

Date: 20.05.11  
Subject: Fuel pressure damper

Engine type: **M 43 / M 43 C / VM 43 / VM4 3C**  
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### Fuel pressure damper

The fuel low-pressure system of the M 43 engine has been further developed in order to optimize the fuel pressure pulsation induced by the injection system. By means of modified throttle screws in the fuel outlet of the injection pumps the already good pressure pulsation values (approximately half of the value of +- 10 bar required by the classification societies) have been improved to such an extent that fuel pressure dampers on the engine will not be required any more. This successful measure has already been adopted for the current M 43 C engine series.

In case of a fuel damper replacement due to maintenance or other reasons we will offer you these new throttle screws and corresponding plugs to replace a previously installed fuel pressure damper.

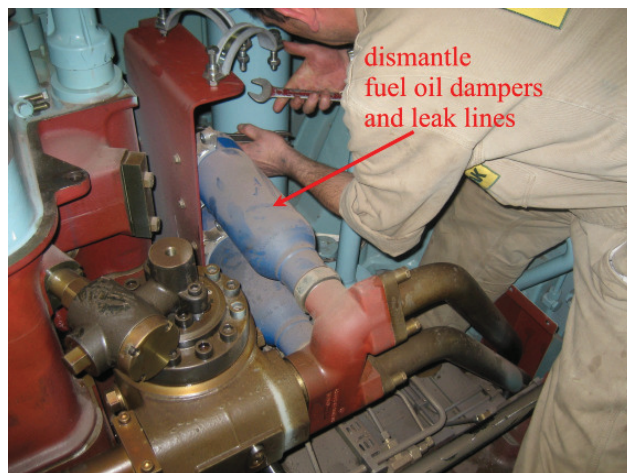
Please contact your MaK service representative to get a corresponding quotation.

Attached please find a short description of the involved work and a spare parts sheet for the new assembly. Please make sure that the new documentation is available on board and will be included in the existing documentation.

## Procedure for replacing fuel oil dampers by plugs on M43 engines.

I.

Drain the fuel oil lines of the engine.  
Dismantle both fuel oil dampers and the related leak oil lines. Scrap the parts.



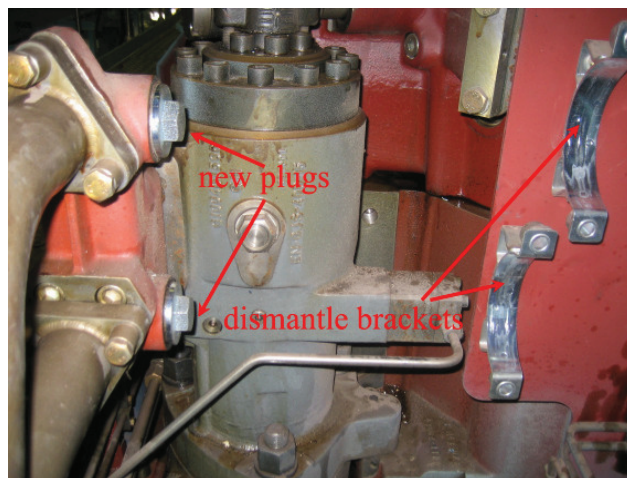
III.

Exchange the upper throttle screw marked with "OUT" by the new delivered throttle screw (433597-617), marked with "OUT" and a slot. Use a new soft iron ring (1.7033-113) and apply a torque of 60 Nm.



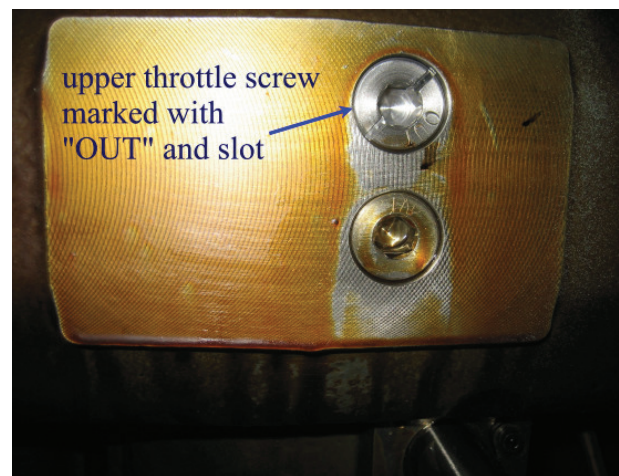
II.

Install the big plug (1.1041-616) by using the seal ring (1.7033-113). Tighten properly.



IV.

Fill the fuel system and check for leakages.



Caterpillar Confidential: Green



# MPPD

Marine and Petroleum Power Division

**Retrofit kit for fuel pulsation dampers**

M43/VM43

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POS. ITEM	BENENNUNG DESCRIPTION	STCK NUMBER	BEST.-NR PART NO.
-	UMRÜSTSATZ, VOLLST. RETROFIT KIT ASSEMBLY	1	439985 AA
1	DICHTRING JOINT RING	# 2	1.7033-113
2	VERSCHLUSSSCHRAUBE SCREW PLUG	2	1.1041-616
3	DICHTRING, 6 ZYL. JOINT RING, 6 CYL.	# 6	1.7033-113
3	DICHTRING, 7 ZYL. JOINT RING, 7 CYL.	# 7	1.7033-113
3	DICHTRING, 8 ZYL. JOINT RING, 8 CYL.	# 8	1.7033-113
3	DICHTRING, 9 ZYL. JOINT RING, 9 CYL.	# 9	1.7033-113
3	DICHTRING, 12 ZYL. JOINT RING, 12 CYL.	# 12	1.7033-113
3	DICHTRING, 16 ZYL. JOINT RING, 16 CYL.	# 16	1.7033-113
4	DROSSELSCHRAUBE, 6 ZYL. THROTTLE SCREW, 6 CYL.	6	433597-617
4	DROSSELSCHRAUBE, 7 ZYL. THROTTLE SCREW, 7 CYL.	7	433597-617
4	DROSSELSCHRAUBE, 8 ZYL. THROTTLE SCREW, 8 CYL.	8	433597-617
4	DROSSELSCHRAUBE, 9 ZYL. THROTTLE SCREW, 9 CYL.	9	433597-617
4	DROSSELSCHRAUBE, 12 ZYL. THROTTLE SCREW, 12 CYL.	12	433597-617
4	DROSSELSCHRAUBE, 16 ZYL. THROTTLE SCREW, 16 CYL.	16	433597-617

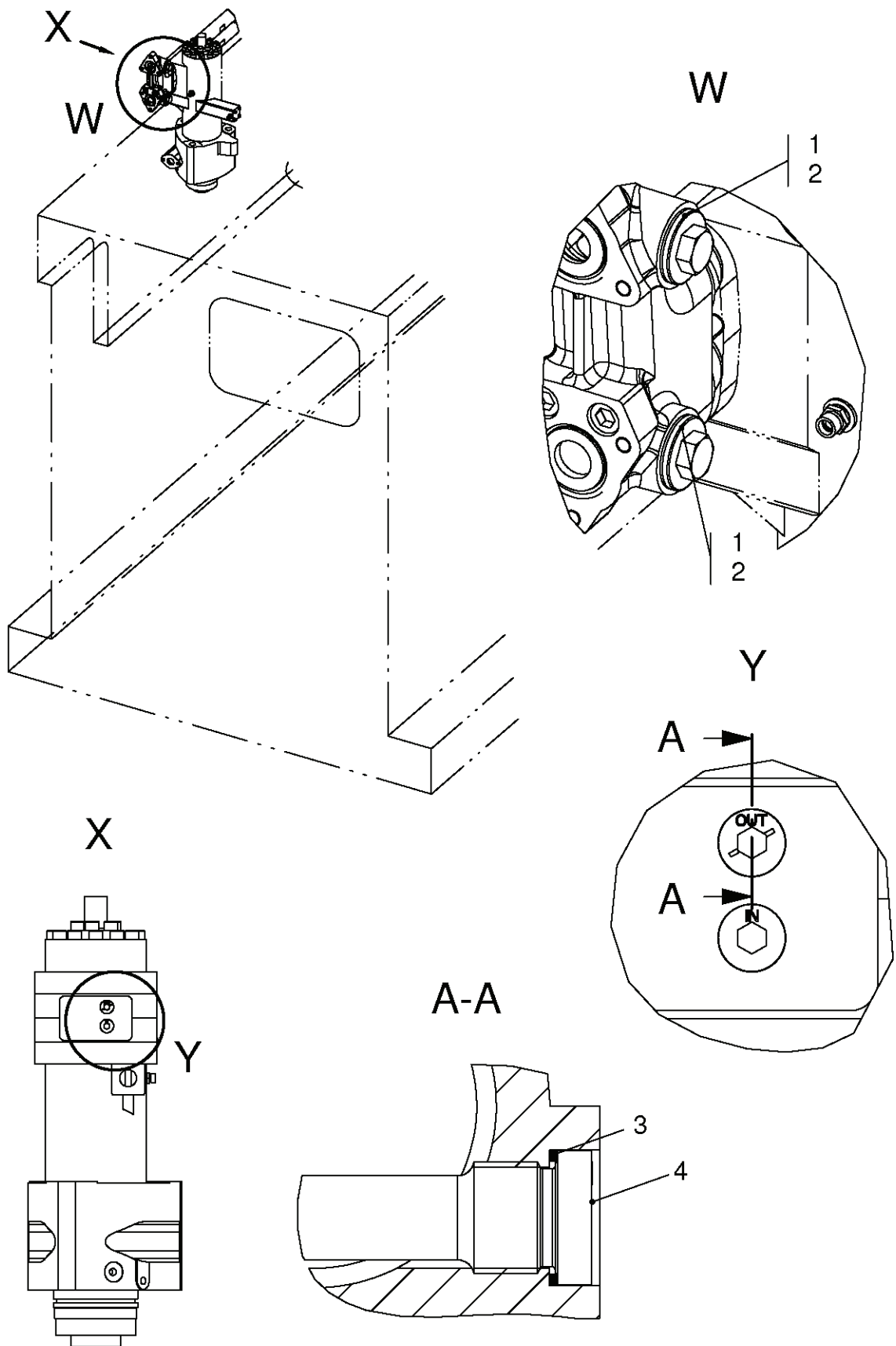
# = VERBRAUCHSTEILE  
CONSUMABLES

Jede Bestellung muß folgende Angaben enthalten: **Motor-Nr. / Ersatzteilblatt-Nr. / Bestell-Nr.**  
Each order must include the following: **Engine No./Spare parts sheet No./Part No.**

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