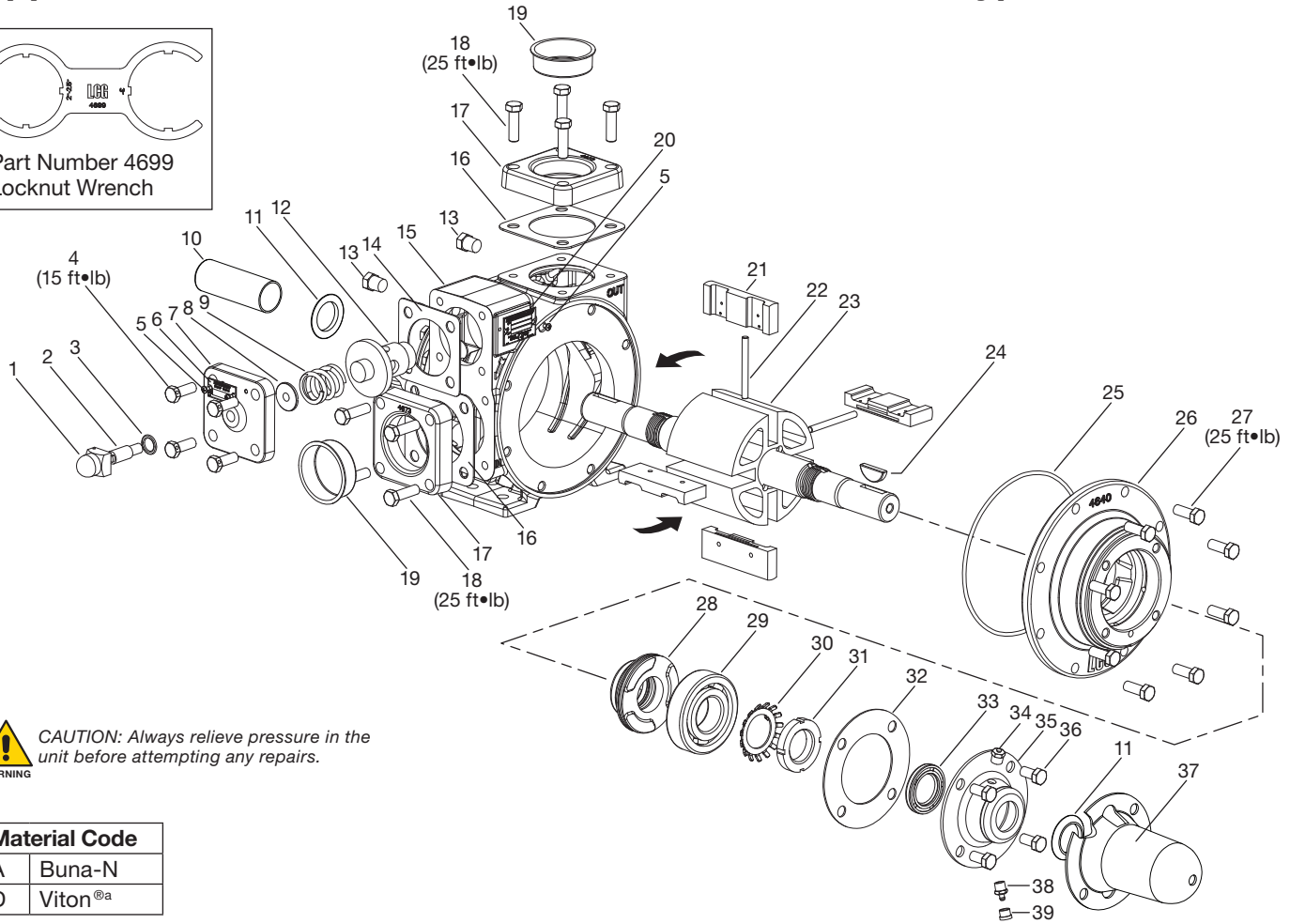
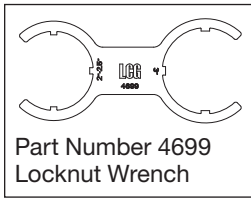


Appendix E—Part Details for the PT20 with Standard Bypass Valve



WARNING CAUTION: Always relieve pressure in the unit before attempting any repairs.

Material Code	
A	Buna-N
D	Viton ^{®a}

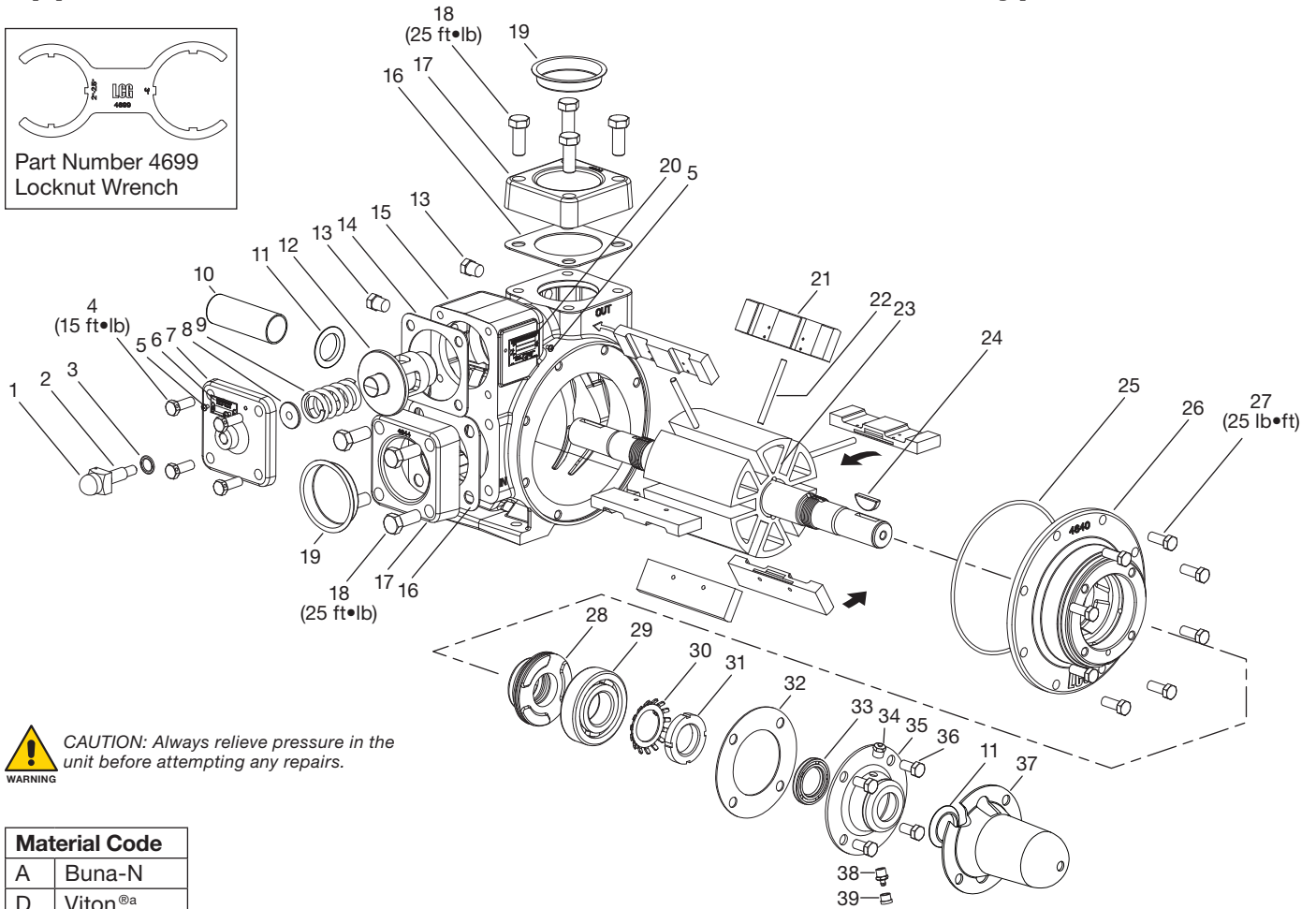
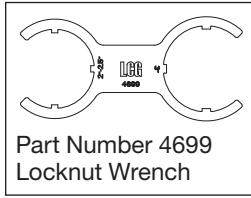
Ref No.	Part No.	Description	Qty.
1.	4667	Bypass valve cap	1
2.	4665	Bypass valve adjustment stem	1
3.	4659	Bypass valve cap gasket	1
4.	4613	Drilled - hex head bolt	4
5.	7012-006SF019E	Pan HD phillip 6-32 X3/16 in.-type F plated	4
6.	4626	Bypass valve tag	
7.	4675	Bypass valve cover	1
8.	4647	Spring guide	1
9.	4764	Spring (35–50 psi)—optional	1
	4765	Spring (50–75 psi)—optional	1
	4676	Spring (75–110 psi)—standard	1
	4766	Spring (110–125 psi)—optional	1
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
17.	4673	Flange (2 in. NPT)—standard	2
	4666	Flange (2 in. weld)—optional	2
18.	7001-037NC125A	Hex head bolt	8

Ref No.	Part No.	Description	Qty.
19.	4695	Flange plug 2 in.	2
20.	4624	Nameplate	1
21.	4677	Vane	4
22.	4678	Vane driver	2
23.	4671-X2	Rotor shaft assembly—double	1
24.	4653	Shaft key	1
25.	2-258_ ^b	O-ring	2
26.	4640	Head	2
27.	7001-037NC100A	Hex head bolt	16
28.	4634-X_2 ^b	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	1
	4649-1	Blind bearing cap	1
36.	7001-037NC075A	Hex head bolt	8
37.	4651	Shaft protector	1
38.	2158	Grease zerk	2
39.	2159	Lubricap	2

^a Registered trademark of the DuPont company.

^b _ denotes material code.

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



WARNING CAUTION: Always relieve pressure in the unit before attempting any repairs.

Material Code	
A	Buna-N
D	Viton ^{®a}

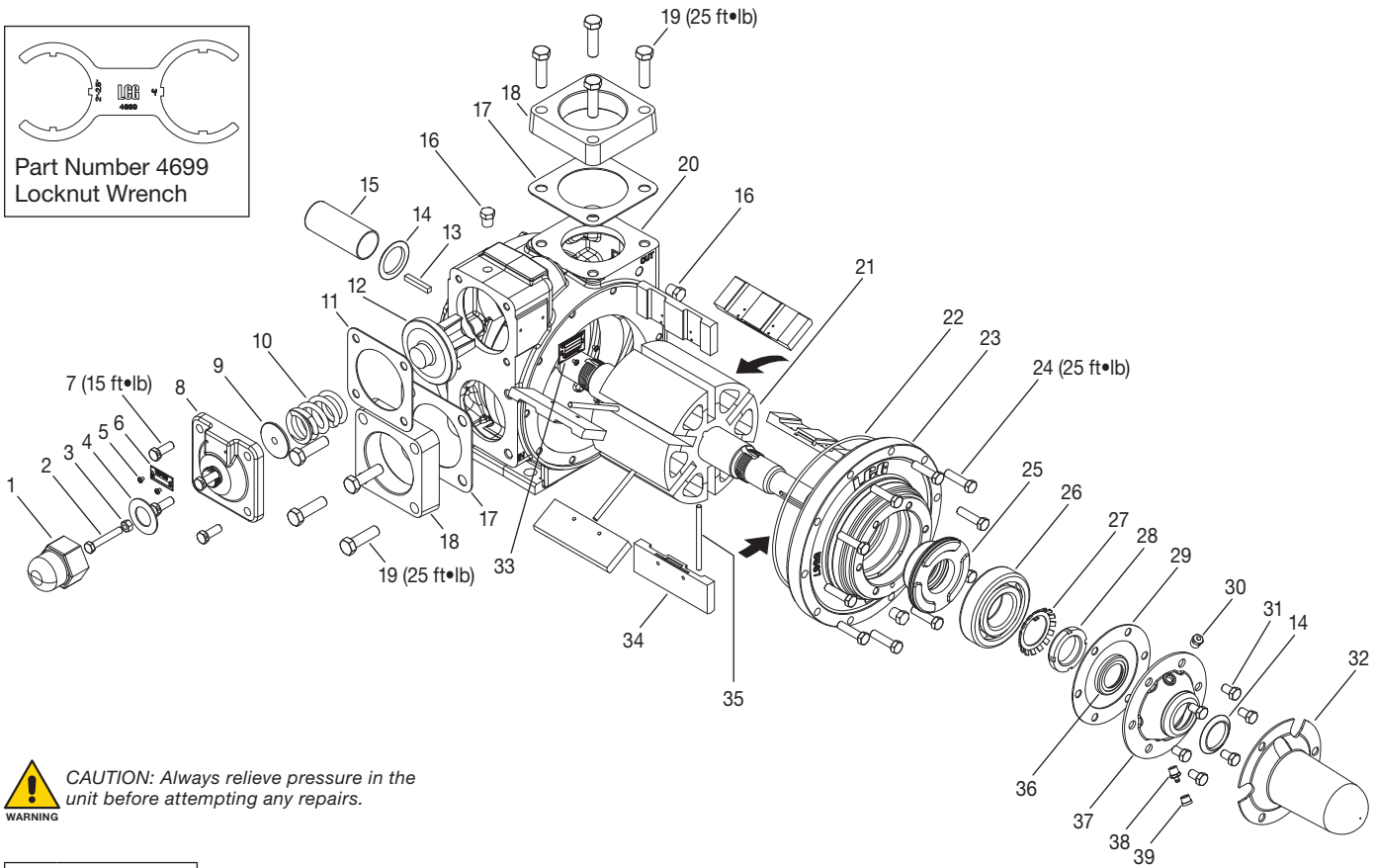
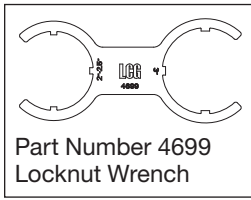
Ref No.	Part No.	Description	Qty.
1.	4667	Bypass valve cap	1
2.	4665	Bypass valve adjustment stem	1
3.	4659	Bypass valve cap gasket	1
4.	4613	Drilled - hex head bolt	4
5.	7012-006SF019E	Pan HD phillip 6-32 X3/16 in.- type F plated	4
6.	4626	Bypass valve tag	1
7.	4645	Bypass valve cover	1
8.	4647	Spring guide	1
9.	4646	Spring (50–110 psi)—standard	1
	4756	Spring (110–125 psi)—optional	1
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
17.	4568	Flange (2-1/2 in. weld)—opt.	2
	4698	Neck flange (2 in. NPT)—opt.	2
18.	7001-050NC175A	Hex head bolt	8
19.	4735	Flange plug	2

Ref No.	Part No.	Description	Qty.
20.	4624	Nameplate	1
21.	4696	Vane	6
22.	4652	Vane driver	3
23.	4641-X2	Rotor shaft assembly—double	1
24.	4653	Shaft key	1
25.	2-258 ^b	O-ring	2
26.	4640	Head	2
27.	7001-037NC100A	Hex head bolt	16
28.	4634-X ₂ ^b	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	1
	4649-1	Blind bearing cap	1
36.	7001-037NC075A	Hex head bolt	8
37.	4651	Shaft protector	1
38.	2158	Grease zerk	2
39.	2159	Lubricap	2

^a Registered trademark of the DuPont company.

^b _ denotes material code.

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



WARNING CAUTION: Always relieve pressure in the unit before attempting any repairs.

Material Code	
A	Buna-N
D	Viton ^{®a}

Ref No.	Part No.	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	4
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)—standard	1
	4745	Spring (110–125 psi)—optional	1
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)—standard	2
	5593	Flange (3 in. weld)—optional	2
19.	7001-050NC175A	Hex head bolt	8
20.	5565	Case	1

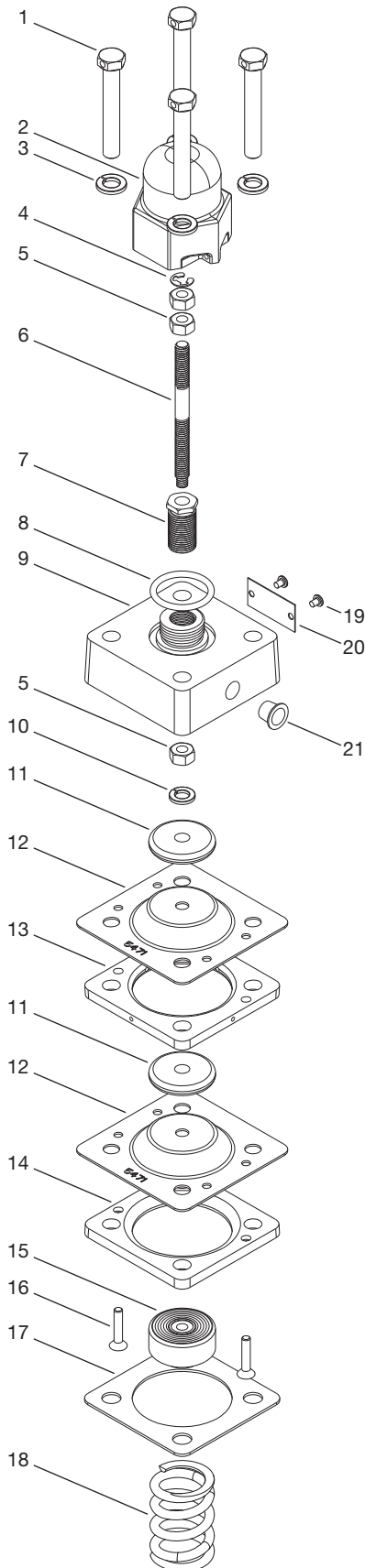
Ref No.	Part No.	Description	Qty.
21.	5569-X2	Rotor shaft assembly—double	1
22.	2-266_ ^b	O-ring	2
23.	4768	Head	2
24.	7001-037NC150A	Hex head bolt	20
25.	4621-X_2 ^b	Seal assembly	2
26.	5584	Ball bearing	2
27.	5591	Lockwasher	2
28.	5592	Locknut	2
29.	5595	Bearing cover gasket	2
30.	1343	Grease relief 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	1
	5585-1	Blind bearing cap	1
38.	2158	Grease zerk	2
39.	2159	Lubricap	2
40.	Consult factory	Flange plug—3 in.	2

^a Registered trademark of the DuPont company.

^b _ denotes material code.

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

5470-1XA Air Operated Valve (AOV) Assembly

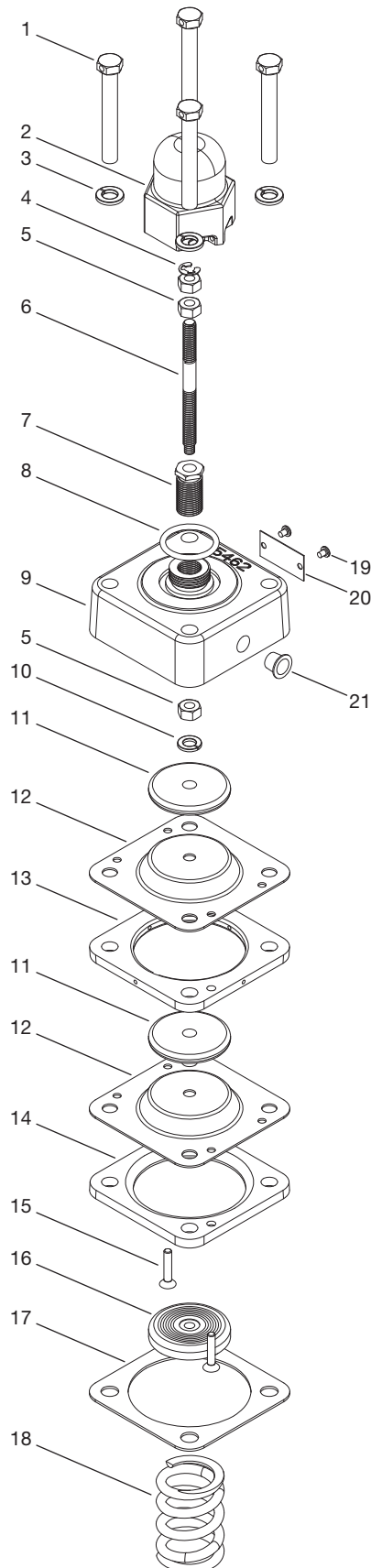


Ref No.	Part No.	Description	Qty.
1.	5500	Hex head bolt 3/8-16 x 2.50 SW	4
2.	5457	AOV cap	1
3.	7206-037A	Lockwasher	4
4.	5471-X	AOV adjustment stem retaining ring ¹	1
5.	5471-X	Hex nut ¹	3
6.	5471-X	AOV adjustment stem ¹	1
7.	5459	AOV low flow adjustment stem	1
8.	2-217A	O-ring	1
9.	5470	AOV housing	1
10.	5471-X	Lockwasher 0.3125 in. ¹	1
11.	5471-X	AOV disc ¹	2
12.	5471-X	AOV diaphragm ¹	2
13.	5464	AOV intermediate plate	1
14.	5465	AOV diaphragm cover plate	1
15.	5471-X	Diaphragm valve disc ¹	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

¹ 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

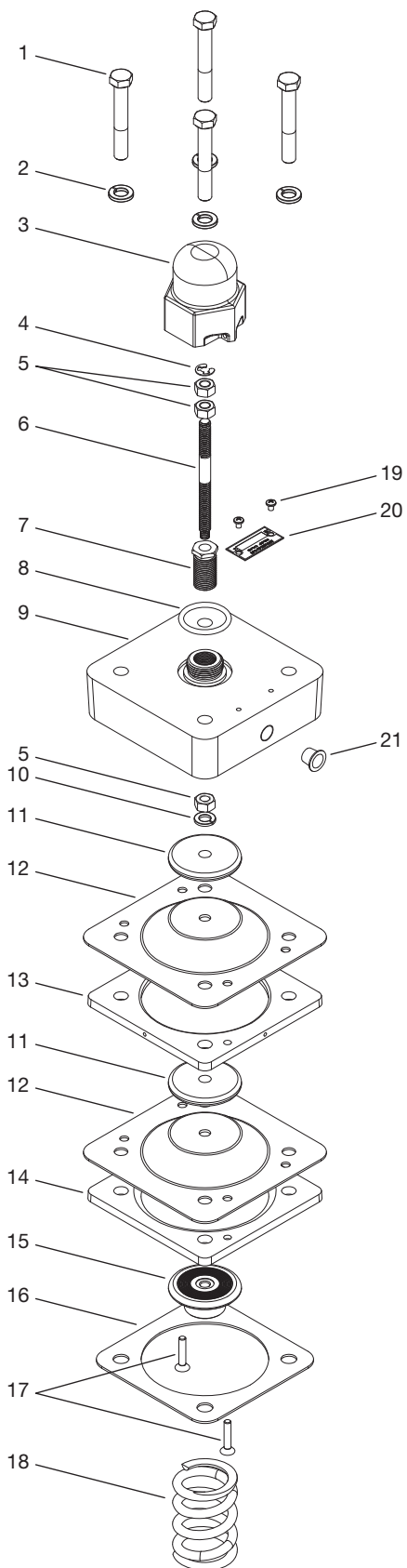


Ref No.	Part No.	Description	Qty.
1.	5501	Hex head bolt 3/8-16 x 2.75 SW	4
2.	5457	AOV cap	1
3.	7206-037A	Lockwasher	4
4.	5466-X	AOV adjustment stem retaining ring ¹	1
5.	5466-X	Hex nut ¹	3
6.	5466-X	AOV adjustment stem ¹	1
7.	5459	AOV low flow adjustment stem	1
8.	2-217A	O-ring	1
9.	5462	AOV housing	1
10.	5466-X	Lockwasher 0.3125 in. ¹	1
11.	5466-X	AOV disc ¹	2
12.	5466-X	AOV diaphragm ¹	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 ¹	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

¹ 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

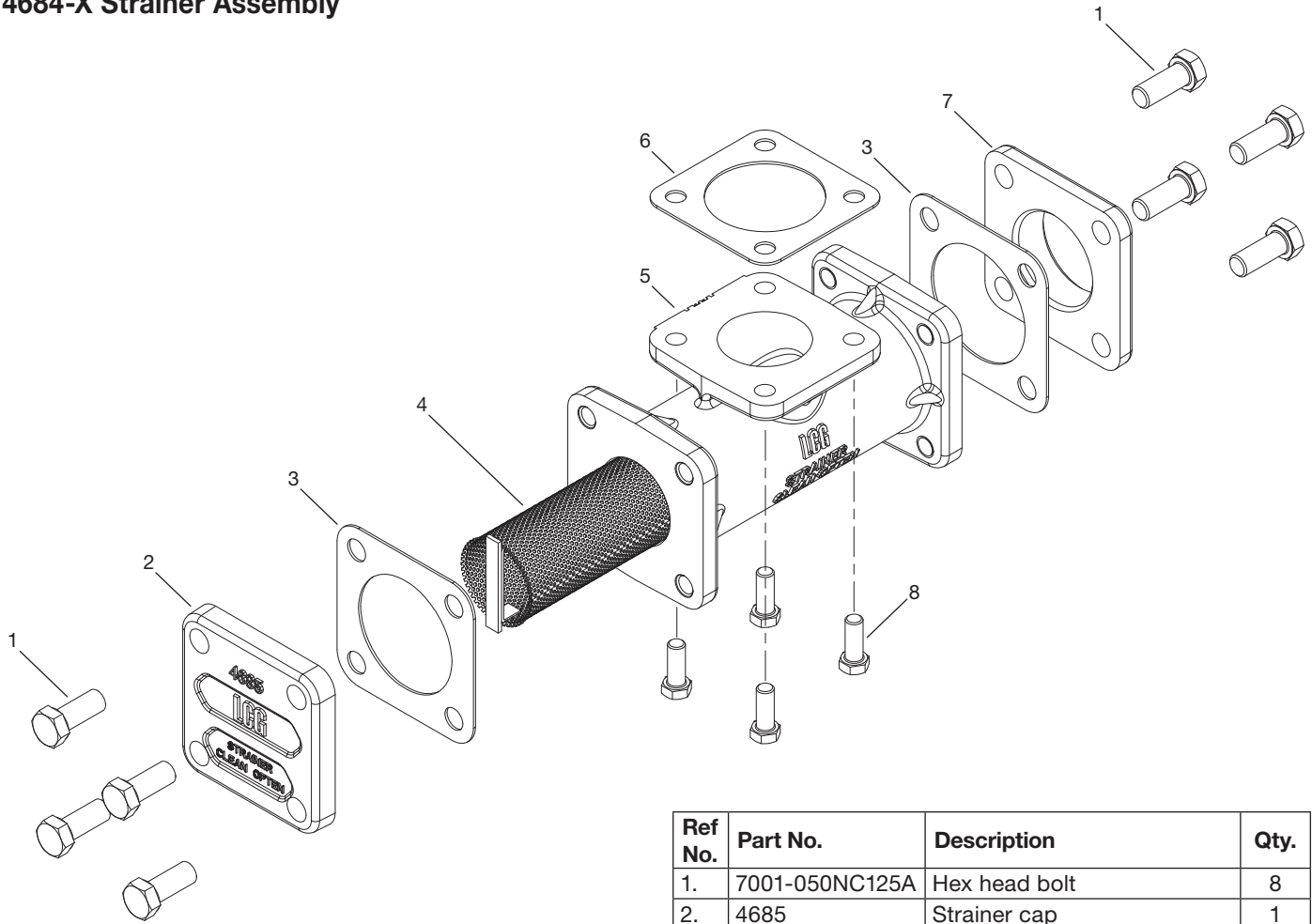


Ref No.	Part No.	Description	Qty.
1.	5501	Hex head bolt 3/8-16x2.75 SW	4
2.	7206-037A	Lockwasher	4
3.	5457	AOV cap	1
4.	5570-X	AOV adjustment stem retaining ring ¹	1
5.	5570-X	Hex nut (locknut) ¹	3
6.	5570-X	AOV adjustment stem ¹	1
7.	5459	AOV low pressure adjustment stem	1
8.	2-217A	O-ring	1
9.	5566	AOV housing	1
10.	5570-X	Lockwasher 0.3125 in. ¹	1
11.	5570-X	AOV disc ¹	2
12.	5570-X	AOV diaphragm ¹	2
13.	5568	AOV intermediate plate	1
14.	5576	AOV diaphragm cover plate	1
15.	5570-X	Diaphragm valve disc ¹	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

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

Appendix E—Part Details for PT/PTH20 Strainer

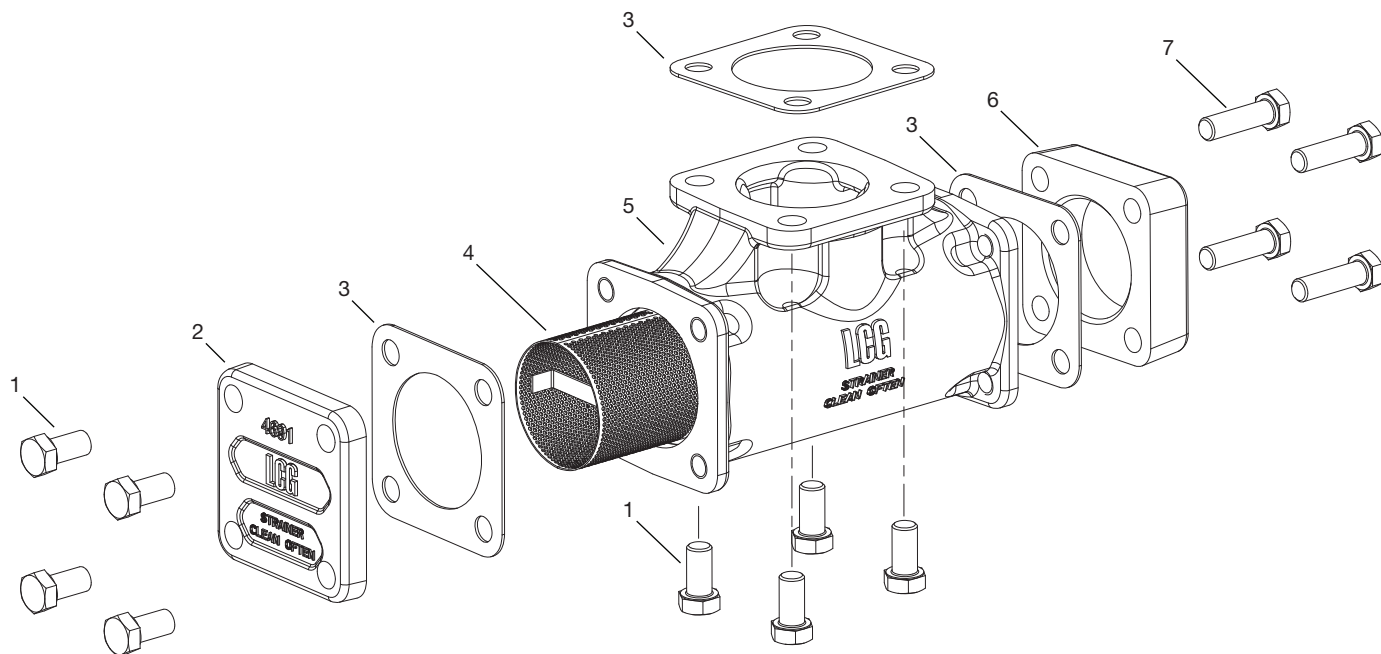
4684-X Strainer Assembly



Ref No.	Part No.	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 PT/PTH25 Strainer

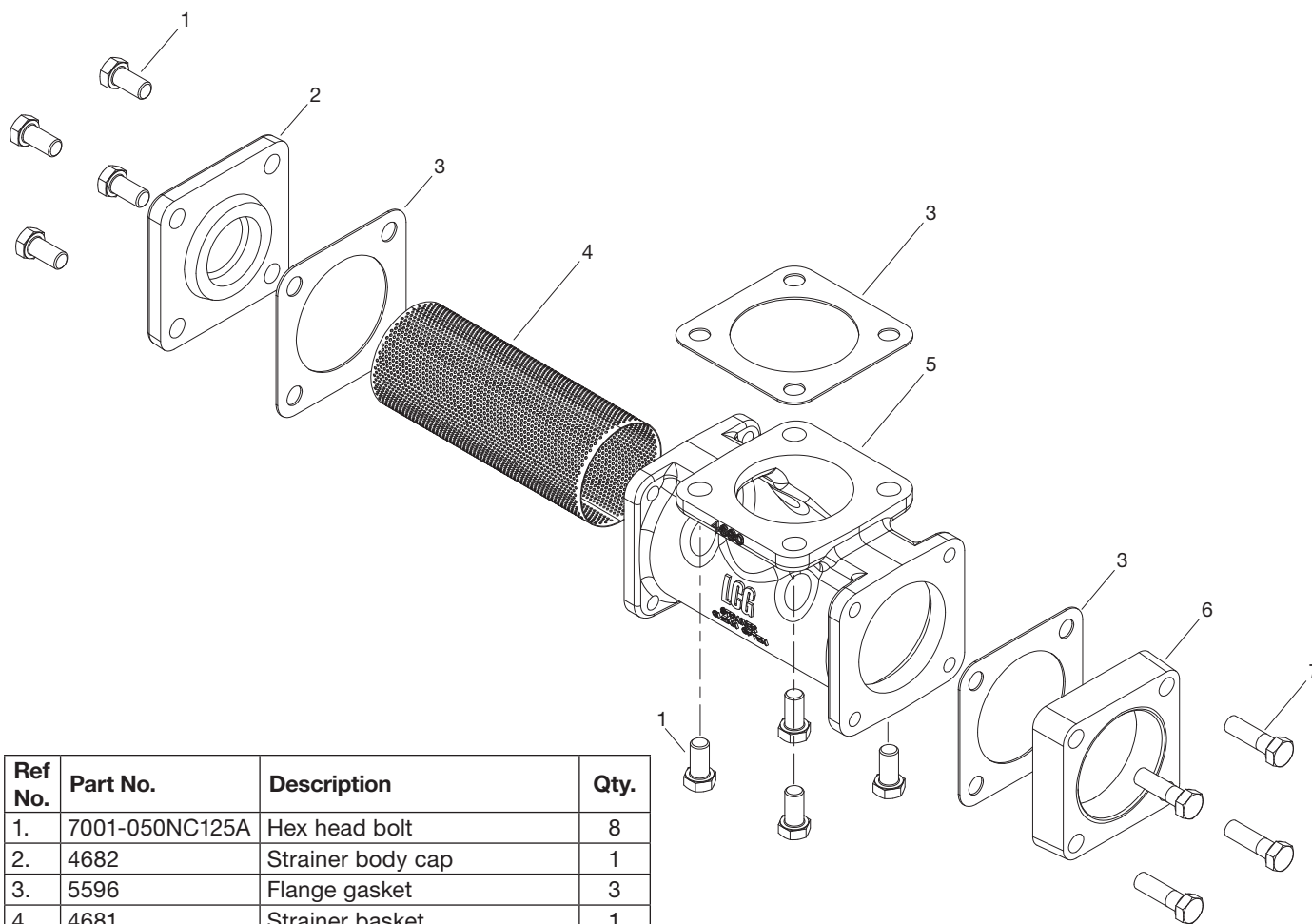
4689-X Strainer Assembly



Ref No.	Part No.	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

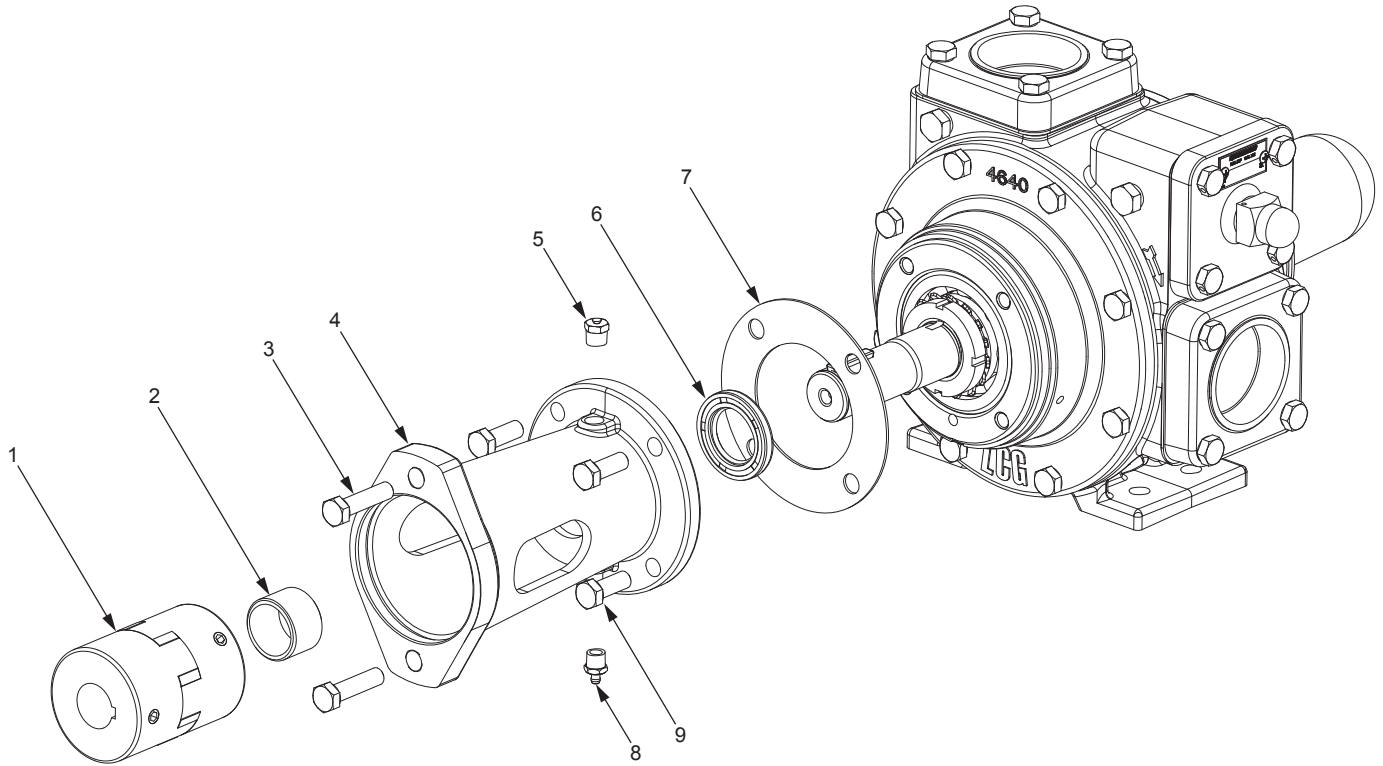
Appendix E—Part Details for PT/PTH30 Strainer

4680-X Strainer Assembly



Ref No.	Part No.	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

Appendix E—Part Details for the PT-Series and Hydraulic Drive Adapter



PTH20 and PTH25 Hydraulic Drive Assembly 4899-X1 (1-1/8" x 1" Bore Size)

Ref No.	Part No.	Description	Qty.
1	1380-1	CJ 28/38 coupling (1-1/8" x 1")	1
2	4897	Hydraulic lockring	1
3	7301-120MC040A	M12 x 1.75 x 40 metric hex head bolt	2
4	4899	Hydraulic adapter	1
5	1343	Grease relief fitting	1
6	4650	Grease seal	1
7	4657	Bearing cap gasket	1
8	2158	Grease zerk	1
9	7001-037NC100A	3/8-16 x 1 hex head bolt	4

PTH30 Hydraulic Drive Assembly 4898-X1 (1-1/8" x 1" Bore Size)

Ref No.	Part No.	Description	Qty.
1	1380-1	CJ 28/38 coupling (1-1/8" x 1")	1
2	4897	Hydraulic lockring	1
3	7301-120MC040A	M12 x 1.75 x 40 metric hex head bolt	2
4	4898	Hydraulic adapter	1
5	1343	Grease relief fitting	1
6	4896	Grease seal	1
7	5595	Bearing cap gasket	1
8	2158	Grease zerk	1
9	7001-037NC100A	3/8-16 x 1 hex head bolt	6

4899-X2 (1-1/8" x 1-1/4" Bore Size)

Ref No.	Part No.	Description	Qty.
1	1380-2	CJ 28/38 coupling (1-1/8" x 1-1/4")	1
2	4897	Hydraulic lockring	1
3	7301-120MC040A	M12 x 1.75 x 40 metric hex head bolt	2
4	4899	Hydraulic adapter	1
5	1343	Grease relief fitting	1
6	4650	Grease seal	1
7	4657	Bearing cap gasket	1
8	2158	Grease zerk	1
9	7001-037NC100A	3/8-16 x 1 hex head bolt	4

4898-X2 (1-1/8" x 1-1/4" Bore Size)

Ref No.	Part No.	Description	Qty.
1	1380-2	CJ 28/38 coupling (1-1/8" x 1-1/4")	1
2	4897	Hydraulic lockring	1
3	7301-120MC040A	M12 x 1.75 x 40 metric hex head bolt	2
4	4898	Hydraulic adapter	1
5	1343	Grease relief fitting	1
6	4896	Grease seal	1
7	5595	Bearing cap gasket	1
8	2158	Grease zerk	1
9	7001-037NC100A	3/8-16 x 1 hex head bolt	6