1975-79 EXHAUST EMISSION SYSTEMS Int'l. Harvester Systems & Service Procedures

DESCRIPTION

Several systems are used to control exhaust emissions. 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.

NOTE: There are 2 Light Duty truck emission control standard classifications: Light Duty and Heavy Duty. Light Duty refers to vehicles up through 8500 lbs. GVW; Heavy Duty refers to vehicles over 8500 lbs. GVW.

EXHAUST EMISSION SYSTEMS

Exhaust Gas Recirculation (EGR) - 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 oxides of nitrogen (NOx) emissions.

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

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.

Catalytic Converter - Catalytic converter reduces exhaust emissions by continuing the burning process of exhaust gasses. As the partially burned and unburned exhaust gasses enter the converter, a combustion type reaction takes place. This provides a more complete burn, lowering emissions. Vehicles equipped with catalytic converters must use unleaded fuel only.

Thermostatic Air Cleaner (TAC) - 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 cleaner air blend door.

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.

Fuel Evaporative Control - Fuel evaporative control system consists of a special fuel tank, a liquid vapor separator, a non-vented filler cap, a charcoal filled storage canister located in engine compartment, and plumbing necessary to direct fuel vapors to charcoal canister for storage. With this system fuel vapors are routed to charcoal canister for storage. Engine vacuum later purges canister of stored fuel vapors.

SERVICE PROCEDURES

EXHAUST EMISSION SYSTEMS

See appropriate articles in this section.

TUNE-UP

See appropriate article in TUNE-UP PROCEDURES section.

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