

# **GENERAL DYNAMICS**

SATCOM Technologies

**4096-135**  
**Rev A**  
**July 28, 2009**

**ASSEMBLY MANUAL**

## **Feed Retrofit Installation Instructions**

**General Dynamics**  
**SATCOM Technologies**  
**1500 PRODELIN DRIVE**  
**NEWTON, NC 28658**

# Feed Retrofit Installation Instructions

| REV. | DESCRIPTION                                 | DATE     | APPROVED |
|------|---|----------|----------|
| A    | Revised Company Name, Logo, and Part Tables | 7/28/09  | RAH      |
| -    | ORIGINAL RELEASE                            | 10/09/93 | RF       |
|      |   |          |          |
|      |   |          |          |
|      |   |          |          |
|      |   |          |          |
|      |   |          |          |
|      |   |          |          |
|      |   |          |          |

## **SECTION 1**

### **FEED ROD CLEVIS ATTACHMENT**

Drill a 1/2" diameter hole through the reflector's petals in the location shown in figures 1, 2 or 3 (2.4 meter, 3.0 meter or 3.7 meter).

Run a 1/2" nut up the threads of the reflector clevis and place a 1/2" flat washer against the nut. Place the clevis through the hole drilled in the reflector petal from the front side and secure with a 1/2" flat washer, lock washer and nut. Tighten these nuts only hand tight at this time. The clevis assemblies should now appear as shown in figure 4.

## **SECTION 2**

### **FEED INSTALLATION**

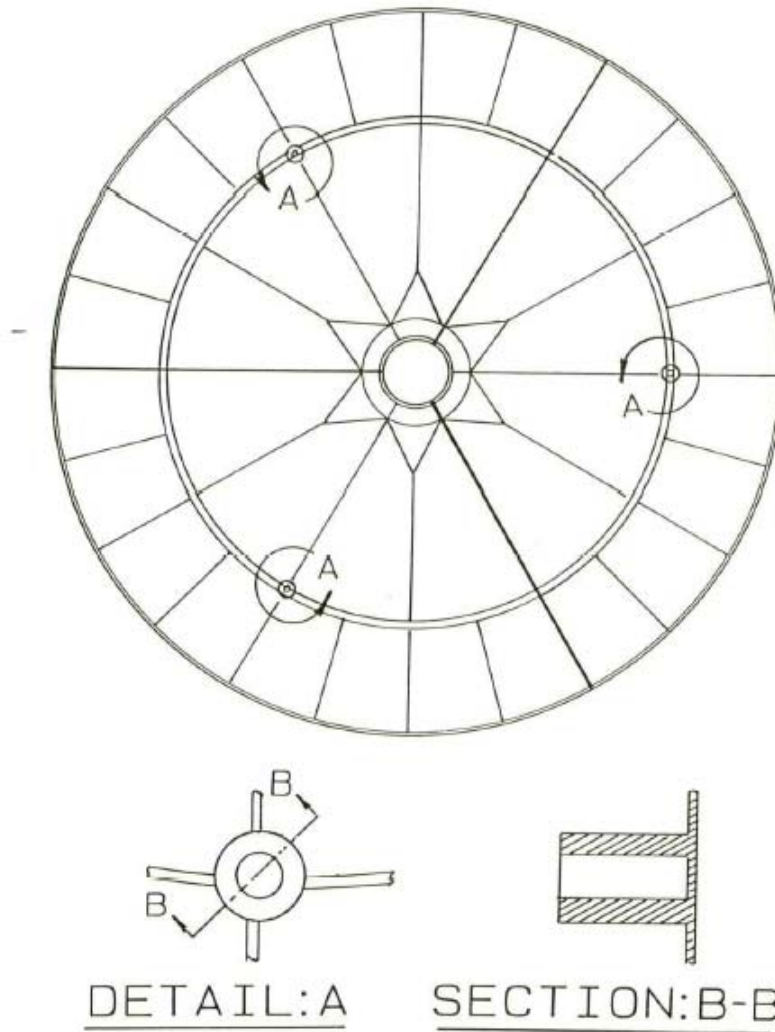
For C/Ku-band feeds, attach the feed mounting brackets to the feed (not supplied) with the 1/4" hardware provided.

Attach the straight end of the feed rods to the clevis's, and the other end to the feed horn with the 3/8" hardware provided. Refer to figure 5. Tighten this hardware securely at this time.

Refer to figure 6 for the correct focal length for your size reflector and make any adjustment necessary by moving the clevis's in or out at the reflector. When the focal length is correct, and all clevis's are equal in length, tighten the 1/2" hardware at the reflector securely.

Attach the LNB/LNB's (not supplied) and adjust polarization. For single pole Ku-band applications, attach the feed cover as shown in figure 7.

## 2.4 Meter Reflector



LOCATE (3) THREE CORED BOSSES ON THE REAR OF THE REFLECTOR.  
REFERENCE DETAIL: A AND SECTION B-B.

DRILL 1/2" DIA. HOLE THRU REFLECTOR IN EACH OF THE 3 BOSSES.

**Figure 1**

### 3.0 meter Reflector

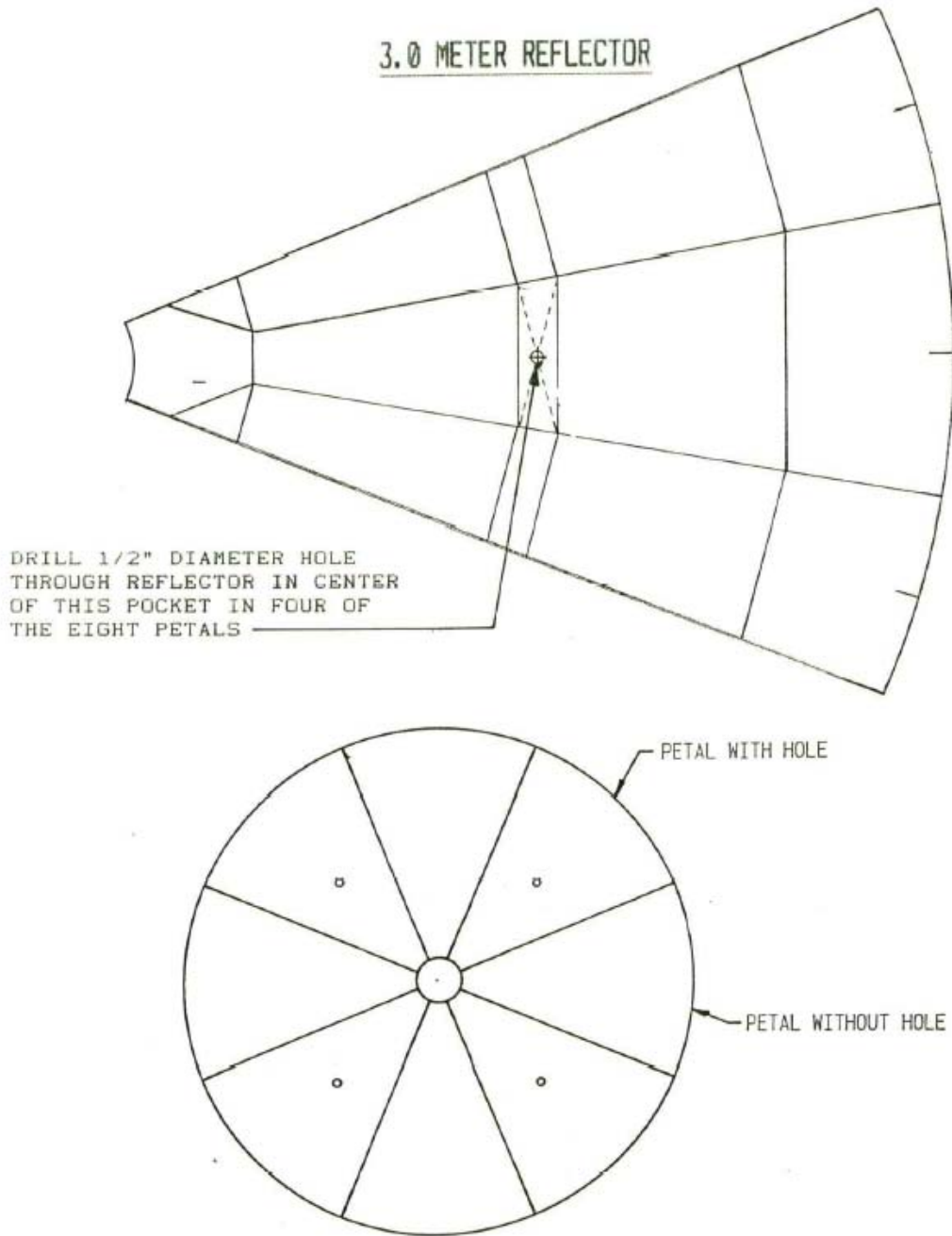


Figure 2

### 3.7 Meter Reflector

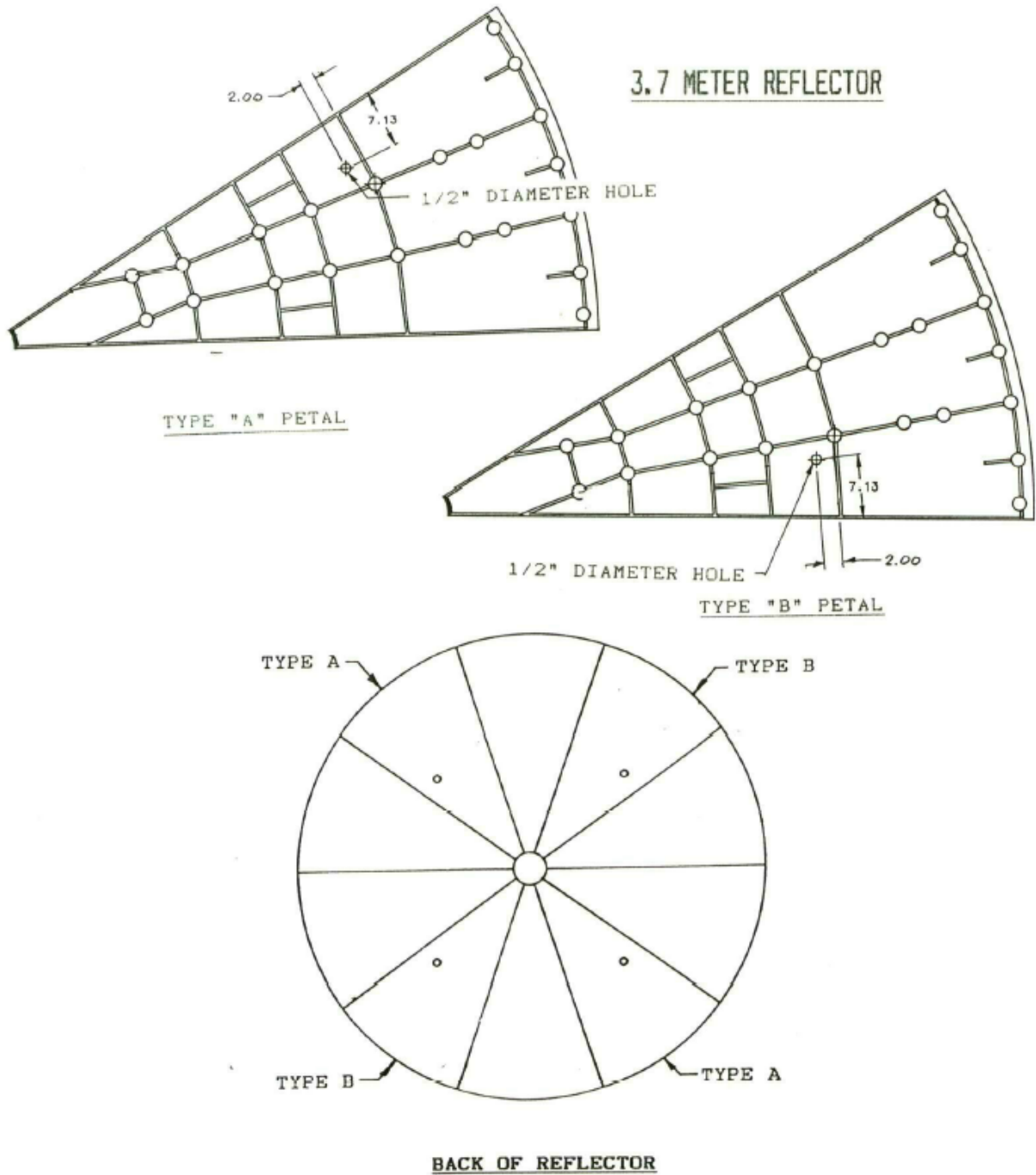


FIGURE 3

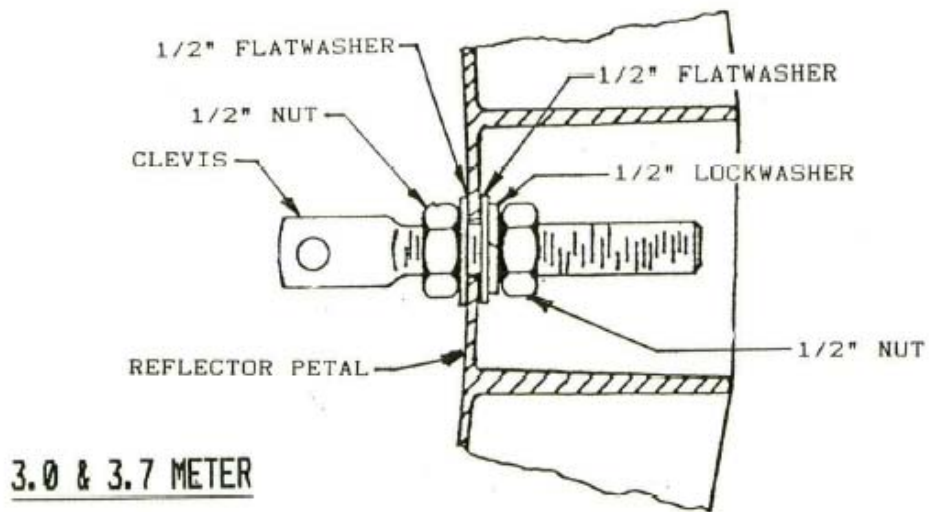
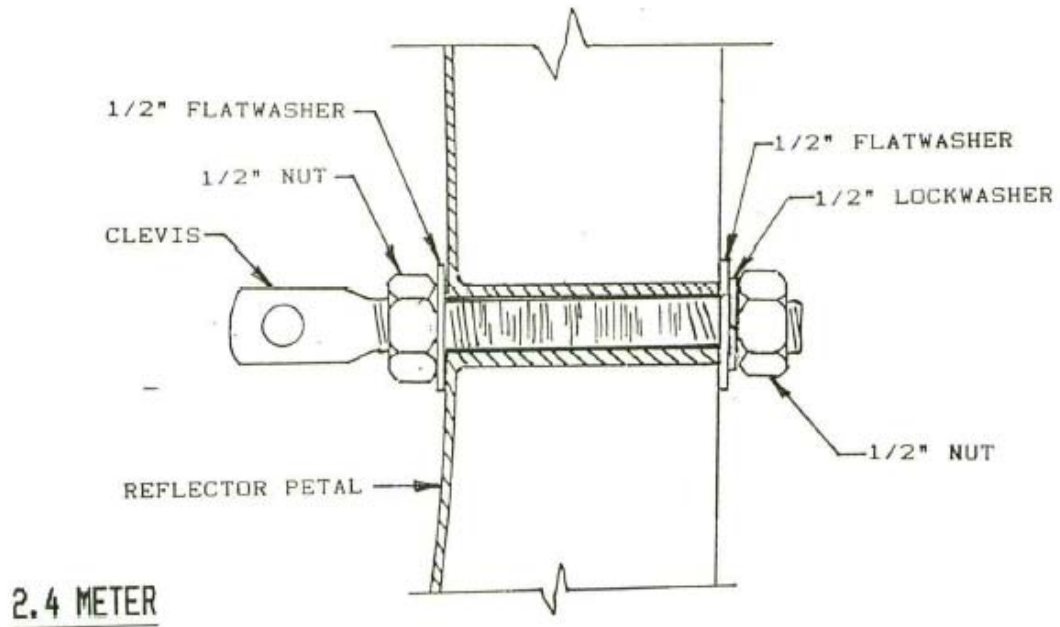


FIGURE 4

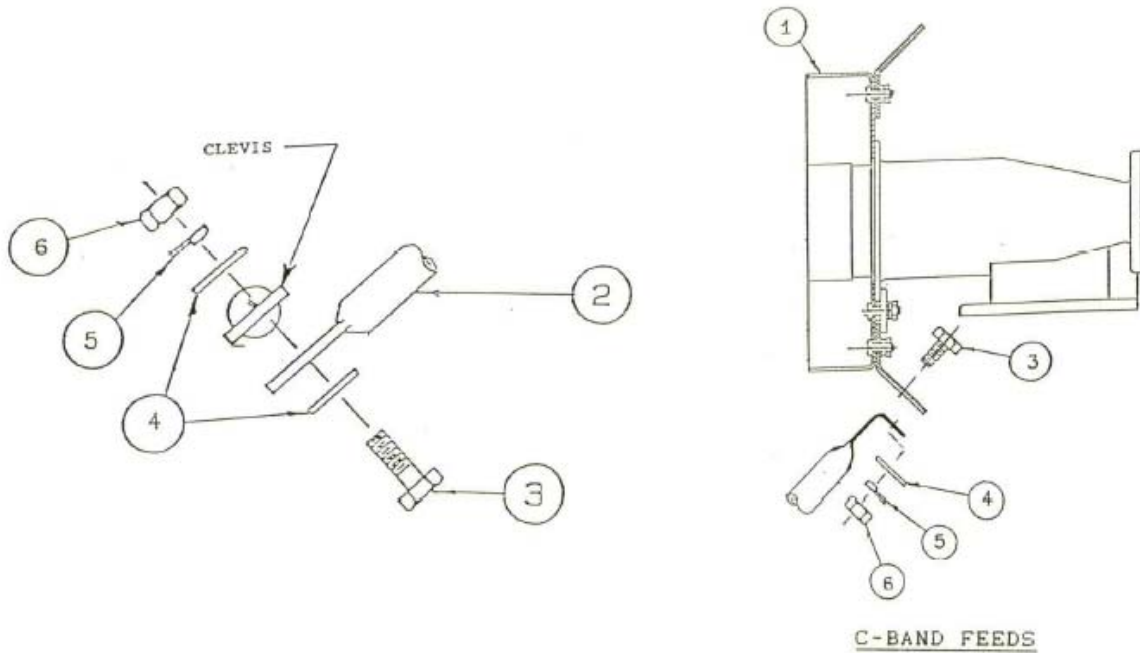
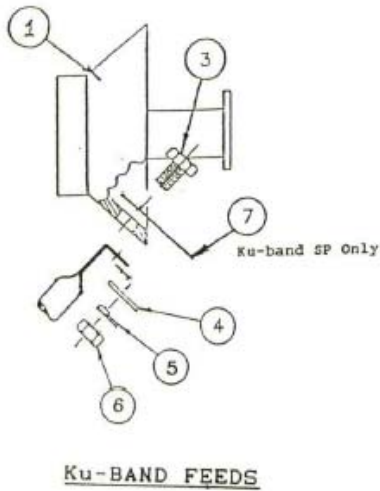
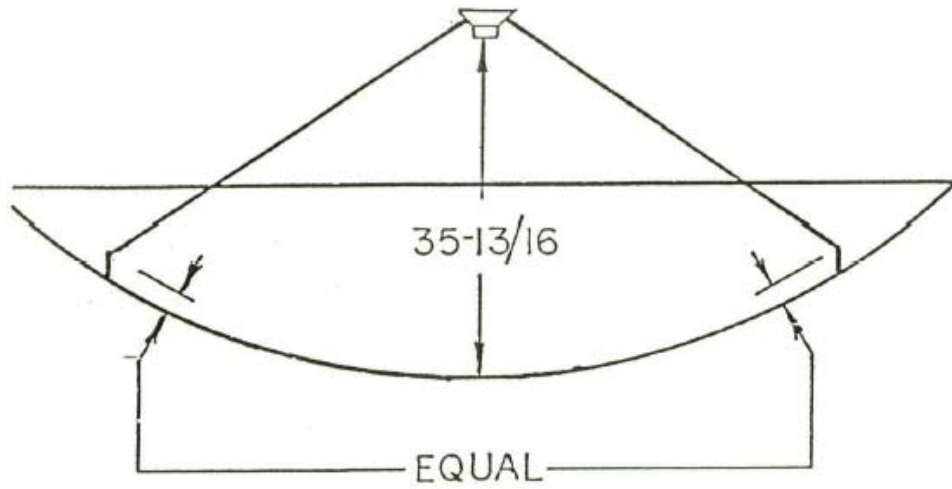


FIGURE 5

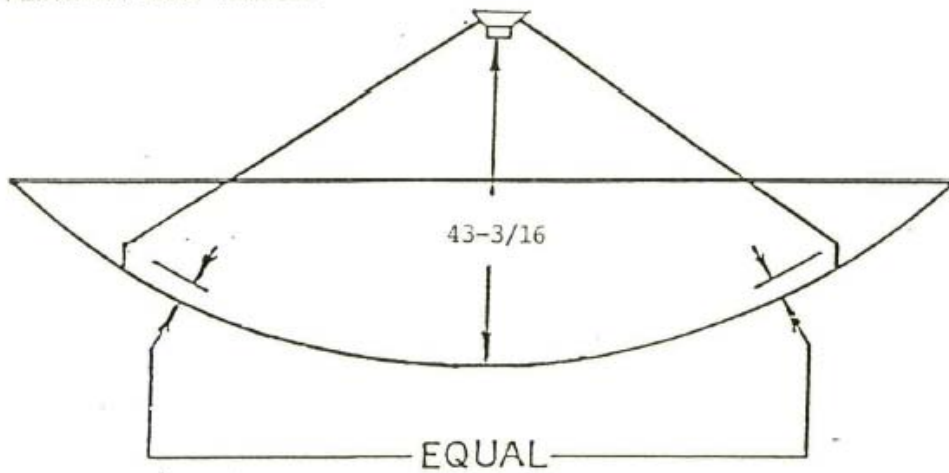


| ITEM NO.                        | PART NO. | DESCRIPTION             |
|---------------------------------|----------|-------------------------|
| 1                               | VARIES   | FEED HORN ASSEMBLY      |
| 2                               | VARIES   | FEED SUPPORT ROD        |
| 3                               | 8008-008 | 3/8-16 x 1.00" BOLT     |
| 4                               | 8201-021 | 3/8" FLATWASHER         |
| 5                               | 8202-021 | 3/8" LOCKWASHER         |
| 6                               | 8102-002 | 3/8-16 HEX NUT          |
| <u>Ku-BAND SINGLE POLE ONLY</u> |          |                         |
| 7                               | 0156-819 | FEED COVER TAB          |
| 8                               | 0250-276 | FEED COVER              |
| 9                               | 8320-001 | #8 x 1/2" TAPPING SCREW |
| 10                              | 4075-003 | CAP                     |



2.4 & 3.0 METER

FOCAL LENGTH IS MEASURED FROM REFLECTOR'S  
CENTER PLATE TO FEED WINDOW.



3.7 METER

FIGURE 6

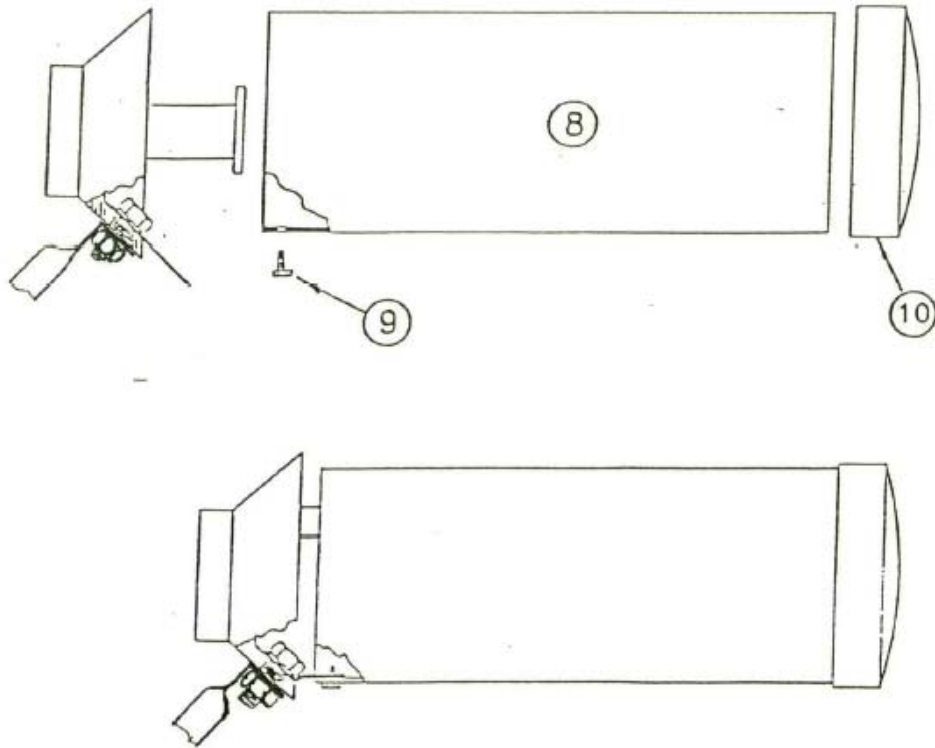
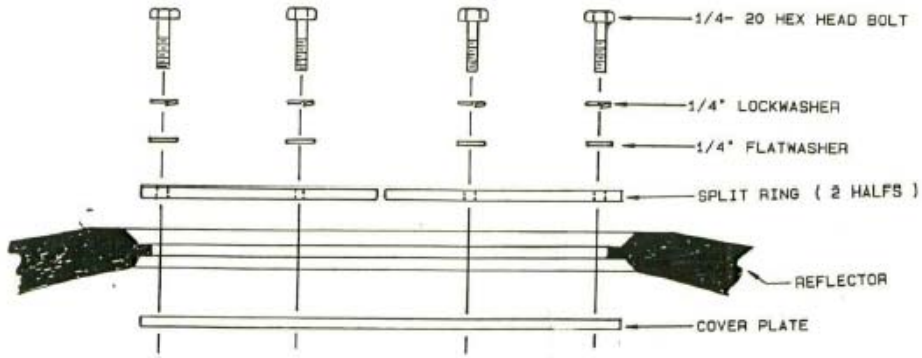


FIGURE 7



COVER PLATE INSTALLATION