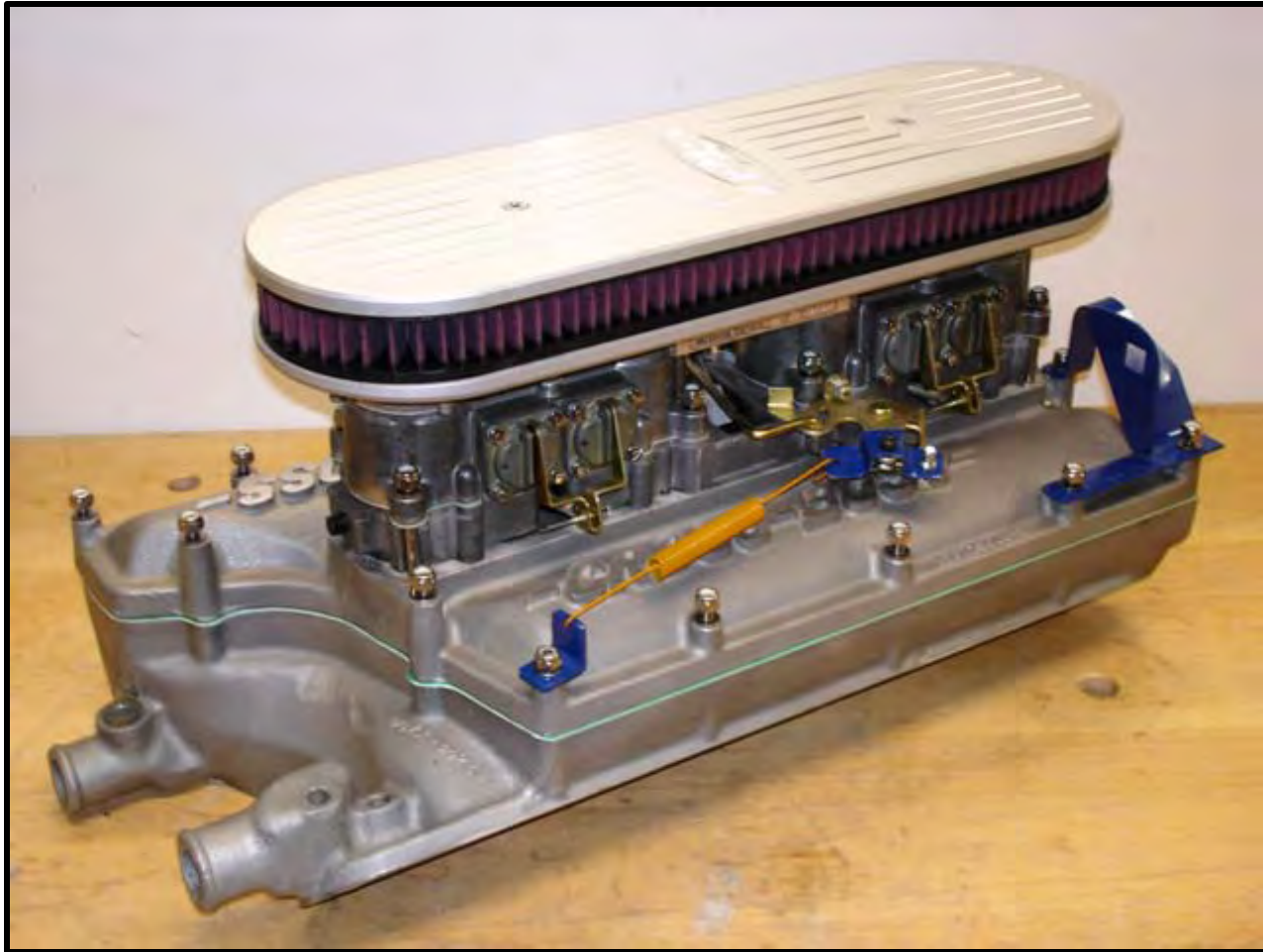


# Inline Autolite Carburetor Parts and Accessories - May 5, 2012 Revision



# Forward

*The internet is a wonderful thing. Information and misinformation abounds about the Inline Autolite Carburetor. They were a novel approach to fuel delivery and more optimal fuel distribution that was conceived to fit within the ever changing rules of the race sanctioning bodies. Unfortunately for the inline, they came at a time when politics were influencing Ford's commitment to racing. Though they were filtered through the hands of many racing teams, the convergence of these events meant they were never fully evolved nor were sanctioning bodies convinced the numbers sold were sufficient for homologation. Consequently they were relegated to relative obscurity. There are many subtle variations throughout the very limited production numbers. Though they are elegantly simple carburetor, they were/are not well understood and many have been modified in unfavorable ways. I have owned, rebuilt, and restored many over the course of the last several decades. As a result I have come to know them well and have reproduced most all of the requisite parts for both D0ZX9510A & B carbs. It's been a very enjoyable hobby and I've met a lot of great people from around the world who share the interest in these unique pieces of Ford history. If you are fortunate enough to own of an Inline Autolite, I'd like to make your acquaintance, and hopefully you will find the items on the following pages useful.*

*Best Regards,  
Kelly Coffield*

# AUTOLITE INLINE CARBURETOR

## SPECIFICATION SHEET

### BASIC SPECIFICATIONS

Bore Dia  
Venturi Dia  
Air Flow Capacity - Dry @ 1.5 in. Hg.  
Air Box Idle Vacuum  
Air Box WOT Vacuum  
Idle Air Flow Setting (Prod. Test)  
Idle F/A Setting (Prod. Test)  
Initial Screw Position (Ref.)

### DOZX 9510-A

1 11/16 In.  
1.6 In.  
875 CFM  
19 in. Hg.  
1.5 in. Hg.  
40 CFM  
.090 F/A  
1 1/2 Turns Out

### DOZX 9510-B

2 1/4 In.  
1.8 In.  
1425 CFM  
19 in. Hg.  
1.5 in. Hg.  
40 CFM  
.090 F/A  
1 1/2 Turns Out

### FUEL INLET SYSTEM:

Fuel Pressure  
Inlet Needle  
Inlet Seat Dia  
Fuel Level Setting - Dry  
- Wet @ 6.0 psi

6.0 psi  
Viton  
.097 In.  
1/4 in.  
1/8 in.

6.0 psi  
Viton  
.097 In.  
1/4 in.  
1/8 in.

### IDLE SYSTEM:

Idle Jet - In Tube  
Idle Air Bleed - Jet  
Idle Channel Rest - Upper Body (if used)  
Idle Discharge Hole - In T'Body  
Idle Discharge Port - Slot (width x length @ bore)

.031 In.  
40F  
.046 In.  
.086 In.  
.032 in. ±  
.320 in.

.031 In.  
63F  
none In.  
.086 In.  
.032 in. ±  
.250 in.

### MAIN SYSTEM:

Main Metering Jet Dia  
Well Emulsion Tube  
High Speed Bleed Dia - In Main Well Retainer  
Bowl Vent Hole Dia

.106 In.  
C9AF-A  
.031 In.  
3/16 In.

.093 In.  
C9AF-A  
.055 In.  
3/16 In.

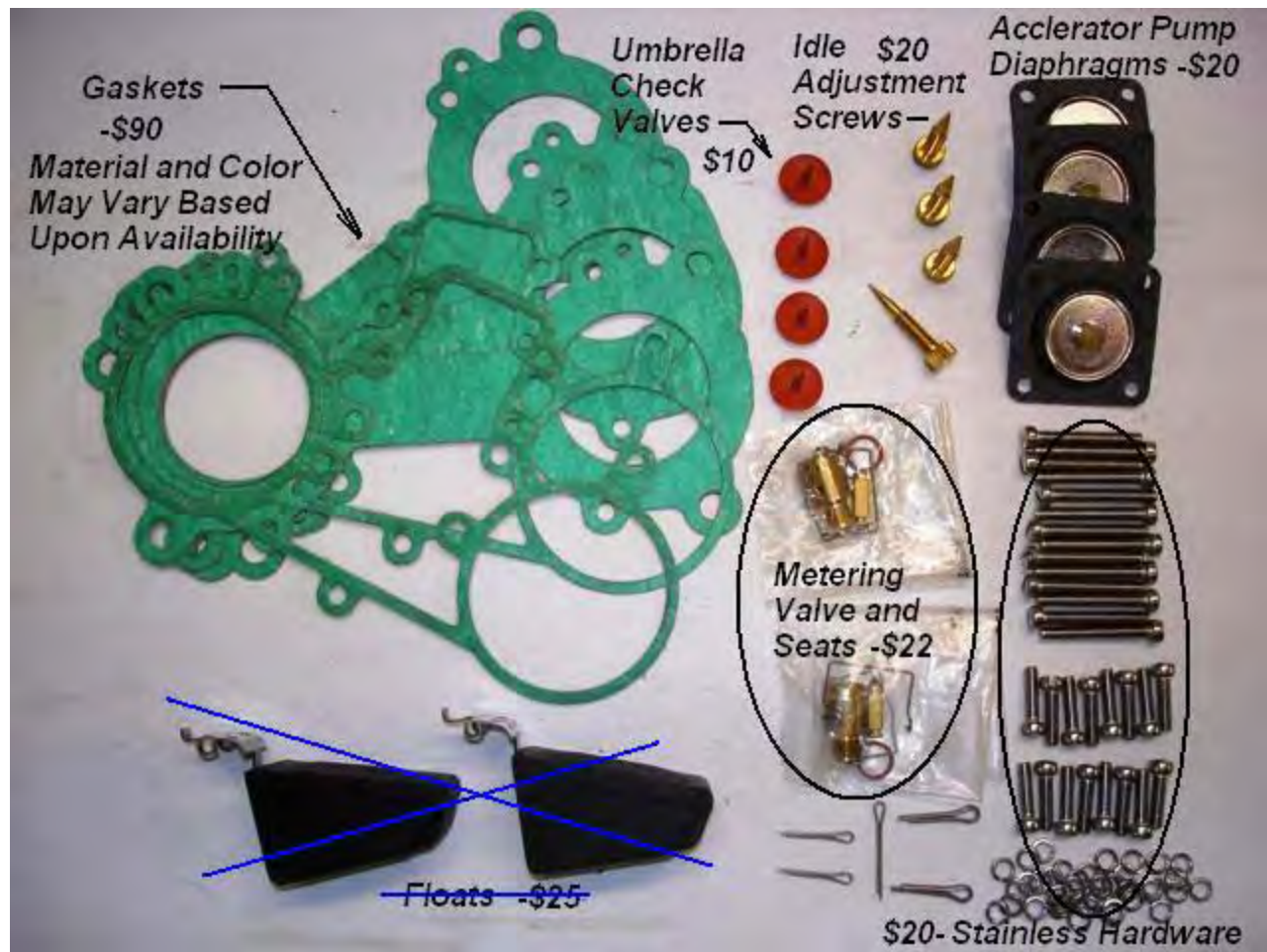
### PUMP SYSTEM:

Accel. Pump Shooter Dia  
Accel. Pump Spring Position  
Accel. Pump Capacity  
Accel Pump Bleed

.035 In.  
Mid Hole  
70-90 cc/10 strokes  
.013 In.

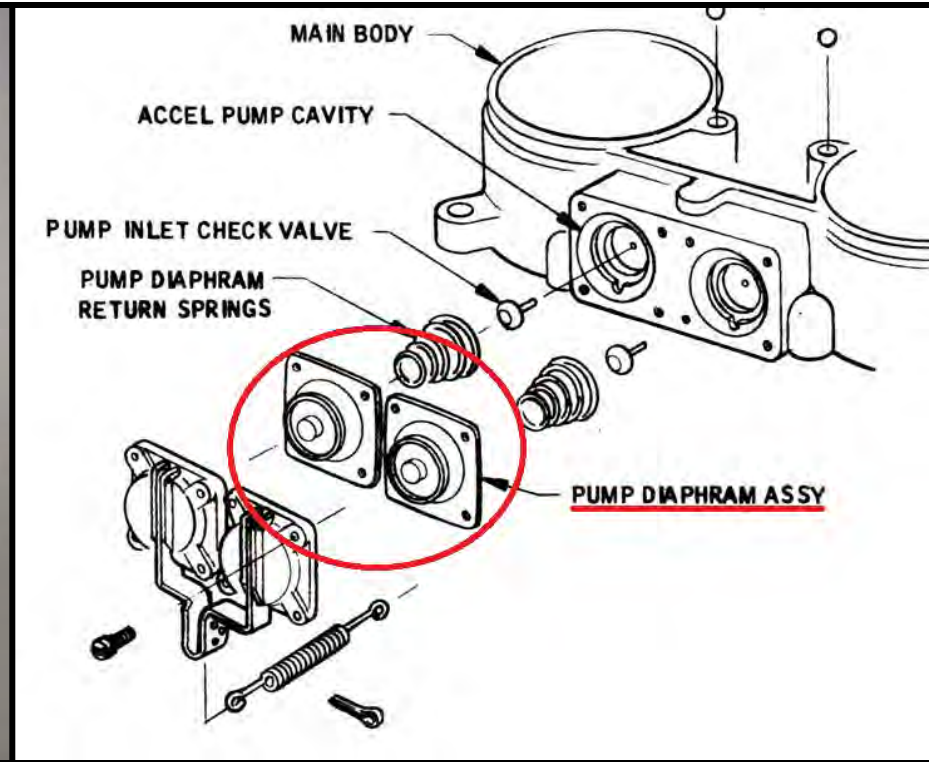
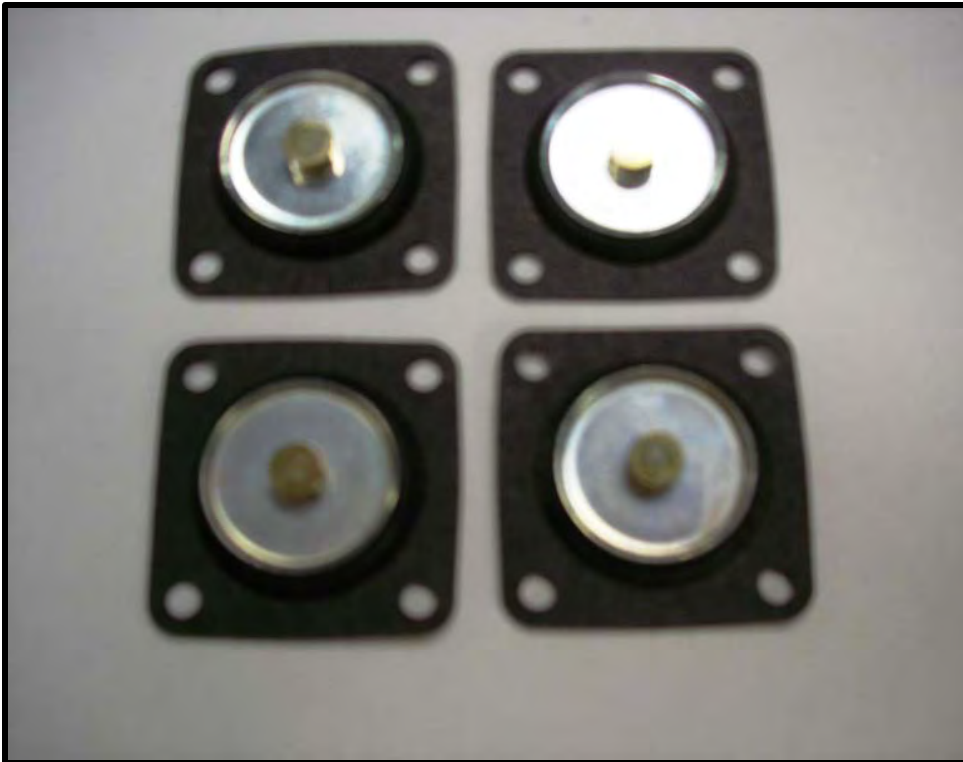
.028 In.  
Mid Hole  
70-90 cc/10 strokes  
.013 In.

# Hardware and Rebuild Parts



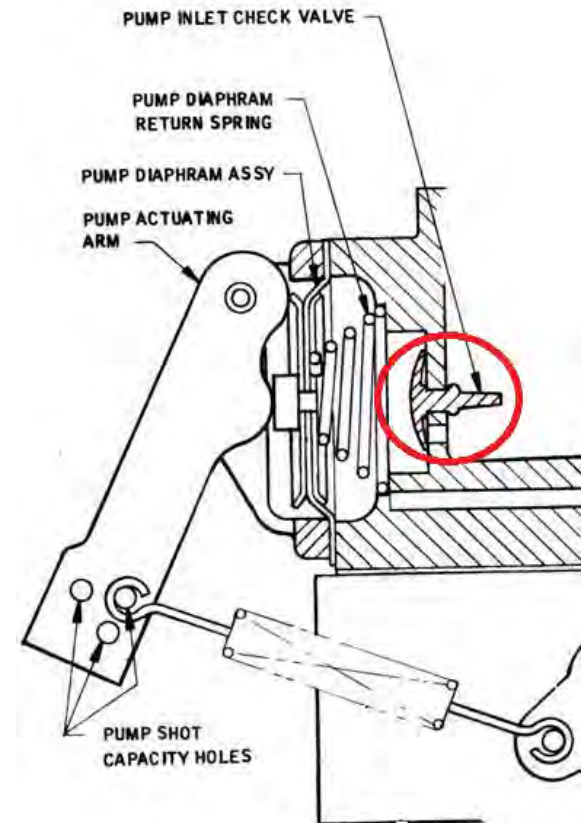
# Accelerator Pump Diaphragms

Accelerator pump diaphragms do not age well. Even if your carb has never had fuel in it, the elastomer on your pump diaphragms is 40+ years old. When they fail they will leak fuel profusely and represent a fire hazard. Do yourself a favor and buy a set of new ones. Sold in sets of four (4): \$20/set.



# Umbrella Check Valves

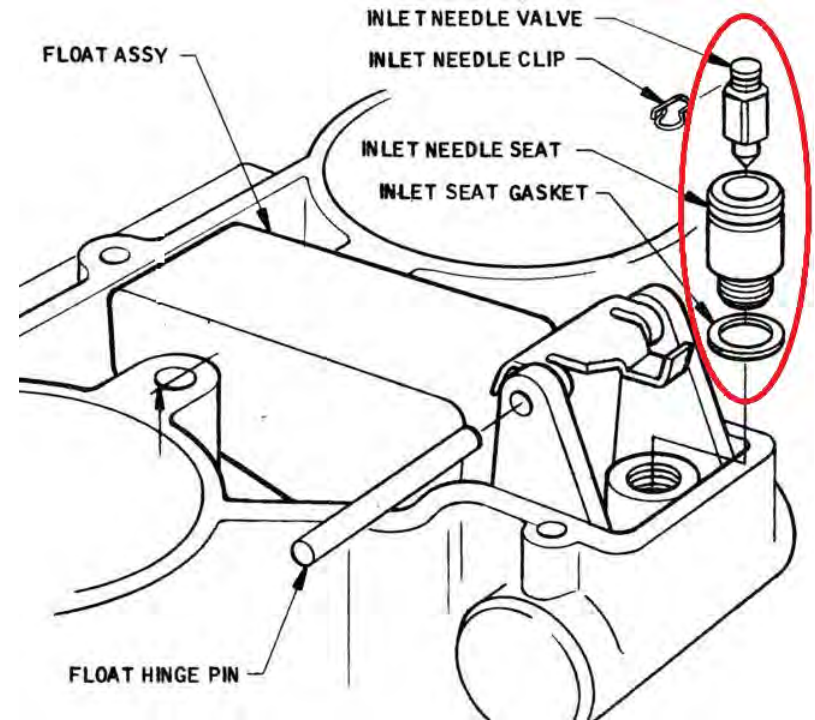
Though the umbrella check valves age better than the accelerator pump diaphragms, they still tend to become stiff. They are also very difficult to remove without damage. To avoid installation damage, remember to put a little lube on the bulge on the stem and pull gently with needle nose pliers on the stem. Sold in sets of four (4); \$10



# Metering Valves and Seats

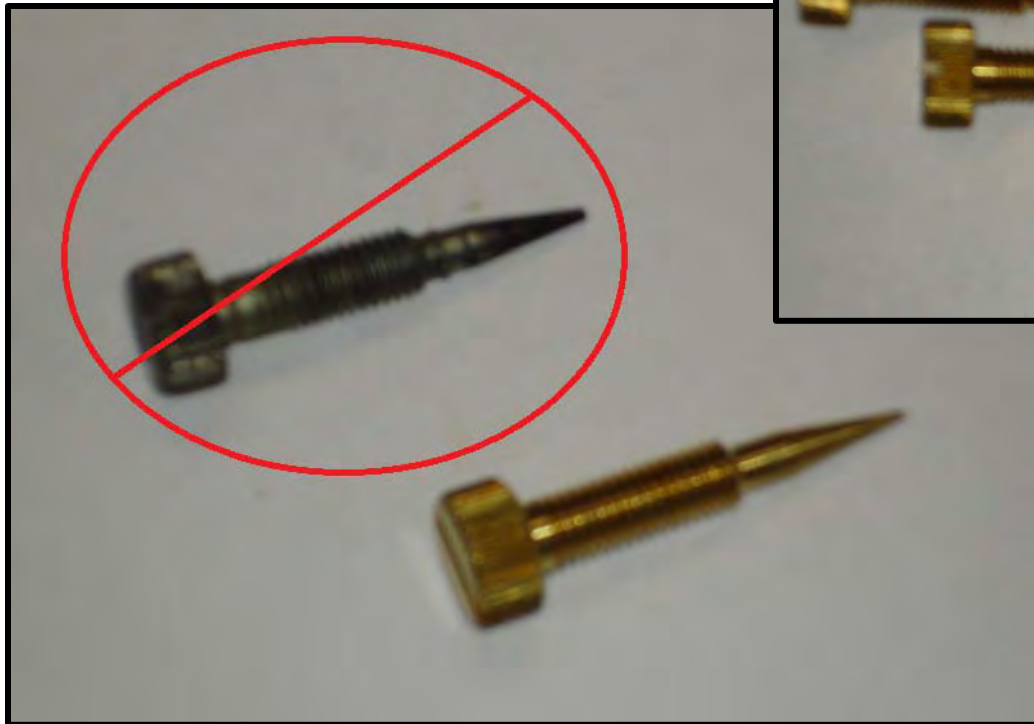
The tip of the metering valve is Viton. They harden and can become damaged with age. When they do, they do not shut off the fuel supply and can cause the main well to overflow at idle and low speed, usually spilling fuel on top of the carb. This is usually ingested and causes fouling at low speed or in the worst case, fuel leaks.

Available in Valve/Seat pairs: \$22/pair



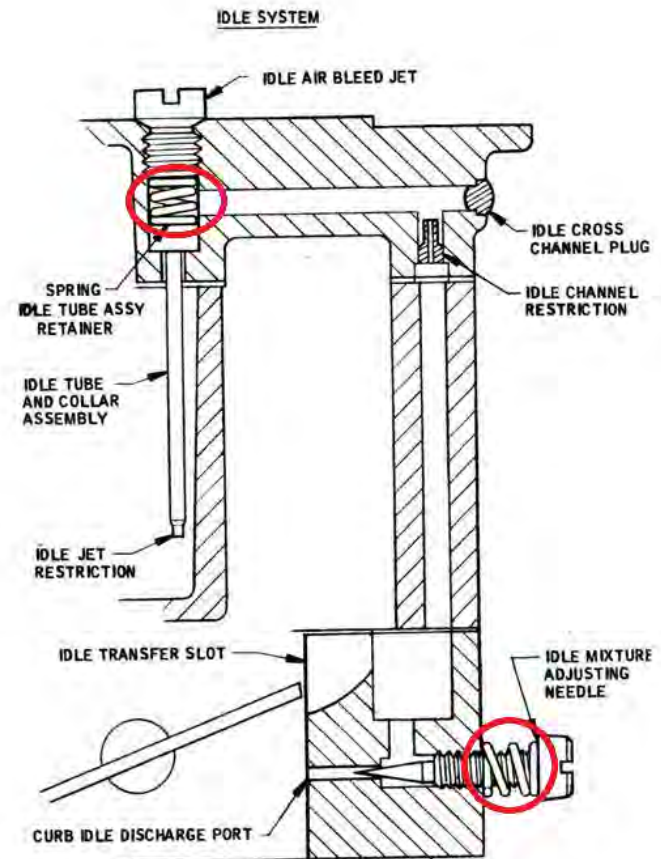
# Idle Adjustment Screws

Are your idle adjustment screws bent or have grooves in the needles from being over tightened? Or maybe just rusty and unsightly? It's a pretty common problem. Here's a set of new idle adjustment screws. Plated and perfect. Sold in sets of four (4): \$20/set.



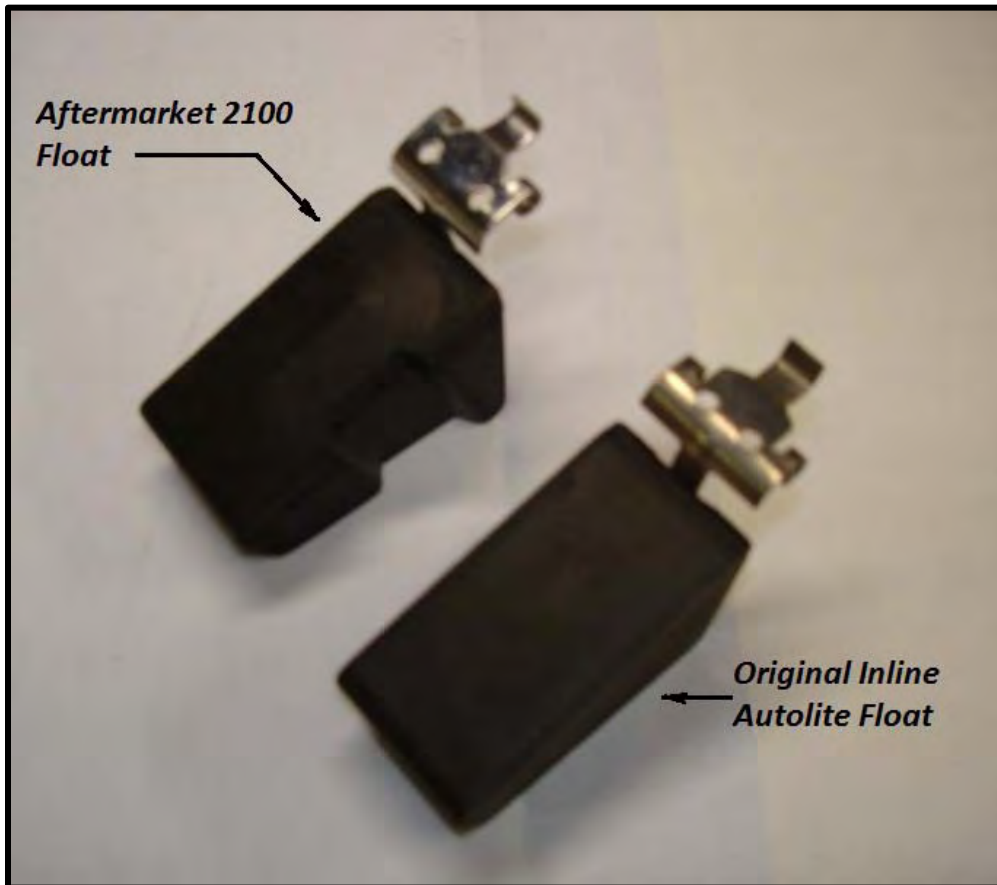
# Idle Adjustment Screw & Idle Tube Retainer Springs

These are suitable replacements for idle screw springs and can also be used for the idle tube retention installed under the Idle air bleed jet. Ends are ground as in originals for proper seating and fit. Sold in sets of four (4): \$5/set.



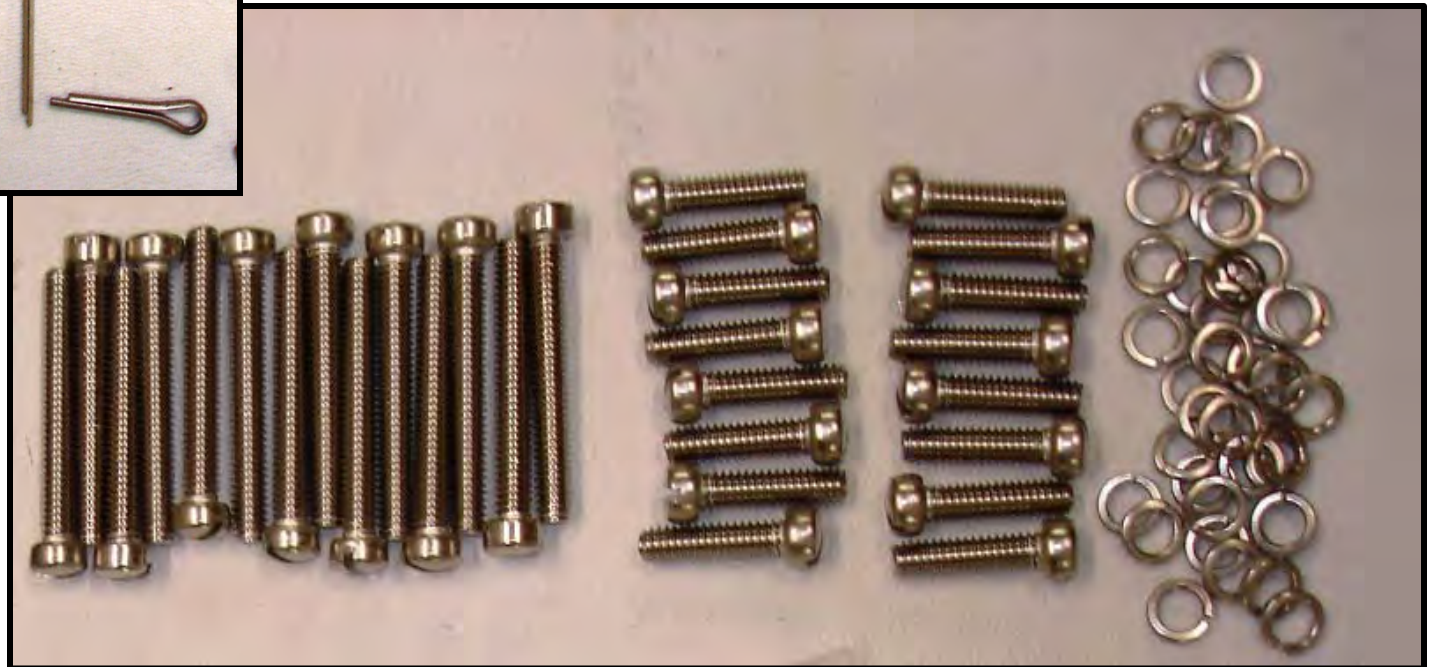
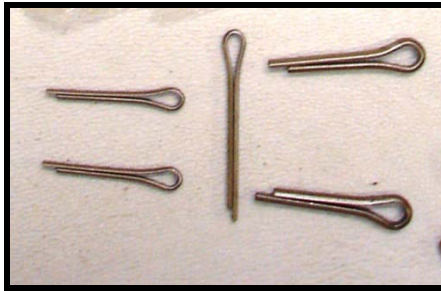
# Floats

Inline Autolites share their float with the 2100 series two barrel Autolite carburetor. Unfortunately, there were multiple styles of floats and the aftermarket replacements that are currently produced for Autolite 2100 have a bulge that causes interference with the main well casting on Inlines. If you're in a pinch, I can provide a pair of the aftermarket floats shaved in to make them the same volume as original inline floats. \$25/pr.



# Stainless Carburetor Hardware Kits

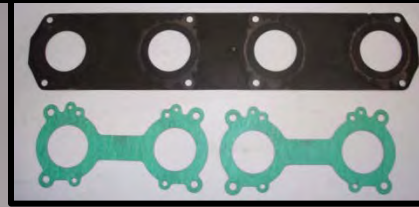
The black oxide original Phillips fillister head hardware was never the most attractive. This is a set of slotted stainless fillister heads, lock washers, and cotter keys. \$20/set



# Inline Carburetor Gasket Sets

These are CNC cut and sold in sets of 6 pieces; I use the same gasket that is used between the throttle plate and main well casting for base gaskets as shown in the upper right hand corner since the original style base gaskets are overly large and unsightly. Gasket color may vary with tan being most commonly stocked.

Original Style Base Gasket →



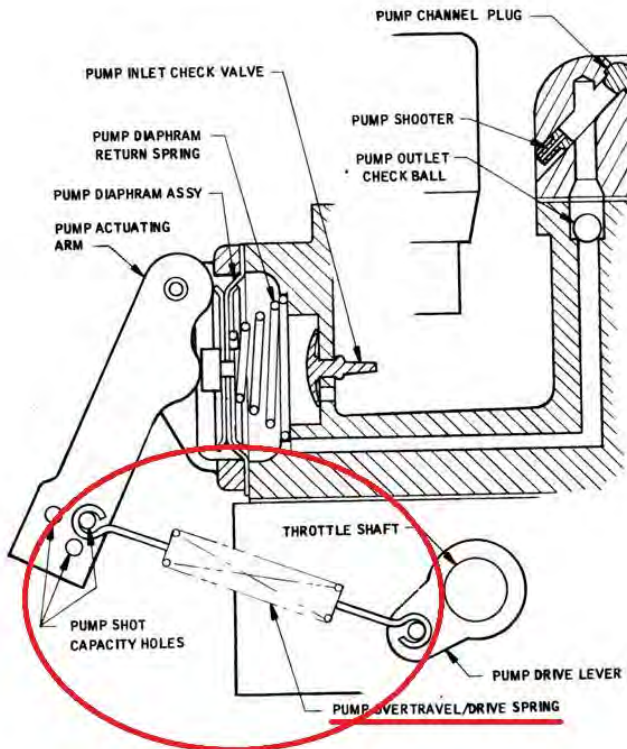
D0ZX9510A:  
\$90/set

D0ZX9510B:  
\$90/set



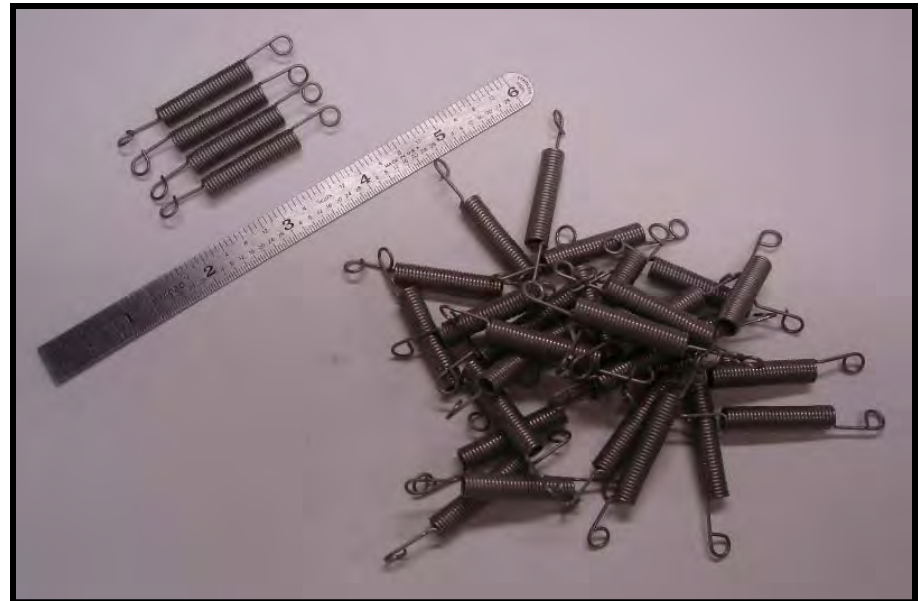
# Accelerator Pump Springs

These springs are reproductions made from high quality 302 stainless and will not deteriorate with age due to rusting. They were made to the spring rates of the originals as I have verified over the many I have measured over the years and I match them in length and rate on my spring tester. The purpose of these springs is to extend in over travel, loading the accelerator pump diaphragms against fuel in the accelerator pump cavity so the pump shot is applied in the same amount and at the same rate in each circuit. This is especially important for carburetors being used in Individual Runner induction systems. They are available in matched pairs or sets of four (4).



Matched Pair: \$25

Matched Set of (4): \$45



# Main Well Retainers

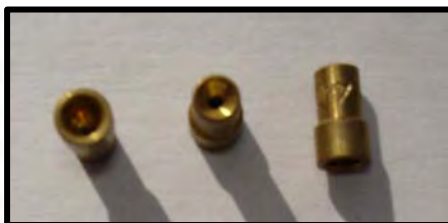
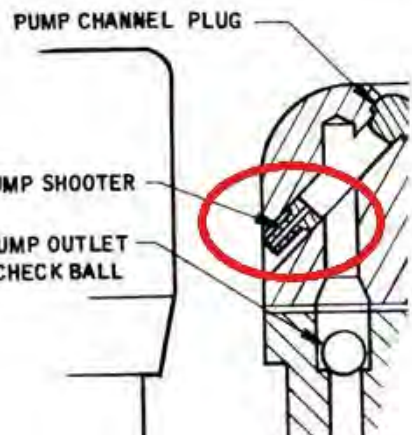
These are dimensionally identical reproductions of the originals. They are available without the bleed orifice. The bleed orifice from your old main well retainer can usually be reused if it is not drilled out or damaged. I can also provide with bleed orifice at additional cost. \$15 each or set of four (4) for \$60



# Bleed Orifices

These orifices are used as high speed bleeds in the main well retainers, accelerator pump shooters, and also pressed into the air horn upper body casting when used as the idle channel restriction in D0ZX9510 A carburetors. Specify orifice diameter.

Sold in matched sets of four (4); \$30/set



D0ZX9510A High Speed Bleed: 0.031"

D0ZX9510B High Speed Bleed : 0.055"

D0ZX9510A Accelerator Pump Shooter: 0.035"

D0ZX9510B Accelerator Pump Shooter: 0.028"

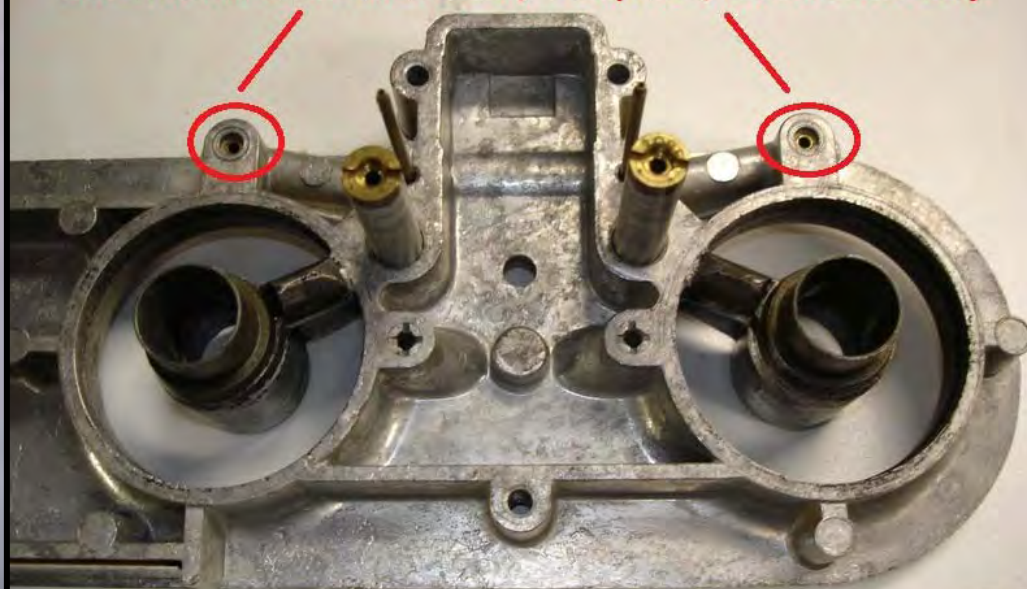
D0ZX9510A Idle Channel Restriction: 0.046"

You'll need to remove the high speed bleed from your old main well retainer (.031 for and 875 cfm "A" carb & .055" for 1425 cfm "B" carb) and press it into the new retainer.



This is for the main well retainer only and does not include the high speed bleed.

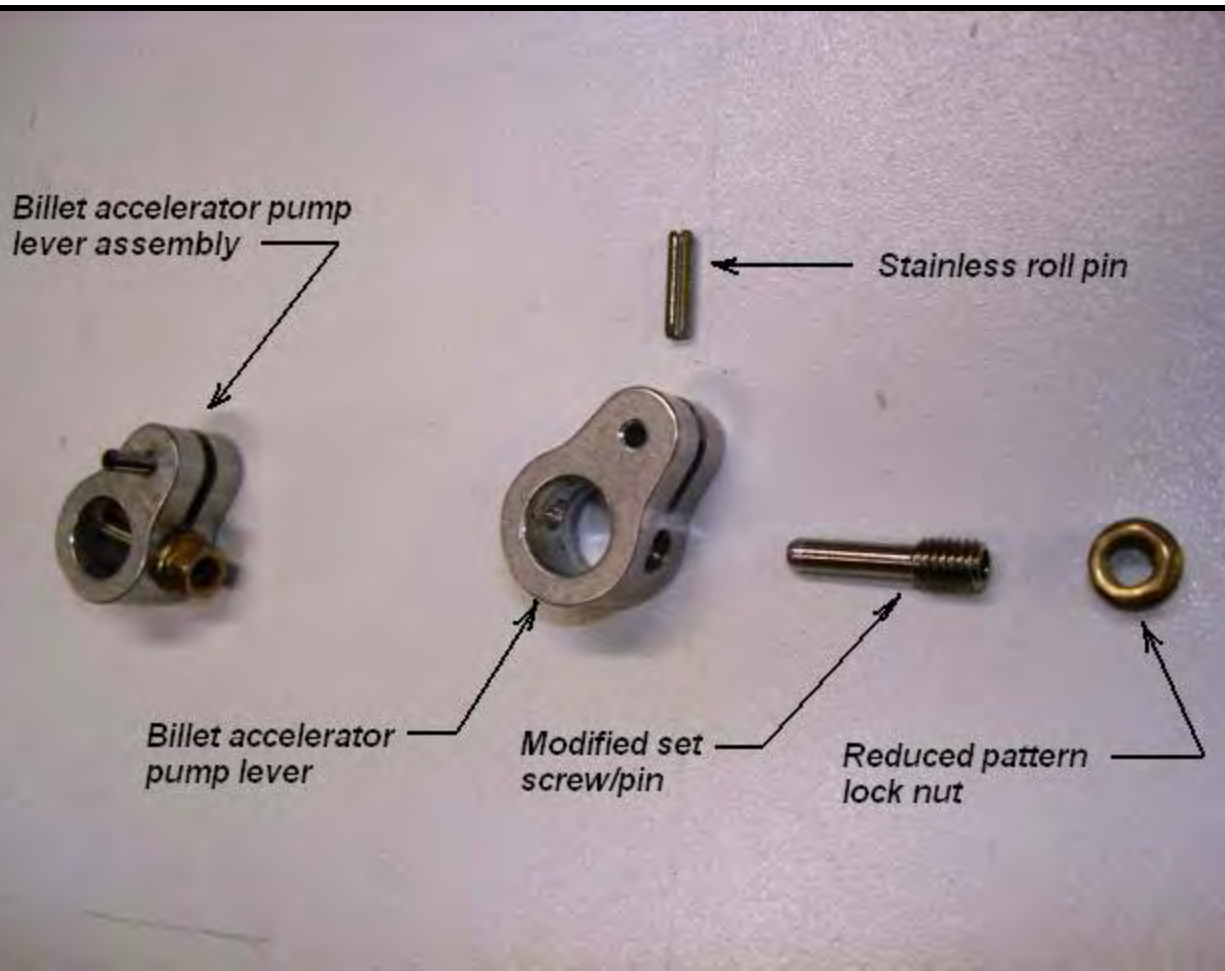
**Idle Channel Restriction Bleed, 4 Required, D0ZX9510A Only**



# Accelerator Pump Drive Levers

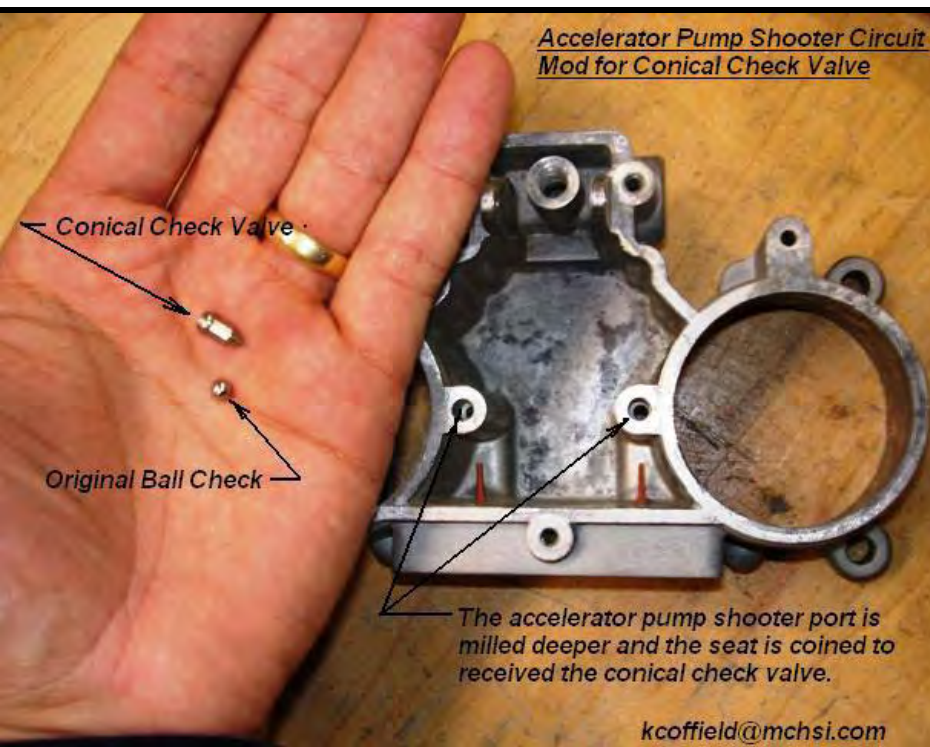
The original nylon accelerator pump drive levers become brittle with age and break easily. They can also be difficult to remove without damaging them. These are strong aluminum reproductions with a threaded lock pin so are more easily removed and very durable.

\$45/pair.



# Accelerator Pump Conical Check Valves

These are stainless steel reproductions of the conical check valves that were sold by Ford in Inline Autolite Carburetor service and tuning kits. They replace the ball checks for more positive sealing and prevent the accelerator pump well from being sucked dry due to the poorer sealing ball checks. The main well casting must be drilled deeper to receive these conical check valves. Purchase price includes professional main well casting modification and installation when purchased with rebuild service. Sold in sets of four (4). \$25



Set of 4 conical accelerator pump check valves included with installation instructions.

kcoffield@mchsi.com



# Identification Plates

I have a limited supply of blank name plates available that can be re-stamped to replace damaged or missing name plates. These are in perfect condition and are quite hard to come by. Available while supplies last on first come first serve basis. Please specify A or B carburetor and 1F or blank version. \$35 each.

**Autolite**  **IN - LINE**

**DOZX9510A** SERIAL

**Autolite**  **IN - LINE**

**DOZX9510B** SERIAL

**Autolite**  **IN - LINE**

**DOZX9510A** SERIAL **1F**

**Autolite**  **IN - LINE**

**DOZX9510B** SERIAL **1F**

Inline Autolite Carburetor  
-Deciphering your ID Tag

**Autolite**  **IN - LINE**

**DOZX9510B** SERIAL **1F** **20541**

Type of inline carb; A=875 cfm, B=1425cfm

9500-9599 = Carburetor and supercharger designation,  
9510=Inline Carb

The design office; X=Emissions, Economy and Special  
Vehicle Engineering (Muscle Car Parts).

The model of car; Z=Mustang (for TA B302's presumably)

Last digit of year of introduction or revision; 0=1970

The decade of introduction; D=1970's

The number of carb produced that month

Type of carb; 1=smaller 875 cfm  
2=larger 1425 cfm

The month of production in alphabetical  
order.

The last digit of production year. \*

So, this is the 541st, 1425 cfm inline carb  
produced in June of 1971.

\*A number present after letter is day of  
month the carb was manufactured.

kcoffield@mchsi.com

# Inline Carburetor Standard Jet Set

Autolite style jets are no longer in production. I have them made in large runs and package them in sets for each version of Inline Autolite Carburetor. The standard set comes with twenty sizes, 4 of each size (total of 80 jets), with 5 sizes above and below the standard (as originally delivered ) idle air and main jets. The jets are stepped in 0.002" increments, individually packaged, and come in a hardwood box as shown.



\$300 Complete, individually packaged with wooden case as shown.

# Jet Set for Pair of D0ZX9510B Carbs

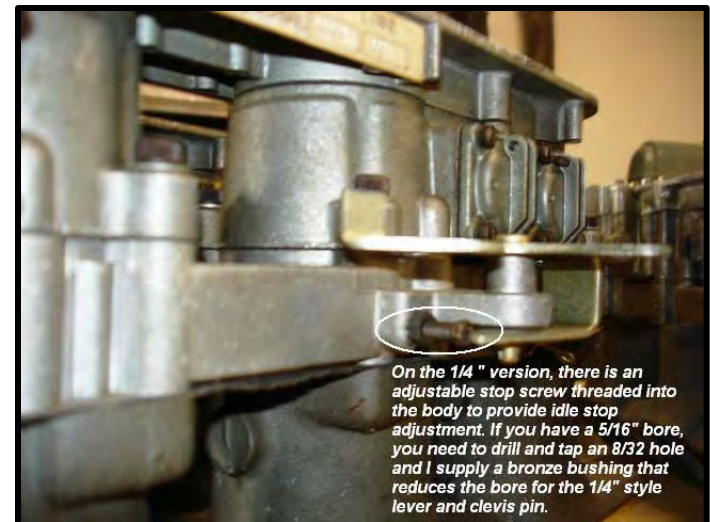
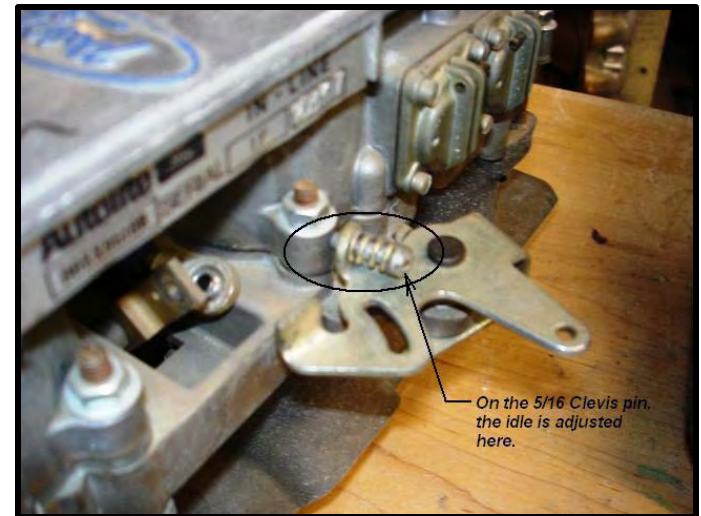
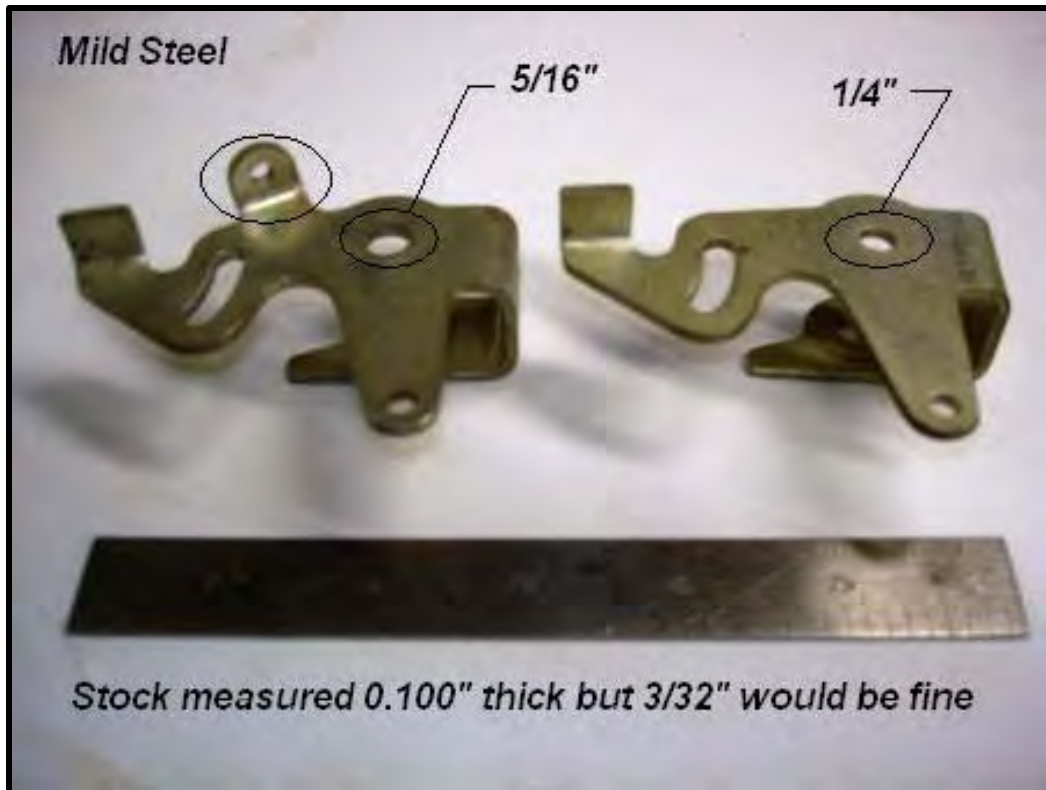
This kit is similar to the standard kit with 20 different sizes but has 8 of each size (160 total jets) to accommodate two B-Carbs when used in Independent Runner configuration. Like the standard set, there are 5 sizes above and below the standard (as originally delivered ) idle air and main jets. The jets are stepped in 0.002" increments, individually packaged, and come in a hardwood box as shown.

\$600 Complete,  
individually  
packaged with  
wooden case as  
shown.



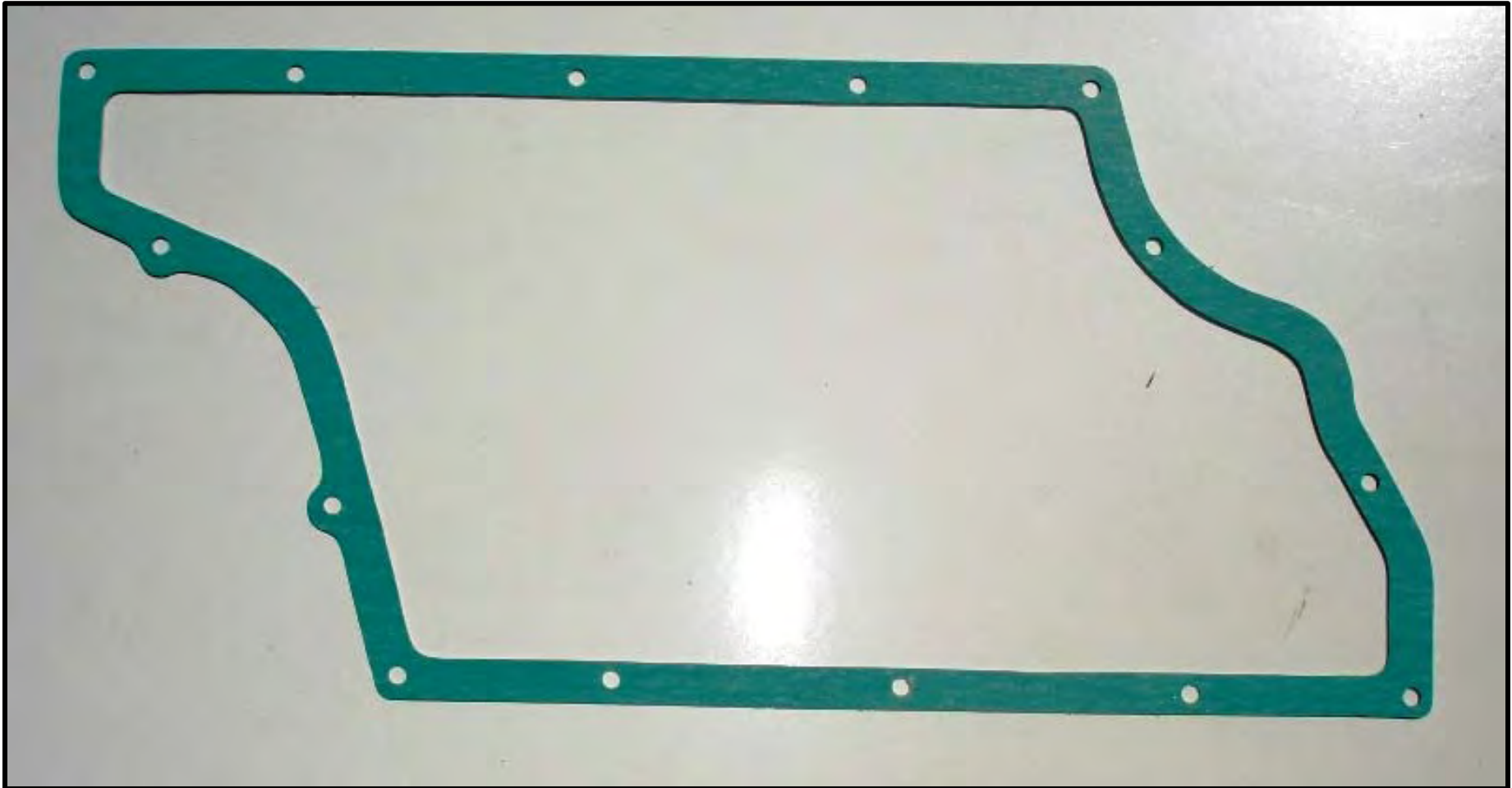
# Accelerator Lever

Accelerator levers came in two versions; early and late production. I have a limited number of the late version with the  $\frac{1}{4}$ " hole which can be adapted to either carburetor with the use of a bronze bushing for the  $\frac{5}{16}$ " style. These levers apply progressive opening of the throttle plates for good low speed resolution and control. \$75/each subject to availability.



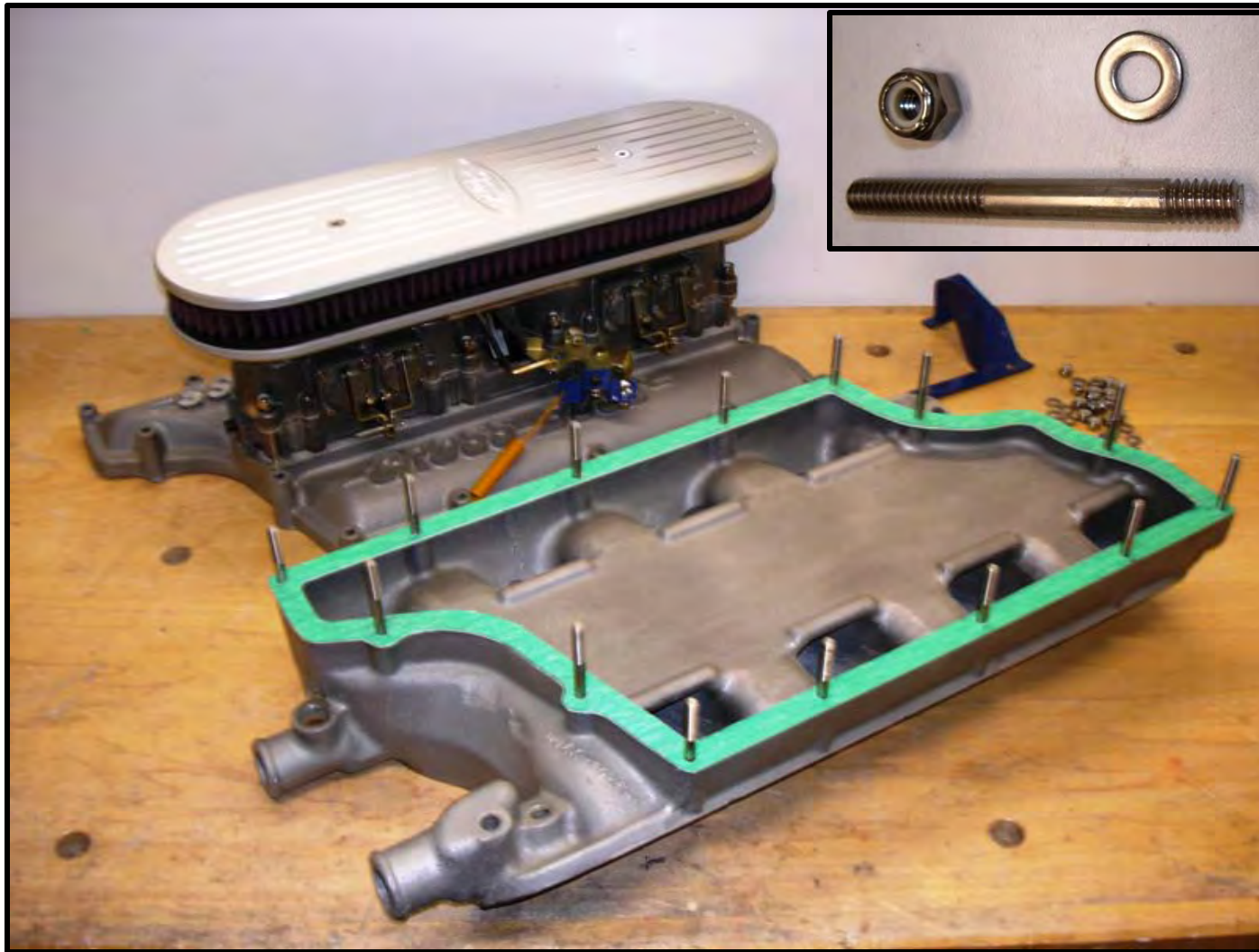
# Cross Boss Intake Manifold Gasket

These reproductions are made from high quality modern gasket materials and are pattern blanked with crisp edges and well aligned holes. These are one-piece and consume quite a bit of gasket material so are priced accordingly. \$60 Each.



# Stainless Steel Carburetor and Intake Manifold Stud Kits

These are stainless stud, washer, and locknut kits for intake manifold and carburetor. These help avoid stripped threads in castings. 14 stud kits for manifold and 8 stud kits for carburetor.



14-Stud Intake  
Stud Set with Nuts  
and washers: \$55

8-Stud Carburetor  
Stud Set with nuts  
and washers: \$45

# Carburetor Air Filter Gasket

This is fuel resistant closed cell adhesive backed foam gasket material that is applied and then cut to length. This is excellent for use with my billet air filter assemblies.



Carburetor Air  
Filter Gasket: \$5

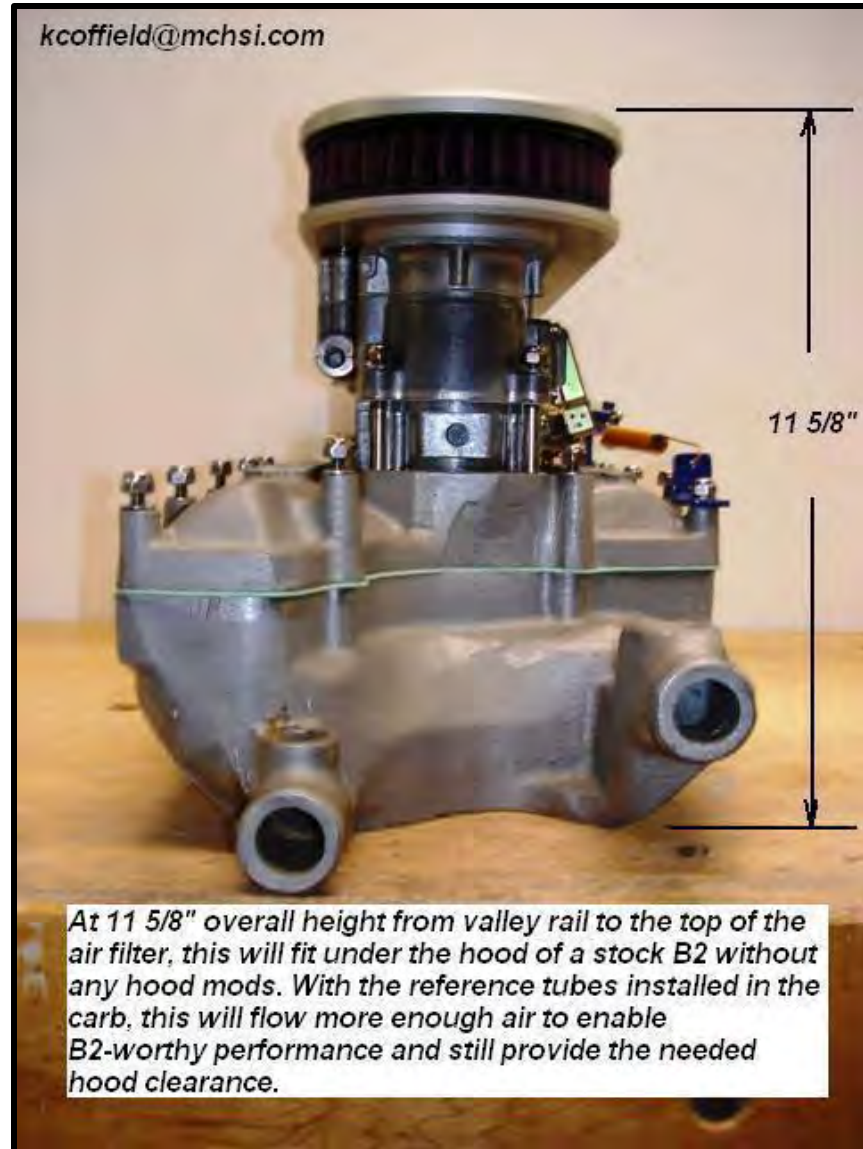
# Billet Aluminum Filter Assemblies

These are high quality CNC'd billet filters for use on Inline Autolite Carburetors. They have anodized finish for durability and are ball mill engraved. They can be fitted with filter elements ranging from 1 1/2" to 3" tall. Each kit contains all necessary hardware and also includes an engraved, clear, high temperature polycarbonate lid for show or use. See following pages for installed photos and additional details. \$650 Complete as shown.



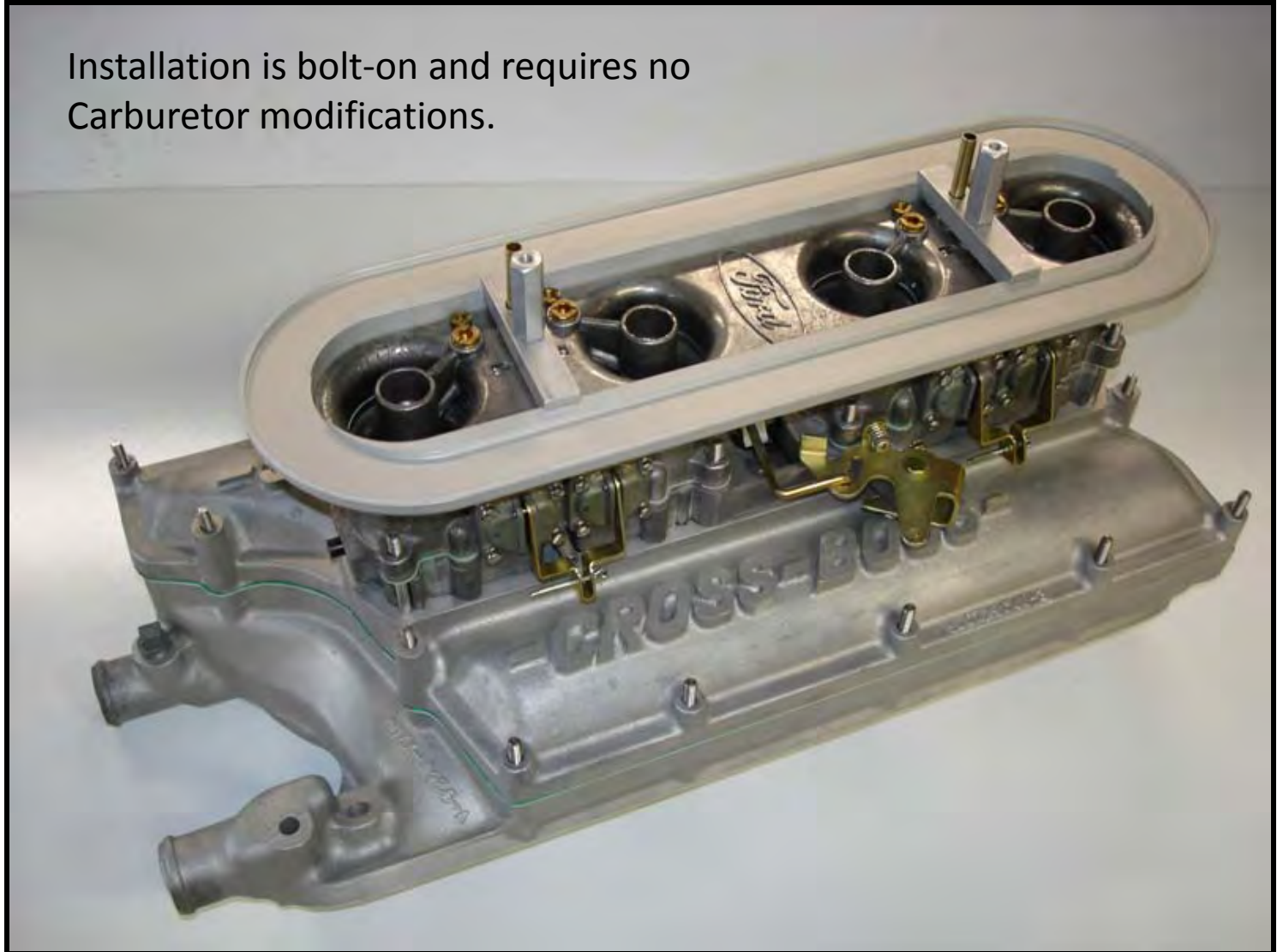
# Cross Boss Installed Height

Shown with 1 ½" tall filter element installed.



# Filter Base Installed

Installation is bolt-on and requires no Carburetor modifications.



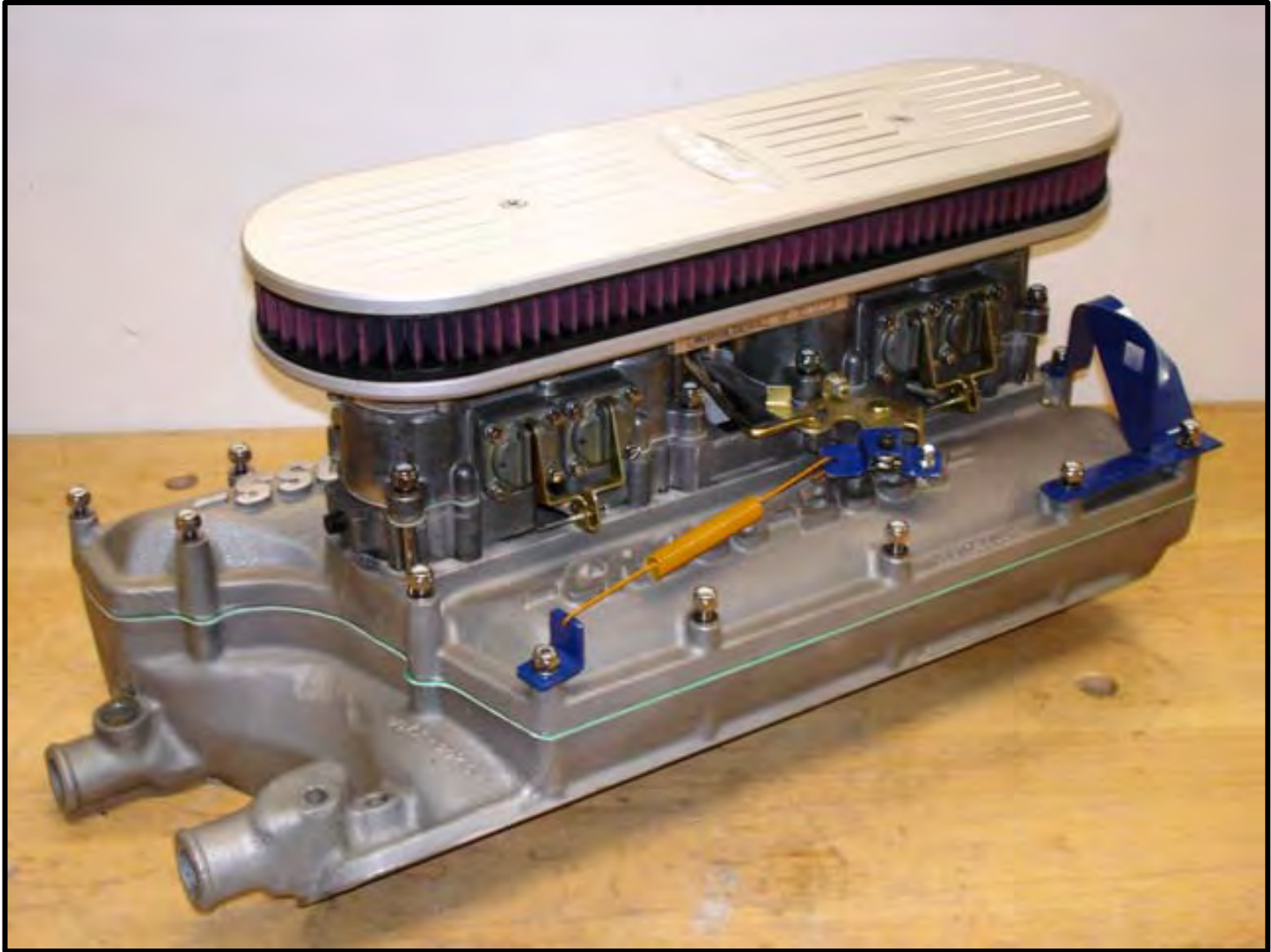
# Clear Lid Air Filter Lid



# Natural Aluminum Finish Filter



# Natural Filter Assembly on Cross Boss



# Black Filter Assembly on Cross Boss



# Installed Height, Doug Nash Dual IR Inlines

The filter assemblies use a standard size washable K&N filter element. The height shown below is with a 1 1/2" tall filter element (included). Heights of 2", 2 1/2", 2 3/4", and 3" are also available from K&N and would require a taller stand-offs to mount the lid.



[kcoffield@mchsi.com](mailto:kcoffield@mchsi.com)

Filters bolt directly to the inline carbs without any modifications to the inline carburetor.

[kcoffield@mchsi.com](mailto:kcoffield@mchsi.com)



# Dual IR Inline Autolites

*The clear lids are high temp polycarbonates, are cut from the same cnc program as the aluminum lids, and could be run if so desired. The aluminum lid is anodized for corrosion protection and ball end milled engraved in tribute.*



kcoffield@mchsi.com

# Dual IR Inlines Black Filter Lids



[kcoffield@mchsi.com](mailto:kcoffield@mchsi.com)

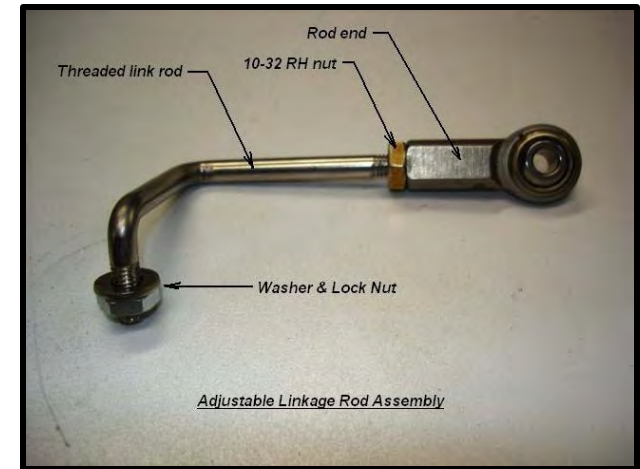
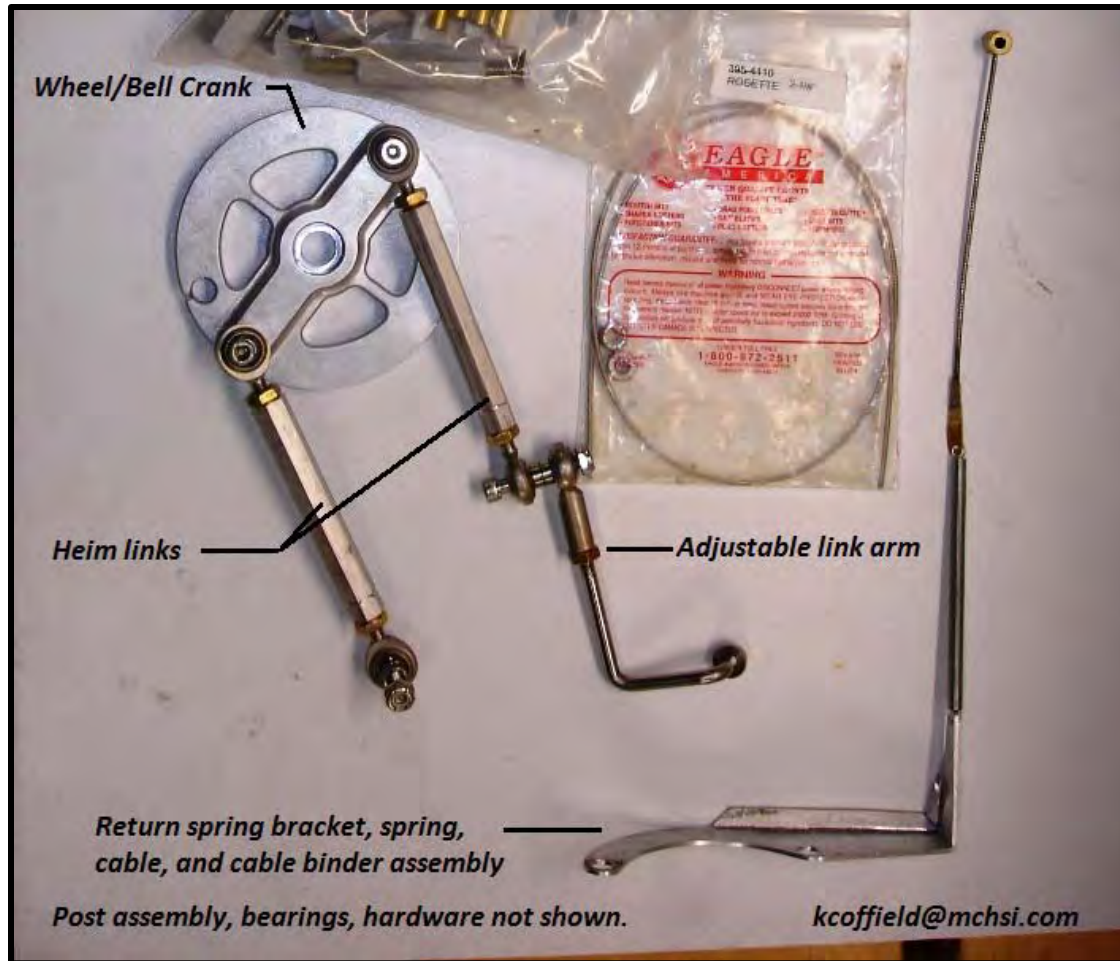
# Dual IR Inlines Clear Filter Lids



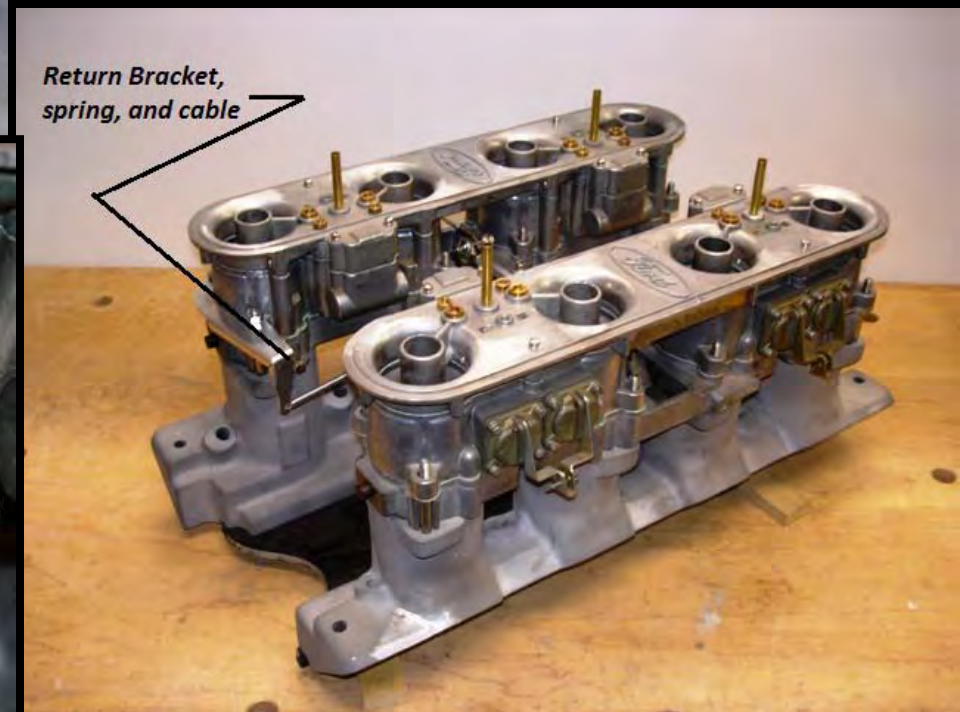
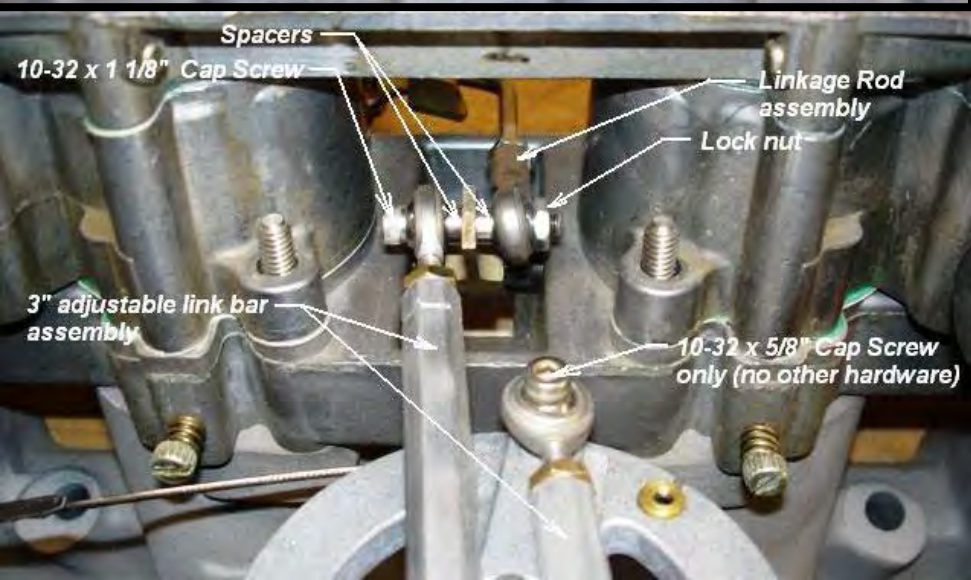
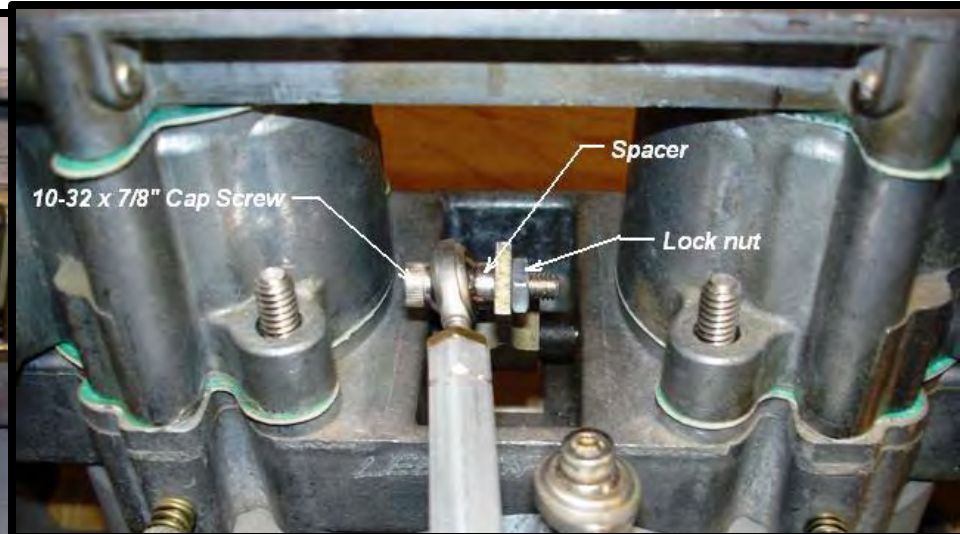
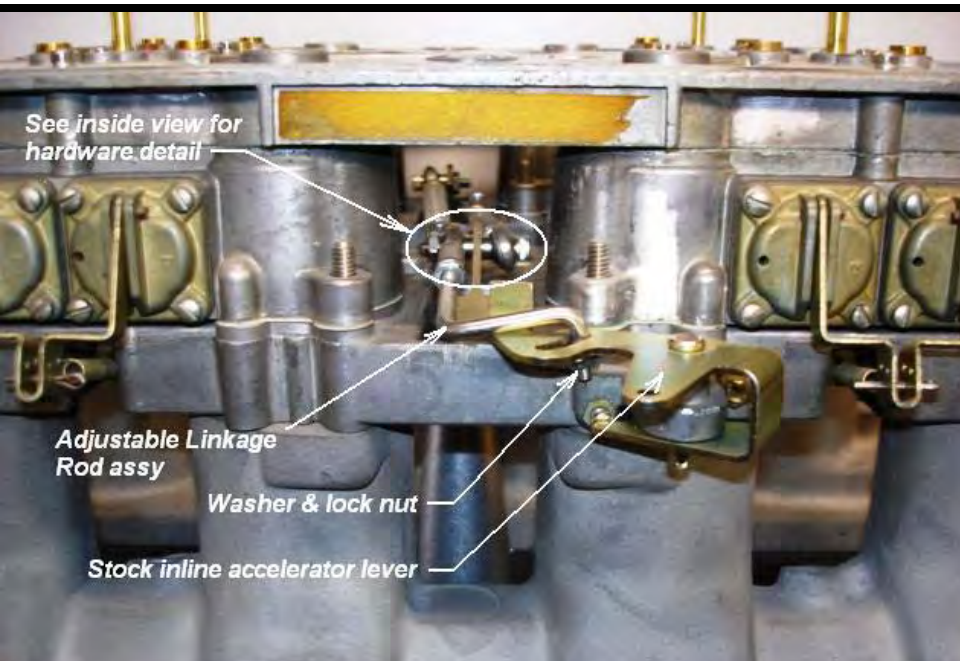
# Dual IR Inlines Natural Filter Lids



# Dual IR Inline Linkage



# Dual Inline Linkage Detail



# Rebuild and Restoration Service

- It's always difficult to guarantee a rebuild price without seeing your carb but if it's running, is in reasonably good shape, and has not been altered or too bugged up, most carbs only need to be cleaned up and have the soft goods replaced. Soft goods consist of (4) accelerator pump diaphragms, (4) umbrella check valves, and a gasket set. The soft goods are \$120. I get \$250 for labor (if you buy rebuild parts from me) and \$25 to crate and ship in the continental USA. I also blue print and gauge all bleeds and critical features so you can be assured of your baseline configuration before tuning. So a basic rebuild job as described above and returned to you \$395.
- If you have a Cross Boss and Carb or Doug Nash Dual IR Inline set up and want it restored like the ones pictured in this pack, send me a picture of your system for a quote.
- I can also repair damaged castings with cracks or broken mounting ears if needed. I need to quote each one because all are different, but it's usually about \$150 to TIG an ear back on and detail with a burr and cartridge roll. I can also fix other casting mods and flaws but would need to see it to quote.