 <p style="text-align: center;"> <small>• MANUFACTURERS OF WIPLINE FLOATS &amp; SKIS          • SPECIALISTS IN AIRCRAFT MODIFICATION</small> </p> <p style="text-align: center;"> <small>1700 Henry Avenue - Fleming Field          South St. Paul, MN 55075          651-451-1205</small> </p>			Rev A
			Date 3-15-06
Prepared by Ellen Parker	Aircraft Make / Model	Float / Ski Model 2100, 2350, 3000 & 3450 Amphibious Floats	Page 1 5
FAA Reviewed <input checked="" type="checkbox"/>	Title <b>Nose Gear Friction Device</b>		
<b>ALL INFORMATION IN THIS SERVICE DOCUMENT BASED ON FAA APPROVED DATA</b>			

**SERVICE KIT: #48**

DATE: March 15, 2006

SERVICE KIT: #48

SUBJECT: Addition of nose gear friction device.

MODEL: 2100, 2350, 3000 and 3450 amphibious floats.

<u>Item</u>	<u>Quantity</u>	<u>Part No.</u>	<u>Description</u>
1.	2	21A06318-005	Pivot Block
2.	2	21A06194-005	Spring Block
3.	2	21A06705-005	Pressure Spring
4.	2	21A06160-053	Pressure Plate
5.	2	21A06475-006	Friction Cup
6.	2	9528K15	1/4" Friction Ball
7.	2	MS16997-60	1/4"-20 x 3/4" S.H.C.S.
8.	2	MS35649-2252	1/4"-20 Jam nut
9.	8	NAS1352-3-18P	10-24 x 1-1/8" S.H.C.S.
10.	8	MS35333-39	#10 Internal lock washer
11.	2	30A06702-016	Modified Bolt
12.	4	AN5-14A (for 2100) AN5-15A (for 2350/3000) AN5-16A (for 3450)	Bolt
13.	4	AN5-16A (for 2100) AN5-17A (for 2350/3000) AN5-20A (for 3450)	Bolt
14.	1	#66	Service Letter

## INSTRUCTIONS:

1. Raise front of float so nose wheel does not contact ground.
2. Remove existing pivot block assembly from nose spring lower end.
3. Remove modified thru bolt holding the pivot shaft and fork in the pivot block.
4. Remove pivot shaft, detent spring, thrust washer and plunger from pivot block.
5. Remove grease zerk and install on new pivot block.
6. Install pivot shaft with detent spring, plunger and thrust washer in new pivot block.
7. Install new modified thru bolt with required washers and nut to hold pivot shaft into pivot block.
8. Put a dab of grease in the machined slit on new pivot block to help hold the ¼ inch ball bearing in place.
9. Put light coat of grease in the detent cup and insert the pressure spring into friction cup (cut side of spring to inside of cup).
10. With the pressure plate on top of pressure spring, and the friction cup around the pressure spring, insert them into the spring block with pressure plate to the bottom of the hole in the spring block.
11. Place spring block assembly on pivot block, making sure the ¼” ball bearing remains in place, and secure using (4) 10-24 Socket Head Cap Screws and internal lock washers.
12. Place ¼-20 jam nut on the ¼-20 Socket Head Cap Screw and insert in ¼ inch hole on the spring block.
13. Replace the pivot block assembly without shims on the nose spring with AN5 bolts of appropriate length (see items #12 and 13).
14. Using a spring scale (a small fishing scale works nicely) pull perpendicular to the wheel near the axle on the fork and adjust the ¼-20 S.H.C.S. until 8-10 pounds is required to turn the wheel. (Figure 1) **NOTE: ENSURE THE WHEEL IS OUT OF THE DETENT FOR AN ACCURATE MEASUREMENT.**
15. Tighten jam nut on socket head screw.

16. Repeat for other nose wheel.



Figure 1

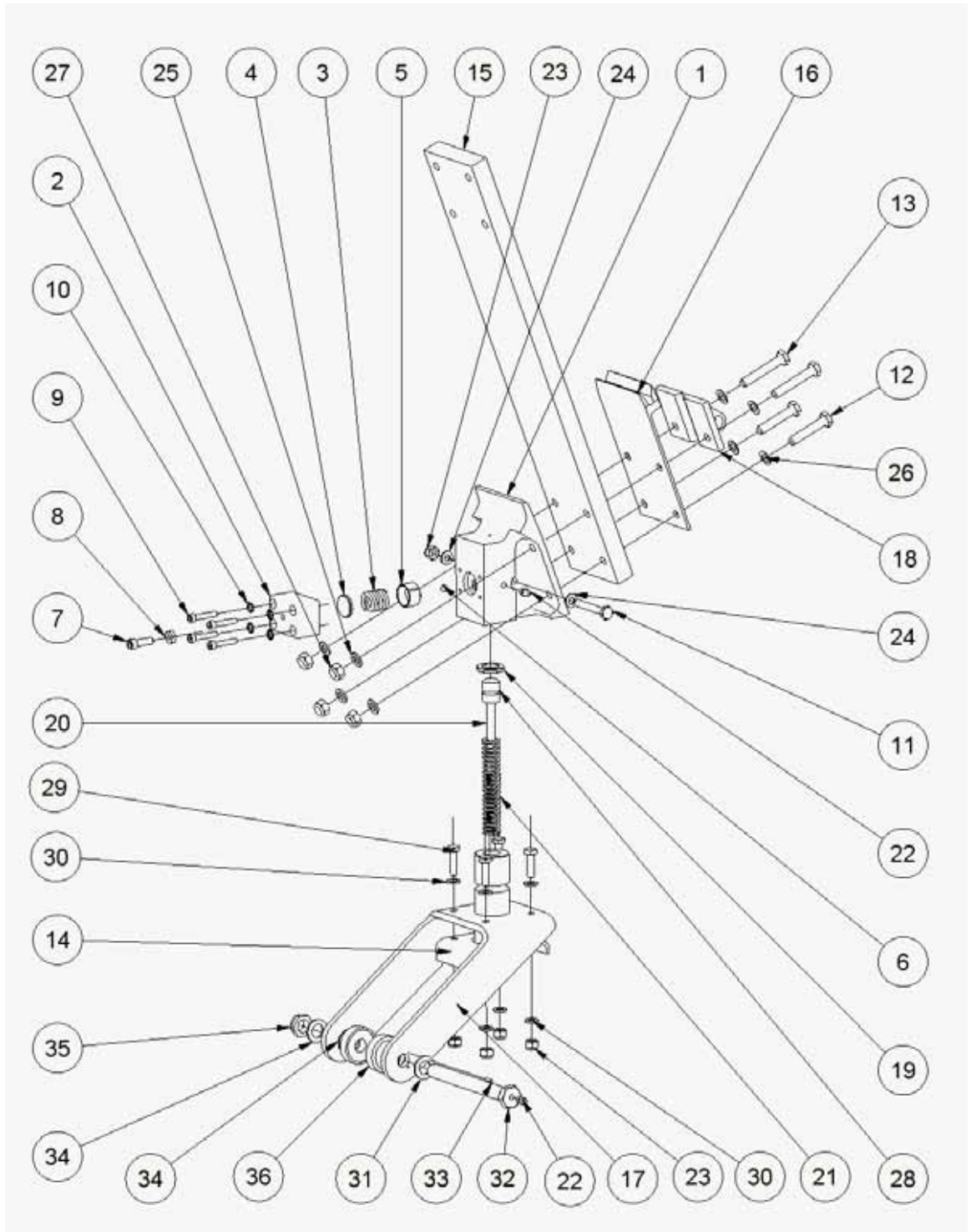


Figure 2 (Wipline model 2100 Nose Gear Assembly)

WIPLINE MODEL 2100 NOSE GEAR ASSEMBLY

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	21A06318-005	PIVOT BLOCK - NOSE GEAR
2	1	21A06194-005	SPRING BLOCK
3	1	21A06705-005	PRESSURE SPRING
4	1	21A06160-053	PRESSURE PLATE
5	1	21A06475-006	FRICTION CUP
6	1	9528K15	1/4" CHROME BALL BEARING
7	1	MS16997-60	1/4-20 SOCKET HEAD CAP SCREW
8	1	MS35649-2252	1/4-20 NUT
9	4	NAS1352-3-18P	10-24 SOCKET HEAD CAP SCREW
10	4	MS35333-39	WASHER STAR
11	1	30A06702-016	MODIFIED BOLT
12	2	AN5-14A	BOLT
13	2	AN5-16A	BOLT
14	1	21A06000-020	ASS"Y - PIVOT SHAFT
15	1	21A06653-001	SPRING NOSE GEAR
16	1	21A06237-001	BEARING PLATE, LOWER, NOSE GEAR
17	1	21A06020-001	FORK, NOSE GEAR (2100)
18	1	21A06213-006	TOW HOOK NOSE GEAR
19	1	3A06602-001	THRUST WASHER
20	1	21A06605-002	NOSE WHEEL PLUNGER (2100)
21	1	M62-350	SPRING
22	2	1095K41	COMMON GREASEZERK
23	5	MS21044N4	Nut
24	2	NAS1149D0463J	WASHER
25	4	NAS1149F0563P	WASHER
26	4	NAS1149F0532P	WASHER
27	4	MS21044N5	Nut
28	1	AN6227-9	O-RING
29	4	AN4-7A	Bolt
30	8	NAS1149F0463P	WASHER
31	1	3A06702-003	MODIFIED WASHER
32	1	3A06702-002	BOLT - NOSE WHEEL AXLE
33	1	21A06476-003	PIN, ANTIROTATION
34	3	NAS1149D0863J	WASHER
35	1	MS21083N8	NUT
36	2	3A06259-001	SPACER - NOSE WHEEL - SMALL FLOAT