# Clinton®

CLINTON ENGINES CORPORATION

SERIES
**420**
LONG LIFE CAST IRON
**9.6 HP**

| Model | Starter | PTO Shaft | Net Wt. |
|---|---|---|---|
| 420-1301 | Rope | Roller Thrust Bearing | 103 lbs. |
| 420-1361 | Rope | 6 to 1 Speed Reducer | 116 lbs. |

## GENERAL SPECIFICATIONS

**Bore:** 3⅛ inches.

**Stroke:** 3¼ inches.

**Piston Displacement:** 25 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.

**Ignition:** Increased spark at starting speed. Breaker points, condenser, radio shielded stop switch and ground wire terminal mounted in box on outside of crankcase for easy servicing. Advanced design magneto elements using Alnico permanent magnets and waterproof molded coil. Spark advance mechanism assembled on cam gear automatically retards spark at starting speed and advances spark as engine speed increases.

**Spark Plug:** 14 mm.

**Lubrication:** Splash type — oil capacity 5 pints.

**Carburetor:** Concentric float type with idle and high power mixture adjustment.

**Fuel Tank:** Six quarts capacity, with visible 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.

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

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

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

**Main Bearings:** High load capacity tapered roller bearings with thrust as well as radial load ability. Adjustment provision for wear.

**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.

**Exhaust Valve Seat:** Alloy insert, replaceable.

**Valve Stem Guides:** Replaceable, inlet and exhaust.

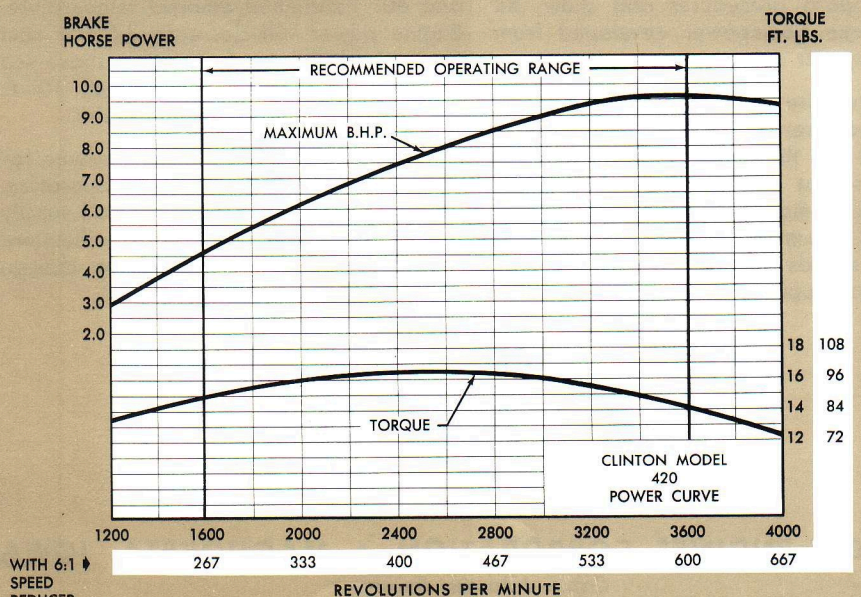
**Valve Tappets:** Hardened and ground.

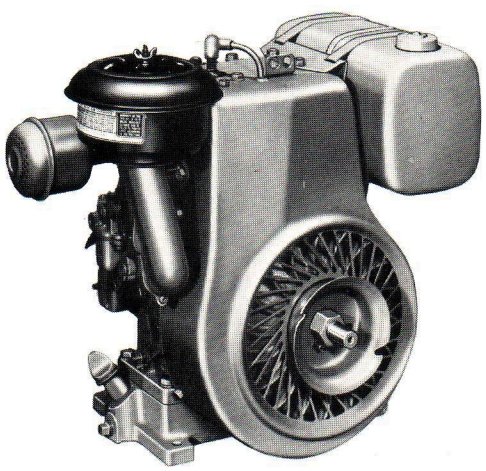
**Muffler:** Efficient type, low back-pressure.

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

**Gear Reduction:** Model 420-1361 only has internal reduction gear, 6 to 1 ratio. Rotation, counterclockwise.

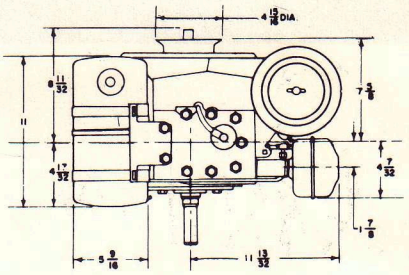
**Finish:** Painted in gray heat-resistant enamel. Prime coat finish if desired.



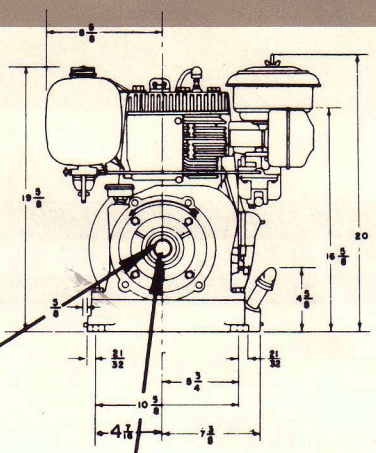



# Clinton Engines
# 420-1301
# 420-1361

## Dimensional Specifications



420-1301



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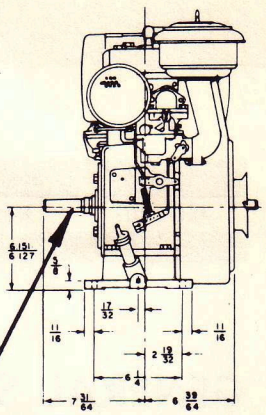

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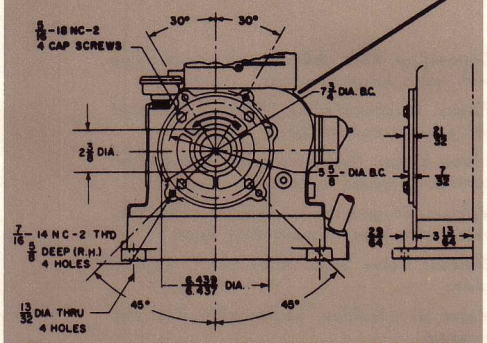
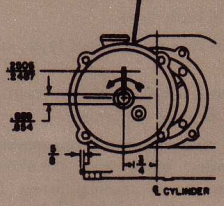
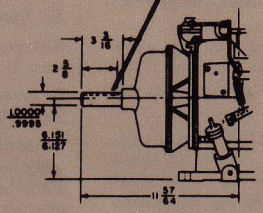


Flange mounting detail for 420-1301



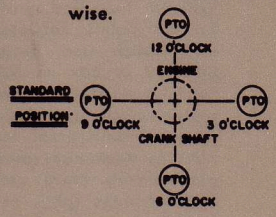
Variation for 420-1361



Variation for 420-1361

Possible mounting positions of power take-off shaft in relation to the engine crankshaft as viewed from the power take-off end.

Rotation — counterclockwise.

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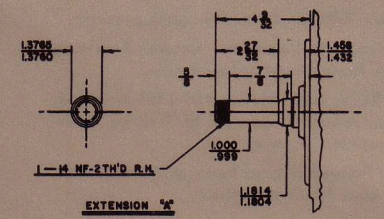
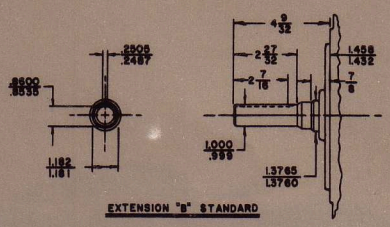
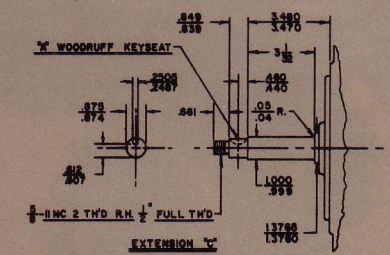


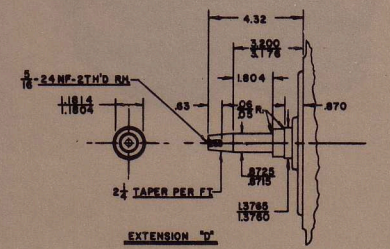
EXTENSION "A"



EXTENSION "B" STANDARD



EXTENSION "C"



EXTENSION "D"

Crankshaft variations for 420-1301

## 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 2900 RPM plus or minus 100 RPM and the engine idle speed at no load is set at 1200 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®

**CLINTON ENGINES CORPORATION • MAQUOKETA, IOWA**

Cable Address: Engines

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