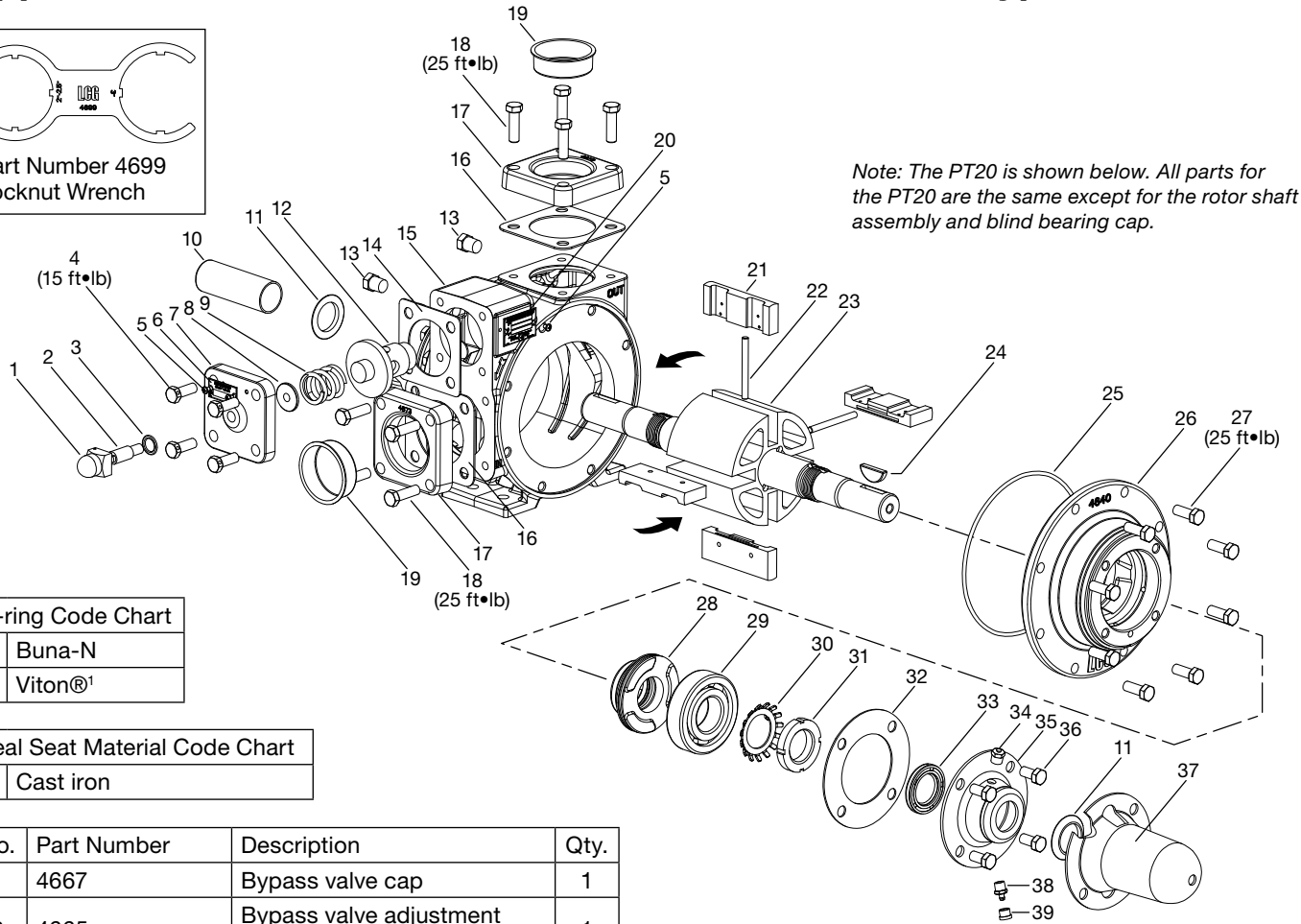
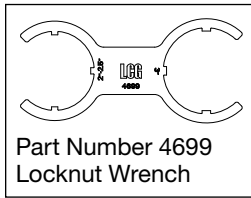


# Appendix E—Part Details for the PT20 with Standard Bypass Valve



Note: The PT20 is shown below. All parts for the PT20 are the same except for the rotor shaft assembly and blind bearing cap.

A	Buna-N
D	Viton® <sup>1</sup>

2	Cast iron
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No.	Part Number	Description	Qty.
1	4667	Bypass valve cap	1
2	4665	Bypass valve adjustment stem	1
3	4659	Bypass valve cap gasket	1
4	4613	Drilled - hex head bolt	4
5	7012-006SF019E	Pan HD phillip 6-32 X3/16 in.-type F plated	2
6	4626	Bypass valve tag	
7	4675	Bypass valve cover	1
8	4647	Spring guide	1
9	4764	Spring (35–50 psi)—opt.	1
	4765	Spring (50–75 psi)—opt.	
	4676	Spring (75–110 psi)—std.	
	4766	Spring (110–125 psi)—opt.	
10	4662	Shaft cover	1
11	4697	Dirt shield	2
12	4674	Bypass valve	1
13	3442	Pipe plug - 1/4 in. NPT	2
14	4767	Bypass valve cover gasket	1
15	4670	Case	1
16	4688	Flange gasket	2
	4673	Flange (2 in. NPT)—std.	
	4673-1	Flange (2 in. BSPT)—opt.	
17	4666	Flange (2 in. weld)—opt.	2
	4673	Flange (2 in. NPT)—std.	
18	7001-037NC125A	Hex head bolt	8
19	4695	Flange plug 2 in.	2

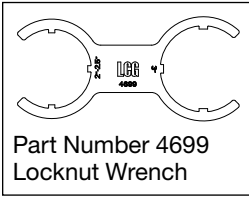
No.	Part Number	Description	Qty.
20	4624	Nameplate	1
21	4677	Vane	4
22	4678	Vane driver	2
23	4671-X2	Rotor shaft assembly	1
24	4653	Shaft key	1
25	2-258_2	O-ring	2
26	4640	Head	2
27	7001-037NC100A	Hex head bolt	16
28	4634-X_2_3	Seal assembly	2
29	4648	Ball bearing	2
30	4654	Shaft lockwasher	2
31	4655	Shaft locknut	2
32	4657	Bearing cap gasket	2
33	4650	Grease seal	2
34	1343	Grease relief fitting	2
35	4649	Bearing cap	2
36	7001-037NC075A	Hex head bolt	8
37	4651	Shaft protector	1
38	2158	Grease zerk	2
39	2159	Lubricap	2

<sup>1</sup> Viton® is a registered trademark of the DuPont company

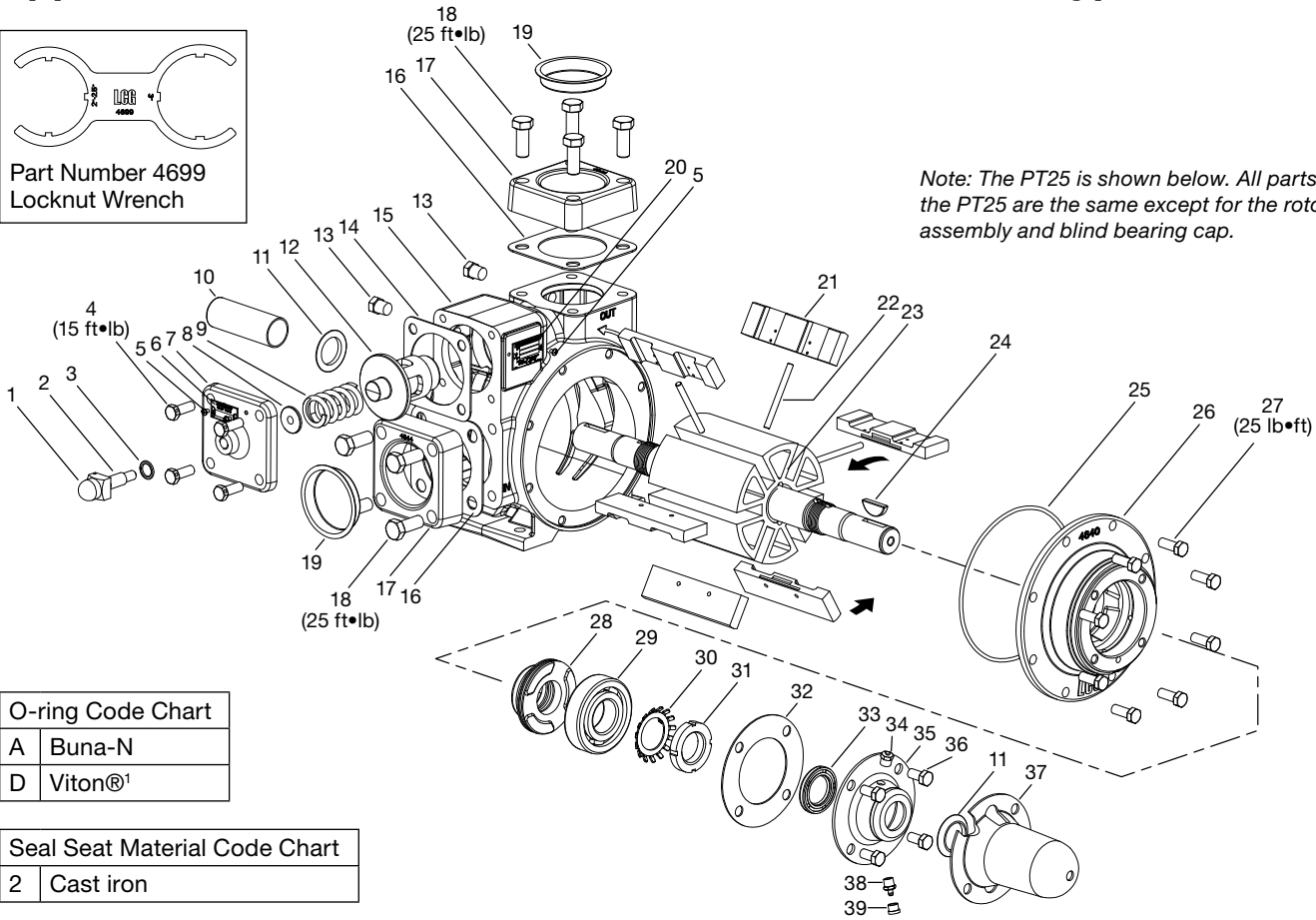
<sup>2</sup> See O-ring material code chart

<sup>3</sup> See seal seat material code chart

# Appendix E—Part Details for the PT25 with Standard Bypass Valve



Note: The PT25 is shown below. All parts for the PT25 are the same except for the rotor shaft assembly and blind bearing cap.



O-ring Code Chart	
A	Buna-N
D	Viton® <sup>1</sup>

Seal Seat Material Code Chart	
2	Cast iron

No.	Part Number	Description	Qty.
1	4667	Bypass valve cap	1
2	4665	Bypass valve adjustment stem	1
3	4659	Bypass valve cap gasket	1
4	4613	Drilled - hex head bolt	4
5	7012-006SF019E	Pan HD phillip 6-32 X3/16 in.-type F plated	2
6	4626	Bypass valve tag	1
7	4645	Bypass valve cover	1
8	4647	Spring guide	1
9	4646	Spring (50–110 psi)—std.	1
	4756	Spring (110–125 psi)—opt.	
10	4662	Shaft cover	1
11	4697	Dirt shield	2
12	4643	Bypass valve	1
13	3442	Pipe plug - 1/4 in.	2
14	4660	Bypass valve cover gasket	1
15	4639	Case	1
16	4658	Flange gasket	2
	4644	Flange (2-1/2 in. NPT)—std.	2
	4644-1	Flange (2-1/2 in. BSPT)—opt.	2
	4568	Flange (2-1/2 in. weld)—opt.	2
	4698	Neck flange (2 in. NPT)—opt.	2
17	4698-1	Neck flange (2 in. BSPT)—opt.	2
18	7001-050NC175A	Hex head bolt	8

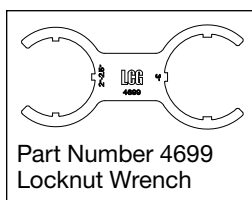
No.	Part Number	Description	Qty.
19	4735	Flange plug	2
20	4624	Nameplate	1
21	4696	Vane	6
22	4652	Vane driver	3
23	4641-X2	Rotor shaft assembly	1
24	4653	Shaft key	1
25	2-258_2	O-ring	2
26	4640	Head	2
27	7001-037NC100A	Hex head bolt	16
28	4634-X_2_3	Seal assembly	2
29	4648	Ball bearing	2
30	4654	Shaft lockwasher	2
31	4655	Shaft locknut	2
32	4657	Bearing cap gasket	2
33	4650	Grease seal	2
34	1343	Grease relief fitting	2
35	4649	Bearing cap	2
36	7001-037NC075A	Hex head bolt	8
37	4651	Shaft protector	1
38	2158	Grease zerk	2
39	2159	Lubricap	2

<sup>1</sup> Viton® is a registered trademark of the DuPont company

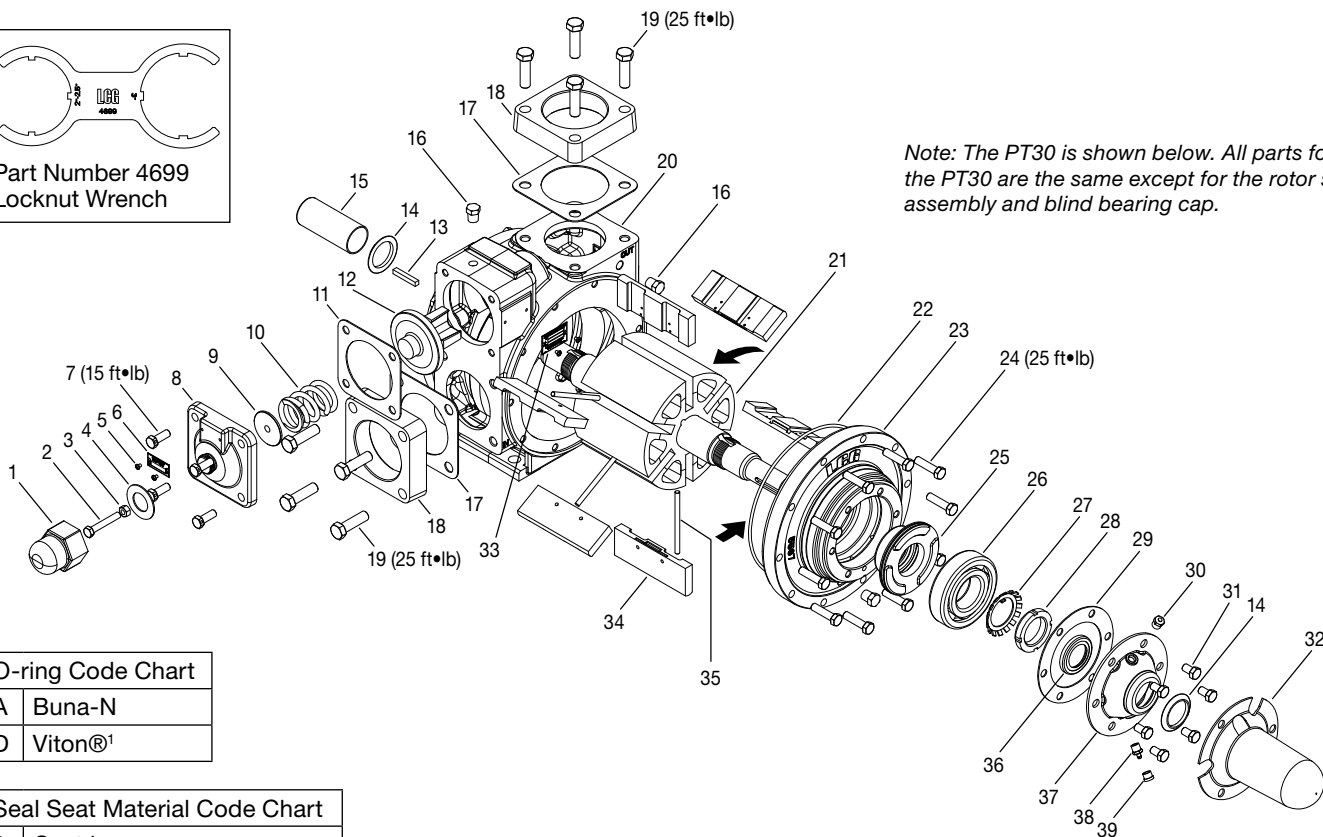
<sup>2</sup> See O-ring material code chart

<sup>3</sup> See seal seat material code chart

# Appendix E—Part Details for the PT30 with Standard Bypass Valve



Note: The PT30 is shown below. All parts for the PT30 are the same except for the rotor shaft assembly and blind bearing cap.



O-ring Code Chart	
A	Buna-N
D	Viton® <sup>1</sup>

Seal Seat Material Code Chart	
2	Cast iron

No.	Part Number	Description	Qty.
1	5457	Bypass valve cap	1
2	5581	5/16-18 hex head bolt	1
3	7101-031NC01A	Hex nut	1
4	5597	Bypass/AOV cap gasket	1
5	7012-006SF019E	Pan HD phillip 6-32 x 3/16" - type F plated	2
6	4626	Bypass/AOV tag	1
7	4613	Drilled hex head bolt	4
8	5577	Bypass valve cover	1
9	5580	Spring guide	1
10	5579	Spring (50–110 psi)—std.	1
	4745	Spring (110–125 psi)—opt.	
11	5578	Bypass/AOV cover gasket	1
12	5575	Bypass valve	1
13	2270	Shaft key	1
14	4697-1	Dirt shield	2
15	4609	Shaft cover	1
16	3442	Pipe plug—1/4" NPT	4
17	5596	Flange gasket	2
18	5573	Flange (3 in. NPT)—std.	2
	5573-1	Flange (3 in. BSPT)—opt.	2
	5593	Flange (3 in. weld)—opt.	2
19	7001-050NC175A	Hex head bolt	8
20	5565	Case	1

No.	Part Number	Description	Qty.
21	5569-X2	Rotor shaft assembly	1
22	2-266_2	O-ring	2
23	4768	Head	2
24	7001-037NC150A	Hex head bolt	20
25	4621-X_2_3	Seal assembly	2
26	5584	Ball bearing	2
27	5591	Lockwasher	2
28	5592	Locknut	2
29	5595	Bearing cover gasket	2
30	1343	Grease relief fitting	2
31	7001-037NC075A	Hex head bolt	12
32	5587	Shaft protector	1
33	4624	Nameplate	1
34	5588	Vanes	6
35	5589	Vane driver	3
36	5586	Grease seal	2
37	5585	Bearing cap	2
38	2158	Grease zerk	2
39	2159	Lubricap	2
40	Consult factory	Flange plug—3 in.	2

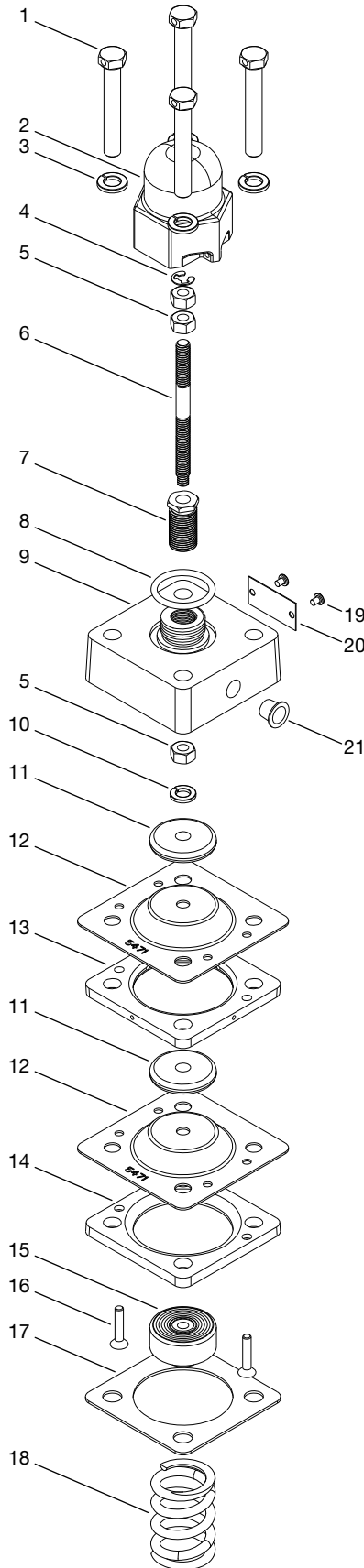
<sup>1</sup> Viton® is a registered trademark of the DuPont company

<sup>2</sup> See O-ring material code chart

<sup>3</sup> See seal seat material code chart

# Appendix E—Part Details for the PT/PTH20 Air Operated Valve (AOV)

## 5470-1XA Air Operated Valve (AOV) Assembly

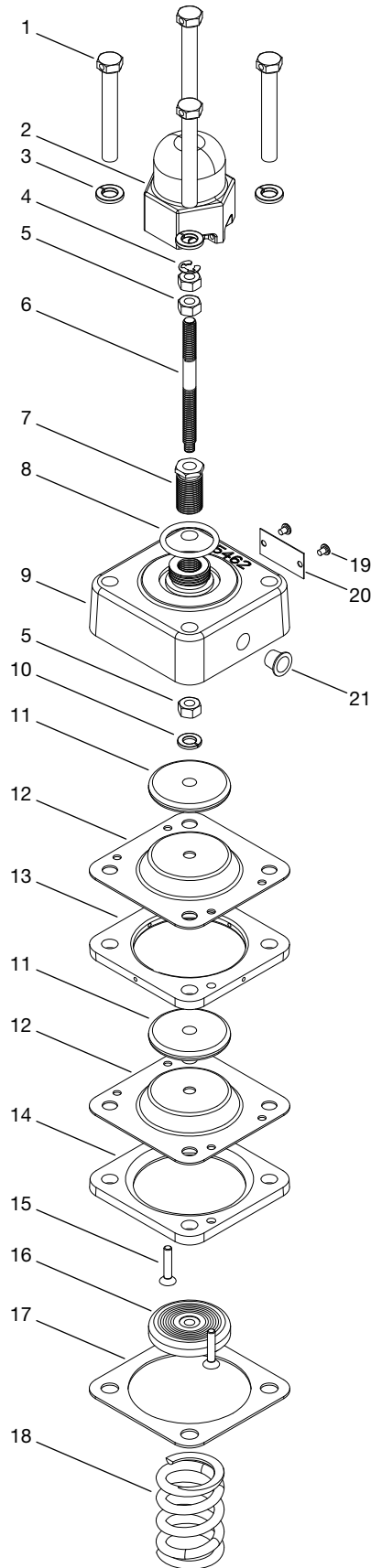


No.	Part Number	Description	Qty.
1	5500	Hex head bolt 3/8-16 x 2.50 SW	4
2	5457	AOV cap	1
3	7206-037A	Lockwasher	4
4	5471-X	AOV adjustment stem retaining ring <sup>1</sup>	1
5	5471-X	Hex nut <sup>1</sup>	3
6	5471-X	AOV adjustment stem <sup>1</sup>	1
7	5459	AOV low flow adjustment stem	1
8	2-217A	O-ring	1
9	5470	AOV housing	1
10	5471-X	Lockwasher 0.3125 in. <sup>1</sup>	1
11	5471-X	AOV disc <sup>1</sup>	2
12	5471-X	AOV diaphragm <sup>1</sup>	2
13	5464	AOV intermediate plate	1
14	5465	AOV diaphragm cover plate	1
15	5471-X	Diaphragm valve disc <sup>1</sup>	1
16	5460	#10-24 x 1 flat head cap screw	2
17	4767	AOV gasket	1
18	4755	Spring	1
19	7012-006SF019E	Pan HD phillip 6-32 x3/16"-type f plated	2
20	4626	Bypass/AOV tag	1
21	2854	Pipe plug	1

<sup>1</sup> Not sold separately. Only available with 5471-X air operated valve (AOV) diaphragm assembly.

# Appendix E—Part Details for the PT/PTH25 Air Operated Valve (AOV)

## 5462-1XA Air Operated Valve (AOV) Assembly

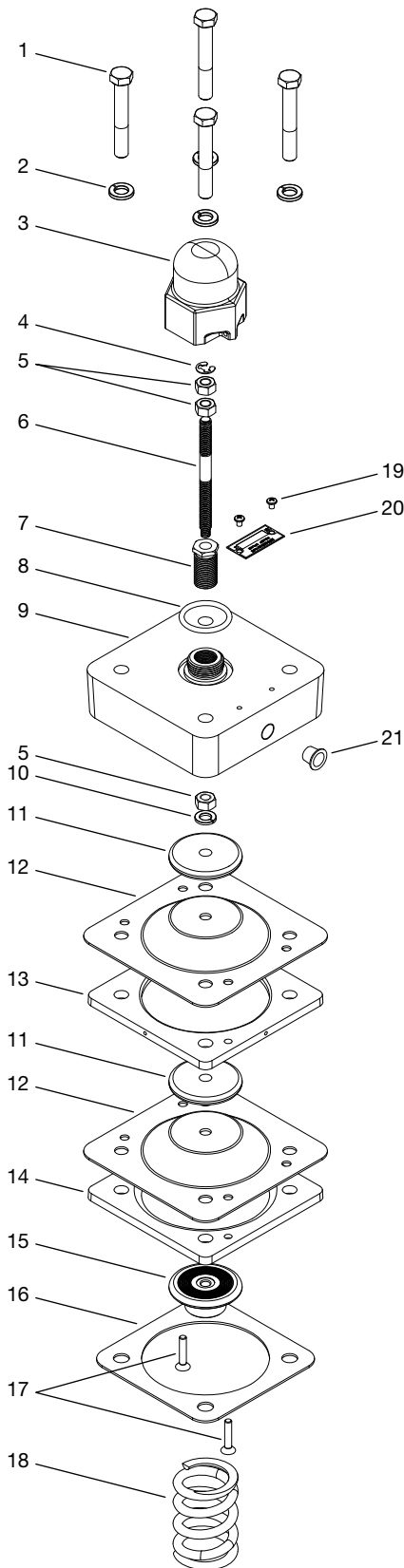


No.	Part Number	Description	Qty.
1	5501	Hex head bolt 3/8-16 x 2.75 SW	4
2	5457	AOV cap	1
3	7206-037A	Lockwasher	4
4	5466-X	AOV adjustment stem retaining ring <sup>1</sup>	1
5	5466-X	Hex nut <sup>1</sup>	3
6	5466-X	AOV adjustment stem <sup>1</sup>	1
7	5459	AOV low flow adjustment stem	1
8	2-217A	O-ring	1
9	5462	AOV housing	1
10	5466-X	Lockwasher 0.3125 in. <sup>1</sup>	1
11	5466-X	AOV disc <sup>1</sup>	2
12	5466-X	AOV diaphragm <sup>1</sup>	2
13	5461	AOV intermediate plate	1
14	5463	AOV diaphragm cover plate	1
15	5460	#10-24 x 1 flat head cap screw	2
16	5466-X	Diaphragm valve disc <sup>1</sup>	1
17	4660	AOV gasket	1
18	4757	Spring	1
19	7012-006SF019E	Pan HD phillip 6-32 x3/16"-type F plated	2
20	4626	Bypass/AOV tag	1
21	2854	Pipe plug	1

<sup>1</sup> Not sold separately. Only available with 5466-X air operated valve (AOV) diaphragm assembly.

# Appendix E—Part Details for the PT/PTH30 Air Operated Valve (AOV)

## 5566-XA Air Operated Valve (AOV) Assembly

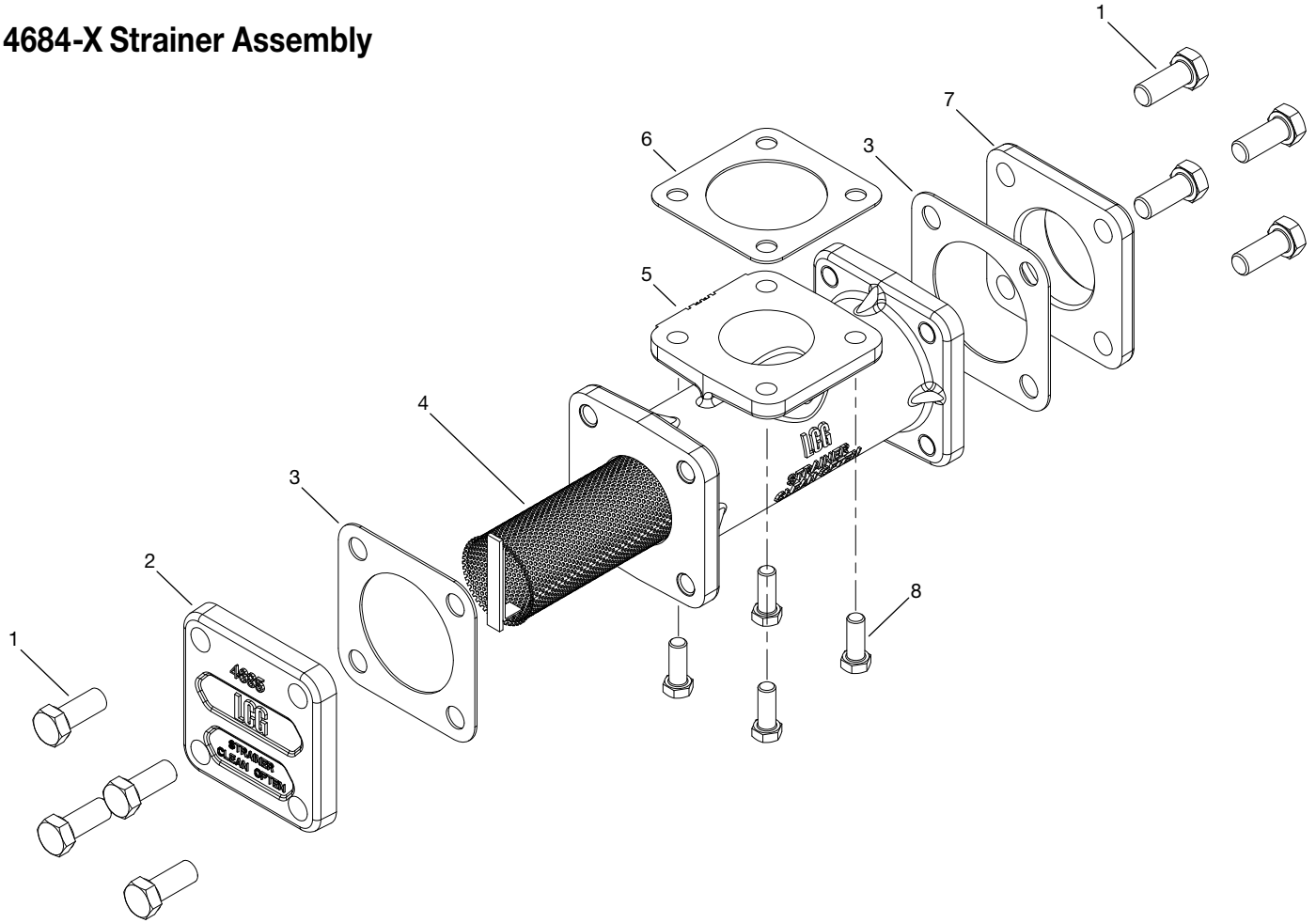


No.	Part Number	Description	Qty.
1	5501	Hex head bolt 3/8-16x2.75 SW	4
2	7206-037A	Lockwasher	4
3	5457	AOV cap	1
4	5570-X	AOV adjustment stem retaining ring <sup>1</sup>	1
5	5570-X	Hex nut (locknut) <sup>1</sup>	3
6	5570-X	AOV adjustment stem <sup>1</sup>	1
7	5459	AOV low pressure adjustment stem	1
8	2-217A	O-ring	1
9	5566	AOV housing	1
10	5570-X	Lockwasher 0.3125 in. <sup>1</sup>	1
11	5570-X	AOV disc <sup>1</sup>	2
12	5570-X	AOV diaphragm <sup>1</sup>	2
13	5568	AOV intermediate plate	1
14	5576	AOV diaphragm cover plate	1
15	5570-X	Diaphragm valve disc <sup>1</sup>	1
16	5578	AOV gasket	1
17	5460	#10-24 x 1 flat head cap screw	2
18	5579	Spring	1
19	7012-006SF019E	Pan HD phillip 6-32 x 3/16 in. type F plated	2
20	4626	Bypass/AOV tag	1
21	2854	Pipe plug	1

<sup>1</sup> Not sold separately. Only available with 5570-X air operated valve (AOV) diaphragm assembly.

# Appendix E—Part Details for the PT/PTH20 Strainer

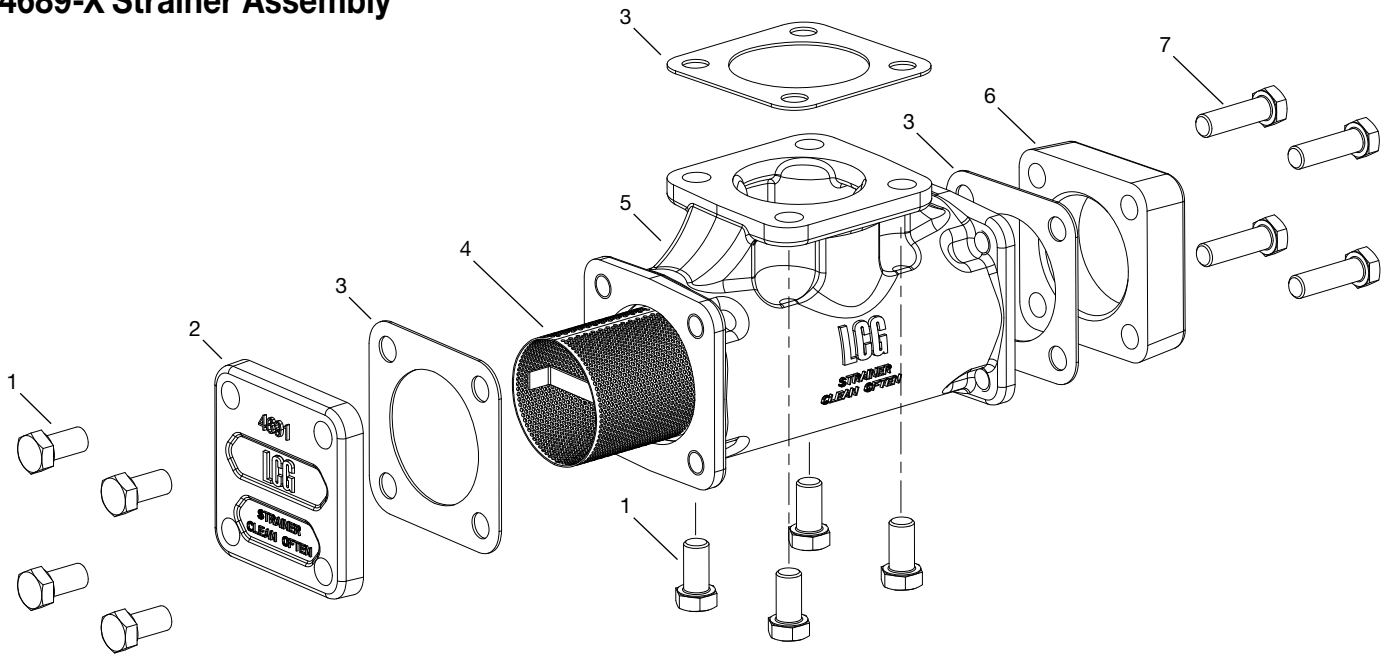
## 4684-X Strainer Assembly



No.	Part Number	Description	Qty.
1	7001-050NC125A	Hex head bolt	8
2	4685	Strainer cap	1
3	4658	Flange gasket	2
4	4686	Strainer basket	1
5	4684	Strainer body	1
6	4688	Flange gasket	1
7	4698	2 in. NPT flange	1
8	7001-037NC100A	Hex head bolt	4

# Appendix E—Part Details for the PT/PTH25 Strainer

## 4689-X Strainer Assembly

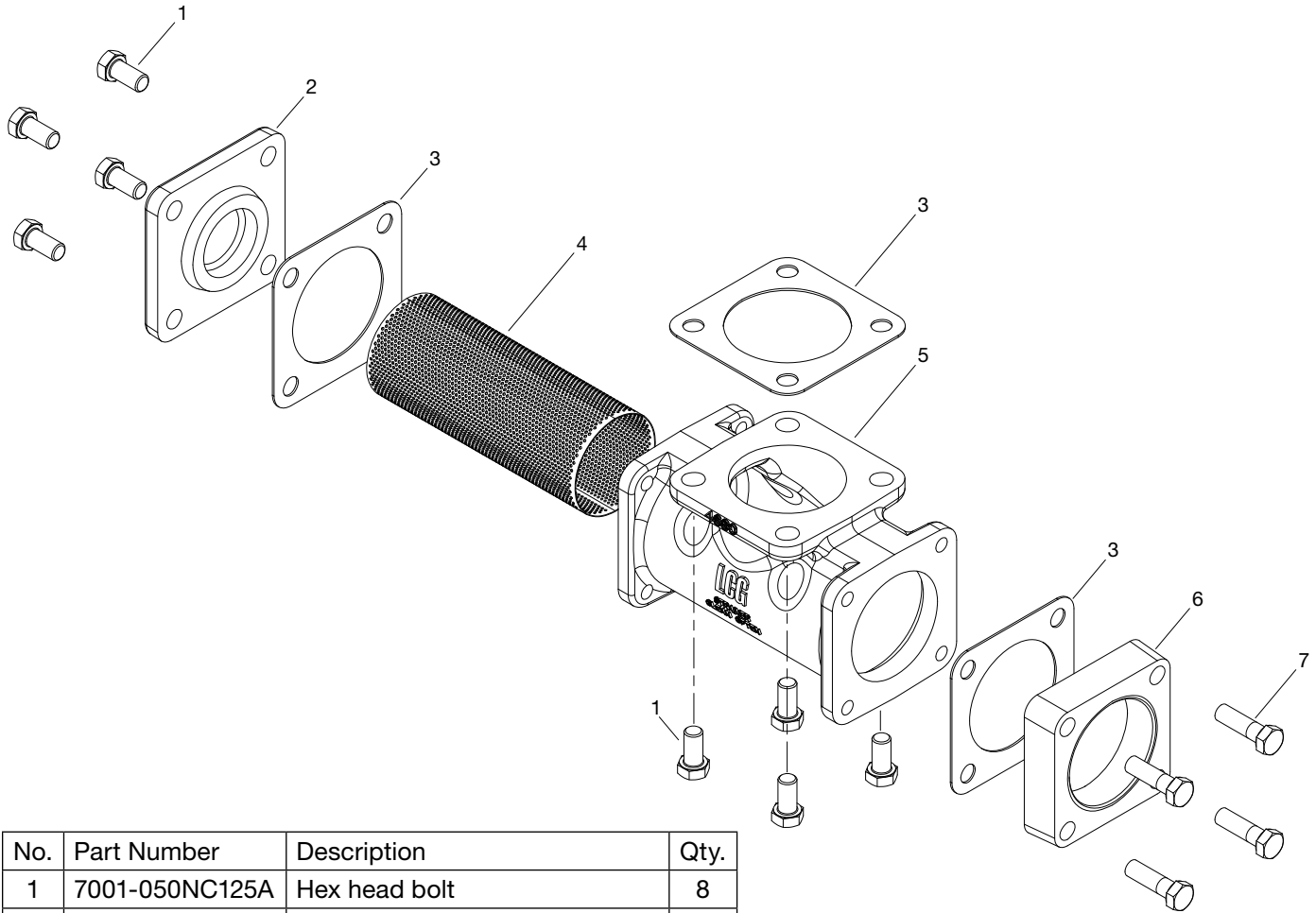


No.	Part Number	Description	Qty.
1	7001-050NC100A	Hex head bolt	8
2	4691	Strainer cap	1
3	4658	Flange gasket	3
4	4690	Strainer basket	1
5	4689	Strainer body	1
6	4644	2.5 in. NPT flange	1
7	7001-050NC175A	Hex head bolt	4



# Appendix E—Part Details for the PT/PTH30 Strainer

## 4680-X Strainer Assembly



No.	Part Number	Description	Qty.
1	7001-050NC125A	Hex head bolt	8
2	4682	Strainer body cap	1
3	5596	Flange gasket	3
4	4681	Strainer basket	1
5	4680	Strainer body	1
6	5573	3 in. NPT flange	1
7	7001-050NC175A	Hex head bolt	4