

Standard Wing Configuration

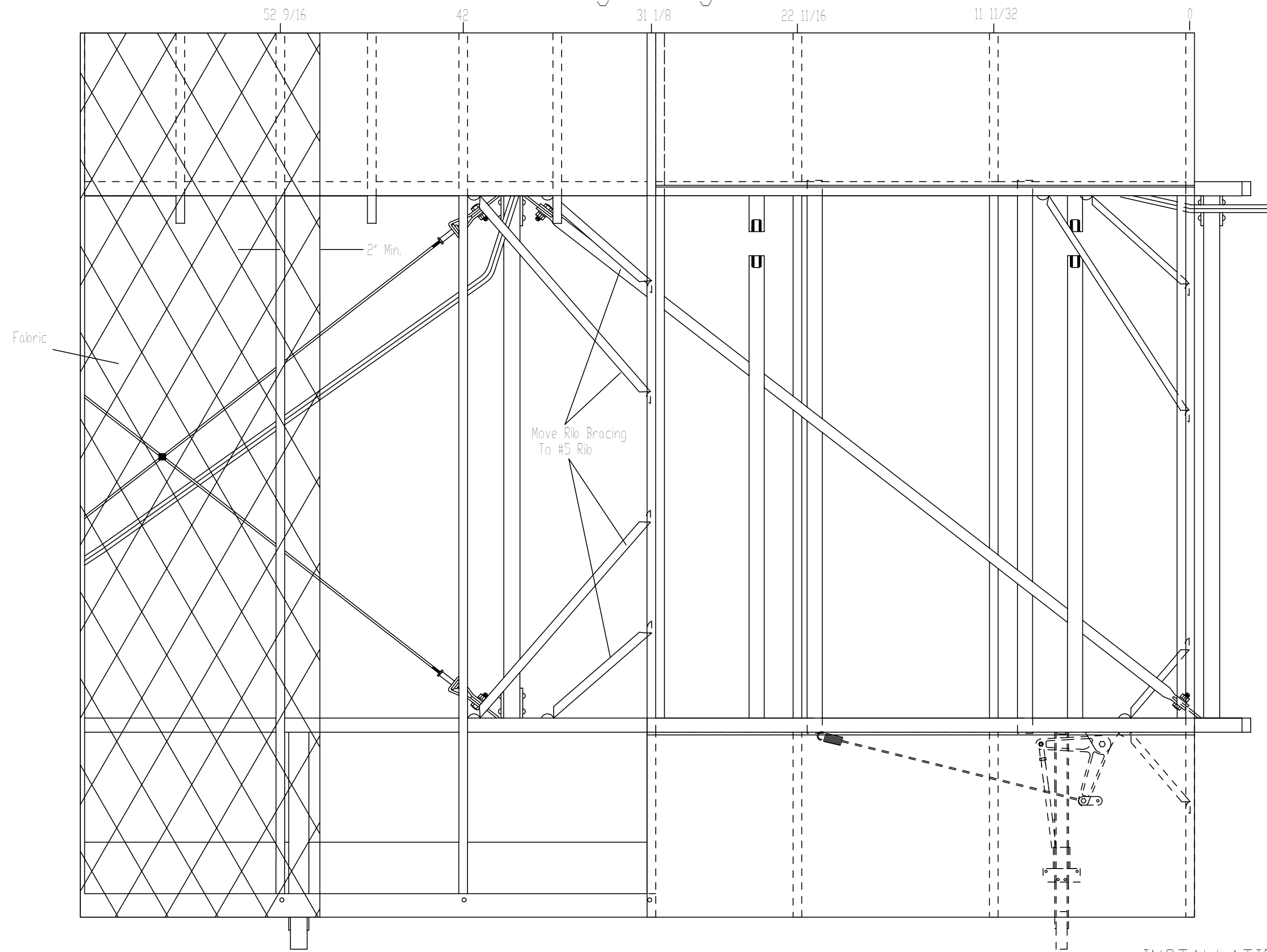


Fig.1

Relocation Of Components For 23 Gallon Tank Installation

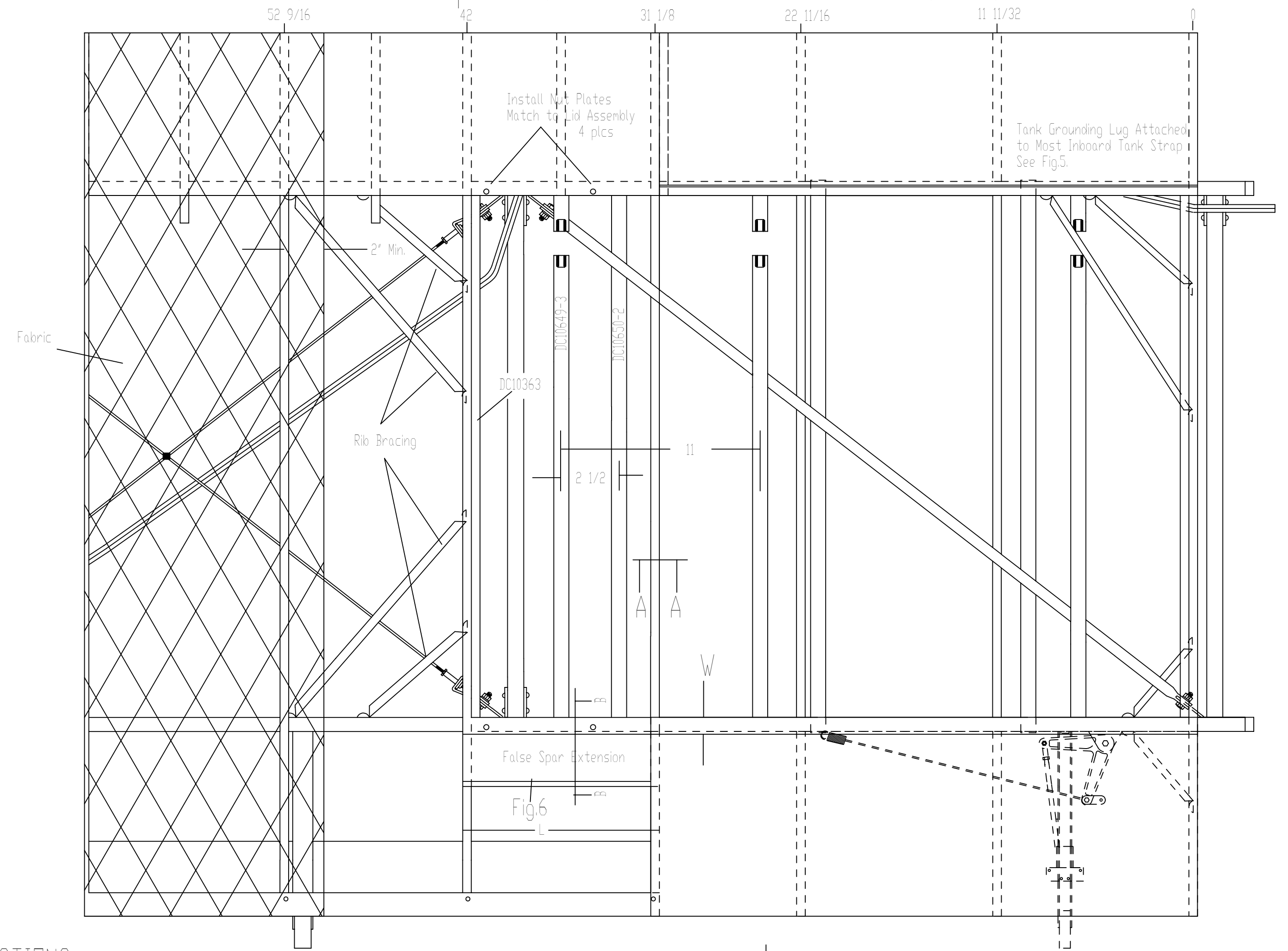


Fig.2

INSTALLATION INSTRUCTIONS

- 1- Remove fabric from butt rib outboard to 2' inside the #6 rib.
- 2- Remove DC10636 Fuel Tank Cover Support Angle or Piper equivalent (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 (Fig.7) 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-Chaff 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-chaff felt to tank bay ribs, tank straps, and tank lid re-inforcing ribs.
- 8- Install fabric covering as per the manufacturers process directions or as per AC4313.
- 9- For additional installation information on installing the 23 gallon into wings utilizing Univair stamped ribs see reverse side of drawing.

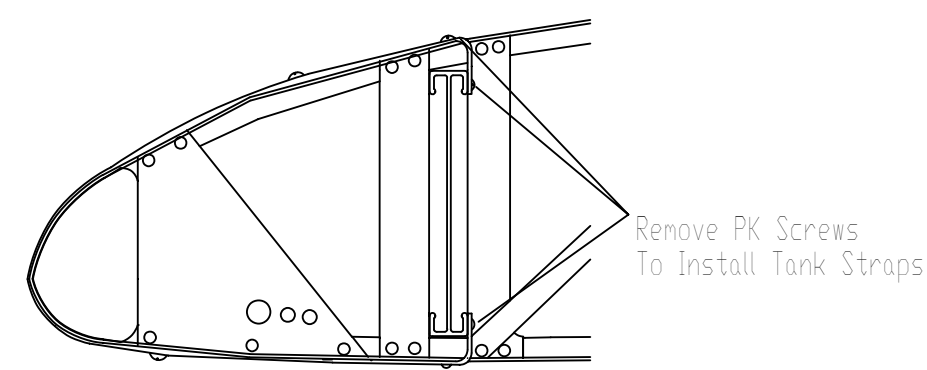


Fig.7

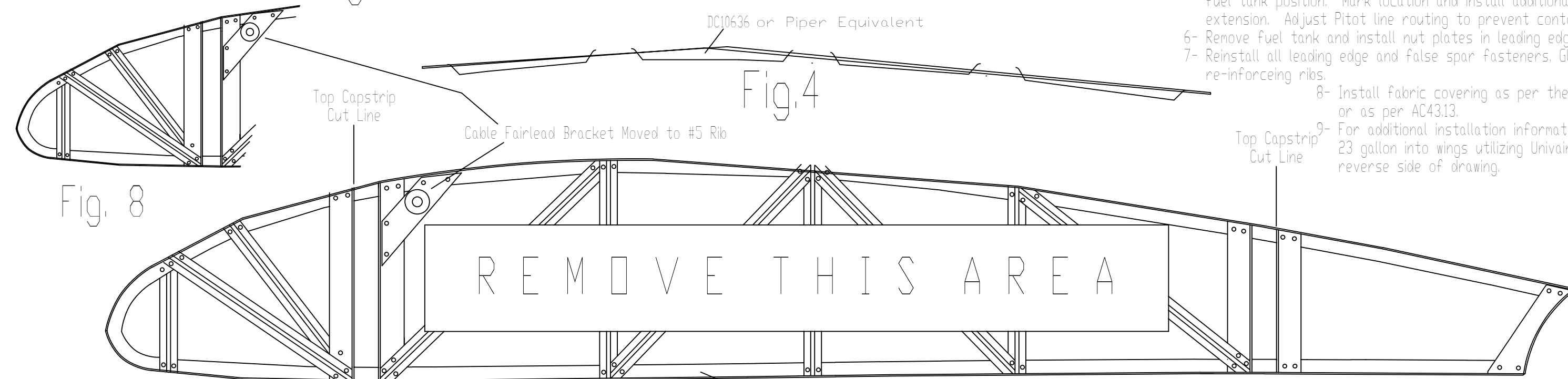


Fig.4

Fig. 8

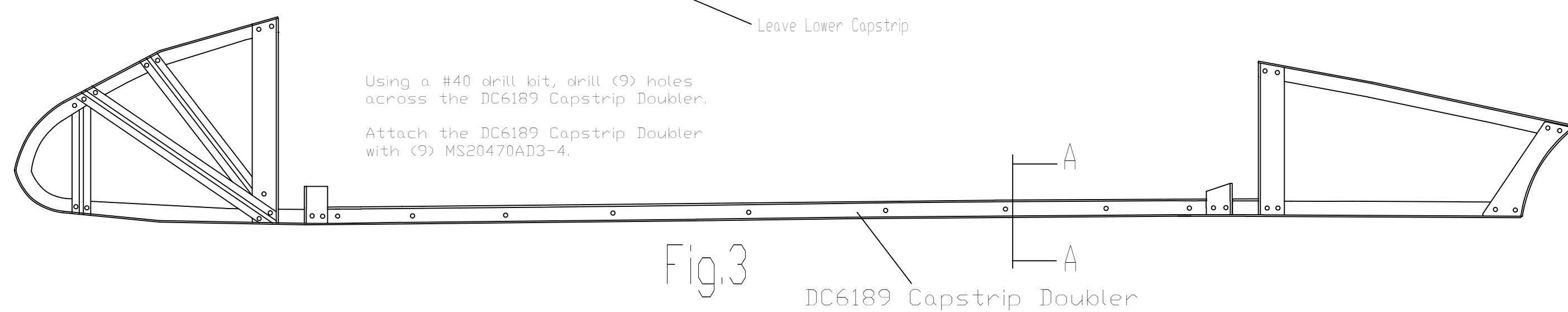
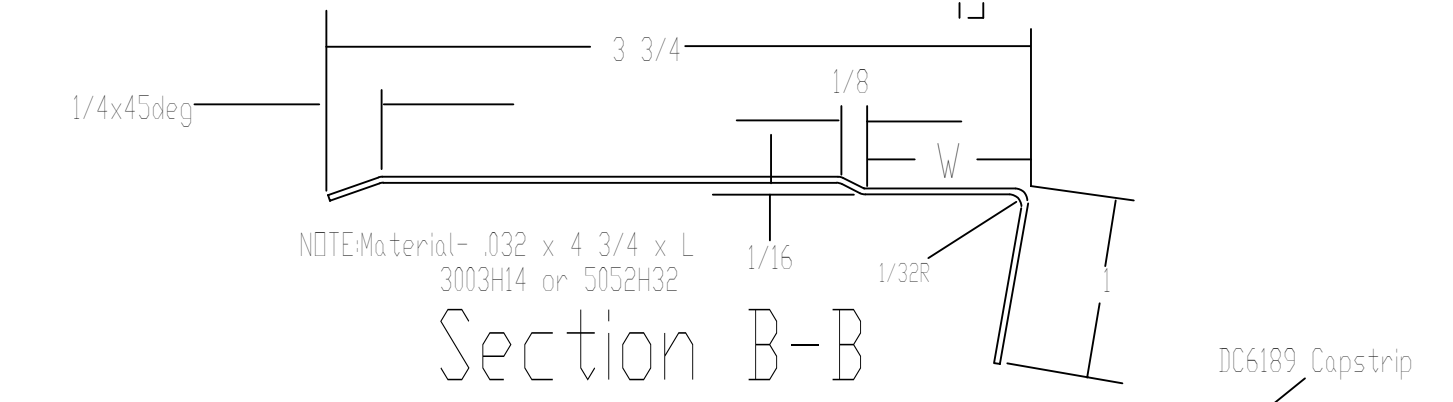


Fig.3



Section B-B

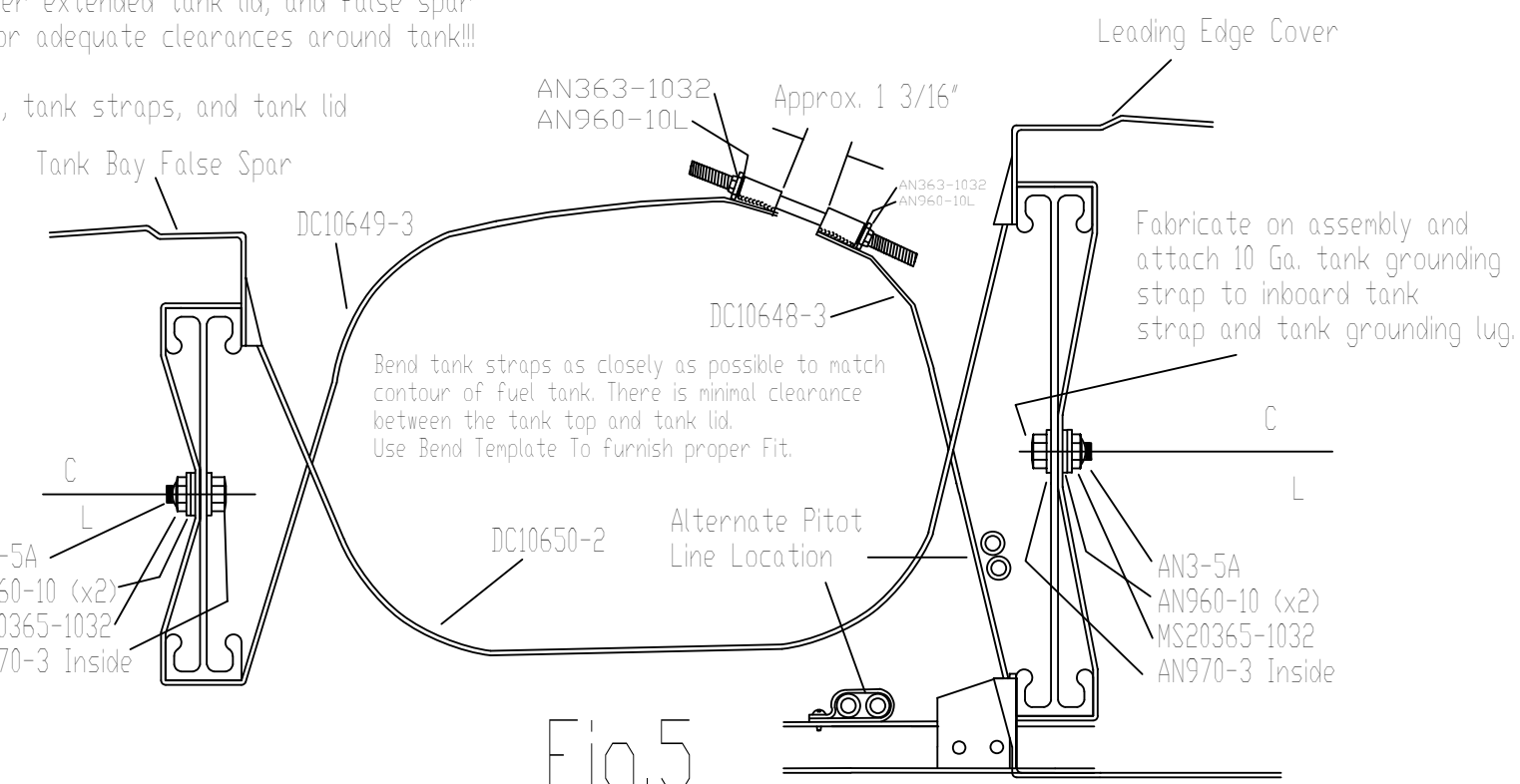
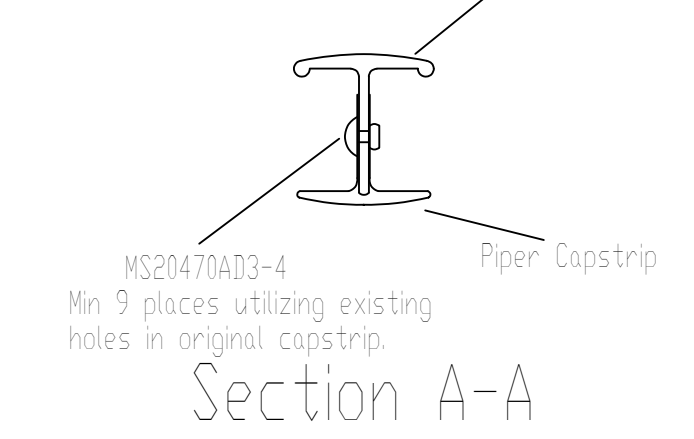


Fig.5

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.



Section A-A

ALL DATA PROPRIETARY TO DAKOTA CUB AIRCRAFT			
Part No.	Qty	Part Name	Remarks
AN3-5A	4	Aircraft Bolt	
AN926C-832RR	4	Stainless Steel Screws	
AN960-10	8	#10 Flat Washer	
AN960-10L	2	Lite #10 Flat Washer	
AN970-3	4	Large Flat Washer	
Antichaff-1	1	60" Tank Lid Antichaff	
Antichaff-1	1	72" Tank Straps Antichaff	
DC10648-3	1	Tank Strap - Short	
DC10649-3	1	Tank Strap - Top	
DC10650-2	1	Tank Strap - Bottom	
DC10849-240-2PR	1	Fuel Tanks - 24G	
DC10849-240-3R	1	Fuel Tanks - 24G	
DC12970-Ext	1	Tank Lid - 24G	
DC6189	1	28" Tank Bay Doubler (TP-1)	
MS20365-1032	4	Rivet - Stainless Anchor Nut	
MS20470AD3-3	8	Rivet - Stainless Doublor	
MS20470AD3-4	9	Rivet - Stainless Doublor	
MS21047-3	4	#10 Anchor Nut	
False Spar Ext.	1	832x4x12	

Left Installation Shown Right Installation Opposite

Install - Extended Range Tank
DAKOTA CUB AIRCRAFT
Rev 214
DC-24G-Instl

Drill On Assembly To Match Mating Part!!!

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 attachment 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.

