STOL CH 801
LYCOMING O-360

SECTION A1
"COWL"

Top and bottom fiberglass engine cowl

P/N 801-COWL 801/0360 FIBERGLASS COWL (TOP AND BOTTOM)

P/N 801-COWL

COWL   (TOP AND BOTTOM)

801-COWL
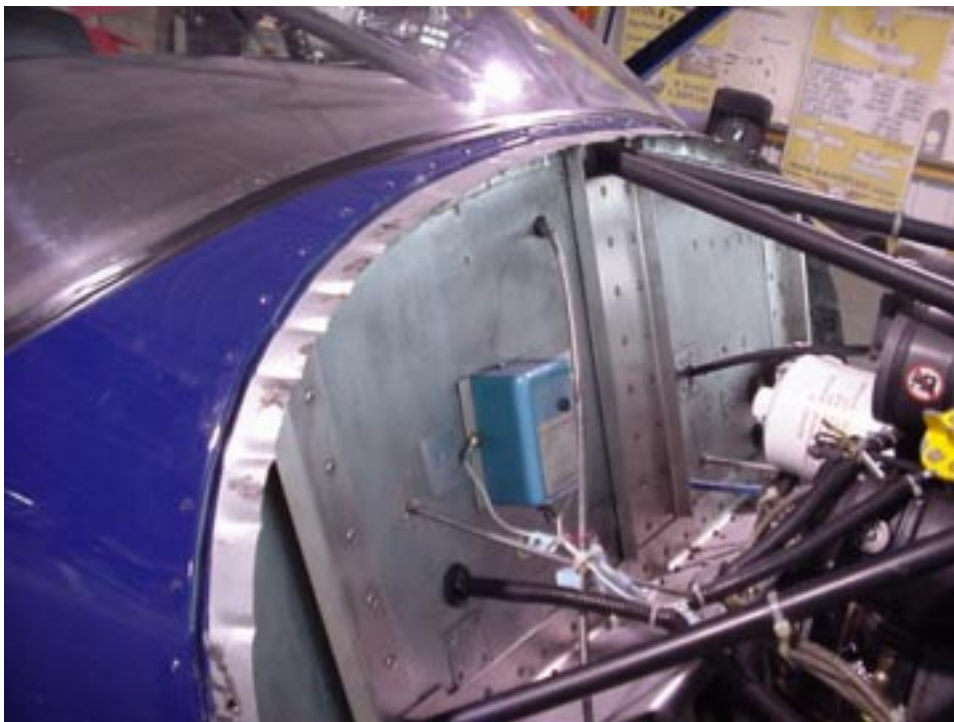**Top cowl**

Fiberglass cowl

801-COWL
Bottom cowl

Fiberglass cowl

COWL STRIP Galvanized
8F14-1

already installed on the
firewall

Cowl strip around the
sides and top of the
firewall.

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TOP COWL

Position the top cowl as supplied on top of the firewall strip.

NOTE: the bottom edge of the cowl is not use as a reference to position the top cowl. (no attempt is made to level the bottom edge of the cowl).

DO NOT TRIM along the side edge.

CHECK: Rely on a visual inspection that the front of the cowl does not point up.

Cutout for oil door on right side.
Supplied length = 920 left side, 890 right side: measured along the bottom edge from firewall to front of cowl (right side is 30mm shorter)

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CENTER THE COWL

Measure equal distance from the bottom edge of the cowl to the bottom edge of the Instrument Panel top Skin 8F14-4 (approximately 55mm)

Mark a mark on the forward top skin for future reference of the lower edge of the top cowl (Left and right sides).

Bottom edge of top cowl in relation to the edge of the Instrument Panel Top Skin 8F14-4

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½" (12mm) clearance
between the top of the fly
wheel and the top of the
cowl.

Set the Height of the cowl from the top of the flywheel (starter ring)

As supplied the front of
the cowl overhangs
approximate 10mm past
the front face of the
flywheel.

CHECK: clearance
between the front of the
cowl and the prop.
Minimum = 12mm (1/2")

OBSERVATION:
On the right side the bottom edge of the cowl comes down further than it does on the left side.

Right side.

Left side.

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OBSERVATION
More of the rocker cover is visible on the left side compared to the right side.

Right side

No adjustment is necessary, DO NOT TRIM THE BOTTOM EDGE.

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Make a template to cut the aft edge of the bottom cowl

Separate templates may be required for left and right sides.

Use a piece a piece of sheet metal or a piece of cardboard (construction board).
Hold the back edge along the front of the firewall, mark the bottom edge of the cowl on the sheet at the front and back. Connect with a straight line and cut.

CHECK: position the template along the firewall and bottom edge of the cowl.

Template to mark the angle between the bottom edge of the top cowl and the firewall.

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LYCOMING O-360
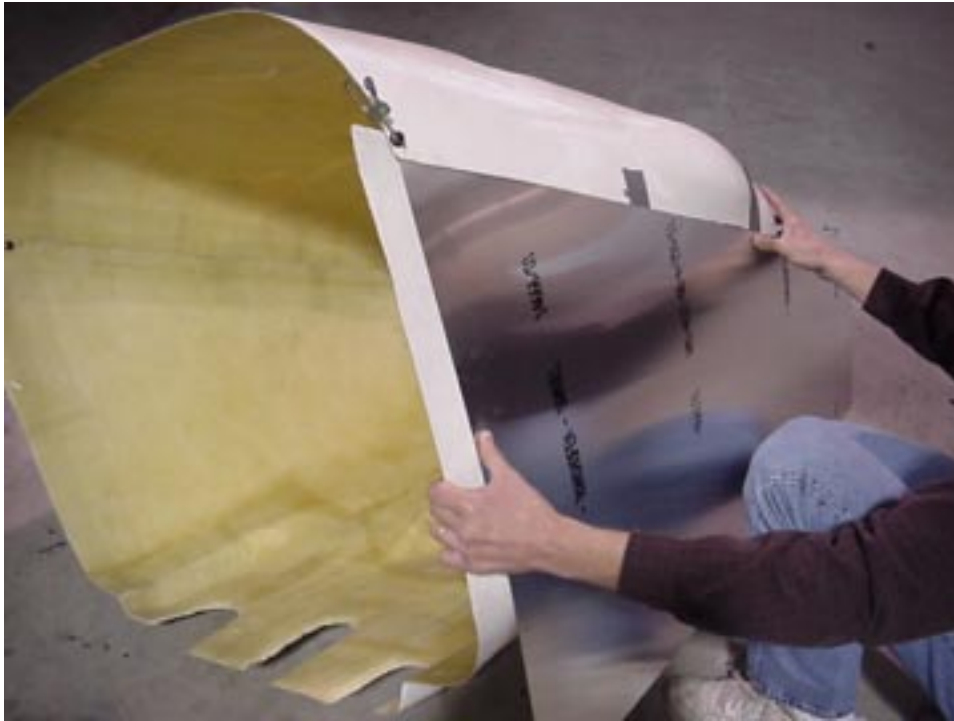**SECTION A1- Page 9 of 13**

Tape the top cowl to the bottom cowl. The top overlaps on top of the joggled flange of the bottom cowl.

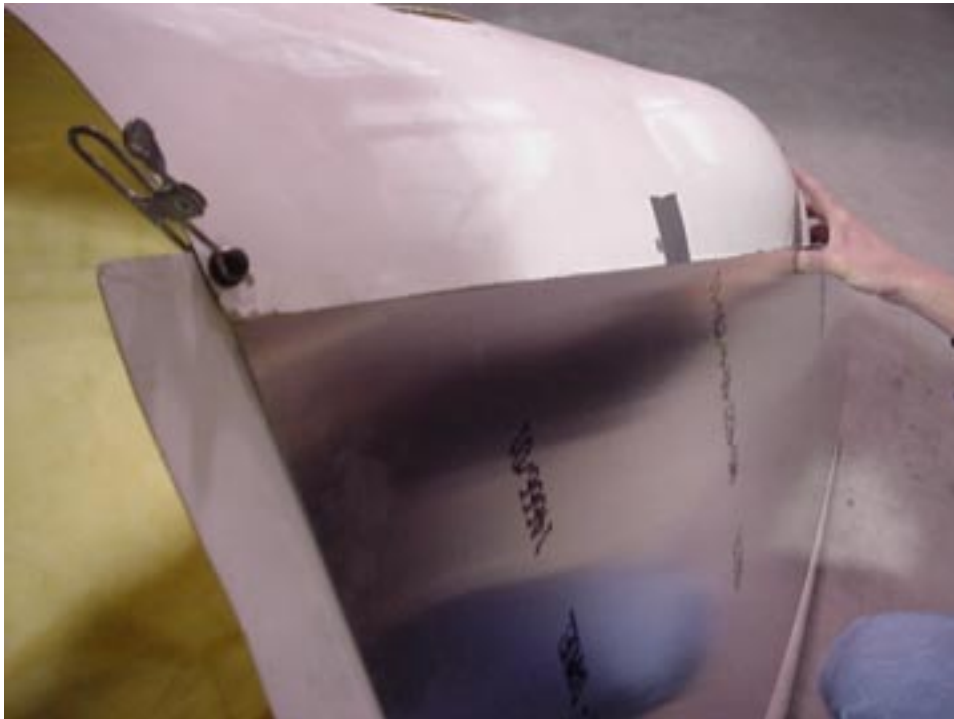Remove the top cowl from the aircraft to tape it to the bottom cowl.

CHECK: alignment at the front

OBSERVATION: the back of the cowl is longer than the top cowl.

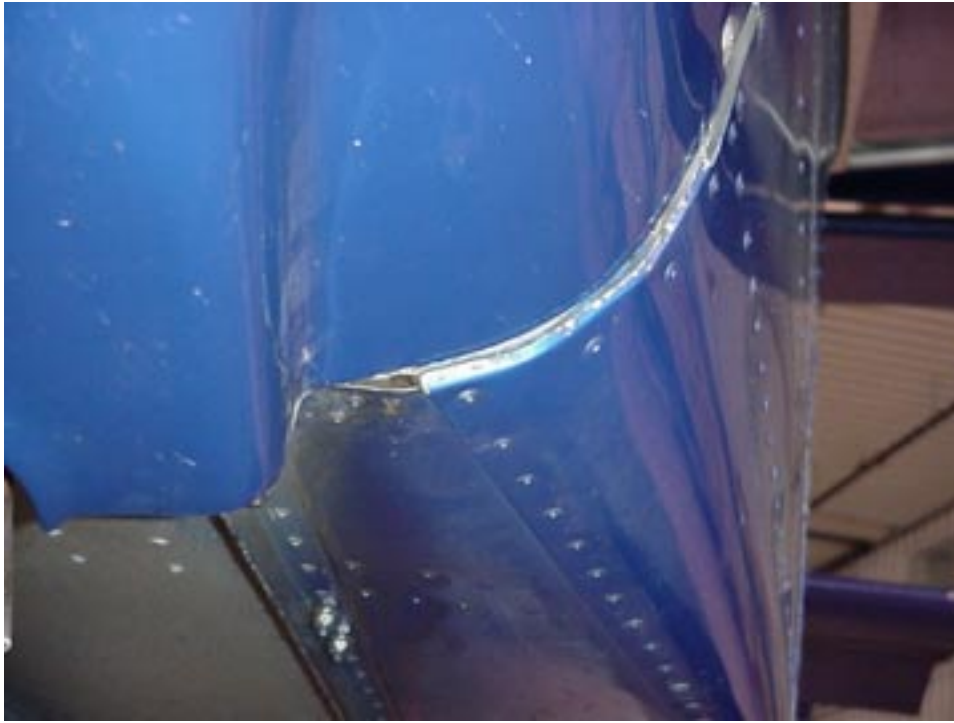Position the template on the side of the cowl

Line up the top edge of the template along the bottom edge of the top cowl.
Line up the aft edge with the end of the top cowl.

Trace along the aft edge of the template. Repeat for other side (make a new template if the angle is different).

Cut cowl along the marked line.

The hand snips can also be used to cut the fiberglass!

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The bottom of the fuselage is not used as a reference to line up the bottom cowl.

Detail of the bottom cowl to the firewall: at the bottom the firewall is wider than the cowl.

SUMMARY
The front of the bottom cowl lines up with the front of the top cowl, the top follows the bottom edge of the top skin, the back overlaps on top of the cowl strip, the back edge is trimmed to follow the angle of the firewall (same length as the top cowl)

COMMENT: there will be a visible space between the bottom edge of the top cowl and the joggle in the bottom cowl.

Before the fasteners are installed, use a body file to remove any high points along the sides.