CHRYSLER CORP. EMISSION SYSTEMS

DESCRIPTION

Control of exhaust emissions is accomplished by a combination of engine modifications and special control components. Component usage varies depending on engine and transmission combination.

Air Injection – System provides for exhaust port injection of air, causing more complete burning of gases. V8 engines have exhaust manifolds that incorporate air passages to rear of exhaust valves. On 6 cylinder engines these passages are incorporated into the cylinder head.

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 opening below 60°F.

Distributor Solenoid – Two types of solenoids are used (depending on engine), both types are mounted on distributor, but function of units are different. Trucks with 383" engines use a solenoid that retards ignition timing during hot (curb) idle. Trucks with 400" engines (if equipped with solenoid) use a Start-Only solenoid to advance ignition timing during engine cranking.

Orifice Spark Advance Control (OSAC) – System is used on all light duty emission engines to aid in control of oxides of nitrogen (NOx). It controls vacuum to vacuum advance actuator during changes in throttle position.

NOx System – System is designed to control oxides of nitrogen in exhaust emissions. System controls distributor vacuum advance in lower gear ranges. NOx system consists of a special cam shaft deisgned to give increased valve overlap, 185°F coolant thermostat, solenoid vacuum valve and on 1972 models, an Exhaust Gas Recirculation system.

Thermostatic Controlled Air Cleaner (TAC) – System provides heated air to carburetor (from stove on exhaust manifold) with progressive mixing of this air with underhood air to maintain an intake air temperature of 90°F-110°F for more efficient combustion and emission control.

Evaporation Control System – Used on all cars, 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.*

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 appropriate article in CRANKCASE VENTILATION Section.*

SERVICE PROCEDURES

IGNITION TIMING

See appropriate article in TUNE-UP Section.

CARBURETION

Carburetor Models

Application	Model
6-Cyl. Engines	
170" (1965)	Carter BBS 1-Bbl.
170" (1965-69)	Holley 1920 1-Bbl.
198" (1969-71)	Holley 1920 1-Bbl.
225" (1965-74)	Carter BBS 1-Bbl.
225" (1965-73)	Holley 1920 1-Bbl.
225" (1974)	Holley 1945 1-Bbl.
V8 Engines	
273" (1965-66)	Carter BBD 2-Bbl.
318" (1965-69)	Stromberg WW 2-Bbl.
318" (1968-74)	Carter BBD 2-Bbl.
350" (1972)	Holley 2210 2-Bbl.
360" (1973-74)	Holley 2210 2-Bbl.
360" (1974)	Holley 2245 2-Bbl.
360" (1971)	Holley 4150C 4-Bbl.
360" (1974)	Carter Thermo-Quad 4-Bbl.
383" (1967-71)	Carter BBD 2-Bbl.
400" (1973-74)	Holley 2210 2-Bbl.
400" (1970-71)	Holley 2245 2-Bbl.
413" (1970-71)	Holley 4150C 4-Bbl.
413" (1972-73)	Holley 4160C 4-Bbl.
440" (1973-74)	Carter Thermo-Quad 4-Bbl.

IDLE SPEED & MIXTURE

See appropriate article in TUNE-UP Section.