PowerTech ™ PSX 6068HFG95 Diesel Engine

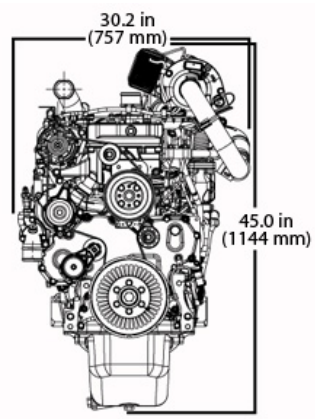
Generator Drive Engine Specifications

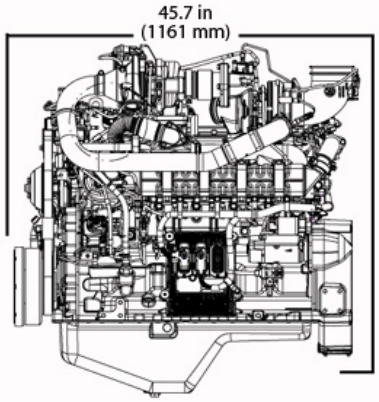
6068HFG95 shown

Emissions

CARB
EPA Interim Tier 4

Engine dimensions





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

General data

Model	6068HFG95
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) to rear of block	1161 (45.7)
Width - mm (in)	767 (30.2)
Height-- mm (in)	1144 (45.0)
Weight, dry - kg (lb)	785 (1731)

Performance data range

Rated speed	Engine power				Generator efficiency	Rated fan power		Power factor	Calculated generator set output			
	Prime		Standby						Prime		Standby	
Hz(rpm)	kW	hp	kW	hp	%	kW	hp		kWe*	kVA	kWe	kVA
60(1800)	196	263	216	290	89-93	13	17.4	0.8	164-172	205-215	181-189	226-236

Prime power is the nominal power an engine is capable of delivering with a variable load for an unlimited number of hours per year when applied in conformance with ISO 8528-1. This rating conforms to ISO3046 and SAE J1995.

Standby power is the maximum engine power available at varying load factors for up to 200 hours per year when applied in conformance with ISO 8528-1. This rating conforms to ISO 3046 and SAE J1995. The calculated generator set rating range for standby applications is based on minimum engine power (nominal -5 percent) to provide 100 percent meet-or-exceed performance for assembled standby gen-sets.

*Electrical power is calculated from the typical generator efficiency and fan power percentages shown. Applications may vary.

DOC/DPF Dimensions

Size	NA
Diameter - mm (in)	320.5 (12.6)
Length - mm (in)	891.9 (35.1)
Weight - kg (lb)	30 (66.1)

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

Features and Benefits

Series turbocharger

- Fresh air is first drawn into the low-pressure turbocharger (fixed geom etry) 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.

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 >

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 in-cylinder dosing system for active regeneration, while larger engines use an external dosing system.

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

- The HPCR fuel system provides variable 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.

Engine unit injector

- The EUI fuel system provides higher injection pressures up to 2,275 bar (33,000 psi). It also controls fuel injection timing and provides precise control for start, duration, and end of injection.

4-valve cylinder head

- The 4-valve cylinder head provides excellent airflow by utilizing a cross-flow design.

Air-to-air aftercooled

- This is the most efficient method of cooling intake air to help reduce engine emissions. It enables an engine to meet emissions regulations with better fuel economy and the lowest installed costs.

Compact size

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

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%

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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All values at rated speed and power with standard options unless otherwise noted. Specifications and design subject to change without notice.