

2011FA06
May, 2012
Product Code(s): 71
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SUBJECT: H 40/50 EP™ Suction Filter Update For Nova Buses Field Action

MODELS AFFECTED: H 40/50 EP™ Drive Units installed in Nova buses

SERIAL NUMBERS AFFECTED: Prior to S/N 7110006189 (See [APPENDIX](#))

Fleets Affected: See [Table 1](#)

Introduction:

Allison Transmission, Inc. has identified a potential concern with Nova buses where the H 40 EP Drive Unit™ or H 50 EP Drive Unit™ is installed at a front to back slope of 8.0 degrees or more downward toward the output end of the Drive Unit. The suction filter has been redesigned with the opening rotated 90 degrees and moved toward the output end of the Drive Unit. Refer to [Figure 1](#). Previous instructions to add fluid until the OLS reading was “oL, HI, 02” (2 quarts/liters high) to prevent the suction filter opening from being uncovered resulting in air being drawn into the system are eliminated upon completion of this repair.

As a Global Customer Satisfaction initiative, Allison Transmission, Inc. will replace, without charge, the suction filter installed in H 40 EP™ and H 50 EP™ Drive Units installed in Nova buses built before S/N 7110006189. In addition to the replacement of the suction filter, all Nova buses included in this Field Action will be reprogrammed with a new System Identification Number (SID) to adjust the “oL, oK” band. The new SID will increase the “oL, oK” band by approximately 0.5 quarts/liters. Nova buses built with Drive Unit serial numbers after the S/N break are already equipped with the new suction filter and programmed with the new SID and are not eligible for this Field Action. Drive Units installed in vehicles other than Nova buses previously described are not eligible for this Field Action. In order to participate in this Global Customer Satisfaction Field Action (FA) program, all repair orders must be opened prior to December 31, 2012.

Allison Service Outlets Field Action Responsibility:

Allison Transmission H 40/50 EP™ authorized overhaul service facilities will replace the suction filter and install a new SID in all Nova Buses equipped with H 40 EP™ and H 50 EP™ Drive Units built before S/N 7110006189. Repairs are to be performed at Allison Transmission authorized overhaul service facilities only. Allison Transmission, Inc. will not reimburse for towing, travel time, or travel mileage.

Use the Drive Unit serial number to obtain Field Action Authorization from the Allison Extranet before working on the Drive Unit.

Customer Notification:

Fleet customers listed in [Table 1](#) are being notified by Allison Transmission, Inc. of this Field Action. The Fleet customers in [Table 1](#) received Drive Unit serial numbers listed in the [APPENDIX](#). Eligible serial numbers are all built before S/N 7110006189.

BD / FA7177EN

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Table 1. Fleet Customers

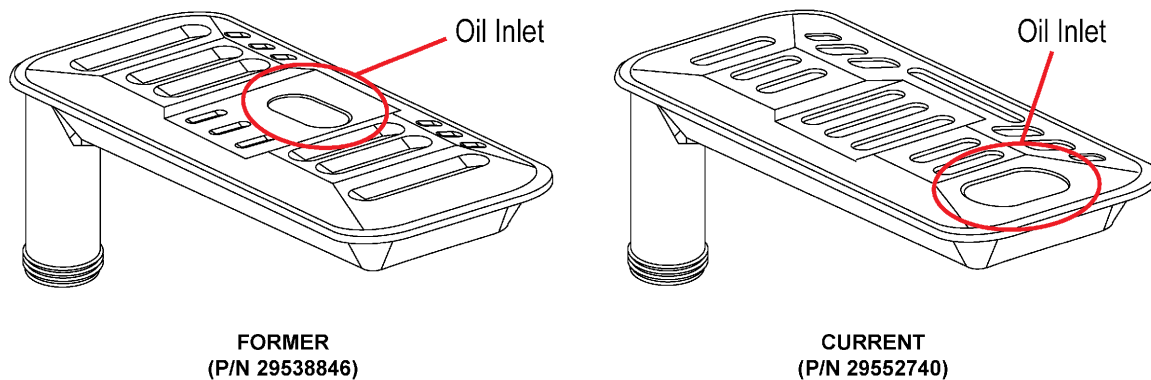
Country	Location	State/Prov	Model	Quantity
Canada	Autobus Paquette	QC	H 40 EP™	2
Canada	RTC Quebec	QC	H 40 EP™	1
Canada	STO Hull	QC	H 40 EP™	2
Canada	Societe Transport de Montreal	QC	H 40 EP™	8
Canada	Town of Banff	AB	H 40 EP™	4
Canada	Unknown	Unknown	H 40 EP™	2
Canada	Grand River Transit	ON	H 40 EP™	12
Canada	The County of Strathcona	AB	H 40 EP™	10
Canada	Translink; Coast Mountain Bus	BC	H 40 EP™	141
Canada	City of Brantford Transit	ON	H 40 EP™	5
Canada	Nova Bus; Demo	QC	H 40 EP™	3
Canada	Nova Bus; Prototype	QC	H 40 EP™	1
US	Connecticut DOT	CT	H 50 EP™	10
US	Duke University	NC	H 50 EP™	2

Field Action Drive Unit Identification:

Before the repair of a suspect Drive Unit is made, verify that the Field Action repair has not already been performed. Login to <https://sap.allisontransmission.com/extranet/fieldactions>, enter the Drive Unit serial number and request an authorization number. Receipt of an authorization number is confirmation that the Field Action has not been performed.

If the Field Action has not been performed on the vehicle Drive Unit, proceed with the repair. The Authorization Number must be included in the warranty claim narrative prior to submittal of the claim. In the event that you are unable to obtain an authorization number and you believe the Drive Unit qualifies for the Field Action, contact the Allison Transmission Technical Assistance Center (TAC) at 1-800-252-5283 or 317-242-0700.

Parts Information:



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Figure 1. Fluid Suction Filter (H 40/50 EP)

The parts required for this Field Action are to be ordered individually and are listed in [Table 2](#).

Table 2. Parts List

Part Number	Description	Quantity
29552740	Filter Assembly, Suction	1
29538847	Gasket, Oil Pan	1
23016014	O-Ring, Cooler	2
29545785	Filter Kit	1

Service Procedures:

1. Clean the exterior of the oil pan to avoid contamination during disassembly.
2. Remove the drain plug and drain the fluid.
3. Remove the four (4) M8 x 1.25 x 70mm bolts that retain the filter cover.
4. Remove the filter cover and discard the o-ring.
5. Remove the filter.
6. Remove the thirty-two (32) M8 x 1.25 x 30mm bolts and the four (4) M8 x 1.25 x 75mm bolts that retain the oil pan.
7. Remove the oil pan and discard the gasket.
8. Remove the two (2) M6 x 1 x 60mm bolts from the two (2) retaining clips that retain the suction filter.
9. Remove the two (2) clips that retain the suction filter (P/N 29538846) and remove the suction filter and seal.



NOTE: If the suction filter seal remains in the housing, carefully remove it, making sure not to score the housing.

10. Install the new suction filter and seal, P/N 29552740.
11. Install the two (2) clips that retain the suction filter.
12. Install the two (2) M6 x 1 x 60mm bolts into the two (2) retaining clips.
13. Torque the bolts to 10-13 N·m (7-10 lb ft).
14. Install oil pan with new gasket and finger tighten the thirty-two (32) M8 x 1.25 x 30mm bolts and the four (4) M8 x 1.25 x 75mm bolts.
15. Install the new lube filter with a new o-ring.
16. Install the filter cover and finger tighten the four (4) M8 x 1.25 x 70mm filter cover retaining bolts.
17. Torque the oil pan and filter cover retaining bolts to 24-29 N·m (18-21 lb ft).
18. Install a new o-ring on the drain plug and install the drain plug and seal assembly in the oil pan.
19. Torque the drain plug to 24-32 N·m (18-24 lb ft).

Drive Unit Fluid:

After the repair is completed, fill the Drive Unit with new fluid. Fluid must meet Allison Transmission specification TES-468.

Reprogram with new System Identification Number (SID):

It is necessary to reprogram the system with a SID that has updated OLS calibration values.

Refer to [Table 3](#) for SIDs that have been created for Nova buses.



NOTE: [Table 3](#) may contain SIDs that have not been loaded into production vehicles. SIDs that could not be identified as being installed in Nova buses are not included in [Table 3](#) but may exist.

How to Determine the Proper Replacement SID

1. Upon installation of the updated suction filter, locate the current SID in the "Current SID" column of [Table 3](#).



NOTE: The latest download of each current SID is shown in [Table 3](#). Earlier versions have different tracking information (last four characters), however, the first seven (7) characters of the SID remain unchanged.

2. After identifying the current SID, locate the replacement SID in the column immediately to the right identified as "Replacement SID".
3. Enter the replacement SID in the SID field of the TCM Reflash window. Refer to [Figure 2](#).



NOTE: The SID replacement can also be accomplished by entering "HEV" followed by the 3rd through the 7th characters of the full "Replacement SID" in the TCM Assembly Number field of the TCM reflash window.

The screenshot shows a software window titled "Add Calibration to Download Information". Inside, there's a "Calibration Information" section with a text field for "SID" (highlighted with a red box), a "Quantity" spinner set to 1, and two radio buttons: "Newest Calibration" (selected) and "Exact Calibration". Below these is a checkbox labeled "Calibration for Dyno Usage or Stock TCM/ECU". To the right, the "TCM Assembly Number" field contains the text "HEVS620X". On the right side of the window, there are two buttons: "View Summary Report" and "View Shift Point Report". At the bottom center are "Add" and "Cancel" buttons.

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Figure 2. SID Update Field



NOTE: The columns in [Table 3](#) identified as "TCM/VCM", "Inverter", and "Energy Storage System (ESS)" identify the vehicle configuration.

If the current SID can not be located in [Table 3](#) or if there are any other questions regarding which SID is to be loaded, please contact the Technical Assistance Center (TAC) at 1-800-252-5283.

Table 3.

SID Configurations				
TCM/VCM	Inverter	Energy Storage System (ESS)	Current SID (W/Filter P/N 29538846)	Replacement SID (W/Filter P/N 29552740)
MY06 or Earlier (Pre-4th Gen)	DPIM1	ESS1	HEVS000T	HEVS000Y
			HEVS001T	HEVS000Y
			HEVS000U	HEVS000Z
			HEVS001U	HEVS000Z
		ESS2	HEVS200T	HEVS200Y
			HEVS201T	HEVS200Y
			HEVS200U	HEVS200Z
			HEVS201U	HEVS200Z
	DPIM2	ESS1	HEVS400T	HEVS400Y
			HEVS400U	HEVS400Z
		ESS2	HEVS500T	HEVS500Y
			HEVS500U	HEVS500Z
MY07 (Pre-4th Gen)	DPIM1	ESS1	HEVS100T	HEVS100U
			HEVS110T	HEVS110U
			HEVS110X	HEVS110Y
			HEVS120T	HEVS120C
		ESS2	HEVS300T	HEVS300U
			HEVS310T	HEVS310U
			HEVS320T	HEVS320C
	DPIM2	ESS1	HEVS600T	HEVS600U
			HEVS610T	HEVS610U
			HEVS620T	HEVS620C
			HEVS620U	HEVS620Y
			HEVS620V	HEVS620Z
		ESS2	HEVS700T	HEVS700U
			HEVS710T	HEVS710U
			HEVS720T	HEVS720C
			HEVS720U	HEVS720Y
			HEVS720V	HEVS720Z
MY10 (4th Gen, updated to MY12 on March 1, 2012)	DPIM2	ESS2	HEVSF016	HEVSF062
			HEVSF020	HEVSF072
			HEVSF030	HEVSF073
			HEVSF041	HEVSF062

Claim Information:

Allison Service Outlets shall submit an AWAARE claim on each vehicle completed under the Field Action. Approved Authorized Allison Electric Drive (H 40/50 EP™) Hybrid System Overhaul facilities must submit claims for work performed per this Field Action as follows. This Global Customer Satisfaction Field Action initiative will remain active until December 31, 2012. All repair orders must be opened by December 31, 2012. Claims must be submitted against the Drive Unit serial number.

Allison Service Outlets must use the published Allison Transmission Labor Time Guide for work performed. The following labor operations will be required to complete the Field Action. Any parts, labor, or net items requested that are not specifically identified in this Field Action Letter must be explained in detail for consideration.

Claim Type	4
Special Activity Code	2011FA06
Primary Failed Part	29538846
Complaint Code	AT02
Failure Code	CC03
Field Action Authorization Number	Provided from Extranet, must be listed in claim narrative

Product Code 71		
Labor Operation Code	Labor Hours	Labor Operation
00094006	0.5 hours	Steam Clean Installed Area
00094100	0.5 hours	R&R Oil Pan
00094201	0.1 hours	R&R Internal Filter
00096501	1.0 hours	Recalibrate ECU
00096400	0.5 hours	Final Test Drive Vehicle

Contact Information:

If you have questions concerning this Global Customer Satisfaction initiative, please contact:

Allison Transmission, Inc.
Attn: H 40/50 EP Service Group
P.O. Box 894, Mail Code M5B
Indianapolis, IN 46222
1-800-252-5283

APPENDIX

Drive Unit Serial Numbers Delivered to Nova Bus				
Serial Number	Model	Vehicle ID	Road No.	Fleet
7110001570	H 40 EP	2NVYL82W563000234	Unknown	STO Hull
7110001693	H 40 EP	2NVYL82W473000100	Unknown	STO Hull
7110001991	H 40 EP	2NVYL82W983000045	28-707	Societe Transport de Montreal
7110001992	H 40 EP	2NVYL82W183000041	28-703	Societe Transport de Montreal
7110001994	H 40 EP	2NVYL82W383000042	28-704	Societe Transport de Montreal
7110001995	H 40 EP	2NVYL82W083000046	28-708	Societe Transport de Montreal
7110002004	H 40 EP	2NVYL82W383000039	28-701	Societe Transport de Montreal
7110002005	H 40 EP	2NVYL82WX83000040	28-702	Societe Transport de Montreal
7110002023	H 40 EP	2NVYL82W583000043	28-705	Societe Transport de Montreal
7110002034	H 40 EP	2NVYL82W783000044	28-706	Societe Transport de Montreal
7110002104	H 40 EP	2NVYL82W083000175	1	Town of Banff
7110002105	H 40 EP	2NVYL82W683000178	4	Town of Banff
7110002106	H 40 EP	2NVYL82W283000176	2	Town of Banff
7110002107	H 40 EP	2NVYL82W483000177	3	Town of Banff
7110002167	H 40 EP	2NVYL82W283000260	8023	Grand River Transit
7110002173	H 40 EP	2NVYL82W883000263	8026	Grand River Transit
7110002175	H 40 EP	2NVYL82W483000261	8024	Grand River Transit
7110002177	H 40 EP	2NVYL82W683000259	8022	Grand River Transit
7110002178	H 40 EP	2NVYL82WX83000264	8027	Grand River Transit
7110002180	H 40 EP	2NVYL82W683000262	8025	Grand River Transit
7110002182	H 40 EP	2NVYL82W483000275	942	The County of Strathcona
7110002184	H 40 EP	2NVYL82W283000274	941	The County of Strathcona
7110002185	H 40 EP	2NVYL82W083000273	940	The County of Strathcona
7110002189	H 40 EP	2NVYL82W683000276	943	The County of Strathcona
7110002319	H 40 EP	2NVYL82W983000417	Unknown	Autobus Paquette
7110002320	H 40 EP	2NVYL82W083000418	Unknown	Autobus Paquette
7110002432	H 40 EP	Unknown	Unknown	Unknown
7110002865	H 40 EP	2NVYL82X993000136	9401	Translink
7110003174	H 40 EP	2NVYL82X093000445	9462	Translink
7110003175	H 40 EP	2NVYL82X793000393	9428	Translink
7110003186	H 40 EP	2NVYL82X193000437	9460	Translink
7110003307	H 40 EP	2NVYL82X393000391	9426	Translink
7110003337	H 40 EP	2NVYL82X893000371	9410	Translink
7110003338	H 40 EP	2NVYL82X693000417	9445	Translink

Drive Unit Serial Numbers Delivered to Nova Bus				
Serial Number	Model	Vehicle ID	Road No.	Fleet
7110003339	H 40 EP	2NVYL82X193000373	9412	Translink
7110003340	H 40 EP	2NVYL82X593000375	9414	Translink
7110003342	H 40 EP	2NVYL82X993000427	9450	Translink
7110003344	H 40 EP	2NVYL82X493000383	9418	Translink
7110003352	H 40 EP	2NVYL82X793000376	9415	Translink
7110003355	H 40 EP	2NVYL82X393000374	9413	Translink
7110003356	H 40 EP	2NVYL82X693000384	9419	Translink
7110003357	H 40 EP	2NVYL82X293000382	9417	Translink
7110003360	H 40 EP	2NVYL82X493000416	9444	Translink
7110003362	H 40 EP	2NVYL82X393000360	9403	Translink
7110003368	H 40 EP	2NVYL82X193000387	9422	Translink
7110003370	H 40 EP	2NVYL82XX93000372	9411	Translink
7110003372	H 40 EP	2NVYL82X793000362	9405	Translink
7110003373	H 40 EP	2NVYL82X893000449	9466	Translink
7110003397	H 40 EP	4RKYL82X894000040	9492	Translink
7110003399	H 40 EP	2NVYL82X993000363	9406	Translink
7110003405	H 40 EP	2NVYL82X793000359	9402	Translink
7110003407	H 40 EP	2NVYL82X893000385	9420	Translink
7110003408	H 40 EP	4RKYL82X394000043	9495	Translink
7110003411	H 40 EP	2NVYL82X493000450	9467	Translink
7110003414	H 40 EP	2NVYL82X093000459	9471	Translink
7110003416	H 40 EP	2NVYL82X093000431	9454	Translink
7110003419	H 40 EP	2NVYL82X293000429	9452	Translink
7110003420	H 40 EP	2NVYL82X393000407	9435	Translink
7110003425	H 40 EP	2NVYL82X893000368	9407	Translink
7110003426	H 40 EP	2NVYL82X093000428	9451	Translink
7110003429	H 40 EP	2NVYL82XX93000453	9470	Translink
7110003430	H 40 EP	2NVYL82X993000377	9416	Translink
7110003431	H 40 EP	2NVYL82XX93000369	9408	Translink
7110003432	H 40 EP	2NVYL82X393000388	9423	Translink
7110003437	H 40 EP	2NVYL82X693000370	9409	Translink
7110003438	H 40 EP	2NVYL82X693000370	9449	Translink
7110003442	H 40 EP	4RKYL82X494000052	9505	Translink
7110003446	H 40 EP	2NVYL82XX93000386	9421	Translink
7110003447	H 40 EP	2NVYL82X6A3000082	10101	City of Brantford Transit

Drive Unit Serial Numbers Delivered to Nova Bus				
Serial Number	Model	Vehicle ID	Road No.	Fleet
7110003449	H 40 EP	2NVYL82X593000425	9448	Translink
7110003450	H 40 EP	2NVYL82X593000361	9404	Translink
7110003491	H 40 EP	2NVYL82X793000412	9440	Translink
7110003492	H 40 EP	Unknown	Unknown	Unknown
7110003496	H 40 EP	2NVYL82X893000452	9469	Translink
7110003498	H 40 EP	2NVYL82X393000424	9447	Translink
7110003499	H 40 EP	2NVYL82X193000390	9425	Translink
7110003500	H 40 EP	2NVYL82X293000432	9455	Translink
7110003501	H 40 EP	2NVYL82X693000448	9465	Translink
7110003502	H 40 EP	2NVYL82X193000406	9434	Translink
7110003503	H 40 EP	2NVYL82X093000414	9442	Translink
7110003504	H 40 EP	2NVYL82X693000451	9468	Translink
7110003505	H 40 EP	2NVYL82X493000447	9464	Translink
7110003506	H 40 EP	2NVYL82X993000394	9429	Translink
7110003507	H 40 EP	2NVYL82X593000389	9424	Translink
7110003508	H 40 EP	2NVYL82X293000415	9443	Translink
7110003549	H 40 EP	2NVYL82X993000430	9453	Translink
7110003551	H 40 EP	2NVYL82X993000413	9441	Translink
7110003552	H 40 EP	2NVYL82X293000396	9431	Translink
7110003553	H 40 EP	2NVYL82X593000392	9427	Translink
7110003554	H 40 EP	2NVYL82X593000411	9439	Translink
7110003555	H 40 EP	2NVYL82X593000408	9436	Translink
7110003556	H 40 EP	2NVYL82X793000409	9437	Translink
7110003557	H 40 EP	2NVYL82X093000395	9430	Translink
7110003559	H 40 EP	2NVYL82XX93000405	9433	Translink
7110003561	H 40 EP	2NVYL82X393000410	9438	Translink
7110003562	H 40 EP	2NVYL82X893000404	9432	Translink
7110003575	H 40 EP	2NVYL82X293000446	9463	Translink
7110003594	H 40 EP	2NVYL82X693000434	9457	Translink
7110003595	H 40 EP	2NVYL82X993000461	9473	Translink
7110003596	H 40 EP	2NVYL82XX93000436	9459	Translink
7110003597	H 40 EP	2NVYL82X793000460	9472	Translink
7110003598	H 40 EP	2NVYL82X393000438	9461	Translink
7110003599	H 40 EP	2NVYL82X493000433	9456	Translink
7110003601	H 40 EP	2NVYL82X893000435	9458	Translink

Drive Unit Serial Numbers Delivered to Nova Bus				
Serial Number	Model	Vehicle ID	Road No.	Fleet
7110003638	H 40 EP	4RKYL82XX94000041	9493	Translink
7110003642	H 40 EP	4RKYL82XX94000055	9508	Translink
7110003643	H 40 EP	4RKYL82XX94000055	9494	Translink
7110003644	H 40 EP	4RKYL82XX94000072	9525	Translink
7110003645	H 40 EP	4RKYL82X994000080	9533	Translink
7110003650	H 40 EP	4RKYL82X294000048	9501	Translink
7110003651	H 40 EP	4RKYL82X094000050	9503	Translink
7110003652	H 40 EP	4RKYL82X594000044	9496	Translink
7110003653	H 40 EP	4RKYL82X494000049	9502	Translink
7110003654	H 40 EP	4RKYL82X294000082	9535	Translink
7110003655	H 40 EP	4RKYL82X694000070	9523	Translink
7110003664	H 40 EP	4RKYL82X694000053	9506	Translink
7110003666	H 40 EP	4RKYL82X894000068	9521	Translink
7110003669	H 40 EP	4RKYL82X694000084	9537	Translink
7110003671	H 40 EP	4RKYL82X394000060	9513	Translink
7110003684	H 40 EP	4RKYL82X394000074	9527	Translink
7110003685	H 40 EP	4RKYL82XX94000086	9539	Translink
7110003686	H 40 EP	4RKYL82X594000089	9542	Translink
7110003687	H 40 EP	4RKYL82X094000047	9499	Translink
7110003688	H 40 EP	4RKYL82X694000067	9520	Translink
7110003689	H 40 EP	2NVYL82X493000464	9476	Translink
7110003690	H 40 EP	4RKYL82XX94000069	9522	Translink
7110003691	H 40 EP	4RKYL82X994000046	9498	Translink
7110003692	H 40 EP	4RKYL82X494000066	9519	Translink
7110003693	H 40 EP	4RKYL82X894000071	9524	Translink
7110003694	H 40 EP	4RKYL82X294000065	9518	Translink
7110003695	H 40 EP	4RKYL82X894000054	9507	Translink
7110003696	H 40 EP	2NVYL82X693000465	9477	Translink
7110003697	H 40 EP	4RKYL82X794000045	9497	Translink
7110003698	H 40 EP	4RKYL82X794000076	9529	Translink
7110003699	H 40 EP	4RKYL82X294000051	9504	Translink
7110003701	H 40 EP	4RKYL82X394000088	9541	Translink
7110003702	H 40 EP	4RKYL82X994000077	9530	Translink
7110003711	H 40 EP	4RKYL82X894000085	9538	Translink
7110003713	H 40 EP	4RKYL82X294000079	9532	Translink

Drive Unit Serial Numbers Delivered to Nova Bus				
Serial Number	Model	Vehicle ID	Road No.	Fleet
7110003714	H 40 EP	4RKYL82X094000064	9517	Translink
7110003715	H 40 EP	4RKYL82X994000063	9516	Translink
7110003718	H 40 EP	4RKYL82X594000061	9514	Translink
7110003724	H 40 EP	4RKYL82X394000057	9510	Translink
7110003725	H 40 EP	4RKYL82X594000058	9511	Translink
7110003726	H 40 EP	4RKYL82X194000056	9509	Translink
7110003729	H 40 EP	2NVYL82X893000466	9478	Translink
7110003730	H 40 EP	2NVYL82X193000468	9480	Translink
7110003731	H 40 EP	2NVYL82X293000463	9475	Translink
7110003732	H 40 EP	2NVYL82X093000462	9474	Translink
7110003734	H 40 EP	2NVYL82XX93000467	9479	Translink
7110003737	H 40 EP	4RKYL82X794000062	9515	Translink
7110003738	H 40 EP	2NVYL82X393000469	9481	Translink
7110003739	H 40 EP	2NVYL82X593000487	9489	Translink
7110003749	H 40 EP	4RKYL82X794000059	9512	Translink
7110003757	H 40 EP	2NVYL82X193000485	9487	Translink
7110003761	H 40 EP	4RKYL82X094000078	9531	Translink
7110003762	H 40 EP	2NVYL82X893000418	Unknown	Translink
7110003763	H 40 EP	2NVYL82X493000481	9483	Translink
7110003764	H 40 EP	4RKYL82X094000081	9534	Translink
7110003766	H 40 EP	4RKYL82X194000087	9540	Translink
7110003767	H 40 EP	4RKYL82X594000075	9528	Translink
7110003768	H 40 EP	4RKYL82X494000083	9536	Translink
7110003769	H 40 EP	2NVYL82X393000486	9488	Translink
7110003770	H 40 EP	2NVYL82XX93000484	9486	Translink
7110003777	H 40 EP	2NVYL82X693000482	9484	Translink
7110003778	H 40 EP	2NVYL82X993000489	9491	Translink
7110003779	H 40 EP	4RKYL82X194000073	9526	Translink
7110003795	H 40 EP	2NVYL82X793000488	9490	Translink
7110003796	H 40 EP	2NVYL82X893000483	9485	Translink
7110003797	H 40 EP	2NVYL82X293000480	9482	Translink
7110003959	H 40 EP	2NVYL82X993000606	3007	The County of Strathcona
7110003962	H 40 EP	2NVYL82X593000604	3005	The County of Strathcona
7110003988	H 40 EP	2NVYL82X293000608	3009	The County of Strathcona
7110003989	H 40 EP	2NVYL82X793000605	3006	The County of Strathcona

Drive Unit Serial Numbers Delivered to Nova Bus				
Serial Number	Model	Vehicle ID	Road No.	Fleet
7110003990	H 40 EP	2NVYL82X093000607	3008	The County of Strathcona
7110003991	H 40 EP	2NVYL82X493000609	3010	The County of Strathcona
7110004140	H 40 EP	2NVYL82X5A3000087	Unknown	MSD #1 (2010)
7110004162	H 40 EP	2NVYL82X3A3000086	10105	City of Brantford Transit
7110004179	H 40 EP	2NVYL82XXA3000084	10103	City of Brantford Transit
7110004188	H 40 EP	2NVYL82X1A3000085	10104	City of Brantford Transit
7110004191	H 40 EP	2NVYL82X8A3000083	10102	City of Brantford Transit
7110004461	H 40 EP	2NVYL82X8A3000259	1001	RTC Quebec
7110004671	H 50 EP	2NVYS92U773000289	Unknown	P3 Articulated - Protoshop
7110005379	H 40 EP	2NVYL82X2B3000212	Unknown	MSD #1 (2011)
7110005726	H 40 EP	2NVYL82X7C3000367	Unknown	MSD #5 (2011)
7110005774	H 50 EP	4RKYS92Y9B4000166	1087	Connecticut DOT
7110005775	H 50 EP	4RKYS92YXB4000161	1082	Connecticut DOT
7110005817	H 50 EP	4RKYS92YXB4000144	1081	Connecticut DOT
7110005818	H 50 EP	4RKYS92Y0B4000167	1088	Connecticut DOT
7110005819	H 50 EP	4RKYS92Y1B4000162	1083	Connecticut DOT
7110005820	H 50 EP	4RKYS92Y5B4000164	1085	Connecticut DOT
7110005821	H 50 EP	4RKYS92Y1B4000145	Unknown	Duke University
7110005822	H 50 EP	4RKYS92Y2B4000168	1089	Connecticut DOT
7110005823	H 50 EP	4RKYS92Y7B4000165	1086	Connecticut DOT
7110005824	H 50 EP	4RKYS92Y3B4000146	Unknown	Duke University
7110005838	H 50 EP	4RKYS92Y4B4000169	Unknown	Connecticut DOT
7110005839	H 50 EP	4RKYS92Y3B4000163	1084	Connecticut DOT
7110005887	H 40 EP	2NVYL82X6B3000469	Unknown	Grand River Transit
7110005888	H 40 EP	2NVYL82X2B3000470	Unknown	Grand River Transit
7110005889	H 40 EP	2NVYL82X9B3000465	Unknown	Grand River Transit
7110005890	H 40 EP	2NVYL82X0B3000466	Unknown	Grand River Transit
7110005891	H 40 EP	2NVYL82X4B3000468	Unknown	Grand River Transit
7110005892	H 40 EP	2NVYL82X2B3000467	Unknown	Grand River Transit

TO: Owners of Nova Buses equipped with H 40/50 EP™ Drive Units prior to S/N 7110006189

SUBJECT: H 40/50 EP™ Suction Filter Update on Nova Buses; Field Action 2011FA06

MODELS AFFECTED: H 40/50 EP™ Drive Units installed in Nova buses

SERIAL NUMBERS AFFECTED: Prior to S/N 7110006189

Reason for this Field Action:

Allison Transmission, Inc. has identified a potential concern with Nova Buses where the H 40 EP Drive Unit™ or H 50 EP Drive Unit™ is installed at a front to back slope of 8.0 degrees or more downward toward the output end of the Drive Unit. The suction filter has been redesigned with the opening rotated 90 degrees and moved toward the output end of the Drive Unit. Previous instructions to add fluid until the OLS reading was “oL, HI, 02” (2 quarts/liters high) to prevent the suction filter opening from being uncovered resulting in air being drawn into the system are eliminated upon completion of this repair.

As a Global Customer Satisfaction initiative, Allison Transmission, Inc. will replace, without charge, the suction filter installed in H 40 EP™ and H 50 EP™ Drive Units installed in Nova buses built before S/N 7110006189. In addition to the replacement of the suction filter, all Nova buses included in this Field Action will be reprogrammed with a new System Identification Number (SID) to adjust the “oL, oK” band. The new SID will increase the “oL, oK” band by approximately 0.5 quarts/liters.

Nova buses built with drive unit serial numbers after the S/N break are already equipped with the new suction filter and programmed with the new SID and are not eligible for this Field Action. Drive Units installed in vehicles other than Nova buses previously described are not eligible for this Field Action. In order to participate in this Global Customer Satisfaction Field Action (FA) program, all repair orders must be opened prior to December 31, 2012.

What Will Be Done:

Allison Transmission H 40/50 EP™ authorized overhaul service facilities will replace the suction filter and install a new System ID (SID) in all Nova Buses equipped with H 40 EP™ and H 50 EP™ Drive Units built before S/N 7110006189 and delivered to the Allison Transmission authorized service facility for this repair.

How Long Will the Repair Take:

The length of time to make the necessary repair is approximately 2.6 working hours to drain the fluid, replace the suction filter, refill with new fluid, and reprogram with a new SID. Making an appointment is highly recommended to ensure a satisfactory service experience.

Contacting Your Authorized Allison Overhaul Distributor or Dealer:

Please contact your Authorized Allison Hybrid Electric Drive Overhaul Distributor or Dealer as soon as possible to schedule an appointment for repair of the H 40 EP™ and H 50 EP™ Drive Units in your fleet that are affected by this Field Action. Presentation to your Distributor or Dealer of this letter and the attached list of H 40 EP™ and H 50 EP™ Drive Units in the serial number range in your fleet will assist in planning to make the necessary repairs in the shortest possible time. The attached list of Drive Unit serial numbers was compiled from Original Equipment Manufacturer (OEM) and Allison Transmission, Inc. records. It may not be a complete list of all serial numbers in your fleet subject to this Field Action (FA). It may also contain serial numbers that are no longer in your fleet due to Drive Unit replacements during earlier repairs. We regret any inconvenience that this may

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cause and we have taken this action in the interest of your continued satisfaction with Allison Transmission, Inc. products. Please visit www.allisontransmission.com and utilize the "Sales and Service Locator" tool for assistance in determining the closest location authorized to perform warranty repairs as an overhaul outlet for Electric Drive Hybrid systems. Instructions for making this correction have been sent to your Distributor or Dealer. Should your Distributor or Dealer be unable to schedule an appointment within a reasonable time, please contact the Allison Transmission Technical Assistance Center (TAC) at 1-800-252-5283. This Global Customer Satisfaction initiative will remain active until December 31, 2012. In order to participate in this Global Customer Satisfaction Field Action program, all repair orders must be opened prior to December 31, 2012. Any repair orders opened after this date will not be paid by Allison Transmission, Inc.

Allison Transmission, Inc.