

# WAUKESHA

## Intermediate Gas Engine

**F1197 G**  
**101 to 255 BHP**

### DESIGN FEATURES

#### ENGINE

**Breather** - Open system.

**Crankcase** - Integral with cylinder frame. Seven large diameter main bearings.

**Crankshaft** - Forged steel, with hardened journals, dynamically balanced. Vibration damper.

**Cylinder heads** - Two, interchangeable, valve-in-head type, with stellite faced exhaust valves and exhaust valve seat inserts.

**Connecting rods** - Drop forged alloy steel, rifle drilled for piston pin lubrication.

**Cylinders** - Replaceable wet cylinder liners of centrifugally cast alloy iron.

**Engine rotation** - Counterclockwise when facing flywheel.

**Pistons** - Aluminum alloy, oil cooled, with full floating piston pin.

### STANDARD EQUIPMENT

#### AIR INDUCTION SYSTEM

**Air cleaner** - Oil bath air cleaner.

#### CONTROL SYSTEM

**Governor** - Waukesha centrifugal design.

**Safety Shutdown** - Low oil temperature and high water temperature cutoff switches. Mechanical fuel shut off valve. Manual reset.

#### EXHAUST SYSTEM

Dry exhaust manifold with threaded flange connections for 4" (102mm) OD pipe.

#### FLYWHEEL

With ring gear (144 teeth), machined for Twin Disc, three plate, 14 inch clutch.

**Flywheel housing** - SAE No. 0, foot-type.

#### FUEL SYSTEM

Updraft, carburetor with 2.5" (64 mm) diameter (NPT) inlet.

#### IGNITION SYSTEM

Low tension magneto and cables. One spark plug and one coil per cylinder.

#### INSTRUMENTATION

Engine-mounted ignition switch, safety switches, vacuum, water temperature, oil pressure and oil temperature gauges.

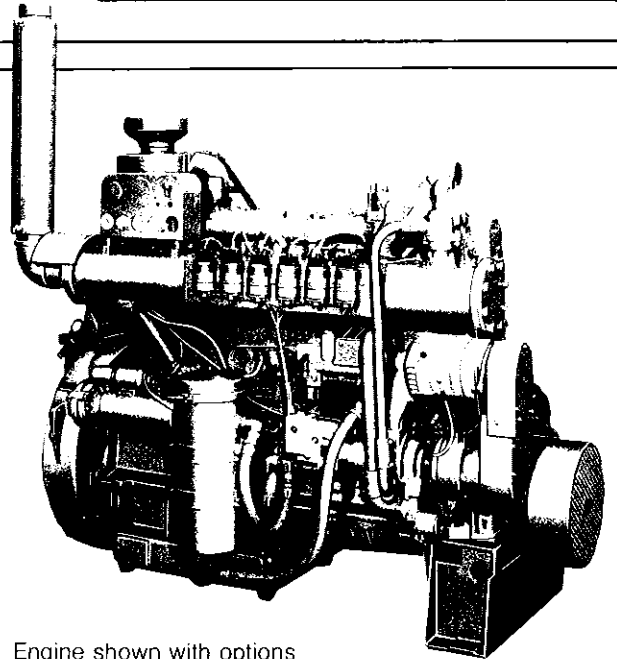
#### LUBRICATION SYSTEM

Full pressure system with high-capacity gear-type pump, shunt oil filter and rear sump.

#### Oil Cooler

#### WATER CIRCULATION SYSTEM

Gear-driven jacket water pump, with thermostatically controlled full flow bypass cooling circuit.



Engine shown with options

**Model F1197G Naturally Aspirated,  
Six Cylinder, Four-Cycle Gas-Fueled Engine**

### SPECIFICATIONS

Cylinders .....	Inline 6
Piston Displacement .....	1197 in. <sup>3</sup> (20t)
Stroke Cycles .....	4
Bore & Stroke .....	6.25" X 6.5" (159 X 165 mm)
Compression Ratio.....	Standard 9:1 ..... Optional 7:1
Jacket Water System Capacity .....	12 gal. (45l)
Lube Oil Capacity .....	12 gal. (45l)
Crankshaft Pulley .....	3 grooves; two, OD 8.31" ..... one, OD 9.13"
Starting System.....	125-150 psi air/gas; 24V electric
Governor .....	Centrifugal
Dry Weight .....	4050 lb. (1840 kg)

### OPTIONS

**Air Cleaner** - Dry element; oil bath with pre-cleaner.

**Ignition** - Solid state.

**Fuel System** - Optional carburetors, regulators, and solenoid valves for multi-fuel systems.

**Instruments** - Ammeter, tachometer, hourmeter.

## POWER RATINGS\*

MODEL	BRAKE HORSEPOWER													
	800 RPM		1000 RPM		1200 RPM		1400 RPM		1500 RPM		1600 RPM		1800 RPM	
	I**	C	I	C	I	C	I	C	I	C	I	C	I	C
NATURAL GAS														
<b>F1197G 7:1</b>	111	101	139	126	164	149	189	172	200	182	211	192	229	—
<b>F1197G 9:1</b>	123	112	151	137	178	162	205	186	217	197	229	208	248	—
<b>F1197G 7:1 Power Unit</b>	109	99	134	122	158	144	180	164	189	172	197	179	209	—
<b>F1197G 9:1 Power Unit</b>	121	110	146	133	173	157	196	178	206	187	215	195	227	—

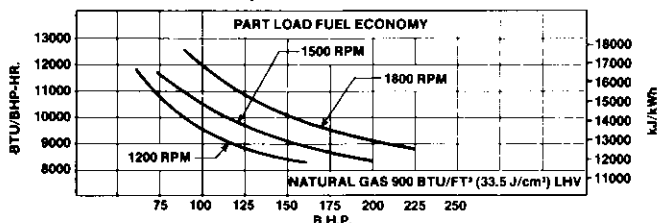
**\*Rating Standard:** All engine data is based on these conditions: barometric pressure—29.38 in (746 mm) mercury; inlet manifold air temperature—85°F (29°C). Altitude—500 ft. (152 m). Correction of ratings may be necessary for some high altitude or high inlet air temperature applications. Check Waukesha Engine Division Technical Data Book for factors.

**\*\*Intermittent Service Rating:** This rating is the highest load and speed that can be applied in special engine applications. Operation should be limited to a maximum of 1,500 hours per year.

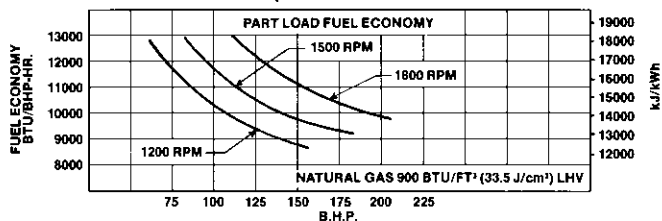
**Continuous Power Rating:** The highest load and speed which can be applied—24 hours a day, seven days a week—except for normal maintenance. The rating includes operation of the engine at up to 10% overload for two hours in each 24 hour period.

## FUEL CONSUMPTION

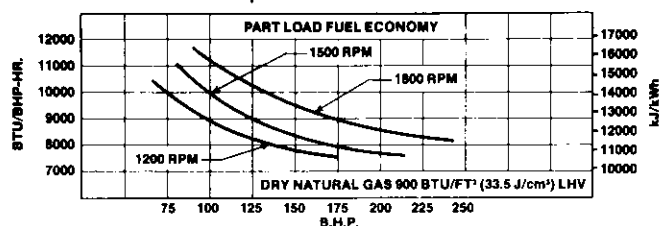
**Model F1197G Engine**  
Naturally Aspirated  
7 to 1 Compression Ratio — Natural Gas



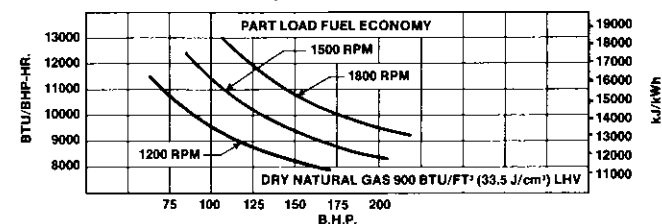
**Model F1197G Power Unit**  
Naturally Aspirated  
7 to 1 Compression Ratio — Natural Gas



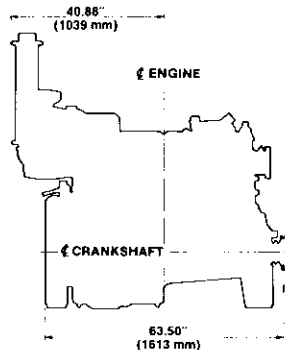
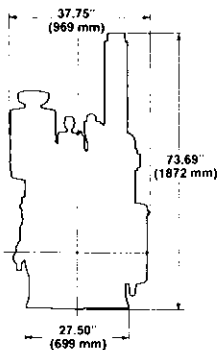
Naturally Aspirated  
9 to 1 Compression Ratio — Natural Gas



Naturally Aspirated  
9 to 1 Compression Ratio — Natural Gas



**Alternate Fuels:** Waukesha gas-fueled engines are designed for wide fuel flexibility — HD-5 propane, landfill, biomass, digester and other gases. Consult W.E.D. applications engineering or your dealer representative.



The manufacturer reserves the right to change without notice, the design, equipment, specifications or ratings as herein set forth without incurring any obligation either with respect to engines previously sold or in the process of construction, except where otherwise specifically guaranteed by the manufacturer.

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