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Frequently Asked Questions


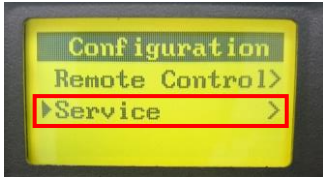

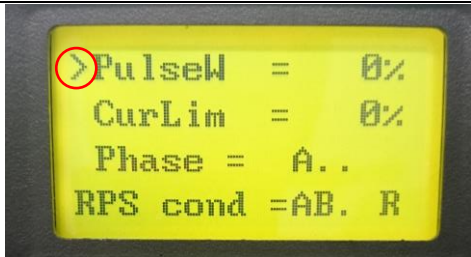
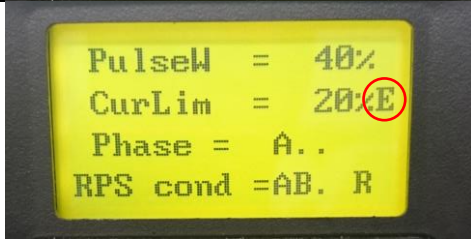
Rotor Position Test on the NOVA Voyager DVR Drill Press

Date Raised: 17 January 2017

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

Date Amended

To run the position testing function on the NOVA Voyager DVR Drill Press:

Step No.	Description	Image
1.	<p>Turn the Voyager drill press on and the enter service mode.</p> <p>To enter service mode, refer to FAQ: <u>How to Enter Service Mode on NOVA Voyager DVR Drill press</u></p>	
2.	<p>Press <Menu/ Cancel> and navigate down to the service menu by turning the dial.</p> <p>Press the dial to enter.</p> <p>Then enter the option of “Sensor Alignment”</p>	<div></div> <div></div>
3.	<p>When in the “Sensor Alignment” option each parameter value can be selected by pressing the dial. A letter “E” would appear on the right when the parameter is selected.</p> <p>Value of the selected parameter can be changed by rotating the dial.</p> <p>Tip: To change the values quickly, press and turn the dial.</p> <p>Set the parameter values to the following: PulseW = 40% CurrentLim = 20%</p> <p>Note: There should be a humming sound from the motor if it is working properly.</p>	<div></div> <div><p>Selecting parameter to change.</p><p>(Arrow on the left)</p></div> <div></div> <div><p>Changing the parameter value</p><p>(Letter “E” on the right)</p></div>

4.

Select the parameter “Phase”

This parameter value will appear as one letter out of [A,B,C]. This letter can be changed by turning the dial.

The parameter “RPS cond” gives the indication if the motor is in the correct position.

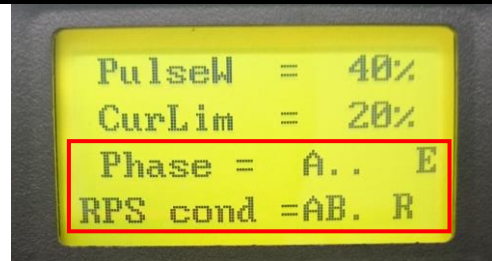
Output of the “RPS cond” should be corresponding to the “Phase” shown by the table below.

Correct Output	
Phase	RPS cond
A	B or AB.
B	C or .BC
C	A or A.C

Note:

Turn the spindle anticlockwise by hand to see if the “RPS cond” would change correctly

Change the letter of the “Phase” by pushing the dial once when selected.



Press <OFF> and then turn off the machine to clear all interim settings

For Reference: Default motor parameters

Parameter	Default Value
Profile	Normal
Kprop/ Kint	Varies
V kprop/ V kint	2000/ 9000
Vd DC Bus	360v
T Heatsink	-
T Threshold	60 degrees
Spd Err	-

Caution: Extreme changes to these parameters can result in undesirable and potentially unsafe behaviour