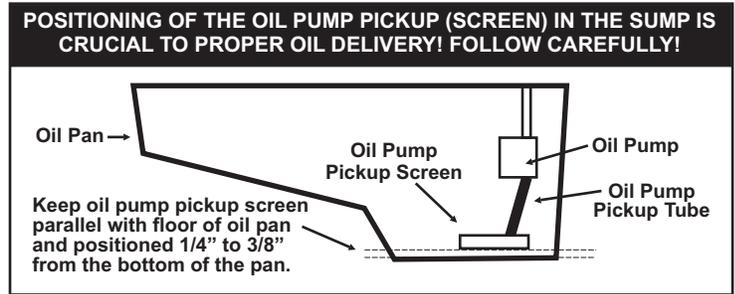




# OIL PAN INSTRUCTIONS INSTALLATION

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. It **MUST** be between 1/4" - 3/8" with the Hamburger's oil pan gasket installed. If you are using a high volume pump, you may need to modify the pickup. For #3080 and #3090 Ford oil pans, see instruction sheet supplement.

5. Using some form of gasket cement, position and glue side rail gaskets to the cylinder block. Make certain all appropriate bolt holes between the block and gaskets are properly aligned. **NOTE:** Only use Genuine Hamburger's oil pan gasket sets! The use of other gaskets, such as 1 piece or extra thick, will cause major engine damage due to oil pressure loss caused by the increased distance between pickup and pan floor. Pan warping and oil leaks may also occur. Use of a non Hamburger's pan gasket will void your Hamburger's oil pan Warranty. **See gasket chart below to ensure correct gasket usage.**

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 all fasteners. Tighten fasteners to 12-ft. lbs. by working from the center of the pan rails out toward the end seals. **DO NOT OVERTIGHTEN THE FASTENERS!** **IMPORTANT NOTE-** Due to this pan's notched siderails, it is highly recommended that spreader bars (not included) are used along with the bolts included with this pan.

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 over-tighten 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.

## HAMBURGER'S OIL PAN GASKET SETS (For use with Hamburger's Oil Pans only)

PART#	DESCRIPTION
3001	Fits 1088 & 3047 Hamburger Oil Pans
3002	Fits 1078 & 3037 Hamburger Oil Pans
3003	Fits 1098 & 3057 Hamburger Oil Pans
3004	Fits 1488 & 1498 Hamburger Oil Pans
3005	Fits 3054 & 3064 Hamburger Oil Pans
3006	Fits 3044 & 3074 Hamburger Oil Pans

PART#	DESCRIPTION
3007	Fits 0218 Hamburger Oil Pans
4340	Fits 0168, 0178 & 0238 Hamburger Oil Pans
4341	Fits 0428 Hamburger Oil Pans
4342	Fits 3080 & 3090 Hamburger Oil Pans
4347	Fits 0777 Hamburger Oil Pans
9164	Fits 0170 & 0198 Hamburger Oil Pans