

Installation Manual

GCG-Unit & iQon Infotainment



Ghulam Car Gateway-Unit (GCG-Unit) for the new generation
Saab 9-3 (MY07-MY14)

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Introduction

The Ghulam Car Gateway-Unit or GCG-Unit was developed as a project to fully integrate the new iQon-infotainment system developed by NEVS for the MY15 Saab 9-3 Aero. Plans changed and no Saab was ever released with the iQon-infotainment system. The GCG-Unit translates information between Saab 9-3's I-Bus from GM (33,33kbps) and the NEVS-LAN (500kbps) that the iQon deploys. To make all this come to life we have developed a kit consisting of three main parts.

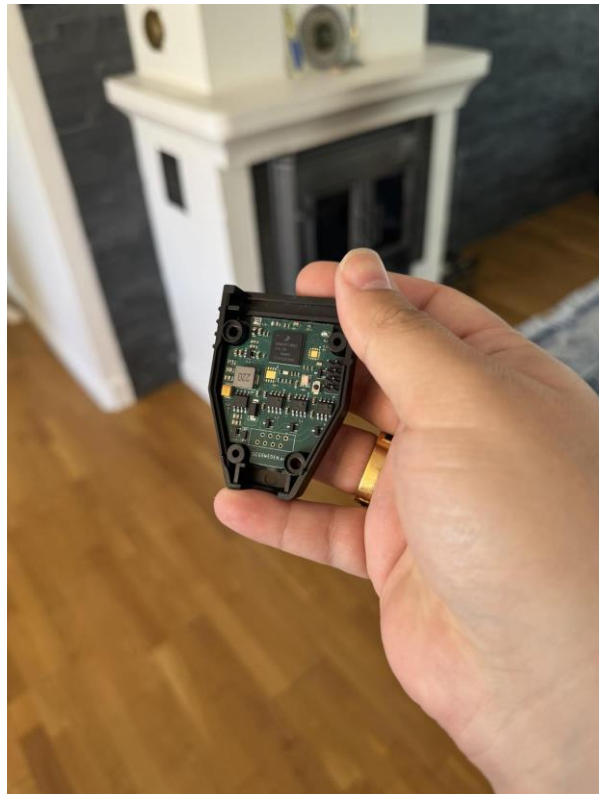
1. The new iQon headunit
2. An adapter harness between the old GM connectors to the new iQon connector.
3. The GCG-Unit

With this gateway added to the 9-3, we get full iQon integration. Examples of this is:

- iQon wake/sleep functionality
- Steering wheel controls
- iQon-display brightness control via the original 9-3 dimmer control-buttons.
- Night panel button working correctly
- Automatic date & time management for maintaining the correct service schedule plus working diesel heater
- AMP-Control for seamless sound integration via the new gateway

Also, by adding the GCG-Unit to the Saab 9-3, we also get a more modern Saab 9-3. Some extra functionality is added and even more is planned. Some of them, as of today, include:

- Auto-blink four times
- Welcome lights when unlocking the 9-3
- Diesel heater via the remote control

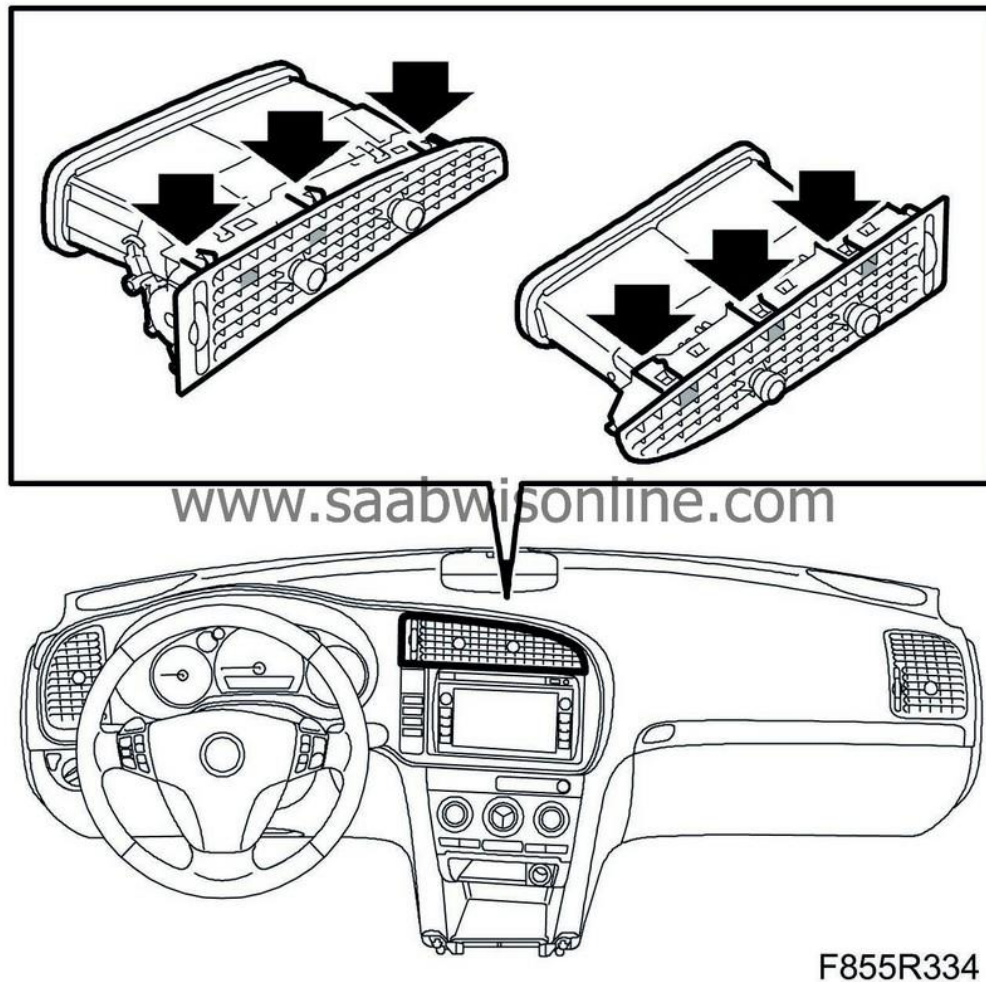


Installation

It's recommended to have access to the Saab Workshop Information System (SAAB WIS) to gain a better understanding of the installation procedure.

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

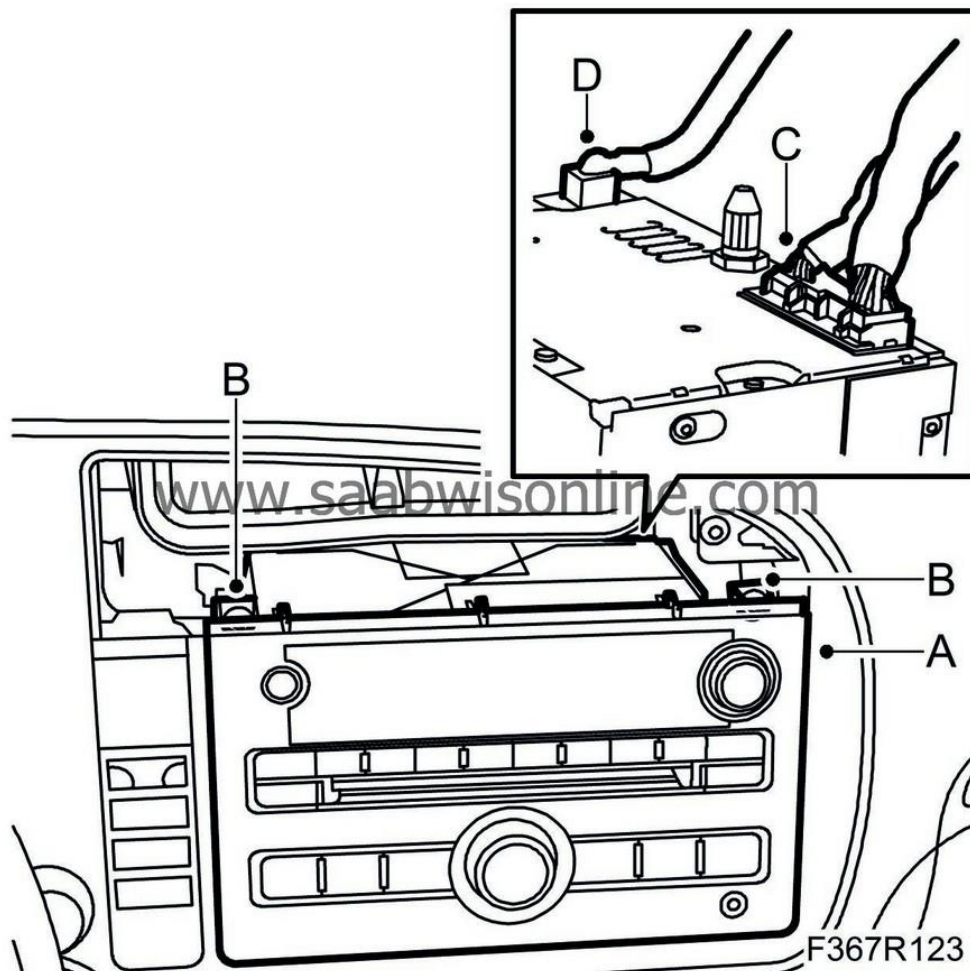
Illustration 1



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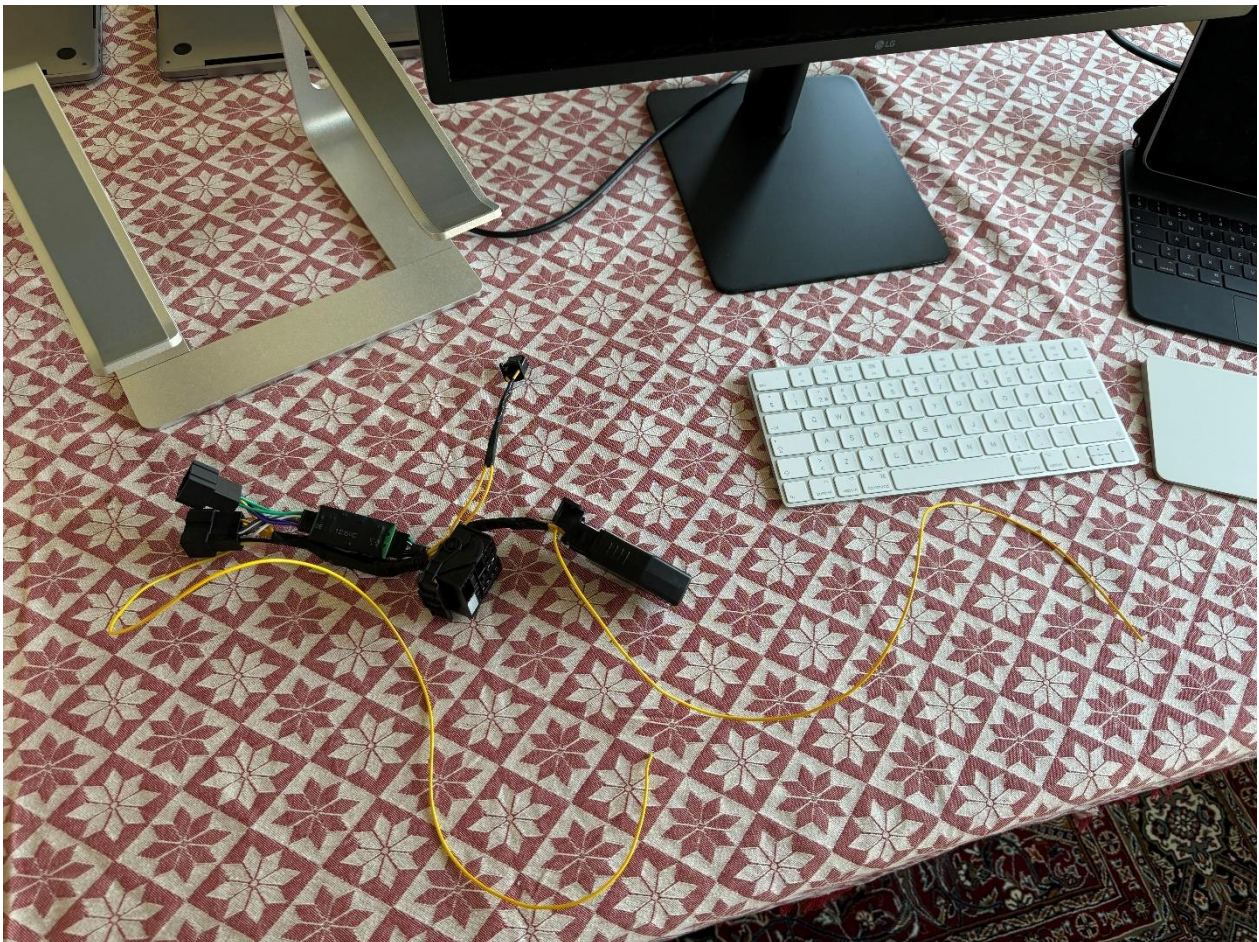
- Step 2) Remove the Entertainment Head Unit (EHU) [A] by first removing the two screws on top [B], then lift up and pull out the EHU. Disconnect the remaining rear connectors [C] & [D].

Illustration 2



Step 3) Take out the adapter-harness included in the kit.

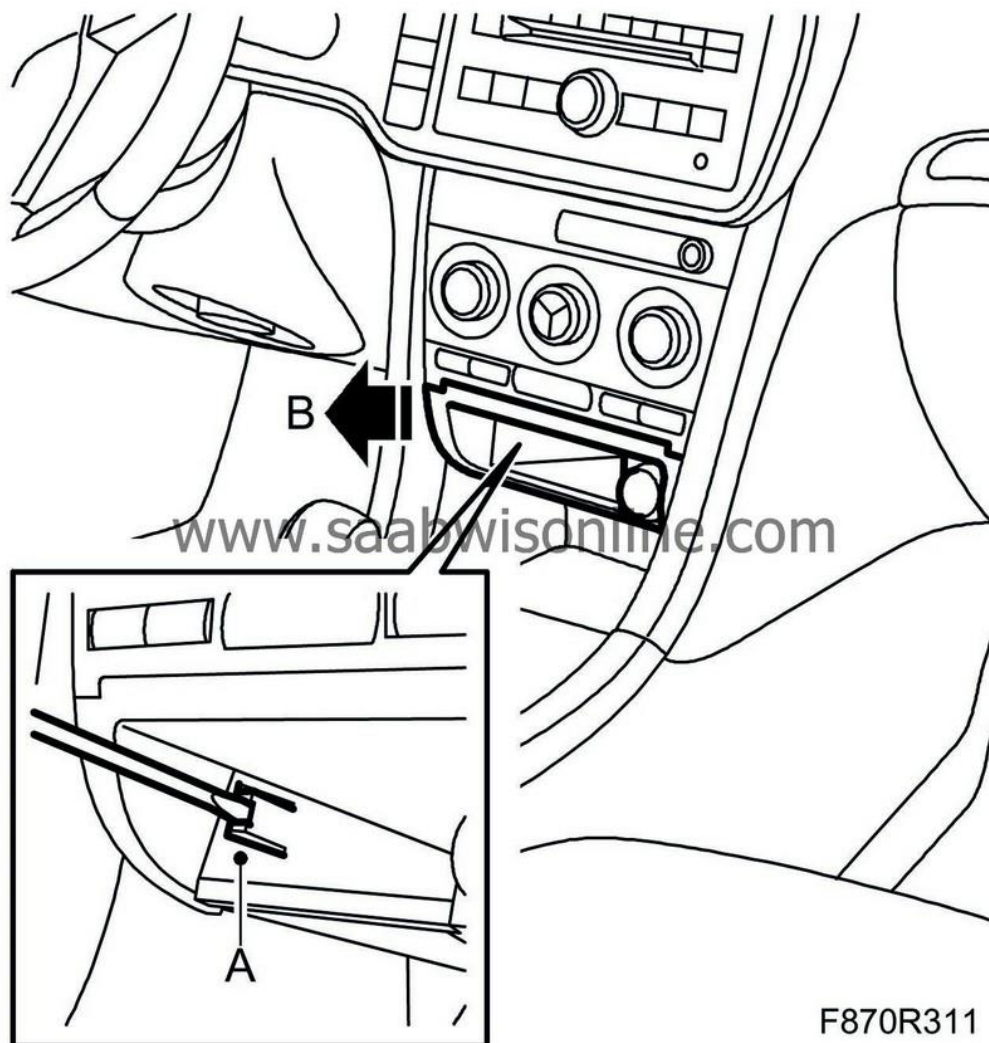
Illustration 3



Step 4) We will now prepare to route the two loose cables in the adapter-harness. One is called the 12V ACC (AMP) and the other is called I-BUS.

We will start by removing the lower ashtray in the center console. To do this, you can feel a tab on the left side of the ashtray. Take a thin screwdriver and pull the tab out and you should be able to remove the ashtray quite easily by simply pulling it out.

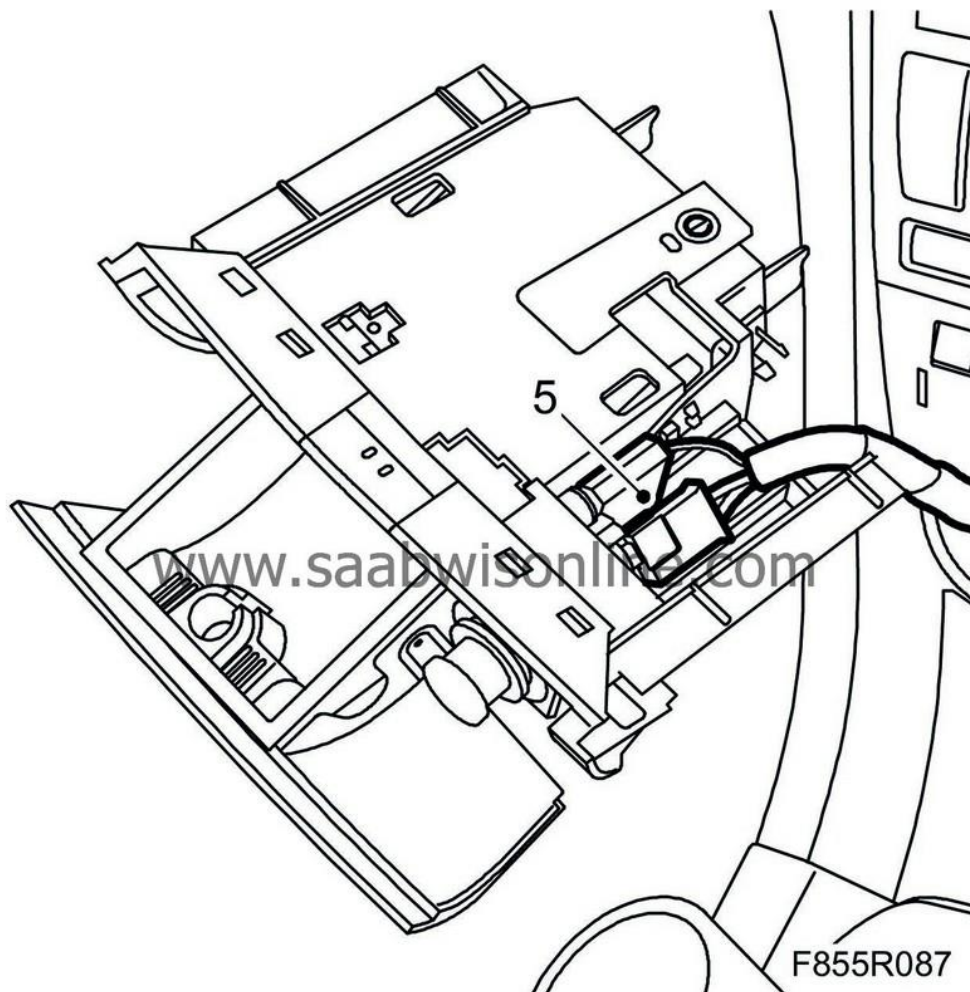
Illustration 4



Step 5) The next step is to disconnect the 12V Accessory connector attached to the ashtray [5] in the pictured illustration.

In this connector, there is a black (GND) cable and a purple/blue 12V cable. We are going to use this purple/blue 12V cable later in this guide.

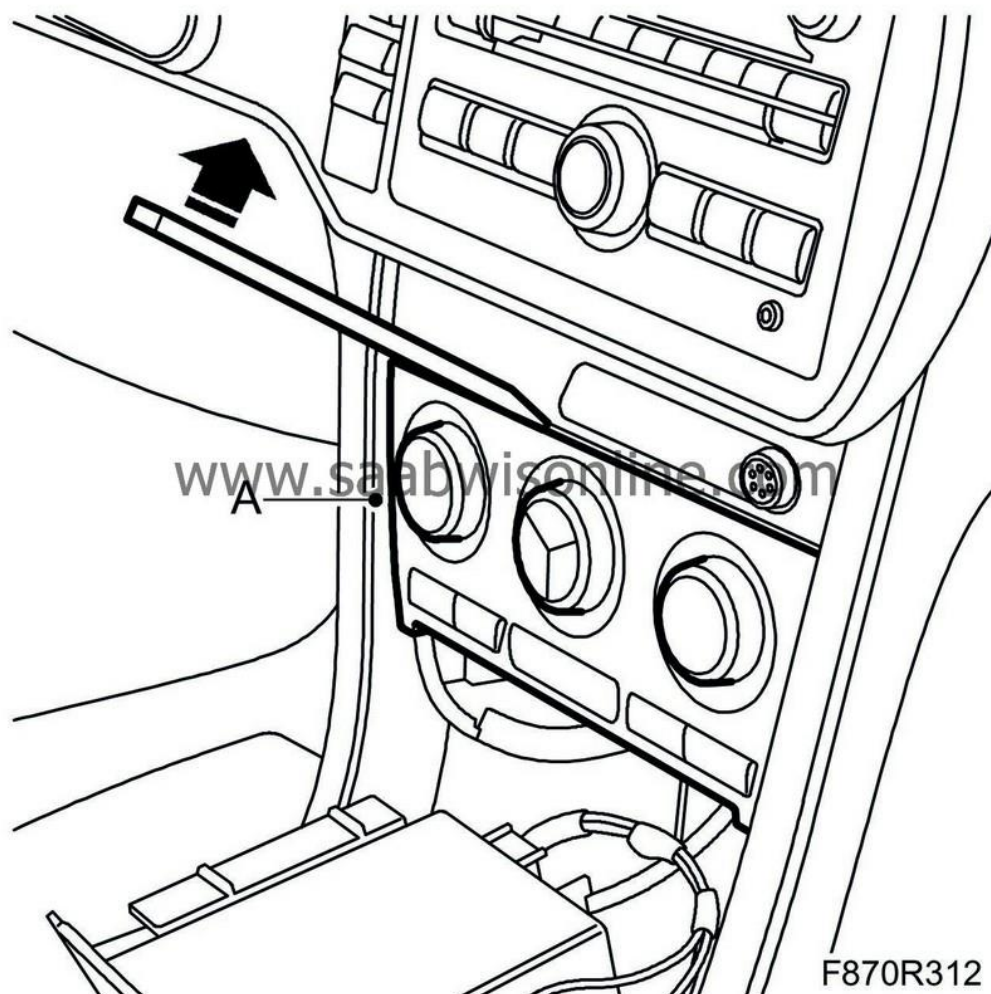
Illustration 5



- Step 6) You are now ready to remove the Automatic Climate Control-panel [A].
- The reason we do this is to gain access to one of the I-Buss cables going to the ACC-Panel. **Remember**, we are going to route two loose cables. We have already prepared for the 12V feed in the step before.

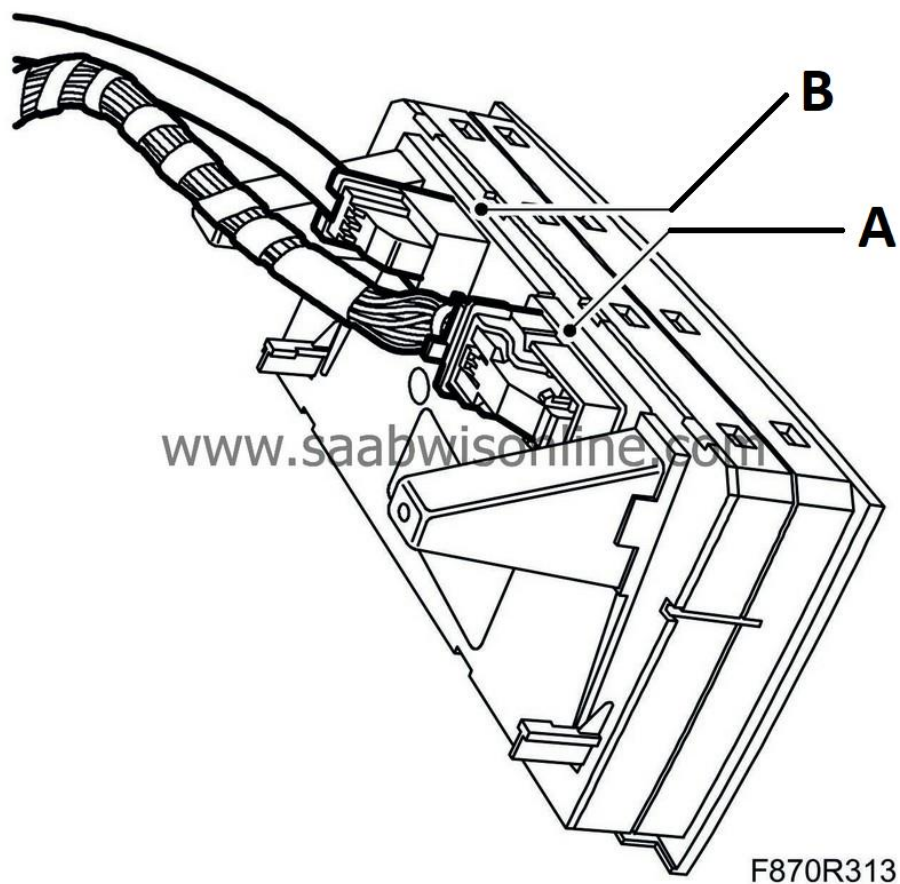
In this step, the information image below will show an example where we use a prying tool to remove the ACC-panel. This is not necessary. You can simply remove it by pulling it outwards from the bottom, this will minimize damage risk.

Illustration 6



- Step 7) Once the ACC-Panel is removed, you are going to want to disconnect the connectors on the backside. The connector we are supposed to work with later is the right-side connector called “**B**”.

Illustration 7



Step 8) You are now ready to route the two loose cables in the adapter-harness for the I-Buss and the 12V ACC (AMP).

Please route both cables from the EHU-compartment to the lower compartment as shown in the first image.



Illustration 8

The cable will be poking out on the other side as shown in the second image (below)

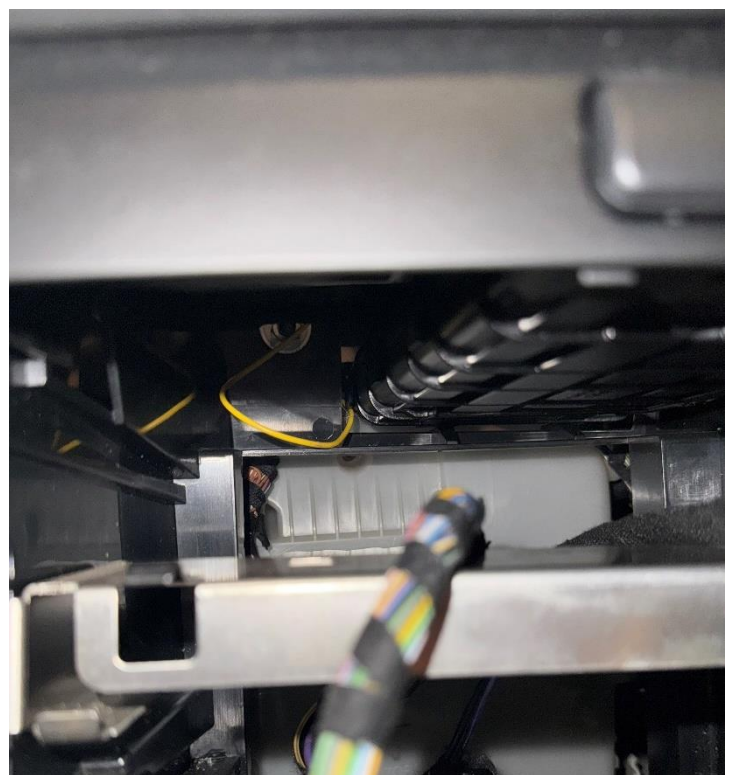


Illustration 9

Step 9) After you have routed both of the loose cables, you should now prepare the red cable clamps. In this step, we will start with the loose I-Bus cable coming from the adapter-harness.

Illustration 10



The I-Bus cables lives in the right-side connector [B] belonging to the Automatic Climate Control-panel. This connector is depicted on page 10, illustration 7.

You need to remove the connector housing and find one of two green cables. Both of the green cables in this connector is I-Bus. You should now slide the red cable clamp over the green i-bus cable and then INSERT the yellow i-bus cable into the red cable clamp. After this, press the clamp together.

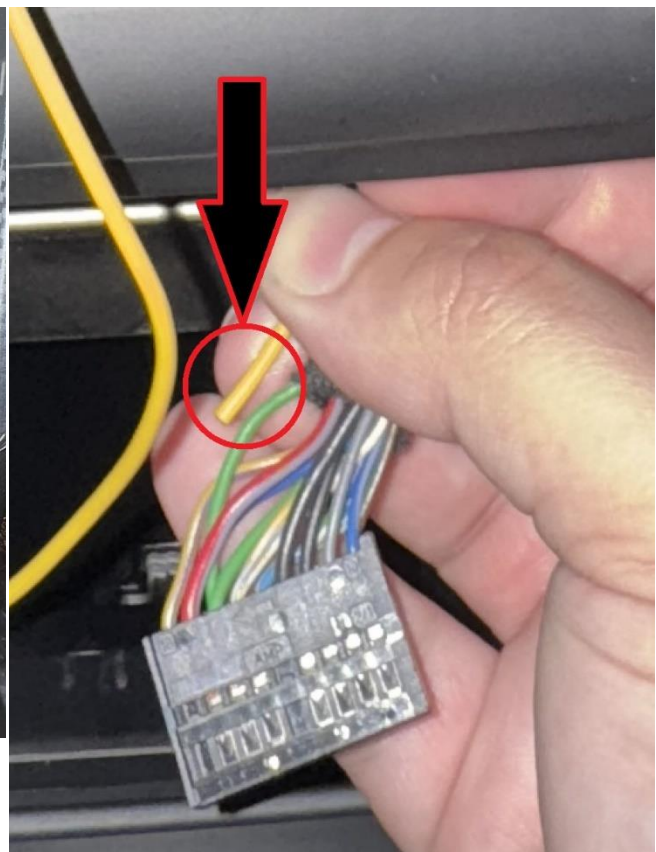
We will test it's functionality later!

WARNING! Make sure to slide the red cable clamp as long up on the green i-bus cable as possible. This is to make sure you are able to reattach the connector housing afterwards!

Illustration 11



Illustration 12



Step 10) We will now attach the last loose cable coming from the adapter-harness. This is the “12V ACC (AMP)” cable. Again, make sure you have the last red cable clamp ready.

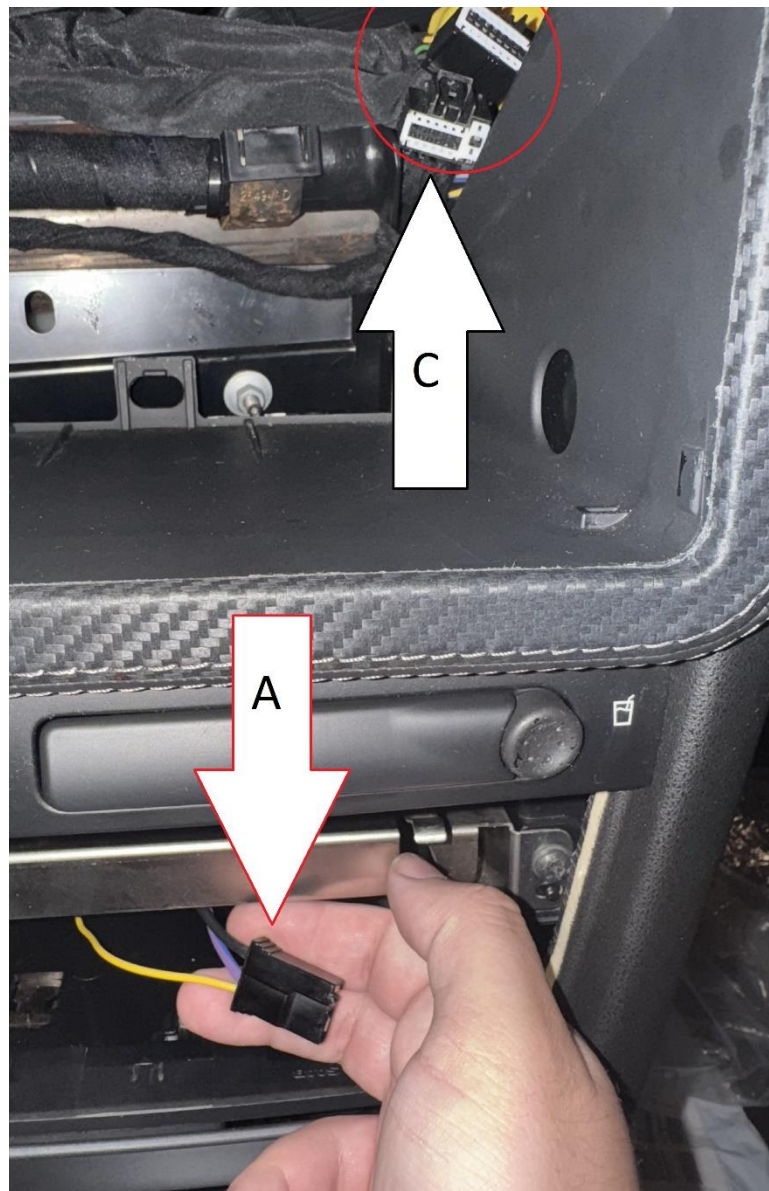
Locate the loose 12V Accessory connector we removed earlier from the ashtray. It looks like this [A]:

Illustration 13

As you can see in the image, we want to slide the red cable clamp over the Purple/Blue 12V cable coming from the vehicle, after we have done this, we want to insert the yellow 12V ACC (AMP) cable coming from the adapter-harness into the red cable clamp.

We then want to press it together.

You can now **officially** connect the adapter-kit to the vehicle by connecting the two main “C” connectors as shown both here and in an earlier illustration on page 5 called illustration “2” (Depicting the removal of the old Entertainment Head Unit).



Step 11) You should now prepare the new iQon-headunit and GCG-Unit with VELCRO as shown in the images below.

The idea is to attach and secure the GCG-Unit to the backside of the iQon-headunit as shown below.

Illustration 14



Illustration 15



Step 12) We will now plug the adapter-harness into the new iQon headunit.

First, start by aligning the big connector [A] but do not yet push it in, then, align and push in (**connect**) the smaller [B] connector into the iQon-headunit. After this, fully connect the [A]-connector. Then lastly, connect the OBD-II (OBD-2) connector to the GCG-Unit.

If the Saab 9-3 you're installing iQon in did not have the Saab Original Navigation system before, please also connect the new GPS-Antenna to the blue FAKRA-connector on the backside of the new iQon-headunit. **The installation is now complete!**

Illustration 16



Step 13) The only thing left is the re-assembly of the vehicle. To do this you more or less follow this guide backwards. But before we start re-assembly we have to check some things to ensure proper functionality of everything installed.

TESTING PROCEDURE:

1. Please mount the iQon-headunit in it's EHU-position without screwing it in. After this, you should take the Saab 9-3 key and hit Unlock.

You should now insert and turn the Ignition to ON!
Make sure that the iQon-headunit is correctly booting.

2. While booting, make sure there is no POPPING sound. After booting, make sure that the sound seems to work correctly. Then, turn the Ignition to the OFF-position, if the sound is disabled, the loose "12V ACC (AMP)"-cable we clamped earlier is working correctly. **Please re-do this test while pulling on the clamped cable to ensure a stable cable-clamp connection!**

3. The last check is to see if the loose "I-Bus"-cable we clamped earlier is working. To do this, please make a short press on the turn signal-stalk. This is to see if Auto-blink is active, if it is, it means that the cable clamp was successful. **Please re-do this test while pulling on the clamped cable to ensure a stable cable-clamp connection!**

Congratulations!

Your installation is now complete, you can now move onto the re-assembly by doing these steps in reverse!



Contact/MAPS

If you have any questions regarding the GCG-Unit or iQon, please feel free to contact Malek Ghulam at Malek@Ghulam.se

2024 Maps [World-Wide] is also available to flash and load into your iQon infotainment-system. We have developed a solution to do this remotely. If you wish to order this addon, please contact Malek Ghulam at Malek@Ghulam.se

Thank you!