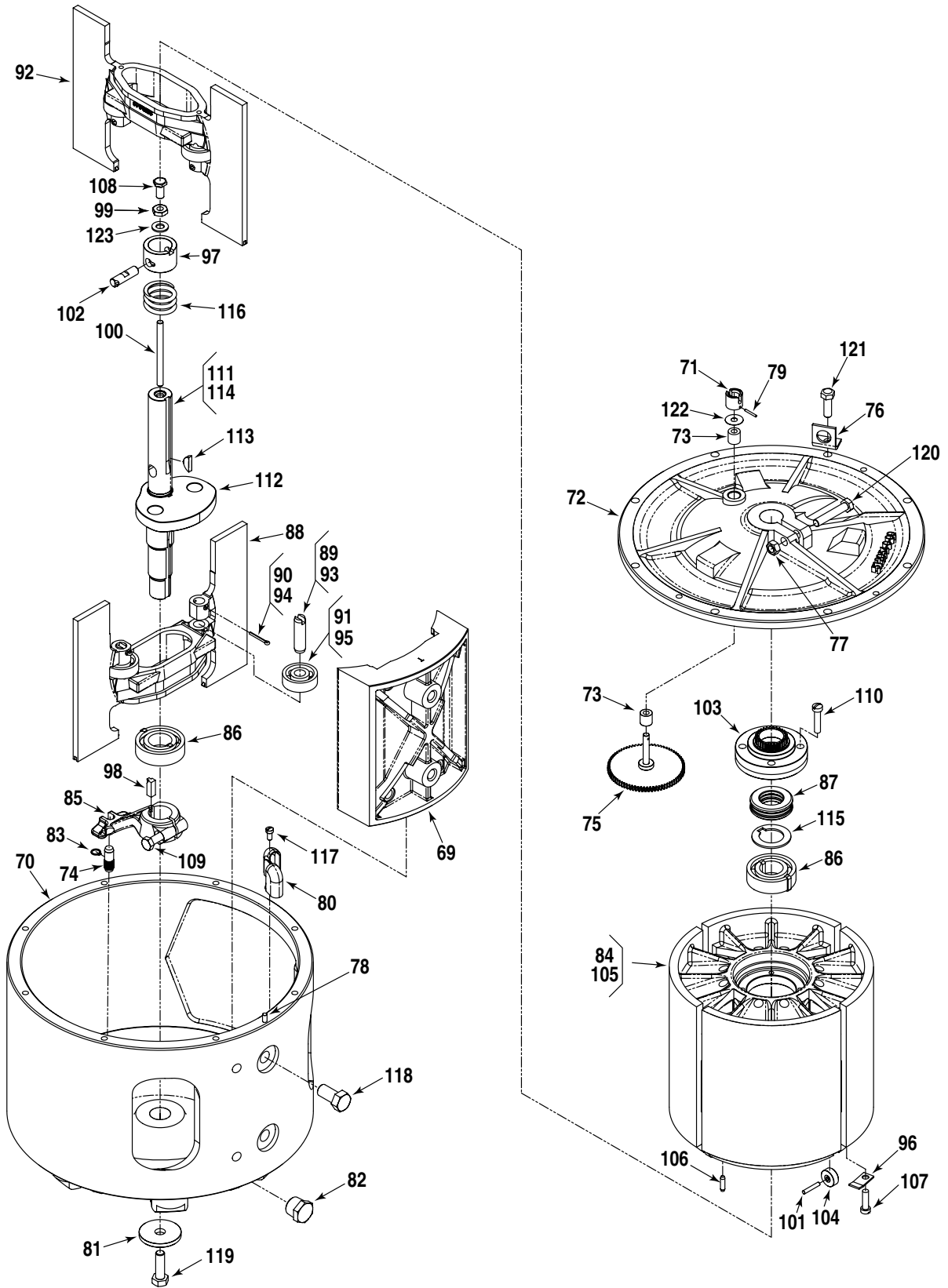


# Inner Mechanism



Item	Description	Qty.	Part Number
1	Adapter, Calibrator Adjusting Stem .....	1	512372-001
2	Adapter.....	1	511946-001
3	+ Bearing, Thrust:		
	Standard .....	1	070360-002
	All Iron.....	1	070360-001
4	Bolt, Eye .....	2	065433-005
5	+ Calibrator:		
	Standard .....	1	512059-001
	With ATC (Standard) .....	1	512060-001
@1	With ATC (Special Temp. or API).....	1	516130-xxx
	Dummy Calibrator .....	1	516105-001
6	Clamp, Oil Tube .....	1	003905-001
7	+ Coupling, Drive.....	1	072103-001
8	Cover Assembly .....	1	553719-091
9	Bearing, Packing Gland .....	1	646178-401
10	Pin, Groove, .19 x .38 .....	2	641007-401
11	Shaft, Gear.....	1	003775-001
12	Shaft, Idler Pinion.....	1	512077-001
13	Cover, Assembly, Packing Gland.....	1	553723-001
14	Cover, Knob.....	1	003553-001
15	Cup, Oil .....	1	006588-001
16	Disc Coupling .....	1	014356-001
17	@2 Gear, Calibrator Drive:		
	U.S. Gallons .....	1	514632-001
	U.S. Gallons, LPG .....	1	515045-001
	Imperial Gallons .....	1	514773-001
	Dekalitres .....	1	514774-001
	Dekalitres, LPG .....	1	515049-001
18	Bushing:		
	LPG .....	1	504653-001
	Standard and All Iron.....	1	013372-001
19	Pin:		
	LPG .....	2	003325-001
	Standard and All Iron.....	2	003325-002
20	@2 Gear, Jack Shaft Idler Assembly:		
	U.S. Gallons, All .....	1	072477-001
	Imperial Gallons, All .....	1	072491-001
	Dekalitres, All .....	1	072485-001
21	Pin.....	2	001126-001
22	@2 Gear Shaft .....	1	072478-001
23	Pin.....	2	001126-001
24	+@3 Gland, Packing .....	1	553722-001
25	Housing, Outer:		
	E3.....	1	553720-002
	E4.....	1	553720-011
26	+ O-ring, Cover:		
	Buna-N.....	1	512278-001
	Viton.....	1	512278-002
27	+ O-ring, Packing Gland:		
	PTFE <sup>1</sup> .....	1	645904-402
	All others .....	1	642586-406
28	Pin, Cotter, 1/16 Dia x 1/2 Long, S.S.....	1	001095-401
29	Pin, Cotter, Jackshaft, 1/16 Dia x 5/8" .....	1	641042-401
30	Pin, Groove, Coupling Disc, .08 x .50" .....	1	006053-002
31	Pin, Groove, Drive Coupling, 1/16 x 5/8" .....	1	006028-002
32	Pin, Groove, Outer Housing, 5/16 x 3/4" .....	2	640985-401

<sup>1</sup> Polytetrafluoroethylene (PTFE).

Item	Description	Qty.	Part Number
33	Plate, Caution Calibrator .....	1	006571-001
34	Plate, Cover.....	1	003440-001
35	+ Plate, Thrust Bearing.....	2	001111-001
36	Plug, Pipe, 1/8 NPT 1010 Thru 101.....	1	006073-002
37	Plug, Pipe, .75 NPT .....	1	006878-002
38	Plug, Temp. Well, .50 NPT .....	1	006505-002
39	Ring, Snap.....	1	512066-001
40	* Screw, 10-32 x 1/2" .....	2	006764-002
41	Screw, Adapter, 5/16-18 x 7/8" .....	1	009563-400
42	Screw, Adapter, 5/16-18 x 7/8" .....	1	009563-401
43	Screw, Base Plate, 10-32 x 7/8" .....	2	640835-001
44	Screw, Calibrator, 6-32 x 5/16" .....	2	006048-002
45	Screw, Caution Plate, 1/8" Self Tapping .....	8	009880-400
46	Screw, Cover Plate, 10-32 x 3/8" .....	2	006045-002
47	Screw, Cover, .75-10 x 1.75" .....	18	646186-401
48	Screw, Housing to Inner Mechanism, 1/2-13 x 2.00" .....	2	646134-401
49	Screw, Knob Cover, 10-24 x 3/4" .....	2	006481-003
50	Screw, Packing Gland, .312-18 x .62" .....	3	646181-401
51	+ Seal, Lead and Wire .....	3	001627-400
52	+ Shaft, Link .....	1	512069-001
53	Pin, Groove, 1/8 x 1" .....	2	065217-402
54	Shaft, Link .....	1	512068-001
55	Shaft Assembly, Packing Gland.....	1	553716-001
56	Coupling, Drive.....	1	512065-001
57	Shaft .....	1	553715-001
58	Stem, Adjusting .....	1	009838-001
59	Ball, 1/8 Dia.....	2	006427-001
60	Plate, Base.....	1	003552-001
61	Plate, Retainer .....	1	003556-001
62	Spring, Knob .....	2	003557-001
63	Stem, Adjusting.....	1	003551-001
64	Tube, Oil .....	1	514658-001
65	Washer, Jack Shaft.....	1	001125-001
66	Washer, 7/32 ID x 3/4" OD .....	1	553712-001
67	Washer, Pinion .....	1	003599-001
68	Washer, Flat, 17/32 ID x 1-1/16" OD .....	2	065309-002

### Inner Mechanism

Item	Description	Qty.	Part Number
69	Block .....	1	538361-001
70	Body .....	1	512071-001
71	+ Coupling, Drive.....	1	512064-002
72	Cover, Inner: Standard and All Iron .....	1	516455-001
	LPG.....	1	516455-002
73	+ Bushing, Jack Shaft: Standard and All Iron.....	2	519882-001
	LPG .....	2	512796-001
74	Dowel, Locating Arm .....	1	512115-001
75	Gear, Jack Shaft.....	1	512282-001
76	Lug, Lift .....	2	512002-001
77	Nut, 5/16-18.....	1	009552-400
78	Pin, Groove, 3/16" x 3/4" .....	1	007900-400

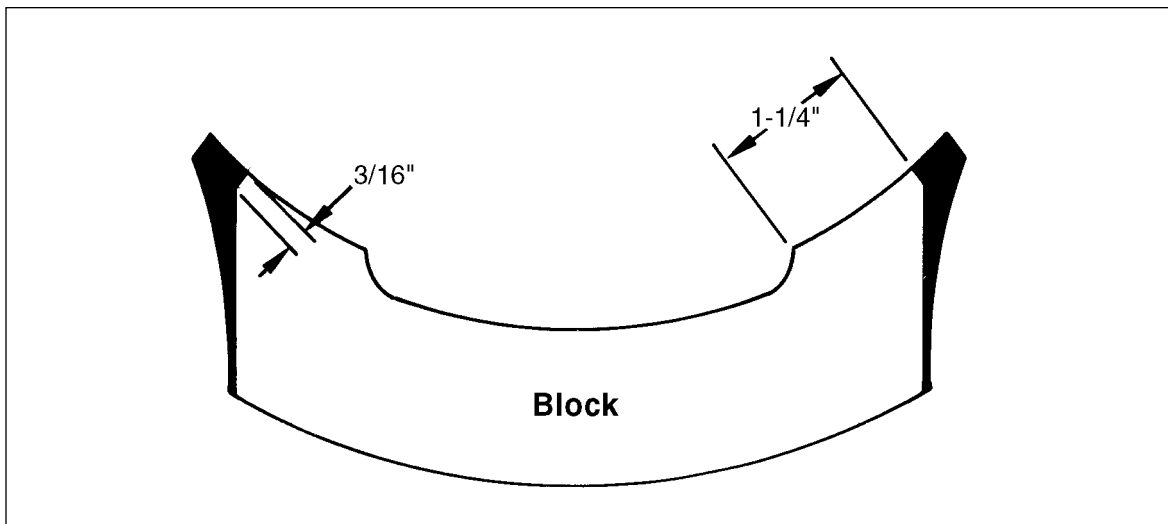
Item	Description	Qty.	Part Number
79	Pin, Groove, 1.08 x .63 .....	1	009593-400
80	Pitot Assembly.....	1	072186-001
81	Plate .....	1	512714-001
82	Plug, Pipe, Hex Head, .50 NPT .....	1	006505-002
83	Ring, Retaining .....	1	064150-001
84	Rotor and Blade Assembly:		
	Standard .....	1	515705-001
	All Iron.....	1	515705-002
	LPG.....	1	515705-003
85	Arm, Rotor Shaft Locating.....	1	512192-001
86	+ Bearing and Clamp:		
	Standard and All Iron.....	2	516108-001
	LPG .....	2	516108-002
	Sealed Carbon Steel .....	2	516108-003
87	+ Bearing, Rotor Thrust:		
	Standard and All Iron.....	1	009589-001
	LPG .....	1	504819-001
88	+ Blade Assembly, Lower:		
	Standard.....	1	008899-001
	All Iron .....	1	009454-001
	LPG .....	1	504807-001
	High Viscosity.....	1	008899-041
	High Temperature .....	1	008899-042
	High Viscosity/High Temperature.....	1	008899-043
89	Pin, Blade Bearing .....	2	003449-001
90	Pin, Cotter, 3/32 x 1" .....	2	006308-001
91	Bearing, Blade:		
	Standard and All Iron.....	2	065109-001
	LPG .....	2	644412-402
	Sealed Carbon Steel .....	2	643597-401
92	+ Blade Assembly, Upper:		
	Standard.....	1	008898-001
	All Iron .....	1	009453-001
	LPG .....	1	504806-001
	High Viscosity.....	1	008898-041
	High Temperature .....	1	008898-042
	High Viscosity/ High Temperature.....	1	008898-043
93	Pin, Blade Bearing .....	2	003449-001
94	Pin, Cotter, 3/32 x 1" .....	2	006308-001
95	Bearing, Blade:		
	Standard and All Iron.....	2	065109-001
	LPG .....	2	644412-402
	Sealed Carbon Steel .....	2	643597-401
96	Clamp, Roller .....	8	011226-001
97	Collar, Thrust Bearing .....	1	512047-001
98	Key .....	1	512722-001
99	Nut, 5/16-24 .....	1	006835-002
100	Pin, Extension .....	1	512279-001
101	Pin, Roller .....	4	002034-001
102	Pin, Collar Thrust Bearing.....	1	008166-001
103	Plate, Rotor Gear .....	1	512049-001
104	Roller, Cover:		
	LPG .....	4	514750-001
	All others .....	4	011227-001

Item	Description	Qty.	Part Number
105	Rotor Sub Assembly:		
	Standard.....	1	008096-002
	High Viscosity .....	1	008096-041
	LPG .....	1	008096-042
106	Dowel, Rotor.....	9	001636-001
107	Screw, 1/4-20 x 7/8" .....	8	006100-002
108	Screw, Adjusting.....	1	002351-001
109	Screw, 5/16-18 x 1-1/4" .....	1	006511-002
110	Screw, M-1/4-20 x 1-1/8" LG .....	4	640992-400
111	Shaft and Cam Assembly.....	1	538426-001
112	Cam.....	1	538360-001
113	Key, Woodruff .....	1	005535-800
114	Shaft.....	1	512042-001
115	Spacer, Rotor Bearing.....	1	512144-001
116	+ Spring, Rotor.....	1	003525-002
117	Screw, #10-32 x 3/8" Fill HD Slot .....	2	006045-002
118	Screw, 1/2-13 x 1" Hex HD.....	2	010525-400
119	Screw, 3/8-16 x 1-1/4" Hex HD.....	1	641044-401
120	Screw, 5/16-18 x 1-3/4" Hex HD.....	1	006325-002
121	Screw, 5/16-18 x 1" Hex HD.....	8	006140-002
122	Washer, Flat, .75 OD, .265 ID, .010 Thick.....	1	643249-401
123	Washer, Flat, 11/16 OD 11/32 ID .....	1	642495-406
124	* Washer, Lock .....	2	642482-406

### Inner Mechanism General Assembly Numbers

Standard.....	538476-091
All Iron .....	538476-092
LPG .....	538476-093

- \* Not illustrated.
- + Recommended stock.
- R Indicates change since last revision.
- @1 When ordering, include temperature range, specific or API gravity, API table used, and meter gearing.
- @2 Only standard gearing is listed. For additional gearing combinations, see Gear Train Bulletin AB01023.
- @3 See Form No. PO01042 for component parts.



Revisions included in publication PO01002 rev 0.0 (2/13):  
PO01002 replaces publications P0537.20 and P0545.52, both of which have been made obsolete.  
Total Revision.

**Editorial Change:** 11/13: Item 27 - material reference changed to PTFE.

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