

# Clinton

CLINTON ENGINES CORPORATION

SERIES  
**494**  
LONG LIFE CAST IRON  
**3.5 HP**

Model	Starter	PTO Shaft	Net Wt.
494-0101	E-Z Pull Recoil	Bronze Bearing	43 lbs.
494-0301	E-Z Pull Recoil	Ball Thrust Bearing	43 lbs.
494-0161	E-Z Pull Recoil	6 to 1 Speed Reducer	49 lbs.

## GENERAL SPECIFICATIONS

**Bore:** 2 $\frac{3}{8}$  inches

**Stroke:** 1 $\frac{7}{8}$  inches

**Piston Displacement:** 8.3 cubic inches

**Type:** Single cylinder, L-Head, air-cooled, 4-cycle.

**Air Cooling:** Large capacity curved vane blower cast integral with flywheel. Air passes through deep fins to maintain correct operating temperature. Rotating blower screen.

**Ignition:** Very high voltage at low speed. Built-in flywheel magneto for faster starting. Moisture and dust proof with fully enclosed ignition points.

**Spark Plug:** 14 mm

**Lubrication:** Splash type — oil capacity 1 $\frac{1}{4}$  pints. Oil drainage permitted from either side of base.

**Carburetor:** Full float feed with idle and high power mixture adjustment.

**Fuel Tank:** Three-quart capacity, with gasoline strainer and shut-off valve.

**Air Cleaner:** Oil bath type.

**Governor:** Adjustable mechanical type, running in oil.

**Governor Control:** Fixed speed setting. Variable speed control optional with provisions for mounting control cable.

**Cylinder and Crankcase:** Close-grained alloy iron cylinder block and crankcase with large amount of cooling area for efficient operation.

**Crankcase Breather:** Maintains a vacuum in crankcase and prevents oil leaks.

**Cylinder Head:** Aluminum alloy, with extra deep cooling fins. Removable.

**Main Bearings:** Models 494-0101 and 494-0161 have bronze bearings on power take-off end. Model 494-0301 has ball thrust bearing at power take-off end. Bronze bearings on flywheel end, all models.

**Crankshaft:** Ductile iron. Counterweights and cam drive gear integral with shaft.

**Connecting Rod:** I-Beam, aluminum alloy with extra large bearings.

**Piston:** Aluminum alloy. Clinton-engineered for efficient combustion.

**Piston Rings:** Two compression and one oil control. Treated surfaces.

**Valves:** Forged steel. Exhaust valve provided with heat-resistant alloy head.

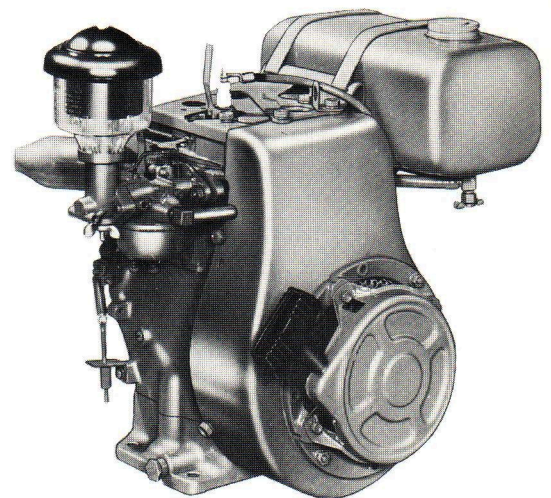
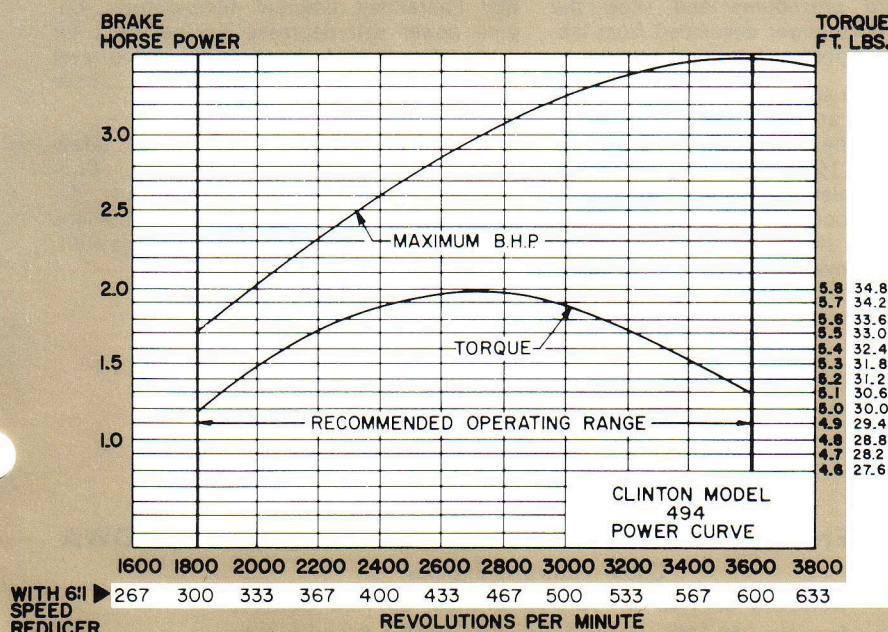
**Valve Tappets:** Hardened and ground.

**Muffler:** Efficient, low back-pressure type.

**Direction of Rotation:** Counter-clockwise, viewed from power take-off side.

**Gear Reduction:** Model 494-0161 only has an internal reduction gear, 6 to 1 ratio. Rotation counter-clockwise.

**Finish:** Painted in gray heat-resistant enamel. Prime coat finish if specified.





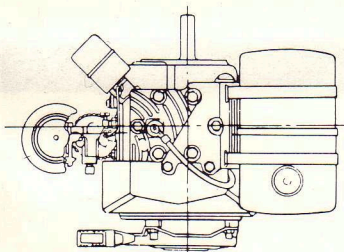
# Clinton Engines

**494-0101**

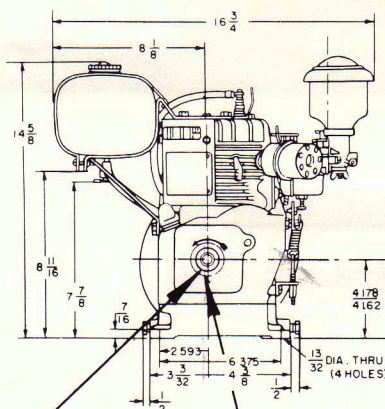
**494-0301**

**494-0161**

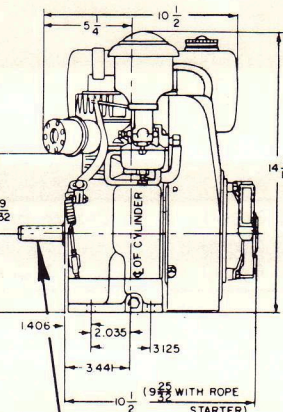
## Dimensional Specifications



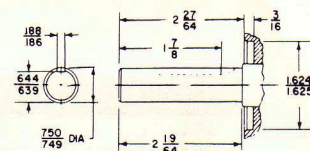
494-0101



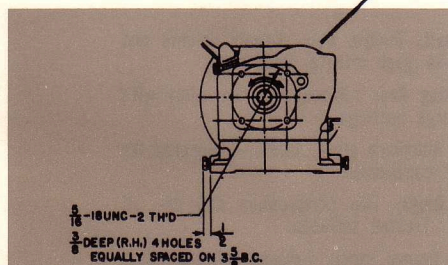
494-0101



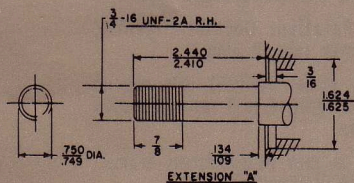
494-0101



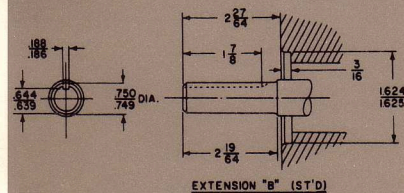
494-0101



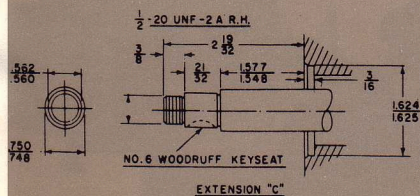
Variation for  
494-0301



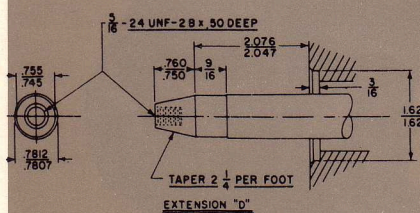
EXTENSION "A"



EXTENSION "B" (STD)

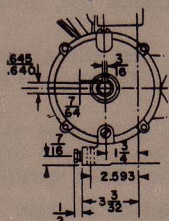


EXTENSION "C"

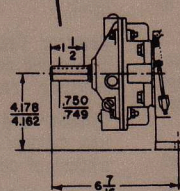


EXTENSION "D"

Crankshaft variations  
for 494-0301

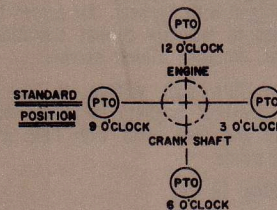


Variation for  
494-0161



Variation for  
494-0161

Possible mounting positions  
of power take off shaft in  
relation to the engine crank-  
shaft as viewed from the  
power take off end.  
Rotation—counter clockwise.



494-0161

## CLINTON POWER DATA

The performance and horsepower ratings shown herein are established in accordance with standard procedures and show the rated Brake Horsepower developed from laboratory test engines.

Unless otherwise specified, the engine speed at no load is set at 3300 RPM plus or minus 100 RPM and the engine idle speed at no load is set at 1500 RPM plus or minus 100 RPM. Complete details of installations requiring operation at other than recommended speeds should be referred to the factory for approval.

The ratings are corrected to Standard Conditions of sea level barometric pressure and 60° Fahrenheit ambient temperature. Engine power will decrease 3.5 per cent for each 1000 feet of elevation above sea level and 1.0 per cent for each 10° F. above 60° F. ambient temperature.

Allow at least 20% of horsepower for safety factor under continuous operation. Clinton Engines Corporation will supply detailed prints upon request. Specifications and Dimensions are subject to change without notice.



CLINTON ENGINES CORPORATION • MAQUOKETA, IOWA

Cable Address: Engines

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