

## **Stromberg Carburetor Mixture Control Arm Extension**

Planes using the C-85 and C-90 Continental Engines

Some of our Cessna 120's and 140's had mixture controls with control movement of less than an inch but others had push-pull controls with longer movements. Users with the short movement tended not to use the control because of its sensitivity, but those with the longer-movement controls strongly advocated the use of the mixture control.

We took a look at those planes which had the mixture controls the owners used without the fear of sudden engine stoppage and found that the mixture control arm at the carburetor was about twice as long as the original; making the arm twice as long meant that the movement of the control in the cockpit was also doubled and there was less risk of getting too lean too fast.

Some owners with the longer arms had upgraded to the vernier type push-pull control which meant even finer control. That meant that they could really sneak up on the correct setting with very precise and tiny changes of the mixture, thereby avoiding any heart-shaking engine changes and easily finding the best mixture settings.

The figures on the next page show the most common features of the mixture control arm extension. If you decide to make the alteration, talk it over with your mech and the A&I who will be signing it off and submitting the 337 form to the FAA. Don't do the work unless it has been established it will be accepted!!

The old push-pull unit may not have enough wire to allow full throw with the new arm, so figure that out beforehand, too, and decide if you want to replace it with the same simple unit or with the vernier type (and note whether you have enough panel space to accommodate the vernier type since they take up more space even though the hole in the panel looks about the same.

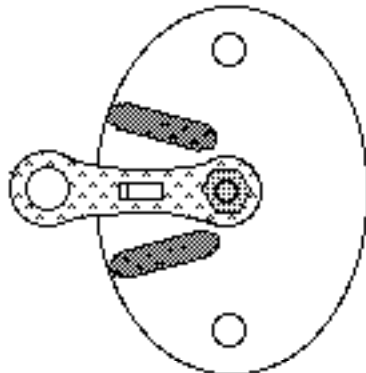
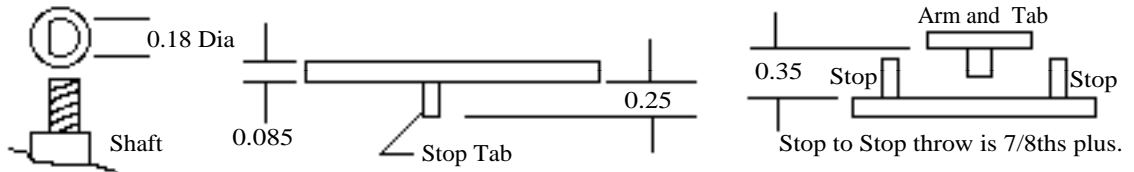
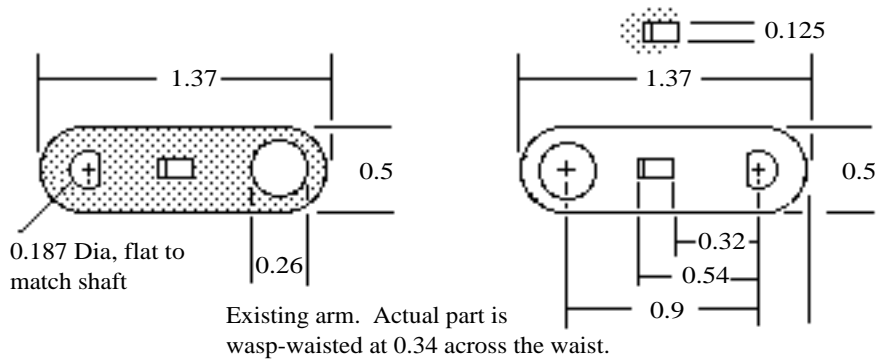
After the change, make sure you get the 337 submitted and approved and the log book noted.

The longer throw, according to all whose planes had it made use easy and precise, and wouldn't fly without it.

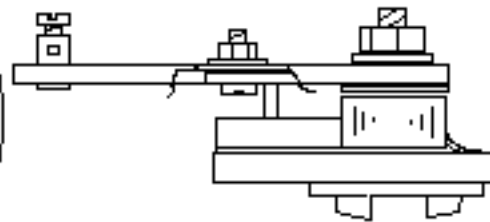
If you are one of those with a plane in which the mixture control has been wired "off" because of the old wives tale that it is ineffective or you have avoided using it, see the articles on how it works in back issues of the Newsletters, especially those written by Doug of the West Coast club (his article later was published in the International letter). Those who have used the mixture control on the Stromberg would never want to be without it!! As Doug said way back when....it works and works well.

Information about the mixture control is limited at best of the Stromberg is limited at best, but it is simple, trouble-free and well worth the effort in getting it set up right, and the longer control arm makes a big difference in use and acceptance.

Stromberg Mixture Control Details/Assembly and Lever Arm Extender

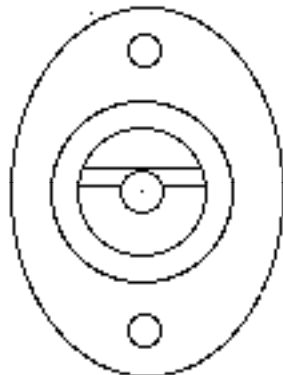
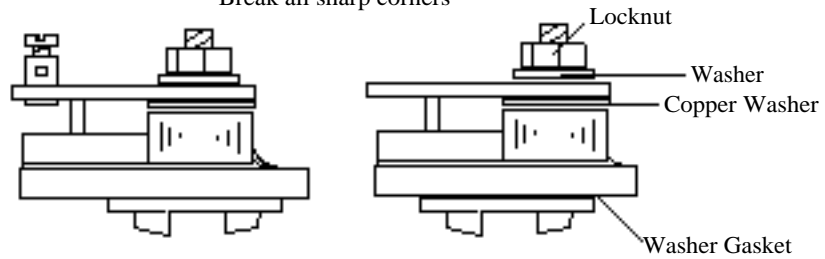


Top View, arm and stops.

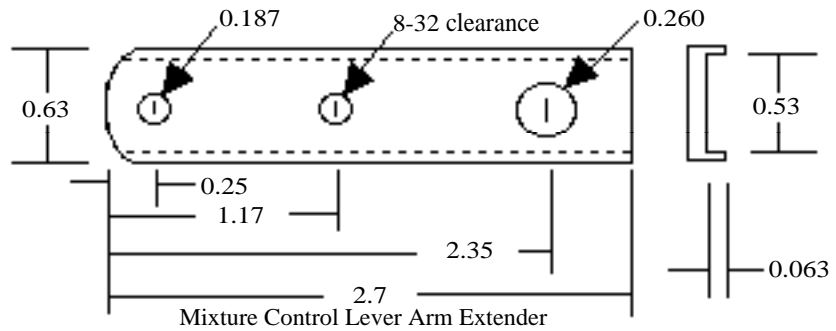


Showing Extender in Position

Material: 4130 or Tool steel  
0.125 thick. Finish Black  
Break all sharp corners



Bottom Side



Filed as Mixture Details Ju98 Neal F. Wright 1542 South Wolfe Rd Sunnyvale CA 94087

