

# THOMASSEN

## PARTS LIST

for

## PUMPING UNITS

Type 20/72 - 730 1CE

Serial numbers	3198, 3199, 3200, 3201, 3202.
Customer	NV. de B.I.P.M. - den Haag
Customer's job number	FP 4101/001 NAM/WN-X1
Location	ROTTERDAM

Drawings fig. 1/2/3/4/5

NV. MOTORENFABRIEK  
THOMASSEN  
DE STEEG  
HOLLAND

## TECHNICAL DATA

Maximum polished rod load	20.000 lbs
Polished rod stroke	72" (60 1/4" - 48 1/2" - 36 3/4" - 25")
API rating at 20 strokes/min.	28500 lbs
Maximum pitch dia. drive shaft V-belt pulley	33 1/2" (850 mm)
V-belts	7 pcs type C
Gear ratio, number of teeth slow and high	1 x 30,25 - 20/110 20/110
Speed gear	
Face width of slow and high speed gear	9 1/16" (235 mm) - 3,5" (90 mm)
Drive shaft dia.	3 3/8" (85 mm)
Wrist pin dia.	3 3/8" (85 mm)
Stroke ratio at end of walking beam	8'6 3/8" : 8'6 3/8" (2600 : 2600)
Standard counter balance effect in lbs polished rod load	12000
Samson post height	15'11 3/8" (4860 mm)
Minimum pitch dia. motor V-belt pulley	8 21/32" (220 mm)
Weight	11475 Kg

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THOMASSEN PUMPING UNITS  
TYPE 20/72-730 CE

NUMBER	DESCRIPTION	Ref. 1: Drwg.	MANUFACTURERS PART NO.	REMARKS	
	BASE			Fig.	Code number
2	Adjusting bolt	1	201 2 BE	3	2183.0078.00
2	Bolt	3	U 114 A	3	1511.1404.50
4	Bolt	4	214 EKE	3	( 1441.0101.00 ( 1511.1005.10
12	Bolt	6	214 CFD	3	( 1441.0101.00 ( 1511.1614.00
2	Chair for engine adjusting bolt	7	576 1 BG	3	2295.0069.01
2	Skid	8	631 DB	3	2631.0017.00
1	Structural steel base (for electric motor under Samson post)	9	730 CE 108 E	3	2733.5108.50

THOMASSEN PUMPING UNITS  
TYPE 20/72-730 CE

NUMBER	DESCRIPTION	Ref. in Drwg.	MANUFACTURERS PART NO.	REMARKS	
	BEARINGS			Fig.	code number
	BEARING (MAIN SHAFT)				
4	Brass	30	730 CE 12 A/B	2	2733.5012.00
	BEARING (PINION SHAFT)				
2	Roller bearing (Hyatt)	45	W 222	1	1006.5512.40
2	Roller bearing housing	47	730 CE 21 A	1	2733.5021.10
2	Retainer plate	-	730 BE 22		2732.5022.00
	BEARING (COUNTER SHAFT)				
2	Roller bearing (Hyatt)	60	W 218	1	1006.5510.00
2	Retainer plate	61	730 BF 22	1	2732.6022.00
2	Roller bearing housing	62	730 CE 8 A	1	2733.5008.10

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TYPE 20/72-730 CE

NUMBER	DESCRIPTION	Ref. in Drwg.	MANUFACTURERS PART NO.	REMARKS	
				Fig.	Code number
	BRAKE GROUP				
1	Brake bracket	182	730 AF 41	3	2731.6041.00
1	Brake level compl. (provided with)	187	730 CK 46 A	3	2733.0046.10
2	Stud bolt	-	181 AKG		1513.0602.20
1	Lock plate	-	730 AB 96		2731.2096.00
1	Brake bracket compl. (provided with)	190	730 BE 73	3	2732.5073.00
1	Fulcrum pin	191	730 AC 78	3	2731.3078.00
1	Tie spring	-	730 AB 80		2731.2080.00
2	Brake segment compl. (provided with)	194	730 AC 81	1	2731.3081.00
2	Fulcrum pin	-	730 AK 79		2731.0079.00
40	Rivet for brake liner	-	6 $\phi$ x 30		1475.1103.01
2	Brake liner	196	60 x 640 x 6 mm	1	0580.7850.06
1	Nipple for 730 AF 41	-	1/8 gasdr.		1030.2100.20
1	Brake bracket compl. (provided with)	205	730 ICK 141	3	2733.0141.01
2	Quadrant	206	730 CK 148	3	2733.0148.00
4	Stud bolt	207	U 108 C	3	1511.0803.00

THOMASSEN PUMPING UNITS  
TYPE 20/72-730 CE

NUMBER	DESCRIPTION	Ref. in Drwg.	MANUFACTURERS PART NO.	REMARKS	
				Fig.	Code number
	ERAKE GROUP (CONT'D)				
1	Brake lever (compr. foll. parts)	-	X 7301 CK 142	-	2733.0142.01
1	Brake lever	210	730 ICK 142	3	2733.0142.11
1	Handle	211	730 BK 143	3	2732.0143.00
2	Lock plate	212	730 BK 144	3	2732.0144.00
2	Tie rod	213	730 BK 145	3	2732.0145.00
1	Pawl	214	730 BK 146	3	2732.0146.00
1	Spring	215	730 BK 147	3	2732.0147.00
2	Stud bolt for 730 BK 144	-	U 104 J		1511.0403.50
1	Fulcrum pin	217	238 AGE	3	2236.0004.00
1	Bolt	218	208 A	3	2235.0004.00
1	Bolt	-	208 CD		2235.0017.00
1	Screw	219	U 260 1AF	3	2183.0092.00
1	Pin	220	730 CK 149	3	2733.0149.00
4	Pin	221	730 BK 150	3	2732.0150.00

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NUMBER	DESCRIPTION	Ref. in Drwg.	MANUFACTURERS PART NO.	REMARKS	
	BRAKE GROUP (CONT'D)			Fig.	Code number
1	Lever bracket compl. (provided with)	222	730 BE 151	3	2732.5151.00
1	Lever	223	730 BK 152	3	2732.0152.00
1	Pin	224	730 BF 149	3	2732.6149.00
1	Nipple	225	1/8 gasdr.	3	1030.2100.20
1	Tie rod compl. (provided with)	226	730 BG 154	3	2732.7154.00
2	Fork	227	730 BK 154	3	2732.0154.00
2	Nut	228	300 J	3	2163.0007.00
1	Tie rod compl. (provided with)	229	X 730 CE 153 A	3	2733.5153.10
2	Fork	230	730 BK 154	3	2732.0154.00
1	Nut	231	300 J	3	2163.0007.00
1	Tie rod only	-	730 CE 153 A		2733.5153.20
1	Spring holder	-	730 CE 153 B		2733.5153.30
1	Bolt	-	730 CE 153 C		2733.5153.40
20	Belleville washer	-	346 BFM		1478.5123.51
1	Lever	232	730 CK 154	3	2733.0154.00



THOMASSEN PUMPING UNITS  
 TYPE 20/72 - 730 CE

NUMBER	DESCRIPTION	Ref. in Drwg.	MANUFACTURERS PART NO.	REMARKS	
	COUNTER WEIGHT			Fig.	Code number
4	Counter weight	300	730 CE 27	3	2733.5027.00
8	Bolt	301	730 CE 47	3	2733.5047.00
4	Pinion	-	730 CE 17		2733.5017.00
	(provided with)				
8	Bearing block	-	730 CE 16		2733.5016.00
8	Circlip	-	730 BH 97		2732.8097.00

THOMASSEN PUMPING UNITS  
TYPE 20/72 - 730 CE

NUMBER	DESCRIPTION	Ref. in Drwg.	MANUFACTURERS PART NO.	REMARKS	
	CROSS BEAM ASSY			Fig.	Code number
2	Upper Pitman bearing (provided with)	351	730 CE 30	2	2733.5030.00
2	Bearing liner brass	352	730 CE 31	2,4	2733.5031.00
2	Benzolite packing	353	730 BE 32	4	2732.5032.00
2	Labyrinth ring	354	730 CE 132	2,4	2733.5132.00
2	Packing ring	355	730 CE 33	4	2733.5033.00
2	Pitman knuckle pin	356	730 CE 44	2	2733.5044.00
1	Cross beam	358	730 ICE 51	2	2733.5051.01
2	Lubricating oil pump (compr. foll. parts)	359	B 730 2CE 130	2	2733.5130.02
2	Lock ring	362	233 1AJB	4	2227.0069.00
2	Plug	363	282 FE	4	2376.0064.00
2	Spring	364	350 DGA	4	2350.2025.01
2	Sight feed glass	365	X396 AB1	4	2395.0001.00
2	Metal	-	421 DC		2421.0013.00
6	Metal	366-368	421 JC	4	2421.0021.00
2	Cover	369	475 BEB	4	2475.0174.00
2	Pump body (provided with)	370	730 CE 130	4	-
2	Plunger guide compl. with	→ 371	730 CE 139	4	2733.5139.00
2	Plunger	→ 373	730 CE 131 A/B	4	2733.5131.10
2	Bolt	-	U 236 AED		2183.0089.00
2	Ball retainer	374	730 CE 134	4	2733.5134.00
2	Spring holder	→ 375	730 BE 140	4	2732.5140.00
2	Seegerring A 16 x 1	378	SB 1423	4	1061.5001.60
2	Sieve	380	730 1CE 136 A	4	2733.5136.11
2	Special bolt	381	730 CF 133	4	2733.6133.00
2	Lock plate	382	730 BE 135	4	2732.5135.00
2	Packing	379	427 GFE	4	2425.0271.00
2	Pipe	-	730 CF 137		2733.6137.00

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NUMBER	DESCRIPTION	Ref. in drwg.	MANUFACTURERS PART No.	REMARKS	
	GEAR HOUSING ASSY (consists of foll. parts)			Fig.	Code number
1	Lockring	425	233 1 AJB	3	2227.0069.00
1	Sight feed glass	426	396 AB	3	2395.0001.00
1	Cover	426A	474 ABA	3	2475.0121.00
1	Gear housing	427	730 1 CE 1 A/B	3	2733.5001.01
2	Packing flange	428	730 BE 10	1	2732.5010.00
2	Packing flange	429	730 BF 10	1	2732.6010.00
2	Base for oil scraper (provided with)	430	730 BF 13	2	2732.6013.00
2	Oil scraper	431	730 BF 14	2	2732.6014.00
2	Spring	432	730 H 29	2	2730.8029.00
2	Packing flange	433	730 BF 16	2	2732.6016.00
2	Packing flange	434	730 BE 43	2	2732.5043.00
1	Cover	435	730 CE 34	3	2733.5034.00
1	Packing flange	436	730 BE 35	3	2732.5035.00
1	Cover	437	730 CE 36	3	2733.5036.00
1	Packing flange	438	730 BE 37	3	2732.5037.00

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NUMBER	DESCRIPTION	Ref. in Drwg.	MANUFACTURERS PART No.	REMARKS	
	HOODS			Fig.	Code number
	HOOD (BELT DRIVE)				
1	Hood	480	730 CE 82C1-3	3	2733.5082.30
	HORSE HEAD-ASSY				
1	Horse head	530	730 1 CE 115	3	2733.5115.01
1	Fulcrum pin	534	730 CE 90	3	2733.5090.00

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NUMBER	DESCRIPTION	Ref.in Drwg.	MANUFACTURERS PART No.	REMARKS
	PITMAN-ASSY			Fig. Code number
2	PITMAN-ASSY (consists of foll.parts)	-	-	
2	Crankpin (provided with)	580/591	730 CE 24	2 2733.5024.00
2	Nut	581/592	730 CE 26	2 2733.5026.00
2	Conical bush	582	730 BE 25	2 2732.5025.00
2	Bearing cover (provided with)	583	730 ICE 28	2733.5028.00
2	Nipple	584	$\frac{1}{4}$ gas thread	2 0764.6010.20
2	Bolt	-	193 FCD	2186.0045.00
2	Plug	-	909 B	0762.1030.20
2	Roller bearing housing (provided with)	585	730 BE 29	2 2732.5029.00
2	Scaling ring	-	435 AHK	1023.1000.21
2	Roller bearing	587	SKF 22317	2 1007.1051.70
2	Pitmanrod (provided with)	588	730 CE 65	2 2733.5065.00
2	Nipple	-	278 AEJ	2371.0078.00
2	Nipple	-	278 AFB	2371.0081.00
4	End coupling	-	X 374 BG	2374.0007.00
2	Nipple	-	$\frac{1}{4}$ gas thread	0764.6010.20
2	Lock plate	589	730 BE 94	2 2732.5094.00
2	Metal packing ring	590	431 HC	2 2428.0121.00

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NUMBER	DESCRIPTION	Ref. in Drwg.	MANUFACTURERS PART No.	REMARKS	
				Fig.	Code number
	SAMSON POST				
2	Guard	650	730 AB 64 A	3	2731.2064.00
2	Guard	651	730 CE 64 B	3	2733.5064.00
1	Centre iron bearing (provided with) Fillingplate	652	730 1 CE 100A	3	2733.5100.11
		654	730 1 AB 102	3	2731.2102.01
1	Centre iron	653	730 CE 101 A	3	2733.5101.10
1	Adjusting bolt	655	730 CE 106	3	2733.5106.00
1	Samson post (provided with)	657	730 1 CE 111A/E	3	2733.5111.01
46	Bolt	658	214 BED	3	{ 1441.0101.20 1511.1205.70
2	Bolt	-	214 BEG		{ 1441.0101.20 1511.1207.00
4	Bolt	659	214 CFK	3	{ 1441.0101.60 1511.1610.20

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NUMBER	DESCRIPTION	Ref. in Drwg.	MANUFACTURERS PART No.	REMARKS	
				Fig.	Code number
	SHAFTS				
	SHAFT (MAIN-)				
1	Mainshaft	700	730 1 CE 2	1	2733.5002.01
1	Gear wheel	701	730 1CE3Asp	1	2733.5003.19
2	Crank	702	730 CE 4	1	2733.5004.00
2	Cover	703	730 CE 9	1	2733.5009.00
2	Key	704	730 AB 40	1	2731.2040.00
1	Key	706	365 AFE	1	2251.0051.00
	SHAFT (PINION-)				
1	Gear wheel	730	730 1CE5Asp	1	2733.5005.19
1	Pinion shaft	730	730 2 CE 6	1	2733.5006.02
2	Cirelip	732	730 BE 23	1	2732.5023.00
	SHAFT (COUNTER-)				
1	Countershaft	780	730 1 CE 7	1	2733.5007.01
2	Cirelip	781	730 BF 23	1	2733.6023.00
1	Brake drum	782	730 BE 38	1	2732.5038.00
1	V-belt pulley	783	730 BE 55 sp	1	2732.5055.01
1	Key	785	366 HJ	1	1076.2217.00
1	Key	786	366 HH	1	1076.2213.00

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NUMBER	DESCRIPTION	Ref. in Drwg.	MANUFACTURERS PART No.	REMARKS	
				Fig.	Code number
	WALKING BEAM				
1	Trunnion bracket (provided with)	850	730 CE 66	3	2733.5066.00
1	Set bolt	851	730 J 140	3	2730.9140.00
1	Nut	852	730 J 141	3	2730.9141.00
4	Bolt	853	730 1 CE 69	3	2733.5069.01
1	Walking beam	854	730 1 CE 99	3	2733.5099.01
1	Adjusting ring	-	730 CE 86		2733.5086.00
1	Adjusting bush	-	730 CE 87		2733.5087.00
1	Bolt	-	U 108 C		1511.0803.00
1	Bolt	-	U 108 BA		1511.0814.00
4	Bolt	855	214 DPA		1441.0102.00 1511.2012.70
	MISCELLANEOUS				
	V-BELTS				
7	V-belt 7/8" x 17/32" Pitch length 5758 mm cross section "C"	950	C 223	3	1014.3225.07



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NUMBER	DESCRIPTION	Ref. in Drwg.	MANUFACTURERS PART No.	REMARKS	
	MISCELLANEOUS (CONT'D)			Fig.	Code number
	BEAM HANGER				
1	Ladder	907	730 CE 121	2	2733.5121.00
1	Safety loop	908	730 CE 122	2	2733.5122.00
1	Pumping rod clamp (provided with)	975	730 AB 320	5	2731.2320.00
2	Adjusting bolt	976	201 DA	5	2186.0048.00
1	Clamping iron (provided with)	-	730 CE 321		2733.5321.00
1	Bolt	-	U 108 F		1511.0804.50
1	Carrier bar compl. (provided with)	984	730 AB 322		2731.2322.00
1	Bolt	977	214 BFC	5	1515.1210.20
2	Bolt	978	214 BEE	5	1515.1206.30
1	Clasing plate	979	730 AB 312 B	5	2731.2312.20
1	Pawl	982	730 AB 312 C	5	2731.2312.30
1	Spring	983	730 AB 312 D	5	2731.2312.40
1	Cable (provided with)	980	730 BK 325	5	2732.0325.00
2	Cable eye	981	730 AB 319	5	2731.2319.00

Fig. 2

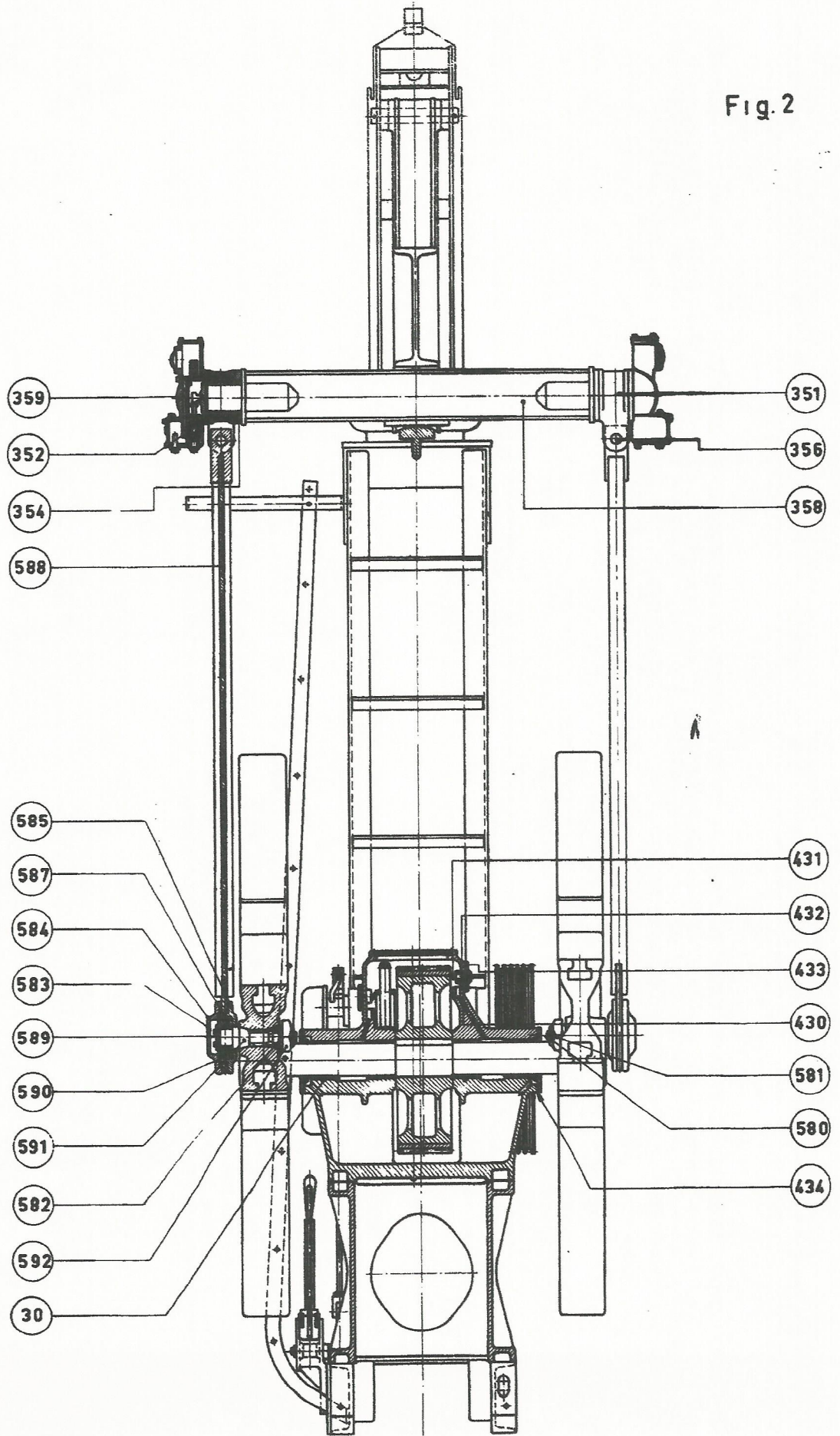


Fig. 1

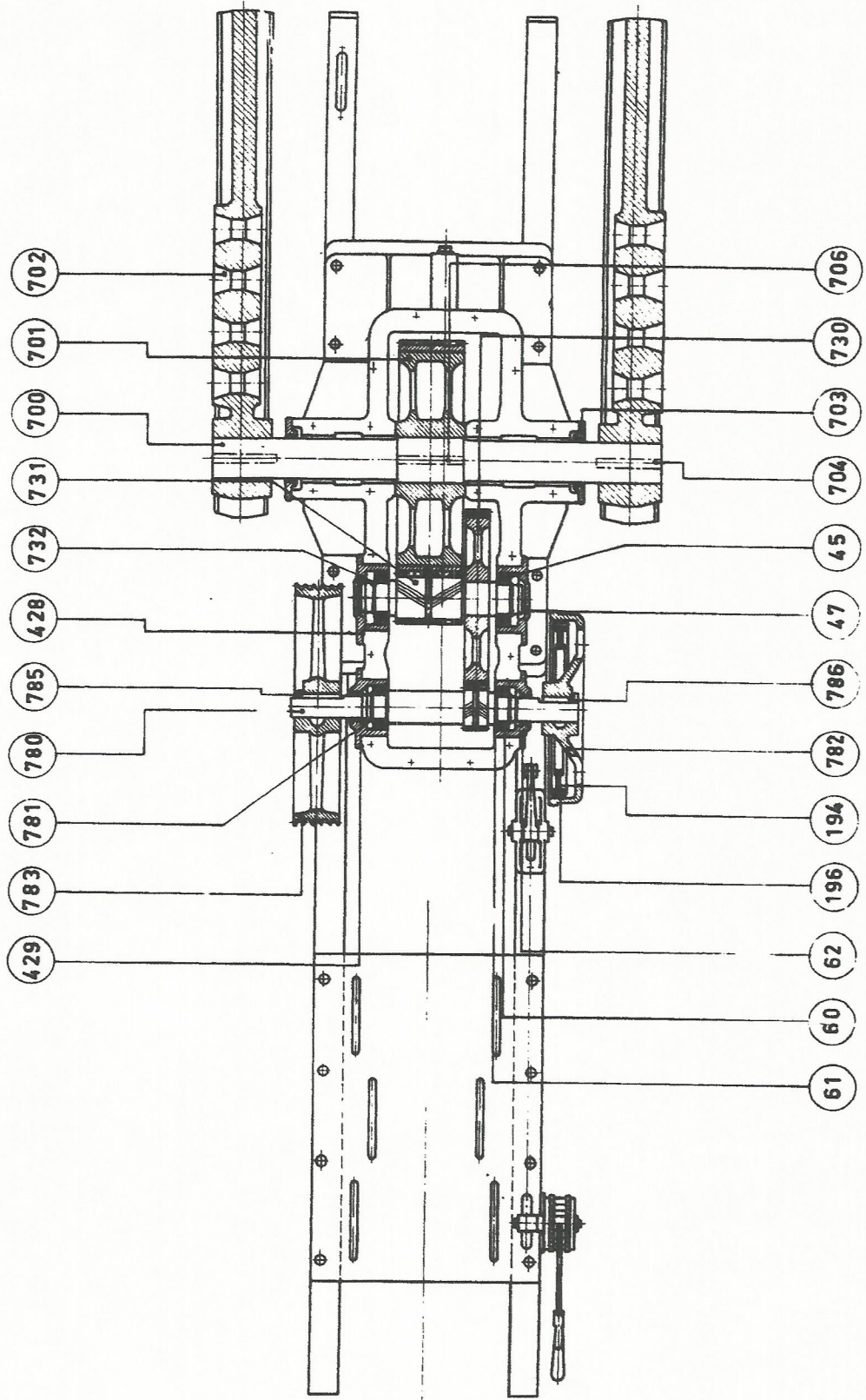


Fig. 3

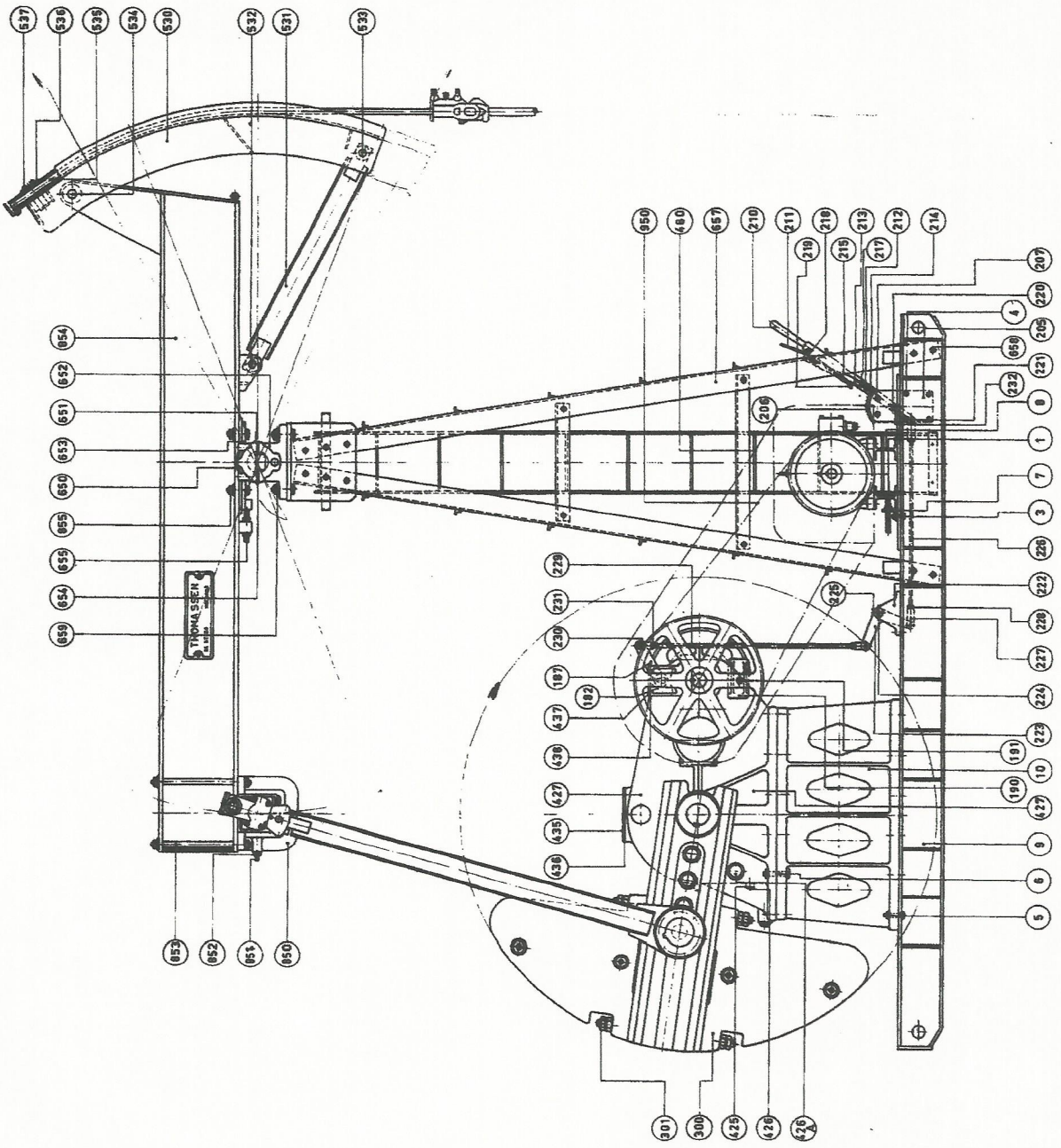


Fig. 4

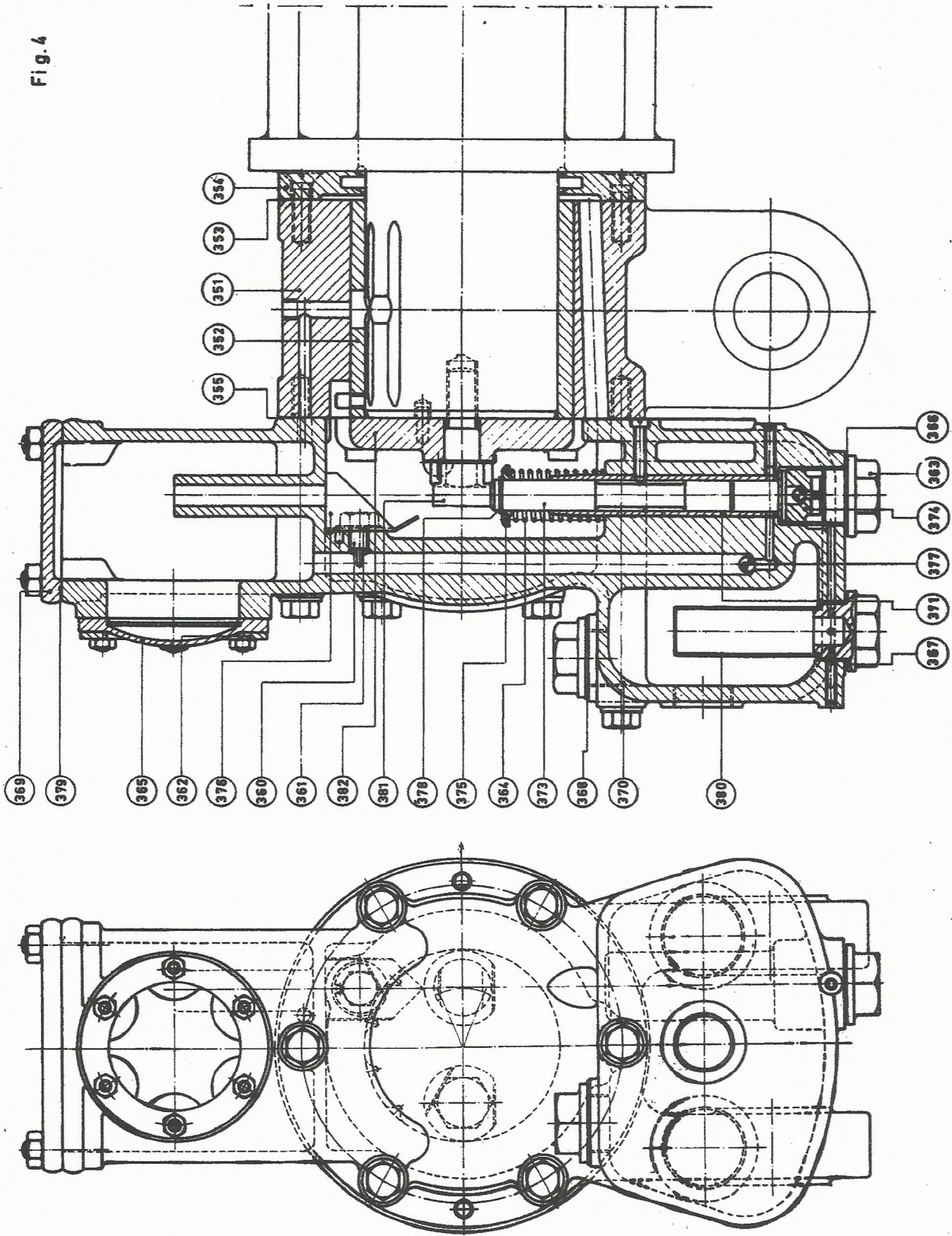


Fig. 5

