

**HEADERS – UNDERSTANDING MATERIALS, SIZES, COATINGS & MORE**

# engine professional®

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**The Piston Ring**  
Your oil's best friend

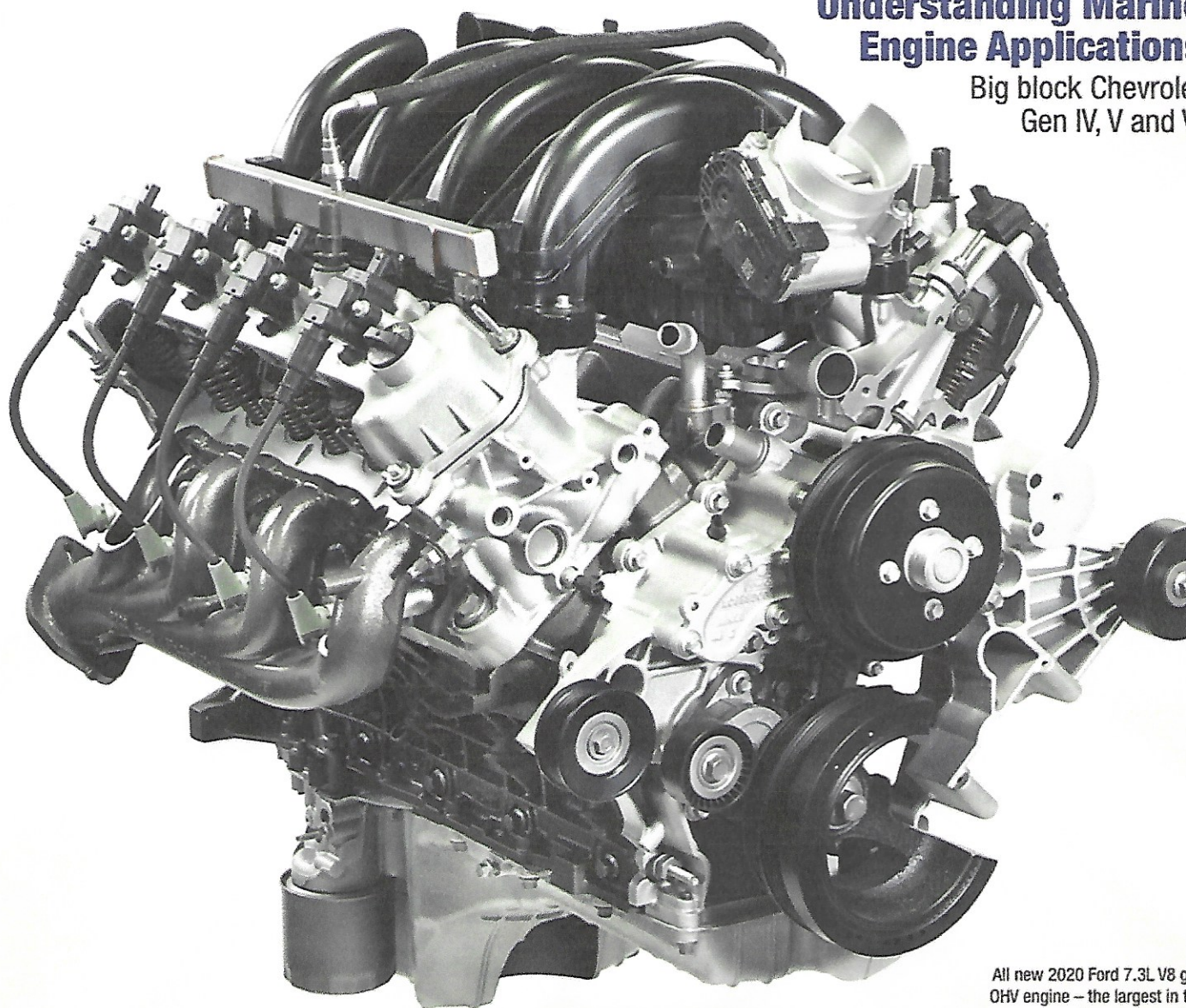
**Ford 6.0L Power Stroke  
High-Pressure Oiling System**

How it functions and where to look  
when a no-start situation occurs

**Piston Failure**  
Modes and analysis

**Understanding Marine  
Engine Application**

Big block Chevrolet  
Gen IV, V and VI



All new 2020 Ford 7.3L V8 g  
OHV engine – the largest in the  
medium-duty market



## ■ industry news

### Cloyes earns Best New Product Award at AAPEX 2019

FORT SMITH, Arkansas — One of the latest product innovations from Cloyes, its **Variable Valve Timing (VVT) Chain Kits**, earned the Best New Product Award in the Hard Parts category of the New Product Showcase at AAPEX 2019. The New Product Showcase at AAPEX is the largest and hottest collection of new automotive aftermarket parts in North America and is often one of the first stops for attendees of the show.

"Chains can experience wear and stretch, guide contact surfaces can become damaged and guide bracketry can break, tensioner damage can occur, and sprocket tooth wear will develop when operating with an unstable chain," said Jason Thompson, vice president of engineering and product development for Cloyes. "For these reasons, and the fact that timing component cost is a fraction of the labor costs required to replace the components, it is recommended to replace all components when making the repair. This is certainly the approach we took with our VVT chain kits."

Cloyes VVT Chain Kits offer technicians a complete repair solution for higher mileage vehicles. These kits are designed for the replacement of worn or damaged timing chains, tensioners, sprockets, guides, and VVT actuators, also known as cam phasers. Cloyes parts are CAD designed and manufactured using premium materials. Each part is extensively tested and measured for function, fitment, and durability to ensure optimal performance.

For more information, go to [cloyes.com](http://cloyes.com). ■

### 103-year-old family firm is North America's oldest engine distributor, one of most environmentally progressive companies

WORCESTER, Massachusetts — AERA member Jay Foley, an Ivy League Ph.D., left his teaching position at the University of South Carolina in the early 1980s to take over Foley Engines, which has become North America's oldest engine distributor. He diversified to manufacture emission control devices as well as industrial clutches for the tree industry.

Foley Engines, headquartered in Worcester, MA, has also become one of America's top clean energy companies. Its customized diesel exhaust scrubbers made it possible for Boston's Big Dig workers breathe safely underground in the midst of unsafe emissions from construction equipment. Additionally, Foley's new line of exhaust scrubbers for internal combustion engines purifies the air to ensure clean, safe emissions. The firm can get engine and clutch parts in a customer's hands with overnight delivery.

In 1916, Foley's grandfather opened the facility as a distributor of Goodyear tires. In the 1950s and 1960s, his father became a rebuilder of industrial engines. Foley has since specialized in industrial engines and new engines as well as remanufactured engines, with same day, worldwide shipping.

Housed in a 20,000-sq. ft. facility, the company stocks approximately 600 remanufactured engines that are ready to be shipped anywhere in the world. Foley said a key component of the company's success is his dedicated workforce.

For more information, go to [foleyengines.com](http://foleyengines.com). ■



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