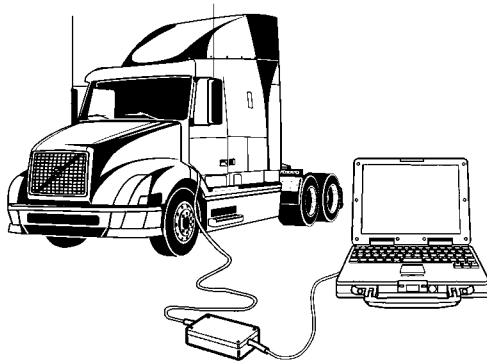


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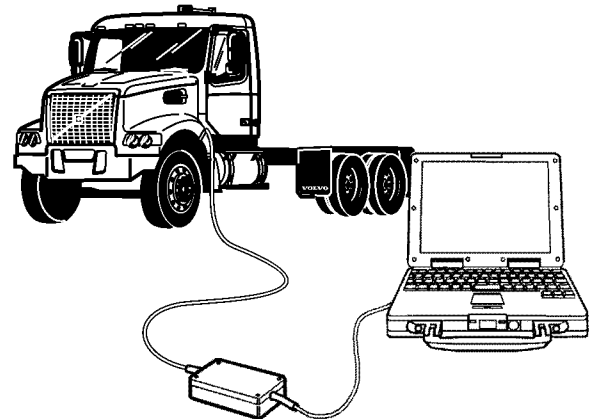
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VCADS Pro Conversion Kit and
Accessory Kit Numbers
ALL Models

VCADS Pro Conversion Kit and Accessory Kit Numbers



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General

Purpose of Conversion and Accessory Kits

The Conversion and Accessory Kit functions are used when certain changes are made to a vehicle that require updates to Volvo Data Administration (VDA).

A Conversion or Accessory Kit may be needed when:

- Programming a replacement electronic control unit (ECU) that has a different hardware part number than the one originally installed on the vehicle (Conversion Kit).
- Installing and programming a type of ECU that the vehicle was not originally equipped with when it was built (Accessory Kit).

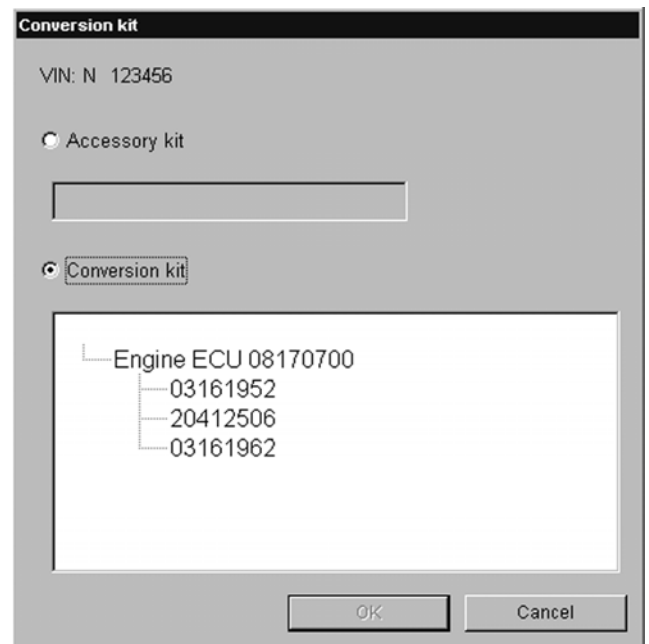
Conversion Kit, Use

The first step in programming a replacement ECU is to check the hardware number of the ECU being replaced and compare it to the hardware number of the replacement ECU. It is possible these numbers do not match because newer replacements for the original ECU may have been made available since the vehicle was built.

If the numbers do not match, a hardware number mis-match error will occur during the programming procedure. This occurs because a check is made during the programming process to ensure the ECU being programmed is correct for the vehicle. To make this check, the replacement ECU hardware number is compared to the information in the database for that vehicle. If these numbers do not match, a hardware number mis-match error will occur. Use Conversion Kit to make the necessary hardware number updates.

Conversion Kit, Function

- Connect to the vehicle's communication connector and start the VCADS Pro application. Select "Conversion Kit" from the menu (located within function group 1).
- Connect the PC to an appropriate communication connection (telephone or network). Start the operation. Communication with the vehicle will take place and a connection to Volvo is initiated.
- After the communication with Volvo has occurred, a window appears to display the result.
- In the conversion kit section of the window (the lower section), some of the ECU's installed on the vehicle may be listed. The number to the right of the ECU name is the hardware number that is registered in VDA for that vehicle.
The number(s) listed below the ECU name are the ECU hardware numbers that are acceptable replacements for that ECU in this particular vehicle.
If the ECU that is being installed appears in the list of ECU's, select the hardware number that matches the replacement ECU. In most cases, the hardware number of the replacement ECU can be found on a label affixed to the ECU or its package.
There are certain exceptions to this however. These exceptions are noted in the information on the following pages when applicable.



If the ECU being replaced does not appear in the list:

- Refer to the appropriate chart on the following pages, corresponding to the ECU that is to be installed.
- In the chart, find the hardware number of the original ECU in the "Old Part Number" column. Make sure the hardware part number of the replacement ECU matches the number in the "New Part Number" column. Note that there may be more than one new hardware number that is acceptable to replace a single old hardware part number. The corresponding conversion kit number will be found in the "Conversion Kit" column of the chart.
- **Important:** Ensure the hardware part number of the ECU to be installed is listed as an acceptable replacement for the one that is being replaced.
- Click the "**Accessory Kit**" selection in the upper section of the Conversion Kit window in VCADS Pro and enter the conversion kit number into the accessory kit blank.
- Click the OK button. Enter a generated password (from your digipass) or static password (if applicable) when requested, and a connection will be made to Volvo. After communication with Volvo has taken place, a prompt will appear stating that the conversion kit has been ordered.

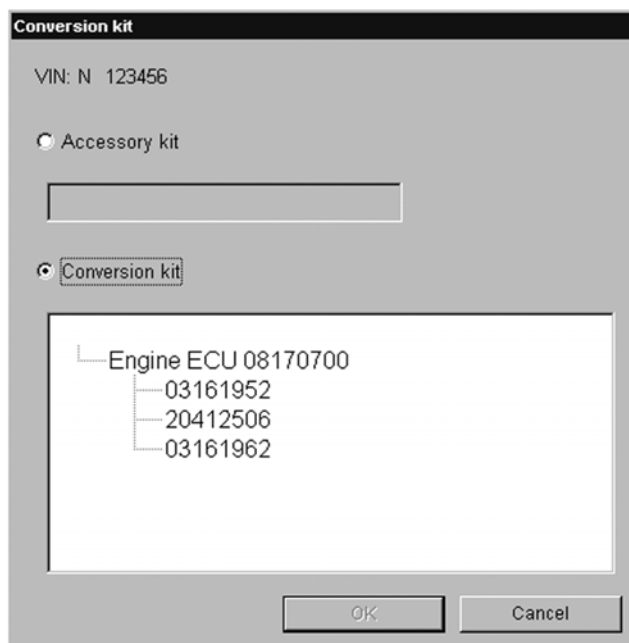
At this point, the replacement ECU can be programmed using the appropriate programming operation ("**MID ??? ECU Programming**", where "???" = the MID number of the ECU).

Accessory Kit, Use

If a new system that includes an ECU is added to a vehicle, information about that system must be added to the vehicle's information in VDA. This information must be in place to enable programming of the ECU during installation and in the future for software updates and programming of replacement ECU's.

Accessory Kit, Function

- Connect to the vehicle's communication connector and start the VCADS Pro application. Select "Conversion Kit" from the menu (located within function group 1). Note: Accessory Kit is part of the Conversion Kit function.
- Connect the PC to an appropriate communication connection (telephone or network). Start the operation. Communication with the vehicle will take place and a connection to Volvo will be initiated.
- After the communication with Volvo has taken place, a window will appear to display the result



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- Select the Accessory Kit selection in the upper section of the window. Refer to the appropriate accessory kit chart (on the following pages) according to the system that is being installed. Enter the accessory kit number in the accessory kit blank and click the OK button.
- Enter a generated password (from your digipass) or static password (if applicable) when requested, and a connection will be made to Volvo. After communication with Volvo has taken place, a prompt will appear stating that the conversion kit has been ordered (the prompt will refer to "conversion kit" regardless of whether an accessory kit or conversion kit has been ordered).
- At this point, the new ECU can be programmed using the appropriate programming operation ("MID ??? ECU Programming", where "???" = the MID number of the ECU).

Specifications

Conversion Kits VN, VHD VERSION2

Vehicle ECU (VECU) and Body Builder Module (BBM)

The hardware number of the VERSION2 vehicle ECU (VECU) is not the same as the part number shown on its label. This is because the VECU unit may be a VECU only, or a VECU / body builder module (BBM) combination. Therefore, separate assembly part numbers are used to differentiate a **VECU** from a **VECU / BBM** combination unit. If a VECU / BBM is being replaced, both ECU's must be programmed separately. If the replacement assembly unit has a different part number, the VECU and BBM hardware numbers will also be different.

Vehicle ECU (MID 144)					
Vehicle ECU Only					
Model	Old HW Number	Old Label Number	New HW Number	New Label Number	Conversion Kit Number
VN, VHD	20453547	20453546	20538396	20538395	85106848

Vehicle ECU (MID 144) and Body Builder Module (MID 249)					
Vehicle ECU/Body Builder Module Combination					
Model	Old HW Number	Old Label Number	New HW Number	New Label Number	Conversion Kit Number
VHD	VECU-20453547 BBM-20453551	20453550	VECU-20538396 BBM-205538400	20538399	85106849

Light Control Module (LCM)

Light Control Module (MID 216)			
Model	Old Part Number	New Part Number	Conversion Kit Number
VN, VHD	20427169	20514900	85105290

Instrument Cluster

Instrument Cluster (MID 140)			
Model	Old Part Number	New Part Number	Conversion Kit Number
VN, VHD	20555544	20524880	85106552
VN, VHD	20455545	20524881	85106553
VN, VHD	20455546	20524882	85106554
VN, VHD	20455547	20524883	85106555

SRS Airbag

SRS (MID 232)			
Model	Old Part Number	New Part Number	Conversion Kit Number
VN, VHD	20493619	20452781	85107560

Engine ECU

Engine ECU (MID 128)			
Engine	Old HW Number	New HW Number	Conversion Kit Number
D12C (Mexico)	3161962	20577131	85107712

Accessory Kits VN, VHD VERSION2

Body Builder Module (BBM)

Addition of a body builder module (BBM) to a vehicle makes it necessary to replace the vehicle ECU (VECU) since these ECU's share the same housing. Therefore, the accessory kit number to be used for installation of the BBM depends on the VECU hardware that is currently installed in the vehicle.

The hardware number of the VERSION2 vehicle ECU (VECU) is **NOT** the same as the part number shown on its label. For details, refer to Vehicle ECU (VECU) and Body Builder Module (BBM) in the Conversion Kits- VERSION2 section see page 6. The correct accessory kit number depends on the part number of the vehicle ECU that was installed in the vehicle prior to the BBM installation, as well as the part number of the VECU / BBM combination unit being installed.

Body Builder Module (MID 249)					
Vehicle ECU/Body Builder Module Combination					
Model	Old VECU HW Number	Old VECU Label Number	New VECU and BBM HW Numbers	New VECU/BBM Label Number	Accessory Kit Number
VHD	20453547	20453546	VECU-20453547 BBM-20453551	20453550	85104980

Light Control Module (LCM) Snow Plow Lights

The addition of snow plow lights to a VERSION2 vehicle does not require replacement of the LCM, but does require reprogramming. An accessory kit is used in order to make the appropriate software available for the vehicle in preparation for this programming.

Light Control Module (LCM) MID 216 Snow Plow Lights
Accessory Kit
85107475

Volvo Link

Volvo Link (MID 142)
Accessory Kit
85105371

Conversion Kits, VN, VHD VERSION1 Vehicle Electronics 98

Engine ECU

The hardware part number is printed on a label located on the back of the engine ECU. The hardware part number is read from the ECU electronically by VCADS Pro. The ECU packaging has a different part number on its label. This number is referred to as an exchange part number. This exchange part number cannot be used in the conversion kit process.

If the ECU is already installed on the engine, it may not be possible to view the hardware part number label. In this case, the hardware number can be read out electronically by performing the Vehicle Information Test in VCADS Pro, or by using the instrument cluster's graphic display.

Engine ECU (MID 128)			
Engine	Old HW Number	New HW Number	Conversion Kit Number
D7C	8192949	3161953	3092924
		20412507	3099134
		3161963	85103653
D7C	3161953	20412507	3099134
		3161963	85103653
D7C	20412507	3161963	85103653
D12B, D12C	8170700	3161952	3092923
		20412506	3099133
		3161962	85103340
		20577131	85107712
D12B, D12C	3161952	20412506	3099133
		3161962	85103340
		20577131	85107712
D12B, D12C	20412506	3161962	85103340
		20577131	85107712

Vehicle ECU (VECU)

Vehicle ECU (MID 144)			
Model	Old Part Number	New Part Number	Conversion Kit Number
VN	3943934	3173624	85101597
VN, VHD	3173622	20442599	85101607

SRS Airbag

SRS Airbag (MID 232)			
Model	Old Part Number	New Part Number	Conversion Kit Number
VN, VHD	20410525	20452781	85107560
VN, VHD	20493619	20452781	85107560

Instrument Cluster

Instrument Cluster (MID 234)			
Model	Old Part Number	New Part Number	Conversion Kit Number
VN	3198180	3198510	3095809
		20410700	3099365
		20461852	85103942
		20528755	85105795
VN	3198181	3198511	3095811
		20410701	3099366
		20461853	85103943
		20528756	85105796
VN	3198182	3198512	3095814
		20410702	3099367
		20461854	85103944
		20528757	85105797
VN	3198183	3198513	3095816
		20410703	3099368
		20461855	85103945
		20528758	85105798
VN	3198184	3198514	3095818
		20410704	3099369
		20461856	85103946
		20528759	85105799
VN	3198185	3198515	3095820
		20410705	3099370
		20461857	85103947
		20528760	85105800
VN	3198186	3198516	3095822
		20410706	3099371
		20461858	85103948
		20528761	85105801
VN	3198187	3198517	3095808
		20410707	3099372
		20461859	85103949
		20528762	85105802
VN	3198188	3198518	3095810
		20410708	3099373
		20461860	85103950
		20528763	85105803

Instrument Cluster (MID 234)			
Model	Old Part Number	New Part Number	Conversion Kit Number
VN	3198189	3198519	3095812
		20410709	3099374
		20461861	85103951
		20528764	85105804
VN	3198190	3198520	3095815
		20410710	3099375
		20461862	85103952
		20528765	85105805
VN	3198191	3198521	3095817
		20410711	3099376
		20461863	85103953
		20528766	85105806
VN	3198192	3198522	3095819
		20410712	3099377
		20461864	85103954
		20528767	85105807
VN	3198193	3198523	3095821
		20410713	3099378
		20461865	85103955
		20528768	85105808
VN, VHD	3198510	20410700	3099365
		20461852	85103942
		20528755	85105795
VN, VHD	3198511	20410701	3099366
		20461853	85103943
		20528756	85105796
VN, VHD	3198512	20410702	3099367
		20461854	85103944
		20528757	85105797
VN, VHD	3198513	20410703	3099368
		20461855	85103945
		20528758	85105798
VN, VHD	3198514	20410704	3099369
		20461856	85103946
		20528759	85105799

Instrument Cluster (MID 234)			
Model	Old Part Number	New Part Number	Conversion Kit Number
VN, VHD	3198515	20410705	3099370
		20461857	85103947
		20528760	85105800
VN, VHD	3198516	20410706	3099371
		20461858	85103948
		20528761	85105801
VN, VHD	3198517	20410707	3099372
		20461859	85103949
		20528762	85105802
VN, VHD	3198518	20410708	3099373
		20461860	85103950
		20528763	85105803
VN, VHD	3198519	20410709	3099374
		20461861	85103951
		20528764	85105804
VN, VHD	3198520	20410710	3099375
		20461862	85103952
		20528765	85105805
VN, VHD	3198521	20410711	3099376
		20461863	85103953
		20528766	85105806
VN, VHD	3198522	20410712	3099377
		20461864	85103954
		20528767	85105807
VN, VHD	3198523	20410713	3099378
		20461865	85103955
		20528768	85105808
VN, VHD	20410700	20461852	85103942
		20528755	85105795
VN, VHD	20410701	20461853	85103943
		20528756	85105796
VN, VHD	20410702	20461854	85103944
		20528757	85105797
VN, VHD	20410703	20461855	85103945
		20528758	85105798

Instrument Cluster (MID 234)			
Model	Old Part Number	New Part Number	Conversion Kit Number
VN, VHD	20410704	20461856	85103946
		20528759	85105799
VN, VHD	20410705	20461857	85103947
		20528760	85105800
VN, VHD	20410706	20461858	85103948
		20528761	85105801
VN, VHD	20410707	20461859	85103949
		20528762	85105802
VN, VHD	20410708	20461860	85103950
		20528763	85105803
VN, VHD	20410709	20461861	85103951
		20528764	85105804
VN, VHD	20410710	20461862	85103952
		20528765	85105805
VN, VHD	20410711	20461863	85103953
		20528766	85105806
VN, VHD	20410712	20461864	85103954
		20528767	85105807
VN, VHD	20410713	20461865	85103955
		20528768	85105808
VN, VHD	20432024	20528771	85105812
VN, VHD	20432026	20528772	85105811
VN, VHD	20432028	20461979	85103957
		20528770	85105810
VN, VHD	20432029	20461978	85103956
		20528769	85105809
VN, VHD	20461852	20528755	85105795
VN, VHD	20461853	20528756	85105796
VN, VHD	20461854	20528757	85105797
VN, VHD	20461855	20528758	85105798
VN, VHD	20461856	20528759	85105799
VN, VHD	20461857	20528760	85105800
VN, VHD	20461858	20528761	85105801
VN, VHD	20461859	20528762	85105802

Instrument Cluster (MID 234)			
Model	Old Part Number	New Part Number	Conversion Kit Number
VN, VHD	20461860	20528763	85105803
VN, VHD	20461861	20528764	85105804
VN, VHD	20461862	20528765	85105805
VN, VHD	20461863	20528766	85105806
VN, VHD	20461864	20528767	85105807
VN, VHD	20461865	20528768	85105808
VN, VHD	20461978	20528769	85105809
VN, VHD	20461979	20528770	85105810

Accessory Kits, VN, VHD VERSION1 Vehicle Electronics 98

Volvo Link

Volvo Link (MID 142)	
Engine Type	Accessory Kit
Volvo Engine	85105368
Non-Volvo Engine (Cummins, Detroit Diesel)	85105369

Conversion Kits, AC, WG, WX

Engine ECU

Engine ECU (MID 128)			
Engine	Old HW Number	New HW Number	Conversion Kit Number
D7C	8192949	3161953	3092924
		20412507	3099134
		3161963	85103653
D7C	3161953	20412507	3099134
		3161963	85103653
D7C	20412507	3161963	85103653
D12B, D12C	8170700	3161952	3092923
		20412506	3099133
		3161962	85103340
		20577131	85107712
D12B, D12C	3161952	20412506	3099133
		3161962	85103340
		20577131	85107712
D12B, D12C	20412506	3161962	85103340
		20577131	85107712

Vehicle ECU (VECU)

Vehicle ECU (MID 144)			
Model	Old Part Number	New Part Number	Conversion Kit Number
AC, WG, WX	1079118	3173623	85101596
		20442646	85101608
AC, WG, WX	3173623	20442646	85101608