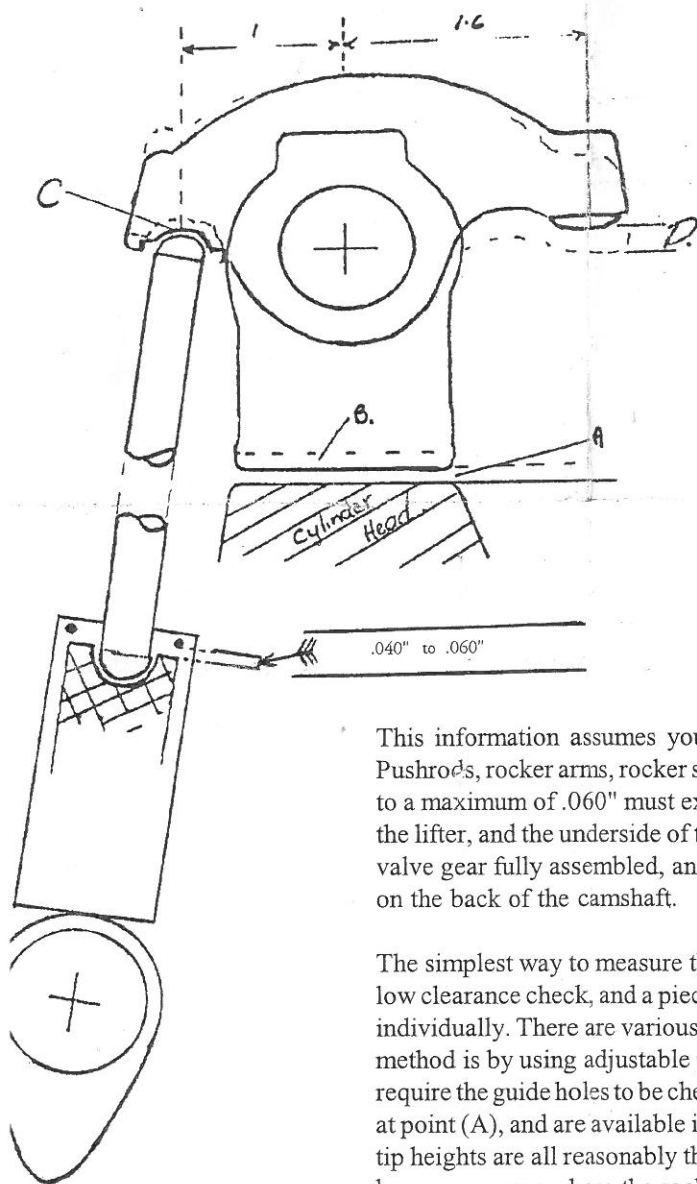


# LIFTER PRELOAD

Lifter preload is the distance between the pushrod seat in the lifter and the circlip, when the lifter is on the heel of the cam and the valve is closed.

Setting the lifter preload, could cause premature wear, or something to break. Also, if the preload is too high, your hydrocarbon reading will be too high to pass the MOT.



This information assumes you have no wear on any of the following components. Pushrods, rocker arms, rocker shafts, valve guides, valve stem tips. A clearance of .040" to a maximum of .060" must exist between the spring loaded pushrod seat in the top of the lifter, and the underside of the retaining circlip. This check should be made with the valve gear fully assembled, and the lifter empty of oil, positioned on the lowest point, on the back of the camshaft.

The simplest way to measure the gap is by using round wire. Use a piece .040" for the low clearance check, and a piece .060" for the high clearance check. Check all 16 lifters individually. There are various ways to adjust the preload on the Rover V8. The easiest method is by using adjustable pushrods (AZ1005). These pushrods are 5/16" and will require the guide holes to be checked. Adjustable rockers can be used. Shims can be used at point (A), and are available in a pack (DW400). It would be wise to check your valve tip heights are all reasonably the same by putting a straight edge across them. Also, we have seen cases where the rocker pedestal mounting points cast into the head, are not parallel to the cylinder head face. This can make it a long tedious operation.

Remember to take into account the rocker arm ratio of approximately 1.6. eg: Putting a shim of .030" at point A, will decrease the lifter preload by approximately .048". ( $.030" \times 1.60$ ). Make sure the shims are properly aligned under the pedestal so as not to block off the oil supply. Do not use shims of different thicknesses on the same shaft assembly, as breakage may occur.