thru the guides onto the roller. It may be necessary to make some adjustments to the counter balance to assure proper tension. (Please see instructions for adjusting counter balance tension if this is needed.)

- c. **Rain Gutter** - The front face of the guides should be pre-cut $3/16$ " less than your overall opening. This gap between the front face of our guide and your header is where the rain gutter is installed. **Be sure that when drilling the body to attach rain gutter not to drill into the face of the door. Be sure to use fasteners short enough not to scratch or obstruct the door.** (See FIG.7) It is recommended to slide gutter cap ends in place and pre-drill thru the cap ends and apply fasteners above door guides through the gutter end cap holes after they are installed (See FIG 8). At this time, pre-drill using a $7/32$ " drill bit, fix the rain gutter securely with rivets (recommended: long Multi-grip $3/16$ " x $3/4$ " "AD63-66-BS") or Stainless steel screws. Then install fastener cover into slots to hide the fasteners. (**NOTE:** If fasteners are used anywhere over the face of the door, **BE SURE** to use short fasteners so the door will not be damaged while rolling up.)

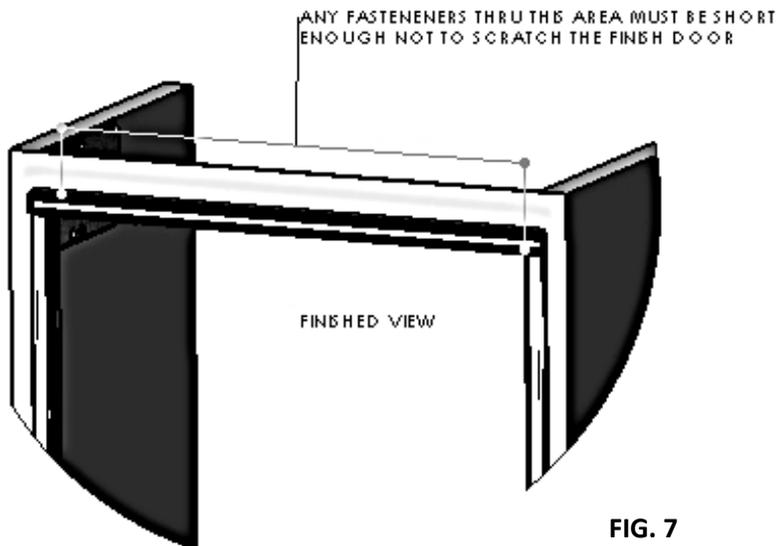


FIG. 7

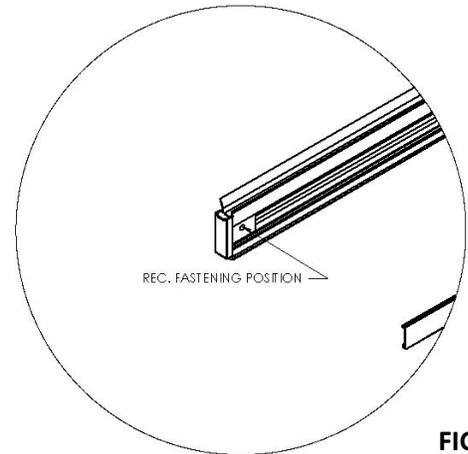


FIG. 8

5) Install striker blocks (If not already installed) See FIG. 9

- a. With door held closed and bottom seal compressed, slide the striker block into position & mark the striker block mounting location. Should be approx. 1/2" from the bottom of the guides to the bottom of the striker block. Pre-drill using 7/32" drill bit and fix securely with rivets (supplied) or screws.

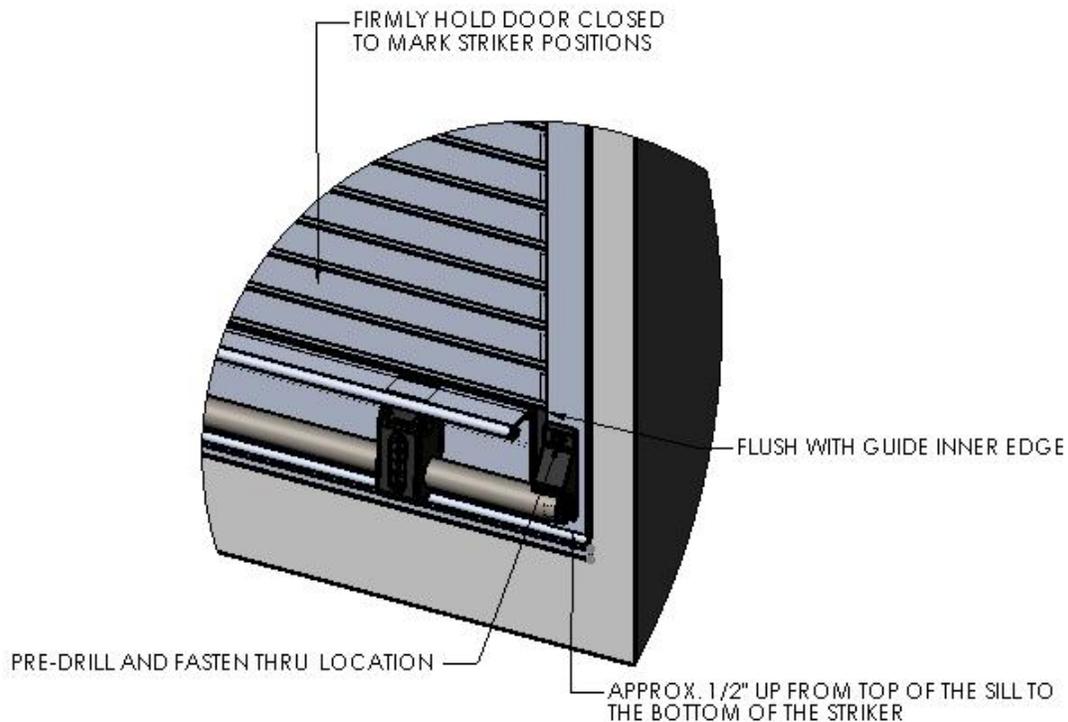


FIG. 9

Dover Roller Shutters pre-winds the counter balance to the specs of each individual door according to its size. Should you accidentally allow the tension to come off the springs or if you find you need more or less assistance with the shutter operation, please see the following instructions for adjusting the tension on the counter balance assembly.

Adjusting the Counterbalance Assembly (CB)



Please read these instructions carefully, before you attempt to adjust the unit. This is for your safety as well as to protect the inner components of the CB assembly from getting damaged.

Before you attempt to adjust the counter balance trouble shoot these possible causes of increased friction first:

- 1) Check the compartment to be sure it's square and the side walls are perpendicular to the overall opening. (Double check that the head plate width matches the overall opening width.)
- 2) Check head plate alignment.
- 3) Counter balance must be level or parallel to bottom of cabinet.
- 4) Check the curtain width, if the opening is too narrow the edges of the door will rub inside the guides, increasing friction.

Occasionally, you may need to adjust the tension on the counter balance assembly to improve the function of the roller shutter. The roller shutter is tensioned / designed to be neutral in any position. If the door opens with light force or requires heavy force to close then there may be too much tension. As well as, if the door opens with heavy force and closes with light force then the tension is not enough.

1. **If you can be in the compartment with the shutter in the down position**, firmly hold counterbalance from spinning with your hands. Remove joining straps and add one or two winds (in the direction of the arrows). Reconnect joining straps and test the balance of the door. Same can be done to reduce the tension, only in the opposite direction of the arrows.
2. **If the compartment is too small to enter**, roll-up the curtain to the open position then reach in the compartment and unwind the curtain from the counter balance and let the door sag into the compartment (See FIG. 10, pg.8). **Be careful not to let the curtain roll back up, the CB is under tension.** After the curtain is unrolled into a sagging position:
 - a. Place the pin into the core end, thru the axle, while holding firmly to the rolled shutter. **This MUST be done before anything else. Do NOT remove the axle from the mounting brackets, nor the cotter pins securing the axle to the square bosses.** Disconnect the joining straps from the CB tube and remove the curtain.
 - b. Once the tension pin is securely in position and the shutter removed, hold onto the CB tube firmly, and carefully remove the pin.
 - c. To increase the tension, turn the tube in the direction of the arrows, 1-2 turns. To decrease the tension, turn the tube in the opposite direction of the arrows. Replace the tension pin while still holding the tube firmly. Once the pin is replaced, you may release the tube.
 - d. Refasten the straps and curtain to the CB assembly.



- e. While holding the rolled curtain firmly, you may now remove the pin and allow the CB to roll the door onto the tube, until the bottom is just above the opening of the door.
3. **If options 1 & 2 are not available to you, you may have to remove the guides from the opening and remove the door.**
- a. Roll-up the curtain to the open position then remove guides.
 - b. Unwind the curtain from the counter balance slowly pulling the door out of the compartment. **Be care full not to let the curtain roll back up, the CB is under tension.** After the curtain is fully unrolled:
 - c. Repeat previous steps from option 2. (2a – 2e).
 - d. Feed the bottom of the door into the top of the guides and reattach guides to wall.

REMINDER

To reduce the tension (slow the door down) turn the tube in the opposite direction of the arrows on the label. To increase the tension (speed the door up), turn the tube in the direction of the arrows on the label. At this time, the door should move freely up and down. **IF YOU ACCIDENTLY RELEASED THE WINDS FROM THE COUNTER BALANCE, DO NOT PANIC.** The formula to figure how many winds need to be put back on the door is: **A WIND PER FOOT OF DOOR HEIGHT + 3.**

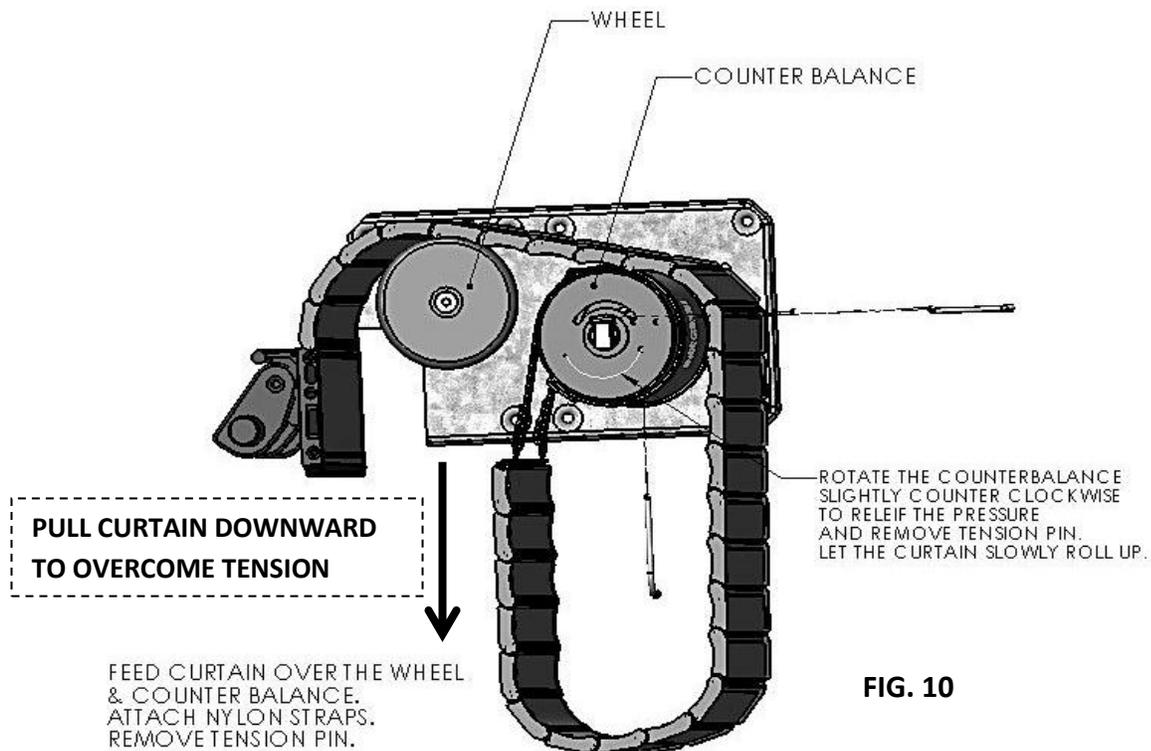


FIG. 10

Cleaning and Maintenance

It is important to follow a simple maintenance program to keep the door in its original condition. Smooth opening & closing operation is the goal and simple cleaning regularly will help achieve this.

Anodized Aluminum- Anodized Aluminum is very durable and resistant, but it will need to be properly maintained in order to keep factory finish. Use a mixture of water and a mild non-abrasive soap product. ***Do not use a high-pressure sprayer in the cleaning process.***

Powder Coating- Our powder coating finish is also a very durable finish, but like the anodized material it also will need a simple cleaning and maintenance program. Use a mixture of water and a mild non-abrasive soap product. ***Do not use a high-pressure sprayer in the cleaning process.***

Guides- The guides also will need to be routinely checked and cleaned to assure smooth operation. Use a mixture of water and a mild non-abrasive soap product. A silicone spray may be used to assist with smooth operation. ***Do not use a petroleum based product, grease or lithium.*** These products attract dirt and will hinder the operation more than help it. Lubrication should be completed on a preventive maintenance program and each time the vehicle is washed.