

## **Installation Information**



#### **Kit Contents:**

- 1 Custom Oil Pan and Pickup tube
- 1 Bellhousing Adapter plate and hardware
- 1 Custom Pilot Bushing and adapter
- 1 Correct spline clutch disc
- 1 GM Throwout Bearing/Slave cylinder
- 1 Remote Clutch Bleeder
- 2 Motor mount uprights
- 2 Motor mount isolators
- 2 Motor mount engine plates
- 1 Front K member spacers/ hardware
- 1 GM VSS Sensor adapter (Uses Sensor from a 2002 Camaro with Auto trans. REF: ACDelco 24225896)
- 1 Power Steering pump Bracket
- 1 Tee fitting for use with remote oil filter to adapt 944 oil pressure sensor
- 1 Full Custom Stainless Exhaust System

Not included: Corvette C5 Bellhousing, VSS Sensor, Remote oil filter kit, LS Flywheel

**Note:** This kit includes most of the components required to LS swap your 944. Although, as with any custom engine swap, there will be additional parts and/or fabrication required.

## GF-LS944-KIT - Porsche 944 LS Swap Kit

#### **Installation Tips**

- 1. We have found it easiest to remove and install engines by removing the front K-member and lowering the whole assembly down and out of the car.
- 2. You will have to remove the steering shaft to install the long tube headers.
- 3. Prep the engine by installing the following components
  - a. Install supplied oil pickup tube. Apply a small amount of oil to new o-ring to help install.
  - b. Install custom oil pan to engine.
  - c. Press Pilot bearing into adapter and tap pilot bearing adapter into rear of crank on LS.





d. Install LS style flywheel and torque to GM manufacture specs.



e. Using provided clutch disc and LS style pressure plate (not included), install clutch setup making sure to use a clutch alignment tool. Torque to GM specs





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- f. Install C5 bellhousing (not included) to LS engine.
- g. Install motor plates to engine then attach the isolators to the plates. Don't forget the metal sandwich plate behind the isolators.



4. Reinstall K member with supplied spacers and new, longer hardware.



5. Install slave cylinder to bellhousing adapter plate, attach remote bleeder, and install adapter plate to torque tube. Please note: adapter uses larger, stronger bolts than stock, so you will have to drill out the (4) torque tube flange holes slightly.







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6. Install motor mount uprights to engine and drop the engine down into the engine bay, carefully aligning the input shaft into the pilot bushing, and bolting the bellhousing to the adapter plate. Do not bolt motor mounts down to K member yet.





- 7. Headers are to be installed at this time. You may need to raise the engine up slightly to finesse the headers in place. Please note that a gen 5 LT starter is required and should be installed before headers (Ref AC Delco Part number 12691976).
- 8. Reinstall steering shaft.
- Power steering bracket installs using existing oil pan bolts for small bracket, and tapped holes in the side of the block for the large bracket. It utilizes the stock 944 turnbuckle and pump and installs as shown below. You will need to remove stock 944 pulley and press on a 6 rib LS Pulley (REF: AC Delco 12559885).





10. VSS adapter ring installs between drivers side CV shaft and the transaxle, and the bracket installs on existing tapped holes in the transaxle above the CV. Be sure to adjust to appropriate spacing between sensor and reluctor wheel