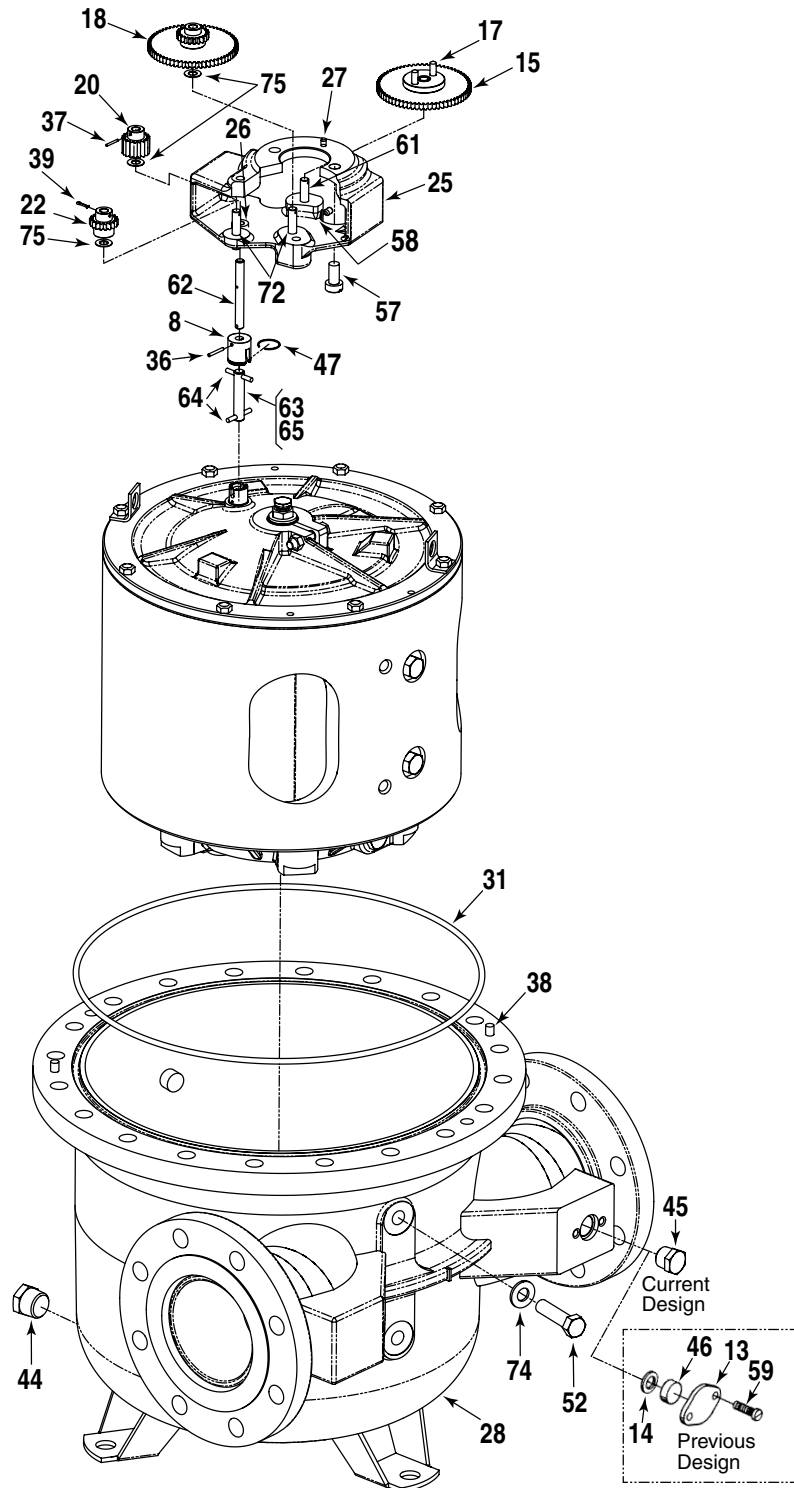
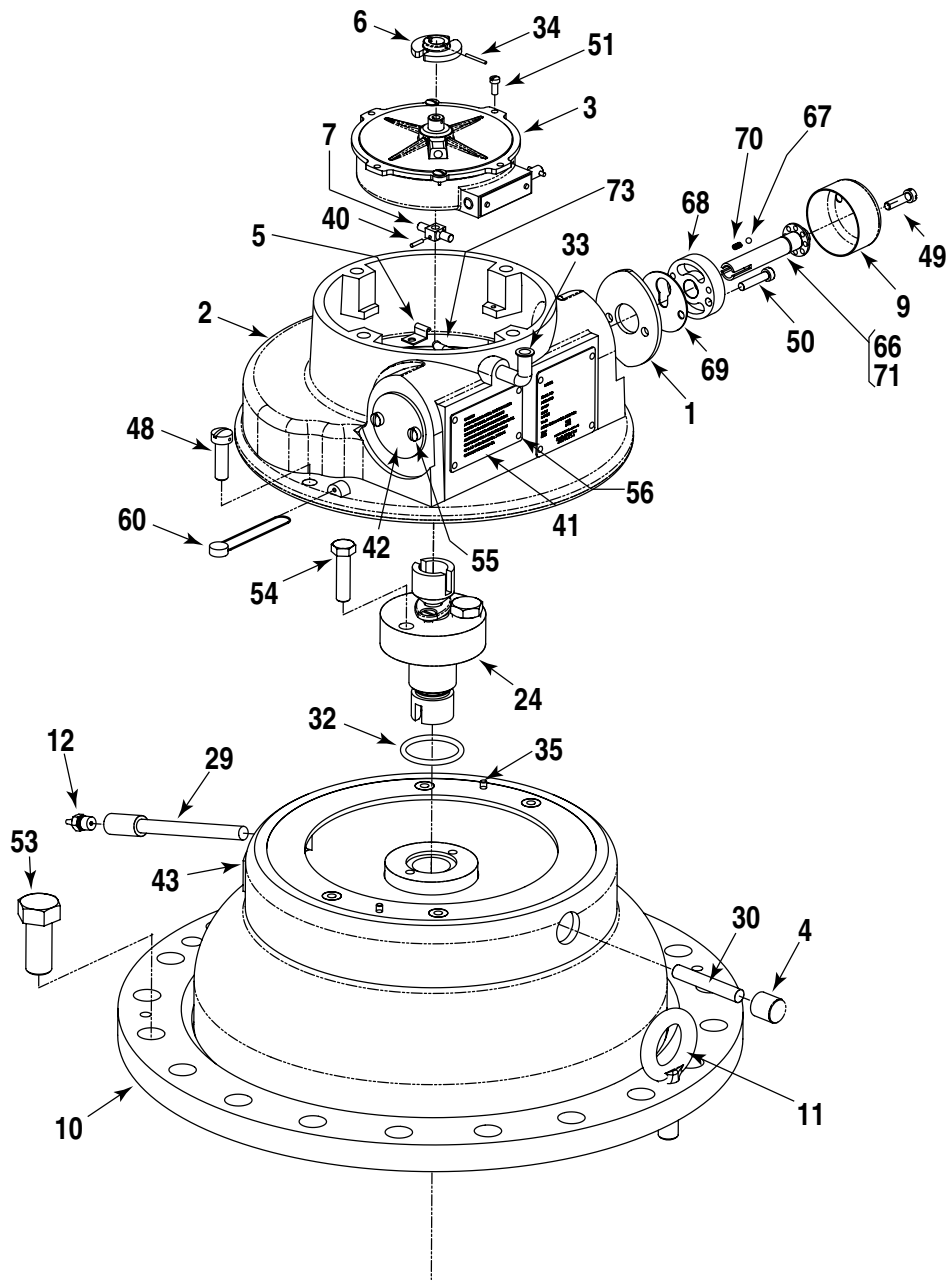


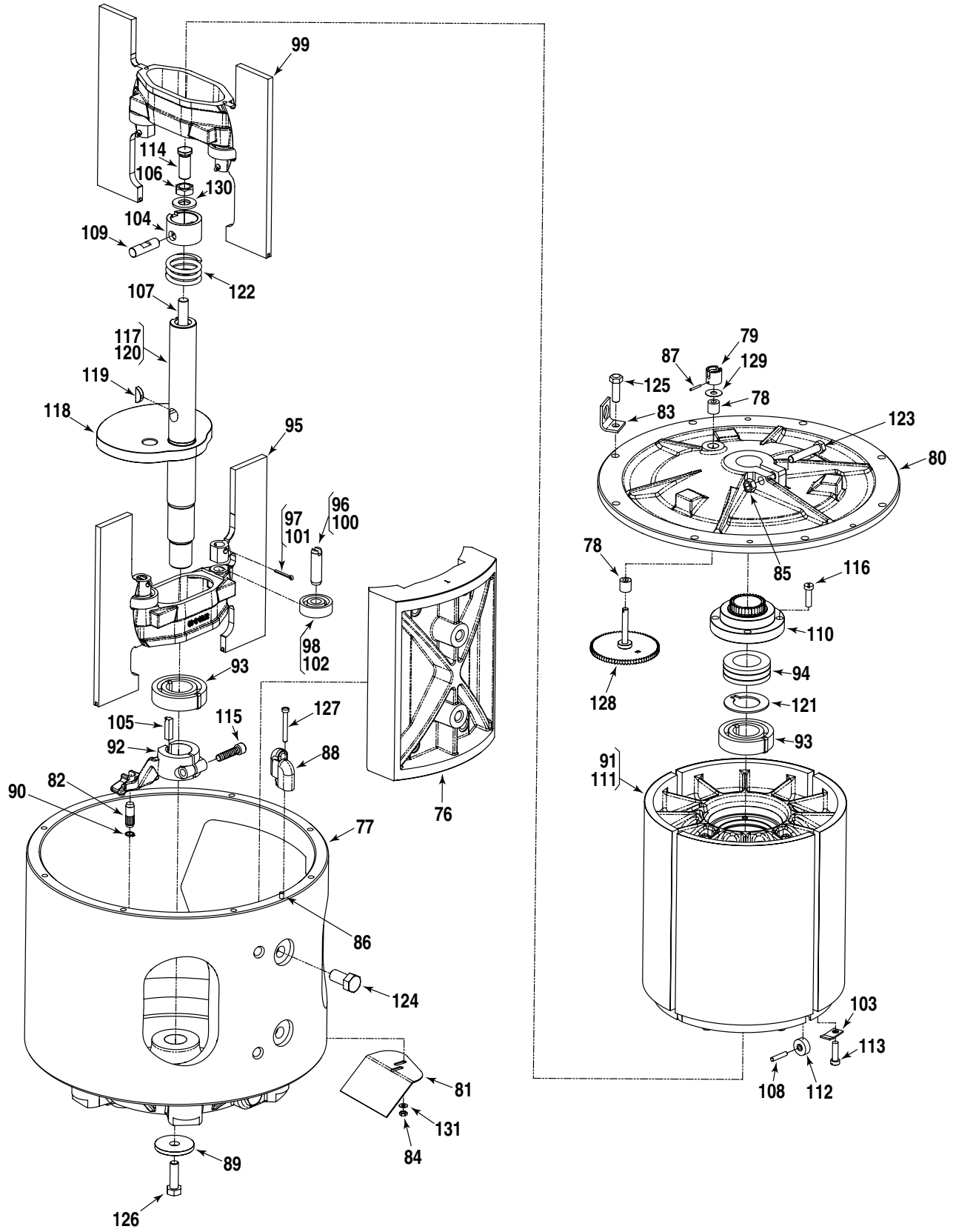
Smith Meter® PD Meter
**Meter, PD Series,
F4 – A3, S3, S5**

Parts List Bulletin PO01016 || Issue/Rev 0.0 (7/13)





Inner Mechanism



Item	Description	Qty.	Part Number
1	Adapter, Calibrator Adjusting Stem	1	512372-001
2	Adapter:		
	Standard and ATC	1	511946-001
	ATG	1	512916-002
3	+ Calibrator:		
	STD	1	512059-001
	W/ ATC (STD)	1	512060-001
@1	W/ ATC (Special Temp. or API)	1	516130-xxx
	Dummy Calibrator	1	516105-001
4	Cap:		
	Standard	1	641746-401
	NACE	1	645238-401
5	Clamp, Oil Tube.....	1	003905-001
6	+ Coupling, Drive.....	1	072103-001
7	Coupling, Input	1	003821-001
8	Coupling, Jack Shaft	1	514633-001
9	Cover, Knob.....	1	003553-001
10	Cover, Outer Housing.....	1	512682-898
11	Eyebolt	2	644974-402
12	Fitting, Grease.....	1	006408-001
13	Flange, Temp. Well Plug (Previous Design).....	1	011941-001
14	Gasket, Temp. Well (Previous Design).....	1	060341-001
15	@2 Gear, Calibrator Drive:		
	U.S. Barrels.....	1	514368-001
	U.S. Barrels, LPG	1	512239-001
	U.S. Gallons.....	1	008248-001
	U.S. Gallons, LPG.....	1	511858-001
	Imperial Gallons	1	514368-001
	Imperial Gallons, LPG.....	1	512239-001
	Dekalitres	1	515934-001
	Dekalitres, LPG.....	1	516373-001
16	* Bushing:		
	Standard and All Iron	1	013372-001
	LPG.....	1	504653-001
17	Pin.....	2	003325-002
18	@2 Gear, Intermediate Pinion:		
	U.S. Barrels.....	1	514366-001
	U.S. Barrels, LPG	1	515068-001
	U.S. Gallons.....	1	514770-001
	U.S. Gallons, LPG.....	1	515071-001
	Imperial Gallons	1	514769-001
	Imperial Gallons, LPG.....	1	515072-001
	Dekalitres	1	515932-001
	Dekalitres, LPG.....	1	516372-001
19	* Bushing, LPG only	1	504653-001
20	@2 Gear, Jack Shaft Pinion:		
	U.S. Barrels.....	1	514363-001
	U.S. Barrels, LPG	1	515066-001
	U.S. Gallons.....	1	514767-001
	U.S. Gallons, LPG.....	1	515070-001
	Imperial Gallons	1	514767-001
	Imperial Gallons, LPG.....	1	515070-001
	Dekalitres	1	514767-001
	Dekalitres, LPG.....	1	515070-001
21	* Bushing, LPG only	1	504653-001

Item	Description	Qty.	Part Number
22	@2 Gear, Reversing Pinion: U.S. Barrels.....	1	514361-001
	U.S. Barrels, LPG	1	515067-001
23	* Bushing, LPG only	1	504653-001
24	+@3 Gland, Packing: Standard – Buna-N	1	513644-001
	PTFE ¹	1	513644-002
	NACE	1	551178-001
25	Housing, Gear: Standard and All Iron	1	514628-001
	LPG.....	1	514628-002
26	Bushing: Standard and All Iron.....	1	519882-001
	LPG	1	512796-001
27	Dowel	1	003628-001
28	Housing, Outer: R A3	1	C/F
	S3.....	1	552982-801
	S3 – PTFE ¹	1	552982-899
	S5.....	1	552984-801
29	Lubrication Assembly	1	514659-001
30	Nipple: Standard	1	641111-404
	NACE	1	645185-401
31	+ O-Ring, Cover: Buna-N.....	1	512140-001
	Viton.....	1	512140-002
	PTFE ¹	1	645842-401
32	+ O-Ring, Packing Gland: Buna-N.....	1	640173-023
	Viton.....	1	640894-403
	PTFE ¹	1	645905-402
33	Oiler.....	1	006588-001
34	Pin, Counter Drive Coupling.....	1	006028-002
35	Pin, Groove, Drive Coupling (3/16 x 3/8")	2	641007-401
36	Pin, Groove, Jackshaft Coupling (5/64 x 5/8")	1	009593-400
37	Pin, Groove, Jackshaft Pinion Gear (1/16 x 1/2").....	1	006054-002
38	Pin, Groove, Outer Cover.....	2	640985-401
39	Pin, Cotter, Reversing Pinion Gear (1/16 x 3/8").....	2	009825-400
40	Pin, Input Coupling.....	1	006317-002
41	Plate, Caution.....	1	006571-001
42	Plate, Cover.....	1	003440-001
43	Plate, Gland Lubrication	1	517715-001
44	Plug, Pipe: Standard	1	006878-002
	NACE	1	645242-403
45	Plug, Pipe (Current Design): Standard	1	006505-002
	NACE	1	645242-402
46	Plug, Temperature Well (Previous Design)	1	012025-001
47	Ring, Snap.....	1	512066-001
48	Screw, Adapter to cover: A3 (5/16-18 x 3/4", Drilled).....	2	009563-400
	S3, S5 (5/16-18 x 1", Drilled)	2	065075-003
49	Screw, Adjusting Stem Assembly, #10-24 x 3/4", Drilled	2	006481-003

¹ Polytetrafluoroethylene (PTFE).

Item	Description	Qty.	Part Number
50	Screw, Base Plate, #10-32 x 7/8"	2	640835-001
51	Screw, Calibrator, #6-32 x 5/16"	2	006048-002
52	Screw, Cap – Inner Mechanism:		
	A3 (1/2-13 x 1-3/4").....	2	006169-002
R	S3, S5 (1/2-13 UNC-2A x 2")	2	646134-401
	NACE, (1/2-13 x 1-3/4")	2	645182-401
53	Screw, Cap – Outer Housing:		
	A3 (9/16-12 x 2-1/4").....	20	640975-403
R	S3, S5 (3/4-10 x 1-3/4")	20	646186-401
54	Screw, Cap – Packing Gland to Cover (5/16-18 x 1-1/4")	2	006511-002
55	Screw, Cover Plate, #10-32 x 3/8"	2	006045-002
56	Screw, Drive, #2 x 1/8"	12	009880-400
57	Screw, Gear Housing, 5/16-18 x 5/8"	2	009813-400
58	Screw, Set-Gear Housing, #10-32 x 1/4"	1	009469-400
59	Screw, Temperature Well Flange (5/16-18 x 1") (Previous Design)	2	060133-002
60	+ Seal, Lead and Wire	3	001627-400
61	Shaft, Calibrator Drive Gear	1	515341-001
62	Shaft, Jack (Upper)	1	514634-002
63	Shaft, Link Assembly	1	514757-001
64	Pin	2	640780-001
65	Shaft.....	1	512068-003
66	Stem, Adjusting Assembly	1	009838-001
67	Ball	2	006427-001
68	Plate, Base.....	1	003552-001
69	Plate, Retainer	1	003556-001
70	Spring, Knob	2	003557-001
71	Stem, Adjusting	1	003551-001
72	Stud, Gear Shaft.....	2	514370-001
73	Tube, Oil	1	514658-001
74	Washer, 17/32 x 1-1/16"	2	065309-002
75	Washer, Jack Shaft.....	3	641985-402

Inner Mechanism			
Item	Description	Qty.	Part Number
76	+@4 Block:		
	All, Standard	1	517085-001
	All, High Viscosity:		
	For 2,000 SSU to 10,000 SSU	1	517085-041
77	Body.....	1	511997-001
78	+ Bushing, Jackshaft:		
	Standard and All Iron	2	519882-001
	LPG	2	512796-001
79	+ Coupling, Drive.....	1	512064-002
80	Cover, Inner		
	Standard and All Iron	1	516456-001
	LPG	1	516456-002
81	Cover, Pitot, (Prior to 2010).....	1	512719-001
82	Dowel, Locating Arm	1	512115-001
83	Lug, Lift.....	2	512002-001
84	Nut, Pitot Assembly, #10-32, (Prior to 2010)	2	001723-400
85	Nut, 5/16-18 Shakeproof	1	009552-400
86	Pin, Groove, Body, 3/16 x 3/4"	1	007900-400
87	Pin, Groove, Drive Coupling, 5/64 x 5/8"	1	009593-400
88	Pitot	1	072186-001

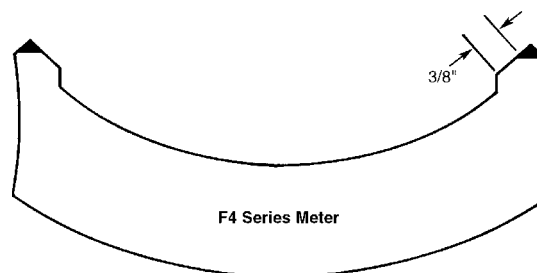
Item	Description	Qty.	Part Number
89	Plate	1	512714-001
90	Ring, Retaining.....	1	064150-001
91	@3 Rotor and Blade Assembly:		
	Previous Design, A1 Only:		
	Standard	1	515706-001
	All Iron.....	1	515706-002
	Current Design, All:		
	Standard	1	517231-001
	All Iron.....	1	517231-002
	LPG.....	1	517231-003
92	Arm, Locating	1	511945-001
93	+ Bearing, Rotor:		
	Standard and All Iron.....	2	516109-001
	LPG	2	516109-002
94	+ Bearing, Thrust:		
	Standard and All Iron.....	1	006519-001
	LPG	1	504658-001
95	+ Blade, Lower:		
	Standard.....	1	008901-001
	All Iron	1	009441-042
	LPG	1	504662-001
	Standard – Modified for 2,000 SSU to 10,000 SSU	1	008901-041
	Standard – Modified for 200°F Max	1	008901-042
	Standard – Modified for 2,000 SSU to 10,000 SSU and 200°F	1	008901-043
	A.I. – Modified for 2,000 SSU to 10,000 SSU	1	009442-041
96	Pin, Blade Roller.....	2	003449-001
97	Pin, Cotter, 3/32 x 1".....	2	006308-001
98	Roller, Blade:		
	Standard and All Iron	2	065109-001
	LPG.....	2	644412-402
99	+ Blade, Upper:		
	Standard.....	1	008900-001
	All Iron	1	009441-042
	R LPG	1	504663-001
	Standard – Modified for 2,000 SSU to 10,000 SSU	1	008900-041
	Standard – Modified for 200°F Max	1	008900-042
	A.I. – Modified for 2,000 SSU to 10,000 SSU	1	009441-041
100	Pin, Blade Roller.....	2	003449-001
101	Pin, Cotter, 3/32 x 1".....	2	006308-001
102	Roller, Blade:		
	Standard and All Iron	2	065109-001
	LPG.....	2	644412-402
103	Clamp, Rotor Cover Roller	8	011226-001
104	Clamp, Thrust Bearing	1	512074-001
105	Key.....	1	512715-001
106	Nut, Adjusting Screw	1	003527-001
107	Pin, Adjusting Screw Extension.....	1	512073-001
108	Pin, Rotor Cover Roller	4	001634-001
109	Pin, Thrust Bearing Collar	1	008251-001
110	Plate, Rotor Gear	1	512112-001
111	Rotor:		
	Standard.....	1	008253-002
	Previous Design	1	008253-191
	Standard – High Visc.....	1	008253-041
	LPG and Standard –High Temp	1	008253-042
	Standard – High Visc/High Temp	1	008253-041

Item	Description	Qty.	Part Number
112	+ Roller, Rotor Cover: Standard and All Iron.....	4	011681-001
	LPG	4	514751-001
113	Screw, 1/4-20 x 7/8"	8	006100-002
114	Screw, Adjusting	1	003526-002
115	Screw, Locating Arm, 5/16-18 x 1-1/4"	1	643764-402
116	Screw, Rotor Gear Plate, 1/4-20 x 7/8"	4	006100-002
117	+@4 Shaft and Cam Assembly: Previous Design, A1 only	1	512113-001
	Current Design, All	1	517152-001
118	+@4 Cam: Previous Design, A1 only	1	003814-001
	Current Design, All	1	517019-001
119	Key	1	005535-800
120	Shaft	1	511876-001
121	Spacer, Bearing	1	512075-001
122	+ Spring, Rotor Bearing	1	002198-002
123	Screw, 5/16-18 x 1"	1	006325-002
124	Screw, Cap (Block) 1/2 - 13 x 1"	2	010525-400
125	Screw, Inner Cover to Body.....	8	006140-002
126	Screw, Nylok	1	641044-401
127	Screw, Pitot Assembly: Previous Design (Prior to 2010) #10 - 32 x 1 1/2".....	2	009606-400
	Current Design #10 - 32 x 3/8".....	2	006045-002
128	Shaft, Jack and Gear Assembly	1	512062-001
129	Washer-Flat, .75 OD, .265 ID, .010 Thick	1	643249-401
130	Washer-Flat, 1/2"	1	065309-002
131	Washer, Lock #10, (Prior to 2010).....	2	642482-406

Inner Mechanism General Assembly Numbers

Standard	517153-091
All Iron.....	517153-092
LPG	517153-093

- + Recommended spares.
- * Not illustrated.
- R Indicates change since last revision.
- @1 Note 1: When ordering, include temperature range and specific API gravity.
- @2 Note 2: Only Standard gearing is listed. For additional gearing combinations, see Gear Train Bulletin AB01023.
- @3 Note 3: See Form No. PO01042 for components.
- @4 Note 4: In 1973 a change in design was made to the block and cam of the four-inch meter. To ensure proper operation, a current style block must be used with a current style cam. Either current or previous style block can be used with previous style cam. The shaded area of the block outline below represents the dimensioning of the previous style.



PO01016 has replaced publication P0546.20X which has been made obsolete.

Editorial Change: 11/13: Items 24, 28, 31, 32 - material reference changed to PTFE.

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The specifications contained herein are subject to change without notice and any user of said specifications should verify from the manufacturer that the specifications are currently in effect. Otherwise, the manufacturer assumes no responsibility for the use of specifications which may have been changed and are no longer in effect.

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