PowerTech ™ PSX 6068HFC95 Diesel Engine

Industrial Engine Specifications





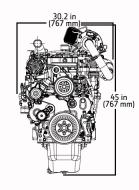
6068HFC95 shown

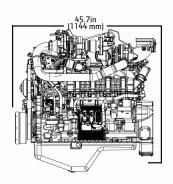
Emissions

CARB

EPA Interim Tier 4

Engine dimensions





Dimensions may vary according to options selected. Call your distributor for more information.

General data

Model	6068HFC95
Number of cylinders	6
Displacement - L (cu in)	6.8 (415)
Bore and Stroke mm (in)	106 x 127 (4.17 x 5.00)
Compression Ratio	17.2:1
Engine Type	In-line, 4-Cycle
Aspiration	Turbocharged and air-to- air aftercooled

Length - mm (in)	1161 (45.7)
Width - mm (in)	767 (30.2)
Height mm (in)	1144 (45.0)
Weight, dry - kg (lb)	785 (1731)

Performance data range

Application ratings	Intermittent
Rated power/Rated speed	168-187 kW(225-250 hp) @2200rpm
Peak power	185-190 kW (248-255 hp) @2000rpm
Power bulge	2-10% @ 2000rpm
Peak torque	1000-1025 N.m (738-756ft-lb) @1600rpm
Torque rise	26-37%

The Industrial Intermittent engine power rating is for applications that operate at varying loads and speeds, and do not fit the Industrial Heavy-Duty rating information.

Power output is within + or - 5% at standard SAE J 1995 and ISO 3046.

DOC/DPF Dimensions	
Size	5
Diameter - mm (in)	320.5 (12.6)
Length - mm (in)	891.9 (35.1)
Weight - kg (lb)	NA

See your John Deere Power Systems engine distributor for more information on available filter size options.

Features and Benefits

Engine Performance

 Faster engine control unit (ECU) manages both the engine and the exhaust filter; full authority electronic controls; four times the memory, twice the RAM, and double the processing speed; the input/output capability has increased 40%

Cooled exhaust gas recirculation (EGR)

 EGR cools and mixes measured amounts of cooled exhaust gas with incoming fresh air to lower peak combustion temperatures, thereby reducing NOx.li >

Series turbocharger

- Fresh air is first drawn into the low-pressure turbocharger (fixed geometry) and compressed to a higher pressure. The compressed air is then drawn into the high-pressure turbocharger (VGT), where the air is further compressed. The high-pressure air is then routed through a charge air cooler and into the engine 's intake manifold.
- By splitting the work between two turbochargers, both can operate at peak
 efficiency and at slower rotating speeds lowering stress on turbocharger
 components and improving reliability. Series turbocharging delivers more
 boost pressure than single turbocharger configurations, which results in
 higher power density, improved low-speed torque, and improved high
 altitude operation.

High-pressure common-rail (HPCR) and engine control unit (ECU)

 The HPCR fuel system provides var iable common-rail pressure, multiple injections, and higher injection pressures up to 1,975 bar (29,000 psi). It also controls fuel injection timing and provides precise control for the start, duration, and end of injection.

4-valve Cylinder Head

The 4-valve cylinder head provides excellent airflow resulting in greater low-speed torque and better transient response time by utilizing a U-flow design.

Air-to-Air Aftercooled

 This is the most efficient method of cooling intake air to help reduce engine emissions while maintaining low-speed torque, transient response time, and peak torque. It enables an engine to meet emissions regulations with better fuel economy and the lowest installed costs.

Exhaust Filters

- These engines utilize a catalyzed exhaust filter that contains a diesel oxidation catalyst (DOC) and a diesel particulate filter (DPF). The DOC reacts with exhaust gases to reduce carbon monoxide, hydrocarbons, and some particulate matter (PM). The downstream DPF traps and holds the remaining PM. Trapped particles are oxidized within the DPF through a continuous cleaning process called passive regeneration.
- Passive regeneration occurs during normal operating conditions when heat
 from the exhaust stream and catalysts within the exhaust filter trigger the
 oxidation of the trapped PM. If passive regeneration cannot be achieved due
 to low temperature, load, or speed, then PM is removed using active
 regeneration an automatic cleaning process controlled by the exhaust
 temperature management system. Engines below 130 kW (174 hp) use an incylinder dosing system for active regeneration, while larger engines use an
 external dosing system.

Compact size

 Lower installed cost; simplifies installation; mounting points are the same as previous engine models

Additional features

Glow plugs, 500-hour oil change, self adjusting poly-vee fan drive, variable-speed fan drive increases fuel economy and decreases noise levels, R.H. and L.H. engine-mounted final fuel filters, low-pressure fuel system with electrical transfer pump and "auto-prime" feature, directed top-liner cooling

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