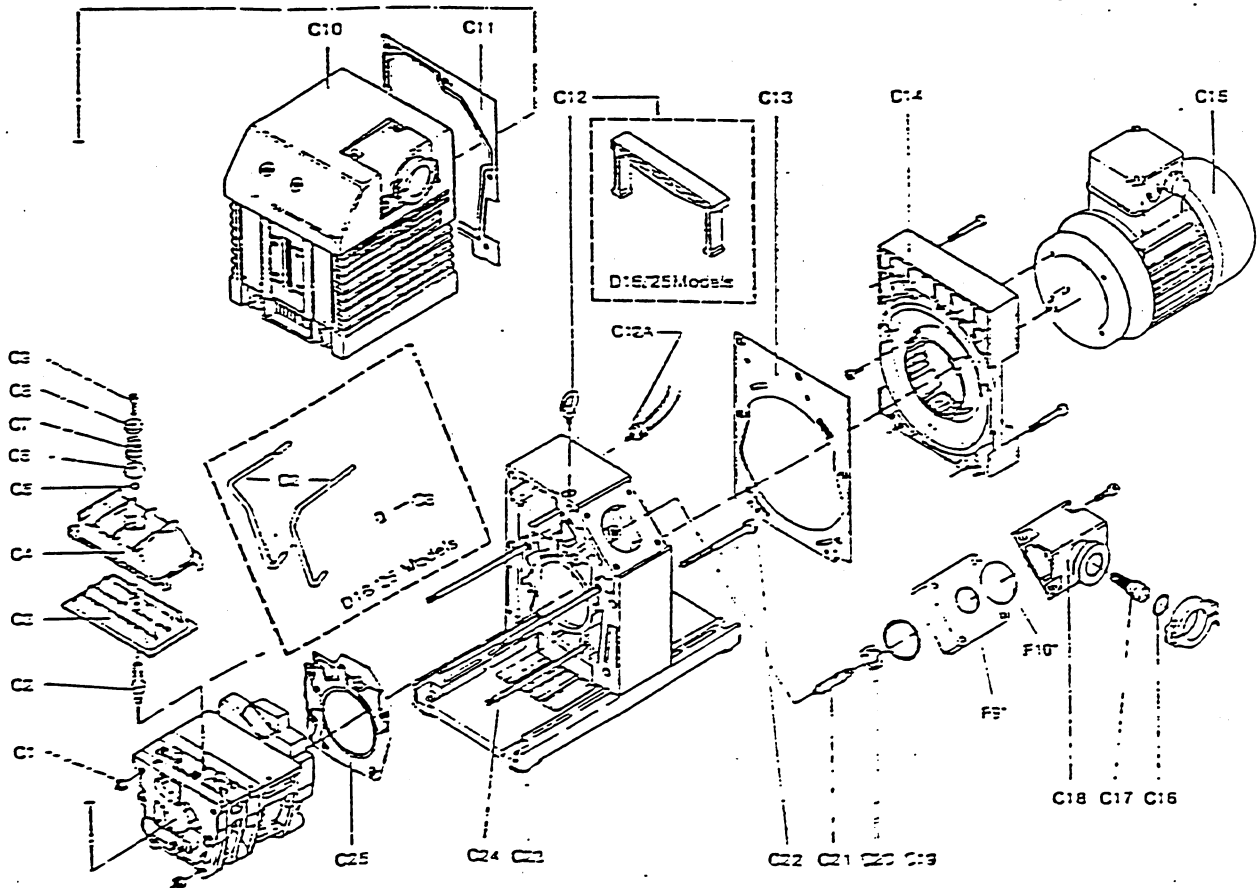
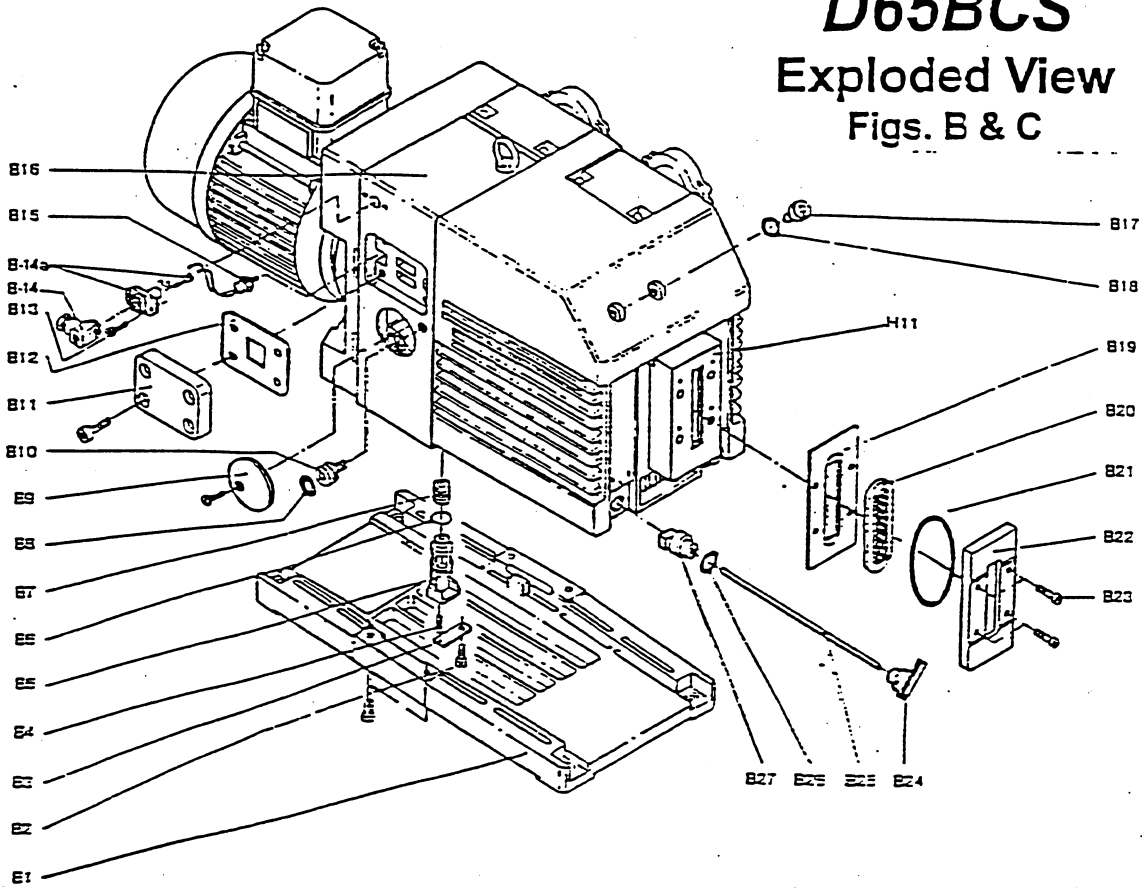


D16BCS thru

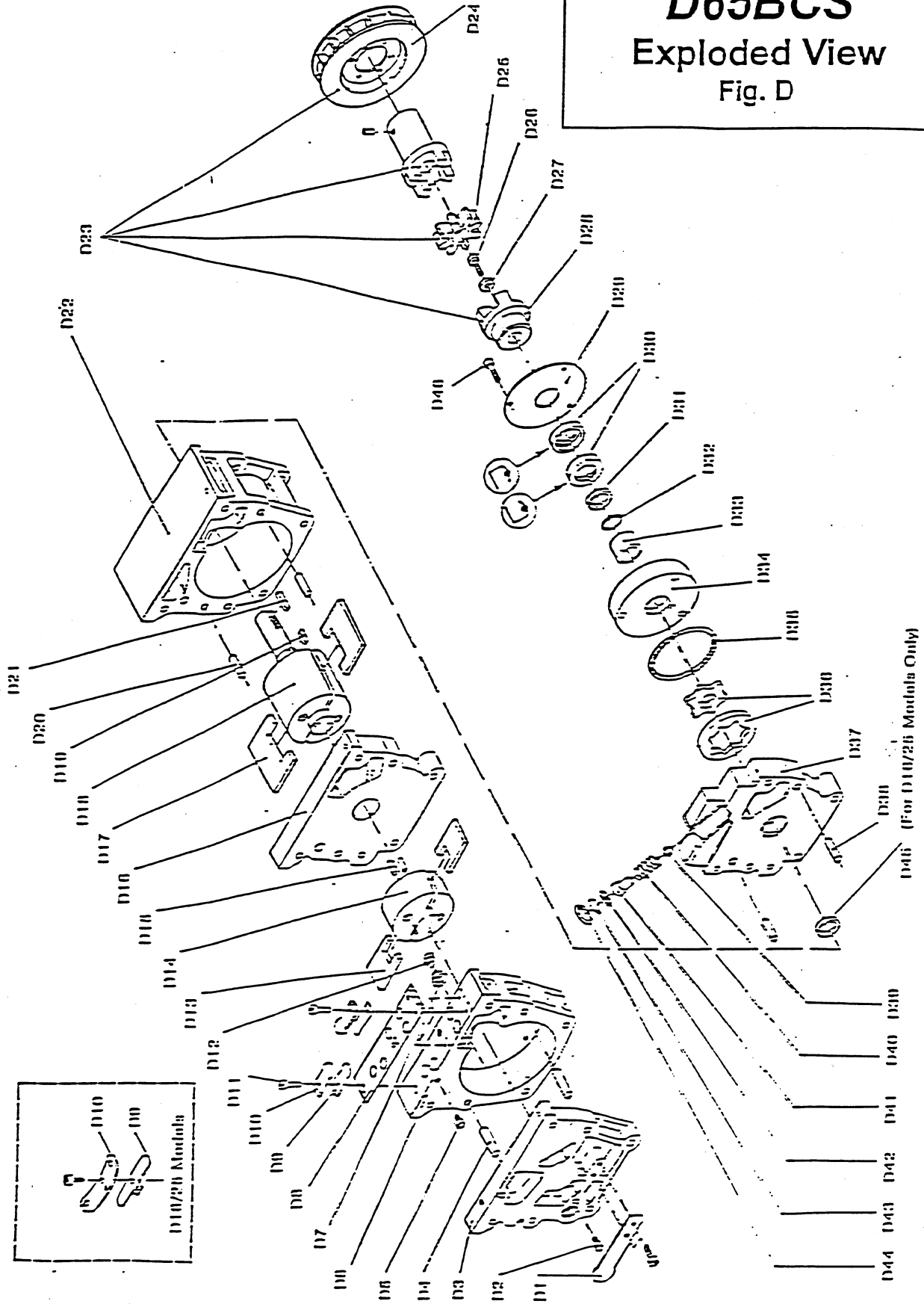
D65BCS

Exploded View

Figs. B & C



D16BCS thru D65BCS Exploded View Fig. D

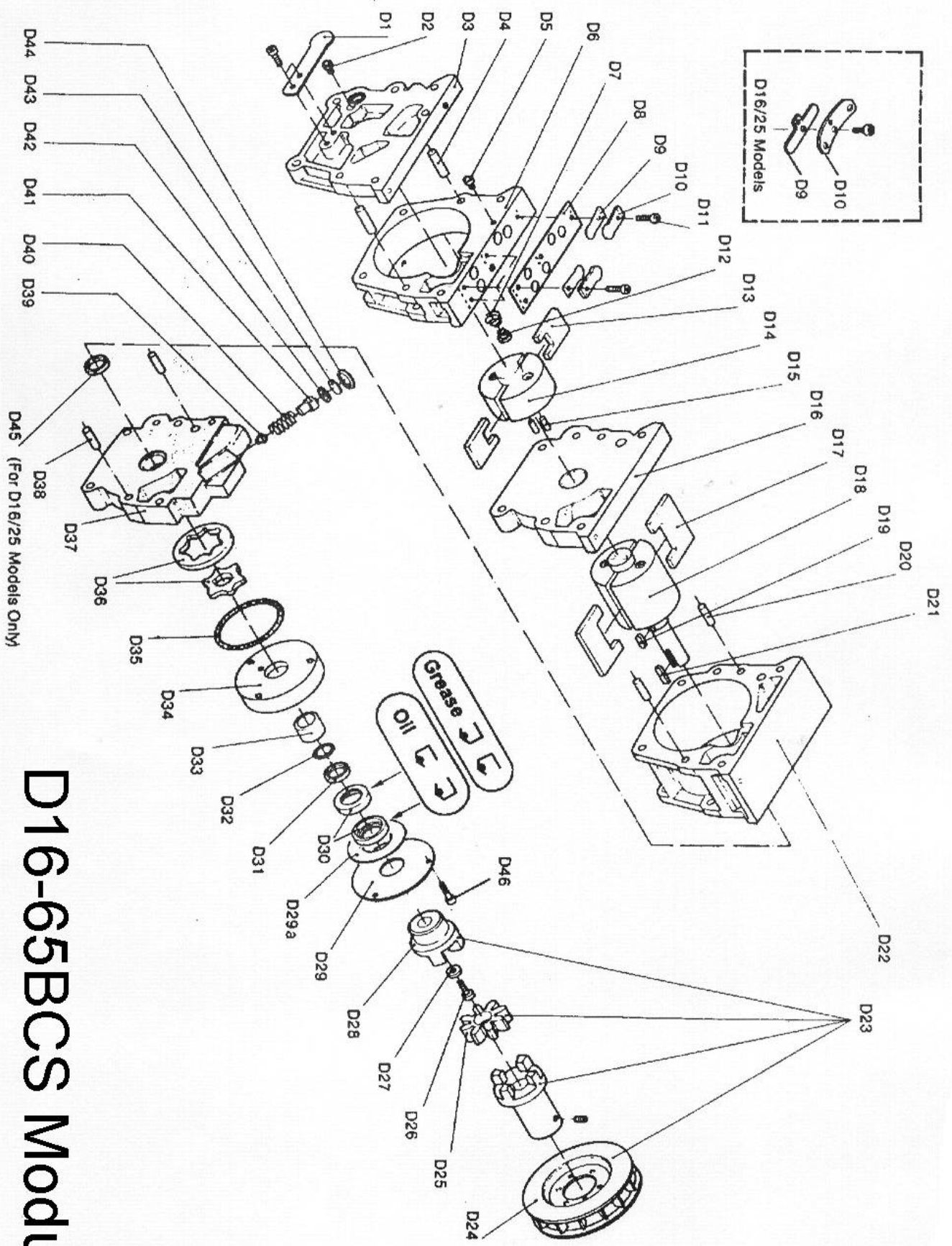


LEYBOLD BCS PUMPS

pos.					OEM No.	CV Order No.	Seal	Repair	Repair Kit
	16	25	40	65			Kit	Kit	+ Vanes
	X				SEAL KIT	23L-D16BCS-S	X		
		X			SEAL KIT	23L-D25BCS-S	X		
			X		SEAL KIT	23L-D40BCS-S	X		
				X	SEAL KIT	23L-D65BCS-S	X		
	X				REPAIR KIT	23L-D16BCS		X	
		X			REPAIR KIT	23L-D25BCS		X	
			X		REPAIR KIT	23L-D40BCS		X	
				X	REPAIR KIT	23L-D65BCS		X	
	X				REPAIR KIT + VANES	23L-D16BCS-V			X
		X			REPAIR KIT + VANES	23L-D25BCS-V			X
			X		REPAIR KIT + VANES	23L-D40BCS-V			X
				X	REPAIR KIT + VANES	23L-D65BCS-V			X
B04	1	1	1	1	SPRING	221 61 041		X	X
B06	1	1	1	1	O-RING, VITON	239 70 147	OV-0770	X	X
B07	1	1	1	1	PISTON SEAL, VITON	348 61 029	L0087	X	X
B08			1	1	O-RING, VITON	239 70 008	OV-0340	X	X
B08	1	1			O-RING, VITON	239 70 412	OV-0300	X	X
B12	1	1			COVER GASKET no bar	200 10 732	L0073	X	X
B12			1	1	CFS GASKET (bar)	200 10 746	L0051B	X	X
B18	3	3	3	3	PLUG GASKET	239 55 165	L0074V	X	X
B19			1	1	SIGHT GLASS GASKET	200 39 131	L0040	X	X
B19	1	1			O-RING, VITON	239 70 509	OV-2200	X	X
B20	1	1	1	1	OIL SIGHT GLASS	350 01 179	L0067		
B21	1	1			SIGHT GLASS GASKET	200 12 257	L0068	X	X
B21			1	1	O-RING, BUNA	239 50 121	OB2650	X	X
B26	1	1	1	1	O-RING, VITON	239 70 108	OV0120	X	X
C03	1				INTERNAL DEMISTER	390 26 012	L0030	X	X
C03		1			INTERNAL DEMISTER	390 26 013	L0070	X	X
C03			1	1	INTERNAL DEMISTER	390 26 014	L0045	X	X
C05			1	1	O-RING, VITON	239 70 305	OV-1110	X	X
C11	1	1			OIL CASE GASKET	200 10 737	L0026	X	X
C11			1	1	OIL CASE GASKET	200 10 741	L0065	X	X
C13	1	1			MOTOR GASKET	200 10 738	L0024	X	X
C13			1	1	MOTOR GASKET	200 10 743	L0145	X	X
C16	2	2			O-RING, VITON	239 70 506	OV-2150	X	X
C16			2	2	O-RING, VITON	239 70 516	OV-2170	X	X
C19			2	2	O-RING, VITON	239 70 223	OV-1490	X	X
C19	1	1			O-RING, VITON	239 70 261	OV-1420	X	X
C20			1	1	VALVE DISC, VITON	400 50 140	L0156	X	X
C20	1	1			VALVE DISC, VITON	401 59 004	L0158	X	X
C25	1	1			MODULE GASKET	200 10 736	L0025	X	X
C25			1	1	MODULE GASKET	200 10 744	L0157	X	X
D01	1	1	1	1	Overpress. Flap SS	401 75 023	L0048		X
D02	1				OIL NOZZLE	200-09-057	L0192		X
D02			1		OIL NOZZLE	393-50-007	L0194		X
D02		1			OIL NOZZLE	393-50-008	L0193		X
D02				1	OIL NOZZLE	393-50-018	L0195		X

LEYBOLD BCS PUMPS

pos.					OEM No.	CV Order No.	Seal	Repair	Repair Kit	
	16	25	40	65			Kit	Kit	+ Vanes	
D05	1	1			SILENCE NOZZLE	393 50 015	L0190		X	X
D05			1	1	SILENCE NOZZLE	393 50 019	L0191		X	X
D07	1	1	1	1	SPRING, Non. Ret. Valve	221 61 031	L0160		X	X
D09			4	7	EXHAUST VALVE, S.S.	200 11 245	L0185		X	X
D09	1				EXHAUST VALVE, S.S.	401 75 017	L0042		X	X
D09		1			EXHAUST VALVE, S.S.	401 75 019	L0046		X	X
D12	1	1	1	1	Non Return Valve, Viton	348 61 028	L0086	X	X	X
D13	2				VANE, LV	411 55 235	L0114			X
D13			2		VANE, LV	411 55 236	L0176			X
D13		2			VANE, LV	411 55 238	L0082			X
D13				2	VANE, LV	412 55 239	L0177			X
D17	2				VANE, HV	411 55 238	L0082			X
D17		2			VANE, HV	411 55 241	L0081			X
D17			2		VANE, HV	413 55 239	L0177			X
D17				2	VANE, HV	414 55 242	L0178			X
D25	1	1			COUPLING ELEMENT	200 09 094	CUP0066	X	X	X
D25			1	1	COUPLING ELEMENT	200 09 095	CUP0006	X	X	X
D30	2	2			SHAFT SEAL VITON	200 09 235	SV0005	X	X	X
D30			2	2	SHAFT SEAL VITON	239 53 007	SV0083	X	X	X
D32			1	1	O-RING VITON	239 70 016	OV-0140	X	X	X
D32	1	1			O-RING VITON	239 70 108	OV-0120	X	X	X
D33	1	1			SHAFT SLEEVE	231 92 026	L0154		X	X
D33			1	1	SHAFT SLEEVE	231 92 034	L0186		X	X
D35	1	1			O-RING, VITON	239 70 409	OV-0490	X	X	X
D35			1	1	O-RING, VITON	701 20 381	OV-1500	X	X	X
D39	1	1	1	1	OIL FLOW SEAL, VITON	239 73 146	L0088	X	X	X
D40	1	1	1	1	SPRING, OIL FLOW	221 61 040	L0089		X	X
D42	1	1	1	1	OIL FLOW GASKET	200 10 734	L0075	X	X	X
D45	1	1			SHAFT SEAL VITON	239 53 004	SV0006	X	X	X



D16-65BCS Module

Parts List for the TRIVAC BCS Pumping Module

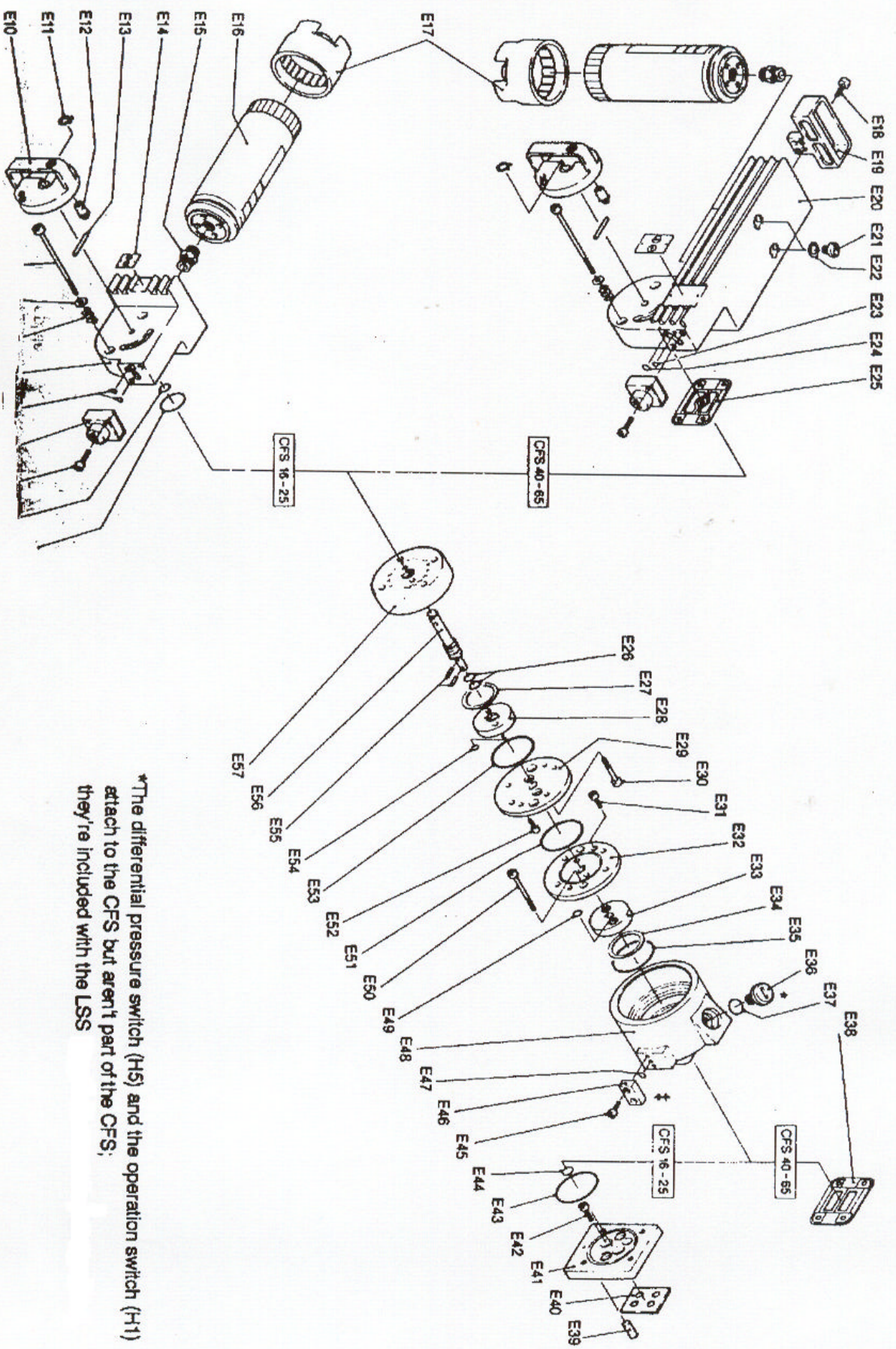
Item No.	Quantity				Description	Dimensions (mm)	Material	Part Number	Remarks
	D16	D25	D40	D65					
D1	1	1	1	1	Overpressure valve flap	0.4 x 26 x 92	Steel	401 75 023	
D2	1				Oil nozzle	D 12	Steel	200 09 057	
		1			Oil nozzle	D 12	Aluminum	393 50 008	
D3			1		Oil nozzle	D 15	Aluminum	393 50 007	
				1	Oil nozzle	D 21	Aluminum	393 50 018	
D4	1	1	1	1	Rear end plate	115 x 115 x 16	Cast Iron	351 11 011	
D5	2	2	2	2	Rear end plate	185 x 143 x 19	Cast Iron	351 11 012	
D6				1	Dowel pin	8k4 x 32. DIN 7979		241 03 009	
	1	1	1	1	Slancing nozzle GD	D 0.4	Aluminum	393 50 015	
D7				1	Slancing nozzle GD	D 0.2	Aluminum	393 50 019	
				1	Slancing nozzle GD	D 0.2	Aluminum	393 50 019	
D8				1	Pump cylinder, foreslage	115 x 118 x 26	Aluminum	393 50 019	
				1	Pump cylinder, foreslage	115 x 118 x 57	Cast Iron	231 92 022	
D9				1	Pump cylinder, foreslage	185 x 147.5 x 38	Cast Iron	231 92 024	
				1	Pump cylinder, foreslage	185 x 147.5 x 79	Cast Iron	231 92 025	
D10	1	1	1	1	Split spring	D 0.8 x 10.2 x 15.4	Steel	221 61 031	
D11				1	Valve deflector plate	72 x 28 x 0.5	Steel	200 09 015	
				1	Valve deflector plate	72 x 36 x 0.5	Steel	200 09 016	
D12				1	Valve deflector plate	146 x 38 x 1.5	Steel	200 09 137	
				1	Valve deflector plate	146 x 70 x 1.5	Steel	200 09 136	
D13				1	Exhaust valve plate	0.2 x 19 x 68	Steel	401 75 017	
				1	Exhaust valve plate	0.2 x 35 x 68	Steel	401 75 019	
D14				1	Exhaust valve finger	16 x 44 x 0.3	Steel	200 11 245	
				1	Exhaust valve stop	2 x 24 x 72	Steel	451 74 046	
D15				1	Exhaust valve stop	2 x 36 x 72	Steel	451 74 048	
				1	Exhaust valve stop	15 x 43 x 2.5	Steel	200 11 376	
D16	1	1	1	1	Capcrew	M 5 x 8. DIN 912		200 09 231	
D17				1	Nonreturn valve	D 12 x 7	Viton	348 61 028	
				1	Vane foreslage	5 x 37.5 x 26	Inkutex	200 10 656	
D18				1	Vane foreslage	5 x 37.5 x 57	Inkutex	200 10 655	
				1	Vane foreslage	38 x 52 x 6	Inkutex	200 10 653	
D19				1	Vane foreslage	79 x 52 x 6	Inkutex	200 10 652	
				1	Rotor, foreslage	D 60 x 26	Cast Iron	321 66 168	
D20				1	Rotor, foreslage	D 60 x 57	Cast Iron	321 66 169	
				1	Rotor, foreslage	D 82.5 x 62	Cast Iron	321 66 170	
D21				1	Rotor, foreslage	D 82.5 x 103	Cast Iron	321 66 171	

Parts List for the TRIVAC BCS Pumping Module

Item No.	Quantity				Description	Dimensions (mm)	Material	Part Number	Remarks
	D16	D25	D40	D65					
D15	2	2			Dowel pin	6m6 x 24, DIN 6325		241 03 011	
			2	2	Dowel pin	8 m6 x 32 DIN 6325		241 03 292	
D16	1	1			Intermediate plate	115 x 115 x 20	Cast Iron	261 51 138	
			1	1	Intermediate plate	165 x 143 x 25	Cast Iron	261 51 139	
D17	2				Vane, high vacuum stage	5 x 37.5 x 57	Inkutex	200 10 655	
		2			Vane, high vacuum stage	5 x 37.5 x 88	Inkutex	200 10 885	
			2		Vane, high vacuum stage	79 x 52 x 6	Inkutex	200 10 652	
				2	Vane, high vacuum stage	120 x 52 x 6	Inkutex	200 10 886	
D18	1				Rotor, high vacuum stage	D 60 x 57	Cast Iron	321 66 162	
		1			Rotor, high vacuum stage	D 60 x 88	Cast Iron	321 66 163	
			1		Rotor, high vacuum stage	D 82.5 x 186	Cast Iron	321 66 164	
				1	Rotor, high vacuum stage	D 82.5 x 227	Cast Iron	321 66 165	
D19	1	1			Key for gear pump	3.2 x 3.2 x 6	Steel	221 16 022	
			1	1	Key for gear pump	4.8 x 4.8 x 6	Steel	221 16 026	
D20	2	2	2	2	Dowel pin	8M4 x 45, DIN 7979		241 03 010	
D21	1	1			Key for coupling	5 x 5 x 22, DIN 6885		221 16 024	
			1	1	Key for coupling	6 x 6 x 32	Steel	221 16 025	
D22	1				Pump cylinder, HV-stage	115 x 118 x 57	Cast Iron	231 92 016	
		1			Pump cylinder, HV-stage	115 x 118 x 88	Cast Iron	231 92 017	
			1		Pump cylinder, HV-stage	165 x 147.5 x 79	Cast Iron	231 92 018	
				1	Pump cylinder, HV-stage	165 x 147.5 x 120	Cast Iron	231 92 019	
D23	1	1			Coupling, complete		Polyurethane	200 09 158	Includes both halves of coupling, insert, & fan.
			1	1	Coupling, complete		Polyurethane	570 42 002	
D24	1	1			Fan			200 98 007	
			1	1	Fan			200 98 006	
D25	1				Coupling Insert	D55	Polyurethane	200 09 094	
		1			Coupling Insert	D55, 92 Shore	Polyurethane	701 00 197	
			1	1	Coupling Insert		Polyurethane	200 09 095	
D26	1	1			Shaft capcrew	M 5 x 12, DIN 7991		201 03 017	
			1	1	Shaft capcrew	M 6 x 20, DIN 912		201 03 103	
D27	1	1			Clamping disc	D 20 x 3.5	Steel	401 57 309	
			1	1	Clamping disc	D 25 x 3	Steel	401 57 311	
D28	1	1			Coupling, pump side	D 55		200 09 099	
			1	1	Coupling, pump side			200 09 100	

Parts List for the TRIVAC BCS Pumping Module

Item No	Quantity				Description	Dimensions (mm)	Material	Part Number	Remarks
	D16	D25	D40	D65					
D29	1	1			Cover plate	D 75 x 0.5	Steel	200 09 211	
			1	1	Cover plate	D 104 x 1	Steel	200 09 212	
D29a			1	1	Felt washer	58 x 29 x 1	Felt	200 39 108	For pump models with grease-lubricated shaft seals.
	2	2			Radial shaft seal	WDR 20 x 30 x 4.5	Viton	200 09 235	
D30			2	2	Radial shaft seal	WDR 30 x 45 x 8	Viton	200 39 118	For extreme-corrosive service pumps with PTFE grease-lubricated shaft seals. The PTFE grease P/N is 726-25-001.
			1	1	Inner radial shaft seal	WDR 30 x 40 x 7	Viton	239 53 007	
D31			1	1	Outer radial shaft seal	WDR 30 x 42 x 6/5.5	Viton	200 39 115	For standard pumps with hydrocarbon grease-lubricated shaft seals. The hydrocarbon grease P/N is 200-39-107.
			1	1	Pressed Disc	D 30 x 6.4	Steel	231 92 033	
D32	1	1			O-ring	12 x 1.5	Viton	239 70 108	
			1	1	O-ring	22 x 1.5	Viton	239 70 016	
D33	1	1			Shaft bushing sleeve	15 x 20 x 13 EGS	Steel	231 92 026	
			1	1	Shaft bushing sleeve	D 22 x 24	Steel	231 92 034	
D34	1	1			Centering plate	D 76 x 11	Cast Iron	200 09 208	For extreme-corrosive service pumps with PTFE grease-lubricated shaft seals. For standard pumps with hydrocarbon grease-lubricated shaft seals.
			1	1	Centering plate	D 106 x 22	Cast Iron	200 39 110	
D35	1	1			O-ring	60 x 2	Viton	239 70 409	
			1	1	O-ring	85 x 3	Viton	701 20 381	
D36	1	1			Gear pump rotors	D 51 x 6.4	Type 6063	321 66 158	
			1	1	Gear pump rotors	D 40 x 7.5	Type 6170	321 66 159	
D37	1	1			Front end plate	119 x 149 x 35	Cast Iron	200 09 205	
			1	1	Front end plate	192 x 168 x 34	Cast Iron	200 09 206	
D38	2	2	2	2	Dowel pin	8 K4 x 32, DIN 7979		241 03 009	
D39	1	1	1	1	Seal	D 8 x 6	Viton	239 73 146	
D40	1	1	1	1	Spill spring	D 18 x 1.5 x 29	Steel	221 61 040	
D41	1	1	1	1	Oil-flow piston	D 20 x 31.5	Aluminium	321 06 152	
D42	1	1	1	1	Flat gasket	D 23.8 x 0.5	AFM	200 10 734	
D43	1	1	1	1	Cover disc	D 23.5 x 1	Steel	221 02 035	
D44	1	1	1	1	Retainer ring	24 x 1.2, DIN 472		231 04 009	
D45	1	1			Radial shaft seal	BA 20 x 30 x 7	Viton	239 53 004	For inside of front end plate
D46	3	3			Cap screw	M4 X 18, DIN 912		201 03 206	
			3	3	Cap screw	M5 X 35, DIN 912		201 03 223	



*The differential pressure switch (H5) and the operation switch (H1) attach to the CFS but aren't part of the CFS; they're included with the LSS

D16-65BCS Oil Filter System

Parts List for the CFS-B2 Oil Filter

Quantity		Description	Dimensions (mm)	Material	Part Number	Remarks
Item No.	1625					
E1	1	O-ring	40 x 1.5	Viton	239 70 0154	
E2	1	O-ring	42 x 1.78	Viton	239 70 0104	
E3	2	Cap screw	M5 x 25	DIN 912	201 03 221	
E4	1	Oil pressure meter	2.2 & 4 bar scales		200 09 803	Two scales displayed.
E5	2	O-ring	12 x 1.5	Viton	239 70 1084	
E6	1	Filter housing	92 x 98 x 143	Aluminum	200 09 799	
E7	1	Split spring	1 x 9 x 28	Steel	200 09 805	
		Split spring	1 x 11 x 30	Steel	200 09 794	
E8	2	Washer	A6.4, DIN 125		221 01 103	
		Washer	A8.4, DIN 125		221 01 106	
E9	2	Cap screw	M8 x 90, DIN 912		200 09 481	
		Cap screw	M8 x 125, DIN 912		201 03 722	
E10	1	Handle	D 98 x 50	Ultramid	200 09 758	
E11	1	Snap ring	12 x 1	Steel	231 03 101	
E12	1	Stop	D8 x 10		200 09 792	
E13	1	Dowel pin	5 x 40, DIN 7		241 03 173	
E14	1	Position-indicator label	24 x 31 x 0.8	Aluminum	200 09 484	
		Position-indicator label	37 x 45 x 0.8	Aluminum	200 09 403	
E15	1	Double-threaded nipple	M18 x 1.5	Steel	200 09 149	
		Double-threaded nipple	M24 x 1.5	Steel	200 09 160	
E16	1	Oil filter element:	10 bar			
		Combination filter*	1.6 ltr, 140 x 233	Al ₂ O ₃ & Fiberglass	18999	Three stripes.
		Particulate filter*	1.6 ltr, 140 x 233	Fiberglass	200-09-804	One wide stripe.
		Alumina filter**	1 ltr, 93 x 210	Al ₂ O ₃	18996	Two stripes.
E17	1	Filter removal tool	D 115/27 SW	Aluminum	200 09 800	For 1.6 ltr elements.
		Filter removal tool	D 102/27 SW		200 09 171	For 1 ltr elements.
E18	2	Cap screw	M6 x 16, DIN 912		201 03 102	
E19	1	Handle	100 x 50 x 40	Ultramid	200 09 757	
E20	1	Filter housing	99 x 152 x 323	Aluminum	200 09 752	
E21	2	Plugscrew	M16 x 1.5, DIN 908		201 27 105	
E22	2	Gasket Ring	15.1 x 22 x 2	Viton	239 55 1654	
E23	1	O-ring	2.57 x 1.78	Viton	239 74 1024	
E24	1	O-ring	24.8 x 1.5	Viton	239 70 1024	
E25	1	Flat gasket	62.5 x 98.5 x 0.5	AFM	200 10 7554	
E26	2	O-ring	9 x 2.5	Viton	239 70 1034	
		O-ring	14 x 2	Viton	239 70 4144	
E27	1	Ring-gasket	UAM35.5 x 40 x 3	PTFE	200 09 4834	
		Ring-gasket	UAM45.5 x 50 x 3	PTFE	200 09 4004	
E28	1	Valve rotor - filter side	D42 x 12, C15		200 09 795	
		Valve rotor - filter side	D64 x 14, C15		200 09 783	
E29	1	Valve plate - filter side	D62 x 6.5	Cast Iron 25	200 09 475	
		Valve plate - filter side	D100 x 8.5	Cast Iron 25	200 09 321	
E30	2	Cap screw	M 6 x 35, DIN 912		201 03 106	
		Cap screw	M 8 x 40, DIN 912		201 03 124	