

The Machinist

One of the challenges of working on older cars is that often we may want to make improvements to the car that are beyond the scope of what is available in stock parts. Recently, I was working on an older car that had terrible front drum brakes. No amount of adjustment or replacement parts would make the brakes work correctly. There was pulling to one side or the other, shuddering, vibration and since I let others drive the car, this was obviously just not a safe situation. Since there were no off-the-shelf disc brake conversion parts available for a 1959 Messerschmitt, I knew this meant that I would need to fabricate some adapter parts that would attach the rotors and calipers where the drums and drum brake backing plates had formerly been. I knew this was a job for Miklos.

Miklos and I had met through having similar three wheeled cars and this chance meeting had been a wonderful blessing for me as he turned out to be a master machinist. On the wall of his shop he had pictures of some of the massive projects he had worked on in his lifetime and it was just amazing to see what he could do. I later learned that he had machined some of the complex parts on the original GPS satellites that other machinists had given up trying to make.

I picked up some aluminum stock and headed off to the shop to let him work his magic. I guess I could sit and watch him work for hours and indeed have done that. The aluminum ribbons or hardened steel chips fly out from his lathe or mill revealing the hidden part beneath that was formerly only a sketch on a sheet of paper. Miklos' mastery of the equipment is amazing as he operates pedals, flips switches, turns the handles, monitors the dials and feeds the material into the cutting blade. All of this is done while he dodges the hot chips of material that are flying out. Sometimes the hot chips burn his hands and arms but he flicks them off before they burn beneath the surface. At the end of each operation he quickly measures the results, initially with his caliper and eventually his micrometer. Notes are recorded and marks made on the piece and then back into the mill or lathe it goes because although it is close, it is not yet perfect. Often the part is so close to the design dimensions I will tell him to just forget it. "We'll go with it like it is" I'll say, "And if it doesn't line up quite right I'll use some shims." Miklos looks up in anger and says, "No shims! We don't use shims!" After the part is seemingly perfect he grabs his deburring tool, a file and a polishing cloth and performs a final cleanup of his work while it continues to spin in the lathe jaws right adjacent to his fingers. Unseen sharp edges are removed and the work that was only functional now becomes shiny and beautiful. Sometimes the part is hidden and its appearance is not visible after assembly, but Miklos is never satisfied until the part has a mirror-like finish, even if no one but us will be able to see it. At this point the part is done but still the machinist has a little ritual he does. He holds up the part and shows me with great pride the hidden details that were never on the drawing. There is an undercut here and a chamfered edge there. These small details will accomplish various purposes of making the part fit closer, allow more easy removal or reduce interference problems with other parts because the machinist can think in all the dimensions and see both the big picture and the most minute details.

Eventually, I hold in my hand some elegant looking rotor adapters and caliper brackets. No one will ever know and appreciate the hours and craftsmanship that it took to produce these.

I'm reminded of our Heavenly Father and how He is shaping us just like a finely machined part. We were redeemed at great cost. The cost was His Son. The smallest almost invisible details are attended to. The unseen places are seen by Him and likewise addressed. We would like to just have His work in our lives be a surface polish – maybe a touch up here or there to make us look good on the surface. But He has in mind a more extensive work and a greater result. Large amounts of excess material may need to be removed - cut away so that the real glory of His work and purpose can be revealed. All this may be a bit more than what we hoped for and more intrusive and uncomfortable but He is looking beyond our short term comfort and towards our long term gain. He holds us up in our finished state as an example of what a great work He has done (Job 1:8). And He has promised to continue this work in us until He comes again...

PHP 1:3-6 “I thank my God every time I remember you. In all my prayers for all of you, I always pray with joy because of your partnership in the gospel from the first day until now, being confident of this, that he who began a good work in you will carry it on to completion until the day of Christ Jesus.”

Richard Lewis
Pathway Christian Church
Riverside, CA