

## **RPM Display Retrofit Instructions**

1. Replace existing Safety Collar with the new one provided. See photo 1.



Photo 1



Photo 2

- 2. Hold Sensor Bracket in position and mark and drill holes. You need a gap of about 2 4 mm from the Sensor to Magnet. See photo 2. **IMPORTANT:** Be cautious where you drill the holes, check the inside of the headstock.
- 3. Screw the Sensor Bracket in position with provided hardware.
- 4. **IMPORTANT:** For the steps below and Electrician may be required as there is high voltage inside the Inverter Box connected to the Variable Speed Drive (VSD).
- 5. Make sure power is not connected to the lathe. Feed the 2 core cable through an existing gland on the Inverter Box if possible. See photo 3.
- 6. **NOTE:** Inverter access will depend on the model of the lathe.





Photo 3





- 7. Connect the long white coloured 2 core cable to the inverter in the positions shown in photo 4 (white into the CM terminal and Brown into the PLC terminal).
- 8. Position the RPM display in desired position on the headstock (this can go anywhere as there is a magnet on the back). Undo the cable gland by hand and slide excess cable back into the box to keep as short as possible. Do the same with the 2 core cable to obtain your desired length and then retighten the cable gland by hand. See photo 5.
- 9. Before running the lathe make sure all cables are free from moving parts. You may need to add cable fasteners to ensure the cables are safely out the way.

**NOTE:** If connecting to another brand VSD or lathe. On a Fuji Drive, CM is 'common' or a 0 volt terminal. PLC and CM can be used to operate a lamp, relay or similar load when switched on/off as required. Most brands of VSD will have similar wiring to Fuji, but terminal names will be different. Essentially when you wire a contact between any X terminal and CM on Fuji drives, you are applying 24v to the X terminal. Some internal connections are already in place to facilitate this and you finalise the circuit with the external wiring and switch. All other brands of VSD operate along these lines.

