

OceanTRx4 Ku Feed Replacement Procedure

Document: TEC-OTRx4-FEED-008 Rev. -



Figure 1-1 Location of Feed

Before You Start



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-008

KIT Content (OceanTRx4-500-FEED-008)

Quantity	Description	
1	FEED Ku Band without LNB	

2. Required tools

Tool/Part Name	Figure
Side cutter	
Allen keys: 4mm, 5mm T-handle	
Open wrench 10mm	



3. Removing the Feed

Step 1.

Disconnect Rx/Tx Cables:

- 1x Rx cable F type (RED);
- 1x Tx cable SMA connector (BLUE)

NOTE: If available, use specific (relevant) RF connector wrenches; otherwise, tighten by hand.

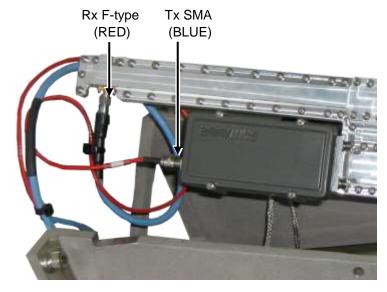


Figure 3-1 Remove Rx & Tx cables

Step 2.

Disconnect three plugs from the FEED Servo Driver to release both cables.

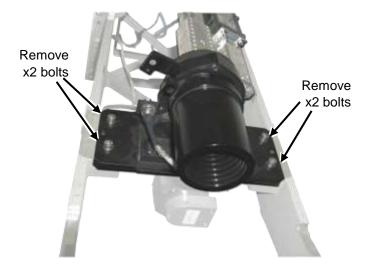
- MOTOR
- M.ENC
- L.SW



Figure 3-2 Servo Driver plugs

Step 3.

Release 4 bolts securing the feed to the structure. Use 5 mm Allen key. Lift and the feed and remove it





4. Installing the Feed

Step 1.

Place the new Feed in its place. Slightly push to insert pins to their designated holes.

NOTE: You may have to use a light plastic hammer to gently align the feed onto the locking pins.

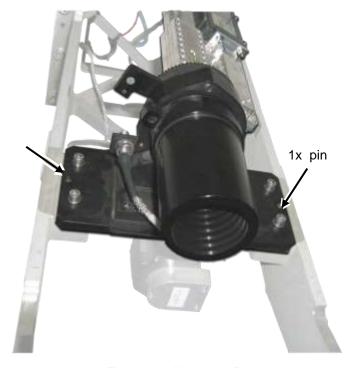


Figure 4-1 Alignment Pins

Step 2.

Tighten 4X bolts securing the Feed to the structure.

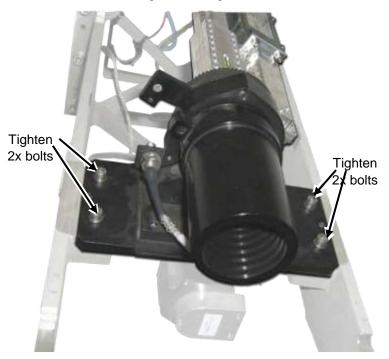


Figure 4-2 4X bolts



Step 3.

Route both Motor and Zero Hall cables behind the structure.

Connect three plugs to the FEED Servo Driver:

- MOTOR
- M.ENC
- L.SW

Step 4.

Connect two cables to the feed:

- Rx cable (RED)
- Tx cable (BLUE)

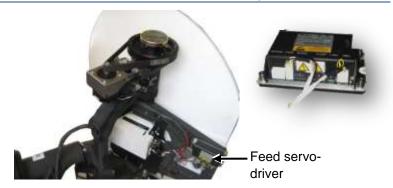


Figure 4-3 Servo Driver plugs

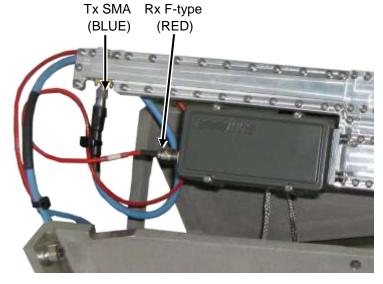


Figure 4-4 Remove Rx & Tx cables



5. Performing Verification Test

- 1. Move the feed by hand and verify that the RF cables are routed and secured properly.
- 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.
- 4. Contact the airtime provider (or satellite operator) and perform CPI (Cross Pole Isolation) optimization.

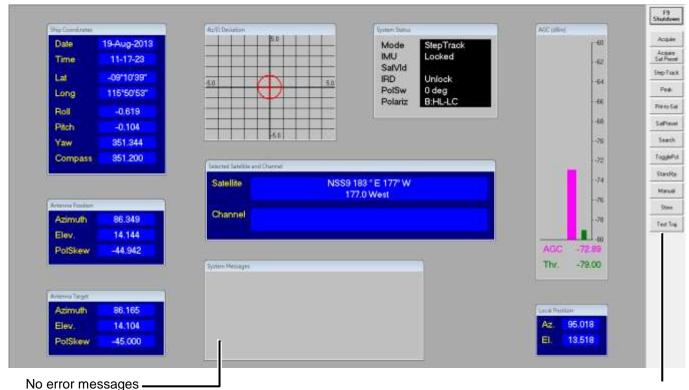


Figure 5-1: Verification Test