Stalled Restoration Project Update: The Rest of the Story

Since I last wrote about this project we have made significant progress. As most folks know, stopping is more important than going, so, I went through the new reproduction master cylinder that came with the car to make sure it was still OK. I had read about issues with MCs where an MGA with disc brakes tended to drag the calipers. I replaced the reproduction springs inside on each piston with original good spares and ensured the return valve had a release hole in the side. I also installed the taller MGA 1600 MC cover for extra capacity. One thing I learned was to ensure that ALL surfaces where a copper sealing washer is used has to be absolutely perfect and it is best to use NEW copper washers! After much fiddling I found a rusted surface that had to be cleaned up because it would not stop leaking the DOT5 brake fluid. Fortunately, it was DOT5 so, no paint damage! We also found that one rear brake did not want to stop, so, upon further investigation we found it had not been adjusted all the way and this fixed the problem. We also bled the clutch and now that is working perfectly. There was much fiddling with that system as well. The clutch slave was a cheap aftermarket and the dust boot was already deteriorated. The piston inside was aluminum and it did not have the proper cutout in the inside for trapped air to reach the bleed screw. There was also a very heavy cup seal with no spring support behind. I rebuilt an original Lockheed unit and we used that instead. Since the custom oil pan sticks out on either side we had to use a banjo fitting and bolt (like on very early MGAs) for the clutch slave.

When it came time to test the fuel system we discovered that the new (from 10 years ago) aftermarket fuel pump was not ticking. We wacked it with a hammer and it started ticking like the original SU. BUT, there was still no fuel being pumped. We ended up taking off the pump and taking off the cover do discover that the diaphragm was goo. We also discovered that rebuild kits are no longer available. We ended up getting a replacement pump of a different kind and it is working. But, we discovered that we had a fuel leak at the see-through fuel filter on the heater shelf. This proved to be an overtightened fuel line adapter and cracked case, so, we had to replace the unit. We had refurbished a speedometer and sent out the tach to be converted to electronic tach as the 5 main MGB engine has no mechanical tach drive gear. The dashboard was repainted and assembled with a boost gauge for the supercharger in the middle of the speaker screen. We had to replace most of the switches as the spring-loaded button would not retract or would not stay out to hold the knobs on. The dash was installed and all hooked up and then we filled the radiator only to discover that there was a leak in the new radiator from when we installed the dual electric fans. I was able to solder up the tiny hole and refill the radiator. Now it was time to see if the engine would start!

We switched on the ignition and the fuel pump started up, the ignition light came on and I pulled out the choke for the initial startup. I pulled the starter cable and after a few revolutions of the engine IT STARTED! It was not running well and we were looking for any leaks and just keeping it going at first. We did see a oil leak at the rear of the rocker cover and the rear bolt to the tappet cover and a little leak along the oil pan on the left side. Also, a small oil leak at the dip stick tube of all places! The engine was very “clattery” and there was some bubbling at the rear head bolt, so, we shut the engine off. We pulled to rocker cover and discovered that the

valves had not been adjusted and one of the adjuster locking nuts was missing (we found it laying in the bottom of the head recess). So, this was another lesson learned! We should have known from all the other items left half done that this would be one of them! We discovered that the head studs were the APT replacements but they had used the small supplied washers which are not recommended for aluminum heads, so, we changed all the hardened steel washers and retorqued the head. Then we adjusted the valve clearance. We restarted the engine and now it ran like a swiss watch! We also rechecked the compression and now that the valves were operating correctly the compression is at 140 psi per cylinder which indicated that it still has the low compression pistons (which is good if you are using a supercharger). It is common to get pre-detonation on a higher compression engine particularly if the timing is too advanced. We checked the timing and the initial timing I had set worked perfectly and we took it up to 28 degrees BTDC at 3000 RPM which is about right for this supercharger.

Since the car is still on the lift we were able to run the engine and shift it through the gears. We had installed the newly painted alloy wheels with new tires and our next adventure will be to run it on the road. We did discover that the ignition light was not going out and after checking wiring and alternator discovered an issue. Rick insisted on LED bulbs throughout the lighting, including the dashboard. It turns out that the ignition light when using an alternator takes a current to the sense terminal on the alternator to tell it to charge. With an LED bulb there is not enough current flow, so, the regulator in the alternator does not start producing power. We switched out the bulb back to an in incandescent and now it is charging the battery.

When rebuilding the windshield Rick wanted to corner posts for the hood screws. He bought them from Moss and they are made of chromed brass (like the earlier MGAs – they had gone to chromed steel about 1958). These were pre-drilled (they also come undrilled). It turned out that the parts were way too thick and would not fit into the channel in the chrome frame. I had to grind off a lot of material to get them to fit and they also had the wrong angle for the corner so they had to be bent and then the corner hole re-tapped (as it partially collapsed from bending the bracket). We also used the thinner glazing as the glass was of a thickness that the thicker glazing did not work. We ensured that the little strip of wood on the bottom frame was in place and used plenty of lubricant on the glazing and the glass went right in. We installed the windshield on the car along with some of the other chrome bits.

We have been working on the interior but are now waiting for carpeting to be able to install the seats and the rest of the interior. We are also working on the hood frame and getting it read to install the hood. It is beginning to look like an MGA!

Making progress

Engine bay mostly complete and engine runs and hydraulics work!

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