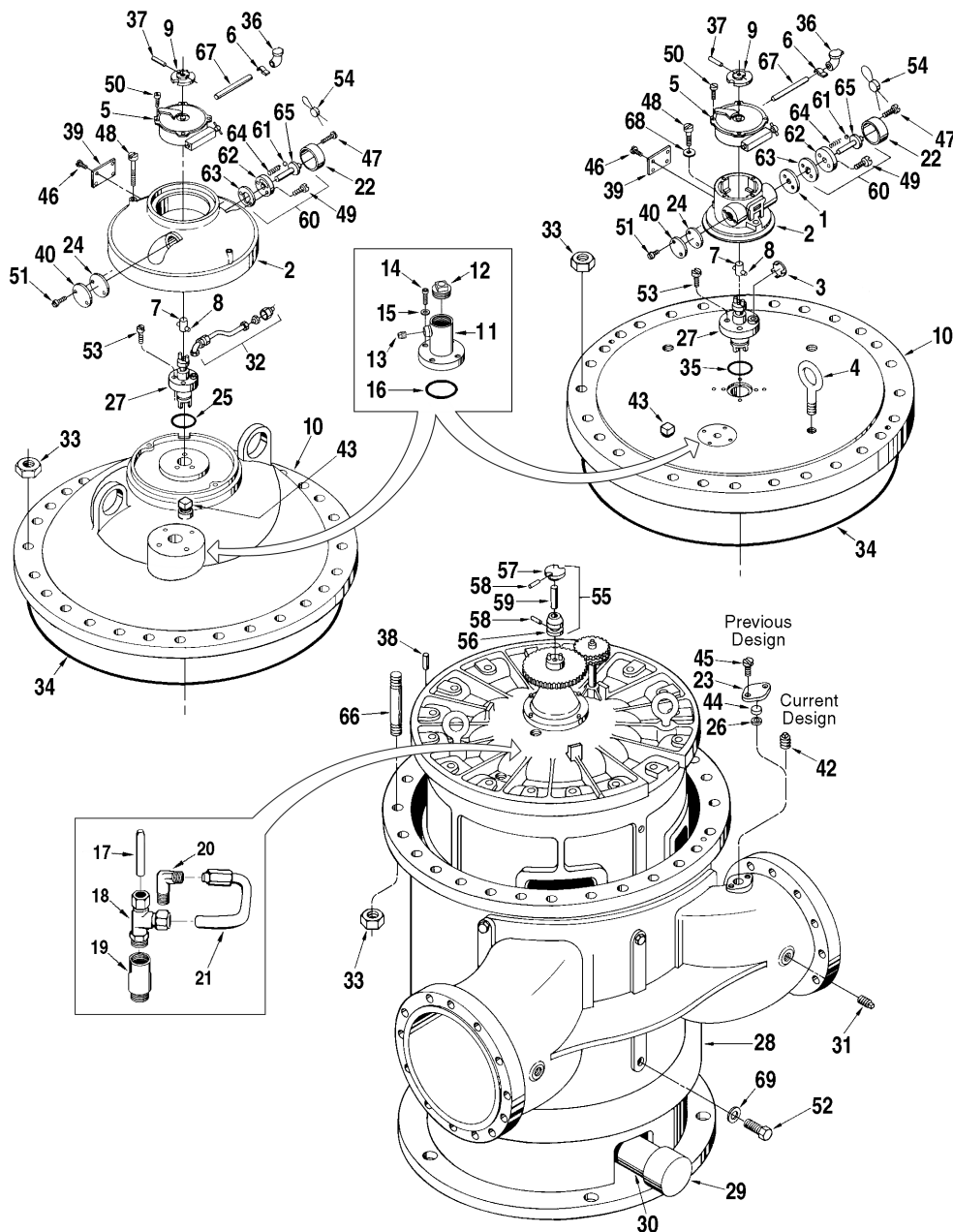


Model K12-S1, S3, S5, S6, and S7

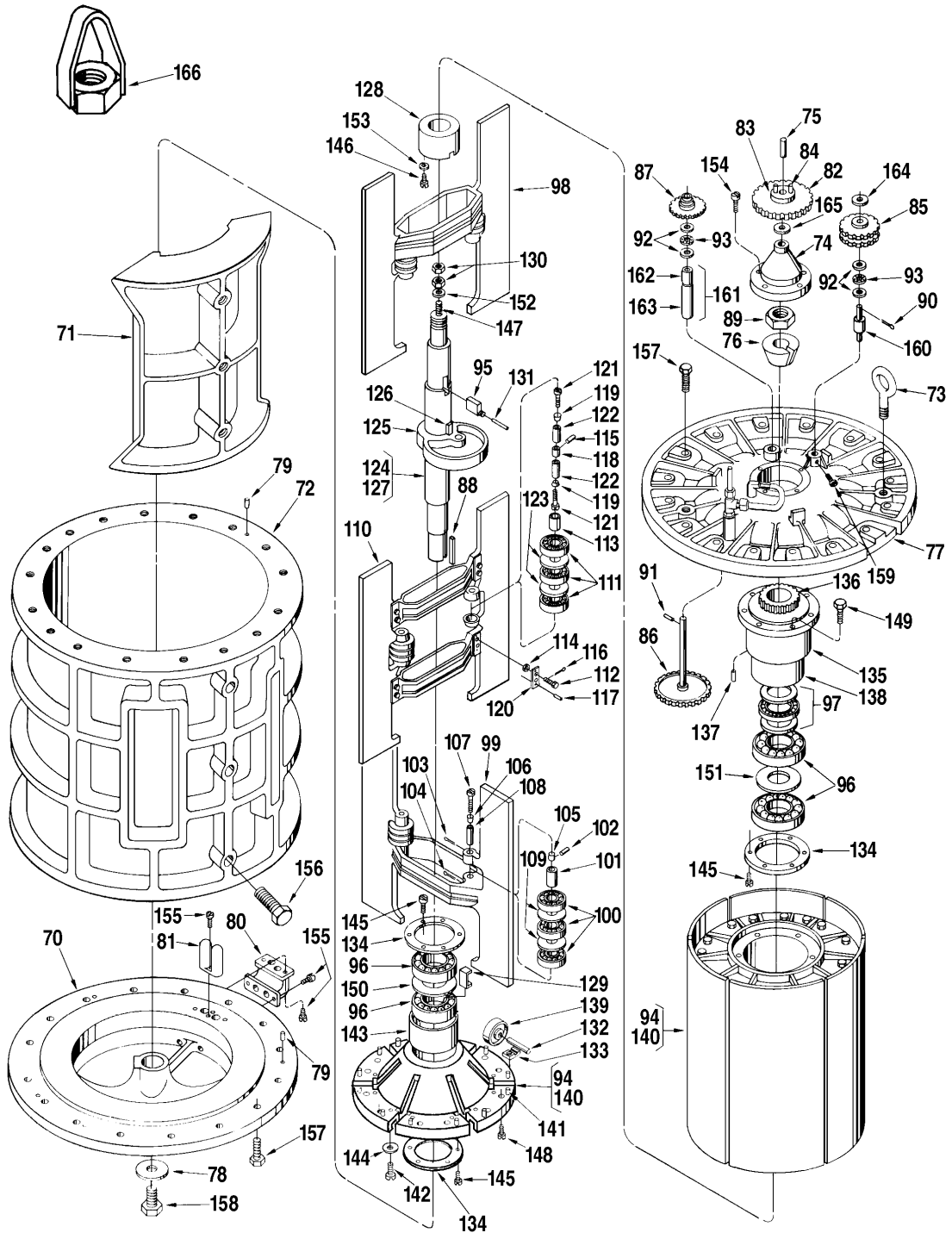
Bulletin PO01018 Issue/Rev. 0.5 (12/23)

S1, S3, S5

S6, S7



Inner Mechanism



Item	Note	Description	Quantity	K12-S1	K12-S3, S5	K12-S6, S7
1		Adapter, Calibrator Adjusting Stem	1	N/A	N/A	512372-001
2		Adapter:				
		Standard and ATC	1	518350-001	518350-001	515755-001
		Slotted (for use with packing gland lubrication kit)	1	518350-002	518350-002	N/A
		ATG	1	506123-002	506123-002	516608-001
3		Blank, Snap In	1	N/A	N/A	015533-401
4		Bolt, Eye	2	N/A	N/A	065289-001
5	2	Calibrator:				
		Manual	1	512059-001	512059-001	512059-001
		Temperature Condensated, Standard	1	512060-001	512059-001	512060-001
	5	Temperature Condensated, Special Temperature or API Gravity	1	516130	516130	516130
		Dummy Calibrator	1	516105-001	516105-001	516105-001
6		Clamp, Oil Tube	1	003905-001	003905-001	003905-001
7		Coupling, Calibrator Drive:				
		Standard, Used on 3/16" Shaft	1	005969-001	005969-001	005969-001
		Used on Transmitters with 1/4" Shaft	1	005969-002	005969-002	005969-002
8		Pin	1	003540-001	003540-001	003540-001
9	2	Coupling, Drive	1	072103-001	072103-001	072103-001
10		Cover:				
		S7	1	N/A	N/A	518803-001
		All Others	1	N/A	513321-001	533071-001
		Vent:				
11		Vent Housing:	1	N/A	554606-003	554606-003
12		Pipe Plug, 2" NPT	1	N/A	645350-401	645350-401
13		Pipe Plug, 1/2" NPT	1	N/A	645242-402	645242-402
14		Screw	4	N/A	646205-402	646205-402
15		Washer	4	N/A	065309-002	065306-002
16		O-Ring	1	N/A	646612-401	646612-401
17		Spacer	1	N/A	554059-009	554059-003
18		Fitting	1	N/A	646200-401	646200-401
19		Adapter	1	N/A	554336-001	554336-001
20		Elbow	1	N/A	643386-405	643386-405
21		Tubing 316 SS, 3/8" OD X 0.035" Wall	1	N/A	N/A	N/A
22		Cover Knob	1	003553-001	003553-001	003553-001
23		Flange, Temperature Well	1	011941-001	011941-001	012026-001
24		Gasket, Cover Plate	1	003834-001	003834-001	003834-001
25	2	Gasket, Packing Gland	1	011337-001	011337-001	N/A
26		Gasket, Temperature Well	1	060341-001	060341-001	060341-001
27	2, 6	Gland, Packing:				
		Standard	1	009652-001	009652-001	515849-001
		PTFE	1	009652-002	009652-002	515849-002
		NACE	1	N/A	551132-001	515549-001
28		Housing Assembly:				
		S1, S3, S6 Standard	1	C/F	518925-002	533074-001
		S5, S7	1	N/A	513326-002	518802-001
		S3, S6 (with flanged drain) NACE	1	N/A	518925-051	551505-001
29		Cap, Pipe:				
		Standard	1	640259-001	640259-001	640259-001

Item	Note	Description	Quantity	K12-S1	K12-S3, S5	K12-S6, S7
		NACE	1	N/A	645238-402	N/A
30		Nipple, Pipe:				
		S7	1	N/A	N/A	643351-401
		All Others Standard	1	640475-002	640475-002	640475-002
		S3 Only, NACE	1	N/A	645249-403	N/A
31		Plug, Pipe, 1/2" NPT:				
		Standard	2	006505-002	006505-002	006505-002
		S3 and S6 NACE	2	N/A	645242-402	645242-402
32		Lubrication Assembly	1	513127-001	513127-001	N/A
33		Nut, Cover:				
		S7, 1-1/2"-8	64	N/A	N/A	642148-410
		S6, 1-1/4"-8	64	N/A	N/A	640976-402
		S1, S3, and S5, 1"-8	56	006385-400	006385-400	N/A
34	2	O-Ring, Cover:				
		Buna-N	1	513032-001	513032-001	513032-001
		FKM	1	513032-002	513032-002	513032-002
35	2	O-Ring, Packing Gland:				
		Buna-N	1	N/A	N/A	640888-001
		FKM	1	N/A	N/A	640894-001
36		Oiler	1	006588-001	006588-001	006588-001
37		Pin, Groove, 5/64 x 1/2"	1	006053-002	006053-002	006053-002
38		Pin, Locating Dowel	2	641075-401	641075-401	641075-401
39		Plate, Caution	1	006571-001	006571-001	006571-001
40		Plate, Cover	1	003440-001	003440-001	003440-001
41	1	Plate, Lubrication	1	517715-002	517715-002	515873-001
42		Plug, Pipe, 1/2" NPT:				
		Standard	1	006505-002	006505-002	006505-002
		NACE:				
		S3	3	N/A	645242-402	N/A
		S6	4	N/A	N/A	645242-402
43		Plug, Pipe, 1" NPT:				
		Standard	1	006482-002	006482-002	006482-402
		NACE:				
		S3	1	N/A	645242-404	N/A
		S6	1	N/A	N/A	645242-404
44		Plug, Temperature Well	1	012025-001	012025-001	012025-001
45		Screw:				
		S1, S3, S5, 5/16-18 x 7/8"	2	009563-400	009563-400	N/A
		S6 and S7, 5/16-18 x 3/4"	4	N/A	N/A	006409-002
46		Screw, Drive, #2 x 1/8"	12	009880-400	009880-400	009880-400
47		Screw, #10-24 x 3/4"	2	006481-003	006481-003	006481-003
48		Screw, Adapter to Cover	2	642043-432	642043-432	642019-416
49		Screw, Base Plate. #10-32 x 7/8"	2	640835-001	640835-001	640835-001
50		Screw, Calibrator Mounting	2	006048-002	006048-002	006048-002
51		Screw, Cover Plate, #10-32 x 3/8"	2	006045-002	006045-002	006045-002
52		Screw, Cinch Bolt:				
		Standard 7/8"-9 x 3-1/2"	4	P8000017725	P8000017725	P8000017725
		NACE:				
		S3 Only 7/8"-9 x 3-1/2"	4	N/A	P8000017725	N/A
		S6 Only 7/8"-9 x 4"	4	N/A	N/A	P8000017726

Item	Note	Description	Quantity	K12-S1	K12-S3, S5	K12-S6, S7
53		Screw, Packing Gland:				
		5/16-18 x 1-1/4"	3	006511-002	006511-002	N/A
		7/16-14 x 1-1/2"	4	N/A	N/A	006410-002
54		Seal, Lead, and Wire	2	001627-400	001627-400	001627-400
55		Shaft Assembly, Calibrator Drive:				
		S7	1	N/A	N/A	518804-001
		All Others	1	512944-001	512944-001	533065-001
56		Coupling, Lower Drive:				
		S7	1	N/A	N/A	518851-001
		All Others	1	503408-001	503408-001	503408-001
57		Coupling, Upper Drive	1	501970-001	501970-001	501800-002
58		Pin, Groove, 5/64 x 1/2":				
		S7	2	N/A	N/A	065354-002
		All Others	2	006053-002	006053-002	006053-002
59		Shaft:				
		S7	1	N/A	N/A	518850-001
		All Others	1	512945-001	512945-001	533064-001
60		Stem Assembly, Adjusting	1	009838-001	009838-001	009838-001
61		Ball	2	006427-001	006427-001	006427-001
62		Plate, Base	1	003552-001	003552-001	003552-001
63		Plate, Retainer	1	003556-001	003556-001	003556-001
64		Spring, Knob	2	003557-001	003557-001	003557-001
65		Stem, Adjusting	1	003551-001	003551-001	003551-001
66		Stud, Cover:				
		S1, S3, S5 1"-8 x 6"	28	640446-402	640446-402	N/A
		S6, 1-14"-8 x 9-1/2"	32	N/A	N/A	642355-404
		S7, 1-1/2" - 8 x 15"	32	N/A	N/A	642356-405
67		Tube, Oil	1	514658-001	514658-001	514658-001
68		Washer, Lock Spring	2	N/A	N/A	002917-400
69		Washer, Cinch Bolt	4	518854-001	518854-001	518854-001

Inner Mechanism

Item	Note	Description	Quantity	Part Number
70		Base	1	512978-001
71		Block:		
		Standard	1	512983-001
		High Viscosity for 1,000 SSU to 3,000 SSU	1	512983-201
		High Viscosity for 3,000 SSU to 5,000 SSU	1	512983-202
		High Viscosity for 5,000 SSU to 10,000 SSU	1	512983-203
72		Body	1	512982-001
73		Bolt, Eye	2	065433-005
74		Cap, Adjusting Screw	1	502823-001
75		Shaft, Drive Gear	1	503407-001
76		Cone, Shaft	1	512962-001
77		Cover	1	512977-001
78		Cover, Rotor Shaft	1	512968-001
79		Dowel, Cover, and Base	2	641075-401
80		Elbow, Pitot Fitting	1	513060-001
81		Fitting, Pitot	1	503582-001
82	7	Gear, Calibrator Drive:		

Item	Note	Description	Quantity	Part Number
		Hectoliters, Standard	1	518417-001
		Barrels, Standard	1	512947-001
83		Bushing:		
		Standard	1	065311-001
84		Pin	2	500418-001
85	7	Gear, Idler:		
		Hectoliters, Standard	1	518415-001
		Barrels, Standard	1	512948-001
		Barrels, LPG:	1	533114-001
86		Gear, Jackshaft	1	512949-001
87	7	Gear, Jackshaft Pinion:		
		Standard	1	512951-001
		LPG	1	533102-001
88		Key, Rotor Shaft	1	513122-001
89		Nut, Rotor Shaft, 1-3/4"-8, UN-3B	1	643797-401
90		Pin, Cotter, 1/8 x 3/4"	1	001292-401
91		Pin, Groove, 1/8 x 3/4"	1	006127-002
92	2	Plate, Thrust Bearing	4	001111-001
93	2	Retainer, Thrust Bearing	2	070360-001
94		Rotor Assembly, Standard	1	517522-001
95		Bar, Adjusting	1	536440-001
96	2	Bearing, Rotor:		
		Standard and All Iron	4	513168-001
		LPG	4	513168-002
97	2	Bearing, Thrust	1	641071-401
98	2	Blade Assembly, Upper:		
		Standard	1	513106-001
		Modified for 1,000 SSU to 3,000 SSU	1	513106-101
		Modified for 3,000 SSU to 5,000 SSU	1	513106-102
		Modified for 5,000 SSU to 10,000 SSU	1	513106-103
		Modified for 200 °F	1	513106-104
		Modified for 1,000 SSU to 3,000 SSU and 200 °F	1	513106-105
		Modified for 3,000 SSU to 5,000 SSU and 200 °F	1	513106-106
		Modified for 5,000 SSU to 10,000 SSU and 200 °F	1	513106-107
99	2	Blade Assembly, Lower:		
		Standard	1	513107-001
		Modified for 1,000 SSU to 3,000 SSU	1	513107-101
		Modified for 3,000 SSU to 5,000 SSU	1	513107-102
		Modified for 5,000 SSU to 10,000 SSU	1	513107-103
		Modified for 200 °F	1	513107-104
		Modified for 1,000 SSU to 3,000 SSU and 200 °F	1	513107-105
		Modified for 3,000 SSU to 5,000 SSU and 200 °F	1	513107-106
		Modified for 5,000 SSU to 10,000 SSU and 200 °F	1	513107-107
100		Bearing	6	644412-407
101		Bushing	2	513016-001

Item	Note	Description	Quantity	Part Number
102		Pin, Blade Bearing Bushing	2	513150-001
103		Pin, Cotter, 1/8 x 2"	4	006187-001
104		Pin, Cotter, 1/8 x 2-1/2"	2	640477-001
105		Plug, Center	2	513017-001
106		Plug, End	4	513018-001
107		Screw, Cap, 1/4-28 x 1-1/2"	4	640438-403
108		Sleeve, Expansion	4	513019-001
109		Spacer	4	516947-001
110	2	Blade Assembly, Middle:		
		Standard	1	513121-001
		Modified for 1,000 SSU to 3,000 SSU	1	513121-101
		Modified for 3,000 SSU to 5,000 SSU	1	513121-102
		Modified for 5,000 SSU to 10,000 SSU	1	513121-103
		Modified for 200 °F	1	513121-104
		Modified for 1,000 SSU to 3,000 SSU and 200 °F	1	513121-105
		Modified for 3,000 SSU to 5,000 SSU and 200 °F	1	513121-106
		Modified for 5,000 SSU to 10,000 SSU and 200 °F	1	513121-107
111	2	Bearing	6	644412-407
112		Bolt	8	513158-001
113		Bushing	2	513016-001
114		Nut, Hex	8	006015-002
115		Pin, Blade Bearing Bushing	2	513150-001
116		Pin, Cotter, 3/32 x 1"	8	006308-001
117		Pin, Dowel	8	513173-001
118		Plug, Center	2	513017-001
119		Plug, End	4	513018-001
120		Retainer, Dowel	8	513146-001
121		Screw, Cap, 1/4-28 x 1-1/2"	4	640438-403
122		Sleeve, Expansion	4	513019-001
123		Spacer	4	516947-001
124	2	Cam and Shaft Assembly	1	513157-001
125		Cam	1	518132-001
126		Key	1	513122-001
127		Shaft	1	512961-001
128		Collar	1	512957-001
129		Lock, Rotor Bearing	2	513119-001
130		Nut, Adjusting Screw	2	640671-001
131		Pin, Roll, 5/32 x 1"	1	010527-400
132		Pin, Rotor Cover Roller	6	512960-001
133		Plate, Rotor Cover Roller Pin	12	502858-001
134		Plate, Lock	2	512965-001
135		Plate, Rotor Gear	1	512958-001
136		Gear, Rotor	1	512959-001
137		Pin, Lock	1	503321-001
138		Sleeve, Upper Rotor Bearing (not sold as a separate component; included with item 140)	N/A	N/A
139	2	Roller, Rotor Cover:		
		Standard and All Iron	6	503552-001

Item	Note	Description	Quantity	Part Number
140		Rotor, Sub Assembly:		
		Standard	1	512980-001
		Modified for 1,000 SSU to 3,000 SSU	1	512980-101
		Modified for 3,000 SSU to 5,000 SSU	1	512980-102
		Modified for 5,000 SSU to 10,000 SSU	1	512980-103
		Modified for 200 °F	1	512980-104
		Modified for 1,000 SSU to 3,000 SSU and 200 °F	1	512980-105
		Modified for 3,000 SSU to 5,000 SSU and 200 °F	1	512980-106
		Modified for 5,000 SSU to 10,000 SSU and 200 °F	1	512980-107
141		Dowel	13	502945-001
142		Screw, 5/8-11 X 2-1/4", Drilled	12	503665-001
143		Sleeve, Lower Rotor Bearing (not sold as a separate component; included with item 140)	N/A	N/A
144		Washer	12	513138-001
145		Screw, 5/16-18 x 5/8", Drilled	12	640353-001
146		Screw, #10-32 x 3/8"	2	643339-401
147		Screw, Adjusting	1	512956-001
148		Screw, Pin Clamp, 3/8-16 x 1-1/4", Drilled	12	660248-404
149		Screw, Rotor Gear Plate 1/2-13 x 1-3/4", Drilled	6	503664-001
150		Spacer, Lower Rotor Bearing	1	512967-001
151		Spacer, Upper Rotor Bearing	1	512966-001
152		Washer, Flat	1	646636-401
153		Washer, Flat	2	006929-001
154		Screw, 3/8-16 x 1-1/4"	4	002238-401
155		Screw, 5/16-18 x 7/8"	6	009563-400
156		Screw, Body to Block, 5/8-11 x 2-1/4"	3	640206-006
157		Screw, Cover, and Base, 5/8-11 x 2-1/4"	32	640206-006
158		Screw, Rotor Shaft, 3/4-10 x 2-1/4"	1	641079-401
159		Screw, Set, 1/4-20 x 1/4"	1	006538-001
160		Shaft, Pinion with Spacer	1	513159-001
161		Sleeve Assembly:		
		Standard	1	512950-001
		LPG	1	533113-001
162		Bushing:		
		Standard	1	642242-404
		LPG	1	533093-001
163		Bushing, Flanged:		
		Standard	1	641077-401
		LPG	1	533094-001
164		Washer, Flat	1	005500-401
165		Washer, Flat	1	002801-400
166	3	Rotor Lifting Lug	N/A	551919-001

Inner Mechanism General Assembly Part Numbers

Description	Part Number
Barrel Geared, Standard	513167-091

Description	Part Number
Barrel Geared, All Iron Trim	513167-092
Barrel Geared, LPG Trim	513167-093
Hectoliter Geared, Standard	513167-891
Hectoliter Geared, All Iron Trim	513167-892
Hectoliter Geared, LPG Trim	513167-893

Notes

Note	Description
1	Not illustrated
2	Recommended stock
3	As required
4	Indicates change since last revision
5	When ordering, include product temperature range, specific or API gravity, API table used, and meter and gearing the calibrator is to be used in conjunction with
6	See Packing Glands Parts List (PO01042) for component parts
7	Only standard gearing is listed; for additional gearing combinations, see PD Meters Gear Train application bulletin (AB01023)

The specifications contained herein are subject to change without notice and any user of said specifications should verify from the manufacture 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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