

eSID 03-06

Installation Manual

extended Saab Information Display (eSID)
for new generation Saab 9-3 (MY2003-2006)
with HPD (High Position Display)



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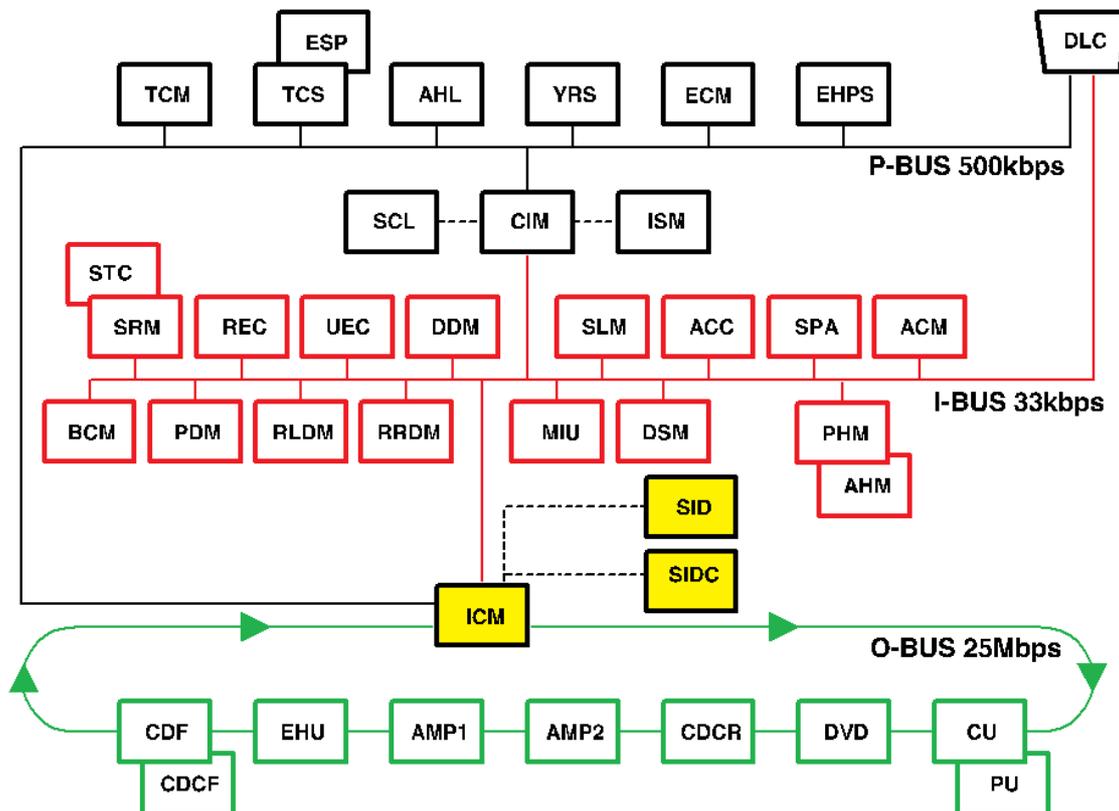
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Introduction

The eSID2 (extended Saab Information Display) product was released to the market in late 2014 to give the owners of a new generation Saab 9-3 MY2007 to MY2014 the possibility to use the display in the instrument cluster to show hidden vehicle data like for instance torque, power, tire pressure, read fault codes and instantaneous fuel consumption but also non-display related functions like "Three-Blink" if the driver touches the turn indicator stalk while changing lanes or a manual selectable wiper arm speed.

However based on market response, there was also a need for an eSID for the customers of the first model years of the new generation Saab 9-3 (2003-2006), and the answer is eSID 03-06!

The early NG9-3 vehicle (2003-2006) is equipped with two CAN-communication buses (P-bus, and I-bus) and one fiber optic bus (O-bus) as illustrated in the figure below:



Saab 9-3 Electrical Architecture (2003-2006)

The ICM exist in three-different levels:

- ICM1 – No Display
- ICM2 – Monographic Display
- ICM3 – LCD Display

The figure below shows how these three components look like (vehicle in figure equipped with ICM3):



Components related to the SID

The ICM unit reads the status of the switches from SIDC (SID Control) and controls the output to the SID (marked yellow in Figure 1).

eSID 03-06 components

The eSID 03-06 consists of two components: eSID-HPD that mainly controls the display and eSID-GW that is a data collection and pre-processing unit.

eSID-HPD

HPD is short for “High Position Display” and was the internal development name of the display located near the windscreen on these model years (commonly known as SID, Saab Information Display).

eSID-HPD needs to be installed behind the SID, in series with the display cables between ICM and SID. This operation also requires that four new cables are installed in the vehicle (more information later in this document).

eSID-HPD has two connectors, one VEHICLE-connector that is for the original SID connector (with extra cables) and one DISPLAY-connector where a small adapter cable is installed to the SID.



eSID-HPD

eSID-GW

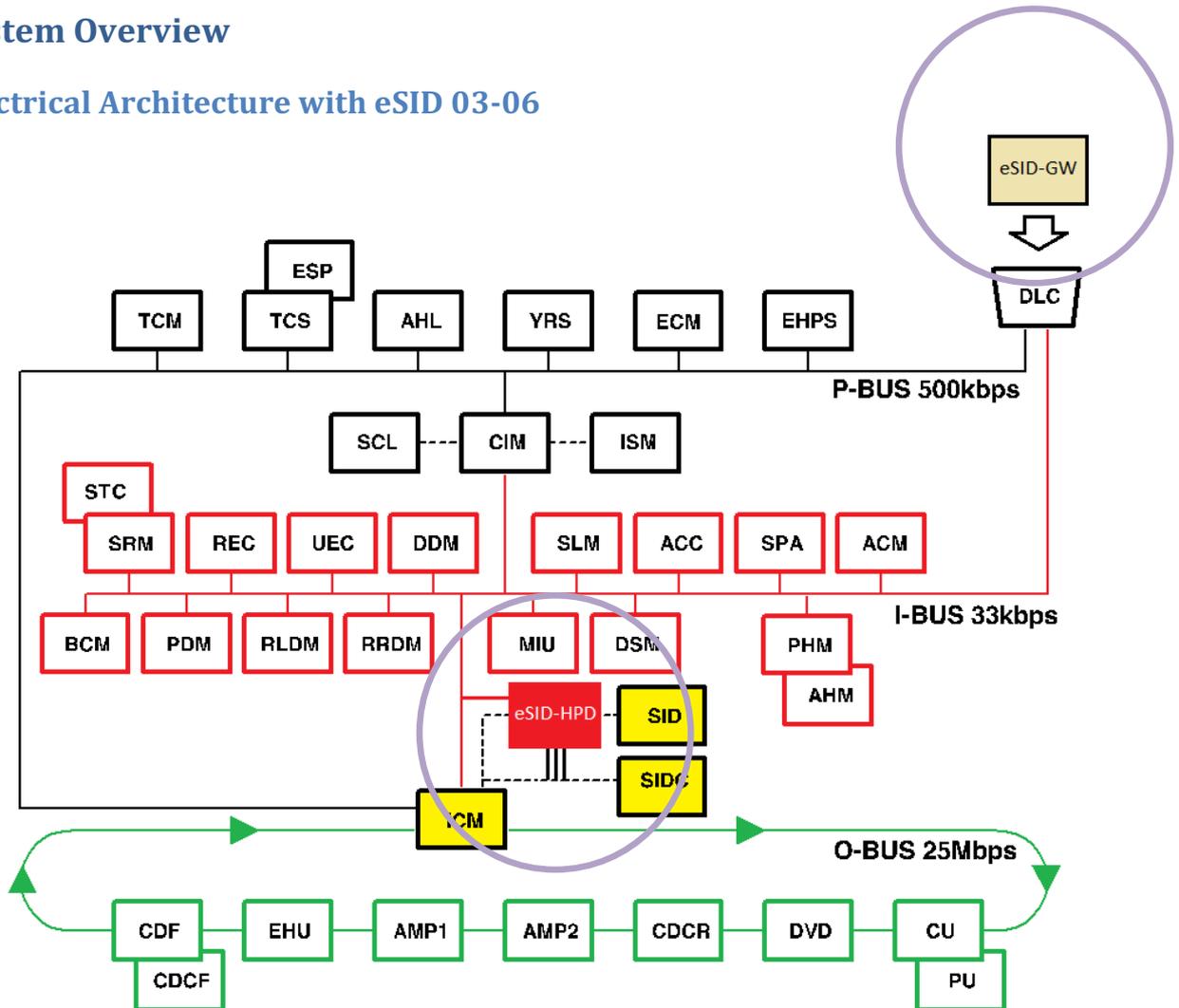
eSID-GW (Gateway), needs to be placed in the diagnostic connector under the steering wheel above the driver feet. eSID-GW is easily installed within a few seconds.



eSID-GW

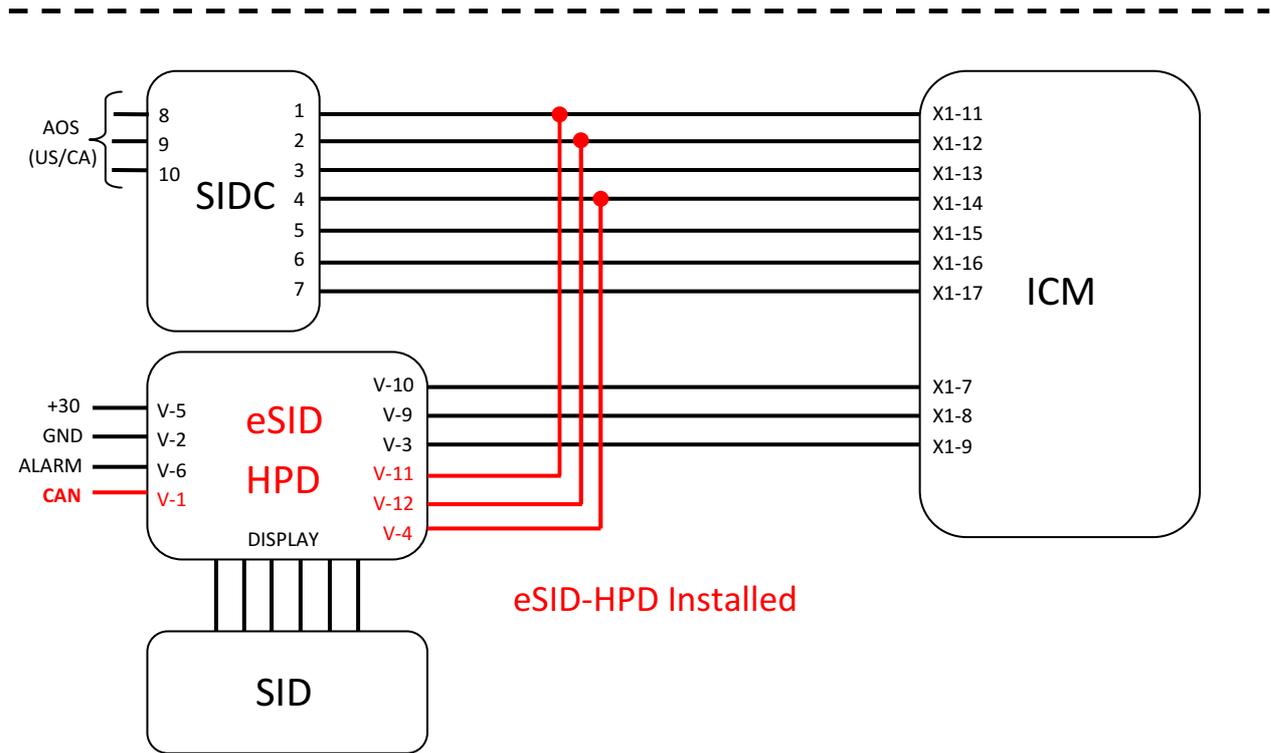
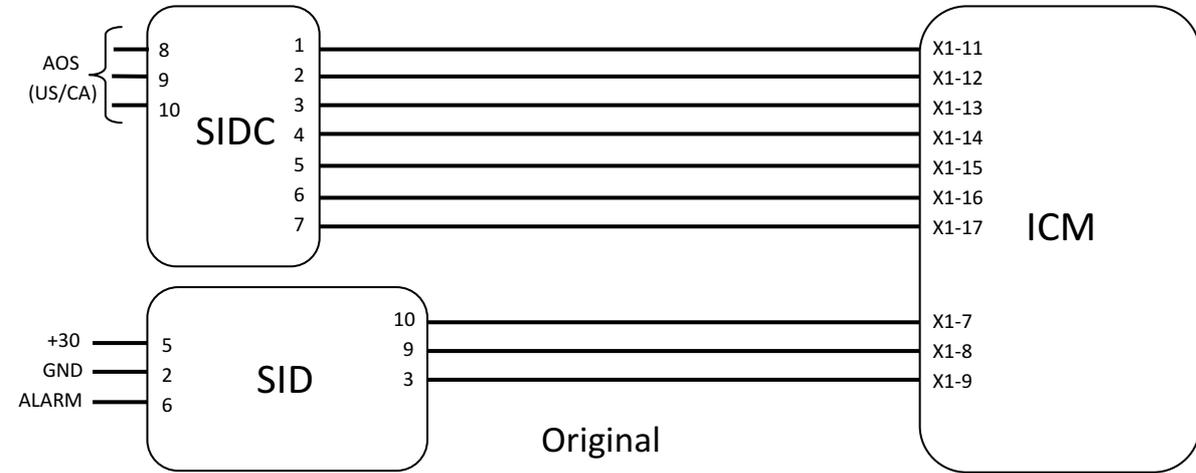
System Overview

Electrical Architecture with eSID 03-06



Saab 9-3 Electrical Architecture (2003-2006) with eSID 03-06

Schematic eSID 03-06



Electrical Schematic ICM/SID/SIDC/eSID-HPD

Installation

It is recommended to look in the Saab Workshop Instruction System (WIS) when performing some of these steps.

- Step 1) Remove the center ventilation (see WIS) or YouTube:
<https://www.youtube.com/watch?v=9jR4k2kOQ6Q>



- Step 2) Remove ICM (two screws and remove the rear connector)



Step 3) Remove the center speaker grille



Step 4) Remove the SID
(Two screws, and two connectors in the back)



- Step 5) Drill a hole from the SID basket to place four new cables to be installed
(Ensure that the drill does not hit the air channels below, look with a lamp into the instrument panel. It is recommended to use at least 4.5mm drill to fit all the cables and to drill slightly forward in the direction of the steering wheel for easier installation)

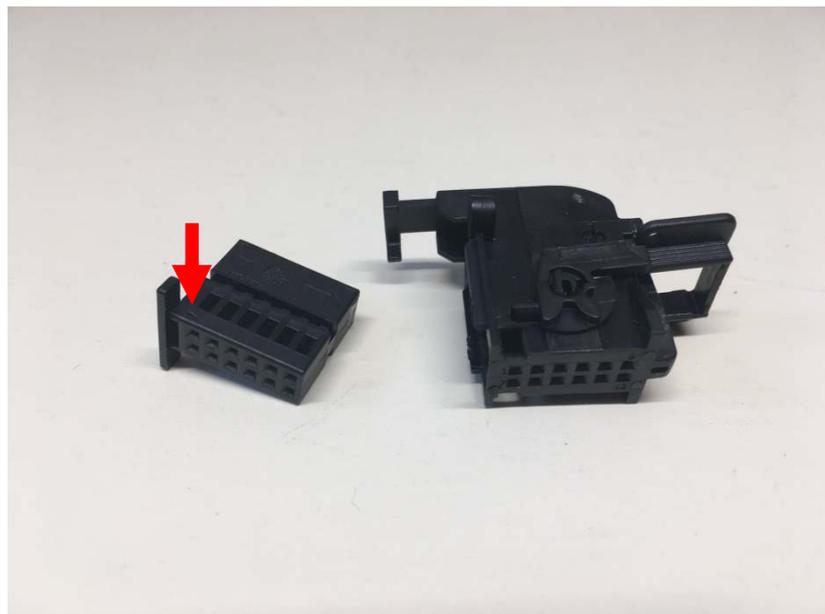
Note! The drilling will be through two layers.



Step 6) Push all four cables through the hole (terminals shall be on SID side)



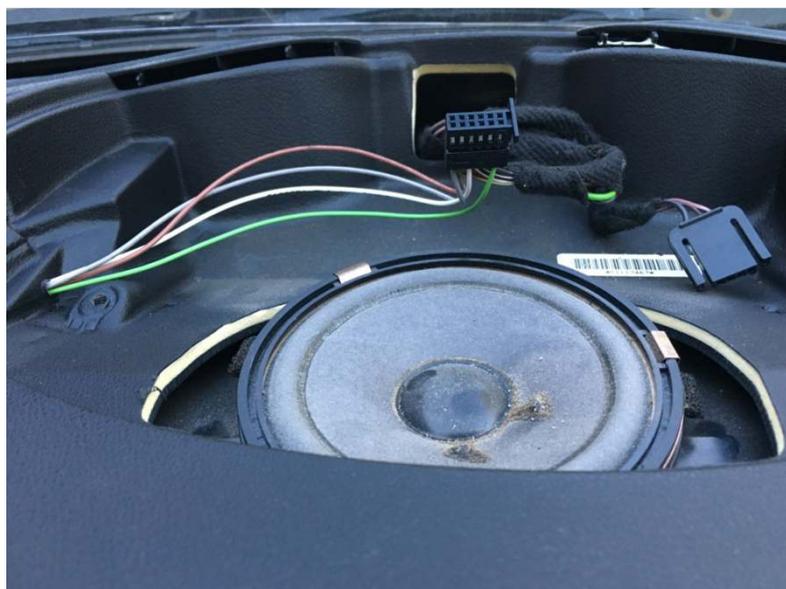
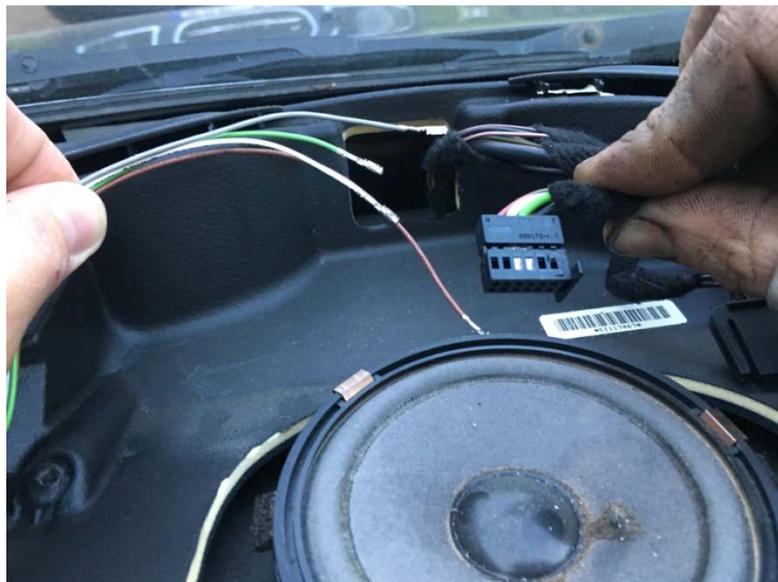
Step 7) Remove the connector housing to the SID (will be used later for adapter cable between eSID and SID. It's a tricky connector (crap design actually). The inside part needs to be slid out and there are two small hooks that holds it in place, one on each side



Step 8) Remove the SIDC from the Instrument Panel
 (Press together the lock from the back and pushed forward)

Step 9) Push the four cables into the eSID/SID connector:

eSID Pin	Cable Colour	Cable description
Pin 1	Green	ICM – LS CAN
Pin 4	Pink	SIDC - Switch PWM
Pin 11	Green/Grey	SIDC - Switch Encoder 1
Pin 12	Brown/Orange	SIDC - Switch Encoder 2



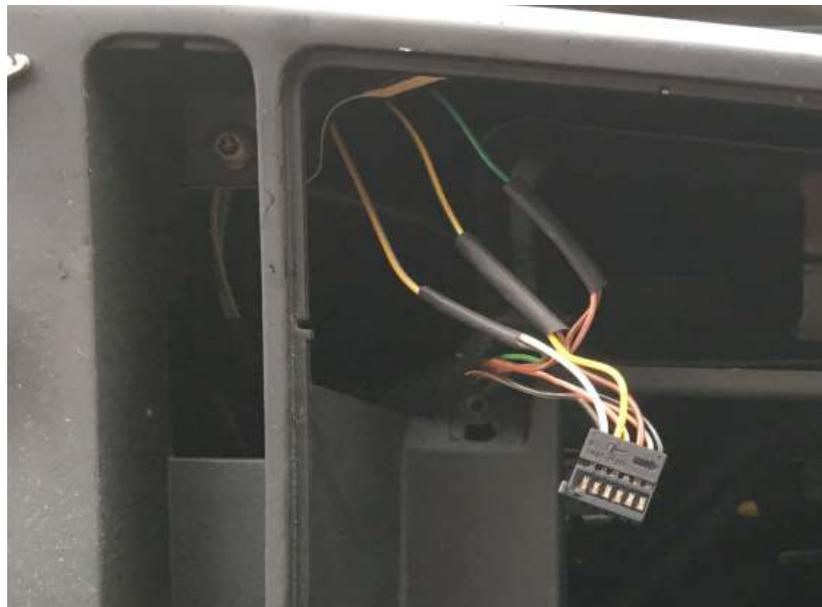
Step 10) Use a cutter and cut off one edge from the SID connector as the figure below shows. This is needed when connecting it to eSID-HPD.



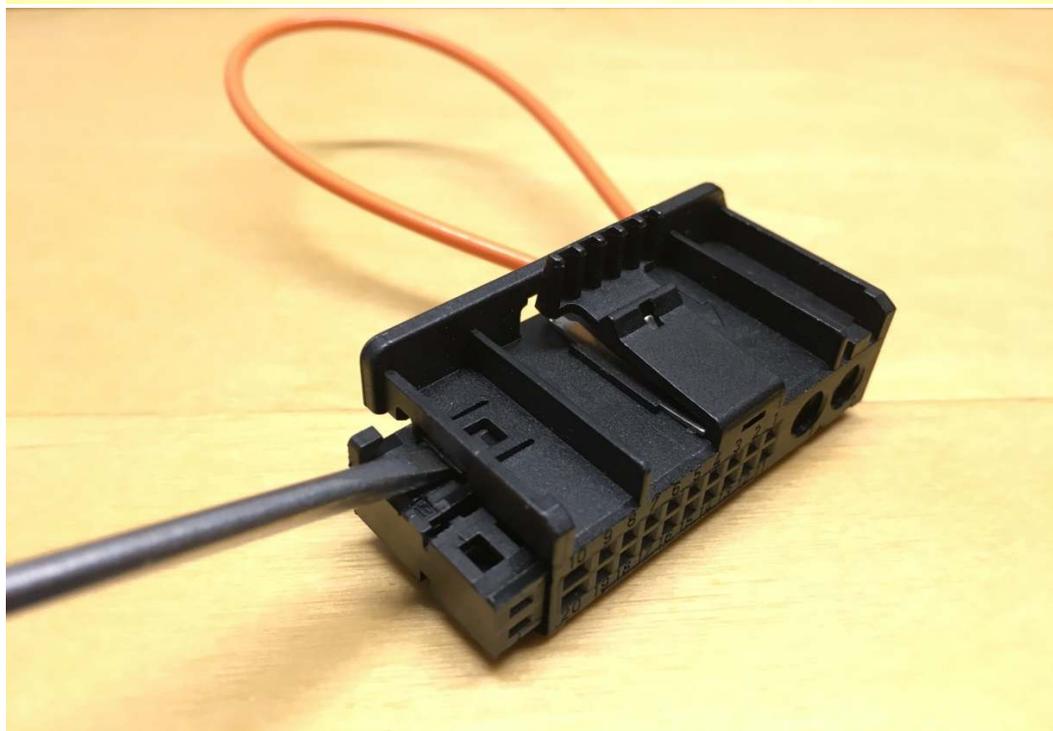
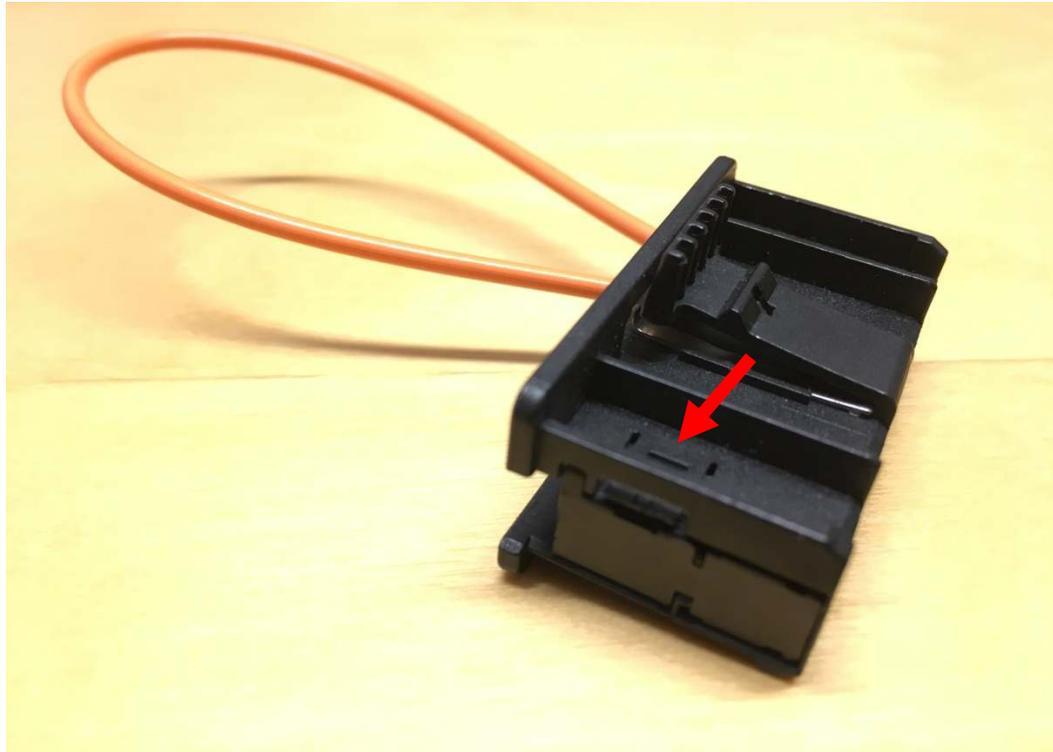


Step 11) Splice three of the new cables from eSID with the cables from the SIDC connector.

SIDC Pin	eSID-HPD Pin	Cable Color MY03-05	Cable Color MY06	New Cables	Cable description
Pin 1	Pin 11	Green/Grey	Brown/Green	Green/Grey	INFO-switch Encoder 1
Pin 2	Pin 12	Brown/Orange	Grey/Blue	Brown/Orange	INFO-switch Encoder 2
Pin 4	Pin 4	Pink	White	Pink	SIDC Switch status (PWM)



Step 12) Open the ICM connector by lifting the lock and slide out the part that has only standard cables (to avoid damages to the fiber-optic cables when splicing)

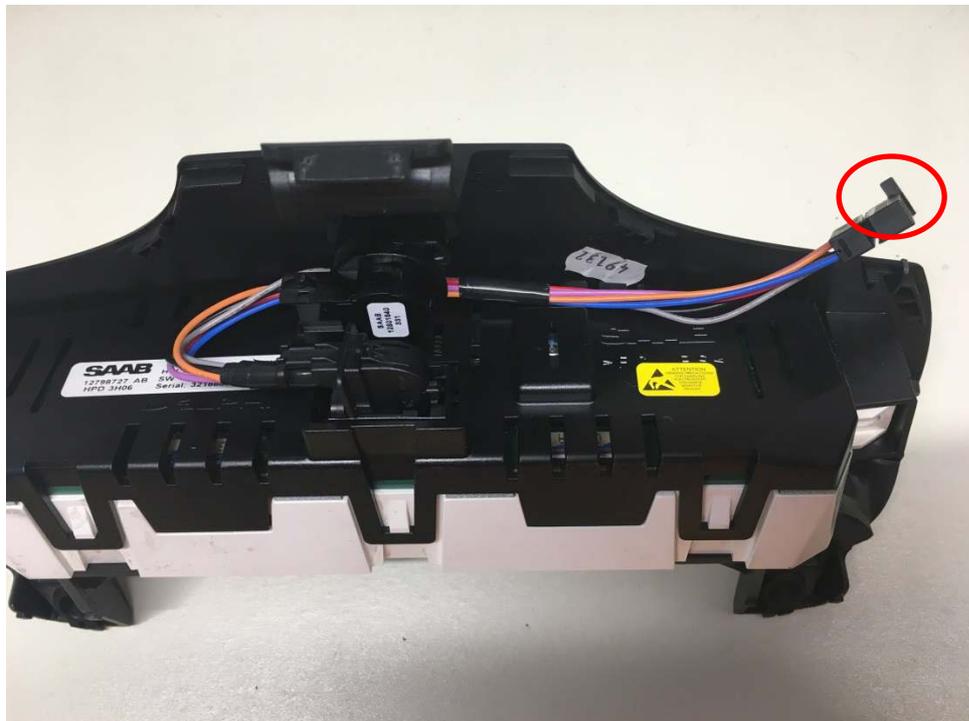
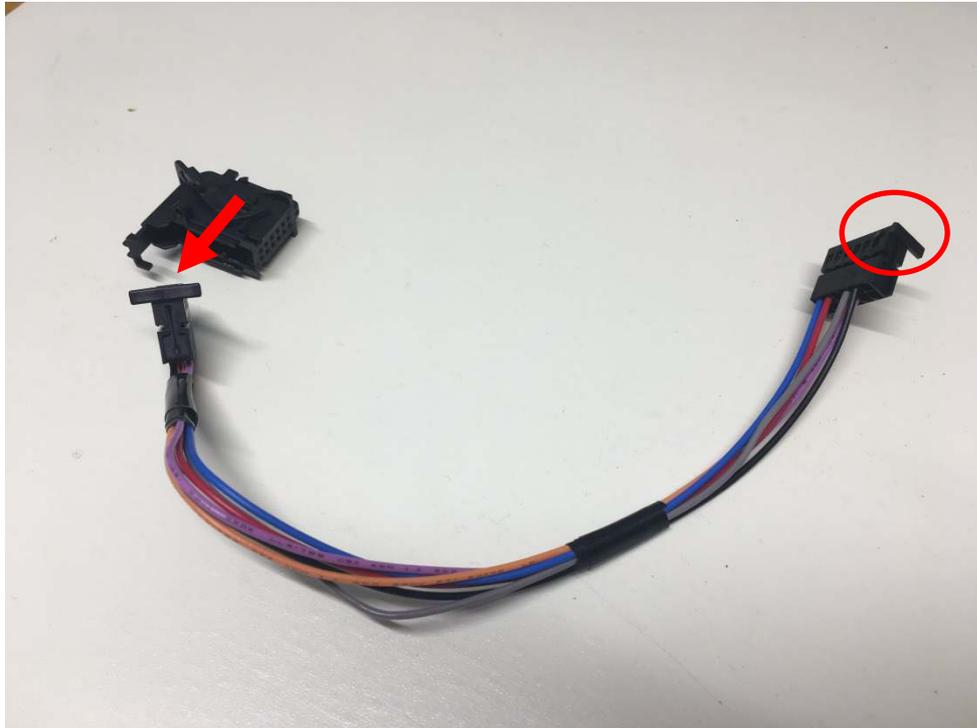


Step 13) Splice the last of the new cables from eSID-HPD with the I-bus cable in the ICM connector.

ICM Pin	SID/eSID Pin	Cable Color MY03-06	New Cable	Cable description
Pin 1	Pin 1	Green	Green	I-Bus (LSCAN)



Step 14) Move the SID connector housing that was removed in the earlier step and attach it to the short adapter cable that will be placed between eSID-HPD and SID. It shall be put on the side where the connector is NOT cut.



Step 15) Cut a piece off the plastic of the SID cover where the hole was drilled, so that the new eSID cables doesn't get squeezed.



- Step 16) The eSID-HPD must be installed in a 45 degree angle related to the windscreen in the corner next to the hole (otherwise the SID with cover doesn't fit!) with the VEHICLE connector down. Recommendation when installing: First connect all the cables, then remove the tape cover from the back and install the eSID HPD in the corner.



eSID-HPD position

- Step 17) Remount the SID, SIDC and ICM
- Step 18) Install the eSID-GW in the OBD-connector
- Step 19) Turn on the Ignition; The ICM and normal SID operation shall be active. Press and hold the INFO button on the SIDC panel, then the SID shall go black and shortly after shall the eSID functionality be activated
- Step 20) Remount the speaker grille and the center ventilation