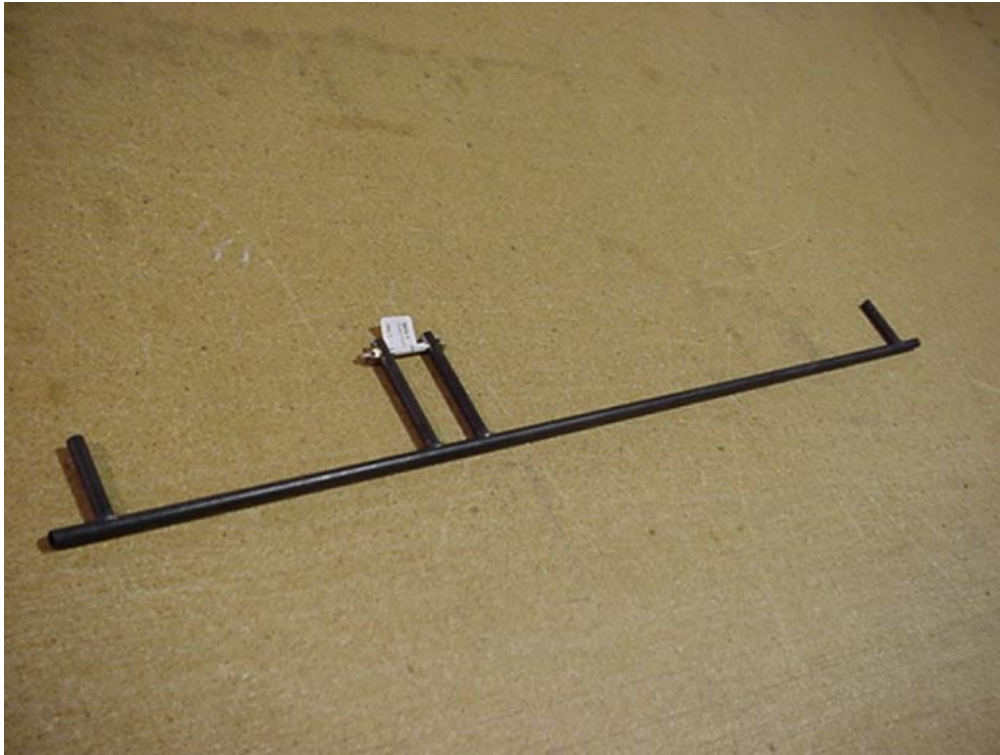


SECTION 1
THROTTLE
Drawing 6-E-5



Throttle vertical rods installed on left side of firewall

Note: The Choke Cable Angle 6E5-3 is only required to splice two cables together, it is not installed for the Jabiru, which has only one carburetor. Run the cable straight to the carb.

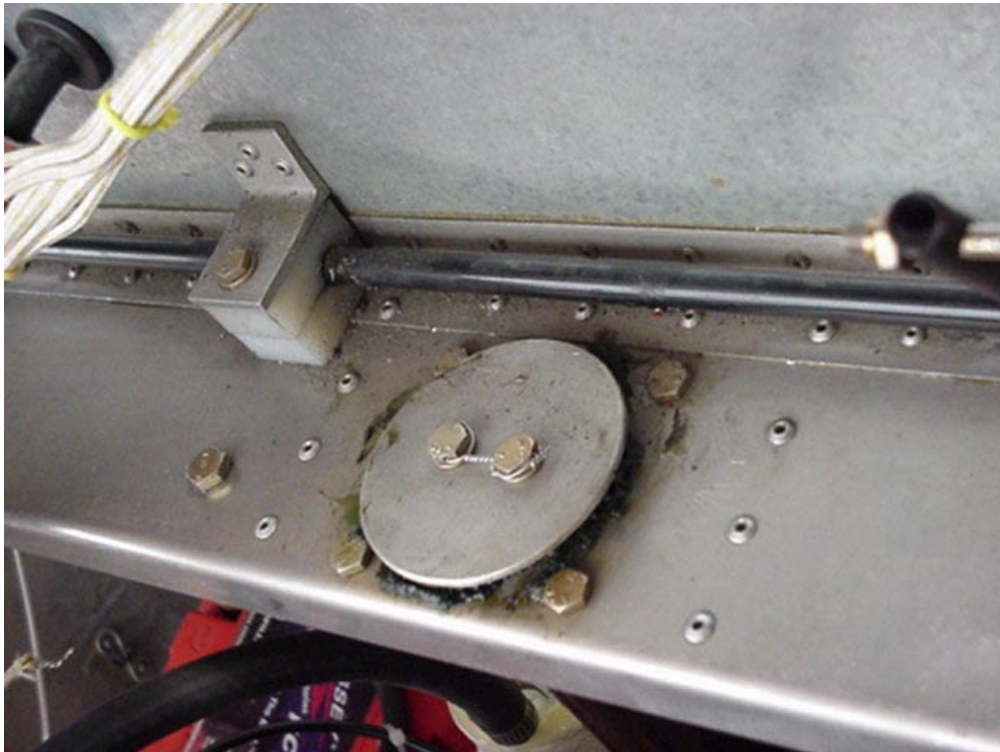


**6E5-1
THROTTLE
BELLCRANK**



Throttle on left and right side of instrument panel

Welded assembly



**FRICTION CLAMP
6E5-6**

**FRICTION BLOCK
6E5-7**

**AN3-16A BOLT
QTY: 1**

IMPORTANT: The throttle bellcrank 6E5-4 is installed close to the firewall to make room for the Nose Gear Leg and the Stop Plate 6G2-3



Drill the 3/8" hole in the Plastic Block 6E5-7

The height of the 3/8" hole in the bottom half of the plastic block 6E5-7 sets the position of the Bellcrank 6E5-1



THROTTLE BEARING
6E5-5
Qty: 1L + 1R

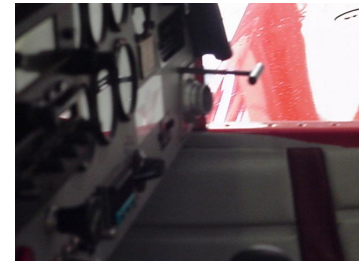
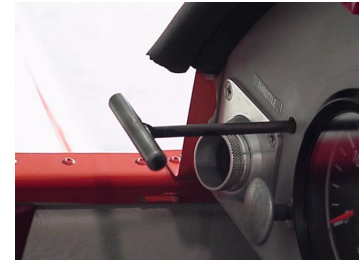
THROTTLE RODS
6E5-4
Qty: 2

1/16" COTTER PIN
AN380-2-2
Qty: 2

3/16" WASHERS
AN960-10
Qty: 2

Note: vertical slot in firewall for 6E5-4

The end of the Throttle rods 6E5-4 are bent 90 degrees, fitted through the 3/16" hole in the Throttle Bellcrank 6E5-1 and secured with a cotter pin.

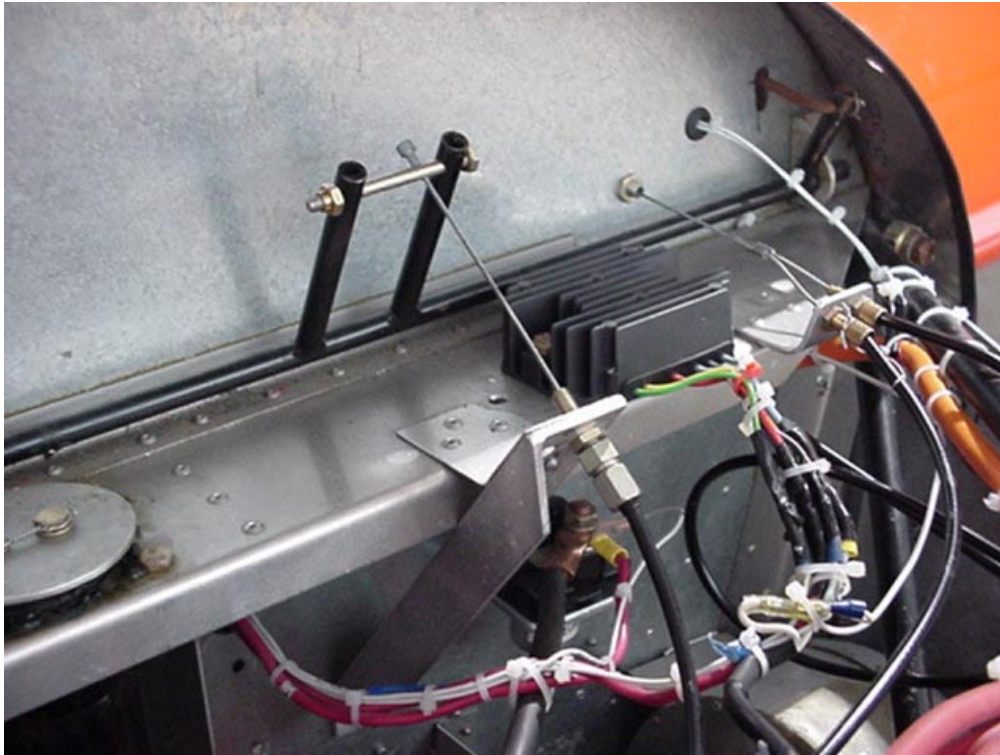


Dual throttle, detail of left side.



1/8" plastic riveted to the back side of the instrument panel (flush rivets)

Detail of back side of the instrument panel: Throttle rod 6E5-4 through the plastic bearing Ref. middle left diagram on drawing 6-E-5

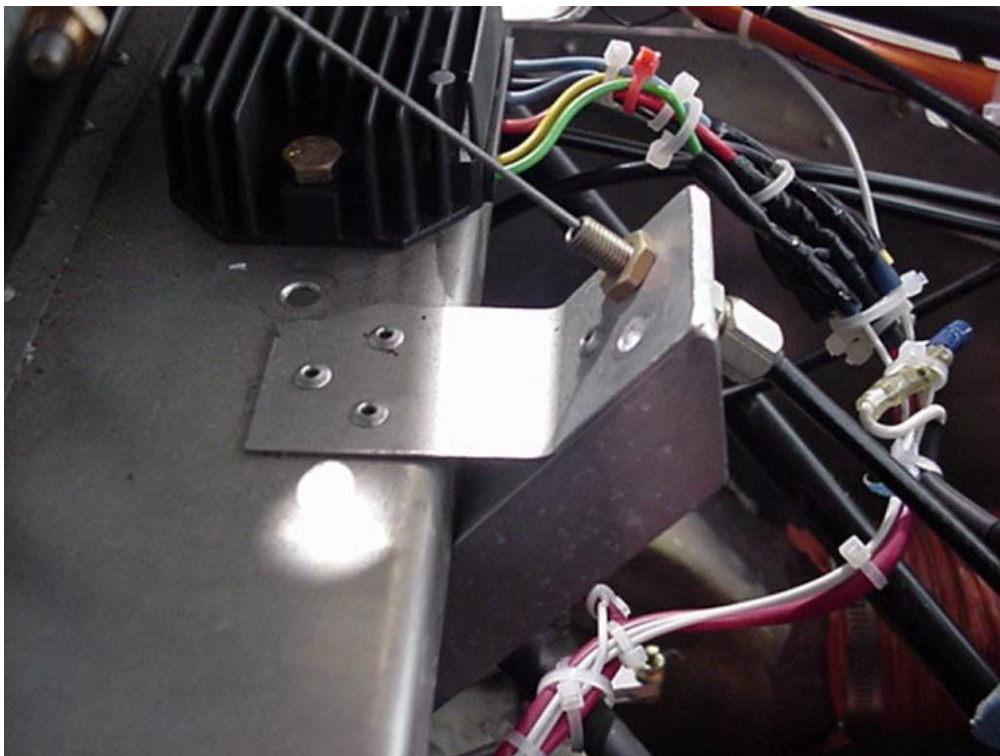


THROTTLE CABLE STOP
6E5-2

THROTTLE STOP SUPPORT
6E5-8

Note: The regulator rectifier is installed to the left of the throttle. The bracket to the left is not required (only required for dual choke assembly on the Rotax 912 engine installation).

Approximately 65mm from the bottom edge of the front flange of Firewall top Stiffener to the top of the Throttle cable stop extrusion: When the Bellcrank is pushed forward, the AN3 bolt is in line with the cable stop 25-0700



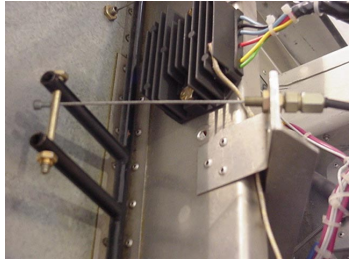
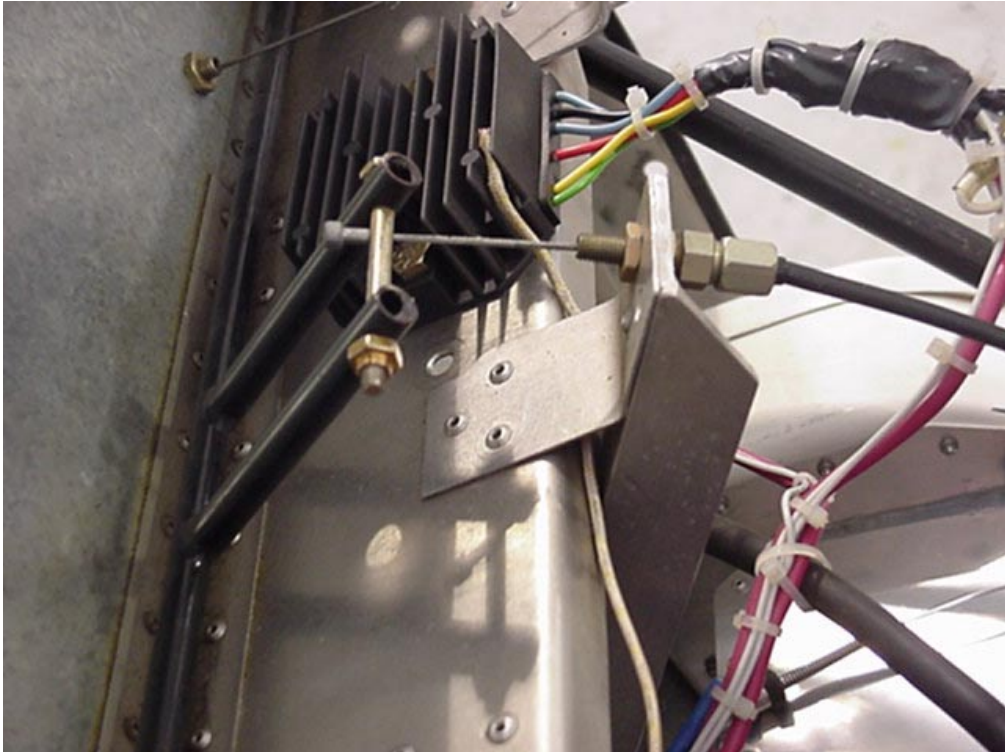
Cable Stop Adjuster with Steel
25-0700

Detail of the Throttle Stop Support 6E5-8



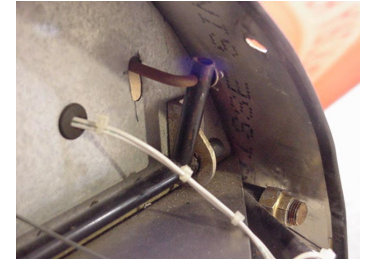
**25-0700
CABLE STOP
ADJUSTER
QTY: 5**

If the Sleeve does not want to go over the flexible cable housing, drill it out to enlarge the inside diameter of the sleeve.



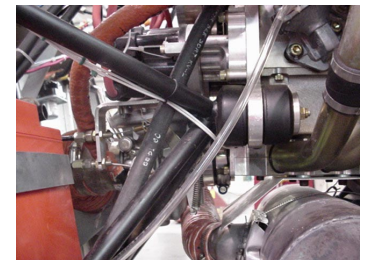


Pulled back idle, the stop is on the carburetor



Idle position

Allow for approximately 30mm between the instrument panel and the "T" handle of the Throttle Rod 6E5-4



See section 8 for the connection of throttle cable to carb.

Throttle lever is located on the right side of the carburetor (the carb is on the bottom rear of the engine)

SECTION 2 ENGINE MOUNT





**ENGINE MOUNT FOR
3300 JABIRU
6J1-1**

4130N
3/4" x.035" round tube.



PIN – ENGINE MOUNT

See Jabiru installation,
manual
Figure 2.0 – engine mount
assembly.

Welded assembly



AN365-624 SL NUT
AN960-616 WASHER
Qty: 4

For 6B6-4 & 5

Photo of bottom left firewall attachment



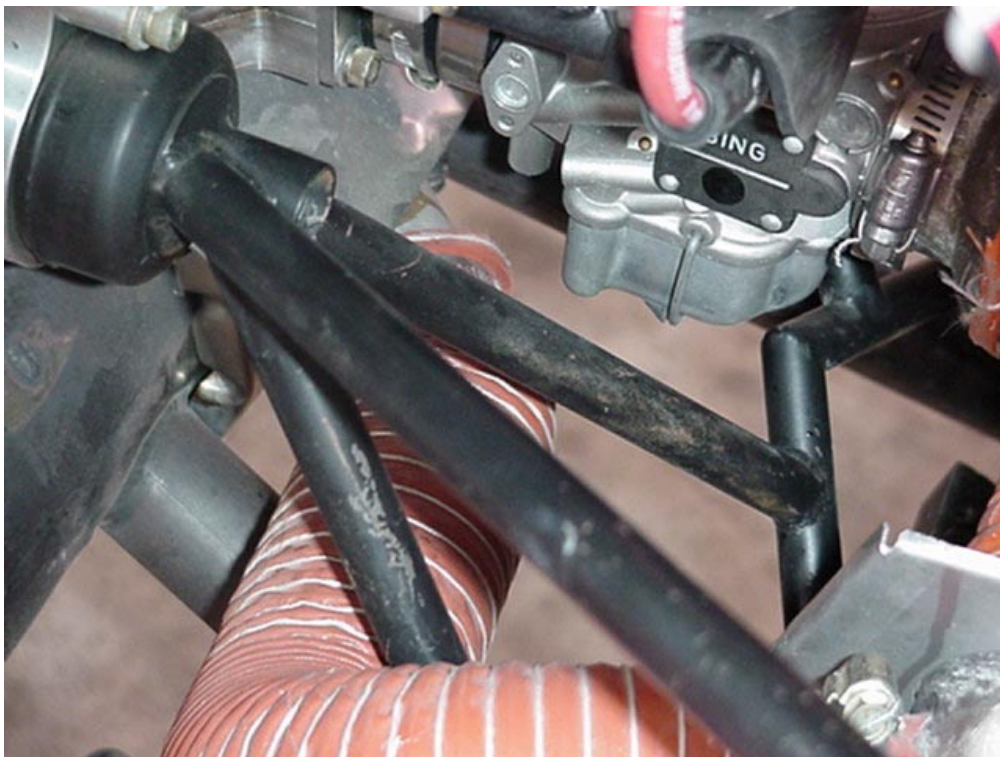
**RUBBER MOUNT
BUSHING**

Qty: 4



FRONT WASHER
(left)
QTY: 4

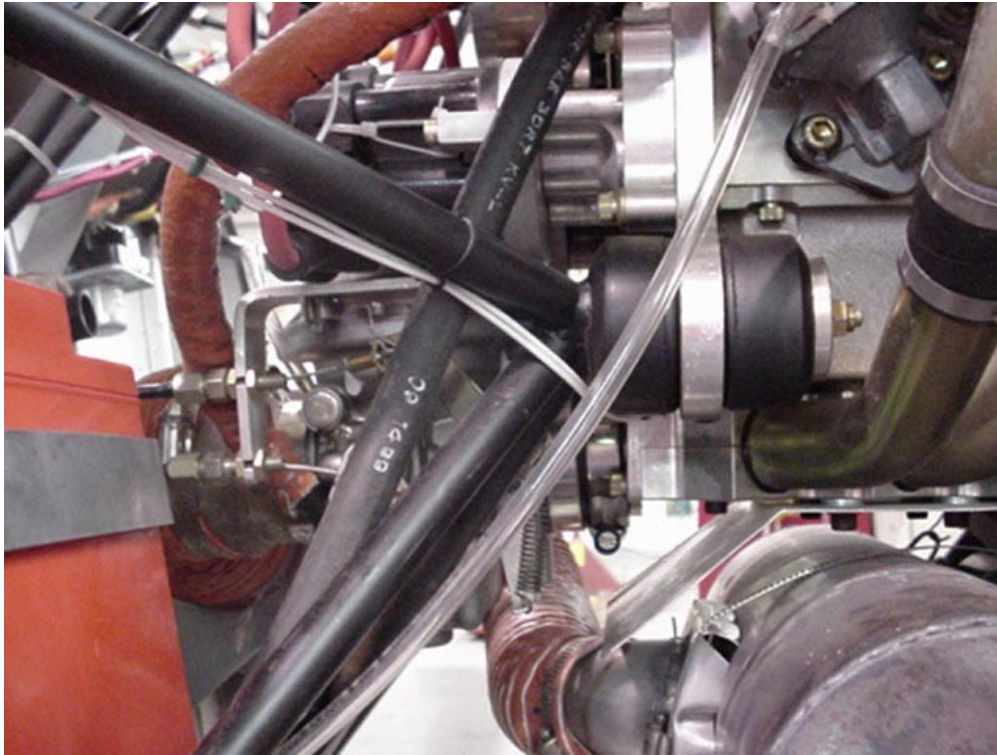
OPTIONAL
REAR SPACERS
(right)



Insert male rubber
cushion on the engine
mount.

IMPORTANT: Refer to the
INSTALLATION MANUAL
FOR THE JABIRU 3300
AERO ENGINE

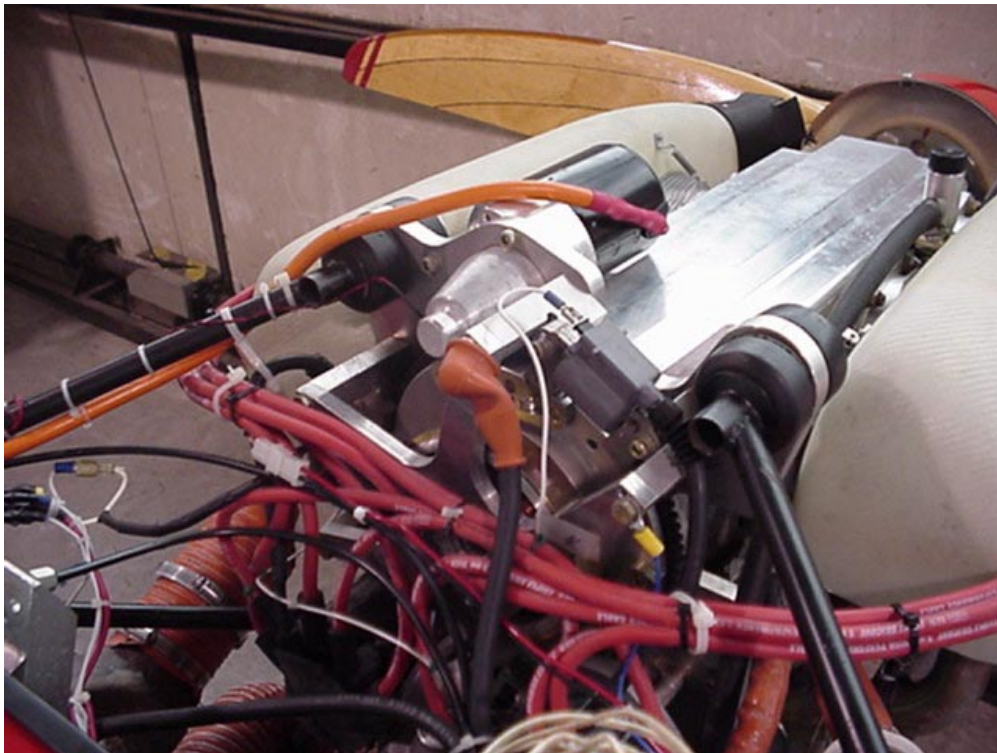
Detail of the back side of the bottom left mount



NOTE: The rear spacers are optional, use them as required to level the engine – one per assembly only)

IMPORTANT: Refer to the INSTALLATION MANUAL FOR THE JABIRU 3300 AERO ENGINE Section 5 figure 2

Detail of bottom right mount, Jabiru aluminum washer at the front under the 1/4" washer and nut.



Insert the AN4-32A from the back

Back side of engine.

SECTION 3 COWL



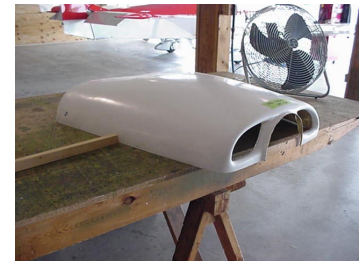
Zenair 3300 cowl for the Zodiac CH 601 XL

The cowl fits inside the overhang of the fuselage side skin past the front of the firewall.



3300 cowl

Two half fiberglass cowls



Top cowl

Tape the top and bottom cowl together. Start at the front.



Layout 3 fasteners along the sides.

Location: The hole is approximately 13mm up from the bottom edge of the flange.

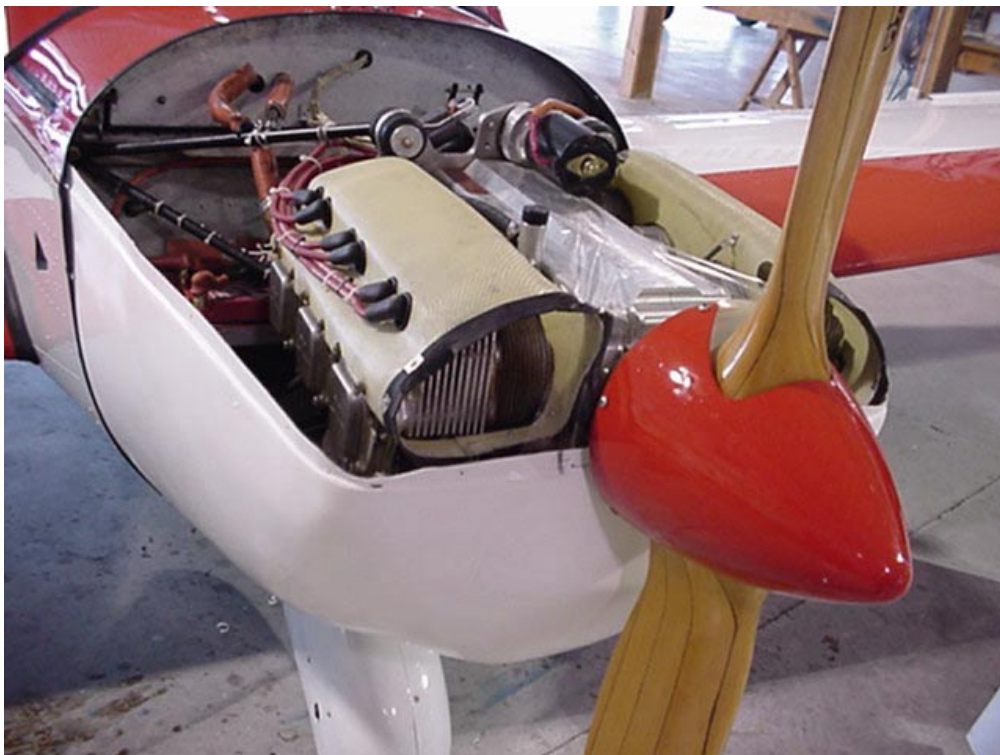
Note: there will be another fastener at the rear to attach the cowl to the fuselage.



Objective: to mark the bottom edge of the top cowl on the fuselage sides.

Position the top cowl underneath the overhang of the top skin. Push up on the left and right sides to bring the cowl up against the top skin.

Reference: the bottom edge of the Forward Top Skin 6C1-2. Check equal distance on the left and right side (bottom edge to the reference).



Note: The cowl is fitted with the engine bolted to the airframe.

Position the bottom cowl on the inside of the overhang of the fuselage side skin. Use tape across the top engine and the front of the cowl to keep the front of the cowl from falling down.

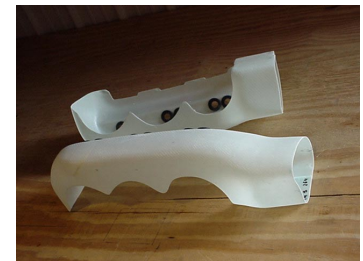


Adjust the top edge of the cowl for equal distance between left and right sides.

Check that the cowl lines up with the mark on the fuselage side (bottom edge of the top cowl).
Clamp the bottom of the cowl to the overhang of the side skin.



Insert the torque studs on the propeller flange to center the spinner backing plate.



The baffles are installed after the cowl is fitted.

Install the top cowl. Cleco the top cowl to the bottom cowl.



Center the cowl on the spinner.
The flange at the front of the cowl is smaller than the diameter of the spinner



Alignment on spinner.

**DZUS SPRINGS
S5A-225**



The spring is mounted on the inside of the cowl.



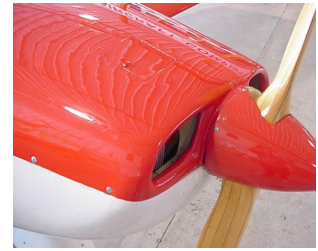
The springs are installed along the top inside surface of the bottom

Counter sink the fiberglass for an A4 rivets (use a flat nose piece on the riveter to set the flush countersunk rivet).

SECTION 4 OIL DOOR

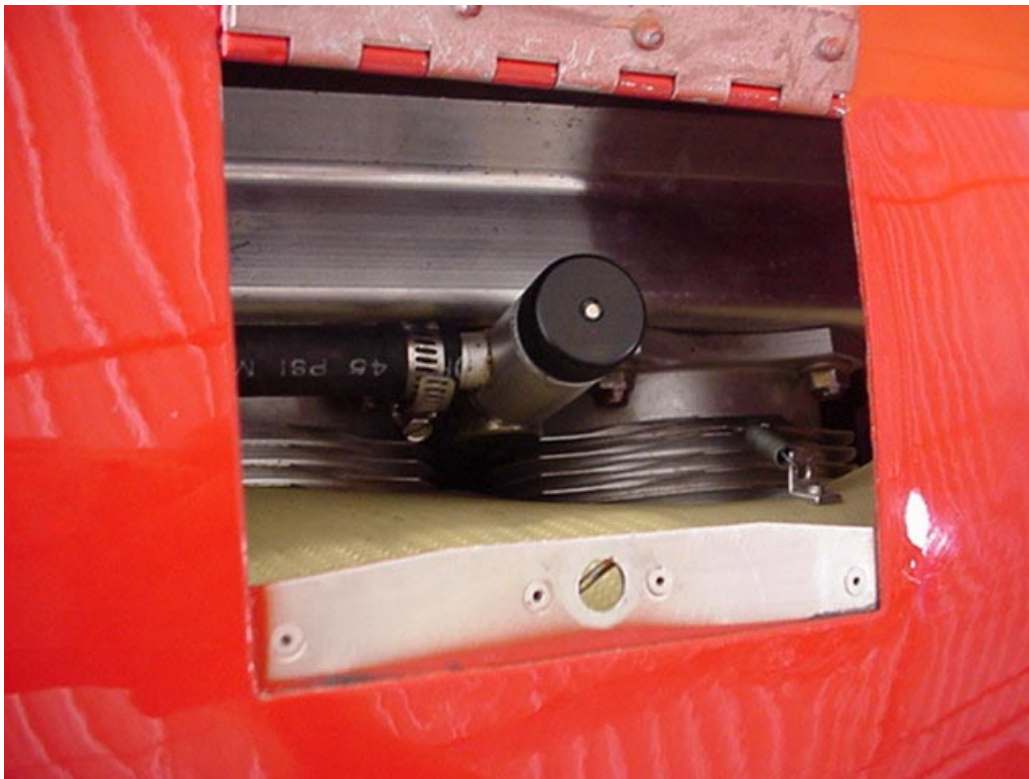


Rectangular door hinged up, installed in the top cowl for convenient pre-flight inspection of oil dip stick.



Remove the top cowl to reference the center of the oil dip stick

Flush door assembly



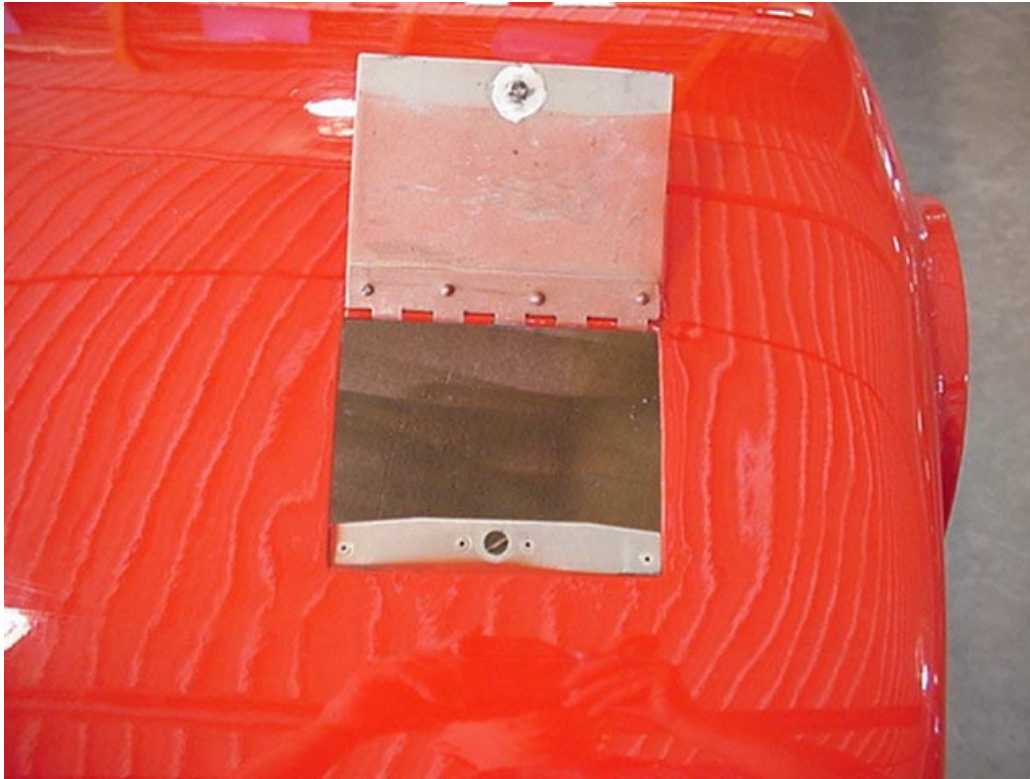
Fasten the top cowl to the aircraft, layout the position of the dip stick on the top cowl.

Lay the door on top of the cowl centered over the dip stick.

With a pen trace around the door.

CHECK: orientation and alignment of the door on the cowl.

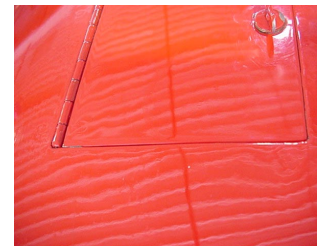
Cutout in to cowl over the oil dip stick



OIL DOOR
 JD-4
 130mm long
 105mm wide
 t=.040" 6061-T6
 Qty: 1

Make the cutout in the fiberglass: to get started use a hole saw to drill a large hole in the middle. Sheet metal snips can also be used to cut fiberglass or use a Roto zip tool. Cut 2 to 3mm from the line, and then finish with a file to get straight edges (coarse file or body file).

Slightly radius the bottom corners of the oil door.



PIANO HINGE:
 MS20257-4
 JH-4
 Length=130mm
 Qty: 1

THE SPINE IS TOWARDS THE OUTSIDE. NOTE: leave a small gap of approximately .016 to .025" between the top edge of the door and the spine (if the gap is too small, the door will scrape off the paint!)



First drill & Cleco the hinge to the Door.

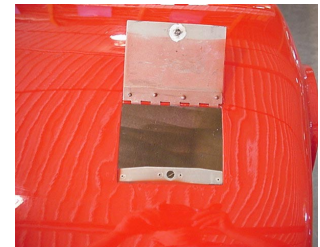
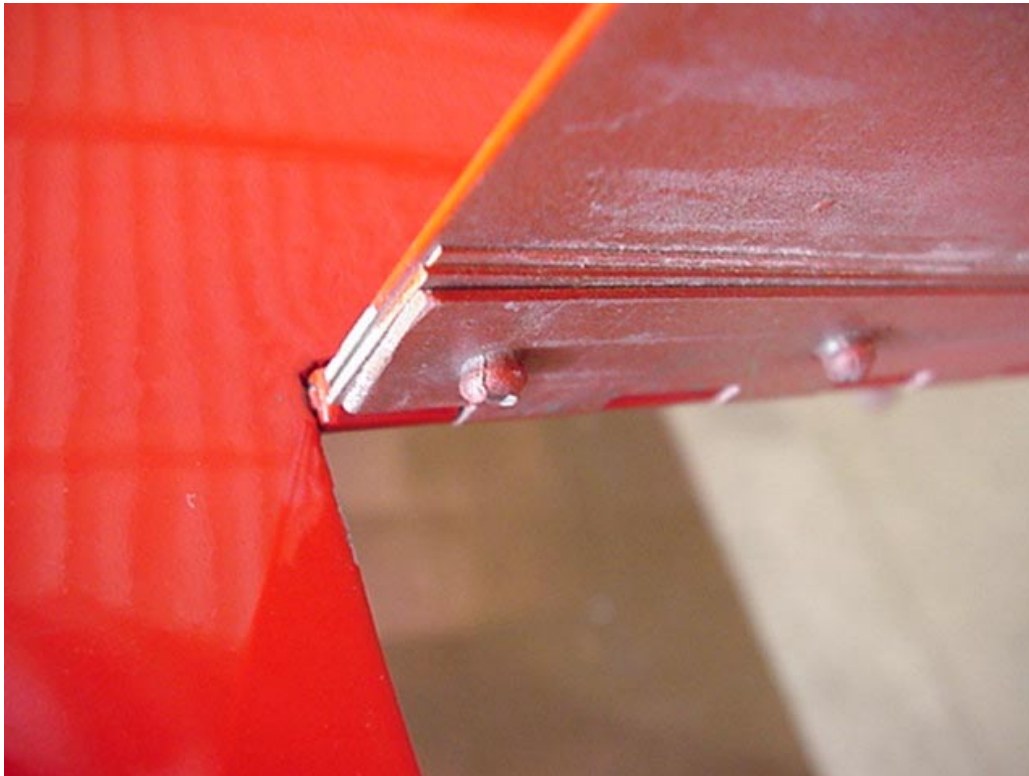
Drill & Cleco the piano hinge to the inside of the cowl.

**BOTTOM PLATE
JB-4**

170x40mm
t=.032" 6061-T6
Qty: 1

Drill and Cleco the Bottom plate, 20mm overlap all around.

Detail of inside



Shim between the Hinge and the door to bring the door flush with the cowl.

**SHIMS MATERIAL
JS-4**

130X20mm
t= .025 Qty: 2
t=.016 Qty: 2

Shim between hinge and door



Also add a shim on top of the bottom plate.

Counter sunk rivets. Use a drill bit to counter sink the hole in the aluminum, set the standard A4 rivets using riveter with a conventional flat nose piece.



Counter sink the rivets.

Gap around door = approximately .025"



Edge distance for the Dzus fastener in the door = 13mm

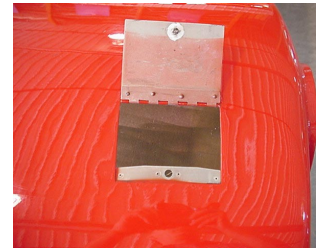
**DZUS SPRING
S5A-225
Qty: 1**

Drill a hole through the door into the bottom plate for the Dzus fastener

Drill an oversize hole in the plate. Lay the spring across the hole and drill the #30 holes.



AJWS-40 Dzus with wings, one 5/16" washer **AN960-516** between the Dzus and the door.



Drill a 5/16" hole in the door.



Insert a Plastic retainer ring through the Dzus

SECTION 5 PROPELLER / SPINNER

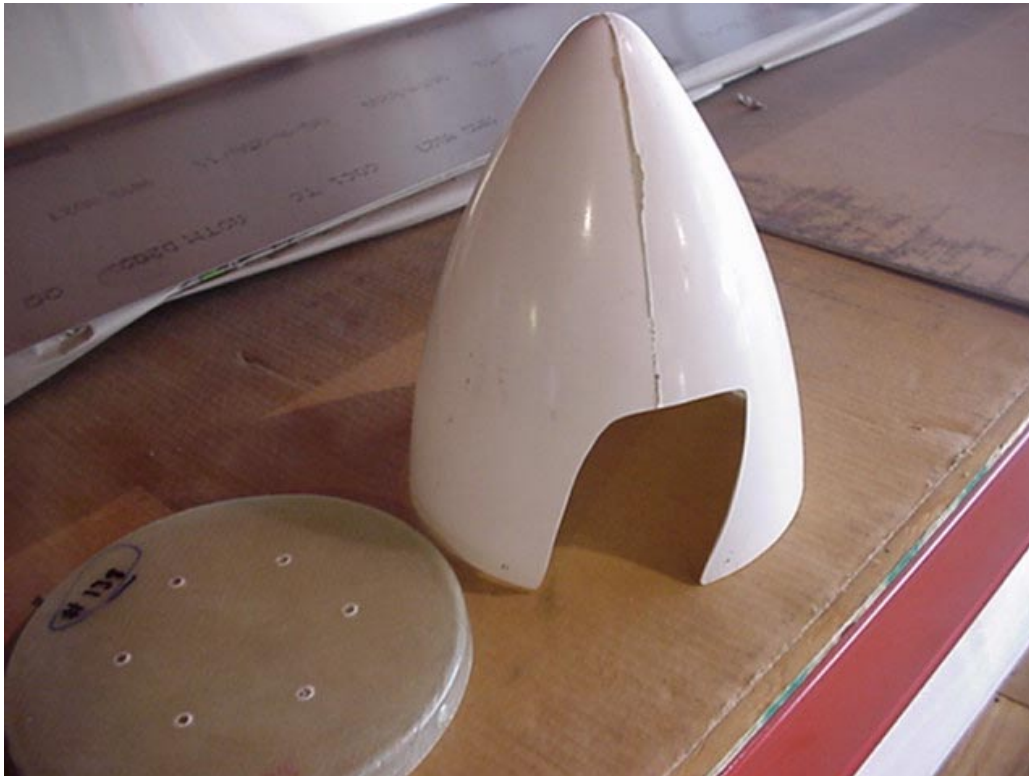


2-blade fix pitch propeller



SAE-1 bolt pattern

AN6
3/8" prop bolts.



Jabiru Fiberglass
Spinner

Cleco the spinner to the spinner back plate, look for alignment reference marks to proper alignment. Install the nut plates on the inside of the spinner plate.



Trim the spinner to fit the prop.

SUGGESTION: First make a cardboard or page template to fit over the prop. The same template is used twice, once for each of the 2 cutouts in the spinner.



Minimum 1/8" clearance around the prop.



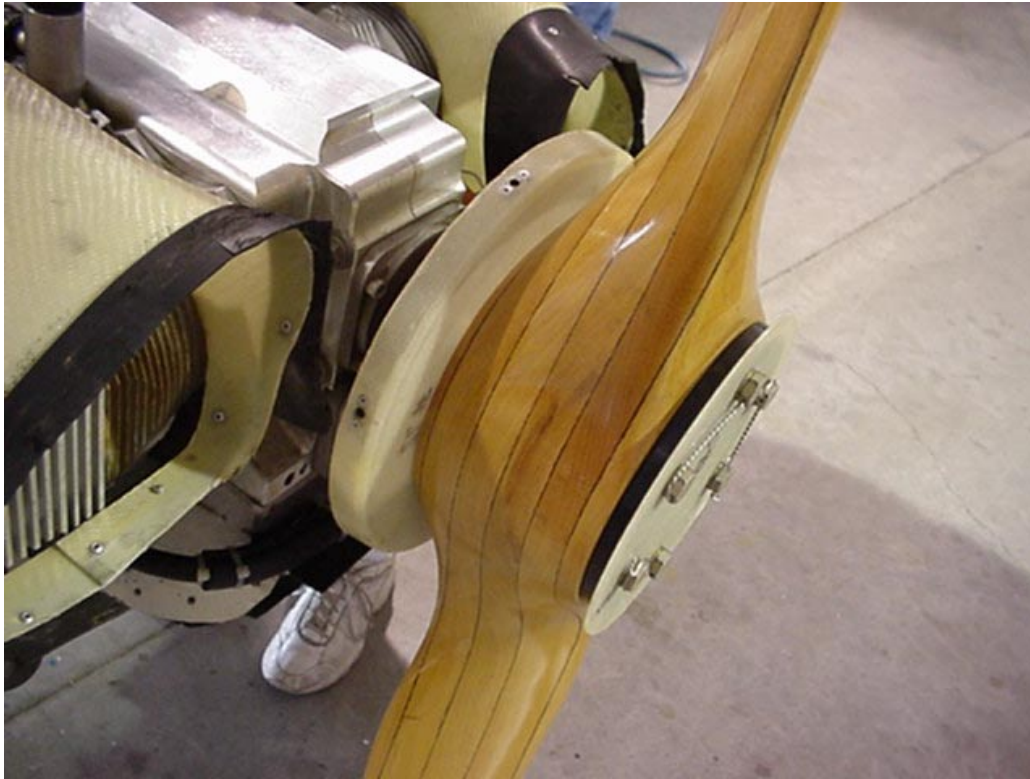
The spinner is attached the spinner back plate with 6 screws.



Face plate

SAE-1 BOLT
PATTERN

3/8" holes



Depending on the thickness of the prop, the side flanges of the spinner front plate may have to be trimmed off.

Note: Front spinner alignment plate with the side flanges trimmed off.



Back side of the prop showing the Nylon Self locking nuts



Drill a 3/8" hole though the PROPELLER GUIDES (TORQUE STUDS)



AN6H-51A
PROP BOLTS W/
SL NUTS

.040" safety wire
prop bolts

Note: braid the wire between the bolts.

SECTION 6 BAFFLE



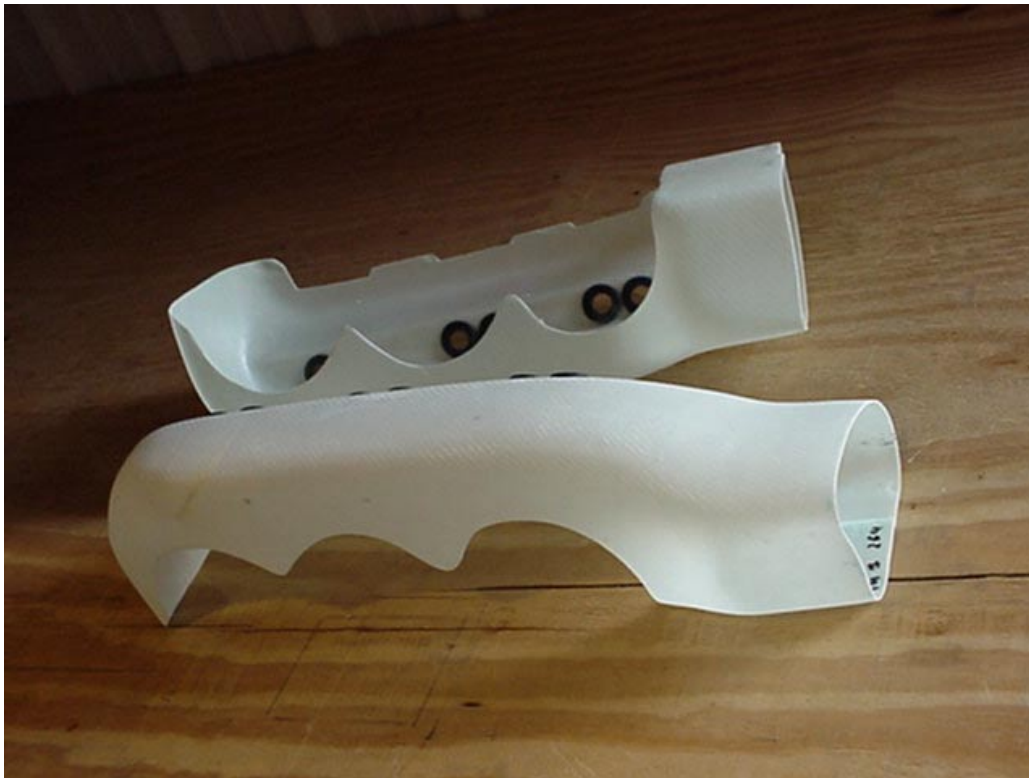
Alignment of fiberglass baffles on top of the cylinders with the left and right opening in the top cowl



Ram Air Ducts –
Tractor

Supplied by Jabiru in
the engine box

IMPORTANT: To install the Ram Air Ducts to the engine, please refer to the installation manual supplied with the Jabiru engine: Ram Air Cooling Ducts Procedure.



Trim the front of the
supplied Jabiru
fiberglass baffles to fit
the top cowl

Cutting: the hand snips
are quite effective to cut
through the fiberglass.
Plus, they do don't
make a mess!

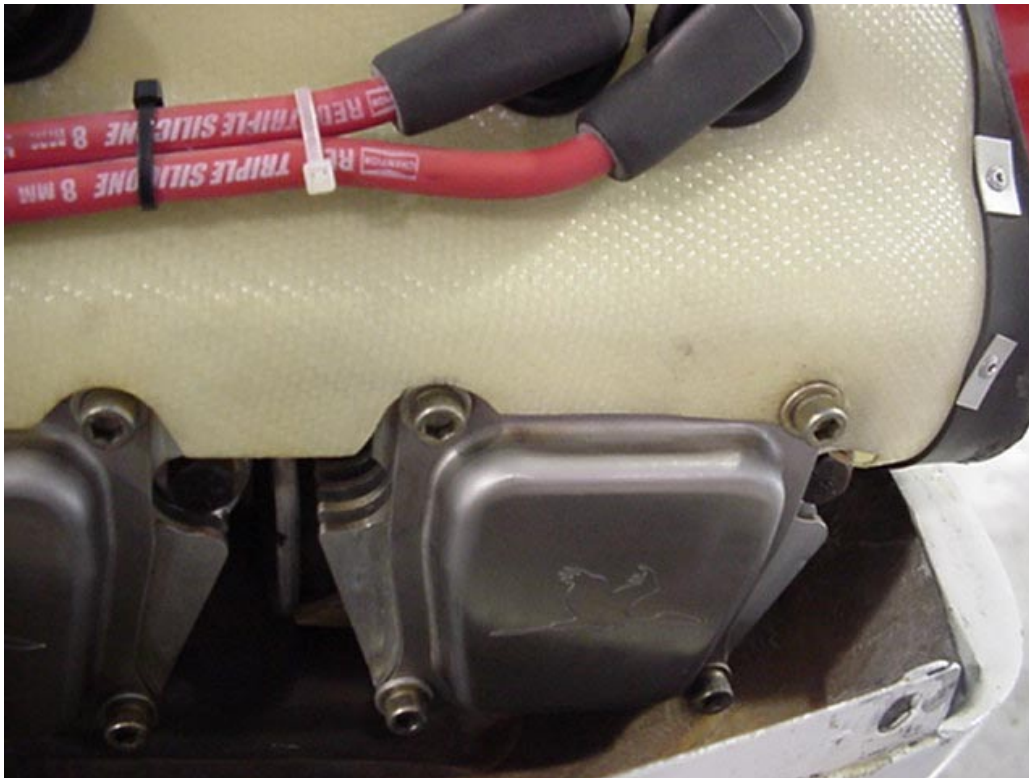


Rod cover screws to hold the baffle.

Detail of front left, cylinder #2



Detail of rear left, cylinder 4, & 6



Right front, cylinder #1

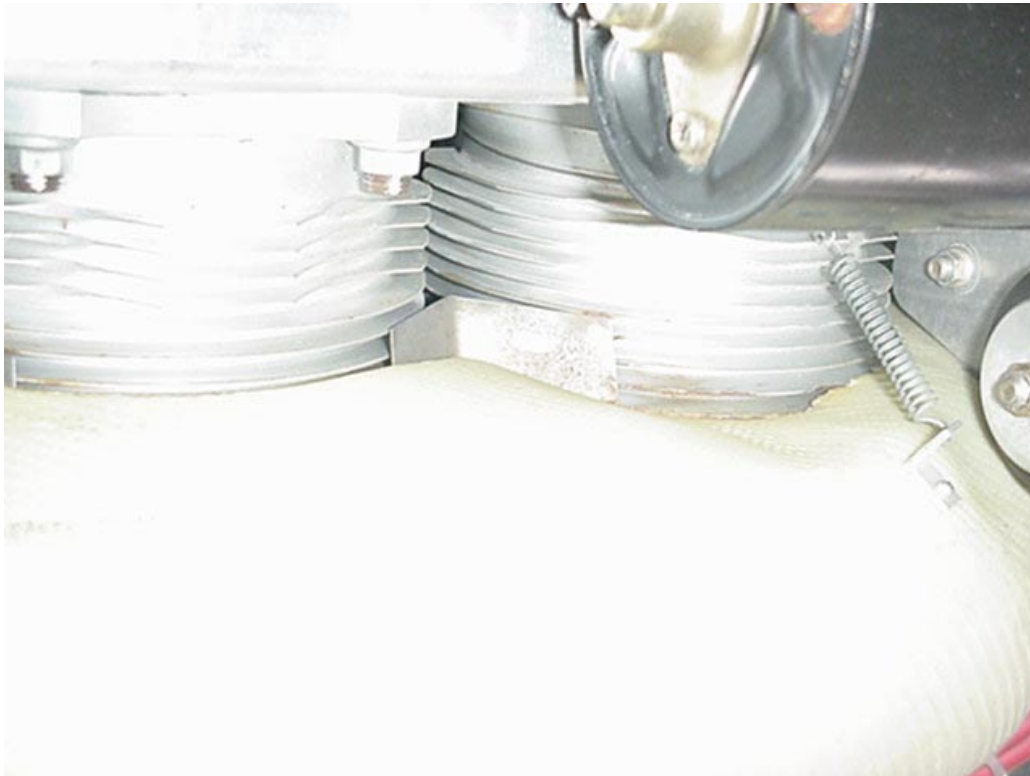


Right rear, cylinder 3 & 5



Safety wire around cylinder, spring to aluminum angle.

Right side, cylinder #1



GULL WING BAFFLE,
see Jabiru installation:
"Ram air cooling ducts "

Left side, Gull wing baffle between cylinder 4 and 6.
Spring on cylinder #6



BAFFLING STRIP
3" WIDE

P/N 05-00700

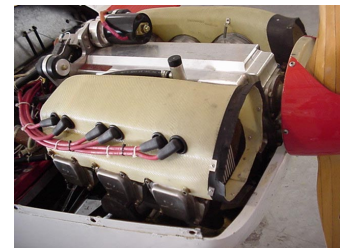
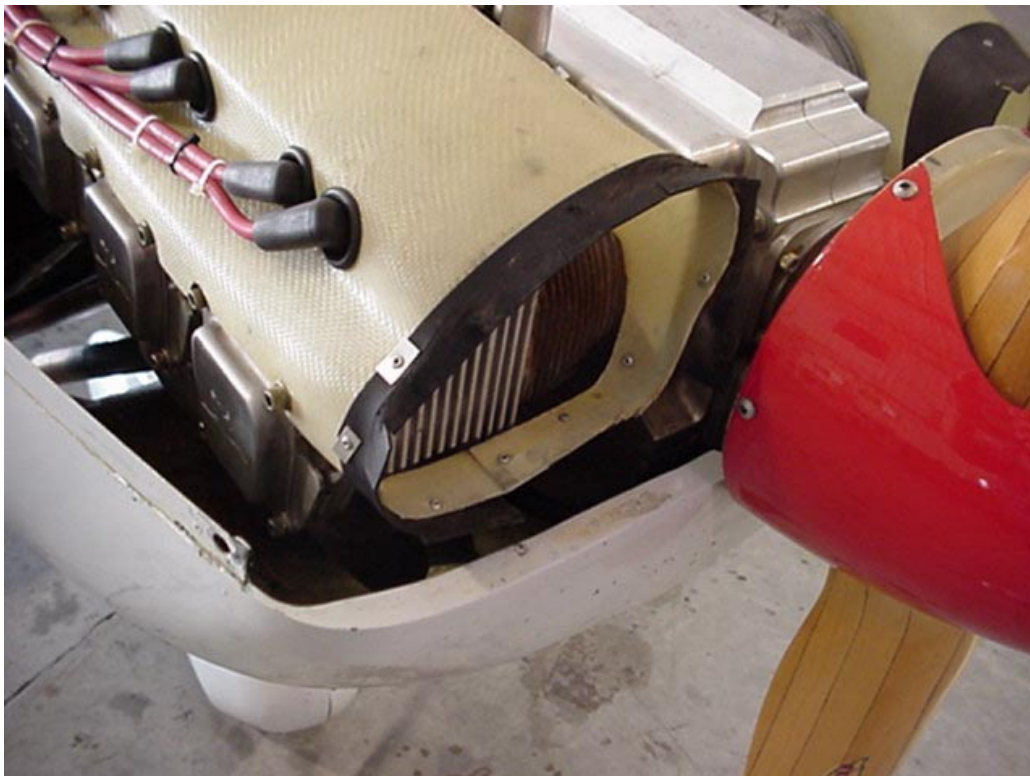


FLAT WASHERS
90107A005

1/8" ID
5/16" OD



Right side



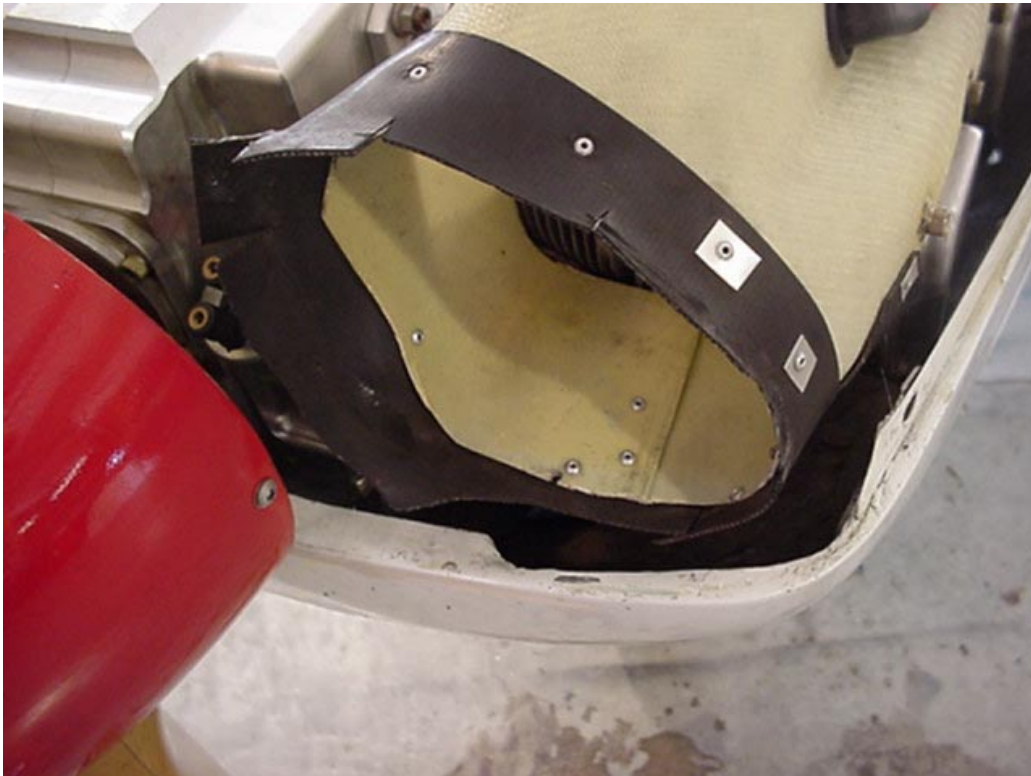
Add the rubber baffle tape if required along the front edge of the fiberglass baffles.

Note the shorter distance between cylinder 1 and the cowl compared with cylinder #2 on the left side.



Baffle strip to close the gap between the fiberglass baffle and the opening in the top cowl.

Left side



Aluminum washers under the rivet head

SECTION 7 AIRBOX



The air-box is mounted on the left side of the firewall.



Space on firewall to mount the air box



Air filter
P/N 42299

6" diameter, 3" height



Fiberglass portion of the air-box

3" inlet

Cutout in the front of the flange of the lid to make room for the 3" inlet

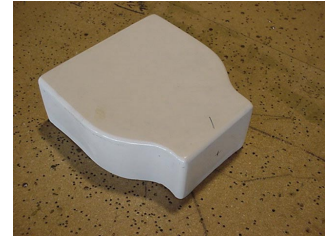


Fiberglass box with lid

Lid with recessed ring



Center the air-filter on the lid.



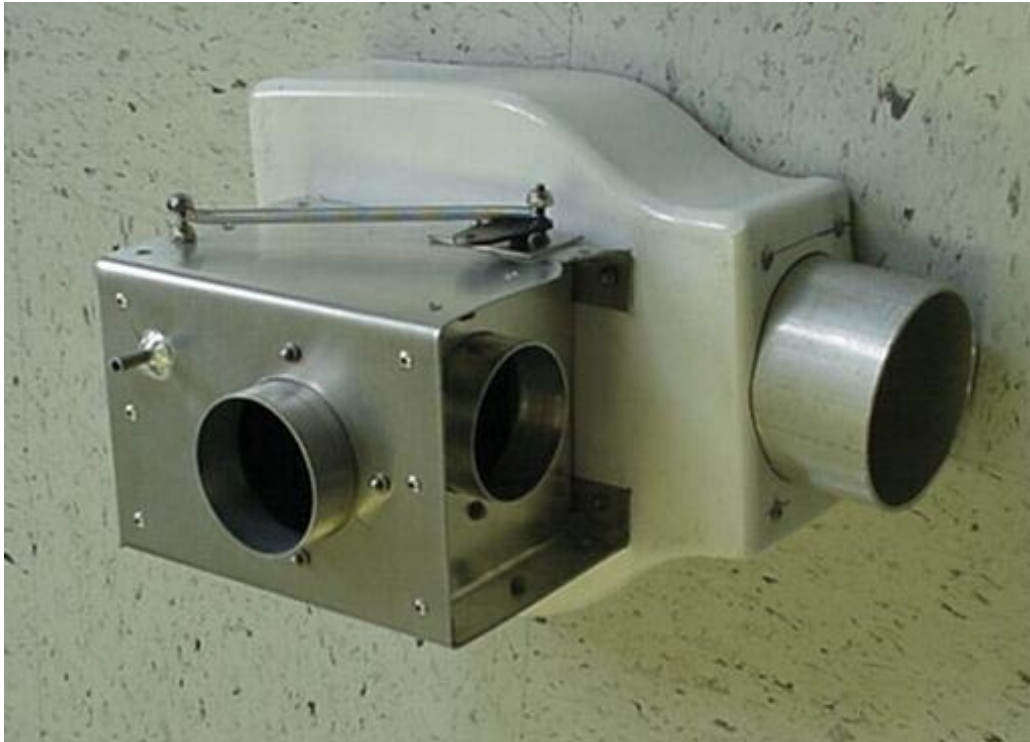
Position the box on the lid turn the assembly over and remove the lid.



As installed on the aircraft the box will be on its side. To keep the filter centered, rivet support angle to the box on the **outside** of the filter.

IMPORTANT: Mount all supporting brackets for the air-filter on the outside of the filter.

Trace around the inside of the air filter. Check, repeat the centering process, keep in mind that the air filter may not be perfectly round.



**AIRBOX
P/N AR-3**

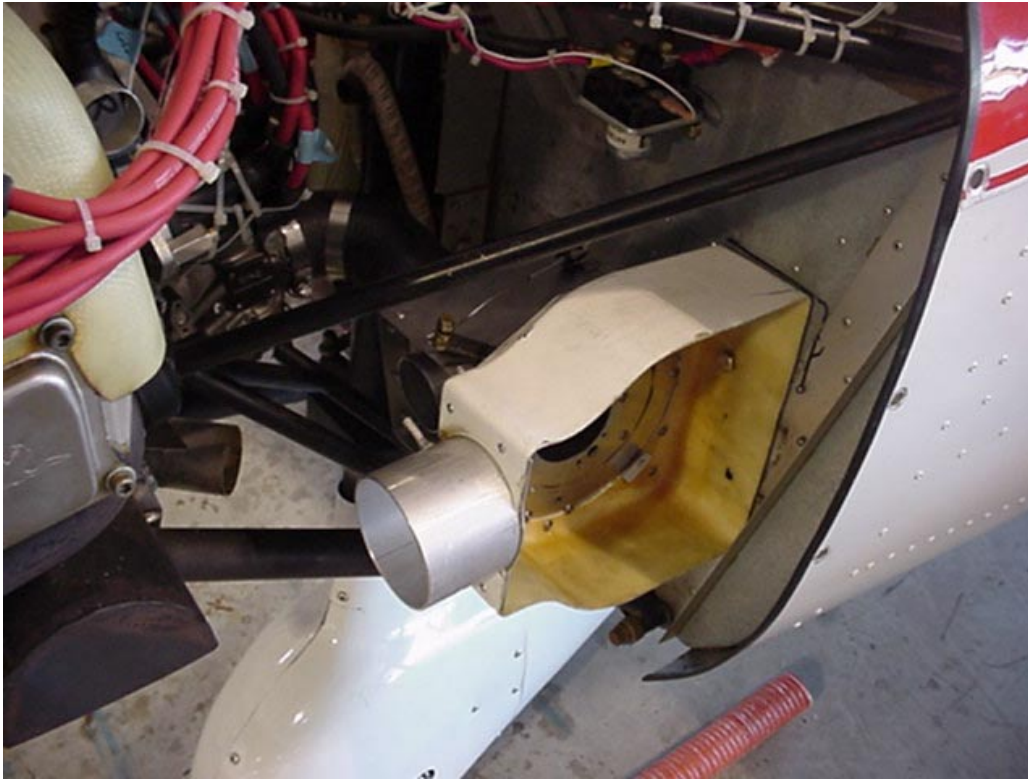


**2" CONNECTING
HOSE
P/N CB-2**



Hose on carb

The short end slips over the carb

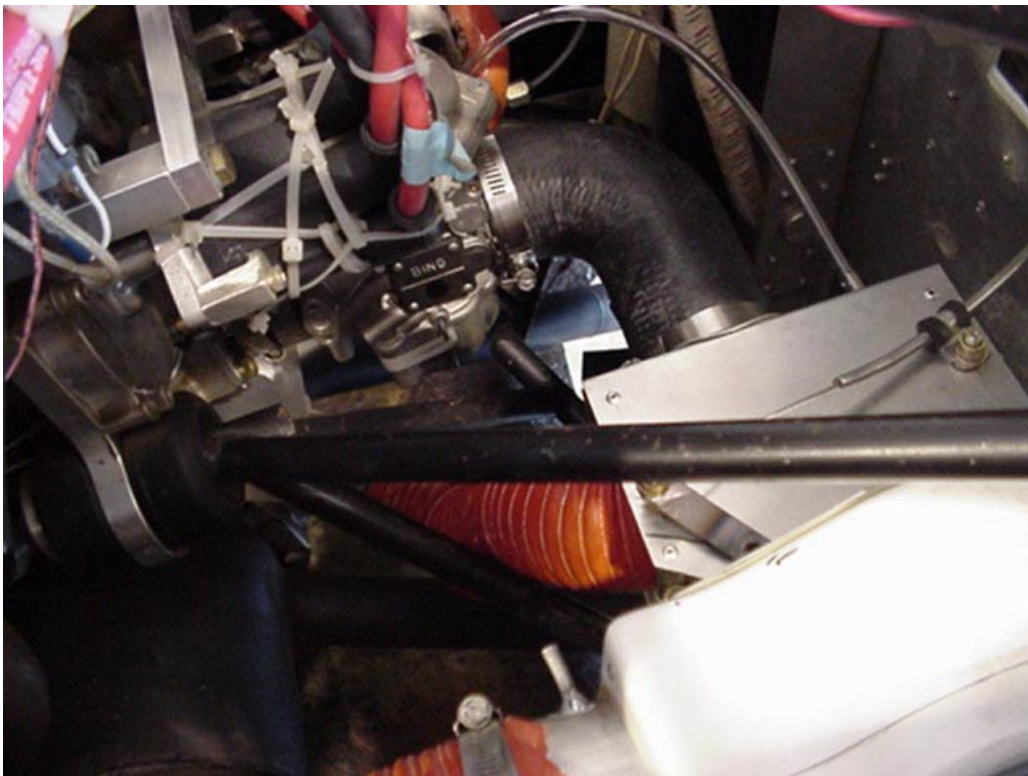


Trial fit:
Hold the air-box against
the firewall to cut the
CB-2 hose to fit
between the carb and
the air-box

Bolt the air-box to the
fuselage with two
AN3-6A bolt and the
large penny washers
AN970-3

Air box on fuselage

Note: insert a spacer between the firewall and the air-box to slip the lid on.



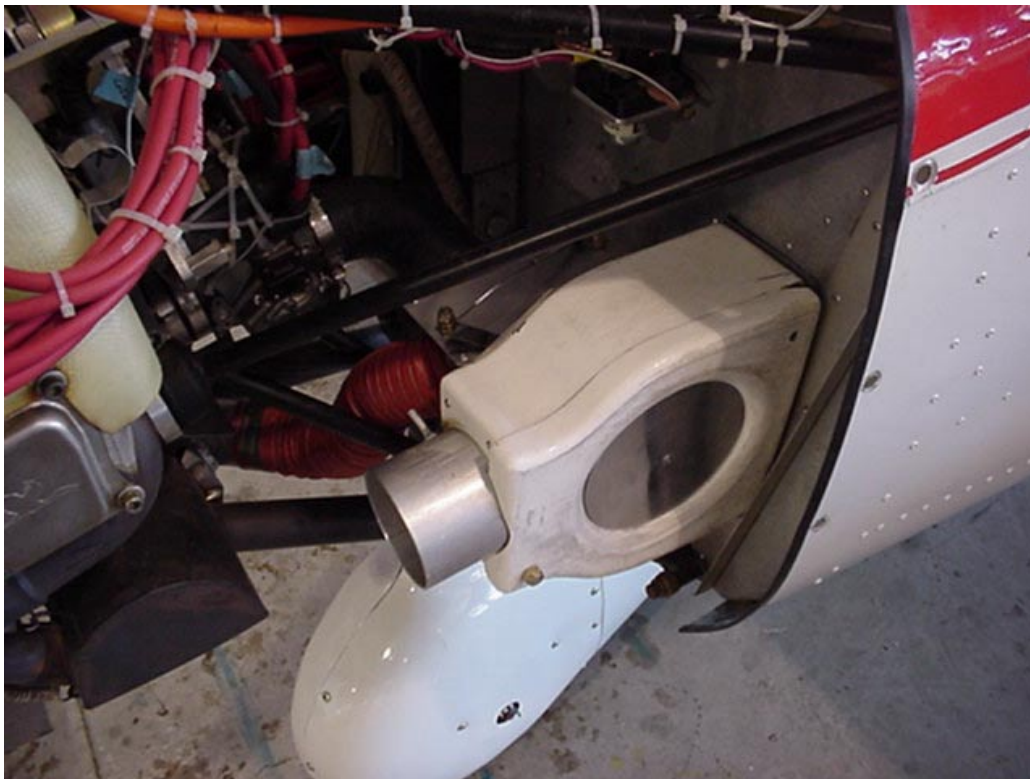
CB-2 hose to join the
back of the carb to the
side of the air-box



Bolts through the air-box and the lid, front bottom & top right

An3-34A
Qty: 2

Bolt location in the lid and the air-box



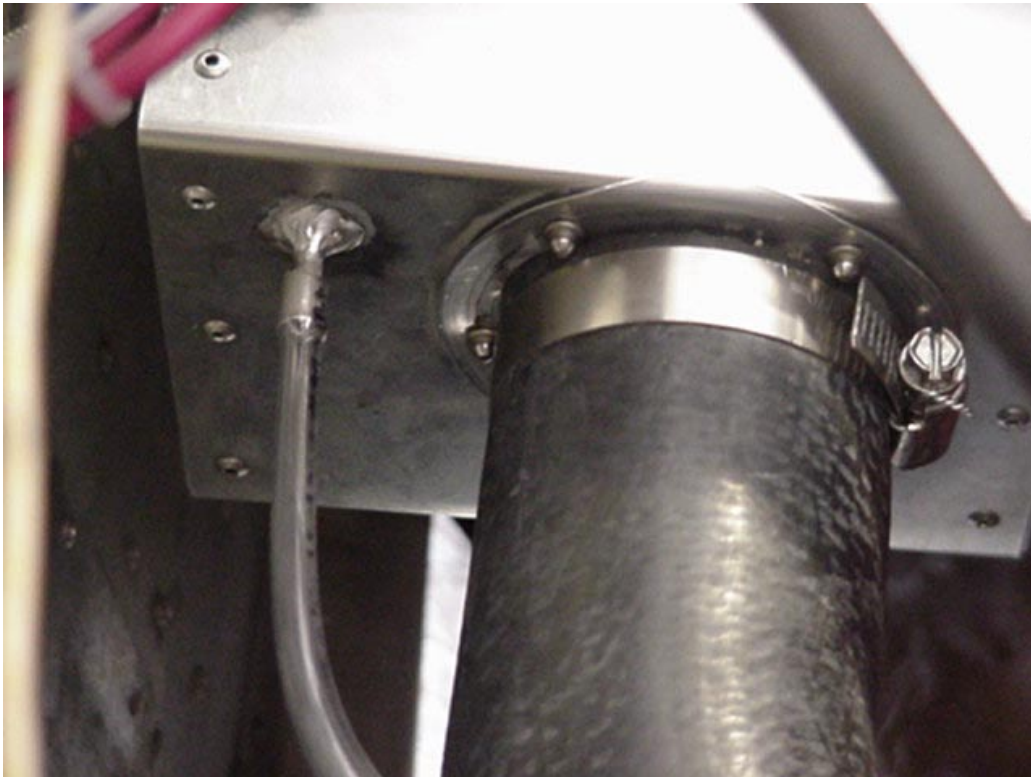
Center the air filter and close the lid



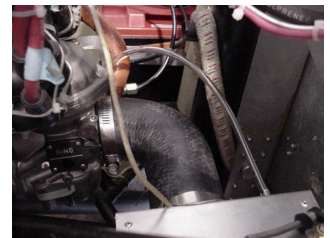
Detail of 1/4" hose on right side of carb.



Vent hose
CH-4
Connect with 1/4" plastic
hose the nipple on the
right side of carb to
nipple on the air box



1/4" hose and CB-2 to the side of the air-box



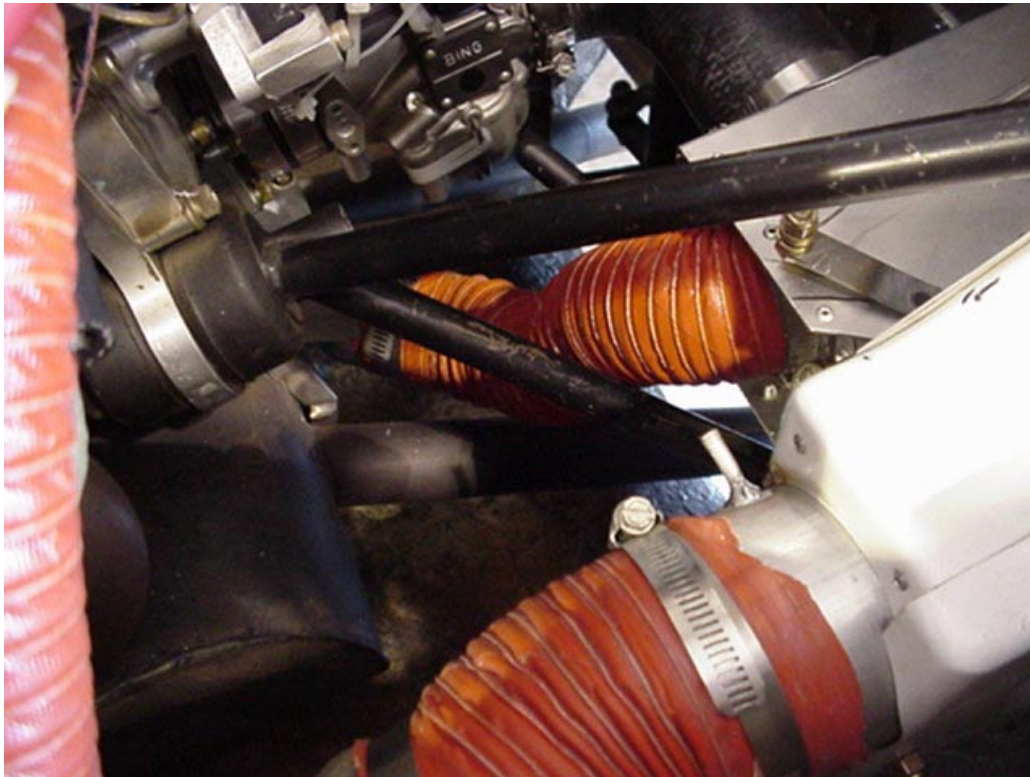
IMPORTANT
Safety wire all hose
clamps.



Hose clamp
P/N 6799-5
Qty: 1

Muffler heat shroud
P/N HS
Qty: 1

Installed with the outlet to the left.



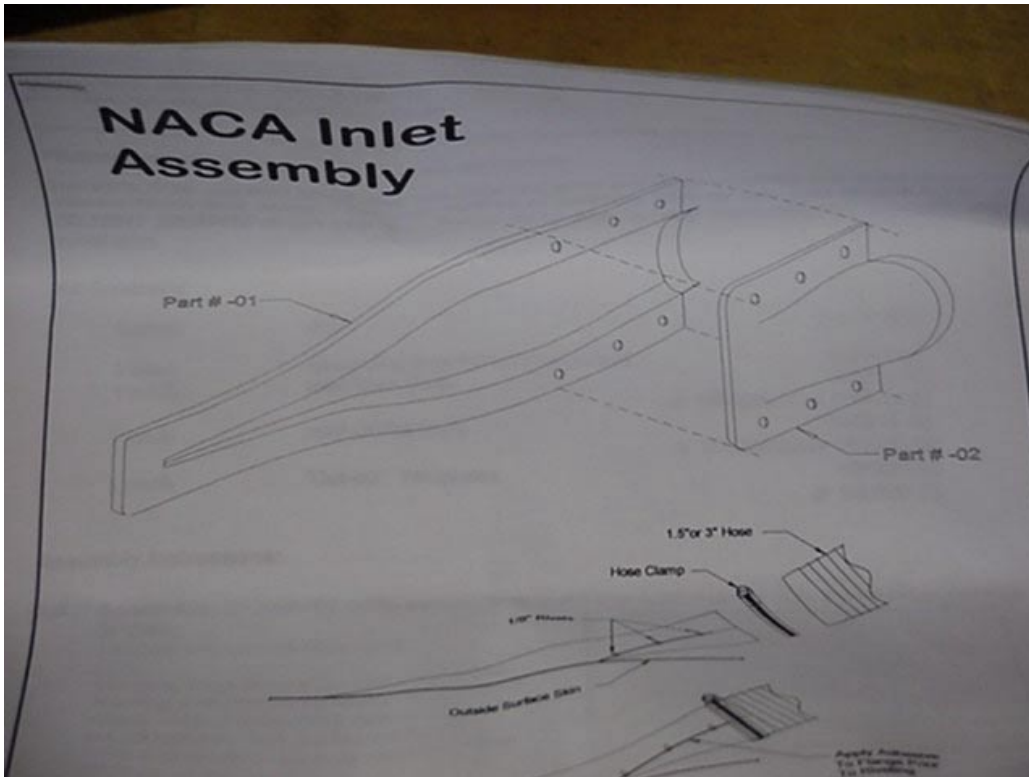
2" SCAT HOSE
P/N SCAT-8

HOSE CLAMP 2"
FHC5-36
Qty: 2

Scat hose to connect the heat shroud to the 2" front outlet on the air box



**NACA AIR SCOOP
3" OUTLET
P/N 05-2280
Qty: 1**



Assembly instruction

Cut the paper template to layout the shape of the cutout in the side of the bottom cowl.



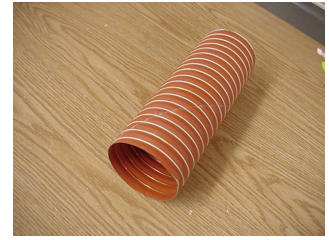
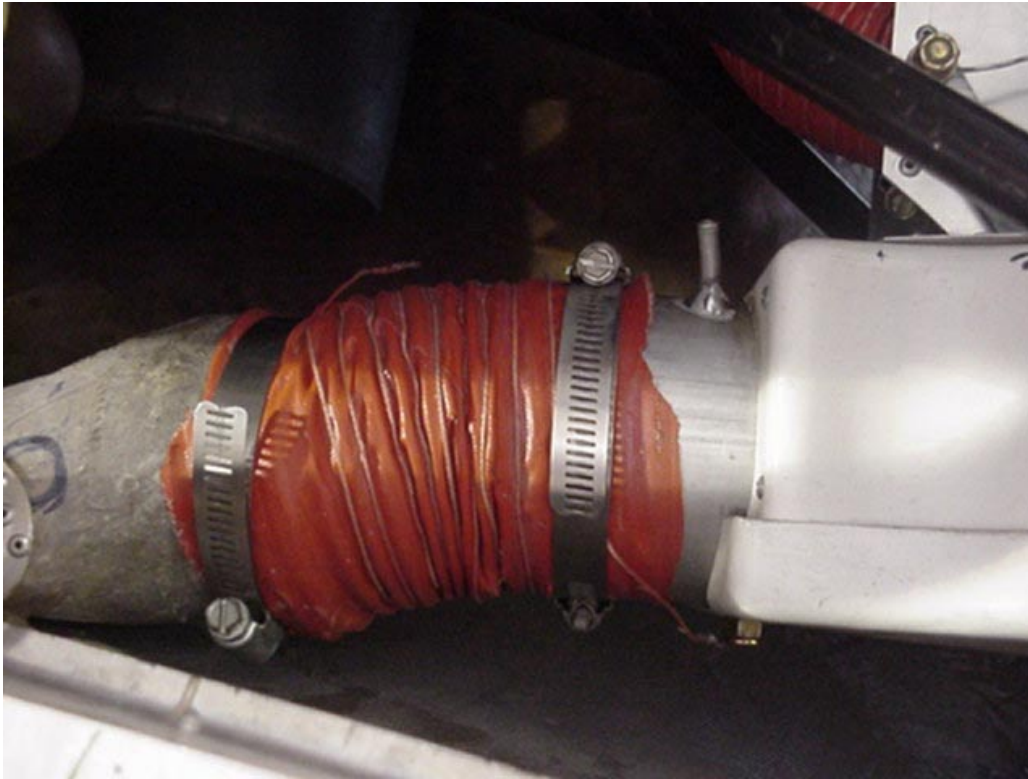
Location of scoop on left side of cowl.

Distance measured along the tape line from the aft edge of the scoop: 145mm bottom edge of the top cowl, 435mm to the rivet line in the firewall.
CHECK: the Naca scoop will line up with the inlet on the air-box



Counter sink the holes and flush rivet the scoop to the cowl. Additional epoxy or fiberglass resin can also be used to bond the joint. Finish the outside with body filler.

Detail of installed scoop. Make the cutout in the side of the cowl using the paper template. Then drill and cleco the scoop to the cowl with #30.



**3" O/D SCAT HOSE
SCAT-12**

**HOSE CLAMP 3"
Qty: 2**

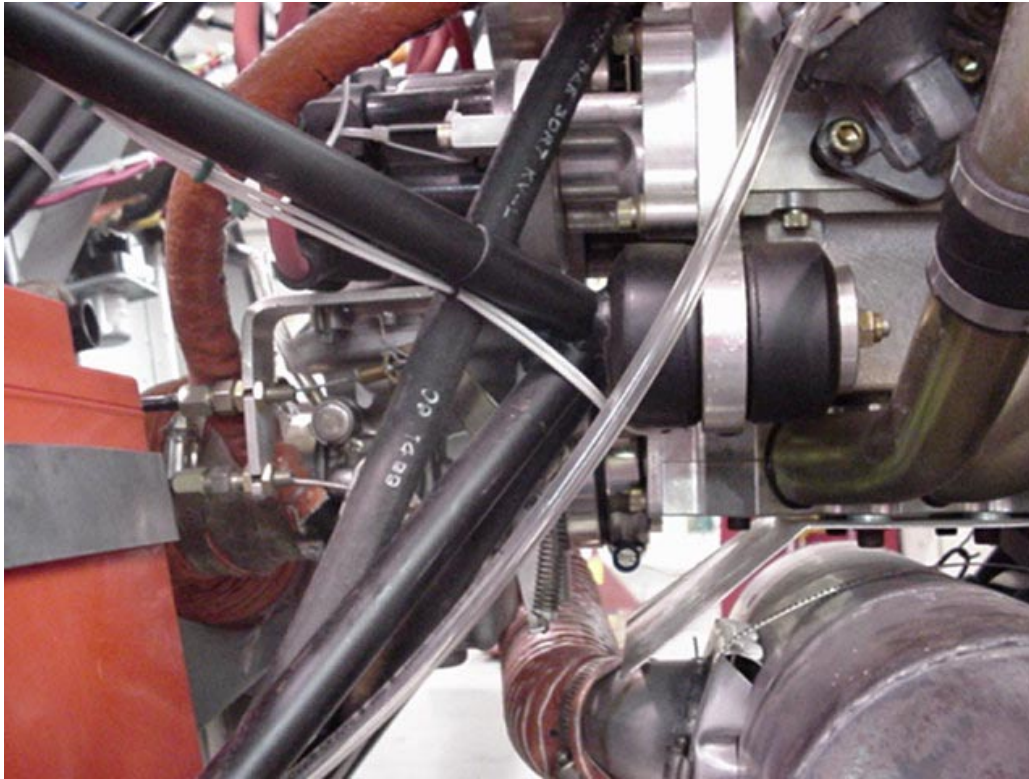
Scat hose between the Naca Scoop and the air-box.



SECTION 8
LEVER CABLE ENDS
(THROTTLE, CHOKE, CARB HEAT)



BOLT TYPE TERMINAL



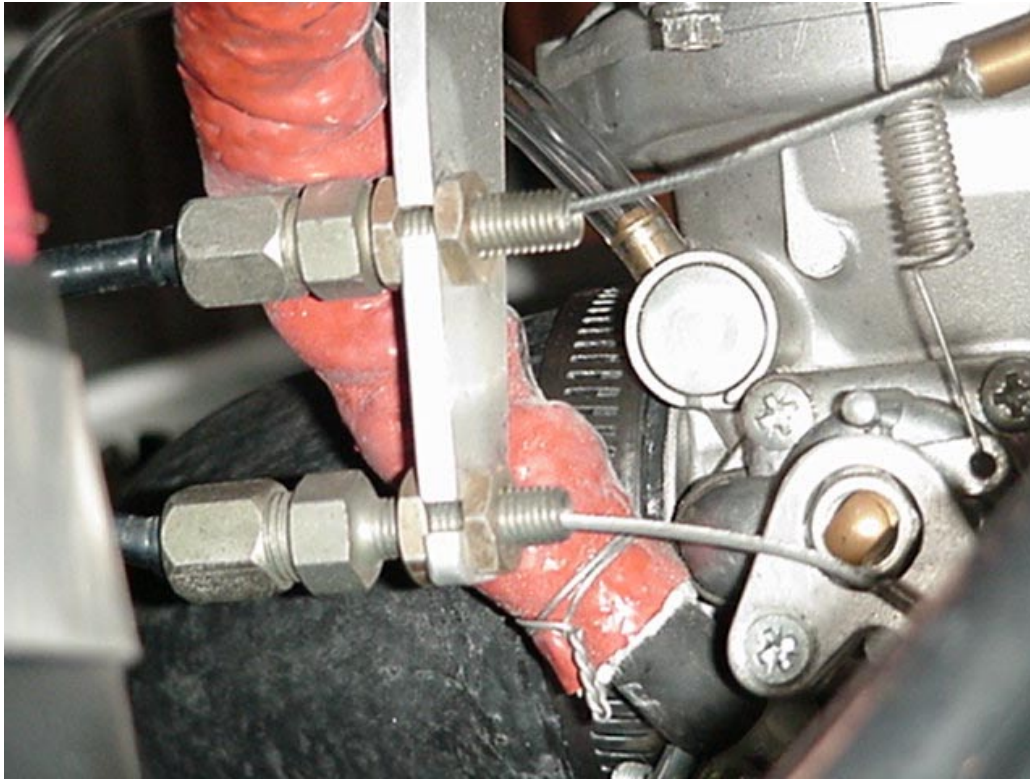
Carburetor located at the bottom back of the engine.

Support bracket on Right Side of Carb



**CABLE STOP
ADJUSTERS W/2 JAM
NUTS
P/N 25-0700
Qty: 4**

SUGGESTION: If the flexible cable housing for the throttle cable does not fit through the plastic sleeve, run a drill bit through the sleeve.



Cable stop adjusters:

Top = throttle

Bottom = choke

Install the cable stops 25-0700 to the bracket on the right side of the carb.



1/16" THROTTLE
CABLE WITH END

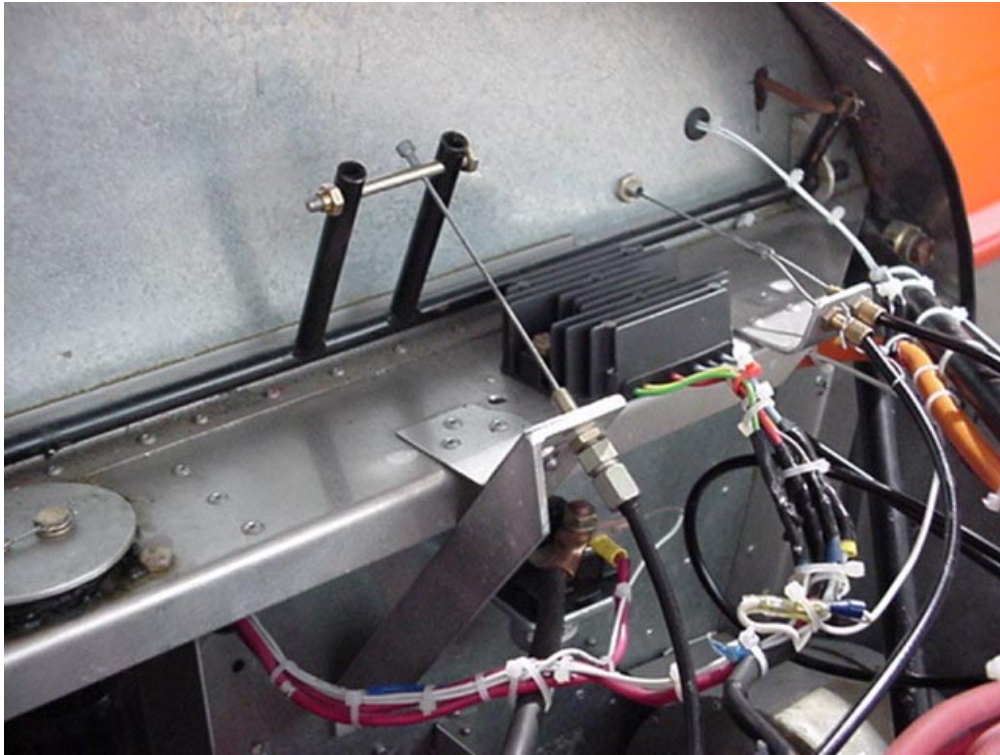
1/16" CHOKE CABLE
WITH END

1/4" OD FLEXIBLE
CABLE HOUSING

P/N C100

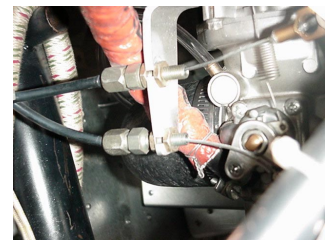
Qty: 2

The formed end will be on the AN3 bolt through the Throttle Bellcrank 6E5-1



Drill a 1/16" hole through the AN3 bolt in line with the cable stop 25-0700

CHECK: The cable housing does not pull out of 25-0700



Remove the nut from the backside of the cable stop 25-0700 and insert it on the cable housing. Next remove the plastic sleeve and insert it on the cable housing (if it does not fit, drill through the sleeve). Assembly and tighten the nut.



**BOLT TYPE
TERMINAL
AN5-6A with 1/16"
hole in shank, 2 jam
nuts & 3 washers.**

P/N BT516

Insert the cable through the AN3 bolt on the Bellcrank 6E5-1, through the flexible cable housing and through the Bolt terminal



IMPORTANT: do not remove the lever arm from the carb.

Insert the bolt through the 5/16" hole.



Check: the bolt is free

Tighten the first nut to allow the bolt to turn in the hole.
IMPORTANT: with a wrench hold the first nut; tighten the second jam nut against the first nut.

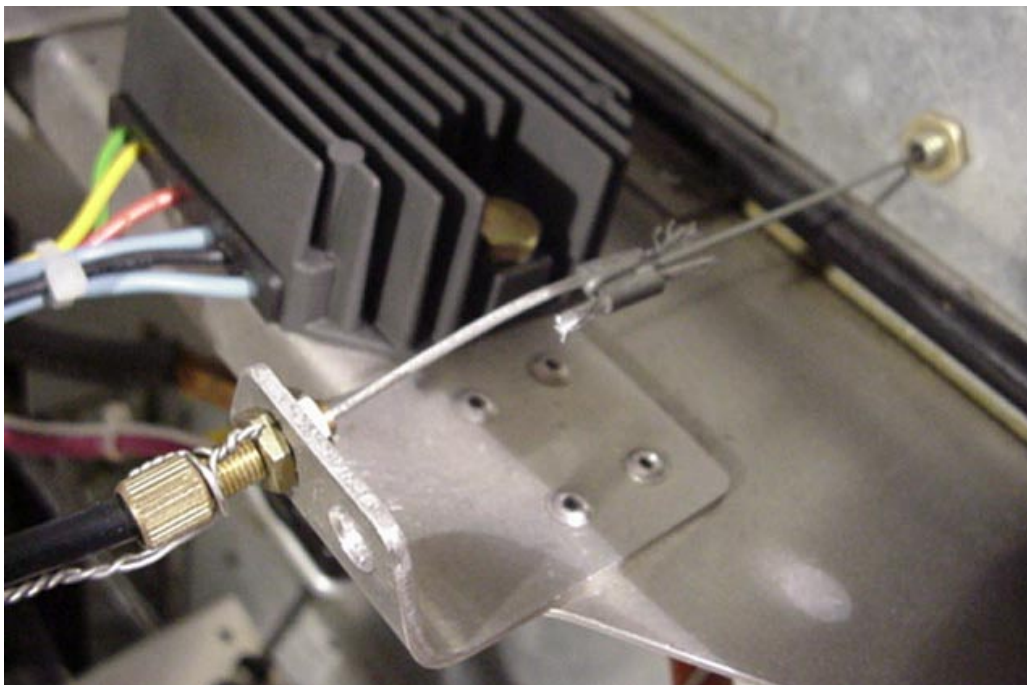


PUSH/PULL CABLE
P/N 100-001
Qty: 2

(CHOKE & CARB HEAT)

Note: supplied coiled up. Un-coil and straighten out.

Choke & Carb heat push pull cable.
 RECOMMEND: PAINT THE KNOB BLUE (placard: CARB HEAT), COLOR CODE BLACK for CHOKE.



CHOKE CABLE ANGLE

P/N 6E5-3
Qty: 1

Drill a hole in middle of the 25mm flange to screw in a Cable Stop Adjuster
 P/N 25-0700

Installed to Stiffener 6B7-1 with 4 RIVETS A5

Push/Pull cable P/N 100-001 Pull on the knob to remove the wire from flexible housing. Install the flexible housing through the instrument panel, and secure the nut on the back side. Feed the other end through a hole drilled in the firewall. With side cutter, cut the flexible housing approximately 15mm past the front of the firewall.



3/16" CLEVIS PIN

P/N MS20392-13

Qty: 1

3/16" WASHERS

AN960-10

Qty: 2

The head is filled flat on one side parallel to the cable.

Insert the clevis pin in the 3/16" hole in the choke lever arm, add the washers and insert the cable through the hole.



ALTERNATIVE:

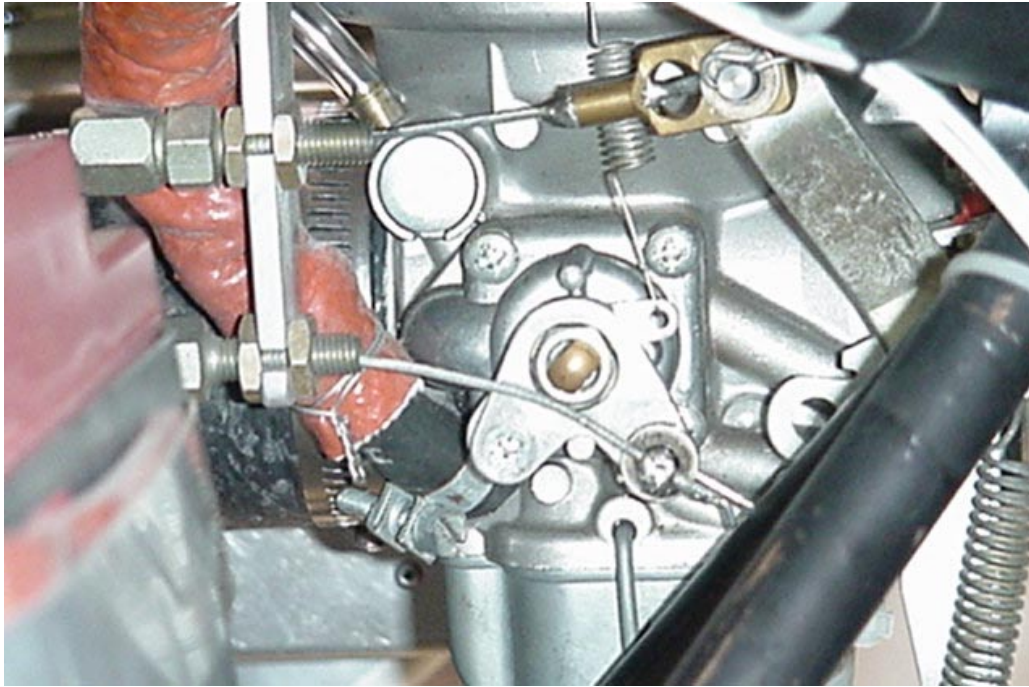
3/8" ROD WITH 1/16" HOLES

COTTER PIN

AN380-2-2

Note: the holes are in line to each other 8mm part (length = 12mm)

Insert the cable through the 1/16" hole; wait to install the cotter pin.



Check: the cotter pin does not interfere with the boss (choke stops) on the carburetor.

Note: there are two springs, one for the throttle and one for the choke.

Throttle: the spring pulls the throttle to full open

Choke: the spring pulls the choke closed.

Insert the 3/16-rod through the hole in choke lever and secure it with the cotter pin.

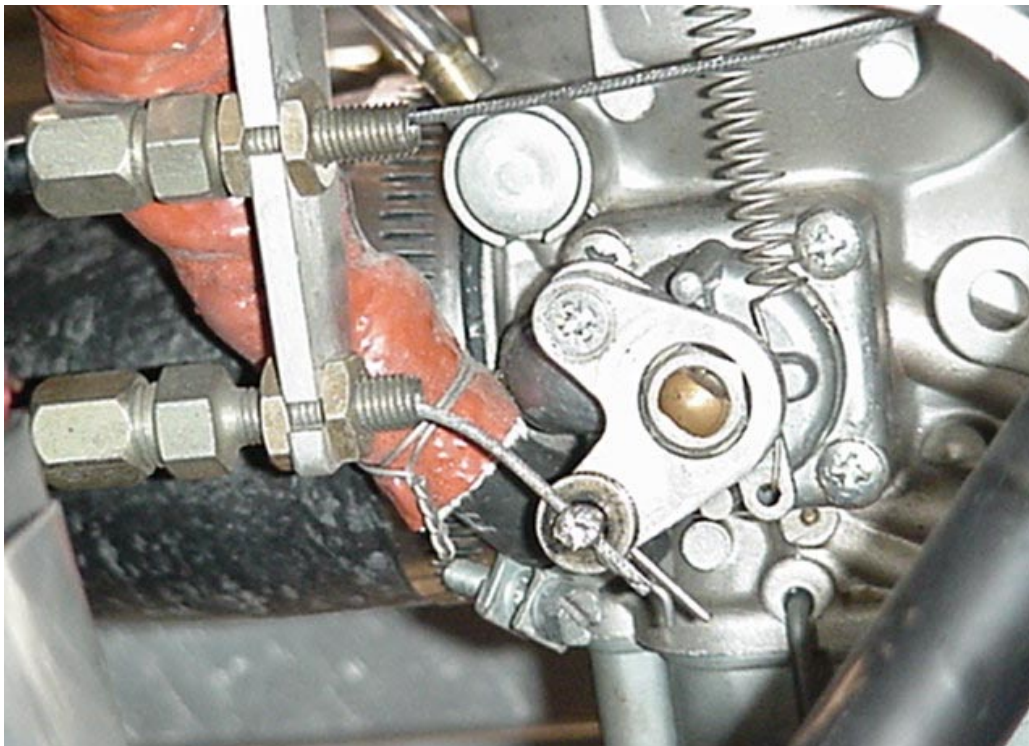
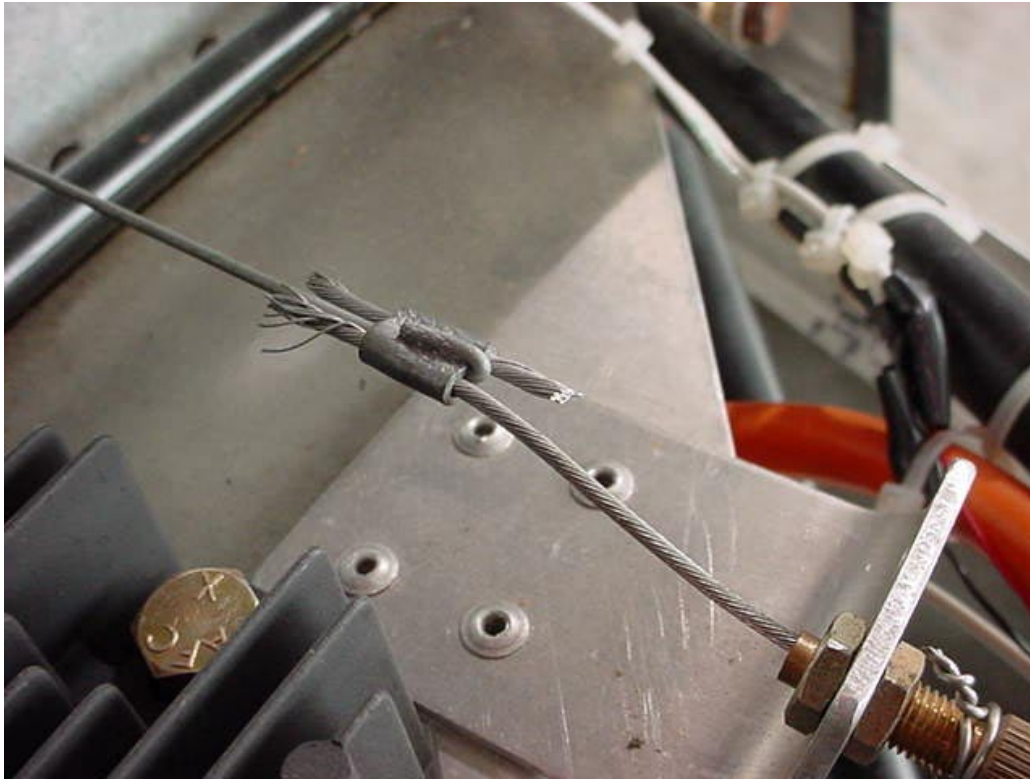


Photo of choke pulled

Notice the spring is stretched.

Install the cable stop adjuster 25-0700 on the carb.
 Install the flexible housing between the two cable stop adjusters (if necessary drill out the plastic sleeve to insert the cable housing through the sleeve)
 Insert the end of the 1/16" cable through the cable stop and flexible housing.

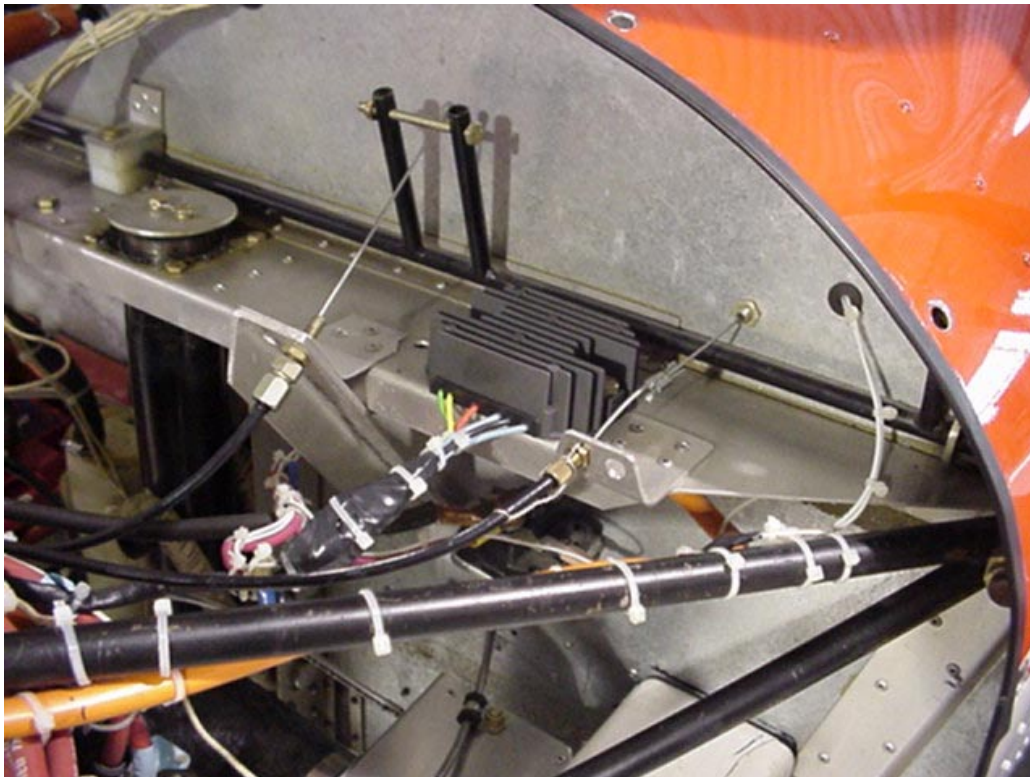


1/16" NICO PRESS SLEEVE

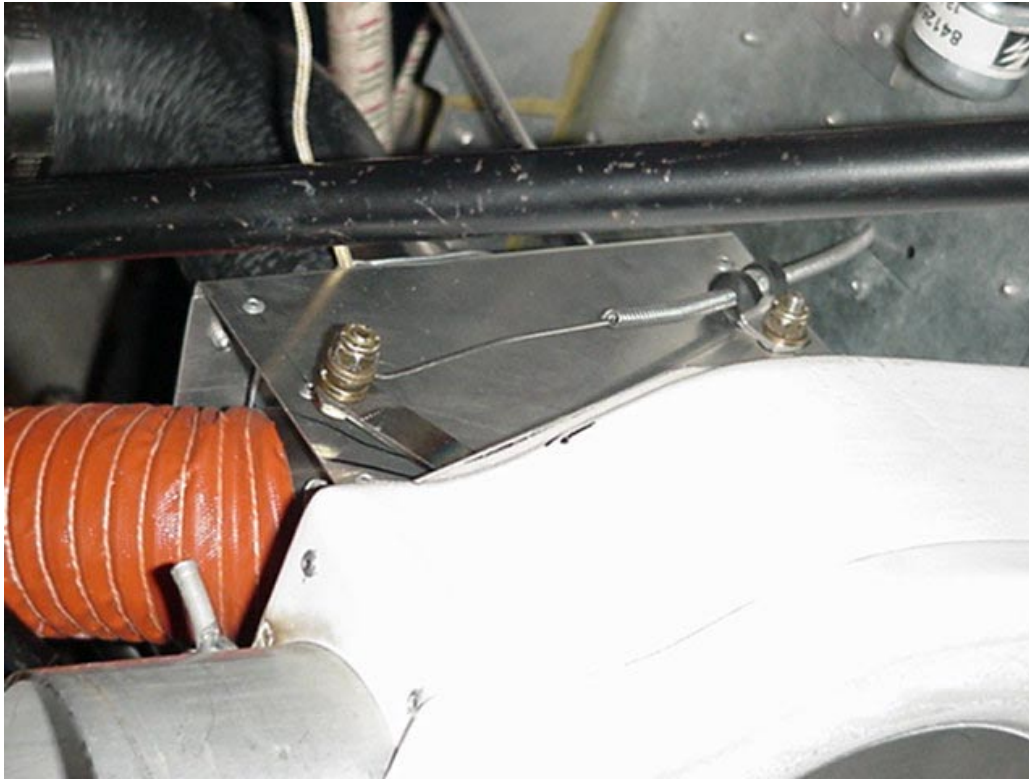
P/N S-22-002

A nico press sleeve is used to connect the flexible cable to the push/pull wire

It is acceptable to set the 1/16" nico press with a vise grip; then bend the end of the wire up.



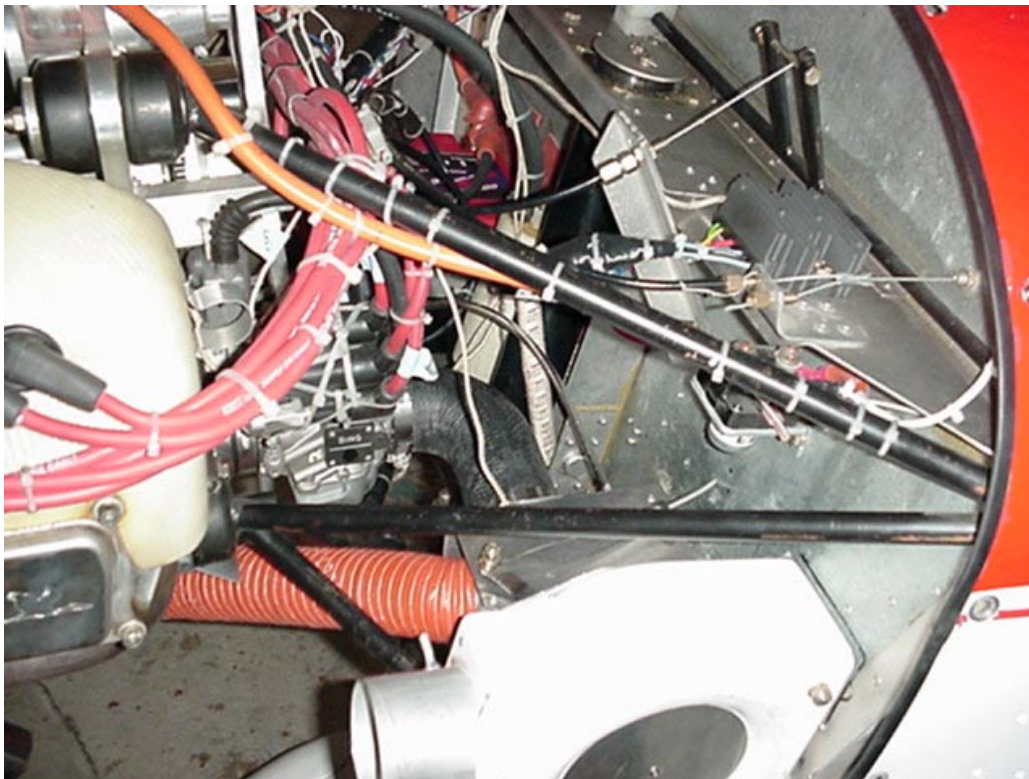
Overview photo of throttle bellcrank and choke bracket.

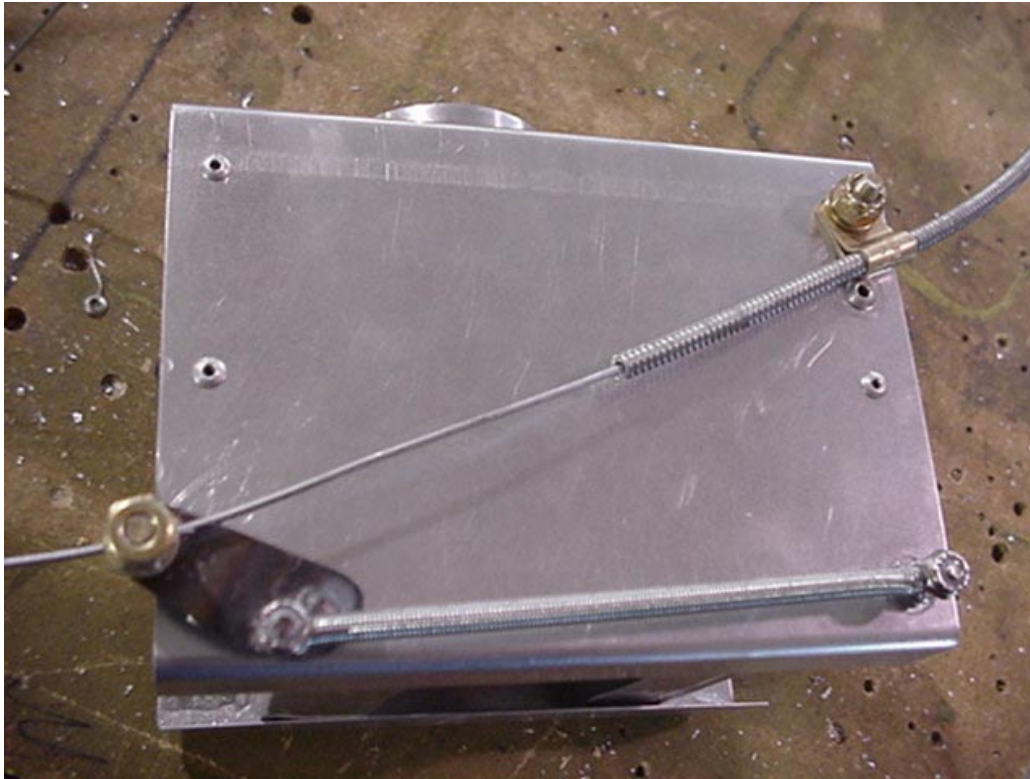


CARB HEAT

Drill a 3/16" Hole through firewall (for the push pull cable housing) in line with the clamp on top of the air-box.

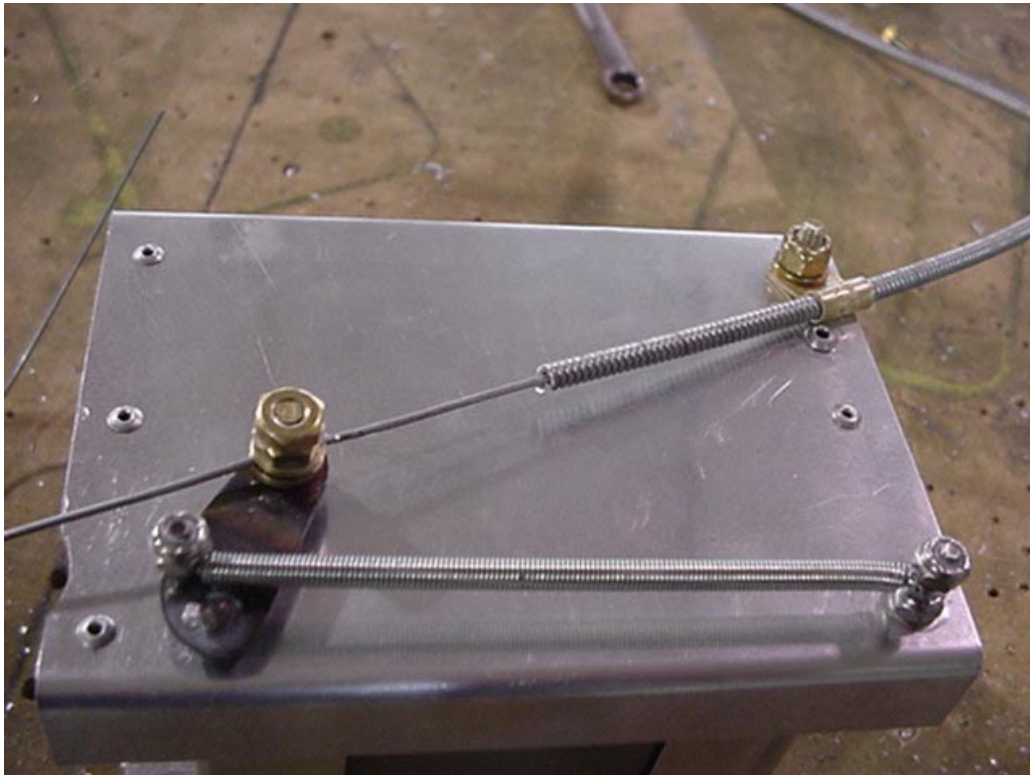
First install the push/pull cable on the instrument panel then feed the end through the hole in the firewall.





Cable pushed in
"CARB HEAT OFF"

Comment: Over center spring keeps tension on the flap.



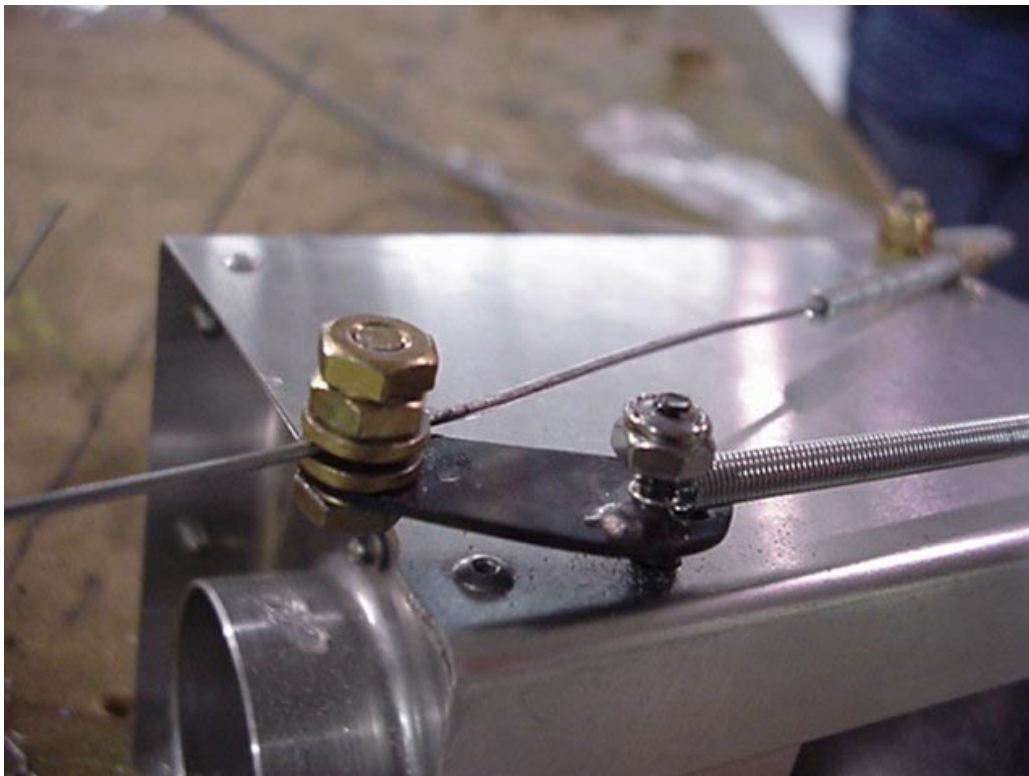
Cable pulled out
"CARB HEAT ON"

Note side of the box is filed to install the drilled AN3 bolt



PLAIN CLAMP
AN742-D3
Qty: 1
BOLT + WASHER +
SL NUT
AN3-4A
Qty: 1

Clamp to hold the flexible housing. Check: the flexible housing cannot be pulled out of the clamp!



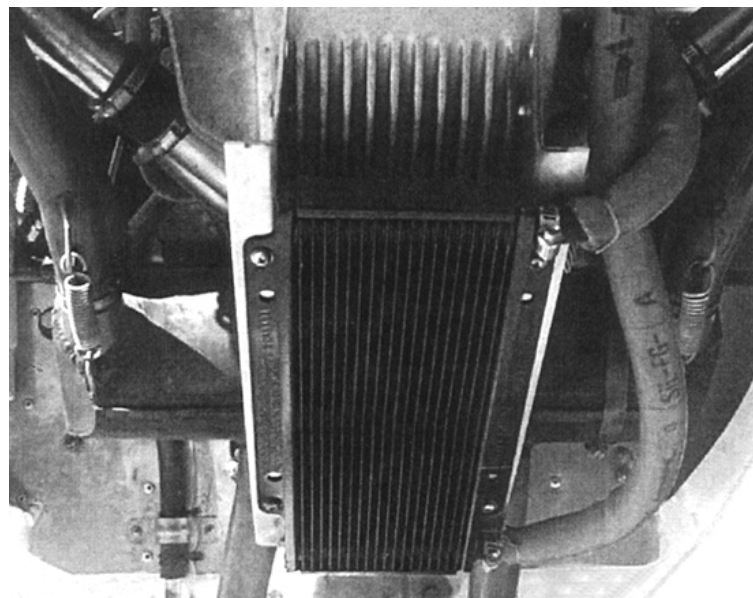
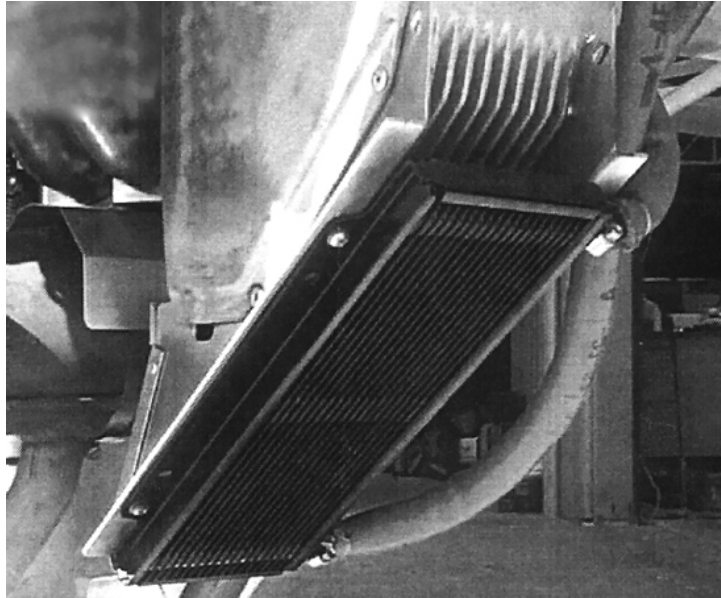
BOLT TYPE
TERMINAL
AN3 BOLT W/
DRILLED SHANK + 2
WASHERS + JAM
NUT

P/N 05-16100
Qty: 1

Photo of carb heat off

Tighten the 2 jam nuts against each other.
 Check: The bolt turns freely, the cable cannot be pulled out.

SECTION 9 OIL COOLER



Oil cooler installed across the front of the cooling fins on the oil pan



Oil cooler adapter



The female threads screw into the engine casing.



New engine, filter screwed on engine.

Location of the oil filter in front of cylinder #2



Suggestion: mark the date and hours on the oil filter



Screw the adapter between the engine and the oil filter.

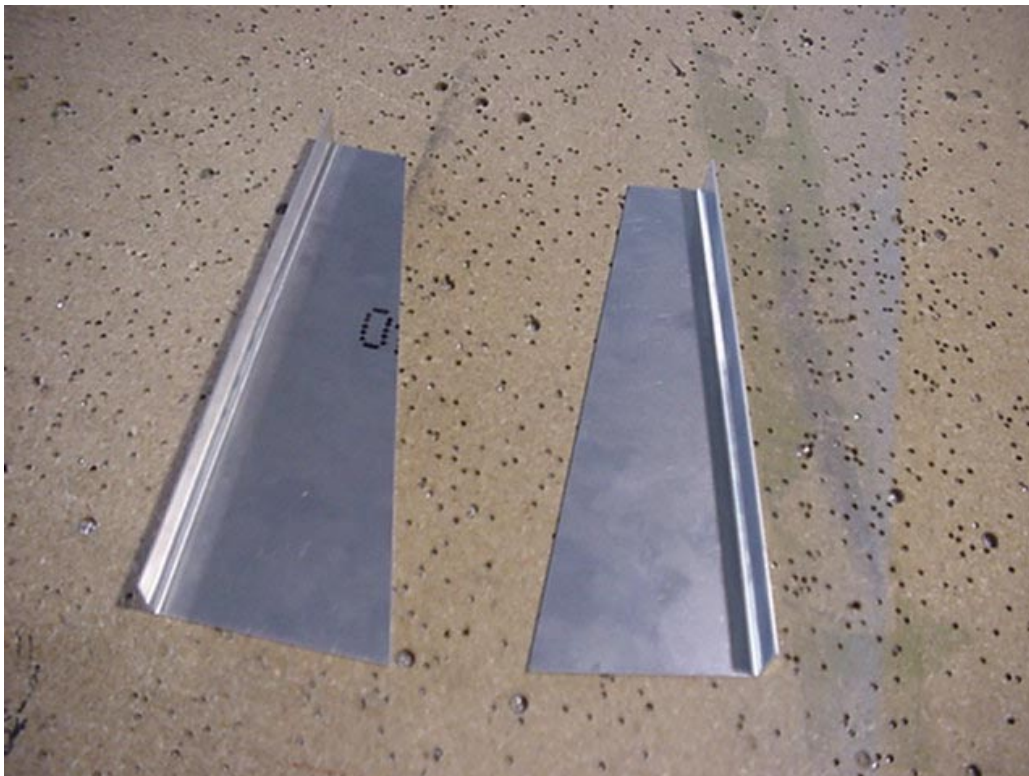


Oil cooler

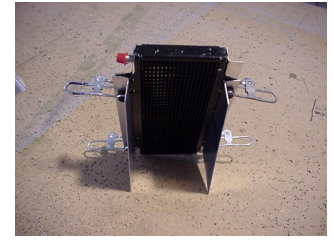
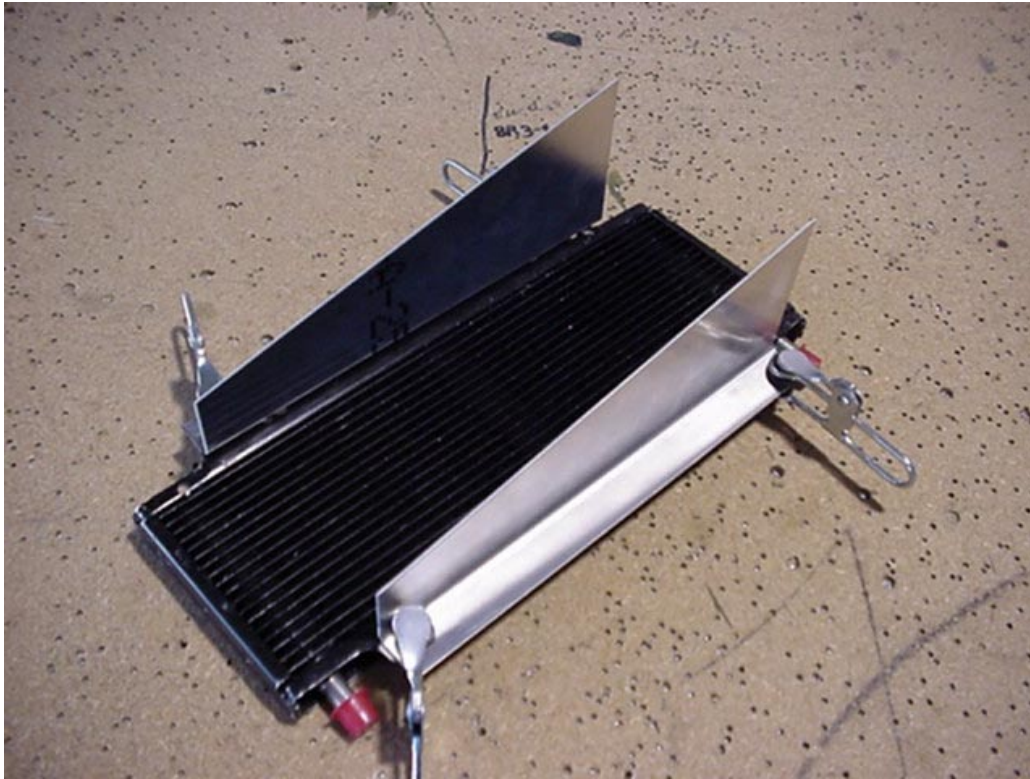
ORIENTATION:
The outlets go on the left side (same side as the oil filter)

Photo shows the back side of the cooler.

Note: the existing 1/4" holes in the side flange are not used. New #20 holes are drilled closer to the edge.



Side Brackets
Qty: 1L + 1R



Maintain approximately 105mm between the brackets

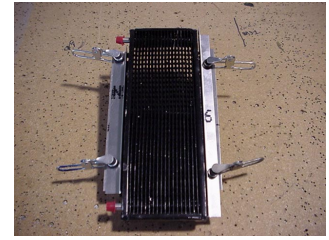
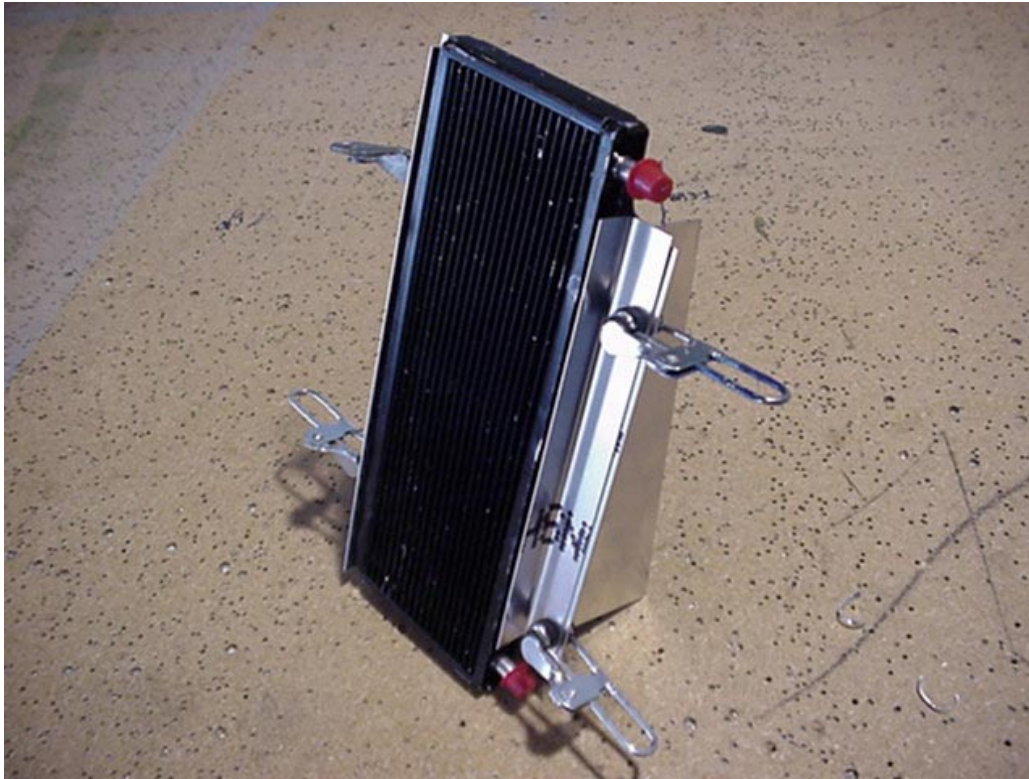
The short side is up. The top of the radiator is closer to the engine than the bottom.



Hold the cooler to the engine to check the distance across the left and right bracket.

NOTE: the engine already has holes in the cooling fins to attach the brackets.

SUGGESTION: Position the edge of the bracket on the inside of the cooling fins. Above photo shows the bracket on the outside!



Before riveting the bracket to the cooler, back drill a piece of L angle on the front side.

The L angle is to secure a piece of baffle material to seal the gap between the cooler and the cowl.

The L angle is riveted to the oil cooler and to the Side Brackets.

Remove the L angle from the cooler to install the baffle material



BAFFLING STRIP
3" WIDE
P/N 05-0070



FLAT WASHERS
90107A005

IMPORTANT: remove the L angle from the cooler to drill the #30 holes in the baffler, use the washers 1/8" ID 5/16" OD against the baffle.



Cutout in the bottom cowl in line with the oil cooler.

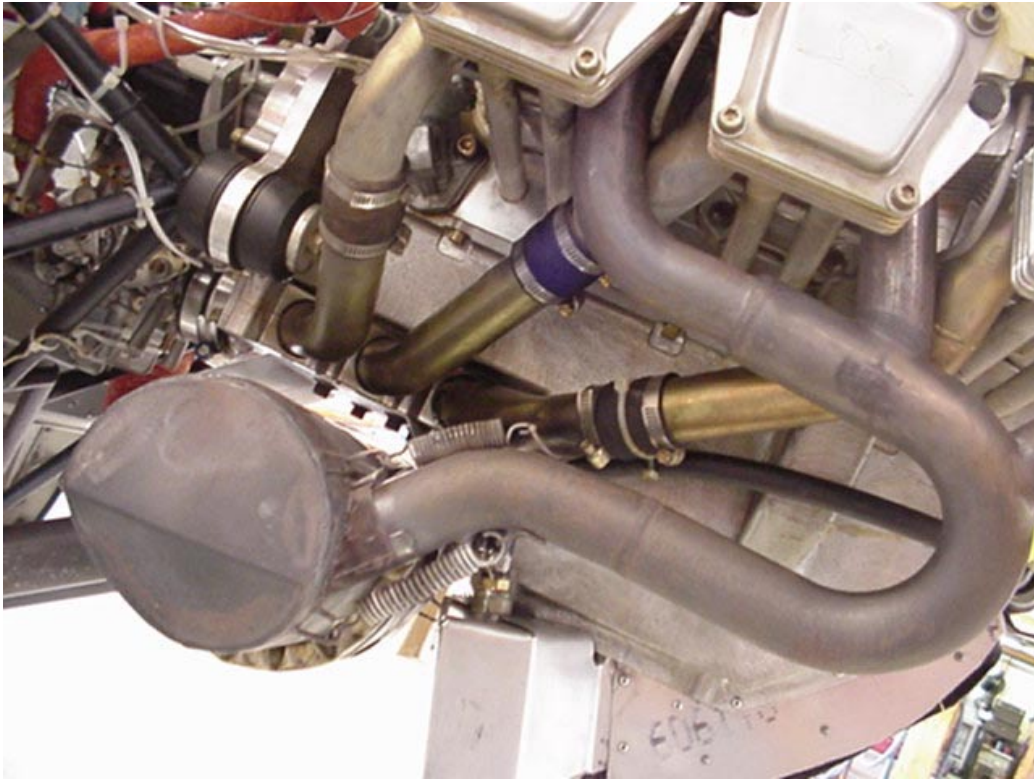


Trim the baffle to fit the cowl.

SECTION 10 MUFFLER



Detail of left side

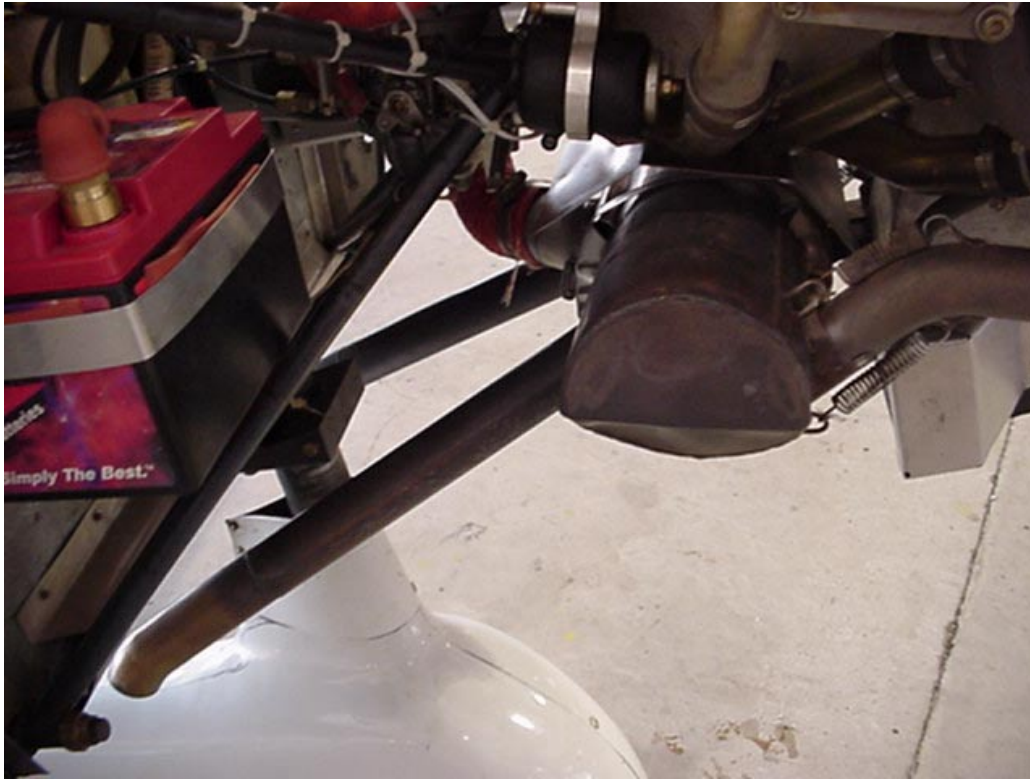


Detail of right side



Detail of left side.





Two springs per side

Detail of right side.

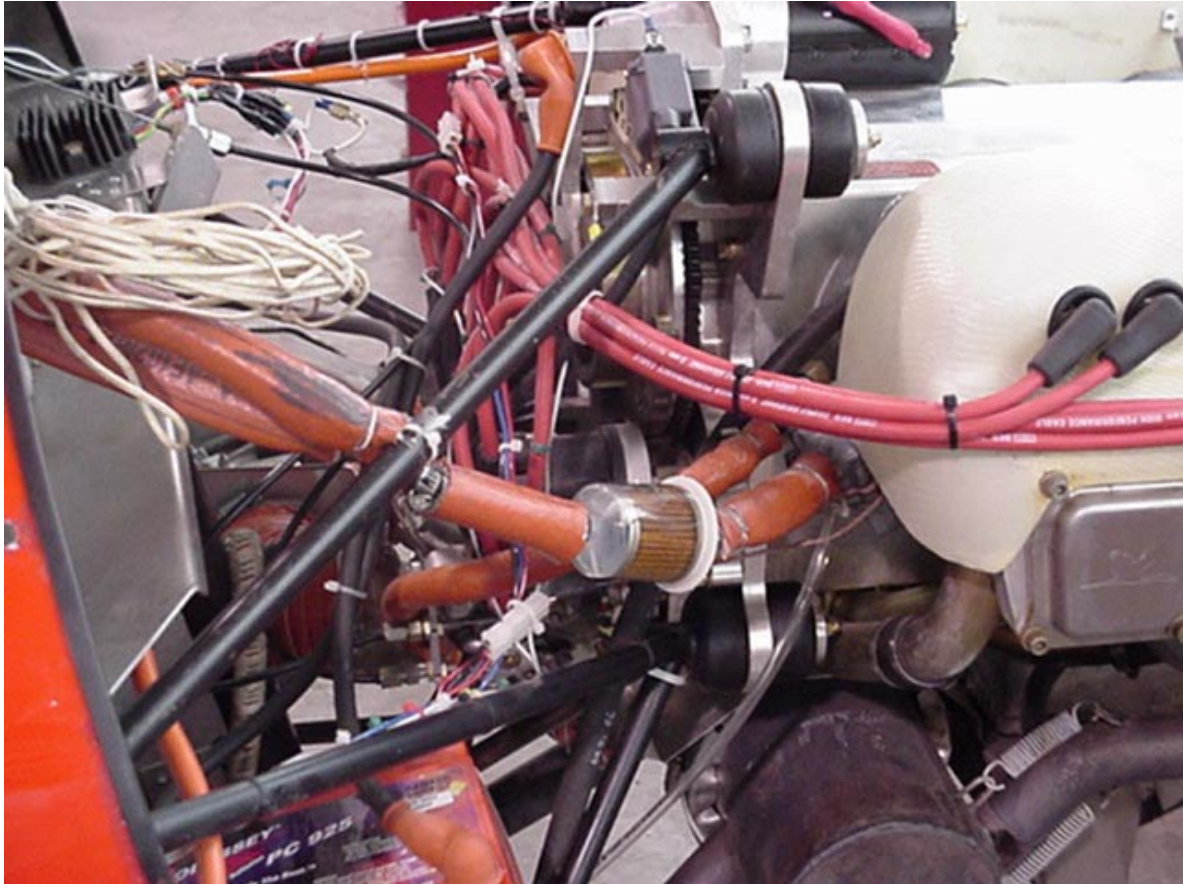


Muffler installed with bottom cowl in place.

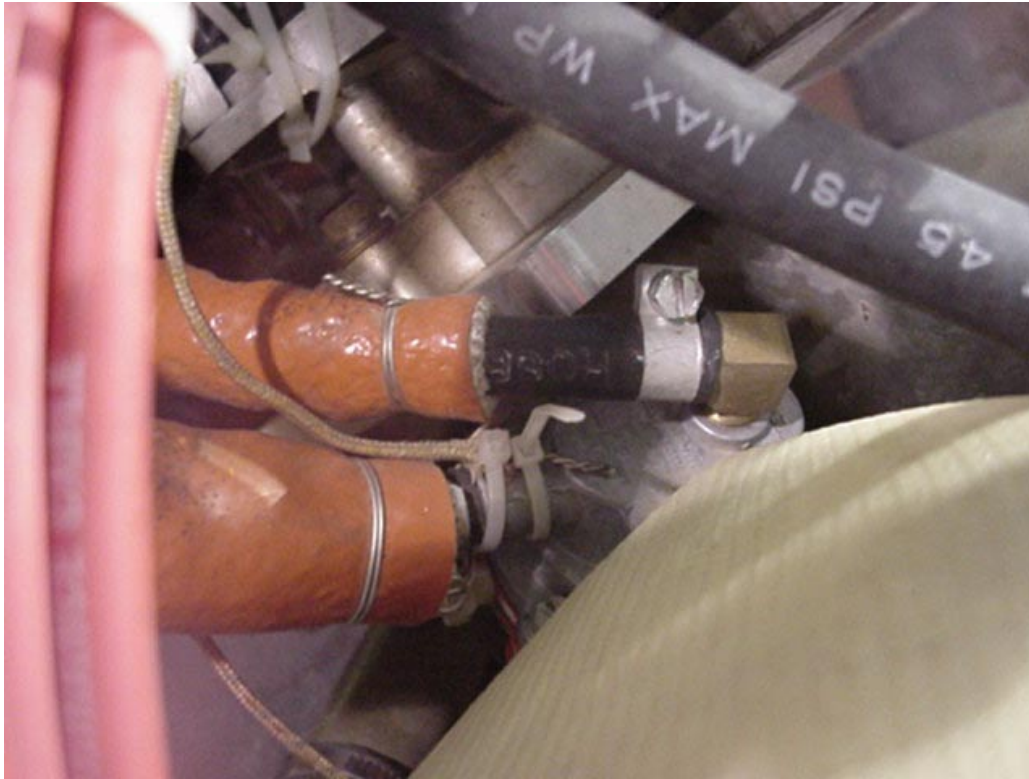


Front view showing the muffler outlets below the fuselage.

SECTION 11 ACCESSORIES



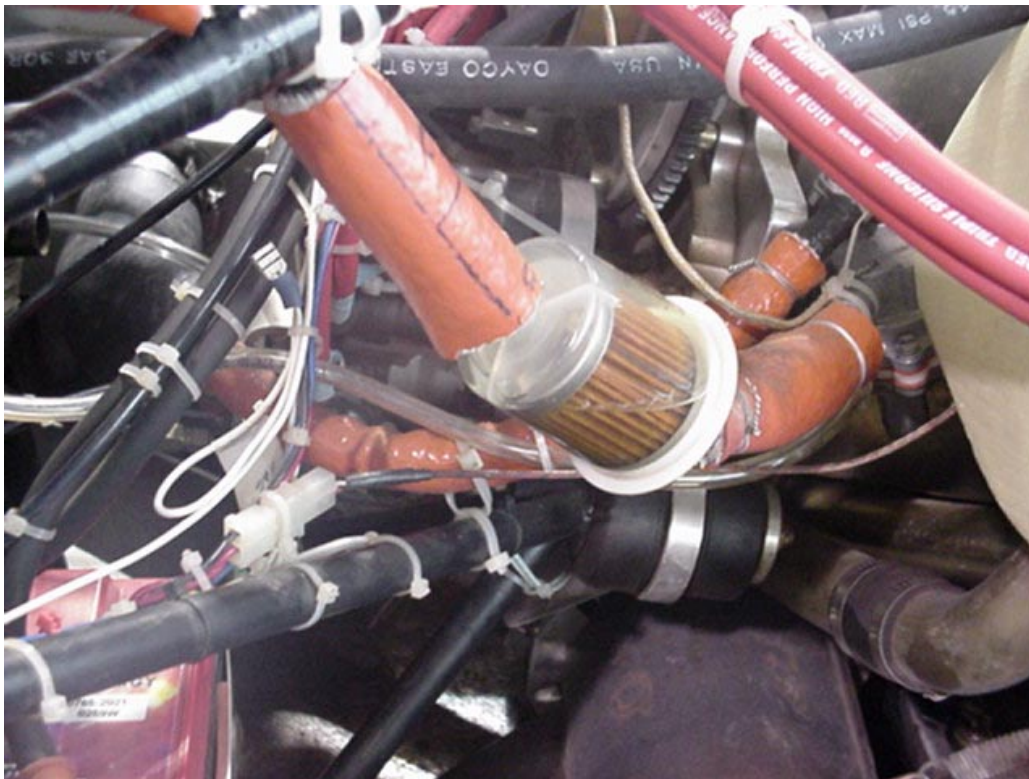
In line fuel filter



OUT: located on the top of the mechanical fuel pump.

Mechanical fuel pump located on the right side of the engine.

Note: The engine is supplied by Jabiru with the fuel line connected between the top of the fuel pump to the carb.



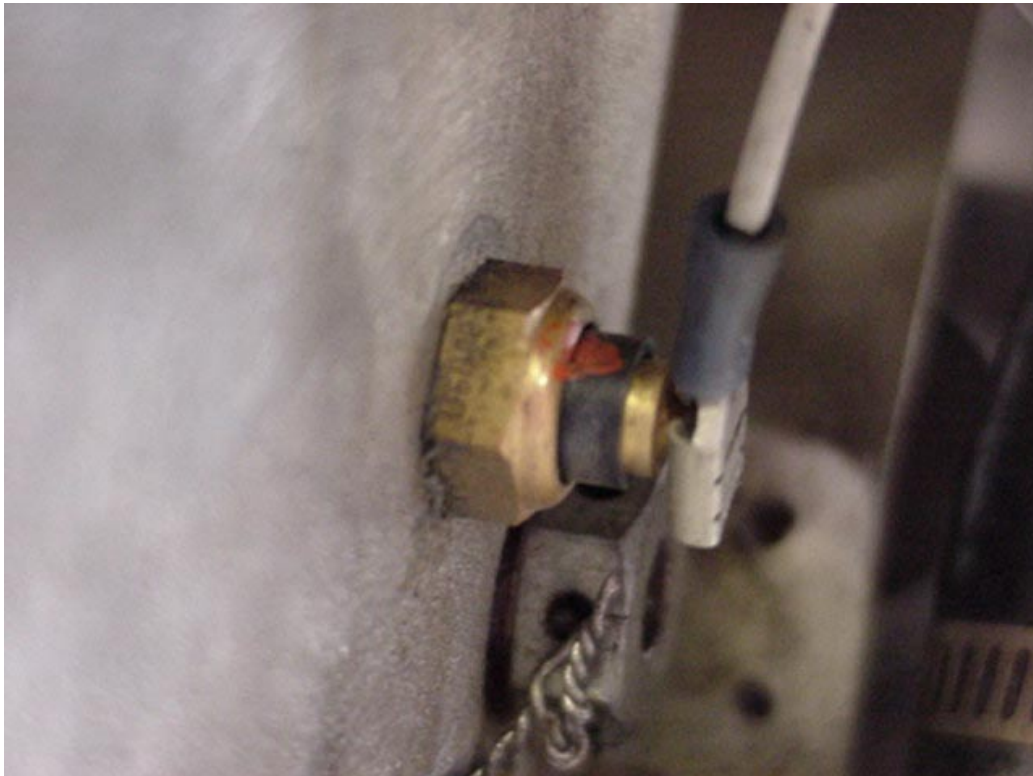
In line fuel filter on the in line before the mechanical fuel pump

IN line: straight nipple on the side.



Oil temp sender

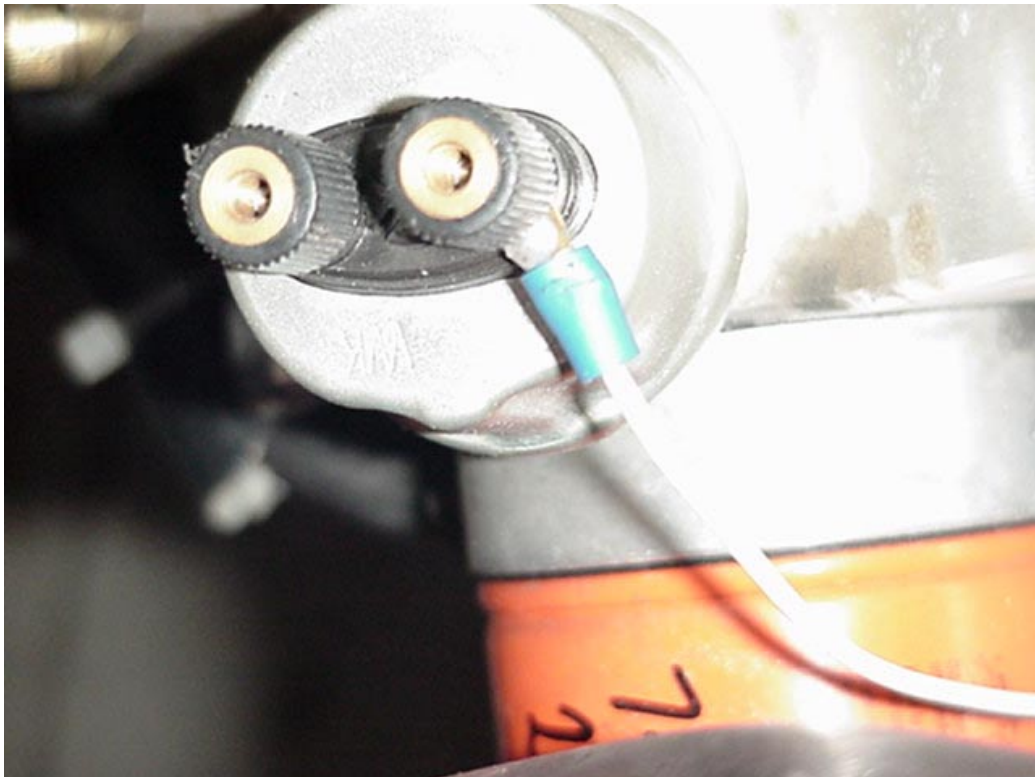
VDO oil temperature sender, supplied installed on the engine.



Terminal:
Female type spade
terminal



Oil pressure sender



Connect "G" to oil pressure

WK is not hook up (low oil pressure light)

VDO oil pressure sender unit



Crank case vent /oil overflow line

End of hose is connect to the top of the oil recover container (keeps the bottom of the fuselage clean!)



Oil recover container with clip



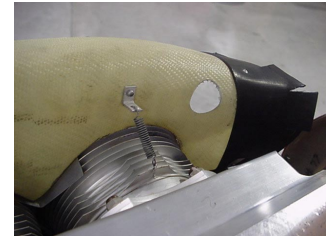
Fiberglass part. The clip is riveted to the firewall.

The tube on the side is the vent, the top tube is connect to the side of the oil dipstick, the 1/4" hole is to insert the vent line for the fuel pump.

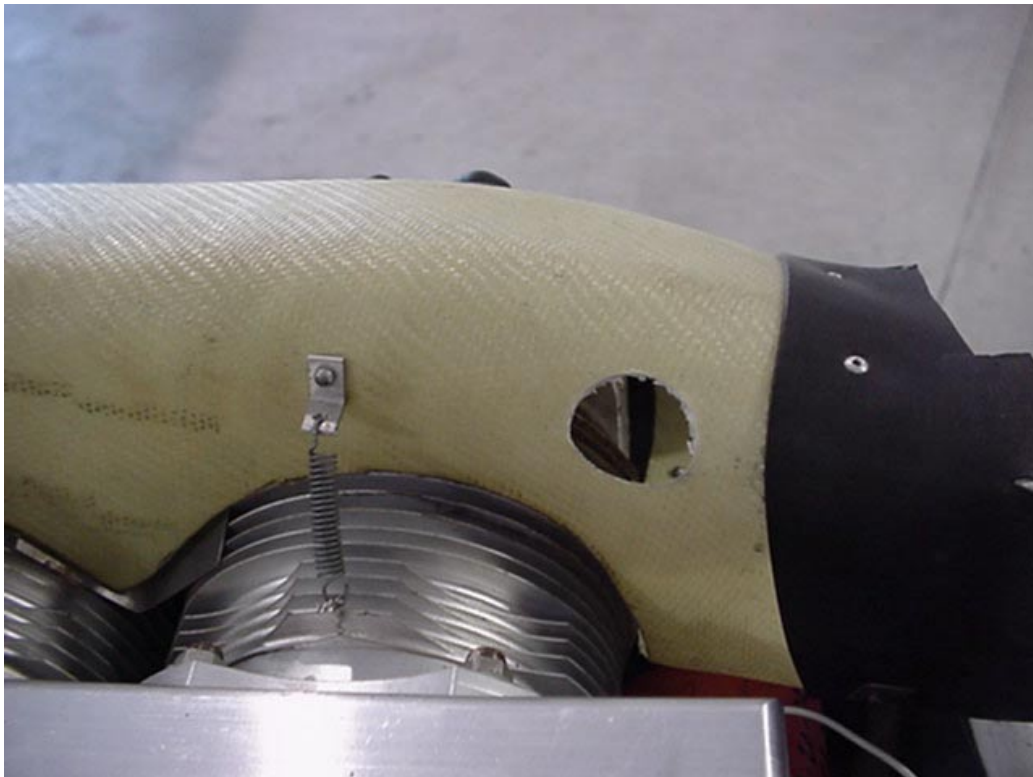


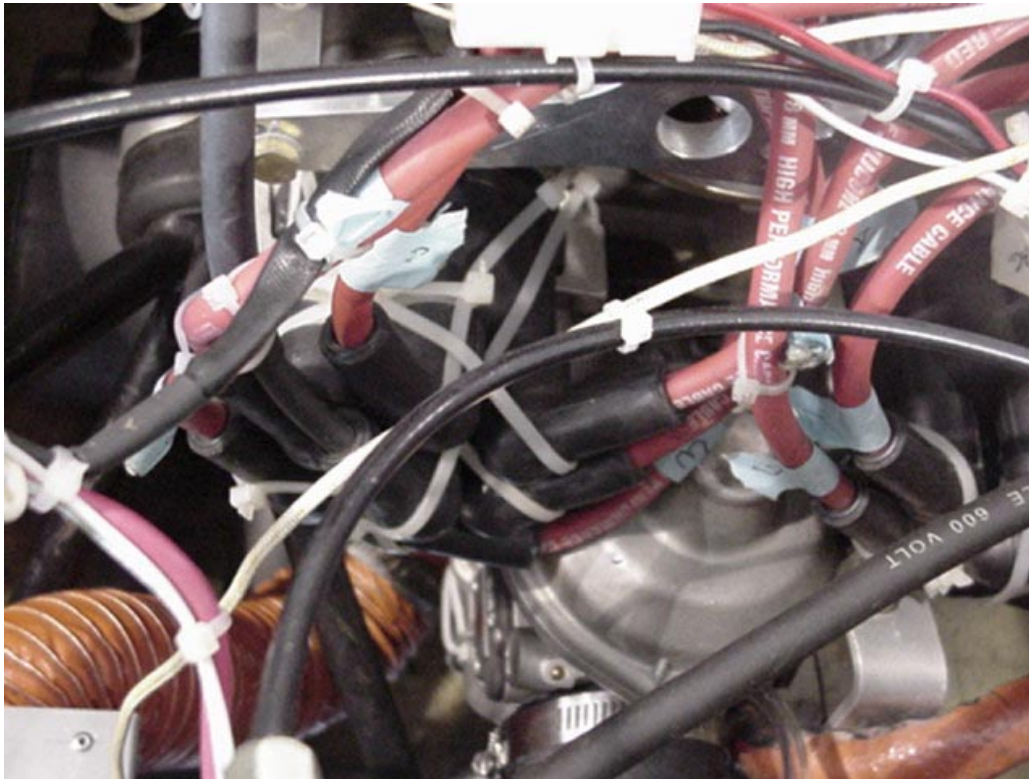
Safety wire on all hose clamps



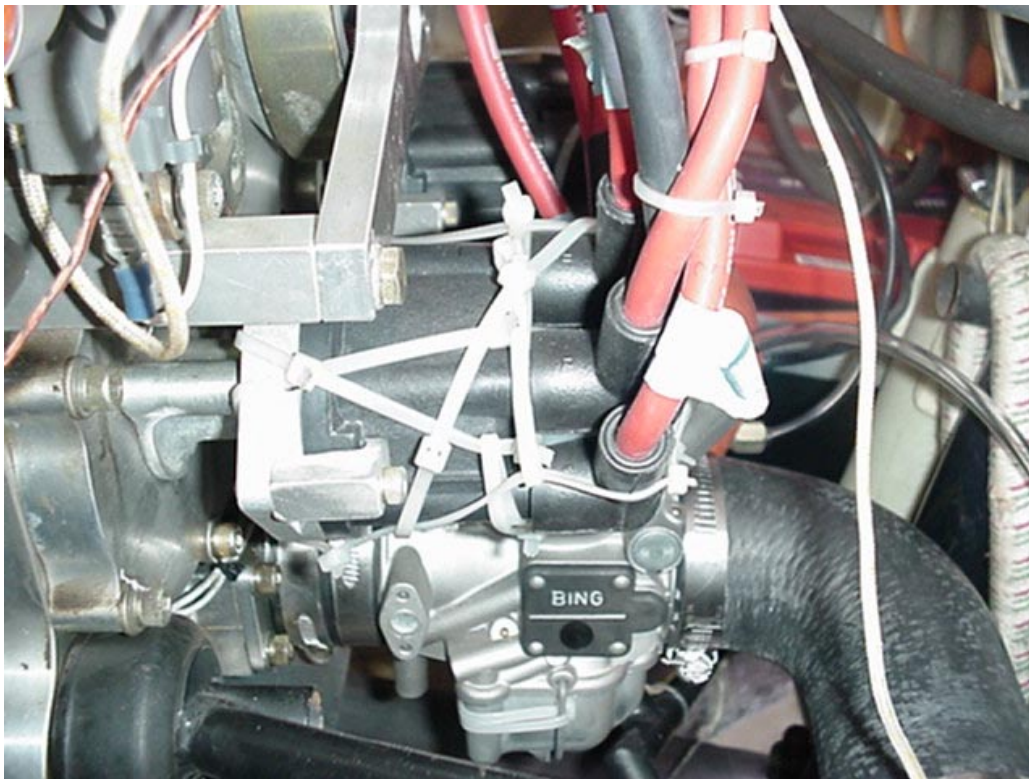


Vent hole in left baffle

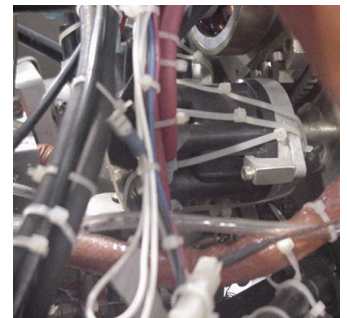




Optional tie wraps to hold the spark plug wires on the distributor cap.



Detail of left side



Right side