

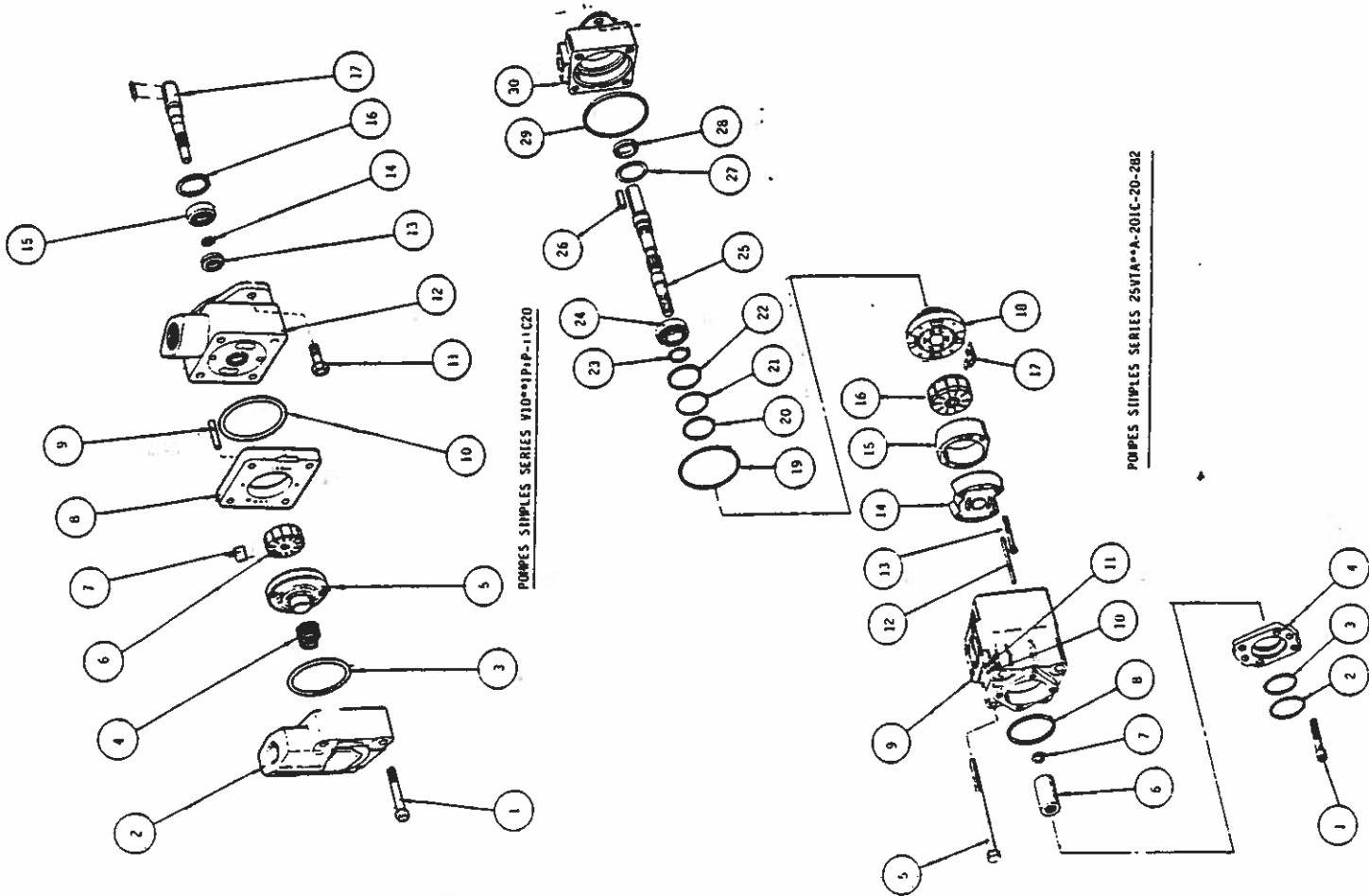
NOM ENCLATURE "VICKERS" DE PIÈCES  
POMPS SIMPLES SERIES 25VITA\*\*A-201C-20-282

POS.	NO. DE PIÈCE	DESIGNATION
1	298147	Boulon
2	307203	Joint torique
3	154086	Joint torique
4	584936	Adaptateur
5	38523	Boulon (2 Nec.)
6	941299	Couplage
7	223172	Jonc D'arrêt
8	353409	Joint torique
9	251263	Corps.
10	36212	Boulon (2 Nec.)
11	294959	Plaque de rotation
12	229662	Broche (2 Nec.)
13	289472	Boulon (2 Nec.)
14	324434	Plaque de pression
15	326984	Anneau 12 gpm
	326985	Anneau 14 gpm
	326986	Anneau 17 gpm
	326988	Anneau 21 gpm
16	270597	Rotor
17	922710	Jeu de Palettes
18	324431	Plaque de pression
19	419673	Joint
20	154076	Joint torique
21	271789	Anneau
22	191400	Jonc D'arrêt
23	120128	Jonc D'arrêt
24	17706	Roulement
25	941299	Arbre
26	9955	Clauette
27	190362	Jonc D'arrêt
28	394976	Joint d'étanchéité
29	154095	Joint torique
30	942353	Corps

DESIGNATION "WAGNER" POMPE ENSEMBLE

12 gpm	P/N 80-100031
14 gpm	P/N 80-100032
17 gpm	P/N 80-100033
21 gpm	P/N 80-100034

POMPS SIMPLES SERIES 25VITA\*\*A-201C-20-282

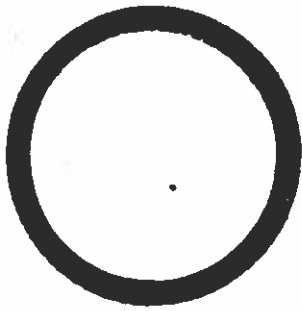


NOM ENCLATURE "VICKERS" DE PIÈCES  
POMPS SIMPLES SERIES 25VITA\*\*A-201C-20-282

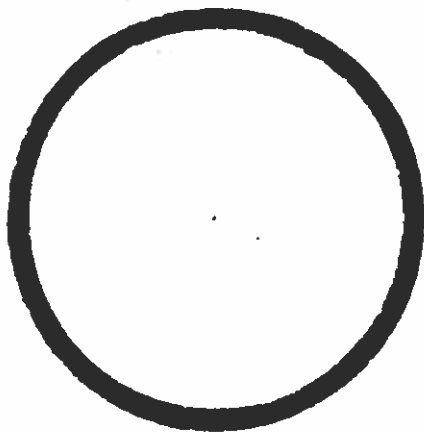
POS.	NO. DE PIÈCE	DESIGNATION
1	11156	Boulon
2	372865	Couvercle
3	199622	Joint torique
4	345262	Ressort
5	374343	Plaque de pres
6	317681	Rotor
7	923499	Jeu de Palette
8	317674	Anneau
9	231042	Broche (2 Nec.)
10	199823	Joint torique
11	1273	Boulon (2 Nec.)
12	317668	Corps.
13	263585	Joint D'elanch
14	87541	Jonc D'arrêt
15	148423	Roulement
16	87541	Jonc D'arrêt
17	374339	Arbre

DESIGNATION "WAGNER" POMPE ENSEMBLE P/N 80-100042

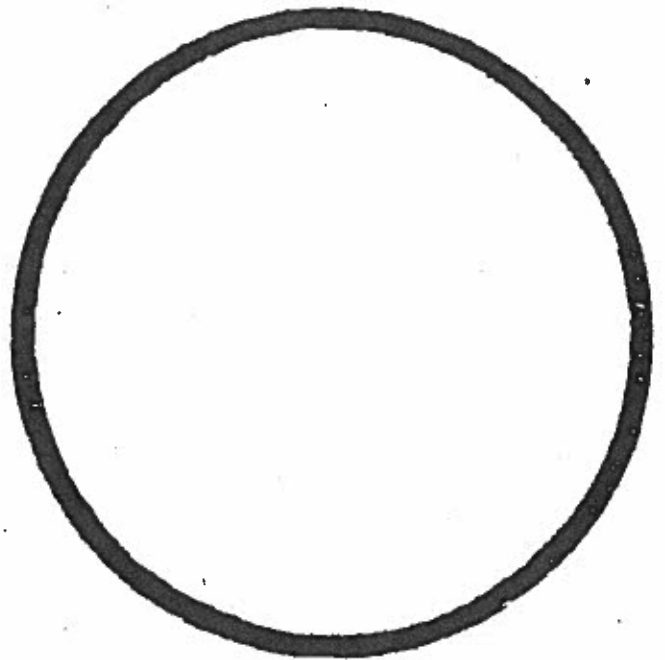
DETAIL	QUANTITY	DESCRIPTION	MA
<b>WAGNER ENGINEERING LTD.</b> 40 GOSICK PLACE NORTH VANCOUVER B.C. CANADA V Manufacturers of MARINE HYDRAULIC STEERING GEARS AND AUTOMATIC TITLES			
POMPS SIMPLES SERIES 25VITA**A-201C-20			
V10-1P1P-11C20			
DATE	SCALE	QUOTE N°	DRAWING N°
JAN 15/81	1/1		
REVISION NOTES			C-3387



JOINT TORIQUE (16)



JOINT TORIQUE (55)



JOINT TORIQUE (7, 12)



(24)

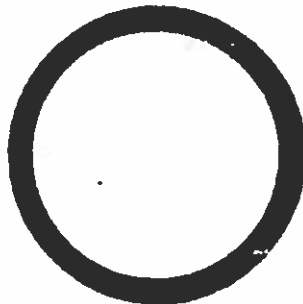


(73)



(21)

JOINT TORIQUE



JOINT TORIQUE (4)



JOINT TORIQUE (11)



COUPELLE U (30)

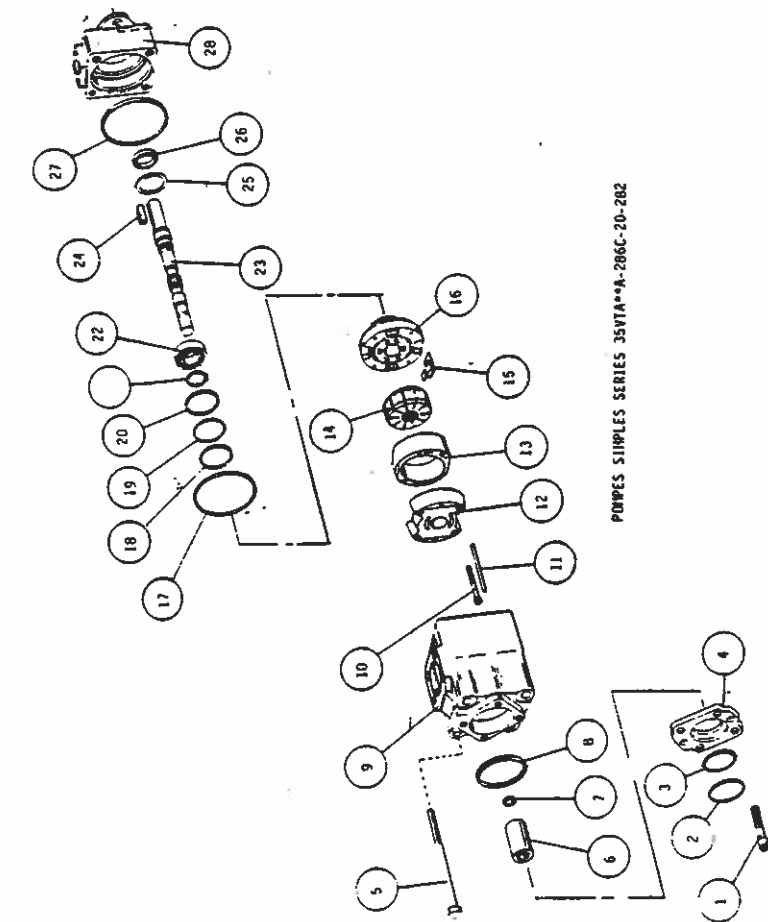


RONDELLE D'ETANCHEITE (4, 40)

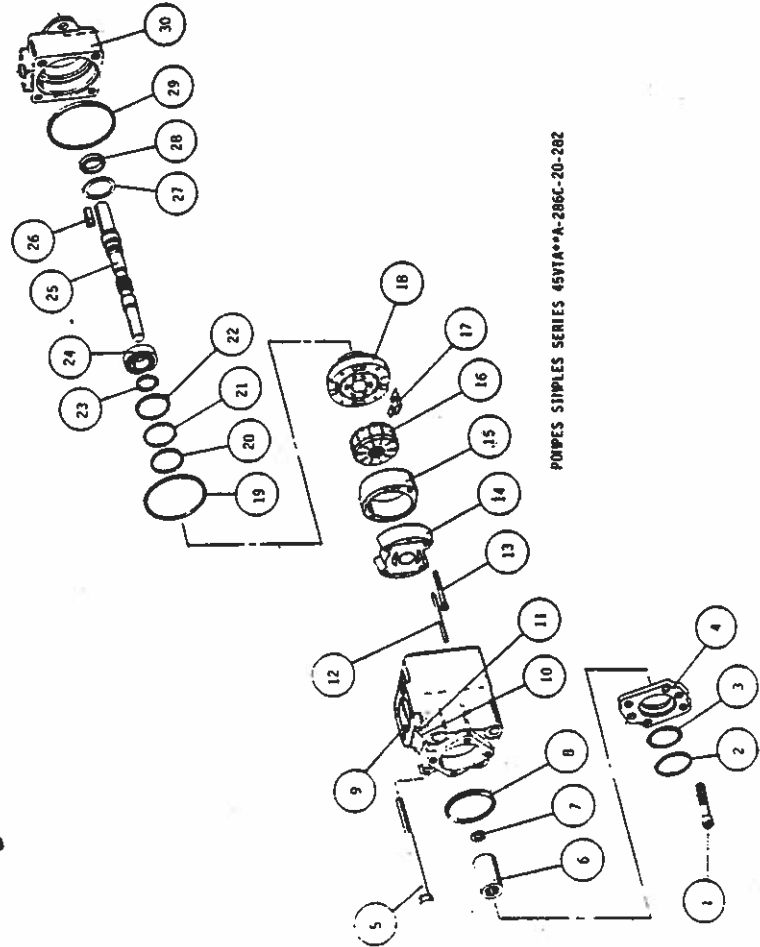
POS.	NO. DE PIÉCE	DESIGNATION
1	258147	Boulon (4 Nec.)
2	307203	Joint torique
3	154086	Joint torique
4	941296	Adapleur
5	42023	Boulon (4 Nec.)
6	941302	Couplage
7	223172	Jonc D'arret
8	353409	Joint torique
9	250818	Corps.
10	289475	Boulon (2 Nec.)
11	280031	Broche (2 Nec.)
12	576265	Plaque de pression
13	576210	Anneau 25 gpm
	576212	Anneau 30 gpm
	576214	Anneau 35 gpm
	575476	Anneau 38 gpm
14	575478	Rotor
15	941019	Jeu de Palettes
16	575479	Plaque de pression
17	419674	Joint
18	154084	Joint torique
19	263717	Anneau
20	183144	Jonc D'arret
21	119982	Jonc D'arret
22	38441	Roulement
23	941302	Arbre
24	393536	Clauette
25	192220	Rondelle
26	394973	Joint d'étanchéité
27	154101	Joint torique
28	942355	Corps.

DESIGNATION "WAGNER" POMPE ENSEMBLE

25 gpm P/N 80-100035  
30 gpm P/N 80-100036  
35 gpm P/N 80-100037  
38 gpm P/N 80-100038



POMES SIMPLES SERIES 35VITA\*\*A-286C-20-282



POMES SIMPLES SERIES 45VITA\*\*A-286C-20-282

POS.	NO. DE PIÉCE	DESIGNATION
1	298147	Boulon (4 Nec.)
2	307203	Joint torique
3	154086	Joint torique
4	941296	Adapleur
5	87947	Boulon (2 Nec.)
6	941305	Couplage
7	223172	Jonc D'arret
8	353409	Joint torique
9	252283	Corps.
10	36212	Boulon (2 Nec.)
11	294959	Plaque de rotation
12	220886	Broche (2 Nec.)
13	289476	Boulon (2 Nec.)
14	294959	Plaque de pression
15	581679	Anneau 42 gpm
	581680	Anneau 50 gpm
	578904	Anneau 60 gpm
16	578900	Rotor
17	941049	Jeu de Palettes
18	580921	Plaque de pression
19	154107	Joint
20	134087	Joint torique
21	266392	Anneau
22	158630	Jonc D'arret
23	102949	Jonc D'arret
24	131812	Roulement
25	941305	Arbre
26	239751	Clauette
27	194878	Rondelle Plate
28	394974	Joint d'étanchéité
29	419675	Joint
30	942356	Corps.

DESIGNATION "WAGNER" POMPE ENSEMBLE

42 gpm P/N 80-100039  
50 gpm P/N 80-100040  
60 gpm P/N 80-100041

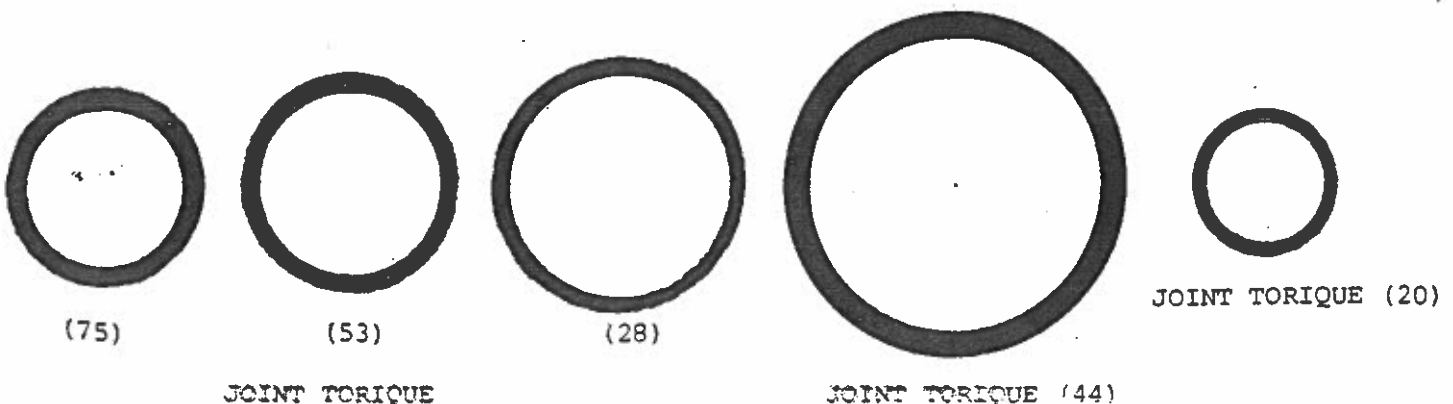
DETAIL		QUANTITY	DESCRIPTION	MATERIAL
<p><b>WAGNER ENGINEERING LTD.</b> 40 GOSPEL PLACE NORTH VANCOUVER, B. C. CANADA V7M 3D2 Manufacturers of MARINE AUTOMATIC STEERING GEARS AND AUTOMATIC PILOTS</p>				
<p>POMES SIMPLES SERIES 35VITA**A-286C20-282</p>				
<p>45VITA**A-286C20-282</p>				
DATE	SCALE	QUOTE NO	REV.	
JUNE/84			C-3388	

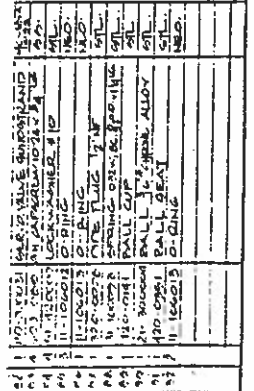
ORGANES D'ETANCHEITE POUR DISTRIBUTEUR NO 63 -  
PIECE NO 119-0049

QUANTITE	NO DE PIECE	DESIGNATION	NO D'ARTICLE	NO DE DESSIN
3	10-800003	Rondelle d'étanchéité 7/16	4, 40	D3-455 D3-438
1	11-106117	Joint torique 13/16 x Bouchon d'étanchéité 1"	75	D3-455 D3-438
2	11-106119	Joint torique 15/16 x 1-1/8	53	D3-455 D3-438
2	11-106122	Joint torique 1-1/8 x 1-5/16	28	D3-455 D3-438
2	11-106222	Joint Torique 1-½ x 1-3/4	44	D3-455 D3-438
1	11-106218	Joint torique 1-1/4 x 1-1/2	16	D3-455 D3-438
2	11-106225	Joint torique 1-7/8 x 2-1/8	55	D3-455 D3-438
2	11-106234	Joint torique 3 x 3-1/4	7 12	C3344 C3-449
2	11-208001	Coupelle U 1/2 x 7/8 x 3/16	30	D3-438
1	11-106016	Joint torique 5/8 x 3/4	20	D3-455 D3-438
1	11-106014	Joint torique 1/2 x 5/8	24	D3-455 D3-438
1	11-106010	Joint torique 1/4 x 3/8	73	D3-455
1	11-106015	Joint torique 9/16 x 11/16	21	D3-455 D3-438
2	11-106013	Joint torique 7/16 x 9/16	11	C3-449
2	11-106218	Joint torique 1-1/4 x 1-1/2	4	C3-449

IDENTIFICATION DES COMPOSANTS

Les dessins ci-dessous représentent les composants susmentionnés en vraie grandeur. Les pièces sont accompagnées de leur numéro d'article, qui peut être rapporté aux dessins D-3-438, D-3-455, C-3-449 et C-3344. Il est fabriqué plusieurs versions du distributeur No 63, nécessitant l'inclusion d'organes d'étanchéité, qui risquent de ne pas être requis.



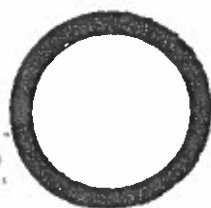


SEAL KIT FOR NO.63 CONTROL VALVE ASSEMBLY  
(P/N 119-0049)

QTY	PART NO.	DESCRIPTION	ITEM NO.	DWG NO.
3	10-800003	Seal Washer ✓	4, 40 ✓	D3-455 D3-438
1	11-106117	O-Ring ✓	75 ✓	D3-455 D3-438
2	11-106119	O-Ring ✓	53 ✓	D3-455 D3-438
2	11-106122	O-Ring ✓	28 ✓	D3-455 D3-438
2	11-106130	O-Ring ✓	44 ✓	D3-455 D3-438
1	11-106218	O-Ring ✓	16 ✓	✓ D3-455 D3-438
2	11-106225	O-Ring ✓	55 ✓	D3-455 D3-438
2	11-106234	O-Ring ✓ - 6032	7 12 ✓	C3344 C3-449
2	11-208001	U-Cup ✓	30 ✓	D3-438
1	11-106016	O-Ring ✓ - 3248	20 ✓	D3-455 D3-438
1	11-106014	O-Ring ✓ - 3264	24 ✓	D3-455 D3-438
1	11-106010	O-Ring ✓	73 ✓	D3-455
1	11-106015	O-Ring ✓	21 ✓	D3-455 D3-438
4	11-106013	O-Ring ✓ - 3261	11, 92 ✓	C3-449 D3-455
2	11-106218	O-Ring ✓	4 ✓	C3-449
3	11-106012	O-Ring 5330-21-TAD-3252	85	D3-455

COMPONENT IDENTIFICATION

The following drawings indicate the full size of the above listed components. The parts are indicated by item numbers which can be related to drawings D-3-438, D-3-455, C-3-449, and C-3344. Several versions of the No. 63 manifold are manufactured necessitating the inclusion of seals which may not be required.



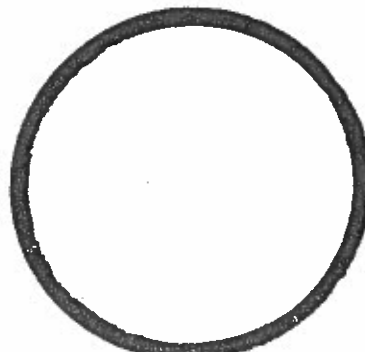
O-RING (75)



O-RING (53)



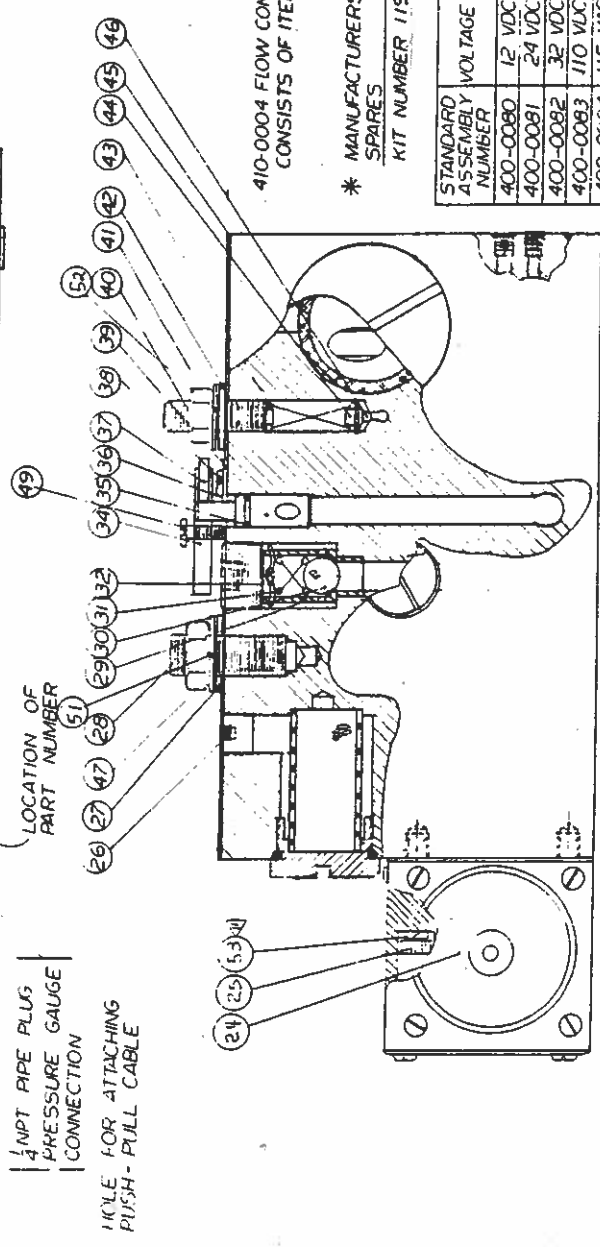
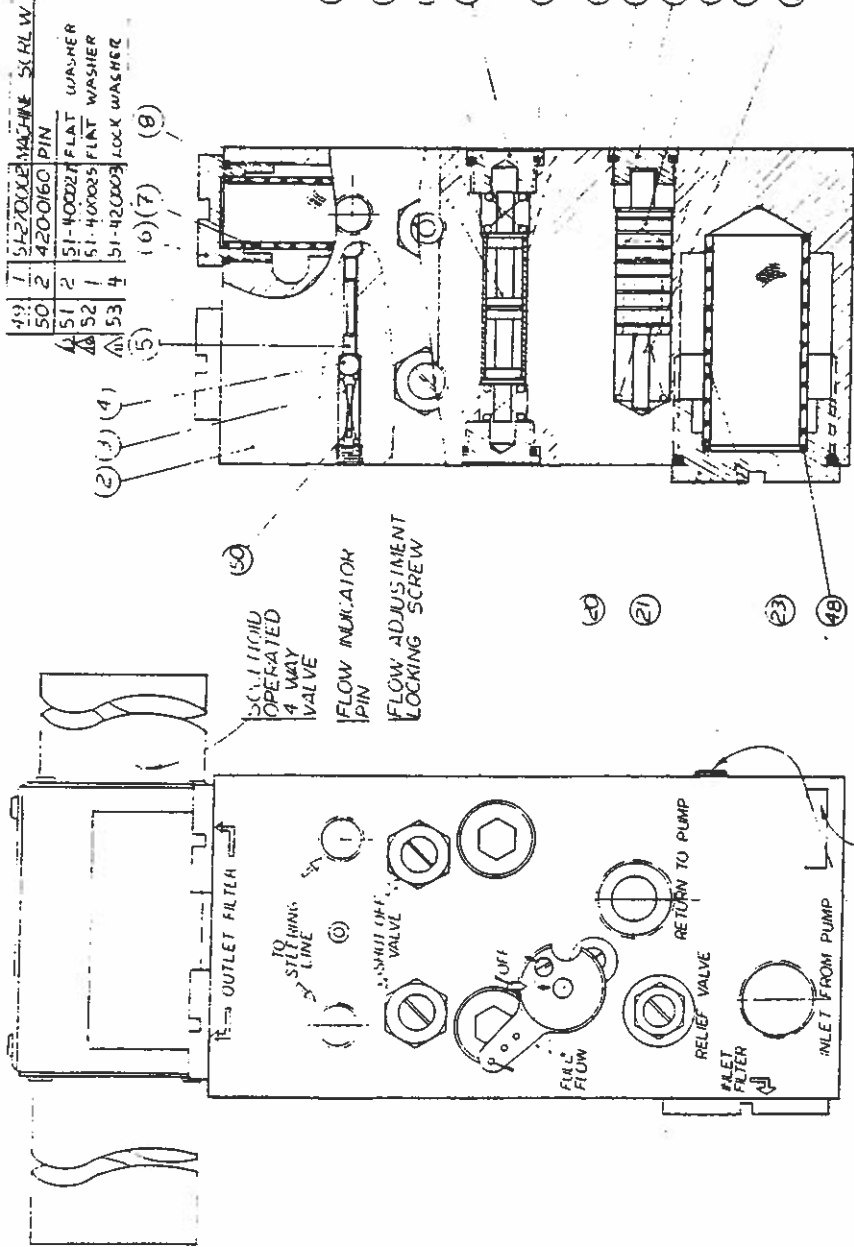
O-RING (28)



O-RING (44)



O-RING (20)



NO	QTY	PART NO.	DESCRIPTION
1	1	11-106222	O-RING 222
2	1	51-500003	NUT 5/16 NC
3	1	21-3000104	BALL
4	1	91-703034	LABEL
5	1	420-0141	BALL CUP
6	1	31-100008	SPRING
7	1	10-800003	SEAL WASHER
8	1	51-500021	NUT
9	1	420-0159	ADJUSTING SCREW
10	1	420-0217	WASHER
11	1	51-271001	SCREW
12	1	51-170003	SPRING
13	1	420-0063	SPOOL
14	1	11-106012	O-RING
15	1	420-0192	CONTROL KNOB
16	1	51-182001	COTTER PIN
17	1	31-100005	SPRING
18	1	21-300005	BALL
19	1	420-0070	BALL CASE
20	1	420-0213	ADJUSTING SCREW
21	1	10-800005	SEAL WASHER
22	1	51-200036	CAP SCREW
23	1	SEE BELOW	SOLENOID VALVE D6454
24	1	60-510007	FILTER ELEMENT
25	1	420-0187	FILTER CAP
26	1	11-106137	O-RING
27	1	31-100010	SPRING
28	1	420-0205	PISTON FILLER
29	1	420-0050	PISTON
30	1	11-106117	O-RING
31	1	420-0069	SLEEVE
32	1	11-106117	O-RING
33	1	420-0049	END CAP
34	1	31-100038	SPRING
35	1	51-402007	WASHER
36	1	420-0068	SPOOL
37	1	11-106125	O-RING
38	1	80-510012	FILTER ELEMENT
39	1	420-0186	FILTER CAP
40	1	420-0071	PISTON
41	1	21-300015	BALL
42	1	31-100060	SPRING
43	1	420-0212	NON FOLLOW UP BODY

**WAGNER ENGINEERING LTD.**

80 DODD PLACE, NORTH VANCOUVER B.C. CANADA V6M 2G2

MANUFACTURERS OF MARINE AUTOMATIC STEERING GEARS AND AUTOMATIC PILOTS

**UNIBLOCK #2 PART LISTS**

DATE	SCALE	QUOTE NO
MAR 81	3/4	1
DRAWING NO	REV	REV
2-419	3	3

**\* MANUFACTURERS RECOMMENDED SPARES**

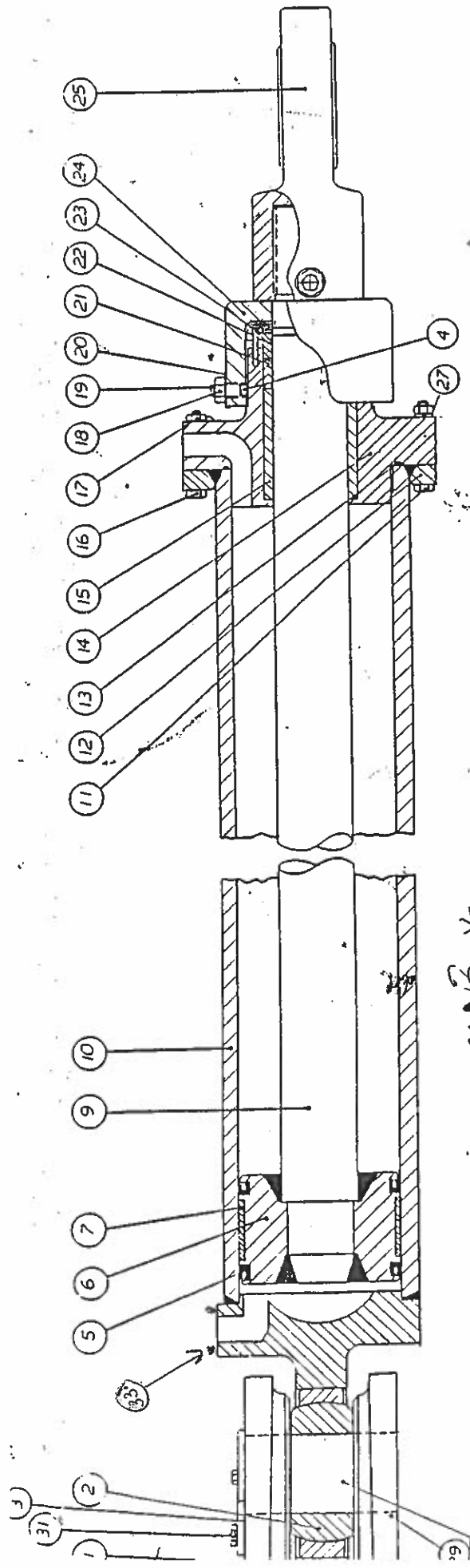
KIT NUMBER 119-0101

STANDARD ASSEMBLY NUMBER	VOLTAGE	SOLENOID VALVE PART NO.	SOLENOID COIL ONLY
400-0080	12 VDC	80-700021	80-300028
400-0081	24 VDC	80-700024	80-300029
400-0082	32 VDC	80-700025	80-300030
400-0083	110 VAC	80-700026	80-300031
400-0084	115 VAC	80-700027	80-300032
400-0085	1220 VAC	80-700028	80-300033

410-0004 FLOW CONTROL ASS'Y  
CONSISTS OF ITEMS 34, 36, 37

1/2" NPT PIPE PLUS PRESSURE GAUGE CONNECTION

WIRE FOR ATTACHING PUSH-PULL CABLE



SUB ASSEMBLIES	
PISTON & ROD SUB ASSY CONSISTS OF ITEMS: 6, 7, 9.	
BARREL SUB ASSY CONSISTS OF ITEMS: 1, 10, 12.	

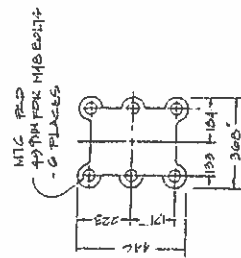
PARTS  
 119-0074  
 119-0074

119-0074  
 119-0074

CYLINDER MODEL ASSEMBLY NUMBER	L160-655 / -1010 600-0007 / -0008	L200-655 / -1047 600-0009 / -0010	L250-1039 600-0012	L280-842 / -1336 600-0013 / -0014	QTY	PART NUMBER
1 TAIL	1 620-0040	1 620-0035	1	1 620-0299		
2 SPHERICAL BEARING	2 21-500008	2 21-500009 *	2	2 21-500011		
3 LOCKING PLATE	2 620-0048	2 620-0072	2	2 620-0087		
4 LOCK PLUG	1 620-0266	1 620-0263	1	1 620-0263		
5 U-CUP	2 11-216014	2 11-216010	2	2 11-216012		
6 PISTON HEAD	1 620-0041	1 620-0286	1	1 620-0300		
7 SPLIT RING	1 620-0240	1 620-0287	1	1 620-0301		
9 PISTON ROD	1 620-0043/0052	1 620-0289 / 0297	1	1 620-0302 / 0311		
10 BARREL	1 620-0042/0051	1 620-0289 / 0298	1	1 620-0303 / 0312		
11 CAPSCREW	12 51-230017	12 51-230021	12	12 51-230023		
12 END FLANGE	1 620-0033	1 620-0290	1	1 620-0304		
13 O-RING	1 11-106260	1 11-106268 *	1	1 11-106277		
14 CYLINDER HEAD	1 620-0044	1 620-0291	1	1 620-0305		
15 ROD BEARING	1 620-0045	1 620-0292	1	1 620-0306		
16 CAPSCREW	2 51-230018	2 51-230020	2	2 51-230032		
17 NUT	14 51-500036	14 51-500034	14	14 51-500035		
18 NUT	3 51-500034	3 51-500035	3	3 51-500035		
19 SETSCREW	3 51-610028	3 51-610031	3	3 51-610033		
20 LOCK TAB	3 51-449010	3 51-449006	3	3 51-449006		
21 V-PACKING	1 11-406014	1 11-406016	1	1 11-406010		
22 PACKING GLAND RING	1 620-0315	1 620-0294	1	1 620-0308		
23 CAPSCREW	6 51-230006	6 51-230019	6	6 51-230010		
24 MECHANICAL STOP	1 620-0049	1 620-0295	1	1 620-0309		
25 CLEVIS	1 620-0050	1 620-0296	1	1 620-0310		
26 LOCKWASHER	14 51-430019	14 51-430020	14	14 51-430022		
28 MOUNTING PAD	1 620-0277	1 620-0278	1	1 620-0280		
30 MOUNTING PIN	1 610-0029	1 610-0030 *	1	1 610-0032		
31 CAPSCREW	2 51-230014	2 51-230014	2	2 51-230024		
32 Seal Kit (5 & 21)		1 119-0074				
33 Seal Kit		2 C-3-602-33				
34						
35						

DETAIL	QUANTITY	DESCRIPTION	MATERIAL
<b>WAGNER ENGINEERING LTD.</b> 48 GOSWICK PLACE, NORTH VANCOUVER, B.C. CANADA V1M 3G2 Manufacturers of MARINE HYDRAULIC STEERING GEARS and AUTOMATIC PILOTS			
TITLE: MODEL CYLINDER PARTS LIST FOR L-160, L-200, L-250, L-280			
DATE	SCALE	QUOTE NO.	REV.
5.1. AUG 80	1/8" = 1"	NTS	3-602 05
DRAWING NO. 3-602 05 QUOTE NO. 3-602 05			





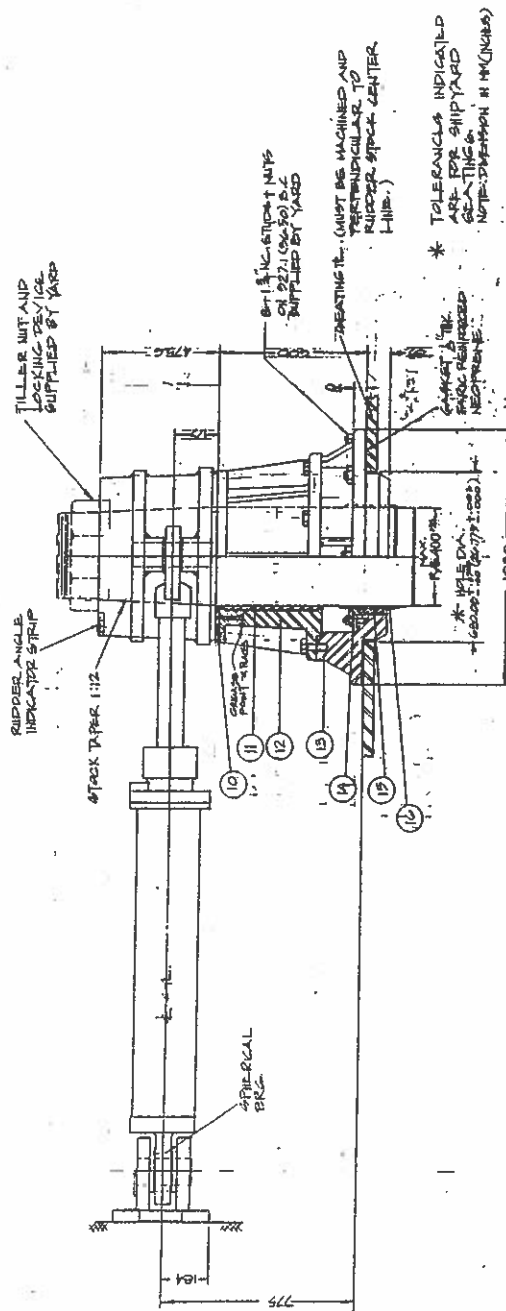
RUPTER STOCK PR. (MM)	KEY SIZE 141 x 141	KEY MAT 54 INCH 40 x 20
370 - 400	100 x 70	

BOLT STRENGTH: 5.5 MKS P.D. (107 3/4" L x 1 1/2" DIA)  
YIELD P - 40 KSI / IN<sup>2</sup> (29000 PSI)  
UTS - 60 KSI / IN<sup>2</sup> (42000 PSI)

SPHERICAL BEARING pour ITEM 2 ET ITEM 8  
sont les mêmes voir C-3-602 ITEM 2

ITEM 2 - mounting pin: 7" long. X 4.25" dia  
P/N 21-500209

Item 8 - Tiller pin =  $9\frac{7}{8}$ " Long x  $4.25$ " dia.



1	1	MOUNTING PAD	SH.
2	2	MOUNTING PAD PN	SH.
3	3	TAIL BLOCK	CAST STL
4	4	CYLINDER	SH.
5	5	MCH. STOP	SH.
6	6	VISION STOP	SH.
7	7	CLIPPING	DUCT IRON
8	8	CLIPPING	SH.
9	9	THREE PIN	SH.
10	10	THREE PIN	SH.
11	11	BRACKET BRZ.	PLY
12	12	RADIAL BRZ.	BRZ.
13	13	HOUSING	DUCT IRON
14	14	CLAMP HOUSING	BRZ.
15	15	CLAMP THING	BRZ.
16	16	CRACKING	YAMAHA PIST
17	17	THREE CHOT SUPPLY BY WAGNER	BRZ.

[illegible]

SPHERICAL BEARINGS - # PICES

original GE.110 UK - 2RS

NEWBORN  
NEWBORN  
GE 110 ES-2RS (IKD#)

- FEEDRE  
AXIAL.

NAME \_\_\_\_\_

