

AWROT
automotive



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Model support

BMW 3 E-Serie



E46- Coupé – Extension Kit

All models with following engines are supported:

Gasoline engine

Product description

E46DGA Display system

Data display:

- Boost pressure
- Torque
- Performance
- Sprint
- Exhaust and intake temperature screen
- Cooling water output and Throttle angel
- Lambda values
- Lateral and Longitudinal acelaration
- Performace chart
- Maximum values

Visually, the display fits perfectly into the Interior. The monitor, which is equipped with latest OLED technology is incorporated into the existing ventilation shaft. Thus, no external holders are necessary, and you have a good view of the displays while driving.



System components

Rpm SCREEN

1 Battery voltage

3 Peek holder bar

1 Indicates the current battery voltage

2 Rpm

2 Graphically represents the boost pressure, between 0 and 1.35 bar, and is equipped with a towing pointer



4 Rpm

3 Holds the early maximum of loading pressure for 2 seconds

5 Cooling water temperature

6 Oil temperature

4 Indicates the charging pressure digital, between 0 and 1.35 bar

5 Specifies the current cooling temperature in °C

6 Specifies the actual oil temperature between - 40 °C and 150 °C

Sprint display

1 Speed

3 max. Speed

1 Specifies currently speed in km/h according to the speedometer

2 Stopwatch

2 Specifies the time depending on the current speed



4 Sprint times

5 Longitudinal acceleration

3 Indicates the ever reached maximum speed in km/h

4 Specifies the best Sprint time from 0 to 100 km/h or 0-200 km/h

5 Specifies the maximum reached longitudinal acceleration in g ($g = 9,81 \text{ m/s}^2$)

Lateral and Longitudinal acceleration

1 Longitudinal acceleration

2 Longitudinal acceleration bar

3 Peek holder bar



4 Lateral acceleration

5 Lateral acceleration

1 Specifies the longitudinal acceleration in G ($G = 9,81 \text{ m/s}^2$)

2 Graphically represents the longitudinal acceleration, between 0,8G backwards and 0,8G forwards and is equipped with a drag indicator ($G = 9,81 \text{ m/s}^2$)

3 Hold for 2 seconds the provisional maximum of longitudinal acceleration

4 Specifies the lateral acceleration in G ($G = 9,81 \text{ m/s}^2$)

5 Graphically represents the lateral acceleration between 2,0G to the left and 2,0G to the right, and is equipped with a towing pointer ($G = 9,81 \text{ m/s}^2$)

Exhaust and intake temperature screen

1 Exhaust temperature

2 Air intake temperature



1 Specifies of the exhaust temperature in °C

2 Specifies of the air intake temperature in °C

System components

Cooling water output and Throttle angle



- 1 Specifies the current cooling temperature in °C
- 1 Specifies the current percent of throttle angle in percent

Oxygen values



- 1 Specifies the current value of wideband oxygen sensor Bank 1; measures the residual oxygen content in the exhaust gas; $\lambda > 1$ = lean mixture; $\lambda < 1$ = oily mixture; Range is between 0.65 and 2.5

System components

Oxygen values

AFR A. BANK1

AFR A.BANK2



- 1 Specifies the current value of wideband oxygen sensor Bank 1; measures the residual oxygen content in the exhaust gas; $\lambda > 1$ = lean mixture; $\lambda < 1$ = oily mixture; Range is between 0.65 and 2.5

Water and Oil temperature + Oil pressure

1 Water temperature

2 Oil temperature

3 Oil pressure bar



- 1 Specifies the current water temperature in °C
- 2 Specifies the actual oil temperature between - 40 °C and 150 °C
- 3 Specifies the actual oil pressure between 0 bar and 10 bar

System components

Rear axle temperature Oil pressure

1 Rear axle
temperature

RE. AX. TEMP. -45 °C

2 Oil pressure

OIL PRESS 0.0 bar

1 Specifies the current rear axle temperature in °C

1 Specifies the current oil pressure/temperature in bar

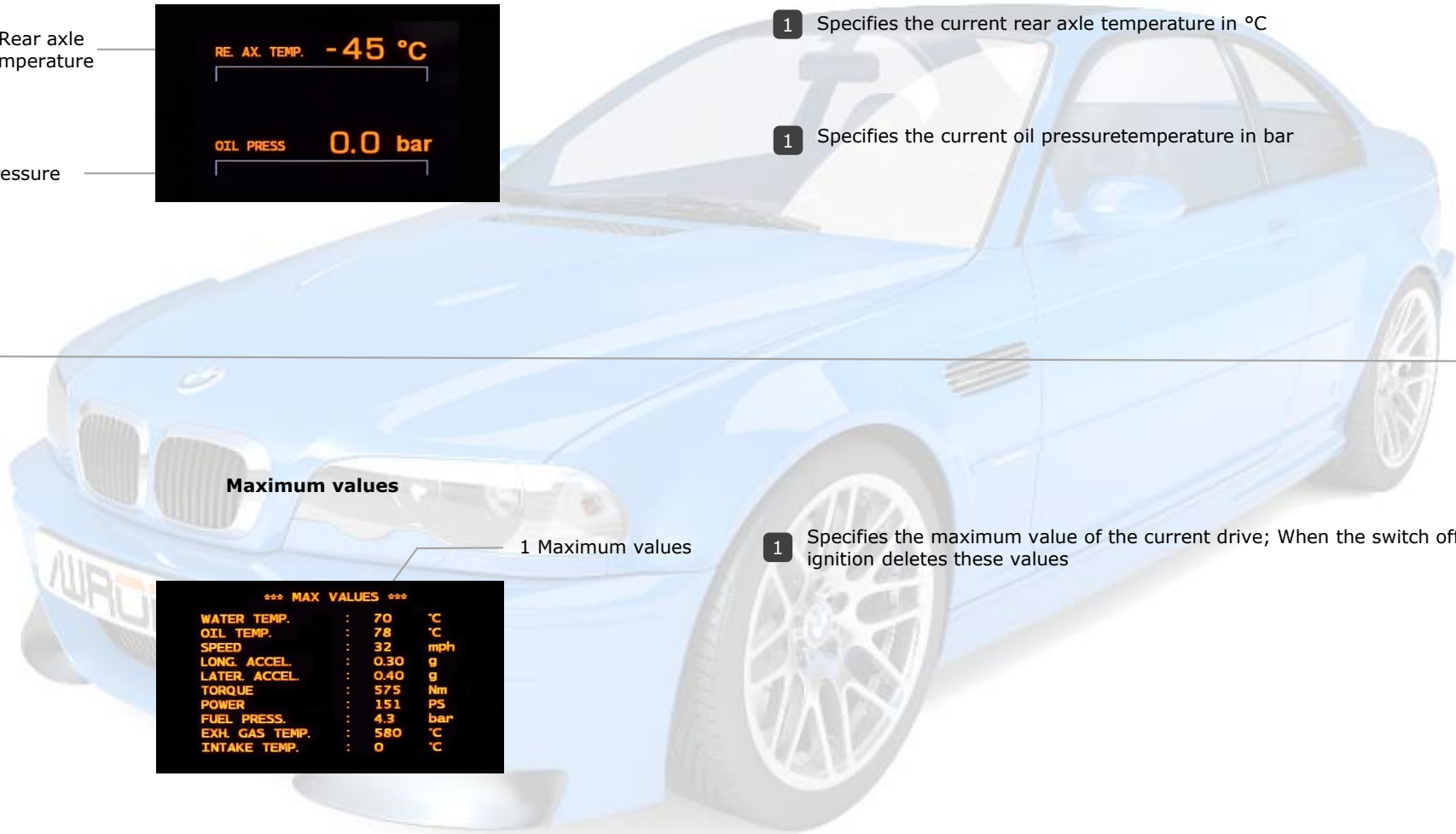
Maximum values

1 Maximum values

1 Specifies the maximum value of the current drive; When the switch off the ignition deletes these values

```

*** MAX VALUES ***
WATER TEMP.      : 70 °C
OIL TEMP.        : 78 °C
SPEED            : 32 mph
LONG. ACCEL.     : 0.30 g
LATER. ACCEL.    : 0.40 g
TORQUE           : 575 Nm
POWER            : 151 PS
FUEL PRESS.      : 4.3 bar
EXH. GAS TEMP.   : 580 °C
INTAKE TEMP.     : 0 °C
    
```



System components

Switch off display

1 Switch off display



- 1 During the brief wait about 2 seconds, the display turns off; by pressing the wheel button it is possible to turn the display back



Operating concept

To operate the Display E46DGA you just have to use the touch screen. This allows an easy handling and ensures the control of the vehicle by the driver.

Diagnose Mode:

The display will go in diagnose mode when use settings menu. This allows vehicle work with the BMW- diagnose device. The diagnostic mode is finished leaving the settings menu.

Dimming:

To adjust the dimming, you have to press the allocated button settings menu. 3 Different levels are selectable.



Operating concept

Sprint function

The sprint display is operated only by the driving style of the driver. So they are not any external buttons for the operation necessary.

In the stand is the stopwatch, as well as the speed to 0.

As soon as the driver accelerated the timing begins. For the first measurement, from 0 to 100 km/h, the driver will have 15 seconds. If the driver is not able to accelerate to 100 km/h, the measurement stops and the timer goes back to 0.

Is the driver able to accelerate to 100 km/h, the second measurement from 0 to 200 km/h begins. For this speed the driver has 10 more seconds, so 25 seconds to speed up to 200 km/h.

The maximum achieved times, as well as the maximum longitudinal acceleration are stored and displayed at the bottom of the display.

As well, the ever reached maximum speed is represented in the upper right area of the screen. These stored maximum values are automatically replaced by new highs.

To delete these peaks, it is only necessary to press the control button for 3 seconds. There is a short display change and therefore resets all values. This is done only in the Sprint display mode.

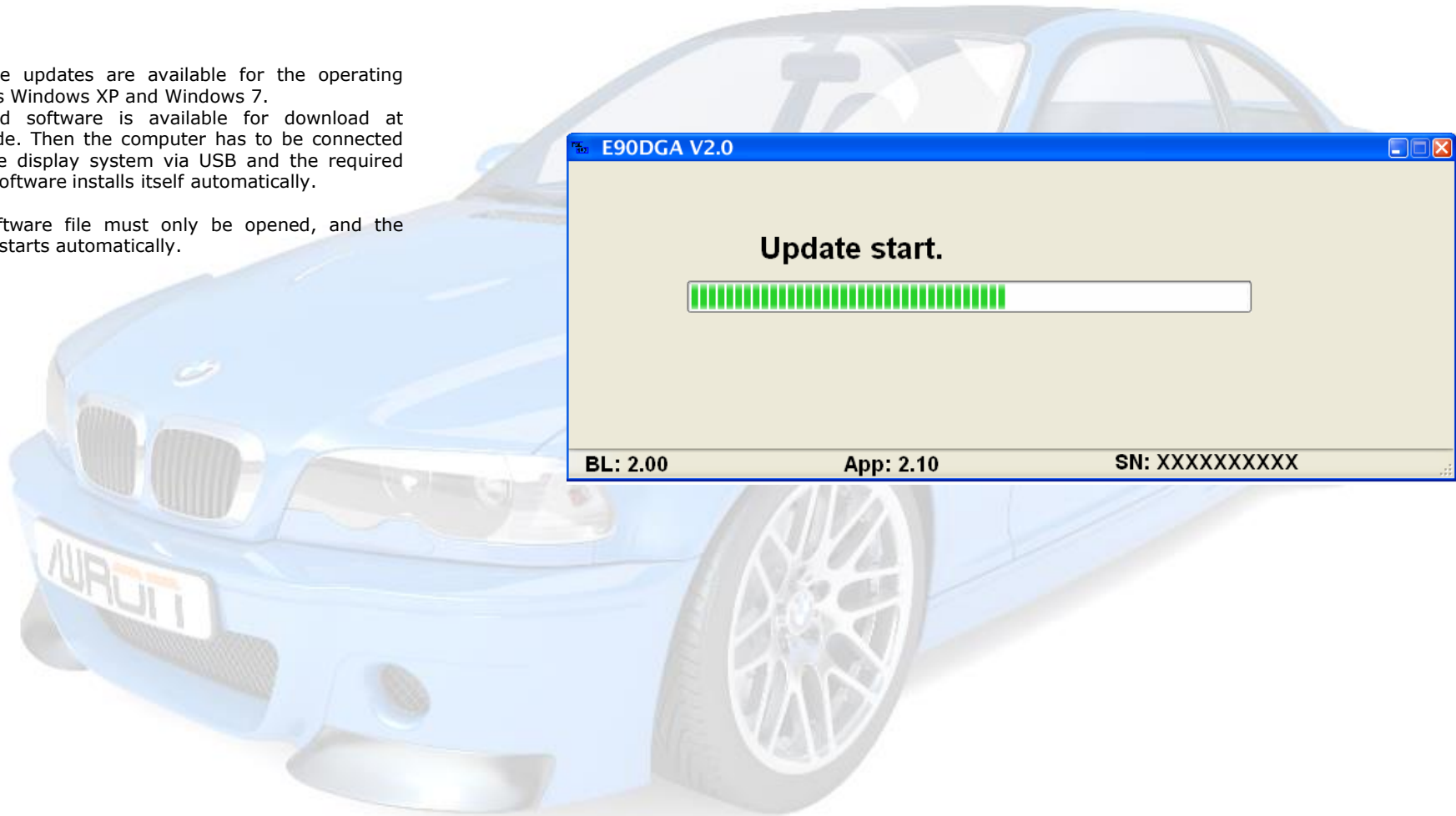


Operating concept

Softwareupdate

Software updates are available for the operating systems Windows XP and Windows 7. Required software is available for download at Awron.de. Then the computer has to be connected with the display system via USB and the required driver software installs itself automatically.

The software file must only be opened, and the update starts automatically.



Purchased parts package

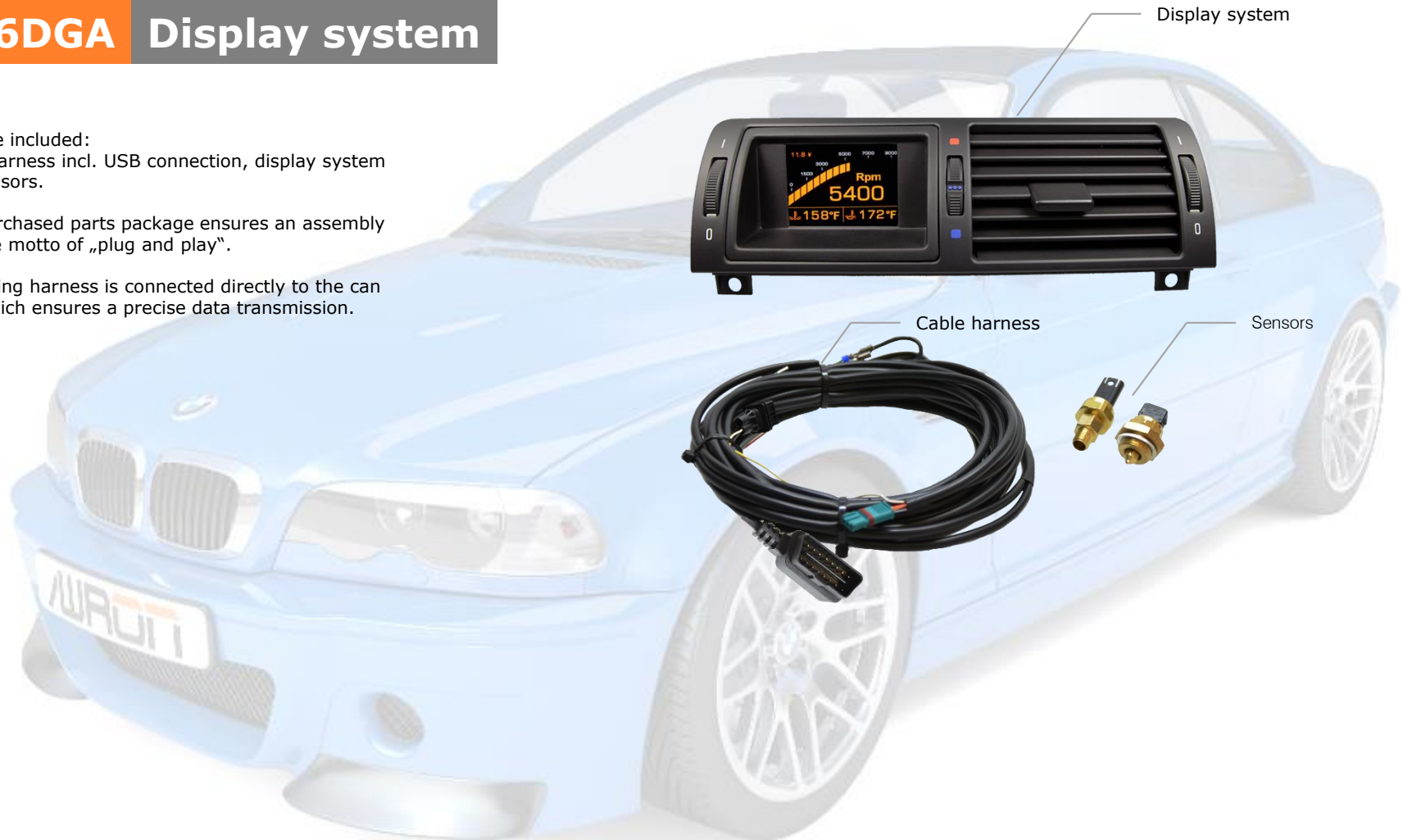
E46DGA Display system

Package included:

Cable harness incl. USB connection, display system and sensors.

This purchased parts package ensures an assembly true the motto of „plug and play“.

The wiring harness is connected directly to the can bus, which ensures a precise data transmission.



Technical data

E46DGA Display system

Display

- OLED display 320 x 240

Cutting point

- USB cutting point for Software update

Case

- Plastic, original BMW air grille

Size (length x width x depth)

- 290 mm x 105 mm x 110 mm

Weight

- 300 g

