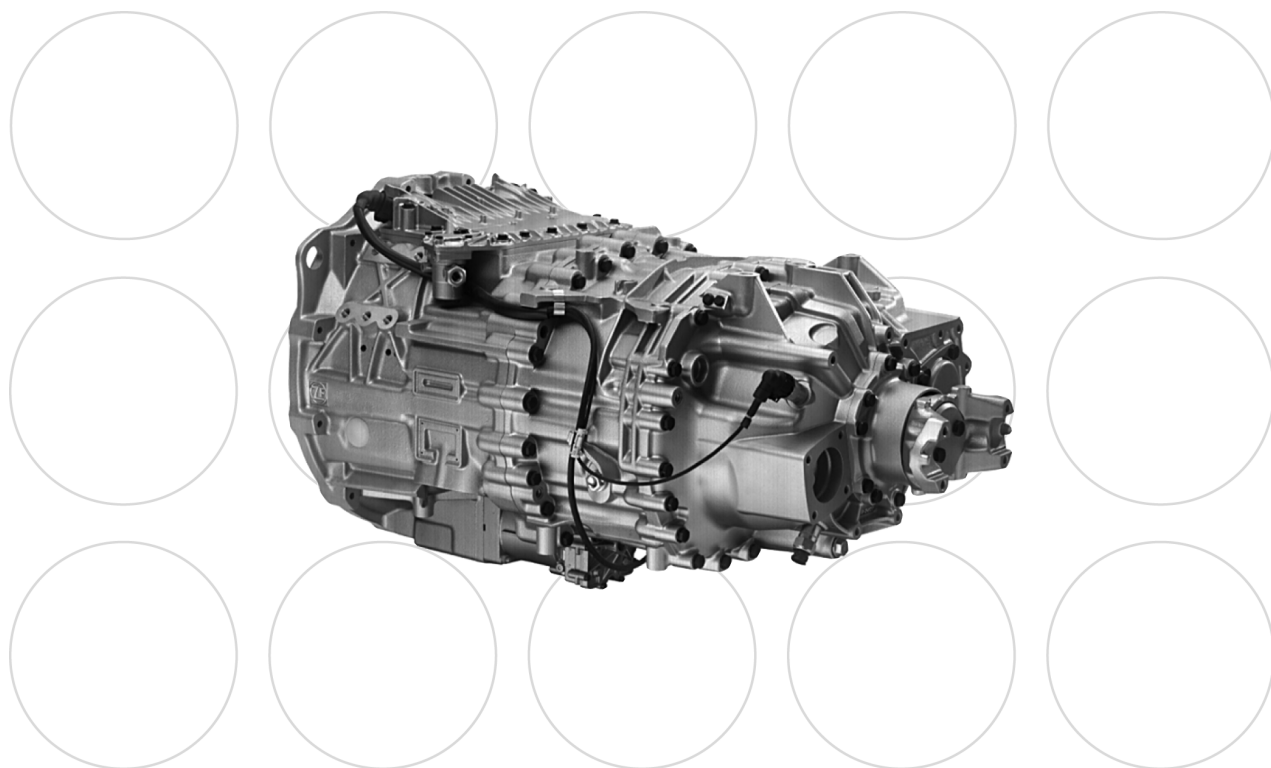




Parts Book PB-0127

ZF-FreedomLine Transmission

Revised 07-2006



How to Use This Parts Book

This parts book contains information for ZF-FreedomLine transmission.

Each component table in this catalog contains the following information:

- ① Item..... The numbers in the Item column correspond to the numbers in the illustration that identify parts.
- ② Quantity (Qty.)..... The numbers in the Quantity column indicate the parts required in each component.
- ③ Aftermarket..... Designates the ArvinMeritor's aftermarket part number.
- ④ ZF Friedrichshafen AG Part Number..... Designates the manufacturer's part number.
- ⑤ Description Designates the part name.

Transmission Case

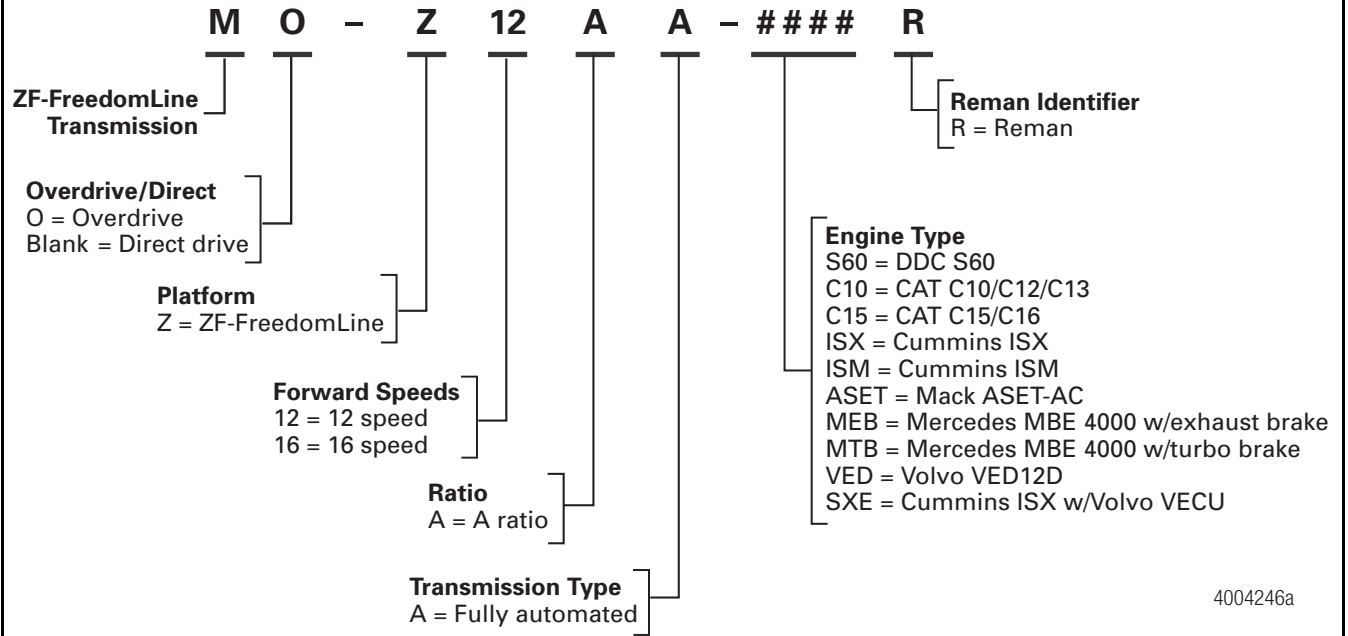
① Item	② Qty.	③ ArvinMeritor's Aftermarket Part Number	④ ZF Friedrichshafen AG Part Number	⑤ Description
1	2	R970001	0768 409 063 01	Fill Plug Assembly
2	2	R970002	1328 301 047 01	Tag, Oil
3	2	R970003	0736 304 145 01	Plug, Fill
4	2	R970004	0730 008 637 01	Sealing Ring
5	2	—	—	Adaptor, Air Line
6	1	2297-Y-8293	2297-Y-8293 01	Tag, Transmission Serial Number
7	1	R970005	0768 409 499 01	Drain Plug Assembly
8	1	R970006	0736 305 070 01	Plug, Drain
9	1	R970004	0730 008 637 01	Sealing Ring

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ZF-FreedomLine Transmission Aftermarket Part Numbers



Model Nomenclature

12-Speed ZF-FreedomLine Transmission

Transmission Type	Model Number	Torque Rating lb-ft	Overall Ratio		Rev. L	Rev. H	Ratio and Percent Step																						
			FWD.	REV.			1 %	2 %	3 %	4 %	5 %	6 %	7 %	8 %	9 %	10 %	11 %	12 %											
12-Speed Direct Drive	M-13Z12A-A13 M-14Z12A-A14	1,350 1,450	15.86	14.68	14.68	11.41	15.86	29	12.33	29	9.57	29	7.44	27	5.87	28	4.57	32	3.47	28	2.70	29	2.10	29	1.63	26	11.29	29	1.00
12-Speed Overdrive	MO-13Z12A-A13 MO-14Z12A-A14 MO-15Z12A-A15 MO-16Z12A-A16	1,350 1,450 1,550 1,650	15.81	14.62	11.41	8.88	12.33	29	9.59	29	7.44	29	5.78	26	4.57	29	3.55	31	2.70	29	2.10	29	1.68	28	1.27	27	1.00	28	0.78

16-Speed ZF-FreedomLine Transmission

Transmission Type	Model Number	Torque Rating lb-ft	Overall Ratio		Rev. L	Rev. H	Ratio and Percent Step																														
			FWD.	REV.			1 %	2 %	3 %	4 %	5 %	6 %	7 %	8 %	9 %	10 %	11 %	12 %	13 %	14 %	15 %	16 %															
16-Speed Overdrive	MO-13Z16A-A13 MO-14Z16A-A14 MO-15Z16A-A15 MO-16Z16A-A16	1,350 1,450 1,550 1,650	17.01	15.75	13.07	10.81	14.12	21	11.68	22	9.54	21	7.89	21	6.52	21	5.39	18	4.57	21	3.78	22	3.09	21	2.56	22	2.09	21	1.73	21	1.43	21	1.18	18	1.00	20	0.83

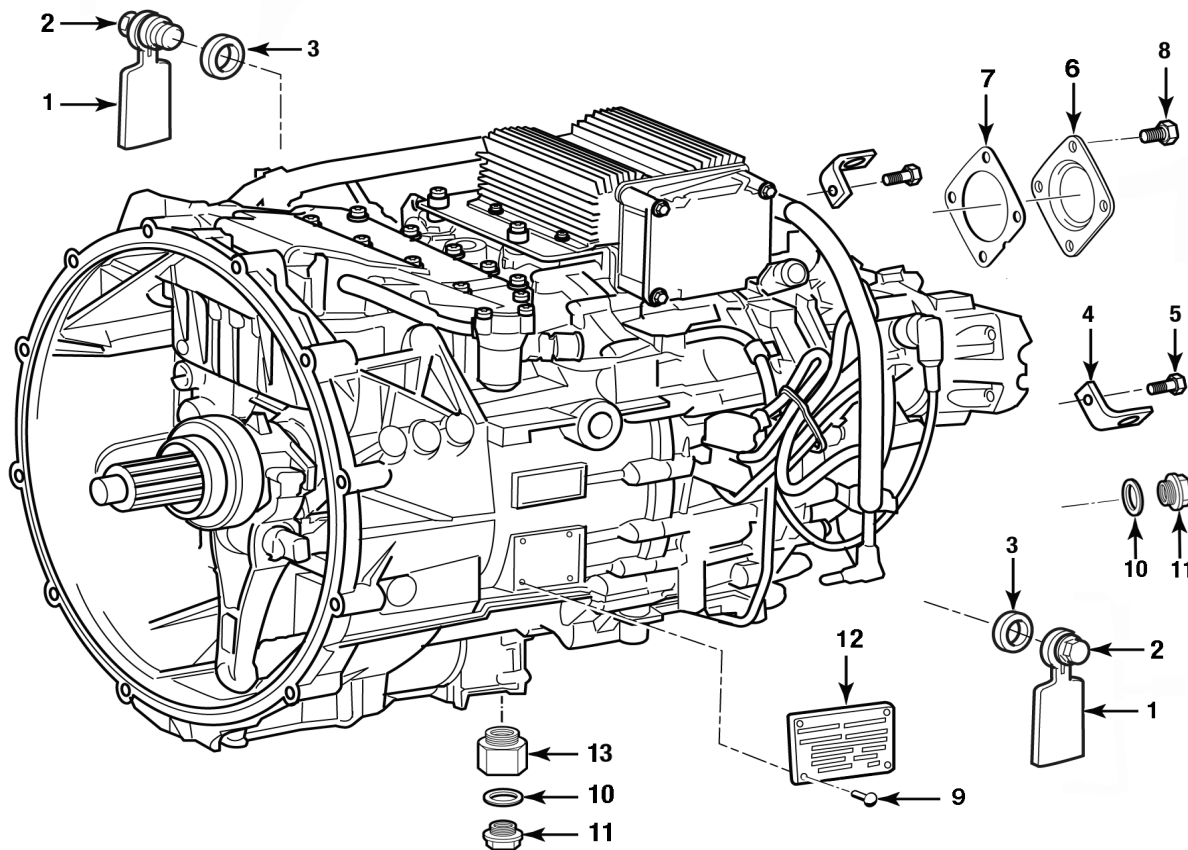
ZF-FreedomLine Transmission Reman Quick Reference

Transmission Type	Engine Type										
	Freightliner only	Freightliner only	Freightliner only	Freightliner only	Freightliner only				Volvo only	Volvo only	Volvo/Mack only
	Detroit Diesel Series 60	Mercedes Benz MBE4000 with an exhaust brake prior to VECU 13.15	Mercedes Benz MBE4000 with a turbo brake prior to VECU 13.15	Mercedes Benz MBE4000 Requires VECU 13.15 or later	Caterpillar C10/C12/C15/C16	Caterpillar C10/C12/C15/C16	Cummins ISM	Cummins ISX without a Volvo VECU	Cummins ISX with a Volvo VECU	Volvo VED12D	Mack ASET-CEGR
12-Speed Direct Drive	MZ12AA S6009	MZ12AA MEB09	MZ12AA MTB09	MZ12AA M4F09	MZ12AA C16F09	MZ12AA C1009	MZ12AA ISM09	MZ12AA ISX09	N/A	MZ12AA VED09	MZ12AA ASET09
12-Speed Overdrive	MOZ12AA S6009	MOZ12AA MEB09	MOZ12AA MTB09	MOZ12AA M4F09	MOZ12AA C16F09	MOZ12AA C1009	MOZ12AA ISM09	MOZ12AA ISX09	MOZ12AA SXE09	MOZ12AA VED09	MOZ12AAA SET09 (Nodal Mgt) MOZ12AA SETS09 (Standard Mgt)
16-Speed Overdrive	MOZ16AA S6009	MOZ16AA MEB09	MOZ16AA MTB09	MOZ16AA M4F09	MOZ16AA C16F09	MOZ16AA C1009	N/A	MOZ16AA ISX09	MOZ16AA SXE09	MOZ16AA VED09	N/A

ZF-FreedomLine Transmission TCU Quick Reference

Transmission Type	Engine Type										
	Freightliner only	Freightliner only	Freightliner only	Freightliner only	Freightliner only				Volvo only	Volvo only	Volvo/Mack only
	Detroit Diesel Series 60	Mercedes Benz MBE4000 with an exhaust brake prior to VECU 13.15	Mercedes Benz MBE4000 with a turbo brake prior to VECU 13.15	Mercedes Benz MBE4000 Requires VECU 13.15 or later	Caterpillar C10/C12/C15/C16	Caterpillar C10/C12/C15/C16	Cummins ISM	Cummins ISX without a Volvo VECU	Cummins ISX with a Volvo VECU	Volvo VED12D	Mack ASET-CEGR
12-Speed Direct Drive	6009 V74 042 01	6009 V74 065 01	6009 V74 066 01	6009 V74 080 01	6009 V74 079 01	6009 V74 063 01	6009 V74 071 01	6009 V74 074 01	N/A	6009 V74 062 01	6009 V74 069 01
12-Speed Overdrive	6009 V74 044 01	6009 V74 056 01	6009 V74 055 01	6009 V74 078 01	6009 V74 077 01	6009 V74 050 01	6009 V74 058 01	6009 V74 045 01	6009 V74 057 01	6009 V74 059 01	6009 V74 068 01
16-Speed Overdrive	6009 V74 046 01	6009 V74 076 01	6009 V74 075 01	6009 V74 081 01	6009 V74 082 01	6009 V74 053 01	N/A	6009 V74 047 01	6009 V74 061 01	6009 V74 060 01	N/A

Transmission Case



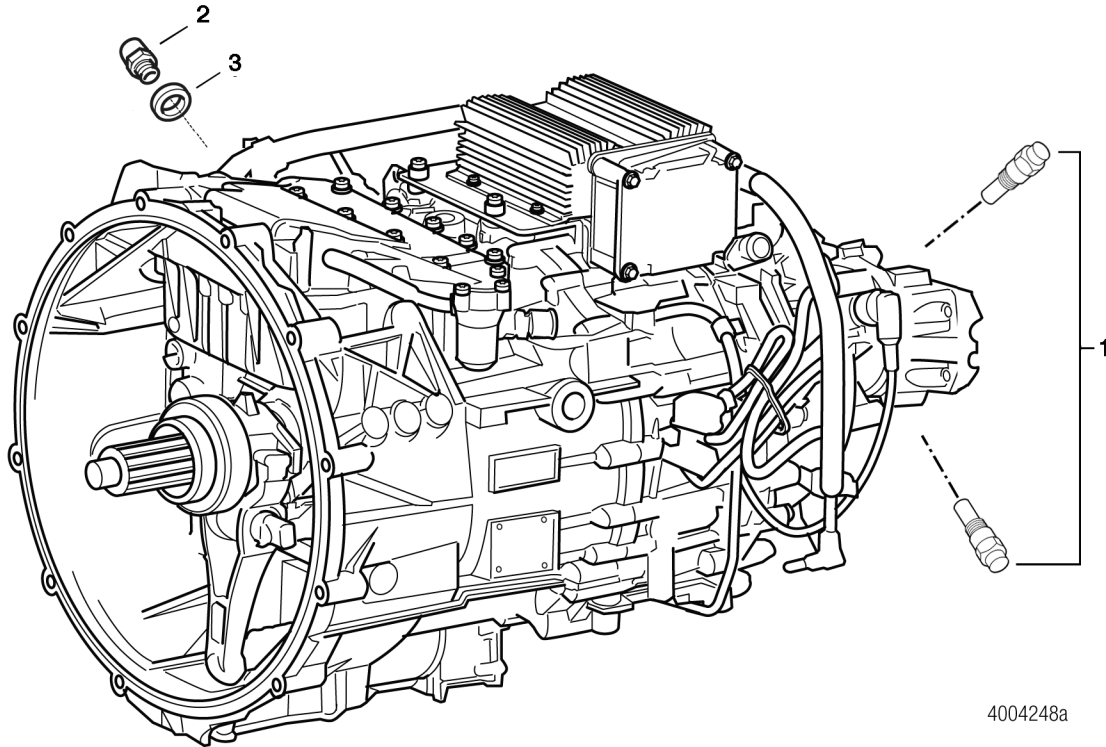
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Transmission Case

Item	Quantity	Part Number	ZF Part Number	Description
1	2	—	1328 301 047 01	Plate
2	2	—	0736 304 145 01	Screw plug
3	2	—	0730 008 637 01	Sealing ring
4	2	2297G8301	1338 390 015 01	Lifting hook
5	2	0636 011 335	0636 011 335 01	M12*35 bolt — lifting hook to housing
6	1	3266R1474	1304 301 034 01	PTO cover
7	1	—	1238 308 201 01	Gasket
8	4	0636 011 335	0636 011 335 01	M12*35 bolt — PTO cover to case
9	4	—	0731 101 047 01	Rivets
10	2	0730 008 637	0730 008 637 01	Sealing ring
11	2	0736 305 070	0736 305 070 01	M24*1.5 drain plug
12	1	22978293	0730 365 147 01	Transmission identification tag
13	1	A 3268T1814	0501 321 504 01	M24*1.5 1/2 — 14 NPFT adapter, oil temp sensor

Main Case

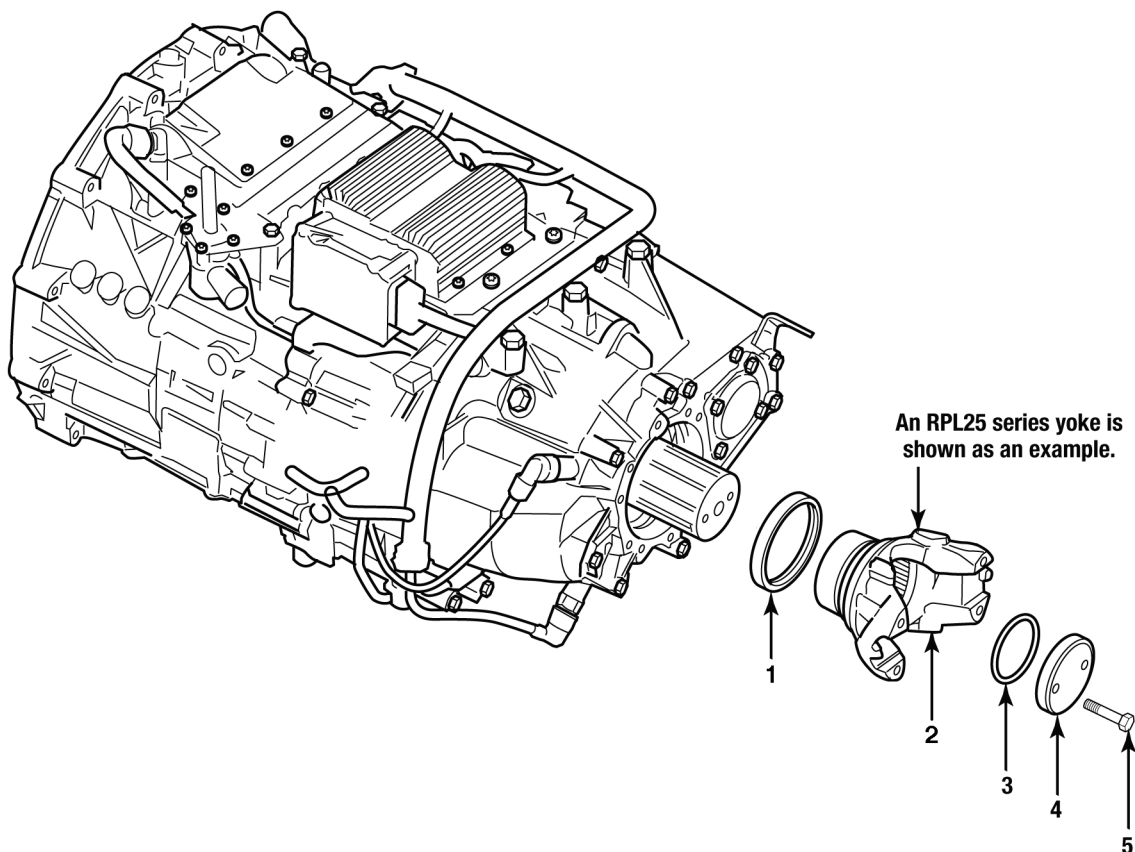
Transmission Sensors



Transmission Sensors

Item	Quantity	Part Number	ZF Part Number	Description
1	2	0501 210 859	0501 210 859 01	Output shaft speed sensor
2	1	—	1328 298 007 01	Neutral switch kit
3	1	—	1328 306 024 01	Neutral switch pin

Driveline and Output Shaft Seal

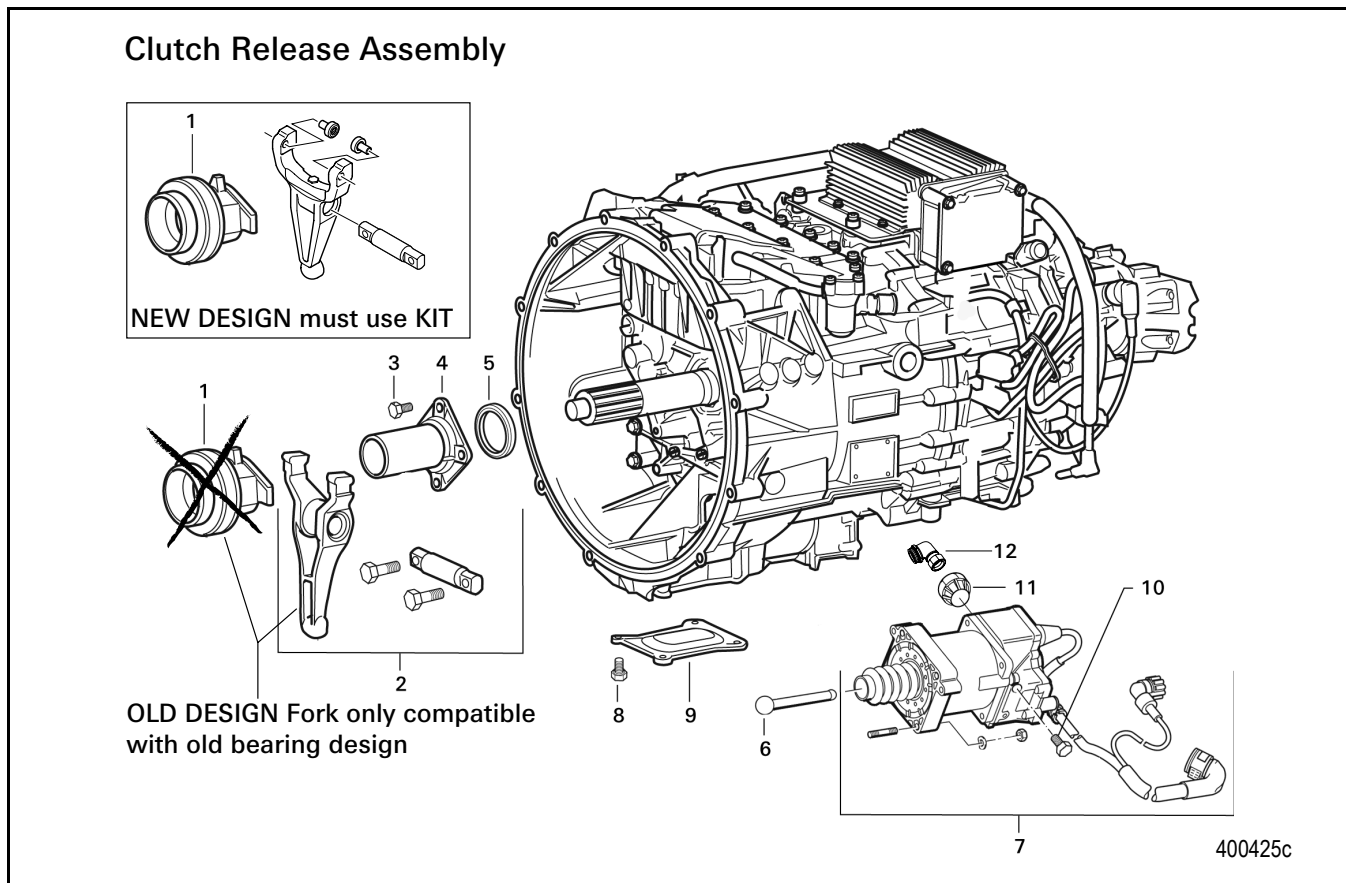


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Driveline and Output Shaft Seal

Item	Quantity	Part Number	ZF Part Number	Description
1	1	0734 319 459	0734 319 459 01	Output shaft seal
2	1	176TYS57-1	0501 320 467 01	176T series 1/2 round yoke
2	1	18NYS57-1	0501 321 467 01	18N series full round yoke
2	1	18TYS57-2	0501 319 866 01	18T series 1/2 round yoke
2	1	1314 332 054	1314 332 054 01	Output Flange — European Style
2	1	20WYS57-1	0501 321 466 01	RPL20 series yoke
2	1	25WYS57-1	0501 321 464 01	RPL25 series yoke
2	1	250-4-921-1	2504921101	SPL250 series yoke
2	1	170-4-1761-1	17041761101	SPL170 series yoke
3	1	0634 313 805	0634 313 805 01	Yoke retaining plate O-ring
4	1	1312 332 028	1312 332 028 01	Yoke retaining plate
5	2	0636 011 540	0636 011 540 01	M12*60 bolt, yoke retaining plate to output shaft

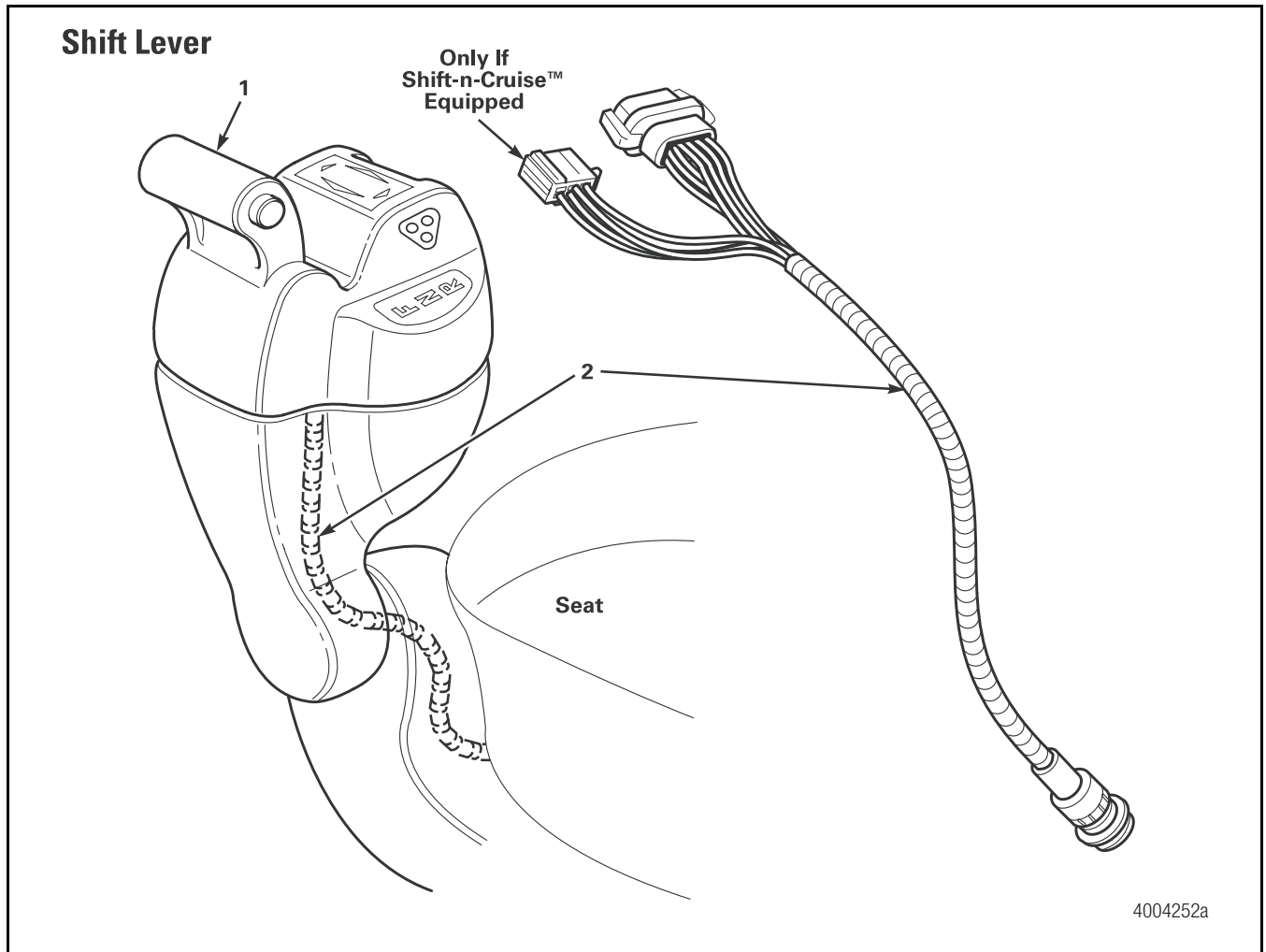
Main Case



Clutch Release Assembly

Item	Quantity	OEM	Part Number	ZF Part Number	Description
1	1		—	1328 298 008 01	Release bearing and Roller fork kit
2	1		—	1328 298 004 01	Release fork kit
3	4		0636 015 257	0636 015 257 01	M8*25 bolt, quill tube to front cover
4	1		1314 302 096	1314 302 096 01	Quill tube
5	1		0750 111 348	0750 111 348 01	Input shaft seal
6	1		1328 368 009	1328 368 009 01	Clutch actuator rod (all engines except the MBE 4000 and Mack/Volvo)
6	1		1328 368 004	1328 368 004 01	Clutch actuator rod (MBE 4000, Mack, Volvo engines only)
7	1		—	1328 298 005 01	Clutch actuator kit
8	4		0636 015 299	0636 015 299 01	Inspection cover bolt
9	1		1328 301 008	1328 301 008 01	Inspection cover
10	1		0636 305 072	0636 305 072 01	Screw plug
10	1		0634 801 205	0634 801 205 01	Sealing ring
11	1		0501 322 365	0501 322 365 01	Clutch Actuator filter
12	1	Kenworth	A 3268P1810	0501 321 507 01	Air fittings (90 Degree Quick Disconnect)
12	1	International	2206L1442	0501 321 489 01	Air fittings (90 Degree Quick Disconnect)
12	1	Mack	2206L1442	0501 321 489 01	Air fittings (90 Degree Quick Disconnect)
12	1		OEM supply	OEM supply	Freightliner, Peterbilt, Volvo

Note New Design: When changing the release bearing, all parts in the kit 1328 298 008 01 must be used.
The part 1328 298 004 01 (old design) is not compatible with the bearing 1328 298 008 01 kit.



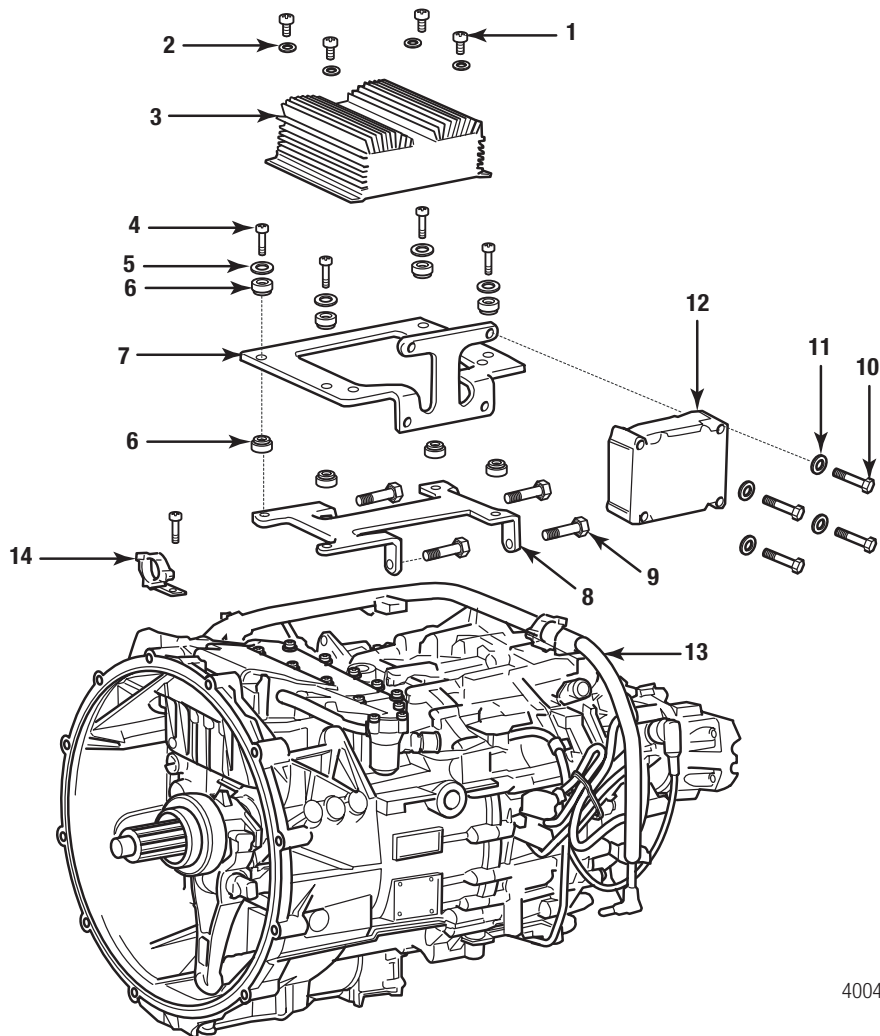
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Shift Lever

Item	Quantity	Part Number	ZF Part Number	Description
1	1	A 2297E8273	1338 390 027 01	Shift lever assembly with Shift-n-Cruise™
1	1	A 2297P8284	1338 390 021 01	Shift lever assembly without Shift-n-Cruise™
2	1	A 2297T8288	1338 290 003 01	Seat mounted shift lever harness with Shift-n-Cruise™
2	1	A 2297U8289	1338 290 004 01	Seat mounted shift lever harness without Shift-n-Cruise™

Controls

Configuration 1, Kenworth, International

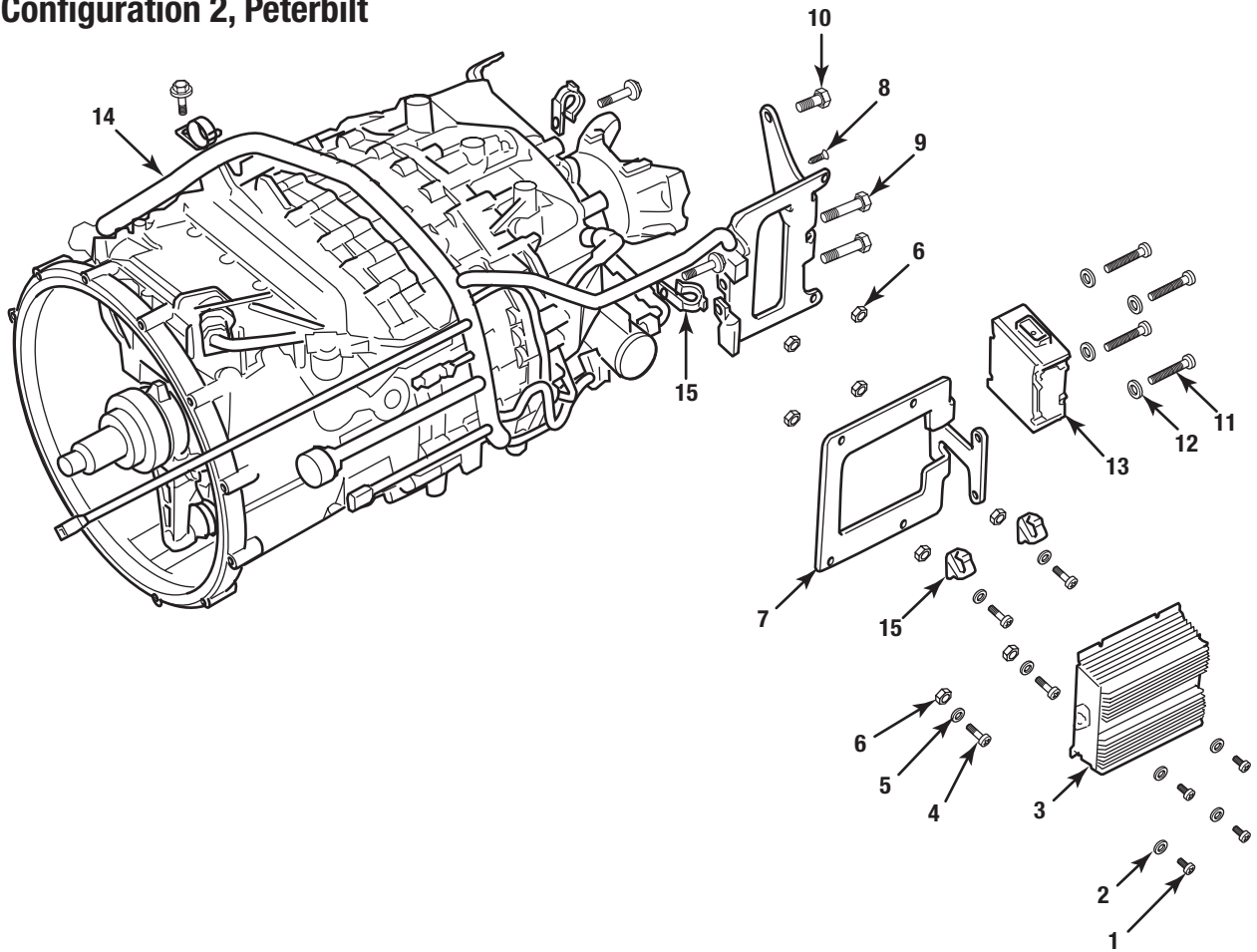


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Configuration 1 – Kenworth, International

Item	Quantity	Part Number	ZF Part Number	Description
1	4	S244A1	0501 321 516 01	1/4 - 20 bolt, Voltage doubler to top accessory plate
2	8	WA34	0501 321 518 01	1/4 washer, Voltage doubler to top accessory plate
3	1	A 2297Z8268	1338 290 010 01	Voltage doubler
4	4	15X1812	1338 390 018 01	5/16 - 18 bolt, top accessory to bottom accessory bracket
5	4	1229B1666	0501 321 510 01	5/16 washer
6	8	1225F1306	1338 390 017 01	Isolator bushings
7	1	3305A1457	1338 390 001 01	Top accessory bracket, 12 & 16 speed
8	1	3305D1460	1338 390 004 01	Bottom accessory bracket, 12 speed
8	1	3305C1459	1338 390 003 01	Bottom accessory bracket, 16 speed
9	6	0636 015 601	0636 015 601 01	M10*65 bolt
10	4	S2422A2	0501 321 515 01	1/4 - 20 bolt, ZMTEC to top accessory plate
11	8	WA34	0501 321 518 01	1/4 washer, ZMTEC to top accessory plate
12	1	R970036	1338 390 036 01	ZMTEC KIT (ZF-FreedomLine Transmission Electronic Controller)
13	1	A 2297A8295	1338 290 002 01	Wire harness
14	4	A 2257C1277	0501 321 501 01	Wire harness clip

Configuration 2, Peterbilt

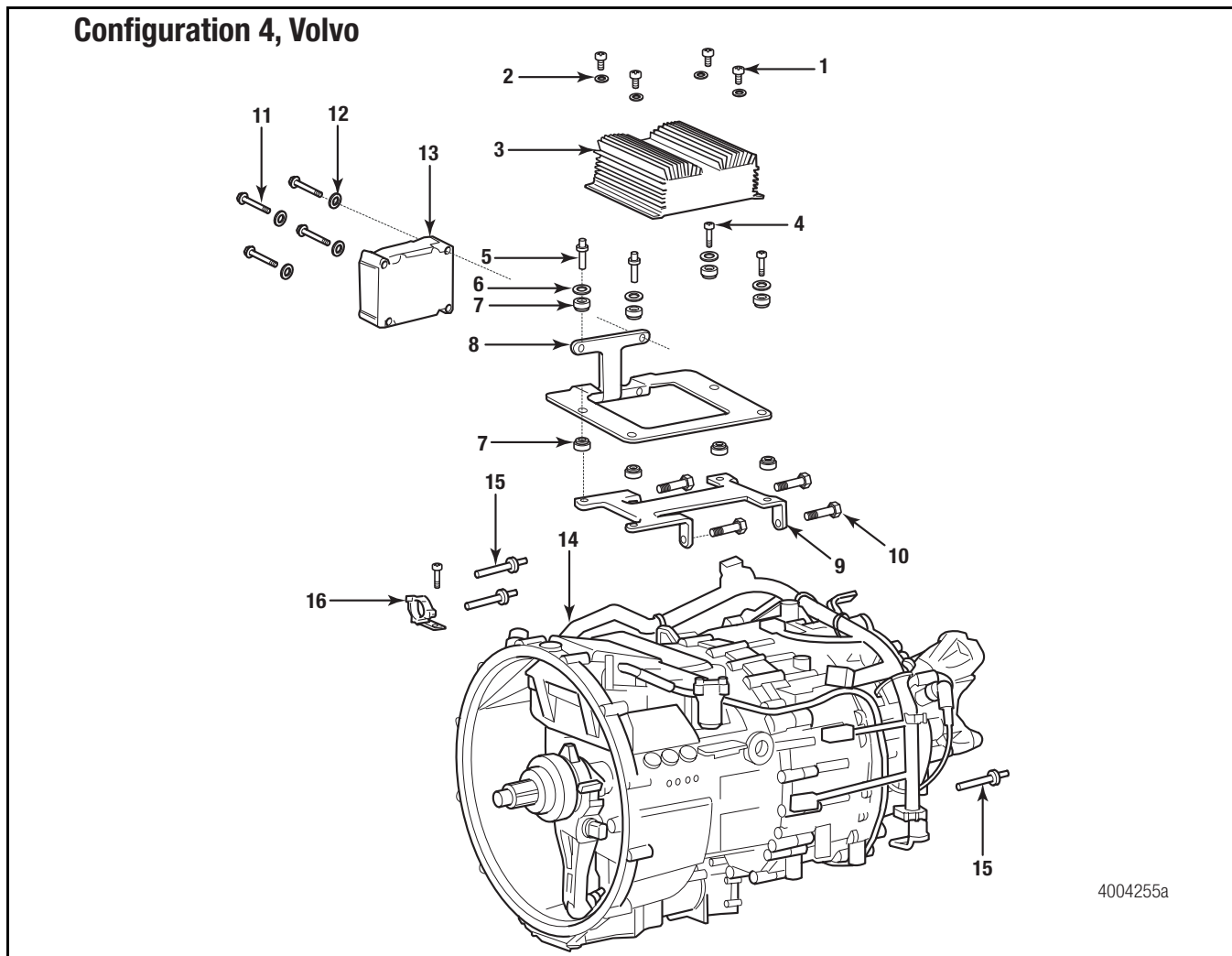


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Configuration 2 – Peterbilt

Item	Quantity	Part Number	ZF Part Number	Description
1	4	S244A1	0501 321 516 01	1/4 - 20 bolt, Voltage doubler to top accessory plate
2	8	WA34	0501 321 518 01	1/4 washer, Voltage doubler to top accessory plate
3	1	A 2297Z8268	1338 290 010 01	Voltage doubler
4	4	15X1812	1338 390 018 01	5116 - 18 bolt, top accessory to bottom accessory bracket
5	4	1229B1666	0501 321 510 01	5/16 washer
6	8	1225F1306	1338 390 017 01	Isolator bushings
7	1	3305A1457	1338 390 001 01	Top accessory bracket, 12 & 16 speed
8	1	3305N1548	1338 390 006 01	Bottom accessory bracket (S/N LB03043343 and greater)
9	6	0636 015 601	0636 015 601 01	M10*65 bolt
10	1	0636 011 335	0636 011 335 01	M12*35 bolt
11	4	S2422A2	0501 321 515 01	1/4 - 20 bolt, ZMTEC to top accessory plate
12	8	WA34	0501 321 518 01	1/4 washer, ZMTEC to top accessory plate
13	1	R970036	1338 390 036 01	ZMTEC KIT (ZF-FreedomLine Transmission Electronic Controller)
14	1	A 2297X8266	1338 290 001 01	Wire harness
15	5	A 2257C1277	0501 321 501 01	Wire harness clip

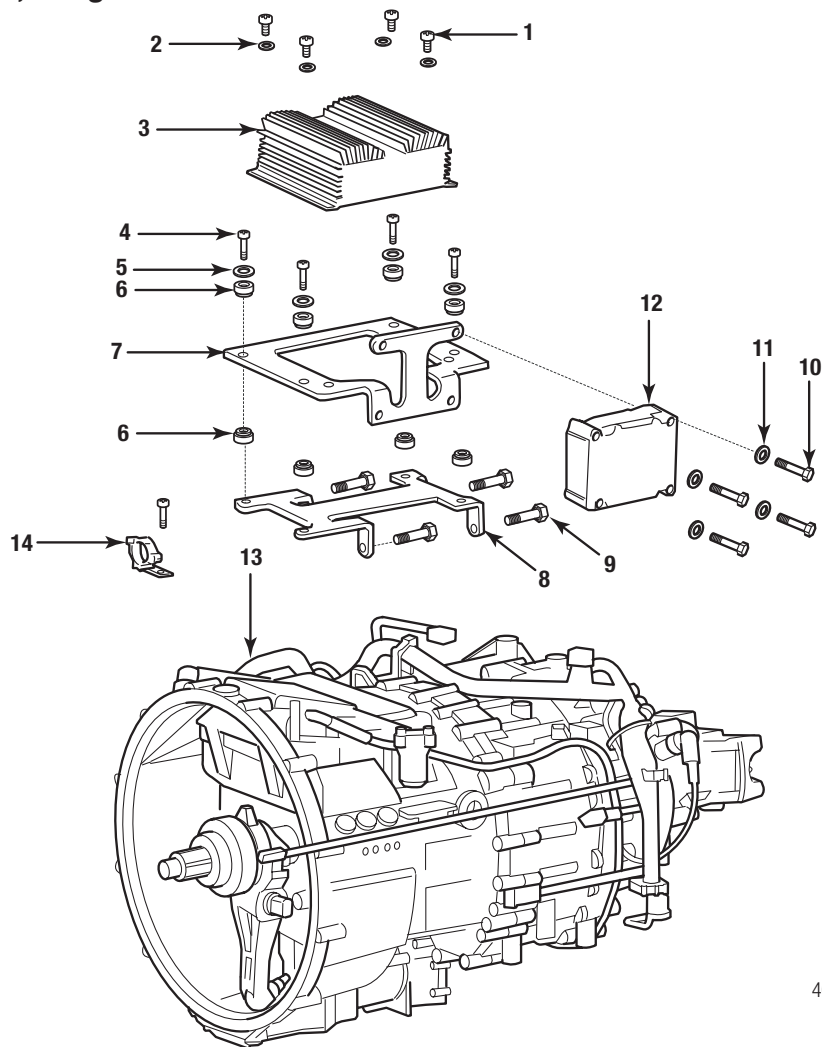
Controls



Configuration 4 – Volvo

Item	Quantity	Part Number	ZF Part Number	Description
1	4	S244A1	0501 321 516 01	1/4 - 20 bolt, Voltage doubler to top accessory plate
2	8	WA34	0501 321 518 01	1/4 washer, Voltage doubler to top accessory plate
3	1	A 2297Z8268	1338 290 010 01	Voltage doubler
4	2	15X1812	1338 390 018 01	5/16 - 18 bolt, top accessory to bottom accessory bracket
5	2	4X1909	1338 390 012 01	5/16 - 18 M8*16 stud, top accessory to bottom accessory bracket
6	4	1229B1666	0501 321 510 01	5/16 washer
7	8	1225F1306	1338 390 017 01	Isolator bushings
8	1	3305X1636	1338 390 007 01	Top accessory bracket, 12 & 16 speed
9	1	3305D1460	1338 390 004 01	Bottom accessory bracket, 12 speed
9	1	3305C1459	1338 390 003 01	Bottom accessory bracket, 16 speed
10	6	0636 015 601	0636 015 601 01	M10*65 bolt
11	4	S2422A2	0501 321 515 01	1/4 - 20 bolt, ZMTEC to top accessory plate
12	8	WA34	0501 321 518 01	1/4 washer, ZMTEC to top accessory plate
13	1	R970036	1338 390 036 01	ZMTEC KIT (ZF-FreedomLine Transmission Electronic Controller)
14	1	A 2297U8419	1338 290 005 01	Wire harness
15	3	4X1910	1338 390 010 01	Stud — Special
16	1	A 2257C1277	0501 321 501 01	Wire harness clip

Configuration 5, Freightliner



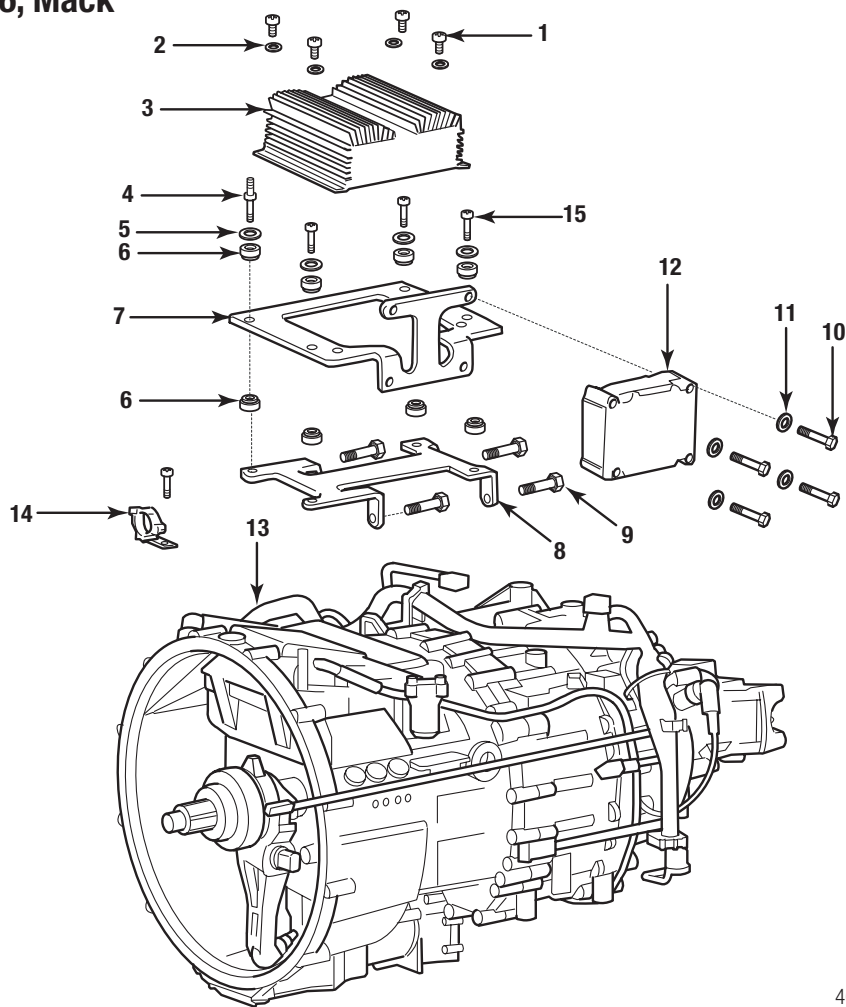
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Configuration 5 – Freightliner

Item	Quantity	Part Number	ZF Part Number	Description
1	4	S244A1	0501 321 516 01	1/4 - 20 bolt, Voltage doubler to top accessory plate
2	8	WA34	0501 321 518 01	1/4 washer, Voltage doubler to top accessory plate
3	1	A 2297Z8268	1338 290 010 01	Voltage doubler
4	4	15X1812	1338 390 018 01	5/16 - 18 bolt, top accessory to bottom accessory bracket
5	4	1229B1666	0501 321 510 01	5/16 washer
6	8	1225F1306	1338 390 017 01	Isolator bushings
7	1	3305A1457	1338 390 001 01	Top accessory bracket, 12 & 16 speed
8	1	3305D1460	1338 390 004 01	Bottom accessory bracket, 12 speed
8	1	3305C1459	1338 390 003 01	Bottom accessory bracket, 16 speed
9	6	0636 015 601	0636 015 601 01	M10*65 bolt
10	4	S2422A2	0501 321 515 01	1/4 - 20 bolt, ZMTEC to top accessory plate
11	8	WA34	0501 321 518 01	1/4 washer, ZMTEC to top accessory plate
12	1	R970036	1338 390 036 01	ZMTEC KIT (ZF-FreedomLine Transmission Electronic Controller)
13	1	A 2297A8295	1338 290 002 01	Wire harness
14	5	A 2257C1277	0501 321 501 01	Wire harness clip

Controls

Configuration 6, Mack

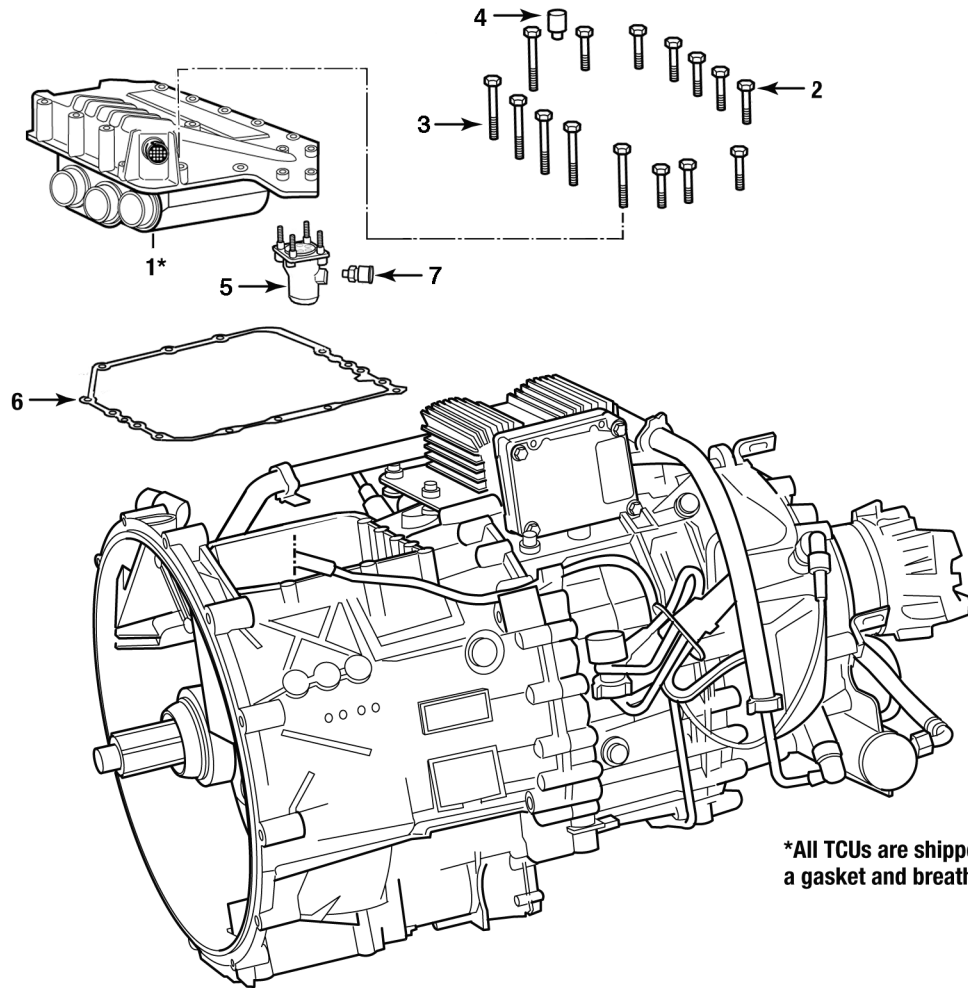


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Configuration 6 – Mack

Item	Quantity	Part Number	ZF Part Number	Description
1	4	S 244A1	0501 321 516 01	1/4-20 bolt, voltage doubler to top accessory plate
2	8	WA34	0501 321 518 01	1/4 washer, voltage doubler to top accessory plate
3	1	A 2297Z8268	1338 290 010 01	Voltage doubler
4	1	4X 1909	1338 390 012 01	5/16-18 M8*16 stud, top accessory to bottom accessory bracket
5	4	1229B1666	0501 321 510 01	5/16 washer
6	8	1225F1306	1338 390 017 01	Isolator bushings
7	1	3305A1457	1338 390 001 01	Top accessory bracket, 12 & 16 speeds
8	1	3305D1460	1338 390 004 01	Bottom accessory bracket, 12 speed
8	1	3305C1459	1338 390 003 01	Bottom accessory bracket, 16 speed
9	6	0636 015 601	0636 015 601 01	M10*65 bolt
10	4	S2422A2	0501 321 515 01	1/4-20 bolt, ZMTEC to top accessory plate
11	8	WA34	0501 321 518 01	1/4 washer, ZMTEC to top accessory plate
12	1	R970036	1338 390 036 01	ZMTEC KIT (ZF-FreedomLine Transmission Electronic Controller)
13	1	A 2297W8473	1338 290 006 01	Wire harness
14	3	A 2257C1277	0501 321 501 01	Wire harness clip
15	3	15X 1812	1338 390 018 01	5/16-18 bolt, top accessory to bottom accessory bracket

Transmission Controller Unit (TCU)



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Transmission Controller Unit (TCU)

Item	Quantity	OEM	Part Number	ZF Part Number	Description
7	1	Kenworth	A 3268N1808	0501 321 506	Air line fitting (Straight Compression)
7	1	International	2206K1441	0501 321 490	Air line fitting (Straight Quick Disconnect)
7	1	Mack	2206K1441	0501 321 490	Air line fitting (Straight Quick Disconnect)
7	1		OEM supply	OEM supply	Freightliner, Peterbilt, Volvo

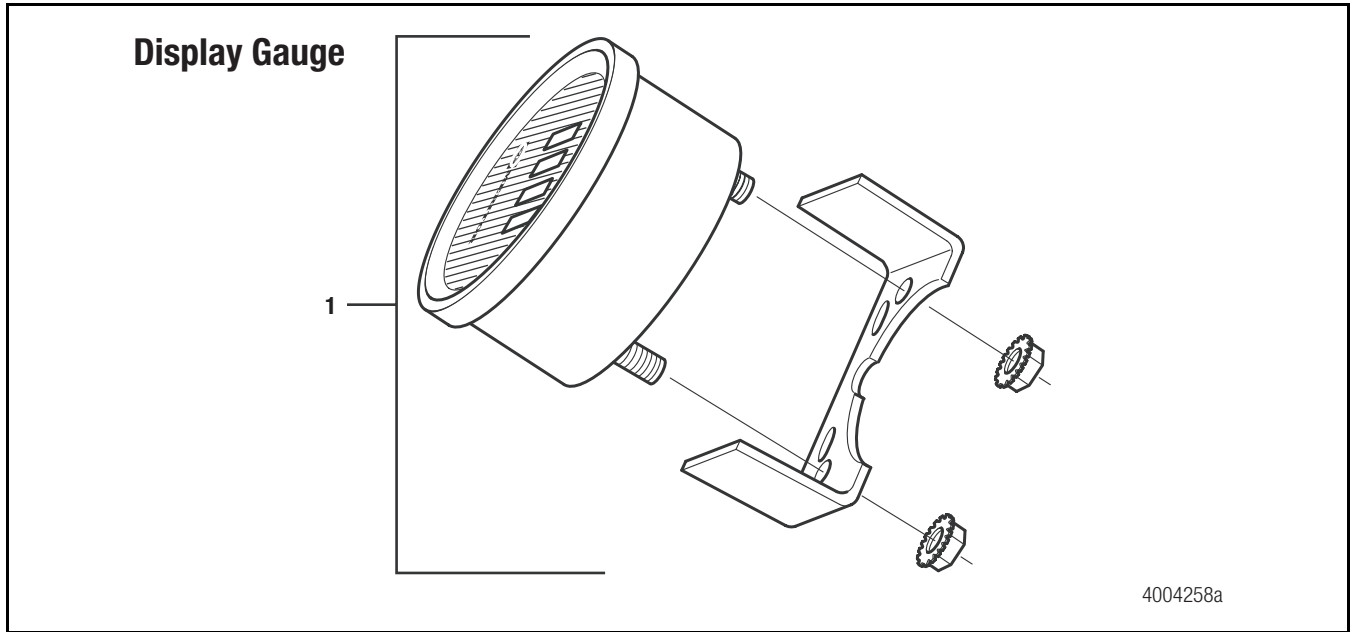
Controls

Transmission Controller Unit (TCU)

Item	Qty.	Part Number*	ZF Part Number	Description
1	1	R970042	6009 V74 042 01	12 Spd Direct Drive, Detroit Diesel S60, Freightliner Only
1	1	R970044	6009 V74 044 01	12 Spd Over Drive, Detroit Diesel S60, Freightliner Only
1	1	R970045	6009 V74 045 01	12 Spd Over Drive, Cummins ISX
1	1	R970046	6009 V74 046 01	16 Spd Over Drive, Detroit Diesel S60 Engine, Freightliner Only
1	1	R970047	6009 V74 047 01	16 Spd Over Drive, Cummins ISX
1	1	R970050	6009 V74 050 01	12 Spd Over Drive, Caterpillar C10/C12/C13/C15/C16
1	1	R970053	6009 V74 053 01	16 Spd Over Drive, Caterpillar C10/C12/C13/C15/C16
1	1	R970055	6009 V74 055 01	12 Spd Over Drive, Mercedes MBE 4000 TB, Not VEPS Capable, Prior VECU 13.15, Freightliner Only
1	1	R970056	6009 V74 056 01	12 Spd Over Drive, Mercedes MBE 4000 EB, Not VEPS Capable, Prior VECU 13.15, Freightliner Only
1	1	R970057	6009 V74 057 01	12 Spd Over Drive, Cummins ISX with VECU, Volvo Only
1	1	R970058	6009 V74 058 01	12 Spd Over Drive, Cummins ISM
1	1	R970059	6009 V74 059 01	12 Spd Over Drive, Volvo VED12D Engine, Volvo Only
1	1	R970060	6009 V74 060 01	16 Spd Over Drive, Volvo VED12D Engine, Volvo Only
1	1	R970061	6009 V74 061 01	16 Spd Over Drive, Cummins ISX with VECU, Volvo Only
1	1	R970062	6009 V74 062 01	12 Spd Direct Drive, Volvo VED12D Engine, Volvo Only
1	1	R970063	6009 V74 063 01	12 Spd Direct Drive, Caterpillar C10/C12/C13/C15/C16 Engines
1	1	R970065	6009 V74 065 01	12 Spd Direct Drive, Mercedes MBE 4000 EB, Prior VECU 13.15, Freightliner Only
1	1	R970066	6009 V74 066 01	12 Spd Direct Drive, Mercedes MBE 4000 TB, Prior VECU 13.15, Freightliner Only
1	1	R970068	6009 V74 068 01	12 Spd Over Drive, Mack ASET-AC Engine
1	1	R970069	6009 V74 069 01	12 Spd Direct Drive, Mack ASET-AC Engine
1	1	R970071	6009 V74 071 01	12 Spd Direct Drive, Cummins ISM Engine
1	1	R970074	6009 V74 074 01	12 Spd Direct Drive, Cummins ISX Engine
1	1	R970075	6009 V74 075 01	16 Spd Over Drive, Mercedes MBE 4000 TB, Prior VECU 13.15, Freightliner Only
1	1	R970076	6009 V74 076 01	16 Spd Over Drive, Mercedes MBE 4000 EB, Prior VECU 13.15, Freightliner Only
1	1	R970077	6009 V74 077 01	12 Spd Over Drive, Caterpillar C10/C12/C13/C15/C16, Freightliner Only
1	1	R970078	6009 V74 078 01	12 Spd Over Drive, Mercedes MBE 4000, Freightliner Only
1	1	R970079	6009 V74 079 01	12 Spd Direct Drive, Caterpillar C10/C12/C13/C15/C16, Freightliner Only
1	1	R970080	6009 V74 080 01	12 Spd Direct Drive, Mercedes MBE 4000, Freightliner Only
1	1	R970081	6009 V74 081 01	16 Spd Over Drive, Mercedes MBE 4000, Freightliner Only
1	1	R970082	6009 V74 082 01	16 Spd Over Drive, Caterpillar C10/C12/C13/C15/C16, Freightliner Only
2	9	0736 010 185	0736 010 185 01	M8*45 bolt, GS3 to case
3	6	0736 010 188	0736 010 188 01	M8*70 bolt, GS3 to case
4	1	0501 202 797	0501 202 797 01	Breather, TCU
5	1	0501 320 849	0501 320 849 01	Air regulator
6	1	0501 316 322	0501 316 322 01	Gasket, GS3 to case

* ZF-FreedomLine TCU software is specific not only to ZF-FreedomLine transmission model, but to engine, truck, and possibly other configuration considerations. Never guess the part number to a ZF-FreedomLine aftermarket TCU.

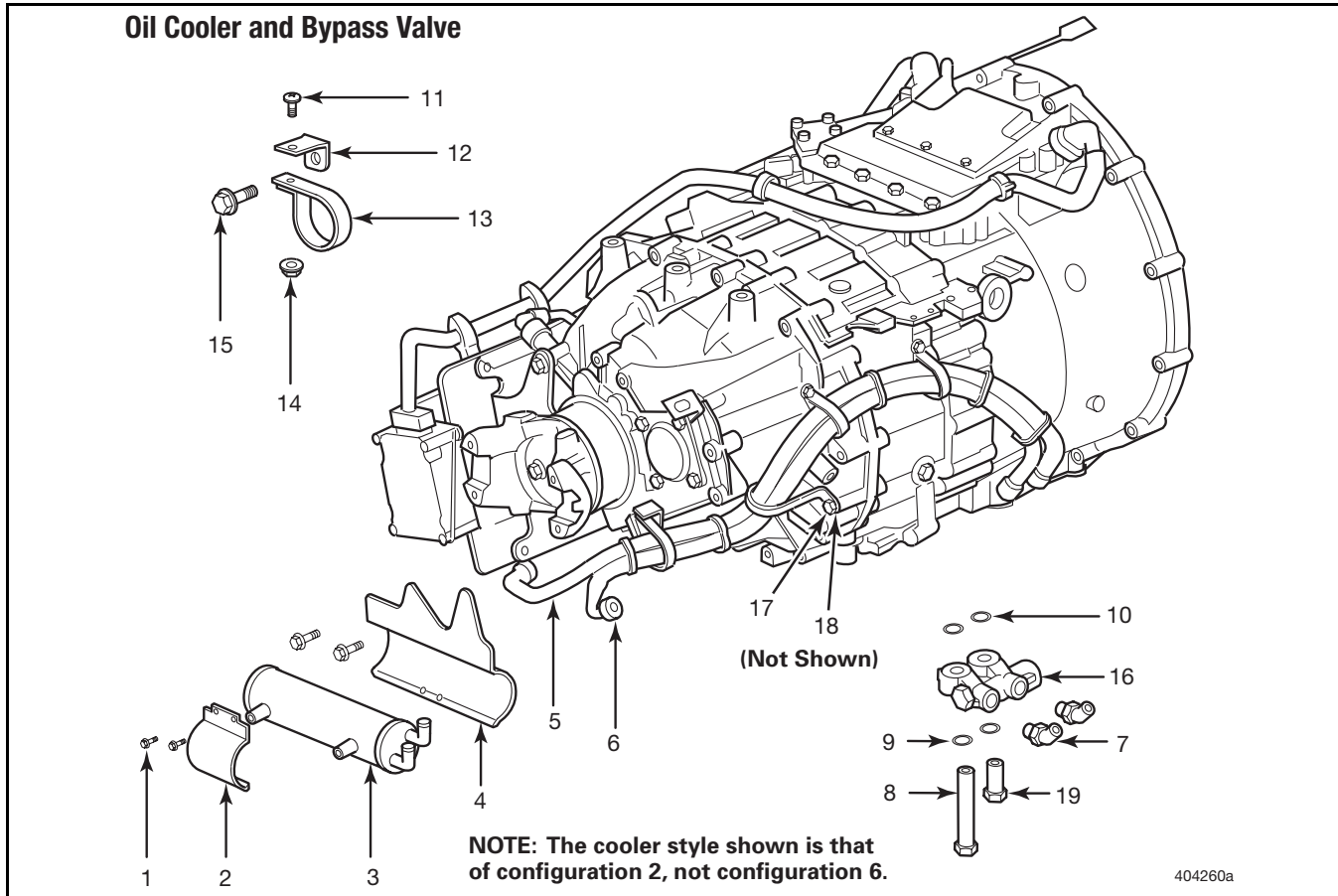
NOTE: Each kit includes items 4, 5 and 6.



Display Gauge

Item	Quantity	Part Number	ZF Part Number	Description
1	1	A 6002Q1005	1338 390 028 01	Display with a black bezel
1	1	A 6002S1007	1338 390 029 01	Display with a chrome bezel

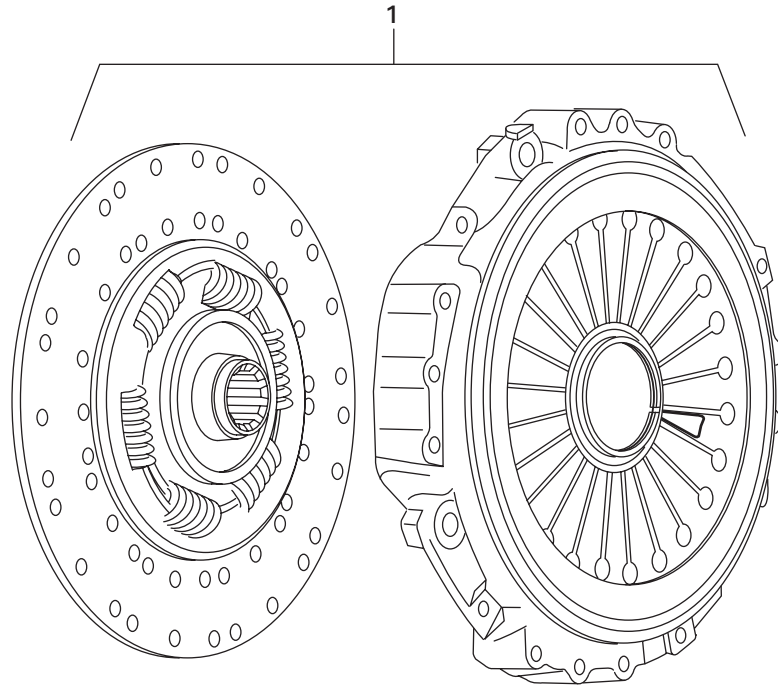
Oil Cooler



Oil Cooler and Bypass Valve

Item	Qty.	Part Number	ZF Part Number	Description
1	2	S244A1	0501 321 516 01	1/4 - 20 bolt, Oil cooler top mounting bracket bolt
2	1	3305H1464	1338 390 009 01	Oil cooler top mounting bracket
3	1	3280P9922	1338 290 009 01	Oil cooler, 3/4 BIB
3	1	3280Z9776	1338 290 007 01	Oil cooler, 5/8 BIB
3	1	3380H1022	1338 290 008 01	Oil cooler, 5/8 BIB, Mack only
4	1	3305Y1481	1338 390 002 01	Oil cooler bottom mounting bracket
5	1	A 3196V1192	0501 214 585 01	Hose assembly, 48 inch
6	1	A 3196Y1195	0501 214 586 01	Hose assembly, 42 inch
7	2	3268J1830	0501 321 488 01	Oil cooler adapters, 45 degree bend — cooler bypass valve
7	2	3268K1805	0501 321 508 01	Oil cooler adapters, 90 degree bend — cooler bypass valve
7	2	2206J1440	0501 321 020 01	Oil cooler adapters, straight — cooler bypass valve
8	1	—	1328 301 014 01	Union screw
9	2	0634 801 073	0634 801 073 01	Cooler bypass valve crush washers
10	2	0634 313 886	0634 313 886 01	Cooler bypass valve O-rings
11	4	S-246-2	0501 321 517 01	1/4 - 20 bolt, oil cooler hose bracket
12	4	3155N1340	1338 390 032 01	Oil cooler hose L bracket
13	4	2255G1333	0501 321 509 01	Oil cooler hose clip
14	4	1227C1615	0501 321 499 01	1/4 - 20 locknut
15	3	0636 015 601	0636 015 601 01	M10*60 bolt, L bracket to housing
15	1	0636 011 335	0636 011 335 01	M12*35 bolt — L bracket to housing
16	1	1328 247 001	1328 247 001 01	Cooler bypass valve
17	1	0736 010 180	0736 010 180 01	M10 bolt, L bracket to housing
18	1	1244V2466	1338 390 019 01	Spacer
19	1	—	0737 835 131 01	Union screw

Clutch Assembly



4004251a

Clutch Assembly

Item	Quantity	OEM	Part Number	ZF Part Number	Description
1	1		R171558		Clutch cover and disk assembly, 1350-1650 lb-ft

**Note: Purchased this part from ArvinMeritor CVA US: 888-725-9355 or Canada 800-387-3889 and not from ZF Sales and Service North America, LLC.
All other parts to be purchased via your PDC from ZF Sales and Service North America, LLC, Vernon Hills IL. USA.**



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