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.*

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 unleaded fuel only. *For additional information, see "Catalytic Converters" 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 Section.*

Evaporation Control System — Used on most models, system routes fuel vapors from fuel tank through filter canister to engine for burning. This closed system prevents vapors from venting to the atmosphere. *For additional information, see appropriate article in FUEL EVAPORATION Section.*

SERVICE PROCEDURES

IGNITION TIMING

See appropriate article in TUNE-UP SERVICE PROCEDURES.

CARBURETION

Carburetor Applications

Application	Model
225" 6 Cyl.	
1-Bbl.	Holley 1945
318" V8	
2-Bbl.	Holley 2280
4-Bbl.	Carter ThermoQuad
360" V8	
2-Bbl.	Holley 2245
4-Bbl.	Carter ThermoQuad

IDLE SPEED & MIXTURE

See appropriate article in TUNE-UP SERVICE PROCEDURES.