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Model support

E9xDGA

3 E-Serie



M3 – Kompressor Kit 1

All models with following engines are supported:

Turbo- Gasoline engine

Product description

E9xDGA Product description

Data display:

- Boost pressure
- Torque
- Performance
- Sprint
- Lateral and Longitudinal acceleration
- Performance 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.

To operate the Displayssystem, you just have to use the steering wheel buttons. Thus, control of the vehicle by the driver is always maintained.



System components

Boost pressure display

1 Battery voltage

2 Boost pressure bar

5 Cooling water temperature



3 Peek holder bar

4 Boost pressure

6 Oil temperature

- 1 Indicates the current battery voltage
- 2 Graphically represents the boost pressure, between 0 and 1.35 bar, and is equipped with a towing pointer
- 3 Holds the early maximum of loading pressure for 2 seconds
- 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

Torque display

1 Battery voltage

2 Torque bar

5 Cooling water temperature



3 Peek holder bar

4 Torque

6 Oil temperature

- 1 Indicates the current battery voltage
- 2 Graphically represents the torque between 0 and 650 Newton Mertes, and is equipped with a towing pointer
- 3 Holds the early maximum of loading pressure for 2 seconds
- 4 Indicates digital torque between 0 and 650 Newton metres
- 5 Specifies the current cooling temperature in °C
- 6 Specifies the actual oil temperature between - 40 °C and 130 °C

System components

Performance display

1 Battery voltage



3 Peek holder bar

2 Power bar

4 Power

5 Cooling water temperature

6 Oil temperature

- 1 Specifies currently speed according to the speedometer
- 2 Represents the power between 0 and 400 PS and is equipped with a peek holder bar
- 3 Holds the early maximum of loading pressure for 2 seconds
- 4 Specifies the power digital between 0 to 400 PS
- 5 Specifies the current cooling temperature in °C
- 6 Specifies the actual oil temperature between -40 °C and 130 °C

Sprint display

1 Speed



3 max. Speed

2 Stopwatch

4 Sprint times

5 Longitudinal acceleration

- 1 Specifies currently speed in km/h according to the speedometer
- 2 Specifies the time depending on the current speed
- 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 ($g = 9,81 \text{ m/s}^2$)

System components

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 ($G = 9,81 \text{ m/s}^2$)

Performance chart

3 Torque graph

1 Power

2 Power



4 Torque

1 Graphically represents the power

2 Specifies the power digital between 0 and 500 hp; the provisional maximum value is kept

3 Graphically represents the torque

4 Specifies the torque digital between 0 and 600 Nm; the provisional maximum value is kept

System components

Gasoline pressure and transmission oil temperature

1 Gasoline pressure



1 Specifies the current gasoline pressure between 0 and 10 bar

2 Specifies the current transmission oil temperature between -30 °C and 130 °C

2 Transmission oil temperature

Lamda display

1 wideband
oxygen sensor Bank 1



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

2 Specifies the current exhaust gas temperature between 0 °C and 130 °C

3 Specifies the current value of wideband oxygen sensor Bank 2; 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

3 wideband
Oxygen sensor Bank 2

2 waste gas
temperature

System components

Pressure and temperature display

1 Boost presure

2 Temperature prior to charging air cooler



3 Temperature after charge air cooler

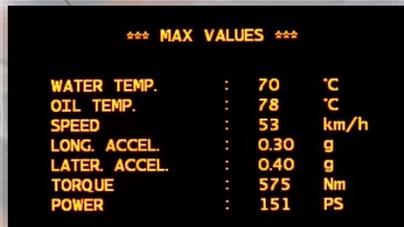
1 Indicates the current charging pressure, between 0 and 10 bar

2 Indicates the current temperature prior charging air cooler, between 0 °C and 130 °C

3 Indicates the current temperature after charge air cooler, between 0 °C and 130 °C

Maximum values Page 1

1 Maximum values



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

System components

Maximum values Page 2

*** MAX VALUES ***		
BOOST PRESS.	: 0.00	bar
FUEL PRESS.	: 4.3	bar
EXH. GAS TEMP.	: 580	°C
INTAKE TEMP.	: -3	°C
BOOST TEMP.	: 0	°C
TRANS. TEMP.	: 42	°C

1 Maximum values

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

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

E9xDGA Key functions

To operate the Display E9xDGA you just have to use the steering wheel buttons. Each a press of a specified button (for example the hash key) is enough, to switch between the displays. This allows an easy handling and ensures the control of the vehicle by the driver.

Assignment of keys:

The buttons of the left, as well as by the right-hand wheel block can be used. By 5 seconds press any key, it is applied to the operation. The display reports the adoption of the key acoustically.

Diagnose Mode:

Hold 10 seconds again to activate the workshop mode. The message „ DIAGNOSE MODE AKTIV!“ appears in the display. This allows vehicle work with the BMW- diagnose device. The diagnostic mode is finished by on and turn off the ignition

Dimming:

To adjust the dimming, you have to press the allocated button for 3 seconds and an acoustic signal is heard. In the space of another 3 seconds, you can regulate the dimming by pressing the button. 3 Different levels are selectable. By longer wait for 10 seconds, the dimming mode is deactivated.



Operating concept

E9xDGA 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.



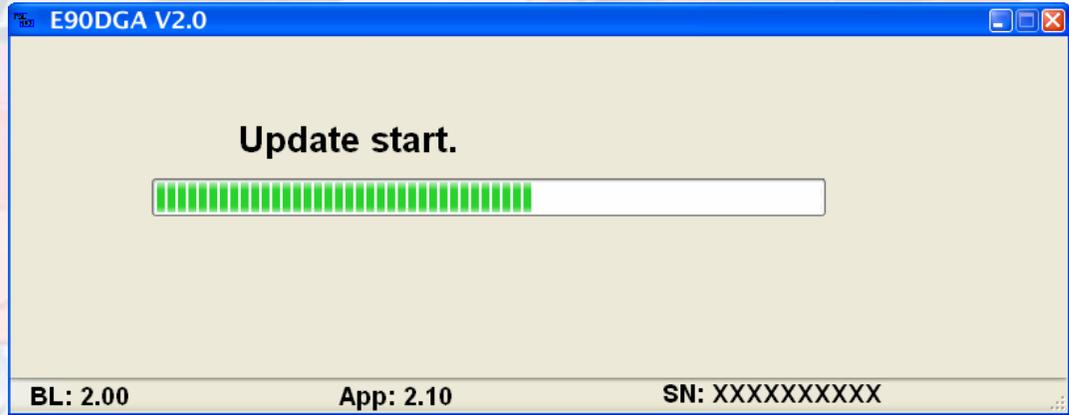
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Author: Awron GmbH	Date: 3.12.2013	

Operating concept

E9xDGA Software update

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

E9xDGA Purchased parts package

Purchased parts package

- Display system
- Cable harness incl. USB connection
- Sensors
- Operating instructions

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

E9xDGA Technical data

Display

- OLED display 320 x 240

Cutting point

- CAN – Bus 500 KBit
- USB cutting point for Software update

Case

- Plastic, original BMW air grille

Size (length x width x depth)

- 350 mm x 70 mm x 130 mm

Weight

- 320 g

