Tool Reviews: Circlip Injector

Posted on: 12/27/2014 12:00:00 AM

This year while working our My Shop Assist booth at the Professional Racing Industry (PRI) Trade Show, we spoke with a lot of fantastic shops about our software. We try to make time to venture out into the halls and see the new parts, tools, and cars people bring to the show. It was especially difficult this year as we had a good location for our booth and the traffic was great! People who visited our booth also noticed the 4G63 block we brought on an engine stand to assemble. We did this to demonstrate how the software functions while actually working on cars. By the end of the show, only the main studs and oil squirters were installed, a testament to how busy we were!

Kevin Dubois standing in the My Shop Assist booth.
During the show, we were speaking to a group of people who own a shop that restores and races Porsches and they pointed out a friend who made tools for assembling engines. His name was Steven Stomski of Stomski Racing. He handed me his brochure of tools and mentioned he has a patented tool for installing the wrist-pin cir-clips. Now, if you have ever built a motor with these, you know how difficult they can be to install. Every single Mitsubishi engine that I assemble uses this style wrist-pin clip. Over the years I have stabbed myself with picks, launched the clips across the shop, scratched the side of the pistons with the picks and clips, and cursed more times then I care to admit. There were times where I would spend upwards of 10 minutes fighting with a clip to try and force it in. At one point I even attempted to make my own tool out of copper pipe with no success. So I thanked Steven for inventing the tool and promised him I would make an order as soon as we got back from PRI.

This morning, I received my 22mm Circlip Injector (http://www.stomskiracing.com/products.php?id=6) just in time for 3 more engines I was about to assemble. It is comprised of a female sleeve to hold the clip and a male punch to press it into the piston.

This little clips are pretty stiff and I couldn't pinch it hard enough to push it into the tool. Knowing it had to be easier then my previous pick method, I took a quick glance at the provided diagrams and directions. It said to use a notched flat blade screwdriver to press the clip into the injector. Then you can press the clip into the piston.
Circlip inserted into the sleeve.

The first piston was quick and painless, albeit a little slow trying to build a technique.
Pressing the circlip into the piston.

Inserted circlip. Very easy to install and no damage to the piston.

By the 4th piston, it was taking me less than a minute to do each clip. When I moved on to the second engine, I felt like it was taking only 10-15 seconds a clip. This was a huge improvement over my original method of trying to pry each clip in with pics and screwdrivers! This tool has greatly simplified and streamlined my engine building process and ensured I don't damage the pistons installing clips ever again.

The takeaway from this post is that tools serve a purpose. This purpose is to make your job easier and allow you to work faster. Both of which translate to more money. By streamlining my engine building process by approximately 2 minutes per clip, I save about 15 minutes on each 4 cylinder engine that I assemble. At $100/hour, that's about $25 per engine in savings. If I build 100 engines per year, I have just freed up $2,500 in labor. As an added benefit, this tool eliminates the chance of me damaging a piston which can cost about $150 if I have to replace it.

We want you to look at My Shop Assist in the same way as tools like this. Sure, you have a method for installing circlips into pistons. But this tool helps you do it more efficiently. Similarly, you may have a way to write down what work needs to be done and has already been done to a customer car. But is that method easy for you? If you want to grow your business, is your current method going to scale up easily?

My Shop Assist takes care of keeping track of the progress for each car. It can greatly streamline your operations and
allow you to spend more time and effort actually working on cars rather than trying to remember if you ordered that one little part for that car that is being picked up tomorrow. We urge you to sit down and think about how much time you spend trying to manage the builds. How long does it take you to order the correct parts each day? How many times do your technicians come in and ask what they need to work on next? How many texts, emails, and phone calls do you get from customers inquiring about the progress of the build? Wouldn't you like to reduce the times for these tasks and concentrate on billing more hours?

Improving your workplace processes will reduce the number of mistakes, make managing the builds easier, and allow you to make more money on each job. And my shop, Evolution Dynamics is a testament to this claim. I am able to deliver more cars with fewer mistakes because of My Shop Assist. With the year end only a few days away, the revenue of my shop is up 20%. And this is with a smaller building and fewer employees compared to last year. This proves how being organized and efficient can greatly boost profitability.

Feel free to contact us at anytime if you have questions about how My Shop Assist can help you run your business more effectively!

And thanks again to Stomski Racing for the innovative tool to simplify engine building. Information for purchasing his tools is on his webpage Stomski Racing (http://www.stomskiracing.com/). They also have a quick video link for a demonstration on using the tool: Circlip Injector Video (http://www.stomskiracing.com/instructions.php)

My Shop Assist - Winner of the 2013 SMU Business Plan Competition

Posted on: 4/8/2013 12:00:00 AM

My Shop Assist – Winner of the 2013 SMU Business Plan Competition

My Shop Assist is pleased to announce that we have won the 2013 Business Plan Competition at Southern Methodist University! Competition was tough, but Todd Earsley and Sean Tremblay managed to capture the win in front of three judges.

The judging panel comprised of Joel Fontenot of Trailblazer Capital, Joseph Hoffman of Andrews Kurth LLP, and Hubert Zajicek of NTEC. My Shop Assist scored high marks in product and competitive differentiation. The judges were impressed by the presentation (hyperlink) and their industry knowledge.

Todd and his business partner, Kevin Dubois, have a long history with automotive related businesses. Todd grew up around cars and co-founded a mobile car wash business in high school. He now races a Mitsubishi Evolution built by Kevin Dubois’ shop, Evolution Dynamics (http://evolution-dynamics.myshopify.com/).

My Shop Assist originated out of Kevin’s need to run his shop more efficiently. One night, working late on race cars, Todd and Kevin dreamed up the idea for My Shop Assist. They hired Third Corner (http://www.thirdcorner.com/) to develop the software and introduced the product at the 2012 SEMA convention (http://www.semashow.com/).

My Shop Assist was awarded cash and in-kind donations totaling more than $30,000.
Other business ideas that My Shop Assist competed against include a rapid prototyping stereo lithography machine, a B-to-C online portal for resale businesses, a kale-based healthy food snack, and a suite of medical mobile apps.

Sponsors include: V-Rooms, TechWildcatters, Caruth Small Business Institute, Andrews Kurth, NTEC, The Coulter Group, and Booth Albanesi Schroeder LLC.

Why we created My Shop Assist

Posted on: 3/20/2013 12:00:00 AM

We created My Shop Assist out of a need. That need was for a simple-to-learn and easy-to-use project management software system geared specifically for performance and aftermarket installation shops. Our shop, Evolution Dynamics was surviving off of sheer enthusiasm by the employees. We knew we were losing money due to inefficiencies in communication, scheduling, and prioritizing work.

There were numerous occasions where we would forget to bill the customer for a part simply because somebody forgot to write it down on the invoice or the whiteboard. We were being bombarded by customers calling and asking about the progress of their build; eating up an estimated 2 hours each day. And I can't even begin to count how many times the technicians would come into the office and say “What should I work on next?” They often had to wait 15 minutes for the manager to finish a call before finding out what to do next.

We talked to dozens of other shops and found out they these scenarios were shared by all. Lots of stories about accidentally giving parts away for free, forgetting to order parts for a customer’s car and then missing a deadline, and difficulties keeping up with hundreds of texts, emails, and phone calls.