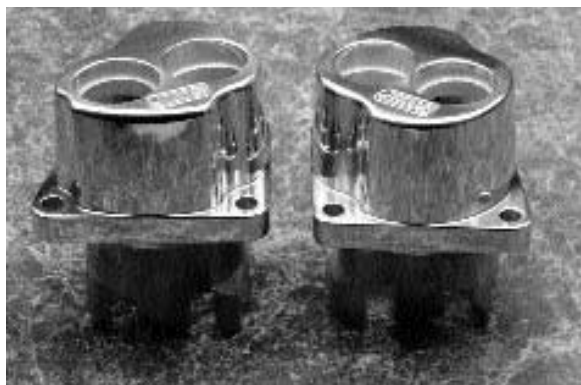




Instruction Sheet For No.1094 & No.1092



EVO Billet Tappet Blocks Use on Big Twin 1984-Present

Billet EVO Tappet Blocks are designed to accommodate a gross valve lift of .550 at the valves. This is about .350 at the tappets, leaving a clearance of .035 roller to block freeplay. Will also work with all of Head Quarters cams from their rumble stick to camzilla (.600 Intake, .530 Exhaust). We recommend using with JIMS® tappets No. 18523-86. Any cam over .550 lift needs to be checked and should have .035 to .045 roller to block clearance (Please note, if using a cam with a higher lift, a simple modification to tappet blocks is all that is needed). Caution: you still need to follow cam manufacturers guidelines.

1. Make sure your H.D.® cannot start. Remove ground wire from frame. Have a clean working environment, including clean rags and a clean engine.
2. If not already removed, remove old blocks and tappets, per H.D.® Service Manual. If using the same lifters and pushrods, mark for location and rotation. Check lifter to block bore clearing per H.D.® Service Manual. If using JIMS® lifters you will have about .0007" to .0012" clearance.
3. Remove old gasket material and keep all foreign material out of tappet block holes.
4. Wash all parts and inspect per H.D.® Service Manual install all new seals and gaskets.
5. NOTE: These blocks are designed to accommodate a gross valve lift of .550 at the valve, this is about .350 at the lifter. We strongly recommend you check for at least a .035 roller to block clearance with any cam being used.
6. To check for this do the following: With a tappet in rear block, no base gasket, one tappet at a time, cam lobe for the one you are checking at the highest point of lift. Slide the assembly into the motor (Note: if the tappet block flange does not touch the motor case during this trial assembly, remove material as needed to give the necessary .035" of up and down tappet movement). With the assembly still in motor snug, with JIMS® tool #33443-84, to about 30 in./lb. (Note: Use JIMS® tool #33443-84 only if your case has 1/4-20 threads). Now check again for .035" free movement. Do the same for the other tappets. If more clearance is needed remove the least amount of material from the tappet blocks as needed (Note: Make sure to remove any burrs after modifying the blocks, wash and air dry). Also check tappet to tappet clearance on cams with small base circles.
7. Apply a light film of motor oil or sealer to both sides of gasket, install on blocks. Apply assembly lube to tappets and rollers. Slip tappets into blocks, you can hold tappets in place with a paper clip.
8. With both blocks in place (Note: putting both blocks into motor case will keep the screws from falling into case). Install JIMS® tool #33443-84 if your case has 1/4-20 mounting holes. Lube tool and screw into the hole inside and center through block into case. Tighten to 30 in./lbs. Apply lube to the other three screws and torque to 30 in./lbs. Install the other block the same way. Remove tool and install last lubed screw and finish torquing to 120 in./lb. in a criss cross pattern at 30 in./lbs. increments.
9. This is a good time to clean the tappet filter. See H.D.® Service Manual. Install the front pushrod and covers first. Apply assembly lube to top and bottom ends and threads of pushrods.
10. If using JIMS® lifters follow the instruction sheet. If using stock H.D.® lifters follow H.D.® Service Manual, or follow the instructions for the pushrods and lifters you are using.

CAUTION: Wear safety glasses. Excessive force may damage the parts !
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The last tools you will ever need to buy.

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INSTRUCTION SHEET FOR PART No.1800



BIG TWIN HYDROSOLID TAPPET

This tappet replaces and surpasses H.D.® No.18523-86 and S & S® No.33-5341.

No.1800 - Use on Big Twin 1984-99, Sportster 1986-90 and Buell® 1987-90. Standard O.D. .8425.

NOTE: FOR USE ON ADJUSTABLE PUSH RODS ONLY

Safely add more horse power to your higher RPM levels with a simple installation of Hydrosolids, use on any cam, be it a solid or hydraulic cam, and receive 3 to 6 more usable horsepower after about 5600 RPM. To the safest RPM level possible for your valve train. Hydrosolids have a built in anti pump-up device. So at the time your springs start to surge and go into a harmonized distortion causing the tappet rollers to start lofting off the back side of your cam, the hydro-solids will not pump-up to allow your valves to hit each other.

NOTE: Hydrosolids will be adjusted as a solid lifter in a cool motor only. If you are unfamiliar with solid lifter adjustment, seek professional help. Otherwise serious valve train motor damage will result.

READ ALL INSTRUCTIONS BEFORE STARTING JOB

1. Refer to H.D.® Service Manual for tappet installation. If installing a cam and tappet blocks at the same time follow those instructions.
2. Place the front piston at TDC compression.
3. With all four Hydrosolids installed start with the front intake pushrod making sure tappet is at the lowest point on the cam.
4. Extend the pushrod adjuster to zero lash (no up and down free play. See pushrod adjustment chart and follow adjustments for your particular pushrod. Example: If your pushrods have 24 threads per inch extend pushrod 5 hex wrench flats) this adjustment will bleed the Hydrosolid tappet, which may take 5-15 minutes or longer to bleed off oil pressure. What we're looking for is a pushrod that just barely turns with your fingers. If after 15 minutes the pushrod is still turning easily, extend the pushrod until you can just barely turn pushrod with your fingers. If you can barely turn the pushrods with your fingers and the Hydrosolids are at the lowest point on the cam, then they have been adjusted properly.
5. CAUTION: If you cannot turn pushrod with your fingers DO NOT rotate engine.
6. Repeat exact procedure for the next three pushrods, making sure to be on the lowest position of cam for the tappet you're adjusting.

MAINTENANCE FOR HYDROSOLIDS IS AS FOLLOWS:

1. New motors, after the first 50 miles (at time of first oil change), check adjustment of pushrods. You should still be able to turn them with your fingers.
2. After 200 miles, readjust if needed and as needed until all your motor parts are seated.
3. Recheck as you would for solid tappets, at about 2,000 mile intervals.

PUSHROD ADJUSTMENTS FOR HYDROSOLIDS - A STARTING POINT ONLY				
Threads per inch	Hex Wrench Flats	Total Travel Distance	Distance Per Turn	Per One Hex Flat
24	5	.0345"	.0414"	.0069"
28	6	.0354"	.0354"	.0059"
32	7	.0364"	.0312"	.0052"
36	8	.0360"	.0270"	.0045"
40	8	.0336"	.0252"	.0042"
52	11	.0352"	.0192"	.0032"

POPULAR PUSHRODS		
JIMS® Pro-lite	24	No.s 2380, 2400
Slim Jims	32	No.s 2404, 2369
Andrews	28	
Andrews	32	
Crane	28	New Time Savers
Crane	24	Old Time Savers
Crane	32	
H.D.	32	
S & S	32	
Screamin Egl.	32	
Rivera	40	Taper Lite
Rev Tech	36	

CAUTION: WEAR SAFETY GLASSES. EXCESSIVE FORCE MAY DAMAGE PARTS AND TOOL. SEE JIMS® CATALOG FOR OVER 200 OTHER TOP QUALITY PROFESSIONAL TOOLS. THE LAST TOOLS YOU WILL EVER NEED TO BUY.

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