

SINCE 1911

MOBILE DRIVER APPS

Help with fuel buying, routing just a touch away

page 42

TAPPING IN

How fleets can leverage ELDs for more than just compliance

BALANCING ACT

More fleets consider shunned tire practice

page 66

Randall  Reilly.

BUSINESS SOLUTIONS FOR TRUCKING PROFESSIONALS

CSA'S DATA TRAIL

More hours violations going to smaller fleets

page 58

WHICH LUBE SHOULD I USE?

Many still confused over new engine oils

page 34



IN BRIEF

- **PurePower Technologies**, a former unit of Navistar Inc., announced an investment of \$15 million to expand manufacturing capacity in Blythe-wood, S.C., for its new diesel fuel injector technology. The company said the investment will result in 79 new jobs.
- **Continental** announced the return of its Off The Road tire sales and product lines to the Americas markets for the first time in 10 years.
- **Pressure Systems International**, a provider of automatic tire inflation systems, entered into a distribution agreement with aerodynamic technology provider Plasma Stream Technologies. Plasma's proprietary active flow control system is engineered to be used with either roll-up or swing doors without the added weight of bolt-on aero devices.
- Drivers interested in sitting in the cab of a **Mack Pinnacle, Granite or Titan** equipped with the mDrive HD 13-speed automated manual transmission can do so through Mack's virtual reality test drive by using headgear, Google Cardboard or a smartphone. The interactive videos are available for viewing at Mack's VR website.
- **Maxion Wheels** was chosen again by Wabash National as the standard position steel-wheel supplier for its full line of commercial trailer products. Maxion now offers a five-year standard warranty for its MaxCoat Extra multi-layer finish on its hub-piloted single and wide-base tubeless disc steel wheels.
- **Ryder System** launched its fully responsive website, Ryder.com, featuring reorganized content designed to make it easier to navigate the site from any device.
- **U.S. Xpress** (CC/Top 250, No. 14) is specifying Phillips' Uptime Premium Trailer Package of components with an extended warranty on 1,700 new trailers.
- **Bergstrom**, a provider of climate systems to the commercial vehicle industry, opened a new parts and service facility in Rockwall, Texas, to enhance service for its Southwest customers.

Detroit ready to roll out inline 4-cylinder engine

Daimler Trucks North America is set to begin production of Freightliner M2106 trucks equipped with Detroit's new inline four-cylinder engine in October.

Announced earlier this year, the 5.1-liter Detroit DD5 initially will roll out as an option to customers in pickup-and-delivery applications before being made available widely in 2018.

The DD5 initially will be offered in two ratings – 210 hp/575 lb.-ft. and 230 hp/660 lb.-ft. – that target best-in-class fuel efficiency. The efficiency gains are among the dividends of the more than \$375 million that Daimler put into research and development of its medium-duty products.

Kary Schaefer, general manager of marketing and strategy for DTNA, said the DD5 will have extended oil and fuel filter change intervals of up to 45,000 miles in short-haul applications.

The DD5 development program was built on a European platform. The engine has undergone extensive U.S. development and testing, with 12 reliability test trucks racking up nearly 3 million miles, including three seasons of summer and winter tests.

The DD5 emerged from the road test with an expected B10 life of 400,000 miles. "What that means is that 10 percent of the engines will have a failure within 400,000 miles," she said.

The engine was designed to provide component stiffness for low noise and vibration, while oil lubrication and coolant circuit designs also contribute to reduced friction. The piston connecting rods use a crank rod manufacturing process, and the crank and rod bearing journals were hardened. The cylinder heads feature a clamp load design and optimized roundness for high firing pressures. A fixed-geometry dual-stage turbo with a waste gate provides boost on demand.

Variable exhaust cam phasing technology is used at low engine speeds to increase exhaust temperature and provides Detroit the ability to optimize thermal management under low engine load conditions and improve the aftertreatment system's overall performance.

The engine features an advanced machining process and a high-pressure common-rail fuel system. Dual-overhead cam, piston and cylinder heads all support improved combustion for fuel efficiency and emissions compliance, Schaefer said.

From a serviceability standpoint, Schaefer said the four-cylinder design is shorter and provides better access for service, especially to the engine's rear. Cartridge-style fuel and oil filters are mounted above the rail, and the engine features a maintenance-free crankcase breather. Bolt-on accessories are limited to three- and four-attachment points.

The DD5 uses the same Detroit electronic platform as its heavy-duty cousins. It also features the Detroit Connect Virtual Technician remote diagnostics system, and both the engine and aftertreatment system are backed with a three-year/250,000-mile warranty.

Plans for the DD5's full rollout in 2018 call for power-takeoff options as production shifts from Mannheim, Germany, to Detroit's powertrain facility.

The DD5 already has been U.S. Environmental Protection Agency-certified to meet 2017 greenhouse gas and fuel efficiency standards. The DD5 engines can accept soon-to-come CK-4 oils, but the factory fill will be FA-4, said Chris Moran, medium-duty project manager.



DTNA is set to begin production of Freightliner M2106 trucks equipped with Detroit's 5.1-liter DD5 engine.

– Jason Cannon