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Frequently Asked Questions

DVR 2024 "Low Voltage" issue

Date Raised: 8 February 2017 Date Amended	Safe practices should always be employed to ensure the Health and Safety of yourself, employees and customers (if applicable) Refer to product manuals, exploded drawings and our website if further assistance is required, or contact us on service@teknatool.com

Typically, the "Low Voltage" error that appears on the DVR 2024 lathe is caused by connection issues of the wires.

There are few procedures which can be taken to solve this issue.

Note:
Before commencing any of these operations, make sure to unplug the machine out of the power source.

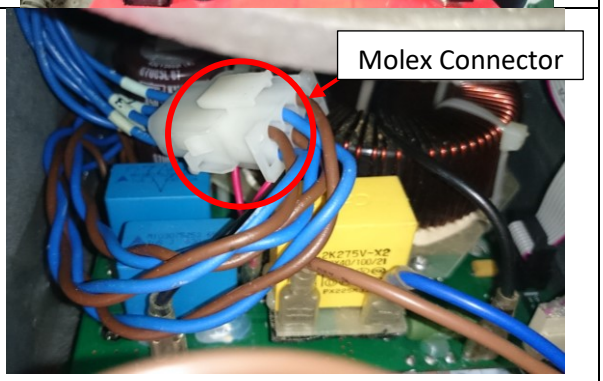
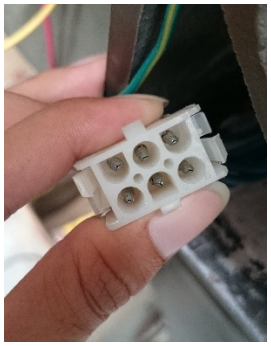
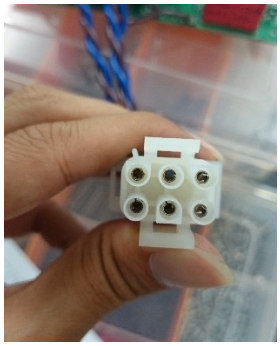
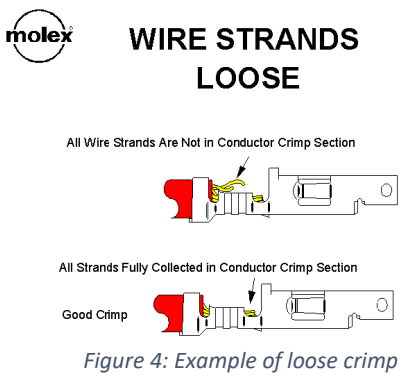
Required Tools:
1 x Philips screw driver
1 x 2.5mm Allen ke

The first option which you should try is to check the control panel connection.

Step No.	Description	Image
1.	Remove the cover of the control panel by removing the screws. This will expose the control circuit board.	
2.	Unplug and re-plug both ends of the grey ribbon cable from the interface board to the key pad panel and from the interface board to the main board. Retest with power to see if the issue still exists.	

If the issue still exists after performing this step, proceed onto the next page.

The second step is to check the **Molex connectors** inside the headstock. Connections of Molex connectors may get insecure over time of use due to heat, moisture etc. To access the Molex connectors, the control circuit board may have to be removed.

Step No.	Description	Image
1.	Remove the cover of the control panel and disconnect the grey ribbon cable leading to the main board.	**Shown in previous page**
2.	Remove the back panel of the headstock by unscrewing the hex screws using the 2.5mm Allen key **Note:** The removal procedure of the main circuit board is shown in the **FAQ: How to change the DVR control board**.	
3.	The removal of the control circuit board will allow access to the Molex connectors which may be hidden at the back.	  *Figure 1: Male Molex*  *Figure 2: Female Molex*
4.	When you have gained access to the Molex connectors, check to see if there are any defects in each of the connectors. Check for any loose connections on the wire side and if there is any loose connection, re-crimp it with a new conductor crimp. After re-crimping, assemble everything back together and retry with power. **Note:** Follow the instruction/ warnings on how to reassemble the main circuit board since there is a potential of short circuiting which can lead to permanent damage of the circuit.	 *Figure 3: Conductor Crimp*  *Figure 4: Example of loose crimp*

If the issue remains even after following these procedures, please check each of the **parameter values** of the lathe. In order to gain access to all of the parameter values of the lathe, refer to the **FAQ: How to enter service mode** under the FAQ section of the respective model. All default value will be shown on the FAQ article as a reference, compare each parameter values with your lathe for any abnormal values.

If the error still exists after performing all the procedures listed above and checking the lathe parameter values, please contact our services for further support.

Image References:

Figure3: https://jtechphotonics.com/wp-content/uploads/2015/11/Crimp-Terminal.jpg
Figure4: http://www.molex.com/tnotes/crimp.html