

# Renowned for MAINTENANCE

**The foundation for success at John Christner Trucking is the continuous efforts to improve the maintenance operation**

By David A. Kolman



**W**ith the rising cost of doing business nowadays, effective vehicle maintenance and repair takes on even greater significance. More and more fleets and service providers are working to improve their efficiency in getting vehicles serviced and gain the greatest return on investments in tools and equipment.

But that is not the case at John Christner Trucking in Sapulpa, OK, a family-run truckload fleet that specializes in transporting temperature controlled products - from -20 to +90 degrees Fahrenheit. Creating and continuing best maintenance practices has been the guiding principle since day one. When John Christner founded the company in 1986, he built a shop before an office.

His business philosophy can be encapsulated thusly: be proactive in keeping the fleet on-the-road operating efficiently, and constantly be looking for tools, methods and technology that can be used to improve things. And that philosophy has paid off. John Christner Trucking is one of the top temperature controlled truckload companies in North America. It has an industry-wide, well-deserved reputation for having a superbly maintained fleet.

The company operates about 750 tractors - an assortment of Kenworth, Peterbilt, Freightliner and International models. It was an all Caterpillar engine fleet, but with the engine manufacturer no longer building truck engines, John Christner Trucking is now using Cummins and Detroit Diesel engines, from 450 to 470 horsepower. These are mated to 10-speed Eaton Fuller transmissions.

Tractors are ordered with upgraded owner operator specs and components, along with equipment and accessories specific to the fleet's operation and application requirements operation. The power units also come with extended warranties.

Tractors generally average about 140,000 miles per year, with the typical length of haul being 1,100 to 1,200 miles. Tractors are commonly traded after about three years.

The truck specs and mileage help enhance resale value, says Steve Dickson, vice president of maintenance. Plus, it helps keep maintenance

and repairs to regular PM work and minor repairs.

"We can literally do anything here," he says. "We can rebuild engines and we have our own body shop and paint booth. But we prefer not to. Most of our major issues and problems are generally handled under vehicle warranty."

The fleet's shop, which operates around the clock, is staffed with 37 truck technicians "who have certifications across the board." It also has a truck wash on the premises, but contracts out the labor.

John Christner Trucking's 970 trailers are all 53-foot, air-ride suspension Great Dane and Utility models, the majority of which have Thermo King refrigeration units. The remainder have Carrier Transicold units. The reefers usually run around 3,000 hours per year. Trailers are on a five-year trade cycle.

Last year the fleet repowered the refrigeration units on some 200 of its trailers to extend their useful life. "We couldn't get good trade numbers so we elected to repower and run them another three to four years," Dickson says.

## IMPROVEMENT STRATEGY

The fleet is constantly looking for better ways of maintaining its vehicles and is regularly trying out new products and different ways of doing things. By way of example, Dickson cites the use of ESOC Commercial Trucks' engine oil exchange machines. The units are environmentally safe oil evacuation systems that reduce labor time and costs and help minimize truck downtime.

About three and a half year ago, Dickson first saw an ESOC engine oil change exchange system at a truck quick lube facility. Shortly thereafter he then noticed a couple of his trucks come in with the two special ESOC drain fittings. He began looking into the quick oil change technology system and decided: "It made perfect sense," he recalls.

"With the ESOC system, technicians don't have to worry about removing the drain plug, positioning the bucket correctly to catch all the oil that drains out and doing all the processes associated with changing engine oil," says Dickson. "The technician simply attaches the two lines to the fittings, programs the ESOC machine, starts it and let then lets it do its thing."

Initially, two low-profile, quick-connect, spill-free fittings are attached to the engine and left in place. The fittings are designed so that it is impossible to have a wrong connection.

The ESOC system's closed-loop technology automatically sends clean, dry air to purge the inlet side of the filter, forcing the used oil out of the filter and out of the lubricating passages down into the oil pan. Simultaneously, the used oil is being evacuated from the oil pan into a holding tank, and an oil sample can be automatically drawn.

After the purged air stops, the oil exchanger signals with an audible and on-screen alert that the engine is now clean of waste oil. At this point, the used oil filter can be replaced with a new one - even while the oil is still being evacuated. Because the used filter has been purged, it can be removed without spilling oil.

After the used oil is removed from the oil pan, the pump stops automatically. By following the on-screen instructions, a pre-selected amount of fresh oil is introduced through the inlet side of the oil filter pre-filling the oil filter and lubricating oil passages and the crankcase. At the start-up, the oil filter is full and the oil passages inside the engine are pre-lubricated so that upon engine start-up, there is instant oil pressure.

At John Christner Trucking, the captured waste oil is used to heat the fleet's drive-through bay shop.

The fleet bought the ESOC Series 1000 oil changer and positioned the stationary unit in between two of its drive-through shop bays. This allows technicians to do more oil changes without having to move trucks in and out as much, further increasing technician and shop productivity.

"The technicians really appreciate the system," Dickson notes. "It requires no special training and cuts down on the time and effort needed to change

oil. There is a lot less mess so they're working in a cleaner environment."

The ESOC Series 1000 "is a very handy piece of equipment," remarks technician Bruce Kuka, who has been with John Christner Trucking for 10 years. "You don't have to pull drain plugs or drop oil pans, and that helps keep us and the shop cleaner. It also helps us get oil changes done faster."

"The system is simple to operate because of the easy-to-follow on-screen instructions," Brian Mattson, another 10-year technician at the fleet, says. "You program in the truck number, mileage, whether or not you want an oil sample, how much oil to put it and then you start the operation."

"It does everything automatically, even draining the oil filter and pre-priming it so there are no dry starts," adds Kuka. "Because the process is automatic, we can go off and do something else, so we get more things done in less time," says Mattson.

## To run a successful maintenance operation, it is necessary to constantly be looking for better ways of maintaining vehicles and regularly trying out new products and technologies.

The ESOC engine oil change system worked so well, John Christner Trucking bought another system, the Series 850. It is portable unit that is used to change the oil in the engines on the trailer refrigeration units. This machine operates in the same fashion as the ESOC 1000.

With both the Series 850 and Series 1000 systems, oil changes can be completed in about 10 minutes, saving on average 20 minutes when compared to using the conventional gravity drain method.

Management control is another benefit of the ESOC oil change systems, points out Dickson. The systems include tracking oil totals by day, week, month and year. There is also the ability to download oil change history to a computer spreadsheet and store individual vehicle data in a database.

## FIELD TESTING

The fleet regularly tries out new products and different ways of doing things. That is how the fleet has come to use wide-base tires - a single tire and wheel used in place of two standard tires and wheels.

After recently completing testing with wide-base tires, the fleet has specified them on an order for 100 new trailers.

"We found that wide-base tires provide some weight and maintenance savings over dual assemblies and offer a better ride," says Dickson. "However, we have some concern about the infrastructure and being able to get a replacement tire if one goes now in a small town off the beaten track. We have temperature- and time-sensitive loads and we can't have trucks down for long periods of time."

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**The fleet's ESOC Series 1000 engine oil exchange machine in positioned between two shop bays to enable technicians to do more oil changes without having to move trucks in and out as much, increasing technician and shop productivity. Technicians Bruce Kuka, left, and Brian Mattson, right, say the machine cuts down on the time and effort needed to change oil, with less mess for a cleaner work environment.**