

LYCOMING O-360 Engine Installation

SECTION 1b Engine Baffle Accessories



STOL CH 801 Lycoming O-360 engine with baffles

Accessories mounted on aluminum Baffles

Slotted screws to secure aluminum baffles to cylinder head, 2" flange and SCAT hose for carb heat air-intake on (front left baffle), 2" flange and SCAT hose on rear left baffle for cabin heat 1" flange and SCAT hose for alternator cooling (front left), Nylon 66 cowl fairlead (front right & left), wire seal for spark plug wires through left and right rear baffles, baffle strip along the top of the aluminum baffle.



“ROCKER BOX COVER SCREWS”

P/N STD1925

Used to attach side baffles to the cylinder heads.
Use existing pre-tapped hole on the engine.

2 screws in each baffles
Qty = 8

Rear right
Rear left
Front Right
Front left

Slotted screws with external tooth locking washer



Baffles screws located at
4 o'clock and
10 o'clock

2 screws per cylinders.

NOTE: THE 2" FLANGE ON THE RIGHT SIDE IS NOT REQUIRED

Note: heat shield (heat wrap) is not required around the muffler

OBSERVATION: Aluminum baffles are generally not painted or primed.



5/16"OD, .035"
CONTINUOUS LENGTH
SPRING
P/N 9664K17

Supplied 2 length 900mm
each (there will be some
extra)



Drill 1/16" hole in the middle
of the bottom flange
approximately 2mm
down from the bend.
One hole in each of the 4
baffles.

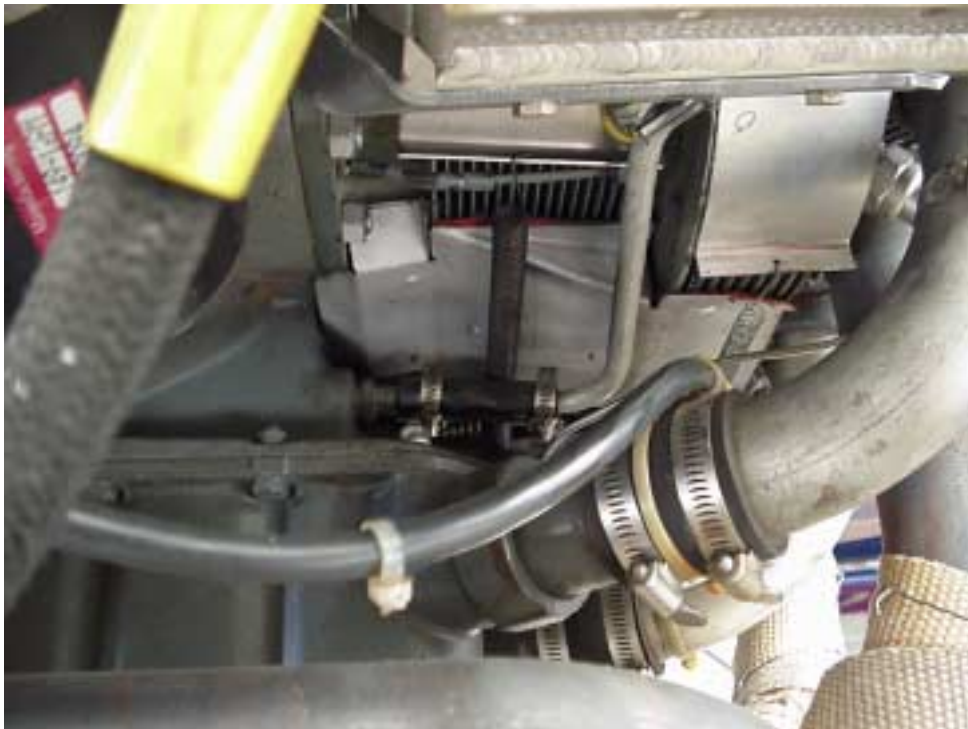
Bottom baffles.



Cut the springs to length and bend the ends to hook through the drilled holes in the baffle.

Requires 2 springs per side:
Join the front and rear O/B
and the front and rear I/B

Left side



The purpose of the springs is to keep the bottom portion of the baffle against the cooling fins on the cylinders.

Looking up at right side.



BAFFLING STRIP
3" WIDE

P/N 05-00700

Supplied one roll 84" long



FLAT WASHERS
90107A005

1/8" ID
5/16" OD

Supplied in box of 100



RIVET HEAD IS SET ON ALUMINUM BAFFLE WITH 1/8" ID WASHER ON THE BAFFLE STRIP

A4 RIVETS PITCH 40mm

Right side. Notice the Wire Seal P/N 375 on the rear baffle.



THE TOP EDGE OF THE BAFFLE STRIP IS ANGLED TOWARDS THE INBOARD AND TOWARDS THE FRONT.

NOTE: HIGH TEMPERATURE SILICON TO FIT THE GAP BETWEEN THE TOP EDGE OF THE ALUMINUM BAFFLE AND THE BAFFLE STRIP.

Note the staple in the corner to keep the top of the baffle strip together to prevent air-leaks: no air should escape between the top of the baffle and the cowl; the airflow flow direction is down through the cooling fins on the cylinders.



2" FLANGE
P/N CH01

Qty=1

Carb heat air-intake



2-1/4" HOSE CLAMP
P/N FHC5-36
QTY = 8



SAFETY TIE THE HOSE CLAMPS:

Slide SCAT hose on the flange and tighten up the hose clamp. Insert a piece of safety wire along each side of the worm gear and across the slot of the hex head then braid the end of the safety wire.

Safety tie all hose clamps.



Cleco the 2" flange on the backside of the front right baffle. The bug screen will go between the baffle and the flange.

Note support bracket on manifold air intake to secure the scat hose
Piece of .016 or .025" 40 to 50mm wide folded around 2" tube riveted together with 4 rivets.



1" FLANGE
P/N 10350-4

Qty = 1

Alternator cooling



1" SCAT HOSE
(RED)

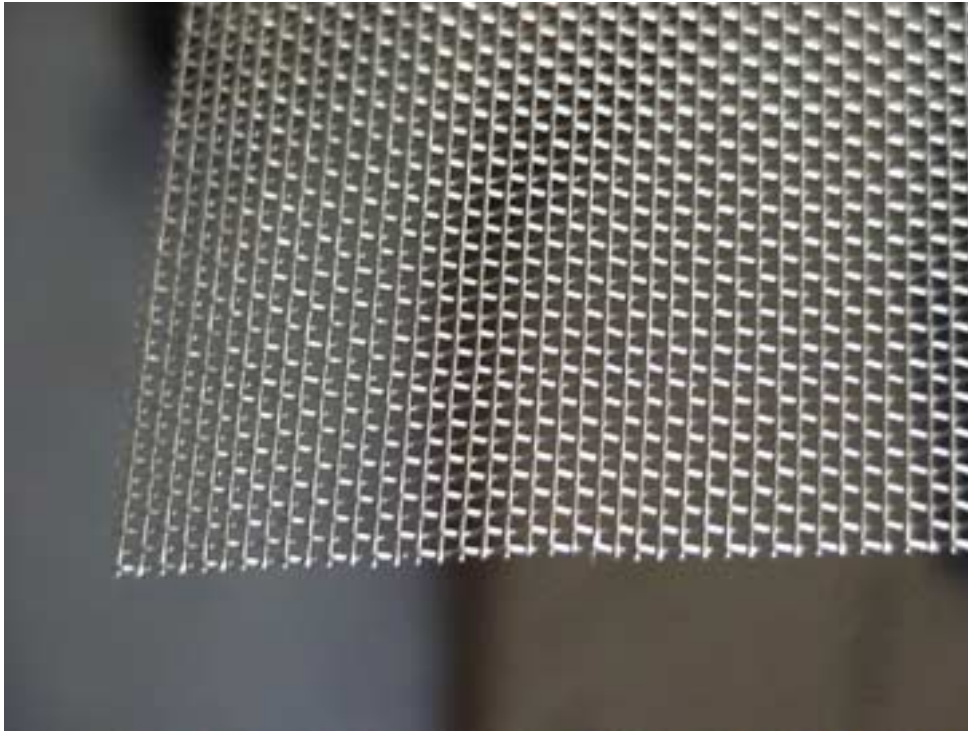
P/N SCAT-4

Qty = 1ft

HOSE CLAMPS

P/N FHC5-20
QTY =2

SCAT hose for the Alternator cooling

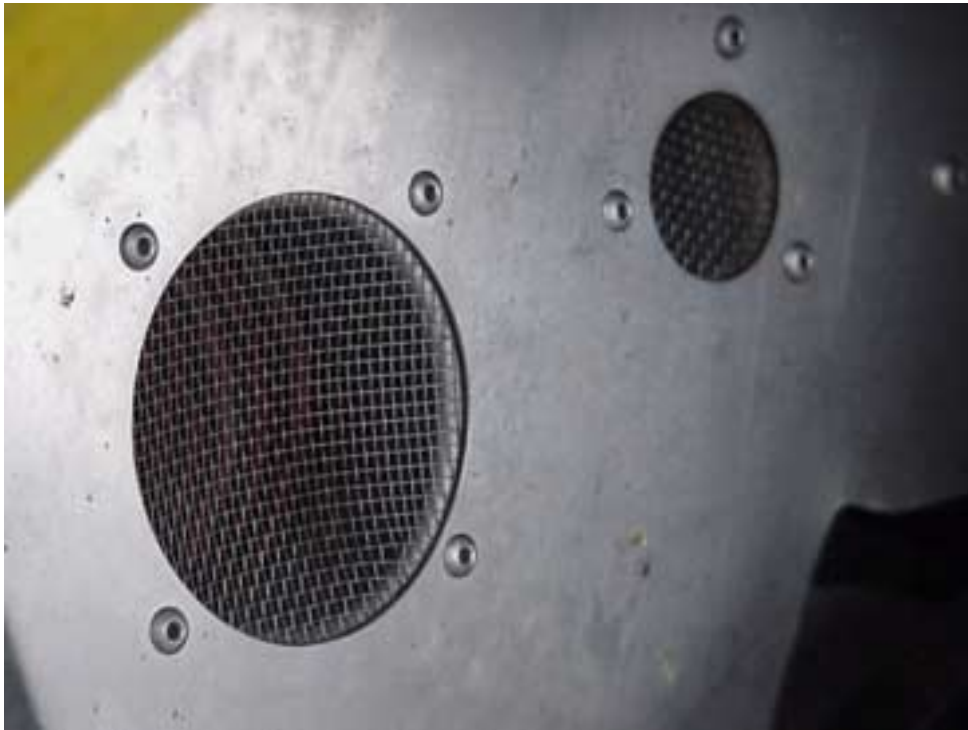


INLET BUG SCREEN (14X14
TYPE 316 STAINLESS STEEL
WIRE CLOTH

P/N 9319T548

Supply 1 piece
75mm x 225mm

Cut in 3 pieces: Lay the
flanges on the screen, trace
around the flange and use
the hand snips to cut the
screen.



AIR INTAKE

4 rivets in 2" Flange
3 rivets in 1" Flange

Bug screen between flange and baffle

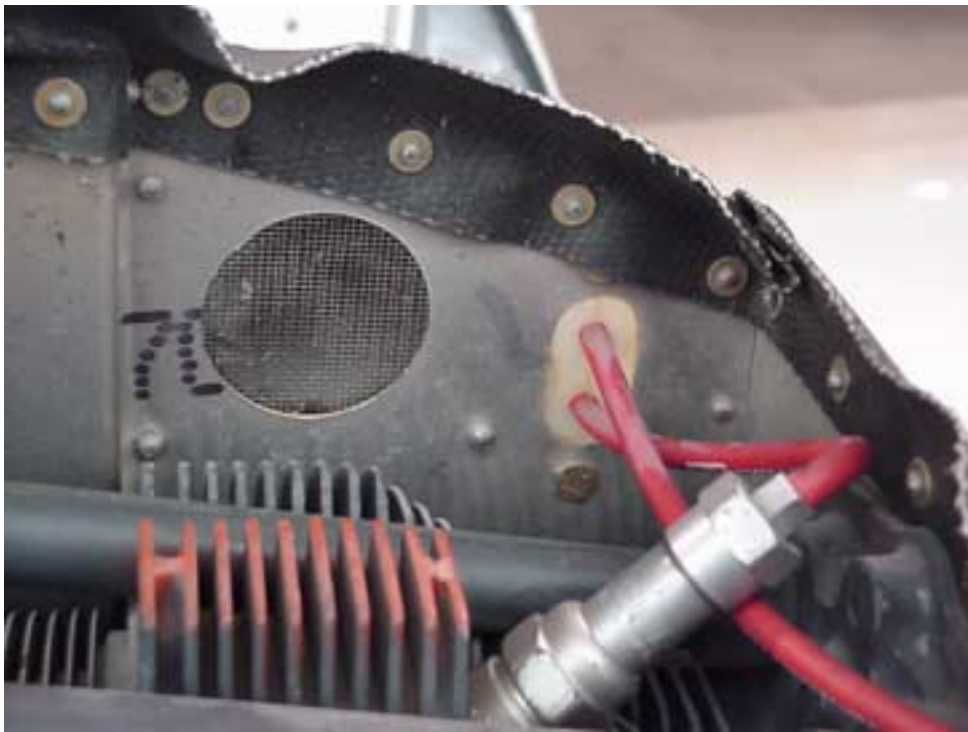


5MM WIRE SEAL TWO-
WIRE
P/N 375

Qty=2

3/16" Bolt with SL nuts and
washers
AN3-4A

Qty=4

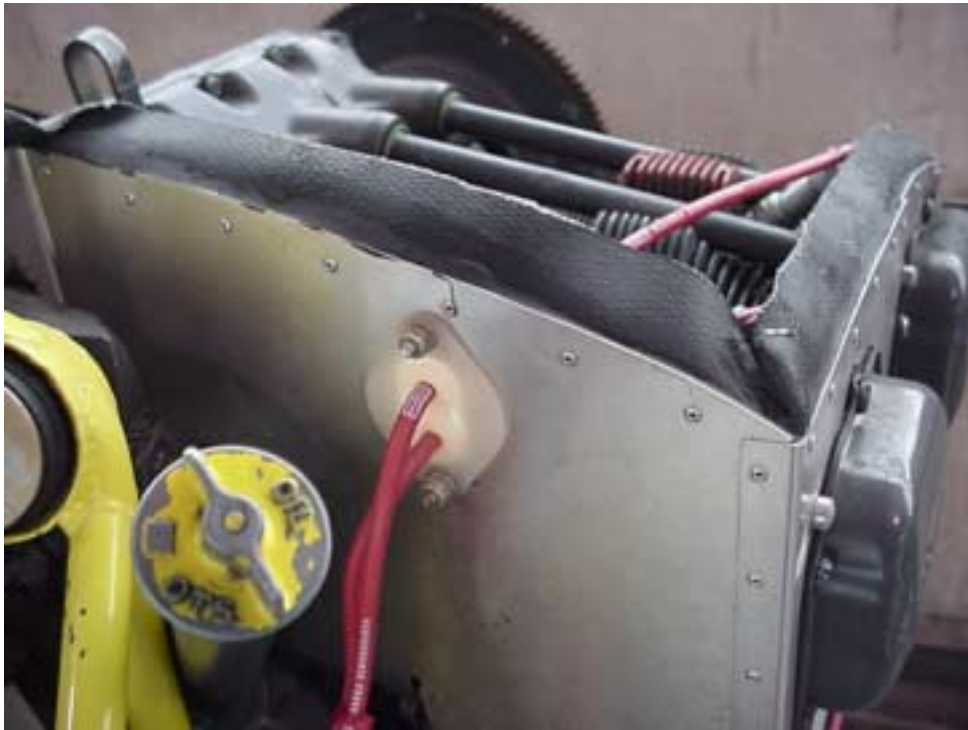


OVAL HOLE IN THE LEFT
AND RIGHT REAR BAFFLE
FOR THE WIRE SEAL

LEFT SIDE, 2" AIR INTAKE FOR CABIN HEAT



The Wire Seal and the Nylon self-locking nut is on the backside of the baffle.



View from the back of the engine looking at the Wire Seal

*****BAFFLE ACCESORIES*******Section 1b**

P/N	DESCRIPTION	QTY
STD1925	SLOTTED SCREWS W/TOOTH LOCKING WASHERS (to attach baffles to cylinder heads)	8
9664K17	5/16"OD, .035" CONTINUOUS LENGTH SPRING (bottom of baffles) supplied length = 900mm each	2
05-00700	NEOPRENE COATED PYRGLASS CLOTH (BAFFLE STRIP) 3" x 84"	1
90107A005	1/8" ID FLAT WASHERS (between rivet and baffle tape)	1PK G
N66	1/8" plastic bearing material (front baffle with cowl)	1
SCAT-4	1" SCAT HOSE (for alternator cooling)	1 ft
10350-4	1" FLANGE (riveted to right front baffle for alternator cooling)	1
CH01	FLANGE 2" DIAM. (carb heat air intake on right front baffle – cabin heat) & left rear baffle for cabin heat)	2
SCAT-2"	2" SCAT HOSE (for Carb heat & cabin Heater- left muffler – cut in 4 pieces)	6 ft
9319T548	INLET BUG SCREEN (14X14 TYPE 316 STAINLESS STEEL WIRE CLOTH for 2" flange CH01 & 10350-4) 75MM x 225MM	1
FHC5-36	2-1/4" HOSE CLAMP (for Scat hose; cabin and carb heat)	8
FHC5-20	3/4" to 1-3/4" HOSE CLAMP (for 1" SCAT hose)	2
375	5MM WIRE SEAL TWO- WIRE	2
AN3-4A	BOLTS, SL NUT, WASHERS (for wire seals #375)	4