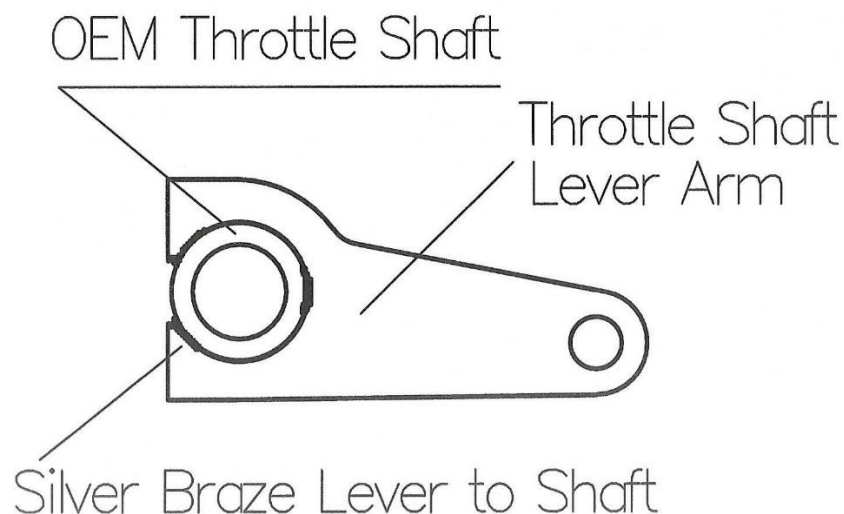


Jaguar XKE ZS CD175 Tri-Carburetor Throttle shaft Linkage Options

OEM throttle shafts: (Modifications of the FWD Shaft)

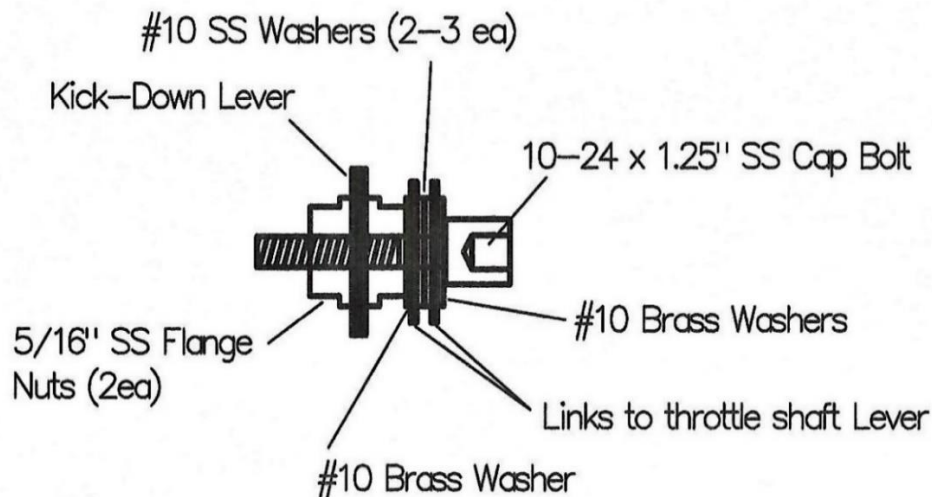
1. After 3 carburetors are installed on the manifold, the Aft & Center **Carburetor shaft lengths require trimming** and then hooked together with Zig-Zag clamps; Check the location of the **lost motion lever** (salvaged from the two-carburetor OEM setup), **may also require trimming**, it should be just aft of center line between forward and center carburetor; held in place by two Zig-Zag clamps (P/N C30342).
2. **Modification of the FWD OEM Throttle Shaft:**
Option 1. I use two forward OEM shafts “tubes” (very hard to find new) **cut, spliced and pinned**; using an 11/32’ dia. Internal shaft to get the two levers in the right location and angle; one opposite Auto-Transmission Kick-down Lever the other opposite the Carburetor Lost Motion Lever between the Forward and Center Carburetor.
Option 2. The OEM shaft will be ½” too long for Mark X manifold, so the FWD side will have to be trimmed. Trimming the shaft by ½ inch will remove the bearing area that the ball socket adaptor fits into. You will have to drill the FWD side of the OEM “Tube” shaft ½” deep with a 3/8” drill bit (best to drill 3/8” hole before you cut ½” off the FWD end). Then you need to silver solder (SSF-6) a New Shaft Lever (in basic kit) to OEM shaft opposite Carburetor shaft lost motion lever. (You-Tube has instructions for handheld propane tank silver soldering); or take the shaft to your favorite welding shop.

OEM 1/2" ID Throttle Lever Carburetor Shaft Lever



3. **The transmission kick-down lever** will be out of alignment approximately **3/16-5/16"** fore and aft with the OEM lever location; and will require: a 1-1/4" long 10-24 SS Cap head bolt, Flanged Nuts, Washers (as needed) installed on forward side of the Kick-Down Lever. The links should be loose (side to side) on the bolt by the thickness of one brass washer.

Kick-Down Lever Offset



4. The OEM Carburetor Shaft "**Lost Motion Lever**" (allows the choke, to advance the throttle without binding the throttle linkage). The dimensions are: 1.5" C.L. of shaft to C.L. of 3/16" pin hole. The transmission kick-down lever on throttle shaft is 1.125' C.L. to pin C.L... The Carburetor Lever on the throttle shaft is 1.25" C.L. to pin C.L.
5. The two **straight links** are for the throttle shaft to trans-kick-down lever and the two **curved links** are for the throttle lever to the carburetor shaft lever (lost motion lever). The curved in the link should be up. All links are "as machined", so all sharp edges should be smoothed with sandpaper, especially at the 3/16 pin hole area.
6. The transmission **kick-down cable** is **re-attached after all the other linkages are in place**. With the cable end pushed in against the rubber tube over the exposed cable, the lever on the kick-down bracket will not line up with the Cable Fork **pin hole**. Loosen the jamb nut and adjust threaded portion of cable Fork until the Fork **pin hole aligns** with the kick-down assembly **lever pin hole**; then install clevis pin and safety. Tighten the jamb nut and remove the rubber tubing you originally placed over the exposed cable. The final adjustment of cable to achieve the correct transmission shift point and down shift point, will require **Road Testing** per the Maintenance Manual.
7. Although each carburetor has its own return spring, it was necessary for positive return, to add a SU return spring to a shaft lever between the aft and center carburetors. Throttle Return Spring Lever - C14371 and Spring C34388 should be attached to frame with bracket P/N BD-28582.

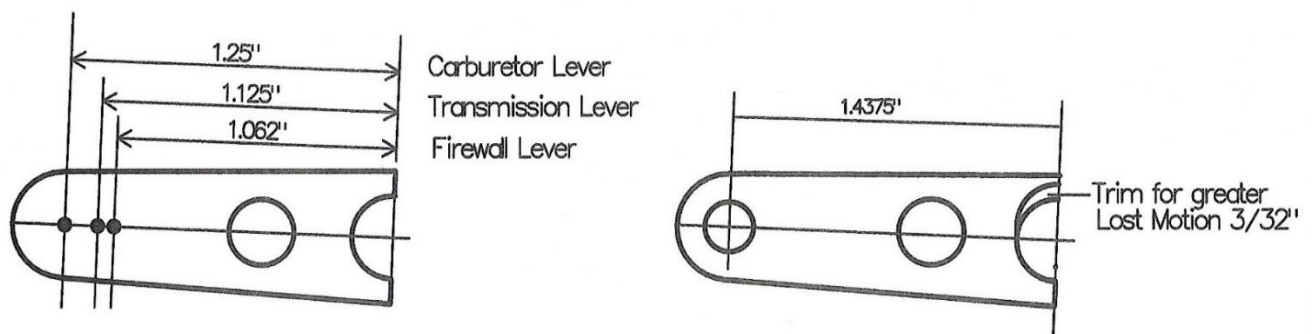
Option Without “Modifying” OEM throttle shafts:

1. Use two Craftsman $\frac{1}{4}$ " socket extensions (one 14" and one 9") and Craftsman $\frac{1}{4}$ " universal joint. Cut to length required (use OEM shafts as templet) These are chrome plated $\frac{5}{16}$ " dia. Shafts. See layout Diagram below.
2. Three $\frac{5}{16}$ " clamping levers will be needed. They can be **3ea SU P/N C24927**, **3ea Webber DCOE / IDF 8MM levers**, or Moss **2ea P/N 021-692** and **1ea P/N 021-690**.

The $\frac{3}{16}$ " pin holes will have to be measured and drilled at the right locations. If the OEM lost motion link with 1.5" C.L. to C.L. is used between the forward and center carburetor, then the following lever dimensions apply to Throttle shaft levers: **1.25" Carb. Lever**, **1.125" Trans. Lever** and **1.062" firewall Lever** (an exact size templet for setting the angles and location of the levers is in the drawing package)

3. **If the OEM lost motion link is not available**, an additional **SU P/N C24927** lever can be used on center carburetor shaft. **This lever is $1 \frac{7}{16}$ " C.L. to C.L., so the 3 levers on the throttle shaft will be 1.25" carburetor lever, 1.125" transmission kick-down lever and 1.062" for Firewall lever. The upper lip of the $\frac{5}{16}$ " pivot hole in the carburetor lever (P/N C24927) needs to be ground off to increase the lost motion range to at least $\frac{5}{16}$ " at the pin hole (see picture below). This setup will use only one Zig - Zag fitting.**
4. The $\frac{1}{4}$ " pin in the **SU transmission lever** and the **SU firewall lever** need to be replaced with $\frac{1}{4}$ "-20 x $\frac{1}{2}$ " SS Pan Head Bolt & lock nut, Loctite lever to clamp, **so that these two levers are fixed.**

SU Carberutor Lever dimensions



Throttle Shaft Levers

Carburetor Shaft Lever

SU P/N C24927 Lever



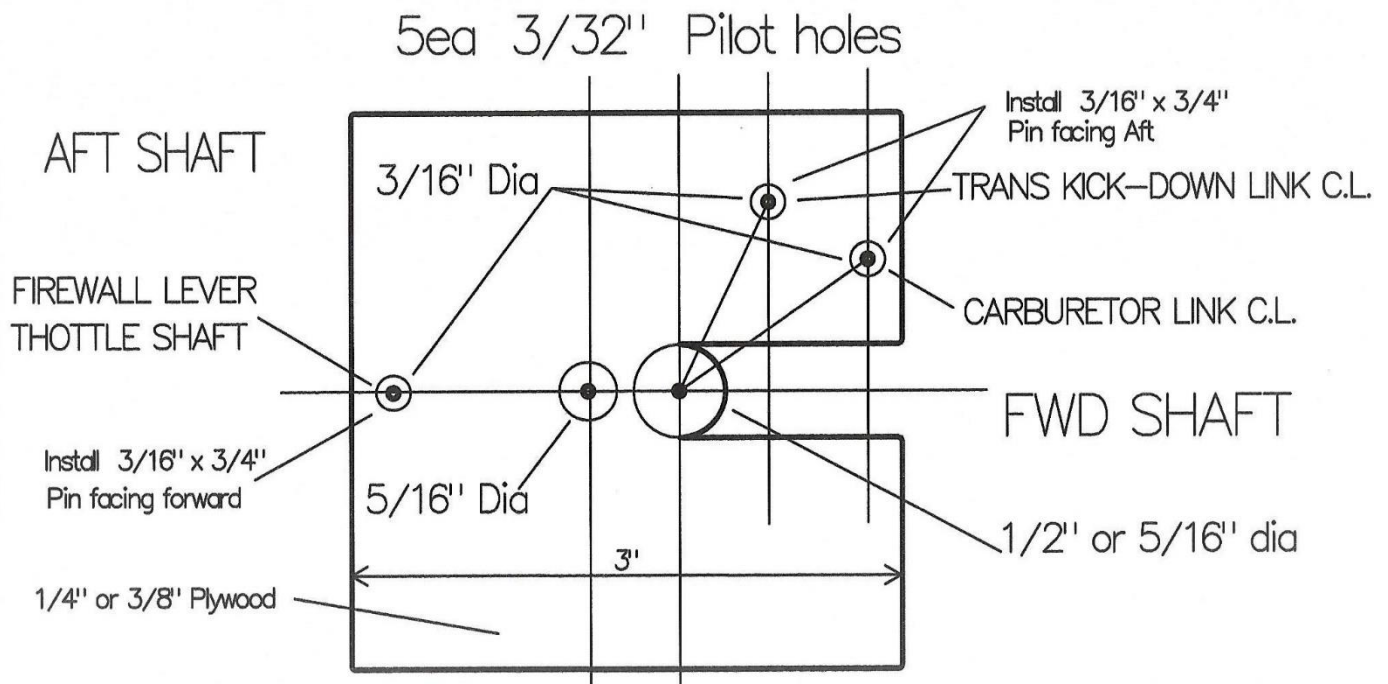
2224(2880) Jaguar S.2 4.2- XKE Stromberg Duel Carburetor "Lost Motion Link"



Used: \$68.00 5/16" Carb Shaft hole, 3/16" pin hole: 1.5" shaft C.L. to pin hole C.L.

Install between Center and Forward Carburetor; **trim** Center Carburetor shaft as required to fit.

THROTTLE SHAFT LEVER ARM TEMPLAT (3ea)



If you are using the 5/16" Craftsman Throttle Shafts, then the 1/2" Dia. OEM FWD Shaft Center Hole should be 5/16". Plywood can be 1/8" - 1/4" - 3/8" interior grade.

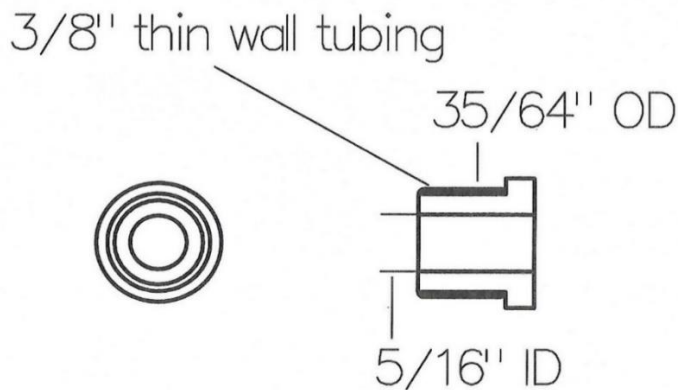
An Actual Size Print of templet is provided. Print last Page Below; after printing check that the base is 3 inches

Using Three 3" x 3" pieces of plywood stacked with the templet on top, mark and drill each of the Five 3/32" pilot holes. Then for each lever position templet, drill the appropriate pilot holes to correct diameter.

Throttle Shaft Bushings/Bearings in Manifold Boss

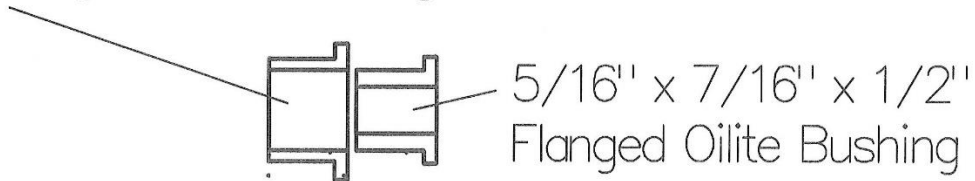
5. **Two flanged Oilite Bronze bushings: $5/16''$ id x $7/16''$ id x $1/2''$ length.** Stretch a $7/16''$ piece of $3/8''$ ID thin wall black Vinyl tubing (ACE Hardware 032888193970) over the Flange Bushings. Install them into the Mark X manifold shaft bosses (Adaptors removed) from inside facing out. When the $5/16''$ FWD rod is installed they are held in place by two inside **Set Screw Collar Stops** secured up against the flange of the bushing. These stops also keep the $5/16''$ shafts in their proper position.

$5/16''$ x $7/16''$ x $1/2''$ Flanged Bushing



Custom Throttle Shaft Bearing Stack

7/16" x 9/16" x 1/2"
Flanged Oilite Bushing

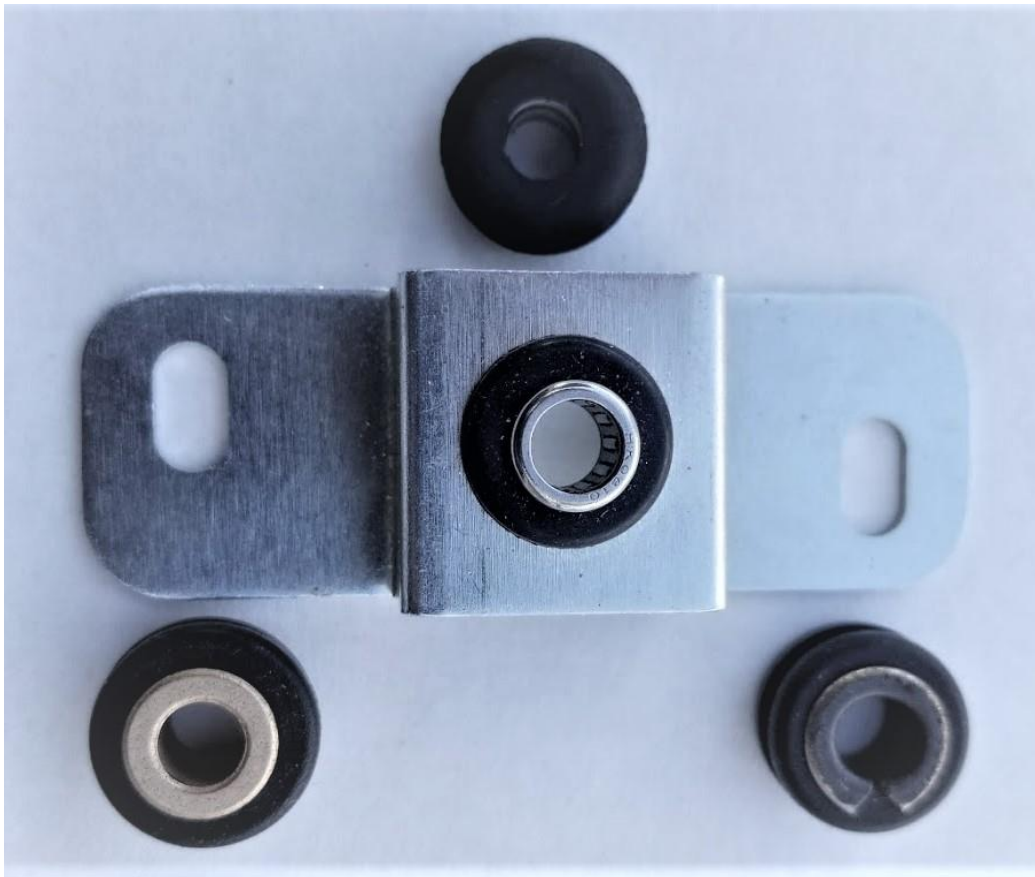
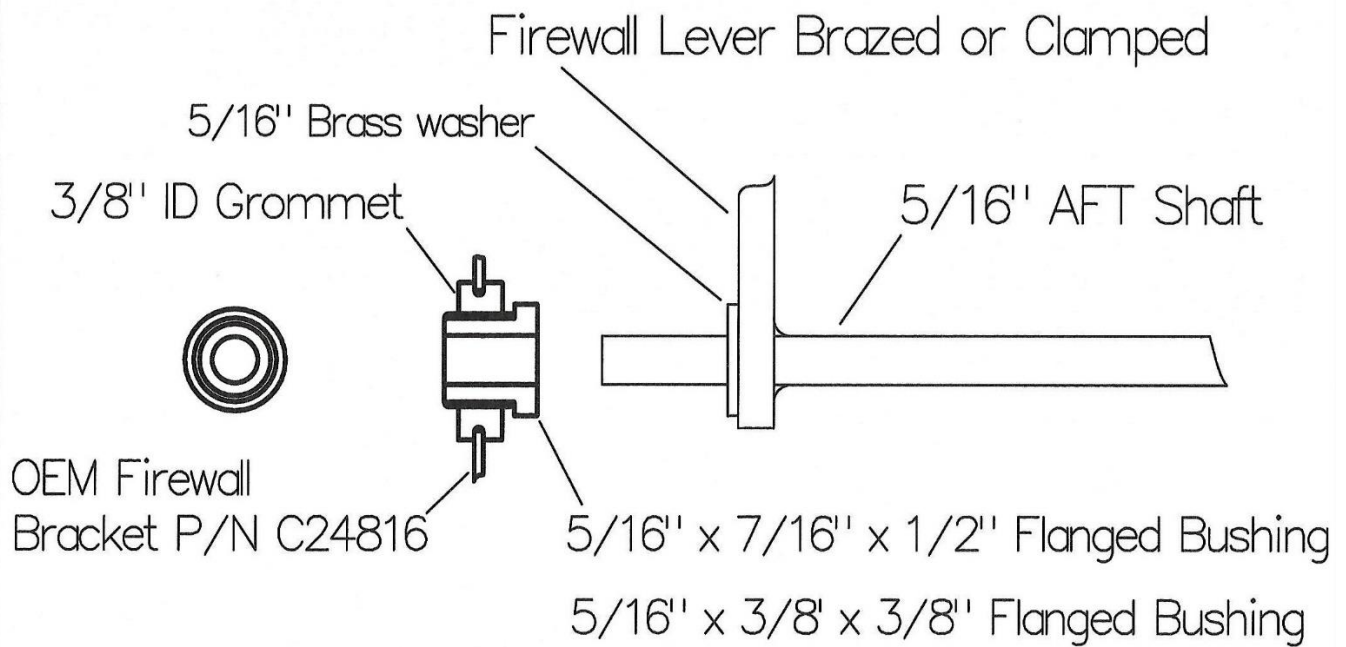


Drill Manifold Boss to 9/16" ID

6. **Firewall OEM Bushing can be upgraded** from 5/16" ID Rubber "Grommet" Bushing (P/N CO-34388) placed in the firewall mounted **Bracket P/N C24816**.

Bracket P/N C24816





Top Bush is OEM Rubber Grommet 5/16" ID (P/N **C34388**)

Center is 8mm x 12mm x 10mm needle bearing in 7/16" ID Grommet

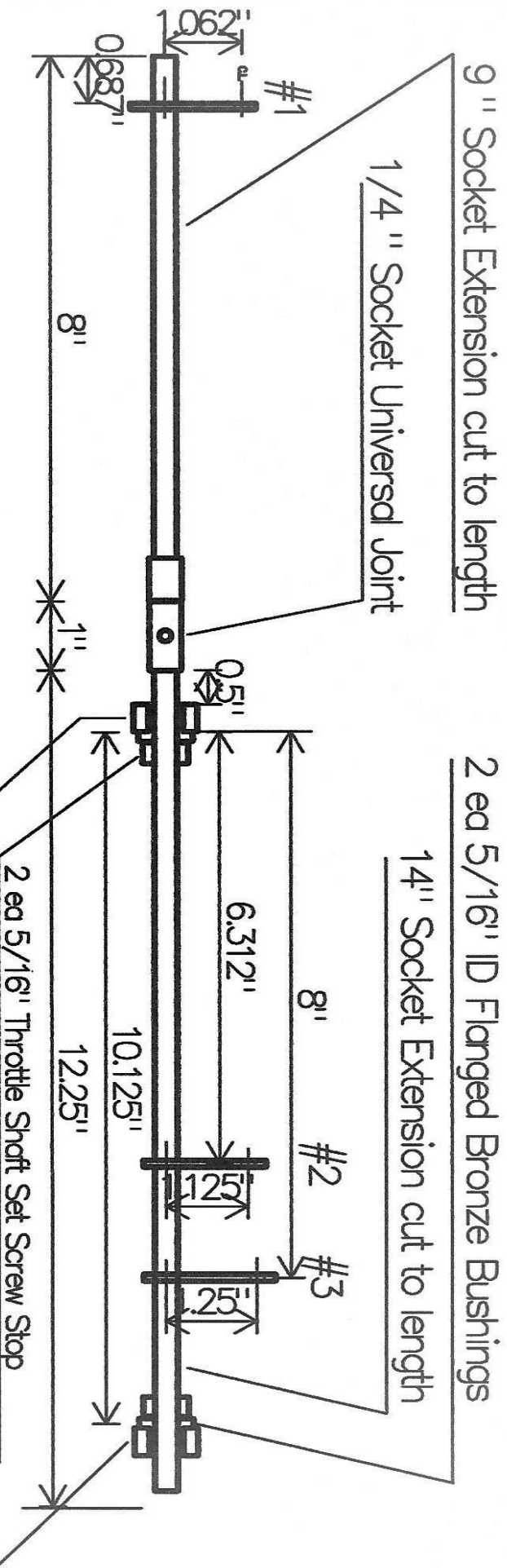
Left is 5/16" x 7/16" x 1/2" Flanged Bronze Bush in 3/8" ID Grommet

Right is 5/16" x 3/8" x 3/8" Flanged Bronze Bush in 3/8" ID Grommet

7. The **Machined Links** fit on either side of the Throttle and Carburetor Shaft Levers with a 3/16" x 1/2" Clevis Pin and #10 brass washers as needed. Insert Spring Pin or Cotter Pin into the Clevis Pin to secure assembly. The linkage should be loose by 10-20 thousandths side to side. HT Grease pin before assembly or add a drop oil motor oil after assembly.



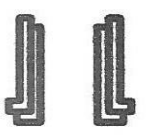
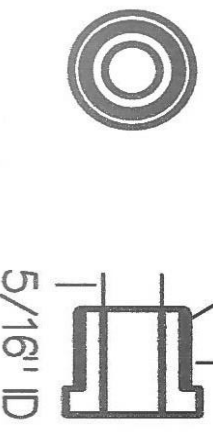
CRAFTSMAN 1/4" EXTENSION THROTTLE SETUP



- #1 Throttle Linkage lever at Fire Wall
- #2 Automatic Transmission Kick-Down Lever
- #3 Carburetor Throttle Lever

5/16" x 7/16" x 1/2" Flanged Bushing
 3/8" thin wall tubing 35/64" OD

5/16" x 7/16" x 1/2" Flanged Bushing
 7/16" x 9/16" x 1/2" Flanged Bushing Stack



THROTTLE SHAFT LEVER ARM TEMPLLET (3ed)

5ed 3/32" Pilot holes

