

SPARE PARTS MANUAL

FOR

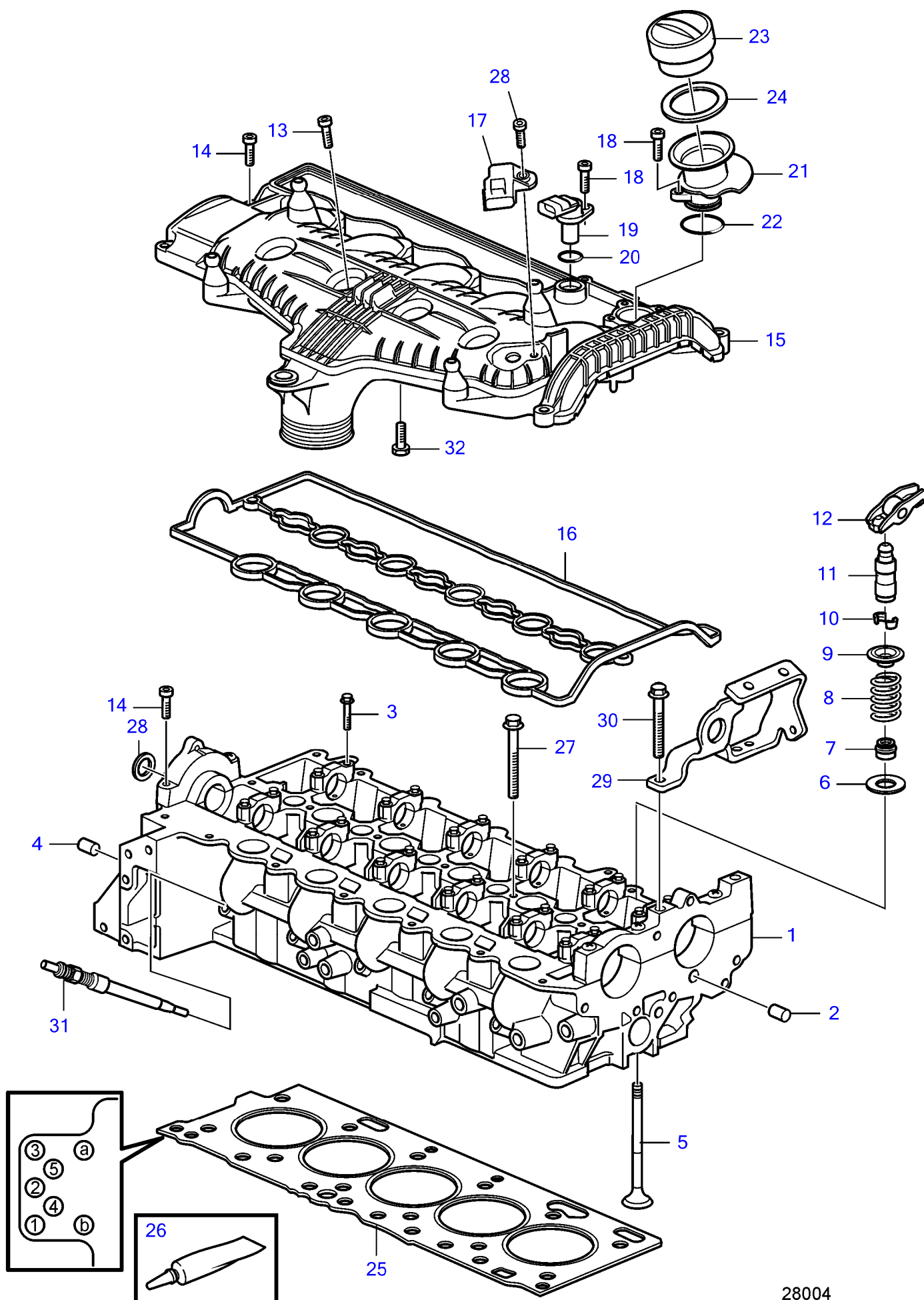
BUKH MARINE DIESEL LIFEBOAT ENGINE TYPE D3



powering **marine** safety

BUKH A/S
Aabenraavej 13-17
DK- 6340 Krusaa
Tel: +45 74 62 20 88
Fax: +45 74 62 74 07
E-mail: bukh@bukh.dk
www.bukh.dk

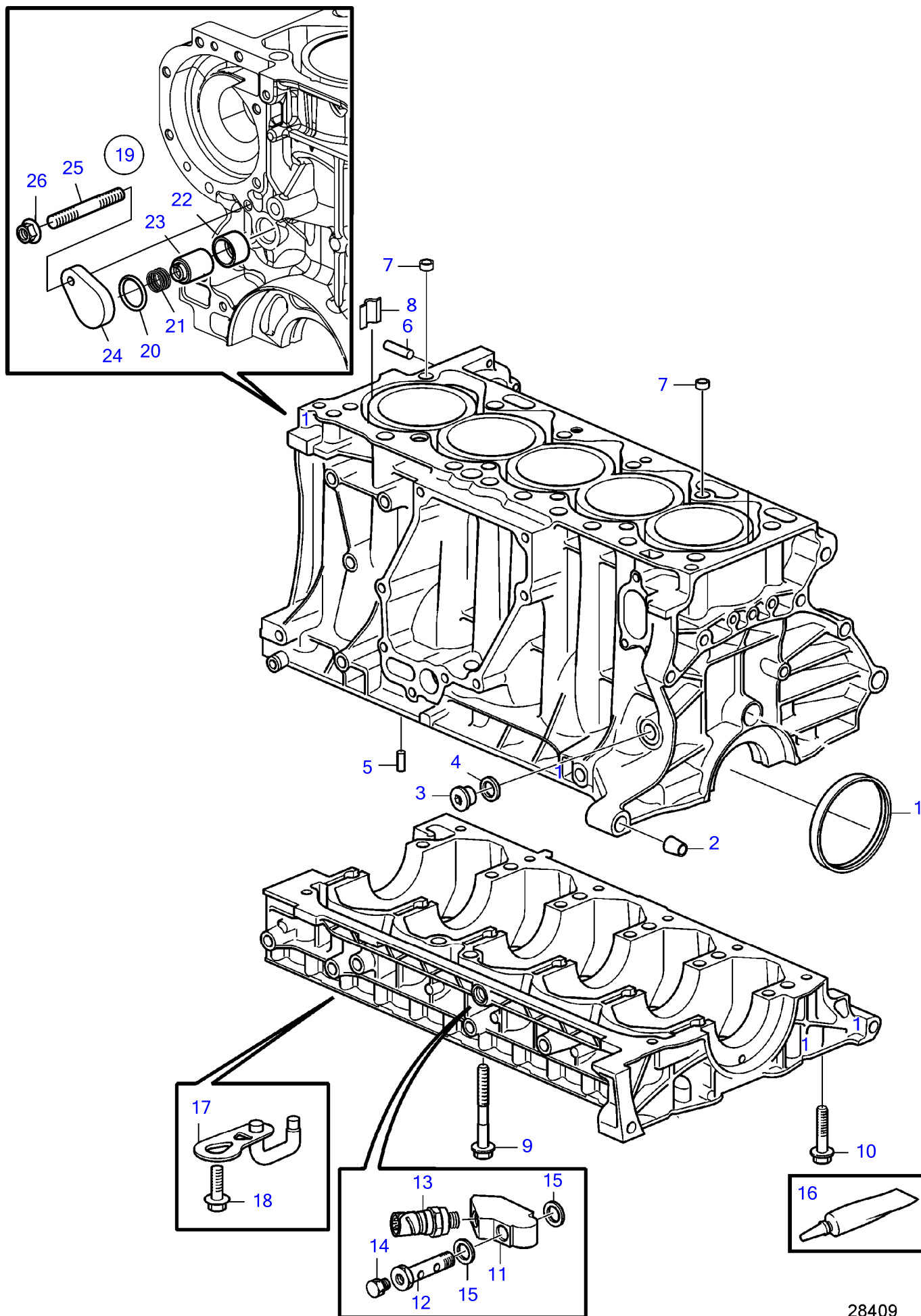
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28004

REF	PART NO.	QTY	DESCRIPTION	NOTES
1	3801663	1	Cylinder head, exch	
	36010025	1	Cylinder head	
	3801745	1	Cylinder head	
	31460230	1	Cylinder head	
2	24426721	1	• Expansion plug	
3	982761	24	• Flange screw	M6x35mm
4	30670582	3	• Plug	
5	8631650	10	• Inlet valve	
	8631651	10	• Exhaust valve	
6	8631655	20	• Valve spring washer, lower	
7	8631652	20	• Valve stem seal	
8	31258132	20	• Valve spring	
9	8631654	20	• Valve spring washer, upper	
10	9454613	40	• Valve collet	
11	31251885	20	• Pivot	
12	8670045	20	• Tappet	
13	987740	5	Flange screw	
14	987494	12	Flange screw	
15	31430316	1	Valve cover	
16	31430317	1	• Gasket	
	30777600	1	• Gasket	Replaced by 31430317
	31430317	1	Gasket	
17	31216308	1	Pressure sensor	
18	986072	5	6 point socket screw	M6x25mm
19	8658726	1	Sensor	
20	30756062	1	O-ring	
21	31330189	1	Oil filler pipe	
22	30757159	1	O-ring	
23	3819129	1	Oil filler cap	
24	30677740	1	• O-ring	
25				Gasket (a) not valid for VP
	31392321	1	Cylinder head gasket	Hole 5 and b, Class 1
	31392322	1	Cylinder head gasket	Hole 4, 5 and b, Class 2
	31392323	1	Cylinder head gasket	Hole 3, 4, 5 and b, Class 3
	31392324	1	Cylinder head gasket	Hole 2, 3, 4, 5 and b, Class 4
	31392325	1	Cylinder head gasket	Hole 1, 5 and b, Class 5
26	1161059	X	Sealing compound	
27	30777636	12	Flange screw	M12x197mm
28	8631561	1	Sealing ring	
29	21806510	1	Lifting eye	
30	965181	2	Flange screw	M8x70mm
31	30777311	5	Glow plug	
32	987349	12	6 point socket screw	

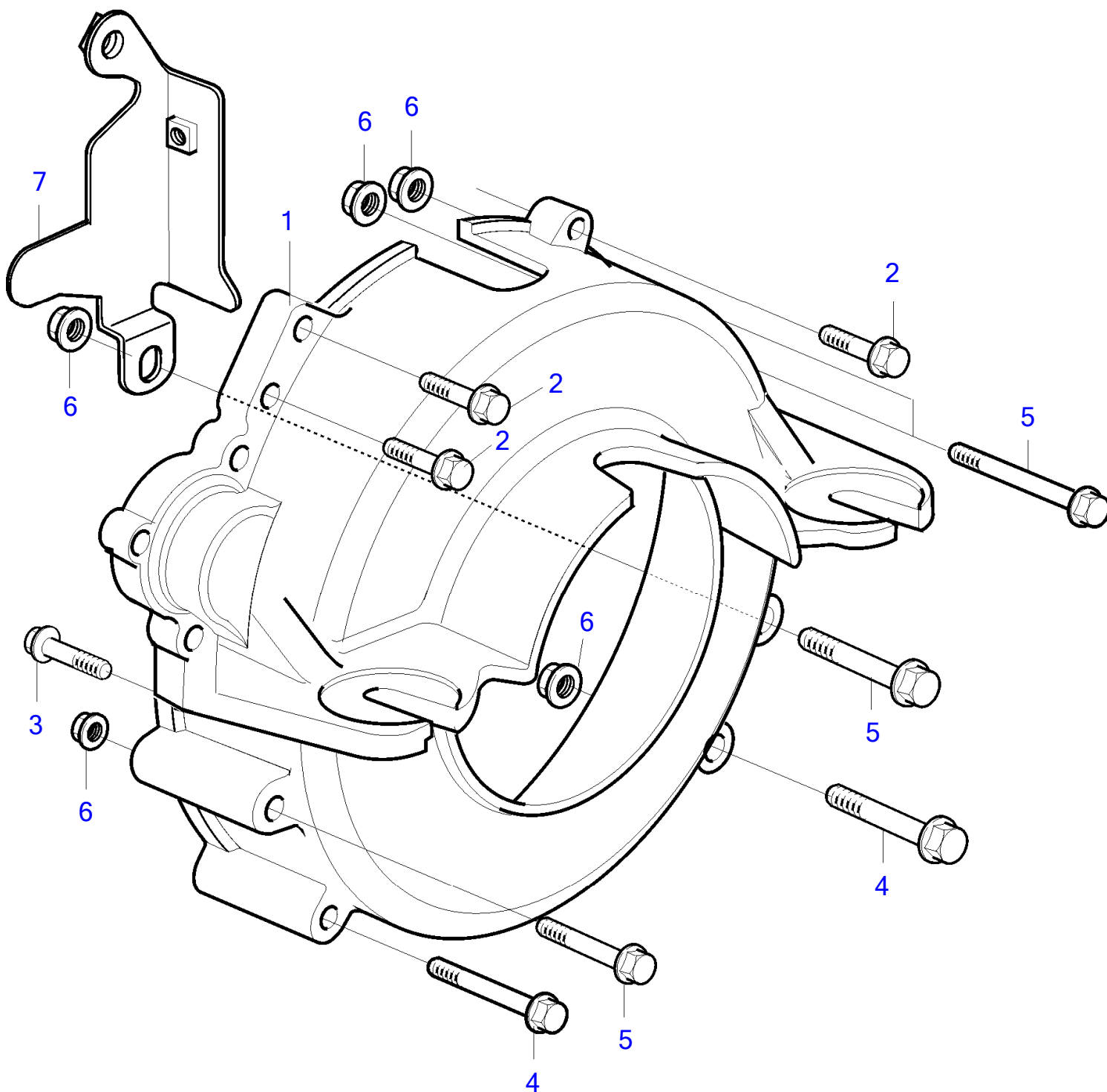
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D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

REF	PART NO.	QTY	DESCRIPTION	NOTES
1	31330091	1	Sealing ring	
2	1256394	2	Guide sleeve	
3	30713237	1	Plug	
4	11996	1	Gasket	
5	1383730	2	Locating pin	
6	950542	2	Pin	
7	1366129	2	Guide sleeve	
8	8631501	1	Guide rail	
9	31368044	12	Screw	M10x117mm
10	987962	12	Flange screw	M8x70mm
11	21636474	1	Connection block	
12	21636477	1	Hollow screw	
13	21634021	1	Pressure sensor	
14	981749		Plug	
15	11994	2	Gasket	
16	1161771	1	Sealing compound	
17	31401266	5	Piston cooling jet	
18	982777	5	Flange screw	
19	22543924	1	Kit	
20	949657	1	• O-ring	
21	22468375	1	• Spring	Obsolete part
22	22448834	1	• Adapter	Obsolete part
23	22544033	1	• Piston cooling valve	
24	22448833	1	Cover	Replaced by 22716222
	22716222	1	Cover	
25	953036	1	Stud	
26	990939	1	Flange nut	

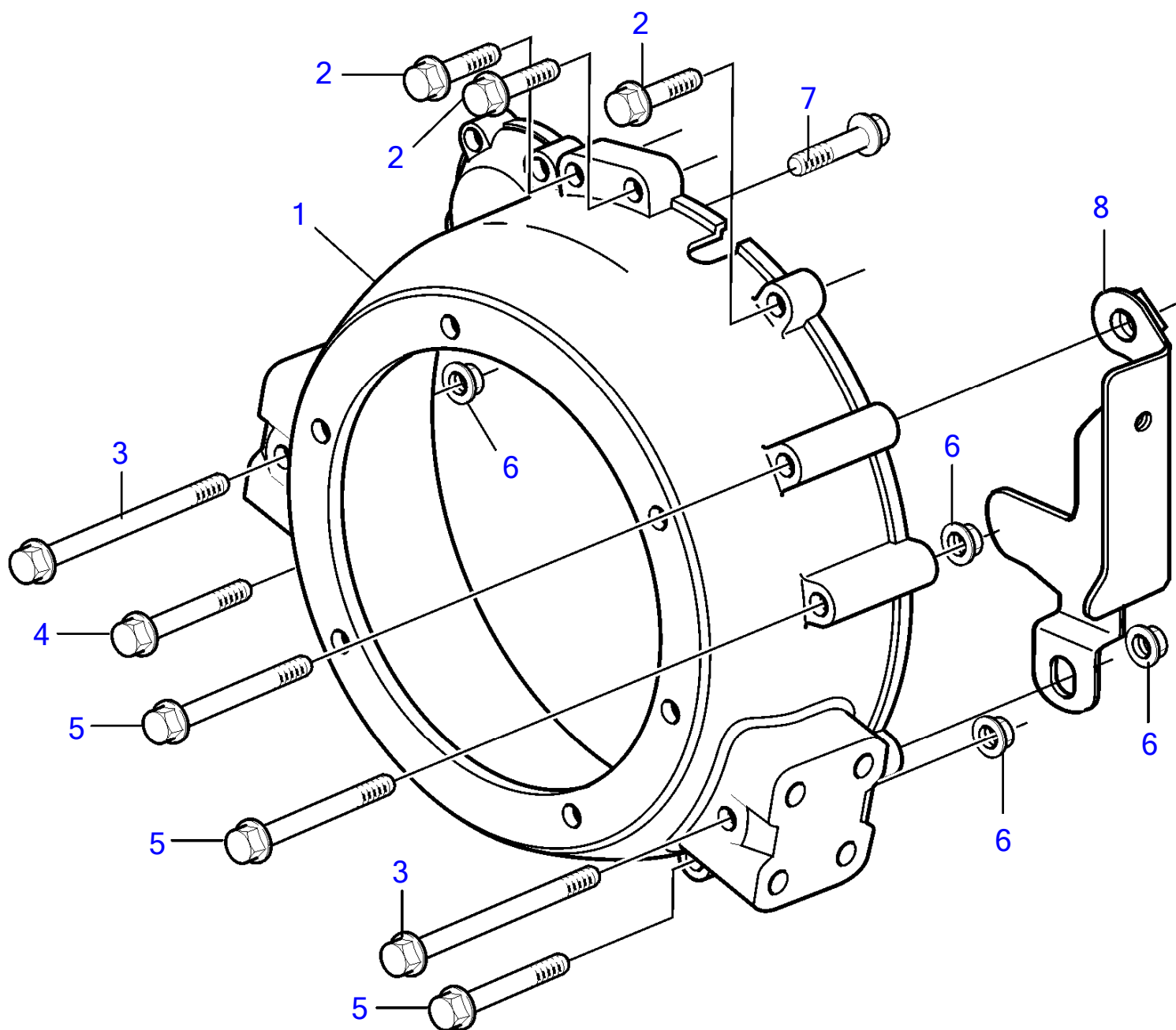
D3-140A-H, D3-170A-H, D3-200A-H, D3-220A-H



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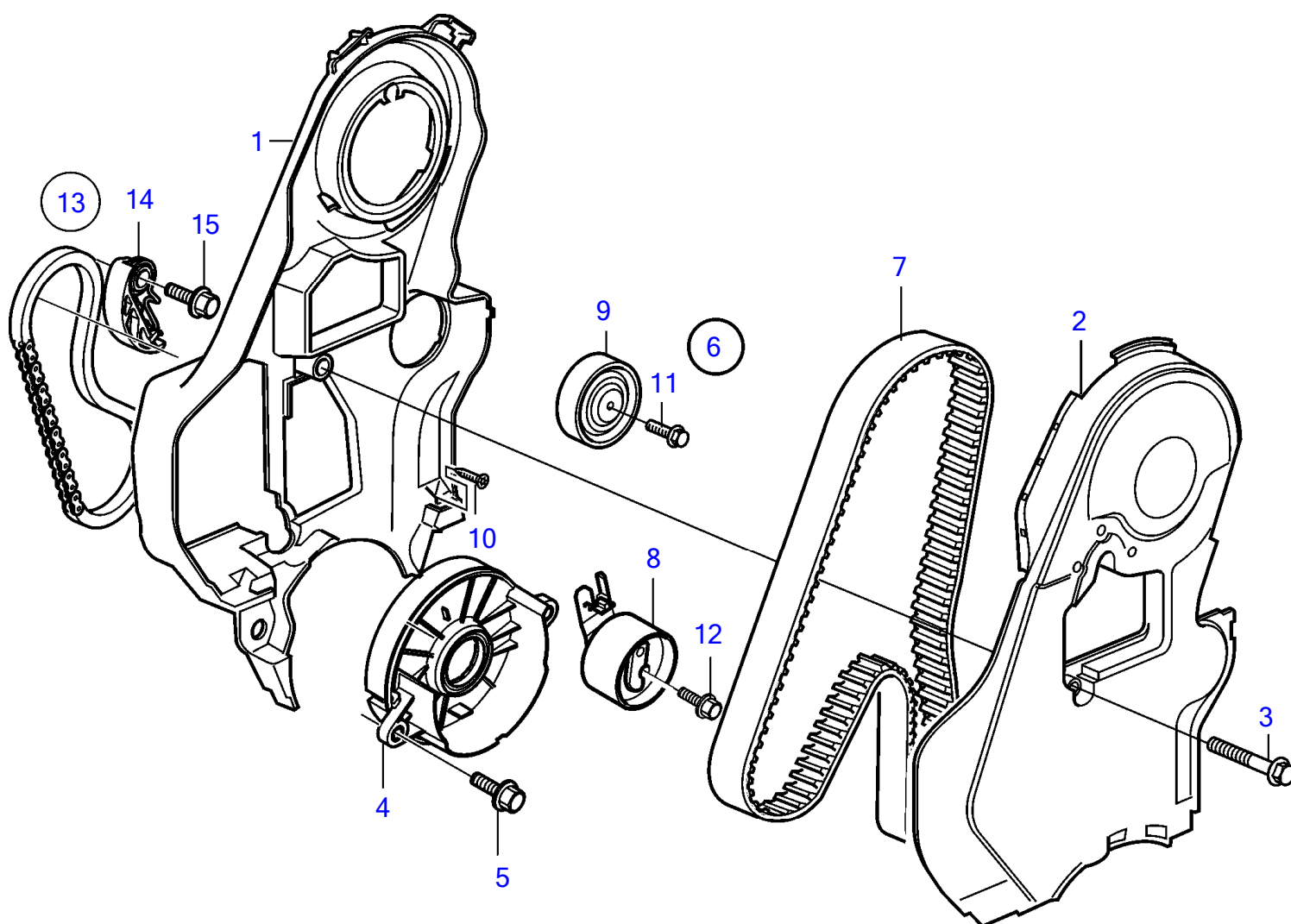
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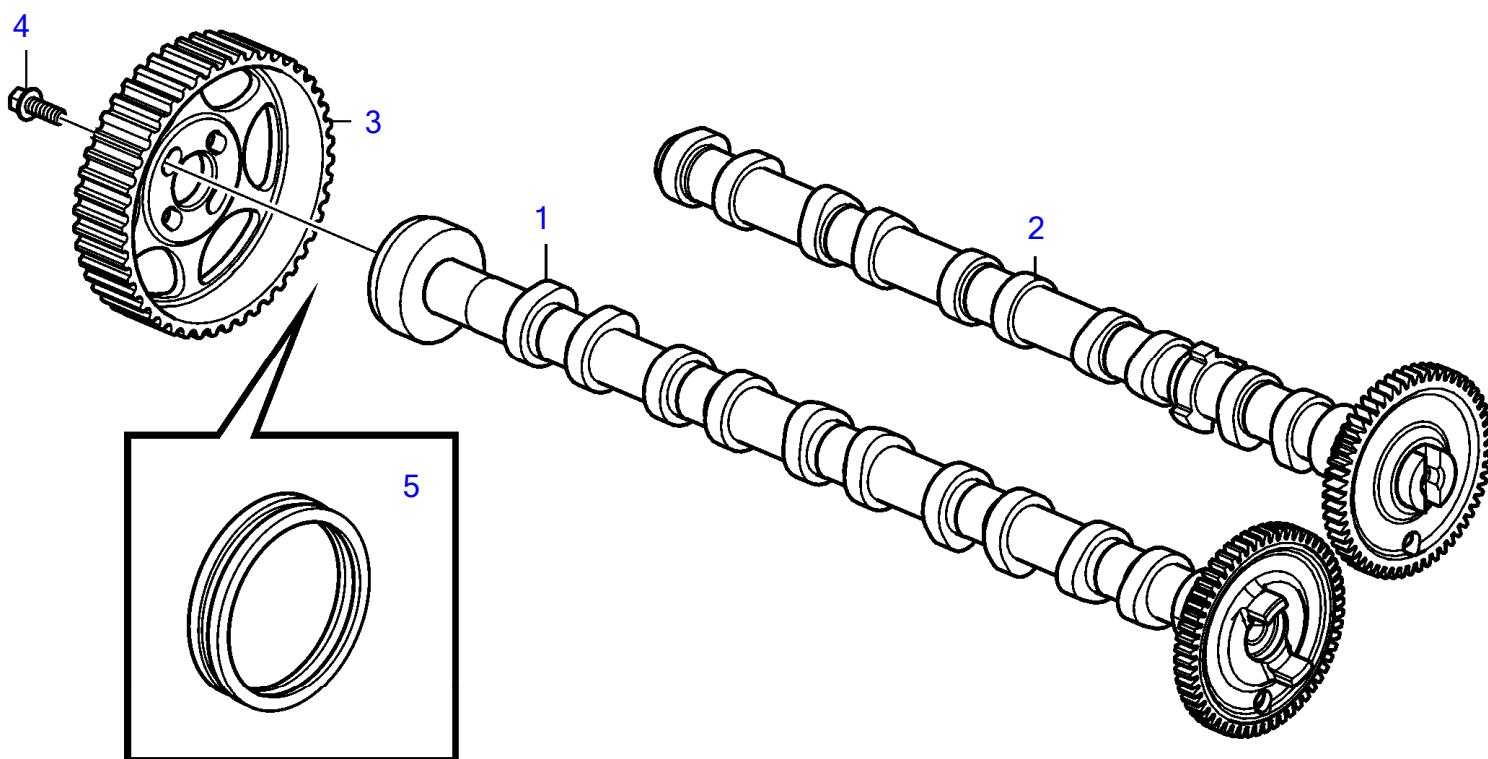


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REF	PART NO.	QTY	DESCRIPTION	NOTES
1	30757901	1	Belt protector	Rear
2	30757900	1	Belt protector	Front
3	987966	1	Flange screw	
4	31293007	1	Belt protector	Lower
5	982777	2	Flange screw	
6	31359568	1	Tooth belt	
7	30777779	1	▪ Tooth belt	
8	31339542	1	▪ Tensioner	
9	8692561	1	▪ Idler pulley	
10	986387	3	6 point socket screw	
11	985187	1	Flange screw	
12	987498	1	Sems screw	
13	31375415	1	Drive chain	
14	31272500	1	▪ Chain tensioner	
15	31272502	1	▪ Guide screw	

D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

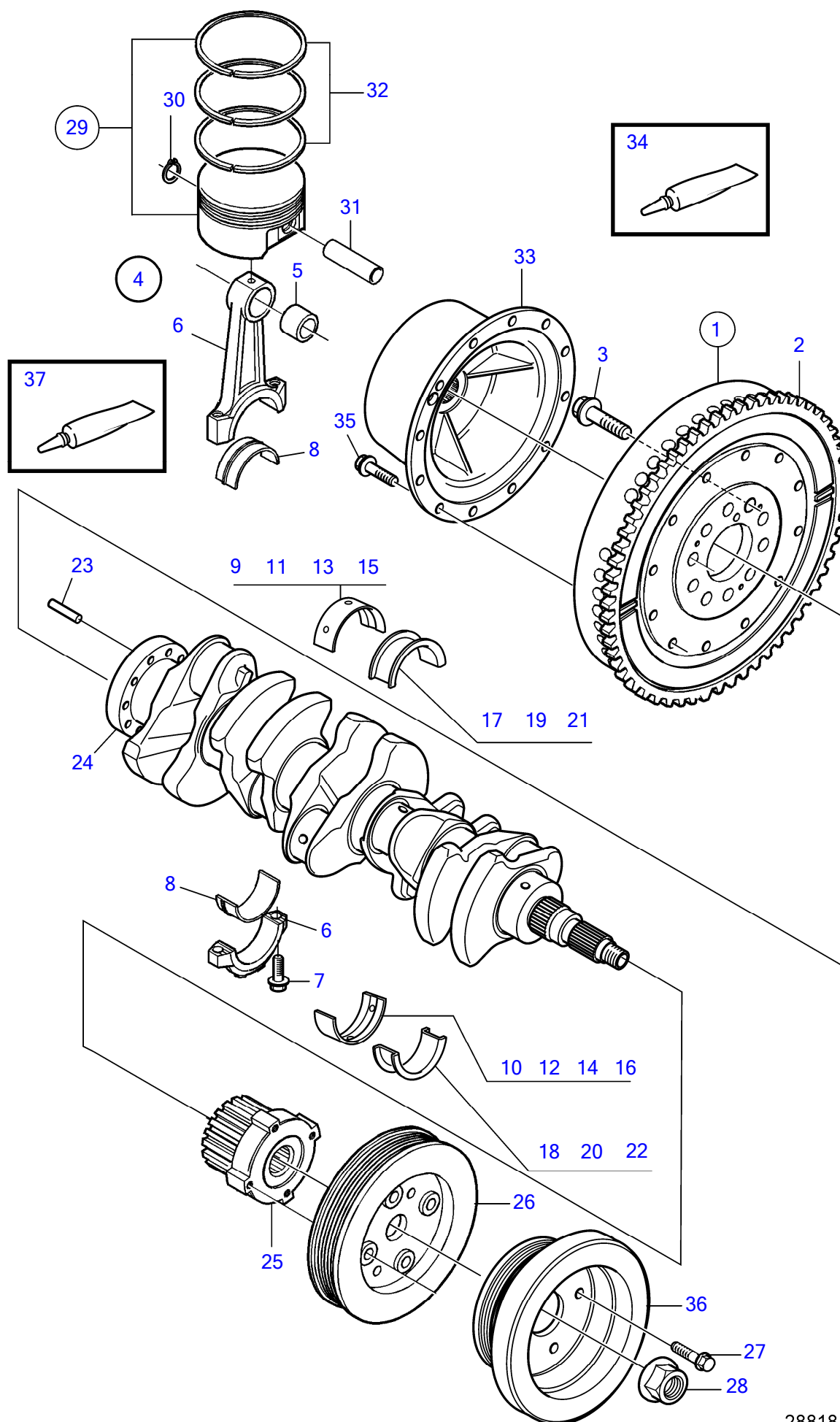


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REF	PART NO.	QTY	DESCRIPTION
1	31258094	1	Camshaft, intake
2	31258092	1	Camshaft, exhaust
3	8642804	1	Gear pulley
4	985373	4	Screw
5	8631561	1	Sealing ring

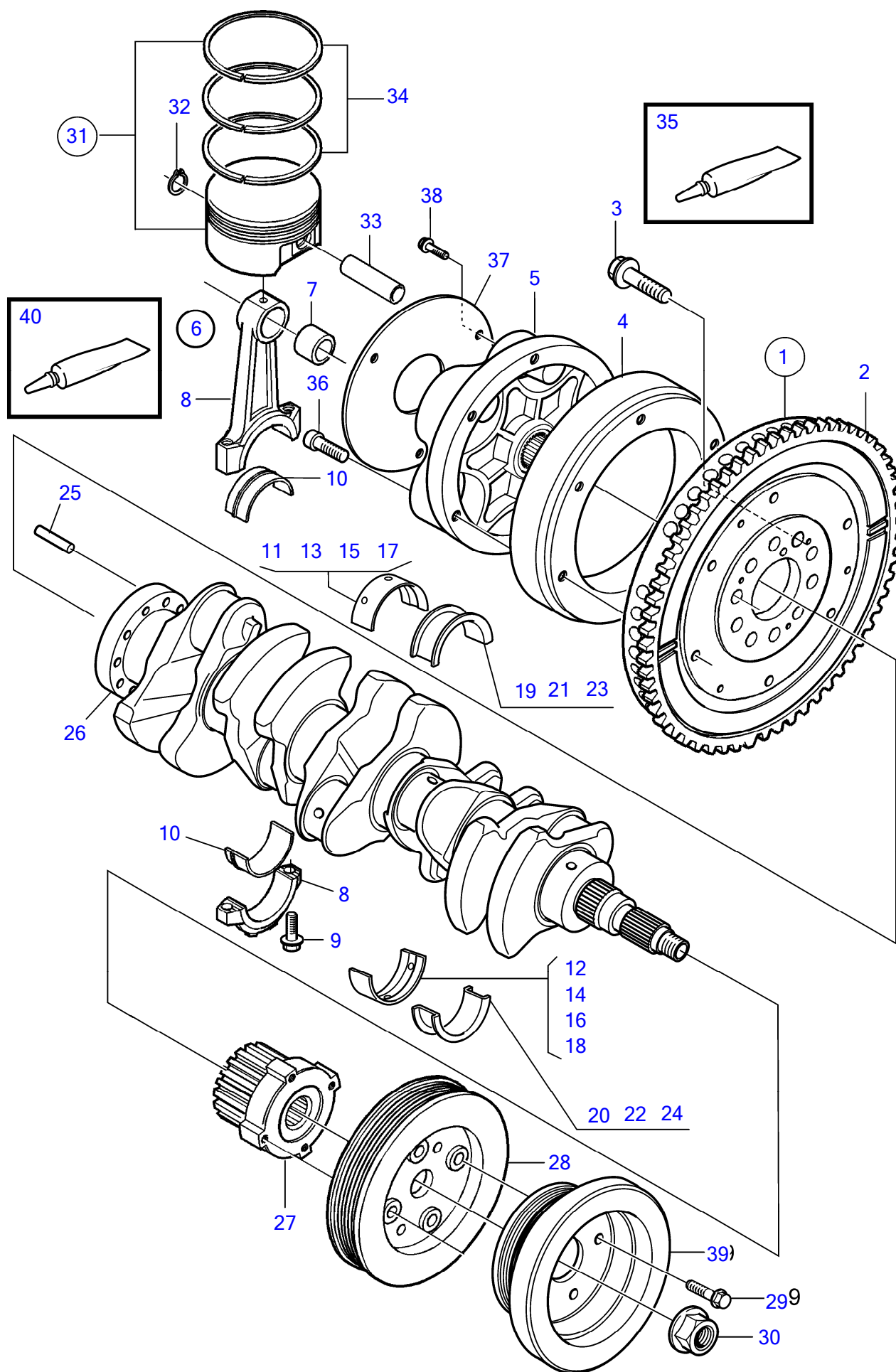
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D3-140A-H, D3-170A-H, D3-200A-H, D3-220A-H

REF	PART NO.	QTY	DESCRIPTION	SEE SEC.	NOTES
1	21517500	1	Flywheel		
2	21517489	1	• Gear ring		
3	9454743	10	Screw		
4	31401209	5	Connecting rod		
5		1	• Bushing		
6		1	• Connecting rod		
7	9497858	2	• Screw		
8	31251996	5	Big-end bearing kit		
9	31330321	5	Main bearing		Red, Without flange, upper, See workshop Manual
10	30777951	5	Main bearing		Red, Without flange, lower, See workshop Manual
11	31330322	5	Main bearing		Yellow, Without flange, upper, See workshop Manual
12	30777952	5	Main bearing		Yellow, Without flange, lower, See workshop Manual
13	31330323	5	Main bearing		Blue, Without flange, upper, See workshop Manual
14	30777953	5	Main bearing		Blue, Without flange, lower, See workshop Manual
15	31330324	5	Main bearing		Green, Without flange, upper, See workshop Manual
16	30777954	5	Main bearing		Green, Without flange, lower, See workshop Manual
17	31316541	1	Flange bearing		Red, With flange, upper, See workshop Manual
18	31316551	1	Flange bearing		Red, With flange, lower, See workshop Manual
19	31316542	1	Flange bearing		Yellow, With flange, upper, See workshop Manual
20	31316552	1	Flange bearing		Yellow, With flange, lower, See workshop Manual
21	31316543	1	Flange bearing		Blue, With flange, upper, See workshop Manual
22	31316553	1	Flange bearing		Blue, With flange, lower, See workshop Manual
23	973660	1	Spring pin		
24	31375826	1	Crankshaft		
25	30777171	1	Pulley		
26	31258122	1	Oscillation damper		
27	984755	4	Flange screw		
28	3531111	1	Nut		
29	31339777	5	Piston kit		Class C
	31339778	5	Piston kit		Class D
	31339779	5	Piston kit		Class E
30	30777225	10	• Lock ring		
31		5	• Piston pin		
32	31339782	5	• Piston ring kit		
33	21373176	1	Flexible coupling		
34	828250	1	Lubricating grease		
			• Bulletin P-18-4-6	P-18-4-6-EN	Water resistant grease for grease gun
35	946671	6	Flange screw		
36	21255747	1	Vibration damper		
37	1161325	1	Silicone grease		See Workshop Manual

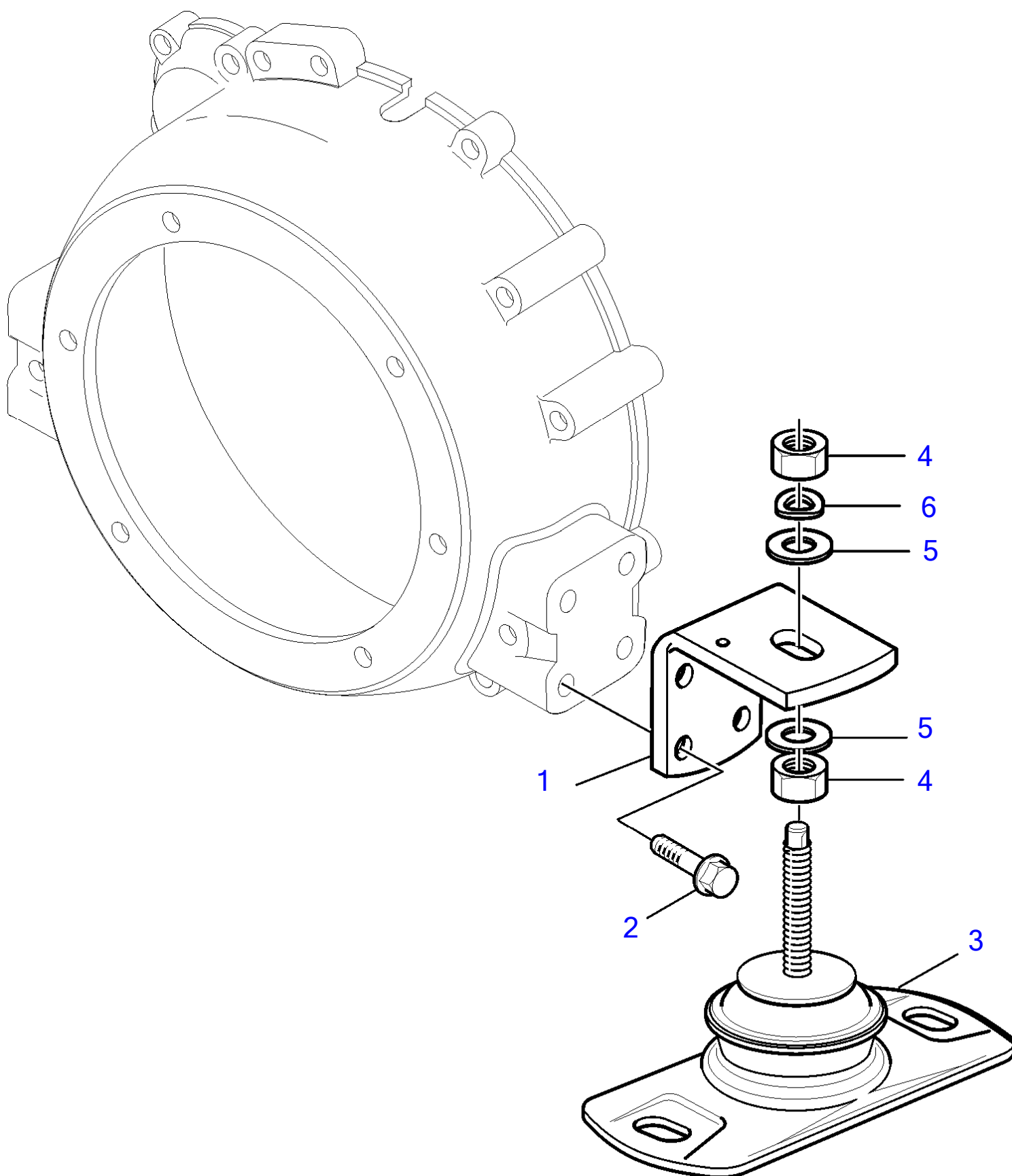
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D3-110I-H, D3-140I-H, D3-150I-H, D3-170I-H, D3-200I-H, D3-220I-H

REF	PART NO.	QTY	DESCRIPTION	SEE SEC.	NOTES
1	21517500	1	Flywheel		
2	21517489	1	• Gear ring		
3	9454743	10	Screw		
4	21429352	1	Adapter ring		
5	21485410	1	Flexible coupling		
6	31401209	5	Connecting rod		
7		1	• Bushing		
8		1	• Connecting rod		
9	9497858	2	• Screw		
10	31251996	5	Big-end bearing kit		
11	31330321	5	Main bearing		Red, Without flange, upper, See workshop Manual
12	30777951	5	Main bearing		Red, Without flange, lower, See workshop Manual
13	31330322	5	Main bearing		Yellow, Without flange, upper, See workshop Manual
14	30777952	5	Main bearing		Yellow, Without flange, lower, See workshop Manual
15	31330323	5	Main bearing		Blue, Without flange, upper, See workshop Manual
16	30777953	5	Main bearing		Blue, Without flange, lower, See workshop Manual
17	31330324	5	Main bearing		Green, Without flange, upper, See workshop Manual
18	30777954	5	Main bearing		Green, Without flange, lower, See workshop Manual
19	31316541	1	Flange bearing		Red, With flange, upper, See workshop Manual
20	31316551	1	Flange bearing		Red, With flange, lower, See workshop Manual
21	31316542	1	Flange bearing		Yellow, With flange, upper, See workshop Manual
22	31316552	1	Flange bearing		Yellow, With flange, lower, See workshop Manual
23	31316543	1	Flange bearing		Blue, With flange, upper, See workshop Manual
24	31316553	1	Flange bearing		Blue, With flange, lower, See workshop Manual
25	973660	1	Spring pin		
26	31375826	1	Crankshaft		
27	30777171	1	Pulley		
28	31258122	1	Oscillation damper		
29	984755		Flange screw		
30	3531111	1	Nut		
31	31339777	5	Piston kit		Class C
	31339778	5	Piston kit		Class D
	31339779	5	Piston kit		Class E
32	30777225	10	• Lock ring		
33		5	• Piston pin		
34	31339782	5	• Piston ring kit		
35	828250	1	Lubricating grease		
			• Bulletin P-18-4-6	P-18-4-6-EN	Water resistant grease for grease gun
36	959230	6	Hex. socket screw		
37	21752671	1	Plate		
			• Installation Instruction 47700624	47700624-EN	Rubber Roller Kit
38	965185	3	Flange screw		
39	21255747	1	Vibration damper		
40	1161325	1	Silicone grease		See Workshop Manual

D3-110I-H, D3-140I-H, D3-150I-H, D3-170I-H, D3-200I-H, D3-220I-H

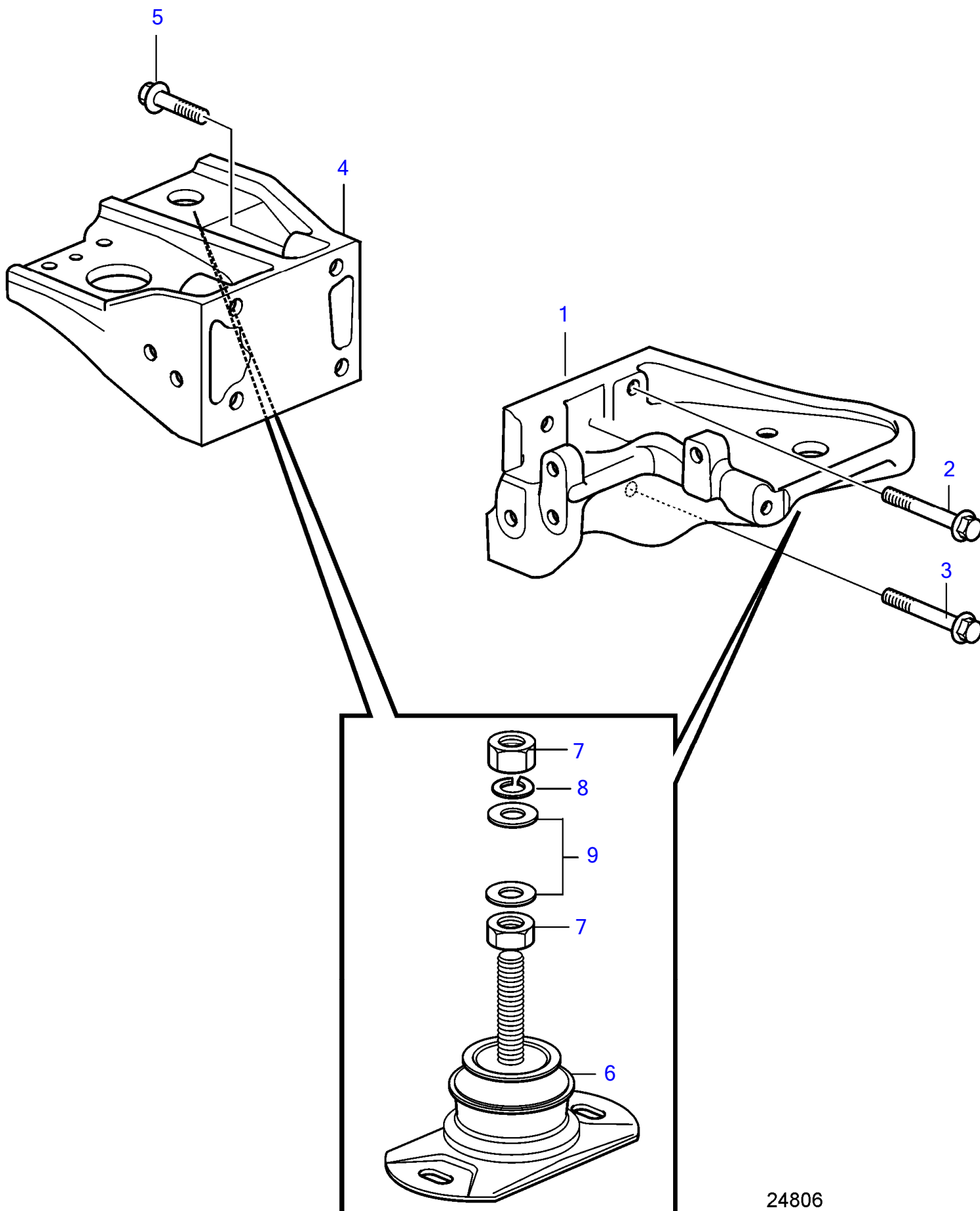


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D3-110I-H, D3-140I-H, D3-150I-H, D3-170I-H, D3-200I-H, D3-220I-H

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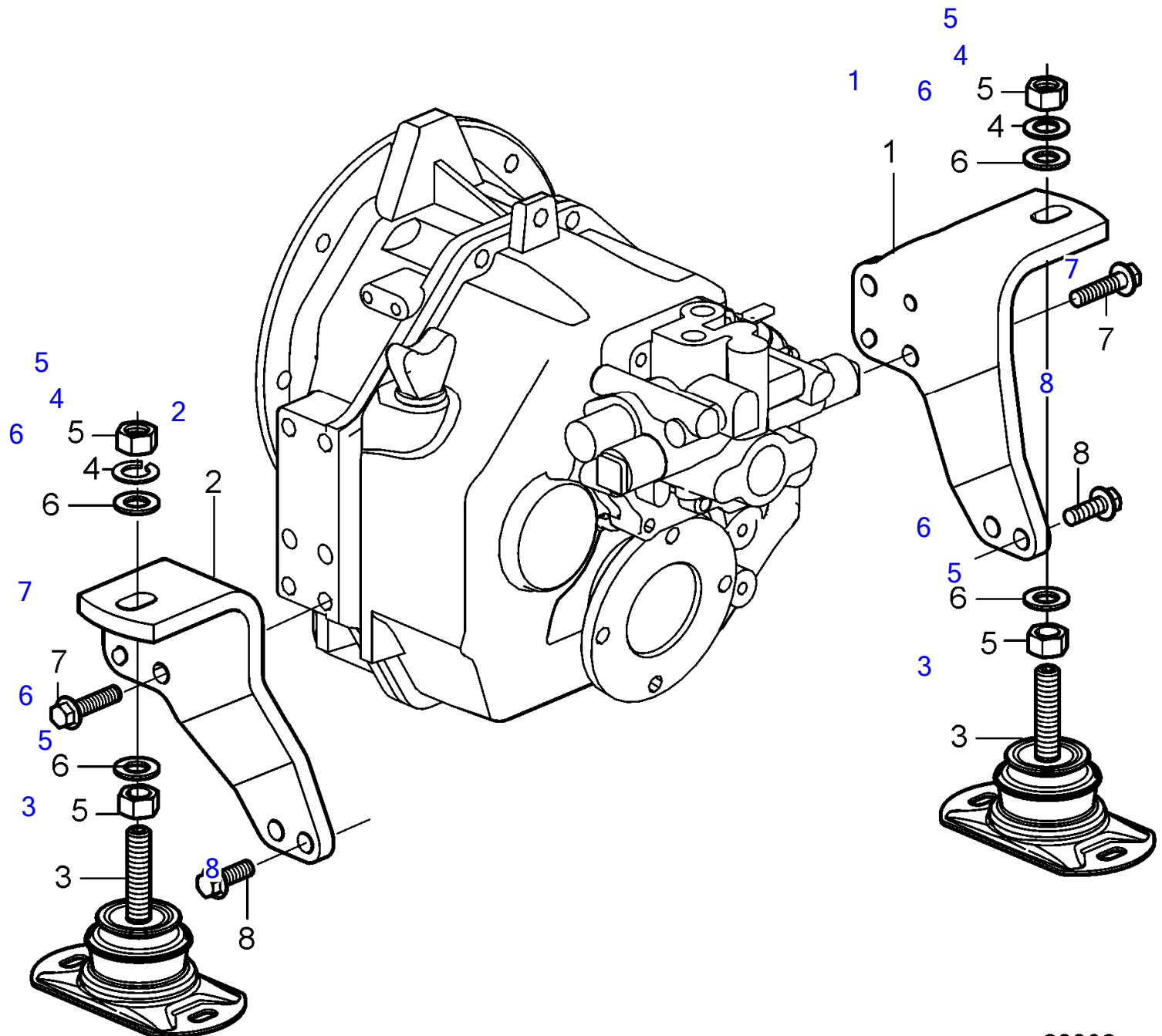


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REF	PART NO.	QTY	DESCRIPTION	NOTES
1	21750952	1	Engine bracket	Left, Replaced by 22769792
	22769792	1	Engine bracket	
2	984651	2	Flange screw	
3	984662	3	Flange screw	
4	21107717	1	Engine bracket	Right
5	984757	4	Flange screw	
6	22230030	2	Rubber cushion	
7	955806	4	Hexagon nut	
8	941913	2	Spring washer	
9	955901	4	Washer	

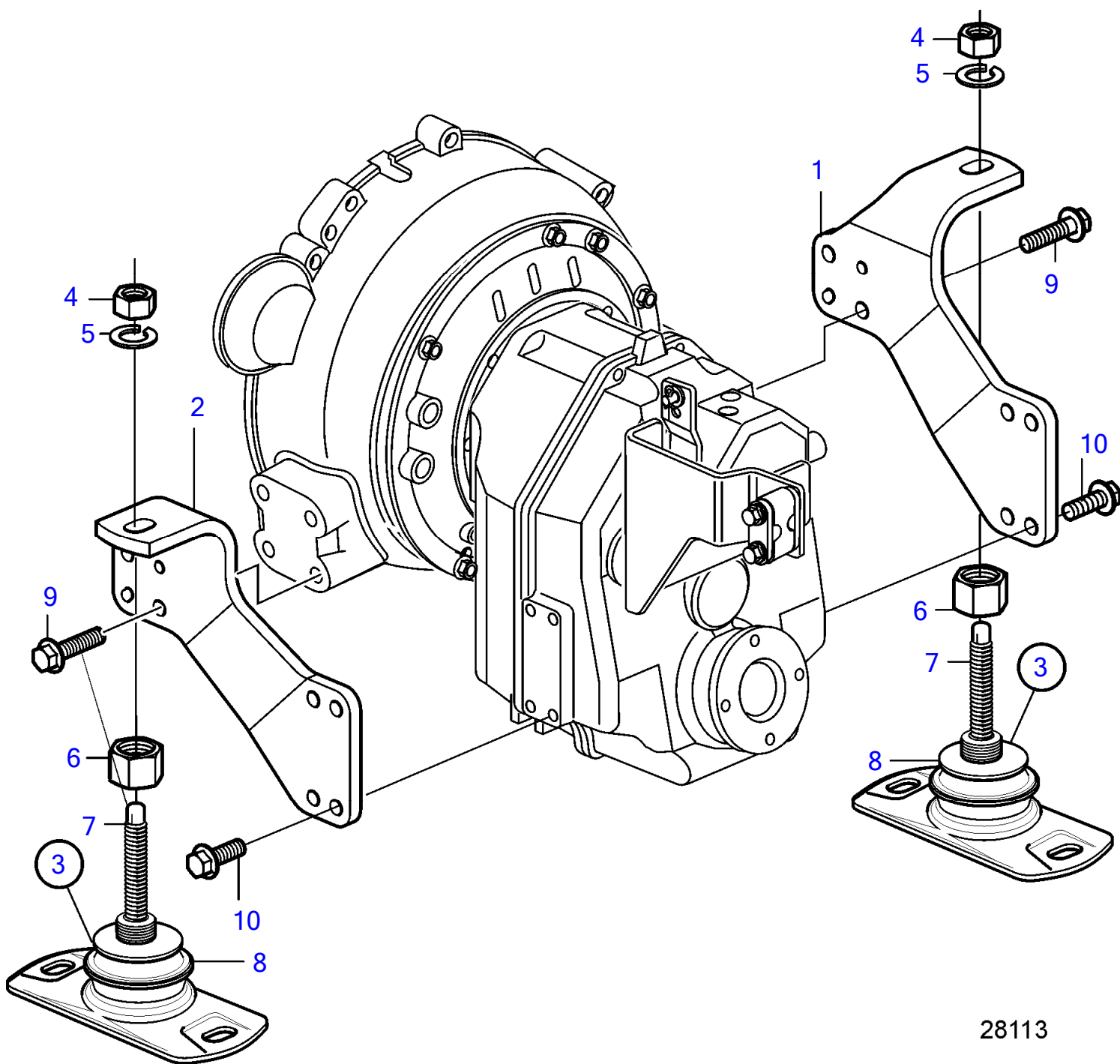
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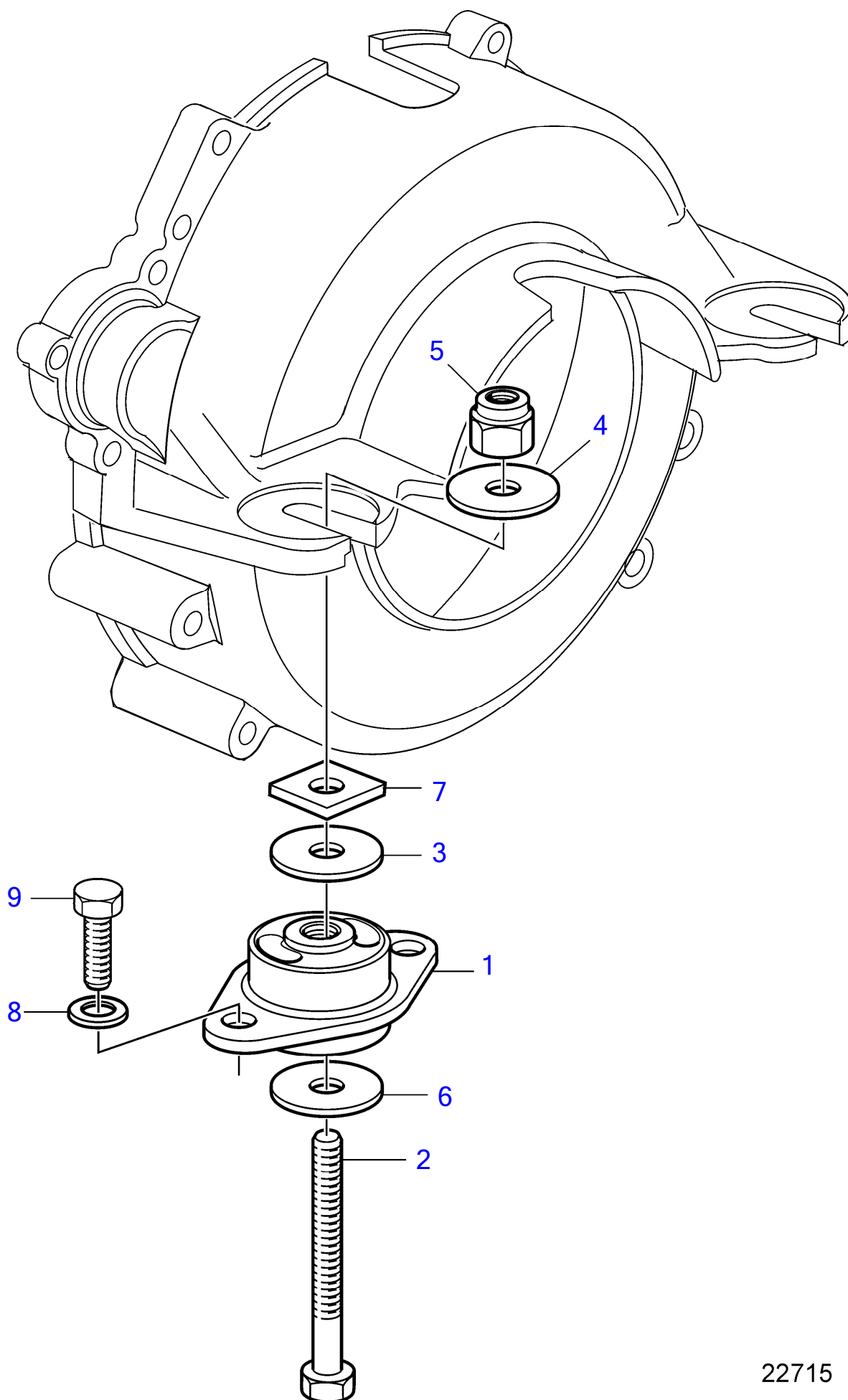


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REF	PART NO.	QTY	DESCRIPTION	NOTES
1	22176274	1	Engine bracket	Right
2	22176272	1	Engine bracket	Left
3	22006200	2	Rubber cushion	
4	990973	2	▪ Hexagon nut	
5	847766	2	▪ Lock washer	
6	3594127	2	▪ Nut	
7	3593856	2	▪ Adjusting screw	
8	3593858	2	▪ Washer	
9	984850	8	Flange screw	M12x50mm
10	965225	8	Flange screw	M12x35mm

D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

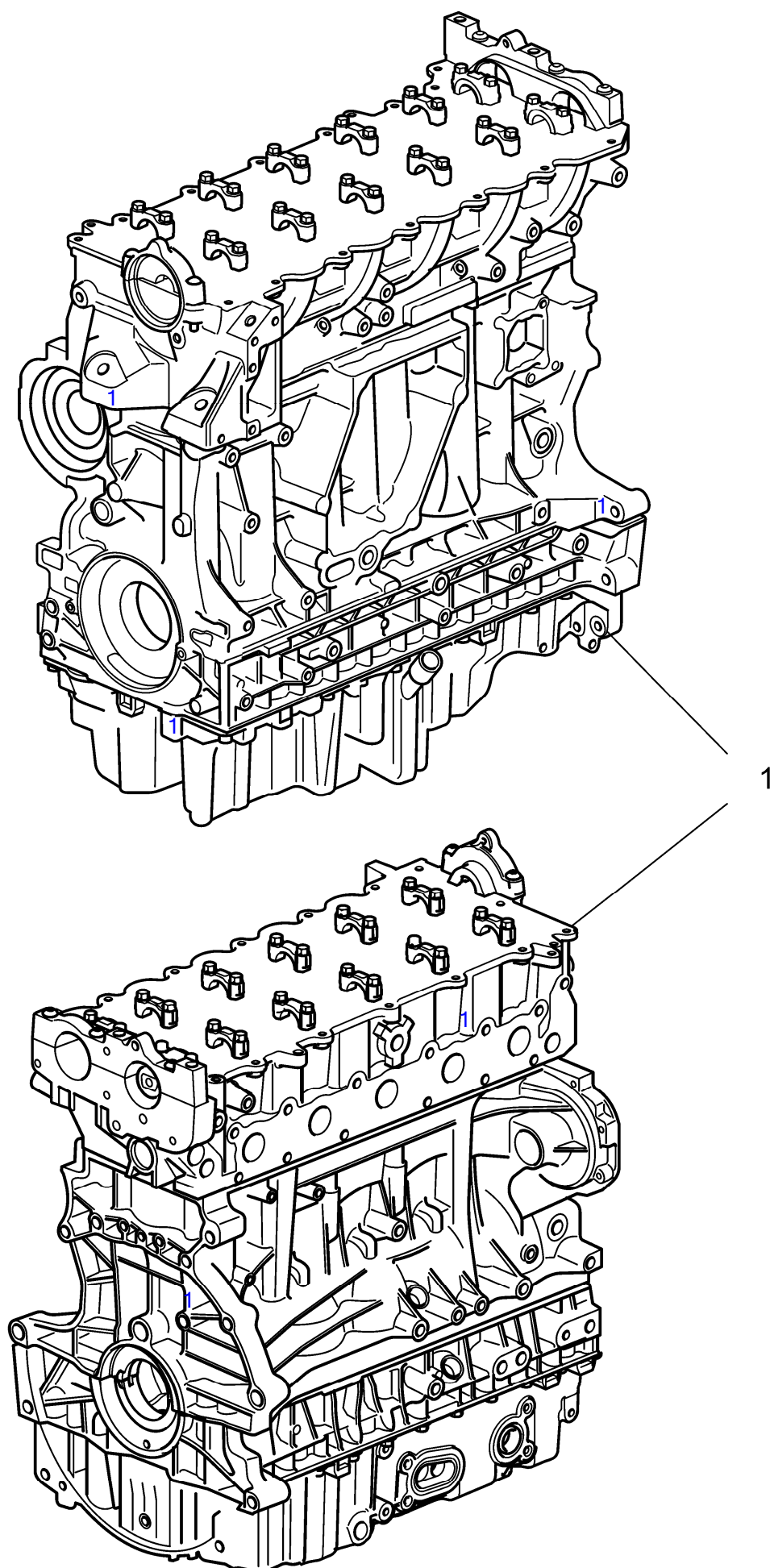


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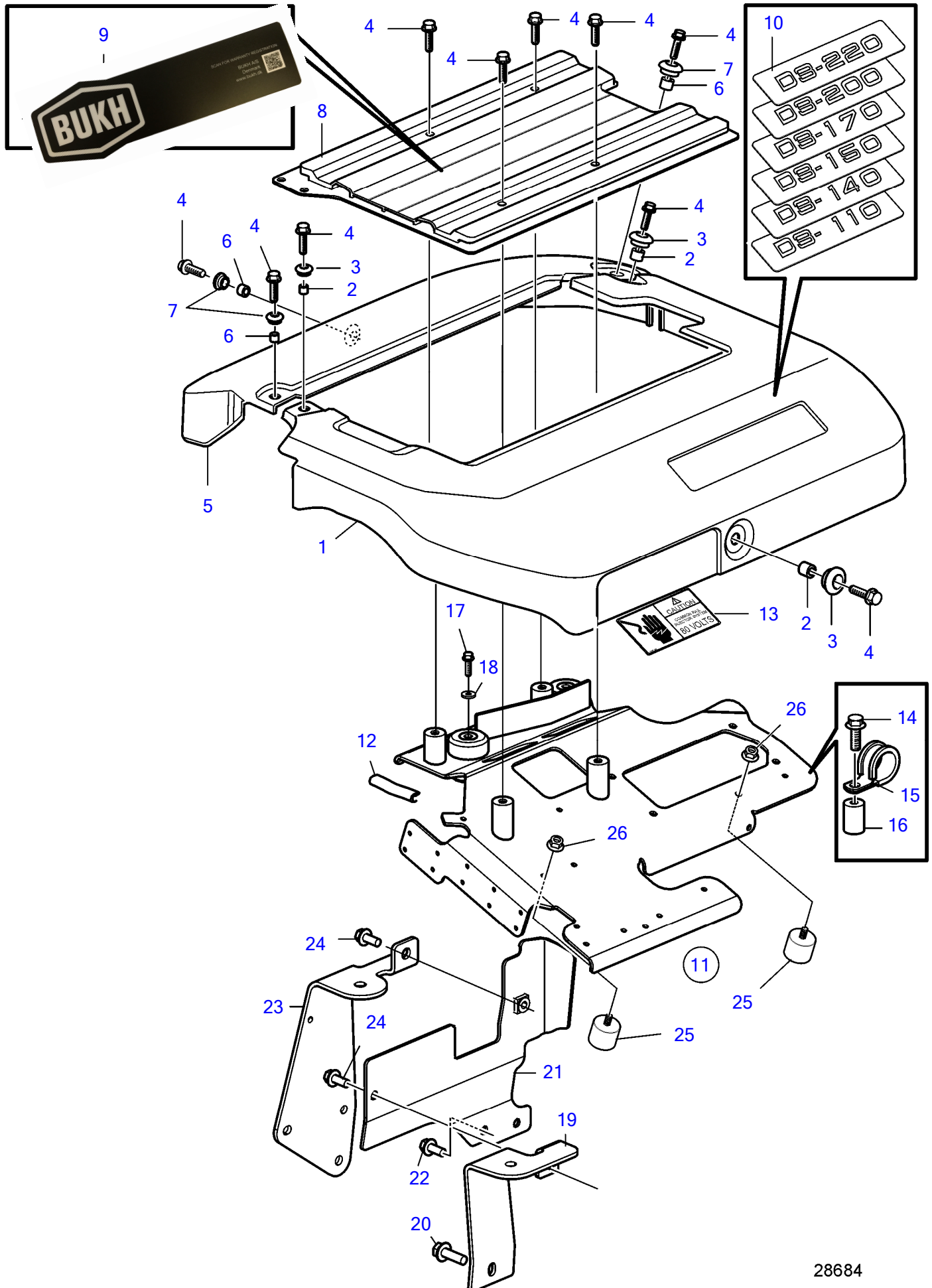
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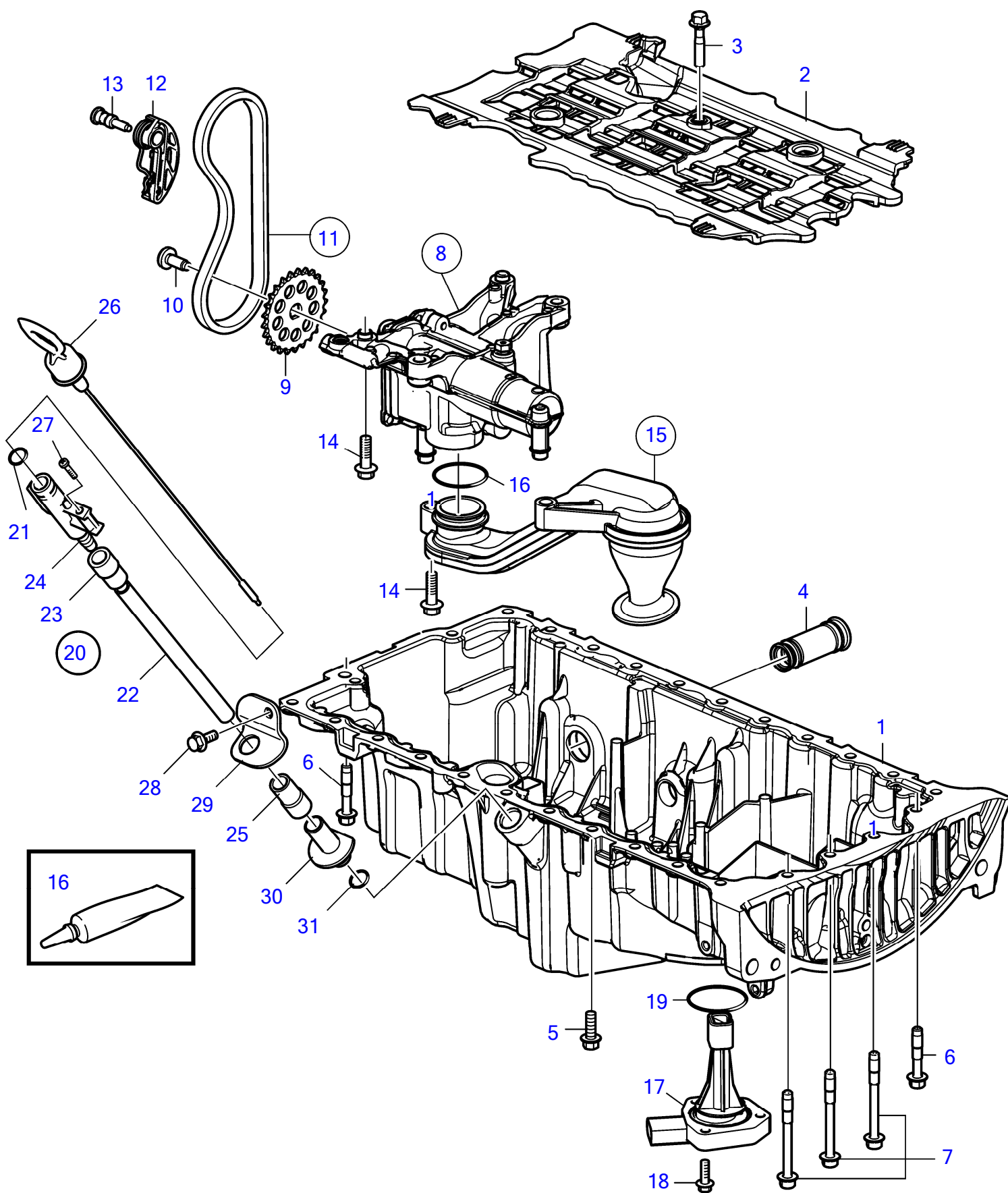


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REF	PART NO.	QTY	DESCRIPTION	NOTES
1	21231496	1	Engine casing	
2	40005089	3	• Spacer	
3	992404	3	• Grommet	
4	945444	10	Flange screw	M8x25mm
5	21231498	1	Engine casing	
6	40005089	3	• Spacer	
7	992404	3	• Grommet	
8	21231632	1	Plate	
9	100-140002	1	Bukh engine sticker	
10		1	Decal	D3-110
		1	Decal	D3-140
			Decal	D3-150
		1	Decal	D3-170
		1	Decal	D3-200
		1	Decal	D3-220
11	22475684	1	Bracket	
12	21421516	1	• Edge protection	L=70mm
13	3807239	1	Decal	
14	949556	1	Flange screw	
15	952634	1	Clamp	
16	1257499	1	Spacer sleeve	
17	965217	2	Flange screw	
18	993933	2	Washer	
19	21441581	1	Bracket	
20	945444	1	Flange screw	
21	21447773	1	Plate	
22	982775	2	Flange screw	
23	21441601	1	Bracket	
24	984733	2	Flange screw	
25	21441515	2	Vibration damper	
26	990939	2	Flange nut	

D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

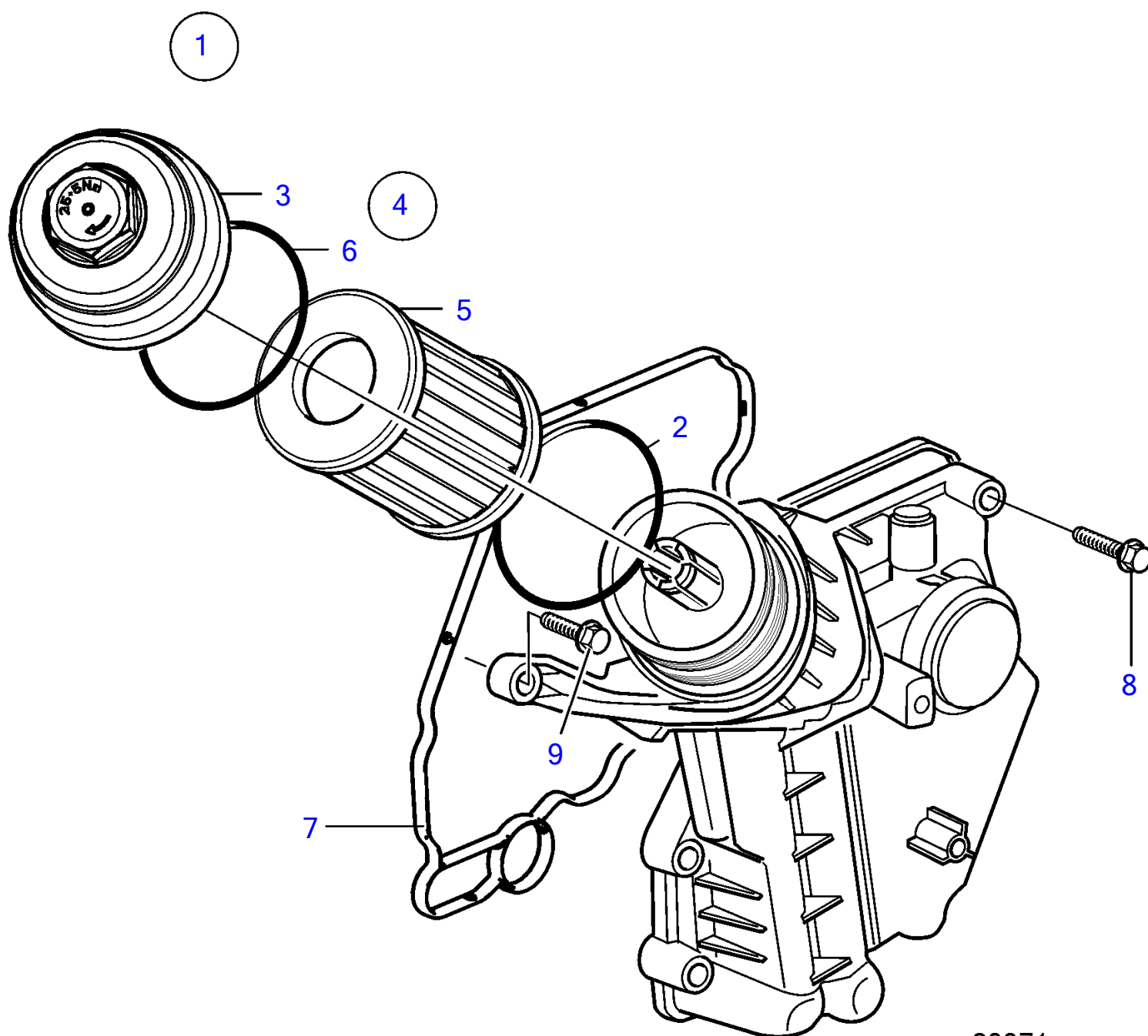


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REF	PART NO.	QTY	DESCRIPTION	NOTES
1	9487254	1	Oil sump	
2	31359659	1	• Oil plate	
3	985135	1	Flange screw	
4	31258024	1	Oil pipe	O-rings included
5	975880	22	Flange screw	
6	985322	3	Flange screw	
7	989850	3	Flange screw	
8	31330979	1	Oil pump	
9	31272512	1	• Sprocket	
10	9487162	1	• Screw	
11	31375415	1	Drive chain	
12	31272500	1	• Chain tensioner	
13	31272502	1	• Guide screw	
14	985135	6	Flange screw	
15	31330963	1	Suction line	
16	9487163	1	• O-ring	
17	31272687	1	Oil level sensor	
18	982759	3	Flange screw	
19	31219441	1	O-ring	
20	21666364	1	Pipe	
21	944124	1	• O-ring	
22	980833	1	• Tube	
23	843533	1	• Rubber hose	
24		1	• Anchorage	
25	843533	1	Rubber hose	
26	3847530	1	Oil dipstick	
27	975378	1	6 point socket screw	
28	982775	1	Flange screw	
29	3847997	1	Bracket	
30	21625925	1	Insert nipple	
31	968757	1	O-ring	

D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

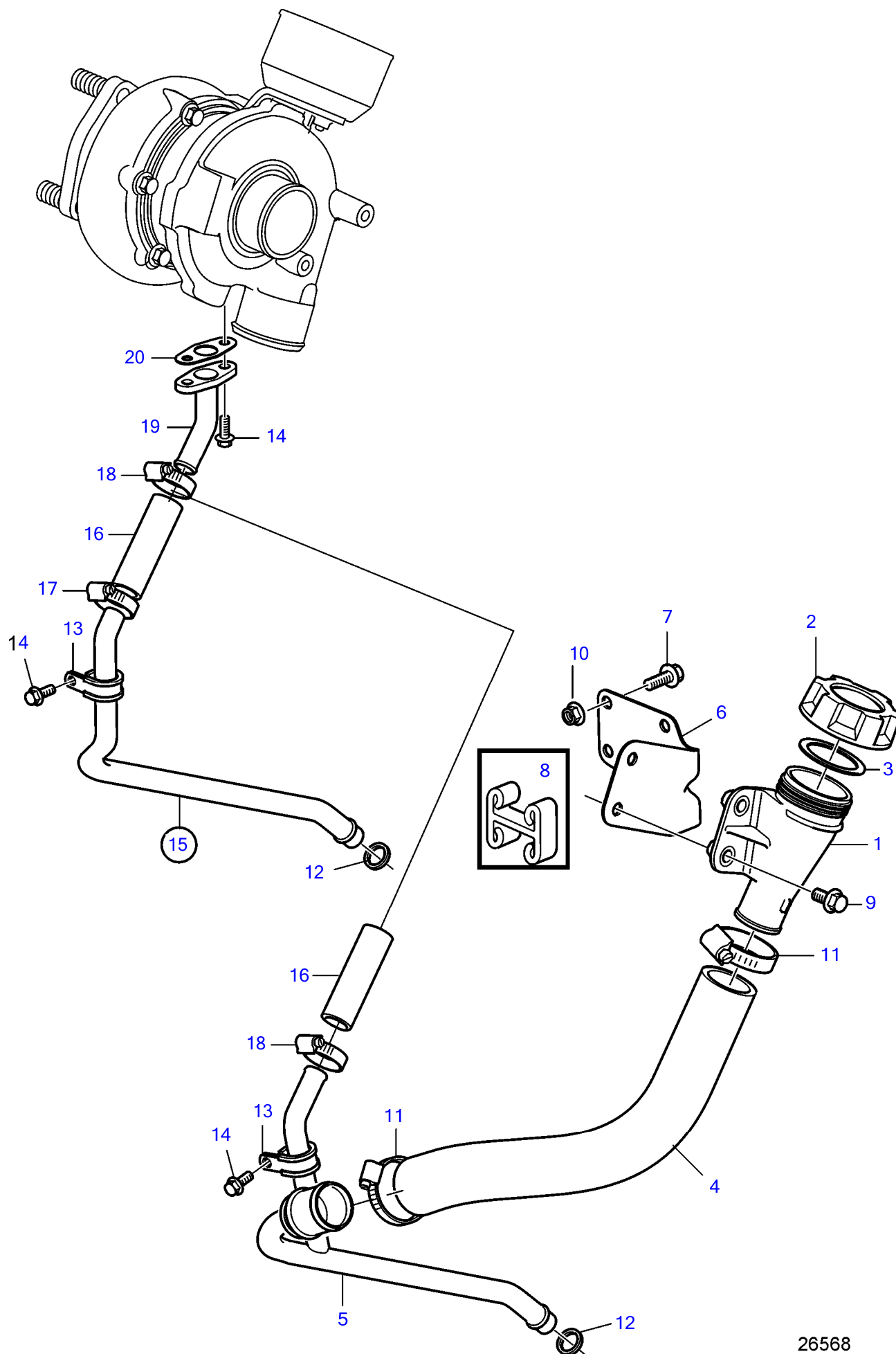


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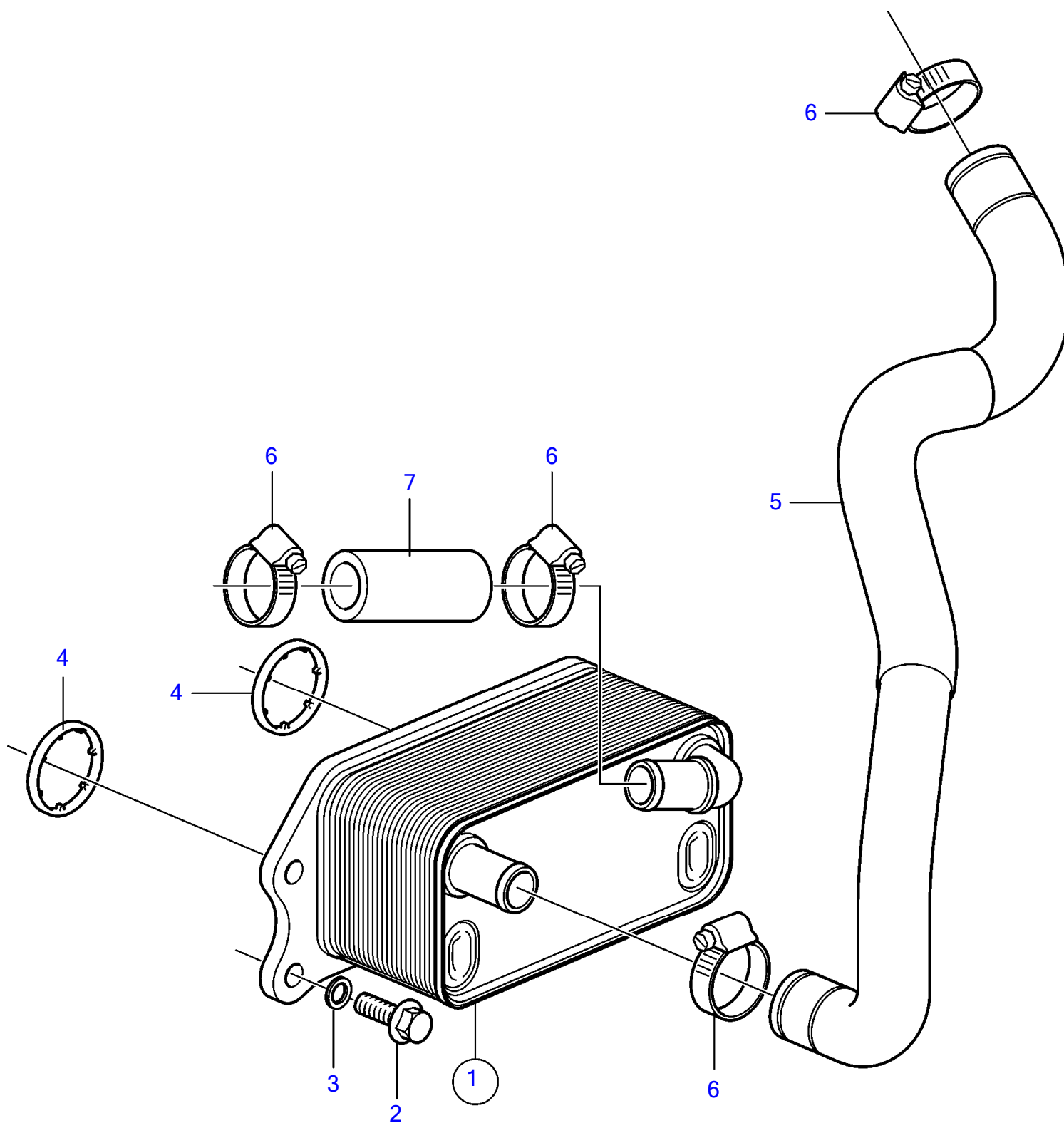
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D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

REF	PART NO.	QTY	DESCRIPTION	NOTES
1	20808091	1	Oil filler pipe	
2	20807510	1	• Oil filler cap	
3	20365079	1	• • Rubber washer	
4	21711255	1	Hose	
5	21177977	1	Oil return pipe	Option
6	21353908	1	Bracket	
7	965180	4	Flange screw	For inboard
8	21369356	1	Profile	For inboard
9	984733	2	Flange screw	M8x16mm
10	990940	4	Flange nut	
11	961669	2	Hose clamp	
12	31251439	1	Sealing ring	
13	952629	1	Clamp	
14	984725	3	Flange screw	M6x16mm
15	21294908	1	Oil return pipe	Standard
16	3593534	1	• Hose	
17	961665	1	• Hose clamp	
18	961665	2	Hose clamp	
19	21098797	1	Oil return pipe	
20	31251456	1	Gasket	

D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

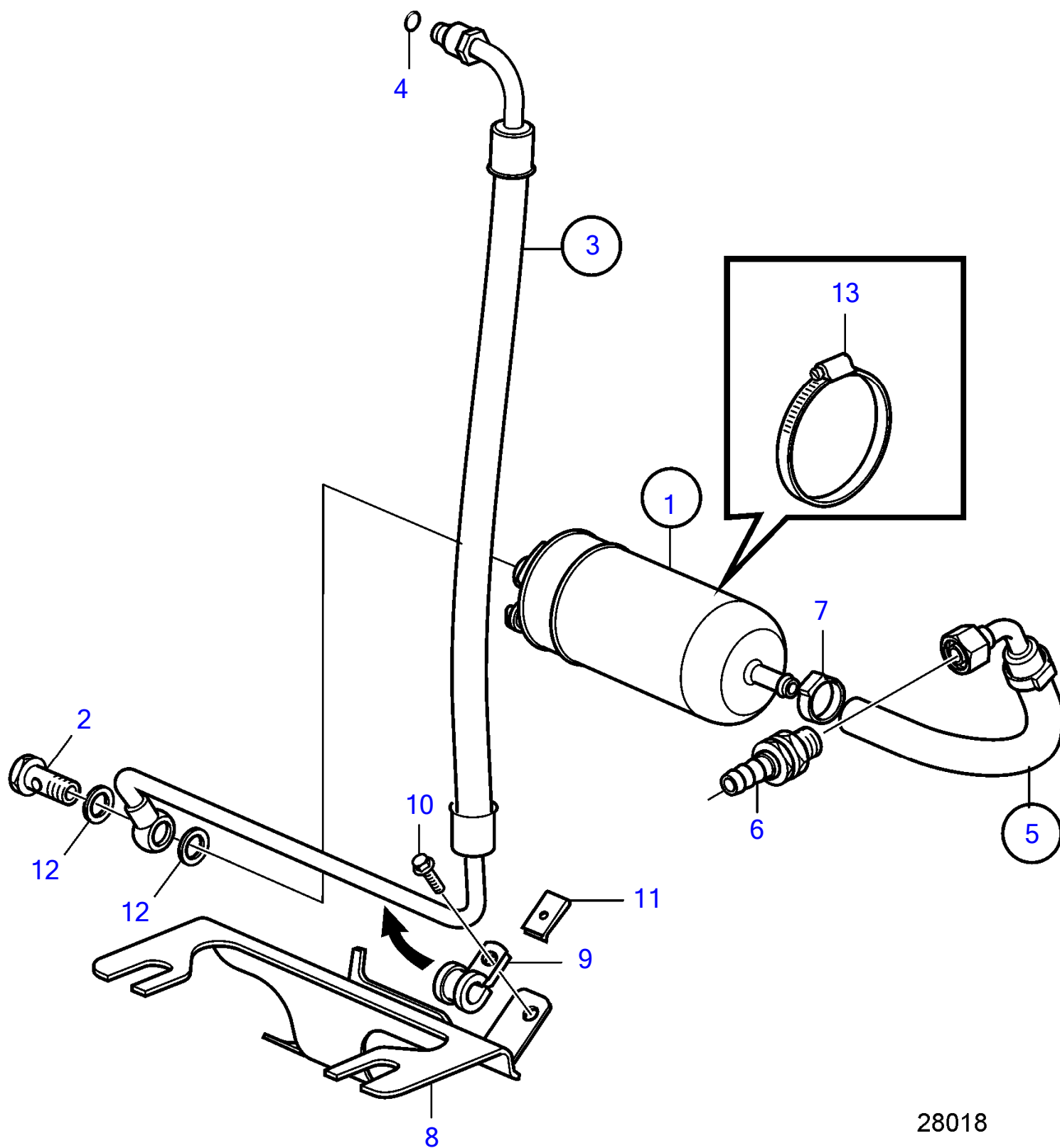


28017

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47706190-22-38886	28017	Upd:2/10/2017
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D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

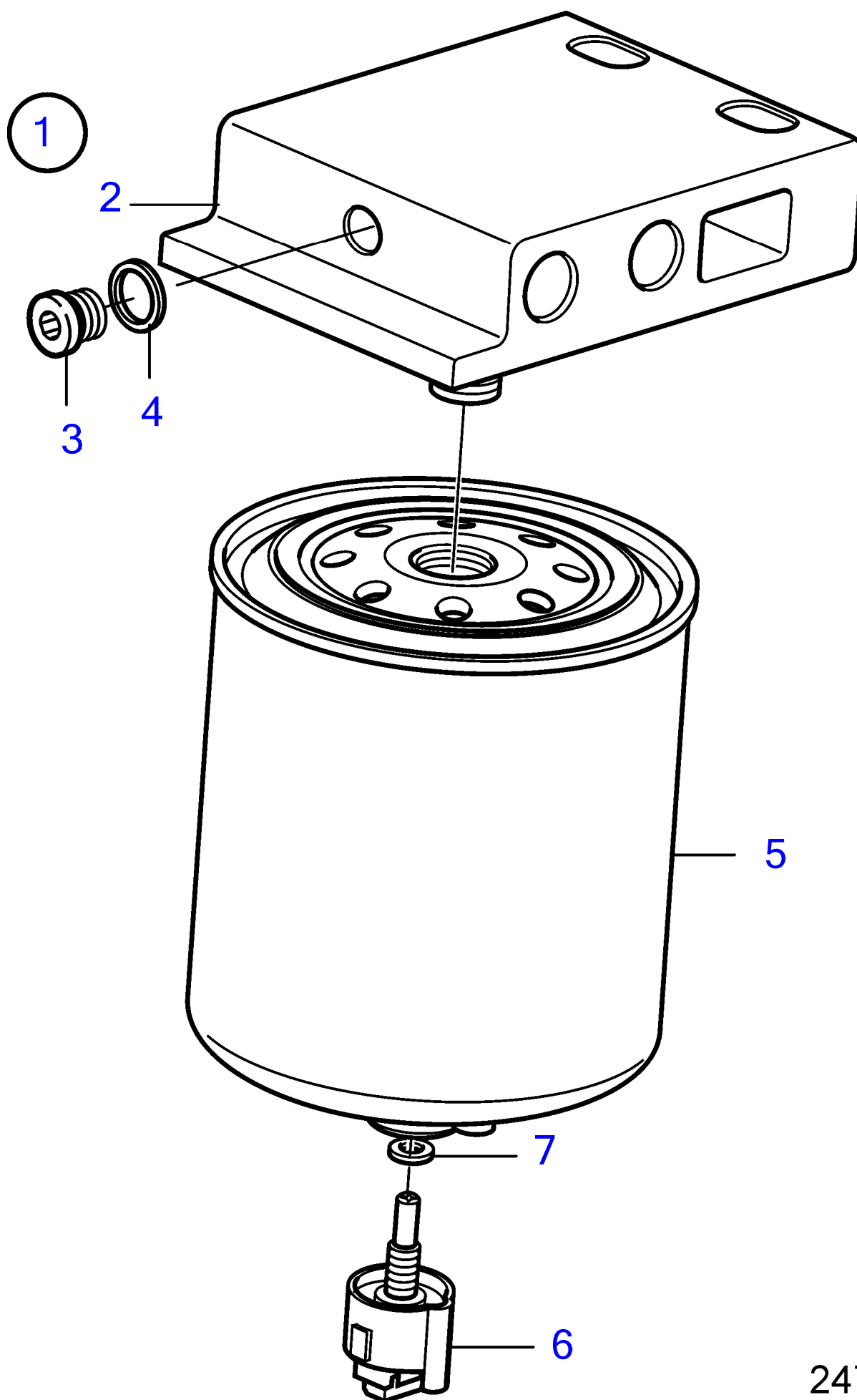


28018

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REF	PART NO.	QTY	DESCRIPTION	NOTES
1	21120406	1	Feed pump	
2	980973		• Hollow screw	
3	21300622	1	Fuel hose	Replaced by 22345973
	22345973	1	Fuel hose	
4	976011	1	• O-ring	
5	21300624	1	Fuel hose	Replaced by 22363670
	22363670	1	Fuel hose	
6	21282656	1	• Bulkhead grommet	
7	961663	1	Hose clamp	
8	21300619	1	Bracket	
9	952624	1	Clamp	
10	968476	1	Flange screw	
11	191391	1	Spring nut	
12	18665	2	Gasket	
13	961671	1	Hose clamp	

D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

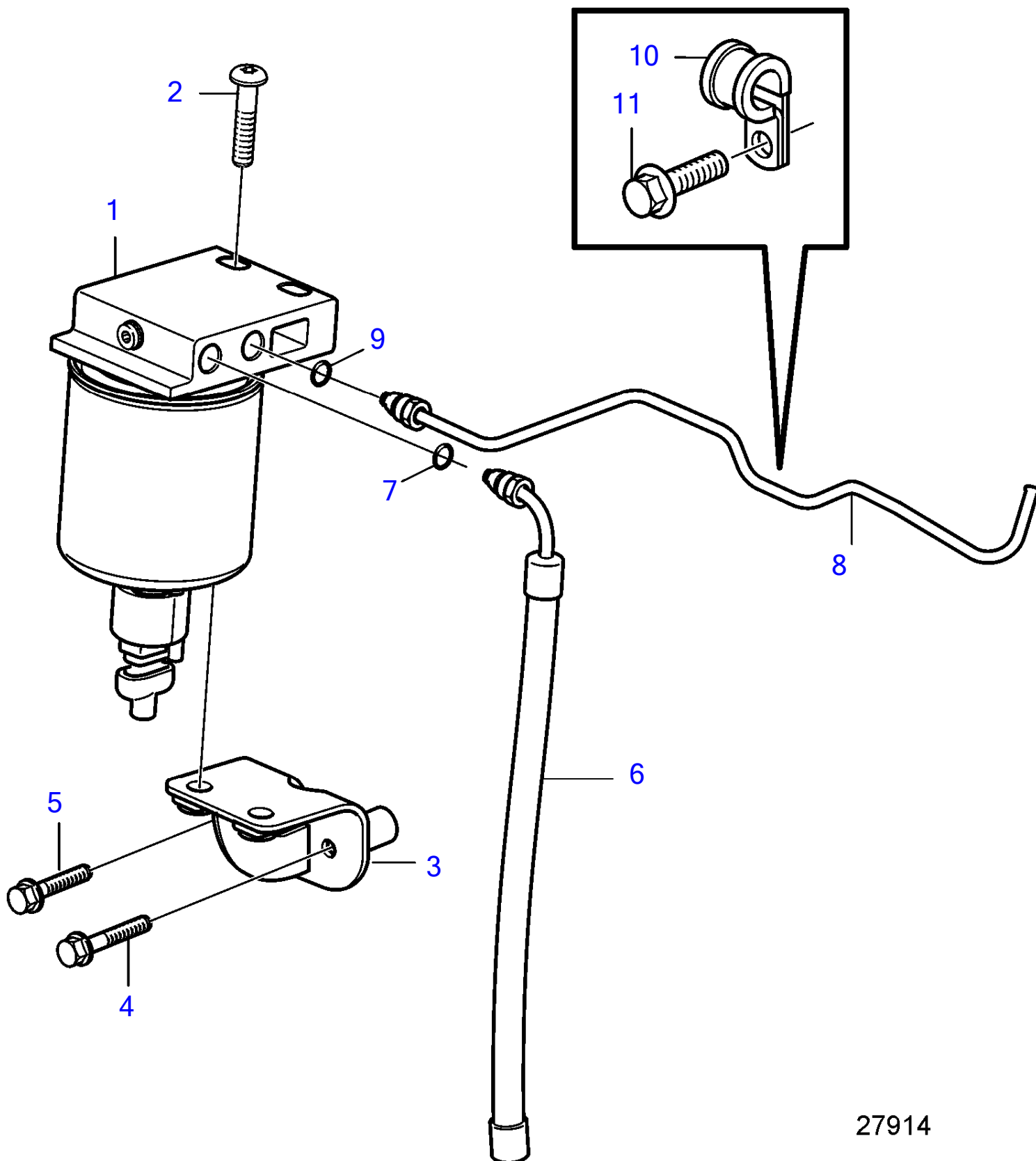


24796

D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

47706190-23-35664	24796	Upd:2/10/2017
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D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

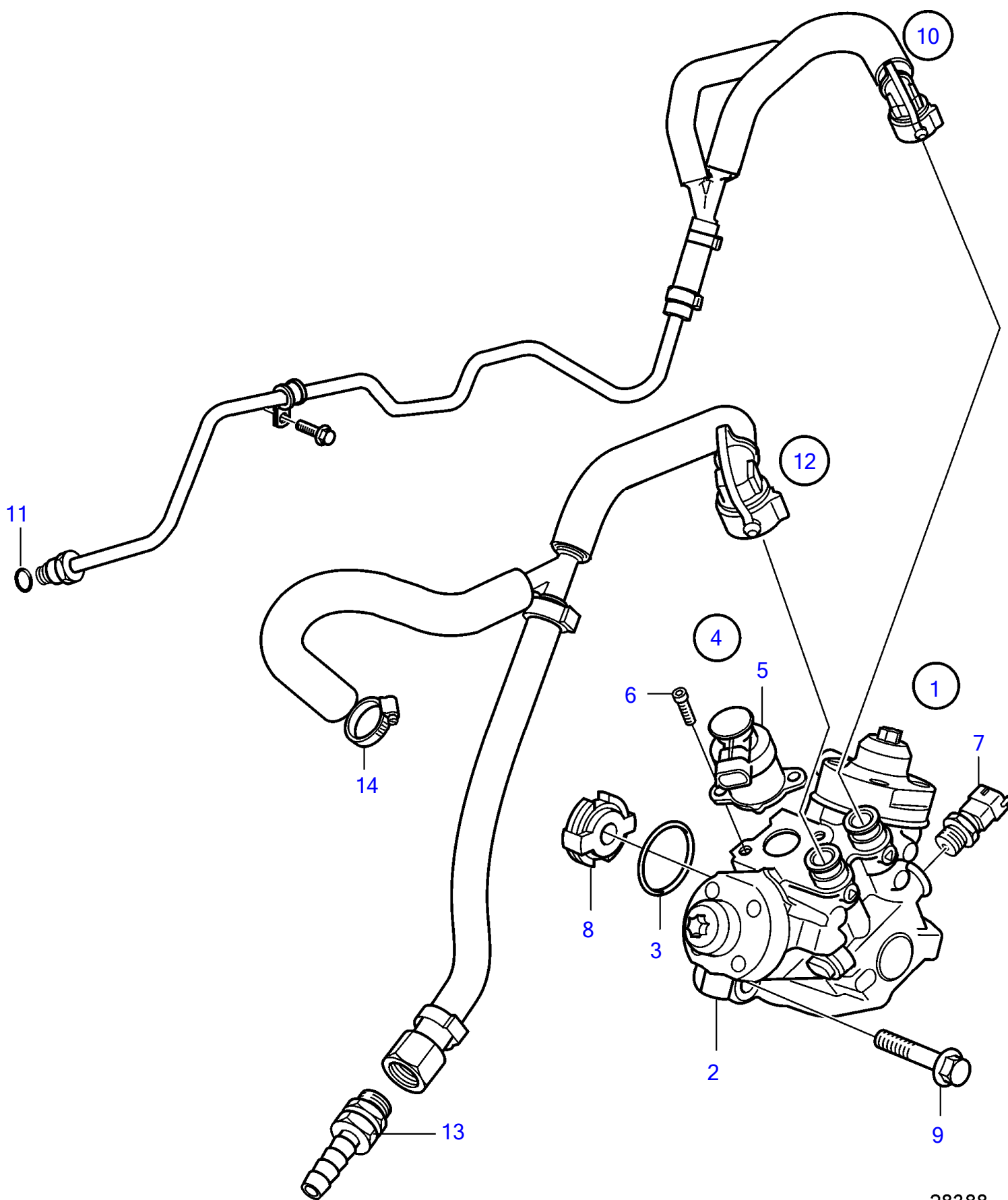


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REF	PART NO.	QTY	DESCRIPTION	SEE SEC.
1	21286999	1	Fuel filter, complete	35664
2	969544	2	6 point socket screw	
3	21184378	1	Bracket	
4	968168	1	Flange screw	
5	965179	1	Flange screw	
6	22345973	1	Fuel hose	35713
7	976011	1	• O-ring	
8	21467499	1	Fuel pipe	35728
9	976011	1	• O-ring	
10	952624	1	Clamp	
11	946501	1	Flange screw	

D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

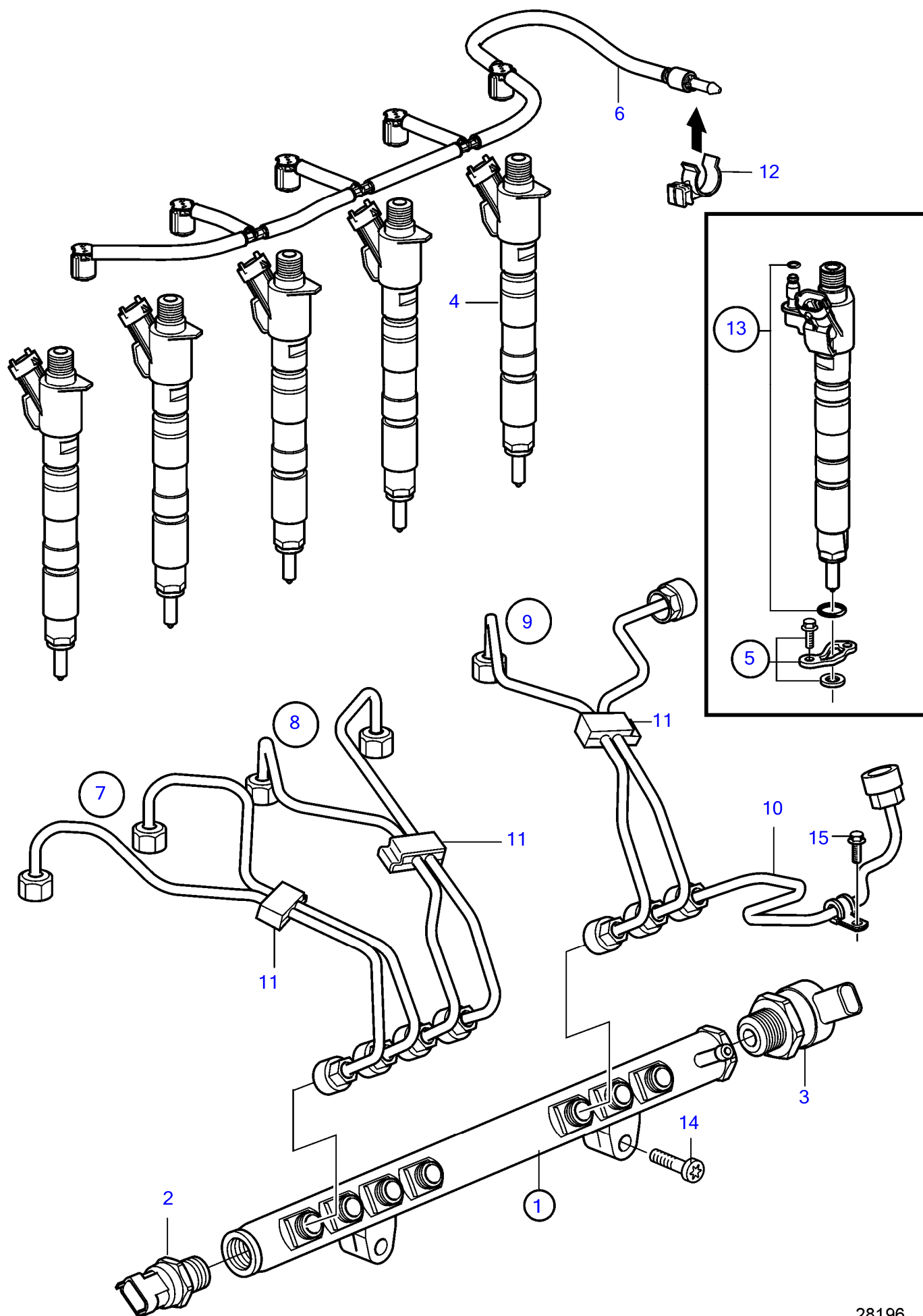


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REF	PART NO.	QTY	DESCRIPTION	NOTES
1	36002064	1	High-pressure pump	
2	31259211	1	• Housing	
3	31259208	1	• O-ring	
4	31478083	1	• Kit	
5	30777529	1	• • Control valve	Replaced by 31478083
	31478083	1	• • Kit	
6	31259210	2	• • Screw	
7	31272619	1	• Temperature sensor	
8	30777586	1	Cross connection	
9	982799	3	Flange screw	M8x45mm
10	21467499	1	Fuel pipe	
11	976011	1	• O-ring	
12	21467497	1	Hose assembly	
13	21282656	1	• Bulkhead grommet	
14	961663	1	Hose clamp	

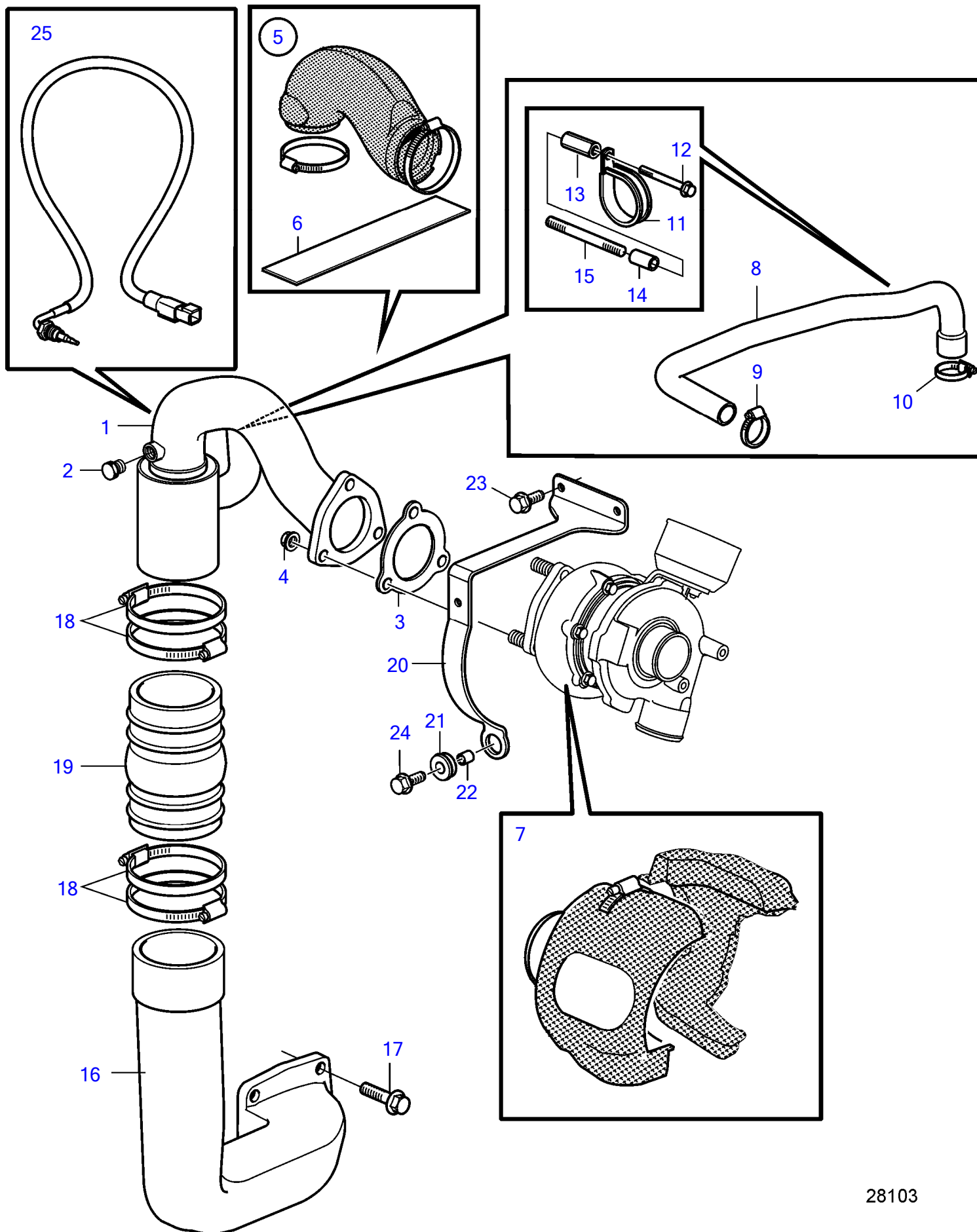
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D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

REF	PART NO.	QTY	DESCRIPTION	NOTES
1	30777759	1	Distribution pipe	
2	30787950	1	• Pressure sensor	
3	31216313	1	• Control valve	
4	3801385	5	Injector	
5	31272772	1	Retaining clamp	
6	31321198	1	Fuel hose	
7	31251172	1	Delivery pipe	Cylinder 1, Cylinder 2
8	31251173	1	Delivery pipe	Cylinder 3, Cylinder 4
9	31251174	1	Delivery pipe	Cylinder 5, Fuel pump
10	31251175	1	Delivery pipe	Fuel pump
11	30677792	3	Clip	
12	31321272	1	Clip	
13	31272771	1	O-ring kit	
14	994441	2	Flange screw	M8x50mm
15	946671	1	Flange screw	

D3-140A-H, D3-170A-H, D3-200A-H, D3-220A-H

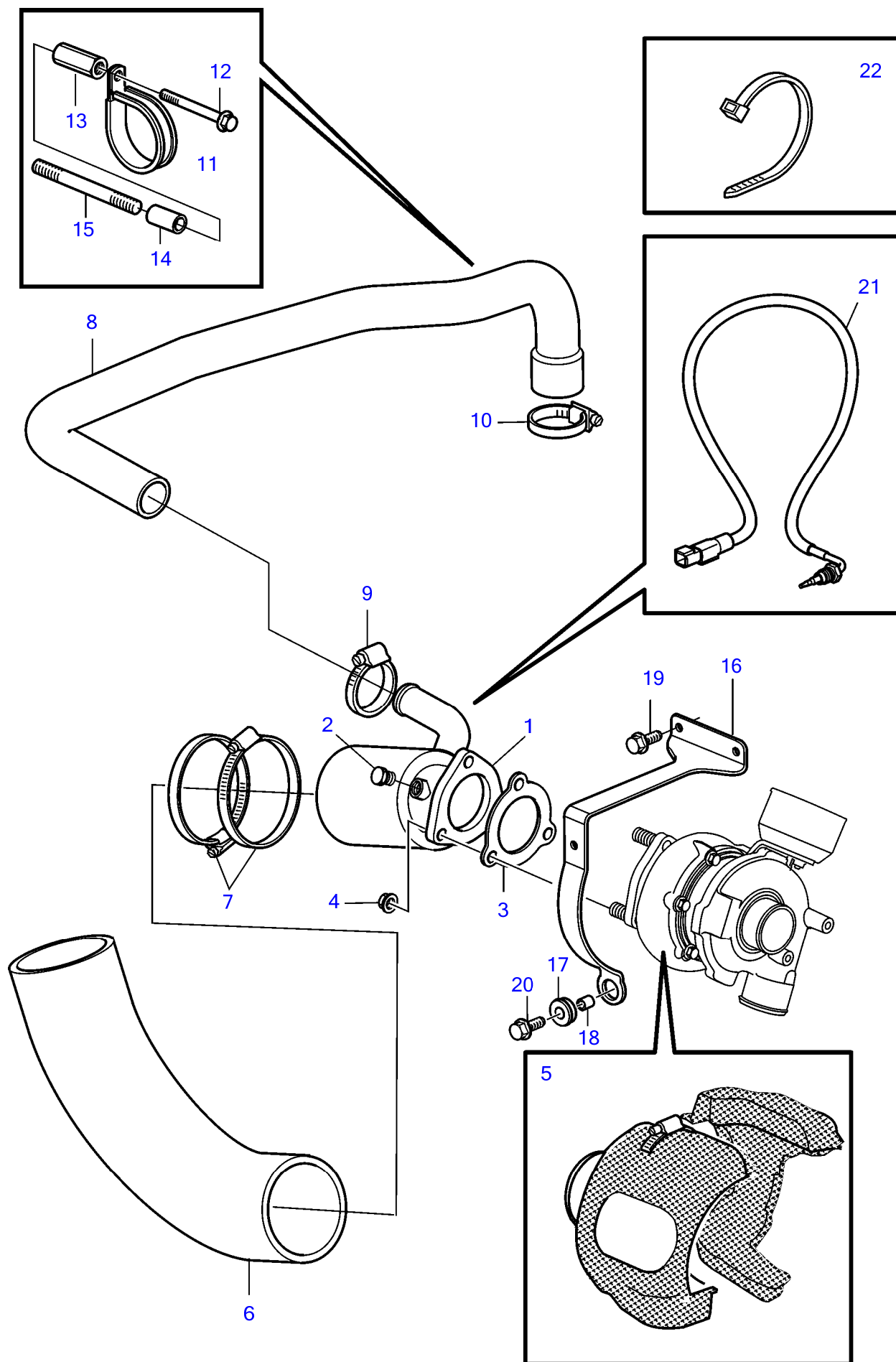


28103

D3-140A-H, D3-170A-H, D3-200A-H, D3-220A-H

47706190-25-38922	28103	Upd:2/10/2017
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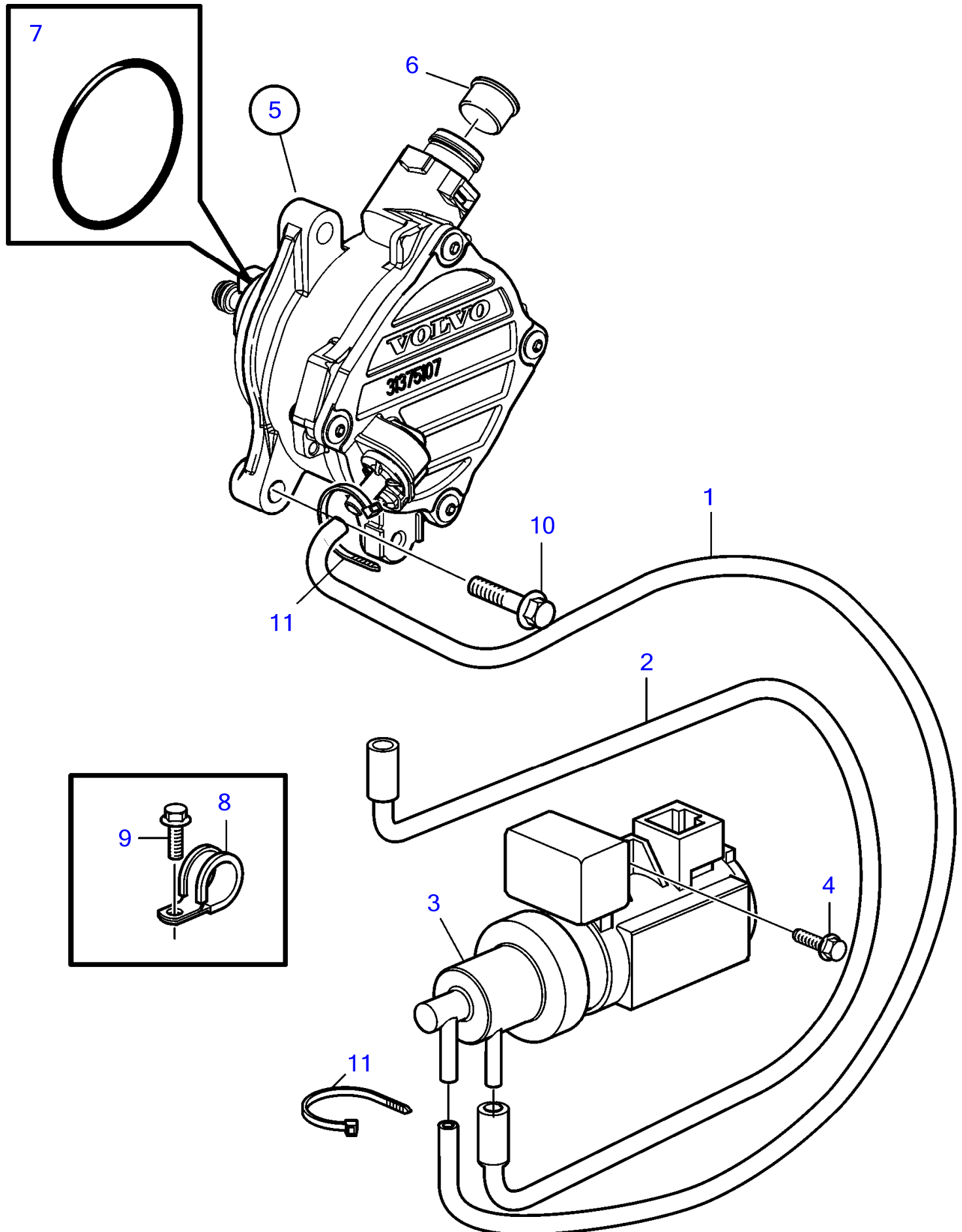
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D3-110I-H, D3-140I-H, D3-150I-H, D3-170I-H, D3-200I-H, D3-220I-H

REF	PART NO.	QTY	DESCRIPTION	SEE SEC.	NOTES
1	22108628	1	Exhaust pipe		
2	981749	1	• Plug		
3	1275549	1	Gasket		
4	981152	3	Flange nut		
5	21985888	1	Heat shield		
6	1140667	1	Exhaust hose		
7	22274887	4	Hose clamp		
8	21202798	1	Hose		Heat exchanger-exhaust riser.
9	961669	1	Hose clamp		
10	22274885	1	Hose clamp		
11	969194	1	Clamp		
12	984733	1	Flange screw		
13	21264221	1	Spacer nut		
14	977801	1	Spacer sleeve		
15	953060	1	Stud		
16	21441559	1	Bracket		
17	992404	1	• Grommet		
18	40005089	1	• Spacer		
19	984733	2	Flange screw		M8x16mm
20	945444	1	Flange screw		
21	21673187	1	Temperature sensor		
			• Installation Instruction 47703789	47703789-EN	Sensor
22	948211	2	Cable tie		

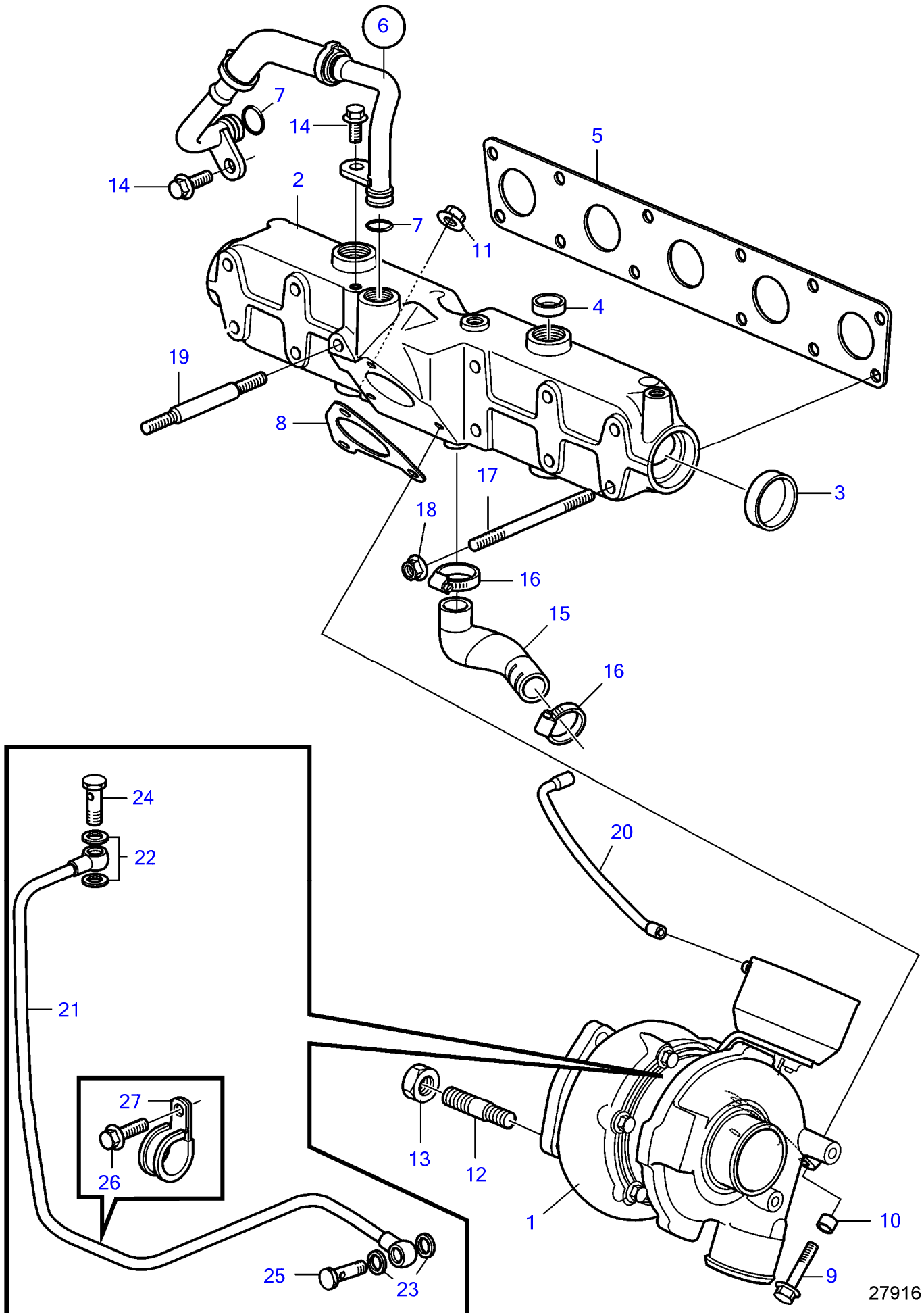
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D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

REF	PART NO.	QTY	DESCRIPTION	NOTES
1	22398749	1	Hose, vacuum pump	Replaced by 22722539
	22722539	1	Hose	
2	21377749	1	Hose, turbo	
3	30637251	1	Governor	
4	994258	2	Flange screw	M6x16mm
5	22661660	1	Vacuum pump, kit	
6	955083	1	• Cap plug	
7	8658101	1	• O-ring	
8	952624	1	Clamp	
9	946501	1	Flange screw	
10	982778	1	Flange screw	
11	948211	2	Cable tie	

D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

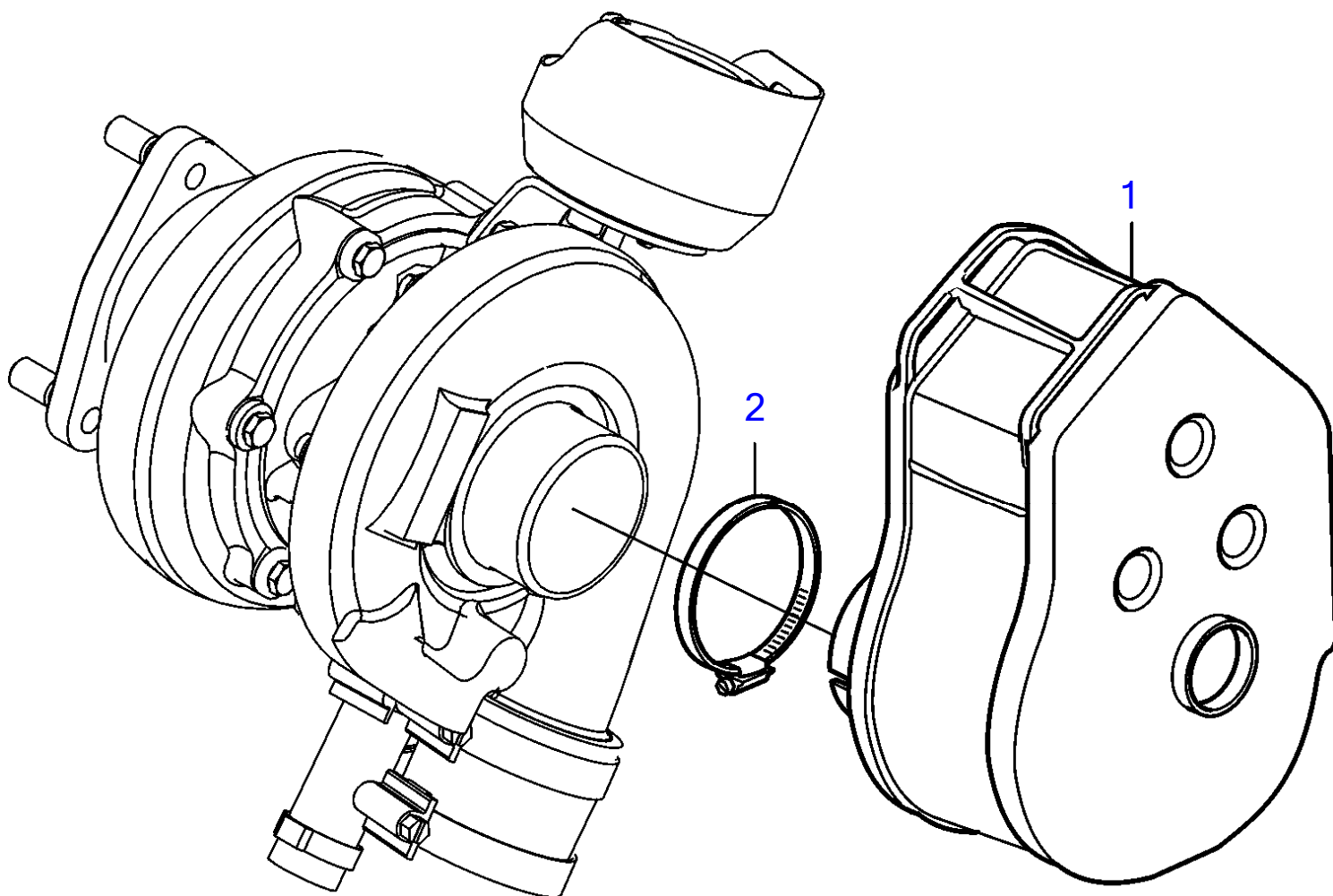


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D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

REF	PART NO.	QTY	DESCRIPTION	SEE SEC.	NOTES
1	3801387	1	Turbocharger		
2	21489972	1	Exhaust manifold		
3	967962	2	• Cap plug		
4	948811	4	• Cap plug		
5	30777682	1	Gasket		
6	21252495	1	Inlet pipe		
7	982292	2	• O-ring		
8	21584008	1	Gasket		
9	994647	2	Flange screw		
10	994626	2	Spacer sleeve		
11	990940	1	Flange nut		
12	982449	3	Stud		
13	981152	3	Flange nut		
14	945444	2	Flange screw		M8x25mm
15	21454204	1	Hose		
16	961665	2	Hose clamp		
17	953060	11	Stud		
18	990940	12	Flange nut		
19	947698	1	Stud		M8x130mm
20	21377749	1	Hose	38888	
21	21506563	1	Oil pressure pipe		
22	18665	2	Gasket		
23	969011	2	Gasket		
24	995343	1	Hollow screw		
25	25167	1	Hollow screw		
26	984725	1	Flange screw		M6x16mm
27	952625	1	Clamp		

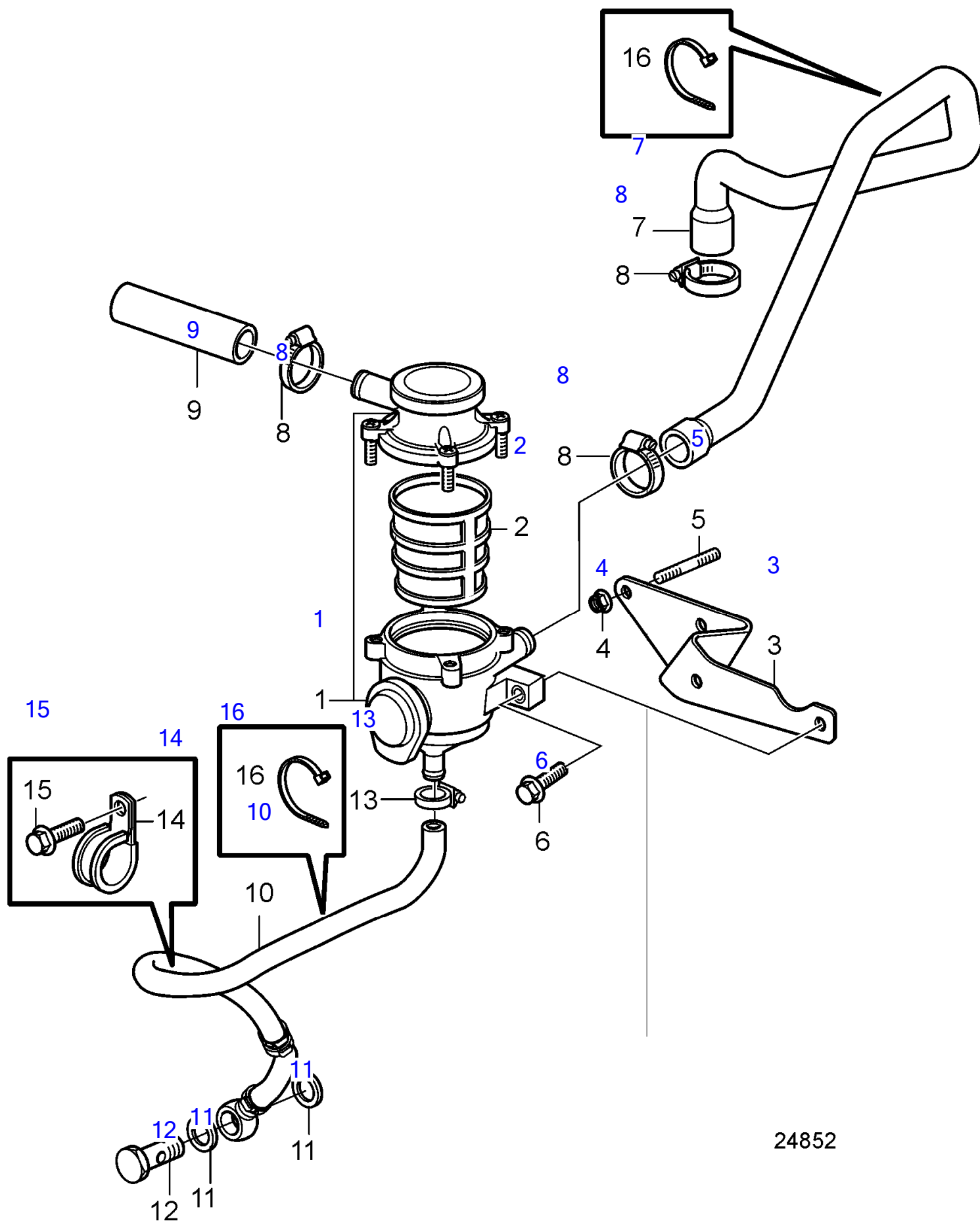
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27719

D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

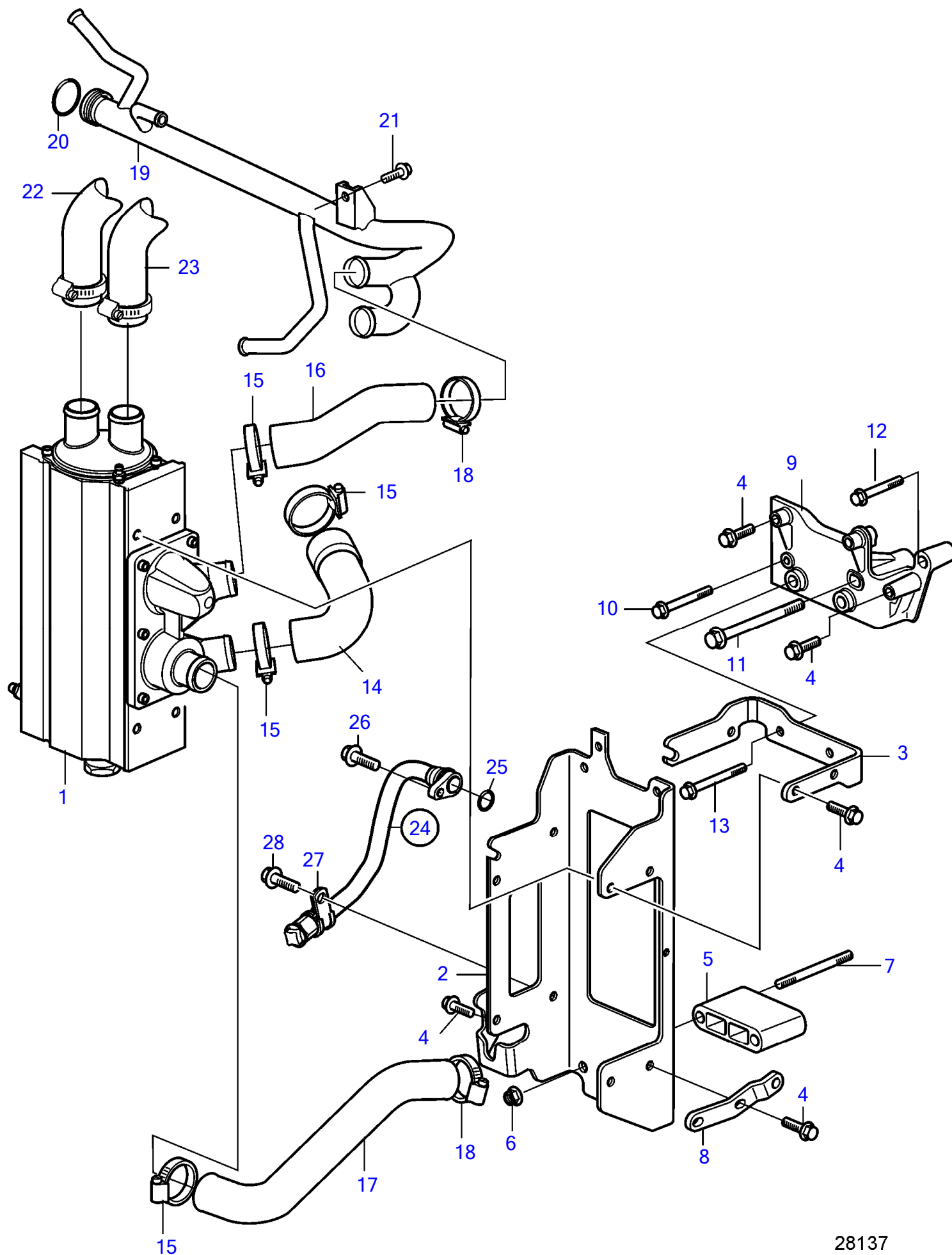
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D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

REF	PART NO.	QTY	DESCRIPTION	NOTES
1	21690243	1	Oil trap	
2	21368879	1	• Insert	
3	21560971	1	Bracket	
4	990940	3	Flange nut	
5	953060	3	Stud	
6	946671	2	Flange screw	
7	21353366	1	Hose	
8	961666	3	Hose clamp	
9	949995	1	Hose	L=100mm
10	21461603	1	Hose assembly	
11	11998	2	Gasket	
12	26013	1	Hollow screw	
13	961664	1	Hose clamp	
14	952631	1	Clamp	
15	984725	1	Flange screw	
16	948211	3	Cable tie	

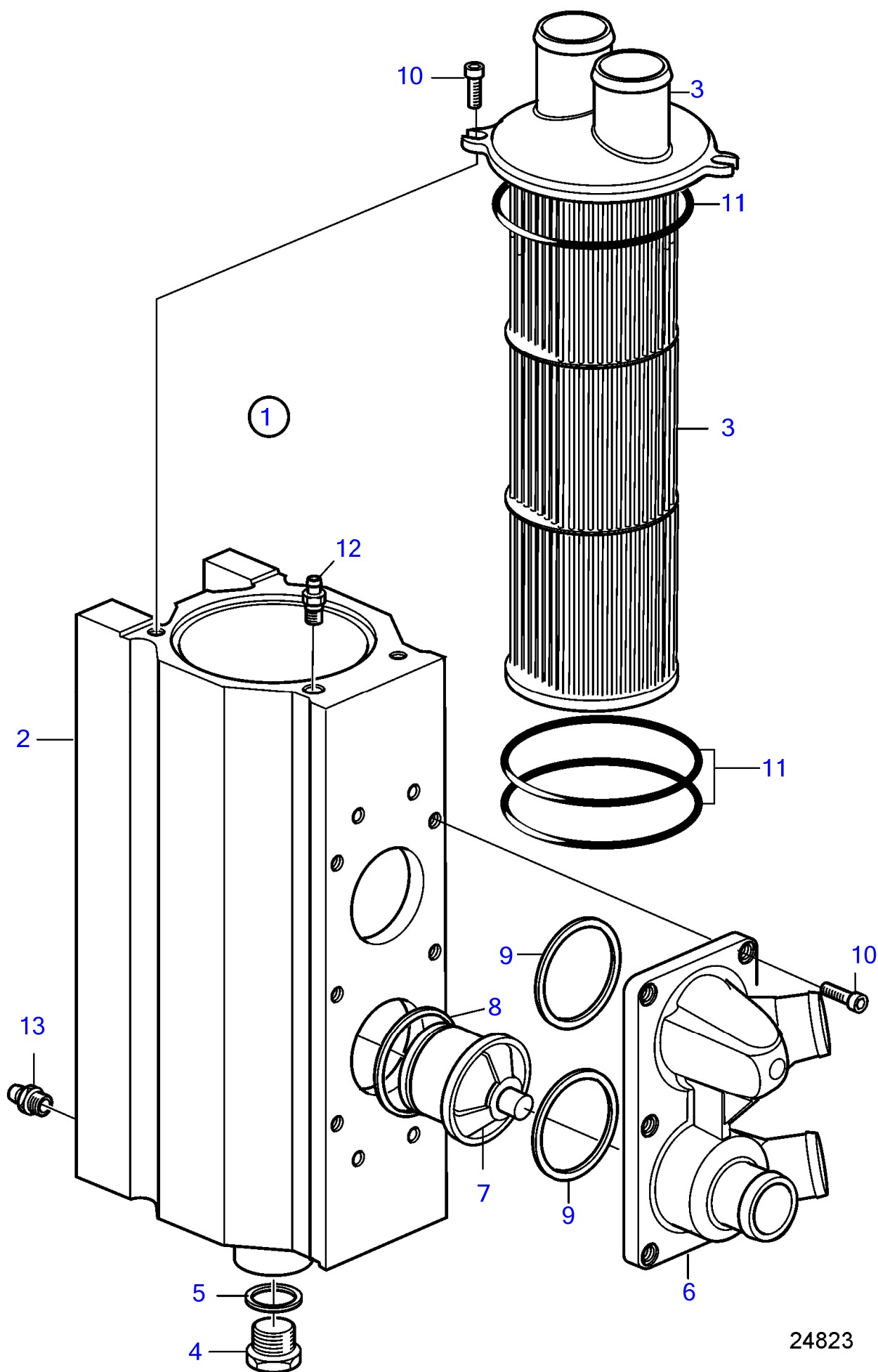
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D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

REF	PART NO.	QTY	DESCRIPTION	SEE SEC.	NOTES
1	22004363	1	Heat exchanger	38810	
2	21572462	1	Bracket		
3	21308169	1	Stay		
4	946671	11	Flange screw		M8x30mm
5	21306599	1	Profile		
6	971095	2	Flange nut		
7	953084	2	Stud		M10x110mm
8	21406493	1	Stay		
9	21514338	1	Bracket		
10	968172	1	Flange screw		M7x90mm
11	969313	1	Flange screw		
12	965187	1	Flange screw		M10x60mm
13	969445	2	Flange screw		
14	21166146	1	Hose		
15	22274885	4	Hose clamp		
16	21166149	1	Hose		
17	21454184	1	Hose		
18	961669	2	Hose clamp		
19	21591184	1	Inlet pipe		
20	976045	1	O-ring		
21	984725	1	Flange screw		
22	21202798	1	Hose	38923	Inboard
	21104921	1	Hose	38922	AQ
23	22004801	1	Hose	38831	Charge air cooler-Heat exchanger, Without servo pump.
	22004787	1	Hose	38268	Servo Oil Cooler-Heat Exchanger, Replaced by 22990055
	22990055	1	Hose		Servo Oil Cooler-Heat Exchanger
24	21501494	1	Hose		
25	982292	1	• O-ring		
26	984725	1	Flange screw		
27	947827	1	Clamp		
28	946501	1	Flange screw		

D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

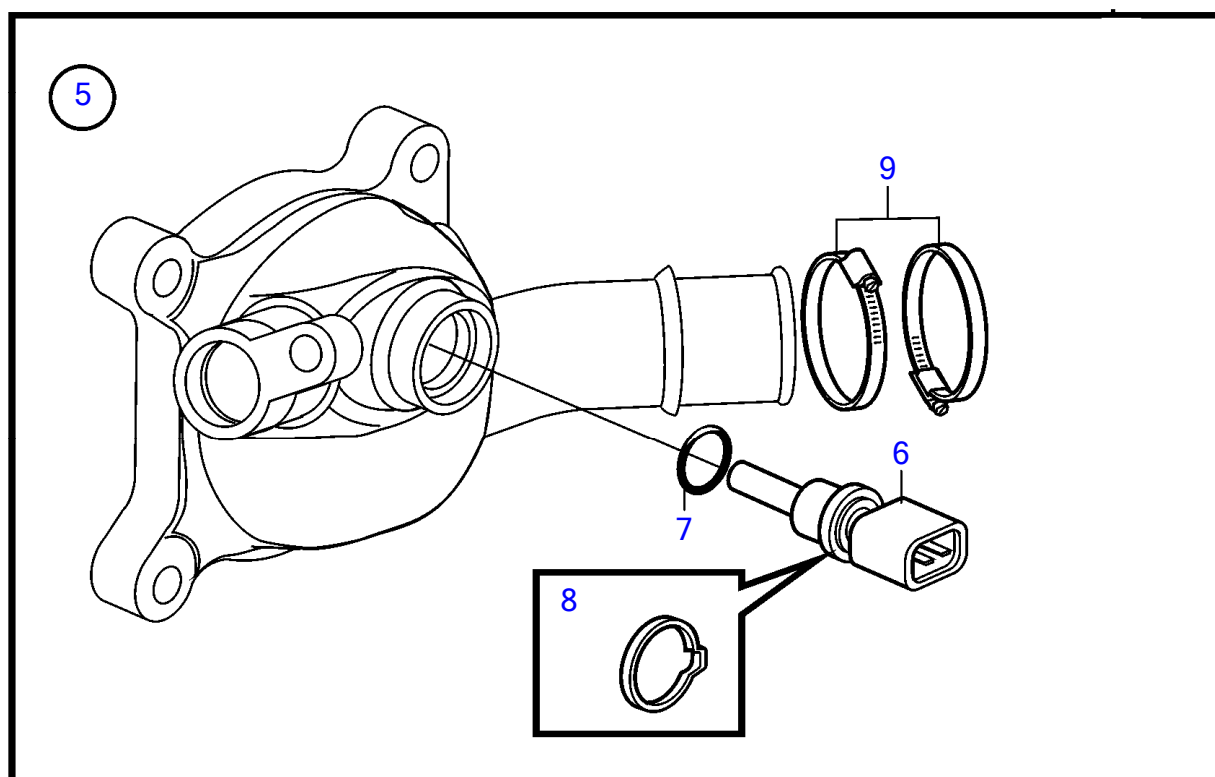
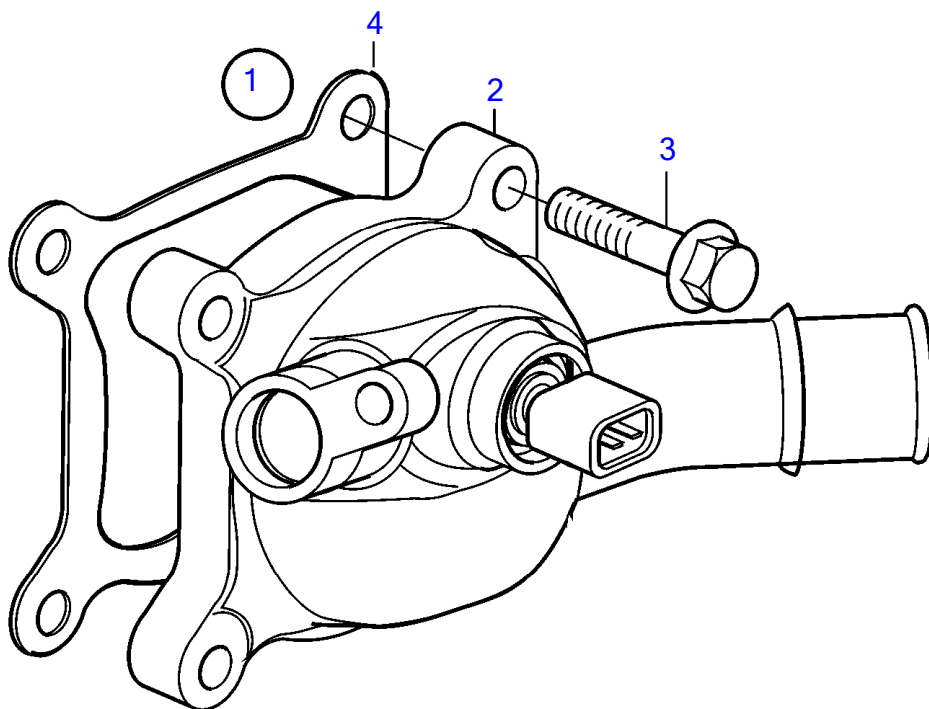
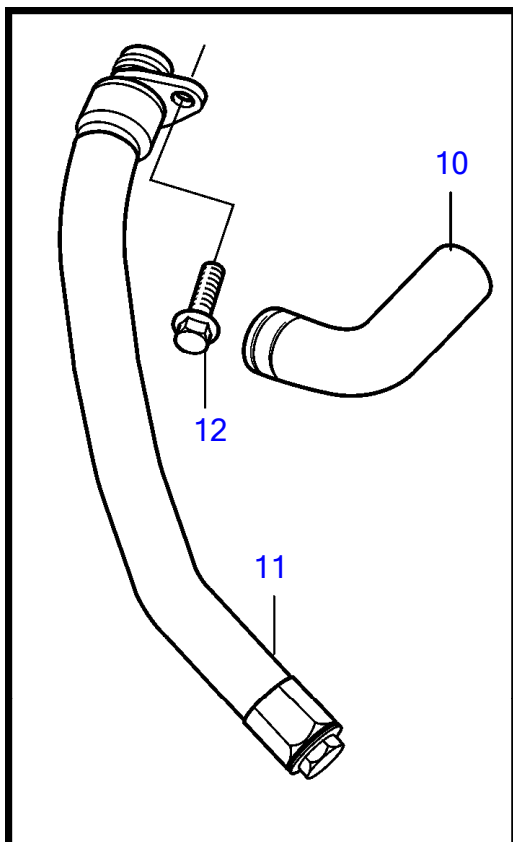


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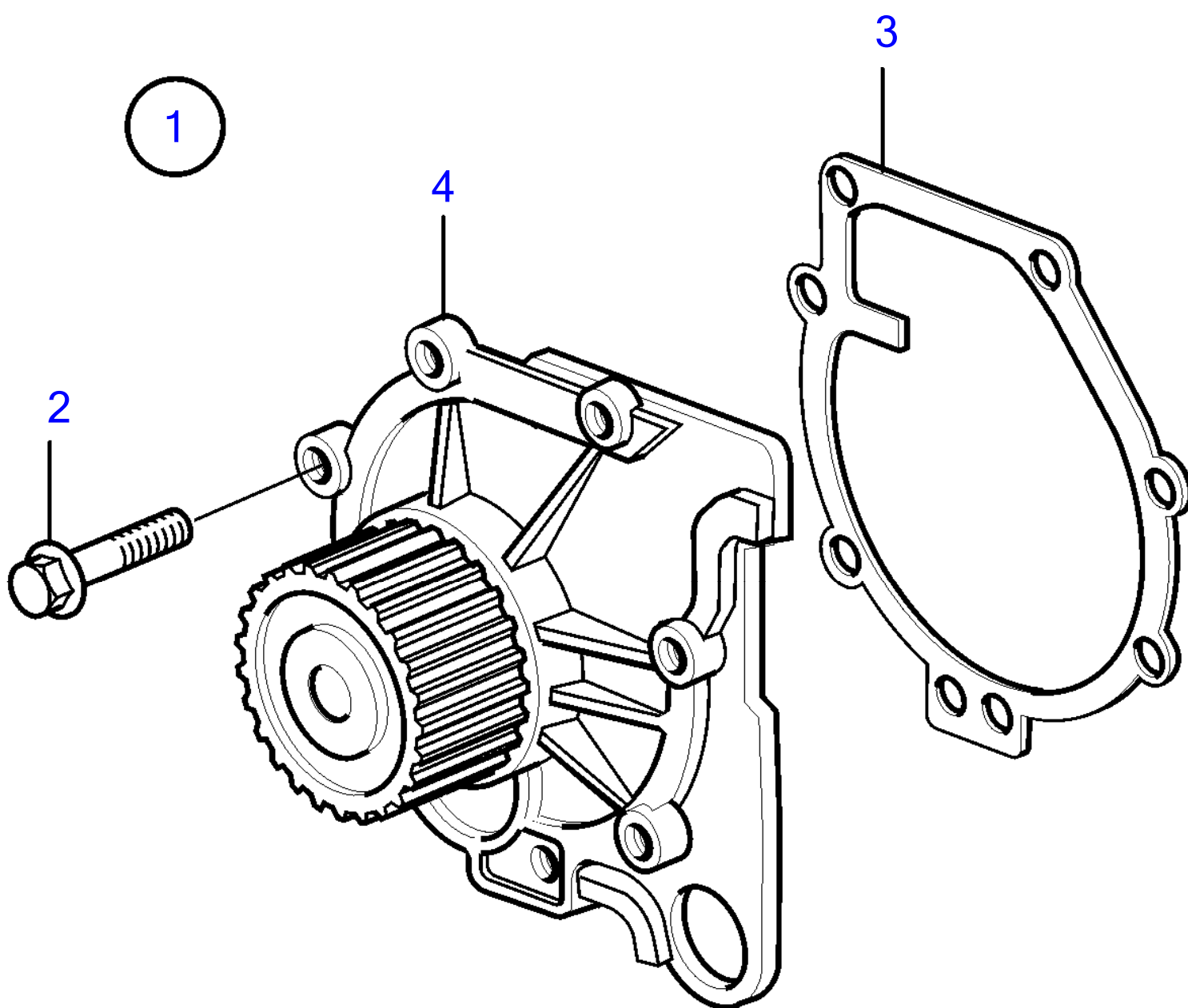


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47706190-26-38890	27881	Upd:2/10/2017
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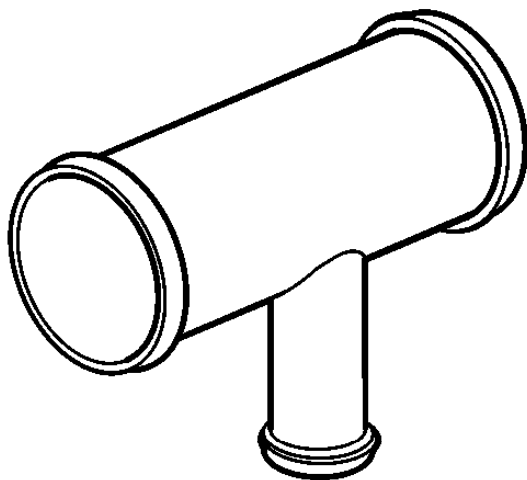
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47706190-26-38891	25091	Upd:2/10/2017
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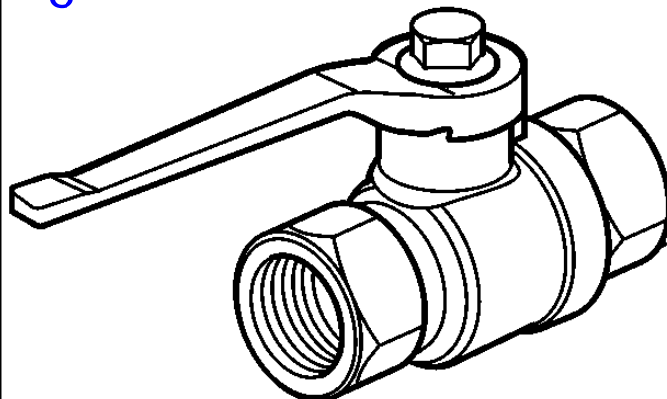
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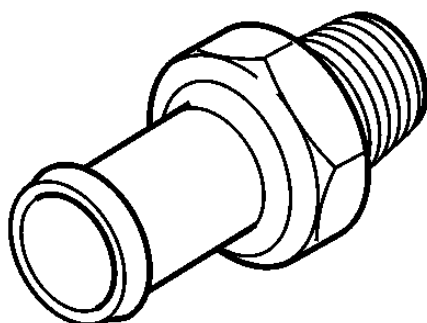
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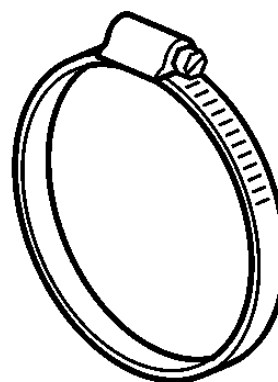
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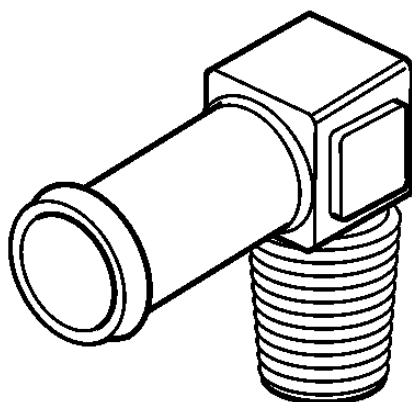
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7



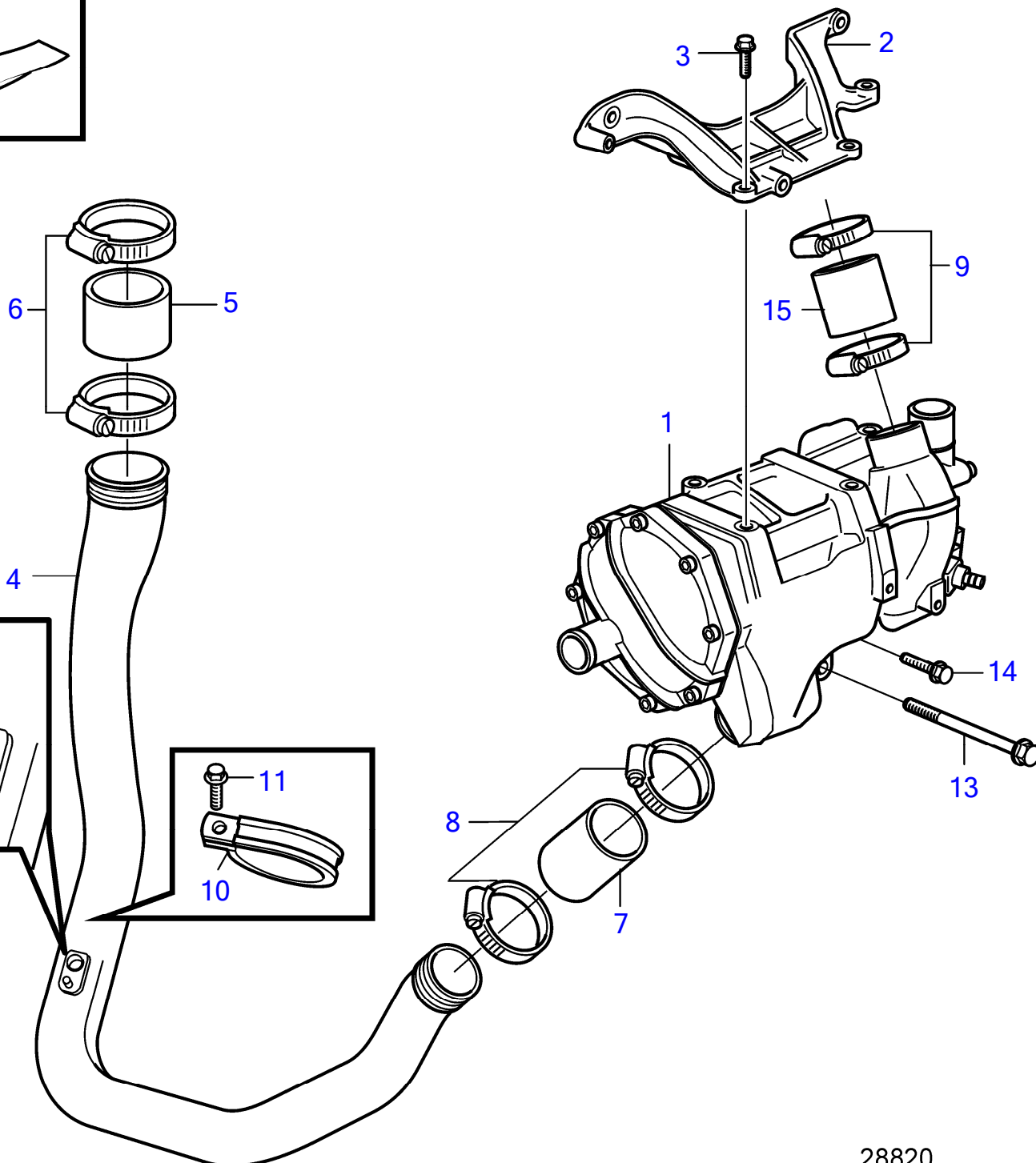
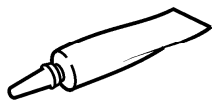
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REF	PART NO.	QTY	DESCRIPTION
1	21339078	1	Hot water output kit
2	22411926	1	▪ Coolant pipe
3	1140097	2	▪ Ball valve
4	961657	5	▪ Hose nipple
5	961665	6	▪ Hose clamp
6	961669	2	▪ Hose clamp
7	961607	1	▪ Hose nipple

D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

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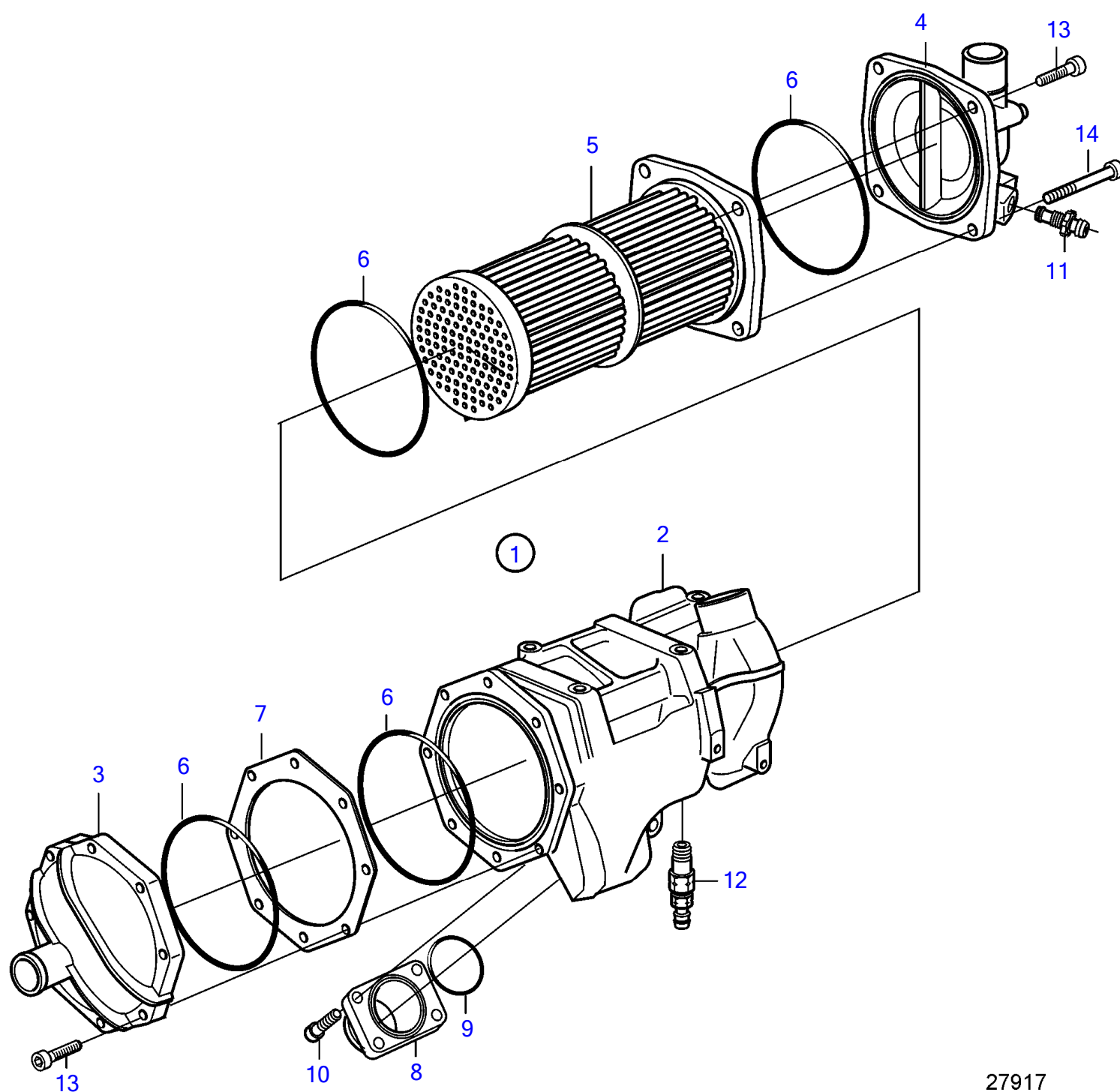


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D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

REF	PART NO.	QTY	DESCRIPTION	SEE SEC.	NOTES
1	21928775	1	Intercooler	37411	
2	21194424	1	Bracket		
3	946671	4	Flange screw		M8x30mm
4	21501408	1	Charge air pipe		
5	30677765	1	Hose		
6	961673	2	Hose clamp		
7	847385	1	Hose		
8	21109868	2	Hose clamp		
9	961671	2	Hose clamp		
10	945734	1	Clamp		
11	946501	1	Flange screw		M6x12mm
12	22320906	1	Pressure sensor		
13	973098	1	Flange screw		M10x150mm
14	947760	1	Flange screw		M8x40mm
15	466327	1	Hose		
16	965483	1	Flange nut		
17	1161277	1	Sealant		See Workshop Manual

D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

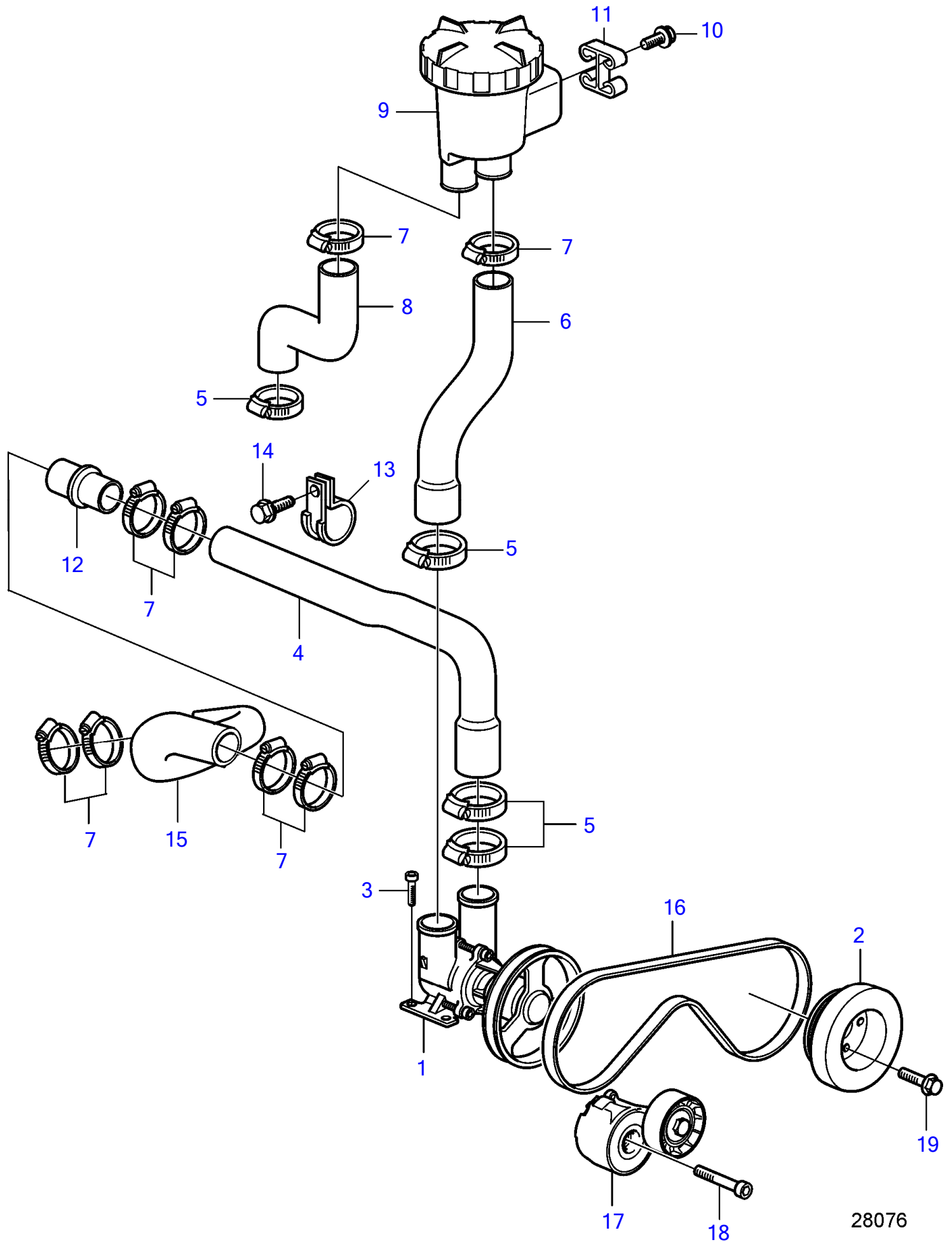


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D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

REF	PART NO.	QTY	DESCRIPTION	NOTES
1	21928775	1	Intercooler	
2	21262889	1	▪ Housing	
3	21262899	1	▪ Cover	Outlet
4	21262896	1	▪ Cover	Inlet
5	21262900	1	▪ Intercooler	
6	3838406	4	▪ O-ring	
7	3838407	1	▪ Spacer	
8	21262907	1	▪ Pipe	
9	866690	1	▪ O-ring	
10	3838501	4	▪ Screw	M6x25mm
11	3583822	1	▪ Draining nipple	
12	974320	1	▪ Shut-off cock	
13	959224	11	▪ Hex. socket screw	M8x35mm
14	959230	1	▪ Hex. socket screw	M8x65mm

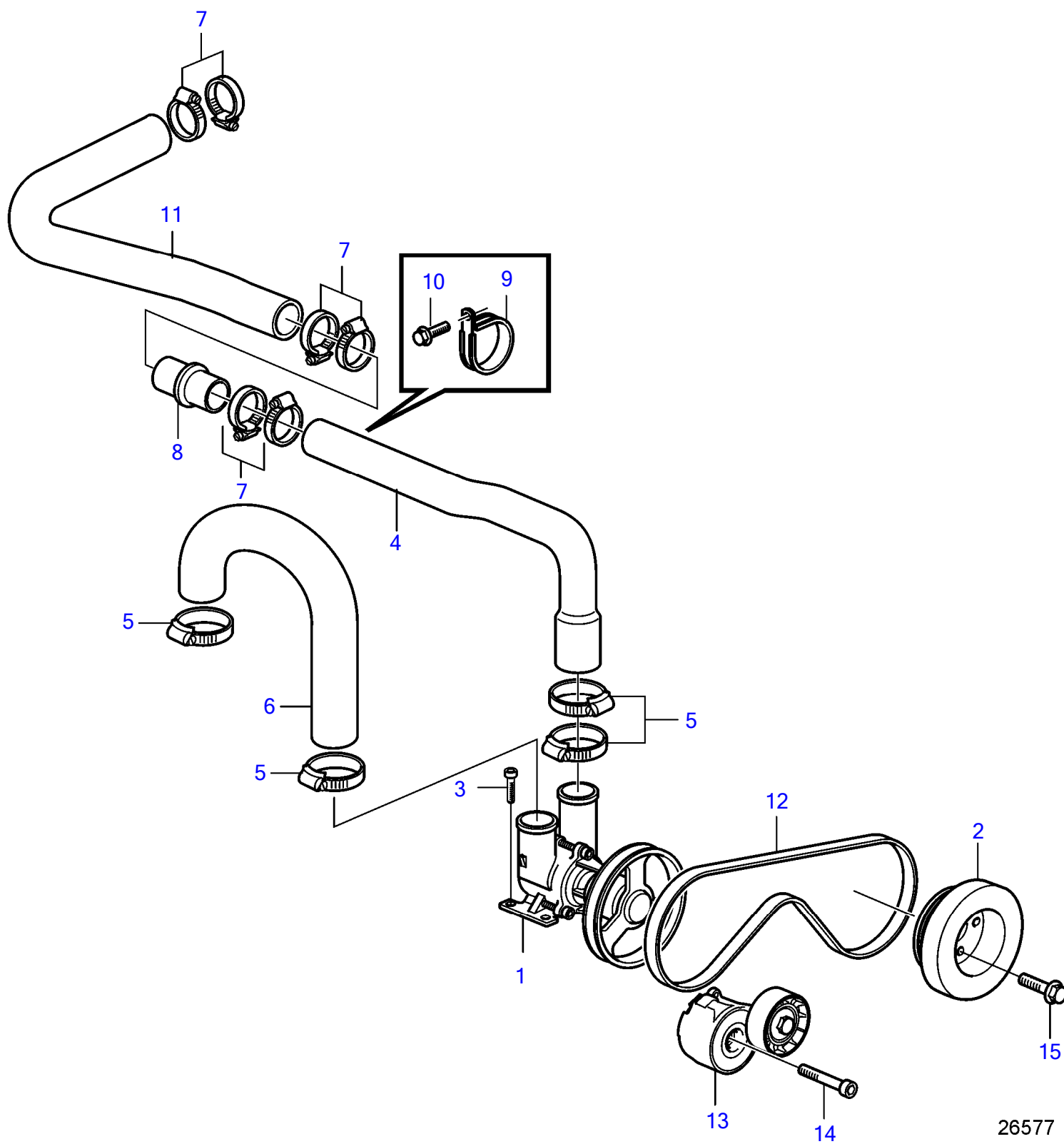
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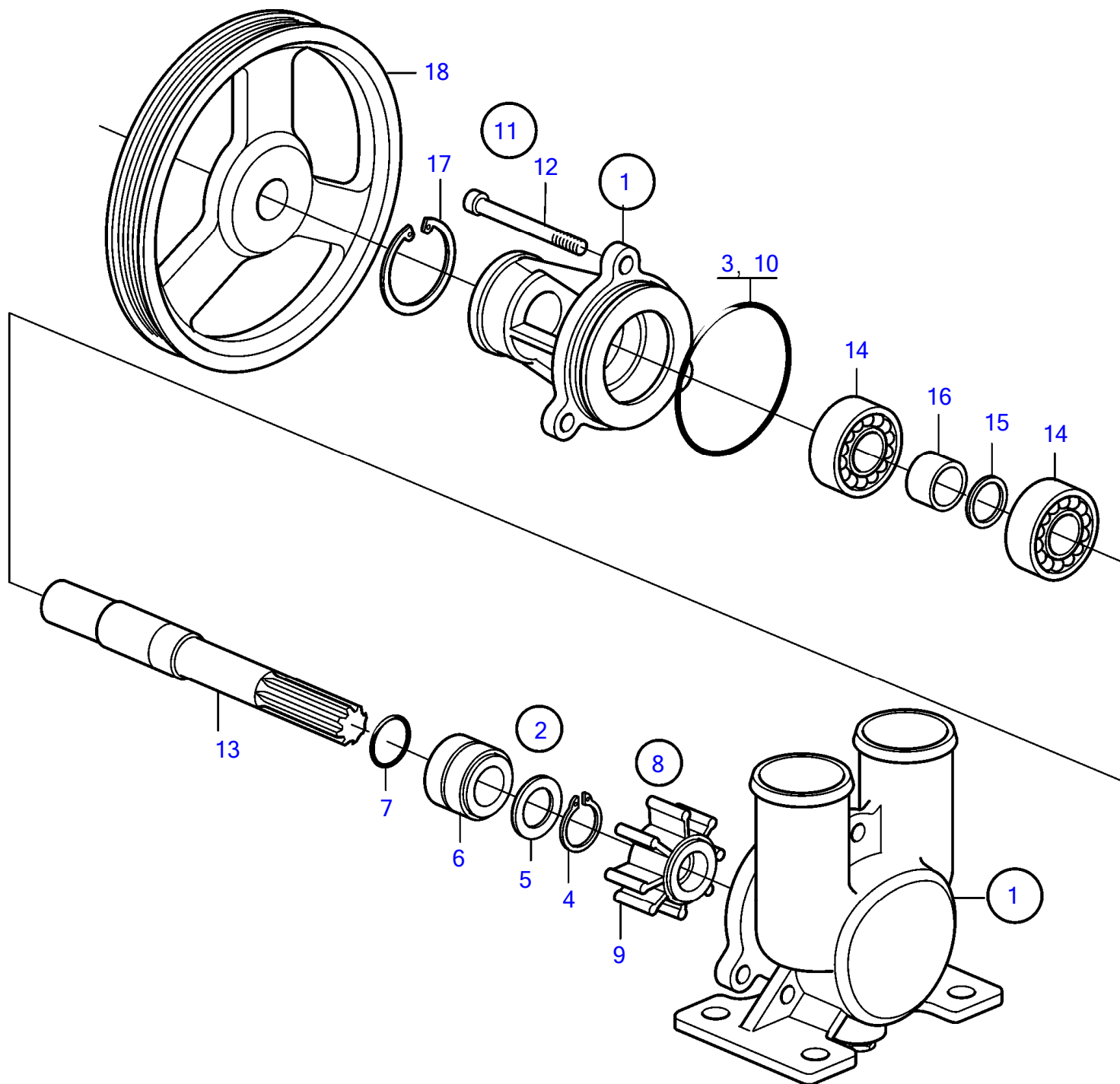


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D3-110I-H, D3-140I-H, D3-150I-H, D3-170I-H, D3-200I-H, D3-220I-H

REF	PART NO.	QTY	DESCRIPTION	SEE SEC.	NOTES
1	21379102	1	Sea water pump		
			•	38260	
			• Bulletin P-26-6-5	P-26-6-5-EN	New seawater pump kits
2	21255747	1	Vibration damper		
3	984736	4	Flange screw		
4	22371786	1	Hose		
5	22274885	4	Hose clamp		
6	21162640	1	Hose		Sea water pump-intercooler.
7	961669	6	Hose clamp		
8	861090	1	Tube		
9	967645	1	Clamp		
10	984725	1	Flange screw		M6x16mm
11	22371868	1	Hose		To oil cooler.
12	21160912	1	V-ribbed belt		
13	21424647	1	Belt tensioner		
14	959245	1	Hex. socket screw		
15	984755	4	Flange screw		M10x40mm

D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H



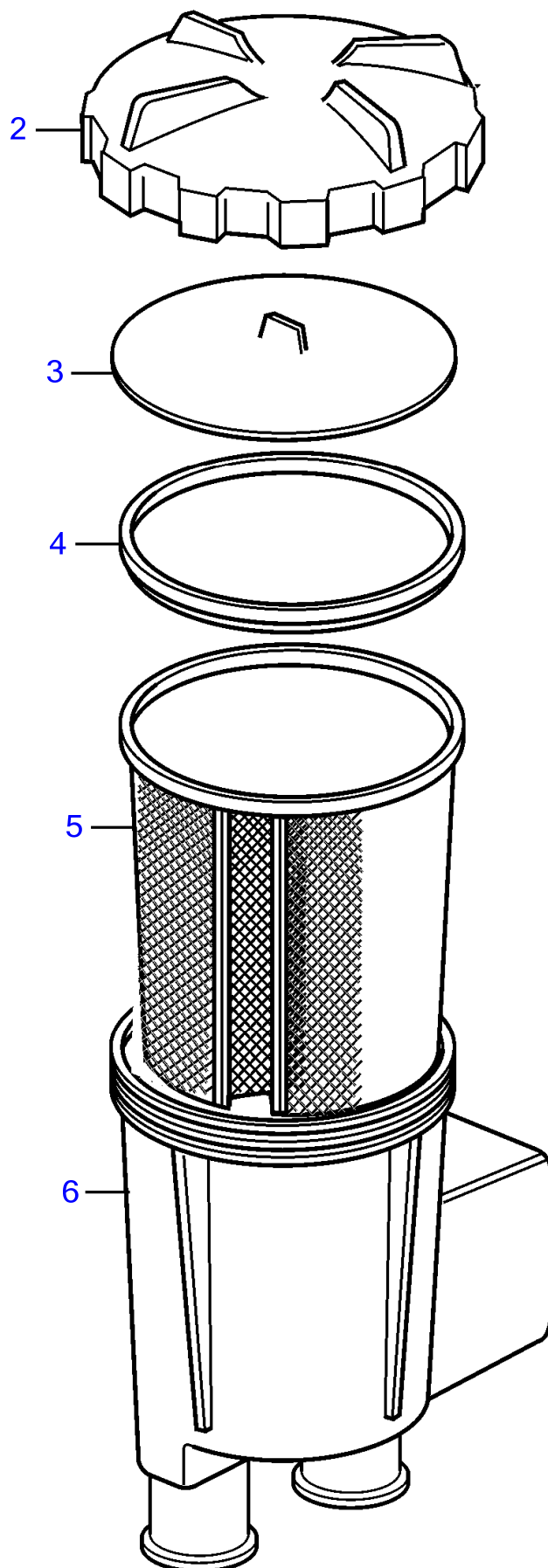
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D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

REF	PART NO.	QTY	DESCRIPTION	SEE SEC.	NOTES
1	21379102	1	Sea water pump		
			• Bulletin P-26-6-5	P-26-6-5-EN	New seawater pump kits
2	21951386	1	• Wear kit		
3		1	• • O-ring		
4	809444	1	• • Lock ring		
5			• •		
7	960166	1	• • O-ring		
8	21951352	1	• Impeller kit		
9		1	• • Impeller		
10		1	• • O-ring		
11	21951330	1	• Screw kit		
12		3	• • Hex. socket screw		
13		1	• Shaft		
14	181800	2	• Ball bearing		
15	914451	1	• Snap ring		
16			•		
17	914523	1	• Snap ring		
18		1	• Pulley		

D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

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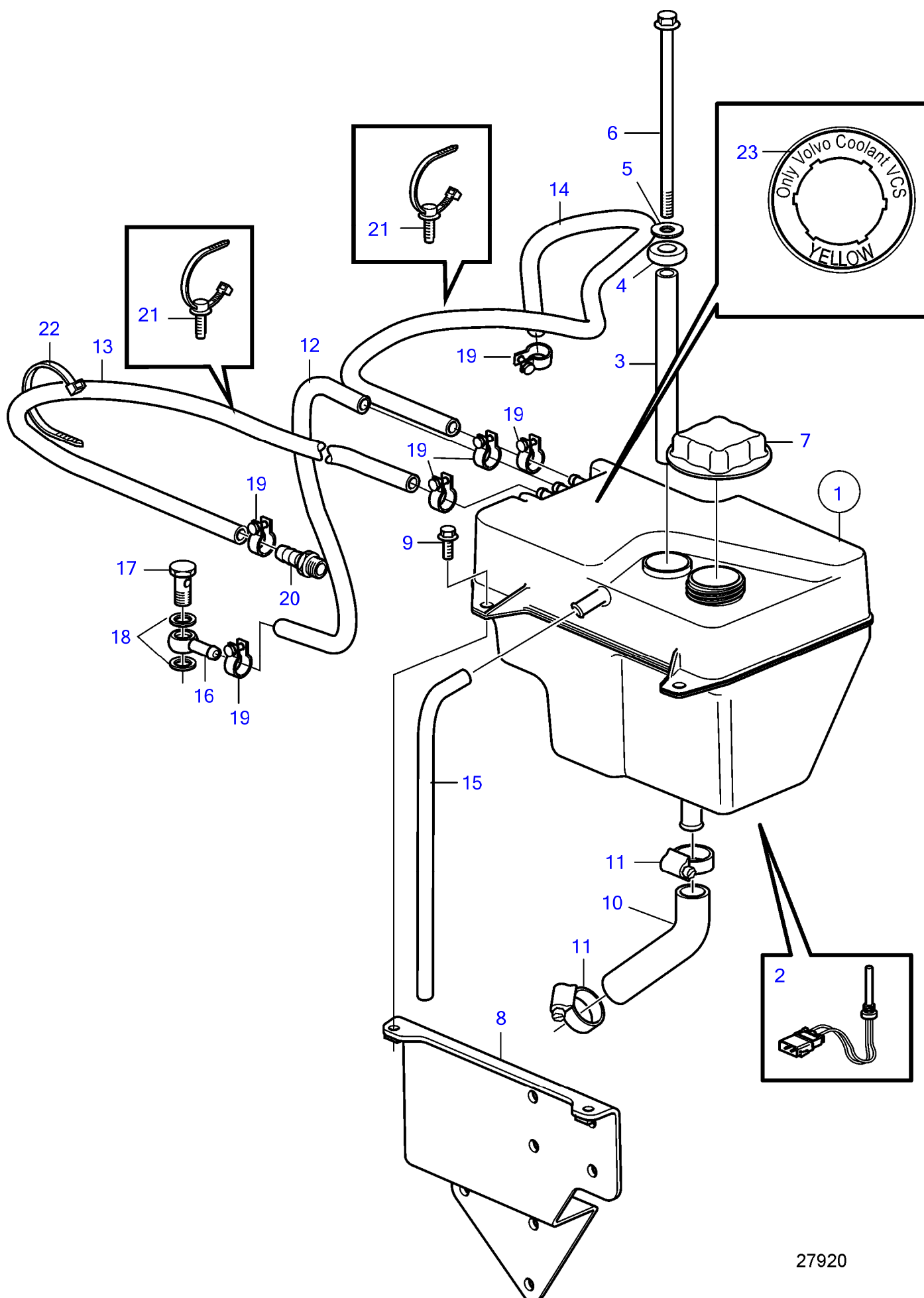


24786

D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

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D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

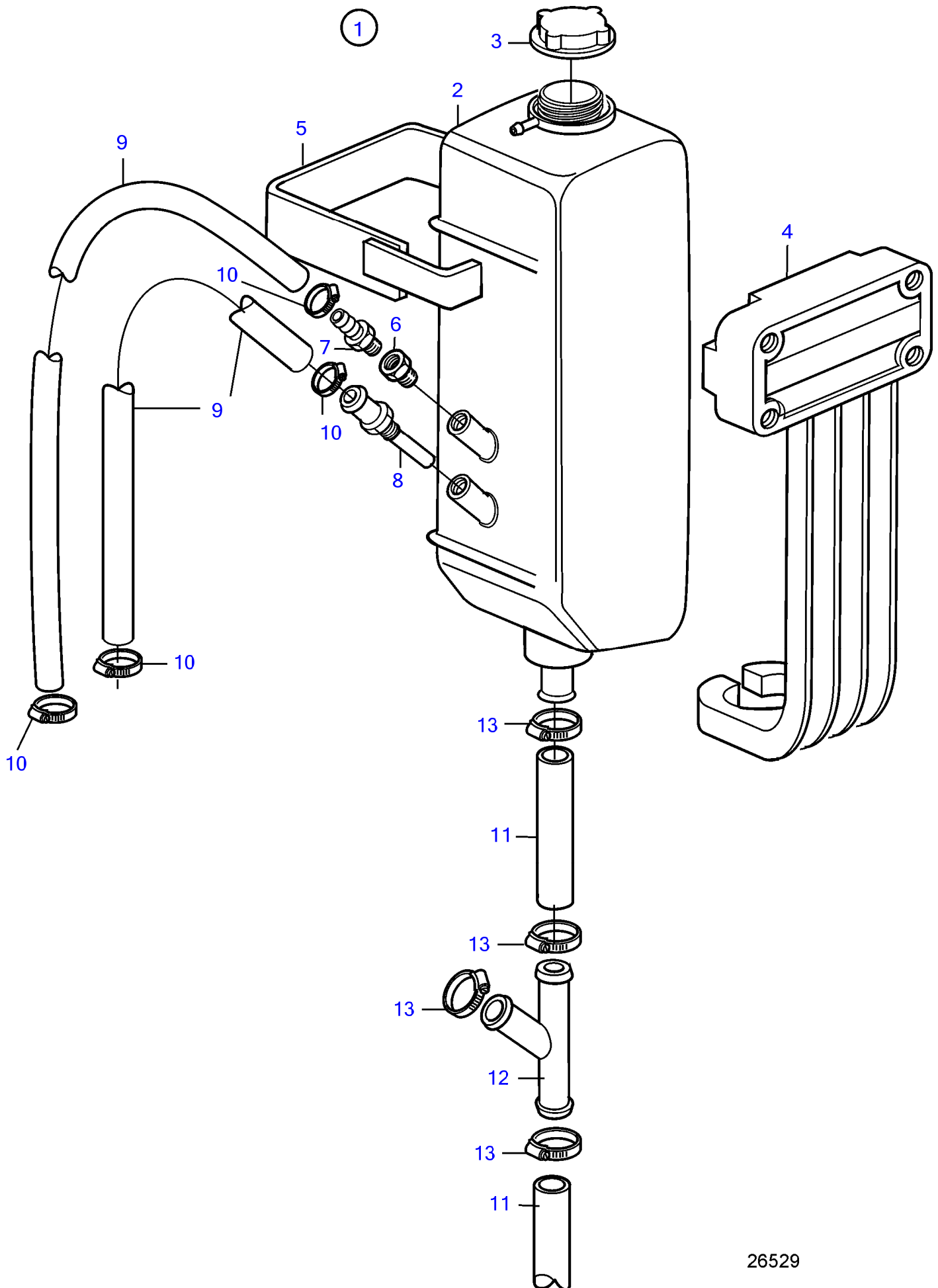


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D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

REF	PART NO.	QTY	DESCRIPTION	NOTES
1	22356962	1	Expansion tank	
2	3547710	1	• Level guard	
3	993301	1	Spacer sleeve	
4	3285120	1	Spacer sleeve	
5	976944	1	Washer	
6	20797255	1	Flange screw	M8x150mm
7	1674083	1	Pressure cap	
8	21142689	1	Bracket	
9	946501	2	Flange screw	M8x20mm
10	21162074	1	Hose	Coolant hose.
11	961665	2	Hose clamp	
12	942700	X	Hose	L=250mm
13	942700	X	Hose	L=680mm
14	942700	X	Hose	L=680mm
15	942754	1	Hose	L=560mm
16	858750	1	Banjo nipple	
17	969299	1	Hollow screw	
18	11994	2	Gasket	
19	976576	6	Hose clamp	
20	21332988	1	Hose nipple	
21	980881	2	Cable tie	
22	948211	1	Cable tie	
23	21506995	1	Label	

D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

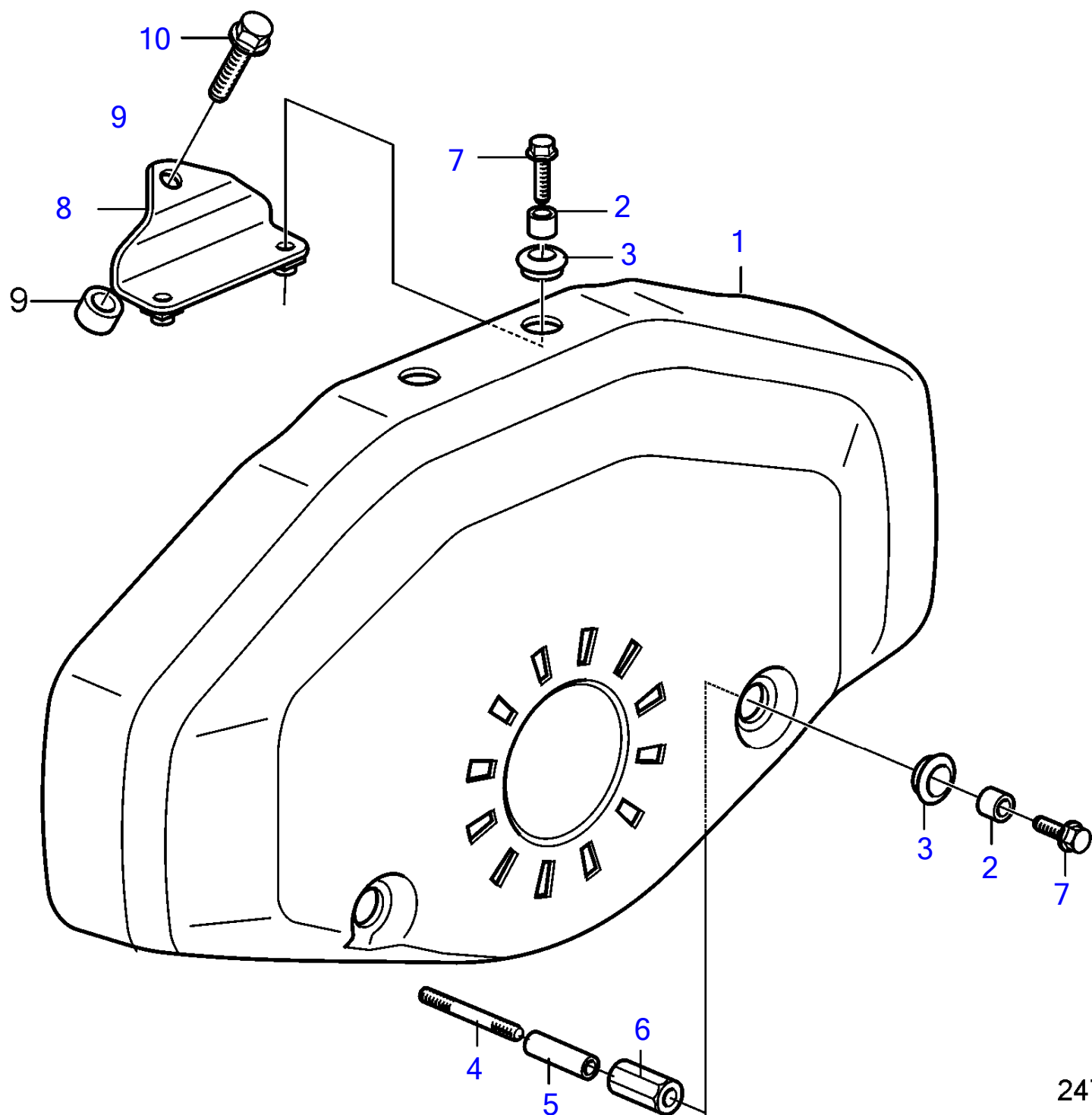


26529

D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

REF	PART NO.	QTY	DESCRIPTION	NOTES
1	21656191	1	Kit	
2	844062	1	• Expansion tank	
3	860866	1	• Filler cap	
4	843260	1	• Bracket	
5	843266	1	• Clamp	
6	847579	1	• Nipple	
7	180003	1	• Nipple	
8	843247	1	• Connection pipe	
9	942700	X	• Hose	L=6000mm
10	976576	4	• Hose clamp	
11	952969	X	• Hose	L=6000mm
12	345845	1	• Distribution pipe	
13	961665	6	• Hose clamp	

D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H



24792

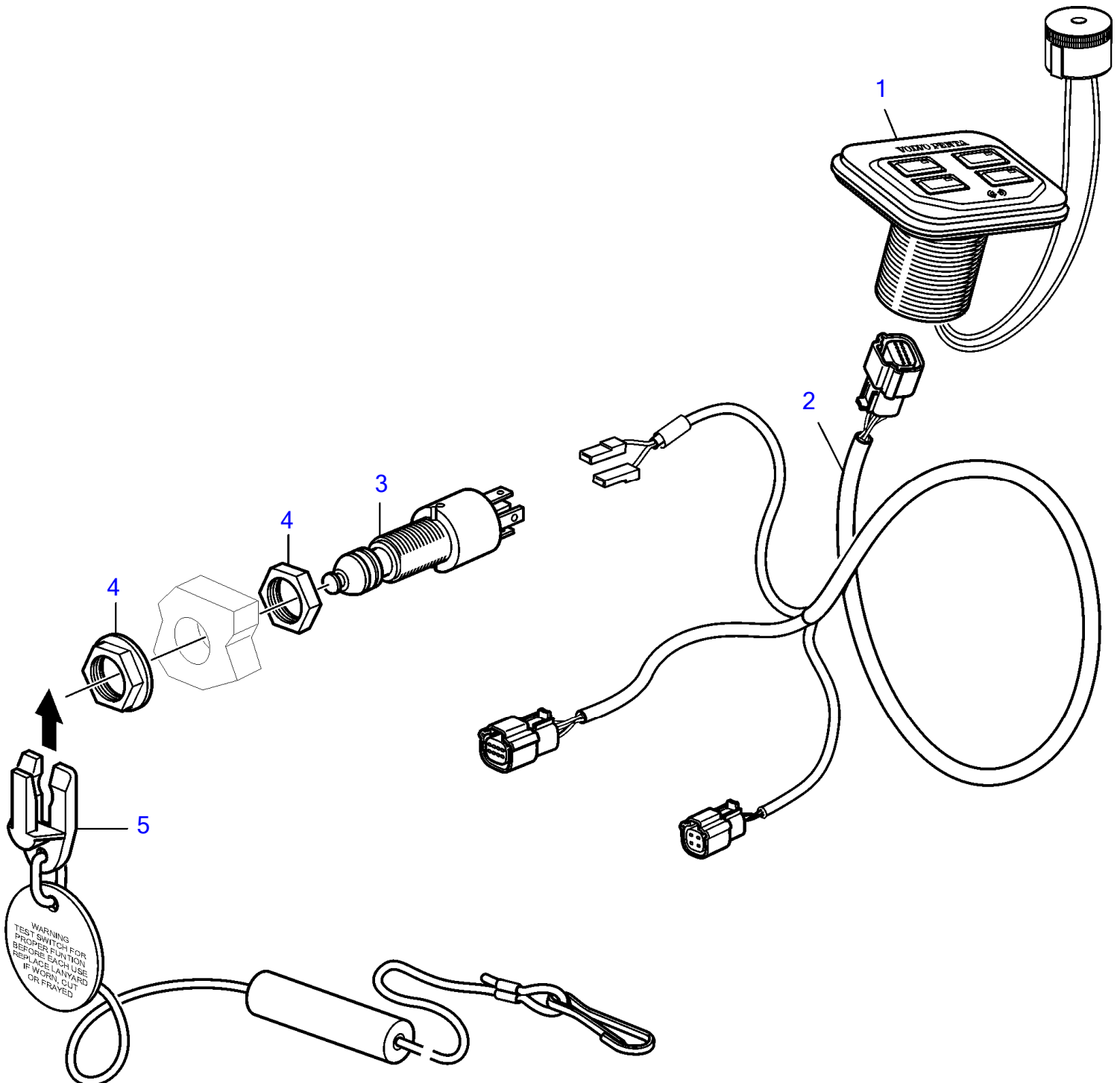
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REF	PART NO.	QTY	DESCRIPTION	NOTES
1	21330506	1	Belt protector	
2	40005089	4	• Spacer	
3	992404	4	• Grommet	
4	953060	2	Stud	
5	847690	2	Spacer sleeve	
6	21264221	2	Spacer nut	
7	945444	4	Flange screw	M8x25mm
8	21330148	1	Bracket	
9	1678297	1	Spacer sleeve	
10	984850	1	Flange screw	M12x50mm

D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

REF	PART NO.	QTY	DESCRIPTION	SEE SEC.	NOTES
1	21164029	1	Control lever, black		
			• Bulletin P-28-4-13	P-28-4-13-EN	New Electronic Controls for EVC Engines
1	21164033	1	Control lever, stainless		
			• Bulletin P-28-4-13	P-28-4-13-EN	New Electronic Controls for EVC Engines
2		1	• Control housing, black		
3	3581674	1	• Gasket		
4		1	• Plate		
5	3581666	2	• Friction washer		
6		2	• Disc		
7		2	• Spring		
8		2	• Guide lug		
9		2	• Spacer ring		
10	3581676	2	• Ring		
11	1336385	2	• Potentiometer		
12		4	• Washer		
13	3581678	2	• Screw		
14	3581680	2	• Nut		
15		2	• Washer		
16	3581681	2	• Screw		
17		2	• Shift lever		
18	3808284	2	• Ball		
19		2	• Washer		
20		2	• Disc spring		
21		2	• Washer		
22		2	• Adjusting screw		
23	3581686	4	• Nut		
24		4	• Washer		
25		4	• Stud		
26	3582830	2	• Plug		
27	3584000	2	• Decal		Bukh
28	3819903	2	• Microswitch		
29		4	• • Washer		
30		4	• • Nut		
31		1	• • Insulator		
32		1	• • Cable		
33	21256757	1	Cable kit		

D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

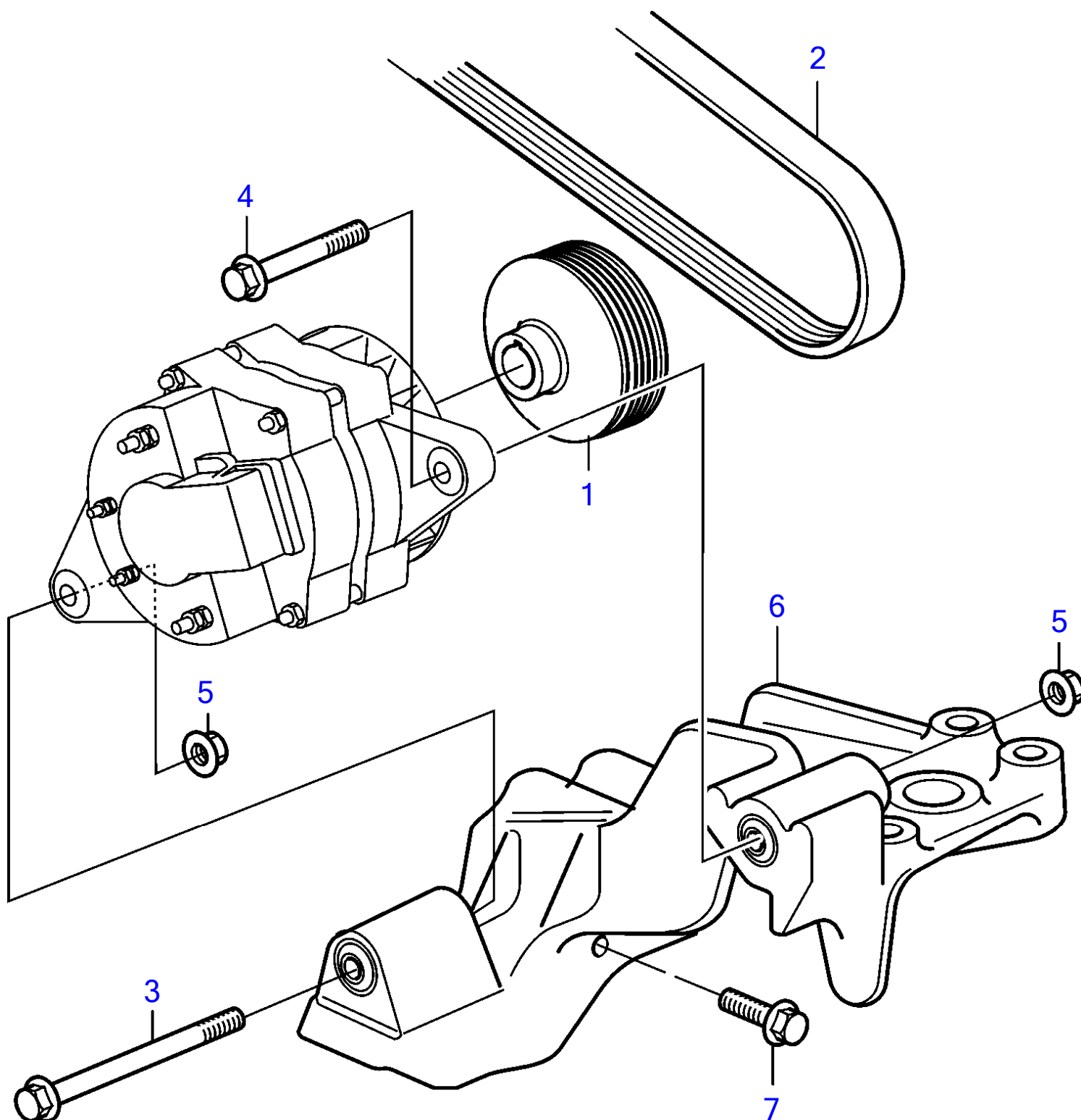


27926

D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

47706190-27-38821	27926	Upd:2/10/2017
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D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

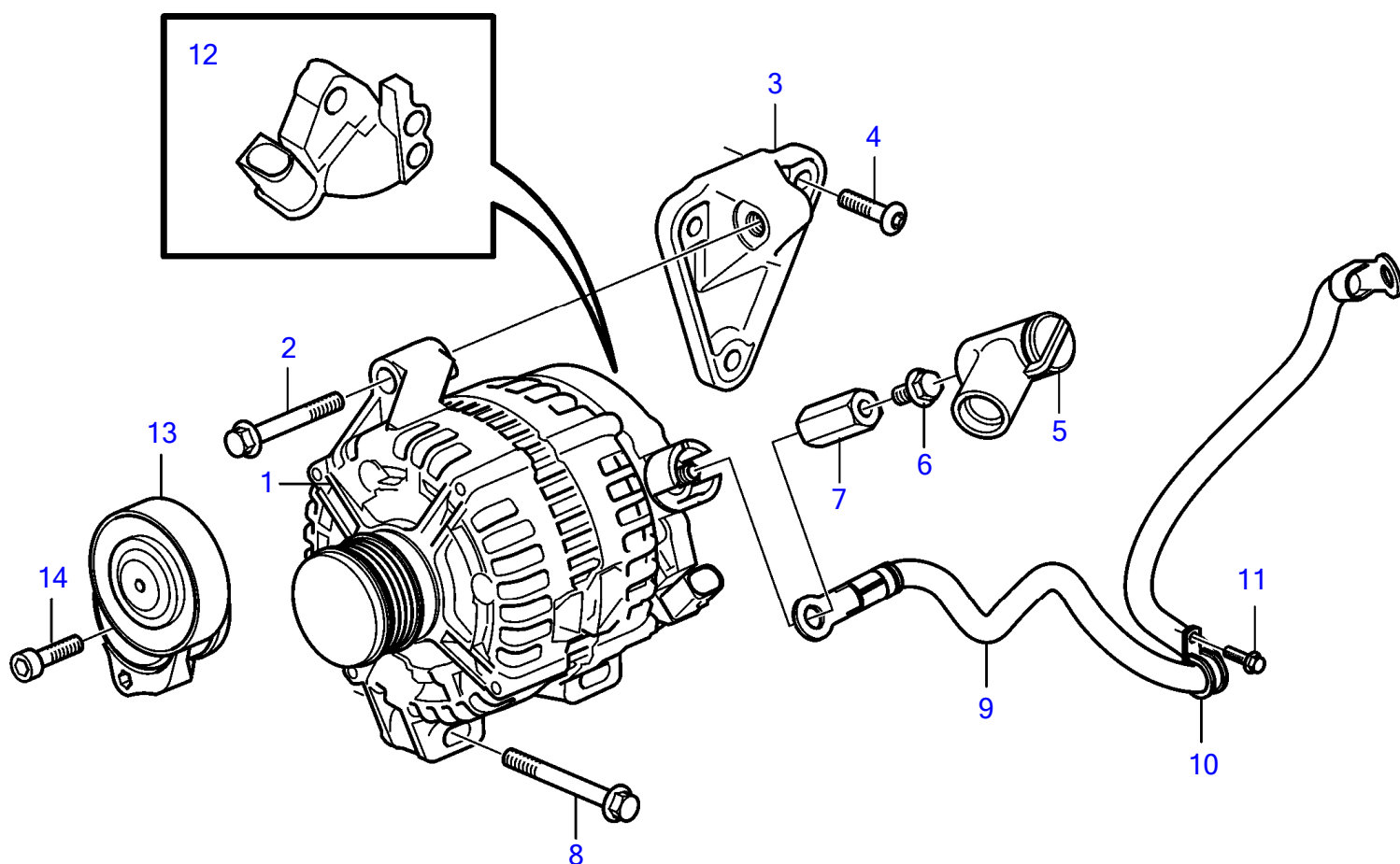


24923

D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

47706190-30-35834	24923	Upd:2/10/2017
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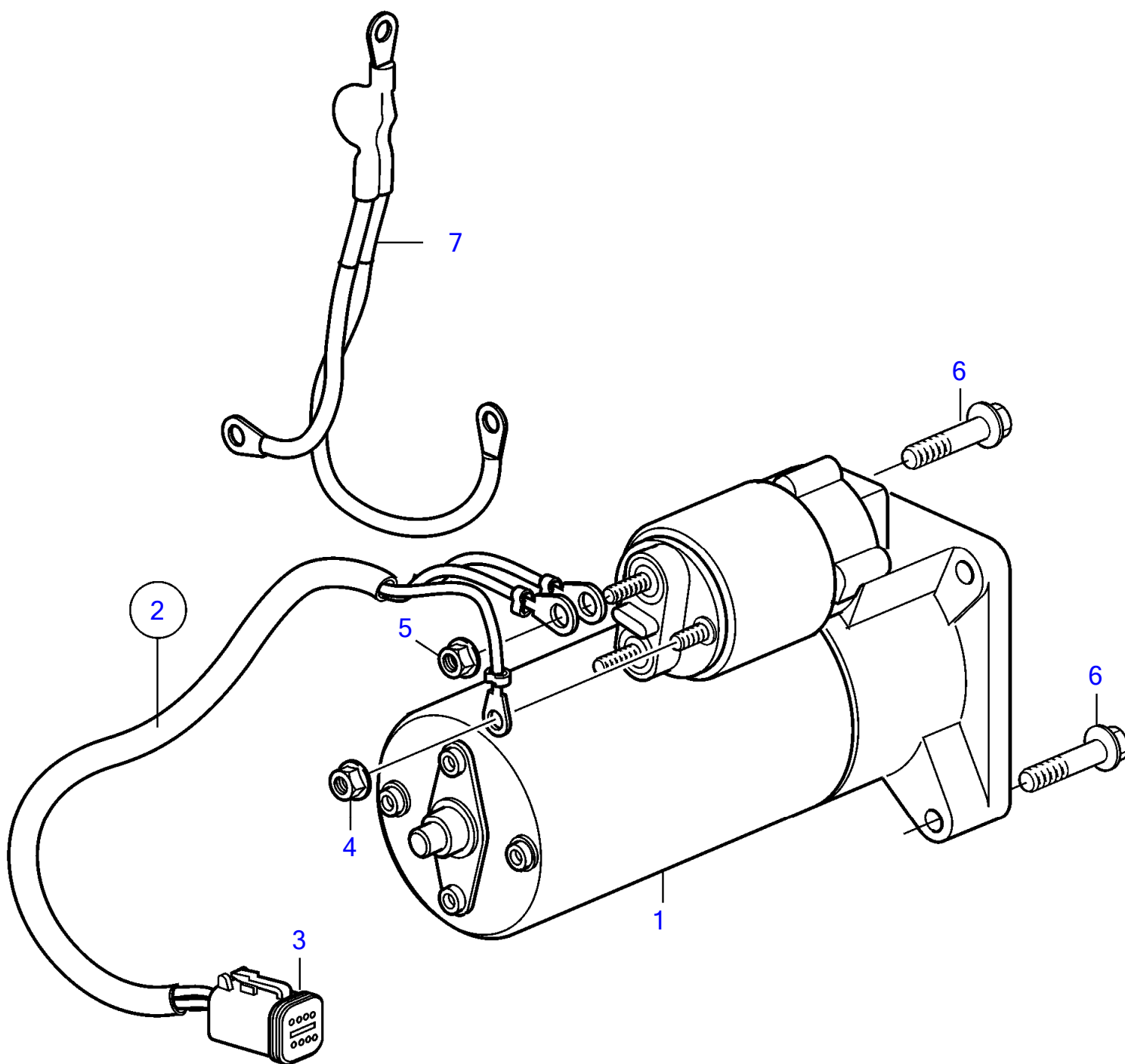
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27928

D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H



28403

D3-110I-H, D3-140A-H, D3-140I-H, D3-150I-H, D3-170A-H, D3-170I-H, D3-200A-H, D3-200I-H, D3-220A-H, D3-220I-H

47706190-30-35696	28403	Upd:2/10/2017
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