9.1 BATTERY BACK-UP INSTALLATION (OPTIONAL)

IMPORTANT:

Reference installation instruction included with battery back-up system, before any work is performed.

⚠ WARNING ⚠

To reduce the risk of FIRE or INJURY to persons:

- *Disconnect ALL electric and battery power BEFORE performing ANY service or maintenance.*
- *Use ONLY Marantec part #104587 replacement battery.*
- *DO NOT dispose of battery in fire. Battery may explode. Check with local codes for disposal instructions.*

⚠ CAUTION

- *ALWAYS wear protective gloves and eye protection when changing the battery or working around the battery compartment.*
- *See installation manual included with battery back-up system.*

Fig. 38 **Connection XN70**

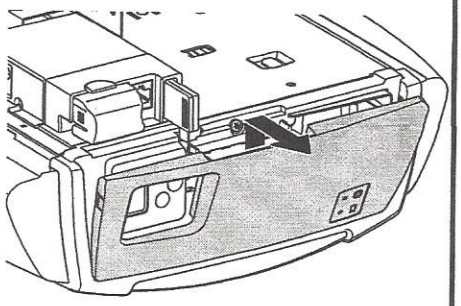
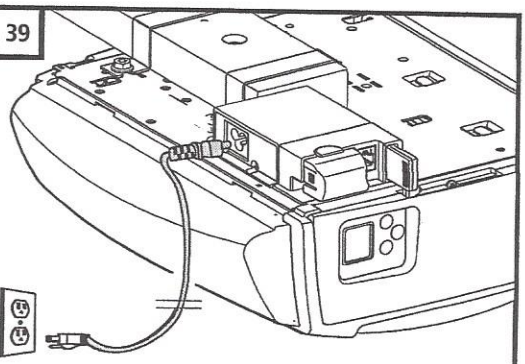


Fig. 39



10. CONNECT TO POWER

To reduce the risk of electric shock, your opener is provided with an insulated power cord with a 3-prong grounding plug. The cord must be connected to a standard grounding outlet. If there is no outlet available at the location, you must have a qualified electrician install an approved grounded outlet in this area.

⚠ WARNING ⚠

To prevent electrocution or fire, installation and wiring must be done in accordance with local electrical and building codes. DO NOT use an extension cord. DO NOT use a 3 to 2 plug adapter. DO NOT modify or cut off the grounding pin on the plug.

- Plug the operator into a properly grounded outlet (Fig. 39).
- The display will illuminate the word "On" and ⏍ will be displayed. This indicates that the operator is ready for set up. See fig. 41 for additional display icons.
- DO NOT operate or run the opener at this time.

IMPORTANT:

Contact Access for
Replacement Power Cord

Part #105475
Model: YP-12/YC-12
Overall length 6ft.
UL/CSA Recognized
UL Type: E241374: SJT 3/C 18AWG 105°C 300V VW-1
CSA 177323: SJT 3/C 18AWG 105°C 300V FT2

11. INTIAL SYSTEM SET UP

⚠ WARNING ⚠

In order to guarantee a trouble-free programming:

- ***The door must be in the "CLOSED" position and engaged to the drive system (rail) before programming the operator or a system reset is performed.***

For proper initial operation of the operator, two basic functions must be set using the initial system programming:

- Open Door Position
- Close Door Position

Press and hold the "P" button for approximately 3 seconds. When illuminates, release the button. You are now ready to set or change the desired adjustment. If no buttons are pressed within 120 seconds while in programming mode, the control unit reverts back to operating mode.

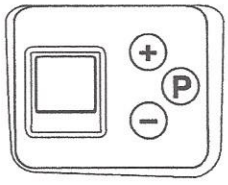
TO MAKE OR CHANGE ANY ADJUSTMENT:

NOTE: If no changes are needed at any particular stage, you can keep the current information and "skip" over a specific adjustment by pressing the "P" button once. This is useful to know if you want to change only one setting, without changing any of the other adjustments. Simply enter the adjustment mode by pressing and holding the "P" button for approximately 2 seconds, then press and release "P" repeatedly until your particular adjustment is reached. This bypasses the unneeded adjustments, and takes you right to the adjustment you want. When your adjustment or setting is complete, simply press "P" as many times as needed to bypass the remaining steps and exit out of the program, returning the operator to normal mode.

Your new operator has automatic force learning and maximum force setting. It may be required to change force settings. If the force needs to be increased or decreased, it should be changed by one (1) increment at a time. The force should be set as low as possible, just enough to allow your unobstructed door to travel freely without reversing or stopping.

NOTE: You may exit the System Set Up at any time by pressing the button "P" for more then 5 sec. The set up programming can be terminated at any time and from any stage. To do so, press the "P" button for longer than 5 seconds.

Fig. 40 Overview of the control unit



Control elements

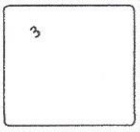
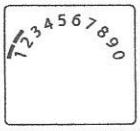
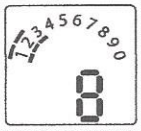
LED display

⊕ Drive the door in the OPEN direction, increase the value

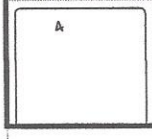
⊖ Drive the door in the CLOSE direction, decrease the value

Ⓟ Start programming, confirm and save values

Fig. 41

Display	Description
	Ready for operation
	Door position: CLOSED
	Door position: OPEN
	Fault message / Maintenance indicator in CLOSED door position
	Photocell safety device
	Remote control
	External button
	Status display Battery backup system connected
	Level indicator (Example: Level 2) Display shows Level 2
	Menu and parameter indicator (Displayed Menu 3, Parameter Setting 8)
Minute indicator	
	Times exceeding one minute are shown in minutes and seconds. Example: 1.2 = 1 minute + 20 seconds = 80 seconds

Status display

Display	Function / Element
	Warning time indicator (only for programmed automatic closing)

11. INITIAL SYSTEM SET UP (cont'd)

Power on

1	**Programming the "OPEN" door position**		
		The control system is in operating mode.	
	Ⓟ	P > 3 sec. < 10 sec.: Start express programming.	
	⊕	Drive the door to the OPEN position.	
	Ⓟ	Save the OPEN position.	
2	**Programming the "CLOSED" door position**		
	⊖	Drive the door to the CLOSED position.	
	Ⓟ	Save the CLOSED position.	
3	**Programming the remote control**		
		Press the hand transmitter button.	
		Release the hand transmitter button.	
	Ⓟ	Save the remote control setting. End express programming.	
		The control system is in operating mode.	

Operating mode

NORMAL OPERATION
IMPORTANT:

On the first open travel activation the trolley will make contact and will rest against the rail bumper. This will appear as if the system (door) went pass the set open travel limit. However this is not the case, on the next open travel cycle the system will recognize the set open travel limit thereafter activation of the system. Every 20 cycles the operator will perform a travel limit check and it will function as described on "Normal Operation" note.

IMPORTANT:

Upon completion of the initial set up, the operator must be cycled for two complete cycles (complete cycle comprises of one uninterrupted up activation of the system and one uninterrupted down activation of the system).

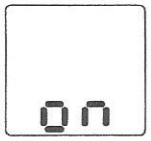
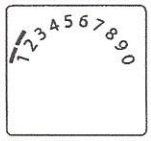
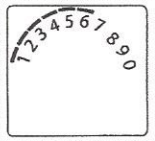
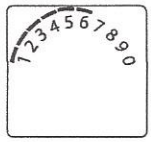
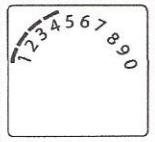
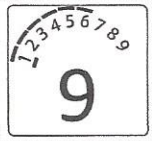
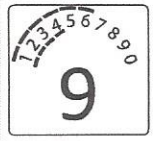
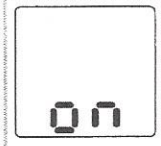
Legend:	
Drive the door in the OPEN direction, increase the value	⊕
Drive the door in the CLOSE direction, decrease the value	⊖
Start programming, comfirm and save values	Ⓟ
The display flashes	
Display lights up	
Ready for operation	on
Door position: CLOSED	
Door position: OPEN	
Fault message/Maintenance indicator in CLOSED door position	
Photocell or closing edge safety device	
Remote control	
External button	

12. ADVANCED SETTINGS

⚠ CAUTION

Additional operator functions can be set using the advanced operator functions. Parameters factory default settings can be restored. This programming may only be carried out by a professional installer.

Advanced Settings Programming Procedure (Diagram Illustrates Setting of Level 6, Menu 4)

1.		The control system in operating mode.		7.	Change parameter setting.	
2.	P	P > 10 sec.: Start programming the advanced operator functions. Displayed starting level.		8.	P	Saves parameter setting and to display levels.	
3.	⊕ ⊖	Select the level required (Example: Level 6).		9.	⊕ ⊖	Select a new level to continue, repeat steps - step 8 to make other adjustments.	
4.	P	Confirm the level shows the first menu and the setting for level parameter.			or		
5.	⊕ ⊖	Select menu that needs adjustment (Example: Menu 4)			P	P > 5 sec.: All changed parameter settings are saved.	
6.	P	Confirms menu. Parameter setting blinks.				The control system switches to operating mode.	

Note: Level 3 is disable

12. ADVANCED SETTINGS (cont'd)

⚠ CAUTION

After a system reset, all parameters are restored to the factory settings.
- *All the required function in the initial set up and advanced settings must be re-programmed if it is required.*
- *The operator must be activated for two (2) complete uninterrupted cycles in order for all restored or operating parameters settings to be learned by the operator again.*

General overview of the programmable functions

Level	Menu	Factory default setting (🖷)
Level 1 – Basic function	Menu 3: Intermediate "OPEN Position"	
	Menu 8: RESET	
Level 2 – Operator settings	Menu 1: "OPEN" position – operator (system) force	Setting 8
	Menu 2: "CLOSE" position – operator (system) force	Setting 8
	Menu 3: "OPEN" position – operator sensitivity	Setting 10
	Menu 4: "CLOSE" position – operator sensitivity	Setting 10
Level 4 – Transmitter Additional Functions	Menu 2: "Intermediate "OPEN Position"	
Level 5	Menu 4: Light timer	Setting 16
Level 6 – Variable speed	Menu 1: OPEN speed	Setting 12
	Menu 2: Soft run OPEN speed	Setting 5
	Menu 3: Soft run OPEN position	
	Menu 4: CLOSE speed	Setting 12
	Menu 6: Soft run CLOSE speed	Setting 5
	Menu 8: Soft run CLOSE position	
Level 7 – Maintenance and servicing	Menu 1: Door cycle counter	
	Menu 2: Servicing counter	
	Menu 3: Servicing interval	
	Menu 8: Reset maintenance and servicing	
	Menu 9: Fault indicator	
Level 8	Menu 7: Force relief CLOSED door position	Setting 1 - Not Active

Level 1: Basic Functions

Menu 3: Intermediate OPEN Position
Set using the (+ / OPEN) and (- / CLOSE) buttons The closing function with automatic closing is possible. Only the intermediate position that was programmed last can be used.

Menu 8: System RESET

🖷 1	No Reset - Default Setting
2	Reset system settings

12. ADVANCED SETTINGS (cont'd)

Level 2: Operator settings

Menu 1: "OPEN" position operator (system) operating force	← Lower Force											Higher Force →				
8	1	2	3	4	5	6	7	**8**	9	10	11	12	13	14	15	16
Menu 2: "CLOSE" position operator (system) operating force	← Lower Force											Higher Force →				
8	1	2	3	4	5	6	7	**8**	9	10	11	12	13	14	15	16
Menu 3: "OPEN" position operator sensitivity	← More Sensitive											Less sensitive →				
10	OFF	2	3	4	5	6	7	8	9	**10**	11	12	13			
Menu 4: "CLOSE" position operator sensitivity	← More Sensitive											Less sensitive →				
10	OFF	2	3	4	5	6	7	8	9	**10**	11	12	13			

Level 4: Transmitter Additional Functions

Menu 2: Intermediate OPEN Position
Set using the (+ / OPEN) and (- / CLOSE) buttons The closing function with automatic closing is possible. Only the intermediate position that was programmed last can be used.

Level 5: Functions overview

Menu 4: Operator Light "ON" Timer (in seconds)																
	2	5	10	15	20	25	30	35	40	50	80	100	120	150	180	**255**

Level 6: Variable Speed

Menu 1: OPEN speed	← Slower											Faster →				
12	-	-	-	-	5	6	7	8	9	10	11	**12**	13	14	15	16
Menu 2: Soft run OPEN speed	← Slower											Faster →				
5	1	2	3	4	**5**	6	7	-	-	-	-	-	-	-	-	-
Menu 3: Soft run OPEN position																
Set using the (+ / OPEN) and (- / CLOSE) buttons																
Menu 4: CLOSE speed	← Slower											Faster →				
12	-	-	-	-	5	6	7	8	9	10	11	**12**	13	14	15	16
Menu 6: Soft run CLOSE speed	← Slower											Faster →				
5	1	2	3	4	**5**	6	7	-	-	-	-	-	-	-	-	-
Menu 8: Soft run CLOSE position																
Set using the (+ / OPEN) and (- / CLOSE) buttons																

12. ADVANCED SETTINGS (cont'd)

Level 7 – Maintenance and servicing

Menu 1:	Door cycle counter
	Six-figure indicator showing the number of complete cycles, up to 999999. Once the counter setting is reached, it restarts count again.
Menu 2:	**Servicing counter**
	Five-figure indicator showing the number of complete cycles left up to maintenance indication. Figures shown one after the other up to the indicator point, then repeated.

Menu 3: Service/Maintenance Counter Setting

Adjustment of the number of door operations to be completed before a servicing reminder is displayed.

1	OFF Default
2	100 door operations
3	500 door operations
4	1,000 door operations
5	4,000 door operations
6	5,000 door operations
7	6,000 door operations
8	7,000 door operations
9	8,000 door operations
10	9,000 door operations
11	10,000 door operations
12	15,000 door operations
13	20,000 door operations
14	30,000 door operations
15	40,000 door operations
16	50,000 door operations

Menu 8: Reset maintenance and servicing

The fault log for maintenance, diagnostics and servicing work is reset here.

1	No Reset - Default Setting
2	Reset the fault log

Menu 9: Fault indicator

Shows the current fault message.
(No more than 16 fault messages can be viewed).

⊖	Display the previous fault / Navigate through the list of faults
⊕	Navigate through the list of faults

Level 8 - CLOSE Travel Position Pressure Sensitivity Adjustment (PSA™)

1	Default not activated
2	Short
3	Medium
4	Long

13. TRANSMITTERS

⚠ WARNING ⚠

Danger of injury due to uncontrolled operation of the door!

- *Operate the controls or the hand transmitter only when there are no persons or objects in the path of the door.*
- *Ensure that the controls and the hand transmitter are never used by children or unauthorized persons.*
- *Ensure that the hand transmitter cannot be operated by accident (in a trouser pocket, for example).*

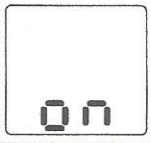
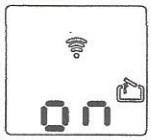
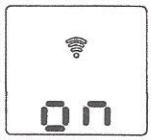
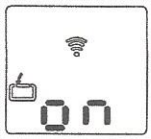
⚠ WARNING ⚠

Danger of damage to property due to uncontrolled movement of the door!
When the door moves, the hand chain can get caught and this could result in damage (in case of ceiling-mounted supports for example)

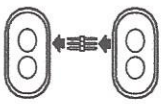
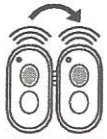
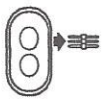
- *Ensure that there are no obstacles blocking the path of the door or the hand chain.*

The operator works with the supplied hand transmitter on the basis of a pulse sequence control system.

Operating the door using the hand transmitter

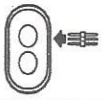
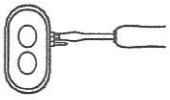
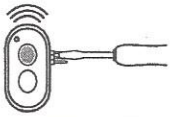
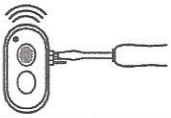
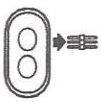
1.	The control system is in operating mode.	
2.	1. Impulse: The door opens and moves in the OPEN direction	
3.	2. Impulse. The operator system stops.	
4.	3. Impulse: The door moves in the opposite direction (CLOSE direction).	

Transmitting the code

1.		Connect the hand transmitter to the programming connector
2.		Press the button on the master transmitter with active code. Keep the button pressed. The LED lights up.
3.		Press the button on the hand transmitter which is to be given a new code. The LED flashes.
4.		The LED lights up. The coding procedure is completed.
5.		Remove the programming connector.

***NOTE:** For multi-button transmitters, be sure to carry out this procedure for all the buttons you desire to use.*

Changing the code

1.		Plug the programming connector into the hand transmitter.
2.		Short-circuit one of the two outer pins with the centre pin adjacent to it (e.g. using a screw driver).
3.		Press the desired button on the hand transmitter. The LED flashes.
4.		The LED lights up. The coding procedure is completed.
5.		Remove the transmission plug.
6.	Once the transmitter code is changed, the operator must be recoded with the new transmitter code as described on the initial system set up page 18. ***NOTE:** For multi-button transmitters, be sure to carry out this procedure for all the buttons you desire to use.*	

13. TRANSMITTERS (cont'd)

TRANSMITTERS (Fig. 42):
A family of state-of-the-art transmitters, each transmitter is custom encoded with installed battery. Offered in two styles to suit your personal preference.

- Mini (2-or 4-channel)
- Micro (3-channel) with keyring attachment.

TRANSMITTER MOUNTING:
The transmitters can be conveniently mounted inside your car using the visor clip or on the wall using the mounting plate.

Visor Clip (Fig. 43)

- Snap visor clip into transmitter.
- Affix assembly to visor.

NOTE: *If you do not need the visor clip, install the visor compartment cover.*

Mounting Plate (Fig. 44) Optional Accessory

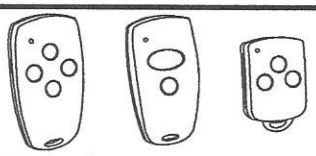
- Secure the mounting plate to area of preference using screw and anchor.
- Snap the visor compartment cover.
- Slide the transmitter into the mounting plate, which will hold it firmly in place.

BATTERY REPLACEMENT (Fig. 45):

- Open the transmitter by using small coin.
- Insert a 3V battery (type CR2032) as shown.
- Close the transmitter.

NOTE: Replace batteries with same type only.

Fig. 42



FCC Certified: This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Fig. 43

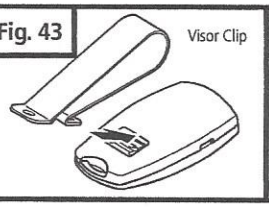


Fig. 44

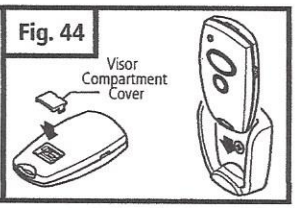
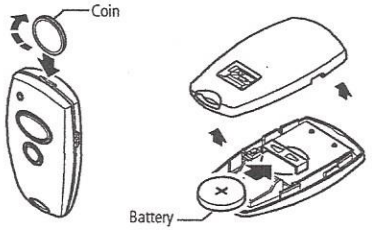


Fig. 45



14. OPERATION OF YOUR OPERATOR

Your operator can be activated via any of the following, depending on which accessories your opener system has:

- Remote Control Transmitter
- Wall Control Panel
- Keyless Entry (optional accessory)

REMOTE CONTROL TRANSMITTER:

- To open or close garage door, press and hold button (Transmitter has an indicator light that will illuminate). See Fig. 46A. When garage door begins to move, release button.
- To stop garage door during travel, press and hold button until door stops, then release button.
- To resume garage door travel after stopping, press button again. Door begins to move in the opposite direction.

WALL CONTROL PANEL:

- The Door Pushbutton will light when Wall Control properly connected (if it does not light up, review section 8-12 "Install Wall Control" on page 14.
  To open or close garage door, press and hold Illuminated Door Pushbutton. See Fig. 47. When garage door begins to move, release button.
  To stop garage door during travel, press and hold button until door stops, then release button.
  To resume garage door travel after stopping it, press button again. Door begins to move in the opposite direction.
- The Light On / Off button can be used to turn lights on or off.

NOTE: The Light On / Off button must be pressed twice, in order to turn the operator light(s) off after a door cycle (activation).

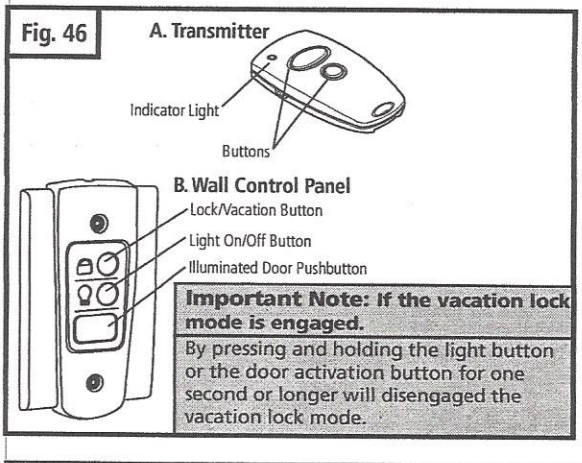
When using the light On / Off button, the automatic timer is ignored, and the lights will remain on until the button is pressed again, or until the operator is activated and the automatic timer begins again.

- The Lock/Vacation button can be used to lock out all remote control transmitters. The door can still be activated by wall control panel or keyless entry system. Press and hold Lock/Vacation button for 2-3 seconds. Release button. Illuminated Door Pushbutton will flash continuously while lock mode is active. To unlock opener, press and hold Lock/Vacation button for 2-3 seconds.

OPERATOR LIGHTS:

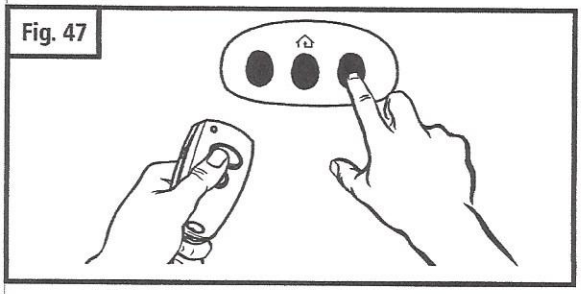
- The amount of time that the operator light(s) are "on" can be adjusted. Please refer to level 5 menu 4 in the "Advanced Settings"
- Lights will come on whenever operator is activated. The default factory setting for the light to stay "on" is 4 minutes and 15 sec., or until the Light On / Off button on the wall control panel is pressed, whichever is sooner.
- Lights can be turned on and off manually as described under operation of wall control panel.
- Lights will flash when the operator senses an obstruction either detected by the internal safety system or the photo eye sensors. To stop lights from flashing, remove obstruction and operate door normally. The fault light indicator will flash for the set light time "on" factory default setting of 3 minutes maximum.

Fig. 46



Important Note: If the vacation lock mode is engaged.
By pressing and holding the light button or the door activation button for one second or longer will disengaged the vacation lock mode.

Fig. 47



15. HOMELINK® TRANSCEIVER

Before you can use your car's HomeLink® device to open a garage door you must transfer an active code from the transmitter to the HomeLink® Universal transceiver. (Reference - HomeLink® Manual) (See Fig. 47)

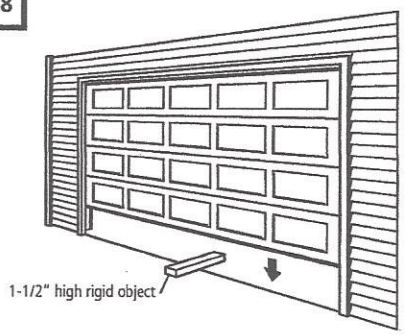
- Clear memory in HomeLink® transceiver per manufacturer instructions.
- Make sure the door path is clear and the door is in the line of site at all time during the set up.
- Start the programming sequence by pressing the transmitter button and the HomeLink® transceiver button on console simultaneously. Follow manufacturer instructions to complete programing sequence. **No learn button on the operator is required to be pressed.**
- Repeat steps above for the other channels available.

16. TEST SAFETY REVERSAL

The safety reversal function of your operator is an extremely important feature of your operator. Testing this function ensures the correct operation of your operator and door.
The reversal system test should be performed:

- Once per month.
- Anytime the travel or force limits are reset or changed. Once the adjustments have been set and the door has been run up and down twice to "learn" the new settings, you must test the reversal system for proper operation.
- Place a 1-1/2" high rigid object (or a 2x4 board laid flat) on the floor directly in the path of the door. See Fig. 48.
- Start the door in the downward direction and watch what happens.
- When door contacts the object (or 2x4), it should stop, reverse, and automatically return to the fully opened position.
- If the door does not reverse, reset the down travel limit so that the door travels slightly further down in the closed direction. Then, retest the unit as described above.
- If the door still does not reverse, disconnect your operator and call a service person.

Fig. 48



17. ALIGN AND TEST PHOTO EYE SENSORS

PHOTO EYE SENSORS ALIGNMENT:
The photo eye sensors maintain an invisible, unbroken beam between each other. See Fig. 49.

NOTE: *Sensor alignment must be done with the door in the closed position in order to ensure proper visibility of the sensor indicator LED.*

- When the photo eye system is connected to the operator and the power is on, the green light on the transmitter sensor flashes, if the sensors are not aligned. When the sensors are aligned, the green light on the transmitter sensor will turn steady. See Fig. 49.
- Sensors must be installed parallel to the door plane and make sure the sensors are facing each other.

AFTER THE SENSORS HAVE BEEN PROPERLY ALIGNED. MAKE SURE THAT THE SYSTEM OPERATION AND SAFETY TESTS OUTLINED BY THE GARAGE DOOR OPENER MANUFACTURER HAVE BEEN VERIFIED.

SAFETY TEST:
Photo eye sensors installed on opposite sides of your door opening are intended to detect a person or object in the path of the door and prevent the door from moving downward. The following steps will determine if the system is functioning properly:

- Open door using the operator's transmitter or wall control.
- Place a box or other object in the path of the door so it breaks the photo eye beam. See Fig. 51.
- Press and release the wall control button. The door should not move in the down direction.
  If this does not happen, disconnect operator and call for service.
- To reset operator, remove the obstruction and operate the door normally.
- If photo eye sensors are not aligned or are damaged, door can only be closed by pressing and holding wall control button until door is fully closed.

Fig. 49

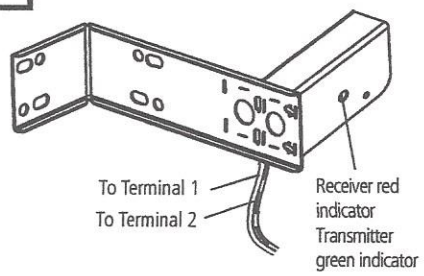


Fig. 50 Clear Path between Photo Eye Sensors

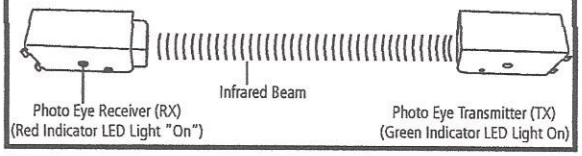
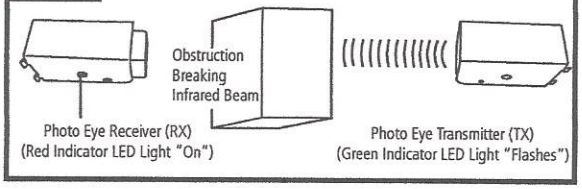


Fig. 51 Object directly in Path between Photo Eye Sensors



18. APPLY LABELS TO INSIDE OF GARAGE

Several important safety and instruction labels are included with your operator package. These labels must be posted inside your garage where they can be easily seen by all. We recommend installing them in the location shown in Fig. 9 on page 7. To affix the labels, peel off the protective backing, and stick onto smooth, clean surface. If labels don't adhere well to surface, use tacks (wood door only) or additional adhesive to securely affix in place.
DO NOT PAINT OVER ANY LABELS.

19. ATTACH *OWNER'S* MANUAL TO WALL

It is important that the manual be stored where it can be referred to later in case adjustments need to be made, and / or new controls or accessories added. Store the manual in a safe, easily accessible location. We recommend you use an envelope with an eyelet to store the manual in the garage on a nail or hook on the wall near the wall control.

20. IMPORTANT SAFETY INSTRUCTIONS

IMPORTANT SAFETY INSTRUCTIONS

⚠ WARNING ⚠

TO REDUCE THE RISK OF SEVERE INJURY OR DEATH:

1. **READ AND FOLLOW ALL WARNINGS AND INSTRUCTIONS CAREFULLY.**
2. **Synergy 380 - Use this operator ONLY with sectional doors.**
3. Never let children operate or play with door controls. Keep the remote control away from children.
4. Always keep the moving door in sight and away from people and objects until it is completely closed. NO ONE SHOULD CROSS THE PATH OF THE MOVING DOOR.
5. NEVER GO UNDER A STOPPED, PARTIALLY OPEN DOOR.
6. Test door operator monthly. The garage door MUST reverse on contact with a 1-1/2" (40mm) high object (or a 2x4 laid flat) on the floor. After adjusting either the force or the limit of travel, retest the door operator. Failure to adjust the operator properly may cause severe injury or death.
7. If possible, use the emergency release only when the door is closed. Use caution when using this release with the door open. Weak or broken springs may allow the door to fall rapidly, causing severe injury or death.
8. KEEP GARAGE DOORS PROPERLY BALANCED. See Garage Door Owner's Manual. An improperly balanced door could cause severe injury or death. Have a qualified service person make repairs to cables, spring assemblies, and other hardware.
9. Disconnect the electrical power to the garage door operator before making any repairs or removing the housing cover.
10. SAVE THESE INSTRUCTIONS for future safety, adjustment, and maintenance purposes.

21. TENSION ADJUSTMENT

Your preassembled rail comes with the tension adjusted to factory specifications. There should be no need for further adjustment. However, if exposed or subjected to unusually harsh operating conditions, the tension may need to be readjusted during the life of the opener.

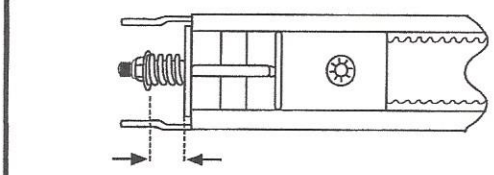
CHECK PROPER TENSION (Fig. 52):

- Release trolley from belt or chain, then examine the setting of the tension adjustment at the header end of the rail.
- Proper tension is set when the tension nut is tightened just enough so that the washer will be spaced approximately 21mm or 53/64" from the stationary rail end-stop arch.
- If the gap between the washer and the rail end-stop arch is too big or too small, the tension needs to be adjusted.

ADJUST THE TENSION:

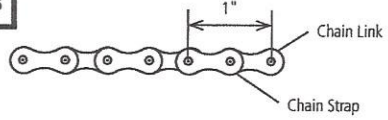
- To increase the tension and tighten the belt or chain, turn the tension nut clockwise with 7/16" wrench until the washer is spaced properly from the rail end-stop arch. See Fig. 52.
- Once the washer is spaced correctly, any additional tightening will overtighten the belt or chain and may cause damage to the system.
- To loosen the tension, turn nut counterclockwise.
- Reattach trolley.

Fig. 52 Proper Tension Adjustment



Proper Space 21mm + 0.5 or approximately (53/64")

Fig. 53



22. RAIL LENGTH ADJUSTMENT

FOR PROFESSIONAL INSTALLERS ONLY

If your particular installation calls for a shorter rail than the standard length provided, it is possible to shorten the rail.

NOTE: Shortening rail too much may result in door travel length reduction and door not opening fully. This depends on door size and configuration. Carefully plan all such modifications before proceeding. THIS PROCEDURE SHOULD BE PERFORMED ONLY BY A PROFESSIONAL INSTALLER FULLY FAMILIAR WITH THIS TYPE OF OPENER SYSTEM.

TO SHORTEN BELT RAIL LENGTH:

- Loosen belt tension as much as possible.
- Remove screws from sprocket holder and rail end-stop.
- Slide belt and all rail parts out of rail from header end. See rail exploded view, Fig. 54 on p. 29, for disassembly details.
- Measure and cut off excess rail from header end.
- Using rail end-stop as a guide, mark and drill a 3/16" hole for rail end-stop screw.
- Disassemble connector to expose free ends of belt.
- Using the same measurement as the excess rail length, cut the same amount off BOTH free ends of the belt.
- Reassemble belt connector, and slide all rail parts into rail from header end according to original assembly (Fig. 52).
- Tension belt properly (Fig. 52).
- Check rail for proper assembly and operation by manually moving trolley from end to end with trolley connected to belt.

TO SHORTEN CHAIN RIAL LENGTH:

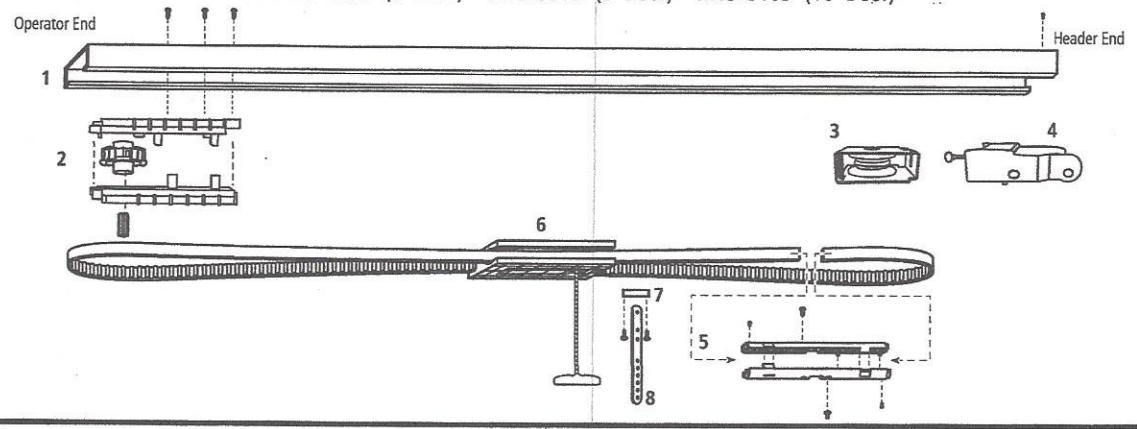
- Loosen chain tension as much as possible.
- Remove screws from sprocket holder and rail end-stop.
- Slide chain and all rail parts out of rail from header end. See rail exploded view, Fig. 55 on p. 29, for disassembly details.
- Measure and cut off excess rail from header end by 1" increment only.
- Using rail end-stop as a guide, mark and drill a 3/16" hole for rail end-stop screw.
- Disassemble connector to expose free ends of chain.
- Using the same measurement as the excess rail length, remove the same amount off chain links and chain straps from BOTH free ends of the chain (Fig. 53).
- Reassemble two piece connector and slide chain and all rail parts into rail from header end according to original assembly (Fig. 52).
- Tension chain properly (Fig. 52).
- Check rail for proper assembly and operation by manually moving trolley from end to end with trolley connected to chain.

23. RAIL MODELS AND ASSEMBLY PARTS (A2000 OPERATOR)

Fig. 54

Belt Rail Assembly

Model#: M13-807B (7' Door) M13-808B (8' Door) M13-810B (10' Door)

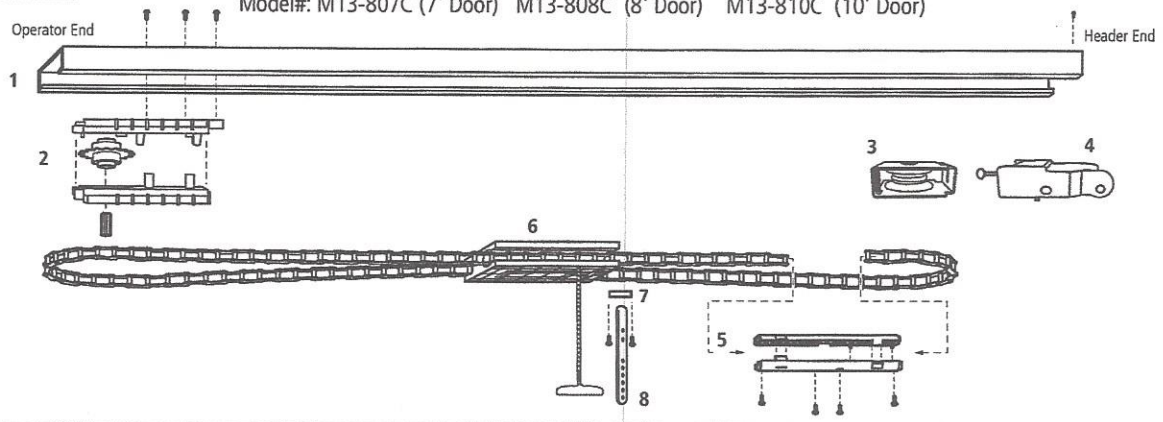


Item	Part #	Description
1.	———	Rail
2.	89687	Sprocket holder assembly
	97484	Shaft adapter
3.	95358	Roller holder assembly
4.	91566	Rail end assembly
5.	8030196	Belt connector
6.	91569	Trolley assembly (7' Door)
	91570	Trolley assembly (8' & 10' Door)
7.	98886	Pin
8.	8030735	Straight door arm

Fig. 55

Chain Rail Assembly

Model#: M13-807C (7' Door) M13-808C (8' Door) M13-810C (10' Door)



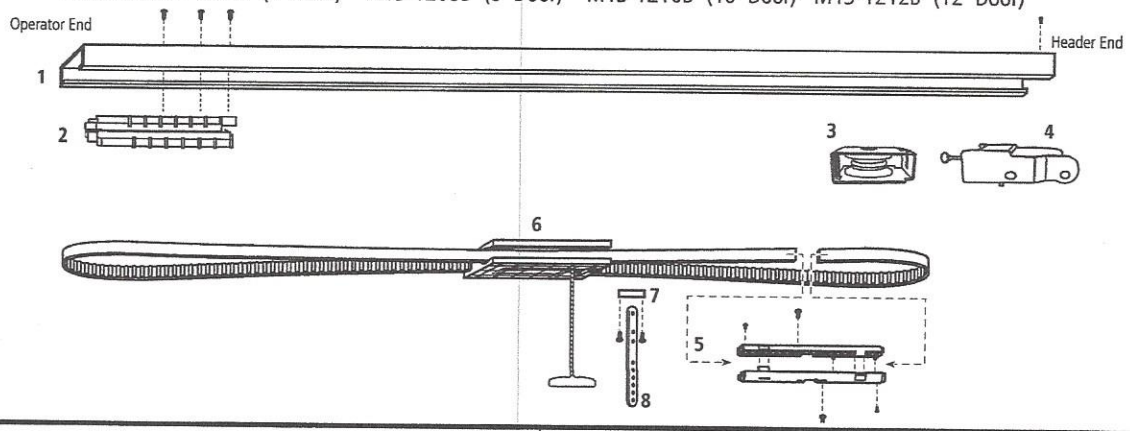
Item	Part #	Description
1.	———	Rail
2.	8030339	Sprocket holder assembly
	97484	Shaft adapter
3.	95358	Roller holder assembly
4.	91566	Rail end assembly
5.	8030234	Chain connector
6.	91569	Trolley assembly (7' door)
	91570	Trolley assembly (8' & 10' Door)
7.	98886	Pin
8.	8030735	Straight door arm

24. RAIL MODELS AND ASSEMBLY PARTS (A3000 OPERATOR)

Fig. 56

Belt Rail Assembly

Model#: M13-1207B (7' Door) M13-1208B (8' Door) M13-1210B (10' Door) M13-1212B (12' Door)



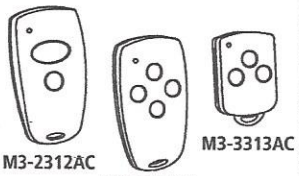
Item	Part #	Description
1.	———	Rail
2.	88824	Sprocket holder assembly
3.	95358	Roller holder assembly
4.	91566	Rail end assembly
5.	8030196	Belt connector
6.	91569	Trolley assembly (7' Door)
	91570	Trolley assembly (8' & 10' Door)
7.	98886	Pin
8.	8030735	Straight door arm

25. ACCESSORIES

The following accessories are designed to provide added convenience, satisfaction and value to your door opener system. Accessories are available from your dealer. If you have difficulty locating available accessories, please contact us directly at the number listed on our web site: www.accessgaragedoor.com

Fig. 57

Mini & Micro Transmitters
(Battery and visor clip included)

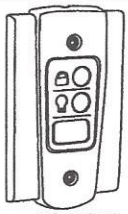


M3-2312AC
M3-3313AC
M3-2314AC

MINI Transmitter Mounting Plate

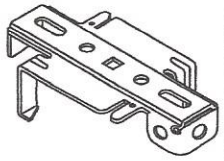
ML-920

Wall Control Panel



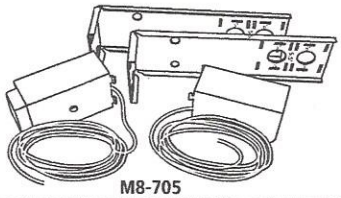
M3-543AC

Rail Support Bracket
(For 10' doors and higher)



P/N: 71865

Photo Eye Safety System

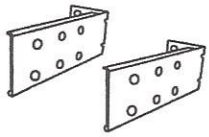


M8-705

Wire Holder Kit

P/N: 86141

Extension Bracket Kit



P/N: 85678

Detachable Power Cord

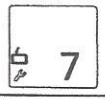
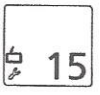
P/N: 105475

26. TROUBLESHOOTING — FOR PROFESSIONAL INSTALLER ONLY

The operator displays the system fault(s) automatically one at a time as follows:

System Fault Display: (Example - Error Code 7)
Fault 1 

Note: ■ *The last system fault code can be viewed by pressing the "P" button once. To return to operation mode press "-" or "+" button.*

FAULT DISPLAY	CODE	PROBLEM	SOLUTION
	7	***NOTICE:*** ■ If no buttons are pressed within 120 seconds, the programming mode terminates automatically. ■ OPEN and CLOSED door positions programmed without passing the reference point.	
	8	■ Adjustments setting interrupted before completion.	■ Door can be operated normally. Recheck adjustments if adjustment settings were not completed. Refer to page 18. ■ Have operator serviced.
	9	■ Rational speed sensor impulse not present, operator system is obstructed.	■ Have operator serviced.
	10	■ The door does not move easily or is obstructed.	■ The maximum driving power has been set too low. Have maximum driving power checked by specialist dealer.
	11	■ Excess travel stop.	■ Have operator serviced.
	15	■ Photo eye sensors not connected properly. ■ Photo eye sensors not aligned. ■ Obstruction in the door path (photo eye beam broken).	■ Check photo eye sensors wiring and connections. ■ Realign photo eye sensors. ■ Remove obstruction from door path.
	16	■ The current sensor for the automatic cut-out is defective.	■ Have operator serviced.
	26	■ Operator system overloaded.	■ Have the outlet assigned for the operator and/or supplied power checked.
	28	■ Door movement too stiff or irregular. ■ Door blocked. ■ Operator operating sensitivity set too sensitive (low).	■ Check door for obstructions, proper manual operation, proper balance, or broken springs. Clear obstructions or have door serviced, If needed. ■ Have the operating sensitivity settings checked by an authorized dealer/installer d.
	30	■ MS bus fault	■ Reset the bus modules ■ Have the connected bus modules checked.

26. TROUBLESHOOTING — FOR PROFESSIONAL INSTALLER ONLY (cont'd)

FAULT DISPLAY	CODE	PROBLEM	SOLUTION
	33	■ Rise in temparature.	■ Allow the operator to cool down.
	35	■ Electronic defect.	■ Have operator serviced

27. MAINTENANCE AND ADJUSTMENTS

To ensure continued safe operation and extended life of your operator system, periodic checking for proper operation is necessary. Occasional maintnance and readjustment of your system may also be needed.

MONTHLY:

- Check reversal system by performing "safety reversal test" described in this manual.
- Check proper operation of door by manually moving door open and closed. If door binds or sticks, or is out of balance call for garage door service.
- Check and test photo eye safety system as described in this manual.

ONCE EVERY YEAR

- Keep door rollers, hinges, and bearings properly lubricated by following recommended door instructions or contacting a door service company in your area.

AS NEEDED:

- Readjust operator travel limits and force settings as necessary — due to cold weather, normal wear of door, etc. For any periodic adjustments needed refer to this manual.
- Check and readjust belt tension, if necessary, in the unlikely event that it loses its proper tension during the life of the operator. Always check the reversal system after any adjustment of travel limits or forces. A door operator that is not checked could possibly be out of adjustment and be dangerous.

28. MAINTENANCE RECORD

Good maintenance of your garage door is an imperative requirement. Not only will it prolong the life of the door and the opener, but more importantly, it assures your safety and that of others. Use the form below to record the monthly, yearly, and "as needed" maintenance.

Maintenance Steps	Date	Performed By	Comments