

## CHRYSLER CORP. IMPORTS AIR INJECTION SYSTEM

**Arrow Pickup, Challenger, Champ, Colt, Ram-50 Pickup, Sapporo**

### DESCRIPTION

#### ARROW PICKUP & RAM-50 PICKUP

Air injection system consists of 2 air lines from air cleaner to exhaust manifold and catalytic converter. Reed-type valves are mounted in both lines. System supplies secondary air into exhaust manifold to promote oxidation of exhaust emissions.

#### CHALLENGER, CHAMP, COLT & SAPPORO

Air injection system consists of air line from air cleaner which enters exhaust system between catalytic converters. A pulse air feeder, mounted in line, consists of main and sub reed valves. System supplies secondary air into exhaust manifold to promote oxidation of exhaust emissions.

### OPERATION

#### ARROW PICKUP & RAM-50 PICKUP

Reed valve, actuated by vacuum pulsations in exhaust manifold, directs air from air cleaner to exhaust manifold and/or catalytic converter.

#### CHALLENGER, CHAMP, COLT & SAPPORO

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 seal cover discharges engine oil and blow-by gas. Sub reed valve is actuated by exhaust vacuum generated from pulsations in exhaust system between front and rear catalytic converters.

### TESTING

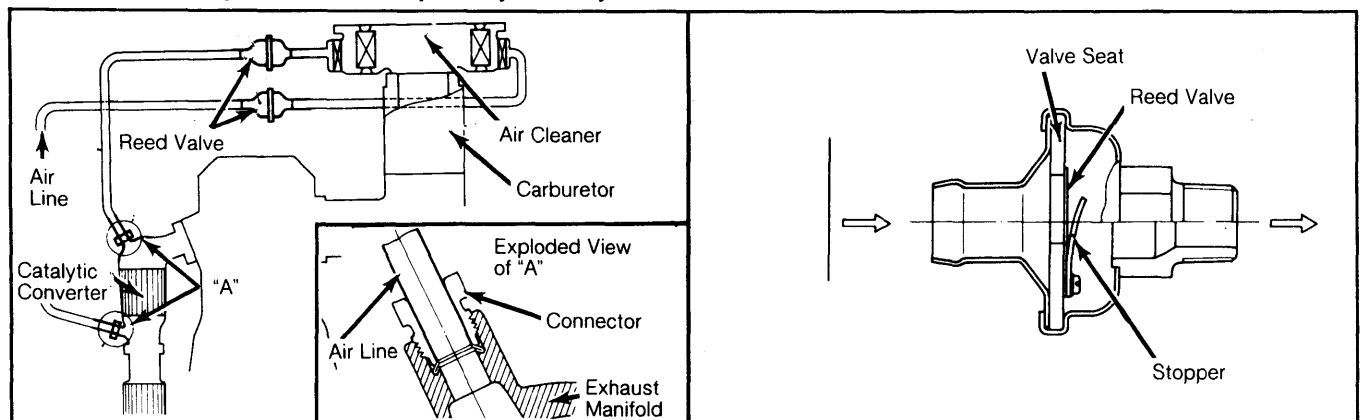
#### ARROW PICKUP & RAM-50 PICKUP

Check air lines, filter element and reed valves for cracks, clogging, damage and leaks. Replace if defective. Start engine and run 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 & SAPPORO

With engine running at idle, remove hose connected to air cleaner, and check vacuum generated at opening of hose. 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: Arrow Pickup & Ram-50 Pickup Air Injection System**



**Fig. 2: Challenger, Champ, Colt & Sapporo Air Injection System**

