

OceanTRx4

Slip-ring with Rotary-Joint Replacement Procedure

Document: TEC-OTRx-SR/RJ-001 Rev:-

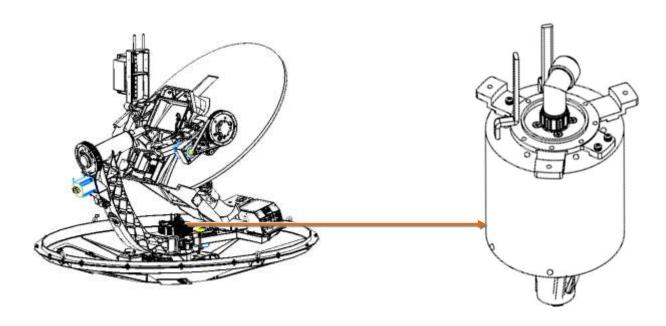


Figure 1-1 Slip-ring/Rotary-Joint Location

Before You Start



WARNING!

- Only qualified and authorized personnel are allowed to carry out system service/maintenance procedures.
- Follow the marking (L,N and ground) on the power cable. Failure to do so may result in electrical shock

Before starting the procedure:

- Open the radome hatch. Inside the RADOME, Switch off the ADE Power switch at the Antenna pedestal base.
- Manually rotate the pedestal axes to gain convenient access to the serviced unit.
- Disconnect all designated ADE power sources

General instructions relevant to this procedure

Note the following:

Make sure the slip-ring rotary joint cable are routed properly under the pedestal



Box content: (P/N: OTRx-SR/RJ-001-SP)

Quantity	Description	Figure
1	Slip-ring with Rotary- joint assembly	
1	Adapter cable S.R/R.J NOT USED	
1	Mechanical adapter NOT USED	
4	Washer NOT USED	
4	Spring washer NOT USED	
3	Philips screw M3 NOT USED	

^{*}KIT contains may change

Required tools

Tool/Part Name	Figure
Flat screwdriver (small)	
Tie cutter	
Open/ring wrench 11,19mm and 3/4"	३
Allen keys: 4mm, 5mm T-handle	



1. Removing the Slip-Ring Rotary Joint

Step 1

- Locate the Slip-Ring Rotary Joint
- Cut the tie wraps securing the cables
- Disconnect the 9P Molex connector



Step 2

- Disconnect the IMU cable from ACU and release it.
- Disconnect from the ADMx and release the blue RF cable



Step 3

- Disconnect the power cable from the power box output
- Disconnect the IMU cable from IMU
- Remove the Blue cable N-type from its bracket

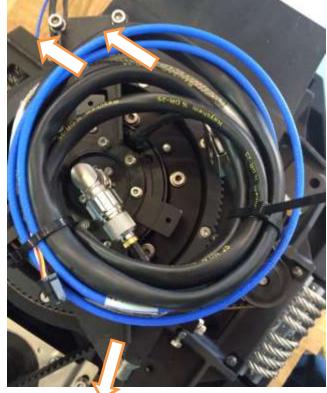






Step 4

- Remove 3 bolts holding the slip-ring bracket
- Lift the slip ring slowly



Step 5

While lifting the slip-ring body Gently guide cables below

The cables below should pass in the space between the springs



You may need to increase the opening between the 2 base palate so the cables can pass between them







2. Installing the Slip-Ring Rotary Joint

Step 1

- Pass all 3 cables via the hole all the way to the below structure
- Insert the Slip-Ring. Mind the rotor orientation and align it with the driver bar in the antenna base

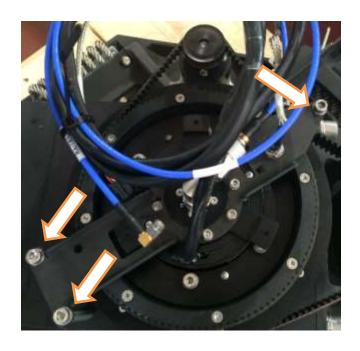


If rotor not fitting the driver bar rotate the pedestal if still no success take it out and adjust the rotor with the driver bar



Step 2

 Secure the slip-ring bracket with 3 bolts and spacers





Step 3

- Route the cables between 2 base plates and bring them out between the power box and IMII
- Connect the cables below in reverse order





Pay attention to the power cable marking



Do not bend the blue RF cable



Step 4

- Route and secure cables with tie wraps
- Connect the cables to their respective connectors





3. Performing Verification Test



Verify the cable routing is correct and properly secured Make sure all bolts properly tight and Radome clear of tools/spares

Power up the system and confirm system initializes properly.



If No ADE-BDE communication verify the antenna moves on startup if doesn't check power cable Otherwise check the Blue RF cable connection at both sides

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.



In case WRN 070 ACU-IMU communication fault appear check IMU cable

- Acquire satellite and verify you have proper AGC.
- Verify the Modem Rx EbNo and TX power with NOC.

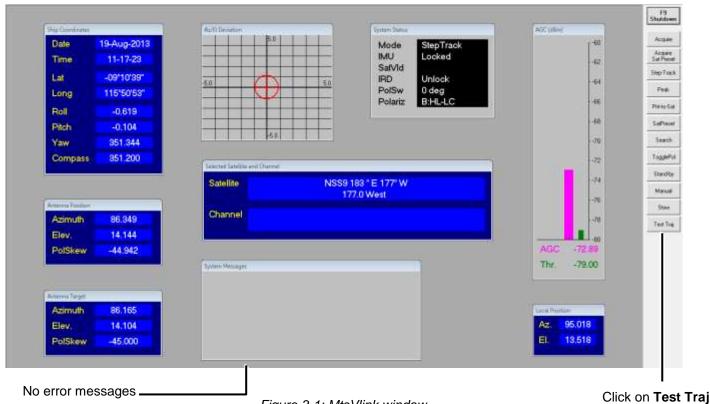


Figure 3-1: MtsVlink window