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## Frequently Asked Questions

### DVR Rotor Position Test why and when

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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](mailto:service@teknatool.com)

Date Amended

The DVR motor is integrated with a Rotor Position Sensor (RPS), drive control board and Human Machine Interface (HMI) which forms the control system of the motor.

RPS is an optical sensor that feeds back the spindle position of the lathe to the control board.

#### **Why rotor position test is needed:**

During the use of the lathe, a numerous amount of wood chips and dust will be building up in various parts of the machine. These accumulated debris may obscure the rotation position sensor optics and may lead to unexpected behaviour of the lathe during use. Most commonly if the sensor optics are obscured, damaged or disconnected you will be displayed with a flashing “**RP State Error**” on the LCD screen.

To check what is happening to the rotor position sensor when the “**RP State Error**” appears, rotor position test is required.

#### **When should the rotor position test be performed:**

If the lathe is behaving in an unexpected manner/ when the “**RP State Error**” is appearing on the LCD screen, the rotor position test should be performed. Before the rotor position test is performed, the following operations should be commenced:

1. Spin the spindle by hand and retry the motor
2. If step 1 did not solve the issue, disconnect the power. Open the machine to locate the electronics and vacuum or blow the dust out.
3. Some dust from step 2 may fall into the lower parts of the machine so suck or blow the dusts out from the vents.
4. Retry the motor

Repeat these steps a couple of times to see if the error will disappear.

If the error still remains after these procedures, you will need to check whether if the rotation sensor is correctly functioning by performing the rotation position test.

**To perform the rotation position test, the machine is required to be in service mode.**

To enter service mode and perform the rotor position test, follow the FAQ's found in section of:

- DVR Galaxi 1644
  - <https://teknatool.freshdesk.com/support/solutions/folders/19000147087>
- DVR 2024
  - <https://teknatool.freshdesk.com/support/solutions/folders/19000147085>
- DVR Voyager
  - <https://teknatool.freshdesk.com/support/solutions/folders/19000150922>