

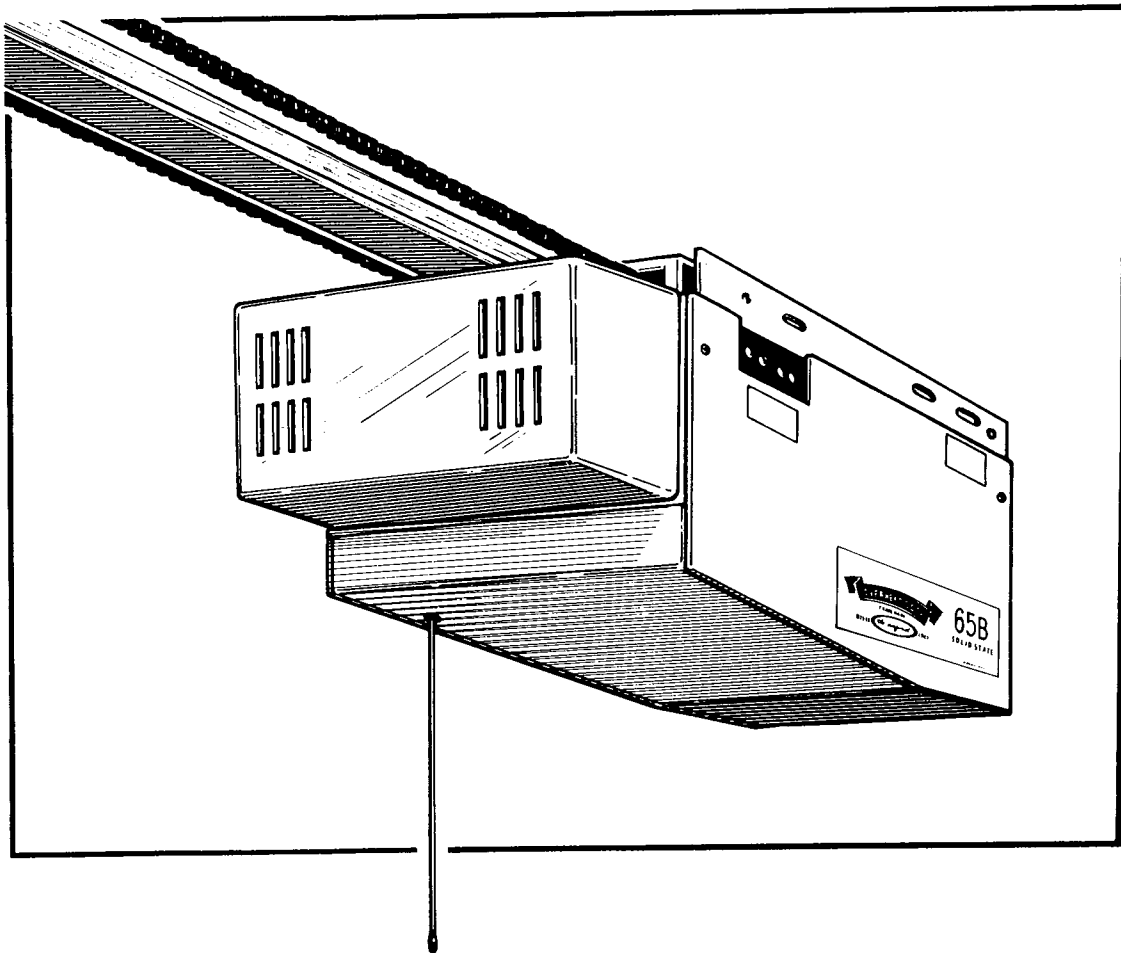
MODEL 65B

GARAGE DOOR OPENER SYSTEM



INSTALLATION INSTRUCTIONS AND OWNERS MANUAL

READ THESE INSTRUCTIONS CAREFULLY
BEFORE INSTALLING , OR USING THIS OPENER.



WARNING

DO NOT allow children to play in area of door or with radio control transmitter or with push button control.

WARNING

Door is under extreme spring tension. Repairs and adjustments, especially to cables and spring assembly, can be hazardous and can result in severe personal injury. Repairs and adjustments should be performed ONLY by QUALIFIED DOOR SERVICE PEOPLE.

After installation is completed, place instructions
in close proximity to garage door.

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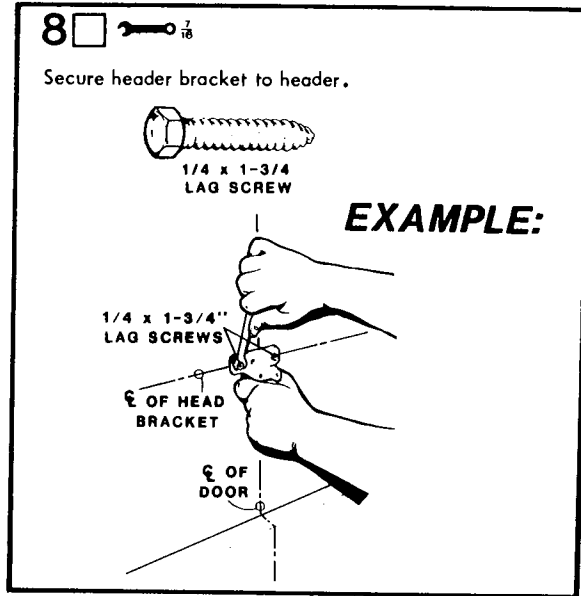
WIRING SCHEMATIC _____ 20

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READ THROUGH MANUAL
BEFORE BEGINNING ASSEMBLY.

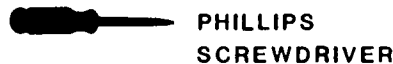
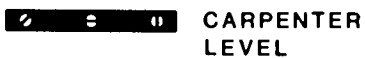
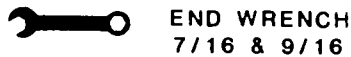
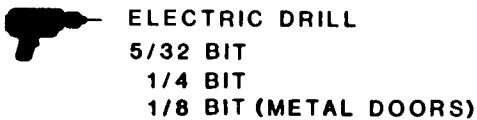
HOW TO USE THIS BOOK

1. Use tools indicated by silhouettes at top of instruction.
2. Perform the instruction according to the words and illustration.
3. Put a check in box after completion of instruction.
4. Proceed to next step.



TOOLS NEEDED

You will need the tools shown below to assemble and install this opener.



GENERAL INSTALLATION NOTES

Preparing Door for Opener

The following procedures must be performed before opener can be installed. Failure to complete the following procedures can cause opener failure and/or hazardous conditions which could cause personal injury.

1. Check working condition of door. Door should operate freely without sticking or binding, and should not have to be held up or down. Lubricate door rollers and hinges with SAE 30 wt. oil.
2. If any part of the door is worn or broken, call a qualified door service person to repair it before the opener is installed.

WARNING

Door is under extreme spring tension. Repairs and adjustments, especially to cables and spring assembly, can be hazardous and can result in severe personal injury. Repairs and adjustments should be performed only by qualified door service people.

3. If door is equipped with a locking device, make it inoperative by permanently securing the locking bar in an unlocked position.

CAUTION

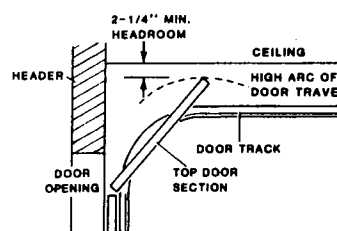
Remove any lift or pull rope to avoid entrapment by rope when the door is opened.

CAUTION

It is recommended that the top section of door be strutted on doors 16 feet wide or larger.

CAUTION

This opener cannot be installed on garage doors where the headroom is less than 2-1/4". Headroom is the distance between the ceiling and the high arc of the door's travel.



WARNING

This opener is not designed for use with one piece doors.

CAUTION

DO NOT USE lighted-type pushbutton. See troubleshooting chart, page 17.

CAUTION

Opener must be properly grounded to prevent personal injury and damage to opener components.

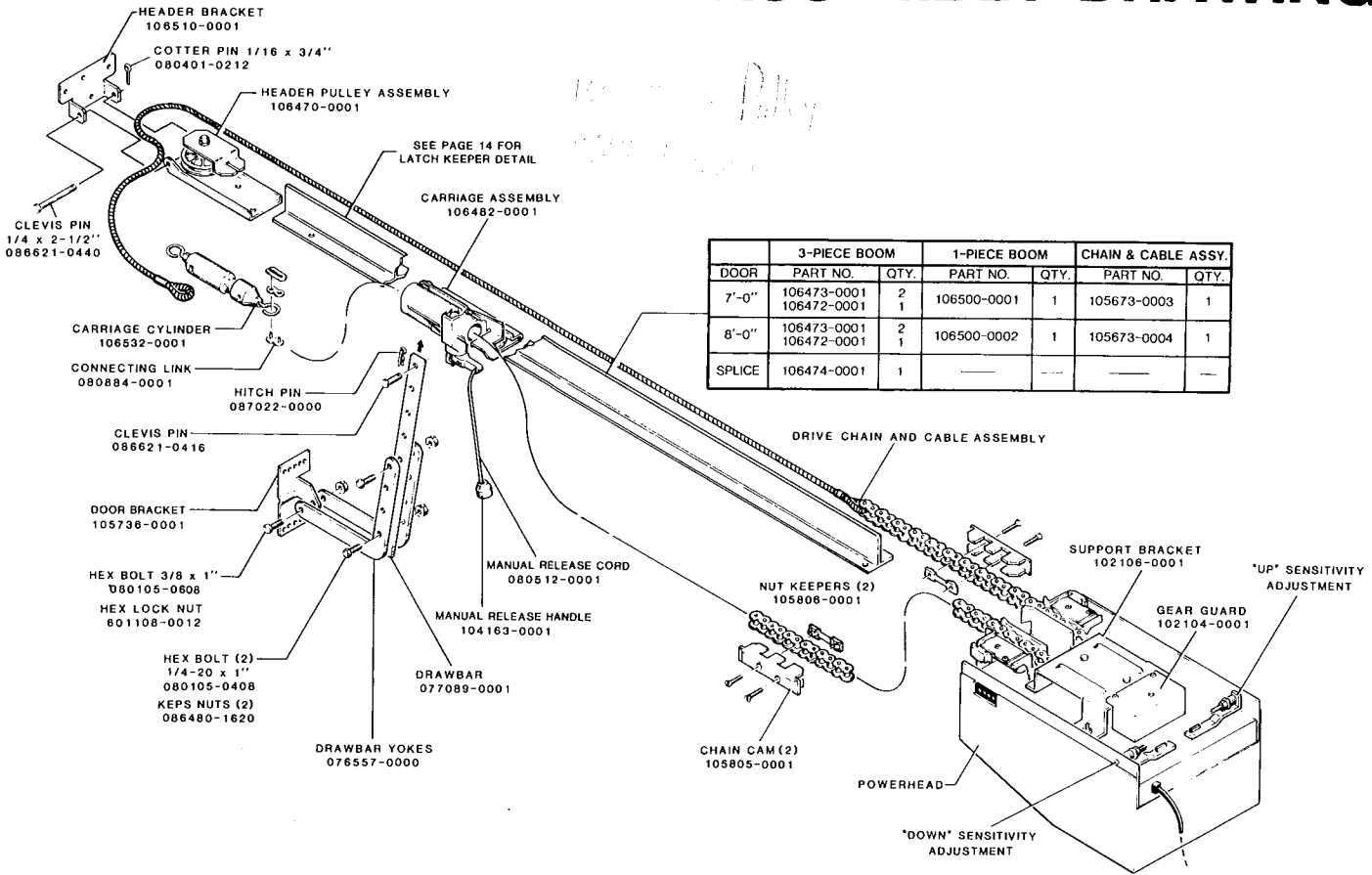
WARNING

DO NOT CONNECT ELECTRICAL POWER TO UNIT UNTIL INSTRUCTED TO DO SO.

IMPORTANT

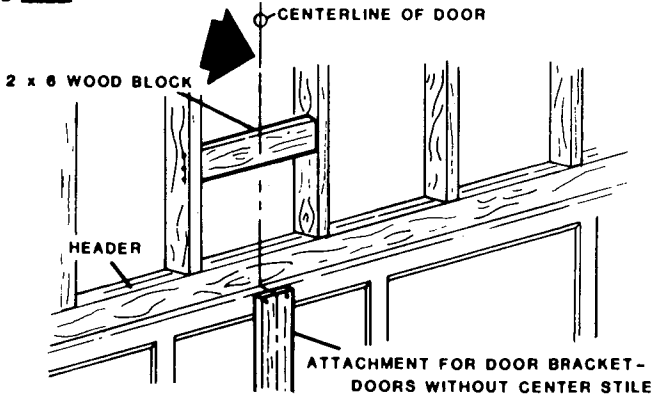
For proper and safe use of the installed opener, carefully read the Owners Information beginning on Page 15.

ASSEMBLY DRAWING



INSTALLATION

1 Measure width of door to determine center.

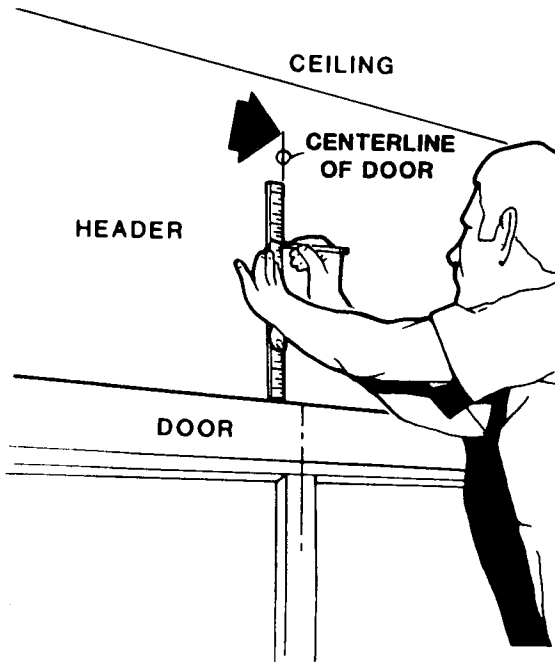


If header does not have suitable woodwork where header bracket will be installed, then such will have to be made. It is suggested that a wood 2"x6" be secured to nearby existing woodwork.

If door does not have a center stile or suitable material for attaching door bracket then door must be reinforced with wood or steel at this mounting point. This reinforcing member must attach to both top and bottom rail of the top section. This must be used on fiberglass and thin metal doors.

2

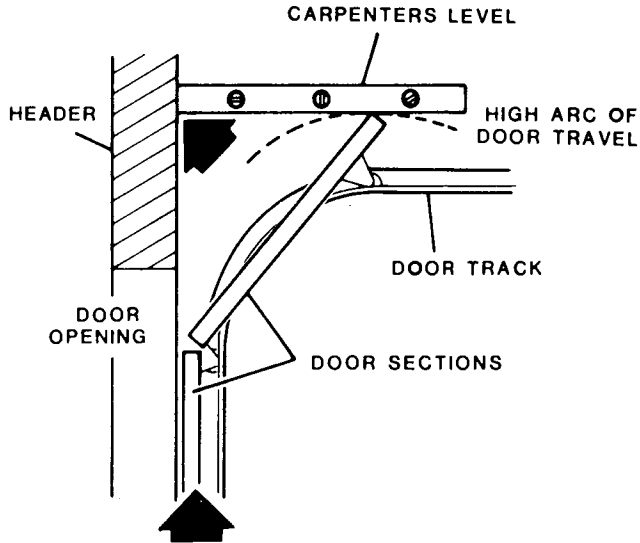
Mark center line on door and header.



INSTALLATION

3

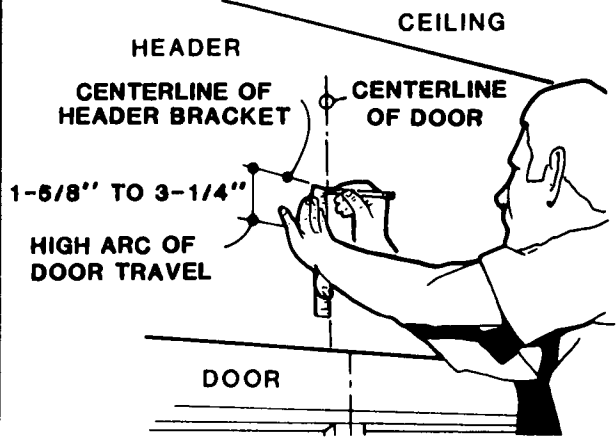
Raise door until top section reaches its highest arc of travel. Mark header on center line at point where level touches header.



IT IS RECOMMENDED THAT OPENER BE MOUNTED A MINIMUM OF 7 FEET ABOVE FLOOR.

4

Mark horizontal center line of header bracket 1-5/8" minimum to 3-1/4" maximum above high arc of door travel. Use lowest figure permitted by door counterbalance.

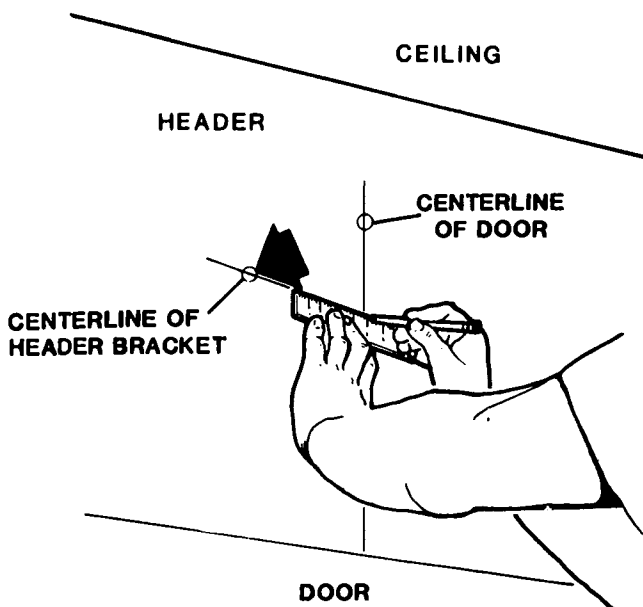


NOTE

2-1/4" minimum headroom required above high arc of door travel for 3 piece boom.
2" minimum headroom required for solid boom.

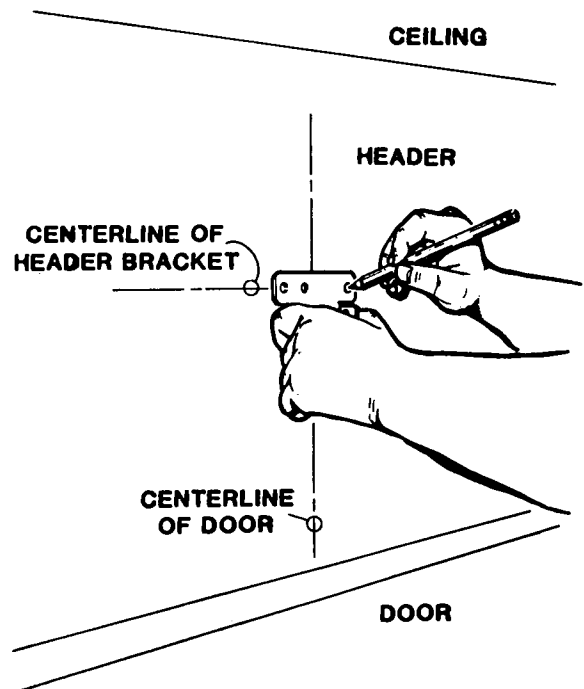
5

Mark horizontal center line of header bracket.



6

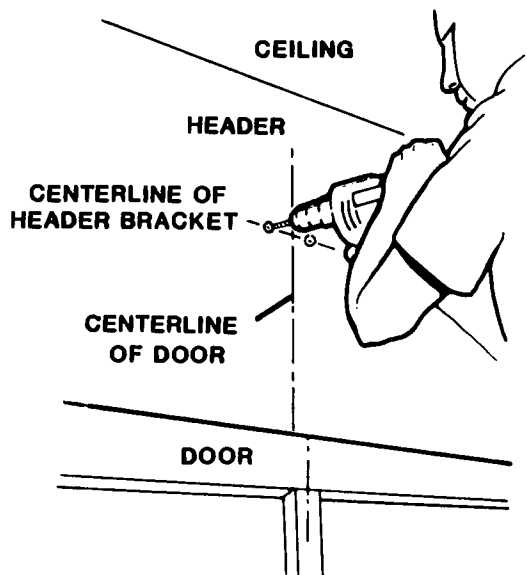
Position header bracket on center line and mark mounting hole locations on center line.



INSTALLATION

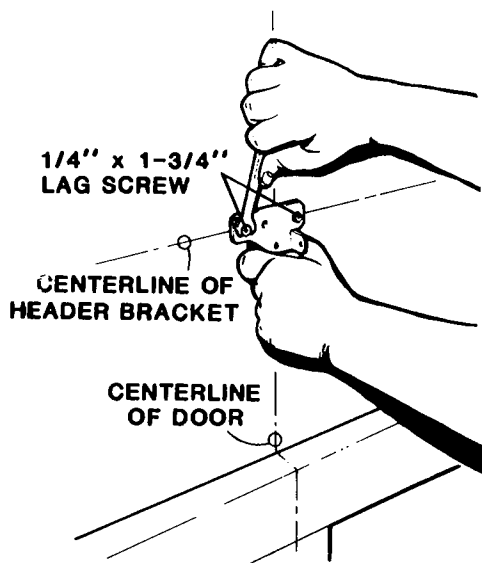
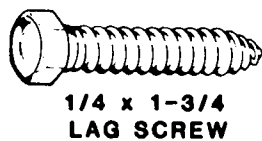
7 

Drill 5/32" diameter holes at marked locations.



8 

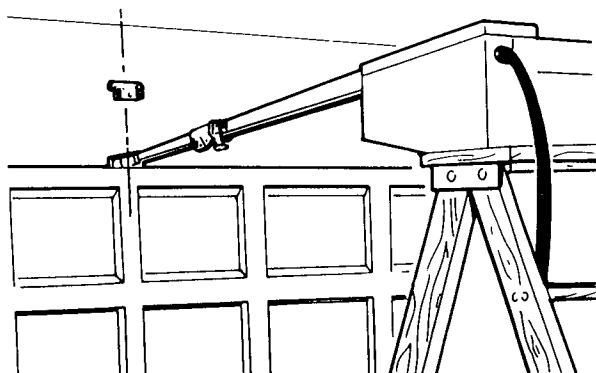
Secure header bracket to header.



9  A

EXTENSION SPRING DOOR

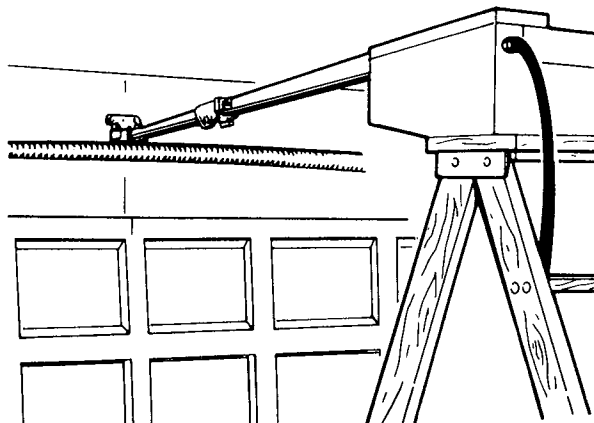
Rest header end of boom on top edge of top door section and powerhead on top of step ladder.



TORSION SPRING DOOR

Rest header end of boom on torsion spring and powerhead on top of step ladder.

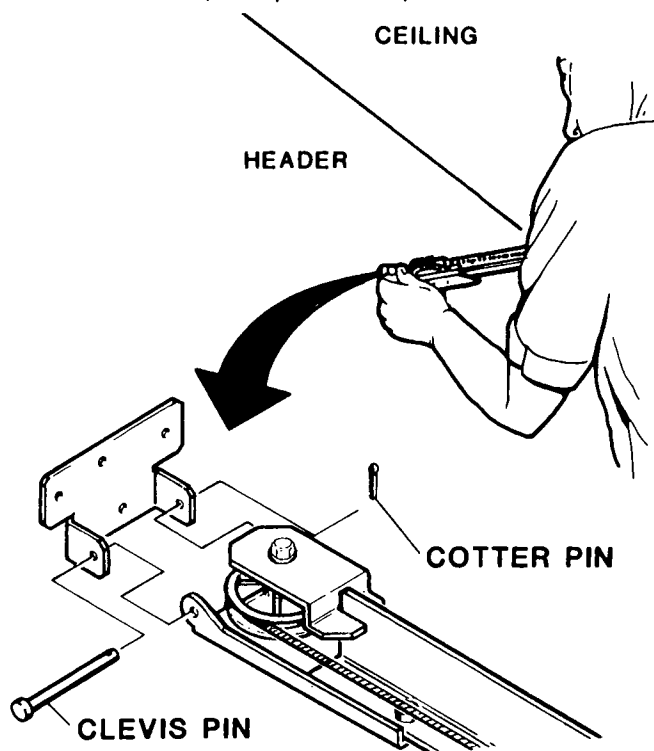
OR



INSTALLATION

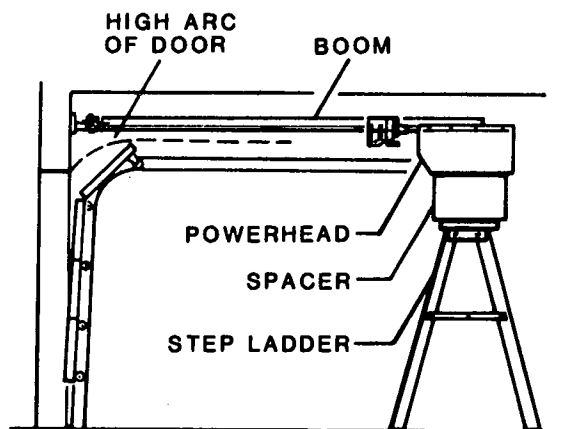
10

Attach header pulley assembly to header bracket.



11

Raise powerhead additionally if required so that boom is above high arc of door when opened.

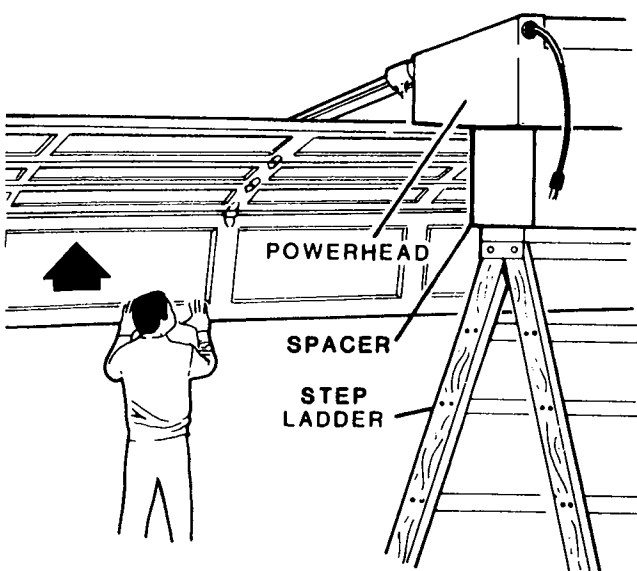


NOTE

Carriage should be located near powerhead when raising opener.

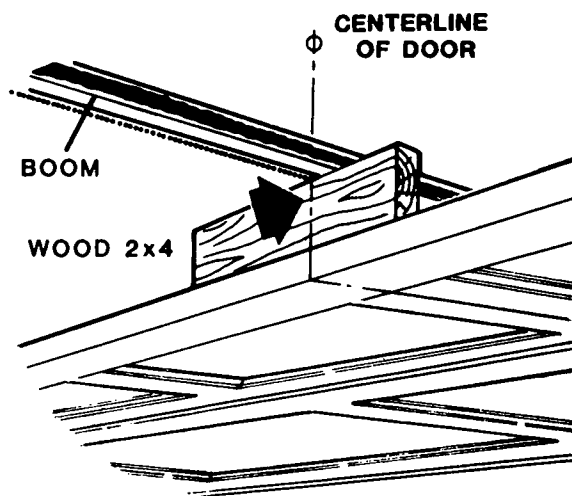
12

Raise door until fully open.



13

Position a wood 2x4 on edge between top door section and boom. Use center line of door to correctly align boom.



DOOR IN FULLY OPEN POSITION

INSTALLATION



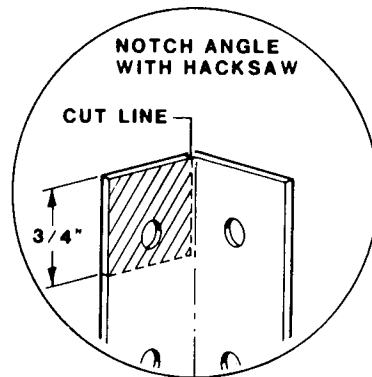
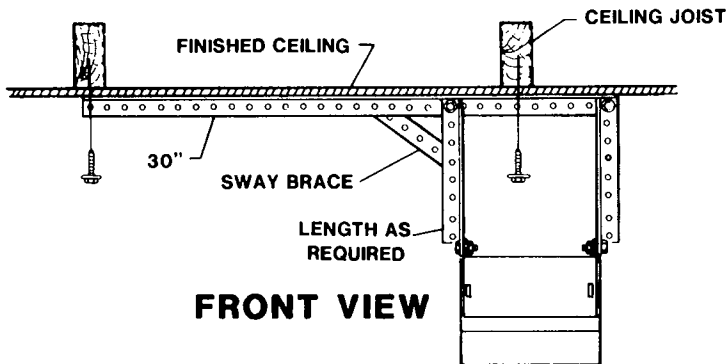
1. Shown are examples of various installation configurations. Determine the configuration which best suits your requirements.
2. If necessary, span ceiling joists with wood 2 x 4's sufficient enough to support opener.
3. Hold ceiling mounting angle in mounting position. Using holes in angle as a guide, drill 3/16" diameter pilot holes in ceiling joists or 2 x 4 framing.
4. Using 1/4" x 1-3/4" lag screws, secure ceiling mounting angle to ceiling joists or 2 x 4 framing.
5. Notch opener end of vertical angles (Detail A).
6. Using 1/4"- 20 x 1/2" hex head bolts and lock nuts, secure angle brackets to opener.
7. Using 1/4"- 20 x 1/2" hex head bolts and lock nuts, secure vertical mounting angles to ceiling angle. Vertical angles may be bent at notch if necessary (Detail B).

NOTE

IT IS RECOMMENDED THAT OPENER BE MOUNTED A MINIMUM OF 7 FEET ABOVE FLOOR.

LENGTHWISE CEILING JOISTS

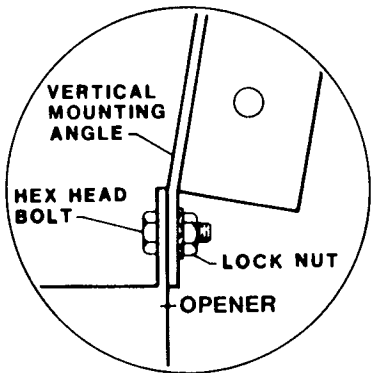
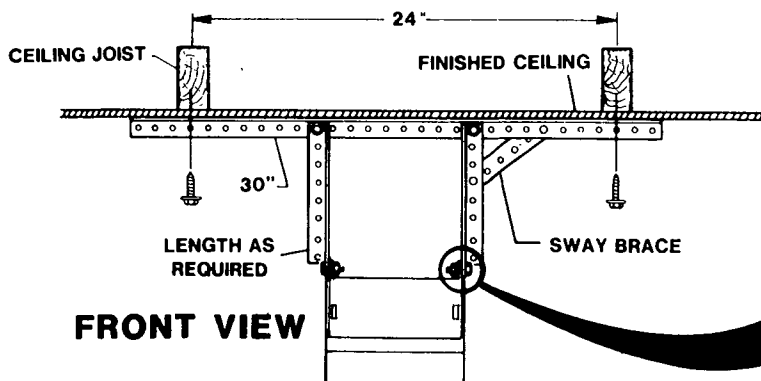
OFF-CENTER



DETAIL A

LENGTHWISE CEILING JOISTS

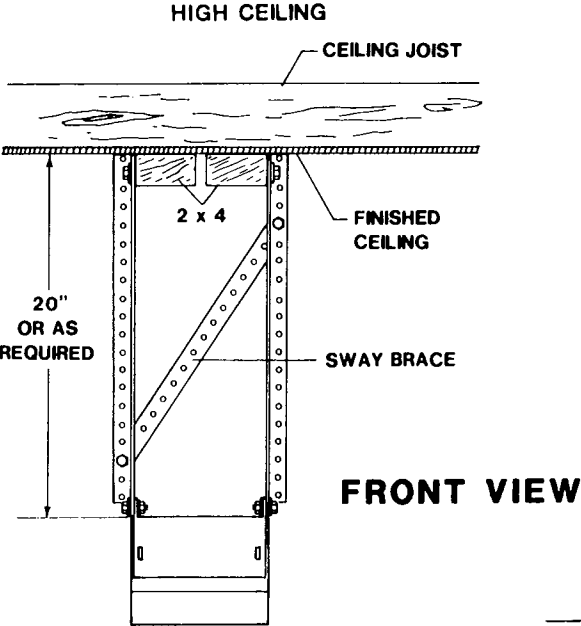
ON CENTER



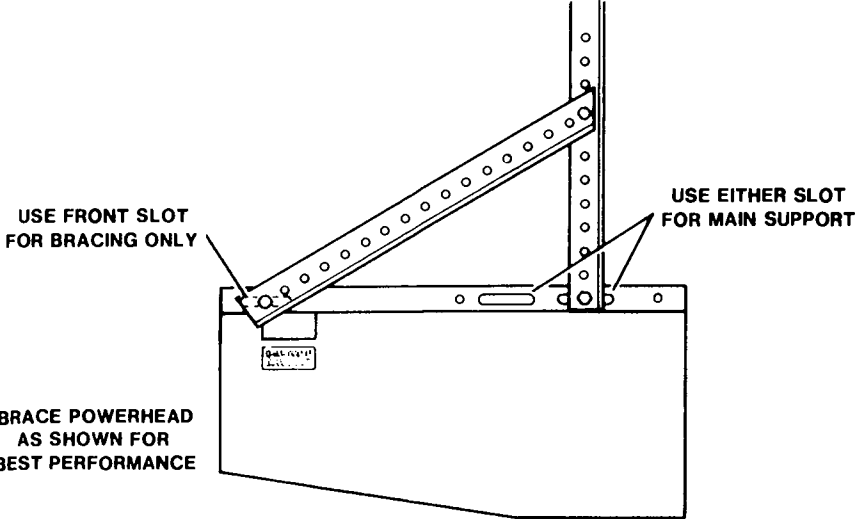
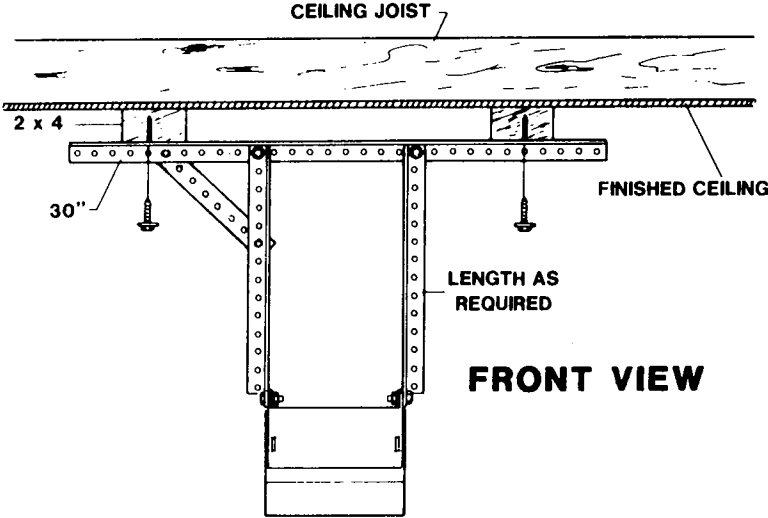
DETAIL B

INSTALLATION

CROSSWISE CEILING JOISTS



CROSSWISE CEILING JOISTS

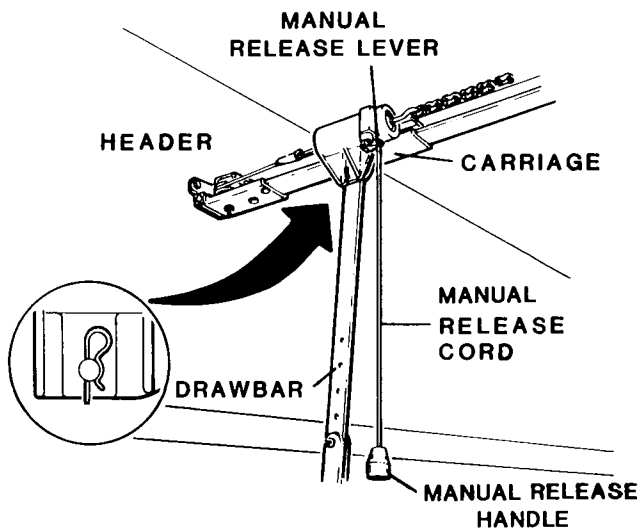


SIDE VIEW


INSTALLATION

15

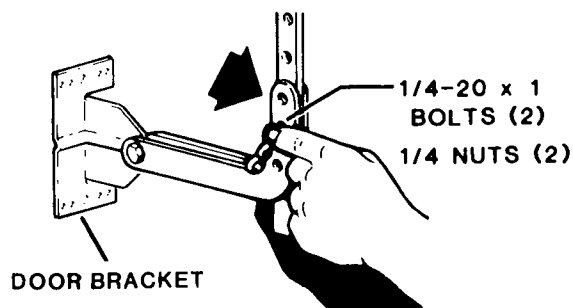
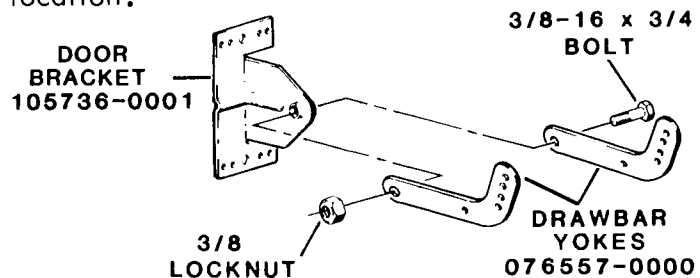
Plug opener cord into outlet and run carriage toward door using radio transmitter for control. Connect drawbar to carriage using clevis pin and hitch pin. Route pull cord through manual release lever on carriage and locate manual release handle approximately 6 feet from floor.



16

 7/16 & 9/16

Attach yokes to door bracket. Tighten locknut but do not compress yokes to bracket. Yokes MUST move freely. Temporarily bolt yokes to drawbar to permit check on carriage location.



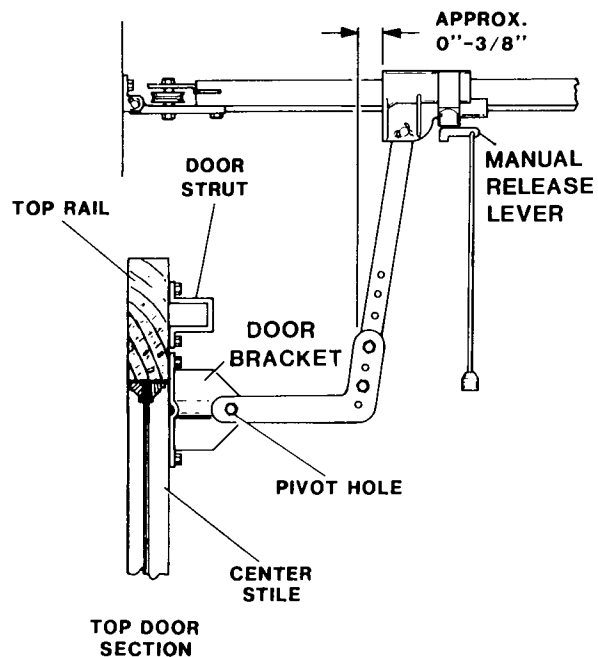
17

 7/16

Position door bracket against door to check drawbar angle. Drawbar should be at slight angle from door (as shown). If necessary re-adjust down limit switch (see page 15) to obtain correct drawbar position. Door bracket pivot hole should be in line with top fixture roller. If necessary remove yoke bolts and readjust. Secure yoke bolts to drawbar.

NOTE

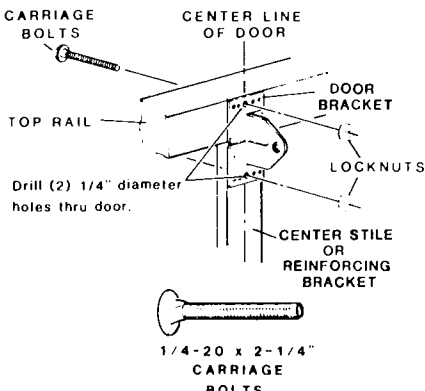
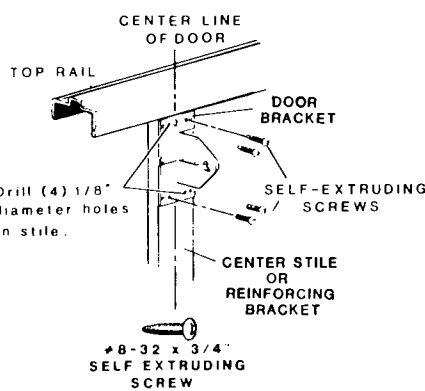
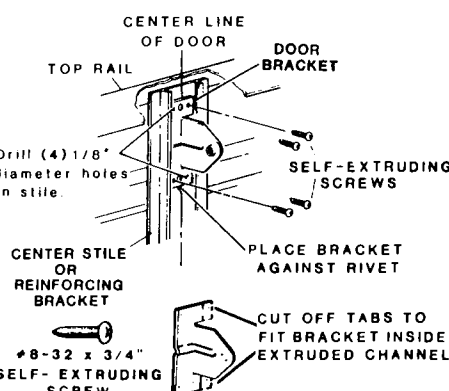
If door strut interferes with mounting of door bracket, move bracket below strut. DO NOT CUT OR MODIFY STRUT IN ANY WAY. Refer to page 11 for attachment of drawbar.

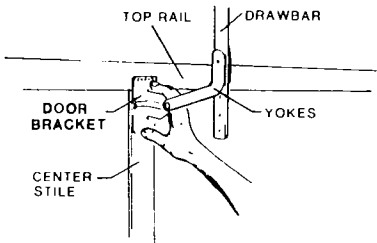
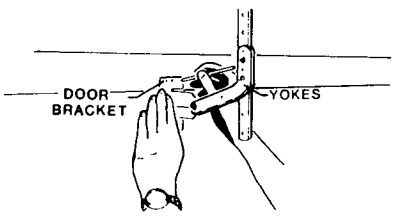
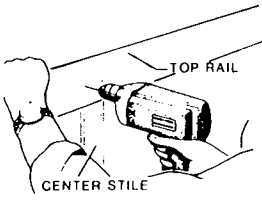
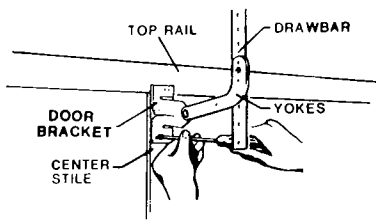


INSTALLATION

18    7/16

The illustrations below depict installation of door bracket, P/N 105376-0001, on 3 types of doors. Install bracket in the appropriate manner according to door type.

WOOD DOORS	STEEL DOORS	FIBERGLASS DOORS
 <p>CARRIAGE BOLTS CENTER LINE OF DOOR TOP RAIL DOOR BRACKET LOCKNUTS Drill (2) 1/4" diameter holes thru door. CENTER STILE OR REINFORCING BRACKET 1/4-20 x 2-1/4" CARRIAGE BOLTS</p>	 <p>CENTER LINE OF DOOR TOP RAIL DOOR BRACKET SELF-EXTRUDING SCREWS Drill (4) 1/8" diameter holes in stile. CENTER STILE OR REINFORCING BRACKET #8-32 x 3/4" SELF EXTRUDING SCREW</p>	 <p>CENTER LINE OF DOOR TOP RAIL DOOR BRACKET SELF-EXTRUDING SCREWS Drill (4) 1/8" diameter holes in stile. PLACE BRACKET AGAINST RIVET CENTER STILE OR REINFORCING BRACKET CUT OFF TABS TO FIT BRACKET INSIDE EXTRUDED CHANNEL #8-32 x 3/4" SELF-EXTRUDING SCREW</p>

<ol style="list-style-type: none"> 1. With door bracket and yokes attached to drawbar, swing assembly into place against door. 2. Mark mounting hole locations. Refer to wood, steel, or fiberglass door details above. 3. Drill appropriate size mounting holes. 4. Attach door bracket to door using appropriate hardware. 	<p>STEP 1</p>  <p>TOP RAIL DRAWBAR DOOR BRACKET YOKES CENTER STILE</p>	<p>STEP 2</p>  <p>DOOR BRACKET YOKES</p>
	<p>STEP 3</p>  <p>TOP RAIL CENTER STILE</p>	<p>STEP 4</p>  <p>TOP RAIL DRAWBAR DOOR BRACKET YOKES CENTER STILE</p>

19 

CHECKLIST

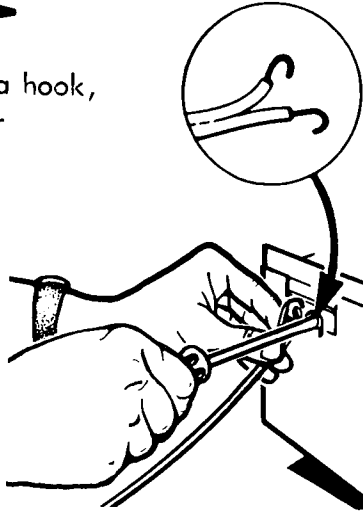
- | | |
|--|--|
| <input type="checkbox"/> Header bracket secure. | <input type="checkbox"/> Drawbar to yoke bolts tight. |
| <input type="checkbox"/> Door bracket-yoke pivot bolt secure, but not too tight. | <input type="checkbox"/> Drive chain-cable is tight (tensioned correctly). |
| <input type="checkbox"/> Header pulley assembly pivot bolt secure but not too tight. | <input type="checkbox"/> Carriage engagement cylinder is engaged with carriage. |
| <input type="checkbox"/> Hanging bracket bolts tight. | <input type="checkbox"/> Make fine adjustments on "UP" limit switch (See Page 16). |

WIRING

20

Shape wire leads like a hook, then connect to opener terminals.

Route push button wire from powerhead, along ceiling, to garage entrance door. Staple wire as necessary to prevent entanglement or contact with moving objects.



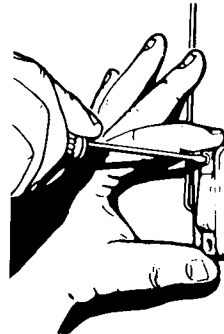
CAUTION

Be careful not to pierce wire insulation with staples.

Shape wire leads like a hook, and connect leads to push button terminals.

21

Install push button on wall near garage entrance door approximately six (6) feet from floor.



APPROX.
6'-0"

FLOOR
PUSH BUTTON
OPERATION DECAL
106913-0001

CAUTION

Button **MUST** be installed out of reach of children.

PUSHBUTTON OPERATION

TO START OPERATOR:
Press pushbutton 1 time. (Door will automatically stop in "fully opened" or "fully closed" position.)

TO STOP OPERATOR:
Press pushbutton 1 time.

TO RESTART OPERATOR:
Press pushbutton 1 time. (Door will move in opposite direction.)

CAUTION

To reduce the risk of injury to persons, operate door only when fully visible, properly adjusted, and free of all obstructions. Do not permit children to play in the area of the door. See instruction manual for proper operation. **NOTE:** To detach the operator from the door, press downmost red and red.

106913-0001

Peel backing off "PUSHBUTTON OPERATION" decal and attach to wall near pushbutton.

22

WARNING

It is important that electrical power to opener be off when powerhead cover is removed. Electrical power must remain disconnected while making electrical connections and limit switch adjustments. Keep hands and objects clear of powerhead if electrical power is re-connected with cover off.

Opener is equipped with a factory installed power cord and must be plugged into a 115 volt, 60 hertz, grounded electrical outlet.

CAUTION

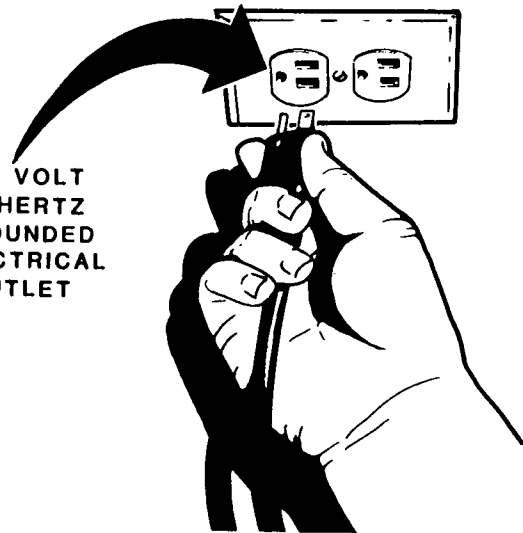
OPENER **MUST** BE PROPERLY GROUNDED TO PREVENT PERSONAL INJURY AND DAMAGE TO THE OPENER COMPONENTS.

If a convenient electrical outlet has to be installed it is recommended that such work be performed by a licensed electrician. Use of an extension cord is **NOT RECOMMENDED**.

NOTE

If extension cord is required for temporary testing and adjustment, use only 3 wire (grounded) with a minimum 10 amp rating. This will assure proper operation of electronic system.

115 VOLT
60 HERTZ
GROUNDED
ELECTRICAL
OUTLET



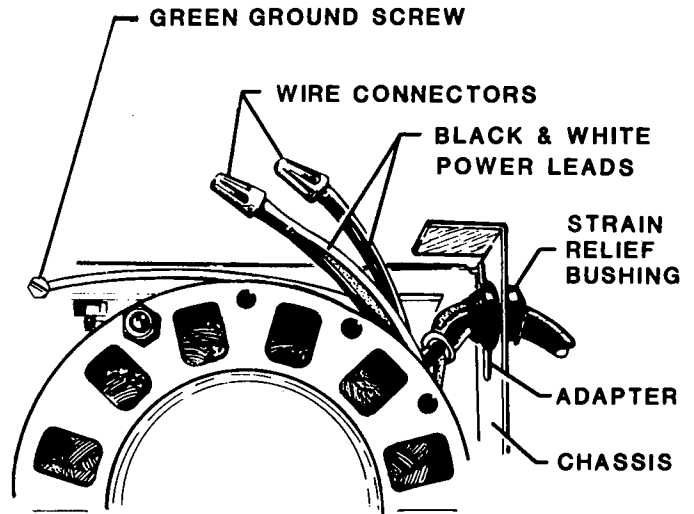
When installing a convenient electrical outlet, it is suggested that an electrical switch be installed to facilitate emergency power cutoff.

WIRING

23 □

If local electrical codes require permanent wiring, proceed as follows:

1. Remove opener cover (4 screws), two (2) wire connectors and disconnect green ground wire.
2. Remove power cord, strain relief bushing and adapter.
3. Connect conduit to opener frame through the 7/8" diameter hole.
4. Use appropriate wire connectors and connect black power wire to the two (2) black wires (in opener) and white power wire to the three (3) white wires. **CONNECT GREEN GROUND WIRE TO GREEN GROUND SCREW--**
MAKE SURE CONNECTION IS SECURE.
5. Reinstall opener cover.

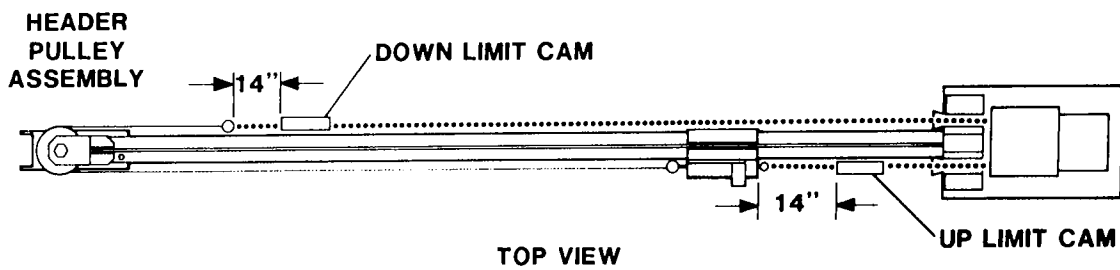


OPERATION AND ADJUSTMENT

24 □

CHAIN CAM ADJUSTMENT

Door travel is limited by the placement of the chain limit cams. Moving a chain cam one chain link, varies carriage movement by 1/2 inch (and thus affects door travel proportionately). Use the transmitter to control the opener when making final adjustments.



DOWN TRAVEL ADJUSTMENT

Using transmitter, run carriage to down position. Check position of carriage and, if necessary, readjust so that the drawbar will be almost vertical when the door is closed. To readjust, use transmitter to move carriage approximately 2 feet in the open direction, stop, then adjust chain cam. Using transmitter, again run the door to closed. Check to see that the door is sealing properly to floor. Repeat procedure if further adjustment is needed.

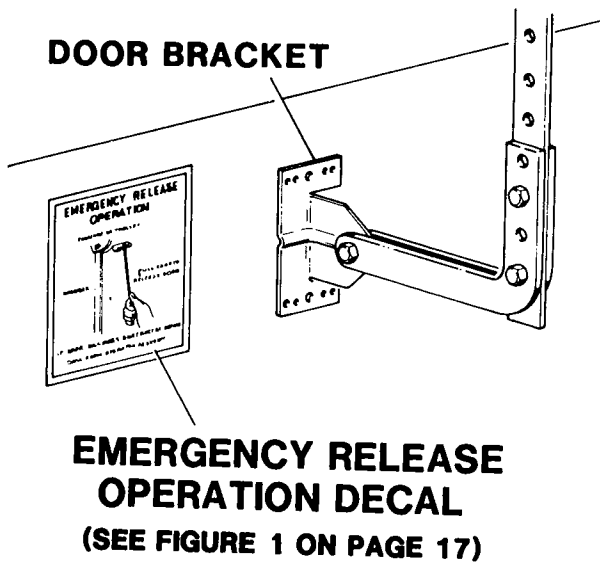
UP TRAVEL ADJUSTMENT

Using transmitter, run carriage to the up position. Check door position and readjust chain cam as necessary to stop door just after clearing the top of the door opening. Do not allow the door to open beyond this point.

OPERATION AND ADJUSTMENT

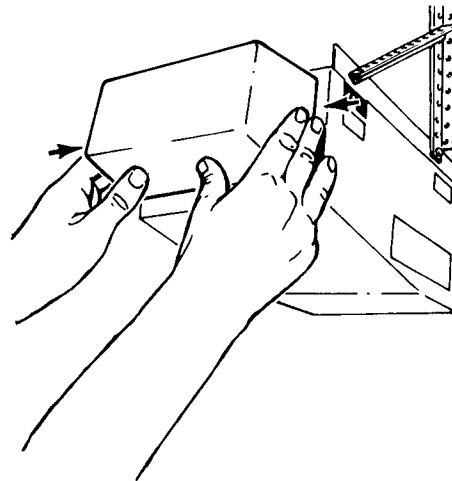
25

Remove protective backing from EMERGENCY RELEASE OPERATION decal and install on door, near door bracket.



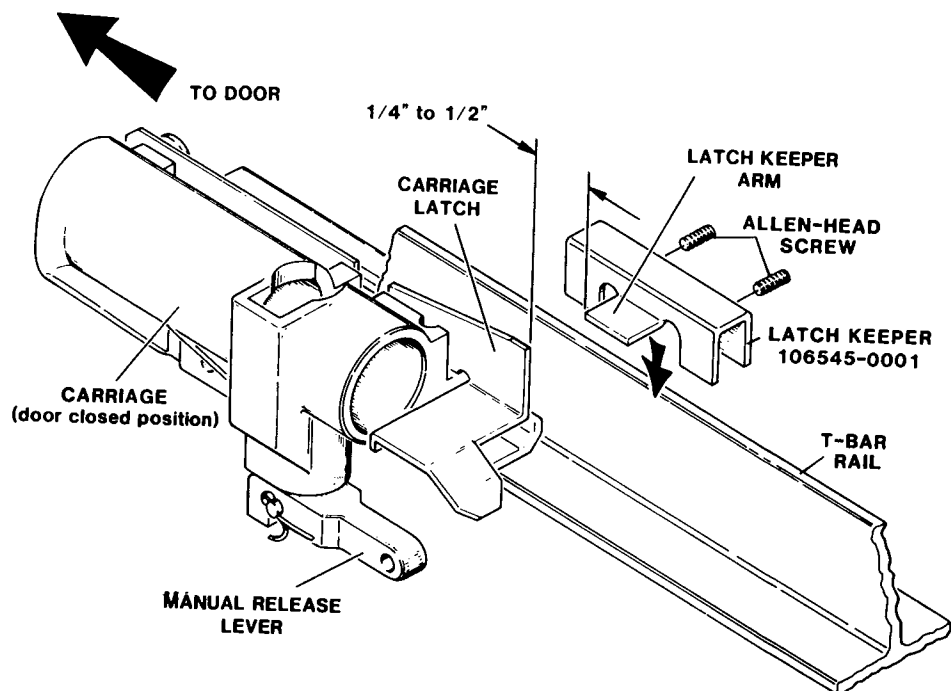
26

Install light bulb (60 watt maximum).
Depress ends of light lens and insert tabs into slots on front of opener. Depress ends to remove lens.

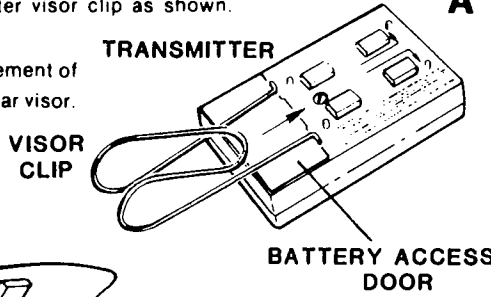
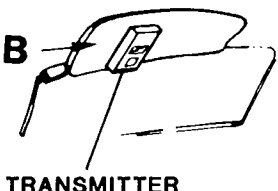


27

With the door in the closed position, install latch keeper between carriage and power-head. The latch keeper arm should be $1/4''$ to $1/2''$ behind carriage latch. Firmly tighten set screws using $1/8''$ allen wrench.

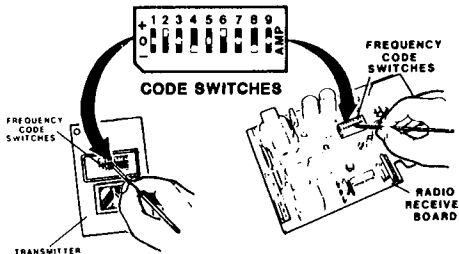
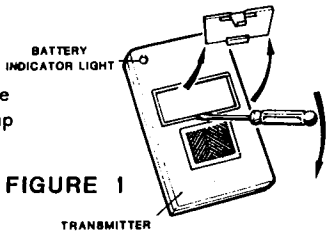


OWNERS INFORMATION - OPERATION/ADJUSTMENT

Transmitter Visor Clip Mounting	General Information
<p>A. Attach transmitter visor clip as shown.</p> <p>B. Suggested placement of Transmitter on car visor.</p>  	<p>If you have two transmitters and one does not work it is reasonable to assume the problem is in the transmitter. However, when you have one transmitter and it does not work, the problem may be in the receiver. When returning controls to the factory for service, it is always recommended that you send the receiver and all transmitters so they can be serviced and tested as a set.</p> <p>When writing to the factory for assistance or when returning a control for repair be sure to include the following information:</p> <ol style="list-style-type: none"> 1. RADIO CONTROL MODEL NO. 2. NUMBER OF TRANSMITTERS 3. DOOR OPENER MODEL NO. AND MANUFACTURER'S NAME 4. DATE UNIT WAS INSTALLED 5. NATURE OF DIFFICULTY <p>SEE PAGE 19 FOR ADDRESS</p>

NOTE

For maximum Radio Control performance on garages with two or more openers, it is recommended that the Radio Frequency(RF) of each unit be different. For example: 380 --- RF on one opener with 360 --- on the second opener. (Refer to sticker on back of transmitter).

Your Radio Control System	How To Change Frequency Coding
<p>Your Trinary Digital Control is designed to give years of trouble-free service. The concept of Digital Control allows you to easily change the coding of your control, should you experience "phantom" operation. Phantom operation is the inadvertent opening or closing of your garage door by an outside signal source other than your own hand-held transmitter.</p> <p>Should you experience this inadvertent operation, follow these simple steps to change the coding of your transmitter(s) and receiver. We recommend you do not change the coding UNLESS you are experiencing "phantom" operation.</p>	 <p style="text-align: center;">FIGURE 2</p>
<h3>How To Change Frequency Coding</h3> <ol style="list-style-type: none"> 1. Disconnect power to door opener. 2. Remove door opener cover to expose receiver circuit board. 3. Open transmitter access door as shown in Figure 1. <div style="text-align: center;">  <p>FIGURE 1</p> </div> <p>Insert small screwdriver in code switch access door slot and snap it out.</p> 4. To change the code (see Fig. 2), simply change the position of one or more of the code switches on the Receiver and Transmitter(s) circuit board. PLEASE NOTE: The code switches (three position) settings of the Receiver and Transmitter(s) must match each other. EXAMPLE: If code switch No. 1 is "+" in the Receiver, code switch No. 1 must be "+" in the Transmitter(s), and so on. 	<ol style="list-style-type: none"> 5. If you have purchased only one Transmitter and you wish to purchase a second one, specify the frequency and code found on the white sticker on the back of the Transmitter or Receiver case. <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p style="text-align: center;">EXAMPLE:</p> <p style="text-align: center;">Specify frequency number and letters when ordering a second transmitter.</p> </div> <p>FREQ 340-AVO ← MFG. 810915</p> <p>When you receive the new transmitter it will NOT work with your present Digital receiver if you have previously changed the code switches in the receiver. You MUST position the new transmitter code switches to the same "+", "0", "-" sequence as your receiver code switches. Refer to Item 4 above.</p> <ol style="list-style-type: none"> 6. Replace door opener cover. 7. Reconnect power to door opener. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p style="text-align: center;">NOTE:</p> <p>Warranty on the Control will be nullified if service other than specified in the service hints is not performed at the factory.</p> </div>

OWNERS INFORMATION-OPERATION /ADJUSTMENT

Operation

On initial power application or after a power failure, the motor will always run first in the open direction when signaled from either the transmitter or wall push button.

Opener always restarts in the direction opposite its last run.

TO START OPENER: Press transmitter push button or wall push button 1 time.

TO STOP OPENER: Press transmitter push button or wall push button 1 time.

Adjustment And Testing Of The Reversing Mechanism

WARNING

The proper adjustment and testing of the reversing mechanism is important for the safety of everyone who uses your door and opener. Failure to properly adjust and test may result in serious personal injury from a closing garage door.

The reversing mechanism is a safety feature that reverses the door's travel and returns it to the fully open position if the door encounters an obstruction while closing. If this does not happen and the door cannot close completely, an additional back-up circuit will automatically reverse the motor within 30 sec. and fully open the door.

The reversing mechanism is designed to operate in the closing direction after the motor has run one second, and until the door is closed completely.

The sensitivity of the reversing mechanism is controlled by the sensitivity adjusting screw (see Fig. 1). Turning the screw clockwise decreases the sensitivity so as to require more resistance to reverse the door. The reversing mechanism should be set for the maximum sensitivity (as far counterclockwise as possible) consistent with proper operation of the door. Do not decrease the sensitivity to compensate for a binding or sticking door. This will interfere with proper operation of the reversing mechanism.

As a final check, place a 1-1/2" thick board on the floor in the path of the door. When the door strikes this board it should reverse within 2 seconds and fully open. If it does not, check the door opener linkage, and opener for proper adjustment and operation.

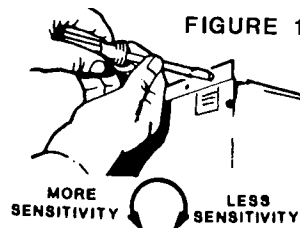
For your safety, it is vital that the reversing mechanism be adjusted to perform properly. Check it every six months or call a professional door service person to check it for you. If, for any reason, the opener is not functioning properly, immediately disconnect the opener from the door (Emergency Release Operation) and do not reconnect until the problem is corrected.

Adjusting "Up" Sensitivity

The "Up" Sensitivity Adjustment Screw is located on the side opposite the Reversing Sensitivity ("Down") Adjustment Screw (see Assembly Drawing, Page 4). Turning the "Up" Sensitivity Screw clockwise will increase the amount of force necessary to stop the door's upward movement if it encounters an obstruction. Turning the screw counterclockwise will decrease the force required to stop the door. Adjustment should be made just to the point that will allow the door to fully open.

WARNING

If satisfactory operation of the door/opener cannot be achieved by following the instructions above, disconnect the opener from the door by pulling the emergency release rope (page 17), then check operation of the door alone. If door balance, rollers, and hinges operate smoothly, without striking or binding in the jambs, reconnect the opener and repeat the sensitivity adjustment procedure. If door/opener operation is still unsatisfactory, contact qualified door service personnel.



GENERAL INFORMATION

- When "Emergency" or "Manual" operation of door is required, refer to "EMERGENCY RELEASE OPERATION" decal mounted on garage door.

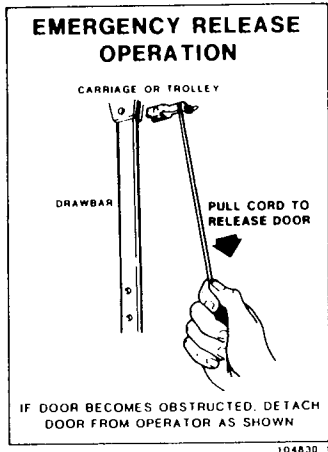


FIGURE 1

- To reconnect the opener, place the manual release lever in the horizontal position and run the opener. It will automatically reconnect.
- Operate door only when fully visible and clear of all persons and obstructions.

WARNING

DO NOT allow children to play in area of door, or with radio control transmitter, or with push button control.

- If light does not work when opener is in use, replace light bulb (60 watt maximum).
- Oil door hinges, rollers, and springs once each year with 30 weight oil. Wipe off any excess oil.
- Transmitter is equipped with a standard 9 volt battery. Do not substitute with any other voltage input.
- Opener motor is protected against burn-out by an internal protector which will stop motor if door is opened and closed too many times in succession, or if some other overload condition exists. If motor stops, allow it to cool 10-15 minutes, then press wall push button to resume operation.
- It is suggested that every 6 months door be disconnected from opener and manually operated. Door should open and close freely. If door does not operate freely, correct the problem.

WARNING

Door is under extreme spring tension. Repairs and adjustments, especially to cables and spring assembly, can be hazardous and can result in severe personal injury. Repairs and adjustments should be performed ONLY by QUALIFIED DOOR SERVICE PEOPLE.

- For normal conditions, lubrication of opener rotating parts is not required. Motor is permanently lubricated.
- DO NOT lubricate boom. It is possible a film may develop inside the nylon carriage. This film may cause binding in freezing weather. To correct, spray boom, or either side of carriage, with a spray lubricant (WD 40, LIQUID WRENCH, etc.), run opener open and closed, then wipe boom clean.

TROUBLESHOOTING GUIDE

This troubleshooting guide shows malfunction symptoms and their possible causes. Use it to help determine the cause of a problem. Disconnect power to the opener before opening the cover unless inside voltages have to be measured.

The microprocessor does a self test when power is connected to the opener, when the push-button or transmitter button is pushed and at the end of the light timing cycle, which is a 4 minute period after each motor run. The self test shows a system problem by flashing the opener lights.

SYMPTOM	POSSIBLE CAUSE
Opener light flashes at 1 second intervals for 7 flashes.	Safety switch is on or the safety circuit is defective.
Opener light flashes at 1-1/2 second intervals for 5 flashes.	Short in wall pushbutton, lighted pushbutton or pushbutton circuit, or a failure in the radio output circuit.
Opener inoperative from transmitter or pushbutton when pressed BUT Opener light flashes at 1/2 second intervals for 15 flashes.	* Both limit switches are on (Door at one and the other defective). Defective opener wiring.
Door will not open using radio or pushbutton when pressed.	Short in wall pushbutton, lighted pushbutton or pushbutton circuit.
Door will not open using radio but will with pushbutton.	Defective transmitter, check battery in transmitter. * Defective radio receiver.
Door starts down, runs 1 second and reverses.	* Open safety switch or circuit.
Door runs down, hits floor and reverses within 1/2 second.	Improper adjustment of down limit switch. * Defective limit switch. * Defective circuit board.
Door starts down, runs longer than 1 second, then reverses.	Obstruction in doorway or roller pathway. Hard operating or defective door. Sensitivity control set too light.
Door raises, carriage hits powerhead.	Improper adjustment of up limit switch. * Limit switch defective. * Circuit board defective.
Door runs up, won't run down.	* Down limit switch or circuitry open. * Circuit board defective.
Door runs down, won't run up.	* Up limit switch or circuitry open. * Circuit board defective.
Door runs down, hits obstruction, does not reverse immediately, but reverses in 30 seconds.	* Defective safety switch or circuitry or mechanism.
Motor runs, door will not open.	Broken chain, chain-cable, drive sprocket, or drive gear.
Door drives into floor and does not stop running until thermal shutdown.	* Stuck relay contact.
Door drives into powerhead and does not stop running until thermal shutdown.	* Stuck relay contact.
Door starts up, runs longer than 1 second, and then stops.	* Open safety switch or circuit.

* Requires the assistance of a qualified repairman.

TRANSMITTER SERVICE HINTS

NATURE OF DIFFICULTY:

- Short Distance-

When Battery Condition Light is quite dim or begins to flicker, replace battery. Refer to Radio Coding on Page 10.

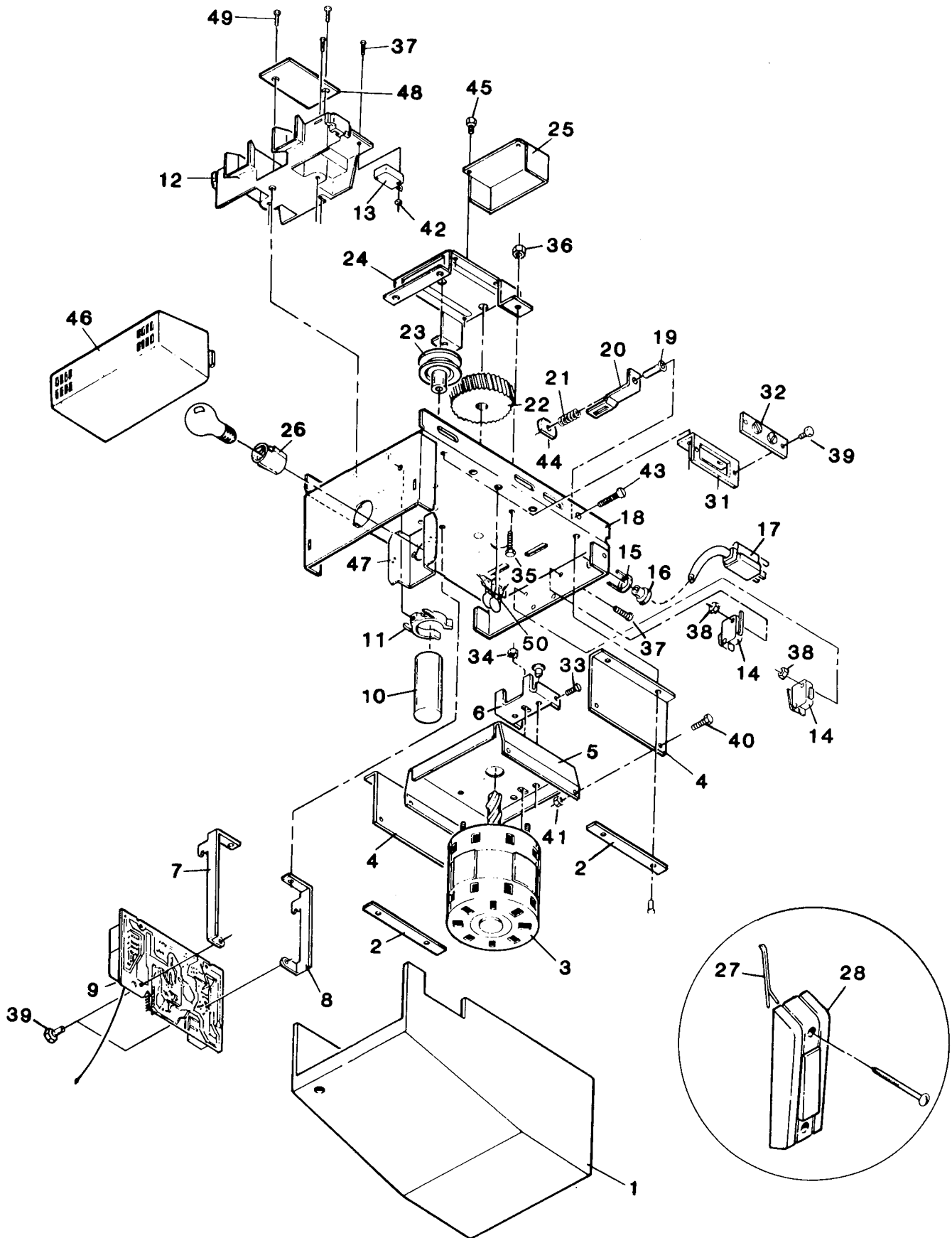
- Inoperative or Intermittent Operation-

A. Check Radio Code Switches in transmitter or receiver.

B. When Battery Condition Light is quite dim or begins to flicker, replace battery.

C. Be sure battery connector makes good contact to battery terminals.

ILLUSTRATED PARTS BREAKDOWN



PARTS LIST

1	106566-0001	Cover Assembly
2	102147-0001	Motor Support
3	107334-0001	Motor
4	102137-0001	Motor Mounting Angle
5	102105-0001	Motor Bracket
6	102101-0001	Safety Trigger
7	105359-0001	Circuit Board Mounting Bracket
8	105358-0001	Circuit Board Mounting Bracket
9	106549-0003	Circuit Board
10	077156-0001	Capacitor, 330VAC, 54-64 µF
11	077452-0000	Capacitor Clip
12	106484-0001	Limit Switch Assembly
13	106505-0001	Limit Switch
14	106504-0001	Sensitivity Switch
15	080628-0000	Adapter
16	076877-0012	Strain Relief Bushing
17	107443-0001	Power Cord Assembly
18	106649-0001	Main Frame
19	104050-0001	Eyelet
20	102102-0001	Safety Trigger Retainer
21	102087-0001	Sensitivity Spring
22	104086-0002	Main Drive Gear Assembly
23	102103-0001	Chain Idler
24	102106-0001	Support Bracket
25	102104-0001	Gear Guard

26	604067-0001	Lampholder
27	080813-0001	Bell Cord Wire
28	106527-0001	Push Button
29	105352-0004	Control Wiring Harness (not shown)
30	104107-0002	Power Wiring Harness (not shown)
31	101601-0001	Terminal Bracket
32	104703-0001	Terminal Strip
33	086575-0508	Screw, Hex Hd., Sltd, 6-32 x 1/2"
34	086480-1232	Nut, Hex w/Lockwasher, 8-32
35	080105-0404	Bolt, Hex Hd, 1/4-20 x 1/2"
36	086480-1620	Nut, Hex w/Lockwasher, 1/4-20
37	080288-0810	Screw, Rd. Hd., Sltd, 4-40 x 5/8"
38	086480-0840	Nut, Nex w/Lockwasher, 4-40
39	607083-0001	Screw, Hex Hd., 6-32 x 3/8"
40	604723-1006	Screw, Hex Hd., 10-32 x 3/8"
41	086480-1332	Nut, Hex Lk. Fig., 10-32
42	086480-0840	Nut, Hex Lk., 4-40
43	080288-1232	Screw, Rd. Hd., Sltd, 8-32 x 2"
44	086584-0002	Nut, Spotweld, 8-32
45	086575-0504	Screw, Hex Hd., 6-32 x 1/4"
46	104059-0001	Light Lens
47	104039-0001	Lampholder Bracket
48	106465-0001	Plate, Spacer/Retain
49	080295-1608	Bolt, Socket Head- 1"
50	106453-0001	Surge Protector Assembly

107871-0001 54-64 @ 220 VAC Metal Capacitor

NOTE: Item 12, Limit Switch Assembly, contains two limit switches (item 13).

PARTS AND SERVICE

For parts and service, contact the nearest Distributor.

When ordering parts, specify:

MODEL NUMBER

PART NUMBER

PART DESCRIPTION

Repairs to transmitter and receiver should be performed by a qualified repairman. See Radio Control Instructions.

NOTE TO OWNER

IF SERVICE IS REQUIRED ON THE CONTROL MAIL THE COMPLETE UNIT (RECEIVER AND TRANSMITTERS)

to

Overhead Door Corporation

Advance Operator Division

801 St. Joe

Shelbyville, IN 46176

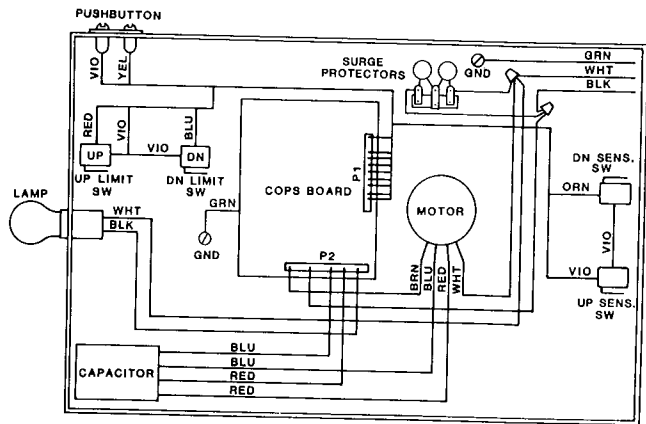
or

Advance Industries

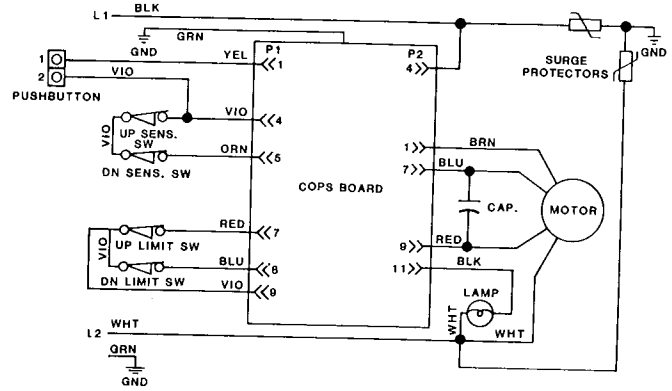
3233 W. Harvard

Santa Ana, CA 92704

WIRING DIAGRAM



WIRING SCHEMATIC



LIMITED WARRANTY

The authorized distributor of Overhead Door Corporation products whose name appears below ("Seller") warrants this automatic garage door opener system to be free from defects in material and workmanship under normal use and service. This warranty extends only to the original consumer ("Buyer").

During the following periods after the sale, Seller shall furnish the goods and services indicated to repair or replace any portion of the system determined by Seller to be defective:

- 1 year All parts and labor (including installation, if the system was installed by Seller)
- 5 years Motor only

The foregoing represents Seller's sole obligation under this warranty, and is conditioned upon Buyer giving notice to Seller within the respective warranty period. Proof of purchase is required.

If Seller concludes that repair or replacement is necessary, Seller will commence work within a reasonable time after the decision to repair or replace is made.

This warranty does not apply if the system has been altered or repaired by any person not authorized by the Seller, or has been subject to misuse, neglect or accident.

Seller has not established any informal dispute settlement procedure of type described in the Magnuson-Moss Warranty Act.

SELLER ASSUMES NO LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. WARRANTIES IMPLIED BY LAW ARE LIMITED IN DURATION TO ONE YEAR FROM THE DATE OF SALE.

This warranty gives you specific legal rights, and you may have other rights which vary from state to state. Some states do not allow limitations on how long an implied warranty lasts, and some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

Inquiries to the Seller concerning this warranty should be directed to: