



Installation Instructions

LS Engine Swap Engine Oil Pans (364010, 364020 & 364030)

Thank you for your purchase! Follow these instructions for a hassle-free installation. If you are unsure about installing your new oil pan, please consult a qualified technician at your preferred repair shop. Please fully read and understand these instructions before proceeding to avoid damage to your engine, or personal injury. Failure to follow these instructions or misuse/incorrect application of the part will void any warranty offered. Stripped/damaged threads are not covered under warranty.

364010 - Up to 4.25" stroke. Most 1955-1987 car and truck chassis (except G-Body). 6 quarts w/filter.

364020 - Up to 3.62" stroke (No LS7). Most 1955-1987 car and truck chassis (including 1967-1969 F-Body, 1968-1974 X-Body and 1978-1987 G-Body) where additional clearance is needed on the front half of the oil pan. 6.2 quarts w/filter.

364030 - Same as the 364020 except with the addition of Fox Body Mustangs. Up to 4.00" stroke (No LS7). 6.1 quarts w/filter.

Notes:

- 364010 is designed to be used with a full length GM windage tray. Modification to the tray near the pick-up screen mount is required.
- 364020 & 364030 are designed to be used with the F-Body windage tray. (GM #12558253). Modification relief for the pick-up tube is required. Full length windage trays may be used but the front section requires removal as well as above modifications.
- A LS3 dipstick/tube (or equivalent) will be required. (Dipstick GM #12669528) (Tube GM #12625031)
- Some LS engines may have a plug at the dipstick location that will need to be removed prior to installation.
- Standard replacement LS oil filters can be used. (AC Delco PF48 or equivalent)

Pre-Installation Notes:

If you are installing this oil pan, we assume you are familiar with the standard procedures associated with removal and installation so we will not tell you how to do your job! Always take necessary safety precautions, jack stands, eye protection etc.

The oil level sensor is not used in the 364010 or 364020. Disconnect and set aside.

Remove the existing oil pan pick-up tube and screen and set aside. A new pick-up tube and screen is supplied with your new oil pan.

Check the dipstick hole below #6 cylinder to ensure there is no plug (or it has been removed) and the new dipstick and tube fit properly.

Test fit the oil pan before installation. 1) To make sure it fits your engine/windage tray etc., 2) To make sure your connecting rod/stroke combo clears the pan, tray, pick-up etc. and 3) To make sure it will work with your specific chassis combination.

Check the drain plug threads prior to installation. (Thread the plug in to ensure proper engagement)

Since the LS oil pan is a structural component of the LS engine, proper alignment is critical as it is the mounting point for the transmission bellhousing. The machined oil pan surface needs to be flush with the rear of the block. Use a straight edge or machined steel block to check.

Windage Tray Modifications:

364010 - A small modification to the tray is required so the pick-up screen mount sits flush.

Test fit first to see where modifications need to be made. Alternatively, GM offers an oil deflector that will work without modification if desired. GM #12611129.

364020 & 364030 - The F-Body windage tray requires a small cutout to provide clearance for the pick-up tube. Full length windage trays may be used but the front section requires removal as well as above modifications.

After modifications, check for proper clearance of the tube, and that the mounting brackets seat correctly against the stud and tray.

Installation Notes:

Lubricate the oil pick-up tube o-ring with engine oil and insert into the oil pump. Make sure it is fully inserted before tightening the bolt. Check that the o-ring seated correctly.

Install the oil pump screen using the nut and/or bolt(s) provided. For 364020, use the cap screws provided and torque the bolts to 106 in/lbs. and the nut to 18 ft/lbs.

If the baffle is not factory installed, use blue threadlocker on the 4 bolts that hold the baffle into the oil pan and torque to 8-10 ft/lbs.

Install the provided oil passage cover, gasket and bolts to the oil pan (above the oil filter) and tighten to 106 in/lbs.

Attach the supplied oil pan gasket to the oil pan with a few bolts to hold in place. Apply a small bead of RTV sealant on the protruding front cover gasket (where the front cover meets the block). Do the same at the rear of the block (rear cover to block gasket).

Install the oil pan onto the block tightening all the bolts by hand.

Working from the center out, tighten all the oil pan to block (and oil pan to front cover bolts) to 18 ft/lbs. Tighten the oil pan to rear cover bolts to 106 in/lbs.

Attach the 2 bellhousing to oil pan bolts and torque to 37 ft/lbs.

Attach the LH and RH side transmission cover and bolt and torque both to 106 in/lbs.

Tighten the oil pan drain plug to 18ft/lbs.

Attach the oil filter adapter (provided) and torque to 40 ft/lbs.

Install the oil filter and fill with your desired grade of oil taking care to not overfill.

Start engine and check for leaks. Recheck oil level and top up if required.

Tech questions? Ask your dealer or email us at sales@performance-world.com