

Clinton

CLINTON ENGINES CORPORATION

SERIES
410
ALUMINUM
4 HP

Model	Starter	PTO Shaft	Net Wt.
410-0105	E-Z Pull Recoil	Bronze Bearing	24½ lbs.
410-0305	E-Z Pull Recoil	Ball Thrust Bearing	24½ lbs.
410-0165	E-Z Pull Recoil	6 to 1 Speed Reducer	31 lbs.

GENERAL SPECIFICATIONS

Bore: 2½ inches.

Stroke: 1⅞ inches.

Piston Displacement: 9.2 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 1¼ pints. Oil drainage permitted from either side of base.

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

Fuel Tank: Two-quart capacity with fuel shut-off valve.

Air Cleaner: High efficiency oiled non-spill MICRO-SEAL® element.

Governor: Adjustable pneumatic type.

Governor Control: Shipped fixed speed. Provision for variable speed with use of remote control cable.

Cylinder and Crankcase: Die-cast aluminum alloy with large amount of cooling area. A close-grained iron cylinder sleeve is cast in block.

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

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

Main Bearings: Models 410-0105 and 410-0165 have replaceable bronze sleeve bearings at power take-off end. Model 410-0305 has ball thrust bearing on power take-off end. Bronze bearings on flywheel end, all models.

Crankshaft: High strength 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.

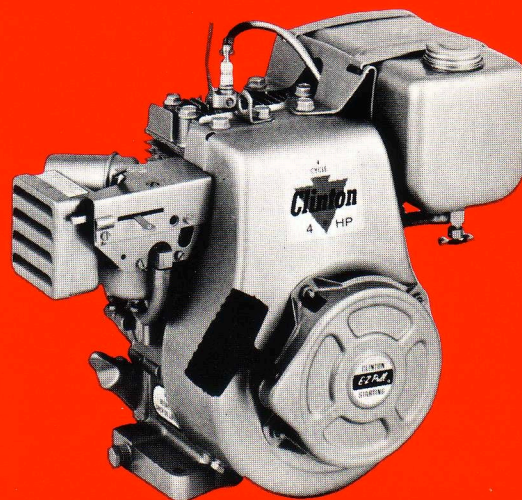
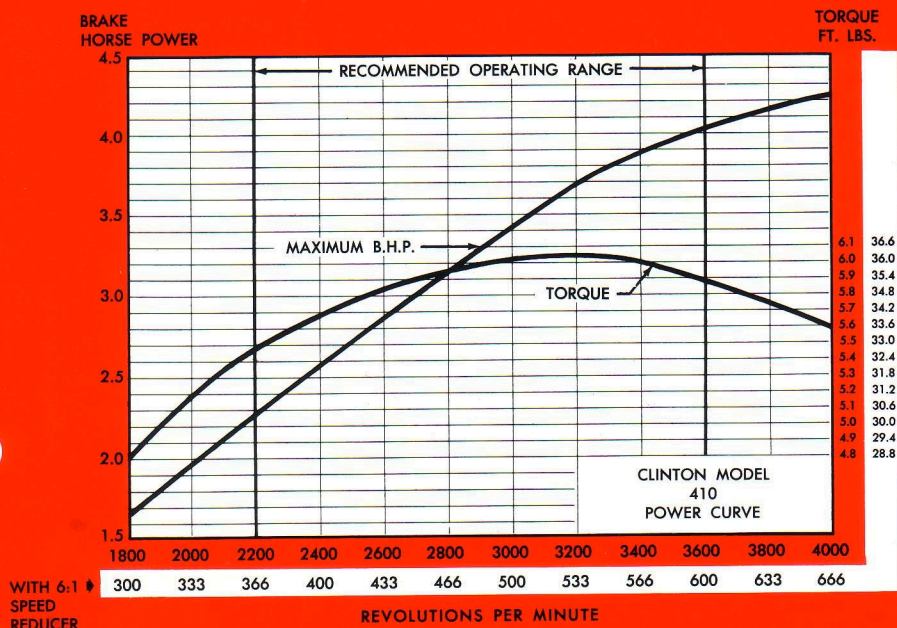
Valve Seats: Alloy inserts.

Muffler: Efficient, low back-pressure type.

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

Gear Reduction: Model 410-0165 only has internal reduction gear, 6 to 1 ratio. Rotation, counterclockwise.

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



410-0105
410-0305
410-0165

Technical drawing of the Honda 100 cc engine, showing dimensions and an accessory mounting boss. The drawing includes the following dimensions:

- Overall height: 13 1/8"
- Height to the top of the cylinder: 8 5/8"
- Height to the top of the carburetor: 11 1/8"
- Distance from the base to the center of the spark plug: 2.985"
- Distance from the base to the center of the carburetor: 3.781"
- Distance from the base to the center of the spark plug (alternative measurement): 3 1/8"
- Distance from the base to the center of the carburetor (alternative measurement): 4 1/8"
- Distance from the base to the center of the spark plug (alternative measurement): 3 5/8"
- Distance from the base to the center of the carburetor (alternative measurement): 4 15/16"
- Distance from the base to the center of the spark plug (alternative measurement): 3 1/8"
- Distance from the base to the center of the carburetor (alternative measurement): 4 1/8"

Accessory mounting boss available on special order.

Technical drawing of a mechanical assembly, likely a pump or engine component, showing a side view with various dimensions and labels. The drawing includes a vertical shaft with a pulley at the top, a main body with cooling fins, and a base. Dimensions are given in inches and millimeters. Labels include '13/32', '1.391', '8/16', '11/16 DIA. THRU HOLES', and '1.754'. A vertical arrow points upwards from the base.

Technical drawing of a mechanical part. The front view (left) shows a circular feature with a diameter of $\frac{750}{748}$ DIA. and a vertical dimension of $\frac{100}{106}$. The side view (right) shows a cylindrical part with a total length of $2 \frac{27}{64}$ and a central section with a length of $1 \frac{7}{8}$. A dimension of $2 \frac{19}{64}$ is also indicated at the bottom right.

Technical drawing of a square flange. The drawing shows a square flange with four mounting holes, one in each corner. A central hole is also shown, which is threaded. The drawing includes dimension lines and a note indicating the hole specifications: 3/8" - 24 UNF - 28 THD x 69 DEEP. The note also states that the four holes are equally spaced. The drawing is labeled with '3/8' and '4 HOLES EQUALLY SPACED'.

3/8" - 24 UNF - 28 THD x 69 DEEP
4 HOLES EQUALLY SPACED

186
186

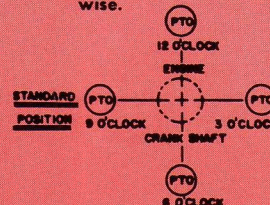
645
640

2 1/2 1 1/2

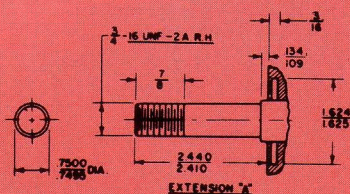
CYLINDER

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

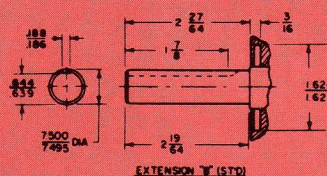
Rotation — counterclockwise.



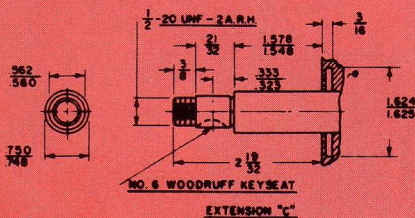
410-0165



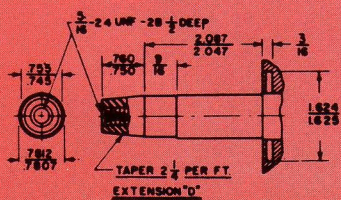
EXTENSION "



EXTENSION "B" (STD)



EXTENSION "C"



EXTENSION "D"

CLINTON POWER DATA

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.



Cable Address: Engines

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