WIPAIRE, INC.

WIPLINE FLOATS • SKIS • MODIFICATIONS • AIRCRAFT SALES
AVIONICS • INTERIOR • MAINTENANCE • PAINT REFINISHING

SERVICE LETTER 230

Cessna 180 & 185 Hydraulic Pump Replacement on 3000A Floats & 3450A Floats

Aircraft Makes/Model(s):	Float Model(s):	**Compliance:** Optional	**By:** MAB
Textron Aviation 180 Series 185 Series	3000A & 3450A	**Part Number:** 1011873	**Approved:** SDW
		Date: 7/13/2021	**Revision:** A

LOG OF REVISIONS

Revision	Description	Date
A	Initial release	7/13/2021

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 models 180 series and 185 series with Wipline 3000 Amphibian Floats installed per STC SA01320CH or Wipline 3450 Amphibian Floats installed per STC SA01272CH.

COMPLIANCE:

Optional compliance

BACKGROUND:

Textron Aviation (Cessna) 180 & 185 Hydraulic Pump Assembly 12 VDC p/n 34A09000-266 and Hydraulic Pump Assembly 24 VDC p/n 34A09000-281 have both been discontinued. This service letter provides the option to replace them with pumps p/n 1011865 for the 12 VDC or 1011866 for the 24 VDC.

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:

+4.2 LBS, F.S. 2.47

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.

1700 Henry Ave - Fleming Field (KSGS), South St. Paul, MN 55075
Phone: 651.451.1205 | Fax: 651.457.7858
www.wipaire.com

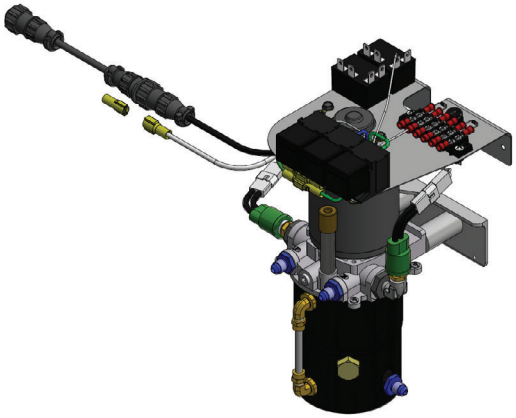
ITEMS PROVIDED IN SERVICE KIT 1011873-01 (12 VDC HYDRAULIC PUMP ONLY)

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	1011865	ASSEMBLY, HYDRAULIC POWER PACK, 12V
2	1	1011861	ANGLE, PUMP MOUNT
3	1	1011872	TOOLING, HYDRAULIC PUMP RETROFIT
4	4	CR3243-4-3	CHERRY MAX RIVETS

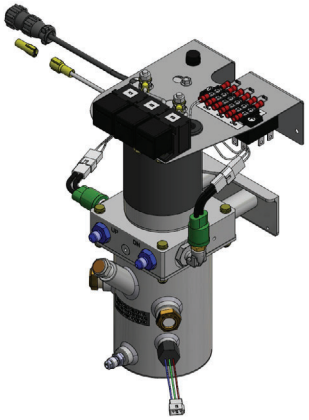
ITEMS PROVIDED IN SERVICE KIT 1011873-02 (24 VDC HYDRAULIC PUMP ONLY)

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	1011866	ASSEMBLY, HDYRAULIC POWER PACK, 24V
2	1	1011861	ANGLE, PUMP MOUNT
3	1	1011872	TOOLING, HYDRAULIC PUMP RETROFIT
4	4	CR3243-4-3	CHERRY MAX RIVETS

12 VDC PUMP ONLY

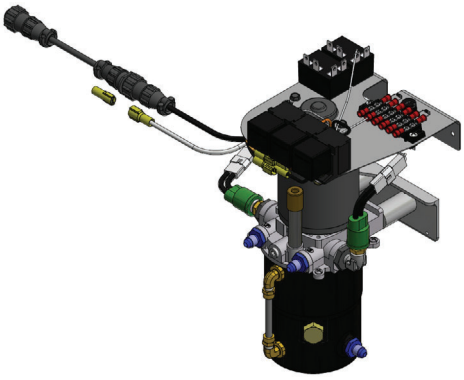


DISCONTINUED 12 VDC HYDRAULIC PUMP 34A09000-266

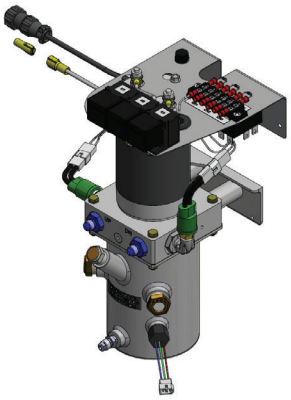


NEW 12 VDC HYDRAULIC PUMP 1011865

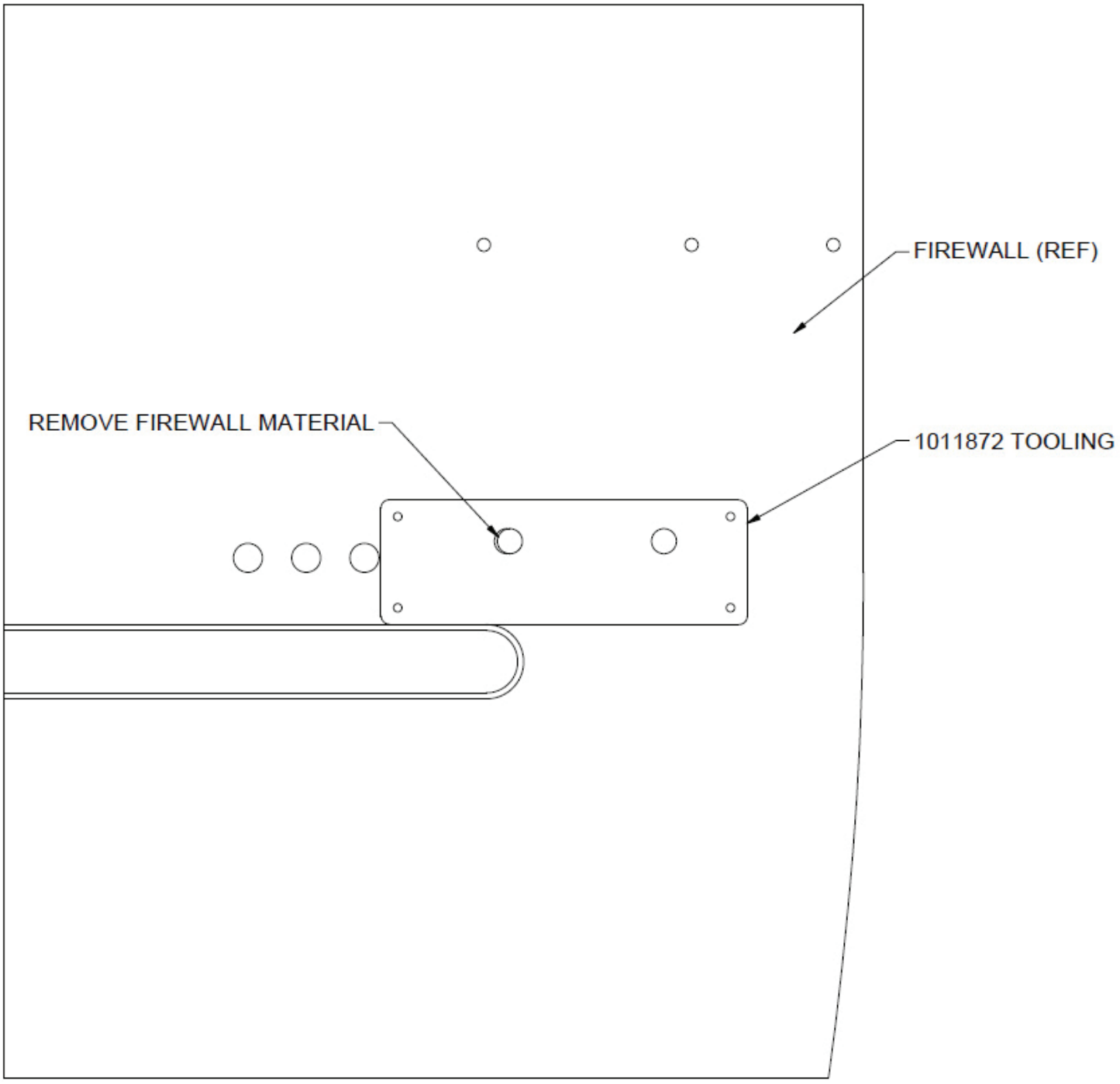
24 VDC PUMP ONLY



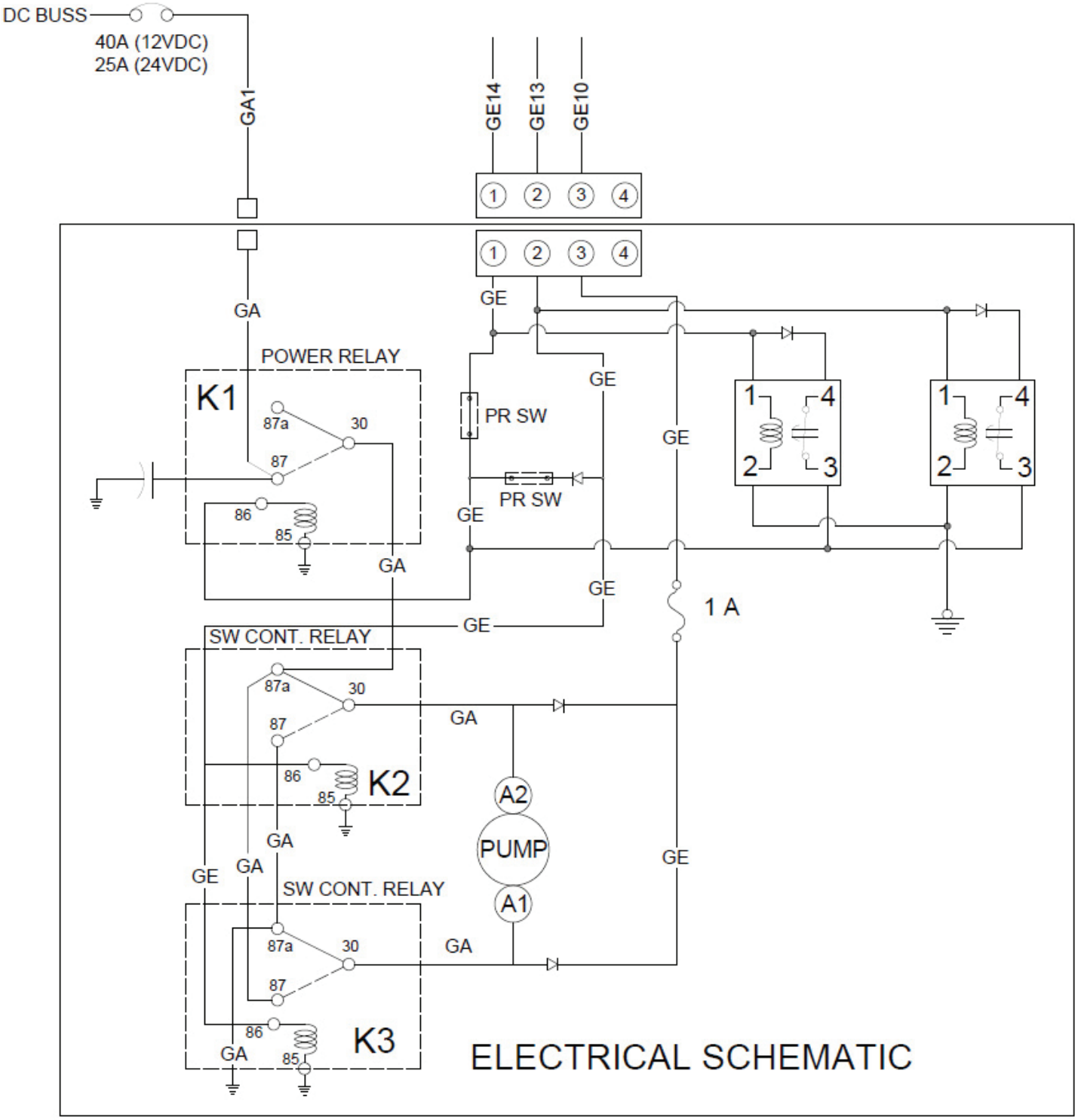
DISCONTINUED 24 VDC HYDRAULIC PUMP 34A09000-281

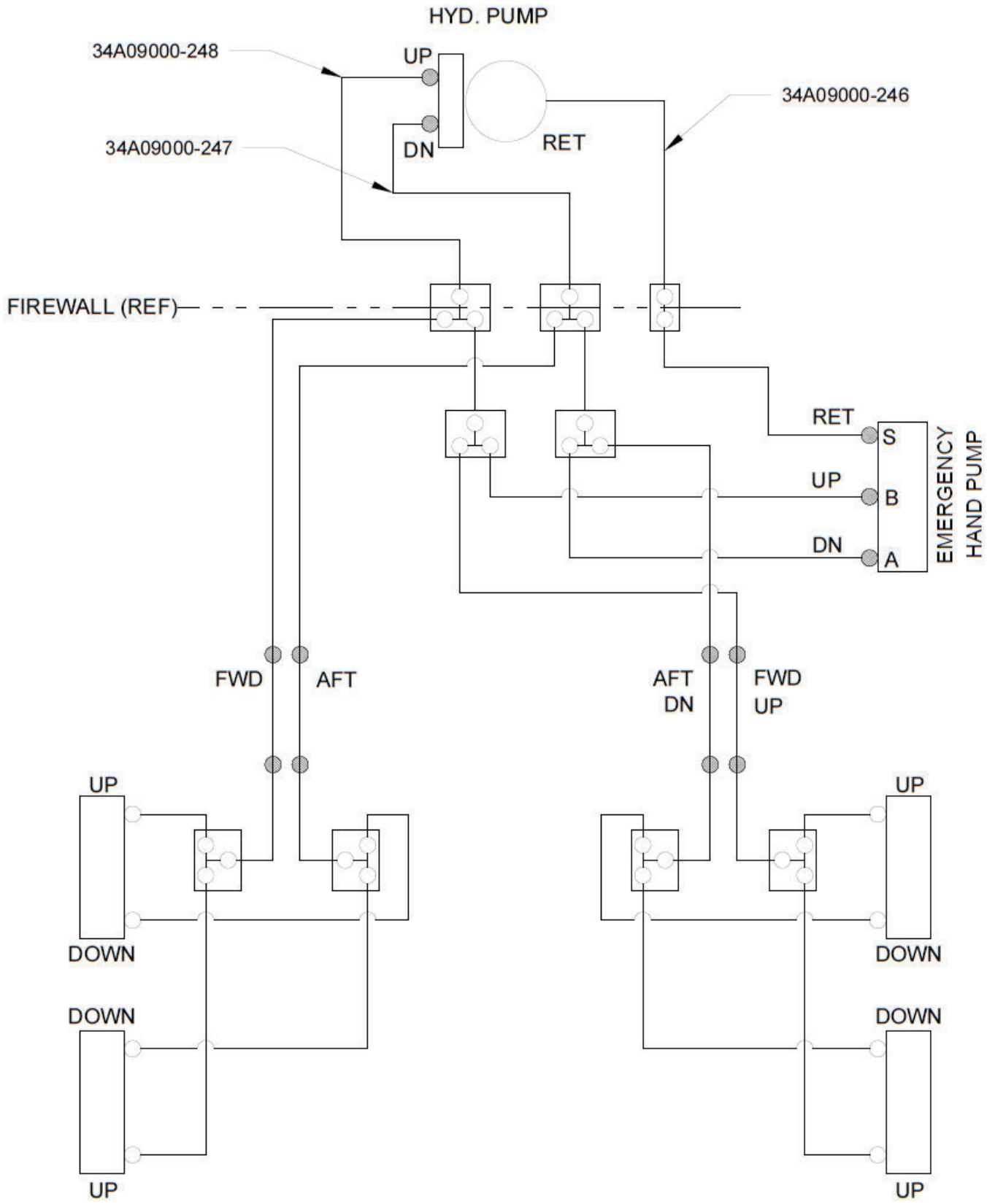


NEW 24 VDC HYDRAULIC PUMP 1011866



1011872 TOOLING LOCATION ON FIREWALL


DC BUSS
40A (12VDC)
25A (24VDC)
GA1
GE14
GE13
GE10
1
2
3
4
GA
GE
POWER RELAY
K1
87a
30
87
86
85
PR SW
PR SW
GE
GE
GE
GE
GA
1 A
SW CONT. RELAY
K2
GA
A2
PUMP
A1
GE
GA
SW CONT. RELAY
GA
K3
GA
ELECTRICAL SCHEMATIC



HYD. SYS. SCHEMATIC

Work Instructions

12 VDC Hydraulic Pump Only

1. Disconnect aircraft battery.
2. Disconnect single pin Molex connector for GA1 wire.
3. Disconnect 4 pin CPC connector from hydraulic power pack assembly 34A09000-266.
4. If aircraft has a hydraulic low level warning system, disconnect wire harness from sensor in reservoir.
5. Drain hydraulic fluid from hydraulic power pack reservoir.
6. Disconnect and cap 34A09000-246 hydraulic line from reservoir and firewall bulkhead fitting.
7. Disconnect and cap 34A09000-247 hydraulic line from “DN” port on hydraulic pump manifold and firewall bulkhead fitting.
8. Disconnect and cap 34A09000-248 hydraulic line from “UP” port on hydraulic pump manifold and firewall bulkhead fitting.
9. Unscrew upper bracket from firewall. Unbolt the two bolts going to the hydraulic pump manifold and remove hydraulic power pack 34A09000-266 from firewall.
10. Remove the three bulkhead fittings passing through 34A09357-074 mounting angle and firewall.
11. Drill out the four CR3243-4-3 cherry max rivets holding 34A09357-074 mounting angle to the firewall.
12. Locate 1011872 tooling on firewall so the oval hole is lined up with the inside mounting hole as shown. Cleco tooling to firewall.
13. Remove material around inside mounting hole on firewall to match 1011872 tooling.
14. Remove 1011872 tooling and install 1011861 angle onto firewall with CR3243-4-3 cherry max rivets.
15. Re-install bulkhead fittings in same location as previously installed.
16. Install 1011865 hydraulic power pack assembly onto 1011861 angle using existing hardware and spacers. Safety wire mounting bolts after pump is installed.
17. Re-install 34A09000-246 hydraulic line from bulkhead fitting to hydraulic reservoir fitting.
18. Re-install 34A09000-247 hydraulic line from bulkhead fitting to “DN” port on hydraulic pump manifold.
19. Re-install 34A09000-248 hydraulic line from bulkhead fitting to “UP” port on hydraulic pump manifold.
20. If aircraft has a hydraulic low level warning system, reconnect wire harness to sensor in new reservoir.
21. Re-install 4 pin CPC connector. See electrical schematic.
22. Cut single pin Molex connector from GA1 wire. Install 73F-250-32NL connector onto GA1 wire. Connect GA1 wire to power wire on hydraulic pump assembly. Run ground wire from hydraulic pump to ground on aircraft. See electrical schematic.
23. Reconnect aircraft battery, service pump reservoir with MIL-H-5606 hydraulic fluid, and perform a retraction/extension test to make sure system is functioning correctly. Watch the system for leaks and add MILH-5606 hydraulic fluid as needed.

24 VDC Hydraulic Pump Only

1. Disconnect aircraft battery.
2. Disconnect single pin Molex connector for GA1 wire.
3. Disconnect 4 pin CPC connector from hydraulic power pack assembly 34A09000-281.
4. If aircraft has a hydraulic low level warning system, disconnect wire harness from sensor in reservoir.
5. Drain hydraulic fluid from hydraulic power pack reservoir.
6. Disconnect and cap 34A09000-246 hydraulic line from reservoir and firewall bulkhead fitting.
7. Disconnect and cap 34A09000-247 hydraulic line from “DN” port on hydraulic pump manifold and firewall bulkhead fitting.

8. Disconnect and cap 34A09000-248 hydraulic line from “UP” port on hydraulic pump manifold and firewall bulkhead fitting.
9. Unscrew upper bracket from firewall. Unbolt the two bolts going to the hydraulic pump manifold and remove hydraulic power pack 34A09000-281 from firewall.
10. Remove the three bulkhead fittings passing through 34A09357-074 mounting angle and firewall.
11. Drill out the four CR3243-4-3 cherry max rivets holding 34A09357-074 mounting angle to the firewall.
12. Locate 1011872 tooling on firewall so the oval hole is lined up with the inside mounting hole as shown. Cleco tooling to firewall.
13. Remove material around inside mounting hole on firewall to match 1011872 tooling.
14. Remove 1011872 tooling and install 1011861 angle onto firewall with CR3243-4-3 cherry max rivets.
15. Re-install bulkhead fittings in same location as previously installed.
16. Install 1011866 hydraulic power pack assembly onto 1011861 angle using existing hardware and spacers. Safety wire mounting bolts after pump is installed.
17. Re-install 34A09000-246 hydraulic line from bulkhead fitting to hydraulic reservoir fitting.
18. Re-install 34A09000-247 hydraulic line from bulkhead fitting to “DN” port on hydraulic pump manifold.
19. Re-install 34A09000-248 hydraulic line from bulkhead fitting to “UP” port on hydraulic pump manifold.
20. If aircraft has a hydraulic low level warning system, reconnect wire harness to sensor in new reservoir.
21. Re-install 4 pin CPC connector. See electrical schematic.
22. Cut single pin Molex connector from GA1 wire. Install 73F-250-32NL connector onto GA1 wire. Connect GA1 wire to power wire on hydraulic pump assembly. Run ground wire from hydraulic pump to ground on aircraft. See electrical schematic.
23. Reconnect aircraft battery, service pump reservoir with MIL-H-5606 hydraulic fluid, and perform a retraction/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 230.