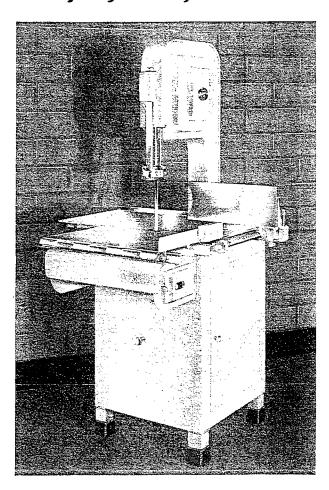
INSTRUCTION MANUAL with Catalog of Replacement Parts

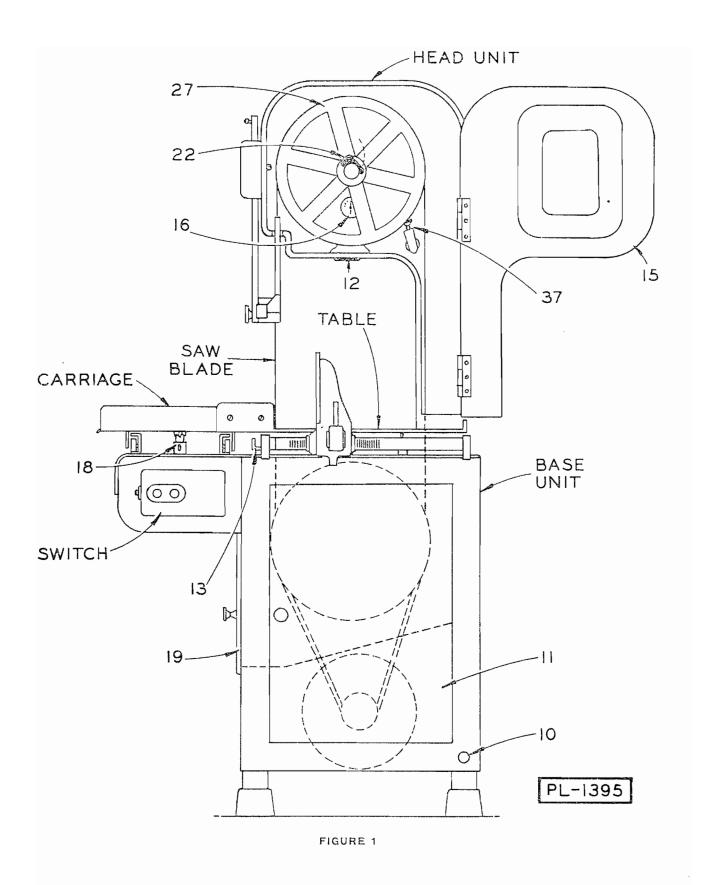


MODEL 5213 MEAT SAW

Specification No. 4864 - A. C. Specification No. 4876 - D. C. (And Model 5313, Specification No. 4865)



THE HOBART MANUFACTURING CO. TROY, OHIO, U. S. A.



Instructions for Model 5213 Meat Saw

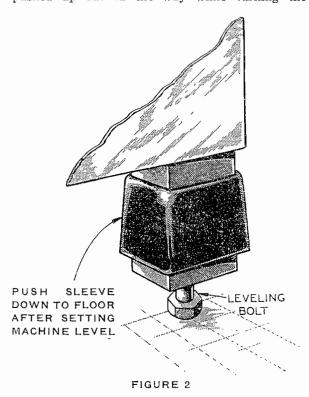
(The same instructions apply to Model 5313 which is similar but has a 11/2 h.p. motor.)

I - UNPACKING

Having removed the shipping box that covers the base unit, the first step is to detach the unit from the skids or base timbers. It is fastened down with four heavy bolts which must be removed from underneath, and it will therefore be necessary to tip the skid assembly to get at them. Discard the washers but DO NOT LOSE THE BOLTS; SCREW THEM BACK INTO THE LEGS. THEY ARE TO BE USED AS LEVELING BOLTS.

II - SETTING UP

(1) Move the machine to the location where it is to be used. Place a spirit level on top of the base unit and adjust the bolts in the legs to suit an uneven floor. The sleeves may be pushed up out of the way while turning the



leveling bolts, (as shown in fig. 2) and, when all four have been adjusted, push the sleeves down in contact with the floor to prevent the entrance of dirt.

- (2) Lower the upper blade pulley by giving the tension adjustment handle 12 (fig. 1) a few turns to the left, swing the guard 17 (fig. 3) down to a horizontal position, and put on a saw blade. The teeth must point to the right and downward when viewed from the front as shown in fig. 6. Turn the tension adjustment handle 12 (fig. 1) to the right until the indicator reads "2". Give the upper pulley 27 a few turns by hand so that the blade centers itself on the pulleys, then turn the tension adjustment handle slowly to the right until the indicator 16 registers between "3" and "4".
- (3) Move the guard 17 (fig. 3) to the vertical position. As this is done, the slot in the bakelite block attached to the guard will straddle the saw blade.
- (4) Put in the lower wiper unit (fig. 4). Before sliding it into place swing up the bakelite guard 21 and see that the saw blade is between the two wipers 20 and in the guide slot of the steel block 36. After sliding the unit into place, close down the bakelite guard 21.
- (5) Put on the table. Squeeze the latch K (fig. 5) and move the gage plate assembly back as far as it will go, then swing it up out of the way. Catches on the underside of the table will engage mating parts on the base, after which the table can be secured by moving the locking handle 13 (fig. 1) to the right. Be sure that the ribs on the table are inside the lugs on the base.
- (6) Put on the carriage. While rolling it into place hold down the plunger 18 (fig. 1). When the plunger is released, stops on top of it will prevent the carriage from rolling off.

III - WIRING

Before connecting to the power line, check the data on the name plate to make sure that the motor is correct for your electric service. The name plate is at N (fig. 6). Connections are already made between the motor and the starting switch, leaving only the connection between the switch and the power lines to be made at installation. Flexible or rigid conduit is recom-

mended for the purpose and a hole 10 (fig. 1) is provided in the base for its entrance. The switch is of the pushbutton type and has thermal overload protection.

A wiring diagram of the switch is attached to the inside of the cover. Be sure to use wire large enough to meet your local code requirements. For long runs, use a larger size.

IV - SAFETY FEATURES

Any edged tool can be a source of danger if not handled properly. This is true even of a butcher knife. The Hobart Saw is provided with safety devices to give maximum protection to the operator. Keep the guards in place at all times.

- (1) UPPER GUIDE ASSEMBLY (fig. 3) Keep as low as the size of the work permits.
- (2) UPPER GUARD 17 (fig. 3) Keep folded up in front of the saw blade.
- (3) SAW BLADE The blade must be neither too tight nor too loose. A setting of "3" to "4" is recommended.
- (4) DOORS Keep all doors closed when the machine is running.
- (5) BUTT-END PUSHER 30 (fig. 5) Use this device as described in paragraph VI and it will be unnecessary to hold your hand near the running saw blade.
- (6) GAGE PLATE The end of the gage plate at 32 (fig. 5) is shaped to give maximum support and protection at this critical point and, at the same time, facilitate the taking off of slices.

V - LUBRICATION

Very little lubrication is required because all the high-speed shafts have ball bearings which are grease-packed and will go a long time without attention.

- (1) Keep a small amount of grease in the six ball bearing rollers on the carriage.
- (2) Apply a few drops of oil occasionally to the gage plate rack 33 (fig. 5) and work the gage plate assembly back and forth a few times.
- (3) Once a week, put a drop or two of oil on the upper and lower pulley wiper plungers 37 (figs. 4 and 1) and the holders to which the two wipers 20 (fig. 4) are attached.
- (4) Once a year have a Hobart Service Man look over the motor and main bearing carriers. He will take out the plugs and inject the correct amount of ball bearing grease.

(5) After washing, oil where necessary.

VI - OPERATION

Place the piece of meat on the carriage and switch on the motor. Stand in front of the machine leaning lightly against the scalloped side of the carriage and move the carriage to the left, past the saw blade, at a steady and uniform rate. Be careful not to cause the saw blade to twist, but hold the meat firmly and cut straight. Rest your right hand upon the meat and use your body to help move the carriage. Your left hand will then be free to take away the pieces of meat as they are cut off. Make it a habit to move your hand around the left side, or back of the saw blade, when reaching for a piece of meat - never in front of the teeth. On the return stroke, pull the meat toward you a little so that it does not drag past the saw blade.

The saw cuts through bone and meat alike and no preliminary preparation with the butcher knife is necessary as with a hand saw.

When cutting slices of uniform thickness, set the gage plate at the desired point on the scale etched on the table. If the gage plate is not needed and interferes with the work, it may be pushed out of the way. Squeeze the latch and slide it on back to the end of rack 33 (fig. 5). Be sure to squeeze the latch before trying to swing up the gage plate.

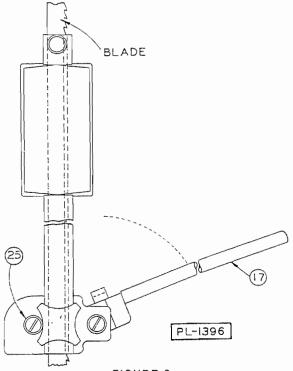
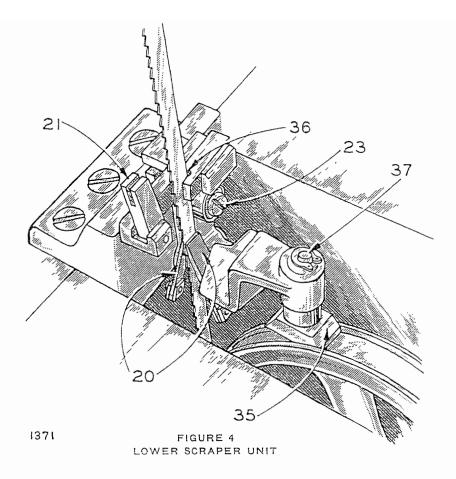


FIGURE 3
UPPER GUIDE ASSEMBLY



To slice short ends, use the pusher plate 30 (fig. 5) to hold the meat against the gage plate. A groove in the pusher slips over and slides along the up-turned edge of the carriage. Hold the pusher with your right hand as shown in fig. 5. Your hand will then always be a safe distance from the saw blade and the stop 31 will prevent the pusher from going too far. When not using the pusher plate, keep it on the inside of door 11 where provision has been made for holding it. See illustration at the right in fig. 5.

VII - CLEANING

It is very important that any appliance used in the preparation of food be kept in a clean and sanitary condition and this machine has been designed to make cleaning a quick and easy job. In moderate weather, cleaning every evening at the close of business should be sufficient, but, in hot sultry climates, more frequent attention may be required.

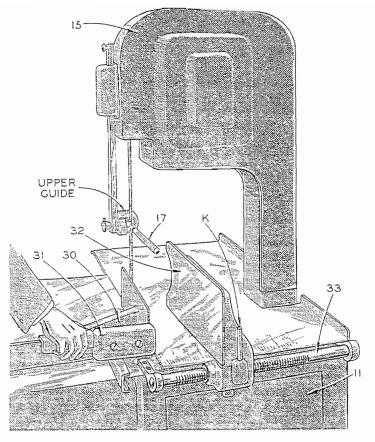
Observe the following procedure:

(1) Open the head door 15 (fig. 1) and clean out inside. Ordinarily this can be done

without taking off the blade pulley, but the pulley can be removed and should be taken off occasionally and washed. Always see that the bore of the pulley is dry before replacing and rub a little oil in it. Be sure that the latch 22, (fig. 1) which retains the pulley, is down properly in the groove on the shaft.

Observe these same precautions in regard to the lower blade pulley.

- (2) Take off the carriage, the table, and the lower guide assembly for cleaning. See paragraph VIII. Both the upper and lower guide assembly should be cleaned carefully.
- (3) Take off the saw blade. See paragraph VIII.
- (4) Pull out the drawer 19 and clean out the bone dust and meat particles thrown off the saw blade.
- (5) Wipe over the entire surface of the machine with a damp cloth moistened with tasteless oil.



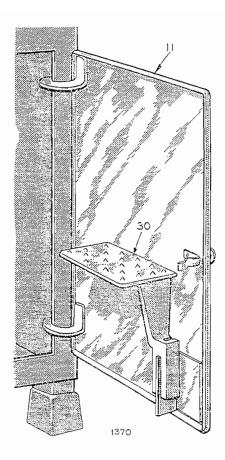


FIGURE 5

VIII - CHANGING SAW BLADES

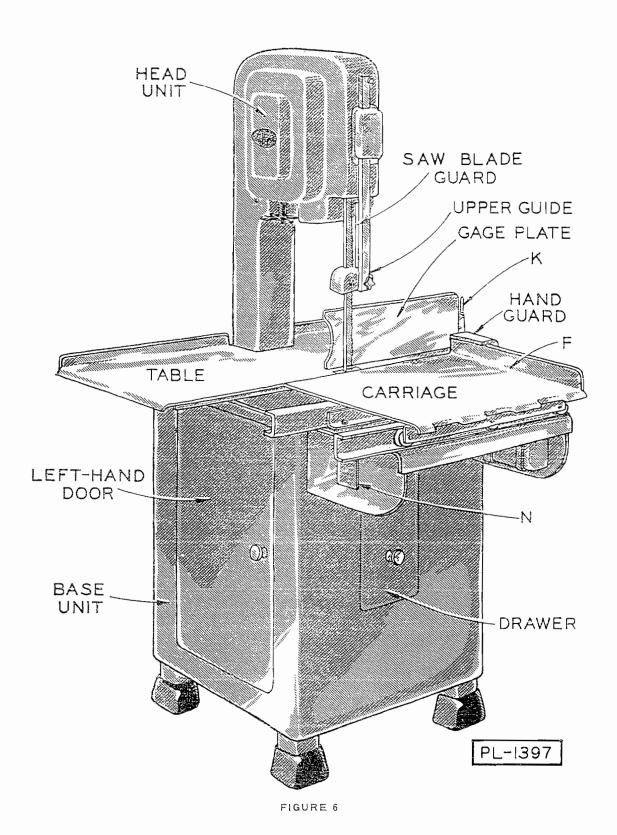
- (1) Take off the carriage. To release it, the plunger 18 (fig. 1) must be pushed down.
 - (2) Unhook lock 13 and take off the table.
 - (3) Open the head door 15 (fig. 1).
- (4) Swing down the guard 17 (fig. 3) to the horizontal position, swing up the bakelite guard 21 (fig. 4), and lift out the lower wiper unit.
- (5) Turn the Hand Wheel 12 (fig. 1) to the left to loosen the tension and lift off the saw blade.
- (6) Put on the new blade, turn the hand wheel to the right until the indicator reads "2", turn the upper blade pulley 27 by hand to center the blade, and then turn the hand wheel until the indicator registers between "3" and "4". Now move the guard 17 to the vertical position and insert the lower wiper unit.

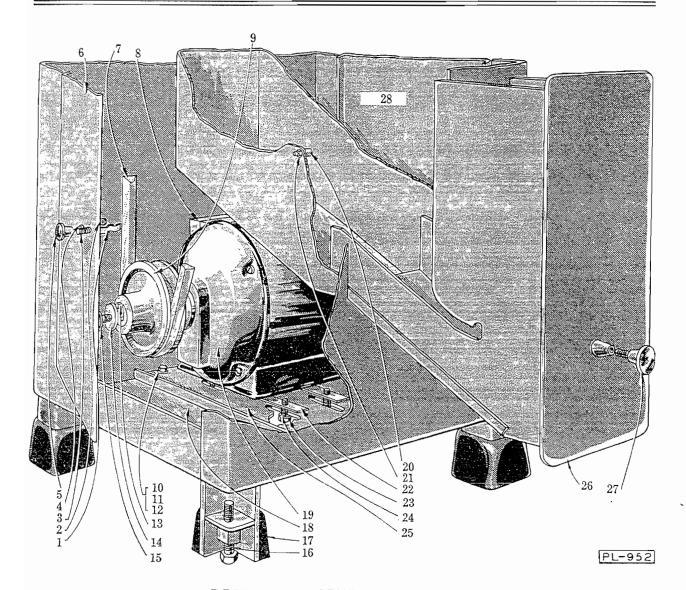
IX - ADJUSTMENT OF THRUST ROLLERS

At the back edge of the saw blade in the upper guide and the lower wiper unit are ball bearing rollers which will take the cutting thrust. When the saw is running without load, the rollers should not touch the blade; the clearance being 1/32 to 1/16 inches. Always check this after putting in a new blade. Rollers may be adjusted to suit any variation in blade widths. Adjust the upper roller by turning the screw 25, (fig. 3) and the lower roller by turning screw 23, (fig. 4).

X - BLADE REPLACEMENT

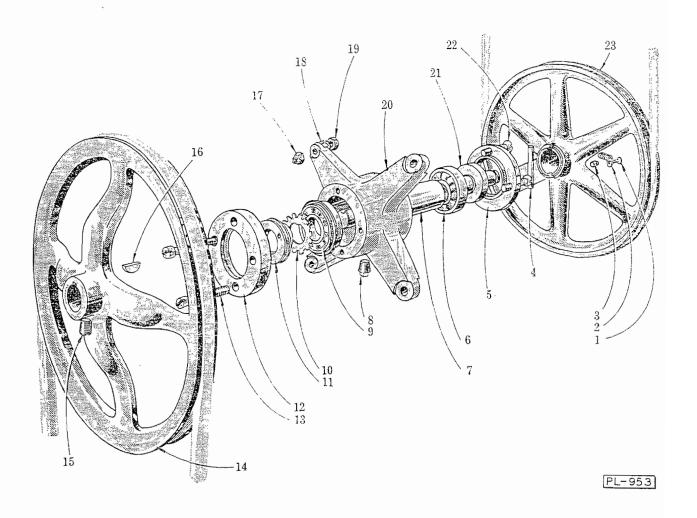
Two saw blades are furnished as regular equipment with every machine. Replacement blades are available thru all Hobart offices.





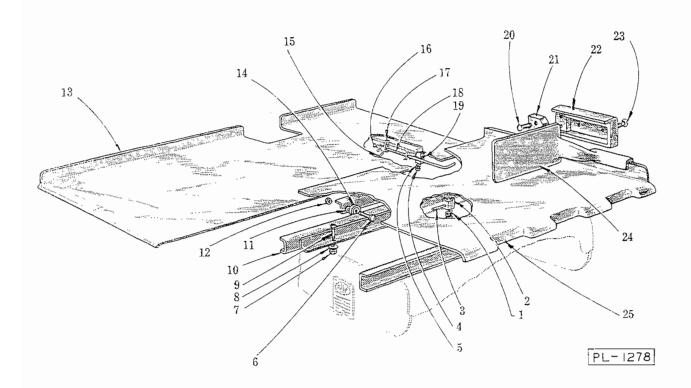
BASE AND MAIN FRAME UNIT

ILLUS.	PART		
PL-952	NUMBER	NAME OF PART	TRUOMA
PL-952 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	V-20894 NS-9-21 SC-7-77 SC-7-71 M-22374 S-23332 BV-5-4 P-23212 P-20819 SC-36-27 NS-31-28	NAME OF PART	2 2 2 2 2 1 1 1 4 4 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1
27 28	M-20838-3 S-23331 SC-9-92	Knob - Drawer Door - R.H. Base Mach. Screw - #10-32 x 2" Rd. Hd. (Retains Item #8)	1
	20 5 52	mach. Belew - + 10-52 x 2 Rd. Hd. (Retains Item #8)	,



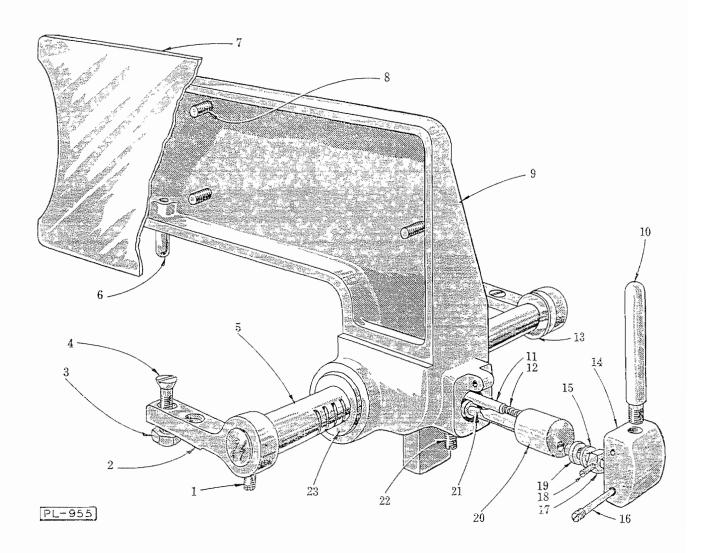
LOWER BEARING CARRIER UNIT

	_		
ILLUS.	PART		
PL-953	NUMBER	NAME OF PART	AMOUNT
1	V-20851	Company Todah	
2	M-20852	Screw - Latch	1
2	M-24114	Latch	,
ş	PG-7-23	Catch - #8½ Frost	
5	M-23329	Groov-Pin - Type 5, 5/16" x 1-3/4"	
6	BB-6-41	Retainer - Seal	
7	R-20839		
(FP-28-5	Shaft - Lower Brg. Carrier Drive	
8 9	BB-6-43	Plug - ¼" Pipe	. 1
10	WL-12-8	Lock Washer N.D. W-07	
11	M-20853		
12	M-20786-1	Nut - Lock	
13	SC-38-5	Retainer - Bearing	
14	S-20818	Cap Screw - 1/4"-20 x 1" Fil. Hd	
15	SC-47-43	Pulley - Drive	ì
		Set Screw - 3/8"-16 x 1/2" Soc. Hdls. Kn. Cup Pt.	
16	KW-3-10	Woodruff Key - #606	1
17	NS-31-37	Lock Nut - 1/2"-13 "Elastic"	
18	WL-4-12	Lock Washer - 1/2" x .170" x .099"	
19	NS-17-27	Jam Nut - 1/2"-13 Hex	
20	R-23232	Carrier - Lower Bearing	
21	M-23637	Seal - Grease	
22	SC-13-85	Mach. Screw - 1/4"-20 x 3/4" Flat Hd	
23	M-60294	Flanged Blade Pulley Sub-Assy. Unit (Includes items #1, 2 & 3)	
	R-23367	Lower Brg. Carrier Sub-Assy. (Includes items #4, 5, 6, 7, 8, 9, 10.	_
		11. 12. 13. 20. 21 & 22)	1



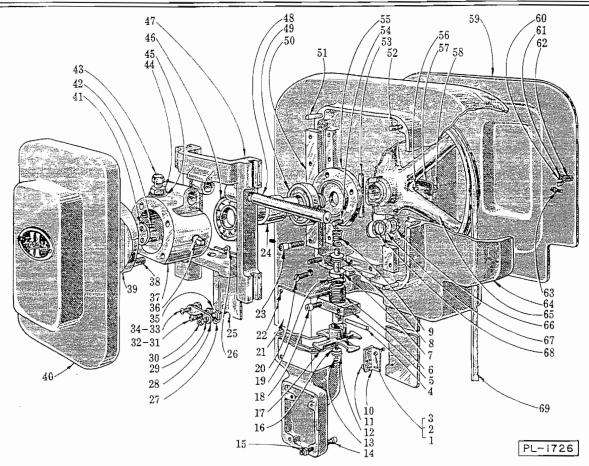
TABLE, TRACK AND CARRIAGE UNIT

ILLUS.	PART		
PL-1278	NUMBER	NAME OF PART	AMOUNT
1	V-28327	Spring - Carriage Stop	1
2	M-23248	Stop - Carriage	1
3	PG-7-18	Groov-Pin - Type 5, 1/4" x 1"	1
4	SC-36-2	Cap Screw - 1/4"-20 x 1/2" Hex Hd.	4
5	WL-3-36	Lock Washer - 1/4" x .107" x .047"	4
6	V-20866	Screw - Roller Retaining	
7	NS-31-28	Lock Nut - 5/16"-18 "Elastic"	4
8	WS-4-25	Washer	4
9	SC-8-88	Mach. Screw - 5/16"-18 x 3/4" Rd. Hd.	4
10	R-23272	Track Assembly	2
11	WS-4-19	Washer	6
12	NS-31-28	Lock Nut - 5/16"-18 "Elastic"	6
13	S-23250	Table Assembly	1
14	_BB-8-2 638-4	Ball Bearing - Nice #400-24	6
15	PG-7-9	Groov-Pin - Type 5, 1/8" x 5/8"	1
16	RR-4-2	Retaining Ring	1
17	M-23254	Cam - Table Locking	1
18	P-23253	Lever - Table Locking	1
19	V-24121	Table Rest Assembly	4
20	SC-13-54	Mach. Screw - #10-24 x 7/8" Flat Hd.	2
21	V-20893	Guard - Saw Blade	1
22	P-20816-2	Guard - Hand	1
23	SC-15-S4	Mach. Screw - 1/4"-20 x 7/S" Oval Ctsk. Hd.	2
24	S-20967 7 LP	Plate - Butt End Push	3
25	R-20859	Carriage Assembly	1



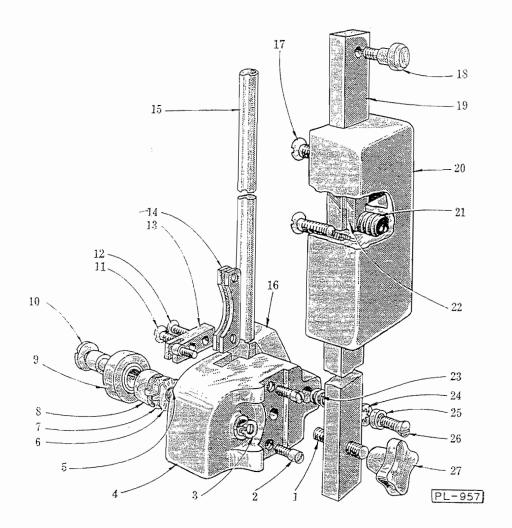
GAGE PLATE UNIT

ILLUS. PL-955	PART NUMBER	NAME OF PART	AMOUNT
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	SC-47-15 P-23238 NS-31-17 SC-13-91 P-23361 V-20863 R-22356 SC-15-85 P-63284 M-23345 M-23360 V-7009 V-22736 P-23321 WL-7-15 V-20895 NS-17-1 V-23347 M-23346 M-23347 M-23346 M-23357 SC-47-42 V-20826 S-23341	Set Screw - 1/4"-20 x 1/2" Soc. Hdls. Kn. Cup Pt. Bracket - Rack Support Lock Nut - 1/4"-20 "Elastic" Mach. Screw - 1/4"-20 x 1-1/4" Flat Hd. Rack - Gage Plate Shoe - Gage Plate Gage Plate Sub-Assy. Mach. Screw - 1/4"-20 x 3/4" Oval Ctsk. Hd. Support - Gage Plate (Includes item #23) Handle Flunger Spring - Plunger Washer - Bumper Cap - Trip Lever Lock Washer - 1/4" Ext. Shakeproof Fin - Special Jam Nut - 1/4"-20 Hex Screw - Hinge Nut - Gage Plate Cartridge Screw - Special Set Screw - 3/8"-16 x 1/2" Soc. Hdls. Kn. Cup Pt. Bushing - Gage Plate Gage Plate Gage Plate Assy. (Includes items #5, 6, 7, 8, 9, 10, 11, 12, 14, 15,	244113311221111211121112
		16, 17, 18, 19, 20, 21, 22 & 23)	,



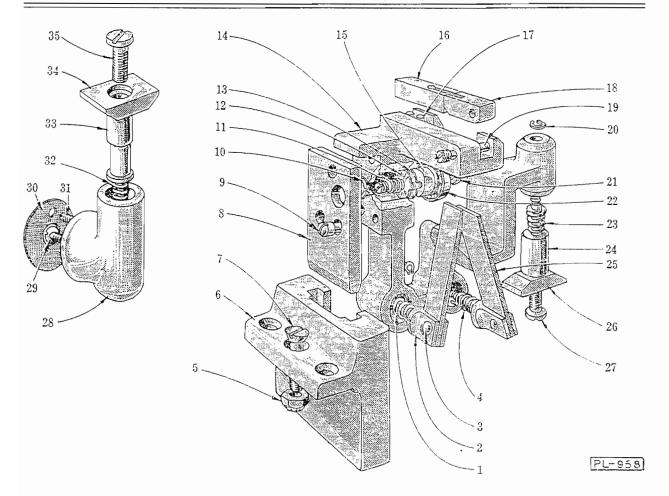
HEAD UNIT

				4 4 4 4 4 4 4 4	O 2 1 2 2		
	ILLUS.	PART	•		ILLUS	PART	
	PL-1726	NO.		TAUON	PL-1726		NAME OF PART AMOUNT
	1	SC-13-46	Mach. Serew - #10-24 x 1/2" Flat Hd	6	38	SC-38-3	Cap Screw - 1/4"-20 x 3/4" Fil. Hd4
	2	NS-31-11	Stop Nut - #10-24 "Elastie"	12	39	P-20794-1	Cap - L.H. Upper Bearing 1
	3	WS-2-19	Washer	12	40	S-23267	Cover - Headl
	4	PG-7-18	Groov-Pin - Type 5, 1/4" x 1"	1	41	V-20846	Retainer - Upper Bearing
	5	M-23262	Nut - Blade Tension Adj	1	42	SC-13-46	Mach. Screw - #10-24 x 1/2"
	б	M-23264	Screw - Blade Tension Adj	1			Flat Hd. 2
	7	BB-13-1	Ball Bearing - Nice # 603	1	43	SC-36-56	Finish. Bolt - 2/8"-16 x 1-1/8"
	8	M-23265	Spool - Adj. Blade Tension	1			Hex. Hd.
	9	M-20867	Spring - Adj. Blade Tension	1	4.4	NS-17-14	Jam Nut - 3/8"-16 Hex Finish 1
	10	M-23271	Hinge - Door to Head	2	45	WL-4-2	Lock Washer - 3/8" x .136" x
	11	SC-13-54	Mach. Screw - #10-24 x 7/8"		1.0	DD 0 40	.070" 1 Ball Bearing - N.D. #43207 1
	-0	3720 4 16	Flat Hd.	6	16	BB-6-43	Slide - Upper Bearing Carrier 1
	12	WC-4-16	Ctsk. Washer - 1/4"	1	48	R-23263 V-20854	Pin - Hinge 1
16	13	SC-16-2	Mach. Screw - 1/4"-20 x 1" Oval	1	\49	BB-7-41	Ball Bearing - N.D. #99507 1
1 A	9.3	SC-40-37	Ctsk. HdCap Screw - 1/2"-13 x 2" Soc.	1	50	M-20849	Gib2
51.	7.4	30-40-31	Fil. Hd	4	51	P-11800-206	Dowel (Cover to Head)2
. 138	165	NS-31-37	Stop Nut - 1/2"-13 "Elastic"	1	52	SC-14-43	Mach. Screw - 1/4"-20 x 2-1/2"
1. 10/10	116	WS-3-35	Washer	î			Mach. Screw - 1/4"-20 x 2-1/2" Flat Hd 2
	117	P-23266	Wheel - Hand	î	53	PG-7-23	Groov-Pin - Type 5, 5/16" x 1-3/4" 1
لممري والمرابع المراب الماع المواع الم المواع الم	18	SC-40-24	Cap Screw - 3/8"-16 x 1-1/2" Soc. Fil. Hd.	2	54	SC-13-79	Mach. Screw - 1/4"-20 x 1/2" Flat Hd4
(li ' i) 100"	19	RR-4-8	Retaining Ring	ī	55	M-20793	Cap - R.H. Upper Bearing 1
ان مان	20	SC-14-26	Mach. Screw - 3/8"-16 x 1-1/2"	-	56	M-24114	Catch - #8-1/2 Frost 1
13 / 11			Flat Hd.	1	57	M-20S52	Latch1
\$ 10° is it.	21	R-64333	Shield - Head	3	58	V-20851	Screw - Latch 1
G.,	22	SD-7-15	Self-Tapping Screw - #6 x 3/16"		59	S-23270	Door - Head1
·			Phillips Bind, Hd., Type B	3	60	NS-31-11	Stop Nut - #10-24 "Elastic" 2
	23	SC-40-1÷	Cap Screw - 5/16"-18 x 3/4" Soc.		61	SC-13-43	Mach. Screw - #10-24 x 3/8" Flat Hd 2
		D 000=0	Fil. Hd.	8	0.0	77 00001	
	bi 24	P-20856	Shart - Upper 92	1	62	V-20894	Clip - Spring 1 Screw - Spring Clip 1
		M-23257	Dial - Indicator	1	63 64	M-63642 T-23256	Head1
	26	SC-19-14	Mach. Screw - #10-24 x 1/4" Bind. Hd.	2	65	M-60294	Flanged Pulley (Blade) Sub-Assy.
	27	V-23259	Pointer - Indicator	1	69	M-00294	Unit (Includes items #56, 57 &
		V-23258	Arm - Lever for Indicator	1			58) 1
		V-23261	Screw - Special for Lever	1	66	M-23335	Ring - Lens Retaining1
		NS-31-11	Stop Nut - #10-24 "Elastic"	î	67	V-20889	Lens - Indicator1
		SC-7-42	Mach. Screw - #8-32 x 1/2"	•	68	V-20898	Gasket - Indicator Lens 1
	-		Rd. Hd.	1	69	P-63145	Blade - Saw 1
	32	NS-31-5	Stop Nut - = 8-32 "Elastic"	1		M-63580	Upper Brg. Carrier Sub-Assy. (In-
		SC-7-74	Mach. Screw - #10-24 x 3/8" Rd. Hd	1			cludes items #24, 36, 37, 38, 39, 41, 42, 43, 44, 45, 46, 49,
	34	NS-9-21	Nut - #10-24 Hex. Mach.	î			54 & 55)1
		V-23260	Spool - Lever Indicator	î		S-28354	Upper Brg. Carrier & Slide Assy.
		FP-28-6	Plug - 1/4" Pipe	1			(Incl. items #25, 26, 27, 28, 29.
	37	R-20800	Carrier - Upper Bearing	ì			30, 31, 32, 33, 34, 35, 47, 48 & M-63580)



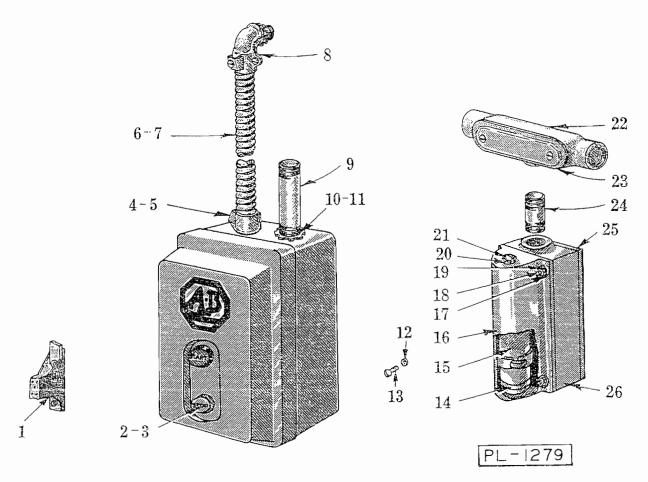
UPPER GUARD UNIT

1LLUS. PL-957	PART NUMBER		
PL-937	MOMBER	NAME OF PART	AMOU
1	V-21158	Stud	
2	SC-11-51	Mach. Screw - #10-32 x 5/16" Fil. Hd.	
3	RR-4-4	Retaining Ring	
·i	P-23273	Support - Upper Guide	. 1
5	V-23326	Spring	
6	M-23275	Washer (Stationary)	
7	M-23328	Washer (Rotating)	
8	M-23236	Shaft	
9	BB-5-11	Ball Bearing - Fafnir # 201 PP	
10	V-20840	Screw - Bearing Retaining	
11	SC-15-49	Mach. Screw - #10-24 x 5/8" Oval Ctsk. Hd.	
12	SC-15-49	Mach. Screw - #10-24 x 5/8 Oval Ctsk. Hd	
13	V-20845	Guard - Upper	3
-14	V-20802	Guide - Upper Blade	2
15	V-20901	Guard - Saw Blade	1
16	M-20798	Support - Guard	
17	SC-10-30	Mach. Screw - 1/4"-20 x 1" Truss Hd.	5
18	V-20891	Stop - Slide Bar	
19	M-20848	Bar - Slide	
20	P-20797-3	Guide - Slide Bar	1
21	M-18046	Spring - Shoe	1
22	V-20855	Shoe - Slide Bar	
23	V-20963	Spring - Blade Guard	
24	WL-8-16	Lock Washer - 1/4" Internal Shakeproof	1
25	V-20850	Washer - Retaining	3
26	SC-15-64	Mach. Screw - 1/4"-20 x 1/2" Oval Ctsk. Hd	1
27	M-21159	Knob - Upper Guide Support	1
	P-20954	Guard Support & Blade Guard Sub-Assy. (Includes items #11, 12, 13, 15 & 16)	1
	S-23365	Upper Guard Sub-Assy. (Includes items #1, 2, 3, 4, 5, 6, 7, 8, 9,	_
		10, 11, 12, 13, 14, 15, 16, 18, 19, 23, 24, 25, 26 & 27)	1



UPPER AND LOWER WIPER AND GUIDE UNIT

ILLUS.	PART		
PL-958	NUMBER	NAME OF PART	TNUOMA
1	M-20931	Spring - R.H. Tension	3
2	M-20831	Holder - Blade Wiper	2
3	SC-15-48	Mach. Screw - #10-24 x 7/16" Oval Ctsk. Hd	5
र्ने	$\lambda 1-20932$	Spring - L.H. Tension Stop Nut - 1/4"-20 "Elastic"	1
5	NS-31-17	Stop Nut - 1/4"-20 "Elastic"	3
6	P-23233	Slideway - Winer Bracket	1
7	SC-13-88	Mach. Screw - 1/4"-20 x 1" Flat Hd.	3
8	M-23234	Slide - Lower Wiper Brkt	3
9	SC-3\$-1	Cap Screw - 1/4"-20 x 1/2" Fil. Hd	2
10	RR-4-4	Retaining Ring	1
11	V-23326	Spring	1
12	M-23275	Washer	1
13	M-23328	Washer	1
14	R-23235	Bracket - Wiper	.1
15	M-23236	Shaft	1
16	M-20836	Guide - Lower Saw Blade	3
17	SC-11-48	Mach. Screw - #10-24 x 5/8" Fil. Hd	2
18	V-20865	Guard - Lower Saw Blade	
19	V-20895	Pin - Hinge	1
20	RR-4-2	Retaining Ring	3
21	V-20840	Screw - Bearing Retaining	ĩ
22	BB-5-11	Ball Bearing - Fainir #201-PP	î
23	V-7433-2	Spring	
24	V-20837	Plunger	î
25	M-20829	Wiper - Saw Blade	,
26	M-22027	Wiper - Blade Pulley	
27	V-3404-6	Screw	ī
28	P-23268	Bracket - Upper Wiper	7
29	SC-14-26	Mach Servey - 2 /8"-16 v 1-1 /2" Flor Hd	î
30	M-24567	Mach. Screw - 3/8"-16 x 1-1/2" Flat Hd. Gasket - Wiper Bracket	As read.
31	SC-46-13	Set Screw - #10-24 x 1/2" Slot. Hdls. Flat Pt.	2
32	M-23325	Spring - Upper Wiper	7
33	M-23269	Plunger - Upper Wiper	1
34	M-22027	Wiper	, 1
35	V-3404-6	Screw	;
5.,	SC-46-17	Set Screw - #10-24 x 3/8" Slot, Hdls, Flat Pt, (Used with item #14)	,
	S-23366	Lower Wiper Sub-Assy. (Includes items #1, 2, 3, 4, 8, 9, 10, 11, 12,	,
	2.20000	13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 & 27)	1
	M-23349	Upper Blade Pulley Wiper Sub-Assy. (Includes items #28, 31, 32, 33,	,
	MA-20013	34 & 35)	1
		34 & 30)	1



STARTER EQUIPMENT

ILLUS.	PART		
PL-1279	NO.	NAME OF PART	AMOUNT
1 2 *3 4 5	FE-2-13 WS-12-24 P-24127-11	Starter Element (Give Elec. Spec.) Starter - (A.C.) (Give Elec. Spec.) Starter - (D.C.) (Give Elec. Spec.) Connector - 1/2" (For 1/2" Flex. Cond.) Washer Conduit - 1/2" x 27".Lg. Flexible	1 1 1
7	BF-2-17	Bushing - 1/2" Anti-Short	2
8	FE-2-31	Connector - 1/2 x 90° (For 1/2" Flex. Cond.)	
9	FE-5-48	Conduit - 3/4" x 4" Lg. Rigid	
10	FE-6-6	Lock Nut - 3/4" Conduit	J
11	FE-6-9	Bushing - 3/4" Conduit	_ 1
12	NS-9-21	Nut - #10-24 Hex	4
13	SC-7-74	Mach. Screw - #10-24 x 3/8" Rd. Hd	
*14	WS-3-9	Washer	2
*15	P-20175	Coil - Resistance (Give Voltage)	
*16	P-14670	Box - Resistance Coil	
*17	WL-3-22	Lock Washer - #10 x .055" x .040"	
*18	SC-7-91	Mach. Screw - #10-24 x 2-1/4" Rd. Hd.	_ <i>d</i> ,
≈19	NS-9-21	Nut - #10-24 Hex	_ 4
* 20	WL-3-43	Lock Washer - 5/16" x .117" x .056"	
*21	SC-8-88	Mach. Screw - 5/16"-18 x 3/4" Rd. Hd.	
* 22	FE-3-4	Junction Box - Resistor	
*23	FE-4-13	Cover - Junction Box	
*24	FE-5-3	Conduit - 1/2" x 1-1/2" Lg. Rigid	
*25	P-20969	Cover - Connection Box	
*26	R-20968	Box - Connection	_ 1
		* D.C. Starter Equipment	