FLA COE FLB COE FLD Conventional Business Class FLC 112 Conventional Century Class Conventional Argosy COE Cargo Columbia 122SD and Coronado > Business Class M2
 > Cascadia
 > 108SD/114SD
 > New Cascadia

Freightliner Service Bulletin

General Information

DiagnosticLink supports programming of both chassis and powertrain ECUs. It may be necessary to perform additional steps prior to the programming of a chassis ECU. When a chassis ECU is programmed using "Program Device" in DiagnosticLink, the ECU will be programmed with the most recent parameter sets and software from the server. This process will overwrite the parameters and software previously installed on the ECU.

When it is necessary to retain the parameter information contained within a chassis ECU on the vehicle, vehicle parameters should be read and uploaded to the server prior to downloading unit data and flashing the ECU. The data can then be re-downloaded from the server before programming the controller.

IMPORTANT: This process should not be performed if there are parameters on the vehicle that are not intended to be recorded in a service record. Only 1 service record per ECU, per vehicle, can be stored on the server. Once a new service record is created, the old record is lost.

DO NOT follow the process described in this document:

- when performing the initial programming of a spare part ECU;
- when attempting to recover an incorrectly parameterized ECU.

Programming ECUs in DiagnosticLink

- 1. Park the vehicle, shut down the engine, and apply the parking brakes. Chock the tires.
- 2. Connect the vehicle to DiagnosticLink
- Select "Program Device". If there are any items in the section "Request Pending" downloads, they should be removed. To remove them, select the "Request Pending" list item, then press the "Remove" button. See Fig. 1.

Jnit	Status (powertrain)	Status (chassis)	Add
Request Pending			
3AKJGLDR6JSJV9132 (472910S0531207)	Request Pending	Request Pending	<u>R</u> emove
3AKJHLDV8JSJT0657 (471928S0501614)	Request Pending	Request Pending	
			Remove Al
			Refresh
			Refresh All

Fig. 1, Removing Pending Requests

4. Once all controllers are connected, read the vehicle parameters. See Fig. 2.

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I/O Control	Green House Gas All Parameters	Emissions Group Cod Compare Parameters	ing Strings Idle an Compare Server Dat	a Cruise Control	Inputs and Outp DPF History	uts Optimized Idle Engine Brake Config	Progressive Shift Engine Protection	PTO Speed Li Fan Fleet	niter Transfer Accumulator: Management Fuel Economy
Parameters	Parameter	Common Powertrain Co	ntroller 4	Part	Value	Units	Minimum	Maximum	Description
Program Device	MCM21T - GOV_P3 -	Motor Control Module Instrument Cluster Unit P3 - SAM Cabin Central Gateway Modular Switch Field Aftertreatment Contro	2.1 : 4Me I Module 2.1						
onnections	 ■ □ SAMCHAS ■ □ VRDU01T 	i_P3 - SAM Chassis - Video Radar Decision	Unit						
CPC04T: Reading (31.0%) Motor Control Module 2.1 MCM21T: Read ECU Information Transmission Control Module TCM01T: Online									
Instrument Cluster Unit 4Me ICU4ME: Reading (94.3%) SAM Cabin SAMCAB_P3: Reading (13.6%) Central Gateway CCWI 82: Online									
Radar Frontend v	📙 Reading param	neters							
J1708 22% 🕘 J1939 75%								Send.	 Information
2/11/2018									f1204

Fig. 2, Reading Vehicle Parameters on DiagnosticLink

5. Select "Program Device." There should be data to upload. Click "Connect to Server" to upload vehicle parameters to the server. See Fig. 3.

Parameters	Gather Data > Select Operation > Program Device	6		
Program Device	Unit Data Software Datasets Diagnosis Descri	iptions		
V 3 ·	Unit	Status (powertrain)	Status (chassis)	Add
•	Upload Data			D
Connections	3AKJGLD56ESFN6780 (472906S0183241)	Data to Upload	Data to Upload	Kemove
CPC04T: Online				Remove All
Motor Control Module 2.1				Refrech
Transmission Control Module				Nellesii
TCM01T: Online			2	Refresh A <u>l</u> l
ICU4ME: Online			\backslash	
SAM Cabin				
SAMCAB_P3: Online				
CGW_P3: Online				Connect to Server
Radar Frontend V				<u>connect to server</u>
J1708 22% J1939 68%				Back Next
12/14/2018				f120456
1. Program Device		2. Connect to Ser	rver	

Fig. 3, Uploading Vehicle Parameters

6. Click "Add" to add a download request for the vehicle. See Fig. 4.

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	Gather Da	ita > Select Operation > Pro	ogram Device			
Program Device	Unit Dat	^a Software Datasets Diag	gnosis Descriptions	freenwet in option of a power		
-	Unit		Status (powertrain)	Status (chassis)		Add
onnections						Remove
Common Powertrain Con CPC04T: Online	trolle ^					Remove All
Motor Control Module 2. MCM21T: Online	1					Refresh
Transmission Control Moo TCM01T: Online	lule					Refresh All
Instrument Cluster Unit 4 ICU4ME: Online	Me					
SAM Cabin						
Central Gateway						
Radar Frontend	~				Conr	nect to Server
J1708 21%	939 69%				<u>B</u> ack	Next
14/2018						f120

Fig. 4, Adding the VIN to Download Updated Server Data

7. Make sure the correct VIN and hardware is populated, then click OK. See Fig. 5.

/ek	icle Identification			
A	KIGED JOESI NO/00			
ng	gine Serial Number (Unit N	lumber)	
72	906S0183241			
)e	vice controllers for t	his ea	uipment	
	vice controllers for t	nis eq	upment	
r	Add 💥 Remove			~
	Device		Hardware Part Number	1
۲	CPC04T	-	A0034461002-001	
	MCM21T	+	A0004469135-001	
	TCM01T	-	A0504460109-001	
	ICU4ME	-	06-84378-000	
	ICU4ME SAMCAB_P3	•	06-84378-000 06-74862-000	
	ICU4ME SAMCAB_P3 CGW_P3	•	06-84378-000 06-74862-000 06-73829-003	
	ICU4ME SAMCAB_P3 CGW_P3 MSF_P3	• • • •	06-84378-000 06-74862-000 06-73829-003 06-66446-002	
	ICU4ME SAMCAB_P3 CGW_P3 MSF_P3 ACM21T	- - - -	06-84378-000 06-74862-000 06-73829-003 06-66446-002 A0004463754-003	
	ICU4ME SAMCAB_P3 CGW_P3 MSF_P3 ACM21T SAMCHAS_P3	- - - -	06-84378-000 06-74862-000 06-73829-003 06-66446-002 A0004463754-003 06-74863-000	

Fig. 5, Verifying Correct VIN Hardware

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- 8. There should be a request pending status for the VIN. Click "connect to server" to download the updated unit data. See **Fig. 6**. The server will provide any new software available on the server as well as updated parameter sets for the new software, adjusted for the parameter set that was just uploaded from the vehicle.

Parameters	Gather Data > Select Operation > Program Devi	nission: D112-D112 DA ce		5
Program Device	Unit Data Software Datasets Diagnosis Des	riptions		
VE	Unit	Status (powertrain)	Status (chassis)	Add
•	Request Pending			
Connections	3AKJGLD56ESFN6780 (472906S0183241)	Request Pending	Request Pending	Remove
Common Powertrain Controlle A CPC04T: Online	•			Remove All
Motor Control Module 2.1 MCM21T: Online				Refresh
Transmission Control Module				Refresh All
Instrument Cluster Unit 4Me				(internet)
ICU4ME: Online				
SAM Cabin				
Central Gateway				
CGW_P3: Online Radar Frontend				<u>C</u> onnect to Server
J1708 22% 🔵 J1939 65%				<u>B</u> ack <u>N</u> ext
11 (Multin)	· · · · · · · · · · · · · · · · · · ·			
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Fig. 6, Downloading Updated Unit Data

9. Once the data has been downloaded, click "Next". See Fig. 7.

	Gather Data > Select Operation > Program Device	e					
Program Device	Unit Data Software Datasets Diagnosis Descriptions						
V- royan bene	Unit	Status (powertrain)	Status (chassis)	<u>A</u> dd			
	ОК						
Connections	3AKJGLD56ESFN6780 (472906S0183241)	OK	OK	<u>R</u> emove			
CPC04T: Online				Remove All			
Motor Control Module 2.1 MCM21T: Online				Refresh			
Transmission Control Module TCM01T: Online				Refresh All			
Instrument Cluster Unit 4Me							
SAM Cabin							
SAMCAB_P3: Online							
CGW_P3: Online							
Radar Frontend V				Connect to Server			
J1708 22% J1939 69%				Back Next			
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Fig. 7, Clicking Next

NOTE: "Latest" is the last service record (may be older software) and "Newest" is the most up to date software available for the installed hardware. Both will have parameter sets that have been updated relative to the upload from the vehicle.

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- 10. Select the controller to program, select the VIN, and select either "Latest" or "Newest." Click "Next." See Fig. 8.

VO Control	Gather Data > S	elect Operation > Program Device				
Parameters	Select the device	Select the device to program				
	Name	Description	^			
	MSF_P3	Modular Switch Field				
Program Device	ACM21T	Aftertreatment Control Module 2.1				
Maria	SAMCHAS_P3	SAM Chassis	1 1			
Flash	VRDU01T	Video Radar Decision Unit				
	BHM_J1939	Manual connection required for programming				
Application Status	Select the reprog	ramming operation you wish to take place				
	Replace Dev	ice Settings with Server Configuration				
	O Update Devi	ce Software				
· ·	Change Dat	aset				
Connections	Select the unit ar	d settings data to apply to the device				
Common Powertrain Controlle	A Select the unit ar	as settings data to apply to the device				
CPC041: Online Motor Control Module 2.1	Unit	Status				
MCM21T: Online	3AKJGLD56E	SFN6780 (47290650183241) OK				
Transmission Control Module		_3				
Instrument Cluster Unit 4Me						
ICU4ME: Online	Cattings	Chabur				
SAMCAB P3: Online	Settings	Status				
Central Gateway	Factory	Factory settings cannot be programmed after software has been upgraded. Original software: A0504480461-001.				
CGW_P3: Online	Latest	OK .				
Radar Frontend	✓ Newest	OK				
J1708 22% J1939 69%		<u>B</u> ack	Next			
12/14/2018			f12046			
A Device to Due o						
1. Device to Program		2. vehicle identification Number 3. Settings (VIN)				

Fig. 8, Selecting "Latest" or "Newest" Software

11. Review and verify the VIN and hardware part number. Click "Start" to program the controller. The software will be flashed and the new parameter set will be written to the controller on the vehicle. See Fig. 9.

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Parameters	The following data will be programmed					
	Name	Target Data				
Program Device	Operation	Replace Device Settings with Server Configuration (same device)				
Programoence	Device	SAMCHAS_P3				
1 Elach	Unit	3AKJGLD56ESFN6780 (472906S0183241)				
FidSh	Software	A0504480561-001 (APP_SAMCHAS_142800)				
Application Status	Settings	Newest				
	Engine Serial Number	472906S0183241				
	Vehicle Identification Number	3AKJGLD56ESFN6780				
	Hardware Part Number	06-74863-000				
AMCHAS_P3: Offline						
AMCHAS_P3: Offline						
ngine #2						
ransmission #1						
939-3: Offline						
ody Controller						
939-33: Offline						
939-37: Offline						
ab Controller - Primary						
020_/0. Offline	U I	Back <u>Finis</u>				
haust Emission Controllor						

Fig. 9, Programming the Controller

Warranty

This is an informational bulletin only. Warranty does not apply.