

VOLVO XC60 (2-nd generation)

Installation of AirTouch Performance 8 Navigation System

Installation Guide



Vehicle Brand/ Model/ Generation (body index) or MY:	Volvo/ XC40/ 2017-2020 Volvo/ XC60/ 2017-2020 Volvo/ XC90/ 2015-2020 Volvo/ XC60 Recharge/ 2020 Volvo/ XC90 Recharge/ 2020 Volvo/ S60/ 2019-2020 Volvo/ S90/ 2016-2020 Volvo/ V60 Cross Country/ 2019-2020 Volvo/ V90 Cross Country/ 2016-2020
Vehicle manufacture year	2019
Stock head unit:	Sensus Connect HIGH PERFORMANCE
Equipment installed (product name/ code/ ID):	Video interface with AirTouch Performance 8.1 Navigation System for Volvo cars
Time rate for equipment installation (standard hours):	2.9

Edition #1. June 16, 2020

Equipment installation time rates

Product name	Code	ID	Standard Hours
Video interface with AirTouch Performance 8.1 Navigation System for Volvo cars	9996152	CC-VI-NAVI-VOLVO-8	2,9













General Rules

- Use PVC tape to isolate splices of electrical wires, current-carrying parts of cables and to band cable bundles inside the vehicle passenger compartment.
 - Use PET cloth tape to make a wiring harness assembly or to fix wiring harness assemblies inside the vehicle passenger compartment.
 - Use PET cloth tape to make a wiring harness assembly or to fix wiring harness assemblies inside the vehicle underhood space.
 - Before applying double-sided foam adhesive tape, remove all grease from both surfaces (if necessary, first clean to remove all dirt) using deoiler.
 - Do not cover AirTouch Performance 8 central unit (as well as video interface unit, if installed) with any material preventing it from ventilation and cooling; do not cover its ventilation.
 - Use only double-sided foam adhesive tape and weatherproof nylon ties to install AirTouch Performance 8 central unit.
 - Always install fuse-holders and fuses with rating according to the load on new power circuits.
 - **Assembly of stock interior and exterior components is performed in the reverse of the procedure for disassembly.**
- Figures for this note see in Tools and C&E Materials section.**

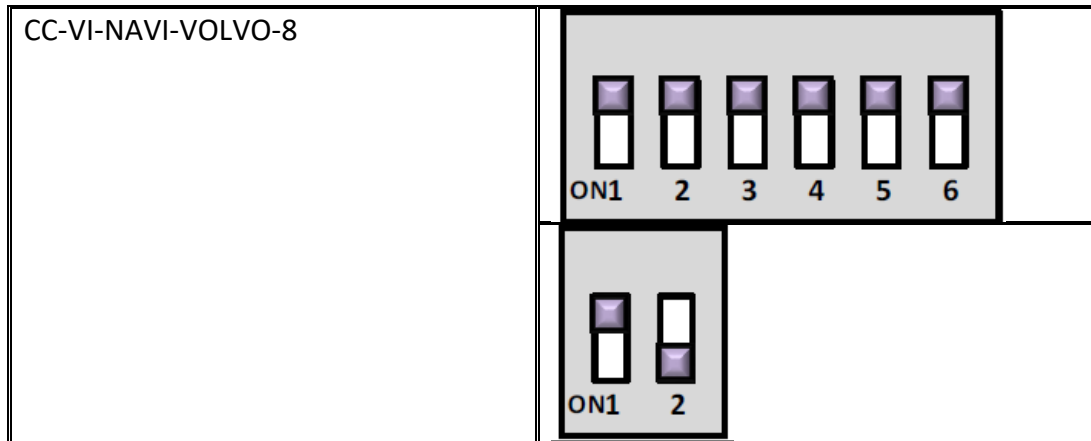
1. Equipment (Delivery Set)

CC-VI-NAVI-VOLVO-8								
								
A	Central unit	1x	B	GPS antenna	1x	C	External speaker	1x
								
D	Power supply harness	1x	E	Microphone	1x	F	LVDS cable	1x
								
G	"AV IN" connection harness	1x	H	"AV IN/ OUT" connection harness	1x	I	Remote control IR receiver connection harness	1x
								
J	Adjustment PCB	1x	K	"Wi-Fi/ BT" antenna	2x	L	USB cable	2x
								
M	HDMI cable	2x						

2. Tools and C&E Materials (outside of the scope of supply)

Tools and Materials			
			
PVC tape for isolation and banding cables inside vehicle passenger compartment	PET cloth tape for banding cables inside vehicle passenger compartment	Clip remover	Chizler
			
Sockets and bits toolset	Socket wrench with 7mm, 8mm sockets	Double-sided foam adhesive tape	Weatherproof nylon ties 4.8x400 mm
			
Sidecutters	Pliers	Fuse holder	Blade fuse 5A

3. Installation of DIP Switches



4. Protection of vehicle body and interior components



Picture 1.

Apply protection film to steering wheel rim; protect front seats with protective covers; put disposable protective mats over stock carpeting; apply masking tape over parts close to working area that may be damaged during installation; apply masking tape to front sills and door openings (Picture 1).

5. Stock Head Unit disassembly



Picture 2.

Using chizlers, remove dashboard speaker cover (Picture 2).



Picture 3.

Remove two Torx T25 screws in the upper part of screen (Picture 3).



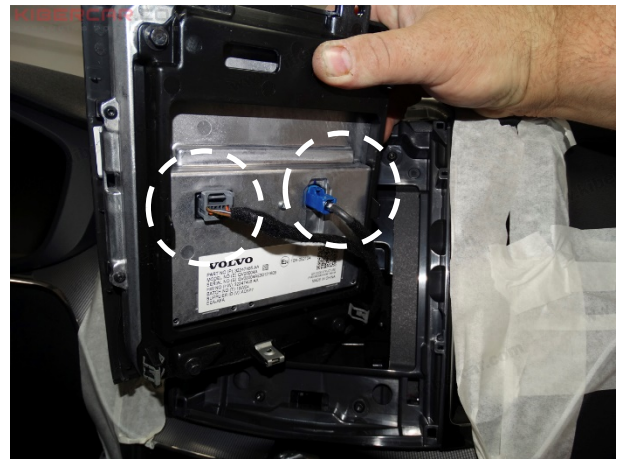
Picture 4

Using chizlers, remove control unit (Picture 4).



Picture 5.

Remove Torx T25 screw in the lower part of stock head unit (Picture 5).



Picture 6.

Remove screen from its housing and disconnect it from stock head unit (Picture 6).



Picture 7.

Using chizlers, remove dashboard side trim panel (Picture 7).



Picture 8.

Using chizlers, remove dashboard vertical trim panel (Picture 8).



Picture 9.

Using chizlers, remove kick trim panel (Picture 9).



Picture 10.

Using chizlers, remove protective cap. Remove screw, using 8 mm socket. Move passenger side windscreen pillar trim panel aside (see direction on picture 10), then remove trim from its slot in dashboard (Picture 10).



Picture 11.

Remove two Torx T25 screws to remove panel from under glovebox (Picture 11).



Picture 12.

Remove two Torx T25 screws in the bottom part of glovebox (Picture 12).



Picture 13.

Remove three Torx T25 screws in the upper part of glovebox, then remove one screw, using 7 mm socket, then pull glovebox towards passenger compartment (Picture 13).



Picture 14.

Using clip remover, remove all clips holding electrical wire harness on glovebox (Picture 14).



Picture 15.

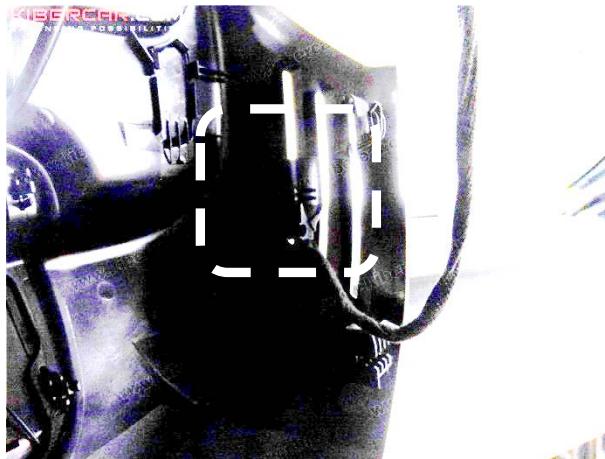
Remove rearview mirror case, then using chizlers, remove protective cap in the case (Picture 15).

5. Equipment Installation



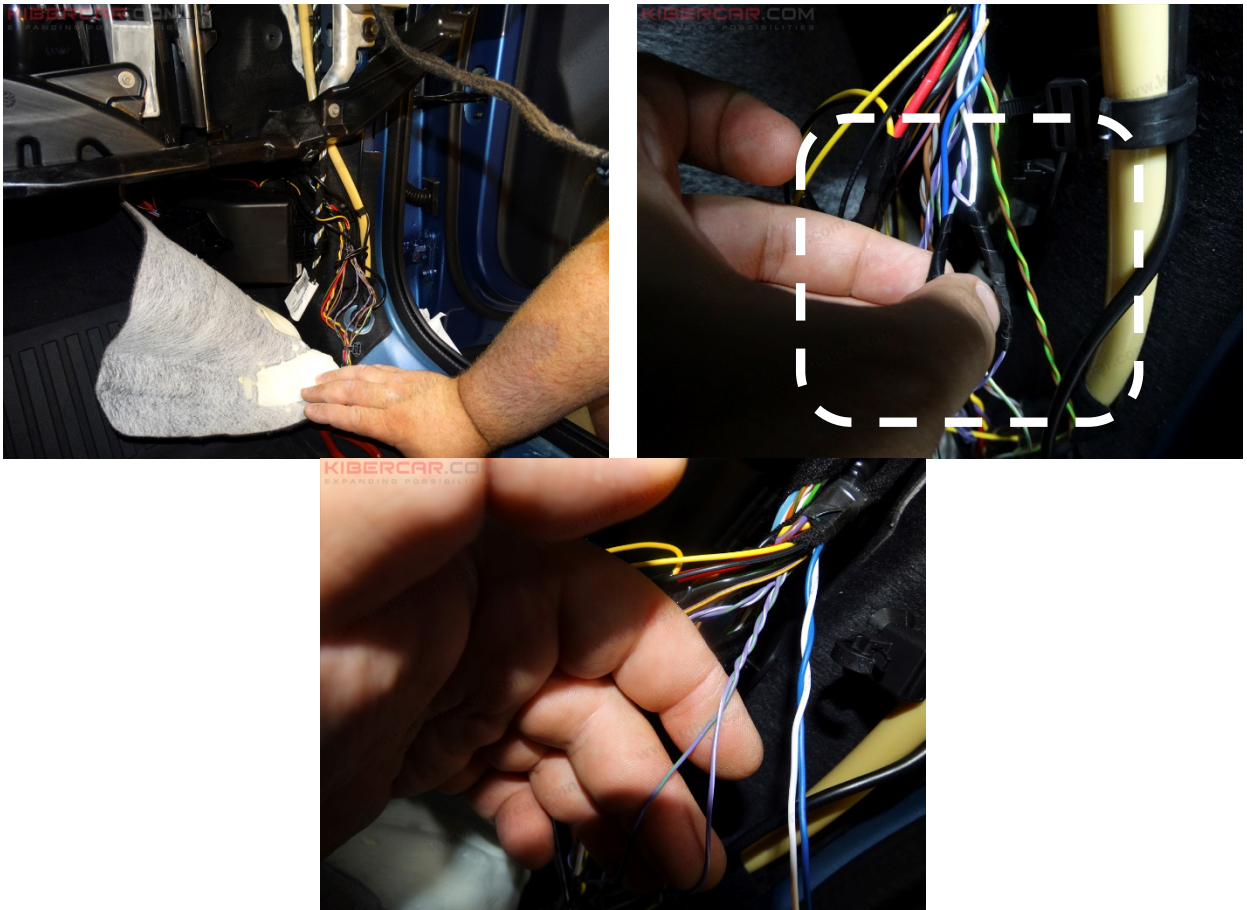
Picture 16.

Using double-sided foam adhesive tape, attach GPS antenna body [B] to the right-hand side of dashboard (under passenger side windscreen pillar panel) as shown on picture 16.



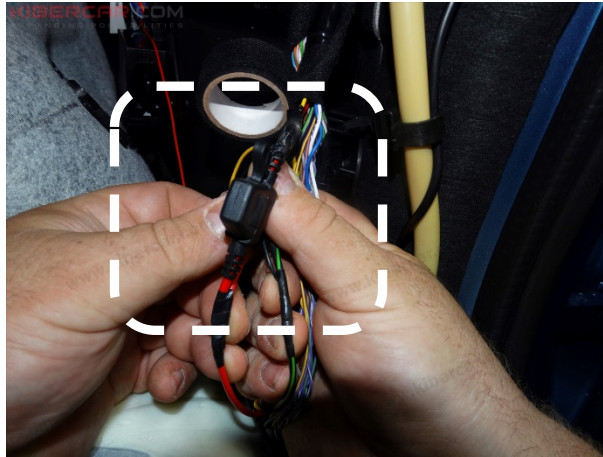
Picture 17.

Using double-sided foam adhesive tape, attach microphone (E) to inner part of rearview mirror case as shown on picture 17.



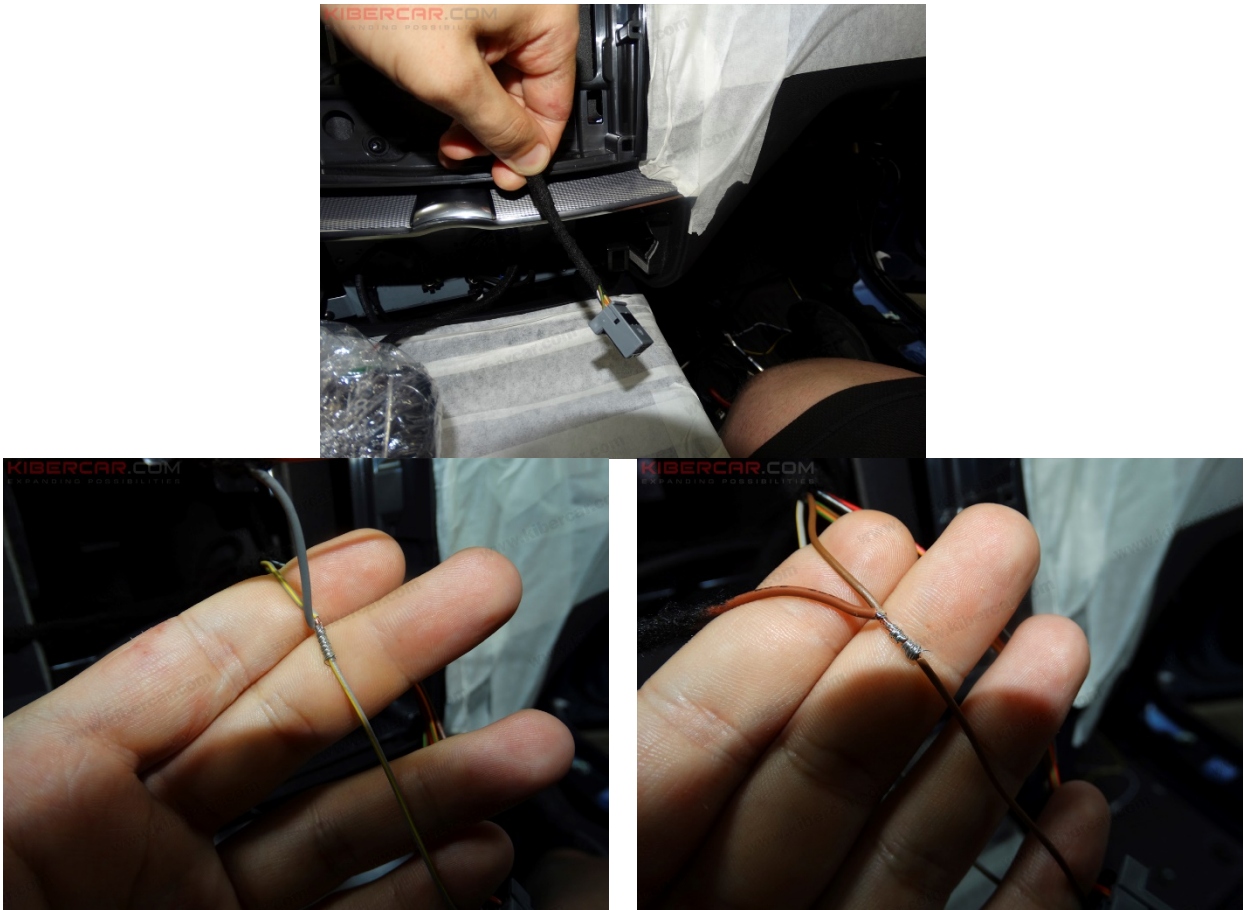
Picture 18.

Can bus connection terminal is located under the right kick panel. To connect to CAN bus, use the following wires of stock electrical cable harness: purple with a green stripe – to connect to CAN-LOW, purple with a white stripe – to connect to CAN-HI (Picture 18).



Picture 19.

Install blade fuse holder. Connect the red wire of electrical cable harness (+12V) in the right kick panel. Connect chassis to the black with a green stripe wire in the right kick panel (Picture 19).



Picture 20.

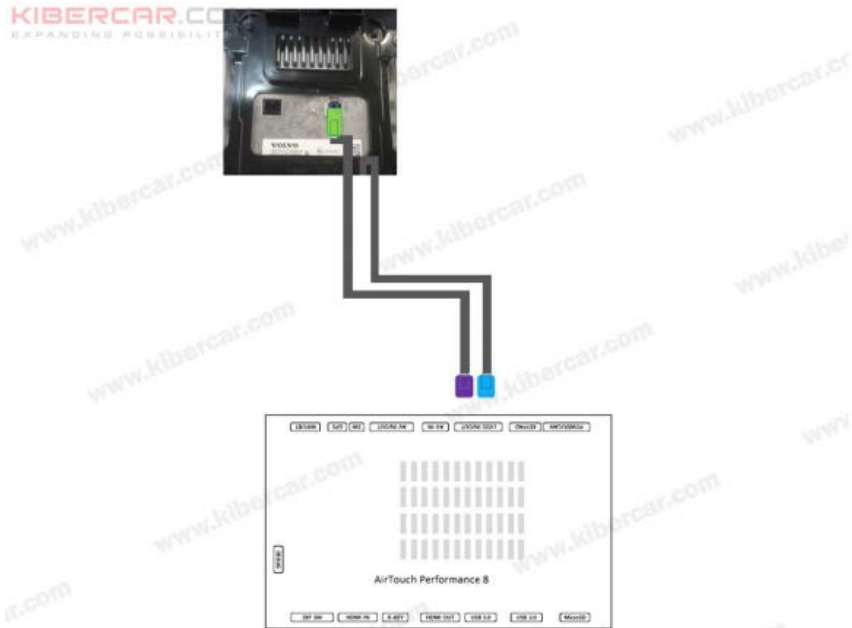
Connection to stock functional display button (to switch between vehicle's stock multimedia system and AirTouch Performance 8) is shown on picture 20.

Connect "MON 5V IN" wire to the brown wire of stock electrical cable harness; connect "BUTTON KEY" wire to the gray wire of stock electrical cable harness (Picture 20).



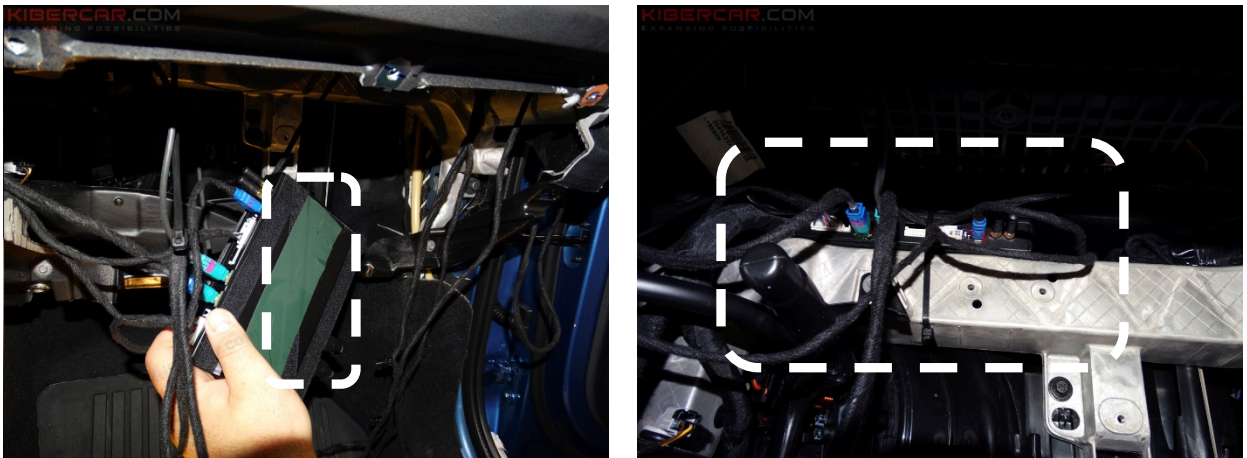
Picture 21.

In order for external modem to operate correctly, cut wires “DATA+” and “DATA-” in USB cable [N], that is used to connect USB Wi-Fi modem. Use PVC tape to isolate stripped wire ends, then use PET tape to band cable armor as shown on picture 21.



Picture 22.

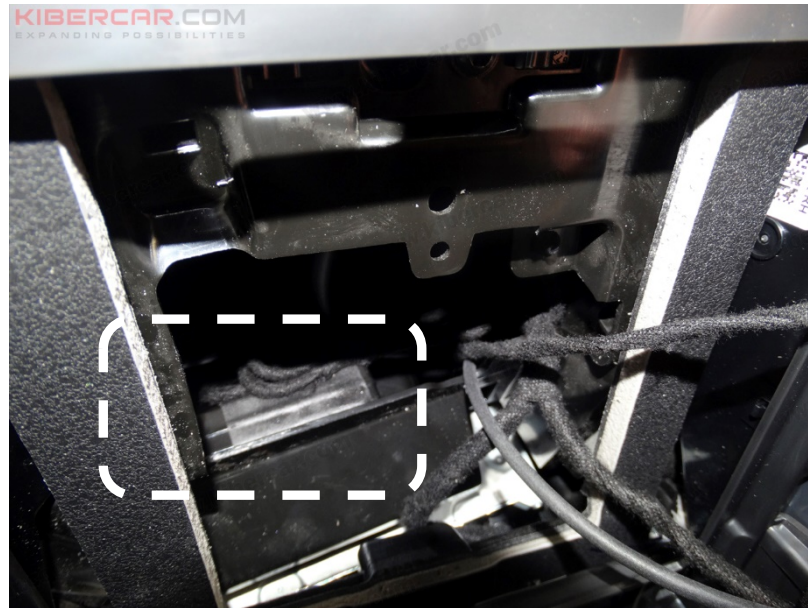
Picture 22 indicates how to connect video signal from AirTouch Performance 8 main unit to display. Connect the following parts from delivery set to main unit: [D], [F], [G], [H], [K], if necessary, also install parts [I] and [J].



Picture 23.

Connect terminals to AirTouch Performance 8 main unit [A], attach double-sided foam adhesive tape to lower part of unit case

Attach main unit to crossmember behind glovebox, then secure main unit using nylon ties as shown on picture 23.



Picture 24.

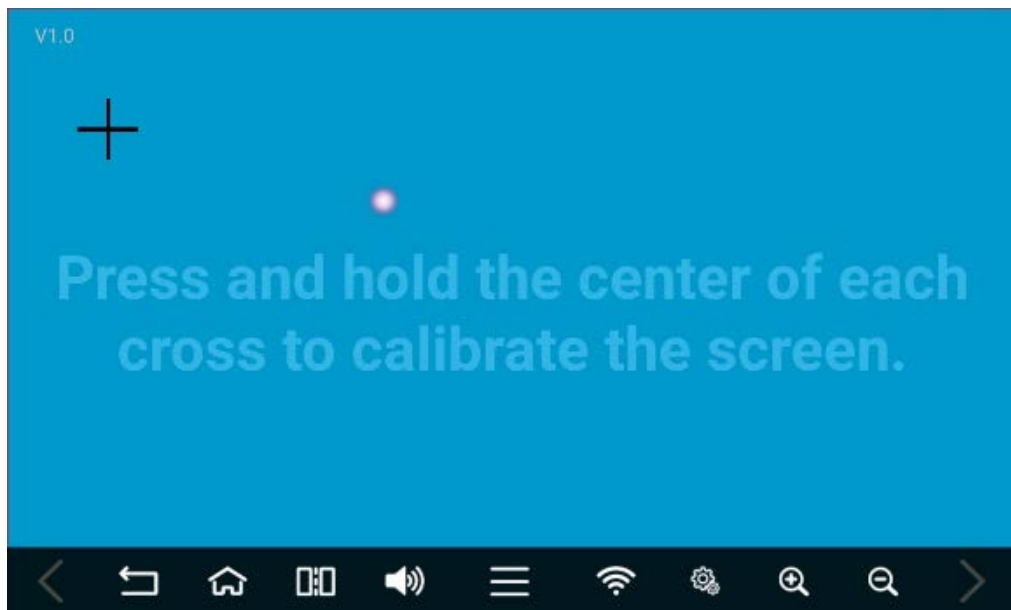
Install additional external speaker [C] using double-sided foam adhesive tape as shown on picture 24.



Picture 25.

Secure USB connectors [L] on glovebox case with nylon ties (location indicated with a circle), then run them through stock opening in glovebox (location indicated with a rectangle) (Picture 25).

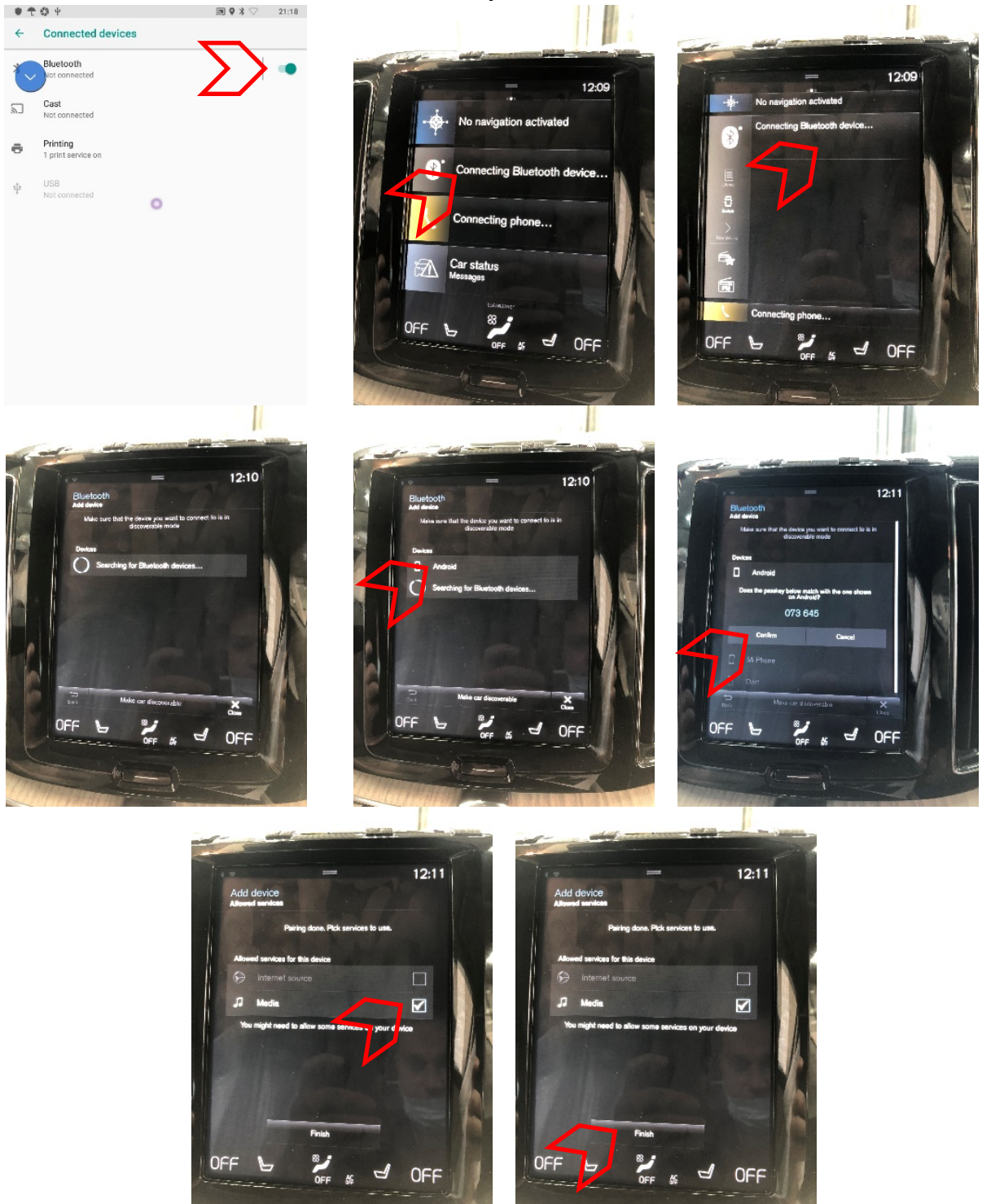
6. Screen Calibration



Picture 26.

Calibrate touchscreen (Picture 26). To calibrate touchscreen, press and hold the center of each cross, until the next cross appears. Repeat this step for each appearing cross.

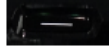
6. Connect audio to vehicle's stock sound system via Bluetooth



Picture 27.

Step-by-step instructions how to connect AirTouch Performance 8 to stock Bluetooth module are shown on picture 27.

8. Functional Check

Turn on ignition (“ACC”) → Wait for “AirTouch Performance 8” power-on (tune coming from “AirTouch Performance 8” sound speaker) → To launch “AirTouch Performance 8” interface mode, press and hold (for 2 seconds)  functional under stock head unit display.

Touchscreen check.
For this check, tap several times any virtual buttons and see, if the following action corresponds with the button tapped.

Built-in Wi-Fi module check.
For this check, connect to any available Wi-Fi network.

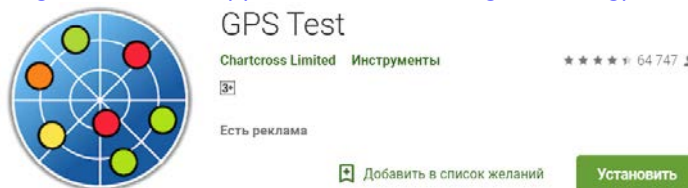
Check system microphone, e.g. by setting the route in Google.Maps via voice commands.

Check USB cable for connection to USB Wi-Fi router.
For this check, connect a USB Wi-Fi router to this cable and check, if the router works (see Router User Manual).

Check built-in Bluetooth module.
For this check, connect to any available compatible device with Bluetooth support.

GPS Receiver check.
For this check, you may use GPS Test application, which you may download via the following link:

<https://play.google.com/store/apps/details?id=com.figurecross.gpstest&hl=ru>



Park the vehicle in an open area, so that it is not shaded by any buildings or trees. The application should be able to locate and fix at least 6 satellites.

Check both USB hosts.
For this check, connect a USB Drive to any USB host. Then check, if the drive is mounted and may be opened, using a pre-installed Explorer app. Repeat this procedure for the other USB host.

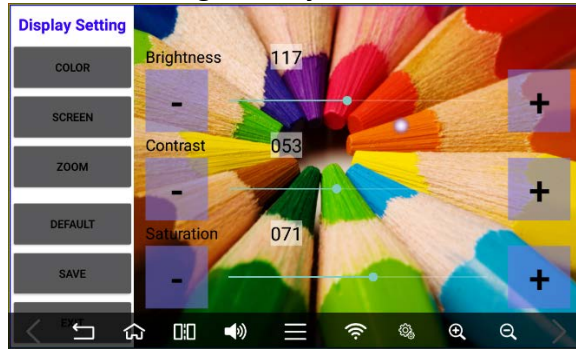
□ Check, if the vehicle’s stock sound system plays back the sound from “AirTouch Performance 8”.

For this check, activate sound playback by the vehicle’s stock sound system according to the method used to connect “AirTouch Performance 8” to the sound system.

□ Check MicroSD memory card installed in “AirTouch Performance 8” (***if memory card is installed***).

For this check, open the memory card, using a pre-installed Explorer app.

□ Adjust brightness, contrast, and saturation, if necessary.
For this check, adjust these parameters in the “Analog RGB Settings” menu.
For a detailed description of this (and some other) procedures please consult “AirTouch Performance 8” Navigation System User Manual.



9. Notes