JOHN DEERE POWER SYSTEMS DIESEL ENGINE, BATTERY, AND DIESEL-ELECTRIC POWERTRAIN SOLUTIONS

POWER MEETS PROGRESS



JOHN D

POWER

GROUNDED IN RELIABILITY

From the moment the first John Deere plow gave farmers a better way to turn the soil, we have stood for one unwavering commitment — to provide smarter ideas and reliable solutions that help you get work done faster and more efficiently.

LEAPING FORWARD

The future belongs to those of us who are ready for what comes next. Fueled by innovation and ingenuity, we're working to power a cleaner, more efficient world — with diesel engines, battery power, diesel-electric power, and renewable fuel technologies.

R-OGRESS

When power meets progress, great things happen for powertrain manufacturers, OEMs, and equipment owners. John Deere is here to help you seize every opportunity — from emerging forms of power for off-highway equipment to remote ways to monitor, protect, and maintain equipment.

If diesel power makes sense for your application, we'll deliver a clean-running, easy-to-maintain engine. As battery and diesel-electric technology becomes viable for certain machines, we'll help you seamlessly integrate it. If you're exploring alternative fuels as a sustainable solution, we have the technology and know-how to make it happen. And if you're looking for easier ways to diagnose service issues and proactively protect equipment uptime, our advanced telematics will empower greater productivity on the jobsite.

One thing is certain. Whichever power or technology fits your application best, John Deere will be ready to give you and your customers a competitive edge. Now. And years from now.

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BATTERY POWERTRAIN SOLUTIONS

REMOTE MONITORING AND DIAGNOSTICS



THE JOHN DEERE

DIFFERENCE



John Deere is much more than an off-highway engine manufacturer. We're an OEM too — with more than 300 internal applications in rugged agricultural, construction, and forestry applications. Not only do we integrate engines and drivetrains, but we are also adding diesel-electric and battery powertrains to our equipment at an accelerating pace.

When OEMs specify John Deere power, they get something other engine manufacturers can't provide — application help and engineering assistance from someone who understands their needs. This total machine integration lets us provide a seamless OEM solution from the engine electronics to the drivetrain components. Plus, our preconfigured options save hours of engineering time and help get thousands of OEM machines to market faster.



INTERNAL JOHN DEERE ENGINE APPLICATIONS



THOUSANDS OF OEM APPLICATIONS

NEXT GENERATION INDUSTRIAL ENGINES

John Deere is expanding their engine power range with next generation engines that are simple to integrate, are easy to service, and share many common maintenance parts.



JD4

The JD4 engine offers a low purchase price and integration cost with performance benefits that contribute to overall customer value.

JD14

Providing more power per liter than 13.5L configurations, the JD14 engine delivers performance in the extremes for rugged, off-highway applications.





JD18

With ratings from 522 to 677 kW (700 to 908 hp), you can streamline your equipment power with the help of the high-horsepower JD18 engine.





They work with our engineering team to design custom power units and are creative with their packages to fit our space claims.

DERRICK DAVIS | Design Engineering Manager, Bandit Industries

THE POWER OF CHOICE

Our complete product line includes variable-speed and constant-speed engines with power ratings from 36 to 677 kW (48 to 908 hp). From non-certified to Stage V, John Deere provides engine technology and aftertreatment options to help OEMs meet emissions regulations in all areas of the world.

With John Deere, you get a wide range of configurations and accessories so you can specify the right engine, drivetrain, or electronic system for your application. Every engine is built to your specifications from a wide selection of engine options — everything from engine power, flywheels, and fan drives down to engine paint color.

BATTERY POWER SOLUTIONS

KREISEL 🔆

The strong commitment of John Deere to near-zero-carbon power technologies is proven by our majority ownership in Kreisel Electric, headquartered in Rainbach im Mühlkreis, Austria. Kreisel develops high-performance, high-durability electric battery modules and packs that will allow John Deere to provide all-electric vehicles and powertrains to off-highway equipment customers.

The Kreisel Battery Pack 63 (KBP63) incorporates all Kreisel technology benefits into one product. The KBP63 utilizes patented immersion cooling technology for an even temperature spread and highest safety standards in relation to energy density.

KREISEL BATTERY PACK 63





No matter what kind of prime power a customer needs, John Deere will be prepared to deliver the reliability and durability they require.



20% GREATER BATTERY LIFE*

* Compared to standard bottom-cooling technology.

HEAT

TRANSFER AREA*

When they first start using the MG11 rail-milling train, operators are amazed at how quiet the engine runs.

GEORGINE SCHŐN | Marketing and Public Relations Manager, Linsinger



MODULAR DRIVETRAIN COMPONENTS

John Deere and Funk[™] drivetrain components are built in a modular approach for versatility and quick delivery. Backed by a reputation for reliability and customer service, John Deere pump drives, transmissions, axles, and planetary drives boost performance, maximize uptime, and lower cost of operation.

Concernence

TTAL DATE NAME

- Modular pump drives
- HMD and powershift transmissions
- Inboard planetary axles
- Planetary gear drives

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DIESEL-ELECTRIC SOLUTIONS

OFF-HIGHWAY ELECTRIC POWERTRAINS

From vehicle electrification to complete machine electronics integration for off-highway applications, you can count on John Deere electric drivetrain products and power electronics. We have extensive experience in the custom design and manufacture of integrated electronics that can withstand the harshest physical and electrical environments.

- Electric motor drives
- Electric pump drives
- Generator pump drives
- Power inverters

DIESEL-ELECTRIC DRIVE SYSTEMS



John Deere's investment in renewable fuel technologies fits its strategic vision to accelerate and lead the industry in low- and near-zero-carbon powertrain technology.

USING BIODIESEL IN JOHN DEERE ENGINES

Biodiesel is a renewable, oxygenated fuel made through transesterification of a variety of renewable resources such as vegetable oils and animal fat. All John Deere engines can use biodiesel blends. Stage V engines operated within the European Union may use blends up to 8% (B8). Final Tier 4/Stage IV and Interim Tier 4/Stage III B engines can use biodiesel concentrations up to 20% (B20). Tier 3/Stage III A and lower tier engines can use up to 100% (B100) biodiesel.



RENEWABLE FUELS

RENEWABLE DIESEL FUEL

Renewable diesel fuel is a paraffinic fuel made by either hydrotreatment of renewable resources such as vegetable oils (soybean, rapeseed, etc.) and animal fat, or through a synthesis process such as gas-to-liquids (GTL). These biofuels offer a sustainable replacement for petroleum diesel fuel with comparable performance. They can be blended with petroleum diesel or used at 100% (RD100).



INVESTING IN ETHANOL SOLUTIONS

John Deere has made a significant investment in ClearFlame Engine Technologies, a growing start-up dedicated to the development of clean engine technology. ClearFlame is researching and exploring technologies that will enable low-carbon fuels like ethanol to be easily integrated into compression-ignition engines for heavy-duty and off-highway markets.

JOHN DEERE GENERATOR DRIVE ENGINES



GENERATOR DRIVE ENGINES

Leading gen-set manufacturers trust John Deere generator drive engines to provide prime and standby power for a wide variety of critical applications. We offer more than 250 configurations of generator drive engines from 31 to 563 kW (42 to 755 hp) to meet emissions regulations and power nodes for the global market.

- Stage V/Final Tier 4 engines that meet EU and EPA emissions regulations
- Final Tier 4 engines that meet EPA regulations without the need for a diesel particulate filter (DPF)
- Tier 3/Stage III A engines for emergency standby applications
- Engines for non-certified applications and regions not subject to emissions regulations



By adding John Deere engines to our generator set range, we can now meet any power capacity requirement, no matter how demanding the project or operating conditions.

MOHAMAD AFIF GHADDAR

Marketing & Business Development Manager, Ghaddar Machinery Co.

Sydneysider now pushes out an excess of 9 knots at wide-open throttle and is doing 5.5 to 6 knots at easy-running rpm.

JENNY NUGENT | Operator, Sydneysider Charter Boat



PROPULSION ENGINES

From 60 to 559 kW (80 to 750 hp), our complete, high-horsepower lineup offers the right engines for your needs. Boost your vessel's performance in swells, tides, or currents with added torque at slower speeds. John Deere engines build power fast and cruise at high speeds with a low rpm. Whether you're 100 miles offshore or in a busy port, you face many challenges on the open water. Your life and your livelihood are dependent on your boat running sure and strong — and carrying you back to shore safely. That's why vessel owners and operators have trusted and recommended John Deere power for more than 30 years.

TRUSTED FOR

JOHN DEERE MARINE POWER PRODUCTS

GENERATOR DRIVE AND AUXILIARY ENGINES

John Deere generator drive and constant-speed auxiliary engines deliver quiet operation and low vibration. We also provide a full line of reliable and fuel-efficient variablespeed auxiliary engines, with dry-exhaust or wet-exhaust manifolds, to run vessel auxiliaries such as pumps, winches, deck cranes, and hydraulics.

CONNECTED TO WHAT COUNTS

THE POWER OF CONFIDENCE

John Deere OEM industrial and marine engines can be protected by John Deere Connected Support[™] remote monitoring and diagnostic services.* So instead of reacting to maintenance issues, Connected Support lets you and your authorized John Deere dealer or distributor proactively anticipate and prevent unplanned machine downtime.

HERE FOR YOU WHEREVER YOU GO

The proven John Deere network of 9,000+ John Deere parts and service dealers is here to fully support you near worksites and waterways around the world. Our dealers keep John Deere maintenance and repair parts in stock to get you back to work quickly. Also, the John Deere worldwide parts distribution system has overnight delivery in most areas.

Find your closest John Deere engine distributor or service dealer at **JohnDeere.com/Dealer**. Ask them about the parts you need, or visit **JohnDeere.com/EngineParts**.

* Contact your John Deere dealer or distributor for availability of Connected Support on specific engine models.

MACHINE HEALTH MONITORING

Think of Connected Support as a wellness program for John Deere–powered equipment. It not only tracks the health of engine and emissions components, but it is also capable of proactively discovering improper engine operation that could lead to downtime.

PREDICTIVE ALERTS

Connected Support is a proactive monitoring system that sends predictive alerts to dealers (with a customer's permission) of potential engine concerns. This allows technicians to diagnose OEM equipment remotely and fix issues before they happen.*

REMOTE DIAGNOSTICS

John Deere dealers or distributors can manage engine trouble codes without having to visit your site. Sometimes the solution is as simple as sending a software update to your machine. If a service call is required, the technician can arrive with the right parts to keep your equipment running.

JOHN DEERE PARTS AND SERVICE LOCATIONS

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WARRANTY SUPPORT WHEN YOU NEED IT

Every John Deere engine comes with a solid 2-year/2,000-hour standard warranty. This warranty applies not only to the new OEM engine but also to John Deere parts and accessories added by a John Deere engine distributor.* Registering your engine at JohnDeere.com/OEMWarranty gives us the information needed to stock the right service parts, maintenance products, and servicing tools.

LOOK UP DETAILS ABOUT YOUR ENGINE

Retrieve serial-specific information for your John Deere engine. Just scan or enter your John Deere engine serial number in the free PowerAssist[™] App to access option codes, manuals, ECU information, and much more. Don't have a mobile device? Go to **JohnDeere.com/EngineSupport** and sign in to the engine information search database.

^{*} When sold by John Deere, its authorized dealers and distributors, and delivered to the first retail purchaser. See specific OEM product warranty language for applicable terms and conditions. Refer to the John Deere new engine warranty for complete warranty coverage details. Not available in all countries.



WORLDWIDE LOCATIONS

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