SHOP NOTES King Midget Maintenance and Restoration

1-26 LETTERS: Bent Axles

Lee: On the front end, is ½" camber ok or normal on a '63 Model 3? (/----\ example) or should they be (|-----|). This was measured by putting a level on the vertical sidewall of the tire and there's a ½" gap at the top of the level. **Tony Andrusyszyn**

Hi Tony, I copied this to two more people that may know the answer to your question. I don't think there is any camber in a King front end. **Lee**

Hi Tony, I don't know what the original spec on camber was and I don't find an answer in a quick cruise through the front end section in Shop Notes. I'd guess Lee is right. My M3 has zero camber and my M2 has just a little positive camber. If your car's camber is negative (knock-kneed, like your graphic illustration) that suggests to me that your front shock tubes are either badly out of adjustment or worn egg shaped. Do you know how to adjust those straps on the sides? If not, let me know. If adjustment won't get your car back to approximately zero camber, you may need a new front end from Paul, or serious rebuilding. **Bob V.**

Hi Tony, There are no caster or camber adjustments on a King Midget unless you use heat and a pry bar. **Paul**

Lee: I am in need of a good used straight front driver side strut assembly. My spindle is bent. Got any of those laying around? I emailed Paul. He didn't have any. If not, Plan B, get the front end kit from him. Tony Andrusyszyn

The new spindle systems are a great replacement. The spindle on your strut is a piece of $3\4"$ rod and if you look on the back of the strut, you will see it's just welded through the strut. Or you can straighten the spindle you have. If you can't get that axle straight, Paul can make you an axle to install in the strut. **Lee**

I am going to make a jig to hold the strut and use a bottle jack to try to straighten it. The spindle should be a perfect right angle (90 degree) to the strut correct? Tony Andrusyszyn

Yes, that is correct and this has happened before so you should have success. Let me know how your progress advances on the car. Lee

Paul emailed me he found a factory front LH strut assembly he is gong to send me for \$25.00 plus shipping. God bless him. I'm still going to try to straighten mine without heat

to not mess up its temper. I think this old girl was used off road as a go kart in her life. It has welding cracks and reinforcing on the frame and suspension areas.

Here's a photo of what I did. I went a little at a time, to avoid going too far. I used no heat. I slipped a seal driver tool over the axle to protect it and pulled it with a bottle jack and chain. The block of wood is to keep the chain at the end of the spindle. The jack pushed square on the bottom of the spindle. The other



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end of the chain was wrapped around the axle on the outside of the frame rail. It didn't take much to get it to pull the spindle down. Before I did this the speedometer drive shaft had to be driven out with a punch. After the tweak, it goes in and out and can be wobbled a little like butter through the spindle!

After I was done the bubble level on the side of the tire was dead on in the middle. I also did the same on the rear axle but the bottle jack pushed in the middle of the axle support and took the bow out and put the rear spindles perfectly plum and the bubble centered as the front. Also note the tires were over inflated for measuring so there was no bulge at the bottom to throw the level off! Thanks, Tony Andrusyszyn

Other Steering Parts

Lee: What about other suspension and steering parts for my loose front end? Tony Andrusyszyn

Rear shocks are just springs inside the tubes no problems if it is a little saggy put a couple washers in the bottom of the tube that will raise the rear. Tie rod ends are a different animal. You can use ball joint rod ends from McMaster Carr. A left hand thread and right hand thread for the tie rod and I think for the pitman arm also. Lee

Lee: Is it normal that the front end lifts up a little on the left or right front when turned left and right? Sorry for all the "new KM owner" questions. Thanks for all the help. Tony Andrusyszyn

It's normal in turning corners for the front end to raise on one side; at least mine does. Paul or Bob should know. Give them a bit to answer and I'm sure they can help. Lee

Tony, I believe all King Midgets do a bit of that, probably because of the very strong caster built into the front end—but I really don't know. **Bob V.**

Tony, Stock steering linkage on a King will move the car up a little on turns because of the short drag link binding at a complete turn to lock. **Paul**

Lee, Paul and Bob, I want to thank you all for the help so far on this little guy! Tony Andrusyszyn □