OceanTRx4
Ka Feed Replacement Procedure

Document: TEC-OTRx4-FEED-003 Rev:-

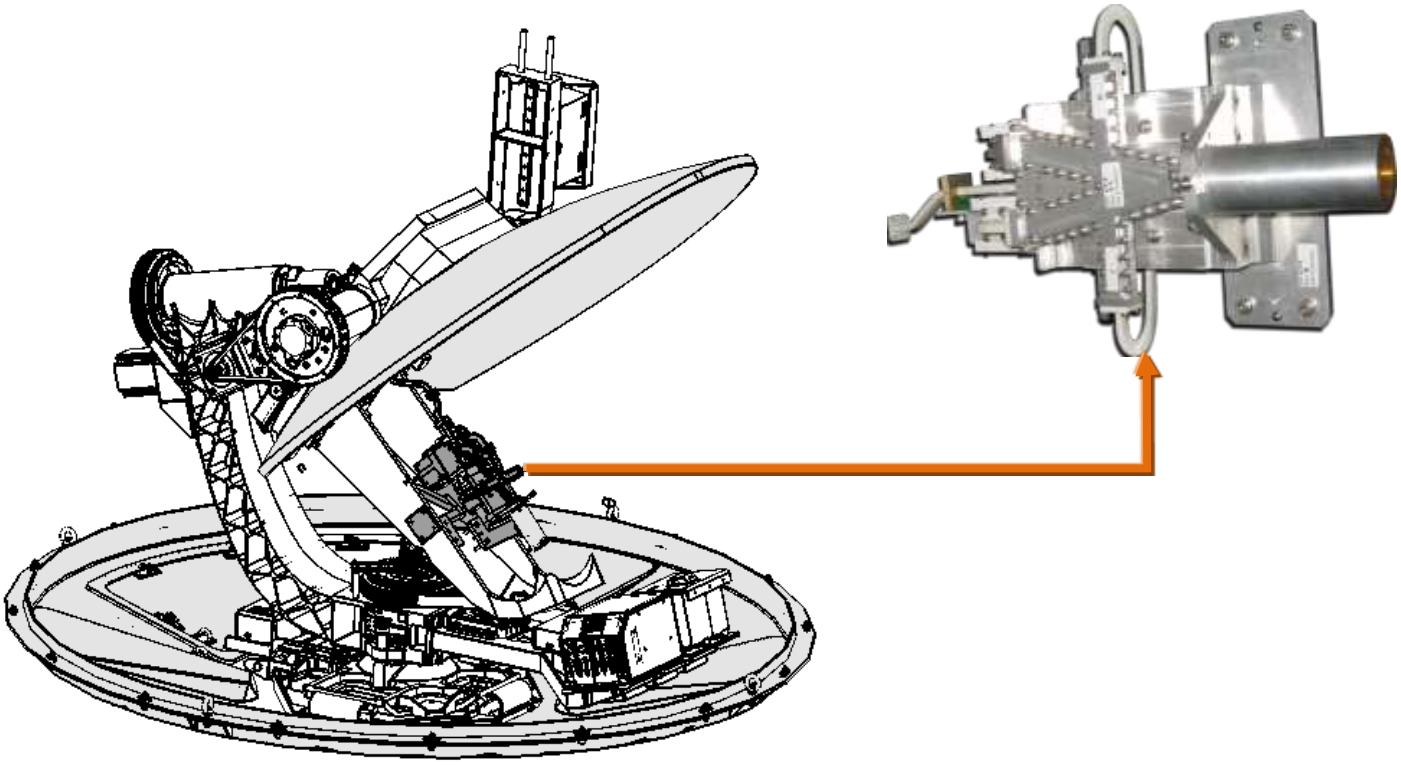


Figure 1-1 Ka Circular Feed and its location on the pedestal.

Before You Start

General warnings and instructions!

WARNING!

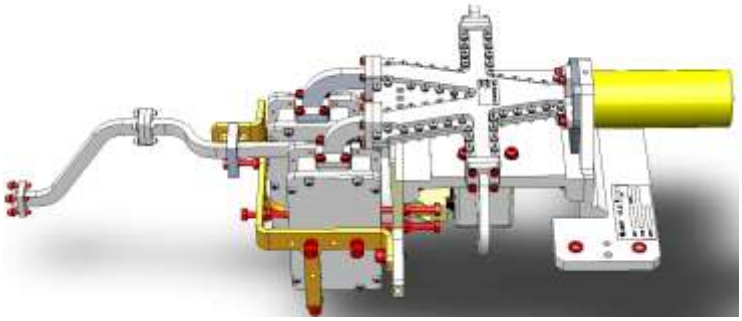
- Only qualified and authorized personnel are allowed to carry out system service/maintenance procedures.
- Do not place any tools or parts on the Base Plate. This may damage the pedestal while it is being repositioned during the replacement procedure.

Before starting the procedure:

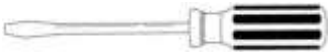
- Open the radome hatch. Inside the RADOME, Switch off the ADE Power Box at the Antenna pedestal base.
- Manually rotate the pedestal axes to gain convenient access to the serviced unit.

1. Applicable for P/N: OceanTRx4-500-FEED-003

KIT Content (OceanTRx4-500-FEED-003)

Quantity	Description	
1	FEED Ka (o3b) for 4-500	

2. Required tools

Tool/Part Name	Figure
Side cutter	
Allen sets: metric and inches	
Flat screw driver	

3. Removing the Feed

Step 1. Disconnect **Tx waveguide** connector:

- Position the pedestal to access the Flexible Waveguide (Tx) connector.
- Disconnect the *Flexible* Waveguide (part) from the Feed:
  - Use a small Allen key
  - 4x screws

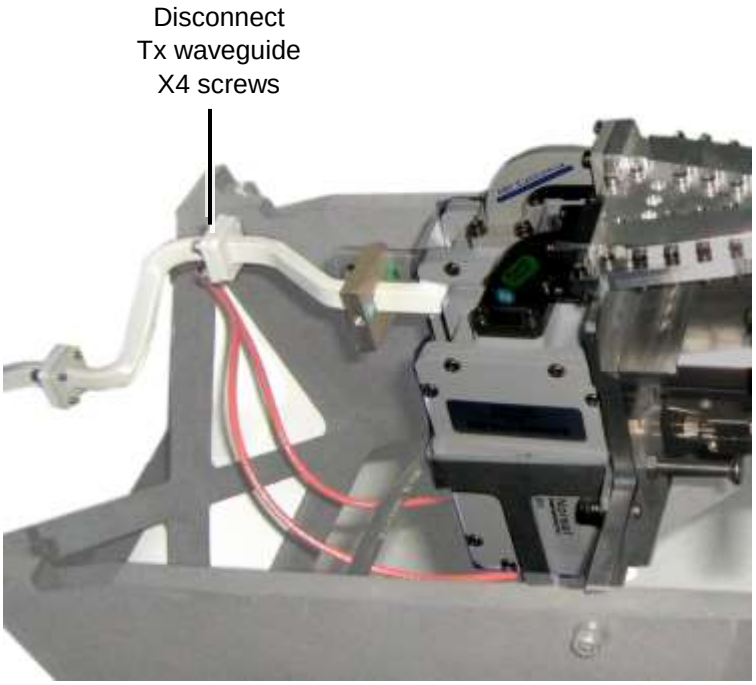


Figure 3-1 Wave Guide screws

Step 2. Disconnect **two Rx cables** and **Control connector**:

- Position the pedestal as shown.
- Disconnect the 2x Rx BNC cables – by hand
- Disconnect Control Cable – use small flat screw driver

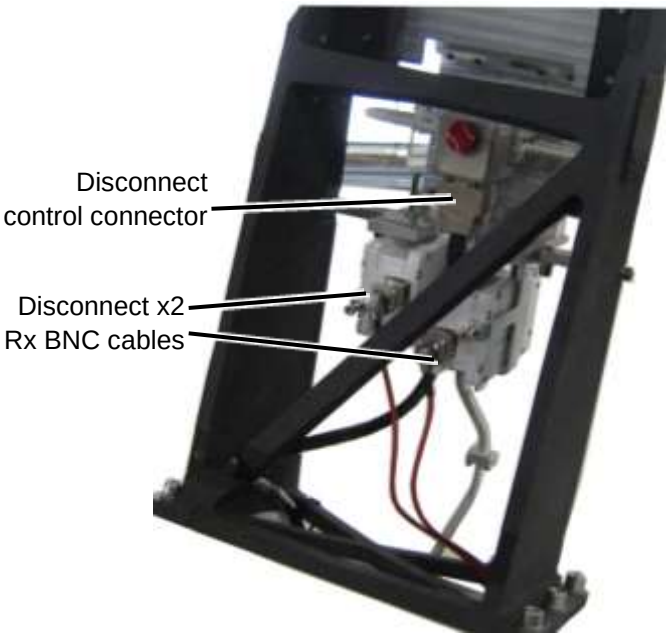


Figure 3-2 Rx and Control Cables

Step 4. Release the feed from the sub-reflector structure:

- Release x6 bolts (x3 on each side) securing the feed to the sub reflector structure.
- Use 5 mm Allen key.

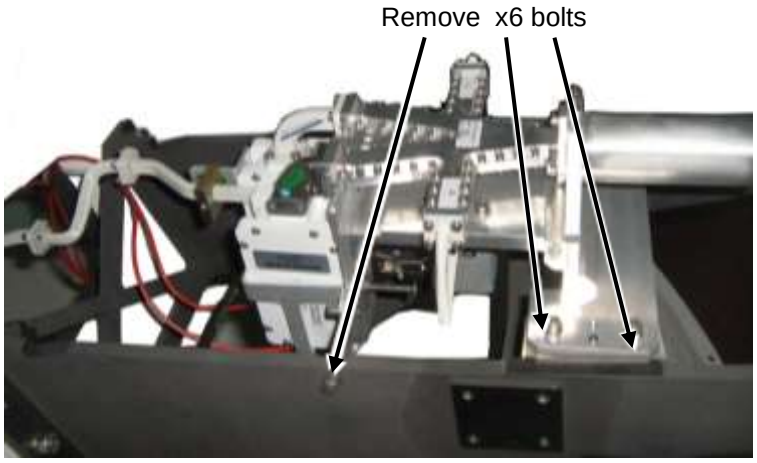


Figure 3-4. 6X bolts

Step 5. Loosen alignment pin:

- Insert one of the (previous) bolts in the service holes
- Jiggle a bit to release the alignment pins.

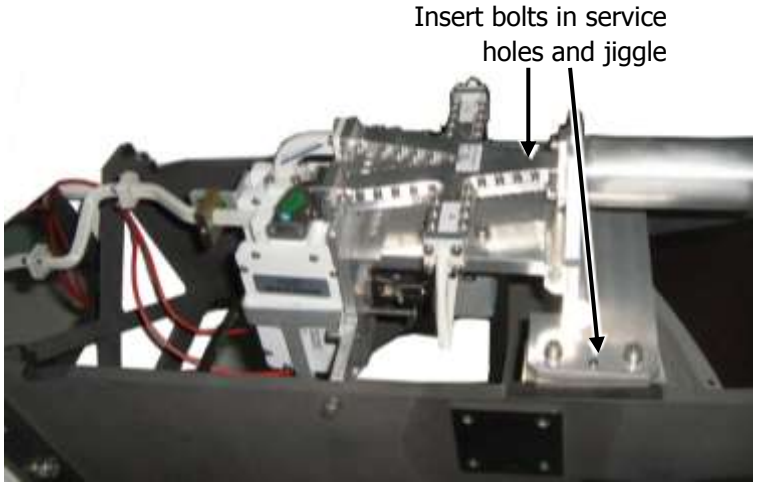


Figure 3-5 Service Holes

Step 6. Set Feed aside.

4. Installing the Feed

Step 1.

Position feed.

- Position the new Feed in its place.
- Slightly push to insert alignment pins to their designated holes.

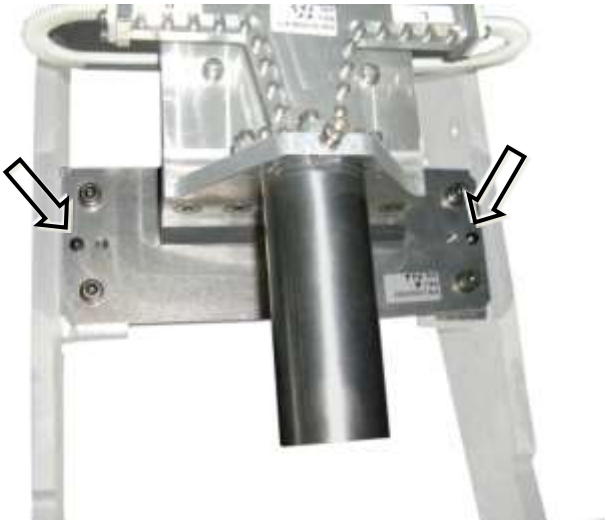


Figure 4-1 Alignment Pins

Step 2.

Secure Feed to the sub-reflector frame:

- Tighten x6 bolts (x3 on each side).
- Use 5 mm Allen key.

Figure 4-4. 6X bolts

Step 3. Connect **two Rx cables** and **Control connector**:

- Position the pedestal to access the required connectors.
- Connect the 2x Rx BNC cables – by hand
- Connect Control Cable – use small flat screw driver

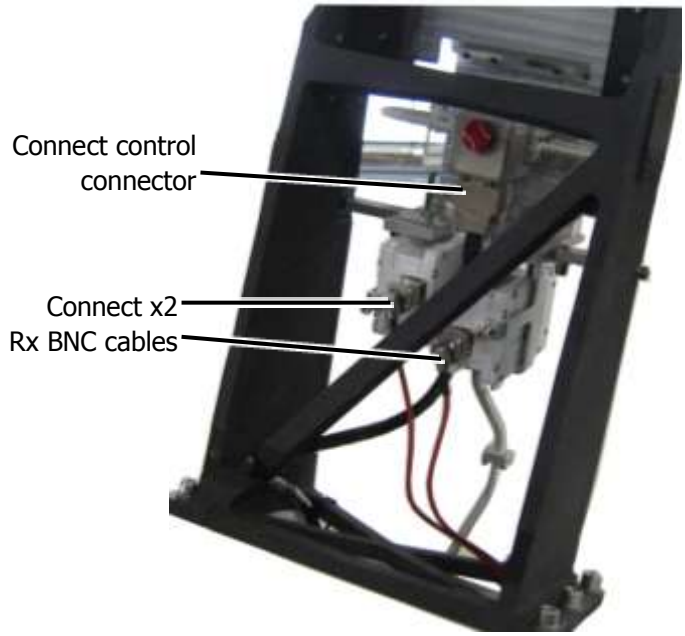


Figure 4-2 Rx and Control Connectors

Step 4.

Connect Tx port:

- Position the pedestal to access the Flexible Waveguide (Tx) connector.
- Connect the Flexible Waveguide to the Feed:
  - Use small Allen screwdriver
  - 4x screws

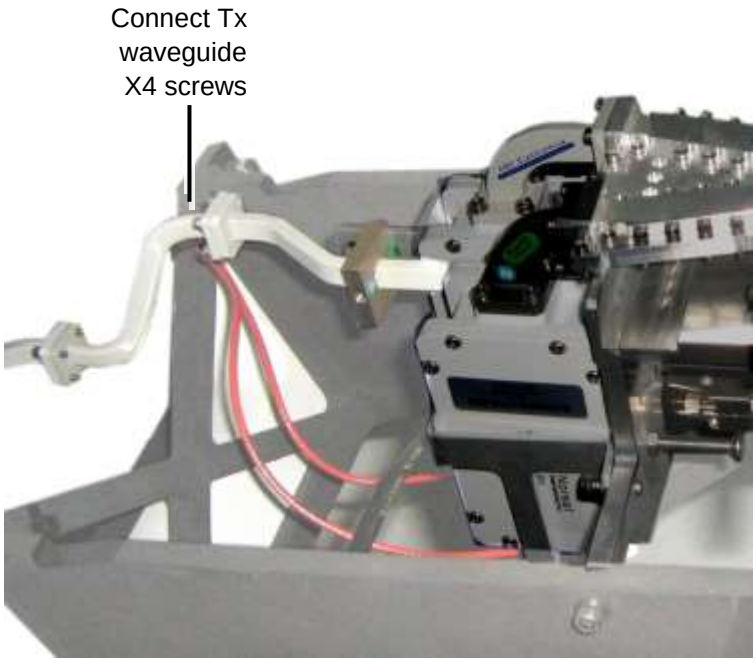


Figure 4-3 Wave Guide screws

5. Performing Verification Test

1. Verify the cable routing is correct and properly secured.
2. Power up the system and confirm system initializes properly.
3. To make sure the technical process completed successfully, in the **MtsLink** application:
   - Click on **Test Traj**
   - Make sure no error messages appear in the System Messages window.
   - Acquire satellite and verify you have proper AGC.
   - Verify the Modem Rx EbNo and TX power with NOC.

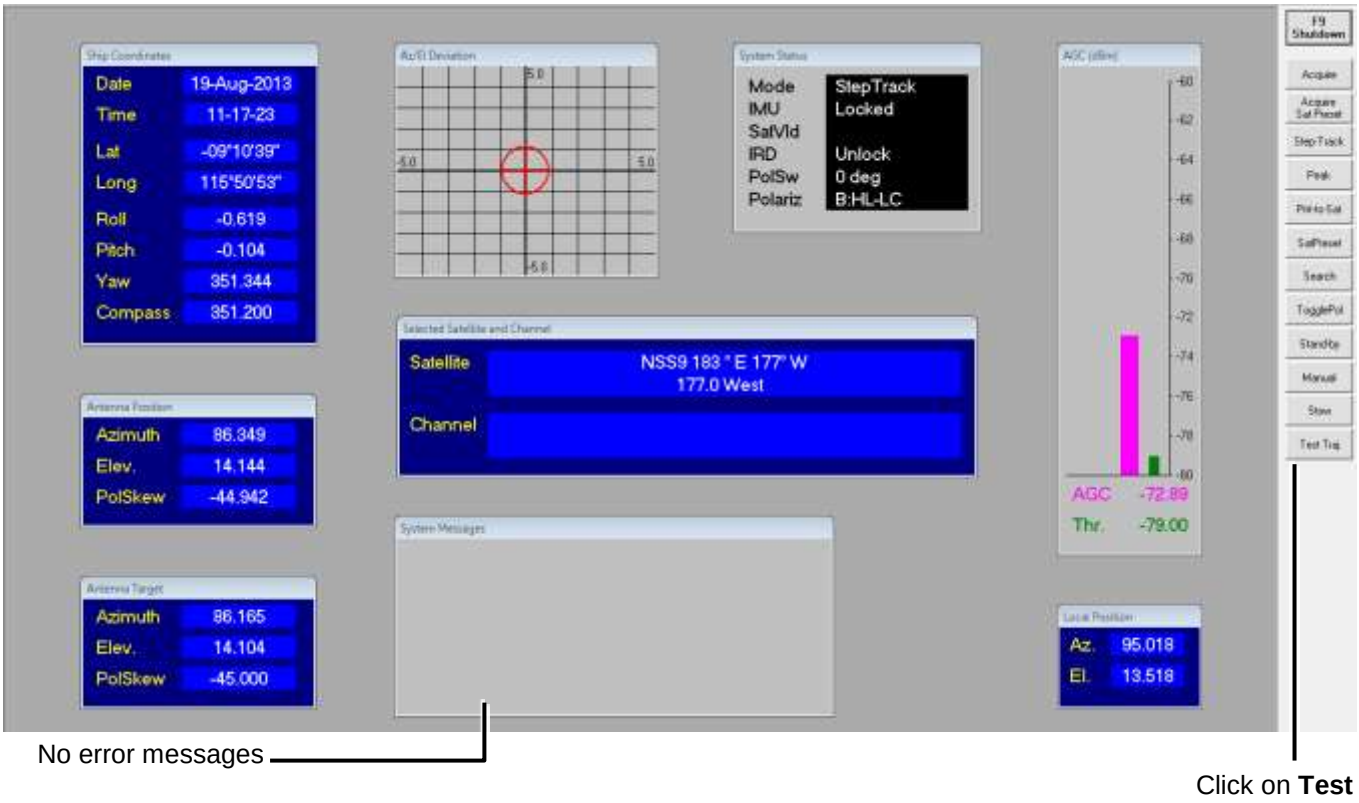


Figure 5-1: Verification Test