

## CHRYSLER CORP. SYSTEMS & SERVICE PROCEDURES

### DESCRIPTION

Control of exhaust emissions is accomplished by a combination of engine modifications and special system components. Component usage varies according to model, engine, states, and emissions cycle application.

**NOTE** — There are 2 light duty truck emission control standards classifications: Light Duty and Heavy Duty. Light Duty refers to vehicles up through 8,500 lbs. GVW; Heavy Duty refers to vehicles over 8,500 lbs. GVW.

### CHRYSLER VACUUM DIAGRAMS NO LONGER PROVIDED

**NOTE** — Chrysler vehicles use a new type of vacuum harness with connectors at each end. This harness prevents incorrect routing, so Chrysler Corp. no longer provides vacuum hose diagrams.

**Thermostatic Air Cleaner (TAC)** — System provides heated air to carburetor (from stove on exhaust manifold) in combination with underhood air to maintain a constant intake air temperature for more efficient combustion and emission control.

**Air Injection** — System consists of an air pump, diverter valve, check valves and various air distribution lines. Injection of fresh air adjacent to exhaust valves creates an afterburn effect which results in lower emission levels. For additional information, see "Air Injection Systems — Air Pump Type" in this section.

**Aspirator Air System** — System is used to reduce carbon monoxide and hydrocarbon emissions by drawing fresh air from the air cleaner and allowing it to mix with exhaust gases. System consists of an aspirator air valve and connecting tubes to the air cleaner and exhaust manifold.

**Exhaust Gas Recirculation (EGR)** — System allows a predetermined amount of hot exhaust gas to recirculate and dilute air/fuel mixture in order to aid combustion and reduce NOx emissions.

**Electric Assist Choke** — System is designed to give faster choke openings at temperatures above 60°F and slower choke openings below 60°F.

**Orifice Spark Advance Control (OSAC)** — System is used on some Light Duty emissions engines to aid in control of oxides of nitrogen (NOx). It controls vacuum to distributor vacuum advance unit in response to changes in throttle position.

**Idle Enrichment System** — System is used on some Light Duty emissions models with automatic transmission to reduce cold engine stalling. System enriches carburetor mixture at curb idle and fast idle during cold or semi-cold operation.

**Vacuum Throttle Positioner** — System is used on Heavy Duty emissions vehicles. Throttle positioner prevents unburned hydrocarbons from entering atmosphere by preventing full throttle closure during deceleration from high engine speeds.

**Catalytic Converter** — Converter brings about combustion type reaction to further consume unburned elements in the engine exhaust. Converter is located in exhaust system ahead of muffler. Vehicles equipped with catalytic converters must use unlead fuel only. For additional information, see Catalytic Converter article in this section.

**Positive Crankcase Ventilation (PCV)** — System is used on all cars to eliminate fumes and vapors from crankcase by directing them back through the combustion chamber to be burned. For additional information, see Crankcase Ventilation article in this section.

**Evaporation Control System** — The dual canister evaporation control system is used on all vehicles. The system routes fuel vapors from fuel tank through filter canisters to engine for burning. This closed system prevents vapors from venting to the atmosphere. For additional information see appropriate Fuel Evaporation System article in this section.

## SERVICE PROCEDURES

### IGNITION TIMING

See appropriate article in TUNE-UP SERVICE PROCEDURES.

### CARBURETION

Carburetor Applications	
Application	Model
3.7L (225") 6-Cyl.	
1-Bbl. ....	Holley 1945
5.2L (318") V8	
2-Bbl. ....	Holley 2280
4-Bbl. ....	Carter Thermo-Quad
5.9L (360") V8	
2-Bbl. ....	Holley 2280
4-Bbl. ....	Carter Thermo-Quad

### IDLE SPEED & MIXTURE

See appropriate article in TUNE-UP SERVICE PROCEDURES.