



John Deere PowerTech™
 Engines

ISD-458 Turbocharged 4 Cylinder Diesel 5.0 Liter (304 CID)

SPECIFICATIONS

Engine Type	Direct Injection, vertically oriented, 4 cylinder
Fuel	Meets all standards
Net Capacity	17.0 Gal. (64.6 Liter) Fueling Rate
Net Weight	860 lbs. (390 Kg) Net Weight (including cooling accessories)
Displacement	304 CID (4.9 Liter)
Bore and Stroke	4.000 in. x 4.750 in.
Compression Ratio	17.5:1
Maximum Horsepower	52 HP @ 2200 rpm
Maximum Torque	32.0 lb-ft @ 1500 rpm
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Maximum Horsepower	52 HP @ 2200 rpm
Maximum Torque	32.0 lb-ft @ 1500 rpm
Speed/RPM	2700 RPM (2700-3000 RPM) (1800-2200 RPM)

INDUSTRIAL ENGINE



ISD-458 Diesel 304

STANDARD FEATURES

- Cast-iron crankcase with casted iron block is an ISO 9000 certified design. Standard components include cast iron cylinder block/cylinder head and cast iron flywheel. All components meet strict ISO 9000 standards.
- Industrial-grade cast-iron head, forged in water and temper heat-treatment and water cooled and treated.
- Aluminum alloy valve mechanism to provide an extra weight saving advantage on all engine standard engine oil maintenance.
- Turbo pump is casted into cylinder head in single bearing.
- High torque piston/crank system with full contact surface.
- Crankcase equipped with 40 high torque aluminum pistons and 80 aluminum crankshaft.
- An intake system provided by its own low third order harmonic. An intake air filter made with 100% of air flow characteristics maintenance.
- Exhaust valve (EGR) valve that reduce pressure. Exhaust valve has 2000 rpm valve lift. 2000 rpm exhaust valve lift provides maximum torque, maximum performance.
- Full stroke gear pump with oil pump driven by the cam timing control to the engine operation.
- Aluminum alloy cast intake manifold with casted aluminum valve cover. High torque piston/crankshaft and high torque crankshaft.
- Cast crankcase fully coated with casted iron oil pan. The oil pan is fully coated with casted iron oil pan. The oil pan is fully coated with casted iron oil pan. The oil pan is fully coated with casted iron oil pan.

INSTALLATION DRAWINGS



IMPORTANT INFORMATION: Always use the correct refrigerant for this compressor. Always use correct oil for this compressor.

POWER CURVES



CONDENSING PRESSURE (PSIG)	40°F	30°F	20°F	10°F
0	0	0	0	0
20	10	8	6	4
40	20	16	12	8
60	30	24	18	12
80	40	32	24	16
100	50	40	30	20



INTRACOR CORPORATION

120 Parkway One
 Bay Bridge Plaza • USA
www.intracor.com

Telephone: 601-250-2500
 Fax: 601-250-3333
 E-Mail: intra@intracor.com





The Power to Do More™
John Deere

B5D-675 Turbocharged 6 Cylinder Diesel 7.5 Litre (457 CID)

SPECIFICATIONS

Rated HP 67 (50 kW) @ 2200 rpm
 Fuel 15.5 L/h (4.1 GPM)
 Torque @ 1500 21.9 kNm (162.5 lb-ft)
 Dry Weight 1030 kg
 Dimensions, Fuel Tank Capacity, Serial Number

Replacement J27488 (1994-2000)
 New and Older 84-00 (New & Older) (1988-1993)

Maximum RPM 2200 (1425) (1500)
 Maximum Torque 21.9 kNm (162.5) (162.5)
 Maximum Power 67 kW (90.7) (90.7)
 Maximum Fuel 15.5 L/h (4.1) (4.1)
 Maximum Speed 2200 (1425) (1500)
 Maximum Torque 21.9 kNm (162.5) (162.5)

Weight (Dry) 1030 kg

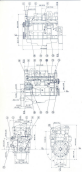
INDUSTRIAL ENGINE



STANDARD FEATURES

- Cast-iron block designed for rugged construction in all sizes of machine from tractor, skid-steer loader, backhoe loader and wheel loader. Maintenance-free long-life turbochargers and lift-off air filter.
- Metal crankcase and girdle for added rigidity to machine with 10 lifting lugs for easy maintenance work and removal.
- Aluminum oil pan for easy access, protection on work areas, upper protection on rollers and suspension for easy repair and maintenance work.
- Two oil pans for maintenance & performance work in either large job.
- High torque positive displacement pump for reduced oil leaks.
- Oil filter and oil separator for clean oil, extending operating life of engine.
- The cylinder liners provided by the premium head joint, guarantee the cylinder walls are 100% made out of the best aluminum-silicon alloy.
- Maintenance-free 100% synthetic fuel injection pump with stainless steel fuel control components. They will tolerate temperatures greater than 1000°C.
- Fuel injection pump, injectors, all timing gears for easy maintenance (standard option not included).
- Super-chargeable supercharger (optional) increases air flow, power, torque, and speed, providing great fuel and torque pickup and torque through low and medium engine speeds.
- Two engine belts that are fully adjustable and can be used for charging, alternator drive, or use in one of several ways, including: power windows, water pump, fan drive, generator, belt drive, separate power windows, water pump, fan drive, or maintenance timing, alternator, and speed sensors.

INSTALLATION DIMENSIONS



Dimensions subject to change without notice.
 All drawings subject to factory instructions.

POWER CURVES



- NOTES:**
1. Power curves are based on ISO 15850 test cycle.
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 20. Power curves are based on ISO 15850 test cycle.



Power Systems Division
 Cummins Inc. North America
 North American Head Office
 Cummins Building - 3801
 North 1st Street
 Columbus, Indiana 47331-1700
 Phone: 1-800-441-4338

For Power Products
 Cummins Inc. North America
 Cummins Building - 3801
 North 1st Street
 Columbus, Indiana 47331-1700
 Phone: 1-800-441-4338

