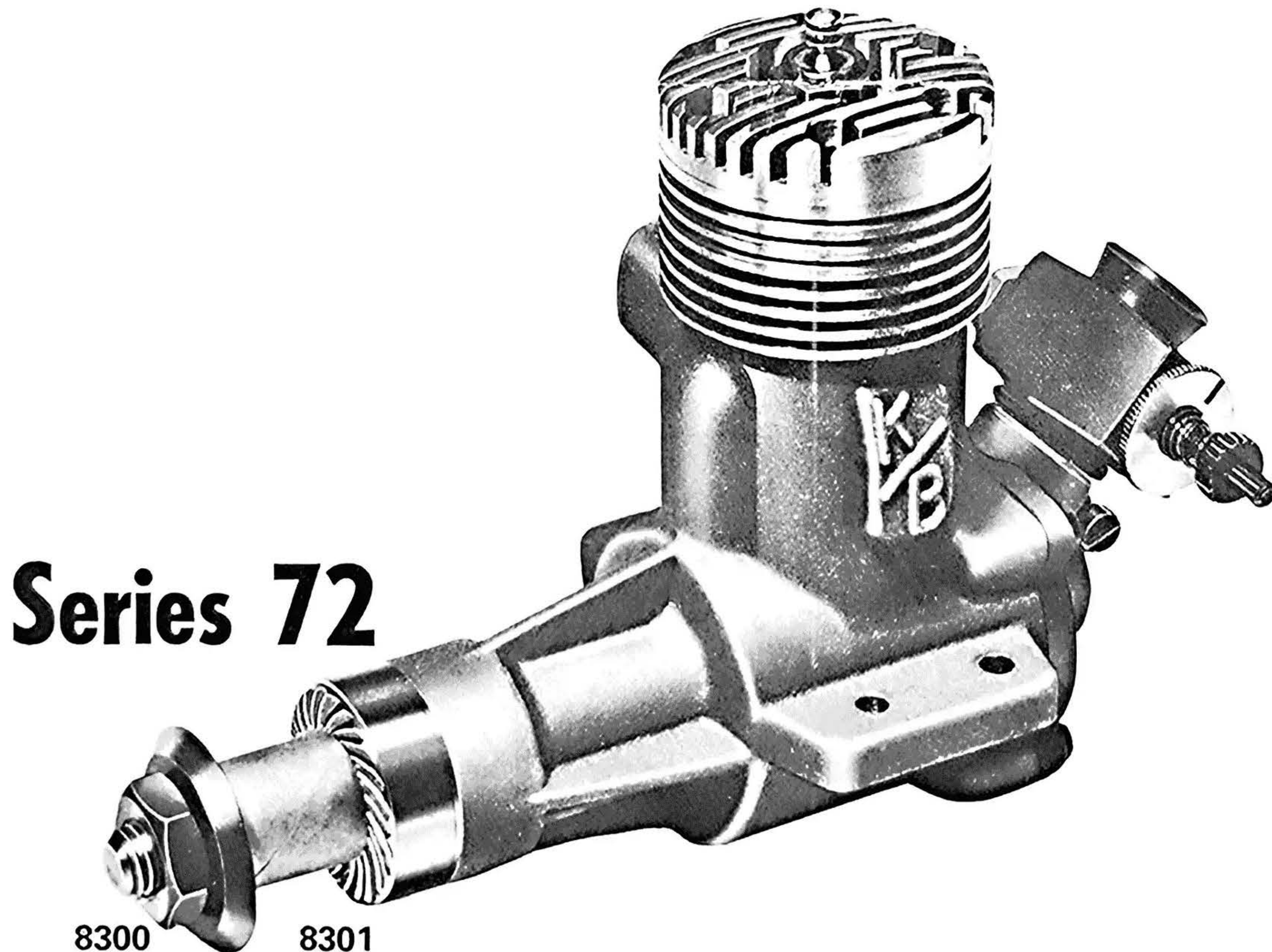


# K & B 15 Schneurle Glow-Plug Engine



**Series 72**

8300  
STD

8301  
RC

**OPERATING INSTRUCTIONS AND GENERAL INFORMATION**

## CONGRATULATIONS . . .

As the owner of the all new K & B Schneurle Port 15 engine, you are equipped for a new experience in high performance and ease of operation in your engine-powered model activities. To assure complete satisfaction with your engine, please read these instructions carefully and follow the few, simple steps for proper installation, operation, and care.

*Thank you,*  
**K & B Manufacturing**  
**Division of Aurora Products Corp.**

## ENGINE AND FUEL TANK INSTALLATION

The engine may be installed upright, on either side or inverted (upside down). Refer to the engine drawings for dimensions of the engine mounting holes.

The ¼-inch diameter output shaft mounts standard hole-size propellers and most flywheels used for operation in boats or cars.

Mount the engine rigidly to hardwood rails, or to metal engine supports. For maximum security, use carbon steel, self-locking hex nuts and hardened alloy steel machine screws to mount the engine.

The fuel tank size, location, and height have a great influence on engine operation. It should be located close to the engine; and, it must be vented to the atmosphere.

**EXCEPTION:** A pressure system must be used on Engine No. 8300 Std.

## PROPELLERS

A 7-6 top flite wood prop is recommended for R/C and regular U-control flying.

All prop recommendations should be regarded as starting sizes. Experimenting with one pitch or diameter larger or smaller can improve results. However, do not use a much larger prop even though the engine appears capable of handling it. Too large a prop can overload the engine and cause damaging overheating.

## ENGINE BREAK-IN

It is unnecessary to give the engine a prolonged break-in. However, it is strongly recommended that fuel containing more than 10% to 12% nitromethane be avoided until after the engine has been run at least 30 minutes on a mild fuel and under rich mixture conditions. Rich mixture, where the engine has a slight "burbling" sound and probably a very smokey exhaust, helps lubrication and cooling when the engine is new. You also may wish to limit operation to 3 or 4 minute intervals during the first half hour or so of engine life, allowing plenty of time for cooling between each run.

Typically, an engine will be ready for continuous full-throttle and lean mixture operation after less than an hour running. When the engine holds speed after the mixture has been leaned out — when speed does not sag after a moment or so — the engine can be considered to be broken in.

## STARTING THE ENGINE

With a full tank of fuel, and a 7-6 propeller installed, and a fully-charged booster battery of no more than 1.5 volts ready for connection to the glow plug, proceed as follows to manually start an engine installed in a plane.

**NOTE:**...*To avoid burning out the glow plug, never use a booster battery of more than 1.5 volts. The battery is used to heat the glow plug coil only during engine starting. After the engine has started and is running smoothly, the booster battery is disconnected. Heat from the burning mixture in the cylinder keeps the coil hot.*

1. Turn the needle valve counterclockwise three to four turns from the fully closed position.
2. Place the fingertip over the venturi or the carburetor inlet, and flip the propeller quickly two or three times, to prime the engine.
3. Remove the fingertip from air inlet and flip the propeller quickly two or three times.

**NOTE:**...*With carbureted engines, the throttle valve should be wide open during engine starting. Prime the engine by placing a few drops of fuel directly into the carburetor and the exhaust port.*

4. Connect the booster battery clip to the glow plug.
5. Slowly turn the propeller (counterclockwise) and "feel" for a momentary resistance — which indicates ignition of the mixture in the cylinder.
6. Quickly flip the propeller to start the engine and, then, disconnect the booster battery.

7. Except for the first few hours or so, when rich-mixture operation is desired, adjust the needle valve to lean the mixture. Adjust the needle valve for maximum engine speed and then open the needle valve several clicks to slightly enrichen the mixture.

## **ENGINE CARE**

Dust and dirt are the worst enemies of your engine. At all times keep the engine — and the fuel — clean. Wipe engine surfaces clean with a rag dipped in a solvent such as methanol.

## **TIPS ON AIR FILTERS**

Long-life engine operation where dusty conditions prevail, which includes any operation of a car, or plane, requires the use of an air filter at the carburetor. The filter must be able to clean the air of dust particles without creating an unnecessary restriction to air flow into the engine. An air filter must be cleaned or replaced frequently, depending on its design.

## **FACTORY OVERHAUL**

When an engine has been damaged or worn sufficiently to require replacement of parts, it is recommended that it receive a complete factory overhaul.

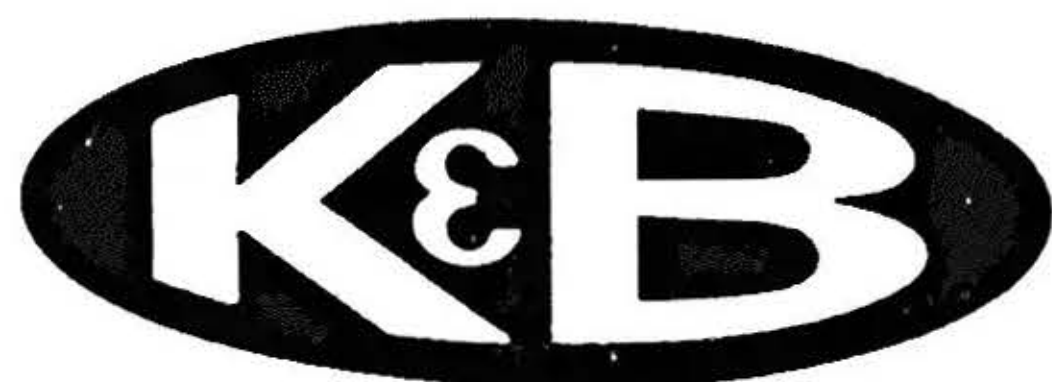
This consists of replacement of all worn or damaged parts, and test running to insure good as new condition.

If an estimate is requested by the customer, a service charge will apply, whether or not he decides to have the engine repaired.

**MAXIMUM REPAIR** — Regardless of condition, no engine repair will exceed \$20.00 (this includes service charge and postage except air mail). A new guarantee is given on factory overhauled engines.

There will be a service charge of \$3.00 on any repair (except maximum repairs as above).

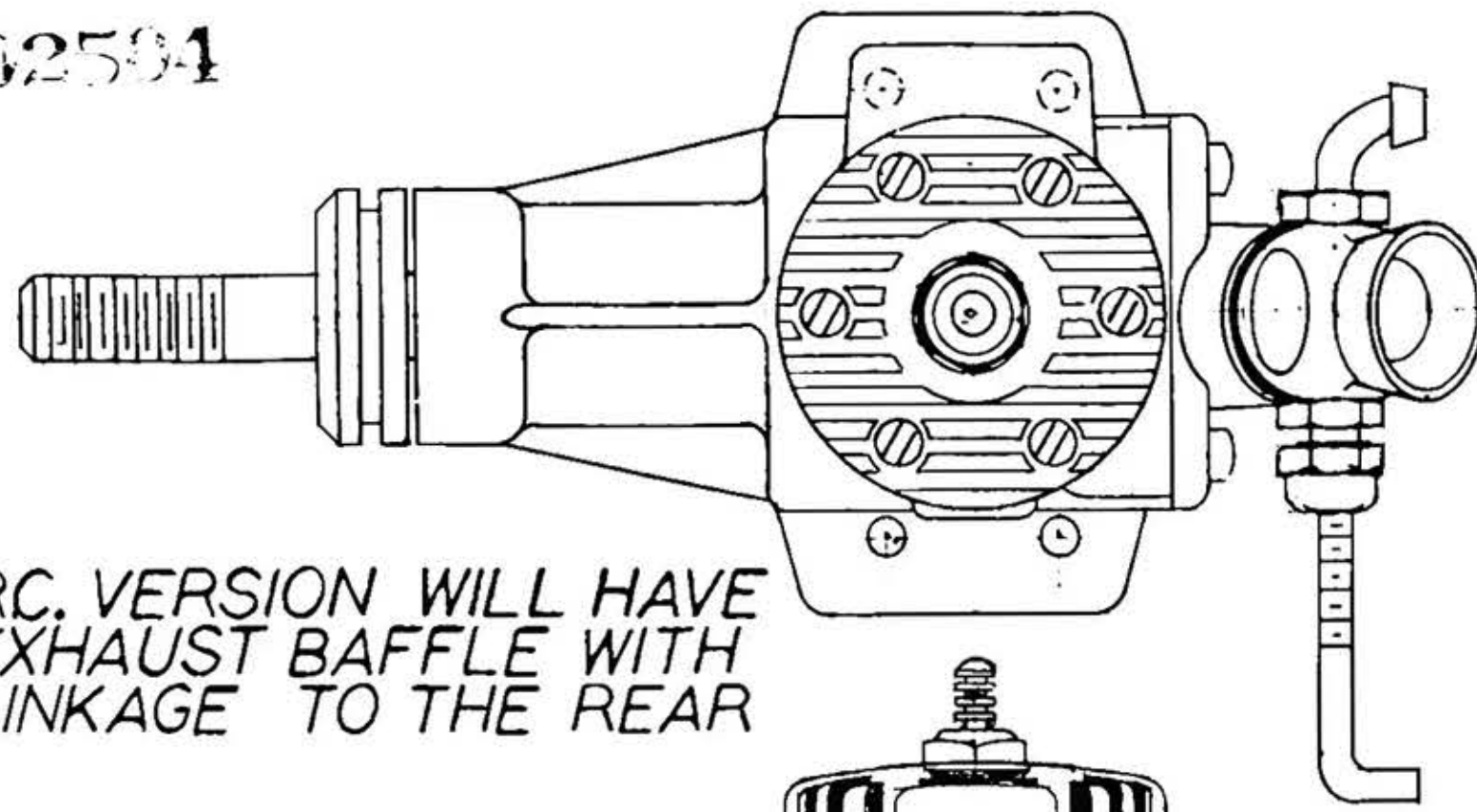
All repaired engines will be returned C.O.D.



**K & B MANUFACTURING**  
*DIVISION OF AURORA PRODUCTS CORP.*

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DOWNEY, CALIFORNIA 90241  
AREA CODE 213 • 923-5493

B02504



NOTE: RC. VERSION WILL HAVE  
EXHAUST BAFFLE WITH  
LINKAGE TO THE REAR

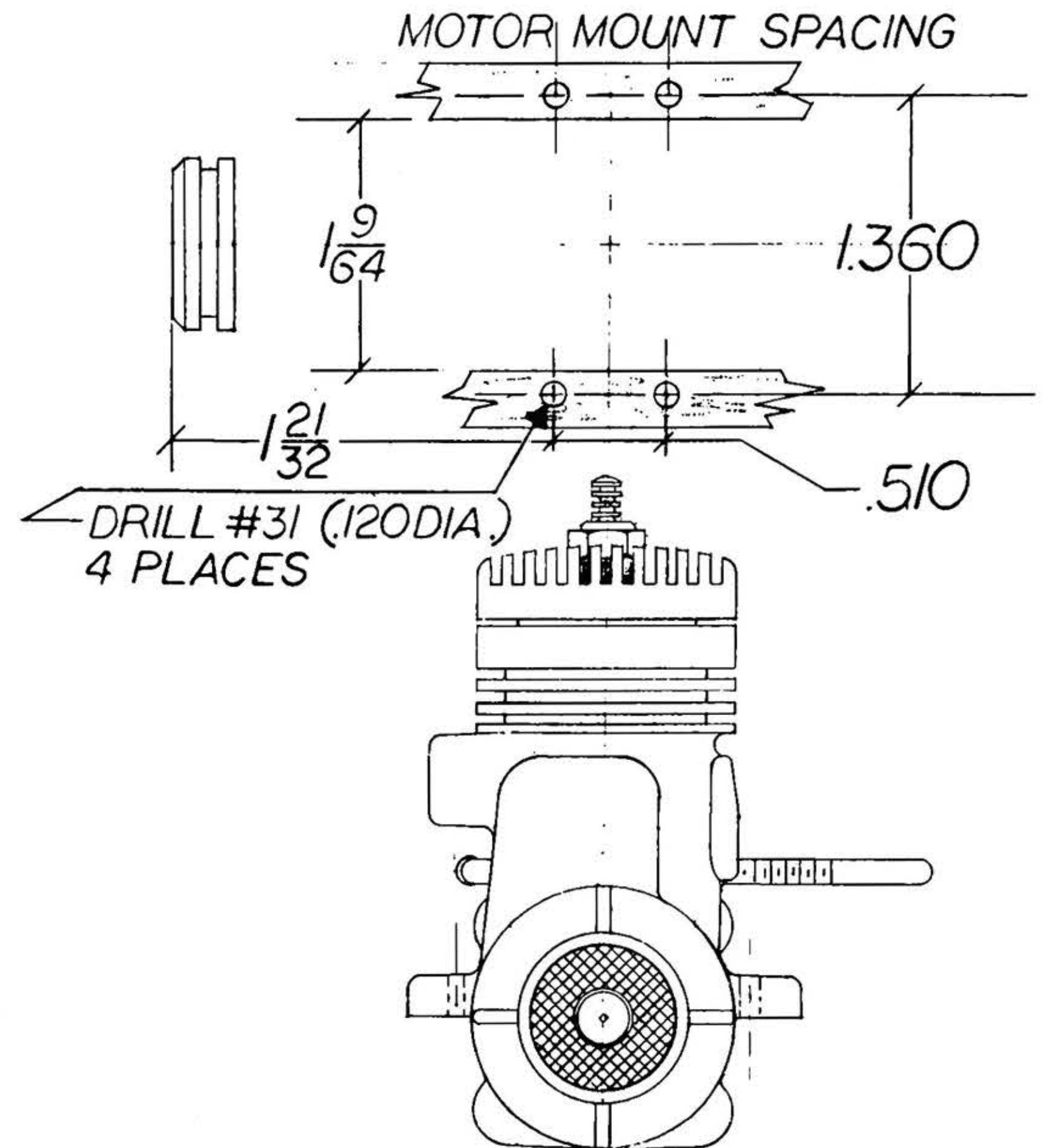
$\frac{1}{4} \times 28$  THREAD

ENG. WT. 7 OZ.  
—APPROX.—

$2 \frac{5}{8}$

$3 \frac{3}{8}$

MOTOR MOUNT SPACING



DRILL #31 (.120 DIA.)  
4 PLACES

ORDER BY THIS NUMBER	8300		8301		ORDER BY THIS NUMBER	8300		8301	
	.15	PRICE	15 RC	PRICE		.15	PRICE	15 RC	PRICE
SLEEVE & PISTON ASSEM. (INCL. RETAINERS)	8305	8.00	8305	8.00	NEEDLE VALVE COLLET AND NUT.	7739	.75		
HEAD	8303	3.50	8303	3.50	NEEDLE VALVE SEAT AND NUT.	7740	.75		
CONNECTING ROD	8309	2.50	8309	2.50	NEEDLE VALVE ASSEMBLY	7738	2.00		
WRIST PIN (INCLUDES RETAINERS)	8310	1.60	8310	1.60	CARBURETOR COMPLETE (*PERRY)			8320	8.95
CRANKCASE	8302	7.50	8321	8.00	EXHAUST ROTOR LEVER			6981	.40
BACKPLATE	8307	3.50	8307	3.50	ROD LINK (CARB. TO EXH. ROTOR)			8324	.40
ROTOR	8308	2.50	8308	2.50	SPRING FOR ROD LINK			8042	.35
VENTURI ONLY	8312	2.00			EXHAUST ROTOR			8325	.60
CRANKSHAFT	8306	6.00	8306	6.00	SCREW AND LOCK WASHER (EXHAUST ROTOR)			8043	.15
PROP DRIVE ADAPTER	8313	.80	8313	.80	SCREW (VENTURI LOCK)	7743	.05	7743	.05
COLLET FOR DRIVE ADAPTER	8314	.50	8314	.50	COMPLETE SCREW SET	8316	.40	8316	.40
BALL BEARING (FRONT)	7742	1.75	7742	1.75	PRESSURE FITTING	8315	.80	8315	.80
BALL BEARING (REAR)	7766	2.50	7766	2.50	GLOW PLUG AND WASHER	7321	.59	7321	.59
PROP FRONT WASHER	7758	.35	7758	.35	RETAINER FOR WRIST PIN (2)	8311	.60	8311	.60
PROP NUT	7759	.10	7759	.10	PLUG FOR BACKCOVER ROTOR	8317	.50	8317	.50
VENTURI RUBBER GASKET	6522	.20			BUSHING (EXHAUST ROTOR)			8322	.20
NEEDLE VALVE ONLY	7737	.50			REPAIR SERVICE CHARGE.		2.50		3.00

\*AVAILABLE ONLY AS A REPLACEMENT WHEN REQUIRED ON ENGINES RETURNED TO FACTORY FOR SERVICE AND REPAIR.

Prices Subject to Change Without Notice