

JAGUAR DUPLEX SYSTEM

Jaguar XKE (1968-72)
Jaguar XJ6 (1969-73)

NOTE - 1972 Jaguar models use Air Injection also.

DESCRIPTION

System consists of modified carburetor, distributor, and induction system. A vacuum servo unit, control valve, and thermal sensor are also incorporated into air induction system on 1971 models only.

Carburetor - Stromberg CDSE carburetor of constant vacuum type. Several modifications for emission control purposes have been made. See *Stromberg CDSE Carburetors in CARBURETION Section*.

Distributor - Modified distributor incorporates a vacuum retard unit. A pipe connects unit to a tapping in carburetor for the necessary supply of vacuum.

Thermal Sensor - Located on clean air side of air cleaner. A valve in sensor regulates vacuum supplied to servo unit. Sensor maintains air intake temperature at approximately 120°F.

Control Valve - Located in air cleaner inlet tube. Position of valve determines amount of hot air drawn from shroud, and amount of ambient air drawn from underhood.

Vacuum Servo Unit - Regulates position of valve according to engine vacuum.

OPERATION

Duplex Manifolding System employs the metering system of carburetors to feed fuel mixture to combustion chambers through two manifolds. Two throttles are employed. The first, being in its normal position in the carburetor and the second

located in the secondary throttle housing. Linkage between the two throttles are arranged so that on part throttle opening (used during most city driving and cruising), the secondary throttle remains closed, routing mixture through primary mixture pipe to an exhaust heated conditioning chamber and returning it to the inlet manifold past the secondary throttles. This makes sure of an air/fuel ratio being distributed to cylinders so an overall leaner mixture can be employed. Deposition of wet fuel in the inlet manifold is avoided. At 20° of primary throttle opening, the secondary throttle comes into operation until, at full throttle, both butterflies are fully opened.

MAINTENANCE

Every 3,000 Miles - 1) Change engine oil, top up carburetor hydraulic piston dampers, lubricate distributor.

2) Clean and adjust contact breaker gap and spark plug gap.

3) Adjust engine idle and fast idle speeds.

Every 6,000 Miles - On 1971 models only, wash fuel line filter bowl in gasoline. Replace filter element and install new sealing washers.

Every 12,000 Miles - 1) Carry out yellow service as detailed in carburetor section. See *Stromberg CDSE Carburetor in CARBURETOR Section*.

2) Replace spark plugs and air filter element.

3) Check tightness of secondary throttle housing and inlet manifold securing nuts. Check tightness of nuts securing primary mixture pipe to secondary throttle housing and exhaust manifold. Check exhaust system for leaks. Replace parts if needed.

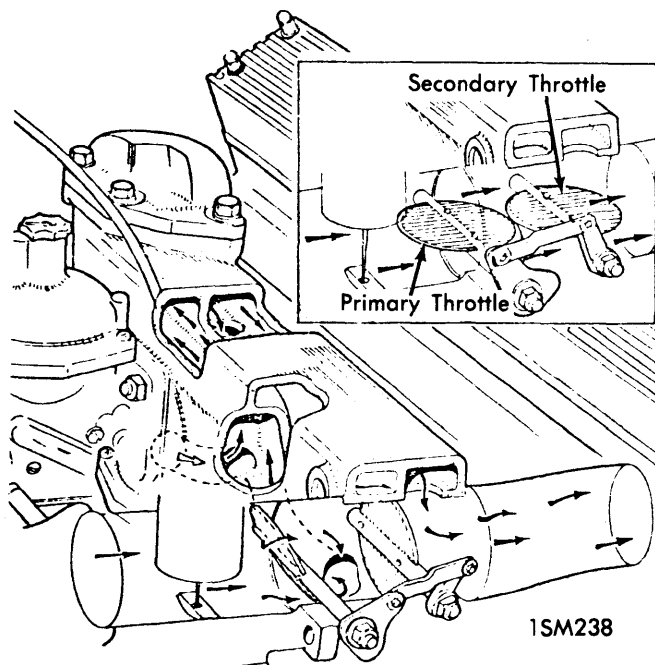
4) Check and adjust ignition timing if necessary.

5) On 1968-70 models, clean fuel line filter. Examine sealing washer and replace if necessary.

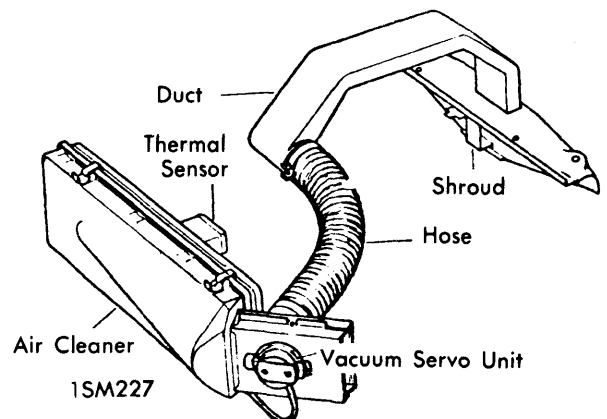
Every 24,000 Miles - 1) Carry out red service as detailed in carburetor section. See *Stromberg CDSE Carburetor*.

2) Adjust valve clearances, check valve timing.

3) Compression pressures must be checked with engine at normal operating temperature.



DUPLEX MANIFOLD SYSTEM



TEMPERATURE CONTROLLED AIR SYSTEM
(1971 MODELS ONLY)