NOVO'S MODEL AG

2 H.P. ROLLR ENGINE

TWO POWER SHAFTS

HIGH COMPRESSION

LIGHT WEIGHT . . .

NO VIBRATION . . .

Novo Engine Co.
Lansing, Michigan, U. S. A.

Bulletin 163

The New Novo Roller Bearing Engine

Model AG—2 H. P.

THIS new 2 H. P. Novo brings to the light horse power field the important developments that have occurred in automotive and industrial engine design during the past few years.

The new AG single-cylinder 2 H. P. Novo is a vertical type engine with a high compression head. It is a light, compact and portable power unit for all power requirements within its capacity.

The AG is especially useful for general farm power requirements as on **pumps, feed grinders, saw tables, cream separators, washing machines, churns, light plants, milking machines, farm elevators, spray rigs, corn shellers, farm shops, etc.**

Anti-Friction Bearings

The two Timken Roller Bearings used on the crankshaft and two on the powershaft, lengthen bearing life, reduce friction, require no attention and are an economy on fuel.

All radial and thrust loads are amply cared for by these antifriction bearings.

Chrome Nickel Block

The cylinder block contains a high percentage of steel also chromium and nickel which gives a close grained metal of high transverse strength and the proper Brinell hardness to insure long wear.

Splash Oiling System

The oiling system is simple and positive—composed of a dipper on the connecting rod, which picks up the oil from the bottom of the crankcase and distributes it to bearings, gears, piston, connecting rod and all working parts within the engine.

Integral Transmission

A speed reducing transmission is built into the AG Rollr Engine, eliminating a speed reduction outside of the engine. This integral transmission drops the 1200 R. P. M. engine speed down to 600 R. P. M. pulley speed. Like the crankshaft, the transmission is mounted on Timken Tapered Roller Bearings.

Throttling Governor

The AG is equipped with an enclosed, adjustable, self-oiling fly-ball governor which maintains the rated crankshaft speed at all loads within the engine's rated horse power.

Vibrationless

The crankshaft is designed along the latest automotive lines, being precisely counterbalanced. This practically eliminates vibration and contributes many years to engine life.

Easy Starting

An automatic impulse coupling connected to the high tension magneto insures a hot spark at cranking speed—a quarter right hand turn is sufficient to start the engine. The retarding action of the coupling prevents any chance of kick back.

Light Weight

The new Novo AG Rollr Engine is designed for ready portability. Precise construction and high-grade metals bring the actual weight of the engine down to a weight of 150 pounds.

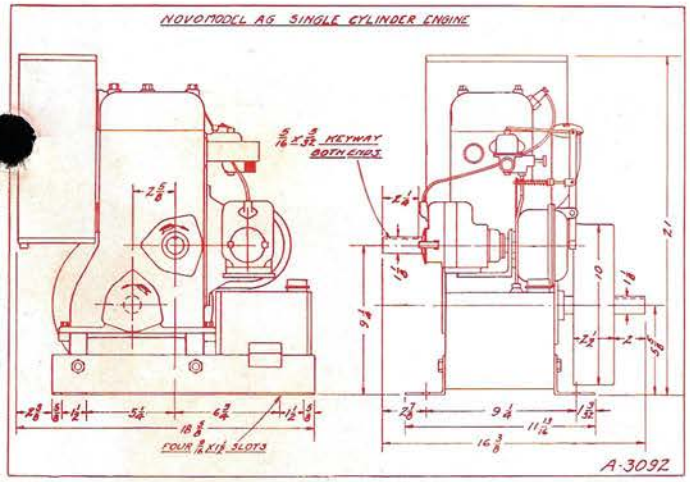
Smooth Power

The normal speed of the crankshaft is 1200 R. P. M. whereas the speed of the powershaft to which the pulley is attached is 600 R. P. M. This arrangement gives this engine two power impulses for every one of the average power unit of this size which normally operate at 600 R. P. M. A smoother operation and the delivery of full power continuously, results. (Power may be taken off the crankshaft at 1200 R. P. M. if desired, in which case a special crank is furnished.)

Low Price

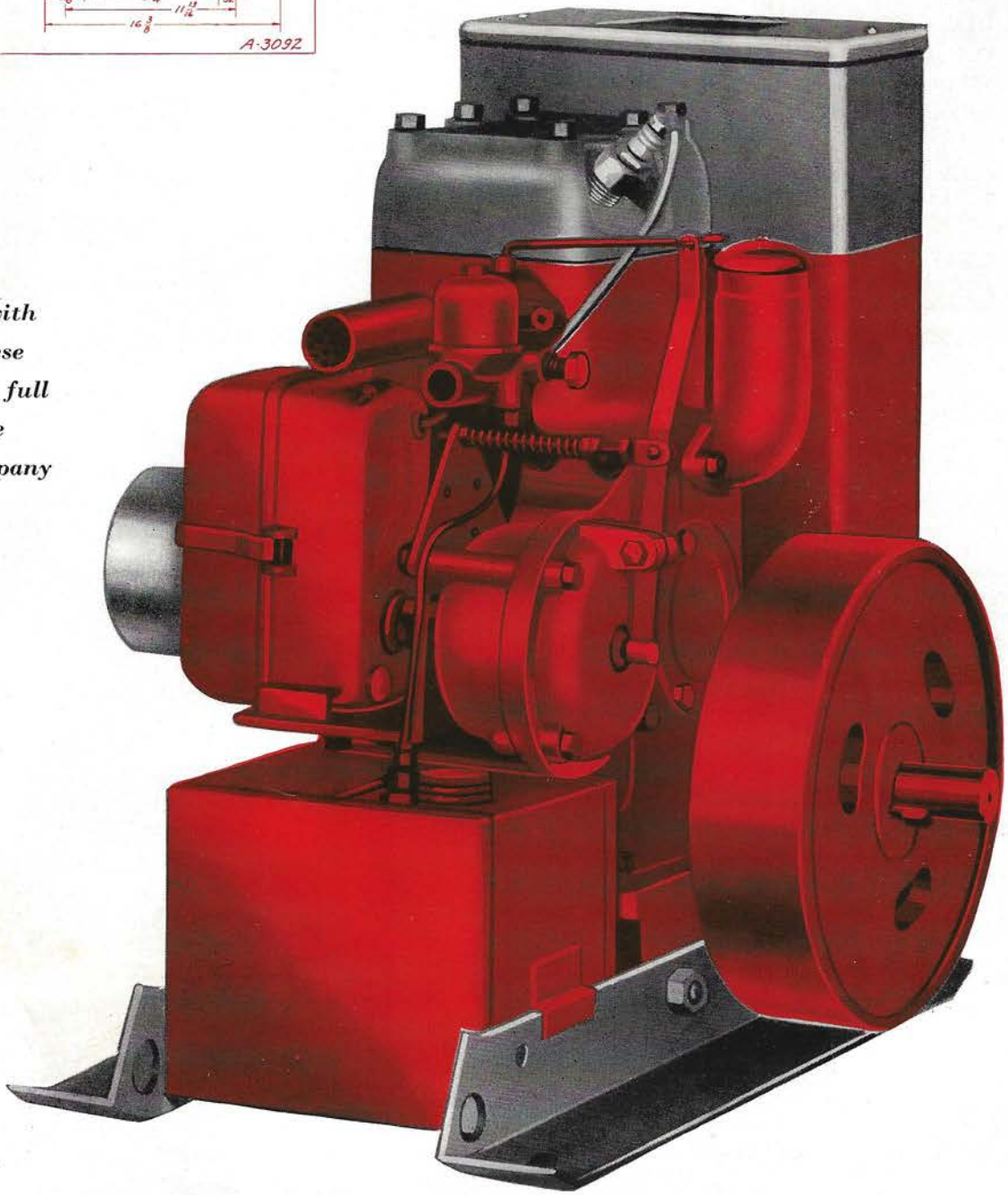
In spite of the modern design and construction that makes the new AG such an outstanding engine in the light horse power field, prices are based upon modern, quantity production manufacturing. This gives you a remarkably low cost which competes with prices of old-fashioned horizontal 1½ H. P. engines that can't compare with the Novo on a design and performance basis. Prices in any quantity on application.

NOVO ROLLR ENGINES



Novo's Mighty Midget—The AG Rollr Engine, trim, compact and easily portable. It delivers two full horse power with ample reserve—note the compact dimensions.

A one year guarantee goes with each one of these engines, with the full backing of the Novo Engine Company



ROLLR ENGINES

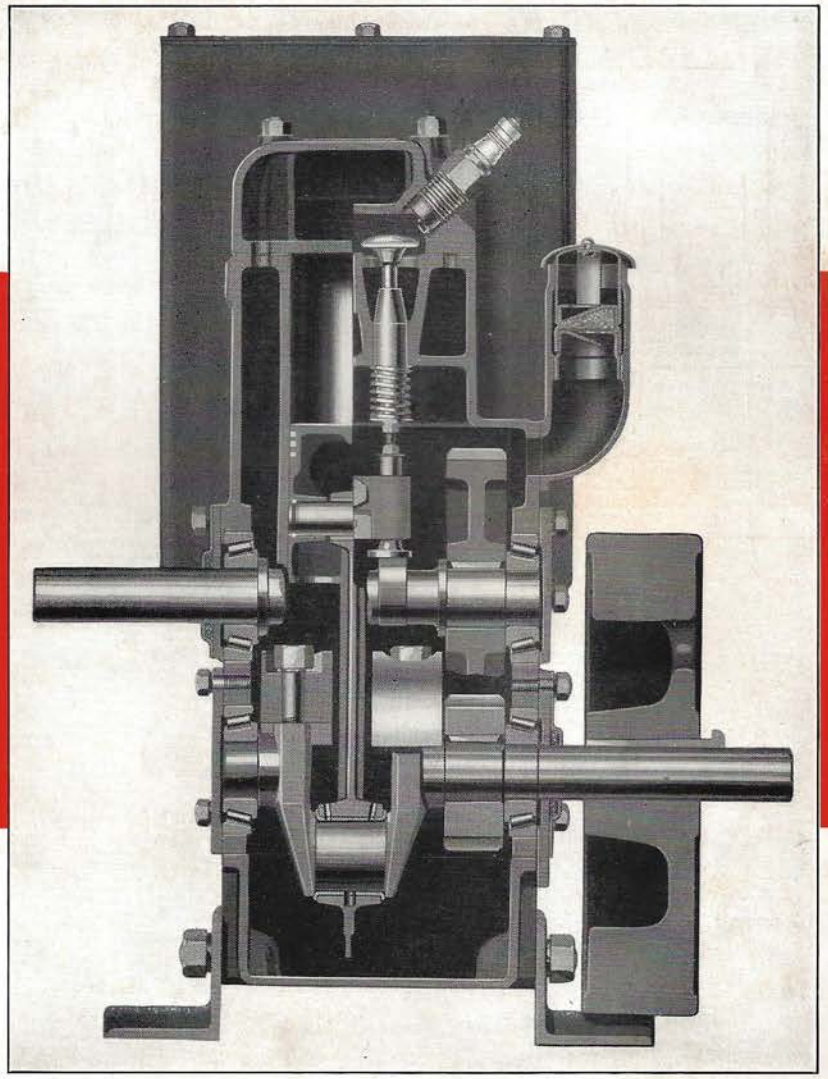


Fig. 1581. Sectional view of the New Novo AG Rollr Engine showing the simplicity of design. Note the four Timken Roller Bearings on the crank and power shafts, the ample water cooling hopper in the rear, the heavy power gears, the modern combustion chamber design, improved breather, replaceable valve tappet and valve stem guides, the steel base angles and the precisely counterbalanced crankshaft.

Specifications on Novo Single Cylinder 2 H. P. AG Rollr Engine

Bore	2¾"
Stroke	3½"
R. P. M. crankshaft	1200
Power shaft	600 R. P. M.—1⅛" dia. x 3½" long
Displacement, cu. in.	20.79
Fuel tank capacity	1 U. S. gallon
Oil capacity	1 quart
Carburetor	Own make suction type
Ignition	*(with impulse coupling)* High tension magneto
Cooling	(2 gallon capacity) Hopper
Valve diameter clear	1 3/16"
Connecting rod bearings, pressure cast	1½" x 1½"
Main bearings	2 Timken tapered roller bearings
Power shaft bearings	2 Timken tapered roller bearings
Cylinder block	(Novite) chrome nickel alloy
Timing gears	Spur 8 pitch 1¼" face
Piston	Improved design, special analysis cast iron
Piston rings per piston	2 compression—1 oil control
Piston ring width	⅛"
Piston pin (full floating type)	¾" dia. hardened, ground and lapped
Flywheel diameter	10"
Hopper capacity	2 gallons
Overall length	16⅜"
Overall width	20½"
Overall height	21"
Pulley (when specified)	4 x 4
Approximate net weight, lbs.	150 lb.
Approximate shipping weight, lbs.	170 lb.
Code	AGROL

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