



# 5.0.5 Drive calibration

## 5.0.5 Drive calibration



The drive control is a Bosch-Rexroth system. To diagnose, parameterize and also for the software update Bodas Version 3.5 (04039640000) is needed. For the communication between machine (controller) and computer with diagnose software the Hako Interface is needed, either the Sontheim CAN-USB (03501750), or the Sontheim CAN-FOX (03502430) and the OBD II cable (03502750). To Bodas belongs a dongle. This one have to be plugged in an USB-Port of the computer. If the drive controller is changed or a software update is available, an implementing procedure have to be carried out. To this procedure belongs a drive controller adjustment. Therefore the hydraulic oil temperature have to be at least 40°C (check with Hako-Diagnose). Furthermore the CM1600 have to be jacked at one side (recommended is the right side, cause the wheels have to be seen during the machine is operated with the drive pedal). For save conditiones use the lock-pin at the articulated joint and secure the machine against rolling away (**parking brake need to be open!**). The engine have to be stopped!



# 5.0.5 Drive calibration



BODAS-service 3.5 (BOSCH Rexroth AG)

File Actions View Tools Help

Scan Open Save Preview Print Break Get data Password PAR→PC EPR→PC EPR→ECU Save Default Reinit Reset Compare Help

**Available ECUs**

**RC12-10/30** SN: 00102924  
HAK08878 V4.01 HwCode: 0002D6  
No errors detected

- Parameter
- Processdata
- I/O Status view
- Custom view
- Error messages

**Rexroth Bosch Group**

**Parameter**  
Parameter values are displayed and can be edited.

Parameter Learning curves

**1.7 Konfiguration II**

1.7.1 Fahrpedalauswahl	Pedal ohne Mikros.	Value: 2	STD
1.7.2 Bremspedalauswahl	Pedal ohne Mikros.	Value: 2	STD
1.7.3 Fahrpedal 1 - K1 Min-Max	Minimum: 0.51 V, Maximum: 4.50 V, Current: ---	Accept, Calibrate	STD
1.7.4 Fahrpedal 1 - K2 Max-Min	Minimum: 0.52 V, Maximum: 4.51 V, Current: ---	Accept, Calibrate	STD
1.7.5 Fahrpedal 2 - K1 Rückw.Min-Max	Minimum: 0.52 V, Maximum: 4.51 V, Current: ---	Accept, Calibrate	STD
1.7.6 Fahrpedal 2 - K2 Rückw.Max-Min	Minimum: 0.51 V, Maximum: 4.50 V, Current: ---	Accept, Calibrate	STD
1.7.7 Bremspedal	Minimum: 0.53 V, Maximum: 3.65 V, Current: ---	Accept, Calibrate	STD

Show only menus Show groups Show all parameters Write for filtering Update interval ms

Connected with: RC12-10/30 + HAK08878 V4.01 + Sontheim CANfox

In the menu „1.7 Konfiguration II“

In the field „1.7.1 Fahrpedalauswahl“ choose “Pedal ohne Mikro Schalter“

In the field „1.7.2 Bremspedalauswahl“ choose “Pedal ohne Mikro Schalter“.

Press “Save” to transfer the values into the control unit.

# 5.0.5 Drive calibration



BODAS-service 3.5 (BOSCH Rexroth AG)



File Actions View Tools Help



**Available ECUs**

**RC12-10/30** SN: 00102924  
HAK08878 V4.01 HwCode: 0002D6  
**Errors detected**

- Parameter
- Processdata
- I/O Status view
- Custom view
- Error messages**

In the menu „1.7 Konfiguration II“

In the field „1.7.3 Fahrpedalauswahl 1 – K 1“

1. Activate calibration.
2. Forward pedal in neutral position  
Press the button „**Set min. value**“
3. Forward pedal fully pushed down.  
Press the button „**Set max. value**“

**Parameter**  
Parameter values are displayed and can be edited.

Parameter Learning curves

**1.7 Konfiguration II**

1.7.1 Fahrpedalauswahl Pedal ohne Mikros. Value: 2 [STD]

1.7.2 Bremspedalauswahl Pedal ohne Mikros. Value: 2 [STD]

1.7.3 Fahrpedal 1 - K1 Min-Max	Minimum 0.51 V	Maximum 4.50 V	Current 4.50 V	Set max value	Cancel	[STD]
1.7.4 Fahrpedal 1 - K2 Max-Min	Minimum 0.25 V	Maximum 4.73 V	Current ---	Accept	Calibrate	[STD]
1.7.5 Fahrpedal 2 - K1 Rückw.Min-Max	Minimum 0.25 V	Maximum 4.73 V	Current ---	Accept	Calibrate	[STD]
1.7.6 Fahrpedal 2 - K2 Rückw.Max-Min	Minimum 0.25 V	Maximum 4.73 V	Current ---	Accept	Calibrate	[STD]
1.7.7 Bremspedal	Minimum 0.20 V	Maximum 3.78 V	Current ---	Accept	Calibrate	[STD]

Show only menus Show groups Show all parameters Write for filtering Update interval ms

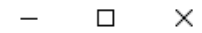
Connected with:

RC12-10/30 + HAK08878 V4.01 + Sontheim CANfox

# 5.0.5 Drive calibration



BODAS-service 3.5 (BOSCH Rexroth AG)



File Actions View Tools Help



**Available ECUs**

**RC12-10/30** SN: 00102924  
 HAK08878 V4.01 HwCode: 0002D6  
Errors detected

- Parameter
- Processdata
- I/O Status view
- Custom view
- Error messages

In the menu „1.7 Konfiguration II“

In the field „1.7.4 Fahrpedalauswahl 1 – K 2“

1. Activate calibration.
2. Forward pedal in neutral position  
Press the button „**Set max. value**“
3. Forward pedal fully pushed down.  
Press the button „**Set min. value**“

**Rexroth**  
Bosch Group

**Parameter**  
Parameter values are displayed and can be edited.

Parameter Learning curves

**1.7 Konfiguration II**

1.7.1 Fahrpedalauswahl	Pedal ohne Mikros.	Value:	2	STD
1.7.2 Bremspedalauswahl	Pedal ohne Mikros.	Value:	2	STD
1.7.3 Fahrpedal 1 - K1 Min-Max	Minimum: 0.51 V, Maximum: 4.50 V	Current: ---	Accept, Calibrate	STD
1.7.4 Fahrpedal 1 - K2 Max-Min	Minimum: 0.52 V, Maximum: 4.50 V	Current: 0.52 V	Set min value, Cancel	STD
1.7.5 Fahrpedal 2 - K1 Rückw.Min-Max	Minimum: 0.25 V, Maximum: 4.73 V	Current: ---	Accept, Calibrate	STD
1.7.6 Fahrpedal 2 - K2 Rückw.Max-Min	Minimum: 0.25 V, Maximum: 4.73 V	Current: ---	Accept, Calibrate	STD
1.7.7 Bremspedal	Minimum: 0.20 V, Maximum: 3.78 V	Current: ---	Accept, Calibrate	STD

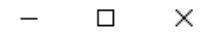
Show only menus Show groups Show all parameters Write for filtering Update interval ms

Connected with: RC12-10/30 + HAK08878 V4.01 + Sontheim CANfox

# 5.0.5 Drive calibration



BODAS-service 3.5 (BOSCH Rexroth AG)



File Actions View Tools Help



**Available ECUs**

**RC12-10/30** SN: 00102924  
 HAKO8878 V4.01 HwCode: 0002D6  
Errors detected

- Parameter
- Processdata
- I/O Status view
- Custom view
- Error messages

Im the menu „1.7 Konfiguration II“

In the field 1“.7.5 Fahrpedalauswahl 2 – K 1“

1. Activate calibration.
2. Backward pedal in neutral position  
Press the button „**Set min. value**“
3. Backward pedal fully pushed down.  
Press the button „**Set max. value**“

**Rexroth**  
Bosch Group

**Parameter**  
Parameter values are displayed and can be edited.

Parameter Learning curves

**1.7 Konfiguration II**

1.7.1 Fahrpedalauswahl	Pedal ohne Mikros.	Value:	2	STD
1.7.2 Bremspedalauswahl	Pedal ohne Mikros.	Value:	2	STD
1.7.3 Fahrpedal 1 - K1 Min-Max	Minimum: 0.51 V, Maximum: 4.50 V, Current: ---	Accept	Calibrate	STD
1.7.4 Fahrpedal 1 - K2 Max-Min	Minimum: 0.52 V, Maximum: 4.50 V, Current: ---	Accept	Calibrate	STD
1.7.5 Fahrpedal 2 - K1 Rückw.Min-Max	Minimum: 0.51 V, Maximum: 4.51 V, Current: 4.51 V	<b>Set max value</b>	Cancel	STD
1.7.6 Fahrpedal 2 - K2 Rückw.Max-Min	Minimum: 0.25 V, Maximum: 4.73 V, Current: ---	Accept	Calibrate	STD
1.7.7 Bremspedal	Minimum: 0.20 V, Maximum: 3.78 V, Current: ---	Accept	Calibrate	STD

Show only menus Show groups Show all parameters Write for filtering Update interval ms

RC12-10/30 + HAKO8878 V4.01 + Sontheim CANfox

Connected with:

## 5.0.5 Drive calibration



BODAS-service 3.5 (BOSCH Rexroth AG)

File Actions View Tools Help

Scan Open Save Preview Print Break Get data Password PAR→PC EPR→PC EPR→ECU Save Default Reinit Reset Compare Help

**Available ECUs**

**RC12-10/30** SN: 00102924  
HAK08878 V4.01 HwCode: 0002D6  
**Errors detected**

▶ **Parameter**

▶ Processdata

▶ I/O Status view

▶ Custom view

▶ **Error messages**

In the menu „1.7 Konfiguration II“

In the field „1.7.6 Fahrpedalauswahl 2 – K 2“

1. Activate calibration.
2. Backward pedal in neutral position  
Press the button „**Set max. value**“
3. Backward pedal fully pushed down.  
Press the button „**Set min. value**“

Press “Save” to transfer the values into the control unit.

**Parameter**  
Parameter values are displayed and can be edited.

Parameter Learning curves

**1.7 Konfiguration II**

1.7.1 Fahrpedalauswahl	Pedal ohne Mikros.	Value:	2	STD
1.7.2 Bremspedalauswahl	Pedal ohne Mikros.	Value:	2	STD
1.7.3 Fahrpedal 1 - K1 Min-Max	Minimum	Maximum	Current	Accept Calibrate STD
	0.51 V	4.50 V	---	
1.7.4 Fahrpedal 1 - K2 Max-Min	Minimum	Maximum	Current	Accept Calibrate STD
	0.52 V	4.50 V	---	
1.7.5 Fahrpedal 2 - K1 Rückw.Min-Max	Minimum	Maximum	Current	Accept Calibrate STD
	0.51 V	4.51 V	---	
1.7.6 Fahrpedal 2 - K2 Rückw.Max-Min	Minimum	Maximum	Current	Set min value Cancel STD
	0.51 V	4.50 V	0.51 V	
1.7.7 Bremspedal	Minimum	Maximum	Current	Accept Calibrate STD
	0.20 V	3.78 V	---	

Show only menus Show groups Show all parameters Write for filtering Update interval ms

Connected with: RC12-10/30 + HAK08878 V4.01 + Sontheim CANfox

## 5.0.5 Drive calibration



BODAS-service 3.5 (BOSCH Rexroth AG)

File Actions View Tools Help

Scan Open Save Preview Print Break Get data Password PAR→PC EPR→PC EPR→ECU Save Default Reinit Reset Compare Help

**Available ECUs**

**RC12-10/30** SN: 00102924  
HAKO8878 V4.01 HwCode: 0002D6  
**Errors detected**

Parameter  
Processdata  
I/O Status view  
Custom view  
Error messages

In the menu „1.7 Konfiguration II“

In the field „1.7.7 Bremspedal“

1. Activate calibration.
2. Break pedal in neutral.  
Press the button „**Set min. value**“
3. Break pedal fully pushed down.  
Press the button „**Set max. value**“  
If the message „**Voltage to high**“ occurs  
=> carry out procedur on next page 26  
(in 1.7.8)

Otherwise save it by clicking the “Save” button

**Parameter**  
Parameter values are displayed and can be edited.

Parameter Learning curves

Parameter	Minimum	Maximum	Current	Buttons	STD
1.7.2 Bremspedalauswahl	Pedal ohne Mikros.		Value: 2	Accept	STD
1.7.3 Fahrpedal 1 - K1 Min-Max	0.51 V	4.50 V	---	Accept Calibrate	STD
1.7.4 Fahrpedal 1 - K2 Max-Min	0.52 V	4.50 V	---	Accept Calibrate	STD
1.7.5 Fahrpedal 2 - K1 Rückw.Min-Max	0.51 V	4.51 V	---	Accept Calibrate	STD
1.7.6 Fahrpedal 2 - K2 Rückw.Max-Min	0.51 V	4.50 V	---	Accept Calibrate	STD
<b>1.7.7 Bremspedal</b>	0.52 V	4.19 V	4.19 V	<b>Set max value</b> Cancel	STD
1.7.8 Auflösung Kalib Bremspedal	2000 2500 3000 3500 4000 4500 5000		4,511 mV		STD

1.8 Diag Geschw Sensoren

Show only menus Show groups Show all parameters Write for filtering Update interval ms

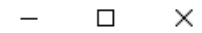
Connected with: RC12-10/30 + HAKO8878 V4.01 + Sontheim CANfox



# 5.0.5 Drive calibration



BODAS-service 3.5 (BOSCH Rexroth AG)



File Actions View Tools Help



**Available ECUs**

**RC12-10/30** SN: 00102924  
HwCode: 0002D6  
HAKO8878 V4.01 **Errors detected**

- Parameter
- Processdata
- I/O Status view
- Custom view
- Error messages

Only if calibration failure **“voltage to high” !!!**

In the field „1.7.8 Auflösung Kalib Bremspedal“ change the value to 5000 setzen and press the button „Save“

Then reset controller by the button „Reset“

After it carry out procedure on Page 25 ( 1.7.7 Kalibrieren) again

**Parameter**  
Parameter values are displayed and can be edited.

Parameter Learning curves

1.7.2 Bremspedalauswahl	Pedal ohne Mikros.		Value:	2	STD			
1.7.3 Fahrpedal 1 - K1 Min-Max	Minimum	Maximum	Current	Accept	Calibrate			
	0.51 V	4.50 V	---		STD			
1.7.4 Fahrpedal 1 - K2 Max-Min	Minimum	Maximum	Current	Accept	Calibrate			
	0.52 V	4.50 V	---		STD			
1.7.5 Fahrpedal 2 - K1 Rückw.Min-Max	Minimum	Maximum	Current	Accept	Calibrate			
	0.51 V	4.51 V	---		STD			
1.7.6 Fahrpedal 2 - K2 Rückw.Max-Min	Minimum	Maximum	Current	Accept	Calibrate			
	0.51 V	4.50 V	---		STD			
1.7.7 Bremspedal	Minimum	Maximum	Current	Accept	Calibrate			
	0.52 V	4.19 V	---		STD			
1.7.8 Auflösung Kalib Bremspedal				4,500	mV			
	2000	2500	3000	3500	4000	4500	5000	STD

**1.8 Diag Geschw Sensoren**

Show only menus Show groups Show all parameters Write for filtering Update interval ms

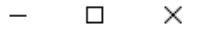
Connected with: RC12-10/30 + HAKO8878 V4.01 + Sontheim CANfox



# 5.0.5 Drive calibration



BODAS-service 3.5 (BOSCH Rexroth AG)



File Actions View Tools Help

Scan Open Save Preview Print Break Get data Password PAR→PC EPR→PC EPR→ECU Save Default Reinit Reset Compare Help

### Available ECUs

**RC12-10/30** SN: 00102924  
 HAK08878 V4.01 HwCode: 0002D6  
**Errors detected**

- ▶ Parameter
- ▶ Processdata
- ▶ I/O Status view
- ▶ Custom view
- ▶ **Error messages**

Delete all errors before you start the drive calibration.

Delete active and saved errors



Connected with:

### Error messages



Overview of current active and saved error messages:

#### Active errors:

Index	Error Code	Occurrences	Timestamp	Error Message	Param
1	0xF015	1	73:18	Flag RC Start	0
2	0xA010	1	73:18	Anst. Deakt. Arbeitshydraulik	0
3	0x9005	1	73:18	Start: Motordrehzahl	0
4	0xA007	1	73:25	Anst. Lüfterumschaltung	0

#### Saved errors:

Index	Error Code	Occurrences	Timestamp	Error Message	Param
1	0xA010	4	73:18	Anst. Deakt. Arbeitshydraulik	0
2	0x06D1	1	73:05	menu1: invalid param corrected	73
3	0x06D1	1	73:05	menu1: invalid param corrected	74
4	0x06D1	1	73:05	menu1: invalid param corrected	75
5	0x06D1	1	73:05	menu1: invalid param corrected	76
6	0x06D1	1	73:05	menu1: invalid param corrected	77
7	0xA007	1	73:25	Anst. Lüfterumschaltung	0

Operation time: 73:27

Update interval  ms

RC12-10/30 + HAK08878 V4.01 + Sontheim CANfox

## 5.0.5 Drive calibration



BODAS-service 3.5 (BOSCH Rexroth AG)

File Actions View Tools Help

Scan Open Save Preview Print Break Get data Password PAR→PC EPR→PC EPR→ECU Save Default Reinit Reset Compare Help

**Available ECUs**

**RC12-10/30** SN: 00102924  
HAK08878 V4.01 HwCode: 0002D6  
No errors detected

- Parameter
- Processdata
- I/O Status view
- Custom view
- Error messages

Following parameters has to be activated to start the drive calibration

In the menu „5.1 Stromabgleich I“

In the field „5.1.1 Funktion I“ choose „Ein“.  
In the field „5.1.2“ Funktion II“ choose „Ein“.

Press “Save” to transfer the values into the control unit.

**Parameter**  
Parameter values are displayed and can be edited.

Parameter Learning curves

**5.1 Stromabgleich I**

5.1.1 Funktion I	EIN	Value: 1	STD
5.1.2 Funktion II	EIN	Value: 1	STD

Show only menus Show groups Show all parameters Write for filtering Update interval ms

Connected with: RC12-10/30 + HAK08878 V4.01 + Sontheim CANfox



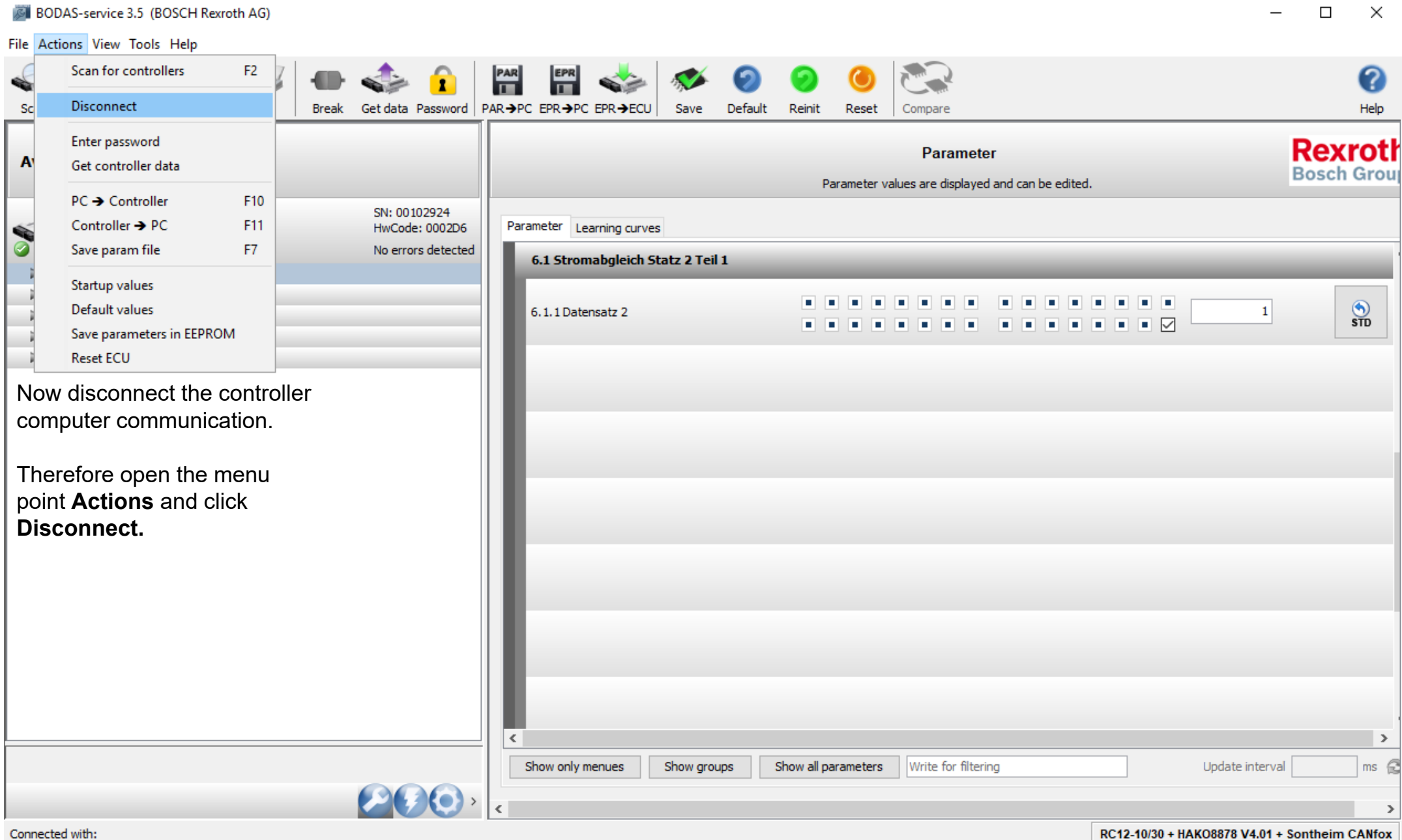
## 5.0.5 Drive calibration



Now the following steps have to be carried out at the machine:

1. Start the engine (low idle) ★
2. Press the drive pedal to full forward and hold it ,if the engine revolution increasing one of the procedure conditiones (hydraulic oil temperatur, brake activ or controller not correctly switched off) are not correct, or there are still failures in Bodas, => Delete them. After correcting you need to switch of the controller for minium 2 min. [Ignition OFF]. Then restart the procedure.)
3. After some time the wheels start to turn in forward direction (first the rear then the front) (if the wheels are not start turning, check for error messages and erase them. After it see above)
4. After approx. 1 min. they stop again
5. Press further the drive pedal till the revolution increase (plus 100 rpm)
6. Release the forward pedal to neutral
7. Press the drive pedal to full revers and hold it
8. After some time the wheels start to turn in revers direction (first the rear then the front)
9. After approx. 1 min. they stop again
10. Release the revers pedal to neutral

★ With the current working hydraulic software the brake must be applied for starting. Release brake immediatly after engine run, cause the adjustment procedure will not start then.



BODAS-service 3.5 (BOSCH Rexroth AG)

File Actions View Tools Help

- Scan for controllers F2
- Disconnect**
- Enter password
- Get controller data
- PC → Controller F10
- Controller → PC F11
- Save param file F7
- Startup values
- Default values
- Save parameters in EEPROM
- Reset ECU

Break Get data Password PAR → PC EPR → PC EPR → ECU Save Default Reinit Reset Compare Help

Parameter

Parameter values are displayed and can be edited.

Rexroth Bosch Group

Parameter Learning curves

6.1 Stromabgleich Statz 2 Teil 1

6.1.1 Datensatz 2

1

STD

Show only menus Show groups Show all parameters Write for filtering Update interval ms

Connected with: RC12-10/30 + HAKO8878 V4.01 + Sontheim CANfox

Now disconnect the controller computer communication.

Therefore open the menu point **Actions** and click **Disconnect**.

# 5.0.5 Drive calibration



BODAS-service 3.5 (BOSCH Rexroth AG)

File Actions View Tools Help

Scan Open Save Preview Print Break Get data Password PAR→PC EPR→PC EPR→ECU Save Default Reinit Reset Compare Help

**Available ECUs**

**RC12-10/30**  
HAKO8878 V4.01

SN: 00102924  
HwCode: 0002D6  
No errors detected

- Parameter
- Processdata
- I/O Status view
- Custom view
- Error messages

**Rexroth**  
Bosch Group

**Parameter**  
Parameter values are displayed and can be edited.

Parameter Learning curves

**6.1 Stromabgleich Statz 2 Teil 1**

Lost the connection to the controller: RC12-10/30 + HAKO8878 V4.01

**Rescan system**

Discard all active connections and start a new search for controllers in the system.

Reconnect

Rebuild connection and load all data

Rebuild connection and reload values only

Discard connection

Do not ask again and if possible always perform the selected action.

After the disconnect press „Rescan system“

Connected with: RC12-10/30 + HAKO8878 V4.01 + Sontheim CANfox

## 5.0.5 Drive calibration



BODAS-service 3.5 (BOSCH Rexroth AG)

File Actions View Tools Help

Scan Open Save Preview Print Break Get data Password PAR→PC EPR→PC EPR→ECU Save Default Reinit Reset Compare Help

**Available ECUs**

**RC12-10/30** SN: 00102924  
HAK08878 V4.01 HwCode: 0002D6  
No errors detected

▶ **Parameter**

▶ Processdata

▶ I/O Status view

▶ Custom view

▶ Error messages

Following parameters has to be deactivated after the drive calibration.

In the menu „5.1 Stromabgleich I“

In the field „5.1.1 Funktion I“ choose „AUS“.

In the field „5.1.2“ Funktion II“ choose „AUS“.

Press “Save” to transfer the values into the control unit.

**Parameter**  
Parameter values are displayed and can be edited.

Rexroth  
Bosch Group

Parameter Learning curves

**5.1 Stromabgleich I**

5.1.1 Funktion I	AUS	Value: 0	STD
5.1.2 Funktion II	AUS	Value: 0	STD

Show only menus Show groups Show all parameters Write for filtering Update interval ms

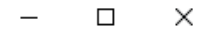
Connected with: RC12-10/30 + HAK08878 V4.01 + Sontheim CANfox



# 5.0.5 Drive calibration



BODAS-service 3.5 (BOSCH Rexroth AG)



File Actions View Tools Help

Scan Open Save Preview Print Break Get data Password PAR→PC EPR→PC EPR→ECU Save Default Reinit Reset Compare Help

### Available ECUs

**RC12-10/30** SN: 00102924  
 HAK08878 V4.01 HwCode: 0002D6  
**Errors detected**

- ▶ Parameter
- ▶ Processdata
- ▶ I/O Status view
- ▶ Custom view
- ▶ **Error messages**

### Finalizing steps

1. Delete all errors of the hydrostat

Delete active and saved errors

### Error messages



Overview of current active and saved error messages:

#### Active errors:

Index	Error Code	Occurrences	Timestamp	Error Message	Param
1	0xF015	1	73:18	Flag RC Start	0
2	0xA010	1	73:18	Anst. Deakt. Arbeitshydraulik	0
3	0x9005	1	73:18	Start: Motordrehzahl	0
4	0xA007	1	73:25	Anst. Lüfterumschaltung	0

#### Saved errors:

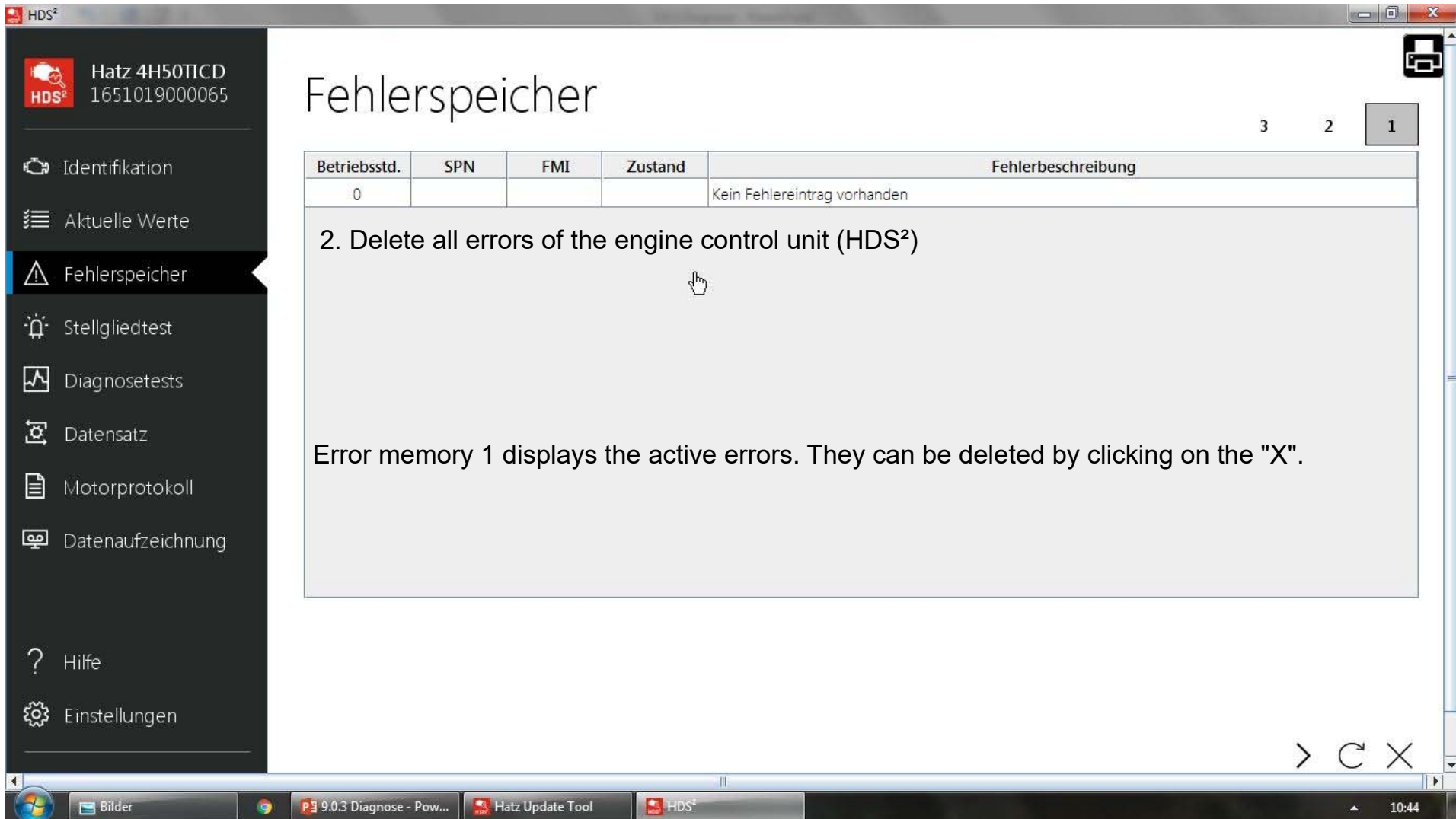
Index	Error Code	Occurrences	Timestamp	Error Message	Param
1	0xA010	4	73:18	Anst. Deakt. Arbeitshydraulik	0
2	0x06D1	1	73:05	menu1: invalid param corrected	73
3	0x06D1	1	73:05	menu1: invalid param corrected	74
4	0x06D1	1	73:05	menu1: invalid param corrected	75
5	0x06D1	1	73:05	menu1: invalid param corrected	76
6	0x06D1	1	73:05	menu1: invalid param corrected	77
7	0xA007	1	73:25	Anst. Lüfterumschaltung	0

Operation time: 73:27
Update interval  ms

Connected with:

RC12-10/30 + HAK08878 V4.01 + Sontheim CANfox

## Hatz



HDS²

Hatz 4H50TICD  
1651019000065

- Identifikation
- Aktuelle Werte
- Fehlerspeicher**
- Stellgliedtest
- Diagnosetests
- Datensatz
- Motorprotokoll
- Datenaufzeichnung
- Hilfe
- Einstellungen

## Fehlerspeicher

3 2 1

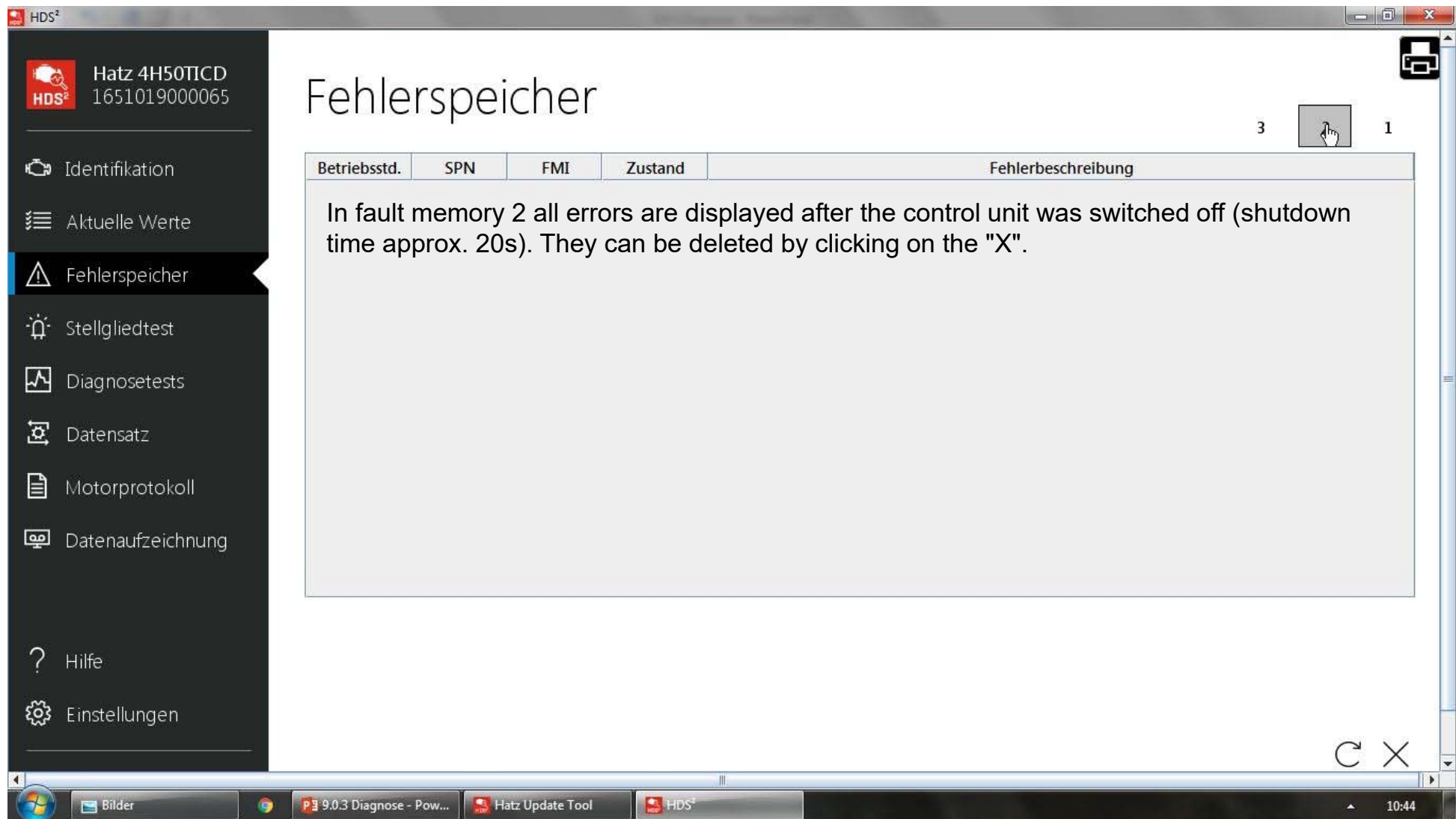
Betriebsstd.	SPN	FMI	Zustand	Fehlerbeschreibung
0				Kein Fehlereintrag vorhanden

2. Delete all errors of the engine control unit (HDS²)

Error memory 1 displays the active errors. They can be deleted by clicking on the "X".

> ↻ ✕

Bilder 9.0.3 Diagnose - Pow... Hatz Update Tool HDS² 10:44




HDS²

Hatz 4H50TICD  
1651019000065

- Identifikation
- Aktuelle Werte
- Fehlerspeicher**
- Stellgliedtest
- Diagnosetests
- Datensatz
- Motorprotokoll
- Datenaufzeichnung
- Hilfe
- Einstellungen

## Fehlerspeicher

3  1

Betriebsstd.	SPN	FMI	Zustand	Fehlerbeschreibung
In fault memory 2 all errors are displayed after the control unit was switched off (shutdown time approx. 20s). They can be deleted by clicking on the "X".				

↻ X

Bilder | P 9.0.3 Diagnose - Pow... | Hatz Update Tool | HDS² | 10:44

# 5.0.5 Drive calibration



CM600 - Ereignisspeicher

Information Arbeitshydraulik Hydrostat Konfiguration System ? [DE]

334 Level: 1 CM 1600 - Information - Service Info Anzahl Einträge: 6 **Hako**

Speicher löschen Speicher lesen Historie lesen

Zelle	Intern	Text_1	Datum	Zeit	Anzeige	Text_2	R
1	412	HS: Fehler Fahrsteuerung	12-08-2016	10:26:11	0	0	
2	418	HS: Fehler Fahrsteuerung	12-08-2016	10:26:11	0	0	
3	415	HS: Fehler Fahrsteuerung	12-08-2016	10:26:16	0	0	
4	412	HS: Fehler Fahrsteuerung	12-08-2016	10:28:54	0	0	
5	415	HS: Fehler Fahrsteuerung	12-08-2016	10:28:54	0	0	
6	418	HS: Fehler Fahrsteuerung	12-08-2016	10:28:54	0	0	
End							

3. Delete all errors in the Hako diagnose

HakoDiagnose - Star... CM600 - Ereignisspei... 10:32