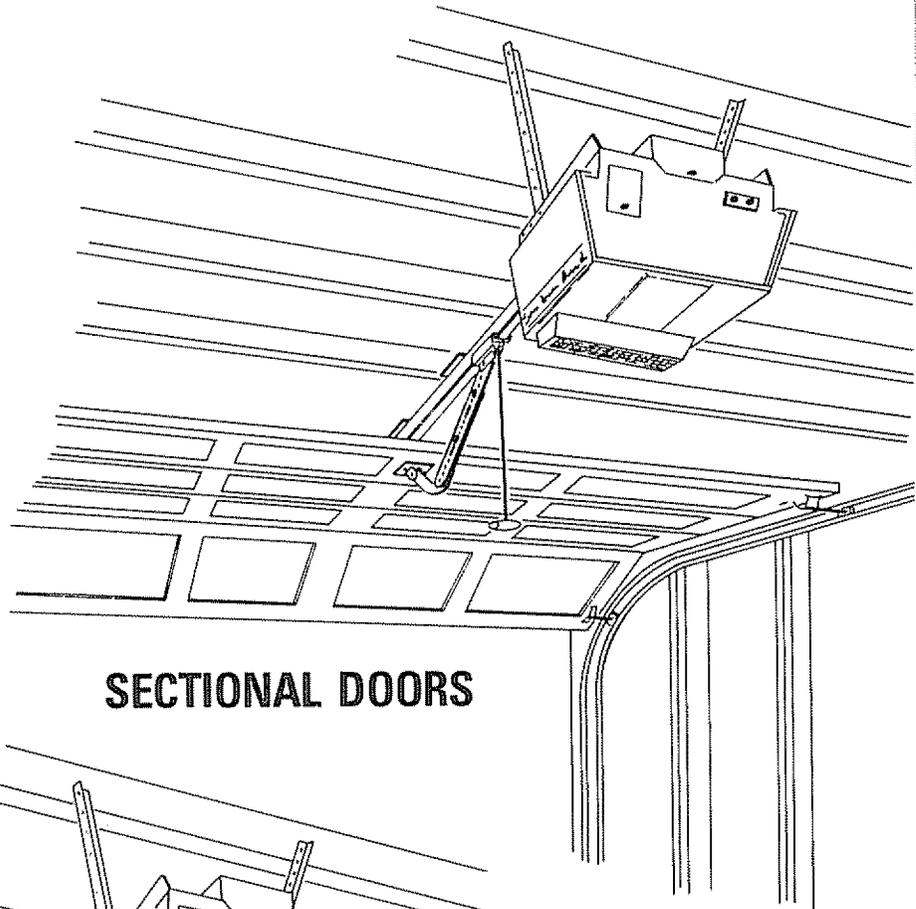


Sears

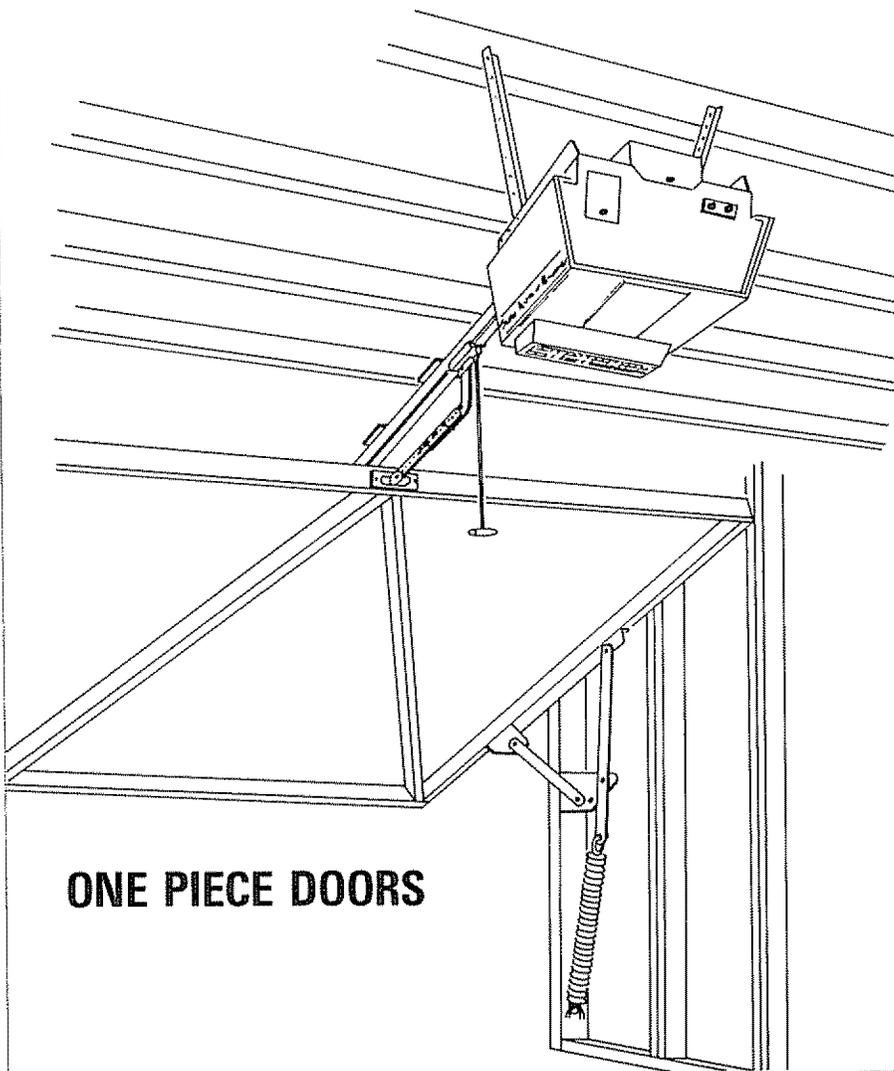
Garage
Door
Opener
Models

139.653000

139.653100



SECTIONAL DOORS



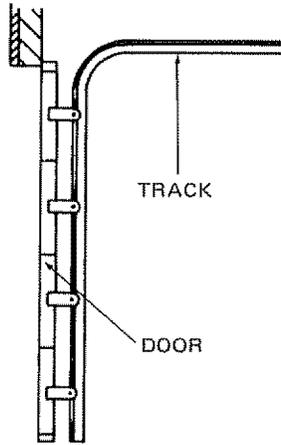
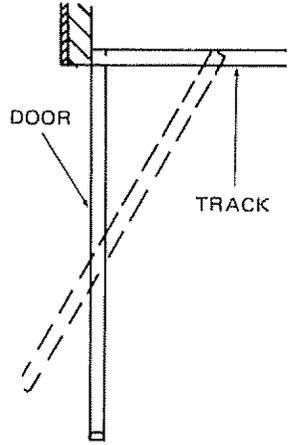
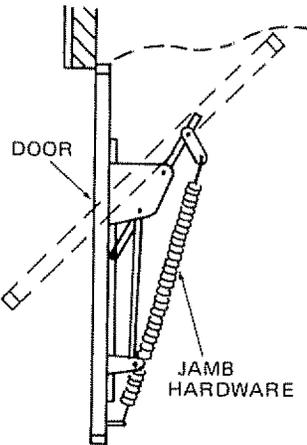
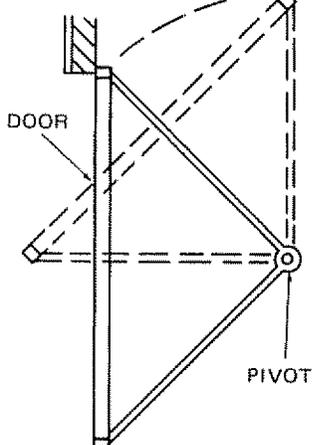
ONE PIECE DOORS

INSIDE

- COMPLETE INSTRUCTIONS FOR ASSEMBLY, INSTALLATION & ADJUSTMENT
- RADIO CONTROL INFORMATION
- OPENER WIRING DIAGRAM
- PARTS LISTS
- SAVE-A-CALL HINTS
- ALSO —
- SEARS WARRANTY
- SEARS MAINTENANCE AGREEMENT BENEFITS
- OPENER FEATURES
- MAINTENANCE TIPS
- SAFETY SUGGESTIONS
- ACCESSORIES

Before You Start . . .

identify your door • follow specific index for assembly and installation

<p>Sectional Door With Curved Track</p>  <p>INSTRUCTION INDEX Assembly Pg. 6 Installation Pg. 8</p>	<p>One Piece Door. Jamb Hardware. Horizontal Track.</p>  <p>INSTRUCTION INDEX Assembly Pg. 6 Installation Pg. 14</p>	<p>One Piece Door. No Track. Jamb Hardware.</p>  <p>INSTRUCTION INDEX Assembly Pg. 6 Installation Pg. 14</p>	<p>One Piece Door. No Track. Pivot Hardware.</p>  <p>INSTRUCTION INDEX Assembly Pg. 6 Installation Pg. 14</p>
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COMMON INDEX :	Warranty	2	Safety Rules	3	Wiring Diagram	20
	Maintenance	3	Radio Controls	17	Parts Lists	21

Carton Check List—

SEARS Has packaged your Garage Door Opener in 2 cartons with handles.

THE LARGE CARTON CONTAINS:

- 1 Box of Radio Controls
- 1 Operator assembly (in foam end caps)
- 1 Plastic light lens
- 1 Box of rail assembly hardware
- 1 Owners manual

- 1 Box of chain
- 1 Curved door arm
- 1 Straight door arm
- 1 Bag of installation hardware
- 1 Handy hints label



THE SMALL CARTON CONTAINS:

- 1 Three-section Tee rail
- 2 Sections of hanging strap

Sears Garage Door Opener Warranty

FULL 90 DAY WARRANTY ON GARAGE DOOR OPENER

When the Garage Door Opener is installed, adjusted and operated in accordance with our instructions, Sears will, for a period of 90 days from the day of purchase, repair any defect in material or workmanship in the Garage Door Opener, at no charge.

LIMITED WARRANTY

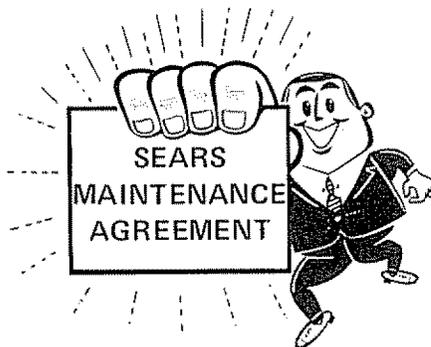
From the 91st day until one year from the day of purchase, when the Garage Door Opener is installed, adjusted and operated in accordance with our instructions, Sears will furnish replacement parts for any defective parts in the Garage Door Opener, free of charge. You pay labor.

Warranty service is available by simply contacting the nearest Sears store or service center throughout the United States. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Sears Roebuck & Co., BSC 41-3, Sears Tower, Chicago, IL 60684

Preparation

MAINTAIN THE VALUE OF YOUR GARAGE DOOR OPENER WITH A SEARS MAINTENANCE AGREEMENT



Sears Garage Door Openers are designed, manufactured and tested for years of dependable operation. Any Garage Door Opener however, may require service from time to time. The Sears warranty plus the Sears Maintenance Agreement provides coverage from unexpected repair bills from normal use and assures you of obtaining the maximum use possible from your purchase.

The only exceptions to the coverage provided by the Sears' Maintenance Agreement are repairs necessary because of acts of abuse, fire, flood, wind, lightning and freezing.

Here is a comparative chart indicating the warranty and Maintenance Agreement coverage for a Sears Maintenance Agreement.

Coverage	Years of Ownership			
	1	2	3	4
1) Defective Parts	W	MA	MA	MA
2) Service to replace defective parts	90 Days Warranty MA	MA	MA	MA
3) Service, (technical and non-technical) and parts necessary for proper operation not covered by the warranty	MA	MA	MA	MA
4) Preventive maintenance check at customer's request	MA	MA	MA	MA

W = Warranty

MA = Maintenance Agreement

CONTACT YOUR SEARS SALESPERSON OR LOCAL SEARS SERVICE CENTER AND PURCHASE A SEARS MAINTENANCE AGREEMENT TODAY!

To obtain the best service from your Garage Door Opener and to avoid needless inconvenience or service expense, please use "Save-A-Call" on Page 23 of this manual.

Rules For Safe Operation

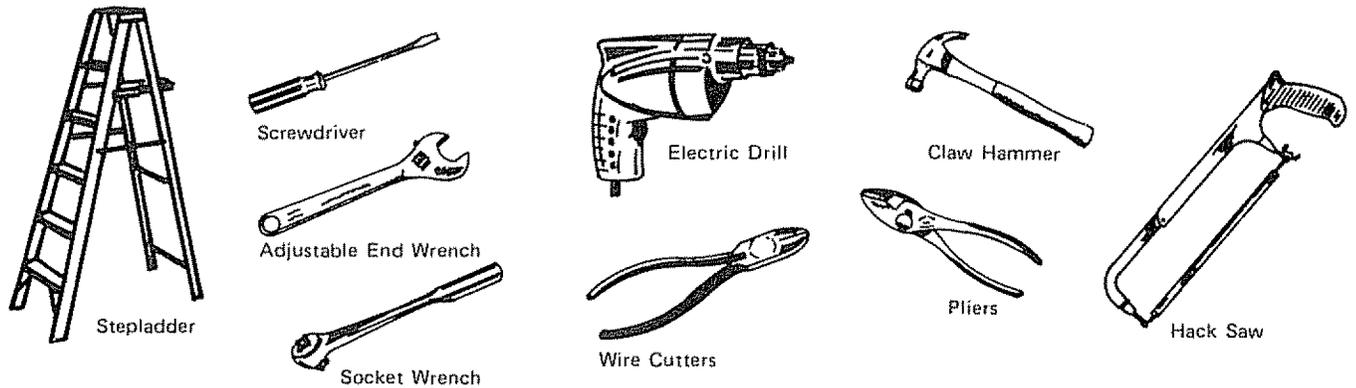
**WARNING—DOOR SPRINGS CAN CAUSE FATAL INJURIES.
DO NOT ATTEMPT ADJUSTMENTS UNLESS YOU ARE
PROFESSIONALLY TRAINED.**



1. Installation and wiring must conform to local building and electrical codes.
2. Keep door hinges and rollers well lubricated. A lubrication used every three months will insure minimum maintenance and continuing quiet operation. Do not lubricate the tracks.
3. The only part of your opener that requires lubrication is the rail on which the trolley rides. Clean the rail once a year with solvent and a clean rag, then re-lubricate with rail grease included in hardware package.
4. **Your door must be in good balance for proper operation of the opener safety system. It should travel up and down freely with normal manual impetus. If the door springs are weak, have a serviceman replace them.**
5. Your new opener will provide adequate locking for your door (Sectional track-type door). Existing locks should be made inoperative. Pin the door latch open with a stout wood screw or other disabling device.
6. Remove all ropes connected to the garage door.
7. Before making repairs, disconnect electric power to opener!
8. Do not operate transmitter unless garage door is in sight.
9. Fasten Handy Hints label near wall button.

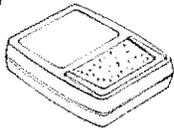
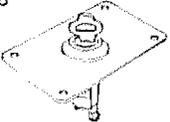
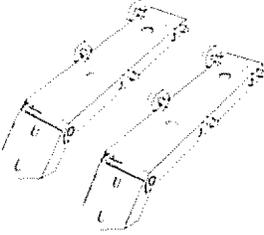
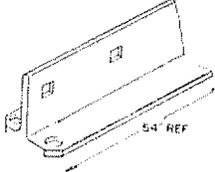
You'll Need Tools

During assembly and installation of your opener, the instructions will call for use of various hand tools. Have a stepladder handy, and those tools illustrated below: Hammer, electric drill (also 3/16" and 5/16" drill bits), screwdriver, adjustable end wrench or socket wrench kit, wire cutters, pliers and hacksaw.



Accessories

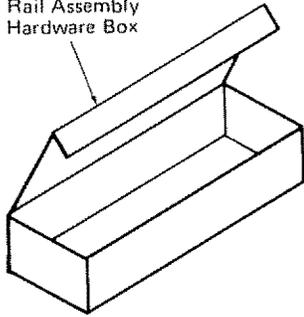
Sears stocks many useful accessories for your garage door opener. They are illustrated below with Sears stock numbers and descriptions:

<p>6545</p> 	<p>Extra transmitter for use with the following Sears stock nos. 6550, 6530, 6551 and 6531. Black with wood grain trim. ORDER BY CODE LETTER.</p>
<p>6528</p> 	<p>Outdoor Key Switch. Included with best models 6550 and 6551. Just a turn of the key opens the door automatically from outside when transmitter is not handy.</p>
<p>6571</p> 	<p>Quick-Release Key Lock. In case of power failure on garages without service entrances. Wood or metal doors only.</p>
<p>6785</p> 	<p>Quick Turn Brackets for Garage Door Opener installations with low headroom clearance. Reduces headroom requirement to 2 inches.</p>
<p>6538</p> 	<p>Sectionalized T-Rail extension kit. Allows opener to handle garage doors up to 8 feet high. Consists of replacement T-Rail section, chain and master link. For use on sectionalized rail models only.</p>

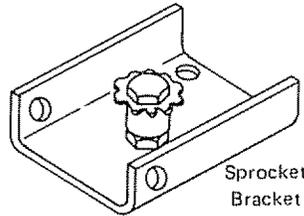
Hardware

Open the hardware containers and check contents before starting!

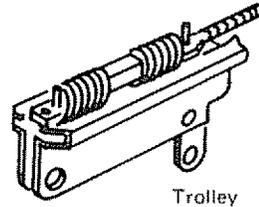
Rail Assembly Hardware Box



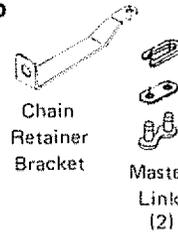
Items in this box are for assembly of the T-rail. Illustrated nuts, bolts, screws and washers are actual size.



Sprocket Bracket

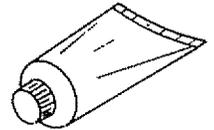


Trolley

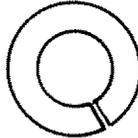


Chain Retainer Bracket

Master Link (2)



Rail Grease



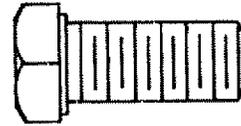
2 Lock Washers 3/8"



2 Nuts 3/8" - 16



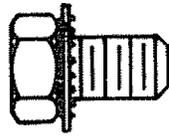
4 Carriage Bolts 1/4" - 20 x 1/2"



2 Screws 3/8" - 16 x 7/8"



4 Lock Nuts 1/4" - 20



2 Washered Screws 5/16" - 18 x 9/16"



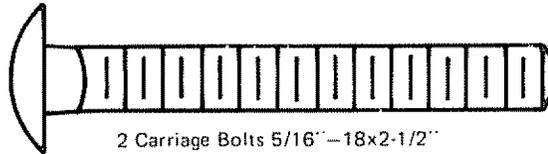
1 Lock Washer 5/16"



2 Nuts 5/16" - 18



Items in this bag are for installing the opener. Illustrated nuts, bolts, screws, pins and washers are actual size.



2 Carriage Bolts 5/16" - 18 x 2-1/2"

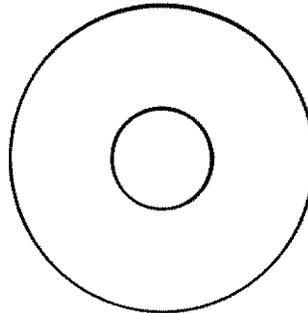


Insulated Staples

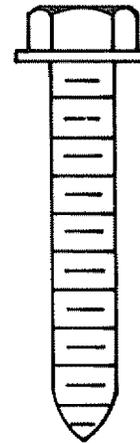
2 Lock Washers 5/16"



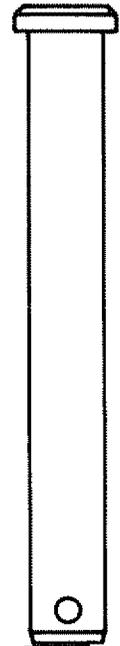
2 Nuts 5/16"



2 Flat Washers



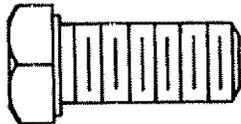
4 Lag Screws 5/16" x 1-7/8"



1 Clevis Pin 3/8" x 3"



2 Clevis Pins 3/8" x 1-1/16"



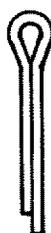
4 Screws 3/8" - 16 x 7/8"



4 Nuts 3/8" - 16



4 Lock Washers 3/8"



3 Cotter Pins 3/32" x 3/4"



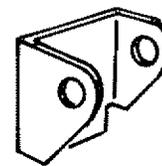
Handle



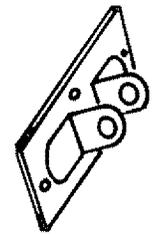
White Lead Wire



Rope



Header Bracket



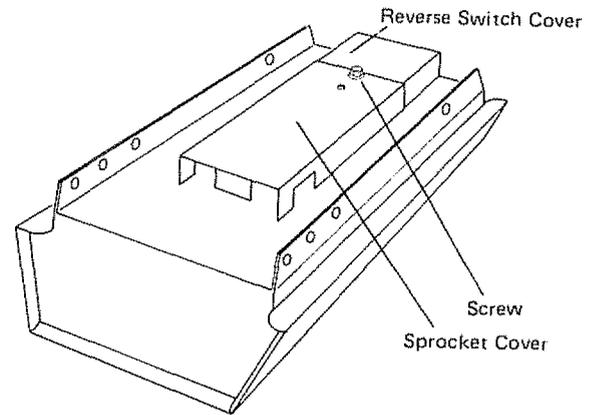
Door Bracket

Assembly

Step 1

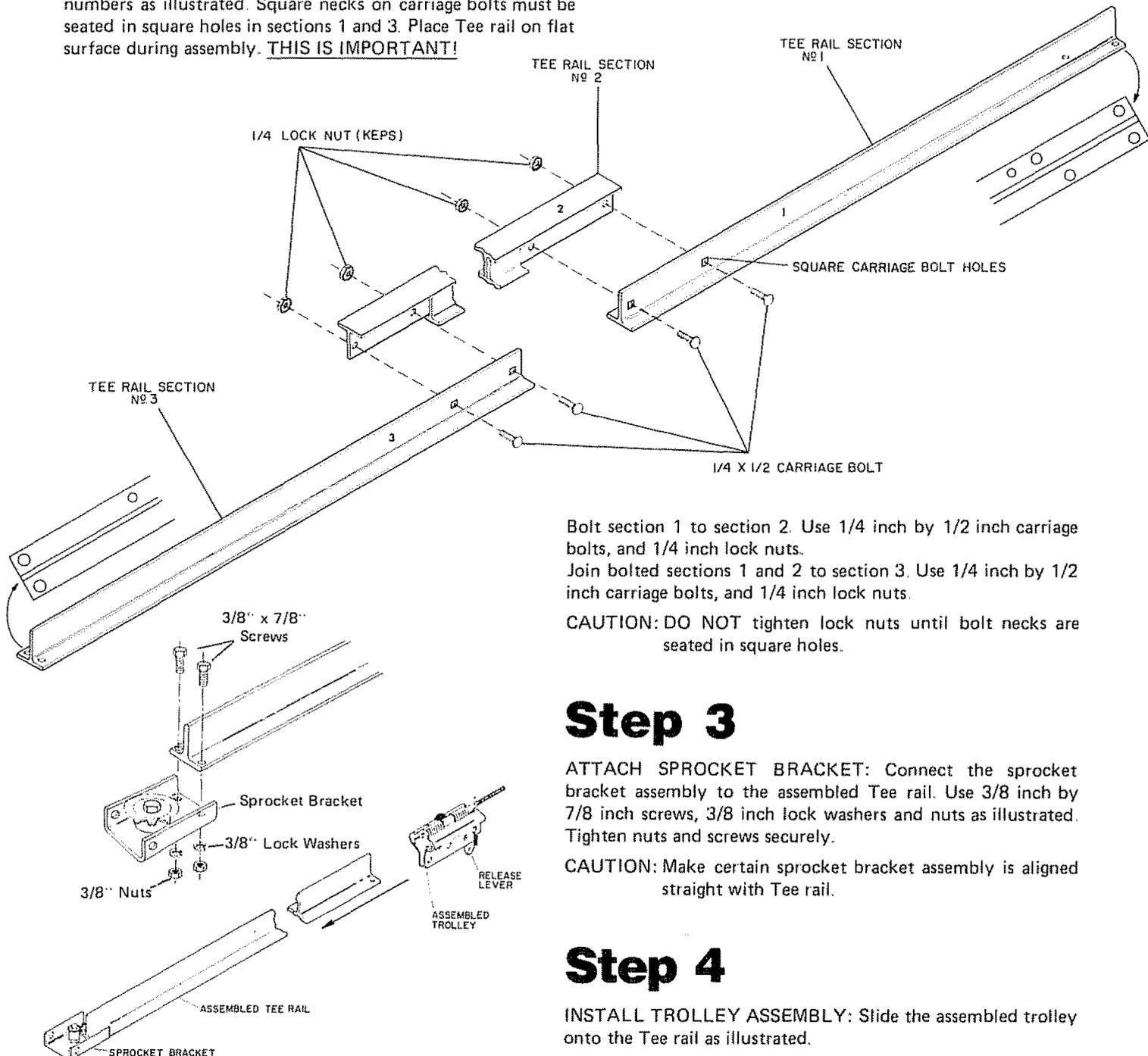
Open Rail Assembly Hardware Box

REMOVE SPROCKET COVER FROM OPERATOR: Place operator on packing material to prevent scratching chassis cover. Remove sprocket cover from top of chassis by unfastening screw as illustrated. **DO NOT REMOVE REVERSE SWITCH COVER.**



Step 2

ASSEMBLE RAIL: Assemble the 3 Tee rail sections by the numbers as illustrated. Square necks on carriage bolts must be seated in square holes in sections 1 and 3. Place Tee rail on flat surface during assembly. **THIS IS IMPORTANT!**



Bolt section 1 to section 2. Use 1/4 inch by 1/2 inch carriage bolts, and 1/4 inch lock nuts.

Join bolted sections 1 and 2 to section 3. Use 1/4 inch by 1/2 inch carriage bolts, and 1/4 inch lock nuts.

CAUTION: DO NOT tighten lock nuts until bolt necks are seated in square holes.

Step 3

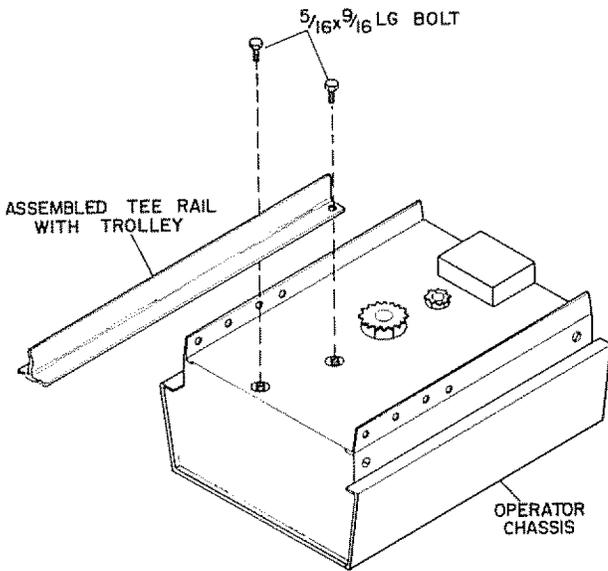
ATTACH SPROCKET BRACKET: Connect the sprocket bracket assembly to the assembled Tee rail. Use 3/8 inch by 7/8 inch screws, 3/8 inch lock washers and nuts as illustrated. Tighten nuts and screws securely.

CAUTION: Make certain sprocket bracket assembly is aligned straight with Tee rail.

Step 4

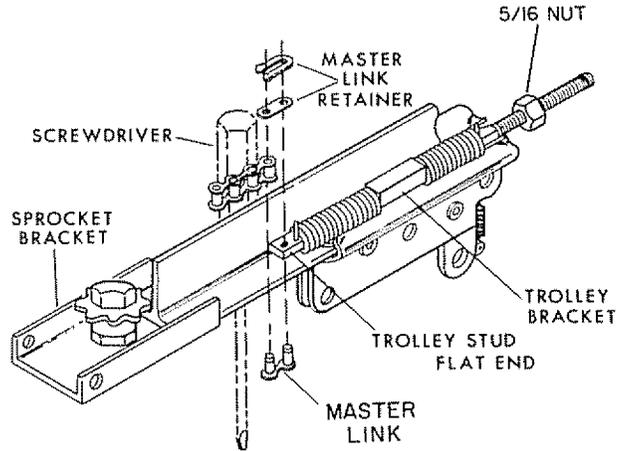
INSTALL TROLLEY ASSEMBLY: Slide the assembled trolley onto the Tee rail as illustrated.

Assembly



Step 5

ATTACH ASSEMBLED TEE RAIL TO OPERATOR: Place operator on packing material to avoid scratching cover. Align two holes in motor end of Tee rail with holes in operator chassis as illustrated. For convenience, place a support under sprocket bracket. Fasten Tee rail to operator with two washed screws 5/16 inch by 9/16 inch. Tighten securely.



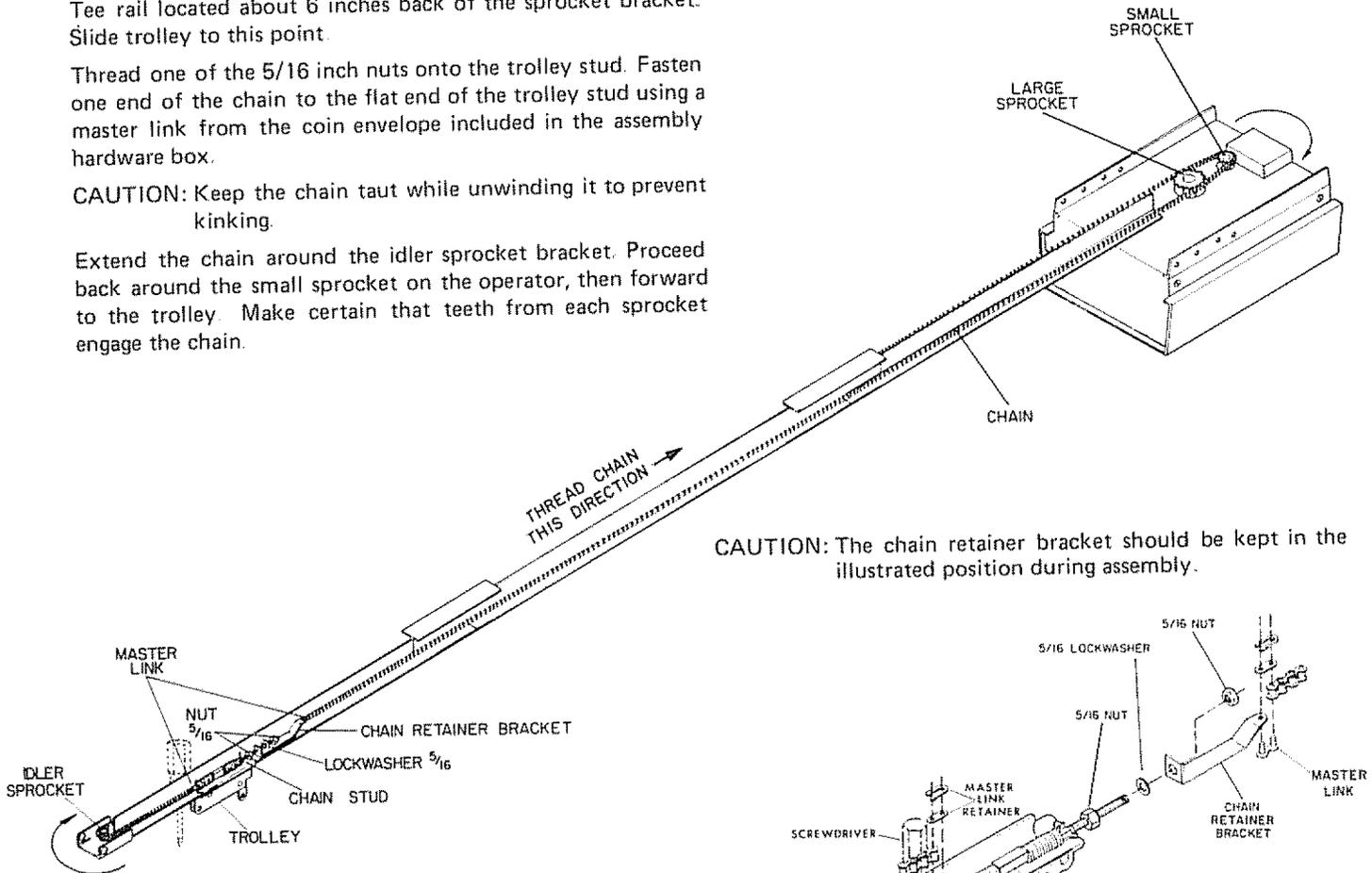
Step 6

INSTALL CHAIN: Insert a screwdriver or nail in the hole in Tee rail located about 6 inches back of the sprocket bracket. Slide trolley to this point.

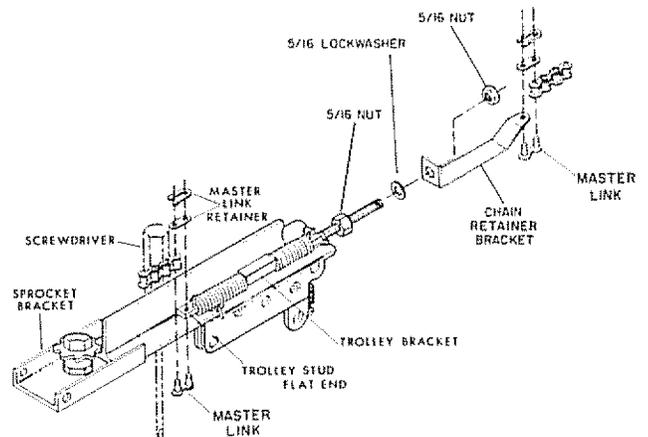
Thread one of the 5/16 inch nuts onto the trolley stud. Fasten one end of the chain to the flat end of the trolley stud using a master link from the coin envelope included in the assembly hardware box.

CAUTION: Keep the chain taut while unwinding it to prevent kinking.

Extend the chain around the idler sprocket bracket. Proceed back around the small sprocket on the operator, then forward to the trolley. Make certain that teeth from each sprocket engage the chain.



CAUTION: The chain retainer bracket should be kept in the illustrated position during assembly.



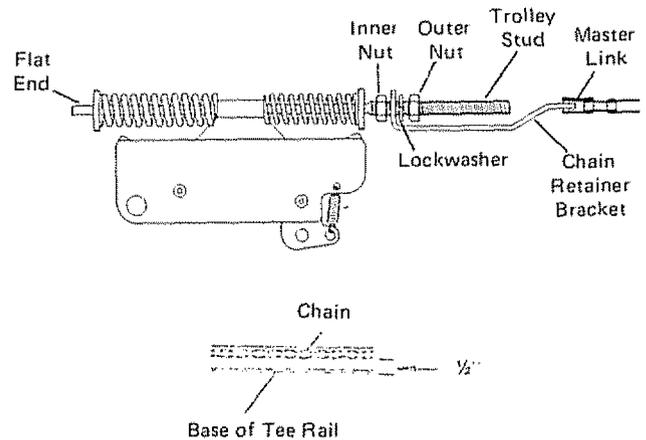
Connect the chain to the chain retainer bracket using the second master link in the coin envelope. Slide the chain retainer bracket onto the chain stud as illustrated. Secure it to the stud with the second 5/16 inch nut and lock washer.

Installation

Step 7

TIGHTEN THE CHAIN: Tighten the chain by adjusting the two 5/16 inch nuts on chain stud designated "inner" and "outer" as illustrated. Chain is properly tightened when it is approximately 1/2 inch above the base of the Tee rail at its midpoint between idler sprocket and the operator.

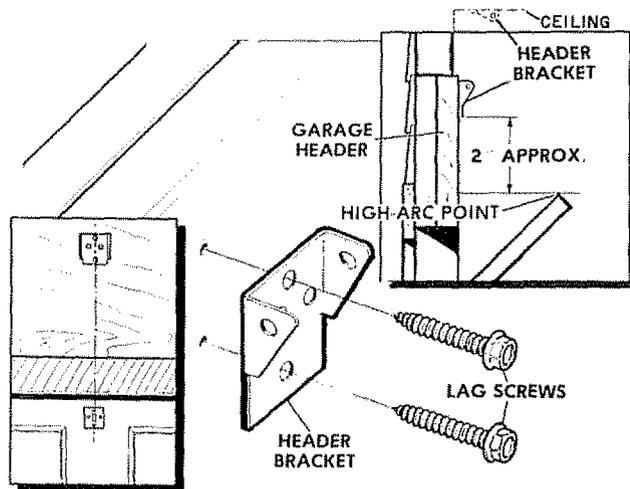
CAUTION: Keep the chain from twisting as nuts are turned. Remove screwdriver or nail from Tee rail



REPLACE SPROCKET COVER REMOVED IN STEP 1.

Assembly of the garage door operator is complete. Installation now begins. Refer to Pages 14–17 for installation on one-piece doors. With Step 8 below, begin installation on sectional doors with curved track.

Step 8

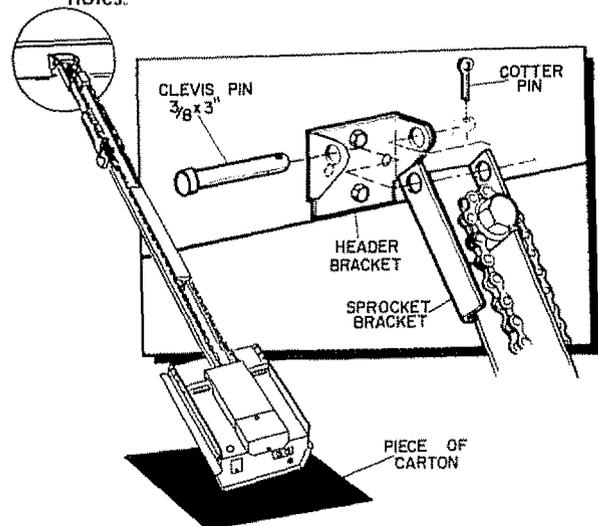


POSITION AND INSTALL HEADER BRACKET. Opener hardware in plastic bag will be needed in the following steps. Determine vertical center line of garage door. Extend this onto garage header wall above door. Position header bracket center-on-center with this line at height approximately 2 inches above the high arc point (this is high point of travel of top edge of door as illustrated). Mark either pair of bracket holes - vertical or horizontal on header wall. Drill 3/16 inch pilot holes and install bracket with 5/16 inch by 1-7/8 inch lag screws.

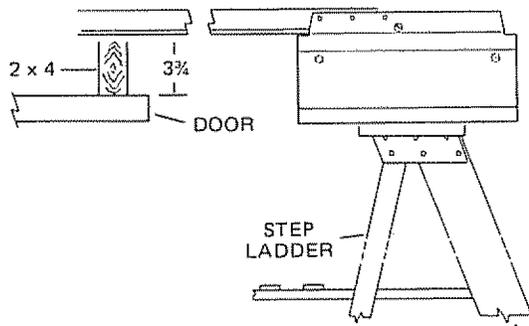
- NOTES:**
1. When headroom is not sufficient for 2 inch clearance, the bottom edge of bracket may be placed at high arc height. Bracket can also be attached to the ceiling.
 2. The header bracket must be rigidly fastened to the header wall or ceiling. Reinforce the wall or ceiling with a 2 x 4 if necessary.
 3. If it is necessary to fasten the header bracket to the ceiling, use the horizontal (left and right) bracket holes.

Step 9

ATTACH RAIL TO HEADER BRACKET: Place operator on packing material. Raise Tee rail until sprocket bracket joins header bracket. Align the bracket holes. Attach with 3/8 inch by 3 inch clevis pin. Secure with cotter pin.



Installation



Step 10

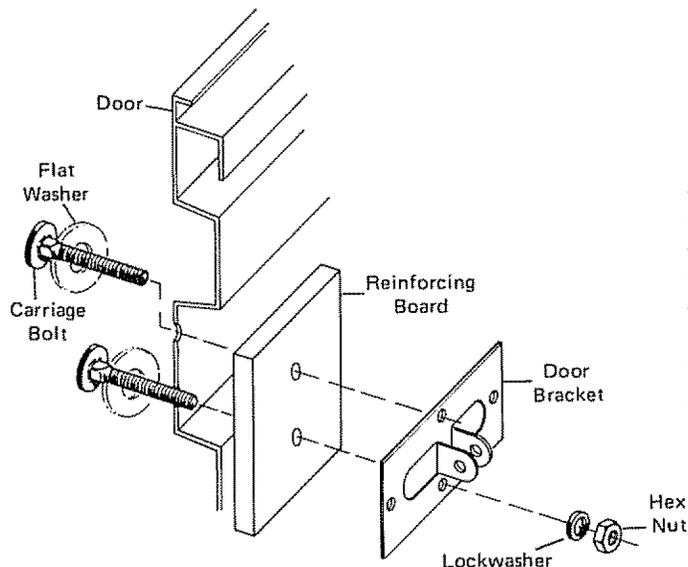
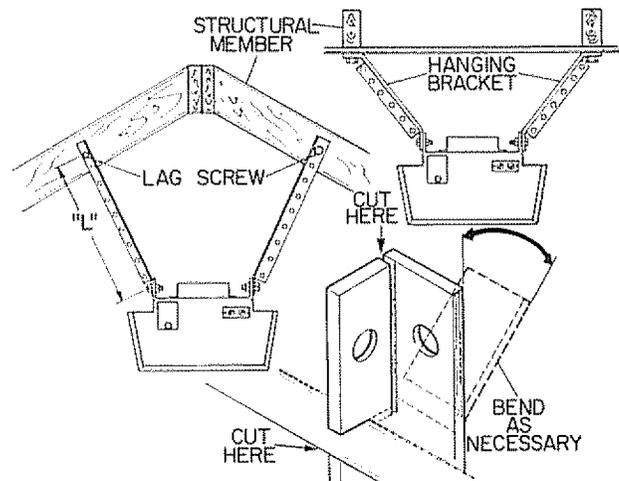
POSITION THE OPERATOR: Raise operator onto a stepladder. Open the garage door. Place a 2x4 on edge along top section of door. Rest the Tee rail on the 2x4 as illustrated.

NOTE: A 2x4 is convenient for establishing an ideal door-to-rail distance. It is not a necessity where headroom is insufficient. Take precautions against damaging light weight doors, and doors with windows.

Step 11

SECURE THE OPERATOR: Measure distance ("L" in illustration) between operator and joist, or other garage roof support. Cut both pieces of hanging bracket just beyond selected holes. Notch bracket ends with hack saw. Bend ends to form desired angles. Fasten hanging brackets to operator chassis with 3/8 inch by 7/8 inch screws, and 3/8 inch nuts and lock washers. Drill 3/16 inch pilot holes in roof supports. Fasten brackets with 5/16 inch lag screws.

NOTE: Lubricate bottom surface of Tee rail before proceeding. Use tube of rail grease included in the hardware package.



Step 12

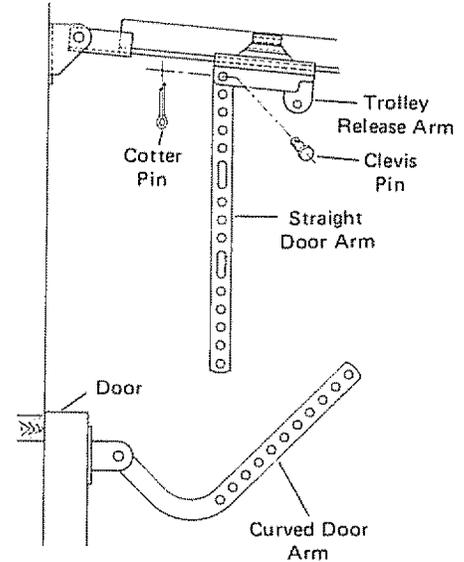
FASTEN DOOR BRACKET: Place door bracket center-on-center with inside vertical center line of door (also see note below). Align bracket ears with top rollers of door. Mark either top and bottom, or left and right bracket holes on door. Drill 5/16 inch diameter holes in door (or center stile) where door bracket holes were marked. Bolt bracket in place with two 5/16 inch by 2-1/2 inch carriage bolts, and two 5/16 inch lock washers and nuts.

NOTE: Use center stile on aluminum or light steel doors. Where this is impractical, use the heavy flat washers between bolt head and door. In such case also, REINFORCE THE INSIDE OF THE DOOR WITH A BOARD 1 INCH THICK, 6 INCHES WIDE AND ABOUT 12 INCHES LONG.

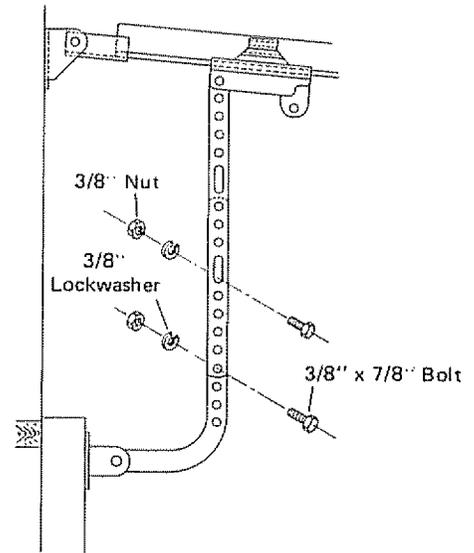
Installation

Step 13

DETERMINE DOOR ARM LENGTH: Thread one end of nylon cord through red handle and secure with knot. Thread other end through hole in release arm of trolley. Secure with a knot. Remove plastic carrying strap from straight door arm. Place one end of straight door arm in slot in trolley and fasten with 3/8 inch clevis pin and cotter pin. Fasten short end of curved door arm to door bracket with 3/8 inch clevis pin and cotter pin.



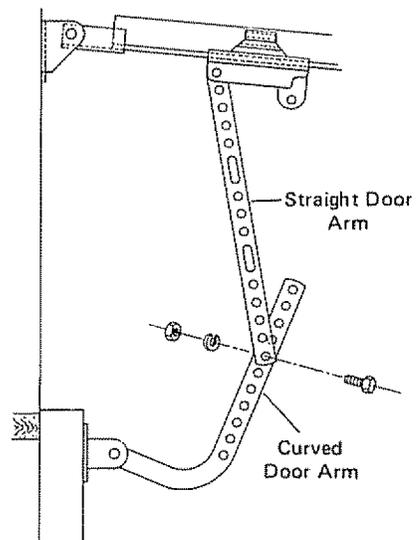
- Push the garage door to "closed tight."
- Bring the two door arm sections together. If holes (in each section) line up, join the sections with two 3/8 inch by 7/8 inch bolts, lock washers and nuts. **PUT BOLT HEADS ON STRAIGHT DOOR ARM SIDE.** Select bolt holes as far apart as possible to increase door arm rigidity. **DO NOT USE MORE THAN ONE SLOTTED HOLE.**



If door arm holes do not line up when the two sections are brought together, cross the door arms in scissors fashion (see illustration) until a pair of holes (one in each section) line up. Insert a 3/8 inch by 7/8 inch bolt. Secure "finger tight" with lock washer and nut.

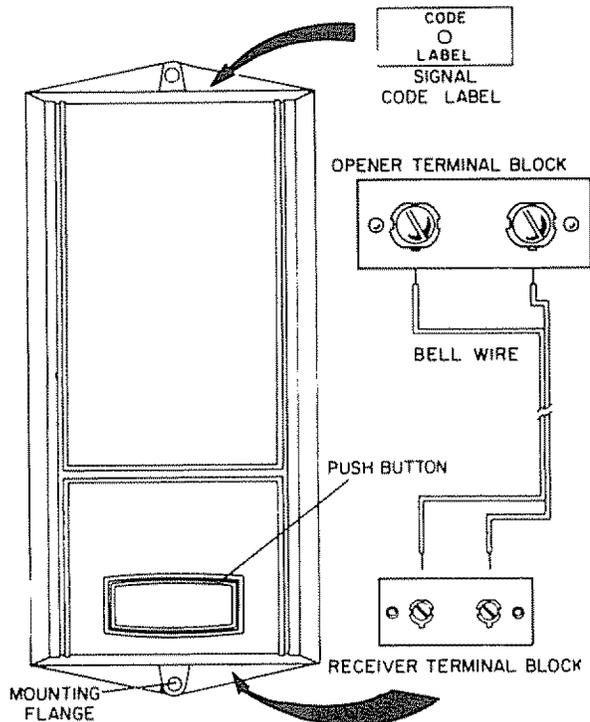
- Pull the emergency release cord to disengage trolley.
- Bring the door arm sections together and bolt securely with both bolts.

NOTE: Sears Keylock Release accessory No. 64-6571 provides an outside emergency access for garages without a service entrance door.



Installation

Step 14



CAUTION: RECEIVER OR ADDITIONAL PUSH BUTTON MUST BE MOUNTED OUT OF THE REACH OF SMALL CHILDREN.

INSTALL RADIO RECEIVER: There are installation flanges at both ends of the receiver. Attach the receiver to an interior garage wall with the wood screws provided. A convenient location is alongside the service door. When installing more than one receiver in a garage, place them as far apart as possible to prevent interference (also keep wires from receivers to garage door operator far apart).

The receiver terminal strip is located just above the bottom attachment flange. Use bell wire in hardware bag to connect receiver and operator. Remove 1/2 inch of insulation from wire ends. Connect wires to terminals on back end of operator. Extend the wires across the ceiling and down the wall to the receiver using insulated staples provided.

If after connecting electric power, door opens or closes by itself, or does not operate from the receiver push button on the lower front face of the unit, check for a short in the bell wire (under staples, for example).

The garage door opener can be activated by a transmitter signal, or from the receiver push button. Push button signals will override those from a transmitter as a safety feature.

NOTE: A special security switch is provided on the side of the receiver. When the switch is in the LOCK position, the door can not be opened by external radio signals. The opener can be activated from a key switch or the receiver push button.

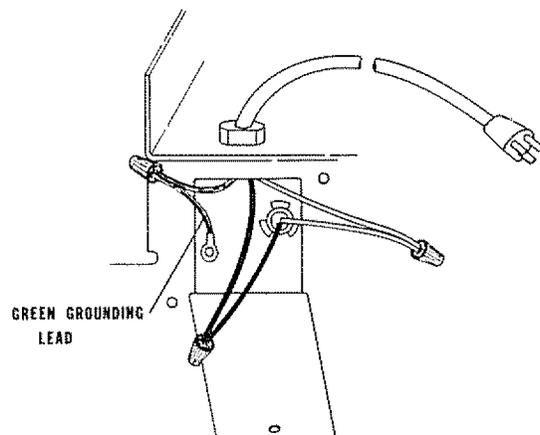
Step 15

CONNECT ELECTRICAL POWER: First, make certain all locking devices on door have been removed or disabled. Then, plug the attached 3-pronged electric cord into a 3-wire receptacle.

If permanent wiring is necessary to meet local codes, proceed as follows:

1. Remove electrical connection cover plate from back of operator chassis.
2. Remove attached 3-pronged cord.
3. Make the permanent connection through the hole provided in the top of the operator.

CAUTION: IT IS EXTREMELY IMPORTANT THAT THE UNIT BE GROUNDED USING THE GROUNDING LEAD PROVIDED IN THE WIRING COMPARTMENT. Install a shut-off switch in the line.



Adjustment

Step 16

ADJUST OPENER LIMITS: Run the opener through a complete up and down cycle. Adjustments are not needed when door opens and closes completely.

If door does not close completely, lengthen door arm as required.

A. Run door in UP direction. If it does not open enough, limit nut adjustments are necessary. Proceed as follows:

CAUTION: Disconnect power before cover is removed.

B. Remove 4 cover screws as illustrated and slide cover forward from chassis.

C. Adjustments are made by turning large plastic limit nuts up or down a threaded shaft just behind the motor (see illustration). The limit nut retaining bracket which holds the nuts in place must be loosened before nuts can be turned.

CAUTION: Do not run opener before limit nut bracket is secured in original position.

1. The top nut controls closing limits.
2. The bottom nut controls opening limits.
3. One turn of the limit nut equals 3 inches of trolley travel.
4. All adjustments require complete turns.

D. **TO MAKE ADJUSTMENTS:** Loosen limit nut bracket screw. Slide bracket to the left.

1. To increase UP limits—turn bottom nut upward.
2. To decrease UP limits—turn bottom nut downward.
3. To increase DOWN limits—turn top nut downward.
4. To decrease DOWN limits—turn top nut upward.
5. These procedures may require repetition before adjustment is complete.

E. When adjustments are complete, slide bracket to its original position and **TIGHTEN SCREW SECURELY** before applying power.

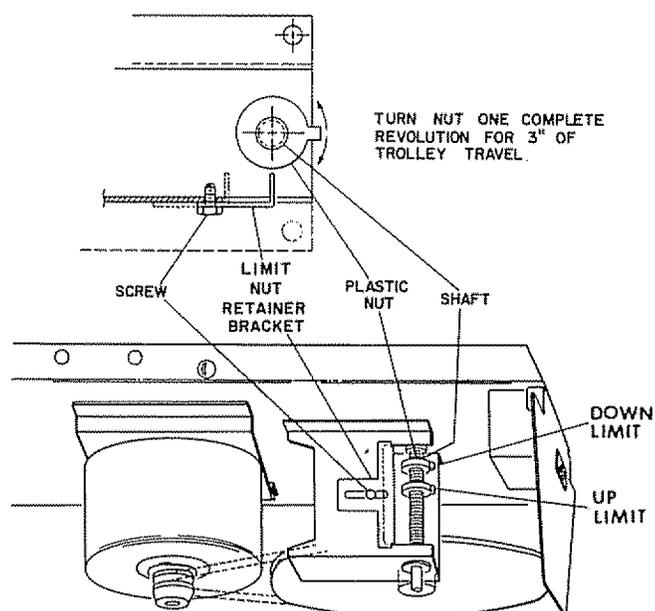
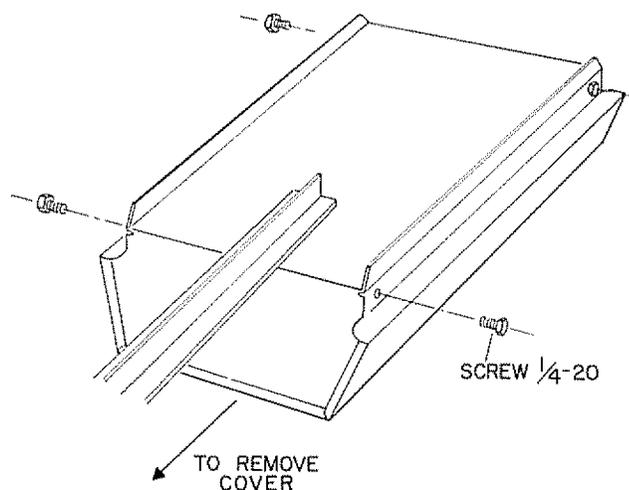
F. Replace cover and 4 cover screws. Reconnect power.

CAUTION: After an adjustment, the motor will run when power is turned on.

If door reverses at end of downward travel, the door arm is too long. Shorten it one set of holes at a time until reversing ceases.

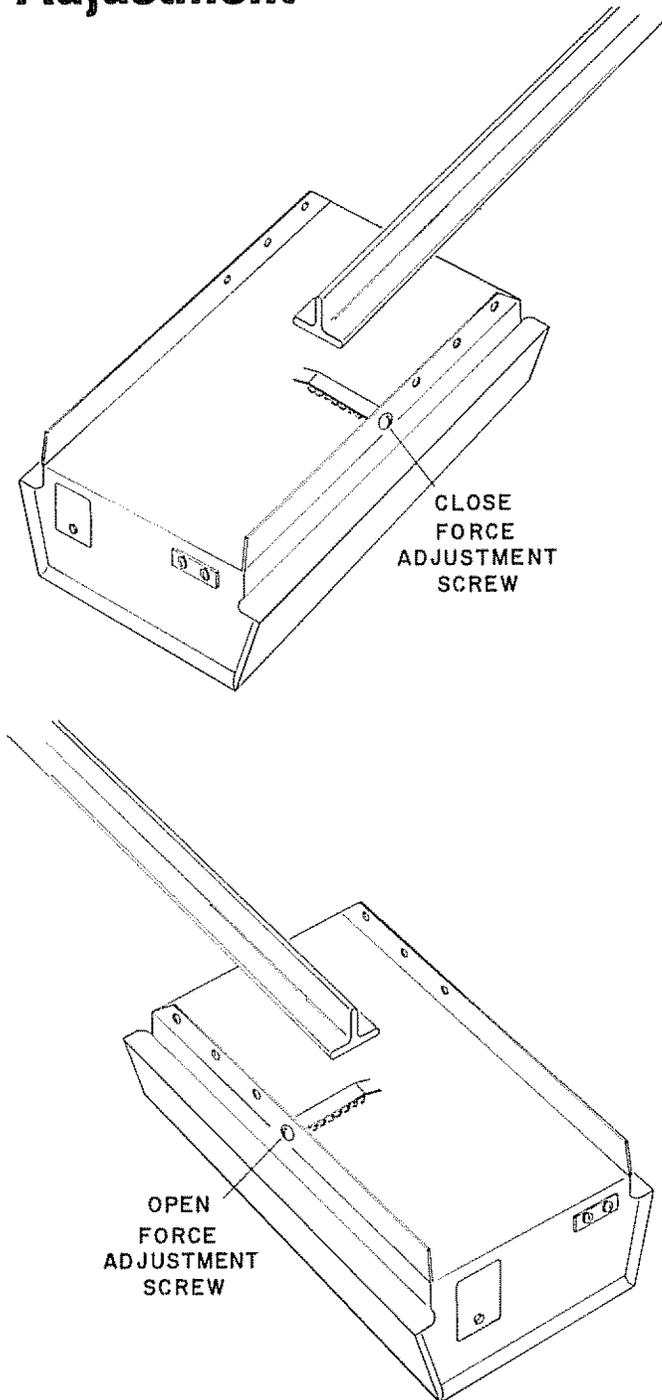
During limit nut adjustment procedure, if door reverses before completing travel cycle in either direction, also check:

1. Excessive binding of door (check manually and correct).
2. Force adjustments are too light. Refer to Step 17.



CAUTION: If the door opener is installed on a door with a height greater than 6 feet, the "UP" limit must be adjusted.

Adjustment



Step 17

ADJUST DOOR FORCE: Determine that door force is not excessive in down direction. Grasp the door handle or the bottom of the door as it is about halfway through downward travel. Normally the door should reverse by this action.

If it is hard to hold, or doesn't reverse, loosen the down force screw one turn at a time until the door reverses normally. This means it will not reverse at the end of a travel cycle, and will reverse when moderately obstructed.

A. Adjustment screws are near center of upper chassis flanges as illustrated. "Close" force screw is on the right side (facing door). "Open" force screw is on left side. Refer to labels next to screws. Turn clockwise by half turns until door opens and closes without reversing

B. Tighten adjustment screws an added half turn to allow for climatic changes.

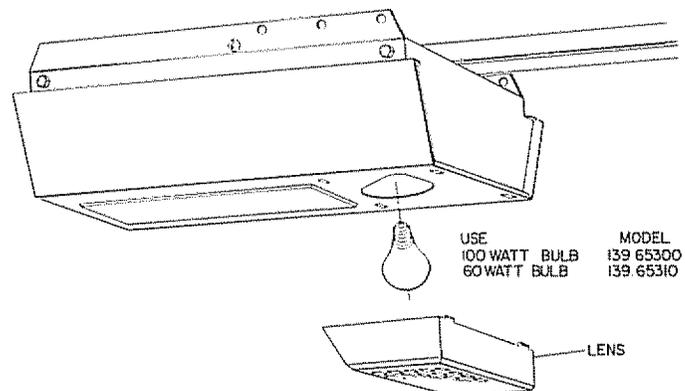
CAUTION: Door force is not to compensate for faulty door hardware.

Step 18

INSTALL LIGHT AND LENS: Install a light bulb* in socket. Light turns on automatically when opener starts. It will turn off automatically about 90 seconds after the opener stops. If available, "Rough Service" bulbs should be used.

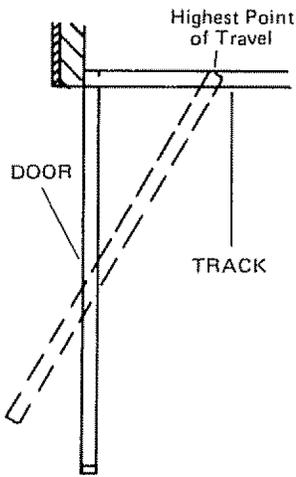
*Use 100 watt bulbs in Model 139 653000
60 watt bulbs in Model 139.653100

LENS: Gently squeeze lens and insert tabs in slots in chassis. Release pressure and lens will snap into place. To remove lens, reverse this procedure.



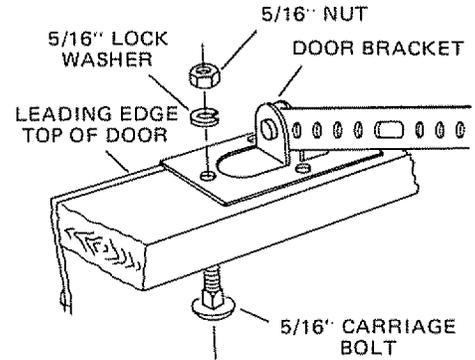
One Piece Door Installations

One Piece Door. Jamb Hardware.
Horizontal Track.



Step 1

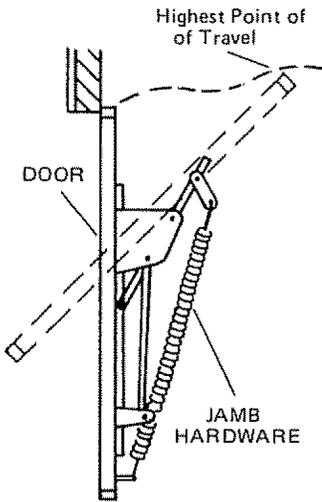
INSTALL DOOR BRACKET: (Hardware in plastic bag will be needed in the following steps). Determine vertical center line of garage door. Position door bracket center-on-center with this line at leading edge of top of door (see illustration). Mark outer holes. Drill 5/16 inch holes through door top. Fasten bracket with 5/16 inch carriage bolts, lock washers and nuts.



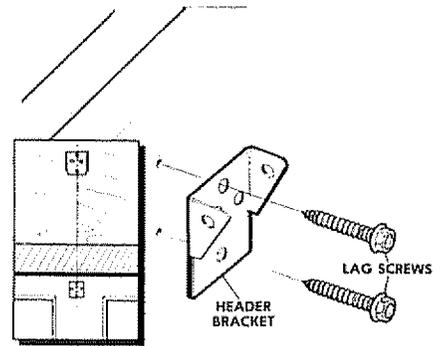
Step 2

INSTALL HEADER BRACKET: Extend vertical center line of door onto garage header wall above door. Reinforce header wall if necessary for header bracket support. A 2x4 or 2x6 will suffice. Position the header bracket according to door type and its arc of travel (see illustrations at left edge of page).

One Piece Door. No Track. Jamb Hardware.



A. One-Piece Door Without Track: Open door to highest point of travel. Measure distance from top of door to floor. Subtract actual height of door (top to bottom). Remainder is door rise (see column 1 of adjoining chart). Refer to chart for setting height of header bracket above door. Place bracket at referenced height and center-on-center with extended vertical center line of door. Mark bracket holes. Drill 3/16 inch pilot holes. Fasten bracket with 5/16 by 1-7/8 inch lag screws.

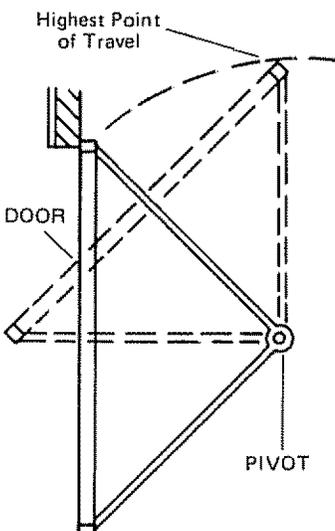


B. One-Piece Door With Track: Position header bracket center-on-center with extended vertical center line of door and approximately 2 inches above the horizontal tracks. Mark bracket holes on wall. Drill 3/16 inch pilot holes. Fasten bracket with 5/16 by 1-7/8 inch lag screws.

Door Rise In Inches	Location of Header Bracket Above Door In Inches
Up to 4	10
4 to 8	15
8 to 12*	20

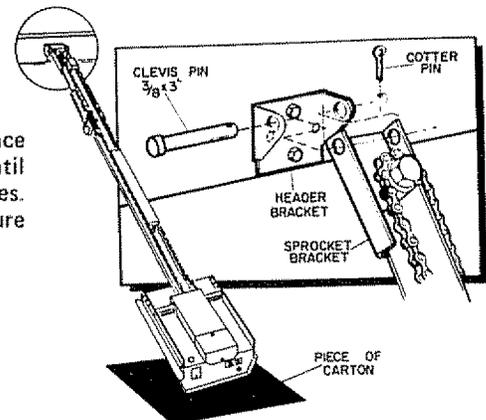
*If door rise is greater than 12 inches, or if low ceiling clearance doesn't allow positioning header bracket as shown in column 2 above, use the remote installation procedures on Page 17.

One Piece Door. No Track. Pivot Hardware.

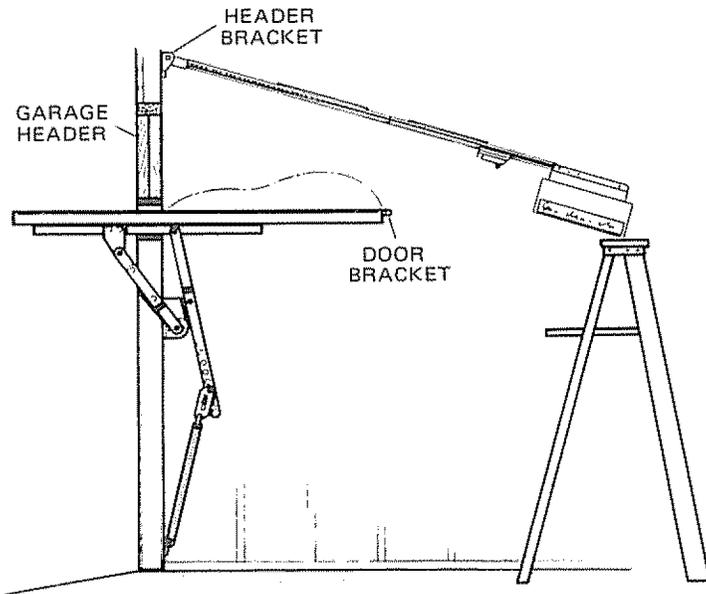


Step 3

ATTACH RAIL TO HEADER BRACKET: Place operator on packing material. Raise Tee rail until sprocket bracket joins header bracket. Align holes. Attach with 3/8 inch by 3 inch clevis pin. Secure with cotter pin.



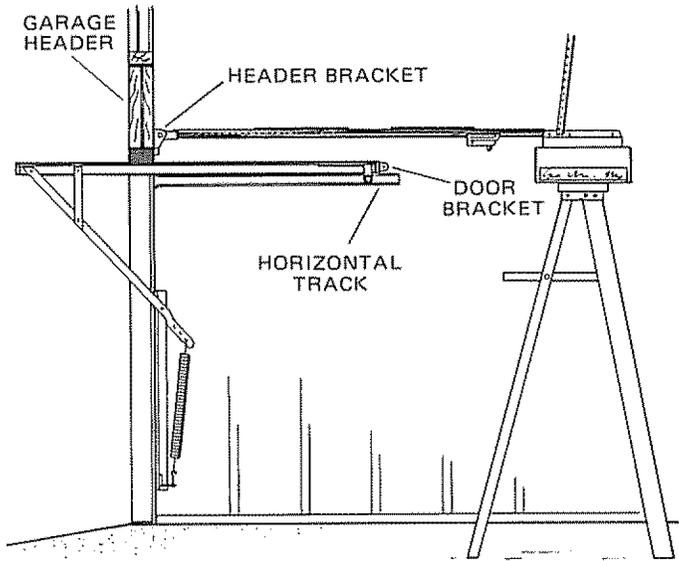
One Piece Door Installations



Step 4

POSITION THE OPERATOR:

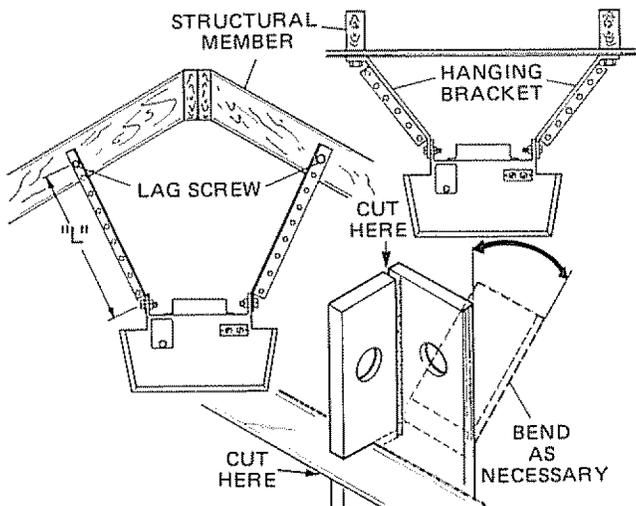
- A. One-Piece Door Without Track: Raise motor end of opener to a height equal to door bracket with door open. Support opener with stepladder. For maximum efficiency, do not secure the operator more than 2 inches higher than this.
- B. One-Piece Door With Track: Raise motor end of opener to height above and parallel to horizontal tracks. Support it with stepladder.



Step 5

SECURE THE OPERATOR: Measure distance ("L" in illustration) between operator and joist, or other garage roof support. Cut both pieces of hanging bracket just beyond selected holes. Notch bracket ends with hack saw. Bend ends to form desired angles. Fasten hanging brackets to operator chassis with 3/8 inch by 7/8 inch screws, and 3/8 inch lock washers and nuts. Drill 3/16 inch pilot holes in roof supports. Fasten brackets with 5/16 inch lag screws.

NOTE: Lubricate bottom surface of Tee rail before proceeding. Use tube of rail grease included in hardware box.



Step 6

INSTALL RADIO RECEIVER: Refer to Step 14, Page 11.

Step 7

CONNECT ELECTRICAL POWER: Refer to Step 15, Page 11.

One Piece Door Installations

Step 8

SET OPENER LIMITS: (1) Using the radio controls, run trolley back to the "up" limit near motor end of unit. Disconnect electric power. Remove 4 cover screws and slide cover forward from chassis as illustrated.

(2) Adjustments are made by turning large plastic limit nuts up or down a threaded shaft just behind the motor (see illustration). The limit nut retaining bracket which holds the nuts in place must be loosened before nuts can be turned.

CAUTION: Do not run opener before limit nut bracket is secured in original position.

- The top nut controls closing limits.
- The bottom nut controls opening limits.
- One turn of limit nut equals 3 inches of trolley travel.
- All adjustments require complete turns.

TO MAKE ADJUSTMENTS: Loosen limit nut bracket screw. Slide bracket to left.

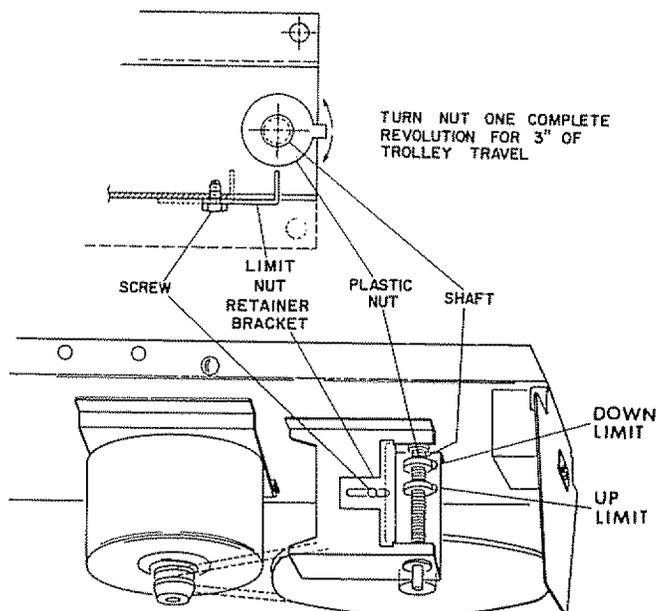
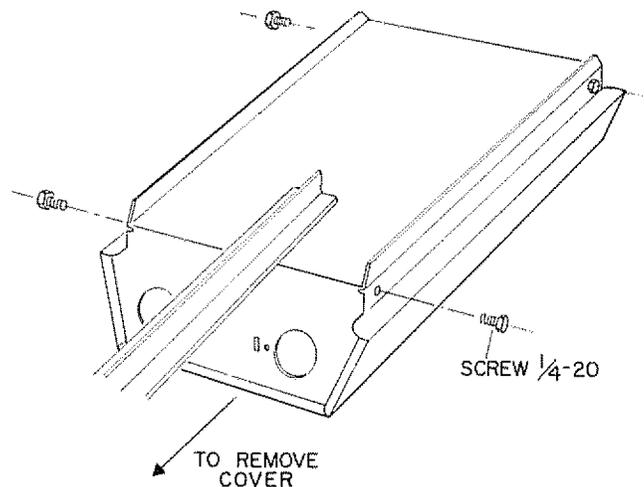
- (3) Reset top nut (down limit) 6 turns to right (counterclockwise).
Reset bottom nut (up limit) 3 turns to left (clockwise).

Slide limit nut bracket to right and tighten screw.

Replace chassis cover.

Reconnect power.

CAUTION: After an adjustment, the motor will run when power is turned on.



CAUTION: If the door opener is installed on a door with a height greater than 6 feet, the "UP" limit must be adjusted.

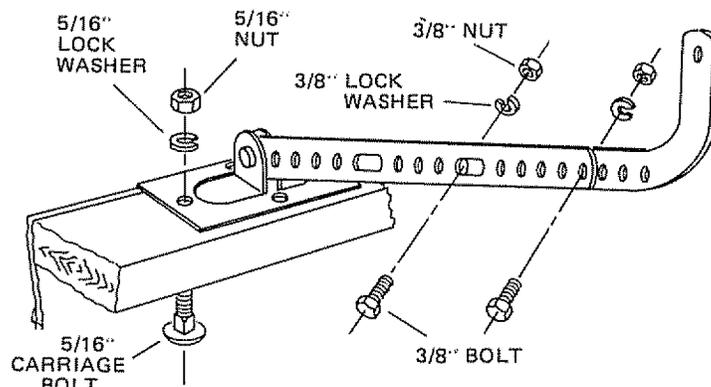
Step 9

CONNECT DOOR ARM: Thread one end of nylon cord through red handle and secure with knot. Thread other end through hole in release arm of trolley. Secure with knot. Remove plastic carrying strap from straight door arm.

Using 3/8 inch clevis pin, connect one end of straight door arm and door bracket. Secure with cotter pin. Use other 3/8 inch clevis pin to connect short end of curved door arm to trolley. Secure with cotter pin.

Close the door tight. Bring the two door arm sections together. Bolt the sections if the holes line up. Use 3/8 inch by 7/8 inch bolts, and 3/8 inch lock washers and nuts. Select bolt holes as far apart as possible to increase door arm rigidity. **DO NOT USE MORE THAN ONE SLOTTED HOLE.**

If the door arm holes do not line up to permit bolting, follow the instructions in Step 13, Page 10.



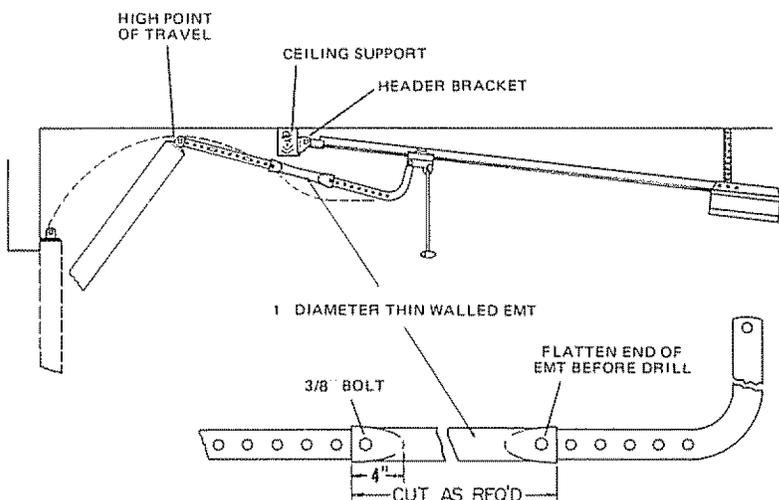
One Piece Door Installations

ADJUSTMENTS: If, after installation of opener, door does not open or close satisfactorily, follow adjustment steps 16 and 17 on Pages 12 and 13.

Step 10

INSTALL LIGHT AND LENS: Refer to Step 18, Page 13.

REMOTE INSTALLATION PROCEDURES



REMOTE INSTALLATION PROCEDURES: (1) Fasten header bracket to a suitable support on ceiling (a 2x4 or 2x6 reinforcing plank nailed to joists, for example). The support location should be the most convenient in line with the door bracket and further inside the garage than the highest point of door travel.

(2) Follow procedures of Steps 3, 4, 5, 6, and 7 by which garage door opener is fastened to header bracket and ceiling. Increased distance between trolley and door bracket is joined by 1 inch thin walled electrical metallic tubing (EMT) conduit available at most electrical supply or hardware stores.

(3) Run trolley to "Down" limit. Close door. Measure distance between holes for door arm clevis pins in door bracket and trolley. Subtract 24 inches.

Remainder is desired length of EMT. Cut EMT to this length. Insert long end of curved door arm, and one end of straight door arm into ends of conduit at least 4 inches. Flatten EMT at each end where bolt hole is needed for attaching to door arms. Drill 3/8 inch holes. Fasten with 3/8 inch by 7/8 inch screws, and 3/8 inch lock washers and nuts.

Radio Controls

1 The radio control has two basic components:

- A portable transmitter which sends a coded signal from an automobile
- A receiver which is attached to a garage wall. It receives the coded signal, and activates the garage door opener.

FOR SERVICE — DO NOT ATTEMPT REPAIR OF RADIO CONTROLS. If service becomes necessary, see instructions on page 23 of manual.

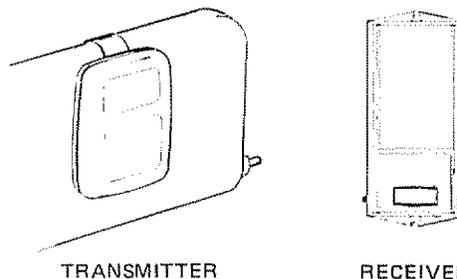
2 THE TRANSMITTER

- The transmitter, including a battery and push button switch, is contained in an attractive, high-impact plastic case. A metal clip is provided for attaching the unit to an auto sun visor. Separate transmitters can be installed in each of the vehicles using the garage.

3 THE BATTERY

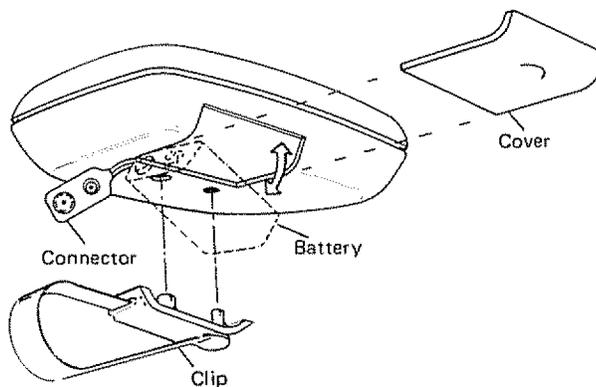
The battery should operate for a time equal to its normal shelf life (approximately one year). This may be shortened by weather conditions. To avoid unexpected battery failure, replace it at least once a year. There is less possibility of cold weather failure if a new battery is installed in autumn. In regions where temperature extremes are below 0° F. and above 90° F., mercury batteries assure the most reliable operation.

TO CHANGE BATTERY—Remove cover as indicated in accompanying illustration. Disconnect battery from connector. Clip new battery to connector. Replace cover.



TRANSMITTER

RECEIVER



Connector

Battery

Clip

Cover

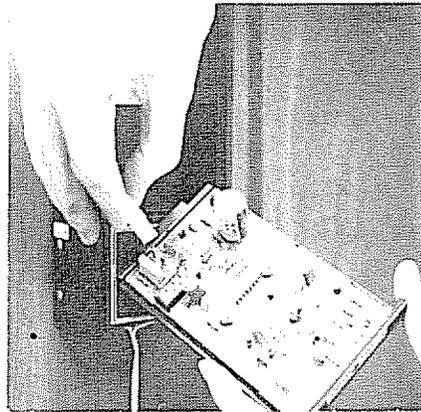
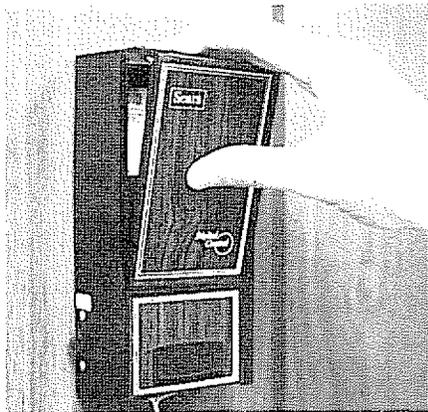
Radio Controls

SEARS DIGITAL RADIO CONTROL PAT. APPLIED FOR

The coded signal in Sears Digital Radio Controls can be changed easily without the aid of a serviceman. The only tool needed is a flat blade screwdriver. Choose your own code by changing position of ON-OFF switches numbered 1 through 9 on the code switch block. Changing the ON-OFF position of only one switch makes an entirely different code. The 9 switches can be arranged into 512 code combinations.

OPENING THE RADIO CONTROLS

FIGURE 1



RECEIVER

STEP 1

Remove receiver cover by gripping top lip of cover with ends of fingers and pulling outward (Figure 1). Do not move printed circuit board components.

STEP 2

Disconnect the two wire, 24 volt, AC connector from the receiver (Figure 2).

FIGURE 2

TRANSMITTER

STEP 3

Remove visor clip from back of transmitter by prying it away from the case. Remove the screw (Figure 3).

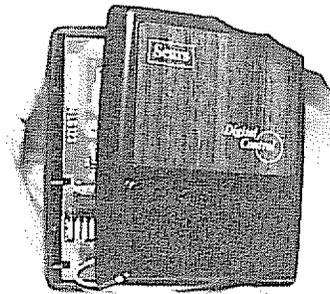
STEP 4

Carefully turn transmitter case over (with pushbutton up). Remove top of transmitter case (Figure 4). Be careful. Do not move circuit board components.



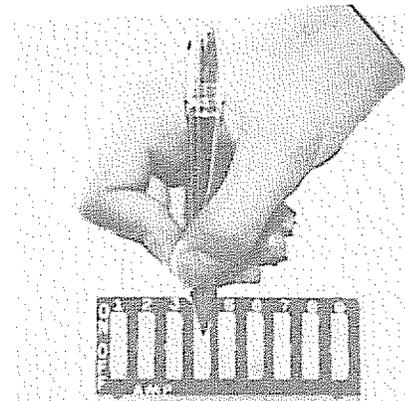
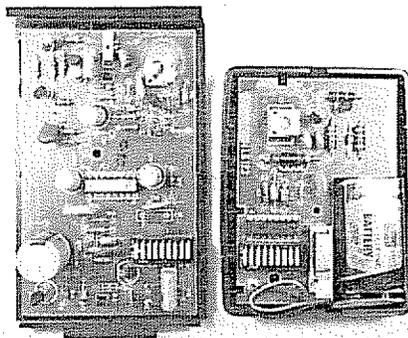
FIGURE 3

FIGURE 4



HOW TO CHANGE THE CODE SWITCHES

FIGURE 5



STEP 5

Place the receiver cover with its printed circuit board alongside that of the transmitter (Figure 5). Code switch blocks should be at the bottom (right side up for reading).

STEP 6

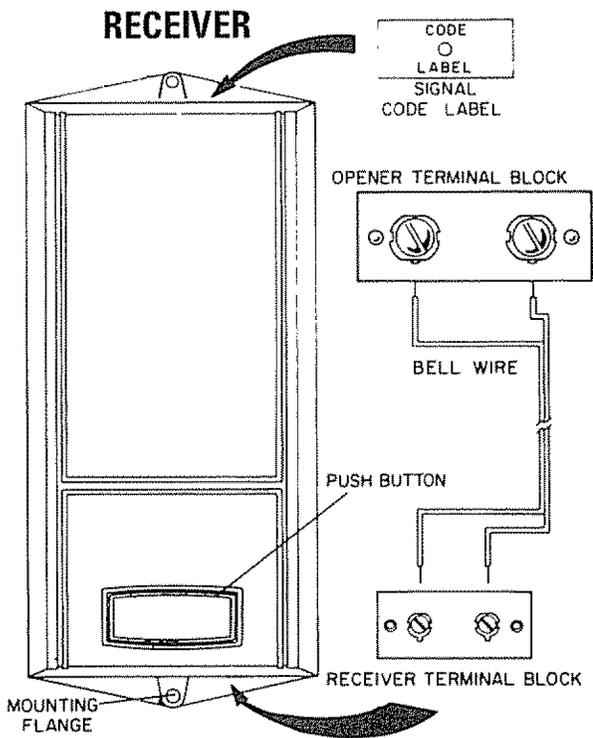
Use a pencil or screwdriver to change switch positions (Figure 6). To change a code, press one or more switches either ON or OFF. Changing all switches to OFF will constitute a code.

FIGURE 6

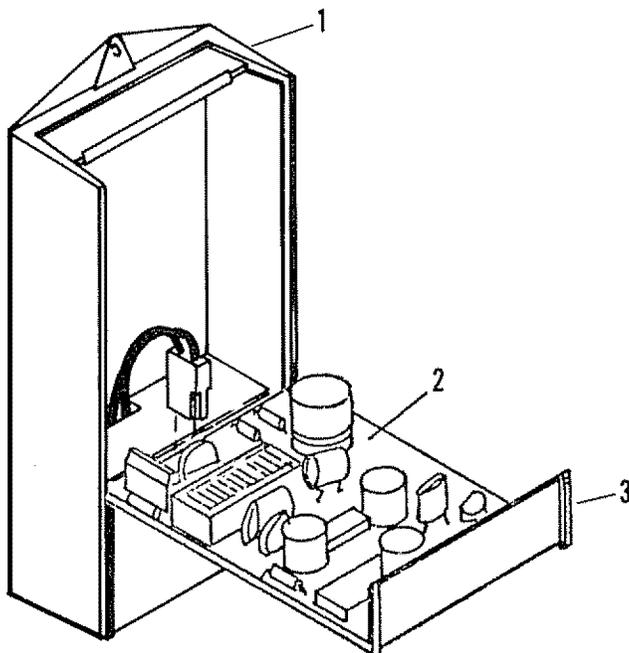
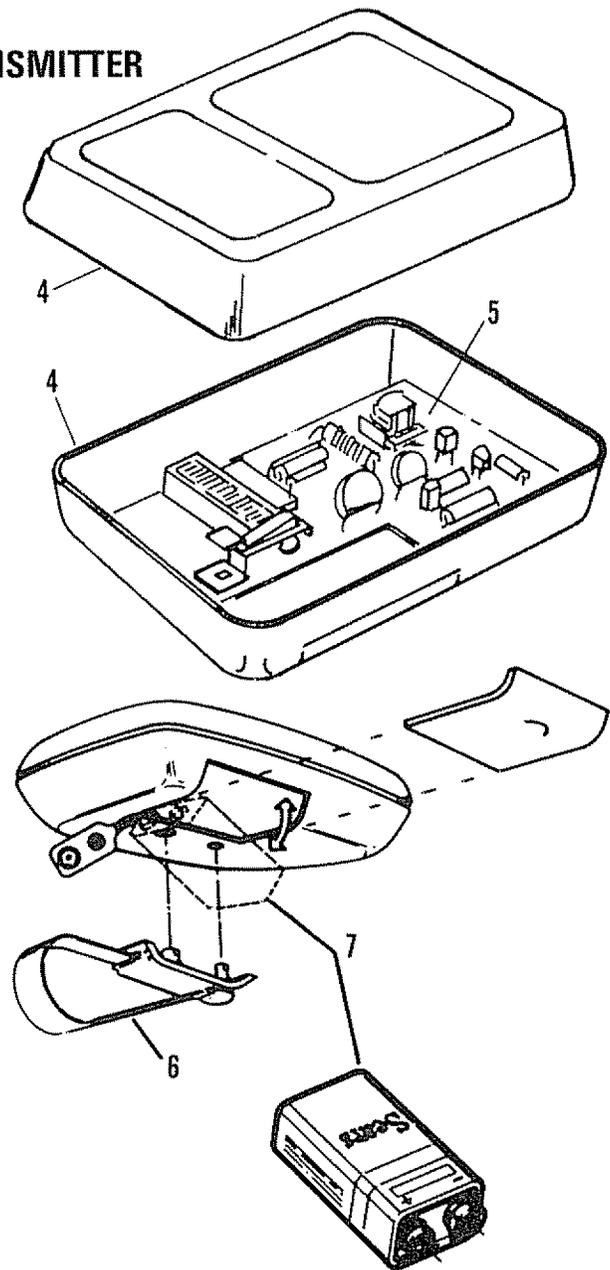
IMPORTANT NOTE: The new code setting must be exactly the same in both the receiver and transmitter, also, in any additional transmitters used to operate the door. Reconnect the AC connector to the receiver and snap the receiver cover back into place. The lock switch on some receivers (built into side of case) must be unlocked (Down position). Reassemble transmitter. Please keep this instruction sheet for future reference.

Radio Controls

Parts Lists



TRANSMITTER

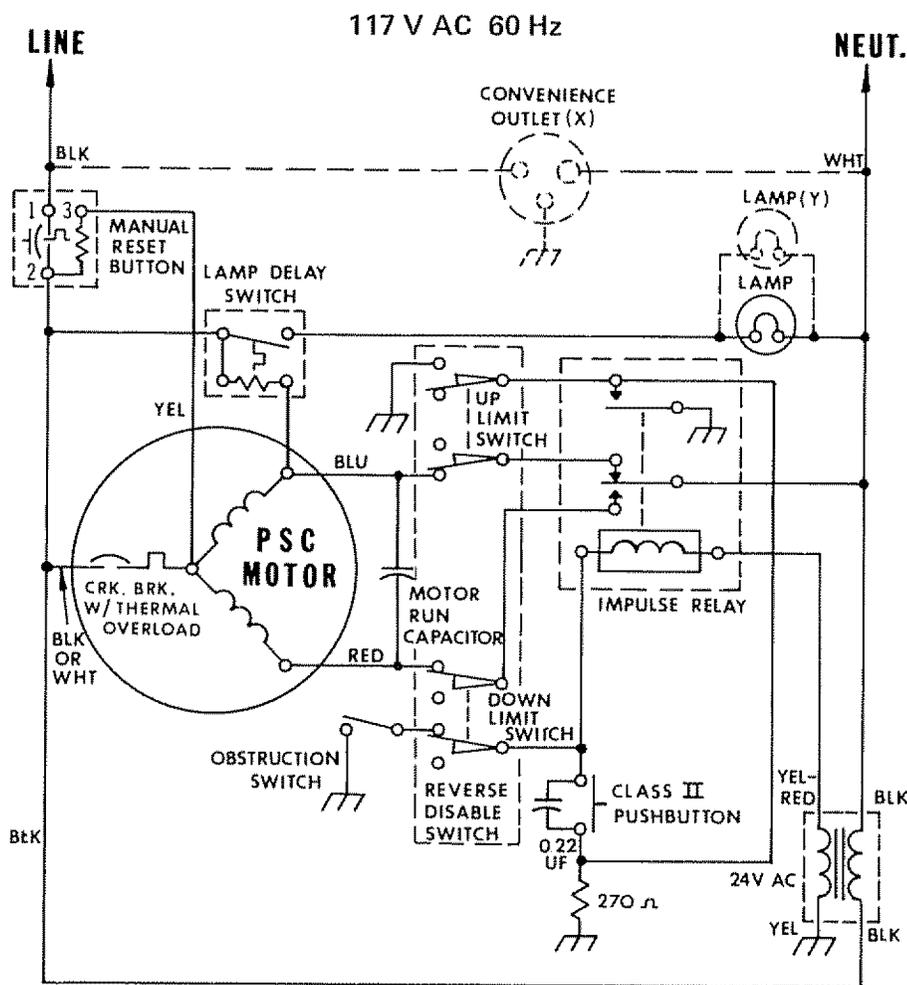


Parts List

KEY NO.	PART NO.	DESCRIPTION
RECEIVER		
1	IB1436	Receiver case assy.
2	IA1385S	Receiver circuit board
	IA1385Y	with cover (Specify S or Y)
3	IA1492	Receiver cover
TRANSMITTER		
4	IA1489	Case assembly
5	IA1138S	Printed circuit board
	IA1138Y	(specify S or Y)
6	2B126	Clip,visor
7	57-6423	Battery, 9 volt

Wiring & Specifications

WIRING DIAGRAM



NOTE: 1 PARTS (X) AND (Y) NOT USED IN ALL MODELS
2 SOME VERSIONS OF MANUAL RESET BUTTON HAVE TERMINALS 2&3 REVERSED

MOTOR

Type	1/3 HP capacitor run (Model 139.653000) 1/4 HP capacitor run (Model 139.653100)
Speed	1,000 rpm
Volts	117 VAC 50/60 Hz
Current	4.5 amps (Model 139.653000) 2.6 amps (Model 139.653100)

SAFETY

Personal	Pushbutton reverse in down direction. Automatic door reversal both directions on obstruction
Mechanical	Independent up and down adjustment
Electrical	Motor overload protector and low voltage pushbutton wiring
Limit Device	Circuit actuated by limit nuts
Limit Adjustment	Traveling nuts on sprocket shaft
Start Circuit	Low voltage pushbutton, key switch or radio control

DRIVE MECHANISM

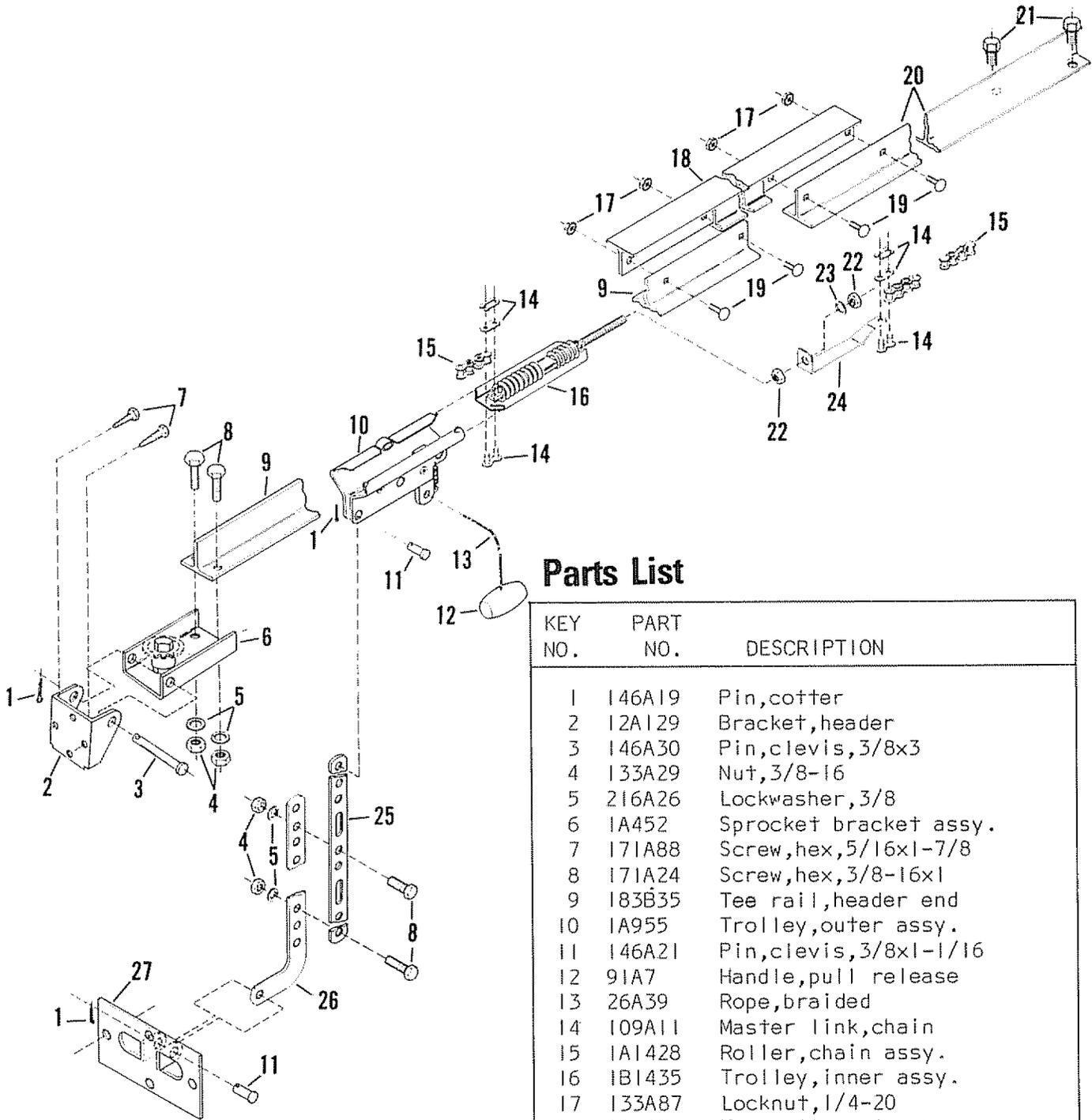
Speed Reduction	Belt and pulley 8.1 : 1
Drive	Roller chain and two piece trolley on steel Tee rail
Lubrication	Motor self lubricated Drive shaft bronze oilite bearings
Length of Travel	0 - 8 feet
Travel Rate	6 - 8 inches per second
Lamp	On when door starts in travel, off approximately 90 seconds after stop
Door Linkage	Adjustable "L" arm pull cord trolley release

DIMENSIONS

Length (overall)	10½ feet
Headroom Required	2 inches
Weight	60 pounds

Repair Parts

Rail Assembly

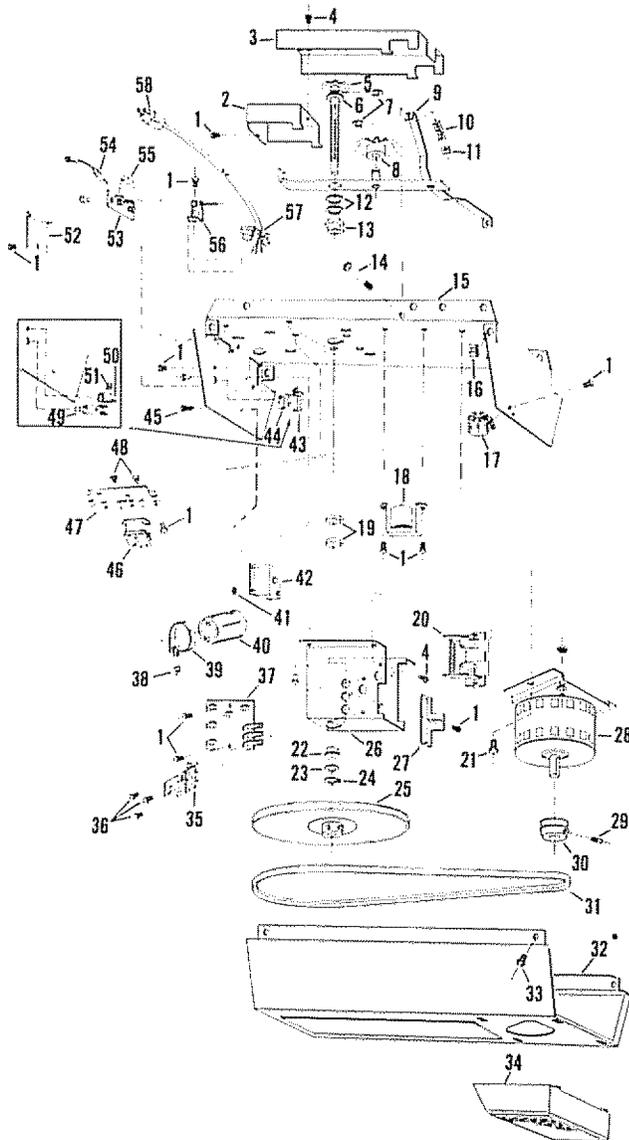


Parts List

KEY NO.	PART NO.	DESCRIPTION
1	146A19	Pin,cotter
2	12A129	Bracket,header
3	146A30	Pin,clevis,3/8x3
4	133A29	Nut,3/8-16
5	216A26	Lockwasher,3/8
6	1A452	Sprocket bracket assy.
7	171A88	Screw,hex,5/16x1-7/8
8	171A24	Screw,hex,3/8-16x1
9	183B35	Tee rail,header end
10	1A955	Trolley,outer assy.
11	146A21	Pin,clevis,3/8x1-1/16
12	91A7	Handle,pull release
13	26A39	Rope,braided
14	109A11	Master link,chain
15	1A1428	Roller,chain assy.
16	1B1435	Trolley,inner assy.
17	133A87	Locknut,1/4-20
18	2B123	Tee rail,center brace
19	171A191	Carriage bolt,1/4-20
20	183B36	Tee rail,motor end
21	171A184	Screw,Sems,5/16-18x1/2
22	133A28	Nut,5/16-18
23	216A25	Lockwasher,5/16
24	12A197	Bracket,chain retainer
25	178B22	Strap,door arm,straight
26	178B23	Strap,door arm,curved
27	12B198	Bracket,door

Repair Parts

Chassis Assembly Parts List



KEY NO.	PART NO.	DESCRIPTION
1	171A183	Screw, 8F x 3/8
2	31B129	Cover, reverse switch
3	31B127	Cover, sprocket
4	171A74	Screw, hex, 8B x 3/8
5	1A950	Shaft and sprocket assy.
6	216A95	Washer, shim, 1/2" I.D.
7	158A30	"E" ring, 1/2" shaft
8	81A9	Sprocket, idler
9	1B948	Lever, actuator switch assy
10	177A73	Spring, switch adjustment
11	133A106	Nut, square, 5/16-18
12	216A100	Washer, shim, 3/4" I.D. x 1" O.D. x .010
13	11A13	Bearing, top, 1/2" I.D.
14	171A182	Screw, 5/16-18 x 2-1/2
15	37D61	Chassis, component mounting
16	133A109	Tinnerman, 1/4-20
17	1A989	Light socket assy
18	204B77	Transformer
19	133A105	Nut, special limit
20	1A1081	Switch, limit assy.
21	171A184	Screw, washered, 5/16-18 x 9/16
22	11A12	Bearing, 3/8" I.D.
23	216A96	Washer, shim, 3/8" I.D.
24	158A31	Push on ring, 3/8" shaft
25	1A1481	Pulley assy, .865 pitch diameter
26	12C196	Bracket, shaft retaining
27	12A201	Bracket, nut retainer
28	123D17	Motor assy. for Model 139.653000. Rating: 1/3hp; 4.5 amps; 117VAC; 50/60Hz
	123D16	Motor assy. for Model 139.653100. Rating: 1/4hp; 2.6 amps; 117VAC; 60 Hz
29	171A58	Screw, set, 5/16-18
30	144B6	Pulley, drive
31	20A3	Belt, Vee, 3L-31
32	31D106	Cover, chassis
33	171A175	Screw, hex, 1/4-20 x 1/2
34	108C6	Lens, lamp cover
35	1A35	Light delay assy.
36	171A51	Screw, hex, 6Tx3/8
37	2A150	Terminal board assy.
38	133A49	Tinnerman, type 8U
39	12A194	Bracket, capacitor mounting
40	30A205	Capacitor, motor start for Model 139.653000. Rating: 50-60MFD; 250VAC
	30A218	Capacitor, motor start for Model 139.653100. Rating: 36-42MFD; 250VAC
41	216A10	Lockwasher, internal tooth, No. 6
42	1A1375	Wiring box assy.
43	12A218	Bracket, reset button for Model 139.653000
44	180B48	Reset button for Model 139.653000
45	171A189	Screw, 8B x 1
46	160B27	Relay, impulse
47	12B208	Bracket, relay mounting
48	171A15	Screw, sems, 8-32 x 3/16
49	180B50	Reset button for Model 139.653100
50	12B225	INSET Bracket, reset button for Model 139.653100
51	133A43	Tinnerman nut for Model 139.653100
52	31F103	Wiring box cover
53	203A68	Terminal board
54	1A1070	Resistor, 270 ohms, 2 watts
55	30A219	Capacitor, .22 MFD; 200VDC
56	1A942	Switch, reverse assy.
57	28A60	Cable, clamp
58	26A42	Cable, line cord, 4 ft.



**SAVE-A-CALL BY CHECKING THESE BASIC POINTS.
INSTALLATION GUARANTEED BY THE INSTALLER. IF IT IS A
SELF-INSTALLATION, CORRECTIONS WILL BE MADE ON A
CHARGE BASIS.**

● **WHEN DOOR WILL NOT OPEN WITH TRANSMITTER(S),
NOR WALL OR RECEIVER PUSHBUTTONS:**

1. Check to be certain that **NO LOCKS OR BOLTS** are preventing the door from opening.
2. Check for tripped circuit breaker or blown fuse.
3. Check to be certain any wall switch used to supply power to the opener is in "ON" position.
4. Check wire from wall receiver to opener for break (generally broken where wire terminates).
5. If the unit has been operated numerous times in succession, a thermal overload switch in the motor may have tripped. Allow several minutes for cooling before operation is repeated.
6. Check reset button on back of operator chassis.

● **WHEN DOOR WILL NOT OPEN WITH TRANSMITTER, WORKS
O.K. FROM PUSHBUTTONS, OR SECOND TRANSMITTER:**

1. Check battery. If two transmitters are used, check by exchanging with "working" transmitter.
2. If wall receiver is equipped with **LOCK SWITCH**, check to see that the switch is in the "OFF" position (away from lock label).

● **WHEN DOOR REVERSES FOR NO APPARENT REASON:**

1. Check for **DOOR BALANCE, OR BINDING**. Disconnect door from opener by pulling **RED HANDLE**. Open and close door manually. Door should operate smoothly and reasonably easy. If door is binding, check for physical binding at jamb, track, etc. If service is needed, call a garage **DOOR** service company.
2. Increase tension of **FORCE SCREW(S)** located at side(s) of opener chassis. Check label and Owner's Manual for adjustment instructions.

● **WHEN DOOR OPENS AND/OR CLOSES BY ITSELF:**

1. Check pushbuttons and wiring (receiver to opener) by prodding pushbutton(s) and wiggling wire, especially under staples, etc.
2. Check to determine if a **SEARS** garage door opener in the neighborhood uses the same radio code. If same **IDENTICAL** codes exist, bring **BOTH** the receiver **AND** transmitter to SEARS service to obtain a different code. If your unit features the Sears Digital Radio Controls, set your own new code according to instructions in the Owners Manual.

● **WHEN DOOR DOES NOT QUITE OPEN OR CLOSE COMPLETELY:**

1. Check to be certain there are **NO PHYSICAL UNINTENDED STOPS** preventing the door from opening or closing completely.
2. Opener limit setting needs adjustment, **ESPECIALLY ON NEW INSTALLATIONS**. See easy-to-follow instruction in your Owners Manual.

● **WHEN LIGHT DOES NOT GO ON WHENEVER THE OPERATOR IS ENERGIZED:**

1. Check light bulb(s).

● **WHEN THERE IS INSUFFICIENT TRANSMITTER RANGE FROM WITHIN THE CAR:**

1. Check battery.
2. Change transmitter location in car.
3. Check antenna to be certain connection or installation is proper. **THERE IS NO ANTENNA** with Digital Radio Controls.

CAUTION:

- OPERATE DOOR ONLY WHEN FULLY VISIBLE, PROPERLY ADJUSTED, AND FREE OF OBSTRUCTIONS.
- DO NOT PERMIT CHILDREN TO PLAY IN AREA OF DOOR.
- READ THE INSTRUCTION MANUAL.

THINGS TO REMEMBER . . .

DOOR DISCONNECT — Your garage door can be disconnected from the opener when manual operation is necessary (i.e. power failures) Pull down on the red handle tied to the trolley. It will reconnect automatically when the opener is reactivated.

DOOR LUBRICATION — Oil door rollers, bearings and hinges every 3 months. Use silicone lubricant, or light oil.

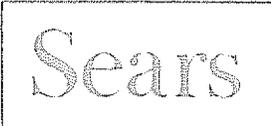
OPENER LUBRICATION — Clean and regrease top and bottom surfaces of tee rail once a year. Use rail grease supplied.

DOOR SPRINGS — Make certain door is not locked down, or otherwise held fast (i.e. snow, ice). Disconnect door from opener (see Things to Remember). Raise door manually. Check door springs. If one is broken, have a garage door company replace it.

DOOR BALANCE — The opener's automatic safety system works best when the door is in good balance. It is tested manually by opening and closing the door (see Door Disconnect). A door is balanced when it stays in any point of travel while being supported solely by its springs. If adjustments are needed, call a garage door company.

IN CASE OF RADIO CONTROL PROBLEMS, REMOVE RECEIVER COVER BY UNLATCHING AND UNPLUGGING. BRING RECEIVER COVER ONLY WITH ATTACHED PRINTED CIRCUIT BOARD AND TRANSMITTER TO A SEARS SERVICE CENTER.

owners manual



Garage
Door
Opener
Models
139.653000
139.653100

HOW TO ORDER REPAIR PARTS

The Model Number will be found on the label attached to the back of the opener. Always mention the Model Number when requesting service or repair parts for your SEARS ELECTRONIC GARAGE DOOR OPENER.

All parts listed herein may be ordered through SEARS, ROEBUCK AND CO. When ordering parts by mail, selling prices will be furnished on request, or parts will be shipped at prevailing prices and you will be billed accordingly.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION AS SHOWN IN THIS LIST:

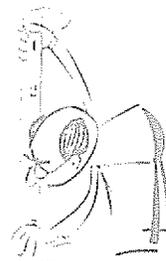
1. The PART NUMBER
2. The MODEL NUMBER
3. The PART DESCRIPTION
4. The NAME of the ITEM

Your Sears merchandise takes on added value when you realize that Sears has over 2,000 Service units throughout the country. Each is staffed by Sears-trained, professional technicians using Sears approved parts and methods.

IMPORTANT NOTE: Include Radio Control code when ordering radio control parts. If you suspect radio malfunction, take radio controls to the nearest SEARS Service Center for test and/or low cost exchange.

FEATURES OF YOUR OPENER

1. Opener light—will turn on and off automatically for your safety and convenience.
2. Automatic reverse—door reverses automatically when obstructed in either up or down direction.
3. Reverse disable—automatic reverse feature is disabled in last few inches of down travel to prevent nuisance reversals due to ice, snow, etc.
4. Emergency disconnect—pull cord disconnect permits manual door operation.
5. Automatic reconnect—trolley halves reconnect for automatic operation when opener is energized after emergency disconnect.
6. Digital Radio Controls—Coded signal can be changed easily by owner.



SEARS, ROEBUCK AND CO. BSC 41-3 SEARS TOWER CHICAGO, ILLINOIS 60684
