

PRINCIPAL ENGINE DIMENSIONS

Bore and Stroke , 145-GKB.....	5¼ x 6
Displacement , cu. in., 145-GKB.....	779
Bore and Stroke , 145-GZB.....	5¾ x 6
Displacement , cu. in., 145-GZB.....	817
Number of Cylinders	6
Valve , Intake, clear diameter.....	2⅝
Valve , Exhaust, clear diameter.....	1⅜
Connecting Rod Bearings , dia. x lgth.	3 x 2¼
Connecting Rod Lgth. , c. to c.....	11¾
Front Main Brg. , dia. x lgth.....	3½ x 2
Center Main Brg. , dia. x lgth.....	3½ x 3¾
Intermediate Main Bearings (4), dia. x lgth.....	3½ x 2⅝
Rear Main Brg. , dia. x lgth.....	3½ x 3½
Piston Pin , floating, dia. x lgth.....	1⅝ x 4½
Piston Rings , compression (3), 145-GKB....	¾
Piston Rings , oil control (2), 145-GKB.....	¾
Piston Rings , compression (3), 145-GZB....	¾
Piston Ring , oil control (1), 145-GZB.....	¾
Carburetor Flange , SAE size.....	2
Spark Plugs , 2 per cylinder.....	14 mm.
Exhaust Manifold Bore	4⅝
Weight , approximate, lb.....	1810

All dimensions are nominal and given in inches unless otherwise stated.

WAUKESHA 145-GKB and 145-GZB

High Output FIRE FIGHTERS

SPECIFICATIONS

Cylinder Heads—Twin castings, interchangeable front or rear. Valves and two spark plugs per cylinder carried in head.

Crankcase—Crankcase and cylinder frame in one unit. Heavy top and bottom diaphragms with baffles and ribs direct coolant circulation. Crankshaft carried in upper half.

Cylinders—Removable, wet-type cylinder sleeves of Waukesha special alloy close-grained iron. Honed finish.

Pistons—Aluminum alloy, heavily ribbed with four rings, all located above the bearing bosses, Model 145-GZB; Model 145-GKB has a fifth ring below. Full-floating piston pins used in both models.

Piston Rings—Model 145-GZB has four rings located above the bearing bosses. Two compression rings, one compressor-scraper ring, and one oil control ring. Top ring is chrome plated. Ring surfaces flat and parallel. Model 145-GKB is same except a fifth ring is at the bottom of the piston skirt.

Crankshaft—Forged steel. Seven 3½-inch main bearings. Specially hardened, counter-balanced, and vibration-dampened.

Connecting Rods—Drop-forged, heat-treated steel. Large end ground to receive replaceable precision high capacity bushings. Rods matched in sets to ¼ ounce. Full floating piston pin, pressure oiling to large and small end bearing bushings.

Camshaft—Solid steel forging, case hardened, precision ground cams and bearings. Oil pump drive gear integral with shaft.

Main Bearings—Replaceable precision-type extra high capacity bushings. Deep caps held by ¾-inch heat-treated cap screws and locks. Exceptionally long center bearings.

Valves—Placed in cylinder head. Special alloy steel intake and exhaust. Stellite-faced exhaust valves and exhaust valve inserts. Hardened valve guides of aluminum-bronze alloy pressed in place.

Valve Adjustment—Screw and lock-nut on rocker arms. Mushroom tappets flood oiled. Rocker arm oiling controlled to provide intermittent pressure feed.

Timing Gears—Helical-cut gears of mild steel. Fully enclosed and flood oiled.

Cooling—High-duty coolant pump delivers large volume of coolant in directed paths. Large, clear passages surround valve seats. Thermostat by-pass assures quick warm-up.

Lubrication—Full-pressure oiling by positive gear-type pump. Oil is forced through large drilled passages to each main, camshaft, connecting rod, piston pin, rocker arm, oil pump drive shaft bearing, and to idler gear stud and gears. Valve mechanism and cylinder walls are drenched by oil mist. Oil inlet surrounded by strainer and oil level equalizer which prevents air-bound lines and insures lubrication at all oil levels and temperatures. Outside pressure adjustment permits regulation while engine is operating. Large filler opening protected by hair-filled breather cap. Simple, bayonet-type, oil level gauge. Rear sump oil pan is standard.

Scavenger Oil Pump—Provision for scavenger pump, available as an "extra."

Oil Filter—Extra large capacity, waste-packed, lubricating oil filter is mounted on crankcase, shunt connections.

Flywheel Housing—S.A.E. No. 2 standard

Carburetor—Downdraft is standard, 2-in. Coolant jacketed intake manifold.

Fuel Feed Pump—Fuel pump drive and mountings standard. Fuel pump itself can be supplied at extra cost.

Ignition—Mounting and drive for both battery and magneto ignition and dual spark plugs are standard. Ignition devices are not standard; can be furnished at additional cost.

Electric Starter (Extra)—Standard 12-volt starter and generators are available.

Air Compressor Drive (Extra)—Compressor mounting and drive when specified.

Other Accessories and Equipment—Additional fuel, ignition, cooling, and lubrication system equipment, and instruments, controls and accessories for special services are available.

Curves show performance characteristics of 145-GKB and 145-GZB engines for fire fighting service. For continuous full load, use no more than 80% of power shown; and for intermittent duty and part load, no more than 90% of the power shown.

Permissible Speeds—Governors, if furnished, will be set for 2600 rpm. Consult Waukesha Motor Company for permissible speeds for your service.

Horsepower Shown Is Obtained with the Following Equipment: Pistons—Aluminum, 6.2 CR. Carburetor—2-inch downdraft. Intake Manifold—Warm. Crankshaft—Counter-balanced. Fan—None. Air Cleaner—None. Generator—None. Muffler—None.

The manufacturer reserves the right to change or modify the design or equipment specifications as herein set forth without incurring any obligation either with respect to engines previously sold or in process of construction.



