



## Idle Adjustment Instructions

### Preparation

In this article we will try to give you ideas on how to adjust a carburetor. This should only be done after the engine has been checked for a mechanical and electrical problems that may affect the way the engine runs.

To begin, start the motor and allow it to warm up to operating temperature (15-20 minutes). **Make** sure that the choke is all the way open at the fast-idle cam is no longer engaged. First, set the idle speed according to specs, then adjust the mixture. The idea is to get the mixture as lean as possible without effecting engine performance. This will usually be just as the RPM begins to drop on the lean side of best running. Note that most mixture screws turn inward (clockwise) to make lean, and out for rich. These screws control the fuel being delivered to the engine at idle only. Adjusting them will not affect how much gas the car uses except at idle. If there are 2 screws on the carb, they are both gas control screws and must be adjusted equally. Don't have one set at 2 turns out and the other at three turns out. If you turn one a little, turn the other the same amount and same direction.

Adjustments must be done after all of the electrical connections, vacuum hoses, and lines are hooked up. The PCV valve must not be leaking and there must be no other vacuum leaks. Air conditioning must be turned off. Vacuum leaks are common, and they must all be fixed first.

Japanese vehicles, it is common to find bad grounding circuit up to the carb or no power to one or more of the solenoids or the choke. Be careful to check for this and fix it first. Remember, you will never get your carb adjusted right if your engine has mechanical problems, vacuum leaks, or needs a tune up.

The transmission should be in neutral and apply the parking break. All accessories should be turned off. Refer to the under-hood sticker, the check the ignition timing.

### Doing it



When you turn the mixture screw, turn it slowly, no more than 1/2 turn every few seconds. It takes 2 to 5 seconds for the gas to trickle through the carb and actually have an effect on the RPM of the engine.

If the engine has been idling for an extended period of time, blip the throttle a couple of times to "normalize" the idle speed. Let it settle back idle, then continue with your mixture adjustment.

If your car has a "throttle positioner" you will also need to adjust that. See your manual.

You may also need to adjust the "fast idle adjustment" if the engine ran too fast or too slow when it was still cold. It should run faster when but within factory recommendations. Refer to under hood sticker.

The general idea is to get the mixture set as lean as possible, but not to where the RPM is dropping off a lot. It will probably run Ok.

Remember that adjusting the mixture is always the **last** adjustment that is made. Don't use the mixture screw to adjust the idle speed. If you decrease the idle SPEED, the mixture will get leaner and you may have to enrichen, and vice versa.

If you turn the idle speed screw way up (faster), you will by-pass the mixture circuit and turning the mixture screw will then have little or no effect on idle.

**When in doubt or for any installation questions, call us toll free at 1 800 526 9952.**