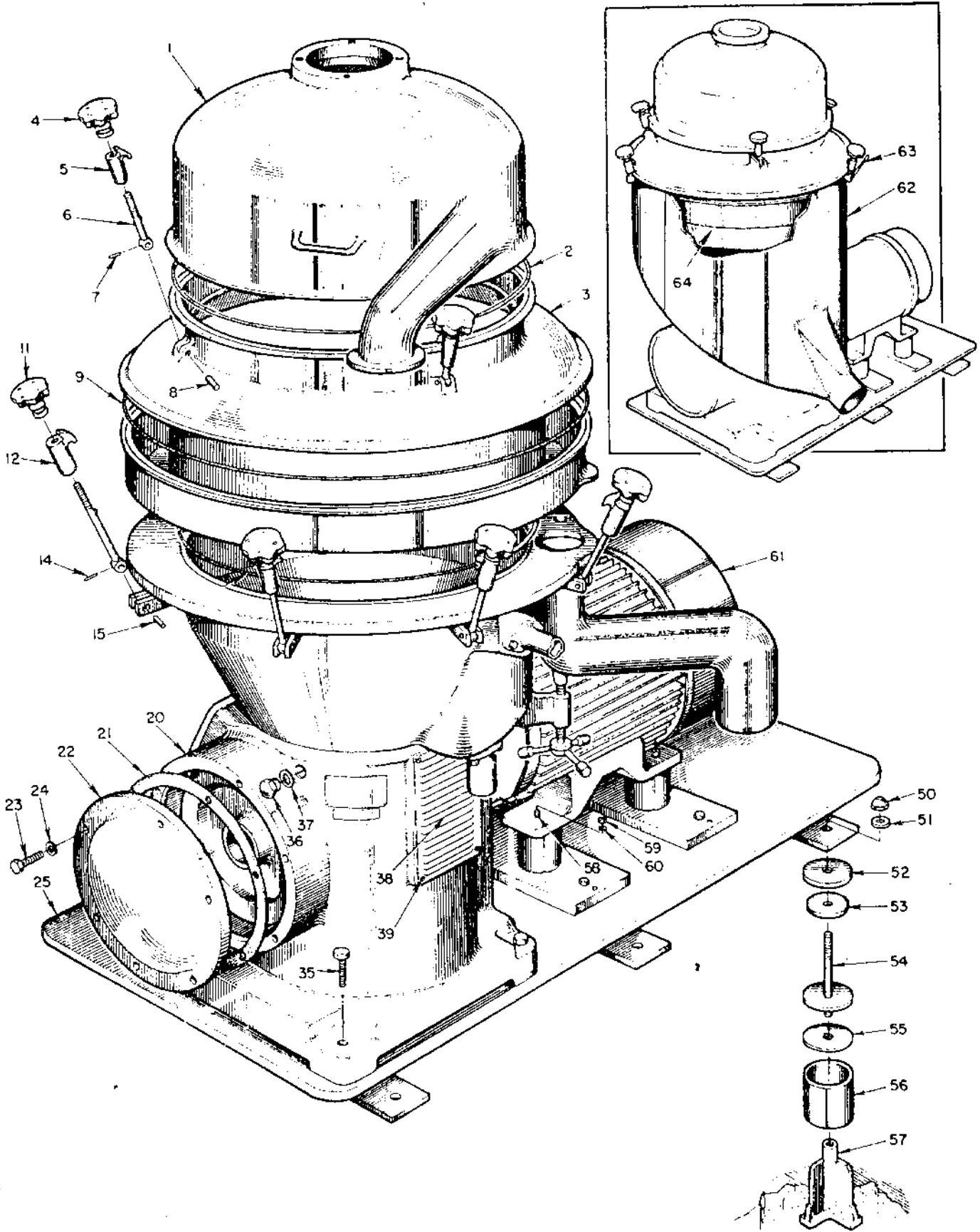


## **Hutchison-Hayes Separators, Inc.**

### **Model BRPX 213 Clarifier Parts List With Diagrams**

**P.O. Box 2965 ♦ Houston, Texas 77252**  
**3520 East Belt ♦ Houston, Texas 77015**  
**(713) 455-9600 ♦ Fax (713) 455-7753**

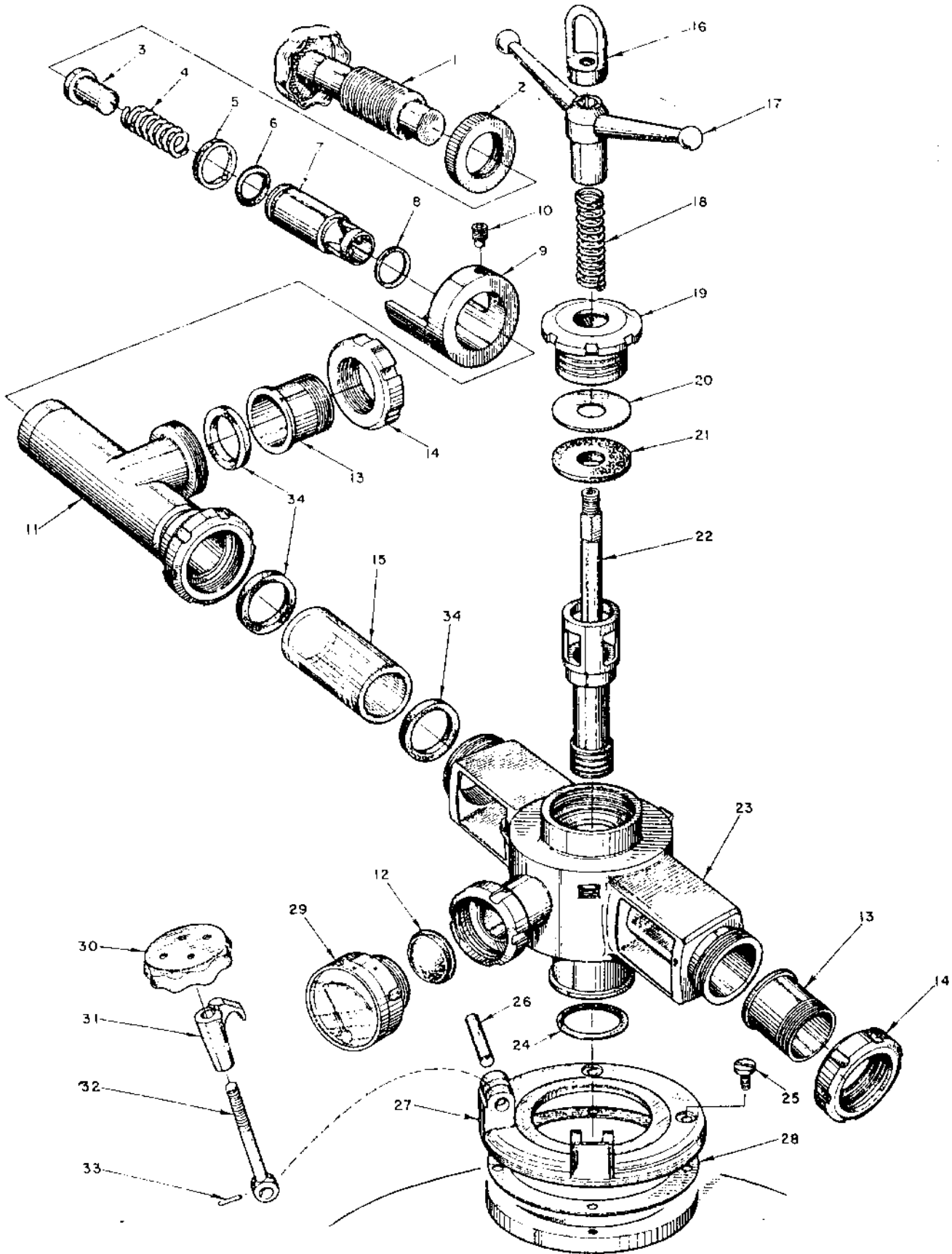
MAIN ASSEMBLY



## PARTS LIST - PLATE 1

KEY NO.	PART NO.	PART NAME	QTY.
1	39435	Frame Cover	1
2	37311	Rubber Ring	1
3	39160	Top Shell	1
4	39173	Handwheel	4
5	39188	Cover Clamp Lug	4
6	39123	Cover Clamp Stud	4
7	39420	Groov Pin	4
8	39434	Hinge Pin	4
9	39268	Rubber Ring	1
11	37428	Handwheel	8
12	38459	Cover Clamp Lug	8
14	39118	Groov Pin	8
15	39119	Hinge Pin	8
	39398	Screw-Bottom Cover to Frame	6
20	39043	Frame Bottom	1
21	37216	Gasket	1
22	39222	Worm Wheel Housing Cap	1
23	39100	Screw	6
24	38514	Washer	6
25	39200	Base	1
35	8000023-01	Screw	4
36	39364	Screw Plug	1
37	39147	Gasket	1
38	39297	Louver	1
39	39084	Screw	<u>6</u>
50	39349	Cap Nut	6
51	39111	Upper Base Cushion	6
52	39116	Lower Base Cushion Cap	6
53	39112	Lower Base Cushion	6
54	39453	Anchor Stud	6
55	39115	Height Adj. Washer	(as req'd.)
56	39136	Spacer Sleeve	6
57	39226	Anchor Foot	<u>6</u>
58	38837	Motor Stud	4
59	32309	Nut	4
60	10753	Lock Washer	4
61		Motor	1
62	8700630-80	Deep Sludge Cover	1
63	39463	Cover Clamp Stud	8
64	8700644-81	Inner Shell	1
	39275	Rubber Ring, Inner Shell	1
	39376	Screw, Inner Shell to Bot. Cover	8
	33529	Lock Washer	8

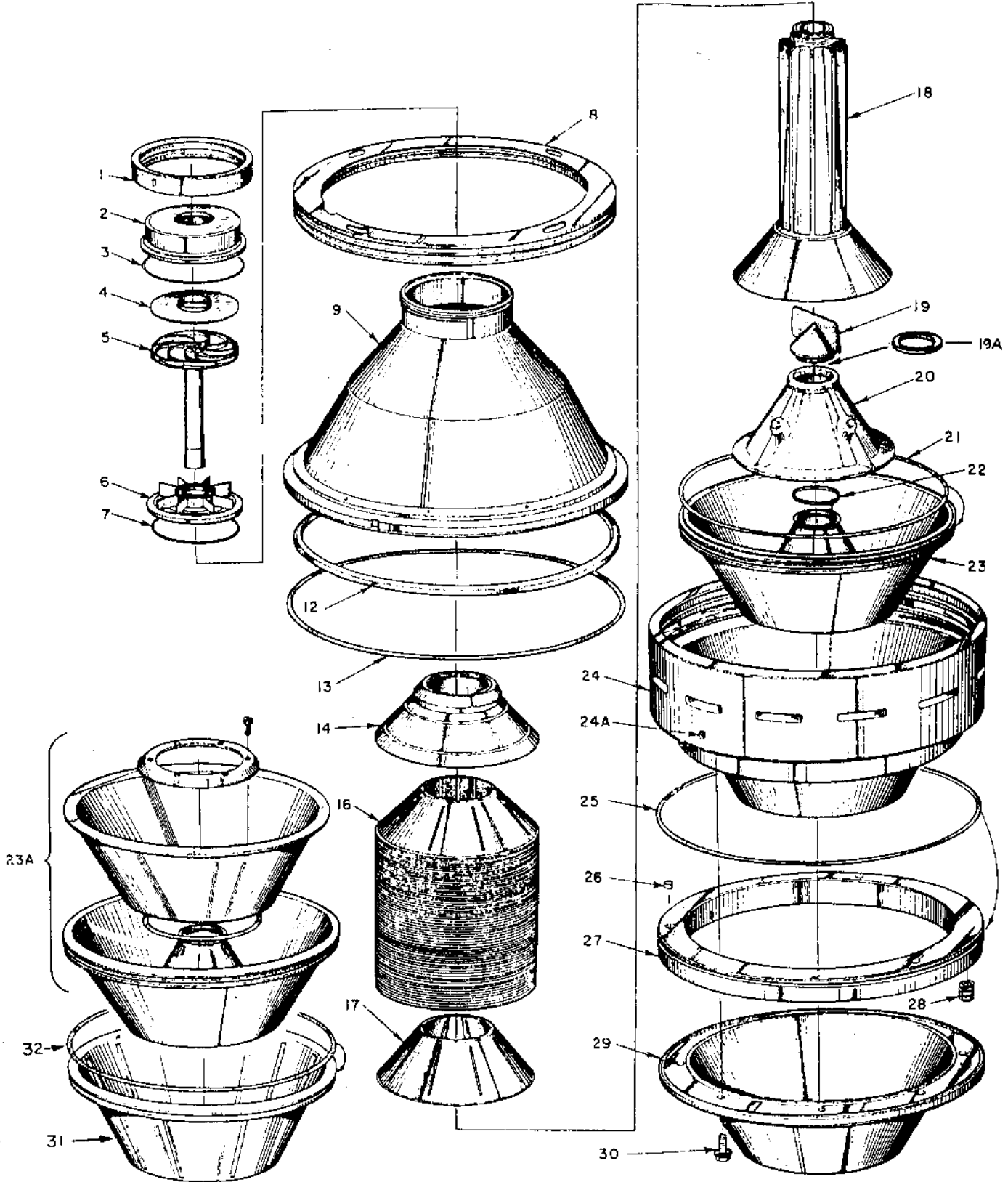
# INLET AND OUTLET DEVICE



## PARTS LIST - PLATE 2

KEY NO.	PART NO.	PART NAME	QUANTITY
1	39468	Adjusting Screw	1
2	39425	Lock Nut	1
3	39371	Thrust Plug	1
4	39462	Valve Spring	1
5	39373	Inner Nut	1
6	39461	Rubber Ring	1
7	39379	Regulating Valve	1
8	39370	Seal Ring	1
9	39405	Stop Ring	1
10	32056	Set Screw	1
11	39384	Valve Body	1
12	39273	Rubber Membrane	1
13	39484	Adapter Ferrule	3
14	39382	Coupling Nut	3
15	39235	Sight Glass	2
16	39194	Lifting Eye	1
17	39205	Handwheel	1
18	39459	Spring	1
19	39460	Cap Nut	1
20	39458	Seal Washer	1
21	39455	Seal	1
21A	39456	Spring	1
22	8700785-01	Feed Tube	1
23	39391	Inlet and Outlet Connect. Housing	1
24	39272	Rubber Ring	1
25	39094	Screw	4
26	39124	Hinge Pin	3
27	39474	Guide Ring	1
28	39475	Height Adjusting Ring (qs req'd.)	
29	39239	Pressure Gage	4
30	39173	Handwheel	3
31	39188	Clamping Lug	3
32	39123	Clamping Stud	3
33	39420	Cross Pin	3
34	39365	Gasket	5
	39888	Hose (Comp.)	2

# CLARIFIER BOWL WITH PARING DEVICE

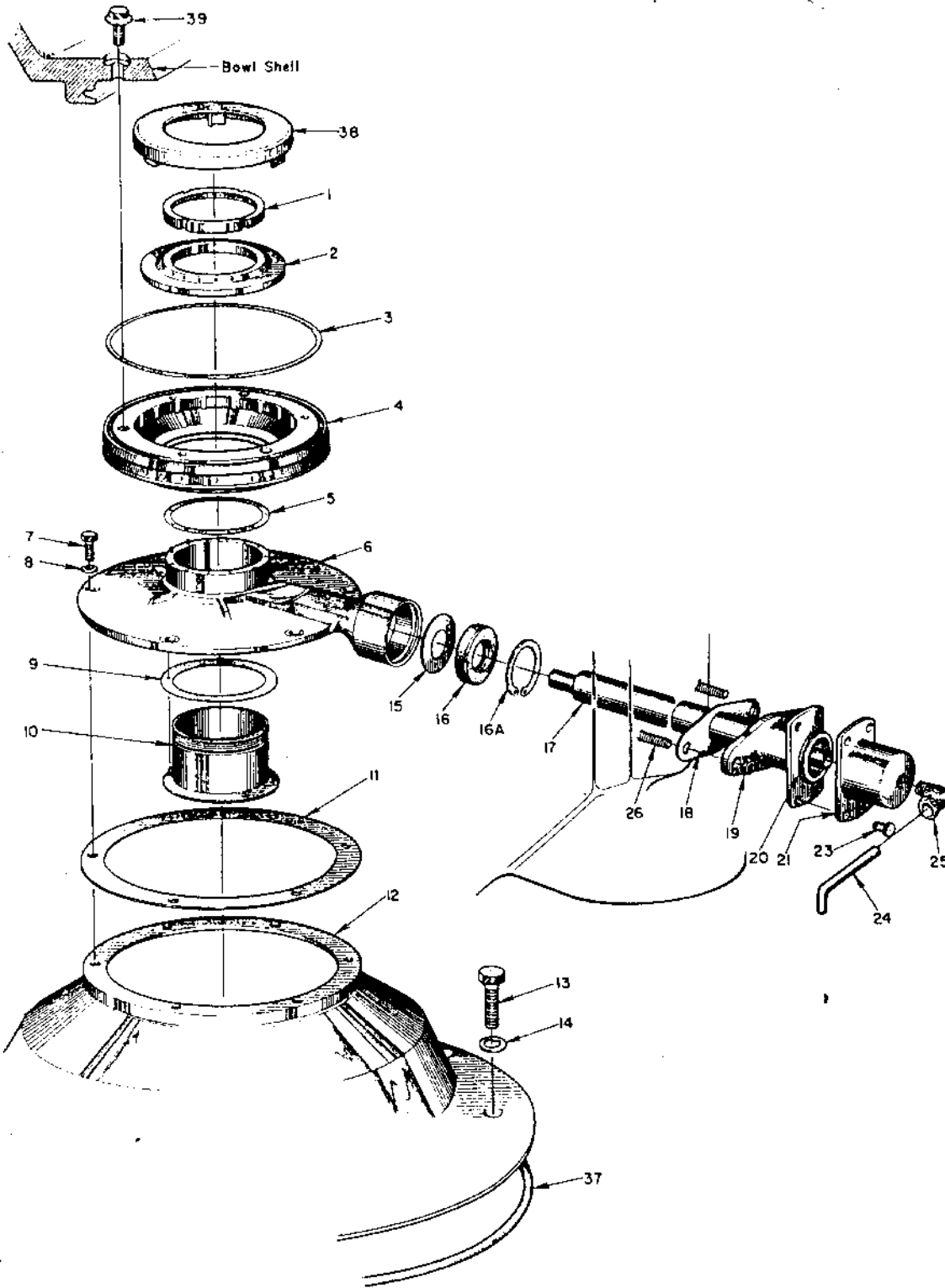


## PARTS LIST - PLATE 3

REF	PART NO.	QTY.	PART NAME
1	39478	1	Coupling Nut
2	8700200-01	1	Paring Chamber Top 39372
3	8200211-01	1	Gasket
4	39290	1	Paring Disc Top
5	39681	1	Paring Disc Bottom
6	8700201-01	1	Paring Chamber Bottom
7	8700212-01	1	Gasket
* 8		1	Coupling Ring
* 9		1	Bowl Top
12	39026	1	Seal Ring
13	39275	1	Rubber Ring
14	8700205-80	1	Top Disc
16	39212	149	Intermediate Disc
17	39214	1	Bottom Disc
*18		1	Tubular Shaft
19	39654	1	Spindle Cap Nut
19A	8200034-01	1	Gasket
*20		1	Tubular Shaft Cone
21	8700083-02	1	Rubber Ring
22	8700073-02	1	Rubber Ring
*23		1	Sliding Bowl Bottom
23A	39085	6	Screw
	39898	1	Lock Ring
	520559-1Y	1	Lining
	39816	1	Rubber Ring
*24		1	Bowl Shell
24A	8200145-01	1	Nozzle - 2 MM
25	8700170-02	1	Rubber Ring
26	8700225-01	3	Valve Plug
*27		1	Operating Slide
28	39408	18	Spring
*29		1	Spring Support
30	39039	8	Screw
31	39538		Level Control Ring
32	39276		Rubber Ring

\*IMPORTANT-- The clarifier bowl forms a balanced unit. If the bowl top, bowl shell, the tubular shaft or the large coupling ring need repair or replacement, the entire bowl should be sent back to the factory. The remaining parts can normally be replaced or repaired in the field.

# OPERATING WATER PARTS



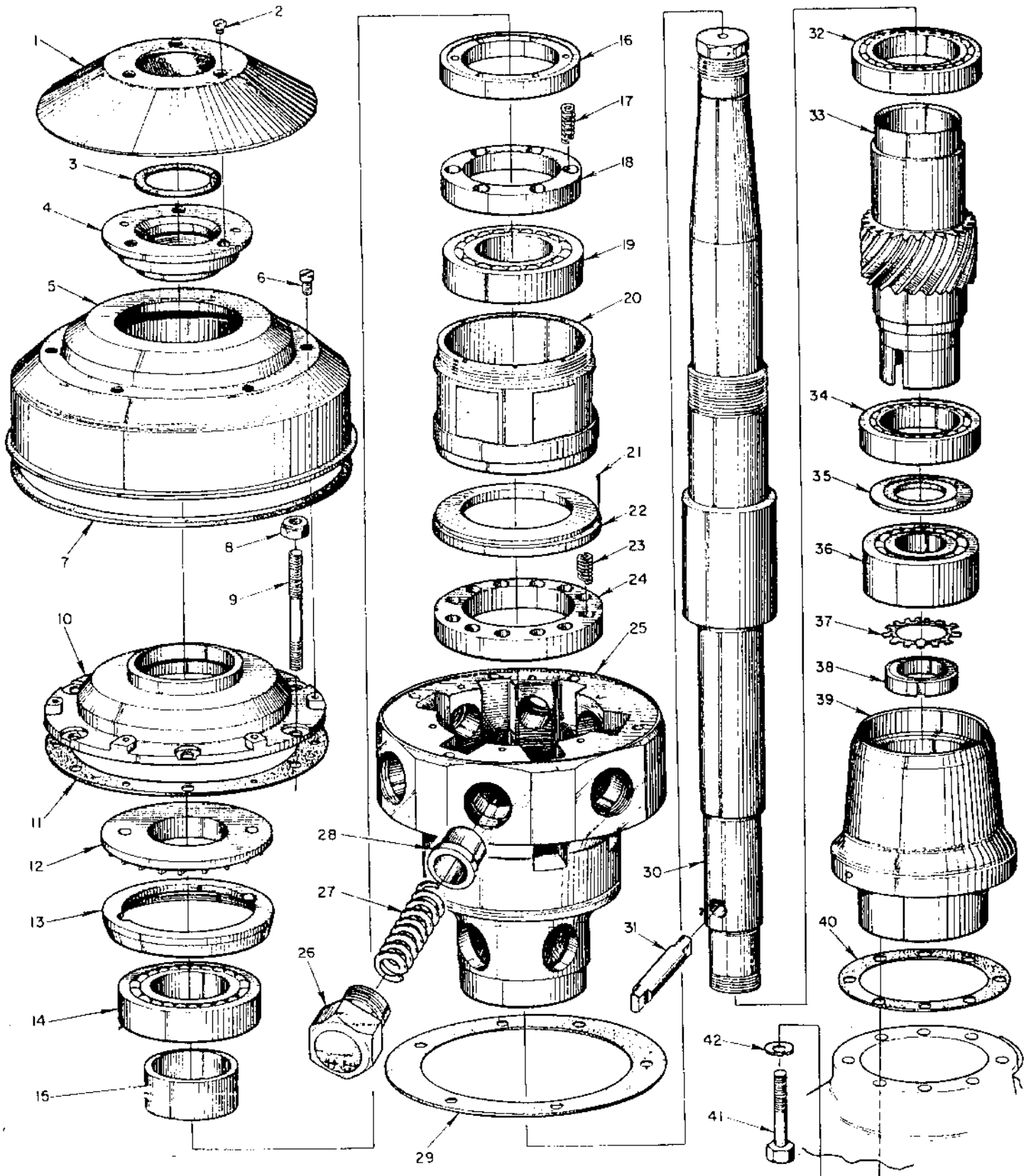


## PARTS LIST - PLATE 4

KEY NO.	PART NO.	PART NAME	QUANTITY
1	39137	Nut	1
2		Paring Disc	1
3	39283	Rubber Ring	1
4	39279	Distribution Ring	1
5	39363	Gasket	1
6	39399	Distribution Cover	1
7	32310	Screw	6
8	39148	Washer	6
9	39362	Gasket	1
10	39202	Sleeve	1
11	39473	Height Adjusting Ring (as req'd.)	
12	39231	Top Bearing Cover	1
13	39090	Screw	6
14	39148	Washer	6
15	39352	Guide Ring	1
16	39274	Seal Ring	1
16A	39354	Snap Ring	1
17	39249	Water Inlet Connection (for deep sludge cover)	1
18	20376	Gasket	1
19	30573	Nut	2
20	35333	Rubber Ring	1
21	37917	End Cap	1
23	30037	Screw	4
24	39536	Drain Tube	1
25	12182	Elbow	1
26	38920	Stud	2
37	39271	Rubber Ring (67566)	1
38	8700282-80	Collar	1
39	39039	Screw	3

→ B12 HEUBLIN WINE

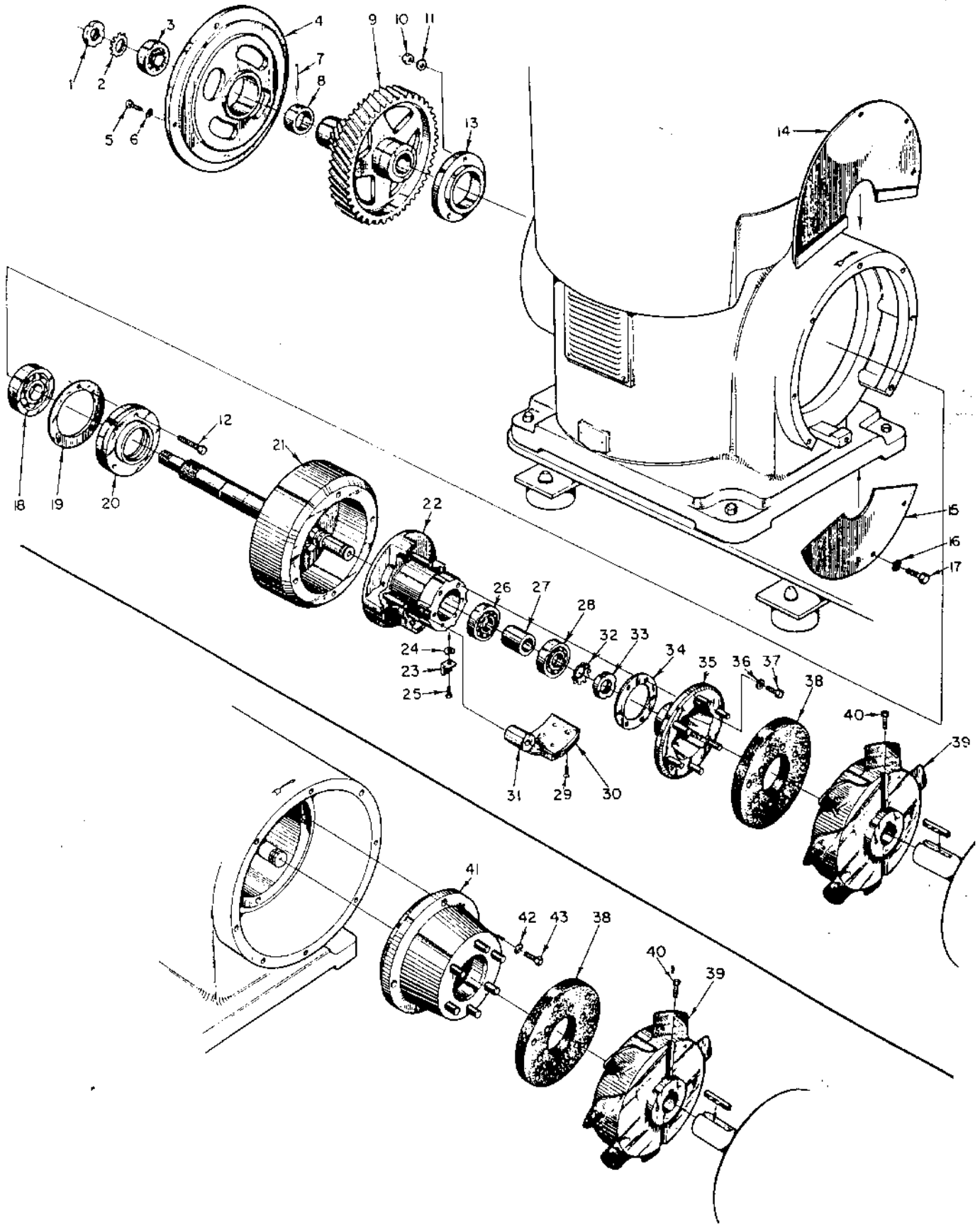
VERTICAL DRIVE



PARTS LIST - PLATE 5

KEY NO.	PART NO.	PART NAME	QUANTITY
1	39223	Throw-off Plate	1
2	39086	Screw	3
3	39270	Rubber Ring	1
4	39288	Protecting Cover	1
5	8700220-80	Drip Shield (Comp.)	1
6	39085	Screw	6
7	38567	Rubber Ring	1
8	39109	Nut	6
9	39101	Stud	6
10	39444	Top Bearing Plate Cover	1
11	36502	Gasket	1
12	39406	Oil Fan	1
13	39292	Lock Ring	1
14	(38507)	Ball Bearing, Upper	1 767107
15	38425	Spacer Sleeve	1
16	39046	Spring Holder	1
17	38509	Spring	6 767107
18	39046	Spring Holder	1
19	(37326)	Ball Bearing, Lower	1 688207
20	(39293)	Ball Bearing Housing	1 767107
21	36448	Cotter Pin	2 164307
22	39224	Wear Ring	1
23	36446	Spring	12 164307
24	39229	Spring Support	1
25	39281	Top Bearing Plate	1
26	36454	Top Bearing Adjust'g Screw	6
27	(36453)	Top Bearing Spring	6 667207
28	36452	Top Bearing Buffer	6 767107
29	36502	Gasket	1
30	39040	Bowl Spindle	1
31	39443	Drive Pin	1
32	(39242)	Quill Ball Bearing, Upper	1 688207
33	39069	Worm Quill	1
34	37328	Quill Ball Bearing, Lower	1 688207
35	39127	Cover Plate	1
36	37423	Spindle Ball Bearing	1
37	22756	Ball Bearing Lock Washer	1
38	39417	Ball Bearing Lock Nut	1 688207
39	39221	Step Bearing	1
40	39359	Gasket	1
41	39098	Screw	8
42	9611	Washer	8

# HORIZONTAL DRIVE



CONTROLLED TORQUE DRIVE PARTS

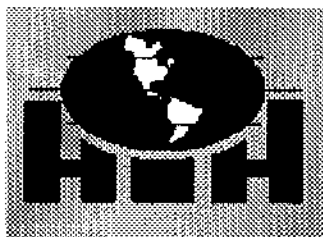
## PARTS LIST - PLATE 6

KEY NO.	PART NO.	PART NAME	QUANTITY
1	39423	Lock Nut	1
2	14602	Lock Washer	1
3	37524	Ball Bearing	1
4	39287	End Shield	1
5	39099	Screw	4
6	9611	Washer	4
8	8700470-01	Sleeve	1
9	8701178-01	Worm Wheel	1
10	39107	Nut	3
11	6478	Washer	3
12	39091	Screw	3
13	37287	Inner Cap	1
14	39448	Clutch Cover Plate, Upper	1
15	39449	Clutch Cover Plate, Lower	1
16	9611	Washer	8
17	39102	Screw	8
18	37424	Ball Bearing	1
19	39446	Gasket	1
20	37283	Outer Cap	1
21	39445	Worm Wheel Shaft and Friction Clutch Housing	1
22	37292	Friction Clutch Hub	1 703537
23	37203	Friction Weight Stop	4
24	6478	Lock Washer	4
25	37206	Screw	4
26	30765	Clutch Hub Ball Brg., Inner	1
27	37210	Sleeve	1
28	30293	Clutch Hub Ball Brg., Outer	1
29	37231	Screw	16
30	39410	Lining	4
31	39380	Friction Clutch Weight	4
32	14564	Lock Washer	1
33	(39418)	Lock Nut	1 674720
34	37207	Gasket	1
35	37286	Clutch End Coupling	1
36	6478	Washer	6
37	39092	Screw	6
38	37215	Rubber Cushion	1
39	39378	Motor End Coupling	1
40	39375	Set Screw	1
41	39593	Adapter	1
42	6478	Washer	4
43	39092	Screw	4

PARTS LIST - PLATE 7

KEY NO.	PART NO.	PART NAME	QUANTITY
1	38485	Brake Handle	1
2	39122	Pin	1
3	4528	Cotter Pin	1
4	39392	Brake Mounting Plate	1
5	39088	Screw	10
6	8700519-01	Washer	10
7	37441	Brake Spring	1
* 8	39120	Brake Stem	1
* 9	39357	Brake Shoe	1
*10	39419	Pin	1
*11	(39358)	Lining	1 65 227Y
*12	37231	Screw	3
13	39429	Oil Filler Cap	1
14	39146	Gasket	1
15	39427	Speed Indicator Shaft(comp.)	1
16	37228	Stop Collar	1
17	39407	Groov Pin	1
18	39149	Sleeve	1
19	39087	Stop Screw	1
20	39428	Pinion	1
21	39411	Taper Pin	1
22	39361	Gasket	1
23	39360	Gasket	2
24	39280	Stabilizer	1
25	36496	Sight Glass	1
26	39367	Gasket	1
27	39394	Retaining Ring	1
28	39083	Screw	3
29	30253	Gasket	1
30	39426	Plug	1
31	39393	Speed Ind. Mount Plate	1

\*Included in Brake Shoe (complete), Part No. 39356

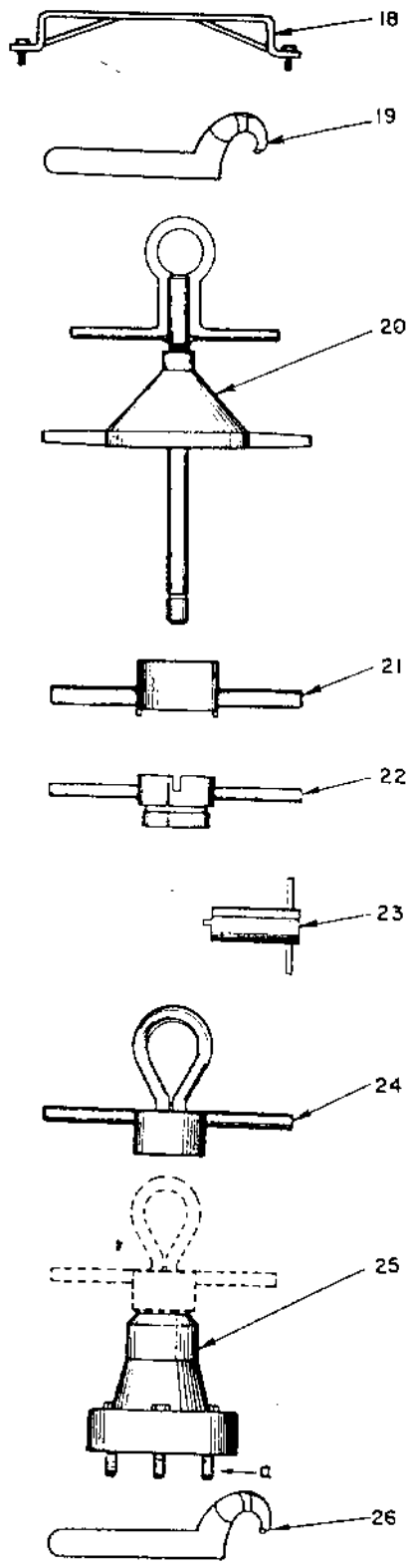
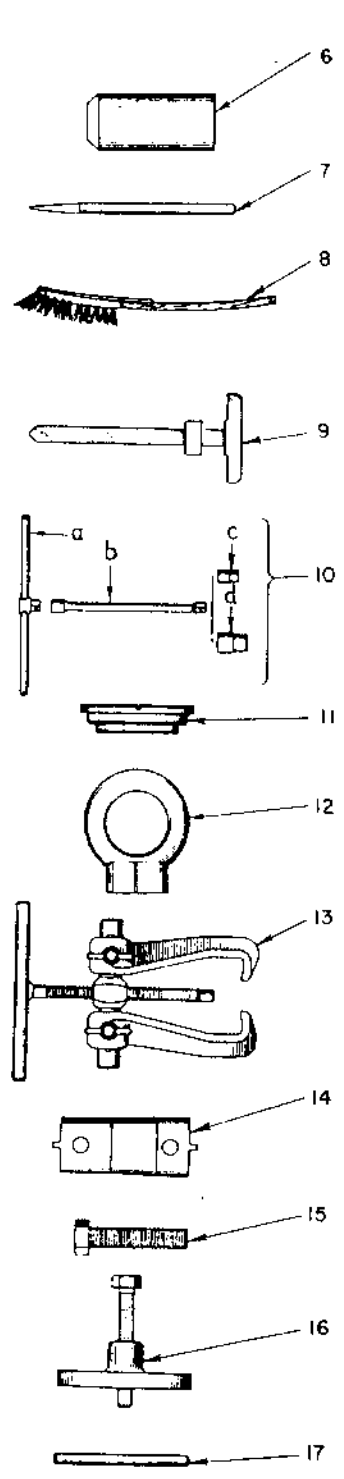
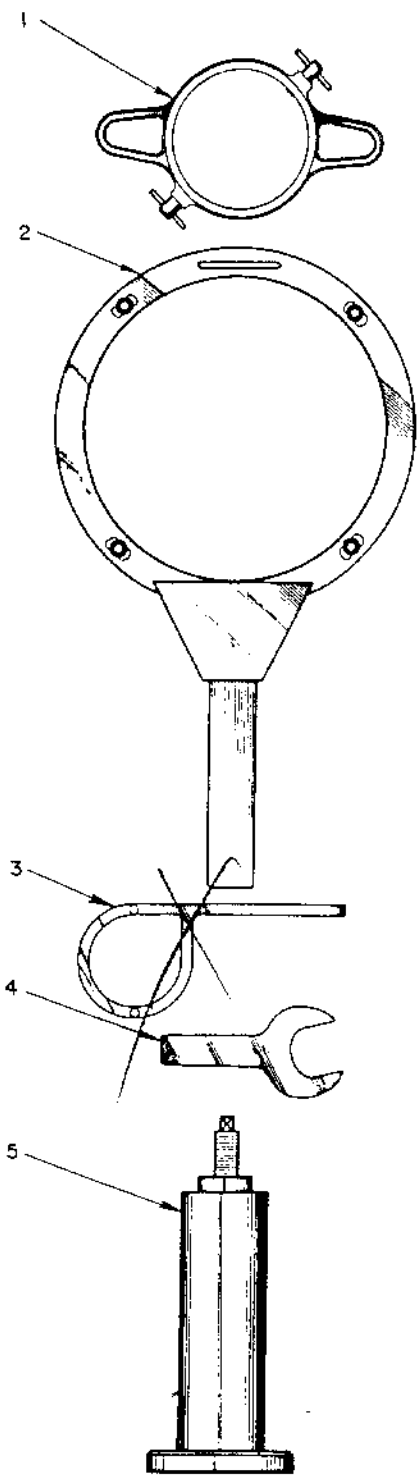


## **Hutchison-Hayes Separators, Inc.**

**This is a Spacer Page**

**P.O. Box 2965 ♦ Houston, Texas 77252**  
**3520 East Belt ♦ Houston, Texas 77015**  
**(713) 455-9600 ♦ Fax (713) 455-7753**

TOOLS

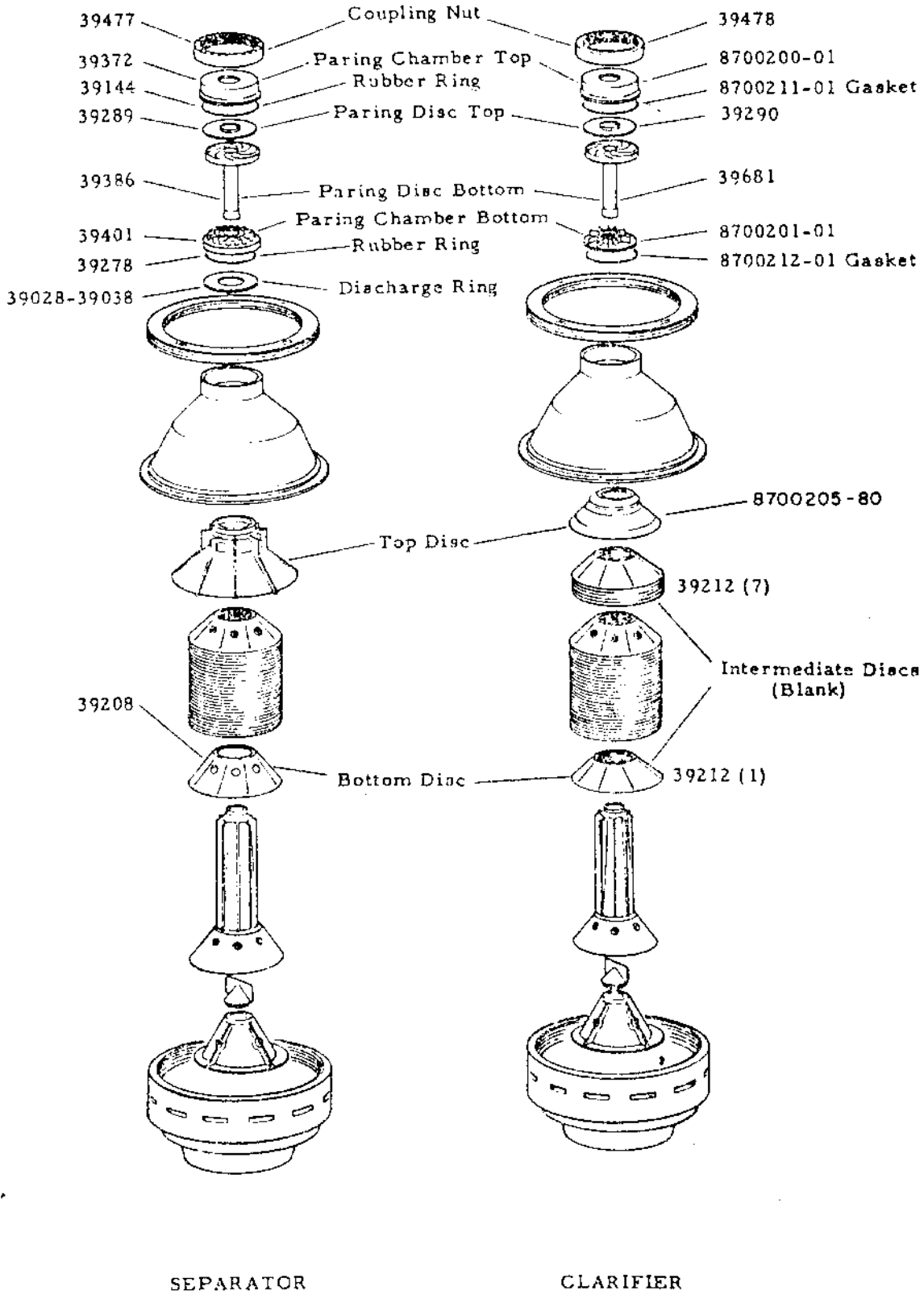




## PARTS LIST - PLATE 8

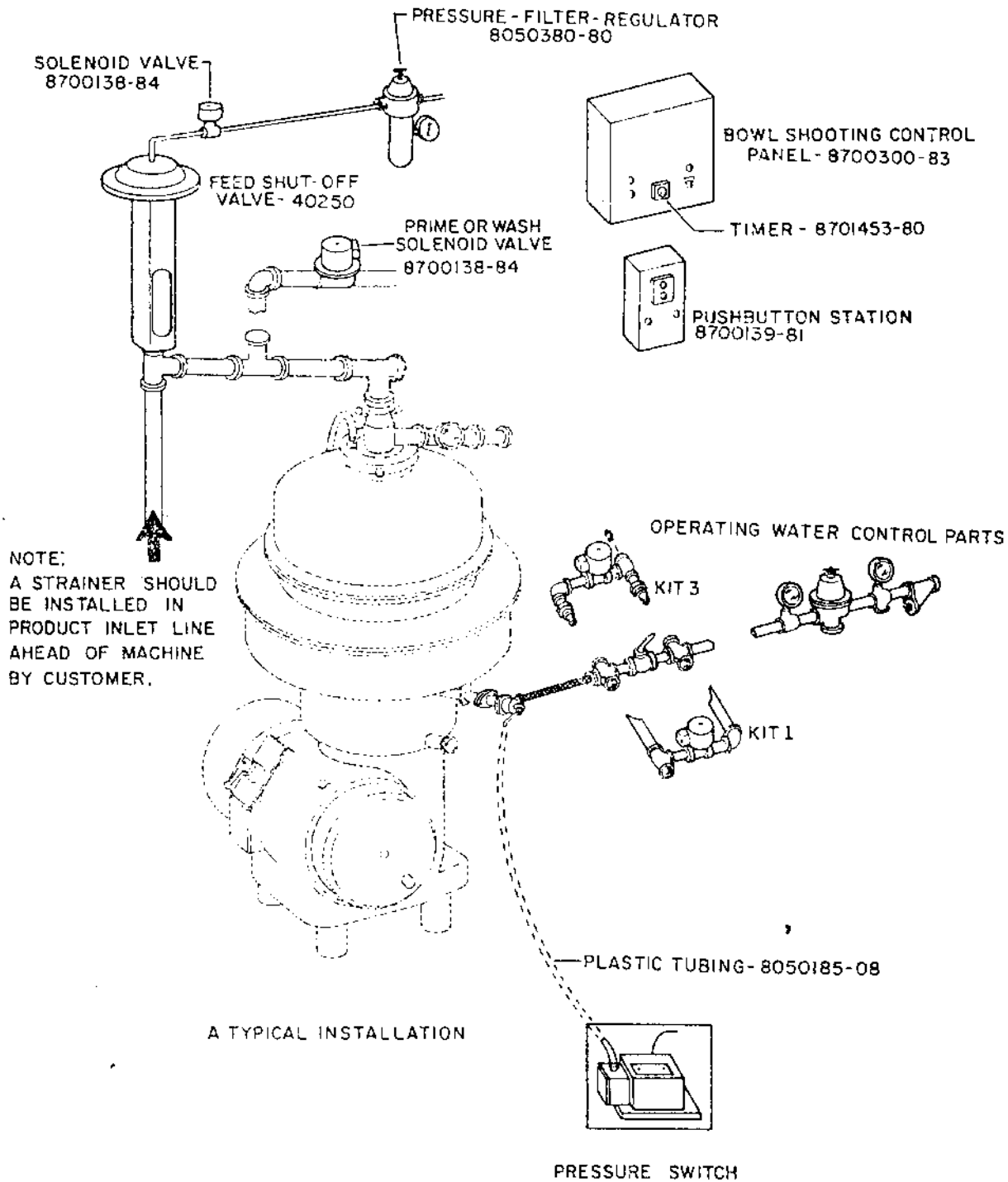
KEY NO.	PART NO.	PART NAME
1	39526	Bowl Top Coupling Nut Wrench
2	39403	Coupling Ring Wrench
3	38433	Ball Bearing Lock Ring, Oil Fan and Protecting Cover Wrench
4	38548	Top Bearing Buffer Wrench
5	39495	Top Ball Bearing Extractor
6	37469	Clutch Ball Bearing Mounting Tool
7	38543	Punch
8	8300636-01	Bowl Brush
9	39519	Operating Paring Disc Height Adjustment Templet
10a	39500	Socket Handle
10b	39501	Socket Extension
10c	39486	Socket, 15mm ( $1\frac{1}{2}$ " )
10d	39487	Socket, 21mm ( $1\frac{3}{8}$ " )
11	39532	Clamp Plate - Pull Worm Quill Ball Bearing
12	39515	Bowl Spindle Lifter
13	8700477-80	Ball Bearing Extractor
14	38544	Worm Wheel and Clutch Ball Bearing Lock Nut Wrench
15	39533	Worm Wheel Shaft Ball Bearing Jack Screw
16	39055	Friction Clutch Hub Extractor
17	39537	Bowl Top Seal Ring Drive Out Pin
18	8701155-80	Level Control Ring Lifter
19	39541	Inlet and Outlet Connection Adjustment Hook Spanner
20	39918	Bowl Top Lifter
21	39517	Sliding Bowl Bottom Lifter
22	39657	Tubular Shaft Cone Lifter and Spindle Cap Nut Wrench
23	39424	Wrench for Inner Nut of Regulating Valve
24	39507	Tubular Shaft Lifter
25	39498	Bowl Shell Lifter
26	39483	Ball Bearing Lock Nut Hook Spanner
a	39514	Bowl Shell Screw

DE LAVAL MODEL BRPX 213 CONVERSION  
FROM SEPARATOR TO CLARIFIER FUNCTION



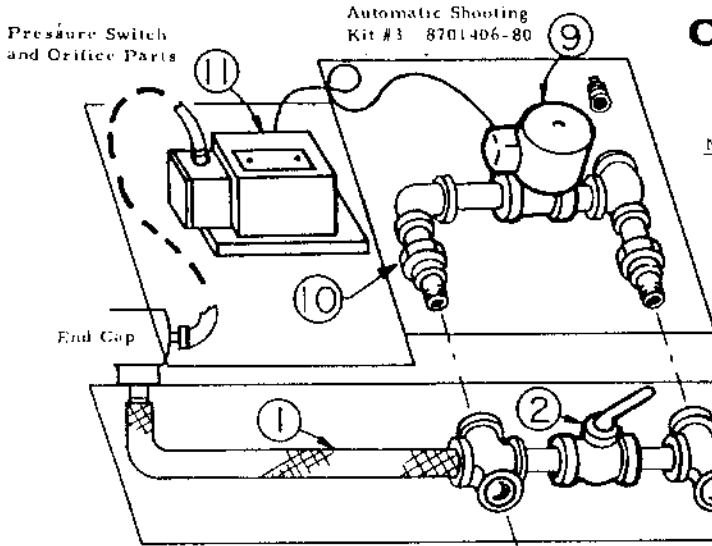
After converting Separator to Clarifier, there should be no discharge from the spout on the frame cover. The clarified effluent is carried away by the paring device.

# FEED & BOWL SHOOTING CONTROLS



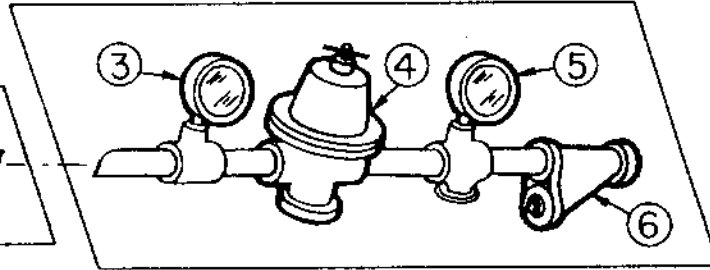
# OPERATING WATER MANIFOLD

(FOR OPTIONS 1 AND 2)

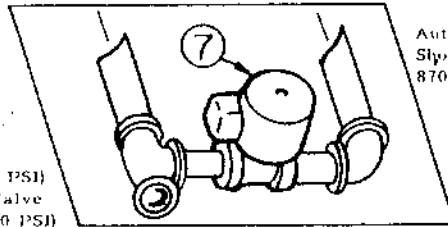


**NOTE:**  
For manual operation only.  
use Kits 8701402-80 and  
8701403-80 only.

Strainer and Regulator Kit 8701403-80



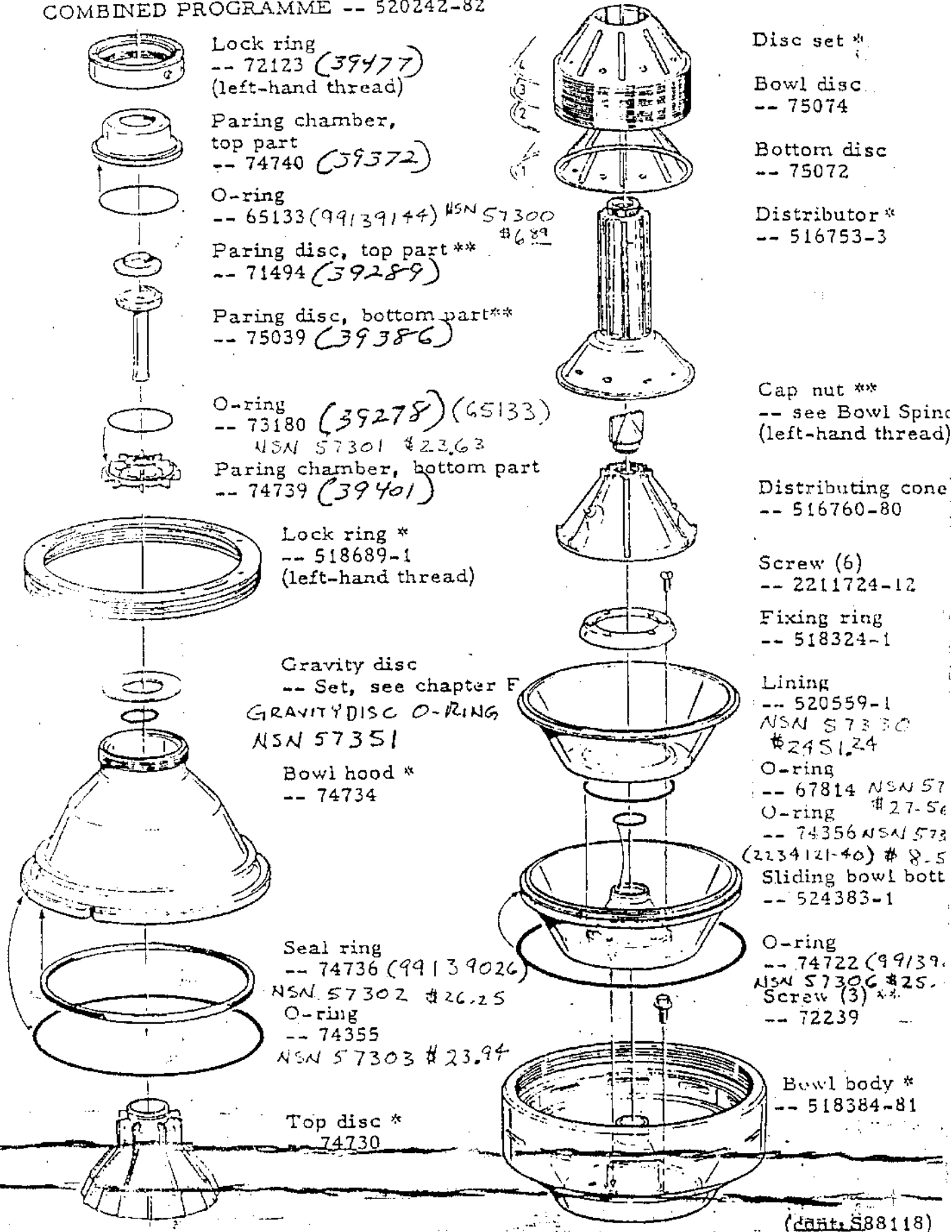
Standard Control  
Kit 8701402-80



Automatic Blow  
Stopping Kit #1  
8701404-80

P. N.	Part
1. 8701401-01	3/4" Flexible Hose
2. 37938	1/2" Bronze Cock
3. 8400097-81	3/4" Pressure Gage (0-60 PSI)
4. 8701224-80	3/4" Pressure Reducing Valve
5. 8400097-80	3/4" Pressure Gage (0-100 PSI)
6. 8700975-81	3/4" Y-Strainer
7. 8700138-82	3/4" Solenoid Valve
9. 37932	1/2" Solenoid Valve
10. 8701225-01	1/2" Blank Orifice Plate (Drilled and inserted in union of Kit #3 when required. See page 14A).
11. 8050381-80	Pressure Switch
12.	Hook-up for Cover Flush Line

PURIFIER BOWL WITH EROSION-PROTECTED SLIDING BOWL BOTTOM FOR COMBINED PROGRAMME -- 520242-82



Lock ring  
-- 72123 (39477)  
(left-hand thread)

Paring chamber,  
top part  
-- 74740 (39372)

O-ring  
-- 65133 (99139144) NSN 57300 #6.89

Paring disc, top part\*\*  
-- 71494 (39289)

Paring disc, bottom part\*\*  
-- 75039 (39386)

O-ring  
-- 73180 (39278) (65133)  
NSN 57301 #23.63

Paring chamber, bottom part  
-- 74739 (39401)

Lock ring \*  
-- 518689-1  
(left-hand thread)

Gravity disc  
-- Set, see chapter F  
GRAVITY DISC O-RING  
NSN 57351

Bowl hood \*  
-- 74734

Seal ring  
-- 74736 (99139026)  
NSN 57302 #26.25  
O-ring  
-- 74355  
NSN 57303 #23.94

Top disc \*  
-- 74730

Disc set \*

Bowl disc  
-- 75074

Bottom disc  
-- 75072

Distributor \*  
-- 516753-3

Cap nut \*\*  
-- see Bowl Spine  
(left-hand thread)

Distributing cone  
-- 516760-80

Screw (6)  
-- 2211724-12

Fixing ring  
-- 518324-1

Lining  
-- 520559-1  
NSN 57330  
#245.124

O-ring  
-- 67814 NSN 57  
#27.56

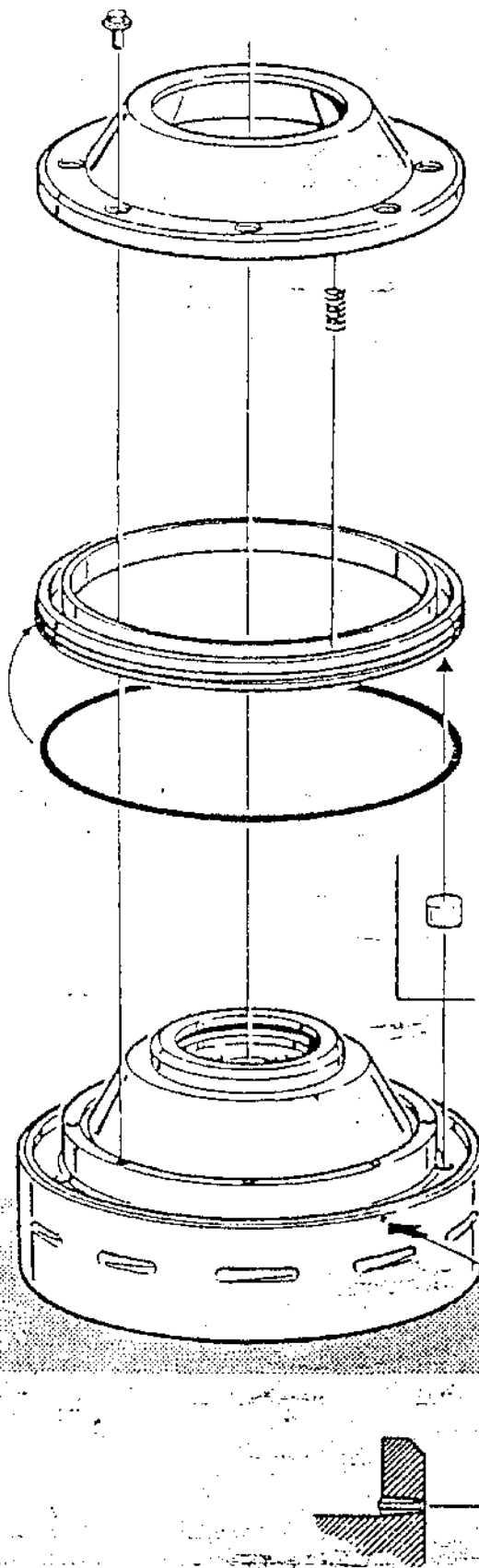
O-ring  
-- 74356 NSN 573  
(2134121-40) # 8.5

Sliding bowl bott  
-- 524383-1

O-ring  
-- 74722 (99139)  
NSN 57306 #25.  
Screw (3) \*\*  
-- 72239

Bowl body \*  
-- 518384-81

(Bowl for PARTIAL or QUICK TOTAL DISCHARGE, page 2)



Screw (8)  
-- 72239

Spring support  
-- 74718

Spring (18)  
-- 68657

NSN 57331

Operating slide  
-- 74716

Seal ring  
-- 74355

NSN 57303

\$23.94

Valve plug (3)  
-- 71468

(39176) NSN 57332

Bowl body\*  
-- 75079

Nozzle  
-- 515133-1

~~Exchange necessitates rebalancing - send the COMPLETE bowl to an ALFA-LAVAL/DE LAVAL representative.~~

\*\* Not included in the complete-unit number.