

REFERENCE:	Nova Bus Manuals
SECTION:	16: 24-Volt Electrical System
RS N°:	MQR 7621-877
EFFECTIVE IN PROD.:	N/A

APPLICATION DEADLINE:N/A

SUBJECT:	Incompatibility of Actia gauge programs
JUSTIFICATION:	A fault may appear on the Actia gauge if an incorrect program version is used

LEVEL	DESCRIPTION	DIRECT CHARGES		TIME
		LABOUR	MATERIAL	
1	Reprogram the Actia gauges	Client	Client	15min
2	-	-	-	-

MATERIAL

QTY	PART N°	REV.	DESCRIPTION	REPLACES PART N°
LEVEL 1				
-	-	-	-	-
LEVEL 2				
-	-	-	-	-

Contact your customer service representative to obtain the required software and program revision required.

DISPOSAL OF PARTS

REMOVED PARTS ARE:	DISCARDED *	RETAINED	* Dispose of the unused parts and the defective parts in accordance with local environmental standards in effect.
	N/A	-	

REVISION HISTORY

REV.	DATE	CHANGE DESCRIPTION	WRITTEN BY
NR	2016MA12	Initial release	Marc Rougeau
R1	2016SE29	Speedo SW 109633V08_00 changed to 109633V08_02 for ATUQ. For TTC Speedo SW 116724V04_35 changed to 116724V01_40 and Tach SW 117130V01_07 changed to 117130V01_09	Marc Rougeau

**CAUTION**

In order to avoid all software incompatibility issues between the speedometer and tachometer install the required tachometer software version and appropriate speedometer software from the table below with the configurator version found in the table below. The information in the table below will change in time, contact your after sales representative for the latest SW versions.

CLIENT	LOT	N° VÉHICULE		NIV (2NVY/4RKY...)		QTÉ	S P E E D O P/N	SPEEDO SW	TACH	TACH SW	CONFIG TOOL
		DE	À	DE	À						
Academy Bus - New Jersey	L333	—	—	L82U273000207	L82U473000211	5	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Academy Bus - New Jersey	L339	—	—	L82U483000047	L82U883000052	5	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Academy Bus - New Jersey	L340	—	—	L82U493000003	L82U193000007	5	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Airdrie Transit - Alberta	L664	—	—	L82U2B3000507	L82U2B3000507	1	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Airdrie Transit - Alberta	L759	—	—	L82U0D3000928	L82U0D3000928	1	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Ames Transportation Agency - Iowa	L707	660	661	S92U5C4500159	S92U1C4500160	2	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Arrow Coach Line - Arkansas	L494	—	—	L82U793000397	L82U793000397	1	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Austin - CMTA - Texas	L635	5001	5001	S92U7C4500163	S92U7C4500163	1	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Austin - CMTA - Texas	L636	5002	5022	S92U1D4500306	S92U0D4500328	21	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Austin - CMTA - Texas	L704	5051	5068	L82J7E4500471	L82J2E4500488	18	N38412010	116724V01_35	N79043	117130V01_07	116796V04_04
BC Transit - BCT - British Columbia	L342	9232	9251	L82U173000294	L82U173000313	20	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
BC Transit - BCT - British Columbia	L343	9252	9267	L82U973000463	L82U073000478	16	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
BC Transit - BCT - British Columbia	L414	9268	9289	L82U983000299	L82U783000320	22	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
BC Transit - BCT - British Columbia	L417	9290	9297	L82U983000321	L82U183000328	8	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
BC Transit - BCT - British Columbia	L430	9301	9318	L82U483000503	L82U483000520	18	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
BC Transit - BCT - British Columbia	L458	9298	9300	L82U683000521	L82UX83000523	3	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
BC Transit - BCT - British Columbia	L463	9319	9333	L82U093000273	L82U093000287	15	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
BC Transit - BCT - British Columbia	L481	9334	9353	L82U794000004	L82U094000023	20	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
BC Transit - BCT - British Columbia	L484	9370	9403	L82U494000090	L82U494000123	34	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
BC Transit - BCT - British Columbia	L486	9354	9369	L82U294000024	L82U494000039	16	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
BC Transit - BCT - British Columbia	L487	9404	9433	L82U094000149	L82U794000178	30	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
BC Transit - BCT - British Columbia	L604	9434	9434	L82U5C3000597	L82U5C3000597	1	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
BC Transit - BCT - British Columbia	L735	9435	9440	L82U4C3000848	L82U8C3000853	6	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
BC Transit - BCT - British Columbia	L736	9441	9446	L82U8D3000854	L82U7D3000859	6	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
BC Transit - BCT - British Columbia	L858	9447	9481	L82JXE3001401	L82J5F3001436	35	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
BC Transit - BCT - British Columbia	L891	—	—	L82J5F3001565	L82J2F3001569	5	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Belleville Transit - Ontario	L354	354-1	354-1	L82U983000089	L82U983000089	1	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Belleville Transit - Ontario	L357	357-1	357-1	L82U783000091	L82U783000091	1	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Belleville Transit - Ontario	L542	—	—	L82UXA3000088	L82U8A3000090	3	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Belleville Transit - Ontario	L598	—	—	L82U5A3000581	L82U7A3000582	2	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Belleville Transit - Ontario	L655	—	—	L82U3B3000385	L82U3B3000385	1	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07

CLIENT	LOT	N° VÉHICULE		NIV (2NVY/4RKY...)		QTÉ	S P E E D O P/N	SPEEDO SW	TACH	TACH SW	CONFIG TOOL
		DE	À	DE	À						
Belleville Transit - Ontario	L702	—	—	L82U4D3000706	L82U4D3000706	1	N38412003	109633V08_02	N45935	109634V07_03	113942V02_07
Belleville Transit - Ontario (ref. L754)	L809	—	—	L82U2D4500404	L82U2D4500404	1	#N/A				
Bow Valley Transit - Alberta	L347	1	4	L82W083000175	L82W683000178	4	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Bow Valley Transit - Alberta	L712	5	6	L82U6C3000804	L82U8C3000805	2	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Brampton - Ontario	L348	0701	0715	L82U273000479	L82U773000493	15	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Brampton - Ontario	L349	0801	0810	L82U283000094	L82UX83000103	10	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Brampton - Ontario	L424	0811	0827	L82U783000463	L82U083000479	17	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Brampton - Ontario	L425	0901	0916	L82U993000045	L82U593000060	16	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Brampton - Ontario	L501	0917	0926	L82U893000506	L82U893000523	10	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Brampton - Ontario	L789	—	—	L82J4E3001216	L82J1E3001223	8	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Brampton - Ontario	L816	—	—	L82J3E3001224	L82J9E3001230	7	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Brampton - Ontario	L864	1501	1510	L82JXF3001500	L82J6F3001509	10	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Brampton - Ontario	L865	1511	1519	L82JXF3001514	L82J9F3001522	9	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Brantford - Ontario	L351	9071	9075	L82U883000018	L82UX83000022	5	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Brantford - Ontario	L422	9081	9084	L82U183000524	L82U783000527	4	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Brantford - Ontario	L547	10101	10105	L82X6A3000082	L82X3A3000086	5	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Brantford - Ontario	L663	10121	10121	L82U1B3000532	L82U1B3000532	1	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Brantford - Ontario	L718	10123	10125	L82U5C3000826	L82U9C3000828	3	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Brantford - Ontario	L775	10131	10132	L82U1D3000999	L82U2D3001000	2	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Calgary Transit - Alberta	L601	8101	8114	L82U5A4000099	L82U4A4000112	14	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Calgary Transit - Alberta	L607	8115	8130	L82UXA3000477	L82U6A3000492	16	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Calgary Transit - Alberta	L615	8131	8158	L82U1B4000019	L82U4B4000046	28	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Calgary Transit - Alberta	L624	—	—	L82U4B4000077	L82U6B4000078	2	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Calgary Transit - Alberta	L637	8161	8180	L82U7B3000356	L82U2B3000376	20	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Calgary Transit - Alberta	L709	8181	8200	L82UXC3000806	L82U3C3000825	20	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Calgary Transit - Alberta	L733	8201	8202	L82AXD3000926	L82A1D3000927	2	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Chicago Transit Authority - CTA - Illinois	L773	—	—	L82JXD4500429	L82J6D4500430	2	N38412010	116724V01_35	N79043	117130V01_07	116796V04_04
Chicago Transit Authority - CTA - Illinois	L811	7902	7949	L82J6E4500509	L82J6E4500526	48	N38412010	116724V01_35	N79043	117130V01_07	116796V04_04
Chicago Transit Authority - CTA - Illinois	L837	7950	7999	L82J6E4500655	L82J1E4500708	50	N38412010	116724V01_35	N79043	117130V01_07	116796V04_04
Chicago Transit Authority - CTA - Illinois	L847	8000	8049	L82J1E4500773	L82JXE4500822	50	N38412010	116724V01_35	N79043	117130V01_07	116796V04_04
Chicago Transit Authority - CTA - Illinois	L848	8050	8099	L82JXF4500823	L82J1F4500872	50	N38412010	116724V01_35	N79043	117130V01_07	116796V04_04
Chicago Transit Authority - CTA - Illinois	L849	8100	8149	L82J5F4500874	L82J3F4500923	50	N38412010	116724V01_35	N79043	117130V01_07	116796V04_04
Chicago Transit Authority - CTA - Illinois	L850	8150	8177	L82J5F4500924	L82J8F4500951	28	N38412010	116724V01_35	N79043	117130V01_07	116796V04_04
Clemson Area Transit - South Carolina	L617	—	—	S92U5C4500002	S92U5C4500002	1	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Clemson Area Transit - South Carolina	L769	—	—	S92U1D4500418	S92U1D4500418	1	N38412010	116724V01_35	N79043	117130V01_07	116796V04_04
Clemson Area Transit - South Carolina (ref. L641)	L722	—	—	L82U1C4500005	L82U5C4500010	5	#N/A				
CMBC (TransLink) - British Columbia	L301	9602	9649	L82U373000216	L82U173000263	48	N38412004	109905V08_01	N45936	110102V07_03	113942V02_07
CMBC (TransLink) - British Columbia	L302	9650	9706	L82U673000386	L82U973000351	56	N38412004	109905V08_01	N45936	110102V07_03	113942V02_07
CMBC (TransLink) - British Columbia	L317	9601	9601	L82U973000155	L82U973000155	1	N38412004	109905V08_01	N45936	110102V07_03	113942V02_07
CMBC (TransLink) - British Columbia	L341	V9707	V9725	L82U373000412	L82U573000430	19	N38412004	109905V08_01	N45936	110102V07_03	113942V02_07
CMBC (TransLink) - British Columbia	L380	9726	9747	L82U483000209	L82U683000230	22	N38412004	109905V08_01	N45936	110102V07_03	113942V02_07

CLIENT	LOT	N° VÉHICULE		NIV (2NVY/4RKY...)		QTÉ	S P E E D O P/N	SPEEDO SW	TACH	TACH SW	CONFIG TOOL
		DE	À	DE	À						
CMBC (TransLink) - British Columbia	L381	9748	9781	L82U383000329	L82U483000369	34	N38412004	109905V08_01	N45936	110102V07_03	113942V02_07
CMBC (TransLink) - British Columbia	L382	9782	9791	L82U083000370	L82U783000379	10	N38412004	109905V08_01	N45936	110102V07_03	113942V02_07
CMBC (TransLink) - British Columbia	L412	9401	9401	L82X993000136	L82X993000136	1	N38412004	109905V08_01	N45936	110102V07_03	113942V02_07
CMBC (TransLink) - British Columbia	L454	9402	9470	L82X793000359	L82XX93000453	69	N38412004	109905V08_01	N45936	110102V07_03	113942V02_07
CMBC (TransLink) - British Columbia	L455	9471	9491	L82X093000459	L82X993000489	21	N38412004	109905V08_01	N45936	110102V07_03	113942V02_07
CMBC (TransLink) - British Columbia	L482	9492	9517	L82X894000040	L82X094000064	25	N38412004	109905V08_01	N45936	110102V07_03	113942V02_07
CMBC (TransLink) - British Columbia	L483	9518	9542	L82X294000065	L82X594000089	25	N38412004	109905V08_01	N45936	110102V07_03	113942V02_07
CMBC (TransLink) - British Columbia	L532	9543	9551	L82U093000497	L82U693000505	9	N38412004	109905V08_01	N45936	110102V07_03	113942V02_07
CMBC (TransLink) - British Columbia	L533	9552	9573	L82U193000511	L82U093000537	22	N38412004	109905V08_01	N45936	110102V07_03	113942V02_07
CMBC (TransLink) - British Columbia	L534	9574	9590	L82U694000124	L82U894000139	16	N38412004	109905V08_01	N45936	110102V07_03	113942V02_07
CMBC (West Vancouver) - British Columbia	L345	701	702	L82U373000264	L82U573000265	2	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
CMBC (West Vancouver) - British Columbia	L401	801	803	L82U983000206	L82U283000208	3	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
CMBC (West Vancouver) - British Columbia	L539	901	909	L82U494000140	L82U994000148	9	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
CT Transit - Connecticut	L554	1041	1065	S92U1A4000139	S92U0A4000164	25	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
CT Transit - Connecticut	L571	1101	1110	S92YXB4000144	S92Y4B4000169	10	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
CT Transit - Connecticut	L814	1462	1473	S92LXE4500717	S92L4E4500728	12	N38412010	116724V01_35	N79043	117130V01_07	116796V04_04
CT Transit - Connecticut	L815	1426	1426	S92L0E4500709	S92L0E4500712	4	N38412010	116724V01_35	N79043	117130V01_07	116796V04_04
Demo - Articulated Bus	L433	—	—	S92UX93000029	S92UX93000029	1	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Demo - Engineering Platform 2010 (Altoona)	L373	373-1	373-1	L82UX83000151	L82UX83000151	1	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Demo - Nova PF2010 (TARC)	L356	356-2	356-2	L82U883000231	L82U883000231	1	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Demo - Plateforme 2010 (ATQ)	L456	—	—	L82U893000019	L82U893000019	1	N38412003	109633V08_02	N45935	109634V07_03	113942V02_07
Demo - Proto Platform 2010	L271	—	—	L82U283000001	L82U283000002	2	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Demo CNG	L716	—	—	L82A5D3000896	L82A5D3000896	1	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Duke University - North Carolina	L651	—	—	S92Y1B4000145	S92Y3B4000146	2	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Duke University - North Carolina (ref. L703)	L641	—	—	L82U9C4500012	L82U1C4500022	8	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Durham Region Transit - Ontario	L872	8551	8553	L82J0F3001523	L82J4F3001525	3	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Fredericton - New Brunswick	L369	1	1	L82U693000018	L82U693000018	1	N38412003	109633V08_02	N45935	109634V07_03	113942V02_07
Fredericton - New Brunswick	L375	8081	8081	L82U983000142	L82U983000142	1	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Fredericton - New Brunswick	L672	8111	8112	L82U0B3000540	L82U2B3000541	2	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Fredericton - New Brunswick	L688	8113	8113	L82U8C3000643	L82U8C3000643	1	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Fredericton - New Brunswick	L774	8131	8131	L82U7D3000960	L82U7D3000960	1	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Fredericton - New Brunswick	L812	—	—	L82J4E3001202	L82J4E3001202	1	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Fredericton - New Brunswick	L836	8143	8143	L82J2E3001389	L82J2E3001389	1	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Gaylord Opryland - Nashville, Tennessee	L353	—	—	L82U583000008	L82U383000010	3	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07

CLIENT	LOT	N° VÉHICULE		NIV (2NVY/4RKY...)		QTÉ	S P E E D O P/N	SPEEDO SW	TACH	TACH SW	CONFIG TOOL
		DE	À	DE	À						
Grand River Transit - GRT - Ontario	L337	2701	2712	L82U373000281	L82UX73000293	12	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Grand River Transit - GRT - Ontario	L338	2713	2724	L82U773000431	L82U173000442	12	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Grand River Transit - GRT - Ontario	L404	8007	8021	L82U683000244	L82U683000258	15	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Grand River Transit - GRT - Ontario	L405	8022	8027	L82W683000259	L82WX83000264	6	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Grand River Transit - GRT - Ontario	L464	20901	20913	L82U193000296	L82U493000308	13	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Grand River Transit - GRT - Ontario	L560	21001	21009	L82U2A3000246	L82U1A3000254	9	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Grand River Transit - GRT - Ontario	L599	21116	21118	L82X9B3000465	L82X2B3000467	3	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Grand River Transit - GRT - Ontario	L631	21119	21121	L82X4B3000468	L82X2B3000470	3	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Grand River Transit - GRT - Ontario	L633	21101	21115	L82U7B3000289	L82U8B3000303	15	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Grand River Transit - GRT - Ontario	L668	21201	21220	L82U6C3000737	L82UXC3000756	20	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Grande Prairie Alberta	L834	—	—	L82J7E3001386	L82J2E3001389	4	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Greater Toronto Airports Authority - GTAA - Ontario	L432	432-1	432-1	L82U793000061	L82U793000061	1	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Greater Toronto Airports Authority - GTAA - Ontario	L477	L477-1	L477-1	L82U194000001	L82U194000001	1	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Greater Toronto Airports Authority - GTAA - Ontario	L616	—	—	L82U4C4500001	L82U4C4500001	1	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Guelph - Ontario	L397	195	198	L82U183000152	L82U783000155	4	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Guelph - Ontario	L418	199	205	L82U883000410	L82U983000416	7	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Guelph - Ontario	L431	206	220	L82U793000030	L82U793000044	15	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Guelph - Ontario	L579	221	224	L82UXA3000401	L82U5A3000404	4	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Guelph - Ontario	L669	225	228	L82U9B3000536	L82U4B3000539	4	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Guelph - Ontario	L715	234	235	L82U3C3000792	L82U5C3000793	2	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Guelph - Ontario	L767	237	239	L82UXD3000967	L82U3D3000969	3	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Guelph - Ontario	L835	240	243	L82J0E3001391	L82J0E3001391	4	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Halifax - Nova Scotia	L558	717	731	S92UXA3000293	S92U6A3000307	15	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Halifax - Nova Scotia	L613	732	741	S92UXB3000019	S92UXB3000028	10	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Halifax - Nova Scotia	L693	526	534	L82U8C3000657	L82U7C3000665	9	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Halifax - Nova Scotia	L708	742	761	L92UXC3000782	S92U3C3000803	20	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Halifax - Nova Scotia	L710	1160	1161	L82U7C3000780	L82U9C3000781	2	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Hampton Roads - Virginia (L754)	L802	—	—	L82U1D4500278	L82UXD4500408	7	#N/A				
Honolulu - Hawaii	L559	201	224	L82U6A4000113	L82U7A4000136	24	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Houston - Texas	L737	1510	1510	S92U4D4500297	S92U4D4500297	1	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Houston - Texas	L755	1511	1579	S92U4D4500333	S92U8D4500402	69	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Kings Transit - Nova Scotia	L581	—	—	L82U2B3000054	L82U2B3000054	1	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Krapf's Coaches - Pennsylvania (ref. L833)	L754	—	—	L82U4D4500405	L82U4D4500405	1	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Leduc Bus Line - Ontario	L346	—	—	L82UX83000053	L82UX83000053	1	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Lethbridge - Alberta	L489	165	169	L82U493000454	L82U193000458	5	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Lethbridge - Alberta	L868	—	—	L82J2F3001510	L82J2F3001510	1	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
LYNX - Florida	L725	—	—	S92Y9D4500329	S92Y5D4500330	2	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
LYNX - Florida	L764	—	—	S92Y7D4500331	S92Y9D4500332	2	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
LYNX - Florida	L785	—	—	S92L6E4500505	S92L8E4500506	2	N38412010	116724V01_35	N79043	117130V01_07	116796V04_04
Marketing Sales Demo	L705	—	—	L82U1D3000906	L82U1D3000906	1	N38412010	116724V01_35	N79043	117130V01_07	116796V04_04
Marketing Sales Demo - MSD 1 ISB Hybrid	L548	—	—	L82X5A3000087	L82X5A3000087	1	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07

CLIENT	LOT	N° VÉHICULE		NIV (2NVY/4RKY...)		QTÉ	S P E E D O P/N	SPEEDO SW	TACH	TACH SW	CONFIG TOOL
		DE	À	DE	À						
Marketing Sales Demo - MSD 5	L619	—	—	L82X7C3000367	L82X7C3000367	1	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Marketing Sales Demo - MSD 6 Houston	L628	—	—	L82U8C4500003	L82U8C4500004	2	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Minnesota Valley Transit Authority - MVTA	L706	4252	4258	L82U4C4500127	L82U4C4500133	7	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Moncton (Codiac) - New Brunswick	L334	600	603	L82U673000212	L82U173000215	4	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Moncton (Codiac) - New Brunswick	L358	358-1	358-1	L82U093000001	L82U093000001	1	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Moncton (Codiac) - New Brunswick	L361	361-1	361-1	L82U293000002	L82U293000002	1	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Moncton (Codiac) - New Brunswick	L569	—	—	L82U4B4000001	L82U4B4000001	1	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Moncton (Codiac) - New Brunswick	L570	—	—	L82U6B4000002	L82U6B4000002	1	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Moose Jaw - Saskatchewan	L344	17	25	L82U083000143	L82U883000147	5	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
MTD - Santa Barbara, California	L730	—	—	S92J8E4500567	S92J1E4500569	3	N38412010	116724V01_35	N79043	117130V01_07	116796V04_04
New York City Transit - New York	L536	1200	1201	S92U793000490	S92U993000491	2	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
New York City Transit - New York	L545	1202	1289	S92U5A4000001	S92U0A4000098	88	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
New York City Transit - New York	L608	8000	8014	L82U6B4000047	L82U0B4000061	15	N38412005	112097V08_01	N38510	106499V07_04	113942V02_07
New York City Transit - New York	L620	8015	8074	L82U2B4000062	L82U7B4000123	60	N38412005	112097V08_01	N38510	106499V07_04	113942V02_07
New York City Transit - New York	L621	8075	8089	L82U9B4000124	L82U9B4000138	15	N38412005	112097V08_01	N38510	106499V07_04	113942V02_07
New York City Transit - New York	L643	5895	5895	S92U1B4000143	S92U1B4000143	1	N38412005	112097V08_01	N38510	106499V07_04	113942V02_07
New York City Transit - New York	L670	5770	5894	S92U9B4000147	S92U9C4500061	125	N38412005	112097V08_01	N38510	106499V07_04	113942V02_07
New York City Transit - New York	L681	5896	5283	S92U2C4500023	S92U9C4500195	122	N38412005	112097V08_01	N38510	106499V07_04	113942V02_07
New York City Transit - New York	L692	5284	5363	S92U3C4500158	S92U3D4500274	80	N38412005	112097V08_01	N38510	106499V07_04	113942V02_07
New York City Transit - New York	L840	8090	8093	L82J5E4500713	L82J0E4500716	4	N38412010	116724V01_35	N79043	117130V01_07	116796V04_04
New York City Transit - New York	L841	8094	8175	L82J2F4500959	L82J2F4501075	82	N38412010	116724V01_35	N79043	117130V01_07	116796V04_04
Niagara Falls - Ontario	L499	2986	2989	L82U093000564	L82U693000567	4	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Niagara Falls - Ontario	L652	—	—	S92U3C3000607	S92U6C3000617	11	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Niagara Falls - Ontario	L653	—	—	L82U9C3000618	L82U9C3000621	5	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Niagara Falls - Ontario	L771	1396	1397	L82U9D3000958	L82U0D3000959	2	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Niagara Parks Commission - Ontario	L656	—	—	L82U0C3000653	L82U2C3000654	2	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Niagara Parks Commission - Ontario	L685	—	—	S92U9C3000644	S92U8C3000652	9	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Oakville - Ontario	L874	—	—	L82J6F3001526	L82JXF3001531	6	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Peterborough - Ontario	L411	36	50	L82U283000354	L82U083000532	15	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Peterborough - Ontario	L490	—	—	L82UX93000345	L82U593000348	4	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Peterborough - Ontario	L770	55	60	L82U0D3000993	L82UXD3000998	6	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Puerto Rico (ref. L754)	L788	—	—	L82UXD4500277	L82U0D4500305	16	#N/A				
Red Deer - Alberta	L726	—	—	L82UXC3000840	L82U1C3000841	2	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Red Deer - Alberta	L766	1104	1105	L82U7D3001025	L82U9D3001026	2	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Red Deer - Alberta	L772	1106	1108	L82J2E3001120	L82J6E3001122	3	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Red Deer - Alberta	L813	10008	10009	L82J2E3001361	L82J4E3001362	2	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Red Deer - Alberta	L869	—	—	L82J9F3001570	L82J0F3001571	2	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Regina - Saskatchewan	L304	611	616	L82U373000457	L82U773000462	6	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07

CLIENT	LOT	N° VÉHICULE		NIV (2NVY/4RKY...)		QTÉ	S P E E D O P/N	SPEEDO SW	TACH	TACH SW	CONFIG TOOL
		DE	À	DE	À						
Regina - Saskatchewan	L356	356-1	356-1	L82U883000150	L82U883000150	1	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Regina - Saskatchewan	L360	—	—	L82U283000290	L82U283000290	1	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Regina - Saskatchewan	L459	617	624	L82UX83000537	L82U783000544	8	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Regina - Saskatchewan	L476	625	628	L82U893000313	L82U393000316	4	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Regina - Saskatchewan	L561	631	644	L82U8B4000003	L82UXB4000018	14	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Regina - Saskatchewan	L639	645	654	L82U1B3000336	L82U2B3000345	10	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Regina - Saskatchewan	L748	655	662	L82U3D3000874	L82U0D3000881	8	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Regina - Saskatchewan	L776	663	669	L82U4D3001001	L82U5D3001007	7	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Regina - Saskatchewan	L807	671	685	L82J8E3001137	L82J2E3001151	15	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Regina - Saskatchewan	L892	686	691	L82J5F3001484	L82J4F3001489	6	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
San Joaquin County - California	L768	—	—	S92L4D4500422	S92L3D4500427	6	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Saskatoon - Saskatchewan	L359	—	—	S92U583000289	S92U583000289	1	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Saskatoon - Saskatchewan	L551	1005	1007	S92UXA3000178	S92U8A3000180	3	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Saskatoon - Saskatchewan	L568	—	—	S92U9B3000013	S92U9B3000013	1	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Saskatoon - Saskatchewan	L618	—	—	S92U1C3000377	S92U1C3000377	1	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Saskatoon - Saskatchewan	L690	1201	1204	L82U6C3000690	L82U1C3000693	4	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Saskatoon - Saskatchewan	L831	1401	1405	L82J7E3001307	L82J9E3001311	5	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Saskatoon - Saskatchewan	L894	1501	1510	L82J0F3001490	L82J7F3001499	10	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Sault Ste-Marie Transit Services - Ontario (ref. L686)	L641	135	139	L82U7C4500008	L82U6C4500016	5	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Sault Ste-Marie Transit Services - Ontario (ref. L751)	L754	—	—	L82U7D4500284	L82U7D4500284	1	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
SEPTA - Pennsylvania	L724	7300	7301	S92Y1D4500275	S92Y3D4500276	2	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
SEPTA - Pennsylvania	L728	—	—	L82W7D4500335	L82W7D4500335	1	N38412010	116724V01_30	N79043	117130V01_07	116796V04_04
SEPTA - Pennsylvania	L741	—	—	S92L4E4500504	S92L4E4500504	1	N38412010	116724V01_30	N79043	117130V01_07	116796V04_04
SEPTA - Pennsylvania	L742	7371	7414	S92L6E4500729	S92L7E4500772	44	N38412010	116724V01_30	N79043	117130V01_07	116796V04_04
SEPTA - Pennsylvania	L743	—	—	S92L1E4500489	S92L2E4500503	15	N38412010	116724V01_30	N79043	117130V01_07	116796V04_04
SEPTA - Pennsylvania	L744	—	—	L82L7E4500570	L82LXE4500661	89	N38412010	116724V01_30	N79043	117130V01_07	116796V04_04
SEPTA - Pennsylvania	L745	7415	7415	S92L0F4500873	S92L0F4500873	1	N38412010	116724V01_30	N79043	117130V01_07	116796V04_04
SEPTA - Pennsylvania	L746	7416	7454	S92L7F4500952	S92L8F4501012	39	N38412010	116724V01_30	N79043	117130V01_07	116796V04_04
SEPTA - Pennsylvania	L749	7302	7354	S92Y7D4500409	S92L2E4500470	53	N38412010	116724V01_30	N79043	117130V01_07	116796V04_04
St. John - New Brunswick	L272	—	—	S92U483000011	S92U483000011	1	N38412003	109633V08_02	N45935	109634V07_03	113942V02_07
St. John - New Brunswick	L273	—	—	S92U383000050	S92U383000050	1	N38412003	109633V08_02	N45935	109634V07_03	113942V02_07
St. John's - Newfoundland	L352	0857	0861	L82U683000003	L82U383000007	5	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
St. John's - Newfoundland	L403	0962	0965	L82U299300014	L82U493000017	4	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
St. John's - Newfoundland	L503	1066	1066	L82U4A3000071	L82U4A3000071	1	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
St. John's - Newfoundland	L687	1201	1209	L82U7C3000598	L82U2C3000606	9	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
St. John's - Newfoundland	L731	1310	1314	L82U3C3000842	L82U2C3000847	5	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
St. John's - Newfoundland	L808	1415	1419	L82J4E3001152	L82J1E3001156	5	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
St. John's - Newfoundland	L875	1520	1525	L82JXF3001478	L82J3F3001483	6	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Stratford - Ontario	L371	—	—	L82U183000104	L82U183000104	1	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Stratford - Ontario	L493	—	—	L82U2A3000019	L82U2A3000019	1	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Stratford - Ontario	L634	—	—	L82UXB3000352	L82UXB3000352	1	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Stratford - Ontario	L752	—	—	L82U9D3000863	L82U9D3000863	1	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Strathcona County Transit - Alberta	L383	—	—	L82U083000269	L82U083000269	1	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Strathcona County Transit - Alberta	L406	937	939	L82U783000270	L82U083000272	3	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07

CLIENT	LOT	N° VÉHICULE		NIV (2NVY/4RKY...)		QTÉ	S P E E D O P/N	SPEEDO SW	TACH	TACH SW	CONFIG TOOL
		DE	À	DE	À						
Strathcona County Transit - Alberta	L407	940	943	L82W083000273	L82W683000276	4	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Strathcona County Transit - Alberta	L457	944	949	L82U683000597	L82U683000602	6	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Strathcona County Transit - Alberta	L523	2010	2010	L82U693000603	L82U693000603	1	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Strathcona County Transit - Alberta	L524	3005	3010	L82X593000604	L82X493000609	6	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Strathcona County Transit - Alberta	L580	2011	2023	L82U1A3000464	L82U8A3000476	13	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Strathcona County Transit - Alberta	L659	2024	2028	L82U7B3000440	L82U4B3000444	5	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Sudbury - Ontario	L385	781	782	L82U583000137	L82U783000138	2	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Sudbury - Ontario	L386	785	785	L82U783000141	L82U783000141	1	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Sudbury - Ontario	L399	783	784	L82U983000139	L82U583000140	2	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Sudbury - Ontario	L465	791	795	L82U593000317	L82U793000321	5	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Sudbury - Ontario	L552	801	808	L82U3A3000238	L82U0A3000245	8	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Sudbury - Ontario	L632	811	817	L82U9B3000326	L82U4B3000332	7	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Sudbury - Ontario	L740	831	833	L82U1D3000887	L82U5D3000889	3	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Thunder Bay - Ontario	L408	—	—	L82U283000239	L82U483000243	5	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Thunder Bay - Ontario	L453	—	—	L82U283000533	L82U683000535	3	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Thunder Bay - Ontario	L488	—	—	L82U193000332	L82U593000334	3	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Thunder Bay - Ontario	L614	—	—	L82UXB3000061	L82U3B3000063	3	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Thunder Bay - Ontario	L662	20168	20168	L82U3B3000533	L82U7B3000535	3	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Thunder Bay - Ontario	L739	—	—	L82U3D3000860	L82U7D3000862	3	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Thunder Bay - Ontario	L806	—	—	L82J6E3001170	L82J8E3001171	2	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Thunder Bay - Ontario	L863	—	—	L82J8F3001558	L82J6F3001560	3	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Timmins - Ontario	L426	—	—	L82U783000480	L82U883000536	2	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Timmins - Ontario	L475	—	—	L82U493000311	L82U693000312	2	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Timmins - Ontario	L550	—	—	L82U8A3000171	L82UXA3000172	2	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Timmins - Ontario	L661	—	—	L82U9B3000486	L82U9B3000486	1	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Timmins - Ontario	L720	12-98	12-98	L82U0C3000829	L82U0C3000829	1	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Timmins - Ontario	L783	—	—	L82U8D3001017	L82UXD3001018	2	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Timmins - Ontario	L839	—	—	L82J8E3001395	L82J8E3001395	1	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Toronto Transit Commission - TTC - Ontario	L729	9000	9000	S92U9D3000905	S92U9D3000905	1	N38412006	116724V01_40	N79043	117130V01_09	116796V04_04
Toronto Transit Commission - TTC - Ontario	L738	9001	9026	S92J6D3001094	S92J7D3001119	26	N38412006	116724V01_40	N79043	117130V01_09	116796V04_04
Toronto Transit Commission - TTC - Ontario	L777	9027	9152	S92J7E3001123	S92J6E3001372	126	N38412006	116724V01_40	N79043	117130V01_09	116796V04_04
Toronto Transit Commission - TTC - Ontario	L859	8400	8400	L82J5F3001405	L82J5F3001405	1	N38412006	116724V01_40	N79043	117130V01_09	116796V04_04
Toronto Transit Commission - TTC - Ontario	L860	8401	8462	L82J0F3001554	L82J1F3001739	71	N38412006	116724V01_40	N79043	117130V01_09	116796V04_04
University of Alabama - Alabama	L310	7004	7013	L82U973000267	L82UX73000276	10	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
University of Alabama - Alabama	L311	7014	7017	L82U173000277	L82U173000280	4	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
University of Alabama - Alabama	L479	479-1	479-1	L82U394000002	L82U394000002	1	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
University of Alabama - Alabama	L480	480-1	480-1	L82U594000003	L82U594000003	1	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
University of Alabama - Alabama	L573	—	—	L82U9A4000137	L82U0A4000138	2	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07

CLIENT	LOT	N° VÉHICULE		NIV (2NVY/4RKY...)		QTÉ	S P E E D O P/N	SPEEDO SW	TACH	TACH SW	CONFIG TOOL
		DE	À	DE	À						
University of Alabama - Alabama	L640	—	—	L82U9B4000141	L82U0B4000142	2	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
University of Alabama - Alabama	L671	7024	7025	L82U5C4500119	L82U1C4500120	2	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
University of Alabama - Alabama	L727	7026	7027	L82U4D4500310	L82U6D4500311	2	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
University of Alabama - Alabama	L787	—	—	L82J2E4500507	L82J4E4500508	2	N38412010	116724V01_35	N79043	117130V01_07	116796V04_04
University of Alabama - Alabama	L902	7030	7030	L82J2F4500993	L82J4F4500994	2	N38412010	116724V01_35	N79043	117130V01_07	116796V04_04
University of Colorado - Colorado	L336	—	—	L82U773000266	L82U773000266	1	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
University of Colorado - Colorado	L427	—	—	S92U693000027	S92U693000027	1	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
University of Colorado - Colorado	L428	—	—	S92U893000028	S92U893000028	1	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
University of Colorado - Colorado	L627	—	—	S92UXB4000139	S92U6B4000140	2	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Walt Disney World - Florida	L535	1204	1213	L82UXA4000003	L82U0A4000012	10	N38412002	113813V08_02	N38510	106499V07_04	113942V02_07
Walt Disney World - Florida	L763	—	—	S92U0D3001019	S92U4D3001024	6	N38412010	116724V01_35	N79043	117130V01_07	116796V04_04
Whitehorse - Yukon	L423	—	—	L82U983000481	L82U083000482	2	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Whitehorse - Yukon	L563	38	41	L82U3A3000255	L82U9A3000258	4	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Whitehorse - Yukon	L784	43	43	L82U9D3001057	L82U9D3001057	1	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Woodstock - Ontario	L335	—	—	L82U083000093	L82U083000093	1	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Woodstock - Ontario	L419	—	—	L82U183000409	L82U183000409	1	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Woodstock - Ontario	L460	—	—	L82U693000309	L82U693000309	1	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Woodstock - Ontario	L492	—	—	L82U4A3000040	L82U6A3000041	2	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
Woodstock - Ontario	L778	—	—	L82U2D3001014	L82U2D3001014	1	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
Woodstock - Ontario	L832	—	—	L82J9E3001342	L82J9E3001342	1	N38412006	116724V01_35	N79043	117130V01_07	116796V04_04
York Regional Transit - Ontario	L562	1080	1082	S92U2A3000420	S92U6A3000422	3	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
York Regional Transit - Ontario	L572	1083	1094	S92U3A3000569	S92U2A3000580	12	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
York Regional Transit - Ontario	L654	1370	1390	S92U1D3000946	S92U2D3000986	21	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07
York Regional Transit - Ontario	L761	1391	1396	S92U6D3001008	S92UXD3001013	6	N38412001	106712V08_02	N38510	106499V07_04	113942V02_07



WARNING

Follow your internal safety procedures.



NOTE

This procedure requires the CAT CAN Analyzer programming and diagnostic tool. Contact Prevest Parts to order N43578 (Cable) and N43579 (RS232 connector CAN Analyzer) or N8901881 (CAN Analyzer with USB cable). See Figure 1.

PROCEDURE

Engine Type	Page
2005-2012	18
2013 and up	29

TOOLS

- 1.1. Connect the CAN Analyzer to a computer equipped with the **NOVA BUS SETUP PROGRAM** software (see Figure 1).
- 1.2. Open the left overhead console panel and connect the CAN Analyzer cable to the **DDR** connector (see Figure 1).

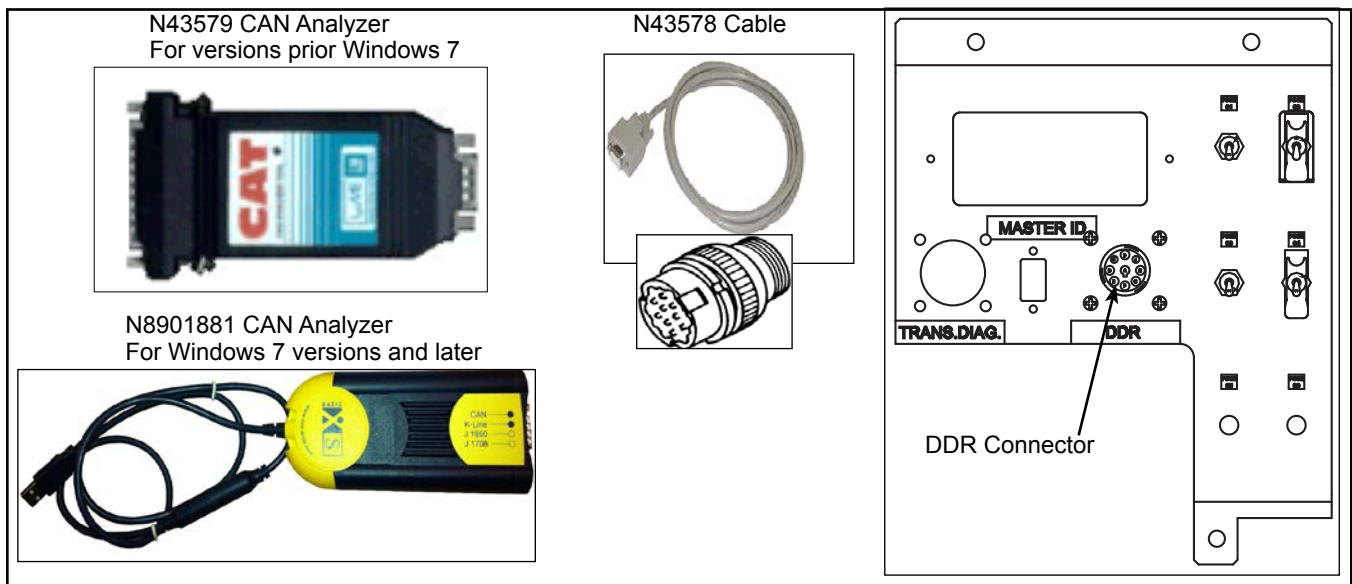


Figure 1 - CAN Analyser, Cable and Location of DDR Connector

- 1.3. Validate that the computer has the latest versions of the NOVA BUS SETUP PROGRAMS installed.
 - 1.3.1. To check the version, open the software and check the version number displayed in the title bar. See the table below for the correct software for your engine model.

Cummins Engine	Software VERSION
Prior TO 2013	113942 version 2_07 or higher
2013 and up	116796 version 4_04

- 1.4. If needed download the latest ACTIA program supplied by your customer service representative for the vehicle to the computer connected to the CAN Analyzer. See the Client List for the appropriate program.
- 1.5. Program the ACTIA system. For the programming procedure, refer to the **ACTIA GAUGES REPROGRAMMING** heading in section 16 : **24-VOLT ELECTRICAL SYSTEM** of the Nova LFS maintenance manual.

FAMILIARISATION

2005-2012 ENGINES

- 2.1. General functions (see Figure 2).

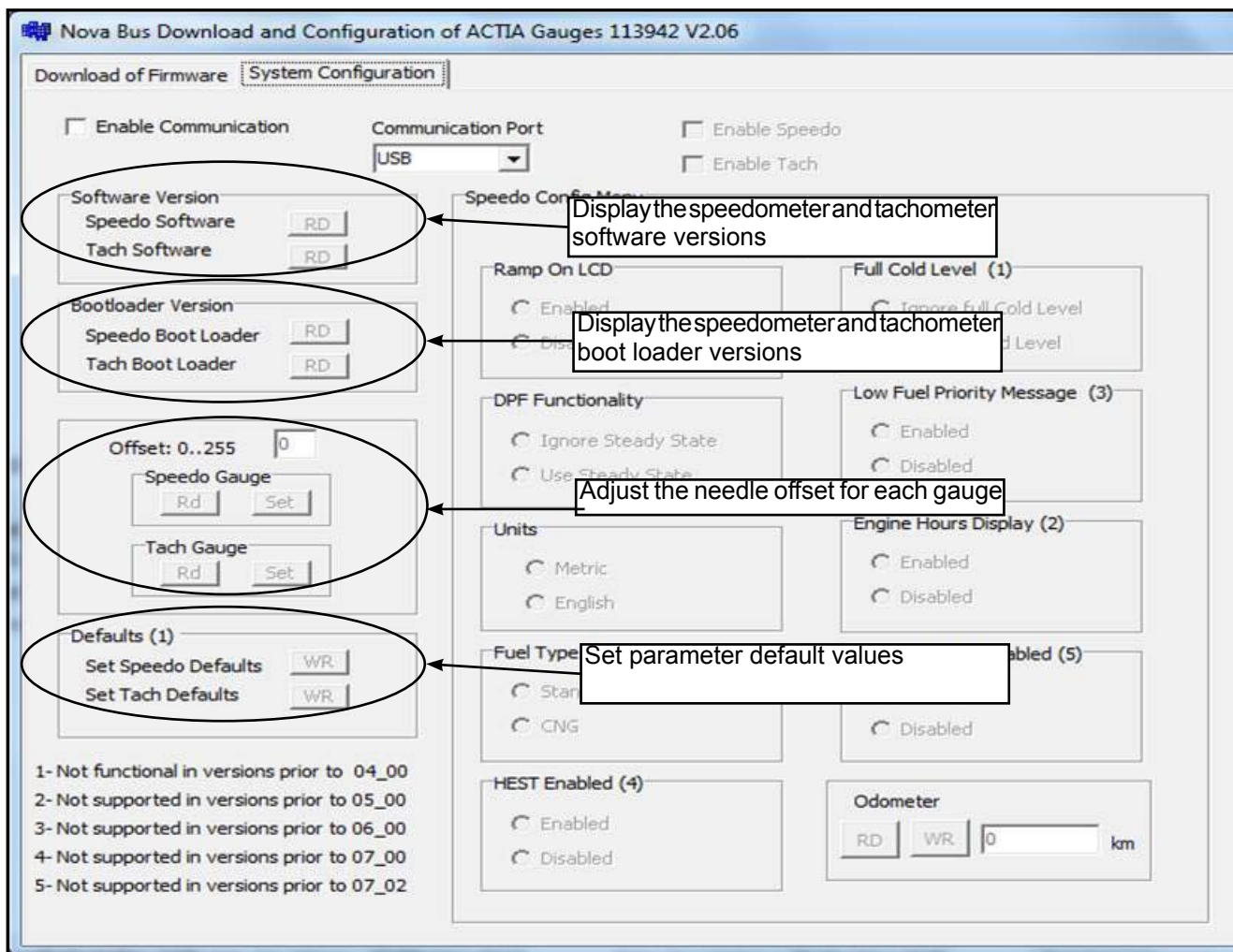


Figure 2 - General Functions

2.2. Speedometer parameter overview (see Figure 3).

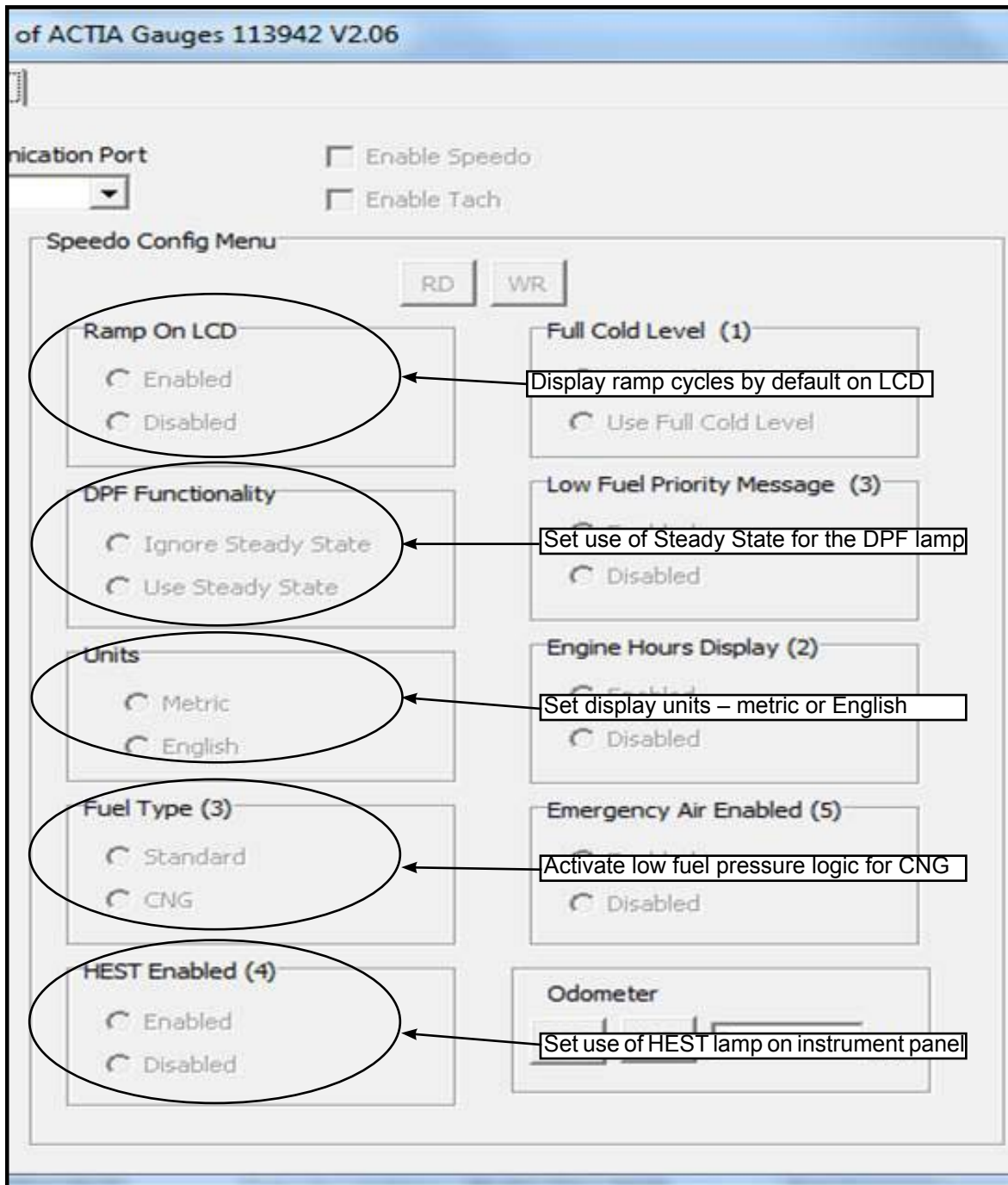


Figure 3 - Speedometer Parameters

2.3. Speedometer parameter overview (see Figure 4).

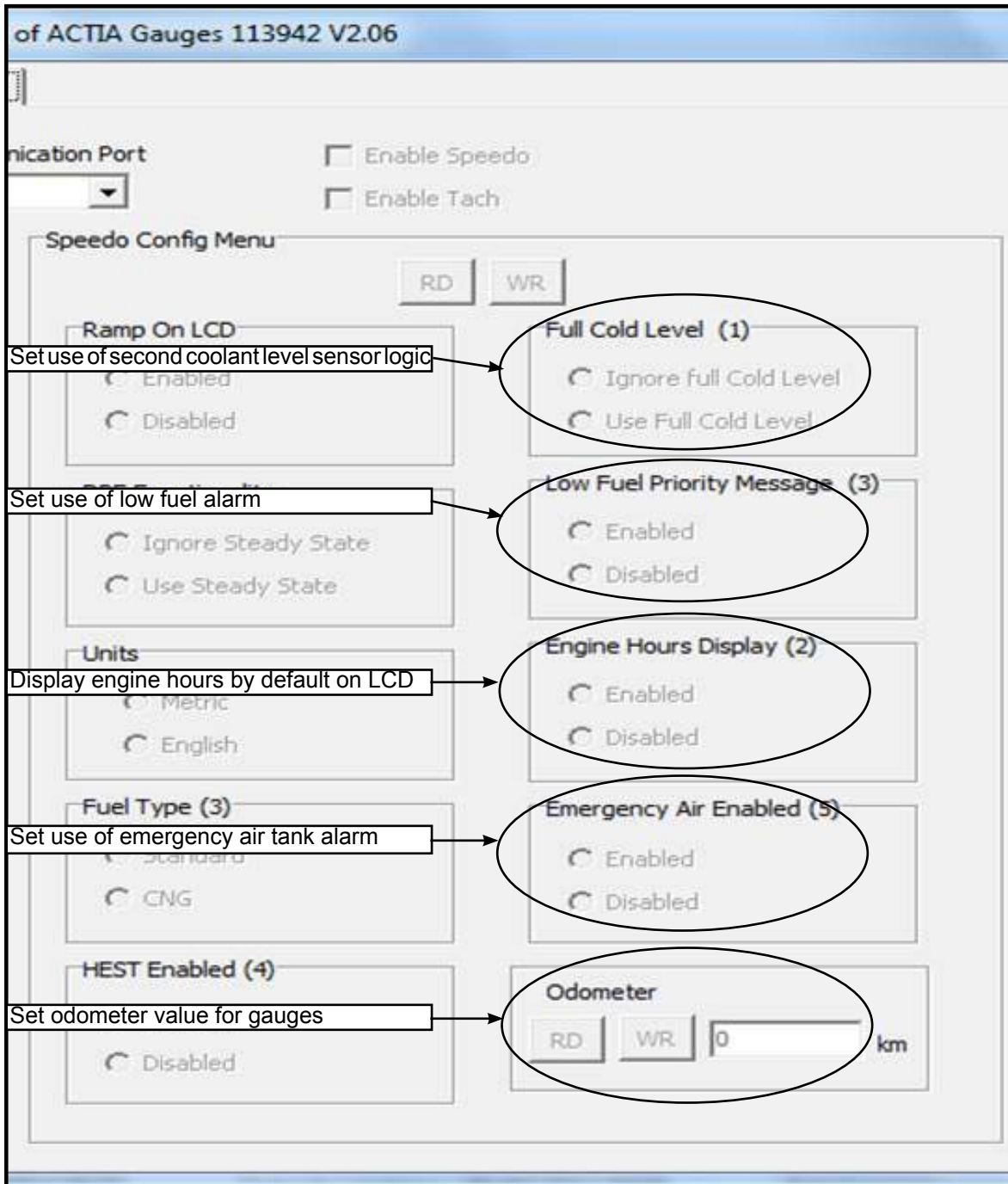


Figure 4 - Speedometer Parameters

2.4. Tachometer parameter overview (see Figure 5).

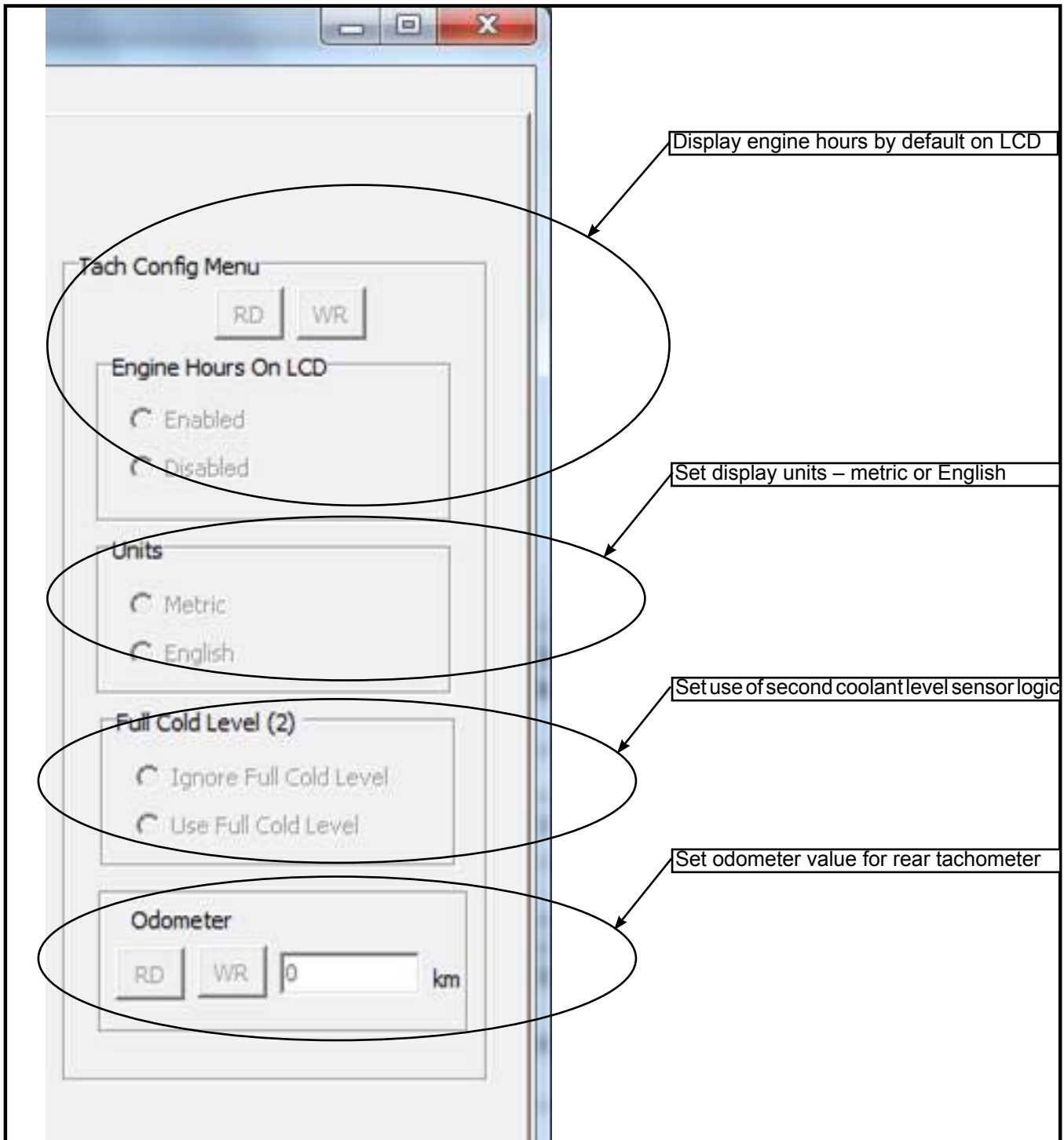


Figure 5 - Tachometer Parameters

2013 ENGINES AND ABOVE

2.5. General functions (see Figure 6).

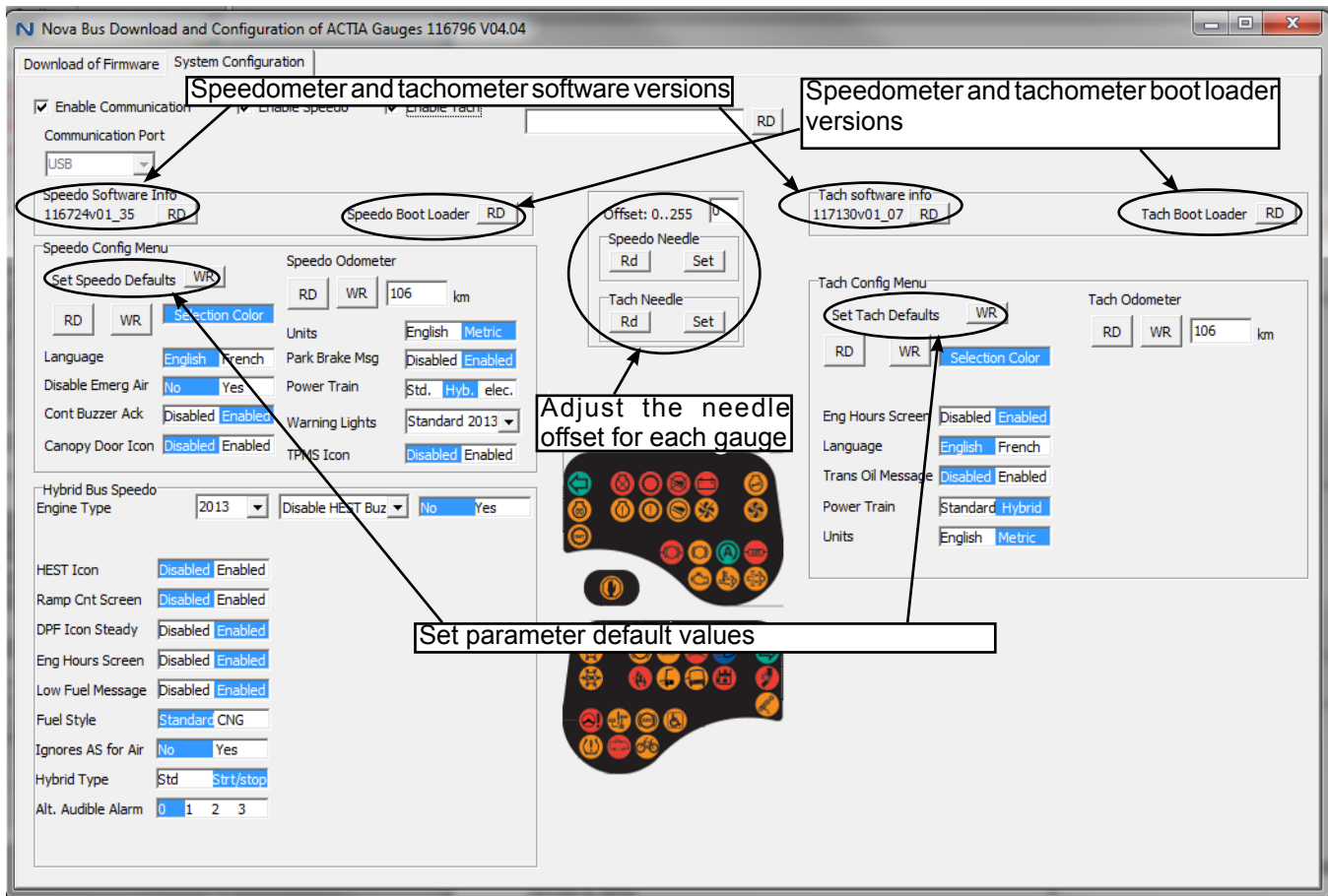


Figure 6 - General Functions

2.6. Speedometer parameter overview (see Figure 7).

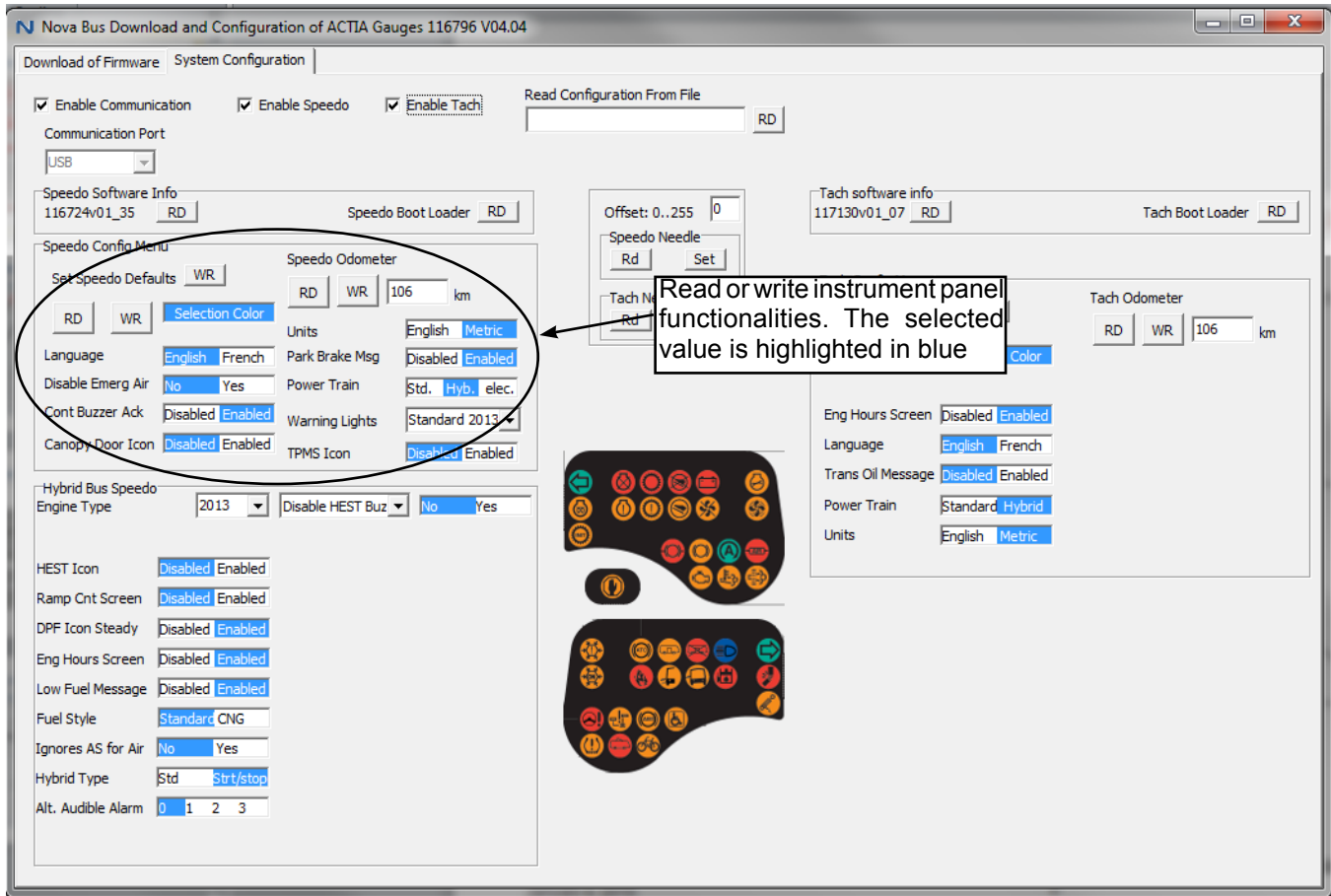


Figure 7 - Speedometer Parameters

2.7. Tachometer parameter overview (see Figure 8).

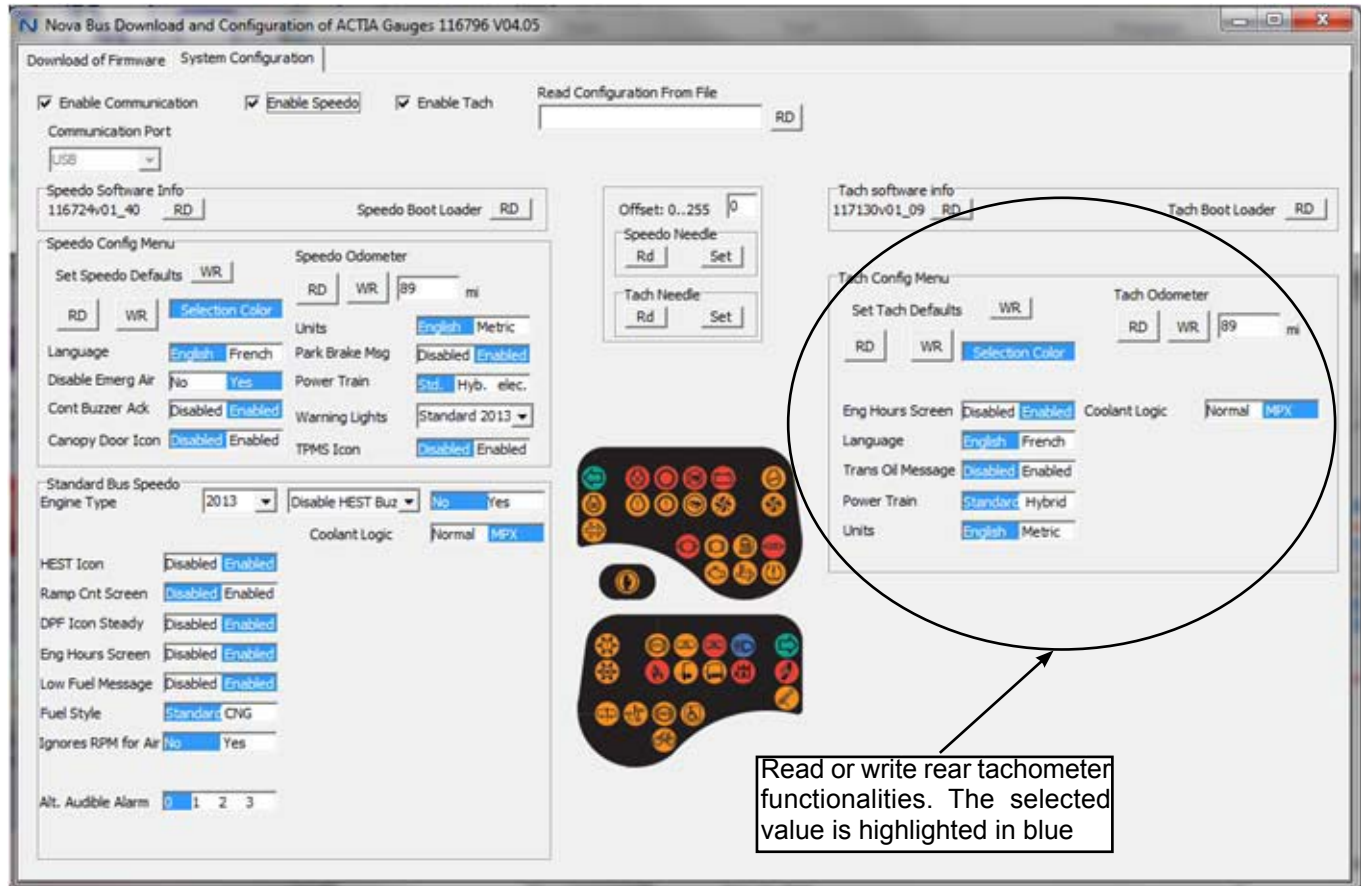


Figure 8 - Tachometer Parameters

SPEEDOMETER PROCEDURE 2005-2012 ENGINES



NOTE

There are two possible settings during this procedure, set the MASTER CONTROL SWITCH to the ON position with the engine start switch, in the engine compartment set to front. Or, set the MASTER CONTROL SWITCH to the OFF position with the engine start switch, in the engine compartment set to rear. Both settings work.

3.1.1 In the System Configuration tab, select the appropriate communication port from the drop-down list (see Figure 9).

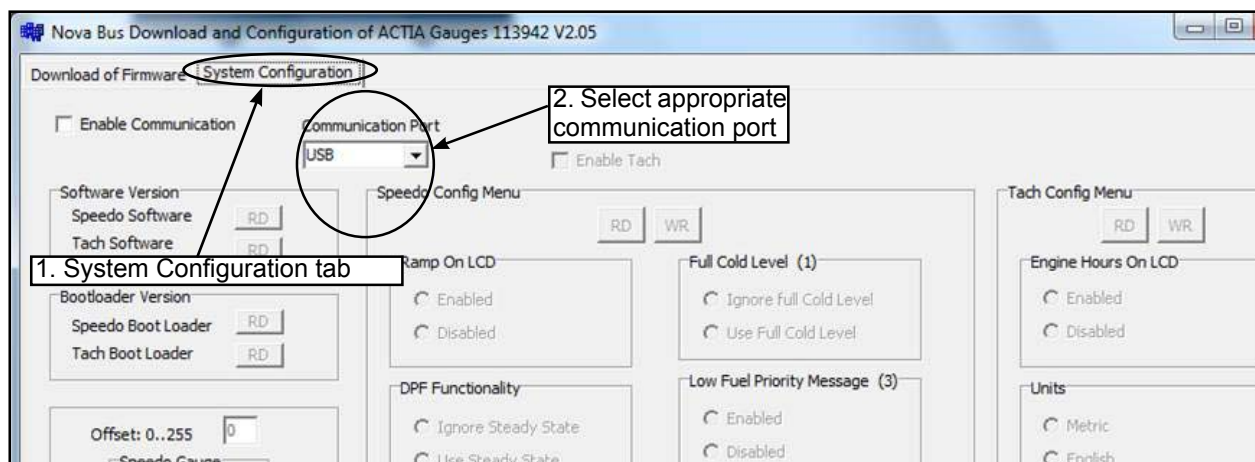


Figure 9 - Select the Appropriate Communication Port

3.1.2 Check the Enable Communication box (see Figure 10).

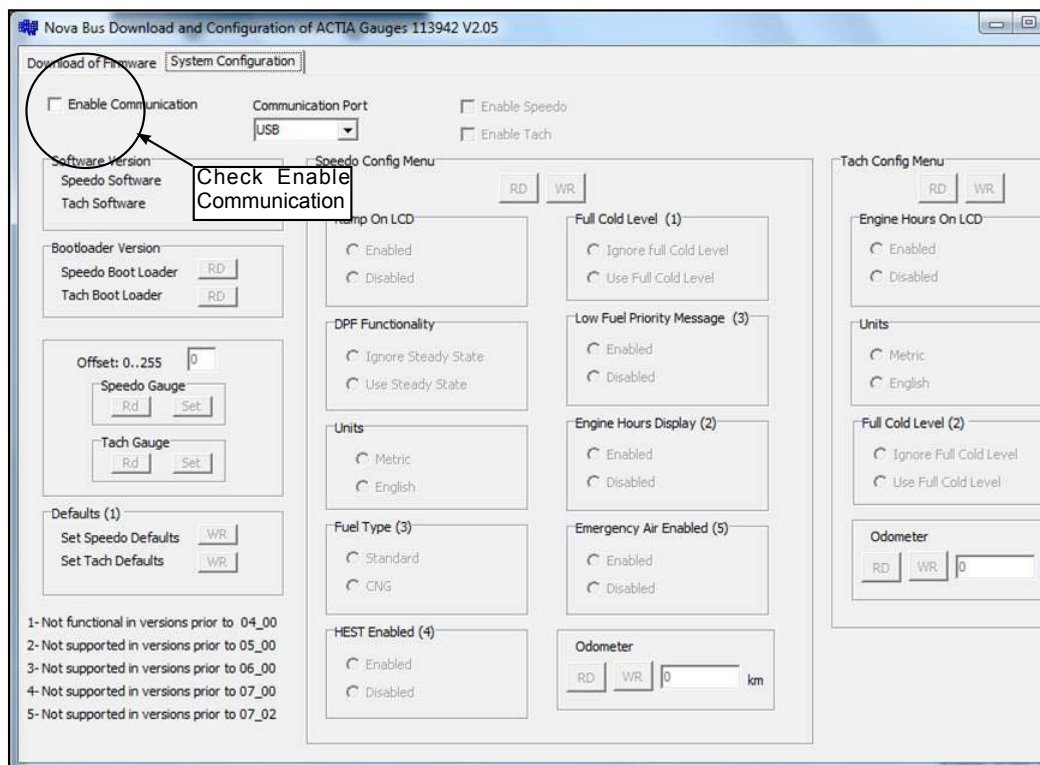


Figure 10 - Enable Communication

3.1.3 Check the Enable Speedo box (see Figure 11).

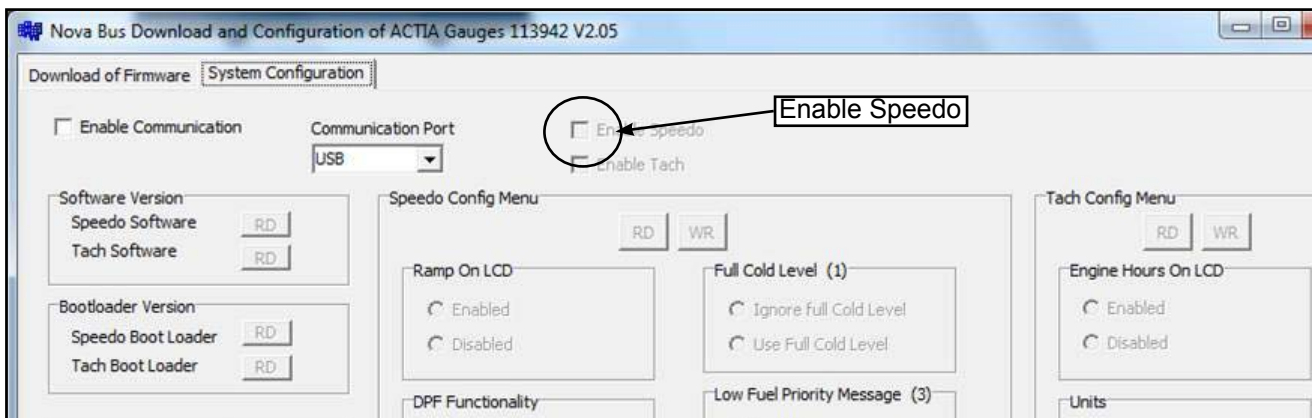


Figure 11 - Enable Speedometer

3.1.4 Click the Read (RD) button in each section as needed to display the configuration of parameters (see Figure 12).

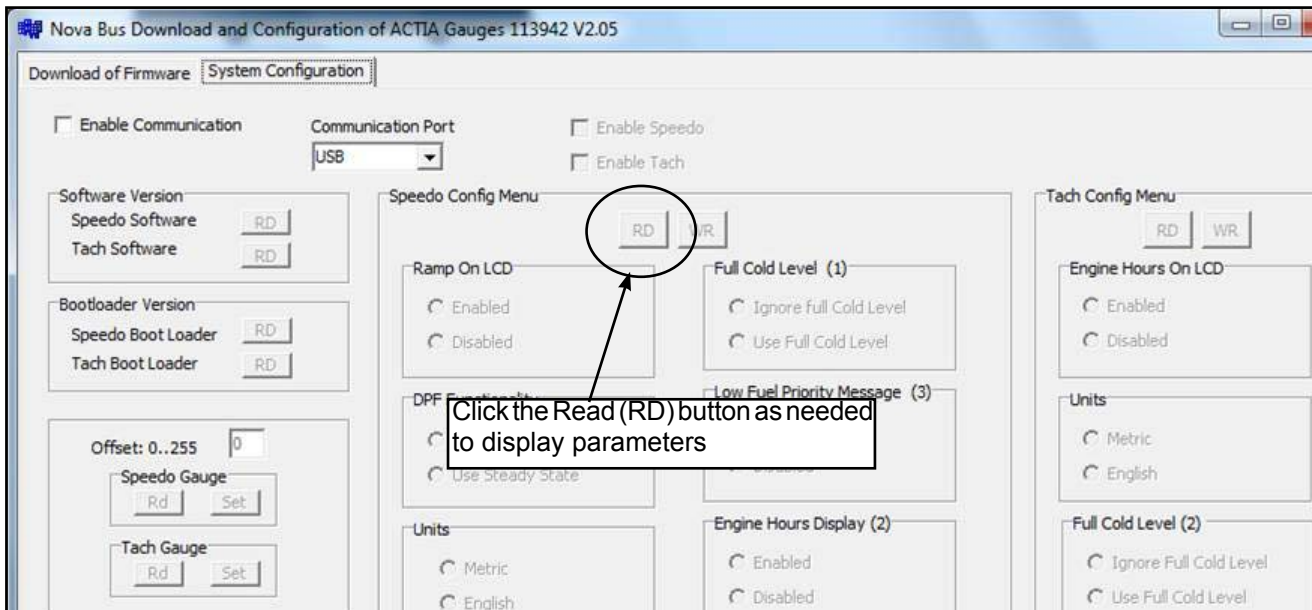


Figure 12 - Click the Read (RD) Button

3.1.5 Note the configuration of the following parameters: Ramp On LCD, DPF Functionality, Units, HEST Enabled, and Emergency Air Enabled. This configuration will be required in step 3.1.15 (see Figure 13).

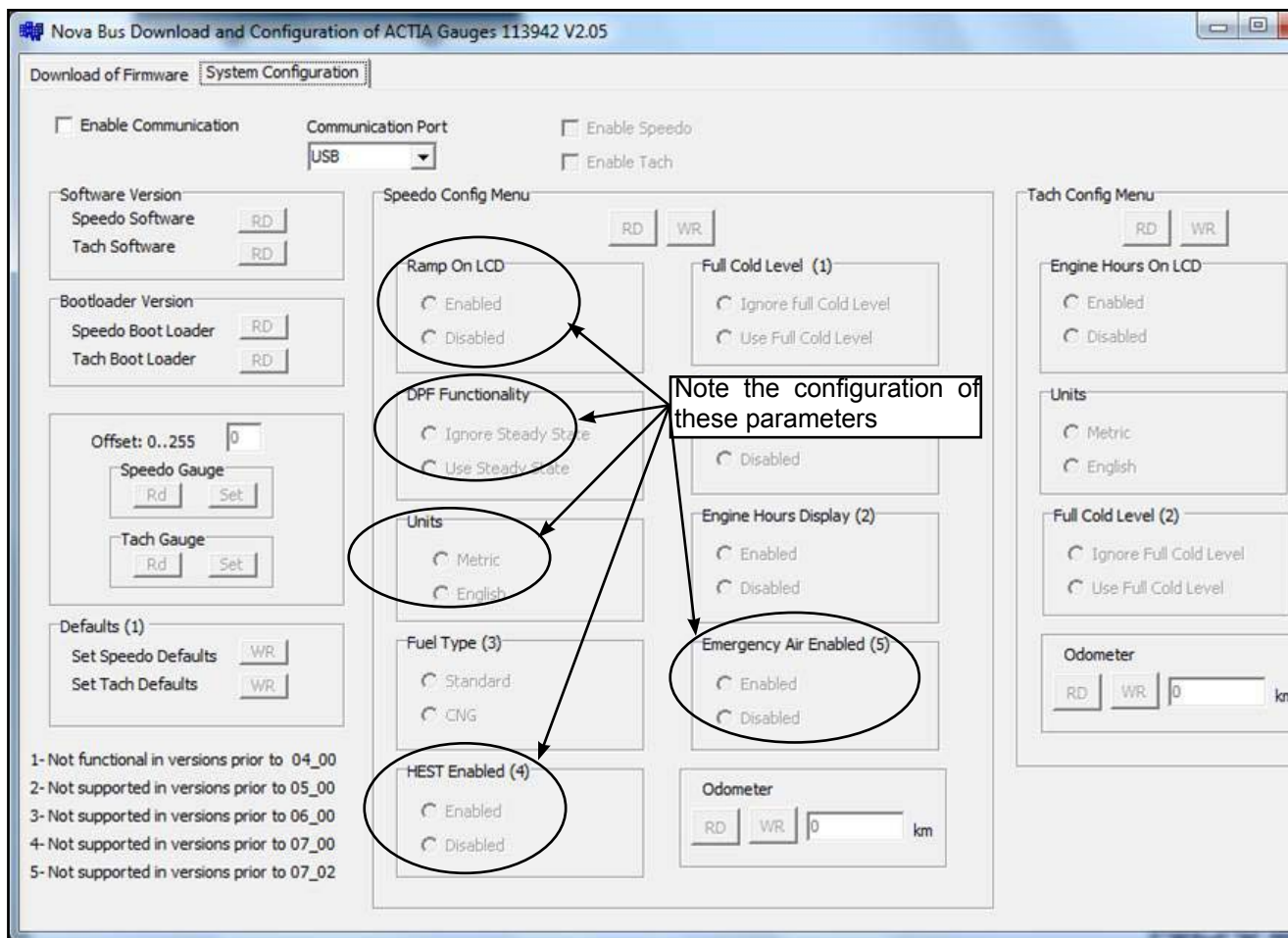


Figure 13 - Note the Configuration

3.1.6 In the Download of Firmware tab, select the appropriate communication port from the drop-down list (see Figure 14).

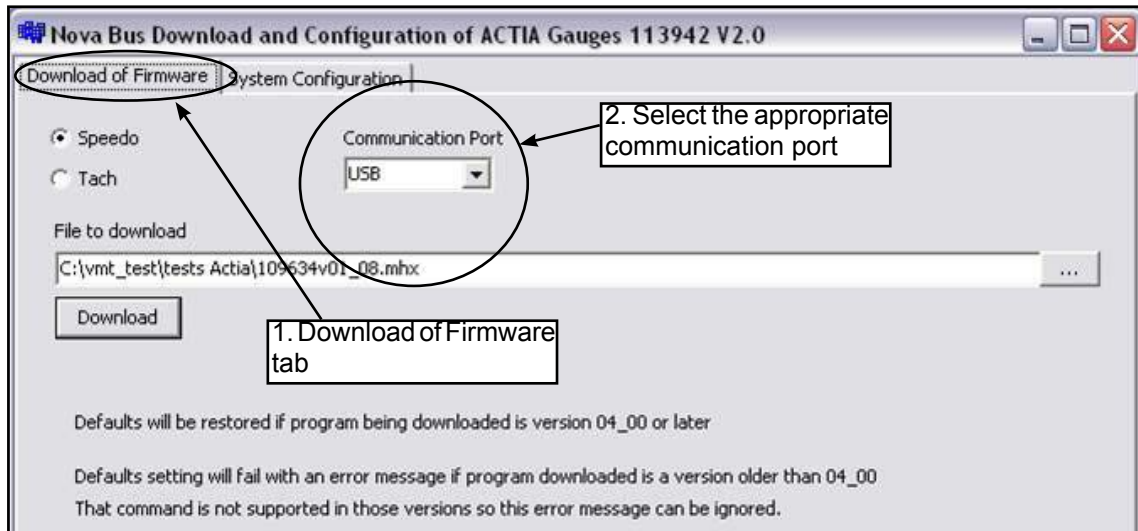


Figure 14 - Select the Appropriate Communication Port

3.1.7 Select the required gauge (see Figure 15).

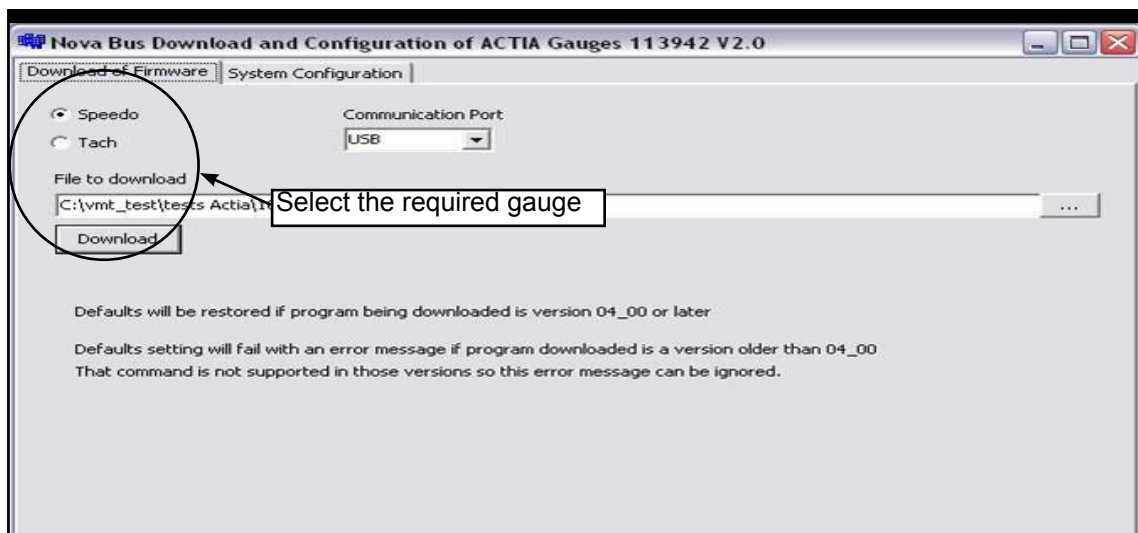


Figure 15 - Select the Required Gauge

3.1.8 Use the Browse button to select the right program for the gauge being reprogrammed (see Figure 16).

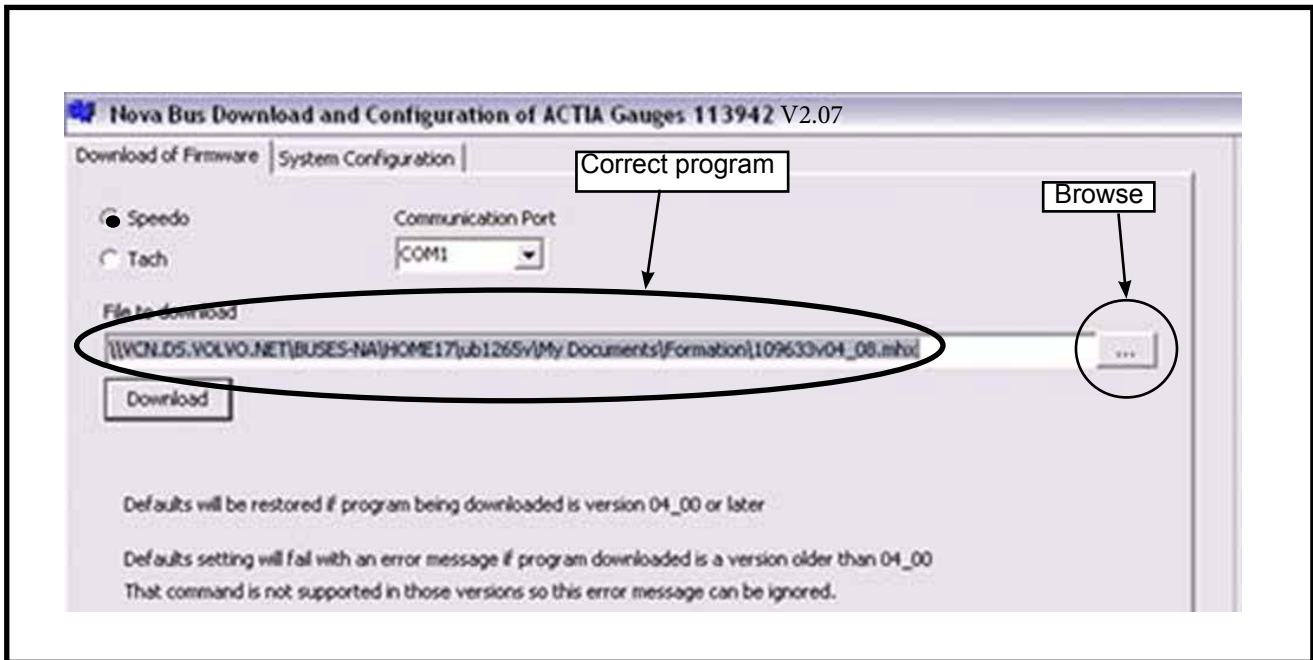


Figure 16 - Select the File to Download

3.1.9 Click the Download button (see Figure 17).

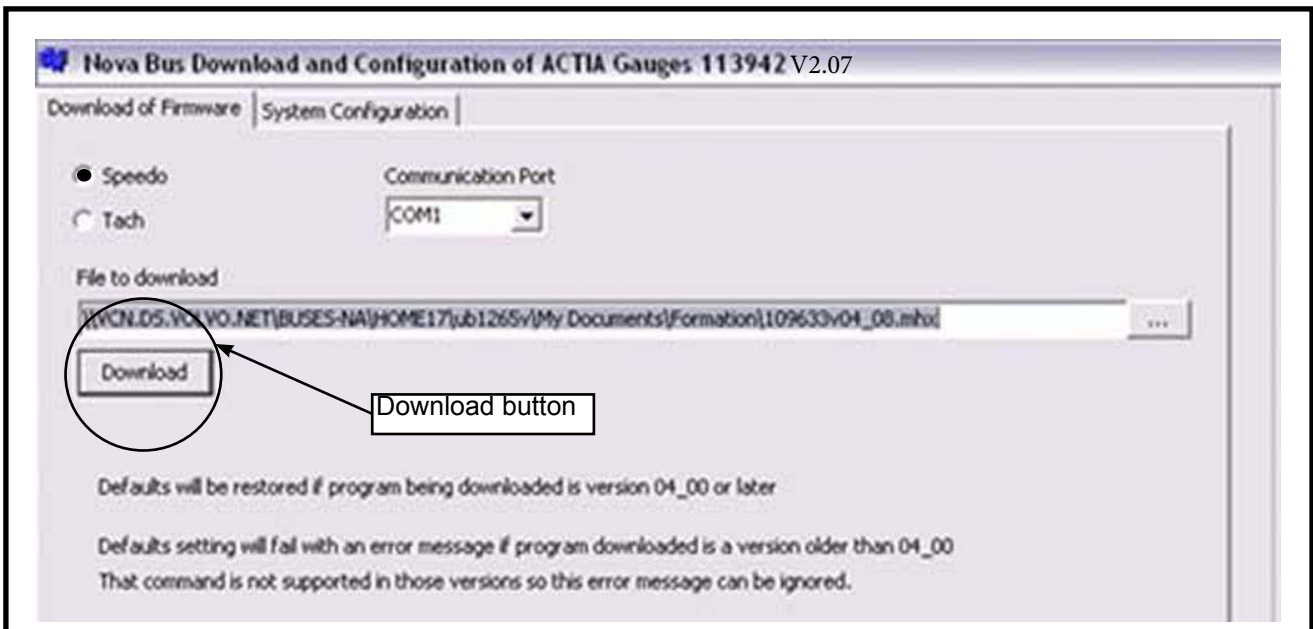


Figure 17 - Download the Program

3.1.10 A download progress window is displayed. A new window opens once the download process is complete (see Figure 18).

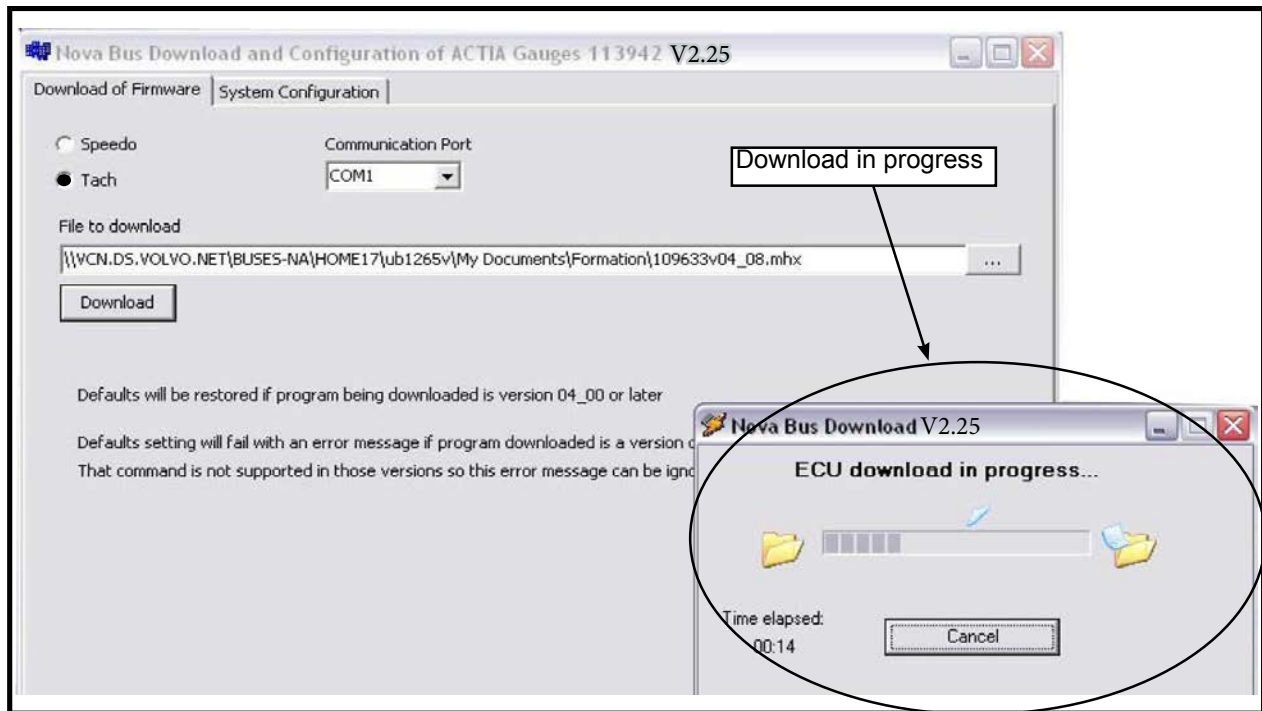


Figure 18 - Program Download

3.1.11 In the System Configuration tab, select the appropriate communication port from the drop-down list (see Figure 19).

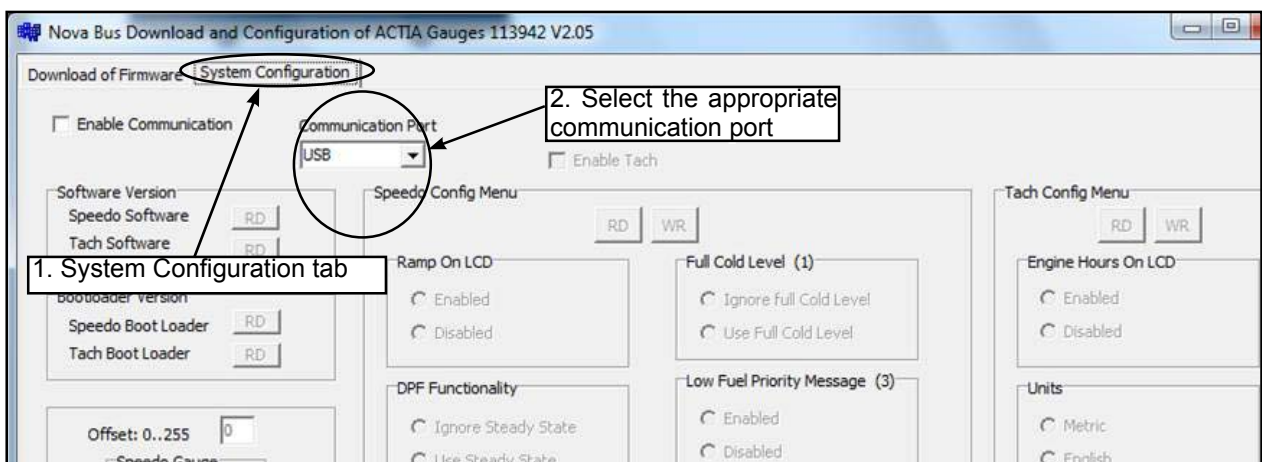


Figure 19 - Select the Appropriate Communication Port

3.1.12 Check the Enable Communication box (see Figure 20).

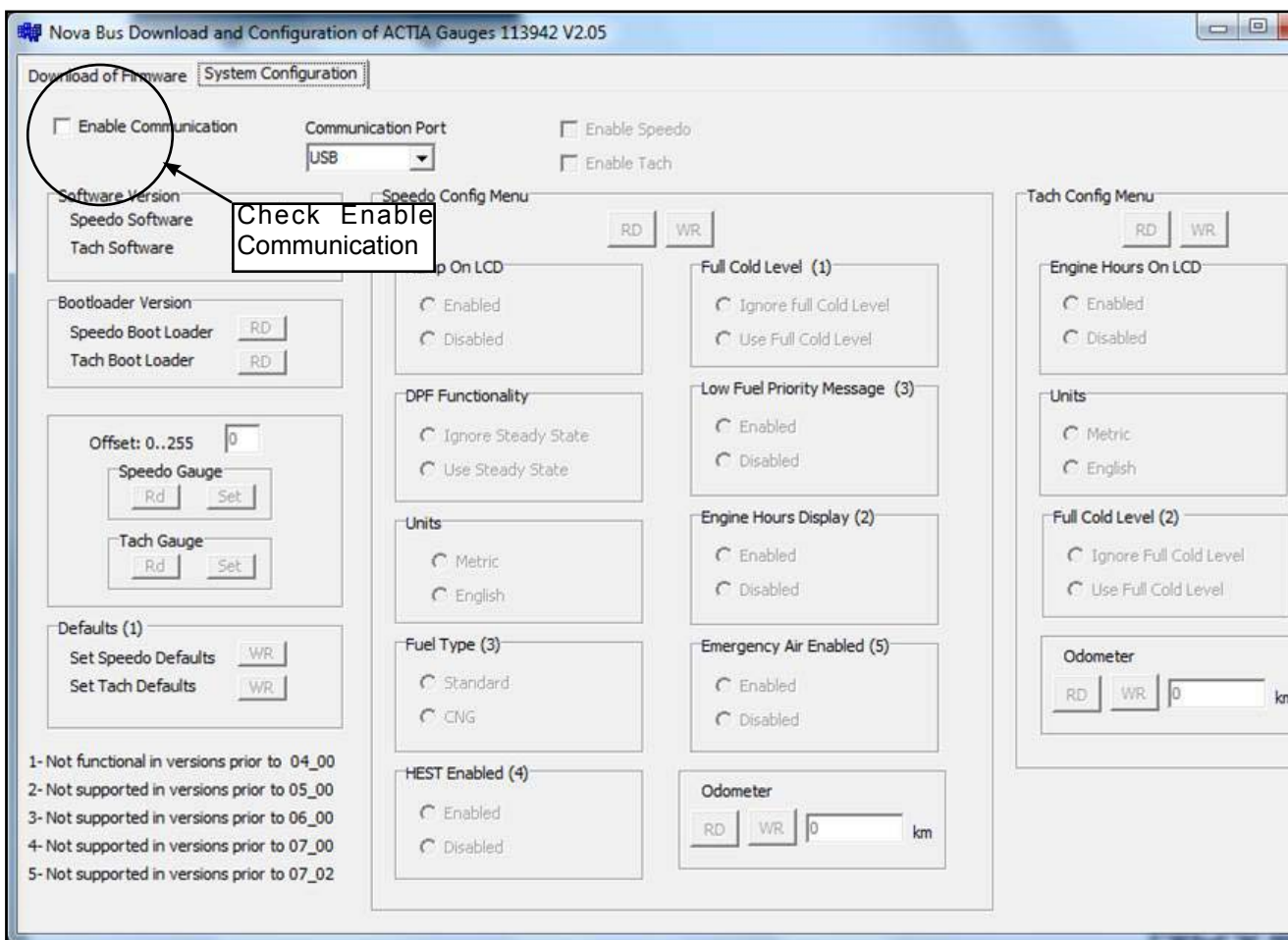


Figure 20 - Enable Communication

3.1.13 Check the Enable Speedo box (see Figure 21).

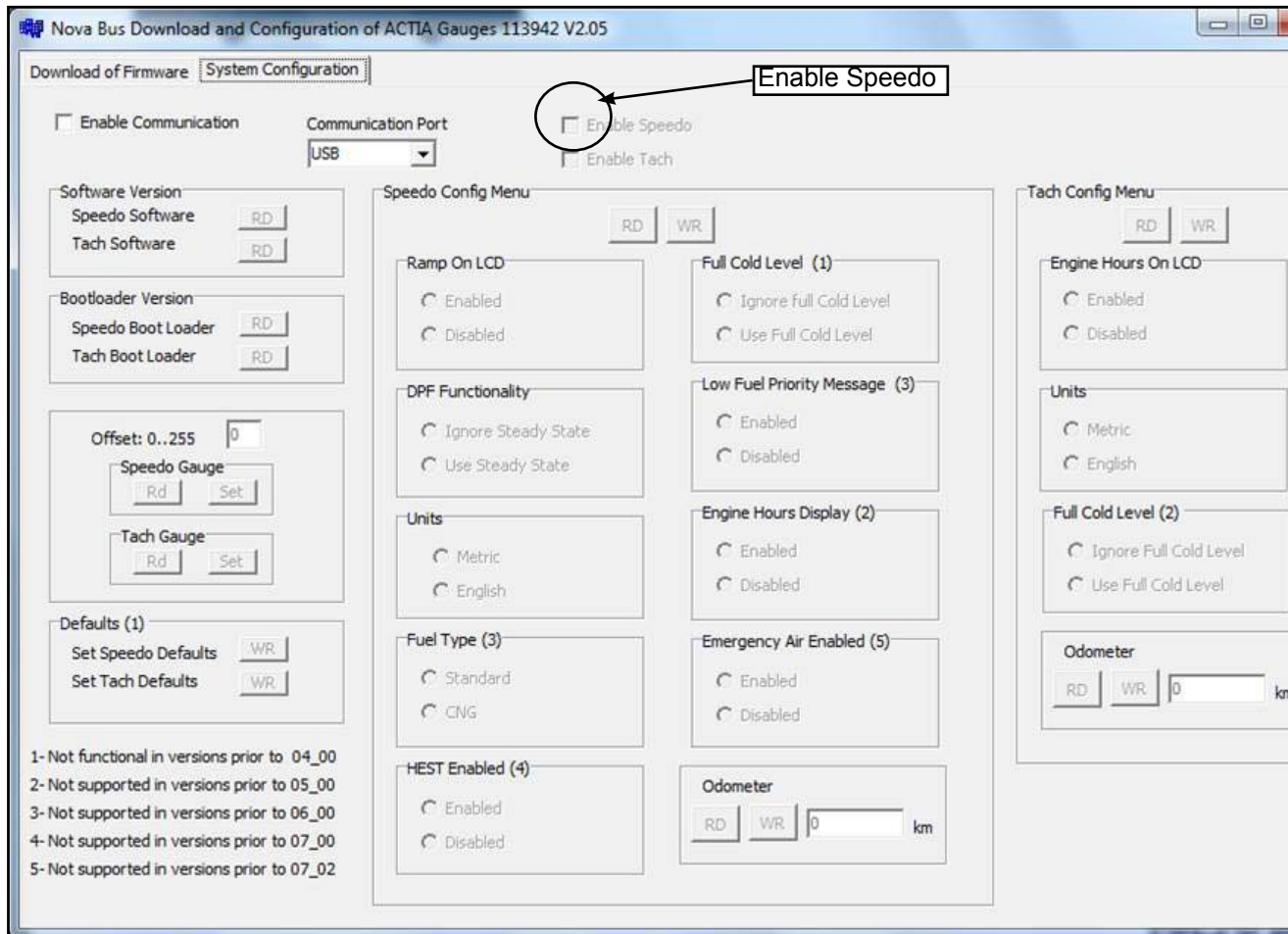


Figure 21 - Enable Speedometer

3.1.14 Click the Read (RD) button in the Speedo Config Menu to display the configuration of parameters (see Figure 22).

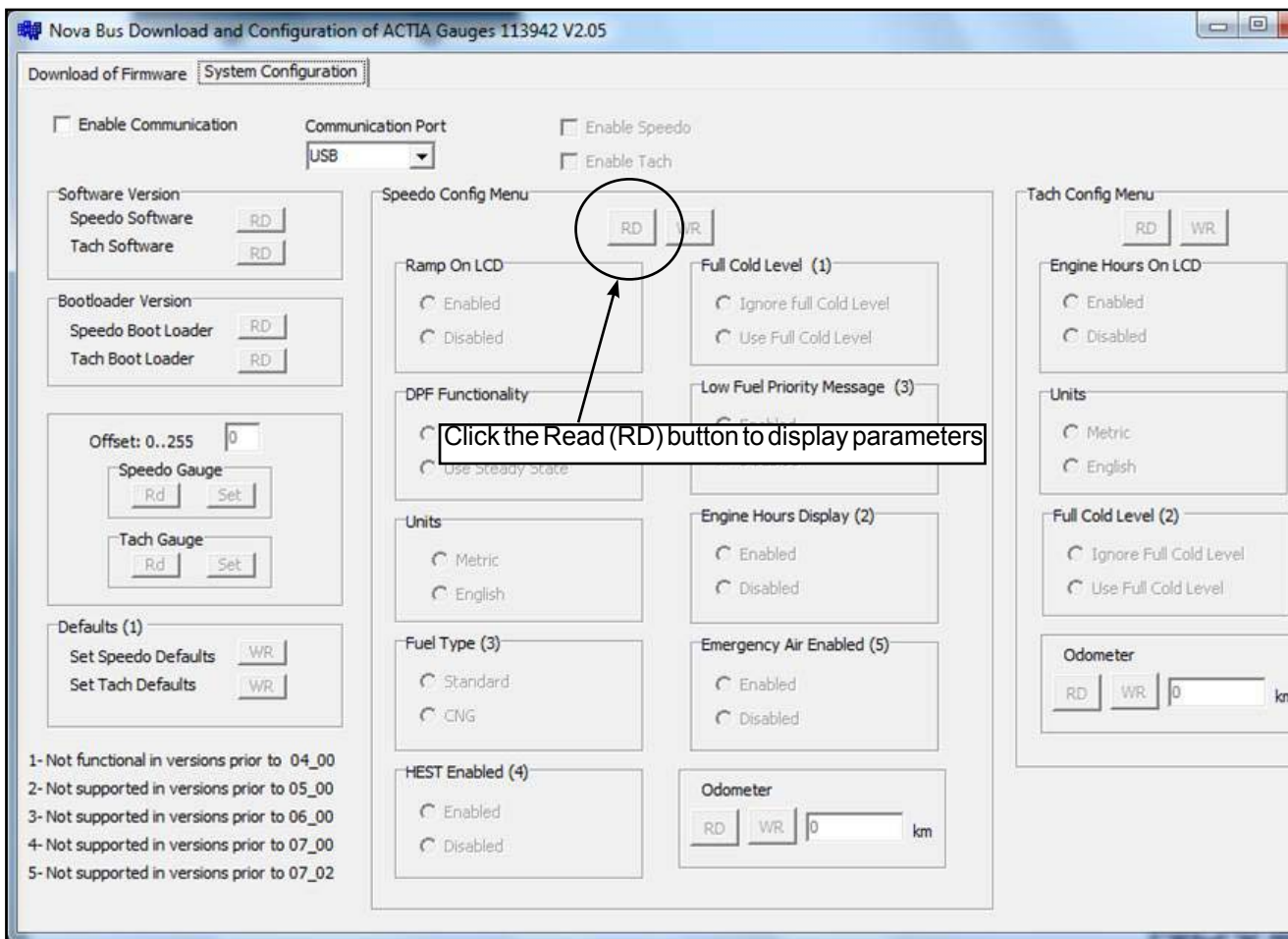


Figure 22 - Click the Read (RD) Button

3.1.15 Check that the software version is correct per the table on page 2. Check whether the Ramp On LCD, DPF Functionality, Units, HEST Enabled, and Emergency Air Enabled parameters are the same as in step 3.1.5. If the configuration remains the same, skip to the next step. If the configuration is different, make the necessary changes then click (WR) to save (see Figure 23).

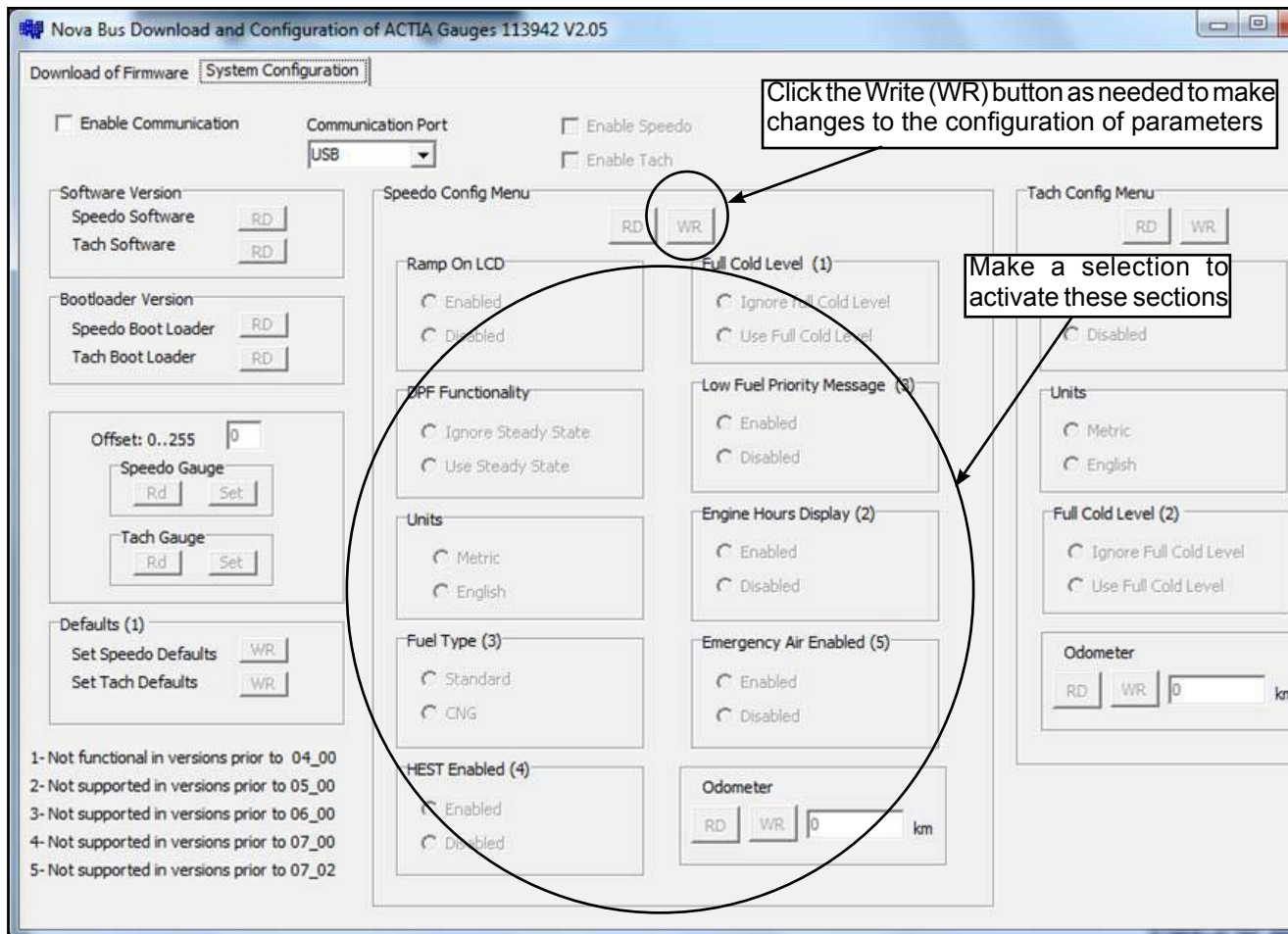


Figure 23 - Adjusting Speedometer Parameters

3.1.16 Adjust the needle zero as needed.

Step 1: Check Enable Communication.

Step 2: Click RD and note the value displayed in the offset box.

Step 3: If the speedometer needle position is above zero, enter a new value lower than the one displayed in the offset box, e.g. if the value shown is 50, enter 40 in the offset box.

Step 4: Click Set.

Step 5: Repeat steps 1-3 until the needle is correctly positioned at zero (see Figure 24).

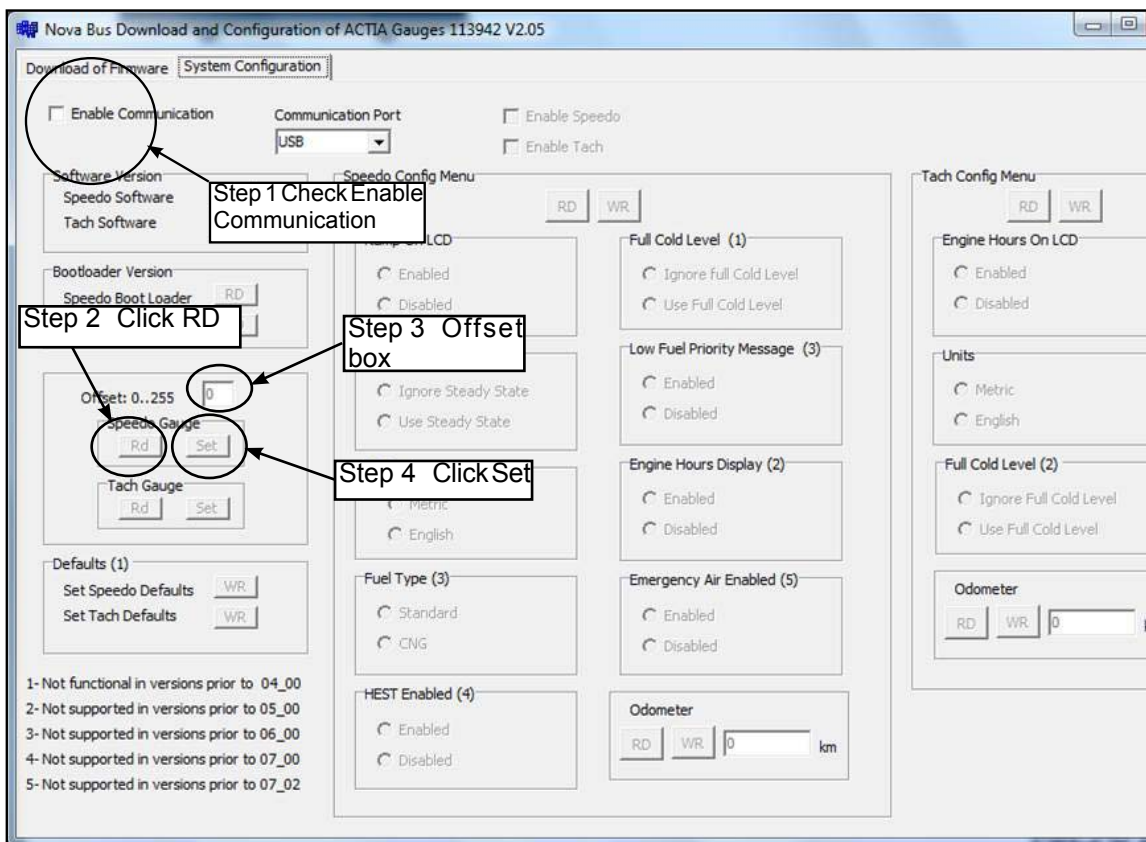


Figure 24 - Adjusting Needle to Zero

SPEEDOMETER PROCEDURE

2013 ENGINES AND LATER



NOTE

Before following the Actia gauge programming procedure, set the Master Control Switch on the operator's control panel to OFF. In the battery compartment, turn the Battery Disconnect Switch OFF, then back ON. On the operator's control panel, turn the hazard lights switch ON and leave it on until programming of the Actia gauges is complete.

3.1.17 In the Download of Firmware tab, select the appropriate communication port from the drop-down list (see Figure 25).

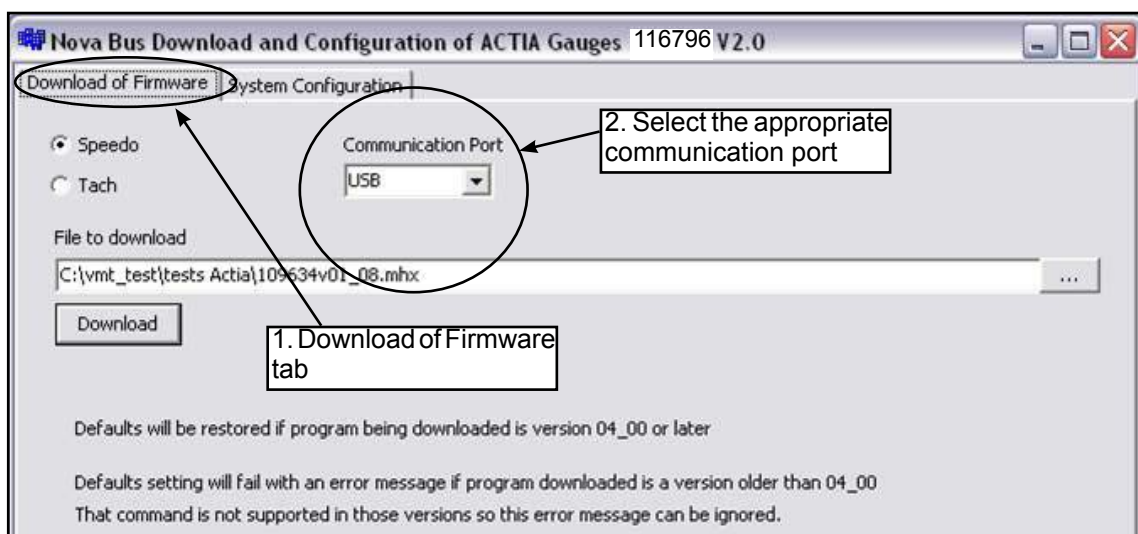


Figure 25 - Select the Appropriate Communication Port

3.1.18 Select the required gauge (see Figure 26).

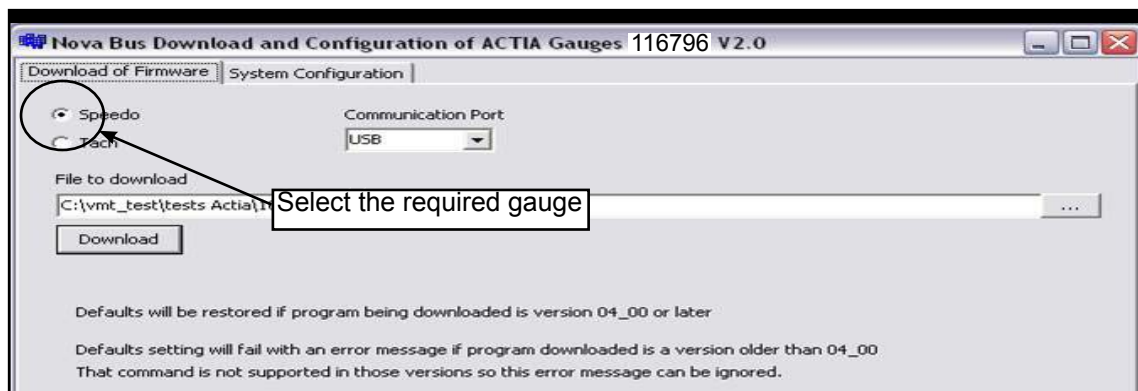


Figure 26 - Select the Required Gauge

3.1.19 Use the Browse button to select the right program for the gauge being reprogrammed (see Figure 27).

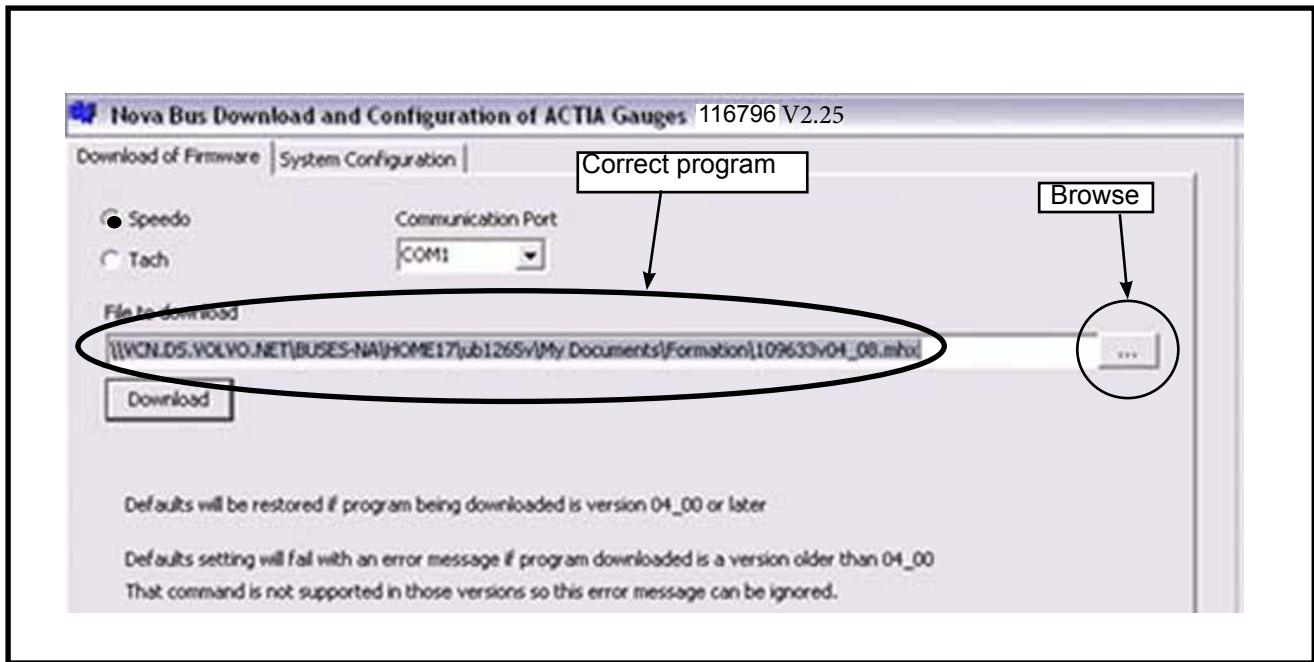


Figure 27 - Select the File to Download

3.1.20 Click the Download button (see Figure 28).

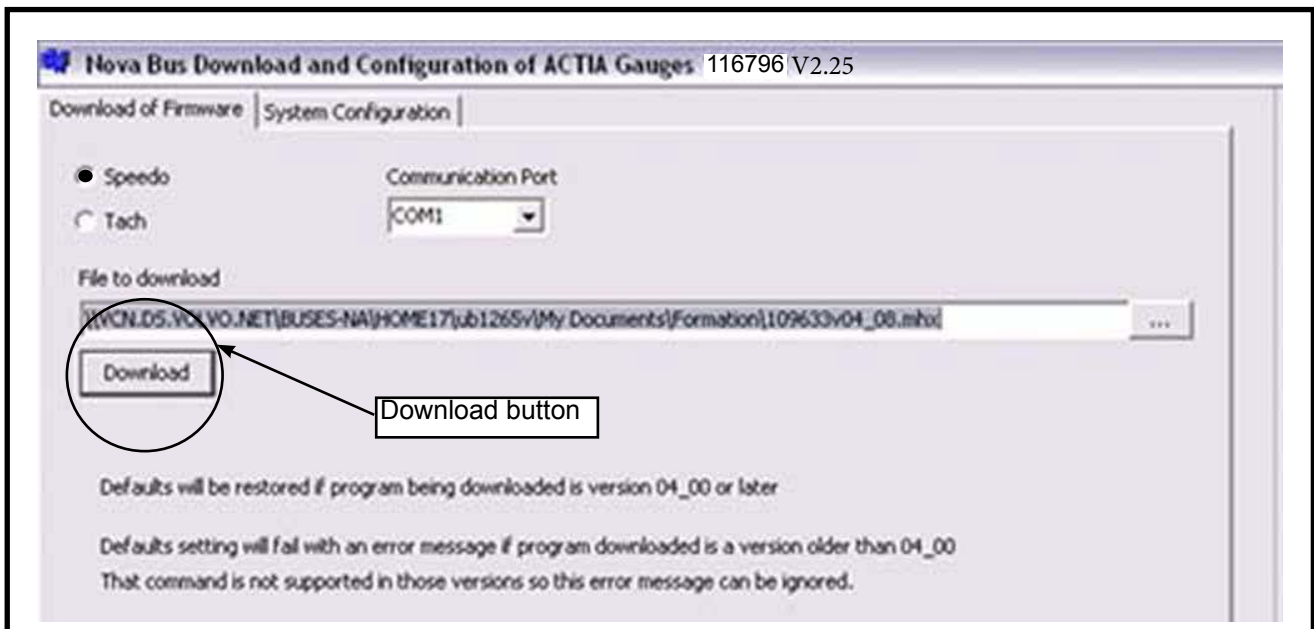


Figure 28 - Download the Program

3.1.21 A download progress window is displayed. A new window opens once the download process is complete (see Figure 29).

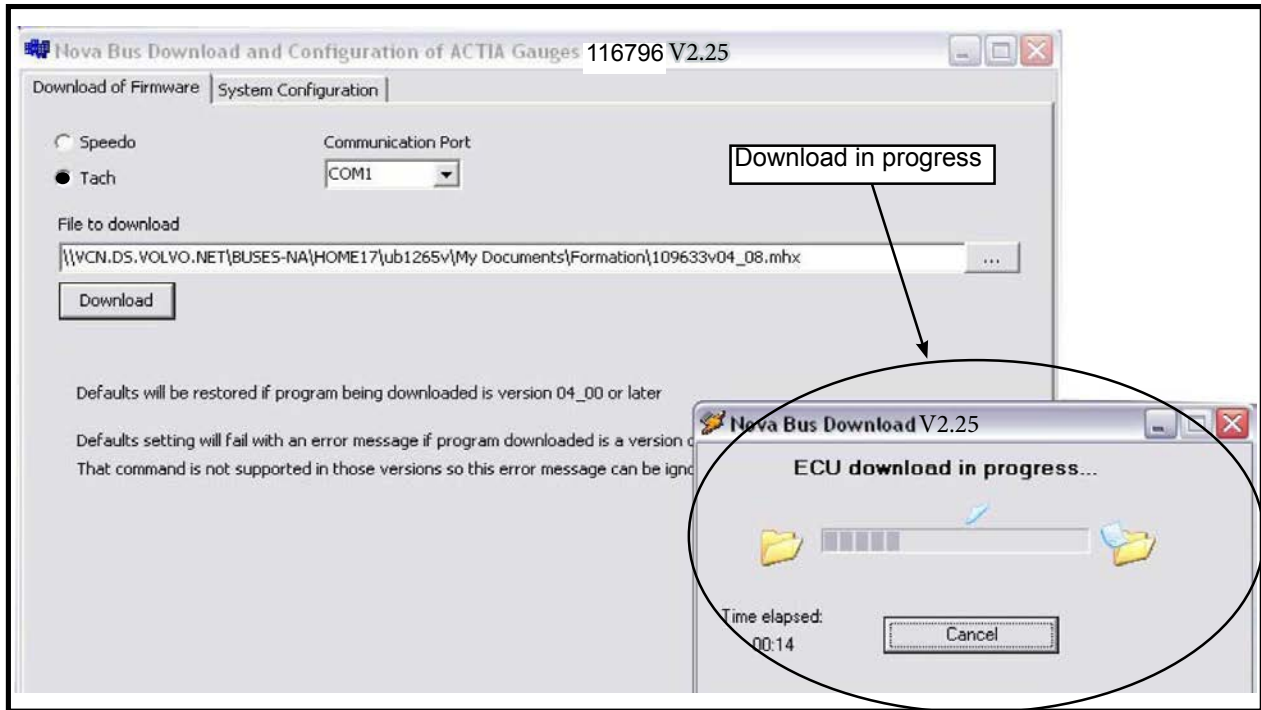


Figure 29 - Program Download

3.1.22 In the System Configuration tab, select the appropriate communication port from the drop-down list (see Figure 30).

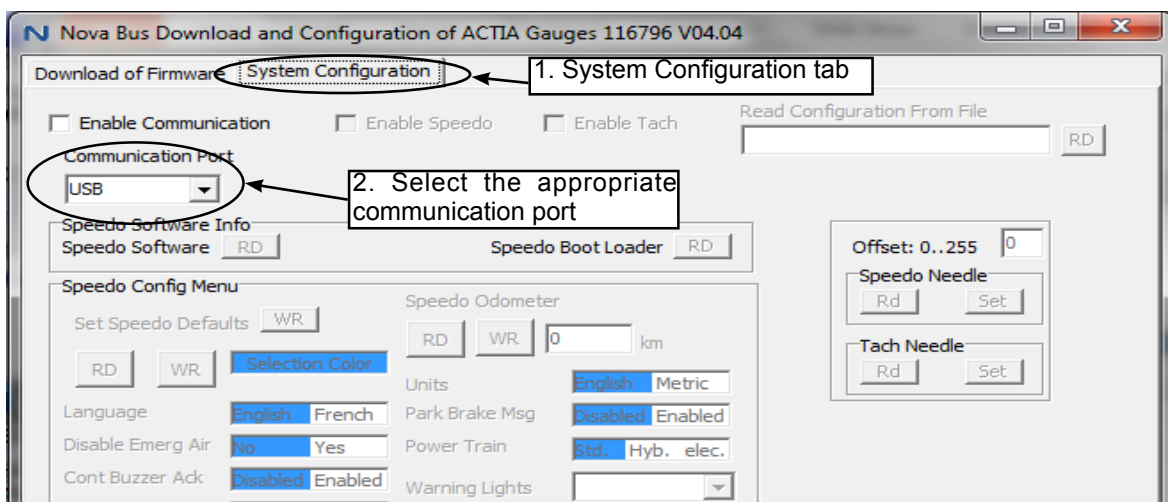


Figure 30 - Select the Appropriate Communication Port



WARNING

To check on the program download status, use the RD button in the Speedo Config Menu; make sure not to use the WR button, as this would cause the speedometer to return to its previously set values.

3.1.23 In step 5, use the RD button in the Read Configuration From File section to browse to the correct file. Select SCP_LXXX_Rev_Y.txt, where LXXX is the bus lot number. Click OK to start the automatic file download (see Figure 31).

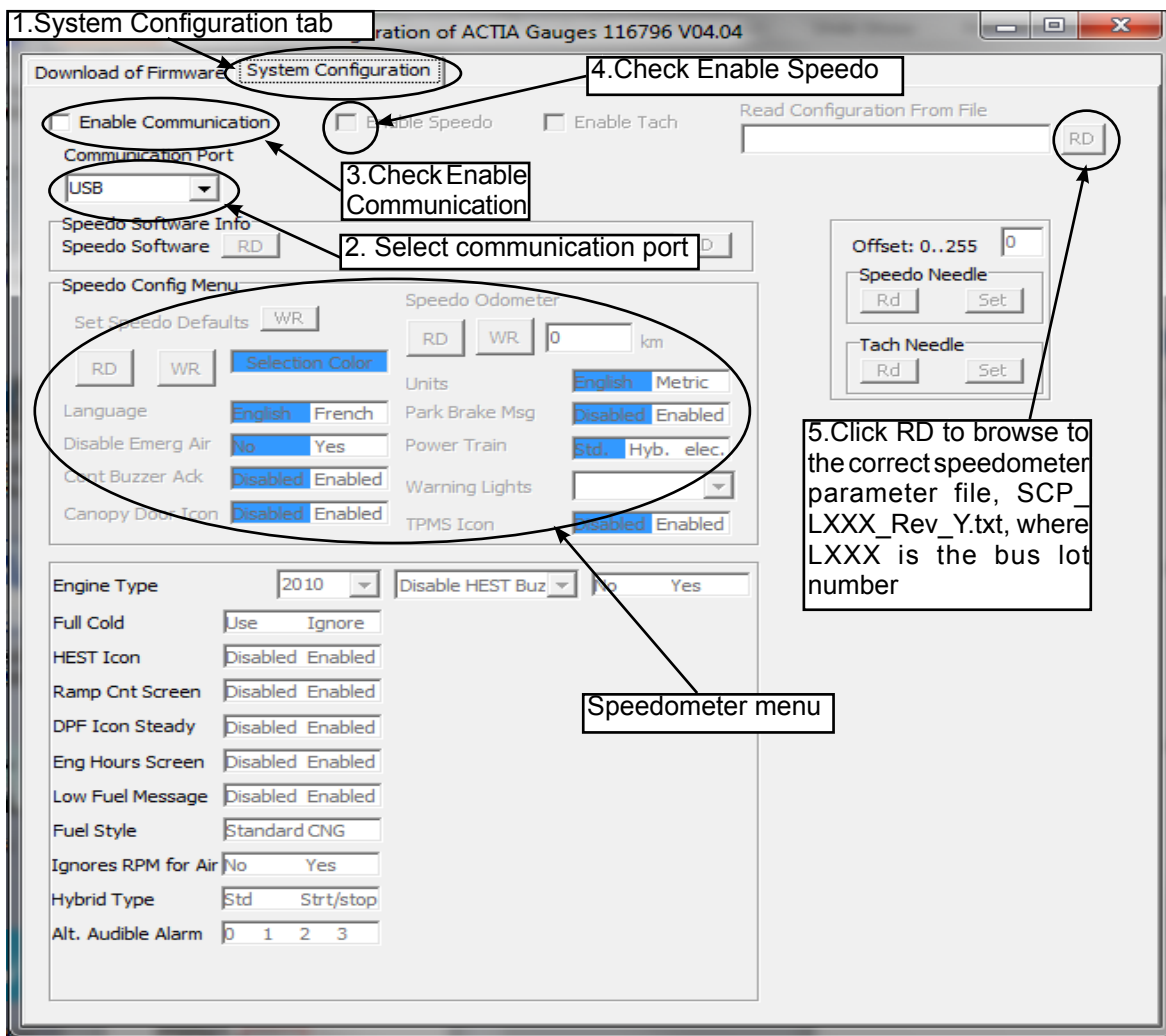


Figure 31 - Speedometer Adjustments

3.1.24 Adjust the needle zero as needed.

- Step 1: Click RD and note the value displayed in the offset box.
- Step 2: Click RD and note the value displayed in the offset box.
- Step 3: Click Set.
- Step 4: Repeat steps 1-3 until the needle is correctly positioned at zero (see Figure 32).

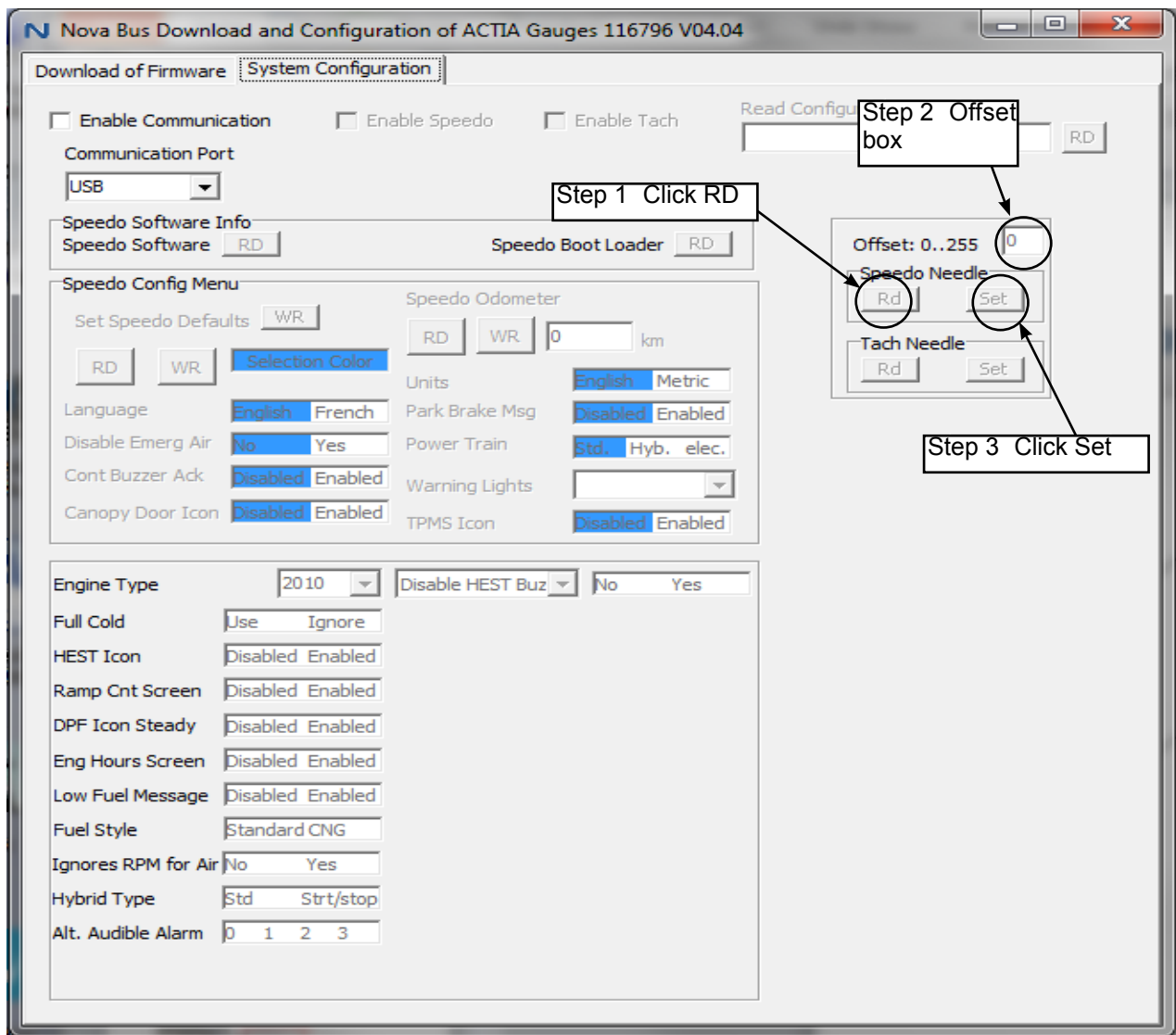


Figure 32 - Adjusting Needle to Zero

TACHOMETER PROCEDURE

2005-2012 ENGINES

4.1.1 Throughout the entire download procedure, the MASTER CONTROL SWITCH must be in the OFF position and the engine start switch, set the engine compartment switch to rear mode. Follow the steps in Figure 33. Note the configuration of tachometer parameters. This configuration will be required in step 4.1.5 (see Figure 33).

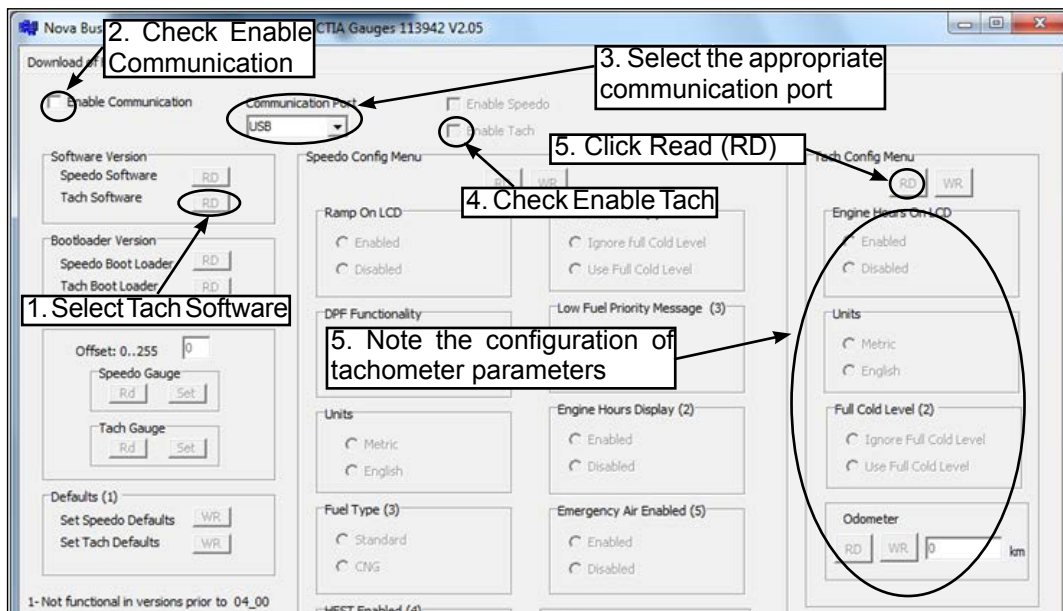


Figure 33 - Tachometer Menu Screen

4.1.2 Follow the steps in Figure 34 to select the right program for the gauge being reprogrammed (see Figure 34).

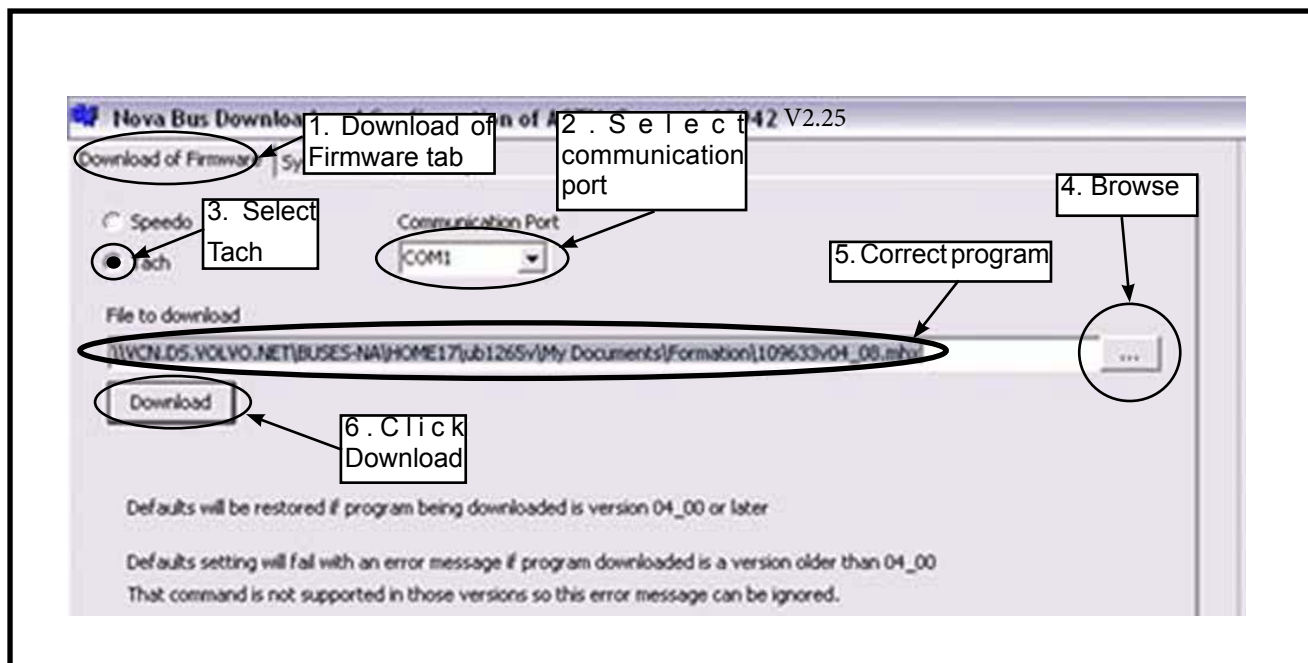


Figure 34 - Select the File to Download

4.1.3 A download progress window is displayed. A new window opens once the download process is complete (see Figure 35).

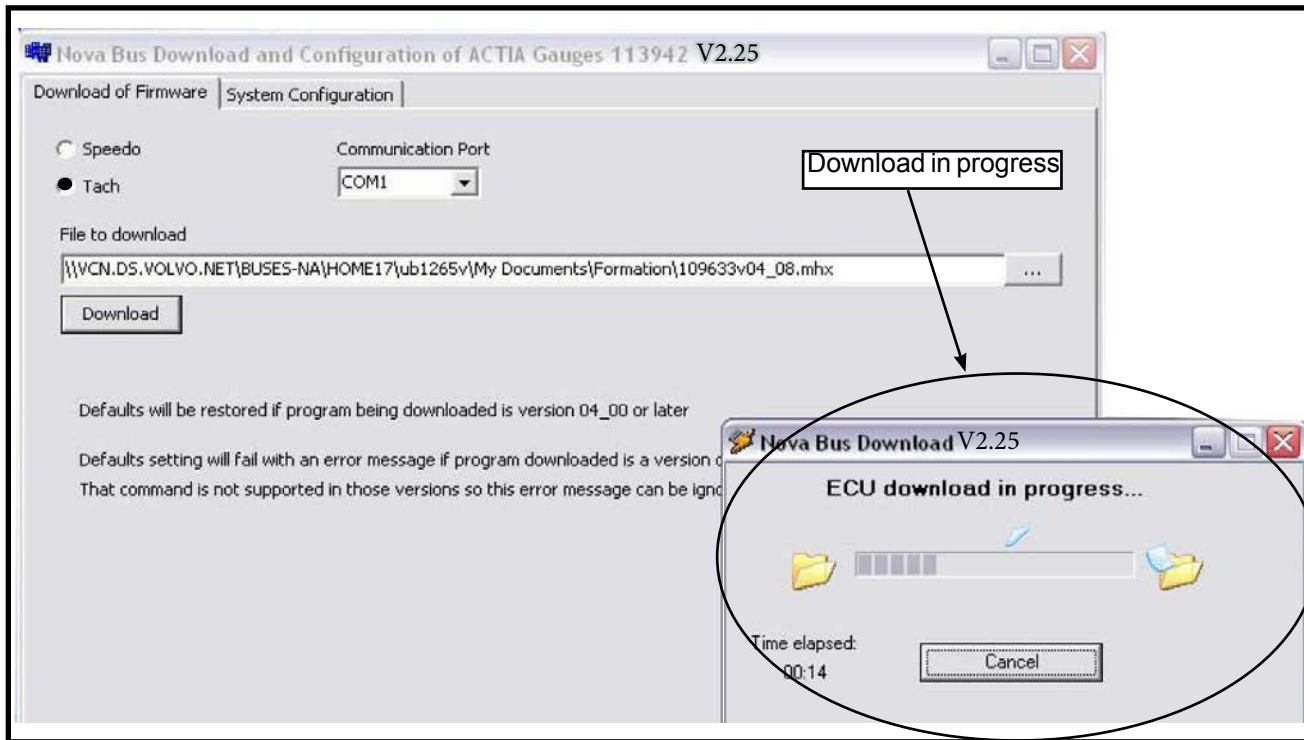


Figure 35 - Program Download

4.1.4 Use the Tach Config menu to check tachometer parameters and make the required adjustments. Check that the configuration of parameters is the same as in step 4.1.1. If the configuration remains the same, skip to the next step. If the configuration is different, make changes as necessary and click WR to save (see Figure 36).

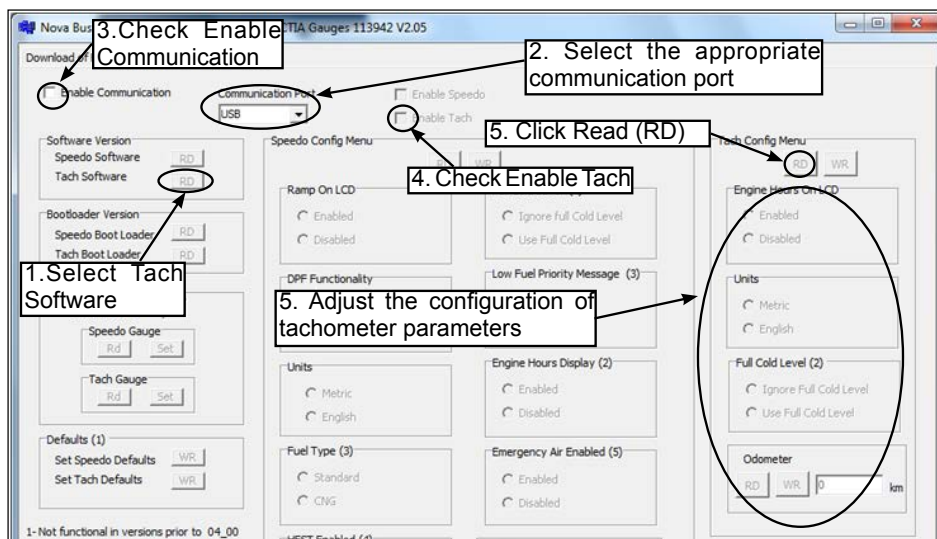


Figure 36 - Adjusting Tachometer Parameters

2013 ENGINES AND LATER

4.1.5 Throughout the entire download procedure, the MASTER CONTROL SWITCH must be in the OFF position and the engine start switch, set the engine compartment switch to rear mode. Follow the steps in Figure 37 to reprogram the tachometer gauge (see Figure 37).

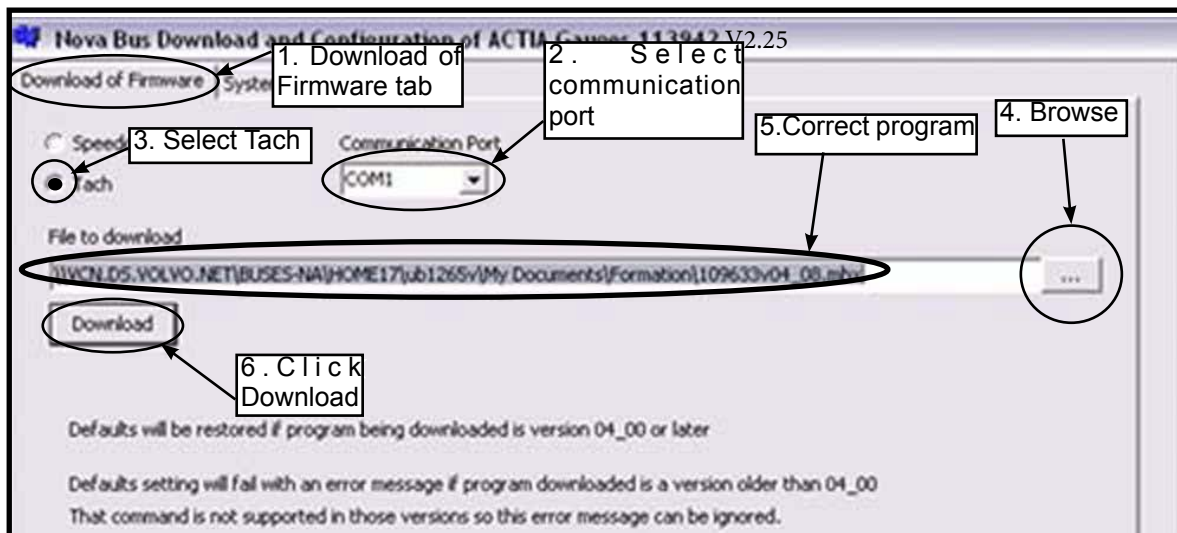


Figure 37 - Select the File to Download

4.1.6 A download progress window is displayed. A new window opens once the download process is complete (see Figure 38).

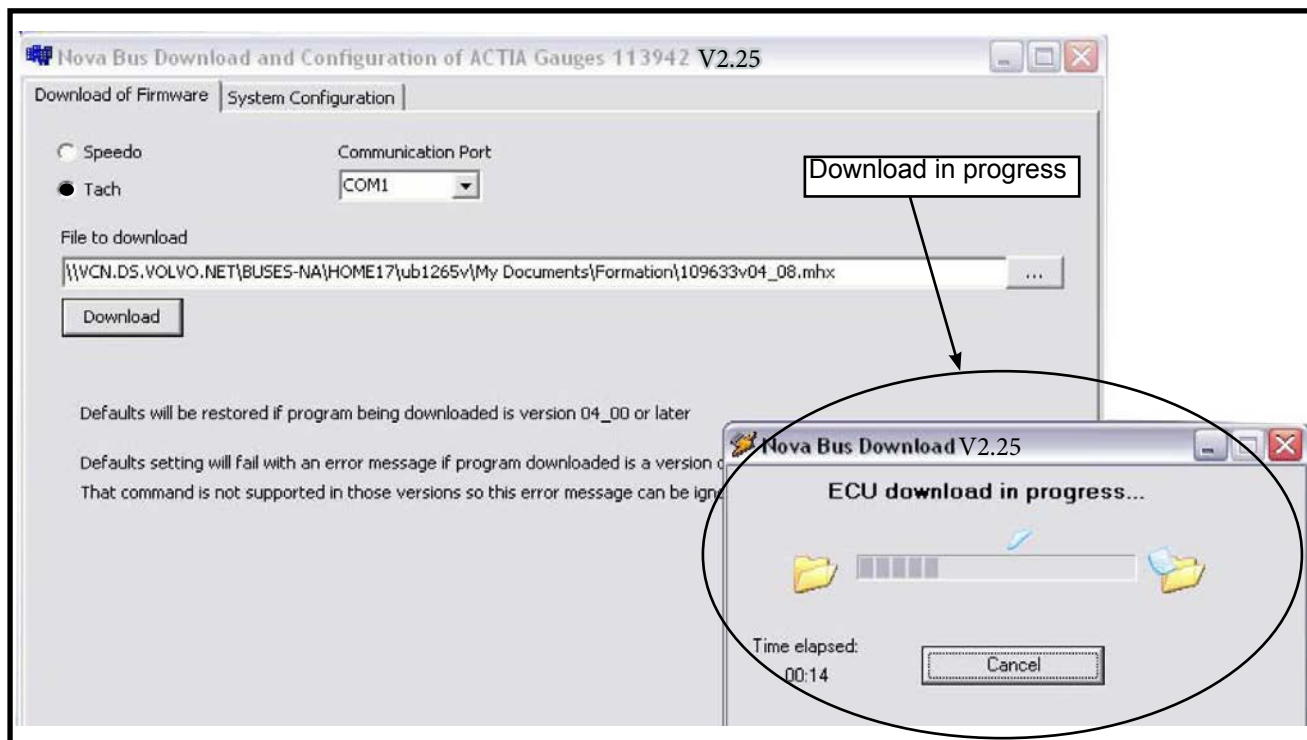


Figure 38 - Program Download

**WARNING**

To check on the program download status, use the RD button in the Tach Config Menu; make sure not to use the WR button, as this would cause the tachometer to return to its previously set values.

4.1.7 In step 5, use the RD button in the Read Configuration From File section to browse to the correct file. Select TCP_LXXX_Rev_Y.txt, where LXXX is the bus lot number. Click OK to start the automatic file download (see Figure 39).

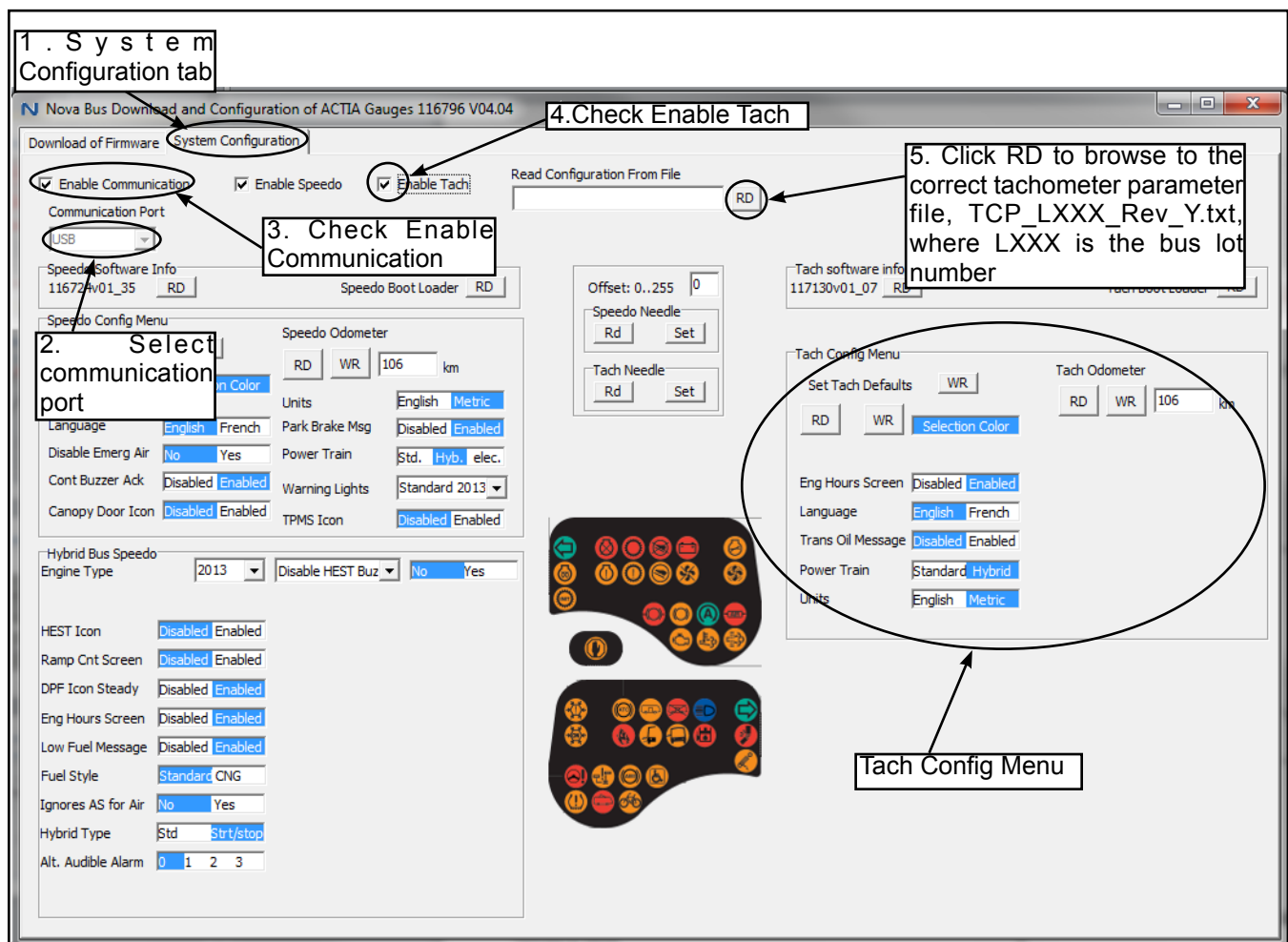


Figure 39 - Tachometer Adjustments

- 4.1.8 Close software and computer.
- 4.1.9 Disconnect cable.
- 4.2.0 Close the left overhead console panel.
- 4.2.1 Start the vehicle and conduct operational test before returning vehicle in service.

