#### **GRAFLEX** Incorporated



## Graflex Technical Manual Technical Notes

# Boresight Compensation Device (BCD) Adjustment Instructions

**GT-BCD** 

#### **REVISION HISTORY LOG**

Revision	Effective Date	Description of Change
3	2011-06-12	Document Release
4	2012-03-12	BCD adjustment instructions expanded
5	2014-15-08	Add 4 Point instructions

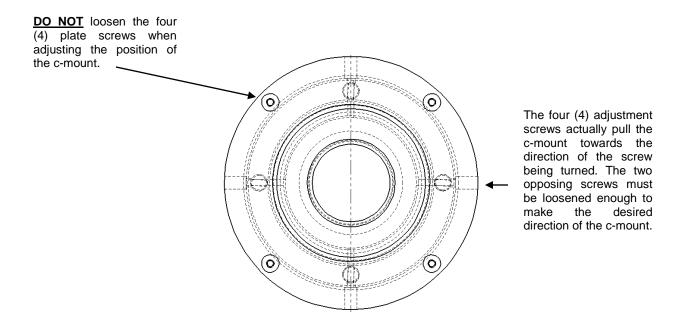
#### 1. PURPOSE

The BCD is used to attain the very best boresight retention across focal length range by moving the C/CS-mount to any position perpendicular to the optical zoom axis of the zoom lens. The BCD allows the user to calibrate the position of the camera should the CCD chip not be exactly centered to the optical axis of the lens.

### 2. DEFINITIONS

**BCD** = Boresight Compensation Device

#### 3. REFERENCES



#### 4. PROCEDURE

- 1. Screw camera securely onto the Graflex installed BCD. Loosen adjusting screws on your camera mounting collar; rotate your camera until the camera horizon is properly aligned.
- 2. Check boresight retention through the zoom range. If adjustment is required go to step 3.
- 3. Loosen the four "adjustment screws" on the BCD circumference so that the head of the screw is completely out of the outer flange. NOTE: Be careful not to loosen "adjustment screws" more than necessary as it may be difficult to replace a screw that is completely removed.
- 4. To set Boresight.....
  - a) With camera connected to Lens, run zoom all the way out (full zoom). Place an "X" in the center of your monitor and bring lens to full wide view. Notice the travel away from the center "X".
  - b) Because the adjustment screws <u>PULL</u> the camera towards that screw being turned, tighten the screw that would PULL the image back to the center "X", then adjust the opposite screw to help pull the image closer to the center.
  - c) Repeat process at the axis 90 degrees apart.
- 5. Once Boresight is complete, check to make sure all adjustment screws are under tension (to assure camera / Boresight does not move). Then apply a sealant, such as Glyptol, or RTV to the "adjustment screws" to prevent movement during vibration.

Page 2 of 2 Rev. Date: 11-02-2011 Written By: MDM Document #: GT-BCD Revision: 4 Note: IF THIS DOCUMENT IS HELD ON PAPER, IT SHOULD BE CONSIDERED "UNCONTROLLED". PLEASE CONSULT