

CHRYSLER CORP. IMPORTS AIR INJECTION SYSTEM

Arrow Pickup
Challenger
Champ

Colt
Ram-50 Pickup
Sapporo

DESCRIPTION

Arrow Pickup and Ram-50 Pickup — The air injection system consists of 2 air lines from the air cleaner to the exhaust manifold and the catalytic converter. Reed-type valves are mounted in both lines. The system supplies secondary air into the exhaust manifold to promote oxidation of exhaust emissions.

Challenger, Champ, Colt and Sapporo — The air injection system consists of an air line from the air cleaner which enters the exhaust system between the catalytic converters. A pulse air feeder, mounted in the line, consists of main and sub reed valves. The system supplies secondary air into the exhaust manifold to promote oxidation of exhaust emissions.

OPERATION

Arrow Pickup and Ram-50 Pickup — The reed valve, actuated by vacuum pulsations in the exhaust manifold, directs air from the air cleaner to the exhaust manifold and/or catalytic converter.

Challenger, Champ, Colt and Sapporo — The main reed valve is actuated by diaphragm movement, caused by pressure pulsations generated by piston motion in No. 3 cylinder crankcase (sealed by a seal cover). A small hole in the seal cover discharges engine oil and blow-by gas. The sub reed valve is actuated by exhaust vacuum generated from pulsations in the exhaust system between front and rear catalytic converters.

TESTING

Arrow Pickup and Ram-50 Pickup — 1) Check air lines, filter element and reed valves for cracks, clogging, damage and leaks. Replace if defective.

2) Start and run engine at idle. Disconnect air hose at inlet side of reed valve. If suction is felt at inlet side of reed valve; valve is good. No exhaust emission should be blown from inlet side of valve. Replace valve if defective.

Challenger, Champ, Colt and Sapporo — 1) With engine running at idle, remove hose connected to air cleaner, and check vacuum generated at opening of hose.

2) If no vacuum is felt, check hoses for cracks, clogging, damage or leaks. Replace if defective. Periodic maintenance service of hose and system is not required.

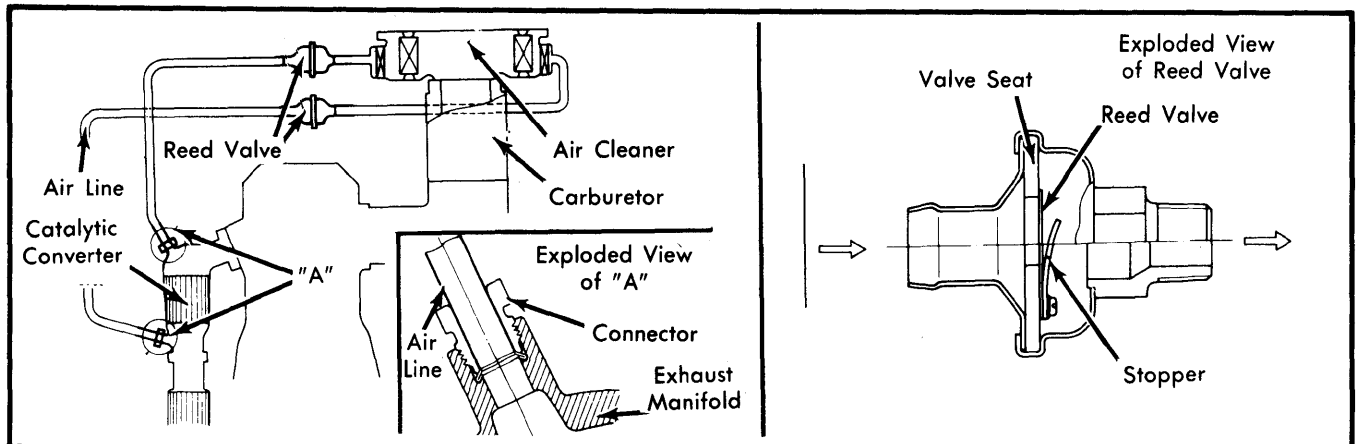


Fig. 1 Air Injection System (Arrow Pickup & Ram-50 Pickup)

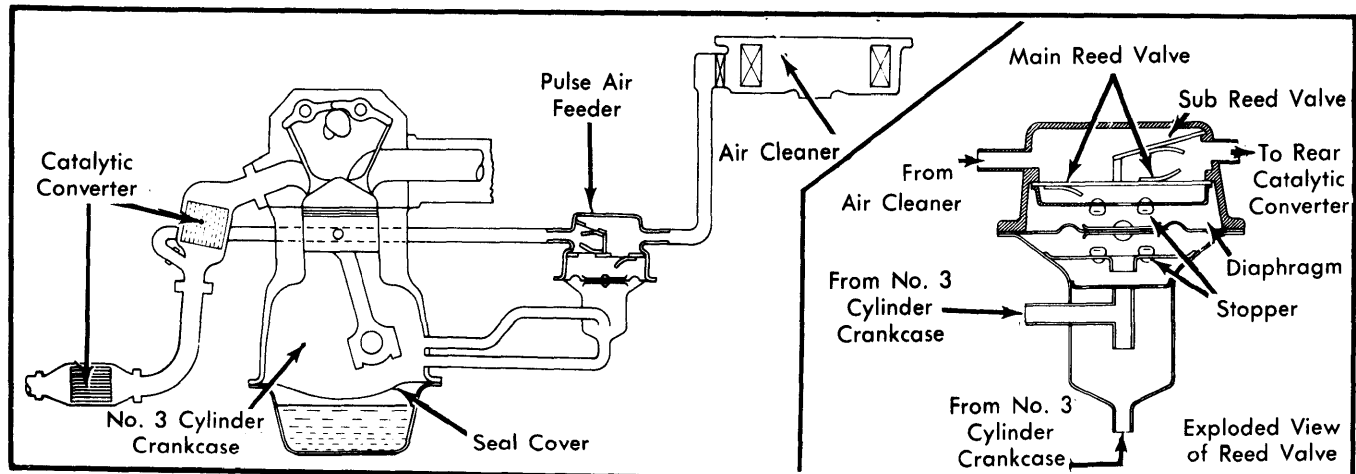


Fig. 2 Air Injection System (Challenger, Champ, Colt & Sapporo)