

Magnetic DRO Mounting instructions

Each machine is supplied a Generic type mounting hardware to fit "Optional" Optimum Digital Readout Reader heads (D692) and Magnetic Scales (D694) to connect to a 3 Axis Display (D690)

Some modification of the brackets and Drilling and tapping new and existing holes may be needed to fit to your machine, depending on the Model you have purchased.

Lathes have a slot in the Cross Slide, right hand side and a slot along the rear of the bed under the rear slideway for the fitting of the magnetic scale and cover strip,

Supplied with each machine

1 off each

"X,(Cross) & Y (Saddle),"
Axis Reader head mounting
brackets.

Mounting Fastener hardware
to suit..

Firstly roughly mark the position the reader head and wiper of each Axis will be located.
Checking to ensure there is enough travel in the slide movements and that the magnetic scale when fitted are always under them at both ends of full axis movement.



Fitting of magnetic Scale and protector strip.

Clean the groove it will be sitting in.

Mark and cut to length with sharp tin snips or similar, the brown magnetic strip and the stainless steel cover strip.

Carefully peel back the paper cover off the self-adhesive back of the Brown Magnetic strip and place it in position in the groove, smoothing it out by running your finger along it hard to push it down.

Carefully peel back the paper cover off the self-adhesive back of the silver stainless steel and place this on top of the magnetic strip smoothing it out by running your finger along it hard to push it down.

Magnetic DRO Mounting instructions

Accurately mark out and centre punch as needed, where the "X" & "Y" reader head bracket attachment screws will be and drill and tap holes M3 x ?? deep.

(depth depends on where the screw is positioned to ensure that the hole is not drilled through into lathe bed or other parts that may be damaged.)

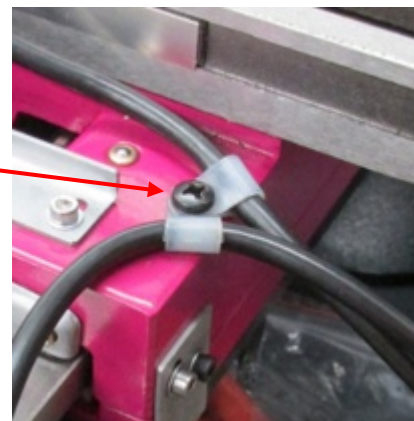
Reader heads/wipers are held on each bracket with 3 off M3 screws, with nuts and washers.

A "Wiper Plate" also needs to be fitted to the top of each Reader head as shown below.



Tolerance of the gap between reader head and magnetic scale is 0.3mm to 1.0mm. This allows for any variance due to depth of groove scale is fitted in etc. Put a 0.5mm washer between the head and scale, tighten the 3 screws and remove washer.

To protect the cable into the head a saddle supplied must be fitted as shown or similar position to all heads.



Position DRO Display were needed on the machine and fit cables to the rear of it.

Secure all excess cable to the rear of the machine allowing enough cable so machine can be wound to all Axis extremities without pulling on any cable,

Plug in and test all Axis

The Optimum (D690) Display can be changed for the cross (X) Axis to read on Diameter or radius
Follow instructions supplied with the Display "Function diameter-radius" .

Being

- . Turn off Display with I/O switch
- . Press and hold the MEM button while switching back on "I/O" switch
(to set Display into Parameters mode)
- .Ensure the Axis X is selected (LED on left of it is lit up!) (SEL button)
- .Then, to enter into "rd" parameter. Press MEM as needed to scroll through parameters until "rd" is found.
- .Press "INCH/mm" button to toggle from "1" or "0" ("1" is for Diameter)
- .Press MEM button to set and exit parameters..