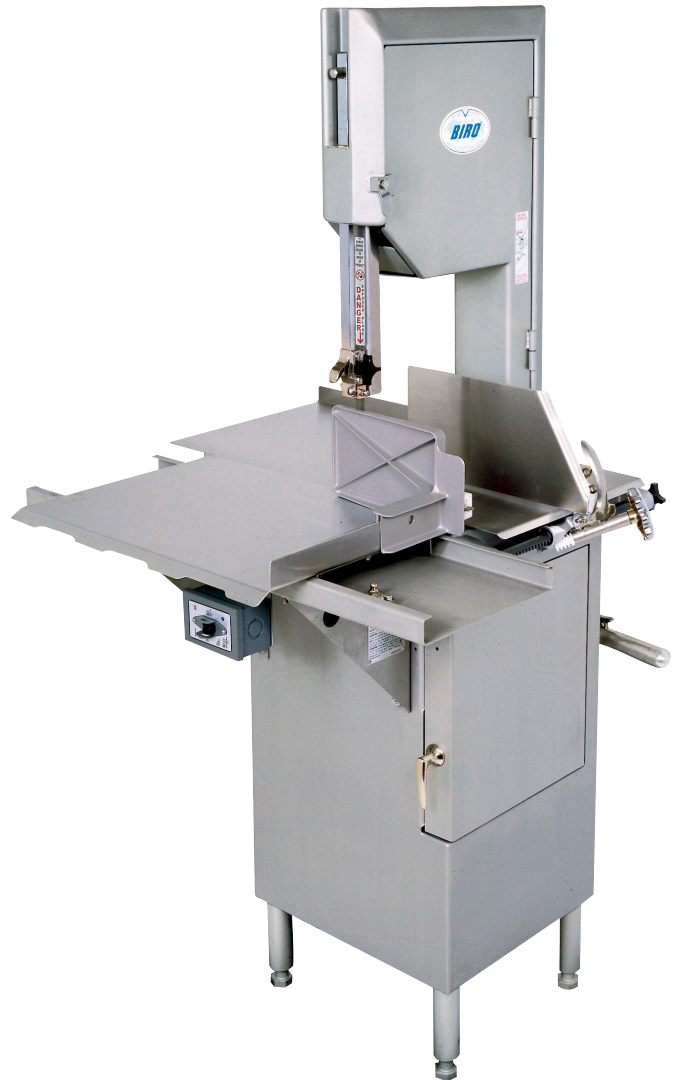




**MODEL 22 POWER MEAT SAW
OPERATING AND SERVICE MANUAL
REVISED - SERIAL No. 35301 ON**



☆ **IMPORTANT NOTICE** ☆

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

TABLE OF CONTENTS

	Page
NOTICE TO OWNERS AND OPERATORS.....	1
SAFETY TIPS.....	2
INSTALLATION.....	3-5
WARNING LABELS FOR BIRO POWER MEAT SAWS.....	5
OPERATION.....	6
TO PROCESS PRODUCT.....	6
CLEANING PROCEDURE.....	8
MAINTENANCE.....	9
GENERAL.....	9
LUBRICATION.....	10
SAW GUIDE BAR & SAW GUARD.....	11
PARTS DIAGRAM.....	12-19
TOGGLE SWITCHES.....	20
TOGGLE SWITCH WIRING DIAGRAMS.....	21
SWITCH ASSEMBLIES AND SERVICE PARTS.....	22
WIRING DIAGRAMS.....	23
PARTS LIST/ORDERING.....	24-25
PARTS ASSEMBLIES LIST /ORDERING.....	25
WEARABLE SAW PARTS.....	26
WARNING LABEL LOCATIONS ON MACHINE.....	27
WALL CHART (Item No. 671).....	28
OPERATOR’S SIGNATURE PAGE.....	29
LIMITED WARRANTY.....	30

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, 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 modification 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 Parts Manual **BEFORE** Operating, Cleaning or Servicing.

ALWAYS Keep Hands Clear of Sharp 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 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 Guard on Saw Guide Bar in the Raised Position or the Saw Guard Removed from the Saw Guide Bar.

ALWAYS Adjust the Saw Guide Bar with Saw Guard to Within ½" of Product to be Cut.

ALWAYS Use Supplied 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 the Saw is Running.

PROMPTLY REPLACE Any Worn or Illegible Warning Labels.

USE ONLY BIRO Parts and Accessories Properly Installed.

INSTALLATION



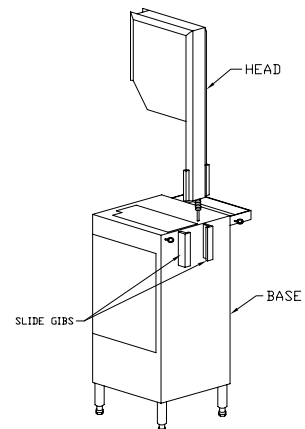
TO AVOID SERIOUS PERSONAL INJURY PROPERLY INSTALL EQUIPMENT IN ADEQUATE WORK AREA

- **ALWAYS** Read Operating and Parts Manual **BEFORE** Installation.
 - **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.
 - **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 $\frac{1}{2}$ " of Product to be Cut.
 - **NEVER** Operate Without all Warning Labels Attached and Wall Chart Posted.
 - **USE ONLY BIRO** Parts and Accessories Properly Installed.
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 hex bolts be adjusted to level the machine and also to eliminate rocking.
4. To assemble meat gauge plate (Item No. A14275) to the machine; Loosen the lock knob (Item No. 272-10) on the right side meat gauge bracket. Remove the meat gauge gear rack (ItemNo. S12272-3) and insert into the meat gauge plate. Be sure to hold meat gauge arm so that the release handle is depressed. Re-install the gear rack by first inserting the rectangle end into the left hand meat gauge bracket, then swing the right hollow round end of the gear into the original lock position. Upon aligning the gear rack with the capscrew (Item No. 272-11), tighten the lock knob clockwise, fastening the locking cap screw into the hollow end to 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 (Item No. 12005A) comes detached from the base. Slip the head into the slide gibs (Item 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 (Item No. A211MS-AL or A211MS-SS) on the saw guide bar (Item No. 116-18) and fasten in place with finger lift fastener knob (Item No. 211Q).



SHARP SAW BLADE. HANDLE WITH EXTREME CAUTION.

7. Placing blade on cutter: Hang upper wheel assembly (Item No. A12003U335-6) on the hinge bracket (Item No. 71-1). Lift the nylon filler (Item No. 177). Hang blade on the upper wheel and hold with right hand. With the left hand force the back of the blade between the front blade cleaners (Item No. 131), located below the nylon filler. Lower the nylon filler and insert the back of the blade in the upper saw guide (Item No. S602B). The blade has already dropped over the lower wheel. With the right hand, force the back of the blade between the rear blade cleaners. The blade is now ready to be tightened.
8. Press down on the ratchet arm (Item 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 (Item No. 197), located at the bottom rear of the head becomes tight laterally the blade is at proper tension.
9. The side platter bracket (Item 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 check for proper adjustment. Stationary platter must be flat.
10. The stationary platter (Item No. A12163-2) is placed on top of the base structure and held in place by two push-pull hold down rods (Item No. 12212W), located at the rear of the base.
11. The sliding meat carriage assembly (Item No. A12155) is installed by turning the movable stop assembly (Item No. A200) clockwise. After the carriage assembly is in the channel for operation, turn the movable stop counterclockwise to lock.
12. Post SAFETY TIPS wall chart within easy view of operator. Keep Manual available to operator.

WIRING MOTOR

Machine MUST be properly grounded. Use qualified electrician to install according to building codes.

- a. Interchange of motor current is made in motor outlet box. Leads are properly marked. Changing instructions are on motor plate or motor box outlet box.
- b. 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.
- c. Connect leads to machine in a manner that will be approved by local electrical inspectors.
- d. We recommend no less than No. 12 Ga. wire. If the leads are too light, machine may not have sufficient cutting power and/or speed.
- e. The V-belt is packed loose in machine to prevent deformation, and must be installed on pulleys at time of wiring motor.
- f. 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 (1010.147 OSHA).

13. Make sure saw guide bar with saw guard is in its lowest position. Close head and base doors.



KEEP HANDS CLEAR OF SHARP MOVING BAND TYPE SAW BLADE.

14. Push the toggle switch to start or press start button. Check for proper phasing of motor and proper tracking of the saw blade in the saw guides. Back of the blade should be centered in the lower saw guide in the stationary bar. Blade should be moving down through the guide. Push the toggle to stop or press stop button to stop the machine.
15. Check placement of all warning labels, wall chart and Manual. Machine is ready for trained operators to process product.
16. Contact your local Distributor or BIRO directly if you have any questions or problems with the installation or operation of this machine.

**WARNING LABELS
FOR BIRO POWER MEAT SAWS
SEE PAGE 27 FOR LOCATIONS ON MACHINE**

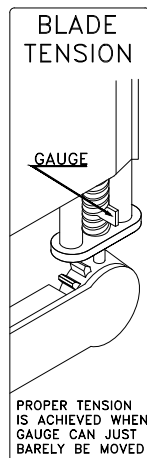


Item No. 653PC-E



Item No. 653PC-SP

Item No. 710



Item No.
708



NOT TO SCALE



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 Saw Type 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 the 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/Tag Out Procedures Before Cleaning, Servicing or When Not in Use.

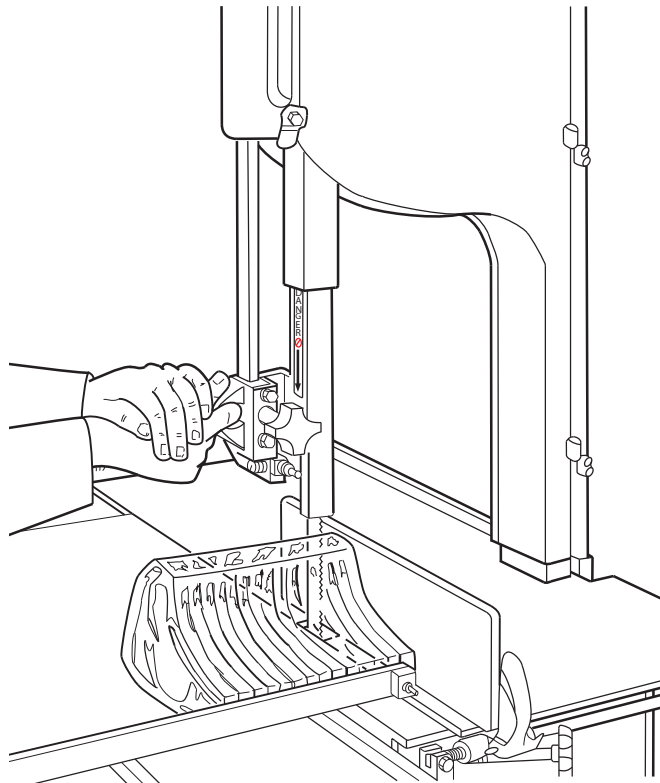
NEVER Leave Machine Unattended While the Saw is Running.

NEVER Operate Without All Warning Labels Properly Affixed to Machine.

ALWAYS Check to have the proper blade tension before switching the power ON - the tension gauge (Item No. 197), located at the bottom rear of the head should be tight.

A. TO PROCESS PRODUCT

1. Before starting power saw, adjust saw guide bar with saw guard to within $\frac{1}{2}$ " (13 mm) of product to be cut. See "B" on page 7.





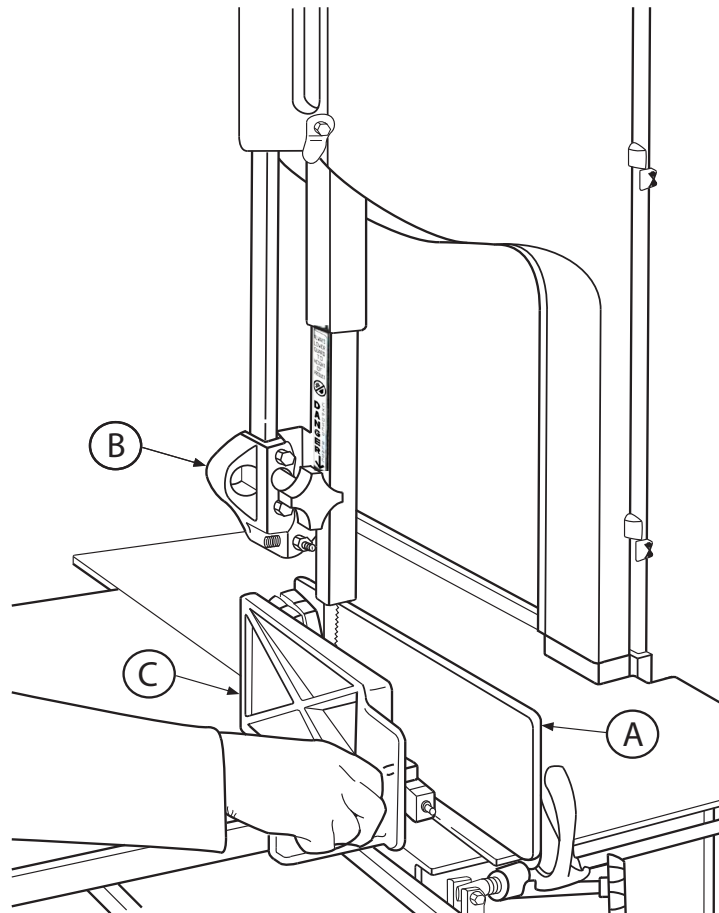
DO NOT WEAR GLOVES WHILE OPERATING

2. Make sure all doors are closed and locked.
3. Adjust meat gauge plate forward to desired thickness of cut. "A"
4. Push the toggle switch to start or press start button and watch blade for proper tracking.
5. Stand in front of the power saw, 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 the 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 slightly toward you to clear the blade.



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

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



7. When finished cutting, push the toggle switch to stop or press stop button. Perform lockout/tagout procedure.

CLEANING

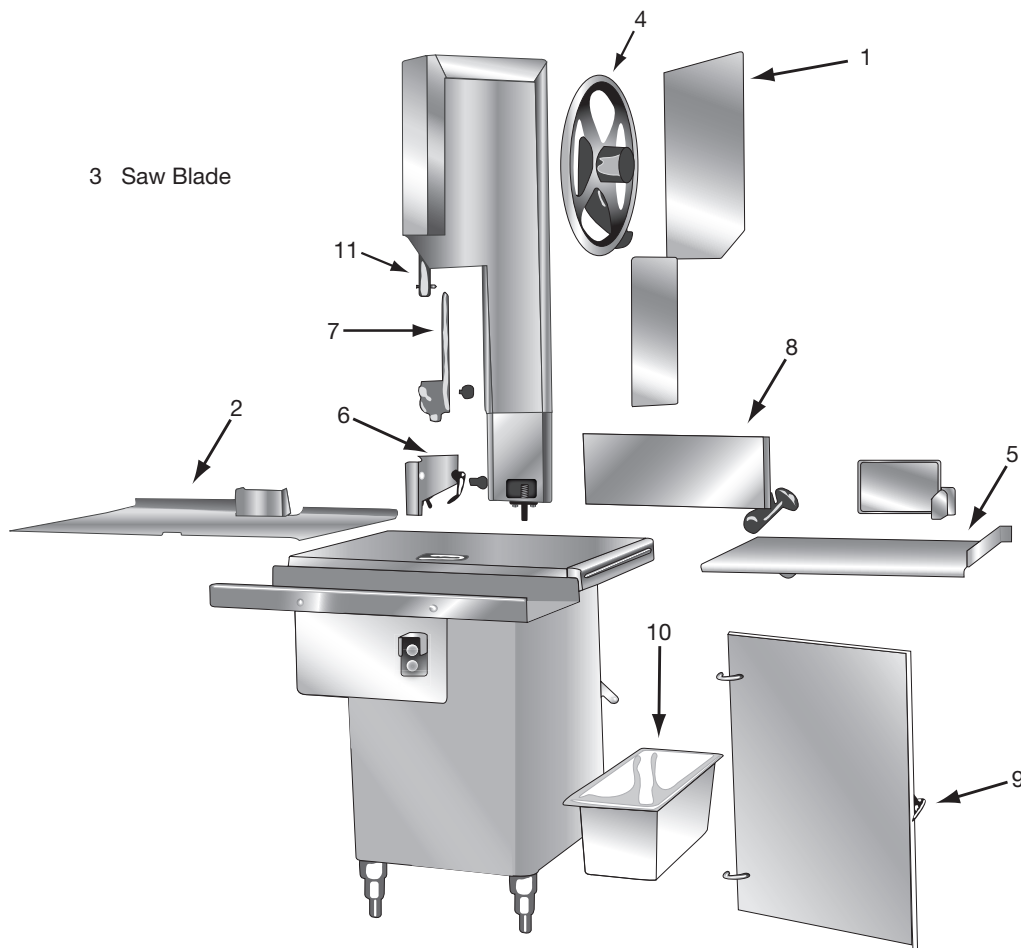


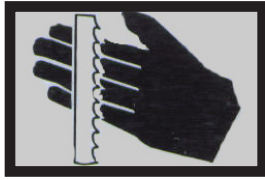
SHARP MOVING BAND TYPE SAW BLADE TO AVOID SERIOUS PERSONAL INJURY

- **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 SAW:

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 parts on 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. S119A), Upper Saw Guide (Part No. S602B), 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** Cleaning or 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 Warning 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 the flange and grooves.



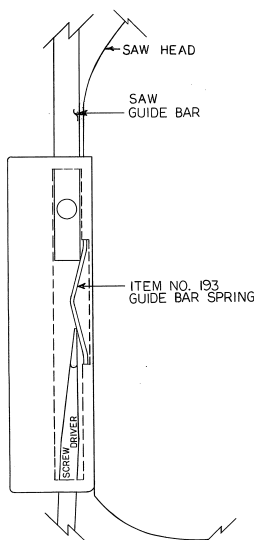
DO NOT IMMERSE UPPER WHEEL ASSEMBLY IN WATER

- 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 the "DANGER EXPOSED BLADE" decal is affixed and legible. Check condition of upper saw guide (Part No. S602B), 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. Replace saw guide bar spring (Part No. 193) as necessary.



1. Remove the finger lift fastener knob and the finger lift 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 finger lift assembly and the finger lift fastener knob.
9. Test by making several adjustments.

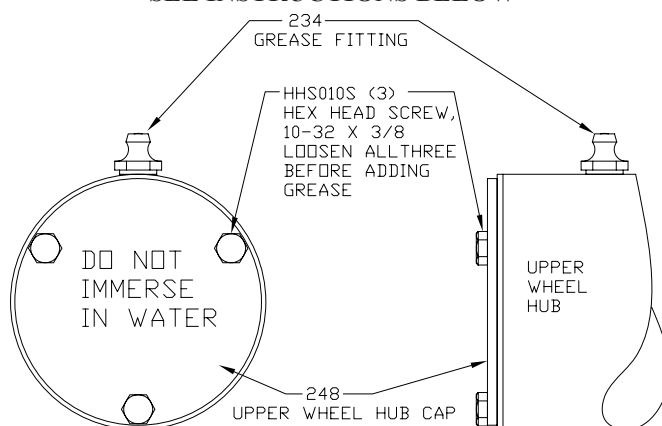
- e. **STATIONARY BAR ASSEMBLY:** Check condition of nylon filler (Part No. 177), change every four (4) weeks. Check condition of saw guide (Part No. S119A), check tracking of blade through guide, back of blade should be centered in hole, replace every six (6) months. Check condition of lower blade back-up 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 and grease bearings, replace as necessary. Check condition of thumb guard, replace as necessary.
- k. **SAFETY ITEMS:** Safety end cut pusher plate is with machine and accessible. All warning labels are present, properly affixed and legible. Model and Serial Number plate properly affixed and legible. Wall poster within operator's 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**

USE BIRO 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 screw 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 forced out of the cavity during greasing.

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 12 months with the equivalent of two (2) teaspoons of grease. If motor does not have zerk fittings, the motor bearings are sealed for life.

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 No. 211 O/S) FINGER LIFT held the (Item No. 17-0) SAW GUIDE BEARING BRACKET that held the (Item No. 228) SAW GUIDE BEARING. The (Item No. 255) SAW GUARD attached directly to the SAW GUIDE BAR. Any items required for these units should be replaced by (Item No. A116-18AL) SAW GUIDE BAR ASSEMBLY, (Item No. 193) SAW GUIDE BAR SPRING and (Item No. 660) SAW GUARD ON HEAD DOOR (see photo below).

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

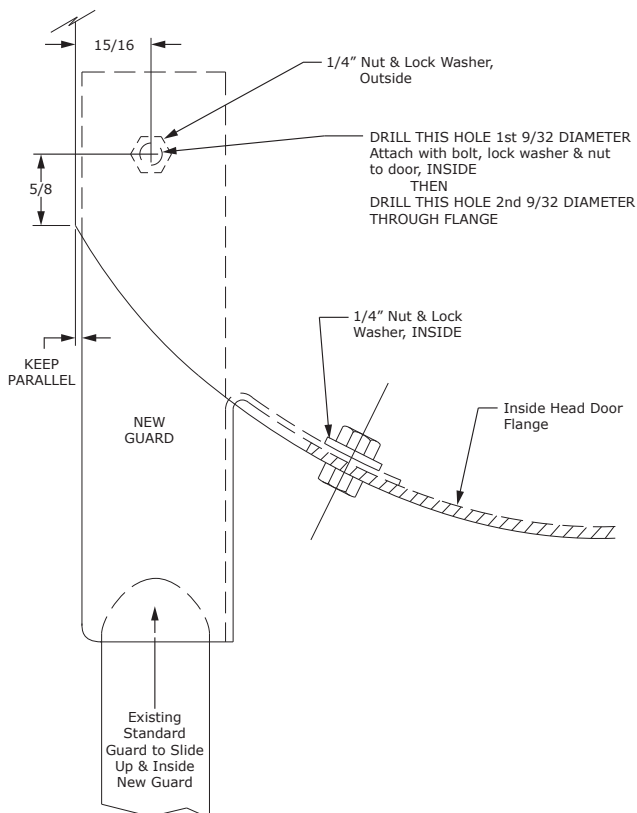
The SAW GUIDE BAR was not drilled across the width. The (Item No. 255MS) SAW GUARD was now attached to the (Item No. 211MS) FINGER LIFT. The (Item No. 17-0) SAW GUIDE BEARING BRACKET and (Item No. 228) SAW GUIDE BEARING were replaced by (Item No. 601) SAW GUIDE BRACKET and the (Item No. 602B) UPPER SAW GUIDE. When replacing any items on these units the factory recommends the complete SAW GUIDE BAR ASSEMBLY (Item No. A116-18AL) be installed along with a new (Item No. 193) SAW GUIDE BAR SPRING. The (Item No. 660) SAW GUARD ON HEAD DOOR (see photo below) should be attached to the head door.

Serial Number 29423 (1975) 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 No. 211MS) FINGER LIFT was redrilled to mate to the (Item No. 211D) FASTENER STUD. The GUARD (Item No. 12662-AL) now attaches directly to the FINGER LIFT along with the (Item No. 601) BRACKET and (Item No. 602B) GUIDE. The (Item No. 211Q) FINGER LIFT FASTENER KNOB holds the entire finger lift assembly to the guide bar. The (Item No. 660) HEAD DOOR GUARD is standard equipment (see below) and nest with the (Item No. 12662-AL) GUARD.

Once again, (Item No. A116-18AL) SAW GUIDE BAR ASSEMBLY is currently standard and is applicable to any Model 22 in the field.

The (Item No. 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.

ALWAYS REPORT MACHINE
SERIAL NO. WHEN
ORDERING PARTS

ALWAYS REPORT MACHINE
SERIAL NO. WHEN
ORDERING PARTS

16112
-ALSO SEE
#A16112

SEE #A12003U335-6
UPPER WHEEL
AND HINGE PLATE
ASSEMBLY

SEE #AS415D
STATIONARY
BAR ASSEMBLY

SEE #12155
MEAT CARRIAGE
ASSEMBLY

S7-0

6808-G
7810-G

SEE #A12120
CHANNEL
ASSEMBLY

200
311
304

-NOT SHOWN-
SEE #AS12290-3
FOR FRONT
CLEANING UNIT
ASSEMBLY

71-1

248

12006A
S12006

AS16014U

AS16014L

660

12003U-6
-ALSO SEE-
#A12003U335-6

SEE #AS12273-275-2
MEAT GAUGE,
GEAR RACK AND
BRACKET ASSEMBLY

272-10

12273RH-3

S12272-3

-NOT SHOWN-
SEE #AS12132
FOR REAR
STEEL CLEANER
ASSEMBLY

AS249R
HNNL25S
S249
S242R

12232-2

12003-6
ALSO SEE
#A360

AS239-B30-B
S239-B30-B
HN20S
LW20S
HHS055S
239-B31-2
239-B32-AR
(NOT SHOWN)

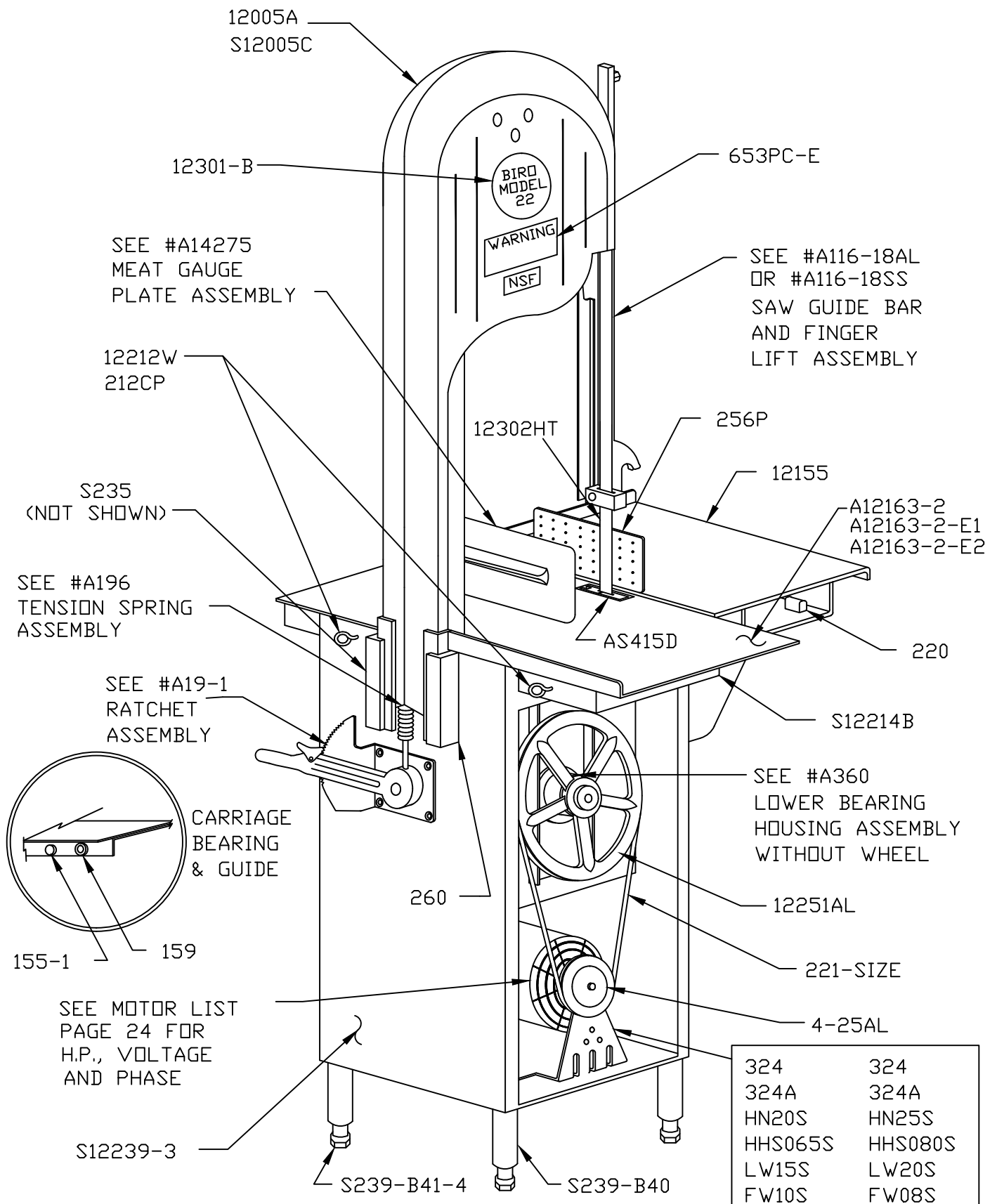
708

211Q

175S

SERIAL NO. 36101 ON

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



Exploded view diagram of the head door assembly, showing various components and their assembly points. The diagram includes callouts for parts such as the upper wheel hinge bracket assembly, head door hinge assembly (upper and lower), head door latch assembly, and head door saw guard assembly. It also identifies specific fasteners like bolts (HHS050S, HHS060S, HHS025S), washers (LW10S), and pins (112-212). The main components are labeled with part numbers: A71-1, AS16014U, A12006A, A16112, and AS660.

This diagram shows the assembly of the head door latch and the upper wheel hinge bracket. The main assembly is shown in the center, with two detailed inset boxes providing close-up views of specific components.

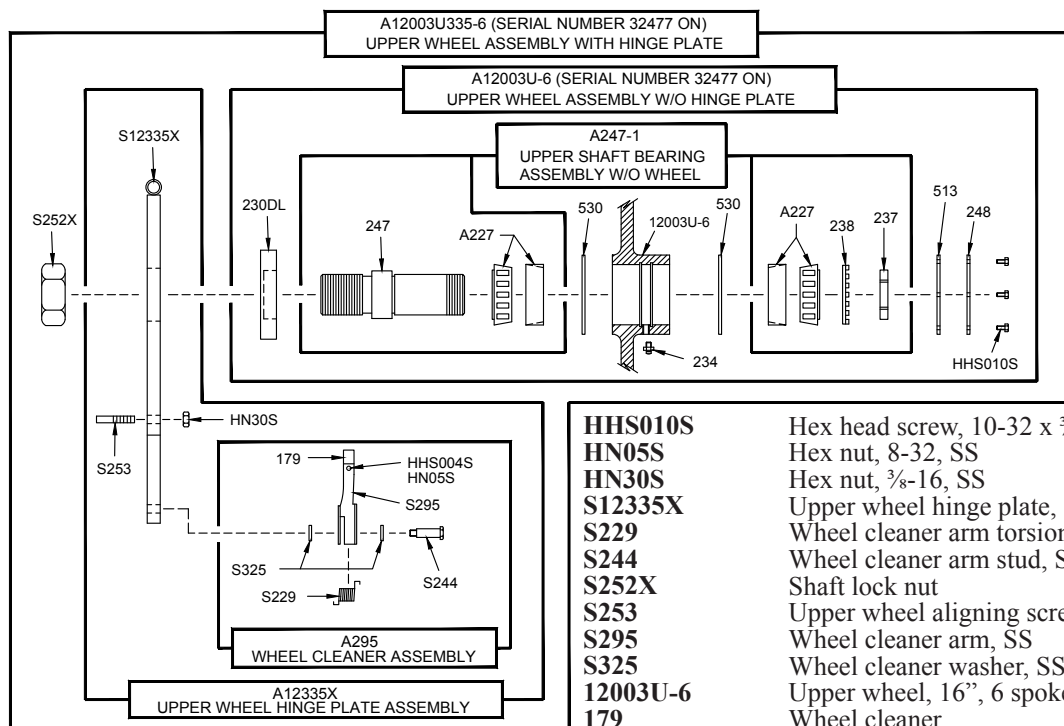
Top Inset Box: Shows the upper wheel hinge bracket assembly. It includes the **A71-1 UPPER WHEEL HINGE BRACKET ASSEMBLY**, which is secured with a screw **SSS15S** and a washer **LW15S**. The bracket is also labeled **71-1**.

Bottom Inset Box: Shows the head door latch assembly. It includes the **A16112 HEAD DOOR LATCH ASSEMBLY**, which is secured with a screw **HHS060S** and a washer **16112**. The latch is also labeled **112-212**.

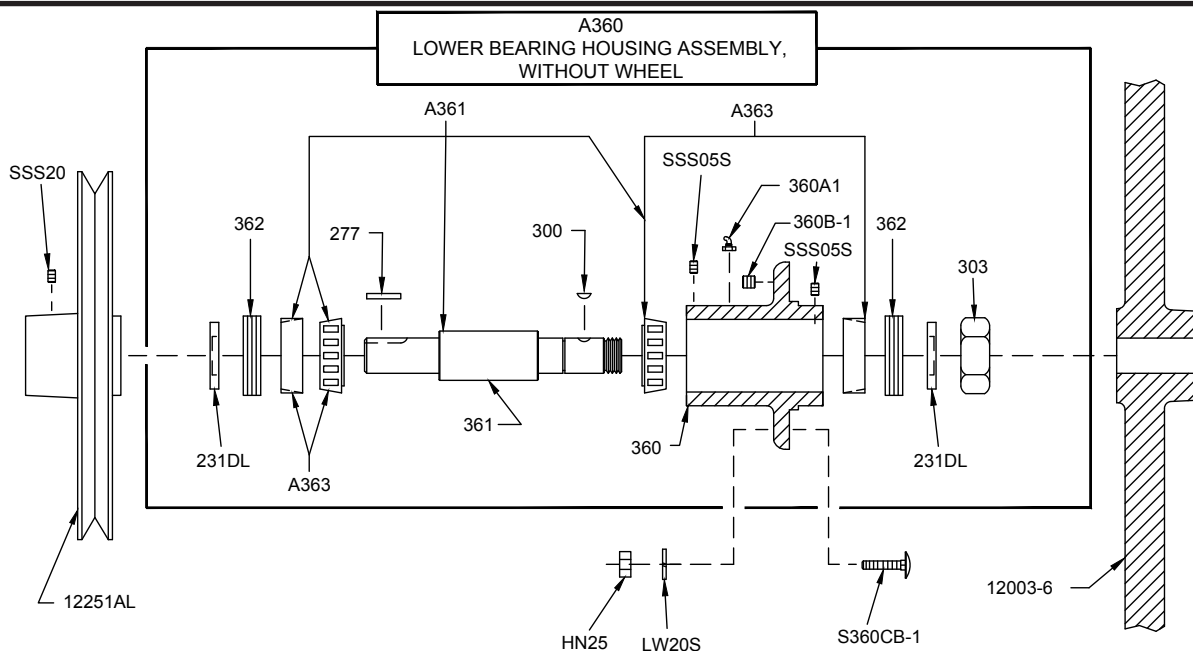
Main Assembly Labels:

- S12005C**: Points to the main frame of the head door.
- 194KS-1**: Points to a screw securing the latch assembly.
- 194**: Points to a component of the latch assembly.
- S12006**: Points to a component of the head door frame.

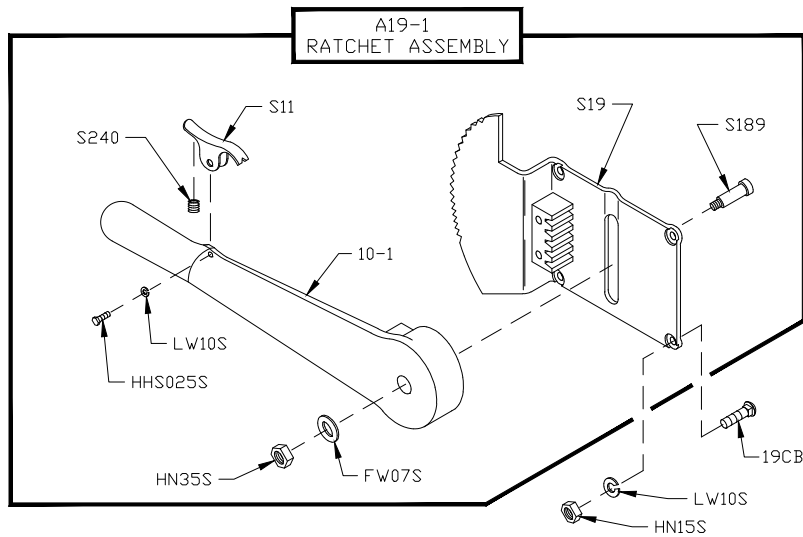
Item No.	Description	Item No.	Description
A16112	Head door latch assembly	S12006	Head door, SS
AS12005	Head & door assembly, SS	SSS15S	Set screw, ⁵ / ₁₆ -18 x ⁵ / ₁₆ cup point
A71-1	Upper wheel hinge bracket assembly	112-212	Waved washer
HHS050S	Hex head screw, ⁵ / ₁₆ -18 x ⁵ / ₈ SS	16112	Head door latch
HHS060S	Hex head screw, ⁵ / ₁₆ -18 x 1 SS	194	Saw guide bar lock pad, brass
LW15S	Lock washer, ⁵ / ₁₆ SS	194KS-1	Saw guide bar lock knob assembly
S12005C	Head, SS	71-1	Upper wheel hinge bracket



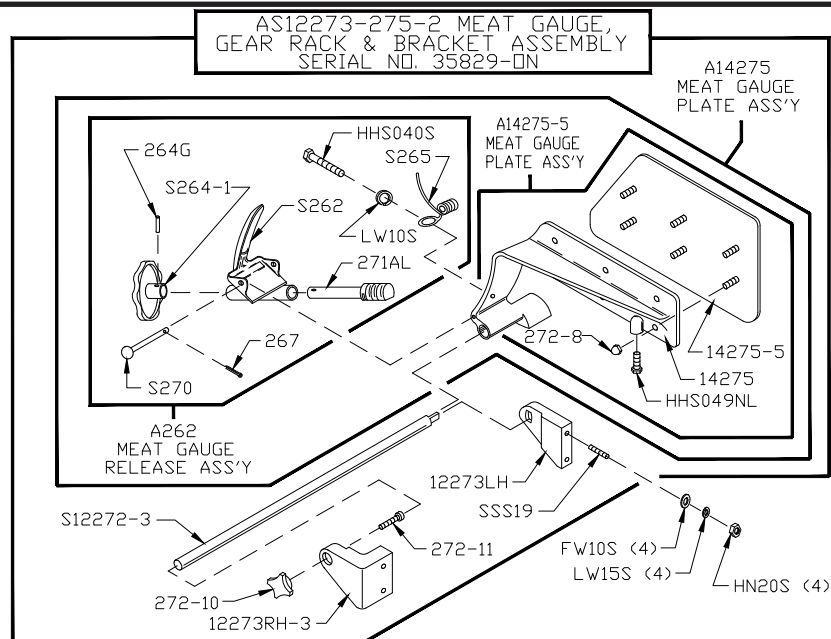
Item No.	Description	Item No.	Description
A12003U-6	Upper wheel assembly without hinge plate	230DL	Upper shaft seal, double lip
A12003U335-6	Upper wheel assembly with hinge plate	234	Grease fitting, upper wheel
A12335X	Upper wheel hinge plate assembly	237	Upper shaft castellated lock nut
A227	Bearing cup/cone assembly	238	Upper shaft castellated lock nut washer
A247-1	Upper shaft bearing assembly less spacer	247	Upper shaft
A295	Wheel cleaner assembly	248	Upper wheel hub cap
HHS004S	Hex head screw, 8-32 x 3/8, SS	513	Upper wheel hub gasket
		530	Retaining ring, (2 req.)



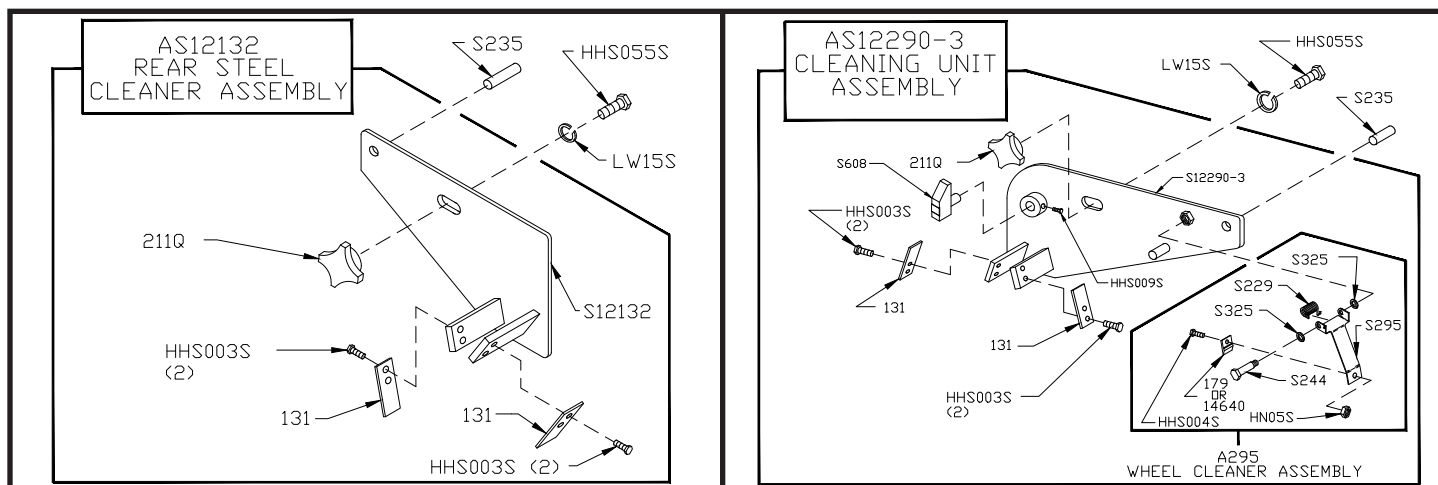
Item No.	Description	Item No.	Description
A360	Lower bearing housing assembly w/o wheel	300	Lower shaft woodruff key
A361	Lower shaft and bearing assembly	303	Lower shaft nut
A363	Lower bearing cup/cone assembly	360	Lower bearing housing
HN25	Hex nut, 3/8 -16	360A1	Lower bearing housing grease fitting
LW20S	Lock washer, 3/8, SS	360B-1	Set screw 1/2-13 x 1/2
SSS05S	Set screw, 10-24 x 3/8, SS, cup point	361	Lower shaft
SSS20	Set screw, 3/8 -16 x 3/8, knurled cup point	362	Lower bearing housing adjusting cap
S360CB-1	Carriage bolt, 3/8 -16 x 1 1/4, SS	12003-6	Lower saw wheel, 12", 6 spoke
231DL	Lower shaft seal, double lip	12251AL	Upper V-belt pulley, 9 x 1"
277	Lower shaft pulley key		



Item No.	Description	Item No.	Description
A19-1	Ratchet assembly	S11	Ratchet trigger SS
FW07S	Flat washer, $\frac{3}{8}$ SS	S189	Ratchet arm stud SS
HHS025S	Hex head screw, $\frac{1}{4}$ -20 x $\frac{1}{2}$ SS	S19	Ratchet base SS
HN15S	Hex nut, $\frac{1}{4}$ -20 SS	S240	Ratchet trigger spring
HN35S	Hex nut, $\frac{3}{8}$ -16 SS	10-1	Ratchet arm
LW10S	Lock washer, $\frac{1}{4}$ SS	19CB	Carriage bolt $\frac{1}{4}$ -20 SS



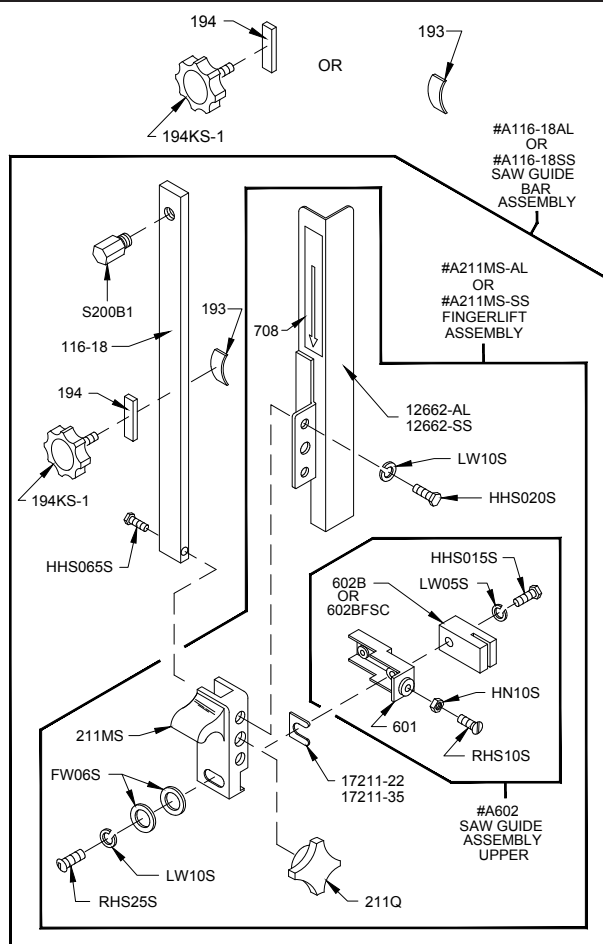
Item No.	Description	Item No.	Description
AS12273-275-2	Meat gauge assembly	S264-1	Meat gauge hand wheel, SS
A14275	Meat gauge plate assembly w/ release	S265	Meat gauge release spring, SS
A14275-5	Meat gauge plate assembly less release	S270	Meat gauge release pin, SS
A262	Meat gauge release assembly	12273LH	Meat gauge bracket- LH
FW10S	Flat washer, $\frac{5}{16}$ SS	12273RH-3	Meat gauge bracket- RH
HHS040S	Hex head screw, $\frac{1}{4}$ -20 x $\frac{3}{4}$ SS	14275	Meat gauge arm
HHS049NL	Hex screw- nylon, $\frac{5}{16}$ -18 x $\frac{1}{2}$	14275-5	Meat gauge plate, SS
HN20S	Hex nut, $\frac{5}{16}$ -18 SS	264G	Meat gauge hand wheel groove pin
LW10S	Lock washer, $\frac{1}{4}$ SS	267	Meat gauge release cotter pin
LW15S	Lock washer, $\frac{5}{16}$ SS	271AL	Meat gauge worm gear, Aluminum
SSS19	Set screw, cup point, $\frac{5}{16}$ -18 x $1\frac{1}{2}$ SS	272-8	Cap nut, $\frac{5}{16}$ -18, SS
S14272	Meat gauge gear rack, SS	272-10	Lock knob $\frac{3}{8}$ -16, 4 point
S235	Taper pin, 4 x $\frac{3}{4}$ SS	272-11	Allen head cap screw $\frac{3}{8}$ -16 x $1\frac{1}{2}$
S262	Meat gauge release handle, SS		



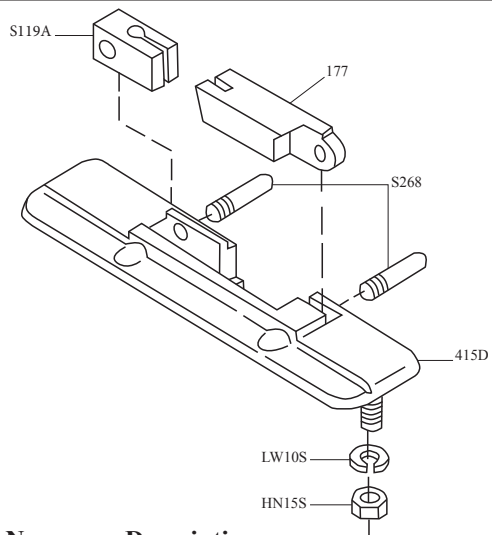
Item No.	Description
AS12132	Steel cleaner assembly, rear
AS12290-3	Cleaning unit assembly
A295	Wheel cleaner assembly
HHS003S	Hex head screw, 8-32 x 1/4 trimmed, SS
HHS004S	Hex head screw, 8-32 x 3/8, SS
HHS009S	Hex head screw, 10-24 x 1/4, SS
HHS055S	Hex head screw, 5/16-18 x 3/4, SS
HN05S	Hex nut, 8-32 SS
LW15S	Lock washer, 5/16 SS
S12132	Cleaning unit, rear
S12290-3	Cleaning unit
S229	Wheel cleaner arm spring, SS

Item No.	Description
S235	Taper pin, #4 x 3/4 SS
S244	Wheel cleaner arm stud, SS
S295	Wheel cleaner arm, SS
S325	Wheel cleaner arm stud washer, SS
S608	Saw back-up guide w/ carbide
131	Blade cleaner, SS
131N	Blade cleaner, Nyleen
131SHORT	Blade cleaner, Short SS, 1 9/16 LG
131SS-NYL	Blade cleaner combo, Short SS & Nyleen
179	Wheel cleaner
211Q	Lock knob, 5/16-18, 4 point
14640	Wheel cleaner, Rulon

Item No.	Description
A116-18AL	Saw guide bar assembly 18" AL head
A116-18SS	Saw guide bar assembly 18" SS head
A211MS-AL	Finger lift assembly, removable AL head
A211MS-SS	Finger lift assembly, removable SS head
A602	Saw guide assembly, upper
FW06S	Flat washer, 1/4 SS
HHS015S	Hex head screw, 10-32 x 7/8, SS
HHS020S	Hex head screw, 1/4-20 x 3/8, SS
HHS065S	Hex head screw, 3/8-16 x 1 1/2, SS
HN10S	Hex nut, 10-32 SS
LW05S	Lock washer, #10 SS
LW10S	Lock washer, 1/4 SS
RHS10S	Round head screw, 10-32 x 3/4 SS
RHS25S	Round head screw, 1/4-20 x 3/4 SS
S200B1	Stop stud on guide bar
116-18	Saw guide bar, 18"
17211-22	Finger lift shim, .022
17211-35	Finger lift shim, .035
193	Saw guide bar spring
194	Saw guide bar lock pad, brass
194KS-1	Saw guide bar lock knob assembly
211MS	Finger lift bracket
211Q	Fastener knob, 4 point
601	Upper saw guide bracket
602B	Upper saw guide with carbide
602BFSC	Upper saw guide, narrow, fish
708	Decal "DANGER EXPOSED BLADE"

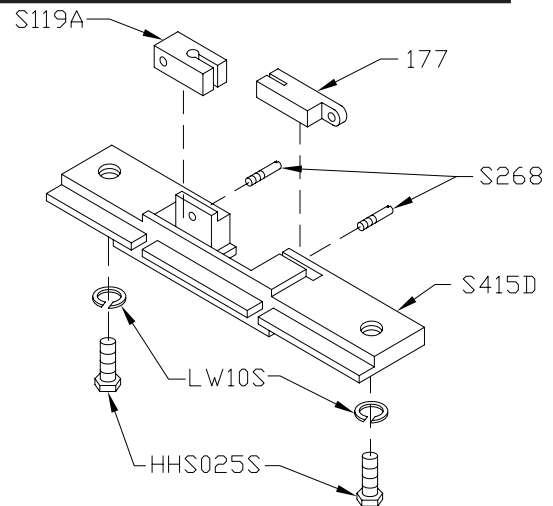


A415D STATIONARY BAR ASSEMBLY



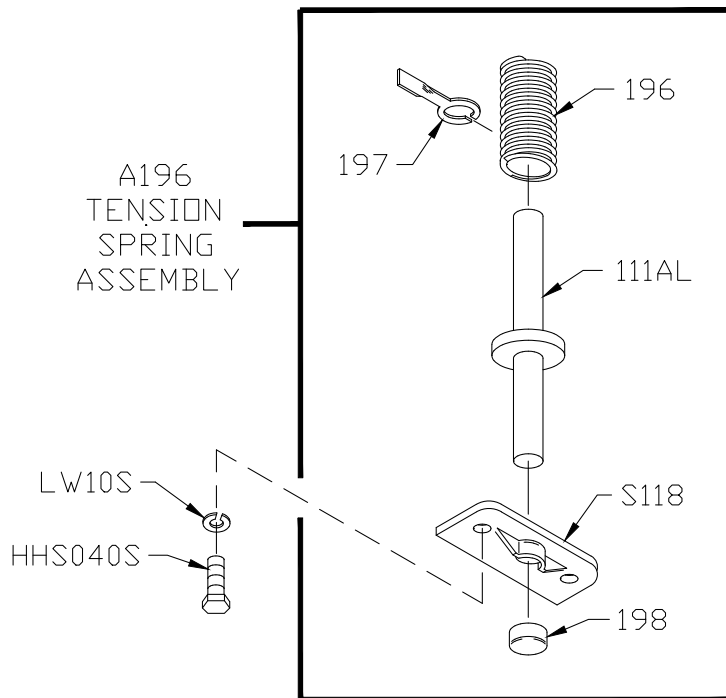
Item No.	Description
A415D	Stationary bar assembly
HN15S	Hex nut, 1/4-20 SS
LW10S	Lock washer, 1/4 SS
S119A	Saw guide in stationary bar, SS
S268	Stationary bar headless screw
177	Nylon filler
415D	Stationary bar

AS415D STATIONARY BAR ASSEMBLY, SS



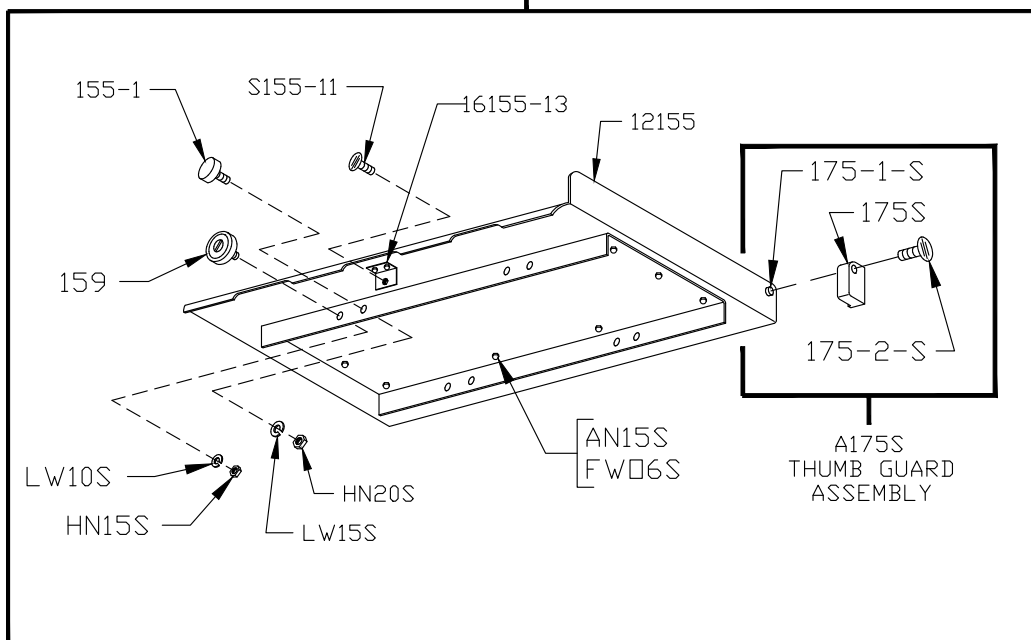
Item No.	Description
AS415D	Stationary bar assembly, SS
HHS025S	Hex head screw, 1/4-20 x 1/2 SS
LW10S	Lock washer, 1/4 SS
S268	Stationary bar headless screw
S119A	Saw guide in stationary bar, SS
S415D	Stationary bar, SS
177	Nylon filler

A196 TENSION SPRING ASSEMBLY



Item No.	Description
A196	Tension spring assembly
HHS040S	Hex head screw, 1/4-20 x 3/4 SS
LW10S	Lock washer, 1/4 SS
S118	Tension spring plate
111AL	Tension spring pin, Aluminum
197	Tension spring gauge
196	Saw tension spring
198	Cap, for tension pin

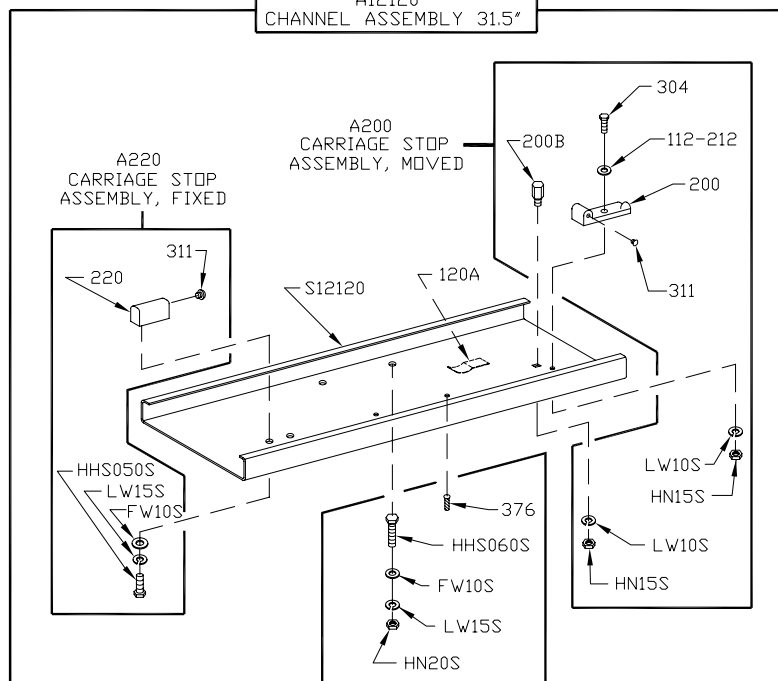
A12155
MEAT CARRIAGE ASSEMBLY



Item No.	Description
A12155	Meat carriage assembly complete
A175S	Thumb guard assembly
AN15S	Acorn nut, 1/4-20, SS
FW06S	Flat washer, 1/4, SS
HN15S	Hex nut, 1/4-20, SS
HN20S	Hex nut, 5/16-18, heavy, SS
LW10S	Lock washer, 1/4, regular, SS
LW15S	Lock washer, 5/16, regular, SS
S155-11	Meat carriage stop thumb screw, SS

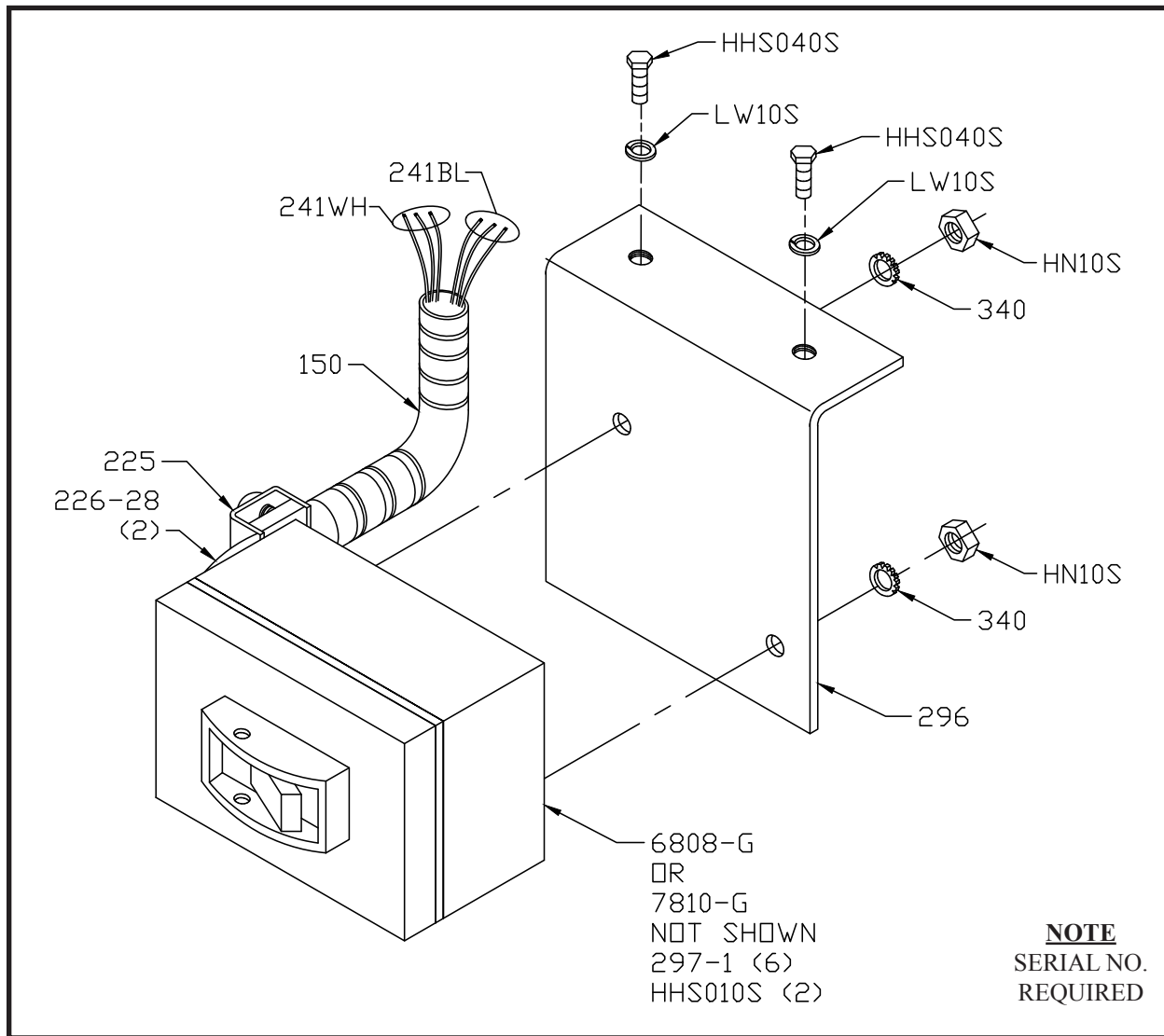
Item No.	Description
155-1	Meat carriage guide
155-3	Meat carriage guide spacer, .025
155-4	Meat carriage guide spacer, .040
159	Meat carriage bearing SS
175S	Thumb guard, nylon
175-1-S	Thumb guard nut, SS
175-2-S	Thumb screw, 1/4-20 x 1/2, SS
12155	Meat carriage top angle & stop
16155-13	Carriage stop angle, SS

A12120
CHANNEL ASSEMBLY 31.5"



Item No.	Description
A12120	Channel assembly, 31.5"
A200	Channel stop assembly, movable
A220	Channel stop assembly, fixed
FW10S	Flat washer, 5/16, SS
HHS050S	Hex head screw, 5/16-18 x 5/8 SS
HHS060S	Hex head screw, 5/16-18 x 1 SS
HN15S	Hex nut, 1/4-20, SS
HN20S	Hex nut, 5/16-18, SS
LW10S	Lock washer, 1/4, SS
LW15S	Lock washer, 5/16, SS
S12120	Channel, 31.5", SS
112-212	Waved washer
120A	Pusher plate clamp, welded
200	Carriage stop, movable
200B	Stop stud carriage stop
220	Carriage stop, fixed
304	Shoulder screw carriage stop
311	Rubber bumper for stops
376	Drive screw

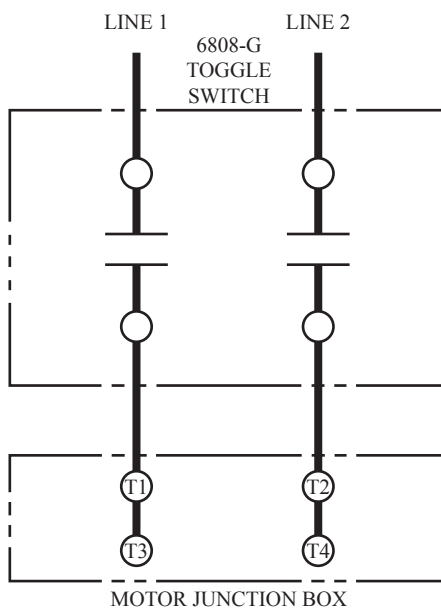
TOGGLE SWITCHES



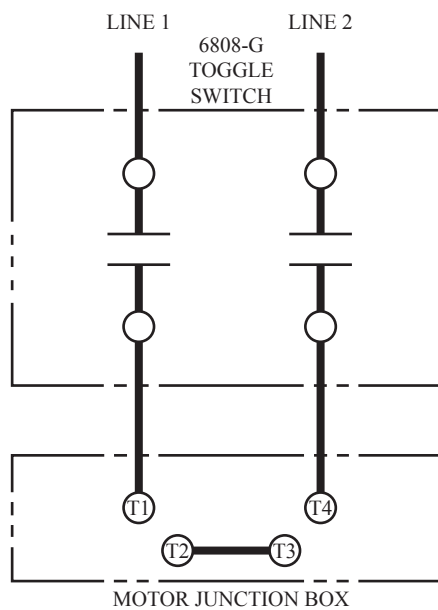
Item No.	Description
A6808-G-12	Toggle switch assembly, 1 phase
A7810-G-12	Toggle switch assembly, 3 phase
HHS010S	Hex head screw, 10-32 x 3/8, SS
HHS040S	Hex head screw, 1/4-20 x 1/4, SS
HN10S	Hex nut, 10-32, SS
LW10S	Lock washer, 1/4, SS
150	Conduit, 1/2, SS
225	Conduit connector, 90°
226-28	Washer, conduit connector
241BL	Wire, black, 12 gauge
241WH	Wire, white, 12 gauge
296	Toggle switch bracket
297-1	Wire terminal eyelet
340	Star lock washer
6808-G	Toggle switch, 1 phase
7810-G	Toggle switch, 3 phase

TOGGLE SWITCH (6808-G/7810-G) WIRING DIAGRAMS

110-115 VOLTS



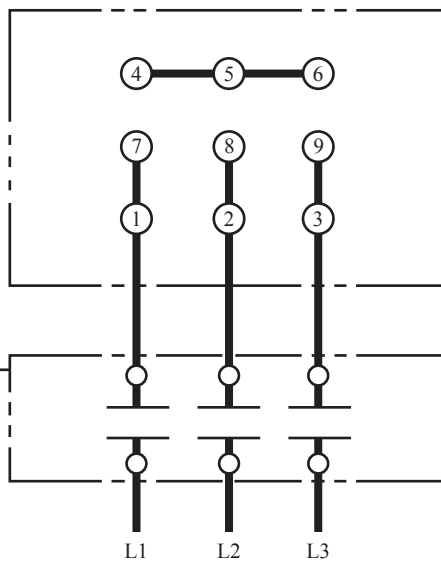
220-230 VOLTS



3 PHASE/ 230 VOLTS
50/60 HZ ELECTRICAL
SUPPLY

MOTOR JUNCTION BOX

7810-G
TOGGLE
SWITCH



L1

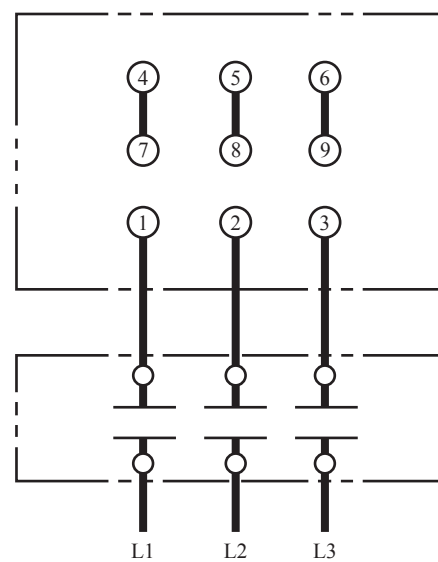
L2

L3

3 PHASE/ 440 VOLTS
50/60 HZ ELECTRICAL
SUPPLY

MOTOR JUNCTION BOX

7810-G
TOGGLE
SWITCH



L1

L2

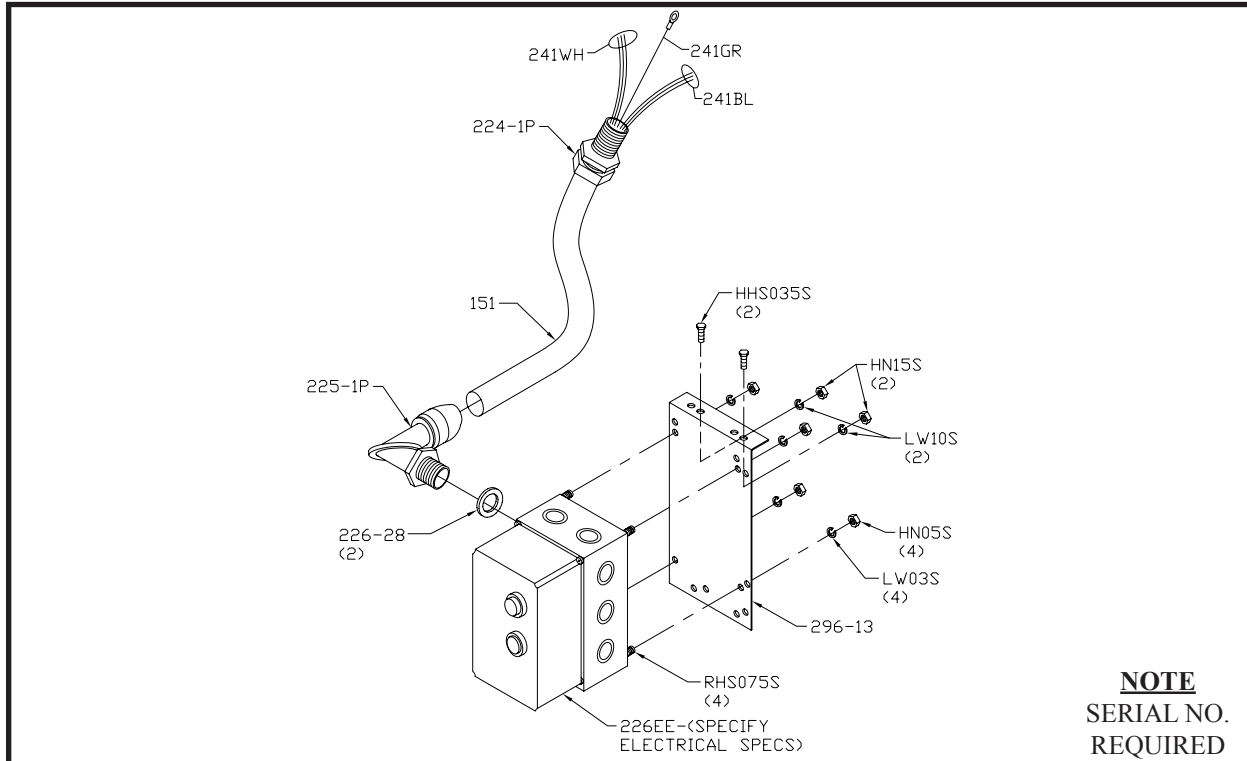
L3

WATERTIGHT MAGNETIC SWITCH ASSEMBLIES

(AEG)

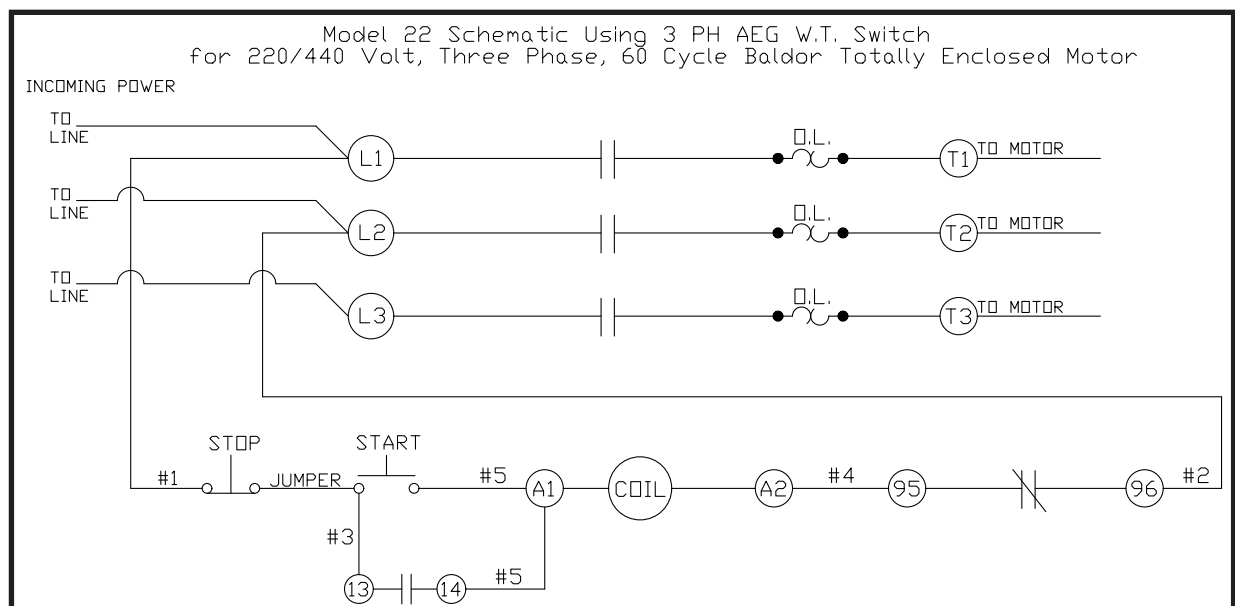
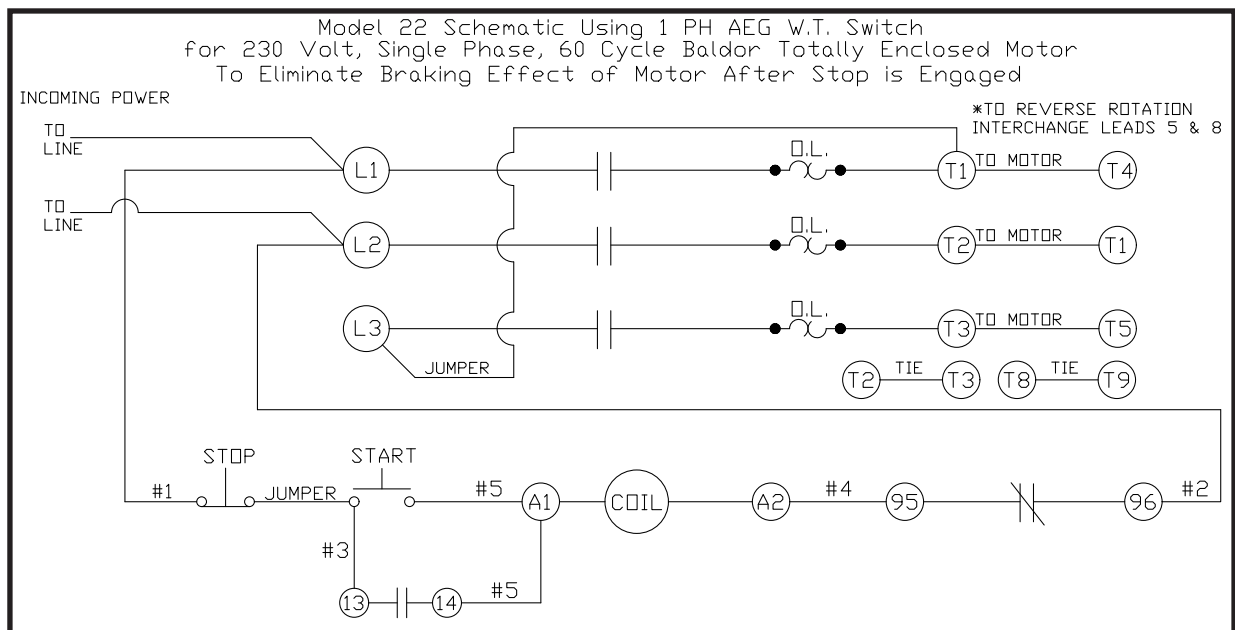
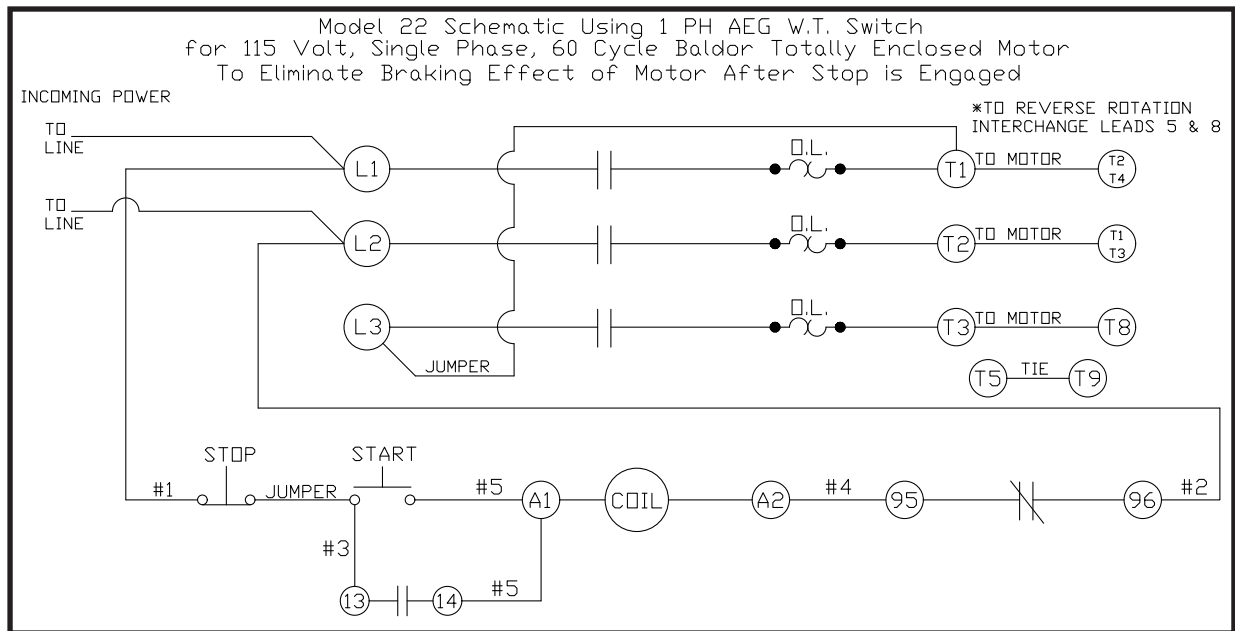
INCLUDES MOUNTING BRACKET AND WIRES

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



NOTE
SERIAL NO.
REQUIRED

Item No.	Description	Item No.	Description
HHS035S	Hex head screw, 1/4-20 x 5/8, SS	226EE-ENCL-PB22	Enclosure w/ pushbutton, 22mm holes
HN05S	Hex nut, 8-32, SS	226EE-ENCL-PB30	Enclosure w/ pushbutton, 30mm holes
HN15S	Hex nut, 1/4-20, SS	226EE-AO11K	Contactor, LS11K.11S-AO, 120V
LW03S	Lock washer, # 8, SS	226EE-CO	Contactor, LS05.10-CO, 208-230V
LW10S	Lock washer, 1/4, SS	226EE-DO	Contactor, LS05.10-DO, 380-415V-50hz
RHS075S	Round head screw, 8-32 x 3/4 SS	226EE-EO	Contactor, LS05.10-EO, 440-480V
151	Watertight conduit	226EE-OL02.4H	Overload, B05-H, 1.7-2.4A
224-1P	Conduit connector, WT	226EE-OL03.2IN	Overload, B05-IN, 2.2-3.2A
225-1P	Conduit connector, WT, 90°	226EE-OL04.7JN	Overload, B05-JN, 3-4.7A
226-28	Washer, conduit connector	226EE-OL06.3K	Overload, B05-K, 4-6.3A
226EE-22PB-GF	Start P/B, 22mm Flush w/ NO contact block	226EE-OL08L	Overload, B05-L, 5.5-8A
226EE-22PB-RE	Stop P/B, 22mm Ext. w/ NC contact block	226EE-OL10.5M	Overload, B05-M, 7.5-10.5A
226EE-5021	BAEG/MS-PBFA18 1HP 115-50/60-1	226EE-OL14NN	Overload, B05-NN, 10-14A
226EE-506	BAEG/MS-PBF/05-C6.3 1HP 220-50/60-3	226EE-OL18O	Overload, B18K-O, 14.5-18A
226EE-508	BAEG/MS-PBF/05-E2.4 1HP 440/460-60-3	226EE-OL26ON	Overload, B05-ON, 21-26A
226EE-510	BAEG/MS-PBF/D3.2 1HP 380/415-50-3	241BL	Wire, Black, 12 gauge
226EE-5141	BAEG/MS-PSF/05-CS10.5 1HP 208-230-1	241GR	Wire, Green, 12 gauge
226EE-514F	BAEG/MS-PBF/05-C8 1.5-2HP 220-50/60-3	241WH	Wire, White, 12 gauge
226EE-516F	BAEG/MS-PBF/05-E4.7 1.5-2HP 440-60-3	296-13	Switch bracket, SS
226EE-518F	BAEG/MS-PBF/05-D4.7 1.5-2HP 380-50-3	297-1	Wire terminal eyelet, 12 gauge
226EE-5201	BAEG/MS-PBF/A26 1.5HP 115-60-1		
226EE-5221	BAEG/MS-PSF/05-CS14 1.5HP 230-50/60-1		



MODEL 22 PART NUMBERS AND DESCRIPTIONS

MODEL NO. AND SERIAL NO. REQUIRED WHEN ORDERING PARTS

Item no.	Description	Item no.	Description
AN15S	Acorn nut, ¼-20, SS	S235	Taper pin, 4 x ¾ SS
FW06S	Flat washer, ¼ SS	S240	Ratchet trigger spring
FW07S	Flat washer, ⅜ SS	S242R	Base door lock, right, SS
FW10S	Flat washer, ⅝ SS	S244	Wheel cleaner arm stud, SS
HHS003S	Hex head screw, 8-32 x ¼ trimmed, SS	S249	Base door handle
HHS004S	Hex head screw, 8-32 x ⅜, SS	S252X	Shaft lock nut
HHS009S	Hex head screw, 10-24 x ¼, SS	S253	Upper wheel aligning screw, SS
HHS010S	Hex head screw, 10-32 x ⅜, SS	S262	Meat gauge release handle, SS
HHS015S	Hex head screw, 10-32 x ⅞, SS	S264-1	Meat gauge hand wheel, SS
HHS020S	Hex head screw, ¼-20 x ⅜, SS	S265	Meat gauge release spring, SS
HHS025S	Hex head screw, ¼-20 x ½, SS	S268	Stationary bar headless screw
HHS035S	Hex head screw, ¼-20 x ⅝, SS	S270	Meat gauge release pin, SS
HHS040S	Hex head screw, ¼-20 x ¾, SS	S295	Wheel cleaner arm, SS
HHS049NL	Hex screw- nylon, ⅝-16-18 x ½	S325	Wheel cleaner washer, SS
HHS050S	Hex head screw, ⅝-16-18 x ⅝, SS	S360CB-1	Carriage bolt, ⅜ -16 x 1¼, SS
HHS055S	Hex head screw, ⅝-16-18 x ¾, SS	S415D	Stationary bar, SS
HHS060S	Hex head screw, ⅝-16-18 x 1, SS	S602B	Saw guide, upper, SS
HHS065S	Hex head screw, ⅜-16 x 1½, SS	S608	Saw back-up guide w/ carbide
HN05S	Hex nut, 8-32 SS	4-25AL	Motor pulley, AL, 60cy, 5 x ⅝
HN10S	Hex nut, 10-32 SS	4-30AL	Motor pulley, AL, 60cy, 5 x ¾
HN15S	Hex nut, ¼-20 SS	4-35AL	Motor pulley, AL, 60cy, 5 x ⅞
HN25	Hex nut, ⅜ -16, Zinc plated	4-45AL	Motor pulley, AL, 50cy, 6 x ¾
HN20S	Hex nut, ⅝-16-18 SS	4-49AL	Motor pulley, AL, 50cy, 6 x ⅞
HN30S	Hex nut, ⅜-16, SS	10-1	Ratchet arm
HN35S	Hex nut, ⅜-16 SS, Machine screw	14GP	Head door hinge pin, 1½"
LW03S	Lock washer, # 8, SS	14GP-1	Head door hinge pin, 1¼"
LW05S	Lock washer, #10 SS	19CB	Carriage bolt ¼-20 SS
LW10S	Lock washer, ¼ SS	71-1	Upper wheel hinge bracket
LW15S	Lock washer, ⅝, SS	111AL	Tension spring pin, Aluminum
LW20S	Lock washer, ⅜, SS	112-212	Waved washer
M34-158ET3E145TW	Motor, 1½HP 208-230/460-50/60-3 TE	116-18	Saw guide bar, 18"
M39-1201007113-BFT	Motor, 1½HP 110/220-50-1 Open	120A	Pusher plate clamp, welded
M40-T32C2JH-N	Motor, 1½HP 115/208-230-60-1 TE	12003-6	Lower saw wheel, 12", 6 spoke
M68-218ET3E145TW	Motor, 2HP 208-230/460-50/60-3 TE	12003U-6	Upper wheel, 16", 6 spoke
RHS10S	Round head screw, 10-32 x ¾ SS	12005A	Head, new style
RHS25S	Round head screw, ¼-20 x ¾ SS	12006A	Head door, new style (not sold separately)
RHS075S	Round head screw, 8-32 x ¾ SS	12155	Meat carriage top angle & stop
SSS05S	Set screw, 10-24 x ⅜, SS, cup point	12212W	Platter rod
SSS15S	Set screw, ⅝-16-18 x ⅝ cup point, SS	12232-2	Scrap bucket
SSS19	Set screw, cup point, ⅝-16-18 x 1½, SS	12251AL	Upper V-belt pulley, 9 x 1"
SSS20	Set screw, ⅜ -16 x ⅜, knurled cup point	12273LH	Meat gauge bracket- LH
S7-0	Channel bracket, SS	12273RH-3	Meat gauge bracket- RH
S11	Ratchet trigger SS	12301-B	Replacement model/serial tag, Model 22
S118	Tension spring plate	12302HT	Saw blade, 91" x ⅝ x .020, 4 TPI
S119A	Saw guide in stationary bar, SS	12313-251	Operating and service manual
S12005C	Head, SS	12662-AL	Saw guard with 708 decal, Al head
S12006	Head door, SS	12662-SS	Saw guard with 708 decal, SS head
S12120	Channel, 31.5", SS	12700-2	Wearable parts replacement kit, #35301 on
S12132	Cleaning unit, rear	131	Blade cleaner, SS
S12214B	Side platter bracket, SS	131N	Blade cleaner, Nyleen
S12217L-2	Base door left, SS, bolt on	131SHORT	Blade cleaner, Short SS, 1⅞ LG
S12217R-3	Base door right, SS, hinged	14275	Blade cleaner combo, Short SS & Nyleen
S12272-3	Meat gauge gear rack, SS	14275-5	Meat gauge arm
S12290-3	Cleaning unit	14640	Meat gauge plate, SS
S12335X	Upper wheel hinge plate, SS	150	Wheel cleaner, Rulon
S14272	Meat gauge gear rack, SS	151	Conduit, ½, SS
S155-11	Meat carriage stop thumb screw, SS	155-1	Watertight conduit
S189	Ratchet arm stud SS	155-3	Meat carriage guide
S19	Ratchet base SS	155-4	Meat carriage guide spacer, .025
S200B1	Stop stud on guide bar	159	Meat carriage guide spacer, .040
S229	Wheel cleaner arm spring, SS	16112	Meat carriage bearing SS
		16155-13	Head door latch
		17211-22	Carriage stop angle, SS
		17211-35	Finger lift shim, .022
			Finger lift shim, .035

MODEL 22 PART NUMBERS AND DESCRIPTIONS (Continued)

MODEL NO. AND SERIAL NO. REQUIRED WHEN ORDERING PARTS

Item no.	Description	Item no.	Description
175S	Thumb guard, nylon	248	Upper wheel hub cap
175-1-S	Thumb guard nut, SS	264G	Meat gauge hand wheel groove pin
175-2-S	Thumb screw, 1/4-20 X 1/2, SS	267	Meat gauge release cotter pin
177	Nylon filler	271AL	Meat gauge worm gear, Aluminum
179	Wheel cleaner	272-8	Cap nut, 5/16-18, SS
193	Guide bar spring	272-10	Lock knob 3/8-16, 4 point
194	Saw guide bar lock pad, brass	272-11	Allen head cap screw 3/8-16 x 1 1/2
194KS-1	Saw guide bar lock knob assembly	277	Lower shaft pulley key
196	Saw tension spring	296	Toggle switch bracket
197	Tension spring gauge	296-13	Switch bracket, SS
198	Cap, for tension pin	297-1	Wire terminal eyelet
200	Carriage stop, movable	300	Lower shaft woodruff key
200B	Stop stud carriage stop	303	Lower shaft nut
211MS	Finger lift bracket	304	Shoulder screw carriage stop
211Q	Lock knob, 5/16-18, 4 point	311	Rubber bumper for stops
212CP	Platter rod cotter pin	340	Star lock washer
220	Carriage stop, fixed	360	Lower bearing housing
221-52	V-belt, 52"	360A1	Lower bearing housing grease fitting
221-53	V-belt, 53"	360B-1	Set screw 1/2-13 x 1/2
221-54	V-belt, 54"	361	Lower shaft
224-1P	Conduit connector, WT	362	Lower bearing housing adjusting cap
225	Conduit connector, 90°	376	Drive screw
225-1P	Conduit connector, WT, 90°	415D	Stationary bar
226-28	Washer, conduit connector	513	Upper wheel hub gasket
230DL	Upper shaft seal, double lip	530	Retaining ring, (2 req.)
231DL	Lower shaft seal, double lip	601	Upper saw guide bracket
234	Grease fitting, upper wheel	602B	Upper saw guide with carbide
237	Upper shaft castellated lock nut	602BFSC	Upper saw guide, narrow, fish
238	Upper shaft castellated lock nut washer	660	Saw guard on head door
247	Upper shaft	708	Decal "DANGER EXPOSED BLADE"

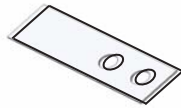
COMPLETE ASSEMBLIES FOR MODEL 22

Item no.	Description	Item no.	Description
AS12005	Head & door assembly, SS	A12335X	Upper wheel hinge plate assembly
AS12132	Steel cleaner assembly, rear	A14275	Meat gauge plate assembly w/ release
AS12217R-3	Base door assembly, right hand	A14275-5	Meat gauge plate assembly less release
AS12273-275-2	Meat gauge assembly	A16112	Head door latch assembly
AS12290-3	Cleaning unit assembly	A175S	Thumb guard assembly
AS16014L	Head door hinge assembly - lower, SS	A19-1	Ratchet assembly
AS16014U	Head door hinge assembly - upper, SS	A196	Tension spring assembly
AS249R	Base door handle assembly, SS, right	A200	Channel stop assembly, movable
AS415D	Stationary bar assembly, SS	A211MS-AL	Finger lift assembly, removable AL head
AS660	Saw guard on head door assembly	A211MS-SS	Finger lift assembly, removable SS head
A116-18AL	Saw guide bar assembly 18" AL head	A220	Channel stop assembly, fixed
A116-18SS	Saw guide bar assembly 18" SS head	A227	Bearing cup/cone assembly
A12003U-6	Upper wheel assembly without hinge plate	A247-1	Upper shaft bearing assembly w/o wheel
A12003U335-6	Upper wheel assembly with hinge plate	A262	Meat gauge release assembly
A12005A	Head & door assembly	A295	Wheel cleaner assembly
A12006A	Head door assembly	A360	Lower bearing housing assembly w/o wheel
A12120	Channel assembly, 31.5"	A361	Lower shaft and bearing assembly
A12155	Meat carriage assembly complete	A363	Lower bearing cup/cone assembly
A12163-2	Sta. platter assembly, #35301 on	A415D	Stationary bar assembly
A12163-2-E1	Sta. platter assembly, Europe, AL head	A602	Saw guide assembly, upper
A12163-2-E2	Sta. platter assembly, Europe, SS head	A71-1	Upper wheel hinge bracket assembly

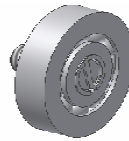
WEARABLE SAW PARTS THAT WILL FIT BIRO MODEL 22SS



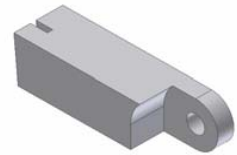
Item No. S119A
LOWER SAW GUIDE



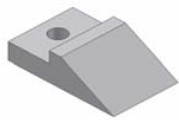
Item No. 131
STEEL BLADE CLEANER



Item No. 159
CARRIAGE BEARING



Item No. 177
NYLON FILLER



Item No. 179
WHEEL CLEANER



Item No. S229
WHEEL CLEANER
ARM SPRING



Item No. S244
WHEEL CLEANER ARM STUD



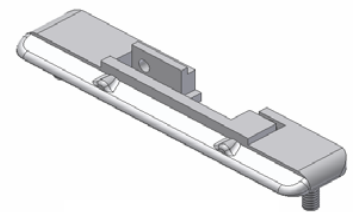
Item No. S265
MEAT GAUGE SPRING



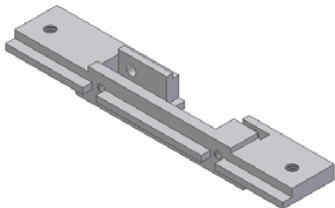
Item No. S268
FILLER & GUIDE STUD



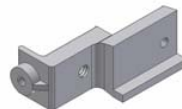
Item No. S295
WHEEL CLEANER ARM



Item No. 415D
STATIONARY BAR



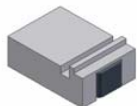
Item No. S415D
STAINLESS STATIONARY BAR



Item No. 601
UPPER SAW GUIDE BRACKET



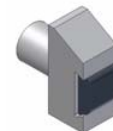
Item No. 602B
UPPER SAW GUIDE
W/ BEVELED CARBIDE



Item No. S604
LOWER BLADE BACKUP
w/ CARBIDE (Before S/N 35300)



NOT TO SCALE



Item No. S608
LOWER BLADE BACKUP
w/ CARBIDE (After S/N 35301)

USE PARTS REPAIR KIT PART NO. 12700-2
Starting with Serial Number 35301

USE PARTS REPAIR KIT PART NO. 12700
Up to Serial Number 35300

WARNING LABELS LOCATIONS ON MACHINE

ALWAYS
LOWER
GUARD
TO
HEIGHT
OF
PRODUCT

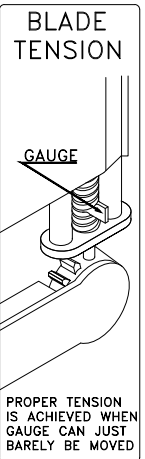


DANGER
EXPOSED
BLADE
↓

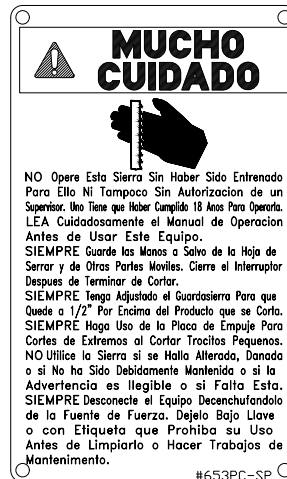
Item No. 708: ALL SAWS
“Danger Exposed Blade” Decal
Attached to saw Guard
on Saw Guide Bar as shown.



Item No. 710:
Blade Tension Decal
Attached to Head Door
as shown.



Item No. 653PC-E
English Warning Label
Attached to channel bracket,
right side of switch &
on head as shown.



Item No. 653PC-SP
Spanish Warning Label
Attached to channel bracket,
left side of switch.
NOT SHOWN



ITEM NUMBER 671

WALL CHART “BAND SAW SAFETY GUIDELINES”

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



WARNING

ONLY TRAINED OPERATORS SHOULD USE THIS EQUIPMENT

**This Saw Contains A Sharp Blade.
To Avoid Serious Injury:**

1. Inspect Before Operating:

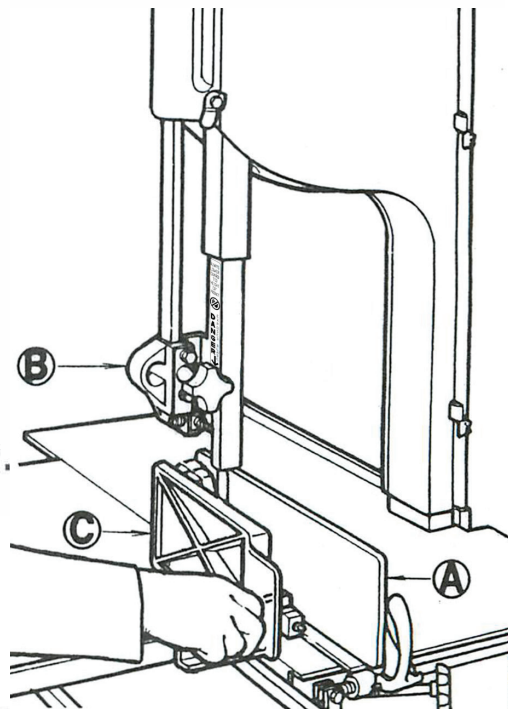
- Gauge Plate **(A)** and Blade Guard Are Secure.
- All Warning Labels And Guards Are In Place.
- The Guide Bar **(B)** Is Adjusted to 1/2 Inch
Above The Product To Be Cut

2. While Cutting:

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

3. Before Cleaning:

- Turn Off Power And Follow Lockout / Tagout Procedure.
- Remove Saw Blade.
- Use Extra Care When Handling The Saw Blade.



USE YOUR MEAT SAW SAFELY!

#671

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 Power Meat Saw 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 date of Inspection/Demonstration advised on the returned Warranty Registration Card, or eighteen (18) months from original factory ship date, whichever occurs first, except as noted below.

PARTS NOT COVERED BY WARRANTY: The following are **not** covered by this limited warranty: wearable parts on the cleaning system such as saw blade cleaners (Item No. 131), wheel cleaners (Item No. 179), blade backup guides (Item No's. S602B, and S119A), and the nylon filler (Item No. 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 controls 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 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 registration 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 Manufacturing Company for the nearest authorized service entity in your area.

BIRO MANUFACTURING COMPANY

1114 West Main St.
Marblehead, OH 43440
Ph. 419-798-4451
Fax 419-798-9106
Service@birosaw.com
www.birosaw.com