INSTRUCTION TO SERVICE

ITS61783	6/4/2026
SECTION:	290-Electrical Schematics & Programs
SUBJECT:	Move all existing J1939 message routing from DPS instrument cluster to PVSG
ISSUE:	Loss of required feedback signals results in numerous telltales on IP cluster and potential for interlocks to apply above 2 mph
SUMMARY:	Flash latest released PLC, IP and PVSG programs to the vehicle

ITS61783

Ref. NHTSA Recall No.	Ref. Transport Canada Recall No.
Not Applicable	Not Applicable

THIS ITS DOCUMENT SHOULD BE RETAINED AND REFERRED TO FOR FUTURE MAINTENANCE UNTIL THE NEW FLYER PARTS AND/OR SERVICE MANUAL IS UPDATED TO REFLECT WORK DONE AS A RESULT OF THIS DOCUMENT. ENSURE THAT THIS DOCUMENT IS AVAILABLE FOR PARTS AND MAINTENANCE STAFF GOING FORWARD.

Section	Field Name	
1. EXECUTIVE SUMMARY	**Document Type**	Service Campaign
	Year and Model Affected	SRs 2965, 2996
	Triggering Event	Condition is primarily triggered when the DPS instrument panel stops routing messages from CAN 2 to CAN 1
2. SAFETY RISK	**Safety Risk Statement**	Possible activation of interlocks >2mph if redundant signal is not present and a secondary condition exists or surfaces.
3. CORRECTIVE ACTION	**Corrective Measure**	Flash latest released PLC, IP Config and PVSG programs to the vehicle
	Issue Resolution Statement	Issue resolved by updating logic group ES-AS Interlock, removing all J1939 message routing from DPS instrument panel and adding all J1939 message routing to the PVSG
	Validation Criteria	**Disconnect DPS CAN 2 connector, confirm bus can still operate with no issues. Reconnect DPS CAN 2 connector, disconnect PVSG CAN 2 connector. Confirm Hill Hold Disabled telltale illuminates.**

PROCEDURE:

1. Set the park brake and chock wheels.
2. All procedures are to start with the MRS is in the OFF position until otherwise noted.
3. Ensure the hazard switch is in the ON position during all below procedures.
4. Ensure laptop and bus LV batteries are fully charged or plugged into a power source/external, offboard charger respectively while flashing. It is imperative that neither the laptop nor bus run out of batteries while programming.
5. Follow all appendices at the end of the ITS to program all required devices.

⚠ **WARNING: DO NOT TURN OFF BATTERY DISCONNECT SWITCH. CONTROLLERS CANNOT BE PROGRAMMED WITH LV BATTERIES DISCONNECTED.**

☞ **NOTE: After programming, some controllers may have stored CAN message related fault codes caused by the programming process itself. This can be normal. Attempt to clear the fault codes once all programming is completed if any codes are stuck after**

LABOUR ESTIMATE				
	Operation	Number of Technician(s)	Hours	Labor Time T X HR
1	Update VMMs	1	0.5	0.5
2	Update DPS	1	0.5	0.5
3	Update PVSG Configuration	1	0.5	0.5

SPECIAL TOOLS REQUIRED					
Item	Part Number	Description	Qty.	Units	Notes
1	6467705	Nexiq USB 2.0 w/ Harness	1	EA	For VMM/CM0711/ DPS
2	N/A	VMMS (Vansco Software)	1	EA	For VMM/DPS
3	N/A	USB A to B Cable or #5	1	EA	For DPS
4	N/A	PVSG Configuration Software	1	EA	For PVSG
5	6487019	PVSG Interface Cable (USB to M12)	1	EA	For PVSG

Appendix A: Updating the VMMs

6. Connect the USB interface of your NEXIQ to your laptop.
7. Connect the CAN interface of your NEXIQ to Channel 1 (Pins C and D) of the Rear Vehicle Diag port.
8. Open the PLC program in the VMM software.
9. Select Tools and Query VMMs.

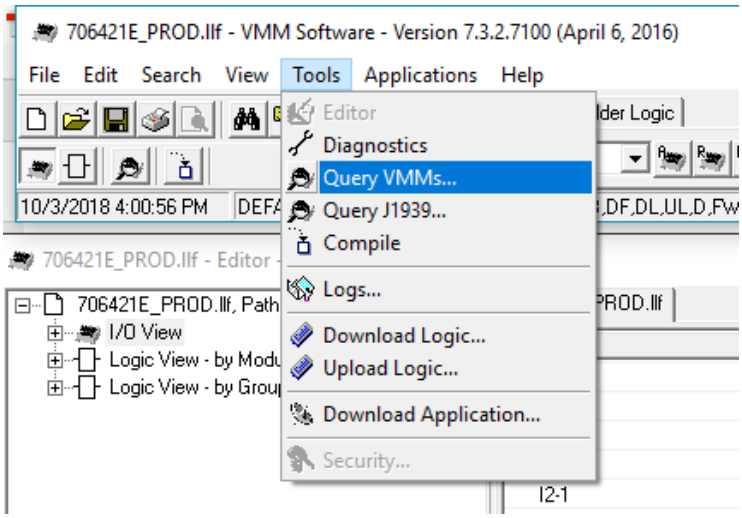

Figure 1: Query VMMs Option

10. Ensure you are communicating with all the nodes in the query screen prior to downloading.
11. Select download logic.
12. Ensure the correct file name and revision appear in the file window.

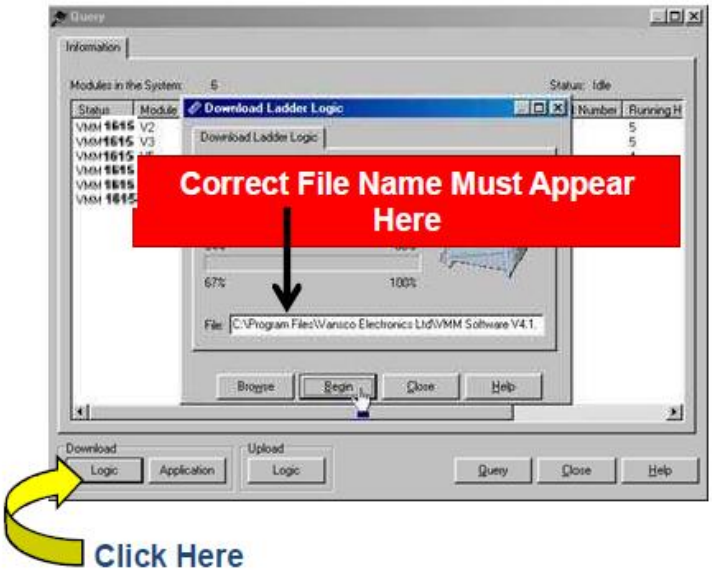

Figure 2: File Selection and Flashing Start

13. The software will verify the correct number of VMMs are found. Do not download program if all VMMs are not located. If the correct number of VMMs were found, select Yes.
14. Flashing will happen in two parts; the main logic and the J1939 Table data will be 2 separate progress screens. Make sure not to close anything after the first progress screen reaches 100% as another one will appear after that also needs to complete before flashing is completed.
15. Once flashing has truly finished, allow the bus to stay awake for 15 minutes without knifing the bus or turning off the hazards.

    This ensures that the VMMs stay awake long enough to load the program into the dash with the new PLC program. This is an important step as the dash may get stuck rebooting repeatedly if interrupted while it is being programmed by the other VMMs. This needs to happen as the DPS70 has a slave VMM inside of it that is not programmed as a part of the above outlined VMM flashing process.

Appendix B: Updating the DPS

1. Turn the MRS to the ON position.
2. Perform either step 3 or steps 4 and 5 depending on whether there is an available USB B port.
3. If there is an exposed USB B connector as shown in Figure 4, connect your laptop to the USB B connector with the USB A to B connector (also known as a printer cable).

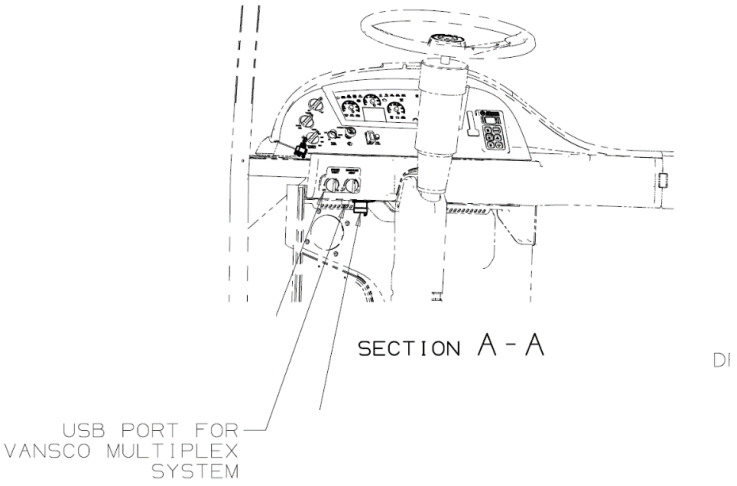

Figure 3: Dash USB Port Location

4. If the above USB port is unavailable, connect the USB interface of your NEXIQ to your laptop.
5. Connect the CAN interface of your NEXIQ to Channel 2 (Pins H and J, 250k baud rate) of the Front Green Diagnostic port (Vehicle Diag) behind the driver's seat.
6. Open the VMM software, select Applications and then FlashLoader as shown in Figure 5 below.

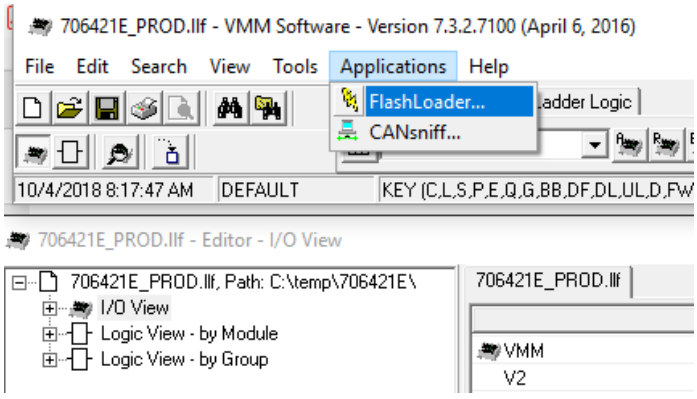

Figure 4: Selecting FlashLoader

7. A window will appear on the left of your screen and the IP cluster should be identified below one of the question marks. Select the IP Cluster. Figure 6 below is an example of how it will appear.

Figure 5: ? Symbol with Instrument Cluster #1 Underneath Example

8. Once you have selected the IP Cluster, there will be a "…" button to allow you to select one of the VSF files you want to load.

⚠ **WARNING: DO NOT PROCEED ANY FURTHER WITH THE IP CLUSTER PROGRAMMING UNLESS YOU HAVE BOTH APPROPRIATE VSF FILES (IP CONFIG AND IP APPLICATION CODE).**

9. Select the appropriate .vsf file and press Start. Be sure to load the files in the following order:
   a. App code
   b. IP config

☞ **NOTE: You will see the dash turning off and a message will appear on the LCD screen during the procedure. It is normal to have alerts on the dash while programming until both files are finished being installed.**

10. Once both .vsf files have been downloaded, the programming is complete. Disconnect the USB cable from the dash.

Appendix C: Updating the PVSG

1. Connect the USB interface of the PVSG Interface Cable to your laptop.
2. Connect the M12 end of that same cable to the PVSG.
3. Open the supplied PVSG configuration file (.pvsgc file format). This should open the Parker Vehicle System Gateway Configuration Tool software (PVSG Configuration Software).
4. If prompted for a password, the password will be CrashCartPVSG (case sensitive, no spaces).

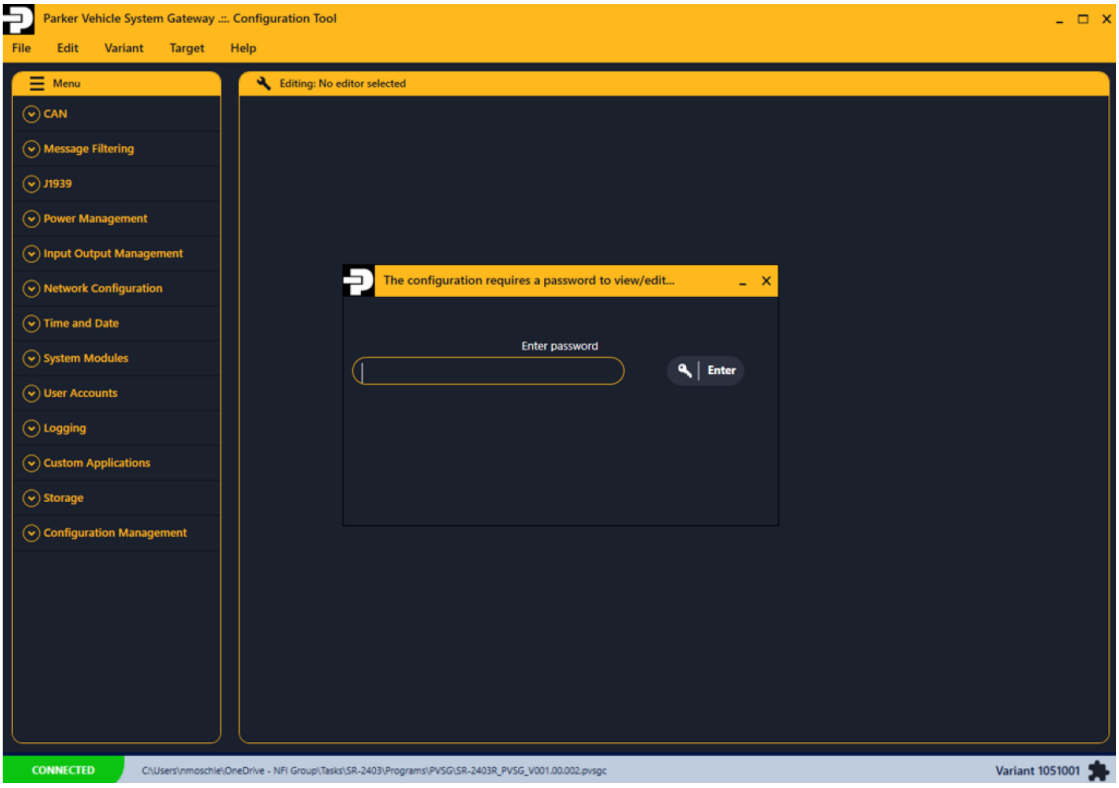

Figure 6: Window of PVSG Configuration Software Once Opened

5. A green checkmark will appear if the password was entered correctly.

6. To begin the programming process, select “Target” and then “Send Configuration” as shown.

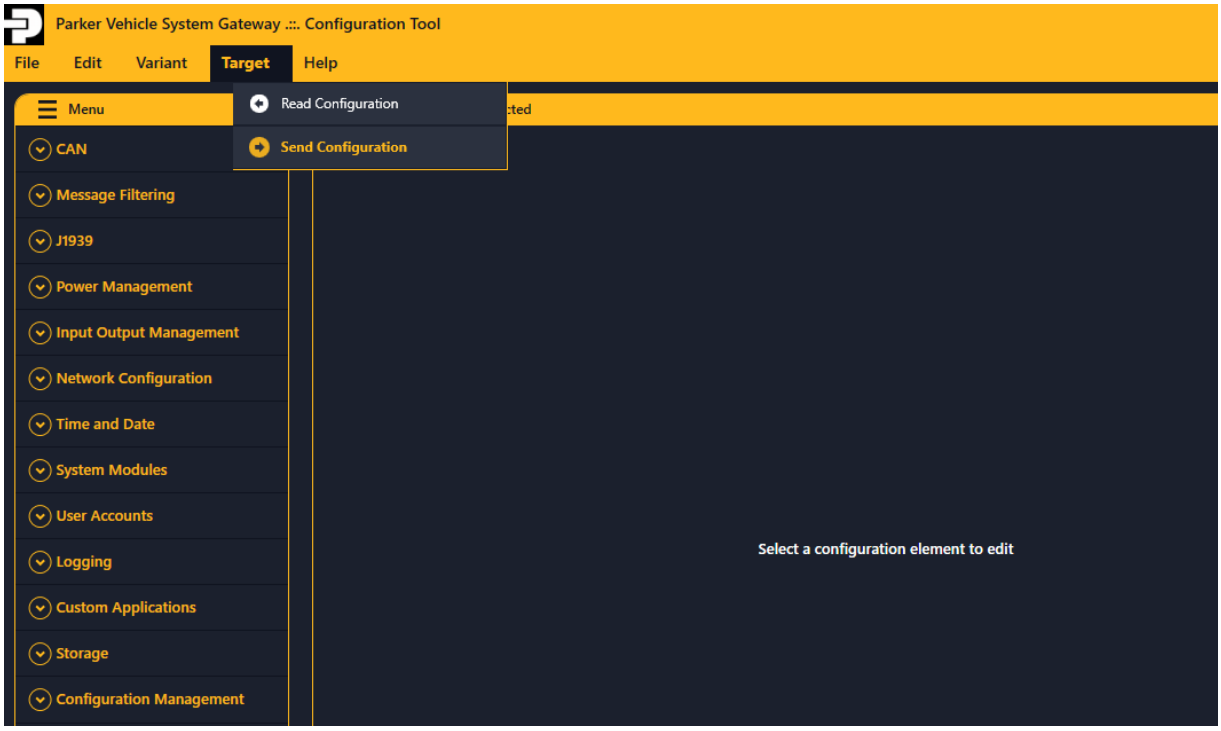

Figure 7: Send Configuration Button to Begin Flashing

7. A dialog box will appear asking to confirm, select Yes.
8. A Configuration Transfer Bar will appear to inform on the programming progress.

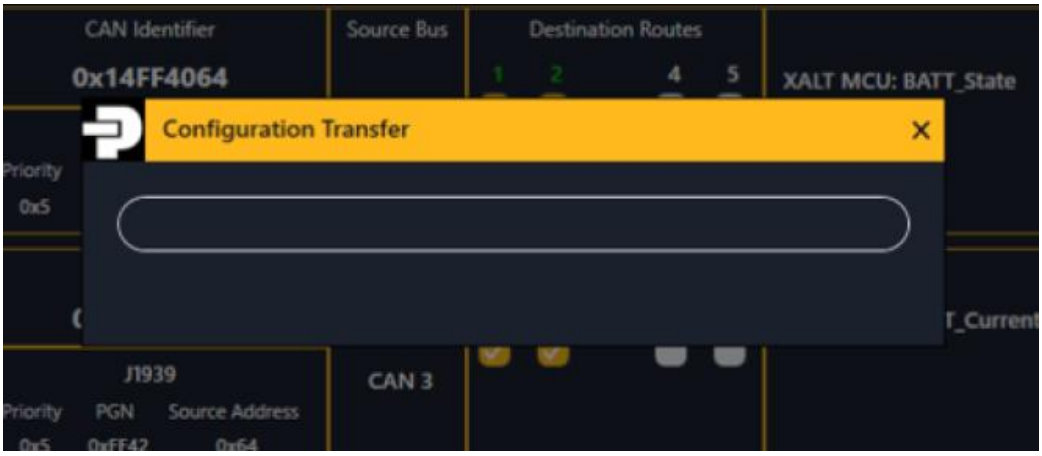

Figure 8: Configuration Transfer Progress Bar Window

9. Once completed, a new dialog box will appear to inform you that there is a restart required in order for the programming to take effect. Select Yes.
10. While rebooting, the communication will be lost to the PVSG so the green “Connected” will change to a red “Not Connected” in the bottom left corner of the window. Don’t panic, this is expected.
11. Once the green connected comes back, the process is complete.