Standard Wing Configuration

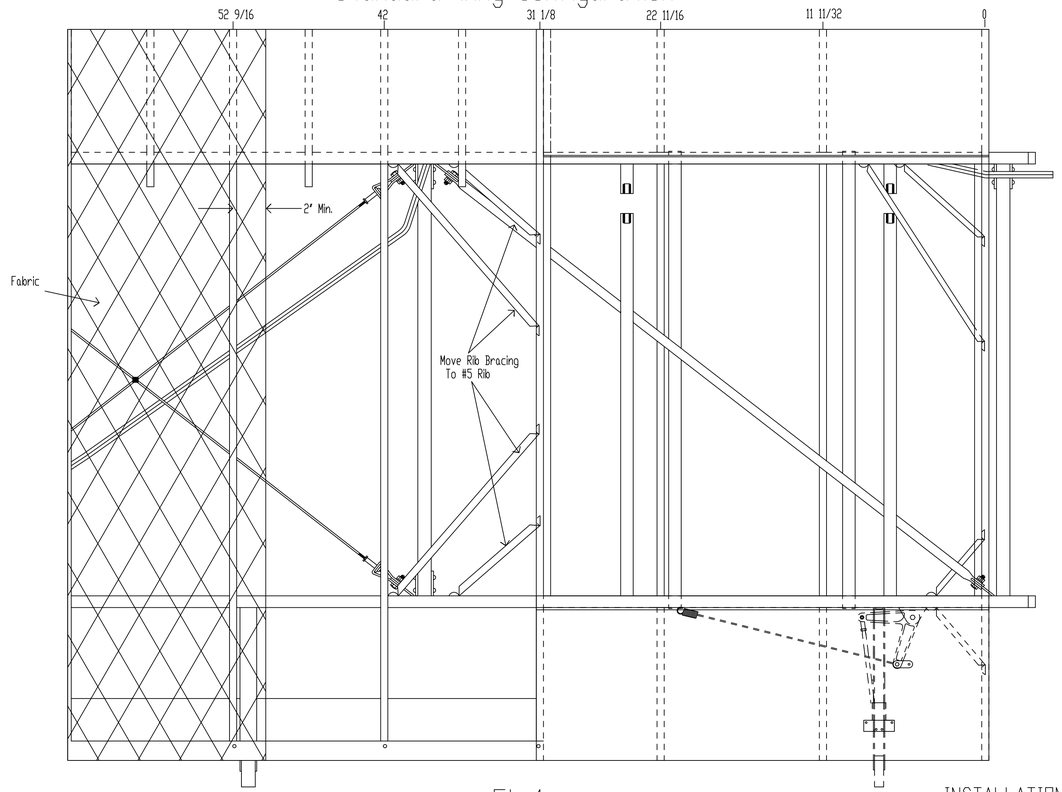


Fig.1

Relocation Of Components For 23 Gallon Tank Installation

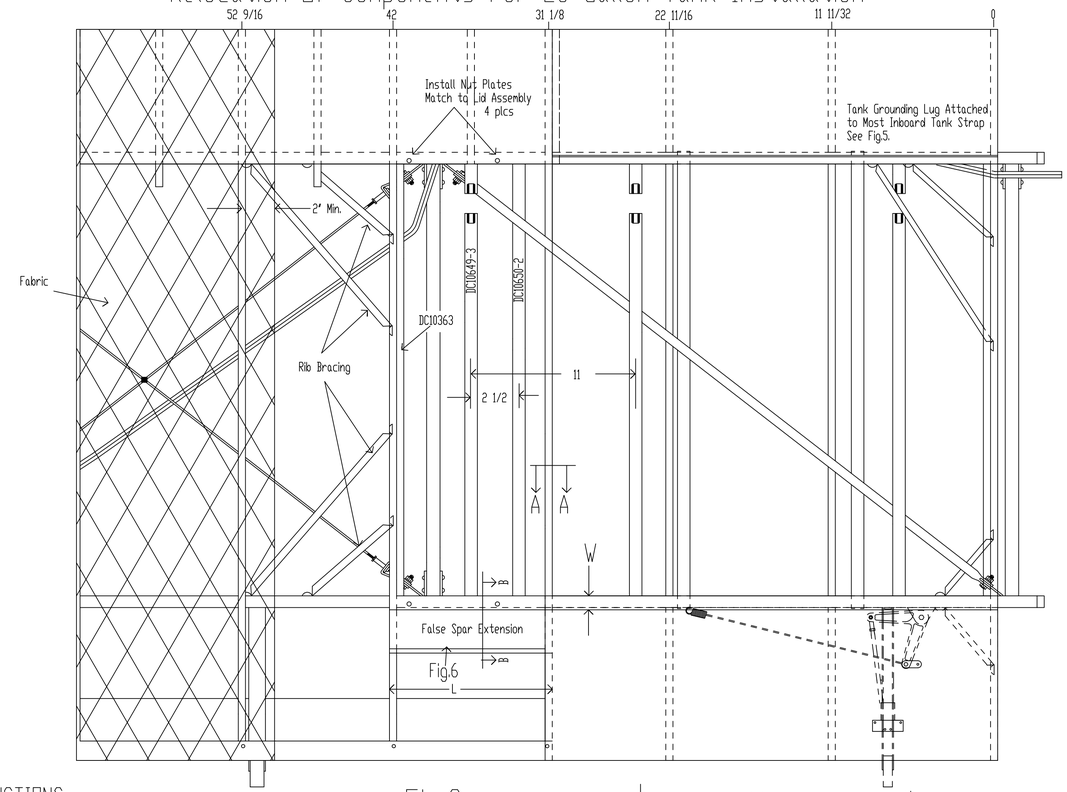


Fig.2

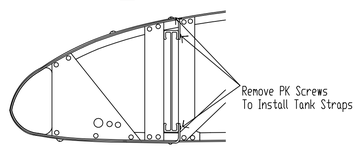


Fig.7

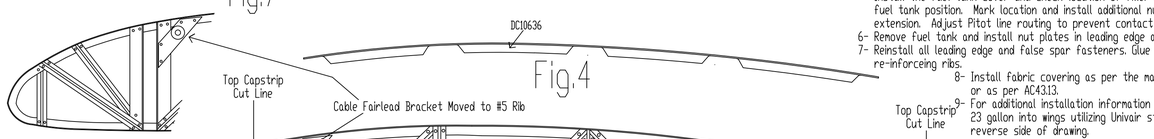


Fig. 8

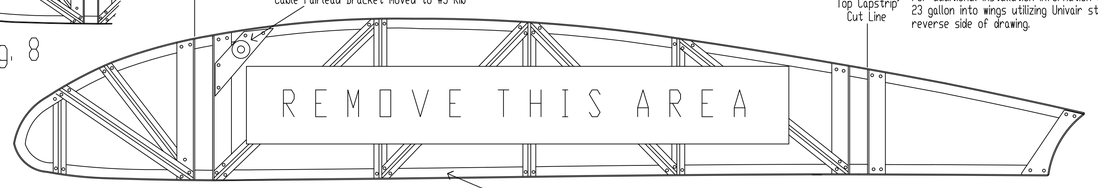


Fig.4

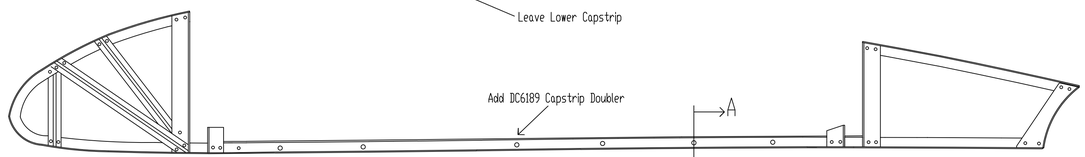


Fig.3

INSTALLATION INSTRUCTIONS

1- Remove fabric from butt rib outboard to 2" inside the #6 rib.
2- Remove DC10636 Fuel Tank Cover Support Angle (Fig.4)and rib bracing from #4 rib.
Re-attached to #5 rib with MS20470AD3-4 Rivets and rib brace channels as previously attached.
3- Modify #4 rib by removing center rib section from between top capstrip cut lines, leaving lower capstrip intact.
Rivet Extruded Capstrip Doubler DC6189 (Fig.3) onto lower capstrip with a minimum of 9 MS20470AD3-4 rivets.
4- Install Tank Straps as shown in Fig.5. Drill .191 holes at a distance of 11 1/2" from centerline of existing straps (Fig.2).
The leading edge and false spars screws must be removed at the spar caps (Fig7) to facilitate tank strap installation. It is best to Install the false spar extension (Fig.6) and reinstall the cable fairlead bracket (Fig.8) at this time.
Glue Anti-Chaffe felt to tank straps.
5- Install fuel tank and adjust placement to allow the tank drag tube to center as closely as possible in the tank cross tube. Install the fuel tank cover and check location of filler neck opening with filler neck, and make necessary adjustments to fuel tank position. Mark location and install additional nut plates on outboard section under extended tank lid, and false spar extension. Adjust Pitot line routing to prevent contact with fuel tank. Carefully check for adequate clearances around tank!!!
6- Remove fuel tank and install nut plates in leading edge and false spar extension.
7- Reinstall all leading edge and false spar fasteners. Glue anti-chaffe felt to tank bay ribs, tank straps, and tank lid re-inforceing ribs.
8- Install fabric covering as per the manufacturers process directions or as per AC43.13.
9- For additional installation information on installing the 23 gallon into wings utilizing Univair stamped ribs see reverse side of drawing.

NOTE:
On Piper Models PA11, PA20, PA22 and PA18 wings with 13 ribs per wing An additional rib must be added at Rib Station 42" to accept the extended tank lid. This requires dis-assembly and re-assembly of the wing from the #2 Drag Strut Inboard.

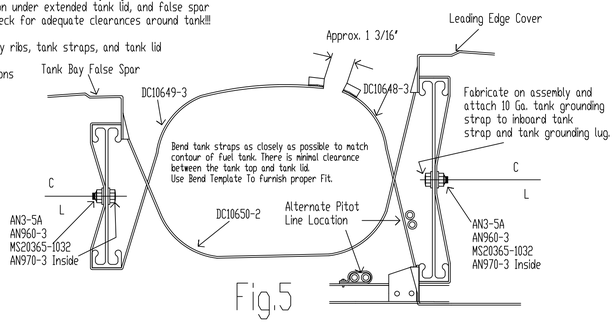
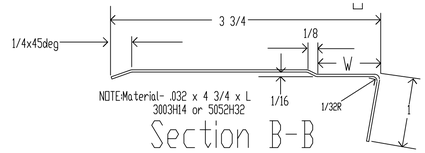
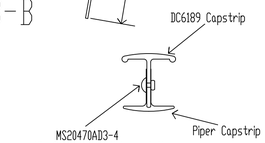


Fig.5

Left Installation Shown
Right Installation Opposite



Section B-B



Section A-A

PART NO.	NO. PCS	SIZE	DESCRIPTION
DC12570-EXT	1		Extended Tank Lid
1/8 x 1"	1	72"	Felt Anti-Chaffe
DC6189	1	29"	Rib Extrusion
MS20365-1032	4		Nylock Nut
AN3-5A	4		Bolt
AN970-3	4		Washer
AN960-3	4		Washer
DC10849-24G-3L	1		23 Gallon Fuel Tank
DC10849-24G-25R	1		23 Gallon Fuel Tank
DC10636	1		Lid Attachment
DC10648-3	1		Tank Strap
DC10649-3	1		Tank Strap
DC10650-2	1		Tank Strap
False Spar Ext	1	.032x4 3/4x12	5052H32

SCALE- Full Size
Manufacturing Practices- DCA Process Spec. #9 | Finish - DCA Process Spec. #10
Nomenclature: Install - Extended Range Tank
MJR 3-2-2000 | MJR 3-2-2000 | DRWG.No.- DC-24G-Instl
DWG. BY- | CHECK BY-

LET.	REVISION	DATE	BY
B	Add Section View C-C & Instruction and Tank Grounding Lug Reference Fig.5	7-21-01	MJR
A	Additional installation information added	5-14-2001	MJR

Next Assembly
Unless Otherwise Specified Tolerances-
Fractions = +/- 1/32
.00 = +/- .010
.000 = +/- .005

DAKOTA CUB AIRCRAFT
Box 214
Soldotna, AK 99669

C:/A-DRAFTING FILES/AUTOCAD DRAWINGS/INSTALL DRAWINGS/24 GALLON TANK INSTALL 1

Rev-A Installation with Univair Stamped Ribs

Follow the installation instructions on front side, with the following exceptions-

1- Move number 4 rib to the number 5 rib location. On Right wing the vertical attachments must be trimmed to provide clearance for brace wire clevises. See Supplement 1, pages 1&2.

2- Install additional rib attachment screw as per Supplement 1, page 3. Drill #40 and use std rib attachement screw.

3- Install additional tank bay rib at number 4 rib location.

4- Lengthen "relief area" to provide adequate clearance at fuel take-off fittings as per Supplement 1, page 3.

5- Upon completion check for adequate tank clearances, and adjust as necessary. Tighten tank straps as per Fig.5.