

INSTALLATION INSTRUCTIONS STEEL CARRIAGE HOUSE DOORS COURTYARD DOOR, 160 SERIES




READ THIS MANUAL CAREFULLY AND OBSERVE
ALL WARNINGS WHEN INSTALLING, OPERATING
OR MAINTAINING YOUR GARAGE DOOR.

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! WARNING

Garage doors are large, heavy objects that move with the help of springs under high tension and electric motors. Since moving objects, springs under tension, and electric motors can cause injuries, your safety and the safety of others depend on you reading the information in this manual. If you have questions or do not understand the information presented, call your nearest service representative.

POTENTIAL HAZARD	EFFECT	PREVENTION
 MOVING DOOR	<p>WARNING</p> <p>Can Cause Serious Injury or Death</p>	<p>Get help or use support when removing old door and lifting new door into place. Keep people clear of opening while door is moving. Do Not place fingers or hands between sections. Use handles and step plates for manual operation.</p>
 SHOCK	<p>WARNING</p> <p>Can Cause Serious Injury or Death</p>	<p>Turn OFF power before removing operator cover.</p> <p>When replacing cover, make sure wires are NOT pinched or near moving parts.</p> <p>Operator must be fully grounded.</p>
 HIGH SPRING TENSION	<p>WARNING</p> <p>Can Cause Serious Injury or Death</p>	<p>Do Not try to remove, repair or adjust springs or anything to which door spring parts are fastened, such as, wood blocks, steel brackets, cables or other like items.</p> <p>Installation, repairs and adjustments must be done by a trained technician or a person with good mechanical skill using proper tools and instructions.</p>

SAFETY INSTRUCTIONS

<p>Removing Old Door</p> <ol style="list-style-type: none"> 1. Have trained technician remove torsion springs from door. 2. Get help to remove heavy door panels. 3. Do Not reuse old track. <p>Before Installation</p> <ol style="list-style-type: none"> 1. Read manual and warnings carefully. 2. Get tools and materials ready. 	<p>Installing New Door</p> <ol style="list-style-type: none"> 1. Get Help to lift and hold heavy door panels. <p>Installing Extension Springs</p> <ol style="list-style-type: none"> 1. Before raising door: <ul style="list-style-type: none"> • Check distance between tracks. • Put bolts in track ends to stop door. • Get help to raise door. • Use clamps or locking pliers to hold door up. 	<p>Installing Torsion Spring(s)</p> <ol style="list-style-type: none"> 1. Read, understand, and follow instructions. 2. Wear safety goggles. 3. Use two solid steel winding bars (1/2" x 18"). 4. Sound footing is required. 5. Do not remove a winding bar until second bar is in place and holding spring load.
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In the following text, the words Warning and Caution emphasize important Safety Information:

! WARNING means that serious injury or death can result from failure to follow instructions.

! CAUTION means that minor injury or property damage can result from failure to follow instructions.

NOTE means that special attention should be given to the instruction.

INSTALLATION INSTRUCTIONS

HOW TO USE THESE INSTRUCTIONS

These instructions have been designed to aid the "Do-it-Yourself" Craftsperson when installing a Residential Sectional Garage Door. A "Do-it-Yourself" Craftsperson should have the tools necessary for this installation and be skilled in their use. It is very important that you read and understand these instructions and **WARNINGS** before attempting to install your door. If you do not understand an instruction or have a question, call your nearest service representative.

1. Use "KEY DRAWING" on page 5 and illustration Step 1, page 6 to locate and identify specific terminology.
2. These instructions show the step-by-step procedures required to install the Courtyard 160 Series Door.

TRACK

Standard 2" commercial

COUNTERBALANCE SPRINGS

Torsion

Use only those instructions applicable to your particular installation.

3. Each "STEP" will include:
 - a. A brief statement of the procedure to be performed.
 - b. Illustrations showing procedure in specific detail.
 - c. Hardware and fasteners required.

DOOR OPENING REQUIREMENTS

1. Jambs should be plumb.
2. Floor should be flat and level.
3. Opening should be the same width as the length of the door section.
4. Minimum headroom - 12"R=12-1/2", 15"R=14-1/4"
5. Minimum sideroom - 3 1/4"
6. MASONRY WALLS:

HEADER - should be cased with a wood 2 x 4 or 2 x 6.

JAMB - should be cased with wood 2 x 4's or 2 x 6's which extend 12" above header.

NOTE: Casings should be flush with opening and secured with masonry anchors.

DEFINITIONS OF TERMS USED

HEADROOM - distance from top of door opening to ceiling.

SIDEROOM - distance from side of door opening to sidewall.

PLUMB - perpendicular to floor of structure. Measured with a plumb line.

CASE - attachment of wood 2 x 4's or 2 x 6's around the inside face (header & jambs) of door opening on masonry walls.

CLINCH NAIL - #16 framing nail driven into door jambs and bent 90° over ends of door sections to temporarily hold door sections in mounting position. See General Note 4, page 4.

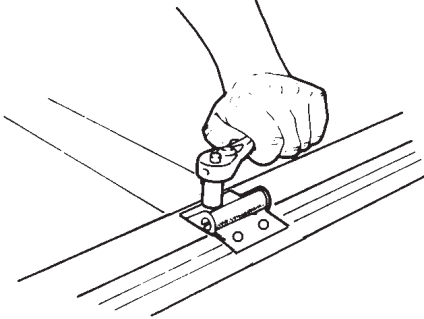
CLEARANCE HOLE - hole drilled through material and large enough to allow easy passage of a bolt or fastener being used.

PILOT HOLE - predrilled hole in material in which a screw is used. May be step to obtaining larger hole in thin material.

GENERAL NOTES

- Nuts, bolts and screws should be hand tightened to prevent thread stripping.

NOTE: Use care with power tool on steel door, do not exceed 100 in/lbs of torque.



- All required items are furnished except those noted. Additionally you will need:

2x4 or 2x6 wood framing material.

Ten (10) #16 framing nails.

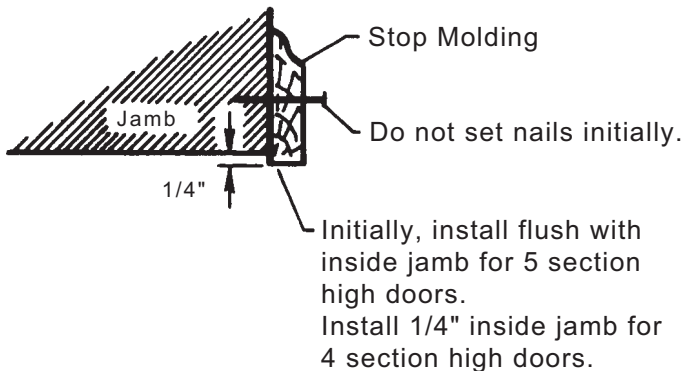
Stop molding.

Hanging angle (see Page 15).

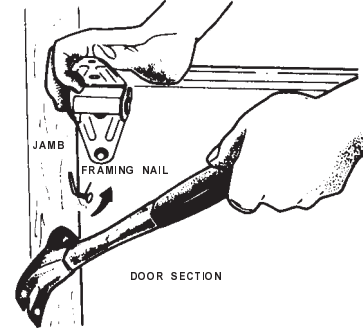
Lag screws for attaching ceiling angle to ceiling joists.

1/4" hex bolts, nuts & lockwashers used to secure hanging angles, sway braces & track.

- Stop molding (not furnished) is required to correctly install this door. It must be installed inside door opening on jambs and header.



- When stacking door sections in mounting position on door opening, temporarily "CLINCH NAIL" sections to jambs. Drive a #16 framing nail securely into jamb. Carefully bend nail over end of section. Do not damage door section.



- Hanging angle shown in details on Step 10, page 15 is not supplied with your door. You will need approximately 6 feet of hanging angle to complete this project.

TOOLS NEEDED

You will need the following tools to perform this installation:

Safety Glasses

Tape Measure

Stud Finder

Electric Drill and Bits



Carpenter Level



Step Ladder



Saw Horses



Hack Saw



Locking Pliers (2)



Hammer



Slotted Screwdriver



Wrenches



* Winding Bars

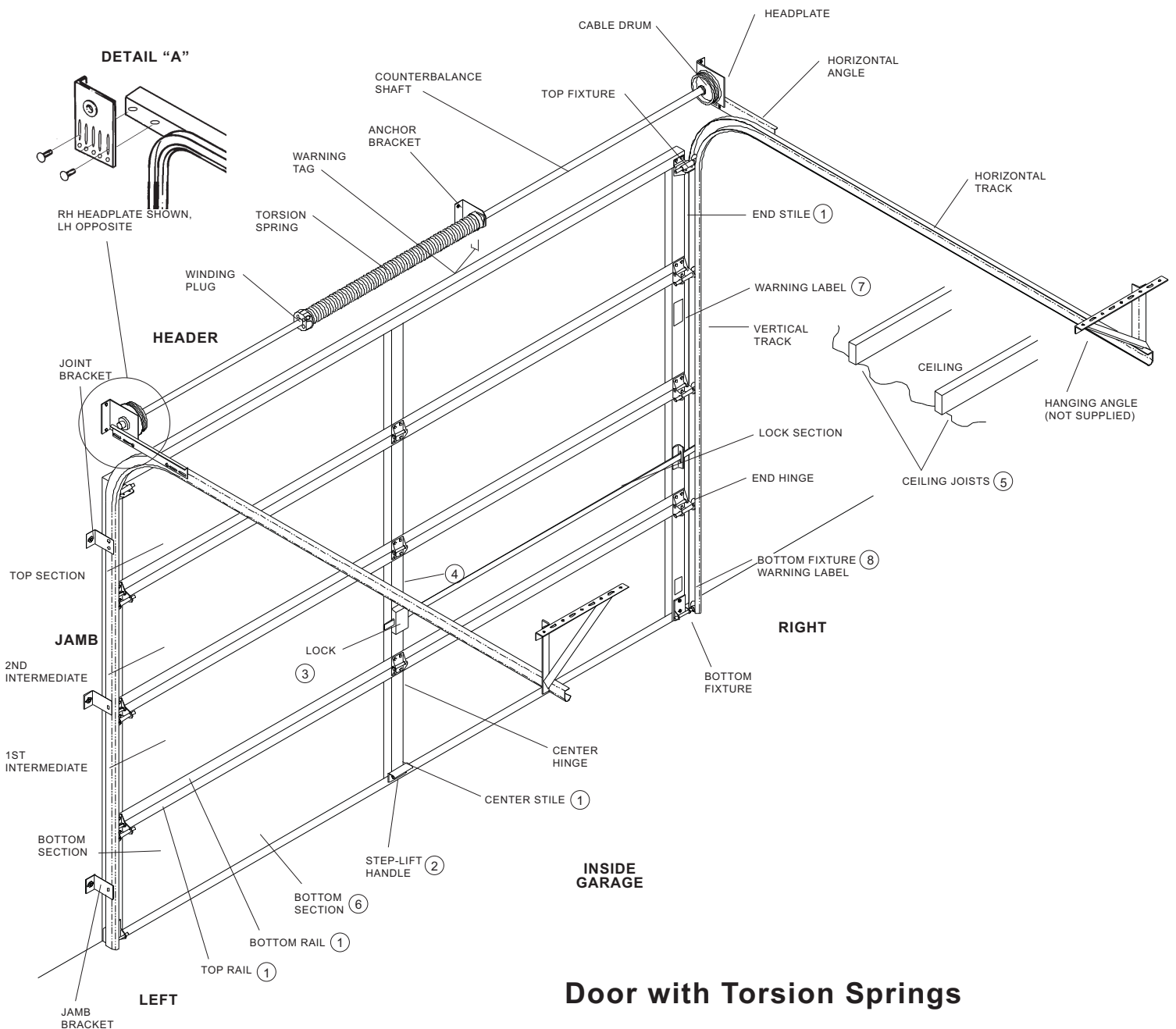
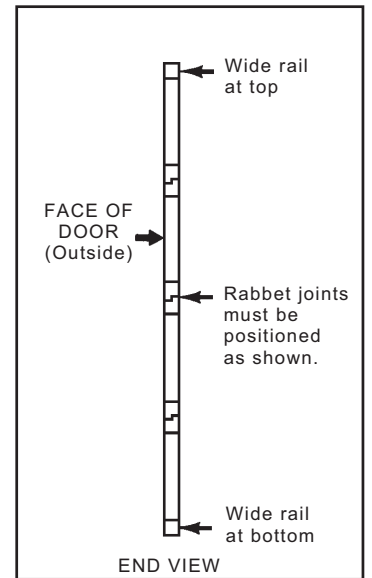
(Two - 1/2" x 18" long steel rods)

for Torsion Spring Counterbalance only, included with Pre-packed Door.

KEY DRAWING

NOTES

- ① Top rails, bottom rails, center stiles and end stiles on Insulated Doors are not visible as shown, but do exist.
- ② Step-Lift handles must be mounted near bottom rail.
- ③ Lock mounting hole locations will vary according to size and type of door.
- ④ Lift handles must be mounted vertically on any center stile on lock section, but must clear lock and/or strut and be directly above step lift handle.
- ⑤ Ceiling joists shown run parallel to header. Some structures have joists that run parallel to sidewall.
- ⑥ Bottom sections of Steel doors are supplied with weatherseal installed.
- ⑦ Warning labels are placed on either side, about 5' from the floor.
- ⑧ Bottom bracket warnings are placed on each side adjacent to the bracket position. Do not paint over or cover labels.



Door with Torsion Springs

REMOVING THE EXISTING DOOR

The first and most important step in removing an existing door is to release spring tension which counterbalances the weight of the door. Generally there are two types of springs used to help move the door - "torsion springs" and "extension springs". Refer to the Key Drawing on page 5 and Step 1, page 6 illustration below to see which type of springs your old door has.

⚠ WARNING

DO NOT try to remove doors with **TORSION SPRINGS**. Have a trained technician remove the torsion spring and the attached cables and hardware from the door.

Attempting to remove a torsion spring assembly without proper training or tools may result in an uncontrolled release of spring forces which can cause serious injury.

REMOVING EXTENSION SPRINGS

Extension springs are shown installed on a sectional garage door in the drawing in Step 1 shown below. Instructions for removing this type of spring are given below. If your door has springs that are different from the extension springs shown below, have a trained technician release the spring tension for you.

⚠ WARNING

Raise the door to release spring tension before attempting to remove the door.

Do not attempt to remove or adjust springs with door in the down position. Use locking pliers or "C" clamps to keep the door from moving or falling once the springs are removed.

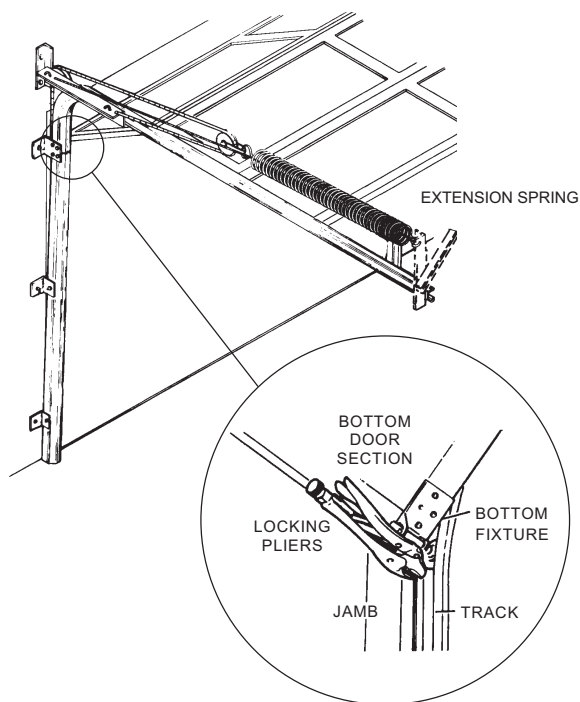
STEP 1

Removing Extension Springs.

Raise the door to the full open position.

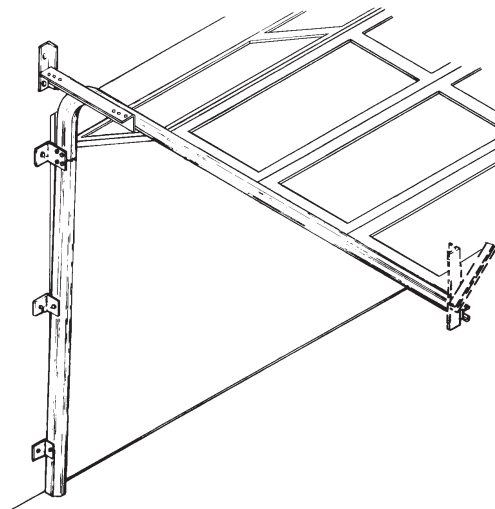
Install locking pliers or "C" clamps to flat portion of track on both sides just below door to prevent door from closing.

With the door fully open, most spring tension has been removed.



STEP 2

Detach the lift cables at both ends. Disassemble and remove the springs and cables completely from the door.



REMOVING THE EXISTING DOOR

STEP 3

Remove the locking pliers or "C" clamps from the track and carefully close the door.

! WARNING

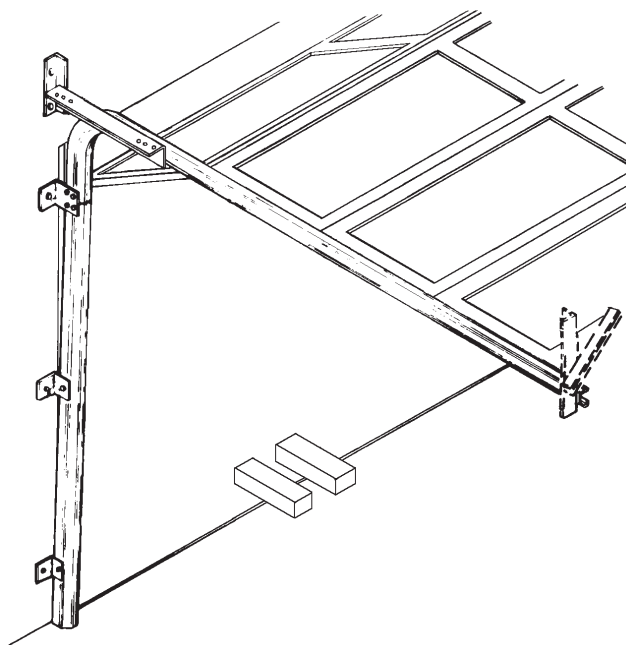
Use two or more helpers to assist you in lowering the door.

Some large wood doors might weigh as much as 400 pounds when the spring tension is removed. The weight of the door will not be apparent when you first begin to close the door. The door will feel progressively heavier as it is lowered until its full weight (as much as 400 pounds) is realized about one foot from the floor. A single car door may weigh as much as 140 pounds.

! CAUTION

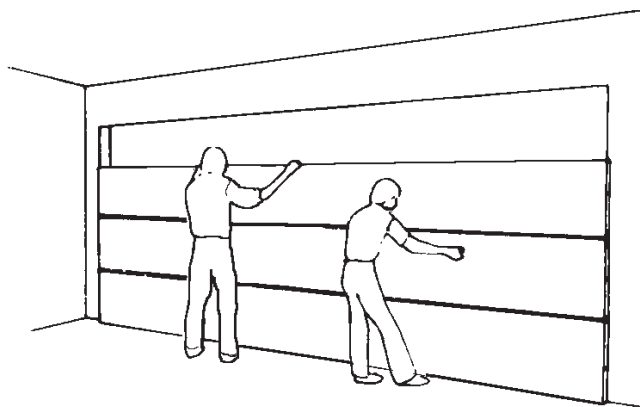
For personal safety, keep hands and fingers clear of section joints, track and other door parts while the door is opening and closing.

Wooden blocks should be placed underneath the door when closing to prevent fingers from being trapped.



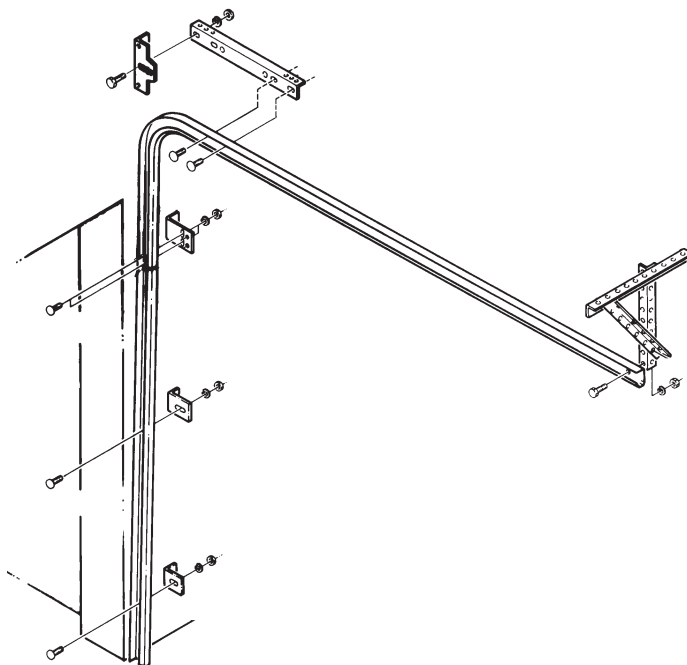
STEP 4

The door can now be disassembled. Starting with the top section, remove the hardware and unstack the sections one at a time.



STEP 5

After all sections have been removed from the opening, remove all remaining track and hardware from the jambs. The hangers that attach the rear ends of the overhead track could be left for reuse on the new door.



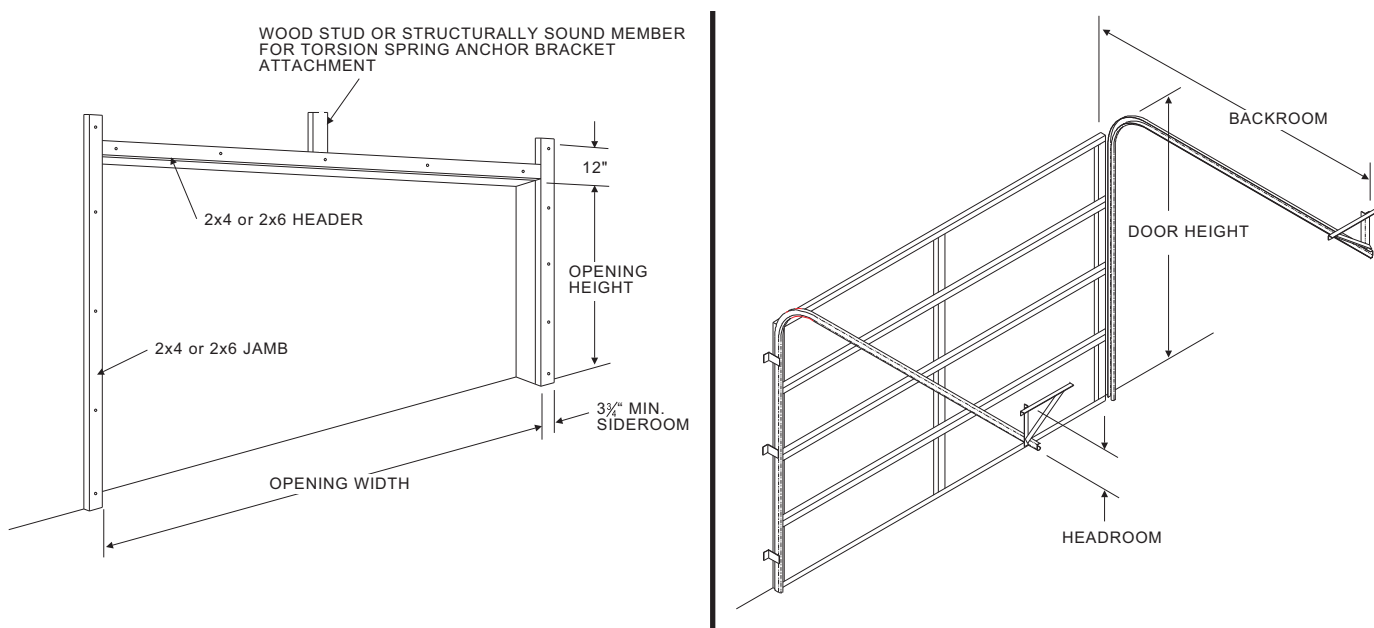
PREPARING THE OPENING

On the inside of the garage the door opening should be framed with wood jambs, 2 x 4's or 2 x 6's. The jambs should extend 12 inches above the header. If you have just removed an old door, the jambs should be inspected for the condition of the wood. If the wood is rotten it should be replaced now. The jambs should be plumb and the header level. If there are any bolts fastening the jambs to the wall, the heads should be flush so they don't interfere with the installation of the new door.

NOTE: Opening width = Door Size

! WARNING TORSION SPRINGS

If the door has a torsion spring assembly, YOU MUST MAKE SURE THAT THE TORSION SPRING ANCHOR BRACKET WILL BE SECURELY FASTENED TO THE GARAGE WALL. Anchor into wood stud or structurally sound member. Failure to securely fasten the anchor bracket could allow the springs to break loose from the garage wall and cause severe personal injury.



Check Headroom

Headroom is the space needed above the top of the door opening for the door, the overhead tracks and the springs. Measure to check that there are no obstructions in your garage within that space. The minimum headroom space requirement is 12 inches.

The backroom distance is measured from the back of the door into the garage, and should be at least $1\frac{1}{2}$ feet more than the height of the opening.

A minimum sideroom of $3\frac{3}{4}$ inches should be available on each side of the door.

NOTE: About three inches of additional headroom height at the center plus additional backroom is needed to install an automatic garage door opener. Check door opener instructions.

Low Headroom

If you have restricted headroom, several remedies are available. Contact your nearest Overhead Door dealer for correct product.

Door stop molding should be temporarily nailed to the edges of the jambs (see General Note 3, page 4).

STRUT INSTALLATION - COURTYARD DOOR - NO WINDOWS

Struts are attached after hardware is installed.

All doors are furnished with one, three, or four struts.

Courtyard Series doors use **one strut** on the top section for 8'-0" thru 10'-2" if there is **no** glass in top section. Wider doors (over 10'-2") use **three struts**. These wider doors (over 10'-2") use **four struts** if there is glass in the top section.

When a single strut is furnished, that strut is attached to the top section. If three or more struts are supplied, those struts will be attached to the top, 1st intermediate and bottom sections.

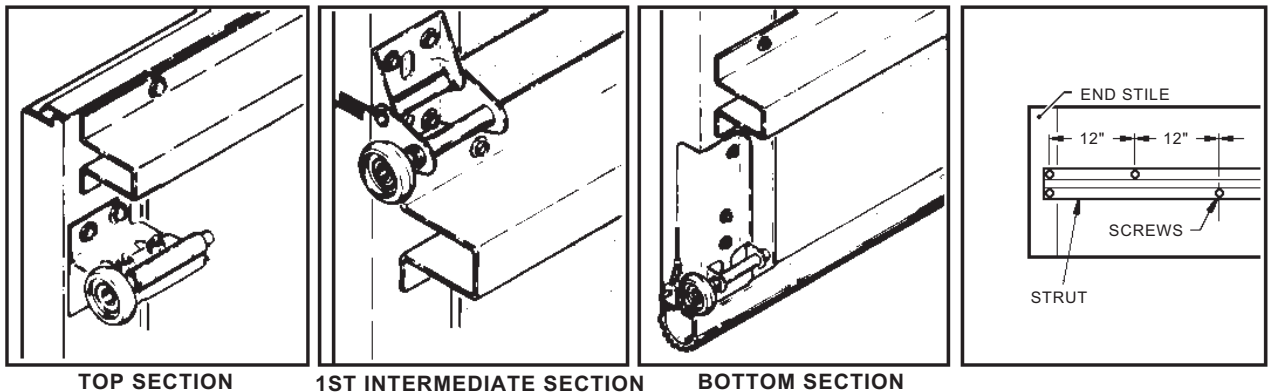
The top section strut is horizontally centered so that the strut flange is flush with the top edge of the door.

The #2 strut is horizontally centered just under the end hinges on the 1st intermediate section.

The bottom section strut is horizontally centered just above the bottom fixtures.

Struts are attached with self-drilling screws (605879-0001).

Use two screws at each end of strut, and then at 12" spacing across section, alternating from upper to lower flange of strut.

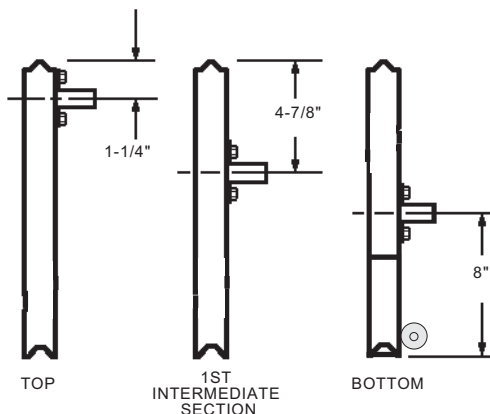


TOP SECTION

1ST INTERMEDIATE SECTION

BOTTOM SECTION

STRUT LOCATIONS



TOP

1ST INTERMEDIATE SECTION

BOTTOM

STRUT SCHEDULE

	Doors with NO glass	Doors WITH glass
Door widths 8'-0" thru 10'-2"	1	3
Doors wider than 10'-2"	3	4

STRUT INSTALLATION - COURTYARD DOOR - WITH WINDOWS

Struts are attached after hardware is installed.

All doors are furnished with one, three, or four struts.

Courtyard Series doors use two struts on the top section for single car doors, 8'-0" thru 10'-2" with windows.

Wider doors (over 10'-2") without windows use **three struts**. These wider doors (over 10'-2") with windows use **four struts**, **two** in the top section.

When a single strut is furnished, that strut is attached to the top section. If three or four struts are supplied, those struts will be attached to the top, 1st intermediate and bottom sections.

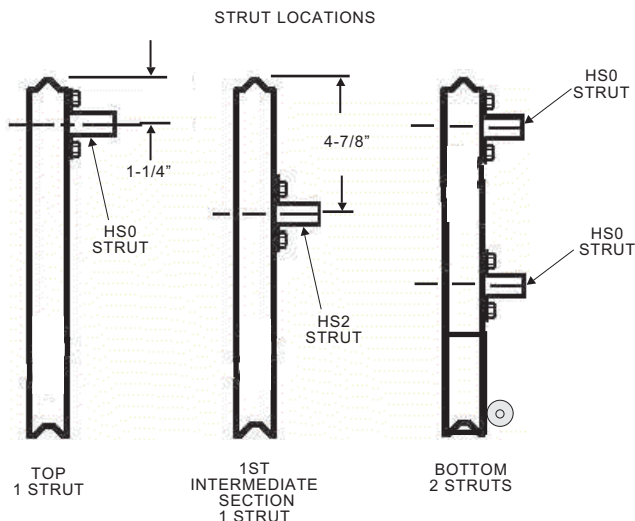
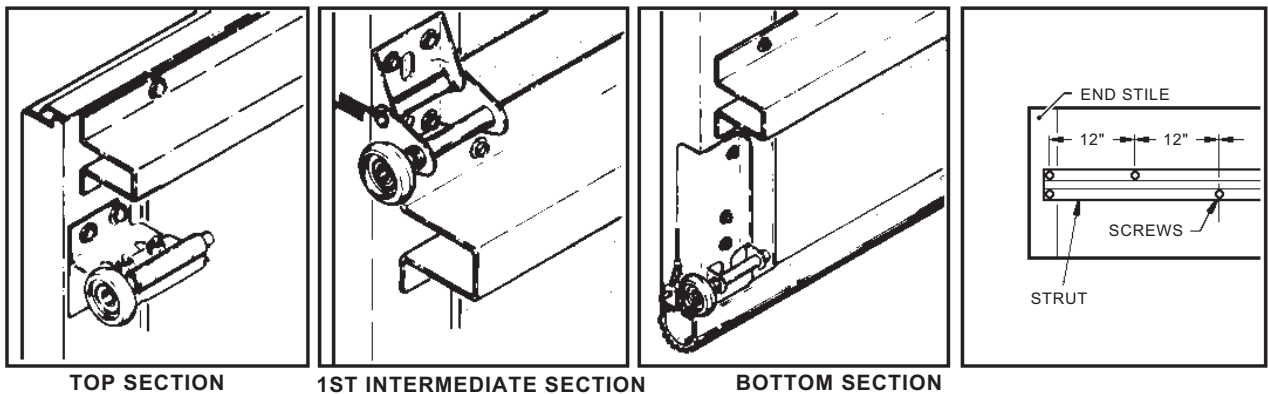
The top section strut is horizontally centered so that the strut flange is flush with the top edge of the door.

The #2 strut is horizontally centered just under the end hinges on the 1st intermediate section.

The bottom section strut is horizontally centered just above the bottom fixtures, and just below the end hinges.

Struts are attached with self-drilling screws (605879-0001).

Use two screws at each end of strut, and then at 12" spacing across section, alternating from upper to lower flange of strut.



STRUT SCHEDULE

	Doors with NO glass	Doors WITH glass
Door widths 8'-0" thru 10'-2"	1	3
Doors wider than 10'-2"	3	4

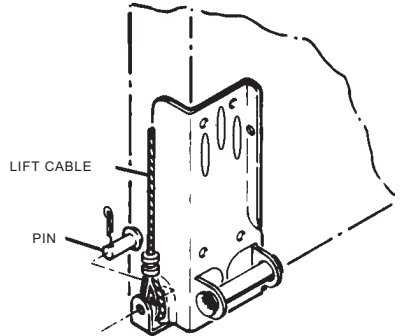
HARDWARE INSTALLATION

STEP 1

Secure lift cables to bottom fixture.

Hold bottom fixture in mounting position.

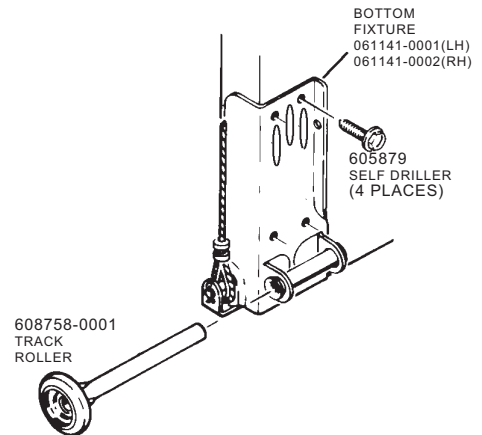
Using bottom fixture as a guide, drill 1/8" diameter pilot holes in door.



STEP 2

Secure bottom fixtures to door.

Install track rollers.

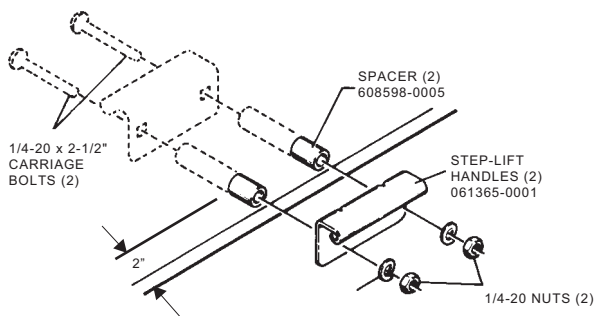


HANDLE INSTALLATION

STEP 3

Install step-lift handles (supplied when lock is furnished) according to instructions below.

- Align step-lift handle with bottom edge of door (on the inside) so that it is under the lock. Make sure that it is no closer than six (6) inches from the edge of the door. Drill two (2) 1/4" dia. holes through door using holes in step-lift handle as a guide.
- Drill two (2) 1/2" dia. holes through inside of door only, using 1/4" holes as pilot.
- Insert carriage bolts through outside handle and door.
- Slide spacers over carriage bolts from inside.
- Secure handles to door with lockwashers and nuts.



KIT 406984-0007

WITH TWO(2) EXTRA CARRIAGE BOLTS
2-1/2" LONG

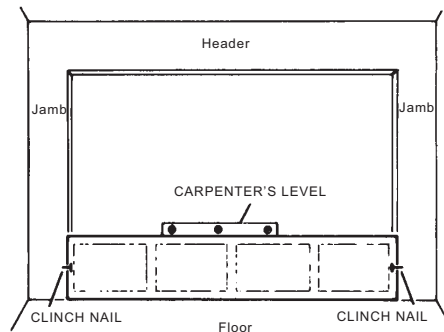
SECTION INSTALLATION

STEP 4

ALL SECTIONS

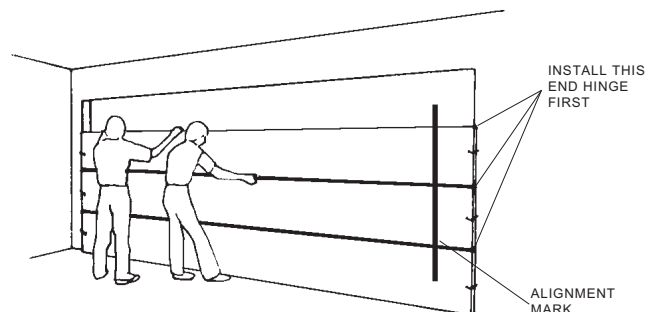
Install Stop Mold (See General Note 3, page 4).
Center and level bottom section in doorway.

Clinch nail bottom section to jambs.
(See General Note 4, page 4)



Stack Bottom and Intermediate Sections
in doorway.

**NOTE: Align sections using alignment mark
decal on right side. Install end hinge nearest
alignment mark first. Remove decal after
installation.**



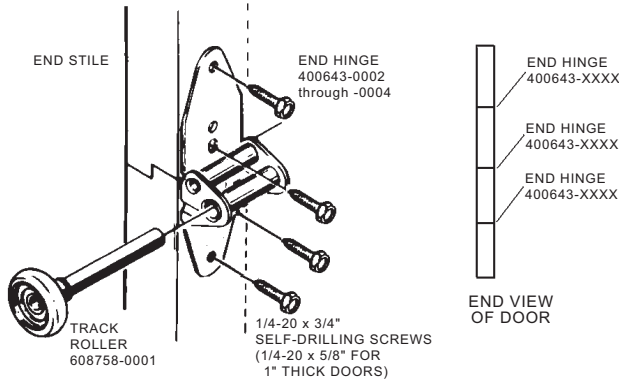
HARDWARE INSTALLATION CONT.

HINGE INSTALLATION

STEP 5

Install end hinges at top of each end stile on each section. Install end hinge closest to the alignment mark first. Do not secure fasteners completely.

Install track rollers.



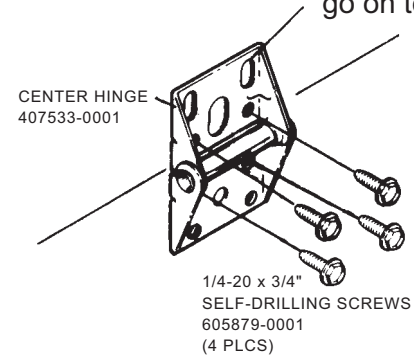
After door sections have been installed in opening, secure upper hinge halves to next higher section and secure all fasteners.

CENTER HINGE INSTALLATION

STEP 6

Install center hinges to the top of each panel at the holes provided on each section. Do not secure fasteners completely.

NOTE: Slots go on top.

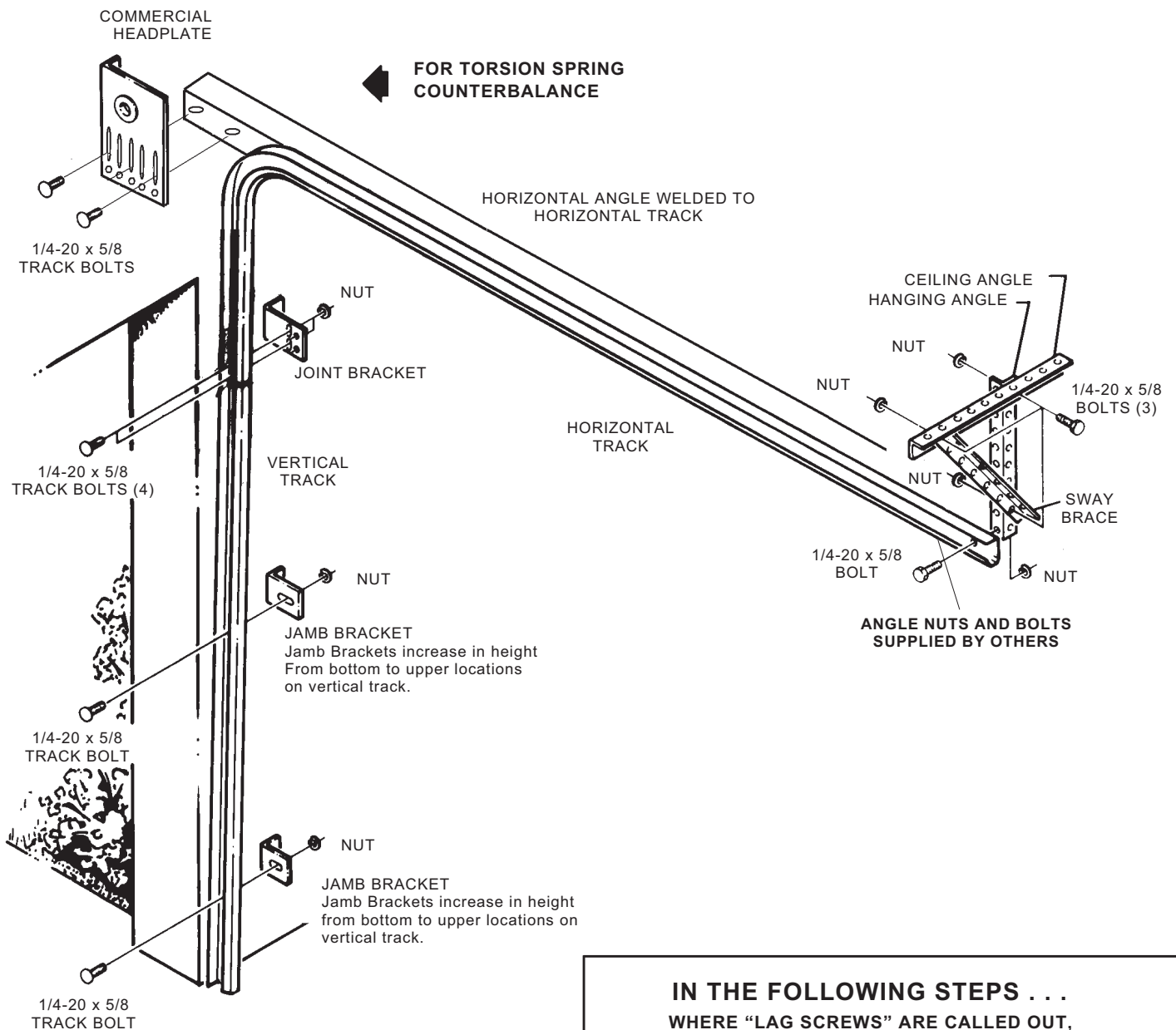


After door sections have been installed in opening, secure upper hinge halves to next higher section and secure all fasteners.

TRACK ASSEMBLY

The drawing below shows all track components and assembly hardware for residential track with extension spring and torsion spring counterbalance headplates and brackets.

Follow the step sequence for assembly and installation.



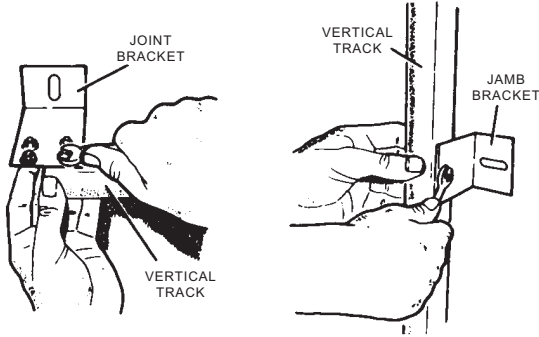
IN THE FOLLOWING STEPS . . .
WHERE "LAG SCREWS" ARE CALLED OUT,
USE THE 5/16" x 1-3/4" LAG SCREWS
SUPPLIED UNLESS OTHERWISE INDICATED
TO SECURE JAMB BRACKET ONTO JAMB.

TRACK ASSEMBLY

STEP 1

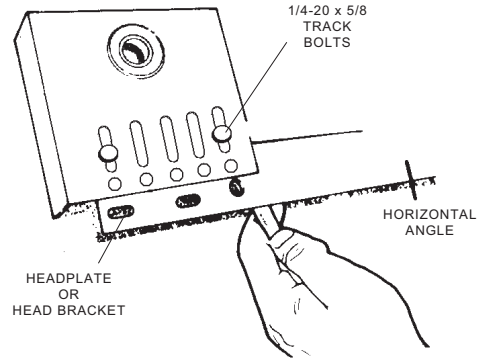
Secure joint brackets to vertical tracks using track bolts.

Install bottom and center jamb brackets on vertical tracks using track bolts.



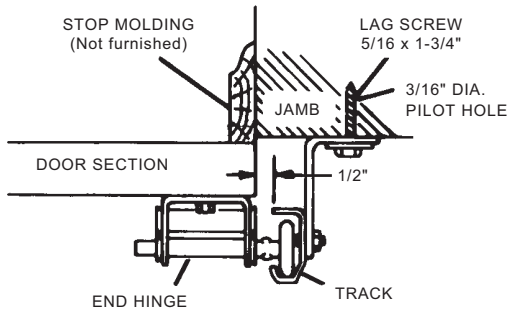
STEP 4

Secure headplates or head brackets to track radius using track bolts for headplates and head brackets.



STEP 2

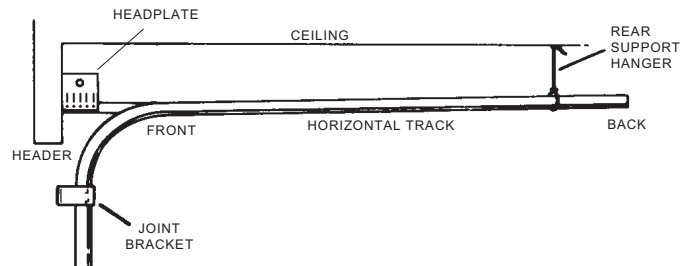
NOTE: When positioning vertical tracks over track rollers, track must be spaced 1/2" away from end of door as shown in detail below.



STEP 5

Install horizontal track by supporting rear of track with temporary hanger. Secure horizontal track to joint brackets.

Align headplates or head brackets with vertical tracks and secure to header using lag screws.

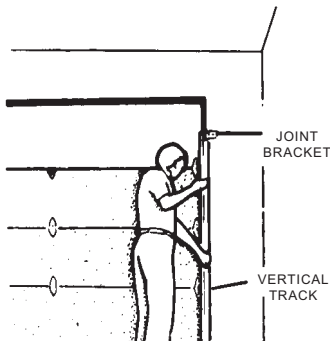


STEP 3

Position vertical tracks over track rollers.

Adjust vertical track(s), as required, to match leveling of bottom section.

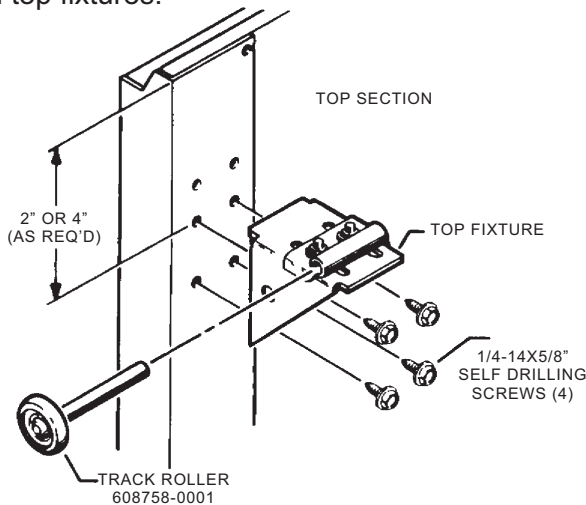
Secure joint brackets and jamb brackets to jambs using lag screws.



TRACK ASSEMBLY

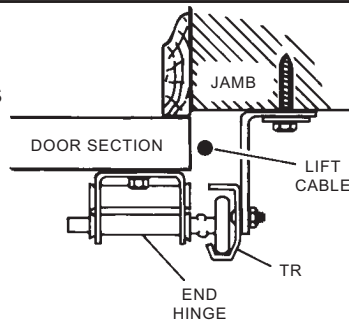
STEP 6

Install top section. Install track rollers in top fixtures.
Hook track roller/top fixture into track.
Install top fixtures.



STEP 7

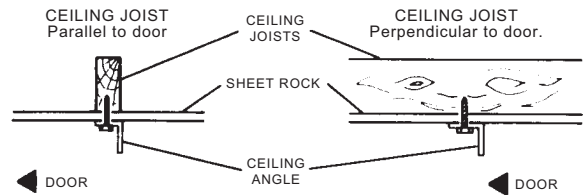
Route lift cables up ends of door sections and over joint brackets.
Remove all clinch nails.
Make sure horizontal tracks are parallel and perpendicular to the wall.



STEP 8

Using a stud finder, locate ceiling joists nearest rear end of horizontal tracks.
NOTE: The "KEY DRAWING" should help to locate ceiling joists.

Cut two 24" lengths of perforated angle for ceiling angles (not supplied).

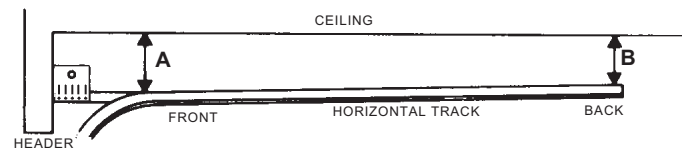


- Secure ceiling angles to ceiling joists using lag screws (not supplied).

STEP 9

Measure distance from ceiling to horizontal tracks at front and rear.

NOTE: Rear of tracks should be elevated 1" higher than front. Tighten track bolts shown in Step 5.

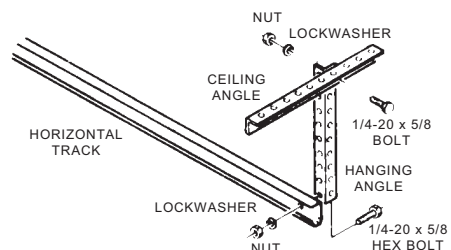


Dimension "B" should be 1" less than dimension "A".

STEP 10

Cut vertical hanging angles to length required from perforated angle (not supplied).

Secure hanging angles to ceiling angles and track using hex head bolts (not supplied).
DO NOT install sway braces at this time.



DOOR ASSEMBLY CHECK LIST

COMPLETION CHECK LIST

- Make sure all fasteners are secure at:
 - Bottom Fixtures
 - End Hinges
 - Center Hinges
 - Top Fixtures
 - Handles (As Required)
 - Struts and Straps (if required)
 - Joint Brackets
 - Jamb Brackets
 - Hanging Angles
 - Ceiling Angles
 - Headplates or Head Brackets
 - Horizontal Angles

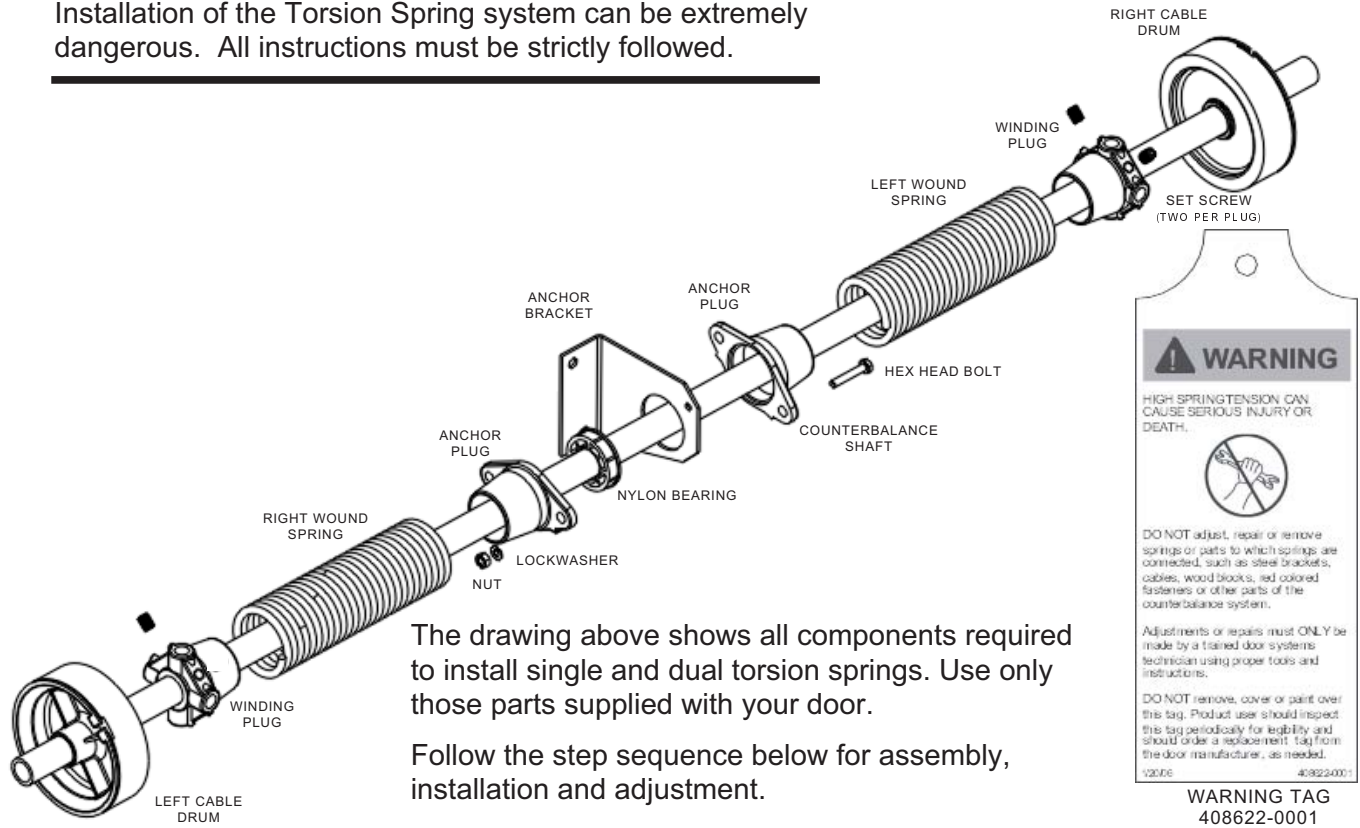
Make sure lift cables are attached securely.

Make sure all clinch nails are removed.

TORSION SPRING COUNTERBALANCE ASSEMBLY (SCREW-IN PLUGS)

WARNING

Installation of the Torsion Spring system can be extremely dangerous. All instructions must be strictly followed.



TORSION SPRING COUNTERBALANCE (SCREW-IN PLUGS)

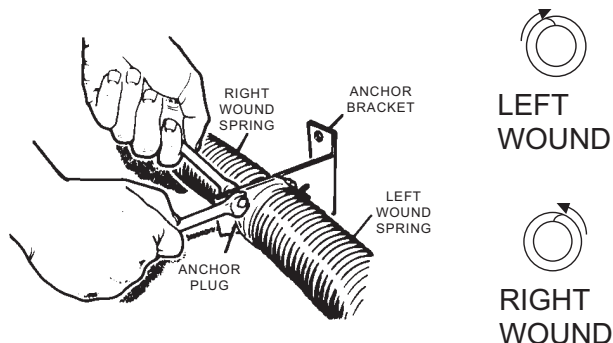
STEP 1

Secure anchor plug(s) to anchor bracket.

NOTE:

Single torsion spring: If spring is "Left" wound it should be located on right side of anchor bracket. If spring is "Right" wound it should be located on left side of anchor bracket.

Dual torsion springs: "Left" wound spring located on right side of bracket and "Right" wound spring on left side.



STEP 2

Slide torsion spring assembly onto counterbalance shaft.

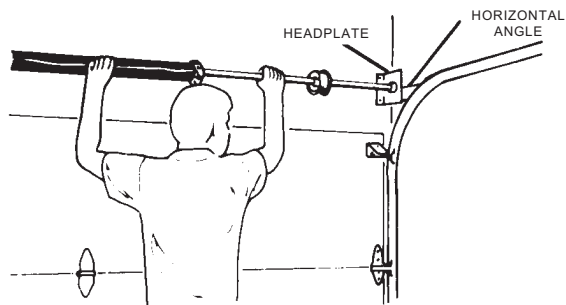
Install cable drums on shaft. Make sure left and right drums are on correct ends.

NOTE: Drums are marked "R" for right and "L" for left.

Do not secure setscrews at this time.

Lay counterbalance shaft assembly on horizontal angles, then insert one end thru headplate with largest amount of sideroom.

CAUTION: Do not insert shaft far enough to pull opposite end off its horizontal angle. Go to opposite end and insert shaft thru remaining headplate. For double wide doors two people are recommended.



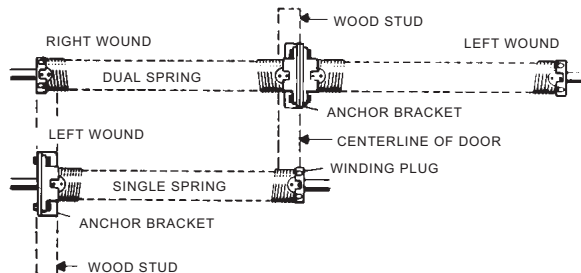
STEP 3

Raise anchor bracket up to header until counterbalance shaft is level or slightly above.

NOTE: Anchor bracket must be mounted so that center of shaft does not sag below level.

SINGLE SPRINGS - Locate winding plug near centerline of door.

DUAL SPRINGS - Locate anchor bracket near centerline of door.



Secure anchor bracket to stud using 5/16 x 2-1/2" screws in 3/16" pilot holes.

! WARNING

Anchor brackets will be under high spring tension and must be securely fastened to a structurally sound wood member or the bracket can break loose and cause severe personal injury.

Anchor into wood stud or structurally sound member. If you have 1/2" drywall between anchor bracket and wood studs, 2-1/2" lag screws should be used.

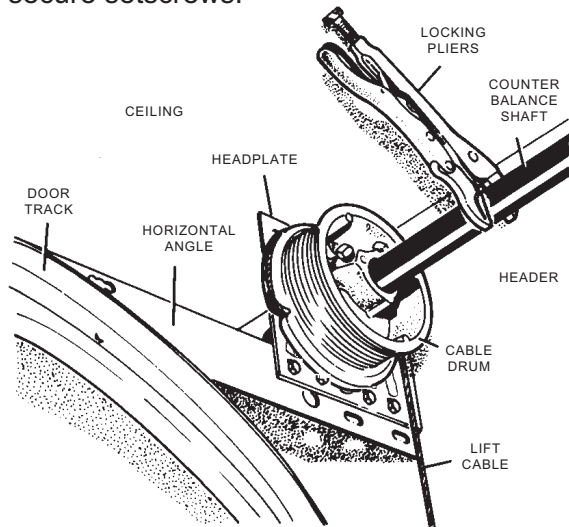
TORSION SPRING COUNTERBALANCE (SCREW-IN PLUGS)

STEP 4

Route left side lift cable up to cable drum and insert into cable slot.

Wind lift cable onto cable drum until all slack is removed and install locking pliers on shaft with handles against ceiling or header.

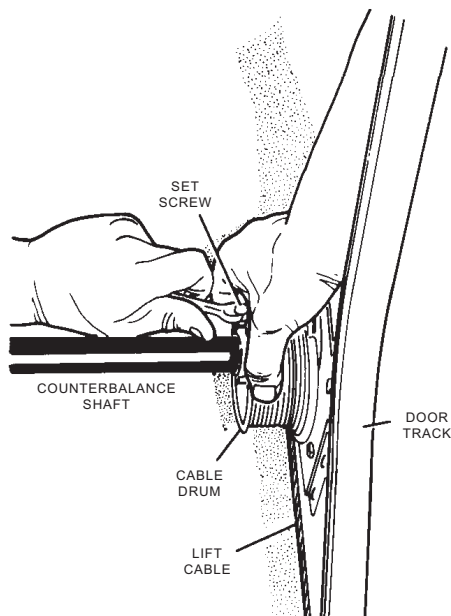
Position right cable drum against right headplate and secure setscrews.



STEP 5

Route right side lift cable up to cable drum and insert into cable slot.

Wind lift cable onto cable drum until all slack is removed.



STEP 6

Check the following before attempting to wind torsion springs:

Lift cables secure at bottom fixtures.

Lift cables routed unobstructed to cable drums.

Lift cables correctly installed and wound onto cable drums.

Lift cables are taut.

Cable drums are against headplates and setscrews are tight.

Torsion spring(s) are installed correctly.

! WARNING

Winding torsion springs is an **EXTREMELY DANGEROUS** procedure and should be performed by a trained technician or a mechanically experienced person using proper tools and following these instructions.

Should you elect to perform this procedure:

1. Read winding instructions thoroughly.
2. Make sure you understand procedure.
3. Follow the instructions carefully.
4. Wear safety glasses.
5. Use only the winding bars included with the door and described in the "Tools Needed" section. **DO NOT SUBSTITUTE** with screwdrivers, pipe, etc. Other tools may fail and cause serious personal injury.
6. Door must be closed when winding or making any adjustments to torsion spring(s).
7. Sound footing is required. Before attempting to wind torsion spring(s) make sure stepladder is sturdy and positioned correctly.

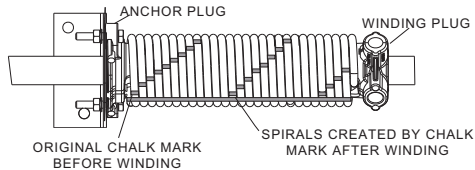


NOTE: Clamp locking pliers to flat portion of door track just above door. This will prevent door from rising quickly once torsion spring winding is complete.

TORSION SPRING COUNTERBALANCE (SCREW-IN PLUGS)

STEP 7

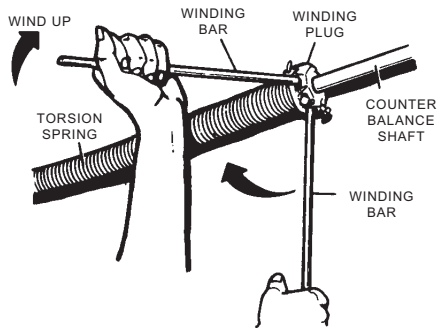
Draw a chalk line horizontally along the center of the spring coil. As spring is wound, chalk mark will create a spiral. These can be counted to determine the number of turns on the spring.



STEP 8

Insert a winding bar into winding plug and rotate plug 1/4 turn in the direction shown.

Insert second winding bar into plug, take up torque load and remove first winding bar.



! WARNING

DO NOT remove a winding bar from winding plug until a second bar has been fully seated in plug and torque load has been assumed.

Continue winding torsion spring until spring is wound the required number of turns.

- 6 Foot high doors - 6 1/2 turns
- 7 Foot high doors - 7 1/2 turns
- 8 Foot high doors - 8 1/2 turns

STEP 9

After winding spring, keep winding bar fully seated in plug.

Secure winding plug setscrews and remove winding bar.

Remove locking pliers from counterbalance shaft.

If dual torsion springs are used, wind remaining spring the same as the first.

Remove locking pliers from door track.

See Step 12 for adjustment.

STEP 10

! WARNING

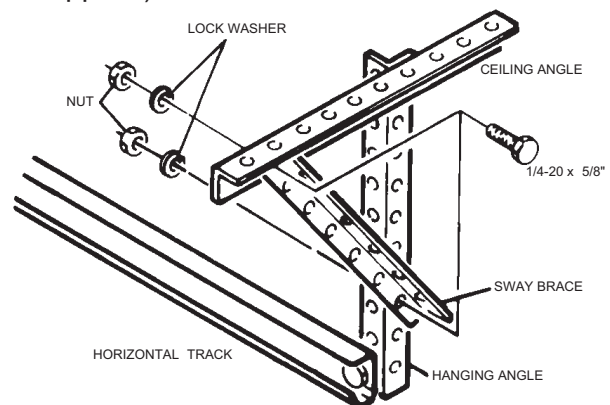
If horizontal tracks are set too far apart at rear, door may fall from tracks resulting in serious personal injury. Raise door slowly so that distance between tracks can be checked.

Raise door slowly. Watch top track rollers and horizontal tracks.

Check spacing between ends of door and tracks. Maintain 1/2" clearance.

If tracks are set too far apart, lower door and make necessary adjustments.

Cut sway braces from perforated angle (not supplied) and install using hex head bolts (not supplied).



TORSION SPRING COUNTERBALANCE

FINAL ADJUSTMENTS

STEP 11 SCREW-IN PLUGS

Raise door to check spring tension.
Too much spring tension will not allow door to close fully.

Insufficient spring tension will make door hard to open.

Readjust spring tension as required. If tension has to be readjusted, be sure to insert a winding bar into winding plug and assume radial torque load before loosening setscrews.

Observe all previous WARNINGS.

Adjust spring tension in 1/4 turn increments.

Use locking pliers shown in Step 5 before adjusting single spring doors.

Verify that the counterbalance shaft turns freely in the anchor plug and that the spring tangs do not come in contact with the shaft.

STEP 12

Lightly oil springs, hinges and lift cables using 30 wt. oil. Wipe off any excess oil.

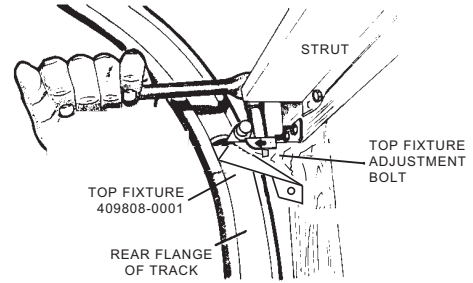
If door is painted after installation, torsion springs will have to be readjusted to compensate for the added weight.

With door closed, loosen center and bottom jamb bracket track bolts.

At bottom of door, push vertical track as far forward as possible and secure track bolt at bottom jamb bracket.

Resecure track bolt at center jamb bracket.

Adjust stop molding against outside face of door and secure.



Adjust top fixtures until top section is flush against stop molding and track rollers are against rear flange of track.

NOTES