



# INSTRUCTION MANUAL

... with Replacement Parts



## MODEL 4812 CHOPPER

(INCLUDES MOTOR PARTS)

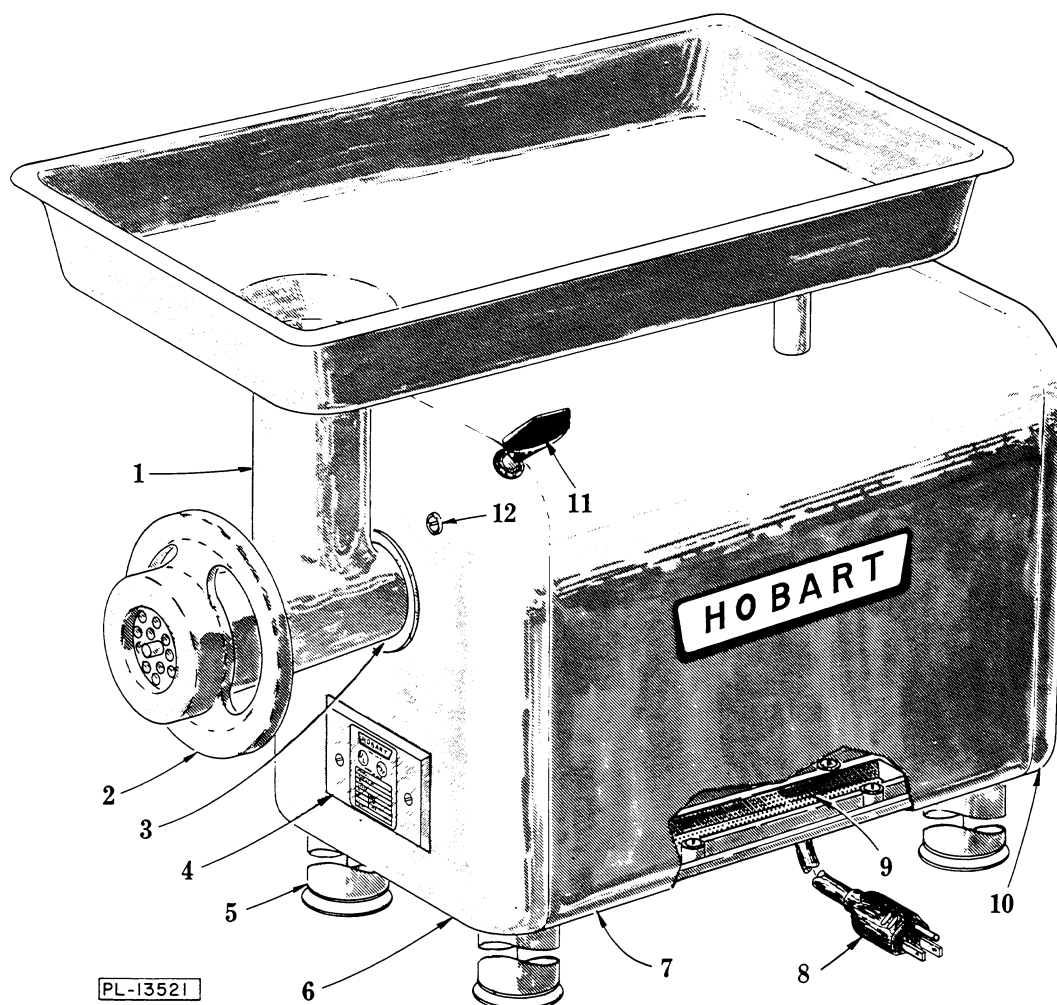
ML-33811 (REAR MOUNTED SWITCH)

THIS MANUAL REPLACES AND SHOULD BE USED  
INSTEAD OF FORM 13002B (8-82)

PRIOR ML'S COVERED IN THIS MANUAL:

ML-31440 (REAR MOUNTED SWITCH)





## Instructions for Operation and Care of MODEL 4812 CHOPPER

### INSTALLATION:

Before making electrical connection, CHECK THE SPECIFICATIONS ON THE NAME PLATE (4) TO MAKE SURE THEY AGREE WITH THOSE OF YOUR ELECTRICAL SERVICE.

Electrical connections should be made by qualified workmen who will observe all applicable Safety Codes and the National Electrical Code.

A cord and plug (8) is furnished as standard equipment on this machine. The base on the under side of the machine is tapped for 1/2" conduit,

should a permanent installation be required. Bring the conductors up through this tapped hole and connect directly to the switch on the end of the machine. It is IMPORTANT to use the proper conductor (wire) and fuse sizes. These are listed below and also on the tag attached to the machine.

### WIRE AND FUSE SIZES

Volts	Phase	Line Fuse	Wire Size
115	1	30	12
230	1	15	14
200	3	20	14
230	3	20	14

Multiphase motors should be so connected that the attachment runs counterclockwise facing the attachment hub.

The four leg assemblies (5) are removed and packed in the chopper attachment carton before shipment. Reassemble these legs by simply screwing them into the four tapped holes of the base. The rubber feet on these legs cushion the machine. Under normal operation, the machine need not be bolted down.

#### CARE OF CHOPPER ATTACHMENT:

Before using the chopper attachment, remove from machine, take it apart, and wash thoroughly. When reassembling, apply tasteless oil to the drive shaft and the composition thrust washer of the worm. The knife and plate need some preliminary lubrication; rub tallow over the cutting faces of these parts. When assembling the knife, be sure to turn the cutting side out toward the perforated plate and see that the notch on the circumference of the plate fits over the pin in the bottom of the cylinder.

Do not adjust hand wheel (2) too tight; if the knife and plate are both sharp, only a moderate pressure will be needed. Knives and plates must be sharp and true for proper cutting action. Rub a little tallow over newly-sharpened plates before use. NEVER allow your chopper to run without meat in the chopping end; only a few minutes of such running can ruin a knife and plate.

Wash all parts of the attachment daily, in warm soapsuds.

Take out the entire chopper attachment each time after using, and place it in the refrigerator until it is needed again.

#### INSERTING CHOPPER ATTACHMENT:

Each day, before assembling the chopper attachment, place a drop of mineral oil into the hole marked "oil" on the hub of the cylinder.

When putting on the chopper attachment, see that both the hub and the socket are clean, and insert with a slight twisting motion toward the left, so that the stop pin in the attachment is in contact with the side of the hole that receives it. Then tighten the thumb screw (11).

To remove the attachment, first turn the thumb screw (11) approximately three revolutions to the left (do not remove the screw), then give the attachment a twist to the right as you pull it out. Never strike the cylinder with an object to loosen it.

#### HUB DRAIN:

A drain hole in the trim washer (3) allows any meat juices to drain from the hub. This hole should be inspected periodically to make sure that it is free of obstructions; a small wire can be used for removing any material which may have accumulated.

#### LUBRICATION:

Hobart servicing offices have the current lubricants listed in their lubrication manual. The gears and bearings are packed with special lubricant sufficient to last several years. To gain access to the drain and grease filling plug, it is necessary to remove the front housing panel (6) (see paragraph on "Panel Removal"). Consult a Hobart service technician before adding grease. Lubrication of the chopper attachment is described under the paragraphs "Care of Chopper Attachment" and "Inserting Chopper Attachment".

#### AIR INTAKE:

Under normal operating conditions the motor air intake screen (9) (located in the base of the chopper) will need little or no attention. However, in some installations where saw dust or other foreign materials are present in the air, this intake screen may become partially or completely covered and throttle the cooling air to the motor. Where an adverse dust condition does exist, periodically check the screen (using an adequate light) and wipe exposed side of screen clean with a rag or brush as required.

#### PANEL REMOVAL:

To disassemble the front panel (6), remove the thumb screw (11) and the chopper cylinder (1), next, remove the four lower screws on the under side of the base, the two upper screws (12), and the four screws that retain the hub trim washer (3). Lift off the panel.

To take off the rear panel (10), remove the two upper screws and the four lower screws on the under side of the base. Remove the panel, being careful not to damage the switch leads.

To remove the center housing (7), after removing the front and rear panels, as described above, disassemble the eight screws on the under side of the base. Lift off the center housing.

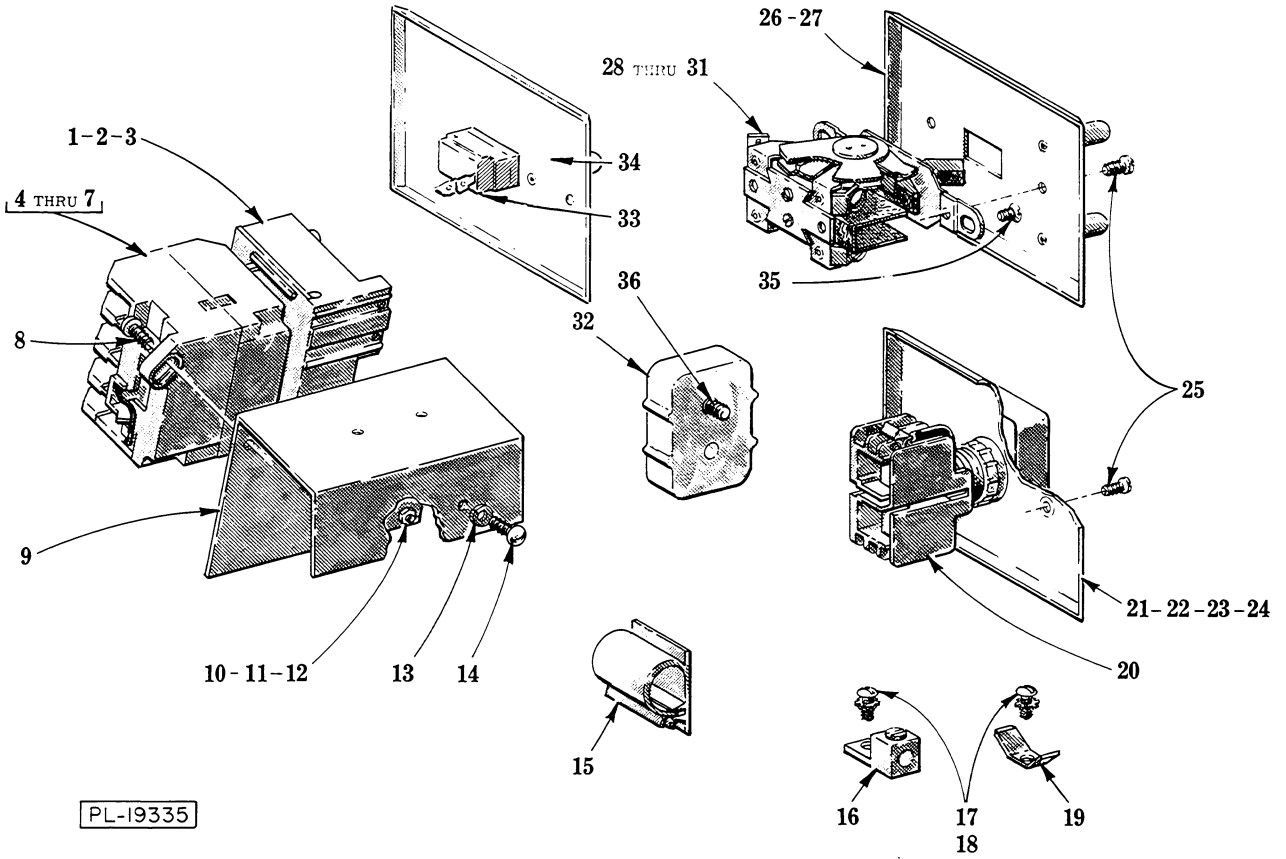
**MEAT CHOPPING:**

Cut the meat into strips and feed it into the chopper, using the feed stomper only as needed. If the strips are cut to proper size, they will feed without assistance from the feed stomper, allowing both hands of the operator free to feed meat. When running meat through the chopper a second time, more speed is attained by feeding small

quantities at a time, than by trying to force large amounts with the feed stomper.

The feed pan should always be kept in place in the cylinder. It not only makes regular feeding easy, but keeps the chopper attachment ready for immediate use. The fineness to which the meat is cut is governed by the size of the holes in the perforated plate, not by the tension put upon the adjusting ring.

---

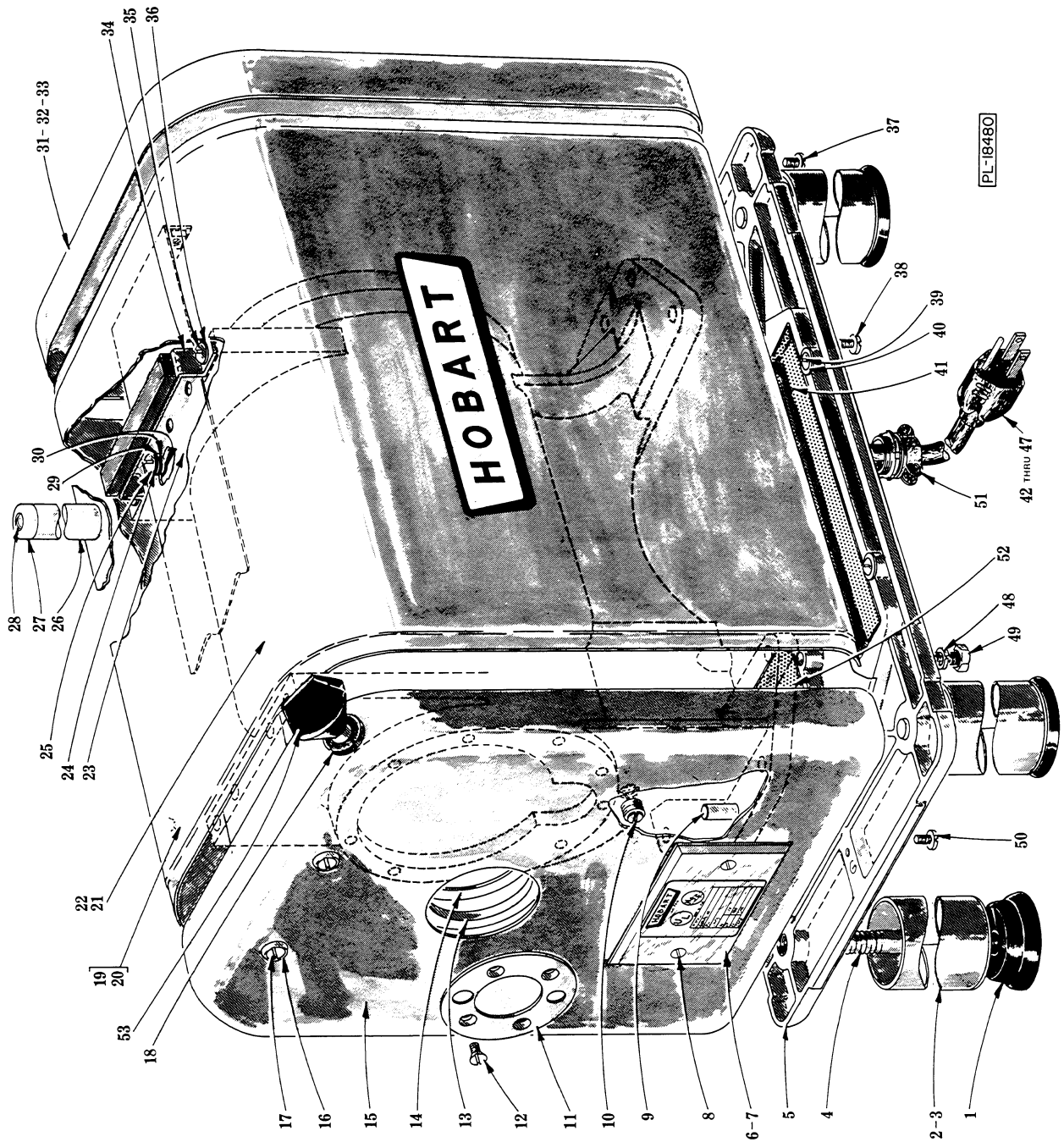


ELECTRICAL UNIT

## ELECTRICAL UNIT

ILLUS. PL-19335	PART NO.	NAME OF PART	AMT.
1	C-88196-7-4	Relay - Thermal Overload (380/415 V., 50 Hz., 3 Ph.) . . . . .	1
2	C-88196-7-5	Relay - Thermal Overload (220/240 V., 50 Hz., 3 Ph.) . . . . .	1
3	C-88196-7-6	Relay - Thermal Overload (220/240 V., 50 Hz., 1 Ph.) . . . . .	1
4	C-87713-54-2	Contacto (220 V., 50 Hz., 1 & 3 Ph.; 380 V., 50 Hz., 3 N) . . . . .	1
5	C-87713-54-3	Contacto (240 V., 50 Hz., 1 & 3 Ph.; 415 V., 50 Hz., 3 N) . . . . .	1
6	C-87713-54-4	Contacto (380 V., 50 Hz., 3 Ph.) . . . . .	1
7	C-87713-54-5	Contacto (415 V., 50 Hz., 3 Ph.) . . . . .	1
*8	SC-8-41	Mach. Screw - #10-32 x 1/2" Rd. Hd. (All Voltages Except 115 V., 50 Hz.) . . . . .	2
*9	B-120324	Contacto Bracket Assy. (All Voltages Except 115 V., 50 Hz.) . . . . .	1
*10	SC-21-8	Mach. Screw - #6-32 x 3/8" Rd. Hd. (All Voltages Except 115 V., 50 Hz.) . . . . .	1
*11	WL-7-1	Lock Washer - #6 Ext. Shakeproof (All Voltages Except 115 V., 50 Hz.) . . . . .	2
*12	NS-9-7	Mach. Nut - #6-32 Hex . . . . .	1
*13	WL-3-8	Lock Washer - #6 Medium (All Voltages Except 115 V., 50 Hz.) . . . . .	2
*14	SC-7-25	Mach. Screw - #6-32 x 1/2" Rd. Hd. (All Voltages Except 115 V., 50 Hz.) . . . . .	2
*15	B-106825-2	Clip - Wiring (All Voltages Except 115 V., 50 Hz.) . . . . .	1
16	C-118544-1	Lug - Solderless (3 Ph., 60 Hz.) . . . . .	1
17	SC-27-29	Mach. Screw - #8-32 x 3/8" Rd. Hd . . . . .	1
18	WL-10-1	Lock Washer - #8 Ext. Shakeproof . . . . .	1
*19	C-65890-90	Terminal - Grounding . . . . .	1
*20	C-87711-142-1	Switch (All Voltages Except 115 V., 50 Hz.) . . . . .	1
*21	C-119953	Plate - Switch (All Voltages Except 115 V., 50 Hz.) . . . . .	1
*22	SC-21-8	Mach. Screw - #6-32 x 3/8" Rd. Hd. (Grounding Screw) . . . . .	1
*23	WL-7-1	Lock Washer - #6 Ext. Shakeproof . . . . .	1
*24	NS-9-7	Mach. Nut - #6-32 Hex . . . . .	1
25	SC-30-6	Mach. Screw - #6-32 x 3/8" Oval Hd . . . . .	2
26	B-124564-1	Plate - Switch (1 Ph. W/Overload) . . . . .	1
27	B-124564-2	Plate - Switch (3 Ph.) . . . . .	1
28	C-292052	Switch & Plate Assy. (Incls. items #33 & 34) (1Ph., W/O Overload) (Mach. ML-31440) . . . . .	1
29	P-87810-19-1	Switch (1 Ph. W/Overload) . . . . .	1
30	---	Heater Element - Starter (Give Elec. Spec., Mach. Model & Motor Type) . . . . .	1
31	P-87711-138-1	Switch (3 Ph.) . . . . .	1
*32	B-116793-2	Block - Terminal . . . . .	1
33	P-87711-184-1	Switch (1 Ph., W/O Overload) (Mach. ML-33811) . . . . .	1
34	C-291961	Switch Plate (1 Ph., W/O Overload) . . . . .	1
35	M-74835	Screw - Switch Mounting . . . . .	2
*36	SC-8-41	Mach. Screw - #10-32 x 1/2" Rd. Hd . . . . .	2

\*50 Hz.

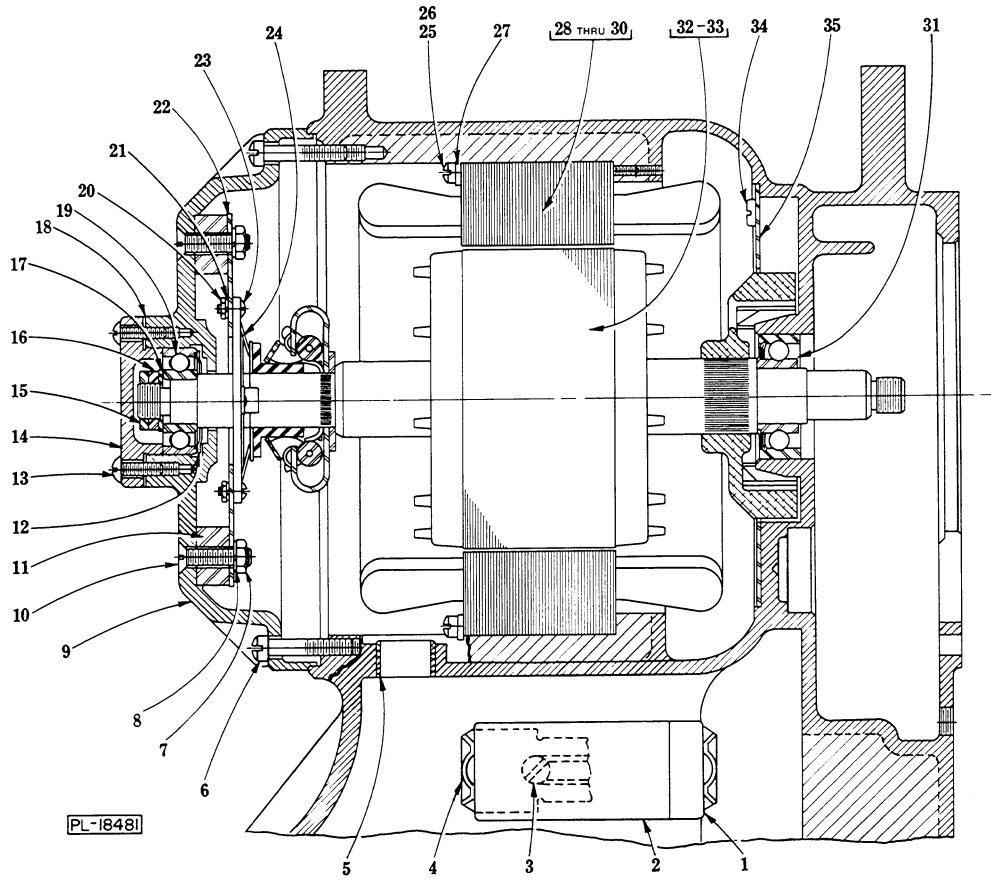


MOTOR AND HOUSING UNIT



## MOTOR AND HOUSING UNIT

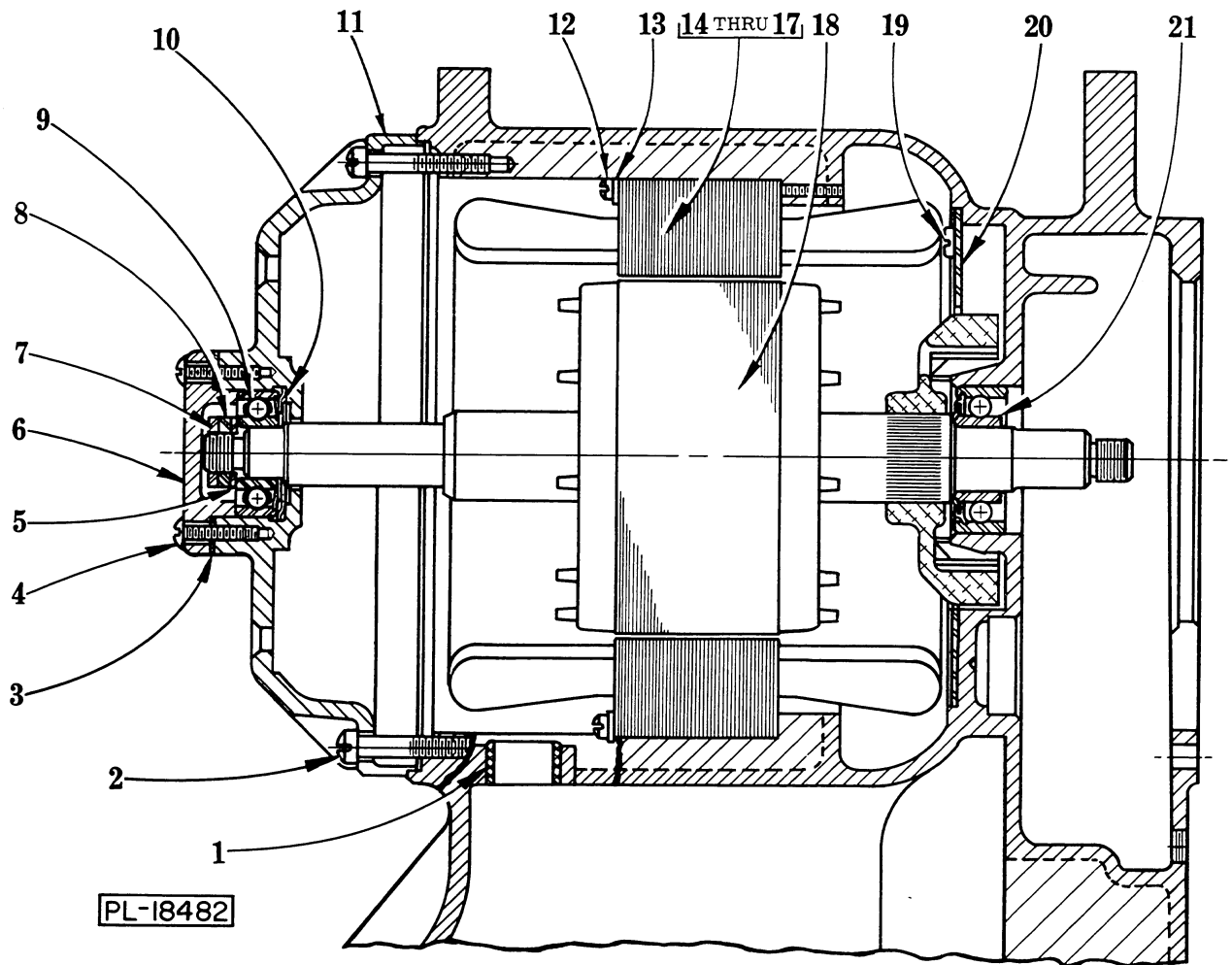
ILLUS. PL-18480	PART NO.	NAME OF PART	AMT.
1	M-83681	Foot - Rubber	4
2	B-290060-2	Leg	4
3	M-64814	Cap - Leg End	4
4	B-290061-2	Stud - Leg (Special)	4
5	D-102214-1	Base Assy. (Incls. items #39, 40, 41 & 52)	1
6	C-117867-1	Plate - Mach. Data (Give Serial No. & Elec. Spec.) (60 Hz.)	1
7	C-117867-2	Plate - Mach. Data (Give Serial No. & Elec. Spec.) (50 Hz.)	1
8	SC-30-6	Mach. Screw - #6-32 x 3/8" Oval Hd	2
9	D-11800-141	Dowel	2
10	B-118827	Plug - Inspection	1
11	P-65152	Washer - Trim (Attach. Hub)	1
12	SC-22-17	Mach. Screw - #10-24 x 3/8" Flat Hd	4
13	M-65140	Gasket - Attach. Hub	1
14	M-65142	Washer - Retaining	1
15	E-64965-5	Panel - Front Housing	1
16	WC-4-10	Csk. Washer - #10	2
17	SC-15-36	Mach. Screw - #10-24 x 5/8" Oval Hd	2
18	M-64824	Grommet (Thumb Screw)	1
19	C-290481-12	Housing Assy. (60 Hz.)	1
20	C-290481-13	Housing Assy. (50 Hz.)	1
21	ML-16327	Motor (Give Elec. Spec.)	1
22	T-65058	Case - Motor Frame & Gear	1
23	R-65148-1	Bracket - Front & Rear Locating	1
24	WL-3-37	Lock Washer - 1/4" Medium	4
25	SC-8-81	Mach. Screw - 1/4"-20 x 1/2" Rd. Hd	4
26	B-119911	Spacer - Pan Rest	2
27	V-19105-1	Bumper	2
28	SC-60-10	Mach. Screw - #8-32 x 3" Rd. Hd	2
29	WS-3-20	Washer (STL)	4
30	M-66185	Washer (Rubber)	8
31	E-64805-5	Panel - Rear Housing	1
32	SC-15-36	Mach. Screw - #10-24 x 5/8" Oval Hd	2
33	WC-4-10	Csk. Washer - #10	2
34	M-65116	Center Panel Brkt. & Compression Strip Assy	2
35	SC-8-81	Mach. Screw - 1/4"-20 x 1/2" Rd. Hd	4
36	WL-3-37	Lock Washer - 1/4" Medium	4
37	SC-25-7	Mach. Screw - #10-24 x 5/16" Bind. Hd	4
38	SC-25-7	Mach. Screw - #10-24 x 5/16" Bind. Hd	8
39	SC-8-9	Mach. Screw - #10-24 x 3/8" Rd. Hd	4
40	WS-2-21	Washer	4
41	P-65119	Screen - Air Inlet	1
42	B-117542-7	Cord & Plug Assy. (Under 150 V., 3 Conductor)	1
43	B-117542-12	Cord & Plug Assy. (230 V., 60 Hz., 1 Ph. 3 Conductor)	1
44	B-117542-24	Cord Assy. (I.E.C.) (220/240 V., 50 Hz.)	1
45	B-117542-36	Cord Assy. (I.E.C.) (115 V., 50 Hz., 1 Ph.)	1
46	C-117613-5	Cord Assy. (I.E.C.) (380/415 50 Hz., 3 N)	1
47	C-117613-8	Cord Assy. (I.E.C.) (220/240/380/415 V., 50 Hz., 3 Ph.)	1
48	WL-3-47	Lock Washer - 5/16" Medium	10
49	SC-36-40	Cap Screw - 5/16"-18 x 1-1/4" Hex Hd	10
50	SC-25-7	Mach. Screw - #10-24 x 5/16" Bind. Hd	4
51	FE-2-45	Connector - Cord (All Voltages except 60 Hz., 3 Ph.)	1
52	M-65141	Screen - Air Outlet	1
53	C-108197-4	Thumb Screw Assy	1



MOTOR PARTS (1 PH.)

## MOTOR PARTS (1 PH.)

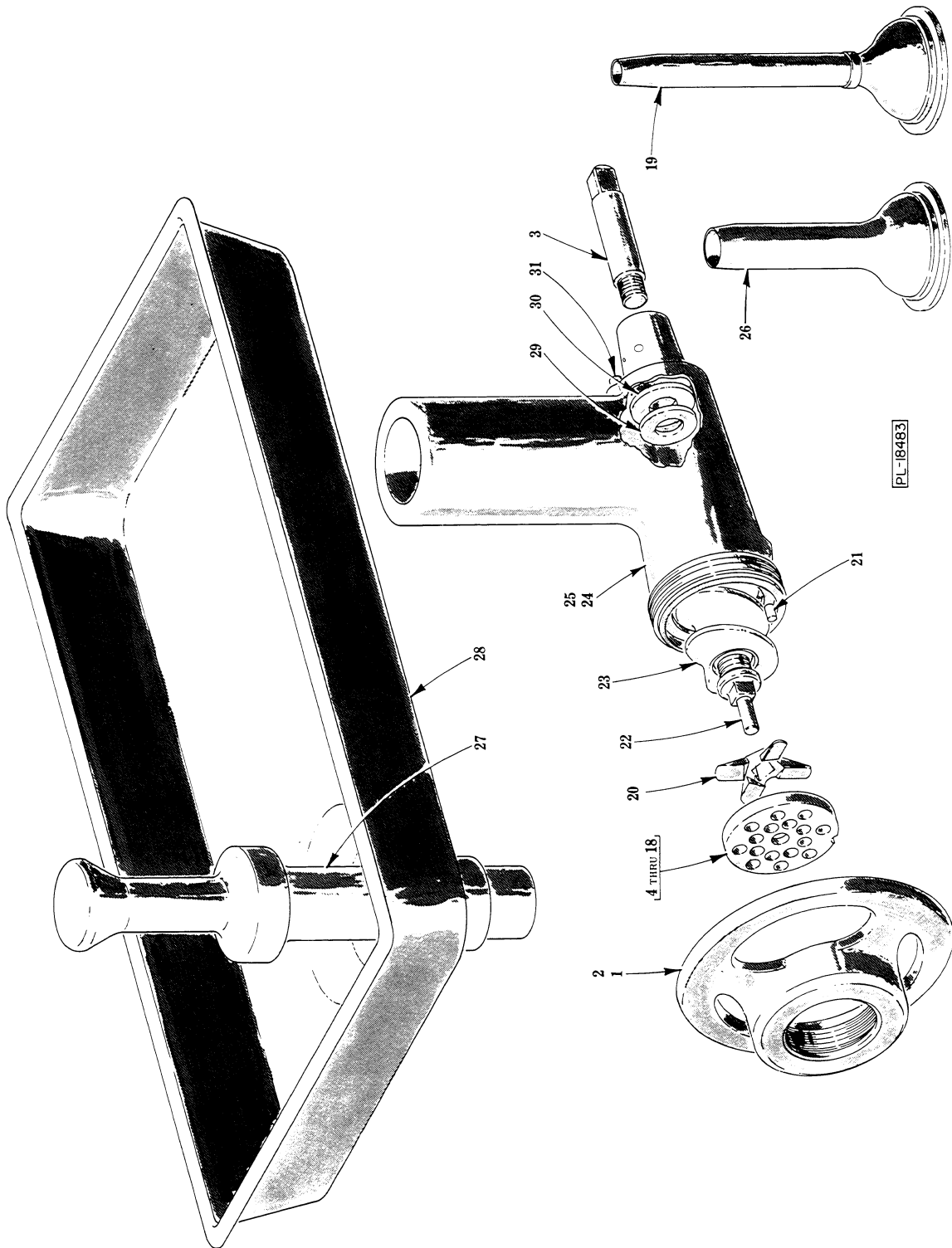
ILLUS. PL-18481	PART NO.	NAME OF PART	AMT.
1	C-70486-1	End Cap - Capacitor . . . . .	1
2	D-70487-3	Capacitor . . . . .	1
3	SC-14-57	Mach. Screw - #10-24 x 1/2" Flat Hd . . . . .	2
4	P-66621-1	Bracket - Capacitor . . . . .	1
5	V-6651	Bushing - Insulating . . . . .	1
6	SC-11-82	Mach. Screw - 1/4"-20 x 1-1/4" Fil. Hd . . . . .	4
7	NS-13-2	Full Nut - 1/4"-20 Hex Fin . . . . .	2
8	WL-3-38	Lock Washer - 1/4" Medium . . . . .	2
9	S-89073-2	Bracket - Bearing . . . . .	1
10	SC-16-24	Mach. Screw - 1/4"-20 x 1-1/4" Oval Hd . . . . .	2
11	M-72818-1	Post - Switch Retaining Plate . . . . .	2
12	SL-2-4	Loading Spring - N.D. #S-17 . . . . .	1
13	SC-9-25	Mach. Screw - #10-24 x 5/8" Rd. Hd . . . . .	4
14	M-65219	Cap - Bearing . . . . .	1
15	V-4478	Lock Nut - Motor Shaft . . . . .	1
16	V-10928-2	Nut - Motor Shaft . . . . .	1
17	WS-8-4	Washer . . . . .	1
18	M-14030	Gasket - Bearing Cap . . . . .	1
19	BB-17-12	Ball Bearing - N.D. #7503 . . . . .	1
20	NS-9-7	Mach. Nut - #6-32 Hex . . . . .	2
21	WL-3-9	Lock Washer - #6 Medium . . . . .	2
22	M-74738	Switch Plate & Weld Nut Assy . . . . .	1
23	SC-9-79	Mach. Screw - #6-32 x 5/16" Rd. Hd . . . . .	2
24	P-66085	Switch - Starting (Stationary Part) . . . . .	1
25	SC-12-52	Mach. Screw - #10-24 x 2-3/4" Fil. Hd. (60 Hz.) . . . . .	8
26	SC-11-32	Mach. Screw - #10-24 x 3" Fil. Hd. (50 Hz.) . . . . .	8
27	WS-2-15	Washer . . . . .	8
28	P-65477-67-1	Stator Assy. (115 V., 60 Hz.) . . . . .	1
29	P-65477-67-3	Stator Assy. (230 V., 60 Hz.) . . . . .	1
30	P-65477-142-1	Stator Assy. (115/220/240 V., 50 Hz.) . . . . .	1
31	BB-18-43	Ball Bearing - N.D. #Z9504 . . . . .	1
32	C-22275-265	Rotor Assy. (60 Hz.) . . . . .	1
33	C-22275-266	Rotor Assy. (50 Hz.) . . . . .	1
34	SC-18-11	Mach. Screw - #10-24 x 3/8" Pan Hd . . . . .	3
35	P-65120	Shroud - Fan . . . . .	1



MOTOR PARTS (3 PH.)

## MOTOR PARTS (3 PH.)

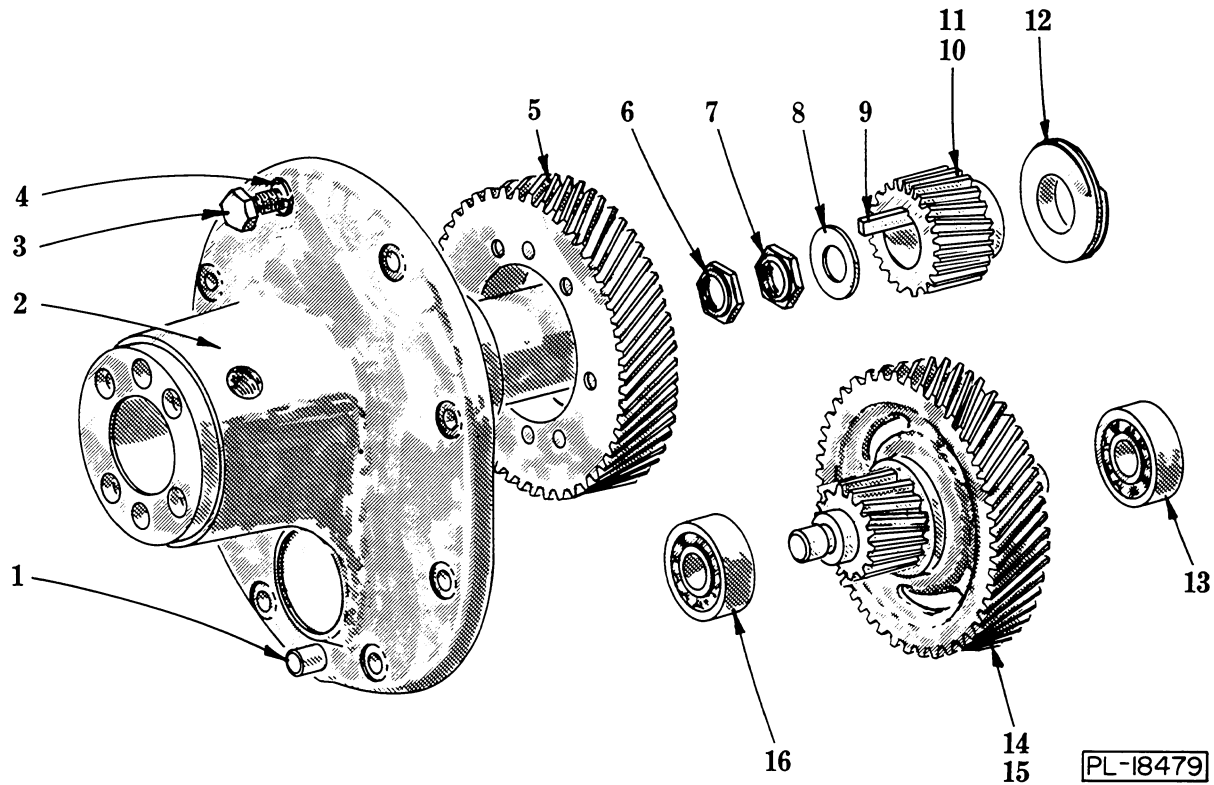
ILLUS. PL-18482	PART NO.	NAME OF PART	AMT.
1	V-6651	Bushing - Insulating . . . . .	1
2	SC-11-82	Mach. Screw - 1/4"-20 x 1-1/4" Fil. Hd . . . . .	4
3	M-14030	Gasket - Bearing Cap . . . . .	1
4	SC-9-25	Mach. Screw - #10-24 x 5/8" Rd. Hd . . . . .	4
5	WS-8-4	Washer . . . . .	1
6	M-65219	Cap - Bearing . . . . .	1
7	V-4478	Lock Nut - Motor Shaft . . . . .	1
8	V-10928-2	Nut - Motor Shaft . . . . .	1
9	BB-17-12	Ball Bearing - N.D. #7503 . . . . .	1
10	SL-2-4	Spring - Loading . . . . .	1
11	S-89073-2	Bracket - Bearing . . . . .	1
12	SC-11-28	Mach. Screw - #10-24 x 2-1/2" Fil. Hd . . . . .	8
13	WS-2-15	Washer . . . . .	8
14	P-65478-14-1	Stator Assy. (200 V., 60 Hz.) . . . . .	1
15	P-65478-14-2	Stator Assy. (230 V., 60 Hz.) . . . . .	1
16	P-65478-14-3	Stator Assy. (460 V., 60 Hz.) . . . . .	1
17	P-65478-136-1	Stator Assy. (50 Hz.) . . . . .	1
18	C-15747-306	Rotor Assy . . . . .	1
19	SC-18-11	Mach. Screw - #10-24 x 3/8" Pan Hd . . . . .	3
20	P-65120	Shroud - Fan . . . . .	1
21	BB-18-43	Ball Bearing - N.D. #Z9504 . . . . .	1



#12 CHOPPER ATTACHMENT UNIT (NSF)

## #12 CHOPPER ATTACHMENT UNIT (NSF)

ILLUS. PL-18483	PART NO.	NAME OF PART	AMT.
1	R-77667-1	Ring - Adjusting (Brite Metal)	1
2	R-77667-2	Ring - Adjusting (Tinned)	1
3	M-4284	Stub - Sq. Drive	1
4	P-19263-1	Chopper Plate (5/64" Dia. Holes) (Carbon Steel)	1
5	P-16423-1	Chopper Plate (1/8" Dia. Holes) (Carbon Steel)	1
6	P-16424-1	Chopper Plate (3/16" Dia. Holes) (Carbon Steel)	1
7	P-16425-1	Chopper Plate (1/4" Dia. Holes) (Carbon Steel)	1
8	P-16426-1	Chopper Plate (3/8" Dia. Holes) (Carbon Steel)	1
9	M-16427-1	Chopper Plate (1/2" Dia. Holes) (Carbon Steel)	1
10	M-103970-1	Chopper Plate (5/8" Dia. Holes) (Carbon Steel)	1
11	M-16429-1	Chopper Plate (11/16" Dia. Holes) (Carbon Steel)	1
12	P-16423-2	Chopper Plate (1/8" Dia. Holes) (Stay Sharp)	1
13	P-16424-2	Chopper Plate (3/16" Dia. Holes) (Stay Sharp)	1
14	P-16425-2	Chopper Plate (1/4" Dia. Holes) (Stay Sharp)	1
15	P-16426-2	Chopper Plate (3/8" Dia. Holes) (Stay Sharp)	1
16	M-16427-2	Chopper Plate (1/2" Dia. Holes) (Stay Sharp)	1
17	M-103970-2	Chopper Plate (5/8" Dia. Holes) (Stay Sharp)	1
18	M-16429-2	Chopper Plate (11/16" Dia. Holes) (Stay Sharp)	1
19	P-4980	Stuffer - Sausage (Sheep Casing)	1
20	E-290339	Knife - Chopper	1
21	B-122999	Pin - Plate	1
22	M-15877	Stud - Plate	1
23	M-15878	Worm Assy. (Incls. items #3, 22 & 29)	1
24	D-119759-1	Chopper Cylinder Assy. (Tinned) (Incls. items #21, 30 & 31)	1
25	D-119759-3	Chopper Cylinder Assy. (Brite Metal) (Incls. items #21, 30 & 31)	1
26	P-5174	Stuffer - Sausage (Hog Casing)	1
27	A-119922-1	Feed Stomper (Plastic)	1
28	A-122555	Pan - Feed (Stainless)	1
29	V-3310	Washer - Worm Thrust	1
30	V-4838-1	Washer - Cylinder Thrust	1
31	M-79213	Stud - Stop	1



ATTACHMENT HUB AND TRANSMISSION UNIT

ILLUS. PL-18479	PART NO.	NAME OF PART	AMT.
1	D-11800-157	Dowel	1
2	D-102328	Attachment Hub & Bushing Assy	1
3	SC-37-75	Cap Screw - 5/16"-18 x 3/4" Hex Hd	8
4	WL-3-47	Lock Washer - 5/16" Medium	8
5	M-15391	Sq. Drive Flange & Gear Assy. (53T)	1
6	V-4478	Nut - Motor Shaft Lock	1
7	V-10928-2	Nut - Motor Shaft	1
8	WS-8-4	Washer	1
9	C-109070-4	Key	1
10	C-14026	Pinion - Motor (20T) (60 Hz.)	1
11	C-113393	Pinion - Motor (23T) (50 Hz.)	1
12	M-14029	Deflector - Grease	1
13	BB-5-50	Ball Bearing - Fafnir #201K	1
14	C-65130	Main Dr. Gear & Co-Shaft Pinion Assy. (56T) (60 Hz.)	1
15	C-113392	Main Dr. Gear & Co-Shaft Pinion Assy. (53T) (50 Hz.)	1
16	BB-5-50	Ball Bearing - Fafnir #201K	1