## **SHOP NOTES King Midget Maintenance and Restoration**

## **1-23** LETTERS Camber

I find I am using your big book [Shop Notes] quite a bit these days. I came across mention of camber for the front wheels, but in the article it mentioned—I think it said—2 degrees positive, but I didn't see any mention of how to adjust it. The discussion centered on tightness of the shock tubes but I don't see how that would affect camber. I haven't attempted to measure mine yet but I was wondering if camber might be a factor in my tire rubbing problems. Your thoughts? **John Henne** 

Good question, John. You're right—there is no actual camber adjustment on a King Midget. If it's off (zero or negative camber) that generally means your shock struts are badly worn. You "adjust" the camber by tightening the straps that cinch the outer tube tighter around the inner, as the manual's instructions show (Articles I-1, I-4, I-6, I-7 & I-8).

That usually helps, unless the struts have run too long with too little lubrication, in which case they can wear "egg-shaped." When you tighten the struts enough to get the camber back, you may find the front wheels won't turn, or won't turn without binding. With a bit of fiddling and fine tuning, you'll probably find a "happy spot" that gets you a bit of positive camber without binding, and you can maintain a happy ride by good lubrication.

If that doesn't do the trick, you may need new struts (good ones are available from Paul Gerhardt) or rebuild the ones you have (see articles I-3 & I-10).

Another problem known to happen is the shock struts themselves splay out from frame bending or other abuse. This is particularly the case with early cars that did not have the later reinforcement gussets or adjusting straps (I-1, I-3). Rebuilding the front end can be a daunting task. If you don't drive a lot or are not too fussy about authenticity, you can tie those struts together with a bar across the bottom of the struts (I-14).

As for tire rubbing, I presume you're still talking about front end? If the rubbing is on one side, it's probably due to tie rod adjustment and easily adjusted (I-1). The fact is though, that tire clearance at the extremes is minimal and stock tires were  $5.50 \times 8$ , which are no longer available. Today's tires, 5.70 or 5.80 increase the likelihood of some rubbing against the sheet metal. Something we live with. **Bob V.**  $\square$