
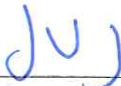



**Field Service Spares Replacement Procedure – AZ Drive Chain, XX97,  
XX97A, XX97B, XX00, XX00B & XX07**

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Approval:

Approving Authority	Signature	Date
Doc Control:	Ron Chaffee / Signature on file. 	12-29-11
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Revision History

Rev.	ECO	Description of Change	Date
X1	8876	Initial release	08-18-2011
A	9059	Clerical revisions	10-30-2011
B	9170	Clerical revisions	12-06-2011

# Field Service Procedure – AZ Drive Chain, XX97, XX97A, XX97B, XX00, XX00B & XX07

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## 1. Brief Summary:

Troubleshooting document for inspecting, and replacing a damaged drive chain on the XX97, XX97A, XX97B, XX00, XX00B and XX07 series antennas.

## 2. Theory of Operation:

The azimuth axis of the XX97 series antennas is chain driven; the motor will drive in response to inputs from the vessels gyro compass, azimuth rate sensor and operator inputs. Under normal operation relative drive will be issued to counteract changes in the vessels heading to maintain the azimuth look angel of the satellite.

## 3. Inspections:



**\*CAUTION:** Be extremely careful rotating the pedestal around while your fingers are in this area to prevent pinching or crushing your fingers in the pedestal assembly.

### 3.1. Alignment.

Inspect the alignment of the chain through the motor drive sprocket and the drive sprocket. Misalignment will stress the chain and potentially cause drive issues with the system. Rotate the pedestal by hand and verify the chain runs freely, with no binding or catching on the sprockets.

### 3.2. Damage.

Inspect the chain for damage. Verify the tensioner is maintaining good contact/tension and that the belt is not slipping on the sprockets.

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## Field Service Procedure – AZ Drive Chain, XX97, XX97A, XX97B, XX00, XX00B & XX07

### 4. Procedure for Replacing the XX97 Series Azimuth Drive Chain:

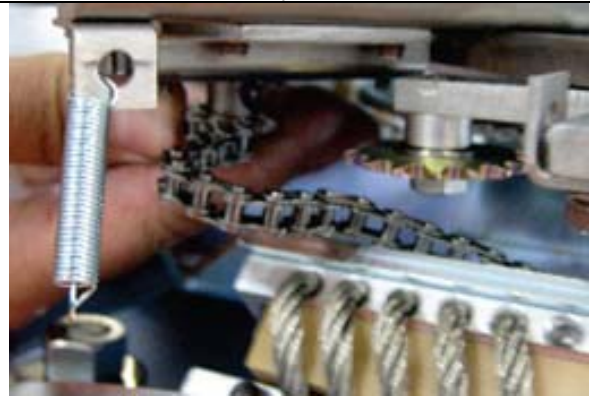
Procedure for replacing the azimuth drive chain, Sea Tel kit part number: 135534 (chain part number: 108305-2).

**\*CAUTION:** Power down the pedestal before following this procedure.

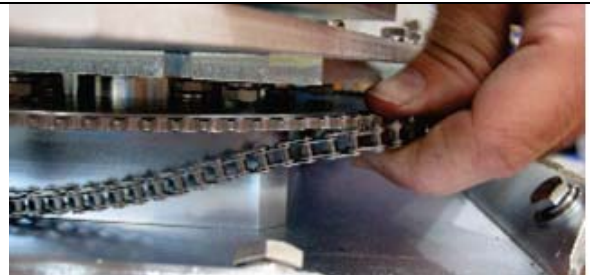
1. First remove the chain tensioner spring. To do this, use a small flat blade screw driver to unhook it from the eyelet. Now you can remove the old drive chain by removing the retaining clip from the split link and breaking the chain.

2. Wrap the replacement chain around the azimuth drive assembly and join it with the split link.

3. Now wrap one side of the chain to the Azimuth motor sprocket and hold in place.



4. Wrap the other side of the chain around the Azimuth drive pulley.



5. Ensure that the chain is fully engaged with the drive pulleys. Take care not to catch your fingers in the assembly.



6. Re-connect the chain tensioner by re-connecting the tensioner spring to the eyelet.  
7. With the chain drive fully engaged, drive the antenna in azimuth while observing for any physical obstructions. Ensure that the axis is running freely and that the chain is not slipping or jamming up.

