INTERNATIONAL'S GOT YOUR BACK.

When selecting a MaxxForce® engine for your International® truck, you are covered by North America's largest commercial truck dealer network – with nearly 800 dealer locations, 7,000 service technicians and unmatched parts availability. Search the "Dealer Locator" at the InternationalTrucks.com for sales and service centers.

With Navistar Engine Group and MaxxForce engines, you get products and an organization behind them that are always performing.

For more information on the MaxxForce® 9 and MaxxForce® 10 engines, visit your local International dealer or visit us at www.MaxxForce.com. MaxxForce® Advanced Diesel Power is the signature brand for Navistar engines for a wide array of commercial vehicle applications. MaxxForce engines are designed, engineered and built to deliver what you expect – power, performance, reliability and durability.

www.MaxxForce.com
MAXXFORCE 9 and MAXXFORCE 10

ALWAYS PERFORMING.

The MaxxForce® 9 and MaxxForce® 10 are built on the same proven and durable platform. These two models, which bring increased 9.3-liter displacement by longer stroke, meet the requirements of more demanding applications.

The MaxxForce 9 adds to this reliable and durable platform premium features like:
- dual sequential turbo technologies
- single-piece gallery-cooled steel pistons
- crankcase ladder reinforcement

The high-output MaxxForce 10 offers these features plus the performance you would expect from larger heavy-duty engines in a weight-saving medium-duty package.

These engines, which retain the platform’s legendary reliability and durability, ensure your trucks and your business will be "Always Performing."

RELIABILITY, DURABILITY AND RESALE VALUE.

A rock-solid, time-tested platform ensures legendary reliability. For the new generation, Navistar engineers carried forward the proven technologies and components like:
- premium plateau-honed cylinder design
- reinforced bearing-cap ladder
- durable roller cam followers

For changes outside the base engine design, the intention was to further improve reliability. Foremost among these changes are dual sequential free-wheel turbochargers and a premium wiring harness, which utilizes a single harness-reinforced design that locks down wiring and secures connections. These engines feature precision-machined wet-sleeved design that provide heavy-duty engine durability. Six bolts per cylinder provide head-gasket integrity for long service life. Premium valvetrain components and low-friction roller cam followers further increase engine life.

Adding to the appeal of this engine is its ability to be completely re-built in-chassis. As a result, the engine can be returned to original factory specifications for a lot less than the cost of remanufacturing, which gives them a strong value advantage at resale.

WIDE VOCATIONAL CAPABILITY.

The MaxxForce 9 and 10 are purpose-built to the needs of International customers. They are compatible with a full range of automatic and manual driveline options and thousands of potential build configurations to serve the broadest range of on- and off-highway applications. Six different model ratings offer 300-350 hp and 860-1150 lb-ft of torque. Shift energy management technology allows for higher peak torque when used with select transmissions.

VERSATILITY, WITH AVAILABLE OPTIONS:

- Optional engine compression retarder brake
- Programmable electronic parameters for increased fuel economy
- Optional front-end PTO for plow and other applications

MAxxFORcE 9 & 10 ENGINES ARE AVAILABLE IN THESE INTERNATIONAL® BRAND VEHICLES AND APPLICATIONS:

- DuraStar® (MaxxForce 9 ONLY)
- WorkStar®
- Utility (MaxxForce 9 ONLY)
- Dump
- Fire

2010 Emissions Solution: Lower Operating Costs, Less Hassle

MAXXFORCE ADVANCED EGR

FULL COMPLIANCE WITHOUT COMPROMISE.

Navistar’s MaxxForce Advanced EGR emissions technology prevents NOx from forming in-cylinder. Four key technologies make it work, so you don’t have the taxing work of sourcing urea, filling a urea tank and maintaining additional components. The result is optimal performance and low cost of ownership.

1 ADVANCED FUEL INJECTION TECHNOLOGY

Our next-generation fuel injection systems are capable of delivering fuel into the cylinder multiple times per cycle and at higher pressures. Utilization of post-injections along with the main injection event means combustion can take place over a longer period and be more complete, resulting in reduced NOx emissions – as well as better fuel efficiency.

2 PROPRIETARY COMBUSTION BOWL DESIGN

Our redesigned combustion bowl combines with the higher fuel injection pressure to break the fuel up into a finer mist spread more evenly inside the cylinder, resulting in a more complete and cleaner burn. That means more power to the wheels and less soot out the exhaust.

3 ADVANCED AIR MANAGEMENT

Turbo matching and advanced EGR cooling provide improved combustion. The result: a controlled reduction of NOx and particulate matter formulas.

4 ELECTRONIC CALIBRATION STRATEGIES

Engine controllers previously utilized pre-programmed look-up tables to determine the fuel-air mixture to burn. Increases in computing power now allow the engine controller to continuously calculate the optimum fuel-air mix to achieve maximum power and efficiency in many different operating conditions.

TO LEARN WHY MAXXFORCE ADVANCED EGR IS THE BEST PATH TO 2010 AND BEYOND, VISIT WWW.MAxxFORcE.COM/2010.
Roller-cam followers provide increased durability, longer valve and camshaft life, and slow valve lash growth compared with competitive flat tappets. Replaceable valve seats and guides allow for easy cylinder head rebuild. Four valves per cylinder provide better breathing, performance and lower emissions.

**PREMIUM VALVETRAIN**

- Single-piece gallery-cooled steel pistons bring longer life, and reduced blow-by and oil consumption.
- Significantly larger main bearings than most competitors result in heavy-duty durability.
- Single-box 32-bit ECM has fewer connection points for added reliability and easier serviceability.
- Premium foam-molded wiring harness secures wiring and connections for increased reliability and durability.
- The crankcase features six head bolts per cylinder, which provides even clamping force.
- Crankcase ladder reinforcement provides added strength and rigidity, maintaining perfect alignment of crankshaft under heavy loads, all while reducing engine noise.
- Maintenance-free closed crankcase ventilation system features a centrifugal oil mist separator, which means there are no filters to change.
- Precision-machined wet sleeves result in even cylinder cooling and unmatched structural integrity.

**ADDITIONAL ADVANTAGES:**

- A dual sequential free-wheel turbocharger system and upgraded cooling system provide outstanding boost and response for every application. The smaller, primary turbo responds quickly for immediate take-off at low engine speeds, and the larger, secondary turbo provides peak power at higher speeds and on steep grades.
- Dual-path EGR cooling provides more and cooler EGR in a robust cast-aluminum housing, and a floating-core design allows long-term system performance.

**ADVANCED HIGH-PRESSURE FUEL SYSTEM**

The electro-hydraulic high-pressure fuel system features high-efficiency injector nozzles and advanced electronic control strategies for fuel economy gains. The results: Better fuel efficiency, in-cylinder reduction of emissions, and one of the quietest running engines in the industry.

**ENGINE BRAKING**

- The optional Diamond Logic® engine brake by Jacobs provides quiet braking power and can extend the life of your service brakes, resulting in lower service costs.
- The optional Diamond Logic® exhaust brake eliminates the need for traditional exhaust-brake hardware and provides a low-cost alternative for extending service brake life.

* Jacobs is a registered trademark of Jacobs Vehicle Systems Inc.
### MAXXFORCE® 9 PERFORMANCE DATA

<table>
<thead>
<tr>
<th>Horsepower (bhp @ 2000 rpm)</th>
<th>Torque Peak (lb-ft @ 1200 rpm)</th>
<th>Gov. Speed (rpm)</th>
<th>Clutch-Engagement Torque (lb-ft @ 800 rpm)</th>
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<tr>
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### MAXXFORCE® 10 PERFORMANCE DATA

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### MAXXFORCE 9 SPECS

- **Engine Type**: Diesel, 4-Cycle
- **Configuration**: Inline 6-Cylinder
- **Displacement**: 9.3L (570 cu. in.)
- **Bore & Stroke**: 4.59 in. & 5.75 in. (11.7 cm & 14.6 cm)
- **Compression Ratio**: 17.2:1
- **Aspiration**: Dual Sequential Turbocharger, Intercooler & Aftercooler
- **Combustion System**: Direct Injection
- **Engine Lubrication**: 30 Quarts (28 L)
- **Total Engine Weight (Dry)**: 1,425 lbs. (646 kg)
- **Dimensions**: L 45 in. x W 42 in. x H 47 in. (L 114 cm x W 107 cm x H 119 cm)
- **Valves**: 4 Valves per Cylinder

### MAXXFORCE 10 SPECS

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### PREVENTIVE MAINTENANCE INTERVALS

- **Change Engine Oil, Replace Oil Filter**: Up to 15,000 miles (24,140 km) / 6 months / 550 hours / 2,100 gallons (7,949 L)
- **Replace Fuel Filter**: 30,000 miles (48,280 km) / 12 months / 1,100 hours / 4,200 gallons (15,899 L)
- **Replace Coolant**: 300,000 miles (482,803 km) / 5 years / 12,000 hours
  - *Add Extended Life Coolant (ECL) Extender @ 150,000 miles (241,400 km) / 30 months / 6,000 hours