record-USA
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SERIES 5100 AUTOMATIC SLIDING DOOR SYSTEM AUXILIARY POWER OPTIONS

Dec'09

The Series 5100 sliding door system has available three auxiliary power options for limited operation when a power outage occurs.

The **Nicad Battery Module** (9-51-0010) is used to operate the door in one of four actions immediately upon loss of 120VAC primary power. The operator remains in this position until power is restored, then resumes the operating mode (Automatic, Off, Exit Only, etc.) in place at the time of power failure. The four field selectable actions are

Unlock and open
Open, if not locked
Close and lock
Close, do not lock

If the door is in the closed position and primary power is lost, it can be opened automatically by providing a closed dry contact to the "Remote Switch" input of the door control.

The Series 5100 door control maintains a full charge in the battery module and monitors its status. If an abnormal condition occurs with the battery module, such as a disconnection from the operator or a low voltage status, the control will indicate the specific issue on the door's digital control panel. An alarm contact is available from the door control that will also provide indication to an independent monitor of the abnormal condition.

If continuous door operation is required, the **Sealed Lead Acid Battery Kit** (4-51-0812) will maintain normal door operation, including electric locking and actuating sensors (if powered from the door control). A small circuit board assembly* is installed in the door control and, in addition to maintaining a charge on the batteries, will also test the system daily and verify sufficient charge is available for door operation.

During a primary power outage, the unit will operate normally for approximately 200 cycles, and if power has not been restored, will execute a final action similar to the Nicad Battery Module described above.

If the testing reveals insufficient power available, an alarm screen will display on the door's control panel.

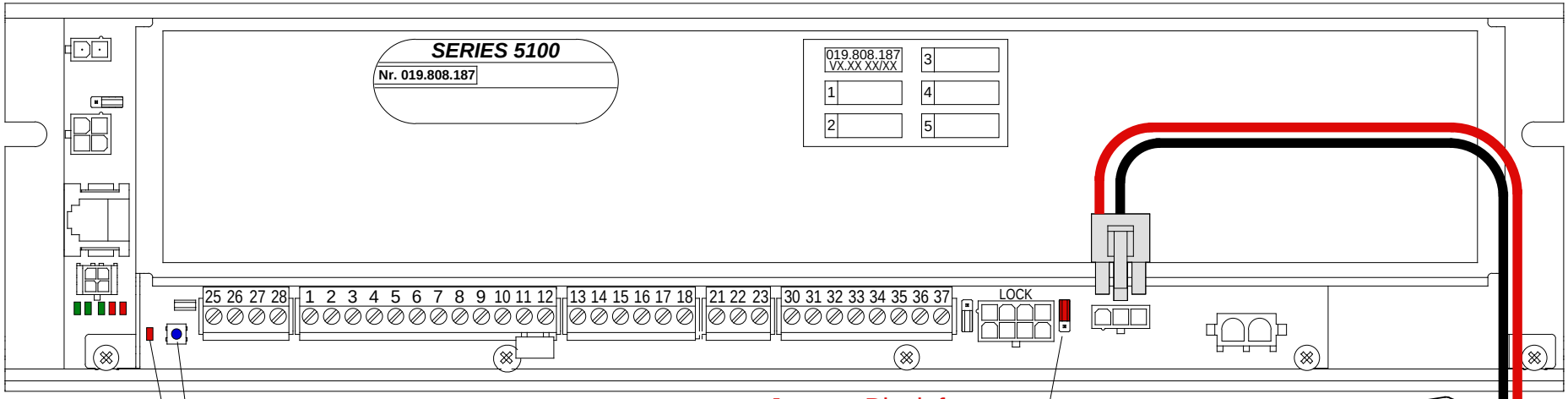
Both the Nicad Battery Module and the Sealed Lead Acid Battery Kit can be located within the Series 5100 Head Section with the drive operator.

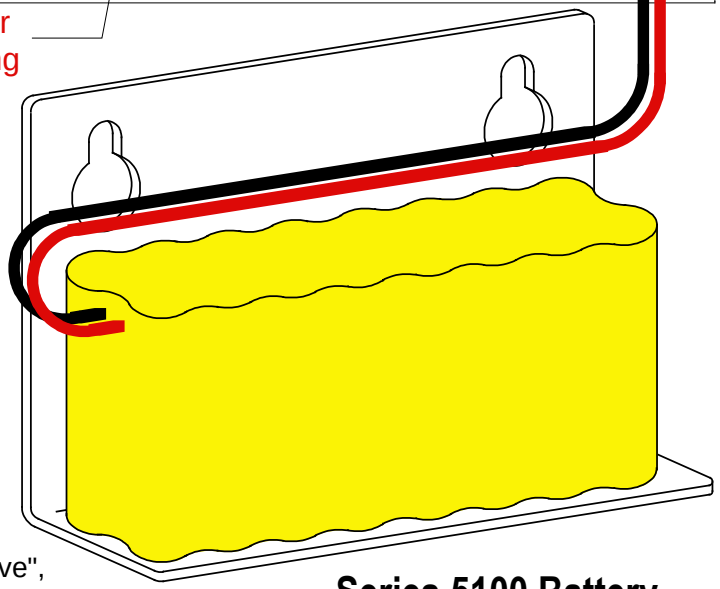
A third alternative for continuous operation is an **Uninterruptible Power Supply** (**UPS**). This stand-alone unit is wired between the door and the 120VAC primary power supply. The length of time the door remains operational is dependent upon the electrical power rating of the **UPS**. A unit rated at 500VA will provide approximately 300 cycles of continuous operation. Units are available in increasing power ratings up to 2,000VA, which will provide 5 hours, or 1,000 continuous cycles of door operation.

The **UPS** may be located in a convenient location such as a Mechanical Room, or Electrical Panel Room. Units are available with an Audio Alarm output and dedicated outputs to provide a warning should a problem develop.

Consult your local record-USA representative for additional information.

*Dual motor controls have this circuit built-in and do not require the additional circuit board.





If the battery module was installed at the factory, the following steps 1 - 4 have already been performed, proceed to step 5.

1. Locate the battery module in a convenient location close to the door control.
2. On the lower right side of the door control is an 8-conductor white connector for an automatic lock and a 3-conductor white connector for the battery module. Between the connectors is a small **red jumper block**. Units without a battery module should have the jumper mounted on the center and lower terminal; units with a battery module should have the jumper mounted on the the center and upper terminal.
3. Connect the battery module to the 3-conductor white connector on the door control. (Note: The Display Control Panel should now be flashing a "Wrong battery" error code.)
4. Press and hold the **blue Control Switch** pushbutton on the lower left of the door control; the adjacent **red LED** will begin flashing; release the **Control Switch** after 8 flashes. This will reset the control, and it will re-configure properly for the battery module.
5. Press and hold the **blue Control Switch** pushbutton for 4 flashes of the **red LED**. The Display Control Panel will now be in parameter adjust mode. Scroll down to and select "Drive", then scroll down to and select "EmergOp Battery". Four selections are available -
   a.) Close, do not lock (Note: Units with a Fail Secure lock will lock when the battery power is removed.)
   b.) Unlock and open
   c.) Close and lock
   d.) Open, if not locked (The keyboard parameter for the display control panel must be set to "Locked" in lieu of "OFF" for this function to operate properly.)
6. If the door does not have an automatic lock, proceed to step 7. If an automatic lock is present, its configuration will be lost in the above reset. Scroll down to the "Locking" parameter and set both the "Lock function" and "Lock type" as required.
7. Exit from the parameter adjust mode by pressing the "PROG" key until asked "Quit Menu?"; then press the record key.
8. The door will now require three calibration cycles, as indicated by the display, and will then be properly configured.

Series 5100 Battery Module 9-51-0010 Function

Aug07

record

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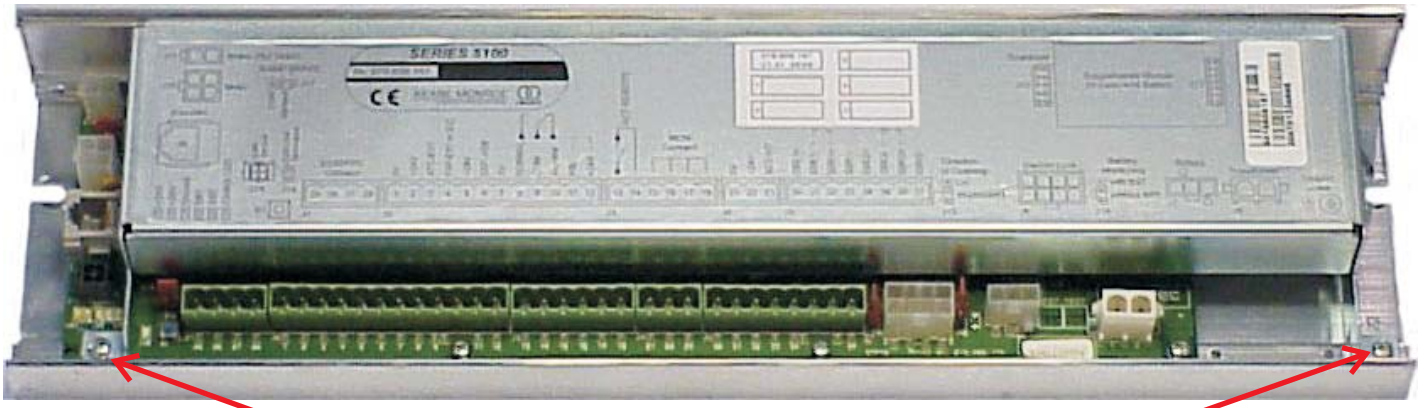
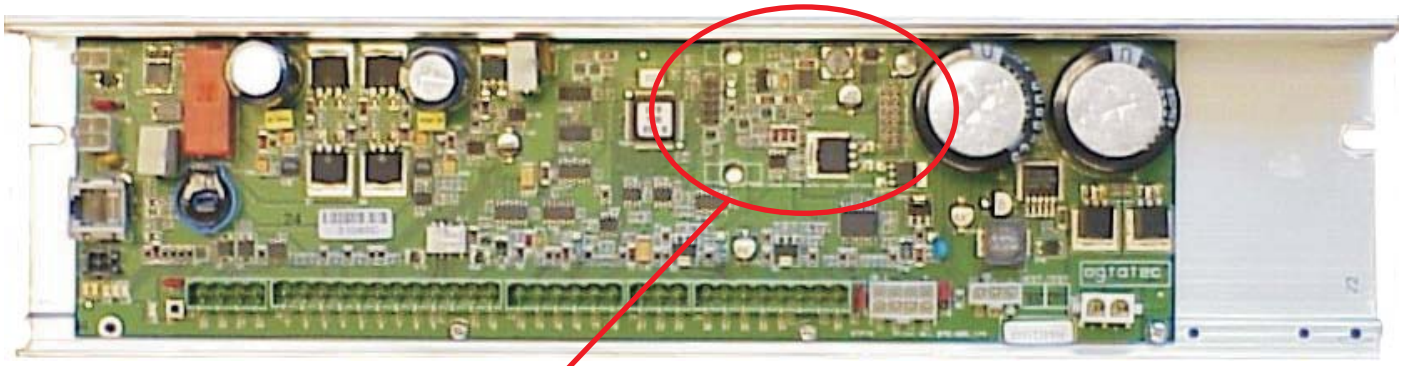
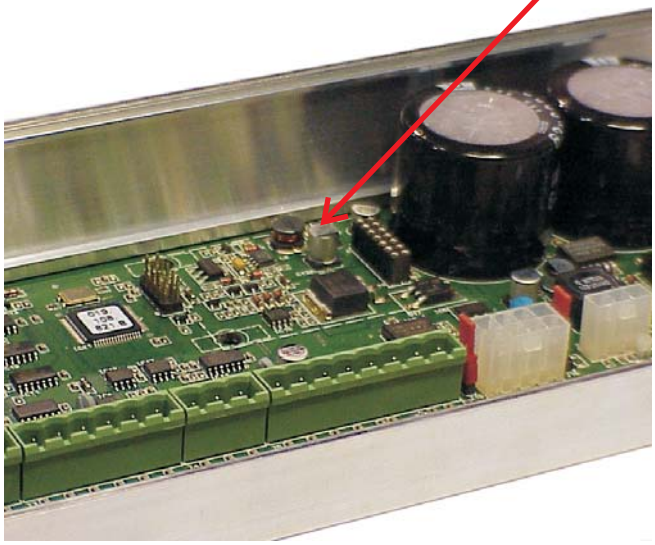
INSTALLATION OF THE 9-51-0016 CHARGER / MONITOR CIRCUIT BOARD INTO THE 9-99-1322 CONTROL FOR THE SERIES 5100

DEC09

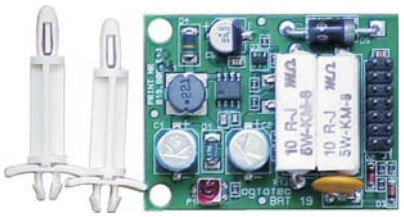


REMOVE COVER SCREWS & REMOVE COVER

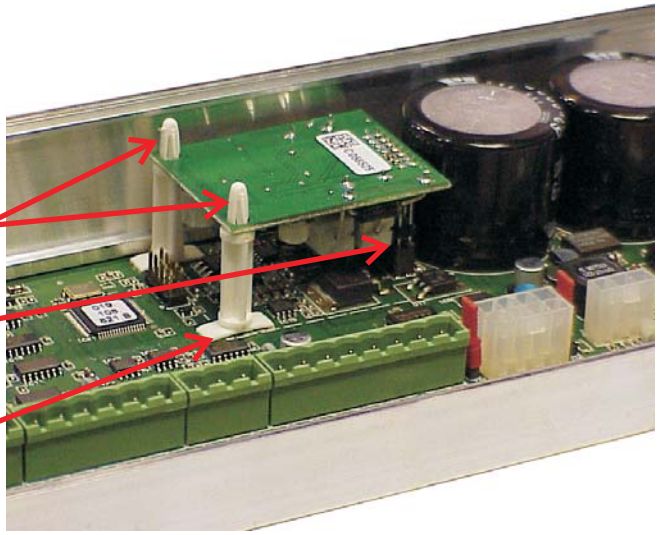




LOCATE CONNECTOR AND SPACER HOLES FOR THE LEAD ACID CHARGER/MONITOR CIRCUIT BOARD



9-51-0016 Charger/Monitor Circuit Board for 9-51-0017 Lead Acid Batteries



INSERT THE BULLET ENDS OF THE SPACERS INTO THE CHARGER/MONITOR CIRCUIT BOARD AS SHOWN, THEN INSTALL INTO CONTROL. NOTE: INSURE PINS ARE PROPERLY ALIGNED WITH CONNECTOR ON CONTROL AND INSURE THE SPACER FLANGE IS FULLY INSERTED AND FLATTENED IN THE CONTROL BOARD HOLES. REINSTALL COVER ON CONTROL. NOTE, THE 9-51-0016 BOARD AND THE 9-51-0017 BATTERY ARE PART OF THE 4-51-0812 KIT.

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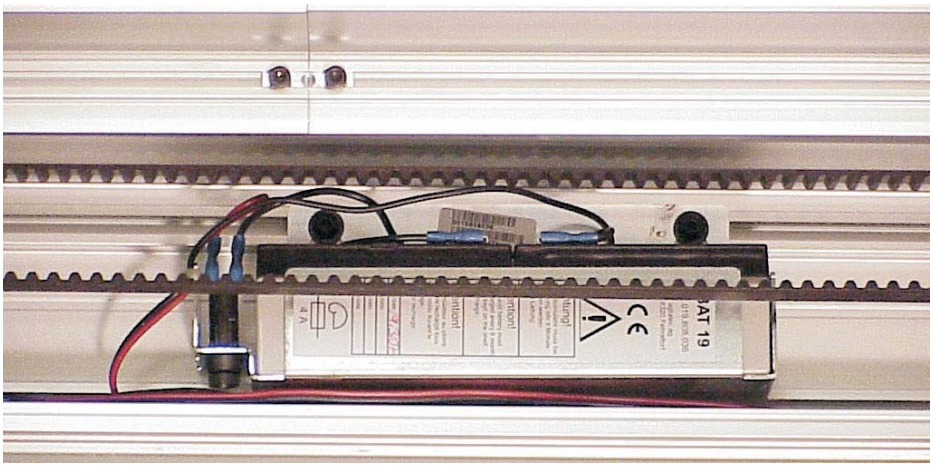
INSTALLATION OF THE 9-51-0017 BATTERY MODULE FOR THE 4-51-0812 BATTERY STANDBY MODULE PROVIDING CONTINUOUS DOOR OPERATION

Feb'10

For proper operation of the 9-51-0017 Battery Module with the standard Series 5100 Control, the 9-51-0016 Charger/Monitor Circuit Board must be installed in the control. Consult the board installation instructions for additional information.

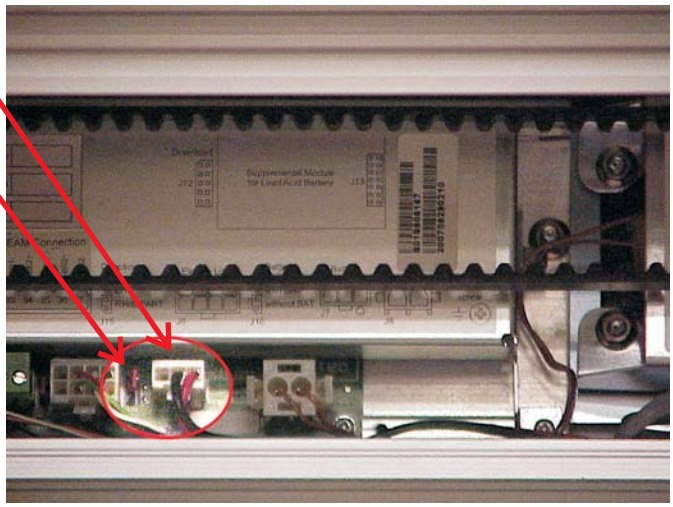
Locate the Battery Module in an open area in the header, typically between the operator's power supply and the 120VAC terminal block. Mount to the upper "TEE" slot on the back of the header with the 1/4-20 X 3/8" screws and square nuts provided.



Route the red and black cable to the operator control, insuring it is not in the path of any moving components.

Plug the cable into the mating 3-conductor connector located on the lower right of the operator control.

Locate the red jumper to the left of the connector and move it from the lower position to the upper position.



With power applied to the unit, the Display Control Panel should be flashing a "Wrong Battery" error code.

Locate the blue Control Switch pushbutton on the lower left of the operator control, and press and hold it for 8 flashes of the adjacent red LED.

This will reset the control and it will reconfigure properly for the battery module.

If the operator has an automatic lock, press and hold the blue Control Switch for 4 flashes of the red LED to enter the parameter adjust mode. On the Display Control Panel, use the AUTO key to scroll down to the "LOCKING" parameter. When highlighted, press the record logo on the display to select, the scroll down to select the proper lock (either Fail Safe or Fail Secure). Press the record logo to select, then press the PROG key multiple times until asked "Quit Menu?". Press the record logo to exit the parameter mode.

The unit will require recalibration. Press and hold the blue Control Switch pushbutton on the operator control for three flashes of the red LED. The display will now show "Calibration Run". The operator will require 3 actuations, either from connected actuation sensors or by momentarily pressing the blue Control Switch pushbutton, to complete calibration.

Proper operation of the battery module can be verified by unplugging the 120V power cord located on the right side of the operator power supply. The unit should continue uninterrupted operation. The Display Control Panel will flash a "Battery Low" alarm when the batteries do not have sufficient power to continue operation.

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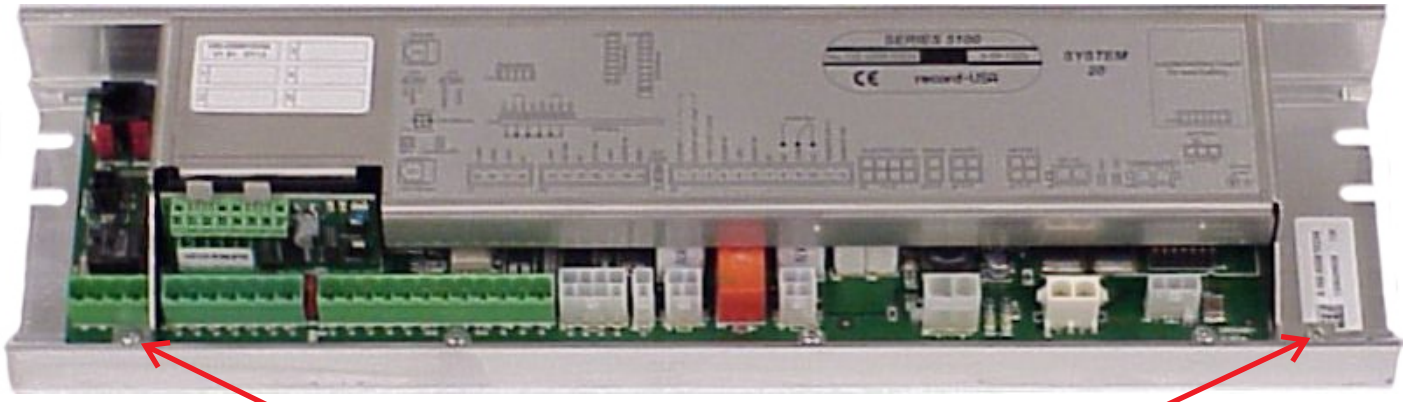
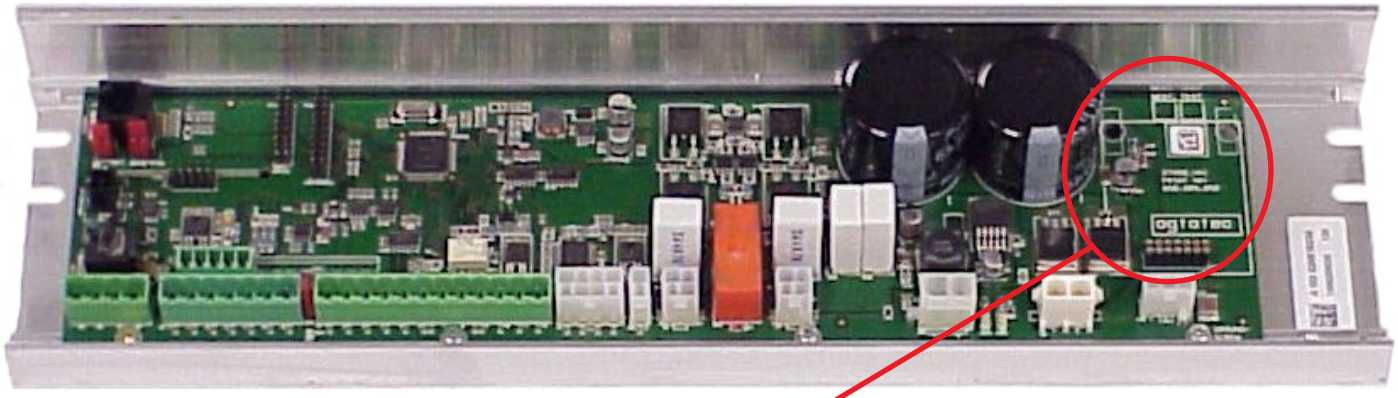
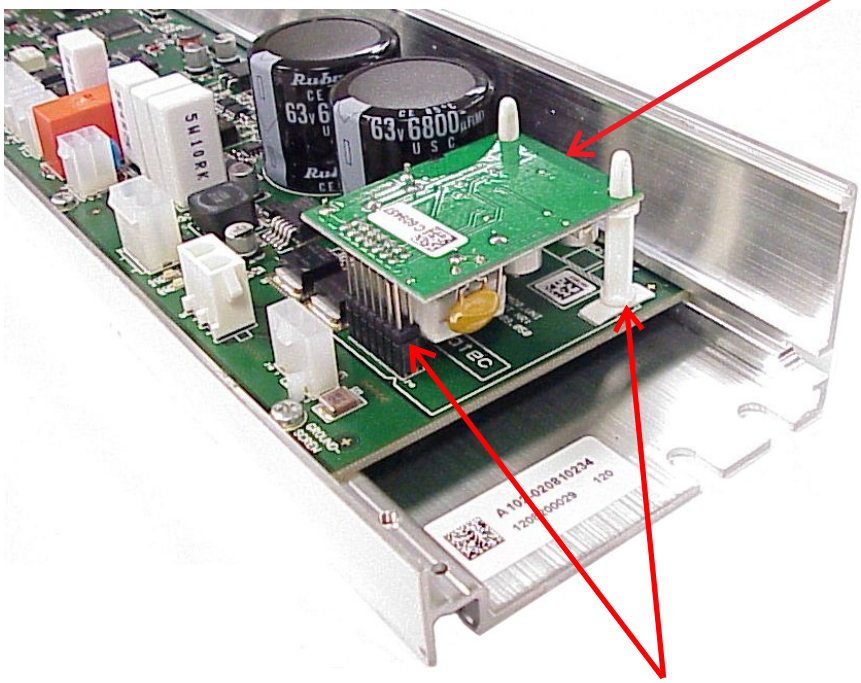
INSTALLATION OF THE 9-51-0016 CHARGER / MONITOR CIRCUIT BOARD INTO THE 9-99-1325 System 20 CONTROL FOR THE SERIES 5100

JAN2013

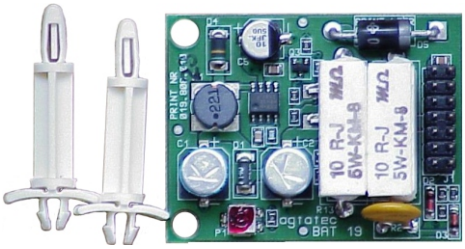


REMOVE COVER SCREWS & REMOVE COVER





LOCATE CONNECTOR AND SPACER HOLES FOR THE LEAD ACID CHARGER/MONITOR CIRCUIT BOARD



9-51-0016 Charger/Monitor Circuit Board for 9-51-0017 Lead Acid Battery Assembly

INSERT THE BULLET ENDS OF THE SPACERS INTO THE CHARGER/MONITOR CIRCUIT BOARD AS SHOWN, THEN INSTALL INTO CONTROL. NOTE: INSURE PINS ARE PROPERLY ALIGNED WITH CONNECTOR ON CONTROL AND INSURE THE SPACER FLANGE IS FULLY INSERTED AND FLATTENED IN THE CONTROL BOARD HOLES. REINSTALL COVER ON CONTROL. NOTE, THE 9-51-0016 BOARD AND THE 9-51-0017 BATTERY ARE PART OF THE 4-51-0812 KIT.

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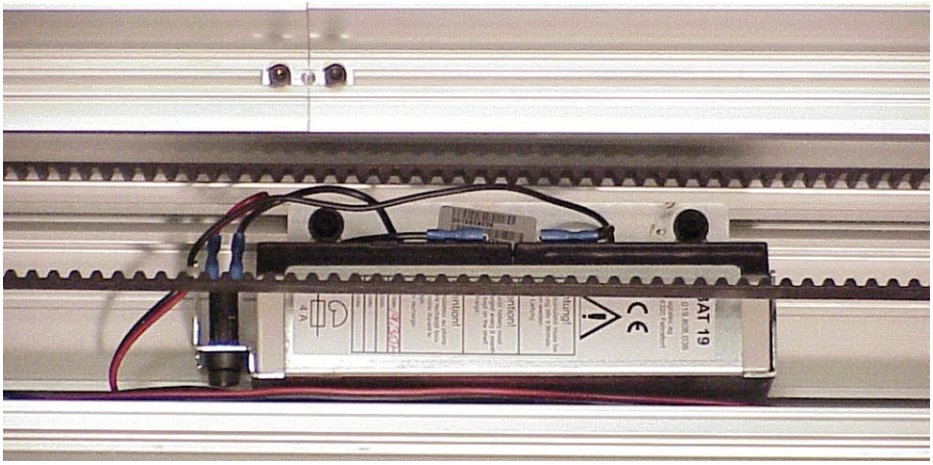
INSTALLATION OF THE 9-51-0017 BATTERY MODULE FOR THE 4-51-0812 BATTERY STANDBY KIT PROVIDING EMERGENCY DOOR OPERATION

JAN2013

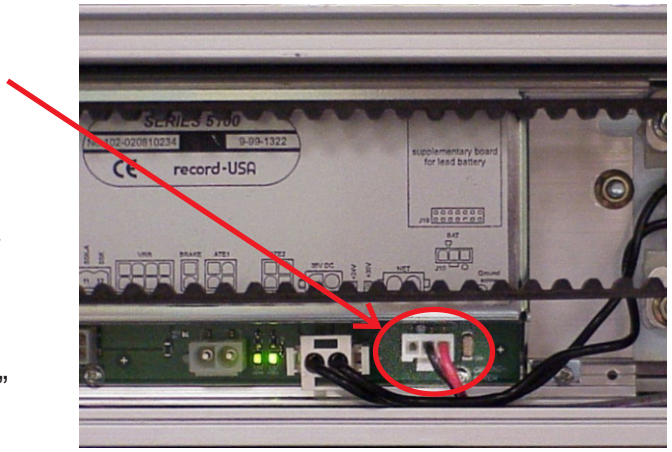
For proper operation of the 9-51-0017 Battery Module with the Series 5100 Control, the 9-51-0016 Charger/Monitor Circuit Board must be installed in the control. Consult the circuit board installation instructions for additional information.

Locate the Battery Module in an open area in the header, typically between the operator's power supply and the 120VAC terminal block. Mount to the upper "TEE" slot on the back of the header with the 1/4-20 X 3/8" screws and square nuts provided.



Route the red and black cable to the operator control, insuring it is not in the path of any moving components.

Plug the cable into the mating 3-conductor connector located on the lower right of the operator control.



When power is applied to the door control, it will automatically detect the presence of the 9-51-0016 Circuit board and the battery module. This can be verified by using an FPC 902 Hand Programmer or the Display Control panel. In the Configuration menu, select "Battery", and the option "Lead" should be selected. Should "None" be selected, highlight and select "Lead" to enable the battery options.

In the Parameters menu, locate and select "Drive", scroll to and select "Power failure". Two options are available - "Battery operation", and "Emergency operation". If "Battery operation" is selected, when a 120VAC power failure occurs, the door will continue normal operation until 120VAC power is restored or the battery power falls to a critical level. When the battery is critically low, the function selected in the "Emergency Operation / Battery" parameter will occur. Details of this parameter are described below.
If "Emergency operation" is selected, when 120VAC power is removed, the function selected in the parameter "Emergency Operation / Battery" will occur immediately.

Also located in the "Drive" menu is the parameter "Emergency Operation / Battery". This will define what function the door will perform in the above conditions -

- Close, do not lock
- Unlock (if required) and open
- Close and lock (assumes electric lock is present)
- Open, if not locked

Proper operation of the battery module can be verified by unplugging the 120V power cord located on the right side of the operator power supply. The unit should perform the programmed operation. When the batteries do not have sufficient power to provide the programmed function, the Display Control Panel will flash a "Battery Low" alarm.