

# Volvo-S60 smart key-half-key-less -Help File

This help file basically includes 4 parts: Function, Operation, Attention, and Reference.

## Function

1. Add key: please first make sure if the key is a new unused one;
2. All keys lost: please first make sure if the key is a new unused one;
3. Read CEM security data: dismantle & read CEM to backup security data (make sure to backup security data before programming);
4. Key identification and unlocking: to identify if the key is a new unused one. If the remote control is invalid after key programming (on condition that battery has been installed and the remote control frequency is correct), try to import the CEM safety data to unlock key, and program again after unlocking successful.

### Note:

1. For "Plug-in sensor start key (5-button)", please be sure to dismantle & read the CEM, please refer to the "Operation Guide" or "Reference"
2. First time to use the adapter, you need to bind it with K518ISE. Go to the K518ISE home page and choose "Settings -> Binding adapter", following the direction to finish binding. One K518ISE host can bind up to 5 adapters, and the bound adapter can not be bound to other K518ISE hosts. Once bound, no need to bind again.
3. "Plug-in sensor start key (5-button)" only need to dismantle & read CEM in the co-pilot storage box and backup security data;
4. The connection between K518ISE host, adapter and RN-01 board:



5. Read Volvo CEM please use RN-01 board:



6. Connection between K518ISE host, adapter and FS-01 board:



7. Read Volvo KVM please use FS-01 board:



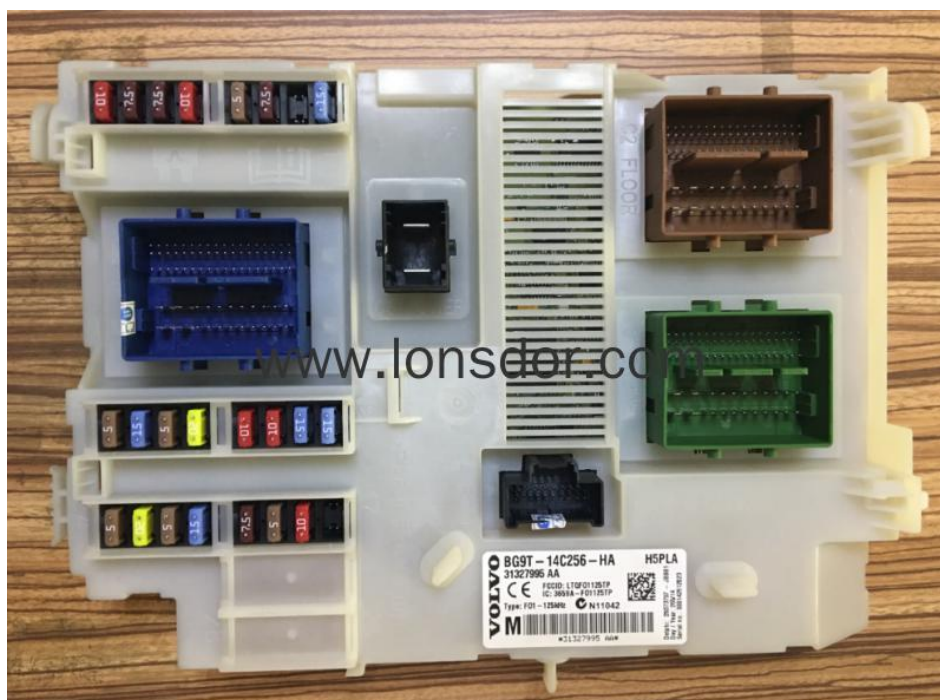
## Operation

Read CEM security data

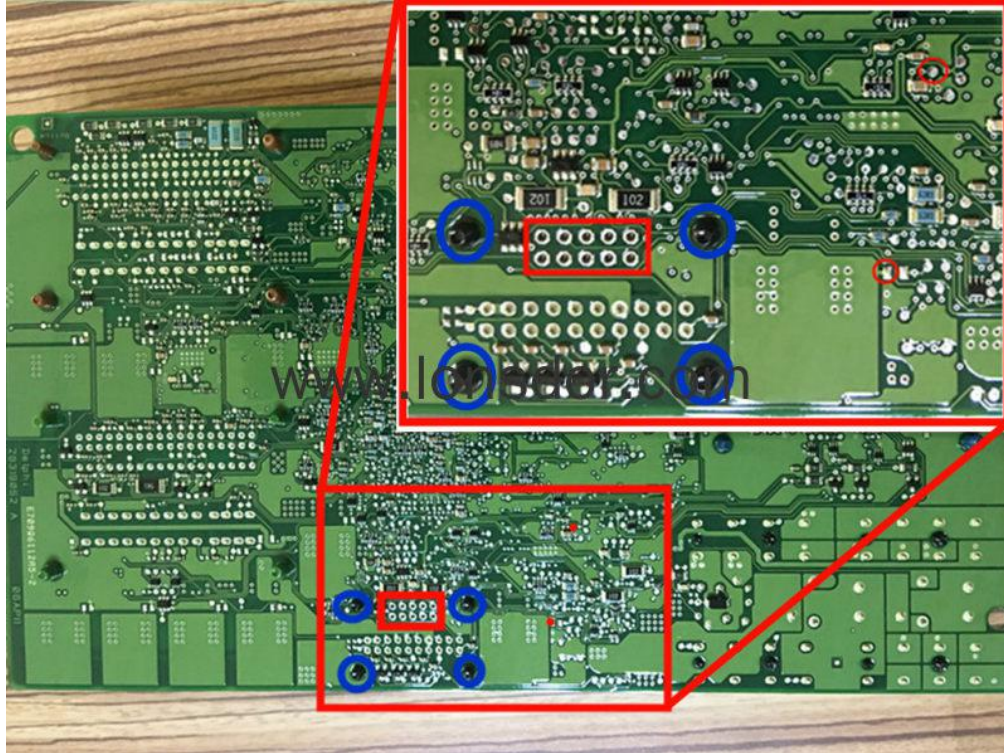
Volvo's CEM is basically located behind the storage box which is in front of the co-pilot seat



CEM boxes may have the same appearance, but the back of the circuit wire location is different, can be called type A and B .







Type A: open the lid, pay attention to the black columns in the blue circle on the back of the circuit board, those are four positioning points, stably match them respectively with the white columns on RN-01 board.

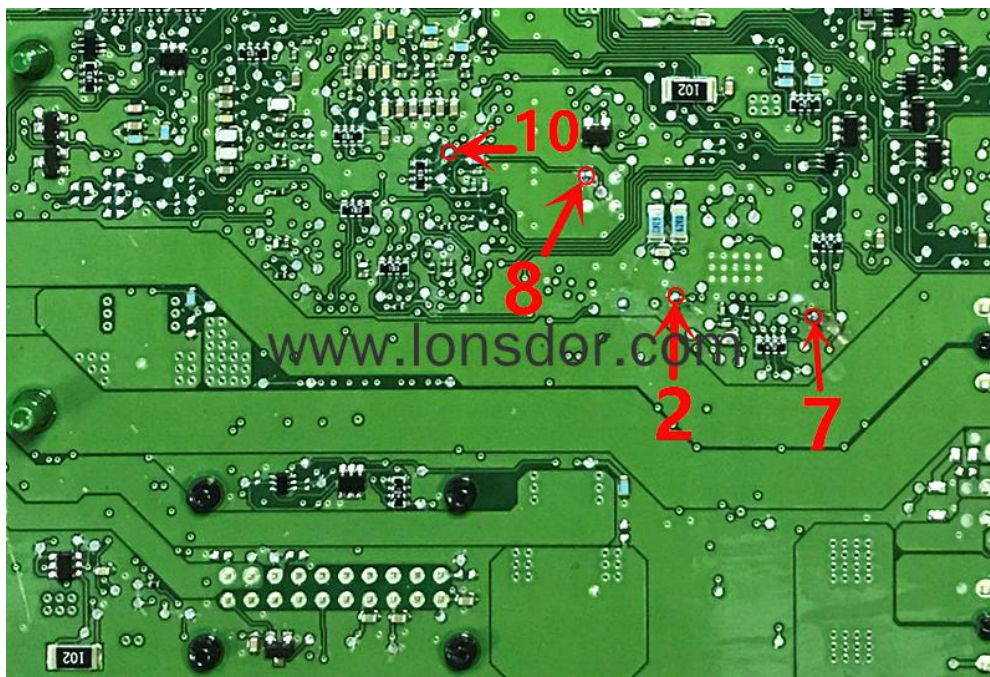
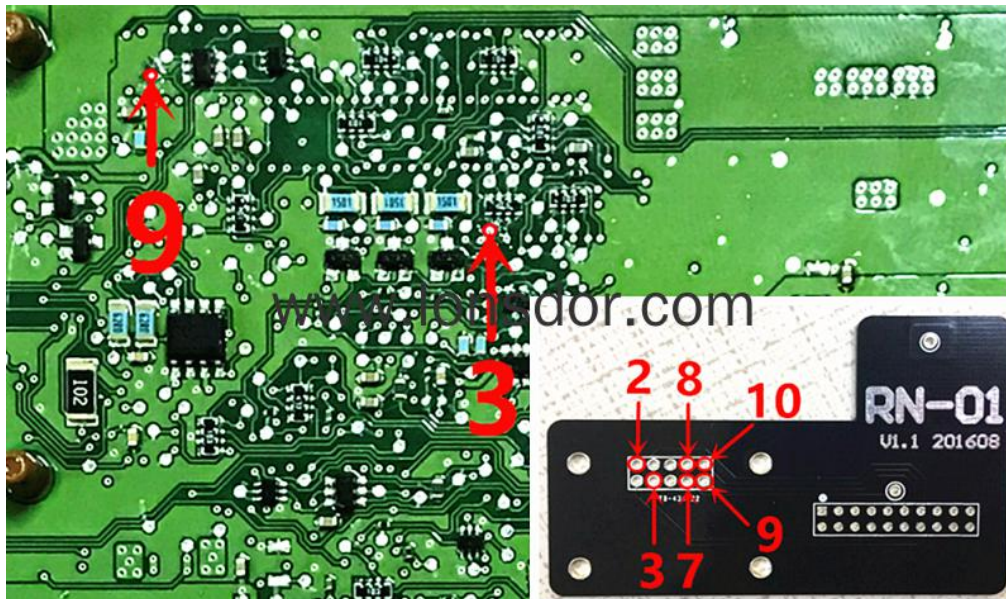
**Note:** The circuit board is coated with insulating glue, it is required to use the washing plate water to wash it off the blue area of the insulation coating in the contact point (solder joint) , or power can not go through, if the needle of RN-01 board is broken, it will need to wire in the corresponding locations.

(First time to use the adapter, please bind it with K518ISE host, please refer to"Function Instruction")



Type B: Its circuit is different from that of type B, it requires to wire to read immodata, please refer to below wire instruction:





Note: Connect power to read the data, it is required to separate RN-01 board to the motherboard to prevent conduction; welding line should not exceed 15cm.



## Attention

1. When programming VOLVO key, be sure to dismantle & read the CEM, as to CEM location and how to read, please refer to the "Operation Guide" or "Reference".
2. It is required to bind the adapter when using it for the first time, you need to bind it with K518ISE. Go to the device home page and choose "Settings -> Bind adapter", following the direction to finish binding. One K518ISE host can bind up to 5 adapters, and the bound adapter can not be bound to other K518ISE hosts. Once bound, no need to bind again.
3. For 6 keys, during operation, you need to first insert the key into the key slot and then operate according to the directions.
4. For 5-button key, please follow the prompts to insert the key into card slot, if the key can't be inhaled, please follow the prompts to click "Cancel", the system will prompt "Please pull out and in the key within 10 sec , and then wait for the program to execute.
5. Check if the card is locked when it can't be kept in the key slot, locked key can't be kept, a new card generally will not be locked.
6. When install battery to Volvo models, please pay attention that the two batteries are overlapped, separated by a white paper in between, do not just replace the above one.



Disassemble is also very simple, remove the metal key, in the place where the key lies, please find a little knife with not too sharp blade, gently open it from the gap.

7. If the remote control can't work after programming, that mainly because operational problems, click "OK" if yes, if click "cancel" and continue to follow the prompt to operate, such operation may cause useless remote. If this happens, please re-program (you can delete the already programmed key, as to the original car key and the key that has been programmed by the vehicle, once being deleted, can only be used to program this car).

## Reference

Chip model: Dedicated chip (brand new)

Remote type: 433 frequency

Key embryo no.: No.24/38

PIN code requirement: Dismantle & read CEM to backup security data and program

Remote generation: Program smart key complete, remote will automatically generated

Under the steering wheel (BCM position):





S60 car model



Plug-in sensor-to-start key (5-button)



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