

Service Bulletin

Ulterra Trim Module Repair

Model: All Ulterra and RT Ulterra

Serial Number Range: N/A

Reason: Technical Clarification

Disposition: None

Related Part Numbers: 2200810 Trim Belt; 2887802, 2887820, 2887807, 2887827, 2887823, 2887825, 2887821, 2887824, 2887808, 2887828 Trim Module Assemblies; 2770816, 2770817, 2770818, 2770819 Lift Belts

Additional References: Ulterra Repair Manual

Explanation:

The Following Trim Housing Components are Individually replaceable:

The trim belt and lift belt are replaceable without replacing the complete trim module.

- The Lift Belt is the large belt that runs along the Shaft of the motor from the Control Box to the Motor Lower Unit, running through the Trim housing.
- The Trim Belt is a Small Belt inside the Trim Housing, it is driven by the Trim Motor and drives the worm gear that actuates the lift belt.



Lift Belt Example [2770819]



2200810 Trim Belt

The Trim Belt should have its tension reset or be replaced when there are indications the Trim Motor is attempting to run but the motor is not trimming, or has noise, especially a ratcheting noise, coming from the trim housing during trim function. Case XVI in the Ulterra Repair Manual includes instructions regarding trim belt replacement.

Case XVI. Ulterra trim module makes a rapid clicking or whining noise when trimming up/down or when pulling motor up or down during the stow/deploy sequence.

Cause: The small reduction drive belt (p/n 2200810) located inside the trim housing has a few stripped or damaged teeth. This causes the clicking noise that is heard when the trim housing motor is running during the stow/deploy sequence or when trimming the Ulterra motor up or down. To confirm this as the cause remove the six (6) #10 x .75 Hi-Lo screws that secure the trim housing cover to the top of the trim housing, lift the housing cover up and examine the belt. Any visual evidence of damaged or stripped teeth on the belt will require replacement of the belt.

Corrective Action: With the housing cover and O-rings slid up the shaft and away from the trim housing locate the three (3) M3-.5 x 10 Phillips panhead screws that secure the trim motor to the motor plate. Locate each screw then use a 5/64" Allen key to loosen the #8-32 x 1/4 set screw that locks the p/n 2058411 belt tensioner in place. With the set screw loosened use a 5/32" Allen key to turn the belt tensioner cam to lessen the belt tension. With the belt tension released the belt can be first lifted off the larger pulley then the smaller flanged motor drive pulley. Examine the teeth of the two (2) pulleys cleaning away any belt teeth residue prior to installing the new p/n 2200810 belt in reverse order of removal. Adjust belt tension with the 5/32" Allen key in the belt tensioner and lock it in place with the 5/64" Allen key in the small p/n 2053420 set screw. To secure the motor plate use a #1 Phillips screwdriver to tighten the three (3) Phillips panhead M3-.5 x 10 screws. Reinstall the trim housing housing cover using care to properly position the two (2) O-rings. Secure the housing cover with the six (6) #10 x .75 Hi-Lo screws. Connect the Ulterra motor to the appropriate voltage for the model being serviced, and test stow/deploy the motor to confirm proper, quiet operation of the trim module system.

Image of Case XVI from Ulterra Repair Manual

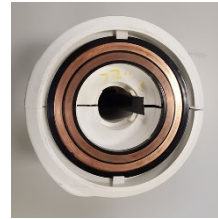
Lift Belt replacement is indicated when there is apparent damage or wear visible on the Lift Belt and no other trim housing issues that would indicate the trim housing should be replaced. Case XVII Includes the instructions on Lift Belt Replacement.

Exceptions:

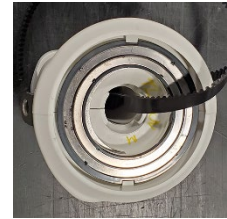
- On RT Ulterras, if the trim housing is a revision prior to implementing Monel (Silver Colored) slip rings the consumer is best served by replacing the complete trim housing assembly.

Note: This change only applies to RT models, on Freshwater models copper rings are still used.

- Any Trim Module that upon removing the top cover appears to have had water intrusion the complete Trim Module should be Replaced.



Copper/Old Slip Rings



Monel/Current Slip Rings