



Model: PSI 22L

Doc #: 56100067 rev 2
Date: 2022-04-18

Gaseous Fueled Gen-Pack Engine Scope of Supply

Page: 1 of 4

Standard Product Offerings

59005018 D219L Standby Certified	59005019 D219L Standby Non-Certified
59005032 PSI HD 22LT HO Standby Certified	59005031 PSI HD 22LT HO Standby Non-Certified
59005030 D219L Prime Certified	59005021 D219L Prime Non-Certified

Basic Engine Data

Engine Model PSI 22L

Number of Cylinders/Valves 12 / 24

Cylinder Arrangement..... Vee

Displacement 21.9 L (1336 in³)

Combustion Type 4-stroke rich burn (stoichiometric)

Emissions..... US EPA certified configurations available

Cooling System..... Thermostatically controlled with integrated oil cooler

Aspiration..... Turbocharged and aftercooled

Flywheel Housing SAE #1

Flywheel SAE #14

Rotation..... Counter-clockwise when viewed from flywheel

Max. Working Ambient Temperature and Elevation..... See derate spec 56100020

Front and Rear Engine Mounting Brackets..... Included, see installation drawing SK88366 (standby, prime) or SK85372 (HO standby)

Lubrication System

Oil Type See PSI fluids spec 56100018

Lubricating Oil Pressure Sensor Included

Replaceable Spin-On Oil Filters..... Included

Oil Dipstick Included

Oil Sampling Valve Included



Model: PSI 22L

Doc #: 56100067 rev 2
Date: 2022-04-18

Gaseous Fueled Gen-Pack Engine Scope of Supply

Page: 2 of 4

Air Intake System

Replaceable UL Certified Air Cleaner Elements	Included
Closed Crankcase Ventilation System with Replaceable Filter	Included
Electronic Throttle Bodies	Included
Throttle Inlet Pressure Sensors and Manifold Absolute Pressure/Temperature Sensors	Included

Exhaust System

Water-Cooled Exhaust Manifolds	Included
Exhaust Gas Oxygen Sensors	Included
<i>EPA Certified Engines Only:</i>	
Three-way Catalysts	Included, shipped loose
Post-Catalyst Exhaust Gas Oxygen Sensors	Included, shipped loose

Engine Control System

Engine Control Unit (ECU)	Included, two per engine
ECU Communication Protocol	SAE J1939
Governor	Included, integrated into engine ECUs
Governor Steady-State Speed Stability at Constant Load (ISO 8528-5 Class G3)	$\leq \pm 0.5\%$
Air/Fuel Ratio Controller	Included, integrated into engine ECUs
Permissible Fuel Types	Natural Gas, Propane (see PSI fuel spec 56100019)
Fuel Control System	Direct electronic pressure regulator (D-EPR) and diaphragm mixer
Knock Sensors	Included
Natural Gas Fuel Shut-off Valves	Included

Electrical System

Electrical System Voltage	24 VDC, negative ground
Starter Power	7 kW (9.4 hp)
Battery Charging Alternator Current	45 A

	Model: PSI 22L	Doc #: 56100067 rev 2 Date: 2022-04-18
	Gaseous Fueled Gen-Pack Engine Scope of Supply	Page: 3 of 4

Available Cooling System Kits

59300061 Kit, Cooling Sys21.9+(52-86)QD	59300069 Kit, Cooling Sys 21.9L Prime
---	---------------------------------------

Cooling System (Radiator, guards, and other cooling system parts shipped loose)

Radiator Type Jacket water radiator with integrated dual air-to-air charge air coolers

Fan Type Pusher

Fan Hub Engine mounted, belt driven

Hoses, Pipes, Joints, and Clamps for Installation.....Included

UL2200 Compliant Fan and Belt Guards.....Included

Coolant Temperature Sensor Included (installed on engine)

Dimensions (L x W x H)

Engine Only 1738mm x 1188mm x 1534mm (68.4" x 46.8" x 60.4")

Engine with Radiator..... 2291mm x 1915mm x 2090mm (90.2" x 75.4" x 82.3")

Paint

Engine block painted gloss black

Radiator, fan and belt guards painted gloss black

Coolant and intake piping unpainted stainless steel

Testing

Standard factory test

Test report available only upon request

Documentation

Installation instructions, operation and maintenance manual, shop repair manual, and diagnostic manual in English language supplied in soft copy

	Model: PSI 22L	Doc #: 56100067 rev 2 Date: 2022-04-18
	Gaseous Fueled Gen-Pack Engine Scope of Supply	Page: 4 of 4

Packaging

Engine shipped on wooden pallet with plastic wrap

Radiator shipped in wooden crate with fan attached to top

Cooling kit pipes, fan guards, and other cooling kit parts shipped in cardboard box on wooden skid