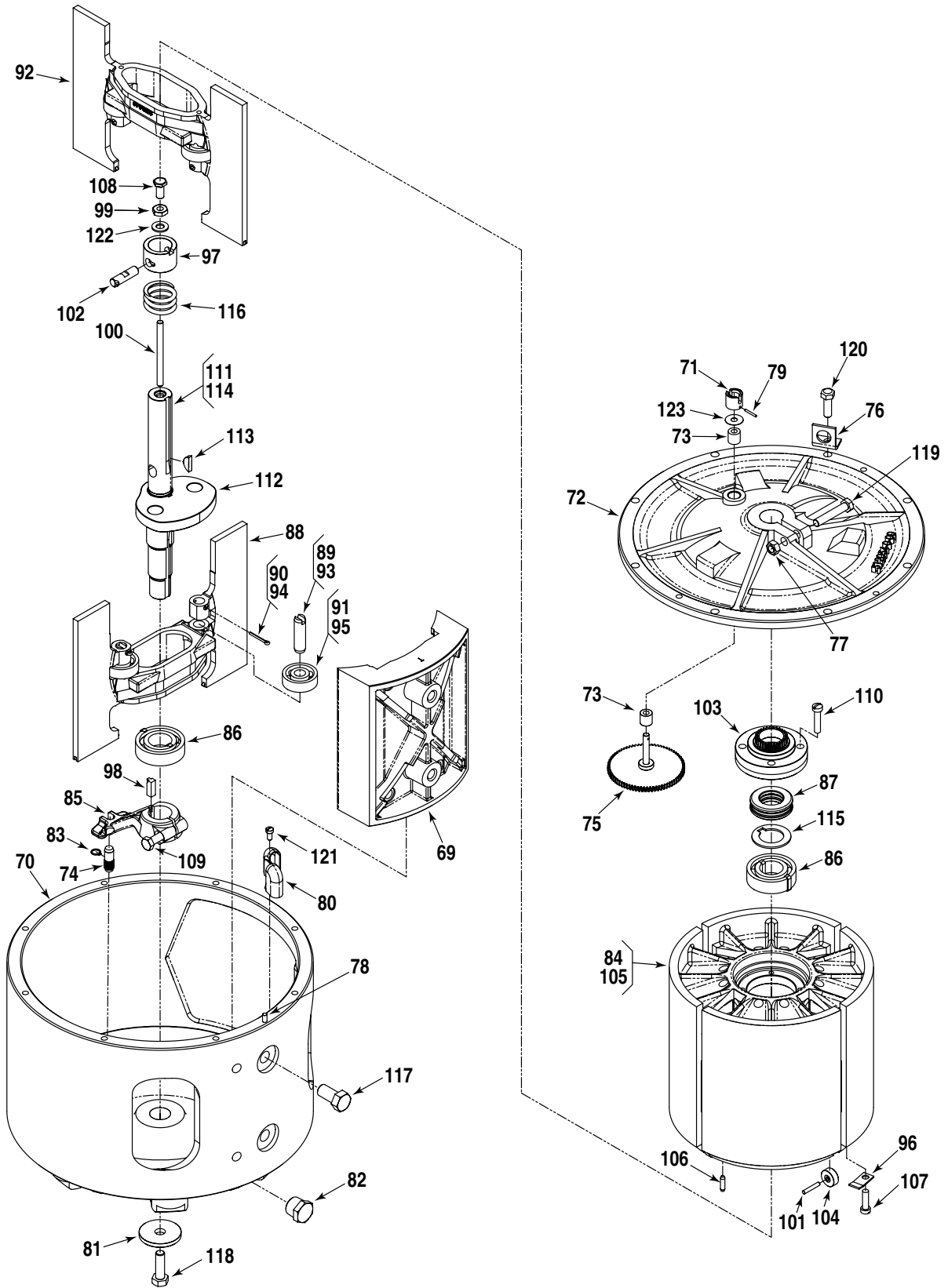


# Inner Mechanism



Item	Description	Qty.	Part Number
1	Adapter, Calibrator Adjusting Stem .....	1	512372-001
2	Adapter.....	1	515755-001
3	Blank, Snap-In.....	1	015533-401
4	Bolt, Eye .....	2	643877-401
5	+ Calibrator, Adjusting Mechanism:		
	Standard .....	1	512059-001
	With ATC (Standard) .....	1	512060-001
@1	W/ ATC (Special Temp. or API) .....	1	516130-xxx
	Dummy Calibrator .....	1	516105-001
6	Clamp, Oil Tube .....	1	003905-001
7	Coupling, Assembly for .188 Dia Shaft.....	1	005969-001
8	+ Coupling, Drive.....	1	072103-001
9	Coupling, Drive:		
	S6, 13/16 Overall .....	1	518321-001
	S7, 1 9/16 Overall .....	1	518321-004
10	Coupling, Jack Shaft.....	1	514633-001
11	Cover, Assembly:		
	S6, Standard .....	1	515902-001
	S6, Teflon .....	1	515902-099
	S6, NACE.....	1	552035-001
	S7, Standard .....	1	516017-001
	S7, NACE.....	1	551433-001
12	Cover Knob.....	1	003553-001
13	Cup, Oil .....	1	006588-001
14	@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
15	Bushing:		
	LPG .....	1	504653-001
	Standard and All Iron.....	1	013372-001
16	Pin:		
	LPG .....	2	003325-001
	Standard and All Iron.....	2	003325-002
17	@2 Gear, Intermediate Pinion:		
	U.S. Gallons .....	1	514615-001
	U.S. Gallons, LPG .....	1	515044-001
	Imperial Gallons .....	1	514771-001
	Dekalitres .....	1	514772-001
	Dekalitres, LPG .....	1	515048-001
18	Bushing, LPG.....	1	512797-001
19	@2 Gear, Jack Shaft Pinion:		
	U.S. Gallons .....	1	514614-001
	U.S. Gallons, LPG .....	1	515043-001
	Imperial Gallons .....	1	514614-001
	Dekalitres .....	1	514614-001
	Dekalitres, LPG .....	1	515043-001
20	Bushing, LPG.....	1	512797-001
21	R+@3 Gland, Packing:		
	Buna-N.....	1	515849-001
	Teflon.....	1	515849-002
	NACE .....	1	515849-001
22	Housing, Gear:		
	LPG.....	1	514649-002
	Standard and All Iron .....	1	514649-001

Item	Description	Qty.	Part Number
23	Bushing:		
	LPG .....	1	512796-001
	Standard and All Iron.....	1	519882-001
24	Dowel.....	1	003628-001
25	Housing, Outer:		
	S6, Standard .....	1	515903-001
	S6, Teflon .....	1	515903-099
	S6, NACE.....	1	552038-001
	S7, Standard .....	1	516016-001
	S7, NACE.....	1	551430-001
26	Nut, Hex Heavy:		
	S6 (3/4" - 10).....	18	642138-411
	S7 (1" - 8).....	20	640261-001
27	+ O-ring, Cover:		
	S6, Buna-N .....	1	515976-001
	S6, Viton.....	1	515976-002
	S6, Teflon .....	1	645842-407
	S7, Buna-N .....	1	516018-001
	S7, Viton.....	1	516018-002
28	+ O-ring, Packing Gland:		
	Buna-N.....	1	640888-001
	Viton .....	1	640894-001
	Teflon.....	1	645905-403
29	Pin, Cotter, 1/16 Dia x 3/8 Long, S.S.....	1	009825-400
30	Pin, Groove Type E .08 Dia x .50 Long.....	1	006053-002
31	Pin, Groove Type E 1.08 Dia x .63 Long.....	1	009593-400
32	Pin, Groove Type 1 1/16 Dia x 1/2 Long.....	1	006054-002
33	Pin, Groove Type 1 1/16 Dia x 5/8 Long.....	1	006028-002
34	Pin, Groove, Outer Cover:		
	S6.....	2	641719-404
	S7.....	2	641719-407
35	Plate, Caution Calibrator .....	1	006571-001
36	Plate, Cover.....	1	003440-001
37	Plate, Gland Lubrication .....	1	515873-001
38	Plug, Pipe, 1/4 NPT .....	1	006393-002
39	Plug, Pipe, .50 NPT:		
	Standard .....	1	006505-002
	NACE .....	1	645242-402
40	Plug, Pipe, .75 NPT:		
	Standard .....	1	006878-002
	NACE .....	1	645242-403
41	Ring, Snap.....	1	512066-001
42	Screw, Adapter to Cover:		
	S6 .....	2	642019-414
	S7 .....	2	642019-416
43	Screw, Base Plate, M-10-32 x 7/8" .....	2	640835-001
44	Screw, Calibrator, M-6-32 x 5/16" .....	2	006048-002
45	Screw, Cap, Outer Cover:		
	S6 (3/4" x 10 x 4 1/4") .....	18	641068-405
	S7 (1" - 8 x 6").....	20	642226-405
46	Screw, Drive, 1/8" .....	8	009880-400
47	Screw, Gear Housing, M-5/16-18 x 5/8" .....	2	009813-400
48	Screw, Inner Mechanism, C-1/2-13 x 2 1/4:		
	Standard .....	2	640580-001
	NACE .....	2	645182-402
49	Screw, Knob Cover, M-10-24 UNC-2A x 3/4" .....	2	006481-003
50	Screw, Packing Gland to Cover, C-7/16-14 x 1 1/2 .....	4	006410-002

Item	Description	Qty.	Part Number
51	Screw, Plate Cover, M-10-32 x 3/8 Fill HD Slot .....	2	006045-002
52	Screw, S-10-32 x 1/4" .....	1	009469-400
53	+ Seal, Lead and Wire .....	3	001627-400
54	+ Shaft .....	1	515341-001
55	+ Shaft, Link .....	1	515866-001
56	Pin, Roll 1/8.....	2	640780-001
57	Shaft .....	1	512068-005
58	Shaft, Stud, Idler Gear.....	1	514370-001
59	Shaft, Upper Jack.....	1	514634-002
60	Stem, Adjusting .....	1	009838-001
61	Ball, 1/8 Dia.....	2	006427-001
62	Plate, Base.....	1	003552-001
63	Plate, Retainer .....	1	003556-001
64	Spring, Knob .....	2	003557-001
65	Stem, Adjusting.....	1	003551-001
66	Tube, Oil .....	1	514658-001
67	Washer, Flat, 1.0 x .510 ID x .125, STL.....	2	533103-001
68	Washer, Flat, .193 ID x .500 OD.....	3	641985-401

### Inner Mechanism

Item	Description	Qty.	Part Number
69	@4 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, 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
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	@4 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, Lower: Standard.....	1	008899-001
	All Iron .....	1	009453-054

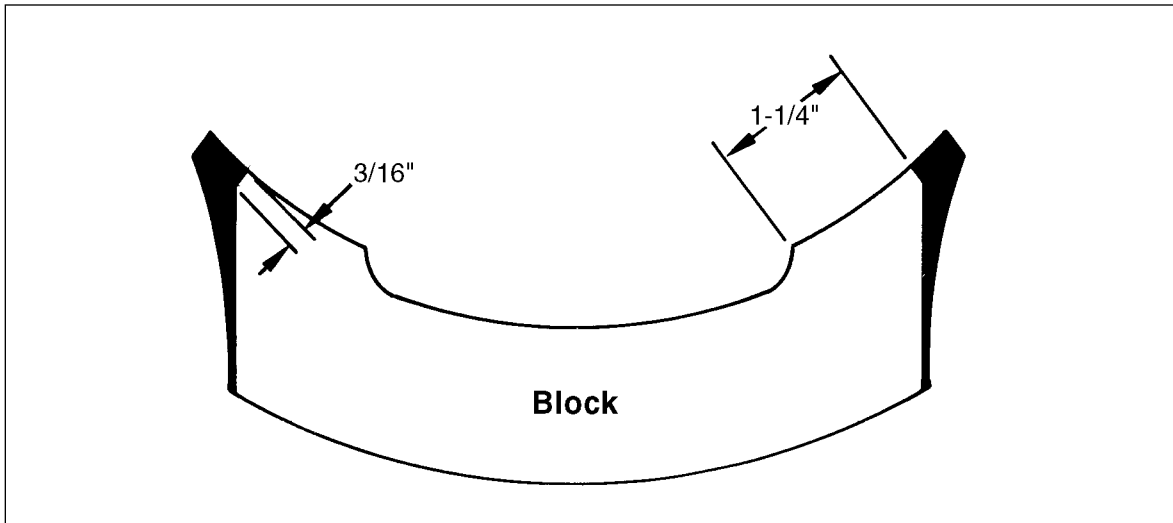
Item		Description	Qty.	Part Number
		LPG .....	1	504807-001
		High Viscosity .....	1	008899-041
		High Temperature .....	1	008899-042
		High Viscosity/High Temperature.....	1	008899-043
89	@5	Pin, Blade Roller.....	2	003449-001
90		Pin, Cotter, 3/32 x 1" .....	2	006308-001
91		Bearing, Blade:		
		Standard and All Iron.....	2	065109-001
		LPG .....	2	644412-402
		Sealed Carbon Steel .....	2	643597-401
92	+	Blade, Upper:		
		Standard.....	1	008898-001
		All Iron .....	1	009453-054
		LPG .....	1	504806-001
		High Viscosity .....	1	008898-041
		High Temperature .....	1	008898-042
		High Viscosity/ High Temperature.....	1	008898-043
93	@5	Pin, Blade Roller.....	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 Assembly.....	1	512049-001
104		Roller, Cover:		
		LPG .....	4	514750-001
		All others .....	4	011227-001
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 .....	8	006100-002
108		Screw, Adjusting.....	1	002351-001
109		Screw, Locating Arm, 5/16-18 x 1-1/4".....	1	006511-002
110		Screw, Rotor Gear Assembly Plate, M-1/4-20 x 1-1/8" .....	4	640992-400
111	@4	Shaft and Cam Assembly:		
		Current Style .....	1	538426-001
		Previous Style .....	1	512285-001
112	@4	Cam:		
		Current Style .....	1	538360-001
		Previous Style .....	1	003524-001
113		Key, Woodruff .....	1	005535-800
114		Shaft, Rotor .....	1	512042-001
115		Spacer, Rotor Bearing.....	1	512144-001
116	+	Spring, Rotor.....	1	003525-002
117		Screw, Body, 1/2-13 x 1".....	2	010525-400
118		Screw, Cam and Shaft, 3/8-16 x 1-1/4" .....	1	641044-401
119		Screw, Inner Cover, 5/16-18 x 1 3/4" .....	1	006325-002
120		Screw, Lifting Lug, 5/16-18 x 1".....	8	006140-002

Item	Description	Qty.	Part Number
121	Screw, Pitot Assembly, #10-32 x 3/8" .....	2	006045-002
122	R Washer, Cam Extension Pin, Flat, 11/16 OD 11/32 ID.....	1	642495-406
123	Washer, Drive Coupling, Flat, .75 OD, .265 ID .....	1	643249-401
124	* Washer, Lock.....	2	642482-406

### Inner Mechanism General Assembly Numbers

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

- + 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. P0605.\*\* for component parts.
- @4 In 1976, a change in design was made to the block and cam of the 3" 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 the previous style cam. The shaded area below represents the dimensions of the previous style.
- @5 Not recommended for old style Sandy Crude blades. Item #88 and #92 should also be replaced.
- \* Not illustrated.



E3 parts list P0545.07 is now replaced with P0537.20, P0537.40 and P0537.60.

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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