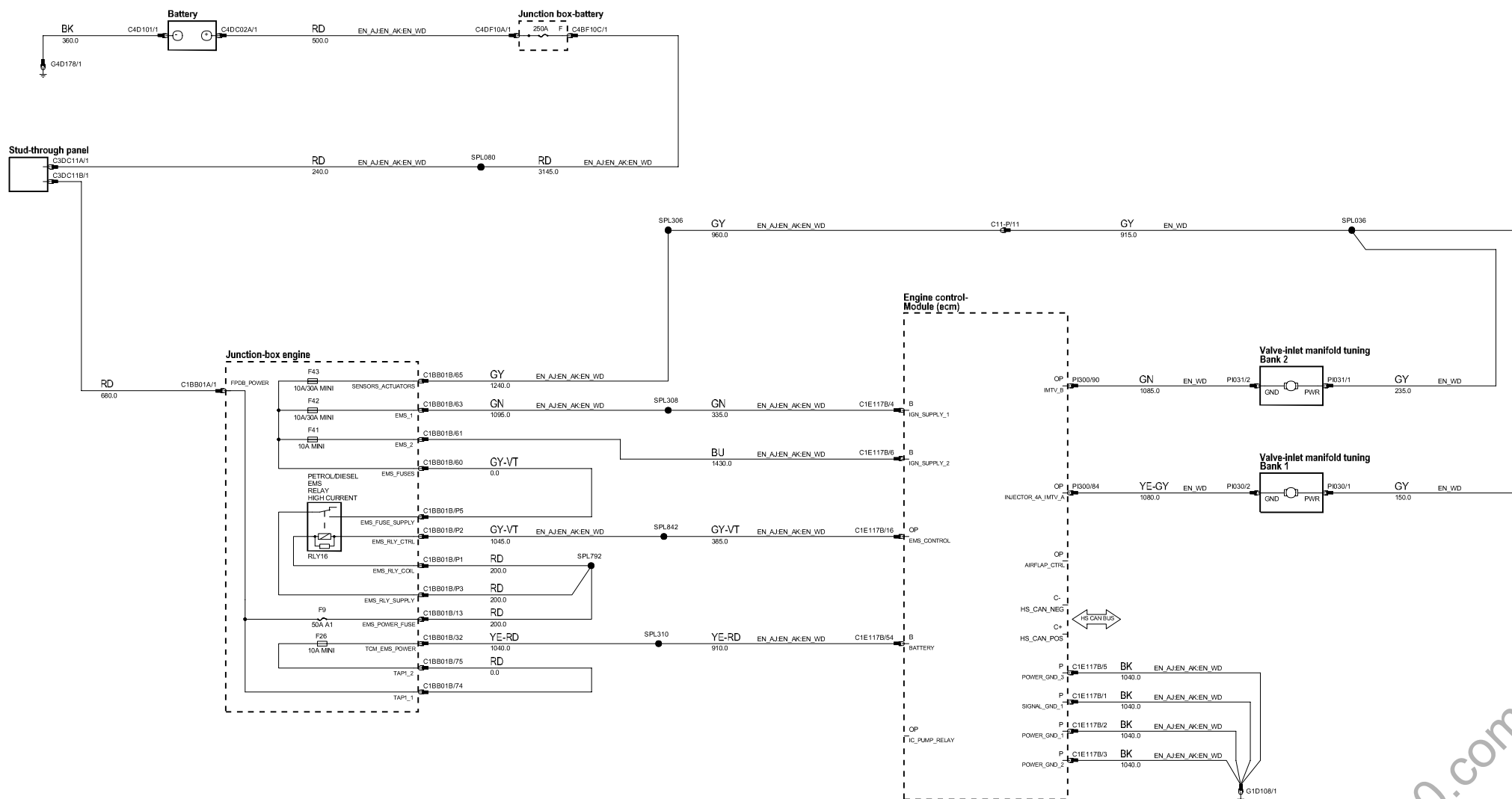


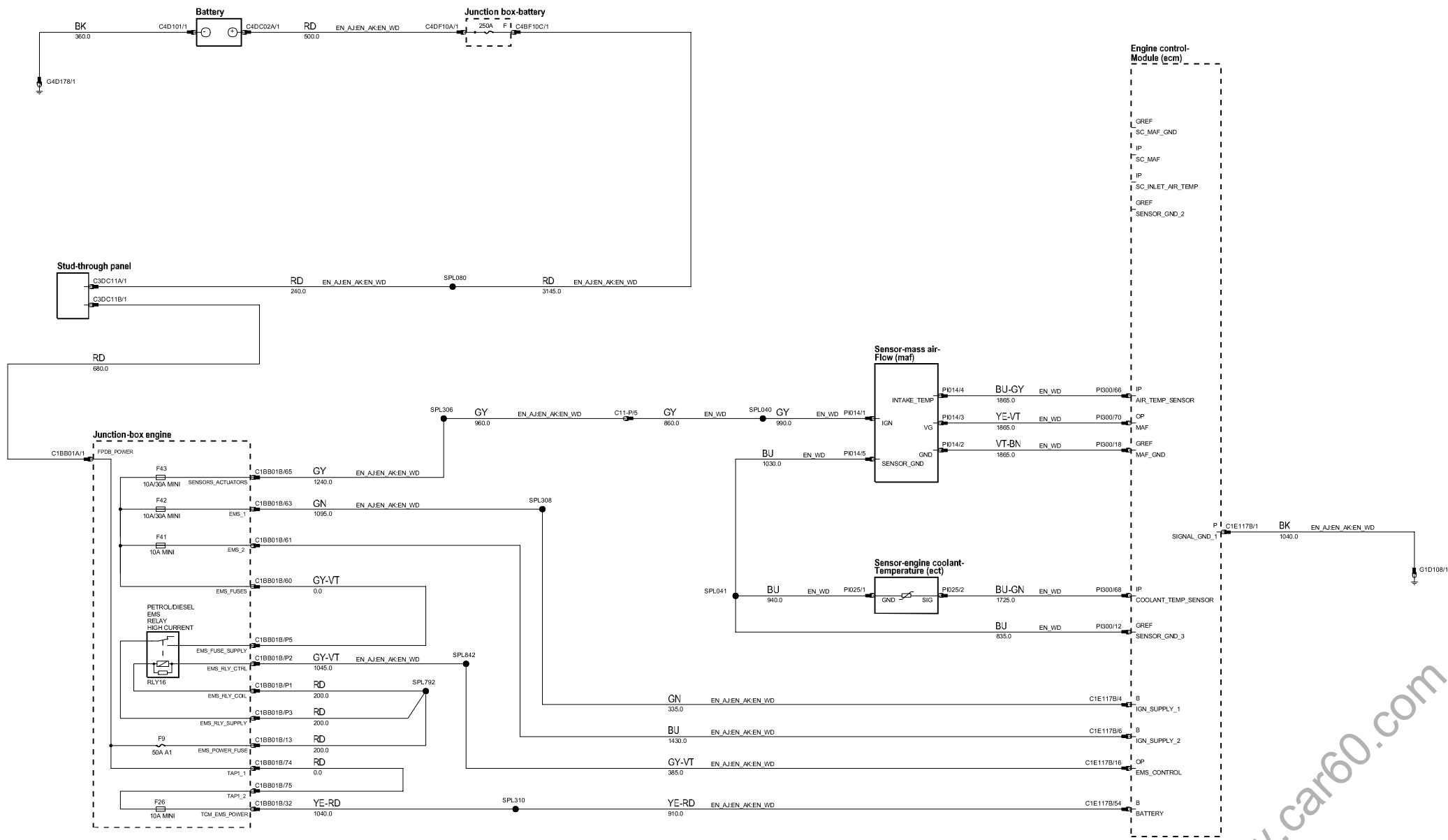
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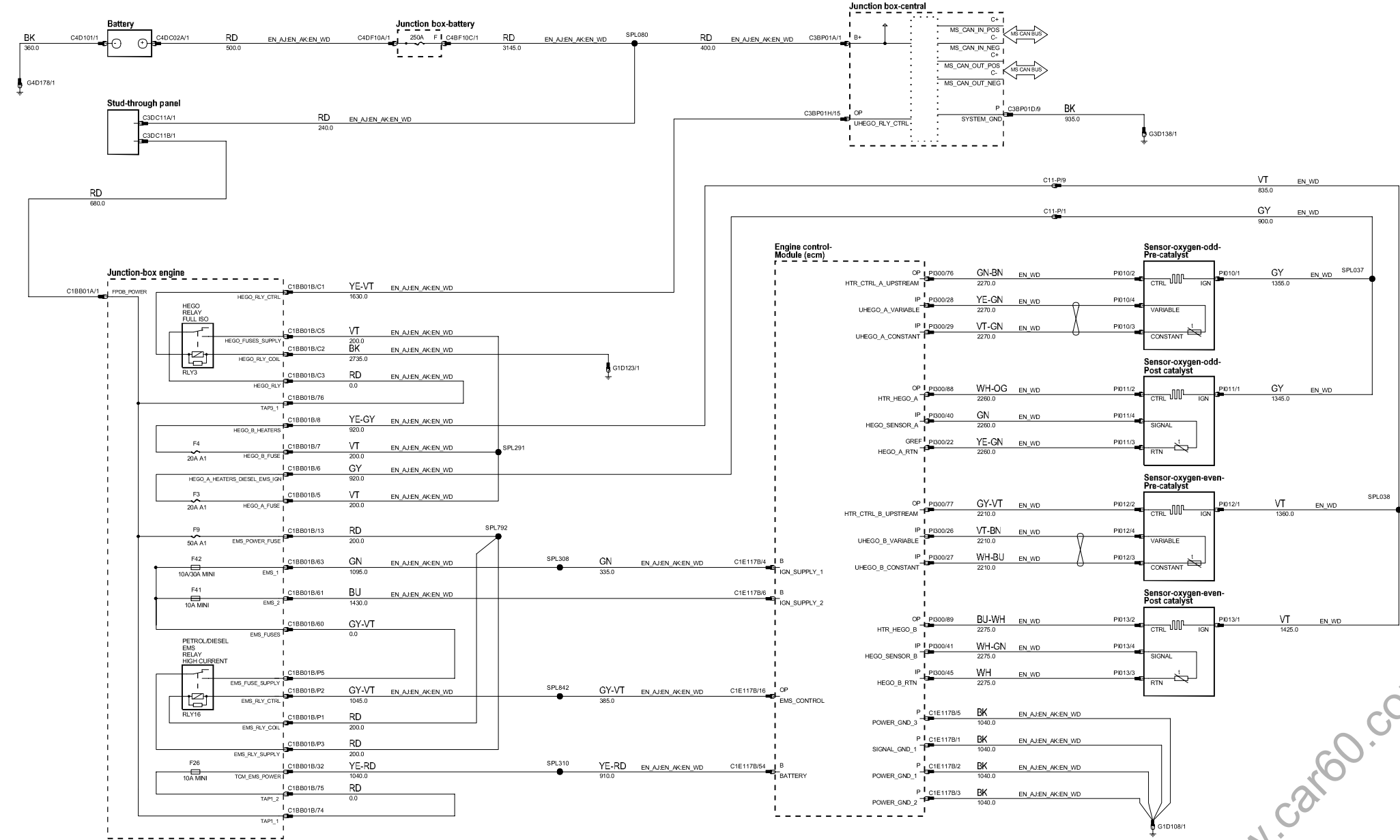


The diagram illustrates the electrical system architecture, starting from the **Battery** (BK 360.0) and **Stud-through panel** (RD 240.0). It branches into the **Junction-box engine** and **Junction box-battery**. The **Junction-box engine** contains fuses (F42, F41, F9, F26) and relays (RLY10) for various circuits like EMS, PETRO/DIESEL, and TOX. The **Junction box-battery** houses sensors for pressure, oil temperature, and manifold absolute pressure. The **Engine control-Module (ecm)** is a central hub for sensor inputs (knock, crankshaft position, camshaft position, temperature) and outputs (ignition supply, fuel rail control). The diagram concludes with detailed wiring for **Sensor-knock-bank 1**, **Sensor-knock-bank 2**, **Sensor-crankshaft-Position (ckp)**, **Sensor-camshaft-Position (cmp)-bank 2**, **Sensor-camshaft-Position (cmp)-bank 1**, and **Sensor-temperature-Fuel rail**.

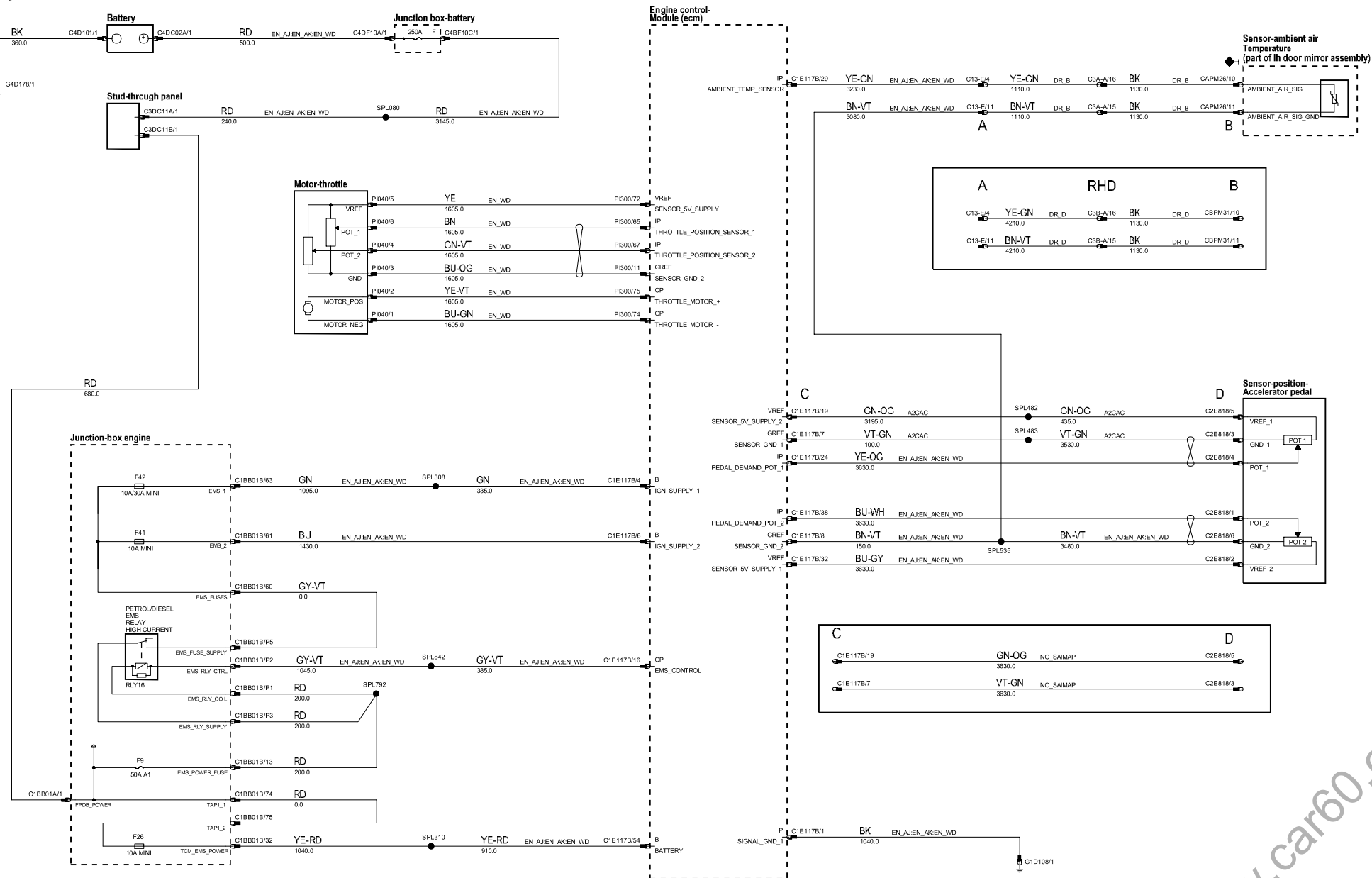
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pt9/83-70026-g-af

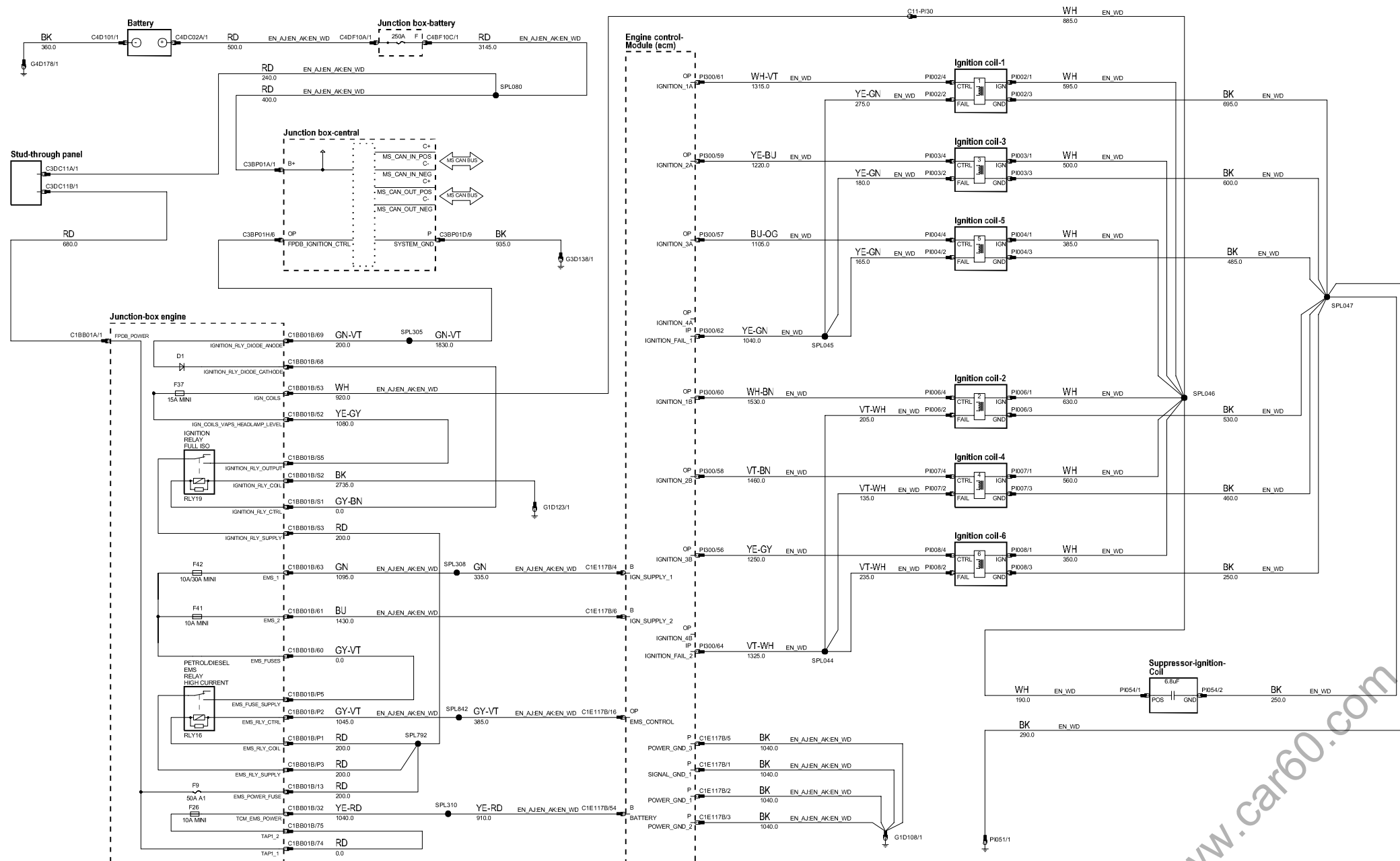


The diagram illustrates the electrical architecture of a vehicle, organized into several functional sections:

- Battery Section:** Shows the main power source (BK 360.0) connected to a junction box (C4D101/1) and a stud-through panel (C3DC11A/1, C3DC11B/1). A ground connection is shown at G4D178/1.
- Junction-box battery:** A sub-section showing the battery's connection to the engine junction box via a 250A fuse (F1) and a 48F10C/1 terminal.
- Stud-through panel:** A panel for connecting the battery to the engine junction box, featuring terminals C3DC11A/1 and C3DC11B/1.
- Junction-box engine:** A central hub for engine-related wiring, including:
 - Sensors/Actuators:** F43 (10A/30A MINI), F42 (10A/30A MINI), F41 (10A MINI), and F44 (15A MINI).
 - EMS (Engine Management System):** Includes EMS_1, EMS_2, EMS_FUSES, EMS_FUSE_SUPPLY, EMS_RLY_CTRL, EMS_RLY_COIL, EMS_RLY_SUPPLY, EMS_POWER_FUSE, and TCM_EMS_POWER.
 - Relays:** RLY16 (PETROL/DIESEL EMS RELAY HIGH CURRENT).
 - Wiring:** Various wires (GY, GN, BU, YE-RD, RD) connecting to terminals like C1B801B/65, C1B801B/63, C1B801B/61, C1B801B/60, C1B801B/P5, C1B801B/P2, C1B801B/P1, C1B801B/P3, C1B801B/13, C1B801B/32, C1B801B/75, and C1B801B/74.
- Engine control-Module (ecm):** The central control unit, showing various inputs and outputs:
 - Inputs:** VVT_A, VVT_B, INJECTOR_4B, INJECTOR_3B, INJECTOR_2B, INJECTOR_1B, INJECTOR_4A_IMTV_A, INJECTOR_3A, INJECTOR_2A, INJECTOR_1A, WH-BN, WH-OG, VT, and PURGE_VALVE.
 - Outputs:** EGR_1, EGR_2, EGR_3, EGR_4, INJECTOR_SUPPLY_1, INJECTOR_SUPPLY_2, and EMS_CONTROL_B.
- Variable camshaft timing (vct) unit-bank 1 & 2:** These units receive signals from the ECM and provide control signals to the engine.
- Purge control valve:** A valve controlled by the ECM, used for evaporative emissions control.
- Grounding:** Multiple ground points are shown, including GND, GY, GN, BU, YE-RD, and RD, connected to various terminals like G1D108/1 and G1D108/2.

The diagram uses a color-coded system for wires (BK, GN, GY, BU, YE-RD, RD) and includes detailed labels for components, wire gauges, and terminal numbers to ensure accurate installation.

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