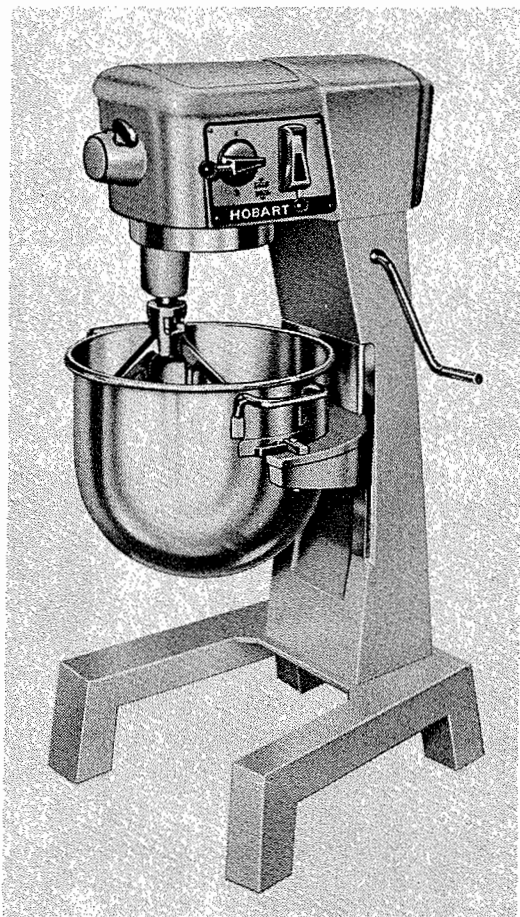




INSTRUCTION MANUAL

... with Replacement Parts



MODEL D-300 SERIES MIXERS

(INCLUDES MOTOR PARTS)

- ML-19544 D-300 (W & W/O Overload Protection)
- ML-19547 D-300-T (Timed)
- ML-19550 D-300-D (W & W/O Overload Protection)
- ML-19819 D-300-DT (Timed)

THIS MANUAL REPLACES AND SHOULD BE USED
INSTEAD OF FORMS 10373F (2-77) & 12649 (2-78)

PRIOR ML'S COVERED IN THIS MANUAL:

- ML-17684 D-300 (W & W/O Overload Protection)
- ML-17685 D-300-T (Timed)
- ML-17686 D-300-D (W & W/O Overload Protection)
- ML-17687 D-300-DT (Timed)

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

Save These Instructions

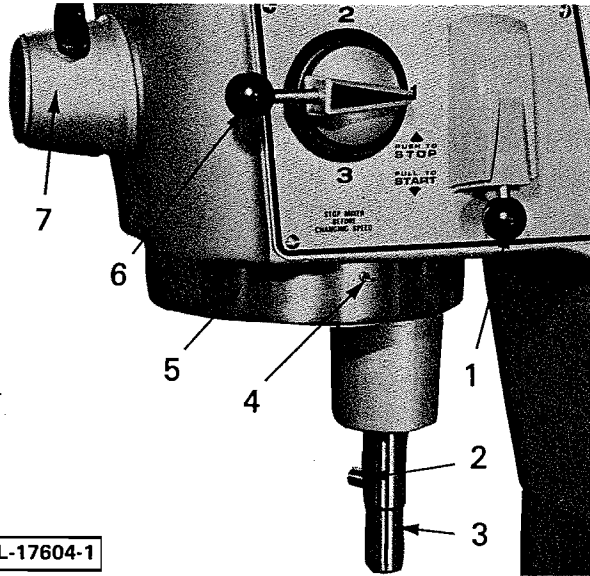


Fig. 1

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- or three-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. A Deck Plate Kit is available from Hobart for permanent bolting to the floor, although this is not necessary in normal installations.

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 |
| 200 | 1 | 15 | 10 | 14 |
| 230 | 1 | 15 | 10 | 14 |
| 200 | 3 | 15 | 6 | 14 |
| 230 | 3 | 15 | 6 | 14 |
| 460 | 3 | 15 | 3 | 14 |

INVERSE TIME CIRCUIT BREAKER

| Volts | Phase | Min. Ckt. Ampacity | Max. Ckt. Bkr. Size | 60°C Copper Wire Size |
|-------|-------|--------------------|---------------------|-----------------------|
| 115 | 1 | 20 | 20 | 12 |
| 200 | 1 | 15 | 15 | 14 |
| 230 | 1 | 15 | 15 | 14 |
| 200 | 3 | 15 | 6 | 14 |
| 230 | 3 | 15 | 6 | 14 |
| 460 | 3 | 15 | 3 | 14 |

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 leads to the pigtail leads from the machine controls. A green pigtail lead is provided for the service ground.

Three-phase machines must be connected so the planetary turns in the direction of the arrow on drip cup (5, Fig. 1). To check the direction of rotation, turn the power disconnect switch ON. Place the speed selector handle (6, Fig. 1) in #1. If machine is equipped with optional timer, place timer on HOLD. Energize machine momentarily and verify the direction of rotation.

If motor rotation is incorrect, **DISCONNECT ELECTRICAL POWER SUPPLY** and interchange any two of the power supply leads.

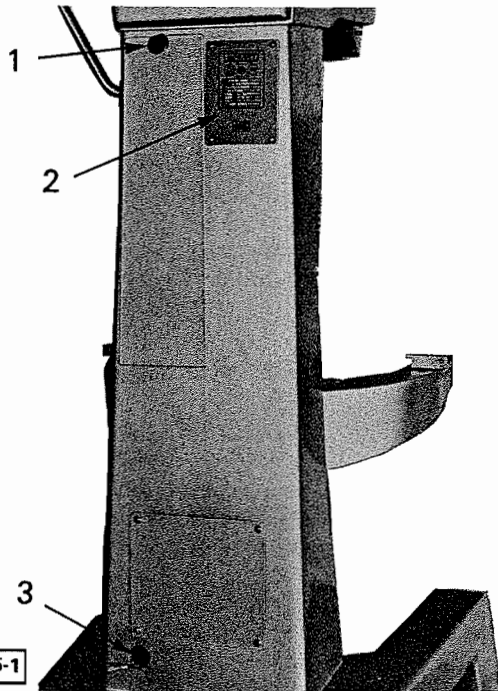


Fig. 2

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.

D-300; D-300-D

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.

D-300-T; D-300-DT

For non-timed operation, set the speed selector handle at the desired speed. Set the timer on HOLD and depress the START button.

For timed operation, set the speed selector handle at the desired speed. Set the timer at the desired time (if less than 3 minutes, turn past "3" and back to the desired time), and depress the START button.

To change speeds, turn the motor off by pushing the STOP button. When the agitator shaft has stopped, move the speed selector handle 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. Lock the bowl in place by rotating bowl clamps (3, Fig. 3) over the ears of the bowl. New mixer bowls and

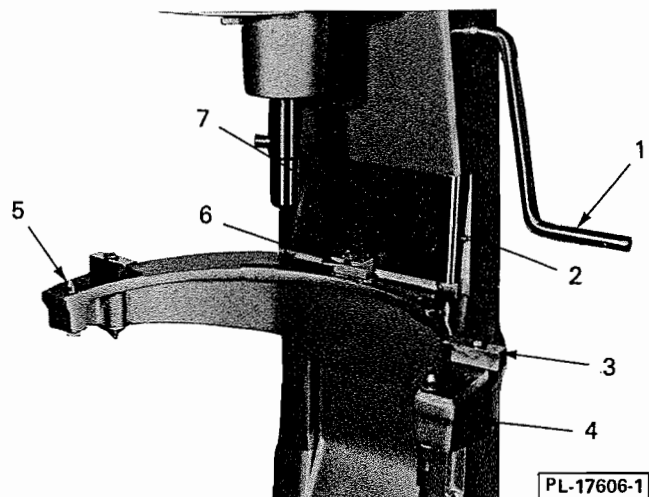


Fig. 3

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 L-shaped 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. 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.

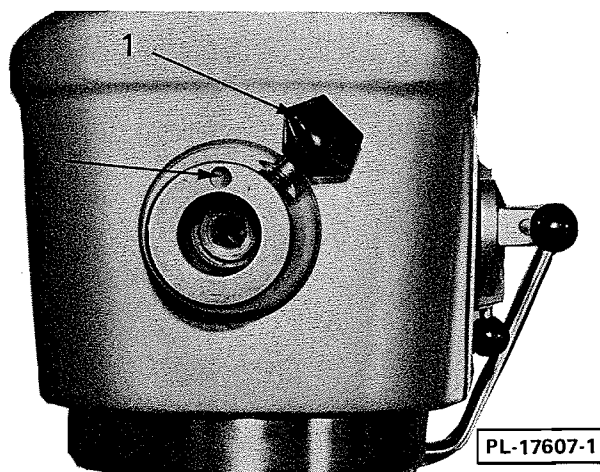


Fig. 4

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.

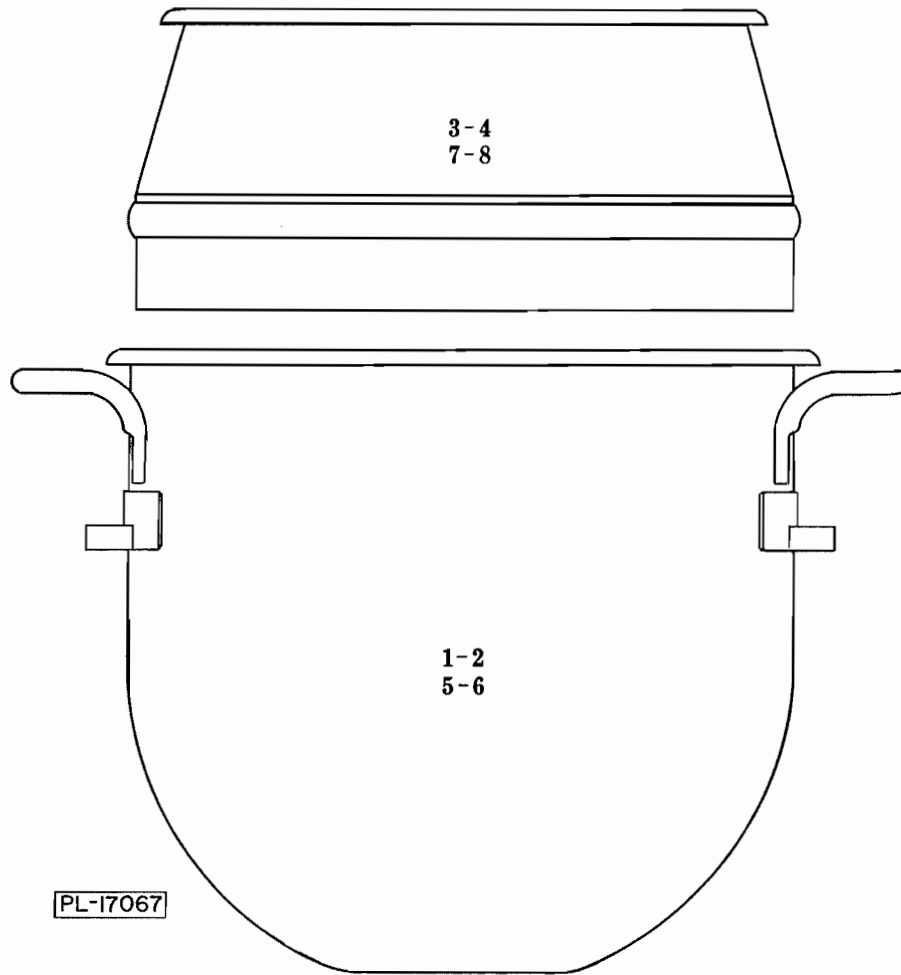
Bowl Slideways

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

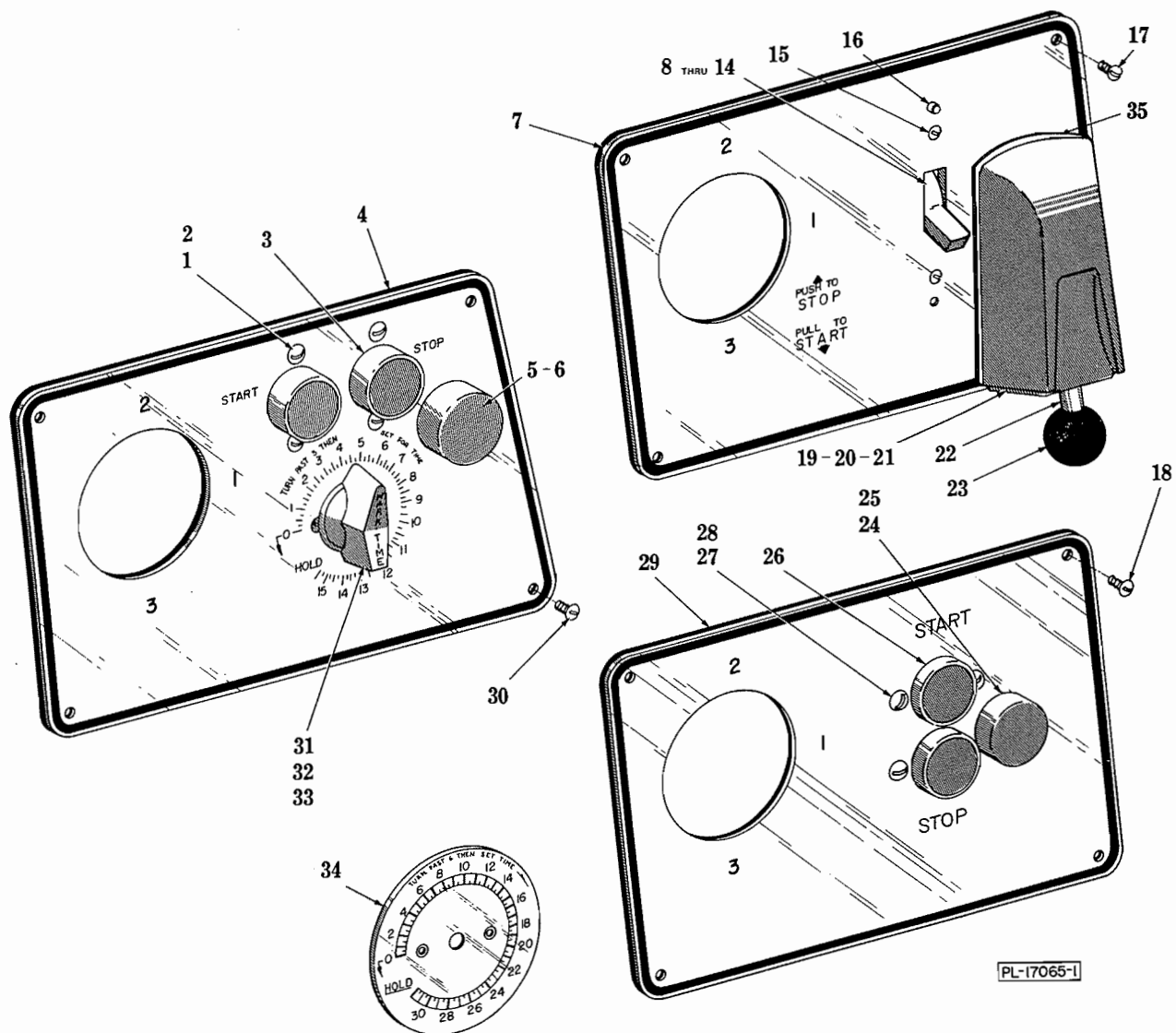
Loosen the access cover knob (1, Fig. 2) and lift off cover. Lightly coat moving parts with Lubriplate 630AA (supplied). Replace cover and knob.

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-17067 | PART NO. | NAME OF PART | AMT. |
|--------------------|-------------|--|------|
| 1 | D-104413 | Bowl - 30 Qt. (Tinned) | 1 |
| 2 | E-115228 | Bowl - 20 Qt. (Not Shown) (Tinned) | 1 |
| 3 | S-70497-1 | Splash Cover Assy. (30 Qt.) (Tinned) | 1 |
| 4 | S-20531-1 | Splash Cover Assy. (20 Qt.) (Tinned) | 1 |
| 5 | D-104414 | Bowl - 30 Qt. (SST) | 1 |
| 6 | E-115229 | Bowl - 20 Qt. (SST) | 1 |
| 7 | S-70497-2 | Splash Cover Assy. (30 Qt.) (SST) | 1 |
| 8 | S-20531-2 | Splash Cover Assy. (20 Qt.) (SST) | 1 |



TIMER, CONTROL AND SWITCH UNIT

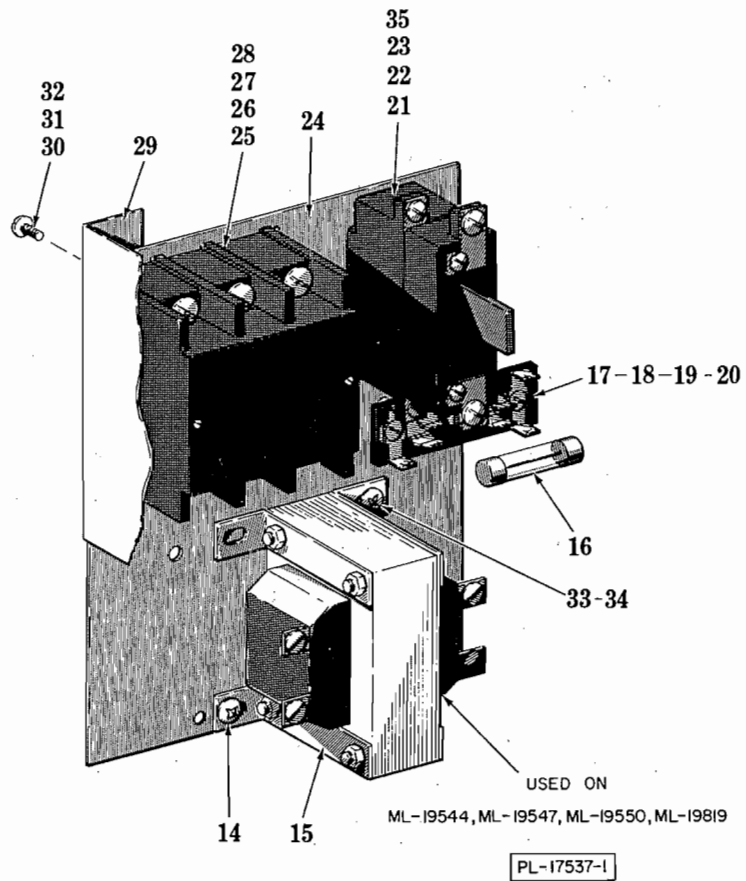
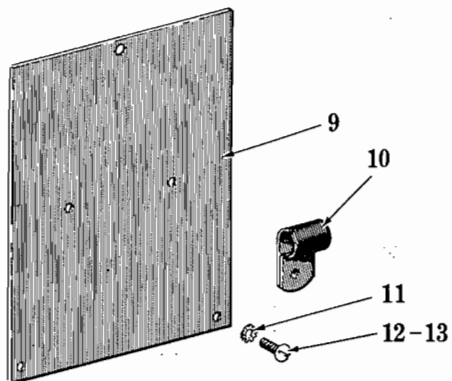
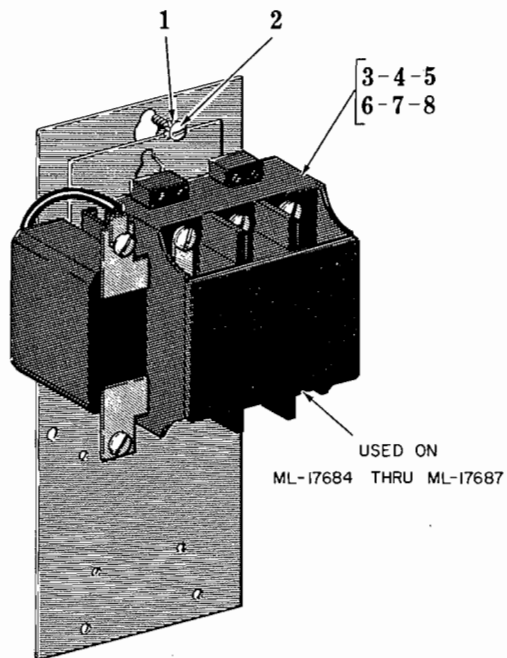
TIMER, CONTROL AND SWITCH UNIT

| ILLUS. PL-17065-1 | PART NO. | NAME OF PART | AMT. |
|----------------------|---------------|--|------|
| 1 | SC-15-26 | Mach. Screw - #8-32 x 5/16" Oval Hd | 4 |
| 2 | WS-2-18 | Washer | 4 |
| 3 | P-87711-102-1 | Station - Push Button | 2 |
| 4 | D-117852 | Plate - Switch & Timer | 1 |
| 5 | A-102467-1 | Cap - Push Button (Start) | 1 |
| 6 | A-102467-2 | Cap - Push Button (Stop) | 1 |
| 7 | D-117864 | Plate - Manual Switch | 1 |
| 8 | P-87711-99-4 | Switch - Manual (1 Ph.) | 1 |
| 9 | P-87711-99-2 | Switch - Manual (200/230 V., 60 Hz.; 220 V., 50 Hz.) (3 Ph.) | 1 |
| ***10 | P-87711-57-1 | Switch - Manual (460 V., 60 Hz.; 380 V., 50 Hz.) (3 Ph.) | 1 |
| **11 | P-87810-19-1 | Switch - Manual (Less Elements) (1 Ph.) | 1 |
| **12 | P-87810-26-1 | Switch - Manual (Less Elements) (3 Ph.) | 1 |
| 13 | * | Heater Element - Manual Switch | AR |
| 14 | M-70262 | Insulator - Switch (460 V., 60 Hz.; 380 V., 50 Hz.) (3 Ph.) | 1 |
| 15 | SC-9-49 | Mach. Screw - #6-32 x 3/8" Rd. Hd | 2 |
| 16 | SD-15-41 | Self-Tapping Screw - #8-32 x 1/2" Phil. Pan Hd. "Taptite" | 2 |
| 17 | B-123109 | Screw - Special | 4 |
| 18 | B-123109 | Screw - Special | 4 |
| 19 | A-105305 | Switch Rod & Housing Assy. (Incls. items #20 thru 23) | 1 |
| 20 | D-105150 | Housing - Switch Seal | 1 |
| 21 | B-121559 | Sleeve - Actuating Rod | 1 |
| 22 | B-121237 | Rod - Switch Actuating | 1 |
| 23 | A-105197 | Knob | 1 |
| 24 | A-102467-1 | Cap - Push Button (Start) | 1 |
| 25 | A-102467-2 | Cap - Push Button (Stop) | 1 |
| 26 | P-87711-102-1 | Station - Push Button | 2 |
| 27 | SC-15-26 | Mach. Screw - #8-32 x 5/16" Oval Hd | 4 |
| 28 | WS-2-18 | Washer | 4 |
| 29 | D-117851 | Plate - Magnetic Switch | 1 |
| 30 | B-123109 | Screw - Special | 4 |
| 31 | A-103228 | Timer & Gasket Assy. (15 Min.) (Incls. item #33) | 1 |
| 32 | A-103229 | Timer, Dial & Gasket Assy. (30 Min.) (Incls. items #33 & 34) | 1 |
| 33 | SC-13-7 | Mach. Screw - #5-40 x 1/4" Flat Hd | 2 |
| 34 | B-73540 | Dial - Timer (30 Min.) | 1 |
| 35 | A-105050 | Gasket - Switch Housing | 1 |
| | M-61285-1 | Boot - Insulating (Not Shown) | AR |

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

**W/ Overload Protection.

***W/O Overload Protection.

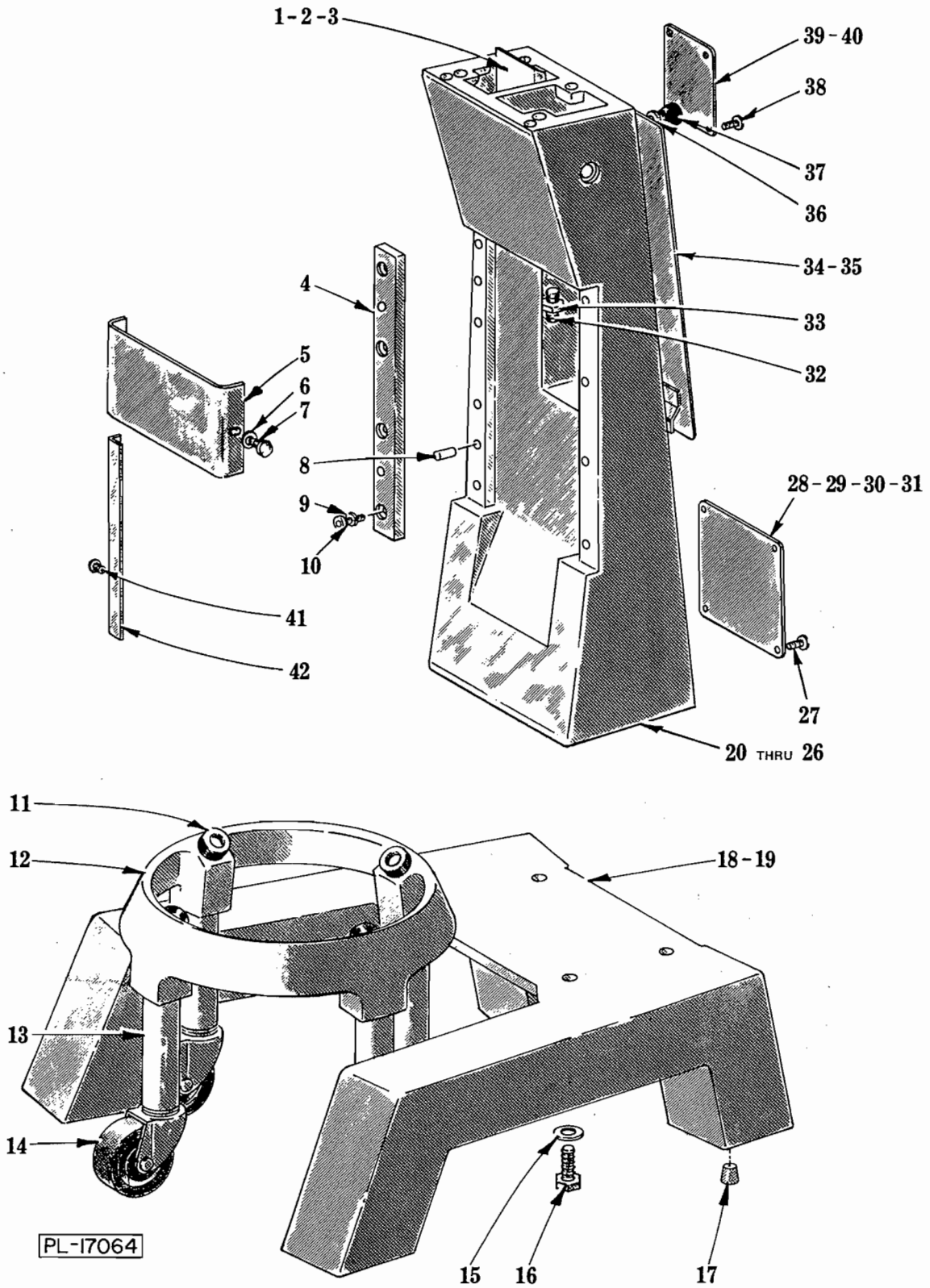


MAGNETIC CONTROL UNIT

MAGNETIC CONTROL UNIT

| ILLUS. PL-17537-1 | PART NO. | NAME OF PART | AMT. |
|----------------------|--------------|---|------|
| 1 | WL-7-6 | Lock Washer - #8 Ext. Shakeproof | 3 |
| 2 | SC-7-37 | Mach. Screw - #8-32 x 1/4" Rd. Hd | 3 |
| 3 | D-87712-38-2 | Starter - Magnetic (Less Elements) (115 V., 50/60 Hz., 1 Ph.) | 1 |
| 4 | D-87712-38-1 | Starter - Magnetic (Less Elements) (220/230 V., 60 Hz.; 220 V., 50 Hz.) (1 Ph.) | 1 |
| 5 | D-87712-40-1 | Starter - Magnetic (Less Elements) (460 V., 60 Hz.; 380 V., 50 Hz.) (3 Ph.) | 1 |
| 6 | D-87712-39-1 | Starter - Magnetic (Less Elements) (200/230 V., 60 Hz.; 220 V., 50 Hz.) (3 Ph.) | 1 |
| 7 | P-72717 | Plate - Mounting (Use with D-87712-39-1) | 1 |
| 8 | * | Heater Elements - Magnetic Starter | AR |
| 9 | P-70147 | Plate - Capacitor Mounting (manual Starter) | 1 |
| 10 | M-78752-4 | Clip - Wiring | 1 |
| 11 | WL-7-6 | Lock Washer - #8 Ext. Shakeproof | 3 |
| 12 | SC-7-37 | Mach. Screw - #8-32 x 1/4" Rd. Hd | 2 |
| 13 | SC-7-41 | Mach. Screw - #8-32 x 3/8" Rd. Hd | 1 |
| 14 | SD-15-20 | Self-Tapping Screw - #10-32 x 3/8" Phil. Pan Hd. "Taptite" (Above 250 V.) (3 Ph.) | 1 |
| 15 | B-101935 | Transformer (Above 250 V.) (3 Ph.) | 1 |
| 16 | FE-9-25 | Fuse (1/2 Amp.) (Above 250 V.) (3 Ph.) | 1 |
| 17 | B-124017 | Fuse Block Assy. (Above 250 V.) (3 Ph.) | 1 |
| 18 | M-85432 | Insulator - Fuse Block (Above 250 V.) (3 Ph.) | 1 |
| 19 | SC-9-49 | Mach. Screw - #6-32 x 3/8" Rd. Hd | 1 |
| 20 | NS-9-7 | Mach. Nut - #6-32 Hex | 1 |
| 21 | B-88196-6-1 | Relay - Thermal Overload (1 Ph.) | 1 |
| 22 | B-88196-5-1 | Relay - Thermal Overload (3 Ph.) (Tri-Block) | 1 |
| 23 | * | Heater Element - Overload Relay | AR |
| 24 | D-123962 | Panel - Control | 1 |
| 25 | C-87713-23-2 | Contacto (115 V., 50/60 Hz., 1 Ph.) | 1 |
| 26 | C-87713-23-1 | Contacto (200/230 V., 60 Hz.; 220 V., 50 Hz.) (1 Ph.) | 1 |
| 27 | C-87713-22-1 | Contacto (200/230 V., 60 Hz.; 220 V., 50 Hz.) (3 Ph.) | 1 |
| 28 | C-87713-22-2 | Contacto (460 V., 60 Hz.; 380/415 V., 50 Hz.) (3 Ph.) | 1 |
| 29 | D-290551 | Insulator | 1 |
| 30 | WL-7-2 | Lock Washer - #6 Ext. Shakeproof | 4 |
| 31 | NS-9-7 | Mach. Nut - #6-32 Hex | 4 |
| 32 | SC-9-49 | Mach. Screw - #6-32 x 3/8" Rd. Hd | 4 |
| 33 | SC-7-37 | Mach. Screw - #8-32 x 1/4" Rd. Hd | 3 |
| 34 | WL-7-6 | Lock Washer - #8 Ext. Shakeproof | 3 |
| 35 | B-123131 | Self-Tapping Screw - #8-32 x 3/8" Truss Hd., "Taptite" | 2 |

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



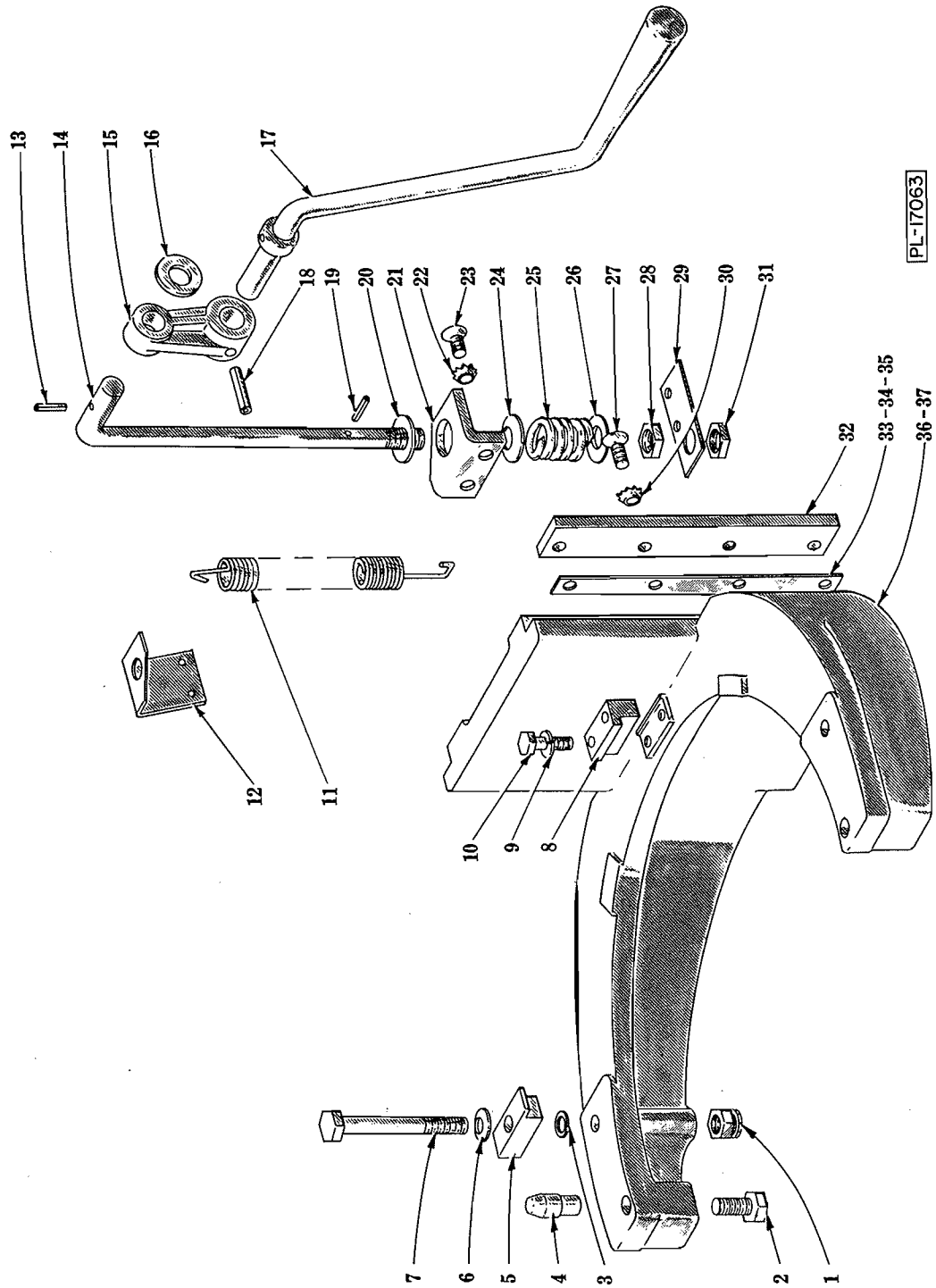
BASE AND PEDESTAL

BASE AND PEDESTAL

| ILLUS. PL-17064 | 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 | SC-16-4 | Mach. Screw - #10-24 x 1" Oval Hd | 1 |
| 4 | R-68717 | Slideway | 2 |
| 5 | R-68720 | Apron | 1 |
| 6 | WS-23-21 | Washer | 2 |
| 7 | P-70641-12 | Thumb Screw - Special | 2 |
| 8 | D-11800-116 | Dowel | 2 |
| 9 | A-120288 | Lock Washer - Special | 8 |
| 10 | SC-40-14 | Cap Screw - 5/16"-18 x 3/4" Soc. Fil. Hd | 8 |
| 11 | B-18682-1 | Bumper | 4 |
| 12 | S-70593-2 | Bowl Truck Assy. (Incls. items #11, 13 & 14) | 1 |
| 13 | P-70590-1 | Leg | 4 |
| 14 | P-87668-1 | Caster | 4 |
| 15 | WS-18-19 | Washer | 4 |
| 16 | SC-62-22 | Cap Screw - 3/8"-16 x 1-1/4" Hex Hd | 4 |
| 17 | B-114992 | Plug - Base (Plug for Foot Pad) | AR |
| *18 | E-110146-2 | Base Assy | 1 |
| **19 | E-110155 | Base Assy | 1 |
| *20 | E-121582-1 | Pedestal (ML-17684 & ML-17685 Only) | 1 |
| **21 | E-121582-4 | Pedestal (ML-17686 & ML-17687 Only) | 1 |
| *22 | E-123961-4 | Pedestal (ML-19544 & ML-19547 Only) | 1 |
| **23 | E-123961-2 | Pedestal (ML-19550 & ML-19819 Only) | 1 |
| *24 | C-87532-88 | Lead Wire Assy. (Grd.) | 1 |
| 25 | SD-24-1 | Self-Tapping Screw - #10-24 x 3/8" Pan Hd. "Taptite" | 1 |
| 26 | WL-10-6 | Lock Washer - #10 Ext. Shakeproof | 1 |
| 27 | B-123109 | Screw - Special | 4 |
| *28 | P-70004-1 | Cover - Capacitor & Starter Access (ML-17684 & ML-17685 Only) | 1 |
| **29 | P-70004-2 | Cover - Capacitor & Starter Access (ML-17686 & ML-17687 Only) | 1 |
| *30 | C-123969-1 | Cover - Capacitor & Starter Access (ML-19544 & ML-19547 Only) | 1 |
| **31 | C-123969-2 | Cover - Capacitor & Starter Access (ML-19550 & ML-19819 Only) | 1 |
| 32 | SC-47-46 | Set Screw - 3/8"-16 x 1-1/4" Soc. Hdls., Half-Dog Pt | 1 |
| 33 | NS-17-15 | Jam Nut - 3/8"-16 Hex Fin | 1 |
| *34 | R-70144-1 | Lift Access Cover Assy | 1 |
| **35 | R-70144-3 | Lift Access Cover Assy | 1 |
| 36 | WS-19-26 | Washer | 1 |
| 37 | M-70450 | Knob - Lift Access Cover | 1 |
| 38 | B-121676-3 | Screw - Special | 4 |
| *39 | C-117872-1 | Plate - Mach. Data (Give Serial No. & Elec. Spec.) (60 Hz.) | 1 |
| **40 | C-117872-3 | Plate - Mach. Data (Give Serial No. & Elec. Spec.) (50 Hz.) | 1 |
| **41 | P-70641-12 | Thumb Screw - Special | 4 |
| **42 | P-70403 | Cover - Slideways | 2 |

*D-300 & D-300-T.

**D-300-D & D-300-DT.



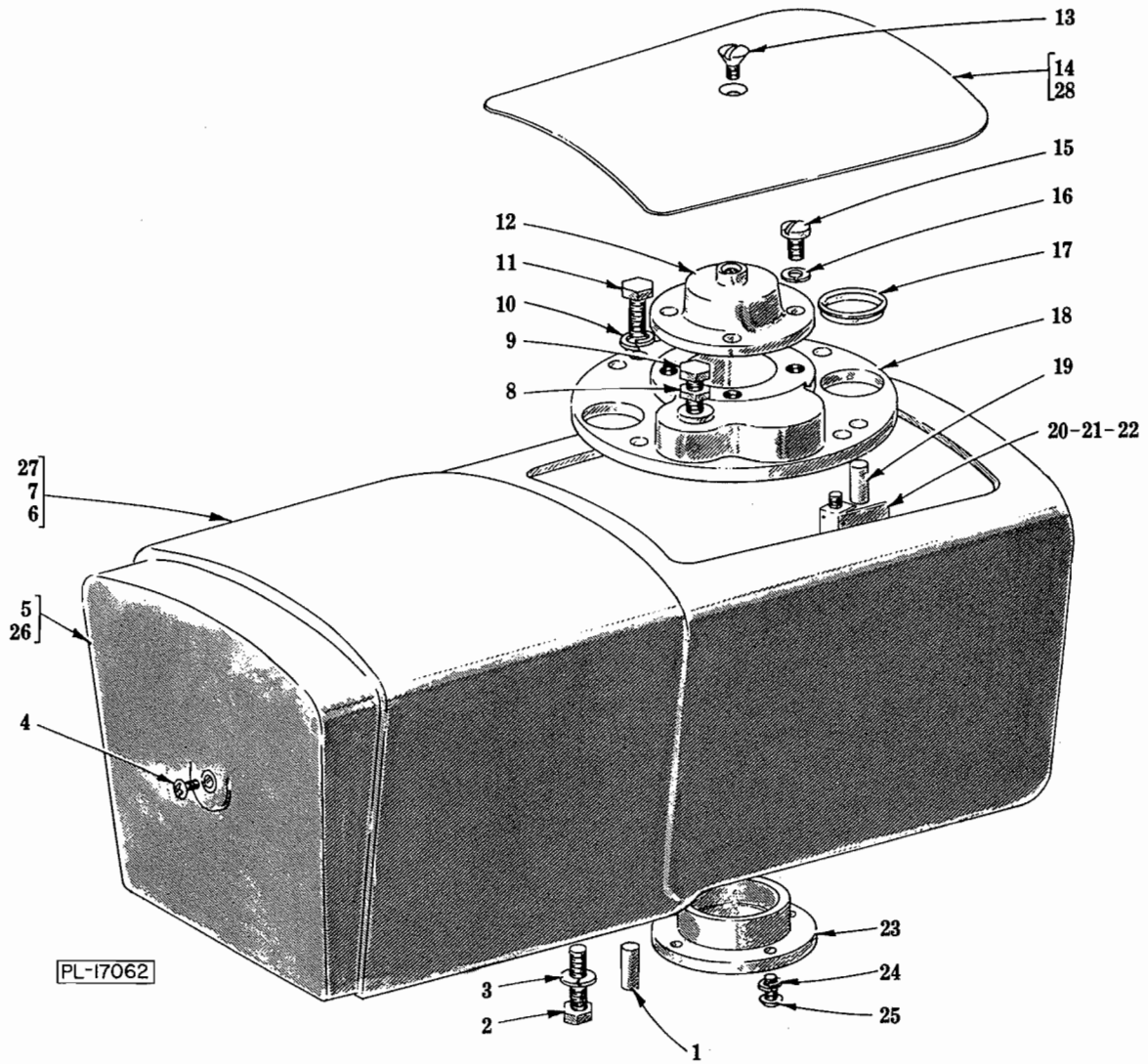
BOWL LIFT UNIT

BOWL LIFT UNIT

| ILLUS. PL-17063 | PART NO. | NAME OF PART | AMT. |
|--------------------|-------------|--|------|
| 1 | NS-32-13 | Stop Nut - 5/16"-18 "Flexloc" | 2 |
| 2 | SC-37-75 | Cap Screw - 5/16"-18 x 3/4" Hex Hd | 2 |
| 3 | WS-4-18 | Washer | 2 |
| 4 | M-70411 | Pin - Bowl Locating | 2 |
| 5 | M-70057 | Clamp - Bowl | 2 |
| 6 | M-70087 | Washer - Spring | 2 |
| 7 | SC-62-28 | Cap Screw - 5/16"-18 x 3-1/2" Hex Hd | 2 |
| 8 | M-70044 | Retainer - Bowl | 1 |
| 9 | WL-6-16 | Lock Washer - 1/4" Light | 2 |
| 10 | SC-36-9 | Cap Screw - 1/4"-20 x 1-1/4" Hex Hd | 2 |
| 11 | M-23884 | Spring - Counterbalance | 2 |
| 12 | P-70056 | Bracket - Upper Spring Lift | 1 |
| 13 | RP-2-25 | Rollpin - 1/8" Dia. x 7/8" Lg | 1 |
| 14 | P-68718 | Rod - Bowl Lift | 1 |
| 15 | P-69995 | Arm - Bowl Lift | 1 |
| 16 | WS-8-47 | Washer | 1 |
| 17 | R-70493 | Lift Handle Assy | 1 |
| 18 | RP-2-26 | Rollpin - 1/4" Dia. x 1-1/8" Lg | 1 |
| 19 | RP-2-10 | Rollpin - 3/16" Dia. x 1" Lg | 1 |
| 20 | WS-8-47 | Washer | 1 |
| 21 | P-69998 | Bracket - Bowl Lift | 1 |
| 22 | WL-9-14 | Lock Washer - 5/16" Csk. Ext. Shakeproof | 2 |
| 23 | SC-61-3 | Cap Screw - 5/16"-18 x 3/4" Soc. Flat Hd | 2 |
| 24 | M-70131 | Washer - Cup | 1 |
| 25 | M-70104 | Spring - Bowl Lift | 1 |
| 26 | WS-8-47 | Washer | 1 |
| 27 | SC-61-3 | Cap Screw - 5/16"-18 x 3/4" Soc. Flat Hd | 8 |
| 28 | NS-17-31 | Jam Nut - 1/2"-20 Hex Fin | 1 |
| 29 | M-70058 | Bracket - Lower Spring Lift | 1 |
| 30 | WL-9-14 | Lock Washer - 5/16" Csk. Ext. Shakeproof | 8 |
| 31 | NS-17-31 | Jam Nut - 1/2"-20 Hex Fin | 1 |
| 32 | P-69996 | Gib | 2 |
| 33 | P-70092-1 | Shim - Bowl Support (.001" Thk.) | AR |
| 34 | P-70092-2 | Shim - Bowl Support (.002" Thk.) | AR |
| 35 | P-70092-3 | Shim - Bowl Support (.003" Thk.) | AR |
| *36 | T-69987-2 | Support - Bowl | 1 |
| **37 | T-70404-3 | Support - Bowl | 1 |

*D-300 & D-300-T.

**D-300-D & D-300-DT.



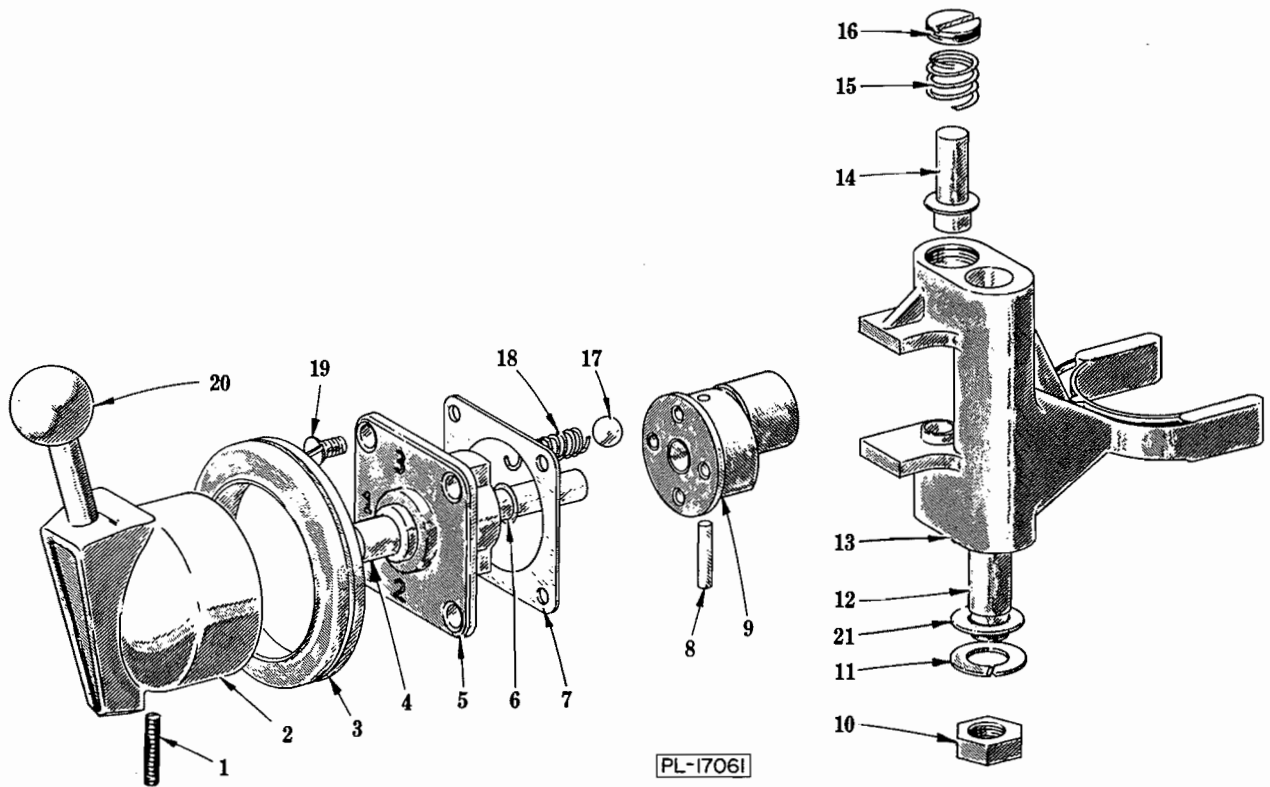
TRANSMISSION CASE

TRANSMISSION CASE

| ILLUS. PL-17062 | 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 Page 19) | 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 |
| **23 | P-70048 | Liner - Aluminum Case | 1 |
| **24 | WL-3-36 | Lock Washer - 1/4" Light | 4 |
| **25 | SC-76-1 | Cap Screw - 1/4"-20 x 1/2" Soc. Button Hd | 4 |
| **26 | S-68723-3 | Cap - Trim | 1 |
| **27 | D-290505-2 | Case - Transmission | 1 |
| **28 | R-70005-2 | Transmission Case Cover Assy | 1 |
| | M-79621 | Shim (Between Trans. Case & Ped.) (Not Shown) | AR |

*D-300 & D-300-T.

**D-300-D & D-300-DT.



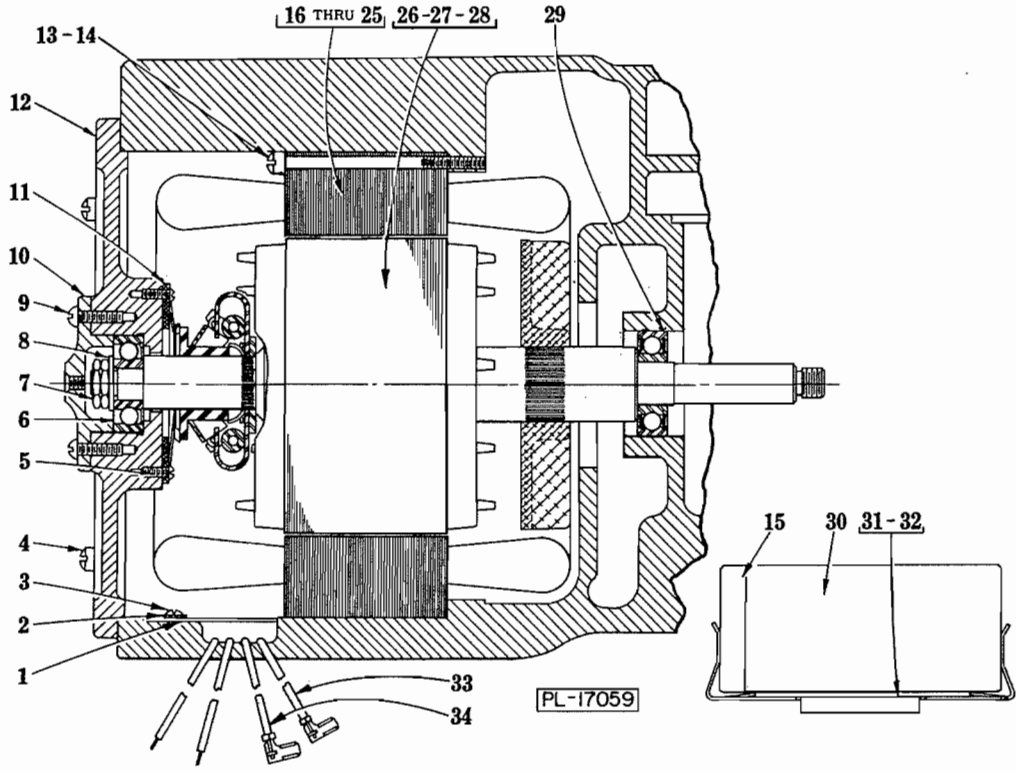
PL-17061

SHIFTER UNIT

SHIFTER UNIT

| ILLUS. PL-17061 | PART NO. | NAME OF PART | AMT. |
|--------------------|-------------|---|------|
| 1 | SC-47-17 | Set Screw - 1/4"-20 x 3/4" Soc. Hd., Cup Pt | 1 |
| 2 | P-70333-2 | Shifter Handle Assy. (Incls. items #1 & 20) | 1 |
| 3 | B-110961 | Grommet - Shifter Handle | 1 |
| 4 | B-114507 | Shaft - Shifter | 1 |
| 5 | P-290115-2 | 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 |
| *21 | WS-6-36 | Washer | 1 |

*D-300-D & D-300-DT.



MOTOR UNIT

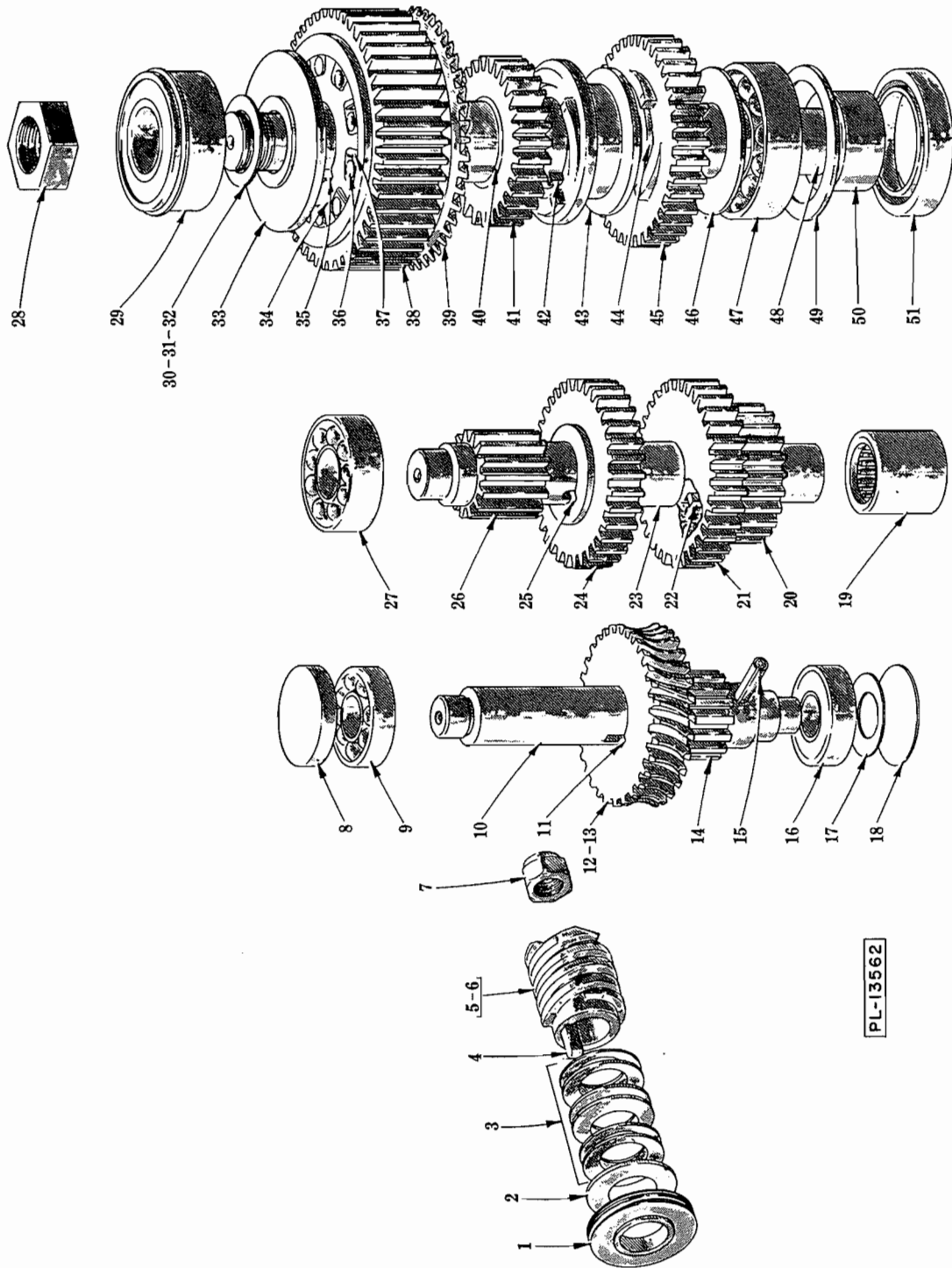
MOTOR UNIT

| ILLUS. PL-17059 | PART NO. | NAME OF PART | AMT. |
|--------------------|--------------|---|------|
| 1 | M-70441 | Retainer - Lead Wire | 1 |
| 2 | WL-7-7 | Lock Washer - #8 Ext. Shakeproof | 1 |
| 3 | SC-9-56 | Mach. Screw - #8-32 x 3/8" Rd. Hd | 1 |
| 4 | SC-11-64 | Mach. Screw - #12-24 x 1" Fil. Hd | 4 |
| *5 | SC-9-70 | Mach. Screw - #6-32 x 1/4" Rd. Hd | 2 |
| 6 | BB-17-5 | Ball Bearing - N.D. #7601 | 1 |
| 7 | V-11430 | Nut - Special | 2 |
| 8 | WS-7-9 | Washer | 1 |
| 9 | SC-9-61 | Mach. Screw - #8-32 x 1/2" Rd. Hd | 4 |
| 10 | P-70012 | Cap - Bearing | 1 |
| *11 | P-66085 | Switch - Starting (Stationary Part) | 1 |
| 12 | S-68722 | Bracket - Bearing | 1 |
| *13 | SC-11-32 | Mach. Screw - #10-24 x 3" Fil. Hd | 4 |
| **14 | SC-11-28 | Mach. Screw - #10-24 x 2-1/2" Fil. Hd | 4 |
| *15 | C-70486-2 | Cap - Capacitor End | 1 |
| *16 | P-65477-64-1 | Stator Assy. (115 V., 60 Hz.) | 1 |
| *17 | P-65477-64-2 | Stator Assy. (200 V., 60 Hz.) | 1 |
| *18 | P-65477-64-3 | Stator Assy. (230 V., 60 Hz.) | 1 |
| *19 | P-65477-64-4 | Stator Assy. (115 V., 50 Hz.) | 1 |
| *20 | P-65477-64-5 | Stator Assy. (220 V., 50 Hz.) | 1 |
| **21 | P-65478-29-1 | Stator Assy. (200 V., 60 Hz.) | 1 |
| **22 | P-65478-29-2 | Stator Assy. (230 V., 60 Hz.) | 1 |
| **23 | P-65478-29-3 | Stator Assy. (460 V., 60 Hz.) | 1 |
| **24 | P-65478-29-4 | Stator Assy. (220 V., 50 Hz.) | 1 |
| **25 | P-65478-29-5 | Stator Assy. (380 V., 50 Hz.) | 1 |
| *26 | P-22275-104 | Rotor Assy. (60 Hz.) | 1 |
| *27 | P-22275-105 | Rotor Assy. (50 Hz.) | 1 |
| **28 | P-15747-219 | Rotor Assy. (50/60 Hz.) | 1 |
| 29 | BB-18-17 | Ball Bearing - Fafnir #H203PP | 1 |
| *30 | D-70487-1 | Capacitor | 1 |
| *31 | P-66621-1 | Bracket - Capacitor | 1 |
| *32 | SC-14-45 | Mach. Screw - #8-32 x 3/8" Flat Hd | 2 |
| *33 | C-87525-235 | Lead (Cap to Start Switch) (40") | 1 |
| *34 | C-87525-236 | Lead (Cap to Start Switch) (47") | 1 |

*1 Ph.

**3 Ph.

D-300 REPLACEMENT PARTS

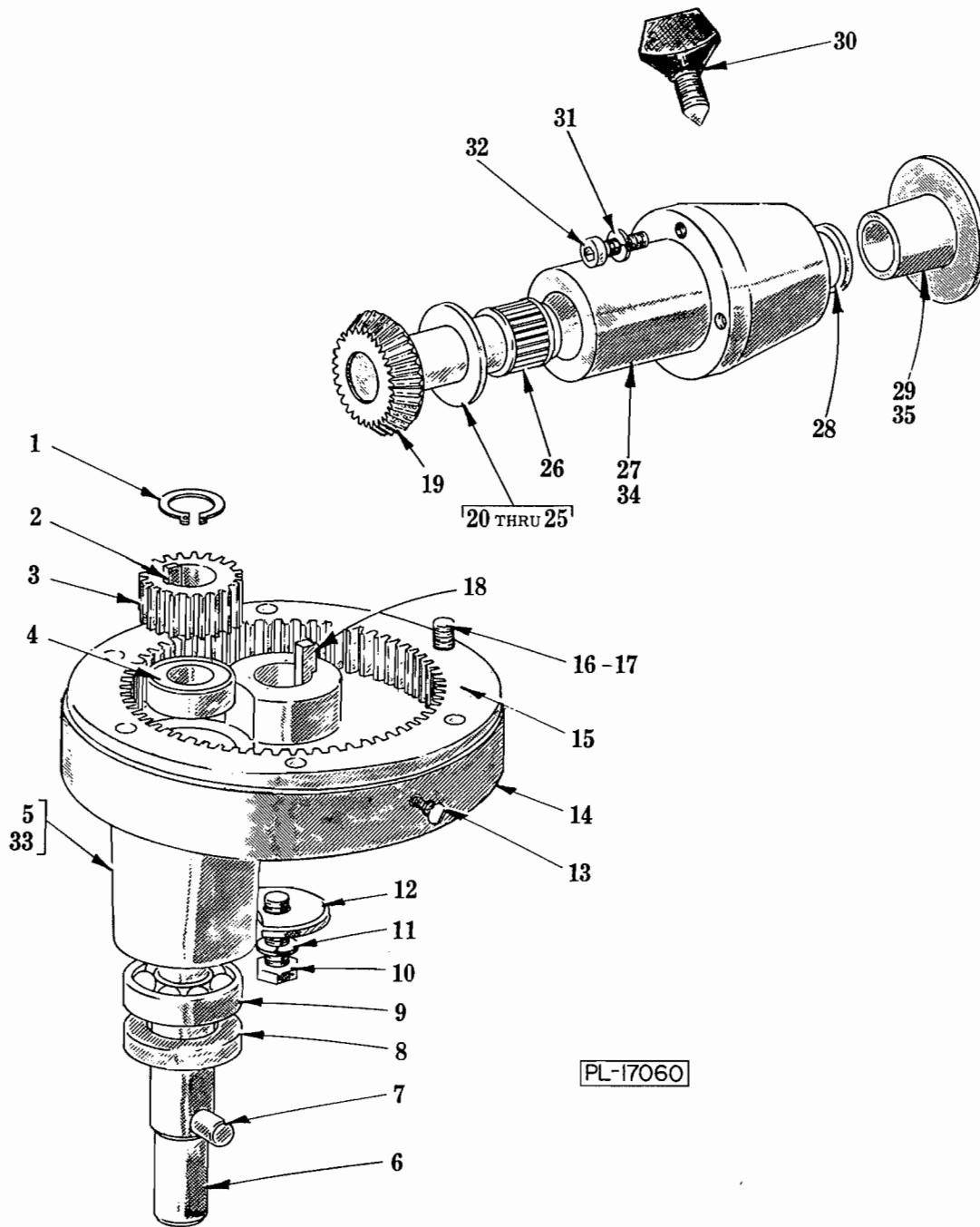


PL-13562

TRANSMISSION

TRANSMISSION

| ILLUS. PL-13562 | 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 - ND #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 - ND #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 - ND #3203 | 1 |
| 28 | NS-32-32 | Stop Nut - 3/4"-16 L.H. Thd. "Flexloc" | 1 |
| 29 | BB-9-41 | Ball Bearing - ND #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 | P-70020 | Gear - Bevel (46T) | 1 |
| 40 | M-70042 | Bushing - Upper Clutch Gear | 1 |
| 41 | P-70040 | Gear - Upper Clutch (29T) | 1 |
| 42 | R-12430-55 | Key | 2 |
| 43 | C-70035-1 | 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 |
| | P-88774 | Planetary Shaft & Gear Assy. (Incls. items #33, 34, 35, 38 thru 43, 45, 46, 47, 48 & 50) | 1 |

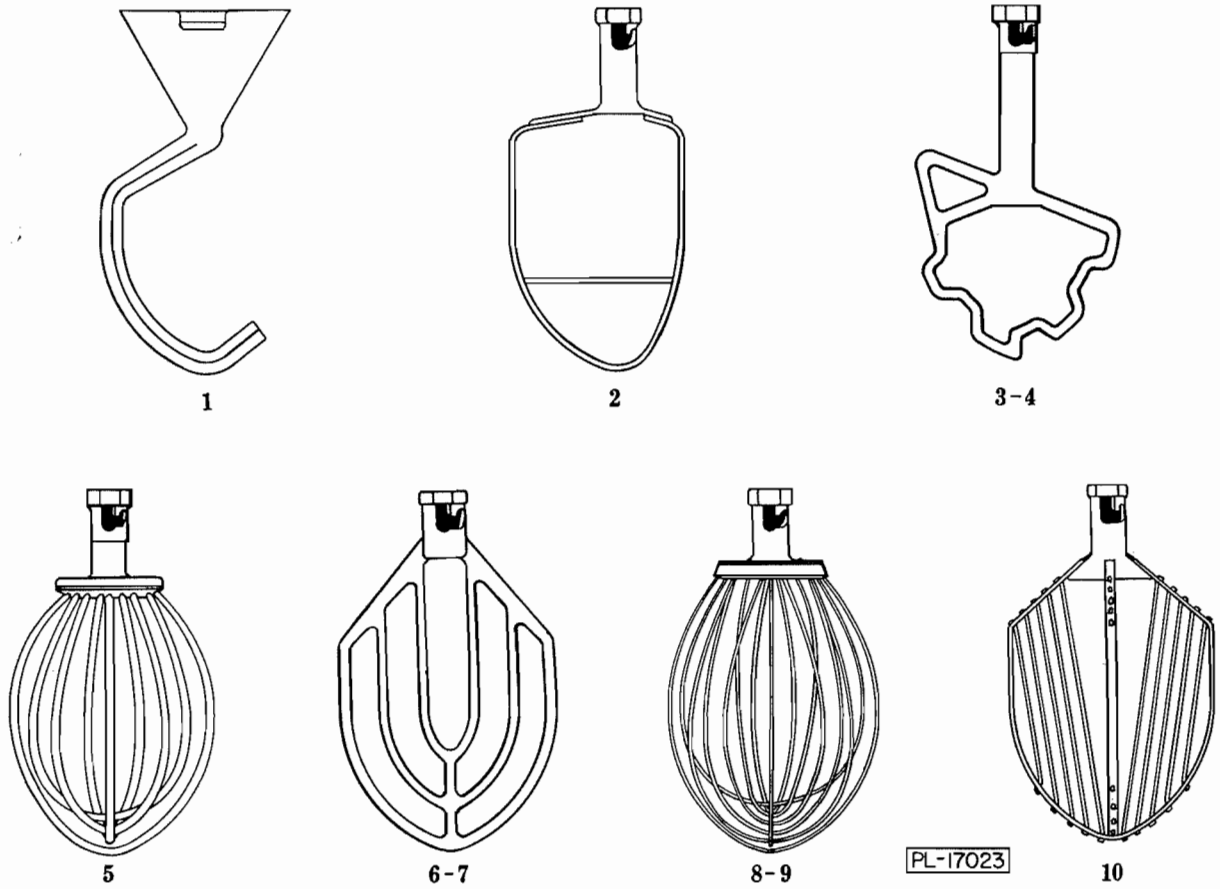


PLANETARY AND ATTACHMENT HUB

PLANETARY AND ATTACHMENT HUB

| ILLUS. PL-17060 | 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 - ND #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 - ND #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 - Special | 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 | M-75393 | Attach. Drive Gear (35T) & Expan. Plug 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 |
| **33 | S-69990-2 | Planetary | 1 |
| **34 | P-70511-2 | Attachment Hub & Bearing Assy. (Incls. item #26) | 1 |
| **35 | C-114824-5 | Plug - Attachment Hub | 1 |
| | *M-88730-1 | Planetary Assy. (Incls. items #1 thru 6, 8 & 9) | 1 |
| | **M-88730-2 | Planetary Assy. (Incls. items #1, 2, 3, 4, 6, 8, 9 & 33) | 1 |

*D-300 & D-300-T.
**D-300-D & D-300-DT.



AGITATORS

| ILLUS. PL-17023 | 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 (Standard) | 1 |
| 4 | R-10582-2 | --- | "S" Sweet Dough (Deluxe) | 1 |
| 5 | R-11016 | --- | "I" Wire Whip (Deluxe) | 1 |
| 6 | S-23641-1 | S-23642-1 | "B" Flat Beater (Standard) | 1 |
| 7 | S-23641-2 | S-23642-2 | "B" Flat Beater (Deluxe) | 1 |
| 8 | S-23525-1 | S-23526-1 | "D" Wire Whip (Standard) | 1 |
| 9 | S-23525-2 | S-23526-2 | "D" Wire Whip (Deluxe) | 1 |
| 10 | D-123717 | D-123724 | "C" Wing Whip | 1 |
| | E-119679 | --- | "ED" Dough Arm - Spiral (Not Shown) | 1 |