

## DESCRIPTION

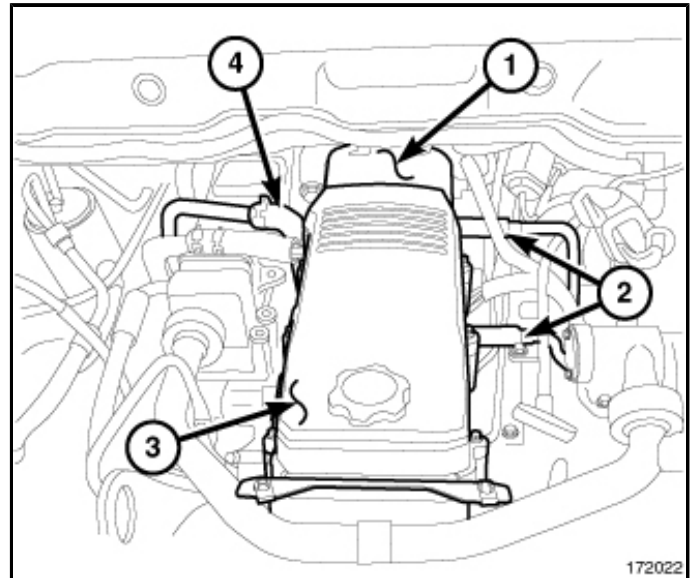
The Closed Crankcase Ventilation System (CCV) consists of several parts to make it functional. One part is the filter. The filter is serviceable and prevents oil mist from entering the discharge tube of the CCV system. It is not cleaned, but replaced at 60,000 mile intervals.

The crankcase breather assembly is integrated into the cylinder head cover (3) and is serviced separately. The external fittings (2) to the breather tube and breather drain tube are serviceable.

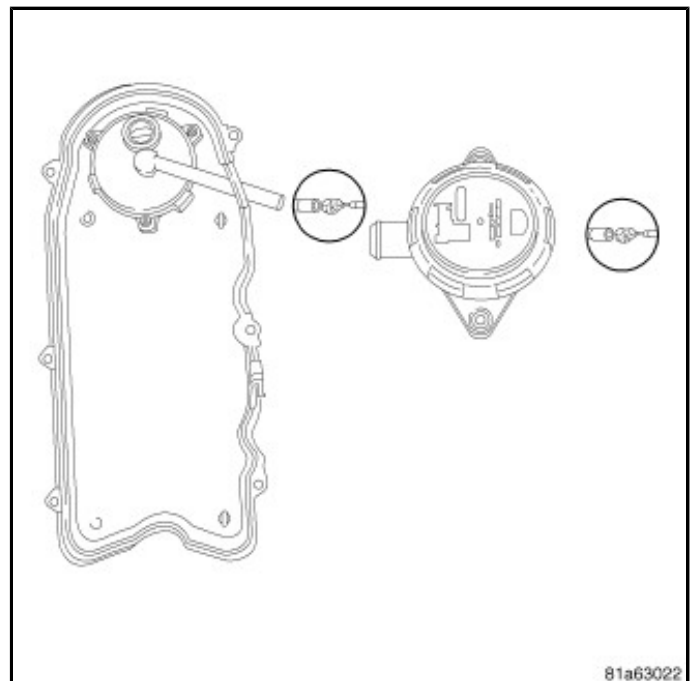
The crankcase breather assembly is integrated into the cylinder head cover and corresponding breather cover. Crankcase gasses travel into the breather cavity under the breather cover where they pass through a filtering media (serviceable maintenance component) which separates the oil from the crankcase gasses. The oil drains back into the engine block through two hoses (2) on the left side of the engine.

The crankcase gasses are directed through the Crankcase Depression Regulator (CDR) valve which allows the system to maintain a constant positive pressure in the crankcase. The CDR valve is a non-serviceable component located on the underside of the breather cover. Clean crankcase gasses flow from the CDR valve into the fresh air side of the turbocharger compressor.

The closed crankcase ventilation valve is used to vent the crankcase gases back into the intake of engine. If the crankcase ventilation filter becomes too restrictive, under high intake vacuum situations, the closed crankcase ventilation prevents the engine from syphoning crankcase gases/oil from the crankcase of the engine. The closed crankcase ventilation valve is located under the crankcase ventilation filter cover at the top of the engine.



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## TESTING

1. If troubleshooting high crankcase pressure, the following items can be causing the closed crankcase ventilation valve to close during engine operation:
  - A restricted crankcase ventilation filter. Change the filter
  - A malfunctioning or misassembled closed crankcase ventilation valve. Check the valve operation.
2. The closed crankcase ventilation valve should allow crankcases gases to flow when the engine is not running and/or removed from the engine.

**NOTE:** Application of air can be applied either to the inlet or outlet of the closed crankcase ventilation valve.

3. A small amount of air can be blown through the closed crankcase ventilation valve (less than 34 kPa [5 psi]) to check the closed crankcase ventilation valve.
4. If air does not go through the closed crankcase ventilation valve, replace the valve.