Bracketeering
(BMAC Tech Tips)

By Lenny Spall

Nice looking bike..!

Zooming in...

Ugly bracket!

Look at this!

Purpose: to support or attach components, instrumentation & splash protection.

Before

After

5052-H32 Aluminum Specifications

- Properties are good workability (useful in forming operations)
- Good corrosion resistance, especially to salt water and fuel & oil lines
- High fatigue strength and withstands excessive vibrations
- Has the best welding characteristics of all the aluminums
- Widely used for storage tanks, truck/trailer components, electronic chassis, etc. and parts requiring strength and good formability at reasonable cost.

Frank uses 0.063" (~$3.50 per sq ft) and
0.09" (~$6.30 per sq ft) Aluminum sheets

Bracket Fabrication & Fasteners


Weld

Bolt

Rivet

Fabrication Steps

- Determine thickness of bracket

- Determine how to attach

- Make cardboard template

- Fabricate with metal

Fabrication Examples
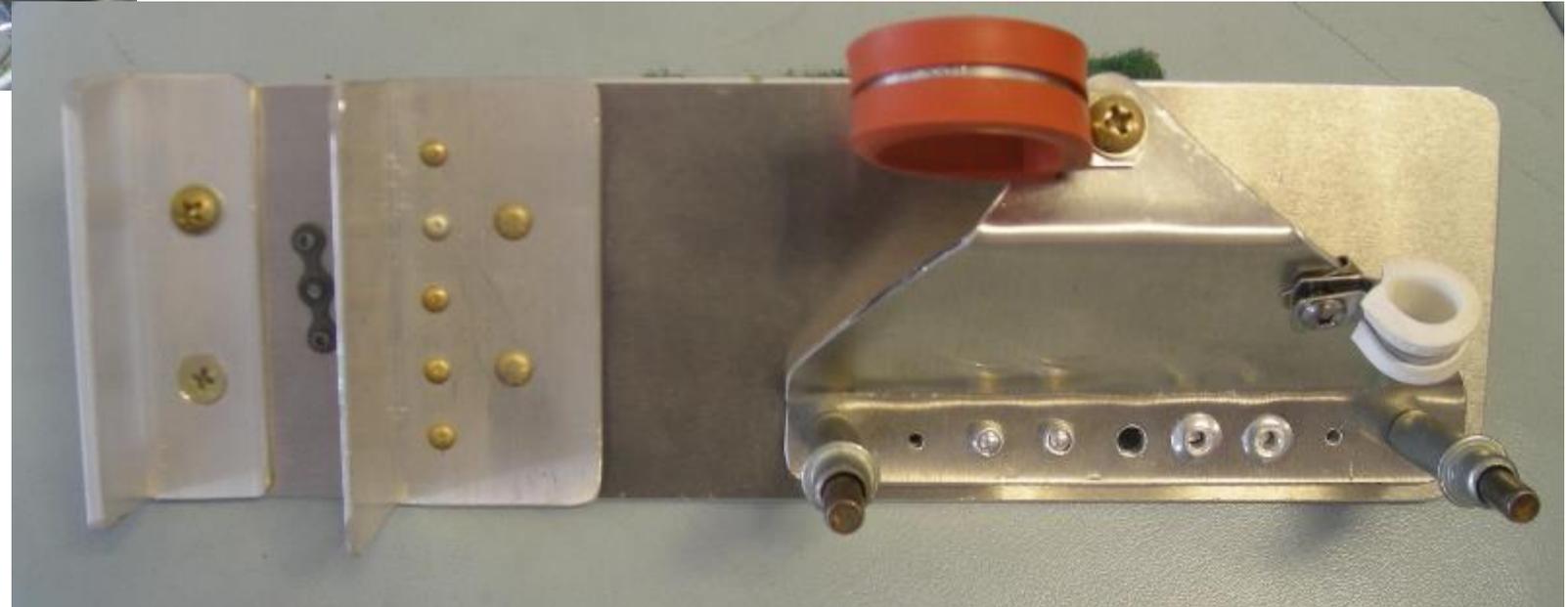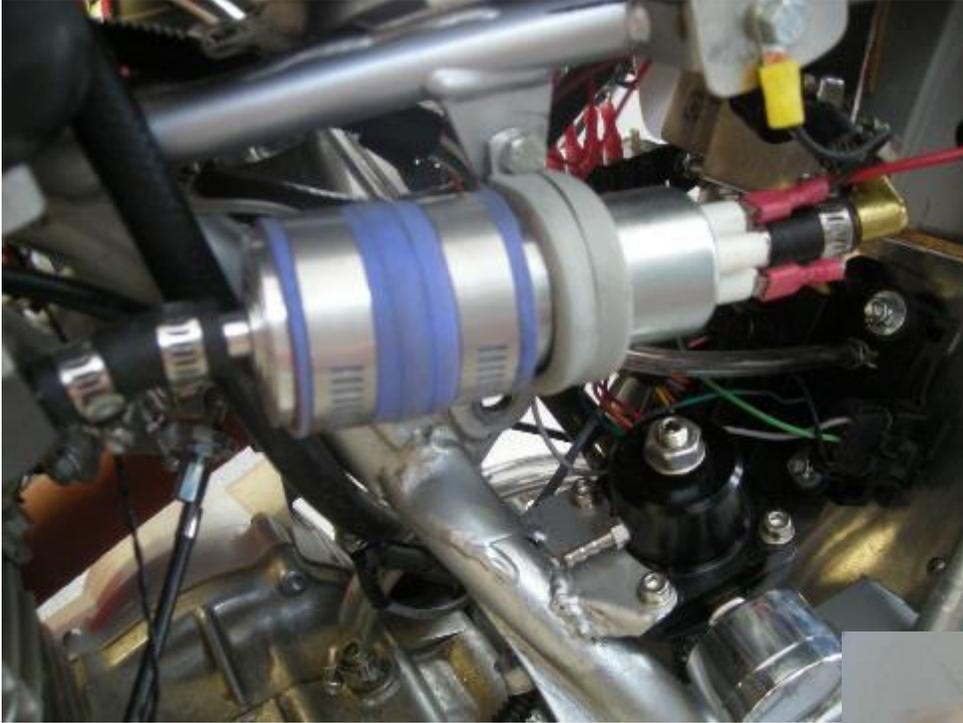
Aluminum Working Tools

More Tools

Finishing Aluminum

- Nothing
- Scotchbright
- Polish
- Paint
- Powdercoat

My Plane

Inlet Air Deflector Panels

Close up

After Market certified panels = $450 each
Fabrication costs: Materials $30 & Powder coating $30

Vertical Stabilizer Leading Edge Panel

After Market certified panel = $280
Fabrication costs: Material on hand; tools $12