

installation instructions for
RIVERA ENGINEERING'S
Taperlite™
adjustable pushrods
for TWIN CAM MOTORS

Thank you for purchasing Rivera Engineering's 100% ALL AMERICAN TAPERLITE adjustable push rods, the logical choice for replacing existing push rods for years of trouble free high performance service. TAPERLITE pushrods are designed to be installed and/or uninstalled without removing the gas tank, rocker box assemblies, or cam-cover. TAPERLITE push rods can be quickly & easily installed by following these instructions. Rivera's TAPERLITE push rods are manufactured from aircraft quality aluminum (bodies) with hardened steel ball-ends & 3/8"X40 aircraft quality adjuster screw. One complete turn of the adjuster screw gives .025" of linear travel. The tapered push rod shape resists "flexing" under extreme valve spring loads. To obtain 100% perfect valve-train geometry use Rivera Engineering's "Rocker-Arm Geometry Kit" available from your local dealer.

PLEASE NOTE: Twin-Cam applications use two different push rod lengths. The blue push rods are shorter than the red push rods, and installed in the intake valve push rod locations. The red push rods are .100" longer and used in the exhaust valve push rod locations.

- 1) Remove the battery ground cable, tape or insulate the end ensuring no contact with the motorcycle will occur.
- 2) Remove both spark plugs.
- 3) If you're using a lift make sure the bike is securely fastened in place. Lift the rear wheel off the surface using a jack so it can be rotated freely.
- 4) Remove the push rod clip, and lift the push rod cover up to access the push rod.
- 5) Shift the transmission into high gear. Rotate the rear wheel until the two front-cylinder push rods are at their lowest (valves closed) & can be spun freely with the finger tips. Cut the OEM push rod with bolt cutters & remove.
- 6) Shorten a red Taper-Lite pushrod for installation. Install into the front cylinder exhaust valve pushrod location. Extend the push rod adjuster until the pushrod is just snug. Check to ensure that the pushrod is located correctly in the lifter (bottom) & rocker-arm (top). Turn the lock-nut until it just contacts the bottom of the pushrod body. Using a 1/2" end wrench, hold the adjuster nut, and use a 1/2" end wrench to spin the pushrod tube exactly 4 revolutions. For each COMPLETE revolution exactly .025" of vertical movement occurs. After adjusting both pushrods, hold the adjuster with a 1/4" wrench, spin the lock nut up against the tube & lock in place. Allow 10-15 minutes for the lifter to bleed off (if it was pumped up) which means you must wait until the push rod can again be spun easily with the fingers.

DO NOT ROTATE THE MOTOR UNTIL THE LIFTERS HAVE BLED OFF OR SERIOUS MOTOR DAMAGE MAY OCCUR.

Repeat this procedure for each valve location...

- 7) After all 4 pushrods have been installed, check the 4 locking nuts for tightness. Close the pushrod covers & re-install the locking clips. Install the spark plugs, & attach the battery cable.

Rivera Engineering assumes no liability for engine damage or personal injury due to misuse or improper installation.



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