

Let's Talk Valve Lash

Y-Block enthusiast, let's talk valve lash. As Y-blocks have no hydraulic lifters, it is necessary to adjust the tappets quite often. Unfortunately, the use of a feeler gauge is satisfactory only if the rocker faces are in good condition. If the rocker faces have wear pockets, from contacting the valve stem, the use of a feeler gauge will provide results which are little better than calculated guessing, as the gap will always be greater than the thickness of the feeler gauge due to said condition.

About fifty years ago when solid lifters were most common, a tool was developed for adjusting valve lash, utilizing a dial indicator, called a P&G Valve Gapper. These tools were supplied with specific adapters for different makes of engines, including Y-block Fords, by P&G manufacturing co. of Portland, Or., but to the best of my knowledge they no longer exist. Can anyone expand on the existence of this company or a source of this tool, or parts thereof? I have found a few at swap meets but not in the last decade. This is the finest tool ever developed for adjusting solid lifter equipped overhead tappets as anyone who owns one would testify.

For those of you without the luxury of such a precision tool, may I suggest a very satisfactory method alternative to feeler gauges anyone can perform without special tools.

The tappet adjust screw is 20 threads per inch thus 1 full turn represents .050" of linear travel. It works just like a micrometer. Multiply 1 turn of travel times existing rocker ratio. Example, .050" X 1.54 = .077". As you can deduct, one full turn of the adjust screw used in a 1.54 ratio rocker will represent .077" of tappet clearance. Now divide one turn of tappet clearance i.e., .077" by 60 as in the 60 minutes of a clock face. This number is .001283" = 1 minute of clock face rotation. Thus 15 minutes of rotation will = .0192" Very close to .019" which is the specification for valve tappet clearance on 292 and 312 engines. 15 minutes clock rotation = 90 degrees rotation, an increment most auto enthusiast can easily estimate quit closely.

Get into the engine, with the lifter all the down obtain some tappet clearance then carefully rotate the adjust screw clockwise to obtain .000' valve lash. Just touching but not depressing the valve. Now rotate the adjust screw counterclockwise 90 degrees. The resulting clearance should be very, very close to .019" regardless of rocker arm face wear.

If adjusting 1.43 ratio rockers rotate the adjust screw 16 min. of rotation ccw. To obtain .01906" clearance. Very, very ,very close.

In order to determine the ratio of said rocker, observe the # on the side. 1.54 rockers are marked ECG 6564-B2 or -B1. I am led to believe any rocker with a B1 or B2 suffix will be a 1.54 ratio rocker and all those without suffixes will be 1.43 ratio.

Walt Nuckels 12/31/00

NOTE: Edited for clarity 2018