

Exhaust Emission Systems

CITROEN AIR INJECTION

Citroen (1968-73)

DESCRIPTION

Air injection is used on all Citroen models. System consists of an air pump, air distribution plate, air injectors, check valve, gulp valve, and connecting hoses.

OPERATION

AIR PUMP

The air pump draws air from the molded tube between air filter and carburetor. Air is pumped to the air distribution plate, located between exhaust manifold and cylinder head, and then into exhaust port area. A check valve is installed in the air delivery circuit between air pump and air distribution plate.

GULP VALVE

The gulp valve is tapped into air circuit feeding the air injectors. Gulp valve, controlled by variations of vacuum existing in intake manifold, permits injected air into the intake manifold.

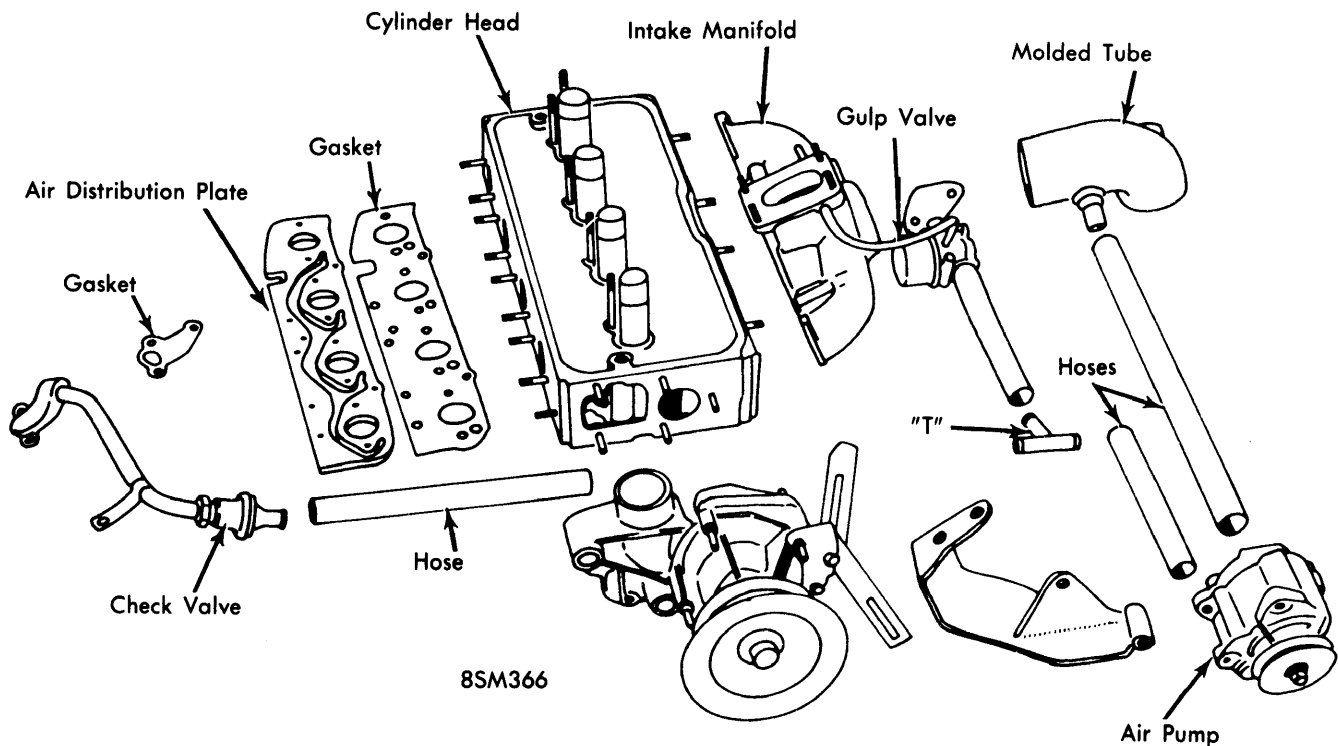
The valve contains a pierced diaphragm which forms a dashpot. One side of diaphragm is subject to vacuum existing in intake manifold. Other side encloses a chamber containing a spring and slide valve which opens or closes an air passage. When carburetor throttle valve closes, vacuum increases in intake manifold. This draws the diaphragm, which moves the slide valve, opening the air passage to intake manifold. When pressure equalizes itself on both sides of diaphragm (through pierced hole), the spring moves the valve back, closing air passage to intake manifold.

CARBURETOR

The carburetor has a dashpot which limits too rapid a closing of the throttle valve, which would cause backfiring from the exhaust. On DJ, DJF, DL, and DLF models, the carburetor also has an accelerated idling device similar to those installed on the DX models.

SERVICE

Periodically inspect hoses and connections for deterioration and leakage, repair or replace as necessary.



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