

Hutchison-Hayes Separators, Inc.

Model SAMM 15 006 Parts List With Diagrams

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Frame and Hood

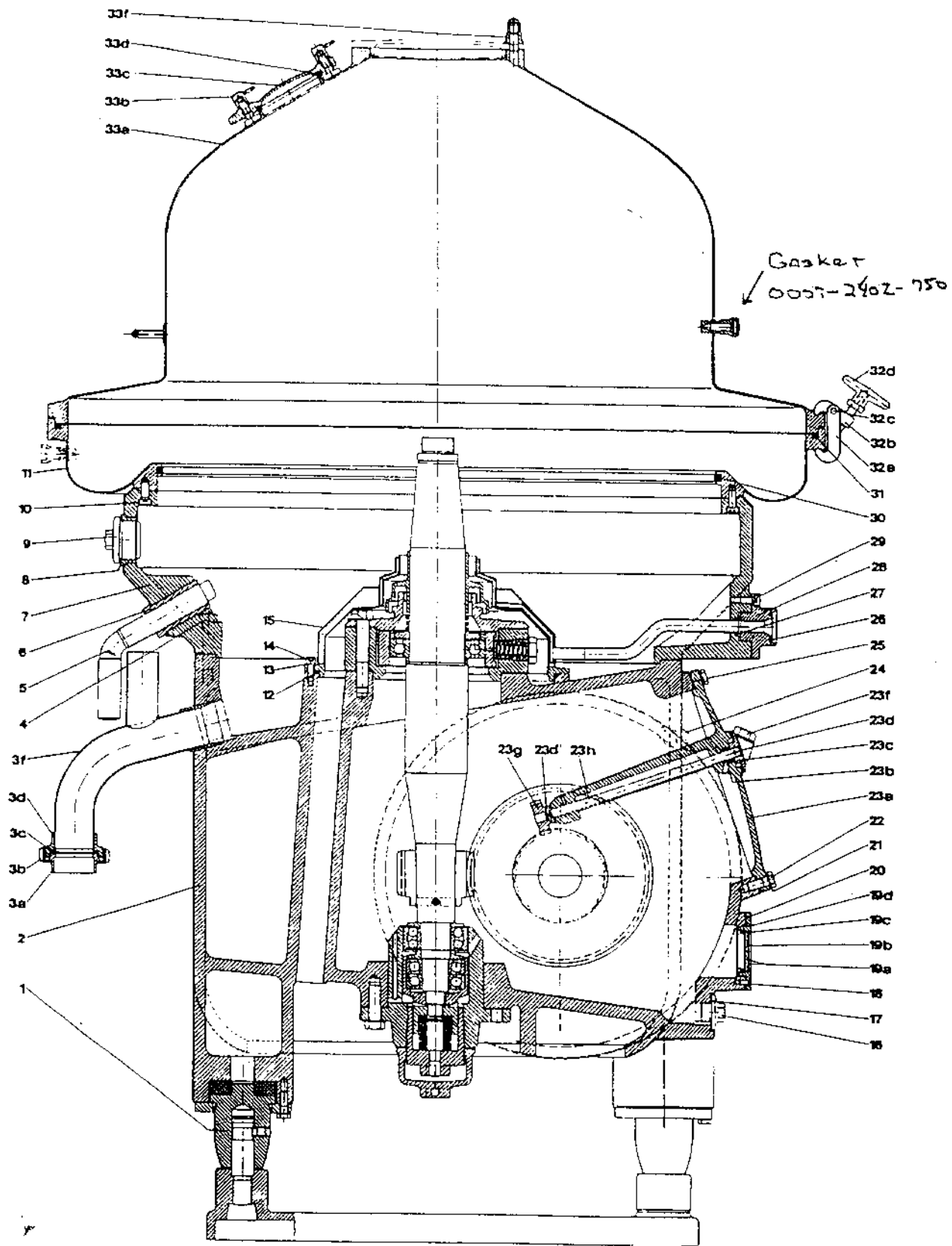


Fig. 50

List of Parts shown in Fig. 50

Item No.	Part - No.	Qty.	Part Description
1	see page 44	4	Foot, complete (see fig. 52)
2	1166-1006-010	1	Lower section of frame
-	1165-1219-000	1	Operating-water discharge assembly (3a-f)
3a	0018-3955-300	1	Cone connection D 50 DIN 11851
3b	0013-2845-300	1	Grooved coupling nut F 50 DIN 11851
3c	0007-2211-750	1	Gasket G 50 DIN 11851
3d	0018-4120-300	1	Threaded connection 50
3f	1165-1448-000	1	Bend
4	0019-6200-150	8	Allen screw M 16x35 DIN 912
5	0019-0539-160	2	Lock screw
6	0019-0797-400	2	Threaded bush
7	3158-1005-010	1	Upper section of frame
8	0004-5040-740	1	Gasket 45/55 ϕ x 2
9	0019-0842-400	1	Plug
10	0019-6144-400	8	Allen screw M 16x35 DIN 912
11	see page 43	1	Sludge collector (see fig. 51)
12	0007-2571-750	1	Gasket 297/4 ϕ
13	0026-1325-400	8	Lock washer
14	0019-6122-400	8	Allen screw M 16x35 DIN 912
15	1167-1219-000	1	Operating-water feed
16	0019-0840-400	1	Oil drain screw
17	0004-5037-710	1	Gasket 38/50 ϕ x 1,5
18	0019-3250-300	3	Lens head screw M 6x15 DIN 88
-	0001-0007-300	1	Sight glass assembly (19a-d)
19a	0004-5041-740	2	Gasket 48/57 ϕ x 1
19b	0001-0046-820	1	Sight glass
19c	0019-1620-300	1	Threaded ring
19d	0001-0021-300	1	Frame
20	0004-5346-770	1	Gasket 70/110 ϕ x 0,3
21	0026-1371-400	4	Washer
22	0019-6970-400	4	Hex head screw M 12x30 DIN 933
-	3170-3495-010	1	Revolution indicator assembly (23a-h)
23a	3170-3510-000	1	Revolution indicator housing
23b	0004-5523-750	1	Sealing ring A 12x22x7 DIN 3760
23c	3117-3497-020	1	Revolution indicator disc
23d	0026-1049-030	2	Cylindrical pin 38 x 24 DIN 7
23f	0019-1419-300	1	Oil fill screw
-	0004-1883-720	1	Gasket 26,5/35 ϕ x 2 (for item 23f)
23g	3117-3487-000	1	Worm wheel
23h	0026-5694-030	1	Cylindrical pin 12h8x302
24	0019-1548-400	1	Plug
-	0007-2229-750	1	Gasket 40/48 ϕ x 5 (for item 24)
25	0004-5762-700	1	Gasket 273/322 ϕ x 2
26	0007-2208-750	1	Gasket G25 DIN 11851
27	0007-2507-750	1	Gasket 16/3,5 ϕ
28	1165-1045-000	1	Connection piece
29	0019-6124-400	3	Allen screw M 16x35 DIN 912
30	0007-2800-840	1	Gasket 725/745 ϕ x 9,8
31	0004-2364-758	1	Packing cord 8x8x3300
-	3123-1127-010	6	Clamp assembly (32a-d)
32a	3123-1130-000	6	Clamp, lower
32b	3123-1130-010	6	Clamp, upper
32c	0026-1099-300	6	Cylindrical pin
32d	0019-1256-310	6	Handle screw
-	1165-7759-040	1	Hood, complete (33a-f)
33a	1165-7765-040	1	Hood
33b	0013-2646-300	2	Hat nut M 10
33c	3145-1061-030	1	Inspection cover
33d	0007-2150-750	1	Gasket 94/110 ϕ x 8
33f	0013-2626-400	4	Hat nut M12

Parts not shown in Fig. 50

-	3050-1085-010	1	Ventilation grid
-	0026-1375-300	4	Washer
-	0019-6966-400	4	Hex head screw M 12x20 DIN 933

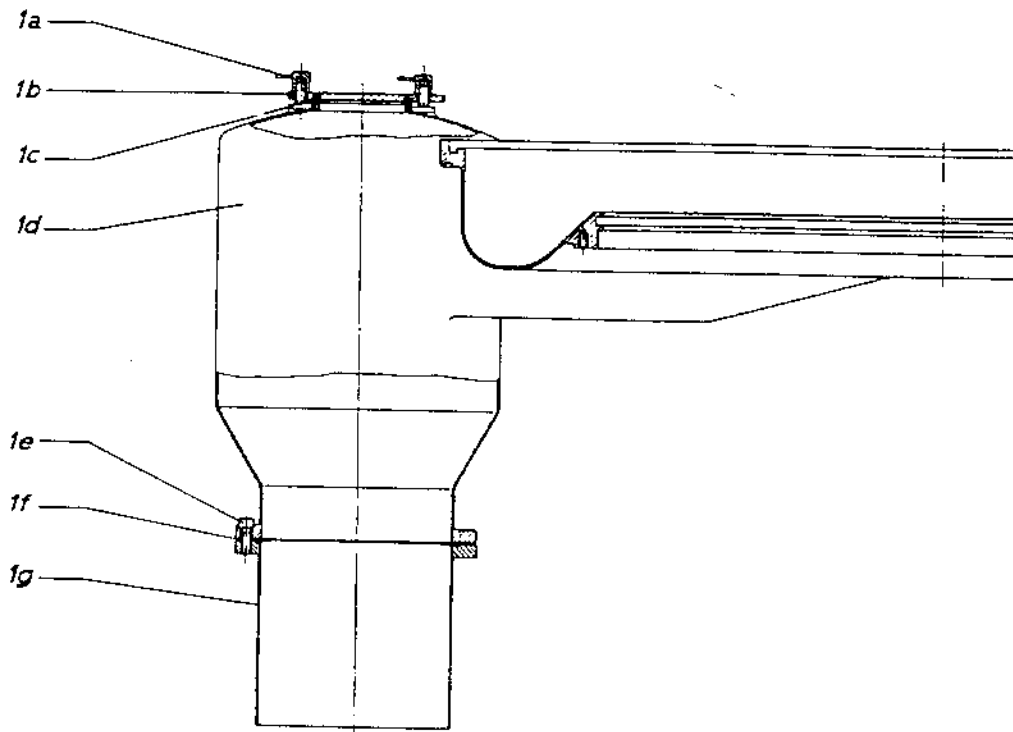


Fig. 51

Item No.	Part - No.	Qty.	Part Description							
-	1165-1019-L +)	1	Sludge collector assembly (1a-h) (see also fig. 50, item no. 11)							
1a	0013-2646-300	2	<table border="0"> <tr><td>Hat nut</td></tr> <tr><td>Inspection cover</td></tr> <tr><td>Gasket 94/110 ϕ x 8</td></tr> <tr><td>Sludge collector</td></tr> <tr><td>Allen screw M 10x25 DIN 912</td></tr> <tr><td>Gasket 200/250 ϕ x 2</td></tr> <tr><td>Pipe</td></tr> </table>	Hat nut	Inspection cover	Gasket 94/110 ϕ x 8	Sludge collector	Allen screw M 10x25 DIN 912	Gasket 200/250 ϕ x 2	Pipe
Hat nut										
Inspection cover										
Gasket 94/110 ϕ x 8										
Sludge collector										
Allen screw M 10x25 DIN 912										
Gasket 200/250 ϕ x 2										
Pipe										
1b	3145-1061-030	1								
1c	0007-2150-750	1								
1d	1166-1018-000	1								
1e	0019-6144-400	3								
1f	0004-2755-750	1								
1g	1165-1122-L +)	1								

+) Parts that differ from the standard design (i.e. parts ending with "L") are specified on the Machine Specification Sheet.

Foundation Frame and Foot

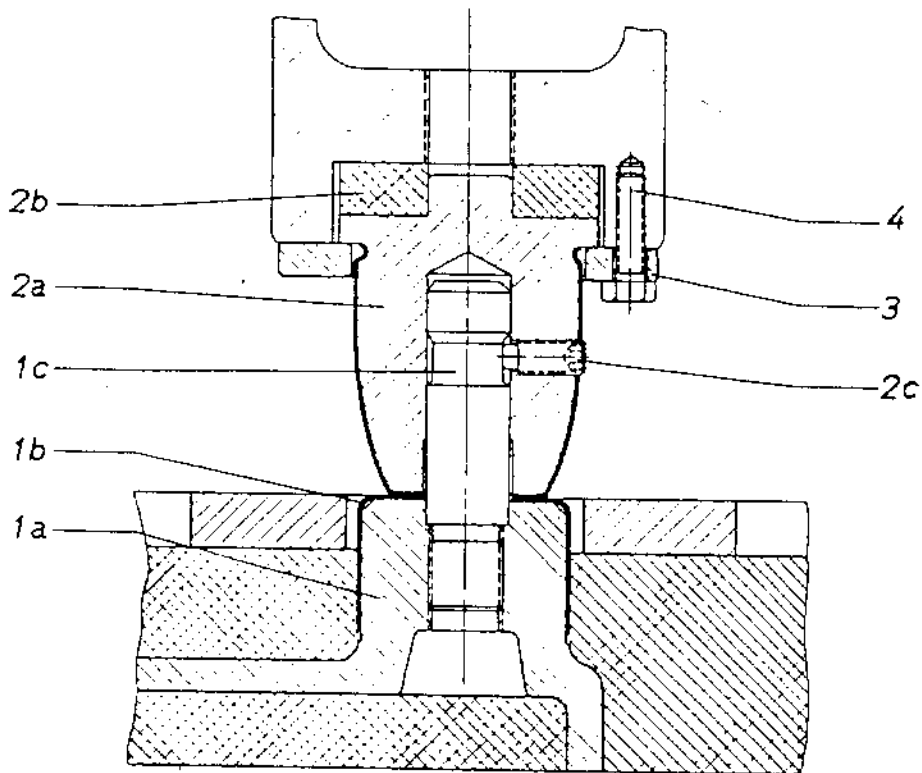


Fig. 52

Item No.	Part - No.	Qty.	Part Description
-	3170-1020-010	1	Foundation frame assembly (1a-c)
1a	3170-1003-010	1	Foundation frame
1b	0026-2031-300	4	Cap
1c	3157-1033-000	4	Bolt
-	2315-1015-010	4	Foot assembly (2a-c) (see also fig. 50, item no. 1)
2a	2315-1011-000	4	Foot, stainless steel coated
2b	0021-3018-750	4	Rubber cushion
2c	0019-6387-400	4	Threaded pin M 12x28 DIN 915
3	0001-0516-300	4	Flange
4	0019-6937-400	12	Hex head screw M 10x30 DIN 933

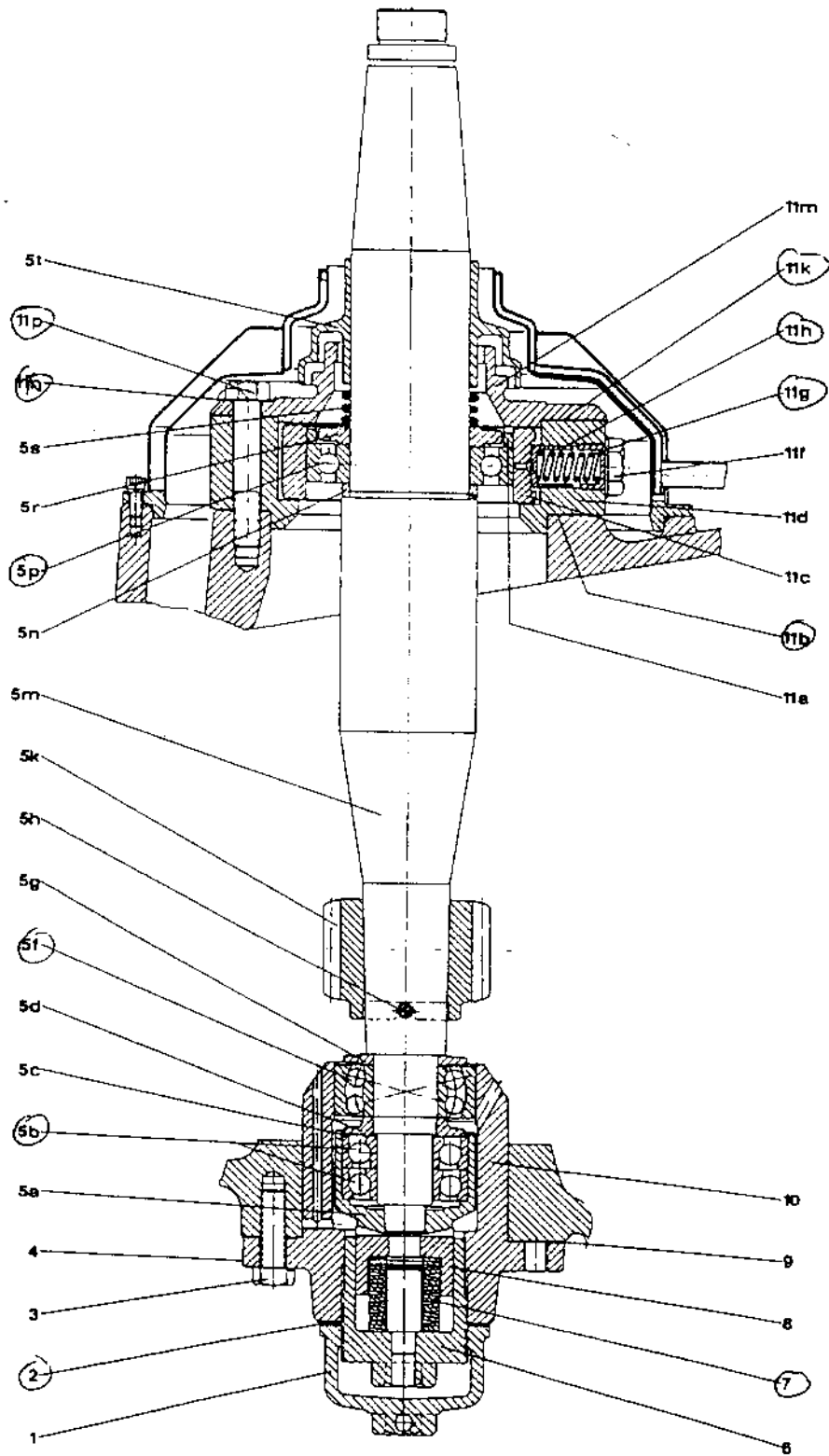


Fig. 53

List of Parts shown in Fig.53

Item No.	Part - No.	Qty.	Part Description
1	0010-8003-210	1	Bottom bearing cap
2	0004-2221-740	1	Gasket 80/108x2
3	0019-7038-150	4	Hex head screw M 16x45 DIN 933
4	0026-5894-600	4	Safety washer 17 DIN 93
-	1167-3429-L +)	1	Worm spindle assembly (5a-t)
5a	0010-8012-020	1	Bottom bearing pressure housing
5b	0011-7307-130	2	Angular contact ball bearing 7307 BN/P6 DIN 628
5c	0026-2109-170	1	Snap ring
5d	0008-4008-030	1	Ball bearing protection ring
5e	0011-2308-030	1	Pendulum ball bearing 2308 M/P62 DIN 630
5g	0008-4008-020	1	Ball bearing protection ring
5h	0026-1563-120	1	Cylindrical notched pin 10x70 DIN 1473
5k	3170-3423-L +)	1 *	Worm
5m	3159-3410-000	1	Spindle
5n	0008-6512-050	1	Ring
5p	0011-6213-110	1	Grooved ball bearing 6213/P6 DIN 625
5r	0008-6508-050	1	Ball bearing protection ring
5s	0006-4383-160	1	Cylindrical pressure spring
5t	0008-6501-750	1	Spindle cap
6	0010-8002-040	1	Bottom bearing threaded piece
7	0006-4440-160	1	Spring column
8	0010-8001-200	1	Bottom bearing pressure piece
9	0004-5793-770	1	Gasket 130/204 ϕ x 0,3
10	3050-1112-020	1	Bottom bearing housing
-	0008-6500-030	1	Neck bearing bridge assembly with covering (11a-p)
11a	0008-6509-050	1	Distance ring
11b	0004-5851-770	1	Gasket 176/235 ϕ x 0,3
-	0008-6510-070	1	Neck bearing bridge assembly (11c-h)
11c	0008-6507-000 ³⁶⁰	1	Pressure ring
11d	0008-6506-000	1	Neck bearing bridge
11f	0019-1423-030	9	Threaded plug
11g	0006-4380-090	1	Set of neck bearing springs
11h	0026-2220-110	9	Spring piston
11i	0004-5852-770	1	Gasket 167/250 ϕ x 0,3
11m	0008-6502-200	1	Protection cap
11n	0026-5894-600	3	Safety washer 17 DIN 93
11p	0019-6616-090	3	Hex head screw M 16x100 DIN 931

* When replacing this part, it is recommended that the worm wheel assembly with clamp plates, 10a-g (fig. 54), be replaced at the same time.

) Parts that differ from the standard design (i.e. parts ending with "L") are specified on the machine specification sheet.

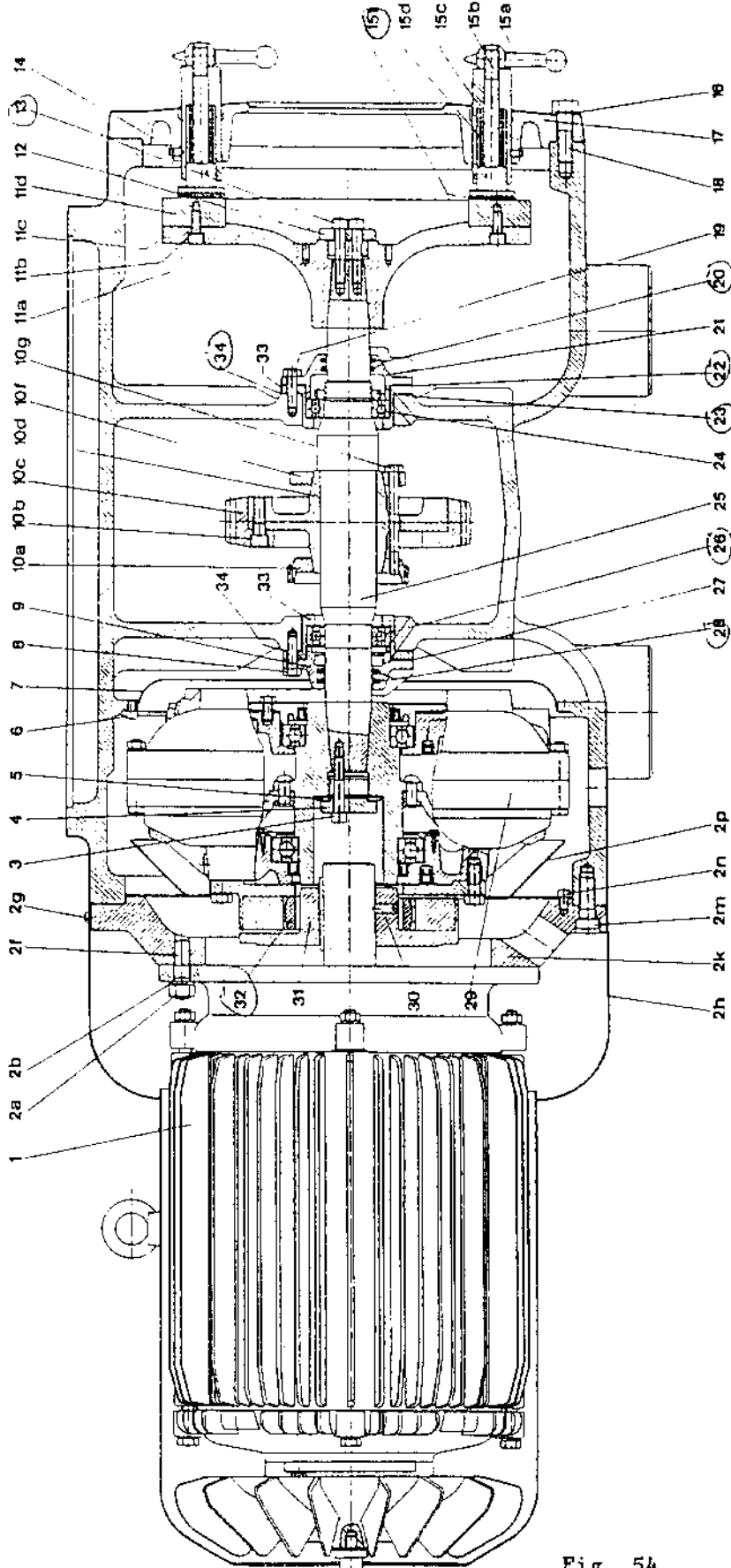


Fig. 54

List of Parts shown in Fig. 54

Item No.	Part - No.	Qty.	Part Description
1	5970-L	1	* Motor, Type A180 LA-4, B5, 35HP
-	1165-1021-L +)	1	Flange assembly (2n-p)
2a	0013-0282-400	8	Hex nut M 16 DIN 934
2b	0026-1330-190	8	Lock washer A 16 DIN 127
2f	0019-7727-090	8	Stud M 16x45 DIN 935
2g	0019-6839-300	8	Hex head screw M 6x70 DIN 933
2h	1080-1475-050	1	Cover
2k	1165-1028-L +)	1	Flange
2m	0019-6202-150	8	Allen screw M 16x45 DIN 912-8.8
2n	0019-6119-150	8	Allen screw M 8x12 DIN 912-8.8
2p	1166-1118-010	1	Baffle
3	0019-6151-150	3	Allen screw M 10x60 DIN 912
4	0026-1640-030	1	Washer
5	0006-4404-010	1	Cup spring
6	0019-6119-150	8	Allen screw M 8x12 DIN 912
7	1166-1118-000	1	Baffle
8	0019-6938-150	3	Hex head screw M 10x35 DIN 933-8.8
9	3050-3375-010	1	Bearing cover
-	1167-3449-L +)	1	*** Worm wheel assembly with clamp plates (10a-g)
10a	-	1	** Clamp plate with toothing
10b	0019-6167-150	3	Allen screw M 12x40 DIN 912-8.8
10c	-	1	** Toothed rim
10d	-	1	** Wheel body
10f	-	1	** Clamp plate
10g	0019-6525-150	4	Hex head screw M10x110 DIN 931-8.8
-	1166-3368-010	1	Brake drum assembly (11a-d)
11a	0019-6144-150	6	Allen screw M 10x25 DIN 912
11b	0026-1337-170	6	Lock washer A 10 DIN 127
11c	1166-3371-010	1	Brake drum
11d	3170-3371-000	1	Brake ring
12	0026-0405-030	1	Washer
13	0019-6151-150	2	Allen screw M 10x60 DIN 912
14	0019-8974-150	2	Threaded pin AM 8x15 DIN 914
-	3170-1043-000	2	Brake assembly (15a-g)
15a	0021-3514-300	2	Brake handle
15b	3170-1031-000	2	Brake bolt (with brake lining)
15c	0021-3537-300	2	Brake housing
15d	0006-4208-160	2	Cylindrical pressure spring
15e	0021-4096-850	2	Brake lining
-	0026-1263-550	8	Countersunk rivet
16	0026-1353-400	4	Washer
17	3170-1065-010	1	Cover
18	0019-6608-400	4	Hex head screw M 16x60 DIN 931
19	0019-6938-150	3	Hex head screw M 10x35 DIN 933-8.8
20	0004-1956-830	2	Felt ring 45/58x5,5
21	3170-3375-000	1	Bearing cover
22	0004-1822-740	1	Gasket 90/140 ϕ x 1
23	0013-0448-090	1	Grooved nut M 50 x 1,5
24	0011-6210-000	1	Grooved ball bearing 6210 DIN 625
25	1166-3400-000	1	Worm wheel shaft
26	0011-6210-000	1	Grooved ball bearing 6210 DIN 625
27	0004-1822-740	1	Gasket 90/140 ϕ x 1
28	0004-1957-830	2	Felt ring 50/67 x7
29	see page 48	1	Fluid clutch (see fig. 55)
30	0019-8984-150	1	Threaded pin AM 10x25 DIN 914
31	3158-3392-L +)	1	Cam hub
32	3158-3282-000	1	Cam ring
33	1166-3131-000	2	Bearing housing
34	0004-1850-740	2	Gasket 99/140x1

* When ordering this part, please state voltage and frequency.

** This part is not available as separate item, but only together with parts 10a-g.

*** When replacing this part, it is recommended that work 5k (fig. 53) be replaced at the same time.

+) Parts that differ from the standard design (i.e. parts ending with "L") are specified on the Machine Specification Sheet.

Fluid Clutch

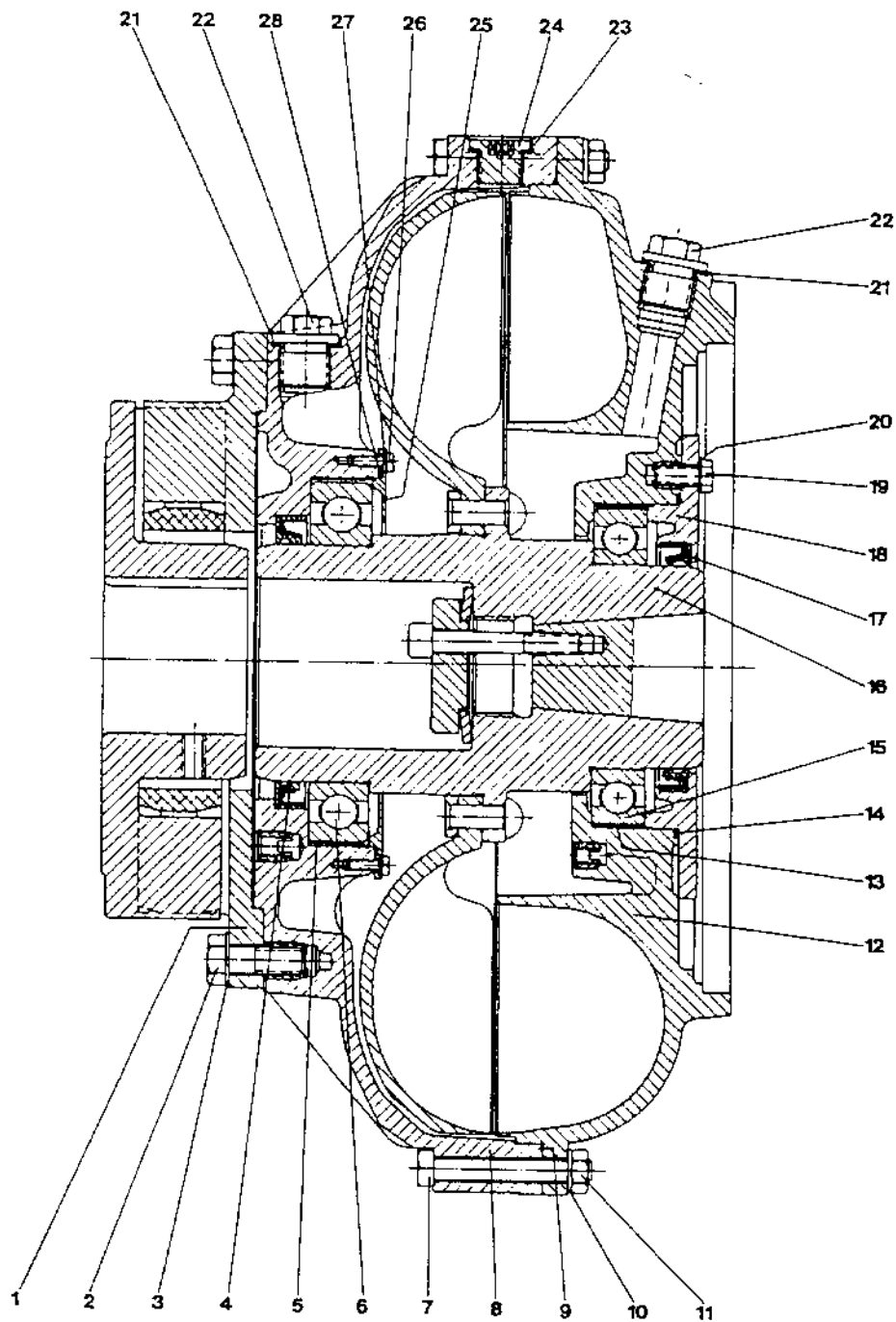


Fig. 55

Fluid Clutch

List of Parts shown in Fig. 55

Item No.	Part - No.	Qty.	Part Description
-	1166-3280-L +)	1	Fluid clutch assembly (1-28) (see also fig. 54, item no. 29)
1	-	1 *	Cam flange
2	-	8 **	Hex head screw M 12x35 DIN 931
3	-	8 **	Spring washer B 12 DIN 137
4	0004-2913-830	1	Sealing ring 105x130x13
5	-	1 **	Spacer ring ANS 160x26
6	0011-6021-390	1	Grooved ball bearing 6021 M/P64 DIN 625
7	-	36 **	Hex head screw M10x70 DIN 931
8	-	1 *	Clutch casing 470 ϕ
9	0004-2385-858 -	1	Packing cord 1 = ϕ , 1400 = long
10	0026-0771-170	36	Spring washer B 10 DIN 137
11	-	36 **	Hex nut M 10 DIN 934
12	-	1 *	Primary wheel 470 ϕ
13	-	1 **	Spacer ring AN 140 x24
14	0007-2944-830	1	Gasket 140/3 ϕ
15	0011-6018-400	1	Grooved ball bearing 6018 M/P63 DIN 625
16	-	1 *	Secondary hub with secondary wheel 425 ϕ
17	0004-2912-830	1	Sealing ring 90x110x13
18	-	1 **	Sealing ring cover
19	-	8 **	Hex head screw M 8x20 DIN 933
20	0026-0770-170	8	Spring washer B 8 DIN 137
21	0004-2144-280	2	Gasket 22/29 ϕ x 1,5
22	-	2 **	Plug M 22x1,5x20
23	0004-2131-280	1	Gasket 18/24 ϕ x 1,5
24	0019-1490-000	1	Threaded plug M 18x1,5x15
25	-	1 **	Oil control ring 119/192 ϕ x 4,5
26	-	8 **	Cylindrical screw AM 5x15 DIN 84
27	-	8 **	Lock washer 5 DIN 7980
28	0007-2640-830	1	Gasket 150/3 ϕ

* If this part needs to be replaced, the complete clutch must be returned to the factory for repair. Instead of Part - No. state Item - No. (see first column).

** Instead of Part - No. state Item - No. (see first column).

+) Parts that differ from the standard design (i.e. parts ending with "L") are specified on the Machine Specification Sheet.

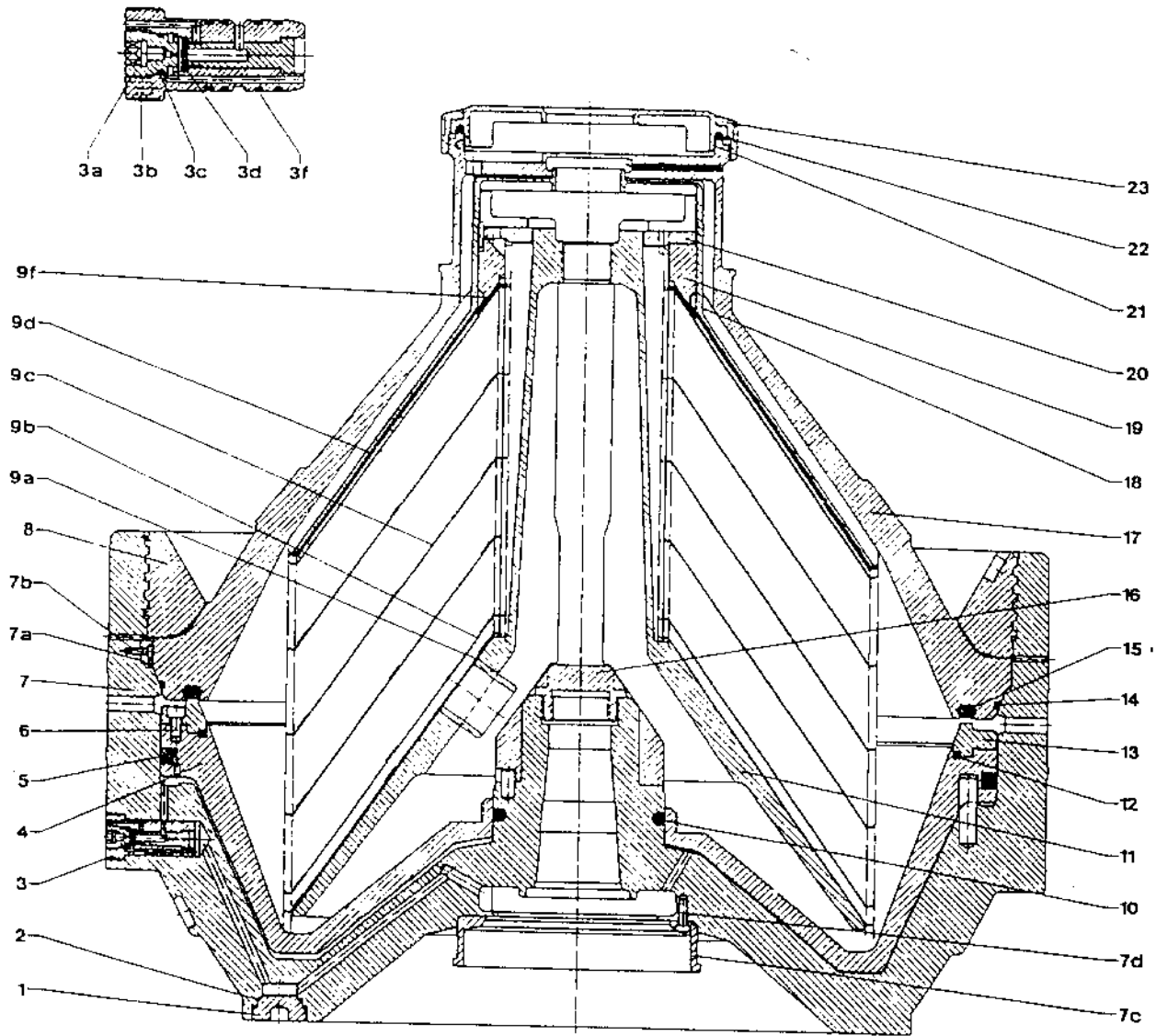


Fig. 56

List of Parts shown in Fig. 56

Item No.	Part - No.	Qty.	Part Description
-	1167-6600-L +)	1	Bowl, complete (1-23)
1	0019-1450-300	1	Threaded plug M 42x1,5
2	0007-1970-690	1	Gasket 26,5/35 ϕ x 5,25
3	3158-6280-L +)	1	Valve in bowl bottom (3a-f)
3a	3158-6279-000	1	[Threaded plug Valve housing Gasket 11,3/2,4 ϕ Sealing disc Gasket 23,3/2,4 ϕ
3b	3158-6282-000	1	
3c	0007-2503-750	1	
3d	0004-5502-850	1	
3e	0007-2920-750	4	
3f	1167-6501-L +)	1 *	
4	0007-2964-750 ²⁴⁶²	1	Sliding piston
5	0019-6120-400	10	Gasket 611/635 ϕ x 12
6	1167-6604-L +)	1	Allen screw M 8x15 DIN 912
7	1167-6604-L +)	1	Bowl bottom
7a	3117-6609-010	1 **	Locating piece
7b	0019-2233-400	1 **	Cylindrical screw AM 5x12 DIN 84
7c	1167-6598-000	1 **	Ring
7d	0019-8341-400	4 **	Allen screw M 6x20 DIN 6912
8	3176-6631-L +)	1 *	Lock ring Tr 670x14, left-hand thread
-	1167-6660-L +)	1 *	Set of discs (9a-f)
9a	1167-6662-L +)	1	[Bottom disc Disc Disc Compensating disc Top disc
9b	1167-6663-L +)	4	
9c	1167-6663-L +)	173	
9d	1167-6664-L +)	1	
9e	1165-6666-L, +)	1	
9f	0007-2586-750	1	
10	1167-6620-L +)	1 *	Gasket 109/10 ϕ
11	1167-6620-L +)	1 *	Distributor
12	0007-2470-750	1	Gasket 555/567x6
13	1167-6448-L +)	1	Sealing ring
14	0007-2546-750	1	Gasket 600/5 ϕ
15	0007-2969-840 ⁹²⁰	1	Gasket 591,5/10,3x11
16	0013-2964-400	1	Spindle nut
17	1167-6610-L +)	1 *	Bowl top
18	1167-6650-L +)	1	Separating disc
19	1167-6670-L +)	1	Upper disc (specially shaped)
20	1167-6420-L +)	1	Retaining ring
21	1167-6645-L +)	1	Centripetal pump chamber cover
22	0007-2854-750	1	Gasket 190/202 ϕ x 6
23	1165-6631-L +)	1	Lock ring Tr 215x6, left-hand thread

* This part can only be replaced by a WESTFALIA or by a CENTRICO service engineer, because of special re-fitting to machine and possible re-balancing of bowl.

** This part is included in bowl bottom assembly, but it is also available as separate item.

+) Parts that differ from the standard design (i.e. parts ending with "(*)" are specified on the Machine Specification Sheet.

#2

Fail Safe Conversion

MSA 120 - 130

- DIAPHRAGM-0004-2121-750

- DIAPHRAGM-0004-2120-890

NOTE: DIAPHRAGM MUST BE INSTALLED WITH FABRIC TO THE INSIDE.

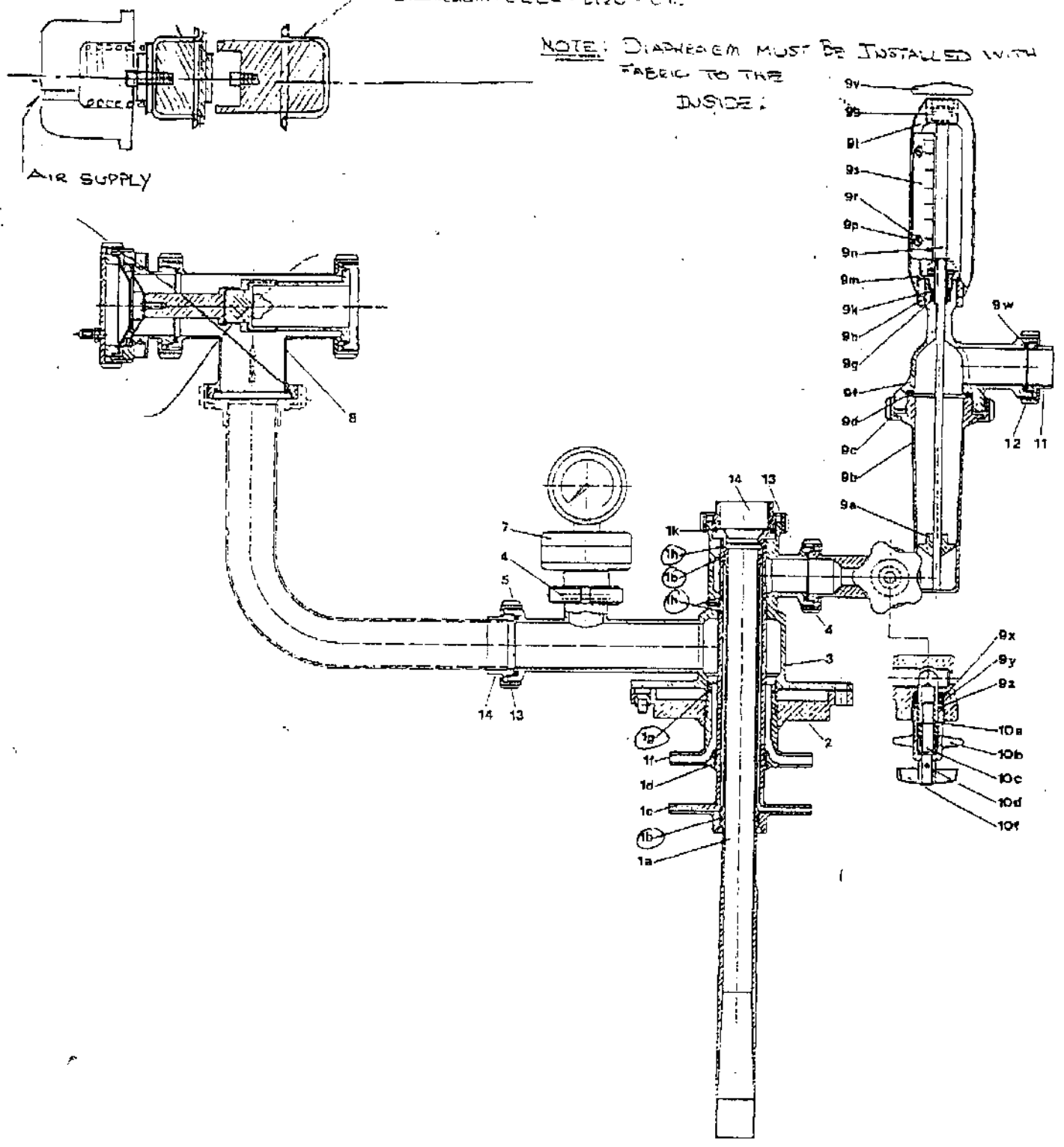


Fig. 18

Discharge Connections
and Centripetal Pump

No. in Fig.	Part - No.	Qty.	Part Description
-	1170-2213-010	1	Double centripetal pump, complete (1a-k)
1a	1170-2246-000	1	Feed tube
1b	0007-1936-750	2	Gasket 29.2/3
1c	1170-2241-000	1	Lower centripetal pump (up to max. 5 bar)
1d	0007-1944-750	1	Gasket 44.2/3
1f	1170-2252-000	1	Upper centripetal pump (up to max. 5 bar)
1g	0007-2929-750	1	Gasket 55.2/3
1h	0007-2925-750	3	Gasket 36.2/3
1k	0007-2211-750	1	Gasket G50 DIN 11851
-	1170-2296-030	1	Feed and discharge connections, compl. (2-10f)
2	1170-2217-000	1	Disc
3	1170-2301-000	1	Feed and discharge housing
4	0007-2210-750	2	Gasket G40 DIN 11851
5	0007-2211-750	1	Gasket G50 DIN 11851
7	8918-2100-080	1	Pressure gauge
8	see special IM	1	Constant pressure valve
-	8021-2000-150	1	Flowmeter, complete (9a-10f)
9a	8021-2012-000	1	Float
9b	8021-2001-190	1	Inlet cup
9c	0013-2846-300	1	Grooved coupling nut F65 DIN 11851
9d	0007-2279-750	1	Gasket 56/60x6
9f	8021-2003-120	1	Outlet pipe
9g	0007-2298-750	2	Gasket 13.5/22x10
9h	0013-3010-300	1	Nut M 33x1.5
9k	0026-1375-300	1	Washer
9m	0019-1380-300	1	Threaded bush
9n	0001-0083-820	1	Cylindrical sight glass
9p	0004-5261-720	2	Gasket 4.8/9.0x1
9r	0019-2478-300	2	Cheese head screw M 4x8 DIN 85
9s	8021-2017-000	1	Scale 700 - 4,000 l/h
9t	8020-2002-000	1	Intermediate piece
9v	0019-1732-400	1	Handle screw
9w	0007-2210-750	1	Gasket G40 DIN 11851
9x	0007-2285-750	2	Gasket 22/32x5
9y	0026-5508-300	1	Washer
9z	0026-1445-300	1	Snap ring
-	1072-2273-020	1	Stuffing box, complete (10a-f)
10a	1072-2279-020	1	Round-slide valve
10b	1072-2284-000	1	Stuffing box housing
10c	0019-1590-610	1	Threaded bolt
10d	0026-1062-400	1	Cylindrical pin
10f	0021-3096-300	1	Handle
11	0018-3949-300	1	Cone connection D40 DIN 11851
12	0013-2844-300	1	Grooved coupling nut F40 DIN 11851
13	0013-2845-300	2	Grooved coupling nut F50 DIN 11851
14	0018-3955-300	2	Cone connection D50 DIN 11851

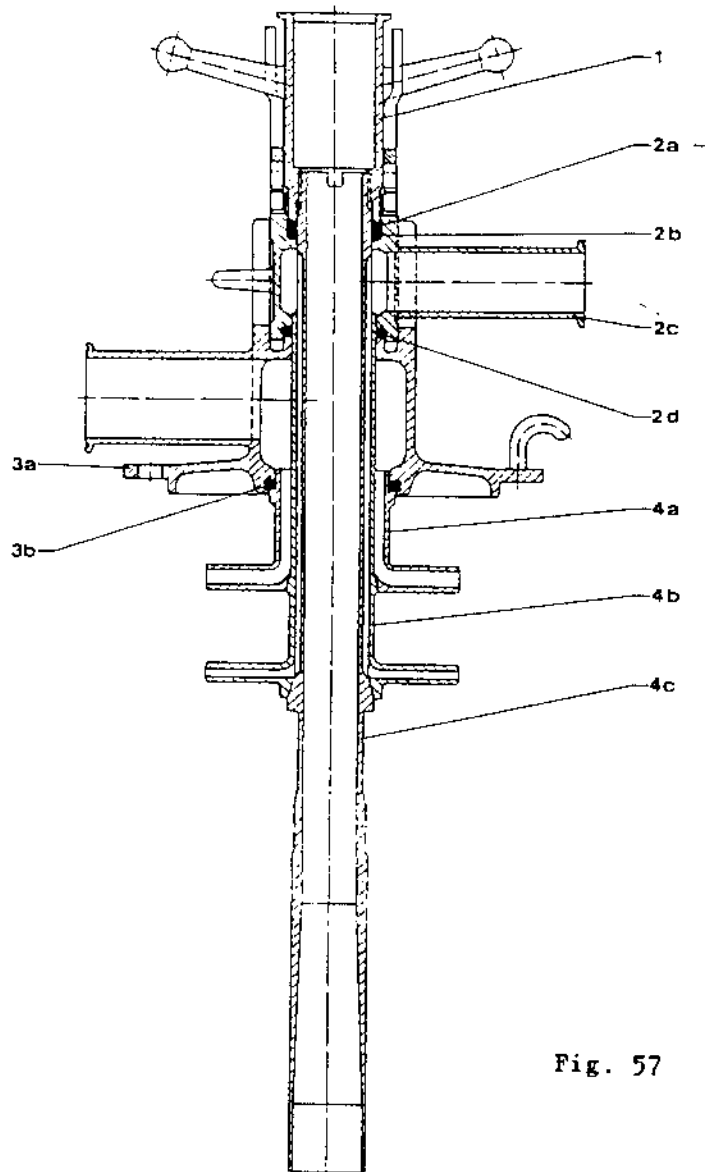


Fig. 57

Item No.	Part - No.	Qty.	Part Description
1	1167-2190-L +)	1	Handle connection piece (with locking device)
-	1167-2299-L +)	1	Discharge assembly (2a-3b)
-	1167-2289-L +)	1	
2a	0007-2373-850	1	
2b	0007-2882-750	1	Gasket 35,5/47x5
2c	1166-2286-L +)	1	Gasket 35/47x6
2d	0007-2892-750	1	Cream discharge
-	1167-2295-L +)	1	Gasket 40/52x6
3a	1167-2285-010	1	Skimmilk discharge assembly (3a-b)
3b	0007-2279-750	1	Skimmilk discharge
-	1167-2213-L +)	1	Gasket 56/68x6
4a	1167-2252-L +)	1	Centripetal pump assembly (4a-c)
4b	1167-2241-L +)	1	Skimmilk pump 140 mm ϕ = 5 1/2" dia. for maximum discharge pressure of 70 psi.
4c	1167-2246-000	1	Cream pump 140 mm ϕ = 5 1/2" dia. for maximum discharge pressure of 70 psi. Feed tube

+ Parts that differ from the standard design (i.e. parts ending with "L") are specified on the Machine Specification Sheet.

Flow Constrictor

(on special order only)

Maximum Throughput Capacity: 15,000 litres/h

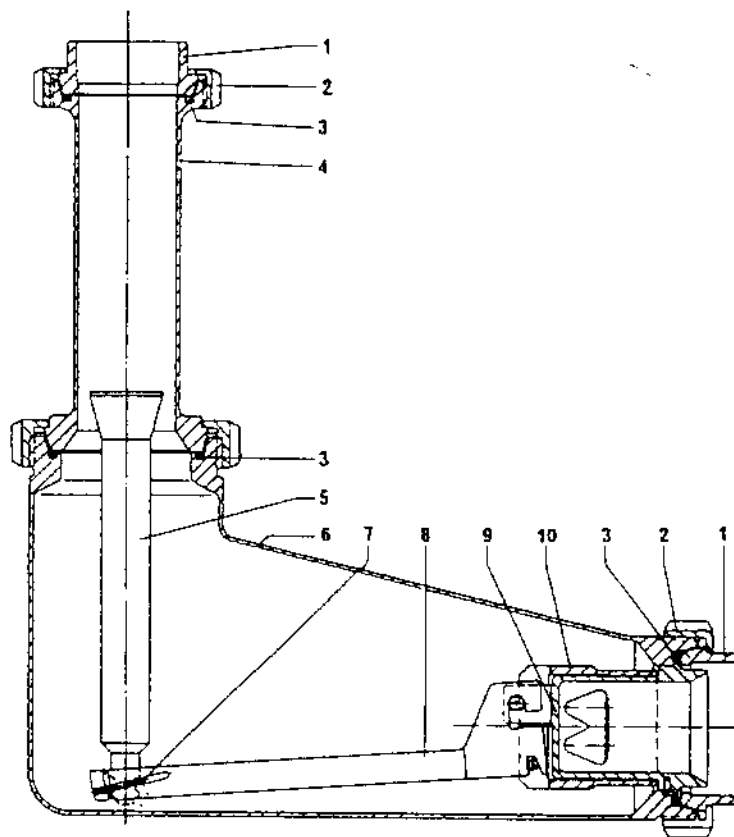


Fig. 58

Item No.	Part - No.	Qty.	Part Description
-	8251-2150-000	1	Flow constrictor (1-10)
1	-	2	** Connection piece D 65 DIN 11851
2	0013-2846-300	2	Groove nut F 65 DIN 11851
3	0007-2212-750	3	Gasket G 65 DIN 11851
4	-	1	* Pipe
5	-	1	* Float
6	-	1	* Housing
7	0006-4421-300	1	Spring
8	-	1	* Throttling lever
9	-	1	* Throttling housing
10	-	1	* Regulating piece

* This part can only be replaced by a Centrico service engineer because of special re-fitting to machine.

** depending on design.