

REFERENCE:	Nova Bus Manuals
SECTION:	18: Articulation system
RS N°:	MQR 7621-661& 7621-730
EFFECTIVE IN PROD.:	L898 (2015JN)

APPLICATION DEADLINE:NA

SUBJECT:	Hübner articulation with ACU III control unit
JUSTIFICATION:	The red articulation tell tale lights: 1- for an «Error 2 Plausibility 2» code generated for no reason, 2- when no code is logged in the ACU (ghost code).

LEVEL	DESCRIPTION	DIRECT CHARGES		TIME
		LABOUR	MATERIAL	
1	If the articulation control module ACU I originally installed was changed in service for an ACU III, reprogramming is required.	Client	Client	12 min
2	–	–	–	–

MATERIAL

QTY	PART N°	REV.	DESCRIPTION	REPLACES PART N°
LEVEL 1				
1	N83632	–	ACU_34.39.NOV.TO3.03B1.hex	–
1	N83633	–	ACU_34.39.NOV.TO3.063B.hex	–
1	N83636	–	ACU_34.39.NOV.T03.0410.hex	–
1	N83637	–	ACU_34.39.NOV.TO3.0343.hex	–
1	N83638	–	ACU_34.39.NOV.T03.068E.hex	–
LEVEL 2				
–	–	–	–	–

Materials will be available within 2 days. To order, please contact your Nova Bus service representative.

To know which part number to use for your vehicle, refer to the client list on page 2 of this document.

DISPOSAL OF PARTS

REMOVED PARTS ARE:	DISCARDED	RETAINED	–
	–	–	

REVISION HISTORY

REV.	DATE	CHANGE DESCRIPTION	WRITTEN BY
NR	2015NO05	Initial release	Bertrand Plouffe

CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY	PART N°
		FROM	TO	FROM	TO		
Clemson Area Transit - South Carolina	L617	—	—	S92U5C4500002	S92U5C4500002	1	N83633
CT Transit - Connecticut	L554	1041	1065	S92U1A4000139	S92U0A4000164	25	N83637
CT Transit - Connecticut	L571	1101	1110	S92YXB4000144	S92Y4B4000169	10	N83638
Demo - Articulated Bus	L433	—	—	S92UX93000029	S92UX93000029	1	N83632
Duke University - North Carolina	L651	—	—	S92Y1B4000145	S92Y3B4000146	2	N83638
Halifax - Nova Scotia	L558	717	731	S92UXA3000293	S92U6A3000307	15	N83633
Halifax - Nova Scotia	L613	732	741	S92UXB3000019	S92UXB3000028	10	N83633
Niagara Falls - Ontario	L652	—	—	S92U3C3000607	S92U6C3000617	11	N83633
Niagara Parks Commission - Ontario	L685	—	—	S92U9C3000644	S92U8C3000652	9	N83637
Saskatoon - Saskatchewan	L359	—	—	S92U583000289	S92U583000289	1	N83632
Saskatoon - Saskatchewan	L551	1005	1007	S92UXA3000178	S92U8A3000180	3	N83632
Saskatoon - Saskatchewan	L568	—	—	S92U9B3000013	S92U9B3000013	1	N83637
Saskatoon - Saskatchewan	L618	—	—	S92U1C3000377	S92U1C3000377	1	N83633
St. John - New Brunswick	L273	—	—	S92U383000050	S92U383000050	1	N83632
University of Colorado - Colorado	L427	—	—	S92U693000027	S92U693000027	1	N83632
University of Colorado - Colorado	L428	—	—	S92U893000028	S92U893000028	1	N83632
University of Colorado - Colorado	L627	—	—	S92UXB4000139	S92U6B4000140	2	N83633
York Regional Transit - Ontario	L562	1080	1082	S92U2A3000420	S92U6A3000422	3	N83636
York Regional Transit - Ontario	L572	1083	1094	S92U3A3000569	S92U2A3000580	12	N83636

**WARNING**

Follow your internal safety procedures.

PROCEDURE

- 1.1. Open the RF9 panel door located at the rear interior of the vehicle.
- 1.2. Locate and identify the Hübner Articulation Control Unit (ACU). See Figure 1.

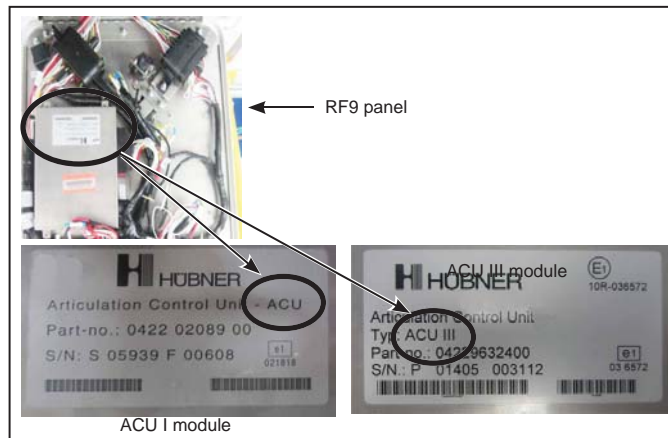


Figure 1 - Location and Identification of the Hübner Articulation Control Unit (ACU) in the RF9 Panel

**NOTE**

- If you have an ACU I, **YOU HAVE NOTHING TO DO.** Close the RF9 panel. The vehicle may be returned to service.
- If you have an ACU III, proceed to the next step.

- 1.3. You will have to use the Hübner Service Interface to connect your computer to the vehicle's ACU. See Figure 2.



Figure 2 - Hübner Service Interface (Part N° N8900610)

**NOTE**

The Hübner service interface is not supplied for this campaign.

Locate the ACU's 9-pin connector. See Figure 3.



Figure 3 - ACU 9-pin Connector Location in RF9 Panel

Connect the Hübner service interface to the ACU's 9-pin connector in the RF9 panel. See Figures 2 and 3.

Connect the Hübner service interface USB plug to your computer.

- 1.4. Set the vehicle's master control switch to the **RUN POSITION**. The interface's red light will come **ON** to indicate it is powered.
- 1.5. Identify the file corresponding to the vehicle you have to update. See client list on page 2 of this document. Save the file in your computer.
- 1.6. Start the Hübner software by clicking the icon. See Figure 4.

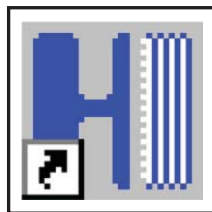


Figure 4 - Hübner software Icon

- 1.7. Click on the **CONNECT** button. See Figure 5. The interface's green light will come **ON** to indicate it is connected.



Figure 5 - Hübner Software Top Menu

- 1.8. A pop-up window will appear to identify the already installed ACU software. See Figure 6. Click OK.

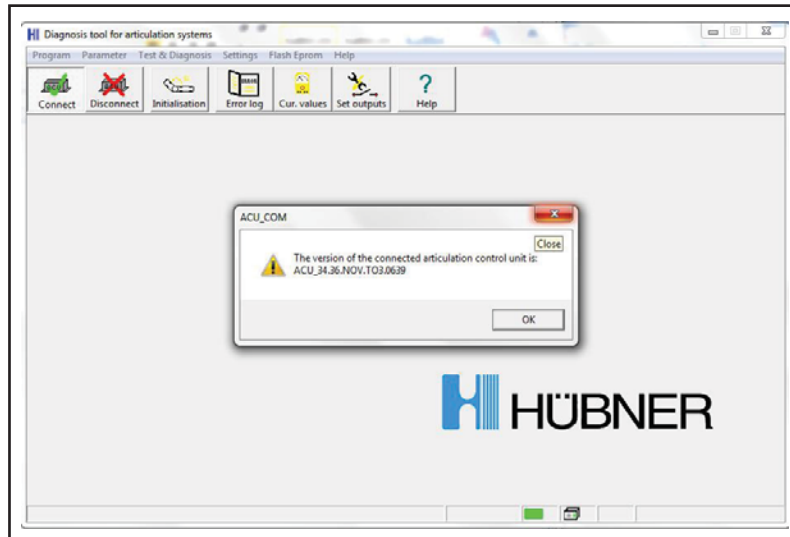


Figure 6 - Typical Window Identifying the already Installed ACU Software

- 1.9. Select **FLASH EPROM** (1) from the Hübner software top menu. See Figure 7.

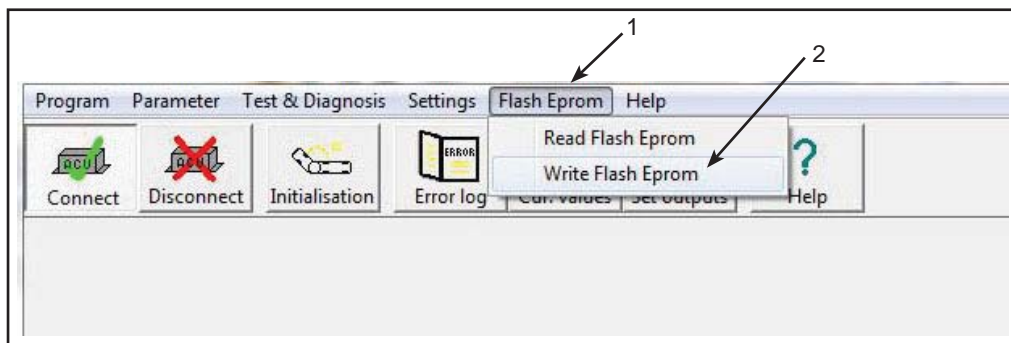


Figure 7 - Hübner Software Top Menu

- 1.10. Click on **WRITE FLASH EPROM** (2) in the sub-menu. See Figure 7.



NOTE

If you can't access to the **WRITE FLASH EPROM** (2), see Figure 7, contact your Nova Bus service representative.

- 1.11. In the opened window, choose your vehicle updated file you did already download at step 1.8.

1.12. A progress window will appear. See Figure 8.

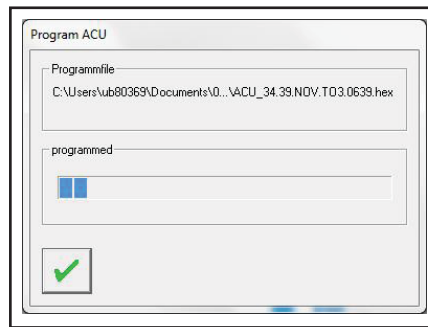


Figure 8 - Typical Progress Window

1.13. When the upload is finished, a pop-up window will appear to confirm that the unit is now programmed and if you want to restart the ACU. See Figure 9. Click OK.

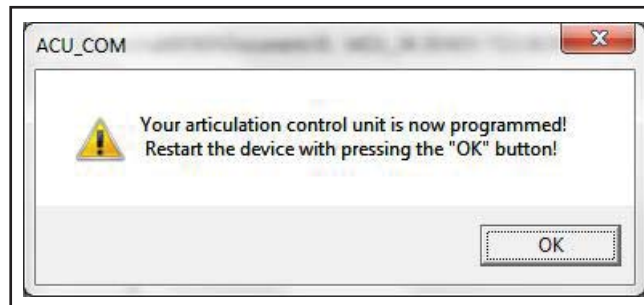


Figure 9 - Upload Completed and ACU Restart Window

1.14. A second pop-up window will appear to confirm the ACU software version. See Figure 10. Compare the version in the pop-up with the one you did upload. If the two versions are identical, click OK. If not, redo the procedure from step 1.8.

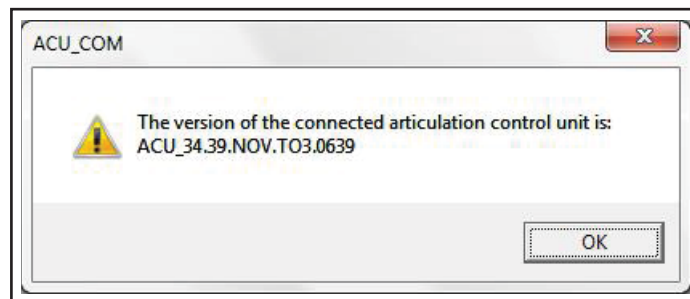


Figure 10 - Software Version Typical Window

- 1.15. A third pop-up window will appear, asking you if you want to keep the initialisation values. See Figure 11. Click **YES**.

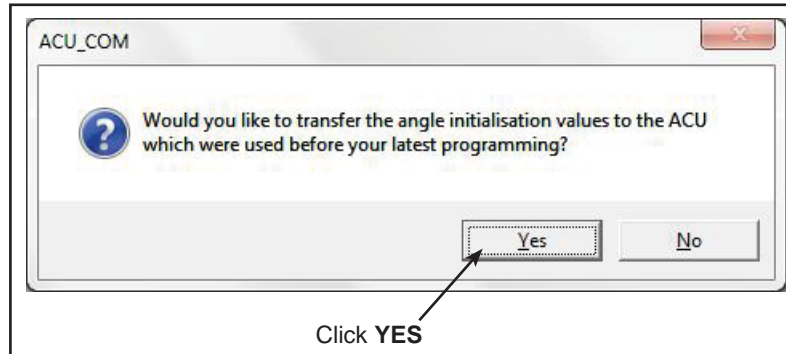


Figure 11 - Initialisation Values Pop-Up Window

- 1.16. Click on the **DISCONNECT** button from the Hübner software top menu. See Figure 12.



Figure 12 - Hübner Software Top Menu

- 1.17. Set the vehicle's master control switch to the **STOP POSITION**.
- 1.18. Disconnect the Hübner service interface USB cable from your computer.
- 1.19. Disconnect the 9-pin connector from the RF9 panel plug.
- 1.20. Close the RF9 panel door.
- 1.21. The vehicle may be returned to service. ❖