

INSTALLATION INSTRUCTIONS

MODEL 100A & 1000A OPERATORS.

FOR OPERATORS MOUNTED ON SECTIONAL AND ONE PIECE DOORS

READ THESE INSTRUCTIONS THOROUGHLY BEFORE ATTEMPTING TO INSTALL THIS OPERATOR.

CAUTION

Repairs and adjustments, especially to cable and spring assemblies, can be hazardous and should be performed by qualified door service personnel only.

CAUTION

If door is equipped with a locking device, it should be made inoperative by permanently securing the locking bar in an open (unlocked) position.

IMPORTANT

This operator cannot be installed on garage doors where the headroom is less than 3". Headroom is the distance between the ceiling and the high arc of door travel.

CAUTION

Check the working condition of the door before installing the operator. Door should be free from sticking and binding.

CAUTION

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

CAUTION

Do not use lighted type pushbutton. If used radio control will be rendered inoperative.

NOTE

External radio receiver is optional on Model 100A.

NOTE

For maximum Radio Control Performance on garages with two or more operators, it is recommended that the Radio Frequency of each unit be different. For example; 340 - Code on one operator, 360 - Code on second operator. (See Sticker on back of transmitter.)

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OPERATOR INSTALLED ON SECTIONAL DOOR

CAUTION

DO NOT APPLY LINE VOLTAGE
UNTIL INSTRUCTED TO DO SO.

NOTE

It is recommended that operator be mounted
at least 7 feet from the floor.

1 Measure width of door to determine center and make a vertical line as shown in Figure 1. If the vertical line is not in line with a stile, the center of the top section must be spanned with a suitable material (wood or steel) for attaching the door bracket.

2 If suitable woodwork is not already in place, attach a 2" x 6" block of wood to center of header as shown in Figure 1. Continue vertical line on block.

3 Use level as shown in Figure 2 to locate the high arc of door travel and make a horizontal line on the header 1-1/2" above this point (See Figure 1).

4 Use a step ladder to support the operator as shown in Figure 3. Place a protective pad, such as cardboard, between ladder and operator to protect operator cover. Position the bottom of the front spreader bracket on the horizontal line, centered on the vertical line. Use two 1/4" x 1-3/4" lag bolts to attach bracket to header.

5 Attach power unit to ceiling joists. The track should be level. If necessary, add side braces for stability (See Figure 4).

6 Attach bell wire to push button terminals. Mount push button approximately 6 feet from the floor (out of reach of children) on a wall next to house entrance. Attach the other end of bell wire to the terminals marked PUSH BUTTON on the rear of the operator. Peel backing off self-adhesive "CAUTION" label and attach label adjacent to push button.

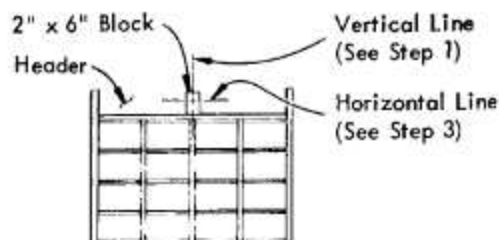


FIGURE 1

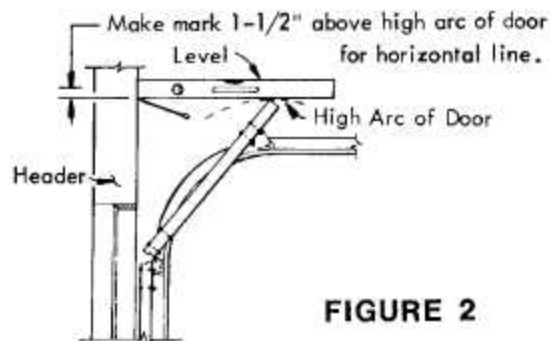


FIGURE 2

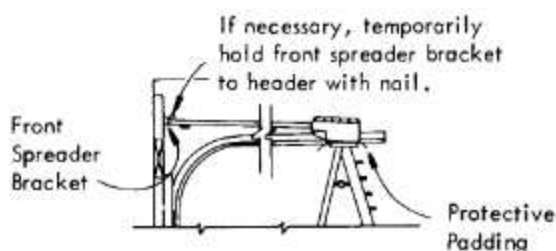


FIGURE 3

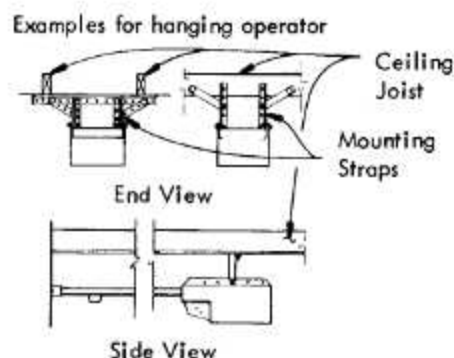


FIGURE 4

Sectional Door Installation continued
on Page 4, step 7a.

OPERATOR INSTALLED ON ONE-PIECE DOOR

CAUTION

DO NOT APPLY LINE VOLTAGE
UNTIL INSTRUCTED TO DO SO.

NOTE

It is recommended that operator be mounted
at least 7 feet from the floor.

1 Measure width of door to determine center and make a vertical line at the top of the door and on the header (See Figure 1). If door does not have a center stile or other suitable attachment for door bracket, one must be made of wood or steel. NOTE: For operators installed on fiberglass doors, a special fiberglass door reinforcing kit should be installed to protect upper section of door.

2 For TYPE A (One Piece Pivotal) and for TYPE B (One Piece Jamb) Doors Loosely attach header bracket to track. Open door to fullest extent. Determine the maximum opening height of door and support power unit end of operator (suggest stepladder) at this elevation. Rest header bracket on vertical center line above door. Keep power unit at same elevation and move toward or away from opening. This will move the header bracket up or down the vertical center line. Open and close door while adjusting operator to achieve the necessary 2" clearance between track and door. Mark mounting hole locations for header bracket using holes in bracket as a guide (See Figures 2 and 3).

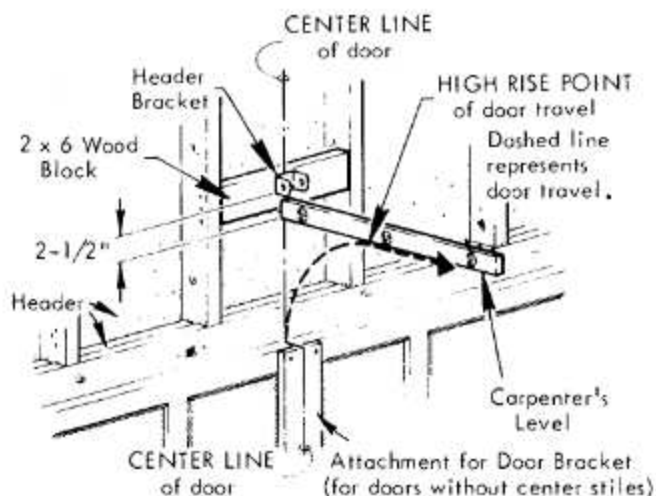
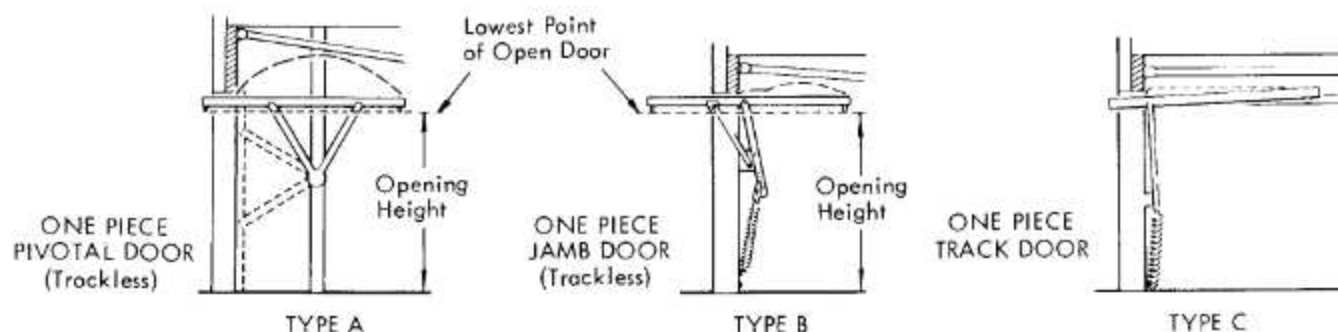


FIGURE 1

Example of a door without a center stile and a header without suitable woodwork for attachment of header bracket.

For TYPE C (One Piece Track) Using a carpenter's level, determine the high rise point of the door (highest point from floor, reached by door in its upward travel) (See Figures 1 and 2). Place level at top of door at its highest point. Butt end of level against header. Level bubble and mark the point on the vertical center line on header. Mark a point 2 - 1 / 2" above this point (See Figure 1). Header bracket will be installed here.

FIGURE 2



3 If header does not have suitable woodwork at attaching point for header bracket, such must be made. It is suggested that a wood 2 x 6 be secured to existing wood near this point. Transfer vertical center line and header bracket mounting point to 2 x 6. Drill pilot holes 1 - 3 / 4" deep where lags will secure header bracket.

OPERATOR ON ONE PIECE DOORS

- 4** With door closed, position header end of track and attach with $1/4 \times 1-3/4$ " lag screws. Swing power unit end of operator up near mounting position and support (suggest step-ladder). Place padding between operator and support to protect operator cover (See Figure 3).

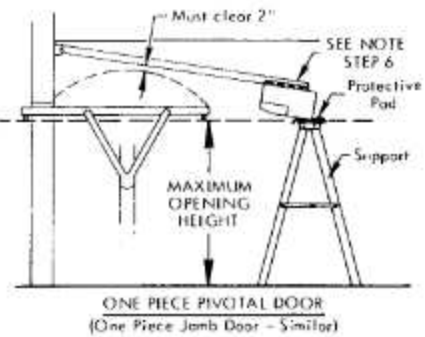


FIGURE 3

- 5** Secure hangers to operator. Provide suitable attachment of hangers to ceiling joists (See Figure 4). Open door to full extent. Use center mark on door to center power unit end of operator. Secure hangers to ceiling joists. NOTE: For optimum operation of one piece Pivotal and Jamb type doors, power unit end of operator should be mounted lower than head end. Check clearance between door and track before securing operator. Door must clear track a minimum of 2" at its closest point. Secure header bracket bolt and hangers.

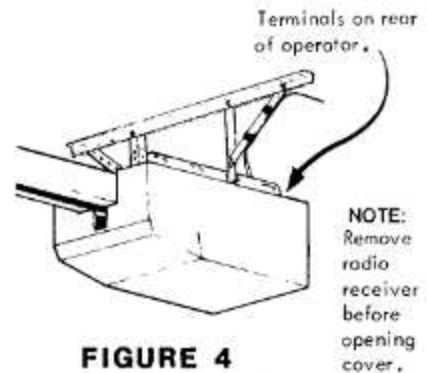


FIGURE 4

- 6** Attach bell wire to push button terminals. Mount push button approximately 6 feet from the floor (out of reach of children) on a wall next to house entrance. Attach the other end of bell wire to the terminals marked PUSH BUTTON on the rear of the operator. Peel backing off self-adhesive "CAUTION" label and attach label adjacent to push button.

OPERATOR ON SECTIONAL & ONE PIECE DOORS

- 7** Mount radio receiver: (for Model 100A without built-in receiver)

- Loosen screws marked 1, 2, and 3 on terminal strip (See Figure 5).
- Slip receiver into place after aligning notches with screws.
- Secure screws.

- Open operator cover.

- Remove snap out cover on transmitter(s) (See Figure 5A).



FIGURE 5A

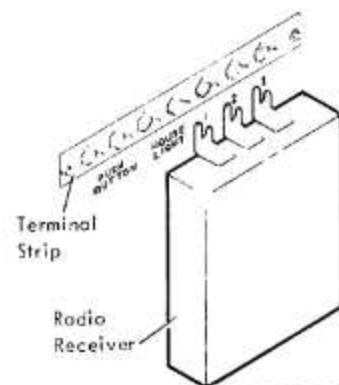


FIGURE 5

OPERATOR ON SECTIONAL & ONE PIECE DOORS

WARNING

Make sure electrical power to operator has been disconnected before opening cover

3. Locate frequency code switches in transmitter(s) and on operator receiver board (See Figure 6).
4. Set switches in transmitter(s) to any position desired. NOTE: Each switch can be set to one of three positions; +, 0, or -.
5. Set switches on operator receiver board to match those in transmitter. NOTE: Switches are numbered 1 thru 9 for ease of identification.
6. Reinstall snap cover on transmitter(s).

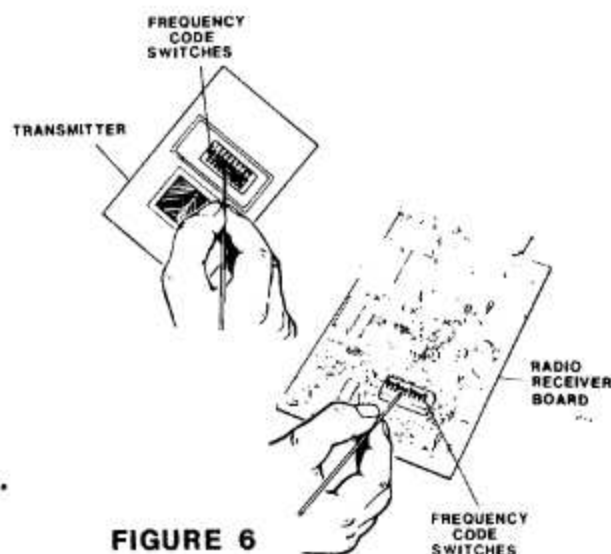


FIGURE 6

CAUTION

FOR MAXIMUM SAFETY, IT IS IMPORTANT THAT THE OPERATOR BE PROPERLY GROUNDED.

8 If operator is equipped with a factory-installed line cord, plug into a grounding type 115 volt 60 hertz receptacle. If local codes specify that a permanent wiring be used, remove the three twist-on connectors, line cord and strain-relief bushing. Make conduit connections thru the same hole from which the strain-relief bushing was removed and reconnect the operator leads to the permanent wiring system. NOTE: If operator is not equipped with a factory-installed line cord, permanent wiring must be used—no attempt should be made to add a line cord in the field.

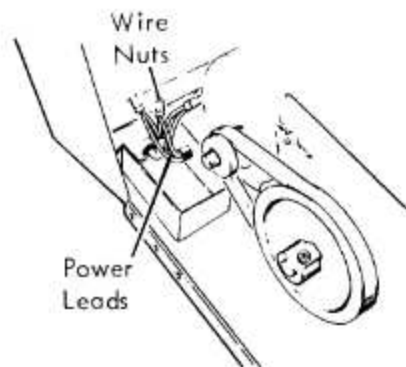


FIGURE 7

9 Refer to Figure 8. Adjustments to the limit switches are made by loosening Wing Nuts "C" and moving Rod "D" away from the travel Nuts. Adjust Travel Nut "A" for the up limit and Travel Nut "B" for the down limit. Moving a travel nut one full turn toward its switch will cause the carriage to travel approximately 4 inches less in that direction and vice versa if the travel nut is moved away from its switch. NOTE: After each adjustment of a travel nut and before starting the operator, make sure that Rod "D" is properly seated in the slots of both Travel Nuts and that both Wing Nuts are securely tightened.

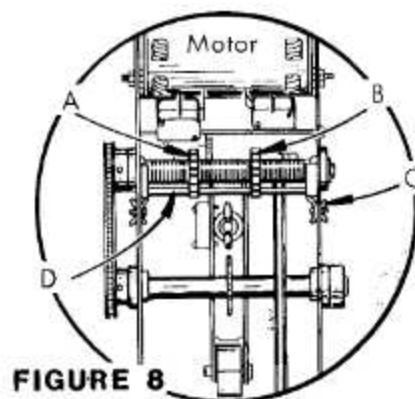


FIGURE 8

OPERATOR ON ONE PIECE DOORS

- 10** Operate the push button so that carriage will stop in its full forward position. If the distance between the carriage and front wall is not as shown in Figure 9, adjust travel nut "B" (Figure 8, Page 5) until carriage stops approximately 12" from front wall.

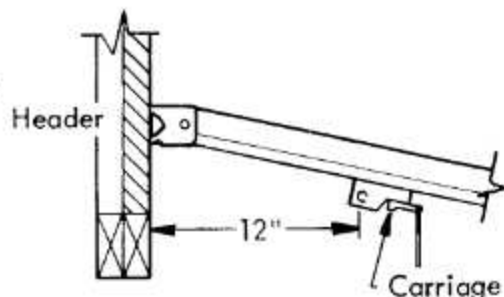


FIGURE 9

- 11** Place drawbar brackets on top center of door. Secure with two lag screws. Attach drawbar to drawbar brackets and carriage with clevis and hitch pins. See Figure 10.

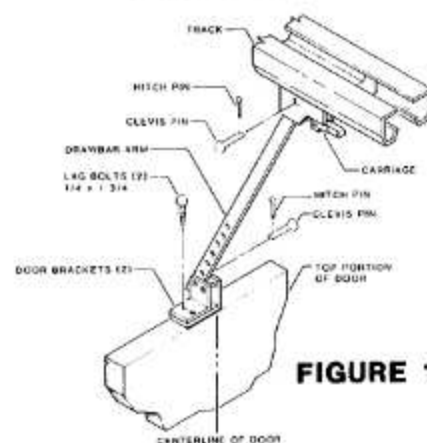


FIGURE 10

- 12** Adjust travel nut "A" (Figure 8, Page 5) so that the door will stop in an open position with the bottom of the door even with the top of the door opening.

OPERATOR ON SECTIONAL DOORS

- 10** Operate the push button so that carriage will stop in its forward position. If the distance between the carriage and front wall is not as shown in Figure 11, adjust travel nut "B" (Figure 8, Page 5) until carriage stops approximately 6-1/2" from the front wall.

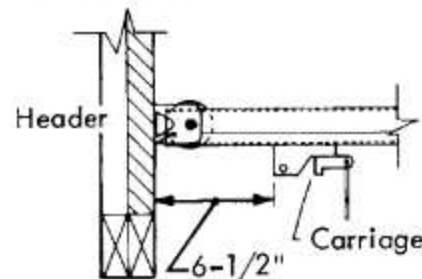


FIGURE 11

- 11** Refer to Figures 12 and 13. Attach door bracket to yoke pieces with pin and cotter key. Attach yoke pieces to Drawbar Arm. Pin Drawbar Arm to Carriage with pin and cotter key. Ref. Fig. 12. Swing entire assembly toward door and mark mounting hole locations using Door Bracket as a template. Drill holes and secure Door Bracket to door. Ref. Fig. 12 & 13.

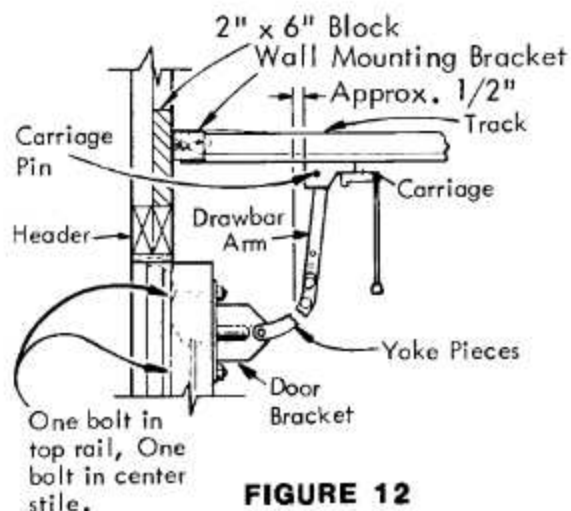
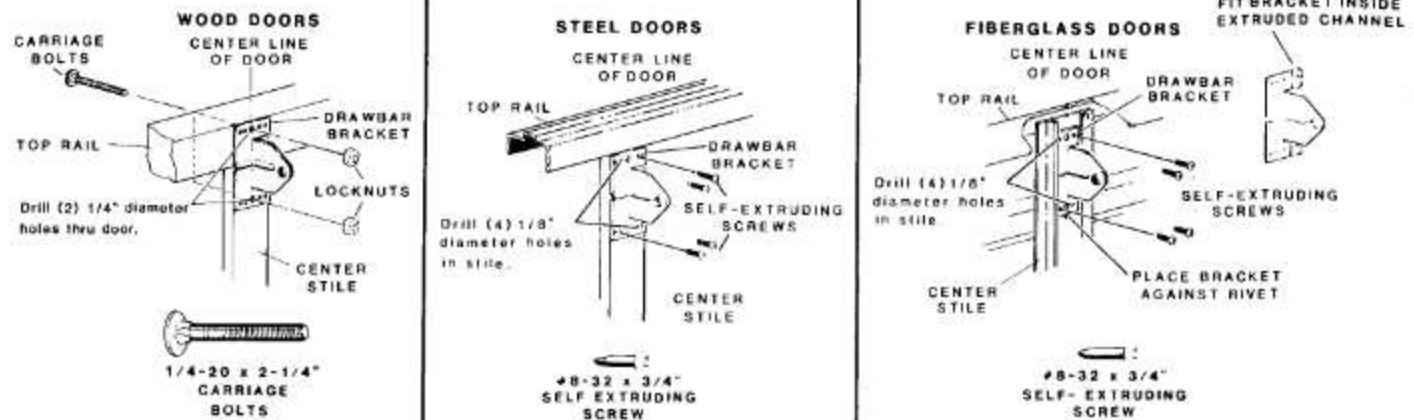


FIGURE 12

- 12** Adjust travel nut "A" (Figure 8, Page 5) so that the door will stop in an open position with the bottom of the door even with the top of the door opening.

FIGURE 13

OPERATOR MOUNTED ON SECTIONAL AND ONE PIECE DOORS

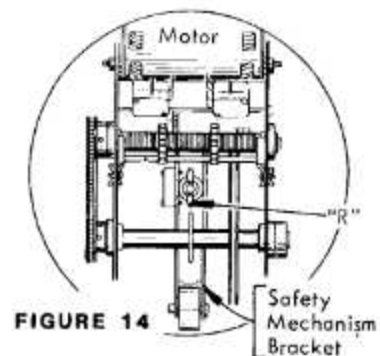
OPERATION AND ADJUSTMENT

13 If necessary, re-adjust travel nut "B" to make sure that the door fully seals at the floor.
NOTE: If the door reverses while closing, perform Step 14 then repeat Step 13.

14 Adjust "DOWN" sensitivity. Door should close without reversing and remain closed.
"DOWN" sensitivity must be adjusted to insure proper operation of door.

Adjust sensitivity by turning Wing Nut (R)...
- clockwise to decrease sensitivity.
- counterclockwise to increase sensitivity.

Door will reverse upon meeting an obstruction.
(When door reaches bottom 1" of travel, door will stop but will not reverse.)

**FIGURE 14**

NOTE

FOR MAXIMUM SAFETY, THE REVERSE ACTION MUST WORK PROPERLY.

After the safety mechanism has been adjusted, the door should reverse within 2 seconds after meeting an obstruction. If the reversal time is longer than 2 seconds, or if the door does not reverse, recheck the door for proper balance and operation. If the door is not causing the problem, use the TROUBLESHOOTING GUIDE to check for possible operator problems. If the problem cannot be corrected, request qualified service.

15 Close operator cover and secure in position with the two cover screws.

**FIGURE 15**

OPERATION AND ADJUSTMENT

16 To install or replace light bulbs, apply pressure to light lens with thumbs as shown in Figure 15 and pull down. Use two 60 watt or less bulbs. Replace lens by inserting retainer tabs in respective holes and push lens up into place. Front tabs should snap into place.

17 To adjust tension of Chain/Cable Assembly, pull Release Lever on Carriage and disconnect Carriage Engagement Cylinder from Carriage. Use a screwdriver to hold eyebolt secure and tighten Chain/ Cable Assembly with wrench. Refer to Fig. 16.

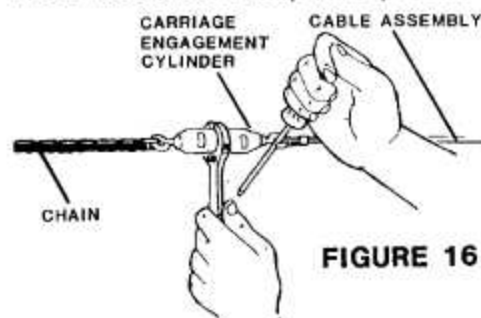


FIGURE 16

18 OPERATION

TO START OPERATOR:

Press transmitter button 1 time.

Press push button 2 times within 3 seconds. (Door will automatically stop in "fully opened" or "fully closed" position.)

TO STOP OPERATOR:

Press transmitter button 1 time.

Press push button 1 time.

TO RESTART OPERATOR:

Press transmitter button 1 time.

Press push button 2 times. (Door will move in opposite direction.)

TO TURN LIGHT ON:

Press push button 1 time. (Light comes on after a brief delay.)

TO TURN LIGHT OFF:

Press push button 1 time. (Light goes off after a brief delay.)

GENERAL INFORMATION

1. When "Emergency" or "Manual" operation is required, as in the case of a power failure, the door can be operated manually by pulling the "Quick Release Lever" (See Figure 10 for one piece doors and Figure 12 for sectional doors). Refer to "EMERGENCY RELEASE DECAL".
2. Keep door in good operating condition by oiling door hinges, rollers and springs once each year with 30 weight oil. Wipe off excess oil. Tighten door hardware fasteners.
3. At least twice a year, manually operate door by disconnecting door from operator. Door should open and close freely. If door does not operate freely, correct problem causing malfunction.

CAUTION

Repairs and adjustments, especially to the cables and spring assembly, can be hazardous and should be performed by qualified door service people only.

CAUTION

When adjusting or lubricating operator, it is recommended that power to operator be turned "OFF". DO NOT operate door, either by push button or radio control, unless door is fully visible and clear of all obstructions.

4. Periodically check operator safety mechanism. See Step 14, "OPERATION AND ADJUSTMENT".
5. DO NOT permit children to play in door area or with push button control.
6. The operator motor is protected against burn-out by an internal protector which will stop the motor if the door is opened and closed too many times in succession or if some other overload condition exists. If the motor quits running, allow the motor time to cool (10 - 15 minutes) then press the wall push button to resume operation.

7. The operator light will come on as the door starts to open and will remain on for approximately 2 1/2 minutes after operator stops.
8. If operator will run using wall push button and not when using radio control, the problem is probably due to a weak battery in the radio transmitter. Use only a standard 9 volt battery for replacement and be sure to observe polarity when replacing battery.
9. When returning radio controls to the factory for service it is recommended that both the receiver and the transmitter(s) be returned so that they can be tested as a set (See Radio Control Warranty).
10. When ordering a new or additional transmitter be sure to specify frequency number and letters found on white sticker on back of transmitter. EXAMPLE: Freq. 340-AAA; Mfg. 820515

TROUBLESHOOTING GUIDE

This Troubleshooting Guide is designed so that an operator malfunction symptom can be compared to the ones listed and then the possible causes can be checked out in the sequence shown. Disconnect power to the operator before opening the cover unless inside voltages have to be measured.

SYMPTOMS	POSSIBLE CAUSE NO'S.
1. Operator runs when controlled by push button but does not run when signaled from radio transmitter.	1, 2
2. Operator runs when signaled from a transmitter but does not run when the push button is pushed.	3
3. Motor hums but will not open or close door from push button.	4, 8, 5, 6, 7
4. No motor hum, door will not open from push button.	10, 6, 7, 9
5. No motor hum, door will not close from push button.	11, 6, 7, 9
6. No motor hum, door will not open or close from push button.	12, 9
7. Door starts down, runs longer than 1 second, then reverses.	4, 14, 20
8. Operator will not reverse if door meets an obstruction while closing.	14, 16, 15, 9
9. Motor will not shut off at end of up cycle.	10, 7, 18, 9
10. Motor will not shut off at end of down cycle.	11, 7, 18, 9
11. Lights will not come on.	17, 9
12. Lights will not go off.	9
13. Light cycles on and off every 3-4 seconds.	3
14. Door starts down, runs 3 seconds and reverses.	19
15. Door starts up, runs 1 second and stops.	10
16. Door runs down, hits floor and reverses within 1/2 second.	11, 9
17. Door runs down, hits obstruction, does not reverse immediately, but reverses in 30 seconds.	15, 16, 19
18. Motor runs, door will not open.	22

POSSIBLE CAUSES	CHECKS AND CORRECTIONS
1. Weak transmitter battery	Replace battery.
2. Inoperative radio transmitter or receiver	Have transmitter and receiver checked by qualified service people. (The radio control system is a matched set. To service the controls, the receiver and all transmitters have to be returned to the shop.)
3. Push Button	Check connections at push button and operator terminals. Check push button and connecting wires. Replace defective parts.
4. Stuck or hard-moving door	Disconnect door from operator and check door for correct balance and operating condition. CAUTION: REPAIRS AND ADJUSTMENTS, ESPECIALLY TO CABLES AND SPRING ASSEMBLY, CAN BE HAZARDOUS AND SHOULD BE PERFORMED BY QUALIFIED SERVICE PEOPLE ONLY.
5. Motor capacitor	Replace capacitor if found defective by visual or ohmmeter testing. (Disconnect the capacitor to test with an ohmmeter.)
6. Motor	Disconnect and test motor windings and thermal protector with ohmmeter (See Figure 12). Replace if either winding or thermal protector is open. (Test motor only when motor is cool.) Check motor shaft for freedom of rotation.
7. Motor wiring	Check for proper electrical connections. Refer to wiring diagram.
8. Pulleys and V-belt	Check for loose or broken V-belt. Check set screws in pulleys.
9. Solid State Board	Request qualified service people.
10. Up limit switch	Check switch with ohmmeter. Replace if defective. Check electrical connections to switch. Make sure adjustment is correct to cause switch to operate when door is open.
11. Down limit switch	Check switch with ohmmeter. Replace if defective. Check electrical connections to switch. Make sure adjustment is correct to cause switch to operate when door is closed.
12. Line voltage	Check for 115 volts at input to operator. Check house fuses or circuit breaker.
14. Sensitivity Control	Check and if necessary adjust the sensitivity control. Refer to Step 14 under "Operation".
15. Safety mechanism	Check the safety mechanism for freedom of movement. Make sure the safety bracket is keeping the reverse switch actuated when the operator is at standstill.
16. Reverse switch	Check switch with ohmmeter. Replace if defective. Check electrical connections to the switch.
17. Light bulbs	Replace if burned out.
18. Limit switch mechanism	Check limit switch drive chain, sprockets, travel nuts, plastic slides, etc. Repair or replace any defective parts.
19. Safety switch circuit	Request qualified service people.
20. Obstruction in doorway or roller pathway	Locate and remove obstacle.
21. Operator unplugged	Plug in operator.
22. Broken chain, chain cable, drive sprocket, or drive gear	Request qualified service people.

POWER UNIT ASSEMBLY

LIST OF ILLUSTRATED PARTS

NS indicates Part not shown.

ITEM	PART NO.	DESCRIPTION	QTY
1	104367-XXXX	Cover Assembly - 1000A	1
2	104652-XXXX	Cover Assembly - 100A	1
3	077523-0000	Shield, Light	1
4	080323-0005	Lockwasher, #6 Internal	2
5	086500-1208	Screw, Hex Head Slotted, 8-32 x 1/2"	2
6	086147-0000	Push Button	1
7	104129-0001	Signal, Push Button	NS
8	077529-0001	Frame, Main	1
9	604062-0002	Rivet, Oval Head, 3/16" Dia.	10
10	080322-0255	Lockwasher, 1/4"	8
11	080352-0420	Nut, Hex, 1/4-20	4
12	077530-0001	Frame, Base	1
13	077521-0001	Enclosure, Make-up Box	1
14	104323-0001	Terminal Strip - 1000A	1
15	104324-0001	Terminal Strip - 100A	1
16	104103-0002	Circuit Board - 1000A	1
17	104103-0003	Circuit Board - 100A	1
18	086120-1008	Screw, 8-32, with Lockwasher	2
19	077156-0006	Capacitor, 64-77 nF, 330V	1
20	077452-0000	Clip, Capacitor	1
21	086575-0508	Screw, Thread Forming, 6 x 3/8"	1
22	101638-0003	Lampholder	1
23			
24	086168-0007	Bushing, Nylon Snap	1
25	086168-0003	Bushing, Nylon	1
26	101638-0004	Lampholder	1
27	102150-0001	Limit Switch Bracket	1
28	604062-0003	Rivet, Oval Head, 5/32" Dia.	1
29	086871-0420	Pin, Clevis, 1/4" x 1-1/4"	2
30	100022-0001	Guide, Chain	1
31	106056-0001	Switch, Reversing	1
32	077022-0000	Pin, Hitch	2
33	077527-0000	Arm, Reversing	1
34	0802PR-0510	Screw, RH, 4-40 x 5/8"	2
35	076400-0840	Nut, Hex, 4-40, with Lockwasher	2
36	076868-0006	Limit Switch Assembly	1
37	077536-0000	Drive Shaft Assembly	1
38	077537-0000	Sprocket Drive Shaft Assembly	1
39	077535-0000	Shaft, Limit Switch Drive	1
40	086563-0001	Sprocket, 14 Tooth, 1/4" pitch	2
41	077452-0000	Pulley, 1.31" Dia.	1
42	076956-0000	Driven Pulley Assembly	1
43	086108-0004	V-Belt, JL Series, 16 Inch.	1

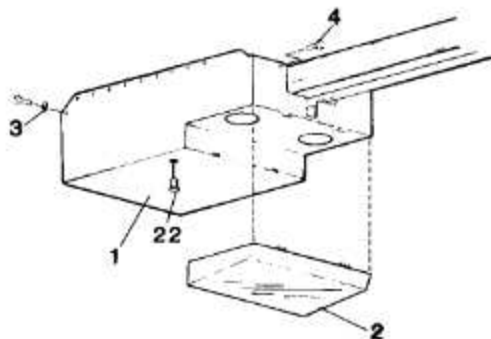
ITEM	PART NO.	DESCRIPTION	QTY
44	086565-0004	Chain, Roller, 1/4" pitch, 44 pitches	1
45	086565-0002	Chain, Roller, 1/4" pitch, 54 pitches	1
46	104036-0001	Board Mounting Bracket	1
47	104047-0001	Board Mounting Bracket	2
48	104005-0001	Retainer Rod	1
49	072017-0001	Nut, Travel	2
50	072018-0000	Bushing, 1/2" I.D.	5
51	072538-0000	Bushing, 3/8" I.D.	1
52	072010-0000	Set Collar Assembly	2
53	086414-1004	Screw, Socket Set, 10-32 x 1/4"	3
54	076666-0000	Bolt-Retaining, Limit Switch Assembly	2
55	086400-1332	Nut, Captive Lock, 10-32	2
56	604361-0420	Bolt, Carriage, 1/4-20 x 3-1/2" (Special)	1
57	077785-0000	Spring, Reversing Arm	1
58	076302-1720	Washer, Flat, 1/2" I.D.	1
59	080326-1020	Nut, Wing, 1/4-20	1
60	080415-0017	Ring, Retaining, 3/2"	1
61	080326-1232	Nut, Wing, 8-32	2
62	086430-1232	Nut, Captive Lock, 8-32	4
63	077522-0000	Cover, Make-up Box	1
64	106153-0001	Surge Protector	1
65	080323-0005	Lockwasher, #6 Internal	1
66	104350-0001	Schematic, Wiring Diagram - 1000A	NS
67	104351-0001	Schematic, Wiring Diagram - 100A	NS
68	086124-0001	Spacer, 1/2" I.D.	1
69	086126-0002	Clamp, Plastic	2
70	086126-0001	Clamp, Plastic	2
71	077155-0000	Cord, Power	1
72	076877-0012	Bushing, Strain Relief	1
73	080528-0000	Adapter	1
74			
75	105PLR-0001	Motor, 1/2 H.P.	1
76	104328-0001	Wiring Harness (Power)	NS
77			
78	104327-0001	Wiring Harness (Control) - 1000A	NS
79	104328-0001	Wiring Harness (Control) - 100A	NS
80	086483-0002	Nut, Blind Captive	2
81	080208-1014	Screw, Hex Head Tap, #6 x 1/4"	1
82	106053-0001	Switch, Limit	1

1 Not available as a replacement part.

2 Specify Label Name when ordering replacement.

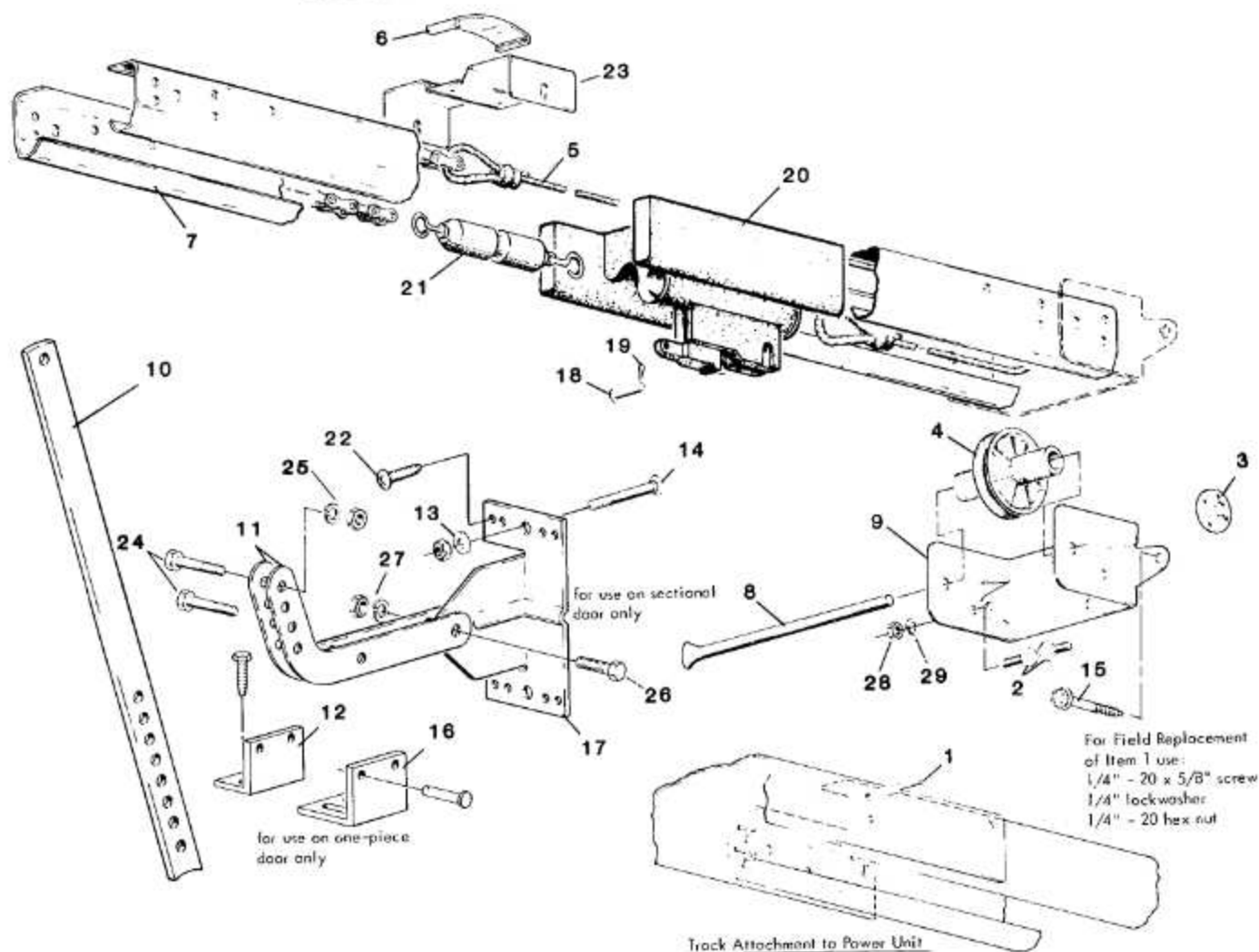
3 Part number determined by availability.

ILLUSTRATED PARTS BREAKDOWN



CARRIAGE/TRACK ASSEMBLY

ILLUSTRATED PARTS BREAKDOWN

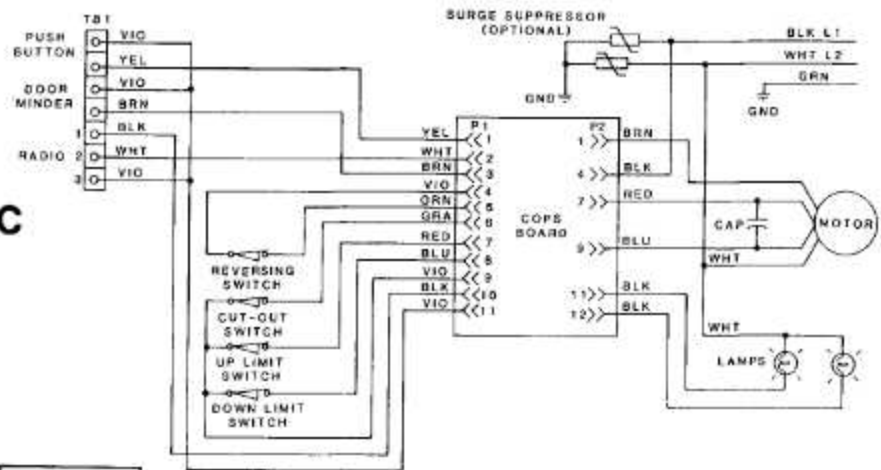
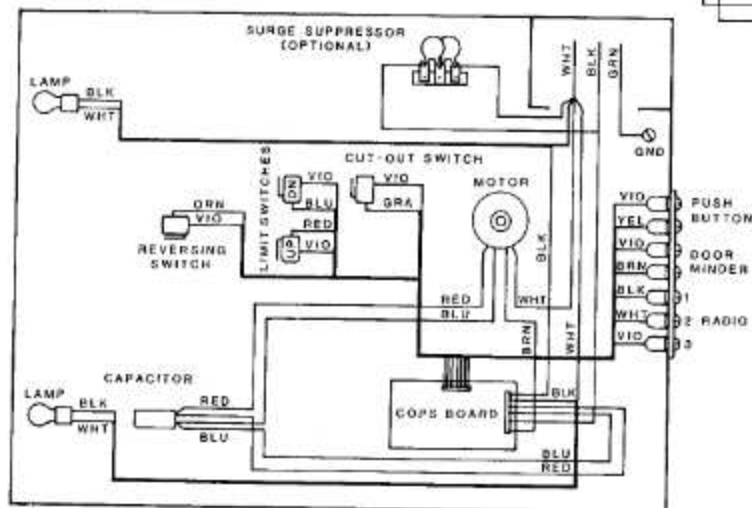


LIST OF ILLUSTRATED PARTS

ITEM	PART NO.	DESCRIPTION	QTY
1	086760-0001	Rivet, Blind, 1/4"	6
2	080019-0001	Bolt, Track, 1/4-20 x 9/16"	4
3	080044-0000	Clip, Push On	1
4	105784-0002	Pulley, Cable	1
5	105902-0001	Cable/Chain Assembly, 7'-0" Door	1
	105902-0002	Cable/Chain Assembly, 8'-0" Door	1
6	076662-0000	Guide, Slide	1
7	077583-0001	Track, Carriage, 7'-0" Door	2
	077583-0002	Track, Carriage, 8'-0" Door	2
8	076168-0000	Rod, Front Spreader	1
9	076169-0000	Bracket, Front Spreader	1
10	077089-0000	Drawbar Arm	1
11	076557-0000	Yokes	2
12	101370-0001	Door Bracket	1
13	080302-1616	Washer, Flat, 1/4"	2
14	080009-0004	Bolt, Carriage, 1/4-20 x 2-1/4"	2

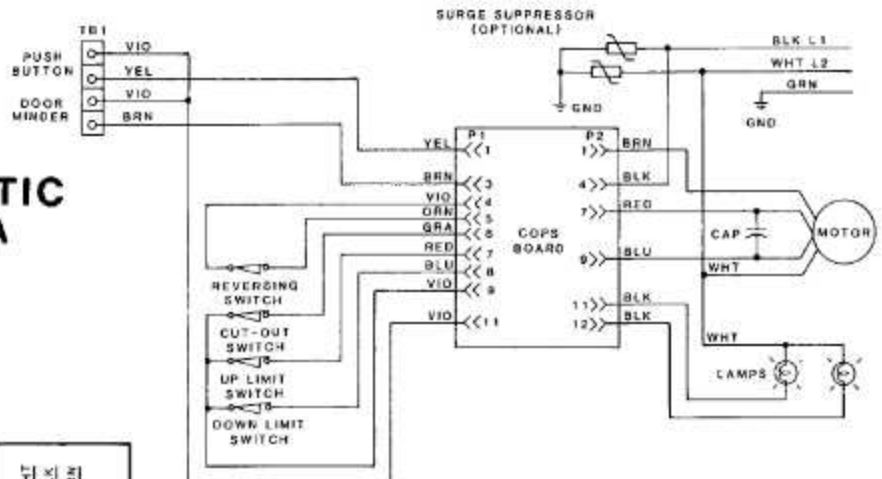
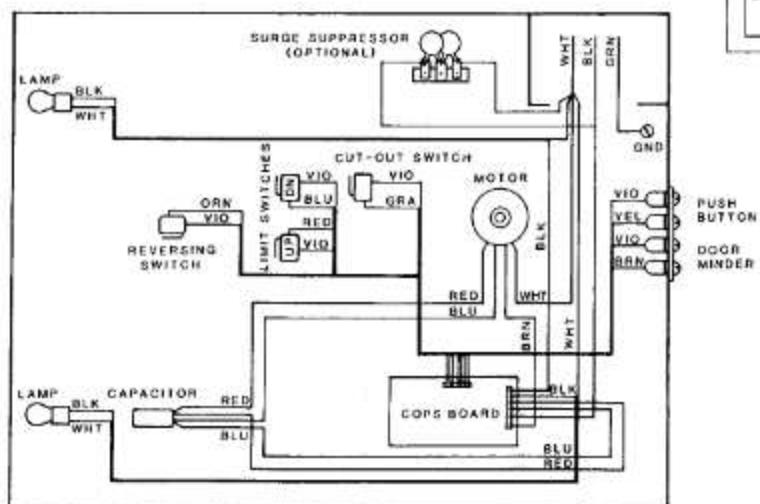
ITEM	PART NO.	DESCRIPTION	QTY
15	080220-1628	Screw, Lag	2
16	101371-0001	Door, Bracket	1
17	105736-0001	Door Bracket	1
18	086621-0416	Clevis Pin	1
19	087022-0000	Hitch Pin	1
20	105840-0001	Quick Release Carriage	1
21	105840-0001	Carriage Cylinder	1
22	605849-0001	Self Extruding Screw, 8-32 x 5/8"	4
23	076150-0000	Bracket, Chain Guide	1
24	080105-0408	Bolt, Hex Head, 1/4-20 x 1"	2
25	086480-1620	Nut, Hex w/Lockwasher	1
26	080105-0606	Bolt, Hex Head, 3/8-16 x 3/4"	1
27	601108-0012	Nut, Hex w/Lockwasher, 3/8-16	1
28	080352-0420	Nut, Hex Head, 1/4-20	1
29	080322-0255	Lockwasher, 1/4"	1

WIRING SCHEMATIC MODEL 100A



WIRING DIAGRAM MODEL 100A

WIRING SCHEMATIC MODEL 1000A



WIRING DIAGRAM MODEL 1000A

NOTES

NOTES

LIMITED WARRANTY

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

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

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

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

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

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

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

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

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

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