

Model WTU

Bore 3¾ inches Stroke 5⅓ inches



Distinctive Features

MODEL WTU

Cylinder block separate from crankcase.

Engine arranged for magneto and battery ignition.

Extra wide face, helically cut timing gears.

Buda two-piece "high turbulence" manifold, designed for maximum power and economy.

Idler gear adjustable.

All oil lines of seamless steel tubing, cast integral with crankcase.

Large-sized crankshaft with special balancing

Cylinder block with complete water circulation around all valve seats.

Cooling by centrifugal pump, which forces cooled water direct to valve seats.

All nuts, bolts and studs subjected to heavy strains are of alloy steel.

Oil pump in center of engine.

Connecting rods of open hearth steel.

THE BUDA COMPANY HARVEY (STISAGE) ILLINOIS

30 CHURCH ST. NEW YORK

THE SECOND ST.

664 MISSION ST.

75 EVERSHOT RD.

A, OKLA SAN FRANCISCO LONDON, N.



SPECIFICATIONS Model WTU

TYPE
Vertical, en bloc, 'L' head, four cycle, four cylinders.

SIZE
Bore (95.25 mm.), 3¾ in.
Stroke (130.175 mm.), 5½ in.

PISTON DISPLACEMENT 226.4 cu. in.

POWER
S.A.E. rating, 22.5
B.H.P. at 1000 R.P.M., 26
B.H.P. at peak, 36.5
R.P.M. at peak of B.H.P., 1800
Torque in foot lbs. at peak, 136
R.P.M. at peak of torque, 1000

SUSPENSION
3 point.

IGNITION Standard.

SPARK PLUGS S.A.E. Standard, 7/8 in.—18.

CARBURETOR FLANGE S.A.E., 1 in.

CONSTRUCTION

Height from center of crankshaft to top of water outlet pipe, 23½ in.

Distance from center of crankshaft to bottom of engine, $9\frac{3}{16}$ in.

Distance from center of front support to center of rear supporting arms, $30\frac{9}{16}$ in.

Drop of front support bracket—standard 3½ in., (optional 2½ in.).

Overall width of rear supporting arms, 253/4 in.

LUBRICATION (Patented)

Force feed pressure to all crankshaft, camshaft, and connecting rod bearings, through a seamless steel distributing pipe cast in the crankcase.

Oil pump is gear driven from the camshaft.

Regulation is by an adjustable spring relief valve.

Sump capacity, 1.25 gal.

COOLING

Centrifugal pump operating at engine speed.

CRANKSHAFT

Open hearth steel, high speed type with heavy cheeks and throws.

Number of bearings, 3.

CRANKCASE

Cast iron, divided horizontally at crankshaft center.

CYLINDERS

Grey iron, cast en bloc. Removable cylinder head.

CAMSHAFT

Open hearth steel, gear driven. Number of bearings, 3.

CONNECTING ROD

Drop forged open hearth steel, 'I' beam construction.

Length, center to center, 111/4 in.

Diameter and number of connecting rod bolts, $\frac{7}{16}$ in.—2.

Phosphor bronze bushings.

PISTONS

Grey iron.

Length, 41/2 in.

PISTON RINGS

Three rings above the wrist pin; one wiper ring below.

PISTON PINS

Open hearth steel. Diameter, 13/8 in.

VALVES

Diameter, 1½ in. Exhausts Silchrome No. 1.

VALVE PUSH RODS Steel, mushroom type.

BEARINGS—MAIN
Bronze shell, babbitt lined.

CRANKSHAFT BEARINGS

Diameter

Front (44.45 mm.), 1³/₄ in. Center (50.8 mm.), 2 in. Rear (53.975 mm.), 2¹/₈ in.

Length

Front (63.50 mm.), $2\frac{1}{2}$ in. Center (63.50 mm.), $2\frac{1}{2}$ in. Rear (74.61 mm.), $2\frac{1}{6}$ in.

CAMSHAFT BEARINGS

Diameter

Front (52.387 mm.), $2\frac{1}{16}$ in. Center 51.59 mm.), $2\frac{1}{32}$ in. Rear (41.275 mm.), $1\frac{5}{8}$ in.

Length

Front (64.29 mm.), $2\frac{17}{32}$ in. Center (80.96 mm.), $3\frac{3}{16}$ in. Rear (44.24 mm.), $1\frac{2}{3}\frac{5}{2}$ in.

CONNECTING ROD BEARINGS

Babbitted direct to rod. Diameter (47.625 mm.), 1% in. Length (50.80 mm.), 2 in.

PISTON PIN BEARING

Diameter (34.92 mm.), $1\frac{3}{8}$ in. Length (34.92 mm.), $1\frac{3}{8}$ in.



FAN

Belt driven. Bracket support integral with crankcase and gear cover.

Diameter, 18 in. Not furnished.

BELL HOUSING

S.A.E., No. 3.

TIMING GEARS

Spiral cut teeth.

Gear Set-crankshaft, cam, idler, pump shaft and generator shaft gear.

FLYWHEEL

Grey iron, accommodates standard disc clutch. Alloy steel bolts and nuts.

Width of flywheel face, 3 in.

INTAKE AND EXHAUST MANIFOLD

Grey iron. Cast separate.

GEAR CASE COVER

Grey iron, with large trunnion.

BREATHER AND OIL FILLER

Equipped with strainer screen.

CABLE TUBE

STARTING CRANK ASSEMBLY

The following accessories can be furnished if desired:

Magneto-S.A.E. Mounting.

Distributer-S.A.E. Mounting.

Lighting Generator-No. 2 S.A.E. Mounting.

Starting Motor-No. 2 S.A.E. Mounting.

Governor-Standard or Buda.

Carburetor-S.A.E. Standard, 1 in.

Clutch-Standard.

Transmission and Gear Reducer-Standard.

SHIPPING DATA

Net weight, 660 lbs.

Domestic

Gross shipping weight less carload, 810 lbs. Gross shipping weight carload, 760 lbs.

Number of engines per minimum carload, 30.

Export

Average gross weight boxed for export, 900 lbs.

Approximate dimensions export box:

Length, 39 in.

Width, 32 in.

Depth, 34 in.

