

Frequently Asked Questions

How to Change to 26 Pin Ribbon in the DVR

Date Raised: May 2003

Safe practises 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

Date Amended:

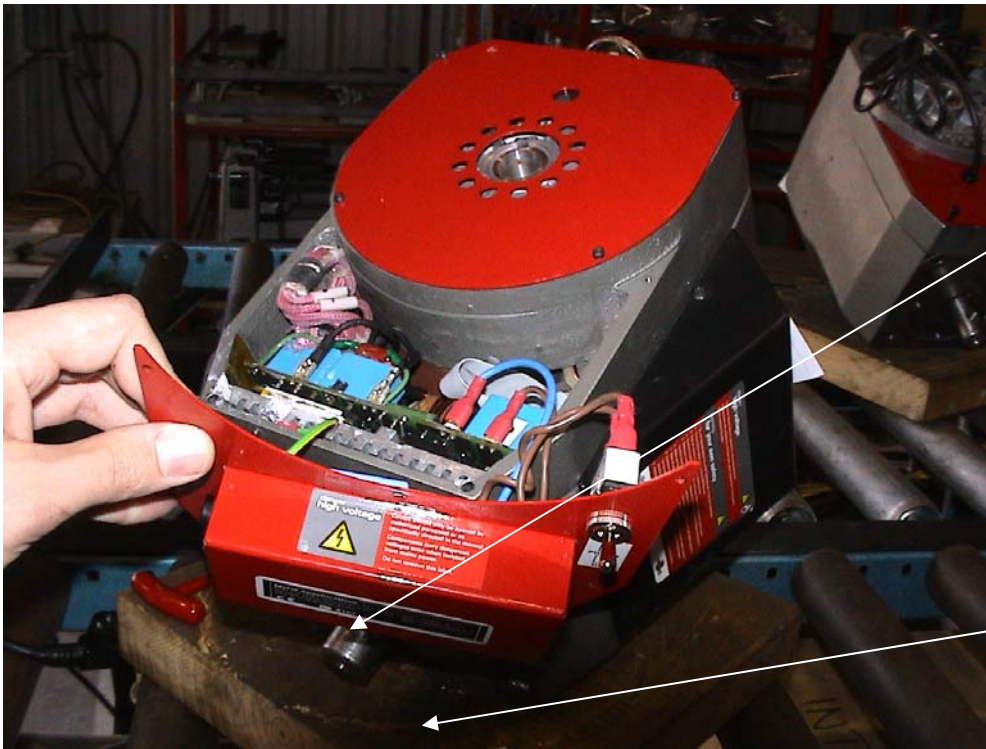
Question: How do I replace the 26 pin ribbon in my DVR Headstock to a shielded one?

Tools required: Allen Key 2.5mm
Allen Key 4mm
Long nose pliers
Headstock Extraction Lever and Bush (Available from Teknatool)
Phillips Screw Driver
The Shielded Ribbon

1. Ensure the lathe is unplugged from mains power and has been for at least 2 minutes.
2. The headstock will need to be taken off the lathe bed. Use the headstock extraction lever and bush to help pry the unit upward and lift the headstock onto a wooden bench gently leaning it forward on the nose (see photo below) Try and protect the thread from bumps etc. Instructions for using the lever are supplied in its kit.

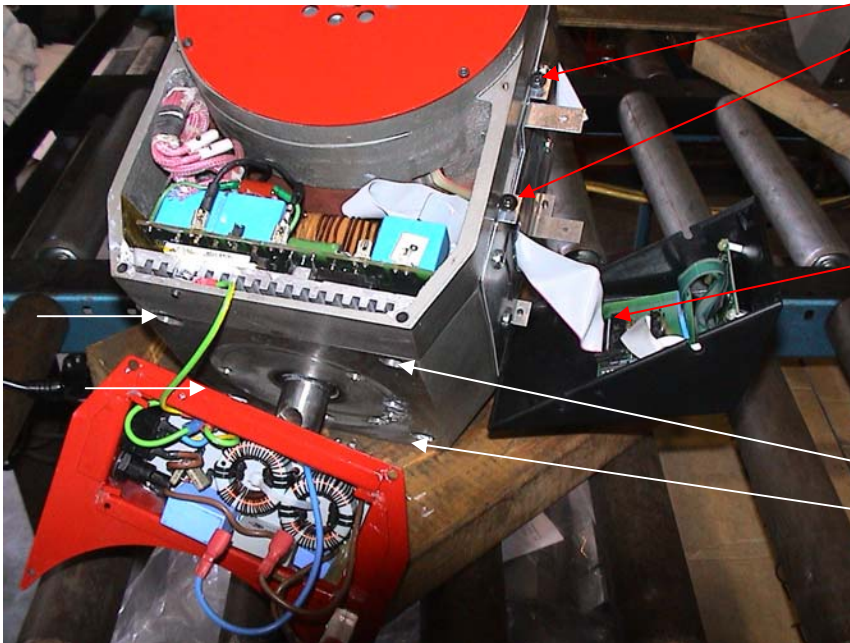
NOTE: The headstock weighs approx 40 KG so care and assistance may be required when lifting.

3. Unfasten the 4 Allan Head Cap Screws with a 2.5mm and 4mm Allen keys. Move the lower guard away from the headstock keeping in mind that the earth, phase and neutral wires are still attached.



Swivel Pin

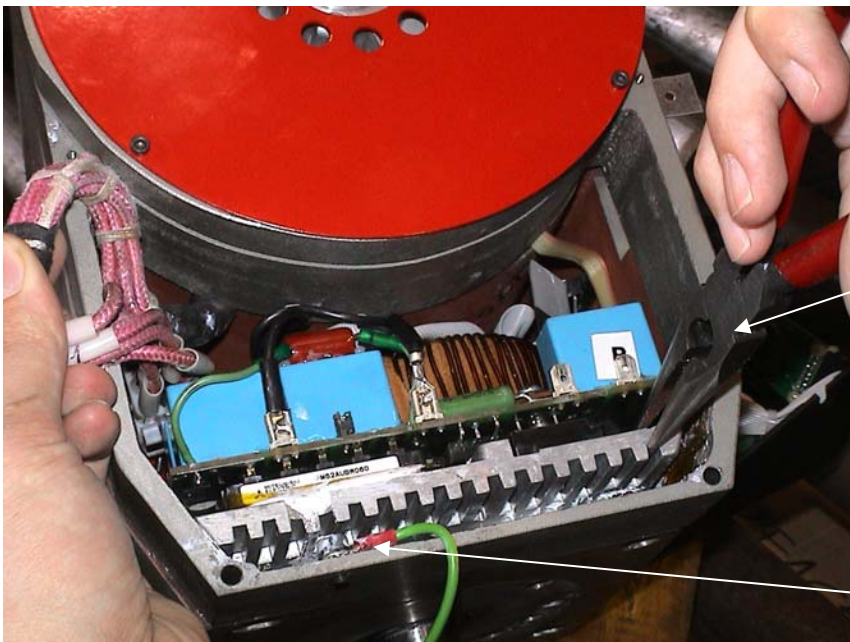
We place the headstocks on 2 inch thick 300mm x 300mm wooden blocks. A 35mm hole is drilled through so if we want to sit the unit upright, the swivel pin does not obstruct. This is a benefit as we can run-test the headstock before lifting it back onto into lathe bed.



Unfasten these a few turns to release the control cover. The ribbon will be connected and will have a blob of glue bonding the plug and receptacle together. The glue can be pulled off and the ribbon plug removed. Feed the ribbon plug through the hole on the side avoiding any scraping on the ribbon.

4 x Allen screws fasten the heat-sink to the headstock.

- Unfasten the 4 Allen screws (with a 4mm Allen Key) underneath the headstock. Carefully remove the Brown Phase wire and the Blue Neutral wire. Leave the earth connection in tact and position the lower guard underneath leaning on the swivel pin



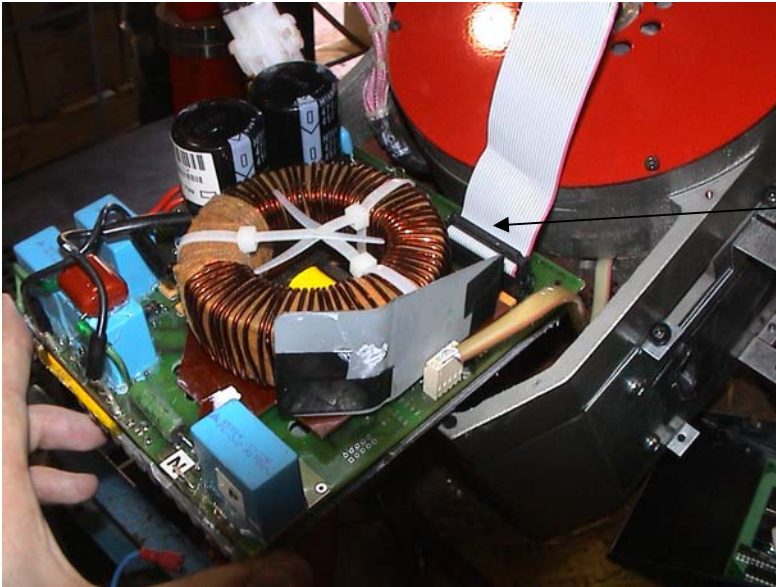
Pliers to hold onto the heat sink.

Earth Fastening

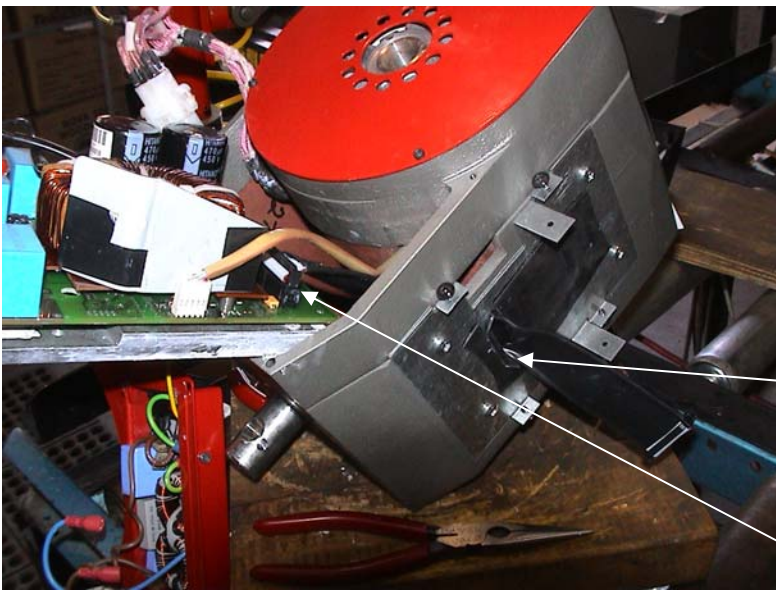
- Carefully locate the stator wiring (6 wires) that connects to the control board. Pull this out giving a clear track for pulling the board out. Be sure to not pull on the wires too much as this may pull the wires from the sockets. There you will see a white male/female plug. This may need to be carefully manoeuvred around the black circular electrolytic capacitors as the control board is pulled out. With some long nose pliers hold onto the aluminium heat sink where no components lie (Be careful not to touch the above control board). Pull the heat sink up about 5mm then pull the heat sink towards you

while keeping the 6 wires out of the way. You will need to move the heat sink over the earth fastening

NOTE: You will probably get the white zinc oxide on your fingers, which is not dangerous but can make a mess when it goes everywhere. The purpose of this is to fill and gaps/voids between the underside of the heat sink and the inside base of the headstock to ensure maximum heat dissipation



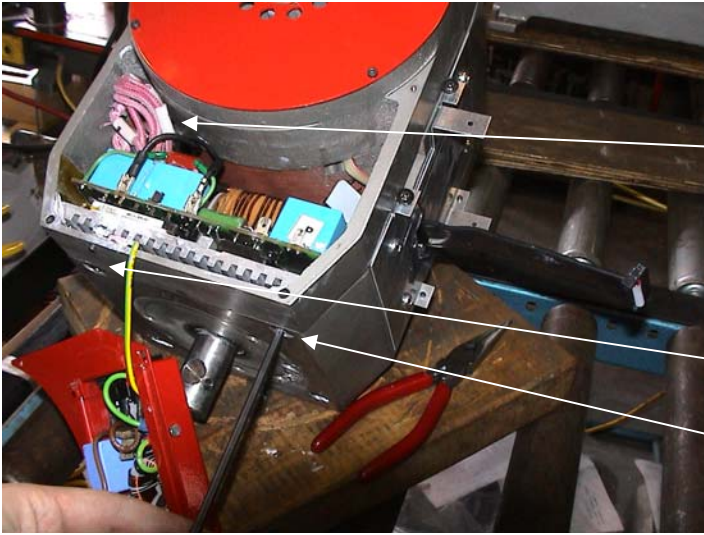
Hold the control board partially out and remove the 26 pin ribbon. Again some glue may need to be removed between the plug and receptor.



Feed the black shielded ribbon through the side slot and attach to receptor on control board.

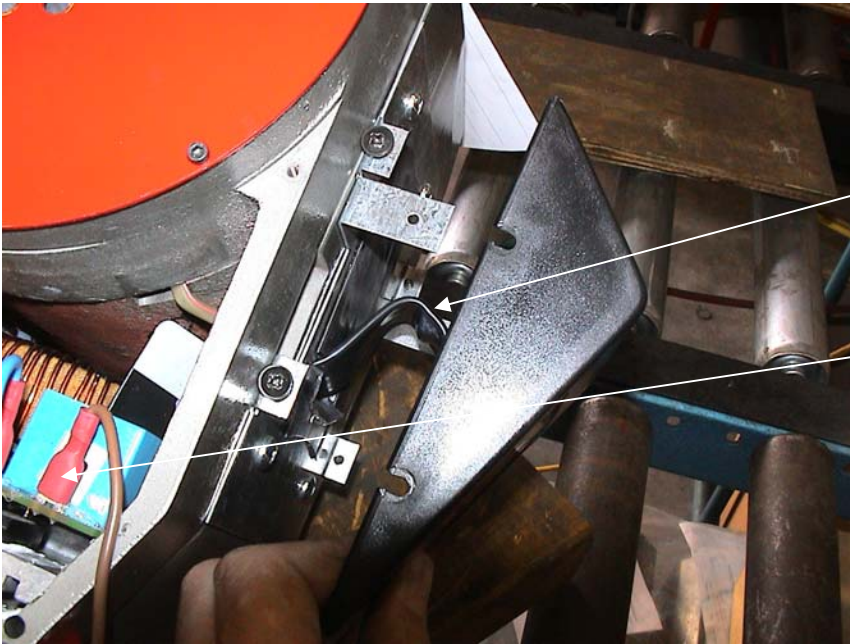
- Be sure that the end marked M/B is entered through the hole. This end needs to fit on the main board (control board).
- The square alignment tab on the plug will need to face down when poking it through. This is so the ribbon will not twist when being plugged onto the control board.

Attach here on control board.



Put the control board back in and push the 6 stator wires back in place.

Refasten the 4 screws under the headstock. Shorter fastenings may have been used at the holes at the end of the headstock.



Reattach the Brown Phase wire onto the right terminal and the Blue Neutral wire onto the left terminal

Reattach the control cover so the ribbon folds as shown in the picture. Refasten the 4 screws on the side.

6. Attach the lower guard and fasten the 4 Allen head cap screws.

QUALITY CHECK It is advisable to run the unit before putting it back on the bed so any loose connections don't involve more lifting on and off the lathe bed. Connect up the power plug and turn the DVR on. Check that all buttons on the keypad are functioning. Run the unit and try starting it from different positions of the spindle. Try numbers: 1,3,5,7,9,11,13 in the index window. The index lock should not be engaged. The numbers are just a guide to ensure each winding is firing.

7. Once you are satisfied with it working, it can be placed back on the bed. Check that the swivel pin hole is in the correct direction (facing back) so the headstock lock pin will engage.

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