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GO 6 Cylinder Series - Spark Plug and Distributor Side



GO 6 Cylinder Series - Manifold Side

SPECIFICATIONS

THREE CYLINDER

	G. O. 130	G. O. 149	G. O. 169
Bore and Stroke	3½" x 4½"	3¾" x 4½"	4" x 4½"
..Millimeters	88.9 x 114.3	95.2 x 114.3	101.6 x 114.3
Number of Cylinders	3	3	3
N.A.C.C. Horsepower	14.7	16.9	19.2
Piston Displacement, Cu. In.	130	149	169
..Liters	2.13	2.43	2.78

FOUR CYLINDER

	G. O. 173	G. O. 198	G. O. 226
Bore and Stroke	3½" x 4½"	3¾" x 4½"	4" x 4½"
..Millimeters	88.9 x 114.3	95.2 x 114.3	101.6 x 114.3
Number of Cylinders	4	4	4
N.A.C.C. Horsepower	19.6	22.5	25.6
Piston Displacement, Cu. In.	173	198	226
..Liters	2.84	3.24	3.71

SIX CYLINDER

	G. O. 260	G. O. 298	G. O. 339
Bore and Stroke	3½" x 4½"	3¾" x 4½"	4" x 4½"
..Millimeters	88.9 x 114.3	95.2 x 114.3	101.6 x 114.3
Number of Cylinders	6	6	6
N.A.C.C. Horsepower	29.4	33.75	38.4
Piston Displacement, Cu. In.	260	298	339
..Liters	4.26	4.89	5.56

MAIN BEARING

	Three Cylinder	Four Cylinder	Six Cylinder
Number of Bearings	4	5	7
Bearing Diameter (Main)	2½" — 63.5 MM	2½" — 63.5 MM	2½" — 63.5 MM
Bearing Length (Front)	1⅞" — 33.3 MM	1⅞" — 33.3 MM	1⅞" — 33.3 MM
Bearing Length (Center)		2⅞" — 54.0 MM	2⅞" — 54.0 MM
Bearing Length (Rear)	1⅞" — 36.5 MM	1⅞" — 36.5 MM	1⅞" — 36.5 MM
Bearing Length (Intermediate)		1⅞" — 33.3 MM	1⅞" — 33.3 MM
Bearing Length (No. 2)	1⅞" — 33.3 MM		
Bearing Length (No. 3)	2⅞" — 54.0 MM		

CAMSHAFT

Drive		Helical Gear	
Number of Bearings	3	4	4
Diameter of Bearings	2⅞" — 52.4 MM	2⅞" — 52.4 MM	2⅞" — 52.4 MM
Bearing Length (Front)	1⅞" — 27.6 MM	1⅞" — 28.6 MM	1⅞" — 28.6 MM
Bearing Length (Intermediate)	1⅞" — 20.6 MM	1⅞" — 20.6 MM	1⅞" — 20.6 MM
Bearing Length (Rear)	1⅞" — 28.6 MM	1" — 28.6 MM	1" — 28.6 MM

CONNECTING ROD

Bearing Diameter	2" — 50.8 MM	2" — 50.8 MM	2" — 50.8 MM
Bearing Length	1½" — 38.1 MM	1½" — 38.1 MM	1½" — 38.1 MM
Rod Length (C to C)	8" — 203.2 MM	8" — 203.2 MM	8" — 203.2 MM

GENERAL DATA

Cooling	Centrifugal Pump
Generator Mounting	Standard Swivel Type Generators
Water Pump—Fan Assembly	Mounted in Front of Cylinder Block
Method of Suspension	3 or 4 Point
Flywheel	For Any Standard Clutch

DESCRIPTION AND MAINTENANCE

Under part throttle, the suction (or vacuum) above the throttle is higher than when the throttle is open. This suction holds up the Economizer and Accelerating Piston Assembly. The Check Valve is open and the Economizer Valve is closed, thus shutting off fuel from the power and accelerating jet.

When the throttle is opened the suction falls, and so does the piston. The falling piston builds up a pressure below it, which forces the check valve to its seat, thus preventing the fuel from being forced back into the bowl. The piston falls on the economizer valve pushing it open, and the fuel displaced by the piston is forced out through the power jet. This is the accelerating charge.

If the throttle is held open, the piston will remain at the bottom holding the economizer valve open. This allows the fuel to continue flowing through the power and accelerating jet. This jet has a measuring hole in its tip which measures only enough additional fuel to develop full power.

When the throttle is partly closed the suction increases above it, the piston is drawn up to the top, the economizer valve closes and only a very economical amount of fuel can be fed to the engine.

AIR CLEANER AND AIR FILTER RESTRICTION—AFFECT ON CARBURETION

Most air filters, now used on gasoline engine carburetors, accumulate the dirt they separate from the incoming air. As this dirt builds up, it has an action similar to closing the choke valve. Both cause restriction and this increases the suction on the carburetor jets. Very little increase in suction is sufficient to create a mixture so rich that it will not only seriously impair engine operation but will also dilute the oil and cause as much wear as dirt. See "Air Cleaner."

CONNECTING ROD

The connecting rods are heavy alloy steel forgings with precision type bearings for the shaft and bronze bushings for the piston pins. With this precision or insert shell type bearing, the cap and rod is split slightly below center so that the bearing split opposite the locking lugs does not match with the split in the forging. No shims are used and, therefore, when reconditioning of the bearings is necessary, only the bearing shells need to be replaced.

CAUTION:—Do not file or grind the caps, as new bearings cannot be installed in a connecting rod that has been filed.

NOTE:—As built at the factory, the connecting rods and caps are marked on the camshaft side and to the front of the engine with the cylinder number in which they are used.



Illustration No. 14

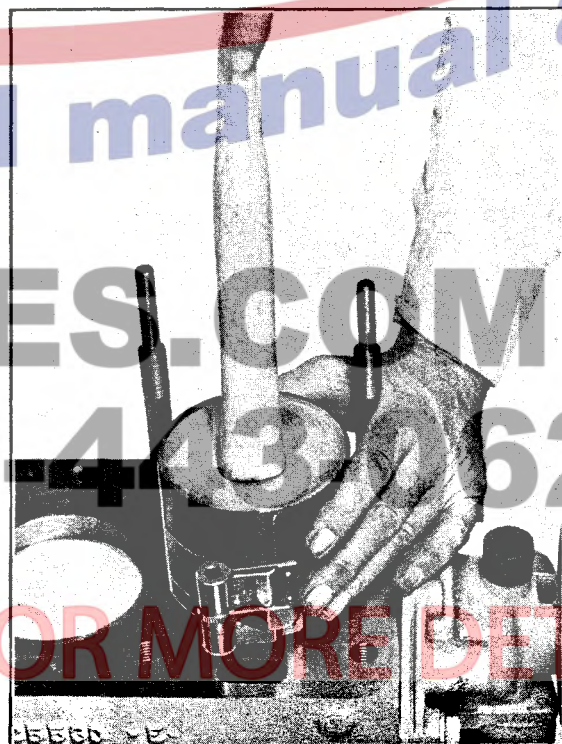


Illustration No. 15

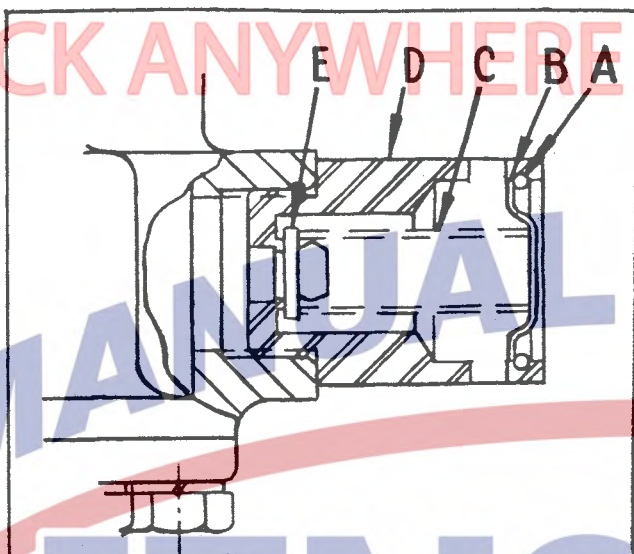


Illustration No. 36



Illustration No. 37

OIL PUMP

The oil pump is attached to the cylinder block with suitable screws and gasket and is driven by a gear solid with the camshaft and located near the center of the camshaft. The lower end of the oil pump extends down into the oil pan, and the oil is drawn into the pump through a large screen, which prevents coarse dirt from being drawn into the lubricating pump. The oil pump extends into the oil; therefore, the pump needs no priming. After the oil pan is removed, the oil pump is readily removed for inspection or repairs. The various parts of the oil pump are shown in Illustration No. 38.

TO REMOVE THE OIL PUMP

1. Remove the oil pan. See "Oil Pan."
2. Turn the engine so that No. 1 piston is in firing position. This may be noted from the position of the distributor rotor or from the position of the cams on the camshaft.

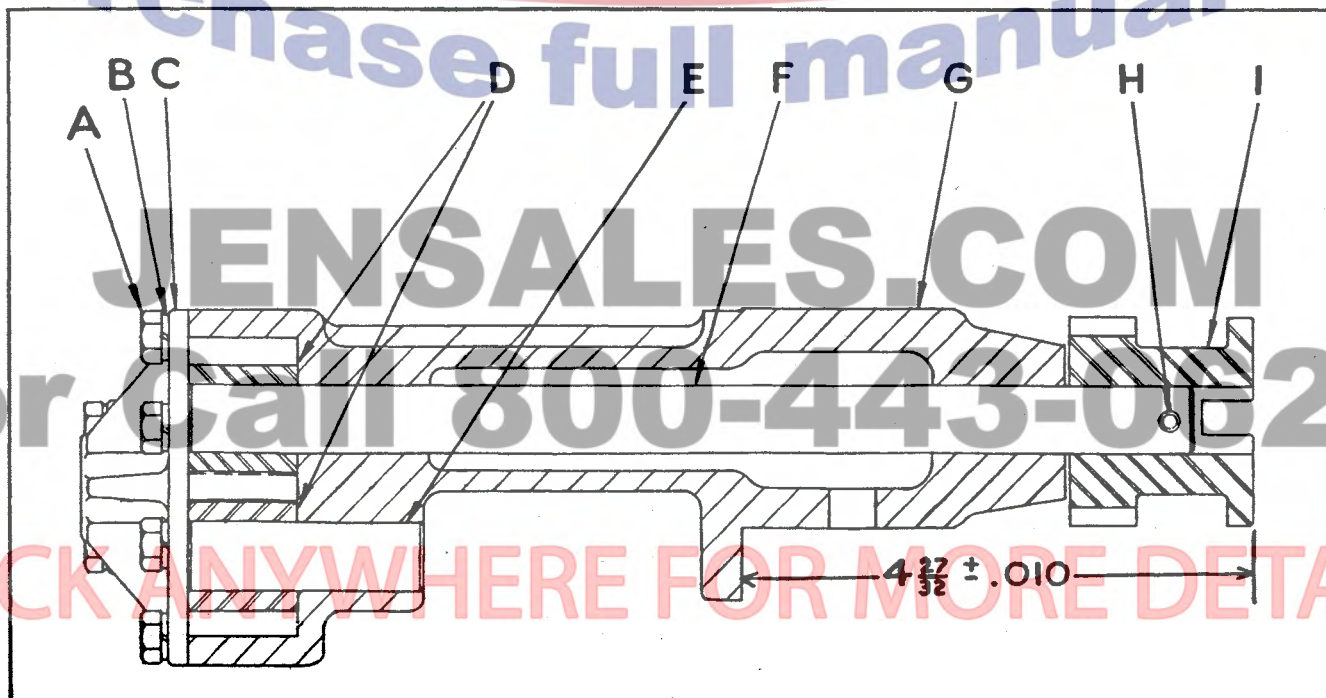


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