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## SERVICE KIT: #42

<u>DATE</u>: August 18, 2003 Revised: June 20, 2007 <u>SUBJECT</u>: Installation – Main Gear Roller Inspection / Torque Arm Replacement.

MODEL: 3000, 3450 Amphibian Floats.

<u>ltem</u>	<u>Quantity</u>	Part No.	Description
1.	1	30A05000-039	Arm Retract Left
2.	1	30A05000-040	Arm Retract Right
3.	2	30A05000-042	Ass'y – Drag Retract
4.	2	30A05114-007	Side Retract Plate
5.	2	30A05114-008	Side Retract Plate
6.	4	30A05702-024	Bolt
7.	8	AN365-440	Nut (MS21044N4)
8.	8	AN515-4R6	Screw
9.	2	TM2S6-M	Mount Tie Strap
10.	2	PLT1M-M	Tie Strap
11.	2	#8	Screw-Mount Attach
12.	1	MS35489-4	Grommet
13.	4	21A05520-003	** Rollers
14.	2	S/K 39	* Shock Strut 3000
15.	2	S/K 39	* Shock Strut 3400
16.	1	#61	Service Letter

- \* Note: Not required if Service Kit #39 has been accomplished.
- \*\* Note: Not required if Service Letters #45, or #46 (Kit #29) installed, check rollers and axle for wear, replace if required.



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## **INSTALLATION INSTRUCTIONS:**

## Gear Removal:

- 1. Refer to the Service Manual to remove main gear ass'y from float.
- 2. With gear removed, use unibit to open retract arm, hole to  $\frac{3}{4}$ " Ø.
- 3. Update main gear assembly, and reinstall in float in reverse order of removal.

## Limit Switch Installation:

- 1. Drill limit switch mounting holes.
  - a. Position limit switch drill jig over the Left Side Retract Plate, Part #30A05114-007, (reference figure 6.1 in the service manual, old part #30A05114-003). The Ass'y. Retract Yoke, Part #30A05000-042, (reference figure 6.1 in the service manual, old part #3005000-024) is the same in both floats. There is not a left and right part. The limit switches will be mounted on the left-hand side panel in both floats, (outboard side of left float and inboard side of right float)
- 2. Install the magnet.
  - a. To install the magnet in the holder on the Ass'y, Retract Yoke, Part #30A05000-042, remove all the side play in the gear assembly by pushing it towards the left (side with switches)
  - b. With the side-play moved left, slide the magnet out until it is within approx 1/4" of the side panel.
  - c. Tighten setscrew.
- 3. Adjust Limit Switches.
  - a. Remove limit switches from there present mounting configuration on the hydraulic cylinder. They should be easily removed by cutting the plastic tie-wrap securing them to the cylinder. Mark wires before cutting to aid rewiring switches after re-installation.
  - b. Mount the switches as shown in the drawing in this Service Kit #42. Leave screws loose enough to slide the switches along the adjustment slots.
  - c. Rewire switches in new location. If wires were not clearly marked when disassembled refer to the electrical schematic, figure 5.2 in the service manual. If the floats are not installed on the aircraft you will need to use an ohmmeter set to check for continuity to know when the switch makes contact
  - d. Slide both switches to the furthest position away from the magnet. Before adjusting switches, push the side-play in the gear assembly to the right, or away from the switches. Actuate gear to its full up position. Make sure it is at its full travel and the side-play away from the switches. Slide the switch towards the magnet until it makes contact and tighten the mounting screws. Actuate gear to its full down position. Make sure it is at its full travel with the side-play away from the switches. Slide the switch towards the magnet until it makes contact and tighten the mounting screws. Actuate gear to its full down position. Make sure it is at its full travel with the side-play away from the switches. Slide the switch towards the magnet until it makes contact and tighten the mounting screws. NOTE. (The magnet maybe moved away or toward the switch as necessary for lights to come on in the up and down position.) Check to see the ground wire is installed. Make sure all wires are secured and do not interfere with the gear retract mechanism. If the floats are installed on the aircraft, or when they are installed on the aircraft, do several gear retract and extensions to check proper function of the gear and limit switches.





