

## Service Information No. 02/ 09

Date: 04.03.2009

### Fuel Pulsation Damper

### M43, M43C, VM43, VM43C

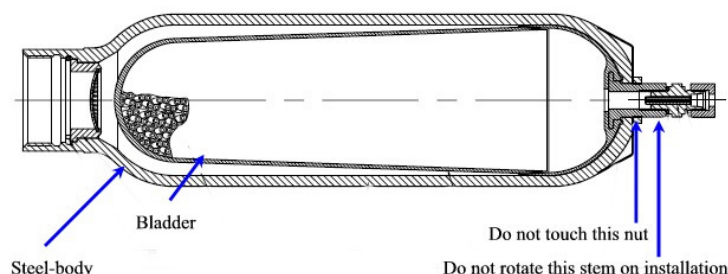
This Service Information applies to fuel pulsation dampers that are damping the pressure surges existing in the fuel system of engines of types M43, M43C, VM43, and VM43C. The internal bladder of these pulsation dampers consists of very high-grade elastomer. As all elastomers are subject to natural ageing, this material does not have an indefinite service life. The currently used fuels may contain substances that are not considered in the CIMAC fuel specification and will accelerate the ageing process affecting the elastomer. In order to take this circumstance into account, we have introduced a **maintenance interval of 7,500 hours** for these fuel pulsation dampers.

When mounting a fuel pulsation damper the notes contained in the attached job card are to be followed. Please add this job card to the documentation kept on board. This job card supplements the assembly instructions provided on the attachments supplied together with the fuel pulsation dampers to date. In the past, leaks on the fuel pulsation dampers were reported to us on various occasions shortly after assembly. Investigations carried out on the damaged components have shown that due to an incorrect assembly of the leak pipe the internal bladder was damaged because the steel body was twisted with respect to the bladder (fig. 1).



**Figure 1**

Figure 2 shows a cross-section of a fuel pulsation damper and the components that must not be twisted.



**Figure 2**

In order to impede any twisting of the steel body with respect to the bladder in the future, the steel bodies of the fuel pulsation dampers have been provided with a left-hand thread since very recently.

M43

7500

**07**

*See also:* 07.15.01.nn

*Spare parts list:* B1.05.07.438533, B1.05.07.438510

**Time requirement:** 1 Pers./ 1,00 h

**Personnel qualification:** skilled engine hand

**Operating medium:** Heavy fuel and distillate fuel

## Maintenance:

Replacement of the fuel pulsation dampers every 7,500 h

## Auxiliary materials:

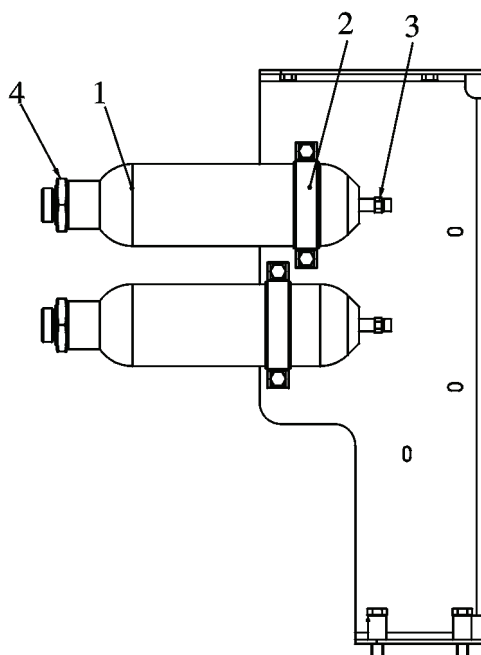
Molykote-Paste "G-Rapid " \*\*

\*\* or equivalent product

## Procedure:

### 1. Disassembly

- 1.1 Close the fuel shut-off valves.
- 1.2 Drain the fuel distributing pipe via the corresponding leakage pipe.
- 1.3 Dismantle the leakage monitoring pipe on the fuel pulsation damper (1) (counterhold the union).
- 1.4 Loosen fastening clamps (2). Loosen locknut (4) (right-hand thread) and dismantle fuel pulsation damper.



M43

7500

## 2. Assembly

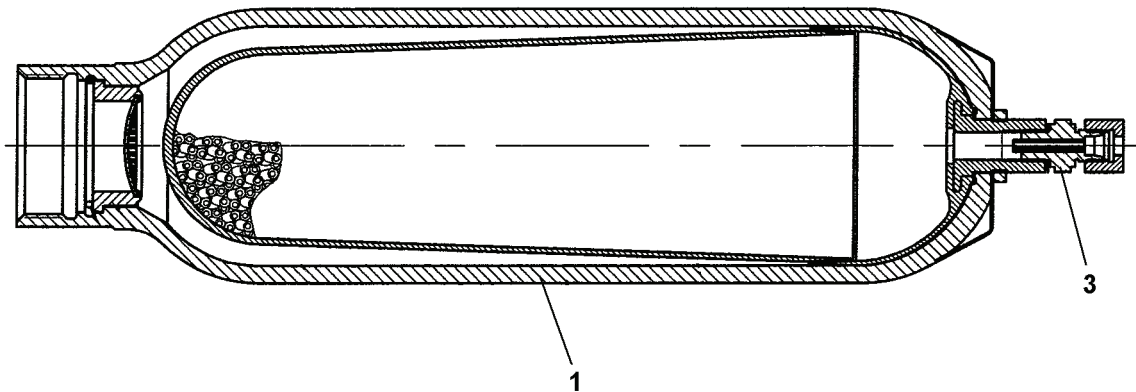
07

- 2.1 Assemble new fuel pulsation dampers (1) in reverse order.

### Attention:

**When mounting the leakage monitoring pipe the valve body (3) of the fuel pulsation damper must not be twisted.  
Hold in place the valve body by means of a second wrench!**

- 2.2 Open the fuel shut-off valves.  
2.3 Fill the fuel system by means of the stand-by pump and vent it..



VM43

7500

**07**

See also: 07.15.01.nn

Spare parts list: B1.05.07.438533, B1.05.07.438510

**Time requirement:** 1 Pers./ 1,00 h

**Personnel qualification:** skilled engine hand

**Operating medium:** Heavy fuel and distillate fuel

**Maintenance:**

Replacement of the fuel pulsation dampers every 7,500 h

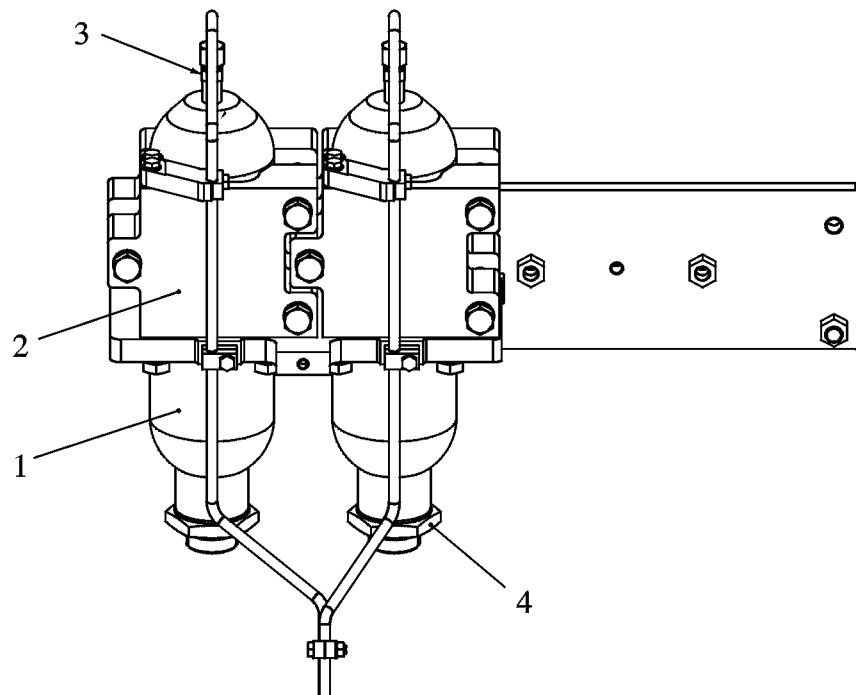
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**Procedure:**
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- 1.1 Close the fuel shut-off valves.
- 1.2 Drain the fuel distributing pipe via the corresponding leakage pipe.
- 1.3 Dismantle the leakage monitoring pipe on the fuel pulsation damper (1) (counterhold the union).
- 1.4 Loosen brackets (2). Loosen locknut (4) (right-hand thread) and dismantle fuel pulsation damper.



VM43

7500

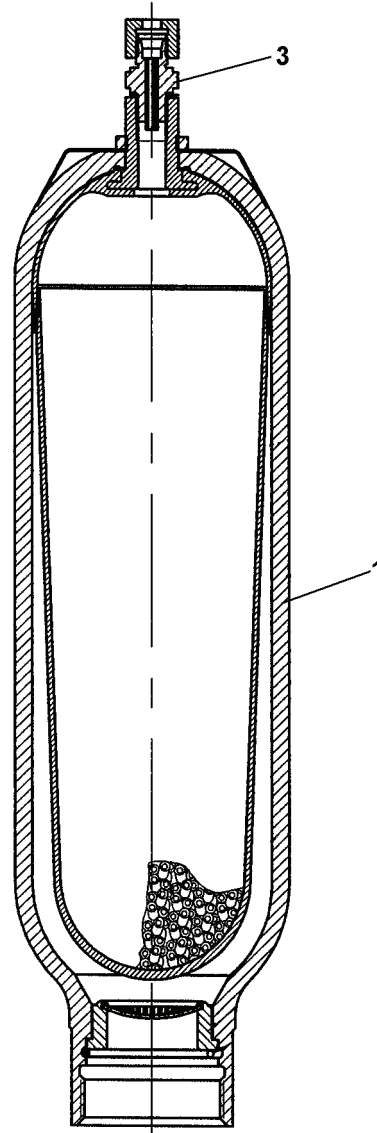
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**07**