

## Alignment of Glass Scales (Mechanical)

### Equipment.

Mechanical Dial Test Indicator.  
Magnetic Base.

### Purpose.

To set the scale reference plate. (This procedure should be carried out only if the reference plate has previously been moved or removed).

### Tolerance.

0.0004" (0.010mm)

### Method.

1. Attach the reference plate to the slide, and snug one bolt.
2. Mount the magnetic base and the dial indicator to the slide rail, so that the probe is touching the reference face of the reference plate.
3. Zero the dial indicator.
4. Move the slide until the adjustable side of the reference plate is on the dial indicator.
5. Adjust until the dial indicator reads zero.
6. Tighten both bolts.
7. Move the slide back to the starting position.
8. Repeat from three above if the dial indicator is not zero.
9. Bolt on the center spring clips.
10. While making sure that the scale is centered to the slide travel, insert the glass scale under the spring clips, and push against the reference plate. Care should be taken to ensure that pressure is applied to the scale at points directly below the reference surfaces. If a pressure of 1.1lbs (0.5Kg) or more is applied to the center of the scale, it **will** be distorted.
11. Let the scale normalize to the machine temperature for one hour.
12. Fit the spring clips and spacers to either end of the scale.
13. Locate the laser head, and snug up the mounting bolts.
14. Refer to the electrical alignment.