



Technical Journal

TITLE:

DTC SRS-B15381B High Voltage battery loop control

| | | | |
|--|---|--|-----------------------------------|
| REF NO: TJ 34567.1.1 | ISSUING DEPARTMENT: Technical Service | CAR MARKET: United States and Canada | |
| PARTNER: 3 US 7510 Volvo Car USA | | ISSUE DATE: 2019-06-18 | STATUS DATE: 2019-08-13 |
| FUNC GROUP: 3113 | FUNC DESC: Battery, high voltage | Page 1 of 15 | |

“Right first time in Time”

Attachment

| File Name | File Size |
|--|-----------|
| 9513036.png | 0.5945 MB |
| Connector 1-4 terminal replacement.pdf | 0.4576 MB |
| TJ 34567.pdf | 0.9564 MB |

Vehicle Type

| Type | Eng | Eng Desc | Sales | Body | Gear | Steer | Model Year | Plant | Chassis range | Struc Week Range |
|------|-----|----------|-------|------|------|-------|------------|-------|---------------|------------------|
| 2XX | BC | | | | | | 2016-2018 | | - | 201526-201744 |
| 2XX | BR | | | | | | 2018-9999 | | - | 201717-999952 |

CSC Customer Symptom Codes

| Code | Description |
|------|---|
| 7G | Text window and warning symbol/Yellow symbol and text message |
| IV | Text window and warning symbol/Text message |

VST Operation Number

| VST Operation Number | Description |
|----------------------|--|
| 36001-2 | Diagnostic trouble codes read / reset / known Diagnostic trouble codes with VIDA |
| 96158-3 | Troubleshooting instrumentation: KT |



DTC Diagnostic Trouble Codes

| Control Module | Code | Fault Type |
|----------------|---------|--------------|
| SRS | B15381B | Intermittent |

Rows beginning with * are modified

Note! If using a printed copy of this Technical Journal, first check for the latest online version.

Text

DESCRIPTION:

If a Supplemental Restraint System (SRS) message in combination with DTC SRS-B15381B is present, please follow “Service”.

Technical explanation:

The SRS module has a loop to the High Voltage (HV) battery as one of several methods to open battery contactors in the event of an accident.

The SRS module monitors the resistance value in this loop. If the loop is open or resistance is high, it will set the DTC and a message will be displayed.

Reported customer symptom are Driver Information Module (DIM) SRS message and SRS warning symbol.

SERVICE:

The resistance of the circuit can be monitored using the SRS parameter “High voltage battery power supply disconnect.”

Check the cable harness from the SRS module to the HV battery.

* Drag check terminal 11 and 12 in the low voltage connector to the HV battery using tool 9513036.

* For more reference information including connector disassembly, see attachments.

*Warranty claim info:

To get warranty claim accepted for a job described in this TJ, please use following data:

VST OP number: 36001-2, 96158-3

VEHICLE REPORT:

Yes, please submit a Vehicle Report if the service solution described in this TJ has no effect. Use concern area “Vehicle Report” and sub concern area “Support needed”, use function group 3113.

To view TJ attachments continue to next page. This TJ has three attachments.



V O L V O

CONNECTOR 1-4 TERMINAL REPLACEMENT



REQUIRED TOOLS

Required tools:

- Volvo Special Tool 951 2630 *
- Pocket Screwdriver

* 951 2630 is available for purchase on the Volvo Cars Special Tools website.

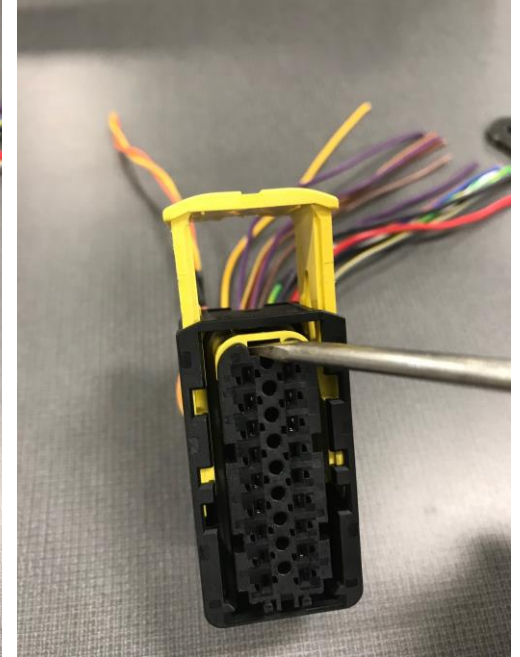
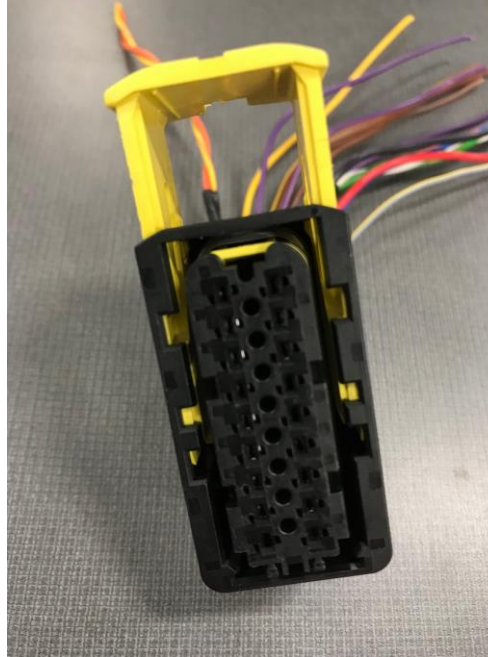
<http://www.volvotools.com/>



TERMINAL REMOVAL

Terminal removal:

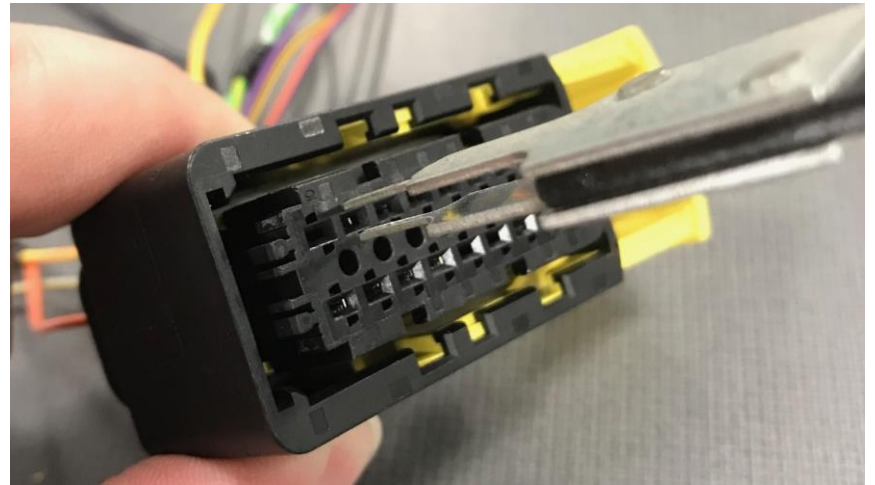
- Use a pocket screwdriver to release the locking tab.



TERMINAL REMOVAL

Terminal removal continued:

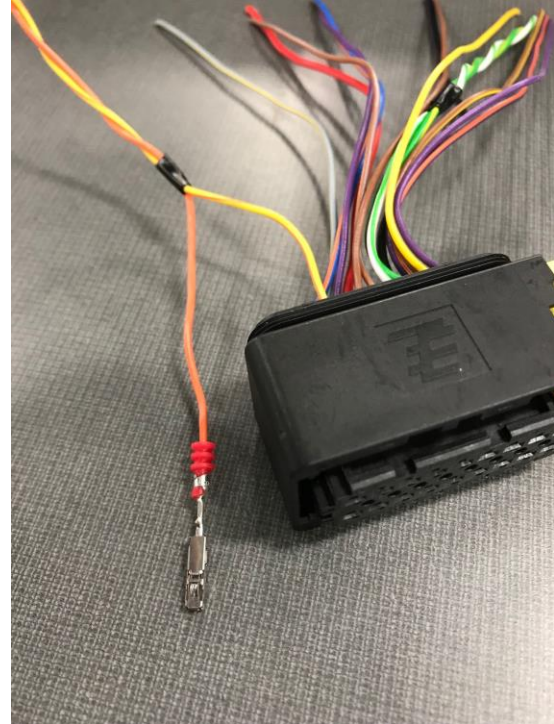
- Insert the prongs of 951 2630 into the smaller holes in the connector housing, push in until it stops.
- Note: **DO NOT** insert the tool into the larger rectangular openings, this will damage the terminals!
- Now remove the tool, the terminal should pull out smoothly from the backside. You may need to pull gently on the wire while removing the tool.



TERMINAL REPLACEMENT

Terminal replacement:

- Replace the terminals using part number 31409245.
- Follow the instructions in Vida for joining cables.
- Vida -> Information -> Repair -> Cleaning, Inspection and Adjustment -> 3 Electrical System -> 37 Cables and fuses -> 371 cables -> Joining cables
- Once the cables are joined install the new terminals into connector 1-4 and reinsert the locking tab.





VIDA, diagnostic service

The screenshot displays the VIDA diagnostic service interface. On the left, a list of ECUs is shown under the 'Other' tab. The 'Supplemental Restraint System Module (SRS)' is selected. On the right, the 'Parameters' tab is active, showing a list of parameters. The 'High voltage battery power supply disconnect - SRS' parameter is selected and highlighted with a red box. Below the list, the detailed information for this parameter is displayed.

| ID | Name |
|------------|--|
| 4/185 | Infotainment Head Unit (IHU) |
| 4/235 | Inverter Electric Rear Axle Drive Module (IEM) |
| 4/236 | Inverter Generator Module (IGM) |
| 4/238 | On-Board Charger Module (OBC) |
| 4/198 | Overhead Console (OHC) |
| 27/13 | Parking Assistance Camera (PAC) |
| 4/214 | Passenger Door Module (PDM) |
| 4/116 | Power Operated Tailgate Module (POT) |
| 4/169 | Power Seat Module Driver (P'SMD) |
| 4/210 | Power Seat Module Passenger (PSMP) |
| 6/163 | Power Steering Control Module (PSCM) |
| 4/102 | Steering Column Lock Module (SCL) |
| 4/247 | Steering Wheel Module (SWM) |
| 93/269_172 | Steering Wheel Module (SWM), SAS in SWM |
| 4/176 | Supplemental Restraint System Module (SRS) |
| 4/209 | Transmission Actuator Control Module (TACM) |
| 4/28 | Transmission Control Module (TCM) |
| 4/161 | Vehicle Connectivity Module (VCM) |
| 4/163 | Vehicle Dynamics Domain Master (VDDM) |
| 93/318_118 | Vehicle Dynamics Domain Master (VDDM), BCM in VDDM |

Source: [Dropdown Menu]

DTCs Documents Wiring Diagrams Parameters Activations Diagnostic Sequences Images ECU Identification

Parameters Selected

Parameter

- Airbag warning lamp - SRS
- High voltage battery power supply disconnect - SRS
- Occupant classification sensor status - SRS
- OWS calibration status - SRS
- Passenger airbag cut-off switch, fault - SRS
- Passenger airbag cut-off switch, status - SRS
- Restraint control module operating mode - SRS
- Seat belt tension sensor - SRS
- Starter motor cut off - SRS
- Supply voltage (KL15A) - SRS
- Supply voltage (KL15B) - SRS

High voltage battery power supply disconnect - SRS

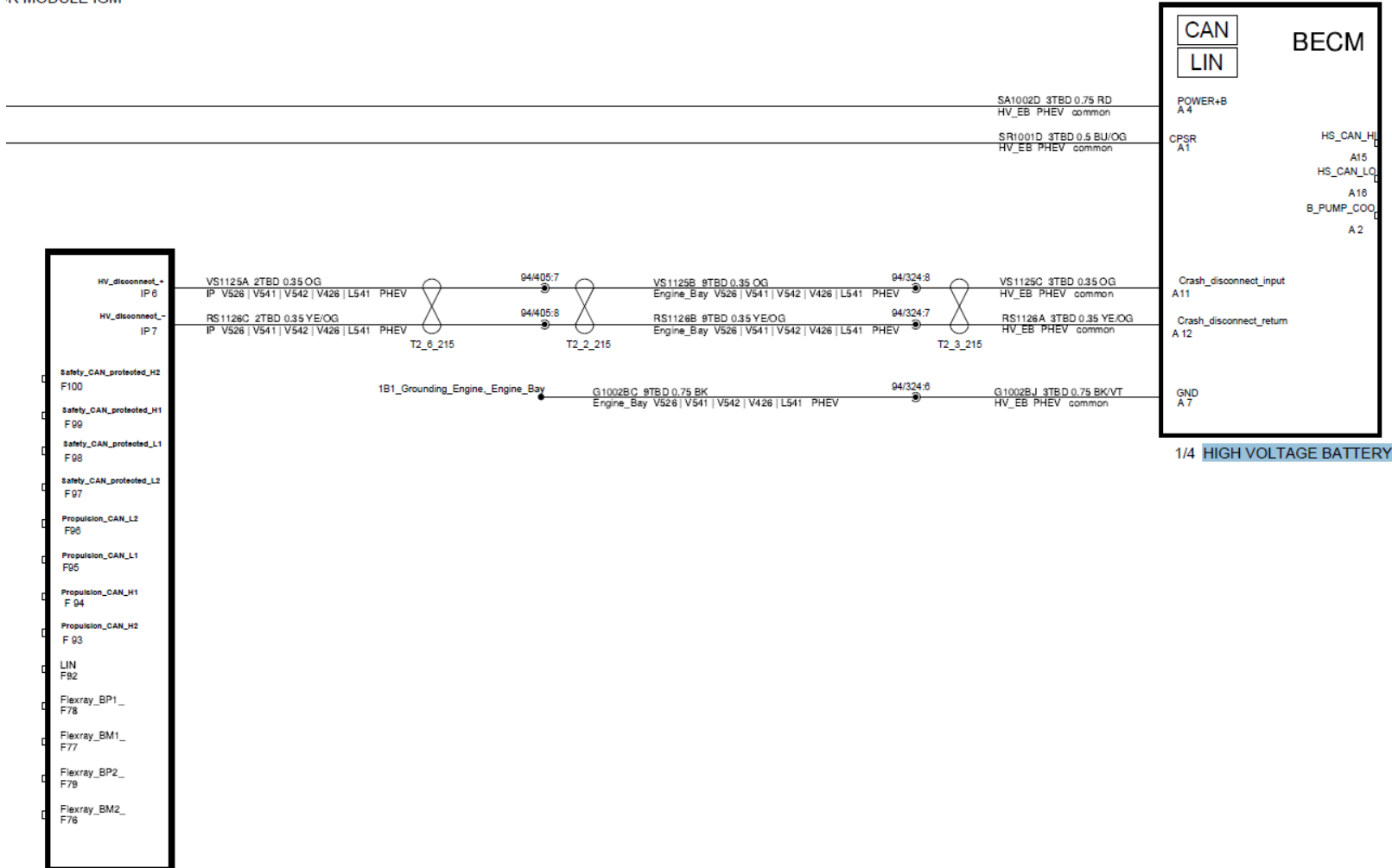
Parameter usage:
The parameter shows the measured resistance within the igniter and its harness.

Parameter origin:
The parameter value originates from the Supplemental Restraint System Module (SRS).

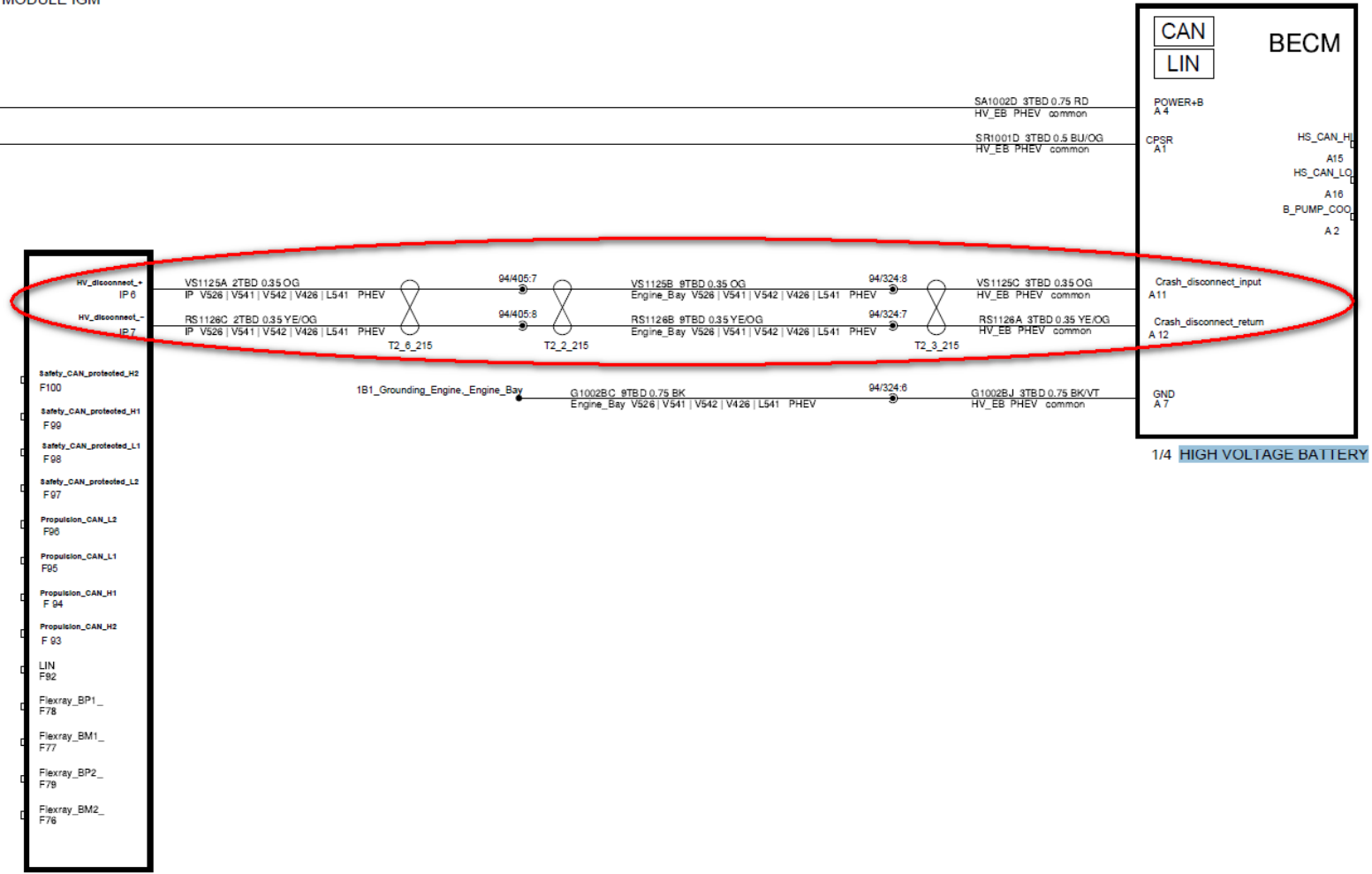
Desired values:
When the component is non faulty the range is 1.8 - 6 Ω.
When the component is short-circuited the value is approximately 0 Ω.
When the component is deployed or there is an open circuit the value is above 10 Ω.
When the component is deployed, open circuit or not installed the value is 65.54 Ω.

DTC SRS-B15381B, High voltage battery power supply disconnect deployment loop control

IR MODULE IGM

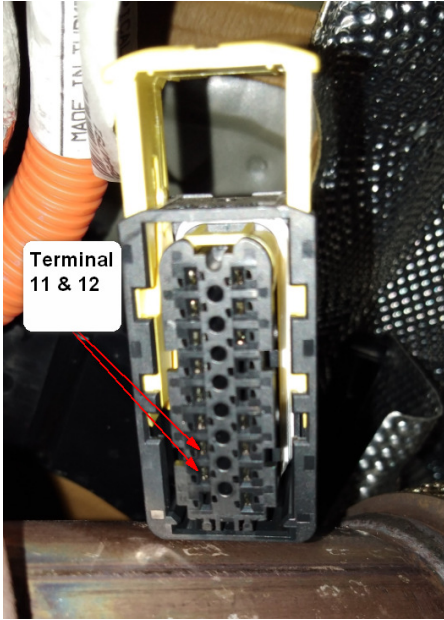
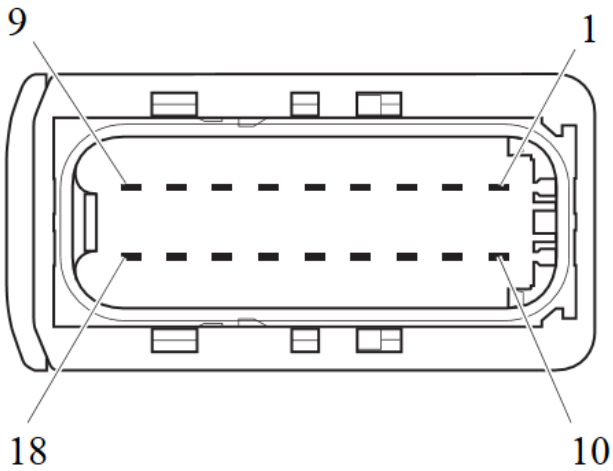


R MODULE IGM



4/176 SUPPLEMENTARY RESTRAINT SYSTEM SRS

LV connector from car to HV battery
Terminal 11 and 12 crash input



PHEV INLINE IP ENGINE BAY

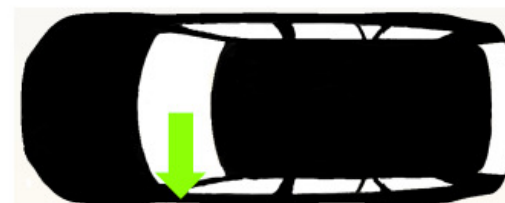


94/405

Connector pno

31409161

Position in vehicle





94/324

Connector pno

31344076

Position in vehicle

