

# STOL CH 801

## LYCOMING O-360 Engine Installation

### SECTION 3 Fuel Lines

#### FUEL FITTINGS ON THE CARBURETOR AND MECHANICAL FUEL PUMP, ALSO THE FUEL LINES TO AND FROM THE MECHANICAL FUEL PUMP



ELECTRIC  
FUEL PUMP  
ASSEMBLY:

**TOP**  
THE FUEL  
PUMP IS  
SCREWED IN  
THE BOTTOM  
OF THE  
MANIFOLD

**BOTTOM:**  
THE "T"  
FITTING IS AT  
THE BOTTOM  
OF THE  
ELCTRIC  
FUEL PUMP

The fuel pressure sender is at the right of the Manifold, the two fittings at the back of the manifold and the smaller fitting on the left side by the OUT to the mechanical fuel pump are for the optional primer system.

REFERENCE CAD DRAWINGS 8ZE-1



**SEALUBE**

Aircraft Spruce & Specialty Co.

**P/N 09-25200**

Anti-seize sealer for threaded aluminum alloy parts exposed to gasoline, oil.



**FUEL LINE SUB  
ASSY**

**P/N 20-SAF-3-3**

**QTY=1**  
PACKAGE  
INCLUDES 4 HOSES  
AND FIRESLEEVE

**REF. CAD DRAWING  
8ZE-1  
SHOWS HOSE  
LENGTH &  
LOCATION**

3/8" O/D FUEL LINE WITH HOSE FITTINGS.  
NOTE: SLIDE THE HOSE IN THE APPROPRIATE FIRE SLEEVE



Electric fuel pump and manifold assembly  
P/N **20-M-37-ASSY**

GASCOLATOR  
P/N **A10580**

GASCOLATOR BRACKET  
P/N **10371A**

1/8" NPT PLUG  
P/N **F109-A**  
(Screwed in at the top of the Gascolator)

90 DEG BRASS FITTING  
3/8" TUBE BARBED  
1/4" NPT PIPE  
P/N **F139-6B**

Replace the NIPPLE (straight fitting) AN816-6D at the bottom of the electric fuel pump assembly with a 90degree ELBOW **AN822-6D** (1/4" PIPE TO 3/8" O/D TUBE). Screw the NIPPLE on the "OUT" of the Gascolator A10580

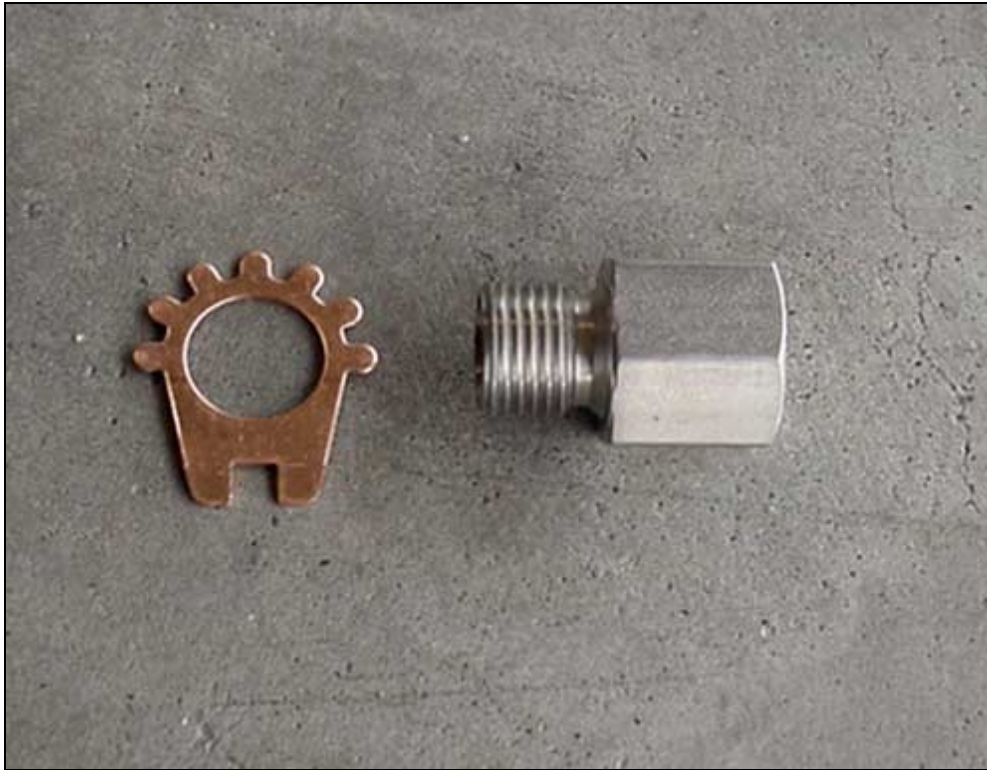


45 DEGREE ELBOW

**P/N AN823-6D**  
(MS20823-6D)  
(ALUMINUM)

Qty = 1

3/8" TUBE O/D, 1/4" PIPE THREAD  
NOTE: PHOTO SHOWS 4 PIECES, ONLY ONE REQUIRED.



FITTING  
P/N **16A48**

GASKET  
P/N **68-93**

**Qty=1**

Lycoming parts



Carburetor fuel supply

45 degree ELBOW  
P/N **AN823-6D**

The end of the  
ELBOW corresponds  
to letter X on drawing  
8ZE-1

Pipe threads on  
ELBOW screwed into  
FITTING P/N 16a48

Tabs on gasket are bent over the fitting



Carburetor (left side)

Fuel inlet fitting

Lycoming carburetor  
Model MA4-5

**P/N 68-93**

Gasket – fuel inlet  
fitting & strainer

**P/N 16-A48**

45 degree flared fitting

**P/N AN823-6D**



FUEL LINE ROUTING  
TO CARBURETOR

LEFT SIDE

Note: this photo shows an alternative installation for the mixture control



STRAIGHT FITTING  
SCREWS IN LEFT  
SIDE OF FUEL PUMP

P/N KB-000

Quantity = 1 required

4 pieces shown in photo, only one required.



STRAIGHT FITTING  
SCREWS IN ON THE  
LEFT SIDE OF THE  
MECHANICAL FUEL  
PUMP (OUT)

HOSE SCREWS TO  
FLARED END OF  
FITTING  
P/N KB-000

HOSE LENGTH=277 TO LABEL "C" ON DRAWING 8ZE-1



90 DEG FITTING  
P/N KB-090

Quantity = 1 required

4 pieces shown in photo, only one required.



90 DEGREE FITTING  
KB-090 SCREWED IN  
THE RIGHT SIDE OF  
THE FUEL PUMP.

HOSE SCREWS TO  
FLARED END OF  
FITTING KB-090

SHORT HOSE LENGTH=189 TO LABEL "D" ON DRAWING 8ZE-1



90 DEGREE ELBOW  
Bass fitting, (1/8"  
TUBE, 1/8"PIPE) fuel  
pump vent

P/N **F969-4A**  
Qty=1

Fitting at the back of the mechanical fuel pump.



1/4" POLY TUBE, fuel  
pump vent

P/N **F487-4**  
QTY=2FT

Vent line for mechanical pump, cut off tube F969-4A even with the bottom of the firewall.





ELECTRIC FUEL  
PUMP AND  
MANIFOLD  
ASSEMBLY

**P/N 20-M-37-ASY**



SEE DRAWING  
8ZE-1 FOR THE  
LOCATION OF THE  
ELECTRIC FUEL  
PUMP ASSEMBLY  
ON THE LEFT SIDE  
OF THE FIREWALL.

MECHANICAL FUEL PUMP SHOWN IN UPPER LEFT OF PHOTO



LEFT SIDE OF ENGINE AND FIREWALL

Note: The hose from the fuel supply loops around the cabin heat box



RIGHT SIDE OF ENGINE

CONNECTION  
HOSES TO  
ELECTRIC PUMP:

TOP FRONT OF  
MANIFOLD TO CAR

LEFT OF MANIFOLD  
IN MECHANICAL  
PUMP (STRICT  
FITTING ON LEFT  
SIDE)

BOTTOM LEFT OF  
"T" TO FUEL SUPPLY  
(IN THIS PHOTO THE  
SYSTEM IS SET UP  
FOR FUEL SYSTEM  
2, REF 8FE-1)

BOTTOM RIGHT OF  
"T" TO IN ON  
MECHANICAL PUMP  
(BOTTOM OF 90  
DEG FITTING KB-  
090)

**\*\*\*FUEL LINES\*\*\*  
SECTION 3**

<b>P/N</b>	<b>DESCRIPTION</b>	<b>QTY</b>
20-M-37-ASY	ASSEMBLY FOR FUEL PUMP (with manifold & fuel pressure sender)	1
20-SAF-3-3	FUEL LINE SUB ASSY (4 hoses with fire-sleeve)	1
AN922-6D	90 DEGREES ELBOW (3/8" TUBE, 1/4" PIPE) Gascolator out	1
AN823-6D	45 DEGREE ELBOW (3/8" TUBE, 1/4" PIPE) Carburetor in	1
KB-090	90 DEG FITTING (for fuel pump)	1
KB-000	STRAIGHT FITTING (for fuel pump)	1
F969-4A	90 DEGREE ELBOW Bass fitting, (1/8" TUBE, 1/8"PIPE) fuel pump vent	1
F487-4	1/4" POLY TUBE, fuel pump vent	2FT