

# FOCUS



1ST ISSUE 2009

## IT'S ABOUT SERVICE AND UPTIME



CLAIBORNE HAULING • DRD WASTE TREATMENT SOLUTIONS, INC. • AVOIDING DUST OUTS



# KAWASAKI KEEPS IT SIMPLE.



Since 1962, Kawasaki has been listening to and learning from customers and dealers in the field. As a result, Kawasaki wheel loaders continue to evolve, with a constant focus on one thing — producing the most durable, most efficient, most dependable machines possible.

## EASY TO OPERATE.

In a world of increasing demands, tighter deadlines, shrinking budgets and complicated contracts, better efficiency and greater productivity are a must. Innovative high-tech features on all Kawasaki wheel loaders allow the operator to adapt to the environment and the application right from the cab.

## EASY TO MAINTAIN.

Diagnostic and operational modules monitor fluids and filters, and constantly provide information on everything from engine and transmission codes to location, hours, alarm sensors and machine performance data.

## EASY TO DO BUSINESS WITH.

No run-arounds. No layers and layers of management. No distractions from competing product lines. Wheel loaders are our only business. Got a question? We'll get you an answer. Need a part? It's on its way. Quickly. Kawasaki offers flexible warranty programs, a state-of-the-art parts distribution system, an in-house rebuild center, and an experienced, knowledgeable support staff, focused on serving you.

The independent dealers that represent and support Kawasaki loaders are experts in their markets and are dedicated to providing you with the best service available.

Together, we are committed to making your investment in a Kawasaki loader a sound business decision that will pay dividends for years to come.

## KAWASAKI. ONE FOCUS. COMPLETE SOLUTIONS.



**Kawasaki Construction Machinery Corp. of America**

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# SAY WHAT YOU DO, DO WHAT YOU SAY



**T**wo mottoes have taken Todd Claiborne, owner of Claiborne Hauling Contractors LLC of Knoxville, Tennessee, from a solo operation to a vertically integrated company with over 150 employees. His first motto was “Never say no.” That one, coupled with a lot of hard work and 24-hour days, took him from driving one dump truck to managing a fleet of 12, and then expanding into the grading business.

The second motto — “Say what you do, do what you say” — explains why he kept expanding. “I had trouble getting subs to do what they said they were going to do,” relates Claiborne. “I’d have trucks go to a job, their people wouldn’t show up, and it would cost me money. So I was forced into other businesses because no one would do what they were supposed to. I got into

excavation which also kept the hauling company growing. The roll-off company came about because I’d send skid steers to load jobsite containers and the companies wouldn’t show up to empty them; I’d have to send the employees home early. We went into heavy hauling so we could move our own equipment and it has grown into a business of its own now, moving for other grading contractors and dealers. We run 25 low-boys now and operate in the lower 48 states.”

Ever on the lookout to save time and money, when Knoxville’s section of I-40 was closed by Tennessee’s SmartFIX40 project, he set up a distribution yard on the west side of town along with buying 12 extra trucks, in order to stockpile aggregate and serve his customers without traffic delays.

“I look for those niches out there and tie it back to a central core. Each of the businesses has got to help the others. We’ve actually started buying property and developing it ourselves.”

## HANDS-ON APPROACH

Claiborne is an equipment guy. He ran his own dump truck for years, then ran a backhoe when he added the grading business. Even today, his love of equipment is evident by the care he takes in studying the specs before making a purchasing decision. “I really know the specs. I’m very methodical about it. That’s one thing that helps me do a little bit better than the competition. I figure what I need and, if necessary, have it specially built and geared to the job.”



*The six cubic-yard specialty bucket is made by TAG.*



**“In addition to price, I buy service and support.”**  
**– Todd Claiborne, Owner, Claiborne Hauling Contractors LLC**

Through the years, Claiborne has run a lot of different wheel loaders. “We’ve had John Deere, Volvo, and Cat®, but when we started doing some demos, the latest generation of Kawasaki loaders really caught up to them. All of our people, all of our operators, really like them. The loaders aren’t too complicated. I feel you don’t have to overwhelm the operators with 15 bells and whistles they’ll never use, and I don’t want to pay for them. I like to keep things a little simpler.

“Before I bought our first Kawasaki, I went online to see how many hours these machines had before being sold and what their condition was. I called about some of those for sale and asked what kind of problems they’ve had. End users were getting 14 to 15 thousand hours, and that’s pretty good.

“In addition to price, I buy service and support. I’ve got to be able to get them both — is the dealer going to step up to the plate? I’ve had trouble in those areas with other



**Todd Claiborne, Owner of Claiborne Hauling Contractors LLC with Chris Etters, Grading Division Manager along side of the Kawasaki 90ZV-2.**

brands. So far, with our Kawasaki dealer, the longest we’ve had to wait is an hour. Service is huge. Time is money in my business. It’s all about time. If my loader is down, I can’t

load my trucks and then I can’t get gravel to my customers. My customers have subs waiting, they can’t pour concrete, and on down the line. There are so many people



beyond me that depend on this machine. We've got to give our customers a reason to use us over the other truckers in the area. So we've got to provide better service and consistency."

## SPECIAL TREATMENT

One unique way the company provides better service is through its selection of themed trucks. Painted to represent diverse national and local institutions like the University of Tennessee, U.S. Army, Rubber Ducky, Tony the Tiger, and MIA/POW, the trucks are huge favorites with their customer base as well as the general public. And it should come as no surprise the company has a clean machine policy. "You could eat off of the floors of our trucks," says Chris Etters, Grading Division Manager. "Our drivers are proud of their equipment and really take the time to form relationships with our customers." Deep respect for their community is evident.

Another specialty the company has isn't one visible to the public, but is appreciated by their customers: Claiborne uses a specialty bucket on their wheel loaders. With a standard bucket, an operator has to load a truck in the middle, the front, and the back. The six-cubic-yard specialty bucket, made by TAG, is a lot wider with flared sides, so the load dissipates better and more evenly. It has cut their loading cycles down to three passes per truck. This enables each loader to load six to eight more trucks a day while saving fuel, making the bucket a win-win proposition for both the company and their customers.

## OPERATOR FAVORITES

Chris Martin runs the company's new West Side Yard, the one established to circumvent the problems created by the I-40 construction. His yard uses a 90ZV-2. "It's a perfect three-pass loader," Martin says. "I ran a Kawasaki myself when I worked in

Florida about 15 years ago — it was a great machine. My operator here loves our 90. I can't get him out of it. It's a good machine."

Another operator, David Hokkanon, adds that he really likes the visibility. "The response is great, the power that you need is great. Everything's within arm's reach and the cab is comfortable. You can tell they really thought about the operator when they designed the cab. Our operators who had never run Kawasaki found it easy to learn. We all like Kawasaki the best."

"So far our Kawasakis are doing a good job," says Claiborne. "You've done a good enough job to hook me. I'm definitely a shopper, very methodical. And I've got to put it out there to my operators to make sure they are onboard from the start. They liked them. It was simple, the power was there, and the ride. And that's why we bought four the first round."

***Claiborne Hauling Contractors is serviced by A.E. Finley, Knoxville, Tennessee.***



***Claiborne's operators who had never run Kawasaki before found them easy to learn.***





# TURNING MUD INTO GOLD

**U**nless you live in an oil-producing state, you're probably not familiar with the term "drilling mud." When a rig drills into the ground, the bore hole is kept small to reduce the amount of steel or concrete that must be used to encase it once drilling is complete. That small hole makes it impossible to retrieve the fragments of rock, shell, and clay generated by the bit as it drills on down. So drilling mud was developed (there are a variety of formulations, including diesel fuel, synthetic oil, chlorides, and bentonite) — and it performs a number of tasks. It keeps the drill-cutting fragments in suspension and carries them out of the drilled hole keeping the bit from clogging up, it keeps the fluids found underground from entering the hole, it keeps the drilling bit cool and clean, and it has minimal interaction with the surrounding formations.

Oh — did we mention it is also expensive? It can cost \$160-180 a barrel, and it's not uncommon to use hundreds of barrels on a drilling job, depending on the depth of the hole and whether there are any unexpected lost circulation zones to siphon off the mud until the fluid pressure is built back up enough to continue drilling.

When the mud is returned to the surface with its fragments and other materials it has picked up along the way, it has to go somewhere. And that's the beauty of what DRD Waste Treatment Solutions, Inc., in Hinton, Oklahoma, has to offer. Unlike other companies that simply dispose of the mud, DRD is the only company in the U.S. that actually recycles the components, which includes returning part of the product back to the oil company. By getting the

hydrocarbons such as oil and diesel back, the oil and gas companies save money because they don't have to purchase those items again.

In addition to separating the hydrocarbons, DRD also reduces the chlorides (salts) which are useful in rebuilding mud products and converting the mud into materials that have beneficial uses.

What's leftover that is not useful to drillers is a bentonite-hydrocarbon mixture. And for that, DRD's own resourceful environmental personnel are finding many uses.

"We can make a road base material that sets up within 48 hours like blacktop," says Ryan Blevins, President. "It doesn't ripple or rut like gravel, and maintenance is simple — a motorgrader only needs to go over it once



a year. We've paved some county roads and now we're working our way up to the Oklahoma Department of Transportation. We can also make fertilizer and construction fill from it. Every bi-product is sellable."

## SURVIVING THE PITS

The company has three Kawasaki loaders — a 70 ZV-2, a 90ZV, and a 95ZV-2. The 70 is at their Coalgate, Oklahoma, location. The other two are in Hinton. If there were ever a wheel loader hell on earth, DRD has to be awfully close.

"These Kawasakis work in a very extreme environment," says Blevins. "A lot more extreme than mining. Our wheel loaders handle 90 percent of the materials — not only the actual drilling mud but also the various elements used to remediate it.

"When the loads come in, they are dumped into cement-lined pits. Because drilling mud is slick by design, traction is a huge challenge. These loaders are in it seven days a week, 18 to 20 hours a day. They experience slippage



**Jeremy Johnson, Facility Supervisor, and Ryan Blevins, President, DRD Waste Treatment Solutions; Tom Damron, Sales Representative, Oklahoma Territory Construction Equipment.**

every day and it's been absolutely amazing we've not had a problem with them. So the loaders drive in there, pick up the stuff, climb back out, and take it to a mechanical shaker that separates solids from liquids. The materials then go through a chemical process and are pumped into another cement pit. The loaders grab a variety of aggregates that will solidify the material and then drive into that second pit to mix the materials. Then they remove the mixture and place it in stockpile areas where it will later become fertilizer, road base, or construction fill.



*DRD really studies their projects. "We don't just come up with an idea and say it is perfectly safe," says Blevins. "We continually test it and prove it. Even after we get approval, we continue to study. After all, at one time, burying waste was considered a great idea. We know better now. So we have our own environmental department. This is a unique company."*



"The loaders are always coming in and out of the pits at a steep angle which is very stressful on the torque converter and transmissions. We tried other brands and they had overheating problems. Not Kawasaki. The chlorides we separate out are very corrosive to the loaders, but they've held up well. Then there are the aggregates. They're very dusty. They cling well to our mud but are quite hard on the radiators. That wide-fin radiator is the best we've ever used. A competitive brand, which promoted they had the best air-cooling system, only lasted 60 days. The loaders also handle compost and add amendments. We have a working farm here too. We monitor the effectiveness of the soil enhancement (fertilizer) we generate; checking the root structure of our plants and soil components. We also monitor

the soil and water for contamination. We're serious about being "green" and we actually live on the property, as we have a lot of customers who need a quick response, and our personal time and attention.

"Another thing we noticed was the cabs are a lot tighter than other brands," says Blevins. "With the way the dust blows around here, when we keep the doors and windows closed, the cabs are as clean at the end of the day as they are at the start of the shift. I can't say that with other brands. And they are extraordinarily stable, even on uneven ground. When we raise a 24,000-pound bucket on our 95 equipped with a standard counterweight, we have no problem at all."

One unexpected Kawasaki benefit DRD discovered was the fuel economy. "When fuel was so high, I could make a monthly machine payment with the fuel savings," notes Blevins. "Our 90 loader, which is the one that is most heavily used, averages just 5.5 gallons an hour, which is incredible. No other brand has ever come close."

DRD has treated waste from as far away as Wyoming, but mainly receives product from as far west as Wheeler, Texas, as far east as Fort Smith, Arkansas, and 100 miles south of Fort Worth, Texas. In addition to recycling drilling mud, they also offer a number of oil-field related services such as excavation, vacuum trucks, water filtration, and soil remediation. Their self-contained bioremediation units that process waste on-site have traveled as far away as Canada.

"We've bought a lot of equipment over the years and we've never had the technical and after-sales support as we have with Kawasaki. And our dealer, Oklahoma Territory, has provided great service in comparison to the other major dealers. Once when we were using another brand of loader, we had to wait three days for them to get to us. With Oklahoma Territory, they've been out here in the evenings and even at 4 am. We're very happy."

**DRD Waste Treatment Solutions, Inc.  
is serviced by Oklahoma Territory  
Construction Equipment, Oklahoma  
City, Oklahoma.**

**"These Kawasakis work in a  
very extreme environment."**

**— Ryan Blevins, President,  
DRD Waste Treatment Solutions, Inc.**



# NEW OR OLD, YOUR ENGINE NEEDS TO BREATHE

As all operators are aware, proper maintenance of equipment leads to longer useful life. They also recognize that this maintenance includes the entire piece of equipment, including subsystems such as the air and fuel system on the diesel engine.

Proper maintenance of the air system is essential to longer engine life. If not maintained at regular intervals, dust can enter an engine and cause extensive damage and even failure. Diesel engine manufacturers produced literature as early as the 1950's to help explain how dust ingestion impacts the life of an engine. As diesel technology has changed, the impact of dust on an engine remains the same. Engines could not tolerate dust 50 years ago, and they still cannot tolerate it today as upwards of 150 gallons of air/second passes through heavy duty diesel engines.

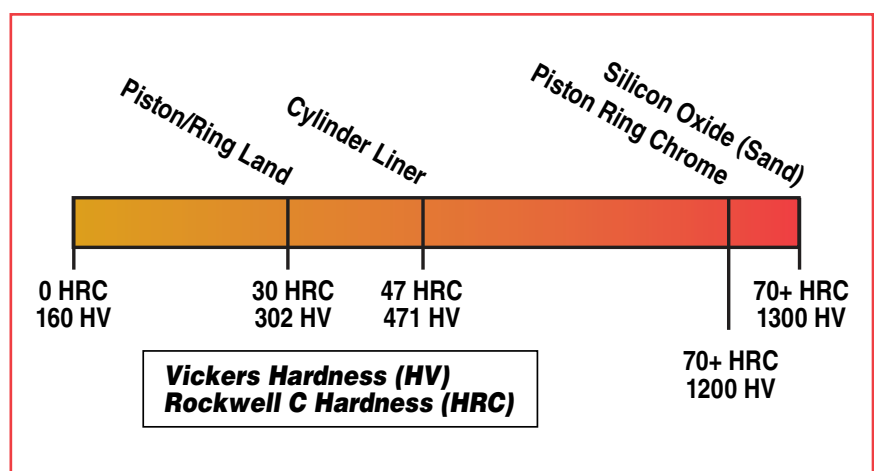
When it comes to providing an insight into the reasons and benefits for maintaining air and fuel system cleanliness, few companies are better qualified to talk on this subject than Cummins Inc. Unlike other engine manufacturers, Cummins is also a world leader in the design and manufacture of filtration products. Here, Cummins explains the causes of dusting and provides tips on how to avoid it.

## WHAT IS A DUST OUT?

A dust out is the ingestion of hard particles into the engine that lead to rapid wear of the power cylinder components. The particles that enter the engine and accelerate ring and liner wear come in multiple forms, including: Silicon Oxide — sand or dirt particles or Aluminum Oxide — aluminum particles. Both of these particles are much harder than the power cylinder components (pistons, rings and liner). The dust particles can range in size from 2 microns to grains of sand, all the way up to small rocks; and as little as 2 oz of dust can severely impact expected engine life. This dirt or dust that is ingested into the engine does not leave out the exhaust, it is embedded into the softer components such as liners and piston ring lands.

The softer material, pistons and liners, allow the dust particles to become embedded and act as a carrier for the abrasive materials. When the abrasive material becomes embedded in the piston ring land, it begins to wear the bottom side of the piston ring creating ring wear, ring flutter and consequential breakage. This dust damage is magnified as an engine is operating at 1400 RPM's, the ring passes over the dust particle embedded in the liner 2800 times per minute.

The Chart below shows the hardness of sand or dirt particles as well as aluminum particles compared to the power cylinder components of an engine.





## AIR SYSTEM COMPONENTS

**Components that are affected by dust include the following:**

- Air Filter Housing
- Air Filter
- Intake Piping (Suction and Pressure Side)
- Charge Air Cooler
- Turbocharger
- Engine Intake Manifold
- Cylinder Head
- Power Cylinder Components (Piston, Rings and Liners)
- Air Compressor

## ROOT CAUSES OF “DUSTING”

Three things cause the “dusting”. First are incorrect maintenance procedures to clean your filters. The outer filter elements should only be cleaned/maintained per the machine OMM recommendation. The inner filter element can never be cleaned and can only be disturbed if it is being replaced. Furthermore, the air system should never be left open in unsatisfactory conditions. The second cause is assembly quality such as incorrect clamp torque, clamp placements, and pipe alignments. The last cause is incorrect equipment repairs including replaced parts due to maintenance.

## MAINTENANCE

To avoid repeat dust-out failures clean the air filter housing with a damp cloth once the filter has been removed. Do not attempt to clean filters by hitting them against the tire. Complete the important daily intake system checks by looking for loose or missing clamps and checking the contact points between the intake system and other equipment components. Also look out for issues such as cracked pipes and filter minders when doing this check.

For more questions reference your Equipment manufacturer’s maintenance manual under air filter maintenance guidelines and understand your air filter change instructions as well as your intake system maintenance guidelines. Here you

will find helpful information such as your recommended cleaning frequency, clamp re-torque frequency, and maintenance item replacement frequency.

## CLEANLINESS FOR FUEL SYSTEMS

Equally important to maintaining air filter cleanliness is the need to take maintenance precautions with the engine fuel system to ensure you attain the peak performance, reliability, and long life cycle you demand.

This also aides in meeting the stringent emissions regulations for which the engine is designed. New technologies, including fuel systems are more sensitive to debris than yesterday’s diesels due to these emission regulations and today’s horsepower and torque demands. Therefore it is imperative that an operator keep the fuel system, like the air system, clean.

Some fuel systems and their parts cannot be cleaned once contaminated. Therefore it is imperative to keep them clean by avoiding sources of contamination that may be introduced through the cleaning process, the repair environment, or on your own person.

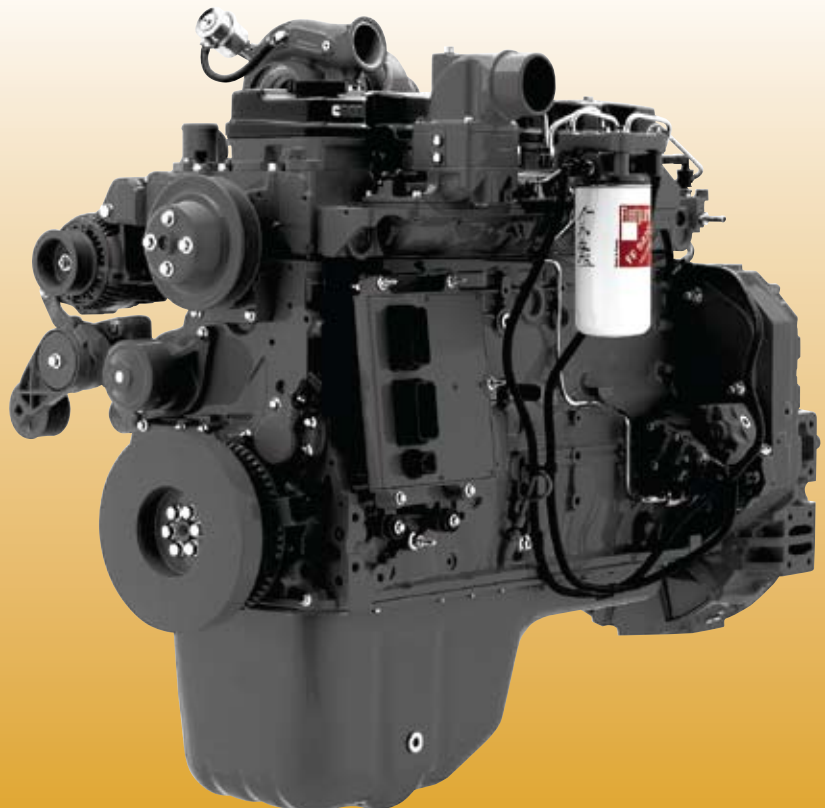
Whenever you open up part of a fuel system for a repair or cleaning you are also opening

up the potential for contamination. Diesel fuel is a dust/dirt magnet, so keeping tools clean before each use is also important. If you are cleaning parts for your fuel system use lint free shop towels since cloth towels and paper towels can leave lint. Often the best cleaning job is done using chemicals only.

Another point that is often overlooked is the actual parts washer. While a parts washer is good for general parts, it is not recommended for use on fuel system parts due to poor filtration and poor drainage of the parts washer itself.

Prefilling your fuel filters, once considered a good maintenance practice, is also not required for today’s diesel engines and is another common way to contaminate your fuel system and cause damage to your engine. This contamination is often due to the quality of the fuel you are pouring from one container into the inside of the filter.

**Information on maintaining air and fuel system cleanliness can be found in the equipment operation and maintenance manual. For additional information or advice, consult your equipment dealer.**







COMING SOON!

# 92ZV-2

## THE KAWASAKI 92ZV-2

Looking over the field of six-cubic-yard wheel loaders, most are really stretched versions of smaller models. Not so with Kawasaki's new 92ZV-2! It is designed specifically for the heavy demands of this size wheel loader. It is coming off the drawing board fully conceived and ready to tackle its intended applications such as load-in in quarries or sand/gravel operations, hopper feeding at asphalt plants, log handling, hot slag, recycling/refuse, and fork applications for pipe and pallets.

## SELECTED FEATURES

- The 92ZV-2 is powered by the Cummins QSM11 Tier III engine. It has 284 fhp (net flywheel – fan losses are deducted), 1,121 ft-lbs of peak torque, and a huge forty-seven percent torque rise to provide great power for digging and hill climbing.
- The newly designed countershaft transmission is built by Kawasaki. It offers smooth shifting and outstanding reliability. One unique transmission feature is the AutoBrake which is similar to what can be found on our larger machines. This protects the transmission from overspeeding or improper directional shifting. No other competitor has this patented feature.

- Dual Z-Linkage delivers the power and strength to handle tough digging and provides outstanding visibility to speed cycles and increase safety. The lift arms are made of heavy alloy steel for durability and long life. Competitive models use a single-cylinder design that blocks center visibility and often provides less break-out force.

**Maneuverable, yet strong. Quick, but powerful. Simple, but best in class. Easy to operate and economical to maintain. That's the 92ZV-2. That's the Kawasaki difference.**



## BRIEF SPECS:

**Bucket Capacity:** 6.0 cubic yards

**Material Density:** 2,800 cubic yards

**Payload:** 16,800 lbs.

**Gross Horsepower:** 300

**Flywheel Horsepower:** 284 with fan

**Peak Torque:** 1121 ft-lbs @ 1400 rpm

**Breakout Force:** 50,900 lbs.

**Full Turn Tipping Load:** 37,325 lbs.

**Operating Weight:** 58,025 lbs.

**Dump Height:** 10 ft. 8 in.

**Reach at Max Height:** 4 ft. 2.3 in.

**Wheelbase:** 11 ft. 7.75 in.

**Turning Circle:** 47 ft.



# KAWASAKI KEEPS IT SIMPLE.



In a world of increasing demands, tighter deadlines, shrinking budgets and complicated contracts, the choice in wheel loaders is simple: Kawasaki.

## A FULL-LINE OF RUGGED, RELIABLE, EFFICIENT MACHINES.

- 13 models
- 96 HP – 720 HP
- 1.8 cu. yd. – 13 cu. yd.

## EASY TO OPERATE.

Increased efficiency and productivity come from innovative high-tech features that allow the operator to customize and adapt to the environment and the application...from the comfort of the redesigned cab.

- Adjustable Declutch
- ELS — Efficient Loading System
- Idle Management System
- Variable Boom Kickout
- Power Mode Switch
- Ride Control

## EASY TO MAINTAIN.

Even basic servicing is easier than ever, with extended greasing and oil change intervals. Not to mention:

- MODM (Machine Operation Diagnostic Module) provides essential operations and diagnostic information in an easy-to-read LED display.
- K-LINK II monitors and transmits digitally the location, hours, system alarm sensors, engine and machine performance data.
- KLEW provides fast and easy access to a total oil analysis and early warning program.

## EASY TO DO BUSINESS WITH.

No run-arounds. No layers and layers of management. No distractions from competing product lines. Wheel loaders are our only business. Got a question? We'll get you an answer. Need a part? It's on its way. Quickly.

- Creative Solutions, Fast Response.
- Focused Resources, Experienced Specialists.
- Flexible Warranty Programs
- Rebuild Center

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