Mini Tech Session Results

John Gill was having trouble with his 1959 MGA 1500 pulling to one side while braking and the right wheel heating up. He told me he wanted new wheel bearings. I sourced the parts but when getting ready to go to his house where he has his own lift I though “hmmm, this sounds more like a brake problem than a bearing problem”. I put all the tools I thought I would need in the car along with some materials to deal with a brake issue. When I got there, Mike Stockwell was there as well and they had completed rotating the tires on his 1967 Land Rover Series IIA and had the MGA on the lift ready to diagnose.

When I rotated the wheel I could tell it was binding a lot. The first thing I noticed is that the hole in the steel wheel for adjusting the brakes was not positioned over the hole in the brake drum to adjust the brakes.. So, we removed the wheel and positioned the drum adjuster hole over the front wheel cylinder adjuster and I backed off the adjuster all the way. I had to put the wheel back onto the studs in order to have enough force to rotate the drum to the rear cylinder. I could not budge the adjuster, so, this indicated that that cylinder was stuck out a bit. Pulling the wheel back off the studs I was able to position two pry bars opposite each other against the backing plate and wiggle the drum back and forth while repositioning the pry bars to get the drum to come off evenly without too much trouble. The key here was to not get the drum too uneven while pulling it off.

The front wheel cylinder looked good with no leaks and the rear looked OK but the piston was seized part way out (expanded). I removed the brake shoes (pretty easy with only the springs holding them onto the cylinders). I was able to spray it with PB Blaster and wiggle the piston top with vice grips a little at a time to free it up. I clamped off the brake hose and was able to wiggle out the piston. To my surprise I found that it was an aftermarket front wheel cylinder that had a lip type seal instead of the original style cup seal. I cleaned out the brake fluid and used a small cylinder hone to clean the bore. I removed the lip seal and it was still in serviceable condition. There are NO REBUILD KITS for this type of cylinder. I did not have any spares on hand, so I lubricated the cylinder wall with grease and the seal with brake fluid and out the cylinder back together. I put the brake shoes back on while John kept the front wheel cylinder piston in place and then put the drum back on. I removed the brake hose clamp and John sat in the car and applied brake pressure while I bled the brakes. I then adjusted the front and rear adjusters and John had good pedal with no dragging.

So, we did not have to do the front wheel bearing job that we anticipated but were able to resolve the problem with a little ingenuity. John will have to keep an eye on this side to make sure it does not start leaking, but now it will be easy to repair if a new cylinder is needed.

John ordered a pizza and Mike let me drive his Land Rover to the pizza shop to pick it up. He wanted my opinion on how the steering was working. When we go back I told him his steering was not bad compared to other Land Rovers I had driven. There are a number of pivot points on a Land Rover and I told him to have someone move the steering wheel back and forth while he observes each pivot point and ball joint to see if he can detect any slop in the system. He had brought along some beer, so, we enjoyed pizza and beer while talking car stuff.

John texted me the next day that he had taken the car for a spin and loved driving it!

Safety Fast,
Jack Horner
President, Bay State MGA Club

John and Mike with the MGA

“Show me your hands if you did the work”