



SERVICE LETTER NUMBER 132			
TITLE: LARGE WATER RUDDER INSTALLATION			
BY: E. BISHOP	AIRCRAFT MAKE/MODEL(S):	FLOAT MODEL(S):	NOTE(S):
APP: D. GARRETT	de Havilland DHC-2 Mk I and	6000	OPTIONAL COMPLIANCE
DATE: 22-JUN-12	Mk III Beaver; Pilatus PC-6 /	6100	S/L P/N 1005806
REV: A	B2-H4 Porter		ECO--22855

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 6000 or 6100 straight or amphibious floats, as installed on De Havilland DHC-2 Mk I and Mk III Beaver, or installed on Pilatus PC-6 / B2-H4 Porter, under one of the following FAA STC numbers: SA610GL, SA309CH, SA227CH.

SERVICE LETTER P/N: 1005806

COMPLIANCE:

Service letter compliance is optional.

BACKGROUND:

More water taxi turn authority may be desired for aircraft on Wipline 6000 or 6100 straight of amphibious floats. This service letter and associated kit replaces the existing water rudder with the larger water rudder found on Wipline 8000 and 8750 floats. In addition to a larger water rudder blade, this kit includes the necessary parts and hardware for installation of the large water rudder on 6000/6100 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 3 hr. to accomplish.

TECHNICAL DATA AND INSTRUCTIONS:*Removal of Old Water Rudder*

Lower the water rudders and disconnect the retraction cable from the water rudder. Remove the bolts that secure the springs to the arms and retain this hardware for later reinstallation. Remove the water rudder pivot bolt and retain for later reinstallation. The blade and arms can now be removed. Remove the bolt that secures the machined down stop on the bottom of the water rudder post, and retain this bolt for later reinstallation. The down stop will be replaced with a new one from the kit.

Assembly of New Water Rudder and Installation

Install the new 1004372 down stop on the bottom of the water rudder post and secure with existing hardware. Attach arms to water rudder pivot and secure with existing hardware. Reinstall springs and secure with existing hardware. See Figure 1.

Check rigging of retraction system. Retraction cable will likely need to be lengthened so that when in the down position, the water rudder contacts the down stop with the cable just slack. Adjust cable length as needed. The down stop is also adjustable depending on the desired water rudder steering stability. It is recommended to start with the most stable configuration (screw plus three NAS1149C0332R washers) and remove washers only if steering is desired to be less stable. The screw may also be removed for less stability. Note that the washers may be substituted with NAS1149C0316R or NAS1149C0363R washers as long as the overall thickness is .096 inches, or less as desired.

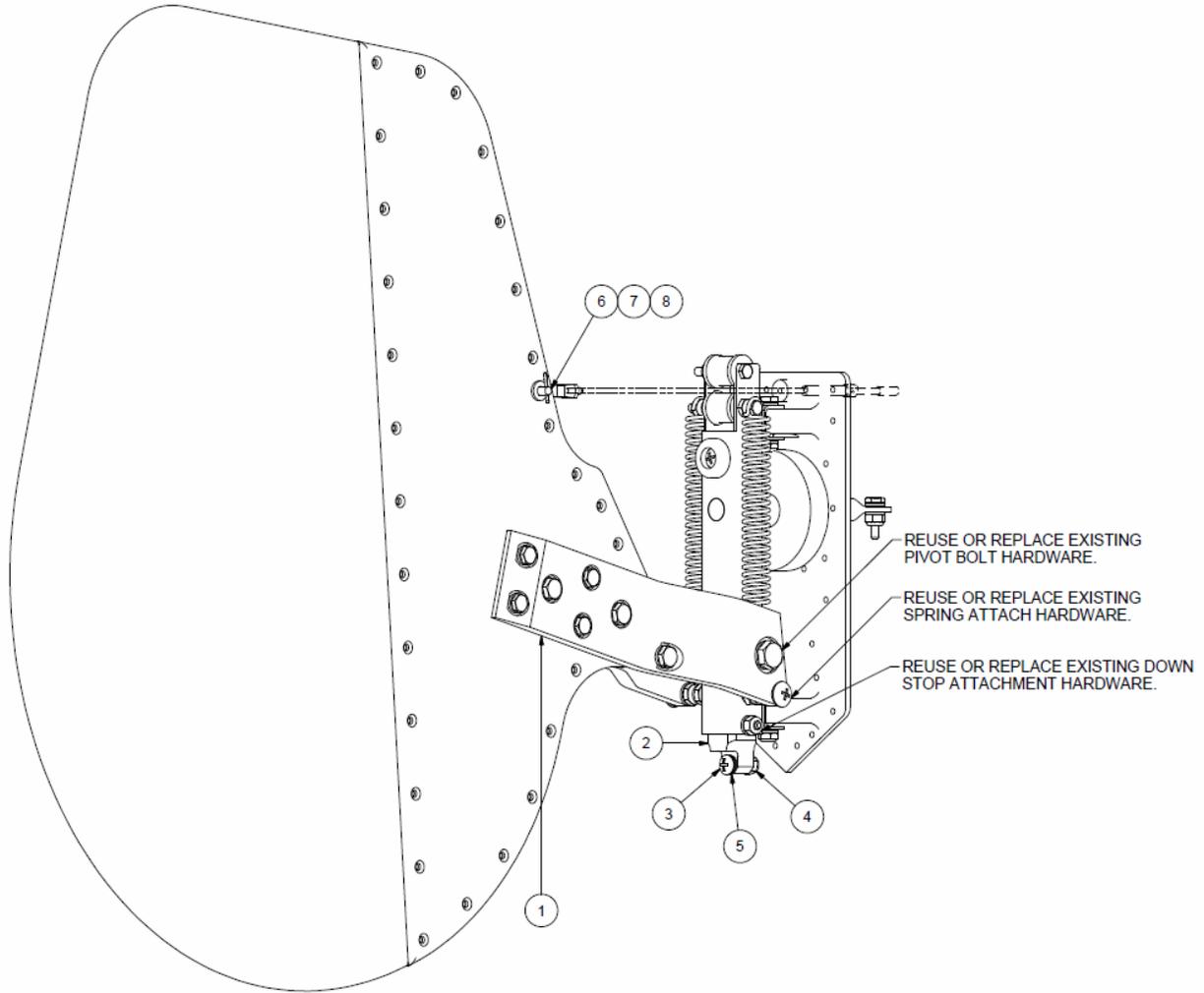


Figure 1. Installation of new 8000 water rudder.



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	8A08000-079	WATER RUDDER W/ DOUBLERS AND ARMS
2	1	1004372	STOP, WATER RUDDER, 7000
3	1	AN526-1032R14	SCREW, MACHINE, TRUSS HEAD
4	1	MS21044N3	NUT
5	3	NAS1149C0332R	WASHER
6	1	MS20392-2C19	CLEVIS PIN
7	2	NAS1149D0316J	WASHER
8	1	MS24665-132	COTTER PIN
*	1	8A08000-023	ASSEMBLY, WATER RUDDER BLADE
*	1	8A08044-001	ARM, WATER RUDDER, LEFT
*	1	8A08044-002	ARM, WATER RUDDER, RIGHT
*	2	AN4-12A	BOLT
*	1	AN4-17A	BOLT
*	2	AN3-10A	BOLT
*	2	AN3-11A	BOLT
*	3	NAS679A4W	NUT
*	4	NAS679A3W	NUT
*	8	NAS1149D0316J	WASHER
*	2	NAS1149D0463J	WASHER
*	4	NAS1149D0416J	WASHER

* Items included in 8A08000-079 assembly, noted here for reference.

NOTES:

1. Water rudder blade and arms come bare with no finish. Contact Wipaire customer service if paint is desired.
2. Exchange weight is +6.4 lbs for two (2) water rudders. Measure distance from aircraft datum to center of water rudder blade (when retracted) to get arm length. 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 132.

END