



Acorn External Rotary Encoder Troubleshooting

P/N 94001

Troubleshooting Issues with the Acorn External Rotary Encoder

Symptom

The spindle turns on and begins to ramp up to speed. Then, the spindle shuts down, and the control is locked up.

Error Code: #455 “Spindle Axis (5) encoder quadrature error.”

Checks

1. We turn the encoder by hand and the tach readout on the control page shows a changing RPM readout. The assumption is that the encoder is good.
2. We checked the wiring and the connections on the DB9 connector for the encoder, and they were good.
3. We removed the timing belt from the encoder pulley to disengage the encoder from the spindle pulley. We then went to the MDI screen and input “S300 M03.” The motor turned on and ran fine. We increase the S to 1000 and 2800. The motor RPM increased and ran fine.

Conclusion

The problem is in the encoder. We replaced the encoder, and that fixed the problem.

Thank you,
Sherline Products Inc.