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INSTRUCTION TO SERVICE ITS: 4878

SECTION:	MODEL:	TYPE:	WRITTEN BY:
290	□30FT ⊠35FT ⊠40FT □ 60FT		Wayne Bergson
Option Group		LOW FLOOR	

OBJECTIVE/SUBJECT:

Reprogram the Instrument Panel with revised Application code and Configuration file if required.

PROCEDURE:

- NOTE: The following are brief instructions that can be followed if the laptop has been configured with the required flash loader program and the operator is familiar with the programming process. For more detailed instructions refer to the attached Parker-Vansco programming guide (appendix A)
- 1. Prepare the laptop computer for the download operation by turning it on and ensuring that the required download files are readily available.
- 2. Referring to figure 1, locate the USB 2.0 port on the lower dash close out panel below the Instrument Panel.
- 3. Plug the USB2.0 cable into the USB port on the laptop and then plug the mating end into the bus mounted USB port identified in step 2.

• NOTE: The USB cable which is included in the DLA kit is correct for this application.







Figure 1: USB Connector Under Dash

- 4. Open the FlashLoader utility on the laptop. The initial screen should come up blank.
- 5. Place the bus into the Day Run mode to energize the Instrument Panel.
- 6. Once communication has been established, several Icons will appear in the FlashLoader window.
- 7. Referring to figure 2, select the icon labeled instrument Cluster #1 or NF Cluster and verify that it has a source address of 0x17.



le ⊻iew <u>H</u> elp				
		Module Details		
(?)	(?) =	Description		
		Instrument Cluster #1		
Instrument Cluster #1	VMM #11	Source Address		
#1		0x17	23	
?	?	E-mation.		
~	\sim	Punction Dv13	19	
VMM #2	?			
		Identity	0.0000	
2	9	UXE65F2	943602	
\mathbf{i}		Version		
2	VMM #14			
	1000 #14	Bootblock ID	Application ID	
Y	Y	⊂Software File Details		
VMM #13	VMM #9			
(?)				
	<u></u>			

Page 3 of 15

4878

ITS:

Figure 2: Flash Loader Screen

- 8. Select the ... button to the right of the "Software File Details" selection box. This will open a dialog window which can be used to direct the downloader to the correct application code.
- NOTE: Temporarily placing the required upload files on the desk top makes them easy to find. This should help expedite the programming process.
- Select the English application code "943602_V4_17_Build_28.vsf" for all English speaking properties and the French application code "943606_V1_02_Build_03.vsf" for any French speaking properties.
- 10. Double click on the correct application code then click **Start** to initiate the download process.
- 11. Press Yes when the download confirmation window opens.
- 12. Verify that the download was successful and press **OK** when the download completed window opens.



- NOTE: Some buses will also require an updated IP Configuration File. These will be identified by your New Flyer Regional Product Support Manager. He will supply these files on an as-required basis. Follow the instructions below if this is required.
- 13. If the bus in process does not require an updated Configuration file then proceed to step 19, otherwise proceed with step 14.
- 14. Select the ... button to the right of the "Software File Details" selection box. This will open a dialog window which can be used to direct the downloader to the correct configuration file.
- 15. Select the IP Configuration File that was supplied by your New Flyer Regional Product Support Manager (RPSM) for this SR.
- 16. Double click on the Configuration file then click **Start** to initiate the download process.
- 17. Press \underline{Yes} when the download confirmation window opens.
- 18. Verify that the download was successful and press **OK** when the download completed window opens.
- 19. Verify the success of the download by performing the following steps:
 - a. Press and hold the "ENTER" button for between 1 and 3 seconds. When released the display should read "NO ALARMS".
 - b. Press and hold the "ENTER" button for between 1 and 3 seconds. When released the display should display the current application version and configuration level.
 - c. Confirm that these match what was provided for the update.
- 20. When the above has been completed and confirmed the bus can be returned to revenue service.



Appendix A :

Parker-Vansco

Instrument Cluster Flashloading Guide

ITS:



New Flyer Instrument Cluster Flashloading Guide

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The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

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Revision History

Rev #	Description of change	Author	Date
01	Initial release.	Kelly Moore	2011-Dec-15
02	Updated instructions	Brett Spulnick	2011-Dec-20

Table of Contents

1.	Materials / Equipment / Software Required	3
2.	Definitions	4
3.	Computer Setup/ Troubleshooting	5
4.	Download Procedure	6

1. Materials / Equipment / Software Required

Vansco USB/RS232 Data Link Adapter Driver - Version 1.7 USB 2.0 Device Cable PC/Laptop Windows 7/XP New Flyer Instrument Cluster English Bus Application 943602_V4_17_Build_28.vsf French Bus Application 943606_V1_02_Build_03.vsf FlashLoader.exe PC Application - Version 1.9.7.70 DPS USB cable *OPTIONAL- Only if required* Vansco USB Data Link Adapter - *OPTIONAL- Only if required* Development Cable (Includes power and connection to CAN) *OPTIONAL- Only if required*

2. Definitions

New Flyer Instrument Cluster:

Device into which programs are to be downloaded

Vansco USB Data Link:

Device used to interface a PC/Laptop with CAN network

FlashLoader:

Vansco PC application used to download programs over CAN, from the PC/Laptop into a device that supports Vansco's proprietary download protocol.

3. Computer Setup/ Troubleshooting

Setup

Install the Vansco USB/RS232 Data Link Adapter Driver and walkthrough the setup to install the device drivers.

Troubleshooting

If the following message is displayed

Error	
8	Unable to connect to the DLA. Check the DLA power and data cables.
	(<u>A</u> bort

You must connect the Bus/ DLA to the computer before running FlashLoader.exe, or make sure the DLA/ Cluster has been installed first (or reconfiguring for a new USB port)

If still receiving the message run "RP1210 Chooser" in the start menu group "Vansco USB DLA Software"

Make sure VE121032 is set to the top of this list as shown below, then click OK

RP1210 Choose	r			×
Installed RP1210 Ir	terface DLLs (he order in the list indicate	s priority.)	
RP1210 DLL Na	me Status	Version Company		
VE121032	Found	1.2.0.33 Vansco Elec	ctronics RP1210A	
CA3rp32	Found	2.5.0.34 Caterpillar	_	
DG121032	Found	5.41 DG Dearbor	rn Group	
Supported Devices	for the Selecte	RP1210 Interface		
Device ID D	evice Name	D	evice Parameters	
1 U	SB DLA	US	SB, COM Port	
2 P	GМ	CC	DM Port	
		ſ		
				ncei Apply

Connect the PC/Laptop to the New Flyer Instrument Cluster's USB B port on the Xcelsior Bus using the USB cable. It is located on the right side of the Steering Wheel just above the gas/brake pedal facing the ground. There might be a cover on it with a cord that needs to be unscrewed to gain access to the USB B Port. Turn the Bus power on to power up the Instrument Cluster.

This section only required if USB port is missing/ not available.

Connect the PC/Laptop to the Vansco USB Data Link Adapter using the USB 2.0 Device Cable. Check the power LED on the adapter. If it turns green, proceed to the next step. Otherwise, make sure that the PC is turned-on and USB cable is connected properly.

Connect the DLA to the New Flyer Instrument Panel using the development cable included in the kit. Or connect to the DIAG port above and behind the driver seat and turn the Bus power on to power up the Instrument Cluster.



On the PC/Laptop, use Windows Explorer to locate and run the PC Application – Flashloader.exe. The initial screen is blank with the following message, "Searching for modules..." shown at the bottom.



Turn the New Flyer Instrument Cluster on. Once FlashLoader detects its presence on the network an Icon will appear on the box at the left side of the screen. Take note that the message is no longer displayed.

🎙 Flash Loader			
<u>F</u> ile ⊻iew <u>H</u> elp			
Instrument Cluster #1	2 VMM #11 2 2 2 2 2	Module Details Description Instrument Cluster #1 Source Address 0x17 Function 0x13 Identity	19
?	2 VMM #14	0xE65F2 Version Bootblock ID	943602 Application ID
VMM #13	CE# MMV	Software File Details	

Several icons will appear, Select the one labeled instrument Cluster #1 or NF_Cluster and

verify it has a Source Address of 0x17 / 23. Icon might look like this

On "Software File Details" field, click the dialog button $\boxed{\ldots}$ at the right side to access the file open dialog screen.

Select the English Application code VSF file 943602_V4_17_Build_28.vsf , or French Application code 943606_V1_02_Build_03.vsf (Sorel, Quebec buses only)

Double Click on the file

Click **Start** to begin the download. Ensure software selected above also appears in the dialog below

Do you want to reprogram the Instrument Cluster #1 with this file 'N:\Application Engineering\VMM Installs\Vansco\NFIL Cluster Testing\Files I am Testing with\943602_v4_17_build_28.vsf'? Yes No	×
Yes No	ər

Press Yes .

Verify Download is successful

Press OK

Download the IP Config File if required for the bus. This will be determined and supplied by New Flyer

On Software File Details Field, click the dialog button $\[\dots \]$ at the right side to access the file open dialog screen.

Select the Config VSF "*supplied by newflyer*".vsf. Config files are unique to a Bus SR# and must be installed to the correct bus.

Double Click on the file

Click **Start** to begin the download. Ensure software selected above also appears in the dialog below

onfirm
Do you want to reprogram the Instrument Cluster #1 with this file 'E:\943606_v1_02_build_03.vsf'?
<u>Yes</u> <u>N</u> o

Press Yes .

Verify download is successful

The flash programming has completedresetting into run mode.
OK

Verify successfully download by retrieving the version numbers from the Cluster

Press and hold Mode button for more than a second if there is a black bar in the bottom right of the display and release

Press and hold Enter for more than a second and release

The display will read "No Alarms"

Press and hold Enter for more than a second and release

Display will read version and Config info

Verify they match what was downloaded.



LABOUR ESTIMATE

	Operation	Men	Hours	Labour Time M X HR
1	Reprogram instrument panel.	1	0.5	0.5

SPECIAL TOOLS REQUIRED				
ltem	Part Number	Description		Notes
1		USB 2.0 Device Cable		Provided in
				the USB -
				DLA kit or
				available
				from any
				store selling
				computer
				accessories