



Engine: Tune-ups/Performance



Description: The traditional tune-up has been replaced by high-tech engine performance checks.

Purpose: Technology has not only made the tune-up obsolete; it also requires a fresh approach to understanding what to do with your technological marvel when it's time for service. Highly sophisticated ignition and fuel systems are now the norm, using one or more onboard computers to control critical engine and transmission management functions. Things that were once handled mechanically are now controlled electronically through the widespread use of onboard computer technology. This has brought about non-adjustable idle speeds and ignition timing, 60,000-mile+ spark plug replacements, and the elimination of other traditional, tune-up-related procedures.

Maintenance Tips/Suggestions: While this may yield the initial impression that today's cars are set-it and forget-it, this isn't the case. Ensuring good performance, fuel economy and emissions may mean that a technician needs to interrogate the vehicle's onboard computer for trouble codes or other system information, analyze exhaust gas readings, or use a scope to look at the operating characteristics of the ignition system or other electrical/electronic circuits. If the situation warrants, a technician may even need to reprogram the internal logic of an onboard computer to correct a drivability problem, right in the service bay. Clearly, the manual adjustments of yesteryear have long since been superseded with high-tech engine performance checks by a qualified service technician.