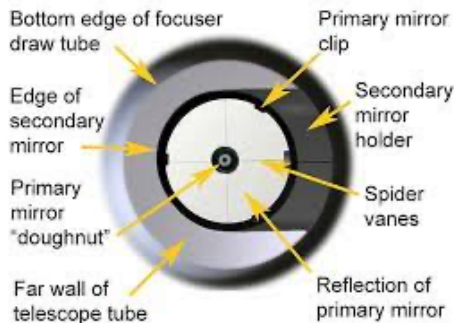


1.25" Aline™

- 1) Insert Aline into the focuser drawtube and point the telescope at the daytime sky. Looking into your Aline, you'll see a bright white disc with a black dot at its center. The black dot is the hole (pupil) through which you're looking and represents the center of your focuser's axis.
- 2) Make sure your secondary mirror is centered in the tube (by adjusting the vanes) and centered under the focuser by adjusting the secondary up or down in the tube using the center bolt and collimation screws in a push/pull manner.
- 3) Adjust the tilt of the secondary mirror so the primary mirror reflection is centered in the secondary mirror. This may entail rotation of the secondary on its center bolt, as well as simple tilt adjustment. Focuser, secondary mirror, and primary mirror reflection should all be concentric.
- 4) Adjust the tilt of the primary mirror until the primary mirror's center marker coincides with the black dot pupil reflection from the Aline. → turn over for step (5)
- 5) This aligns the primary mirror's optical axis with the center of the focuser and the focuser's axis. If your primary mirror has no center marker, adjust the primary mirror until the black dot pupil of the Aline is centered in the primary mirror reflection, though greater precision is obtainable with a center marker on the primary mirror.

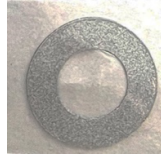


Bonus 😊

Enclosed with your Aline is a FREE highly reflective mirror center spot 5/8" diameter, should you desire to update your center spot for better visibility in your Aline during collimation under low light levels. [Directions are on the other side.](#)

Center Spotting Your Mirror

Please remove the center from the spot making it a "ring".



There is a wealth of videos on the internet on this topic. Just go to [youtube.com](https://www.youtube.com) and search for "center spotting a mirror". The basic steps they all follow are described below.

- 1) Obtain a stiff sheet of clear plastic slightly larger than your mirror.
- 2) Lay your mirror on the plastic sheet (mirror side up) and trace a ring around the mirror on the plastic sheet using a marker.
- 3) Find the "center" of the circle on the plastic sheet.
<https://www.wikihow.com/Find-the-Center-of-a-Circle>
This is your "centering" template
- 4) Cut a piece of scotch magic tape (or equivalent) just smaller than width of the ring.
- 5) Form it into a roll (sticky side out cylinder) and stick it on the center of the centering template.
- 6) Position the "ring" at the center of the centering template **reflective side down** against the sticky tape.
- 7) Carefully peel the backing off the "ring"
- 8) Flip the centering template over in the air and carefully position it over the primary mirror without the "ring" sticking to the mirror. Take time to ensure "ring" is centered and that you can hold the template in position securely.
- 9) Gently push the center of the template down to apply the center "ring"
- 10) Check that the "ring" is centered.
- 11) Carefully run a Q-tip around the "ring" to adhere it securely – ensuring no contact is made with the mirror surface.

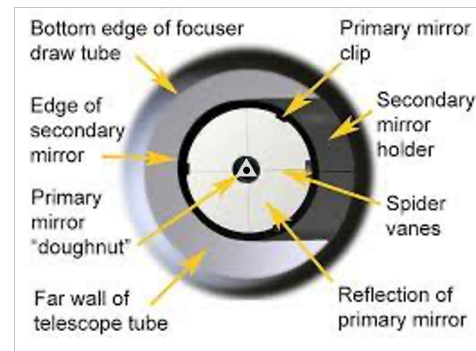
1 year limited warranty: Rigel Systems, 26850 Basswood, Rancho Palos Verdes CA, 90275 warrants to the original consumer purchaser of its product that the product will be free of defects in material or workmanship 1 year from the date of purchase under normal use. During this warranty period, Rigel Systems will, at its option, repair or replace the product without charge for parts or labor when delivered to Rigel Systems with proof of the date of purchase and a statement of the problem with the product. Shipping and handling charges to Rigel Systems are your responsibility. This warranty does not apply if the product has been altered or repaired by anyone other than Rigel Systems or has been subjected to purchaser abuse, accident, negligence or damage subsequent to purchase including battery damage to product. This warranty excludes incidental or consequential damages resulting from the product or use of the product. **The product is not a toy. Keep away from children.**

- 1) e.

2.00" Aline™

- 1) Insert Aline into the focuser drawtube and point the telescope at the daytime sky. Looking into your Aline, you'll see a bright white disc with a black disk at its center. The center of the black disk represents the center of your focuser's axis

- 2) Make sure your secondary mirror is centered in the tube (by adjusting the vanes), and centered under the focuser by adjusting the secondary up or down in the tube using the center bolt and collimation screws in a push/pull manner.
- 3) Adjust the tilt of the secondary mirror so the primary mirror reflection is centered in the secondary mirror. This may entail rotation of the secondary on its center bolt, as well as simple tilt adjustment. Focuser, secondary mirror, and primary mirror reflection should all be concentric.
- 4) Adjust the tilt of the primary mirror until the tips of the primary's triangular mirror's center marker just fits within the black disk reflection from the Aline..
- 5) This aligns the primary mirror's optical axis with the center of the focuser and the focuser's axis. If your primary mirror has no center marker, adjust the primary mirror until the black dot pupil of the Aline is centered in the primary mirror reflection, though greater precision is obtainable with a center marker on the primary mirror.



Bonus 😊

Enclosed with your Aline is a FREE highly reflective fat triangle mirror center spot, should you desire to update your center spot for better visibility in your Aline during collimation under low light levels. [Directions are on the other side.](#)

Center Spotting Your Mirror

Remove the center from the spot so it looks like this before applying to primary.



There is a wealth of videos on the internet on this topic. Just go to [youtube.com](https://www.youtube.com) and search for "center spotting a mirror". The basic steps they all follow are described below.

- 1) Obtain a stiff sheet of clear plastic slightly larger than your mirror.
- 2) Lay your mirror on the plastic sheet (mirror side up) and trace a ring around the mirror on the plastic sheet using a marker.
- 3) Find the "center" of the circle on the plastic sheet.
<https://www.wikihow.com/Find-the-Center-of-a-Circle>
This is your "centering" template
- 4) Cut a piece of scotch magic tape (or equivalent) just smaller than width of the ring.
- 5) Form it into a roll (sticky side out cylinder) and stick it on the center of the centering template.
- 6) Position the "ring" at the center of the centering template **reflective side down** against the sticky tape.
- 7) Carefully peel the backing off the "ring"
- 8) Flip the centering template over in the air and carefully position it over the primary mirror without the "ring" sticking to the mirror. Take time to ensure "ring" is centered and that you can hold the template in position securely.
- 9) Gently push the center of the template down to apply the center "ring"
- 10) Check that the "ring" is centered.
- 11) Carefully run a Q-tip around the "ring" to adhere it securely – ensuring no contact is made with the mirror surface.

1 year limited warranty: Rigel Systems warrants to the original consumer purchaser of its product that the product will be free of defects in material or workmanship 1 year from the date of purchase under normal use. During this warranty period, Rigel Systems will, at its option, repair or replace the product without charge for parts or labor when delivered to Rigel Systems with proof of the date of purchase and a statement of the problem with the product. Shipping and handling charges to Rigel Systems are your responsibility. This warranty does not apply if the product has been altered or repaired by anyone other than Rigel Systems or has been subjected to purchaser abuse, accident, negligence or damage subsequent to purchase including battery damage to product. This warranty excludes incidental or consequential damages resulting from the product or use of the product. **The product is not a toy. Keep away from children.**