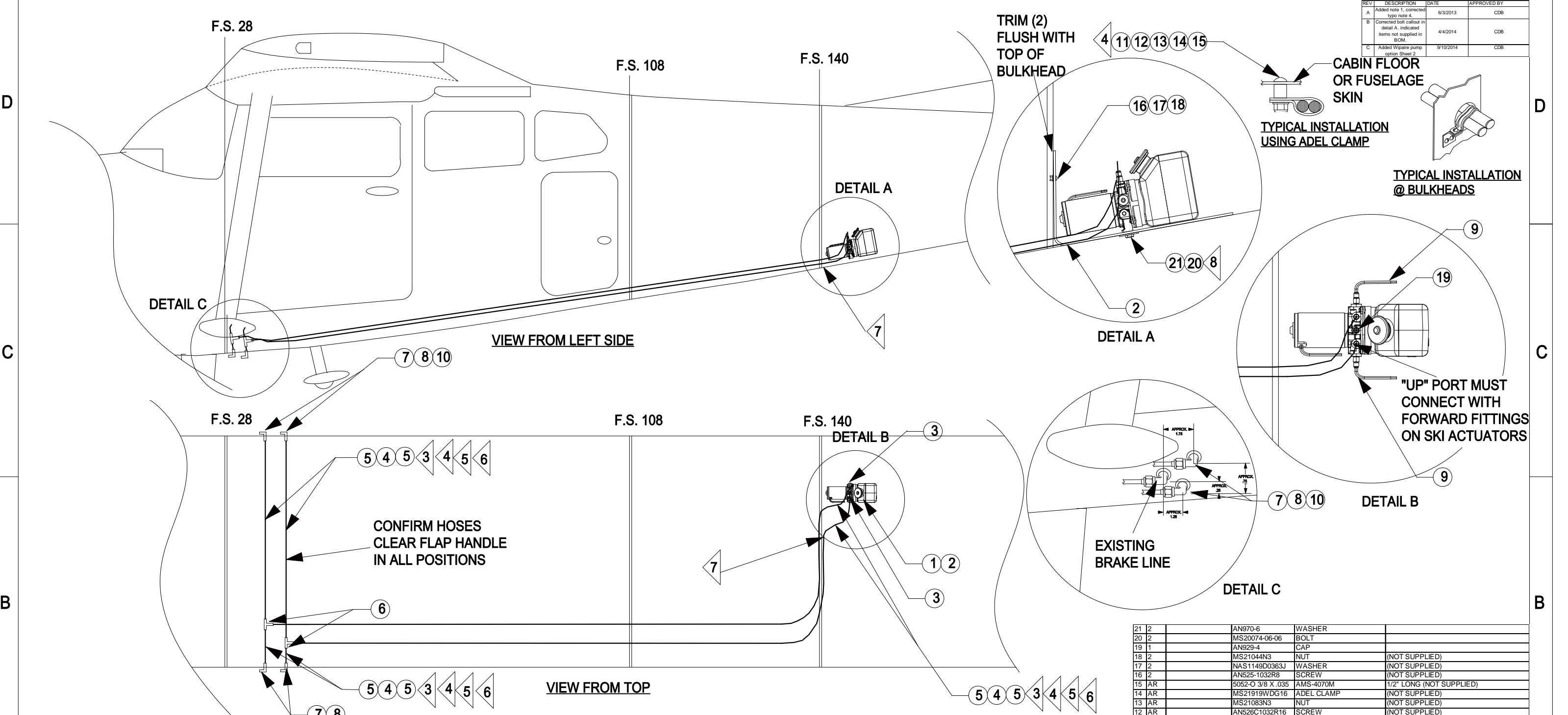


REV	DESCRIPTION	DATE	APPROVED BY
A	Added note 1, corrected typo note 4.	6/3/2013	CDB
B	Corrected bolt callout in detail A, indicated items not supplied in BOM.	4/4/2014	CDB
C	Added Wisaire pump option Sheet 2	9/10/2014	CDB



- NOTES:**
- PREVIOUS INSTALLATION IAW STC SA02244AK ACCEPTABLE ON CESSNA 180 AIRCRAFT.
 - RESERVED
 - ROUTE ALL HOSES CLEAR OF CONTROLS, ELECTRICAL, AND FUEL LINES. USE EXISTING BULKHEAD HOLES.
 - SECURE HOSES AT MAXIMUM OF 24" INTERVALS. CHAFE PROTECT AT ALL BULKHEADS. AVOID HIGH POINTS ALONG HOSE RUNS.
 - FABRICATE LINES IAW AC43.13-1B CHAPTER 9 PARAGRAPH 9-30(d).
 - (OPTIONAL) FABRICATE LINES IAW AC43.13-1B CHAPTER 9 PARAGRAPH 9-30(a) & 9-30(b), USING 1/4" 5052-O (AMS-4070M), AN818-4D, AND MS20819-4D.

- ENSURE DRAIN HOLES ARE CLEAR. DRILL NEW .125 IF REQUIRED.
- SAFETY WITH .040 SS SAFETY WIRE.
- INSTALLER RESPONSIBLE FOR FAA APPROVAL OF ALTERNATE LOCATIONS OF COMPONENTS.

This document and the information disclosed herein are proprietary information of Airglas, Inc. Neither this document nor the information contained herein shall be transmitted, reproduced, copied, or disclosed in any form or by any means without the written authorization of Airglas, Inc.

The information disclosed herein includes trade secrets and confidential business and/or financial information and falls within exemption (b) (4) of 5 USC 552 (FOIA) and the prohibitions of 18 USC 1905.

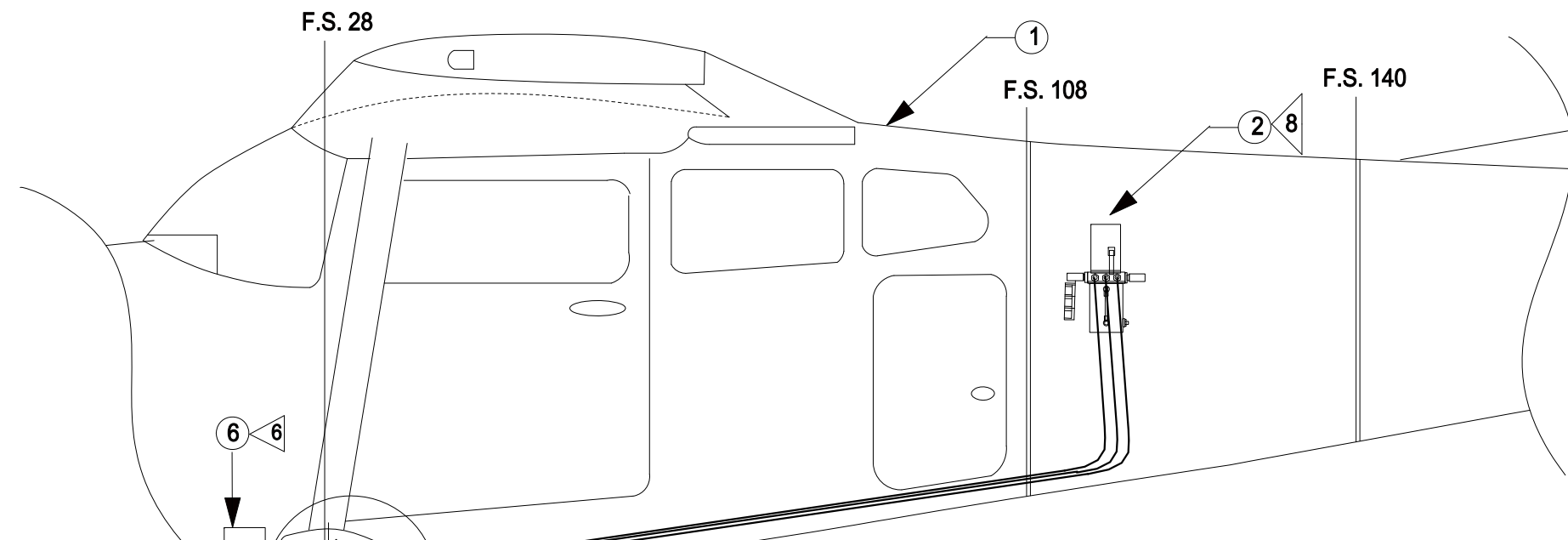
THIS DRAWING INCLUDES INFORMATION PROPRIETARY TO AIRGLAS, INC. AND IS SUBMITTED FOR EVALUATION ONLY AND SHALL NOT BE USED TO MANUFACTURE OR REPRODUCE WITHOUT PERMISSION OF AIRGLAS, INC.

NO.	QTY	CODE-IDENT-NO	PART NO.	DESCRIPTION	NOTES
21	2		AN970-6	WASHER	
20	2		MS20074-06-06	BOLT	
19	1		AN929-4	CAP	
18	2		MS21044N3	NUT	(NOT SUPPLIED)
17	2		NAS1149D0363J	WASHER	(NOT SUPPLIED)
16	2		AN525-1032R8	SCREW	(NOT SUPPLIED)
15	AR		5052-O 3/8 X .035	AMS-4070M	1/2" LONG (NOT SUPPLIED)
14	AR		MS21919WDG16	ADEL CLAMP	(NOT SUPPLIED)
13	AR		MS21083N3	NUT	(NOT SUPPLIED)
12	AR		AN526C1032R16	SCREW	(NOT SUPPLIED)
11	AR		NAS1149D0332J	WASHER	(NOT SUPPLIED)
10	4		NAS1149D0763J	WASHER	(NOT SUPPLIED)
9	2	17564	PS80-K2-1166-500-350	PRESSURE SWITCH	
8	4		AN924-4D	BULKHEAD NUT	(NOT SUPPLIED)
7	4		AN833-4D	BULKHEAD FITTING	(NOT SUPPLIED)
6	2		AN824-4D	"T" FITTING	(NOT SUPPLIED)
5	12		300-4S	STRATOFLEX FITTING	646-4S AND 643-4S IF REQUIRED (NOT SUPPLIED)
4	AR		111-4	STRATOFLEX HOSE	(NOT SUPPLIED)
3	2	17564	PA3503-4-4	HYDRAULIC FITTING 90 DEG.	
2	1	17564	LH3600-20	PUMP BRACKET	
1	AR	17564	108AEC32-PLB-1H-08-08-YZ	PUMP	12 VOLT
1	AR	17564	108BEC32-PLB-1H-08-08-YZ	PUMP	24 VOLT
NO.	QTY	CODE-IDENT-NO	PART NO.	DESCRIPTION	NOTES

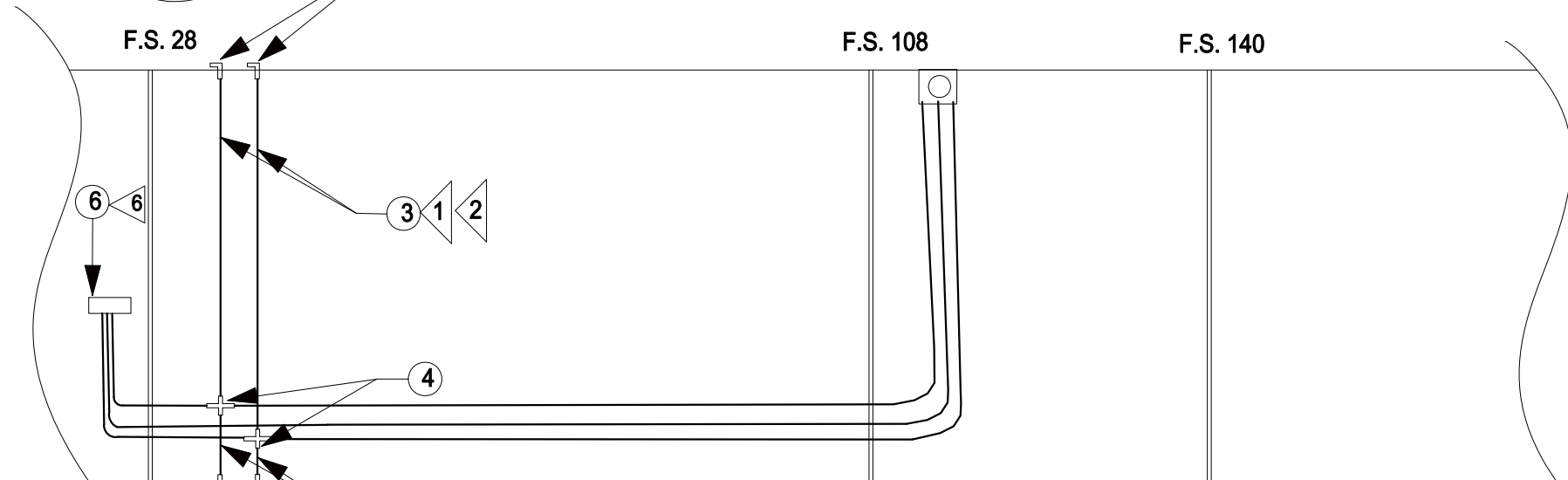
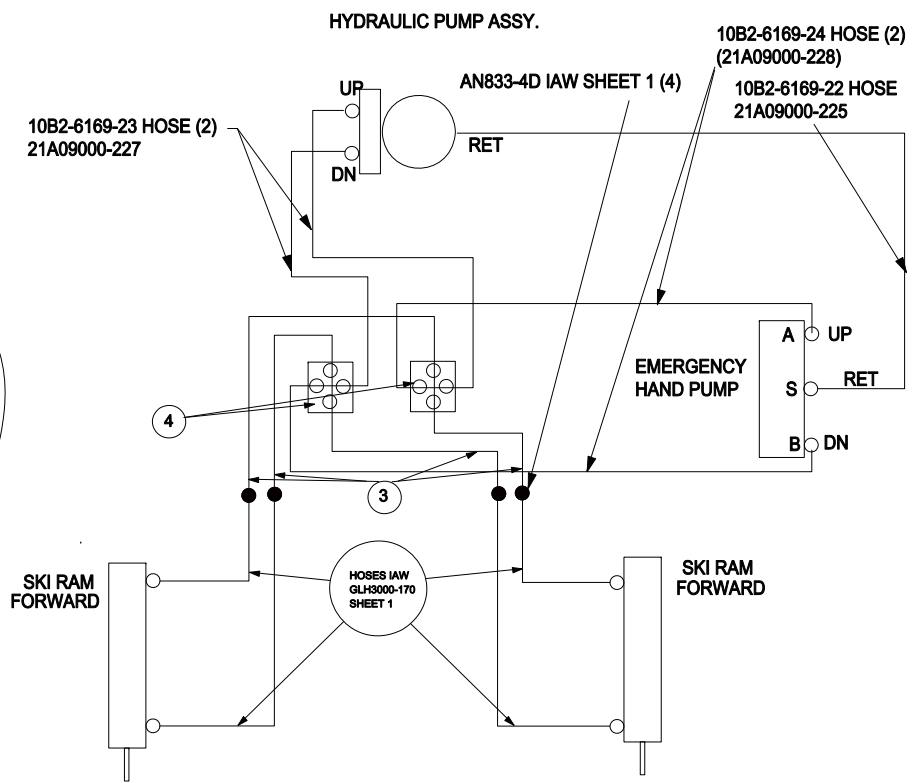
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES				CONTRACT NO.	
DECIMALS	X 2, 1	ANGLES	ANGLES	SPEC. CONTROL NO.	
	254 ± .08		30X ± .010	Airglas, Inc. Anchorage, Alaska	
HEAT TREAT				Approved by: JDH	
MATERIAL				Checked by: JDH	
STEEL				Drawn by: CDB	
ALUM.				Date: DEC 27, 2012	
MAG. CAST				Scale: Do Not Scale	
APPLICATION				Sheet 1 OF 2	

Size	Code Ident No.	REV
B	17564	C

- NOTES:**
1. REMOVE FOUR EACH AMPHIBIOUS FLOAT HOSES P/N 10B2-6169-25 (21A09000-229) FROM AN827-4D CROSSES LOCATED BELOW CABIN DOORS. (REF. WIPAIRE DRAWING 10D1-6391)
 2. INSTALL FOUR EACH SHOP FABRICATED STRATOFLEX 111-4 HOSES (ITEM #3) BETWEEN AN827-4D FITTINGS AND AN833-4D FITTINGS INSTALLED ON SHEET 1.
 3. RESERVED
 4. REMOVE BLUE AND GREEN INDICATOR LIGHTS FROM GEAR SELECTOR.
 5. INSTALL BLANKING COVER PLATE P/N 10B3817(ROUND SELECTORS) OR 10B3818 (RECTANGULAR SELECTORS)
 6. INSTALL PLACARDS AS INDICATED IN AIRGLAS, INC. AFMS AI-12-2-170FM.
 7. PULL GEAR ADVISORY CIRCUIT BREAKER AND SECURE WITH TIE-WRAP. LABEL CIRCUIT BREAKER "DISABLED".
 8. COMPLIANCE WITH WIPAIRE, INC. SERVICE LETTER #48 IS RECOMENDED FOR CONSISTANT OPERATION.
 9. WIPAIRE, INC. PART NUMBER LOCATIONS MAY VARY BETWEEN INSTALLATIONS.
 10. ONLY SKIS EQUIPPED WITH LH3600-9A CYLINDERS ARE APPROVED.

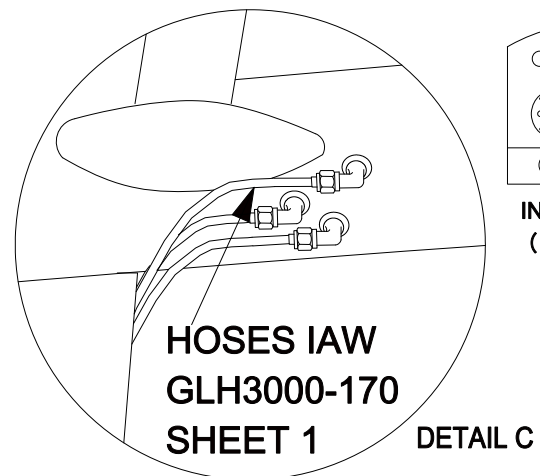


VIEW FROM LEFT SIDE
AN827-4D FITTING (INSTALLATION ON SHEET 1)

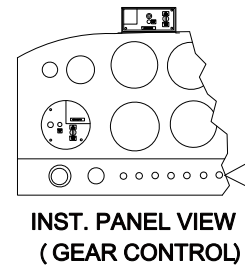


VIEW FROM TOP

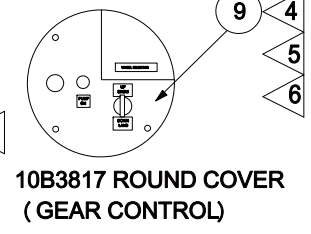
AN827-4D FITTING (INSTALLATION ON SHEET 1)



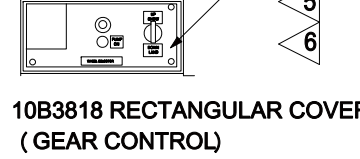
HOSES IAW
GLH3000-170
SHEET 1
DETAIL C



INST. PANEL VIEW
(GEAR CONTROL)



10B3817 ROUND COVER
(GEAR CONTROL)



10B3818 RECTANGULAR COVER
(GEAR CONTROL)

This document and the information disclosed herein are proprietary information of Airglas, Inc. Neither this document nor the information contained herein shall be transmitted, reproduced, copied, or disclosed in any form or by any means without the written authorization of Airglas, Inc.

The information disclosed herein includes trade secrets and confidential business and/or financial information and falls within exemption (b) (4) of 5 USC 552 (FOIA) and the prohibitions of 18 USC 1905.

THIS DRAWING INCLUDES INFORMATION PROPRIETARY TO AIRGLAS, INC. AND IS SUBMITTED FOR EVALUATION ONLY AND SHALL NOT BE USED TO MANUFACTURE OR REPRODUCE WITHOUT PERMISSION OF AIRGLAS, INC.

NO.	QTY	PART NO.	DESCRIPTION	NOTES
* 10	1	10B3818	COVER , GEAR CONTROL	RECTANGULAR (ALTERNATE)
* 9	1	10B3817	COVER , GEAR CONTROL	ROUND
* 8		RESERVED		
- 7		RESERVED		
- 6	1	10C6213	HAND PUMP ASSY.	(21A09000-194)
- 5		RESERVED		
- 4	2	AN827-4D	CROSS	
* 3	4	STRATOFLEX 111-4	HYDRAULIC HOSE	FABRICATE TO FIT(ANY MIL-H-8794-4 ACCEPTABLE)
- 2	1	21A09000-215	ELECTRIC/HYD. PUMP (12 V)	[21A09000-282 (24V)]
1	1	REFERENCE	FUSELAGE	
-			EXISTING WIPAIRE AMPHIBIOUS INSTALLATION COMPONENTS	
* 1			REQUIRED FOR SKI INSTALLATION	

LIST OF MATERIALS			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	CONTRACT NO.	Airglas, Inc. Anchorage, Alaska	
DECIMALS .x.x.1 ANGLES X° x' x"	SPEC. CONTROL NO.	GLH3000 HYDRAULIC INSTALLATION ON CESSNA 170,180	
MATERIAL HEAT TREAT GOV. SPEC.	Approved by: JDH	Size	Code Ident.No.
STEEL MIL - H - 6875	Checked by: JDH	B	17564
ALUM. MIL - H - 6088	Drawn by: CDB	Scale: Do Not Scale	GLH3000-170-HYD
MAG. CAST MIL - H - 6857	Date: DEC 27, 2012	Sheet	2 OF 2