



---

**OBERAIGNER**

---

**DE: Diese Anweisung ist in zwei Sprachen verfügbar.**

**ENG: This instruction is available in two languages.**

**Deutsch:**

## **REPARATURANWEISUNG**

**English:**

## **REPAIR INSTRUCTION**

Dok.-Nr. RA L4.00-00 Sprachen-2-Deckblatt Rev.000	Seite 1/1	Datum / Freigabe: 01.09.2014 Vogelsang
Die deutsche Version dieses Dokuments hat in allen Fällen Gültigkeit. In all cases the German language version of this document shall be taken as authoritative.	Schutzvermerk DIN ISO 16016 beachten! Refer to protection notice DIN ISO 16016!	Ausgedruckte Versionen unterliegen nicht dem Änderungsdienst. Printed versions are not subjected to the updating service.

# IMPLEMENTING INSTRUCTION

Application: Diagnosis at Oberaigner Control Unit



**OBERAIGNER**

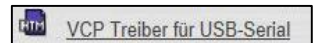
## 1. REFERENCE

PC/Laptop with internet access is essential!

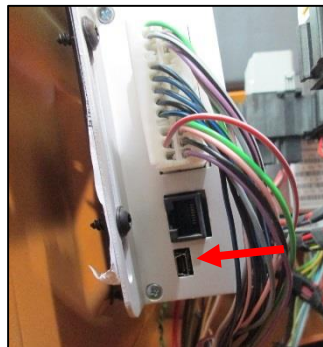
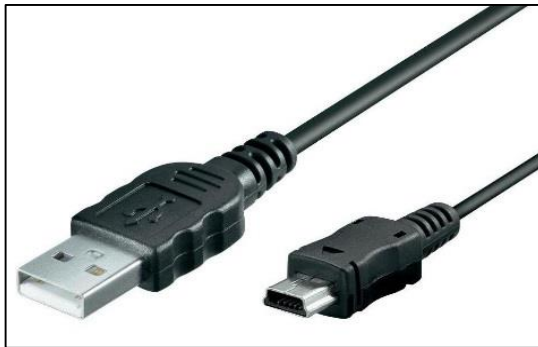
## 2. PRESENTATION

1. Information to conditions for activating / deactivating differential locks take out of the vehicle specific operating manual or the reference in **Diag\_ARS** (= Diagnosis-Software All-wheel-drive)
2. Download and install the diagnosis-software and VCP driver for USB.

[www.oberaigner.com/downloads/](http://www.oberaigner.com/downloads/)



3. Connect PC/Laptop and USB-Routing. **Datatable: USB → Mini USB**



The Oberaigner control unit is located in the seat box on the driver side! (under the driver's seat)

### Start the Diagnosis-Software:

4. Open application and switch on the ignition of the vehicle:



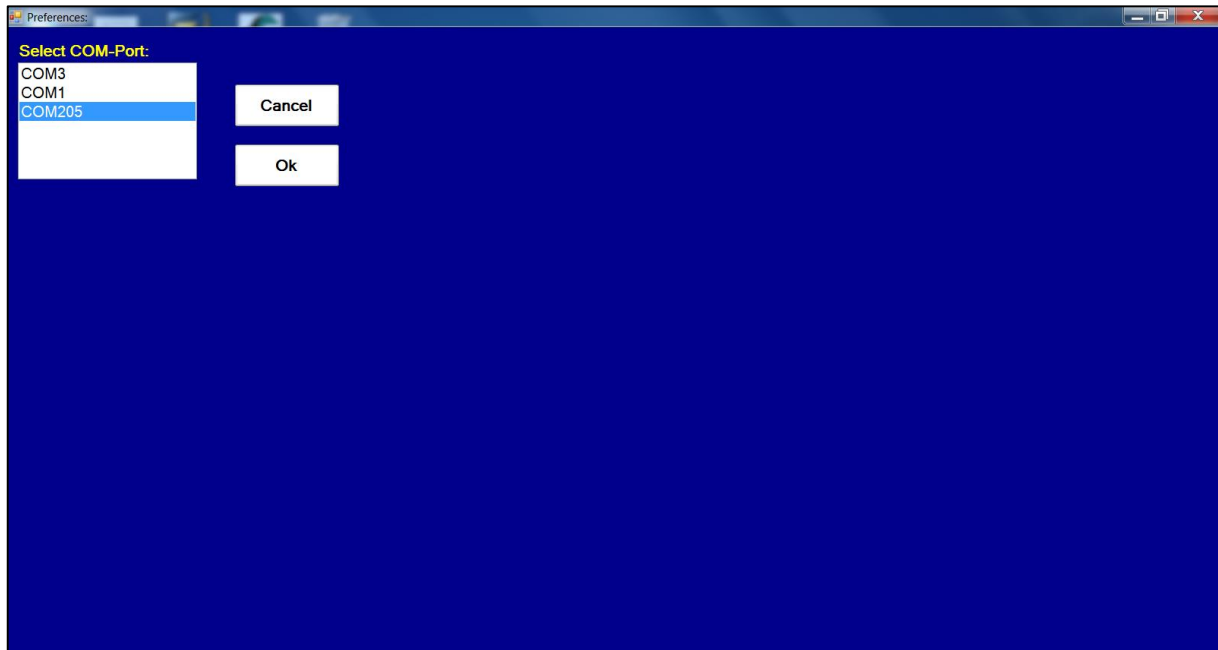
Doc.-No. RA L4.40-00 Rev.000	Page 1/7	Date / Release: 02.04.2014 Vogelsang
In all cases the German language version of this document shall be taken as authoritative.	Refer to protection notice DIN ISO 16016!	Printed versions are not subjected to the updating service.

# IMPLEMENTING INSTRUCTION

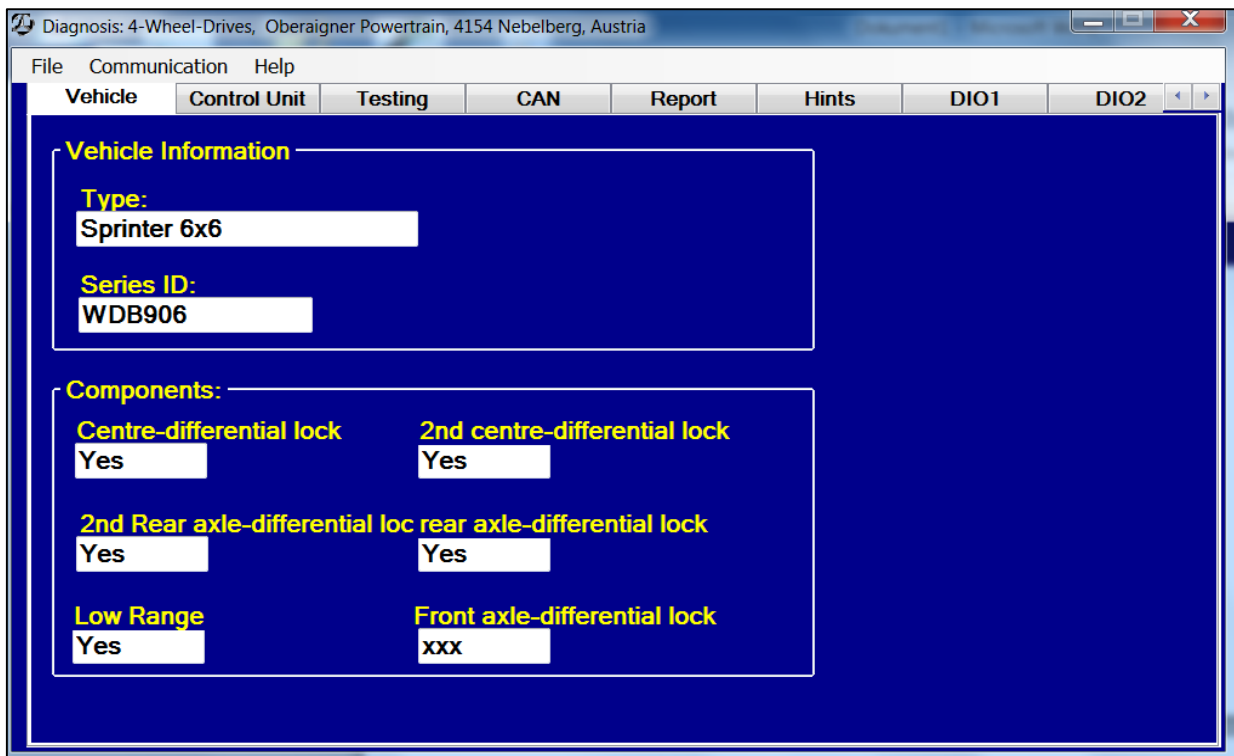
Application: Diagnosis at Oberaigner Control Unit



5. Select COM-Port → highest port :



6. The specific vehicle information are displayed. If this information not displayed under the Button **Testing** (POS8) then read the error messages (example: no connection with CAN):



# IMPLEMENTING INSTRUCTION

## Application: Diagnosis at Oberaigner Control Unit



**OBERAIGNER**

### 7. Displayed data of control unit:

Diagnosis: 4-Wheel-Drives, Oberaigner Powertrain, 4154 Nebelberg, Austria

File Communication Help

Vehicle Control Unit Testing CAN Report Hints DIO1 DIO2

**Name:**  
OTC32/SE\_6x6

**Company:**  
Oberaigner Powertrain GmbH  
Daimlerstr. 1  
A-4155 Nebelberg

**Ordering code:**  
10005295

**Software:**  
OA\_STG\_FW\_NCV3\_6x6\_V001

**Hardware:**  
OA\_STG\_NCV3\_ZG4\_V001

Open Schematics

### 8. Display and control of the installed components:

Accentuate Button, can be used to operate or direct test of each module!

Diagnosis: 4-Wheel-Drives, Oberaigner Powertrain, 4154 Nebelberg, Austria

File Communication Help

Vehicle Control Unit Testing CAN Report Hints DIO1 DIO2

**Status**

<b>Centre-differential lock</b> Off	<b>2nd centre-differential lock</b> Off
<b>rear axle-differential lock</b> Off	<b>2nd Rear axle-differential lock</b> Off
<b>Front axle-differential lock</b> Off	<b>Low range</b> Off

**Messages/Errors:**  
No Errors

Ignition -Signal (Terminal 15)

Centre-differential lock ON

Rear axle-differential

Low-Range ON/OFF

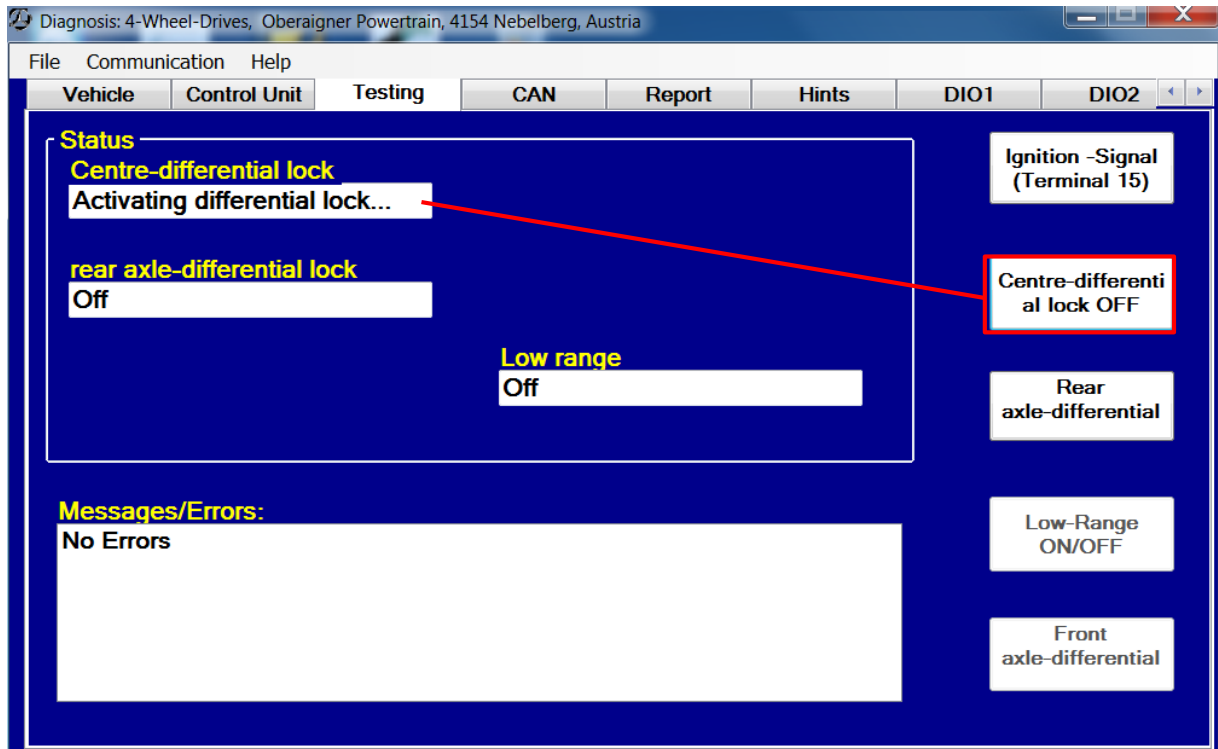
Front axle-differential

# IMPLEMENTING INSTRUCTION

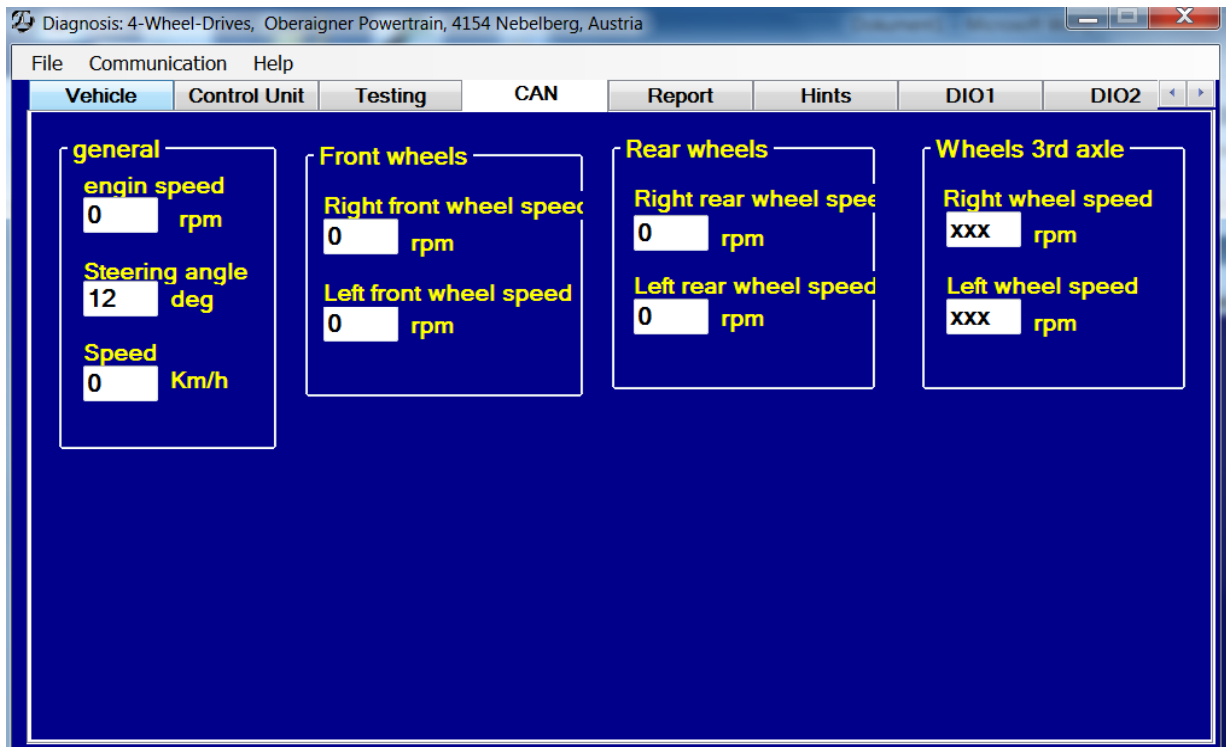
Application: Diagnosis at Oberaigner Control Unit



9. Display of the error messages:



10. Displayed data from the can-bus system of the selected vehicle:



# IMPLEMENTING INSTRUCTION

Application: Diagnosis at Oberaigner Control Unit



**OBERAIGNER**

## 11. Report of contact with Oberaigner GmbH:

Diagnosis: 4-Wheel-Drives, Oberaigner Powertrain, 4154 Nebelberg, Austria

File Communication Help

Vehicle Control Unit Testing CAN Report Hints DIO1 DIO2

**Subsidiary**  
Oberaigner Automotive GmbH

**Address**  
Roman-Oberaigner-Allee 1

**Zip** 18299 **City** Laage

**Phone** 0049 38454 32900 **Save**

**Customer**  
[Empty field]

**Date:** 31.03.2014 11:14:33

**Vehicle**  
**VIN**  
[Empty field]

**Components**  
NCV3 with front axle-differential lock

**Details**  
**Operator**  
[Empty field]

**Remarks:**  
[Empty field]

**Save** **Print**

## 12. Customer informations for conditions of the differential locks:

**Reference: More information see specific vehicle operating manual!**

Oberaigner spare parts catalogue: [http://176.28.42.95/DW\\_shop/jsp/main.jsp?doAction=start](http://176.28.42.95/DW_shop/jsp/main.jsp?doAction=start)  
or [www.oberaigner.com](http://www.oberaigner.com) (registration required!)

Diagnosis: 4-Wheel-Drives, Oberaigner Powertrain, 4154 Nebelberg, Austria

File Communication Help

Vehicle Control Unit Testing CAN Report Hints DIO1 DIO2

**Conditions for activating/deactivating differential locks**

**Conditions for activating the centre-differential lock**  
engine speed is over 600 rpm  
Speed is below 25 Km/h  
Steering angle under 240 deg as off 10 Km/h  
Steering angle over 240 deg up to 10 Km/h

**Conditions for deactivating the centre-differential lock**  
no axle-differential lock is active

**Conditions for activating the rear axle-differential lock**  
engine speed is over 600 rpm

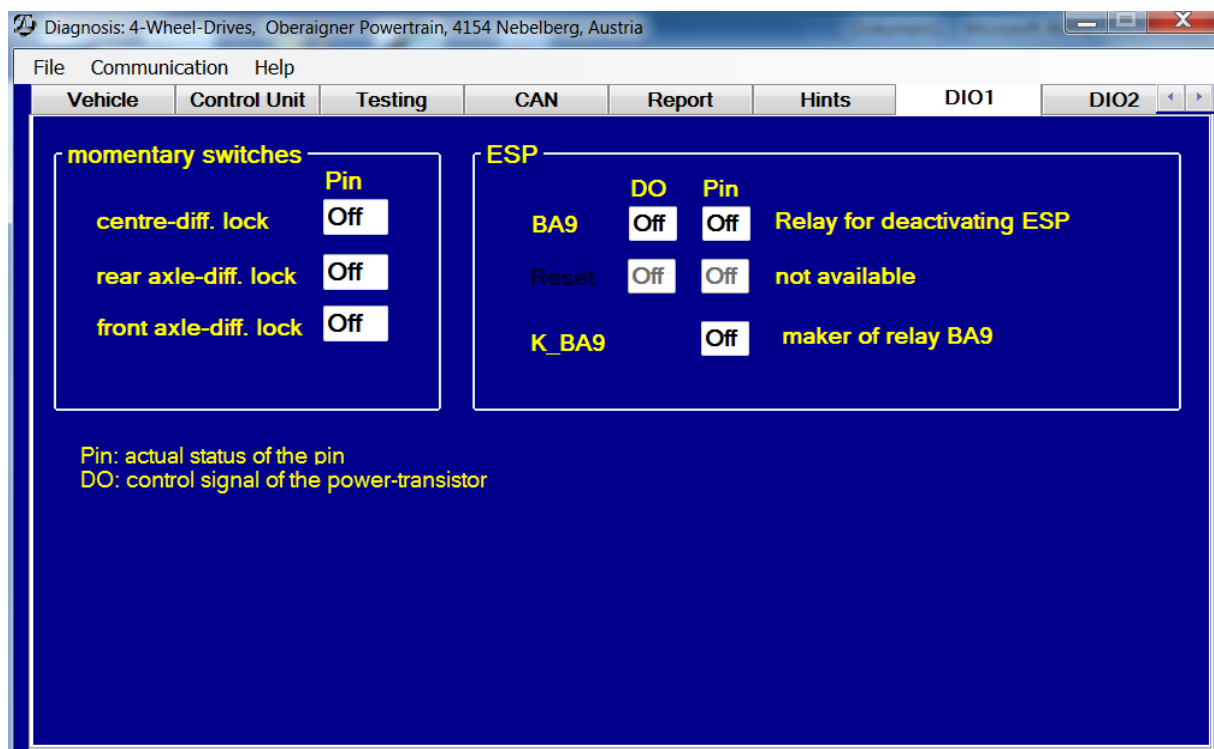
**Conditions for deactivating the rear axle-differential lock**  
none

# IMPLEMENTING INSTRUCTION

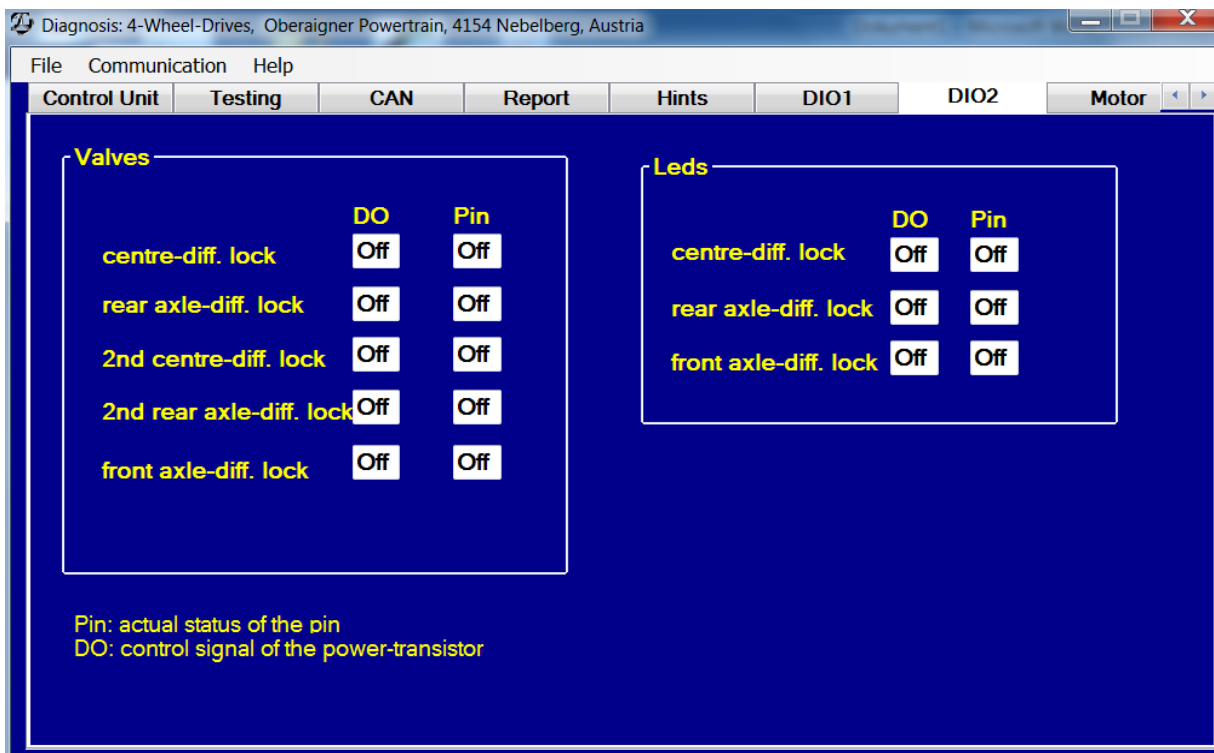
Application: Diagnosis at Oberaigner Control Unit



## 13. Status of the switches / Control of the ESP-Shutdown (BA9):



## 14. Switching status of the valves (front passenger seat box) with LED-indicator light:

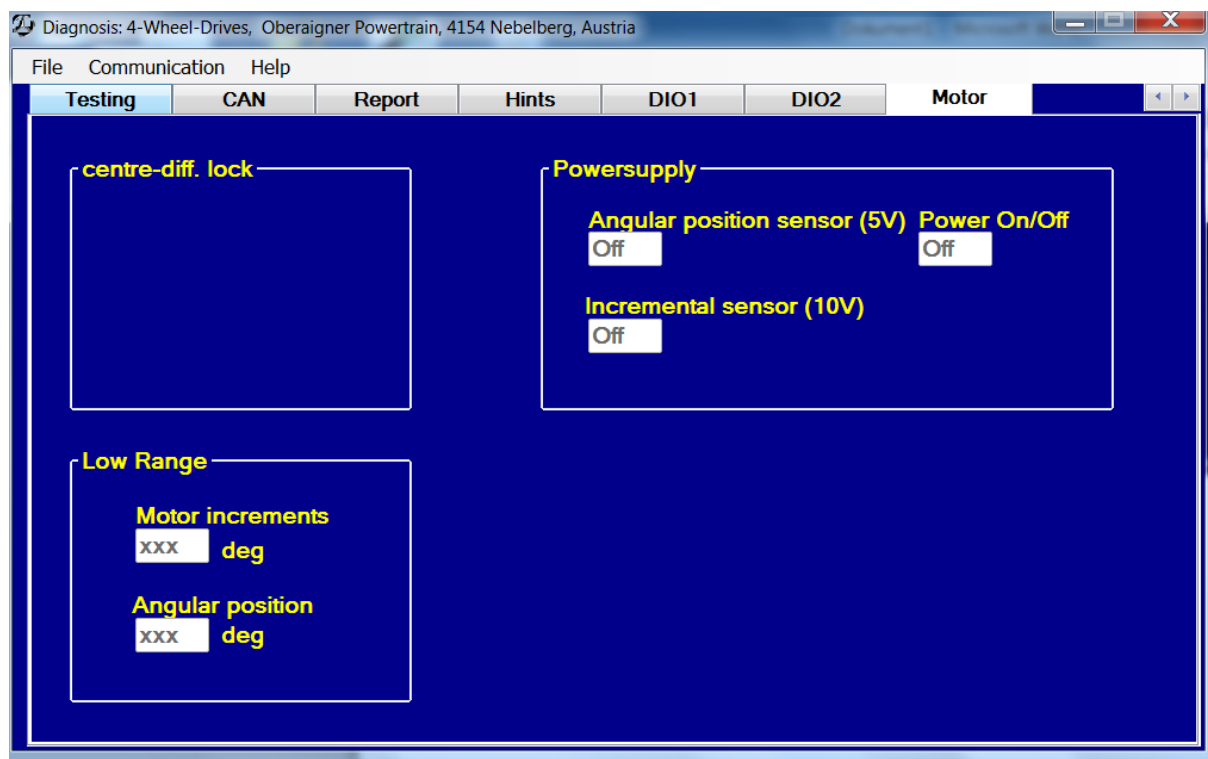


# IMPLEMENTING INSTRUCTION

Application: Diagnosis at Oberaigner Control Unit



15. Values of the actuators and sensors installed at the transfer case:



16. Customer Support:

Our customer service can be reached during our business hours by phone:

+49 (38454) 3290-2230 or by e-mail: [kundendienst@oberaigner.com](mailto:kundendienst@oberaigner.com)