

News & Updates

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Be Car Care Aware™

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Penske-Jasper Racing Names Kvapil as Driver for 2005

Penske-Jasper Racing, which fields the #77 Jasper Engines & Transmissions Dodge in the NASCAR Nextel Cup Series, announced that 2003 NASCAR Truck Series Champion Travis Kvapil will be the team's driver, and will compete for Raybestos Rookie of the Year honors in 2005.

Kvapil participated in a development program during 2004 with Penske Racing and competed in three Nextel Cup Series races - Martinsville, Atlanta and Homestead.

"Travis showed solid potential and demonstrated the skill and determination it takes to be a winner," said Roger Penske. "And we look forward to building on this foundation with our sponsor partners JASPER and Kodak."

"The opportunity to drive for Penske-Jasper Racing is more than a dream come true. I have been a fan of Roger Penske since I was a little

kid watching Rick Mears. It's a once in a lifetime chance for a young driver and I'm excited to get that opportunity," said Kvapil. "I'm honored to represent JASPER and Kodak."

A Wisconsin native, Kvapil resides in North Carolina with his wife, Jennifer, and their two children.

Kvapil succeeds Brendan Gaughan who drove the #77 JASPER Dodge during 2004. Gaughan finished 28th in Nextel Cup points, with one top-five and four top-ten finishes in 36 races, earning over \$2.9 million in prize money.

"In this sport, you don't get much time to produce," said Penske-Jasper Racing Co-owner Doug Bawel. "We were ecstatic with the performance of the team off the track, but we need to improve our on-track performance. Our sponsors want to get back in the winner's circle, and they realize it takes time to build chemistry. But at this level, you've got to perform and there's not much time to do it."

But the ties between JASPER and Gaughan have not been severed. Brendan will drive a JASPER Powered Dodge in the NASCAR Craftsman Truck Series in 2005.

"Gaughan is not Gone as far as JASPER is concerned," said Bawel.



Wisconsin native Travis Kvapil will drive the #77 Kodak-JASPER Dodge in the NASCAR Nextel Cup Series next season.

Whitey's Truck Center

Whitey's Truck Center in Little Rock, Arkansas, is a full service, professional automotive and truck repair facility. Their service work includes general automotive and truck repairs; engine, transmission and differential repair and replacement, vehicle diagnostics, and RV service.

Owner Lloyd White (a.k.a. Whitey) originally worked for Ford Motor Credit for several years before coming to Arkansas. There he started out as a truck service manager for a while, then set his sights on buying his own shop.

Whitey leased his first facility in 1978, which was located at 6500 West 65th Street in Little Rock. In 2003, Whitey's Truck Center purchased its present location at 7200 South University Avenue. This facility, located on Little Rock's Southwest side, sits on six acres of property, consists of 10 service bays, and gives Whitey's the room to sell used trucks, as well.

Twelve people work at Whitey's Truck Center; half of them have been employed there ten years or more. There are four ASE Certified Technicians, including two Master Truck Technicians, one Master Car Technician, and one ASE Bus Mechanic. Whitey's pays for all of his technician training and ASE courses. His technicians also take



advantage of JASPER's Technical Clinics when they are in the area.

Whitey's Truck Center has been a faithful installer of JASPER remanufactured products for more than 10 years. Their purchases include gas and diesel engines, automatic and manual transmissions, differentials, transfer cases and engine installation kits. Whitey says, "It's the quality of the product and the warranty offered that keeps me coming back to JASPER."

The family atmosphere at Whitey's Truck Center is seen through the personal attention given to their customers - from service reminders to vehicle history reports. "The customer is the most important part of our business," says Whitey. "We try to treat them like nobody else can."

In the future, Whitey's Truck Center intends to open more service bays in their automotive repair building, and they will always look for better ways to serve their customers and the Little Rock community.



Whitey's Truck Center has ten service bays on six acres of property located on the Southwest side of Little Rock, Arkansas.

Understanding A Dual Mass Flywheel

by Eric Bakke - JASPER Research and Development

Eric Bakke

has been in the automotive field for 23 years as a business owner, fleet maintenance supervisor and



an automotive machinist. He has been with JASPER for three years. Eric is ASE-Certified as a Master Engine Specialist, and for Engine Repair, Automatic Transmission and Transaxles, and Manual Drivetrain and Axles.

Today's light-diesel technology has changed in a lot of ways, where some have not. We are seeing greater horsepower and torque gains - even some better fuel economy. If you own, or have previously owned, a light-duty diesel truck between the years 1987 and 2004 with a standard transmission, they may share one thing in common... a dual mass flywheel. General Motors had one on the 6.5L diesel. Ford used one on the 6.9L/7.3L/444TE diesels and the new 6.0L Powerstroke engine. You may even find one on the B.M.W. or other luxury vehicle you have in your shop for repair.

A dual mass flywheel, or DMF, is made up of a primary and secondary flywheel with a series of torsion springs and cushions. There is a friction ring located between the inner and outer flywheel that allows the inner and outer flywheel to slip. This feature saves the transmission from damage when torque loads exceed the vehicle rating of the transmission. The friction ring can wear out if excessive torque loads are applied.

You also have a center support bearing that carries the load between the inner and outer flywheel. The leading failure of the bearing is vibration caused by misalignment of the pressure plate and the DMF dowel pins during



The #1 cause of damper spring failure on today's dual mass flywheels is engine runnability problems.

clutch replacement.

Lastly, you have damper springs. The #1 cause of failure on the spring is engine runnability problems. A poor running engine, if not attended to, will change the resonant frequency of the engine, causing the engine to run in an undesirable RPM range. When the DMF is operated in this RPM range, it overworks the damper spring, causing premature failure.

The function of the DMF is to isolate torsion crankshaft spikes created by diesel engines with high compression ratios. With the DMF you can isolate these torsion spikes, eliminating the possibility of damage to the transmission gear teeth. If there was not a DMF in place, the torsion frequencies could possibly be the same, causing damage to the transmission. DMFs isolate the frequency below the engine's operating RPM, usually between 200-400 RPM. The time during engine operation of the engine that the DMF works hardest is during start-up and shutdown.

How do you diagnose the DMF during clutch replacement?

You can first check the friction plate. This has to be done with the flywheel installed and clutch removed. Partially insert two pressure plate bolts on opposite sides of the DMF's pressure plate bolts. Try and rotate the outer portion of the DMF. Direction of rotation will not matter. You should feel approximately 8-11 degrees of movement before the friction ring engages. If the outer half can be

turned with hand pressure on the bar, it must be replaced. Reports say you can also make this inspection with a torque wrench procedure. You will have to make an adapter to bolt to the outer half of the DMF. The specifications are as follows:

- Ford 6.9L/7.3L with 11-inch clutch - 370 ft-lbs.
- Ford 6.9L/7.3L with 12-inch clutch - 425 ft-lbs.
- GM 6.5L - 440 ft-lbs.

Ford claims the secondary flywheel can be resurfaced to a minimum thickness of .550 (14mm). Anything below this must be replaced, with no exceptions. Torque bolts, with sealer, to 47 ft-lbs.

There have been some reports from GM and Ford of the DMF causing ill-running problems prior to 1994. What you may experience are erratic idle, or possibly, no throttle response for five or more seconds when starting the vehicle.

If you do get a dual mass flywheel in for repair, it would not be advised to replace with a single mass flywheel. This can cause drivetrain noise and possible transmission failure. Yes, it will be cheaper, but the end result could be more costly for you and your customer.

We hope this short bit of information will give you some idea of how the DMF works and what to expect when you see one.

Managing the Manager

by Terry Greenhut, Management Editor, *Transmission Digest*

The word "Manager" basically means to handle. It could be the handling of anything, but in the case of business it generally means people. Managers handle people. Some do it well, but others seem to make a career of barely getting the job done while seeing how many employees, customers and business associates they can alienate along the way.

Managers who do a good job are looked up to and are referred to as leaders. They develop associations with employees, customers and business associates, who become more than willing to follow them in any positive direction. If they begin to take a strange course their supporters are more likely to point that out to them, because an important part of their management style is to be open to the suggestions of their followers.

It isn't all that difficult for a good leader to develop a strong following, because most people want to follow as opposed to lead. All they really want is a leader in whom they can believe. They need to trust that their leader will be there for them in their time of need and will display the courage and intelligence it takes to make them feel safe, protected and comfortable.

Army drill sergeants have a lot in common with what we would consider to be poor managers in business. They make all the classic leadership mistakes in the way they treat the troops who function under them. Of course, that is a far different set of circumstances from a business environment and it could very well be that the discipline they instill saves lives. But picture trying to work for someone like that in the business world. Not pretty, is it? Could you function under someone who barks orders at you continually, belittles and berates you for almost everything you do, and who thinks he knows it all and will not accept any kind of constructive criticism from an employee?

Probably not for too long, but if you are that type of manager yourself and wonder why you can't keep a good crew together, that very well could be

the reason.

Can a bad manager, for whom people work out of fear, be turned into a good leader whom employees want to follow? Sure, but there are some prerequisites. First, that manager needs to recognize that he has a problem. If he doesn't know that one exists, why would he think he has to change? Then he must learn to recognize good leadership qualities and work hard to change the habits of the past. He may even



How do you come across to your employees?

have to find a whole new crew to work with, because after years of abusing the one he has now, there may be no way to salvage their trust and loyalty.

So what are the differences between a poor management style and a good leadership style that makes people feel good and want to be more productive? Let's take a look at some different attributes of the poor manager vs. the good manager.

A poor manager looks to catch people doing things wrong. They want the opportunity to criticize and correct.

A good manager wants to catch people in the act of doing things right so that they can be rewarded, and reinforce good behavior so people will want to continue and build upon it.

A poor manager creates regulations that call for more supervision to give himself more chances to catch people making mistakes.

A good manager removes any regulations that get in the way of productivity and a comfortable working environment.

A poor manager gives employees directions to follow for every imaginable situation. He leaves nothing to the employee's imagination or creative side.

A good manager provides the goal and the concept. Then he stands back and allows the employees to devise the plan of execution on the basis of their knowledge of the actual work environment and their experience as to what worked well in the past and can be applied to the task at hand.

A poor manager is interested only in completing the present task. If getting it done burns people out, that is of little or no consequence to him. He believes that he can always find others if he has to.

A good manager is always thinking about the future. He doesn't want to burn anyone out. He may work people to their capacity, but never beyond. He realizes that he needs to use their skills over and over again and that good employees are not easily replaceable.

A bad manager looks to control others by whatever means possible. It may involve intimidation, threats, yelling, or worse.

A good manager learns to control himself. He never loses his temper or uses foul language with employees or customers. He never varies from his principles. He is honest and keeps his promises. He sets an example for the employees by never letting his guard down or acting foolish in social situations outside of work. He has an imaginary sign on his back that says, "Follow me."

A bad manager talks a lot. He likes the sound of his own voice. He wants to tell people what he knows and why it should be his way.

A good manager listens. He cares about the opinions of others and tries to learn from them. He doesn't believe that he knows it all and that there isn't room for the advice of even the lowest employee on the totem pole.

(continued on page 5)

Lubricant News

One of JASPER's accomplishments in 2004 was to enter into a new agreement for the various lubricants which we use in the remanufacturing process. We are pleased to announce that Shell Oil Products is now the "Official Lubricant Supplier" to Jasper Engines & Transmissions.

Along with products for the remanufacturing process, our goal was to develop a lubricant program that would be available to our many installers across the country. That goal has been achieved! This program will be implemented with Quaker State, one of the Shell family of brands.

Be on the lookout for more information about this program. In the very near future, you will receive a letter from JASPER explaining more of the benefits and details about this program.



(continued from page 4)

A poor manager just tries to keep the shop going day after day and month after month. He doesn't like change, because that would require him to do more work.

A good manager is never satisfied and is always looking for a better, faster and more-productive way to handle any situation. Hard work and change don't scare him.

A poor manager takes credit for everything good that happens in the shop. He somehow believes that it's all because of him.

A good manager gives the credit to the employees. He understands that they are the ones who do the physical work and that without them nothing gets done. He also knows that a manager is rated not by how well he performs, but by how well the employees under him perform.

Defined Policy on Coolers/Flushers

It is important that Jasper Engines & Transmissions has a clear definition and policy that reflects the best interest of our customers and our company. Past failure to address this issue has allowed misunderstandings within our company and allowed situations where our customers felt misled or deceived.

Cooler free flow can range from 1 1/2 quarts to over 4 quarts in 20 seconds. It all depends on the transmission. We have established the average acceptable flow is 2 quarts in 20 seconds. However, we also know that this is not true in all situations.

Replacing the vehicle's system with an external cooler isn't always the answer. Consider the fact the original manufacturer's system uses the engine's radiator to transfer heat from the transmission's fluid to the vehicle's cooling system. Under all conditions this is consistent since it is thermostatically controlled. An external cooler depends on its ability to transfer the fluid's heat to air, which is less effective. It is not monitored by thermostat and depends on constant air flow to be effective. Transmission failure can occur when there's an interruption of air flow over the cooler (snow plows, stopped in traffic, etc.), or when the transmis-

sion fluid is unable to warm up in areas of extreme cold, and could contribute to the jelling of the fluid.

Flushing the system is no longer effective. The newer style coolers have complex internal grids used to enhance heat transfer. These systems collect debris and are impossible to fully flush. Some systems have thermostats that open at 190 degrees. The bypass on these systems causes a misleading appearance that the cooler itself is being flushed.

Comparing cooler flow as it exits the transmission, to the flow as it passes through the cooler, is not always effective. Some Chrysler 41TE and 46RE coolers, that have contamination, could pass a flow test at normal operating temperature. However, under load or hot conditions, the cooler will restrict the fluid flow to dangerous levels.

The point is, there is no single answer that fits all circumstances. Below are three blanket statements that will be JASPER's position. They are in order of preference:

- 1. Replace with a new system (radiator)** Check flow to assure lines and check valves are okay.
- 2. Replace with an external cooler.** Keep in mind above information and flow test.
- 3. Flush the original system.** Use heated, hydraulic shock system. Flush in a can IS NOT acceptable. Flow test at operating temperature.

A poor manager believes his job is to tell everyone else what to do, and how and when to do it.

A good manager believes his job is to help everyone else accomplish theirs, not to do it for them, but to lend a hand when needed. He's been known to run for a part if it will speed up production, drive a customer home, or hold a pry bar for an installer.

A good manager is a good leader of people. He gets things done by empowering people to make good decisions about their own work effort and environment. The company he works for is always the best. That's his attitude toward it, and he works to make all the employees feel the same. He's a no-nonsense kind of guy who maintains a solid image. He can laugh at himself and understands that no matter how bad any situation may seem at the time, it too shall pass and views it as a learning experience to be

handled better in the future.

A good manager is a visionary who wants to know only how he can make it better for all the tomorrows than it was today. He understands that for the business to grow, the people must grow first. They must be allowed to learn and must be rewarded when they do. They must have the same pride that the owners and managers have. When they tell people where they work, they have to say it with infectious enthusiasm, which makes others believe that taking their car to that shop is the smartest and the only decision they should be making.

A manager who can accomplish all of that will be known as one of the best in the business.

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...EXPERIENCE IT



JASPER'S 2005 NASCAR GETAWAY

One Race Day Ticket • One Race Day Hospitality Pass
Special Gift • One Race Day Behind-the-Scenes Experience
for any one of the race dates listed below!

Samsung/Radio Shack 500 - Ft. Worth, TX	April 17, 2005
Pontiac Performance 400 - Richmond, VA	May 14, 2005
MBNA America 400 - Dover, DE	June 5, 2005
Michigan 400 - Brooklyn, MI	June 19, 2005
Brickyard 400 - Indianapolis, IN	August 7, 2005
Sharpie 500 - Bristol, TN	August 27, 2005
Bass Pro Shops MBNA 500 - Atlanta, GA	October 30, 2005

Event names determined from the best available information at the time of printing. Dates are subject to change.

Each package is valued at \$350.00 and is available to you for only \$125.00 and the proof of purchase of five engines, transmissions, differentials and/or stern drives. Purchases must be made between October 1, 2004, and October 21, 2005. Package(s) do not include transportation or lodging and must be redeemed 30 days prior to the race you plan to attend. JASPER is not responsible for rain dates or cancellations. All reservations will be confirmed in writing. To redeem package(s), submit copies of your invoices, along with a check for \$125.00, to:

Jasper Engines and Transmissions
Attn: Jasper/NASCAR Promotion
P.O. Box 650 • Jasper, IN 47547-0650
1-800-827-7455 • www.jasperengines.com

Hurry while supplies last! Packages are subject to ticket availability.

Be sure to read an upcoming issue of the JASPER News and Updates for more details!

Available only to businesses whose policies do not prohibit such programs.

Pin Code Security

Some of our customers have expressed their wish to create their own PIN Code for their account information on the JASPER web site to use in conjunction with our Account Number/Zip Code sign-in process for added security. If you decide to create a PIN Code, this code will be required after signing in, using your Account Number/Zip Code.

If you do not wish to create a PIN Code, and one does not exist for your account, you can still sign in, using just the Account Number/Zip Code as in the past.

Establishing the PIN Code is simply an option available if you decide to implement an added level of security.

There is a link to the PIN Code Administration on the My Accounts page of www.jasperengines.com that will allow you to set up a PIN Code.

In addition, there is a link to the PIN Code Administration page from the Installer Catalog, as well as the Check My Account Balance, and the Submit A Warranty Case Or Check On The Status Of A Claim pages that prompts you of the PIN Code availability.

Features available in conjunction with the PIN Code are:

- Setting up a new PIN Code for your Account.
- Changing an existing PIN Code for your Account.
- Changing an e-mail address associated with your PIN Code.
- E-mailing the PIN Code to your associated e-mail address if you have forgotten it.

In addition, if the second and third options are used, an e-mail notification is sent to the originally established e-mail address for security purposes.



Win A Heater! Send In Your Entry Today!

Recently, Burns Best, the distributor of waste oil burners, joined the American Tractor Pullers Association as an Associate Sponsor. To introduce affiliates of the Pulling Association to their products, Burns Best is providing a waste oil burner for a sweepstakes prize.

The Burns Best waste oil unit has several key features that set it apart from other waste oil units on the market.

- The nozzle is self cleaning. A mechanical pin goes through the nozzle every time it starts and stops to prevent clogging.
- Trapped gases and air are eliminated, by a patented process, to prevent sputtering, and therefore, a cleaner burn.
- The electrodes only need to fire for the first 10 seconds, due to reliable flame. This reduces power consumption and electrode wear.
- The fire eye control shuts off oil flow in four seconds, compared to 30 seconds for most competing brands. This eliminates the rumbling sounds (mini explosions) heard in extreme cases that can blow apart exhaust stacks and fill the building with deadly fumes.

The system being offered, Model IN-F200, will heat a 5,000 square foot facility. This system sells for \$5,235.00. If your entry is drawn, you can choose this system, or apply \$5,235.00 towards the purchase of a larger unit.

To enter, complete the following form, and mail to:

Jasper Engines & Transmissions
P.O. Box 650
Jasper, IN 47547-0650
Attn: "Heater Sweepstakes"

Entry deadline is February 28th, 2005. For more information on alternative heat sources such as wood, corn, coal and saw dust, please feel free to contact us at the address below:

BURNS BEST
310 Business Hwy 53
Minong, WI 54859
(877) 983-4328
www.burnsbest.com



Model IN-F200 Waste Oil Burner

Heater Sweepstakes Entry Form

Business Name _____

Contact Name _____

Street Address _____

City _____ **State** _____ **Zip** _____

Phone Number _____

Square Footage of Shop _____



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Your National Car Care Month Reminder!

If you've heard about April being National Car Care Month, but have never hosted a vehicle check up event, then 2005 is your year.

Recognizing that some shops lack the time, money and employees to produce a large National Car Care Month event, the "Be Car Care Aware" campaign has added smaller in-house check up events to its list of offerings.

While not as labor intensive or costly, in-house checks can create a double dose of loyalty. First, motorists become devoted to partici-

pating repair facilities who offer a free check up, educational handouts, freebies and most importantly, time. Throw in a hefty portion of parts sales that occur as a result of these checks, plus goodwill received from hosting a free educational event and the result is a hard working promotion that won't break the bank.

Statistics from the April 2004 National Car Care Month inspection campaign continue to underscore the need for consumer education. Overall, the net failure of any part or system was 87 percent of the

vehicles inspected. Problems ranged from low fluid levels and improper tire pressure, to worn belts and dirty filters. The potential effects on highway safety, air quality, cost of operation, vehicle performance and vehicle dependability are self-evident from these results.

Participating in the "Be Car Care Aware" consumer education campaign is as easy as visiting the campaign web site at www.carcare.org.



Be Car Care Aware™