

BRIGGS & STRATTON CORPORATION Illustrated Parts List

HORIZONTAL CRANKSHAFT SHORT BLOCK ASSEMBLIES

HD-1 (494054)

HD-2 (494055)

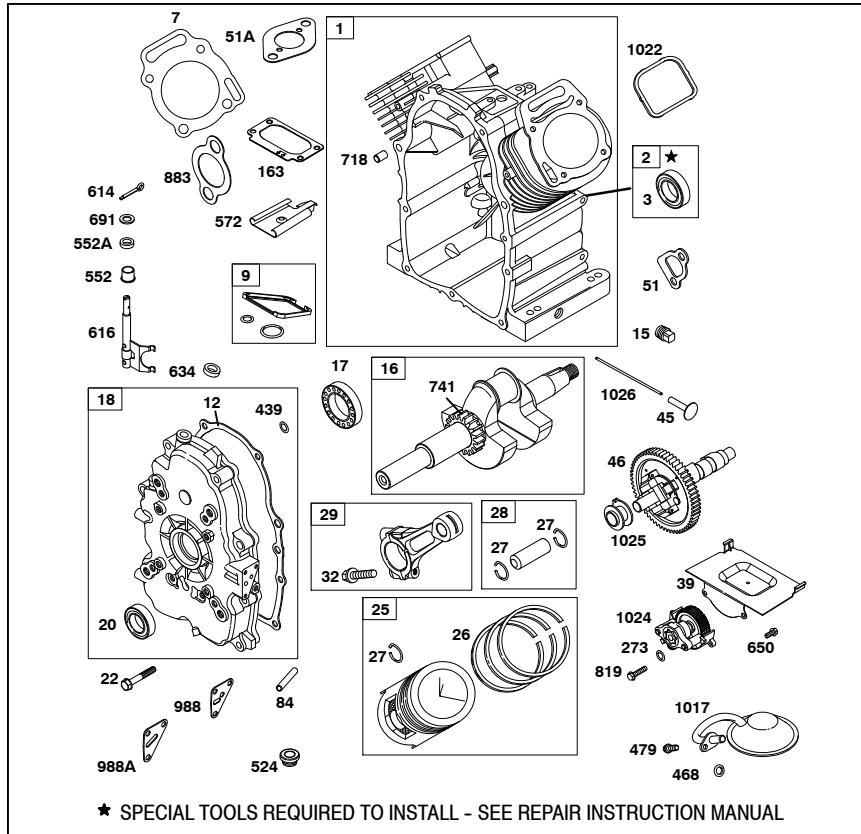
HD-3 (494056)

For use on Engine Model Series
**290400, 294400, 295400,
303400, 305400**

INSTRUCTIONS

To obtain the correct part numbers for an engine which has been rebuilt with a Short Block Assembly, follow these instructions:

- For all parts shown in the illustrated view to the left, use this Parts List.
- For all other parts, refer to the Illustrated Parts List which is appropriate for your engine by Model, Type and Code (Serial) Number.



REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	692178	Cylinder Assembly	25	843951	Piston Assembly (Standard)	552	690101	Bushing-Governor Shaft
2	808534	Bearing-Cylinder		843958	Piston Assembly (.020" Oversize)	552A	806686	Bushing-Governor Shaft
3	805101s	Seal-Oil	26	843953	Ring Set (Standard)	572	690686	Baffle-Breather
7	806085s	Gasket-Cylinder Head (Used After Code Date 96033100). 807986 Gasket-Cylinder Head (Metal)(Used Before Code Date 96040100).		843958	Ring Set (.020 Oversize)	596	691492	Screw (Oil Pump)
9	807688	Gasket-Breather	27	690683	Lock-Piston Pin	614	806096	Pin-Cotter
12	843970	Gasket-Crankcase-Cover	28	807621	Pin-Piston	616	806685	Crank-Governor
15	690946	Plug-Oil Drain	29	807900	Rod-Connecting	650	692539	Screw (Gear Cover)
16	692161	Crankshaft Used on HD-1	32	690698	Screw-Connecting Rod	691	842826	Seal-Governor Shaft
	Note:	807625 Washers Thrust Order 691639 Key for Timing Gear Retaining	39	690745	Cover-Gear	741	691530	Gear-Timing
		692162 Crankshaft Used on HD-3	45	690977	Tappet-Valve	883	805024	Gasket-Exhaust Manifold
		692163 Crankshaft Used on HD-2	46	691557	Gear-Cam	988	692063	Gasket-Oil Adapter
17	690752	Bearing-Ball	51	691694	Gasket-Intake	988A	690687	Gasket-Oil Adapter
18	808847	Cover Assembly Crankcase	51A	692035	Gasket-Intake	1017	690900	Screen-Oil Pump
20	805049s	Seal-Oil	84	91488	Plug-Pipe	1022	806039	Gasket-Rocker Cover
22	807362	Screw (Crankcase Cover)	163	805003	Gasket-Air Cleaner	1024	693185	Oil Pump Assembly
			273	842826	Seal-O-Ring (Oil Pump)	1025	690689	Spool-Governor
			439	692154	Seal-O-Ring (Crankcase Cover)	1026	691758	Rod-Push
			468	690690	Seal-O Ring (Oil Pump Screen)		Note:	691836 Rod-Push Used on Exhaust Side Only.
			479	807084	Screw (Oil Pump Screen)			
			524	693172	Seal-Dipstick Tube			



SHORT BLOCK ASSEMBLY INSTRUCTIONS

GENERAL INFORMATION

To use a Short Block, ignition, carburetion and starter parts are transferred from the old engine to a short block assembly. This reduces repair time and provides an engine with all new internal parts assembled to new engine production standards.

All parts being transferred should be thoroughly cleaned of dirt, oil and grease, and carefully inspected to be sure that all parts are suitable for additional service. Additional engine parts necessary for the repair of the old engine should be supplied from parts stock.

Any new parts that are required should be ordered from the parts list covering the original engine model - type - code number. In some instances the internal parts in the Short Block differ from those used in the original engine. Therefore, to identify the rebuilt engine for future parts requirements, a metallic self-adhesive label is supplied in an envelope with each Short Block. The label bears a symbol (example V-1) and should be attached to the engine adjacent to the model, type and code numbers that are stamped on the engine identification nameplate. At any time repair parts are ordered, add the symbol to the original type number (example 0134 V110). This will permit identification of the proper parts in the Short Block.

To apply the symbol label, first thoroughly clean the area in which it will be applied using petroleum solvent. Carefully peel the backing from the label by starting at one corner. Apply label evenly in position, using finger pressure to smooth out the surface of the label.

See VANGUARD Single Cylinder OHV Service & Repair Instructions, part number 272147, for reassembly procedure and specifications.

SPECIAL INSTRUCTIONS

LUBRICATE UPPER CYLINDER:

Before installing the cylinder head, move piston near top of cylinder bore. Place 2 tablespoons of clean engine oil around outer diameter of piston. Crank slowly to spread the oil. This will protect the upper surfaces of the piston and cylinder bore during the first few moments of operation.

NOTE: Engine Models 260700 - 261700 (Short Block Part Numbers 493886, VE-0). The push rods (supplied) are NOT interchangeable. The hollow steel push rod MUST be installed under the top (exhaust) rocker arm.

NOTE: All Models. Be sure push rods are seated in recess in tappets.

GOVERNOR ADJUSTMENT, BEFORE RUNNING ENGINE:



WARNING: BEFORE STARTING OR RUNNING ENGINE, STATIC ADJUSTMENT OF THE GOVERNOR MUST BE MADE. FAILURE TO MAKE STATIC ADJUSTMENT COULD RESULT IN ENGINE OVERSPEEDING WHICH MAY RESULT IN ENGINE OR EQUIPMENT DAMAGE CAUSING PERSONAL INJURY OR PROPERTY DAMAGE.

All linkage must be installed before making governor adjustment. To ensure proper torque of governor lever nut, remove paint from governor shaft (if required). With governor lever nut and bolt loose, rotate governor lever clockwise, until throttle is wide open, and hold in this position. Then rotate governor shaft clockwise as far as it will go. While holding lever and shaft in this position, torque governor lever nut to 35 in. lbs.

See VANGUARD Single Cylinder OHV Service & Repair Instructions, part number 272147, for proper procedures to adjust Top No Load Speed of engine while running.