

1974-79 EXHAUST EMISSION SYSTEMS

Fiat Air Induction System

3-135

1979 All Models

DESCRIPTION

The air induction system is a non-pump type air injection system which uses engine exhaust pulses to draw fresh air into the exhaust system. This helps further oxidize hydrocarbon (HC) and carbon monoxide (CO) emissions. The main component of this system is a reed valve which reacts to the exhaust system pulses. Brava and Spider models use two reed valves in the system, while Strada and X1/9 use only one.

OPERATION

Air induction is controlled by reed valve(s) mounted on the cylinder head. The reed valve(s) functions as a high speed check valve, operated by each exhaust pulse which passes the induction port. When the reed valve opens, fresh air is drawn from the air cleaner housing. A separate filter element in the air cleaner both filters and silences the air intake system.

On Strada and X1/9, the inducted air is supplied to a delivery passage in the cylinder head and feeds to all cylinders. On Brava and Spider, inducted air is supplied to two delivery passages in the cylinder head. One passage feeds cylinders No. 2 and 3, while the other passage feeds cylinder No. 4. To prevent interference with the EGR pick-up, inducted air is not supplied to cylinder No. 1.

MAINTENANCE

Every 15,000 miles, check operation and condition of reed valve(s) and reed valve filter. Also, inspect condition of all lines and fittings. Every 30,000 miles, replace reed valve filter in air cleaner housing.

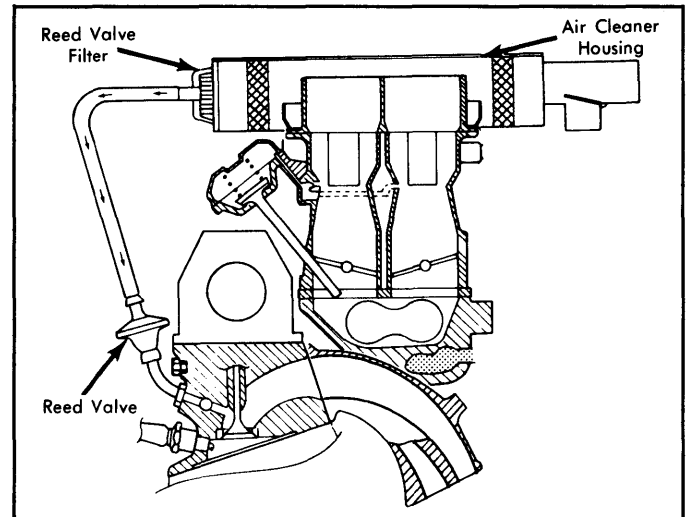


Fig. 1: Air Induction System (Strada & X1/9)

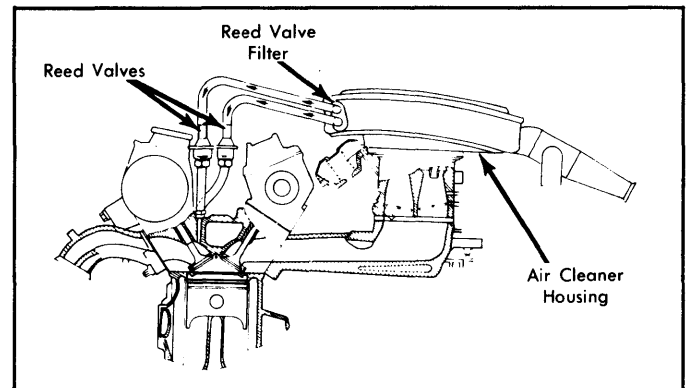


Fig. 2: Air Injection System (Brava & Spider 2000)