



# RESIDENTIAL OPERATOR MOTOR CONTROL BOARD REPLACEMENT INSTRUCTIONS FOR MODELS

- IIA
- 200/250
- 2000 SERIES
- SPRINT
- 310/510/710
- 3000 SERIES
- 325B (TYPE III)
- 6000 SERIES

## PRODUCT FEATURES

The 110929 motor control board (MCB) has all the required mounting holes, wire harness connections and functionality required for the models listed above, except for a built-in radio receiver. The Sprint, 310/510 and 200/250 will require an external receiver when the 110929 MCB is used for replacement in these models.

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## IMPORTANT INSTALLATION NOTES

### Before Beginning Replacement Procedure:

1. Disconnect all wires, pushbuttons, radios, etc. from the operator. Check for shorts and opens in the wired connections.
2. Check the limit switches for proper position and activation.
3. Check for proper connection or loose connections on the internal wire harnesses.
4. Check for problems with the door, door balance, carrier, track, etc.
5. Measure for proper voltage at the outlet supplying power to the operator.

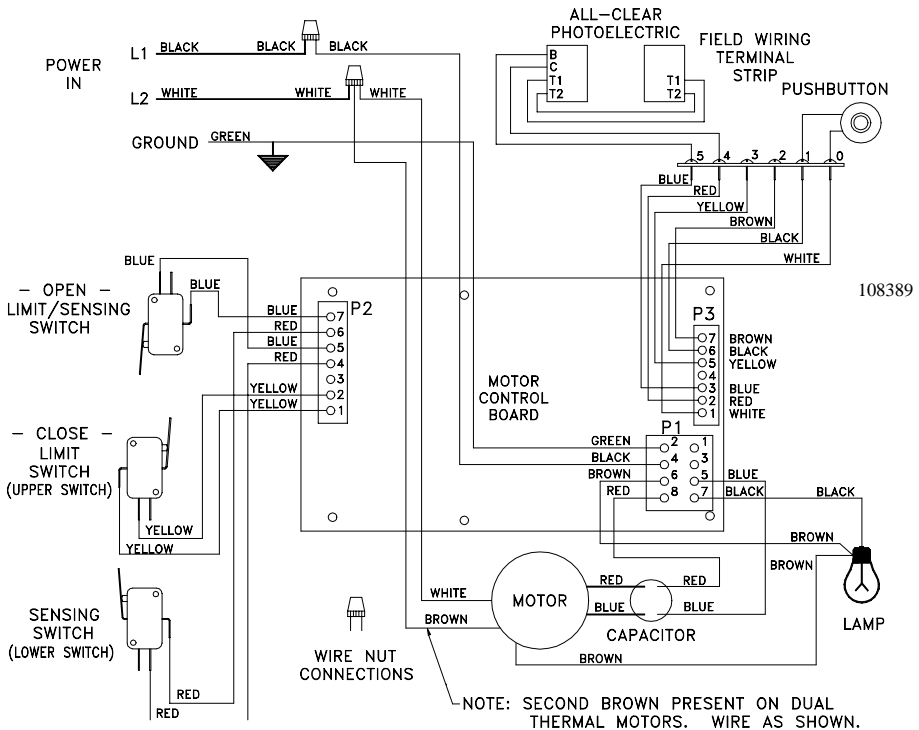
<b>WARNING</b>	<b>To Reduce the Risk of Severe Injury or Death:</b>
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- The 110929 MCB is intended for replacement of existing MCB's in the models listed above. Do not use for any other purpose. Do not modify in any manner
- Check local building and electrical codes for mandatory installation and wiring requirement.
- Connect power cords only to a properly grounded outlet. If permanent wiring is required by codes, disconnect power at fuse box or circuit breaker before attempting any wiring connections.
- Do not wear rings, watches or loose clothing while installing or servicing garage door openers. Wear safety goggles or other protective eyewear.
- An unbalanced door or one that sticks or binds may cause injury or death. Ensure door is properly balanced and eliminate any sticking or binding. Your garage door is a large moving object. The springs, pulleys, cables and mounting hardware utilized to balance its operation are under extreme tension at all times and can cause serious personal injury, even death, is disturbed. Only a qualified service person should move, loosen or adjust door springs or hardware.
- Locate control pushbuttons within sight of the door and away from the moving parts of the door. Install the entrapment warning label next to the control pushbutton in a prominent location.
- Remove all ropes and remove or make inoperative all locks connected to the garage door.
- Important safeguards and instructions in this manual cannot cover all possible conditions and situations. It must be understood that common sense and caution must be exercised by person(s) installing, maintaining and operating this equipment.

**INSTALLER: Leave this manual with your customer after installation.**

**SECTION A**  
**REPLACEMENT PROCEDURE FOR 3000/3500 and 6000/6500 SERIES OPERATORS**  
**Including PDQ and J Models.**

1. Disconnect power before removing cover or control board.
2. Carefully remove the old control board from the snap spacers. Note orientation and location of the wire harness and control board. Inspect the harness for any loose connections.
3. **For 3000 Series** remove and discard the three wire harness (red-white-black).
4. Install the new MCB and replace the harnesses as shown in the schematic in the figure below.
5. **R7 must be removed from the new MCB.** Clip leads and remove completely.
6. **For 3000 Series** if a four wire Deluxe Wall station is attached it must be replaced with an Allstar MVP two wire Super Deluxe Wall Station (SDWS). **The four wire wall station will not work with the new board.** This will require a replacement back panel and pushbutton wire harness. Connect the SDWS to terminals 0 and 1 on the replacement back panel.
7. **For 3000 Series** remove any wires connected to terminal 4 and terminal 5 and rewire the connections from the All-Clear photobeams as follows:
  - Move the wire on terminal B to terminal 5
  - Move the wire on terminal C to terminal 4
8. Replace the cover and reapply power. Test for proper operation according to the operating characteristics listed on page 8. Test for proper reversing action according to the instructions in the Operator Installation Manual.
9. The pushbutton terminal strip has the following functions:
  - Terminal 0: Pushbutton and SDWS (if used)
  - Terminal 1: Common
  - Terminal 2: Radio Relay
  - Terminal 3: 24 VDC
  - Terminal 4: Photoelectric Power
  - Terminal 5: Signal



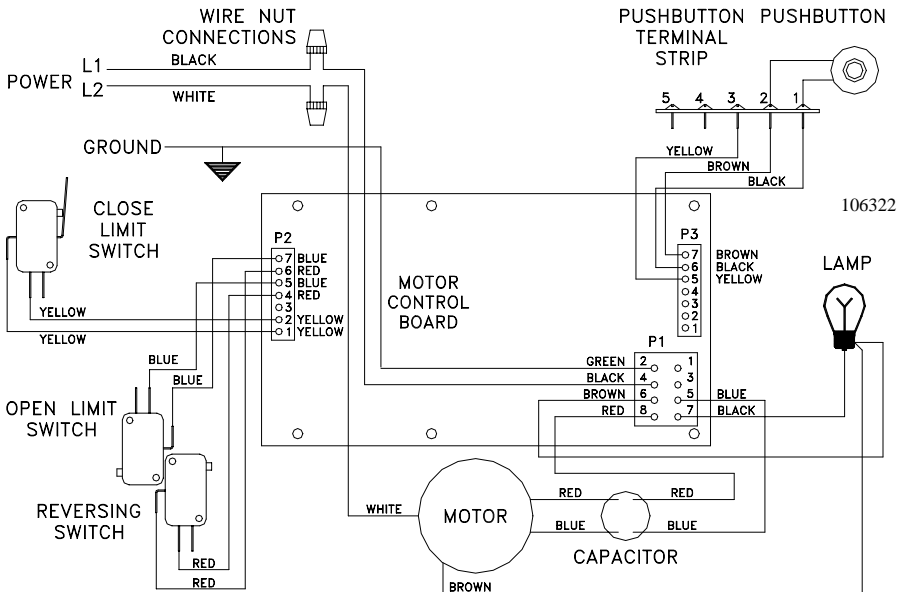
Schematic for 3000/3500 and 6000/6500 Operators

## REPLACEMENT PROCEDURE FOR IIA and 2000/2500 OPERATORS

This Section Applies to IIA and 2000/2500 Models Built Before November 1992.

See Section E for Models Built in November and December 1992

1. Disconnect power before removing cover or control board.
2. Carefully remove the old control board from the snap spacers. Note orientation and location of the wire harness and control board. Inspect the harness for any loose connections.
3. Install the new MCB and replace the harnesses as shown in the schematic in the figure below. Align the pushbutton harness (brown-black-yellow) over the 3 pins on connector P3 that are farthest away from the eight-pin high voltage connector P1.
4. Replace the cover and reapply power. Test for proper operation according to the operating characteristics listed on page 8. Test for proper reversing action according to the instructions in the Operator Installation Manual.
5. The pushbutton terminal strip has the following functions:
  - Terminal 1: Common
  - Terminal 2: Radio Relay
  - Terminal 3: 24 VDC

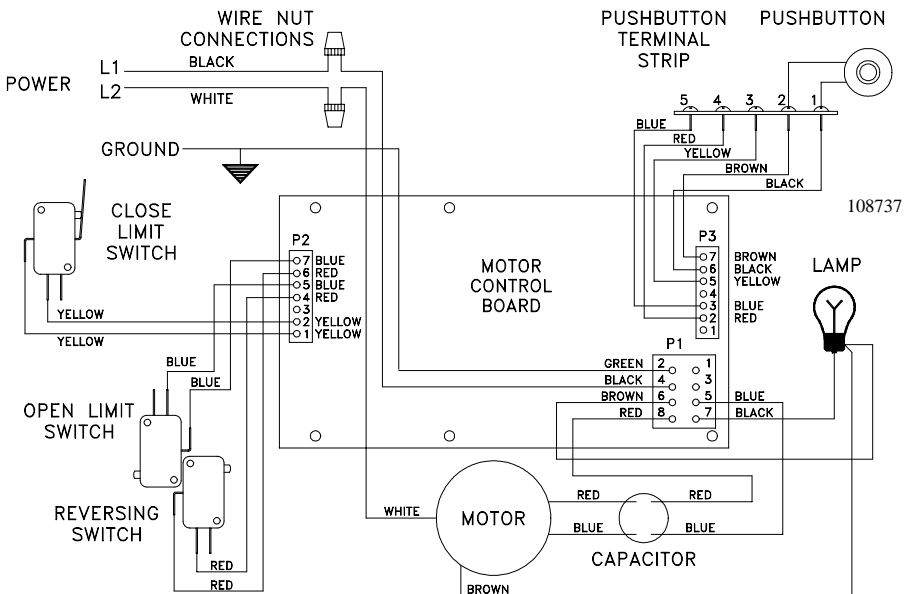


Schematic for 2000/2500 (pre NOV 1992) and IIA Operators

## SECTION C

### REPLACEMENT PROCEDURE FOR 310, 510 and 710 OPERATORS On 310/510 Models, the Radio Receiver was Built Into the Motor Control Board. It will be Necessary to Install a 9921 Receiver in Addition to the MCB.

1. Disconnect power before removing cover or control board.
2. Carefully remove the old control board from the snap spacers. Note orientation and location of the wire harness and control board. Inspect the harness for any loose connections.
3. Install the new MCB and replace the harnesses as shown in the schematic in the figure below.
4. On 310/510 models it will be necessary to re-route the limit harness (blue-red-blue-red-yellow) to connect to the limit connector P2. There is enough wire in the harness to pull it through the operator towards the back panel and rout it up to the control board.
5. If a four wire Deluxe Wall station is attached it must be replaced with an Allstar MVP two wire Super Deluxe Wall Station (SDWS). **The four wire wall station will not work with the new board.** This will require a replacement back panel and pushbutton wire harness. Connect the SDWS to terminals 0 and 1 on the replacement back panel.
6. Replace the cover and reapply power. Test for proper operation according to the operating characteristics listed on page 8. Test for proper reversing action according to the instructions in the Operator Installation Manual.
7. The pushbutton terminal strip has the following functions:
  - Terminal 0: Pushbutton and SDWS (if used)
  - Terminal 1: Common
  - Terminal 2: Radio Relay
  - Terminal 3: 24 VDC
  - Terminal 4: Photoelectric Power
  - Terminal 5: Signal

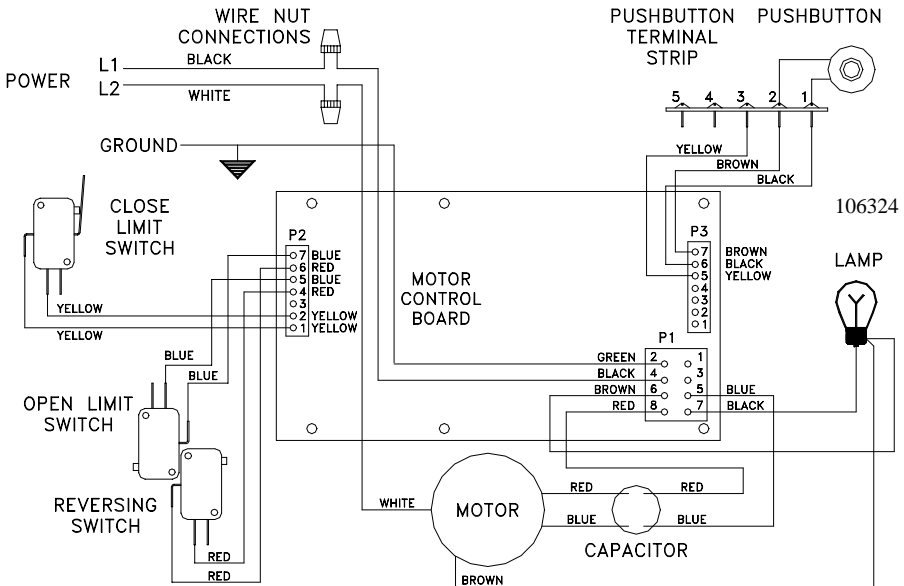


Schematic for 310/510/710 Operators

## REPLACEMENT PROCEDURE FOR SPRINT and 200/250 OPERATORS

On Sprint and 200/250 Models, the Radio Receiver was Built Into the Motor Control Board.  
It will be Necessary to Install a 9921 Receiver in Addition to the MCB.

1. Disconnect power before removing cover or control board.
2. Carefully remove the old control board from the snap spacers. Note orientation and location of the wire harness and control board. Inspect the harness for any loose connections.
3. Install the new MCB and replace the harnesses as shown in the schematic in the figure below. Align the pushbutton harness (brown-black-yellow) over the 3 pins on connector P3 that are farthest away from the eight-pin high voltage connector P1.
4. **On Sprint Models** it will be necessary to reroute the limit harness (blue-red-blue-red-yellow-yellow) to make the connection to P2. There is enough wire in the harness to pull it through the operator towards the back panel and route it up to the control board.
5. **On Sprint Models** it was possible to wire multiple units together to improve radio range. For these applications it will be necessary to remove the connecting wires, replace all control boards and install external receivers.
6. **On 200 & 250 Models** it will be necessary to turn the limit harness (blue-red-blue-red-yellow-yellow) 180 degrees to properly mate with the limit connector P2.
7. Replace the cover and reapply power. Test for proper operation according to the operating characteristics listed on page 8. Test for proper reversing action according to the instructions in the Operator Installation Manual.
8. The pushbutton terminal strip has the following functions:
  - Terminal 1: Common
  - Terminal 2: Radio Relay
  - Terminal 3: 24 VDC



Schematic for SPRINT and 200/250 Operators

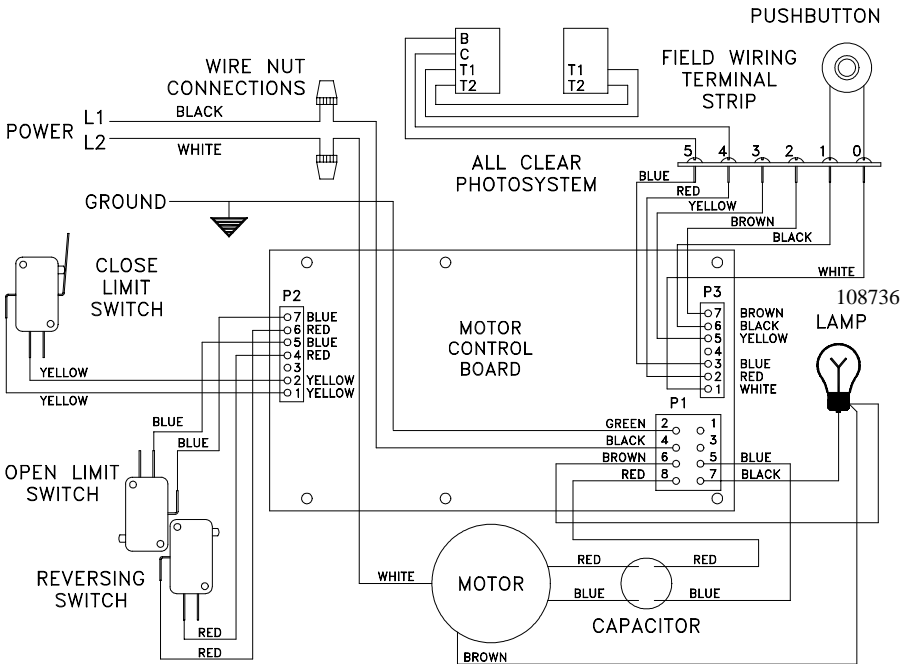
## SECTION E

### REPLACEMENT PROCEDURE FOR 2000 and 2500 OPERATORS

This Section Applies to 2000 and 2500 Models Built in November and December, 1992.

See Section B for Models Built Before November 1992.

1. Disconnect power before removing cover or control board.
2. Carefully remove the old control board from the snap spacers. Note orientation and location of the wire harness and control board. Inspect the harness for any loose connections.
3. Install the new MCB and replace the harnesses as shown in the schematic in the figure below.
4. If a four wire Deluxe Wall station is attached it must be replaced with an Allstar MVP two wire Super Deluxe Wall Station (SDWS). **The four wire wall station will not work with the new board.** This will require a replacement back panel and pushbutton wire harness. Connect the SDWS to terminals 0 and 1 on the replacement back panel.
5. Remove any wires connected to terminal 4 and terminal 5 and rewire the connections from the All-Clear photobeams as follows:  
 Move the wire on terminal B to terminal 5  
 Move the wire on terminal C to terminal 4
6. Replace the cover and reapply power. Test for proper operation according to the operating characteristics listed on page 8. Test for proper reversing action according to the instructions in the Operator Installation Manual.
7. The pushbutton terminal strip has the following functions:  
 Terminal 0: Pushbutton and SDWS (if used)  
 Terminal 1: Common  
 Terminal 2: Radio Relay  
 Terminal 3: 24 VDC  
 Terminal 4: Photoelectric Power  
 Terminal 5: Signal

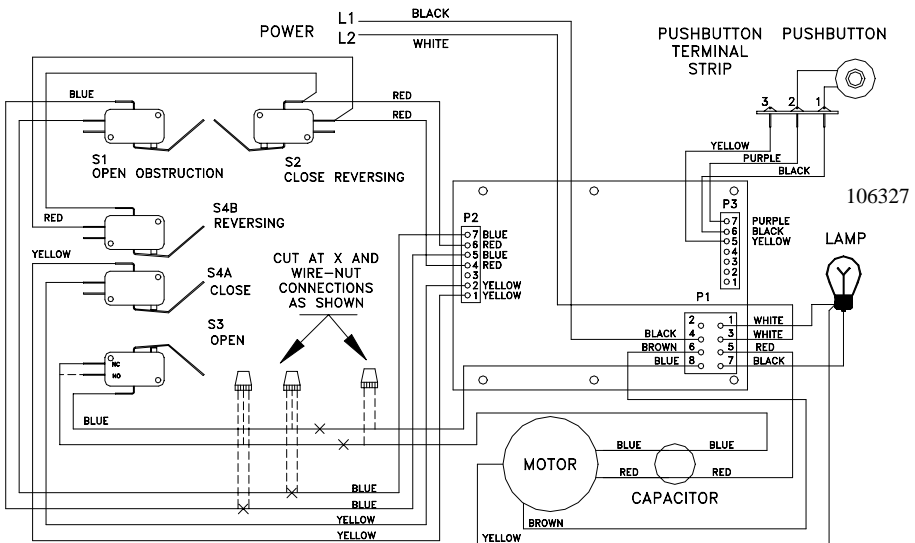


Schematic for 2000 and 2500 Operators

## REPLACEMENT PROCEDURE FOR 325B (TYPE III) OPERATORS

If the original MCB "MC1" is installed it will be necessary to do some rewiring when installing the replacement 110929 MCB.

1. Disconnect power before removing cover or control board.
2. Carefully remove the old control board from the snap spacers. Note orientation and location of the wire harness and control board. Inspect the harness for any loose connections.
3. Located the blue wire connecting the motor capacitor to limit switch S3. Next locate the blue wire connecting S3 to the 8 pin connector. Cut the two blue wires and connect them with a wire nut so that a blue wire now connects the 8 pin connector to the motor capacitor. The changes to the wire harness are noted in the schematic below by dotted lines.
4. Next, connect the two loose wires on S3 to the blue wires connecting S1 to the limit connector P1. It is necessary to cut the wires and use wire nuts to make the connection. When this is complete, S1 and S3 will be wired in parallel.
5. Move the connection on S3 from the normally closed contact (NC) to the normally open contact (NO).
6. Disable S4B or ensure S4A is indexed first as this becomes the new closed limit.
7. Install the MCB and replace the harness as shown in the schematic below. Align the pushbutton harness (purple-black-yellow) over the 3 pins on the connector P3 farthest away from the 8 pin high voltage connector P1.
8. Replace cover and reapply power. Test for proper operation according to the operating characteristics listed on page 8. Test for proper reversing action according to the instructions in the Operator Installation Manual.
9. The pushbutton terminal strip has the following functions:  
Terminal 1: Common  
Terminal 2: Radio Relay  
Terminal 3: 24 VDC



Schematic for 325B (TYPE III) Operators

## SECTION G

### OPERATING CHARACTERISTICS OF THE 110929 REPLACEMENT MCB

For All Operators, *if the Door Is:*

**Fully Open**, using the radio control or the pushbutton will cause the door to begin moving downward.

**Fully Closed**, using the radio control or the pushbutton will cause the door to begin moving upward.

**Stopped, Partially Open**, using the radio control will cause the door to begin moving upward.

**Moving Upward**, using the radio control or the pushbutton will cause the door to stop.

**Moving Downward**, using the radio control cause the door to stop and reverse.

For Operators with the *Pushbutton Connected to Terminals 1 & 2, if the Door Is :*

**Stopped, Partially Open**, using the pushbutton control will cause the door to begin moving upward.

**Moving Upward**, using a pushbutton will cause the door to stop. The next activation of the pushbutton will cause the door to move upward.

**Moving Downward**, using the pushbutton will cause the door to stop and reverse.

For Operators with the *Pushbutton Connected to Terminals 0 & 1, if the Door Is:*

**Stopped, Partially Open**, using the pushbutton will cause to door to move upward if the last door movement was downward before the door was stopped or, cause the door to move downward if the last door movement was upward before the door was stopped.

**Moving Upward**, using a pushbutton will cause the door to stop. The next activation of the pushbutton will cause the door to move downward.

**Moving Downward**, using the pushbutton will cause the door to stop. The next activation of the pushbutton will cause the door to move upward



#### WARNING

Refer to the door operator installation and owner's manual for proper installation and use and adjustments. Follow all warnings. Test the safety systems of your door operator monthly to ensure that the system remains in proper adjustment.

#### Manufacturer's Limited Warranty

Allstar warrants its radio controls to be free from defect in material and workmanship for a period of one (1) year from the date of purchase. To obtain service, contact your dealer.

To obtain service under this warranty the buyer must obtain authorization instructions from Allstar for the return of any goods before returning the goods. The goods must be returned with complete identification, with copy of proof-of-purchase, freight prepaid and in accordance with Allstar's instructions or they will not be accepted. In no event will Allstar be responsible for goods returned without proper authorization or identification.

Goods returned to Allstar for warranty repair within the warranty period, which upon receipt by Allstar are confirmed to be defective and covered by this limited warranty, will be repaired or replaced at Allstar's sole option, at no cost and returned pre-paid. Defective parts will be repaired or replaced with new or factory rebuilt parts at Allstar's sole option.

This limited warranty does not cover non-defect damage, damage caused by unreasonable use, damage caused by improper installation or care, vandalism or lightning, fire or excessive heat, flood or other acts of God (including, but not limited to misuse, abuse or alterations, failure to provide reasonable and necessary maintenance), labor charges for dismantling or reinstalling a repaired or replaced unit, or replacement batteries.

These warranties are in lieu of all other warranties, either expressed or implied. All implied warranties of merchantability and/or fitness for a particular purpose are hereby disclaimed and excluded. Under no circumstances shall Allstar be liable for consequential, incidental or special damages arising in connection with the use or inability to use this product. In no event shall Allstar's liability for breach of warranty, breach of contract, negligence or strict liability exceed the cost of the product covered hereby. No person is authorized to assume for Allstar any other liability in connection with the sale of this product.

This warranty gives you specific legal rights. Warranty effective after July 10, 2002.