



MAGIC CARPET SAFETY SERVICE BULLETIN
March 13, 2008

SERVICE BULLETIN 2008-01

Scope: All Magic Carpet Lifts Using Allen Bradley Micro Logix PLC Controls. Manufacture Dates 2002-2006

Subject: Electrical Wiring Modification For Monitoring PLC run input command.

Action: Immediate Action Required.

Background

While in operation, it was reported that a Magic Carpet® lift commanded to run started properly, but then stopped and re-started without operator intervention. It has not yet been identified as to whether this was a mechanical or electrical issue. No failed electrical components or wiring has been identified. We have been able to duplicate this event in two ways: a) by momentarily removing the coil wire on the output contactor and then re-installing that wire and b) by removing the enable wire from the AC VFD and then re-installing that wire. During these two tests, the run command in the PLC remained on.

Action

Modification of the electrical control wiring is required. Either one of the following two wiring modifications are to be made to your Magic Carpet® lift. This will prevent unintended starts related to a wiring or component failure while the run command remains ON in the PLC. There should be available N.O. contacts on both the M1 contactor and the CR2 relay to implement this change.

Option 1 is a wire modification only. It will require the operator to maintain the key switch in the start position until the lift begins movement and the CR2 contactor closes. This is approximately 10 seconds in duration.

Option 2 uses a wire modification and an additional N.O. contact block on the key switch start position. The lift will still have the 10 second delay before starting but the key switch operation is now momentary.

Test procedure remove the wire from the M1 contactor coil and observe that the lift stops then reattach the wire and observe that the lift does not start. Repeat the test procedure on the CR2 coil wire.

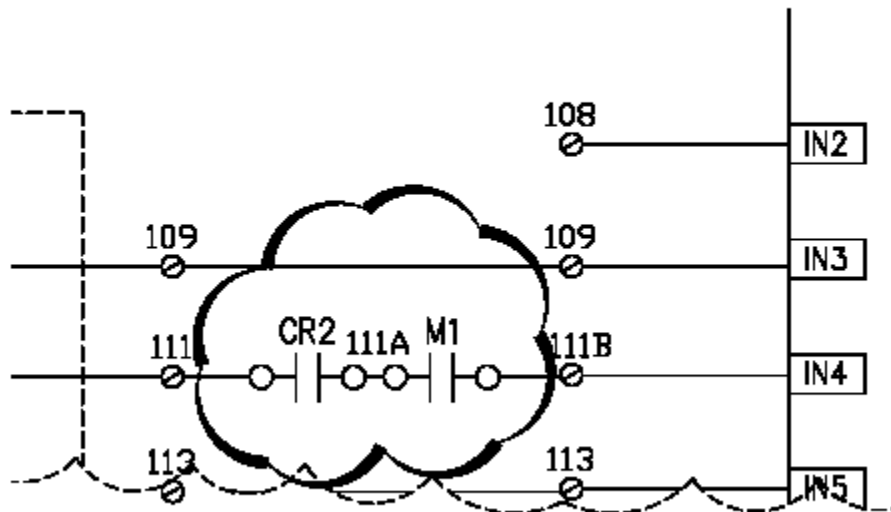
If an area would like to investigate and implement their own manner of control modification, we request that the area furnish to us the control scheme they propose for our review.

Please contact Magic Carpet Lifts, Inc. if additional information is required or if your M1 contactor or CR2 relay has no more available contacts. When contacting us please have

available the manufacturer and model number of the contactor or relay so we can verify that the additional parts we furnish are correct.

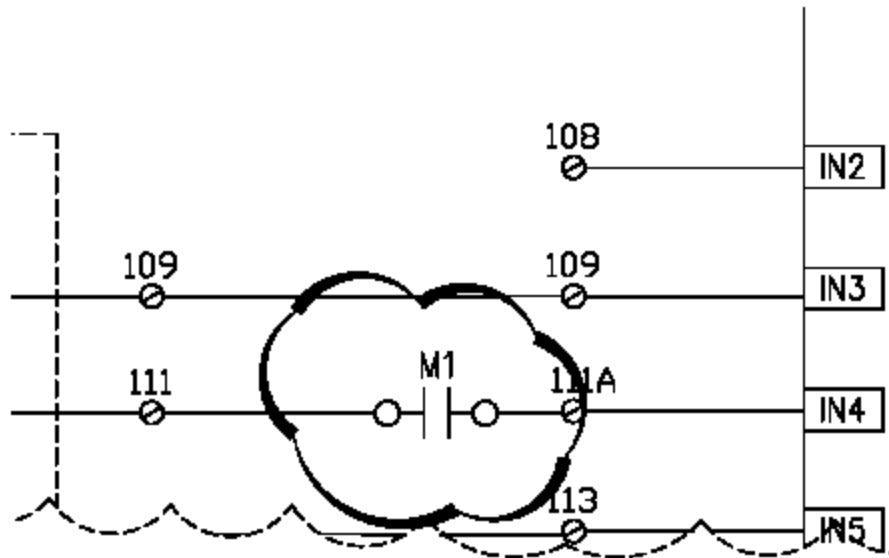
Thank you,

Magic Carpet Lifts, Inc.

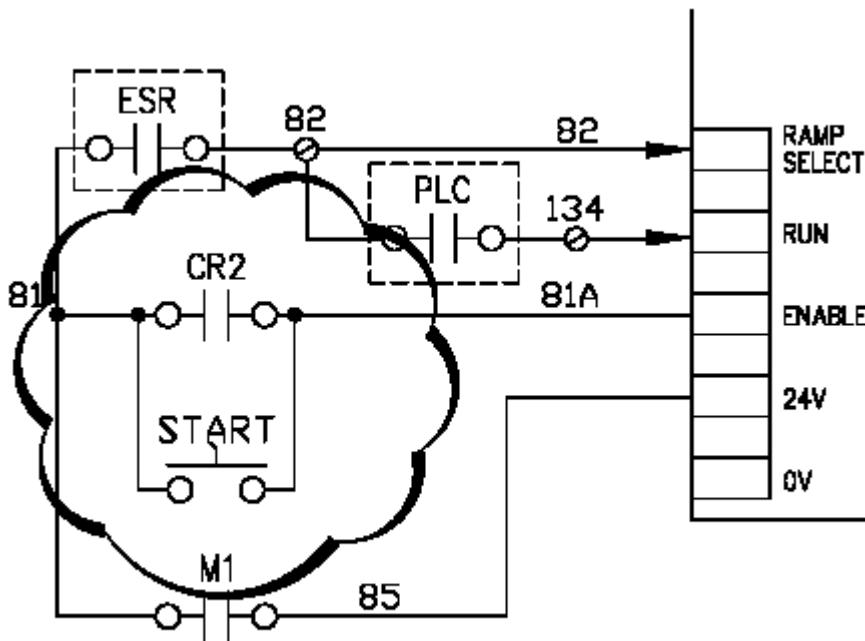


Wiring change at the PLC. Input 4 of the PLC, wire #111, is to be removed and connected to CR2, NO contact. A new wire is to be installed to this NO contact, wire #111A and run to M1, NO contact. From this contact block a new wire #111B is to be installed in the PLC at input 4, formerly where wire #111 was terminated.

**OPTION 1-
RUN WITH MAINTAINED KEY SWITCH -10 SECONDS**



This change is at the PLC. Input 4 of the PLC, wire #111, is to be removed and connected to M1, NO contact. A new wire is to be installed to this NO contact, wire #111A and installed in the PLC at input 4, formerly where wire #111 was terminated.



This change is at the VFD. Wire 81 goes to CR2, NO contact and a new momentary contact in the key switch, actuated when the key switch is in the START position. New wire 81A is wired in parallel with the output of these two contacts. Wire 81A terminates on the AC VFD where 81 was formerly terminated.

OPTION 2 RUN WITH MOMENTARY KEY SWITCH