

Inhaltsverzeichnis

Erstellungsdatum: 20090129

Dokumentliste:

Piston

Service Bulletin

**1. HD 9/20, HD 10/25,
HD 13/18
Piston (4.553-279 /-280 /-282)**

**Service Bulletin
No. 2008-010 dated 06.08.2008
Classification level III**

- Problem:** In some units, piston shoes have come away from the piston.
- Cause:** In some cases the piston shoe was inadequately pressed on.
- Solution:** The assembly tools in the production process have been revised to guarantee that the piston shoes are adequately pressed onto the piston.



Fig. 1: Piston with piston shoe pressed on

- Note 1:** The pistons have been fitted in these units,
- HD 9/20 1.524-4xx
 - HD 10/25 1.286-xxx
 - HD 13/18 1.292-xxx
- with pump set, produced between 01.09.07 and 31.12.2007. This corresponds to 09/07 to 12/07 on the motor nameplate, see Fig. 2.

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Fig. 2: Motor nameplate with production date (example 05/08)

Note 2:

If damage has occurred, replace piston and seals. Check piston guide and swash plate and replace if necessary.

If there is a lot of metal wear debris in the oil, the motor has to be cleaned of swarf. After finishing the repairs and a subsequent test run, it is advisable to change the oil again.

5. Various HD and HDS units Valve (4.580-295 /-379)

International Service Information
No. 2004-006 dated 28.01.2004
Classification Level IV

Note:

Tests have shown that the conical valves have several advantages over the flat valves. Therefore, the flat suction and pressure valve (4.580-379) is no longer displayed as a spare part in the Disis. In future only the conical valve (4.580-295) should be used as a spare part.

Please note!

For a long time only conical valves have been used in series production. Previously the flat valve was offered as a spare part according to Disis.



4580295.jpg

On left:
Conical valve (4.580-295)

Advantages:
Long service life, quiet, good flow properties.

Disadvantage:
Less suitable as just a non-return valve.

On right:
Flat valve (4.580-379)

Advantage:
Very suitable as just a non-return valve.

Disadvantage:
Loud, low flow rate, short service life, expensive production.

**1.) HD 10/25 (1.286-xxx)
HD 13/18 (1.292-xxx)****Contactor 6.632-334 / -356
PCB 6.682-653 / -672/-801/-848****Service Bulletin
No. 2006-027 dated 02.08.2006
Classification level III**

Problem: In units HD 10/22, 10/25, 3.5/30 Ea, 4.5/32 Eb, 4.5/32 Ec, Delaval C 2450, HD 13/15 and 13/18 it is possible for the contactor, PCB and transformer to fail.

Cause: Too high idle voltage in the transformer can damage the PCB, resulting in uncontrolled opening and closing of the contactor contacts. This can cause the contacts to burn.

Solution: When breakdown case occurs, a stronger transformer is fitted depending on the version of the unit.

Transformer (old)	Transformer (new)
6.622-252	6.622-277
6.622-254	6.622-278
6.622-257	6.622-279
6.622-270	6.622-280

The larger dimensions of the new transformer mean that a new electrical box is required. Corresponding sets are provided for this purpose.

A set consists of:

- Electrical box lower part, new
- Electrical box cover, new
- Transformer, new
- Fastening screw part no. 6.303-328 for transformer
- Safety warning 5.388-512

In breakdown case the following parts are to be used, depending on the damage (see following table):

- Defective contactor >> set + contactor + PCB
- PCB defective >> set + PCB
- Transformer defective >> set
- Electrical box cover part defective >> set
- Electrical box lower part defective >> set

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The following unit versions can be affected (see table "up to serial number").
The part numbers of the PCB, contactor and set are shown accordingly.

Order No.	Unit	up to serial number	PCB	Contactor	Set
1.286-101	HD 10/25 EU	50256	6.682-653	6.632-356	2.884-957
1.286-104	HD 10/25 GB	17858	6.682-653	6.632-356	
1.286-108	HD 10/25 VEX	42165	6.682-653	6.632-356	
1.286-201	HD 10/25 Plus EU-I	48385	6.682-653	6.632-356	
1.286-501	HD 10/25 Plus EU	46543	6.682-653	6.632-356	
1.286-505	HD 10/25 EU	41699	6.682-653	6.632-356	
1.286-506	DELAVAL C 2400	10058	6.682-653	6.632-356	
1.286-102	HD 10/25 EU-II	41593	6.682-672	6.632-356	2.884-958
1.286-106	HD 10/22 JP	41793	6.682-801	6.632-356	
1.286-107	HD 10/22 JP	41817	6.682-801	6.632-356	
1.286-109	HD 10/25 VEX	42846	6.682-672	6.632-356	
1.286-202	HD 10/25 Plus EU-II	11101	6.682-672	6.632-356	
1.286-502	HD 10/25 PL EU	41669	6.682-672	6.632-356	
1.286-503	HD 10/22 JP	41644	6.682-801	6.632-356	
1.286-504	HD 10/22 JP	41739	6.682-801	6.632-356	
1.286-105	HD 10/25	42416	6.682-848	6.632-356	2.884-959
1.286-113	HD 4.5/32 Ec	10009	6.682-848	6.632-356	2.884-960
1.286-110	HD 3.5/30 Ea	41607	6.682-848	6.632-334	2.884-961
1.286-112	HD 4.5/32 Eb	10009	6.682-848	6.632-334	

Order No.	Unit	up to serial number	PCB	Contactor	Set
1.292-101	HD 13/18 Plus EU	112136	6.682-653	6.632-356	2.884-957
1.292-501	HD 13/18 Plus EU-I	16743	6.682-653	6.632-356	
1.292-505	DELAVAL C 2450	10055	6.682-653	6.632-356	
1.292-102	HD 13/18 Plus EU-II	19950	6.682-672	6.632-356	2.884-958
1.292-103	HD 13/15 JP	13841	6.682-801	6.632-356	
1.292-104	HD 13/15 JP	13910	6.682-801	6.632-356	
1.292-502	HD 13/18 PL EU	12970	6.682-672	6.632-356	

In breakdown case, these units are modified according to the instructions given on the following pages.

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HD 13/18 (1.292-xxx)**

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Instructions:

We recommend the following procedure for modifying the electrical box. Please read these instructions through carefully before starting work.

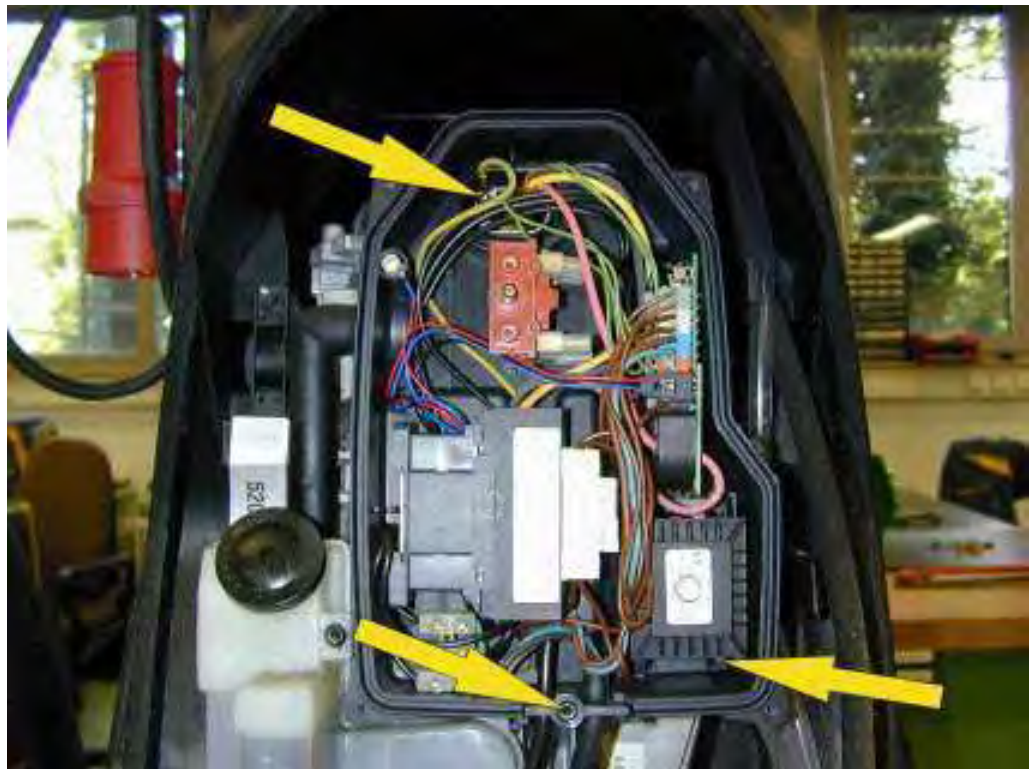


Fig. 1

Caution:

The screw for the earth cable can fall into the motor; we therefore recommend that the unit is positioned vertically.

- Switch the unit off and disconnect the mains plug
- Remove the unit cover, remove the electrical box cover
- Remove the marked screws at the electrical box lower part
 1. screw from strain relief
 2. screw from transformer
 3. screw for fastening the earth cable

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Fig. 2

- Take the electrical components out carefully
- Disconnect the contactor (pink T3, yellow T2, black T1)
- Thread the pink cable through the PCB
- Carefully pull out the control lamp

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Fig. 3

- Disconnect the motor thermal contact (2x green cable) at the PCB.



Fig. 4

- Dismantle the old version of the electrical box lower part (screws as shown by arrows). The seal between motor and the electrical box lower part can be used again.
- Fit the new electrical box lower part.
- When fitting the part, make sure that the seal between the motor and the the electrical box lower part fits correctly.

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Fig. 5: Electrical box with **new** transformer



Fig. 6: Electrical box with **old** transformer

Caution:

Use the screw contained in the set for fastening the new transformer. The new screw 6.303-328 (3x12 mm) is smaller in size than the old screw.

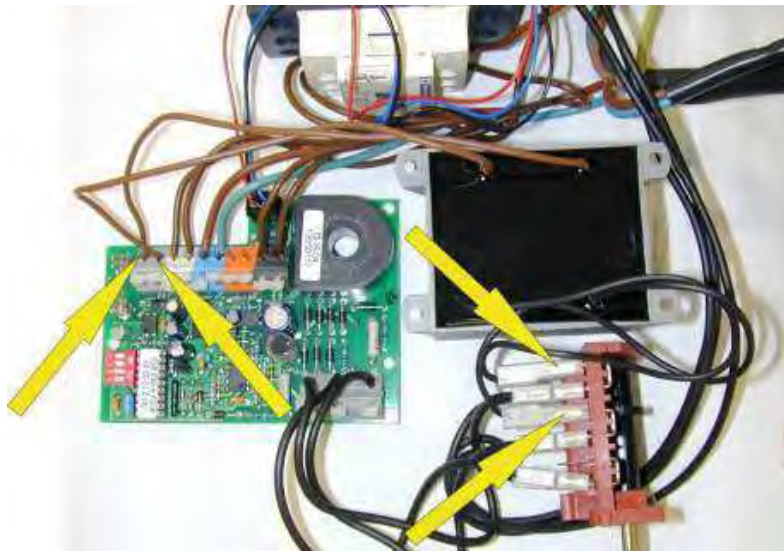


Fig. 7

Disconnect the old transformer and connect the new one. There is no terminal configuration for the two brown and two black cables.

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Fig. 8

Fit the electrical components in the new electrical box lower part

- Insert the cables and fit the strain relief
- Fit the cable terminal in the electrical box lower part
- Fasten the transformer in the electrical box lower part with screw 6.303-328

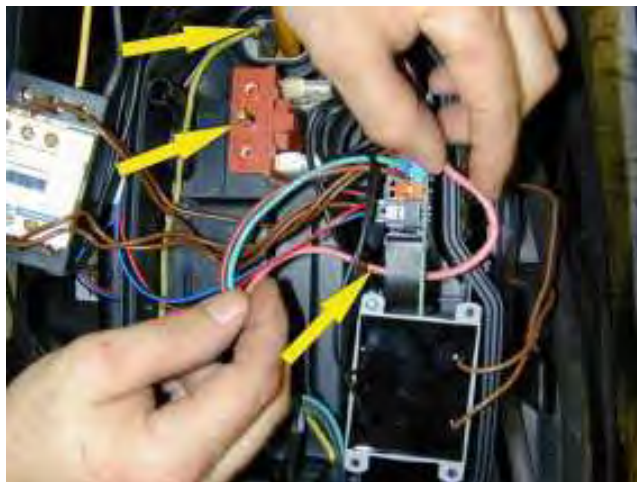


Fig. 9

- Fasten the earth cable. Before positioned the unit vertically.
- Fit ON/OFF Switch
- Put pink cable through the PCB

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Fig. 10

Connect the motor thermal contact (2x green cable) to the PCB again.

No terminal configuration is specified here: the two cables can even be connected the other way round!

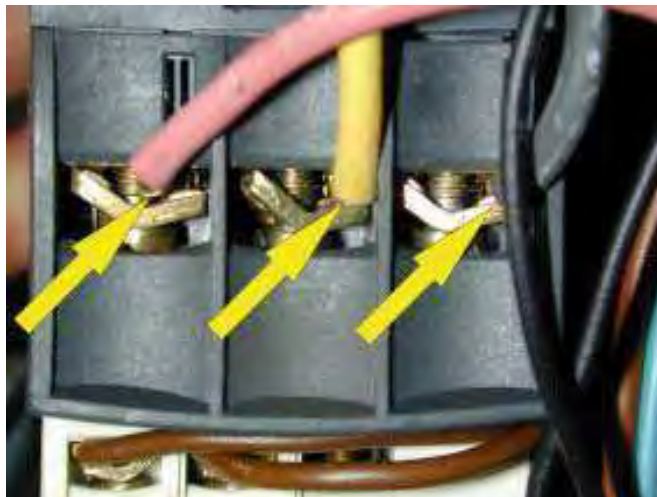


Fig. 11

Connect up the contactor again (T3 pink, T2 yellow, T1 black)

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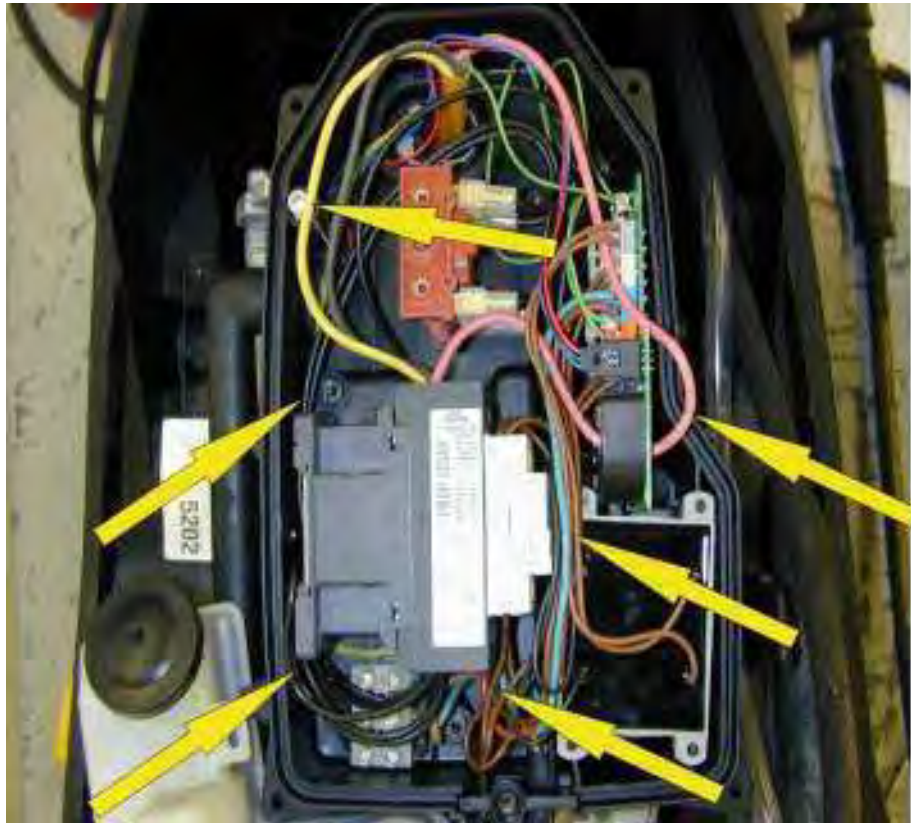


Fig. 12

- Fit the contactor in the electrical box lower part. Caution, retainer plates have to be inserted at the corresponding points
- Insert the control lamp
- Wiring as marked
- Caution when fitting the electrical box cover on the electrical box lower part: there is a risk of the (pink) cable getting crushed in the area of the PCB

Caution:

Make sure that no cable is jammed under the contactor when wiring the cables.

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Fig. 13 Mounting parts Electrical box cover as in set

Fig. 13 shows the change in the electrical box cover marked with an arrow. This holder has been moved 20 mm to the right. The contactor is now held at the base so that it can no longer bend.

Electrical box cover is without mounting parts. Please take the following parts from the old cover.

These parts are also available as spares:

- 6.641-446 2 x rubber grommet for contactor and transformer holder
- 6.651-506 1 x oval head housing for control lamp
- 5.363-616 1 x seal for rotating handle
- 5.321-719 1 x rotating handle
- 7.303-109 4 x screws for electrical box cover (not shown)

Caution: Press the oval head housing carefully out to the electrical box cover.

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Fig.14

- Caution:** Adhere safety warning 5.388-512 to the new electrical box cover.
This adhesive warning is included in the set; it is absolutely vital that it is adhered to the provided panel on the new electrical box cover.
- Caution:** An electrical test as per VDE 701 must be carried out every time after the electrical box has been modified (e.g. with electrical Metra tester 6.803-034).
This consists of an insulation and earth conductor test.

2.) HD 10/21, 10/23
E-box cover 5.063-960
E-box lower part 5.060-859

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Modifications: The electrical box cover and electrical box lower part have been modified in the unit families named below HD 10/21 (1.286-xxx) and HD 10/23 (1.286-xxx).

The corresponding part numbers (old/new) are shown in the table.

Order No.	Unit	Electrical box old	Electrical box new	Cover old	Cover new
1.286-114	HD 10/23 MX	5.060-859	5.061-405	5.063-960	5.064-234
1.286-320	HD 10/21 EU	5.060-859	5.061-405	5.063-960	5.064-234
1.286-321	HD 10/21 KAP	5.060-859	5.061-405	5.063-960	5.064-234
1.286-322	HD 10/21 KAP	5.060-859	5.061-405	5.063-960	5.064-234
1.286-323	HD 10/21 Plus EU-I	5.060-859	5.061-405	5.063-960	5.064-234
1.286-324	HD 10/21 Plus EU-I	5.060-859	5.061-405	5.063-960	5.064-234
1.286-325	HD 10/21 AR	5.060-859	5.061-405	5.063-960	5.064-234
1.286-326	HD 10/21 Plus EU-I	5.060-859	5.061-405	5.063-960	5.064-234
1.286-327	HD 10/21 Plus EU-I	5.060-859	5.061-405	5.063-960	5.064-234