

I-28 Letter: Broken Front Strut

Bob: There's damage to the front axle area on the driver side of the Model 3 I just bought. Hopefully it will not be too difficult to disassemble so it can be welded? **Bob Sharp**

*I'm asking Randy and John White to comment on that broken weld. It appears to me it had broken before and was rewelded, perhaps during the restoration? You can check the look of the weld on the other side of the car and see if it is similarly sloppy. Midget Motors was not noted for the quality of their welds, so it may be a factory weld. Pending Randy's advice, I'd think that weld should, at minimum, be ground smooth and even try to grind down into the crack as much as possible. Then when rewelding, a "hot" weld would probably be best for getting as deep as possible into the fracture, but a "cool" weld would do the least warping of the tube. The problem is that weld is right on the strut and you risk warping the tubing. Not good. Check the camber. It appears that broken weld has likely allowed the strut to pull outward and may have gotten worse over time. How to get it straight without removing the body may be a challenge, but it needs to have at least a little positive camber. Maybe you can get on it with a chain to the top of the tube and brace to the bottom, using a lever and bend it back into alignment—at least enough to hold it tight as possible while welding? By the way, that strut looks like it's not been lubricated for quite a while. If it was run dry, that may have triggered the break. **Bob V.***



Bob S. I'm doing some upgrade work to the shocks on my KM so I was able to take this picture of my shock tube attachment bracket. The gussets were added when I did the rework of my frame. The idea was John White's and can be found in the *Shop Notes* at pg M-5, Power to the Midgets III. If I can be of any help please let me know. **Randy**

Bob S.: Really you don't want any camber in the tubing. Only caster would be in the front tubing. I have to say I've never seen one crack there before. That piece is made from a junk of the frame rail material and "pinched" together so the upper tube fits into it. And had maybe two welds up each side and one top and bottom to secure the tubing in it.



The tubing looks a little dry, might want to check the oil in them. The front tubes lose oil faster than the rear "shocks" do. **John**

John's right—the original tubes have no camber, but when they wear, your front wheels can wind up having negative camber, and that broken weld can increase that. Your front wheels should be at least vertical.

Another possibility. Hook a chain or cable between the bottom of the outside sections of the two front shock tubes and use a boomer or comealong to pull that gap closed before welding. Be sure to weld in the braces as Randy suggests and you should be OK. Or use a jack arrangement as illustrated in Shop Notes 1-26. Section I-3, I-4 and others deal with front end alignment, which can be tricky. Because your car probably has high mileage, you may find the struts are worn, and various cures are available, ranging from replacement to a simple fudge-fix (I-14). Most important--oil up those struts! **Bob V. ■**