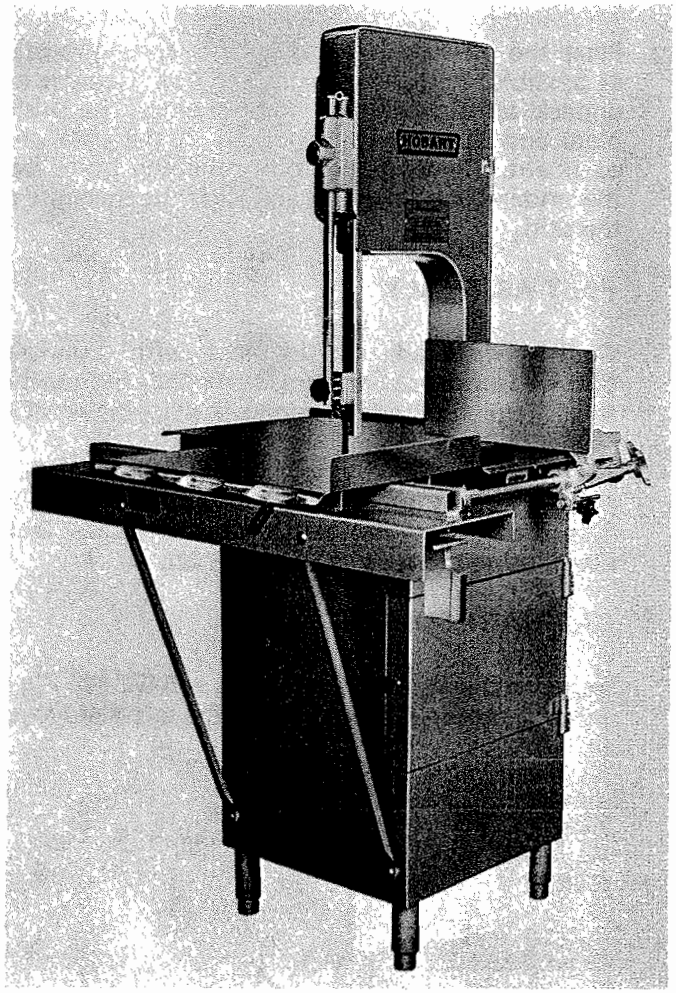
HOBART

INSTRUCTION MANUAL

... with Replacement Parts



MODELS 5212 & 5212-F MEAT SAWS

ML-31665 — 5212
ML-31666 — 5212F

THIS MANUAL REPLACES AND SHOULD BE USED INSTEAD OF FORM 11562C (7-79)

PRIOR ML'S COVERED IN THIS MANUAL:

ML-18964 — 5212
ML-18965 — 5212F

A product of HOBART CORPORATION TROY, OHIO 45374

FORM 13728A (2-85) (Supsds. F. 13728)

Installation, Operation and Care of MODELS 5212 & 5212-F MEAT SAWS

Save These Instructions

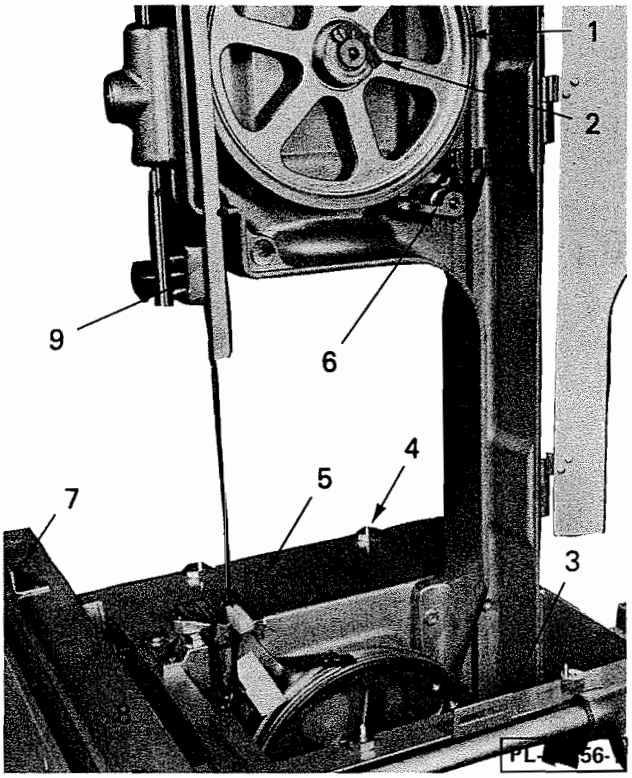


Fig. 1

GENERAL

The 5212 and 5212F Meat Saws are designed to process large quantities of product. They are equipped with a 2 H.P. electric motor. Applications above 250 volts include reduced voltage pilot circuit. Motor overload protection is offered as an option.

The 5212 features a movable carriage table, easily moved by operator's body, and a carriage lock.

The 5212F has stationary cutting tables, specially designed for poultry.

One long life blade is furnished with each meat saw. The blade cannot be resharpened and replacements are available through authorized Hobart offices.

INSTALLATION

Place the machine as close to its operating location as possible. Remove the shipping box. Remove and unpack all disassembled components. The pusher plate and scrap pan are packed in the base compartment. Remove the four retaining bolts from the underside of the skid and slide the machine off the skid.

FEET ASSEMBLY

Coat the threads of the feet with Lubriplate 630AA (supplied) and thread the feet into machine legs. Make final adjustments in machine location.

Level the machine side to side and front to back by placing a spirit level on top of the base unit (5, Fig. 1) and adjusting the feet as necessary. Lock feet in place, using the set screws furnished.

CARRIAGE SUPPORT

Remove the fourteen retaining screws (4, Fig. 2) and the motor access panel on the left-hand side of

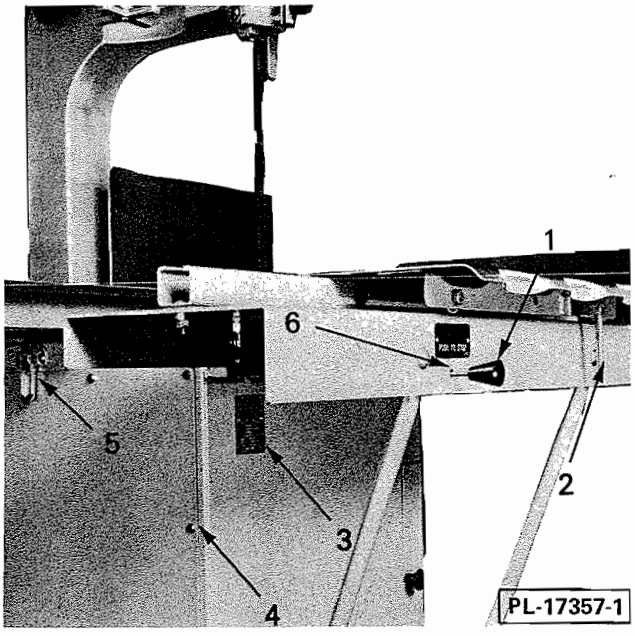


Fig. 2

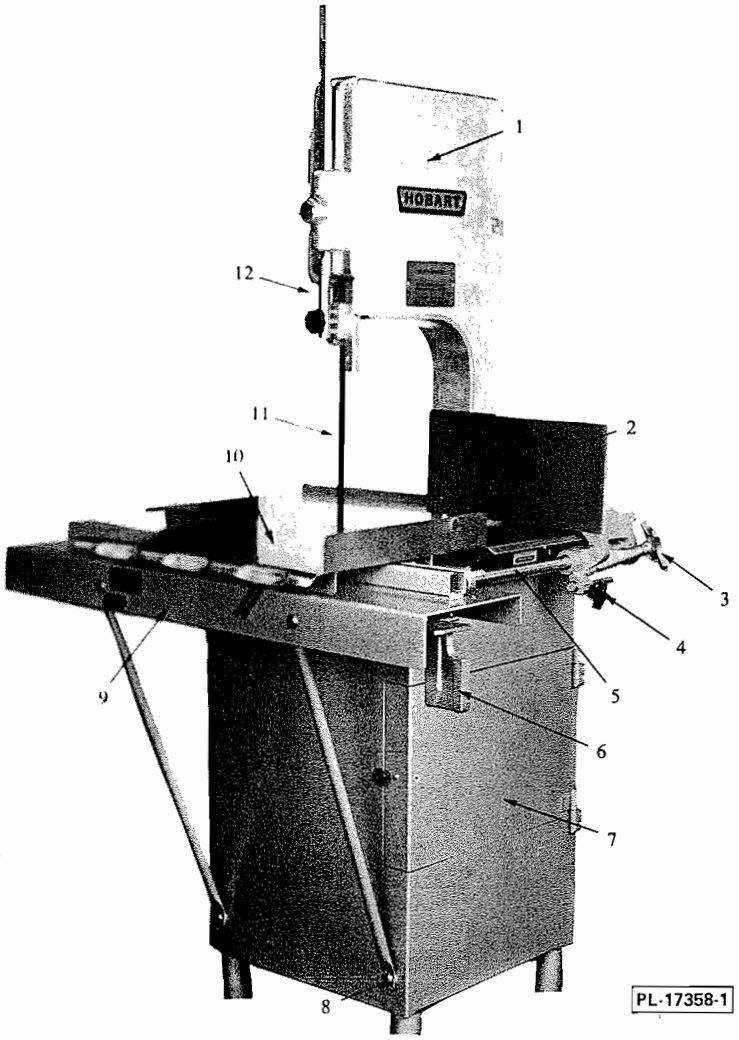


Fig. 3

machine. Locate the carriage support (9, Fig. 3), using dowel pins as locators, and bolt in place. Next, assemble the two support braces. **NOTE:** Spacers (8, Fig. 3) are used on lower carriage bolts with nuts and lock washers on inside of base.

BLADE

Lower upper blade pulley by turning tension adjusting hand wheel (5, Fig. 4) several revolutions to the left. Open head door (1, Fig. 3). Raise gauge plate (2, Fig. 3) to its vertical position. Completely lower the upper guide unit. Place the saw blade over the upper and lower blade pulleys. The blade teeth must point to the RIGHT and DOWN. If the teeth do not point DOWN, remove the blade, twist it inside out and replace on saw. Make sure the blade is properly placed in the upper guide (9, Fig. 1) and rear wiper (6, Fig. 1) units.

Turn the tension adjusting hand wheel (5, Fig. 4) to the right until the figure "3" starts to appear in the tension indicator (1, Fig. 4). Rotate the upper blade pulley, by hand, until the blade centers itself on the pulleys.

Turn the tension adjusting hand wheel (5, Fig. 4) slowly to the right until the indicator (1, Fig. 4) registers "4" at eye level. This is the maximum operating tension for the blade. Swing nylon guard (1, Fig. 5) up. Position front wiper assembly (7, Fig. 5), with blade in slot of steel block and wipers on both sides of blade (5, Fig. 5). Align wiper assembly into wiper bracket slideway slot (6, Fig. 5) and lower into position. Close nylon guard. Close head door.

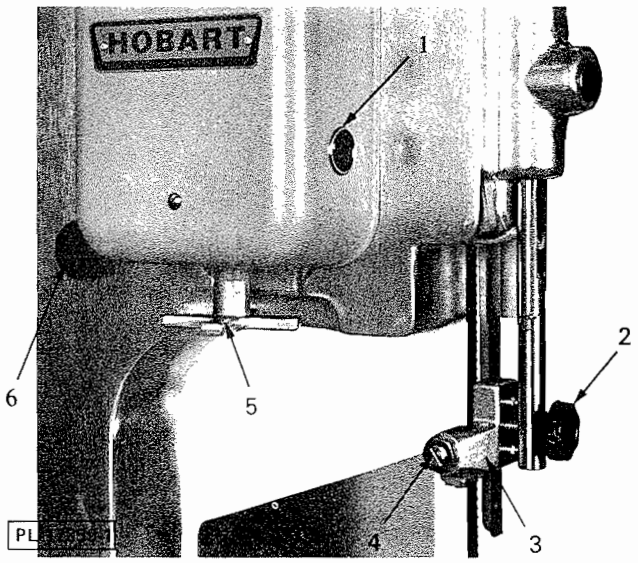


Fig. 4

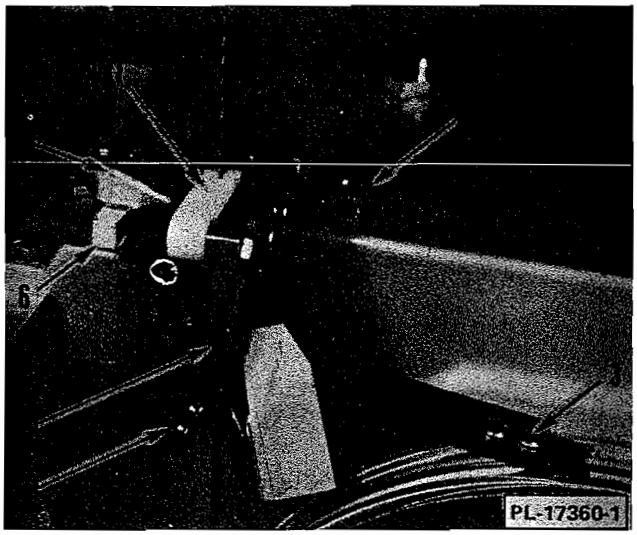


Fig. 5

TABLE

Tilt the table on its side, blade side edge up, slide under saw head and lower in position. The table is aligned and supported by a locator block (2, Fig. 5) and four table rests (4, Fig. 1) fastened to the machine base. Raise the left end of the table and slide it to the right so that the tongue is inserted into the slotted keeper (3, Fig. 1) of the base. Lower the left end of the table and check to assure the pins of the table rests are on the outside of the table angles. Latch table down with the table clamp (5, Fig. 2).

CARRIAGE

The carriage (10, Fig. 3) may be assembled from left or right side. Turn the "L" shaped carriage stop (7, Fig. 1) so that the rubber bumper is toward rear of machine. Align the center bearings of the carriage with the carriage guide. Roll carriage into position. Return carriage stop to stopping position.

Store pusher plate on underside of carriage support (6, Fig. 3).

SWITCH

Insert the rod through the hole (6, Fig. 2) in the carriage support, then through the bushing in the base. Turn the switch rod and knob assembly clockwise and thread firmly into switch rod connector.

ELECTRICAL CONNECTIONS

Before making electrical connections, check the specifications on the data plate (3, Fig. 2) to assure they agree with those of your electrical service.

WARNING: DISCONNECT ELECTRICAL POWER SUPPLY AND PLACE A TAG, AT DISCONNECT SWITCH, INDICATING CIRCUIT IS BEING WORKED ON.

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

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	40	40	8
200-230	1	25	25	10
200-230	3	15	15	14
460	3	15	6	14

Inverse Time Circuit Breaker

Volts	Phase	Min. Ckt. Ampacity	Max. Ckt. Bkr. Size	60°C Copper Wire Size
115	1	40	40	8
200-230	1	30	30	10
200-230	3	20	20	12
460	3	15	10	14

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

Connect the individual branch electrical power supply to the contactor leads. A 1-3/32" diameter hole (for 3/4" conduit) is provided in the base for connecting rigid or flexible conduit. Circuit conductors and fuse protection should conform to local, as well as national, code requirements.

MOTOR ROTATION

In three-phase applications, a check must be made to verify correct direction of motor rotation. Apply electrical power and energize the machine momentarily by pulling, then pushing, the switch knob (1, Fig. 2). The blade must travel in the DOWNWARD direction.

If rotation is incorrect, **DISCONNECT ELECTRICAL POWER SUPPLY** and interchange any two power supply leads. Re-energize machine momentarily and verify correct direction of rotation.

Replace motor access panel and fourteen retaining screws (4, Fig. 2).

CLEANING & SANITIZING

It will be necessary to thoroughly clean and sanitize the machine after installation and prior to being placed into service. Refer to MAINTENANCE for instructions.

SAFETY

Safety devices incorporated in the saw MUST be in correct operating position anytime the saw is in service.

Before turning machine ON, adjust the UPPER GUIDE ASSEMBLY by grasping the knob (2, Fig. 4) and sliding guide (3, Fig. 4) up or down as necessary to keep the guide as close to the work as possible.

The PUSHER PLATE is to be used when cutting short ends, thus keeping operator's hands away from saw blade.

The GAUGE PLATE (2, Fig. 3) is used to cut slices of uniform thickness.

All doors and inspection covers MUST be in operating (closed) position while machine is running.

OPERATION

CONTROLS

The SWITCH KNOB (1, Fig. 2) must be pulled to start the machine, thus eliminating accidental starting by bumping the knob. To turn machine OFF, push knob in.

SAWING

Place item to be cut on the carriage (10, Fig. 3) and turn saw ON by pulling switch knob (1, Fig. 2). Stand in front of machine, leaning lightly against the scalloped front of the carriage. Move the carriage to the left, past the saw blade (11, Fig. 3), at a steady and uniform rate. Use your left hand to remove and stack product as it is cut. NEVER REACH IN FRONT OF BLADE. Always reach around the left side or in back of saw blade. On the return stroke, pull the item back and away from saw blade.

To cut slices of uniform thickness, set the gauge plate (2, Fig. 3) at the desired position by turning the adjusting knob (3, Fig. 3). A scale is etched on the table.

If the gauge plate is not needed and interferes with work, it may be moved out of the way. Lift the adjusting knob, to disengage the teeth, and slide the gauge plate to the rear of the machine or raise the gauge plate to a vertical position and slide to a convenient location.

An adjustable gauging pin permits the operator to slide the gauge plate out of the way and then back to the original position at a later time. To set the pin, adjust the gauge plate to the desired position by turning hand knob. Loosen the gauging pin hand knob (4, Fig. 3) and slide the pin against the gauge plate support stop. Tighten the gauging pin hand knob.

The pusher plate is used to hold meat against the gauge plate when slicing short ends. Dowels in the pusher plate maintain the necessary alignment with the raised edge of the carriage. A stop on the carriage prevents over-travel. By holding the pusher plate handle with the right hand, a safe distance from the blade will always be maintained. Store the pusher plate on the underside of the carriage support (6, Fig. 3) when not in use.

If locked carriage operation is desired, align the right edge of the carriage with the right edge of the table. Turn the spring loaded carriage lock (2, Fig. 2) until it snaps into place.

MAINTENANCE

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

CLEANING AND SANITIZING

It is recommended that the saw be thoroughly cleaned and sanitized after each day's operation or anytime it is not to be used for an extended period of time (over night).

Supplies

Recommended cleaning and sanitizing supplies include: a 12" handle nylon bristle brush; a two compartment pail for cleaning solutions; a pail and spray bottle for sanitizer; a scrap pail; and clean cloths.

Solutions

For cleaning, a powdered detergent such as Soilax or Spic 'n' Span is recommended. Do not use liquid soaps as they can corrode metal surfaces. Prepare a hot detergent solution in one side of the two compartment pail. Fill the other compartment with warm potable rinse water.

Mix a sanitizing solution by adding one tablespoon of household bleach (5.25%) or an iodophor sanitizer, such as Iodet, to one gallon of cool water in a pail. This makes a 200 ppm solution. Use this solution to fill the spray bottle, as well as the pail, for sanitizing.

Disassembly

Release carriage lock.

Turn (at either end) the "L" shaped carriage stop (7, Fig. 1) and remove carriage.

Rotate gauge plate (2, Fig. 3) to raised (vertical) position.

Release table clamp (5, Fig. 2). Pull the table to the left until tongue is clear of the slot. Tilt the table on its side, blade side edge up and remove from under saw head.

Open and lift off head door (1, Fig. 3). Open and lift off base door (7, Fig. 3). Remove scrap pan.

Swing nylon guard (1, Fig. 5) up and lift front wiper assembly (7, Fig. 5) from machine.

Turn tension adjusting hand wheel (5, Fig. 4) to the left, releasing blade tension. Remove blade.

Loosen upper wiper unit hand knob (6, Fig. 4) several turns. Bump knob with palm of hand to free stud. Remove hand knob and remove upper wiper unit (6, Fig. 1).

Open pulley retaining latches (2, Fig. 1) and slide the upper and lower blade pulleys from shafts. NOTE: Pulleys are interchangeable.

All removed parts can be cleaned and sanitized in a sink. Clean and sanitize machine, starting at the top and working down.

Washing

Remove any large scraps of product and place in scrap pail. Dip a clean cloth in the detergent solution, wring it out, and thoroughly wash each component. Use the brush for hard to reach or stubborn soil. Use care to thoroughly clean interior corners of pulley housings. Using a second clean cloth in the rinse water, thoroughly rinse each component immediately after washing.

Sanitizing

Soak a clean cloth in the sanitizing solution. Wring cloth out so that when wiping parts they are left moist, but not dripping wet. Thoroughly wipe all surfaces. Resoak and wring out cloth frequently. Use the spray bottle to sanitize hard to reach spots by spraying a light mist on all surfaces. Do not wipe surfaces dry after sanitizing. Allow adequate time to dry.

Reassembly

Prior to reassembly a light coating of tasteless mineral oil should be applied to all surfaces. Reassembly is a reversal of disassembly. Machine should be covered when stored.

Clean Up

Rinse all buckets, brush, the spray bottle and any other tools in the remaining detergent and sanitizing solutions. Store cleaning tools in a proper storage location. The cleaning cloths used should be sent to a laundry for cleaning or discarded.

NOTE: Hydraulic cleaning equipment is available through private suppliers. If such equipment is used, follow supplier's instructions.

LUBRICATION

Little lubrication is required as all high speed shafts have prepacked bearings.

A small amount of grease is required in the six ball bearing rollers of the carriage. Regularity of lubrication will depend on amount of use.

Frequently apply a few drops of oil to: the gauge plate rack (5, Fig. 3); upper blade slide rod (12, Fig. 3); and pulley shafts. Check to assure each component moves freely.

SAW BLADE REPLACEMENT

DISCONNECT ELECTRICAL POWER SUPPLY and move the carriage (10, Fig. 3) to the left-hand carriage stop. Raise the gauge plate (2, Fig. 3) to the vertical positon. Release the table clamp (5, Fig. 2). Pull the table to the left until the tongue is clear of the slot. Tilt the table on its side, blade side edge up and remove from under saw head. Swing nylon guard up (1, Fig. 5). Open head door (1, Fig, 3).

Turn tension adjusting hand wheel (5, Fig. 4) to the left, releasing blade tension. Remove blade.

Install new blade over upper and lower blade pulleys. The blade teeth must point to the RIGHT and DOWN. If the teeth do not point DOWN, remove the blade, twist it inside out and replace on saw. Make sure the blade is properly placed in the upper guide and rear wiper units.

Turn the tension adjusting hand wheel (5, Fig. 4) to the right until the figure "3" starts to appear in the tension indicator (1, Fig. 4). Turn the upper blade pulley (1, Fig. 1), by hand, until the blade centers itself on the pulleys.

Turn the tension adjusting hand wheel (5, Fig. 4) slowly to the right until the indicator registers "4" at eye level. This is the maximum operating tension for the blade.

The remainder of assembly is a reversal of disassembly.

BLADE BACK-UP BLOCK ADJUSTMENT

Clearance between back-up blocks and blade should be approximately 1/32". The clearance should always be checked after blade installation.

Energize machine momentarily to allow blade to seat. Turn machine OFF. **DISCONNECT ELECTRICAL POWER SUPPLY** and measure the distance from the left edge of the blade to the back-up blocks, located in upper and lower blade guide units. If the clearance is not approximately 1/32" an adjustment will be necessary.

To adjust upper back-up block, loosen lock nut (4, Fig. 4) and turn screw as necessary. Tighten lock nut. To adjust lower back-up block, loosen lock nut and turn screw as necessary. Tighten lock nut.

Re-energize machine momentarily. **DISCONNECT ELECTRICAL POWER SUPPLY** and recheck clearance. Repeat procedure as required.

PULLEY WIPER ADJUSTMENT

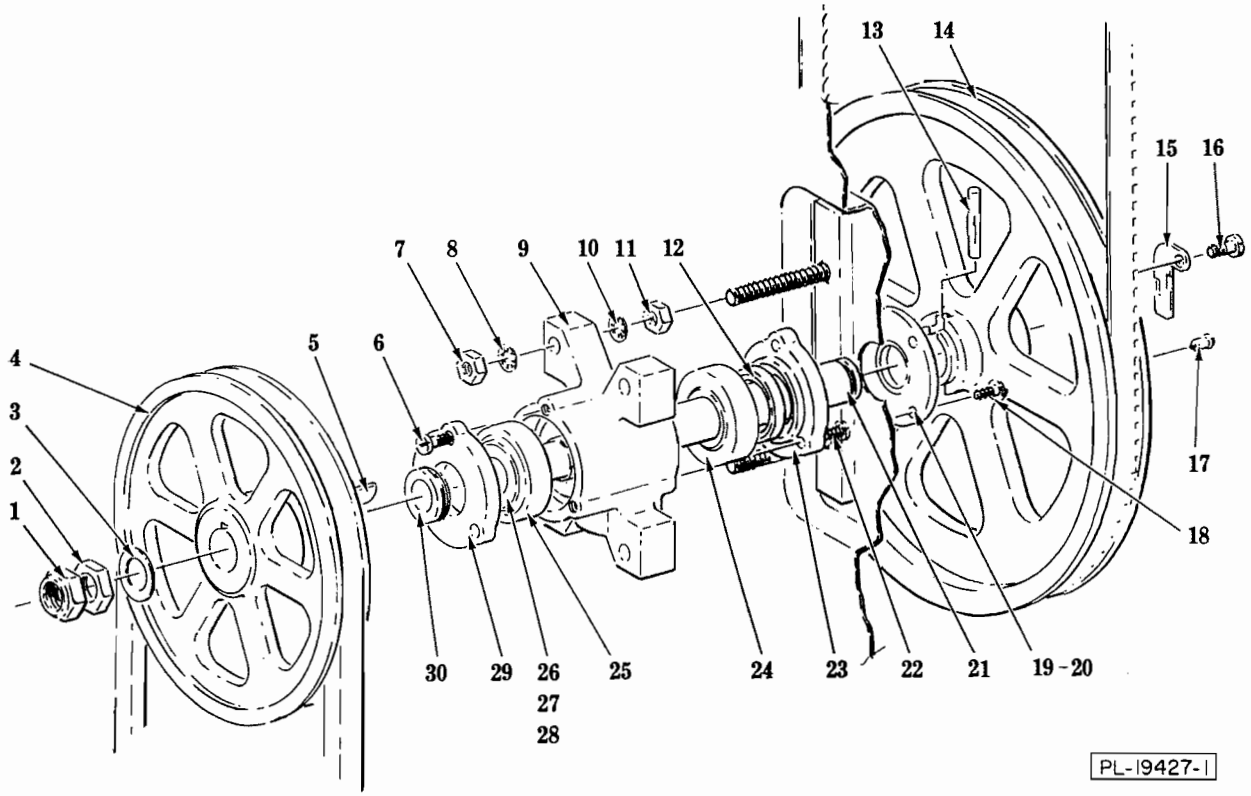
The upper (6, Fig. 1) and lower (3, Fig. 5) pulley wipers should be aligned so that they track squarely in the center of the pulley.

To adjust **DISCONNECT ELECTRICAL POWER SUPPLY.** Remove the table and open the head door to gain access to the pulleys. Make a visual inspection to determine direction and amount of adjustment required. Loosen the two retaining screws (3, Fig. 5), position wiper(s) and retighten. Momentarily energize machine to verify adjustment.

BLADE SCRAPER ADJUSTMENT

Correct adjustment is achieved when scrapers are slightly behind the blade teeth while the blade is resting against the back-up blocks.

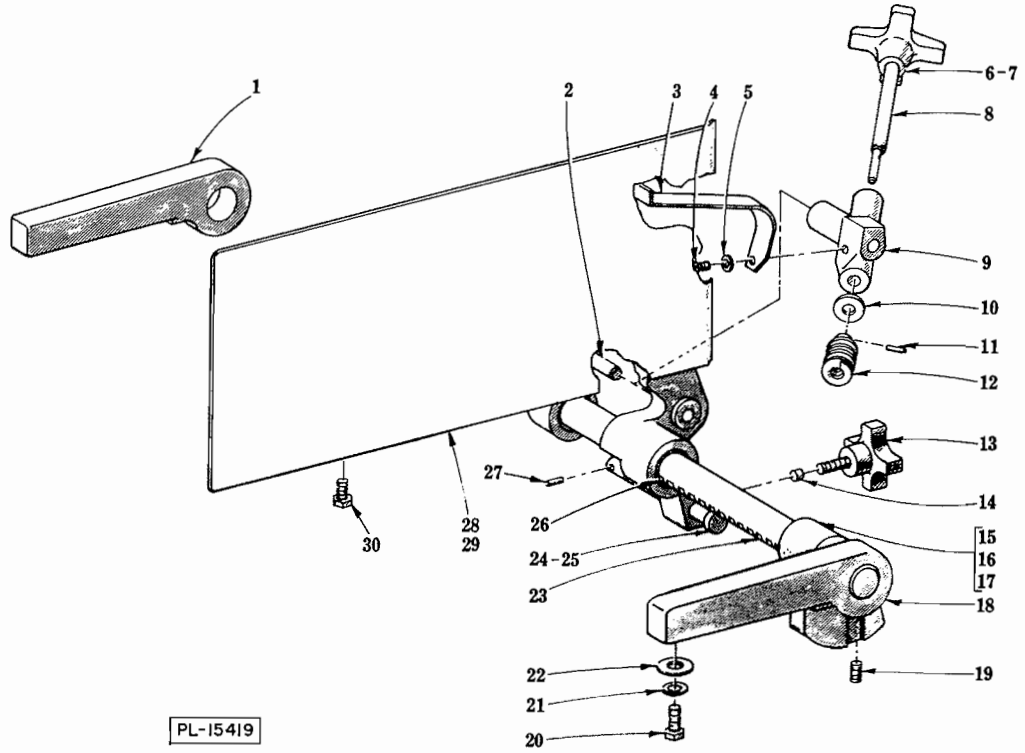
To adjust, **DISCONNECT ELECTRICAL POWER SUPPLY.** Remove the table and open the head door. Remove the upper blade scraper unit (6, Fig. 1) and lower guide and scraper unit (7, Fig. 5). Loosen the scraper retaining screws (4, Fig. 5) so that the scraper can be moved by pushing against it. Replace the units. With a piece of wood, push the blade against the back-up blocks. Position the scrapers. Remove the guide units and tighten the retaining screws. Replace guide units, table, and close head door.



LOWER BEARING CARRIER UNIT

LOWER BEARING CARRIER UNIT

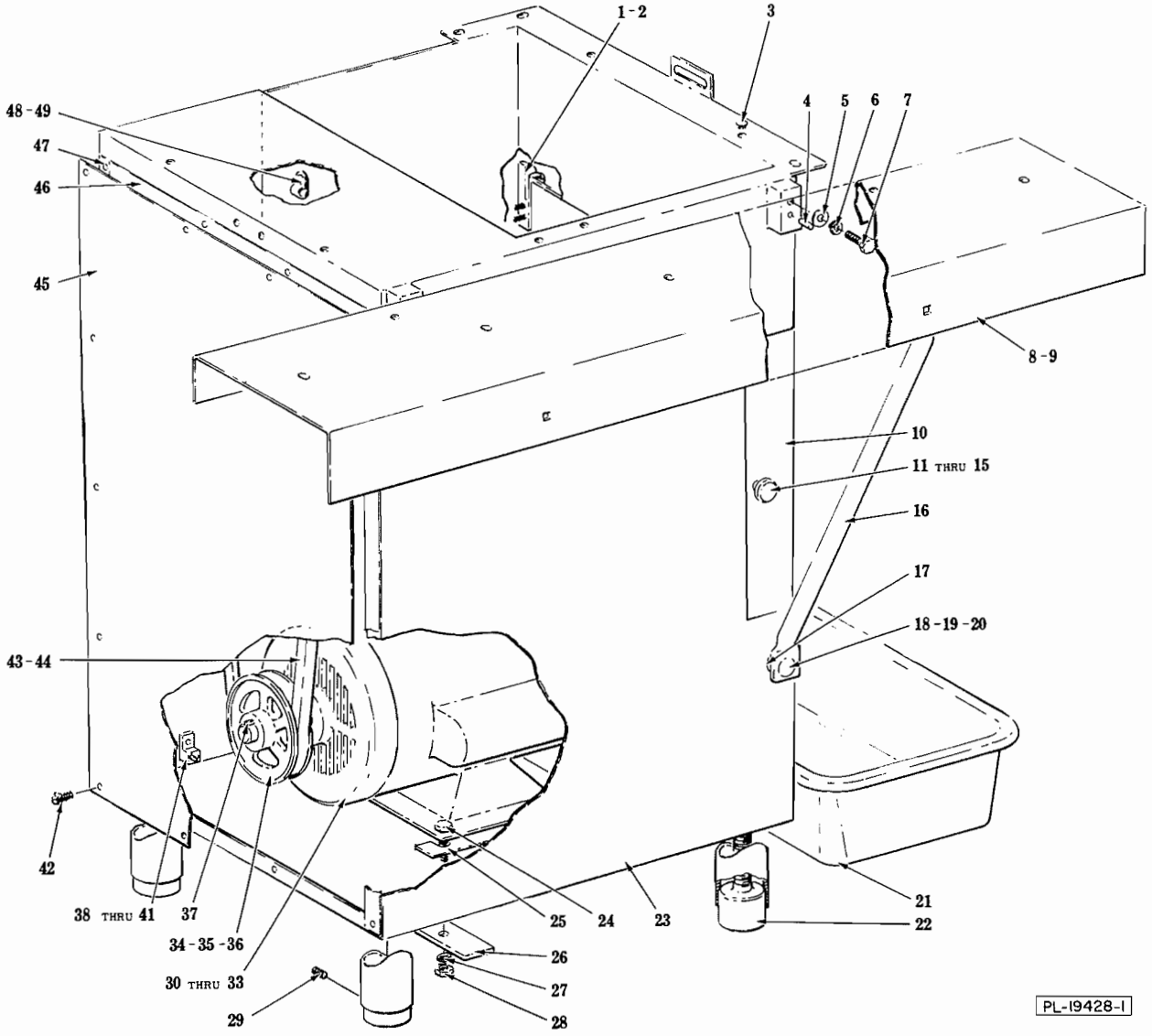
ILLUS. PL-19427-1	PART NO.	NAME OF PARTS	AMT.
1	NS-31-43	Stop Nut ¾-16 "Elastic"	1
2	NS-17-49	Jam Nut ¾-16 Hex Fin	1
3	WS-29-12	Washer	1
4	121033	"V" Pulley - Bearing Carrier (7¾ O.D.)	1
5	KW-3-15	Key - #807 Woodruff	1
6	SC-12-69	Mach. Screw ¼-20 x ½ Fil. Hd	3
7	NS-13-30	Full Nut ½-13 Hex Fin	4
8	WL-8-31	Lock Washer ½ Int. Shakeproof	4
9	114562	Carrier - Lower Bearing	1
10	WL-8-31	Lock Washer ½ Int. Shakeproof	4
11	NS-13-30	Full Nut ½-13 Hex Fin	4
12	71403	Seal - Grease	1
13	122922	Groov-Pin - Special	1
14	72362	Flanged Pulley Assy. (Blade) (Incls. items 15, 16 & 17)	1
15	20852	Latch	1
16	20851	Screw - Latch	1
17	79686	Catch - Friction	1
18	SD-32-15	Self-Tapping Screw 10-32 x ⅜ Indented, Hex Washer Hd., Type TT	4
19	77510-2	Washer & Seal Assy. (Incls. item 20)	1
20	77511	Seal - Diaphragm	1
21	117017	Shaft - Lower Bearing Carrier	1
22	SC-12-69	Mach. Screw ¼-20 x ½ Fil. Hd	3
23	77319	Bearing Cap & Seal Assy. (Incls. item 12)	1
24	BR-2-20	Roller Bearing - Cone & Cap Assy	1
25	BR-2-27	Roller Bearing - Cone & Cap Assy	1
26	123192-1	Washer - Shim (.002" Thk.)	AR
27	123192-2	Washer - Shim (.005" Thk.)	AR
28	123192-3	Washer - Shim (.008" Thk.)	AR
29	114561	Cap - Lower Bearing Carrier ("V" Belt Side)	1
30	114583	Conveyor - Lower Bearing Carrier Grease	1
	117022-1	Lower Bearing Carrier Assy. (Incls. items 6, 9 & 21 thru 30)	1



GAUGE PLATE UNIT

GAUGE PLATE UNIT
(5212 ONLY)

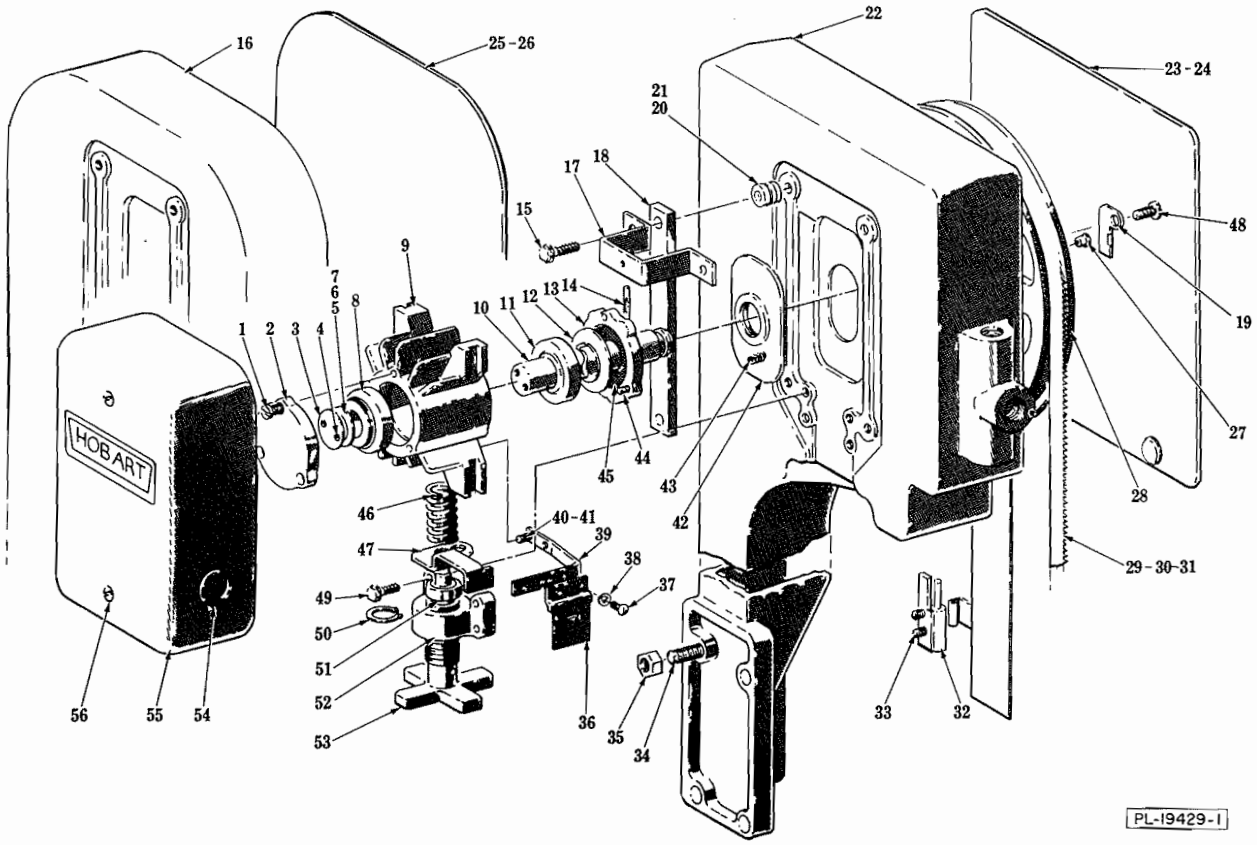
ILLUS. PL-15419	PART NO.	NAME OF PARTS	AMT.
1	77958-1	Bracket - Gauge Plate Support (Rear)	1
2	77235	Pin	1
3	77848	Spring - Gauge Plate	1
4	SC-21-14	Mach. Screw 8-32 x 3/8 Rd. Hd	1
5	WL-6-1	Lock Washer 8 Light	1
6	118551	Knob	1
7	SC-111-5	Set Screw 1/4-20 x 1/4 Soc. Hds., Kn. Cup Pt. "Nylok"	1
8	77843	Shaft - Worm	1
9	83481	Worm Bracket & Bearing Assy	1
10	WS-18-36	Washer	1
11	PG-7-7	Groov-Pin - Type E, 1/8 x 7/16	1
12	20887	Worm	1
13	118958-1	Knob - Positioning	1
14	78920	Slug	1
15	SC-47-1	Set Screw 10-24 x 3/16 Soc. Hdls., Cup Pt	2
16	78168-1	Spacer (Front)	1
17	78168-2	Spacer (Rear) (Not Shown)	1
18	78915-1	Bracket - Gauge Plate Support (Front)	1
19	SC-103-10	Set Screw 5/16-18 x 3/8 Soc. Hdls., Cup Pt. "Unbrako/Loc-well"	2
20	SC-62-44	Cap Screw 5/16-18 x 3/4 Hex Hd	4
21	WL-3-47	Lock Washer 5/16 Medium	4
22	WS-17-16	Washer	4
23	78167	Rack - Gauge Plate	1
24	85397	Gauging Pin	1
25	WS-18-36	Washer	1
26	74424	Bushing - Gauge Plate	2
27	PG-11-2	Groov-Pin - Type E, 7/64 x 1/2	1
28	124056-1	Gauge Plate Assy. (SST) (USDA) (Incls. items 26 & 29)	1
29	NS-25-4	Acorn Nut 1/4-20	6
30	79155	Bolt (Special)	1
	120139-2	Gauge Plate Assy. (SST) (Incls. items 2 thru 14, 24, 25, 27, 28 & 30)	1
	77846	Worm Bracket Assy. (Incls. items 3 thru 12)	1


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BASE UNIT

BASE UNIT

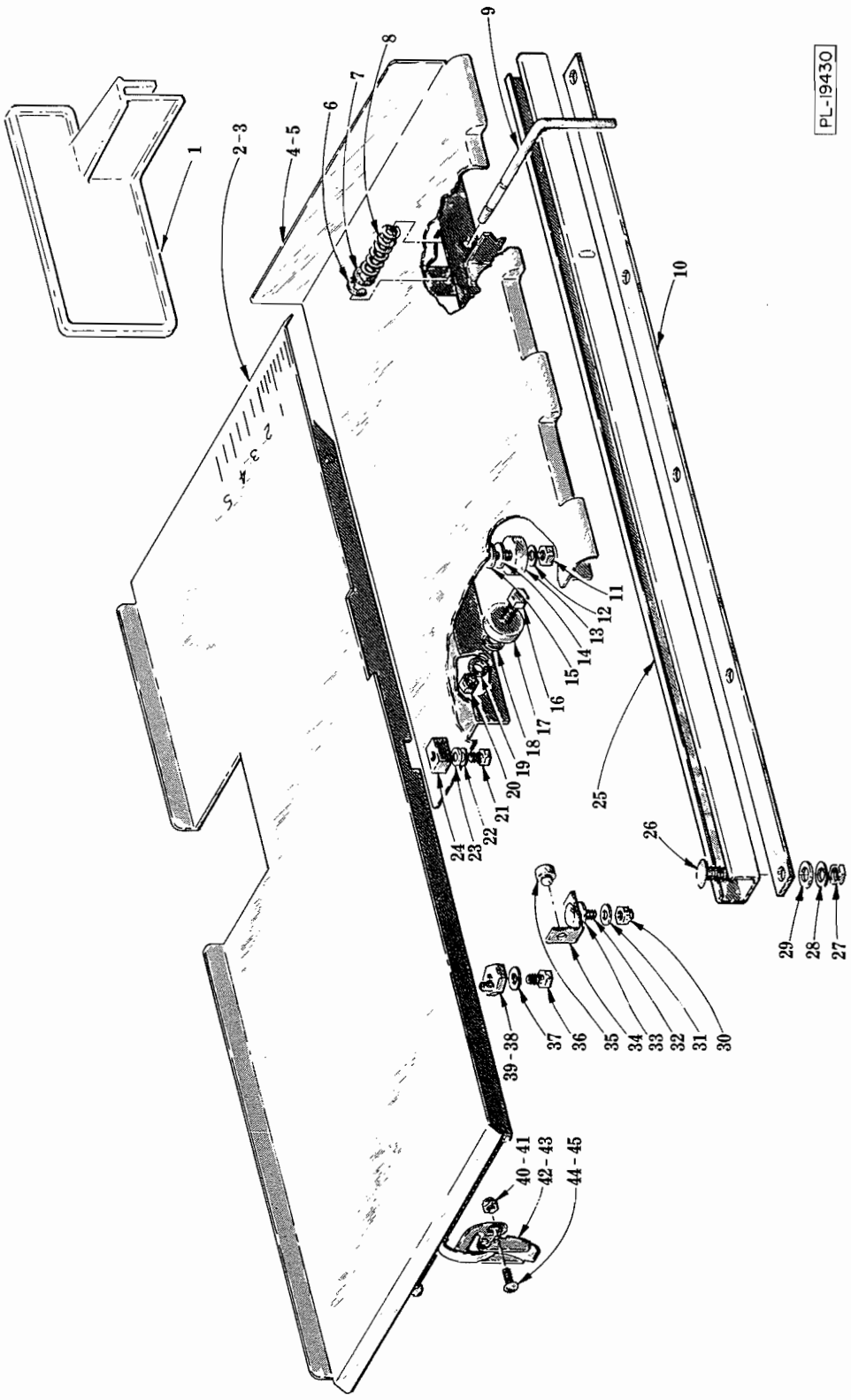
ILLUS. PL-19428-1	PART NO.	NAME OF PARTS	AMT.
1	78917	Bracket - Hinge	2
2	SD-24-29	Self-Tapping Screw 10-32 x ¾ Phil. Flat Hd., Type TT	4
**3	PB-2-16	Plug Button (5/16)	4
4	PG-11-3	Groov-Pin - Type D, 5/16 x ¾	2
5	WS-18-8	Washer	2
6	WL-4-4	Lock Washer ⅜ Light	2
7	SC-62-43	Cap Screw ⅜-16 x ¾ Hex Hd	2
*8	290664-1	Carriage Support Assy	1
**9	290664-2	Table Extension Support (Not Shown)	1
10	77204-1	Base Door Assy	1
11	120039	Knob - Door	1
12	68176	Clip - Spring	1
13	SC-8-9	Mach. Screw 10-24 x ⅜ Rd. Hd	2
14	WL-13-11	Lock Washer 10 Int. Shakeproof	2
15	NS-9-22	Mach. Nut - 10-24 Hex	1
16	78993-1	Brace - Carriage Support	2
17	74888-1	Washer - Shim	2
18	SC-82-38	Carriage Bolt ⅜-16 x 1	4
19	WL-4-4	Lock Washer ⅜ Light	4
20	NS-13-25	Full Nut ⅜-16 Hex Fin	4
21	104075	Pan - Meat Scrap	1
22	290349	Foot & Insert Assy	4
23	115183	Base Unit Assy. (Incls. items 1 & 2)	1
24	SC-36-71	Cap Screw ⅜-16 x 1¼ Hex Hd	4
25	122706	Shim - Motor	AR
26	78992	Reinforcement - Base	2
27	WL-4-4	Lock Washer ⅜ Light	4
28	NS-13-25	Full Nut ⅜-16 Hex Fin	4
29	SC-111-5	Set Screw ¼-20 x ¼ Soc. Hdls. Kn. Cup Pt. "Nylok"	4
30	278201-1	Motor (115/220-230 V., 60 Hz., 1 Ph.) (Incls. item 37)	1
31	294121	Motor (200-230/460 V. 60 Hz., 3 Ph.) (Incls. item 37)	1
32	278201-3	Motor (115/220-240 V. 50 Hz., 1 Ph.) (Incls. item 37)	1
33	118284-3	Motor (220-240/380-415 V. 50 Hz., 3 Ph.) (Incls. item 37)	1
34	67309-1	"V" Pulley - Motor (4.80" O.D.) (60 Hz.) (Incls. item 36)	1
35	85405-1	"V" Pulley - Motor (5.95" O.D.) (50 Hz.) (Incls. item 36)	1
36	SC-47-32	Set Screw 5/16-18 x 5/16 Soc. Hdls., Cup Pt	1
37	12430-62	Key	1
38	118544-1	Lug - Solderless	1
39	WL-13-11	Lock Washer 10 Int. Shakeproof	2
40	NS-11-18	Mach. Nut 10-24 Hex	4
41	122577-2	Retainer - Wiring	1
42	SD-32-15	Self-Tapping Screw 10-32 x ⅜ Hex Washer Hd., "Type TT"	14
43	BV-4-22	"V" Belt (60 Hz.)	1
44	121032-2	"V" Belt (50 Hz.)	1
45	109937	Motor Access Panel & Gasket Assy. (Incls. item 46 & 47)	1
46	107168	Gasket (Long)	2
47	103193	Gasket (Short)	2
48	78752-4	Clamp - Wiring	2
49	NS-9-22	Mach. Nut 10-24 Hex	2



HEAD UNIT

HEAD UNIT

ILLUS. PL-19429-1	PART NO.	NAME OF PARTS	AMT.
1	SC-12-69	Mach. Screw ¼-20 x ½ Fil. Hd	3
2	67210	Cap - Bearing	1
3	67241	Retainer - Bearing	1
4	SC-99-4	Cap Screw 10-24 x ½ Flat Hd. "Eslok"	2
5	103036-1	Washer - Shim (.002" Thk.)	AR
6	103036-2	Washer - Shim (.005" Thk.)	AR
7	103036-3	Washer - Shim (.008" Thk.)	AR
8	BR-2-27	Roller Bearing - Cone & Cup Assy	1
9	103022	Carrier - Upper Bearing	1
10	117019	Shaft - Upper Bearing Carrier	1
11	BR-2-27	Roller Bearing - Cone & Cup Assy	1
12	103290	Plate - Bearing Carrier	1
13	103029	Cap - Bearing Carrier	1
14	122922	Groov-Pin - Special	1
15	SD-33-60	Self-Tapping Screw ⅜-16 x 1⅜ Hex Washer Hd., Type TT	4
16	75872-3	Head & Magnetic Catch Assy. (Round Corners)	1
17	67147	Cover Bracket & Weld Nut Assy	2
18	67187	Gib - Upper Bearing Carrier	2
19	20852	Latch	1
20	123176-3	Spacer - Bearing Carrier (Upper)	2
21	123176-4	Spacer - Bearing Carrier (Lower)	2
22	75892-7	Head & Magnetic Catch Assy. (Square Corners)	1
23	121542-1	Door Assy. (Sq. Head) (60 Hz.)	1
24	121542-2	Door Assy. (Sq. Head) (50 Hz.)	1
25	77278-1	Door Assy. (Rd. Head) (60 Hz.)	1
26	77278-2	Door Assy. (Rd. Head) (50 Hz.)	1
27	79686	Catch - Friction	1
28	72362	Flanged Pulley Assy. (Blade) (Incls. items 19, 27 & 48)	1
29	124444-1	Blade - Meat Saw (.020" - 4T) (Standard)	1
30	118432	Blade - Meat Saw (.020" - 2T) (Poultry)	1
31	124444-2	Blade - Meat Saw (.041" - 3T) (Frozen Fish)	1
32	78917	Bracket - Hinge	2
33	SC-20-15	Mach. Screw 10-24 x ⅞ Phil. Flat Hd	4
34	SC-40-33	Cap Screw ½-13 x 1¼ Soc. Fil. Hd	4
35	NS-41-9	Lock Nut ½-13 "Eslok"	4
36	67249	Plate - Blade Tension Sight	1
37	SC-7-71	Mach. Screw 10-24 x ¼ Rd. Hd	2
38	WL-3-22	Lock Washer 10 Light	2
39	75817	Bracket - Tension Indicator	1
40	SC-90-45	Cap Screw 10-24 x ⅜ Hex Hd	2
41	WL-3-22	Lock Washer 10 Light	2
42	103288	Shield - Bearing Carrier	1
43	75837	Spring - Detent	2
44	SC-12-69	Mach. Screw ¼-20 x ½ Fil. Hd	3
45	103178	Seal - Grease	1
46	20867	Spring - Blade Tension	1
47	75816	Indicator - Tension	1
48	20851	Screw - Latch	1
49	SD-33-66	Self-Tapping Screw 5/16-18 x 1¼ Hex Washer Hd., Type TT	4
50	RR-4-8	Retaining Ring	1
51	BB-13-1	Thrust Bearing - Nice #603	1
52	75897	Nut - Blade Tension Adjusting	1
53	120469-1	Hand Wheel & Screw Assy	1
54	75656	Window Unit	1
55	120830	Cover & Window Assy. (Incls. item 54)	1
56	SD-31-1	Self-Tapping Screw 10-24 x ⅝ Truss Hd. "Powerloc"	1
	114627	Upper Bearing Carrier & Spring Assy. (Incls. items 1 thru 14 & 42 thru 45)	1

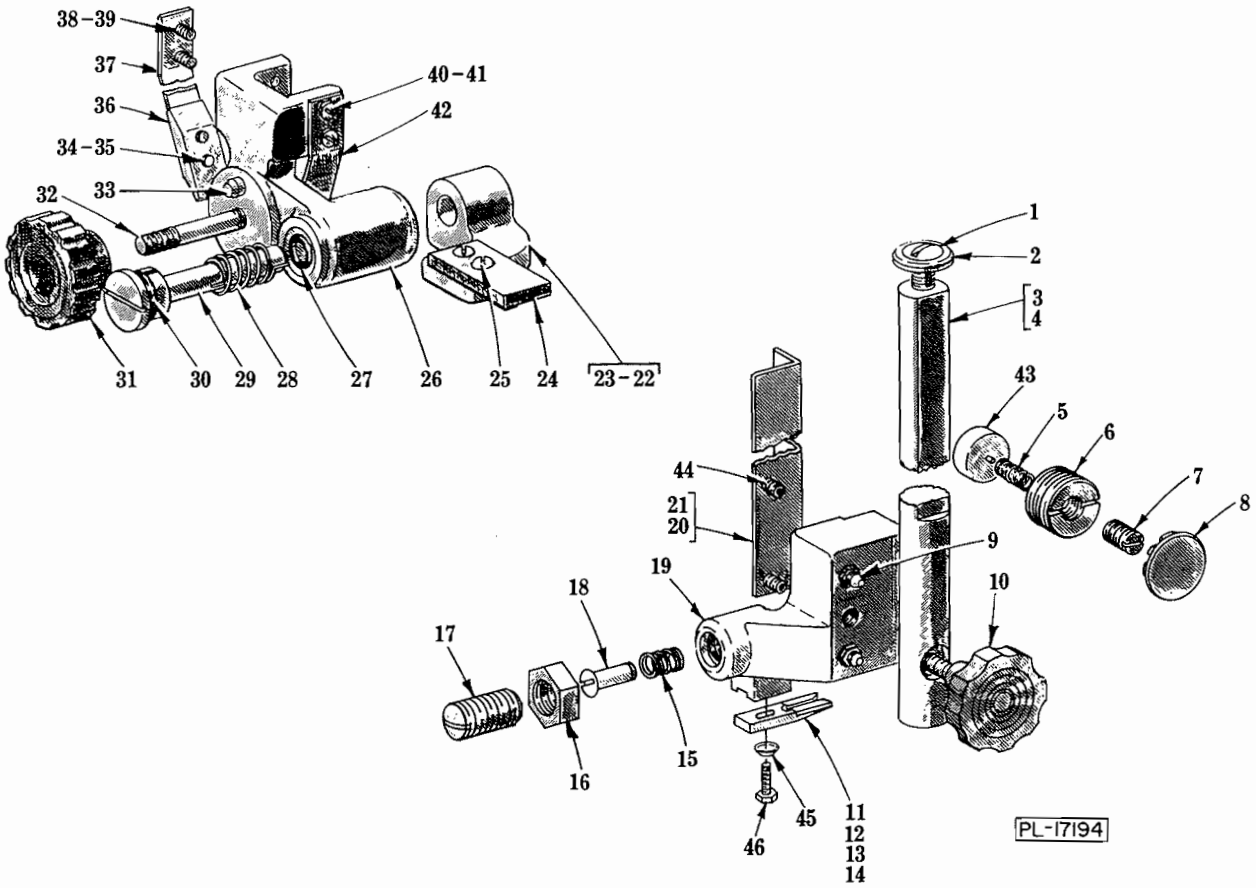


TABLE, CARRIAGE AND TRACK UNIT

TABLE, CARRIAGE AND TRACK UNIT

ILLUS. PL-19430	PART NO.	NAME OF PARTs	AMT.
*1	291435	Pusher Plate Assy	1
*2	77136	Table Assy	1
**3	80923	Table Assy. (Not Shown)	1
*4	123879	Carriage Assy	1
**5	80915	Table Extension Assy. (Not Shown)	1
*6	RR-11-9	Retaining Ring	2
*7	WS-17-8	Washer	1
*8	123343	Spring - Carriage Locking	1
*9	124016	Bar - Carriage Locking	1
*10	77202	Spacer	1
*11	NS-13-25	Full Nut 3/8-16 Hex Fin	2
*12	WL-4-6	Lock Washer 3/8 Medium	2
*13	BB-8-11	Ball Bearing - Nice #SK-T2198	2
*14	WS-18-34	Washer (.010" Thk.)	4
*15	WS-18-14	Washer (3/64" Thk.)	2
*16	SC-37-73	Cap Screw 3/8-16 x 1 Hex Hd	4
*17	BB-8-11	Ball Bearing - Nice #SK-T2198	4
*18	WS-18-5	Washer	4
*19	WL-4-6	Lock Washer - 3/8 Medium	4
*20	NS-13-25	Full Nut 3/8-16 Hex Fin	4
21	SC-62-54	Cap Screw 1/4-20 x 3/4 Hex Hd	1
22	WL-3-38	Lock Washer 1/4 Medium	1
23	WS-22-9	Washer	1
24	78924	Locator	1
*25	124465	Carriage Guide Assy	1
*26	SC-94-20	Carriage Bolt 5/16-18 x 1	5
*27	NS-13-14	Full Nut 5/16-18 Hex Fin	5
*28	WL-3-47	Lock Washer - 5/16 Medium	5
*29	WS-17-16	Washer	5
*30	NS-31-29	Stop Nut 5/16-18 "Elastic"	2
*31	70087	Washer - Spring	2
*32	SC-94-20	Carriage Bolt 5/16-18 x 1	2
*33	WS-18-34	Washer	2
*34	86049	Stop - Carriage	2
*35	77318	Bumper - Carriage Stop	2
36	SC-62-53	Cap Screw 1/4-20 x 1/2 Hex Hd	AR
37	WL-3-38	Lock Washer 1/4 Medium	AR
38	67153	Table Rest Assy. (Back Table)	4
**39	102285	Table Rest (Front Table) (Not Shown)	4
40	NS-31-10	Stop Nut 10-24 "Elastic"	2
**41	NS-31-12	Stop Nut 10-24 "Elastic"	4
*42	67319	Clamp - Table	1
**43	67319	Clamp - Table	2
44	SC-10-36	Mach. Screw 10-24 x 5/8 Truss Hd	2
**45	SC-10-33	Mach. Screw 10-24 x 1/2 Truss Hd	4
	*123878-1	Carriage Unit Assy. (Incls. items 4, 6 thru 9 & 11 thru 20)	1

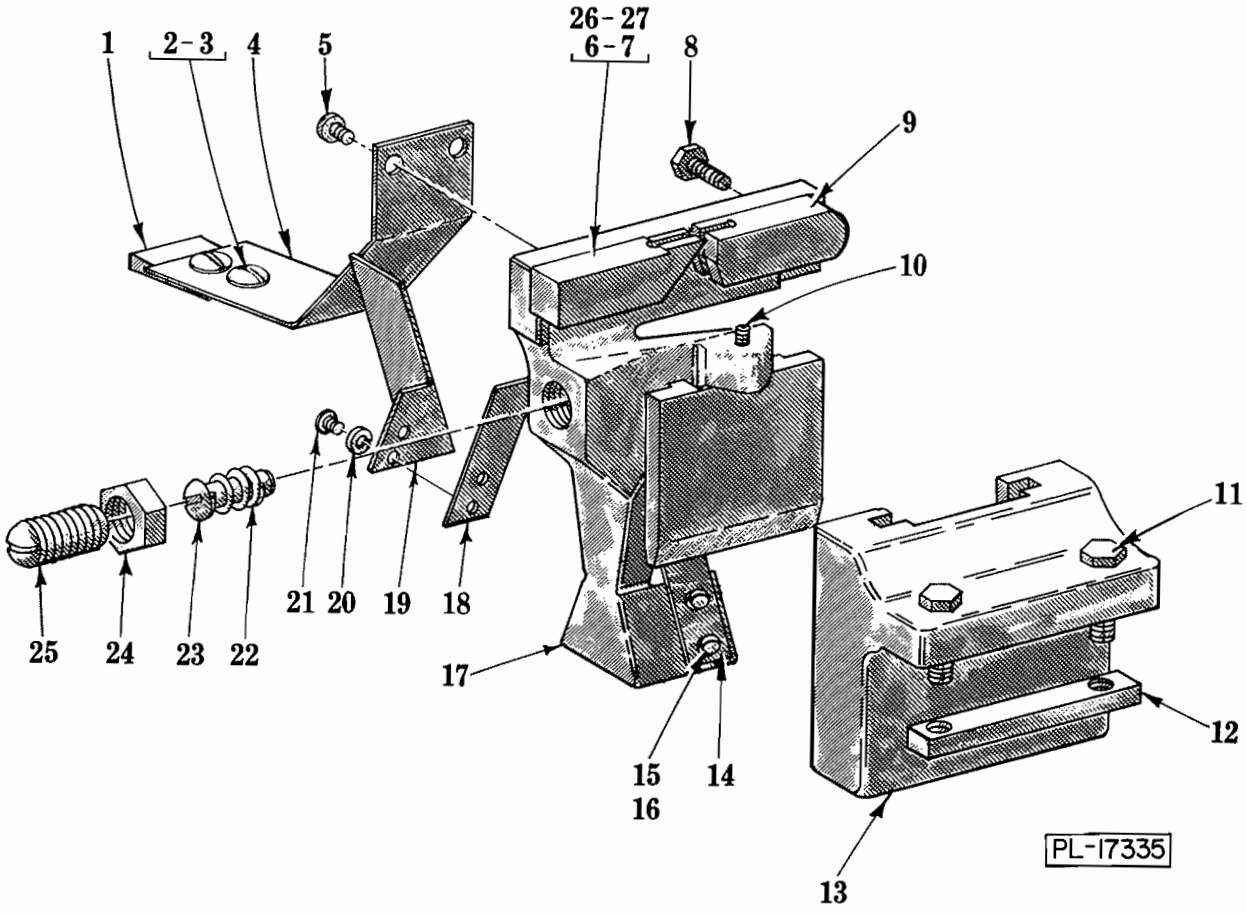
*5212.
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UPPER GUIDE AND PULLEY WIPER UNIT

UPPER GUIDE AND PULLEY WIPER UNIT

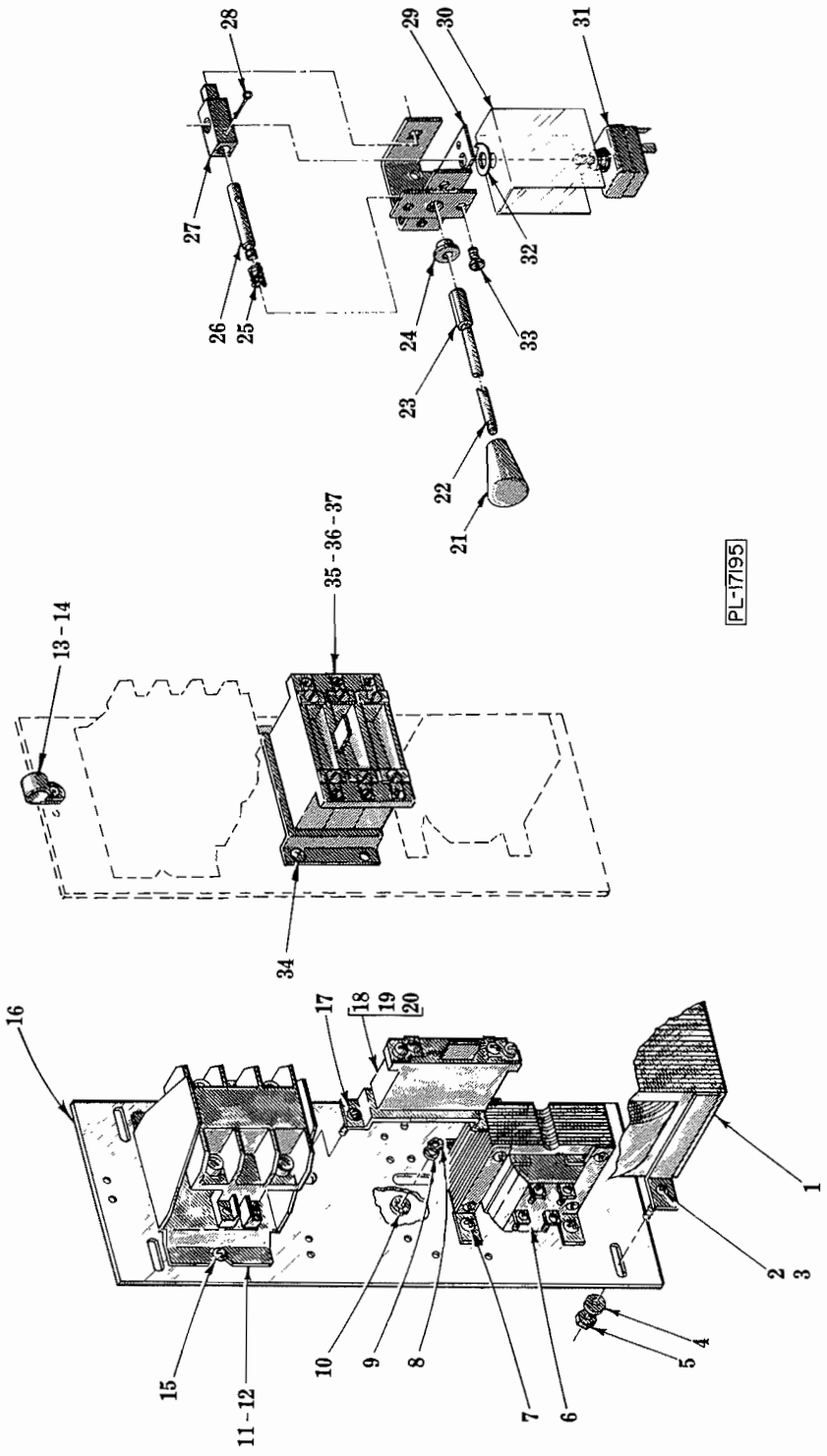
ILLUS. PL-17194	PART NO.	NAME OF PARTS	AMT.
1	SC-53-16	Mach. Screw 5/16-18 x 5/8 Truss Hd	1
2	69849	Stop - Slide Rod	1
3	102321-5	Rod - Upper Blade Guide Slide (18 3/16" Lg.)	1
4	102321-6	Rod - Upper Blade Guide Slide (20 3/8" Lg.)	1
5	75866	Spring - Slide Rod Adjusting	1
6	120140	Screw - Slide rod Adjusting	1
7	SC-63-33	Set Screw 3/8-16 x 3/8 Hdls., Flat Pt	1
8	PB-2-26	Plug Button	1
9	102322	Screw - Adjusting	2
10	120444-1	Knob - Positioning	1
11	101929-4	Guide - Blade (.020" Blade)	1
12	101929-2	Guide - Blade (.014" Blade)	1
13	101929-1	Guide - Blade (.026" Blade)	1
14	101929-3	Guide - Blade (.038" Blade)	1
15	101925	Spring - Back Up Block	1
16	NS-18-33	Jam Nut 9/16-18 Hex Fin	1
17	SC-49-22	Set Screw 9/16-18 x 7/8 Hdls., Flat Pt	1
18	101924	Blade Back Up Block Assy	1
19	113863	Upper Guide Support & Bushing Assy	1
20	120443-1	Guard - Upper Guide Blade (13 7/8 Lg.)	1
21	120443-3	Guard - Upper Guide Balde (16 7/16 Lg.)	1
22	71359	Bracket - Upper Scraper	1
23	SC-88-70	Set Screw 10-24 x 1/4 Soc. Hdls., Kn. Cup Pt	1
24	123886	Wiper - Blade Pulley	1
25	SC-10-33	Mach. Screw 10-24 x 1/2 Truss Hd	2
26	71357	Bracket - Upper Pulley Wiper	1
27	67500-2	"O" Ring	1
28	71364	Spring - Blade Pulley Wiper	1
29	71376	Shaft	1
30	67500-7	"O" Ring	1
31	67315	Knob	1
32	21158	Stud - Upper Wiper Support	1
33	67306	Pin	1
34	SC-21-85	Mach. Screw 8-32 x 3/16 Rd. Hd	4
35	WL-6-1	Lock Washer 8 Light	4
36	110253	Scraper - Blade	2
37	110254	Spring - Scraper Blade	1
38	SC-21-91	Mach. Srew 8-32 x 5/16 Rd. Hd	2
39	WL-6-1	Lock Washer 8 Light	2
40	SC-21-91	Mach. Screw 8-32 x 5/16 Rd. Hd	2
41	WL-6-1	Lock Washer - 8 Light	2
42	110254	Spring - Scraper Blade	1
43	120141	Shoe - Slide Rod	1
44	SC-53-5	Mach. Screw 10-24 x 3/8 Truss Hd	2
45	104573	Washer - Belleville	1
46	SC-67-6	Mach. Screw 10-24 x 1/2 Trimmed Hex Hd	1
	113850-7	Upper Guide & Guard Assy. (.020" Blade) (Incls. items 9, 11, 15 thru 20, 44, 45 & 46)	1
	113850-8	Upper Guide & Guard Assy. (.014" Blade) (Incls. items 9, 12, 15 thru 20, 44, 45 & 46)	1
	113850-9	Upper Guide & Guard Assy. (.020" Blade) (Incls. items 9, 11, 15 thru 19, 21, 44, 45 & 46)	1
	113850-10	Upper Guide & Guard Assy. (.014" Blade) (Incls. items 9, 12, 15 thru 19, 21, 44, 45 & 46)	1
	104609-1	Upper Wiper Bracket & Knob Assy. (Incls. items 22 thru 42)	1



LOWER GUIDE AND WIPER UNIT

LOWER GUIDE AND WIPER UNIT

ILLUS. PL-17335	PART NO.	NAME OF PARTS	AMT.
1	123886	Wiper - Pulley	1
2	SC-53-1	Mach. Screw 10-24 x ¼ Truss Hd	2
3	WS-23-34	Washer	2
4	123808-1	Spring - Pulley Wiper	1
5	SD-15-3	Self-Tapping Screw 10-24 x ¼ Pan Hd., Type TT	2
6	109142-4	Guide - Saw Blade (.020" Blade)	1
7	109142-2	Guide - Saw Blade (.014" Blade)	1
8	SC-41-61	Cap Screw ¼-28 x ¾ Hex Hd	2
9	102653	Guard - Saw Blade	1
10	SC-109-84	Set Screw 10-24 x ⅝ Soc., Hdls., Flat Pt	1
11	SC-41-13	Cap Screw 5/16-18 x 1 Hex Hd	2
12	67702	Plate - Wiper Bracket Retainer	1
13	121161	Slideway - Wiper Bracket	1
14	121170	Scraper - Blade	1
15	SC-21-85	Mach. Screw 8-32 x 3/16 Rd. Hd	2
16	WL-6-2	Lock Washer - 8 Medium	2
17	121660	Lower Wiper Support & Bushing Assy	1
18	121170	Scraper - Blade	1
19	121168	Deflector - Scrap	1
20	WL-6-2	Lock Washer - 8 Medium	2
21	SC-21-85	Mach. Screw 8-32 x 3/16 Rd. Hd	2
22	101925	Spring - Back Up Block	1
23	101924	Blade Back Up Block Assy	1
24	NS-18-33	Jam Nut 9/16-18 Hex Fin	1
25	SC-49-22	Set Screw 9/16-18 x ⅞ Hdls., Flat Pt	1
26	109142-1	Guide - Saw Blade (.026" Blade)	1
27	109142-3	Guide - Saw Blade (.038" Blade)	1
	123846-3	Lower Guide & Wiper Assy. (.020" Blade) (Incls. items 1 thru 6, 8, 9, 10 & 14 thru 25)	1
	123846-4	Lower Guide & Wiper Assy. (.014" Blade) (Incls. items 1 thru 5, 7, 8, 9, 10 & 14 thru 25)	1

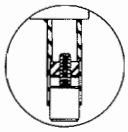


ELECTRICAL UNIT

ELECTRICAL UNIT

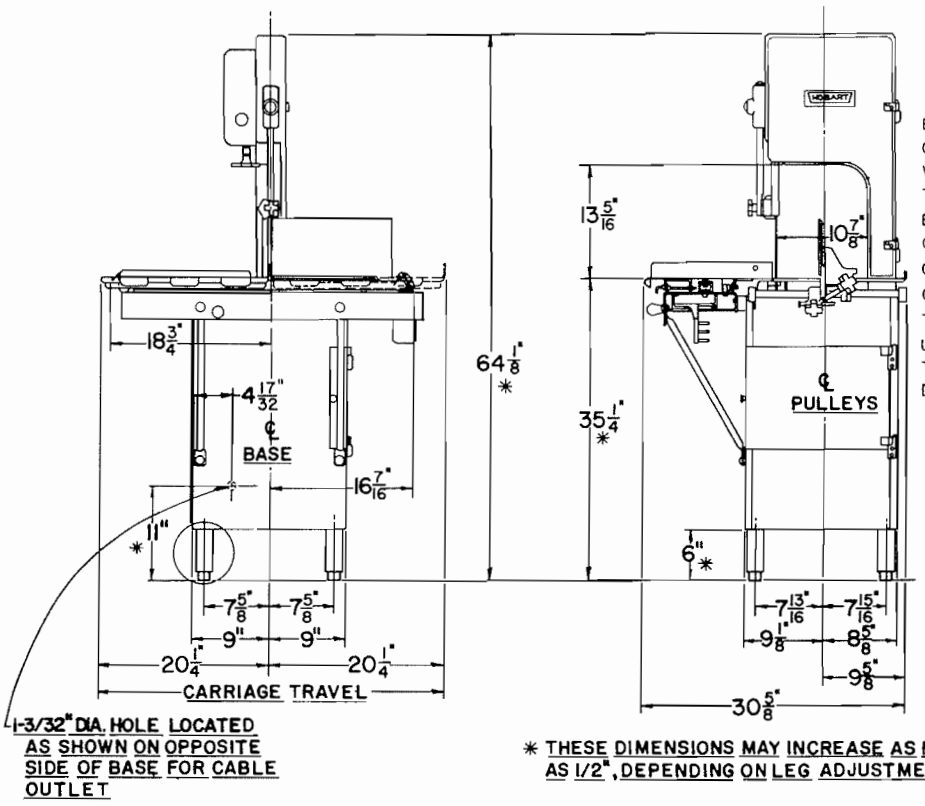
ILLUS. PL-17195	PART NO.	NAME OF PARTS	AMT.
1	83449	Transformer (380 V., 50 Hz., 3 Ph.) (ML-18964 & ML-18965 Only)	1
2	SD-15-40	Self-Tapping Screw 8-32 x 3/8 Phil. Pan Hd., Type TT	2
3	SC-9-61	Mach. Screw 8-32 x 1/2 Rd. Hd	2
4	WL-3-12	Lock Washer 8 Medium	2
5	NS-9-12	Mach. Nut 8-32 Hex	2
6	101935	Transformer (380-415/460 V./Pilot Circuit)	1
7	SD-15-40	Self-Tapping Screw 8-32 x 3/8 Phil. Pan Hd., Type TT	2
8	NS-13-2	Full Nut - 1/4-20 Hex Fin	2
9	WL-3-38	Lock Washer 1/4 Medium	2
10	WS-17-10	Washer	2
11	121926-1	Contactor (W/O Pilot Circuit) (3 Pole) (Incls. item 20)	1
12	121926-2	Contactor (W/Pilot Circuit) (3 Pole) (Incls. item 20)	1
13	78752-4	Clamp	2
14	SD-15-40	Self-Tapping Screw 8-32 x 3/8 Phil. Pan Hd., Type TT	2
15	SD-15-20	Self-Tapping Screw 10-32 x 3/8 Phil. Pan Hd., Type TT	2
16	113861	Panel - Control	1
*17	SD-15-40	Self-Tapping Screw 8-32 x 3/8 Phil. Pan Hd., Type TT	AR
*18	117127	Thermal Overload Relay & Screw Assy. (1 Ph.) (Incls. item 17) (ML-18964 & ML-18965 Only)	1
*19	117127	Thermal Overload Relay & Screw Assy. (3 Ph.) (Incls. item 17) (ML-18964 & ML-18965 Only)	3
*20	— — —	Heater Element - Overload Relay (Give Elec. Spec., Mach. Model & Motor Type) (ML-18964 & ML-18965 Only)	AR
21	120054-1	Knob - Switch	1
22	290155-1	Extension - Switch Rod	1
23	114322-1	Connector - Switch Rod	1
24	80538-1	Bushing - Switch Rod	1
25	121547	Spring - Switch	1
26	124459	Shaft - Switch	1
27	121540-2	Actuator - Switch	1
28	PC-5-8	Cotter Pin	1
29	290156	Switch Bracket Assy	1
30	290058	Insulator	1
31	120388	Switch Assy.	1
32	121827	Ring - Locking	1
33	SC-53-5	Mach. Screw 10-24 x 3/8 Truss Hd	2
34	SD-15-40	Self-Tapping Screw 8-32 x 3/8 Phil. Pan Hd., Type TT	2
*35	88196-6-1	Relay - Thermal Overload (1 Ph.) (ML-31665 & ML-31666 Only)	1
*36	88196-9-1	Relay - Thermal Overload (3 Ph.) (ML-31665 & ML-31666 Only)	1
*37	— — —	Heater Element - Overload Relay (Give Elec. Spec., Mach. Model & Motor Type) (ML-31665 & ML-31666 Only)	AR

*Use with Overload Protection.



ENLARGED VIEW OF LEG SHOWING ADJUSTING FOOT

MACHINE IS PARTIALLY DISASSEMBLED FOR SHIPMENT - CRATED MACHINE WILL PASS THRU A 29" OPENING.



WARNING

ELECTRICAL AND GROUNDING CONNECTIONS MUST COMPLY WITH THE APPLICABLE PORTIONS OF THE NATIONAL ELECTRICAL CODE AND/OR OTHER LOCAL ELECTRICAL CODES.

CONNECTION OF CONDUIT TO BASE MUST BE MADE USING A WATERPROOF FITTING OF PROPER SIZE AND DESIGN.

1-3/32" DIA. HOLE LOCATED AS SHOWN ON OPPOSITE SIDE OF BASE FOR CABLE OUTLET

* THESE DIMENSIONS MAY INCREASE AS MUCH AS 1/2", DEPENDING ON LEG ADJUSTMENT

INSTALLATION DIAGRAM