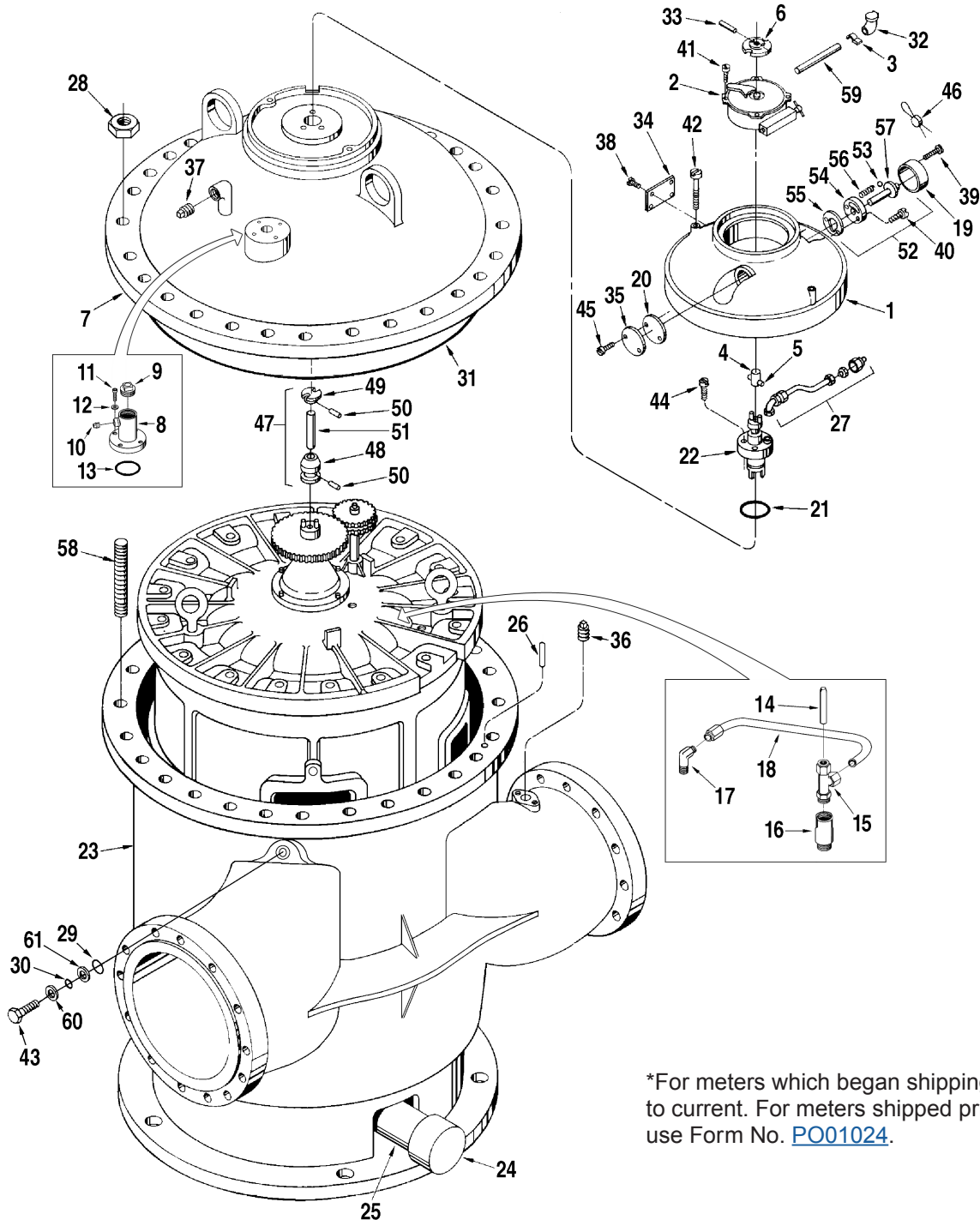


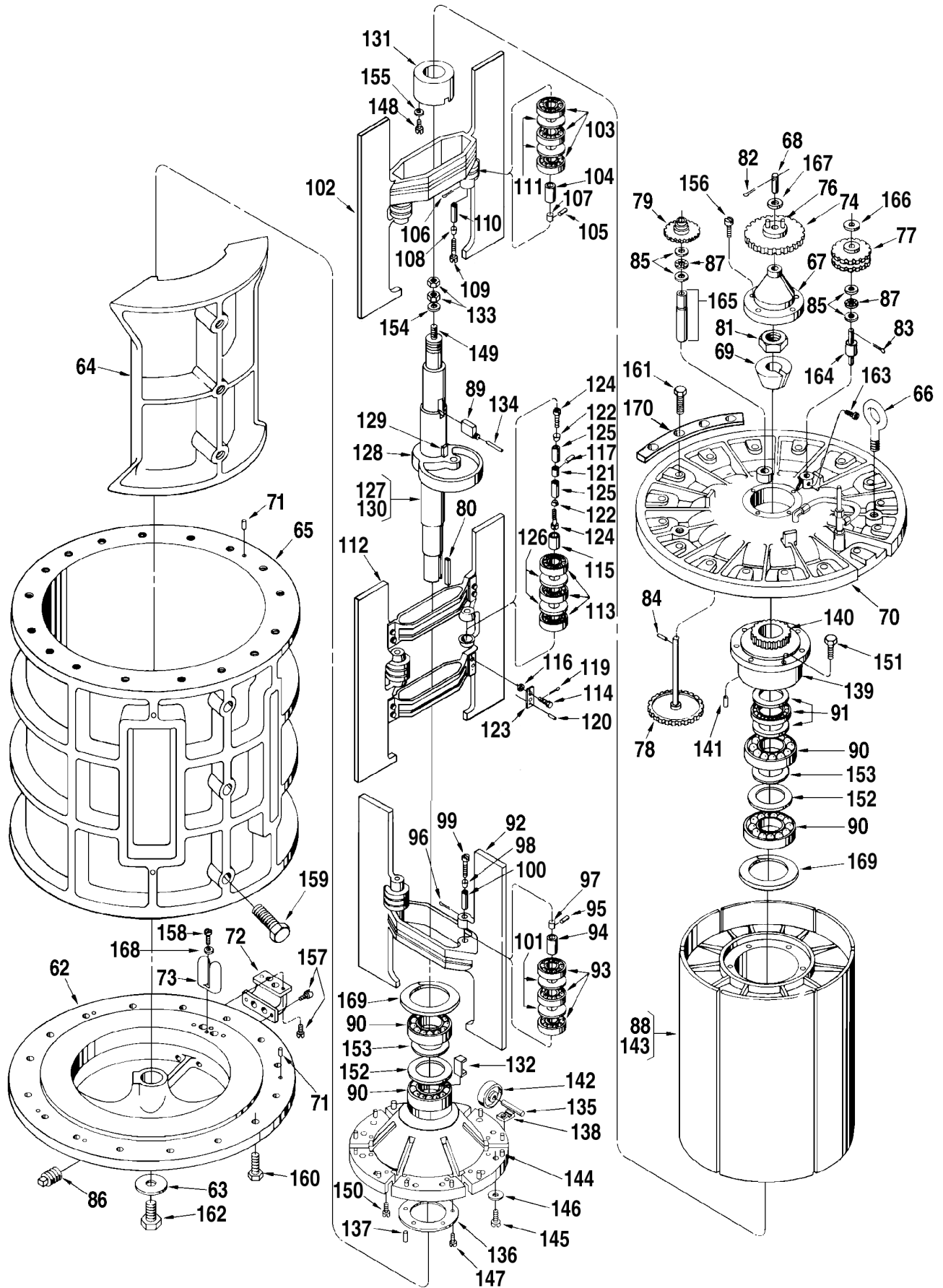
# Meter, PD Series, M16-S3, S5, S6 (1993-Present)

Bulletin PO01023 Issue/Rev. 0.1 (4/18)



\*For meters which began shipping in 1993 to current. For meters shipped prior to 1993, use Form No. [PO01024](#).

# Inner Mechanism



<u>Item</u>	<u>Description</u>	<u>Qty.</u>	<u>M16-S3, S5</u>	<u>M16-S6</u>
1	Adapter:			
	Standard .....	1	518350-001	518350-001
	Slotted (For Use with Packing Gland Lubrication Kit).....	1	518350-002	518350-002
2	+ Calibrator:			
	Standard (Manual).....	1	512059-001	512059-001
	Temperature Compensated, Standard.....	1	512060-001	512060-001
@1	Temperature Compensated, Special Temp. or API Gravity ..	1	516130-xxx	516130-xxx
	Dummy Calibrator.....	1	516105-001	516105-001
3	Clamp, Oil Tube.....	1	003905-001	003905-001
4	Coupling, Drive:			
	Standard, Use on 3/16" Shaft .....	1	005969-001	005969-001
	Used on Transmitters with 1/4" Shaft.....	1	005969-003	005969-003
5	Pin.....	1	003540-001	.....
6	Coupling, Drive.....	1	072103-001	072103-001
7	Cover.....	1	554105-001	554230-001
	Vent:			
8	Vent Housing .....	1	554606-001	554606-001
9	Pipe Plug, 2" NPT .....	1	645350-401	645350-401
10	Pipe Plug, 1/2" NPT .....	1	645242-402	645242-402
11	Screw.....	4	646205-402	646205-402
12	Washer.....	1	641837-401	641837-401
13	O-Ring .....	1	646612-401	646612-401
14	Spacer .....	1	554059-008	554059-008
15	Fitting .....	1	646200-401	646200-401
16	Adapter .....	1	554336-001	554336-001
17	Elbow .....	1	643386-405	643386-405
18	3/8" Tubing.....	1	644759-402	644759-402
19	Cover, Knob.....	1	003553-001	003553-001
20	+ Gasket, Cover Plate .....	1	003834-001	003834-001
21	+ O-Ring, Packing Gland:			
	Buna-N .....	1	012009-001	640888-001
	Viton .....	1	012009-001	640894-001
22	@2+ Gland, Packing.....	1	070318-001	515849-001
23	@3 Housing Assembly, Outer:			
	S3 .....	1	554103-001	.....
	S5 .....	1	554102-002	.....
	S6 .....	1	.....	554144-001
24	Cap, Pipe.....	1	640259-001	640259-001
25	Nipple, Pipe .....	1	640475-003	640475-003
26	Pin, Locating.....	2	003348-001	003348-001
27	Lubrication Assembly .....	1	513127-001	513127-001
28	Nut, Hex			
	1-1/2" - 8 .....	64	642148-426	.....
	1-3/4" - 8 .....	64	.....	642148-411
29	+ O-Ring:			
	Buna-N .....	2	640888-001	640888-001
	Viton .....	2	640888-001	640888-001
30	+ O-Ring:			
	Buna-N .....	2	640888-005	640888-005
	Viton .....	2	640888-005	640888-005
31	+ O-Ring, Cover:			
	Buna-N.....	1	502929-001	502929-001
	Viton.....	1	502929-002	502929-002
32	Oiler, Gits #1230.....	1	006588-001	006588-001
33	Pin, Drive, 5/64 x 1/2".....	1	006053-002	006053-002
34	Plate, Caution.....	1	006571-001	006571-001
35	Plate, Cover.....	1	003440-001	003440-001
36	Plug, Pipe, 1/2" NPT.....	1	006505-002	006505-002
37	Plug, Pipe, 3/4" NPT.....	1	006878-002	006878-002
38	Screw, Type U x 1/8".....	8	009880-400	009880-400
39	Screw, #6-32 x 5/16".....	2	006048-002	006048-002
40	Screw, Base Plate, #10-32 x 5/8".....	2	008338-400	008338-400

Item	Description	Qty.	M16-S3, S5	M16-S6
41	Screw, Calibrator Mounting, #10-24 x 3/4" .....	2	006481-003	006481-003
42	Screw, Cap, Adapter Cover, 5/16-18 x 1-1/5", Drilled.....	2	642043-432	642043-432
43	R Screw, Cap, Innermech., 1"-8 x 5" .....	2	P8000017727	P8000017727
44	Screw, Cap, Packing Gland, 7/16-14 x 1-1/2" .....	4	006410-002	006410-002
45	Screw, Cover Plate, #10-32 x 3/8" .....	2	006045-002	006045-002
46	+ Seal, Lead and Wire .....	2	001627-400	001627-400
47	R Shaft Assembly, Calibrator Drive .....	1	514294-001	513739-001
48	Coupling, Lower Drive .....	-	.....	.....
49	Coupling, Upper Drive .....	-	.....	.....
50	Pin, Groove, 5/64 x 1/2" .....	-	.....	.....
51	Shaft .....	-	.....	.....
52	R Stem Assembly, Adjusting .....	1	009838-001	009838-001
53	Ball .....	-	.....	.....
54	Plate, Base .....	-	.....	.....
55	Plate, Retainer .....	-	.....	.....
56	Spring, Knob .....	-	.....	.....
57	Stem, Adjusting .....	-	.....	.....
58	Stud:			
	1-1/2-8 x 9-1/2" .....	32	642355-409	.....
	1-3/4-8 x 11" .....	32	.....	641177-403
59	Tube, Oil .....	1	514658-001	514658-001
60	Washer .....	2	535493-001	535493-001
61	Washer, O-Ring .....	2	554213-001	554213-001

**Innermechanism**

Item	Description	Qty.	M16-S3, S5	M16-S6
62	Base .....	1	502816-001	502816-001
63	Base, Shaft cover .....	1	502832-001	502832-001
64	Block.....	1	502818-001	502818-001
65	Body .....	1	554106-001	554106-001
66	Bolt, Eye .....	2	065433-005	065433-005
67	Cap, Adjusting Screw Assembly.....	1	502833-001	502833-001
68	R Shaft, Drive Gear .....	-	.....	.....
69	Cone, Shaft .....	1	502874-001	502874-001
70	Cover, Inner.....	1	502817-001	513527-001
71	Dowel, Cover and Base.....	2	003348-001	003348-001
72	Elbow, Pitot Fitting.....	1	503580-001	503580-001
73	Fitting Pitot .....	1	503582-001	503582-001
74	R+ Gear, Calibrator Drive.....	1	.....	.....
75	* Bushing .....	1	065311-001	065311-001
76	Pin .....	2	500418-001	500418-001
77	R+ Gear, Idler.....	1	.....	.....
78	+ Gear, Jackshaft .....	1	502905-001	502905-001
79	R+ Gear, Single.....	1	.....	.....
80	Key, Rotor Shaft .....	1	502937-001	502937-001
81	Nut, Rotor Shaft.....	1	502954-001	502954-001
82	Pin, Cotter, 1/16 x 1/2".....	1	001095-401	001095-401
83	Pin, Cotter, 1/8 x 3/4".....	1	001292-401	001292-401
84	Pin, Groove, 1/8 x 3/4" .....	1	006127-002	006127-002
85	+ Plate, Thrust Bearing.....	4	001111-001	001111-001
86	Plug, Pipe, 1" NPT.....	1	006482-002	006482-002
87	+ Retainer and Balls, Thrust Bearing .....	2	070360-001	070360-001
88	Rotor Assembly (Standard Only).....	1	515694-001	515694-001
89	Bar, Adjusting.....	1	502919-001	502919-001
90	+ Bearing, Rotor.....	4	502938-001	502938-001

Item		Description	Qty.	M16-S3, S5	M16-S6
91	+	Bearing, Thrust:			
		Standard.....	1	640207-001	640207-001
		All Iron .....	1	640207-499	640207-499
92		Blade Assembly, Lower:			
		Standard.....	1	550566-001	550566-001
		All Iron .....	1	551554-001	551554-001
93	+	Bearing .....	6	640163-001	640163-001
94		Bushing.....	2	503915-001	503915-001
95		Pin, Blade Bearing Bushing.....	2	503919-001	503919-001
96		Pin, Cotter, 1/8 x 2".....	2	006187-001	006187-001
97		Plug, Center.....	2	503916-001	503916-001
98		Plug, End.....	4	513018-001	513018-001
99		Screw, Cap, 1/4-28 x 2-14".....	4	640438-402	640438-402
100		Sleeve, Expansion, 2-14" Long .....	4	503917-002	503917-002
101		Washer, Spacer .....	2	504272-001	504272-001
102		Blade Assembly, Upper:			
		Standard.....	1	550565-001	550565-001
		All Iron .....	1	551553-001	551553-001
103	+	Bearing .....	6	640163-001	640163-001
104		Bushing.....	2	503915-001	503915-001
105		Pin, Blade Bearing Bushing.....	2	503919-001	503919-001
106		Pin, Cotter, 1/8 x 2".....	2	006187-001	006187-001
107		Plug, Center.....	2	503916-001	503916-001
108		Plug, End.....	4	513018-001	513018-001
109		Screw, Cap, 1/4-28 x 2-14".....	4	640438-402	640438-402
110		Sleeve, Expansion, 2-14" Long .....	4	503917-002	503917-002
111		Washer, Spacer .....	2	504272-001	504272-001
112		Blade Assembly, Middle:			
		Standard.....	1	550564-001	550564-001
		All Iron .....	1	551552-001	551552-001
113	+	Bearing .....	6	640163-001	640163-001
114		Bolt .....	8	503458-001	503458-001
115		Bushing.....	2	503915-001	503915-001
116		Nut, Hex, 1/2-20 x 9/16".....	8	640266-001	640266-001
117		Pin, Blade Bearing Bushing.....	2	503919-001	503919-001
118	*	Pin, Cotter, 1/8 x 2".....	2	006187-001	006187-001
119		Pin, Cotter, 3/32 x 7/8".....	8	003240-400	003240-400
120		Pin, Dowel .....	8	502884-001	502884-001
121		Plug, Center.....	2	503916-001	503916-001
122		Plug, End.....	4	513018-001	513018-001
123		Retainer, Dowel .....	8	503409-001	503409-001
124		Screw, Cap, 1/4-28 x 2-14".....	4	640438-402	640438-402
125		Sleeve, Expansion, 2-14" Long .....	4	503917-002	503917-002
126		Washer, Spacer .....	2	504272-001	504272-001
127		Cam and Shaft Assembly .....	1	502934-001	502934-001
128		Cam.....	1	518068-001	518068-001
129		Key .....	1	502937-001	502937-001
130		Shaft.....	1	502838-001	502838-001
131		Collar .....	1	502875-001	502875-001
132	+	Lock, Rotor Bearing .....	2	502928-001	502928-001
133		Nut, Adjusting Screw.....	2	006705-002	006705-002
134		Pin, Adjusting Bar .....	1	640200-018	640200-018
135		Pin, Rotor Cover Roller.....	6	503551-001	503551-001
136		Plate Assembly, Lock.....	1	553464-001	553464-001
137		Pin .....	1	503321-001	503321-001
138		Plate, Rotor Cover Roller Pin.....	12	502858-001	502858-001
139	R	Plate, Rotor Gear.....	1	553461-001	553461-001
140		Gear, Rotor.. <i>Not sold as separate components.</i>	-	.....	.....
141		Pin, Lock .... <i>Included with Item 139.</i>	-	.....	.....
142	+	Roller, Rotor Cover .....	6	503552-001	503552-001
143		Rotor, Sub Assembly .....	1	551769-001	551769-001
144		Dowel .....	13	502945-001	502945-001

Item	Description	Qty.	M16-S3, S5	M16-S6
145	Screw, 5/8-11 x 2-14", Drilled .....	12	503665-001	503665-001
146	Washer, Flat .....	12	640437-001	640437-001
147	Screw, 3/8-16 x 7/8", Hex Hd.....	6	007558-400	007558-400
148	Screw, #10-32 x 3/8".....	2	643339-401	643339-401
149	Screw, Adjusting .....	1	502920-001	502920-001
150	Screw, Pin Clamp, 3/8-16 x 1-1/4".....	12	660248-404	660248-404
151	Screw, Rotor Gear Plate, 1/2-13 x 2", Drilled.....	6	553675-001	553675-001
152	Spacer, Rotor Bearing, Outer Race .....	2	553526-001	553526-001
153	Spacer, Rotor Bearing, Inner Race.....	2	504273-001	504273-001
154	Washer, Flat.....	1	641837-402	641837-402
155	Washer, Flat.....	2	006929-001	006929-001
156	Screw, 3/8-16 x 1-1/4" .....	4	002238-401	002238-401
157	Screw, 5/16-18 x 1" .....	4	060133-002	060133-002
158	Screw, 5/16-18 x 3/4" .....	2	009548-400	009548-400
159	Screw, Body and Block 5/8-11 x 2-14" .....	4	503665-001	503665-001
160	Screw, Cover and Base, 3/4-10 x 2-3/4" .....	16	641068-402	641068-402
161	Screw, Cover 3/4-10 x 2-3/4".....	16	641068-402	641068-402
162	Screw, Rotor Shaft .....	1	643535-401	643535-401
163	Screw, Set, 1/4-20 x 1/4".....	1	006538-001	006538-001
164	Shaft, Pinion with Spacer .....	1	502930-001	502930-001
165	Sleeve Assembly, Jackshaft.....	1	502831-001	502831-001
166	Washer, Flat .....	1	005500-401	005500-401
167	Washer, Flat .....	1	060554-001	060554-001
168	Washer, Flat .....	2	642482-407	642482-407
169	Ring, Retaining.....	2	646136-401	646136-401
170	Support Ring, M16-S6 Innermech. only .....	4	.....	535484-001

\* Not illustrated.

R Indicates change since last revision.

+ Recommended Stock

A/R As Required.

@1 Note 1: 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.

@2 Note 2: See Form No. [PO01042](#) for component parts.

@3 Note 3: Meter housing design was updated to a single piece design on meters which began reaching the field in January, 1996.

### Inner Mechanism General Assembly Numbers

M16-S3 and S5 Barrel Geared, Standard.....	554139-091
M16-S3 and S5 Barrel Geared, All Iron Trim.....	554139-092
M16-S3 and S5 Hectoliter Geared, Standard.....	554139-891
M16-S3 and S5 Hectoliter Geared, All Iron Trim.....	554139-892
M16-S6 Barrel Geared, Standard.....	554169-091

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.