

INTERNATIONAL HARVESTER CO. SYSTEMS & SERVICE PROCEDURES

DESCRIPTION

Several systems are used to control emission of pollutants. System usage depends on model, engine and transmission combinations. Each system is designed to control a particular vehicle emission. In addition, specially calibrated carburetors, distributors and modified combustion chambers are used with these systems.

Thermostatic Air Cleaner — This unit is designed to aid carburetor in more complete burning of air/fuel mixture and smoother operation by controlling the temperature of intake air. Heated or cooled portions of air are fed into air cleaner assembly as temperature sensor regulates.

Air Injection — An air injection system is used on all models for further control of exhaust emissions. An air pump injects fresh air into each exhaust port at critical points to aid in further burning of the exhaust gases. *For additional information, see "Air Injection Systems — Air Pump Type" in this section.*

Exhaust Gas Recirculation — Used on all models, the EGR system recirculates a small amount of exhaust gas back into the combustion chambers to lower combustion temperatures and reduce NOx emissions.

Electric Assist Choke — This unit is designed to give faster, more efficient choke operations as the engine requires. This helps reduce exhaust emissions normally given off during cold engine operations. The electric assist choke is used on 4 cylinder Scouts (Federal and California).

Catalytic Converter — Used on all models, the converter is installed in the exhaust system to aid in the reduction of exhaust emissions. This unit changes unburned hydrocarbons (HC) and carbon monoxide (CO) into water vapor and carbon dioxide. *For additional information, see "Catalytic Converters" in this section.*

Positive Crankcase Ventilation (PCV) — System removes engine crankcase vapors which result from normal combustion. Vapors are drawn through a metered PCV valve and are routed back to intake manifold to be reburned in combustion chamber. *For additional information, see CRANKCASE VENTILATION Section.*

Evaporation Emission Control — Used on all models, this system is designed to keep fuel system vapors from escaping to atmosphere. This sealed system separates fuel vapors and routes them to engine to be burned, while retaining liquid fuel in the tank. A carbon canister stores vapors until engine draws them off for burning. *For additional information, see appropriate article in FUEL EVAPORATION Section.*

SERVICE PROCEDURES

IGNITION TIMING

See appropriate article in TUNE-UP SERVICE PROCEDURES.

IDLE SPEED & MIXTURE

See appropriate article in TUNE-UP SERVICE PROCEDURES.

Carburetor Models

Application	Models
4 Cyl. Engines	
196"	Holley 1940-C 1-Bbl.
6 Cyl. Engines	
198"	Diesel Injection
V8 Engines	
304"	Holley 2245-C 2-Bbl.
345"	Carter Thermo-Quad 4-Bbl.