

Air Eliminators And Combination Air Eliminators-Strainers

Flowmeters will measure, not only liquid but, entrained air and vapor in the liquid. Therefore, to insure correct measurement, air and vapor must be removed before the liquid enters the meter. Brodie Air Eliminators are designed to provide separation, elimination and prevention of air in piping systems for a variety of installations and conditions.

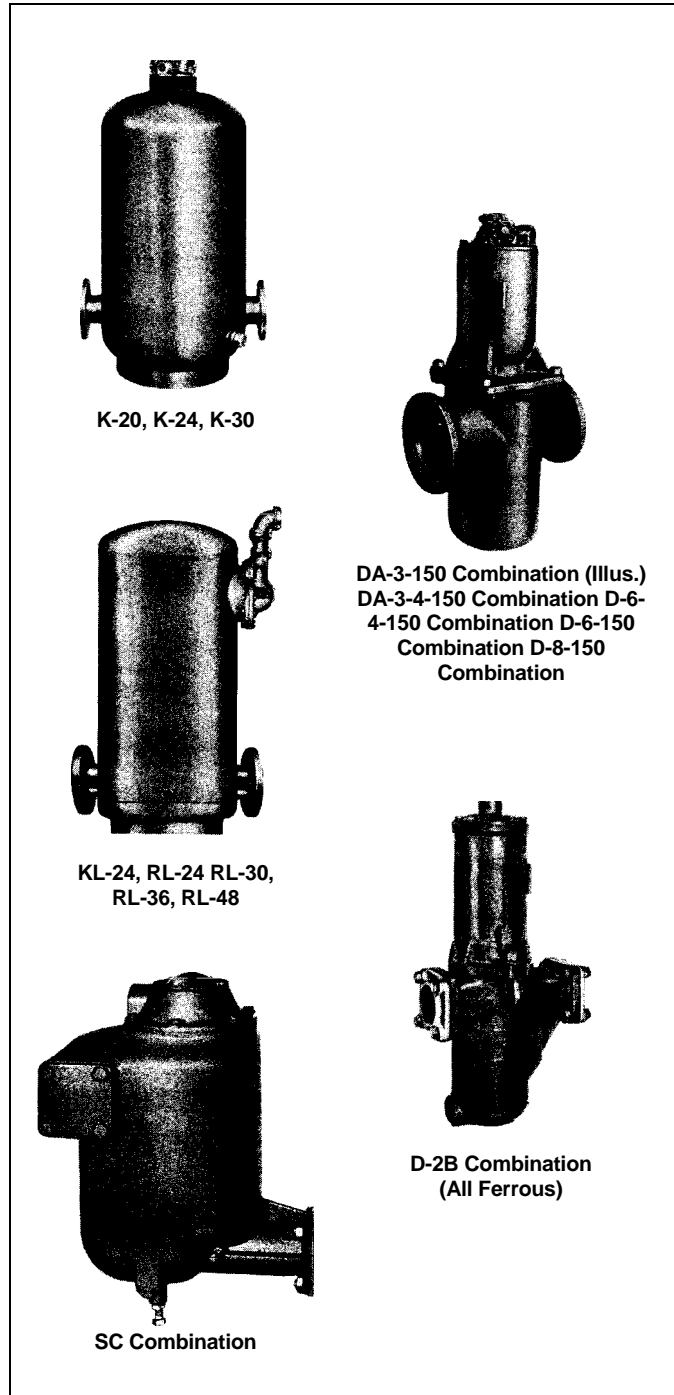
This parts list contains the necessary parts required to make up any standard unit covered within this bulletin. For items that are not listed or for additional information, consult factory.

GUARANTEE

If at any time, within one year after shipment but not thereafter, it is proved that any part of the equipment furnished by us was defective when shipped by us, we will repair or replace the same free of charge F.O.B. our plant. Notice of this claim must be made to us within one year after delivery. Our liability is limited to replacement of such defective parts or equipment. There are no guarantees or warranty expressed or implied other than those herein specifically mentioned.

Brodie Meter Co., LLC shall not, in any event, be liable for any consequential damages, secondary charges, expenses for erection or disconnecting or losses resulting from any alleged defect in the apparatus.

It is understood that corrosion or erosion of material is not covered by our guarantee.



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Strainer Basket Data (Special Mesh Available at Additional Cost)

Combination Model	Hold Down Ring Assembly	Inner Screen Only Mesh of Screen					
		10	20	40	60	80	100
SC	-	-	-	178214	178226	178218	-
D213	175380	-	175321	175330	-	175350	-
DA-3-150	175480	175405-010	175405-020	175430	175430	175450	175460
DA-3-4-150	175480	175405-010	175405-020	175430	175440	175450	175460
D-6-4-150	-	RM-33600	RM-33800	RM-34000	RM-34100	RM-34300	RM-34400
D-6-150	-	RM-33600	RM-33800	RM-34000	RM-34100	RM-34300	RM-34400
D-8-150	-	RM-33600	RM-33800	RM-34000	RM-34100	RM-34300	RM-34400

Combination Model	Complete Strainer Mesh of Basket Screen						Basket Frame
	10	20	40	60	80	100	
SC	178200-010	178200-020	178200-040	178200-060	178200-080	-	-
D213	175315	175320	175325	175335	175345	175355	175370
DA-3-150	175410-010	175420	175425	175435	175445	175455	175470
DA-3-4-150	-	175420	175425	175435	175445	175455	175470
D-6-4-150	178720-010	178720-020	178730	178735	178740	178745	178720-001
D-6-150	178720-010	178720-020	178730	178735	178740	178745	178720-001
D-8-150	178920-010	178920-020	178930	178935	178940	178945	178720-001

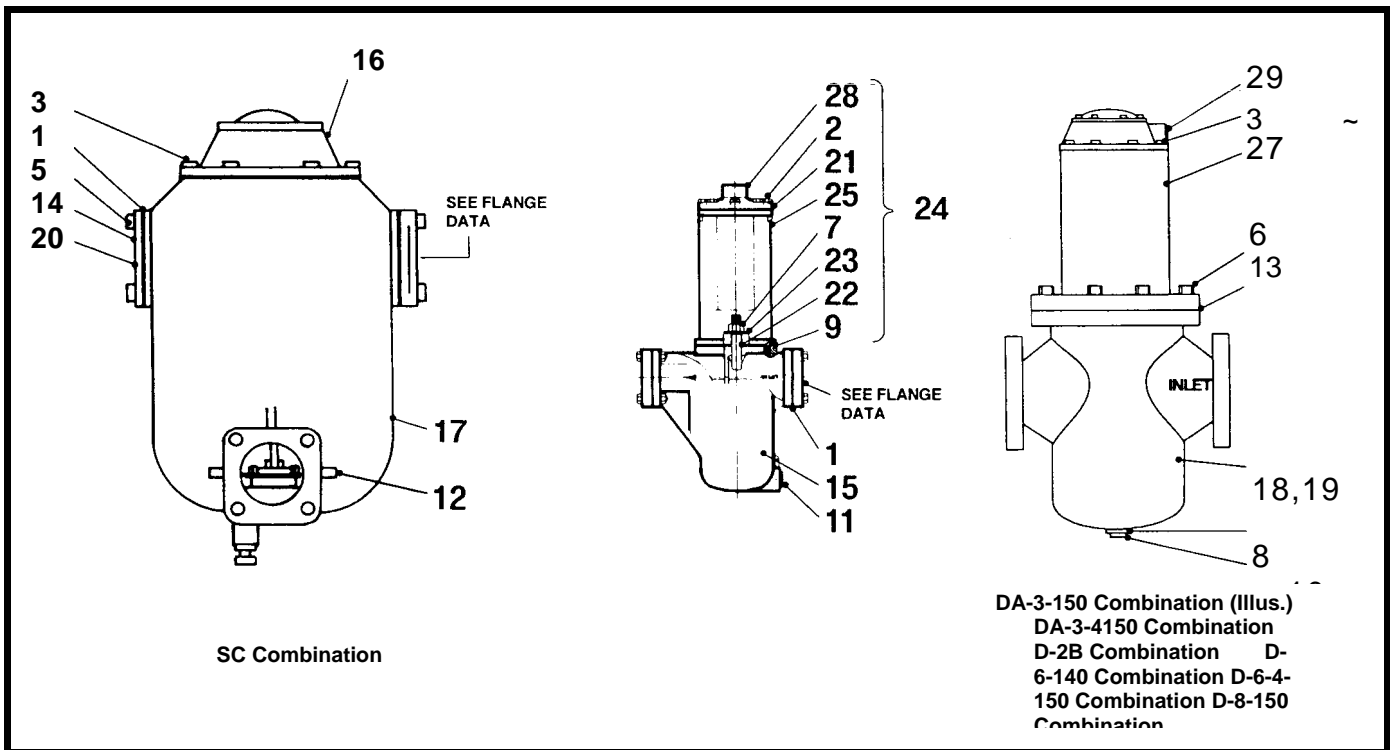


Figure 1 Combination Air Eliminators/Strainers

Item	Description	Quantity Required	Part Number
1	Flange Gasket	2	51307
2	Screw	8	150727
3	Screw	6	150744
5	Bolt	4	150785
6	Nut (DA-3-150 Combination and DA-3-4-150 Combination)	4	151553
7	Nut	2	151556
8	O-Ring (DA-3-150 Combination and DA-3-4-150 Combination)	1	157010
9	O-Ring	1	152081
10	3/4" Strainer Pipe Plug (DA-3-150 Combination and DA-3-4-150 Combination)	1	154707
11	Pipe Plug	1	154717
12	Pipe Plug 1/4"	2	154783
13	O-Ring (DA-3-150 Combination and DA-3-4-150 Combination)	1	157008
	Cover Gasket (D-6-4-150 Combination and D-6-150 Combination)	1	178709
	Cover Gasket (D-8-150 Combination)	1	82884
14	Blind Flange	1	160034
15	Strainer Housing	1	175391
16	Head Assembly	1	178230
17	Housing	1	178219
18	Strainer Housing (DA-3-150)	1	178530
19	Strainer Housing (DA-3-4-150)	1	178560
	Strainer Housing (D-6-4-150)	1	178710
	Strainer Housing(D-6-150)	1	178810
	Strainer Housing (D-8-150)	1	178910
21	Gasket	1	180487
22	Hook Bolt	2	180512
23	Washer	2	151867
24	ET-28 Air Eliminator	1	180535
25	ET-2B Housing	1	180536
26	Air Eliminator Assembly (Conversion to Combination) DA-3-150 Combination and DA-3-4-150 Combination	1	180580
	D-6-4-150 Combination and D-6-150 Combination	1	178865
	D-8-150 Combination	1	179025
27	Air Eliminator Housing (DA-3-150 and DA-3-4-150)	1	180581
28	Air Eliminator Head	1	180605
29	Air Eliminator Head Assembly DA-3-150 Combination and DA-3-4-150 Combination (Aluminum)	2	178235
	D-6-4-150 Combination, D-6-150 Combination and D-8-150 Combination (Steel)	1	178240
30	Cap Screw (D-6-4-150 Combination and D-6-150 Combination)	22	150806
	Cap Screw (D-8-150 Combination)	22	150836
31	Hex Nut (D-6-4-150 Combination and D-6-150 Combination)	22	151555
	Hex Nut (D-8-150 Combination)	22	151557
32	1" Pipe Plug (D-6-4-150 Combination, D-6-150 Combination and D-8-150 Combination)	1	154718-024
33	3/4" Pipe Plug (D-6-4-150 Combination, D-6-150 Combination and D-8-150 Combination)	2	154711

Air Eliminator Head Assemblies - Parts List
For: D-2B Combination

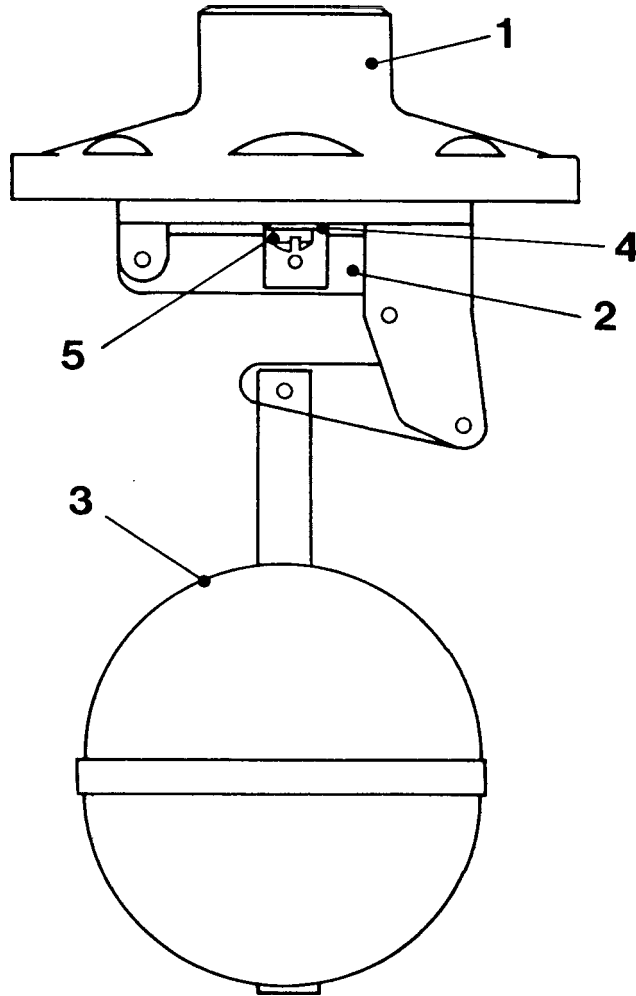
SY

AIR ELIMINATOR

HEAD ASSEMBLY

W180605 - With Float

W180610 - Less Float



Item	Description	Part Number	Quantity Required
1	Ca and Seat	180606	1
2	Link and Level Assembly	180430	1
3	Float Assembly	180405-400	1
4	Lockwasher	152108	2
5	Screw	150552	2

Air Eliminator Head Assembly

No. 180960 - With Float and Linkage

No. 181010 - Less Float and Linkage For: DA-3-4-150, D-6-150, D-6-4-150
and D-8-150 Combination also K-20, D-24 and K-30

Adjusting Bellows for Operating Pressure

The air release valve in this assembly will open under differential pressures of up to 150 psi if the Bellows Assembly (181030) is properly adjusted. Adjust as follows:

Remove Adjustment Cap No. 181033 - leave the two screws in the clearance holes in place.

Turn Adjusting Screw No. 181032 to limit clockwise-do not force.

Disconnect vent line at eliminator head (if bleed or checking valve has not been provided).

Loosen pipe plug in top of Air Eliminator Head and bleed out air.

Turn Adjusting Screw counter-clockwise until poppet just starts to leak.

Complete adjustment by turning screw one turn clockwise.

Item	Description	Part Number	Quantity Required
1	Lockwasher	152259	2
2	Screw	150533	14
3	Float Lever Pivot Pin	181061	1
4	Float Lever Bearing Support	181062	1
5	Main Lever Assembly	181045	1
6	Roll Pin	153523	1
7	Poppet Lever Bearing	181035	1
8	Poppet Guide Assembly	181025	1
9	O-Ring	152069-022	3
10	Poppet Assembly	181020-022	1
11	Poppet and Bellow Guide	181017	1
12	Bellows Assembly	181030	1
13	O-Ring	152067-022	1
14	Bellows Adjustment Cover	181031	1
15	Adjustment Cover	181033	1
16	Shim	152512	As Required
17	Pipe Plug (Not Shown)	154700	
18	Elastic Stop Nut	151689	1
19	Bellows Adjustment Screw	181032	1
20	O-Ring	152064-022	1
21	O-Ring	152082-022	1
22	Air Eliminator Head	181016	1
23	Washer	151861	2
24	Cotter Pin	153927	3
25	Float Assembly	181100	1
26	Float Link Extension	180315	1

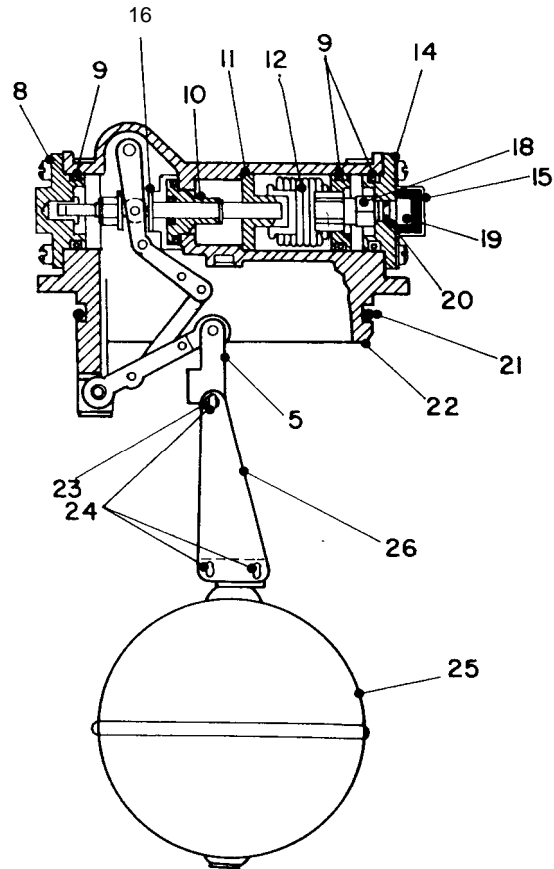


FIGURE 1

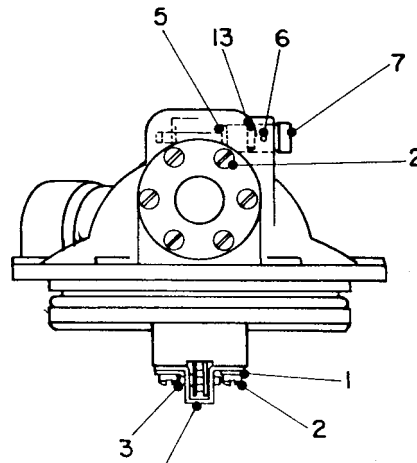
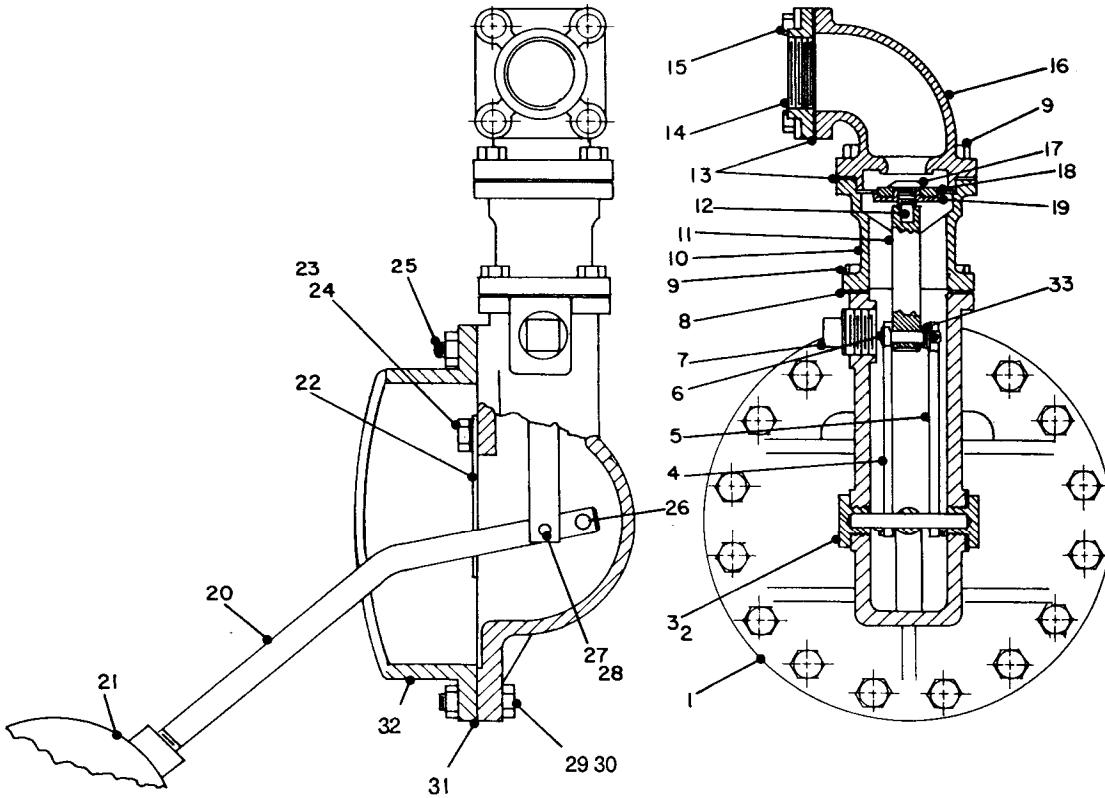


FIGURE 2

RL

Air Eliminator Head Assembly

No. 180000 - Steel Construction No. 180000-001 - Less
 Tank Flange For: KL-24, RL-24, RL-30, RL-36, RL-48



Item	Description	Part Number	Quantity Required
1	Air Eliminator Body	180001	1
2	Bearing Cap	180013	2
3	O-Ring	157024	2
4	Valve Link	180018	1
5	Valve Link	180019	1
6	Shoulder Screw	159372	1
7	Pipe Plug	154718-024	1
8	Gasket	41307	1
9	Screw	150785	8
10	Valve Guide	180051	1
11	Valve Stem	180036-000	1
12	Groove Pin	153518	1
13	Gasket	51307	2
14	Flange	51308	1
15	Screw	150786	4
16	Air Outlet Elbow	180052	1
17	Valve Stud	180042-000	1

Item	Description	Part Number	Quantity Required
18	Valve Disc	180041	1
19	Seal Retainer	180331-000	1
20	Float Lever	180011-000	1
21	Float Assembly	180015	1
22	Float Lever Guide	180009-000	1
23	Screw	150783	2
24	Lockwasher	152112	2
25	Stud	151323	2
26	Float Lever Pin	180014	1
27	Clevis Hinge Pin	180048	1
28	Cotter Pin	153913-419	2
29	Nut	151555	16
30	Screw	150806	14
31	Gasket	180008	1
32	Tank Flange	180007	1
33	Washer	151859	3

SC

Air Eliminator Head Assemblies Parts List

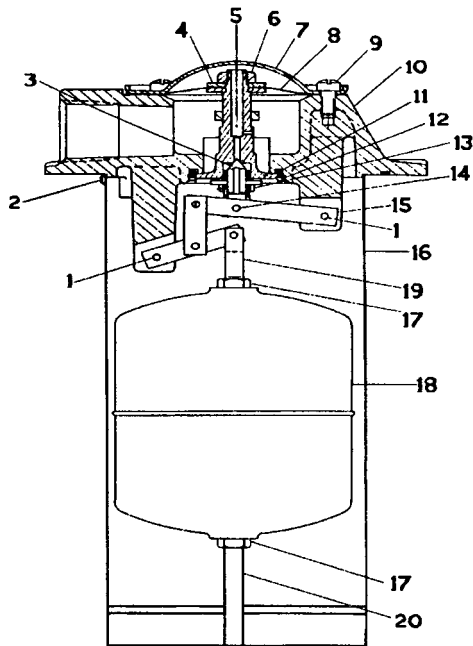


Figure A

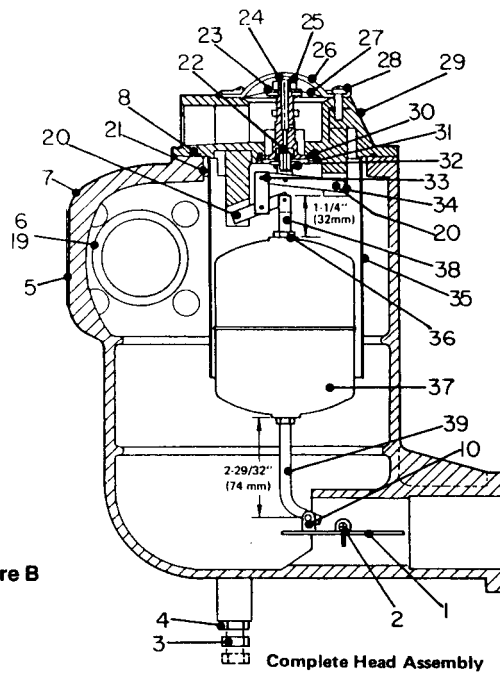


Figure B

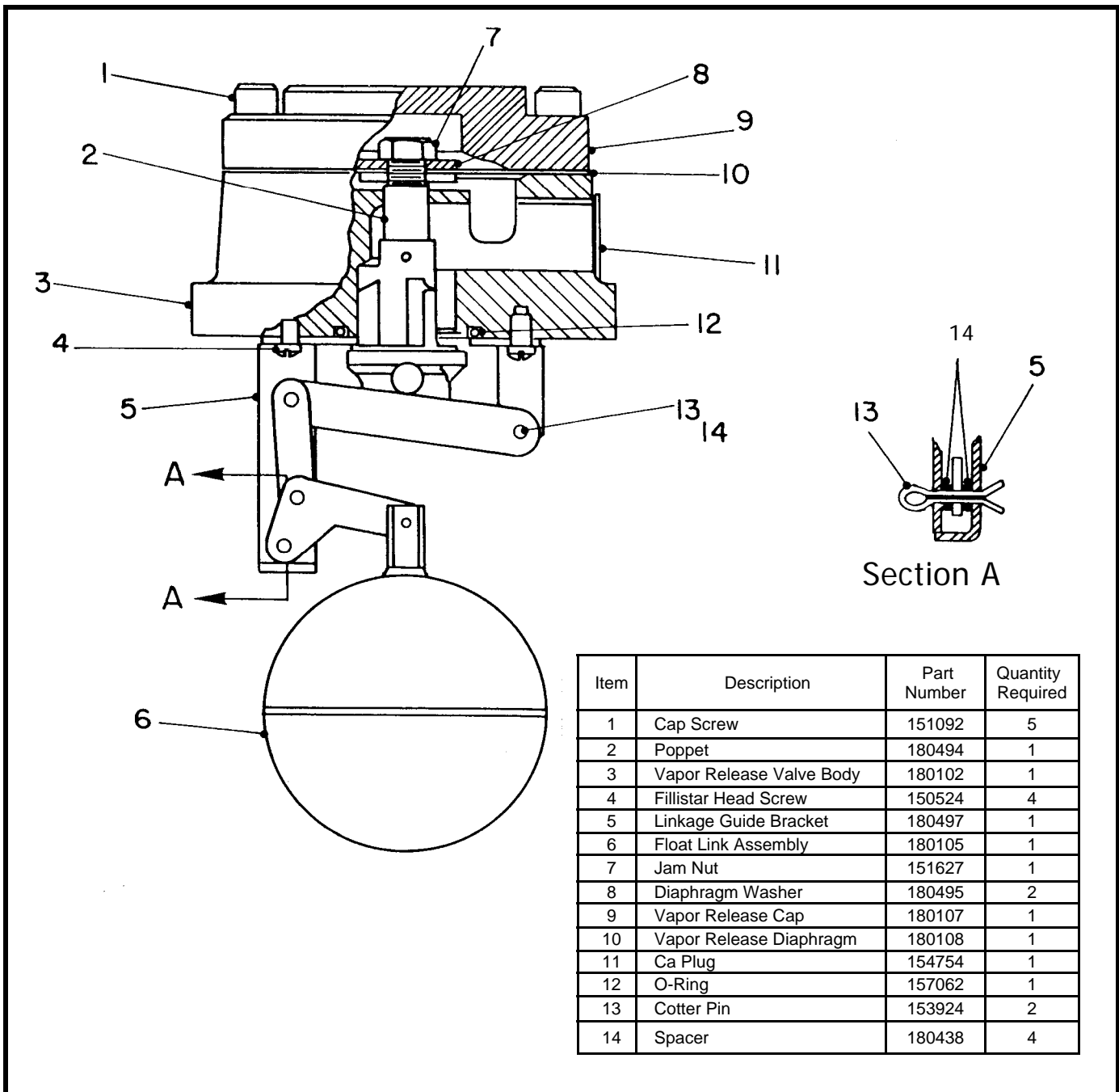
Complete Head Assembly

Item	Figure A Description	Part Number	Quantity Required
1	Roll Pin 1/8"x 1/2"	153622	2
2	Screw 8-32	150140	3
3	Poppet	178222	1
4	Diaphragm Washer	180495	2
5	Pilot Valve Assembly	178210	1
6	Jam Nut 3/8 - 24	151627	1
7	Diaphragm Cover	180492	1
8	Diaphragm	180493	1
9	Screw 1/4-20 x 1/2	150552	5
10	Valve Housing	178217	1
11	O-Ring 2-219	157306-022	1
12	Retainer Ring RR-162	156529	1
13	Retainer Ring 5100-59	156474	1
14	Cotter Pin 1/8" x 3/4"	153923	2
15	Lever Assembly	178220	1
16	Float Sleeve	178195	1
17	Jam Nut 5/15" -18	151624	2
18	Float	178207	1
19	Float Link	178202	1
20	Float Guide Rod	178199	1
Item	Figure B Description	Part Number	Quantity Required
1	Butterfly	178213	1
2	Butterfly Shaft	178211	1
3	Bolt 7/16" -14" x 1-3/8"	150781	1
4	Jam Nut 7/16" -14	151549	1
5	Decal	154504	1

Item	Figure B Description	Part Number	Quantity Required
6*	Strainer Assembly	178200-040	1
	(See Strainer Basket Data)	178200-080	1
7	Housing	178219	1
8*	O-Ring	157306	1
10	Roll Pin 1/8" x 3/4"	153523	1
20	Roll Pin 1/8" x 1/2"	153622	2
21	Screw 8-32	150140	3
22	Pilot Valve Assembly	178210	1
23	Diaphragm Washer	180495	2
24	Poppet	178222	1
25	Jam Nut 3/8" - 24	151627	1
26	Diaphragm Cover	180492	1
27*	Diaphragm	180493	1
28	Screw 1/4" - 20" x 1/2"	150552	5
29	Valve Housing	178217	1
30*	O-Ring	157305-022	1
31	Retainer Ring	156529	1
32	Retainer Ring	156474	1
33	Cotter Pin 1/8" x 3/4"	153923	2
34	Lever Assembly	178220	1
35	Float Sleeve	178216	1
36	Jam Nut - 5/16"-18	151624	
37	Float	178207	1
38	Float Link	178202	
39	Butterfly Link	178201	1
40	Complete Head Assy. w/ Float	178230	1

*Asterisk indicates that item is recommended spare part.

Complete Assembly No. 180120
 (For BI-43 BiRotor Meter Head Assembly)



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