

From Link to Studebaker Champion Flat head engines

Champion engines are remanufactured and assembled in three different packages. With some options available at your request. This page refers to the 169.9, 185, and 170 flat head engines

Short block. Just a bare block with crankshaft, bearings, camshaft, oil pump, rods, pistons, rings valves and attaching parts. **You assemble all the external parts. And use your head, manifold, carburetor, distributor, water pump, motor mounts, generator, starter, harmonic balancer, valve covers and timing gear cover, flywheel, bell housing and oil pan.**

Long block. Similar to a short block, but will have a resurfaced head installed, oil pump, oil pan, front timing gear cover and seal, valve lifter covers and harmonic balancer installed. **You will use your manifold, carburetor, water pump, fuel pump, distributor, flywheel, bell housing, motor mounts generator and starter.**

Complete run tested engine will have all the parts New or remanufactured so the engine can be moved from crate to auto, installed, add oil and drive. It will have a rebuilt intake and exhaust manifold, remanufactured carburetor, distributor, new water pump, spark plugs and wires, oil filter fully plumbed, the oil gage hose or sending unit will be attached. **Should you choose it can have a bell housing attached with flywheel and clutch system or a flex plate installed for automatic transmission. You will use your motor mounts, starter and generator.**

All engines include re-machining of block to be sure it is square and surfaces are free of cracks and warpage.

Line bore is checked. Balancing of rotating parts is an option

Cylinders are bored and New **US** made pistons are fitted individually to the bore. Same size rings are fitted to the cylinder and the pistons. Chrome rings are available.

New valve guides are installed.

Hardened exhaust valve seats are installed. If several valve seat cuttings have been done in the past new intake seats are also installed. The valve seats are cut with a 3-way grind to allow for the best seal. New Stainless-steel valves will be lapped to the seat and installed with springs and other parts, then adjusted to proper clearance.

New cam bearings and lifters are installed. New oil pressure relief spring and valve.

New oil pump or at least a pump overhaul kit is installed, providing the wear is not beyond limits.

The thrust on the camshaft is checked and a new cam gear is installed.

The crankshaft nearly always needs to be ground and fitted with appropriate sized rod and main bearings. Proper crankshaft thrust clearance will be provided.

The latest material for these engines are used in the gaskets for best seal. The rear main seal is installed and the proper bolts for automatic transmission or flywheel are installed. All oil galley plugs are installed

as well as water jacket soft plugs and camshaft plug. The remaining gaskets are shipped with the Short block

The block is painted the color for the year of your vehicle then wrapped in shrink wrap for shipping in a wooden container or prepped for pickup.

I build a substantial shipping crate that can be used to return ship your short block. There is a core charge on the block and shipping container, which is refunded upon the return of the block and shipping container. **Refunds are made available only on parts suitable for remanufacture.**

Pictured is a 170 long block with optional water spout and thermostat.

