

News and Updates From Jasper Engines & Transmissions

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Ohio Technical College Partners with Jasper Engines & Transmissions

Ohio Technical College (OTC), a premier provider of specialized technical training in a wide variety of transportation fields, has formed a partnership with Jasper Engines and Transmissions to use its products in the school's Automotive and Auto-Diesel programs.

Through the partnership, JASPER will provide engines, transmissions and differentials, along with manufacturing, marketing and sponsor support to OTC. Students will train on the company's products during a six-week course held in the new Jasper Engines and Transmissions Training Center Lab building.

"We are excited to have JASPER as the official automotive engines and transmissions partner of OTC, and they will have a great presence in training the next generation of technicians," said Tom King, Vice-President of Enrollment Management and Technical Training for OTC. "The Jasper Engines and Transmissions Training Center allows our students to work with quality products that come from a leader in remanufacturing."

The training center will consist of five classrooms: three engine labs, one automatic transmission lab and one manual transmission and differential lab. Students will learn disassembly, measuring, cylinder honing, how to work with heli-coil inserts, timing belt installation and proper re-assembly and torque procedures.

The JASPER course will also train students on automatic transmissions in rear and frontwheel drive vehicles, which will be covered in car diagnostic testing, as well as transmission removal and reinstallation. In addition, the manual transmission classes will cover differentials.

OTC's ASE/NATEF-Certified Automotive Technology program offers relevant hands-on training over the course of 72 weeks, while the Auto-Diesel program combines the automotive courses with Diesel Equipment Technology



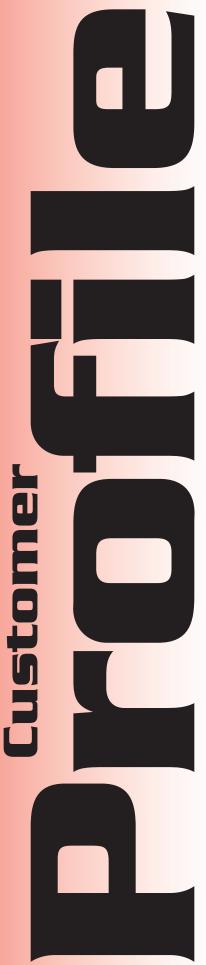
October 2012

Engine stands are at the ready as JASPER provides products for the Automotive and Auto-Diesel programs at Ohio Technical College.

training. Some of the subjects covered include: engine performance and repair, automatic transmission and transaxle, manual drive train and axles and alternative fuels.

About Ohio Technical College

Ohio Technical College (OTC) is an accredited private, proprietary technical school dedicated to providing premier technical training in the world of modern mechanics by pursuing industry alliances, providing outstanding training equipment and focusing on the needs of individual students. An Accrediting Commission of Career Schools and Colleges (ACCSC) college, OTC and its PowerSport Institute branch campus encompass nearly 800,000 sq. feet of classroom and workshop space. OTC offers technician training programs in Automotive, Diesel, Auto-Diesel, Collision Repair, Classic Car Restoration, High Performance and Racing, Welding and PowerSport Technology, as well as specialization in BMW, Alternative Fuel Vehicles, Custom Bike Building, Custom Paint and Graphics, and Power Generator Systems. Motorcycle technician training is provided through the PowerSport Institute, a branch campus of OTC in North Randall, Ohio. For more information, call 800.322.7000 ext. 163; or visit www.ohiotech. edu and www.psi-now.com.



Ewing Automotive

In 2006, JASPER's Drive Line Newsletter highlighted Ewing Automotive in Snellville, Georgia.

Ewing Automotive was founded in 1976 by NHRA and IHRA Pro Stock Drag Racing legend, Billy Ewing. What started as a home-based business for the first 14 years, Ewing opened his first location in Snellville in 1990. The company expanded in small increments over the years, with an emphasis on retaining their current customer base. A BIG expansion took place this year.

"We opened up another shop (in 2012) to work on cars and heavy-duty trucks," says Ewing. "Our workload was growing too much for one shop to handle, and we had customers coming to see us from long distances. So, we went to our customers."

2012 was the right time for Ewing Automotive to open a second location on five acres of land along Highway 78 in Monroe, Georgia. This new facility, approximately 20 miles east of Snellville, has eight service bays in 5,500 square feet of work space, including two truck bays and an alignment bay. Ewing included a spacious front waiting room for customers, along with a kitchen and a master office. A mezzanine above the office is used for parts.

Ewing's Monroe location has six employees, including four ASE-Certified technicians in varying disciplines ranging from Master Technician to Durability Expert, Differentials and Transmissions. Ewing supports his technicians attending seminars and other classes to stay on top of advancements in automotive technology. "Each technician is required to have 20 hours of training every year," says Ewing.

Just like in Snellville, Ewing says his Monroe location will do more in-house repair than a dealership. "By doing this, we can save the customer money and time," he said. "We can repair more jobs quicker, and more efficiently, because of our skills and equipment and the drive to make it work. We'll do jobs other shops turn down."

Ewing Automotive has been an installer of JASPER remanufactured products since 1999. "Good people make a good product and JASPER is both," says Ewing. "JASPER stands behind their product, which allows me to stand behind the job I did for my customer."

For Billy Ewing, his future plans include passing down the business to the next generation. "Our shop is a family business," said Billy. "That pulls us all together."

Ewing Automotive's business philosophy remains 'Quality work at a fair price.' "The customer is the most important thing to us," he said. "Our customer base extends 36 years, and that means a lot. We take care of our customers to build a relationship and to make them feel like a person, not a number."



The New Shop: Ewing Automotive opened a second location in Monroe, Georgia, in early 2012. His first shop is in Snellville, about 20 miles away.

JASPER Performs Upgrade to 6.0L International HEUI Injection Pump



BEFORE: The 6.0L International diesel will lose oil pressure when the steel ball (pictured above) works its way out of the HEUI pump's aluminum housing.

AFTER: JASPER removes the steel ball, threads the hole and inserts a threaded steel plug. This ensures customers receive a HEUI pump they can trust.

The Hydraulic Electronic Unit Injector (HEUI) pump was once considered a disposable piece on a diesel engine. Now Jasper Engines & Transmissions, through a series of updates, has turned the HEUI pump into a reliable, remanufactured component that customers can install with confidence.

One such update involves the HEUI pump used on the International 6.0L diesel. A loss of oil pressure is a common issue with this unit. "During its production, one side of the HEUI pump housing is drilled and sealed off with a steel ball," says TJ Abrams, JASPER Diesel Quality Engineer. "Due to the dissimilar metals of the steel ball and the aluminum pump housing, the steel ball eventually works its way out of the hole and leads to a loss of oil pressure."

To eliminate this failure, JASPER removes the steel ball, threads the hole, and inserts a threaded steel plug. "This ensures that customers receive long life out of our HEUI pump, and that it's a pump customers can trust," says Abrams.

Each JASPER remanufactured HEUI pump, just like an engine, is tested after being remanufactured. "Pressure, flow and leaks are scrutinized on a custombuilt test stand to ensure a quality product," added Abrams.

For more information on the remanufactured diesel fuel components of Jasper Engines & Transmissions, please call 800-827-7455, or log onto *www.jasperengines.com*.

JASPER's Steel Torque Plate Boring Process

Customers of Jasper Engines & Transmissions are familiar with our long-standing process of torque plate honing gas engine blocks. The process ensures the proper size and shape of the cylinder after the block is bored. Through a series of updates, JASPER has taken the successful process one step further by utilizing torque plates during the boring process.

"We're using steel torque plates in place of the traditional aluminum plates on select engine families, to improve the efficiency and effectiveness of the process," says Alex Ernst, JASPER Gas Engine Quality Engineer. "These steel torque plates allow JASPER to bore AND hone the cylinders, with the torque plates installed on the block, enabling us to achieve stricter tolerances for cylinder size and shape."

Ernst added the honing process becomes more efficient by tightening the cylinder boring specification closer to the finished size. "This is another process that has benefited from our commitment to Continuous Improvement as we strive to provide customers with the Perfect Product," he said.



Steel torque plates allow JASPER to bore and hone the cylinders, making the process more efficient by tightening specifications closer to the finished size.

Aisin AW 55-50SN Valve Body

Also fits AW 55-51SN, AF 23/33 and RE5F22A

GM, Nissan, Opel, Saab, Saturn and Volvo early and late castings, including No Code, A Code, B Code and C Code Applications

Transmission pan gasket and case-tovalve body seals included!

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- Main Boost Valve and Sleeve Kit
- Oversized Solenoid Modulator Valve Kit
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- Fluid, bushing and converter overheating and harsh reverse engagement
- Delayed forward engagement and 2-3 upshift flare/low SLT pressure
- 2-3, 3-2 shift concerns and 3-2 neutral concerns
- Delayed forward engagement and low line, lube and converter pressure
- Heat and contamination issues which cause solenoid failure

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JASPER Installer Helping Haitians in Need

by Linda Fields, The Pike County Courier - reprinted with permission

Right before Christmas, Phil Touw left his home in Milford and went to Haiti... for the 23rd time.

It wasn't a leisure trip. This journey, just like all the others, was a labor of love, you might say. Touw flew to one of the poorest nations on Earth, and then traveled by pick-up truck on unimproved roads for five hours to Les Cays, on Haiti's south-

west coast where he helped build a school and church for 80 kids. After that, he traveled another six hours to Jeramie where he volunteered his time at an orphanage, summer camp and school.

"I love it," Touw exclaimed, adding "The toughest thing is leaving that orphanage."

Touw became involved with the Haitian community twenty-two years ago in conjunction with the Evangelical Baptist Mission of South Haiti. At that time, he was asked to go to Haiti to teach auto mechanics. Touw owns and operates Milford Tire and Auto.

So he joined a group of other professionals and it was, he said, "A real eye opener. They had to make their own car parts working with ancient tools and equipment." For Touw, that was the beginning of a long commitment and the start of many lasting friendships.

Later, the non-profit Christian ministry, Camp Elim, asked Touw to help them build a guest house and school in Les Cays. Today, the organization is bigger and is operated by the Haitian people. A second location has since opened in Jeramie to include a summer camp, a school and a nearby orphanage. "They're doing an awesome job running the school and a summer camp for

A Strive-to-Thrive Testimonial

To Mike McDonald and all the folks at JASPER,

Thank You for all the hard work that went into our "Strive to Thrive" presentation. Great food and company - standing room only, in fact. I'm glad we came early.

Good basic info was shared that we take for granted on a daily basis, as well as info that we need reminders on occasionally, and things that sometimes seem distant from our day-to-day routine. The latter are the ones most of us need to work on. I certainly enjoy being reminded of how to do things better, when Ive had a good meal and am in good company. We would indeed attend again, if invited.

My wife was impressed, as well, and immediately set to work implementing some of the ideas expressed (of course that means more work for me). It will help us, however, with our goal of better customer service and satisfaction that go hand-in-hand.

Thank You, again, JASPER and Associates,

Ron and Dori Juleff Richards Auto Clinic Phoenix, Arizona

180 kids," Touw said. In the orphanage, Touw visits 42 children from the ages of seven to fifteen. "I usually go there with a few hundred dollars in my pocket and two to three suitcases filled with clothes, school supplies, toys, toothbrushes, even jump ropes, and return with just the clothes on my back." He said the lack of electricity and running water, things we take for granted,

> makes him more grateful for what he has and even more anxious to help.

"I wish I could help the whole country", Touw declared. "The Haitian people," he added, "are selfless and eager to share what they can, despite being so less fortunate than we are."

In July, Touw planned to make his twenty-fourth trip. He planned to erect a shower with cement stalls, and with pull chain shower heads with a rooftop cistern from which water, heated by the sun, could provide something akin to modern plumbing.

Touw admits the Haitian people have touched his heart, and taught him the importance of relationships. "They've changed me," he admitted. "I think everybody should travel to a third world country like Haiti. It gives you a whole new perspective on life in

general. You come back really thankful for America".

Editor's note: Miflord Tire & Auto is a JASPER installer located in Milford, Pennsylvania. If you'd like to help, donations may be sent to Camp Elim Ministries c/o Milford Tire & Auto, 418 Rte 6 & 209, Milford, PA 18337.

Strive to Thrive Presentations in Your Area

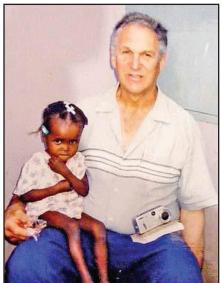
Would you like your shop to be busier? Would you like to grow and improve your profits? If you are looking for simple and effective things you and your staff can do to grow your business, then attend a Strive to Thrive presentation hosted by JASPER Chairman/CEO Doug Bawel.

Strive to Thrive will be presented in these cities:

October 16	Philadelphia
October 17	New Jersey
October 18	Baltimore
November 1	Oklahoma City

During Strive to Thrive, Doug will share current ideas that will enhance the success of your independent business operation. Doug promises, ONLY ideas that work will be shared. The cost to attend Strive to Thrive is several hours of your time... Time to learn ideas that will grow your business and improve your profits.

Make this investment now to attend Strive to Thrive! Contact your JASPER Factory Representative.



Know Your Key Performance Indicators

by Bob Cooper, President & Founder/Elite Worldwide

Bob Cooper

has functioned as the developer, owner and an operator of some of the most successful auto repair shops in North America.



Bob is a member of the prestigious National Speakers Association, and is one of the nation's leading authorities on both personal and career success. Today Bob speaks nationally, as well as internationally, to many trade associations, universities, private banking groups and Fortune 500 companies.

Over the last 22 years, I've been amazed to discover just how many shop owners are lost when it comes to knowing and understanding "the numbers". In order to build a successful auto repair shop, you are going to need to know two sets of key performance indicators: Your "financial" benchmarks, and your "operational" benchmarks. Without a clear understanding of these benchmarks, it becomes quite challenging for shop owners to pinpoint where they are falling short of their goals, and where improvements need to be made. Far too many times I've seen shop owners finally start monitoring these numbers closely, and quickly realize that for years they haven't been charging enough for parts, have been overpaying their employees, have been operating inefficiently, etc. There's no doubt about it: a clear understanding of your shop's financial and operational benchmarks is absolutely critical to your success as a shop owner.

Since your parts cost is one of your largest expenses, it's something you need to monitor continuously. At Elite,

our top clients spend no more than 52% of the dollars they bring in through their parts sales, on parts cost. This means that if they bring in \$40,000 in part sales by the end of the month, the cost of those parts should not exceed \$20,800 (\$40,000 in parts sales X 52% = \$20,800 parts cost.) If you find you are spending more than 52% of your parts sales on parts cost, then you need to take a good hard look at how you price your parts, any parts that are being replaced at no charge, your warranty failures, purchasing habits and the possibility of theft.

When it comes to your direct labor (the cost of your techs), the top shops we work with spend no more than 40% of the dollars they bring in through labor sales, on technician pay. This means that if they bring in \$40,000 in labor sales by the end of the month, their technician payroll does not exceed \$16,000 (\$40,000 in labor sales X 40% = \$16,000 labor cost). the technicians in your shop, including a lack of experience, the lack of prope technical training, and one of the biggest culprits, the wrong compensation programs. And then lastly, after you pay all your expenses, there's the money that is left over for you. In business we ca that profit, and the top shops will typi-

You also need to pay close attention to the cost of your service advisors, and here at Elite, we like to see that number at no more than 8% of your total parts and labor sales. For example, if your shop generates \$80,000 in monthly sales, your advisors should not be costing you more than \$6,400.00 (\$80,000 total sales X 8% target = \$6,400 advisor cost).

You'll need to watch your "operational" benchmarks very closely as well. One key indicator is your labor hours per repair order, and our top clients consistently generate at least 2 - 2.5 hours of labor sales with their average repair order. If you are not seeing 2 - 2.5 hours per repair order at your shop, you need to review your vehicle inspection process, what's being recommended to your customers, and the declined services.

As a shop owner you also need to pay close attention to your technicians' "efficiency" rate. This is a powerful key indicator that will show you just how

good your techs are at getting the work done in a fast and effective way. It's easy to discover your efficiency rate by simply dividing the hours you billed for the repair by the amount of time it took your tech to complete the job. For example, if you bill a customer 2 hours, and your tech gets the job done in $1\frac{1}{2}$ hours, they would be 133% efficient (120 minutes billed/90 minutes to complete the job = 1.33, which is 133%efficient). The top shops are typically operating at an overall efficiency rate of 125+%. There are a number of things that can bring down the efficiency of the technicians in your shop, including a lack of experience, the lack of proper technical training, and one of the biggest culprits, the wrong compensation

And then lastly, after you pay all your expenses, there's the money that is left over for you. In business we call that profit, and the top shops will typically earn a profit of 15 - 20% of sales. So if your shop is generating \$80,000 in monthly sales, in most cases you should be able to earn \$12,000 - \$16,000 per month in taxable income. The good news is, if you know your numbers, and if you never put money ahead of people, you should be able to generate these profits in a professional and ethical way.

Editor's Note: This article was brought to you by Bob Cooper, president of Elite Worldwide. For more information on how you can move your key performance indicators in the right direction, or on how you can build a more successful auto repair business, learn more about the one-on-one coaching and customized action plan offered through the Elite Coaching Program.

JASPER's LEAN Initiative

As one of the nation's largest remanufacturers of engines, transmissions and differentials, Jasper Engines and Transmissions continually strives to improve its quality, standardized processes and production efficiencies in its three remanufacturing facilities. The ultimate goal is to increase the value of its products for our customers and vehicle owners.

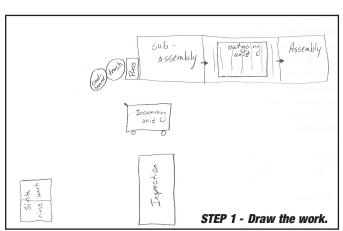
To realize this goal, our company embraces a philosophy of continuous improvement, and with it the *acceptance of, and willingness to change*. Driving this culture of change and improvement is the Jasper Production System (JPS). JPS is a combination of JASPER's workforce and the processes and systems that guide the company's remanufacturing procedures. Among the tools it employs in its work are the principles of LEAN.

LEAN can essentially be defined as a set of methods and practices that improve value and reduce waste. Waste can be something as simple as wasted motion.

One of the first tools we learned on our LEAN journey is called a spaghetti chart. This tool is by far the easiest to understand and teach. The spaghetti chart can be used by anyone, while observing any type of work or task. We have even shared this with some of our customers and they reported back success stories from their shops.

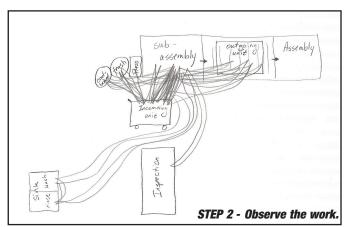
The concept of the chart is simple:

- 1. Draw the area.
- 2. Observe the work.
- 3. Fix the obvious.
- 4. Draw the new area.
- 5. Observe your results.
 6. Repeat.



1. Draw the work - First you draw out your area physical area. Squares and circles are OK to represent benches, trash, machines, etc. However, get the objects as close to scale as possible. Draw all of the objects in the area, or outside the area, that the person uses while working.

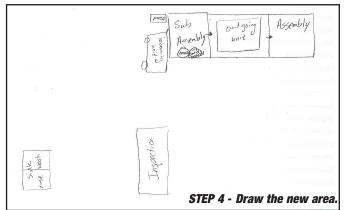
Example: This example is one operation in our transmission assembly area. They take all the good, clean individual parts and sub-assemble them into larger chunks for the assembler. Some new parts have to be unpacked. Some new parts have packing residue and need to be washed. We drew their entire area.



2. *Observe the Work* - Observe the person as they work and when they move their feet you move your pencil. At the end it would look something like this.

Example: We observed for 20 minutes, or one unit. When their feet moved or their body turned, we drew a line. Keep your pencil on the paper and don't let up.

3. Fix the Obvious – With the spaghetti chart, you are looking for trends. Are there objects we can move closer? Are there things in the way that can be moved? What are they going to get or use outside their area? Can we have it delivered? *Example:* We noticed a lot of twisting from the sub-assembly bench to the cart. The ergonomics set off a red flag. We also noticed two steps being taken to go to the cardboard and trash containers. Meanwhile, the press was only used once during this whole cycle. We decided to address these issues first.

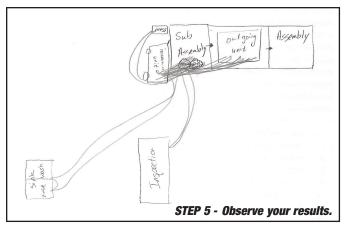


4. *Draw the new area* – An easy rule of thumb to remember is "Keep the builder building". Whatever motion, researching, reaching, reading, walking, talking, going to get or not having a tool, etc., should be identified to reduce the waste.

Example: We made the sub-assembly bench and outgoing unit areas smaller. We cut down the trash and cardboard containers and slid them under the sub-assembly bench. We moved the incoming unit beside the sub-assembler to reduce twisting. Also, the press was moved farther out of the primary area because of usage. We looked at the processes and combined the two trips to the sink into one.

(Continued on back page)

(Continued from page 7)



5. *Observe your results* – Spend the same amount of time observing the "after" as you did the "before". Look to see if your changes were good, or if you added in a whole new problem!

Example: After we made our changes, we made a 50% reduction in footsteps traveled. This traveling time translated into about a 25% reduction in time taken to complete the same unit. Not bad results for about 10 total hours of labor invested in completing the observation, planning and re-arranging.

6. *Repeat* - Don't skip this last step! Keep the momentum going. If you noticed more things glaring on your results sheet, do the area again. Don't ever worry about making it perfect the first time. Do a little bit, view the results, and then do a little bit more. If you try and make it perfect, chances are you won't do anything, or what you did do won't be quite right anyway.

Example: Can we possibly have the parts washed before they come to the sub-assembler? Can we have the parts unpacked? We are still twisting from the incoming cart to sub-assembly. Can we sub-assemble on the cart and then move the whole cart to assembly? – Pick a couple of things to work on. For example, how many steps is it to your soak tanks, parts washer, fluid dispenser, general shop supplier, parts area, etc. Remember... Rome wasn't built in a day.

As a side note, we have had equal success with this in our office environments. Sometimes it is where the physical things are located, and instead of drawing where the feet move, we draw where the hands move. (A different color for each hand.)

We challenge you to think a little differently and let this tool help you to see the possibilities.



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