



Technical Journal

TITLE:

DTC SRS-B15381B High Voltage battery loop control

REF NO: TJ 34567.1.4	ISSUING DEPARTMENT: Technical Service	CAR MARKET: United States and Canada	
PARTNER: 3 US 7510 Volvo Car USA		ISSUE DATE: 2021-07-16	STATUS DATE: 2021-07-19
FUNC GROUP: 3113	FUNC DESC: Battery, high voltage	Page 1 of 11	

“Right first time in Time”

Attachment

File Name	File Size
9513036.png	0.5945 MB
Connector 1-4 terminal replacement.pdf	0.4576 MB
SRS B15381B VIDA Fault Tracing Example.pdf	0.3275 MB

Rows beginning with * are modified

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

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.

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



DTC Diagnostic Trouble Codes

Control Module	Code	Fault Type
SRS	B15381B	Intermittent

Vehicle Type

Type	Eng	Eng Desc	Sales	Body	Gear	Steer	Model Year	Plant	Chassis range	Struc Week Range
2XX	BA						2016-9999		-	201526-999952
2XX	BC						2016-9999		-	201526-999952
2XX	BK						2020-9999		-	201917-209952
2XX	BK						2020-9999		-	201917-999952
2XX	BR						2018-9999		-	201717-999952

SERVICE:

1. The resistance of the circuit can be monitored using the SRS parameter “High voltage battery power supply disconnect” (reference Page 1 of [“SRS B15381B VIDA Fault Tracing Example.pdf”](#) attachment).
2. Confirm continuity and pin tension across all disconnect loop connection points from the SRS module to the HV battery LV connector (reference Page 2 of [“SRS B15381B VIDA Fault Tracing Example.pdf”](#) attachment).
3. If no pin tension or continuity issue are found during Step 2, proceed by replacing terminals 11 and 12 in the low voltage connector at the HV battery using tool 9513036. For more reference information including connector disassembly, see [“Connector 1-4 terminal replacement.pdf”](#).

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, 37119

VST Operation Number

VST Operation Number	Description
37119	General Wire Repair (max time of 0.5)
36001-2	Diagnostic trouble codes read / reset / known Diagnostic trouble codes with VIDA
96158-3	Troubleshooting instrumentation: KT

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.

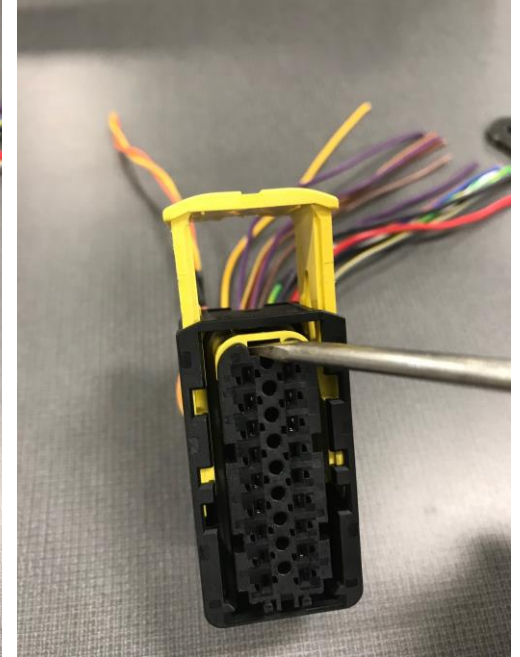
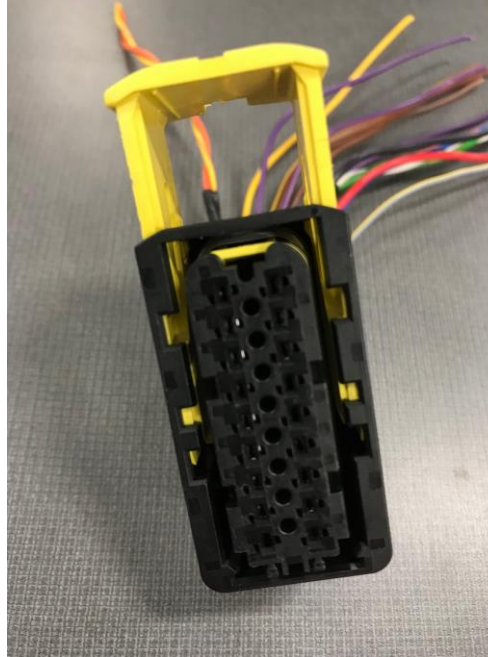
<http://www.volvotools.com/>



TERMINAL REMOVAL

Terminal removal:

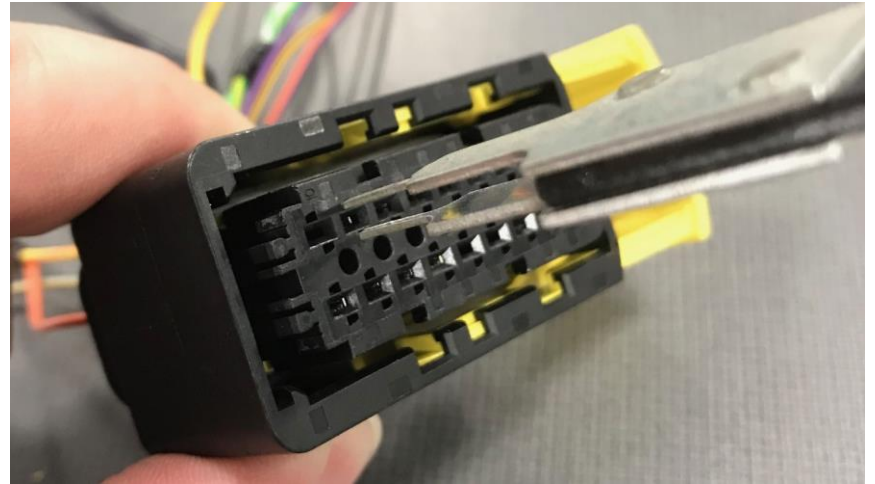
- Use a pocket screwdriver to release the locking tab.



TERMINAL REMOVAL

Terminal removal continued:

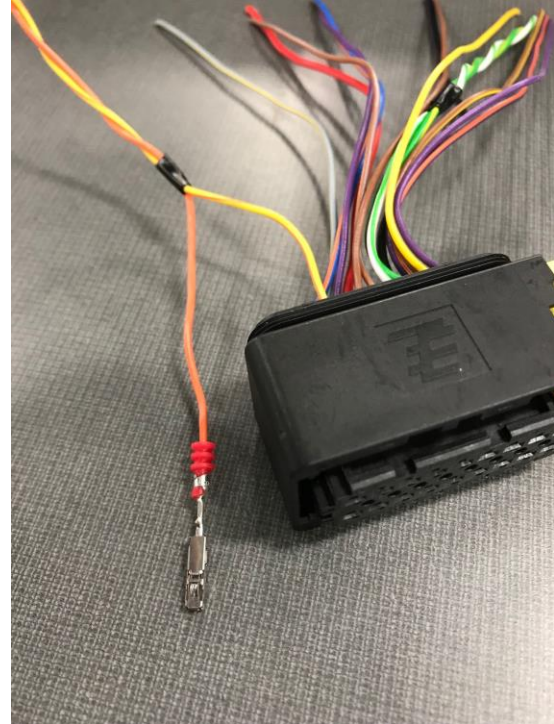
- Insert the prongs of 951 2630 into the smaller holes in the connector housing, push in until it stops.
- Note: **DO NOT** insert the tool into the larger rectangular openings, this will damage the terminals!
- Now remove the tool, the terminal should pull out smoothly from the backside. You may need 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, and the 'High voltage battery power supply disconnect - SRS' parameter is selected and highlighted with a red box. Below the parameter list, detailed information for the selected parameter is provided.

ECUs	Other
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 (PSMD)
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 []

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.

NOTE: The in-line connector numbers differ across vehicle platforms. Be sure to plug the VIN you're working on into VIDA so that the correct information is presented to you!

ECUs	Other
ID	Name
4/214	Passenger Door Module (PDM),
4/116	Power Operated Tailgate Module (POT)
4/169	Power Seat Module Driver (PSMD)
4/210	Power Seat Module Passenger (PSMP)
6/163	Power Steering Control Module (PSCM)
4/211	Restraint Module Left (RML)
4/212	Restraint Module Right (RMR)
4/126	Side Obstacle Detection Control Module Left (SODL)
4/127	Side Obstacle Detection Control Module Right (SODI)
4/68	Steering Wheel Module (SWM), SAS in SWM
4/247	Steering Wheel Module (SWM)
4/176	Supplemental Restraint System Module (SRS)

