

# N54 Oil Pressure Sensor Kit

## Kit contents: 1 x Oil Pressure Sensor 1 x Sensor Harness 1 x License Key Card

Thank you for purchasing the Nexsys Motorsport Oil Pressure Sensor Kit for the BMW N54 engine. This kit allows you to replace the stock oil pressure switch with a sensor along with software enhancements such as configurable alert thresholds, rpm limiting and datalogging. Physical installation takes about 15 minutes.

#### **Physical Installation**

**Step 1:** Disconnect the vehicles battery before proceeding.

Step 2: Remove Engine Cover

Step 3: Remove stock oil pressure switch

**Step 4:** Install oil pressure sensor included with this kit (Torque: 7nm)

**Step 5:** Plug-in included harness to the oil pressure sensor and route harness along the intake manifold to the back of the engine and to the DME box.

**Step 6:** Open DME box and route the oil pressure sensor harness into the box by either fishing the harness through an existing branch in the OEM harness or by cutting/drilling a small hole in the rubber DME box seals. We recommend the fishing method as it ensures the DME box remains sealed. Below is an example of a branch point in the OEM harness that you can separate and fish the oil pressure sensor harness into.



**Step 7:** Release the DME connectors and slide out connector X60007 (26 pin connector in the larger shell). Look on the top and bottom of the X60007 connector to identify pins 2, 3 and 6 (*These pins are empty from the factory*). Insert the blue/yellow wire into pin 2, the yellow/white wire into pin 3 and the black/yellow wire in pin 6. Reassemble the DME connectors & reconnect to the DME. If you have any questions regarding removing the connectors from the shell please contact us at <u>support@nexsysmotorsport.com</u>. Alternatively there are many videos on YouTube demonstrating how to remove them.

#### Pin/Connector Layout (looking at DME/ECU)



**Step 8:** Close the DME box, reinstall the engine cover & proceed to the flashing instructions below.

### **Flashing Instructions**

**Step 1:** Ensure you are using the most updated MHD app version. Launch the MHD app and go to the "My Licenses" page. Select "Active New License Key" and enter the license key on the included License Key Card in this kit (**WARNING: MAKE SURE THE VIN LISTED IS THE CORRECT VEHICLE!**)

**Step 2:** Before re-flashing your existing map (custom or OTS), select the "NXM Oil Pressure Sensor" checkbox in the flash time options. If you wish to enable the RPM limit for critical oil pressure (2000 RPM) then check that box as well.

**Step 3:** Flash vehicle (this flash may take 10-13 minutes depending on what version of the MHD app you last used to flash the vehicle was).

**Step 4:** Verify the oil pressure sensor is operational by datalogging "Oil Pressure" with the MHD app.