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Frequently Asked Questions

Date Raised: 21 Dec 2020

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

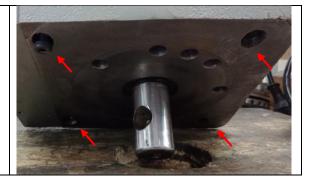
How to Replace the Main Control Board for your NOVA DVR Saturn

Tools:

- Allen Key (4mm)
- Long Nose Pliers
- Headstock Extraction Lever and Brush
- Phillips head Screw Driver
- Replacement Main Control Board & HMI Board

CAUTION: The headstock weighs approximately 45Kg, take extra caution when lifting. It is recommended to have another person to help you hold the headstock while you are replacing the boards to prevent any accidents.

- 1 **Important**: Turn off and unplug the lathe from the power and allow two minutes for the capacitors to discharge.
- 2 Remove the headstock using the Headstock Extraction Lever and Brush. Place the headstock on a workbench.
- 3 Remove the four locking Allen screws underneath the headstock with your 4mm Allen key.

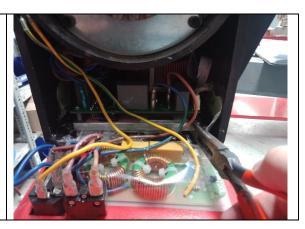


4 Remove the back-cover plate using a Phillips head screw driver to remove the 8 screws.



5 Carefully use your long nose pliers to begin to remove the main control board (MCB) by pulling on the heat sink. Be careful not to touch the control board with your pliers.

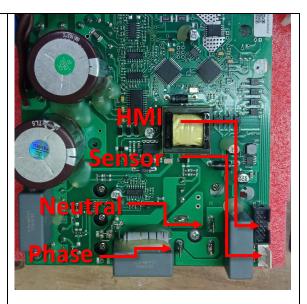
NOTE: There may be thermal paste underneath the heat sink, which may make a mess. It is recommended to have a piece of paper ready to place the extracted MCB onto.



- Whilst removing the control board, you may begin to disconnect wires connecting the control board to peripherals. This includes:
 - Two AC power cables (Phase and Neutral)
 - The white sensor cable
 - The grey HMI control ribbon
 - The 6-pin stator cable (not shown – pinch the buckle on the connector to release the cable)

Some of these cables may be glued down, this is so they don't fall off during shipping.

Carefully use your pliers to remove the glue before attempting to yank the cables off.



Caution: Double check that the power cable is not plugged in before touching electronics.

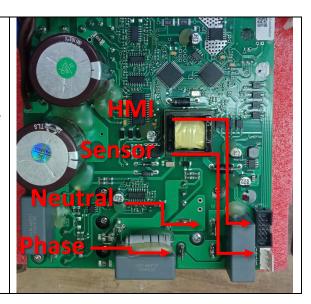
7 Remove the main control board from the headstock and replace it with the new MCB.



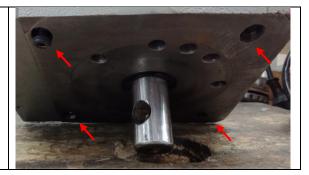
8 Attach the 6-pin stator cable, sensor cable, HMI control ribbon, and AC power leads to your new MCB as you are inserting the board into the headstock.

The polarity of the AC power leads (Phase and Neutral) is not important. Either terminal is fine.

Note: If you have removed the yellow & green earthing cables from the headstock, check that they are properly screwed back into the headstock.



9 Replace the four Allen screws underneath the headstock to secure the control board in place.



10 Replace the head cap plate with the 8 Phillip head screws you removed in step (4).

Once you are satisfied, replace the headstock back on the lathe bed. Check that the swivel pin is facing the correct direction so the locking pin will engage.

Congratulations - You have successfully replaced your MCB!