WIPAIRE, INC.

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AVIONICS • INTERIOR • MAINTENANCE • PAINT REFINISHING

SERVICE LETTER 243

Hydraulic Pump Pressure Settings for 2100A, 2350A, 3000A, and 3450A Floats

Aircraft Makes/Model(s):	Float Model(s):	**Compliance:** Mandatory	**By:** MAS
See Table 1 Below	See Table 1 Below	**Part Number:** 1012002	**Approved:** SDW
		Date: 1/5/2022	**Revision:** A

LOG OF REVISIONS

Revision	Description	Date
A	Initial release	1/5/2022

FAA approval has been obtained for technical data in this publication that affects STC or TSO design compliance.

EFFECTIVITY:

This service letter applies to any aircraft float configuration in Table 1 with a 12 VDC pump installed 1/1/2020 to 12/31/2021.

Aircraft	Float Model	STC Number
Husky	2100	SA00637CH
Piper PA-18 Cub Crafters CC18	2100	SA00713CH CC-18 TC
Scout 8GCBC	2100	SA00763CH
Cessna 172	2100 & 2350	SA00674CH SA00900CH
Cessna 170	2100	SA00804CH
Husky	2100	SA00637CH
Maule	2350 & 3000	SA01411CH SA01412CH
Cessna 206	3450	SA01185CH
Cessna 180 & 185	3450	SA01272CH

Table 1 – Effectivity (installed 1/1/2020 and later)

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COMPLIANCE:

Mandatory compliance

BACKGROUND:

There is potential that an installed hydraulic pump may be rated for a higher pressure than the rest of the system. If the pressure relief valve is not set on the pump correctly, there could be improper pressure in the hydraulic system.

COMPLIANCE METHOD:

Inspect for the correct hydraulic pump part number as directed in the work instructions of this service letter.

APPROXIMATE SHOP HOURS:

- 15 minutes for hydraulic pump part number audit

- 8 hours if hydraulic pump needs to be replaced or pressure and thermal relief valves adjusted

WARRANTY INFORMATION:

Contact Wipaire Customer Service for details.

TECHNICAL DATA:

Copies of this service letter, associated service kit (if applicable), float service manual, and float parts manual are available at www.wipaire.com.

Work Instructions

1. Gain access to the float hydraulic pump. Reference the installation drawing shown in Table 1 above for location. Contact Wipaire customer service for a copy of the applicable drawing as needed.
2. See Figure 1 below. On the hydraulic pump (power pack) assembly, check for the part number of the pump.
   A. If the pump unit is P/N 640661, no further action is needed. Close access and continue to Aircraft Closing & Return to Service section.
   B. If the pump unit is P/N 650085, pressure and thermal relief valves adjustments will be needed. This can be accomplished by either:
      a) Remove the entire pump power pack assembly using the installation drawings in Table 1 as a guide. Contact Wipaire customer service to ship the power pack back to Wipaire for adjustments
      b) Adjust the pressure and thermal relief valves (Reference Figure 2):
         1. Disable the pressure switches by jumping the switch ground connections.
         2. Connect power and ground to motor from a hydraulic test bench.
         3. Connect hydraulic lines from a hydraulic test bench to “UP” and “DN” ports.
         4. Set the “UP” pressure relief valve to ~2000 psi by loosening the jamb nut and turning the pressure relief valve clockwise all the way in. Tighten jamb nut when pressure is set
         5. Loosen jamb nut on “UP” thermal relief valve.
         6. Activate power to run the pump in the “UP” position. Rotate “UP” thermal relief valve counterclockwise until 1000 +/- 50 psi is achieved. Deactivate power and tighten jamb nut after setting pressure. Run pump again to verify thermal relief pressure is set at 1000 +/- 50 psi.
         7. Repeat the same steps to set “DN” thermal relief valve to 1000 +/- 50 psi.
         8. After thermal relief valves are set, loosen jamb nut on “UP” pressure relief valve.
         9. Activate power to run the pump in the “UP” position. Rotate “UP” pressure relief valve counterclockwise until 800 +/- 50 psi is achieved. Deactivate power and tighten jamb nut after setting pressure. Run pump again to verify pressure relief valve is set at 800 +/- 50 psi.
         10. Repeat the same steps to set “DN” pressure relief valve to 800 +/- 50 psi.
         11. Locally fabricate a placard simiar to Figure 3, or contact Wipaire Customer Service to purchase placard p/n 1011996. Place the placard over the top of the current placard on the pump once pressure has been corrected.

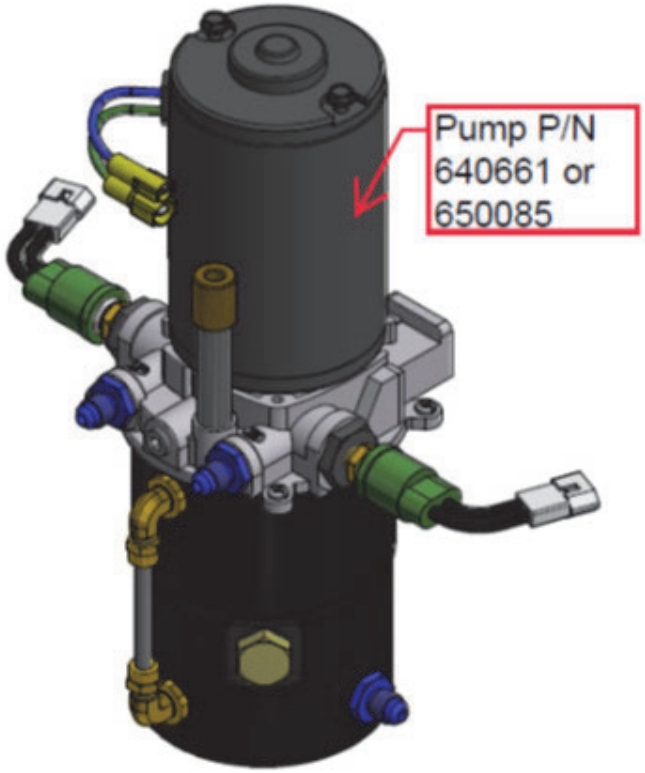


Figure 1 – Hydraulic Pump

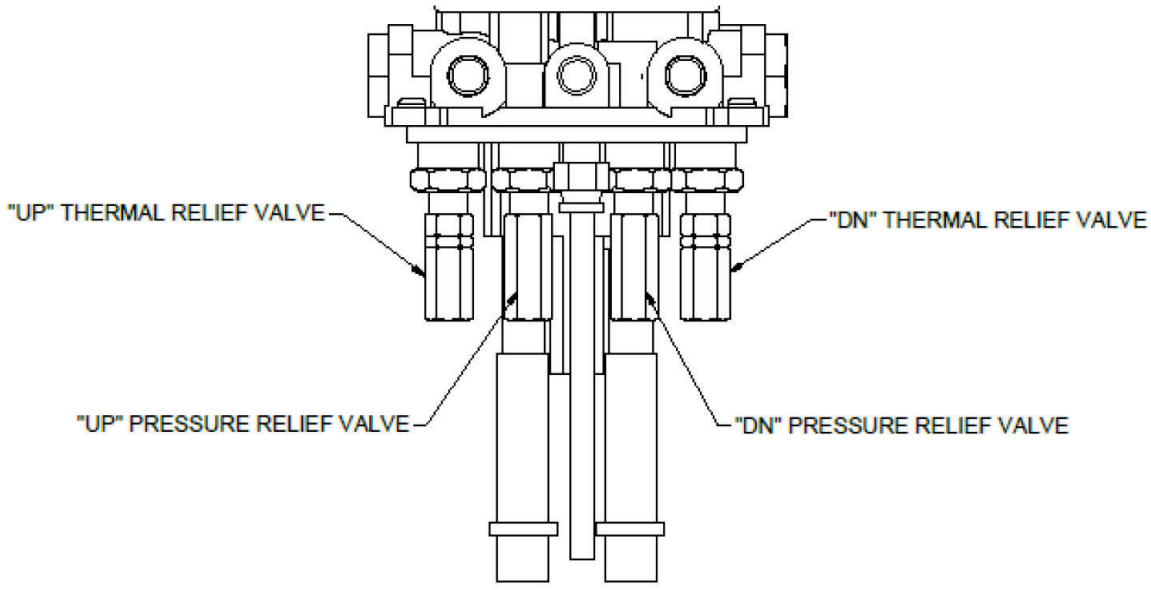
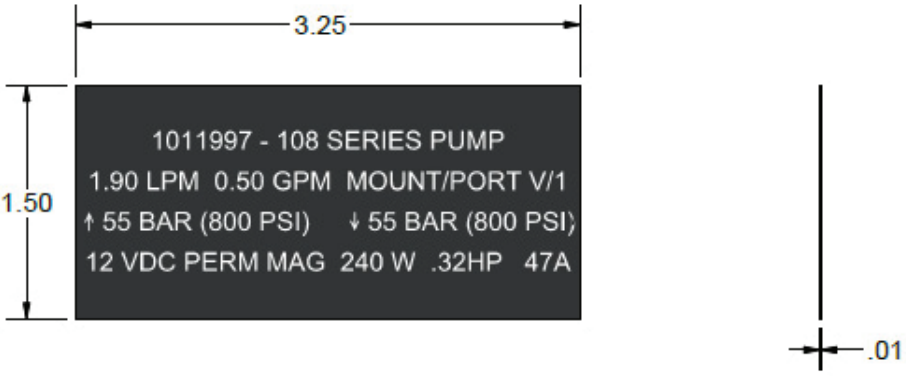


Figure 2 – Up / Dn Pressure and Thermal Relief Valve Location

REVISION HISTORY				
REV	DATE	ECO	DR	DESCRIPTION
A	11/4/2021	26612	DLW	INITIAL RELEASE



NOTES:

1. LETTER TO BE .12"
2. LETTER COLOR IS WHITE ON BLACK BACKGROUND.
3. LETTER STYLE IS HELVETICA BOLD OR EQUIVALENT
4. ALTERNATE MATL: GRAPHIC PRODUCTS INC. ADHESIVE COATED VINYL FILM, STD 3.0 MIL.

MAT'L 4 VELVET POLYCARBONATE WITH 3M 468 ADHESIVE BACK					WIPAIRE, INC. 1700 HENRY AVE. SOUTH ST. PAUL, MN 55075 (651) 451-1205	
FINISH NONE					TITLE PLACARD, HYD. PUMP, INTERNAL SETTINGS	
ALL DIMS IN INCHES & AFTER FINISH	THIRD ANGLE PROJECTION	TOLERANCES .X= ±.05 .XX= ±.015 .XXX= ±.005 X°= ±.5°	SIZE A	SCALE 4:1	PART NO. 1011996	REV A
			Sheet 1 of 1			

Figure 3 - 1011996 Placard

Aircraft Closing & Return to Service

1. Upon completion of inspection, enter information in Aircraft Logbook for completion of Wipaire Service Letter 243.