

### HYDRAULIC ROLLER LIFTER KITS Part #97383, 97384, 97385, 97386, 97387, 97443, 97453

## **INSTALLATION INSTRUCTIONS**

**PLEASE** study these instructions carefully before beginning this installation. Most installations can be accomplished with common tools and procedures. However, you should be familiar with and comfortable working on your vehicle. If you do not feel comfortable performing this installation, it is recommended to have the installation completed by a qualified mechanic. If you have any questions, please call our **Technical Hotline at: 1-800-416-8628**.

# **IMPORTANT NOTE:** Proper installation is the responsibility of the installer. Improper installation will void your warranty and may result in poor performance and engine or vehicle damage.

**DESCRIPTION:** These precision hydraulic roller lifter kits are the perfect match for Edelbrock Performer-Plus and Performer RPM hydraulic roller camshafts. They may also be used with other manufacturer's roller camshafts. Retrofit kits are for engines not originally equipped with a hydraulic roller camshaft and lifters. These kits contain eight (8) hydraulic roller lifter assemblies, consisting of one intake and one exhaust lifter connected with a tie bar. Replacement kits offer sixteen (16) or individual lifters to replace OEM lifters in engines originally equipped with hydraulic roller camshafts. Replacement kits will require the factory guide system. See Applications below for details.

#### **APPLICATIONS:**

- 97383: Retrofit Kit. Small Block Chevrolet, 1986-earlier.
- 97384: OEM Replacement Kit. Contains 16 lifters. Small Block Chevrolet, 1987-later. **NOTE:** Requires factory guide system or Edelbrock Lifter Installation Kit #97386.
- 97385: OEM Replacement Lifter. Single replacement lifter. Small Block Chevrolet, 1987-later. **NOTE:** Requires factory guide system or Edelbrock Lifter Installation Kit #97386.
- 97386: Lifter Installation Kit. Small Block Chevrolet, 1987-Later. Includes lifter hold-down spider, hold-down bolts, and lifter guides. **NOTE:** See Page 2 for Installation Procedure.
- 97387: Lifter Installation Kit. Big Block Chevrolet, 1990-Later. Includes lifter hold-down spider, hold-down bolts, and lifter guides. **NOTE:** See Page 2 for Installation Procedure.
- 97443: Retrofit Kit. Big Block Chevrolet (Mark IV), 1990-earlier. **NOTE:** Shorter than stock pushrods are required to retrofit these lifters.
- 97453: Retrofit Kit. Small Block Ford, 1962-1987 302 C.I.D. & 1969-1993 351 C.I.D. Windsor (351W). *NOTE:* Shorter than stock pushrods are required to retrofit these lifters.

#### **INSTALLATION NOTES**

- NOTE: To achieve proper lifter pump up, it is critical that both the oil and oil filter in the engine are changed prior to installing your new lifters. Install the lifters using a high quality engine oil (5W30 or 10W30). Briefly dip the lifters in fresh, clean oil just before installation. Do not soak the lifters for a long period of time before installation.
- When installing retrofit hydraulic roller lifters, make sure the guide bar faces the opposite side of the block. (Example: If facing the front of the engine, lifters being installed on the left side, should have guidebars facing the right side of the block).
- Roller camshafts in 1986-earlier Chevrolet engines require a Thrust Button to control camshaft end play. Check camshaft end play with the timing cover and timing cover gasket in place. End play should be kept between .005" and .008". Check end play without the roller lifters installed. If end play is excessive, a thinner timing cover gasket may be used to correct end play. Sheet metal covers should use a waterpump with a cam-stop to prevent timing cover flex.
- Most Ford engines use a thrust plate to control end play, and do not require the use of a thrust button. Check end play clearance according to factory specifications.

- Refer to a service manual for your particular application or see instructions for the camshaft being used for directions on removal and installation of lifters. These lifters do not replace original flat tappet lifters, and may only be used with hydraulic roller camshafts.
- When installing these lifters on Ford 289-302 engines, the cylinder heads must be removed to gain enough clearance to install the lifters. Refer to a factory service manual for your particular vehicle/engine for cylinder head removal instructions.
- Hydraulic roller lifters require adjusting the lifter preload. Adjustable rocker arms or pushrods are required. Adjustable roller rocker arms are recommended. Hand rotate the engine until the #1 cylinder is at TDC firing position (Both #1 lifters are down in the lifter bores). You may now adjust intake and exhaust preload on that cylinder as follows: You need to set rockers at zero lash. While tightening the rocker nut, spin the pushrod, when you feel resistance, you are at zero lash. Tighten rocker nut three quarters to one full turn past zero lash. Adjust lifter preload one cylinder at a time. Rotate the engine 90° until the next cylinder in the firing order is at TDC and adjust lifter preload as described above. Continue this process until all cylinders are adjusted.

**IMPORTANT NOTE REGARDING RETRO-FIT LIFTER INSTALLATION:** When installing retro-fit lifters that use a tie-bar, it is critical that the arrow on the tie-bar point up towards the intake manifold when the lifters are installed. This should orient the Edelbrock logo on the tie-bar so that it can be read right-side up. Failure to orient the lifters properly can cause damage to the camshaft and other engine components.

#### LIFTER INSTALLATION KIT: INSTALLATION PROCEDURE

on Page 1.

- 1. If using lifter installation kit 97386 or 97387, install the lifters using the supplied lifter guides to line up the lifters.
- 2. Install the lifter hold down spider over the lifter guides. Make sure each tab on the spider contacts the center of each lifter guide.
- 3. Secure the lifter hold down spider to the lifter valley using the three supplied hold down bolts. Torque bolts to 18 ft./lbs.

4. Adjust lifter preload as described in the "Installation Notes" section

Figure 1 - Lifter Installation Kit, Installed

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