CAUTION

DO NOT ALLOW CHILDREN TO PLAY WITH THE DOOR OPERATOR.

KEEP CHILDREN AND PETS AWAY FROM THE DOOR WHEN IT IS OPENING OR CLOSING.

NEVER OPERATE THE DOOR UNTIL YOU HAVE IT IN FULL SIGHT.

Retain in Garage – Use As a Reference

FOR YOUR RECORDS

DATE PURCHASED _____

DEALERS NAME _____

MODEL NUMBER _____

SERIAL NUMBER _____

DATE INSTALLED _____

IMPORTANT NOTE:

The surge suppressor guards against component failure by acting as a filter to regulate the consistency of the voltage entering the microprocessor control board. The use of a surge suppressor will greatly reduce the chances of microprocessor component failure. Such devices can be purchased at your local hardware store.

Warranty

Our operators are unconditionally warranted against defects in materials or workmanship for one year from date of installation. Any part, parts or complete unit found to be defective within this period shall, at the manufacturer's option, be repaired or replaced free of charge. The Manufacturer will not be responsible for transportation and/or field service charges. The above warranty is in lieu of all other warranties, expressed or implied, and shall be considered void if visible evidence implies recommended installation procedures and maintenance instructions were not followed.

NOTE: THESE OPERATORS ARE UL AND CSA LISTED

NSW Lynx

Napoleon/Lynx™

175 AVE. UPPER EDISON AVE.
ST. LAMBERT, QUE., CANADA J4R 2R3

1040 MEYERSIDE DRIVE
MISSISSAUGA, ONTARIO L5T 1P9

166 GOULD AVENUE
PATERSON, NJ 07503

15801 STAGG STREET
VAN NUYS, CA 91406

111 WEIRES DRIVE
ARCHBOLD, OHIO 43502

101 NORTH 57TH AVENUE
PHOENIX, AZ 85043

NSW Lynx

Napoleon/Lynx™

Ambass-a-dor®

MRE
RESIDENTIAL
GARAGE DOOR OPENER
INSTALLATION MANUAL

READ THIS MANUAL CAREFULLY BEFORE BEGINNING INSTALLATION

IMPORTANT

PERIODIC CHECKING OF THE DOOR AND OPENER IS NECESSARY TO INSURE PROPER FUNCTIONING OF THE SAFETY MECHANISM. IT IS RECOMMENDED THAT YOUR DEALER BE CALLED FOR SERVICE.

– NOTE –

ATTACH INSTALLATION MANUAL NEAR PUSH BUTTON FOR FUTURE REFERENCE.

PRODUCT FEATURES

1. **MOTOR**: Permanently Lubricated, thermally protected, heavy duty motor with automatic reset.

2. **OPENER LIGHTS**: Turn on and off automatically with 4-1/2 minutes of illumination for your safety and convenience.

3. **MECHANICAL SENSING SYSTEM**: A built-in Mechanical Sensing System detects obstructions during door operation. If in the Downward (close) travel mode, the Opener will sense an obstruction and reverse to the full open position. The light will start flashing and continue to flash for 60 seconds. Since all doors are different, the Sensing System has independent adjustments for customizing the level of force for the normal opening and closing of specific doors.

4. **CLOSE LIMIT SWITCH**: In winter months it's common for small pieces of ice or packed snow to be trapped under the door. Ground swelling may also effect the close limit setting of the Opener. The Close Limit Switch overrides the Sensing System under the last one (1) inch of closing travel and prevents the door from reversing if it encounters an obstruction at this point.

5. **EMERGENCY RELEASE**: A pull cord allows manual disconnect and operation of door during a power failure. Unit will automatically reconnect when release is reset (the trolley release lever is snapped back to its original position), power is restored and Opener is activated.

6. **MECHANICAL DOOR LOCK**: When properly adjusted, opener locks door in closed position preventing unwanted entry.

7. **EASY CONNECT CONTINUOUS MONITOR ENTRAPMENT SYSTEM**: System allows quick and easy installation of "Silent Guard" Photoeyesystem while control circuitry monitors these devices continuously for proper operation.

8. **CONSTANT CONTACT TO CLOSE**: For utmost safety if "Silent Guard" Photoeyesystem fails constant contact of mechanical push button is necessary to close door. In this mode of operation, a radio transmitter cannot be used to close door.

9. **MOMENTARY CONTACT TO CLOSE**: Single touch to Radio Transmitter or Wall Button will allow door to close as long as Silent Guard Photoeyesystem is operational.

10. **SILENT GUARD PHOTOEYESYSTEM**: An invisible infra-red beam of light guards the door opening and reverses a downward moving door if the beam is broken by a stationary or moving object. If the beam is broken, the opener light will flash for 60 seconds. Motor control circuitry constantly monitors the Silent Guard Photoeyesystem for proper operation.

11. **DIGITAL RADIO CONTROL**: Built in allowing over 1.6 million private codes, easily selected without use of tools. Bright transmitter LED indicates operation and monitors battery condition.

12. **BELT AND CHAIN DRIVE**: For efficient long lasting quiet operation traveling carriage slides on. Dual heavy angle tracks with full roller chain.

13. **QUICK RELEASE ARM**: For Manual operation, in case of power failure.

LIST OF PARTS AND ACCESSORIES

ITEM #	QTY.	DESCRIPTION
1	1	Power Head Complete
2	1	Carriage Assembly
3	1	Chain tightener assembly
4	1	Front idler assembly
5	1	Door bracket
6	1	Wall bracket (header bracket)
7	1	Center idler (when required0
8	1	Curved arm
9	1	Straight arm
10	1	Push button
11	1	Bell wire
12	1	Set of photo cell with hardware
13	1	Red rope
14	1	Red knob
15	1	Transmitter case and visor clip
16	1	Warning labels
17	1	Set of angle rails (length as required, see P.O.)
18	1	#65 Chain (length as required, see P.O.)
19	1	#65 Connecting link
20	1	Fastener bags

BEFORE ATTEMPTING TO INSTALL THE OPERATOR, READ THESE INSTRUCTIONS CAREFULLY AND PROCEED AS FOLLOWS

Warning: To reduce the risk of injury to persons – Use this operator only with sectional doors.

1. Unpack the operator and check for the correct model ordered. (The model number is marked on the packing case as well as on the power head serial number)

2. Remove the inner packet containing all the necessary parts and accessories. Check for the correctness and completeness against the "List of Parts and Accessories" for the particular model and specific accessories ordered.

3. Read these important Safety Rules before proceeding.

This symbol indicated caution and appears throughout this instruction manual. This garage door opener is designed and tested to offer safe operation provided; installation is followed in strict accordance with the instruction. Failure to comply with these instructions may result in serious personal injury or death.

A) Balancing the door by equalizing the tension of the spring or springs. An improperly balanced door increases the risk of severe injury or death. Have a qualified service person make repairs to cables, spring assembly and other hardware before installing the opener.

B) All installation and wiring must be done in strict compliance with local and state building and electrical codes. Connect the power cord to a properly grounded outlet only. Do not in any way alter or remove the ground pin.

C) Operate the door manually and make any adjustment that may be required too assure the smooth operation of the door.

D) Make the existing lock inoperative by securing the lock bars in the open position with a screw through one of the bars.

E) After installing opener, the door must reverse when it comes in contact with a 1 1/2" high object (or a 2" x 4" board laid flat at the centerline of the door) on the floor. The door must also reverse when the infrared safety beam is obstructed.

F) Install entrapment-warning label next to the control button. Install the control adjustment warning label in a prominent location, such as inside of the garage door or as instructed in the installation instruction. Install emergency release tag to the emergency release cord. Mount the emergency release pull knob 6 feet from the floor. Use the manual release only to disengage the trolley.

G) Do not connect opener to power source until instructed. Install door opener 7 feet or more above floor.

H) To reduce the risk of electrical shock, this equipment is supplied with a grounding type plug. If the 3 – pronged plug does not fit into the outlet contact a qualified electrician to install the proper outlet.

I) Locating the control button:

1) Within full unobstructed view of the door
2) A minimum height of 5 feet so small children cannot reach
3) Away from all moving parts

J) Never operate the opener if the system is not operating properly.

K) *Always disconnect electric power before making repairs or removing cover.*

L) Activate opener only when the door is in full view and free of any obstructions.

M) No one should enter or leave the garage while the door is moving. Do not allow children to play near or operate the door. Keep the remote control away from children.

N) After installation is complete, fasten this manual near garage door. Perform periodic safety checks and recommended maintenance and adjustments.

Caution!

If your garage does not have a separate entrance door, install outside emergency quick release lock. This accessory allows manual operation of the garage door from outside in case of power failure.

Warning!

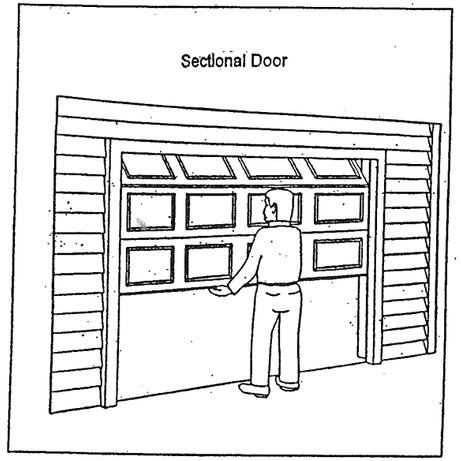
Do not plug in the operator until instructed to do so.

Door Test

WARNING

Balancing the door by equalizing the tension of the spring or springs. An improperly balanced door increases the risk of severe injury or death. Have a qualified service person make repairs to cables, spring assembly and other hardware before installing the opener.

Before beginning installation of the operator please complete the following test to insure that your door is balanced and in good working condition. A poorly balanced door could cause severe personal injury and damage to the opener. Always have a qualified garage door service person make any needed adjustments and/or repairs to your door before proceeding with installation.

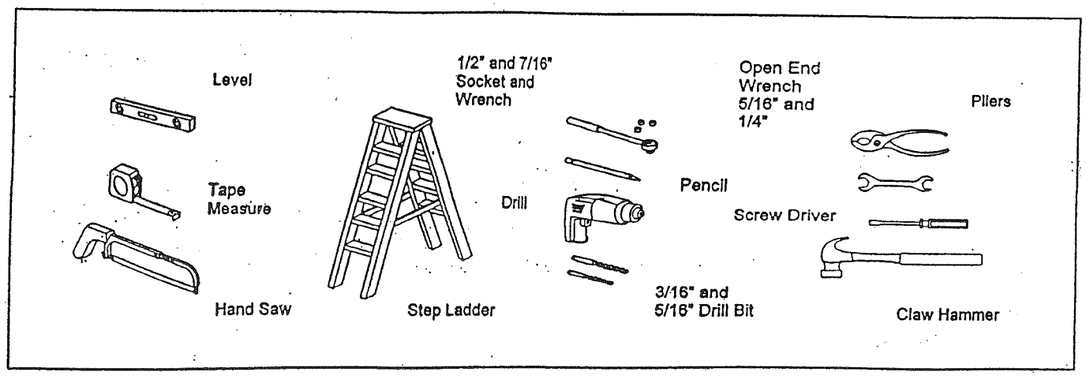


1. Raise and lower the door and check closely for areas of stacking and binding. Check for loose hinges, wobbly rollers, frayed cables and damaged or broken springs. Contact a qualified door service person to make the necessary adjustments.
2. Lift the door approximately halfway. When released, the door should stay in that position. If door pulls opener moves downward, the spring mechanism is not adjusted properly. Contact a qualified door service person to make the necessary adjustments.
3. When properly installed the adjusted the door will remain clear of the opening, when allowed to rest at its natural full open position. If door drifts up or down the door is not adjusted properly. Contact a qualified door service person to make the necessary adjustments.

Do not install the opener until these adjustments and repairs have been made.

Carefully follow the instructions for the assembly and installation of the garage door opener contained in this manual.

Tools Required for Assembly and Installation



Instructions For Assembling Track
See Fig. 1

1) Unbolt the pair of angle iron rails and set on horses or worktable in approximately parallel positions.
2) Take the front idler assembly and insert the threaded shaft ends into the middle hole on one rail and the same on the opposite rail. Secure with the lock washer and hex nut provided and tighten securely.
3) Attach the front wall pivot bracket assembly to the rail assembly using two (2) 5/16-18 x 3/4"lg. hex head bolts (heads to be on inside of track) and secure with the lock washers and hex nuts provided and tighten securely.
4) Take the center idler assembly and insert the threaded shaft ends into the side hole on one rail and the same on the opposite rail. Secure with the lock washer and hex nut provided and tighten securely.
   Note: Make certain the roller turns freely.
5) Take the carriage and insert the trunion bolts with loose hex nuts against the casting at each end. Slide the carriage onto the track.
6) Engage the open end of the track assembly into frame of the power head.
7) Attach one end of the roller chain to the trunion bolt on the carriage using the connecting link.
8) Pass free end of chain under the front idler sprocket and continue feeding the chain to the drive sprocket of the power head and attach the end of the chain to the connecting link.
9) Adjust the tension of the chain by turning the hex nuts on the carriage. Allow for 1/2" sag on the chain.
10) Lock position of trunion bolts by jamming the nuts against the carriage.
11) The operator is now ready to be hung from the ceiling.

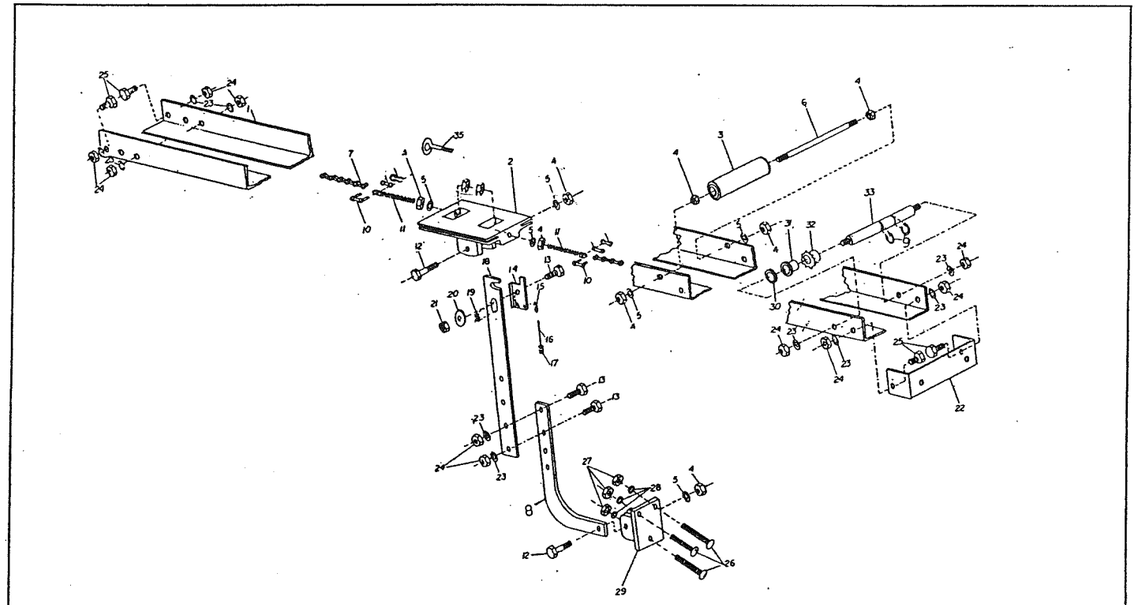


Fig. 1

Installation

Warning: Fiberglass, aluminum or lightweight steel doors will require reinforcement before installation of door mounting brackets. Contact your door manufacturer for a reinforcement kit or instructions. Failure to properly do so may result in severe door damage.

Note: Reinforcing may affect the balance of your door. Check for proper manual operation after installation. If necessary have your door re-balanced by a qualified garage door service person.

Each installation will vary, depending on the construction of the building.
The following instructions will cover most conditions.

Before proceeding, check Fig. 2 and Fig. 2A and the clearances required. All trolley type operators are designed to mount directly over the center of the door and the track should clear the door by approximately 2 1/4". In case of obstruction in the center of the door, the operator can be mounted off to one side, however, more than one foot off center may affect the operation of the door if extension springs are used. Operator should not be installed on a door having more than 18" of high lift, unless 30" radius track is used on the door; then a few more inches can be gained.

Step 1: Open door manually to determine the highest arc of door travel. See Fig. 2. Mark this height on the header above the center of the door.

Step 2: The front mounting bracket has two holes that should be mounted to the front header 3" above the highest arc pf the door, with lag bolts. See Fig. 2b. Suitable wood blocking or angle iron framework may be installed on the wall to provide suitable mounting for the front mounting bracket.
Important! The front wall bracket and blocking carry the full pull and push that the operator can develop. It must be secure.

Step 3: The front wall bracket is made so that it can pivot, It can be securely fastened with the operator attached, setting at about 45 degree angle on the floor. The back end of the operator can be hoisted or lifted up into position with the front end attached. Raise the operator high enough so that it is above the level of the horizontal door track. Secure temporarily in this position.

Step 4: Open the door by hand and locate the rear end of the operator tracks so that it lines up with the centerline of the door. Make sure to have at least 2 1/4" of clearance between the door and the operator track, but not more than 4"clearance. Hanging brackets may now be installed from operator to ceiling. See Fig. 2. Holes are provided in the operator for this purpose. After vertical hangers are made secure, fasten side braces to prevent any side movement. Holes are provided for center hangers approximately six feet from the end. Two vertical hangers and one side brace is recommended. This is for all doors over 10' high.

Step 5: Close door, move the carriage to within 2 1/2" of its most forward position. Hook the door arm over the 3/8" bolt in carriage. Bolt bracket to door as shown in Fig. 2

Step 6: Before connecting power supply, limits should be set in the close position.

Caution

Springs, Pulleys, Cables and Mounting Hardware that balance your garage door are under Tremendous pressure at all times and cause serious injury or death if disturbed. Do not attempt adjustment!

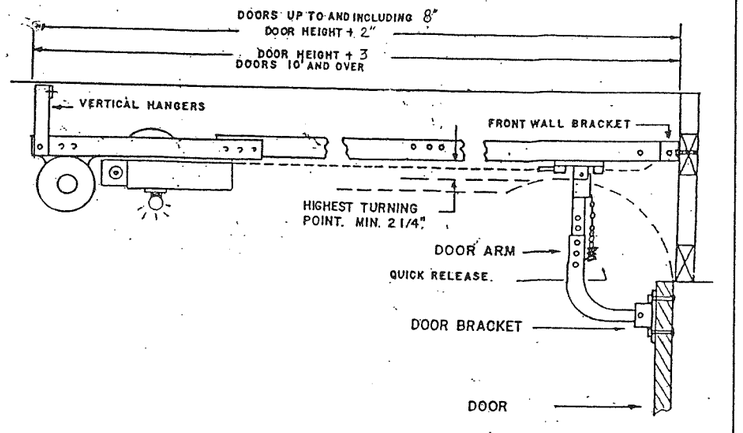


Fig. 2

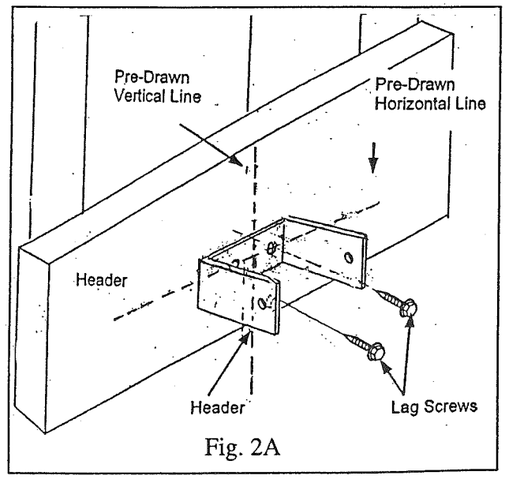


Fig. 2A

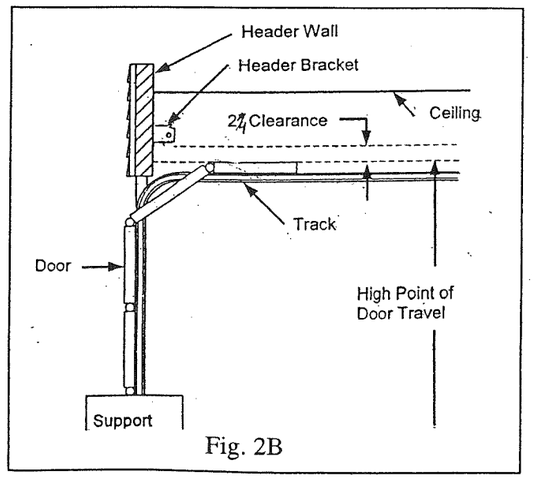


Fig. 2B

Installing Wall Push Button

Remove about 1/4" of insulation from both ends of the two (2) strands of low voltage bell wire. Connect one end to the back of the push button one wire to each screw. Select a convient place near the access door, at the height of 5 ft. and out of reach of children and fasten the push button with the two (2) 1 1/2" long screws supplied. Next run the bell wire up the wall, across the ceiling and to the opener. Secure with insulated staples and attach to terminals 5 & 6 of the terminal strip of the opener. See Fig. 4

Affix the WARNING label Fig. 3 near the push button.

WARNING

Improper operation can cause injury or death. Caution label must be mounted on the wall near the push button.

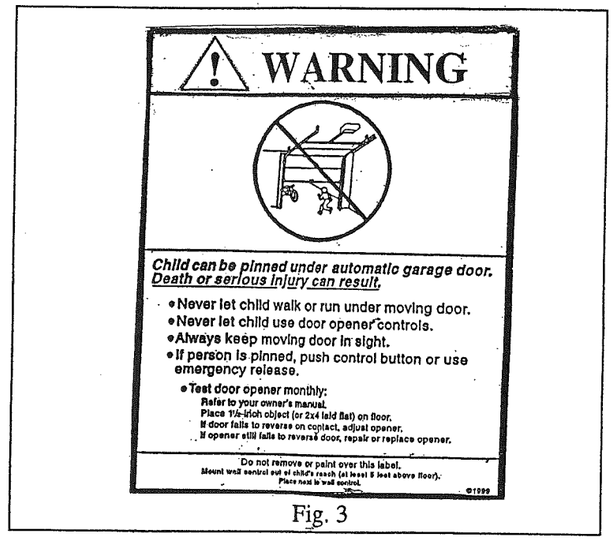


Fig. 3

WARNING

A child operating the door control risks injury or death to themselves and to others. Do not allow children to operate any door controls. Mount the push button at least 5 ft. from the floor, out of reach of children.

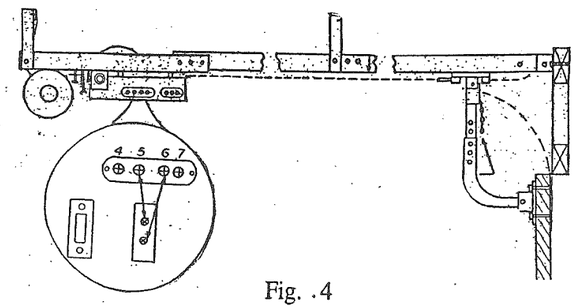


Fig. .4

PHOTO CELL INSTALLATION INSTRUCTIONS

Your garage door opener is supplied with an Auxiliary Entrapment System. Please read the following carefully.

IMPORTANT: The opener will not operate until the Photo Cell (Silent Guard Photo Eye System is installed, properly aligned and connected). This is a required safety device and cannot be disabled.

WARNING!

A garage door without an Auxiliary Entrapment Protection System could result in injury or even death. To protect small children, install the Photo-eye System no higher than 4"- 6" above the floor.

Risk of Entrapment: disconnect power to the opener before or during installation of this accessory. Do not reconnect power to opener until instructed to do so. Ensure doorway is clear before testing opener.

Mark the position of the Silent Guard Photo Eye System as follows:

A) Mark a line in the left and right door jambs (as close-as possible to the door track) 4" to 6" above the floor (See fig.5). The top mark is the maximum height and the bottom is the minimum height that the Silent Guard Photo-eye System may be placed.

B) Assemble the two safety beam brackets one (1) L shaped and one (1) straight shape bracket, by using the 1/4 - 20 x 1/2 Carriage bolt and 1/4 - 20 kept nut (One nut & bolt for each set of brackets).

C) Attach L shaped mounting brackets to the jamb with 2 lag bolts 1/4" x 1" long supplied as shown in (Fig. 6) 4" to 6" above the floor. Make sure that the brackets are the same distance and level from the floor, on both sides of the door jamb.

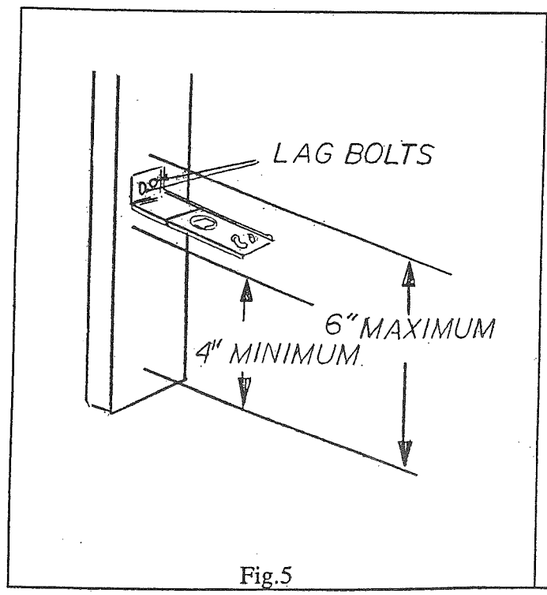


Fig.5

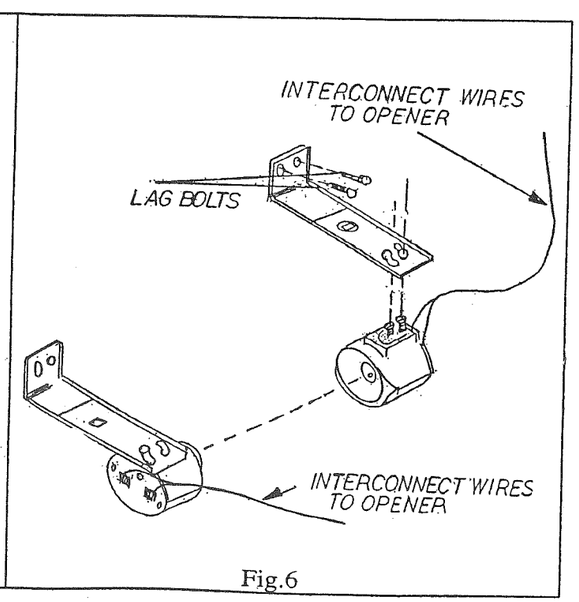


Fig.6

Connecting The Silent Guard Photo Eye System

For your convenience wiring connections are non-polarity sensitive universal wiring.
Start by taking the bell wire supplied, strip 1/2" of insulation from each set of wires, separate the wires and connect the wires at the back of the photo eye sensors. Run the wires up the wall, across the center of the header, along the top of the rail (or ceiling) and to the side of the opener. Strip 1/2" of insulation from each set of wires, separate the wires and connect o the opener terminal strip screws, numbered 4 and 5 respectively as shown in Fig, 7.

Caution!

Cut or pinched wires can cause the door opener to malfunction. Make sure staples are just tight enough to hold the wire.

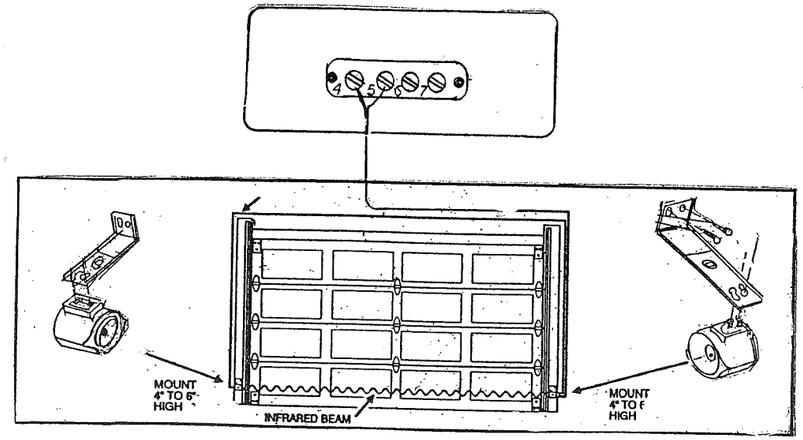


Fig. 7

Connecting Power to Opener

WARNING

To prevent the risk of electrocution; installation and wiring must be in compliance with local electrical and building codes.
Do not use extension cords or two (2) wire adaptors or change the plug in any way.

Opener must be permanently wired or plugged into a grounded receptacle mounted on the ceiling near the opener. Wire according to local codes see Fig. 8.
Do not use a two (2) pronged adaptor or extension cord. I local code requires permanent wiring, contact a licensed electrician to install required circuit.

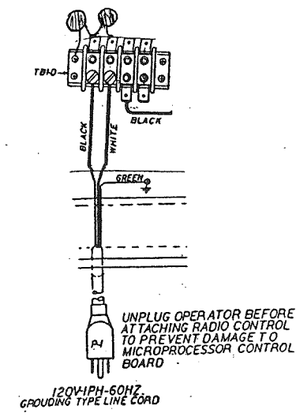


Fig. 8

Permanent Wiring

If local code requires permanent wiring refer to the Illustration in Fig. 9 below.

Procedure: To make a permanent connection through the 7/8" hole on the side of the opener electrical box, follow these steps.

Step 1. Remove the opener cover screws and remove the cover and set aside.

Step 2. Remove the attached 3-pronged line cord.

Step 3. Connect: Black wire (line) to terminal strip

White wire (neutral) to white terminal

Green wire (ground) to ground screw marked ground

Step 4. Replace the opener cover and 4 screws.

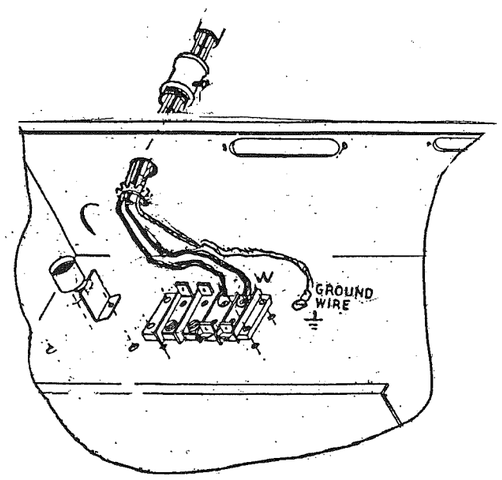


Fig. 9

Limit Switch Adjustment

Run the door to the close position. Depress traveling nut retaining bracket and rotate the traveling nut until it touches the arm of the down limit switch and a click is heard or the switch is opened. Run the door up about two feet, then down to the floor again.

(**Note:** Be ready to stop the door with the push button, just in case the adjustment was not correct)

If the door stopped to soon, disengage the traveling nut and rotate away from the down limit switch. If the door did not stop in time, rotate the traveling nut toward the down limit switch.

Repeat until correct adjustment is obtained. Repeat same adjustment for the open limit. The traveling nut retaining bracket must be reengaged each time the limit switch is adjusted. See Fig. 10

Fig. 10

Warning!

To reduce the risk of injury, do not operate this operator without Belt Guard in place.

Installation of Pulley & Belt Guard

Once the final adjustments are made, install the guard supplied with the opener in the following sequence.

1) Mount the U bracket on the main frame with the 1/4-20 nuts and bolts supplied with the opener.

2) Mount the guard as shown in Fig. 11 by sliding one side of the guard onto the extended motor bolt as shown in picture. Secure guard by using the 10/32 hex nut and washer on one side and the 1/4-20 bolt and washer supplied on the other side. Tighten the nuts and bolts up and the opener is ready for operation. See Fig. 11

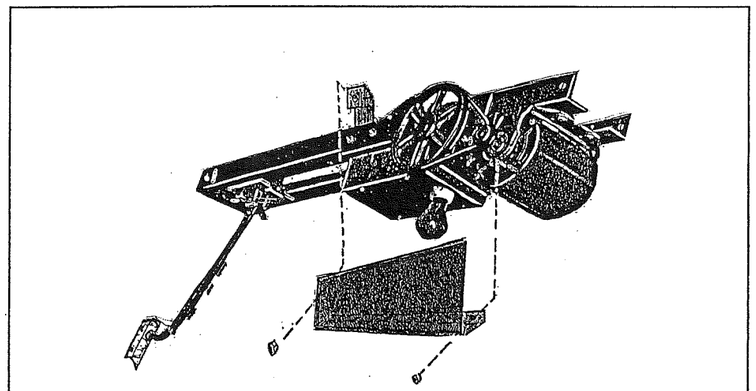


Fig. 11

Manual Operation Inside Garage

In case of power failure or to release the door, pull the red cord with the red knob down and toward the inside of the garage. This action will activate the "Emergency Door Release" and disengage the carriage from the chain, permitting manual operation of the door. See Fig. 12

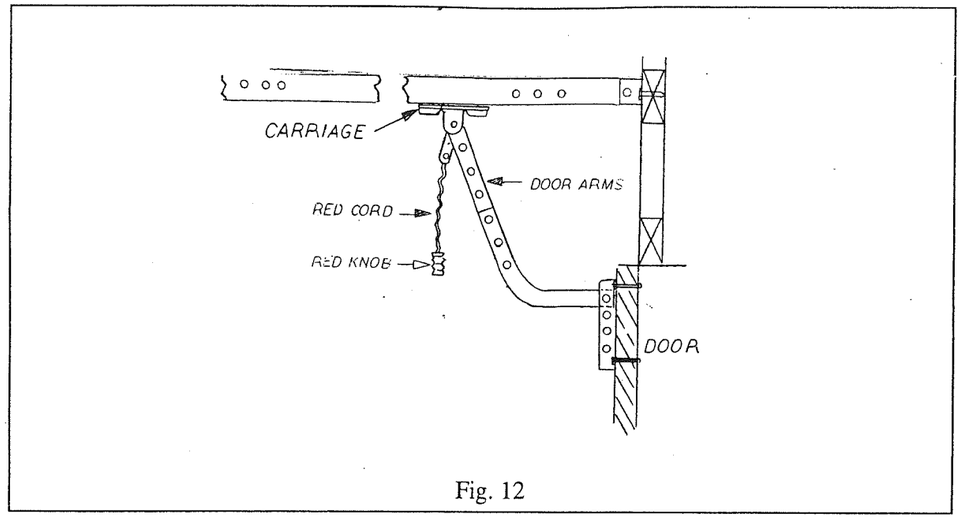


Fig. 12

To reengage carriage to drive mechanism, pull the red cord down and toward the door.
When power is reactivated, press push button to automatically reconnect the carriage to the drive mechanism. You can also manually raise or lower the door to engage the drive mechanism.

Programming the Remote Control - Receiver and Transmitter

The garage door opener control board has a built in receiver and the transmitter that is supplied with the opener must be programmed accordingly.

1) Before each transmitter will operate, the receiver must "learn" the code each transmitter is sending.

   A) On the side of the opener, (see Fig, 13) locate the red button marked "Radio Set Button". Press and release the red button. If the courtesy light of the opener is off, it will come on and will stay on for 30 seconds. During his 30 second time period push the round button on the transmitter, (See Fig, 14) until the courtesy light of the opener flashes twice. This will indicate that the receiver has learned the transmitter code.

   Note: Up to 20 transmitters (including the wireless keypad) can be programmed into the receiver by repeating this process. If you enter more than 20 transmitters the oldest transmitter code will be dropped from the memory and the new transmitter code will be added.

Deleting Transmitter Codes from Memory

2) To delete all transmitter codes from the receiver's memory, hold the receivers red button, marked radio set button in for 7 seconds. The courtesy light will then flash 7 times, indicating all transmitters have been cleared from the memory.

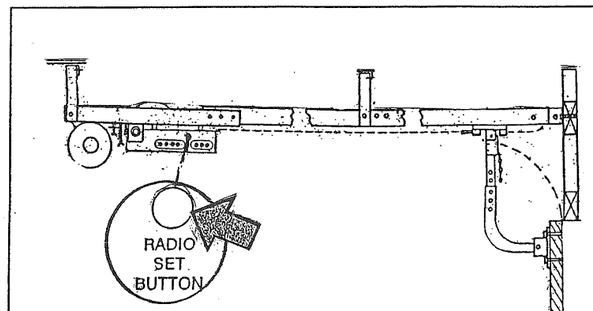


Fig. 13

Fig. 14

WARNING

Improper adjustment of the systems sensitivity force could cause entrapment, injury or death. Risk of entrapment: After adjusting the force or limit travel adjustments, confirm that the door reverses on a 1 1/2 inch object (or a 2x4 board laid flat) on the floor. Set adjusting force just enough to operate the door reliably, but no stronger. Do not over adjust force / sensitivity to compensate for a poorly working, sticking or binding door. **Note:** Contact a qualified garage door service person to correct any binding, sticking or any other door problem.

Obstruction Safety Switch
Door Sensitivity Force Adjustment

The door force adjustment is located in between the motor and the limit shaft. The door force adjustment must be properly set at all times. The close force wing nut adjustment controls how much force is required to cause the door to reverse direction if an obstruction is encountered during the closing cycle. See Fig. 15

Sensitivity Adjustment

Locate the wing nut between the motor and the limit shaft and turn it clockwise for less sensitivity or counter clockwise for more sensitivity.
Caution! Make allowance for door to work harder in damp or cold weather, but allow just enough force for the door to operate properly.

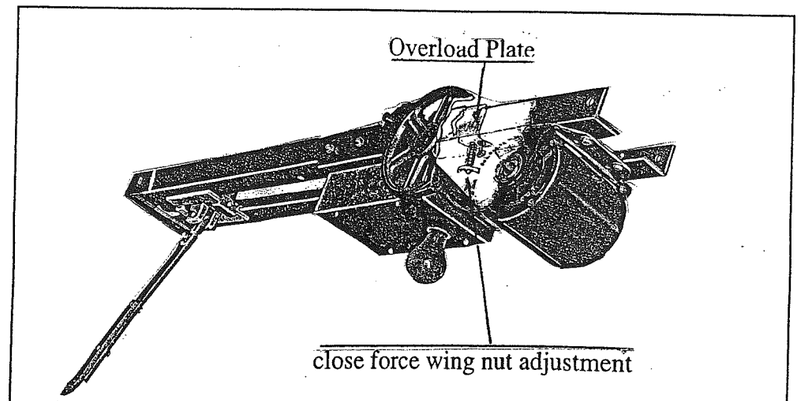


Fig. 15

Testing the Safety Reverse System

Warning: Failure to Test Reversing System Could Result in Death or Serious Injury. Test This System Once A Month.

To test the opener reversing feature at floor level, place a solid object 1-1/2" thick on the ground so that the center of the door will contact it. Close the door. If the down force adjustments are correct, the door will reverse within one and a half (1-1/2) seconds of contacting the object and travel to the Full Open Position. The light will also start flashing and continue to flash for 60 seconds. If this does not occur, re-check Limit Adjustments page 14 and Force/Sensitivity Adjustment Page 19, Fig. 16

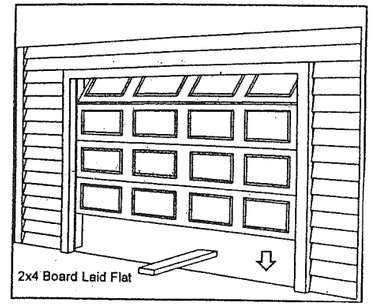


Fig. 16

Note: Any time any adjustments are made to Limits or Sensitivity, You Must Retest the opener for the Reversing Feature at Floor Level as out lined above.
Warning: The sensitivity System Reversing Test Should Be Performed Monthly to Ensure That This Important System Remains in Proper Adjustment.
Warning: A Damaged Or Malfunctioning Photo Eye System Could Enable a Garage Door to Close on People or Property, Causing Serious Injury or Death. Perform this Test Monthly to Ensure Proper Operation.

Testing the Photo Eye System

Start the door down and then place an obstacle approximately 8" high 12 "wide in the path of the beam. The Red Pilot Light on the Silent Guard Photo Eye System should shut off. The door should stop for 1-1/2 seconds and reverse to the fill open position. The opener light will also begin flashing and continue to flash for 60 seconds. If the door is moving up and the beam is broken, the door will continue up to the full open position. With the door fully open and at rest, place an obstacle in the path of the beam once again. Activate the wall button, the opener will not respond to the command. To close the door, apply constant pressure to the wall button until the door is in the closed position. See Fig. 17

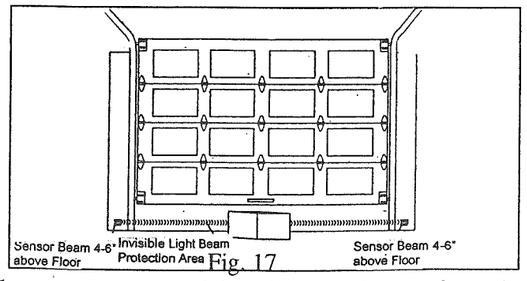


Fig. 17

Note: If the garage door travels more than one inch in a downward path after releasing the button, the Silent Guard Photo Eye System is Malfunctioning, Check all electrical connections and photo cell alignment.

AFTER THE INSTALLATION

1. Never permit children to play with or operate the garage door opener either from the wall station or the remote controls. Keep radio transmitter locked in the car. Misuse of the push button or transmitter could result in serious injury or even death.

2. Open the garage door with the remote controls only when the garage door is fully visible to you and clear of all obstructions. The garage door should be kept in sight until it is completely open or closed and you are certain that the garage door opener has shut off.

3. Attempting to exit the garage, through the garage door opening while the door is in motion is a very dangerous activity, which could result in serious injury or even death.

4. Children and pets should always be clear of the door opening while the garage door is in motion.

5. Check the safety reverse mechanism at least once a month to make sure that it will reverse with the minimum amount of force. Also check to be sure that the door will reverse within 1-1/2" of the floor.

6. Check the manual operation of your garage door at least every 90 days to be sure that it is operating smoothly and does not bind or stick. Tighten all bolts on the door and visually check all hardware including springs for wear of damage. **Caution:** If service is needed contact your local garage door service person.

7. Do not decrease the safety reversing sensitivity mechanism to overcome a damaged or poorly operating door. This will adversely affect the operation of the safety reverse mechanism which could result in damage to the door, personal injury or even death.

CAUTION
Never operate the door opener if the reversing mechanism is not functioning properly.

8. Whenever possible, the manual disconnect should only be used when the door is fully closed. Caution: Extreme care must be taken whenever the disconnect cord is pulled with the door partially Open, Weak or broken springs may allow the door to fall rapidly resulting in property damage, personal injury or even death. If a broken spring is evident, contact your local garage door service person immediately before disconnecting the door from the opener. Never attempt servicing a Broken spring.

9. Always disconnect electrical power supply to the opener when performing any maintenance or service to the opener or garage door. Failure to do so could result in electrical shock, property damage, personal injury or death.

10. If any damage to any mechanical or structural component of the opener is observed, discontinue use and contact your local garage door service person immediately.

Warning: When installing a separately supplied accessory, the operator must be Disconnected from the power source before attempting the installation of the accessory.

FINAL INSTALLATION

1. The front and rear mounts for the opener are sound and secure and the rail is positioned correctly above the high arc of the door and that the opener is positioned over the door action centerline.

2. For sectional doors, the position of the door arm with the opener closed, is such that it's connecting point on the trolley is 5" to 8" behind it connecting point on the door bracket. The door arm should never be perfectly vertical when the door is in the closed position.

3. The emergency release knob and cord are secured to the emergency release lever on the trolley. The knob is located 6 ft. above the floor and requires no more than 50 lbs. Pull the knob to actuate. The trolley and release mechanism are properly lubricated.

4. The standard wall push button is in such a position and at such a height that it can only be actuated by an adult. The caution label is prominently displayed next to the push button.

5. All wiring is correct to code. There is ground continuity in the supply. The ground prong on the power cord is intact.

6. All ropes have been removed from the door. The door moves freely without binding when operated manually. The door is correctly balanced and lubricated. All door hardware is secure and sound. The sensitivity has been adjusted to minimum force. The appropriate warning sticker has been affixed to the door.

7. The door reverses on obstructions to within 1 1/2" of the floor. The floor beneath the closed door provides uniform contact.

8. On doors with extension type springs, safety restraint cables have been installed through the springs.

Home Owner Instructions

Operation of Residential Garage Door Opener

Caution!

A) Read the operating instructions on this page carefully.
B) Do not permit children operate or play with door controls, Keep remote away from children. Do not permit children to play in area of door.
C) Operate only when opener is properly adjusted, fully visible and free of obstructions. No one should cross the path of a moving door.
D) The safety reverse system is important. The garage door must reverse upon contact with a 1 1/2"object(or a 2x4 board laid flat) on the floor. Failure to properly adjust the opener may result in serious personal injury from a closing garage door. Repeat the test at least once a month and make any needed adjustment.
E) The emergency release cord should only be used when the door is fully closed. Use caution when using release when the door is open. Weak or broken springs may increase the rate of door closure and increase the risk of severe injury or death.
F) Keep garage doors properly balanced. An improperly balanced door increases the risk of severe injury or death. Have a qualified service person make repairs to cables, spring assembly and other hardware.

WARNING

Risk of entrapment: After adjusting the force or limit travel adjustments, confirm that the door reverses on a 1 1/2 inch object (or a 2x4 board laid flat) on the floor.

Electrical Operation Inside and Outside of Garage

1) Wall Push Button: With the door in the closed position, a momentary push of the button will open the door. Push the button a second time and the door will stop. Push the button a third time and the door will close. Push the button a fourth time and the door will momentarily stop and reverse to the fully open position and stop when the open limit has been reached. To close the door push the button and the door will begin to close and stop when the door has reached its close limit.

2) Radio Car Transmitter: The operation of the transmitter is the same as the wall push button.

3) Key Switch: The operation of the key switch is the same as the wall push button.

4) Safety Systems: When the door is closing and encounters an obstruction or the safety beam is interrupted, the door will momentarily stop and reverse to the fully open position and the light will start flashing for 30 seconds and then shut off.

5) Safety Shut Off: If the push button is depressed while the door is closing and the limit switch or obstruction switch is not activated within twenty five (25) seconds, the opener will stop then reverse direction to the full open position. If the door is opening and the limit switch is not activated within twenty five (25) seconds, the opener will shut off.

6) Light Delay: When the opener is activated the lights will turn on and remain on for approximately five (5) minutes and then turn off automatically.

TROUBLE SHOOTING GUIDE

SYMPTOMS	Probable Cause/Solution
Opener does not work from the transmitter	1,2,3,5,6,8,9,11,12,13,14,16,19,20,21,22, 23,24
Opener does not work from push button	1,2,3,4,5,6,8,11,12,13.21,23,24
Opener closes door for 2 seconds, then reverses	5,7,11,12,13,15,21,27
Opener stops during cycle and light flashes	6
Opener operates from push button but not from radio	9,14,19,20,22,23
Door stops before reaching full open or closed	10,23
Door reverses when it makes contact with the floor	10,23
Light flashes, but the opener does not start	24
Light does not come on	5,18
Light will not turn off (Light stays on)	5
Motor runs, but chain & door do not move	25
Motor hums and light flashes	26

PROBABLE CAUSE	SOLUTION
1. Mechanical garage door lock is engaged.	1. Remove all locks from the garage door
2. 120 volt power is not present at outlet.	2. Check circuit breakers, fuse box and GFI receptacle.
3. Shorted or defective push button.	3. Remove push button from wall and disconnect wires from the push button (activate transmitter). If the operator works from transmitter replace push button.
4. Bell-wire is shorted.	4. Disconnect bell wire from the terminal stripe on the back of the power head (activate transmitter).
5. Malfunctioning logic board.	5. Unplug operator at 120-volt outlet and then reconnect to reset, consult repairman to replace logic board.
6. Thermal overload breaker protection has been activated.	6. Allow time for motor to cool down (15 to 30 minutes depending on temperature in the garage). Thermal Breaker automatically resets itself.
7. Garage door springs are out of balance.	7. Consult service repairman to balance or replace springs. Operate garage door manually; disconnect opener by pulling red cord on the trolley. Look for binding or jamming of the garage door. Consult service repairman.
8. Garage door is jammed.	8. Consult your service repairman.

PROBABLE CAUSE	SOLUTION
9. Weak transmitter battery.	9. Replace 12-volt battery in the transmitter by removing the screws on the backside of the transmitter case and pulling the case open to expose the battery.
10. Travel limits are out of adjustment.	10. Reset limit switches.
11. Photo eyes are obstructed (light flashes 30 seconds).	11. Check for obstructions between the photo eyes and Remove obstruction.
12. Photo eyes are out of alignment (light flashes 30 seconds).	12. Check red LED inside the lens of the receiver photo eye. (photo eye with 4 wires). LED will light up when photo eyes are aligned properly, refer to page 10 & 11 of the installation manual.
13. Photo eye bell wire is shorted (light flashes 30 seconds)	13. Replace existing bell wire with new. Make sure that insulated staples do not short wire
14. Defective transmitter or receiver.	14. Contact your local dealer (replace control board or transmitter).
15. Down force/sensitivity out of adjustment.	15. Adjust down force/sensitivity, refer to page 18 of the installation manual.
16. Bottom of garage door frozen to the ground.	16. Free bottom of the door from the ice.
17. Foreign object on the floor such as snow/ice.	17. Clear all foreign objects from under the door.
18. Defective light bulb.	18. Replace with rough service bulb of 75 watts or less.
19. Radio receiver is not receiving the radio signal.	19. Point wire antenna straight down towards the floor.
20. Location of radio transmitter.	20. Ensure radio transmitter signal has a direct line of site to the receiver. Radio signals do not pass through metal objects but do penetrate glass.
21. Defective Photo eyes.	21. Contact your local dealer for replacement.
22. Defective transmitter.	22. Contact your local dealer for replacement.
23. Defective Open/Close Limit switch	23. Contact your local dealer for replacement.
24. Activate Vacation switch/on deluxe 3 wall control station	24. Switch back to Vacation off position.
25. Broken helical gear.	25. Contact your local dealer for replacement.
26. Capacitor leaked.	26. Contact your local dealer for replacement.
27. Defective optical reader	27. Contact your local dealer for replacement.

Napoleon/Lynx
Parts list for AMR-PC Electrical Box Dwg, #700100, Fig. 18

Description	Qty.
1. Open limit switch, E13-80H	1
2. Close limit switch, E13-80H	1
3. Overload switch, E13-80H	1
4. Control Board	1
5. Lamp holder	1
6. Lamp holder bracket	1
7. Terminal block, 4 pole, high voltage	1
9. Varistors, surge suppressors	1
10. Line cord, 4' UL/CSA	1
11. Strain relief bushing	1
12. 4 Pole terminal strip	1
13, 3 Pole terminal strip	1
14. Capacitor, 70-84 Mfd.	1
16. Nylon spacer, .014" I.D. x 3/8" O.D. x 1/2" Lg.	1

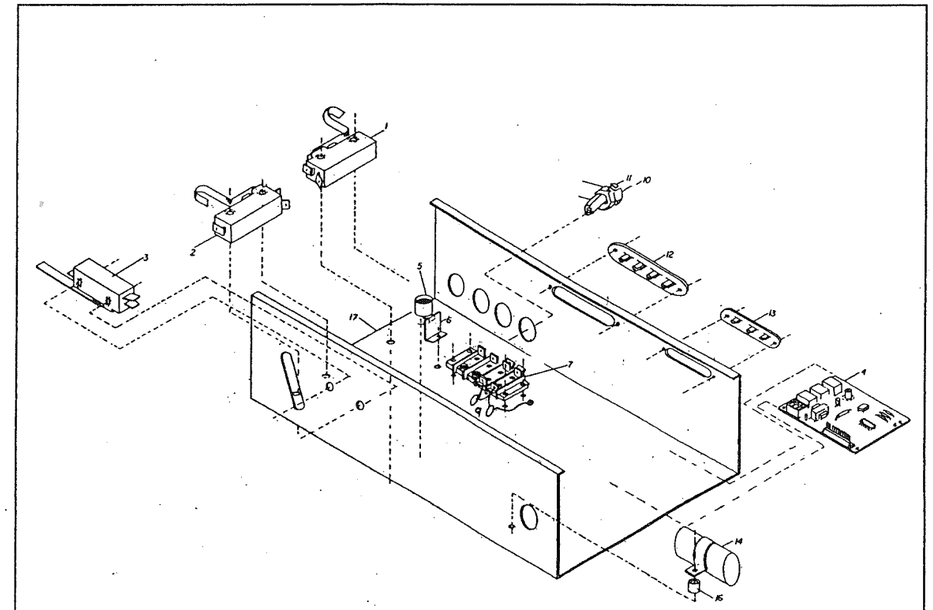


Fig. 18

NAPOLEON/LYNX
PARTS LIST DRAWING #700025 FRAME ASSEMBLY, Fig. 19
MODEL AMR-PC

Description	6/1/03 QTY.
1. MTR #324P220 1/2 HP 115V 1500 R.P.M. FR 48Y (AMR-PC)	1
UNIFRAME, ONE PIECE ASSEMBLY	
2. MOTOR PULLEY 1 1/2" O.D. X 1/2" BORE	1
3. V BELT, 4L300	1
4. DRIVE PULLEY 8" O.D. X 5/8" BORE 3/16" KW	1
5. KEY STOCK, 3/16" X 3/16" X 7/8"LG.	1
6. FLAT WASHER, 1" O.D. X 5/8" I.D. X 1/8" THK.	2
7. SPROCKET, 4889 X 5/8" BORE 3/16" KW. (STEEL)	1
8. KEY STOCK, 3/16" X 3/16" X 1/2' LG.	3
9. BEARING, BALL FLANGED 1 3/8" O.D. X 5/8" I.D.	4
10. U BRACKET, PART OF UNIFRAME	1
11. RETAINING PLATE (TRAVELING NUT)	1
12. SPRING, RETAINING PLATE	2
13. TRAVELLING NUTS, 5/8 –24	2
14. CONNECTING LINK, #65	1
15. LIMIT SHAFT, 5/8" O.D. X 10 1/2" LG.	1
16. SPRING, OVERLOAD 1/4" X 2 3/4" LG.	1
17. HEX JAM NUT, 5/8 – 24 THREAD	2
18. COVER, ELECTRICAL BOX (NOTE:AMR-PC WITH HOLE)	1
19. ELECTRICAL BOX	1
22. OV. RLOAD PLATE, COMMERCIAL	1
23. STUD 5/8" X 1 1/8" LG.	1
24. FLAT WASHER, STEEL 5/8" I.D. X 13/16" O.D. X .062 THK. (SPECIAL)	1
25. SPROCKET, 65B9 X 5/8" BORE P.M. (IDLER)	1
26. FLAT WASHER, STEEL 3/16" USS	1
27. RETAINING RING	2
28. SHAFT COLLAR, STEEL 5/8" I.D.	4
29. SPROCKET, 48B21 X 5/8" BORE 3/16" KW.	1
30. DRIVE SHAFT, 5/8" O.D. X 10 3/8" LG. 3/16" KW.	1
31. SPROCKET, DRIVE 48B10 X 5/8" BORE 3/16" KW. (STEEL)	1
38. CHAIN, #65 X 18" LG. (LIMIT)	1
39. SPACER, 1/4' I.D. X 1/2" O.D. X 9/16" LG. (NYLON)	4

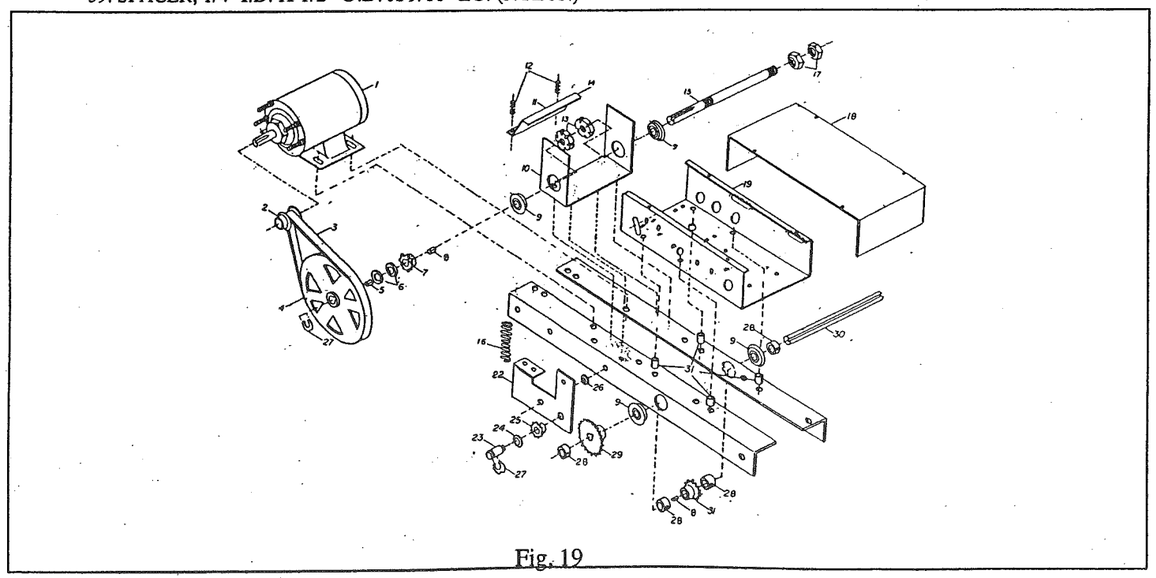


Fig. 19

NAPOLEON / LYNX
PTS. LIST DWG. #700032 TRACK & CARRIAGE
MODEL AMR-PC
Fig. 20

DESCRIPTION	7/9/03 QTY.
1. ANGLE TRACK 7' (9' OL)	1
1A. ANGLE TRACK 8' (10' OL)	1
1B. ANGLE TRACK 10' (13' OL)	1
1C. ANGLE TRACK 12' (15' OL)	1
2. ALUMINIUM CARRIAGE – LC1B	1
3. CENTER IDLER ASSEMBLY, WITH 2 – 5/8"I.D. FLANGED BALL BRG.	1
4. FIN HEX NUT 3/8 – 16	1
5. LOCK WASHER 3/8	1
6. BLACK STUD 3/8-16X7" THREADED BOTH ENDS (1 1/4")	1
7. ROLLER CHAIN #65 7'	1
7A. ROLLER CHAIN #65 8'	1
7B. ROLLER CHAIN #65 10'	1
7C. ROLLER CHAIN #65 12'	1
7G. ROLLER CHAIN #41 7'	1
7H. ROLLER CHAIN #41 8'	1
7I. ROLLER CHAIN #41 10'	1
7J. ROLLER CHAIN #41 12'	1
8. COMMERCIAL CURVED ARM, 1 1/4 X 14 3/4" LG. X 5/16" THK.	1
9. RETAINING RING	1
10. CONNECTING LINK, #65	1
11. TRUNION BOLT, 3/8-16 X 3 1/2" LG.	1
14. SLIDE ARM RELEASE BRACKET	1
15. S HOOK #812-C (SMALL)	1
16. RED CORD	1
17. RED KNOB	1
18. COMMERCIAL STRAIGHT ARM, 1 1/4" X 14 3/4" LG. X 5/16" THK.	1
19. SPRING, COMMERCIAL ARM RELEASE	1
21. NYLON STOP NUT, 5/16-18	1
22, WALL BRACKET, COMMERCIAL	1
29. DOOR BRACKET	1
31. BEARING, FLANGE BRONZE 3/4" O.D. X 5/8" I.D. X 5/8" LG.	1
32. SPROCKET, 48B9 X 3/4" BORE (STEEL)	1
32A . SPROCKET, 48B9 X 3/4" BORE (P/M) – AMR	1
32B. SPROCKET, 41B10 X 3/4" BORE (STEEL)	1
33. FRONT IDLER SHAFT	1
MISCELLANEOUS NUTS & BOLTS	
12. HEX CAP SCREW, 3/8-16X2 1/2" LG.	1
13. HEX TAP BOLT, 5/16-18 X 1" LG.	1
20. FENDER WASHER, 5/16"	1
23. LOCK WASHER, 5/16"	1
24. HEAVY HEX NUT, 5/16-18.	1
25. HEX TAP BOLT, 5/16-18 X 3/4" LG.	1
26. CARRIAGE BOLT, 1/4-20 X 2 1/2" LG.	1
27. HEX NUT, 1/4-20	1
28. LOCK WASHER, 1/4" MED. SPLIT RING	1
30. FLAT WASHER, 1" O.D. X 5/8" I.D. X 1/8" THK.	1
35. EYE BOLT, 3/8-16 X 4" LG. USED WHEN NEEDED	1

Track and Chain Assembly
Exploded View

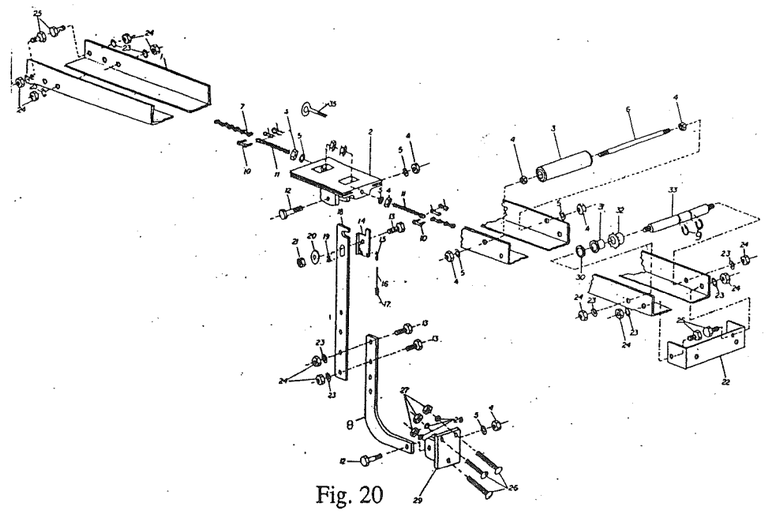


Fig. 20

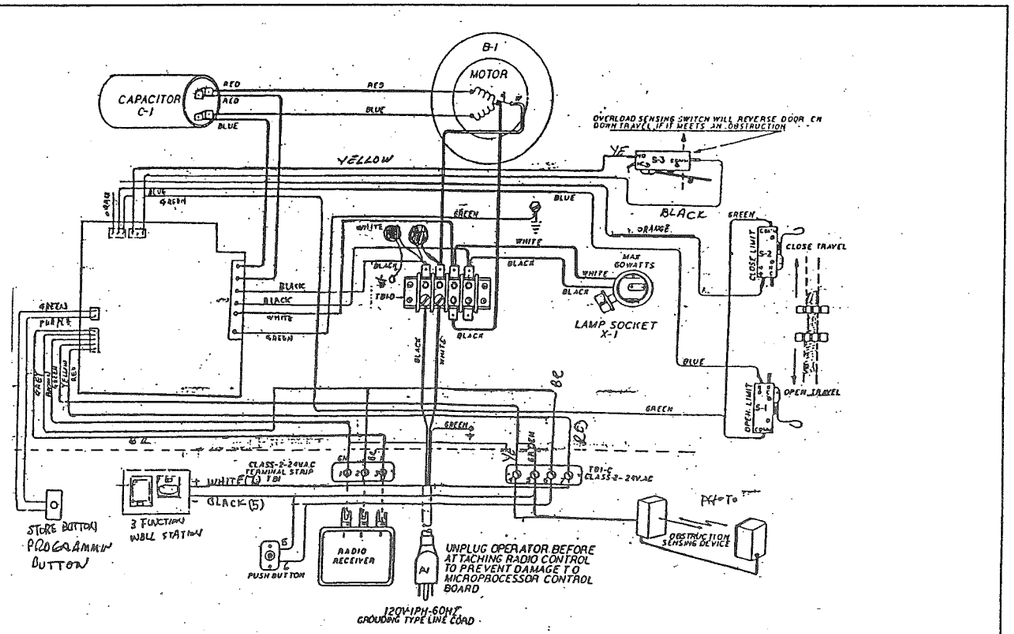


Fig. 21

NOTES