

SERVICE LETTER: #61

| DATE: | AUGUST 28, 2003 | |
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| <u>TITLE</u> : | Main Gear Roller Inspection / Torque Arm Replacement | |
| EFFECTIVETY: | | |
| PARTI | Wipline 3000 Amphibious Floats S/N's: | 30001A to 30082A |
| | Wipline 3450 Amphibious Floats S/N's: | 34001A to 34066A |
| PART II | Wipline 3000 Amphibious Floats S/N's | 30001A to 30118A |
| | Wipline 3450 Amphibious Floats S/N's | 34001A to 34128A |
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Note: This Service Letter supercedes Service Letter 45, 46, and 56.

COMPLIANCE:

- **PART I**: Before next flight perform a retraction test per this Service Letter. If binding or stoppage occurs, proceed with Part II before flight.
- **PART II**: Within the next 20 hours of flight operation or at the next annual inspection, replace parts as per this Service Letter and Service Kit# 42.

BACKGROUND INFORMATION:

Floats in the serial number range 3000A – 30082A and 34000A – 34066A may have track rollers (#21A05520-003) that were not heat treated by the vendor. The rollers may expand and bind in the main gear track causing the main gear to jam or put excessive loads on the retract arm (#30A05000-023 or 022) which could cause the retract arm to fail at the shear bolts. In this condition, the main gear could fail or jam.

METHOD OF COMPLIANCE:

PART I: Reference the 3000 – 3450 Service Manual for jacking instructions. On floats that fall within the effectively range, jack the aircraft and perform a retraction and extension test. Each main gear should be actuated manually both up and down by disconnecting the main gear hydraulic cylinder from the retract arm (part# 30A05000-023) (fig. 6-4 Service Manual). The gear should actuate smoothly in both directions. Raising the gear by hand using the retract arm will take extra force to overcome the weight of the gear assembly. The movement of the gear can be assisted by lifting on the tire or by removing the Main Gear Wheel assembly from the axel to lighten up the force on the Retract Arm. (continued)

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Gear movement should be relatively smooth in both directions. If there is stoppage or binding of the rollers in the side tracks, proceed with Part II of this Service Letter before further flight. If the gear operates smoothly the aircraft may be operated as per Part II of the compliance section of this service letter until parts replacement in accordance with Service Kit #42 can be accomplished.

PART II: Refer to the 3000 – 3450 Service Manual for jacking instructions. Jack the aircraft/floats and remove the complete main gear retraction mechanisms per the 3000 / 3450 Service Manual. Re-install the main gear retraction mechanisms – as per the Service Kit# 42 instructions, utilizing the parts contained in Service Kit# 42. Also remove the existing limit switches from the hydraulic cylinder and replace as shown in the Service Kit instructions. After performing a gear retraction test, remove the aircraft from jacks and complete the sign off (signature) portion of the Service Letter and make appropriate log entries. Return the aircraft to service.

SHOP HOURS REQUIRED:

- **PART I:** 2 Hours for inspection
- PART II: 22 Hours

WARRANTY: Parts and Labor for 18 months past the original issuance of this service letter.