

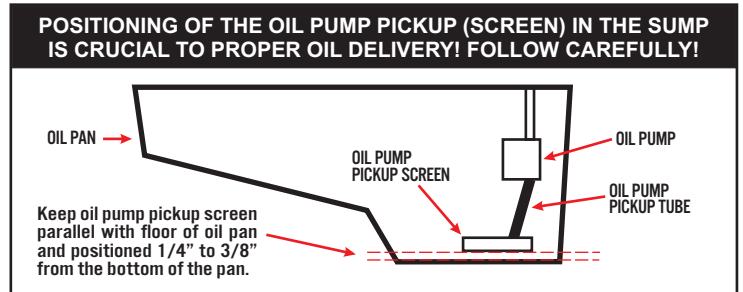


OIL PAN General Product Installation Guide

1. If you are installing a Hamburger's oil pan on an operating engine, remove all old gasket material from the cylinder block's side rails, making certain no residue is left in the tapped bolt-holes in the block. For best installation results, run a bottoming tap into each threaded hole and clean out with compressed air. Also, remove the rear main bearing pan seal and pan seal located in the timing gear cover. Clean away any residual gasket cement.
2. If installing a Hamburger's oil pan on an engine being built, make certain all appropriate gasket surfaces (as outlined above) are properly cleaned and prepared for new gaskets and seals.

3. Install the Hamburger's oil pump pickup in oil pump housing. Trial-fit the pump into the engine to check if the base of the pump pickup is parallel to the floor of the oil pan (*see illustration*). In rare cases, it may be necessary to adjust the pickup to provide correct alignment with the oil pan floor.

NOTE: It is strongly recommended that you tack-weld the pickup tube to the pump housing to prevent pump/tube separation during severe use or vibration.



4. With the oil pump temporarily installed and no gaskets or seals in place, trial-fit the oil pan to make certain there is clearance for all components (oil pump pickup, pan baffles, etc.). If no adjustments are required, remove the oil pan and permanently install oil pump. Measure the distance between the oil pump pickup screen and the pan floor. The clearance **MUST** be between 1/4" - 3/8" with the Hamburger's oil pan gasket installed. ***Hamburger's Oil Pan pick-up tubes are not designed for use with High-volume oil pumps.**

5. Using some form of gasket adhesive, position the side rail gaskets to the cylinder block. Make certain all appropriate bolt holes between the block and gaskets are aligned.

NOTE: Some Older, obsolete Hamburger's Performance Oil Pan designs have notched rails to accommodate stroked engines. These pans use fewer oil pan bolts, and require spreader bars and special gaskets. Confirm the style of your pan before beginning installation.

6. Install the oil pan seals in the rear main bearing cap and timing gear cover. The siderail gaskets and end seals overlap and must be trimmed to ensure a proper, leak-free seal. Trim the siderail gaskets so they butt up against the rubber end seals and do not overlap.

NOTE: We recommend the use of an RTV or "room temperature vulcanizing" gasket sealer between the end seals and grooves into which the seals are seated.

7. Apply a thin coat of RTV (type gasket sealer) to the oil pan side of the siderail gaskets and end seals. Pay special attention to the area where the side rail gaskets and end seals join, ensuring there are no gaps.

8. Position pan onto the side rails and over end seals. Install all oil pan bolts, making certain that all bolts can be started before tightening. Tighten oil pan fasteners to engine manufacturer's torque specifications, working from the center of the pan rails out toward the end seals. **DO NOT OVERTIGHTEN THE FASTENERS!**

9. Re-install any dipstick holders, dipsticks, temperature sending bulbs, and all other components previously removed during this oil pan installation.

10. Start the engine and bring it up to operating temperature. Turn off engine and allow it to cool. Re-torque all fasteners to compensate for gasket compression during first heat cycle. **Do not overtighten oil pan fasteners!** Overtightening of oil pan fasteners produces excessive gasket compression in the area of the fastener, and will lead to future oil leaks.