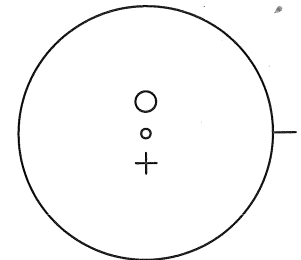
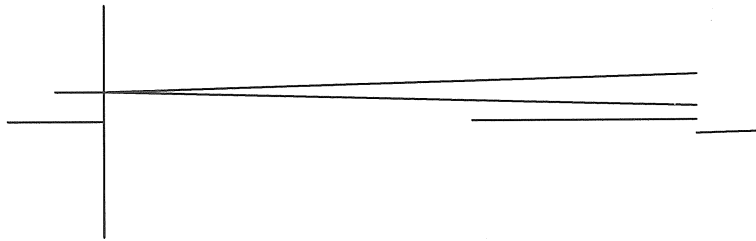


Rotation = 180 degrees

Leaving the instrument rotator at 180 degrees tilt the alignment telescope to bring the auto reflected image to the center of the field of the alignment telescope.

If possible translate the alignment telescope to bring the center of the target to the center of the field of the alignment telescope (this is not possible on the fixtures used on magellan)

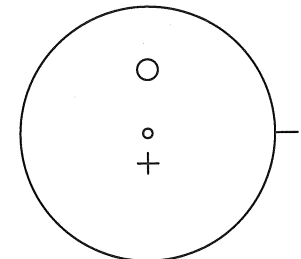
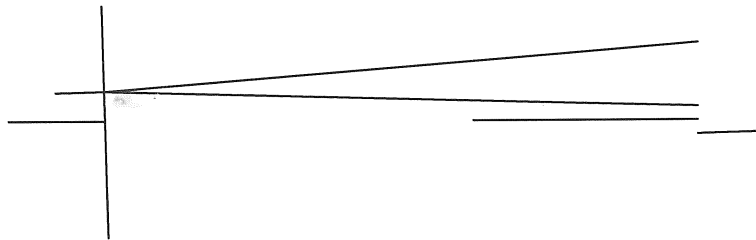
At this point the alignment telescope has its center on the instrument rotator axis and the optical axis of the alignment telescope is parallel to the axis of the instrument rotator.



Rotation = 180 degrees

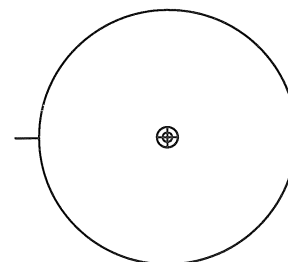
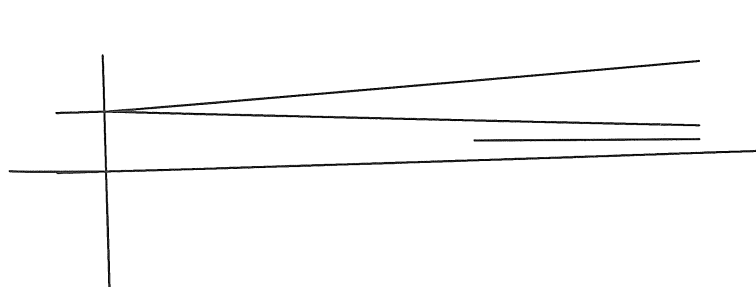
Leaving the instrument rotator at 180 degrees tilt the target mirror such that the auto reflection image of the front of the alignment telescope image is half way between its original position and the center of the field of the alignment telescope.

At this point the target mirror has its center on the instrument rotator axis and the surface of the target mirror is perpendicular to the axis of the instrument rotator.

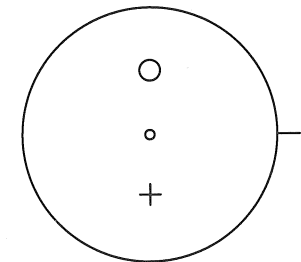


Rotation = 180 degrees

Leaving the instrument rotator at 180 degrees translate the target mirror such that its image is half way between its original position and the center of the field of the alignment telescope.



Rotation = 0 degrees



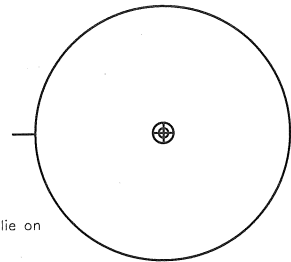
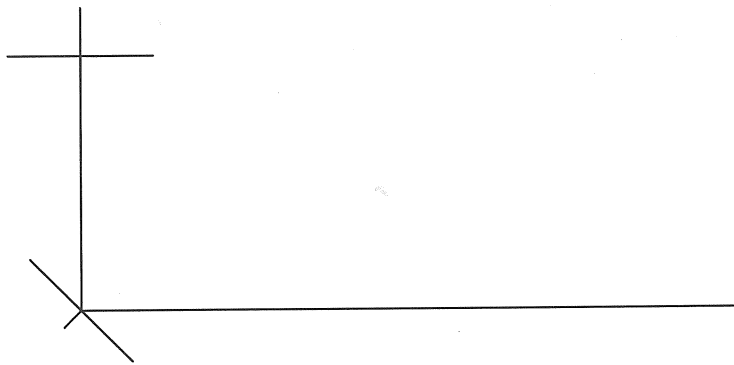
Rotation = 180 degrees

Install alignment scope in fixture in rotator, and install target mirror assembly in front of alignment telescope.

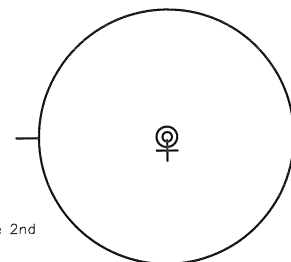
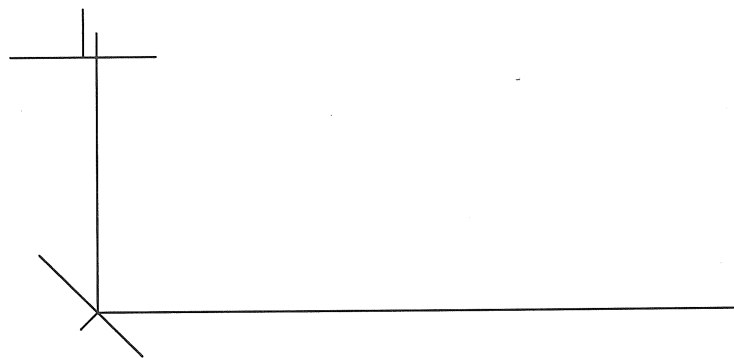
Translate target mirror such that the center of the target mirror is centered on the crosshairs in the alignment telescope.

Tilt the target mirror such that the image of the front of the alignment telescope (auto reflect image) is centered on the crosshairs in the alignment telescope.

Rotate the instrument rotator 180 degrees and note the position of the target mirror center and the auto reflect image center.

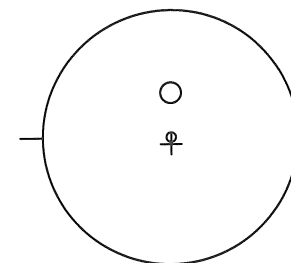
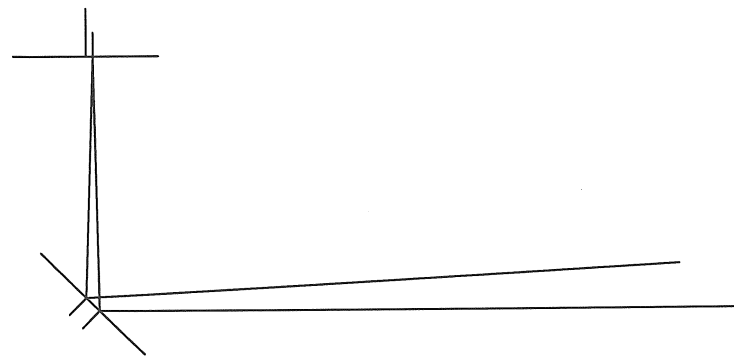


Once the 3ry has the proper piston and tilt the auto selected image and the image of the center mark on the 2nd should both lie on the center of the alignment telescope



Tilt the 3ry mirror until the autocolimated image is centered in the alignment telescope. The image of the center mark on the 2nd will then be slightly offset from the center of the alignment telescope

If the mark on the 2nd is low wrt the autoreflected image the 3ry needs to be retracted, if the mark is hi then the 3ry needs to be pistoned out.



Starting assumption is that the alignment telescope is on the rotator axis and that the secondary mirror is concentric with and perpendicular to the casigrain rotator axis.