

REFERENCE:	Nova Bus Manuals
SECTION:	05: Rear suspension
RS N°:	-
EFFECTIVE IN PROD.:	L707 (2012SE)

APPLICATION DEADLINE:NA

SUBJECT:	O-rings on ZF axle type AV-132
JUSTIFICATION:	Risk of oil leaks, particularly in hot climates.

LEVEL	DESCRIPTION	DIRECT CHARGES		TIME
		LABOUR	MATERIAL	
1	O-rings with greater heat resistance are available.	Client	Client	
2	-	-	-	-

**MATERIAL**

QTY	PART N°	REV.	DESCRIPTION	REPLACES PART N°
<b>LEVEL 1</b>				
-	-	-	-	-
<b>LEVEL 2</b>				
-	-	-	-	-

**DISPOSAL OF PARTS**

REMOVED PARTS ARE:	DISCARDED	RETAINED	
	-	-	

**REVISION HISTORY**

REV.	DATE	CHANGE DESCRIPTION	WRITTEN BY
NR	2014MR12	Initial release	Bertrand Plouffe

APPROVED BY:

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CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
Airdrie Transit - Alberta	L664	—	—	L82U2B3000507	L82U2B3000507	1
Arrow Coach Line - Arkansas	L494	—	—	L82U793000397	L82U793000397	1
BC Transit - BCT - British Columbia	L463	9319	9333	L82U093000273	L82U093000287	15
BC Transit - BCT - British Columbia	L481	9334	9353	L82U794000004	L82U094000023	20
BC Transit - BCT - British Columbia	L484	9370	9403	L82U494000090	L82U494000123	34
BC Transit - BCT - British Columbia	L486	9354	9369	L82U294000024	L82U494000039	16
BC Transit - BCT - British Columbia	L487	9404	9433	L82U094000149	L82U794000178	30
BC Transit - BCT - British Columbia	L604	9434	9434	L82U5C3000597	L82U5C3000597	1
Belleville Transit - Ontario	L542	—	—	L82UXA3000088	L82U8A3000090	3
Belleville Transit - Ontario	L598	—	—	L82U5A3000581	L82U7A3000582	2
Belleville Transit - Ontario	L655	—	—	L82U3B3000385	L82U3B3000385	1
Belleville Transit - Ontario	L702	—	—	L82U4D3000706	L82U4D3000706	1
Brampton - Ontario	L501	0917	0926	L82U893000506	L82U893000523	10
Brantford - Ontario	L663	10121	10121	L82U1B3000532	L82U1B3000532	1
Calgary Transit - Alberta	L601	8101	8114	L82U5A4000099	L82U4A4000112	14
Calgary Transit - Alberta	L607	8115	8130	L82UXA3000477	L82U6A3000492	16
Calgary Transit - Alberta	L615	8131	8158	L82U1B4000019	L82U4B4000046	28
Calgary Transit - Alberta	L624	—	—	L82U4B4000077	L82U6B4000078	2
Calgary Transit - Alberta	L637	8161	8180	L82U7B3000356	L82U2B3000376	20
Clemson Area Transit - South Carolina	L617	—	—	S92U5C4500002	S92U5C4500002	1
CMBC (TransLink) - British Columbia	L532	9543	9551	L82U093000497	L82U693000505	9
CMBC (TransLink) - British Columbia	L533	9552	9573	L82U193000511	L82U093000537	22
CMBC (TransLink) - British Columbia	L534	9574	9590	L82U694000124	L82U894000139	16
CMBC (West Vancouver) - British Columbia	L539	901	909	L82U494000140	L82U994000148	9
CT Transit - Connecticut	L554	1041	1065	S92U1A4000139	S92U0A4000164	25
Demo - Nova PF2010 (TARC)	L356	356-2	356-2	L82U883000231	L82U883000231	1
Duke University - North Carolina	L651	—	—	S92Y1B4000145	S92Y3B4000146	2
Duke University - North Carolina (ref. L703)	L641	—	—	L82U9C4500012	L82U1C4500022	8
Fredericton - New Brunswick	L672	8111	8112	L82U0B3000540	L82U2B3000541	2
Fredericton - New Brunswick	L688	8113	8113	L82U8C3000643	L82U8C3000643	1
Grand River Transit - GRT - Ontario	L464	20901	20913	L82U193000296	L82U493000308	13
Grand River Transit - GRT - Ontario	L560	21001	21009	L82U2A3000246	L82U1A3000254	9
Grand River Transit - GRT - Ontario	L633	21101	21115	L82U7B3000289	L82U8B3000303	15
Grand River Transit - GRT - Ontario	L668	21201	21220	L82U6C3000737	L82UXC3000756	20
Greater Toronto Airports Authority - GTAA - Ontario	L432	432-1	432-1	L82U793000061	L82U793000061	1
Greater Toronto Airports Authority - GTAA - Ontario	L477	L477-1	L477-1	L82U194000001	L82U194000001	1
Greater Toronto Airports Authority - GTAA - Ontario	L616	—	—	L82U4C4500001	L82U4C4500001	1
Guelph - Ontario	L579	221	224	L82UXA3000401	L82U5A3000404	4
Guelph - Ontario	L669	225	228	L82U9B3000536	L82U4B3000539	4
Halifax - Nova Scotia	L558	717	731	S92UXA3000293	S92U6A3000307	15
Halifax - Nova Scotia	L613	732	741	S92UXB3000019	S92UXB3000028	10
Halifax - Nova Scotia	L693	526	534	L82U8C3000657	L82U7C3000665	9

CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
Halifax - Nova Scotia	L708	742	761	L92UXC3000782	S92U3C3000803	20
Halifax - Nova Scotia	L710	1160	1161	L82U7C3000780	L82U9C3000781	2
Honolulu - Hawaii	L559	201	224	L82U6A4000113	L82U7A4000136	24
Kings Transit - Nova Scotia	L581	—	—	L82U2B3000054	L82U2B3000054	1
Marketing Sales Demo - MSD 1 ISB Hybrid	L548	—	—	L82X5A3000087	L82X5A3000087	1
Marketing Sales Demo - MSD 5	L619	—	—	L82X7C3000367	L82X7C3000367	1
Marketing Sales Demo - MSD 6 Houston	L628	—	—	L82U8C4500003	L82UXC4500004	2
Minnesota Valley Transit Authority - MVTA	L706	4252	4258	L82U4C4500127	L82UXC4500133	7
Moncton (Codiac) - New Brunswick	L358	358-1	358-1	L82U093000001	L82U093000001	1
Moncton (Codiac) - New Brunswick	L361	361-1	361-1	L82U293000002	L82U293000002	1
Moncton (Codiac) - New Brunswick	L569	—	—	L82U4B4000001	L82U4B4000001	1
Moncton (Codiac) - New Brunswick	L570	—	—	L82U6B4000002	L82U6B4000002	1
New York City Transit - New York	L536	1200	1201	S92U793000490	S92U993000491	2
New York City Transit - New York	L545	1202	1289	S92U5A4000001	S92U0A4000098	88
New York City Transit - New York	L608	8000	8014	L82U6B4000047	L82U0B4000061	15
New York City Transit - New York	L620	8015	8074	L82U2B4000062	L82U7B4000123	60
New York City Transit - New York	L621	8075	8089	L82U9B4000124	L82U9B4000138	15
New York City Transit - New York	L643	5895	5895	S92U1B4000143	S92U1B4000143	1
New York City Transit - New York	L670	5770	5894	S92U4C4500024	S92U3B4000242	125
New York City Transit - New York	L681	5896	5283	S92U2C4500023	S92U9C4500195	122
New York City Transit - New York	L692	5284	5363	S92U3C4500158	S92U3D4500274	80
Niagara Falls - Ontario	L499	2986	2989	L82U093000564	L82U693000567	4
Niagara Falls - Ontario	L652	—	—	S92U3C3000607	S92U6C3000617	11
Niagara Falls - Ontario	L653	—	—	L82U9C3000618	L82U9C3000621	5
Niagara Parks Commission - Ontario	L656	—	—	L82U0C3000653	L82U2C3000654	2
Niagara Parks Commission - Ontario	L685	—	—	S92U9C3000644	S92U8C3000652	9
Peterborough - Ontario	L490	—	—	L82UX93000345	L82U593000348	4
Regina - Saskatchewan	L356	356-1	356-1	L82U883000150	L82U883000150	1
Regina - Saskatchewan	L360	—	—	L82U283000290	L82U283000290	1
Regina - Saskatchewan	L476	625	628	L82U893000313	L82U393000316	4
Regina - Saskatchewan	L561	631	644	L82U8B4000003	L82UXB4000018	14
Regina - Saskatchewan	L639	645	654	L82U1B3000336	L82U2B3000345	10
Saskatoon - Saskatchewan	L551	1005	1007	S92UXA3000178	S92U8A3000180	3
Saskatoon - Saskatchewan	L568	—	—	S92U9B3000013	S92U9B3000013	1
Saskatoon - Saskatchewan	L618	—	—	S92U1C3000377	S92U1C3000377	1
Saskatoon - Saskatchewan	L690	1201	1204	L82U6C3000690	L82U1C3000693	4
Sault Ste-Marie Transit Services - Ontario (ref. L686)	L641	135	139	L82U7C4500008	L82U6C4500016	5
St. John - New Brunswick	L273	—	—	S92U383000050	S92U383000050	1
St. John's - Newfoundland	L503	1066	1066	L82U4A3000071	L82U4A3000071	1
St. John's - Newfoundland	L687	1201	1209	L82U7C3000598	L82U2C3000606	9
Stratford - Ontario	L493	—	—	L82U2A3000019	L82U2A3000019	1
Stratford - Ontario	L634	—	—	L82UXB3000352	L82UXB3000352	1

CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
Strathcona County Transit - Alberta	L523	2010	2010	L82U693000603	L82U693000603	1
Strathcona County Transit - Alberta	L524	3005	3010	L82X593000604	L82X493000609	6
Strathcona County Transit - Alberta	L580	2011	2023	L82U1A3000464	L82U8A3000476	13
Strathcona County Transit - Alberta	L659	2024	2028	L82U7B3000440	L82U4B3000444	5
Sudbury - Ontario	L465	791	795	L82U593000317	L82U793000321	5
Sudbury - Ontario	L552	801	808	L82U3A3000238	L82U0A3000245	8
Sudbury - Ontario	L632	811	817	L82U9B3000326	L82U4B3000332	7
Thunder Bay - Ontario	L488	—	—	L82U193000332	L82U593000334	3
Thunder Bay - Ontario	L614	—	—	L82UXB3000061	L82U3B3000063	3
Thunder Bay - Ontario	L662	20168	20168	L82U3B3000533	L82U7B3000535	3
Timmins - Ontario	L475	—	—	L82U493000311	L82U693000312	2
Timmins - Ontario	L550	—	—	L82U8A3000171	L82UXA3000172	2
Timmins - Ontario	L661	—	—	L82U9B3000486	L82U9B3000486	1
University of Alabama - Alabama	L479	479-1	479-1	L82U394000002	L82U394000002	1
University of Alabama - Alabama	L480	480-1	480-1	L82U594000003	L82U594000003	1
University of Alabama - Alabama	L573	—	—	L82U9A4000137	L82U0A4000138	2
University of Alabama - Alabama	L640	—	—	L82U9B4000141	L82UOB4000142	2
University of Alabama - Alabama	L671	7024	7025	L82U5C4500119	L82U1C4500120	2
University of Colorado - Colorado	L627	—	—	S92UXB4000139	S92U6B4000140	2
Walt Disney World - Florida	L535	1204	1213	L82UXA4000003	L82U0A4000012	10
Whitehorse - Yukon	L563	38	41	L82U3A3000255	L82U9A3000258	4
Woodstock - Ontario	L460	—	—	L82U693000309	L82U693000309	1
Woodstock - Ontario	L492	—	—	L82U4A3000040	L82U6A3000041	2
York Regional Transit - Ontario	L562	1080	1082	S92U2A3000420	S92U6A3000422	3
York Regional Transit - Ontario	L572	1083	1094	S92U3A3000569	S92U2A3000580	12

**WARNING**

Follow your internal safety procedures.

**NOTE**

This document applies only to axles with ZF serial numbers up to 2396857. Axles with ZF serial numbers 2396857 and up have O-rings with greater heat resistance factory installed.

Use of the O-rings with greater heat resistance is not a must.

Apply this fix only if an oil leak occurs between the two axle casings or between the hub carrier and the gantry housing. See Figures 1 and 2.

Any kind of shield on the axle reducing the airflow must be removed. If such a shield is installed, the temperature of the axle will increase, decreasing the O-rings service life.

## PROCEDURE

- 1.1. Check the ZF axle serial number. See note above.
- 1.2. Install the new O-rings in accordance with section 05: REAR SUSPENSION of the Nova Bus maintenance manual and the ZF AV-132 REAR AXLE T-DRIVE repair manual. ❖

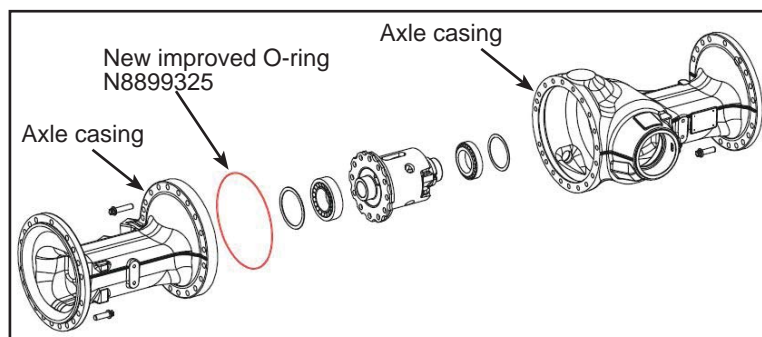


Figure 1 - Axle Casings O-ring

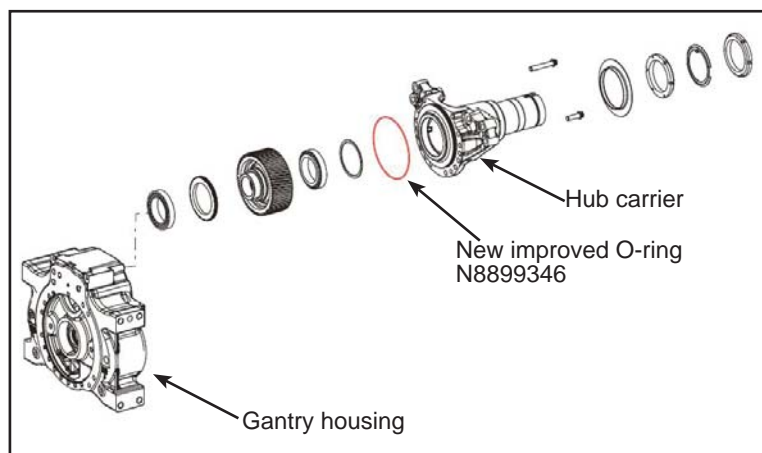


Figure 2 - Hub Carrier / Gantry Housing O-ring