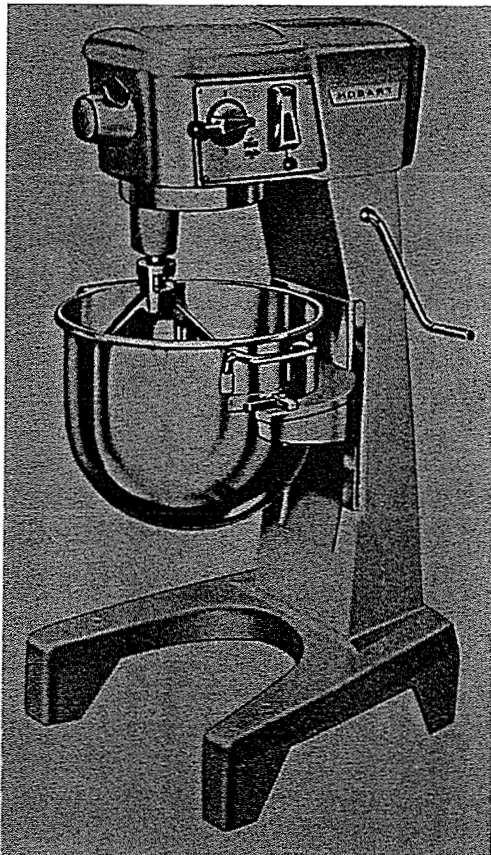




INSTRUCTION MANUAL

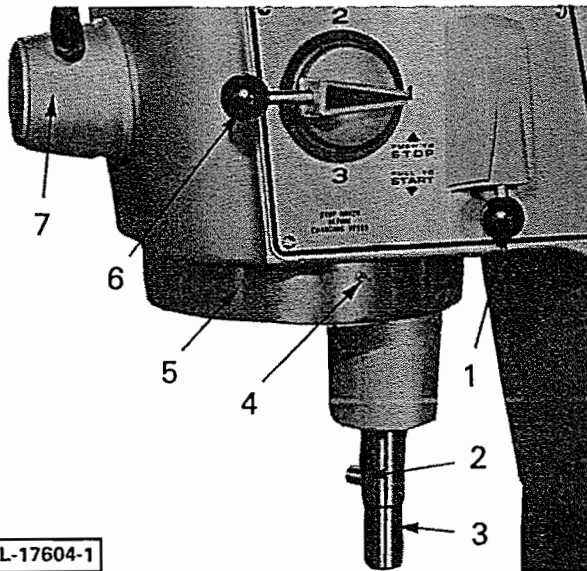
... with Replacement Parts



MODEL D-300 MIXER

ML-11627

Instructions for Operation and Care of MODEL D-300 SERIES MIXERS Save These Instructions



PL-17604-1

Fig. 1

GENERAL

The D-300 series mixers have a bowl capacity of 30 quarts. With the use of an adapter and a special agitator, a 20 quart bowl may also be used. The mixer is powered by a 1/2 H.P. motor and is available for single-phase electrical service.

The D-300 series mixers incorporate a #12 attachment hub (7, Fig. 1). Various attachments and accessories available for this mixer include: Model 12 Power Dicer; Model 12 Vegetable Slicer; Model 12 Meat and Food Chopper; Soup Strainer and Colander; Model 12 Speed Drive (for use with Model 12 Vegetable Slicer only); Tray Support; Bowl Jacket; Bowl Truck and Splash Cover.

INSTALLATION

LOCATION

Mixer should be placed in a convenient location allowing adequate servicing space on the operational controls side, above and in front of the mixer.

ELECTRICAL CONNECTIONS

Before making electrical connections, check the specifications on the data plate (2, Fig. 2) to assure they agree with those of your electrical service.

Electrical and grounding connections must comply with the applicable portions of the National Electrical Code and/or other local electrical codes.

WARNING: DISCONNECT ELECTRICAL POWER SUPPLY AND PLACE A TAG AT THE MAIN CIRCUIT BOX INDICATING THE CIRCUIT IS BEING WORKED ON.

BRANCH CIRCUIT SIZE AND PROTECTION

DUAL ELEMENT TIME-DELAY FUSE

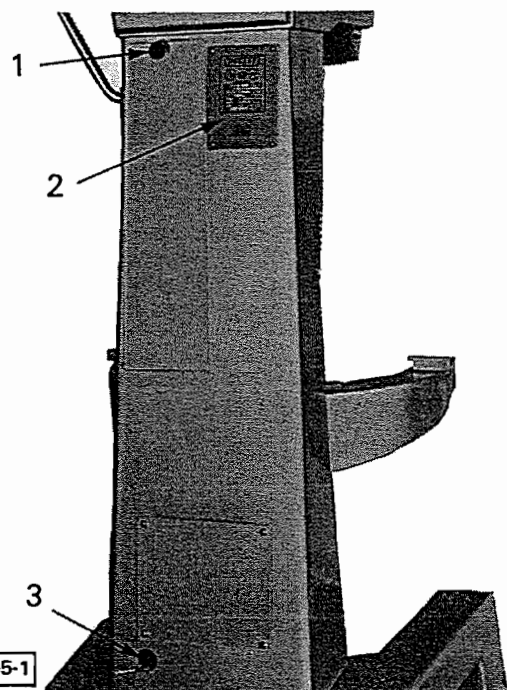
Volts	Phase	Min. Ckt. Ampacity	Max. Fuse Size	60°C Copper Wire Size
115	1	20	20	12

INVERSE TIME CIRCUIT BREAKER

Volts	Phase	Min. Ckt. Ampacity	Max. Ckt. Bkr. Size	60°C Copper Wire Size
115	1	20	20	12

NOTE: The above information compiled in accordance with the National Electrical Code, 1981 edition.

A hole for 3/4" conduit is located at the bottom of the pedestal (3, Fig. 2). Connect the input power



PL-17605-1

Fig. 2

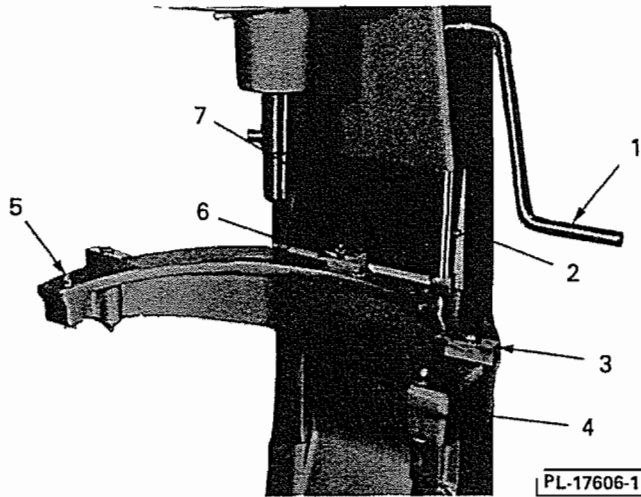


Fig. 3

leads to the pigtail leads from the machine controls. A solderless lug is provided for the service ground.

OPERATION

CONTROLS

The D-300 series mixers may be operated in any of three speeds. With the mixer stopped, the speed selection is made by moving the speed selector handle (6, Fig. 1) to the desired speed. Never change speeds while mixer is running.

SPEED #1 is a slow speed for heavy mixtures such as bread dough.

SPEED #2 is an intermediate speed for light dough which must rise quickly or for whipping.

SPEED #3 is a fast speed for light work like whipping cream, beating eggs and mixing thin batters.

MIXING

Turn power supply to mixer ON. Set the speed selector handle (6, Fig. 1) at the desired speed and pull START-STOP switch (1, Fig. 1) to start machine.

To change speeds, turn the motor off (1, Fig. 1). Allow the planetary to stop rotating. Move the speed selector handle (6, Fig. 1) to the desired speed. Make certain the speed selector handle lines up with the number on the shift selector plate. Never position the handle between numbers. Restart the mixer.

BOWL LIFT

Pull the lift handle (1, Fig. 3) forward to lower the bowl support (4, Fig. 3). It is necessary to lower

the bowl to change agitators. This also makes the bowl more accessible for filling. When raising the bowl, rotate the lift handle counterclockwise until it touches the stop. To mash potatoes or to cream butter, start with bowl down and raise it slowly into working position while the agitator is rotating.

BOWL

Lower the bowl support (4, Fig. 3) to its bottom stop. Position the bowl so the square alignment bracket is to the back and sits under the bowl retainer (6, Fig. 3). Locate the alignment pins (5, Fig. 3) into the alignment holes of the bowl. Rotate the bowl clamps (3, Fig. 3) over the ears of the bowl and lock bowl in place by tightening bowl clamp knobs (on bottom of bowl support). New mixer bowls and agitators (beaters, whips and dough arms) should be thoroughly washed with hot water and a mild soap solution, rinsed with either a mild soda or vinegar solution and thoroughly rinsed with clear water BEFORE being put into service.

AGITATORS

When attaching an agitator, the bowl must be in place on the bowl support and in the down position. Slip the agitator up on the shaft (3, Fig. 1) and turn it until the driving pin in the shaft (2, Fig. 1) reaches the bayonet slot in the agitator shank. Agitators which may be used with this mixer are shown on the last page of this manual.

The style "B" beater is commonly used for thin batters, cakes and mashing potatoes. The style "D" whip is best for whipping cream and beating eggs. Two other styles frequently used are the "ED" dough arm for bread doughs, and the "P" pastry knife for cutting shortening into flour for pastry.

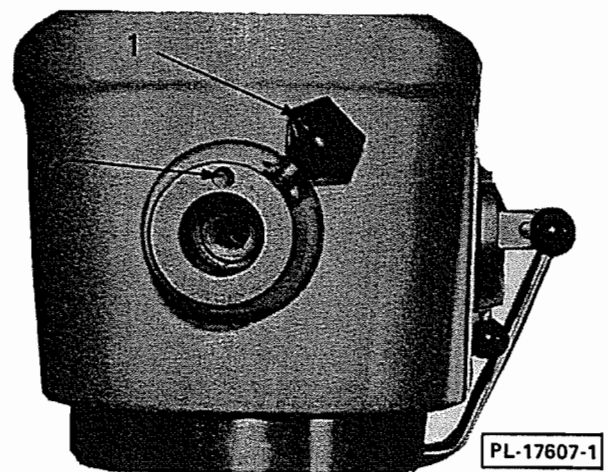


Fig. 4

The "C" wing whip is for heavy whipping, including butter.

ATTACHMENTS

Insert the attachment with a slight twist to the left so that the stop stud of the attachment is tight against the side of the hole (2, Fig. 4) in the mixer. When in place, tighten the thumb screw (1, Fig. 4). The attachment speed is selected by the speed selector handle (6, Fig. 1). It is RECOMMENDED that most chopping operations be carried out in speed #3.

Use the mixer START-STOP switch to start and stop attachments. Always stop the mixer before changing the speed of an attachment.

The Speed Drive may be used with the Vegetable Slicer to increase the speed of operation. DO NOT use any other attachment with the Speed Drive.

MAINTENANCE

WARNING: DISCONNECT ELECTRICAL POWER SUPPLY AND PLACE A TAG AT MAIN CIRCUIT BOX INDICATING CIRCUIT IS BEING WORKED ON BEFORE BEGINNING ANY MAINTENANCE PROCEDURE.

CLEANING

The mixer should be wiped down with a damp towel after each mixing operation. The mixing bowl, beaters or attachments should be thoroughly washed and rinsed at the end of each operation.

The mixer and any attachments or accessories used should be thoroughly washed and rinsed at the end of each working shift or whenever the machine is to be out of service for long periods of time (overnight).

LUBRICATION

Motor

The motor has grease-packed ball bearings and requires little attention. The transmission gearing is packed with special grease that will last for several years. When grease is needed for replacement, it should be ordered from your local Hobart Representative.

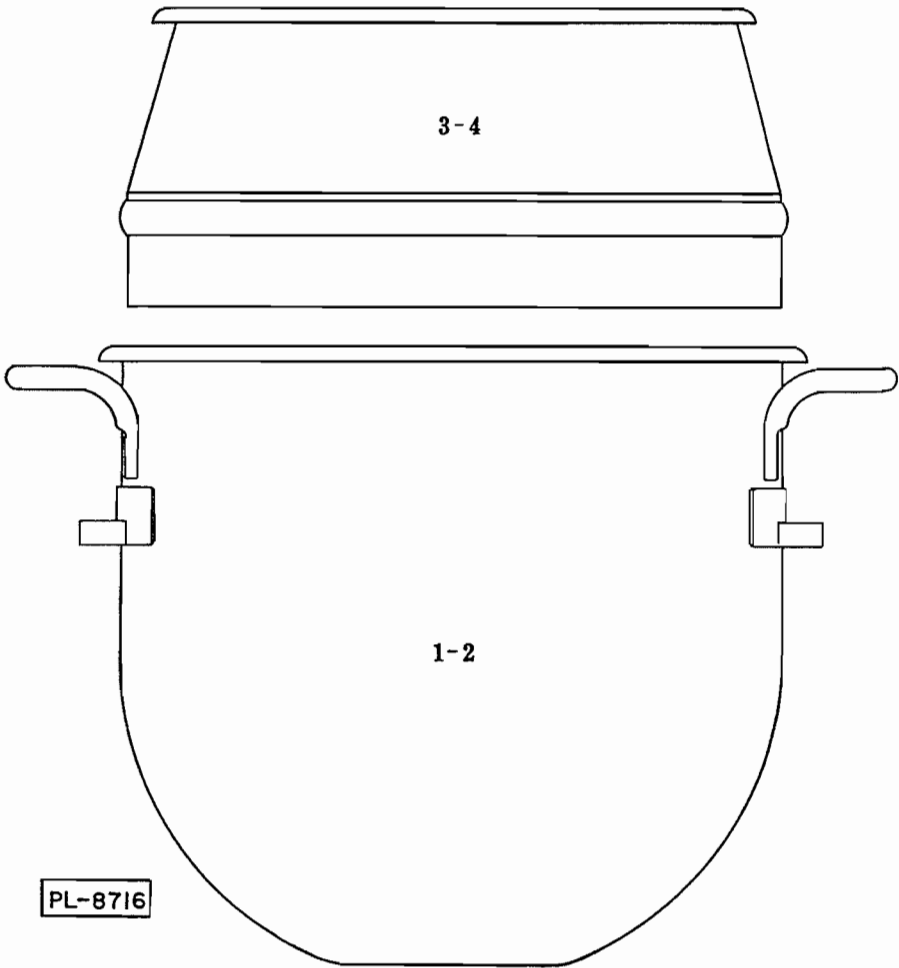
Bowl Slideways

Remove two thumb screws (2, Fig. 3) and lift off apron (7, Fig. 3) to expose bowl slideways. Lubricate slideways by applying a small amount of Lubriplate 630AA (supplied) with the tip of the finger.

Bowl Lift

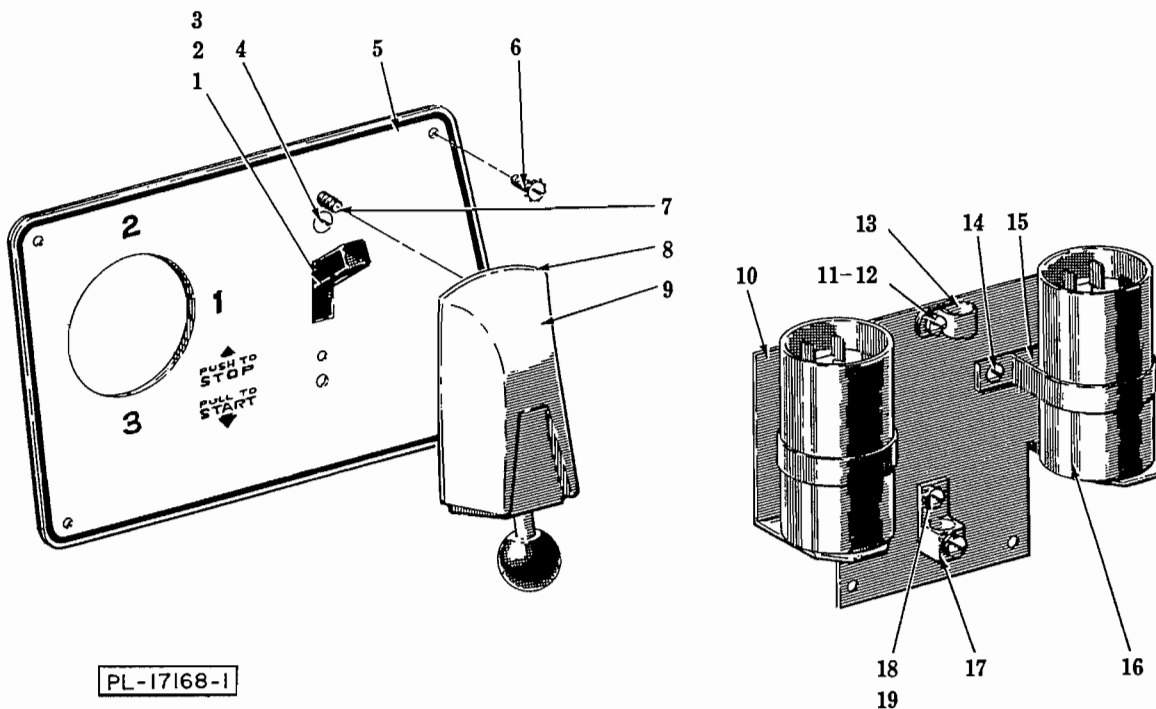
Loosen the access cover knob (1, Fig. 2) and lift off cover. Lightly coat moving parts with Lubriplate 630AA (supplied). Replace cover and knob.

The polished drip cup (5, Fig. 1) is a safe-guard to prevent any lubricant or moisture that may have collected on the planetary from dropping into the bowl. Remove the drip cup (by removing two thumb screws (4, Fig. 1) and pulling straight down) once a month and wipe it clean.



BOWL

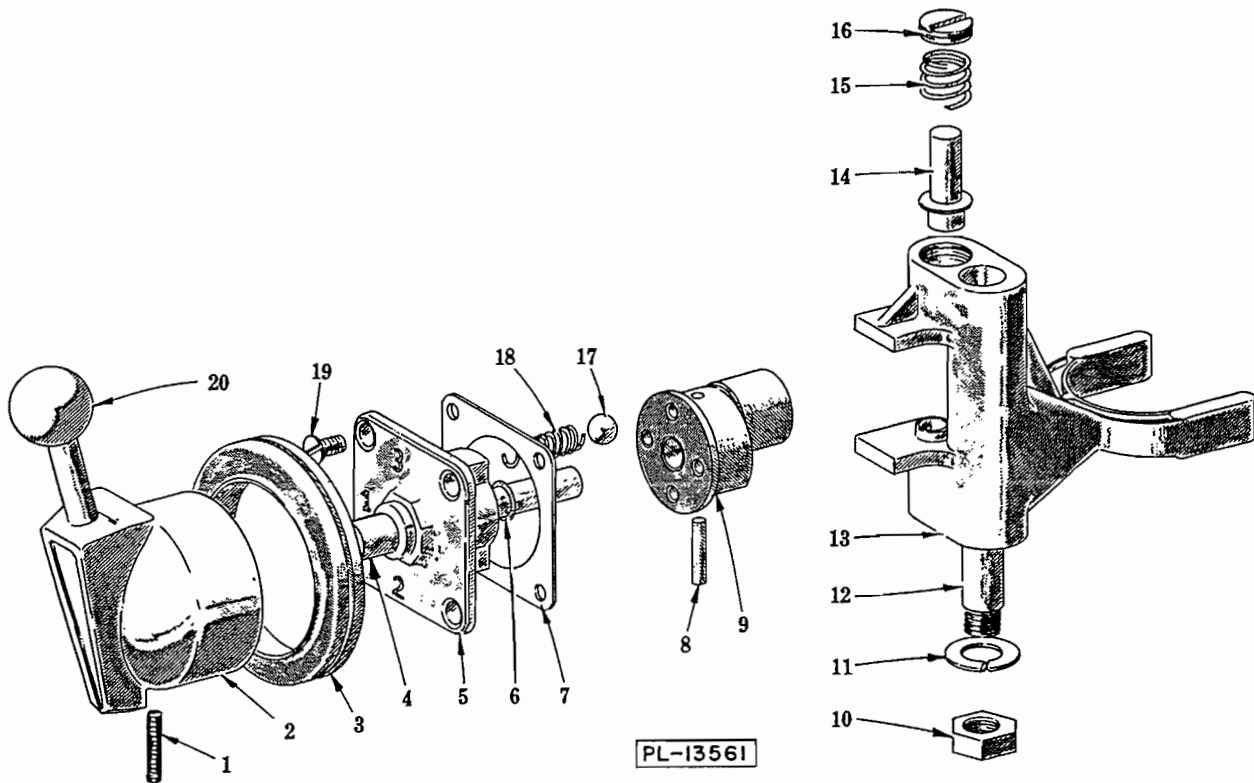
ILLUS. PL-8716	PART NO.	NAME OF PART	AMT.
1	D-104413	Bowl - 30 Qt.	1
2	E-115228	Bowl - 20 Qt. (Not Shown)	1
3	S-70497-1	Splash Cover Assy. (30 Qt.)	1
4	S-20531-1	Splash Cover Assy. (20 Qt.)	1



SWITCH UNIT

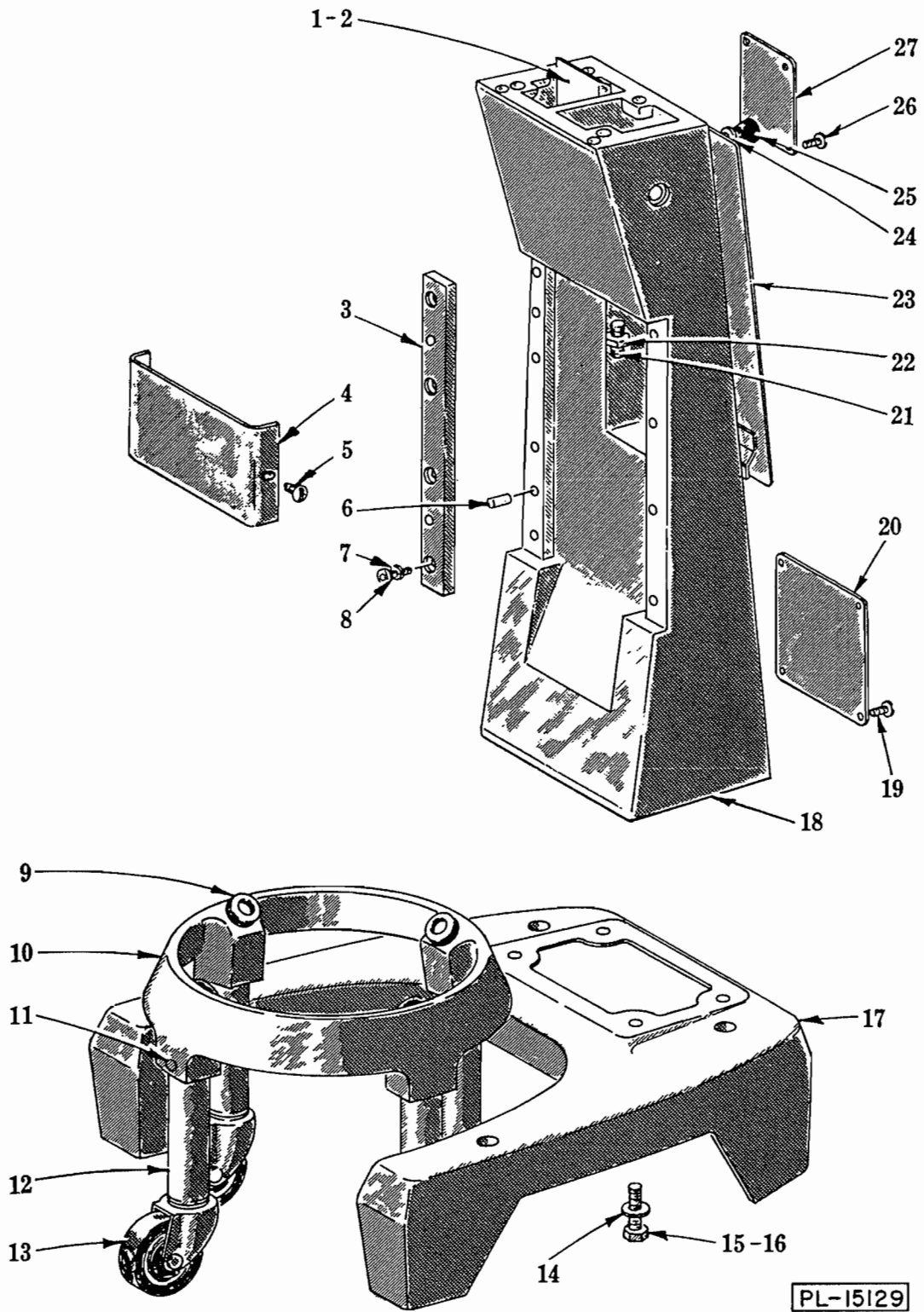
ILLUS. PL-17168-1 NO.	PART NO.	NAME OF PART	AMT.
1	P-87711-99-4	Switch - Manual (115/200/230 V., 60 Hz.; 115/200 V., 50 Hz.) (1 Ph.)	1
2	*	Heater Element	AR
3	M-70262	Insulator - Switch	1
4	SC-9-49	Mach. Screw - #6-32 x 3/8" Rd. Hd	2
5	D-117864	Plate - Manual Switch	1
6	B-123109	Screw - #6-32 x 3/8" Serrated Hd	4
7	SD-15-41	Self-Tapping Screw - #8-32 x 1/2" Phil. Pan Hd. "Taptite"	2
8	A-105050	Gasket - Switch Housing	1
9	A-105305	Switch Rod & Housing Assy	1
10	D-146038	Plate - Capacitor Mounting	1
11	SC-8-16	Mach. Screw - #10-32 x 3/8" Rd. Hd	3
12	WL-7-11	Lock Washer - #10 Ext. Shakeproof	3
13	M-78752-4	Clip - Wiring	1
14	SD-24-1	Self-Tapping Screw - #10-24 x 3/8" Pan Hd. "Taptite"	2
15	C-146075-1	Strap - Capacitor	2
16	B-145084-3	Capacitor	2
17	C-118544-1	Lug - Solderless	1
18	SD-24-1	Self-Tapping Screw - #10-24 x 3/8" Pan Hd. "Taptite"	1
19	WL-7-12	Lock Washer - #10 Ext. Shakeproof	1
	M-61285-1	Boot - Insulating (Not Shown)	2

*Give Elec. Spec., Mach. Model & Motor Type.



SHIFTER UNIT

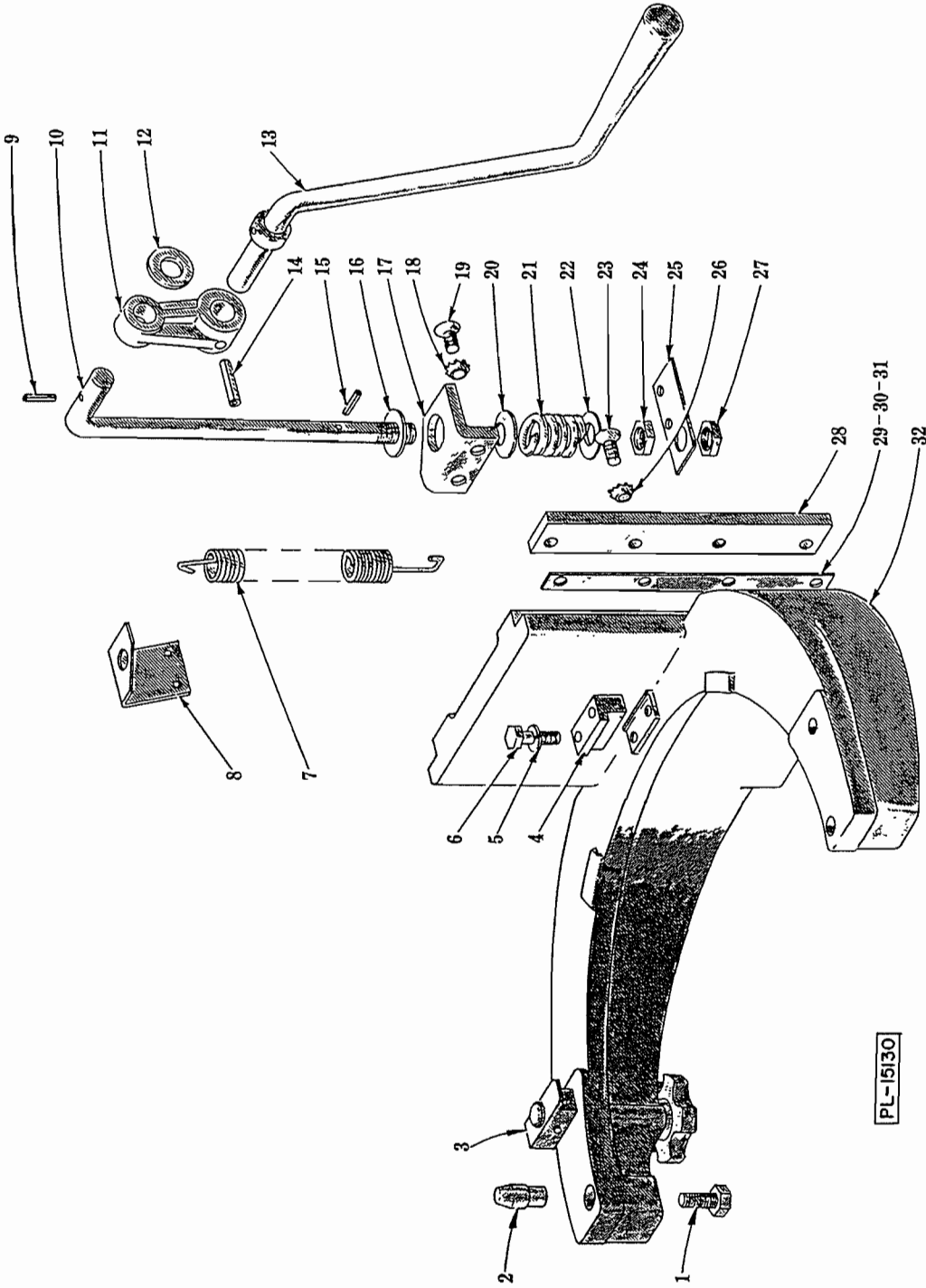
ILLUS.	PART NO.	NAME OF PART	AMT.
PL-13561	1	SC-75-7 Set Screw - #10-32 x 3/4" Soc. Hd., Cup Pt	1
	2	P-70333-2 Shifter Handle Assy	1
	3	B-110961 Grommet - Shifter Handle	1
	4	B-114507 Shaft - Shifter	1
	5	P-12726-2 Plate - Index	1
	6	D-67500-44 "O" Ring	1
	7	M-23946 Gasket - Index Plate	1
	8	PS-3-8 Spirol Pin - 1/8" Dia. x 3/4" Lg	1
	9	B-114506 Cam - Gear Shifter	1
	10	NS-13-22 Full Nut - 3/8"-16 Hex Fin	1
	11	WL-4-2 Lock Washer - 3/8" Light	1
	12	M-70043 Rod - Shifter Guide	1
	13	P-13160 Yoke - Shifter	1
	14	V-12733 Plunger - Shifter Yoke	2
	15	V-12734 Spring - Shifter Yoke	2
	16	V-12732 Retainer - Shifter Yoke Spring	2
	17	BA-2-9 Ball - 1/4" Dia	2
	18	V-111170 Spring - Detent	2
	19	SC-13-46 Mach. Screw - #10-24 x 1/2" Flat Hd	4
	20	M-70085 Knob - Shifter Handle Ball	1



BASE AND PEDESTAL

BASE AND PEDESTAL

ILLUS. PL-15129	PART NO.	NAME OF PART	AMT.
1	R-70145	Air Baffle Assy	1
2	SC-13-55	Mach. Screw - #10-24 x 1" Flat Hd	1
3	R-68717	Slideway	2
4	R-68720	Apron	1
5	SC-19-26	Mach. Screw - #6-32 x 1/4" Bind. Hd	2
6	D-11800-116	Dowel	2
7	A-120288	Lock Washer - Special	8
8	SC-40-14	Cap Screw - 5/16"-18 x 3/4" Soc. Fil. Hd	8
9	B-18682-1	Bumper	4
10	S-70593-1	Bowl Truck Assy. (Incls. items #9, 11, 12 & 13)	1
11	SC-47-33	Set Screw - 5/16"-18 x 3/8" Soc. Hdls., Cone Pt	1
12	P-70590-1	Leg	4
13	P-87663	Caster	4
14	WS-18-19	Washer	4
15	SC-62-22	Cap Screw - 3/8"-16 x 1-1/4" Hex Hd. (Tubular Base)	4
16	SC-62-27	Cap Screw - 3/8"-16 x 1-3/4" Hex Hd. (Cast Base)	4
17	A-123823	Base Assy	1
18	A-291054	Pedestal & Access Cover Assy	1
19	SD-15-14	Self-Tapping Screw - #6-32 x 3/8" Truss Hd. "Taptite"	4
20	P-70004-1	Cover - Capacitor & Starter Access	1
21	SC-47-46	Set Screw - 3/8"-16 x 1-1/4" Soc. Hdls., Half-Dog Pt	1
22	NS-17-15	Jam Nut - 3/8"-16 Hex Fin	1
23	R-70144-1	Lift Access Cover Assy	1
24	WS-19-26	Washer	1
25	M-70450	Knob - Lift Access Cover	1
26	SD-5-37	Drive Screw - #6 x 1/4" Rd. Hd., Type U	4
27	C-123810	Plate - Mach. Data (Give Serial No. & Elec. Spec.)	1

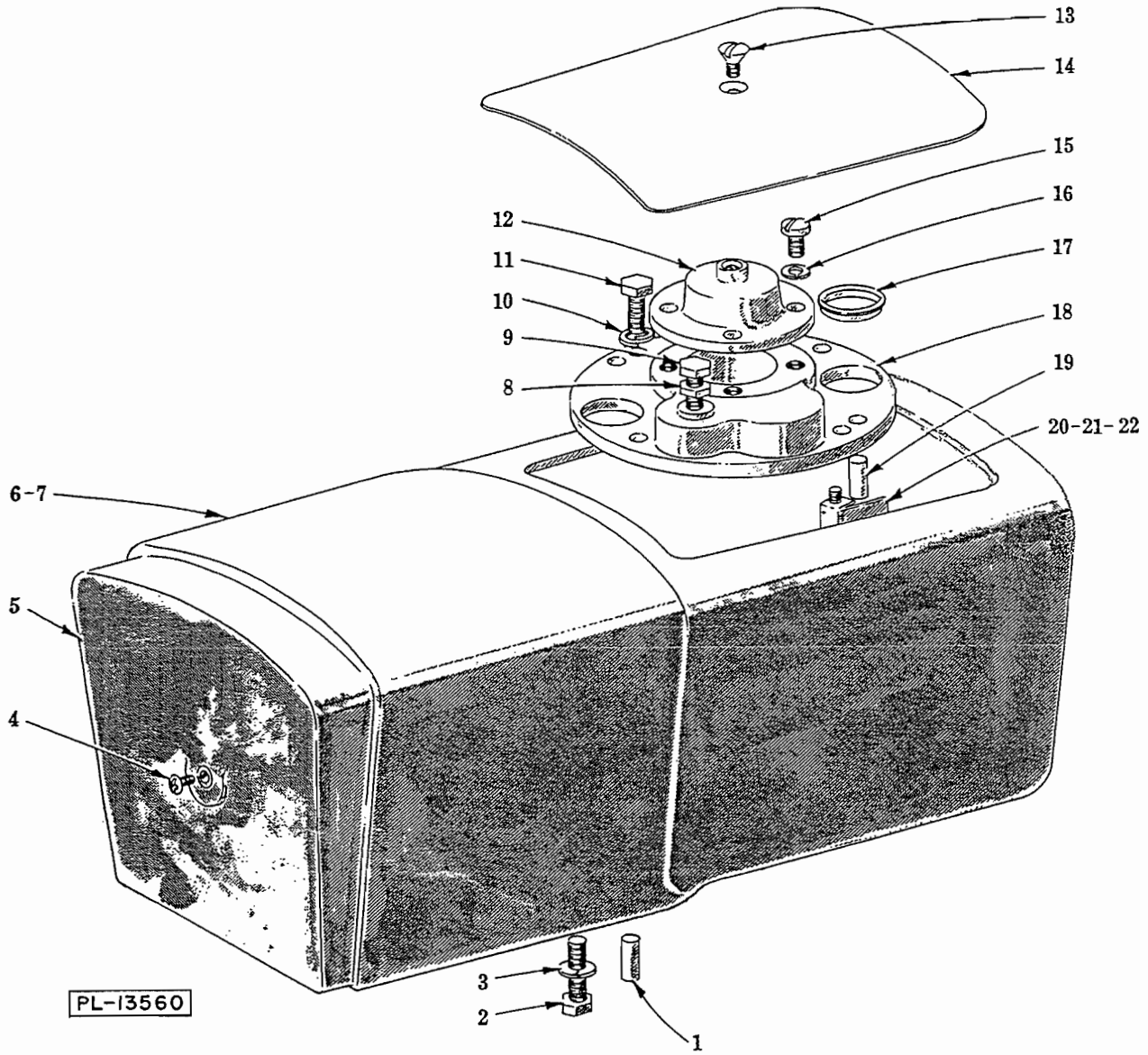


BOWL LIFT UNIT

PL-15130

BOWL LIFT UNIT

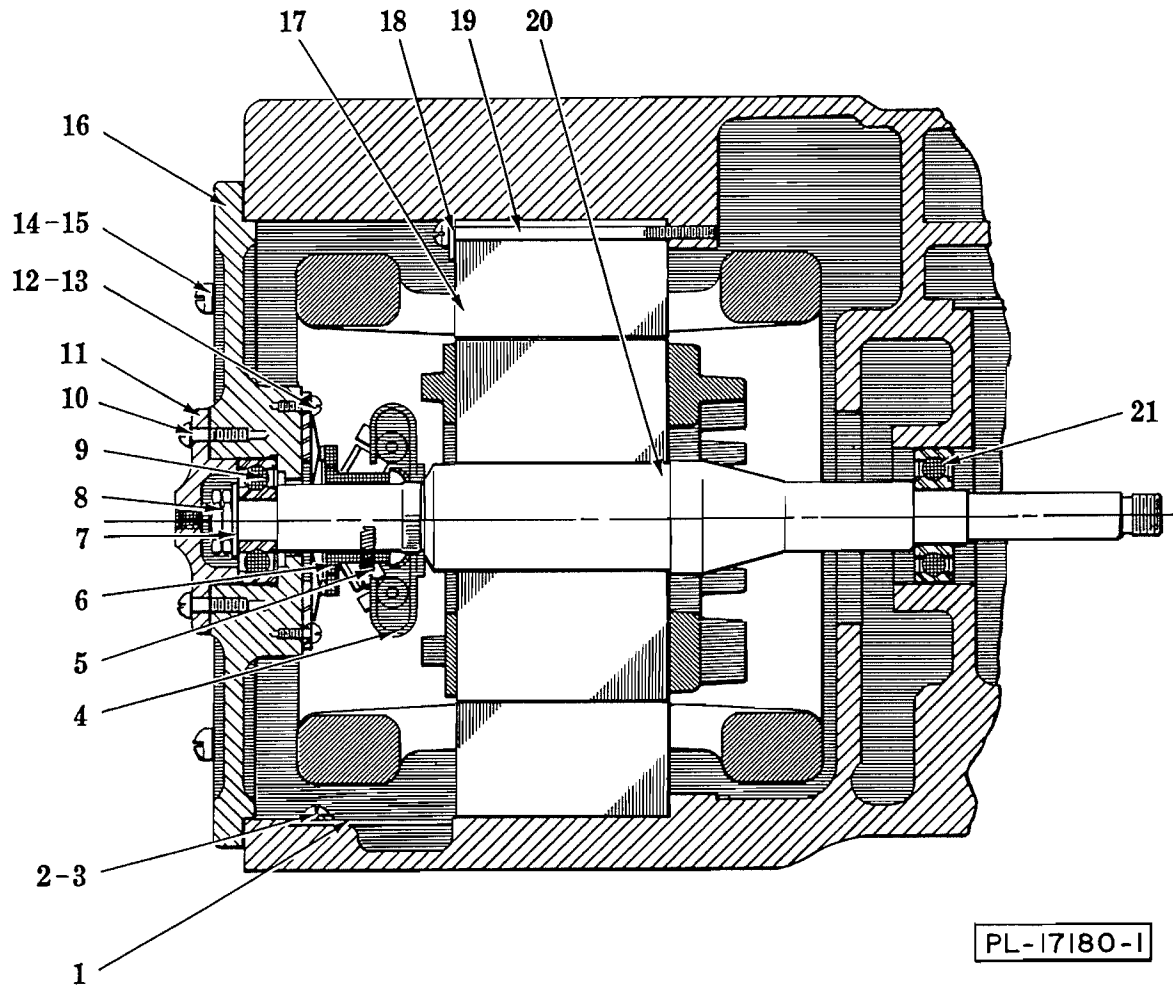
ILLUS. PL-15130	PART NO.	NAME OF PART	AMT.
1	SC-37-75	Cap Screw - 5/16"-18 x 3/4" Hex Hd	2
2	M-70411	Pin - Bowl Locating	2
3	A-123824	Bowl Clamp Assy	2
4	M-70044	Retainer - Bowl	1
5	WL-6-16	Lock Washer - 1/4" Light	2
6	SC-36-9	Cap Screw - 1/4"-20 x 1-1/4" Hex Hd	2
7	M-23884	Spring - Counterbalance	2
8	P-70056	Bracket - Upper Spring Lift	1
9	RP-2-25	Rollpin - 1/8" Dia. x 7/8" Lg	1
10	P-68718	Rod - Bowl Lift	1
11	P-69995	Arm - Bowl Lift	1
12	WS-8-47	Washer	1
13	R-70493	Lift Handle Assy	1
14	RP-2-26	Rollpin - 1/4" Dia. x 1-1/8" Lg	1
15	RP-2-10	Rollpin - 3/16" Dia. x 1" Lg	1
16	WS-8-47	Washer	1
17	P-69998	Bracket - Bowl Lift	1
18	WL-9-14	Lock Washer - 5/16" Csk. Ext. Shakeproof	2
19	SC-61-3	Cap Screw - 5/16"-18 x 3/4" Soc. Flat Hd	2
20	M-70131	Washer - Cup	1
21	M-70104	Spring - Bowl Lift	1
22	WS-8-47	Washer	1
23	SC-61-3	Cap Screw - 5/16"-18 x 3/4" Soc. Flat Hd	8
24	NS-17-31	Jam Nut - 1/2"-20 Hex Fin	1
25	M-70058	Bracket - Lower Spring Lift	1
26	WL-9-14	Lock Washer - 5/16" Csk. Ext. Shakeproof	8
27	NS-17-31	Jam Nut - 1/2"-20 Hex Fin	1
28	P-69996	Gib	2
29	P-70092-1	Shim - Bowl Support (.001" Thk.)	AR
30	P-70092-2	Shim - Bowl Support (.002" Thk.)	AR
31	P-70092-3	Shim - Bowl Support (.003" Thk.)	AR
32	T-69987-2	Support - Bowl	1



TRANSMISSION CASE

TRANSMISSION CASE

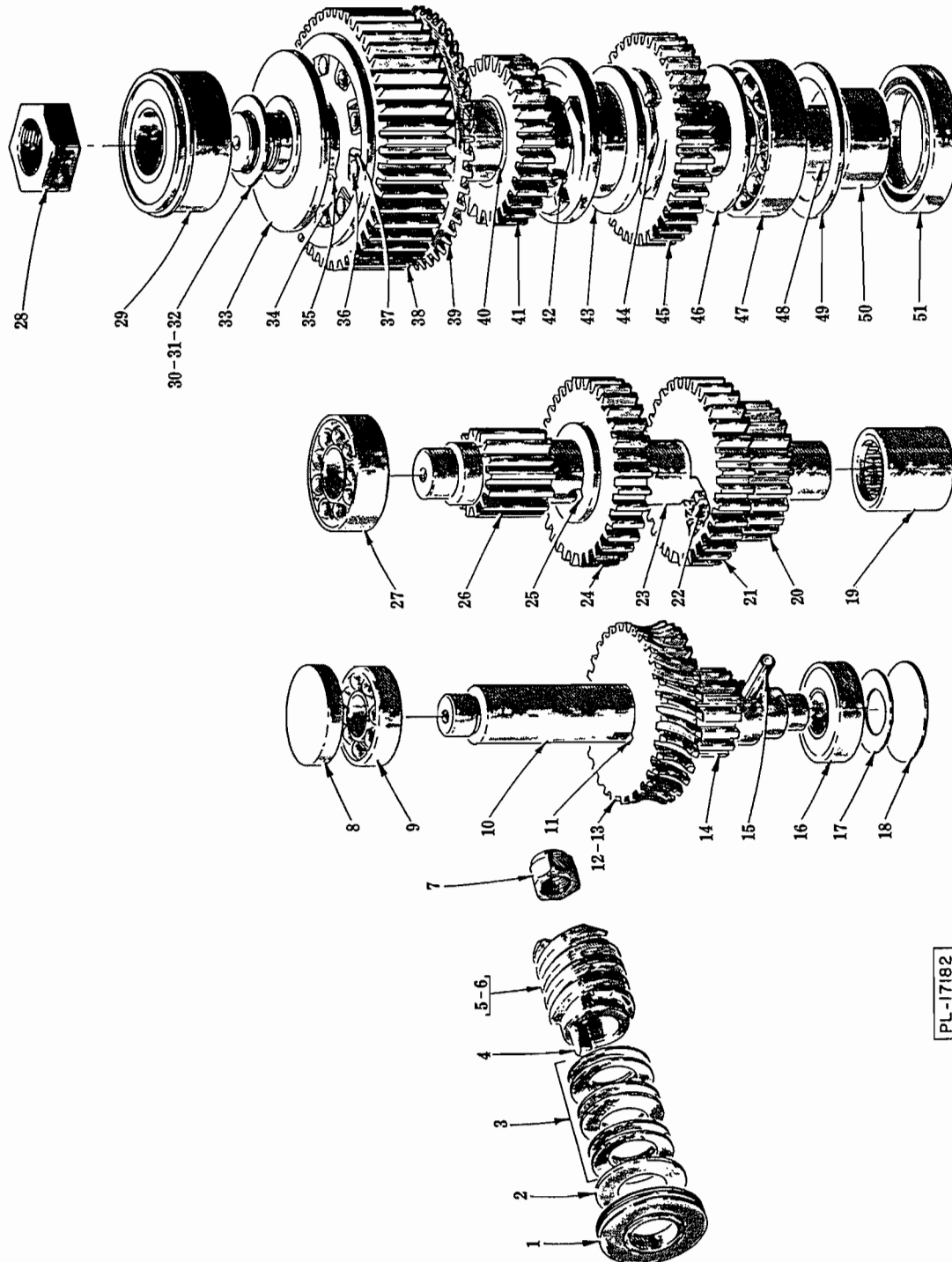
ILLUS. PL-13560	PART NO.	NAME OF PART	AMT.
1	D-11800-221	Dowel	2
2	SC-62-27	Cap Screw - 3/8"-16 x 1-3/4" Hex Hd	4
3	WL-4-2	Lock Washer - 3/8" Light	4
4	M-72189	Mach. Screw - "Nylok" Phil. Truss Hd	1
5	S-68723-1	Cap - Trim	1
6	D-290505-1	Case - Transmission	1
7	---	Motor (See Separate Page This Catalog)	1
8	NS-17-14	Jam Nut - 3/8"-16 Hex Fin	1
9	SC-36-57	Cap Screw - 3/8"-16 x 1-1/4" Hex Hd	1
10	WL-3-43	Lock Washer - 5/16" Light	4
11	SC-36-26	Cap Screw - 5/16"-18 x 7/8" Hex Hd	4
12	P-70017	Retainer - Bearing	1
13	SC-15-36	Mach. Screw - #10-24 x 5/8" Oval Hd	1
14	R-70005-1	Transmission Case Cover Assy	1
15	SC-11-74	Mach. Screw - 1/4"-20 x 5/8" Fil. Hd	4
16	WL-3-37	Lock Washer - 1/4" Medium	4
17	M-64871	Plug - Single Friction	2
18	S-68721	Bearing Carrier - Transmission Case	1
19	D-11800-116	Dowel	2
20	P-70872	Deflector - Roller Clutch Oil	1
21	SC-7-40	Mach. Screw - #8-32 x 5/16" Rd. Hd	1
22	WL-7-6	Lock Washer - #8 Ext. Shakeproof	2
	M-79621	Shim (Between Trans. Case & Ped.) (Not Shown)	AR



MOTOR UNIT

MOTOR UNIT

ILLUS. PL-17180-1	PART NO.	NAME OF PART	AMT.
1	M-70441	Retainer - Lead Wire	1
2	SC-9-56	Mach. Screw - #8-32 x 3/8" Rd. Hd	1
3	WL-7-7	Lock Washer - #8 Ext. Shakeproof	1
4	P-88428	Starting Switch Assy. (Rotating Part)	1
5	P-23706-1	Spring - Switch (60 Hz.) (Rotating Part)	2
6	P-21607	Sleeve - Switch (Rotating Part)	1
7	WS-7-9	Washer	1
8	V-11430	Nut - Special	2
9	BB-17-5	Ball Bearing - ND #7601	1
10	SC-9-61	Mach. Screw - #8-32 x 1/2" Rd. Hd	4
11	P-70012	Cap - Bearing	1
12	P-66085	Switch - Starting (Stationary Part)	1
13	SC-9-70	Mach. Screw - #6-32 x 1/4" Rd. Hd	2
14	SC-11-64	Mach. Screw - #12-24 x 1" Fil. Hd	4
15	WL-3-28	Lock Washer - #12 Light	4
16	S-68722	Bracket - Bearing	1
17	D-146001-1	Stator Assy. (115 V., 60 Hz.)	1
18	V-12671	Retainer - Stator	4
19	SC-11-32	Mach. Screw - #10-24 x 3" Fil. Hd	4
20	C-145269-2	Rotor Assy. (Incls. items #4, 5 & 6)	1
21	BB-18-17	Ball Bearing - Fafnir #H203PP	1



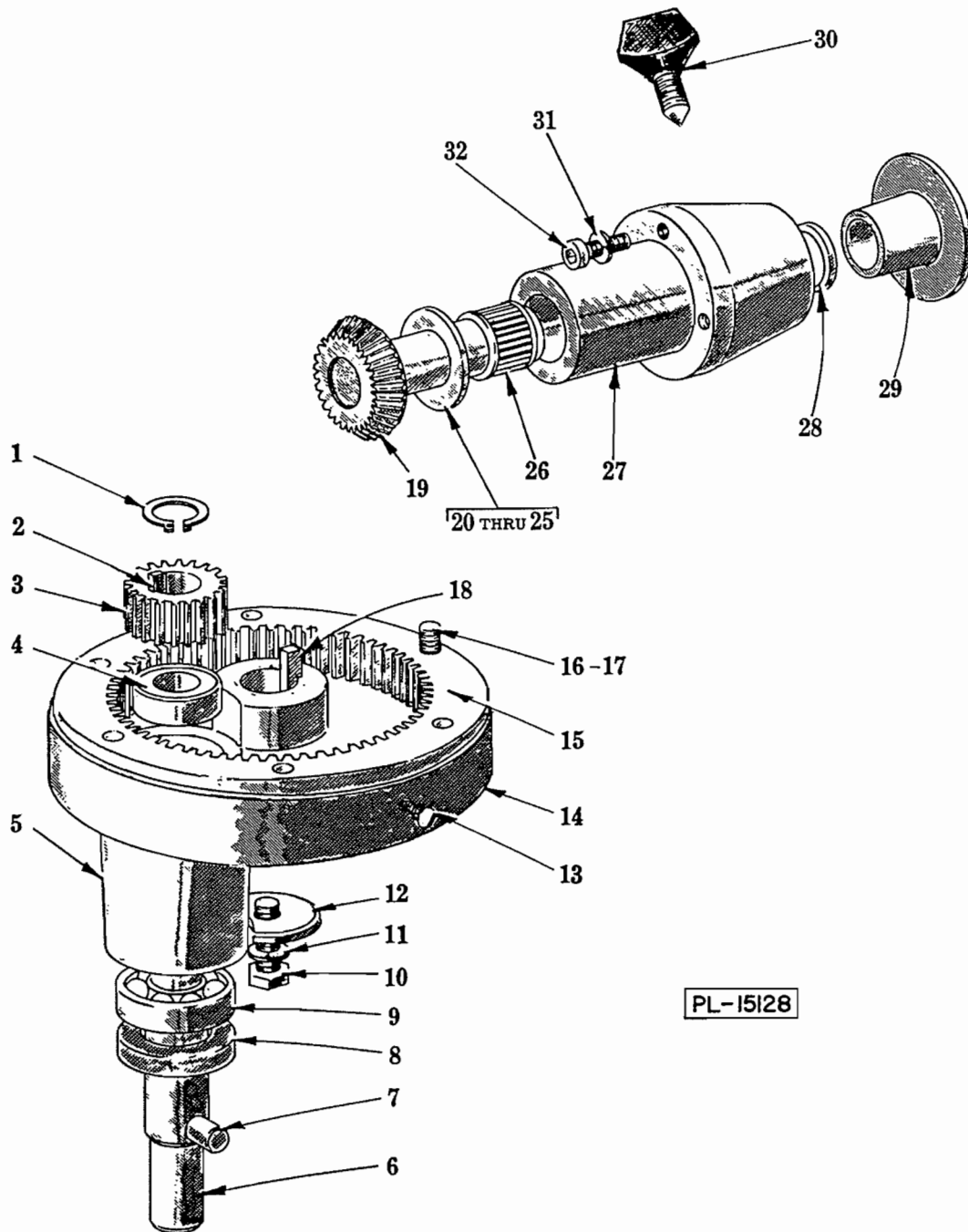
PL-17182

TRANSMISSION

TRANSMISSION

ILLUS. PL-17182	PART NO.	NAME OF PART	AMT.
1	M-13174-1	Deflector - Grease	1
2	WS-10-36	Washer	1
3	M-77840	Washer - Belleville	6
4	V-12747	Key	1
5	M-70406	Worm (5T) (60 Hz.)	1
6	M-70407	Worm (5T) (50 Hz.)	1
7	NS-32-23	Stop Nut - 7/16"-20 "Flexloc"	1
8	M-70026	Pusher - Bearing	1
9	BB-17-4	Ball Bearing - N.D. #7501	1
10	P-70036	Shaft - Worm Gear	1
11	R-12430-52	Key	1
12	P-70034	Gear - Worm (29T) (60 Hz.)	1
13	P-70251	Gear - Worm (24T) (50 Hz.)	1
14	C-70027	Gear - Worm Shaft (14T)	1
15	PS-4-13	Spirol Pin - 1/4" Dia. x 7/8" Lg.	1
16	BB-17-4	Ball Bearing - N.D. #7501	1
17	M-70166	Spring - Worm Shaft	1
18	PL-3-14	Plug - Expansion	1
19	BN-2-2	Needle Bearing	1
20	M-70028	Gear (23T)	1
21	C-70030	Gear (33T)	1
22	M-70260	Key	1
23	M-89829	Spacer	1
24	M-89831	Gear (32T)	1
25	M-89830	Key	1
26	P-89818	Shaft - Transmission	1
27	BB-17-9	Ball Bearing - N.D. #3203	1
28	NS-32-32	Stop Nut - 3/4"-16 L.H. Thd. "Flexloc"	1
29	BB-9-41	Ball Bearing - N.D. #45504	1
30	WS-12-45	Washer (.002" Thk.)	AR
31	WS-12-46	Washer (.003" Thk.)	AR
32	WS-12-47	Washer (.010" Thk.)	AR
33	M-70015	Spacer - Upper Planetary Shaft	1
34	P-70033	Sleeve - Drive	1
35	R-12430-161	Key	1
36	M-70039	Roller - Clutch	10
37	M-70055	Spring - Roller	10
38	P-70032	Gear - Roller Clutch (46T)	1
*39	A-123825	Bevel Gear & Attach. Drive Assy	1
40	M-70042	Bushing - Upper Clutch Gear	1
41	P-70040	Gear - Upper Clutch (29T)	1
42	R-12430-55	Key	2
43	P-70035	Sleeve - Clutch	1
44	M-70031	Bushing - Lower Clutch Gear	1
45	P-70095	Gear - Lower Clutch (38T)	1
46	M-70046	Spacer - Lower Planetary Shaft	1
47	BB-8-33	Ball Bearing - Fafnir #205WD	1
48	M-71187	Planetary Shaft & Bushing Assy. (Incls. item #44)	1
49	M-75050	Washer - Spacing	1
50	M-70016	Spacer - Planetary	1
51	B-110334	Seal - Planetary	1

*Incls. item #19 on Page 19.

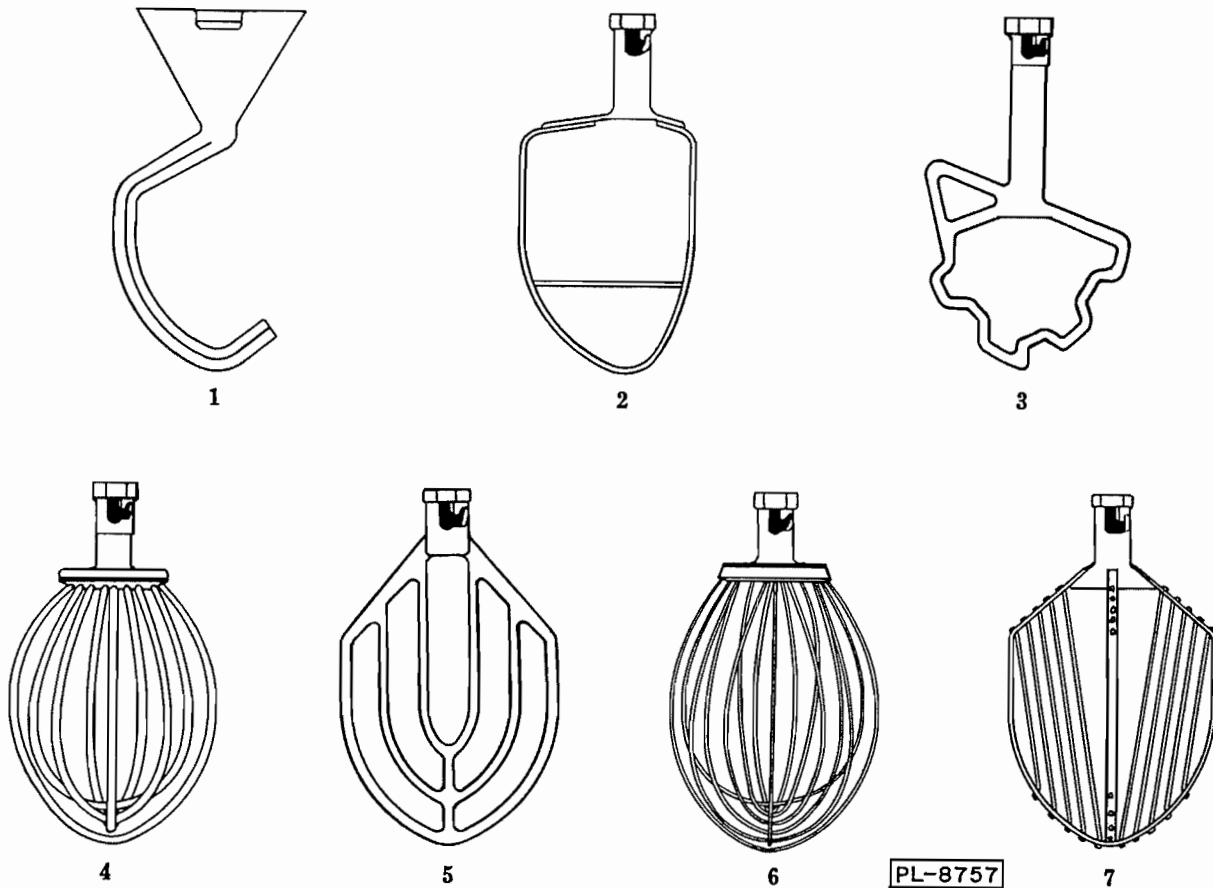


PLANETARY AND ATTACHMENT HUB

PLANETARY AND ATTACHMENT HUB

ILLUS. PL-15128	PART NO.	NAME OF PART	AMT.
1	RR-4-6	Retaining Ring	1
2	R-12430-142	Key	1
3	M-70014	Pinion - Agitator Shaft (18T)	1
4	BB-20-6	Ball Bearing - N.D. #7504	1
5	S-69990-1	Planetary	1
6	M-70339	Agitator Shaft Assy. (Incls. item #7)	1
7	M-70019	Pin - Agitator	1
8	B-110335	Seal - Agitator Shaft	1
9	BB-17-36	Ball Bearing - N.D. #7505	1
10	SC-62-58	Cap Screw - 3/8"-24 x 1-1/4" Hex Hd	1
11	WL-6-27	Lock Washer - 3/8" Light	1
12	M-70047-1	Washer - Planetary	1
13	P-70641-12	Thumb Screw	2
14	R-68719	Cup - Planetary Drip	1
15	S-69994	Gear - Internal (59T)	1
16	SC-40-16	Cap Screw - 5/16"-18 x 1" Soc. Fil. Hd	6
17	WL-3-48	Lock Washer - 5/16" High Collar	6
18	R-12430-158	Key	1
*19	A-123825	Bevel Gear & Attach. Drive Assy	1
20	M-70045-1	Washer - Thrust (.125" Thk.)	AR
21	M-70045-2	Washer - Thrust (.119" Thk.)	AR
22	M-70045-3	Washer - Thrust (.121" Thk.)	AR
23	M-70045-4	Washer - Thrust (.123" Thk.)	AR
24	M-70045-5	Washer - Thrust (.127" Thk.)	AR
25	M-70045-6	Washer - Thrust (.129" Thk.)	AR
26	BN-2-12	Bearing - Needle	2
27	P-70511-3	Attachment Hub & Bearings Assy. (Incls. item #26)	1
28	P-70090	Seal - Attachment Hub	1
29	C-114824-3	Plug - Attachment Hub	1
30	C-108197-1	Thumb Screw Assy	1
31	WL-3-43	Lock Washer - 5/16" Light	3
32	SC-40-15	Cap Screw - 5/16"-18 x 1-1/4" Soc. Fil. Hd	3

*Incls. item #39 on Page 17.



AGITATORS

ILLUS. PL-8757	PART NO.	PART NO.	NAME OF PART	AMT.
	30 Qt.	20 Qt.		
1	---	S-23500	"E" Dough Arm	1
2	S-68093	R-70764	"P" Pastry Knife	1
3	R-10582-1	---	"S" Sweet Dough Beater	1
4	R-11016	---	"I" Wire Whip	1
5	S-23641-1	S-23642-1	"B" Flat Beater	1
6	S-23525-1	S-23526-1	"D" Wire Whip	1
7	D-123717	D-123724	"C" Wing Whip	1
	E-119679	---	"ED" Dough Arm - Spiral (Not Shown)	1