



## **GARAGE DOOR WITH TORSION SPRING**

OWNER'S MANUAL

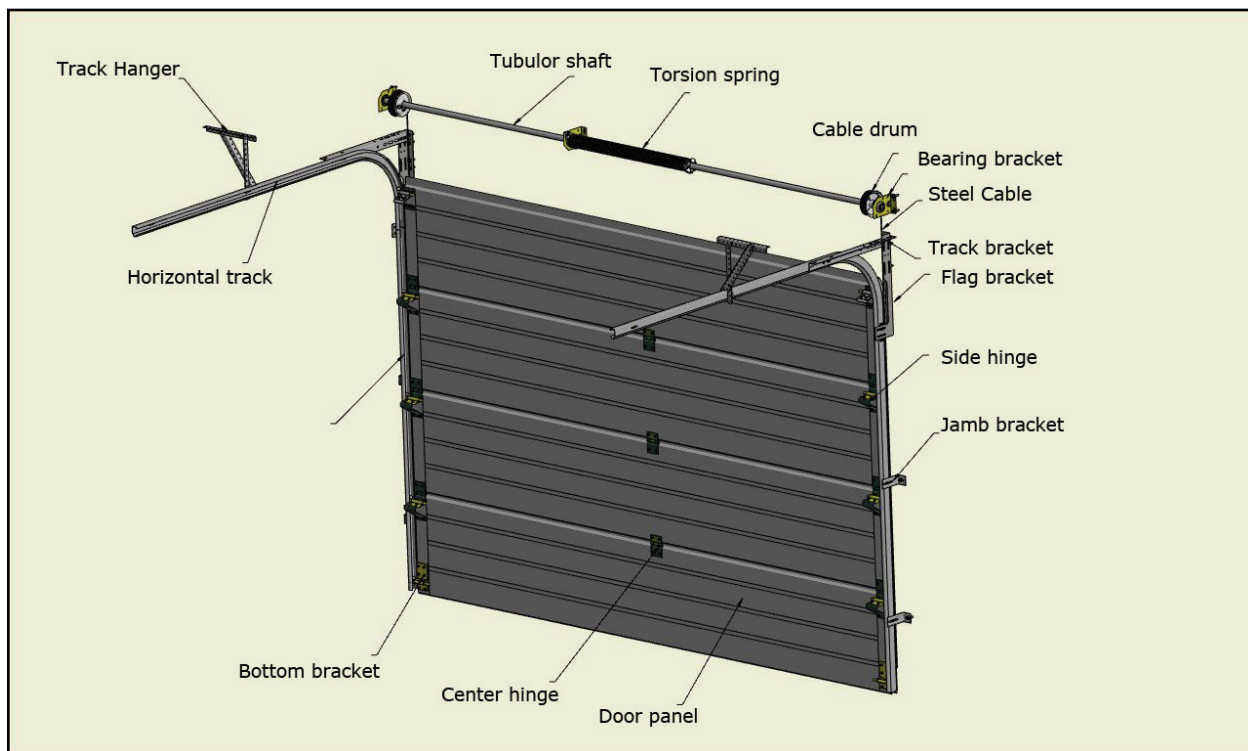
**5' X 6'**

60" X 72"

1.5m x 1.83m



## GARAGE DOOR WITH TORSION SPRING OWNER'S MANUAL



### IMPORTANT SAFETY INSTRUCTIONS

**WARNING:** Read all instructions and warnings before use.

Failure to follow all instructions may result in serious personal injury or product damage.

**SAVE THESE INSTRUCTIONS FOR FUTURE USE.**

### STEP 1 –THINGS TO KNOW BEFORE YOU BEGIN

\*Keep in mind when planning the installation that the garage will be open and unsecured when assembling the new door.

\*If the garage door is the only opening in the structure, make sure everything you need is inside. You will have no way of leaving the garage until the track is assembled and installed. This will take approximately 5 hours.

\*An assistant may be required for lifting the unsprung door. It can weight from 30 – 100 kg.

\*You have the right tools and reasonable mechanical aptitude or experience.

#### \*Tools needed

Locking pliers, Hammer, Screwdriver, Tape measure  
Level, Socket wrench kit, Drill, Step ladder, Hacksaw  
T-square, 2 sawhorse

#### \* Additional Material required(if necessary)

Light house hold oil, stop molding, wood block, Rope

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### STEP 2 – READ THIS SAFETY INFORMATION

\*Only the track specified and supplied with the door should be used.

\*Garage doors use springs to balance them. There are two types of springs installed – extension or torsion. And the following instruction is for TORSION

\*The brackets at the bottom corners of your garage door are under great tension.

\*Do not permit children to play beneath or with any garage door or electric operating controls.

\*Keep hands and fingers clear of section joints, track, and other door parts when the door is opening and closing to avoid injury. The lift handle is provided for the safe operation as well as easy use.

\*Track installations must use sway braces on the rear track hangers to prevent sideways movement. If the tracks are not firmly stabilized they might spread, allowing the door to fall and cause severe injury and damage.

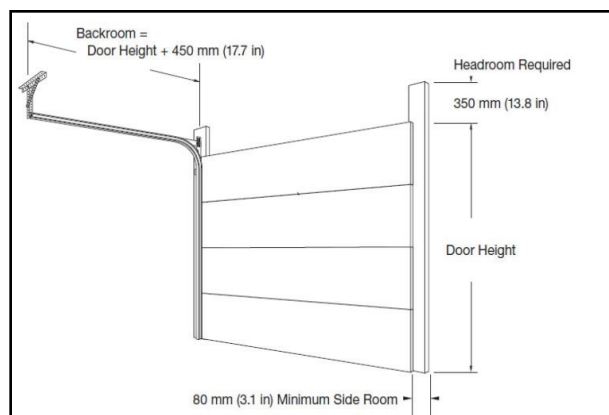
\*If the garage door and/or any of the supporting tracks are damaged, operating the door could be hazardous. Call an authorized representative of the manufacturer or professional door repair service promptly.

\*Once you have completed the installation of your new garage door, please be sure that your garage complies with all applicable ventilation requirements before you enclose any vehicles in the garage. Good ventilation avoids fire and fumes accumulating within a wellsealed garage as they cause health hazards.

\*Doors equipped with automatic door operators can cause serious injury or death if not properly adjusted and operated. To ensure safety of these doors:

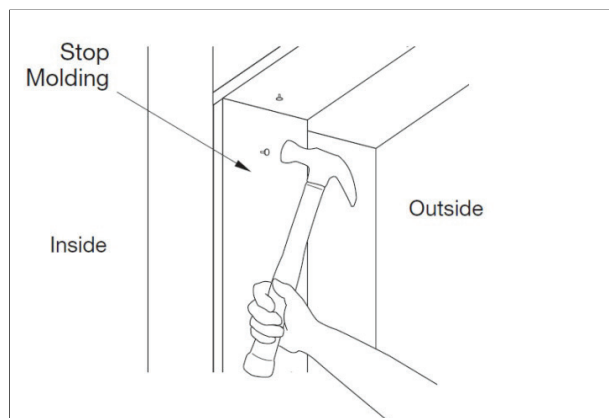
- Test the sensitivity of the operator's safety reverse mechanism monthly
- If your door has a pull down rope, you must remove the pull down rope
- Make sure the door remains unlocked
- Do not allow children to play with the controls

### STEP 3 – CHECK HEADROOM/BACKROOM/SIDE ROOM



Headroom is the space needed above the top of the door for the door, the overhead tracks, and the springs. Measure to check that there are no obstructions in your garage within that space. The normal headroom space requirement as shown is 350 mm (13.8 in). The backroom distance is measured from the back of the door into the garage, and should be at least 450 mm (17.7 in) more than the height of the garage door. A minimum side room of 80 mm (3.1 in) should be available on each side of the door on the interior wall surface to allow for attachment of the vertical track assembly. The rough opening should be the same size as the door.

### STEP 4-PREPARING THE OPENING



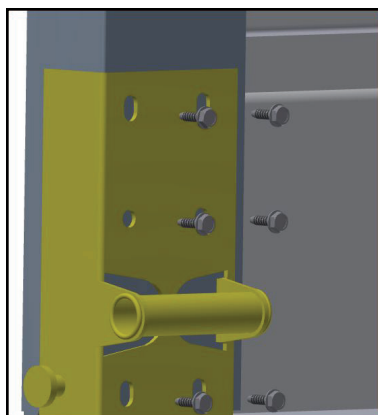
Doorstop molding should be temporarily nailed to the edges of the jambs flush with the inside. Stop molding featuring a built-in weather seal is offered. Rough opening (without stop molding) = Door width

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### STEP 5-PREPARING BOTTOM DOOR SECTION

5-1: Spread the hardware on the garage floor in groups so that you can easily find the parts.

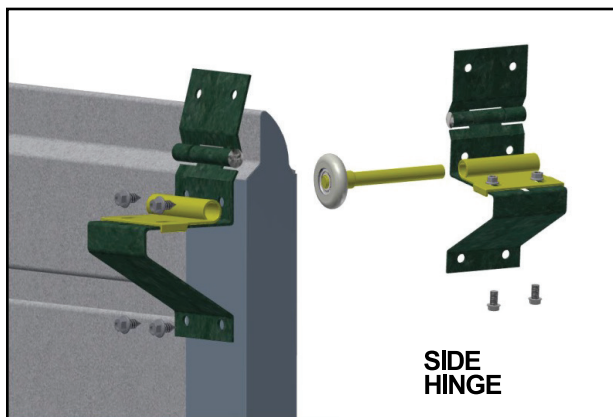
5-2: Find the bottom section with the weather strip retainer fastened to one edge. The weather-strip is on the bottom edge of the bottom section. Place the bottom section on sawhorses facing down. Be sure to cover sawhorses with carpet or cloth so as not to scratch the bottom section.



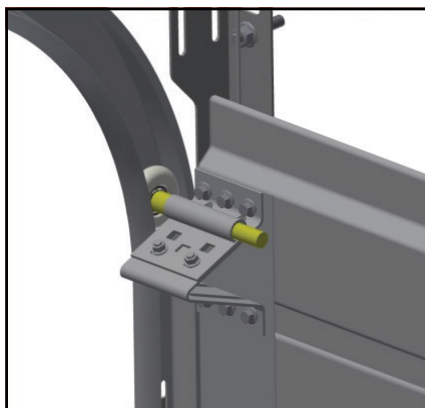
**BOTTOM  
BRACKET**

5-3: Insert safety tabs on bottom bracket into slots on end stile of door. Attach all hardware with self-tapping screws. Attach the bottom brackets with two screws to the bottom corners of the section. Screws go into the end caps.

5-4: Place a roller in a side hinge. Attach the side hinge to the bottom section of the panels using self tapping screws.



**SIDE  
HINGE**



**TOP  
BRACKET**

### STEP 6-LIFT HANDLE ATTACHMENT

Attach the lift handles to the front side and back side of the bottom section using self tapping screws.

### STEP 7- INSTALLING DOOR SECTIONS

7-1: Place the bottom section in the opening so that it is against the stop molding and centered from side to side. Place a level on the section and use a piece of wood under one end or the other (if necessary) to make the section level.

7-2: Place the second section on top of the first section (bottom section). Attach the roller carrier and hinges from the top of the first section (bottom section) to the bottom edge of the second section, using metal screws.

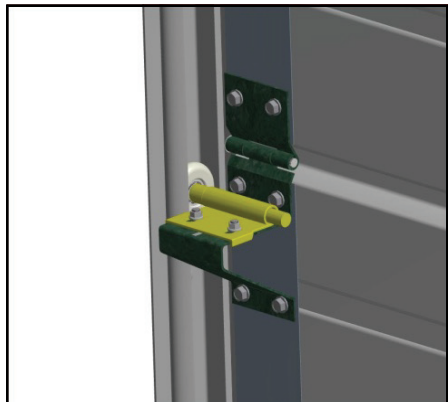
7-3: Attach the remaining sections in order.

**Notes :** These nails are all that will hold the stacked door section in place until the tracks are secured to the back jams. Be sure the nails hold the sections firmly in position.

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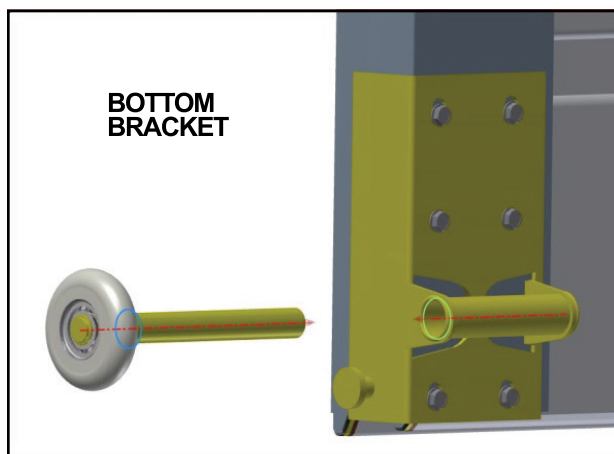
### STEP 7-INSTALLING DOOR SECTIONS

7-4: Attach middle hinges using pre-punched holes along the top and bottom edges of the sections.



7-5: Place the last section on the saw horses. Attach the top roller brackets as shown. The top roller brackets are to be attached with three self-tapping screws. The top of the bracket goes into the bottom hinge hole. The bottom of the bracket goes in smaller holes, either from the top of section.

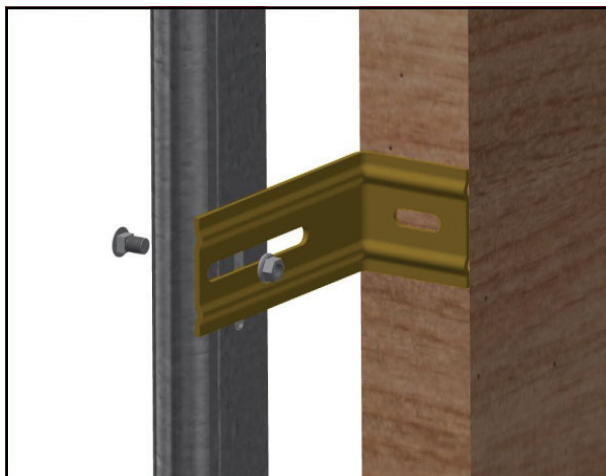
7-6: Place the top section on top of the other sections and nail in place as before. Attach the hinges from the top of the previous section to the bottom of this section.



7-7: Place a roller in the top and bottom brackets and in the tubes in each of the hinges at the ends of each section. Place the roller in the tube that is farthest from the face of the door.

### STEP 8-ASSEMBLING AND INSTALLING THE TRACK

Before assembling brackets to vertical track, be sure to read step 8-1 and Step 8-2. Refer to illustrations for placement of brackets on track.



8-1: Loosely fasten the jamb brackets to the vertical track using 1 track bolt and flange nut as shown with the head of the bolt inside the track. The jamb brackets should be installed 30 mm (1.18 in) from the bottom of the track with the flange facing the flat side of the track, one on the left and one on the right. The next jamb brackets should be installed centered on the track.

8-2: Loosely attach the flag bracket to the top of the track with 2 track bolts and flange nuts with the head of the bolts in the track. Make sure bolts and nuts are attached through the proper holes in the flag bracket for your door thickness.



### FINISHED TRACK ASSEMBLY

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### STEP 8-ASSEMBLING AND INSTALLING THE TRACK

8-3: Place the track over the rollers on the door. Move the track close to the door so that the rollers are all the way into the hinges. Do not force the track too tightly or the door will bind. This should leave about 12 mm between the edge of the door and the track. Lift track about 12 mm from the floor and fasten the flag bracket and jamb brackets to the jamb with lag screws. The flag bracket requires three screws, one each into the top, middle and bottom holes. Do this for both sides of the door. When the jamb brackets and flag brackets are securely fastened to the jamb, tighten the track bolts and flange nuts connecting the flag brackets to the tracks.

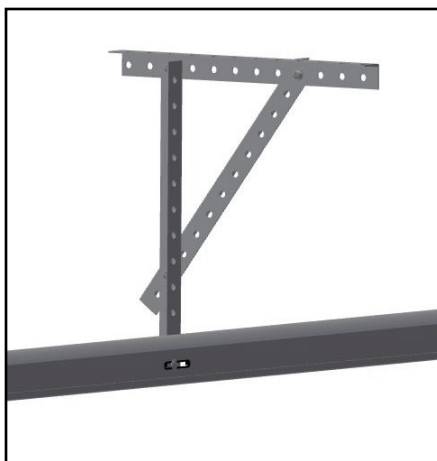
**NOTE:** The tops of the vertical tracks must be level with each other. Check this by measuring from the top of the door sections to the top of the track on both sides. If they are not equal, cut some material off the bottom of one track to lower it or raise the other track.

8-4: Fasten the corner angle to the horizontal curved track with 2 track bolts and flange nuts so that the heads of the track bolts are on the inside of the track.



8-5: Temporarily support the rear end of the track with a rope from the trusses, overhead in the garage or on a tall ladder.

8-6: Place the track over the roller in the top bracket. Attach the curved end of the horizontal track to the flag bracket with 2 track bolts and flange nuts so that the heads of the screws are on the inside of the track. Attach the end of the corner angle to the top of the flag bracket with carriage bolt and hex nut. The horizontal and vertical track must join together to form a continuous channel for the rollers.



**NOTE:** Rear track hangers should not be mounted any farther than 150 mm from the end of the horizontal track.

8-7: Rear track hangers need to be made at this time. Use perforated angle. They are used to attach the rear of the horizontal track to the ceiling joist.

8-8: Placement of rear track hangers is critical for the door to operate properly. The rear track hangers should hold the horizontal track level and square to the door. Squareness should be measured by comparing two diagonal distances.

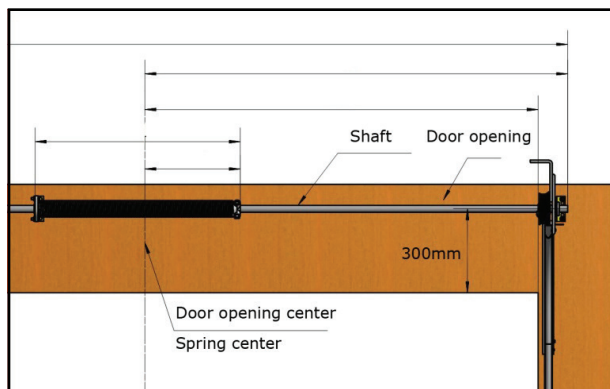
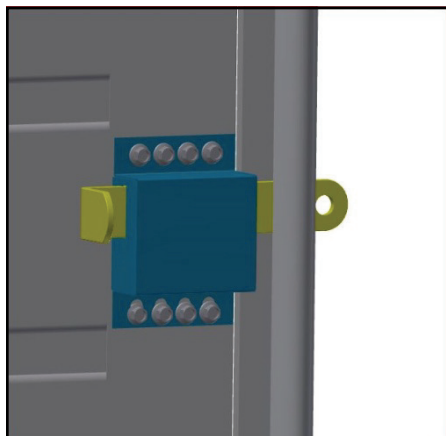
Adjust the position of the tracks if the squareness distances are not within 12 mm (0.5 in) of each other. Horizontal track can be out of level up to 25 mm (1 in) from front jamb to rear track hanger.

8-9: With the track installed, the top door section can now be properly adjusted. With the slide on the top bracket loose, force the top of the door against the stop molding or door jamb. Pull the roller towards you so it is tight against the groove in the track and tighten the slide bolts.

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### STEP 9-LOCK INSTALLATION (IF INCLUDED)

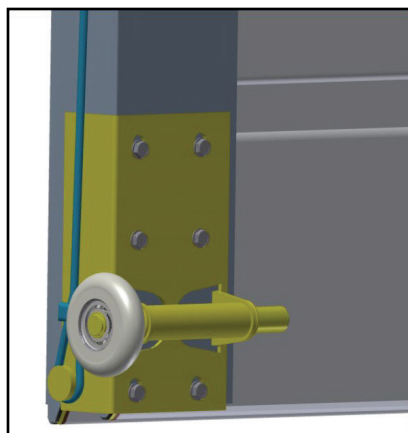
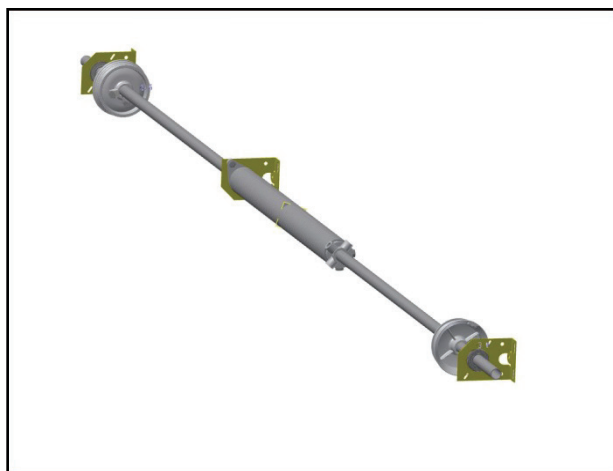
The inside slide bolt lock is installed on the end stile of the second section using hex head self tapping screws.



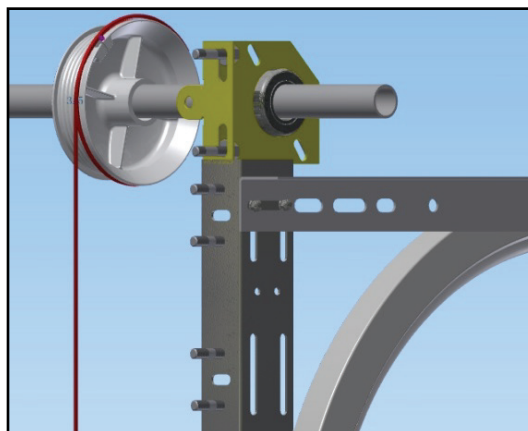
10-3: Fix the cable and cable drum. Hang the cable on the bottom brackets first, then pull behind the side hinges up to the cable drum. Fix the cable on the cable drums, and keep the cables tight then fix the cable drum on the shaft with the two screws.

### STEP 10-TORSION SPRING SYSTEM INSTALLATION

10-1: Wear the spring, center bearing bracket, cable drums, and side bearing brackets on the shaft.



10-2: Fix the side bearing brackets on the wall. The distance from end of the side bracket to the top door opening is at least 240mm. The side bracket is in the same line with the Flag bracket and the vertical track.

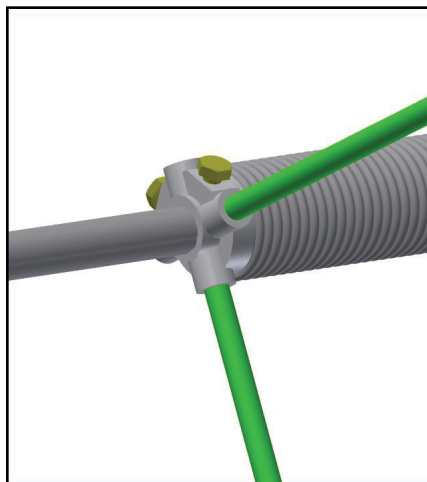
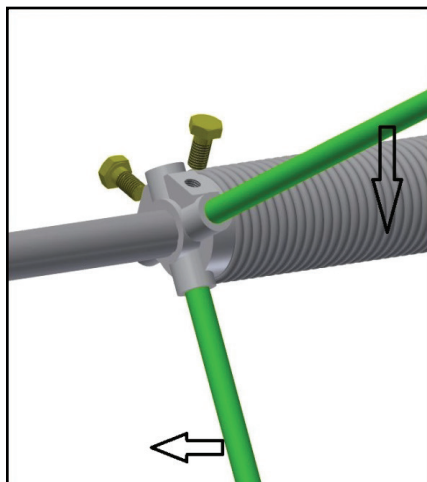


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### STEP 10-TORSION SPRING SYSTEM INSTALLATION

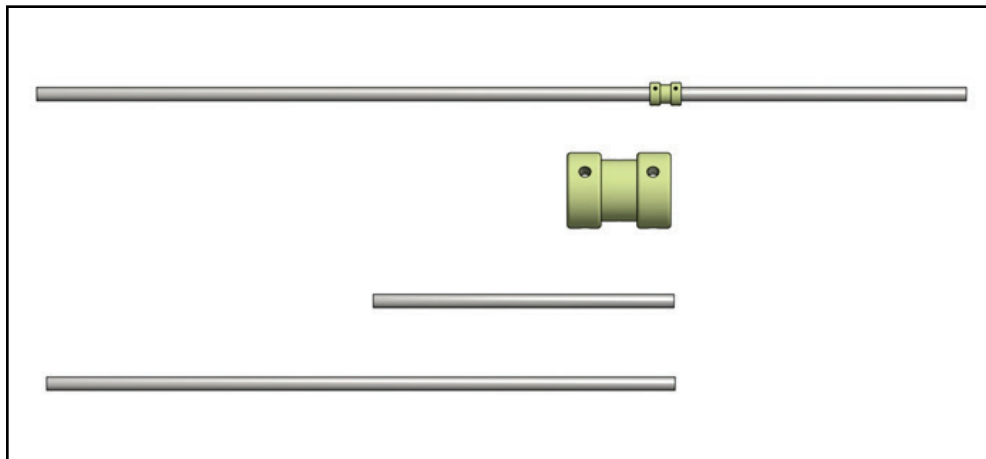
10-4: Fix the center bearing bracket. The center bearing bracket is fixed at left side or right side of the door. The distance between bracket to the center of the door opening is half spring's length. That means, the spring will be put in the center.

10-5: Assemble the spring. Fix the end of spring with the center bearing bracket. Rotate the spring closewisely with the two spring solid bars. The turns number is 8. Then fix the spring on the shaft.

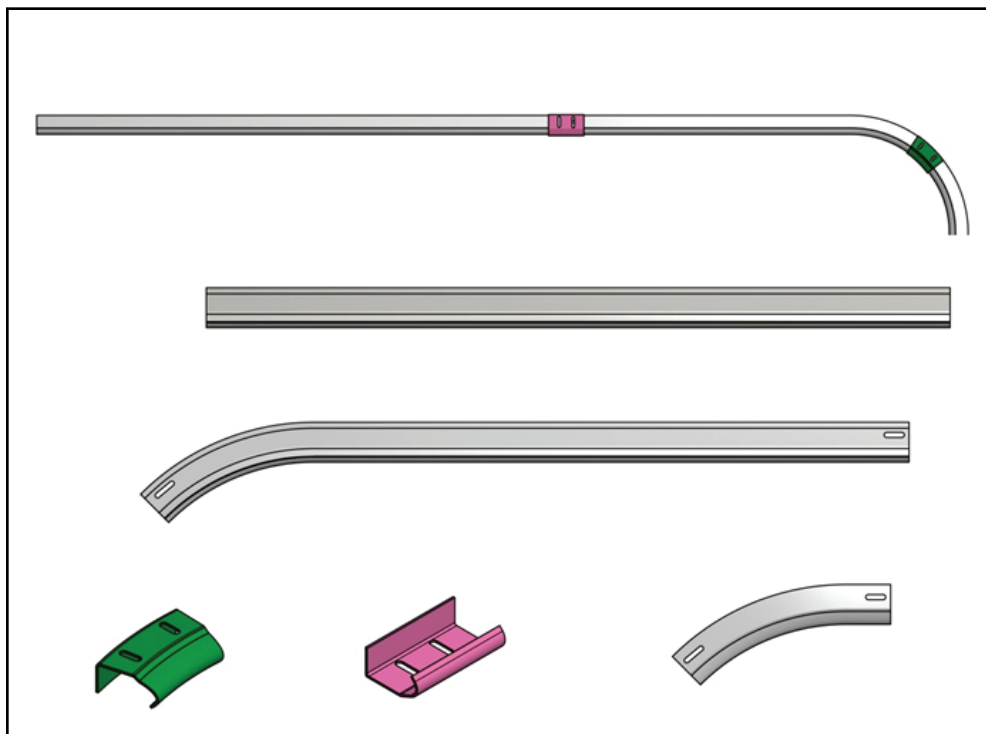


10-6: Until now the installation of the door is finished already.

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The shaft was cut into 2 pieces. Please link them with the shaft linker first.



Please use the track small linkers to compose the 3 pieces tracks together into the horizontal track.