1974-79 EXHAUST EMISSION SYSTEMS
Porsche Air Injection System

1979 All Models

NOTE: For 1974-78 models, see AIR INJECTION SYSTEMS article in this section.

DESCRIPTION

The air injection system is designed to lower formation of HC and CO emissions. This is done by injecting additional fresh air into the exhaust ports to cause an afterburning of the exhaust gases and thus more complete combustion. System uses a fresh air intake filter, an auxiliary air pump (belt driven), a diverter valve, a check valve and necessary connecting lines.

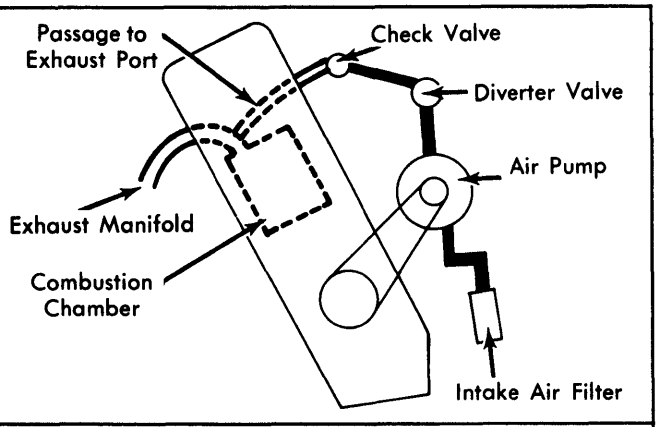

Fig. 1: 924 Air Injection System

OPERATION

The action of the air pump causes fresh air to be drawn in through the air intake filter. Here it is cleaned of excess dirt and foreign particles before it enters the air pump. In the air pump the air is pressurized and pushed on to the diverter valve.

The diverter valve acts as a pressure protection valve. If too much exhaust gas backpressure (or other system pressure) occurs, the diverter valve will dump the air pump air off to the atmosphere or to the air cleaner (depending on application). This protects the air pump from working against excessive system pressure.

Under normal conditions, the air flows through the diverter valve and on to the check valve. This is a one-way flow control valve. It will prevent a backfire flame from passing back into the air pump system. Passed the check valve, normal air will flow into the exhaust ports through a passage system in the exhaust manifold.

MAINTENANCE

Every 15,000 miles the air intake filter should be replaced. At this time, also fully inspect the air injection system for any obvious defects. Replace other items as necessary.