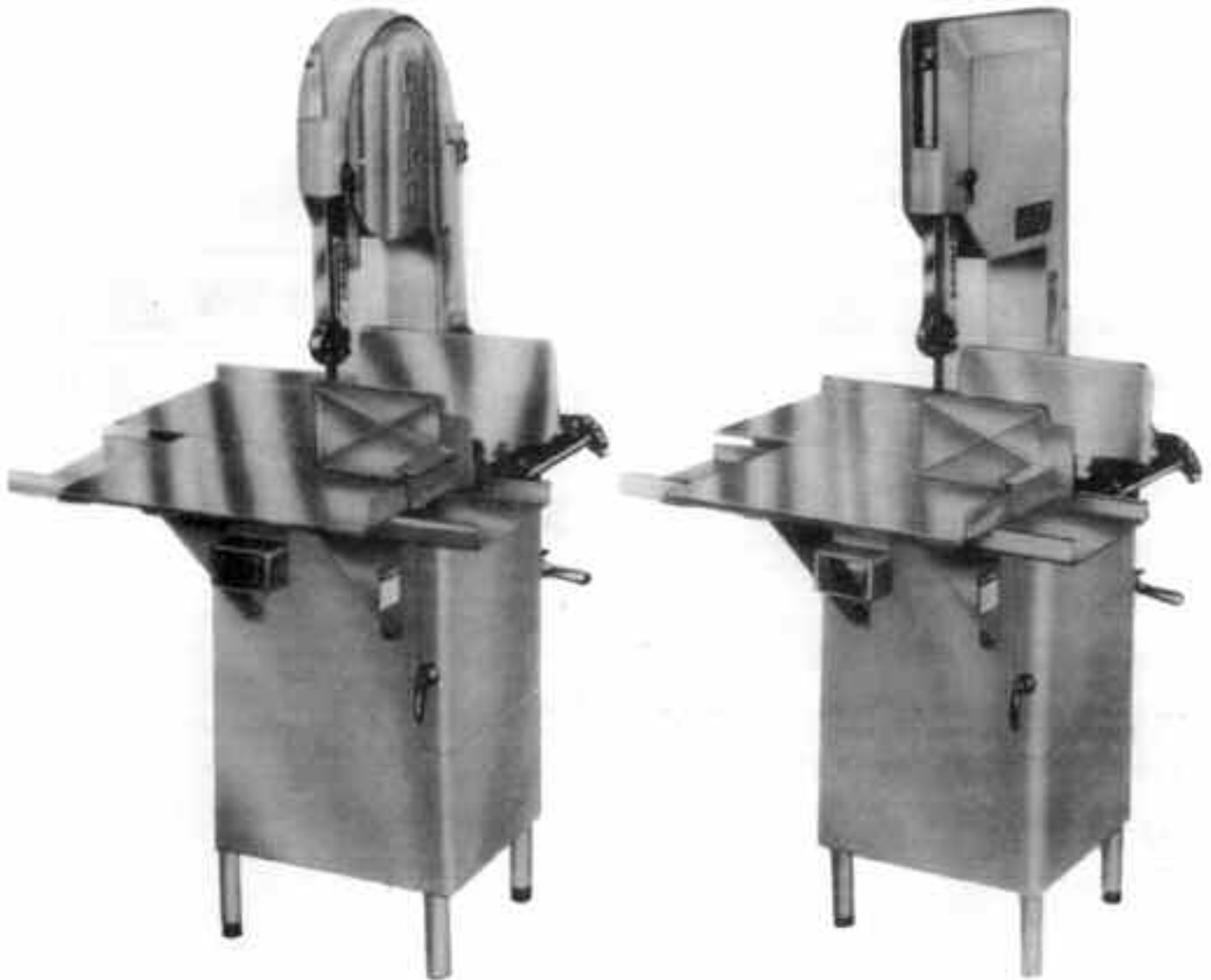


BIRO[®]

MODEL 22 POWER MEAT CUTTER OPERATING AND SERVICE MANUAL

REVISED — SERIAL NO. 35301 ON



☆ **IMPORTANT NOTICE** ☆

This Manual contains important safety instructions which must be strictly followed when using this equipment.

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NOTICE TO OWNERS AND OPERATORS

BIRO's products are designed to process food products safely and efficiently. Unless the operator is properly trained and supervised, however, there is the possibility of a serious injury. It is the responsibility of the owner to assure that this machine is used properly and safely, strictly following the instructions contained in this Manual and any requirements of local law.

No one should use or service this machine without proper training and supervision. All operators should be thoroughly familiar with the procedures contained in this Manual. Even so BIRO cannot anticipate every circumstance or environment in which its products will be used. You, the owner and operator, must remain alert to the hazards posed by the function of this equipment – particularly the SHARP MOVING BAND TYPE SAW BLADE. No one under eighteen (18) years of age should operate this equipment. If you are uncertain about a particular task, ask your supervisor.

This Manual contains a number of safe practices in the SAFETY TIP section. Additional warnings are placed throughout the Manual. Warnings related to your personal safety are indicated by:



OR



Warnings related to possible damage are indicated by:



BIRO also has provided a wall chart to be posted near the equipment. If any warning label, wall chart, or Manual becomes misplaced, damaged, or illegible, please contact your nearest Distributor or BIRO directly for a replacement.

Remember, however, this Manual or the warning labels do not replace the need to be alert and to use your common sense when using this equipment.

This Manual applies to machines with serial number 35301 and higher, except where noted.

— NOTE —

"A copy of this manual is included with each Model 22 Saw."

"The descriptions and illustrations contained in this manual are not binding. The manufacturer reserves the right to introduce any modifications without updating the manual."

SAFETY TIPS



SHARP MOVING BAND TYPE SAW BLADE TO AVOID SERIOUS PERSONAL INJURY

- NEVER Touch This Machine Without Training and Authorization By Your Supervisor.*
- ALWAYS Read Operation and Service Manual BEFORE Operating, Cleaning or Servicing.*
- ALWAYS Keep Hands Clear of Band Type Saw Blade and Other Moving Parts.*
- ONLY Use a Qualified Electrician to Install According to Local Building Codes: Machine **MUST** Be Properly Grounded.*
- ONLY Install on Level, Non-Skid Surface in a Clean, Well-Lighted Work Area Away From Children and Visitors.*
- DO NOT Attempt to Operate This Machine Until it has Been Inspected and Demonstrated by the Seller – Recognized BIRO Representative.*
- DO NOT Alter or Modify This Machine in any Way From its Original Form. This Machine in its Original Form Meets the Intent of O.S.H.A. Applicable Standards.*
- NEVER Operate With Saw Guide Bar with Saw Guard in the Raised Position or the Saw Guard Removed from the Saw Guide Bar.*
- ALWAYS Adjust Saw Guide Bar with Saw Guard to Within $\frac{1}{8}$ " of Product to be Cut.*
- ALWAYS Use Safety End Cut Pusher Plate for Smaller Products or The Last Cuts of Product.*
- DO NOT Use This Machine for Non-Food Products.*
- DO NOT Use This Machine to Cut Pigs Feet.*
- DO NOT Wear Gloves While Operating.*
- ALWAYS Turn Off, Unplug From Power Source and Perform Lockout/Tagout Procedure to This Machine **BEFORE** Removing Shrouds, Removable Guards, Covers, Doors, Fences or Panels for Cleaning, Servicing or Any Other Reason.*
- NEVER Leave Machine Unattended While Operating.*
- PROMPTLY REPLACE** Any Worn or Illegible Warning Labels.*
- USE ONLY BIRO** Parts and Accessories Properly Installed.*

INSTALLATION



TO AVOID SERIOUS PERSONAL INJURY PROPERLY INSTALL EQUIPMENT IN ADEQUATE WORK AREA

ALWAYS Use Qualified Technician and Electrician for Installation.

ALWAYS Install Equipment in Work area with adequate Light and Space.

ONLY Operate on a Solid, Level, Non-Skid Surface.

NEVER Operate With the Saw Guide Bar with Saw Guard in the Raised Position or the Saw Guard Removed from the Saw Guide Bar.

ALWAYS Adjust Saw Guide Bar With Saw Guard to Within $\frac{1}{2}$ " of Product to be Cut.

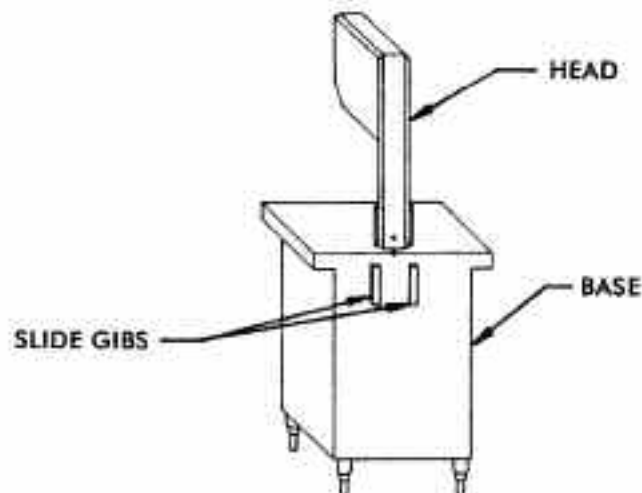
NEVER Operate Without all Warning Labels Attached and Wall Chart Posted.

1. Read this Manual thoroughly before installation and operation. Do not proceed with installation and operation if you have any questions or do not understand anything in this Manual. Contact your local Distributor, or BIRO first.
2. Install machine on a level, solid, non-skid surface in a well-lighted work area away from children and visitors.



ALWAYS LEVEL MACHINE BEFORE USING

3. After installing machine in operational area, it is imperative that the four adjusting leg bolts be adjusted to level the machine and also to eliminate rocking.
4. To assemble meat gauge plate (Part No. A14275) to the machine; Loosen the lock knob (Part No. 272-10) on the right side meat gauge bracket. Remove the meat gauge gear rack (Part No. 512272-3) and insert into the meat gauge plate. Re-install the gear rack by first inserting the rectangle end in to the left hand meat gauge bracket, then swing the right hollow round end of the gear rack into the original lock position. Upon aligning the gear rack with the cap screw (Part No. 272-11), tighten the lock knob clockwise, fastening the locking cap screw into the hollow end of the gear rack, **CHECKING** for a secure assembly. Keep gear rack well oiled with food grade oil to ensure free movement.
5. The head structure (Part No. 12005A) comes detached from the base. Slip the head into the slide gibs (Part No. 260) located on the back of the base structure. Make sure the slide gibs are oiled or greased to ensure free vertical movement of the head structure.



6. Place removable finger lift with saw guard assembly (Part No. A211MS-AL or A211MS-SS) on the saw guide bar (Part No. 116-18) and fasten in place with the finger lift fastener knob (Part No. 211Q).



SHARP SAW BLADE. HANDLE WITH EXTREME CAUTION.

7. Placing blade on cutter: Hang upper wheel assembly (Part No. A12003U335-6) on the hinge bracket (Part No. 71-1). Lift the nylon filler (Part No. 177). Hang blade on the upper wheel and hold with right hand. With left hand force the back of the blade between the front blade cleaners (Part No. 131), located below the nylon filler. Lower the nylon filler and insert the back of the blade in the upper saw guide (Part No. 602B). The blade has already dropped over the lower wheel. With right hand force the back of the blade between the rear blade cleaners (Part No. 131). The blade is now ready to be tightened. Press down on the ratchet arm (Part No. 10-1) located at the rear of the base structure. Turn the upper wheel slowly by hand to ensure proper tracking of the saw blade on the wheels. Tighten to proper tension. When the tension gauge (Part No. 197), located at the bottom rear of the head becomes tight laterally the blade is at proper tension.
8. The side platter bracket (Part no. S12214B) is packed loose in the machine and must be installed on the left side of the base structure with the supplied hardware and checked for proper adjustment. Stationary platter must be flat.
9. The stationary platter (Part No. A12163-2) is placed on top of the base structure and held in place by two push-pull hold down rods (Part No. 12212W), located at the rear of the base.
10. The sliding meat carriage assembly (Part No. A12155) is installed by turning the movable stop assembly (Part No. A200) clockwise. After the carriage assembly is in the channel for operation, turn the movable stop counterclockwise to lock.
11. Post SAFETY TIPS wall chart within easy view of operator. Keep Manual available to operator.
12. Machine **MUST** be properly grounded. Use qualified electrician to install according to building codes.

WIRING MOTOR

- (1) Interchange of current is made in motor outlet box. Leads are properly marked. Changing instructions are on motor plate or motor outlet box.
- (2) All cutters are wired 220 volts unless otherwise specified. Be sure motor specifications (voltage, cycle, phase) match power supply line. Be sure line voltage is up to specification.
- (3) Connect leads to machine in a manner that will be approved by local electrical inspectors.
- (4) We recommend not less than No. 12 wire. If leads are too light, machine may not have sufficient cutting power and/or speed.
- (5) The V-belt is packed loose in machine to prevent deformation, and must be installed on pulleys at time of wiring motor.
- (6) The BIRO Manufacturing Company is not responsible for permanent wiring, connection or installations.



NOTE TO OWNER AND ELECTRICIAN: IF THIS MACHINE IS NOT CORD AND PLUG CONNECTED TO THE ELECTRICAL SUPPLY SOURCE, THEN IT SHOULD BE EQUIPPED WITH, OR CONNECTED TO, A LOCKABLE, MANUALLY OPERATED DISCONNECT SWITCH (OSHA 1010.147).





KEEP HANDS CLEAR OF SHARP MOVING BAND TYPE SAW BLADE

13. Make sure saw guide bar with saw guard is in its lowest position. Close head and base doors.
14. Push start button and check for proper phasing of motor. Blade should be traveling down through saw guide.
15. Watch for proper tracking of blade. Back of blade should be centered in hole in saw guide in stationary bar (Part No. 119A). Push stop button to stop machine.
16. Check Placement of all warning labels, wall chart and Manual. Machine is ready for trained operators to process product.
17. Contact your local Distributor or BIRO directly if you have any questions or problems with the installation or operation of this machine.

WARNING LABELS AND WALL CHART FOR BIRO POWER CUTTERS

SEE PAGE 27 FOR LOCATIONS ON MACHINE

 **WARNING**



DO NOT Use Unless Trained and Authorized By Supervisor And Over 18 Years Old.
Read Operation Manual Thoroughly Before Operating.
ALWAYS Keep Hands Clear of Saw Blade and Other Moving Parts. Turn Off Saw when Finished Cutting.
ALWAYS Keep Blade Guard Adjusted to 1/2" Above the Product being Cut.
ALWAYS Use End Cut Pusher Plate When Cutting Smaller Piece of Product.
DO NOT Use Saw if it is Altered, Damaged, Improperly Maintained, or If Warnings Are Illegible or Missing.
ALWAYS Disconnect and Unplug from Main Power Source and Perform LOCKOUT/TAGOUT Before Cleaning or Servicing.

#653PC-E

Item No. 653PC-E

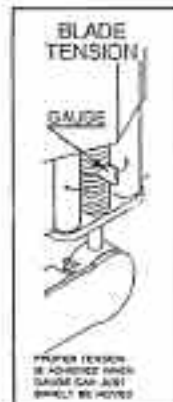
 **MUCHO CUIDADO**



NO Opere Esta Sierra Sin Haber Sido Entrenado Para Ello Ni Tampoco Sin Autorizacion de un Supervisor. Uno Tiene que Haber Cumpido 18 Años Para Operarla.
LEA Cuidadosamente el Manual de Operacion Antes de Usar Este Equipo.
SIEMPRE Guarde las Manos a Salvo de la Hoja de Serrar y de Otras Partes Moviles. Cierre el interruptor Despues de Terminar de Cortar.
SIEMPRE Tenga Ajustado el Guardasierra Para que Quede a 1/2" Por Encima del Producto que se Corta.
SIEMPRE Haga Uso de la Placa de Empuje Para Cortes de Extremos al Cortar Trozos Pequenos.
NO Utilice la Sierra si se Halla Alterada, Danadao si No ha Sido Debidamente Mantenido o si la Advertencia es Alejible o si Falta Esta.
SIEMPRE Desconecte el Equipo Desconectandolo de la Fuente de Fuerza. Dejele Bajo Llave o con Etiqueta que Prohiba su Uso Antes de Limpiarlo o Hacer Trabajos de Mantenimiento.

#653PC-SP

Item No. 653PC-SP



Item No. 710

ALWAYS LOWER GUARD TO HEIGHT OF PRODUCT



D A N G E R

E X P O S E D B L A D E



Item No. 708

OPERATION



SHARP MOVING BAND TYPE SAW BLADE TO AVOID SERIOUS PERSONAL INJURY

ONLY Properly Trained Personnel Should Use This Equipment.

ALWAYS Keep Hands Clear of Band Type Saw Blade and Other Moving Parts.

NEVER Operate With Saw Guide Bar with Saw Guard in the Raised Position or the Saw Guard Removed from the Saw Guide Bar.

ALWAYS Adjust Saw Guide Bar with Saw Guard to Within $\frac{1}{2}$ " of Product to be Cut.

ALWAYS Use Safety End Cut Pusher Plate for Smaller Products or the Last Cuts of Product.

DO NOT Wear Gloves While Operating Machine.

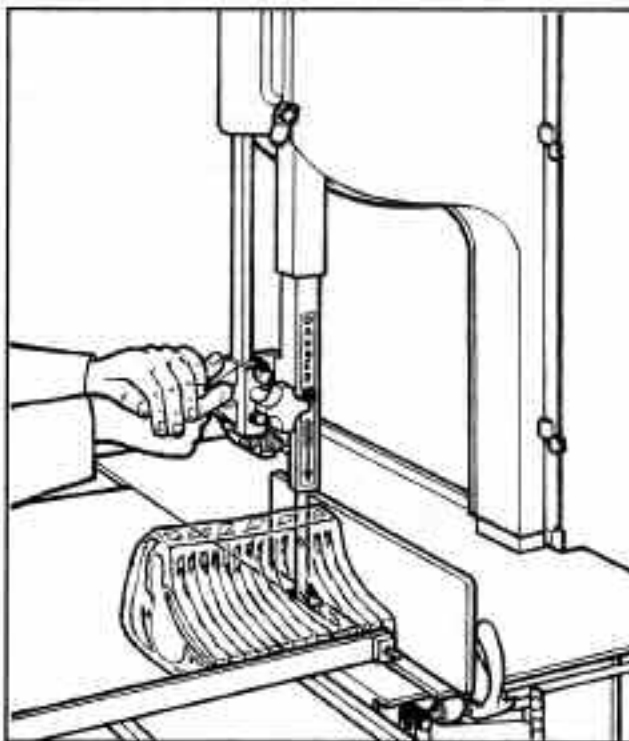
ALWAYS Turn Off, Unplug From Power Source and Perform Lockout/Tagout Procedure to This Machine Before Unjamming, Unclogging, Cleaning or Servicing.

NEVER Leave Unattended While Operating.

NEVER Operate Without All Warnings Attached and Wall Chart Posted.

A. TO PROCESS PRODUCT

1. Before starting power cutter, adjust saw guide bar with saw guard down to within $\frac{1}{2}$ " (13mm) of product to be cut.





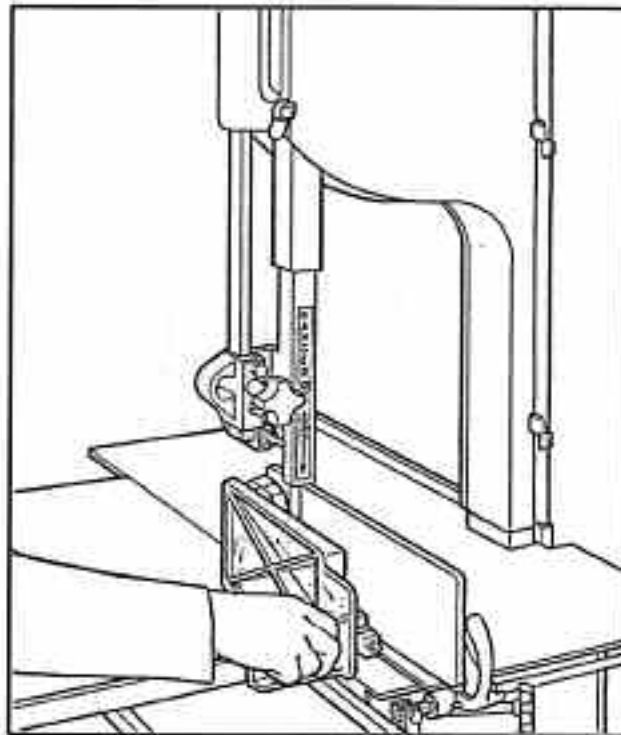
DO NOT WEAR GLOVES WHILE OPERATING

2. Make sure all doors are closed and locked.
3. Adjust meat gauge plate forward to desired thickness of cut.
4. Push start button and watch blade for proper tracking.
5. Standing in front of the power cutter, place product on the meat carriage. Pay attention to position of your hands. Keep hands clear of moving band type saw blade. Leaning lightly against the scalloped front edge of meat carriage, hold the product firmly in right hand with product face flush against meat gauge plate. Move the meat carriage from right to left at a steady rate until fully past the saw blade. Use left hand to remove and stack cut product, **NEVER REACH IN FRONT OF BAND TYPE SAW BLADE**. On the return stroke, pull the product toward you, away from saw blade.



NEVER REACH OR GRAB FOR PRODUCT IN FRONT OF MOVING BAND TYPE SAW BLADE

6. **ALWAYS** use the Safety End Cut Pusher Plate (Part No. 256P) for smaller products or the last cuts of product. The pusher plate is supplied as standard on all BIRO power cutters.



7. When finished cutting, push stop button. Perform lockout/tagout procedure.

CLEANING



SHARP MOVING BAND TYPE SAW BLADE TO AVOID SERIOUS PERSONAL INJURY

ALWAYS Turn Off, Unplug From Power Source and Perform Lockout/Tagout Procedure to This Machine **BEFORE** Cleaning or Servicing.

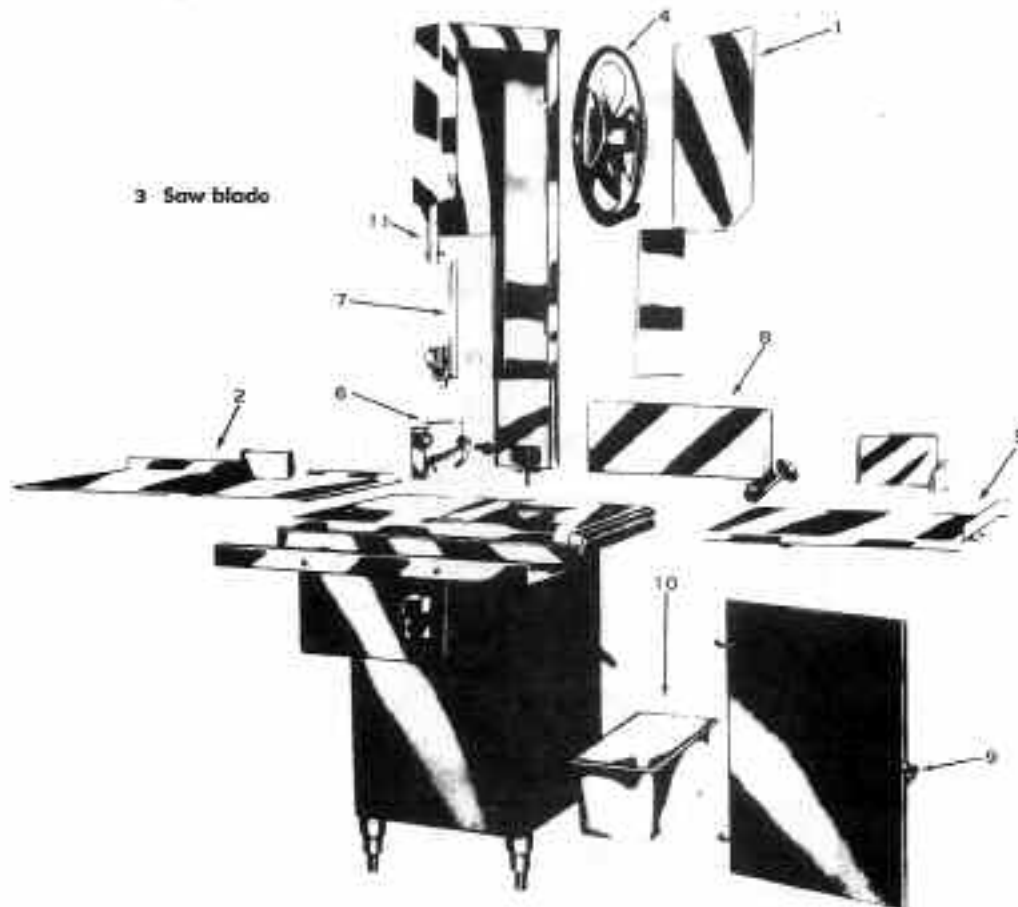
ONLY Use Recommended Cleaning Equipment, Materials and Procedures.

NEVER Spray Water or Other Liquid Substances Directly at Motor, Power Switch or any Other Electrical Components.

ALWAYS Thoroughly Clean Equipment at Least Daily.

CLEANING THE BIRO POWER CUTTER:

Disconnect electrical power to the machine before cleaning. Parts to be removed have been made accessible and can be removed without tools. Notice in the drawing below that all parts are numbered. Each part should be removed for cleaning in the numbered sequence shown. To ensure cleaner cuts, keep the cleaning system in good condition. Parts on the cleaning system which should be checked weekly, and changed as required are as follows: Wheel Cleaners (Part No. 179), Saw Cleaners (Part No. 131), Saw Guide in Stationary Bar (Part No. 119A), Upper Saw Guide (Part No. 602B), Lower Blade Back-Up Guide (Part No. S608) and Nylon Filler (Part No. 177).



MAINTENANCE



SHARP MOVING BAND TYPE SAW BLADE TO AVOID SERIOUS PERSONAL INJURY

ALWAYS Turn Off, Unplug From Power Source and Perform Lockout/Tagout Procedure to This Machine **BEFORE** Servicing.

NEVER Touch This Machine Without Training and Authorization By Your Supervisor.

ALWAYS Keep Hands Clear of Band Type Saw Blade and Other Moving Parts.

NEVER Bypass, Alter, or Modify This Equipment in Any Way From Its Original Condition.

PROMPTLY REPLACE Any Worn or Illegible Labels.

USE ONLY GENUINE BIRO Parts and accessories Properly Installed.

A. GENERAL

1. Machine should be generally inspected every time it is cleaned (at least daily) to ensure that it is in good condition and has not been damaged or tampered with.
 - a. **SAW WHEELS:** Clean outer diameter grooves daily. Check for cracks, gouges or wear on flange and grooves.



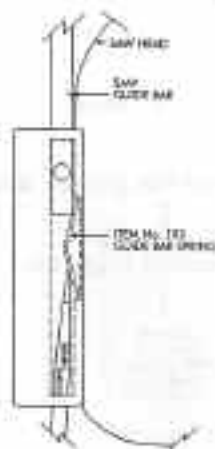
DO NOT IMMERSE UPPER WHEEL ASSEMBLY IN WATER

- b. **WHEEL CLEANER ASSEMBLIES:** Check condition of fiber cleaner, change every four (4) weeks. Check condition of tension spring, replace as needed.
- c. **REMOVABLE FINGER LIFT ASSEMBLY:** Check condition of saw guard, make sure mounting bolts are tight and DANGER EXPOSED BLADE decal is attached and legible. Check condition of upper saw guide (Part No. 602B), replace every six (6) months. Check adjustment of upper saw guide. Should be $\frac{1}{32}$ " between back of blade and saw guide carbide.



NEVER USE THIS MACHINE WITHOUT PROPERLY INSTALLED AND FUNCTIONING SAW GUIDE BAR AND SAW GUARD

- d. **SAW GUIDE BAR:** Check condition of bar for coating peeling and wear, replace as necessary. Check saw guide bar spring for proper tension. The spring should hold the bar in any desired position in its travel. Replaces saw guide bar spring (Part No. 193) as necessary.



1. Remove the finger lift fastener knob and the fingerlift assembly.
2. Remove the finger lift fastener stud.
3. Push the saw guide bar up and out of the top of the head structure.
4. Remove the saw guide bar spring.
5. Clean and lubricate the babbitt pocket area (the square indented area that seats the saw guide bar spring).
6. Lower the new saw guide bar spring through the top of the babbitt pocket area and guide the spring into position with a standard screwdriver. (NOTE: Drawing)
7. While holding the saw guide bar spring in position, re-enter the saw guide bar from the top compressing the saw guide bar spring slightly until the saw guide bar slides past the spring.
8. Replace the finger lift fastener stud, the fingerlift assembly and the finger lift fastener knob.
9. Test by making several adjustments.

- e. **STATIONARY BAR ASSEMBLY:** Check condition of nylon filler (Part No. 177), change every four (4) weeks. Check condition of saw guide (part No. 119A), check tracking of blade through guide, back of blade should be centered in hole, replace every six (6) months. Check condition of lower blade back-up guide (Part No. S608). Check adjustment of back-up guide, should have $\frac{1}{32}$ " gap between back of blade and saw guide carbide. Replace every six (6) months.
- f. **SAW CLEANERS:** Check condition of blade cleaners, replace every four (4) weeks.
- g. **RATCHET ASSEMBLY:** Check for smooth operation through full range of travel. Check condition of trigger spring, replace as necessary.
- h. **SLIDE GIBS:** Check that head structure moves freely up and down. Check for side to side and fore to aft tolerance. Adjust as required. Grease every four (4) weeks.
- i. **MEAT GAUGE ASSEMBLY:** Check free movement of meat gauge plate on gear rack. Gear rack to be kept lubricated at all times with light food grade oil. Check operation of release handle. Check that worm gear engages properly with gear rack. Check tension of release handle spring, replace as necessary.
- j. **MEAT CARRIAGE ASSEMBLY:** Check for free movement through full range of travel. Check for side to side tolerance, adjust as necessary. Check condition of bearings, replace as necessary. Check condition of thumb guard, replace as necessary.
- k. **SAFETY ITEMS:** Safety end cut pusher plate with machine and accessible. All warning labels present, properly affixed and legible. Model and Serial Number plate properly affixed and legible. Wall poster within operators view from machine. Manual accessible to operator.

B. LUBRICATION

1. **UPPER WHEEL BEARINGS:** Grease every four (4) months. Change grease every twelve (12) months.
2. **LOWER BEARING HOUSING:** Grease every four (4) months. Change grease every twelve (12) months.
3. **SLIDE GIBS:** Grease every four (4) weeks.
4. **MEAT CARRIAGE BEARINGS:** Grease every four (4) weeks.
5. **SAW GUIDE BAR:** Oil daily with food machine oil.
6. **MEAT GAUGE GEAR RACK:** Oil daily with food machine oil.

— NOTE —
USE SHELL CASSIDA
GREASE EPS-2

7. **MOTOR BEARINGS:** Bearing grease will lose its lubricating ability over time, not suddenly. The lubricating ability of a grease (over time) depends primarily on the type of grease, the size of the bearing, the speed at which the bearing operates and the severity of the operating conditions. Good results can be obtained if the following recommendations are used in your maintenance program.

A high grade ball or roller bearing grease should be used. Recommended grease for standard service conditions is Polyrex EM (Exxon Mobil).

Equivalent and compatible greases include: Texaco Polystar, Rykon Premium #2, Pennzoil Pen 2 Lube, and Chevron SRI.

Recommended lubrications intervals is every 9 months with the equivalent of two (2) teaspoons of grease.

USE No. 374 GREASE FOR RE-GREASING SEE INSTRUCTIONS BELOW



When lubricating the upper wheel bearing it is important that the three hex head screws securing the upper wheel hub cap be loosened slightly before attempting to pump grease into the grease fitting. Loosening the screws allows for an escape of old broken down grease and air from the bearing cavity. Failure to loosen the screws before greasing the upper bearings can cause the upper shaft seal to be dislodged from the upper wheel allowing grease to escape and moisture to get into the cavity. When finished greasing the bearings, retighten the three screws. Take care to also clean off any grease that was pushed out of the cavity during greasing.

C. SAW GUIDE BAR AND SAW GUARD

The factory recommends that when service is performed on any BIRO SAW the servicing agency be sure that the BIRO SAW is equipped with the most current safety features available.

MODEL 22 SAW GUIDE BARS AND SAW GUARDS

All Model 22 Units Prior to Serial Number 25900 (1967)

The SAW GUIDE BAR used on original equipment measured $14\frac{3}{8}$ " long. The (Item #211 O/S) FINGER LIFT held the (Item #17-0) SAW GUIDE BEARING BRACKET that held the (Item #228) SAW GUIDE BEARING. The (Item #255) SAW GUARD attached directly to the SAW GUIDE BAR. Any items required for these units should be replaced by (Item #A116-18AL) SAW GUIDE BAR ASSEMBLY, (Item #193) SAW GUIDE BAR SPRING and (Item #660) SAW GUARD ON HEAD DOOR (see adjacent page).

Serial Number 25900 (1967) to Serial Number 29423 (1975)

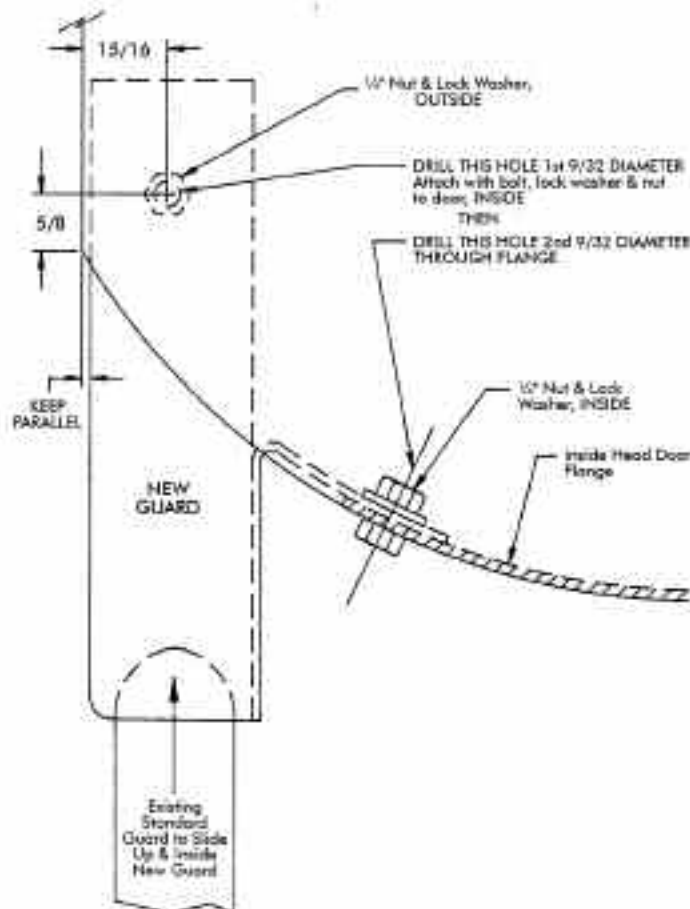
The SAW GUIDE BAR was not drilled across the width. The (Item #255MS) SAW GUARD was now attached to the (Item #211MS) FINGER LIFT. The (Item #17-0) SAW GUIDE BEARING BRACKET and (Item #228) SAW GUIDE BEARING were replaced by the (Item #601) SAW GUIDE BRACKET and the (Item #602B) UPPER SAW GUIDE. When replacing any items on these units the factory recommends the complete UPPER SAW GUIDE BAR ASSEMBLY (Item #A116-18AL) be installed along with a new (Item #193) SAW GUIDE BAR SPRING. The (Item #660) SAW GUARD ON HEAD DOOR (see adjacent page should be attached to the head door.

Serial Numbers 29423 On (1975 to current)

The SAW GUIDE BAR has been increased to $18\frac{1}{4}$ " and drilled and tapped through the one inch width. The (Item #211MS) FINGER LIFT was redrilled to mate to the (Item #211D) FASTENER STUD. The GUARD (Item #12662-AL) now attaches directly to the FINGER LIFT along with the (Item #601) BRACKET and (Item #602B) GUIDE. The (Item #211Q) FINGER LIFT FASTENER KNOB holds the entire finger lift assembly to the guide bar. The (Item #660) HEAD DOOR GUARD is standard equipment (see below) and nests with the (Item #12662-AL) GUARD.

Once again, (Item #A116-18AL) UPPER SAW GUIDE BAR ASSEMBLY is currently standard and is applicable to any Model 22 in the field.

The (Item #660) HEAD DOOR GUARD can be attached to all BIRO Model 22 units produced before and after serial number 25900.



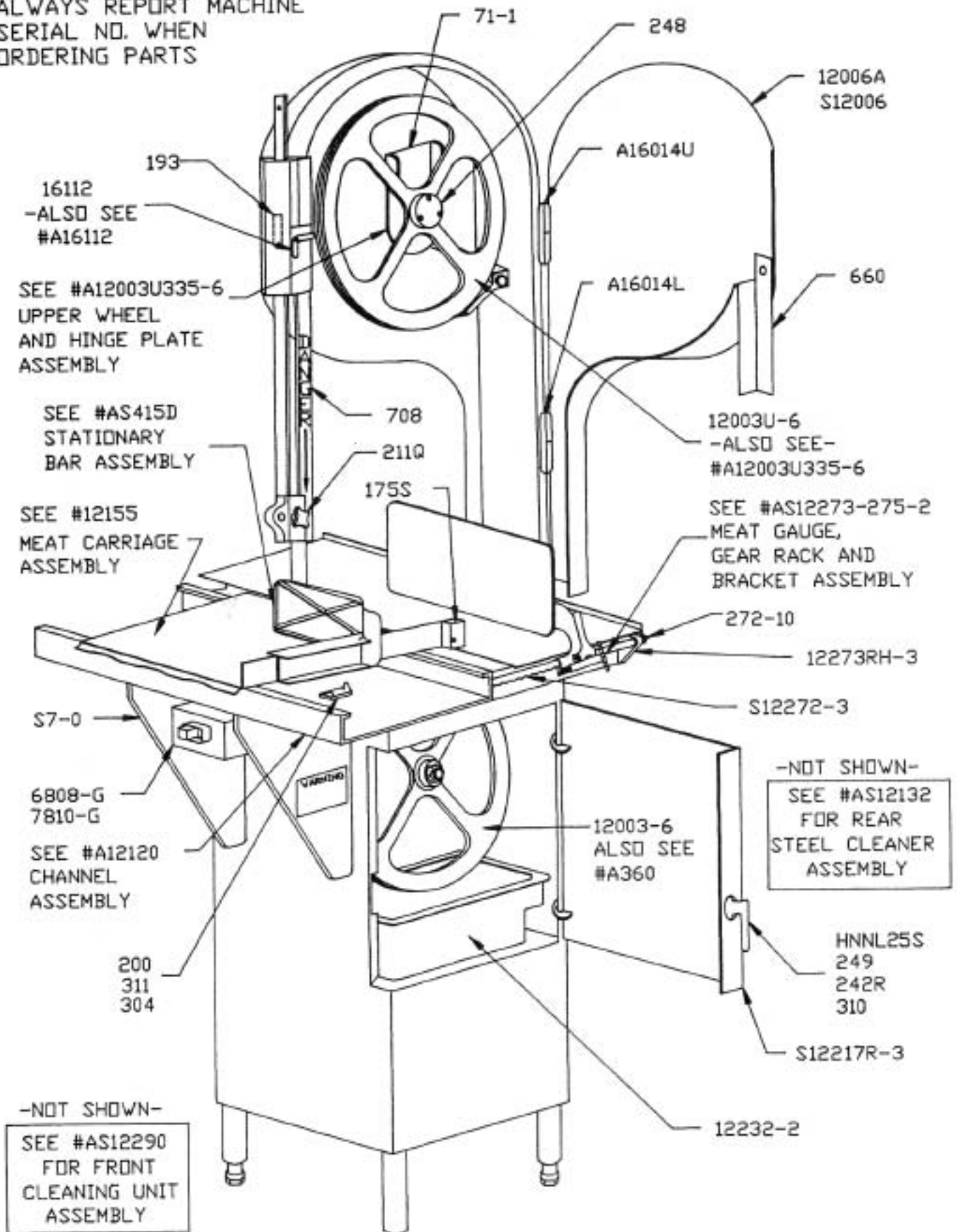
MODEL 22 GUARD ON HEAD DOOR

Instructions for Attaching New Guard for Use With Extended Saw Guide Bar on Older Machines

- Remove head door and lay inside up, placing new guard inside door face and flange as shown in diagram.
- Drill upper hole first, clamp guard tight against inside of door.
- Then drill lower flange hole, using hole in guard as a locator for the lower bolt.
- NOTICE: Care must be taken to position edges parallel so that the old standard guard will slide up inside the new guard.

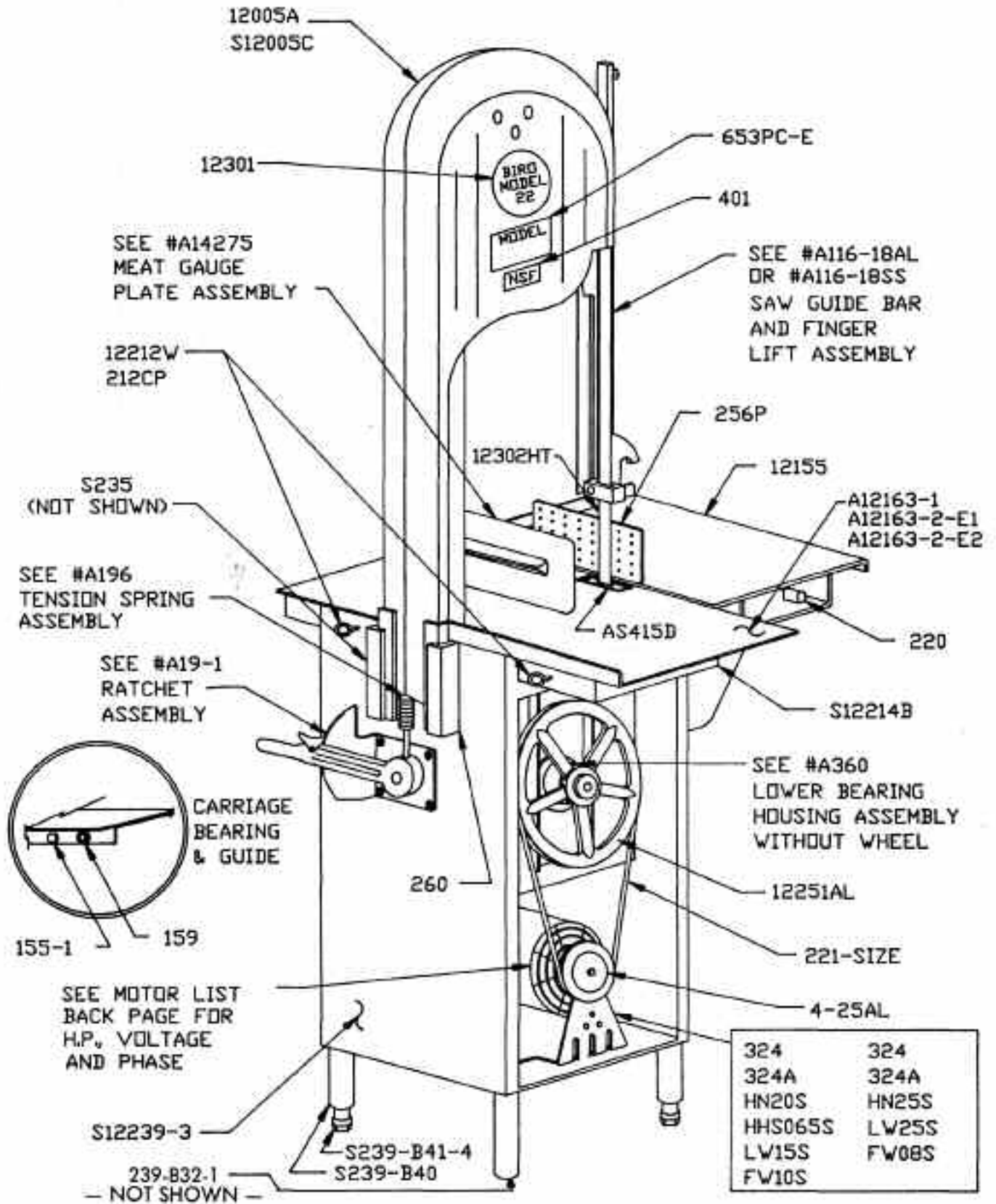
NOTE:
ALWAYS REPORT MACHINE
SERIAL NO. WHEN
ORDERING PARTS

SERIAL NO. 36101 ON

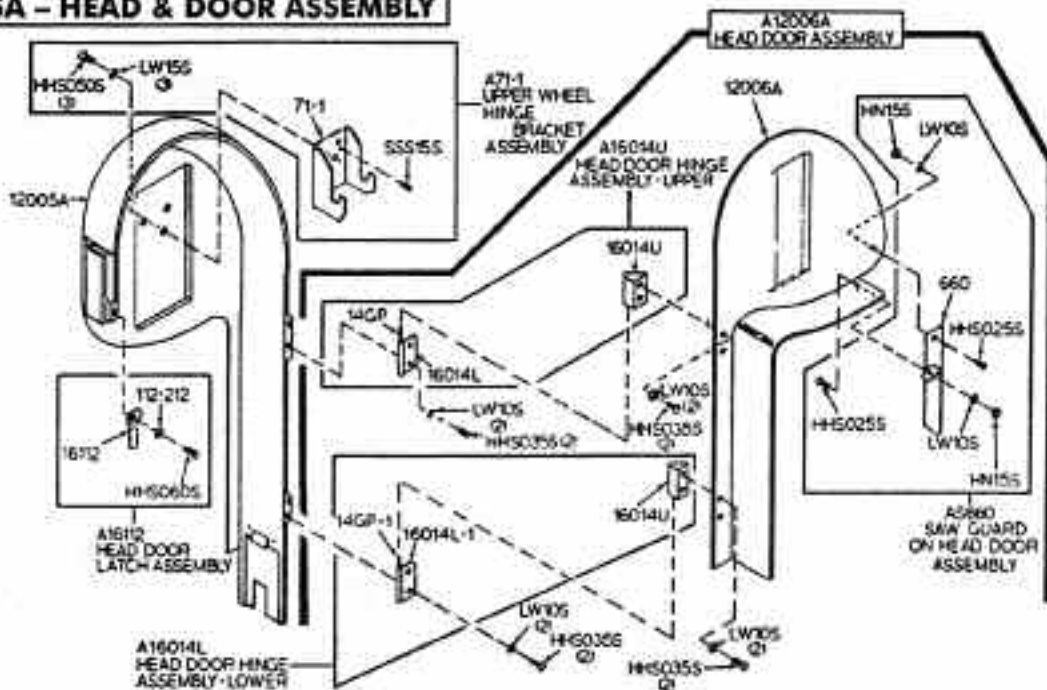


SERIAL NO. 35301 ON

NOTE:
ALWAYS REPORT MACHINE SERIAL
NO. WHEN ORDERING PARTS.

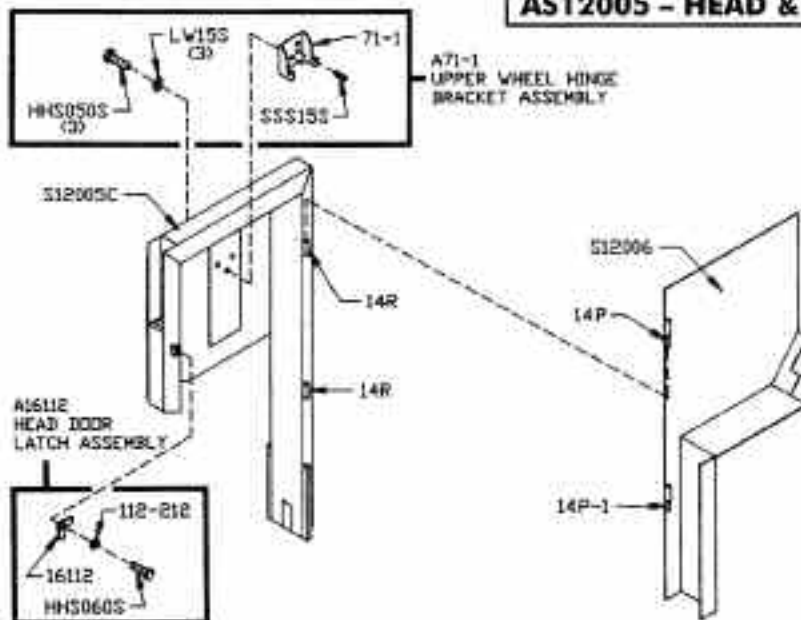


A12005A - HEAD & DOOR ASSEMBLY

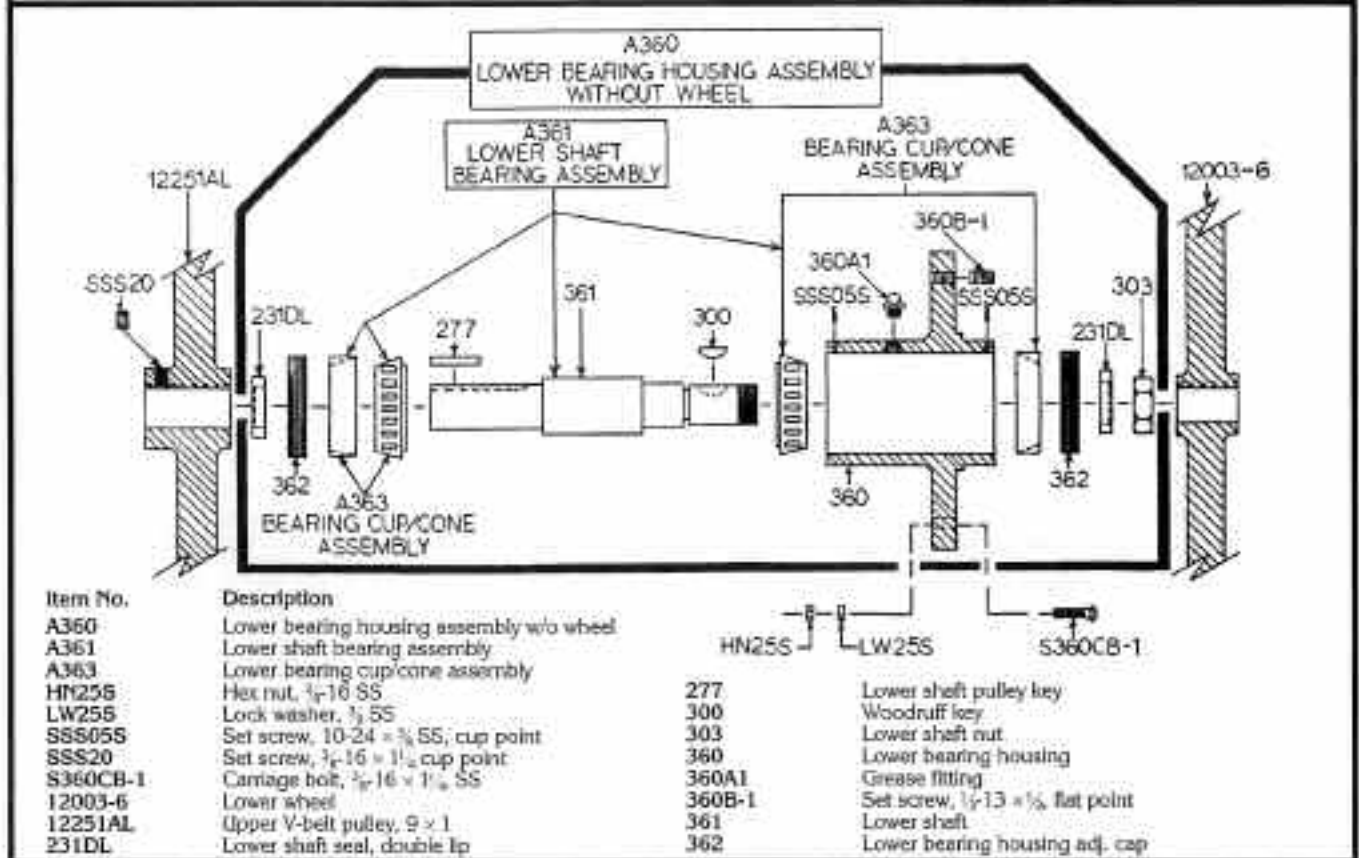
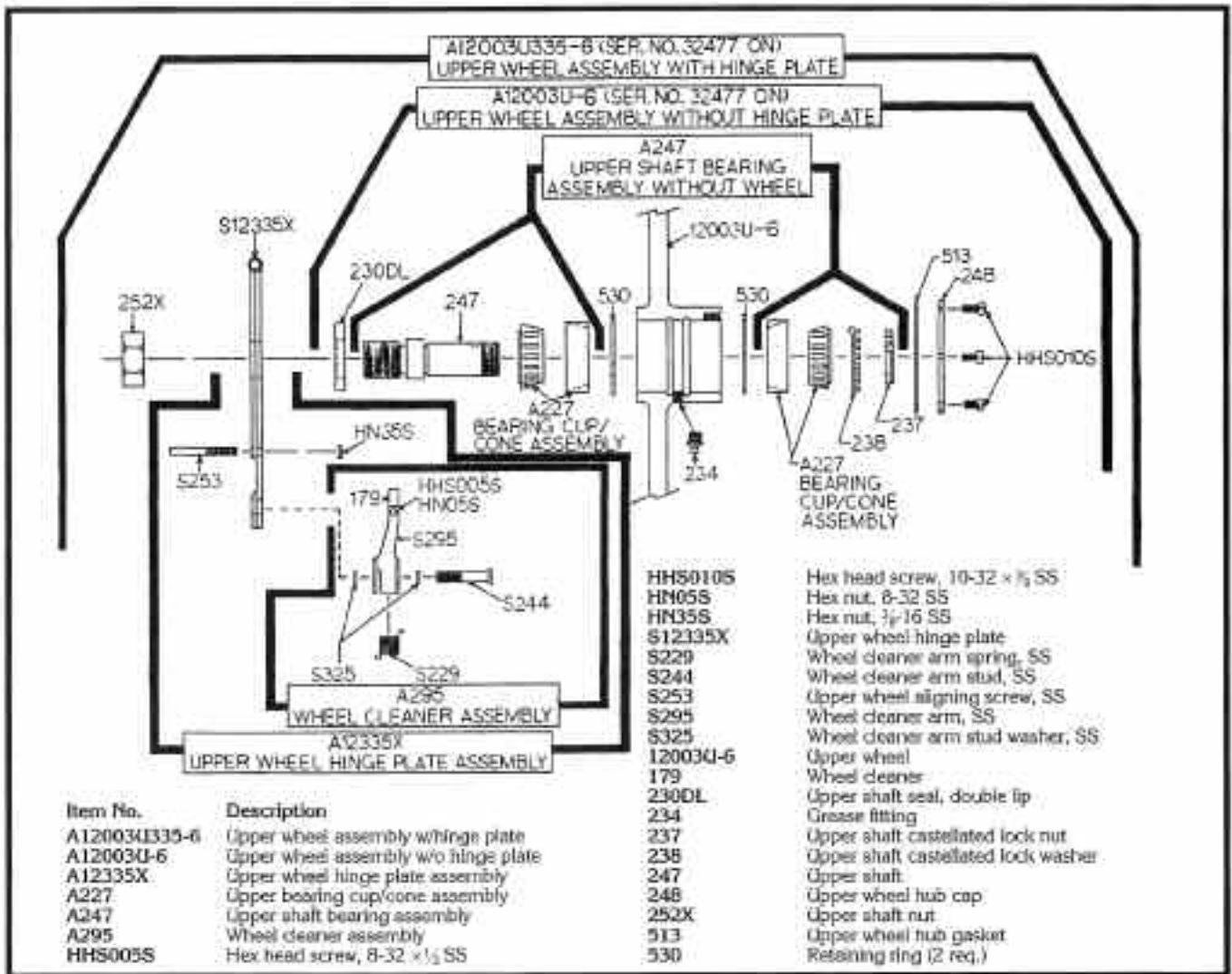


Item No.	Description	Item No.	Description
A12005A	Head & door assembly	LW15S	Lock washer, $\frac{1}{16}$ SS
A12006A	Head door assembly	SSS15S	Set screw, $\frac{1}{16}$ 18 x $\frac{5}{16}$ cup point, SS
A16014L	Head door hinge assembly, lower	112-212	Waved washer
A16014U	Head door hinge assembly, upper	12005A	Head, new style
A16112	Head door latch assembly	12006A	Head door, new style (not sold separately)
A71-1	Upper wheel hinge bracket assembly	14GP	Head door hinge pin, $1\frac{1}{2}$ "
A5660	Saw guard on head door assembly	14GP-1	Head door hinge pin, $1\frac{1}{4}$ "
HHS025S	Hex head screw, $\frac{1}{4}$ 20 x 1, SS	16014L	Head door hinge, lower half (not sold separately)
HHS035S	Hex head screw, $\frac{1}{4}$ 20 x $\frac{1}{2}$, SS	16014L-1	Head door hinge lower - short pin
HHS050S	Hex head screw, $\frac{1}{4}$ 18 x $\frac{1}{2}$, SS	16014U	Head door hinge, upper half (not sold separately)
HHS060S	Hex head screw, $\frac{1}{4}$ 18 x 1, SS	16112	Head door latch
HN15S	Hex nut, $\frac{1}{4}$ 20 SS	660	Saw guard on head door
LW10S	Lock washer, $\frac{1}{16}$ SS	71-1	Upper wheel hinge bracket

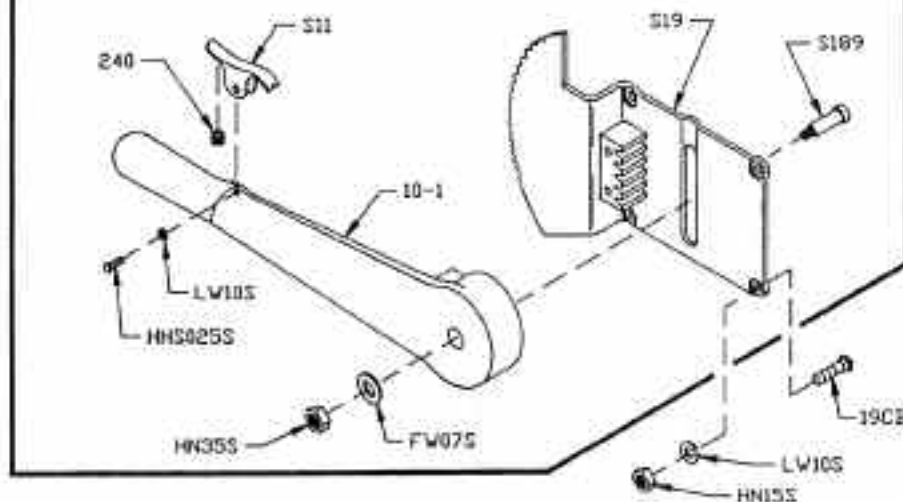
AS12005 - HEAD & DOOR ASSEMBLY, SS



Item No.	Description	Item No.	Description
A16112	Head door latch assembly	SSS15S	Set screw, $\frac{1}{16}$ 18 x $\frac{5}{16}$ cup point, SS
AS12005	Head & door assembly, SS	14P	Door hinge pin, long
A71-1	Upper wheel hinge bracket assembly	14P-1	Door hinge pin, short
HHS050S	Hex head screw, $\frac{1}{4}$ 18 x $\frac{1}{2}$, SS	14R	Hinge receiver (not sold separately)
HHS060S	Hex head screw, $\frac{1}{4}$ 18 x 1, SS	112-212	Waved washer
LW15S	Lock washer, $\frac{1}{16}$ SS	16112	Head door latch
S12005C	Head, SS	71-1	Upper wheel hinge bracket
S12006	Head door, SS		



**A19-1
RATCHET ASSEMBLY**



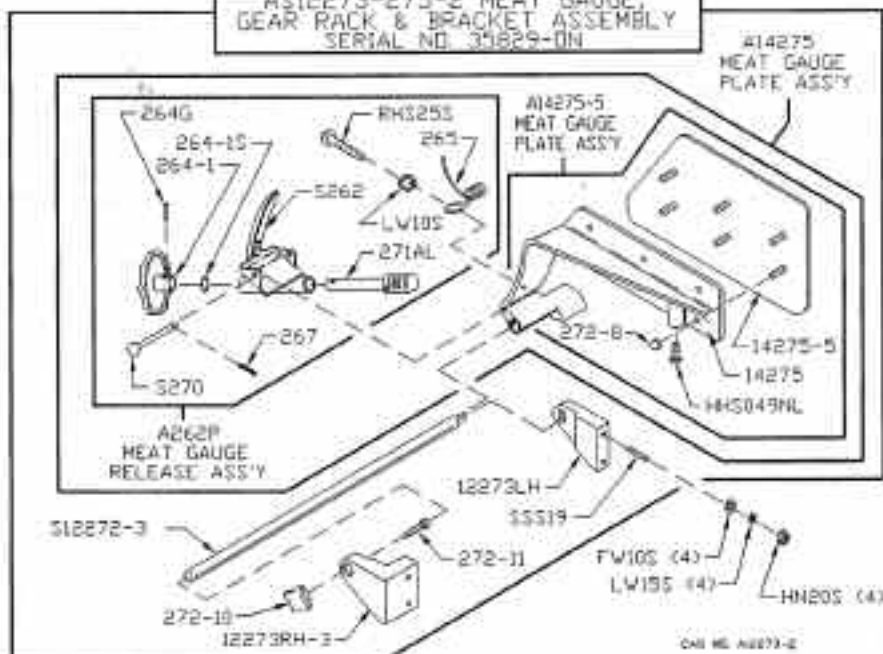
Item No.
A19-1
FW075
HHS025S
HN15S
HN35S
LW10S

Description
Ratchet assembly
Flat washer, $\frac{1}{4}$ SS
Hex head screw, $\frac{1}{4}$ -20 \times $\frac{1}{2}$ SS
Hex nut, $\frac{1}{4}$ -20 SS
Hex nut, $\frac{3}{8}$ -16 SS
Lock washer, $\frac{1}{4}$ SS

Item No.
S11
S189
S19
10-1
19CB
240

Description
Ratchet trigger SS
Ratchet arm stud SS
ratchet base SS
Ratchet arm
Carriage bolt $\frac{1}{4}$ -20 \times $\frac{3}{4}$ SS
Ratchet trigger spring

**A812273-275-2 MEAT GAUGE,
GEAR RACK & BRACKET ASSEMBLY
SERIAL NO. 35829-0N**



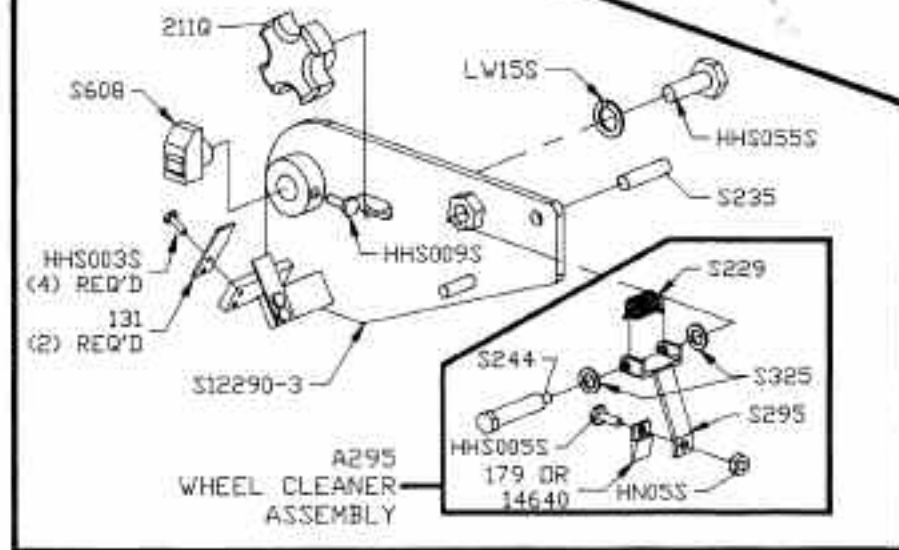
Item No.
A812273-275-2
A14275
A14275-5
A262
FW10S
HHS035S
HN20S
HHS049NL
LW10S
LW15S
S5519
S12272-3
S262

Description
Meat gauge assembly S/N 35301 on
Meat gauge plate assembly w/release
assembly
Meat gauge plate assembly less release
assembly
Meat gauge release assembly
Flat washer, $\frac{1}{4}$ SS
Hex head screw $\frac{1}{4}$ -20 \times $\frac{3}{8}$ SS
Hex nut, $\frac{3}{8}$ -18 SS
Hex screw - Nylox $\frac{3}{8}$ -18 \times $\frac{1}{2}$
Lock washer, $\frac{1}{4}$ SS
Lock washer, $\frac{1}{4}$ SS
Set screw, cup point, $\frac{3}{8}$ -18 \times $\frac{1}{16}$ SS
Meat gauge gear rack, S/N 35829 on
Meat gauge release handle, SS

Item No.
S265
S270
12273LH
12273RH-3
14275
14275-5
264G
264-1
264-1S
267
271AL
272-8
272-9
272-10
272-11

Description
Meat gauge release spring, SS
Meat gauge release pin whole, SS
Meat gauge brkt. - LH, S/N 35301 on
Meat gauge brkt. - RH, S/N 35829 on
Meat gauge arm
Meat gauge plate, SS
Meat gauge hand wheel groove pin
Meat gauge hand wheel
Hand wheel shim
Meat gauge release cotter key
Meat gauge worm gear, aluminum
Cap nut, $\frac{1}{4}$ -18 SS
Hex head screw, $\frac{3}{8}$ -18 \times 2 SS
Lock knob $\frac{3}{8}$ -16, 4 point
Allen head cap screw $\frac{3}{8}$ -16 \times $1\frac{1}{2}$ lg.

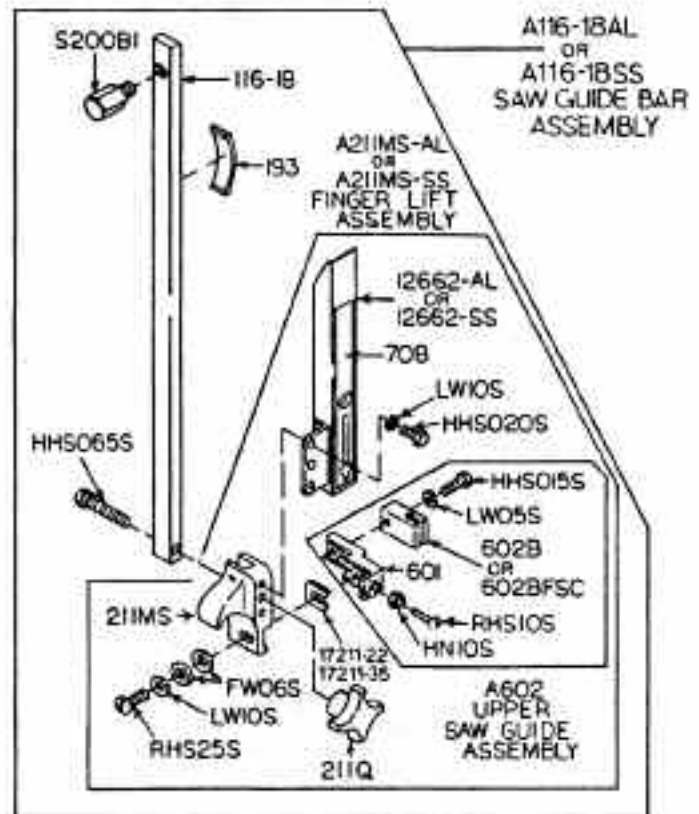
AS12290-3
CLEANING UNIT
ASSEMBLY
SERIAL NO. 35101 DN



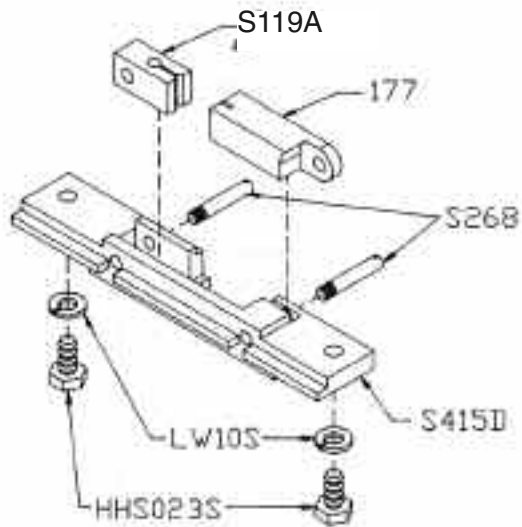
Item No.	Description
AS12290-3	Cleaning unit assembly
A295	Wheel cleaner assembly
HHS003S	Hex head screw, 8-32 x 1/4 trimmed SS
HHS005S	Hex head screw, 8-32 x 1/8 SS
HHS009S	Hex head screw, 10-24 x 1/2 SS
HHS055S	Hex head screw, 5/16-18 x 3/4 SS
HN05S	Hex nut, 8-32 SS
LW15S	Lock washer, 5/16 SS
S12290-3	Cleaning unit
S229	Wheel cleaner arm spring, SS
S235	Taper pin, #4 x 3/4 SS

Item No.	Description
S244	Wheel cleaner arm stud, SS
S295	Wheel cleaner arm, SS
S325	Wheel cleaner arm stud washer, SS
S608	Saw back up guide w/607 carbide
131	Blade cleaner, SS
131N	Blade cleaner, nylene
131SHORT	Blade cleaner, SHORT SS, 7/8 LG
131SS/NYL	Blade cleaner combo, short, SS, STD Nylene
179	Wheel cleaner
211Q	Lock knob, 5/16-18, 4 point
14640	Wheel cleaner, Rulon

Item No.	Description
A116-18AL	Saw guide bar assembly for aluminum head
A116-18SS	Saw guide bar assembly for stainless head
A211MS-AL	Finger lift assembly for aluminum head
A211MS-SS	Finger lift assembly for stainless head
A602	Saw guide assembly upper
FW06S	Flat washer, 1/4 SS
HHS015S	Hex head screw, 10-32 x 1/2 SS
HHS020S	Hex head screw, 1/4-20 x 3/4 SS
HHS065S	Hex head screw, 5/16-18 x 1 1/2 SS
HN10S	Hex nut, 10-32 SS
LW05S	Lock washer, #10 SS
LW10S	Lock washer, 1/4 regular, SS
RHS10S	Round head screw, 10-32 x 1/2 SS
RHS25S	Round head screw, 1/2-20 x 3/4 SS
S200B1	Stop stud guide bar
I16-18	Saw guide bar, 18"
12662-AL	Saw guard for aluminum head
12662-SS	Saw guard for stainless head
17211-22	Finger lift shim, .022
17211-35	Finger lift shim, .035
193	Saw guide bar spring
211MS	Finger lift
211Q	Finger lift fastener knob, 4 point
601	Upper saw guide bracket
602BFSC	Upper saw guide, fish
602B	Upper saw guide
708	Decal, danger exposed blade

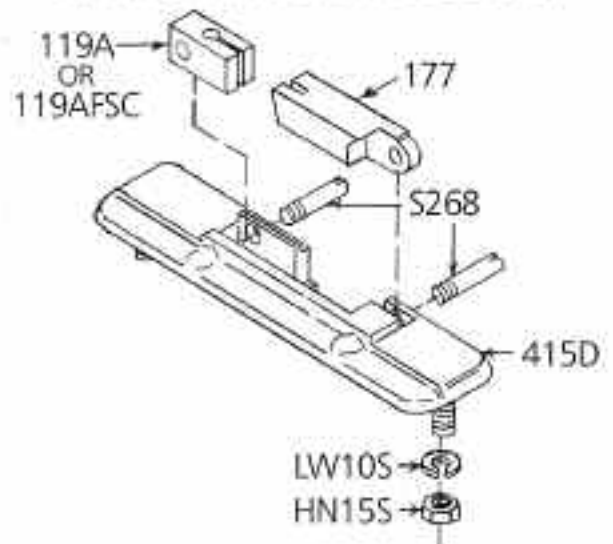


**AS415D
STATIONARY BAR ASSEMBLY**



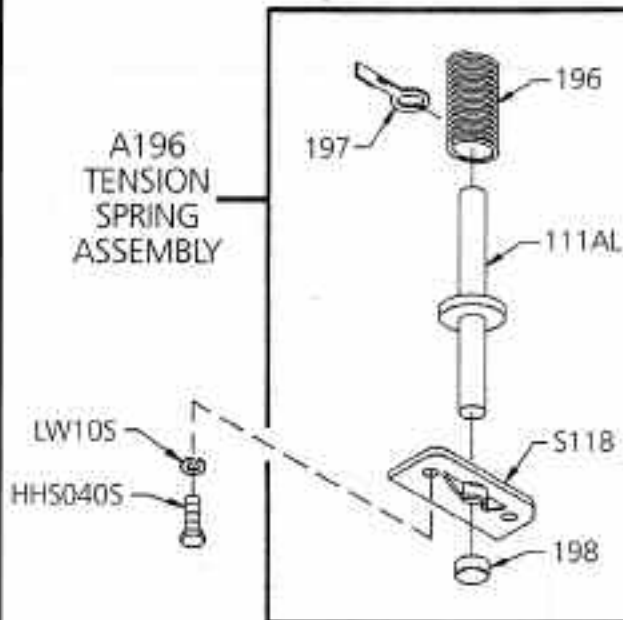
Item No.	Description
AS415D	Stationary bar assembly, 35301 on
HHS023S	Hex head screw, 1/2-20 x 3/8, SS
LW10S	Lock washer, 1/4 SS
S268	Stationary bar headless screw
S119A	Saw guide-stainless
177	Nylon filler
S415D	Stationary bar, 35301 on

**A415D
STATIONARY BAR ASSEMBLY**



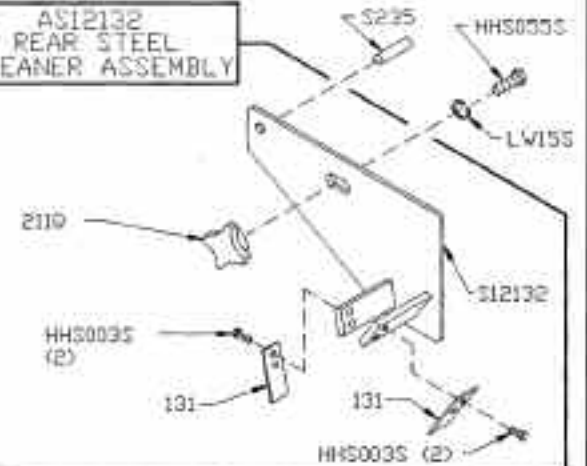
Item No.	Description
A415D	Stationary bar assembly
AS415D	Stationary bar assembly SS
HN15S	Hex nut, 1/4-20 SS
LW10S	Lock washer, 1/4 SS
S268	Stationary bar headless screw
S415D	Stationary bar SS
119A	Saw guide In stationary bar
177	Nylon filler
415D	Stationary bar

**A196
TENSION
SPRING
ASSEMBLY**



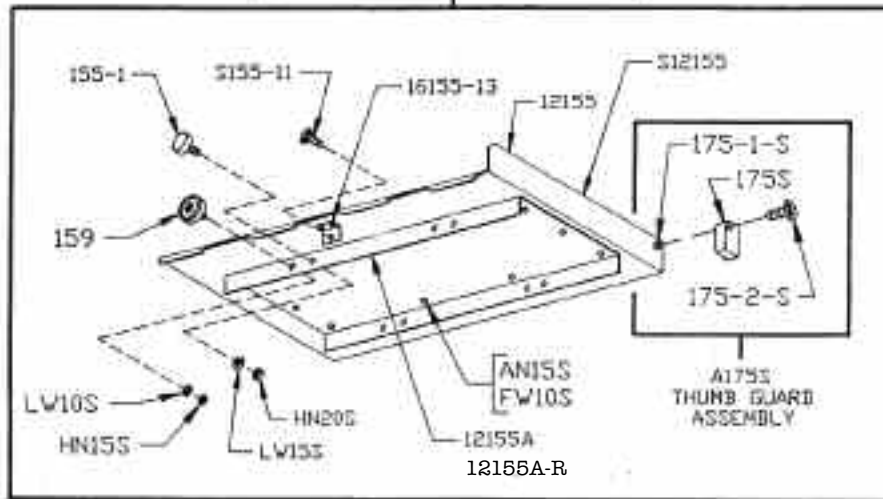
Item No.	Description
A196	Tension spring assembly
HHS040S	Hex head screw, 1/2-20 x 1/4 SS
LW10S	Lock washer, 1/4 SS
S118	Tension spring plate, SS
111AL	Tension spring pin, al.
196	Saw tension spring
197	Tension spring gauge
198	Tension pin cap

**AS12132
REAR STEEL
CLEANER ASSEMBLY**



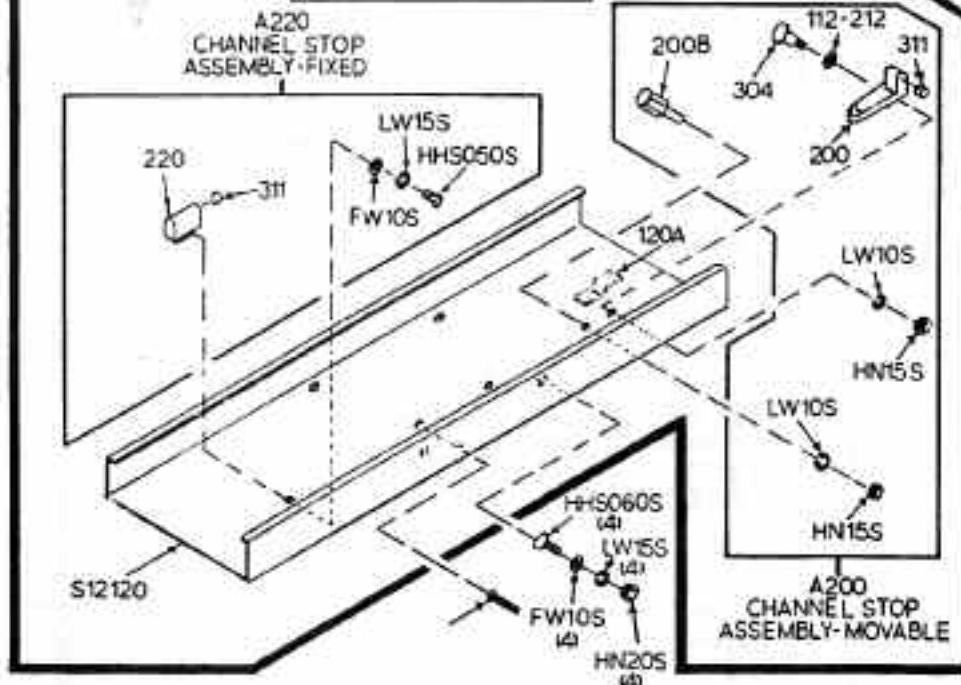
Item No.	Description
AS12132	Steel cleaner assembly, rear, 35301 on
HHS003S	Hex head screw, 8-32 x 1/4 SS
HHS055S	Hex head screw, 1/8-18 x 3/4 SS
LW15S	Lock washer, 1/4 SS
S12132	Cleaning unit, rear
S235	Taper pin, #4 x 3/8 SS
131	Saw cleaner, SS, 35301 on
211Q	Lock knob, 1/8-18, 4 point

A12155 MEAT CARRIAGE ASSEMBLY

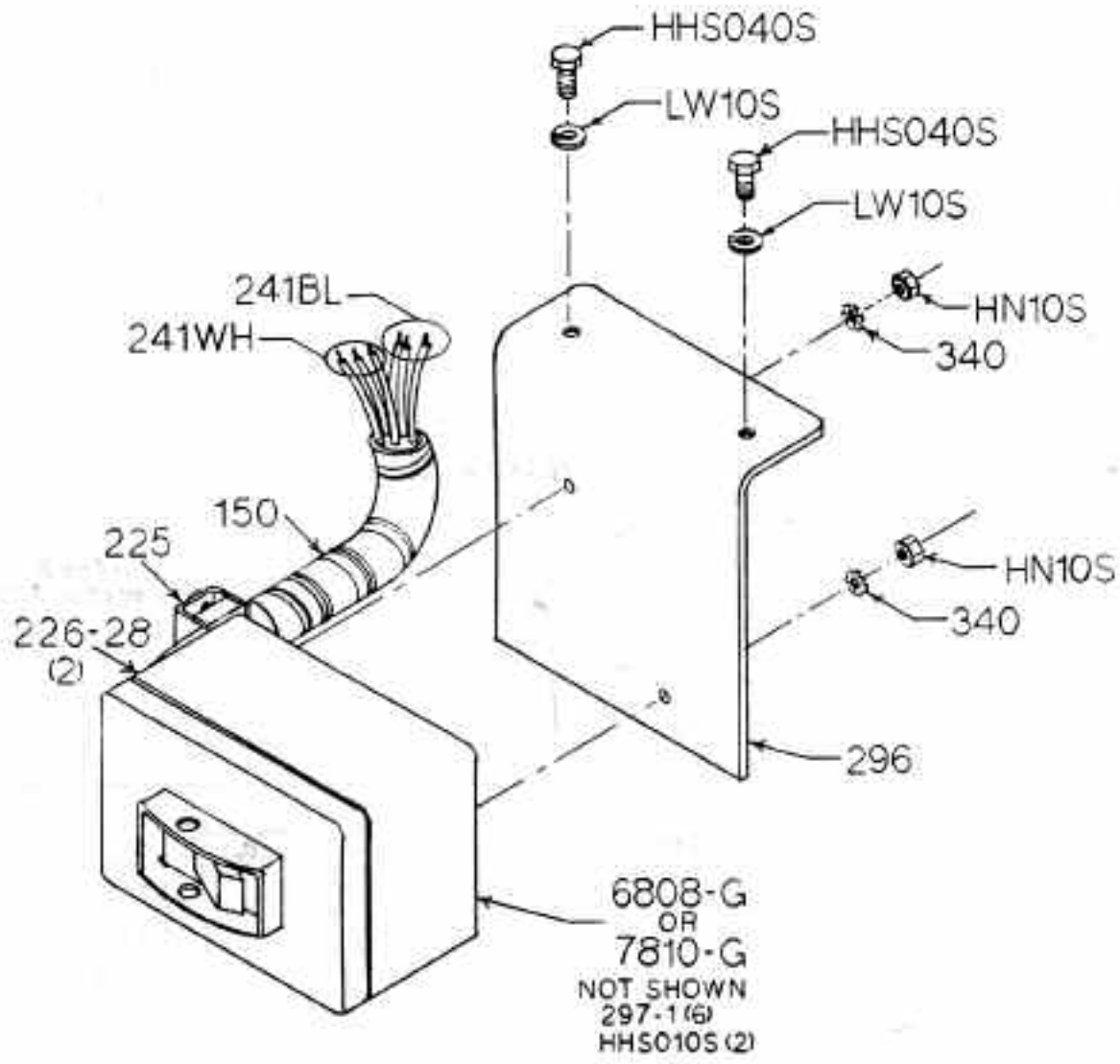


Item No.	Description	Item No.	Description
A12155	Meat carriage assembly	12155	Meat carriage top & angle + stop
A1755	Thumb guard assembly	12155A	Meat carriage guide only with stop
AN155	Acorn nut, SS, 1/4-20	12155A-R	Meat carriage angle only without stop
FW10S	Flat washer, 3/16 SS	155-1	Meat carriage guide
HN15S	Hex nut, 1/4-20 SS	155-3	Meat carriage guide spacer, .025
HN20S	Hex nut, 1/4-18 SS	155-4	Meat carriage guide spacer, .040
LW10S	Lock washer, 1/4 SS	159	Meat carriage bearing
LW15S	Lock washer, 3/16 SS	16135-13	Carriage stop angle
S12155	Meat carriage top only	175S	Thumb guard, nylon
S155-11	Meat carriage stop thumb screw	175-1-S	Thumb guard nut SS
		175-2-S	Thumb screw, 1/4-20 x 1 1/2

A12120 CHANNEL ASSEMBLY 31.5"

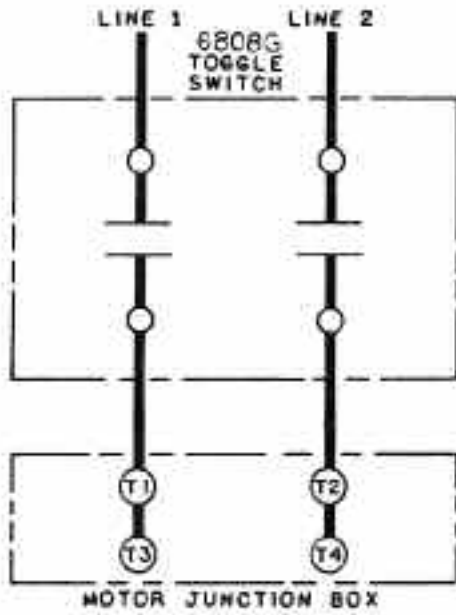


Item No.	Description	Item No.	Description
A12120	Channel assembly, 31.5"	LW15S	Lock washer, 3/16 SS
A200	Carriage stop assembly, movable	S12120	Channel, 31.5", SS
A220	Carriage stop assembly, fixed	112-212	Waved washer
FW10S	Flat washer, 3/16 SS	120A	Pusher plate clamp, welded
HHS050S	Hex head screw, 1/4-18 x 1 1/2 SS	200	Carriage stop, movable
HHS060S	Hex head screw, 3/16-18 x 1, SS	200B	Stop stud carriage stop
HN15S	Hex nut, 1/4-20 SS	220	Carriage stop, fixed
HN20S	Hex nut, 3/16-18 SS	304	Shoulder screw carriage stop
LW10S	Lock washer, 1/4 SS	311	Carriage stop rubber bumper

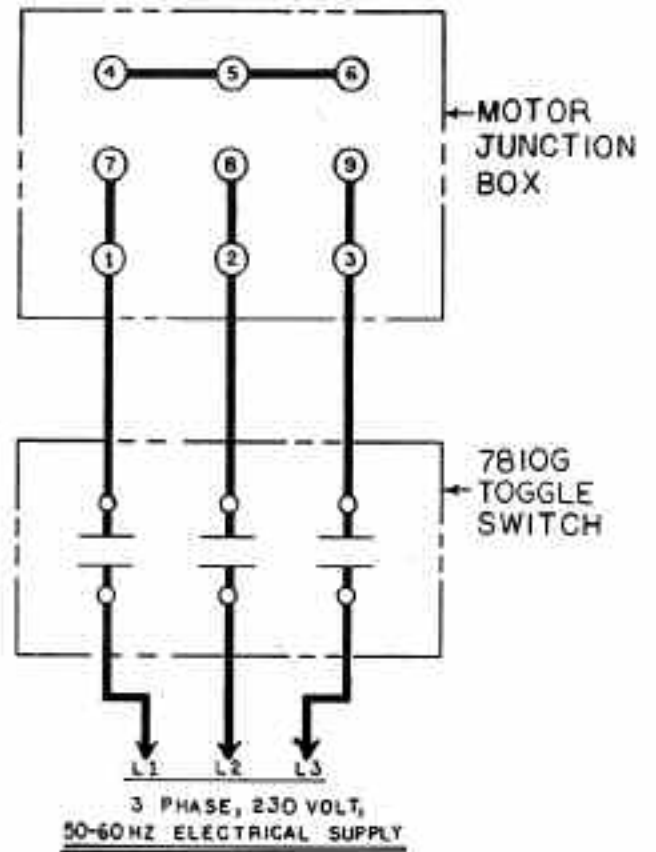
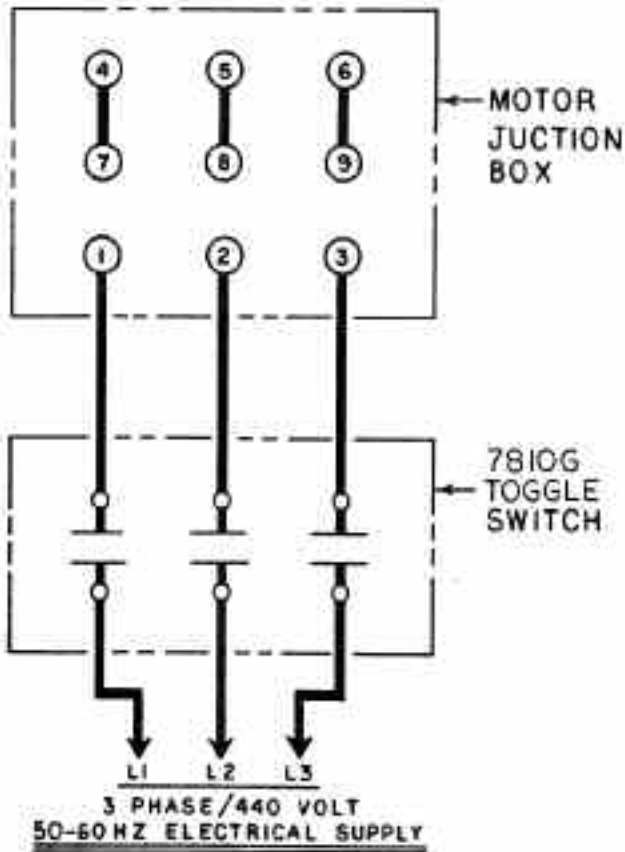
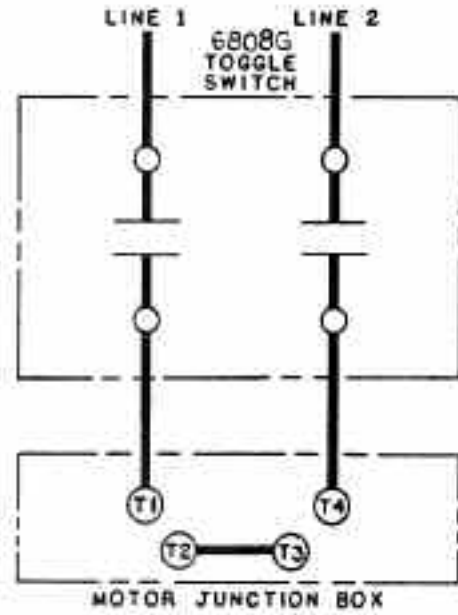


Item No.	Description
A6808-G-12	Toggle switch assembly, 1PH
A7810-G-12	Toggle switch assembly, 3PH
HHS040S	Hex head screw, 1/4-20 x 3/4 SS
HN10S	Hex nut, 10-32 SS
LW10S	Lock washer, 1/4 SS
150	Conduit, 1/2"
225	Conduit connector, 90°
226-28	Washer, SS
241BL	Wire, black, 12GA, CSA E-UL
241WH	Wire, white, 12GA, CSA E-UL
296	Switch bracket SS
297-1	Wire terminal eyelet
340	Star lock washer
6808-G	Toggle switch, 1 phase
7810-G	Toggle switch, 3 phase

110-115 VOLTS

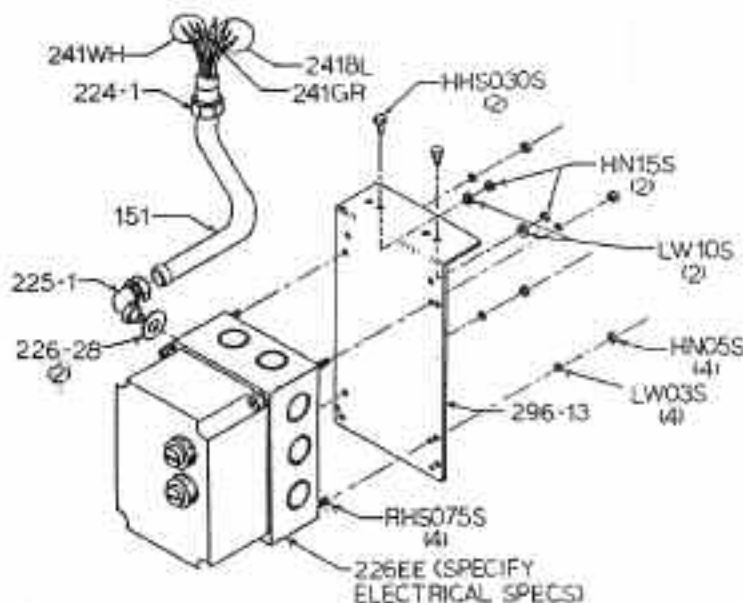


220-230 VOLTS



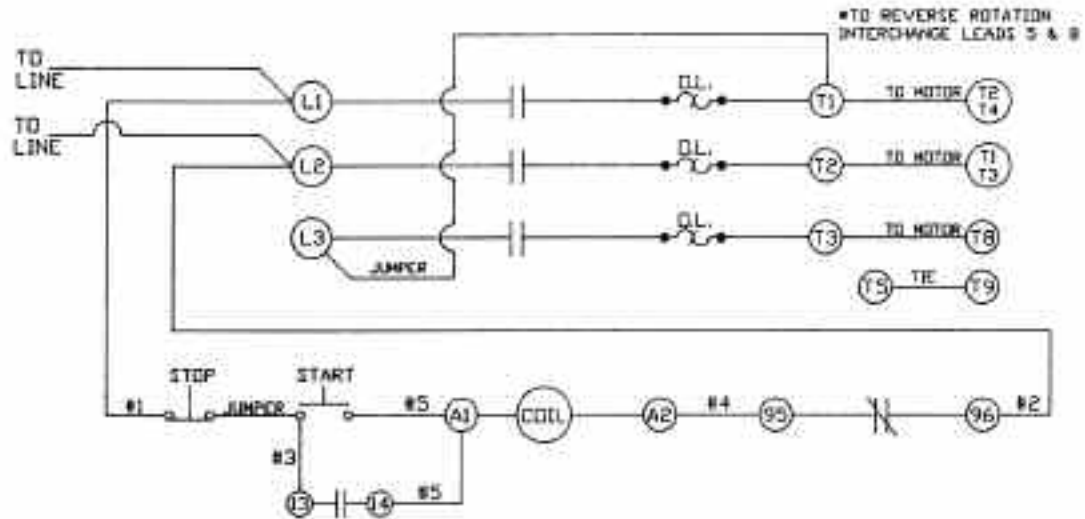
**WATERTIGHT MAGNETIC SWITCH ASSEMBLIES
(AEG)
INCLUDES MOUNTING BRACKET AND WIRES**

Item No.	Description
A22612EE-5021	BAEQ/MS-PBF/A18, 1HP, 104/115-50/60-1
A22612EE-506	BAEQ/MS-PBF/05-C6.3, 1HP, 208/220/230-50/60-3
A22612EE-508	BAEQ/MS-PBF/05-E2.4, 1HP, 440/460-60-3
A22612EE-510	BAEQ/MS-PBF/05-D3.2, 1HP, 380/415-50-3
A22612EE-5141	BAEQ/MS-PBF/05-CS10.5, 1HP, 208/220/230-50/60-1
A22612EE-514F	BAEQ/MS-PBF/05-C8, 1.5-2HP, 208/220/230-60-3
A22612EE-516F	BAEQ/MS-PBF/05-E4.7, 1.5-2HP, 440/460-3
A22612EE-518F	BAEQ/MS-PBF/05-D4.7, 1.5-2HP, 380-3
A22612EE-5201	BAEQ/MS-PBF/A26, 1.5-2HP, 104/115-50/60-1
A22612EE-5221	BAEQ/MS-PS/05-CS14, 1.5HP, /230-50/60-1

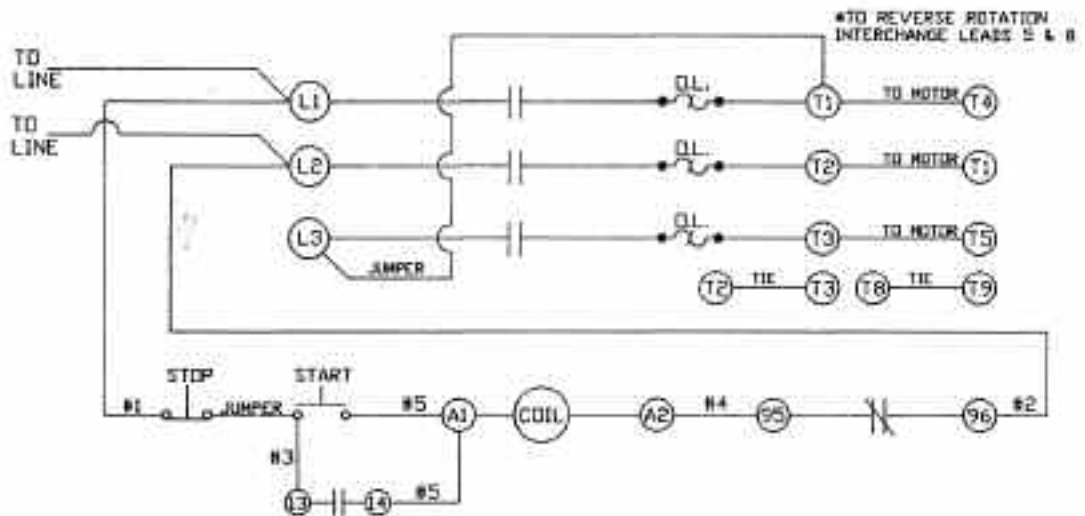


Item No.	Description	Item No.	Description
151	Watertight conduit	226EE-A011K	Contactors, LS11K, 115-AC, 120V
225-1	Conduit connector, WT, 90°	226EE-C0	Contactors, LS05.10-C0, 208-230V
226-2B	Washer, 1 1/2 x 3/8 SS	226EE-D0	Contactors, LS05.10-D0, 380-415V
226EE-22PB-GF	Start pushbutton, 22MM flush w/o contact block	226EE-ENCL-PB22	Enclosure with 22MM button holes
226EE-22PB-RE	Stop pushbutton, 22MM extended w/o contact block	226EE-ENCL-PB30	Enclosure with 30MM button holes
226EE-5021	BAEQ/MS-PBF/A18, 1HP, 104/115-50/60-1	226EE-EO	Contactors, LS05.10-EO 440-480V
226EE-506	BAEQ/MS-PBF/05-C6.3 1HP, 220-50/60-3	226EE-OL02.4H	Overload, B05-H, 1.7-2.4A
226EE-508	BAEQ/MS-PBF/05-E2.4, 1HP, 440/460-60-3	226EE-OL03.2IN	Overload, B05-IN, 2.2-3.2A
226EE-510	BAEQ/MS-PBF/05-D3.2, 1HP, 380/415-50-3	226EE-OL04.7JM	Overload, B05-JN, 3-4.7A
226EE-5141	BAEQ/MS-PBF/05-CS10.5, 1HP, 208/220/230-50/60-1	226EE-OL06.3K	Overload, B05-K, 4-6.3A
226EE-514F	BAEQ/MS-PBF/05-C8 1 1/2-2hp, 220/50/60-3	226EE-OL08L	Overload, B05-L, 5.5-8A
226EE-516F	BAEQ/MS-PBF/05-E4.7, 1.5-2HP, 440/60-3	226EE-OL10.5M	Overload, B05-M, 7.5-10.5A
226EE-518F	BAEQ/MS-PBF/05-D4.7, 1.5-2HP, 380/50-3	226EE-OL14NN	Overload, B05-NN, 10-14A
226EE-5201	BAEQ/MS-PBF/A26, 1.5-2HP, 104/115-50/60-1	226EE-OL18O	Overload, B18K-O, 14.5-18A
226EE-5221	BAEQ/MS-PS/05-CS14, 1.5HP, 208/220/230-50/60-1	226EE-OL26ON	Overload B18K-ON, 21-26A
		241BL	Wire, black, 12 GA., CSA & UL
		241GR	Wire, green, 12 GA., CSA & UL
		241WH	Wire, white, 12 GA., CSA & UL
		296-13	Switch bracket SS
		HN05S	Hex nut, 8-32 SS
		LW03S	Lock washer, #8 SS
		RHS075S	Round head screw, 8-32 x 1/2 SS

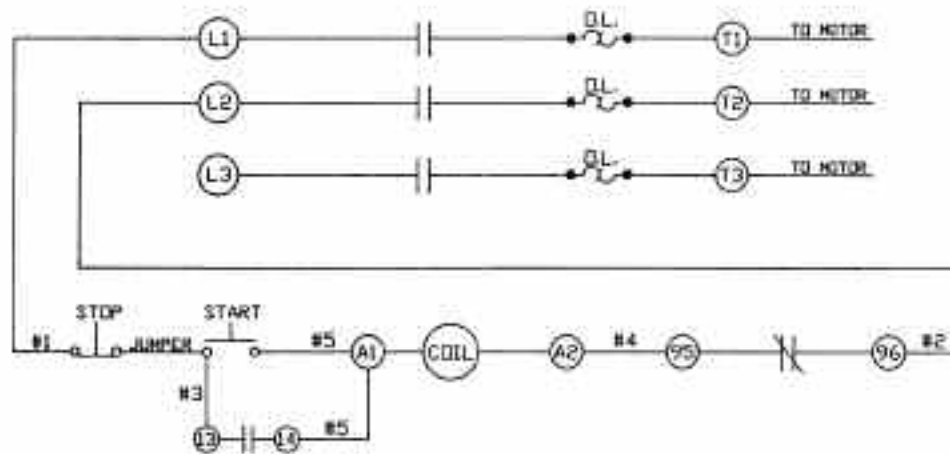
MODEL 22 SCHEMATIC USING 1 PH AEG W.T. SWITCH
 FOR 115 VOLTS, SINGLE PHASE, 60 CYCLE BALDOR TOTALLY ENCLOSED MOTOR
 TO ELIMINATE BRAKING EFFECT OF MOTOR AFTER STOP IS ENGAGED



MODEL 22 SCHEMATIC USING 1 PH AEG W.T. SWITCH
 FOR 230 VOLTS, SINGLE PHASE, 60 CYCLE BALDOR TOTALLY ENCLOSED MOTOR
 TO ELIMINATE BRAKING EFFECT OF MOTOR AFTER STOP IS ENGAGED



MODEL 22 SCHEMATIC USING 3 PH AEG W.T. SWITCH
 FOR 220/440 VOLTS, THREE PHASE, 60 CYCLE BALDOR TOTALLY ENCLOSED MOTOR



MODEL 22 PART NUMBERS AND DESCRIPTIONS
MODEL NO. AND SERIAL NO. REQUIRED WHEN ORDERING PARTS

Item No.	Description	Item No.	Description
M34-350022X232G1B	Motor, 1½HP, 220/440-50/60-3, TE	14P-1	Door hinge pin, short
M39-35L51-3534-B	Motor, 1½HP, 110/220-50-1, open	150	Conduit, flexible, metal, per inch
M40-158E81BF56W	Motor, 1½HP, 115/208-230-60-1 TEFC	151	Conduit, watertight, per inch
M47-M3154T-B	Motor, 1½HP, 208/440-50/60-3 open	155-1	Meat carriage guide
M68-M3558T-B	Motor, 2HP, 208/220/230/440-60-3	155-3	Meat carriage guide spacer .025
S11	Ratchet trigger, SS	155-4	Meat carriage guide spacer .040
S118	Tension spring plate, SS	159	Meat carriage bearing
S19	Ratchet base, SS	16112	Head door latch
S12005C	Head, SS	16155-13	Carriage stop, SS
S12006	Head door, SS	163A	Platter rod clip
S12120	Channel, 31½", SS, #24613 on	17211-22	Finger lift shim .022
S12132	Cleaning unit, rear, ser. #35301 on	17211-35	Finger lift shim .035
S12214B	Side platter bracket, SS	175-1-B	Thumb guard nut, SS
S12217L-2	Base door left, SS, bolt on, #35301 on	175-2-B	Thumb screw ¼D x ½
S12217R-3	Base door right, SS, hinged	175S	Thumb guard, nylon
S12239-3	Base, SS, square, closed top, (not sold separately)	177	Stationary bar nylon filler
S12272-3	Meat gauge gear rack, SS	179	Wheel cleaner
S12290-3	Lower cleaning unit with carbide holder	19CB	Ratchet base carriage bolt ½-20 x ¾
S12335X	Upper wheel hinge plate, SS	193	Saw guide bar spring
S155-11	Meat carriage stop thumb screw, SS	196	Saw tension spring
S155B-1	Meat carriage stop welded	197	Tension spring gauge
S163F	Platter spacer weld button, SS	198	Tension pin cap
S189	Ratchet arm stud, stainless	200	Carriage stop, movable
S200B1	Stop stud on saw guide bar	200B	Stop stud carriage stop
S229	Wheel cleaner arm torsion spring, SS	211MS	Finger lift bracket
S235	Taper pin, SS, 4 x ¾	211Q	Finger lift fastener knob, 4 point
S239-B40	Base foot welded, short, SS, 35301 on	212CP	Platter rod cotter pin
S239-B41-4	Hex leg, adjustable, ¾-9 x 4", SS	212W-E	Platter rod, England
S240	Ratchet trigger spring, SS	220	Carriage stop, fixed
S244	Wheel cleaner arm stud, SS	221-52	V-belt, 52"
S253	Upper wheel aligning screw, SS	221-53	V-belt, 53"
S262	Meat gauge release handle, SS	221-54	V-belt, 54"
S265	Meat gauge release spring, SS	224	Conduit connector, straight
S268	Stationary bar hdless screw SS	224-1	Conduit connector, WT, straight
S270	Meat gauge release pin, SS, with hole	225	Conduit connector, 90°
S295	Wheel cleaner arm, SS	225-1	Conduit connector, WT, 90°
S325	Wheel cleaner arm washer, SS	225-2	Conduit connector, 45°
S360CB-1	Carriage bolt ¾-16 x 1½, SS	226-20	Conduit connector washer
S415D	Stationary bar, SS	230DL	Upper shaft seal, double lip
S416	Platter locator weld pin, SS	231DL	Lower shaft seal, double lip
S608	Lower blade back up guide w/carbide, #35301 on	234	Grease fitting, upper wheel
S7-0	Channel bracket, SS	237	Up shaft castellated locknut
10-1	Ratchet arm	238	Up shaft castid locknut washer
111AL	Tension spring pin	239-B32-1	Base foot plug, plastic, #35301 on
112-212	Waved washer	242R	Base door lock, right
116-1B	Saw guide bar, 18"	247	Upper shaft
119A	Saw guide in stationary bar	248	Upper wheel hub cap
119FSC	Saw guide in stationary bar, fish	249	Base door handle
120A	Pusher plate clamp, welded	252X	Upper shaft lock nut
12003-6	Lower wheel, 12"	256P	Safety pusher plate, composition
12003U-6	Upper wheel, 12"	256PM	Safety pusher plate, aluminum
12005A	Head, aluminum	259	Conduit anti-short bushing
12006A	Head door, aluminum (not sold separately)	260	Aluminum slide gib
12154	Table extension, SS	264-1	Meat gauge release hand wheel
12155	Meat carriage, top E angle, SS	264G	Hand wheel groove pin
12163B	Platter neck guard	267	Meat gauge release cotter key
12163B-1	Platter neck guard, Europe, AL head	272-8	Cap nut, ¼-18, SS
12163B-2	Platter neck guard, Europe, SS head	272-9	Hex head screw, 2", SS
12212W	Platter rod	272-10	Meat gauge lock knob, 4 pt, #35301 on
12232-2	Scrap bucket, #35301 on	272-11	Lock knob socket screw, #35301 on
12251AL	Upper v-belt pulley 9 = 1, aluminum	277	Lower shaft key, v-belt side
12273LH	Meat gauge bkt, LH, #35301 on	280	Motor shaft key
12273RH-3	Meat gauge bkt, RH, #35301 on	300	Lower shaft Woodruff key, blade side
12275	Meat gauge plate, order A14275-5	303	Lower shaft nut
12301-B	Serial number plate (ser. no. required)	304	Carriage stop shoulder screw
12302HT	Saw blade, 91", hand tooth	311	Rubber bumper for carriage stops
12313-251	Operating and service manual, #35301 on	324	Motor shim, ⅜"
12662-AL	Safety saw guard, w/708, AL head	324A	Motor shim, ½"
12662-SS	Saw guard, w/708, SS head	331K	Platter bracket rubber bumper kit
12700-2	Wearable parts replacement kit, #35301 on	340	Star lock washer
131	Saw cleaner, SS, #35301 on	360	Lower bearing housing
14275	Meat gauge arm	360A1	Bearing housing angled grease fitting
14275-5	Meat gauge plate, SS	360B-1	Big hang lift set screw, ⅜-13
14640	Wheel cleaner, Nylon	361	Lower shaft
14GP	Head door hinge pin, long, 1½"	362	Lower bearing housing cap
14GP-1	Head door hinge pin, short, 1½"	374	Grease, Penzol #7072, 1 lb. tub
14P	Door hinge pin, long	375	Drive screw, for name plate
		376	Drive screw, SS, #10 x ½
		4-25AL	Motor pulley, AL, 60cy, 5 x ¾
		4-30AL	Motor pulley, AL, 60cy, 5 x ¾

MODEL 22 PARTS NUMBERS AND DESCRIPTIONS (Cont.)

Item No.	Description	Item No.	Description
4-35AL	Motor pulley, AL, 60cy, 5 x 3/8	602BFSC	Saw guide, upper, fish
4-45AL	Motor pulley, AL, 50cy, 6 x 3/8	653PC-E	Warning decal, English
4-49AL	Motor pulley, AL, 50cy, 6 x 3/8	653PC-SP	Warning decal, Spanish
513	Upper wheel hub gasket	660	Saw guard on head door
530	Retaining snap ring	71-1	Upper wheel hinge bracket
601	Upper saw guide bracket	708	Decal "DANGER EXPOSED BLADE"
602B	Saw guide, upper		

COMPLETE ASSEMBLIES FOR MODEL 22

Item No.	Description	Item No.	Description
AS12005	Head & door assembly, SS	A14275-5	Meat ga. plate & arm assembly
AS12132	Rear cleaner assembly, #35301 on	A16014L	Head door hinge assembly, lower, short pin
AS12217R-2	Base door assembly, right hinged, #35301 on	A16014U	Head door hinge assembly, upper, long pin
AS12273-275-2	Meat gauge assembly, w/SS rack & al. bracket	A16112	Head door latch assembly
AS12290	Front clearing unit assembly, #35301 on	A1755	Thumb guard assembly
AS415D-2	Stationary bar assembly, #35301 on	A19-1	Ratchet assembly
AS660	Saw guard on head door assembly	A196	Tension spring assembly
A116-18AL	Saw guide bar assembly, AL head	A200	Carriage stop assembly, movable
A116-18SS	Saw guide bar assembly, SS head	A211M5-AL	Finger lift assembly, AL head
A12003U-6	Upper wheel assembly w/o hinge plate	A211M5-SS	Finger lift assembly, SS head
A12003U335-6	Upper wheel assembly w/hinge plate	A220	Channel stop assembly, fixed
A12005A	Head and door assembly	A227	Upper bearing cup/cone assembly
A12006A	Head door assembly	A247	Upper shaft brg assem w/o wheel
A12120	Channel assembly 31"	A249R	Base door lock handle assembly, right
A12155	Meat carriage assembly, #24613 on	A262	Meat gauge release assembly
A12163-2	Sta. platter assembly, #35301 on	A295	Wheel cleaner assembly
A12163-2-E1	Sta. platter assembly, Europe, AL head, #35301 on	A360	Lower bearing housing assembly
A12163-2-E2	Sta. platter assembly, Europe, SS head, #35301 on	A361	Lower shaft & bearing assembly
A12335X	Upper wheel hinge plate assembly	A363	Lower bearing cup/cone assembly
A14275	Meat ga. plate assembly w/release assembly	A602	Saw guide assembly, upper
		A71-1	Upper wheel hinge brkt. assembly

**WEARABLE SAW PARTS THAT WILL FIT BIRO POWER CUTTERS
MODELS**

11-22-1433-33-34-3334-44-4436-55

— EXCEPT WHERE NOTED OTHERWISE —

**CONTACT YOUR NEAREST BIRO AUTHORIZED DISTRIBUTOR
OR CONTACT BIRO MANUFACTURING**

Ph.: 419-798-4451 E.Mail: service@birosaw.com



**Item No. 130
SAW CLEANER BRACKET
ALL SAWS**



**Item No. 131
STEEL BLADE CLEANER
ALL SAWS**



**Item No. 159
CARRIAGE BEARING
11-22-33**



**Item No. 16159
CARRIAGE BEARING
1433-34-3334-44-55**



**Item No. 601
UPPER SAW GUIDE BRACKET
ALL SAWS**



**Item No. 602B
UPPER SAW GUIDE
W/BEVELED CARBIDE
ALL SAWS**



**Item No. S265
MEAT GAUGE SPRING
ALL SAWS**



**Item No. S608
LOWER BLADE BACKUP
W/CARBIDE
22 (after S/N 35301)-1433-55**



**Item No. 119A
LOWER SAW GUIDE
ALL SAWS**



**Item No. 177
NYLON FILLER
ALL SAWS**



**Item No. 604
LOWER BLADE BACKUP
W/CARBIDE
11-22 (before S/N 35300)**



**Item No. 605
LOWER BLADE BACKUP
W/CARBIDE
34-3334-44-4436**



**Item No. S295
WHEEL CLEANER ARM
ALL SAWS**



**Item No. 179
WHEEL CLEANER
ALL SAWS**



**Item No. S244
WHEEL CLEANER ARM STUD
ALL SAWS**



**Item No. S229
WHEEL CLEANER
ARM SPRING
ALL SAWS**



**Item No. S268
FILLER & GUIDE STUD
ALL SAWS**



**Item No. 415D
STATIONARY BAR
ALL SAWS**



**Item No. S415D
STAINLESS STATIONARY BAR
STD: 22 (after S/N 35301)-1433-55
OPT: 3334-44**

— USE PARTS REPAIR KIT PART NO. 16700 —

WARNING LABEL LOCATIONS ON MACHINE



PART NO. 653PS
ENGLISH WARNING LABEL



PART NO. 653SP
SPANISH WARNING LABEL



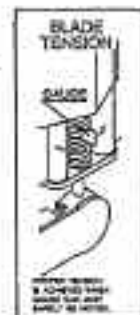
ATTACH ON HEAD STRUCTURE BELOW MODEL/SERIAL NUMBER



ATTACH TO CHANNEL BRACKET NEXT TO SWITCH CONTROL BUTTONS



P/N 708 "DANGER EXPOSED BLADE" DECAL
ATTACHED TO SAW GUARD ON SAW GUIDE BAR



P/N 710 "BLADE TENSION" DECAL
ATTACH TO HEAD DOOR AS SHOWN

ITEM NUMBER 671

WALL CHART "BAND SAW SAFETY GUIDELINES"

ATTACH TO WALL IN VICINITY OF MACHINE IN EASY VIEW OF OPERATOR

WARNING

ONLY PROPERLY TRAINED PERSONNEL SHOULD USE THIS EQUIPMENT

**This Saw Contains A Sharp Blade.
To Reduce Risk of Injury:**

1. Before Using, Make Sure:

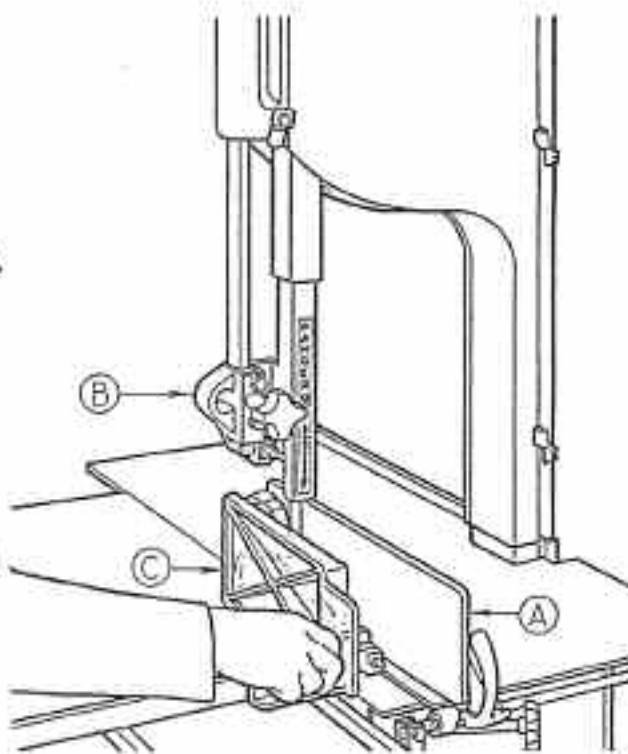
- Gauge Plate (A) And Other Components Are Secure.
- All Warning Labels And Guards Are In Place.
- The Guide Bar (B) Is Adjusted To $\frac{1}{2}$ Inch Above The Product To Be Cut

2. While Cutting:

- Keep Hands and Fingers Away From Blade.
- Keep Product Securely Against Gauge Plate.
- Use End Cut Pusher (C) When Making Final Cuts. Item No. 256P.

3. Before Cleaning:

- Turn Off Power and Unplug.
- Remove Saw Blade.
- Use Extra Care When Handling The Saw Blade.



USE YOUR MEAT SAW SAFELY!

SEE PARTS AND SERVICE MANUAL SUPPLIED WITH MACHINE FOR ADDITIONAL SAFETY INFORMATION.

OPERATOR'S SIGNATURE PAGE

WARNING
READ AND UNDERSTAND THIS ENTIRE
MANUAL BEFORE SIGNING BELOW

MY SIGNATURE ATTESTS THAT I HAVE COMPLETELY READ AND UNDERSTAND THIS MANUAL. I REALIZE THAT THIS MACHINE, IF OPERATED CARELESSLY, CAN CAUSE SERIOUS INJURY TO MYSELF AND OTHERS.

NAME (PRINT)	SIGNATURE	SUPERVISOR'S INITIALS	DATE

LIMITED WARRANTY:

WARRANTY: The BIRO Manufacturing Company warrants that Model 22 will be free from defects in material and workmanship under normal use and with recommended service. BIRO will replace defective parts, which are covered by this limited warranty, provided that the defective parts are authorized for return, shipping charges prepaid, to a designated factory for inspection and/or testing.

DURATION OF WARRANTY: The warranty period for all parts covered by this limited warranty is one (1) year from inspection/demonstration advised on the returned Warranty registration card, or eighteen (18) months from original factory shipping date, whichever occurs first, except as noted below.

PARTS NOT COVERED BY WARRANTY: The following are not covered by this limited warranty: steel saw cleaners, item number 131; wheel cleaners, item number 179; steel guide, item number 119A; upper saw guide, item number 602B; lower back guide, item number S608; nylon filler, item number 177. This limited warranty does not apply to machines sold as used, rebuilt, modified, or altered from the original construction in which the machine was shipped from the factory. (WATER CONTAMINATED ELECTRICAL SYSTEMS ARE NOT COVERED UNDER THIS LIMITED WARRANTY.) BIRO is not responsible for electrical connection of equipment, adjustments to switch components or any other electrical requirements, which must be performed only by a certified electrician. BIRO is not responsible for service charges or labor required to replace any part covered by this limited warranty or for any damages resulting from misuse, abuse, lack of proper or recommended service.

EXCLUSION OF WARRANTIES AND LIMITATION OF REMEDIES: BIRO gives no warranties other than those expressly stated in this limited warranty. THE IMPLIED WARRANTY OF MERCHANTABILITY, THE IMPLIED WARRANTY OF FITNESS FOR PROCESSING OF FOOD PRODUCTS, AND ALL OTHER IMPLIED WARRANTIES ARE SPECIFICALLY EXCLUDED. BIRO IS NOT LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, EXPENSES, OR LOSSES. THE REMEDIES PROVIDED IN THIS BIRO LIMITED WARRANTY ARE PURCHASER'S SOLE AND EXCLUSIVE REMEDIES AGAINST BIRO.

REGISTRATION CARDS: You must sign, date and complete the warranty card supplied with each machine. The warranty card must be returned to The Biro Manufacturing Company for proper registration. If no warranty card is returned to BIRO, the warranty period will begin from the date the machine was originally shipped from the factory.

HOW TO GET SERVICE:

1. Contact the agency from whom you purchased the machine; or
2. Consult the yellow pages of the phone directory for the nearest authorized dealer; or
3. Contact BIRO Mfg. Company for the nearest authorized service entity (250 plus worldwide) in your area.

THE BIRO MANUFACTURING COMPANY

1114 Main Street
Marblehead, Ohio 43440-2099
Ph. 419-798-4451
Fax 419-798-9106
E-mail: Service@biro-saw.com
Web: <http://www.birosaw.com>