
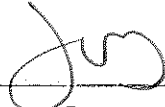
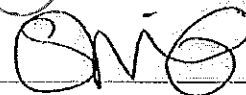


**Field Service Spares Replacement Procedure – Belt Kit, Coastal, USAT  
& ST24**

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Approval:

Approving Authority	Signature	Date
Doc Control:	Ron Chaffee / Signature on file. 	3-26-12
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Revision History

Rev.	ECO	Description of Change	Date
A	9145	Initial release	02-28-2012

# Field Service Procedure – Replacement Belt Kit, Coastal, USAT & ST24

## 1. Brief Summary:

Troubleshooting document for inspecting and replacing a damaged drive belt as well as tensioning on the Coastal, USAT and ST series antennas.

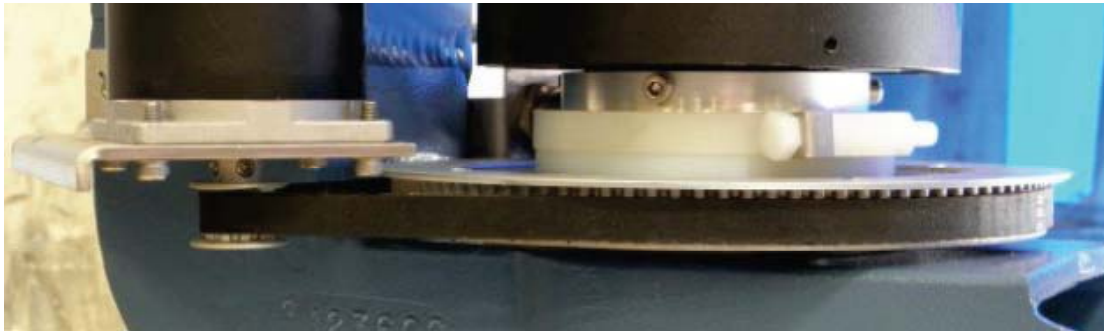
## 2. Inspections:



**\*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.

### 2.1. Alignment.

Inspect the alignment of the belt through the motor drive sprocket and the drive sprocket. Misalignment will cause the belt to wear along its edges (refer to pictures below). Rotate the pedestal by hand and verify the belt runs freely, with no binding or catching on the sprockets.



### 2.2. Damage.

Inspect the belt for damage. Look for teeth that have de-laminated, or been completely torn off the belt (refer to pictures below).



**Belt edge wear**

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## Field Service Procedure – Replacement Belt Kit, Coastal, USAT & ST24



**Missing tooth**



**Seperating tooth and edge wear**

### 3. Universal Drive Belt Replacement Procedure:

#### 3.1. Tools.

- #1 Phillips Screwdriver
- Loctite 242
- **\*Note:** Tools may vary depending on antenna model.

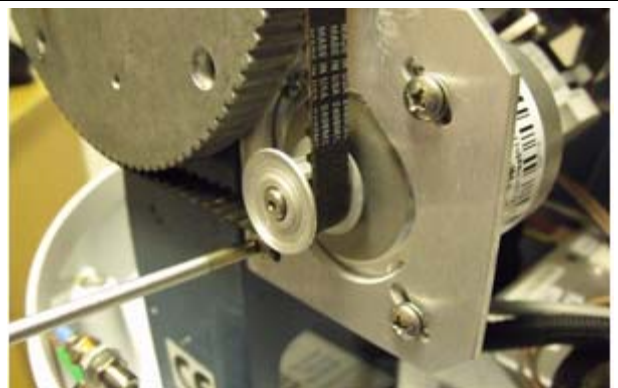
#### 3.2. Procedure.

Universal procedure for replacing a drive belt on a Coastal, USAT or ST series antenna, exact application may vary slightly depending on the antenna model and axis.





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

**\*Note:** The following procedure is for the Coastal elevation belt, procedure may vary for other antennas and axis.

1. Loosen the motor screws using a #1 Phillips screwdriver to allow the motor to be moved closer to the main drive sprocket, releasing the tension of the belt.



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<p>2. Using a #1 Phillips screwdriver remove the 4 screws securing the left side of the reflector to its mounting bracket.</p>	
<p>3. Slacken the belt by moving the pulley closer to the drive sprocket and slip the belt off the motor pulley.</p>	
<p>4. Remove the belt by slipping it off the elevation drive sprocket and out the gap created by removing the reflector mounting screws.</p>	
<p>5. Install the replacement belt by inserting it through the gap created by removing the reflector mounting screws.</p> <p>6. Loop the belt onto the motor pulley and then onto the main drive sprocket.</p>	

## ***Field Service Procedure – Replacement Belt Kit, Coastal, USAT & ST24***

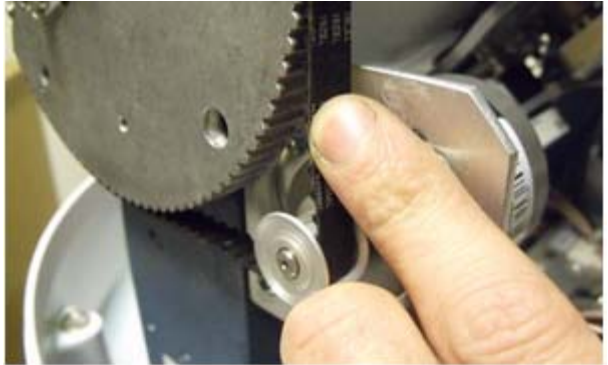
7. Remove two of the motor screws and apply Loctite 242 to them.

8. Tension the belt by applying pressure to the motor and tighten the two screws which have Loctite applied.



9. Verify the tension of the belt by pressing on it at the central point between the motor pulley and main drive sprocket. The belt should be tight enough that the access can rotate without the belt skipping on the teeth but not too tight (the tension of the azimuth belt can be used for reference).

10. If the belt tension is correct tighten remove the two remaining screws, apply Loctite 242 to the threads and reinstall them. If not repeat the above steps until correct.



11. Apply Loctite 242 to the reflector mounting screws and reinstall them.

