

FIRST INSTRUCTIONS CAMERA INSTALLATION

Applicable to:

Mini rearview camera for V70, XC70, S60, S80 2000 – 2008 and XC90 2003-2012

Start point;

Your car is cleanly washed (makes sure you have less chances on making scratches while working on the car.

Required tools;

Drill, 8.5 or 9mm (9mm preferred) and 3 or 4 mm drill.

Torx 20 screw driver

Plastic spoon/ Volvo fishbone tool.

Usage materials required:

Black tape

INDEX

First instructions Camera installation 1

Index 1

Connect the P2 Litecam 2

 V70/S60/S80 2

Camera installation 7

 For V70/XC70: 7

 CABLES 12

 FOR S60/S80: 14

XC90 19

 Rearview camera 20

FOR ALL MODELS AGAIN: 27

FAQ: 28

Instruction# 1669	Version# 0.8	Part# -	EAN# SE-12	Author: KW
-------------------	--------------	---------	------------	------------

CONNECT THE P2 LITECAM

V70/S60/S80

The S60/S80 part is easier, as you don't have to remove these parts.

Firstly remove the cover of the booth. Then remove the bolt shown in #1



Then pull the panel from the left side.



Instruction# 1669	Version# 0.8	Part# -	EAN# SE-12	Author: KW
-------------------	--------------	---------	------------	------------

Now remove DVD player by removing bolt one on the top and only loosen bolts 2. (Do not completely remove them as you can pull the dvd player bracket to the side and then pull it forwards.)

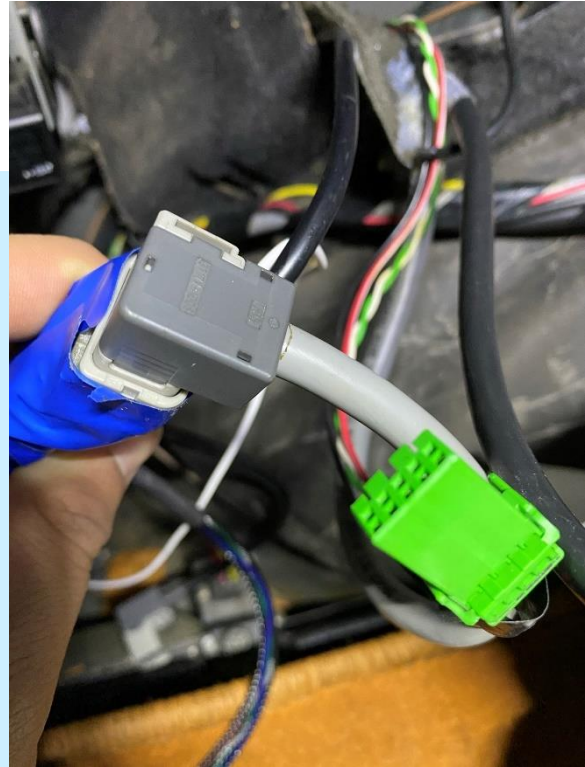
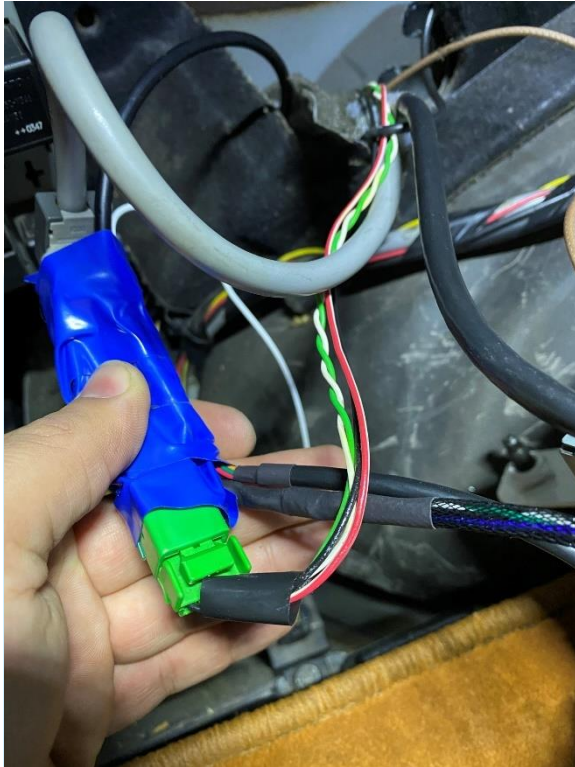


Now remove the green and grey connector as shown below.



Instruction# 1669	Version# 0.8	Part# -	EAN# SE-12	Author: KW
-------------------	--------------	---------	------------	------------

Now connect the grey and green connector to the litecam.



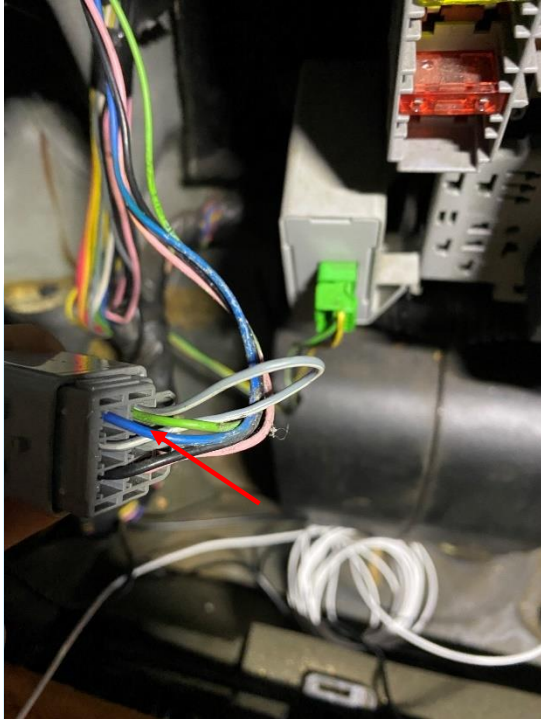
Now connect the cables from the litecam to the RTI Computer. You can leave this step if you are not planning to use the RTI computer.



© 2020 SwedeSolutions the Netherlands - info@swedesolutions.com - www.swedesolutions.com

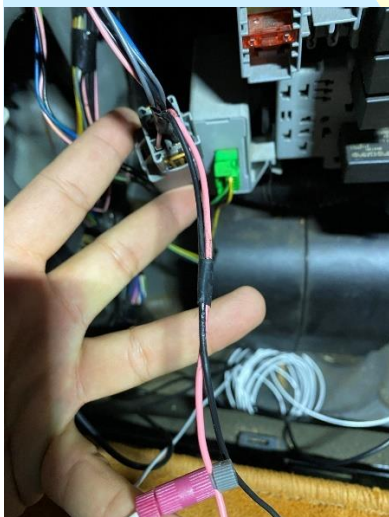
Instruction# 1669	Version# 0.8	Part# -	EAN# SE-12	Author: KW
-------------------	--------------	---------	------------	------------

Now connect the wire from the litecam to the **blue** wire of your reverse light.



Please note that if you have parking sensors that are not factory. It is possible that there is an additional harness installed.

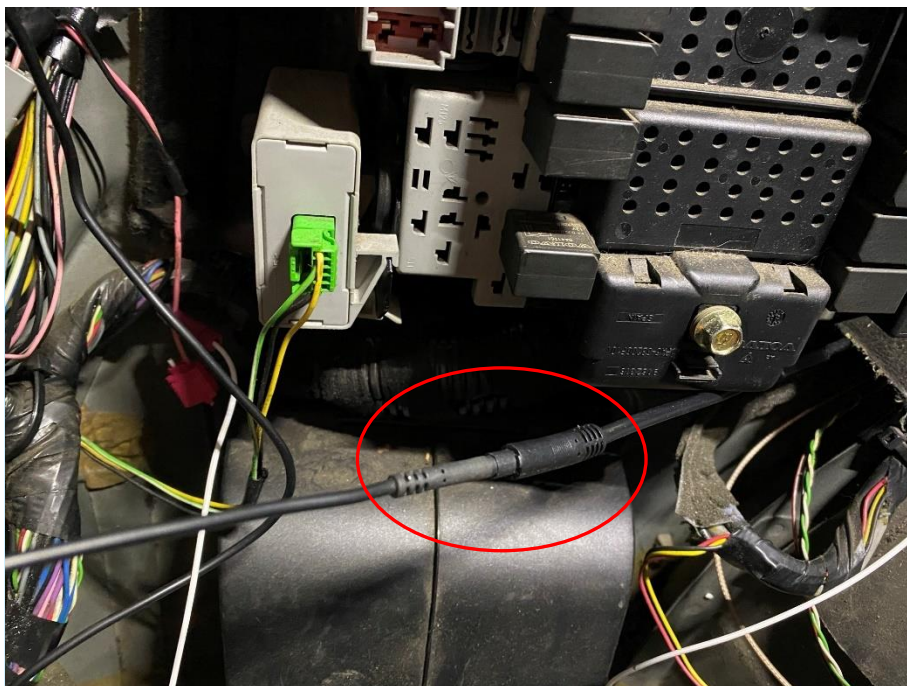
*This harness provides a ground and 12V for the parking sensor computer. Then you need the **red/pink** cable:*



Instruction# 1669	Version# 0.8	Part# -	EAN# SE-12	Author: KW
-------------------	--------------	---------	------------	------------

After you've installed your camera you can plug in the camera using this cable.

How to install the camera? Check the next chapters.



Instruction# 1669	Version# 0.8	Part# -	EAN# SE-12	Author: KW
-------------------	--------------	---------	------------	------------

CAMERA INSTALLATION

FOR V70/XC70:

Remove panels:

Remove the panels/covers first.

Remove the inner cover plate of the trunk cover, first remove the 4 torx screws then tightly pull the cover down.



2x TORX at the hand-grips



2x TORX at the side of the cover

*If the 4 TORX screws are removed, with a firm pull you can remove the panel. (push with 1 hand to the cover of the trunk (*1)) and pull with the other hand at the grip (*2) to pull the cover down.*

© 2020 SwedeSolutions the Netherlands - info@swedesolutions.com - www.swedesolutions.com

Instruction# 1669	Version# 0.8	Part# -	EAN# SE-12	Author: KW
-------------------	--------------	---------	------------	------------



Then remove the top cover parts, just pull down (no force required usually).



*Open the trunk. Then **MAKE SURE ALL IS CLEAN TO AVOID SCRATCHING!**
Then cover the places near where you'll have to drill to avoid damage.*

Instruction# 1669	Version# 0.8	Part# -	EAN# SE-12	Author: KW
-------------------	--------------	---------	------------	------------

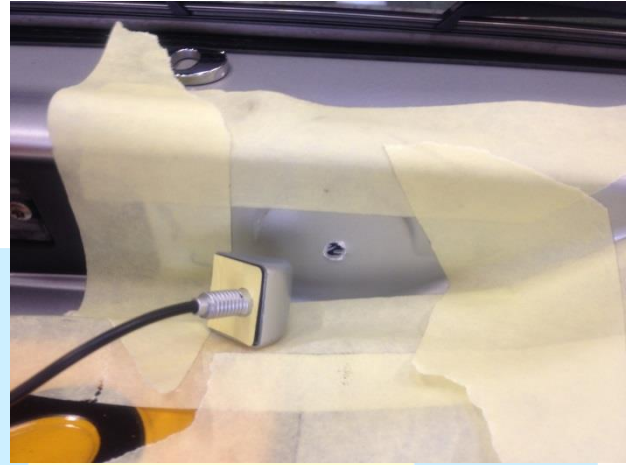
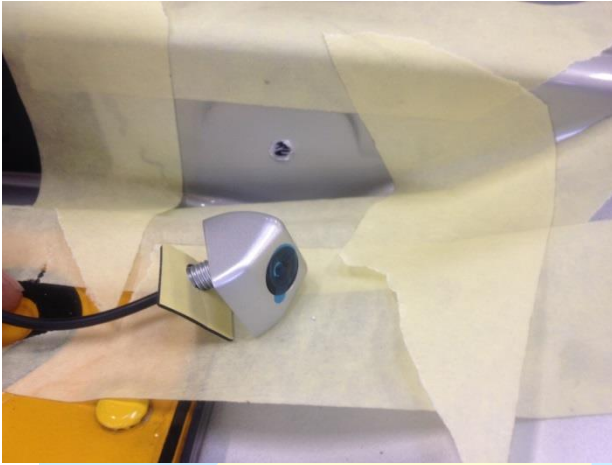


Drill with a 3 or 4 mm drill a small hole, then drill with the 9mm to finalize the hole in the cover.

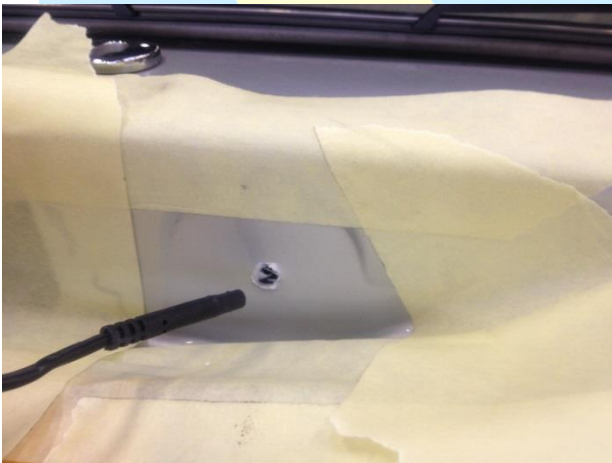


Place the camera as shown, but do not use the sticker cover yet, keep that sealed until later.

Instruction# 1669	Version# 0.8	Part# -	EAN# SE-12	Author: KW
-------------------	--------------	---------	------------	------------



Only remove the sticker once there's image on the RTI screen and you can set the right angle.



Inside the trunk you can now put the bolt on its place. Do not tighten too hard yet.

Instruction# 1669	Version# 0.8	Part# -	EAN# SE-12	Author: KW
-------------------	--------------	---------	------------	------------



Take the extension wire and connect to camera. Although connection is tight already between the 2 wires, please do seal it with some tape so it just can't get loose at all.



Instruction# 1669	Version# 0.8	Part# -	EAN# SE-12	Author: KW
-------------------	--------------	---------	------------	------------

CABLES

Entering cables.

Putting cables to inside the car is quite simple actually. Please follow the route as set out below with the red arrows.



Follow the red arrows and if required here and there tape the camera wire to an existing wire to make sure its guided well.

Next cut the black point from the rubber (red circle) and cut some material away from the rubber (arrow) so the cable can go through.

Instruction# 1669	Version# 0.8	Part# -	EAN# SE-12	Author: KW
-------------------	--------------	---------	------------	------------



Put the wire in its place and preferably tape it to the original wire loom to avoid damages to the wiring.

Next just drop the cable down (behind the speaker cover; remove that cover if the cable won't drop down totally) and connect it to the green connector at the iMIV/MII/LE+



Instruction# 1669	Version# 0.8	Part# -	EAN# SE-12	Author: KW
-------------------	--------------	---------	------------	------------



FOR S60/S80:

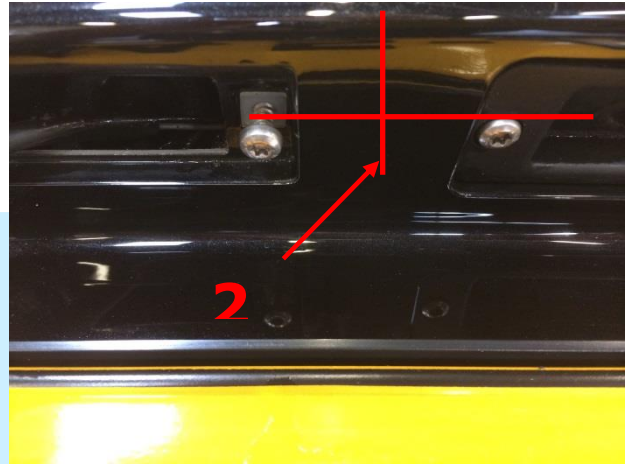
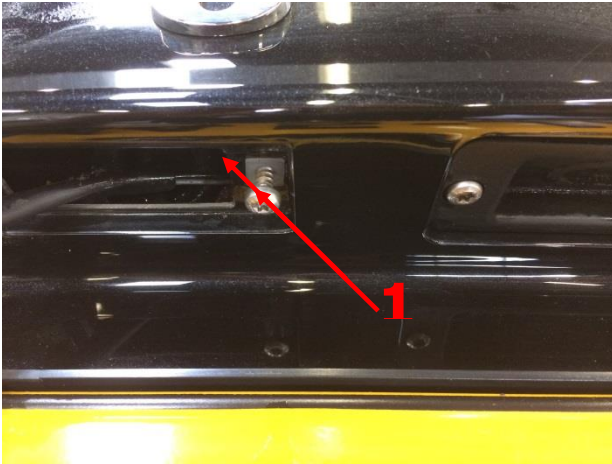
Final Camera location:



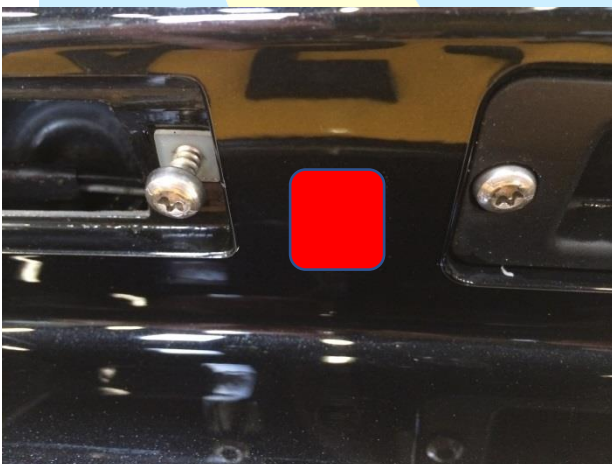
*Start with removing the left license plate light.
(please see Volvo owners manual in case you doubt on how-to) and clean the surrounding area!*

Instruction# 1669	Version# 0.8	Part# -	EAN# SE-12	Author: KW
-------------------	--------------	---------	------------	------------

Mark the center of the cross (point 2) with a sharp object to be able to drill trough later:



Please DO check that particular point, by using the sticker sheet of the camera. Should be nicely centered..



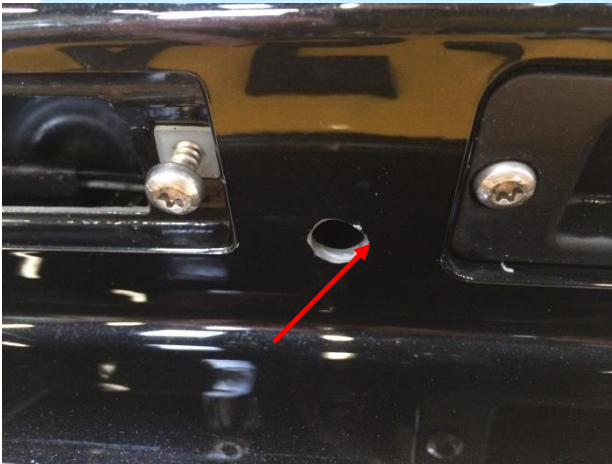
Instruction# 1669	Version# 0.8	Part# -	EAN# SE-12	Author: KW
-------------------	--------------	---------	------------	------------

At the inside of the trunk-plate (behind the material where you'll be drilling later) there are some wires of the license plate light and electrical trunk-opener.

Please move those wires a bit aside before drilling.

Drill with the 9mm drill at the marked spot. Be gentle and make sure any rotating parts of the drill do not hit the trunk anywhere else than the intended point!

Push the camera wire inside, put the nut over the camera wire and connect it slightly (not tight, just so the camera does not drop!)



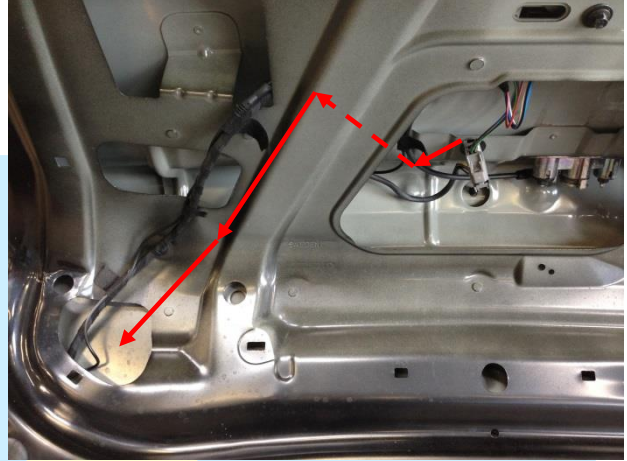
Push the camera wire trough the rubber to the inside of the trunk cover.

(you might need to take the rubber out first, and make a whole to be able to get the wire trough!)



Instruction# 1669	Version# 0.8	Part# -	EAN# SE-12	Author: KW
-------------------	--------------	---------	------------	------------

Next you connect the supplied extension cable to the camera harness. Then follow the red line with the extension cable and make sure you tape the harness together with existing wires.



Guide the wire out now through the rubber as shown below. The best way is to guide the harness in parallel with the original wiring coming out. If you can't get the mini connector through, it is ok to make a small hole as shown in the right picture.



Remove the cable guidance (left arrow on left picture) and guide the camera harness next to the original wiring there. Use some tape to tighten the camera harness to the original wiring. Last point is to push the camera harness into the car again, through the rubber as well at this point.

Instruction# 1669	Version# 0.8	Part# -	EAN# SE-12	Author: KW
-------------------	--------------	---------	------------	------------



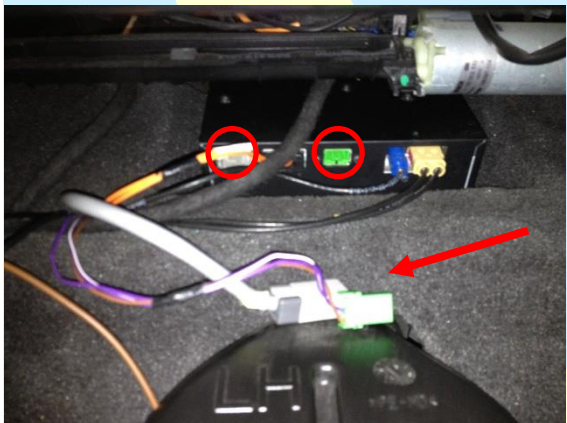
Instruction# 1669	Version# 0.8	Part# -	EAN# SE-12	Author: KW
-------------------	--------------	---------	------------	------------

XC90

Move the driver seat as far UP and FORWARD as possible. Find the RTI computer below the seat.



Remove the GREEN and GREY connector.



Now hookup the Litecam to the RTI computer. The extra cable needs to go to the reverse lights. So route that to the reverse lights in the back.



Instruction# 1669	Version# 0.8	Part# -	EAN# SE-12	Author: KW
-------------------	--------------	---------	------------	------------

REARVIEW CAMERA

Open trunk the inner light in the trunk-door.



Remove the TORX screw on from the trunk-cover where you just remove the internal light. Then remove the handle-bar cover on the right side



Then remove the TORX screws on the right hind side where you just removed the handle-bar cover.



© 2020 SwedeSolutions the Netherlands - info@swedesolutions.com - www.swedesolutions.com

Instruction# 1669	Version# 0.8	Part# -	EAN# SE-12	Author: KW
-------------------	--------------	---------	------------	------------

Remove the trunk cover now. You might need to give it a firm pull. Then also remove the side- and top covers. Slide and pull.



Then remove the little covers from the roof-cover



Slide towards you (1cm) and then pull down the full roof cover part.
Remove the connector from the light-unit. Remove the parts from the side and tilt the floor cover.



Drill a 8.5 mm hole and push the camera and cable in.

© 2020 SwedeSolutions the Netherlands - info@swedesolutions.com - www.swedesolutions.com

Instruction# 1669	Version# 0.8	Part# -	EAN# SE-12	Author: KW
-------------------	--------------	---------	------------	------------

DO NOT USE THE DOUBLE SIDED TAPE TO CLOSE THE CONNECTION AT THIS POINT!
(Please do this AFTER you have seen the image on RTI screen!)



Put on the nut (pull over the harness and turn it loosely on the camera)



Guide (and tape) the cable set (directly connected to the camera) to the LEFT part of the trunk. Connect the extension cable now. Guide the cables between the windshield and the metal to the roof of the car (do NOT push too hard!)



© 2020 SwedeSolutions the Netherlands - info@swedesolutions.com - www.swedesolutions.com

Instruction# 1669	Version# 0.8	Part# -	EAN# SE-12	Author: KW
-------------------	--------------	---------	------------	------------

Pull out the rubber from the roof and guide the cables trough.

*(in this example a red cable to show the exact path!) You can use a long tie-wrap or so to pull the cable trough.



Then guide the cables trough the left-rear covers (if required remove the speaker cover here).

Now hookup the wiring to the car here as done in the set and as labeled for you. Then continue to push the Video/Switchcord cable to the front.



Instruction# 1669	Version# 0.8	Part# -	EAN# SE-12	Author: KW
-------------------	--------------	---------	------------	------------



Move the wiring harness to the left part of the floor cover, below the rails of the 3rd seating row (if applicable).



Then guide the wiring below the rails , and bring it back up next to the seat handle of the 3rd seating row. Pull upwards the covers and put the cables under them.

Instruction# 1669	Version# 0.8	Part# -	EAN# SE-12	Author: KW
-------------------	--------------	---------	------------	------------

Note that you need to be careful with the clips below, put the cables behind them!

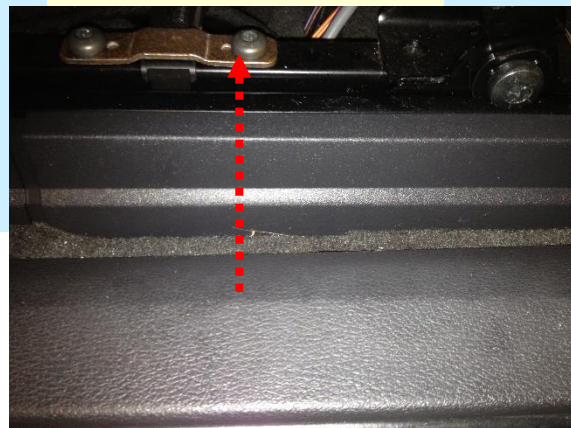


Put the cable forward to the 1st seating row.



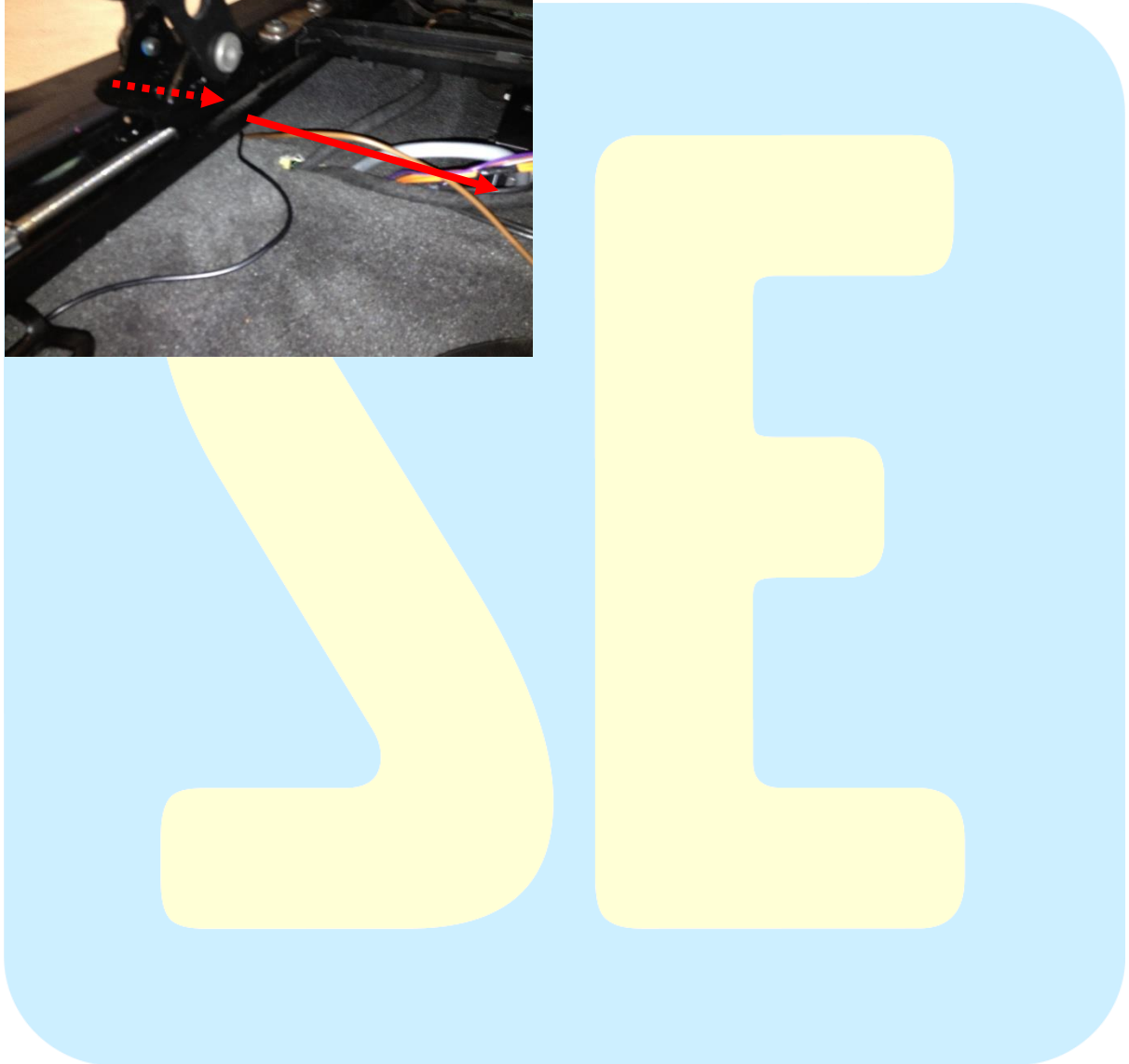
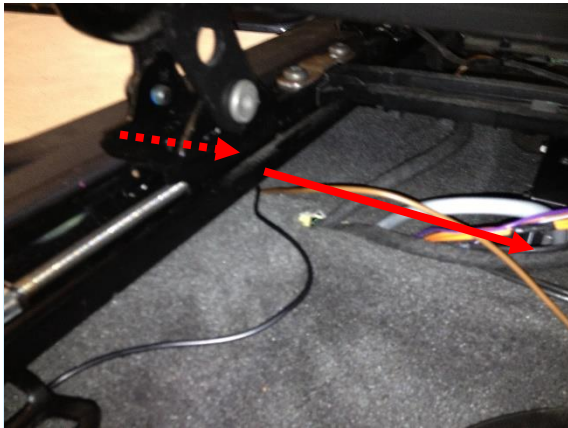
And there the cabling can be put under the floor cover, under the drivers seat!

(please find the place where 2 floor cover parts are connected, if you push the rear part down, you can slip the cables in!)



Instruction# 1669	Version# 0.8	Part# -	EAN# SE-12	Author: KW
-------------------	--------------	---------	------------	------------

Pull the cables up under the drivers seat and connect them to the litecam!
The activation wire needs to go to the opposite side. As it needs to be connected to the reverse light in the back.



Instruction# 1669	Version# 0.8	Part# -	EAN# SE-12	Author: KW
-------------------	--------------	---------	------------	------------

FOR ALL MODELS AGAIN:

*If you want to see parking lines, you can cut the **GREEN Wire**. But note before you do so; as in the original Volvo camera, you cannot expect the lines to match the exact straight, simply because the camera is not centered totally!) We suggest you work without the parking lines. You'll also find a **WHITE** wire-loop at the camera side. Make sure this loop is CUT to make the image on the RTI screen **MIRROR**. (I.e. left on the RTI screen = left in reality!)*



So now put the ignition in position 2, and put car in reverse (with handbrake on please!) and look at the image of the camera on the RTI screen. Now adjust the camera as you want and decide which position is the one you like.

END OF INSTRUCTION

Instruction# 1669	Version# 0.8	Part# -	EAN# SE-12	Author: KW
-------------------	--------------	---------	------------	------------

FAQ:

Questions:

Q: Can I wash my car in an automatic car cleaning box?

A: yes, of course. The camera is water resistant. Normal washing is no problem. Putting a high pressure water jet on it might damage the camera though, so avoid that.

Q: Sometimes the image is a bit "vague", not "clear"

A: Simply clean the camera lens with a soft tissue. Since the camera is mounted at the trunk, it will get dirty..

Q: Sometimes a part of the image is dark or very light.

A: that has to do with the minimum and maximum amount of light the camera thinks is required to display the best image. If 60% of the image is very bright, the camera will close its iris and darken the image. The darker parts will then get even darker. Same goes for the other way around. This is how any camera works by the way.

Q: the Camera does not switch off immediately if I put my car in D or first gear after I finished reverse parking.

A: this is as designed. To avoid very fast and rapid switching while you're parking the car (reversing, back in 1st gear, reversing etc.) the camera will stay active for about 6-7 seconds after the reverse gear is switched off.

Instruction# 1669	Version# 0.8	Part# -	EAN# SE-12	Author: KW
-------------------	--------------	---------	------------	------------