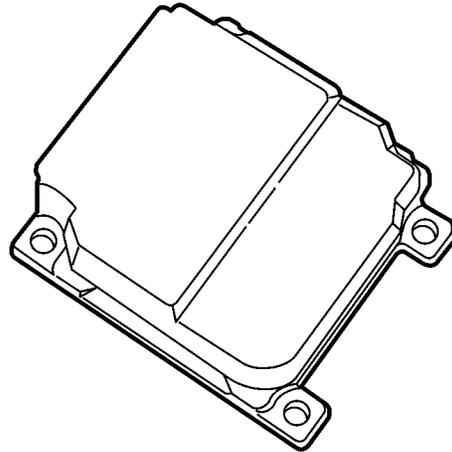


This Service Bulletin is a supplement to Service Manual 884-500, "SRS Airbag, Safety Belts and Bunk Restraints, VN,VHD" (06.2000), publication no. PV776-TSP144851.

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4.2002	884	500	01	1(8)

SRS Generation 2 ECU
VN, VHD

SRS Generation 2 ECU



(Effective from December 2001)

This information includes specifications, design and function, and service procedures for the SRS Generation 2 ECU. For further information, refer to Group 8.

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- ["SRS ECU" page 4](#)
- ["SRS ECU, Replacement" page 6](#)

Specifications

SRS ECU

Fault Code Assignments

MID	232	Supplemental Restraint System (Airbag)
SID	240	Crash Event Stored
SID	253	Calibration Memory

Volvo Proprietary Fault Code Assignments

PSID	1	Wrong VIN Reply
PSID	2	No VIN Reply

Fault Codes

NOTE: For further information concerning fault codes for the SRS ECU, see service information in Group 8, "SRS Airbag, Safety Belts and Bunk Restraints, VN,VHD", Publication Number 884-500.

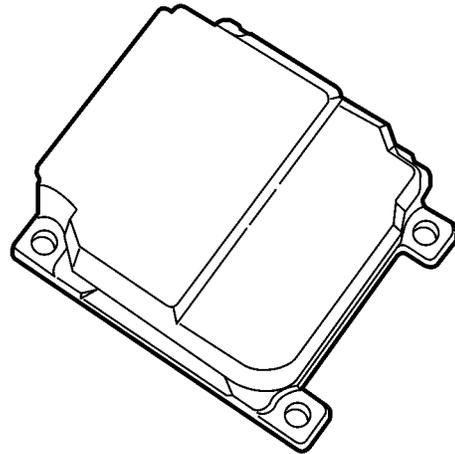
SID	SID Description	FMI	FMI Description
240	Crash Event Stored	14	Special Instruction
253	Calibration Memory	2	<p>Check Sum Incorrect</p> <p>Intermittent or incorrect data.</p> <p><i>Condition for fault code:</i></p> <ul style="list-style-type: none"> ● Check sum incorrect. <p><i>Possible cause:</i></p> <ul style="list-style-type: none"> ● Error when programming. ● Incorrectly compounded data sets. <p><i>Reaction from the ECU:</i></p> <ul style="list-style-type: none"> ● Fault code is stored. ● Yellow warning lamp requested. ● The ECU changes over to the general set up parameters. <p><i>Noticeable external symptoms:</i></p> <ul style="list-style-type: none"> ● The yellow warning lamp and the SRS symbol are illuminated. <p><i>Appropriate action:</i></p> <ul style="list-style-type: none"> ● Reprogram the ECU (See VCADS Pro). ● Change the ECU.
254	Controller # 1	12	Bad Intelligent Device (Internal Error)

PSID	PSID Description	FMI	FMI Description
1	Wrong VIN Reply	2	<p>Data Erratic, Incorrect or Intermittent</p> <p><i>Condition for fault code:</i></p> <ul style="list-style-type: none"> ● The truck instrument cluster responds with the VIN number which does not correspond to the SRS ECU memory. <p><i>Possible cause:</i></p> <ul style="list-style-type: none"> ● The incorrect SRS ECU was installed in the truck, after-market for example. ● The incorrect VIN number has been programmed into the instrument cluster or SRS ECU. <p><i>Reaction from the ECU:</i></p> <ul style="list-style-type: none"> ● Fault code is stored. ● Yellow warning lamp requested. <p><i>Noticeable external symptoms:</i></p> <ul style="list-style-type: none"> ● The yellow warning lamp and the SRS symbol are illuminated. <p><i>Other:</i></p> <ul style="list-style-type: none"> ● The SRS (supplemental restraint system) system now uses general set up trigger parameters. <p><i>Appropriate action:</i></p> <ul style="list-style-type: none"> ● Check that the SRS system and instrument cluster have the correct VIN number stored in memory (checked against the VDA).
2	No VIN Reply	2	<p>Data Erratic, Incorrect or Intermittent</p> <p><i>Condition for fault code:</i></p> <ul style="list-style-type: none"> ● The truck instrument cluster does not respond to the request for a VIN number. <p><i>Possible cause:</i></p> <ul style="list-style-type: none"> ● The instrument cluster is not connected or is not functioning. ● Turning the starter motor with the battery discharged. (Voltage to the instrument cluster panel too low.) <p><i>Reaction from the ECU:</i></p> <ul style="list-style-type: none"> ● Fault code is stored. ● Yellow warning lamp requested. <p><i>Noticeable external symptoms:</i></p> <ul style="list-style-type: none"> ● The yellow warning lamp and the SRS symbol are illuminated. <p><i>Appropriate check / action:</i></p> <ul style="list-style-type: none"> ● Check the instrument cluster. ● Check the condition of the battery.

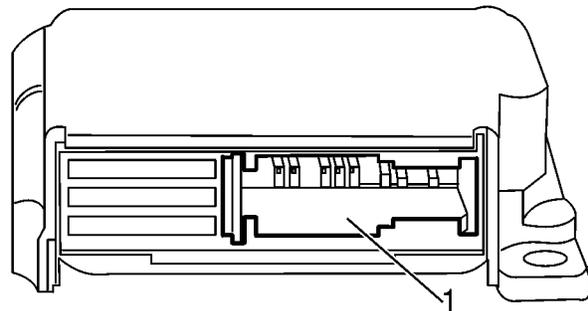
SRS ECU

The following differences exist between the old SRS ECU and the Generation 2 SRS ECU:

- The Generation 2 SRS ECU is programmable through a diagnostic connector. The older SRS ECU was preprogrammed before delivery.
- Additional fault codes and troubleshooting procedures exist for the Generation 2 SRS ECU.
- The Generation 2 SRS ECU has a ground wire while the older SRS ECU was case grounded.



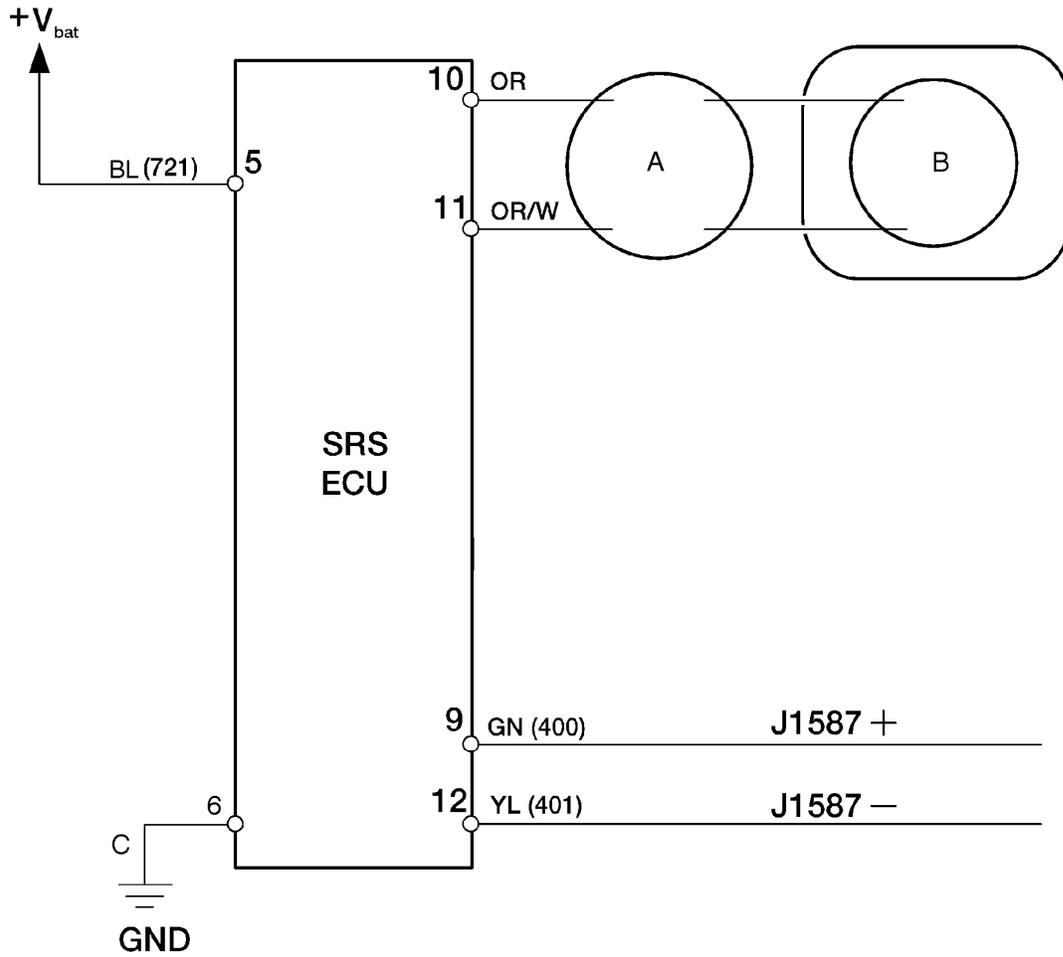
SRS Generation 2 ECU, Top View



SRS Generation 2 ECU, Side View

1 SRS ECU Electrical Connector Port

SRS Wiring Diagram (from 10.2001)



- A** Contact Reel
- B** Airbag Module
- C** SRS Bracket Mounting Hole

No.	Color	Wire No.	Description
5	Black	721	12 Volt Supply
6	White	N/A	Ground
9	Green	400	J1587/J1708 Data Link
10	Orange	N/A	Air Supply
11	Orange /White	N/A	Air Bag Return
12	Yellow	401	J1587/J1708 Data Link

8847-03-02-01 SRS ECU, Replacement

NOTE: Only certified technicians may work on the SRS.

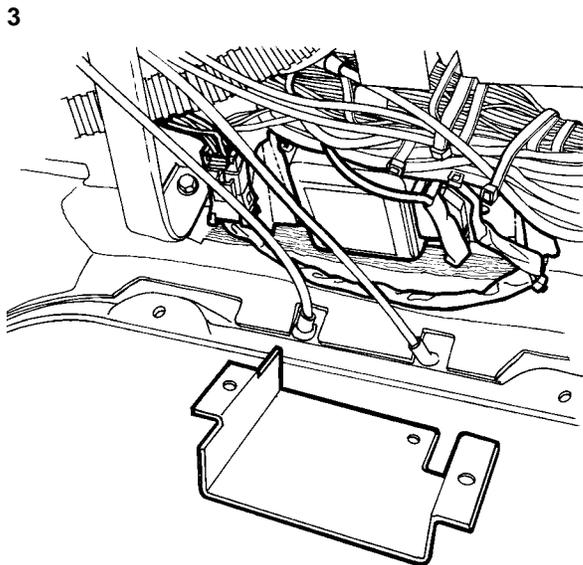
DANGER

Before working on a vehicle, set the parking brakes, place the transmission in neutral, and block the wheels. Failure to do so can result in unexpected vehicle movement and can cause serious personal injury or death.

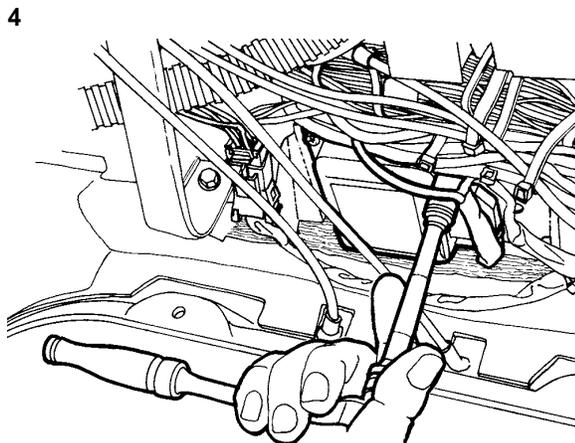
Removal

1
Turn the ignition switch OFF.

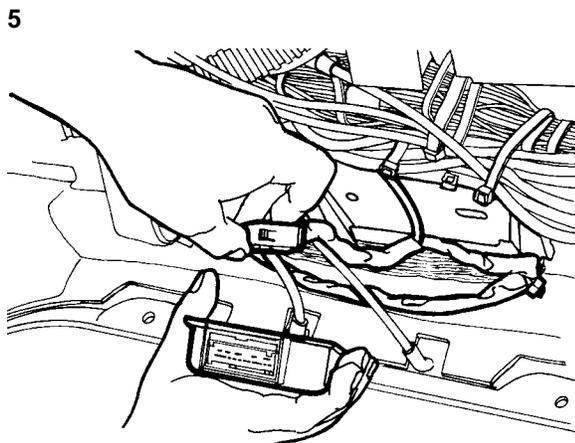
2
Remove the lower dash panels, center and right sections, by removing the 8 torx bolts and 4 plastic nuts.



Remove the 2 torx bolts in the SRS ECU cover, and remove the cover.



Remove the 3 torx bolts from the SRS ECU.



CAUTION

Avoid touching the control unit contact pins. There is a risk of damaging the control unit with electrostatic discharge.

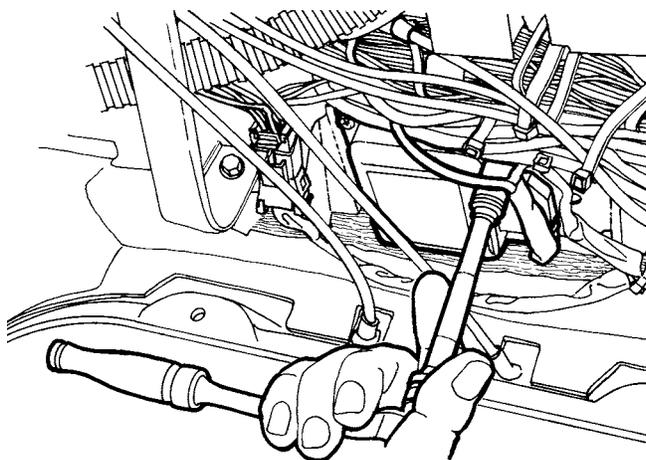
Disconnect the SRS ECU electrical connector. Push in on the tab holding the connector locking arm to release the connector.

Installation

6

Use only Volvo replacement parts and install the ECU only in the proper location described below.

7

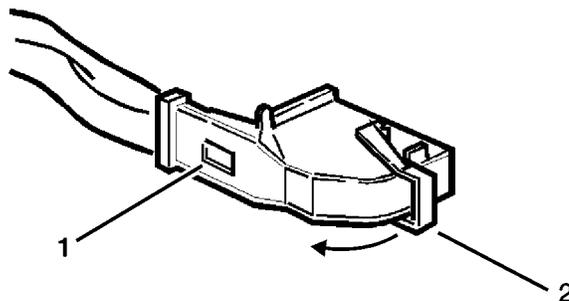


CAUTION

Avoid touching the control unit contact pins. There is a risk of damaging the control unit with electrostatic discharge.

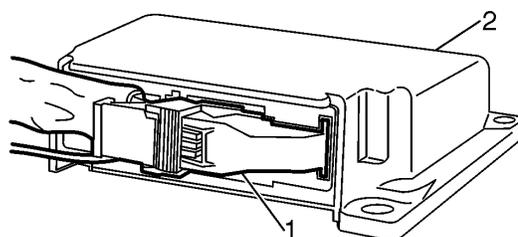
Check the SRS ECU mounting plate for proper ground connection (there should be no grease, paint or dirt between the mounting plate and the cab body since the ECU has an external ground wire). Install the SRS ECU to the mounting plate where the old ECU was with the 3 torx bolts. Torque to 10 ± 2 Nm (88 ± 18 in-lb).

8



1) Locking tab

2) Locking arm shown in unlocked position



1 SRS Electrical Connector

2 SRS Generation 2 ECU

Connect the SRS ECU electrical connector, making certain the locking arm (2) is pulled back onto the locking tab (1), as shown in the illustration.

9

Install the cover for the SRS ECU by installing one torx bolt on each side of the cover. Torque to 10 ± 2 Nm (88 ± 18 in-lb).

10

Install the lower dash panel, center and right sections, with 8 torx bolts and 4 plastic nuts. Torque bolts to 3.5 ± 0.5 Nm (31 ± 4.5 in-lb).

3.5 ± 0.5 Nm
(31 ± 4.5 in-lb)

11

Program the SRS ECU using the VCADS Pro Tool.

12

Clear fault codes. There should be no active fault codes for the SRS system.