

# NEWS

KUD 2013-01  
29.01.2013



*Confidential –  
not for general distribution!*

## *Hako-Citymaster 1200 and 1250 Replacing Delivery Valves 00009660 Injection Pump, Yanmar Engine*

Dear Business Partners,

Our supplier, Yanmar, has informed us that the delivery valves (pressure valves) on the injection pump must be replaced in a certain number of Hako-Citymaster 1200 and 1250 vehicles. The list of vehicles concerned is provided in the Enclosure.

As the result of a production error, the delivery valves may leak. The delivery valves must be replaced on all the vehicles in question as a precautionary measure. **4 delivery valves** must be replaced on the injection pump in each vehicle.

It is necessary to order 4 delivery valves (Hako spare part number 00009660) for each vehicle. Supply is free of charge.

Approx. 45 minutes are required for the work.

Complete the retrofitting work during the next maintenance or repair order. You must personally contact and visit all your customers who complete service and maintenance work themselves.

The measure must be completed before 31. 03. 2013.

Remuneration:

Authorized dealers, Germany and abroad (all partners):

Remuneration is at a flat-rate of Euro 150.00 per individual case.

Send the fully completed warranty application containing all the necessary data to Hako Bad Oldesloe ([mmaier@hako.com](mailto:mmaier@hako.com))

Branches

Per individual case using internal order no. 601020.

Best regards

Hako GmbH  
Customer Support

pp. Christian Büsing

Enclosures

Assembly manual for installing the delivery valves

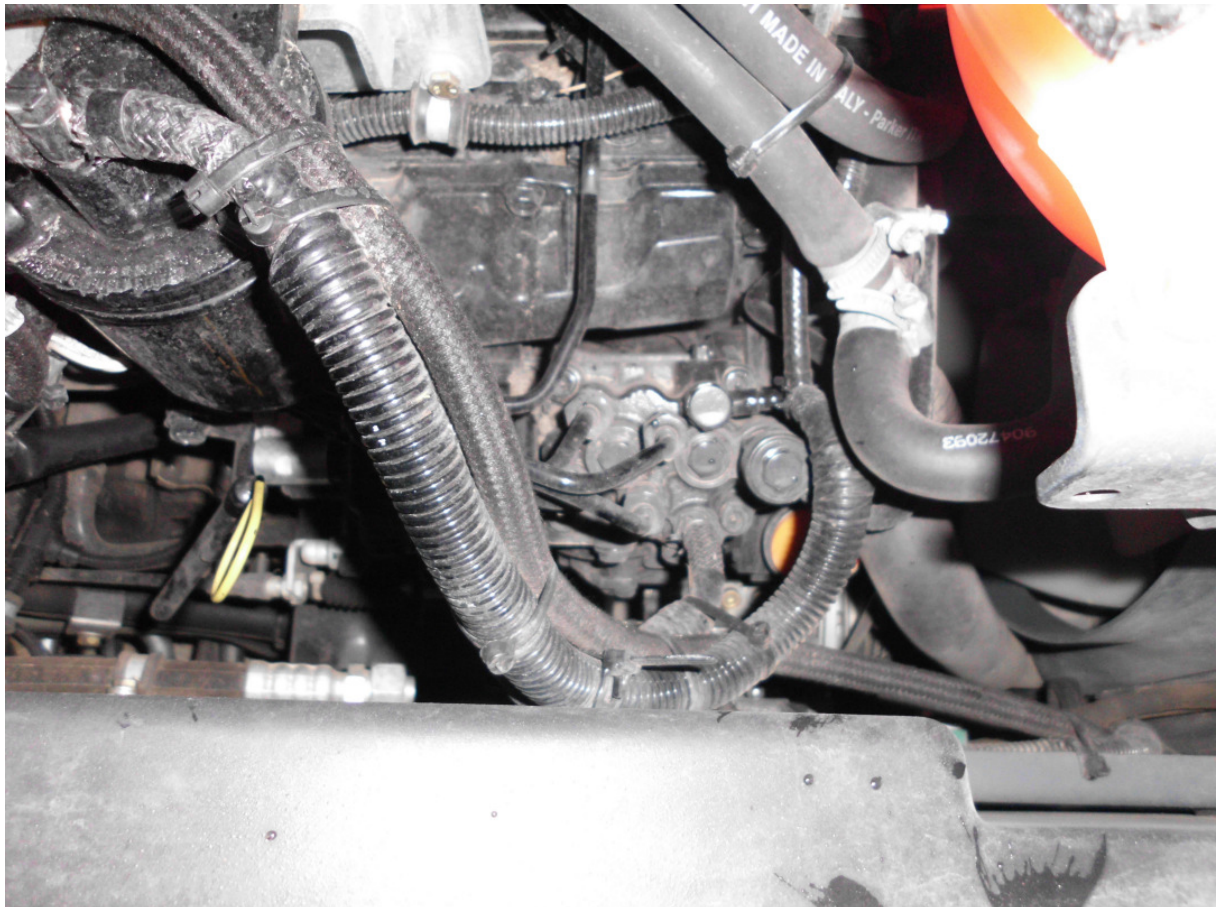
List of vehicles concerned

## Assembly Manual

Regarding the modification measures on the fuel injection pump of the Yanmar engine 4 TNV 88 BMHW according to the Yanmar Service Bulletin ISB-12-004 for the CM 1200 and CM 1250.

The list of vehicles concerned and locations is provided in the Enclosure.

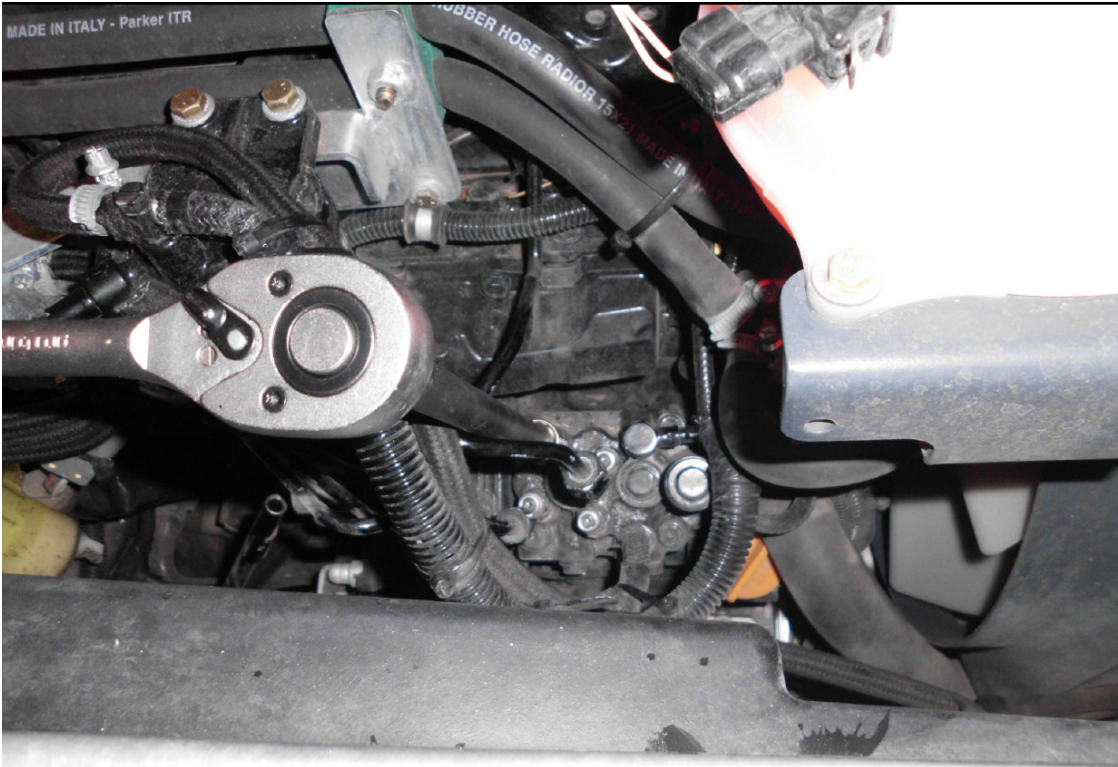
Plan view of the injection pump:



1. Disassemble the 2 holders of the fuel lines.
2. Disassemble the 4 fuel lines on the injection pump (a/f 17).
3. Push the injection pump lines away to the side so that the 4 delivery valve holders can be unscrewed (socket a/f 14).
4. Change the delivery valves.
5. Assembly is completed in the reverse sequence.

Important information: The fuel injection pump must be free of soiling so that when the delivery valves are installed, no dirt gets into the pump; if necessary, the fuel injection pump must be cleaned prior to installation!

Re. point 3: Unscrew the delivery valves.



Re. point 4: Install the delivery valves in the holders.



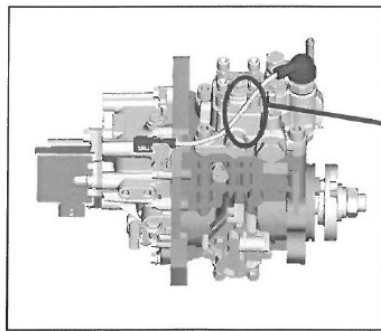


Figure 1 Fuel Pump Structure

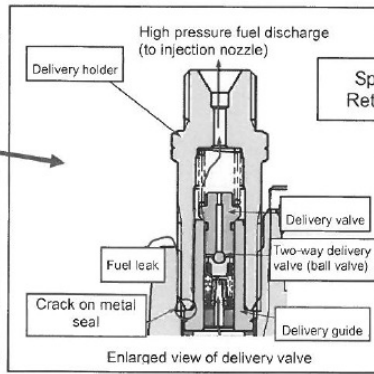


Figure 2 Fuel Leak Path

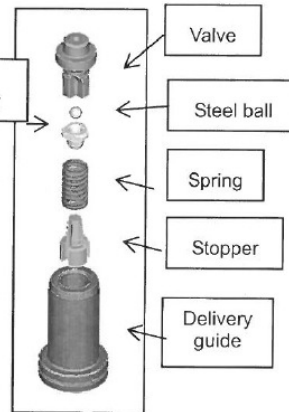


Figure 3 Delivery Mechanism

**YANMAR CO., LTD.**

Umeda Gate Tower  
1-9, Tsuruno-cho, Kita-Ku, Osaka 530-8311, JAPAN  
TEL 06 (6376) 0000

Figure 1 Fuel pump structure

Figure 2 Path of fuel leak

High pressure fuel discharge (to injection nozzle)	Hochdruck-Kraftstoffausstoß (zur Einspritzdüse)
Holder, delivery valve	Halterung, Druckhalteventile
Delivery valve	Druckhalteventil
Fuel leak	Kraftstoffleck
Two-way delivery valve (ball valve)	Zweiwegeventil (Kugelventil)
Crack in metal seal	Riss in der Metaldichtung
Delivery valve guide	Zuführung
Enlarged view of delivery valve	Vergrößerte Ansicht des Druckventils

Figure 3 Delivery mechanism

Valve	Ventil
Steel ball	Stahlkugel
Spring	Feder
Stopper	Anschlag
Delivery valve guide	Zuführung

	Pumpen Typ Pump Type	Motor Modell Engine Model	Motornummer Enginenumbe r	Ersatzteilnum mer Part number	Hako Zähl- numme r	Seriennummer / Serialnumber	Typ	Kunde / Customer
2	MP2	4TNV88-BMHV	I4452	129008-51300	1015	143322200072	CM 1250	MAS
3	MP2	4TNV88-BMHV	I4509	129008-51300	1004	143332200042	CM 1250	MAS
4	MP2	4TNV88-BMHV	I4568	129008-51300	1025	143322200142	CM 1250	Hako Polska
5	MP2	4TNV88-BMHV	I4569	129008-51300	1024	143332200122	CM 1250	Stangl
6	MP2	4TNV88-BMHV	I4655	129008-51300	9869	143312208722	CM 1200	Hako Australia
7	MP2	4TNV88-BMHV	I4657	129008-51300	9870	143312208732	CM 1200	Labor Hako S.A.
8	MP2	4TNV88-BMHV	I4816	129008-51300	9871	143312208742	CM 1200	Labor Hako S.A.
9	MP2	4TNV88-BMHV	I4822	129008-51300	9872	143312208752	CM 1200	Fa. Menzel
10	MP2	4TNV88-BMHV	I4837	129008-51300	9877	143312208802	CM 1200	Labor Hako S.A.
11	MP2	4TNV88-BMHV	I4839	129008-51300	9878	143312208812	CM 1200	N.V. HAKO-Belgium SA
12	MP2	4TNV88-BMHV	I4875	129008-51300	1006	143332200052	CM 1250	NL. Franken, Würzburger Stadtv.
13	MP2	4TNV88-BMHV	I4888	129008-51300	1007	143332200062	CM 1250	Hako Schweiz AG
14	MP2	4TNV88-BMHV	I5010	129008-51300	1020	143332200112	CM 1250	Hako Machines Limited
15	MP2	4TNV88-BMHV	I5011	129008-51300	1021	143322200112	CM 1250	Reitec Reinigungs- und
16	MP2	4TNV88-BMHV	I5019	129008-51300	8236	801012202362	CT 4200	NL Berlin, Bundeswehr
17	MP2	4TNV88-BMHV	I5036	129008-51300	1001	143332200012	CM 1250	Labor HAKO S.A.
18	MP2	4TNV88-BMHV	I5111	129008-51300	9876	143312208792	CM 1200	Labor HAKO S.A.
19	MP2	4TNV88-BMHV	I5112	129008-51300	9875	143312208782	CM 1200	HAKO Ground & Garden A
20	MP2	4TNV88-BMHV	I5187	129008-51300	1018	143322200102	CM 1250	Labor HAKO S.A.
21	MP2	4TNV88-BMHV	I5188	129008-51300	1017	143332200092	CM 1250	DOGUS Teks. Ve Tem. Mak
22	MP2	4TNV88-BMHV	I5228	129008-51300	1012	143332200072	CM 1250	HAKO Danmark A/S
23	MP2	4TNV88-BMHV	I5229	129008-51300	1013	143332200082	CM 1250	Labor HAKO S.A.
24	MP2	4TNV88-BMHV	I6227	129008-51300	1016	143322200082	CM 1250	Hako Australia Pty Limited
25	MP2	4TNV88-BMHV	I6258	129008-51300	1019	143332200102	CM 1250	Hako Machines Limited
26	MP2	4TNV88-BMHV	I6294	129008-51300	9868	143311208712	CM 1200	NL- Hannover
27	MP2	4TNV88-BMHV	I6329	129008-51300	9863	143312208662	CM 1200	JUNGBLUTH
28	MP2	4TNV88-BMHV	I6365	129008-51300	1010	143322200042	CM 1250	HAKO Australia Pty. Ltd.
29	MP2	4TNV88-BMHV	I6380	129008-51300	1011	143322200052	CM 1250	HAKO Espana S.A.
30	MP2	4TNV88-BMHV	I6407	129008-51300	9882	143312208852	CM 1200	HAKO Machines Limited
31	MP2	4TNV88-BMHV	I6415	129008-51300	9880	143311208832	CM 1200	Clean Trade Ltd.
32	MP2	4TNV88-BMHV	I6464	129008-51300	9873	143312208762	CM 1200	HAKO Ground & Garden AB
33	MP2	4TNV88-BMHV	I6469	129008-51300	9874	143312208772	CM 1200	HAKO Ground & Garden AB
36	MP2	4TNV88-BMHV	I6562	129008-51300	1008	143322200022	CM 1250	Hako GmbH, Schwabach
37	MP2	4TNV88-BMHV	I6569	129008-51300	1009	143322200032	CM 1250	Hako Schweiz AG

38	MP2	4TNV88-BMHV	I6592	129008-51300	9883	143312208862	CM 1200	Stangl Reinigungstechnik GmbH
39	MP2	4TNV88-BMHV	I6602	129008-51300	9884	143312208872	CM 1200	Stangl Reinigungstechnik GmbH
41	MP2	4TNV88-BMHV	I6661	129008-51300	1003	143332200032	CM 1250	ELAG
42	MP2	4TNV88-BMHV	I6681	129008-51300	9881	143311208842	CM 1200	Clean Trade Ltd.
43	MP2	4TNV88-BMHV	I6688	129008-51300	8235	801012202352	CT 4200	NL- HH, Hochschule Osnabrück
45	MP2	4TNV88-BMHV	I6717	129008-51300	9867	143311208702	CM 1200	NL Rhein- Ruhr, Kleinert Gebäuder.
46	MP2	4TNV88-BMHV	I6754	129008-51300	9885	143312208882	CM 1200	Stangl Reinigungstechnik GmbH
47	MP2	4TNV88-BMHV	I6759	129008-51300	9879	143312208822	CM 1200	Heunsch, Erfurth