

“Big 4” Engine Manufacturers Debut New Engines For 2016



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The [GIE+EXPO](#) is the place where industry suppliers debut landscape and lawn service equipment that will be showing up in dealers' showrooms. From year to year, manufacturers turn out equipment that is easier to use, more productive and more fuel-efficient. These improvements are generally incremental rather than transformational. Even so, they are enticing enough to lure thousands of green industry pros to the "Big Show" in Louisville for several days each October.

This year, manufacturers showcased a bumper crop of new-and-improved landscape construction and property maintenance equipment. The new models offer more intuitive and operator-friendly controls (in some cases "smart" controls), and for zero-turn mowers, improved suspension systems and adjustable, back-friendly operator seats.

More difficult to assess at a glance from the show floor were the improvements to engine design and performance. Even so, engine manufacturers were no less busy in 2015. As a group, they showed up at the GIE+EXPO with a record number of new commercial engines.

Briggs & Stratton, Kawasaki, Kohler and Subaru were particularly busy expanding their line-ups of engines for commercial mowers. After a huge slump coming out of the 2009 recession, the number of commercial mowers being sold is growing again. Engine manufacturers foresee continued growth for the next several years, at least.

Since commercial mowing remains such an important revenue-producing service for so many contractors regardless of region of the country, let's take a look at the engines the "Big 4" showcased at this past GIE+EXPO. We'll do it alphabetically by company name.

B&S builds upon BIG BLOCK success



Briggs & Stratton Vanguard V-Twin
BIG BLOCK EFI engine.

[Briggs & Stratton Commercial Power](#) introduced its Vanguard air-cooled V-Twin BIG BLOCK EFI engine. The company pioneered the BIG BLOCK engine category in 2005. The latest closed-loop EFI models boost fuel efficiency by at least 25 percent and are available in its 33- and 37-gross-horsepower BIG BLOCK engines.

Also, Briggs & Stratton expanded its lineup of entry-level commercial engines to include nine horsepower options ranging from 16 to 27 gross horsepower in three engine models with displacements of 656cc, 724cc or 810cc.

“The Commercial Series engines are made to start on command and combat debris-related problems, that are so prevalent on many job sites, so contractors can keep their equipment running stronger all day long without interruption,” said Jim Cross, marketing manager for Briggs & Stratton Commercial Power.

Kawasaki touts new 25.5-hp workhorse

[Kawasaki](#) unveiled its new 25.5-horsepower, FX730V-EFI engine at the GIE+EXPO. The company claims this is “the most technologically advanced EFI system” it has ever built. The engine incorporates a fully integrated electronic governor and an advanced ECU that instantly matches power to cutting load and ground speed.

Kawasaki says the load-matching e-governor keeps drive wheels and cutting blades working at peak productivity. The elimination of power loss through the entire load range lets operators move quickly through almost any turf conditions.



Kawasaki’s new 25.5-hp FX730V-EFI
engine.

Kawasaki says its open-loop design is at the core of this system’s reliability for tough commercial use. Also, the all-new EFI is matched by a PC or tablet plug-in diagnostic system for quick, easy troubleshooting, accurate service and minimized downtime. Kawasaki has even maintained the same footprint as its carbureted engine models so upgrading to EFI is clean and easy.

Similar to all Kawasaki engines, the FX730V-EFI features the company’s exclusive SAE Certified Critical Power ensuring that engines deliver a minimum of 98 percent of rated horsepower for the needed productivity commercial users can count on.

KOHLER expands EFI mower lineup

[**KOHLER Engines**](#) expanded its EFI technology with the introduction of the Confidant EFI, Command PRO EFI CH440 and Command PRO EFI 999cc. The 999cc model is designed for large commercial mowing equipment as well as equipment typically found at rental houses, such as chippers and concrete saws. This new EFI workhorse will deliver up to 38 horsepower and 55.3 foot-pound of torque.

"The expansion of our EFI technology into the Confidant series, CH440 and 999cc really speaks to the strong overall demand for our existing EFI engines," says Mark Johansen, director of marketing – gas engines for KOHLER Engines.

All three models utilize the KOHLER-designed closed-loop system, which means an oxygen sensor in the muffler continuously monitors the air/fuel mixture. If the air/fuel mixture strays from the ideal level, the sensor triggers adjustments to the amount of fuel injected into the system.



An engine from KOHLER's Confidant EFI line.

"Our new KOHLER Confidant series is fulfilling a need in the rapidly growing ZTR market with an engine that makes commercial-grade performance available at a lower price point," says Eric Hudak, marketing manager – consumer ride and walk engines.

The durable new Confidant EFI line will include four engines ranging between 20 and 27 horsepower and will also encompass an option with recoil starting – the very first engine ever to offer recoil starting in combination with electronic fuel injection.

Since electronic fuel injection systems replace carburetors, downtime due to carburetor-related issues is also eliminated, including the buildup of residue that often occurs when using ethanol-blended gasoline.

KOHLER Engines has more than 3,000 proprietary EFI diagnostics software kits at dealerships in the field. The KOHLER EFI Diagnostic Software enables a dealer's service technicians to tap into critical performance data logged by the engine control unit (ECU) to help troubleshoot engine operating conditions, failure codes, total hours, oil temperatures, detailed load parameters and much more.



One of Subaru's new 999cc engines.

Subaru offers two 999cc engines

[**Subaru Industrial Power Products**](#), headquartered in Lake Zurich, Illinois, expanded its lineup of V-Twin overhead valve engines with its new 35-horsepower EH90 and 40-horsepower EH99 engines. The engines, which feature

EFI technology, are ideal for equipment like vehicles and zero-turn mowers, says Subaru.

Both engines are 999cc and feature heavy-duty connecting rods, large crankshaft bearings and three-ring pistons. The hardened exhaust valve and seats can handle high temperatures, which improves engine performance, efficiency and overall engine life.

Subaru says temperature sensors are located on the engine heads and will shut off the engine to prevent any damage from overheating due to clogged air intake valves. A dual-element air filter protects the engine from dust and reduces maintenance. The Donaldson canister-style air cleaner comes standard and has an inlet pre-cleaner.

Subaru's annual engine production exceeds one million and the company is the fourth largest engine manufacturer in the world.