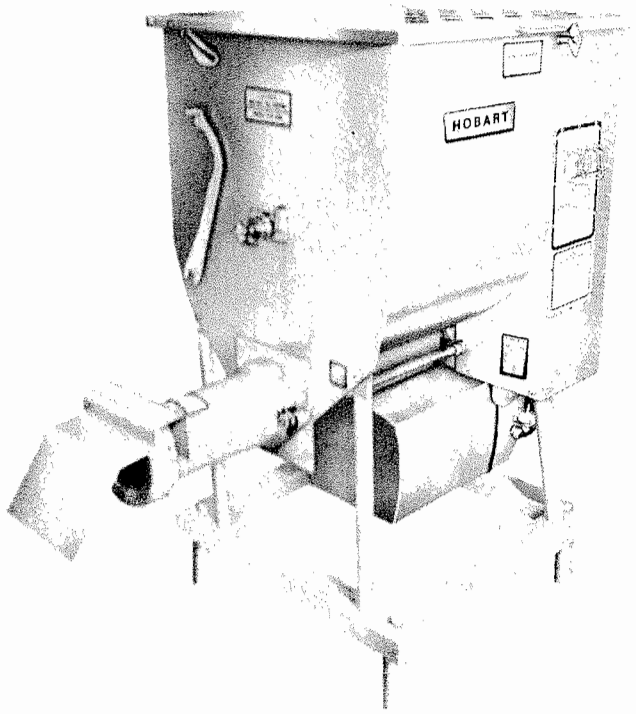
HOBART

INSTRUCTION MANUAL

... with Replacement Parts



MODEL 4352 MIXER-GRINDER

(INCLUDES MOTOR PARTS)

STANDARD HOPPER (W/O Feed Opening)
ML-31193 R.H.
ML-31206 L.H.

OPTIONAL HOPPER (With Feed Opening)
ML-31218 R.H.
ML-31236 L.H.

A product of HOBART CORPORATION 701 RIDGE AVENUE TROY, OHIO 45374-0001

FORM 11590 (Rev D, 11-93)

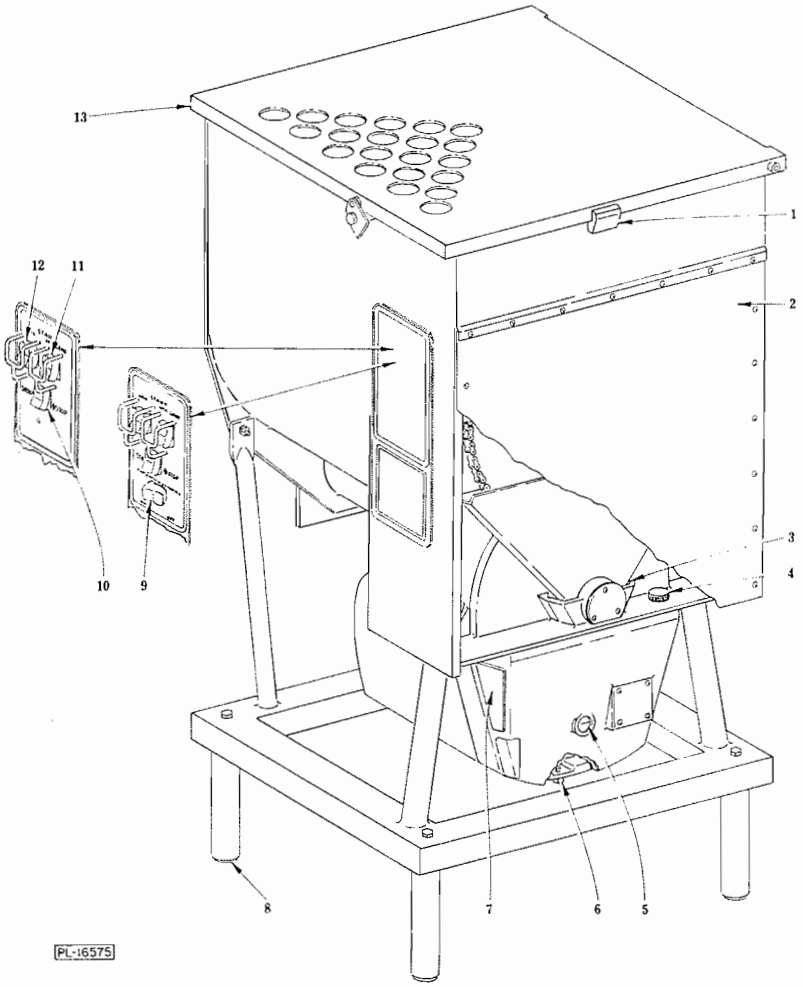


Fig. 1

Installation, Operation and Care of MODEL 4352 MIXER-GRINDER

DESIGN:

The model 4352 Mixer-Grinder is designed to use any U.S.S.A. standard #52 size knife and plate. Do not use a plate with hole size smaller than $^{3}/_{32}$". This model is equipped with a 10 H.P. motor which drives both the mixing arm and the worm. The mixing arm rotates at 29 R.P.M. and the worm at 222 R.P.M.

The Mixer-Grinder may be ordered (at extra cost) with any of the following options:

1. Flexible Power Supply Cord (w/plug) and receptacle (or pendent type connector).
2. Casters and Adjustable Leg Assembly - for mobility. Also includes: power supply cord (w/plug) & receptacle (pendent type connector).
3. Foot Switch - Used for intermittent grinding operations.
4. Side-Inlet Hoppers are available with R.H. or L.H. side inlet hole. This allows the product, from a companion first cut grinder, to be fed directly into the hopper. A plug assembly is available for use when the inlet hole is not used.

   NOTE: With the proper adapter ring, the mixer-grinder will adapt to a Hobart 4146, 4346 or 4152 grinder.

INSTALLATION

Unpack the machine and place it in its operating position. Use the leveling foot (8, Fig. 1) to level the machine.

Oil is installed in the gear case at the factory. Make sure oil is at the proper level by checking the sight gauge (5, Fig. 1).

If it is necessary to add oil, withdraw the retaining screws and remove the rear panel (2, Fig. 1). Then remove the oil fill plug (4, Fig. 1) and add "Texaco Multigear EP-90" oil until the oil level is brought to the center of the oil level gauge (5, Fig. 1).

Oil is added to the chain reservoir at the factory and sealed at the bottom of the splash shield with a silicon rubber sealant for shipping purposes. With the rear panel removed, remove the sealant from around the chain reservoir (3, Fig. 1) and inspect the oil level. Replenish as necessary with "MPO-30 Multi-Purpose Oil".

All internal wiring of the machine is complete before machine is shipped.

Before making any electrical supply connections, **CHECK THE SPECIFICATIONS ON THE SERIAL PLATE (7, Fig. 2) TO MAKE SURE THEY AGREE WITH THOSE OF YOUR ELECTRICAL SERVICE.**

Electrical connections should be made by a licensed electrician who will observe all applicable Safety Codes and the National Electrical Code.

Connect the individual branch electrical power supply to the leads in the junction compartment (7, Fig. 1). The compartment has a tapped hole for 1″ conduit. Circuit conductors and fuse fault protection should conform to local as well as National code requirements.

SUGGESTED WIRE AND FUSE SIZES

Volts	Phase	Line Fuse (Max.) Non-Timed Delay	Wire Size
	LESS than 125 ft. from Meter Service		
200 Volts	3 Ph.	100 Amp.	# 8 Wire
230 Volts	3 Ph.	90 Amp.	# 8 Wire
460 Volts	3 Ph.	45 Amp.	#12 Wire
	MORE than 125 ft. from Meter Service		
200 Volts	3 Ph.	100 Amp.	# 6 Wire
230 Volts	3 Ph.	90 Amp.	# 6 Wire
460 Volts	3 Ph.	45 Amp.	#10 Wire

With the grinder attachment (4, Fig. 2) in place and the hopper guard (13, Fig. 1) closed, make an instantaneous worm rotation check before making a permanent electrical connection, by pushing "Mix-Grind" push button (11, Fig. 1).

If there is no worm rotation but mixer arm turns, pull main power disconnect switch to cut off electrical power, then interchange any two power supply leads to the machine and receptacle.

CONTROLS:

SWITCH BUTTONS (Standard):

The switch buttons (10, 11 & 12, Fig. 1) for starting and stopping the machine are located on the control panel.

To select an operation, either push "Mix" for mixing or "Mix-Grinder" button for mixing and grinding product. When changing from one operation to another, push "Stop" button before going to other position.

FOOT SWITCH (Optional):

A foot switch activator button (9, Fig. 1) is located on the control panel. In the "On" position, a pilot light signals that the foot switch has control and can be used to operate machine. When in this position the grinder will mix-grind only when using foot switch. The operator can then use the foot switch as a "Start/Stop" device for the mix-grind operation.

SAFETY INTERLOCK:

This mixer-grinder has a magnetic actuated type interlock in the hopper (1, Fig. 1). The hopper guard must be in a closed position before the machine can be operated. Raising the guard breaks opens the electrical control circuit and makes the machine inoperative.

GRINDER ATTACHMENT:

The grinder attachment is easily cleaned (see cleaning instructions). Use the spanner wrench (1, Fig. 2) to loosen the adjusting ring (5, Fig. 2) and to withdraw the worm (6, Fig. 2). When the cylinder (4, Fig. 2) is to be removed, first remove the adjusting ring, plate, knife and worm. Next loosen, but do not remove the two nuts, using the spanner wrench. Rotate the cylinder clockwise and remove the cylinder. At reassembly make sure cyclinder nuts are tight before assembling worm and adjusting ring. Use only flange nuts provided.

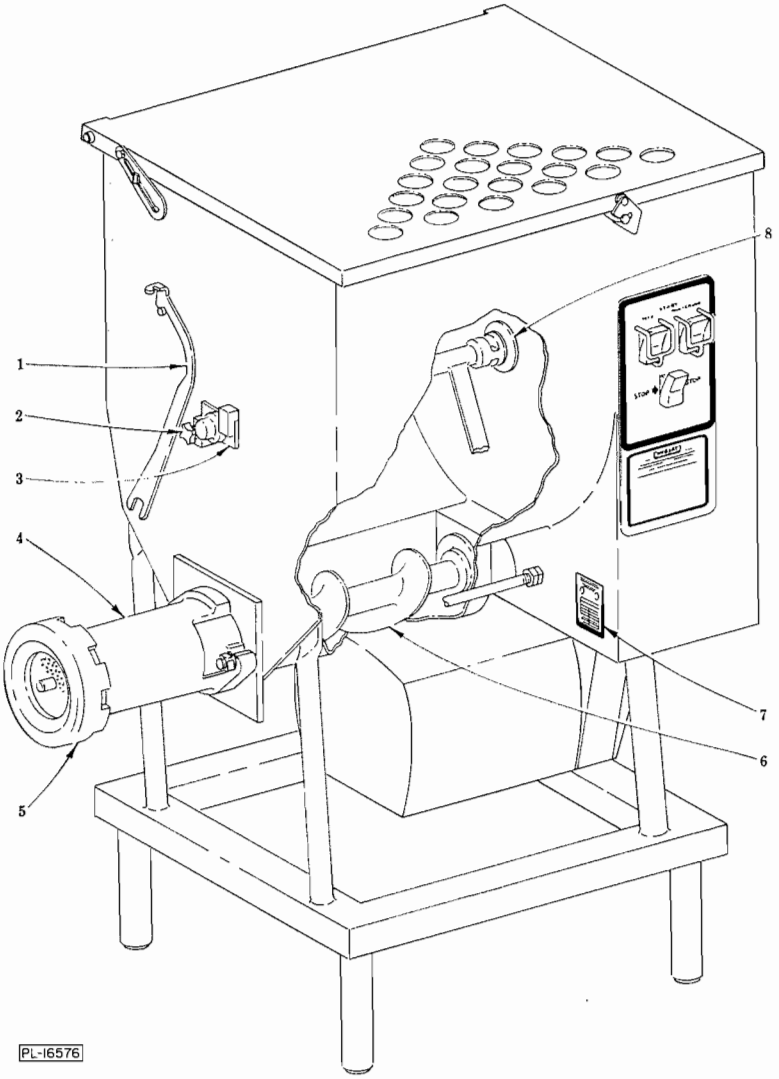


Fig. 2

A heavy duty tapered roller bearing, which is lubricated by transmission oil, takes the worm thrust. A seal prevents loss of lubricant or entrance of moisture.

Before using the grinder attachment, take it apart and thoroughly wash it. The knife and plate need some preliminary lubrication: rub tallow or mineral oil over the cutting faces of these parts. When assembling the knife, be sure to turn the cutting side out toward the perforated plate. The notch on the circumference of the plate must fit over the pin in the cylinder. Knives and plates must be sharp and true for proper cutting action. Keep the grinder attachment in a clean and sanitary condition.

MIXING ARM:

When removing the mixing arm, make sure the "Stop" button is pressed and machine is disconnected from electrical power. Next loosen the thumb screw (2, Fig. 2), then rotate and remove the bushing retainer (3, Fig. 2). Raise hopper guard, pull mixing arm from drive slot and lift arm from hopper.

OPERATION:

The model 4352 has a normal capacity of: 230 pounds when using 80% fresh and 20% frozen chips; 275 pounds using 100% trimmings; or a maximum of 300 pounds of second grind through a 1/8" plate. With the mixing arm turning in the mix/grind operation, the maximum capacity is reached when the product just touches but does not raise the hopper guard.

Second cut meat may be mixed in the hopper for any desired length of time. During the "Mix Only" period, the mixing arm operates in a reverse direction from the "Mix-Grind" operation and the grinder worm does not rotate. Continuous mixing occurs along with grinding in the "Mix-Grind" operation. Mixing of uncut or unground meat is not recommended.

Operating Instructions:

1. First Grind:

   1.1 Fill hopper and close hopper guard. Overfilling will bend guard and may cause interlock to break electrical circuit.

   1.2 Push "Mix-Grinder" button.

2. Second Grind:

   2.1 Fill hopper and close hopper guard.

   2.2 Push "Mix" button.

   2.3 After desired mixing, push "Stop" button and then push "Mix-Grind" button or actuate "Foot Switch" position.

LUBRICATION:

Both motor bearings are pre-lubricated and sealed. No further lubrication is required.

To check oil in gear case, turn off the machine, wait at least one minute (for all oil to drain down) and check the oil level in the sight gauge (5, Fig. 1). Add oil (as described in installation section) if required. Remove the drain plug (6, Fig. 1) and drain the gear case every six months. Refill with approx. 84 oz. of "Texaco Multigear EP-90" oil.

CLEANING:

The model 4352 Mixer-Grinder is designed for easy cleaning. Turn the grinder "Off " and disconnect from electrical power source. Then remove the following components when cleaning: mixing arm, grinder adjusting ring, knife, plate and worm (also side feed hopper plug (when used)). The method for removing these components has already been described in grinder attachment section.

A rubber outer seal (8, Fig. 2) at the drive end of the mixing arm should be removed by hand for cleaning. Grasp the outer flange or use a dull screwdriver tip and pull the seal out.

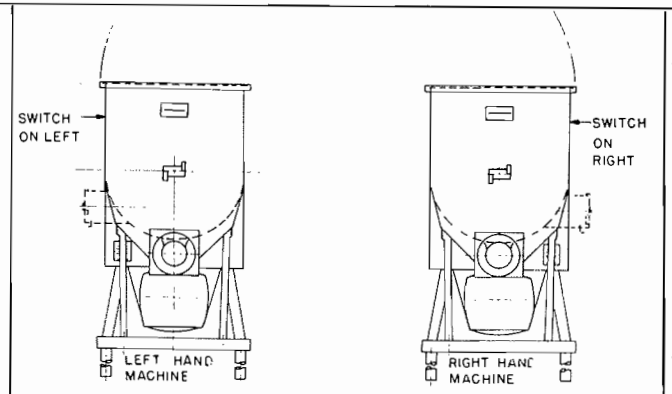
The machine can be washed down with hot water or steam as is customary in meat processing operations. After cleaning machine, reassemble mixing arm seal, mixing arm and bushing retainer.

In any cleaning operation with a machine equipped with the optional power supply cord, which has had this cord disconnected from its receptacle, the receptacle must be sealed. To make this seal, place the cover cap into position then turn the screw type sealing ring clockwise.

HEATER:

The mixer-grinder has a heater in the control box to keep the controls dry. It is automatically "On" when the machine is electrically connected. The mixer-grinder should always be connected except when cleaning or disassembling unit. After cleaning, reconnect to electrical power supply.

WARNING
ELECTRICAL CONNECTIONS SHOULD BE MADE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE



NOTE: UNLESS OTHERWISE SPECIFIED STANDARD RIGHT HAND MACHINE WILL BE FURNISHED

LEGS

	DIM. A	DIM. B	DIM. C	DIM. D	DIM. E	DIM. F
*	7 1/2	23 7/8	19 7/8	54 7/8	32	80 7/8
	11	27 3/8	23 3/8	58 3/8	35 9/16	84 3/8
	15 1/2	31 7/8	27 7/8	62 7/8	40	88 7/8
	18 1/2	34 7/8	30 7/8	65 7/8	43	91 7/8

LEGS WITH CASTERS (OPTIONAL)

DIM-A		DIM-B		DIM-C		DIM-D		DIM-E		DIM-F	
MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
9	10 1/2	25 3/8	26 7/8	21 3/8	22 7/8	56 3/8	57 7/8	33 1/2	35	82 3/8	83 7/8
10 1/2	13 1/2	26 7/8	29 7/8	22 7/8	25 7/8	57 7/8	60 7/8	35	38	83 7/8	86 7/8
13 3/8	16 1/8	29 3/4	32 1/2	25 3/4	28 1/2	60 3/4	63 1/2	38	40 5/8	86 5/8	89 1/2
16 1/4	19	32 5/8	35 3/8	28 5/8	31 3/8	63 9/16	66 3/8	40 7/8	43 1/2	89 5/8	92 3/8

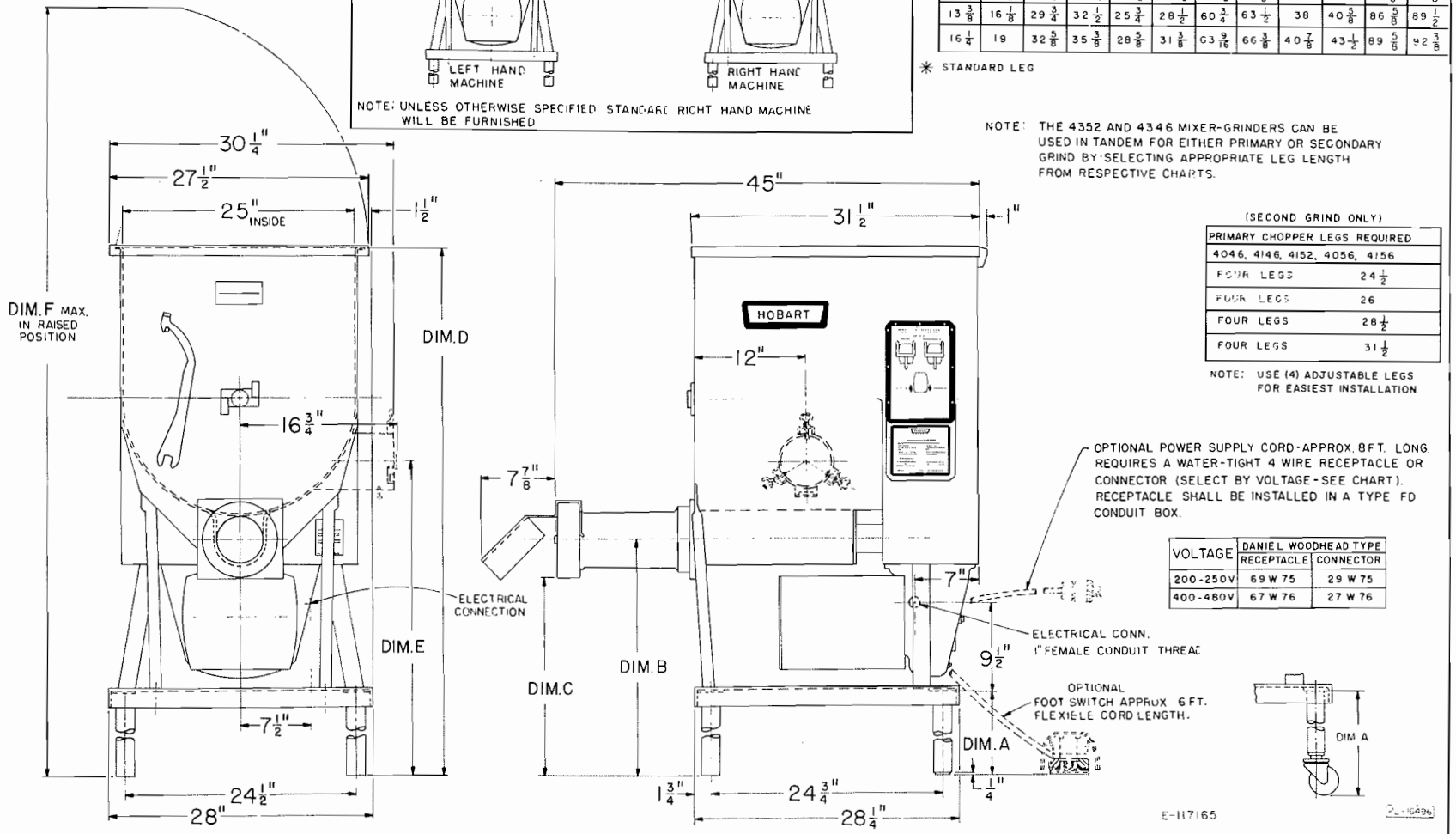
* STANDARD LEG

NOTE: THE 4352 AND 4346 MIXER-GRINDERS CAN BE USED IN TANDEM FOR EITHER PRIMARY OR SECONDARY GRIND BY SELECTING APPROPRIATE LEG LENGTH FROM RESPECTIVE CHARTS.

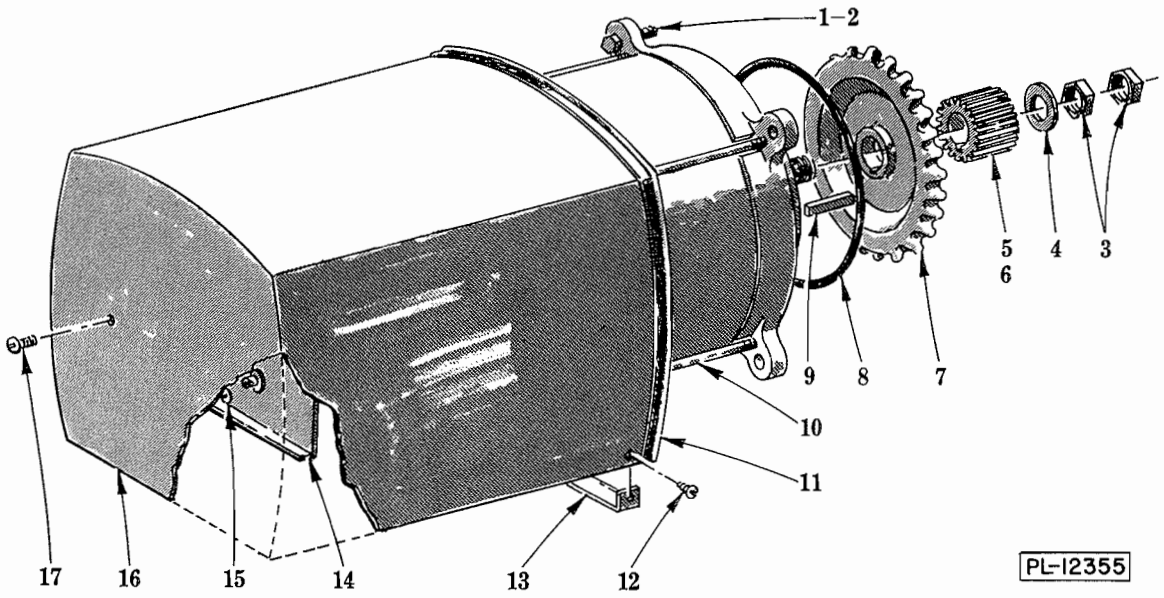
(SECOND GRIND ONLY)

PRIMARY CHOPPER LEGS REQUIRED	
4046, 4146, 4152, 4056, 4156	
FOUR LEGS	24 1/2
FOUR LEGS	26
FOUR LEGS	28 1/2
FOUR LEGS	31 1/2

NOTE: USE (4) ADJUSTABLE LEGS FOR EASIEST INSTALLATION.

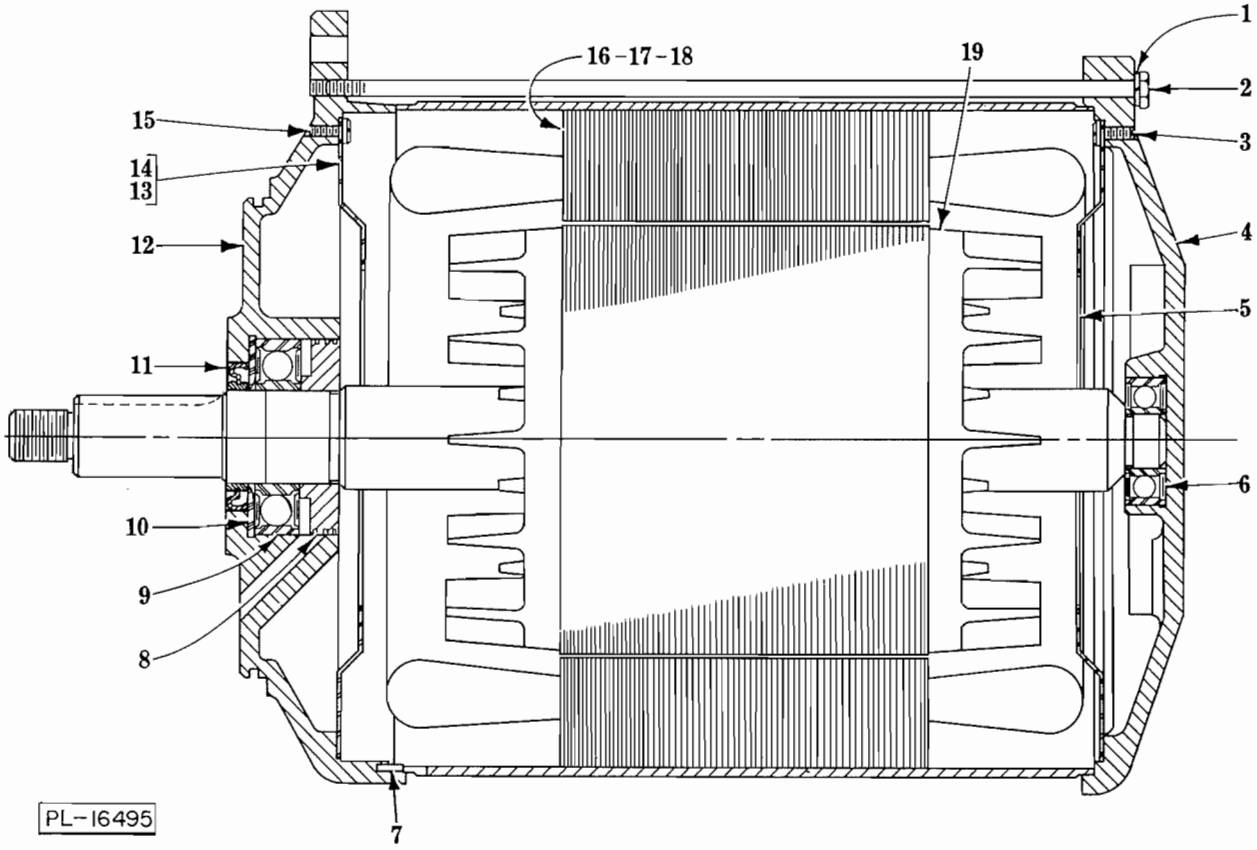


VOLTAGE	DANIEL WOODHEAD TYPE	
	RECEPTACLE	CONNECTOR
200-250V	69 W 75	29 W 75
400-480V	67 W 76	27 W 76



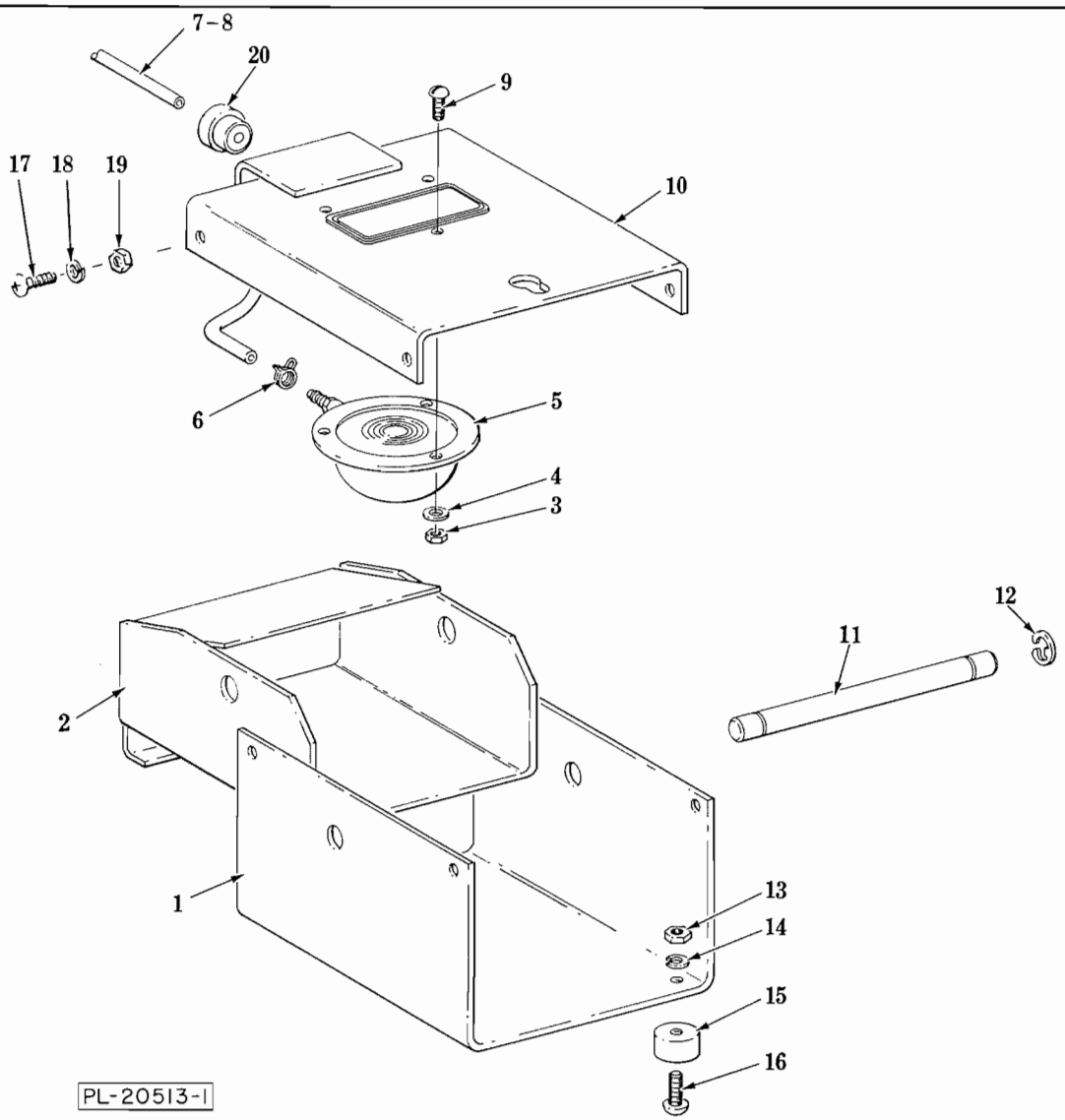
DRIVE UNIT

ILLUS. PL-12355	PART NO.	NAME OF PART25	AMT.
1	SC-62-58	Cap Screw 3/8-24 x 1¼ Hex Hd	4
2	WL-4-6	Lock Washer 3/8 Medium	4
3	6566	Nut	2
4	105218	Washer - Pinion	1
5	105189-1	Pinion - Motor (21T) (60 Hz.)	1
6	105189-2	Pinion - Motor (25T) (50 Hz.)	1
7	105161	Flinger Assy	1
8	67500-24	"O" Ring	1
9	109070-28	Key	1
10	ML-19134	Motor (Give Elec. Spec.)	1
11	102825-2	Seal - Motor Shroud	1
12	SC-21-25	Mach. Screw 10-24 x ¾ Rd. Hd	2
13	123924	Shroud Support Bracket Assy	1
14	108365	Shroud Reinforcement Assy	1
15	SC-21-10	Mach. Screw 6-32 x ½ Rd. Hd	2
16	117742	Motor Shroud & Seal Assy. (Incls. item 11)	1
17	SC-18-4	Mach. Screw 10-24 x ½ Pan Hd	2



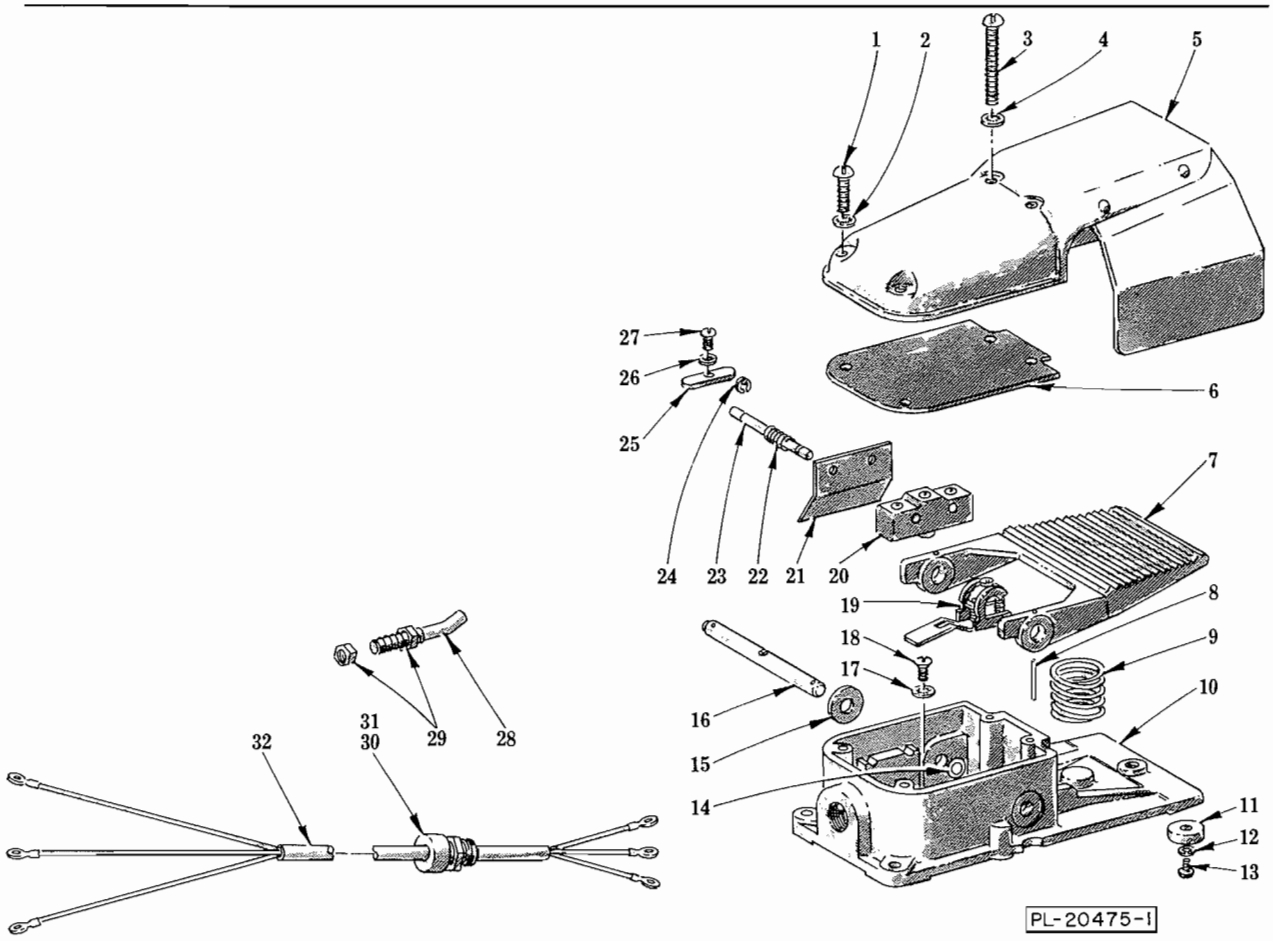
MOTOR UNIT

ILLUS. PL-16495	PART NO.	NAME OF PART[25]	AMT.
1	WL-3-38	Lock Washer ¼ Medium	4
2	80977-6	Cap Screw ¼-28 x 11¾ Hex Hd	4
3	SC-18-13	Mach. Screw 8-32 x ¼ Pan Hd	4
4	89188-1	Bracket - Bearing	1
5	89203-2	Shroud - Fan	1
6	BB-5-46	Ball Bearing - N.D. #77504	1
7	RP-2-42	Rollpin 3/32 Dia. x 3/8 Lg	1
8	105152	Seal	1
9	BB-7-39	Ball Bearing - N.D. #Z99507	1
10	SL-3-11	Loading Spring - N.D. #72	1
11	275053	Seal - Motor	1
12	118100	Bracket - Bearing	1
13	89203-2	Shroud - Fan	1
14	79118	Bushing - Snap	1
15	SC-18-13	Mach. Screw 8-32 x ¼ Pan Hd	4
16	65478-126-1	Stator Assy. (200 V., 60 Hz., 3 Ph. W/Pilot Circuit)	1
17	65478-126-2	Stator Assy. (460 V., 60 Hz.) (230 V., 60 Hz., W/Pilot Circuit) (3 Ph.)	1
18	65478-127-1	Stator Assy. (380/415 V., 50 Hz.) (220/240 V., 50 Hz., W/Pilot Circuit) (3 Ph.)	1
19	15747-284	Rotor Assy	1



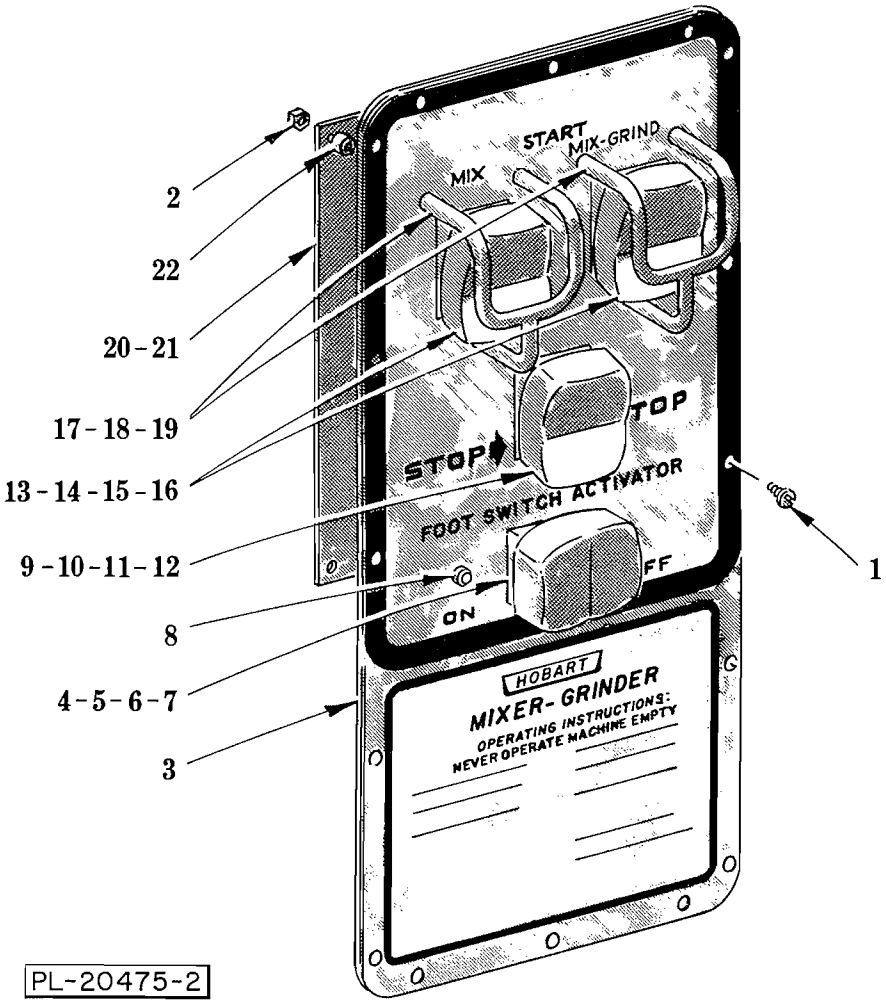
FOOT SWITCH UNIT
(PNEUMATIC)

ILLUS. PL-20513-1	PART NO.	NAME OF PART [25]	AMT.
1	292632	Base - Foot Switch	1
2	292635	Switch - Rocker Assy	1
3	NS-31-8	Nut - Special Stop 8-32	3
4	WS-19-10	Washer	3
5	87711-214-1	Switch - Actuator	1
6	115747-8	Clamp - Hose	2
7	292629-2	Tubing - Air (R.H. Mach.)	1
8	292629-3	Tubing - Air (L.H. Mach.)	1
9	SC-21-15	Mach. Screw 8-32 x ½ Rd. Hd	3
10	292633	Cover - Foot Switch	1
11	292638	Shaft - Pivot	1
12	RR-10-12	Retaining Ring	2
13	NS-11-18	Mach. Nut 10-24 Hex	4
14	WL-6-7	Lock Washer 10 Medium	4
15	19105-2	Bumper	4
16	SC-21-23	Mach. Screw 10-24 x ½ Rd. Hd	4
17	SC-21-23	Mach. Screw 10-24 x ½ Rd. Hd	4
18	WL-6-7	Lock Washer 10 Medium	4
19	NS-11-18	Mach. Nut 10-24 Hex	4
20	FE-14-47	Strain Relief	1
	292631-2	Foot Switch Assy. (R.H. Mach.) (Incls. items 1 thru 7 & 9 thru 20)	1
	292631-3	Foot Switch Assy. (L.H. Mach.) (Incls. items 1 thru 6 & 8 thru 20)	1



FOOT SWITCH UNIT
(ELECTRIC)

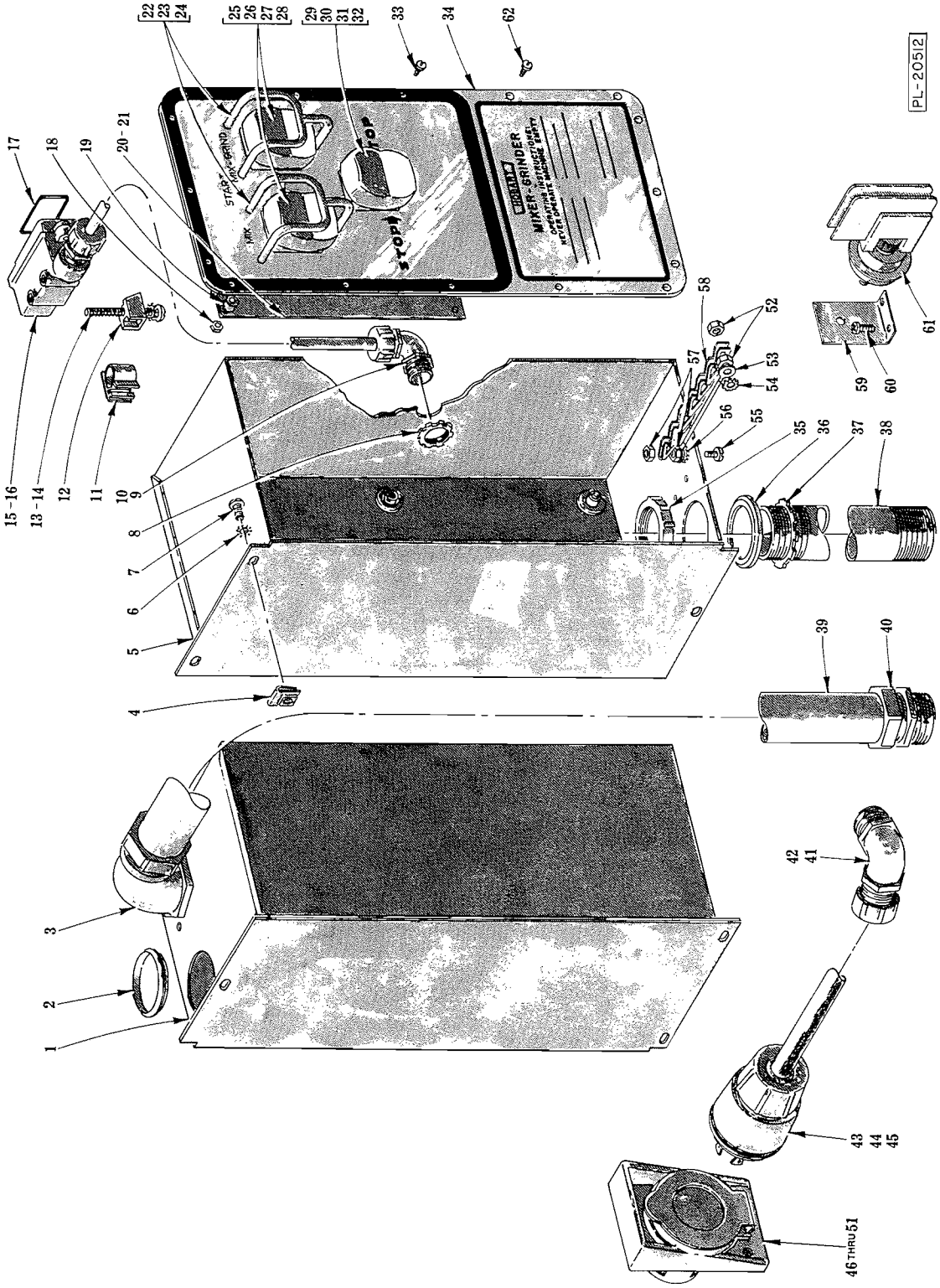
ILLUS. PL-20475-1	PART NO.	NAME OF PART[25]	AMT.
1	81997-31	Screw - Cover (Short)	2
2	81997-2	Washer - Cover & Guard Screw	2
3	81997-1	Screw - Cover (Long)	2
4	81997-2	Washer - Cover & Guard Screw	2
5	81997-3	Cover - Guard Assy	1
6	81997-6	Gasket - Cover	1
7	81997-9	Treadle	1
8	81997-10	Spirol Pin	2
9	81997-11	Spring - Treadle (Main)	1
10	81997-12	Base	1
11	81997-13	Foot - Rubber	4
12	81998-15	Washer - Rubber Foot Screw	4
13	81997-14	Screw - Rubber Foot	4
14	81997-16	"O" Ring	2
15	81997-17	Spacer	2
16	81997-18	Rod - Pivot	1
17	81997-19	Washer - Ground Screw	1
18	81997-20	Screw - Ground	1
19	81997-23	Actuating Mech. Assy	1
20	81997-23	Switch	1
21	81997-24	Insulation	2
22	81997-25	Spring - Spacing	4
23	81997-26	Rod - Interior	2
24	81997-27	Retaining Ring	4
25	81997-28	Clamp - Interior Rod	2
26	81997-29	Washer - Interior Rod Clamp Screw	2
27	81997-30	Screw - Interior Rod Clamp	2
28	113117	Hanger - Foot Switch	1
29	NS-18-6	Jam Nut 5/16-18 Hex Fin	2
30	FE-6-49	Connector - Strain Relief (1/2") (Switch)	1
31	FE-15-38	Connector - Strain Relief (3/4") (Transmission Case)	1
32	80828-2	Cord	1
	87711-62-1	Foot Switch Assy. (Incls. items 1 thru 27)	1



CONTROL PANEL W/FOOT SWITCH ACTIVATOR

CONTROL PANEL W/FOOT SWITCH ACTIVATOR

ILLUS. PL-20475-2	PART NO.	NAME OF PART25	AMT.
1	SD-29-15	Self-Tapping Screw 10-24 × 5/8 Pan Hd., Type F	16
2	NS-31-15	Lock Nut 10-24 Hex (Nylon)	8
3	124500	Control Panel Assy	1
4	120872-3	Switch Assy. (Foot Switch)	1
5	SD-32-3	Self-Tapping Screw 6-19 × 3/8 Phil. Pan Hd. "Plastite"	2
6	WS-28-1	Washer	2
7	WL-7-2	Lock Washer 6 Ext. Shakeproof	2
8	294700-4-3	Pilot Light Assy	1
9	120872-4	Stop Switch Assy	1
10	SD-32-3	Self-Tapping Screw 6-19 × 3/8 Phil. Pan Hd. "Plastite"	2
11	WS-28-1	Washer	2
12	WL-7-2	Lock Washer 6 Ext. Shakeproof	2
13	120872-2	Start Switch Assy. (Mix & Mix-Grind)	2
14	SD-32-3	Self-Tapping Screw 6-19 × 3/8 Phil. Pan Hd. "Plastite"	4
15	WS-28-1	Washer	4
16	WL-7-2	Lock Washer 6 Ext. Shakeproof	4
17	115090	Switch Guard Assy	2
18	SC-21-8	Mach. Screw 6-32 × 3/8 Rd. Hd	6
19	WS-23-44	Washer	6
20	294420	Reed Mounting Board Assy. (Incls. item 21)	1
21	111964	Switch - Reed	4
22	117495	Spacer	8

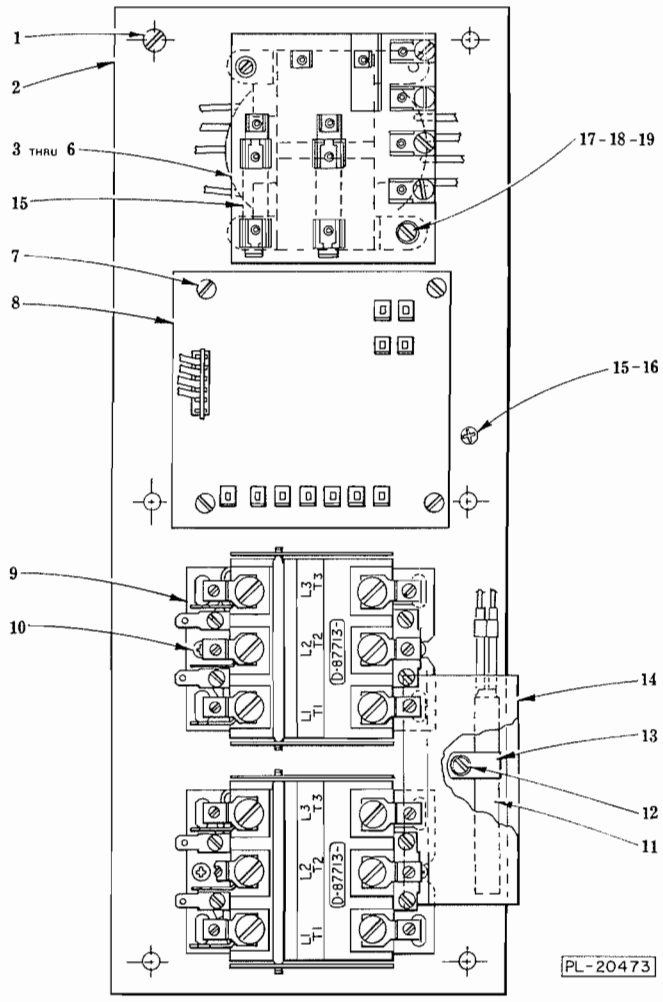


CONTROL BOX AND INTERLOCK UNIT

CONTROL BOX AND INTERLOCK UNIT

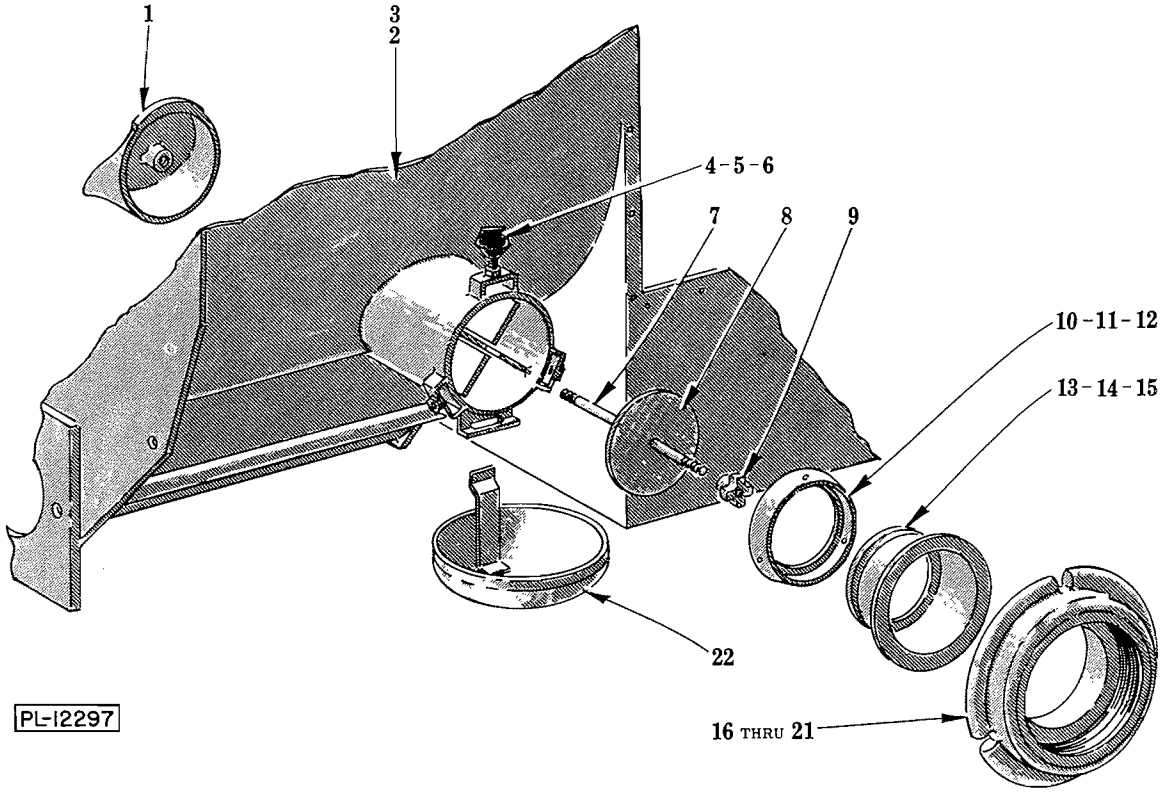
ILLUS. PL-20512	PART NO.	NAME OF PART[25]	AMT.
**1	105377-2	Control Box Assy	1
**2	106827-2	Caplug	1
**3	FE-15-9	Connector 90° "Sealtite" (1¼ Male Thd. × 1¼ Flex. Cnd.)	1
4	106540	Seed Nut	3
*5	105377-1	Control Box Assy	1
6	WL-7-12	Lock Washer 10 Ext. Shakeproof	3
7	SC-8-17	Mach. Screw 10-32 × ⅜ Rd. Hd	3
8	FE-6-7	Lock Nut ½ Cnd	1
9	FE-15-10	Connector 90° Strain Relief (½")	1
10	FE-8-10	Gasket Assy	1
11	106825-1	Clip - Wiring	2
12	107341	Retainer - Switch	1
13	SC-12-72	Mach. Screw 10-24 × 1¾ Fil. Hd	1
14	WL-7-12	Lock Washer 10 Ext. Shakeproof	1
15	108964-6	Interlock Switch Assy. (R.H. Control Box)	1
16	108964-7	Interlock Switch Assy. (L.H. Control Box)	1
17	67500-71	"O" Ring	1
18	NS-31-15	Lock Nut 10-24 Hex (Nylon)	7
19	117495	Spacer	7
20	294421	Reed Mounting Board Assy. (Incls. item 21)	3
21	111964	Switch - Reed	3
22	115090	Switch Guard Assy	2
23	SC-21-8	Mach. Screw 6-32 × ⅜ Rd. Hd	6
24	WS-23-44	Washer	6
25	120872-2	Start Switch Assy. (Mix & Mix-Grind)	2
26	SD-32-3	Self-Tapping Screw 6-19 × ⅜ Phil. Pan Hd. "Plastite"	4
27	WS-28-1	Washer	4
28	WL-7-2	Lock Washer 6 Ext. Shakeproof	4
29	120872-4	Stop Switch Assy	1
30	SD-32-3	Self-Tapping Screw 6-19 × ⅜ Phil. Pan Hd. "Plastite"	2
31	WS-28-1	Washer	2
32	WL-7-2	Lock Washer 6 Ext. Shakeproof	2
33	SD-29-15	Self-Tapping Screw 10-24 × ⅝ Pan Hd., Type F	9
34	124499	Control Panel Assy	1
*35	FE-9-6	Bushing - Conduit (1¼")	1
*36	FE-8-26	Gasket Assy. (1¼")	1
*37	FE-9-7	Lock Nut 1¼ Cnd	1
*38	106043-2	Conduit (Junction Box to Control Box)	1
**39	106044	Conduit 1¼" "Sealtite" (Junction Box to Control Box)	1
**40	FE-15-8	Connector - Straight "Sealtite" (1¼ Male Thd. × 1¼ Flex. Cnd.)	1
41	FE-18-40	Connector 90° Strain Relief (1")	1
42	FE-18-43	Connector 90° Strain Relief (¾")	1
43	117612-6	Cord & Plug Assy. (230 V., 60 Hz.) (Use with items 41, 45 & 47)	1
44	117612-4	Cord & Plug Assy. (460 V., 60 Hz.) (Use iwth items 42, 46 & 48)	1
45	290114-5	Cord & Plug Assy. (208 V., 60 Hz.) (Use with items 41, 46 & 47)	1
46	295692	Receptacle (200 V., 60 Hz.)	1
47	315147	Receptacle (230 V., 60 Hz.)	1
48	315149	Receptacle (460 V., 60 Hz.)	1
49	295691	Connector - Pendent (200 V., 60 Hz.)	1
50	315141	Connector - Pendent (230 V., 60 Hz.)	1
51	315143	Connector - Pendent (460 V., 60 Hz.)	1
52	NS-9-22	Mach. Nut 10-24 Hex	2
53	87526-303	Lead Wire Assy. (Ground)	1
54	WL-7-12	Lock Washer 10 Ext. Shakeproof	1
55	SC-18-38	Mach. Screw 8-32 × ½ Pan Hd	1
56	WL-7-7	Lock Washer 8 Ext. Shakeproof	1
57	NS-9-12	Mach. Nut 8-32 Hex	2
58	64744-6	Chain	1
59	293158	Bracket (Air Actuated Switch)	1
60	SD-8-18	Self-Tapping Screw 8-18 × ⅜ Phil. Bind Hd., Type B	2
61	87711-213-1	Switch - Air Actuated	1
62	SD-29-15	Self-Tapping Screw 10-24 × ⅝ Pan Hd., Type F	7
	83376	Tie - Wire (Lead Wires) (Not Shown)	3
	117659-1	Cord & Strain Relief Assy. (Incls. items 41 & 43)	1
	117659-2	Cord & Strain Relief Assy. (Incls. items 42 & 44)	1
	117659-6	Cord & Strain Relief Assy. (Incls. items 41 & 45)	1

*R.H. Control Box.
**L.H. Control Box.



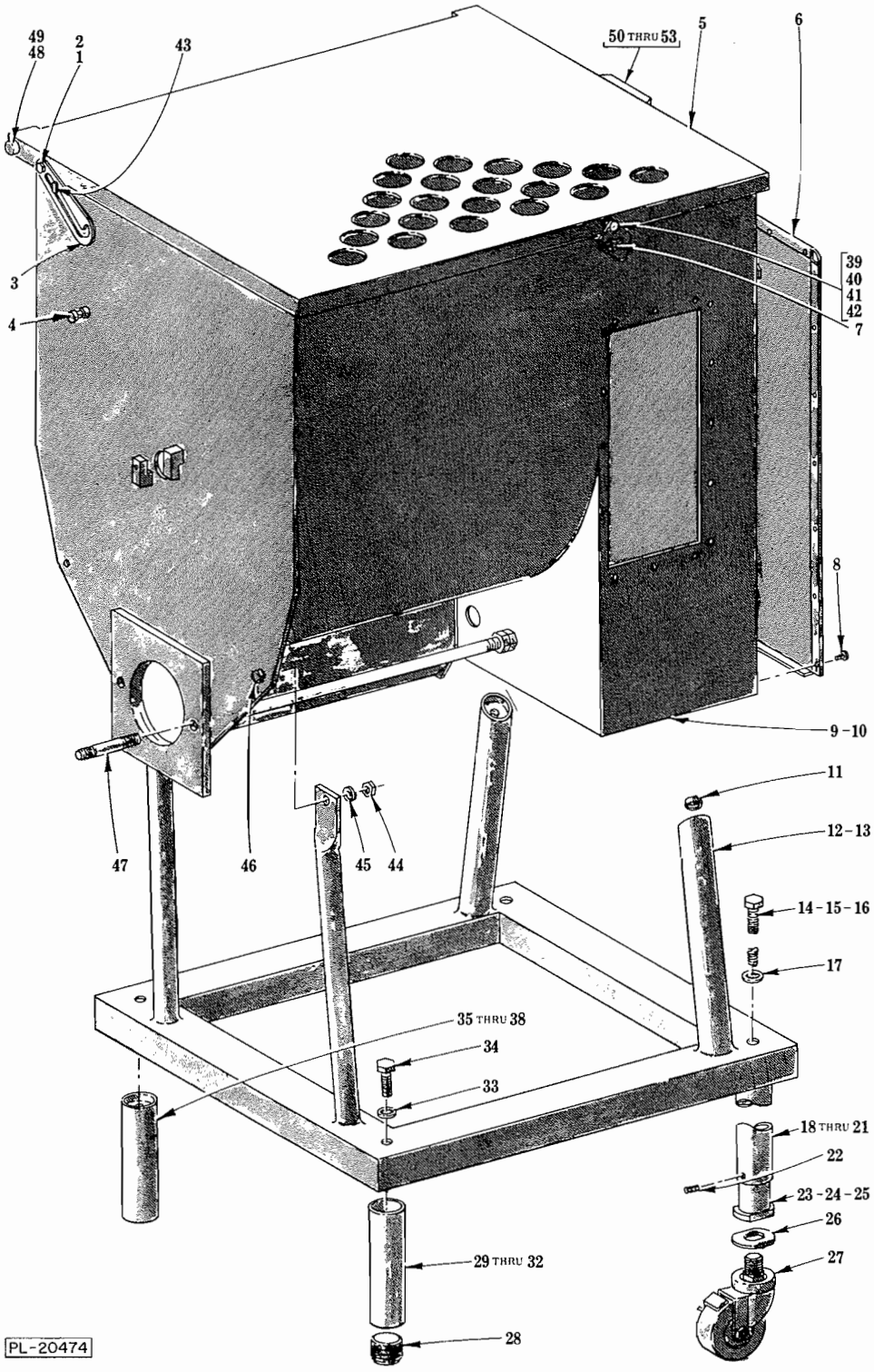
CONTROL PANEL UNIT

ILLUS. PL-20473	PART NO.	NAME OF PART[25]	AMT.
1	SC-8-9	Mach. Screw 10-24 × 3/8 Rd. Hd	6
2	117559	Mounting Panel & Spacer Assy	1
3	117034-1	Power Input Board Assy. (60 Hz.) (Incls. FE-22-63)	1
4	117033	Power Input Board Assy. (50 Hz.) (Incls. FE-22-63)	1
5	SD-9-43	Self-Tapping Screw 10-32 × 3/8 Phil. Pan Hd., Type F	2
6	FE-16-29	Fuse (1 AMP.)	2
7	SC-9-49	Mach. Screw 6-32 × 3/8 Rd. Hd	4
8	278328	Motor Protector Board Assy	1
9	87713-41-2	Contactor (115 V., 50/60 Hz.)	2
10	SD-9-43	Self-Tapping Screw 10-32 × 3/8 Phil. Pan Hd., Type F	4
11	108202-4	Air Heater & Terminal Assy. (115 V., W/Pilot Circuit)	1
12	SD-8-33	Self-Tapping Screw 8 × 5/16 Rd. Hd., Type B	1
13	108199-1	Clamp - Air Heater	1
14	108101	Shield - Heater	1
15	WL-10-6	Lock Washer 10 Ext	1
16	SD-9-43	Self-Tapping Screw 10-32 × 3/8 Phil. Pan Hd., Type F	1
17	NS-9-12	Mach. Nut 8-32 Hex	2
18	WL-7-7	Lock Washer 8 Ext	2
19	SC-19-33	Mach. Screw 8-32 × 1/2 Bind. Hd	2
	FE-22-63	Fuse - Power Input Board (3 AMP.) (Not Shown)	1



SIDE FEED UNIT

ILLUS. PL-12297	PART NO.	NAME OF PART25	AMT.
1	117472	Plug - Side Feed Hopper	1
2	118291	R.H. Hopper Assy. (R.H. Side Inlet Feed)	1
3	118292	L.H. Hopper Assy. (L.H. Side Inlet Feed)	1
4	108197-6	Thumb Screw Assy. (2" Lg.)	3
5	108197-7	Thumb Screw Assy. (1 7/16" Lg.)	3
6	108197-8	Thumb Screw Assy. (2 9/16" Lg.)	3
7	107236	Rod - Tie	1
8	107237	Cap - Hopper Feed	1
9	292420	Knob Assy	1
10	86111	Retainer - Adapter (#56 Size)	1
11	82153	Retainer - Adapter (#32 Size)	1
12	82154	Retainer - Adapter (#52 Size)	1
13	86110	Adapter (#56 Size)	1
14	82146	Adapter (#32 Size)	1
15	82149	Adapter (#52 Size)	1
16	80879-1	Ring - Adapter Adj. (4532, 4046, 4346 & 4146 "V" Thread)	1
17	80879-2	Ring - Adapter Adj. (4532 & 4046 "Stub" Thread)	1
18	81374-1	Ring - Adapter Adj. (#52F "V" Thread)	1
19	81374-2	Ring - Adapter Adj. (#52-46 "Stub" Thread)	1
20	109738-1	Ring - Adapter Adj. (#56 "Stub" Thread)	1
21	109738-2	Ring - Adapter Adj. (#56 "V" Thread)	1
22	81531	Drippings Cup Assy	1
	117523	Hopper Feed Plug Assy. (Incls. items 1, 7, 8 & 9)	1
	109369-2	#56 Adapter Assy. (Incls. items 5, 10 & 13) (Non-Hobart)	1
	109370-2	#52 Adapter Assy. (Incls. items 4, 12 & 15) (Non-Hobart)	1
	109371-2	#32 Adapter Assy. (Incls. items 6, 11 & 14) (Non-Hobart)	1

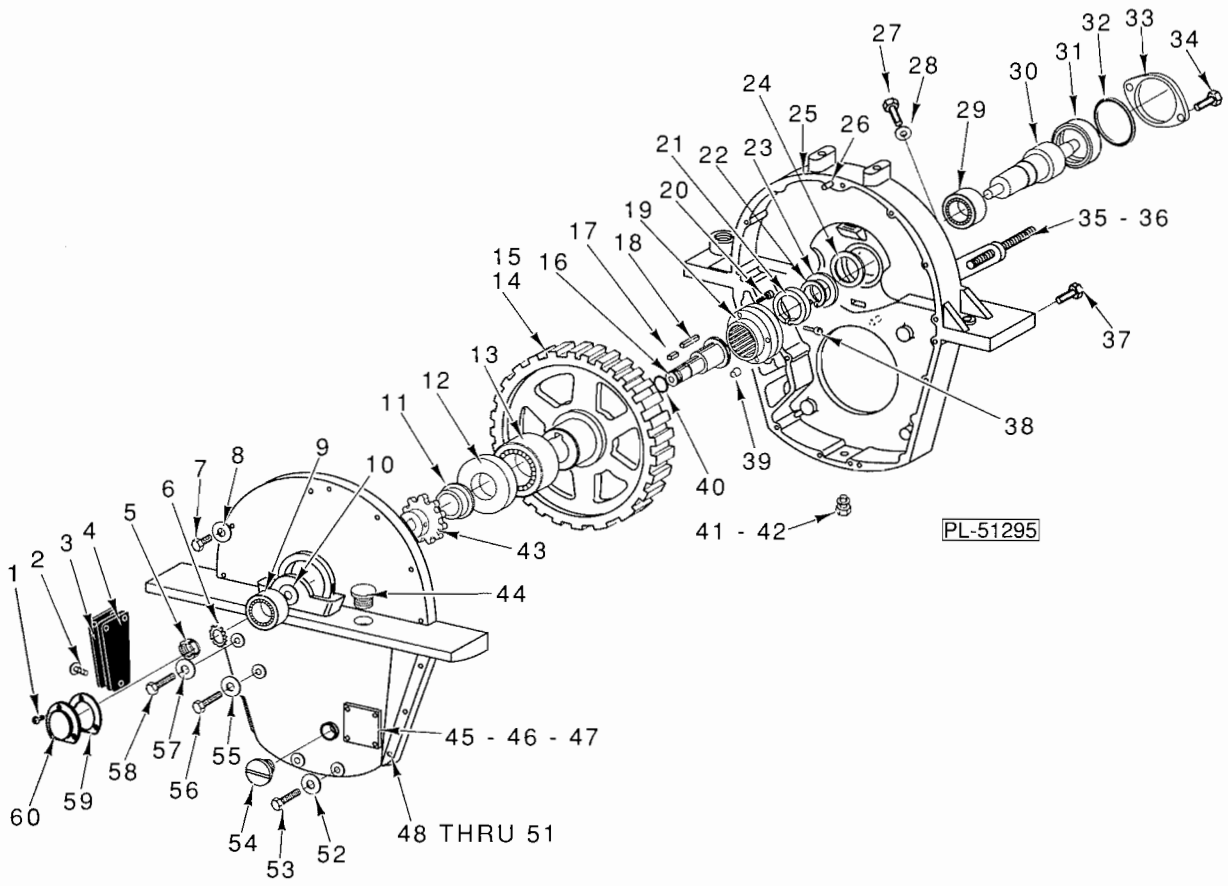


HOPPER AND FRAME UNIT

HOPPER AND FRAME UNIT

ILLUS. PL-20474	PART NO.	NAME OF PART[25]	AMT.
1	120432	Screw - Latch	1
2	NS-25-4	Acorn Nut 1/4-20	1
3	120431-1	Latch - Slide	1
*4	106737-2	Support - Spanner Wrench	1
5	117734-1	Hopper Guard (Incls. items 39, 40, 50, 51, 52 & 53)	1
6	117192	Rear Panel & Gasket Assy	1
*7	106972-2	Pin - Catch	1
8	SD-29-15	Self-Tapping Screw 10-24 x 5/8 Pan Hd., Type F	19
9	118263	Hopper Assy. (R.H. Mach.)	1
10	118290	Hopper Assy. (L.H. Mach.) (Not Shown)	1
11	108765	Spacer - Rear Support	2
12	116953	Base & Support Assy	1
13	106827-1	Caplug	4
14	SC-97-56	Cap Screw 5/8-11 x 3 1/2 Hex Hd. (Use with item 18)	4
15	SC-97-57	Cap Screw 5/8-11 x 5 Hex Hd. (Use with item 18)	4
16	SC-62-51	Cap Screw 5/8-11 x 1 1/2 Hex Hd. (Use with items 20 & 21)	4
17	WL-8-37	Lock Washer 5/8 Int. Shakeproof	4
18	107240-1	Leg & Anchor Nut Assy. (3 1/4" Lg.)	4
19	107240-2	Leg & Anchor Nut Assy. (4 3/4" Lg.)	4
20	107246-1	Leg & Anchor Nut Assy. (7 13/16" Lg.)	4
21	107246-2	Leg & Anchor Nut Assy. (10 11/16" Lg.)	4
22	SC-46-4	Set Screw 8-32 x 3/16 Hdls., Cup Pt	4
23	107242-1	Foot - Adj. (3 1/8" Lg.) (Use with item 18)	4
24	107242-2	Foot - Adj. (4 9/16" Lg.) (Use with item 19)	4
25	107244	Stud & Foot Assy. (Use with items 20 & 21)	4
26	80957	Washer	4
27	117591	Caster	4
28	89247	Foot - Leg	1
29	105348-1	Adjustable Leg & Foot Assy. (7 1/2" Lg.) (Incls. item 28)	1
30	105348-2	Adjustable Leg & Foot Assy. (11" Lg.) (Std.) (Incls. item 28)	1
31	105348-3	Adjustable Leg & Foot Assy. (15 1/2" Lg.) (Incls. item 28)	1
32	105348-4	Adjustable Leg & Foot Assy. (18 1/2" Lg.) (Incls. item 28)	1
33	WL-8-37	Lock Washer 5/8 Int. Shakeproof	4
34	SC-62-51	Cap Screw 5/8-11 x 1 1/2 Hex Hd	4
35	105347-1	Leg & Expansion Plug Assy. (7 1/2" Lg.)	3
36	105347-2	Leg & Expansion Plug Assy. (11" Lg.) (Std.)	3
37	105347-3	Leg & Expansion Plug Assy. (15 1/2" Lg.)	3
38	105347-4	Leg & Expansion Plug Assy. (18 1/2" Lg.)	3
39	106732-1	Catch	1
40	NS-25-4	Acorn Nut 1/4-20	1
*41	290563	Pin - Catch Pivot (Also order item 40)	1
42	WS-22-6	Washer	1
*43	108532-2	Pin - Latch	1
44	NS-15-11	Full Nut 5/16-18 Hex Fin	2
45	WL-6-23	Lock Washer 5/16 Medium	2
46	SC-41-13	Mach. Screw 5/16-18 x 1 Hex Hd	2
47	116914	Stud - Cylinder	2
48	113357	Screw - Should	2
*49	106545-2	Block - Hinge	2
50	106817	Interlock Actuator Assy	1
51	291053	Stud - Drive #12 x 1/2" Rd. Hd., Type U	2
52	108629-1	Shim - Actuator (.06" Thk.)	AR
53	108629-2	Shim - Actuator (.13" Thk.)	AR
	107135-3	Adj. Leg & Caster Assy. (9" Lg. Min.) (Incls. items 14, 17, 18, 22, 23, 26 & 27)	4
	107135-4	Adj. Leg & Caster Assy. (10 1/2" Lg. Min.) (Incls. items 15, 17, 19, 22, 24, 26 & 27)	4
	107243-3	Adj. Leg & Caster Assy. (13 3/8" Lg. Min.) (Incls. items 16, 17, 20, 22, 25, 26 & 27)	4
	107243-4	Adj. Leg & Caster Assy. (16 1/4" Lg. Min.) (Incls. items 16, 17, 21, 22, 25, 26 & 27)	4

*Welded Parts.



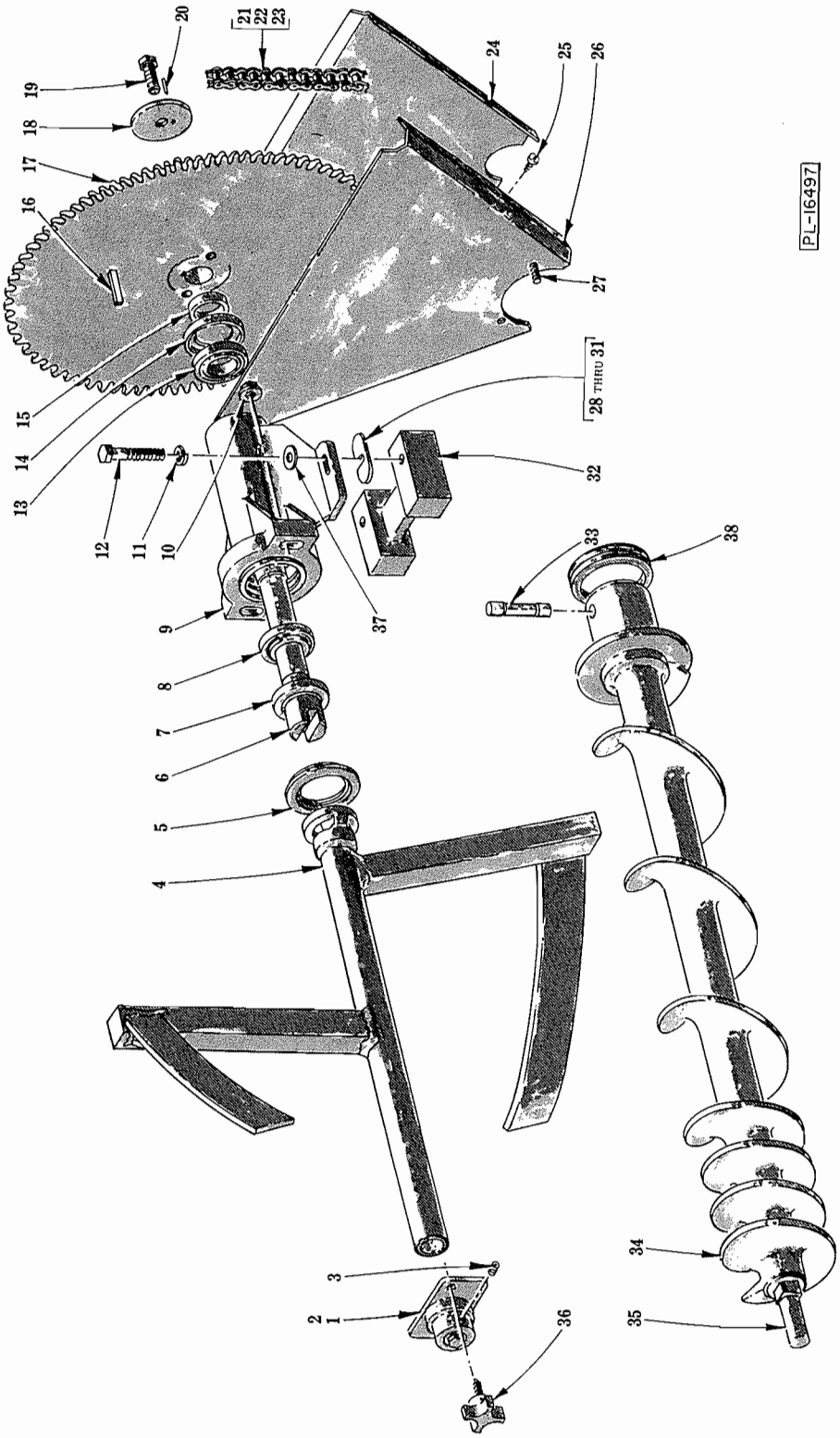
S/N 27-1010-427 and later shown. Prior to S/N 27-1010-427, or if your transmission is different than shown, consult your local Hobart Office, (TSB-886).

GEAR CASE

ILLUS. PL-51295	PART NO.	NAME OF PART	AMT.
1	SC-18-38	Mach. Screw 8-32 x ½ Pan Hd.	3
2	SC-18-11	Mach. Screw 10-24 x ⅜ Pan Hd.	6
3	120429	Cover - Junction Box	1
4	120430	Gasket - Junction Box Cover	1
5	NS-34-6	Lock Nut Brg. N.D. #N-05	1
6	WL-12-6	Lockwasher N.D.#W-05	1
7	SC-36-40	Cap Screw 5/16-18 x 1¼ Hex Hd.	14
8	WL-3-47	Lockwasher 5/16 Medium	14
9	BB-21-33	Ball Bearing SGL. Row ANG.	1
10	438374	Spacer - Drive Sprocket	1
11	105226	Spacer - Drive Sprocket	1
12	105355	Seal - Oil	1

GEAR CASE (CONT.)

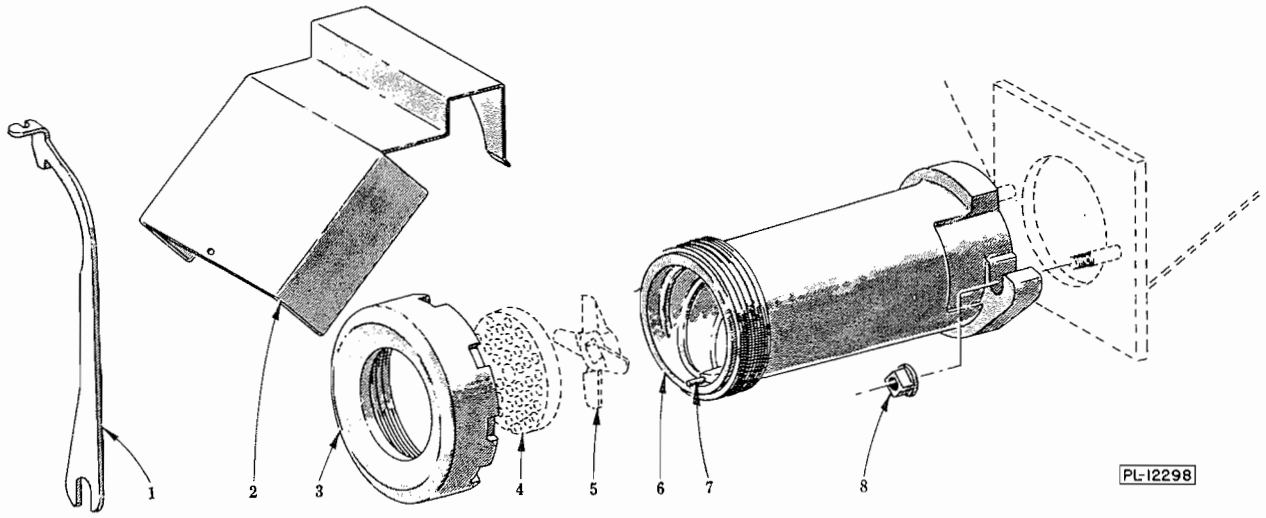
ILLUS. PL-51295	PART NO.	NAME OF PART	AMT.
13	BR-2-11	Roller Bearing - Cone & Cup Assy.	1
14	116901	Gear - Driven (163T)(60 Hz.)	1
15	116901-2	Gear - Driven (159T)(50 Hz.)	1
16	438373	Sprocket Shaft Assy.	1
17	109070-8	Key	1
18	109070-29	Key	1
19	438259	Clutch	1
20	SC-117-56	Cap Screw 5/16-18 1¾ Soc. Hd. "Eslok"	4
21	116925	Collar - Thrust Bearing	1
22	117086	Race - Thrust Bearing	1
23	BN-4-18	Needle Bearing #BT 3244-5-54	1
24	117086	Race - Thrust Bearing	1
25	117010	Gear Case Assy.	1
26	11800-239	Dowel	2
27	SC-62-25	Cap Screw 5/8-11 x 2¼ Hex Hd.	2
28	WL-8-37	Lockwasher 5/8 Int. Shakeproof	2
29	BR-2-36	Roller Bearing - Cup & Cone Assy.	1
30	116913	Shaft - Drive	1
31	117001	Seal - Drive Shaft	1
32	67500-76	"O" Ring	1
33	116917	Retainer - Seal	1
34	SC-67-6	Mach. Screw 10-24 x ½ Hex Hd.	2
35	108951	Screw - Gear Case Support	2
36	NS-17-25	Jam Nut ½-13 Hex	8
37	SC-100-12	Mach. Screw 5/16-18 x ¾ Hex Flange Hd. "Whiz-Lock"	4
38	SC-92-31	Cap Screw ¼-20 x 1½ Soc. Fil. Hd.	1
39	FP-28-17	Plug ¾ Sq. Hd. Pipe	1
40	67500-47	"O" Ring	1
41	SC-36-93	Cap Screw 7/16-20 x ¾ Hex Hd.	1
42	WS-21-20	Washer	1
43	120207	Sprocket - Drive (11T)	1
44	108963-2	Plug - Oil Fill	1
45	116465	Gasket - Window Cover	1
46	116464	Cover - Window	1
47	SD-36-39	Self-Tapping Screw 10-24 x ⅜ Truss Hd, Type TT	4
48	105243	Cover - Gear Case	1
49	118544-1	Lug - Solderless	1
50	SC-27-41	Mach. Screw 10-24 x ⅜ Rd. Hd.	1
51	WL-10-6	Lockwasher 10 Ext. Shakeproof	1
52	WL-3-47	Lockwasher 5/16 Medium	2
53	SC-37-69	Cap Screw 5/16-18 x 1¾ Hex Hd.	2
54	22793	Gauge - Oil Level	1
55	WL-3-47	Lockwasher 5/16 Medium	1
56	SC-62-28	Cap Screw 5/16-18 x 3½ Hex Hd.	1
57	WL-3-47	Lockwasher 5/16 Medium	1
58	SC-97-11	Cap Screw 5/16-18 x 4 Hex Hd.	1
59	106823	Gasket - Bearing Cap	1
60	438279	Cap - Bearing (Metal)	1
	117120	Seal Retainer Assy. (Incls.items 31, 32 & 33)	1



WORM AND MIXING ARM UNIT

WORM AND MIXING ARM UNIT

ILLUS. PL-16497	PART NO.	NAME OF PART[25]	AMT.
1	110342	Bushing Retainer Assy. (Incls. items 2 & 3)	1
2	110326	Bushing	1
3	SC-116-87	Set Screw 10-24 × ¼ Hdls., Cup Pt	2
4	117042	Mixing Arm Assy	1
5	105266	Seal - Outer (Mixing Arm)	1
6	116789	Shaft - Mixing Arm Drive	1
7	105359	Seal - Oil	1
8	BR-2-27	Roller Bearing - Cup & Cone Assy	1
9	116899	Carrier - Bearing	1
10	NS-38-10	Lock Nut ⅜-16 Flange "Whiz-Lock	2
11	WL-4-6	Lock Washer ⅜ Medium	2
12	SC-97-31	Cap Screw ⅜-16 × 2½ Hex Hd	2
13	BR-2-27	Roller Bearing - Cup & Cone Assy	1
14	105359	Seal - Oil	1
15	105386	Spacer - Sprocket	1
16	109070-22	Key	1
17	117013	Sprocket - Driven (84T)	1
18	105380	Washer - Sprocket Retaining	1
19	SC-62-48	Cap Screw ⅜-16 × 1⅛ Hex Hd	1
20	RP-3-15	Rollpin ⅛ Dia. × 1 Lg	1
21	105193-2	Chain - Mixing Drive (Incls. items 22 & 23)	1
22	107540	Link - Offset (#50)	AR
23	107539	Link - Connecting (#50)	AR
24	107122	Panel - Oil Splash (Outside)	1
25	SD-19-15	Self-Tapping Screw 8 × ½ Pan Hd., Type B	4
26	107123	Panel - Oil Splash (Inside)	1
27	SC-18-38	Mach. Screw 8-32 × ½ Pan Hd	2
28	105781-1	Shim (.005" Thk.) (Blue)	AR
29	105781-2	Shim (.010" Thk.) (Brown)	AR
30	105781-3	Shim (.020" Thk.) (Yellow)	AR
31	105781-4	Shim (.030" Thk.) (Coral)	AR
32	116912	Spacer - Bearing Carrier	1
33	116904	Pin - Shear	1
34	116902	Worm Assy. (Incls. items 33 & 35)	1
35	70388	Stud - Plate	1
36	106830	Thumb Screw Assy	1
37	WS-18-8	Washer	2
38	123074-3	Seal	1
	111693	Mixing Arm Drive Shaft Assy. Unit (Incls. items 6, 7, 8, 14, 20 & Special T-Key)	1
	117006	Bearing Carrier Assy. (Incls. items 6, 7, 8, 9, 13, 14, 15 & 20)	1



#52 GRINDER UNIT

ILLUS. PL-12298	PART NO.	NAME OF PART[25]	AMT.
1	88187	Wrench - Spanner (#46)	1
2	117050	Deflector - Meat	1
3	116910	Ring - Adjusting	1
4	*	Plate - Grinder	1
5	*	Knife - Grinder	1
6	116907	Cylinder & Pin Assy. (Incls. item 7)	1
7	122947	Pin - Plate	3
8	69862	Nut - Cylinder	2

*Sharp, high quality knives and plates should be purchased or rented for this grinder.