

# INSTALLATION AND ALIGNMENT

Select from the following CONFIGURATIONS and follow the appropriate instructions:

## CONFIGURATION 1: FIRST ITEM IN THE BEAM PATH IS A POST MOUNTED MIRROR OR REFLECTOR

7A

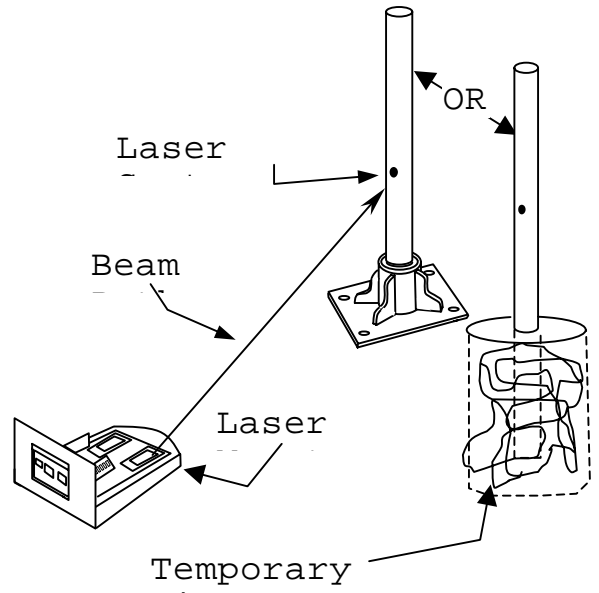
**NOTE:** THE MOUNTING POSTS HAVE NOT BEEN PERMANENTLY ATTACHED AT THIS POINT.



1. At the Transceiver, while holding the laser mount to prevent it from turning, loosen the Union under the laser mount by rotating it clockwise as viewed from above. Aim the laser until it is hitting the Mirror/Reflector Mounting Post at the desired height. The beam will be readily seen as a bright red spot on the Mounting Post.



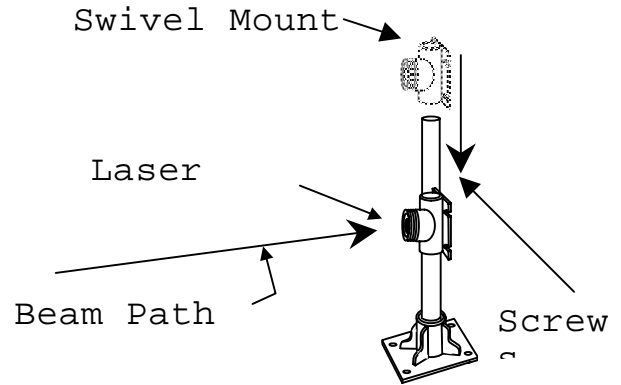
2. Tighten the Union, making sure you have not moved the laser.



## ATTACH A SWIVEL MOUNT TO EACH POST



1. Slide a Swivel Mount downward over the Mounting Post until the Laser Spot appears in the center of the face of the Swivel Mount as shown at the right.

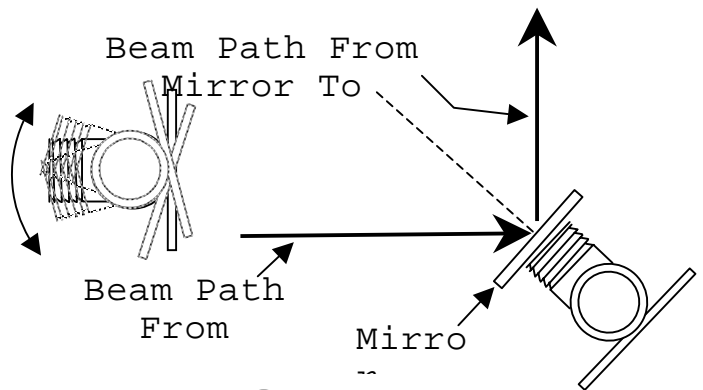


## ALIGN THE SWIVEL MOUNT HORIZONTALLY

Rotate the Swivel Mount to the left or right while viewing the Mounting Post from above.



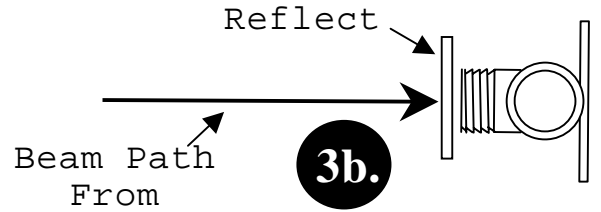
3a. If a **MIRROR** is to be mounted onto the Swivel Mount, rotate the Mount so that it faces a point approximately half way between the Transceiver and the selected location for the Reflector. The Laser Spot should be in the middle of the face of the Swivel Mount. (See Illustration 3a.)



3a.



3b. If a **REFLECTOR** is to be mounted onto the Swivel Mount, the face of the Mount should be perpendicular to the beam path. The Laser Spot should be in the middle of the face of the Swivel Mount. (See Illustration 3b.)

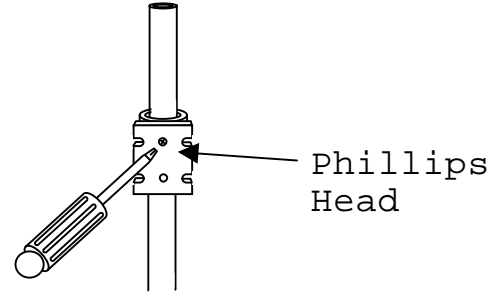


#### LOCK THE SWIVEL MOUNT TO THE POST



4. While holding the Swivel Mount to prevent it from turning on the Mounting Post, tighten the Phillips head screw on the back of the Swivel Mount.

**NOTE:** THE MOUNTING POSTS HAVE NOT BEEN PERMANENTLY ATTACHED AT THIS POINT.



### SKIP TO STEP 8

7B

#### CONFIGURATION 2: FIRST ITEM IN THE BEAM PATH IS A WALL MOUNTED MIRROR OR REFLECTOR.



1. At the Transceiver, while holding the laser mount to prevent it from turning, loosen the Union under the laser mount by rotating it clockwise as viewed from above. Aim the laser until it is hitting the wall or other surface at the proper height. The beam will be readily seen as a bright red spot on the wall.

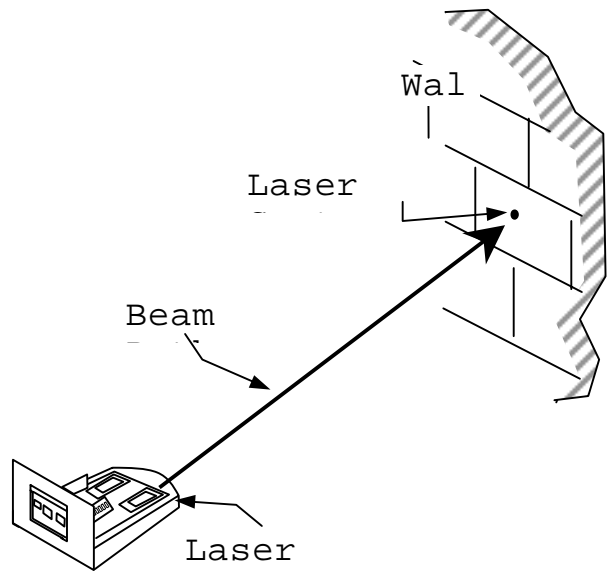
If the surface does not allow the laser spot to be seen readily, a piece of white paper may be taped to the surface temporarily.



2. Tighten the Union, making sure you have not moved the laser.



2. By holding a Swivel Mount against the wall, determine that it can be mounted so that the Laser Spot will hit in the center of the face of the Swivel Mount.

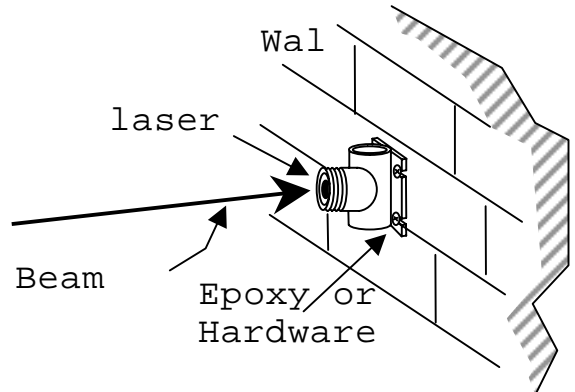


#### COMPLETE THE INSTALLATION OF A SWIVEL MOUNT TO A WALL



4a. If the Swivel Mount is to be attached with epoxy, follow the procedures described on page 9 for applying epoxy to the unit. Use a fresh Mixing Nozzle.

Press the Swivel Mount firmly against the wall, making sure the Laser Spot is still hitting the center of the face of the Swivel Mount. Hold for 2 minutes, then let the adhesive dry for 15 minutes before attaching a Mirror or Reflector to the Swivel Mount.





4b. If screws are to be used to attach the Swivel Mount to a wall or other surface, follow the procedures described on page 11.



5. **If both laser beams are being used, repeat these procedures for the second Beam Path.**

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**ATTACH THE MIRRORS AND REFLECTORS**

**NOTE - A REMINDER:**

The Mounting Posts have not been permanently attached at this point. Try to keep the Posts from moving while attaching the Mirrors or Reflectors.



1. Attach the Mirror or Reflector by inserting the attached ball into the mating ball socket on the Swivel Mount.

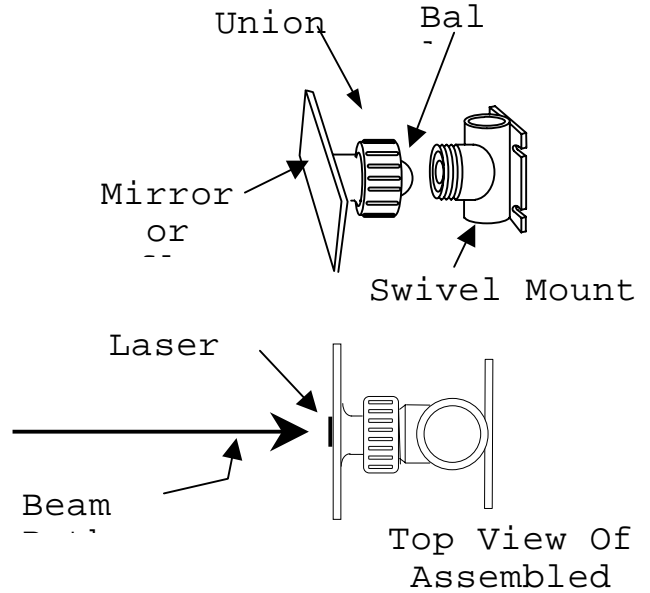


2. Align the threads of the Union with the threads on the Swivel Mount and rotate the Union clockwise to tighten. Do not over-tighten -The Mirror or Reflector should be movable for adjustment purposes.



3. Remove protective film from Mirrors.

4. The Laser Spot should be readily visible in the center of the Mirror or Reflector. If it is not, the Mounting Post may have been moved during this step. Realign the Mounting Post as necessary to get the Laser Spot back to the center of the Mirror or Reflector.



**8A**

**IF ONLY REFLECTORS WERE INSTALLED...**

If a single beam system is being installed, with a Reflector as the only object; or a two beam system with Reflectors as the only objects in both beam paths, the Reflectors should now be aiming directly at the Transceiver, and the Laser Spot should be visible in the center of each Reflector. If not, adjustments may be made as follows:

- Loosen the Union and move the Reflector right-left or up-down.
- Loosen the Phillips screw on the rear of the Swivel Mount Tube and rotate the Mount right-left or slide it up-down on the Mounting Post.
- Rotate the Mounting Post right-left.



**Proceed to the STEP 9:  
"TIME FOR A QUICK SURVEY OF THE SYSTEM"**

