

Standard Wing Configuration

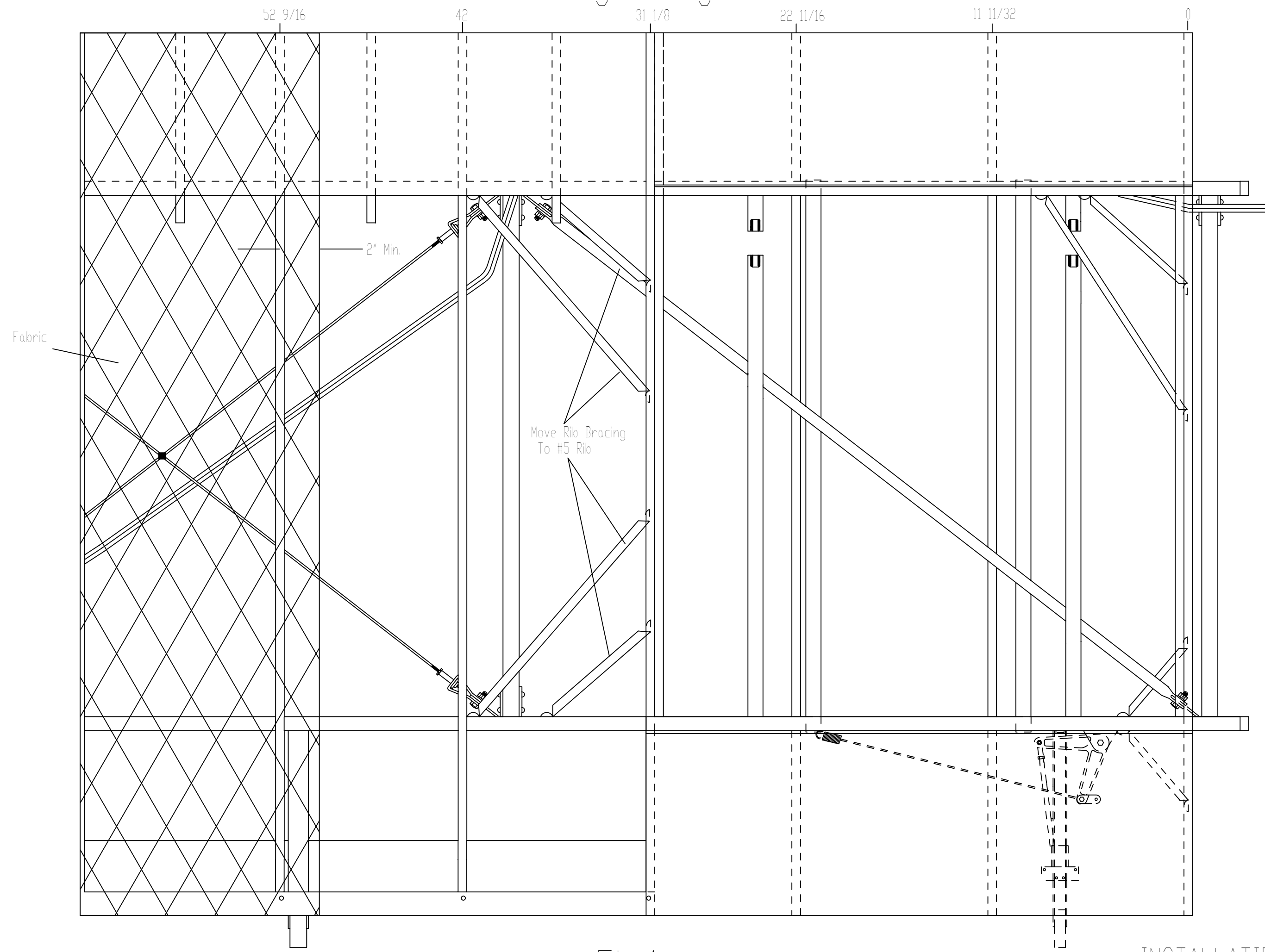


Fig.1

Relocation Of Components For 23 Gallon Tank Installation

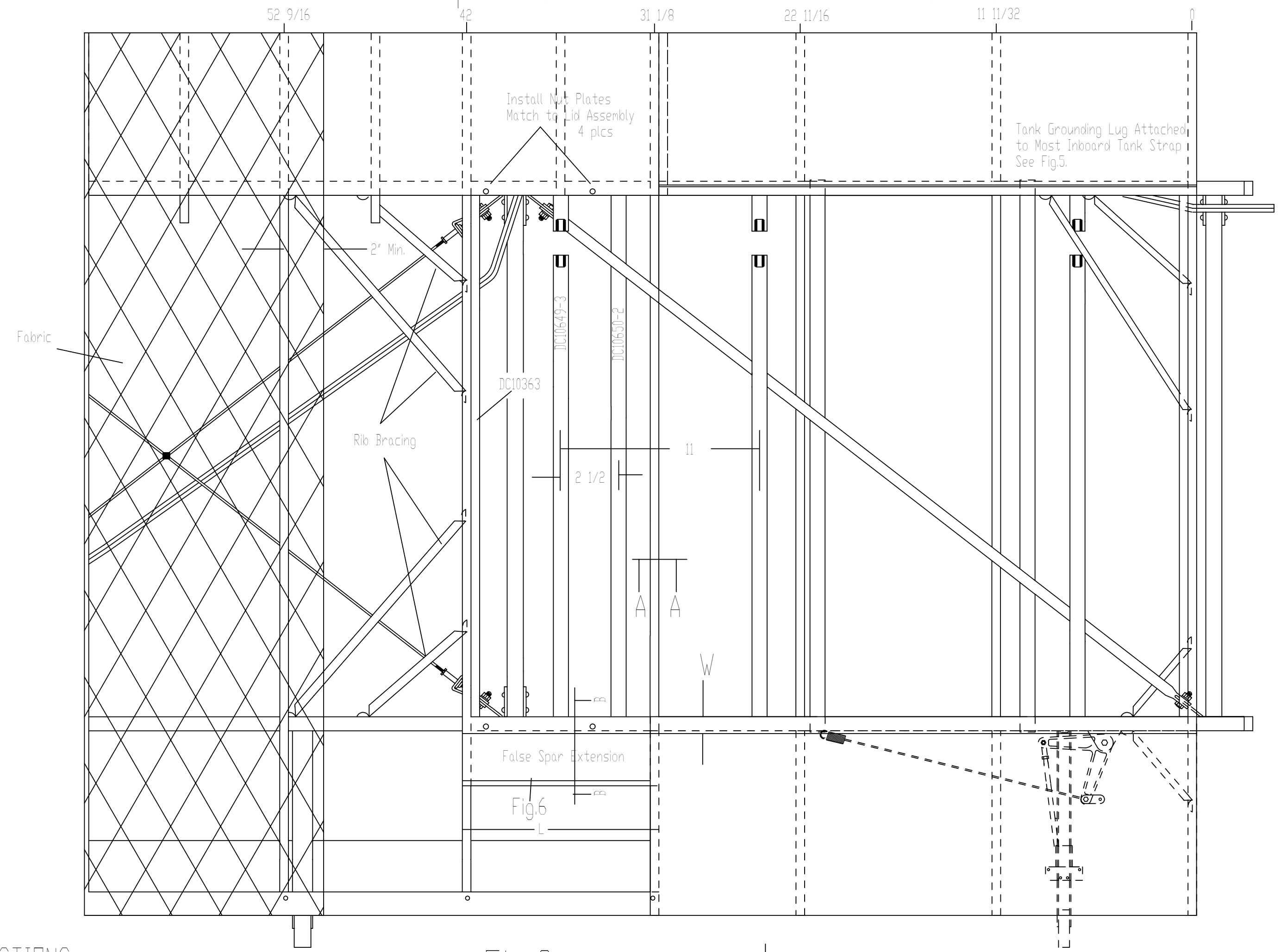


Fig.2

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-Chaffie 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-chaffie 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.

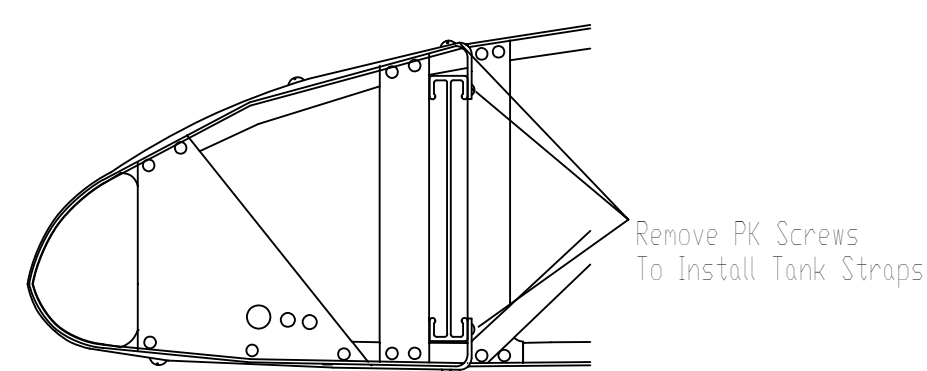


Fig.7

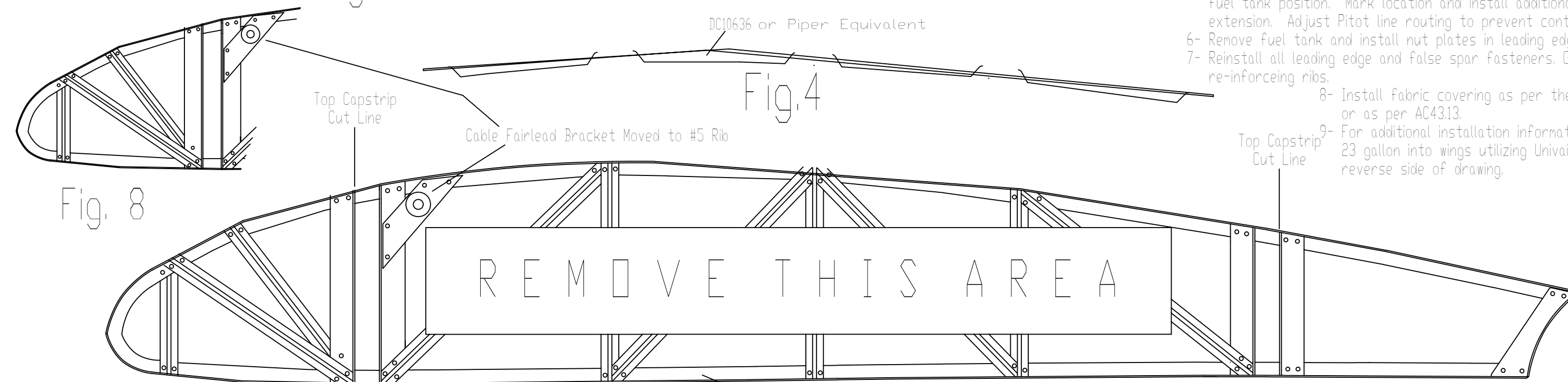


Fig.4

Fig. 8

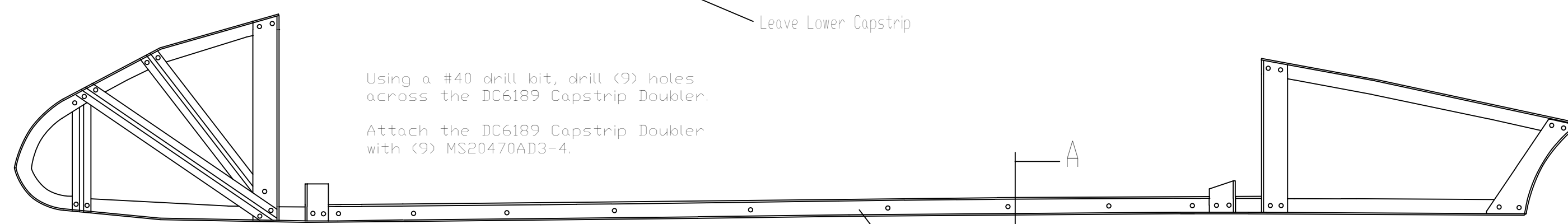
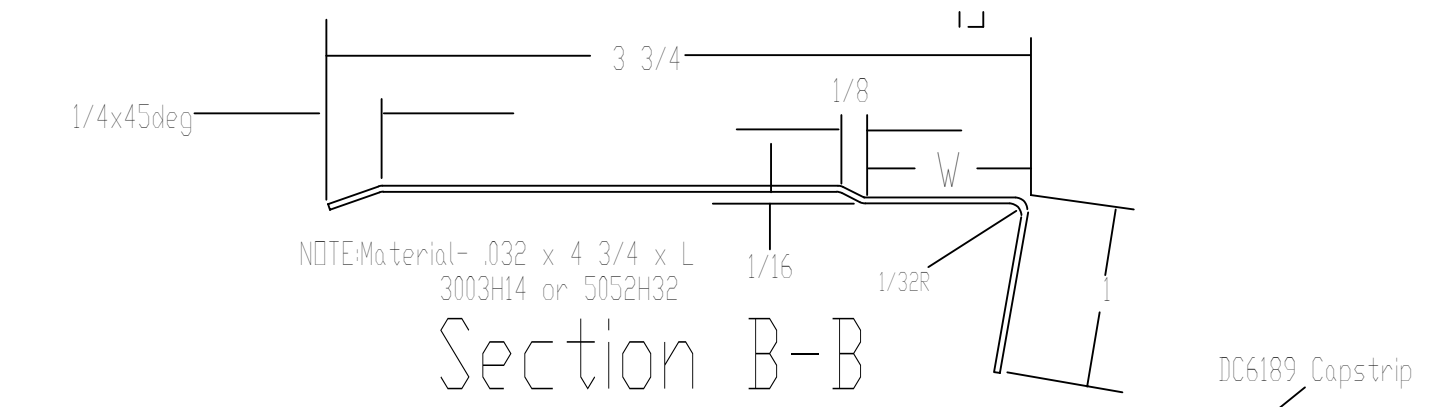


Fig.3



Section B-B

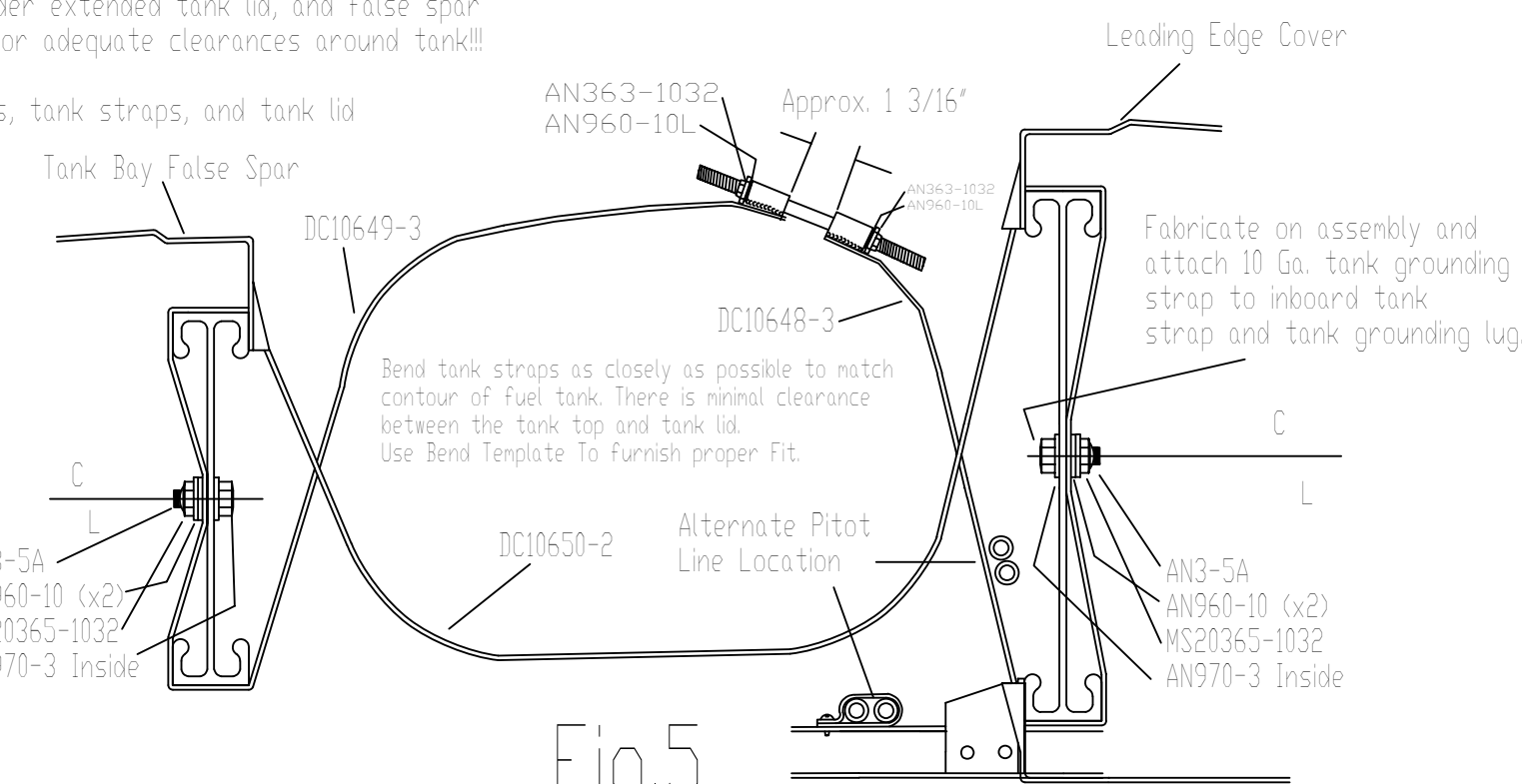
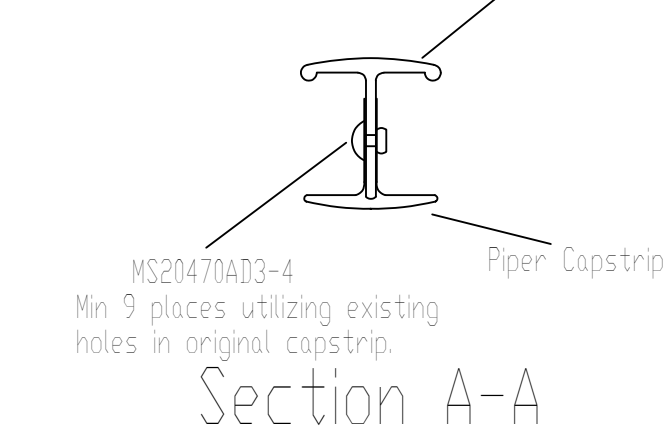


Fig.5

Left Installation Shown
Right Installation Opposite



Section A-A

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.

AN3-5A	4	20x24	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
Antichaffe-1	1	60"	Tank Lid Antichaffe
Antichaffe-1	1	72"	Tank Straps Antichaffe
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)
DC80111-0	1		Tank Strap Stud
MS20365-1032	4		Nylock Nut
MS20470AD3-3	8		Rivet - Assholes Anchor Nut
MS20470AD3-4	9		Rivet - Assholes Doubler
MS21047-3	4		#10 Anchor Nut
False Spar Ext.	1	832x4x12	

ALL DATA PROPRIETARY TO DAKOTA CUB AIRCRAFT			
Part No.	Qty	Part Name	Assembly
1	1	23 Gallon Fuel Tank	
2	1	DC-24G-Instl	

DAKOTA CUB AIRCRAFT
Rev 214
DC-24G-Instl