



OBERAIGNER

DE: Diese Anweisung ist in drei Sprachen verfügbar.

ENG: This instruction is available in three languages.

FR: Cette instruction est disponible en trois langues.

Deutsch:

REPARATURANWEISUNG

English:

REPAIR INSTRUCTION

Français:

INSTRUCTION DE RÉPARATION

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REPAIR INSTRUCTIONS

Application: Operation and diagnosis of
control panel with control unit
ONLY for Renault / Opel / Nissan (2014)



1. WARNINGS



Take not of warnings, see datasheet → HAZARD WARNINGS
CAUTION – danger of death if disregarded!

2. EXPENDITURE ON REPAIRS

Designation	Time required
Diagnosis Implementation	-

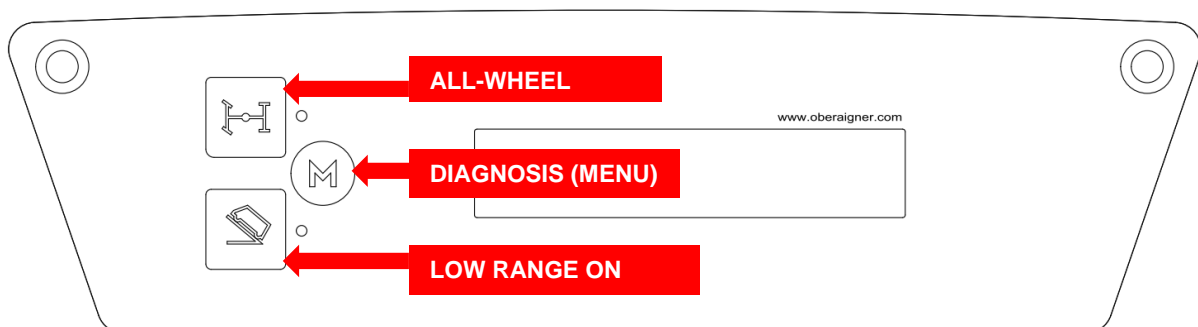
3. OPERATION AND DIAGNOSIS IN THE CONTROL PANEL (OBERAIGNER ALL-WHEEL SYSTEM) FOR RENAULT MASTER, OPEL MOVANO AND NISSAN NV400

SPECIAL EQUIPMENT

Designation	Size / Area
-	-

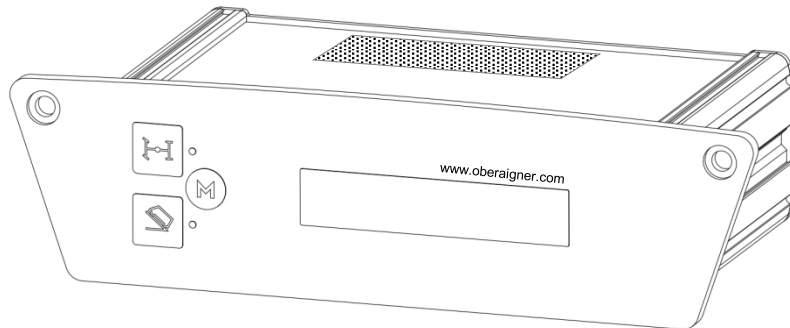
DISPLAYS

Diagnosis in the control panel (Oberaigner all-wheel system) for Renault Master, Opel Movano and Nissan NV400:



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- The basic requirement for operation is that the controller is supplied with power and the ignition is turned on!
- The default setting for the language is always English, if the power supply is interrupted, English is again preset as the operating language!
- Diagnosis mode only allows reading the statuses and current errors!
- It is possible to acknowledge operating faults with all the keys on the operating panel!
- If this involves a wiring error or the CAN, it is only possible to acknowledge this fault with ignition off & on after the fault has been remedied!

OPERATING STEPS

Display when system or engine is started:

All-wheel (4x4) and low range off



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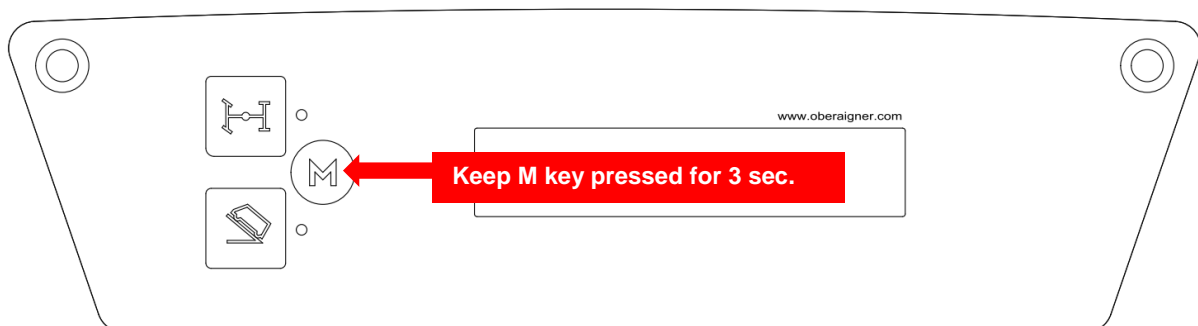


All-wheel (4x4) and low range on



1. Diagnosis – entry in the system:

- Press the **M key** (MENU) for at least 3 seconds for diagnosis mode whereafter the **all-wheel** and **US (low range) keys** serve as up and down menu keys.



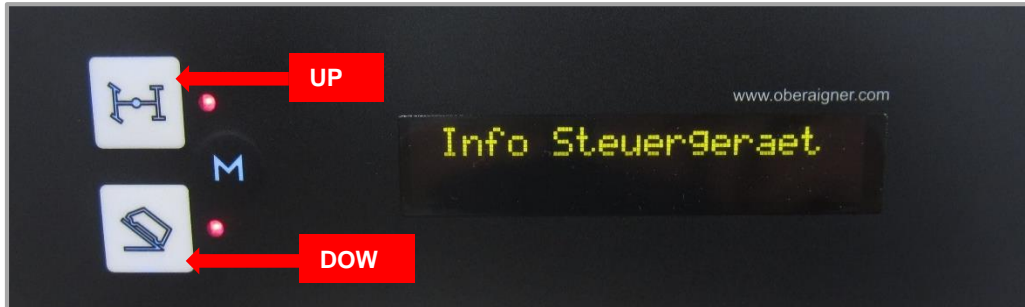
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2. INFO data controller: (Main menu 1)

- Info menu on the controller and control panel:



Press M for details (sub-menu) →

- Display of Oberaigner order number of the control unit with control panel:



- Display of software version of the controller:



- Display of hardware version of the controller:



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- Display of operating hours in 4x4 (all-wheel) operation:



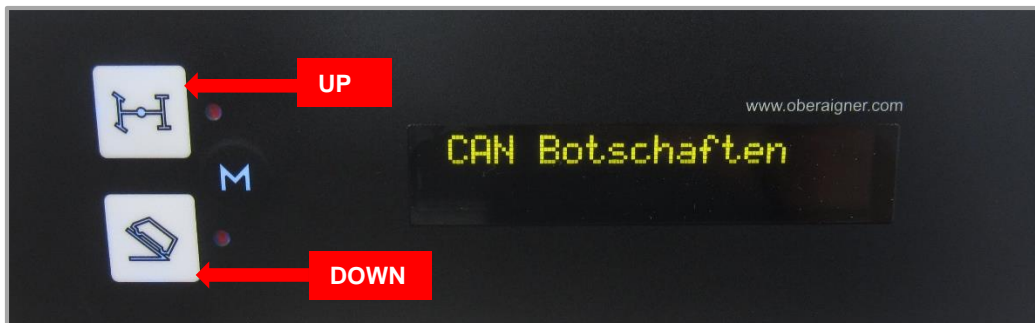
- Display of operating hours with engaged low range:



→ Press the M key to return to the main menu:

3. CAN data: (Main menu 2)

- Info menu on the current CAN data:



Press M for details (sub-menu) →

REPAIR INSTRUCTIONS

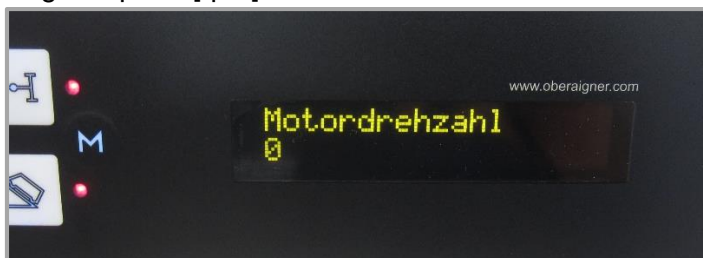
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- Steering angle [steering wheel angle of rotation in °]:



- Engine speed [rpm]:



- Clutch pedal is depressed [yes/no]:



- Vehicle speed [km/h]:

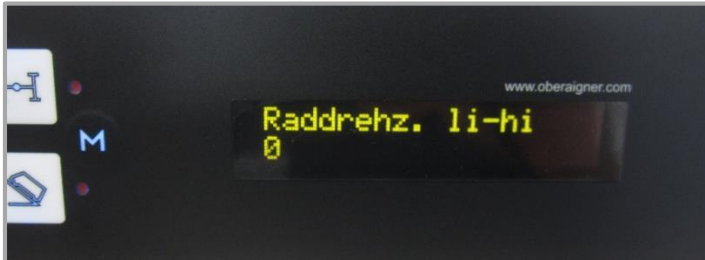


REPAIR INSTRUCTIONS

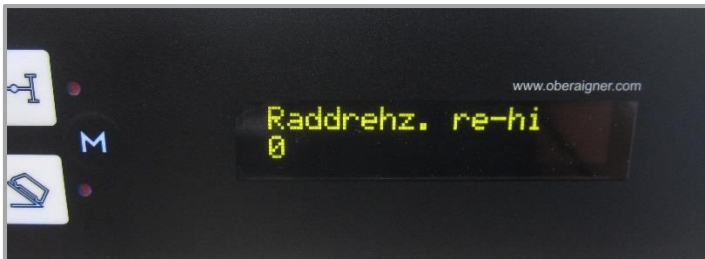
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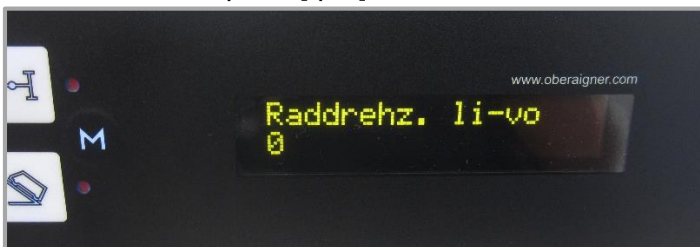
- Left rear wheel speed [rpm]:



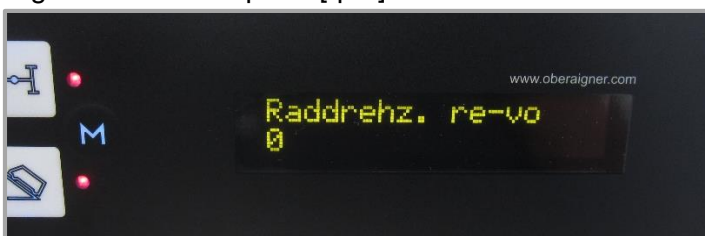
- Right rear wheel speed [rpm]:



- Left front wheel speed [rpm]:



- Right front wheel speed [rpm]:



→ Press the M key to return to the main menu:

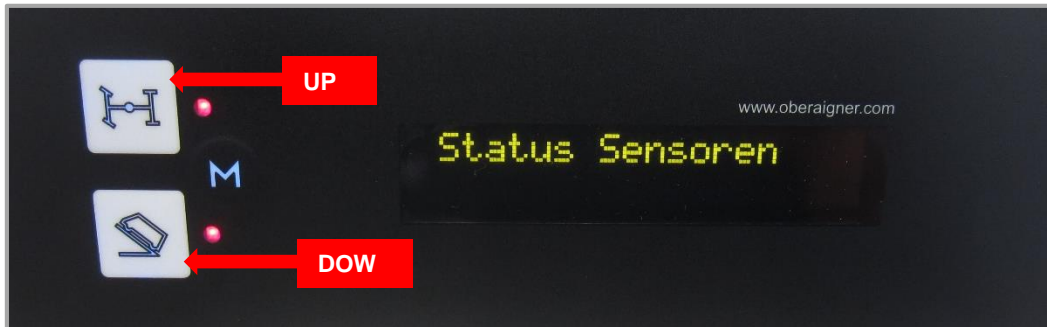
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4. Status of the sensors: (Main menu 3)

- Info menu on the status of the sensors:

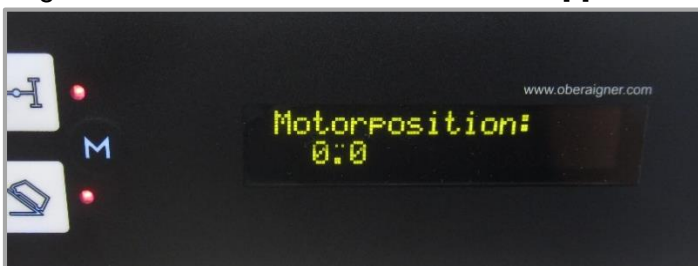


Press M for details (sub-menu) →

- Torque of the electric servomotor [Nm]:

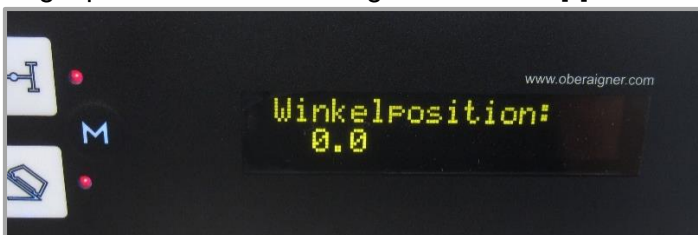


- Angle of rotation of the electric servomotor [°]:



4x4 off = approx. 125.5
4x4 on = approx. 225.5

- Angle position of rotation angle sensor VG [°]:



4x4 off = approx. 125.5
4x4 on = approx. 225.5

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- ESP relay on/off: (In ROM 2014 without function!!!)



→Press the M key to return to the main menu:

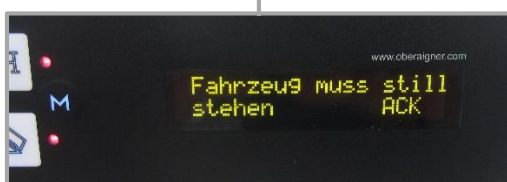
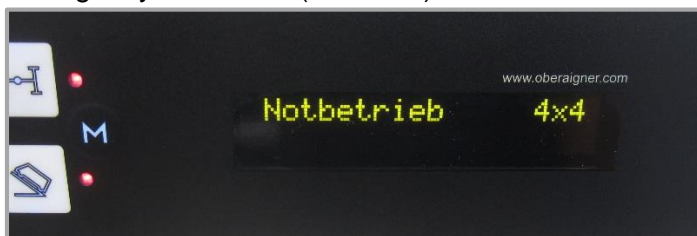
5. Emergency mode: (Main menu 4)

- Info note when wheel and low range no longer switch:



Press M for details (sub-menu) →

- Emergency mode 4x4 (all-wheel):



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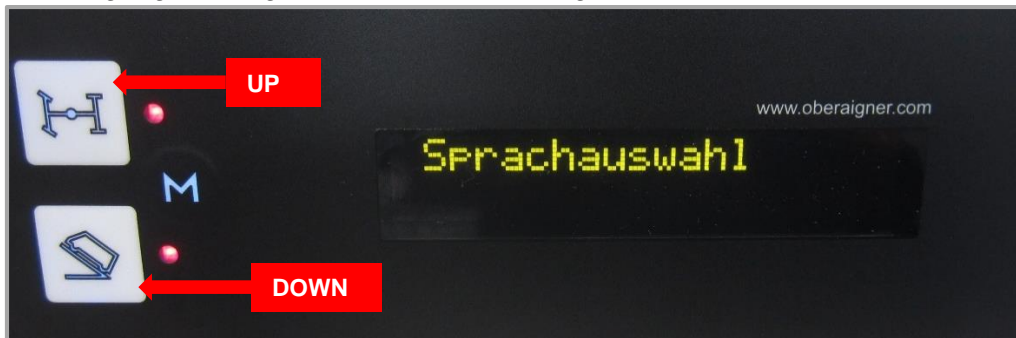
- Emergency mode low range (US):



→ Press the M key to return to the main menu:

6. Language selection on the control panel: (Main menu 5)

- The language setting can be in German, English and French:



Press M for details (sub-menu) →

- Selection German:



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- Selection English:



- Selection French:



→ Keep M key pressed in longer until beep sounds to confirm language selection.

→ Press the M key to return to the main menu:

7. Error list: (Main menu 6)

- Error messages at system start-up:



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- No signals from the vehicle CAN (Controller Area Network). Check CAN wiring!



- No signal from the transfer case servomotor sensor. Check power supply and actuator!



- No signal from the transfer case angle position sensor. Check power supply and actuator!



8. Switching conditions of 4x4 (all-wheel) are not met:

- Vehicle engine must be started.
- Vehicle speed must be throttled below 25 km/h.
- The steering angle must not exceed 240 ° at speeds exceeding 12 km/h.
- Difference between the wheel speeds (left/right) is too large (slip).

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9. Switching conditions of low range are not met:

- Vehicle engine must be started.
- Press the clutch pedal.

10. Diagnosis – exit from the system:

- Press the **M key** (MENU) for at least 3 seconds to switch from diagnosis mode to back to normal mode.



11. RESET of the diagnosis system:

- If the ignition of the vehicle is switched off by pressing the diagnosis **M key** for 5 seconds, the controller can be RESET.
- This is necessary when nothing appears in the display or no functions can be executed in the control panel.

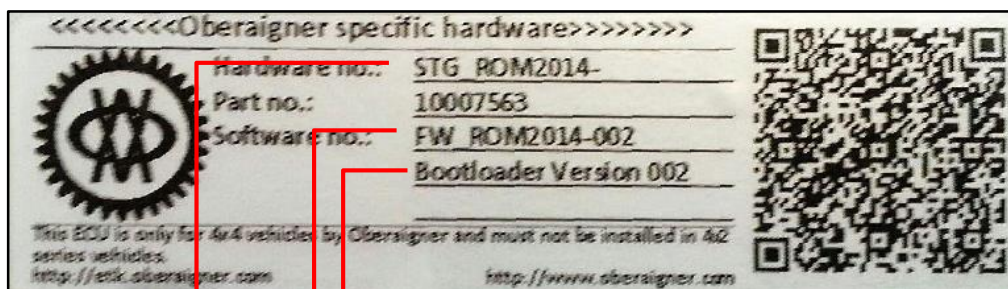
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12. Label on the control unit:

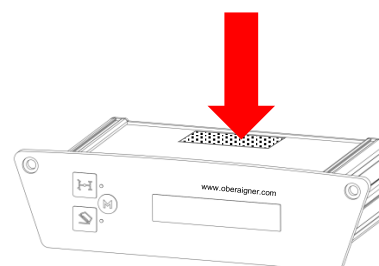
- The label is attached directly on the control unit:



Hardware version

Software version

Bootloader version



SPECIAL INSTRUCTIONS

- No special instructions