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SERVICE LETTER 237

Cessna 185 Hydraulic Pump Replacement on 3730A, 3900A, and 4000A Floats

Aircraft Makes/Model(s):	Float Model(s):	**Compliance:** Optional	**By:** MAS
Textron Aviation 185 Series	3730A, 3900A, 4000A	**Part Number:** 1011965	**Approved:** DRH
		Date: 1/7/2026	**Revision:** B

LOG OF REVISIONS

Revision	Description	Date
A	Initial release	9/22/2021
B	Addition of 12 volt pump replacement. Updated Background section. Added 1011965-02 Kit. Added images and work instructions.	1/7/2026

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

EFFECTIVITY:

This service letter applies to Textron Aviation model 185 series with Wipline 3730, 3900, and 4000 Amphibian Floats installed per STC SA805CE, SA7GL, and SA1569GL.

COMPLIANCE:

Optional compliance

BACKGROUND:

Textron Aviation (Cessna) 185 Hydraulic Pump Assembly 24 VDC p/n 34-24524022-5 has been discontinued. This service letter provides the option to replace it with pump p/n 1011950 for the 24 VDC. This service letter also contains instructions for replacing the hydraulic pump assembly on 12 VDC systems, using pump p/n: 1012884.

COMPLIANCE METHOD:

Install provided parts as shown in the Work Instruction section of this service letter.

APPROXIMATE SHOP HOURS:

The work instruction for this service letter will take approximately 8 labor hours.

WEIGHT AND BALANCE CHANGE:

+.5 lbs at F.S. -3.00

WARRANTY INFORMATION:

This service letter does not include warranty for labor and parts.

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.

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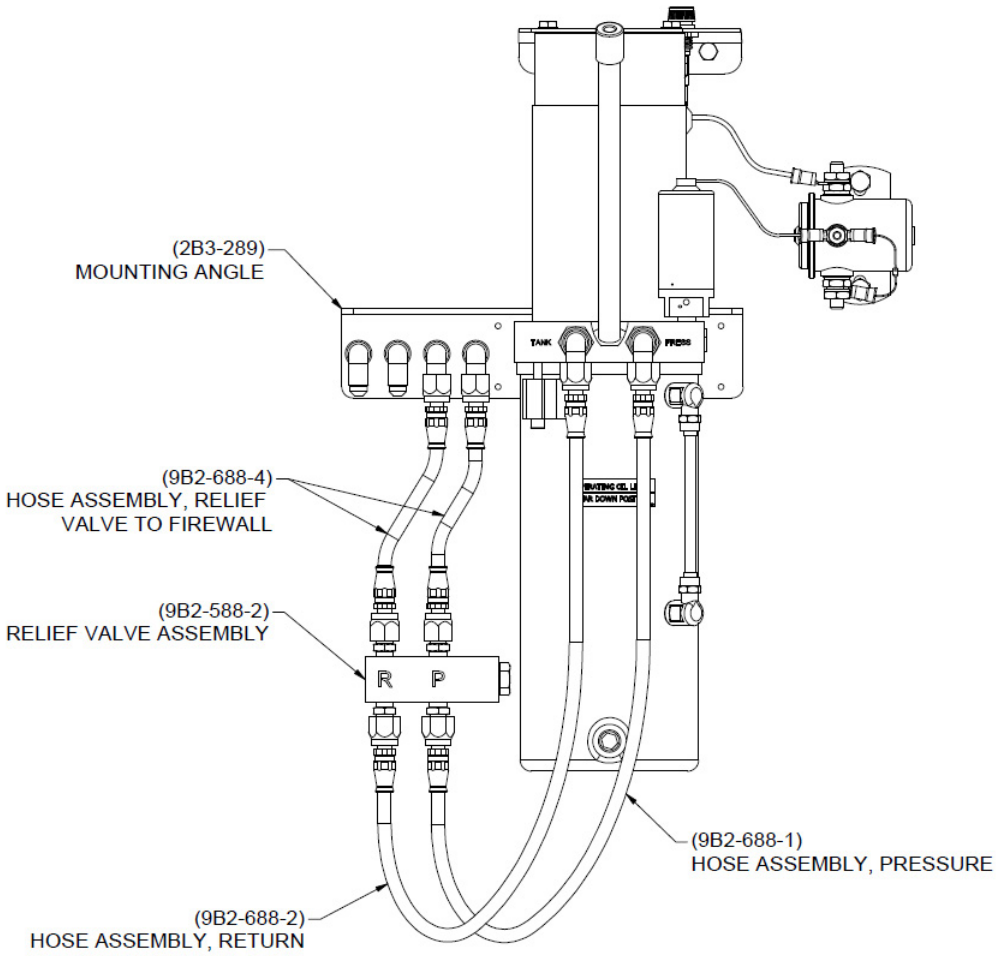
ITEMS PROVIDED IN SERVICE KIT 1011965-01 (24 VDC HYDRAULIC PUMP)

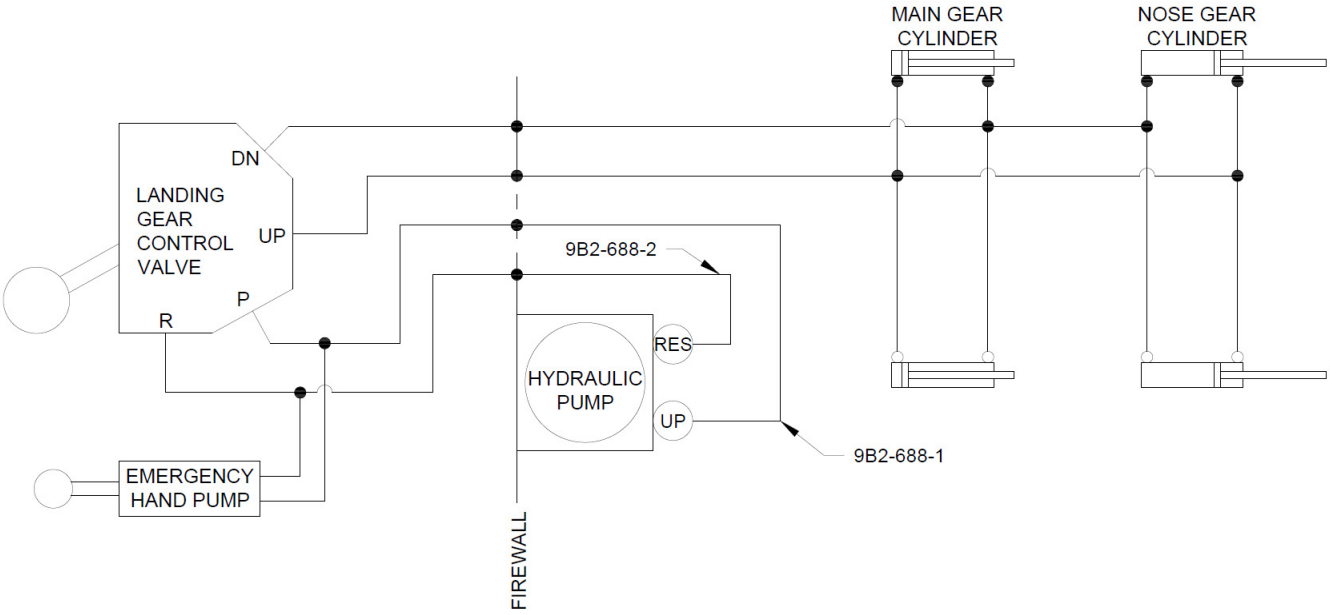
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	1011950	ASSEMBLY, HYDRAULIC POWER PACK, 24V
2	1	1011947	ANGLE, PUMP MOUNT
3	1	MS25036-103	RING TERMINAL, #10 STUD, 22-16 AWG, RED
4	1	MS25036-112	RING TERMINAL, #10 STUD, 12-10 AWG, YELLOW
5	2	MS25036-157	RING TERMINAL, 1/4" STUD, 12-10 AWG, YELLOW
6	1	MS25036-113	RING TERMINAL, 5/16" STUD, 12-10 AWG, YELLOW
7	2	320559	CRIMP TERMINAL, BUTT, 22-16 AWG
8	4	CR3243-4-3	CHERRY MAX RIVETS
9	3 FT	22759-16-12-9	WIRE, 12 AWG, WHITE
10	3 FT	22759-16-20-9	WIRE, 20 AWG, WHITE

ITEMS PROVIDED IN SERVICE KIT 1011965-02 (12 VDC HYDRAULIC PUMP)

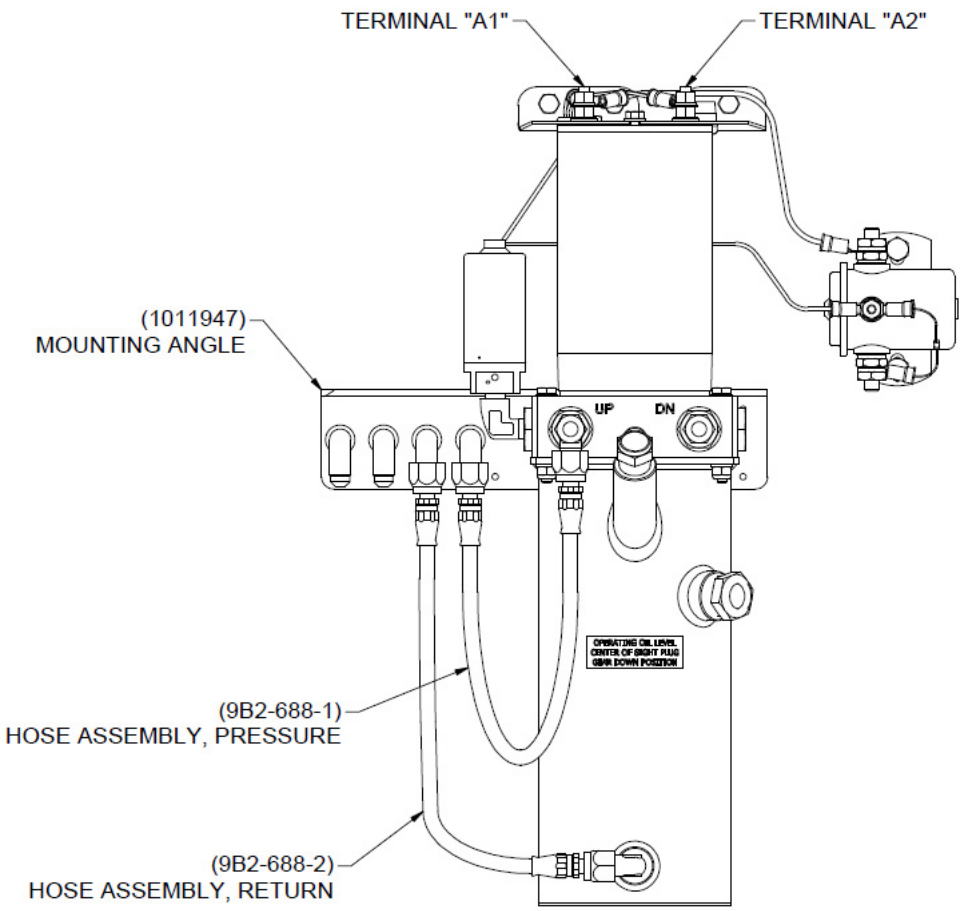
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	1012884	ASSEMBLY, HYDRAULIC POWER PACK, 12V
2	1	1011947	ANGLE, PUMP MOUNT
3	1	MS25036-103	RING TERMINAL, #10 STUD, 22-16 AWG, RED
4	1	MS25036-112	RING TERMINAL, #10 STUD, 12-10 AWG, YELLOW
5	2	MS25036-157	RING TERMINAL, 1/4" STUD, 12-10 AWG, YELLOW
6	1	MS25036-113	RING TERMINAL, 5/16" STUD, 12-10 AWG, YELLOW
7	2	320559	CRIMP TERMINAL, BUTT, 22-16 AWG
8	4	CR3243-4-3	CHERRY MAX RIVETS
9	3 FT	22759-16-10-9	WIRE, 10 AWG, WHITE
10	3 FT	22759-16-20-9	WIRE, 20 AWG, WHITE



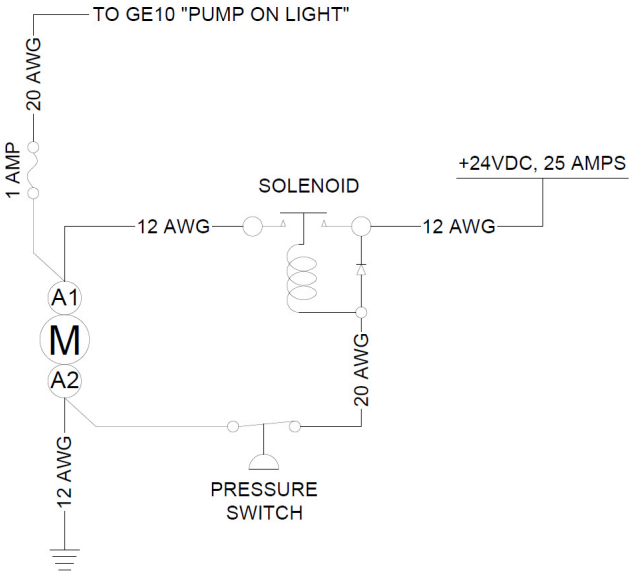
DISCONTINUED OILDYNE HYDRAULIC PUMP 34-24524022-5



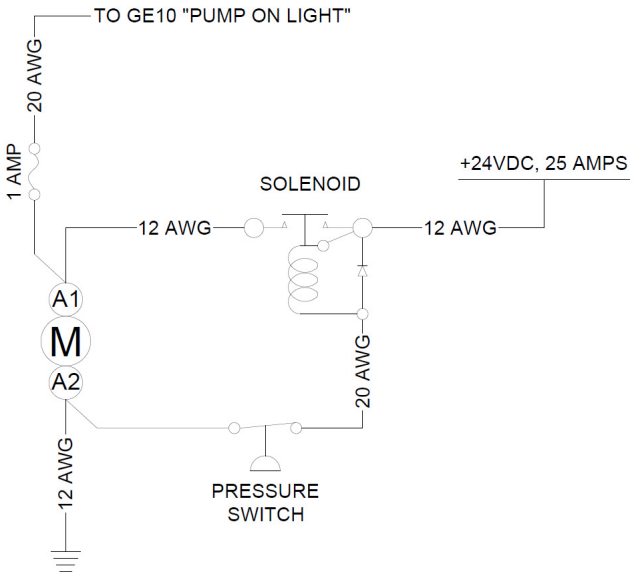
HYDRAULIC SCHEMATIC



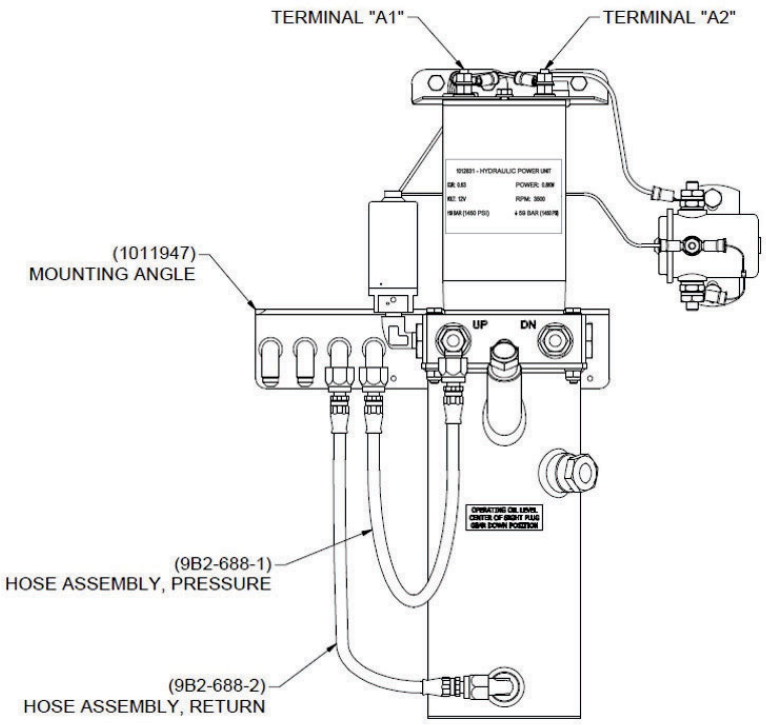
NEW 24VDC HYDRAULIC PUMP 1011950



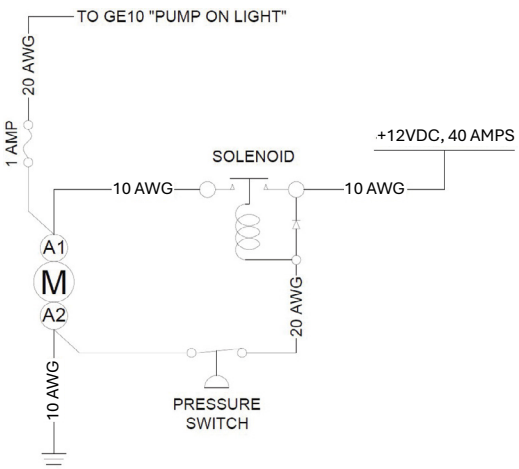
24 VOLT 3 LUG SOLENOID ELECTRICAL SCHEMATIC



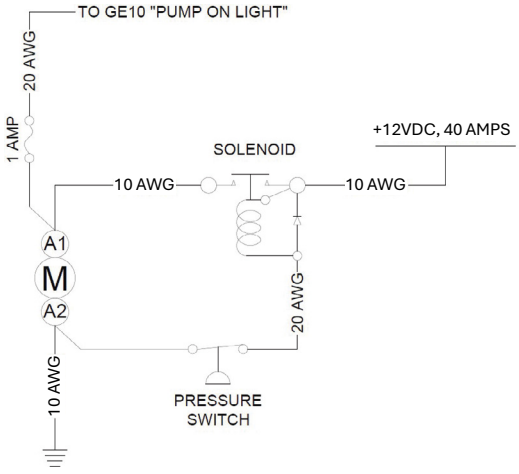
24 VOLT 4 LUG SOLENOID ELECTRICAL SCHEMATIC



NEW 12VDC HYDRAULIC PUMP 1012884



12 VOLT 3 LUG SOLENOID
ELECTRICAL SCHEMATIC



12 VOLT 4 LUG SOLENOID
ELECTRICAL SCHEMATIC

Work Instructions

24 VDC Hydraulic Pump

1. Pull hydraulic pump circuit breaker.
2. Remove electrical wire from hydraulic pump to large terminal on the electrical solenoid.
3. Remove electrical wires from hydraulic pump to aircraft ground.
4. Remove electrical wire from hydraulic pump pressure switch to small terminal on electrical solenoid.
5. Cut wire from hydraulic power pack fuse holder to “GE10” pump on light.
6. Note hydraulic pressure, return, and float fittings on firewall.
7. Remove 9B2-688-1 and -2 from hydraulic pump and pressure relief assembly. Save for re-install.
8. Remove and discard 9B2-588-2 relief valve assembly. The new pump has relief valves in reservoir.
9. Remove and discard 9B2-688-4 hose assembly, relief valve to firewall.
10. Seal mounting holes of relief valve assembly with RTV Sealant.
11. Unbolt upper pump bracket from firewall.
12. Unbolt pump from 2B3-289 mounting angle on firewall.
13. Remove all hydraulic fittings from 2B3-289 mounting angle on firewall.
14. Drill out cherry max rivets and remove 2B3-289 mounting angle from firewall.
15. Locate and install on firewall 1011947 mounting angle in the same location as old mounting angle using supplied cherry max rivets. Outboard pump mounting hole on firewall should line up with outboard mounting hole on new angle mount. Match drill 0.375 inboard mounting hole from new mounting angle thru firewall.
16. Re-install hydraulic fittings into 1011947 mounting angle.
17. Install new hydraulic power pack 1011950 onto mounting angle using existing MS16995-87 bolts and AN935-616 lock washers.
18. Mount upper plate of new hydraulic power pack into existing holes in firewall with existing AN3-4A bolts, and AN936A10 lock washers.
19. Re-install one end of 9B2-688-1 hose assembly on hydraulic fitting at firewall for pressure. Install other end on “UP” port of hydraulic power pack. See hydraulic schematic.
20. Re-install one end of 9B2-688-2 hose assembly on hydraulic fitting at firewall for return. Install other end on hydraulic fitting in hydraulic power pack reservoir. See hydraulic schematic.
21. Make a ground wire from lug “A2” on hydraulic pump motor to aircraft ground with supplied 12 AWG wire and ring connectors. See electrical schematic.
22. Make a wire from lug “A1” on hydraulic pump motor to open, large lug on solenoid using supplied 12 AWG wire and ring connectors. See electrical schematic.
23. Run the single open wire from hydraulic pump pressure switch to the small lug of solenoid with supplied wire and electrical connectors. See electrical schematic.
24. Run the open wire from hydraulic power pack fuse holder to “GE10” pump light on wire with supplied wire and electrical connectors. See electrical schematic.
25. Reset hydraulic pump circuit breaker, service pump reservoir with MIL-W-5606 hydraulic fluid and perform a retract / extension test to make sure system is functioning correctly. Watch the system for leaks and add MIL-H-5606 hydraulic fluid as needed.

Work Instructions

12 VDC Hydraulic Pump

1. Pull hydraulic pump circuit breaker.
2. Remove electrical wire from hydraulic pump to large terminal on the electrical solenoid.
3. Remove electrical wires from hydraulic pump to aircraft ground.
4. Remove electrical wire from hydraulic pump pressure switch to small terminal on electrical solenoid.
5. Cut wire from hydraulic power pack fuse holder to "GE10" pump on light.
6. Note hydraulic pressure, return, and float fittings on firewall.
7. Remove 9B2-688-1 and -2 from hydraulic pump and pressure relief assembly. Save for re-install.
8. Remove and discard 9B2-588-2 relief valve assembly. The new pump has relief valves in reservoir.
9. Remove and discard 9B2-688-4 hose assembly, relief valve to firewall.
10. Seal mounting holes of relief valve assembly with RTV Sealant.
11. Unbolt upper pump bracket from firewall.
12. Unbolt pump from 2B3-289 mounting angle on firewall.
13. Remove all hydraulic fittings from 2B3-289 mounting angle on firewall.
14. Drill out cherry max rivets and remove 2B3-289 mounting angle from firewall.
15. Locate and install on firewall 1011947 mounting angle in the same location as old mounting angle using supplied cherry max rivets. Outboard pump mounting hole on firewall should line up with outboard mounting hole on new angle mount. Match drill 0.375 inboard mounting hole from new mounting angle thru firewall.
16. Re-install hydraulic fittings into 1011947 mounting angle.
17. Install new hydraulic power pack 1012884 onto mounting angle using existing MS16995-87 bolts and AN935-616 lock washers.
18. Mount upper plate of new hydraulic power pack into existing holes in firewall with existing AN3-4A bolts, and AN936A10 lock washers.
19. Re-install one end of 9B2-688-1 hose assembly on hydraulic fitting at firewall for pressure. Install other end on "UP" port of hydraulic power pack. See hydraulic schematic.
20. Re-install one end of 9B2-688-2 hose assembly on hydraulic fitting at firewall for return. Install other end on hydraulic fitting in hydraulic power pack reservoir. See hydraulic schematic.
21. Make a ground wire from lug "A2" on hydraulic pump motor to aircraft ground with supplied 10 AWG wire and ring connectors. See electrical schematic.
22. Make a wire from lug "A1" on hydraulic pump motor to open, large lug on solenoid using supplied 10 AWG wire and ring connectors. See electrical schematic.
23. Run the single open wire from hydraulic pump pressure switch to the small lug of solenoid with supplied wire and electrical connectors. See electrical schematic.
24. Run the open wire from hydraulic power pack fuse holder to "GE10" pump light on wire with supplied wire and electrical connectors. See electrical schematic.
25. Reset hydraulic pump circuit breaker, service pump reservoir with MIL-W-5606 hydraulic luid and perform a retract extension test to make sure system is functioning correctly. Watch the system for leaks and add MIL-H-5606 hydraulic fluid as needed.

Aircraft Closing & Return to Service

1. Upon completion of inspection, enter information in Aircraft Logbook for completion of Wipaire Service Letter 237.