

# Garage Door Brace Installation Instructions

<u>SAFETY INSTRUCTIONS</u>. Thoroughly review these instructions before starting the installation. To minimize the risk of eye injury, always wear eye protection when using an electric drill. To protect against inadvertent opening of the door while installing the brace, pull the automatic door opener disconnect cord prior to commencing work, if an automatic door opener is installed. If no automatic door opener is installed, lock the door to prevent accidental opening of the door while installing the brace. Metal edges are sharp and work gloves are necessary.

Inventory the parts to ensure everything needed for the installation is present in your kit. In the event any of the parts listed above are missing from your vertical bracing system kit, please call us at 561-931-2890 and leave a message with your name, address and description of the missing part and we will promptly ship it to you. Alternatively, you may email this information to us at mike@stormdepot.com

## Parts List (see accompanying photograph of each part)

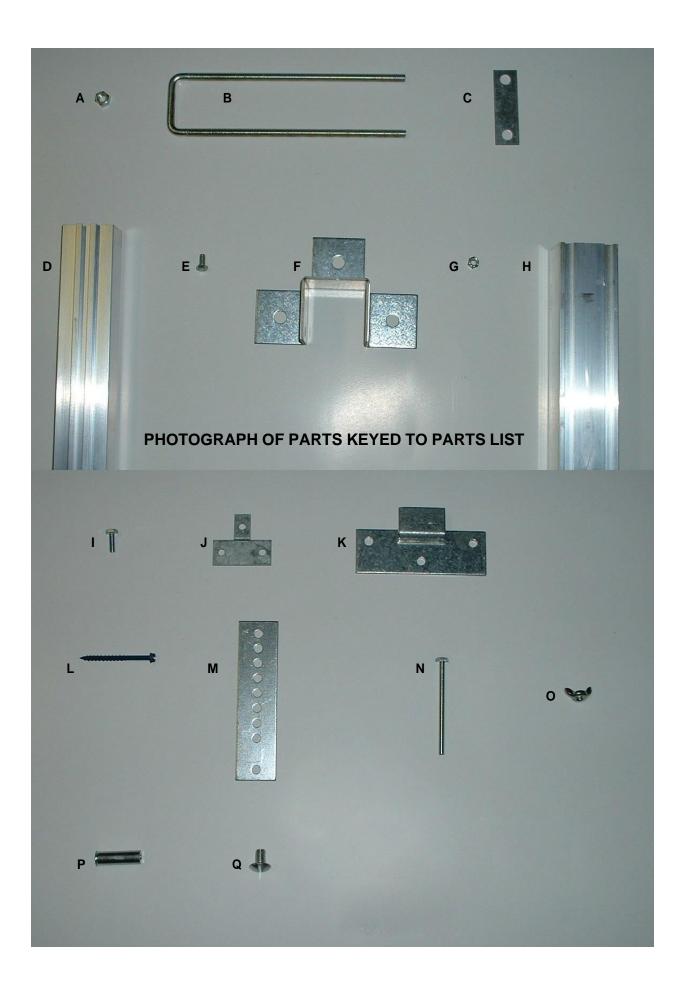
Description	Qty	Part
3/8" x 16 nuts for U-Bolt	4	Α
U-Bolt	1	В
U-Bolt Plates	2	C
Top Profile	1	D
1/4 x 20 x 1/2" Hex HD bolt	5	Ш
Floor Flange	1	F
1/4 x 20 Ny-loc nuts (7 ft door)	11	G
1/4 x 20 Ny-loc nuts (8 ft door)	13	G
Bottom Profile	1	Τ
1/4 x 20 x 3/4" Hex HD bolts (7 ft door)	6	
1/4 x 20 x 3/4" Hex HD bolts (8 ft door)	8	
"T" clip	1	J
Top Bracket	1	K
1/4" x 31/4" ITW Buildex Tap Con w/ 5/16" hex head	3	L
Deflection bracket (7 ft door)	6	М
Deflection bracket (8 ft door)	8	М
1/4 x 20 x 3 1/2" Hex Bolt (7 ft door)	3	Ν
1/4 x 20 x 3 1/2" Hex Bolt (8 ft door)	4	Ν
Wing nut (7 ft door)	3	0
Wing nut (8 ft door)	4	0
4" long clear plastic tube	1	
3/8" drop-in anchor	3	Р
3/8" x 5/8" Round Heavy-Duty Bolt for use w/ anchor	3	Q
Set tool for drop-in anchor	1	

Next, assemble the following tools that will be needed for installing your Secure Door® brace:

Electric drill & extension cord scissors or utility knife 5/16" socket driver Screwdriver hammer ½" masonry drill bit vacuum or shop vac 3/16" masonry drill bit

The drill is used to drill pilot holes, with the 3/16" masonry bit into the door header for the Top Bracket and for drilling three holes with the ½" masonry bit into the garage floor to mount the Floor Flange. AT NO TIME SHOULD ANY HOLES BE DRILLED INTO THE ALUMINUM TOP AND BOTTOM PROFILES OR ANY OTHER PART OF THIS BRACE KIT.

Viewing the video available at www.securedoorbraces.com prior to installation may be helpful.

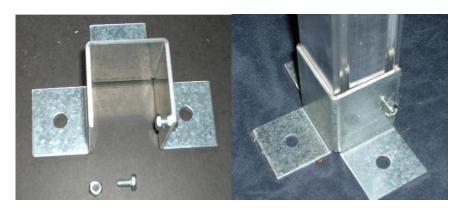


Step 1. Thread a 3/8'x16 nut (part A) onto each side of the U-bolt (part B) about 1/4 to 1/3 of the end of the U-bolt towards the U-end. Next push both U-bolt plates (part C) onto the U-bolt, and then screw the remaining two 3/8"x16 nuts (part A) onto the end of the U-bolt. When this step is finished, the U- bolt assembly should look like the one in the photo below on the left.





- Step 2. Remove the Top Profile from the Bottom Profile. Place the U-bolt assembly over the end of the Top Profile (part D) with a plate on each side of the flat side leaving about 2" of the profile above the assembly (above, right photo).
- Step 3. Locate two ¼ x 20 x ½ bolts (part E) and insert one through each side hole in the floor flange (part F) with the head on the inside (see below left photo). Screw a ¼ x 20 Ny-loc nut (part G) on the outside of the flange on each of the two bolts until finger-tight. Align the heads with the slotted track on the Bottom Profile (part H) and slide the floor flange onto the Bottom Profile until the end of the Bottom Profile is even with the bottom of the floor flange and tighten nuts with a wrench.



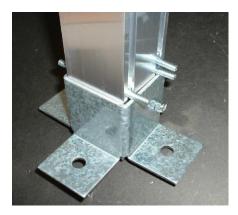
Step 4. Locate two of the ½ x 20 x ¾" hex bolts (part I) and insert one into the slotted channel in the center of both sides of the Top Profile. Next locate one of the three remaining ½ x 20 x ½" hex bolts and insert it on just one side of the Top Profile by placing the head into the slotted channel and sliding it onto the Top Profile (see photo below on left).

Different doors have different hinge types and numbers. Count the number of hinges on your door. Most doors are four panels with three rows of three hinges. Some doors have five panels and three rows of four hinges.

If you are installing one brace on a single door, you will be installing on the center, vertical row of hinges. If you are installing two braces on a double door, you will use the outer two vertical rows of hinges for installation and not the center row. If you are seeking maximum protection and will be installing three braces, you will be utilizing all three rows of hinges.

On one-piece garage doors with no hinges, hinges may be purchased at a hardware store and added just to attach the brace or, alternatively, \*\*you can contact us to order a special adapter bracket.





- Step 5. Locate the remaining six (or 4) ¼ x 20 x ¾" hex bolts (part I) and insert the head of each into each of the two channels on both slotted sides of the Bottom Profile (see photo above on right), placing three on each side of the brace. Next locate the remaining two ¼ x 20 x ½" hex bolts and insert one in each channel of the Bottom Profile on the same side as you inserted the one in the top profile in step 4. Align this side of the Bottom Profile with the side of Top Profile on which you placed the single hex bolt in step 4. Now insert the bottom of the Top Profile into the top of the Bottom Profile and slide the Top Profile about three-quarters of the way into the Bottom Profile.
- Step 6. Turn the two sections of the brace to the side where you can see the three ¼ x 20 x ½" hex bolts and place them near the juncture of the Top Profile and Bottom Profile. Put the "T" Clip (Part J) over the three bolts and then screw three ¼-20 Ny-loc nuts onto the bolts (see photo on left below). Tighten the two nuts on the Bottom Profile with a wrench but only hand-tighten the upper nut. (This nut will be further tightened in step 9 after the brace is extended to its proper height.)





Step 7. Align the Top Bracket (part K) above the garage door on the header in a vertical line with the row of hinges where you will be using for this brace. The very top of the Top Bracket must be even with the top of the wood header above the door, as shown in the picture above on the right. This will ensure no interference with the door as it opens and allow sufficient room from the bottom edge of the lentil or concrete tie beam to provide the holding power needed. With the Top Bracket in place, mark the three holes using the Top Bracket as a template and then remove the Top Bracket and drill the holes with the 3/16" masonry drill bit provided. Be sure to drill the full length of the drill bit assuring concrete dust is not in the drilled hole. Once the drilling is complete, place the Top Bracket back in place and mount permanently with the three 3/16" x 31/4" Tap Cons (part L), using your electric drill and 5/16" socket driver bit or a ratchet set or even a hand wrench.

The Top Bracket must be securely fastened through the header and into the garage structure behind the header. DO NOT SUBSTITUTE SMALLER TAP CONS TO MAKE THIS STEP EASIER AS IT WILL REDUCE THE HOLDING POWER OF THE BRACE. After completing the installation of the Top Bracket, open and close the door to ensure the door clears the upper bracket placement. TAPCONS ARE FOR USE IN MASONRY AND MOST ALL LENTILS IN FLORIDA ARE POURED CONCRETE WITH STEEL REINFORCEMENT. IF YOUR HOME IS WOOD-FRAME CONSTRUCTION, USE THE 1/4" X 3" WOOD LAG SCREWS ALSO PROVIDED IN THE KIT IN LIEU OF THE TAPCONS.

Step 8. Take two of the deflection brackets (part M). Be sure to note which end of the bracket has one hole because the end with one hole is the end of the bracket that attaches to the garage door hinge. Attach the end of the deflection brackets with the one hole to each of the door hinges using the ½ x 20 x 3½ " hex head bolts (part N) and wing nuts (part O). To do so, insert the hex bolt through the one-hole end of the deflection bracket, then through the throat (channel) of the hinge, and then through the one-hole end of the second deflection bracket, securing the bolt on the outside of the second bracket with a wing nut as shown in the picture that follows. Only tighten the wing nut two or three turns; repeat with the other two or three hinges. The deflection brackets will be attached to the brace in step 10.



- Step 9. Stand the brace upright and hook the U-Bolt into the Top Bracket, then extend the brace tight to the floor. Adjust the U-Bolt nuts and plates until the brace is as close and as parallel to the garage door as possible. Then tighten the U-bolt assembly and tighten the remaining nut on the "T" Secure Clip on the side of the brace to fix the length of the brace.
- Step 10. Starting at the hinge nearest the top of the brace and place the rubber spacers (made by cutting the tubing into eight 3/8" pieces as shown in the picture on the lower left) over each of the bolts protruding from the side of the brace. Then move the protruding bolts with spaces attached up or down in the track to be at the same height as the hinge. Place the deflection bracket over the bolt (as pictured on the lower right) and secure with the ½ x 20 ny-loc nut to where the rubber is slightly compressed. Tighten the wing nuts finger-tight. Repeat this with all of the deflection brackets.



- Step 11. Mark through the Floor Flange onto the concrete floor beneath where each of the three bolts will be fastened to secure the brace to the floor. Remove the brace by loosening the wing nuts and detaching the deflections brackets from the hinges at the hinge end only. Remove the brace from the door and replace the bolts and wing nuts through the outer end of the pairs of deflection brackets so they do not get lost.
- Step 12. **Drill the three holes into the concrete garage floor, using the 3/16" masonry drill bit, in the center of each mark from Step 11, then drill the actual holes with a ½" masonry bit to a depth of 1 5/8", and clean out the holes by vacuuming or blowing out the debris. Insert the 3/8" drop-in anchors (part P) with the thread side up into the hole. The top should be flush with the concrete floor. Then using the set tool provided and placing the small end in the**

anchor center, hammer hard on the tool head several times in the center to seat the lead stop in the center of the anchor. If not completely seated, the bottom of the anchor will not spread and the lead stop will prevent the bolt from screwing flush to the floor when the brace is removed.

Step 13. Re-install the brace by sliding the U-Bolt over the Top Bracket and pushing the brace in place tight against the door. Re-attach the deflection brackets to the hinges using the bolts and wing nuts. Install the three 3/8" round heavy duty bolts with large slotted heads (Part Q) through the Floor Flange into the anchors in the concrete garage floor.

If installing multiple braces, mark each brace with a permanent marker to indicate "L" for left, "C" for Center, and "R" for right. Although each brace could be adjusted to fit another location, keeping the braces pre-adjusted facilitates quick installation when a storm approaches.

Installation of your garage door brace is now complete. Your brace can be removed for storage by detaching the mounting brackets from the hinges and unscrewing the floor bolts. Keep the floor bolts screwed in place when garage brace is not in use to keep the holes free from dirt and debris. We recommend that once a year you remove the bolts and lubricate. We also recommend that you guard against the loss of the attachment parts by re-inserting the bolts through the deflection brackets that remain attached to the brace and screwing the wing nuts onto the bolts. Store the brace by lying it flat on the floor, up against the corner of the garage or by fabricating a hanger or strap to hold it safely out of the traffic area and to prevent it from falling on either the cars or persons.

THE BRACING SYSTEM WORKS IN CONJUNCTION WITH YOUR EXISTING DOOR AND MEASURES TO STRENGTHEN THE DOOR ALWAYS AID IN MAKING A STRONGER SYSTEM. WHEN USING THE BRACE, ENSURE THE DOOR LOCK IS ENGAGED. DOOR LOCKS ON BOTH SIDES OF THE DOOR WORK BETTER THAN ONE. IF YOU DO NOT HAVE DOOR LOCKS. PURCHASE THEM AT A D.I.Y STORE AND INSTALL THEM, THEY SHOULD ALSO BE USED WHEN YOU ARE AWAY FOR ANY PERIOD OF TIME AS THEY DETER BREAK-INS THROUGH THE GARAGE DOOR. ANOTHER MEASURE WE ENCOURAGE IS TO ENSURE THE VERTICAL STILES ON YOUR DOOR ARE SECURELY FASTENED TO THE EDGES OF EACH PANEL. ADDING SELF-TAPPING SCREWS OR POP-RIVETS ON BOTH STILE ENDS CAN MAKE THE EXISTING DOOR STRONGER AND THE SYSTEM OF OUR BRACES AND THE DOOR MORE CAPABLE OF WITHSTANDING HIGH WINDS.

## **Return Policy**

If you are not completely satisfied, simply return the <u>unused</u> brace within 10 days for a refund of the purchase price and associated taxes less a \$75 re-stock charge. Shipping charges both from our warehouse to the purchaser and from the purchaser to return the Secure Door brace are the responsibility of the customer. Returns will not be accepted on braces that have been installed, in whole or in part.

### Disclaimer

Secure Door assumes no liability arising from the use or misuse of its product. The garage brace is a retrofit product and therefore its effectiveness is dependent on the type, quality, condition, and strength of the garage door to which it is attached. If your garage door is made of weak materials, has suffered prior damage, has windows, is poorly maintained, improperly installed, or is otherwise of poor or substandard quality, the garage brace alone may not provide the level of hurricane protection you need. Because we cannot verify the nature and condition of each customer's garage door on which the garage brace is installed, we cannot provide assurance to any customer that it will enable their garage door to match the performance achieved in our independent testing on a new door of known quality and materials.

### PICTURE OF INSTALLED GARAGE DOOR BRACE

Top bracket mounted through the wood header and into the concrete lentil with 3 1/4" tapcons

U-bolt assembly (U-bolt, two plates and four nuts)

Top profile with single track for deflection bracket bolts

Deflection brackets with the 3 ½" bolt through the hollow throat of the hinge and attached by the wing nut.

The brace end of the deflection brackets is connected by a ¼ -20x ¾" bolt with the bolt head into the track and secured with a nyloc nut.

The bottom profile has two tracks on both sides and the deflection bracket bolts (1 per bracket) may alternate in the front or rear tracks to spread the load

Floor flange with three anchor bolt heads showing with the drop-in anchors in the floor beneath

\*\* NOTE: THE HORIZONTAL BRACE SHOWN
IN THE PICTURE IS PART OF THE
EXISTING DOOR. IT IS NOT NEEDED
TO USE WITH THE SECURE DOOR™BRACE







