

## Plenum Chamber Installation

Installing the plenum is simple. All we are doing is putting a lid on top of the engine and stopping up all of the holes.

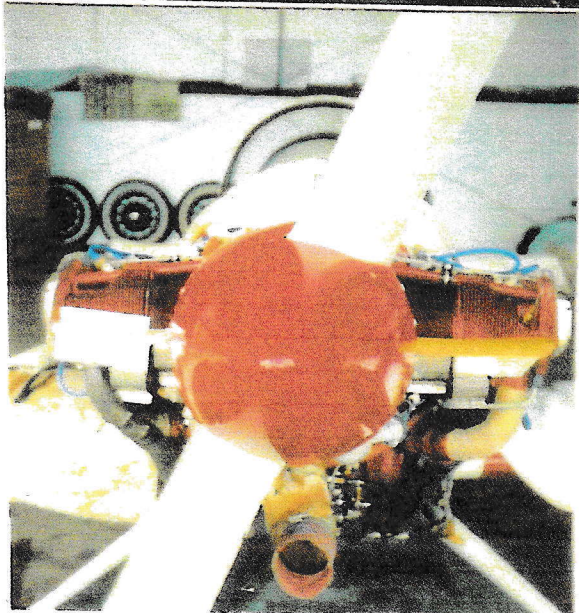
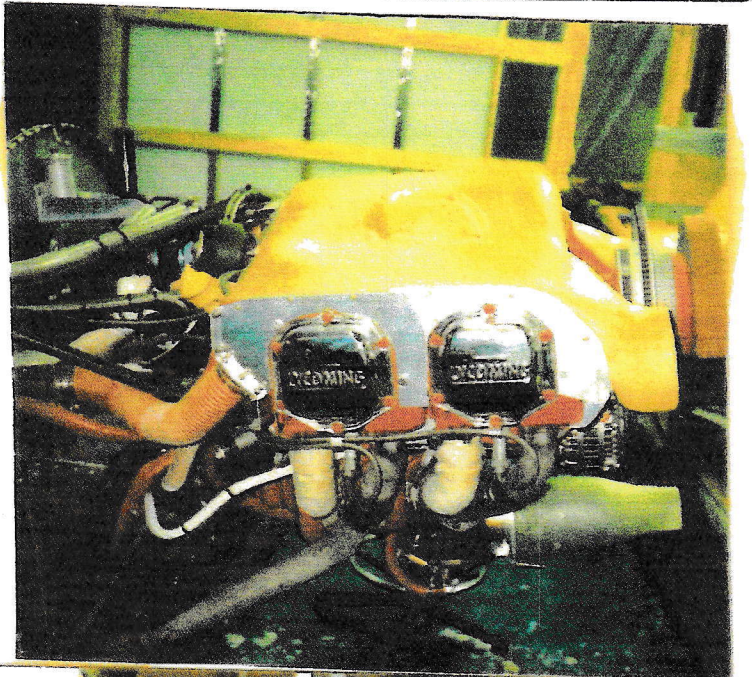
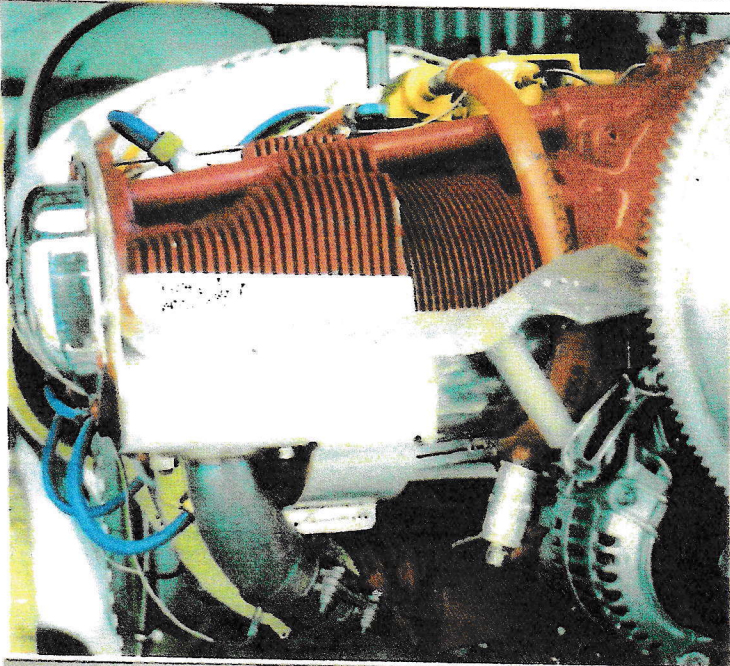
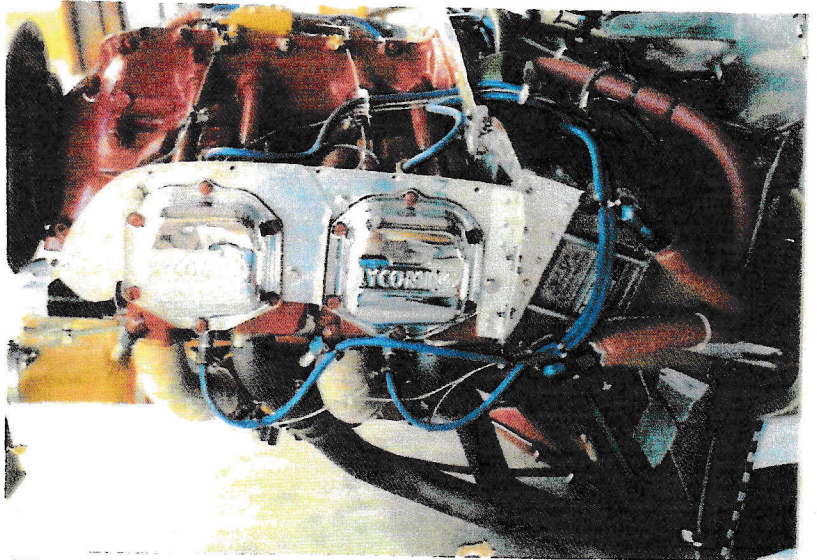
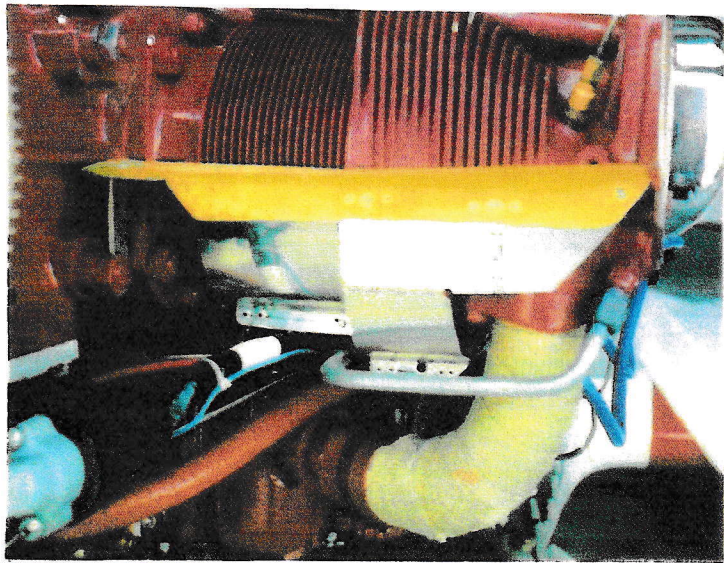
Cut all parts of the aluminum baffles from the full scale patterns. The patterns must be printed on 11" x 17" paper. Using the picture as a guide, install them on the engine. Make sure and hold the outlet air beneath the engine to 2 ¼" on the head and 1' on the cylinder barrel. By letting the air out equally, you will keep the cylinder head temperature plus or minus 2 degrees.

Place the plenum down inside of the aluminum baffle sides. Work in conjunction with the rings in the cowl (have the lower half in place). If you push down on the rear left, the right front goes up. So take time and align correctly. Cleco in place. Place upper cowl on aircraft making sure that everything clears (on the RV-4 you must cut the spacer flange from the spark plug wire nut flange to allow the wire to bend 90 degrees from the plug or the plenum won't be low enough to clear the cowl. Also, you may have to push the rear valley of the plenum down and cleco to clear on a RV-4).

When you are sure that everything clears, install nut plates inside the plenum about 3" spacing will be okay. The oil cooler should be behind #4 cylinder. If you place it on the firewall, the oil temperature will be 30 degrees hotter. We have had a lot of problems with some coolers, so use either a Stewart Warner or a Harrison Niagara. (Do not use the Positech Cooler). Hook up the hoses to the rings.

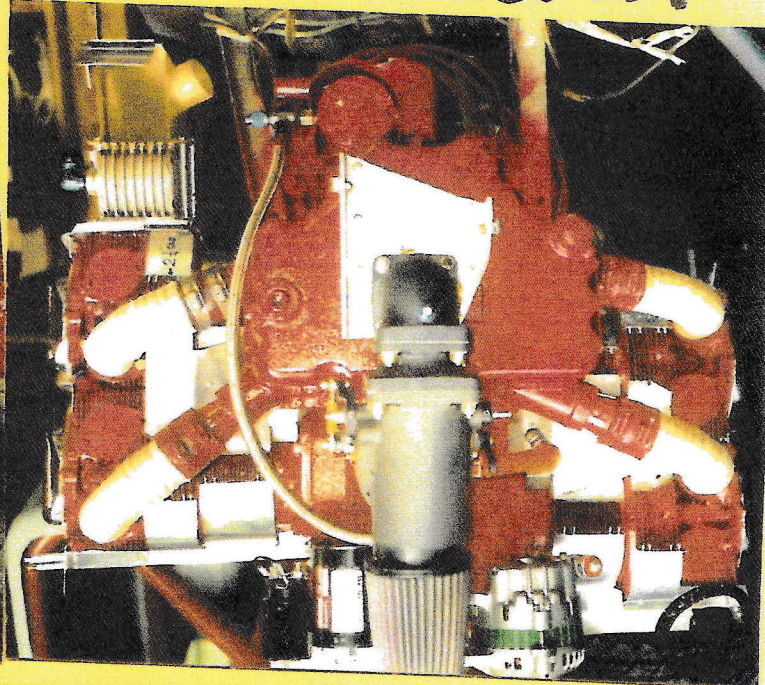
Note: Use a 37 BY spark plug on the top cylinder. The plug is ½ ' shorter than others. Cut the ferrell from the nut that the spark plug wire passes through. That will allow the wire to bend ¾" lower. Also, don't cut the plenum for the spider. Drop it between the cylinders. It will clear. Call me if you have any questions. Jimmy Cox 512-429-8749.



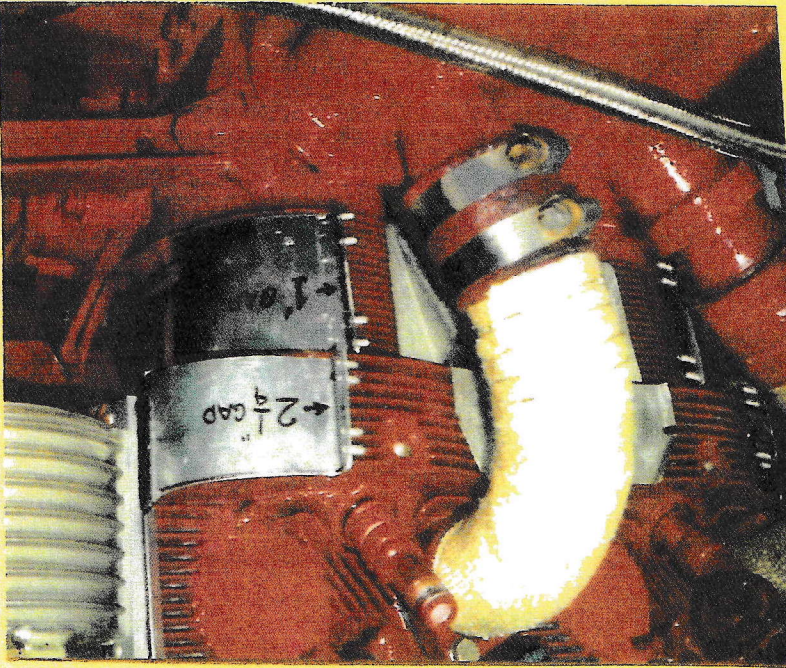




**- LOWER - SIDE -**



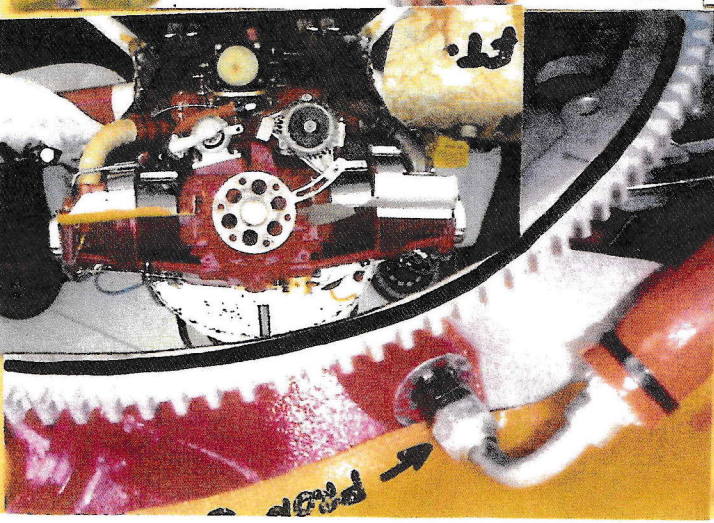
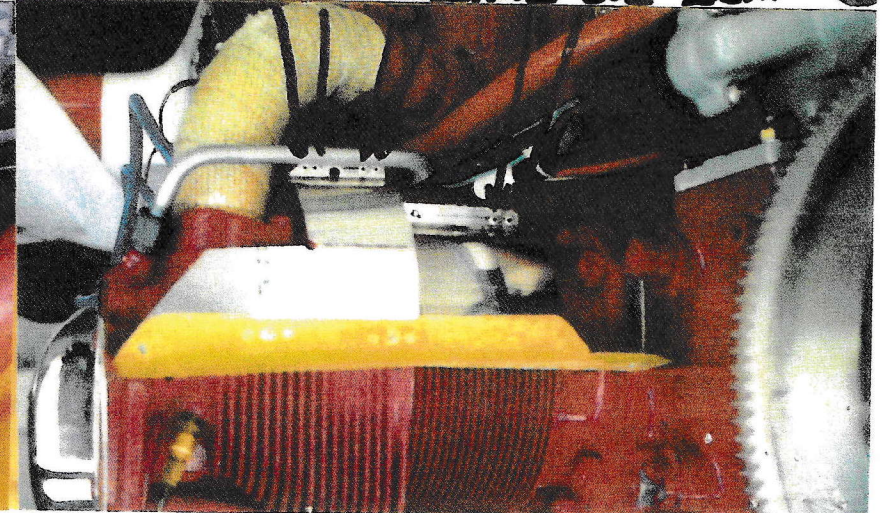
**- NOTE GAP SIZE -**



**NOTE FOR RIVETS TO THE PT 70  
REAR WITH WIRE**



**④**

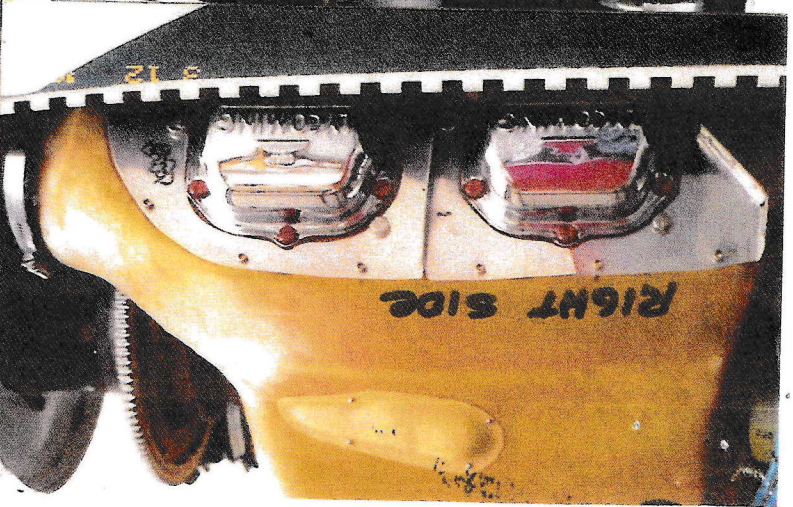
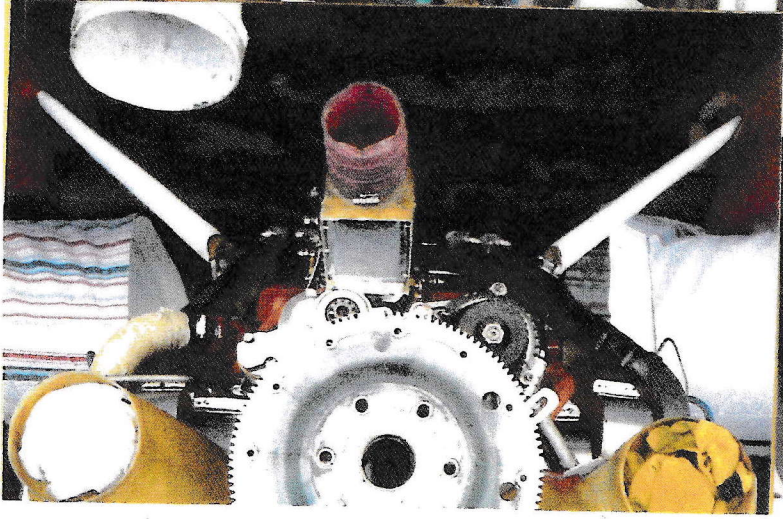
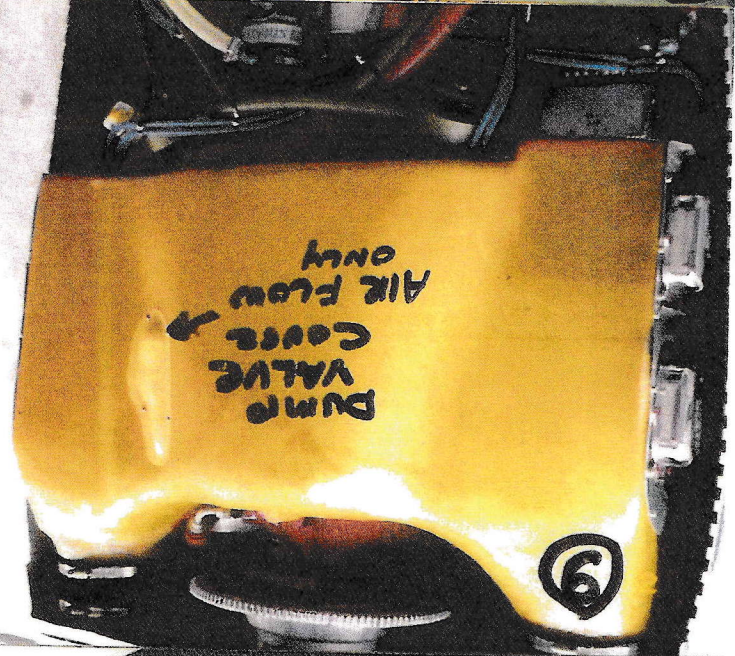
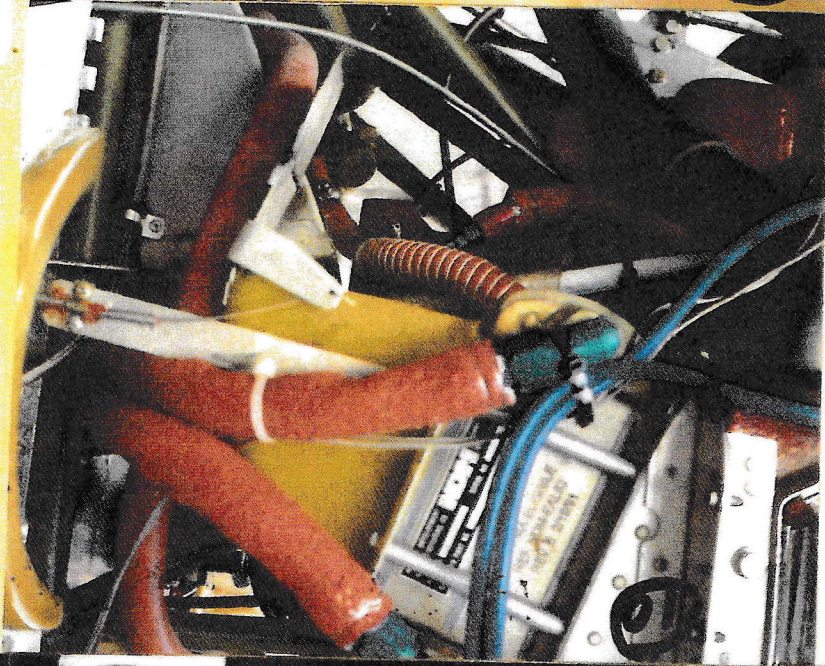
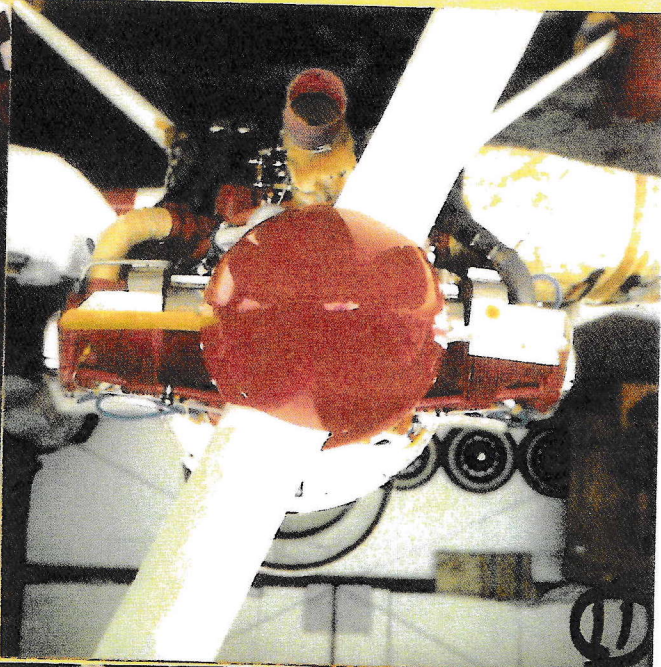
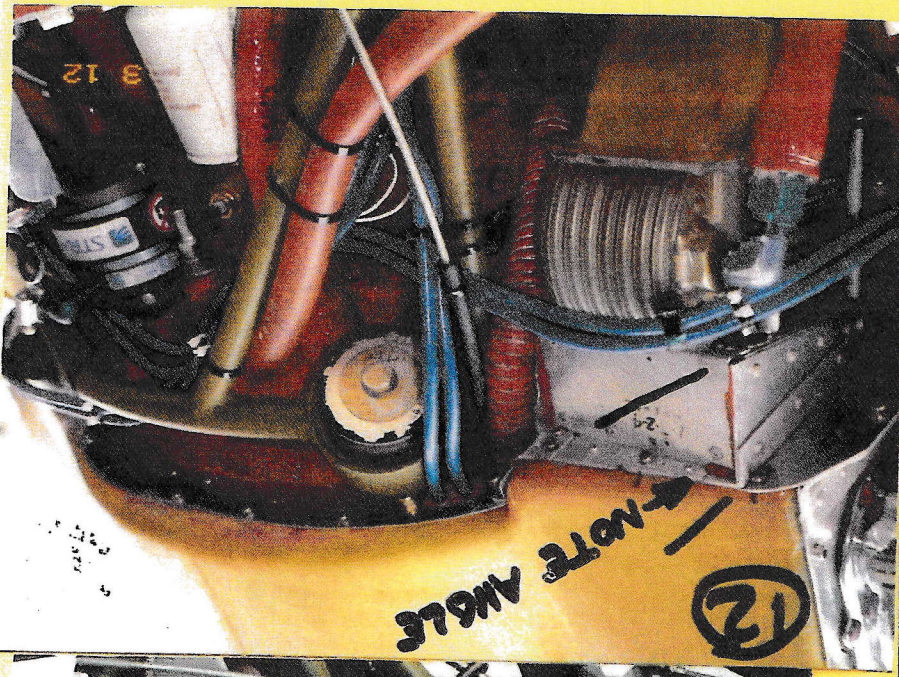


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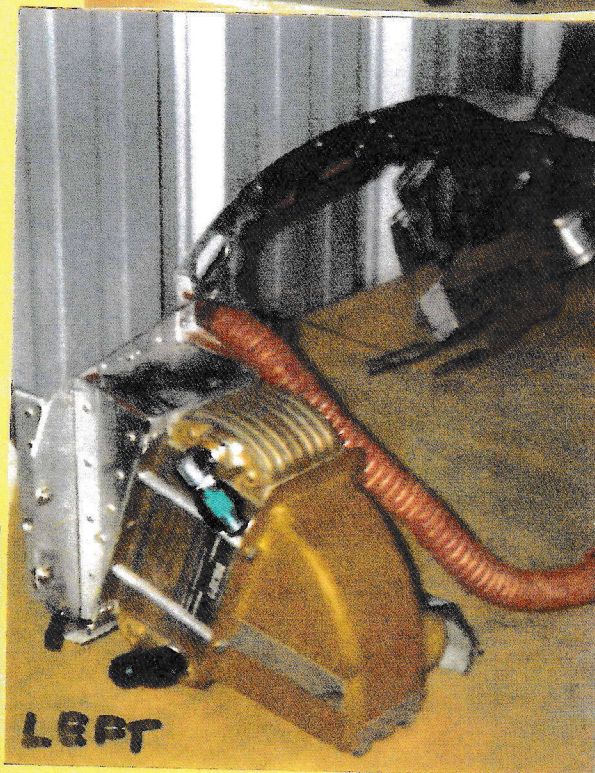
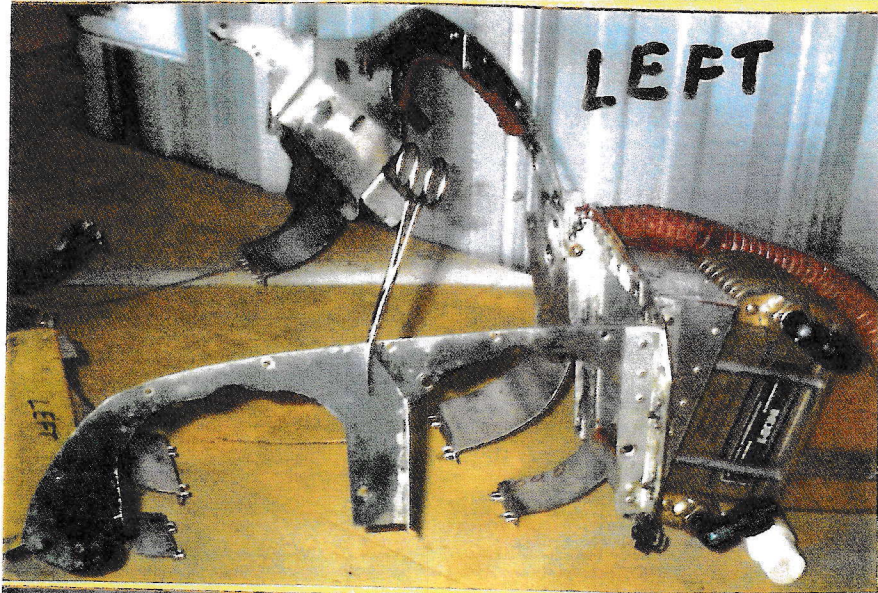
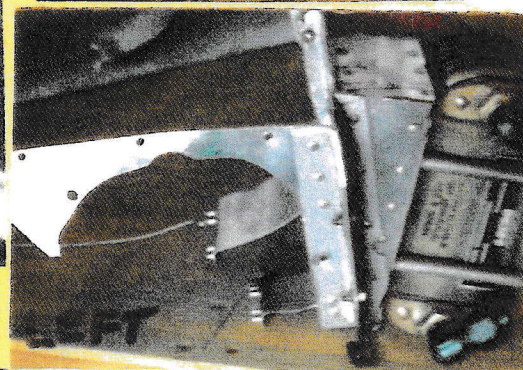
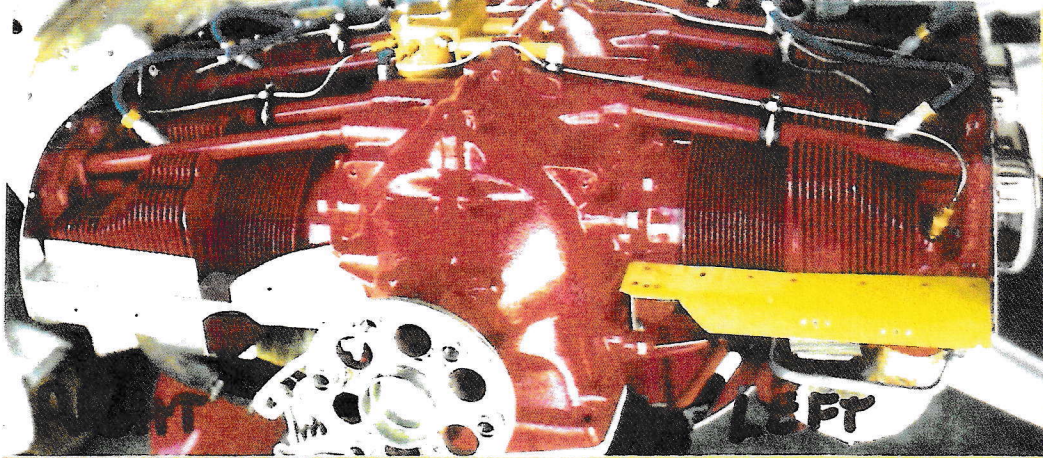


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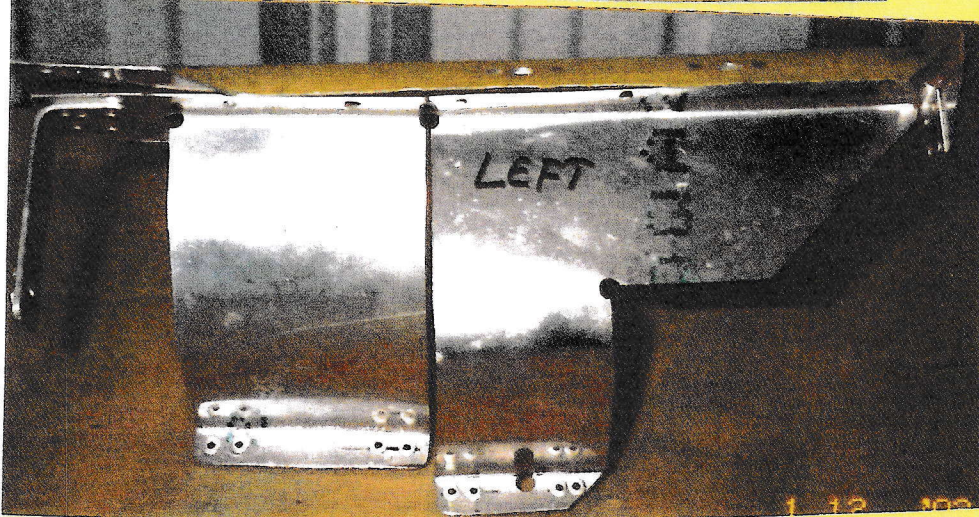
- FRONT-8011 -  
- OIL COOLER 10412 -





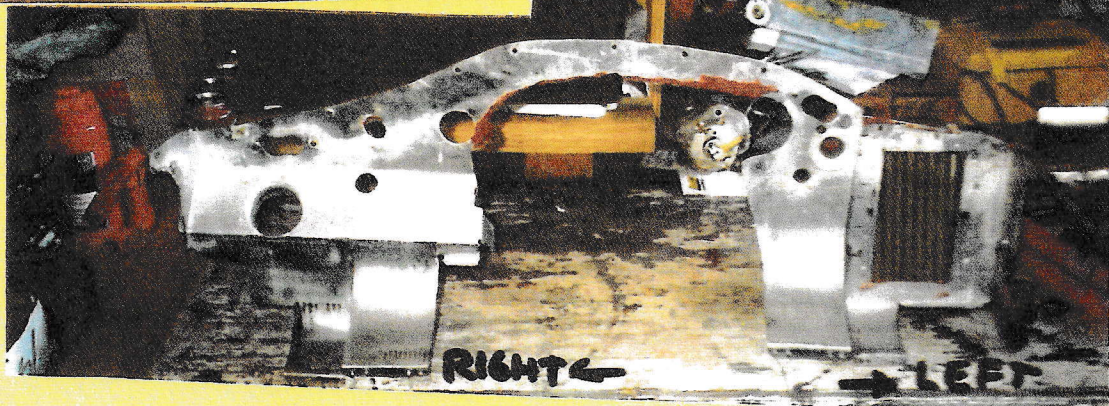
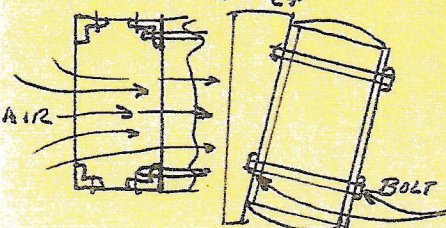


HOSE TO FUEL PUMP  
NOTE SPACER TO AIR COOLER

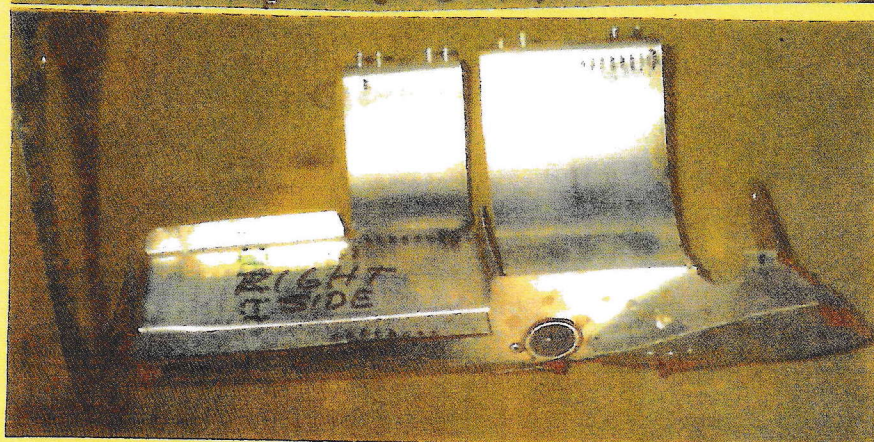
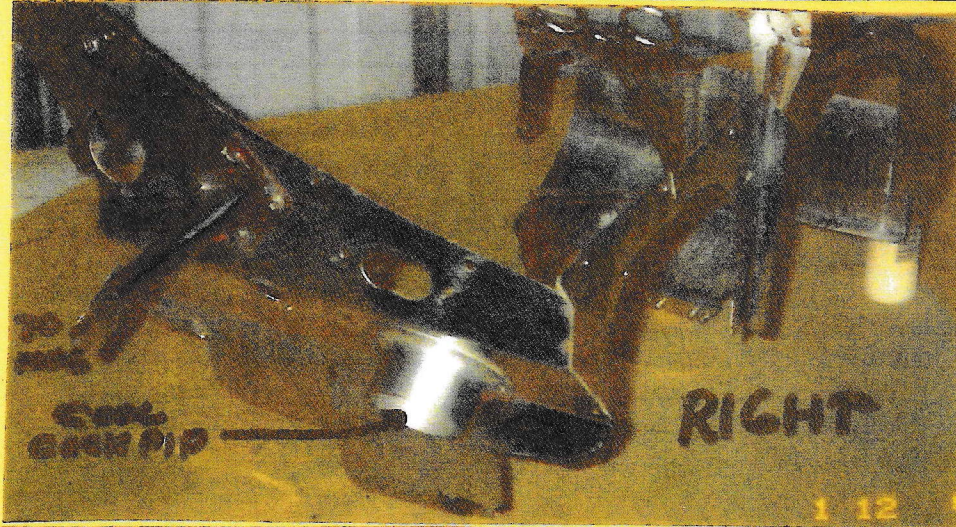


LEFT-SIDE -  
(NOTE) POP RIVIT HOLES  
TO WIRE EACH END  
TOGETHER.

OIL COOLER PATTERNS  
NOT INC. #2 1/2\*

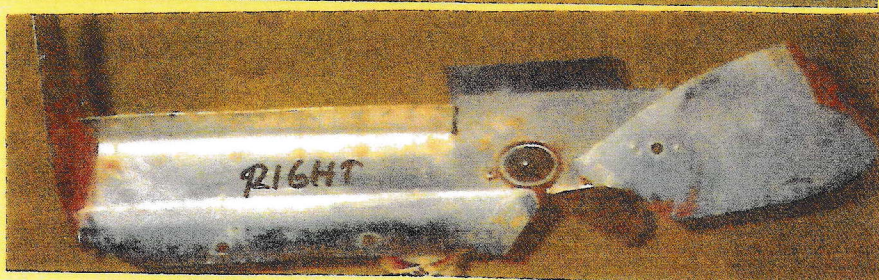






RIGHT SIDE  
NOTE

TUBE OFF REAR COOL MANGS



CALL ME IF YOU  
HAVE PROBLEMS

512-429-0230  
512-429-8749 JIMMY

TUBE UNDER RAMP COOL AIR