



OBERAIGNER

DE: Diese Anweisung ist in zwei Sprachen verfügbar.

ENG: This instruction is available in two languages.

Deutsch:

REPARATURANWEISUNG

English:

REPAIR INSTRUCTION

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IMPLEMENTING INSTRUCTION

Application: Diagnosis at Oberaigner Control Unit



OBERAIGNER

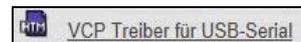
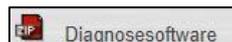
1. REFERENCE

PC/Laptop with internet access is essential!

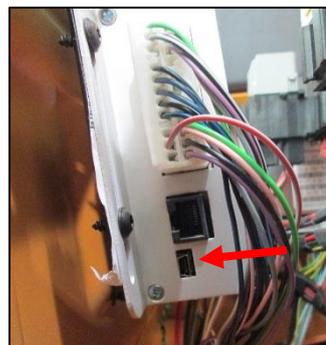
2. PRESENTATION

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/



3. Connect PC/Laptop and USB-Routing. **Datacable: 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:



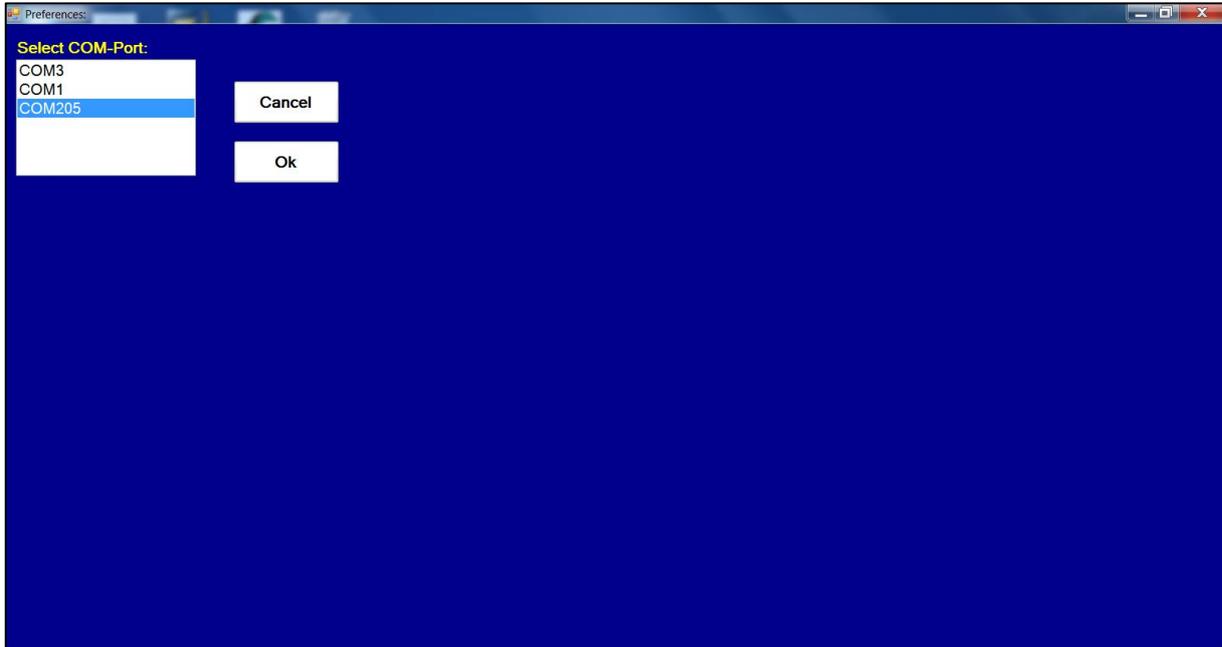
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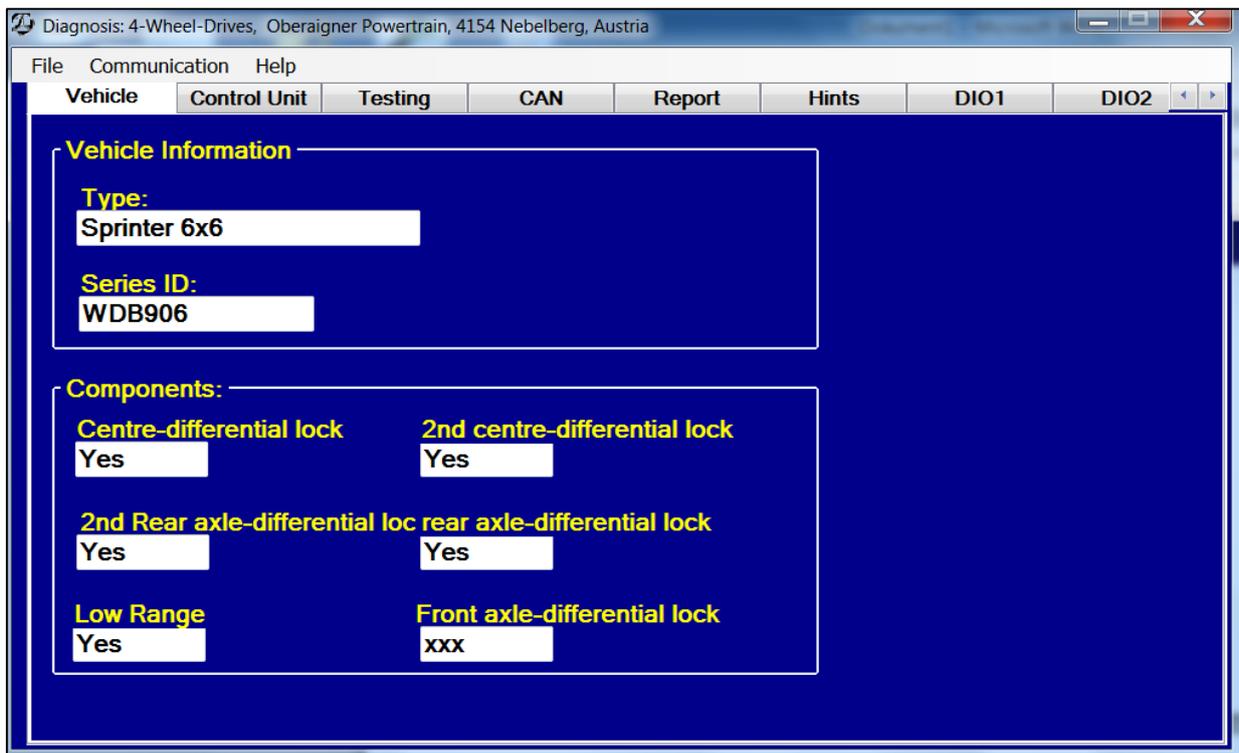
Application: Diagnosis at Oberaigner Control Unit



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):

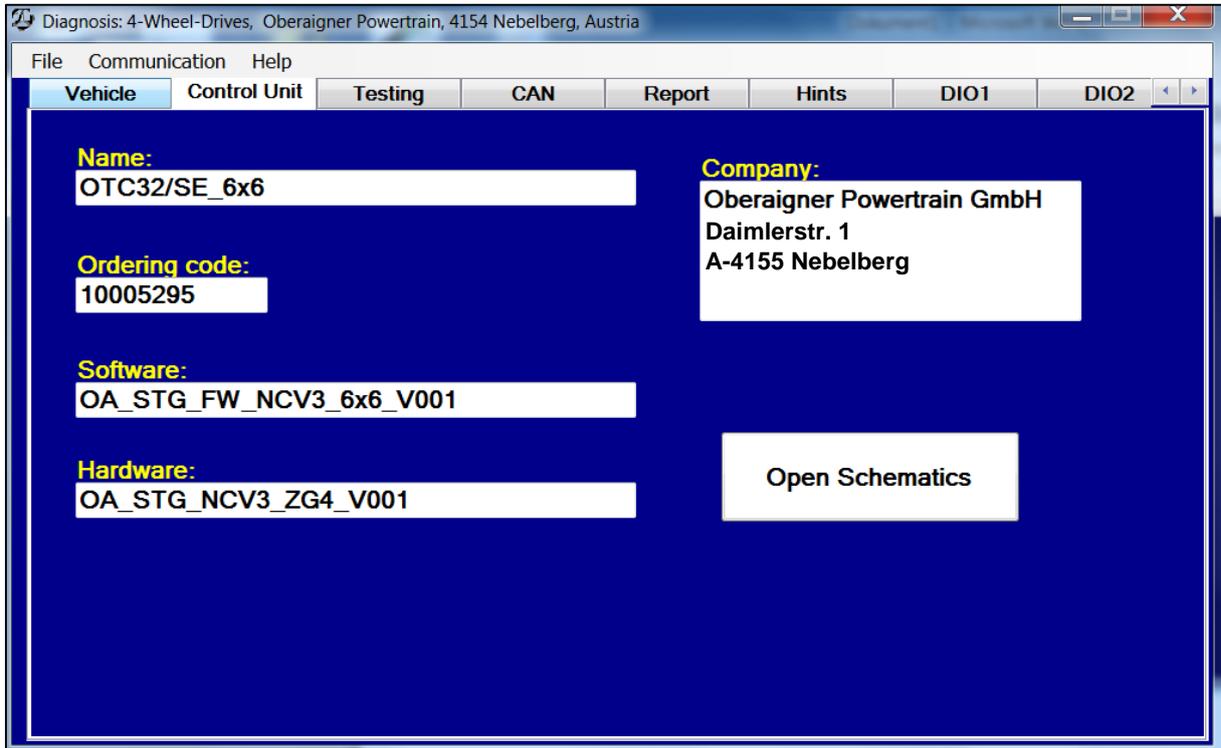


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Application: Diagnosis at Oberaigner Control Unit

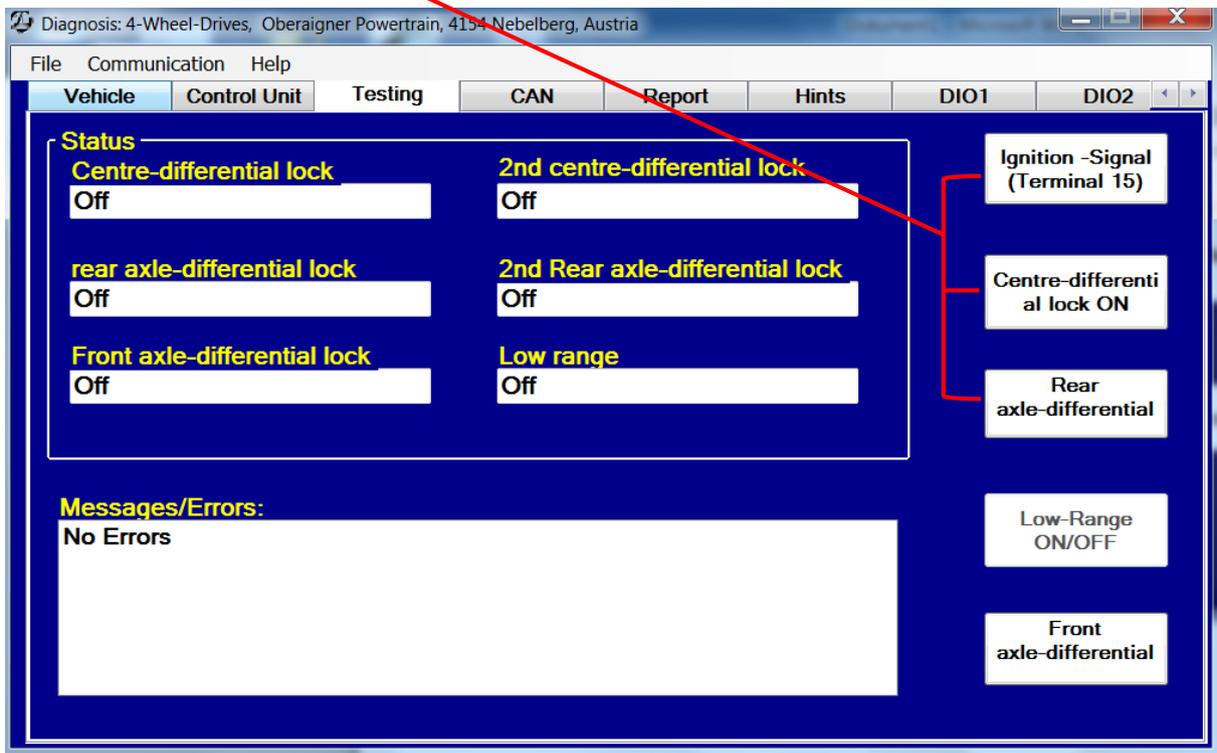


7. Displayed data of control unit:



8. Display and control of the installed components:

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

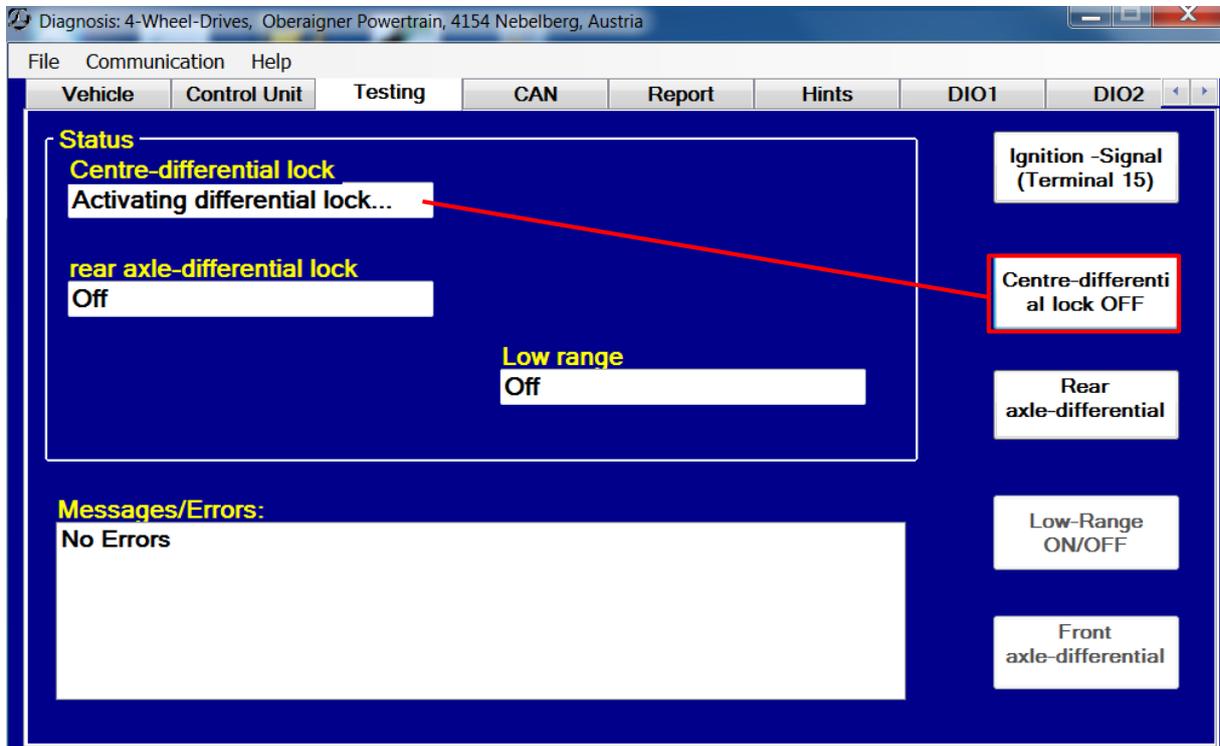


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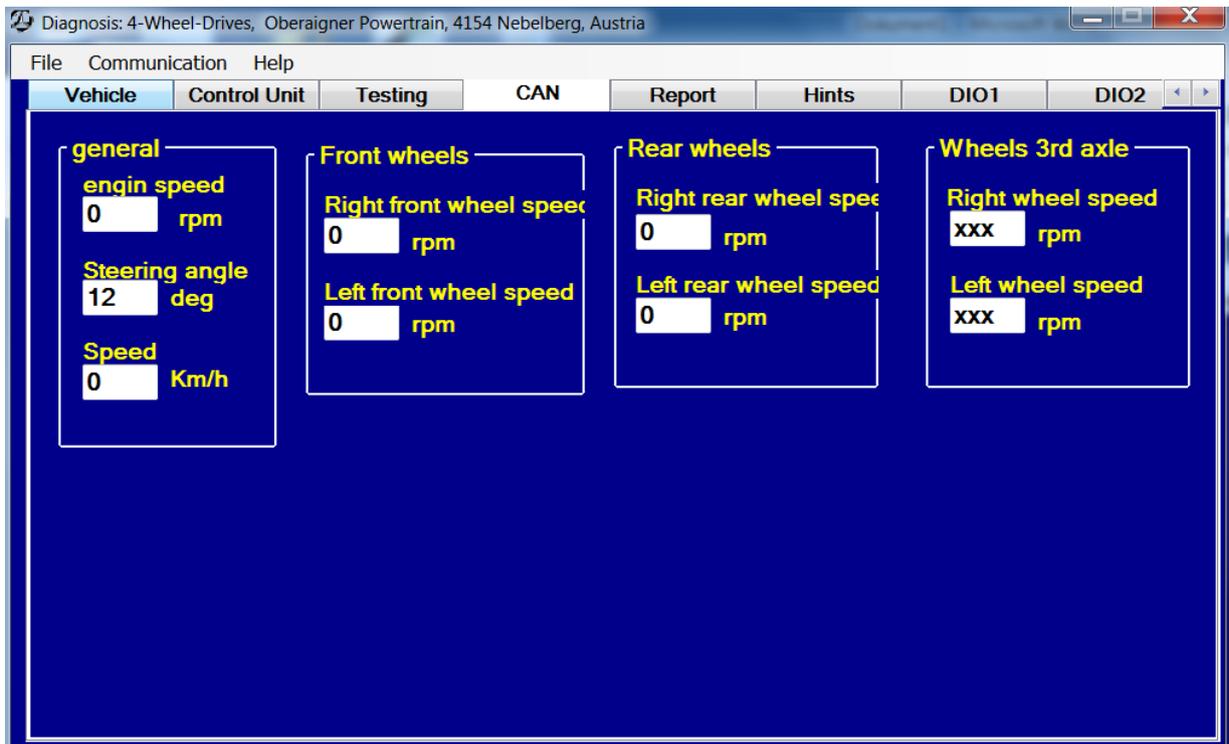
Application: Diagnosis at Oberaigner Control Unit



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



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 text area]

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 or 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

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Application: Diagnosis at Oberaigner Control Unit



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

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

File Communication Help

Vehicle Control Unit Testing CAN Report Hints DIO1 DIO2

momentary switches		ESP	
	Pin	DO	Pin
centre-diff. lock	Off	BA9	Off
rear axle-diff. lock	Off	Reset	Off
front axle-diff. lock	Off	K_BA9	Off

Relay for deactivating ESP
not available
maker of relay BA9

Pin: actual status of the pin
DO: control signal of the power-transistor

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

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

File Communication Help

Control Unit Testing CAN Report Hints DIO1 DIO2 Motor

Valves		Leds			
	DO	Pin	DO	Pin	
centre-diff. lock	Off	Off	centre-diff. lock	Off	Off
rear axle-diff. lock	Off	Off	rear axle-diff. lock	Off	Off
2nd centre-diff. lock	Off	Off	front axle-diff. lock	Off	Off
2nd rear axle-diff. lock	Off	Off			
front axle-diff. lock	Off	Off			

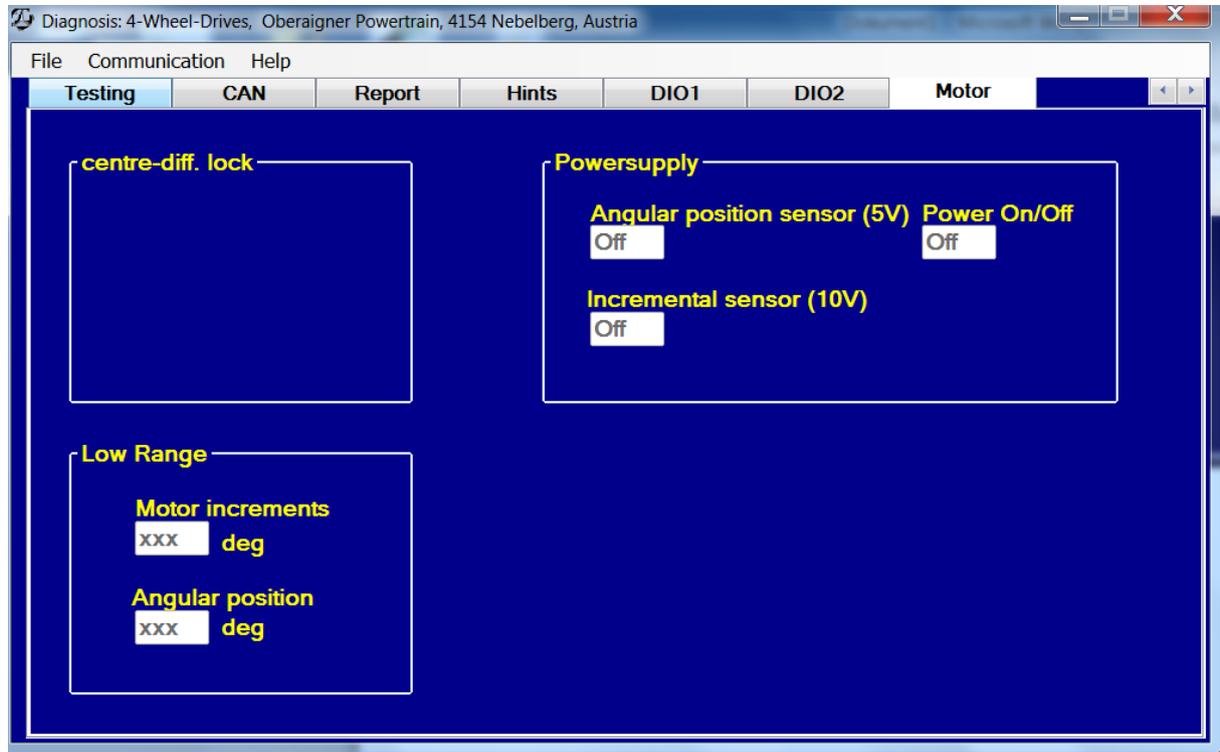
Pin: actual status of the pin
DO: control signal of the power-transistor

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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

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