#### SECTION/OPERATION

#### 19

### HEAT SHIELDING

<u>COMPONENT</u>	PROCEDURE	<u>print #</u>	<u>TEMPLATE</u>
HEAT SHIELDING	Cut out and fit		E24-1 E30-2

#### NOTES

HEAT SHIELDING: When fitting the heat shielding, it is a good idea to cut out cardboard pieces from the templates provided and assemble these around the radiator and exhaust system to check for accuracy. All of the shielding should fit tightly to allow a minimum of air gaps between the fuselage, radiator and exhaust pipes. However, leave 1/8" to 3/16" around the exhaust pipes to allow for movement during operation. In some areas, the exhaust shielding is double in thickness to keep the temperature of the exhaust from softening the fiberglass fuselage in close proximity. TOOLS REQUIRED FOR OPERATION 19:

Cleco Cleco pliers Drill bits of the following sizes: 3/32" 1/8" 3/16" #19 #40 Hand drill (air or electric) Metal cutting snips Pliers Pop rivet gun Scissors



<u>Photo #1</u>

Bottom view of the heat shield that goes between the bottom of the engine and the exhaust pipes. Note: For proper cooling, the

heat shield must fit tightly against the radiator tank without extending into the fin area of the radiators.



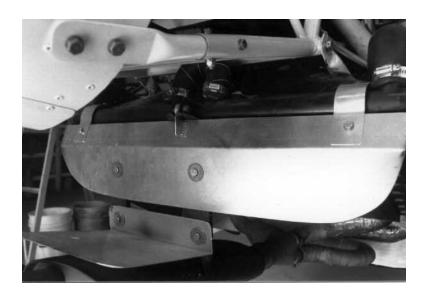
<u>Photo #2</u>

Pilot side view of heat shield.



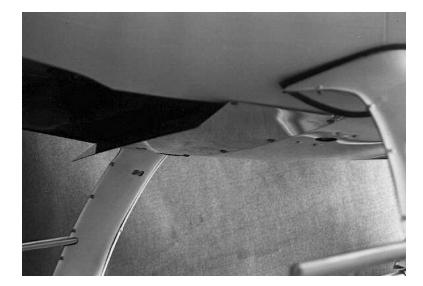
<u>Photo #3</u>

Passenger side view of heat shielding.



<u>Photo #4</u>

Radiator rear heat shield and muffler heat shield.



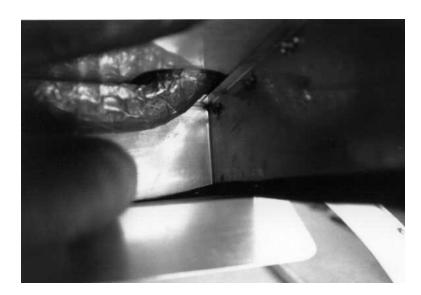
### <u>Photo #5</u>

Engine belly pan mounted to bottom of the tub. Note: This will be done when the body has been final installed.



### <u>Photo #6</u>

The heat shield should be as close as possible to the fiberglass body panel for best cooling.



<u>Photo #7</u>

The heat shield and the belly pan.



# <u>Photo #8</u>

The body panels should be trimmed so that they do not rub or make contact with the exhaust system.



<u>Photo #9</u>

Make and install the heat shield between the top exhaust pipes and the gas tanks.



Photo #10

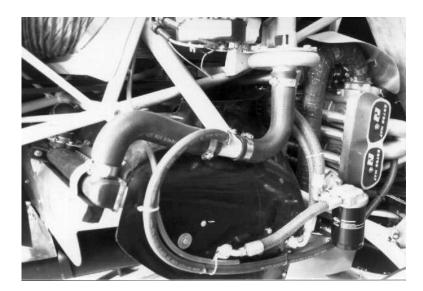
Water hose routing on the pilot side of the ship. Note the heat sleeve by the exhaust pipe.



### <u>Photo #11</u>

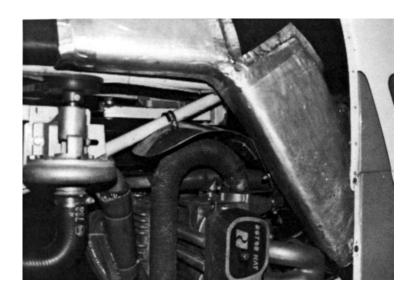
The pilot side of the ship showing the water hose and heat shield for gas tank.

Note: The wrap on the water hose should continue down to the tail boom support tube, fastened securely with ties. This will prevent the hose from rising up under pressure and rubbing on the fan drive pulley.



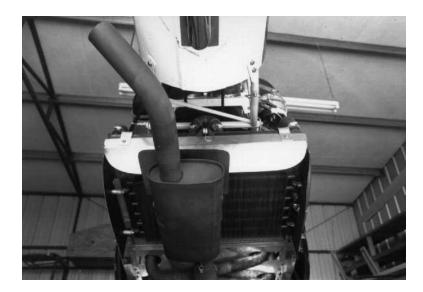
<u>Photo #12</u>

Water hose routing on the passenger side of the aircraft.



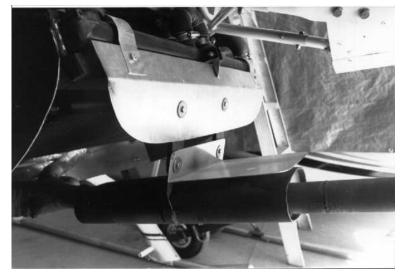
## <u>Photo #13</u>

This shows the water hose from the standpipe to the water pump to the lower manifold of the engine. The gas tank heat shield is shown in place.



# <u>Photo #14</u>

This shows how the muffler and heat shielding will look from underneath.



<u>Photo #15</u> Side view of the above.