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Technical Service Bulletin

SUBJECT	REF. NO.
AFTERMARKET WIRING AFFECTING BUS DOOR SAFETY SYSTEM	**SER0018**
	DATE **13/10/2025**
MODELS **OPTIMUS & ENDURA WITH SCANIA, MAN, OR MERCEDES BENZ CHASSIS**	REV. **A**

Issue:
It has come to the attention of Volgren that there may be inappropriate and unauthorised aftermarket connections made to our wiring systems which has adversely affected several critical bus safety systems. Most notably, an unauthorised connection to connector *S1305* has been discovered causing circuit overload, a blown fuse, and subsequently generating false park brake signal readings. These readings are used in many of the bus safety systems. To identify a potentially affected signal and other relevant connections, please see the appendix sections.

Impact:
Any unauthorised aftermarket connections or modifications to circuits (such as at connector *S1305*) has the potential to affect critical bus safety systems, including the bus door safety system. Any unauthorised connection, tampering or modification has the potential to render the bus door safety system inoperable which can lead to invalidation of the original design parameters, voiding any valid warranty and can result in serious injury or death.

Extreme care should be taken with any unauthorised post-delivery and aftermarket modifications to the vehicle to ensure that the wiring, circuitry and electrical components remain compliant with all applicable standards, are not compromised in any way, and perform in accordance with specifications. It is recommended that advice is sought from Volgren urgently if any aftermarket modifications are being considered.

Vehicles affected:
Certain Optimus and Endura bus body with Scania, MAN, or Mercedes Benz chassis. Refer to Appendix 4 for a list of applicable body numbers (VG, VQ, VM).

Next steps:
All recipients of this notice:

1. Are **encouraged to urgently test** for a compromised park brake signal by carrying out the steps set out in the Appendices.
2. Are **required** to update the vehicle software by installing the software update available which alerts the driver of an errant park brake signal.

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If there are any questions on this notice or any further assistance is required, please contact our closest Aftersales team.

Melbourne	Sydney	Brisbane	Perth	Adelaide
03 9791 4255	02 9618 7876	07 3243 5300	08 9248 8055	08 7095 9824

Appendices

The Appendices outline:
(i) How to identify an errant park brake signal.
(ii) How to inspect the critical fuse and related connections linked to the park brake signal.
(iii) Rectification steps and software update.

Appendix 1 – Identification of an errant park brake signal
Appendix 2 – Inspection of the park brake related fuse and connections
Appendix 2.1 – Optimus vehicles (route bus)
Appendix 2.2 – Endura vehicles (school/charter bus)
Appendix 3 – Rectification and software update
Appendix 4 – List of applicable body numbers

Volgren highly recommends performing regular checks as described in these Appendices to ensure that there are no compromises to the inherent vehicle safety systems, including the doors, brake interlocks, and driver's warnings.

Appendix 1: Identification of an errant park brake signal

1.1 Optimus vehicles (route bus):

- Start up the vehicle in a safe and appropriate location (e.g. the bus depot) and bring it to normal operating conditions.
- Whilst the vehicle is stationary, activate and release the park brake 3 times and monitor if the *park brake ON* symbol shows on both the C90 display (**Figure 1**) as well as the vehicle dash instrument cluster.
- If the *park brake ON* symbol is permanently shown on the C90 display regardless of whether the park brake is activated or released, then it is likely that the park brake signal has been compromised and requires immediate rectification.
- If immediate rectification is required, the vehicle should not be used and should remain in a safe and appropriate location until the issue is resolved.

Figure 1 – C90 display and park brake ON symbol

1.2 Endura vehicles (school/charter bus):

- Start up the vehicle in a safe and appropriate location (e.g. the bus depot) and take it to normal operating conditions.
- Release the park brake and drive the vehicle slowly above 5km/h.
- Attempt to open the front door using the driver's door open button (**Figure 2**). It should not open while driving above 5km/h. If it does, then it is likely that the park brake signal has been compromised and requires immediate rectification. If immediate rectification is required, the vehicle should not be used and should remain in a safe and appropriate location until the issue is resolved.

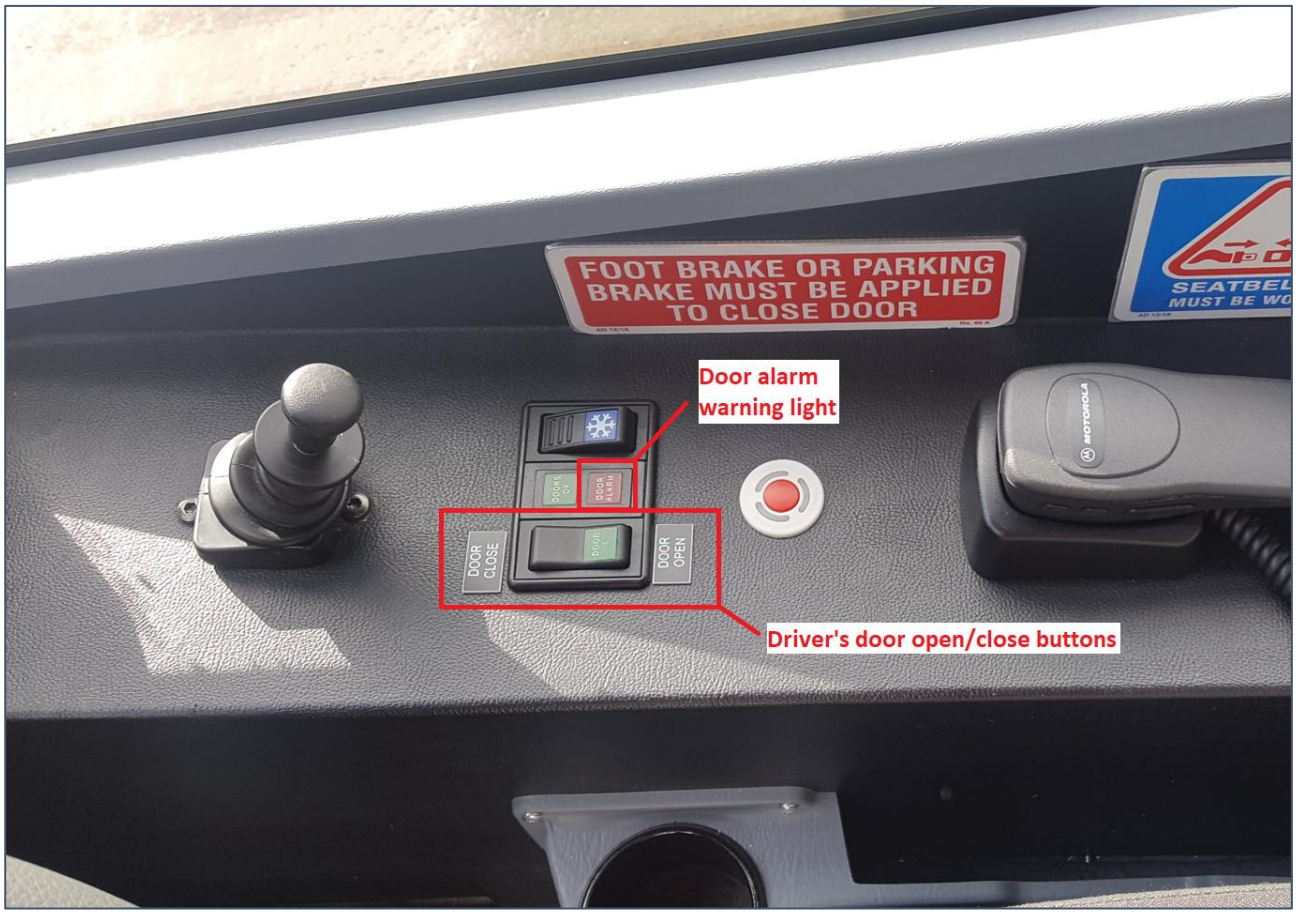

Figure 2 – Driver's door open/close buttons and door alarm warning light on Endura

Appendix 2: Inspection of the park brake related fuses and connections

2.1 Optimus vehicles (route bus):

If there is uncertainty as to whether modifications affecting park brake related fuses have taken place, Volgren strongly recommends an inspection of the following fuses, relays and connectors for any unusual connections or unauthorised modifications. If something is found or suspected, please contact Volgren Aftersales for the most appropriate next steps and ensure the vehicle is question is not used until the issue is resolved.

2.1.1 Fuse F17

This fuse is responsible for ensuring the park brake signal is working correctly. It is located in the overhead body electrical compartment behind the driver (**Figure 3**). When the vehicle is switched off, please inspect the fuse to ensure it has not blown. Verify with a multi-meter if necessary. A blown fuse could compromise the park brake signal.

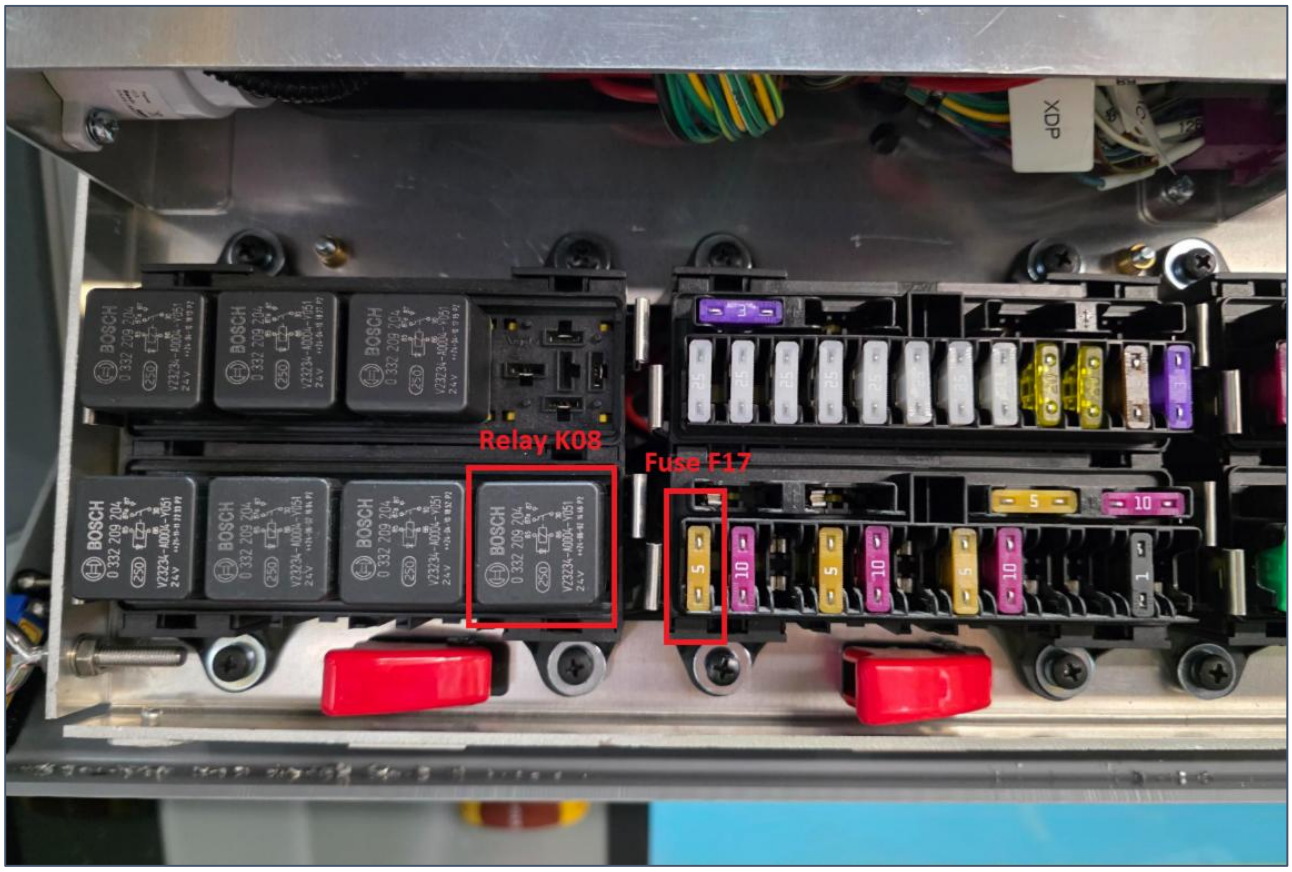

Figure 3 – Fuse F17 and Relay K08 located in overhead body electrical compartment

2.1.2 Relay K08

This relay is responsible for ensuring the park brake signal is working correctly. It is located in the overhead body electrical compartment behind the driver (**Figure 3**). Please inspect the relay to ensure it audibly clicks every time the park brake is released or applied. If the relay stays silent during release or application of the park brake, it is possible that the relay is faulty or *Fuse F17* has blown which could compromise the park brake signal.

2.1.3 Connector S1305

This connector is for Volgren applications only. It is located behind the dash binnacle cover as shown in **Figure 4**. Please remove the dash binnacle cover and inspect connector *S1305* to make sure no other wiring or connections are mated to it. The OEM connector should look intact as per **Figure 5**. If connector *S1305* appears modified or additional aftermarket wiring is connected to it, the park brake signal could be or become compromised.

Figure 4 – Dash binnacle cover and location of connector S1305

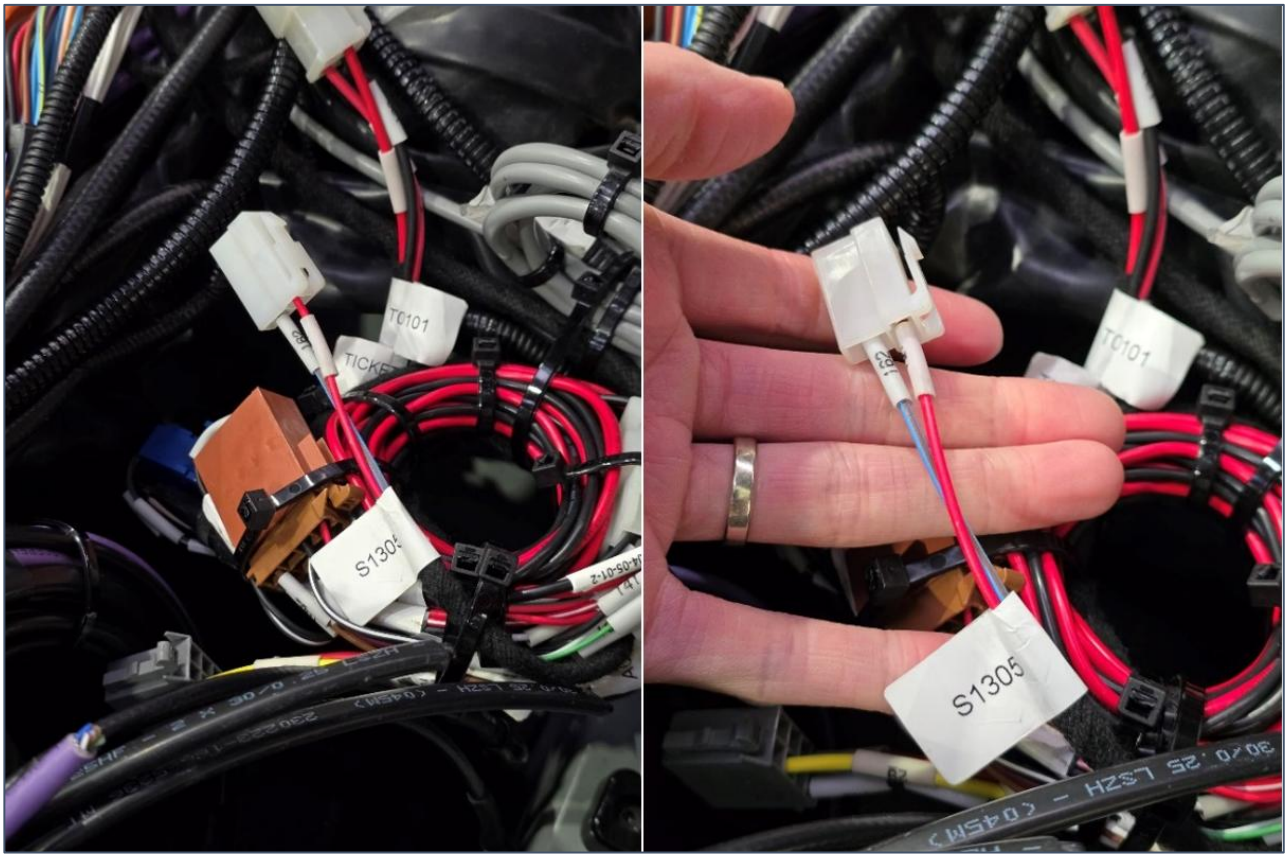

Figure 5 – Connector S1305 behind the dash binnacle cover

2.1.4 Connectors S0401 and S0401-1

These are interface connectors for the external front door open/close (green) button. *S0401* is located above the LHS B-Pillar in the overhead compartment (**Figure 6**), and *S0401-1* is located adjacent to the front door's external open/close push button usually underneath or behind the hinged side panel (**Figure 7**). They should be tied up, mated and fully seated with no obvious modifications like wire splicing or mis-matched wire colours.

Figure 6 – Connector S0401 above the LHS B-Pillar in the overhead compartment

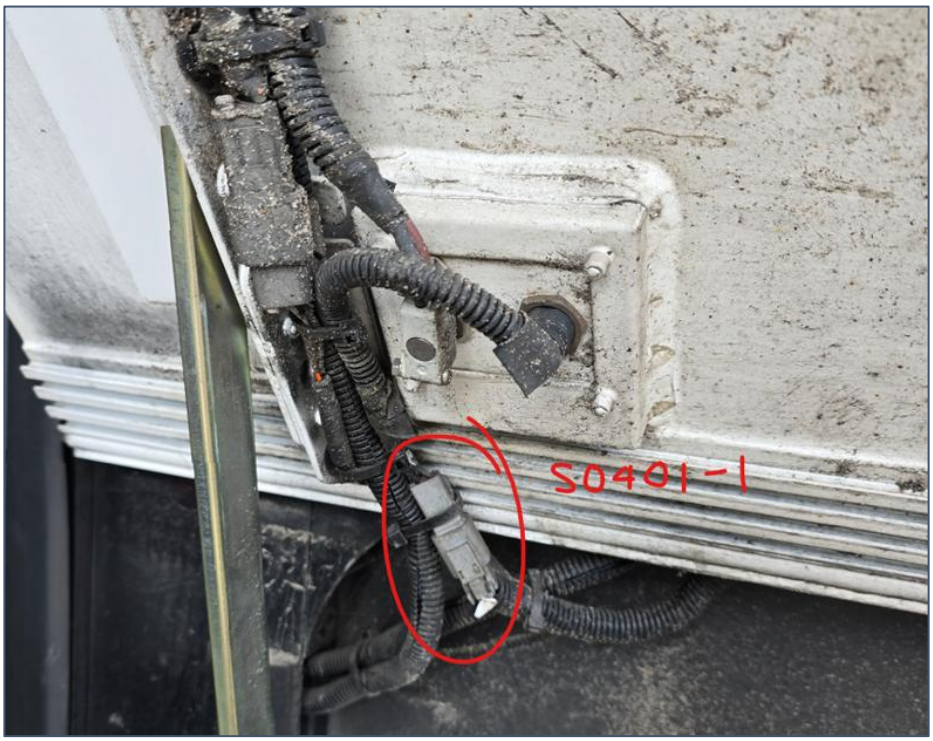

Figure 7 – Connector S0401-1 behind the hinged panel

2.1.5 Connectors S0419 and S0419-1

These are interface connectors for the external centre door open/close (green) button.
(Note: This button is an optional add-on so it may not be present on all vehicles.)

S0419 is located above the centre door behind the door mechanism cover (**Figure 8**), and *S0419-1* is usually located adjacent to the centre door's external open/close push button usually underneath or behind the hinged side panel. They should be tied up with no obvious modifications like wire splicing or mis-matched wire colours.

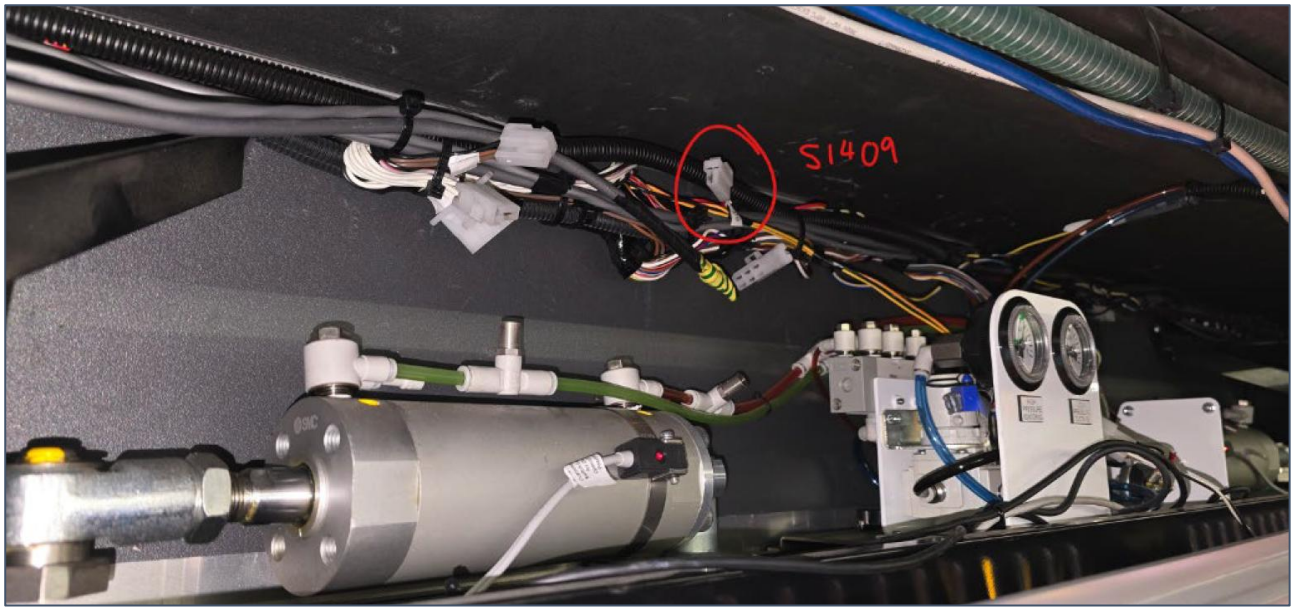

Figure 8 – Connector S1409 behind the centre door mechanism cover

2.1.6 Connectors Y03 and Y03-1

These are interface connectors for the park brake rollaway warning system.
(Note: These connectors may or may not have a mating half depending on the vehicles specification.)

Y03 is located above the front door behind the door mechanism cover (**Figure 9**), and *Y03-1* is located above the RHS B-Pillar in the overhead compartment. They should be tied up with no obvious modifications like wire splicing or mis-matched wire colours.

Figure 9 – Connector Y03 behind the front door mechanism cover

2.1.7 Relay K45

This relay is responsible for ensure the park brake rollaway warning system is working correctly. (Note: This relay may or may not be installed depending on the vehicles specification.)

Relay *K45* is located behind the dash binnacle cover as shown in **Figure 10**. Please remove the dash binnacle cover and inspect it to ensure no obvious wiring modifications or tampering is present.

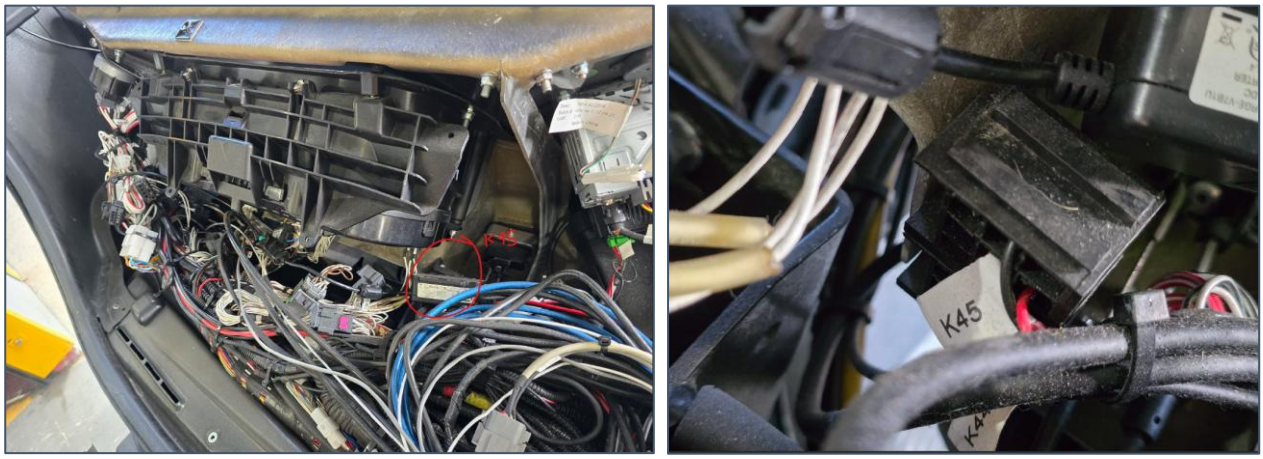

Figure 10 – Relay K45 under the dash binnacle cover

2.2 Endura vehicles (school/charter bus):

Please inspect the following items for any unusual connections or unauthorised modifications. If something is found or suspected, please contact Volgren Aftersales for most appropriate next steps and ensure the vehicle is question is not used until the issue is resolved.

2.2.1 Fuse F12

This fuse is responsible for ensuring the park brake signal is working correctly. It is located in the main electrical compartment inside the passenger luggage bin compartment (**Figure 11**). When the vehicle is switched off, please inspect the fuse ensure it has not blown. Verify with a multi-meter if necessary. A blown fuse could compromise the park brake signal.

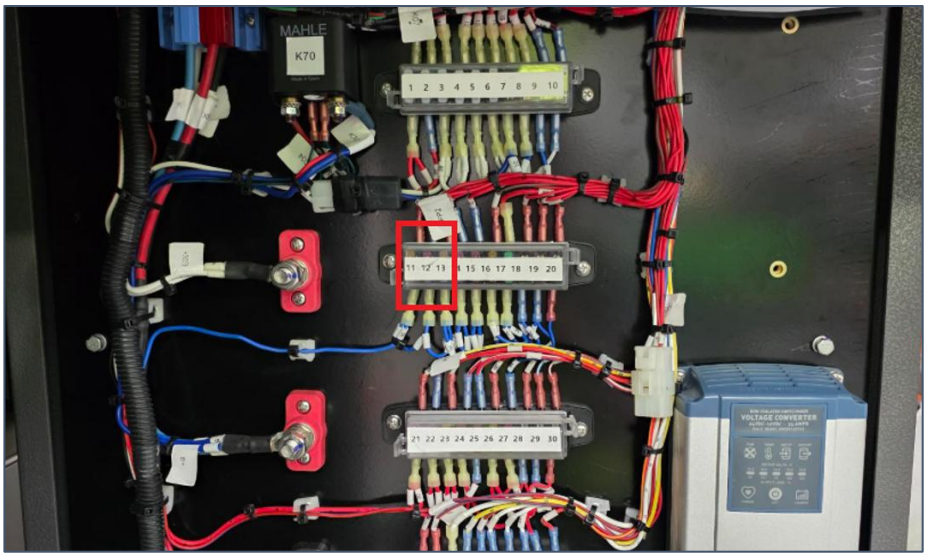

Figure 11 – Fuse F12 in main electrical compartment inside passenger luggage bin area

2.2.2 Relay K08

This relay is responsible for ensuring the park brake signal is working correctly. It is located in the main electrical compartment inside the passenger luggage bin compartment (**Figure 12**). Please inspect the relay to ensure it audibly clicks every time the park brake is released or applied. If the relay stays silent during release or application of the park brake, it is possible that the relay is faulty or *Fuse F12* has blown which could compromise the park brake signal.

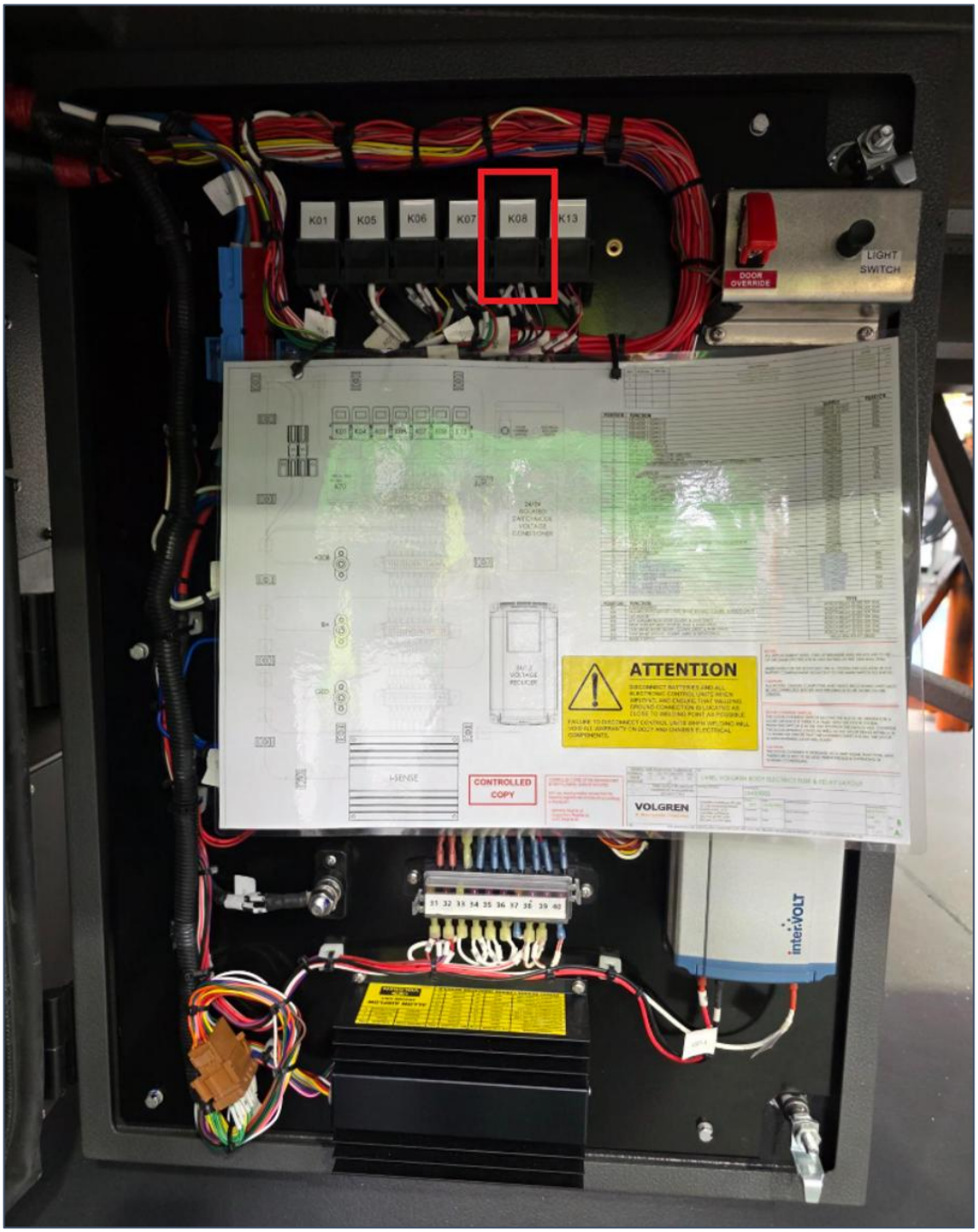

Figure 12 – Relay K08 in main electrical compartment inside passenger luggage bin area

Appendix 3: Rectification and software update

If an errant park brake signal as per Appendix 1 is identified, or unauthorised modifications have been made to any of the fuses, relays or connectors listed in Appendix 2, please contact our closest Aftersales team for most appropriate next steps. Any vehicle on which an issue is identified is not to be used until the issue is fully resolved and rectified.

Volgren also strongly recommends installing our latest multiplex software update which includes an additional alert to the driver if an errant park brake signal is detected.

The update will activate the *door alarm warning light* and *buzzer* if the door safety system detects an errant park brake signal while the vehicle speed is over 5km/h. (**Figure 13** for Optimus, and **Figure 2** for Endura.)

If the vehicle is also fitted with a C90 display, a pop-up warning message will also be shown on screen (**Figure 14**).

Figure 13 – Door alarm warning light on driver's side console on Optimus

Figure 14 – C90 park brake warning message

Please contact our closest Aftersales team to arrange for the vehicle software to be updated at your earliest convenience.

Appendix 4: List of applicable body numbers:

VG3717	VG4192	VG4375	VG4644	VG4713	VG4804	VG4909	VG4960
VG3818	VG4193	VG4376	VG4645	VG4714	VG4805	VG4910	VG4961
VG3838	VG4202	VG4377	VG4646	VG4715	VG4806	VG4911	VG4962
VG3839	VG4232	VG4392	VG4647	VG4716	VG4807	VG4912	VG4963
VG3840	VG4241	VG4393	VG4648	VG4717	VG4808	VG4913	VG4964
VG3841	VG4242	VG4394	VG4649	VG4718	VG4809	VG4914	VG4965
VG3842	VG4243	VG4401	VG4650	VG4719	VG4810	VG4915	VG4966
VG3843	VG4244	VG4402	VG4651	VG4722	VG4811	VG4916	VG4967
VG3844	VG4245	VG4403	VG4652	VG4749	VG4812	VG4917	VG4968
VG3845	VG4249	VG4404	VG4653	VG4750	VG4813	VG4918	VG4978
VG3846	VG4250	VG4405	VG4654	VG4751	VG4814	VG4919	VG4979
VG4000	VG4253	VG4406	VG4655	VG4752	VG4815	VG4920	VG4980
VG4001	VG4254	VG4407	VG4656	VG4753	VG4816	VG4921	VG4981
VG4021	VG4265	VG4408	VG4657	VG4754	VG4817	VG4922	VG4988
VG4022	VG4270	VG4409	VG4658	VG4755	VG4818	VG4923	VG4989
VG4028	VG4319	VG4410	VG4659	VG4756	VG4819	VG4924	VG4990
VG4029	VG4320	VG4411	VG4660	VG4757	VG4820	VG4925	VG4991
VG4035	VG4321	VG4412	VG4661	VG4758	VG4821	VG4926	VG4992
VG4036	VG4322	VG4413	VG4662	VG4759	VG4822	VG4927	VG4993
VG4037	VG4323	VG4414	VG4663	VG4760	VG4827	VG4928	VG4994
VG4038	VG4324	VG4455	VG4664	VG4761	VG4830	VG4929	VG4995
VG4039	VG4325	VG4456	VG4665	VG4762	VG4831	VG4930	VG4996
VG4040	VG4326	VG4457	VG4670	VG4763	VG4832	VG4932	VG4997
VG4042	VG4327	VG4458	VG4671	VG4764	VG4833	VG4933	VG4998
VG4044	VG4328	VG4463	VG4672	VG4765	VG4834	VG4934	VG4999
VG4047	VG4329	VG4466	VG4674	VG4766	VG4835	VG4935	VG5000
VG4048	VG4330	VG4467	VG4677	VG4768	VG4836	VG4936	VG5001
VG4052	VG4339	VG4470	VG4678	VG4769	VG4837	VG4937	VG5002
VG4066	VG4340	VG4473	VG4679	VG4770	VG4838	VG4938	VG5003
VG4069	VG4341	VG4477	VG4680	VG4778	VG4843	VG4939	VG5004
VG4077	VG4342	VG4478	VG4691	VG4779	VG4844	VG4940	VG5005
VG4078	VG4349	VG4479	VG4692	VG4780	VG4849	VG4941	VG5006
VG4079	VG4350	VG4598	VG4695	VG4781	VG4850	VG4942	VG5007
VG4080	VG4353	VG4600	VG4696	VG4782	VG4851	VG4943	VG5008
VG4082	VG4354	VG4601	VG4697	VG4783	VG4863	VG4944	VG5009
VG4083	VG4355	VG4617	VG4698	VG4784	VG4864	VG4945	VG5010
VG4084	VG4356	VG4619	VG4699	VG4785	VG4889	VG4946	VG5011
VG4085	VG4357	VG4622	VG4700	VG4786	VG4890	VG4947	VG5012
VG4086	VG4358	VG4623	VG4701	VG4787	VG4891	VG4948	VG5023
VG4107	VG4359	VG4624	VG4702	VG4788	VG4892	VG4949	VG5029
VG4109	VG4360	VG4625	VG4703	VG4789	VG4893	VG4950	VG5030
VG4110	VG4361	VG4629	VG4704	VG4790	VG4894	VG4951	VG5031
VG4111	VG4367	VG4636	VG4705	VG4793	VG4895	VG4952	VG5032
VG4114	VG4368	VG4637	VG4706	VG4794	VG4896	VG4953	VG5033
VG4115	VG4369	VG4638	VG4707	VG4796	VG4897	VG4954	VG5034
VG4116	VG4370	VG4639	VG4708	VG4798	VG4898	VG4955	VG5036
VG4117	VG4371	VG4640	VG4709	VG4799	VG4905	VG4956	VG5037
VG4124	VG4372	VG4641	VG4710	VG4800	VG4906	VG4957	VG5040
VG4156	VG4373	VG4642	VG4711	VG4802	VG4907	VG4958	VG5041
VG4159	VG4374	VG4643	VG4712	VG4803	VG4908	VG4959	VG5053

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VG5054	VG5113	VG5179	VG5247	VG5299	VG5398	VQ1502	
VG5055	VG5114	VG5180	VG5248	VG5300	VG5399	VQ1503	
VG5056	VG5115	VG5181	VG5251	VG5301	VG5412	VQ1504	
VG5057	VG5116	VG5182	VG5252	VG5302	VG5413	VQ1505	
VG5058	VG5117	VG5183	VG5253	VG5303	VG5414	VQ1506	
VG5059	VG5118	VG5184	VG5254	VG5304	VG5423	VQ1507	
VG5060	VG5119	VG5185	VG5255	VG5305	VG5430	VQ1508	
VG5061	VG5120	VG5186	VG5256	VG5306	VG5431	VQ1509	
VG5062	VG5121	VG5187	VG5257	VG5307	VG5447	VQ1510	
VG5063	VG5122	VG5188	VG5258	VG5308	VG5453	VQ1511	
VG5064	VG5123	VG5192	VG5259	VG5309	VG5454	VQ1512	
VG5065	VG5124	VG5195	VG5260	VG5310	VG5491	VQ1513	
VG5066	VG5125	VG5196	VG5261	VG5311	VG5517	VQ1514	
VG5067	VG5126	VG5197	VG5262	VG5312	VG5523	VQ1515	
VG5068	VG5127	VG5198	VG5263	VG5313	VG5530	VQ1516	
VG5069	VG5128	VG5199	VG5264	VG5314	VG5553	VQ1517	
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VG5071	VG5130	VG5201	VG5266	VG5316	VG5643	VQ1519	
VG5072	VG5131	VG5202	VG5267	VG5317	VG5646	VQ1645	
VG5081	VG5147	VG5203	VG5268	VG5318	VG5647	VQ1646	
VG5082	VG5148	VG5209	VG5269	VG5319	VG5648	VQ1647	
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VG5086	VG5151	VG5216	VG5272	VG5322	VG5668	VQ1650	
VG5087	VG5152	VG5217	VG5273	VG5323	VG5669	VQ1651	
VG5088	VG5153	VG5222	VG5274	VG5324	VG5670	VQ1652	
VG5089	VG5154	VG5223	VG5275	VG5325	VG5671	VQ1653	
VG5090	VG5155	VG5224	VG5276	VG5348	VG5672	VQ1679	
VG5091	VG5156	VG5225	VG5277	VG5349	VG5673	VQ1680	
VG5092	VG5157	VG5226	VG5278	VG5350	VM0620	VQ1693	
VG5093	VG5158	VG5227	VG5279	VG5354	VM0621	VQ1694	
VG5094	VG5159	VG5228	VG5280	VG5355	VM0622	VQ1704	
VG5095	VG5160	VG5229	VG5281	VG5356	VM0633	VQ1710	
VG5096	VG5161	VG5230	VG5282	VG5357	VM0634	VQ1711	
VG5097	VG5162	VG5231	VG5283	VG5358	VM0639	VQ1724	
VG5098	VG5163	VG5232	VG5284	VG5359	VM0699	VQ1725	
VG5099	VG5164	VG5233	VG5285	VG5360	VM0700	VQ1727	
VG5100	VG5165	VG5234	VG5286	VG5361	VM0701	VQ1728	
VG5101	VG5166	VG5235	VG5287	VG5368	VM0725	VQ1730	
VG5102	VG5167	VG5236	VG5288	VG5369	VQ1491	VQ1731	
VG5103	VG5168	VG5237	VG5289	VG5370	VQ1492	VQ1732	
VG5104	VG5169	VG5238	VG5290	VG5371	VQ1493	VQ1750	
VG5105	VG5170	VG5239	VG5291	VG5373	VQ1494	VQ1751	
VG5106	VG5171	VG5240	VG5292	VG5376	VQ1495	VQ1752	
VG5107	VG5172	VG5241	VG5293	VG5386	VQ1496	VQ1815	
VG5108	VG5173	VG5242	VG5294	VG5391	VQ1497		
VG5109	VG5174	VG5243	VG5295	VG5392	VQ1498		
VG5110	VG5175	VG5244	VG5296	VG5393	VQ1499		
VG5111	VG5176	VG5245	VG5297	VG5394	VQ1500		
VG5112	VG5178	VG5246	VG5298	VG5397	VQ1501		