

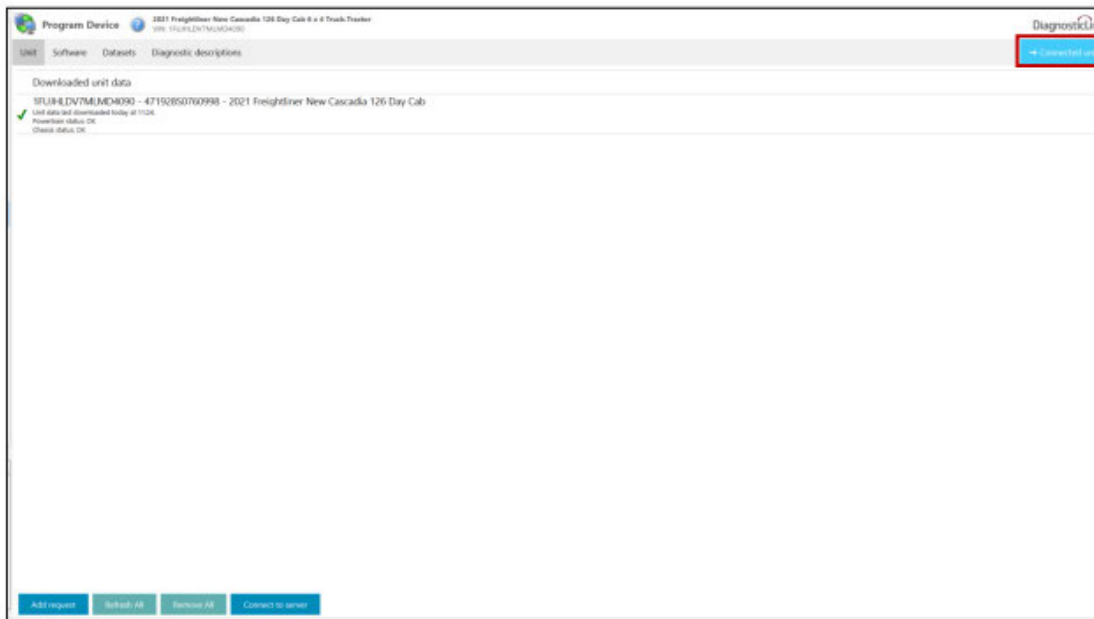
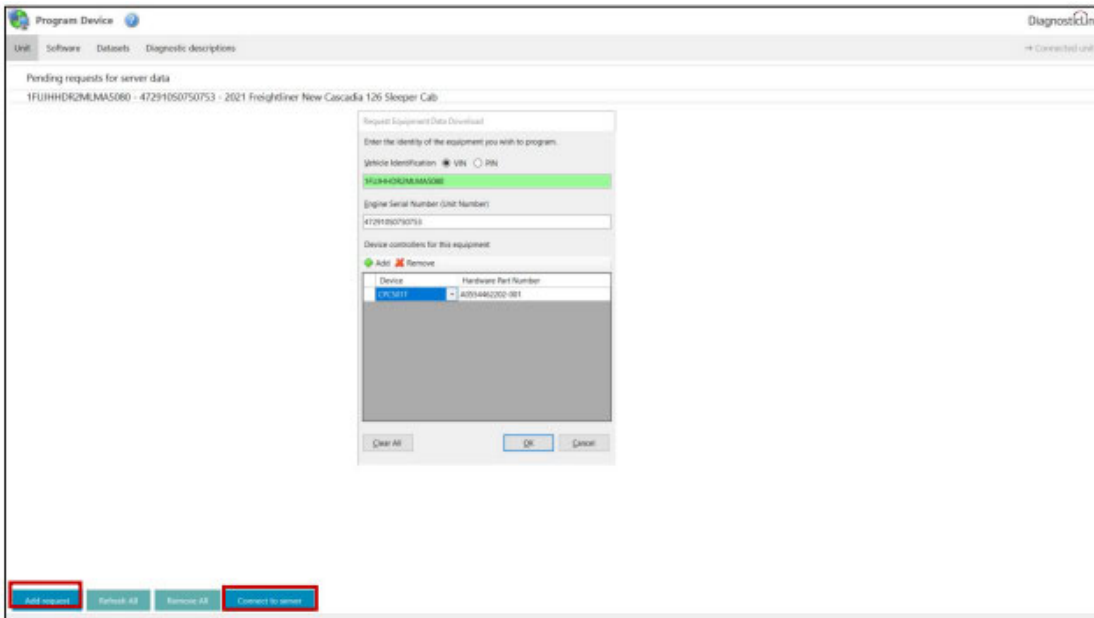
Subject:	<b>Hood Tilt CPC update and OI Comfort Mode parameters</b>
----------	--

	<b><u>Work Instructions:</u></b>
	<ol style="list-style-type: none"> <li>1. Update CPC</li> <li>2. Update Parksmart Controller software.</li> <li>3. Adjust Parksmart parameters.</li> <li>4. Update rear HVAC software .</li> <li>5. Adjust rear HVAC parameter.</li> <li>6. Adjust SSAM parameters.</li> <li>7. Turn off A/C Eco mode.</li> </ol>
SRT:	0.50
Warranty	
Specialty Tooling:	Diagnostic Link version 8.23 sp3

## Work Instructions:

### Section 1 – Update CPC

1. Select “Parameters” option along the left side of the DiagnosticLink® screen. Wait for parameters to be read
2. Select "Program Device" option along the left side of the DiagnosticLink® screen. There will be "Data to Upload". Click "Connect to Server".
3. Select the “Add” button in the lower left corner of the DiagnosticLink® screen and enter the engine serial number. Click the “Connect to Server” button in the lower left corner of the DiagnosticLink® screen to download data, and then select “Connected unit” once complete. Continue by selecting “Next”. See below figures.



4. Program the CPC to level based on production year below  
 Production year 2024/23/22 - CPC501T - 22.33  
 Production year 2025 - CPC501T & CPC502T - 24.32
5. When programming is complete, click the "Finish" button and perform the following to allow the modules to synchronize with each other:
  - Disconnect the USB Link at 9-pin vehicle diagnostic port.
  - Turn the vehicle ignition OFF and wait one minute.
  - Turn the vehicle ignition ON and wait one minute.
  - Turn the vehicle ignition OFF and wait one minute.
  - Turn the vehicle ignition ON and wait one minute.
  - Reconnect the USB Link, reconnect DiagnosticLink® to the CPC and confirm the proper software and fuel map levels.

## Section 2 – Update "Parksmart" software

1. The HVAC\_P01T – HVAC Parksmart controller will need to be updated to Software Part Number A001 448 58 28 ZGS 001 or higher to provide new parameters in the HVAC\_P01T to allow this feature to work properly.
2. If necessary, use “program Device” to update the HVAC\_P01T software.
3. Once HVAC\_P01T has been updated to Software Part Number **A001 448 58 28 ZGS 001** with Diagnostic Link this will provide new parameters in the HVAC\_P01T parameter folder that will need to be adjusted.

– UDS-58 HVAC\_P01T - HVAC Parksmart

Device Configuration	
Software Mode	Running in Application
Device Information	
Software Version	22.37.1
Diagnostic Version	8
ECU Serial Number	
Hardware Part Number	06-94734-000
Software Part Number	A001 448 58 28 ZGS 001
Diagnostic Variant	
Diagnostic Variant Part Number	A0014442928-001

### Section 3 – Adjust Parksmart parameters

1. Navigate to the parameter option on the main menu, and scroll to the HVAC\_P01T HVAC Parksmart folder and expand it
2. There are three parameters to update. Use **EXTREME CARE** and verify you are selecting the correct parameter. You will need to expand the folders to see the parameter and change it per the values in the graphic below.

HVAC_P01T - HVAC Parksmart	
HVAC_Controller_Comfort_Start_High_Limit	
Par_HVAC_Controller_Comfort_Start_Low_Temp	90
HVAC_Controller_Comfort_Start_Low_Limit	
Par_HVAC_Controller_Comfort_Start_Low_Temp	20
HVAC_Controller_Comfort_Start_Req_Limit_Mode	
Par_HVAC_Control_Comfort_Start_Request_Mode	Do not allow comfort start between low temp limit and high temp limit

### Section 4 – Update Rear HVAC software

1. Use program device to update the rear HVAC controller (HVAC\_R01T) to a software level of 21.28.1 or higher.

– UDS-69 HVAC\_R01T - HVAC Rear

Device Configuration	
Software Mode	Running in Application
Device Information	
Software Version	21.28.1
Dataset Version	21.28.1
Diagnostic Version	9
ECU Serial Number	30-30-30-30-30-30-4B-31-56-57
Hardware Part Number	06-94733-000
Software Part Number	A001 448 12 28 ZGS 001
Dataset Part Number	A001 448 13 28 ZGS 001

## Section 5 – Update Rear HVAC temperature parameter

1. Set the parameter **Par\_HVAC\_Controller\_Lo\_Temp\_Set** to 68.
2. You will have to expand the folder to see the parameter.

HVAC_R01T - HVAC Rear			
Par_HVAC_Controller_Hi_Temp_Set	n/a		
Par_HVAC_Controller_Hysteresis	n/a		
Par_HVAC_Controller_Lo_Blo_Spd	n/a		
Par_HVAC_Controller_Lo_Temp_Set	n/a		
Par_HVAC_Controller_Lo_Temp_Set	68		
Par_HVAC_Controller_LVD	A0184470428-001	ACU to consider sSAM LVD message	
Par_HVAC_Controller_LVD_M	A0174479128-001	PNM LVD level at which ACU will shed non ECU loads equals 0	
Par_HVAC_Controller_LVD_Signal	n/a		
Par_HVAC_Controller_OAT_SAM	A0184471628-001	ACU to consider sSAM Outside Air Temp signal	

3. If available, set the parameters **PAR\_HVAC\_Controller\_Hysteresis** to 1.00.

HVAC_R01T - HVAC Rear			
Par_HVAC_Controller_Crank	A0184471228-001	ACU to Consider sSAM Key Position Message	
Par_HVAC_Controller_Hi_Temp...	A0184471828-001	Std HVAC and OI max temp setting is 80 deg F	
Par_HVAC_Controller_Hysteresis	A0184472028-001	Std HVAC and OI set point hysteresis is one half deg F	
Par_HVAC_Controller_Hysteresis	(from parent)	0.50	
Par_HVAC_Controller_Lo_Blo_Spd	A0184471328-001	Std HVAC and OI min blower speed is 4	
Par_HVAC_Controller_Lo_Temp...	A0184471928-001	Std HVAC and OI min temp is 60 deg F	
Par_HVAC_Controller_Lo_Temp...	(from parent)	60	



HVAC_R01T - HVAC Rear			
Par_HVAC_Controller_Crank	A0184471228-001	ACU to Consider sSAM Key Position Message	
Par_HVAC_Controller_Hi_Temp...	A0184471828-001	Std HVAC and OI max temp setting is 80 deg F	
Par_HVAC_Controller_Hysteresis	A0174475128-001	7 Degree F Std Aux OI Hysteresis Band Width	
Par_HVAC_Controller_Hysteresis	(from parent)	1.00	
Par_HVAC_Controller_Lo_Blo_Spd	A0184471328-001	Std HVAC and OI min blower speed is 4	
Par_HVAC_Controller_Lo_Temp...	A0174475528-001	Std HVAC and OI min temp is 68 deg F	
Par_HVAC_Controller_Lo_Temp...	(from parent)	68	

## Section 6 – Turn Off A/C Eco Mode

1. On the identification screen, verify that the Front HVAC controller software is 21.28.01 or higher. Use Program Device to update software is necessary.
2. Navigate to the **HVAC\_F01T HVAC Front** parameters on the main parameter screen and expand it.
3. Navigate to **Par\_HVAC\_Controller\_ECO\_MODE** parameter.
  - a. From the drop-down box select **ECO Mode Disabled**.
  - b. If the parameter does not appear verify controller software level.
4. Send the parameters to the module and verify the changes are correct in the Front HVAC controller.

HVAC_F01T - HVAC Front			
Par_HVAC_Controller_CoolPmp_Type	A0174478128-001	Single Speed Coolant Pump	
Par_HVAC_Controller_Crank	A0174478228-001	FCU to consider sSAM key pos message	
Par_HVAC_Controller_ECO_MODE	A0174479828-001	4479828-001 Auto ECO Mode	▼
Par_HVAC_Controller_Fan_Type	A0174477428-001	A0174479828-001 Auto ECO Mode	
Par_HVAC_Controller_Hi_Temp_Set	A0174478828-001	A0174479928-002 Manual ECO Mode	
Par_HVAC_Controller_Hysteresis	A0174479028-001	A0184470028-001 ECO Mode Disabled	
Par_HVAC_Controller_Lo_Blo_Spd	A0174478328-001	Std HVAC and OI min blower speed is 4	
Par_HVAC_Controller_Lo_Temp_Set	A0174478928-001	Std HVAC and OI min temp is 60 deg F	
Par_HVAC_Controller_LVD	A0174476428-001	FCU to consider sSAM LVD message	