

ALFA TECH: 1957 GIULIETTA SPIDER SHOCK ABSORBER TOOLS

By Conrad Miesiak – AROC-Detroit

If anyone has installed a rear end assembly by oneself, or even with an equally old timer (my darling wife Julie), with just a large floor jack and four jack stands, he knows it is a chore. The most difficult step was getting the shock absorbers up into the bodywork with them firmly attached to the axle tubes (as coil-overs). I pondered for a while and also considered how I could later adjust the Koni shocks (standard shock absorbers are a lesser issue). One has to reach down and pull the shocks up as the rear end is raised. You could peel back any soundproofing from the bulkhead, remove the covers, reach in and guide the shocks into place as the rear end is raised. Farther down the road, how do you adjust the Koni shocks once in place? I felt confident that I had a better plan.

I had some leftover 5/8-inch diameter x 0.4-inch wall heater steel tubing from my 1967 Fiat 850 racecar. Yes, I ran with the heater on during hot racing days for added engine cooling, and it was a benefit on cold mornings. My good buddy Bill Larson came to the rescue again with his “dinky” lathe and turned another dinky part for me: a threaded bushing to suit the Koni upper mounting stud. I silver soldered the bushing into the tubing. I then found I could easily thread onto the shocks and pull them up onto place. Then I got to think about how to adjust both front and rear shocks. The solution was to notch a piece of steel rod (1/2-inch diameter cold-rolled steel from Home Depot) to suit the flats on the studs. Double-nutting the retainer nuts was another minor problem, seeing as how a standard open-end wrench is thicker than the M17 nuts.

Installing the front Konis was less of an issue except again for the nuts. I did not have a thin open-end wrench. But even a thin wrench would be useless for the upper nuts due to the “sunken” of the of the body mounting. The left side even has the steering shaft tube obscuring



Special set of tools for Guilietta shock absorbers on Guilietta red vinyl seat fabric

access. The answer was a “crowfoot” wrench, but standard versions are too thick and bulky. The solution was to fabricate a crowfoot to suit. It was then a lead-pipe cinch to access the nuts, even those under the housing by using a 3/8-inch extension and a socket. The adjustment procedure can be used on the front shocks as well, but from the bottom. Refer to the photo showing the tools in place. The bar knob makes adjustments (e.g., 1/4-turn, 1/2-turn, etc.) simple.

Note the added trunk lid prop limiter tab that is the same on the hood. They prevent inadvertent fender paint damage.

Busybody that I am, I decided to finalize the bits and pieces into a tool kit and provide sketches so that other members could benefit from my experience. I feel sure that others had come up with similar tools, but I’ve never seen anything published.

Oh yes, when installing shocks or adjusting Konis, do not set the trunk lid back onto the hinges as the rear half will indent the front half, damaging the finish. Mine cost \$100 each at Fini for overall finishing and plating.



Steering column rod makes access to the recessed front driver-side shock absorber mount more difficult



A thin crowfoot wrench solves the problem



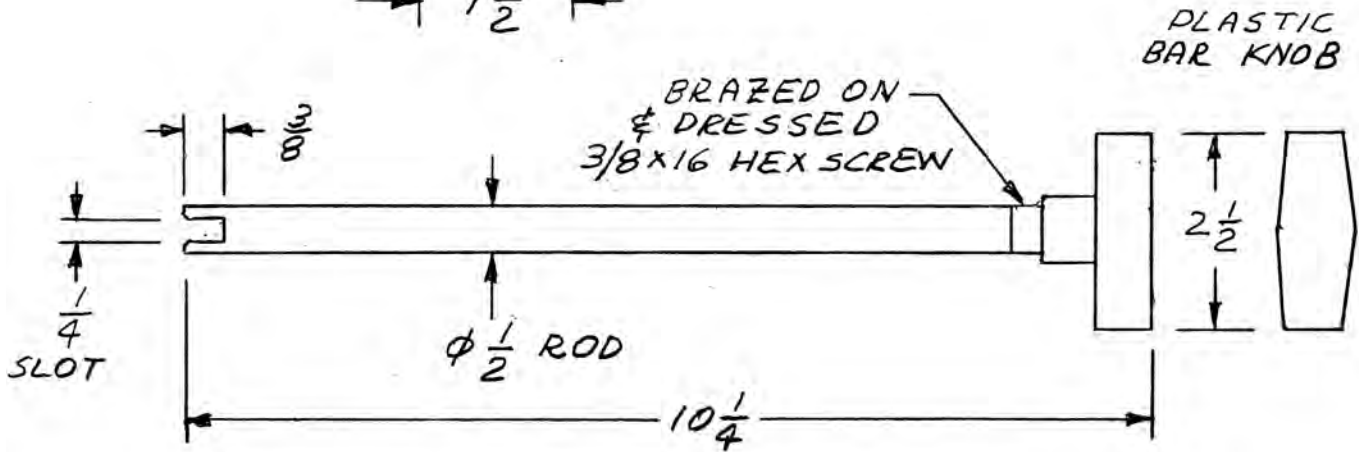
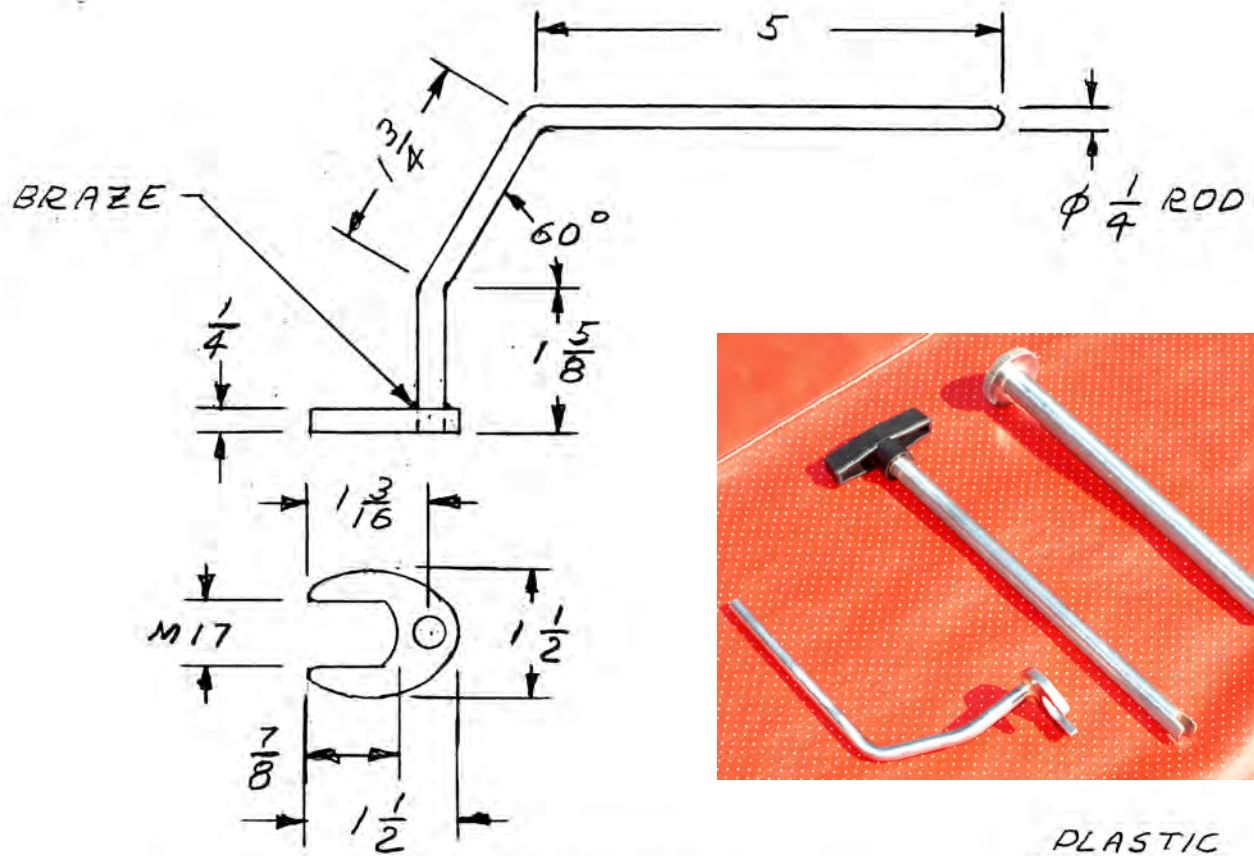
Crowfoot and socket wrenches in tandem

Inserting the two parts of the combination rear shock absorber installation and adjustment tool

Editor's notes: Fini-finish is at 24657 Mound Road in Warren, MI 48091; Phone: (586) 758-0050; www.fini-finish.com

Photos by Dave Hammond

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PLASTIC BAR KNOB

