
NIRSPEC

UCLA Astrophysics Program

U.C. Berkeley

W.M. Keck Observatory

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NIRSPEC Optics Application Note 2.00 Installation of Guider Mirrors

Flat Mirror

1. Attach the mirror mount to the optical plate using five #8-32 screws.
2. Pull out the three spring-loaded retainers and rotate them 180° so that they rest on the L-bracket.
3. While bending the side spring back, place the mirror onto the two silver shims, and push it back against the three microadjusters.
4. Gently release the side spring, allowing it to push the mirror against the opposing silver shim.
5. Rotate the upper spring-loaded retainer back into place and gently release it down onto the mirror face.
6. Rotate the bottom two spring-loaded retainers back into place and gently release them down onto the mirror face.

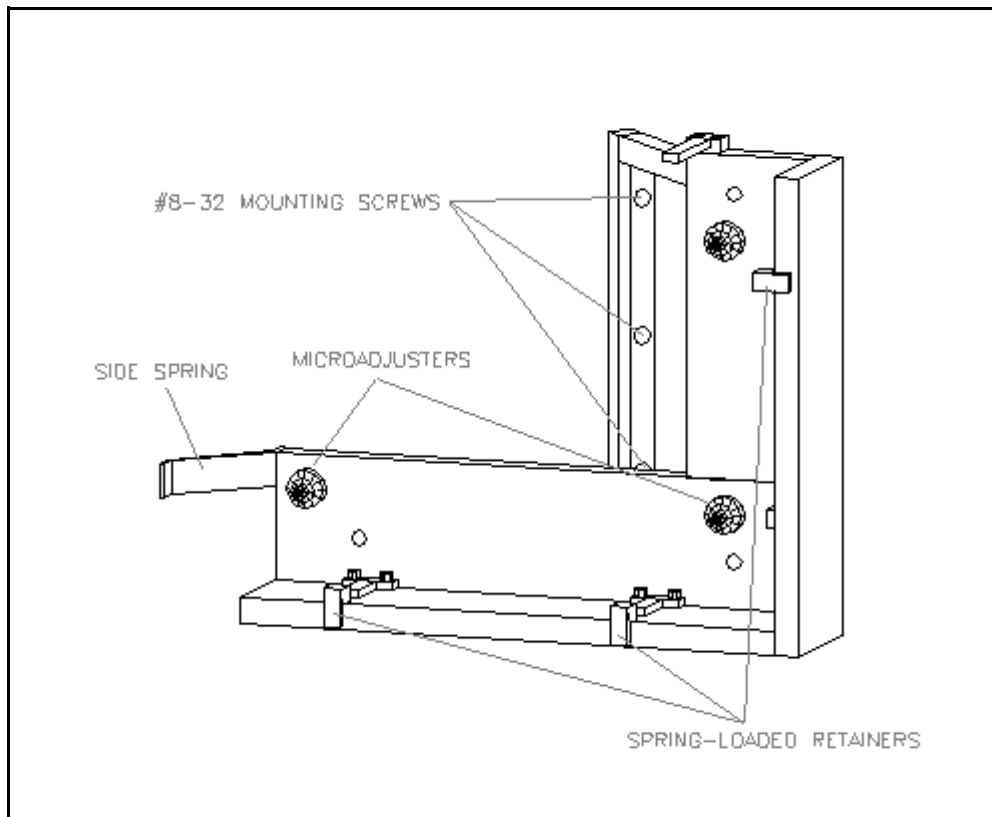


Figure 1. Flat Mirror Mount

Spherical Mirror

1. Attach the mirror mount to the optical plate using six #8-32 screws.
2. Make sure the four #8-32 screws locking down the two triangular supports are tight.
3. Pull out the bottom two spring-loaded retainers and rotate them 180°.
4. Loosen the screw on the top retainer foot and push the plunger completely against its housing.
5. Place the mirror onto the two triangular supports and push it against the three rear microadjusters.
6. Grab the bottom two spring-loaded retainers, rotate them back into place and gently release them down onto the mirror face.
7. Rotate the top retaining foot upward to clear the mirror, pull it in front of the mirror (making sure that keyed plunger fits into its cavity properly), and carefully rotate it back down onto the mirror face.
8. Tighten the screw on the top retainer foot.

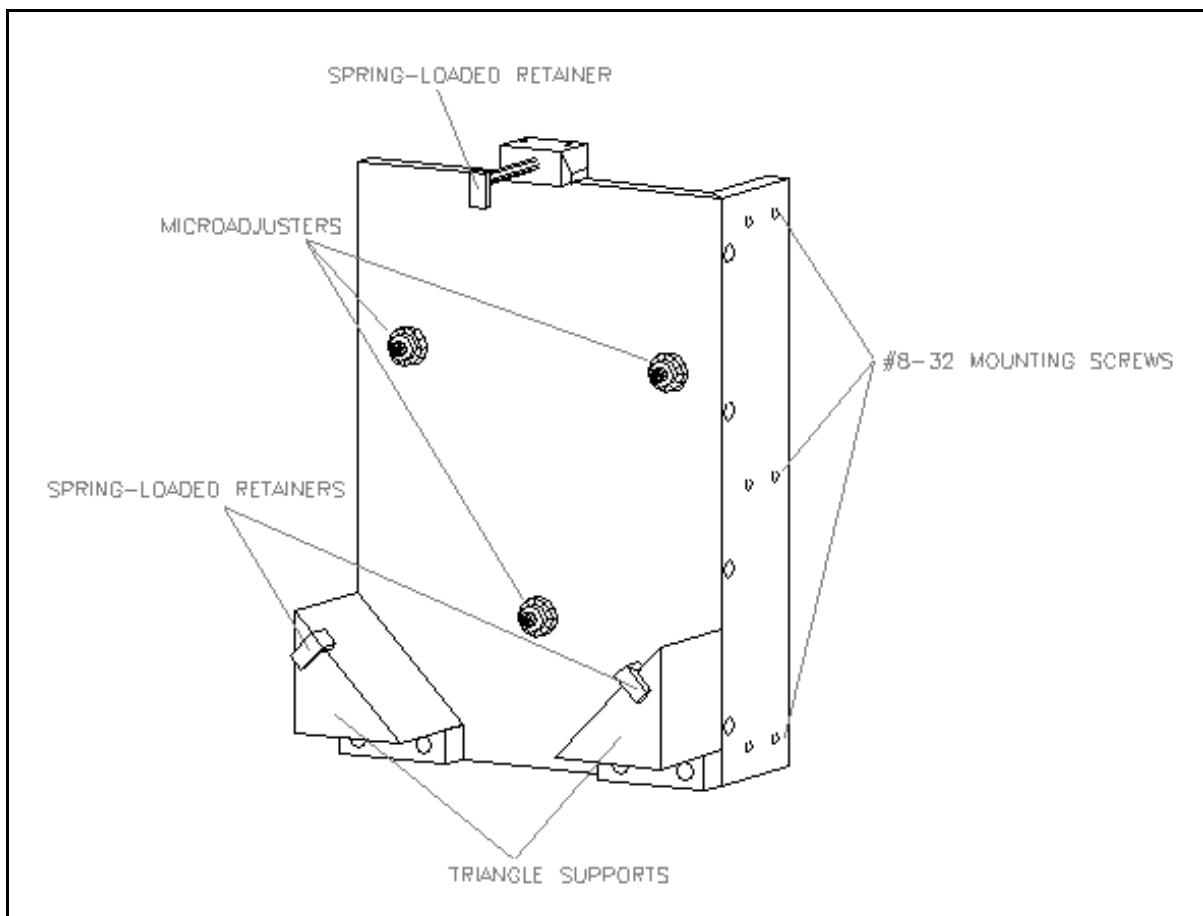


Figure 2. Spherical Mirror Mount