V-Twin Mfg. SIFTON E-Z Pushrod Set Fits Hydraulic or Solid Applications Fits 1984-1999 EVOLUTION VT Part No. 11-9707

This is a custom application and rider safety depends on proper installation. This product should only be installed by a knowledgeable and trained motorcycle technician. V-Twin Mfg. accepts no responsibility for improper installation.

CAUTION: READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION.

This package contains a set of four adjustable pushrods that will now allow you to accurately adjust your valve train. These pushrods are designed to replace the factory non-adjustable pushrods in your EVO engine when equipped with hydraulic or solid tappets. The two short pushrods are for the intake, the two long pushrods are for the exhaust.

We recommend that you read these instructions completely before you start the installation. A copy of the appropriate service manual will help you to perform the work properly.

Installation of the pushrod set does not require the removal of the rocker arms or the cylinder head cover. However, removing the factory pushrods may require it, depending on the method used to remove the stock pushrods.

Installation Instructions:

Removal of Stock Pushrods

- 1. Method One Remove the pushrods according to the manufacturer's appropriate service manual. This procedure requires the removal of the cylinder head cover and the rocker arms.
- 2. Method Two Physically cut the pushrods into two pieces with a bolt cutter. Do not use any tool other than a bolt cutter and you must cover the tappet covers to prevent contamination.

Installing Your New Pushrods

- 1. With a cold engine and the motorcycle firmly on a stand with the rear tire elevated, remove the original pushrods by following one of the procedures outlined above. Be careful not to contaminate the tappets or oil.
- 2. Adjust the pushrods so they are in their shortest position, by turning the adjustable end into the pushrod so that there is no thread visible.
- 3. Rotate the engine until the intake valve is closed. This will put both front cylinder tappets in their lowest position (top of compression stroke, see manual).
- 4. Install the front intake pushrod, adjuster end down, through the pushrod tube and o-rings. Insert the pushrod with tube into the rocker arm pushrod seat. Make sure that the pushrod end is directly in the pushrod seat and not beside it. Swing the lower (adjuster) end over the lifter cover.

Adjustment Procedure-Hydraulic Type

- 1. Lengthen the pushrod by turning the adjustable end out. Lengthen the pushrod until all the slack is taken out, but the lifter is not depressed or preloaded. This point is called "Zero Lash". Mark the pushrod for a reference and hold the lower adjuster end. Lengthen the pushrod 3 turns more. The end result is 3 turns of lifter preload past "Zero Lash".
- 2. Tighten the lock nut against the bottom portion of the pushrod. (Do not over tighten!).
- 3. Repeat the procedure for the front cylinder exhaust pushrod. Let the lifters bleed down at least 10 minutes before rotating the engine so as not to bend a valve or pushrod. The pushrods should rotate by hand with minimal resistance.
- 4. Repeat the procedure for the rear cylinder intake and exhaust pushrods with the lifters in their lowest position.