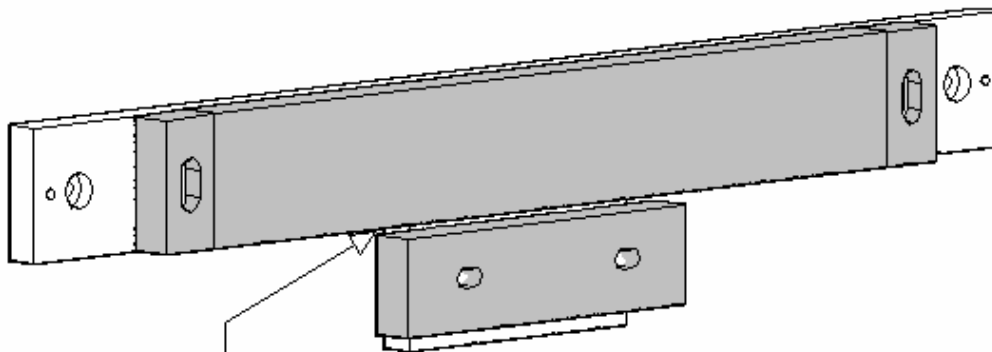




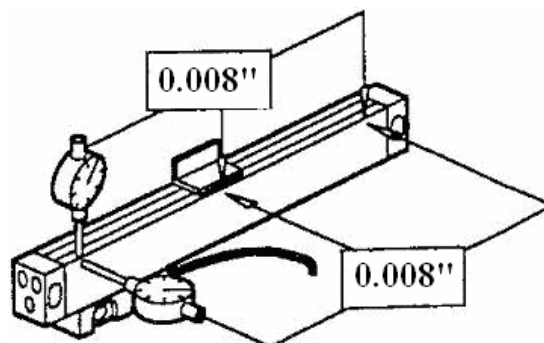
**** (ENGLISH SCREWS ARE SUPPLIED IN THE HARDWARE KIT TO MOUNT THE READER HEAD. THE METRIC SCREWS ARE NOT NECESSARY.) ****

SPACING



For M Series scales, the spacing between the scale and the reader head MUST be 0.040 inches (1mm) \pm 0.02 inches (0.5mm)

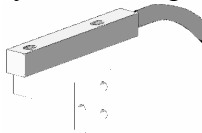
ALIGN THE SIDES OF THE SCALE by indicating the ends and the center.



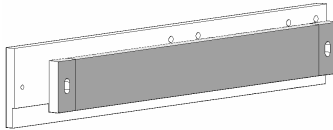
1. Affix the reader head bracket (BRS) to the reader head using the two 8-32 x 1 screws from the package-tie wrapped to the scale. (discard the 4 metric screws)



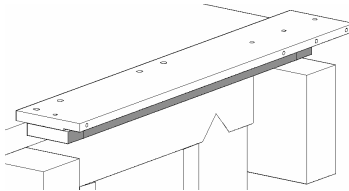
2. Make sure the cable comes out away from the operator at the back of the machine.



3. Place the scale onto the backer bar (BRL) using the two 8-32 x 3/4 screws from the package with the scale & space the scale approximately 3/16 from the lip.



4. Move the cross slide fully back toward the operator and set the BRL backer bar onto the cross slide with the BRS bracket back over the edge of the carriage. It may be necessary to modify the BRS bracket to fit so that the 10-32 screws hold the BRS onto the carriage and has adequate room to transfer, drill, and tap the holes to hold the BRS (reader head) bracket.



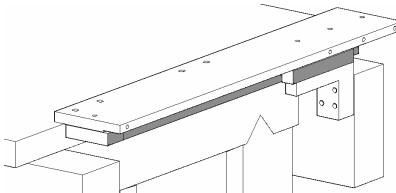
5. Make sure the BRL (backer bar) is positioned so that the turret can rotate 360 degrees and that when the cross slide is fully in, the reader head does not crash into the end cap of the scale. Transfer one of the 4 holes (the one nearest the operator) and drill and tap 10-32 into the cross slide.

6. With one screw in place, indicate the right edge of the BRL bracket as close as possible and transfer the other 3 holes (note: sometimes only 3 of the holes can be used due to the taper of the cross slide. Drill and tap 10-32 and put in the 10-32 BHCS.

7. When secure, indicate the scale in by the sealing lip to 0.005" or better.

8. The red spacer between the reader head and the scale is 1mm (0.040" approx.).

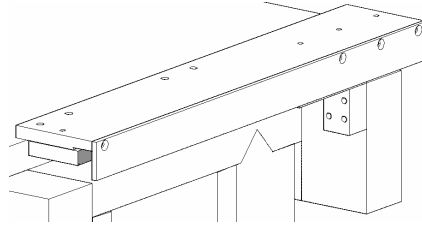
Keep this in place and transfer the two holes for the BRS bracket, drill and tap each and put in the 10-32 SCHS.



9. Remove the red plastic spacer and move end to end making sure that the scale has some travel at each end to avoid a crash also check to see that nothing is binding; the most common problem being a bind in the cable.

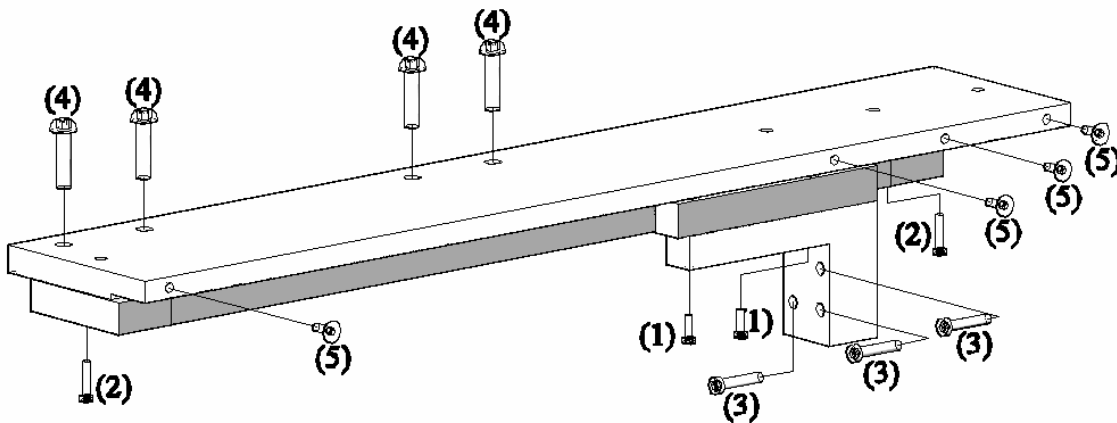
10. Move the cross slide from end to end and watch the counting (if the count is staggered or stops, re-indicate the scale and check the 0.040" space between the reader head and the scale.

11. Mount the scale cover onto the backer bar with four 8-32 x 1/2 FHCS.



Hardware

Code #	Quantity	Size	Description
1	2	8-32 x 1	S.H.C.S.
2	2	8-32 x 3/4	S.H.C.S.
3	3	10-32 x 1/2	S.H.C.S.
4	4	10-32 x 3/4	B.H.C.S.
5	4	8-32 x 1/2	F.H.C.S.



Recommended Tools

7/64 Hex Key	9/64 Hex Key
5/32 Hex Key	3/16 Hex Key
1/4 Hex Key	Screwdrivers
Wire Snips	Power Drill
No. 7 Drill	1/4-20 Tap
No. 29 Drill	8-32 Tap
No. 21 Drill	10-32 Tap
F Drill	5/16-18 Tap
Indicator with Base	6mm Hex Key
3mm Hex Key	1.5mm Hex Key