

Shade Tree Mechanics



Setting Valves

by Scott McGilvray

1) Remove valve covers, hook up remote starter switch, remove coil wire from distributor cap and ground it. Also put standard transmission cars in neutral.

2) Rotate engine with the remote starter and watch #1 cylinder (front, passenger side). Crank engine till the exhaust valve (front) opens and shuts, and the intake (beside it) opens and shuts. Stop cranking as soon as the intake valve is closed. The piston is now at the bottom of the cylinder and is ready to come up on the compression stroke.

3) Get in position to see the timing pointer and the harmonic balancer. Make sure your neck tie is not near the fan blade and then rotate the engine a half turn to bring the timing mark in alignment with the pointer.

4) The engine is now ready to have the valves set on #1.

5) To make the setting of all the other cylinders much easier remove the distributor cap. You will see that the rotor is pointing to the position the #1 spark plug wire occupied. Using a marking pen put a dot on the edge of the distributor housing where the rotor is pointing. Also mark a spot directly across from this

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1)

Remote starter in one hand.



2)



3)



5)



(Continued from page 6)

first mark (at the back of the rotor). Then put marks between these two marks (dividing into quarters) then four more between those marks. Now the edge of the distributor is marked in eights, one mark for each of the eight cylinders. (see photo 5)

6) Set the valves on #1 using a feeler gauge (nineteen thousands).

7) Rotate the engine watching the distributor rotor, stopping it on the second mark. The distributor turns counter clockwise and will only need a short nudge to move it to the next mark. Once it is on the second mark you are ready to set the valves on #5 cylinder (front on drivers side).

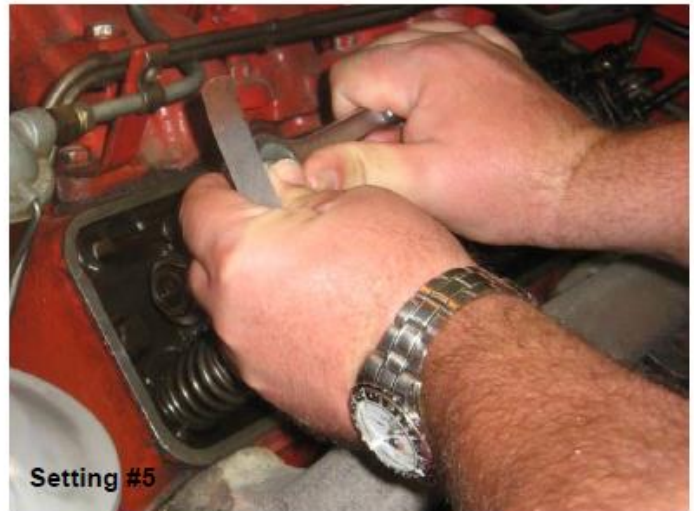
8) Follow this routine through the entire firing order (1 5 4 8 6 3 7 2). The firing order is on almost all intake manifolds right in front of the carburetor. And the cylinders are marked on the intake manifold ports.

6)



Feeler Gauge 0.019

7)



Setting #5

8)



Editor's Note: Valve Timing Tech session took place at our Ice Cream social this past July 17 in Allan Hastings garage (AC was on!) - on Alan's 57 'bird. Scott was helped in his tech session by Jerry Gray and Dave Setser. Dot Lang took the photos.

