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Frequently Asked Questions

How to replace the control board on the DVR Galaxi 1644

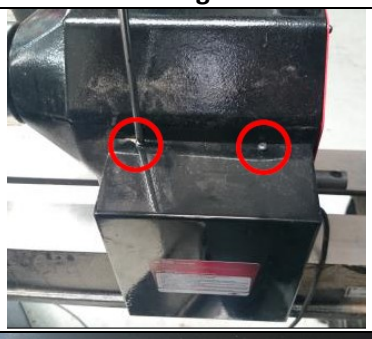
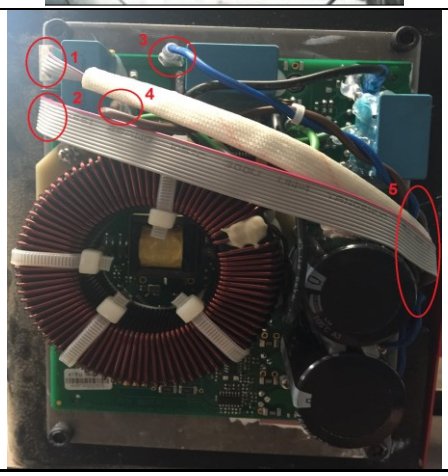
Date Raised: 13 February 2017 Date Amended	Safe practices should always be employed to ensure the Health and Safety of yourself, employees and customers (if applicable) Refer to product manuals, exploded drawings and our website if further assistance is required, or contact us on service@teknatool.com

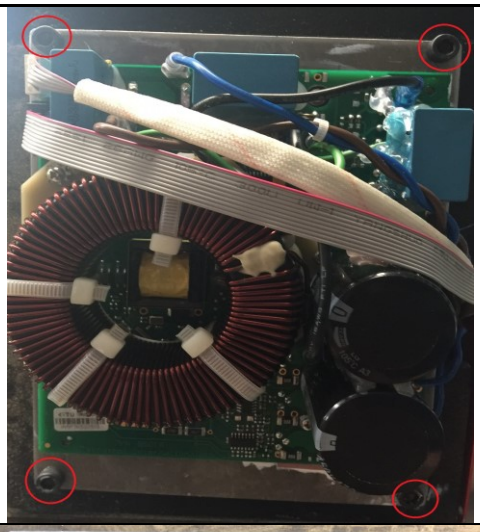
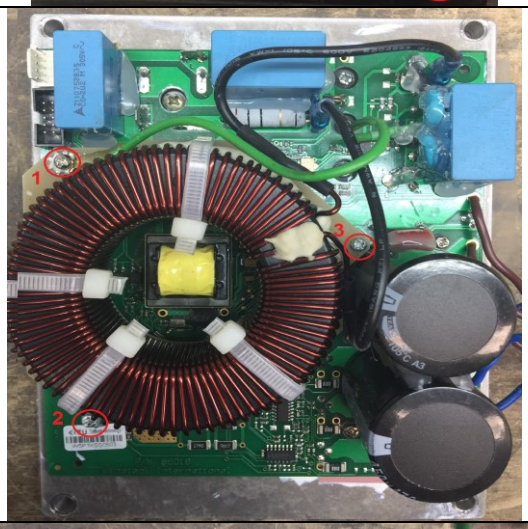
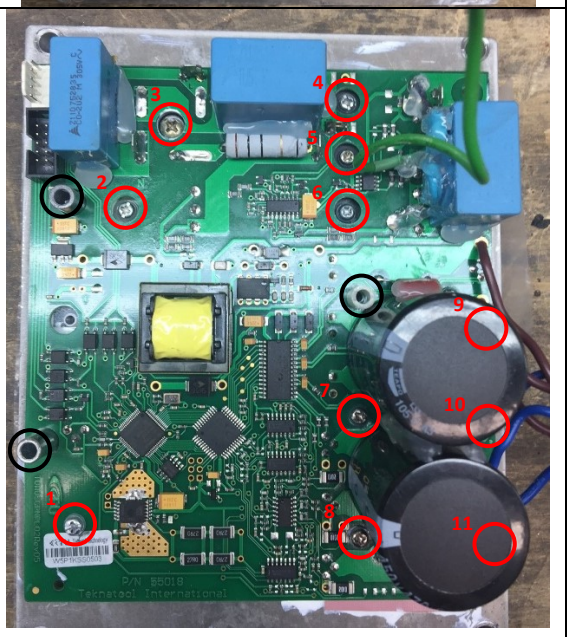
Warning:

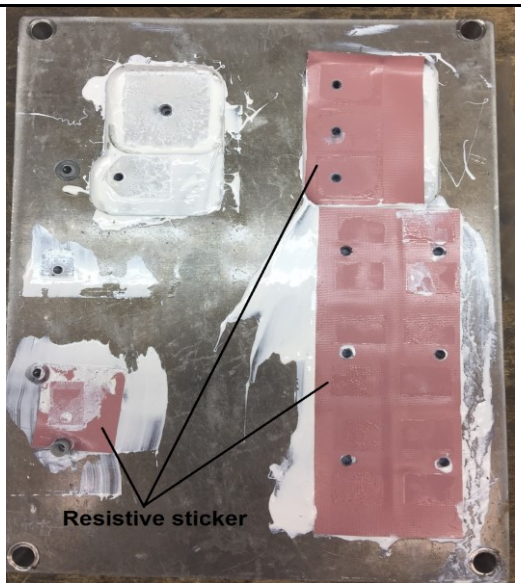
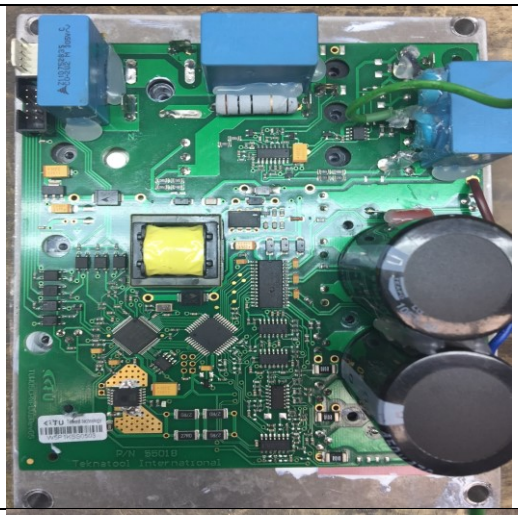
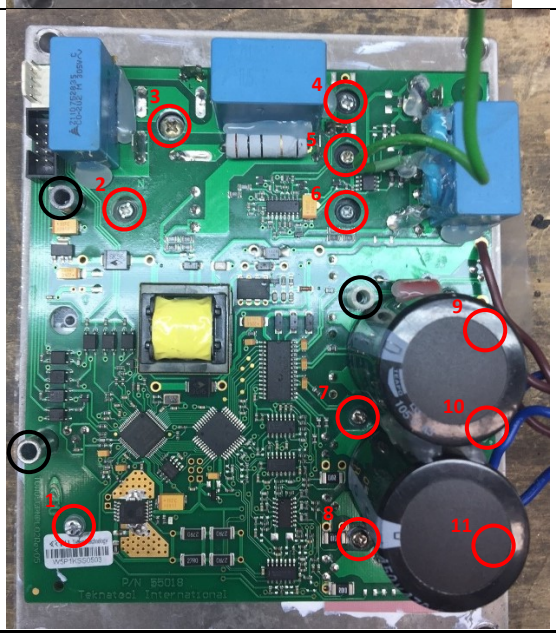
Before commencing the procedures below, make sure to disconnect the lathe from the power source

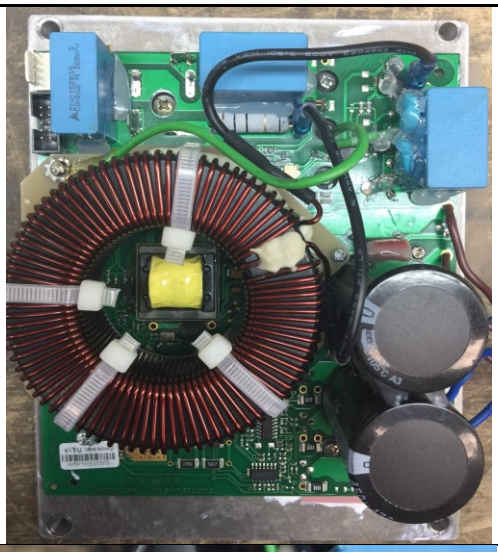
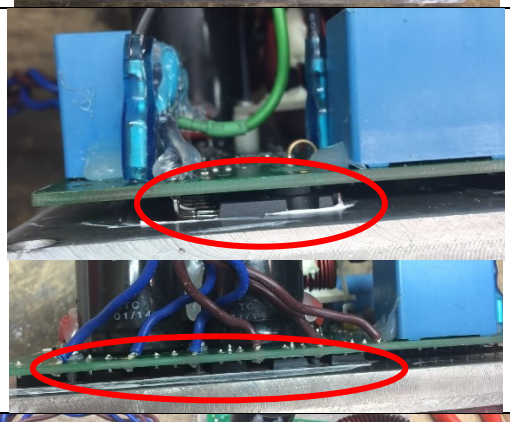
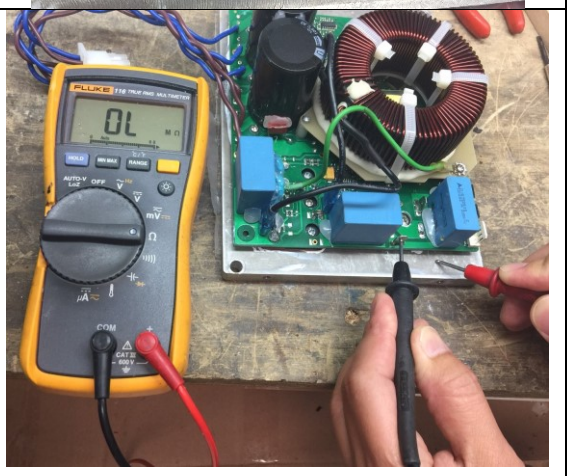
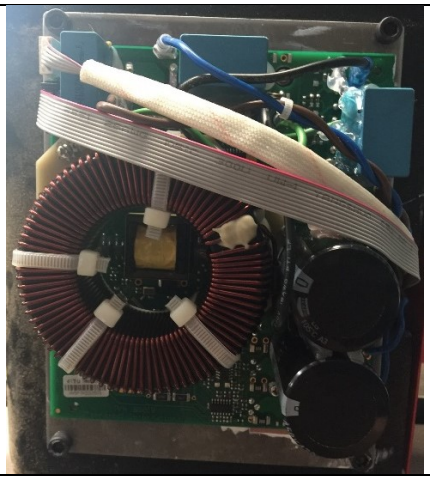
Tools Required:

1 x Philips Screwdriver
1 x Multi-meter
1 x 5mm Allen Key

Step No.	Description	Image
1.	Remove the cover off the control board box. Using the Philips screwdriver to remove the 4 screws (2 on top, 2 on bottom).	
2.	Remove the connecting cables to the control board. The cables shown in the image can be pulled out by hand.	

3.	Remove four hex screws on the aluminium heatsink using the 5mm Allen key. Pull out the heatsink with the control board attached to it.	
4.	Remove the coil from the control board. There are three Philips screws and 2 cables attached to the coil. Remove both screws and cables to detach the coil. **Note:** The black cable connecting the coil to the control board can be pulled out by hand. Green cable will detach once the #1 screw (shown in image) is removed.	
5.	Remove the three coil support posts by hand (circled in black). Then remove the **11 screws** (circled in red) and plastic washers using the Philips screwdriver. **Screws other than #3 will have plastic washers.** **Note:** Make sure not to lose any of the plastic washers. These prevent the control board from short circuiting. 	

6.	Remove the control board. On the heatsink you will find: • Resistive sticker • Thermal glue (White paste) **<u>Note:</u>** **Check for any metal shavings/ conductive material on the heatsink.** If there is any conductive material on the heatsink, you will need to remove everything off from the heatsink using alcohol based wipes and reapply the resistive stickers and thermal glue. The replacement stickers and glue will be supplied with the new board.	
7.	Place the new control board on the heatsink and align the mounting holes. Once the holes are aligned, replace the coil mounting posts.	
8.	Replace the 11 screws with plastic washers on the control board. Note that #3 screw does not require a plastic washer. **<u>Note:</u>** **Make sure to tighten all screws circled in red to prevent detachment during use.**	

9.	Replace the coil onto the control board by fastening the 3 Philips screws on the coil and gently plug the coil cable back onto the control board.	
10.	Carefully check that there are **NO gaps** between the black resistive components of the control board and heatsink (circled in red). **<u>Note:</u>** At the same time check if there are any legs from the control circuit board coming into contact with the heatsink. Any unwanted contact between the control board and heatsink may cause short circuits.	
11.	Test the circuit for any short circuits before turning the lathe back on. **<u>To check for short circuits:</u>** **Connect the blue wire only (cable #2 shown in step 2)** and use a multi-meter to measure the resistance across to the heatsink with the setup shown on the image. If there **<u>is no short circuit</u>**: - Resistance reading will **OL** If the reading does not show OL, check for any contact between the control board and heatsink.	
12.	Once you have confirmed that there are no short circuits on the new control board, place the heatsink back to its original position and replace all cap screws. Reconnect the remaining cables. Place the sheet metal cover back to original position.	
13.	Plug the lathe into the power socket and test the lathe again.	