

REFERENCE:	Nova Bus Manuals
SECTION:	09: Engine Cooling
RS N°:	MQR 7621-1421
EFFECTIVE IN PROD.:	N/A

APPLICATION DEADLINE:N/A

SUBJECT:	Hydraulic filter assembly
JUSTIFICATION:	N64662 PAL hydraulic filter head is discontinued and replaced by hydraulic filter head N8905938 and filter N8905939

LEVEL	DESCRIPTION	DIRECT CHARGES		TIME
		LABOUR	MATERIAL	
1	Replace the hydraulic tank assembly by the new N93676 hydraulic tank	Client	Client	1h
2	-	-	-	-

**MATERIAL**

QTY	PART N°	REV.	DESCRIPTION-	REPLACES PART N°
<b>LEVEL 1</b>				
1	N93676	-	Hydraulic reservoir with filter head	N64662
1	N64587	-	Remote breather support bracket	-
1	N64552	-	Remote breather	-
1	N64549	-	Bulkhead quick connect fitting	-
5 ft	8860102	-	1/4" nylon tube	-
1	N8905939	-	Hydraulic filter	-
4	N31413	-	Bolt M8 X 25	-
4	N28220	-	Lock washer	-
4	N20505	-	Washer M8	-
<b>LEVEL 2</b>				
-	-	-	-	-

Materials will be available within 70 days once your order has been placed. 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](mailto:prevostparts.commandes@volvo.com). Specify document number, quantity of parts required and shipping address.

**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	2018DE19	Initial release	Luc Carignan

CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
Academy Bus - New Jersey	L231	—	—	L82U563000166	L82U163000178	13
Academy Bus - New Jersey	L333	—	—	L82U273000207	L82U473000211	5
Academy Bus - New Jersey	L339	—	—	L82U483000047	L82U883000052	5
Academy Bus - New Jersey	L340	—	—	L82U493000003	L82U193000007	5
Arrow Coach Line - Arkansas	L252	—	—	L82U963000235	L82U963000235	1
BC Transit - BCT - British Columbia	L215	9201	9210	L82U663000001	L82U763000010	10
BC Transit - BCT - British Columbia	L236	9211	9231	L82U063000141	L82U663000161	21
BC Transit - BCT - British Columbia	L342	9232	9251	L82U173000294	L82U173000313	20
BC Transit - BCT - British Columbia	L343	9252	9267	L82U973000463	L82U073000478	16
BC Transit - BCT - British Columbia	L414	9268	9289	L82U983000299	L82U783000320	22
BC Transit - BCT - British Columbia	L417	9290	9297	L82U983000321	L82U183000328	8
BC Transit - BCT - British Columbia	L430	9301	9318	L82U483000503	L82U483000520	18
BC Transit - BCT - British Columbia	L458	9298	9300	L82U683000521	L82UX83000523	3
Belleville Transit - Ontario	L176	—	—	L82U563000233	L82U563000233	1
Belleville Transit - Ontario	L179	179-1	179-1	L82UX53000033	L82UX53000033	1
Belleville Transit - Ontario	L180	180-1	180-1	L82U753000118	L82U753000118	1
Belleville Transit - Ontario	L354	354-1	354-1	L82U983000089	L82U983000089	1
Belleville Transit - Ontario	L357	357-1	357-1	L82U783000091	L82U783000091	1
Bow Valley Transit - Alberta	L347	1	4	L82W083000175	L82W683000178	4
Brampton - Ontario	L209	0601	0621	L82U253000222	L82U853000242	20
Brampton - Ontario	L238	0609	0609	L82U663000094	L82U663000094	1
Brampton - Ontario	L253	0622	0632	L82U463000269	L82U763000279	11
Brampton - Ontario	L284	0633	0638	L82U363000280	L82U263000285	6
Brampton - Ontario	L348	0701	0715	L82U273000479	L82U773000493	15
Brampton - Ontario	L349	0801	0810	L82U283000094	L82UX83000103	10
Brampton - Ontario	L424	0811	0827	L82U783000463	L82U083000479	17
Brampton - Ontario	L425	0901	0916	L82U993000045	L82U593000060	16
Brantford - Ontario	L150	—	—	L82U643000173	L82U843000174	2
Brantford - Ontario	L175	—	—	L82U363000232	L82U363000232	1
Brantford - Ontario	L256	—	—	L82U363000229	L82U363000229	1
Brantford - Ontario	L257	—	—	L82UX63000230	L82UX63000230	1
Brantford - Ontario	L258	—	—	L82U163000231	L82U163000231	1
Brantford - Ontario	L351	9071	9075	L82U883000018	L82UX83000022	5
Brantford - Ontario	L422	9081	9084	L82U183000524	L82U783000527	4
CMBC (TransLink) - British Columbia	L301	9602	9649	L82U373000216	L82U173000263	48
CMBC (TransLink) - British Columbia	L302	9650	9706	L82U673000386	L82U973000351	56
CMBC (TransLink) - British Columbia	L317	9601	9601	L82U973000155	L82U973000155	1
CMBC (TransLink) - British Columbia	L341	V9707	V9725	L82U373000412	L82U573000430	19
CMBC (TransLink) - British Columbia	L380	9726	9747	L82U483000209	L82U683000230	22
CMBC (TransLink) - British Columbia	L381	9748	9781	L82U383000329	L82U483000369	34
CMBC (TransLink) - British Columbia	L382	9782	9791	L82U083000370	L82U783000379	10
CMBC (West Vancouver) - British Columbia	L345	701	702	L82U373000264	L82U573000265	2

CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
CMBC (West Vancouver) - British Columbia	L401	801	803	L82U983000206	L82U283000208	3
Durham Region Transit - Ontario	L142	424	429	L82U643000108	L82UX43000113	6
Durham Region Transit - Ontario	L149	161	168	L82U443000155	L82UX43000161	7
Durham Region Transit - Ontario	L182	182-1	182-1	L82U653000157	L82U653000157	1
Durham Region Transit - Ontario	L199	169	169	L82U453000125	L82U453000125	1
Durham Region Transit - Ontario	L212	—	—	L82UX53000128	L82UX53000128	1
Durham Region Transit - Ontario	L213	—	—	L82U153000129	L82U153000129	1
Durham Region Transit - Ontario	L224	170	170	L82U963000011	L82U963000011	1
Elliot Lake - Ontario	L148	04-01	04-02	L82U143000162	L82U343000163	2
First Transit Inc. (ref. L173)	L144	—	—	L82U543000049	L82U543000049	1
Fredericton - New Brunswick	L146	8031	8032	L82U543000164	L82U743000165	2
Fredericton - New Brunswick	L178	8053	8053	L82U653000109	L82U653000109	1
Fredericton - New Brunswick	L225	8061	8061	L82U663000032	L82U663000032	1
Fredericton - New Brunswick	L240	8062	8062	L82U163000181	L82U163000181	1
Fredericton - New Brunswick	L276	8064	8065	L82U463000286	L82U663000287	2
Fredericton - New Brunswick	L281	8063	8063	L82U363000263	L82U363000263	1
Fredericton - New Brunswick	L282	8071	8072	L82UX73000097	L82U173000098	2
Fredericton - New Brunswick	L289	—	—	L82U573000072	L82U573000072	1
Fredericton - New Brunswick	L369	1	1	L82U693000018	L82U693000018	1
Fredericton - New Brunswick	L375	8081	8081	L82U983000142	L82U983000142	1
Gaylord Opryland - Nashville, Tennessee	L223	—	—	L82VX53000221	L82VX53000221	1
Gaylord Opryland - Nashville, Tennessee	L283	—	—	L82V773000034	L82V773000034	1
Gaylord Opryland - Nashville, Tennessee	L353	—	—	L82U583000008	L82U383000010	3
Grand River Transit - GRT - Ontario	L145	2400	2417	L82U143000114	L82U143000131	18
Grand River Transit - GRT - Ontario	L161	2418	2433	L82U643000254	L82U843000269	16
Grand River Transit - GRT - Ontario	L243	2601	2614	L82U463000188	L82U363000201	14
Grand River Transit - GRT - Ontario	L337	2701	2712	L82U373000281	L82UX73000293	12
Grand River Transit - GRT - Ontario	L338	2713	2724	L82U773000431	L82U173000442	12
Grand River Transit - GRT - Ontario	L404	8007	8021	L82U683000244	L82U683000258	15
Grand River Transit - GRT - Ontario	L405	8022	8027	L82W683000259	L82WX83000264	6
Guelph - Ontario	L167	180	182	L82U943000250	L82U243000252	3
Guelph - Ontario	L187	185	188	L82U353000214	L82U953000217	4
Guelph - Ontario	L211	183	184	L82U653000126	L82U853000127	2
Guelph - Ontario	L241	189	194	L82U363000182	L82U263000187	6
Guelph - Ontario	L397	195	198	L82U183000152	L82U783000155	4
Guelph - Ontario	L418	199	205	L82U883000410	L82U983000416	7
Guelph - Ontario	L431	206	220	L82U793000030	L82U793000044	15
Leduc Bus Line - Ontario	L181	—	—	L82V853000119	L82V853000119	1
Leduc Bus Line - Ontario	L228	228-1	228-1	L82V663000041	L82V663000041	1
Leduc Bus Line - Ontario	L346	—	—	L82UX83000053	L82UX83000053	1
Moncton (Codiac) - New Brunswick	L147	504	505	L82U943000166	L82U043000167	2
Moncton (Codiac) - New Brunswick	L226	506	507	L82U863000033	L82UX63000034	2
Moncton (Codiac) - New Brunswick	L334	600	603	L82U673000212	L82U173000215	4
Moose Jaw - Saskatchewan	L344	17	25	L82U083000143	L82U883000147	5

CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
Ottawa - Ontario	L162	162-1	162-1	L82V343000270	L82V343000270	1
Peterborough - Ontario	L202	—	—	L82U253000110	L82U653000112	3
Peterborough - Ontario	L411	36	50	L82U283000354	L82U083000532	15
Regina - Saskatchewan	L166	598	603	L82U453000027	L82U853000032	6
Regina - Saskatchewan	L183	604	608	L82U853000046	L82UX53000050	5
Regina - Saskatchewan	L239	609	610	L82U363000179	L82UX63000180	2
Regina - Saskatchewan	L304	611	616	L82U373000457	L82U773000462	6
Regina - Saskatchewan	L459	617	624	L82UX83000537	L82U783000544	8
St. John's - Newfoundland	L242	0753	0756	L82U273000028	L82U273000031	4
St. John's - Newfoundland	L352	0857	0861	L82U683000003	L82U383000007	5
St. John's - Newfoundland	L403	0962	0965	L82U299300014	L82U493000017	4
Stratford - Ontario	L371	—	—	L82U183000104	L82U183000104	1
Strathcona County Transit - Alberta	L177	921	923	L82U953000024	L82U253000026	3
Strathcona County Transit - Alberta	L233	924	929	L82V963000101	L82V863000106	6
Strathcona County Transit - Alberta	L303	930	936	L82U073000156	L82U673000162	7
Strathcona County Transit - Alberta	L383	—	—	L82U083000269	L82U083000269	1
Strathcona County Transit - Alberta	L406	937	939	L82U783000270	L82U083000272	3
Strathcona County Transit - Alberta	L407	940	943	L82W083000273	L82W683000276	4
Strathcona County Transit - Alberta	L457	944	949	L82U683000597	L82U683000602	6
Sudbury - Ontario	L208	—	—	L82U653000191	L82UX53000193	3
Sudbury - Ontario	L250	—	—	L82U063000236	L82U263000240	5
Sudbury - Ontario	L251	—	—	L82U063000241	L82U263000242	2
Sudbury - Ontario	L293	—	—	L82U673000128	L82U673000131	4
Sudbury - Ontario	L294	—	—	L82U873000132	L82UX73000133	2
Sudbury - Ontario	L385	781	782	L82U583000137	L82U783000138	2
Sudbury - Ontario	L386	785	785	L82U783000141	L82U783000141	1
Sudbury - Ontario	L399	783	784	L82U983000139	L82U583000140	2
Thunder Bay - Ontario	L221	142	144	L82U863000033	L82UX63000034	3
Thunder Bay - Ontario	L285	—	—	L82U473000046	L82U873000048	3
Thunder Bay - Ontario	L408	—	—	L82U283000239	L82U483000243	5
Thunder Bay - Ontario	L453	—	—	L82U283000533	L82U683000535	3
Timmins - Ontario	L184	184-1	184-1	L82UX53000081	L82UX53000081	1
Timmins - Ontario	L254	254-1	254-1	L82UX73000035	L82UX73000035	1
Timmins - Ontario	L426	—	—	L82U783000480	L82U883000536	2
Timmins - Ontario (ref. L189)	L144	—	—	L82U343000048	L82U343000048	1
University of Alabama - Alabama	L295	7001	7001	L82U173000134	L82U173000134	1
University of Alabama - Alabama	L296	7002	7003	L82U373000135	L82U573000136	2
University of Alabama - Alabama	L310	7004	7013	L82U973000267	L82UX73000276	10
University of Alabama - Alabama	L311	7014	7017	L82U173000277	L82U173000280	4
University of Colorado - Colorado	L237	—	—	L82U163000164	L82U363000165	2
University of Colorado - Colorado	L336	—	—	L82U773000266	L82U773000266	1
Walt Disney World - Florida	L174	174-1	174-1	L82U553000005	L82U553000005	1
Whitehorse - Yukon	L278	—	—	L82U563000264	L82U263000268	4
Whitehorse - Yukon	L423	—	—	L82U983000481	L82U083000482	2

CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
Windsor - Ontario	L186	555	564	L82U053000181	L82U453000190	10
Woodstock - Ontario	L255	—	—	L82U163000228	L82U163000228	1
Woodstock - Ontario	L335	—	—	L82U083000093	L82U083000093	1
Woodstock - Ontario	L419	—	—	L82U183000409	L82U183000409	1
Woodstock - Ontario (ref. L388)	L209	—	—	L82U153000230	L82U153000230	1

**WARNING**

Follow your internal safety procedures.

**PROCEDURE****NOTE**

Since dirty hydraulic systems can quickly clog a new filter element, cleanliness is vital. It is important to remove any dust from the external surfaces of the filter assembly and to plug all piping to prevent any dust or dirt from entering the system. Hydraulic fluid should always be filtered through at least an ISO 16/13/04 rated filter before the system is topped up with fluid. When the pump, motor, steering gear housing, hydraulic tank, filter or hydraulic lines have been removed or dismantled for replacement or complete maintenance, the hydraulic system should be drained before it goes back into operation. Dialysis is then recommended.

- 1.1. Open the rear engine access door. See Figure 1.
- 1.2. Raise the vehicle
- 1.3. Place a container under the hydraulic tank.
- 1.4. Remove the drain plug at the bottom of the hydraulic tank. Clean and retain the drain plug. See Figure 1.
- 1.5. Drain the hydraulic oil.
- 1.6. Disconnect the hydraulic tank electric harness connector.

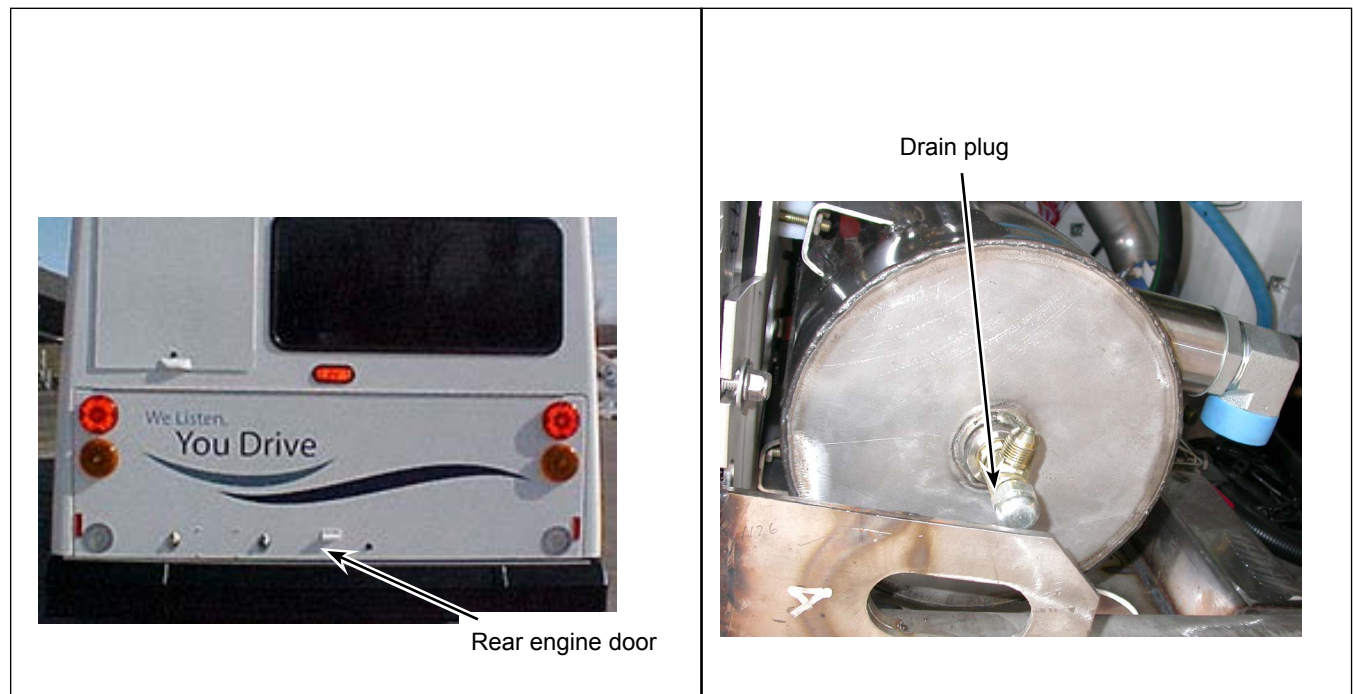
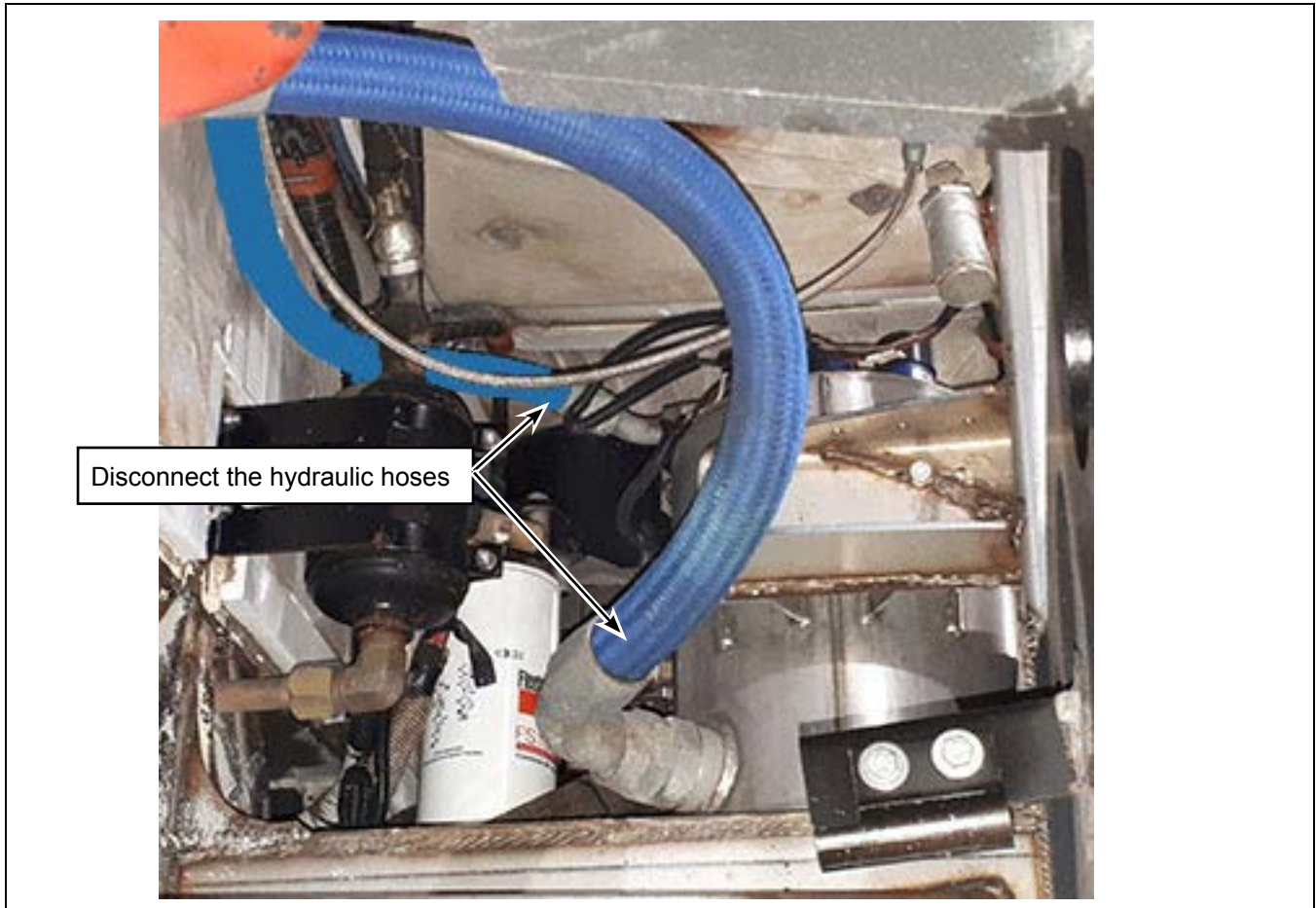


Figure 1 - Rear Engine Access Door and Hydraulic Tank Drain Plug

- 1.7. Disconnect the hydraulic hoses from the filter head and tank. Install a clean rag or clean plastic bag at the end of the disconnected hydraulic hoses. See Figure 2.



*Figure 2 - Hydraulic Hoses to be Disconnected*

- 1.8. Remove the hydraulic tank
- 1.9. Open the filter head cover cap on the new N93676 hydraulic tank. See Figure 3.
- 1.10. With a flashlight, validate whether the plastic cap has been removed from the bottom of the filter head. If the plastic cap is present, remove the filter head to remove the plastic cap.
- 1.11. Install the hydraulic filter N8905939 in the filter head and install the cover cap. See Figure 3.

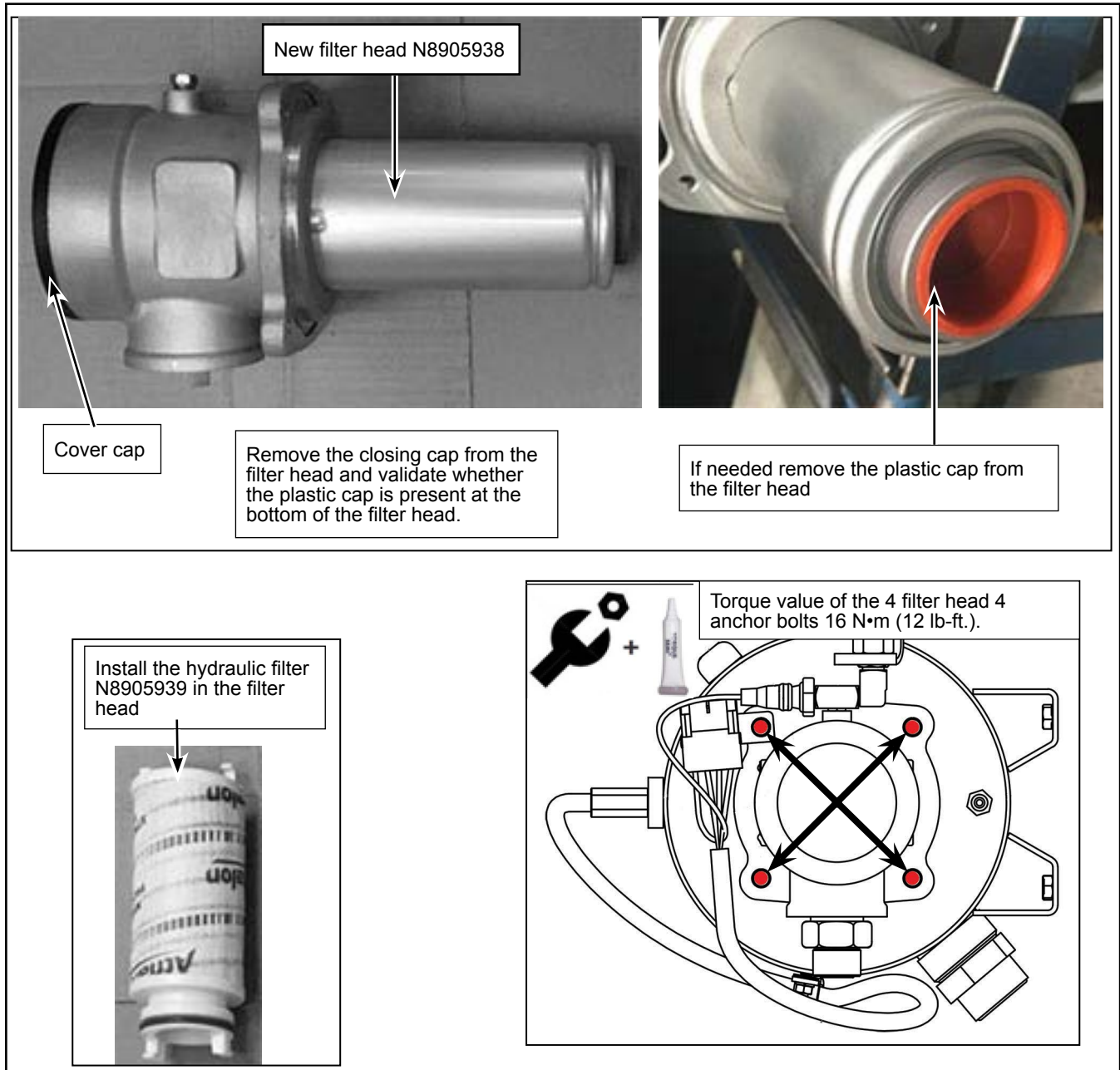


Figure 3 - Validation of the Filter Head

- 1.12. Affix bulkhead quick connect fitting N64549 on the remote breather N64552. See Figure 4.
- 1.13. Affix bulkhead quick connect fitting N64549 on the remote breather support bracket N64587. See Figure 4.
- 1.14. Connect the 1/4" nylon tube 8860102 on the bulkhead quick connect fitting N64549. See Figure 4.

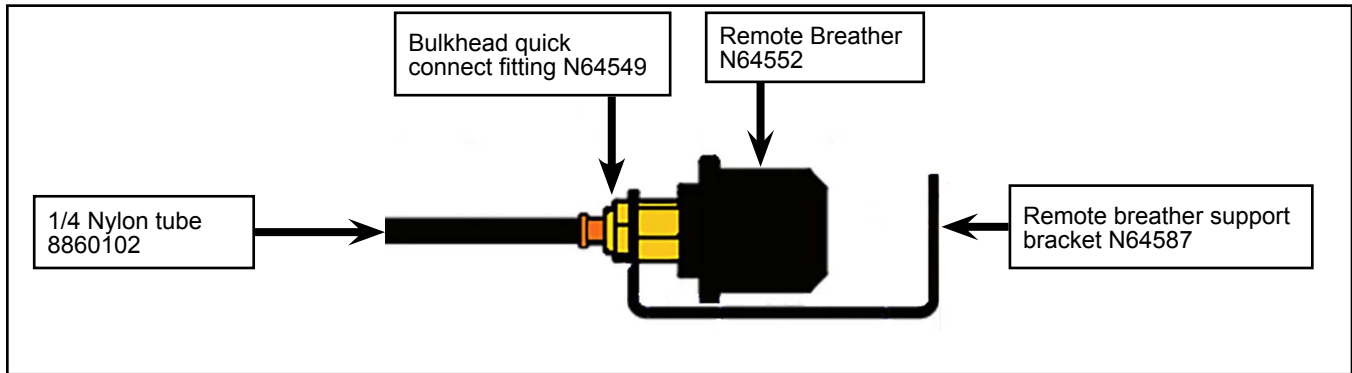


Figure 4 - Remote Breather Assembly

- 1.15. Affix the new N93676 hydraulic tank to the structure using N31413 bolts, N20505 washers and N28220 lock washers. See Figure 5.

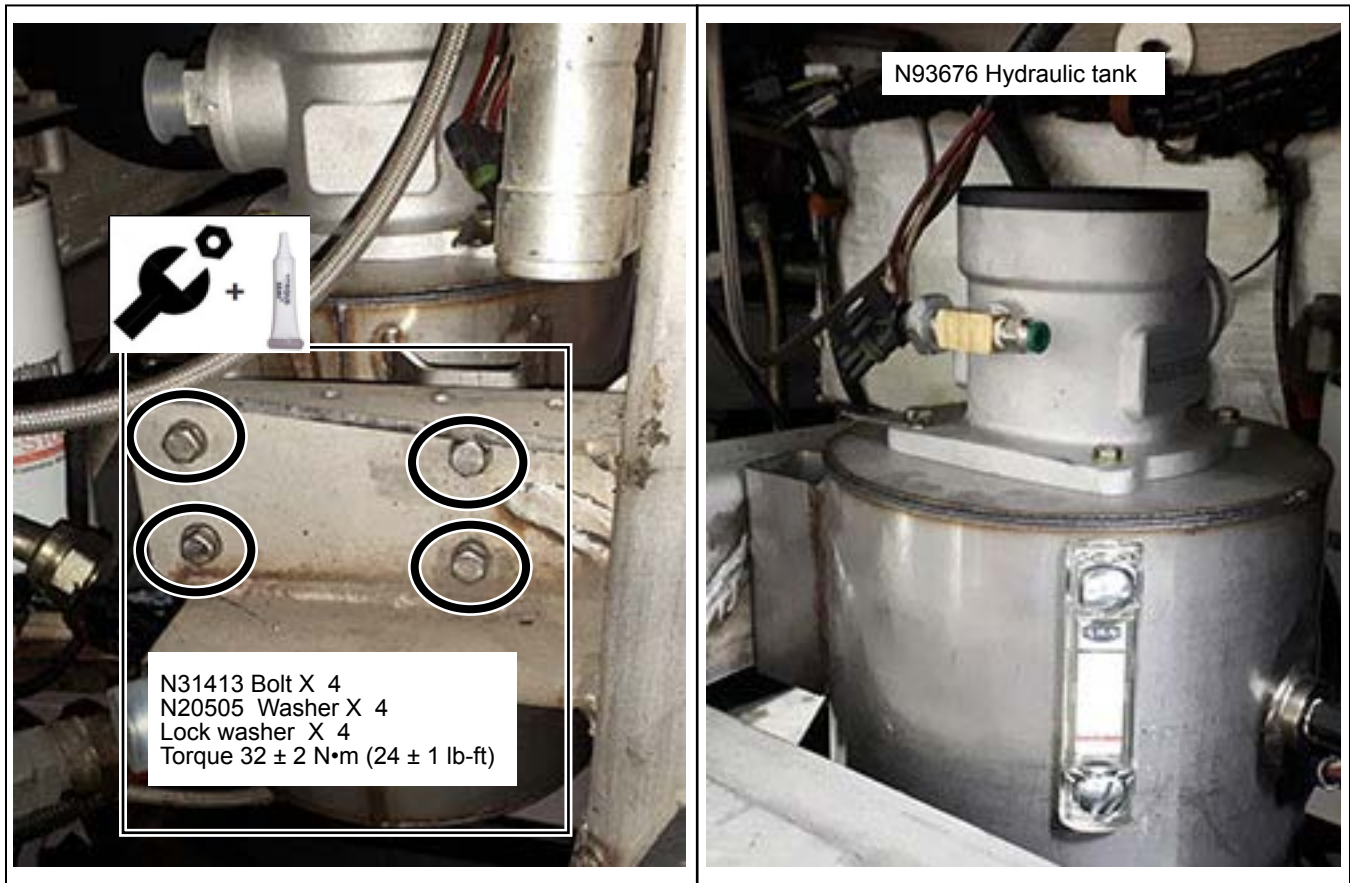


Figure 5 - N93676 Hydraulic Tank Installation

- 1.16. Affix the remote breather support bracket on the stud under the triangular portion of the rear frame portion or to any other anchor point located above the top portion of the filter head. See Figure 6.



Figure 6 - Remote Breather Installed on Frame

- 1.17. Validate that the O'rings are on the tank fittings before connecting of the hydraulic hoses. Apply a thin coat of Oring lubricant on the Oring.
- 1.18. Connect the hydraulic hoses to the tank. See Figure 7 for torque value.

**NOTE**

**When connecting ORS fittings, its important to consult the ORS-TYPE FITTING INSTALLATION heading under section 99 GENERAL PRACTICES badly connected hydraulic hoses may affect the power steering system.**

- 1.19. Cut the excess length of the 1/4" nylon tube 8860102 and connect to the quick connect fitting located on top of the hydraulic tank. If needed secure the tube using tie wraps See Figure 7.
- 1.20. Connect the engine compartment harness to the hydraulic tank harness installed on the new N93676 hydraulic tank. Secure the harness using a tie wrap if needed. See Figure 7.

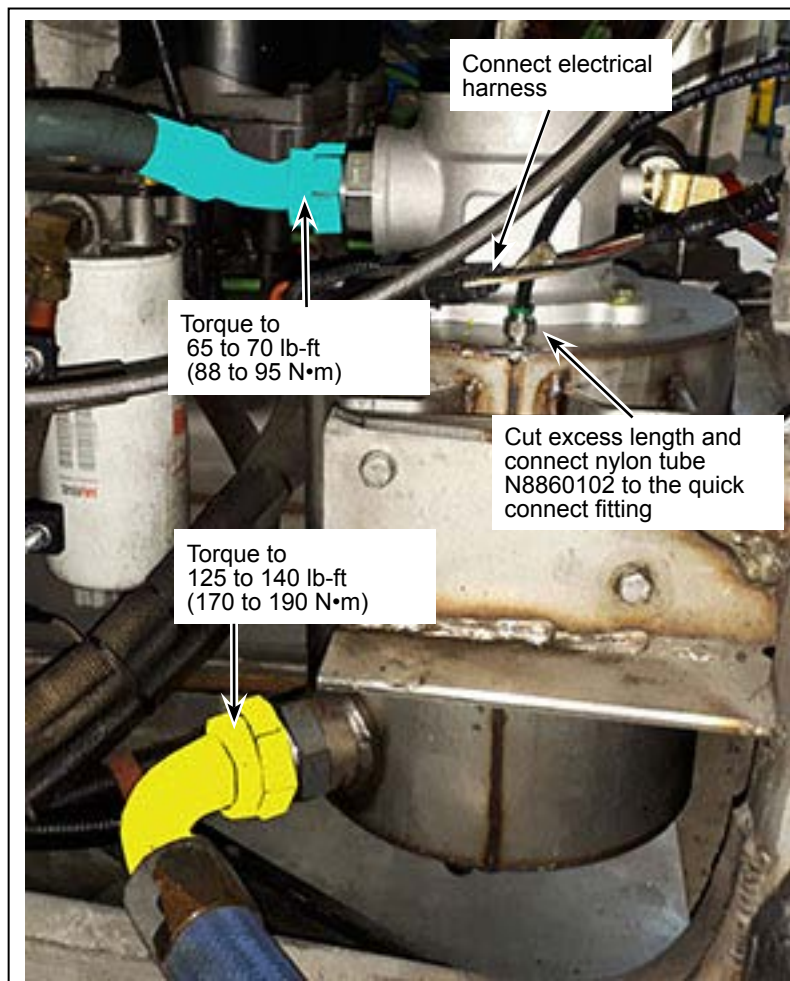


Figure 7 - Hydraulic Hose Torque

- 1.21. Connect a drum of new hydraulic oil to the quick disconnect fitting located on the new hydraulic tank.
- 1.22. Fill the tank until the level in the sight glass indicates the correct level.
- 1.23. Do not disconnect the drum of new hydraulic oil. Start the engine and let it run for 2 minutes in fast idle mode.
- 1.24. The oil level will drop significantly; fill the tank until the oil level indicator shows the correct oil level while the engine is still running in fast idle mode. See Figure 8.

**WARNING**

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**Maintain the hydraulic oil level in the hydraulic tank between the low level and medium level. If the hydraulic oil drop too low, the hydraulic system will start to take in some air. The tank and filter may start to leak oil, creating a false impression of a hydraulic oil surplus inside the hydraulic system.**

- 1.25. Turn off the engine and disconnect the drum of hydraulic oil from the quick connect fitting. ❖