Pre-Paint>Fuselage>Engine>Fit oil cooler

Objectives of this task:

In this task the oil cooler will be fitted to the base of the sump, the oil filter adapter will be fitted under the oil filter and the whole assembly plumbed up.

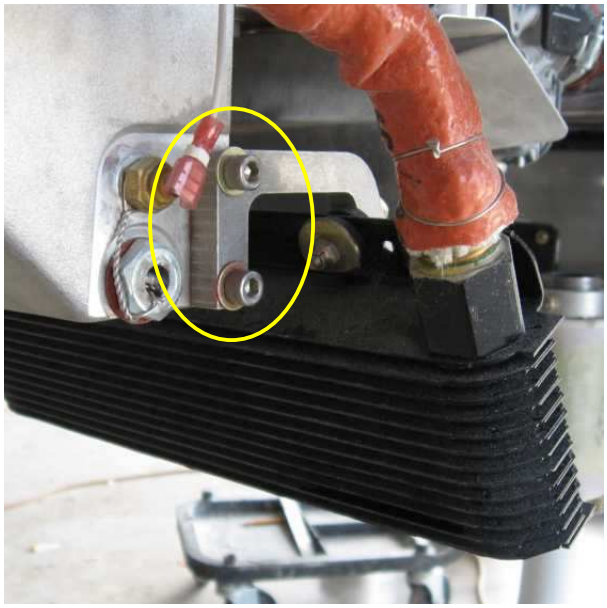
Fireproof sleeving will be used to protect the oil lines.

Materials required:

Card # J24 '*Oil Cooler Kit*'

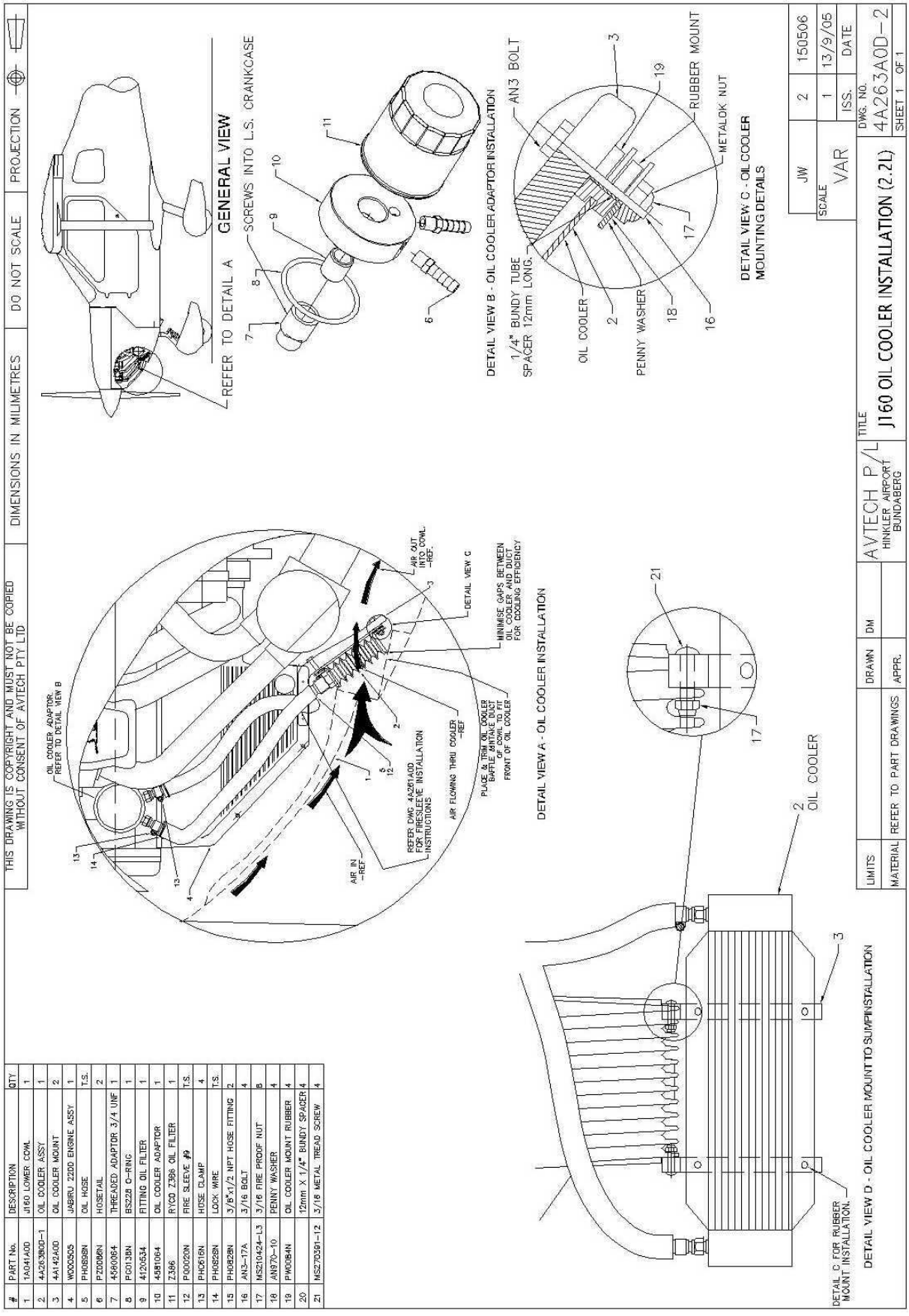
Pipe sealing compound (rated working pressure of 2.6 Mpa, "*Holdtite*" brand or similar)

Mount the cooler



Mount the rails to the sump: fit the 3/16" cap screws through the rail and into the threaded holes in the sump. Fit a rubber grommet to each of the 4 large holes in the cooler, then fit a Bundy tube in the bolt hole and mount the cooler to the rails using AN3 bolts and fireproof lock nuts with a penny washer under each lock nut as shown above.

Refer to the drawing on the next page for detail.



#	PART No.	DESCRIPTION	QTY.
1	1A041AOD	J160 LOWER COWL	1
2	4A263B0D-1	OIL COOLER ASSY	1
3	4A142AOD	OIL COOLER MOUNT	2
4	WOOO505	JABIRU 2200 ENGINE ASSY	1
5	PH0898N	OIL HOSE	T.S.
6	PZ0086N	HOSETAIL	2
7	4586064	THREADED ADAPTOR 3/4 UNF	1
8	PG0138N	BS228 O-RING	1
9	4120634	FITTING OIL FILTER	1
10	4381064	OIL COOLER ADAPTOR	1
11	Z486	RYCO Z396 OIL FILTER	1
12	PG0020N	FIRE SLEEVE #9	T.S.
13	PH0616N	HOSE CLAMP	4
14	PH0828N	LOCK WIRE	T.S.
15	PH0828N	3/8"x1/2 NPT HOSE FITTING	2
16	AN3-17A	3/16 BOLT	4
17	MS21042-L3	3/16 FIRE PROOF NUT	8
18	AN970-10	PENNY WASHER	4
19	PW0084N	OIL COOLER MOUNT RUBBER	4
20		12mm X 1/4" BUNDY SPADER	4
21	MS27039-12	3/16 METAL TREAD SCREW	4

Fit the oil lines

Fit the 2 brass male fittings to the inlet and outlet of the cooler– apply a smear of pipe sealing compound to the threads and tighten firmly into the cooler. Do **not** over tighten, as the brass threads can strip if excess pressure is applied.

Remove the spin-on oil filter and fit the adaptor (circled at right) under it with the O-ring side towards the engine block. Apply a smear of clean engine oil to the O-rings on the adaptor and the oil filter, refit the oil filter and tighten firmly. Absolute cleanliness is required here: there must be no dirt or contaminants anywhere near the oil filter or adaptor fitting area.

Size the blue oil lines by holding one end beside the fitting on the right-hand side of the oil cooler and cutting to length to fit the rear adaptor fitting.

Repeat the process for the other side of the oil cooler to the front adaptor fitting and then cut 2 lengths of fireproof sleeve to the same length as the oil lines and fit them over the oil lines.

The fireproof sleeve can be difficult to fit, but blowing compressed air into the gap between the oil line and the sleeve while pulling the sleeve over the oil line works rather well.

Roll the last inch or so of the fireproof sleeve back on each end as shown above left and fit each oil line into place, securing each end with the supplied hose clamp and cutting off the excess length of the hose clamp screw.

Now roll the fireproof sleeve over the hose clamp and lock wire into place as shown in the photo above right, using a double loop and twisting off. This provides fireproofing to the full length of the oil lines.

The completed oil line arrangement is shown above.

This completes the *Pre-Paint>Fuselage> Engine>Fit oil cooler* task.