



Technical Bulletin

Product Update - TB 2112 Rev. A

This Technical Bulletin has been made in order to inform our Distributors, Warranty and Repair Stations and all MK customers of any, and all product and/or design changes which may affect their normal operating characteristics.

Compatibility Issues Using Prince XL Spool Guns on Millermatic 250X & 251 Units

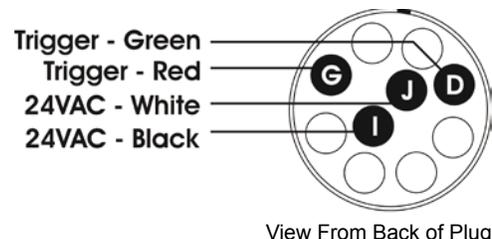
The Prince XL Spool Gun is no longer compatible for use on the Millermatic 250X & 251 wire feed welders when using the MM Adapter Cable, P/N 005-0629.

Current generation Prince XL spool guns utilize a 15VDC motor, instead of the 24VDC motors found on the Prince and early Prince XL guns. Although both motors operate as designed within the MK motor circuit (24VDC), the 15VDC motor draws too much current for the Millermatic motor circuit. This current draw results in a surging of the spool gun motor, followed by an error message and shutdown of the Millermatic unit.

This situation is resolved by using the 24VAC circuit in the Millermatic to operate an MK spool gun control module, the PA-G1 (P/N 005-0264). The PA-G1 Speed Control Module converts the 24VAC to controllable 24VDC, and the spool gun potentiometer controls the wire feed speed. In addition to the PA-G1, a 10-pin circular male connector is required. This 10-pin connector must be assembled and the four wires (trigger & input power) from the PA-G1 must be connected to corresponding pins (shown below). This solution is primarily designed to work on MM units which already have 24VAC on the front panel 10-pin female receptacle.

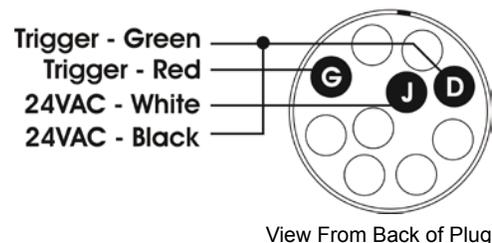
Millermatic 251

MM251 units after serial number "LC385197" connect as shown. Units prior to this serial number will most likely require a slight modification to bring 24VAC up to the 10-pin receptacle from the internal main control board. Contact Miller Electric for details specific to your serial number.



Millermatic 250X

MM250X units are wired differently. The 24VAC supply is routed through one leg of the trigger. Use the MM schematic to verify the connection shown at right. Again, contact Miller Electric for details specific to your serial number.



List of all parts needed, 1 each: 005-0264 (PA-G1), 153-1172 (10-Pin), 301-0019 (Cable Boot) & 411-0027 (Strain Relief Clamp). Contact MK Technical Support for assistance.