NOVA BUS

INFORMATION LETTER LI3944E

REFERENCE:	Nova Bus Manuals
SECTION:	11: Fuel and exhaust
RS Nº:	MQR 7621-1093
EFFECTIVE IN PROD.:	L965 (2016SE)

APPLICATION DEADLINE:N/A

SUBJECT:	Cummins engine code 3568
JUSTIFICATION:	Engine derating, stalling, and loss of power may occur as a result of code 3568.

LEVEL	DESCRIPTION	DIRECT CHARGES		TIME
		LABOUR	MATERIAL	
1	Improve routing of DEF coolant lines	Client	Client	45 min
2	–	–	–	–

MATERIAL

QTY	PART Nº	REV.	DESCRIPTION	REPLACES PART N°
LEVEL 1				
1	N56339	–	Tie wrap	–
*Note 1	NT08134	–	Positioning JIG	–
LEVEL 2				
–	–	–	–	–

To order, please contact Prevost Parts by phone at 1-800-771-6682, by fax at 1-888-668-2555 or by email at prevostparts.commandes@volvo.com. Specify document number, quantity of parts required and shipping address.

***Note 1: One Jig per customer is sufficient. Do not order one JIG per vehicle.**

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.
	Yes	–	

REVISION HISTORY

REV.	DATE	CHANGE DESCRIPTION	WRITTEN BY
NR	2017AL24	Initial release	Marc Rougeau

APPROVED BY: Daniel Theriault

CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
Ames Transportation Agency - Iowa	L904	6101	6104	S92J1G9775221	S92J7G9775224	4
Austin - CMTA - Texas	L704	5051	5068	L82J7E4500471	L82J2E4500488	18
Barrie - Ontario	L878	1501	1504	L82JXF3001691	L82J6F3001719	4
Barrie - Ontario	L955	1601	1604	L82J7G9775408	L82J9G9775412	4
BC Transit - BCT - British Columbia	L858	9447	9481	L82JXE3001401	L82J5F3001436	35
BC Transit - BCT - British Columbia	L891	—	—	L82J5F3001565	L82J2F3001569	5
Belleville Ontario (ref. L962)	L840	8092	8092	L82J9E4500715	L82J9E4500715	1
Bow Valley Transit - Alberta	L993	-	-	L82JXG3750329	L82J6G3750330	2
Brampton - Ontario	L789	—	—	L82J4E3001216	L82J1E3001223	8
Brampton - Ontario	L816	—	—	L82J3E3001224	L82J9E3001230	7
Brampton - Ontario	L864	1501	1510	L82JXF3001500	L82J6F3001509	10
Brampton - Ontario	L865	1511	1519	L82JXF3001514	L82J9F3001522	9
Brampton - Ontario	L941	1614	1623	L82J1G3750123	L82J2G3750132	10
Brampton - Ontario	L942	1601	1613	L82J6G3750070	L82J4G3750083	13
Brandon - Manitoba	L899	67	70	L82J2G3750180	L82J8G3750183	4
Brantford - Ontario	L775	10131	10132	L82U1D3000999	L82U2D3001000	2
Brantford - Ontario	L928	10151	10153	L82J7F3001793	L82J0F3001795	3
Brantford - Ontario	LA03	10161	10612	L82J0G3750369	L82J7G3750370	2
Burlington - Ontario	L887	7017-15	7025-15	L82J7F3001681	L82J8F3001723	9
Chicago Transit Authority - CTA - Illinois	L773	—	—	L82JXD4500429	L82J6D4500430	2
Chicago Transit Authority - CTA - Illinois	L811	7902	7949	L82J6E4500509	L82J4E4500556	48
Chicago Transit Authority - CTA - Illinois	L837	7950	7999	L82J6E4500655	L82J1E4500708	50
Chicago Transit Authority - CTA - Illinois	L847	8000	8049	L82J1E4500773	L82JXE4500822	50
Chicago Transit Authority - CTA - Illinois	L848	8050	8099	L82JXF4500823	L82J1F4500872	50
Chicago Transit Authority - CTA - Illinois	L849	8100	8149	L82J5F4500874	L82J3F4500923	50
Chicago Transit Authority - CTA - Illinois	L850	8150	8199	L82J5F4500924	L82J6G9775013	50
Chicago Transit Authority - CTA - Illinois	L943	8200	8324	L82JXG9775225	L82J3G9775406	125
Clemson Area Transit - South Carolina	L769	—	—	S92U1D4500418	S92U1D4500418	1
Cornwall Ontario	L935	—	—	L82J3F3001838	L82J5F3001839	2
Durham Region Transit - Ontario	L872	8551	8553	L82J0F3001523	L82J4F3001525	3
Durham Region Transit - Ontario	L888	8554	8559	L82J2F3001703	L82J1F3001708	6
Durham Region Transit - Ontario	L996	8560	8563	L82J1G3750414	L82J7G3750417	4
Durham Region Transit - Ontario	LA19	8564	8565	L82J9G3750418	L82J0G3750419	2
Fredericton - New Brunswick	L774	8131	8131	L82U7D3000960	L82U7D3000960	1
Fredericton - New Brunswick	L812	—	—	L82J4E3001202	L82J4E3001202	1
Fredericton - New Brunswick	L836	8143	8143	L82J9E3001390	L82J9E3001390	1
Fredericton - New Brunswick	L901	8151	8151	L82J7F3001602	L82J7F3001602	1
Fredericton - New Brunswick	L968	8161	8162	L82J1G3750218	L82J3G3750219	2
Grande Prairie Alberta	L834	—	—	L82J7E3001386	L82J2E3001389	4
Guelph - Ontario	L767	237	239	L82UXD3000967	L82U3D3000969	3
Guelph - Ontario	L835	240	243	L82J0E3001391	L82J6E3001394	4
Guelph - Ontario	L927	244	247	L82J1F3001756	L82J9F3001763	4
Guelph - Ontario	L985	248	251	L82J7G3750255	L82J2G3750258	4

CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
Halifax - Nova Scotia	LA11	1208	1236	L82J1G9775579	L82J4G9775608	29
Halifax - Nova Scotia	LA14	1237	1237	L82J1G9775596	L82J1G9775596	1
Houston - Texas	L951	1915	1915	L82J0G9775203	L82J0G9775203	1
Houston - Texas	L952	1580	1580	S92J5G9775318	S92J5G9775318	1
Houston - Texas	L981	1916	1994	L82J8G9775434	L82J4G9775513	79
Houston - Texas	L982	1581	1599	S92J5G9775514	S92J5G9775545	19
Keolis Canada - Québec	L854	—	—	L82JXE3001396	L82J8E3001400	5
Keolis Canada - Québec	L876	—	—	L82J5F3001453	L82J2F3001457	5
Keolis Canada - Québec	L906	—	—	L82J9F3001732	L82J2F3001734	3
Keolis Canada - Québec	L988	—	—	L82J8G3750331	L82J9G3750337	7
Kingston Ontario	L880	1502	1502	L82JXF3001786	L82JXF3001786	1
Kingston Ontario	L889	1687	1689	L82J1G3750252	L82J5G3750254	3
Kingston Ontario	L925	1504	1510	L82J5F3001808	L82J5F3001811	4
Kingston Ontario	L954	1683	1686	L82J4G3750259	L82J4G3750262	4
Lethbridge - Alberta	L868	—	—	L82J2F3001510	L82J2F3001510	1
Lethbridge - Alberta	L997	181	186	L82J5G9775570	L82JXG9775578	6
Milton - Ontario	L884	1701	1702	L82J0G3750338	L82J2G3750339	2
Moncton (Codiac) - New Brunswick	LA06	—	—	L82J3G9775552	L82JXG9775564	9
MTD - Santa Barbara, California	L730	—	—	S92J8E4500567	S92J1E4500569	3
New York City Transit - New York	L841	8094	8269	L82J2F4500959	L82J2F4501075	82
New York City Transit - New York	L842	8090	8213	L82J4F4501076	L82J7F4501170	86
New York City Transit - New York	L843	8214	8380	L82J9F4501171	L82J9G9775023	82
New York City Transit - New York	L844	8381	8170	L82J0G9775024	L82J0G9775105	82
New York City Transit - New York	L845	8171	8480	L82J2G9775106	L82J6G9775187	82
New York City Transit - New York	L958	5439	5442	S92J9G9775533	S92J9G9775631	4
New York Demo	L840	8090	8091	L82J5E4500713	L82J7E4500714	2
New York Demo	L940	—	—	S92J7F4501257	S92J7F4501257	1
Niagara Falls - Ontario	L771	1396	1397	L82U9D3000958	L82U0D3000959	2
Niagara Falls - Ontario	L987	1601	1604	L82J6G3750344	L82J1G3750347	4
North Bay - Ontario	L895	784	785	L82J7F3001678	L82J9F3001679	2
North Bay - Ontario	L979	786	789	L82J4G3750312	L82J6G3750313	2
Oakville - Ontario	L874	—	—	L82J6F3001526	L82JXF3001531	6
Oakville - Ontario	L881	—	—	L82J2F3001717	L82J8F3001740	5
Oakville - Ontario	L945	-	-	L82J9G3750211	L82JXG3750217	7
Orillia Ontario	L965	1722	1724	L82J3G3750320	L82J7G3750322	3
Peterborough - Ontario	L770	55	60	L82U0D3000993	L82UXD3000998	6
Peterborough - Ontario	L870	61	63	L82JXF3001612	L82J3F3001614	3
Peterborough - Ontario	L919	64	66	L82J6F3001767	L82JXF3001769	3
Peterborough - Ontario	L966	67	71	L82J2G3750230	L82JXG3750234	5
Red Deer - Alberta	L766	1104	1105	L82U7D3001025	L82U9D3001026	2
Red Deer - Alberta	L772	1106	1108	L82J2E3001120	L82J6E3001122	3
Red Deer - Alberta	L813	10008	10009	L82J2E3001361	L82J4E3001362	2
Red Deer - Alberta	L869	—	—	L82J9F3001570	L82J0F3001571	2
Red Deer - Alberta	L926			L82J2F3001796	L82J4F3001797	2

CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
Regina - Saskatchewan	L776	663	669	L82U4D3001001	L82U5D3001007	7
Regina - Saskatchewan	L807	671	685	L82J8E3001137	L82J2E3001151	15
Regina - Saskatchewan	L892	686	691	L82J5F3001484	L82J4F3001489	6
Regina - Saskatchewan	L949	692	696	L82J3G3750205	L82J0G3750209	5
Regina - Saskatchewan	L992	-	-	L82J6G3750294	L82J3G3750298	5
Sarnia Ontario	L873	151	152	L82J0F3001599	L82J0F3001600	2
Sarnia Ontario	L883	153	153	L82J4G3750021	L82J4G3750021	1
Sarnia Ontario	L963	162	162	L82J7G3750305	L82J7G3750305	1
Saskatoon - Saskatchewan	L831	1401	1405	L82J7E3001307	L82J9E3001311	5
Saskatoon - Saskatchewan	L894	1501	1510	L82J0F3001490	L82J7F3001499	10
Saskatoon - Saskatchewan	L953	1601	1610	L82J9G3750158	L82JXG3750167	10
Sault Ste. Marie Ontario	L934	—	—	L82JXG3750038	L82JXG3750038	1
St. Catharines Ontario	L879	1501	1504	L82J4F3001587	L82J4F3001590	4
St. Catharines Ontario	L882	1601	1605	L82J9G3750225	L82J9G3750229	5
St. Catharines Ontario	L898	1560	1560	S92J4F3001663	S92J4F3001663	1
St. John - New Brunswick	L871	40585	40586	L82J8F3001592	L82JXF3001593	2
St. John - New Brunswick	L939	40687	40687	L82J0G3750078	L82J0G3750078	1
St. John's - Newfoundland	L808	1415	1419	L82J4E3001152	L82J1E3001156	5
St. John's - Newfoundland	L875	1520	1525	L82JXF3001478	L82J3F3001483	6
St. John's - Newfoundland	L930	1626	1630	L82J7F3001826	L82J9F3001830	5
Stratford - Ontario	L893	—	—	L82J9F3001584	L82J0F3001585	2
Sudbury - Ontario	L890	851	855	L82JXF3001609	L82J6F3001641	5
Sudbury - Ontario	L994	861	865	L82J1G3750364	L82J9G3750368	5
Thunder Bay - Ontario	L806	—	—	L82J6E3001170	L82J8E3001171	2
Thunder Bay - Ontario	L863	—	—	L82J8F3001558	L82J6F3001560	3
Thunder Bay - Ontario	L944	—	—	L82J6G3750084	L82JXG3750086	3
Timmins - Ontario	L783	—	—	L82U8D3001017	L82UXD3001018	2
Timmins - Ontario	L839	—	—	L82J8E3001395	L82J8E3001395	1
Timmins - Ontario	L995	-	-	L82JXG3750377	L82JXG3750377	1
Toronto Transit Commission - TTC - Ontario	L777	9027	9152	S92J7E3001123	S92J6E3001372	126
Toronto Transit Commission - TTC - Ontario	L859	8400	8400	L82J5F3001405	L82J5F3001405	1
Toronto Transit Commission - TTC - Ontario	L860	8401	8504	L82J0F3001554	L82JXF3001805	104
Toronto Transit Commission - TTC - Ontario	L937	8510	8617	L82J9G3750001	L82J3G3750401	108
University of Alabama - Alabama	L787	7028	7029	L82J2E4500507	L82J4E4500508	2
University of Alabama - Alabama	L902	7030	7030	L82J2F4500993	L82J4F4500994	2
University of Alabama - Alabama	L961	7032	7033	L82J7G9775294	L82J9G9775295	2
University of Alabama - Alabama	LA02	7034	7037	L82J8G9775546	L82JXG9775550	4
University of Miami Florida	LA13	—	—	L82J4G9775611	L82J5G9775620	10
Walt Disney World - Florida	L763	—	—	S92U0D3001019	S92U4D3001024	6
Welland - Ontario	L991	-	-	L82J9G3750287	L82J9G3750287	1
Welland Ontario	L866			L82J9F3001648	L82J9F3001648	1
Welland Ontario	L933	—	—	L82J1G3750011	L82J1G3750011	1
Whitehorse - Yukon	L784	43	43	L82U9D3001057	L82U9D3001057	1
Whitehorse - Yukon	LA04	—	—	L82J2G3750390	L82J4G3750391	2

CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
Windsor - Ontario	L886	570	577	L82J8F3001818	L82J5F3001825	8
Woodstock - Ontario	L778	—	—	L82U2D3001014	L82U2D3001014	1
Woodstock - Ontario	L832	—	—	L82J9E3001342	L82J9E3001342	1
Woodstock - Ontario	L923	15-16	15-16	L82J9F3001746	L82J9F3001746	1
York Regional Transit - Ontario	L896	1501	1517	L82J2F3001619	L82JXF3001741	17
York Regional Transit - Ontario	L936	1518	1518	L82J3G3750012	L82J3G3750012	1
York Regional Transit - Ontario	L964	1770	1774	S92J3G3750420	S92J0G3750424	5
York Regional Transit - Ontario	L967	1601	1621	L82J2G9775414	L82J8G9775627	21
York Regional Transit - Ontario	LA07	1615	1629	L82J9G3750340	L82JXG3750363	15

WARNING

Follow your internal safety procedures.

Disconnect the batteries prior to starting any work on the vehicle. See maintenance manual section *16: Batteries* for the procedure.

NOTE

Nova Bus has received notification from its engine supplier that Cummins code 3568 can be sensitive to DEF and coolant line routing to the DEF dosing valve. Therefore, inspection/adjustment of the DEF and coolant line routing and the angle of the dosing module is recommended when code 3568 is logged.

PROCEDURE

1.1. Disable the bus from the rear engine control box (see Figure 1).

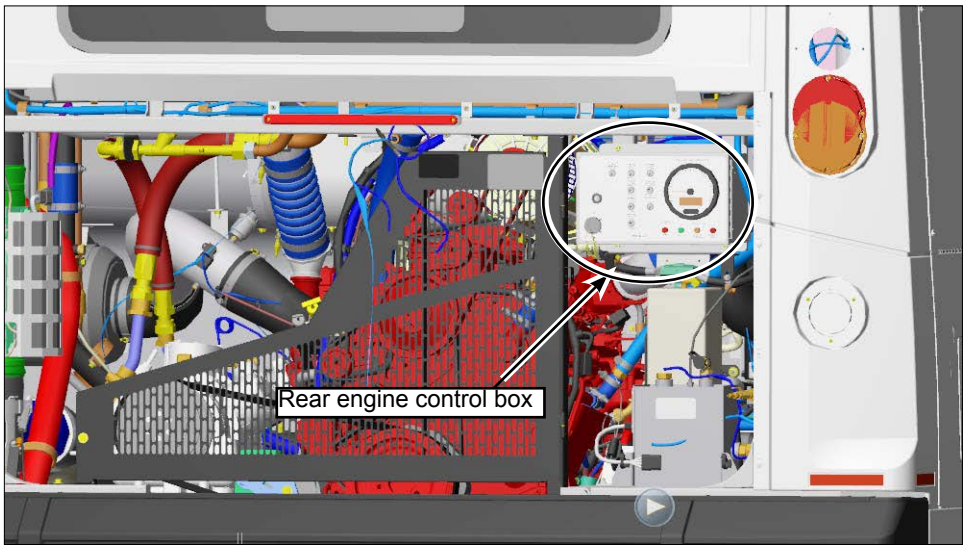

Figure 1 - Disable the Bus

1.2. Open the rear road side access door. Different configurations may not include the louvered door (see Figure 2).

Figure 2 - Open the Rear Road Side Engine Access Door

1.3. Check that the angle of the dosing module is between 45º and 85º from the vertical axis. The ideal angle is approximately 54º using JIG NT08134 as described in step 1.4 (see Figure 3).

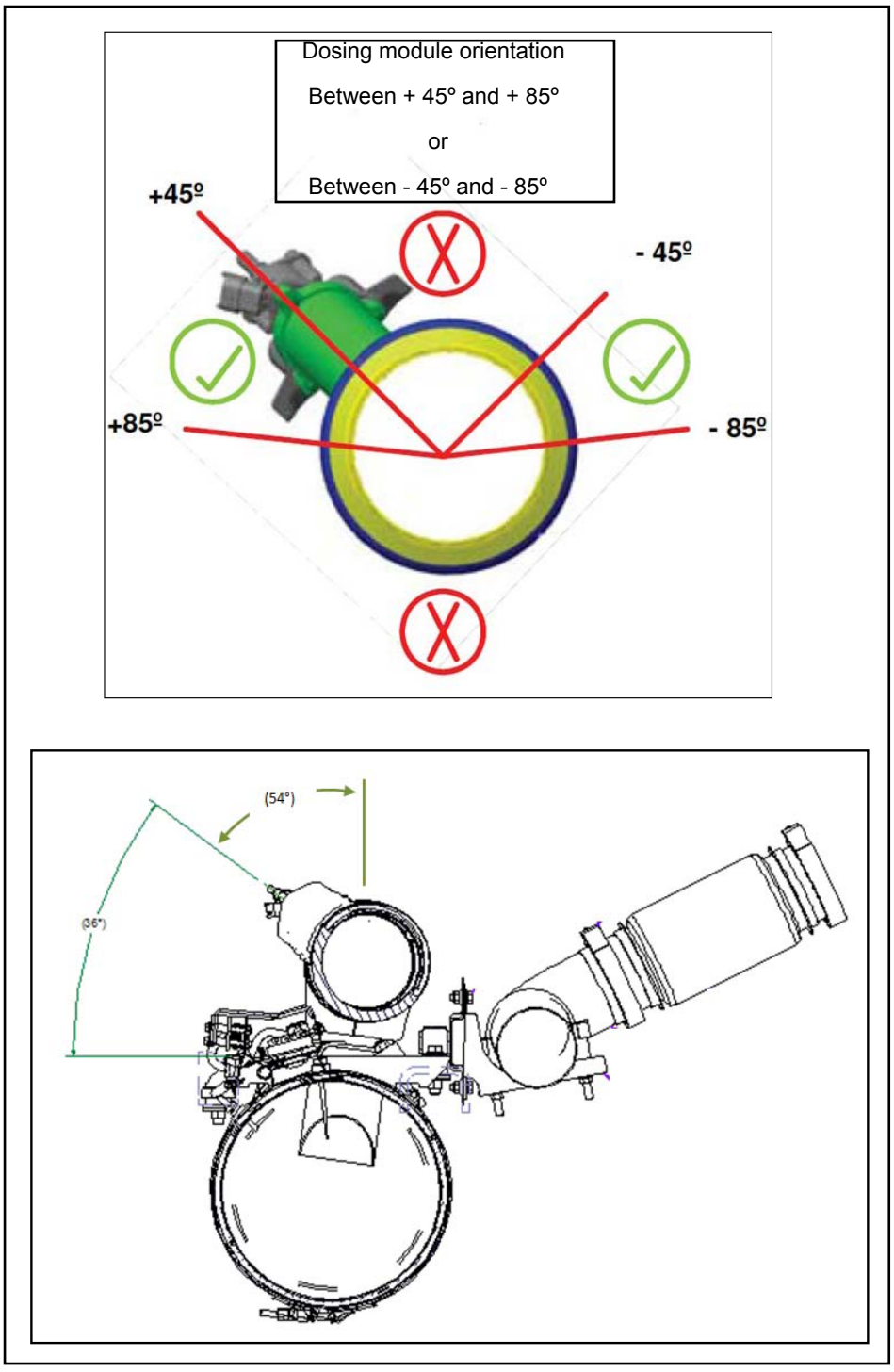

Figure 3 - Check Dosing Module Angle

1.4. Adjust the dosing module angle using JIG NT08314 to achieve an angle of approximately 54° (see Figure 4).

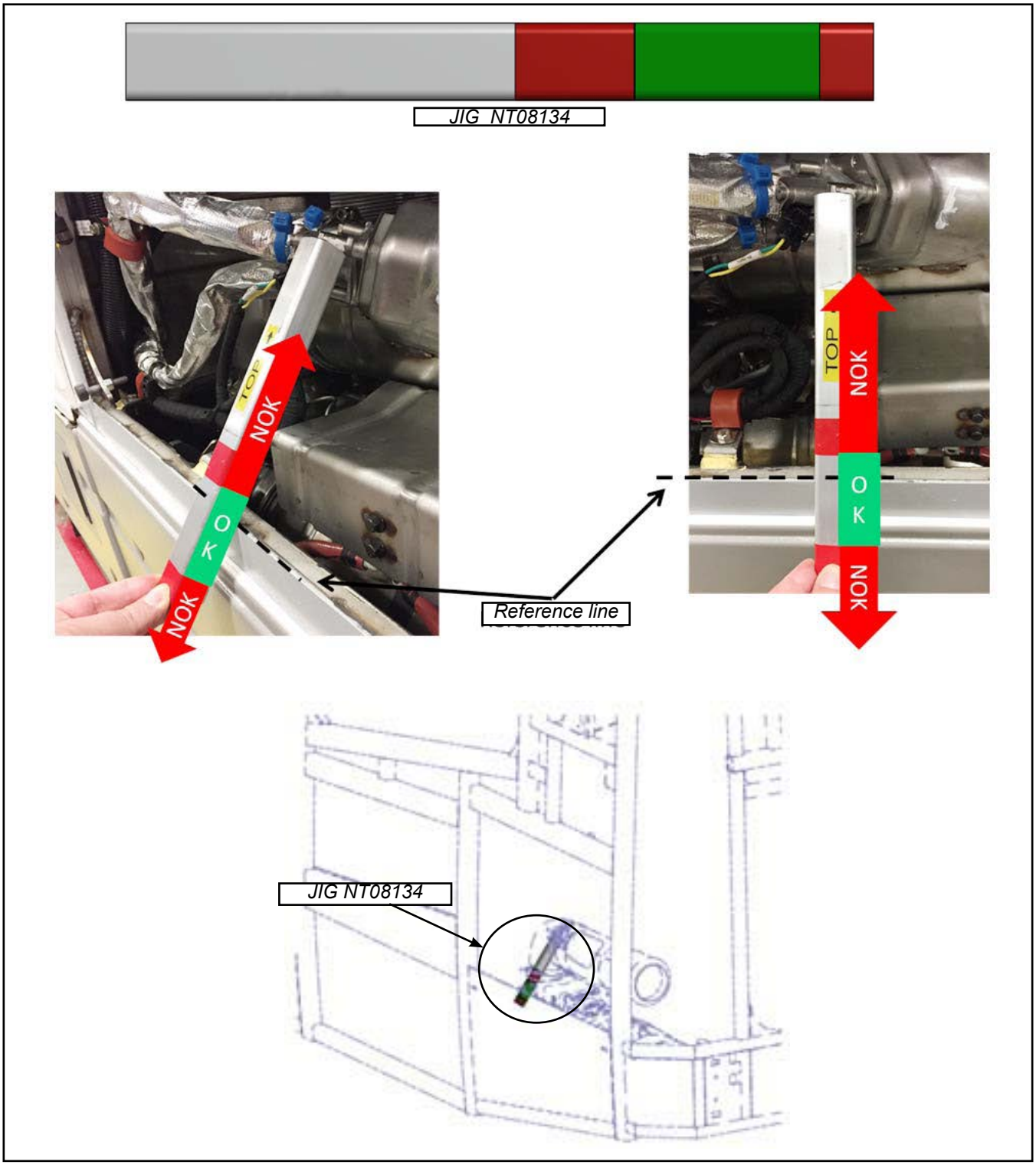

Figure 4 - Adjust Dosing Module Angle

1.5. If the dosing module angle requires adjustment, loosen the clamp screws and turn the decomposition tube to obtain an angle of approximately 54° using JIG NT08134 (see Figure 5).

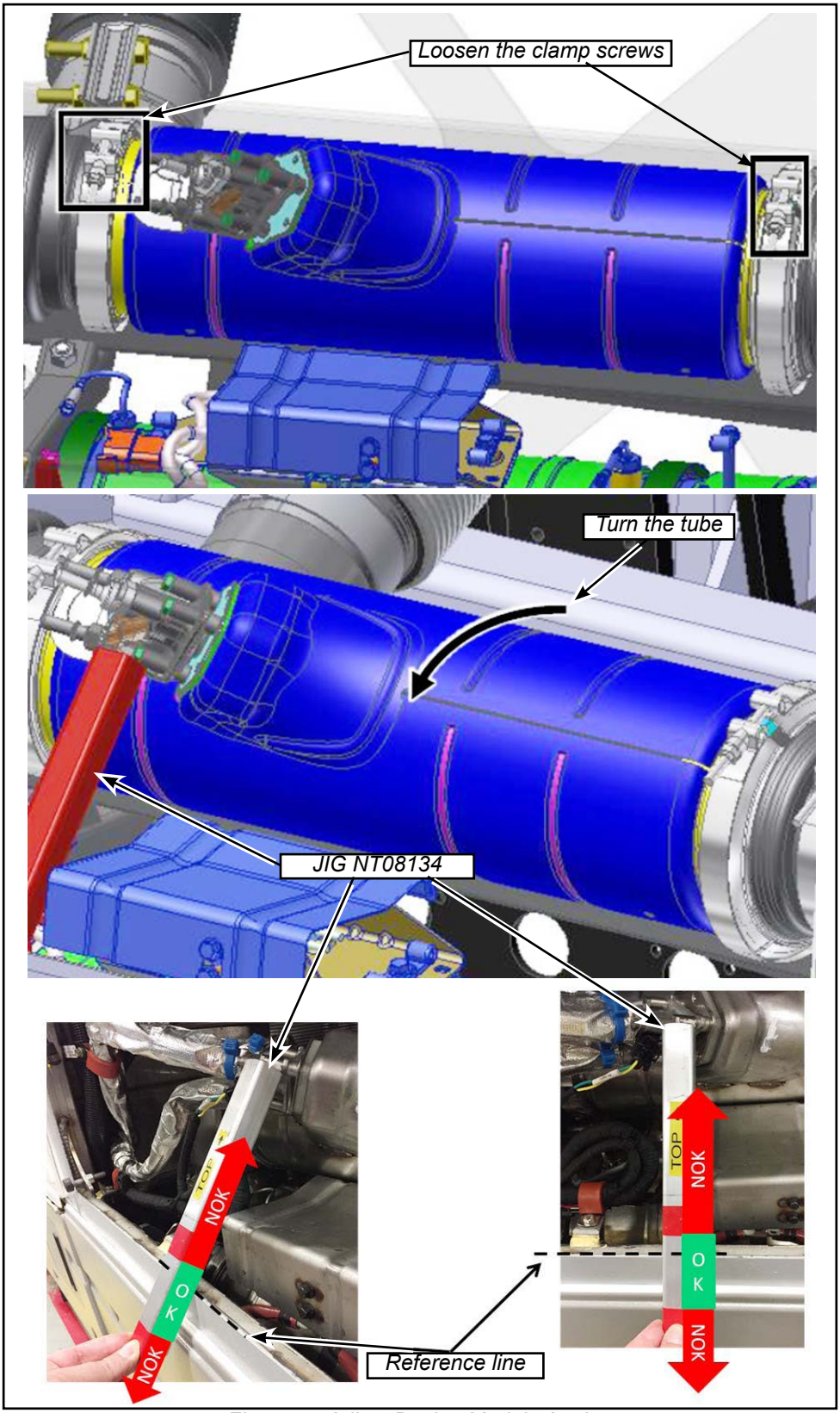

Figure 5 - Adjust Dosing Module Angle

1.6. Tighten the clamp screws and torque to 14 ± 1 Nm (see Figure 6).

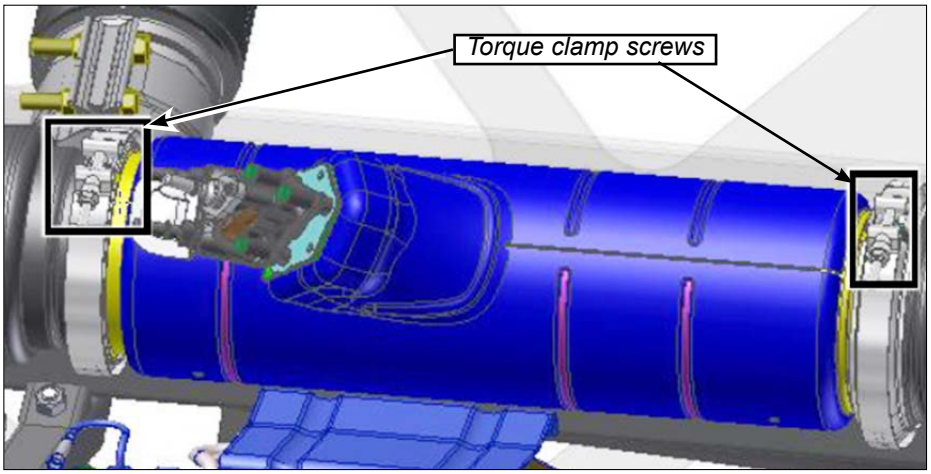

Figure 6 - Torque the Clamp Screws

1.7. Identify the decomposition tube coolant lines (see Figure 7).

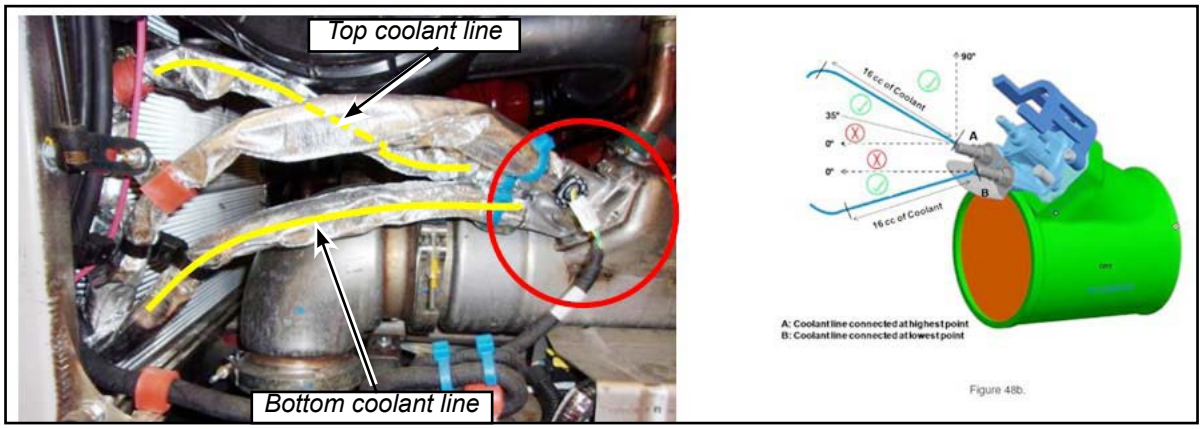

Figure 7 - Identify the Coolant Lines

1.8. Loosen the P-clamp on the upper coolant line (see Figure 8).

Figure 8 - Loosen the P-Clamp on the Upper Coolant Line

1.9. Reposition the P-clamp by turning it counterclockwise as necessary to achieve an upwards arc towards the air cleaner housing. Position the upper coolant line as close to the air cleaner housing as possible without making contact and tighten the P-clamp. It may be necessary to loosen corresponding coolant line P-clamps in the battery compartment to allow repositioning of the coolant line (see Figure 9).

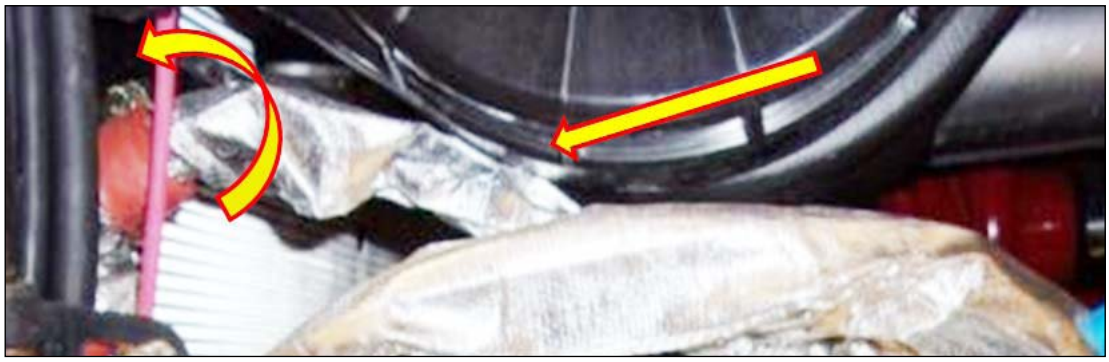

Figure 9 - Position the Upper Coolant Line

1.10. Remove and discard tie wrap N37749 on the lower coolant line (see Figure 10).

Figure 10 - Remove the Tie Wrap

1.11. Reposition the lower coolant line on a downward angle, secure with tie wrap N56339, and cut off excess (see Figure 11).

Figure 11 - Reposition the Lower Coolant Line

WARNING

Connect the batteries after the repair is completed. See manual section *16: Batteries* for the procedure.

1.12. Return the rear run switch to the normal operating position (see Figure 12).

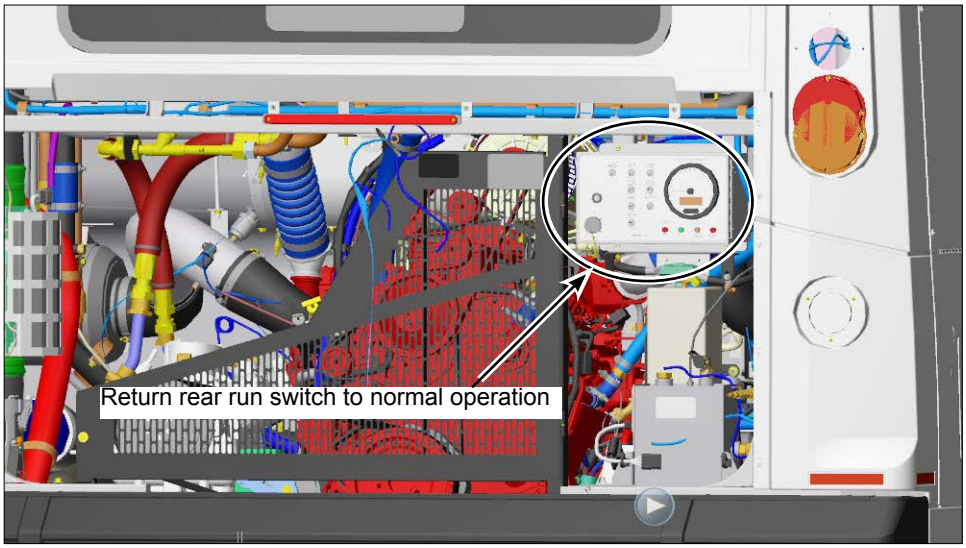

Figure 12 - Return the Rear Run Switch to Normal Operation

1.13. Return the vehicle to service.❖