

# HEAD QUARTERS

## Easy Install Twin Cam Pushrod Installation Instructions

### Tools Needed:

- various wrenches and tools for removing gas tanks and rocker boxes (optional)
  - wire or clips for holding pushrod tubes up when making final length adjustments
  - pliers for removing pushrod cover tubes and securing clips
  - two  $\frac{1}{2}$ " open end wrenches
  - one  $\frac{9}{32}$ " open end wrench
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- 1) Remove existing pushrods. There are two ways to do this - pick one.
  - a. Remove gas tanks and rocker boxes so that stock pushrods can slide out from the top.
  - b. A faster method of removing stock pushrods is to slide the cover tubes up and cut the stock pushrods with a bolt cutter. This method does not require removing the gas tanks or rocker boxes. In this case however, the stock pushrods will not be reusable.
- 2) If you intend to save the four nonadjustable, stock pushrods (method a), they should be identified for future reference since each pushrod may be a different length.
- 3) Adjust each new pushrod to its shortest length by turning lower adjuster screw in as far as possible before installation.
- 4) The two shorter pushrods are intake, the longer rods are exhaust.
- 5) Pushrod cover cover sets with shorter lowers and longer clips are available, part# HQ-4075. They are not absolutely necessary but they will make the pushrod installation and final adjustments much easier.
- 6) Each pushrod can now be assembled into one of the cover tubes and swung into place over the top of the lifter housing cover. *Removing lifter housing covers will allow intake pushrods to swing on over top of lifters.* Holding the lower adjuster screw with a  $\frac{9}{32}$ " wrench, turn pushrod until the adjuster unscrews out far enough to stay in place before making the final adjustment.
- 7) If you have not done so already, remove both spark plugs so the engine can be turned over easily. With all four new pushrods in place, rotate the engine so any one cam lobe is positioned at its lowest lift point. Then adjust pushrod tip longer to remove all freeplay. At this point, pushrod should be finger tight in the lifter seat.
- 8) When pushrod is snug (seated at both ends), turn the pushrod out (longer) 3 to 4 full turns (18 to 24 flats on the hex lock nut). Tighten adjuster locknut against the lower tip using two  $\frac{1}{2}$ " wrenches. Do not over tighten the adjuster locknut. (15 ft-lbs of torque maximum!)
- 9) If the valve unseated during the final adjustment, wait 10 to 15 minutes for hydraulic lifters to bleed down and seat the valve before adjusting the other valve in the head. Repeat this procedure for each remaining pushrod. With all four pushrods adjusted, engine should turn freely with no binding.
- 10) Secure all four cover tubes with the spring clips and your installation is complete.

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