



SERVICE LETTER NUMBER 135			
TITLE: LARGE WATER RUDDER INSTALLATION			
BY: E. BISHOP	AIRCRAFT MAKE/MODEL(S):	FLOAT MODEL(S):	NOTE(S):
APP: D. GARRETT	Quest Kodiak 100	7000	OPTIONAL COMPLIANCE
DATE: 1-AUG-12			S/L P/N 1005816
REV: A			ECO--22888

FAA APPROVAL HAS BEEN OBTAINED FOR TECHNICAL DATA IN THIS PUBLICATION THAT AFFECTS STC OR TSO DESIGN COMPLIANCE

EFFECTIVITY:

This service letter applies to all S/Ns Wipline model 7000 seaplane or amphibious floats, as installed on Quest Kodiak 100 aircraft, under FAA STC number: SA02848CH.

SERVICE LETTER P/N: 1005816

COMPLIANCE:

Service letter compliance is optional.

BACKGROUND:

Wipline 7000 floats have been produced with composite water rudders to save weight over aluminum water rudders featured on other float models. Composite water rudder blades have been shown susceptible to damage when operated in demanding environments, especially high cycle stern beaching operations in windy conditions. This service letter and associated kit replace the composite water rudder for an aluminum one for use in rough environments. The aluminum water rudder is the same shape as the 7000 composite water rudder, and is the same water rudder used on Wipline 8000 and 8750 floats.

WARRANTY INFORMATION:

This service letter does not include any warranty labor or parts.

APPROXIMATE SHOP HOURS:

The functions outlined by this service bulletin will take approximately 1 hr. to accomplish.

TECHNICAL DATA AND INSTRUCTIONS:

Removal of Composite Blade and Hardware

Lower the water rudders and disconnect the retraction cable from the water rudder. Remove all four (4) springs, and the upper and lower bolts that the springs attach to, both sides, including the upper brackets that the springs attach to. See Figure 1 and Figure 2. Retain two (2) springs for reinstallation.

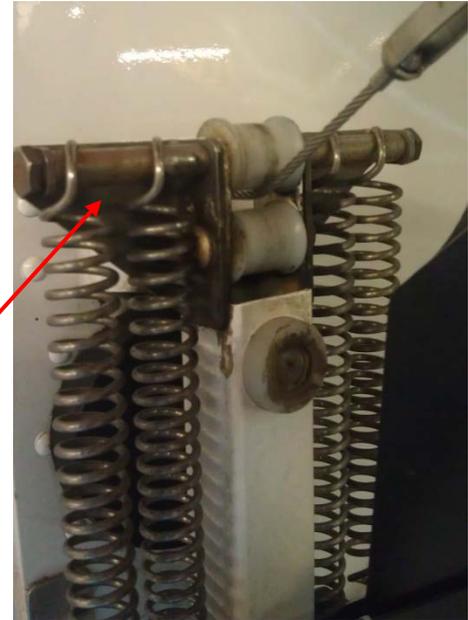


Figure 1. 7000 water rudder springs showing upper bracket.



Figure 2. 7000 water rudder springs lower bolt attachment.

Remove the six (6) bolts that clamp the pivot arms onto the water rudder blade and retain for reinstallation. The old composite blade and doublers may now be removed.

Aluminum Water Rudder Installation

Install the aluminum water rudder 8A08000-023 onto the pivot arms using the six (6) bolts previously removed.

Install the 1-1/2" stainless steel bolt through the upper pulley, and the 2" stainless steel bolt through the lower pulley and secure with NAS679A3W nuts as shown in Figure 3.

Install MS35207-283 screws through water rudder pivot arm as shown in Figure 4. Reattach two (2) of the previously removed springs as shown in Figure 5.

Reattach water rudder retract cable to hole in new blade. If the water rudder retract system was properly rigged previously, the system should not require adjustment since the pivot and cable attach point has not changed.

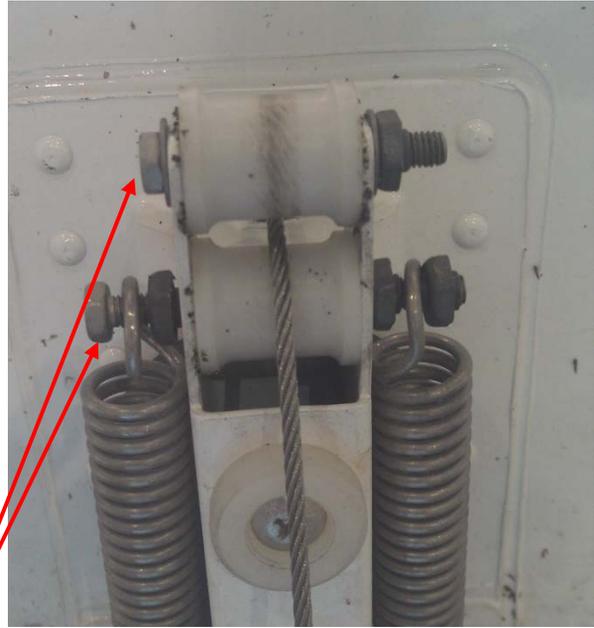


Figure 3. New bolts installed in upper and lower water retract cable pulleys.

INSTALL

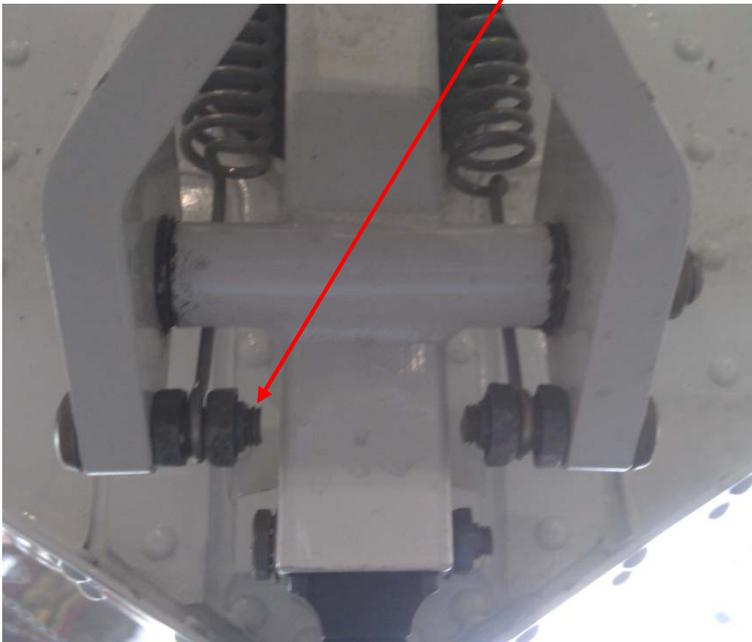


Figure 4. Lower spring attach bolts.



Figure 5. New spring attachment locations.



Figure 6. Original 7000 float water rudder.



Figure 7. 8000/8750 style water rudder (shown painted, part comes bare).



KIT CONTENTS:

The following parts are included in this service kit. Part quantities shown are for one water rudder only. Two kits will be required for each aircraft.

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	8A08000-023	ASSEMBLY, WATER RUDDER BLADE
2	1	1032 X 1 1/2 INCH SS	BOLT, STAINLESS STEEL
3	1	1032 X 2INCH SS	BOLT, STAINLESS STEEL
4	4	NAS679A3W	NUT, SELF LOCK, STEEL
5	2	MS35207-283	SCREW, SPRING ATTACH
6	4	NAS679A4W	NUT, SELF LOCK, STEEL

NOTES:

1. Water rudder blade comes bare with no finish. Contact Wipaire customer service if paint is desired.
2. Exchange weight is +7.0 lbs at 231.4 inches for two (2) water rudders. Adjust weight and balance records accordingly for the modified aircraft.
3. Upon completion of installation, enter information in float logbooks for installation of Wipaire Service Letter 135.

END