

**V-Twin Mfg.**  
**Sifton Adjustable Pushrod Set**  
**VT No. 11-7713**

**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.**

This kit is designed for replacement of non-adjustable pushrods in 1984 and later Evolution engines without the need to disassemble the top end.

**Note: Solid tappets must not be used with the stock camshaft. Severe engine damage may result.**

**When removing the stock pushrods as described in step 1 below, do not cut pushrods using a method that creates metal debris, which may end up in the engine such as using a hacksaw or die grinder.**

**Installation Instructions:**

1. Remove stock pushrods using a bolt cutter.
2. Place the motorcycle on a hydraulic center stand with the rear wheel raised off the ground. Remove spark plugs.
3. With transmission in gear use rear wheel to turn engine over until both front cylinder tappets are at their lowest point.
4. Check condition of O-rings in pushrod covers and replace if necessary.
5. Loosen locknut on all of the pushrods and adjust them to their shortest length.
6. Install pushrods with pushrod covers. Be sure adjuster end of pushrod is down and ball end of adjuster is in tappet socket.
7. If hydraulic tappets are used, adjust pushrods following procedure A. With solid tappets, follow procedure B.

**Note:** Pushrod adjustment must be made with engine cold.

**PROCEDURE A - Hydraulic Tappets**

1. Adjust pushrod length to zero clearance.
2. With the pushrod tube kept from rotating with a 1/2 inch or adjustable wrench, slowly turn the adjusting screw with a 5/16 in. wrench, 2-1/2 complete turns counter clockwise (lengthening the pushrod) as viewed from the bottom. (You may wish to mark adjuster to aid counting turns.)
3. Hold adjusting screw and tighten locknut, with 1/2 in. open end wrench, against the pushrod tube. If pushrod turns with locknut, use three open end wrenches, one to hold the pushrod tube, one to hold adjusting screw and one to turn locknut.
4. Wait ten minutes. With transmission in gear, use rear wheel to turn engine over until both rear cylinder tappets are at their lowest position.

**Note: You must wait ten minutes before turning engine over after adjusting front or rear cylinder pushrods. This wait allows tappets to bleed down and prevents bending pushrods or valves. Pushrods should turn free and valves must be on their seats (closed) before turning engine.**

5. Repeat steps 4 through 3 for the rear cylinder.
6. Install pushrod spring cap retainers on pushrod covers. Install spark plugs and return transmission to neutral.
7. Connect battery cables, positive cable first.

**PROCEDURE B - Solid Tappets**

1. Turn adjusting screw on pushrod until zero clearance exists in valve train. Pushrod should turn with no drag and no up and down "shake."
2. Hold adjusting screw and tighten locknut, with 1/2 in. open end wrench, against the pushrod tube. If pushrod turns with locknut, use three open end wrenches, one to hold the pushrod tube, one to hold adjusting screw and one to turn locknut.
3. With transmission in gear, use rear wheel to turn engine over until both rear cylinder tappets are at their lowest position.
4. Repeat steps 4 through 2 for the rear cylinder.
5. Install pushrod spring cap retainers on pushrod covers. Install spark plugs and return transmission to neutral.
6. Connect battery cables, positive cable first.

## HIGH PERFORMANCE QUICK-INSTALL ADJUSTABLE PUSHRODS

### General

This kit is designed for replacement of non-adjustable pushrods in 1984 and later Evolution engines without the need to disassemble the top end.

QTY	DESCRIPTION	PART NUMBER
4	Pushrod assembly	17988-98A

#### NOTE

These pushrods may be used with hydraulic tappets, tappets that have been converted to solid tappets, or with Screamin' Eagle hydraulic tappets.

#### NOTE

The installation of this kit may void the limited warranty.

### CAUTION

Motorcycles equipped with some high-performance engine parts may not be used on public roads and in some cases must be restricted to closed course competition. This engine related performance part is intended for racing applications and is not legal for sale or use in California on pollution controlled motor vehicles. Engine related performance parts are intended FOR THE EXPERIENCED RIDER ONLY.

### WARNING

Read all applicable Service Manual instructions before beginning. If any procedures are not within your capabilities, or you do not have the correct tools, have your Dealer perform the installation. Incorrect installation of this kit could result in death or serious injury.

### CAUTION

Solid tappets must not be used with the stock camshaft. Severe engine damage may result.

### Installation

### WARNING

To protect against shock and accidental start-up of vehicle, disconnect the negative battery cable before proceeding. Inadequate safety precautions could result in death or serious injury.

### WARNING

Always disconnect the negative battery cable first. If the positive battery cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion which could result in death or serious injury.

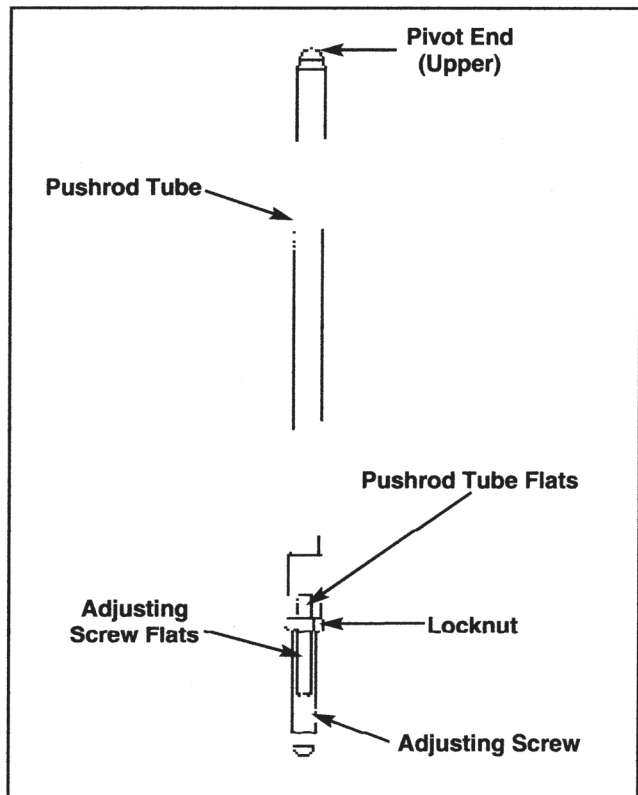


Figure 1. Adjustable Push Rod

### CAUTION

When removing the stock pushrods as described in step 1 below, do not cut pushrods using a method that creates metal debris, which may end up in the engine (such as using a hacksaw or die grinder).

1. Remove stock pushrods using a bolt cutter.
2. Place the motorcycle on a hydraulic center stand with the rear wheel raised off the ground. Remove spark plugs.
3. With transmission in gear use rear wheel to turn engine over until both front cylinder tappets are at their lowest point.
4. Check condition of O-rings in pushrod covers and replace if necessary.
5. See Figure 1. Loosen locknut on all of the pushrods and adjust them to their shortest length.
6. Install pushrods with pushrod covers. Be sure adjuster end of pushrod is down and ball end of adjuster is in tappet socket.
7. If hydraulic tappets are used, adjust pushrods following procedure A. With solid tappets, follow procedure B.

**NOTE**

*Pushrod adjustment must be made with engine cold.*

**PROCEDURE A (Hydraulic Tappets)**

- 1A. Adjust pushrod length to zero clearance.
- 2A. See Figure 1. With the pushrod tube kept from rotating with a 1/2 inch or adjustable wrench, slowly turn the adjusting screw with a 5/16 in. wrench, 2-1/2 complete turns counter clockwise (lengthening the pushrod) as viewed from the bottom. (You may wish to mark adjuster to aid counting turns.)
- 3A. Hold adjusting screw and tighten locknut, with 1/2 in. open end wrench, against the pushrod tube. If pushrod turns with locknut, use three open end wrenches, one to hold the pushrod tube, one to hold adjusting screw and one to turn locknut.
- 4A. Wait ten minutes. With transmission in gear, use rear wheel to turn engine over until both rear cylinder tappets are at their lowest position.

**⚠ CAUTION**

**Wait ten minutes before turning engine over after adjusting front or rear cylinder pushrods. This wait allows tappets to bleed down and prevents bending pushrods or valves. Pushrods should turn free and valves must be on their seats (closed) before turning engine.**

- 5A. Repeat steps 4 through 3A for the rear cylinder.
- 6A. Install pushrod spring cap retainers on pushrod covers. Install spark plugs and return transmission to neutral.
- 7A. Connect battery cables, positive cable first.

**⚠ WARNING**

**Always connect the positive battery cable first. If the positive cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion which could result in death or serious injury.**

**PROCEDURE B (Solid Tappets)**

- 1B. Turn adjusting screw on pushrod until zero clearance exists in valve train. Pushrod should turn with no drag and no up and down "shake."
- 2B. Hold adjusting screw and tighten locknut, with 1/2 in. open end wrench, against the pushrod tube. If pushrod turns with locknut, use three open end wrenches, one to hold the pushrod tube, one to hold adjusting screw and one to turn locknut.
- 3B. With transmission in gear, use rear wheel to turn engine over until both rear cylinder tappets are at their lowest position.
- 4B. Repeat steps 4 through 2B for the rear cylinder.
- 5B. Install pushrod spring cap retainers on pushrod covers. Install spark plugs and return transmission to neutral.
- 6B. Connect battery cables, positive cable first.

**⚠ WARNING**

**Always connect the positive battery cable first. If the positive cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion which could result in death or serious injury.**