

9.0 CONTINUED AIRWORTHINESS

As coded in the Inspection Time Intervals chart in this section, there are items to be checked each 25, 50, 100, and 200 hours. Also there are notes on special items which may require servicing at more frequent intervals.

- ♦ When conducting an inspection at 25 hours, all items marked for 25 hours would be accomplished.
- ♦ When conducting an inspection at 50 hours, the 25 and 50-hour items would be accomplished.
- ♦ When conducting an inspection at 100 hours, the 25, 50, and 100-hour items would be accomplished.
- ♦ When conducting an inspection at 200 hours, the 25, 50, 100, and 200-hour items would be accomplished.
- ♦ A complete inspection (Annual Inspection) would include all 25, 50, 100, and 200-hour items.

Below is a list of recommended lubricants and “protection” products when servicing float hull and amphibious components. This lists products used by Wipaire during assembly of the floats.

There may be equivalent products just as satisfactory for protection. However, it is recommended if trying different products, to inspect them frequently so as to determine their effectiveness.

Protection of nuts, bolts, hydraulic lines or metal surfaces

Zip D-5029NS Corrosion Inhibiting Compound
Zip Chemical Company

CRC – SP400 Soft Seal
CRC Industries

General Lubricants

LPS 1, LPS 2 and LPS 3
LPS Industries

Wheel Bearings, Main Gear Retract Mechanism, Nose Gear Pivot and Rod Ends

*HCF Grease, P/N 605
HCF Industries

*Aeroshell 22
Shell Global Solutions

*Green Grease, Multi-Purpose
Green Grease Inc.

*Aviation Grease SHC 100
ExxonMobil Aviation Lubricants

* If existing grease cannot be identified you must lubri-flush all float grease fittings until visibly exhausting all old grease and new grease is coming out. Additionally if you cannot determine existing grease in wheel bearings, completely clean and repack bearings with new grease.

Rust Protection

Boeshield T9 Rust Protection
Boeing Company

ACF-50 Rust Protection

Corrosion X
Corrosion Technologies Corp.

Tef-Gel
Ultra Safety Systems, Inc.

Float Sealant

890 B2 or B4
Pro Seal Company

PR 1440 C
PPG Aerospace

1422 B2, B4 or B6
Pro Seal Company

RTV Silicones
General Electric

SIKAFLEX 201 or 252
Sika Manufacturing

Teflon Spray

6P-730A
Comet Industries

Electrical Insulating Compound

Dow Corning 4 (DC4)
Dow Corning Corporation

Hydraulic Fluid

Mil-H-5606

Bolt Torque

Bolts in Critical Areas - For common, correct torque when installed, or when visual inspection indicates a need for a torque check.

Nut torque should be applied depending on the hardware application, unless the torque is specified for a certain joint in this manual or installation drawings.

****Tension Application**

Nut-Bolt Size	Torque Limits (in-lbs)	
	Min.	Max.
8-36	12	15
10-32	20	25
1/4-28	50	70
5/16-24	100	140
3/8-24	160	190
7/16-20	450	500
1/2-20	480	690
9/16-18	800	1,000
5/8-18	1,100	1,300
3/4-16	2,300	2,500
7/8-14	2,500	3,000
1-14	3,700	4,500
1 1/8-12	5,000	7,000
1 1/4-12	9,000	11,000

****Shear Application**

Nut-Bolt Size	Torque Limits (in-lbs)	
	Min.	Max.
8-36	7	9
10-32	12	15
1/4-28	30	40
5/16-24	60	85
3/8-24	95	110
7/16-20	270	300
1/2-20	290	410
9/16-18	480	600
5/8-18	600	780
3/4-16	1,300	1,500
7/8-14	1,500	1,800
1-14	2,200	3,300
1 1/8-12	3,000	4,200
1 1/4-12	5,400	6,600

** A Torque of 80% should be used when Tef-Gel is applied to the bolt.

WIPLINE MODEL 3000 / 3450 FLOAT SERVICE MANUAL

		INSPECTION TIME INTERVALS				HOURS					RT	LT	INSP.	
		General	Details	25	50	100	200							
General	Placards													
Hulls & Struts	Float Installation.	Float exterior – Inspect for damage, wrinkled metal, corrosion, paint loss, etc.		X										
		Struts & attach fittings			X									
		Spreader bars				X								
		Float Structure (interior)					X							
	Baggage Compartment Covers and Seals – Inspect for condition, security operation, excessive wear.						X							
	Pumper Tube Installation – Inspect for condition, security, routing of hoses.								X					
Water Rudder System	Water Rudder Hinges – Inspect freedom of rotation.	Clean and Inspect Lube with LPS#2		X										
	Water Rudder Steering and Retract Systems – Inspect the following: cables for broken wire; cable fittings for cable slippage, cracks and distortion; cable pulleys for freedom of rotation; and cable guard pins for presence; rigging.					X								
	Water Rudder Blades and Posts – Inspect for damage, security of attachment; corrosion, paint; rigging.	Clean and Inspect Lube with LPS#2				X								
Electrical System	Pump and Indicator Light Wiring – Inspect for chafing, broken or loose terminals and general condition.					X								
	Solenoids – Inspect wiring, mounting and general condition.					X								
	Pressure Switches – Inspect wiring, mounting and general condition.					X								
	Pump Motors – Inspect wiring, mounting and general condition.					X			X					

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	INSPECTION TIME INTERVALS					RT	LT	INSP.				
	General		Details		25				50	100	200	
Landing Gear Systems	Main and Nose Gear Tracks – Lubricate.				X							
	Nose Gear Pivot Blocks and Forks – Inspect for condition, lubrication, corrosion and paint.		Clean Fork for Inspection, Check Fork Tension 8-10 lbs		X							
	Nose Gear Box/Block Tracks measured at slide route for wear, .020 inches or less wear tolerance.							X				
	Nose and Main Wheel Bearing – Grease zerkl fittings.				X							
	Hydraulic Fluid Level					X						
	Wheels and Tires – Inspect for wear, pressure, condition.					X						
	Brake Assemblies – Inspect for wear, corrosion, leakage.		Clean and Inspect			X						
	Hydraulic Fluid Screen – Clean and inspect. Note: if floats sit for extended periods of time (i.e., if removed during winter months), screen should be cleaned before putting floats back into service. Hydraulic fluid in reservoir should be checked for moisture or other contaminants and changed if necessary.						X					
	Main and Nose Gear Actuator, Assemblies – Inspect for condition, lubrication, leakage, corrosion and cleanliness.		Clean and Lube Nose and Main Gear Tracks.				X					
	Nose Gear Springs – Scotchply springs, inspect for cracks, delamination and paint.						X					
	Main Gear Drag Link – Inspect for condition, lubrication, corrosion, check attach bolts for wear.						X					
	Main Gear Shock Strut – Inspect for evidence of corrosion, pitting, cleanliness and security. Check lower attach bolt for wear.					X						
	Hydraulic Lines and Fittings – Inspect for leaks, condition and security.		AV-30 or Grease Fittings					X				
	Hydraulic Manifolds (if equipped) – Inspect for condition, security and leaks.							X				
					HOURS				RT	LT	INSP.	

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			25	50	100	200				
	Brake System Plumbing – Inspect for leaks, condition and security.					X				
	Perform Retraction Test	Main Gear – Inspect up and down for proper engagement. Nose Gear Trolley – Inspect for proper travel				X				
		Nose Gear – Inspect for excessive side play in the down position. Perform emergency gear Extension (hand pump).				X				
	Nose and Main Wheel Bearings – Disassemble and inspect.					X				