

Service Bulletin 1012: DRO Wiring Retrofit

Date

Issued January 27, 2017

Product

4190 HiTorque Mini Mill with serial numbers in the range 60700-60850. (You can find the serial number on the base by turning the Y-axis to move the table back and then looking under the bellows chip guard, as shown at the right.)



Issue

The power wiring for the DRO Bluetooth transmitter is connected through the power switch. This means you lose DRO coordinates each time you power down the mill.

Symptoms

The DRO is reset to all zeros when you cycle the red/green power switch off and on.

Retrofit Kit

The retrofit kit consists of two wires with terminals on one end, and two clamp-on terminals as shown at the right.

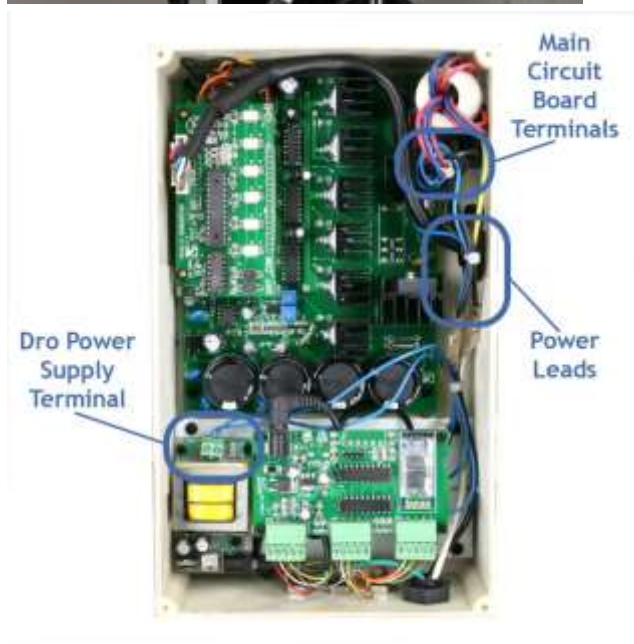


Solution

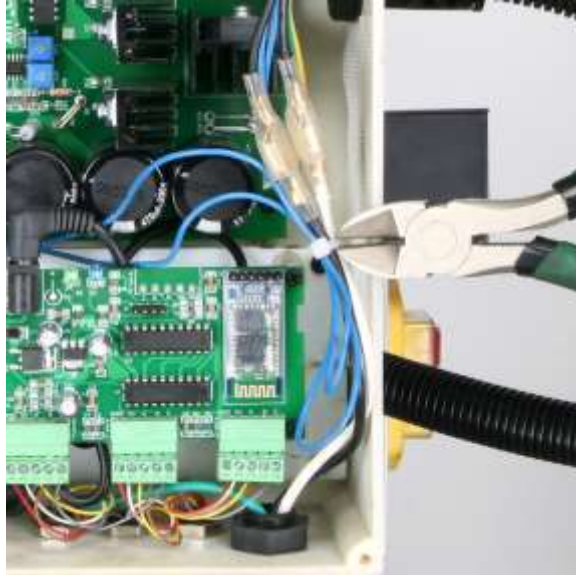
Install the retrofit wiring kit as described below.

BEFORE YOU BEGIN: Be sure the mill is unplugged from the power source.

1. Remove the cover from the control box on the back of the column.



2. Cut the cable ties bundling the power leads.



How to install Quick Splice Connectors

- a) Place the wire across the side of the quick splice connector without the conductor.



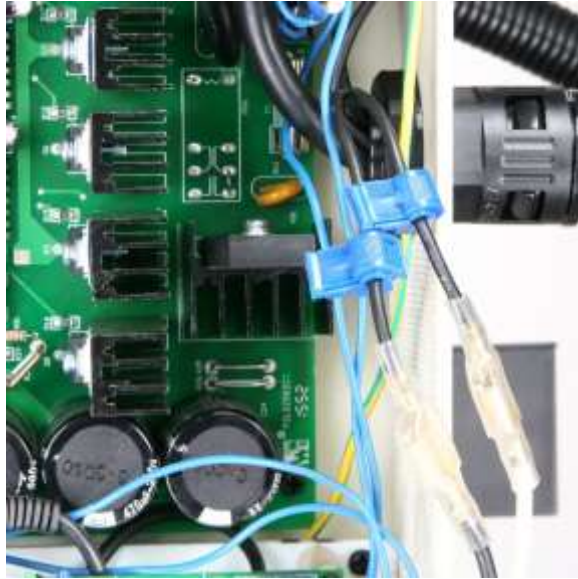
- b) Fold the quick splice connector over the wire.



- c) Clamp the quick splice connector with pliers until it latches.



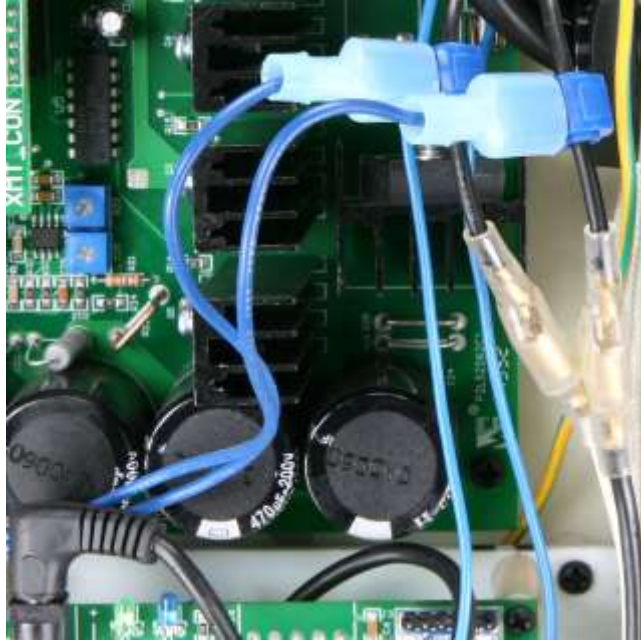
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3. Clamp a quick splice connector on each of the two black power leads above where they connect to the power cord.



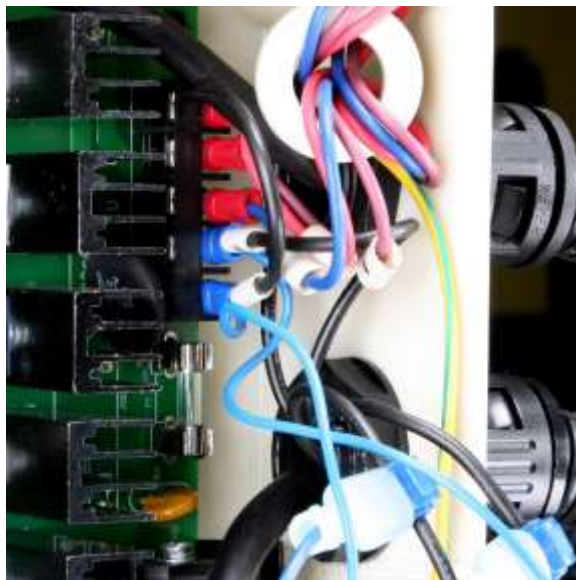
4. Replace the wires in the DRO power supply terminals with the bare ends of the new wire assemblies.



5. Route the new wires behind the DRO board power plug to the power supply leads.
6. Plug the male spade terminals on the new wires onto the quick splice connectors on the power leads. You can plug either new wire into either power lead. Be sure the spade contact is centered within the translucent insulation so that it goes into the slot in the quick splice connector instead of going outside the slot.



7. Follow the two wires you removed from the DRO power supply to the top right of the main circuit board.



8. Cut the two wires within one inch of the terminals they are crimped into. It's OK to leave the bare ends exposed.



9. Replace the cable tie on the power leads using the new tie provided.
10. Replace the cover on the control box.