



READ THIS MANUAL CAREFULLY BEFORE BEGINNING INSTALLATION

RESIDENTIAL OPERATOR MOTOR CONTROL BOARD REPLACEMENT INSTRUCTIONS

MODELS:

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

PRODUCT FEATURES

The 108733 MCB (motor control board) has all the required mounting holes, wire harness connections and functionality required for the models listed above. Note that a radio receiver was built onto the Sprint, 310/510 and 200/250 Model motor control boards. Therefore they require an external receiver (9921R @ 318 MHZ, or compatible) whenever the 108733 MCB is used for replacement in these models.

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Manufacturer's Limited Warranty

Allstar warrants its electronic 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 for the return of any goods from Allstar 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. You may also have other rights which vary from state to state. Warranty effective after October 1, 1998.

For Information:

Phone 610-873-6900 FAX 610-873-6953

INSTALLER: Leave this manual with your customer upon completion of the installation.

# ★ OPERATING CHARACTERISTICS

Please note the following Operating Characteristics of the 108733 Replacement MCB:

## IF THE DOOR IS...

...**FULLY OPEN**, then pushing the Wall Push Button or Radio Control will cause the door to begin **MOVING DOWNWARD**.

...**FULLY CLOSED**, then pushing the Wall Push Button or RadioControl will cause the door to begin **MOVING UPWARD**.

...**STOPPED, PARTIALLY OPEN**, then pushing the Wall Push Button will cause the door to begin **MOVING UPWARD** (all models except Series 3000 & 6000).

...**STOPPED, PARTIALLY OPEN**, then pushing the Wall Push Button will cause the door to begin **MOVING DOWNWARD** (Series 3000 & 6000).

...**STOPPED, PARTIALLY OPEN**, then pushing the Radio Control will cause the door to begin **MOVING UPWARD**.

...**MOVING UPWARD**, then pushing the Wall Push Button or Radio Control will cause the door to **STOP**.

...**MOVING DOWNWARD**, then pushing the Wall Push Button or Radio Control will cause the door to **STOP, PAUSE FOR APPROXIMATELY ONE SECOND, AND THEN BEGIN MOVING UPWARD**.

**FOR ALL MODELS EXCEPT SERIES 3000 AND 6000 THE DOOR WILL ONLY CLOSE FROM A FULLY OPEN POSITION.**

# ★ IMPORTANT INSTALLATION NOTES

## BEFORE BEGINNING REPLACEMENT PROCEDURE:

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



## WARNING

## TO REDUCE THE RISK OF SEVERE INJURY OR DEATH:

- THE 108733 MCB IS INTENDED FOR REPLACEMENT OF EXISTING MCB'S IN ABOVE LISTED MODELS ONLY. DO NOT USE FOR ANY OTHER PURPOSE. DO NOT MODIFY IN ANY MANNER.
- CHECK LOCAL BUILDING AND ELECTRICAL CODES FOR MANDATORY INSTALLATION AND WIRING REQUIREMENTS.
- 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, IF 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.
- THE 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 THE PERSON(S) INSTALLING, MAINTAINING AND OPERATING THIS EQUIPMENT.

# A: REPLACEMENT PROCEDURE IN IIA & 2000/2500 OPERATORS



**NOTE: THIS SECTION APPLIES TO IIA MODELS AND 2000/2500 MODELS BUILT BEFORE NOVEMBER 1992. See Section D for units 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 harnesses and control board. Inspect the harness for any loose connections.
3. Install the 108733 MCB and replace the harnesses as shown in the schematic in Figure 1 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 harness P1.
4. Replace the cover and reapply power. Test for proper operation according to the operating characteristics listed on page 2. Test for proper reversing action according to the instructions outlined in the Operator Installation Manual.

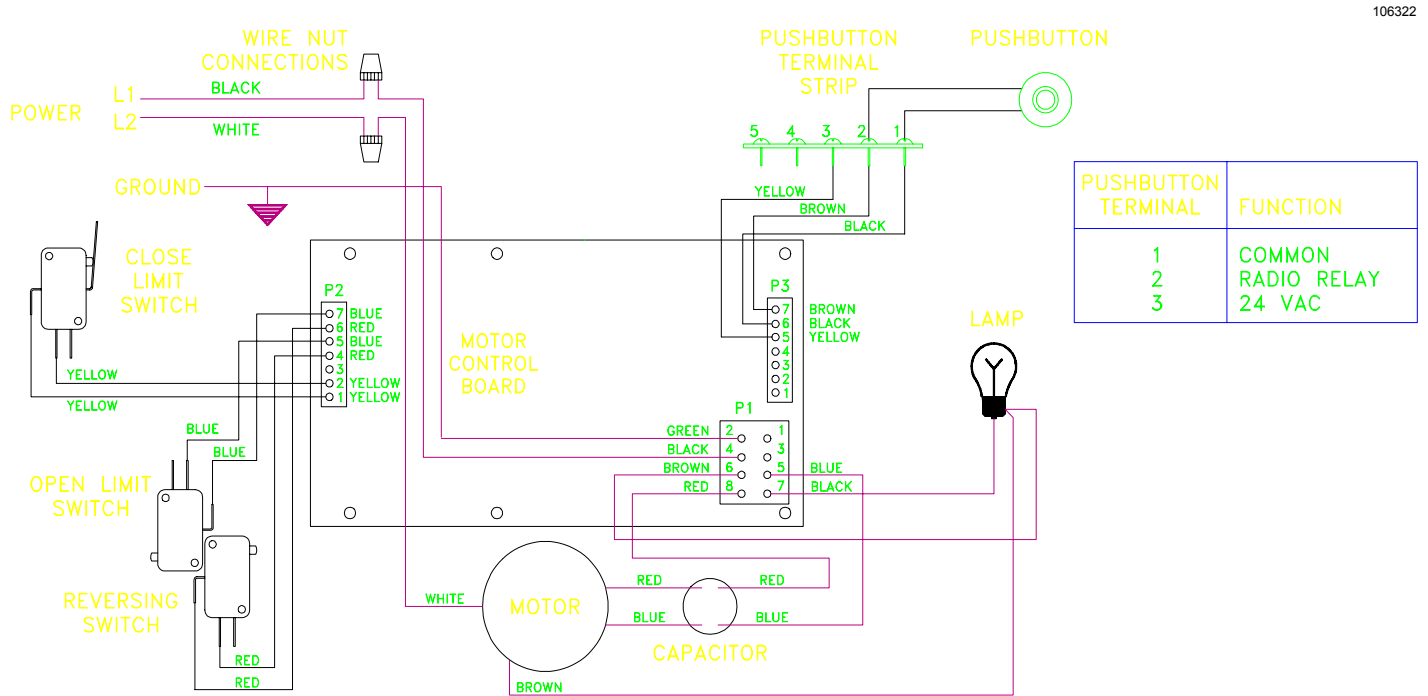


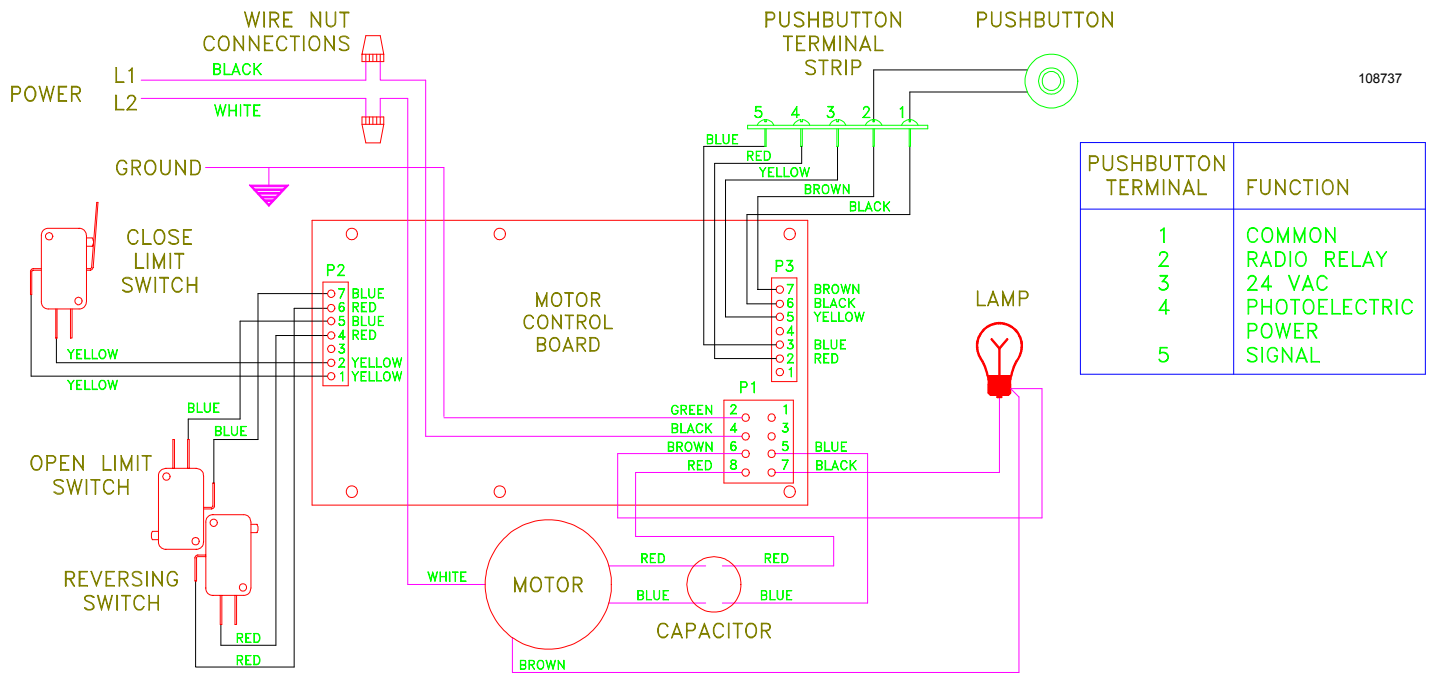
Figure 1: Schematic for 2000/2500 (pre Nov. 1992) and IIA Operators



# B: REPLACEMENT PROCEDURE IN 310, 510 AND 710 OPERATORS

**NOTE: On 310/510 Models,** the radio receiver was built onto the motor control board. It will be necessary to install a 9921 receiver in addition to the motor control board.

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 harnesses and control board. Inspect the harness for any loose connections.
3. Install the 108733 MCB and replace the harnesses as shown in the schematic below.
4. Note: On 310/510 models it will be necessary to re-route the limit harness (blue-red-blue-red-yellow-yellow) to connect to the Limits connector 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. If a four wire Deluxe Wall Station is attached it must be replaced with an Allstar two wire Super Station or a standard wall button. The four wire Deluxe Wall Station **WILL NOT** work with the new board. The Allstar Super Station or a standard wall pushbutton wires into terminals 0 and 1.
6. Replace cover and reapply power. Test for proper operation according to the operating characteristics listed on page 2. Test for proper reversing action according to the instructions outlined in the Operator Installation Manual.



PUSHBUTTON TERMINAL	FUNCTION
1	COMMON
2	RADIO RELAY
3	24 VAC
4	PHOTOELECTRIC POWER
5	SIGNAL

Figure 2: Schematic for 310/510/710 Operators

# C: REPLACEMENT PROCEDURE IN SPRINT & 200/250 OPERATORS



**NOTE: On SPRINT & 200/250 OPERATORS,** the radio receiver was built onto the motor control board. It will be necessary to install a 9921 receiver in addition to the motor control board.

**NOTE: ON THE SPRINT OPERATOR,** it is possible to wire multiple units together to improve radio range. For these applications it will be necessary to remove the connecting wires, replace all of the motor control boards and install 9921 receivers.

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 harnesses and control board. Inspect the harness for any loose connections.
3. Install the 108733 MCB and replace the harnesses as shown in the schematic below. Align the pushbutton harness (brown-black-yellow) over the 3 pins on connector P3 that are farthest away from the 8 pin high voltage harness connector P1.
4. **IMPORTANT: On Sprint models** it will be necessary to reroute the limit harness (blue-red-blue-red-yellow-yellow) to make connection to the Limits connector 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.

**IMPORTANT: On Access 200 Models,** if the original MCB is installed, it will be necessary to **turn the limit harness (blue-red-blue-red-yellow-yellow) 180 degrees** to properly mate with Limits connector P2.

5. Replace cover and reapply power. Test for proper operation according to the operating characteristics listed on page 2. Test for proper reversing action according to the instructions outlined in the Operator Installation Manual.

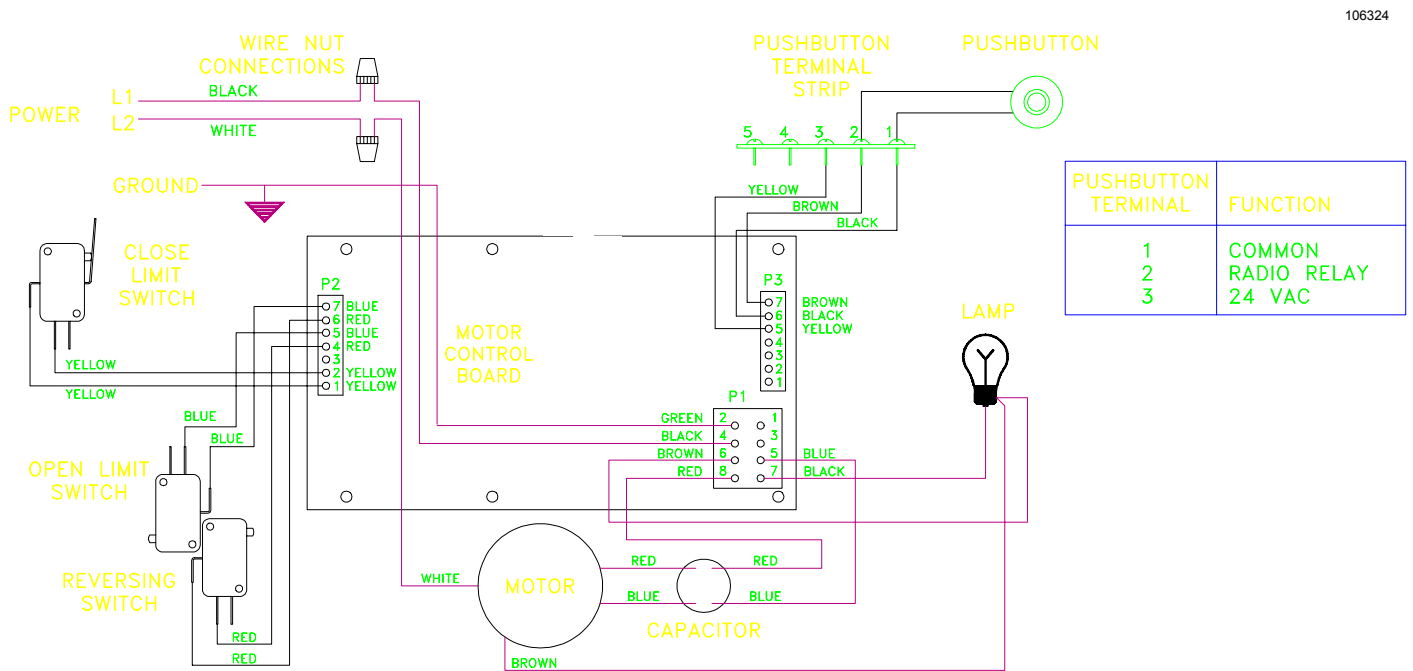


Figure 3: Schematic for Sprint & Access 200/250 Operators



# D: REPLACEMENT PROCEDURE IN 2000 AND 2500 OPERATORS

**NOTE: THIS SECTION APPLIES ONLY TO 2000 AND 2500 MODELS BUILT IN NOVEMBER AND DECEMBER, 1992, see Section A for units 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 harnesses and control board. Inspect the harness for any loose connections.
3. Remove and discard the three wire harness red-white-black, connected to the A-B-C terminal strip.
4. Install the 108733 MCB and replace the harnesses as shown in the schematic below.
5. If a four wire Deluxe Wall Station is attached it must be replaced with an Allstar two wire Super Station or a standard wall button. The four wire Deluxe Wall Station **WILL NOT WORK** with the new board. The Allstar Super Station or a standard wall pushbutton wires into terminals 0 and 1.
6. Externally, remove any wires currently connected to terminals 4 and 5 and rewire the connections from the All-Clear photosystem unit as follows:
  - 1) Move the wire on terminal B to terminal 5
  - 2) Move the wire from terminal C to terminal 4
1. Replace cover and reapply power. Test for proper operation according to the operating characteristics listed on page 2. Test for proper reversing action according to the instructions outlined in the Operator Installation Manual.

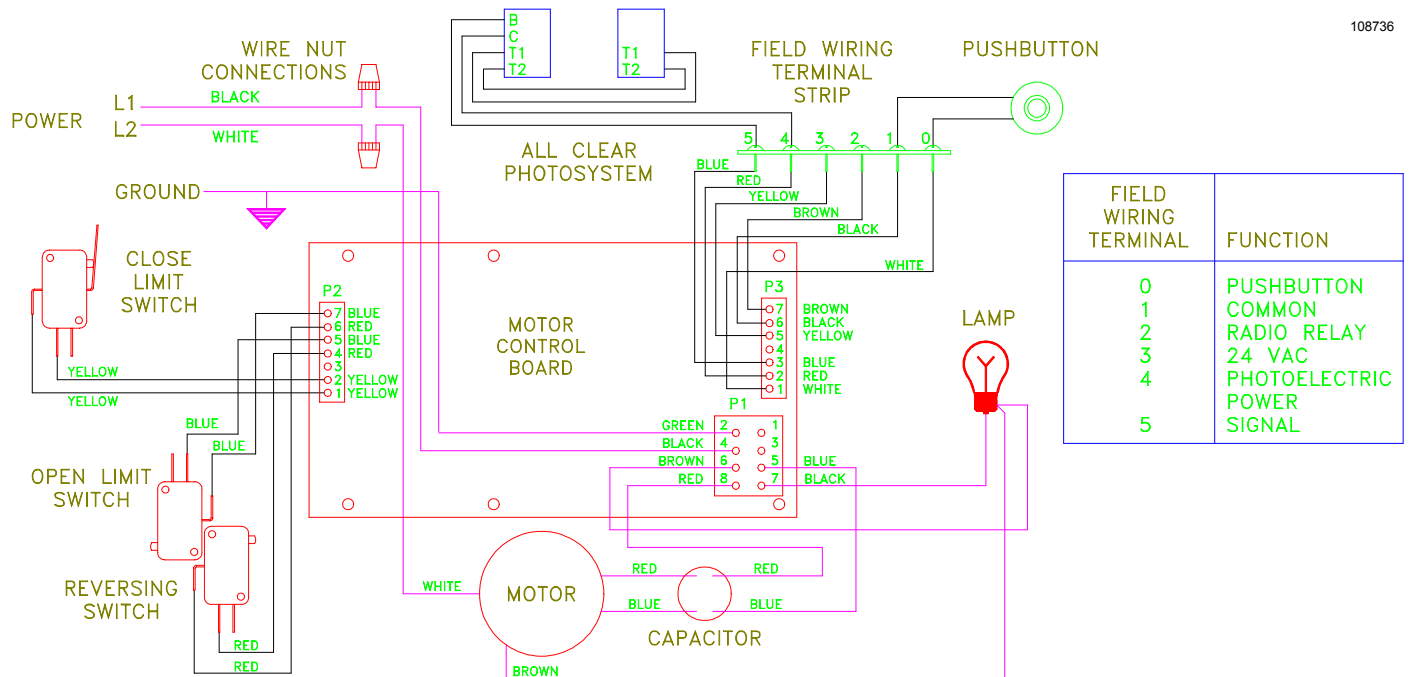


Figure 4: Schematic for Access 2000/2500 Operators

# E: REPLACEMENT PROCEDURE IN SERIES 3000 AND 6000 OPERATORS



**NOTE: THIS SECTION APPLIES TO THE FOLLOWING MODEL OPERATORS: 3000, 3500, 3500-P (PDQ), J3000, J3500, 6000, 6500, 6500-P (PDQ) AND J6500.**

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 harnesses and control board. Inspect the harness for any loose connections.
3. Series 3000 Only: Remove and discard the three wire harness red-white-black connected to the A-B-C terminal strip.
4. Series 3000 Only: If a four wire Deluxe Wall Station is attached it must be replaced with an Allstar two wire Super Station or a standard wall button. The four wire Deluxe Wall Station **WILL NOT WORK** with the new board. The Allstar Super Station or a standard wall pushbutton wires into terminals 0 and 1.
5. Series 3000 Only: Externally, remove any wires currently connected to terminals 4 and 5 and rewire the connections from the All-Clear photosystem unit as follows:
  - 1) Move the wire on terminal B to terminal 5
  - 2) Move the wire from terminal C to terminal 4
5. Remove R7 as shown in Figure 5. Clip leads and remove completely from the board. Resistor R7 is located on the board just below the serial number label (starts with UMxxxx-xxxx) and just above a bank of four 2 watt resistors.
6. Install the 108733 MCB and reinstall the harnesses as shown in the schematic below.
6. Replace cover and reapply power. Test for proper operation according to the operating characteristics listed on page 2. Test for proper reversing action according to the instructions outlined in the Operator Installation Manual.

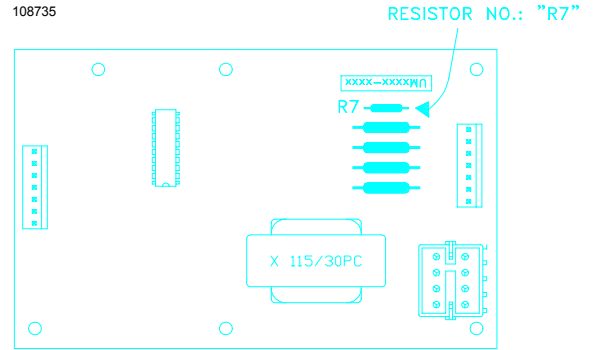


Figure 5: Resistor R7 Location

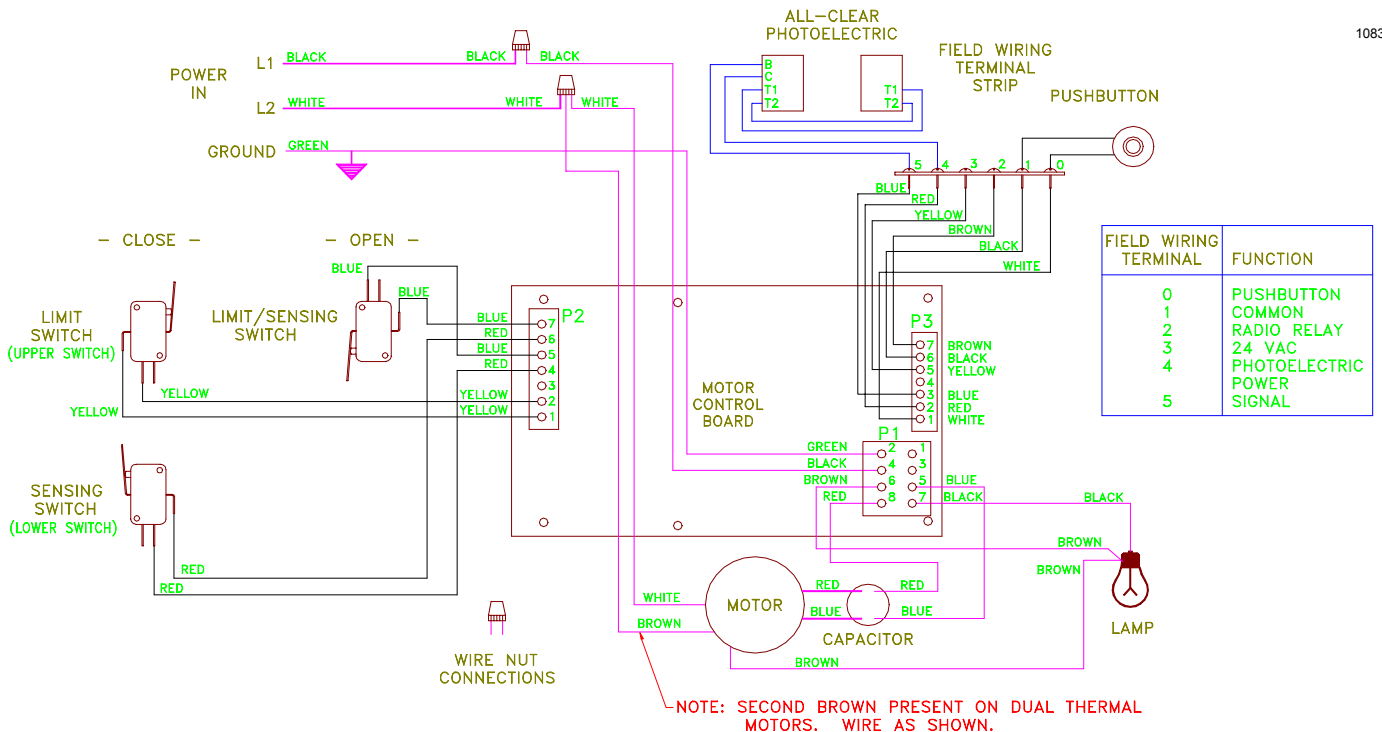


Figure 6: Schematic for Series 3000 and 6000 Operators



# F: REPLACEMENT PROCEDURE IN MODEL 325B (TYPE III)

**NOTE:** If original MCB “MC1” is installed, it will be necessary to do some rewiring when installing the 108733 MCB in Model 325B (Type III) operators.

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 harnesses and control board. Inspect the harness for any loose connections.
3. **Locate 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 the dotted lines.
5. **NEXT**, connect the two loose wires on S3 to the blue wires connecting S1 to the Limit connector P2. It is necessary to cut the wires and use wire nuts to make the connections. When this is complete, S1 and S3 will be wired in parallel. The changes to the wire harness are noted in the schematic below by the dotted lines.
6. **MOVE** the connection on S3 from the normally closed contact (NC) to the normally open contact (NO). The changes to the wire harness are noted in the schematic below by the dotted lines.
7. Disable S4B or ensure S4A is indexed first as this becomes the (new) close limit.
8. Install the 108733 MCB and replace the harnesses as shown in the schematic below. Align the pushbutton harness (purple-black-yellow) over the 3 pins on connector P3 farthest away from the 8 pin high voltage connector P1.
9. Replace cover and reapply power. Test for proper operation according to the operating characteristics listed on page 2. Test for proper reversing action according to the instructions outlined in the Operator Installation Manual.

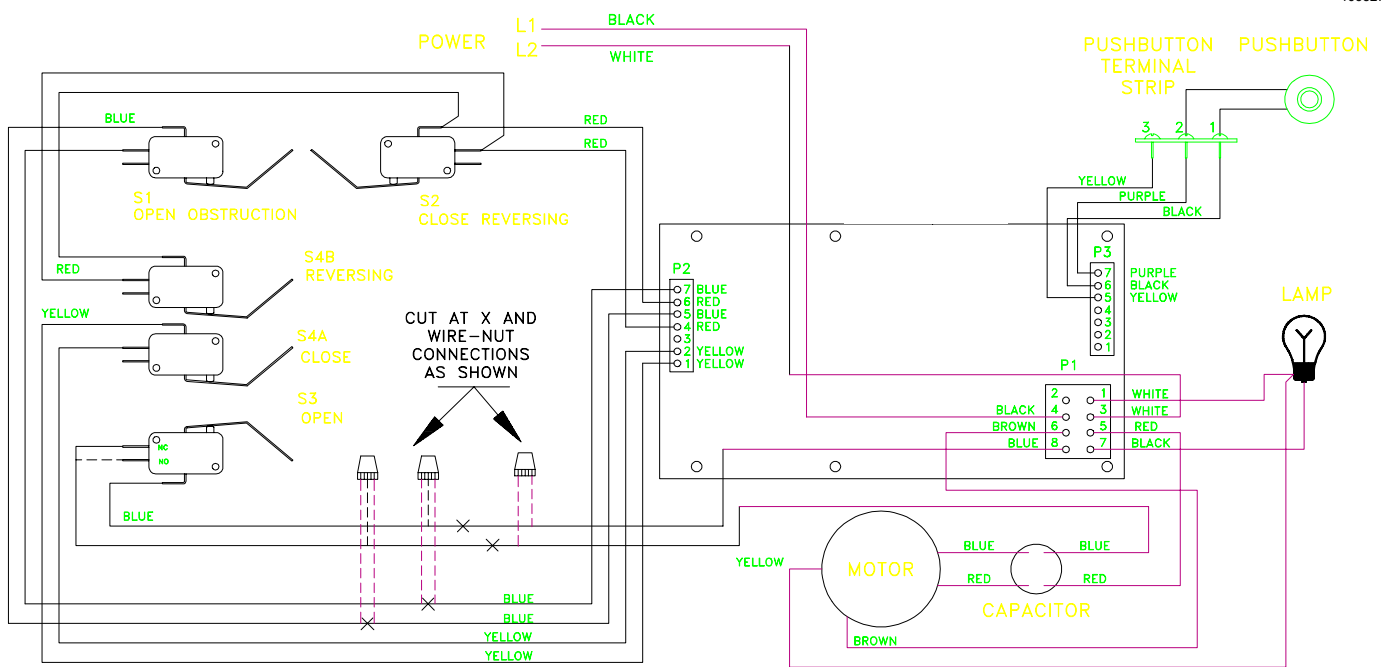


Figure 7: Schematic for Type III (325B) Operators