

Clean EGR Cooler
4TNV84T-Z, 4TNV98T-Z

The EGR cooler is apt to be contaminated with rust and scale that deteriorate the cooling performance. Carbon accumulation in the exhaust gas passage of the cooler hinders circulation of exhaust gas, resulting in deterioration in exhaust gas cleanup performance.

To prevent such a problem, clean the cooler at least every 1500 hours.

Consult your local Yanmar dealer for this service.

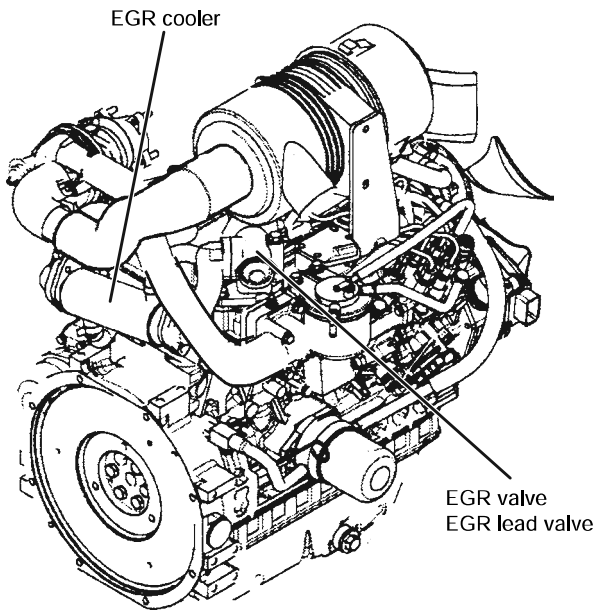


Figure 5-19

Inspect Crankcase Breather System

Proper operation of the crankcase breather system is required to maintain the emission requirements of the engine. The EPA / ARB requires that the crankcase breather system is inspected every 1500 hours.

There are three different crankcase breather systems used on the TNV engines. Only the non-turbo TNV engines crankcase breather system requires periodic maintenance.

The non-turbo TNV engines use a crankcase breather system that has a spring-backed diaphragm (**Figure 5-20, (1)**) in the valve cover (**Figure 5-20, (2)**). When the crankcase pressure reaches a predetermined value, the diaphragm opens a passage that allows crankcase fumes to be routed to the intake manifold.

To inspect the diaphragm and spring (**Figure 5-20, (3)**):

1. Remove the bolts retaining the diaphragm cover (**Figure 5-20, (4)**).

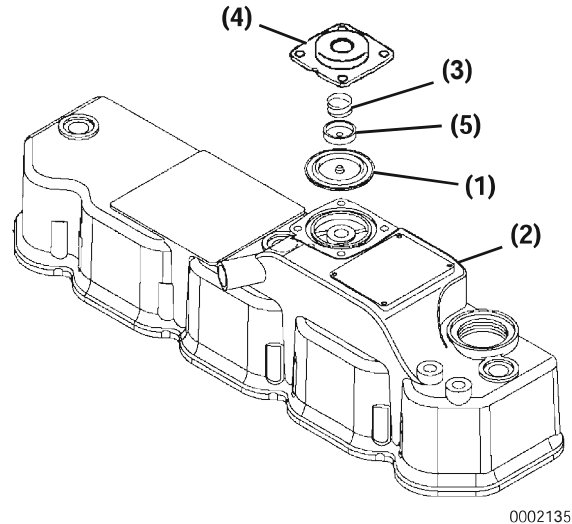


Figure 5-20

2. Remove the diaphragm cover, spring, diaphragm plate (**Figure 5-20, (5)**) and diaphragm.
3. Inspect the diaphragm for tears. Inspect the spring for distortion. Replace components if necessary.
4. Reinstall the diaphragm, diaphragm plate, spring and diaphragm cover. Tighten the diaphragm bolts to specified torque.

Failure of the diaphragm and / or spring will cause the loss of pressure control and allow an excessive amount of crankcase fumes to be routed to the intake manifold. This could result in excessive deposits in the intake system, high engine exhaust smoke levels, excessive engine oil consumption, and / or engine run-on due to the burning of the engine oil.

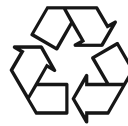
Every 2000 Hours of Operation

Perform the following maintenance every 2000 hours of operation.

- **Check and Replace Fuel Hoses and Engine Coolant Hoses**
- **Lap the Intake and Exhaust Valves.**
If necessary

Check and Replace Fuel Hoses and Engine Coolant Hoses

NOTICE



- ALWAYS be environmentally responsible.

- Follow the guidelines of the EPA or other governmental agencies for the proper disposal of hazardous materials such as engine oil, diesel fuel and engine coolant. Consult the local authorities or reclamation facility.
- NEVER dispose of hazardous materials irresponsibly by dumping them into a sewer, on the ground, or into ground water or waterways.
- Failure to follow these procedures may seriously harm the environment.

Regularly check the fuel system and engine coolant system hoses. If they are cracked or degraded, replace them. Replace the hoses at least every two years.