

## ANOTHER TECH TIP

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### THE QUIET ALPINE - AN ALMOST EXTINCT SPECIES

By Tom Ehrhart

Aging Alpines tend to sound like the submarine in James Thurber's "The Secret Life of Walter Mitty:" ta-pocked ta-pocked ta-pockedta. What may be attractive in a daydream becomes embarrassing in real-life when you clatter into a sports car meet and everybody says, without looking around, "Here comes an Alpine\*"

The problem is not in your deodorant. It's in your valve train. Here's how to bring quiet and respect back into your life. Firsts, throw away the book. Well, don't throw away the instruction manuals, but know when to ignore it.

The instruction manual says, for clearance, .012 intake, .014 exhaust. Let's cheat a little. Make that .010 and .012. But that's not the real problem. Remember your car is a sophisticated British product, with subtle problems that require real understanding. (That's one reason why you see so few old British sports cars on the road.)

#### Do the following:

1. Get the engine up to normal temperature. An end to the cheating! Drive it around, and don't do it by idling.
2. Adjust the valves by using wire gauges, not flat ones. We are checking valve clearance, not points, and the difference is profound, as we shall see.
3. Make certain that the valve you're adjusting is in a full closed position, which is to say, the lifter is at the opposite side of the high point of the cam lobe. This can easily be determined by following the valve cycles of intake, compression, ignition and exhaust. (We are assuming you know something about the theory of the four-cycle engine before you took the valve cover off. If you don't, you are now in trouble). Merely find the compression stroke and park the compression at T.D.C., using the timing marks on the damper and timing chain cover. A neat feature of the Alpine is the little external button on the rear of the starter solenoid that will allow you to jog the crankshaft around with precision. (It's almost as if the designers knew that the day would come when the valves would have to be adjusted).
4. Now we get to the magic, which is to measure the real, and not the apparent gap between the valve stem and the rocker arm. This is why it cannot be done with a flat gauge: the valve stems tend to wear a groove in the rocker arm (and thus that rhythmic ta-pockedta, ta-pockedta).

To check clearance, insert a feeler gauge of correct thickness between the valve stem and rocker foot. When the rocker clearance is correct the feeler will be firm, but not tight, to move between the rocker and valve stem end, while pushing downwards on the adjustment screw slot with a screwdriver. To adjust clearance, slacken lock nut and turn screw with screwdriver until correct clearance is obtained. Tighten lock nut and recheck clearance. Check all valves in this manner, then refit rocker cover.

**To measure the real gap requires a wire gauge**, which measures the real space between the two metal surfaces. Be careful that the wire gauge does not bear the load from the valve spring. The load would damage the gauge.

We should have said that the engine should not be running during this operation. In case you didn't understand this, we are sorry about your burnt, bitten fingers.

But, if the operation is done right, you should be able to snake into the meet next October and run down at least a couple Tiger owners without them ever hearing you creep up from behind.