

THE CHAMBERLAIN GROUP, INC.  
A Unit of Duchossois Industries, Inc.  
845 Larch Ave., Elmhurst, Ill. 60126



Owners Manual

Garage Door Opener

***ALL MODELS IN ARE BOLD ARE DELUXE (2 LIGHTS)***

<b>MODEL</b>		<b>NUMBERS</b>	
<b>550</b>	<b>550-9</b>	<b>550-6</b>	<i>450GM</i>
<i>450</i>	<i>450-9</i>	<i>450-6</i>	<i>140GM</i>
<b>350</b>	<b>350-9</b>	<b>350-6</b>	<b>550TV</b>
<i>240</i>	<i>240-9</i>	<i>240-6</i>	<i>500TV</i>
<i>150</i>	<i>150-9</i>	<i>150-6</i>	<i>250TV</i>
<i>140</i>	<i>140-9</i>	<i>140-6</i>	<i>140TV</i>
	<i>250-9TV</i>	<i>140-6TV</i>	<b>550-6TV</b>
	<i>140-9TV</i>	<b>550-9TV</b>	<i>500-6TV</i>
		<i>500-9TV</i>	<i>250-6TV</i>

## FEATURES OF YOUR OPENER

- 1. Opener Lights:** Turn on and off automatically with 4-1/2 minute illumination for your safety and convenience. Provide constant LIGHT when Light Switch is ON.
- 2. Safety System:** Independent up and down force adjustment. The door REVERSES automatically when obstructed in DOWN direction. The door STOPS when obstructed in UP direction.
- 3. Emergency Disconnect:** Pull cord disconnect permits manual door operation.
- 4. Automatic Reconnect:** Trolley halves reconnect for automatic operation when opener is energized after emergency disconnect.
- 5. Motor Power:** Permanently lubricated motor with automatic reset.
- 6. Digital Radio Controls:** Codes can be easily changed by the owner.
- 7. Easy Limit Adjustment:** Limits of door opening and closing adjusted by turning screws without removing chassis cover.
- 8. Lock Switch:** Prevents operation of opener from transmitter. When LOCK Switch is ON, the opener can be operated in the UP direction ONLY, from the Wall Control or optional Key Switch and Keyless Entry accessories, (See below).

## SPECIFICATIONS

### MOTOR

Type .....	Permanent split capacitor
Speed .....	1500 rpm
Volts .....	120 Volts AC - 60 Hz. Only
Current .....	4.5 amperes

### DRIVE MECHANISM

Gears .....	16:1 worm gear reduction
Drive .....	Roller chain with two-piece trolley on steel Tee-rail.
Length of travel .....	Adjustable to 7 1/2 feet
Travel rate .....	6 to 8 inches per second
Lamp .....	On when door starts to travel, off 4 1/2 minutes after stop. Also separate LIGHT Switch.
Door linkage .....	Adjustable door arm. Pull cord trolley release.

### SAFETY

Personal .....	Push button and automatic reversal in down direction. Push button and Automatic stop in UP direction.
Electronic .....	Independent UP and DOWN force adjustment screws.
Electrical .....	Motor overload protector & low voltage push button wiring.
Limit device .....	Circuit actuated by limit nut
Limit Adjustment .....	Screwdriver adjustment on side panel
Start circuit .....	Low voltage push button or radio control.

### DIMENSIONS

Length (overall) .....	128 inches
Headroom required .....	2 inches
Hanging weight .....	32 pounds

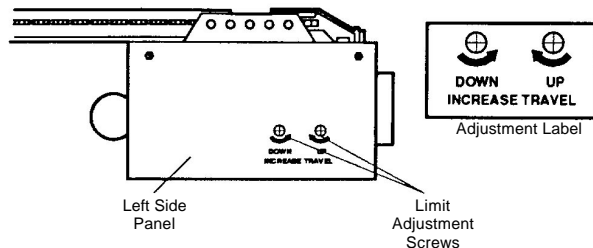
# Adjustment

## STEP 1 *Adjust UP and DOWN Limits*

LIMIT ADJUSTMENT settings regulate the points at which the door will stop when moving up or down.

**NOTE: Door STOPS in the UP direction if anything interferes with door travel. Door REVERSES in the DOWN direction if anything interferes with the door travel (including binding or unbalanced doors).**

**PROCEDURE:** To operate opener, press wall push button. Run the opener through a COMPLETE TRAVEL CYCLE. Limit adjustments are not necessary when the door opens and closes completely and doesn't reverse unintentionally in the fully closed position.



The following chart outlines adjustment procedures. Run the opener through a COMPLETE TRAVEL CYCLE AFTER EACH ADJUSTMENT. NOTE: REPEATED OPERATION OF THE OPENER DURING ADJUSTMENT PROCEDURES MAY CAUSE MOTOR TO OVERHEAT AND SHUT OFF. SIMPLY WAIT 15 MINUTES AND TRY AGAIN. Read chart carefully before proceeding to Step 2. Use a screwdriver to make limit adjustments.

### LIMIT ADJUSTMENT CHART

#### IF DOOR DOES NOT OPEN COMPLETELY BUT IT OPENS AT LEAST FIVE FEET

Increase UP travel. Turn the UP LIMIT adjustment screw clockwise. One turn equals 2" of travel.

**If door does not open at least 5 feet:** adjust OPEN FORCE as explained in Step 2.

#### IF SECTIONAL DOOR DOES NOT CLOSE COMPLETELY

Increase DOWN travel. Turn down limit adjustment screw counterclockwise. One turn equals 2" of travel.

If the door still will not close completely, the header bracket is positioned too high. Repeat Step 1, page 7.

#### IF ONE-PIECE DOOR DOES NOT CLOSE COMPLETELY

Increase DOWN travel. Turn down limit adjustment screw COUNTERCLOCKWISE One turn equals 2 inches of travel.

#### IF OPENER REVERSES IN FULLY CLOSED POSITION

Decrease DOWN travel. Turn down limit adjustment screw clockwise. One turn equals 2" of travel.

#### IF DOOR REVERSES WHEN CLOSING AND THERE IS NO INTERFERENCE TO TRAVEL CYCLE

**Test door for binding:** Pull emergency release handle. Manually open and close door. If door is binding, call a door serviceman. If door is not binding or unbalanced, adjust CLOSE FORCE. See Step 2.

## STEP 2 *Adjust Force*



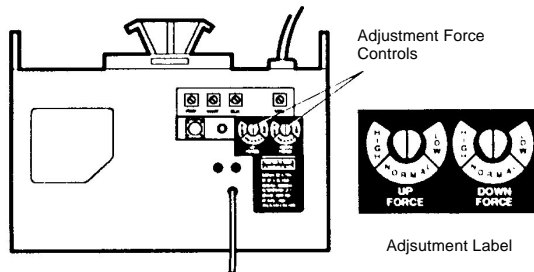
DO NOT USE FORCE ADJUSTMENTS TO COMPENSATE FOR A BINDING OR STICKING GARAGE DOOR. EXCESSIVE FORCE WILL INTERFERE WITH PROPER OPERATION OF SAFETY REVERSE SYSTEM OR DAMAGE GARAGE DOOR.

Force Adjustment Controls are located on rear panel of opener. **FORCE ADJUSTMENT** settings regulate amount of the power required to open and close door.

**NOTE: The door STOPS in the UP direction if anything interferes with its travel. Door REVERSES in the DOWN direction if anything interferes with its travel (including binding or unbalanced doors).**

If the force adjustments are set too light, door travel may be interrupted by nuisance reversals in DOWN direction and stops in UP direction. As weather conditions can affect the door movement, occasional adjustment may be needed.

Maximum force adjustment range is 260 degrees, about 3/4 of a complete turn. Do not force controls beyond that point. Turn force adjustment controls with a screwdriver.



### FORCE ADJUSTMENT CHART

#### TEST DOWN (CLOSE) FORCE

Grasp the door handle or door bottom when door is about halfway through DOWN (CLOSE) TRAVEL. Door should reverse. If the door is hard to hold or doesn't reverse, decrease DOWN (CLOSE) FORCE by turning the control in a counterclockwise direction. Make 10 degree turn adjustments until door reverses normally. After each adjustment, run opener through a complete cycle.

#### IF DOOR DOESN'T OPEN AT LEAST 5 FEET

Increase UP (OPEN) FORCE by turning clockwise. Make 10 degree turn adjustments until door opens completely. Readjust UP LIMIT if necessary. After each adjustment, run opener through a complete travel cycle.

#### IF DOOR REVERSES DURING DOWN (CLOSE) CYCLE

Increase DOWN (CLOSE) FORCE by turning control clockwise. Make 10 degree turn adjustments until door completes close cycle. After each adjustment, run the opener through a complete travel travel

**PROCEED TO STEP 3**

# Adjustment

## STEP 3 *Test Safety Reverse System*



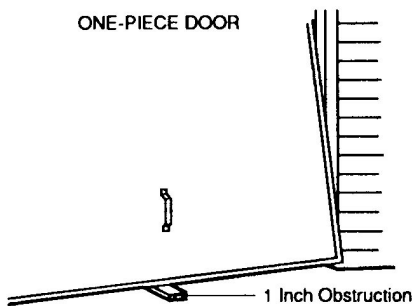
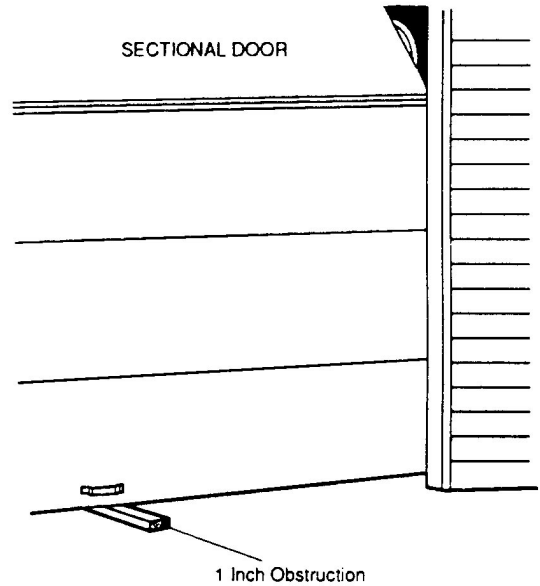
**THE SAFETY REVERSE SYSTEM TEST IS IMPORTANT. GARAGE DOOR MUST REVERSE ON CONTACT WITH A ONE INCH OBSTACLE PLACED ON THE FLOOR. FAILURE TO PROPERLY ADJUST OPENER MAY RESULT IN SERIOUS PERSONAL INJURY FROM A CLOSING GARAGE DOOR. REPEAT TEST AT LEAST FOUR TIMES A YEAR AND ADJUST AS NEEDED..**

**PROCEDURE:** Place a 1-inch obstacle on the floor under the garage door. Operate door in DOWN direction. The door must reverse on the obstruction.

If a the door STOPS on the obstruction, it is not traveling far enough in the DOWN direction. Increase the DOWN limit by turning DOWN limit adjustment screw counterclockwise 1/4 turn. REPEAT TEST.

**NOTE:** Make sure limit adjustments do not force the door arm beyond a straight up and down position. See the illustration on Page 13.

When the door reverses on the 1-inch obstacle, remove the obstruction and run the opener through a complete travel cycle. Door MUST NOT reverse in closed position. If it does, repeat Adjustment Steps 1, 2 and 3.



**REPEAT ADJUSTMENT STEP 3 AFTER:**

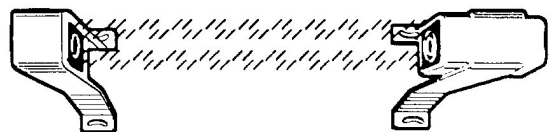
- EACH ADJUSTMENT OF DOOR ARM LENGTH, CLOSE FORCE OR DOWN LIMIT.
- ANY REPAIR OR ADJUSTMENT OF GARAGE DOOR (INCLUDING SPRINGS AND HARDWARE).
- ANY REPAIR OR BUCKLING OF THE GARAGE FLOOR.
- ANY REPAIR OR ADJUSTMENT OF THE GARAGE DOOR OPENER.



## *(Optional)* STEP 4 *Install the Protector System*

The **PROTECTOR SYSTEM™** provides an ADDITIONAL measure of safety against a small child being caught under a garage door. It uses an invisible beam which, when broken by an obstruction, causes a closing door to open and prevents an open door from closing.

After the garage door opener has been completely installed and adjusted, the **PROTECTOR SYSTEM™** accessory can be installed. Instructions are included with this optional device.



# Radio Controls

F.C.C. rules prohibit adjustments to or modification of receiver and/or transmitter circuitry except for changing the code setting and replacing the transmitter battery THERE ARE NO USER SERVICEABLE PARTS.

Manufactured under 1 or more of the following U.S. patents: RE29,525; 4,037,201; 4,750,118; 4,806,930

Your garage door opener receiver and transmitter have been set at the factory to a matching code. If you want to CHANGE your code or purchase additional transmitter follow the instructions below. The code in any NEW transmitter must be set to match the code in the original transmitter.

## MATCH/CHANGE THE CODE IN TRANSMITTER(S)

**PROCEDURE:** With visor clip off, remove screw in the original and any new transmitter as illustrated in Figure 1. Carefully turn cases over (push button sides up). Remove case tops as shown in Figure 2. **CAUTION: Be careful not to move circuit board components.**

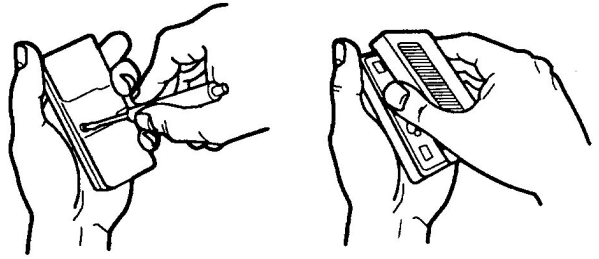


FIGURE 1

FIGURE 2

Place transmitter circuit boards side by side as shown in Figure 3. Set code switches in ALL transmitters to matching positions (+, -, or 0). Use a pen or screwdriver to slide the switches. If one transmitter has 8 code switches, set code switch 9 to center (0) position in other transmitter.

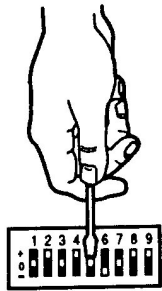
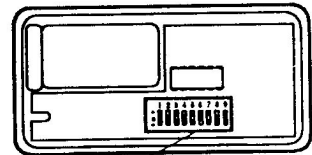
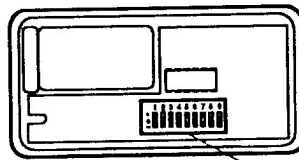


FIGURE 3



Transmitter Circuit Board  
Code Switches

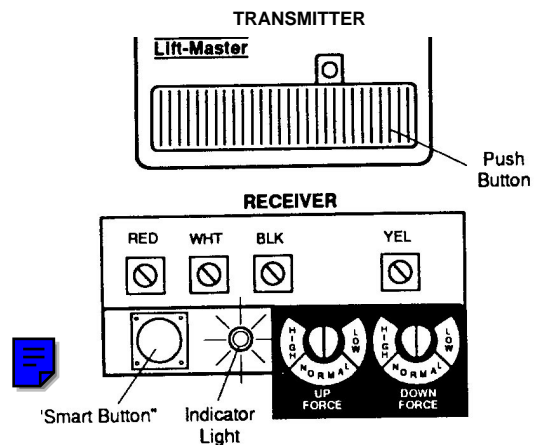
## SET RECEIVER TO MATCH TRANSMITTER(S) CODE

GARAGE DOOR OPENERS  
WITH RECEIVER SMART CODE BUTTON

### PROCEDURE:

1. Press the RECEIVER Smart Button on the back panel of the opener as shown. The adjacent indicator light will turn ON.
2. **STAND AWAY FROM THE DOOR** and press the transmitter push button. The indicator light will turn OFF and the door will move. Receiver and transmitter(s) codes now match. The opener will operate when either the wall push button or the transmitter push button is pressed.

**NOTE:** If the transmitter push button is not pressed within 30 seconds, the indicator light will turn OFF. In that case, begin again at Step 1.



# Repair Parts

## RAIL ASSEMBLY PARTS

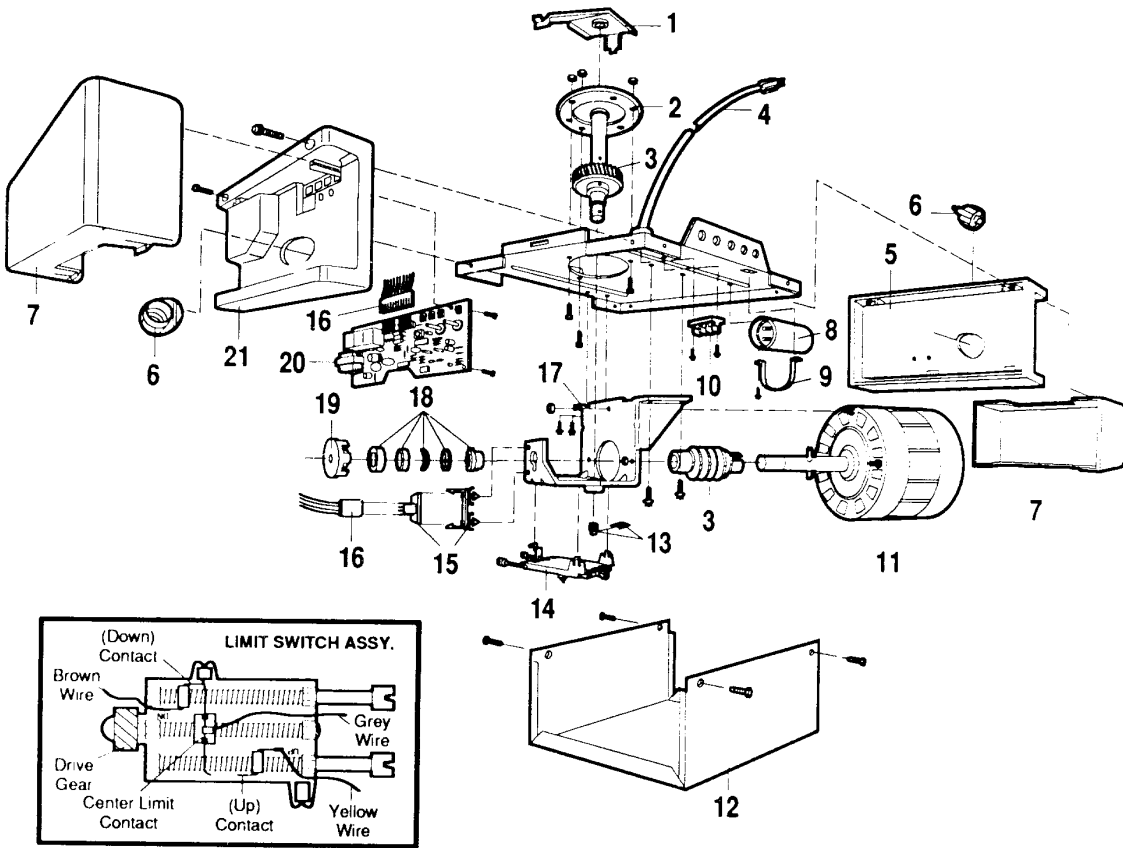
KEY NO.	PART NO.	DESCRIPTION
1	1A995	Master link kit
2	41B617	Outer trolley
3	41B277	Inner trolley
4	12A197	Chain retainer bracket
5	183B73	Rail braces
6	183B94	Tee rail-end section (each)
7	183B71	Tee-rail-end section (each)
8	41B2616	Cable Pulley and bracket assy.
9	41C2735	Chain and cable
		NOT SHOWN
	41A2848	Rail assy. hardware kit (includes hardware illustrated on page 5)

## INSTALLATION PARTS LIST

KEY NO.	PART NO.	DESCRIPTION
1	41D2746	Wall control assembly
2	10A2	9V battery
3	41A2849	Transmitter case, cover & screw
4	29C121-2	Transmitter visor cap
5	41A2828	Emergency rope & handle assy.
6	217A209	4-strand bell wire
7	41A2829	Header bracket w/clevis pin and ring fastener
8	12B374	Door bracket
9	12B380	Door bracket plate
10	178B35	Curved door arm section
11	178B34	Straight door arm section
12	12B350	Hanging brackets
		NOT SHOWN
	41A2815	Installation hardware bag (includes hardware illustrated on page 5)
	114A1228	Owner's Manual

# Repair Parts

## Chassis Assembly Parts List



KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	31C290	Sprocket cover	10	41A3150	Terminal block w/screws
2	41A2827	Gear and sprocket assy	11	41D3058	Universal replacement motor
		<b>Complete with:</b>	12	41D2750	Cover w/all labels (550)
		Spring washer		41D2751	Cover w/all labels (350)
		Thrust washer	13	41A2818	Helical gear & retainer w/grease
		Retaining ring	14	41D3452	Limit switch assembly
		Bearing plate	15	41C3005	RPM sensor assembly
		Roll pins (2)	16	41C2726	Wire harness assy. w/plug
		Drive gear	17	41A3027	Motor bracket and bearing assy.
		Worm gear	18	41A2826	Shaft bearing kit
		Helical gear w/retainer	19	41A2822	Interrupter cup assy.
		Grease	20	41A3519	Receiver logic board assy.
3	41A2817	Drive/worm gear kit w/grease		41A3519-1	Receiver logic board assy.
4	41B2991	Line cord			2 light operator
5	143D110	Wind panel w/all labels			1 light operator
6	175B88	Light socket (each)			<b>Complete with:</b>
7	108D34	Lens (each)			Logic board
8	30B363	Capacitor (550)			End panel w/all labels
	30B387	Capacitor (350)			Light socket (1)
9	12A373	Capacitor bracket	21	41A3052	End panel w/all labels
					<b>NOT SHOWN</b>
				41A2825	Chassis assy. hardware kit (includes screws not designated by a number in illustration)



## CHAMBERLAIN SERVICE IS ON CALL

OUR LARGE SERVICE ORGANIZATION  
SPANS AMERICA

INSTALLATION AND SERVICE INFORMATION IS AS  
NEAR AS YOUR TELEPHONE SIX DAYS A WEEK. SIMPLY  
DIAL OUR TOLL FREE NUMBER:

**1-800-528-9131**

HOURS: 7:00 a.m. TO 3:30 p.m.  
(Mountain Std. Time)  
MONDAY through SATURDAY

FOR or professional installation, parts and service, contact  
your local CHAMBERLAIN dealer. Look for him in the Yellow  
Pages, or call our Service number for a list of dealers in your  
area.

## HOW TO ORDER REPAIR PARTS

Selling prices will be furnished on request or parts will be  
shipped at prevailing prices and you will be billed accordingly.

**WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE  
FOLLOWING INFORMATION:**

- PART NUMBER
- PART NAME
- MODEL NUMBER

ADDRESS ORDERS TO:  
THE CHAMBERLAIN GROUP, INC.  
Electronic Parts and Service Department  
2106 N. Forbes Boulevard  
Tucson, Arizona 85745

SERVICE INFORMATION  
TOLL FREE NUMBER:  
1-800-528-9131

### CHAMBERLAIN GARAGE DOOR OPENER ONE-YEAR LIMITED WARRANTY

The Chamberlain Group warrants to the first retail purchaser of this product that it will be free from any defect in materials and/or workmanship for a period of twelve full months from the date of purchase. The product must be used in complete accordance with Chamberlain's instructions for installation, operation and care.

#### LIMITED WARRANTY ON MOTOR

**Models 550 & 550-2M:** The motor is warranted to be free from any defect in materials and/or workmanship for a period of 60 full months (5 years) from the date of purchase.

**Model 350:** The motor is warranted to be free from any defect in materials and/or workmanship for a period of 36 full months (3 years) from the date of purchase.

This warranty does not cover non-defect damage, damage caused by unreasonable use (including abuse, failure to provide reasonable and necessary maintenance, or any alterations to the product), labor charges for dismantling or re-installing of a repaired or replaced unit or replacement batteries.

If, during the warranty period, the product appears as though it may be defective, **CALL OUR TOLL FREE SERVICE NUMBER BEFORE DISMANTLING IT (1-800-528-9131)**. If the product is then alleged to be defective, please send it prepaid and insured to our Service Center to obtain warranty repair. You will be advised of shipping instructions when you call the number listed above.

Please be sure to include a brief description of the problem and a dated proof-of-purchase receipt with any product that is returned for warranty repair.

Product under warranty, which upon receipt by Chamberlain is determined to be defective in materials and/or workmanship, will be repaired or replaced (Chamberlain's option) at no cost to you and returned pre-paid. Defective parts will be repaired or replaced with new or factory rebuilt parts at Chamberlain's option.

**THE DURATION OF IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IS LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY. SOME STATES MAY NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.**

All claims for consequential or incidental damages for breach of this warranty are excluded and in no event shall manufacturer's liability for breach of warranty, negligence, strict liability or breach of contract exceed this cost of the product covered herein, but the purchaser is entitled to the remedies expressly provided in this policy. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

No representative or person is authorized to assume for us any other liability in connection with the sale of this product. This warranty gives you specific legal rights, and you may also have other rights which may vary from state to state.

## ACCESSORIES FOR YOUR GARAGE DOOR OPENER

<b>ORIGINAL MODEL#</b>	<b>SUBSTITUTE TO USE</b>	<b>DESCRIPTION</b>
50	750CB	Single Function Remote
53	753CB	Three Button Remote
54	756CB	Mini Multi Function Remote
	41A3685	Wall Control Panel (4 wire)
65LM	65LM	Keyless Entry (Wired)
60	760CB	Outside Keypad
1702CB	7702cb	Quick Release Lock(used to open the door with no other entry, in case of power failure)