

# Today's Auto Repair

## with Chip Stewart

### -What's a "Tune-Up"?-

Ask twenty technicians what a tune-up is and you'll get twenty different answers. Is that because they don't know what they're talking about? No. It's because automotive repair is an art as much as a science and each technician has his own definitions and procedures just like every artist has his own style. The trick for the technician is to style his "artwork" to your requirements.

So, what *is* a "tune-up"? A tune-up is a series of procedures to help prevent failures or break downs. It is *not, and never has been*, a repair. True, a tune-up may result in a repair but as Bob Peppin, former NAPA/ASE Technician of The Year once said, "If a tune-up fixes something, it's more by accident than by intention." (And that means you've waited too long to get one.) In short, it's preventative maintenance (PM).

If you have a drivability problem (missing, hard starting, stalling, bucking, no power, etc.) and you've not had a tune-up for some time, say, over 25,000 miles, it's a good place to start - it's time for one anyway and if you're lucky further diagnosis may not be necessary.

Let's look at the procedures involved in tuning up your car. Replacing the spark plugs is important but only after an inspection of the old ones in order to note any problems. And, while they're out, it's a good time to do a compression test on each cylinder. That's a good way to check for some internal engine problems. The plug wires should be examined visually and electrically. It's wise to have them replaced every 50,000 miles or so. An inspection of the distributor cap and rotor and their associated connections and mountings should be performed. Most late model vehicles no longer use conventional distributors and they have different inspection procedures that must be carried out. Spark timing must be checked. All filters (air, fuel, emission and compartment) should be checked and renewed if required. Many fuel filters are mounted under the car and are often neglected, causing serious problems. The PCV (Positive Crankcase Ventilation) system must be inspected to insure proper operation as well as the EGR (Exhaust Gas Recirculation) system. The oxygen sensor (for computer control of fuel/air mixture) should be checked for correct operational parameters and replaced if necessary. The computer should be checked for any trouble codes and they should be addressed as required.

The battery should be serviced and all fluids topped off. The following items should be inspected and any problems noted: All vacuum lines and air intake ducts; any cold start or emission systems and associated controls; all belts and hoses; the electric fan or fan clutch operation and the condition and level of coolant. Some cars require a valve adjustment. Some may require a fuel injection service. And, it's recommended that most timing belts be replaced at 60,000 mile intervals (about every other "tune-up"). A lube, oil and filter service is not usually included but it's a good time to get one.

Remember, like most things, you get what you pay for and a "tune-up" is no exception. Discuss these procedures with your service advisor and together you can formulate a tune-up customized to your particular needs, insuring the dependability of your transportation.

