HEAVY DUTY SCAN TOOL

Bosch HDS 250

Medium and heavy-duty diagnostics for heavy-duty and aftermarket shops
HDS 250 Kit
(1699200240)

HD Scan tool, 9 Pin Deutsch Cable, 6 Pin Deutsch Cable, 16 Pin HD/OBD II Cable, J1962 CAT Cable, USB Cable, Quick Start Guide, Carrying Case and 1-Year Warranty.

Ideal for heavy-duty shops as a second diagnostic tool and mobile repair trucks

Cost-effective solution for aftermarket shops in need of heavy-duty coverage

Includes heavy-duty standard coverage for medium and heavy-duty trucks

HDS 250 Features

- Brilliant Color Display
- Rugged enclosure for durability
- Class 4 – Class 8 truck coverage featuring “Automatic Protocol Search”
- HD J1587 / J1708 and J1939 CAN, Engine, Transmission/ABS coverage and more
- Global OBD II Quick Test
- Works on 24V Systems
- Gasoline and diesel engine coverage
- Read and clear diagnostic trouble codes
- Live vehicle data includes
  - Engine speed
  - Engine ECU temperature
  - Percent acceleration pedal position
  - Engine intercooler temperature
  - Engine coolant temperature
  - Battery voltage
  - Alternator voltage output
  - Ambient air temperature
  - Air inlet temperature
- On-screen text in Spanish, French, and English
- On-screen definitions of diagnostic trouble codes
- Software-defined HOT keys
- Set measurement units in SAE English/Metric
- Includes four AAA batteries for uninterrupted power supply and off-vehicle use
- Internet upgradable
- Demo mode permits training shop employees

J1587/J1708 & J1939 Heavy-Duty Standard

What does it mean?

SAE J1587/J1708

SAE J1587 is a diagnostic protocol standard developed by the Society of Automotive Engineers (SAE) for heavy-duty and most medium-duty vehicles built after 1985. Up to 1995, individual OEMs used their own connectors. From 1996 to 2001, the 6-pin Deutsch was standard. Beginning in 2001, most OEMs converted to the 9-pin Deutsch. Some OEMs still use the 6-pin Deutsch.

SAE J1708 is an SAE physical specification developed especially for heavy-duty vehicles (trucks & busses). The protocol promoted a standard for serial communication between modules with microcontrollers. J1708 describes the physical and data link layer. Almost always used in conjunction with the application layer protocol SAE J1587.

SAE J1939

In the early 90’s, the SAE Truck and Bus Control and Communications Sub-committee started the development of a CAN-based application profile for in-vehicle communication in trucks. In 1998 the SAE published the J1939 set of specifications. A J1939 network connects electronic control units (ECU) within a truck and trailer system. The J1939 specification - with its engine, transmission, and brake message definitions - is dedicated to diesel engine applications.

SAE J1939 has been adopted widely by diesel engine manufacturers. One driving force behind this is the increasing adoption of the engine Electronic Control Unit (ECU), which provides one method of controlling exhaust gas emissions within US and European standards. Consequently, SAE J1939 can now be found in a range of diesel-powered applications: vehicles (on- and off-road), marine propulsion, power generation and industrial pumping.

HD Standard Software for Class 4 – 8 and Global OBD II software for Light Duty Trucks

<table>
<thead>
<tr>
<th>Category</th>
<th>Class</th>
<th>GVWR2</th>
<th>Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light HD Scan</td>
<td>1</td>
<td>0 - 27 kN (0 - 6,000 lbs.)</td>
<td>pickup trucks, ambulances, parcel delivery trucks</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>27 - 45 kN (6,001 - 10,000 lbs.)</td>
<td></td>
</tr>
<tr>
<td>Global OBD II</td>
<td>3</td>
<td>45 - 62 kN (10,001 - 14,000 lbs.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>62 - 71 kN (14,001 - 16,000 lbs.)</td>
<td></td>
</tr>
<tr>
<td>Medium HD Scan Heavy-Duty Software</td>
<td>5</td>
<td>71 - 87 kN (16,001 - 19,500 lbs.)</td>
<td>city cargo vans, beverage delivery trucks, wreckers, school buses</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>87 - 116 kN (19,501 - 26,000 lbs.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>116 - 147 kN (26,001 - 33,000 lbs.)</td>
<td></td>
</tr>
<tr>
<td>HD Scan / HD Software</td>
<td>8</td>
<td>147 kN and over (33,000 lbs. and over)</td>
<td>truck tractors, concrete mixers, dump trucks, fire trucks, city buses</td>
</tr>
</tbody>
</table>

Vehicle manufacturers use precise technical definitions and divide trucks into eight classes according to gross vehicle weight rating (GVWR). The table shows vehicle manufacturer truck classifications.