



★ **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
WALL CHART (PART NO. 671).....	3
INSTALLATION.....	4-6
WARNING LABELS ON MACHINE.....	6
OPERATION.....	7
TO PROCESS PRODUCT.....	7-8
CLEANING PROCEDURE.....	9
MAINTENANCE.....	10
GENERAL.....	10
LUBRICATION.....	11
PARTS DIAGRAMS.....	12-19
SWITCH ASSEMBLIES AND SERVICE PARTS.....	20
WIRING DIAGRAMS.....	21
PARTS LIST/ORDERING.....	22
PARTS ASSEMBLIES LIST/ORDERING.....	23
WEARABLE SAW PARTS LISTING.....	24
OPERATOR'S SIGNATURE PAGE.....	25
LIMIED WARRANTY.....	26

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 6753 and higher, except where noted.

— NOTE —

"A copy of this manual is included with each Model 11 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 $\frac{1}{2}$ " 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.*
- NEVER** Leave Machine Unattended While Operating.*
- PROMPTLY REPLACE** Any Worn or Illegible Warning Labels.*
- USE ONLY BIRO** Parts and Accessories Properly Installed.*

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:

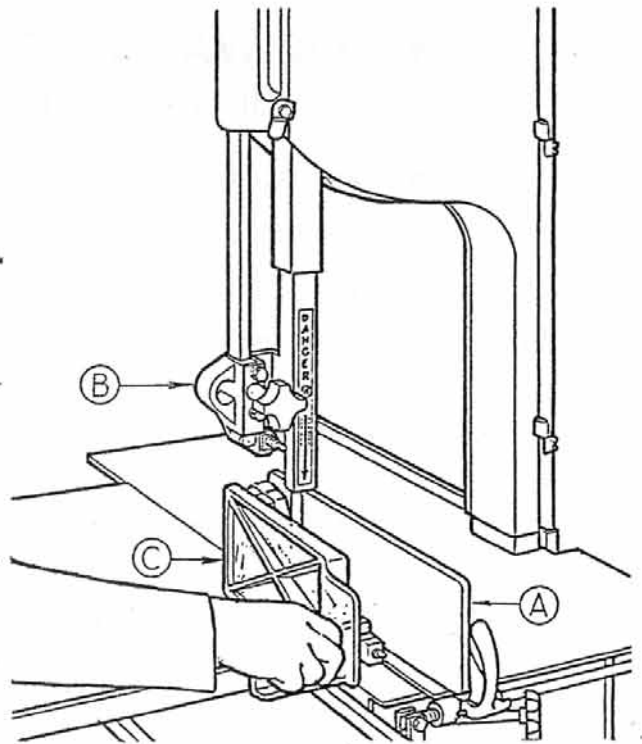
- Gauge Plate (A) And Other Components Are Secure.
- All Warning Labels And Guards Are In Place.
- The Guide Bar (B) Is Adjusted To $\frac{1}{2}$ Inch Above The Product To Be Cut

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.

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.

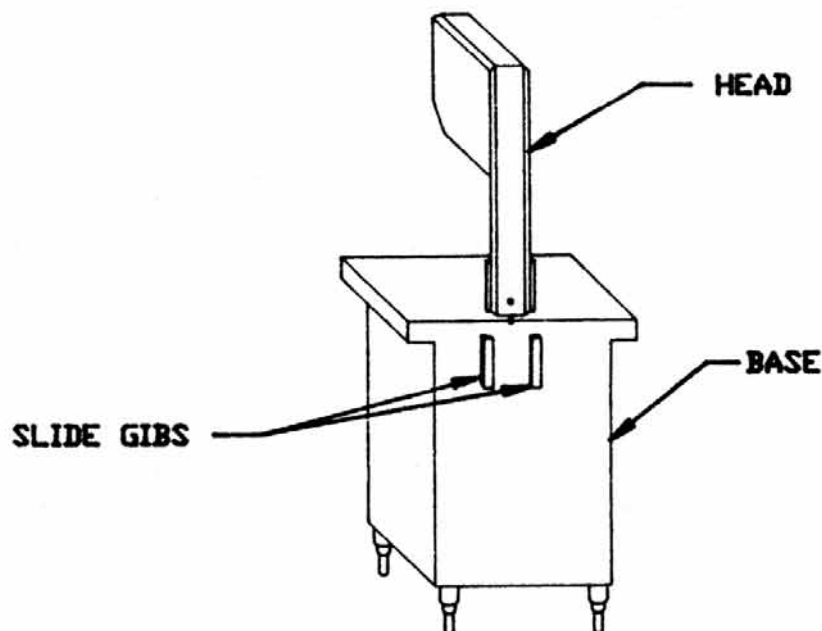
ONLY Operate on a Solid, Level, Non-Skid Surface.

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.
3. To assemble meat gauge plate (Part No. AS10275) to the machine; Loosen the lock knob (Part No. 272-7-1) on the right side of meat gauge bracket. Raise the meat gauge gear rack (Part No. S10272) and slip the meat gauge plate over the gear rack. Lower the gear rack back to its original position, tighten lock knob. Keep gear rack well oiled with food grade oil to ensure free movement.
4. The aluminum head (Part No. 10005) 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.



5. Place removable finger lift with saw guard assembly (Part No. A211MS-AL) on the saw guide bar (Part No. 116-13) and fasten in place with the finger lift fastener knob (Part No. 211Q).



SHARP SAW BLADE. HANDLE WITH EXTREME CAUTION.

6. Placing blade on cutter: Hang upper wheel assembly (Part No. A10003U335.) on the hinge bracket (Part No. S71-0). 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.
7. The stationary platter (Part No. A10163-1) is placed on top of the base structure and held in place by two push-pull hold down rods (Part No. 10212W), located at the rear of the base.
8. The sliding meat carriage assembly (Part No. A10155) 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.
9. Post **SAFETY TIPS** wall chart within easy view of operator. Keep Manual available to operator.
10. 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

11. Make sure saw guide bar with saw guard is in its lowest position. Close head and base doors.
12. Push start button and check for proper phasing of motor. Blade should be traveling down through saw guide.
13. 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.
14. Check Placement of all warning labels, wall chart and Manual. Machine is ready for trained operators to process product.
15. 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



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

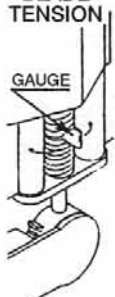


NO Opere Esta Sierra Sin Haber Sido Entrenado Para Ello Ni Tampoco Sin Autorizacion de un Supervisor. Uno Tiene que Haber Cumplido 18 Anos Para Operarla.
LEA Cuidadosamente el Manual de Operacion Antes de Usar Este Equipo.
SIEMPRE Guarde las Manos a Salvo de la Hoja de Serrar y de Otras Partes Moviles. Cirre el Interruptor Despues de Terminar de Cortar.
SIEMPRE Tenga Adjustado 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 Trocitos Pequenos.
NO Utilice la Sierra si se Halla Alterada, Danadao si No ha Sido Debidamente Mantenido o si la Advertencia es Alegible o si Falta Esta.
SIEMPRE Desconecte el Equipo Decenchifandolo de la Fuente de Fuerza. Dejejo Bajo Llave o con Etiqueta que Prohiba su Uso Antes de Limpiarlo o Hacer Trabajos de Mantenimiento.

#653PC-SP

Item No. 653PC-SP

BLADE TENSION



GAUGE

PROPER TENSION IS ACHIEVED WHEN GAUGE CAN JUST BARELY BE MOVED

Item No. 710

ALWAYS LOWER GUARD TO HEIGHT OF PRODUCT



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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.

DO NOT Tamper With, Bypass, Alter or Modify This Equipment in Any Way From Its Original Condition.

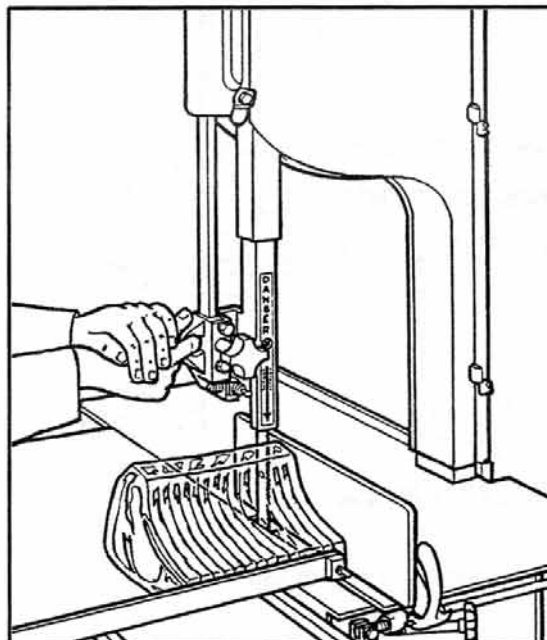
ALWAYS Turn Off, Unplug From Power Source and Perform Lockout/Tagout Procedure to This Machine Before Cleaning, Servicing or When Not in Use.

NEVER Leave Unattended While The Saw Is Running.

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.

ONLY PROPERLY TRAINED PERSONNEL SHOULD USE THIS EQUIPMENT

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

1. Before Using, Make Sure:

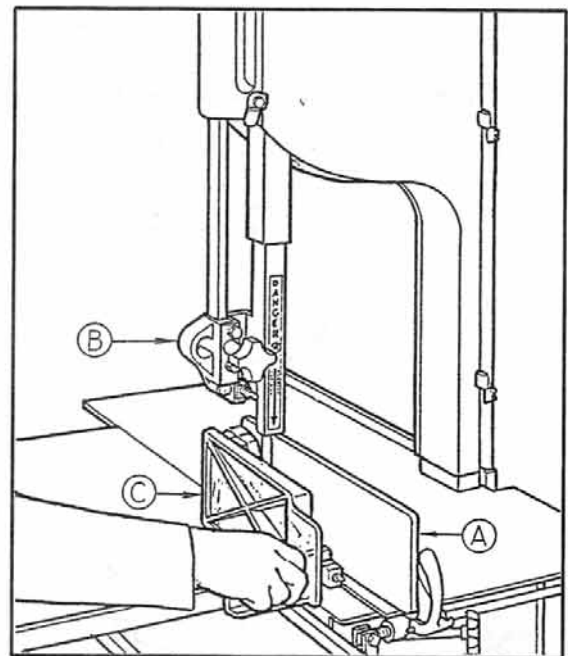
- Gauge Plate (A) And Other Components Are Secure.
- All Warning Labels And Guards Are In Place.
- The Guide Bar (B) Is Adjusted To $\frac{1}{2}$ Inch Above The Product To Be Cut

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.



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

CLEANING



SHARP MOVING BAND TYPE SAW BLADE TO AVOID PERSONAL INJURY

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

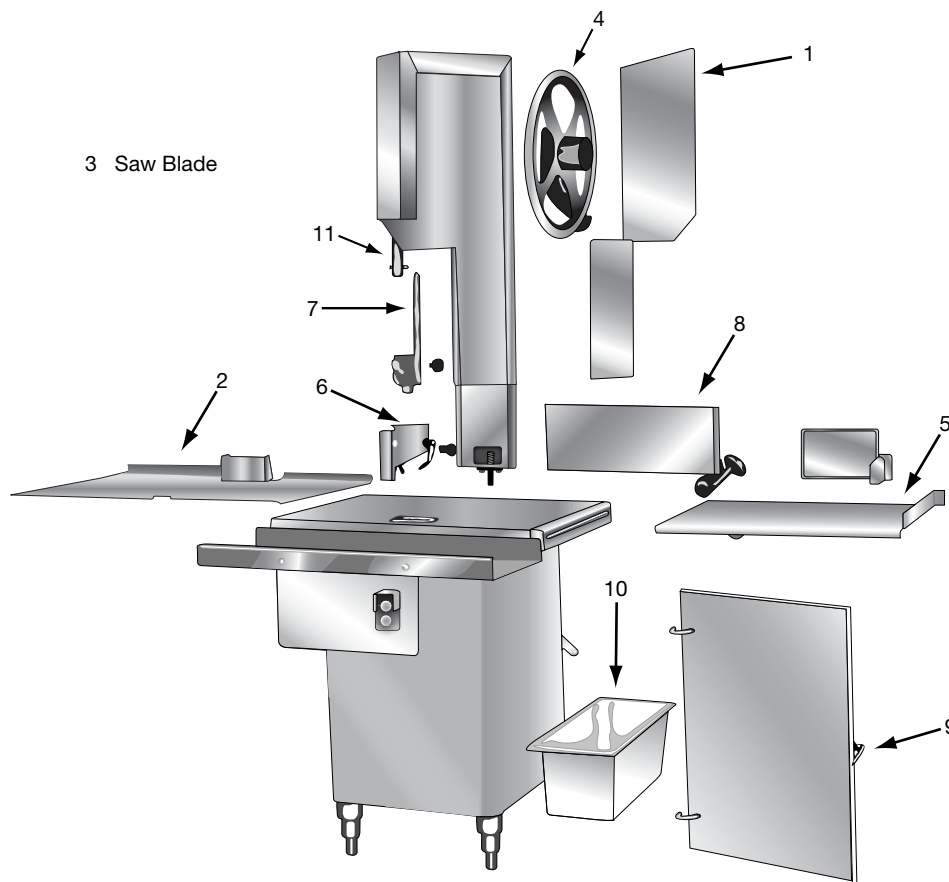
ONLY Use Recommended Cleaning Equipment, Materials and Procedures.

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. 604) 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.



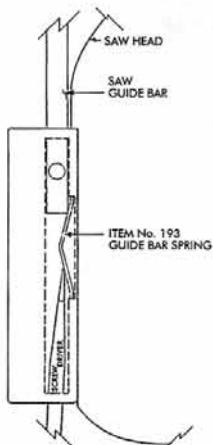
DO NOT IMMERSE UPPER WHEEL ASSEMBLY IN WATER

- 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 using instructions below.



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. 604). 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

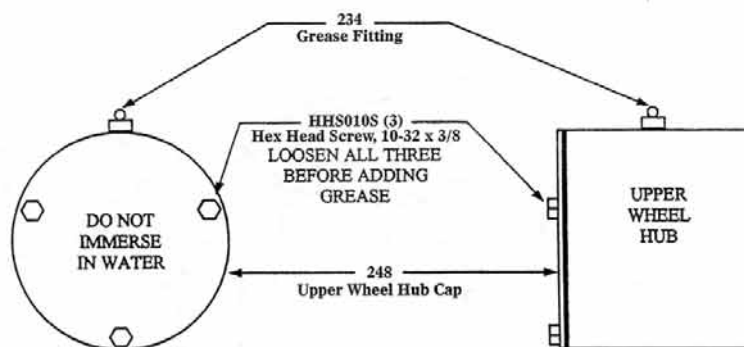
7. **MOTOR BEARINGS:** Bearing grease will lose its lubricating ability over time, not suddenly. The lubricating ability of a grease (over time) depends primarily on the type of grease, the size of the bearing, the speed at which the bearing operates and the severity of the operating conditions. Good 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.

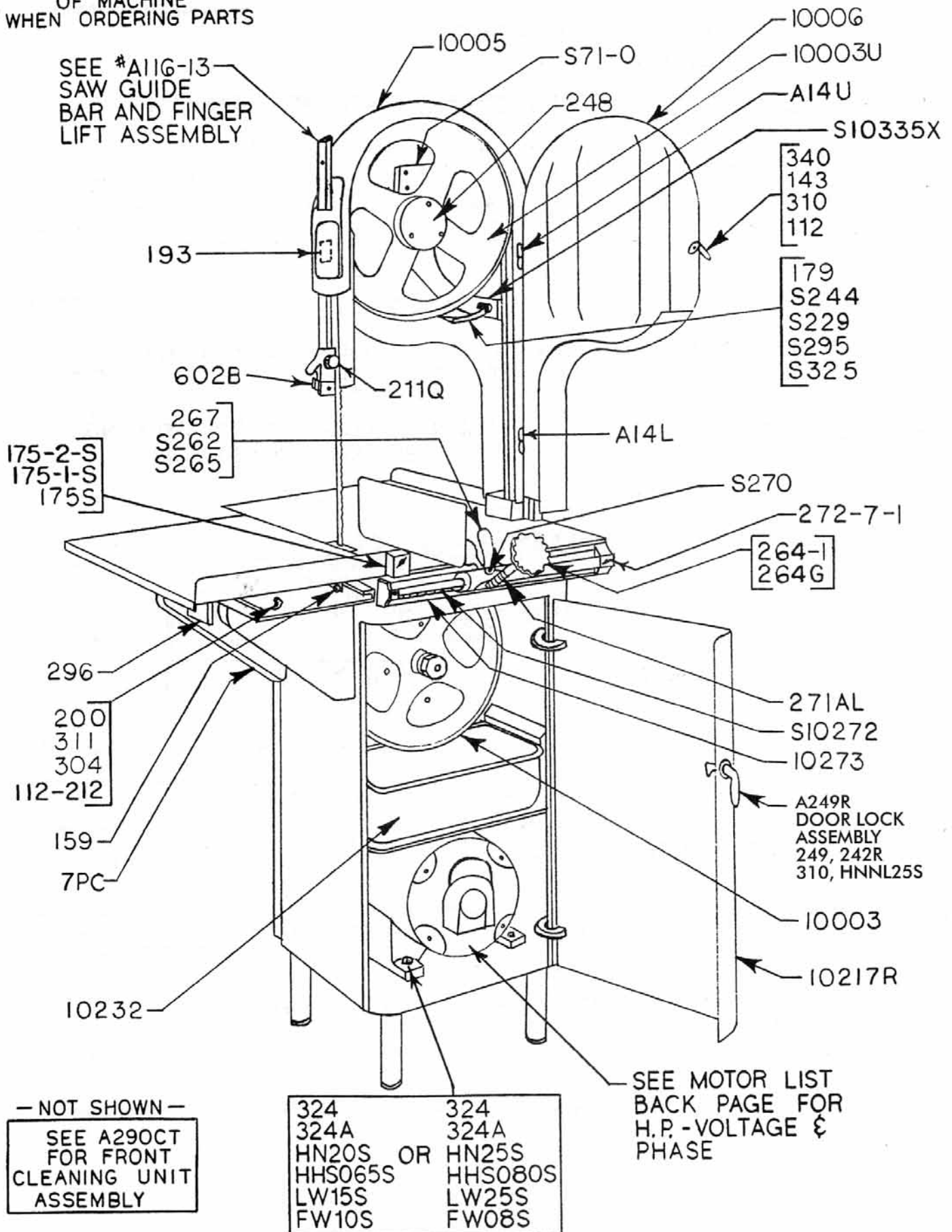
USE No. 374 GREASE FOR RE-GREASING SEE INSTRUCTIONS BELOW



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.

NOTE:
 REPORT SERIAL NO.
 OF MACHINE
 WHEN ORDERING PARTS

SEE #A116-13
 SAW GUIDE
 BAR AND FINGER
 LIFT ASSEMBLY

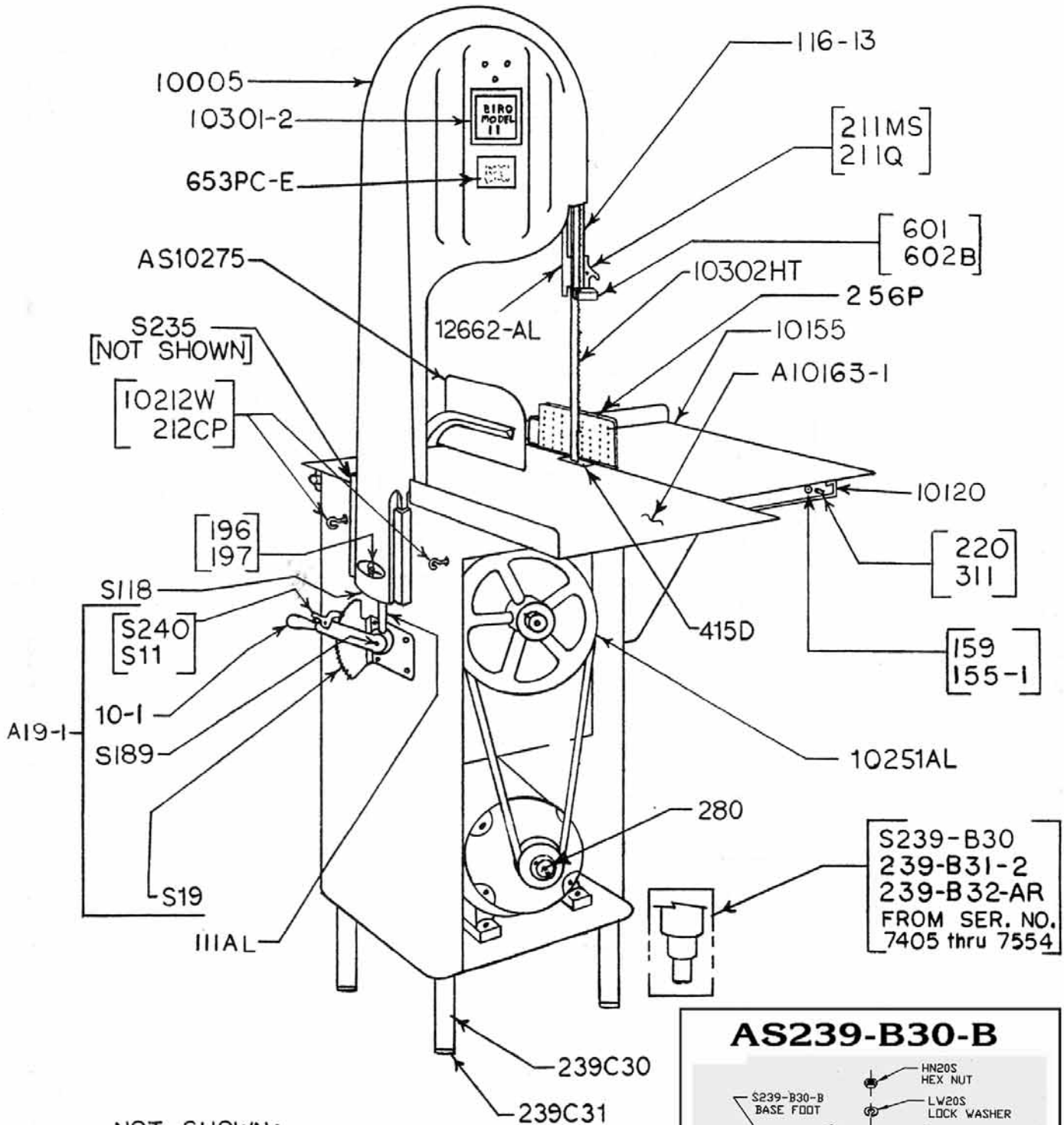


- NOT SHOWN -
 SEE A290CT
 FOR FRONT
 CLEANING UNIT
 ASSEMBLY

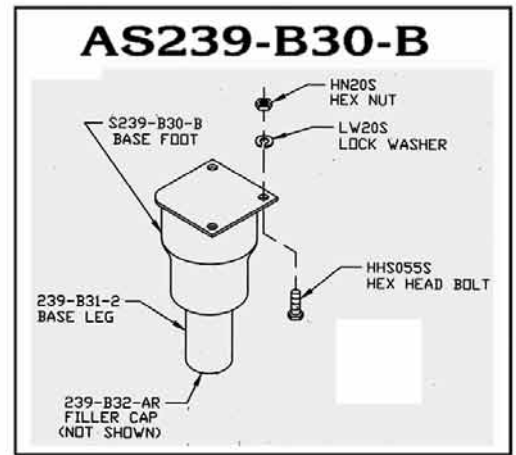
324	OR	324
324A		324A
HN20S		HN25S
HHS065S		HHS080S
LW15S		LW25S
FW10S		FW08S

SEE MOTOR LIST
 BACK PAGE FOR
 H.P. - VOLTAGE &
 PHASE

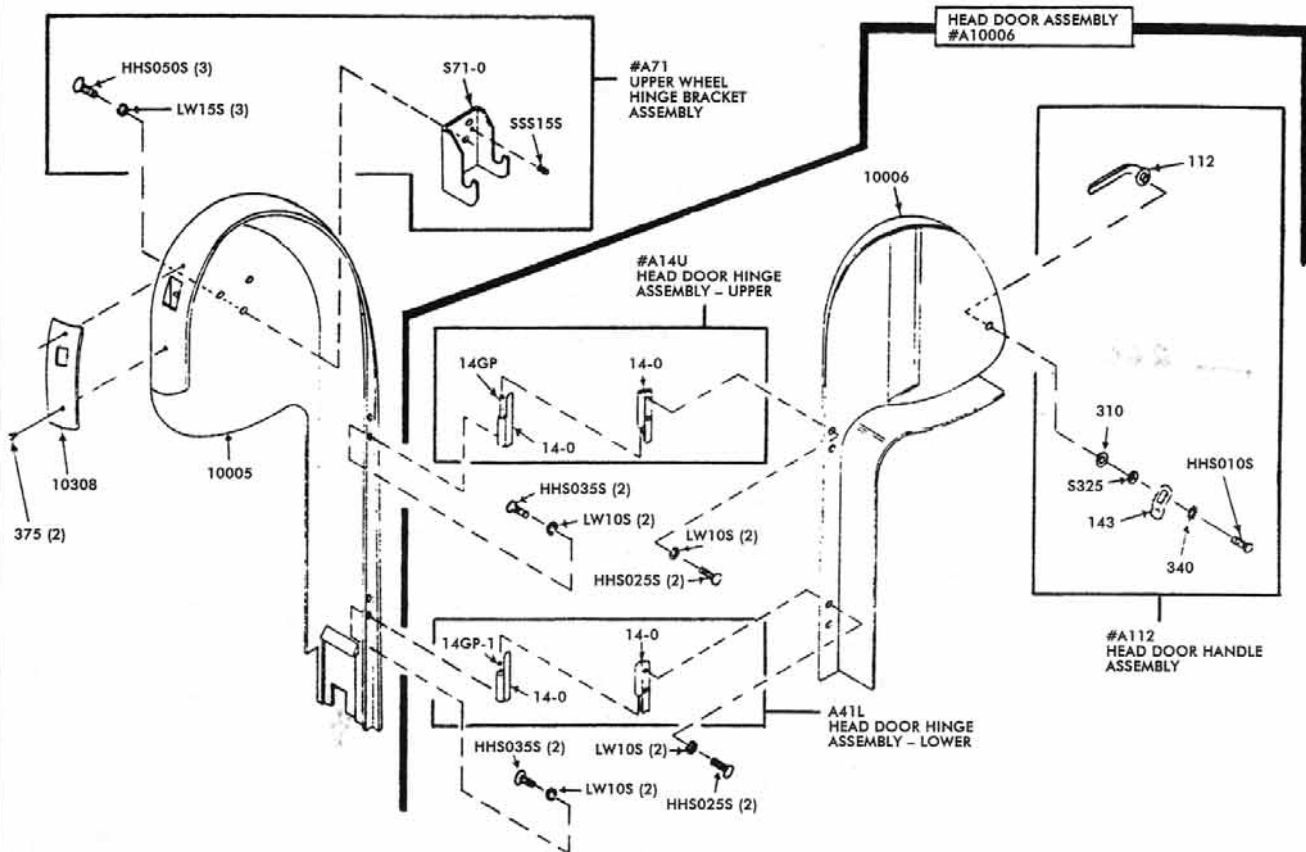
NOTE:
REPORT SERIAL NO.
OF MACHINE
WHEN ORDERING PARTS



NOT SHOWN:
BASE PANEL DOOR
LEFT SIDE: 10217PD

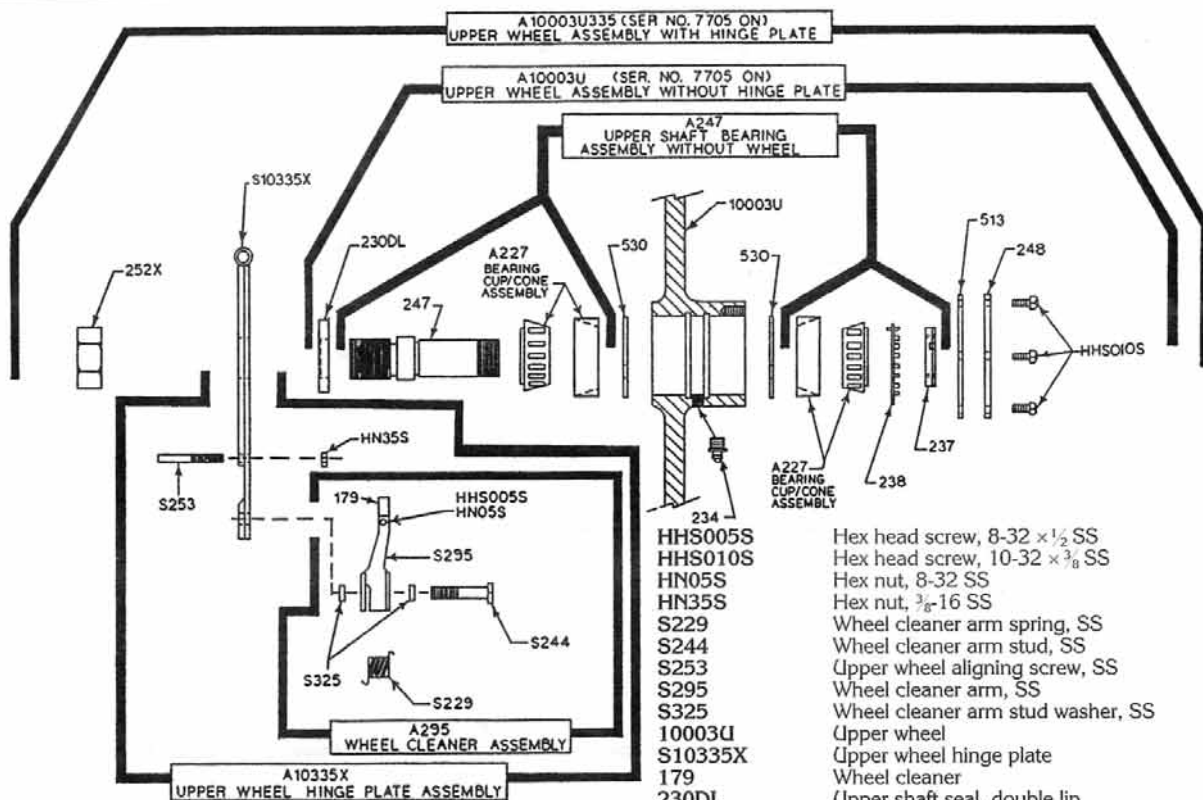


A10005 HEAD & DOOR ASSEMBLY

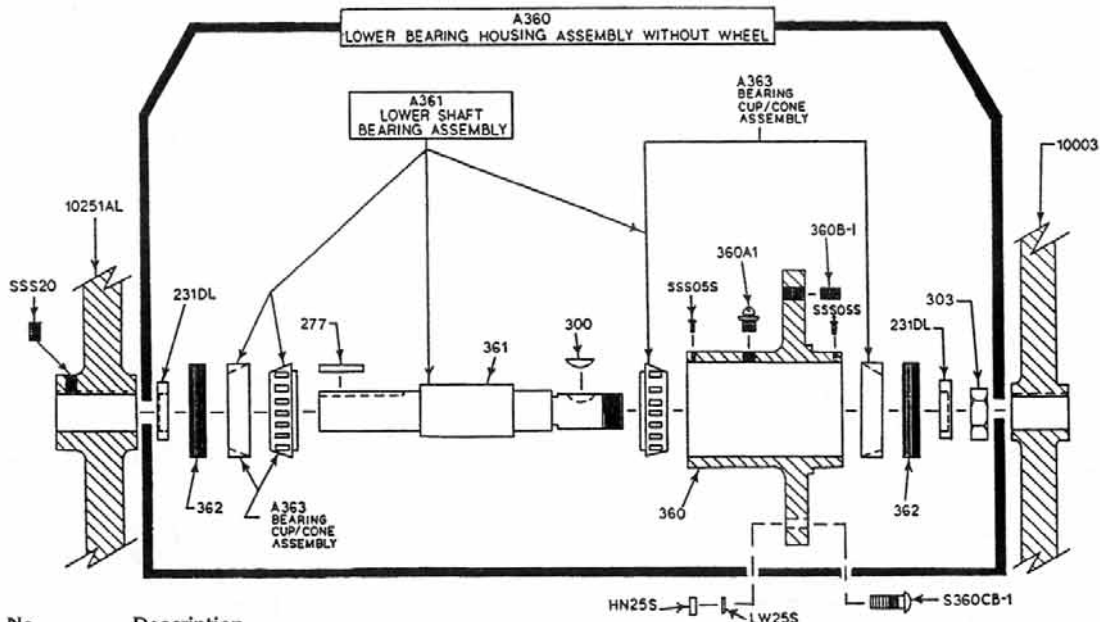


Item No.	Description
A10005	Head & door assembly (not sold separately)
A10006	Head door assembly
A112	Head door handle assembly
A14L	Head door hinge assembly lower short pin
A14U	Head door hinge assembly upper long pin
A71	Upper wheel hinge bracket assembly
HHS010S	10-32 x 3/8 hex head screw SS
HHS025S	1/4-20 x 1/2 hex head screw SS
HHS035S	1/4-20 x 3/8 hex head screw SS
HHS050S	5/16-18 x 3/8 hex head screw SS
LW10S	1/4 lock washer SS, regular
LW15S	5/16 lock washer SS, regular
S325	Wheel cleaner washer, SS
SSS15S	Set screw cup point 5/16-18 x 5/16, SS
10005	Head
10006	Head door (order A10006)
10308	Babbit pocket shield
112	Head door handle
14-0	Head door hinge (not sold separately)
14GP	Head door hinge pin long 1 1/2"
14GP-1	Head door hinge pin short 1 1/4"
143	Head door catch
310	Waved washer
340	Star lock washer
375	Drive screw name & model plate
S71-0	Upper wheel hinge bracket

NOT SHOWN
A116-13 Saw guide bar assembly
A196 Tension spring assembly

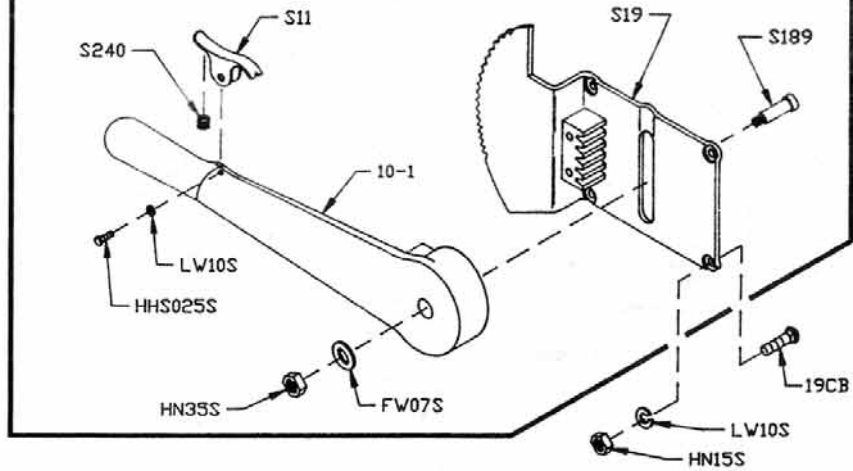


Item No.	Description
A10003U335	Upper wheel assembly w/hinge plate
A10003U	Upper wheel assembly w/o hinge plate
A10335X	Upper wheel hinge plate assembly
A227	Upper bearing cup/cone assembly
A247	Upper shaft bearing assembly
A295	Wheel cleaner assembly
252X	Upper shaft nut
513	Upper wheel hub gasket
530	Retaining ring (2 req.)
234	Grease fitting
237	Upper shaft castellated lock nut
238	Upper shaft castellated lock washer
247	Upper shaft
248	Upper wheel hub cap
530	Upper wheel stud washer, SS
10003U	Upper wheel
S10335X	Upper wheel hinge plate
179	Wheel cleaner
230DL	Upper shaft seal, double lip
234	Grease fitting
237	Upper shaft castellated lock nut
238	Upper shaft castellated lock washer
247	Upper shaft
248	Upper wheel hub cap
252X	Upper shaft nut
513	Upper wheel hub gasket
530	Retaining ring (2 req.)
HH5005S	Hex head screw, 8-32 x 1/2 SS
HH5010S	Hex head screw, 10-32 x 3/8 SS
HN05S	Hex nut, 8-32 SS
HN35S	Hex nut, 3/8-16 SS
S229	Wheel cleaner arm spring, SS
S244	Wheel cleaner arm stud, SS
S253	Upper wheel aligning screw, SS
S295	Wheel cleaner arm, SS
S325	Wheel cleaner arm stud washer, SS



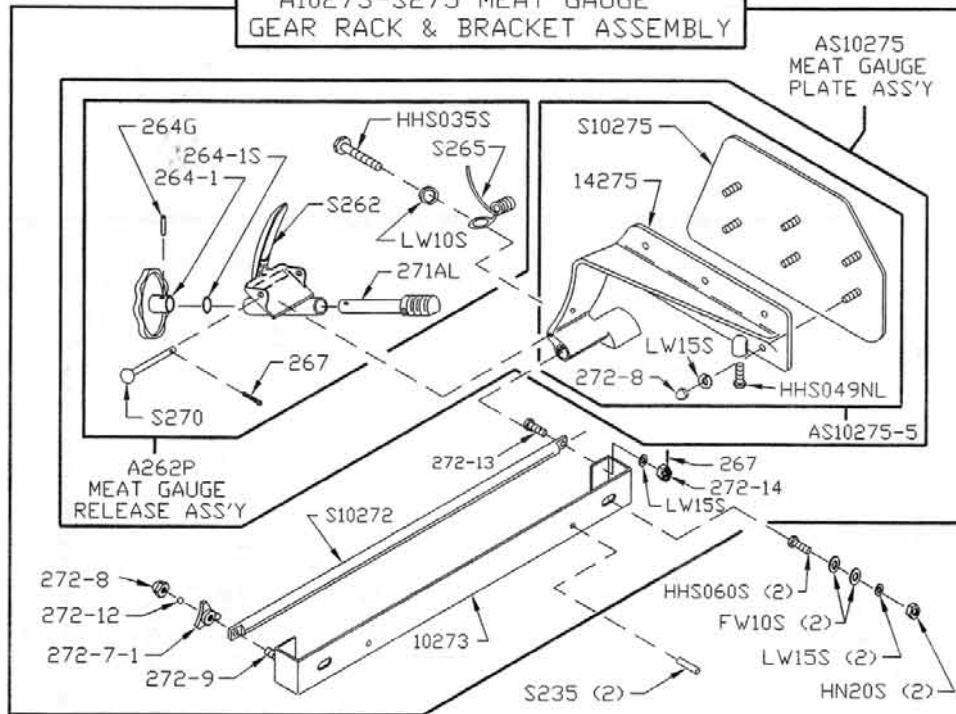
Item No.	Description
A360	Lower bearing housing assembly w/o wheel
A361	Lower shaft bearing assembly
A363	Lower bearing cup/cone assembly
HN25S	Hex nut, 3/8-16 SS
LW25S	Lock washer, 3/8 SS
SSS05S	Set screw, 10-24 x 3/8 SS, cup point
SSS20	Set screw, 3/8-16 x 1 1/4 cup point
S360CB-1	Carriage bolt, 3/8-16 x 1 1/4, SS
10003	Lower wheel
10251AL	Upper V-belt pulley, 7.8 x 1
231DL	Lower shaft seal, double lip
277	Lower shaft pulley key
300	Woodruff key
303	Lower shaft nut
360	Lower bearing housing
360A1	Grease fitting
360B-1	Set screw, 1/2-13 x 1 1/2, flat point
361	Lower shaft
362	Lower bearing housing adjusting. cap

**A19-1
RATCHET ASSEMBLY**



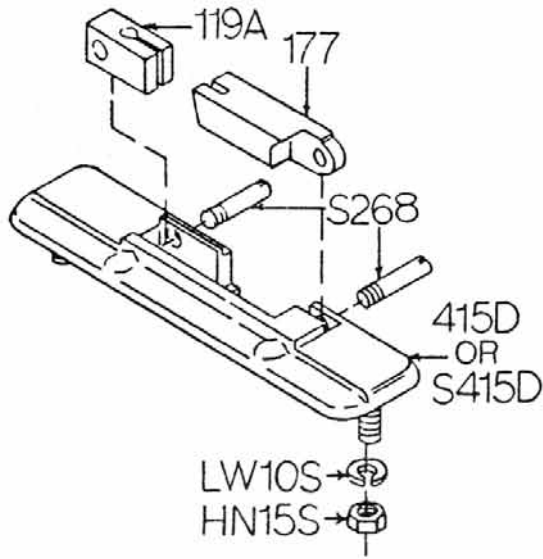
Item No.	Description	Item No.	Description
A19-1	Ratchet assembly	S11	Ratchet trigger SS
FW07S	Flat washer, 3/8 SS	S189	Ratchet arm stud SS
HHS025S	Hex head screw, 1/4-20 x 1/2 SS	S19	Ratchet base SS
HN15S	Hex nut, 1/4-20 SS	10-1	Ratchet arm
HN35S	Hex nut, 3/8-16 SS	19CB	Carriage bolt 1/4-20 x 3/4 SS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

**A10273-S275 MEAT GAUGE
GEAR RACK & BRACKET ASSEMBLY**



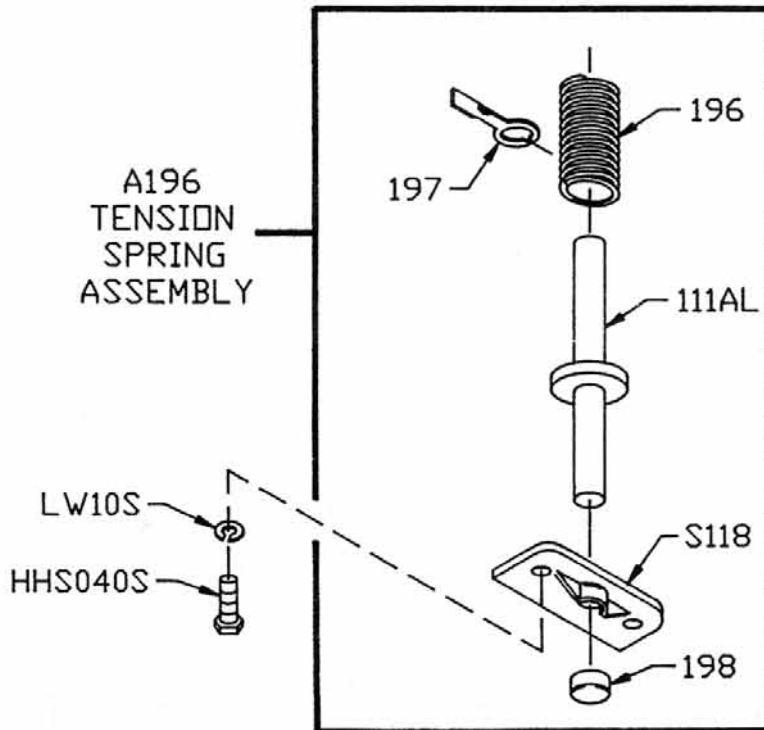
Item No.	Description	Item No.	Description
A10273-S275	Meat gauge assembly	S270	Meat gauge release pin, SS
AS10275	Meat gauge plate & arm assembly	S10272	Meat gauge gear rack, SS
AS10275-5	Meat gauge plate & arm assembly	S10275	Meat gauge plate, SS
A262	Meat gauge release assembly	14275	Meat gauge arm
FW10S	Flat washer, 3/16 SS	264G	Meat gauge hand wheel groove pin
HHS049NL	Hex head screw, 3/16-18 x 1/2, nylon	264-1	Meat gauge hand wheel
HHS060S	Hex head screw, 3/16-18 x 1 SS	264-1S	Hand wheel shim
HN20S	Hex nut, 3/16-18 SS	267	Meat gauge release cotter key
LW10S	Lock washer, 1/4 SS	271AL	Meat gauge worm gear, ALI
LW15S	Lock washer, 3/16 SS	272-7-1	Lock knob, 3/16-18, 3 point
HHS035S	Hex head screw, 1/4-20 x 3/8 SS	272-8	Cap nut, 3/16-18 SS
10273	Meat gauge bracket, SS (not sold separately)	272-9	Hex head screw, 3/16-18 x 2 SS
S235	Taper pin, 4 x 3/4 SS	272-12	Brass ball
S262	Meat gauge release handle, SS	272-13	Hex head screw, 3/16-18 x 1/4
S265	Meat gauge release spring	272-14	3/16-18 castellated nut, SS

A415D OR AS415D STATIONARY BAR ASSEMBLY

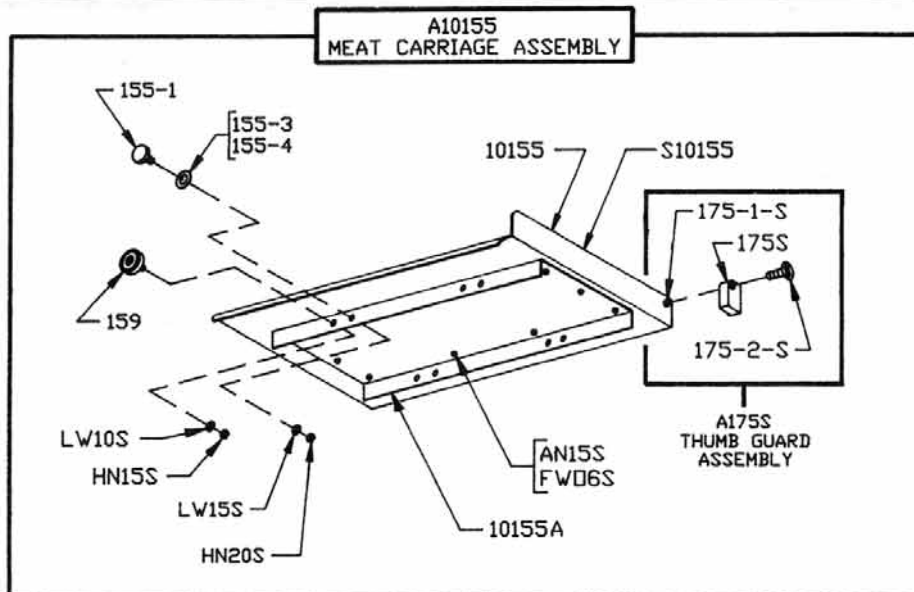


Item No.	Description
A415D	Stationary bar assembly
AS415D	Stationary bar assembly SS
HN15S	Hex nut, 1/4-20 SS
LW10S	Lock washer, 1/4 SS
S268	Stationary bar headless screw
S415D	Stationary bar SS
119A	Saw guide in stationary bar
177	Nylon filler
415D	Stationary bar

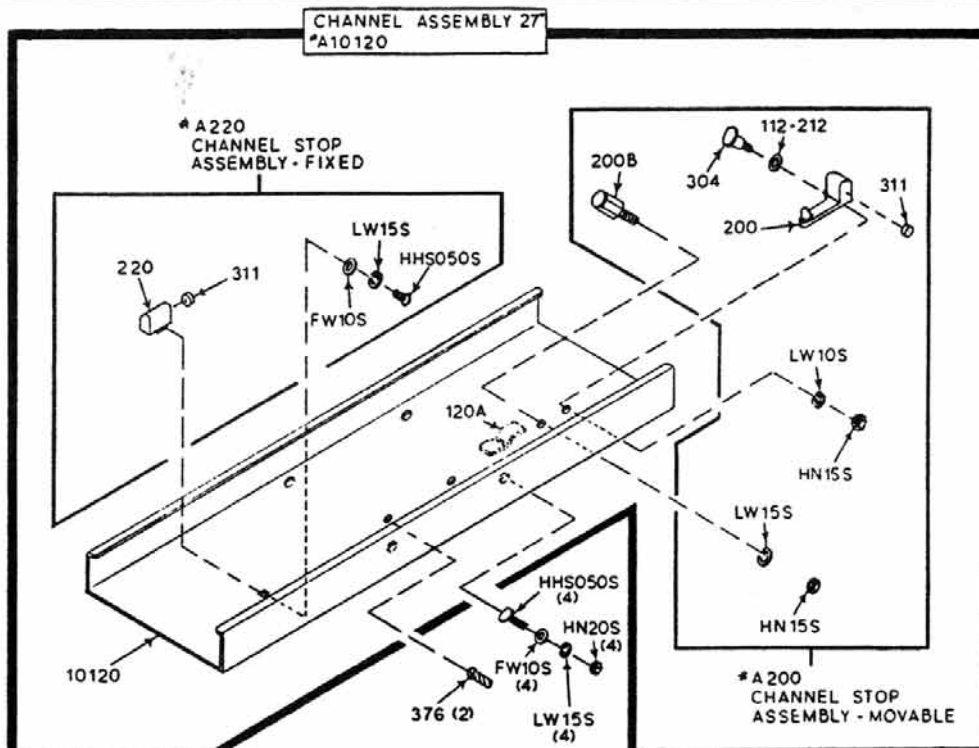
A196 TENSION SPRING ASSEMBLY



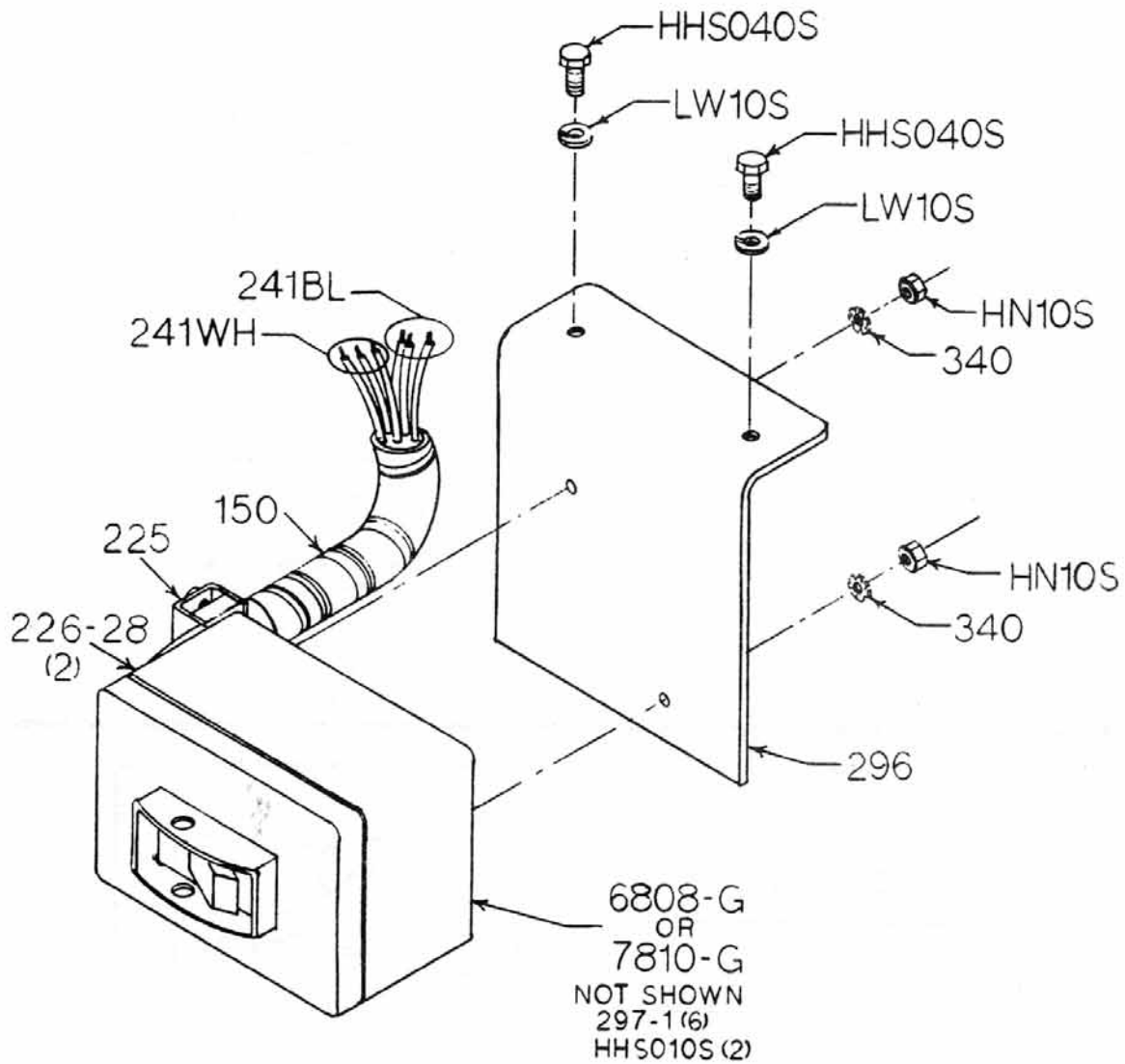
Item No.	Description
A196	Tension spring assembly
HHS040S	Hex head screw, 1/4-20 x 3/4 SS
LW10S	Lock washer, 1/4 SS
111AL	Tension spring pin
S118	Tension spring plate, SS
196	Saw tension spring
197	Tension spring gauge
198	Cap



Item No.	Description	Item No.	Description
A10155	Meat carriage assembly	10155	Meat carriage top & angle
A175S	Thumb guard assembly	10155A	Meat carriage angle only (not sold separately)
AN15S	Acorn nut, 1/4-20 SS	155-1	Meat carriage guide
FW06S	Flat washer, 1/4 SS	155-3	Meat carriage guide spacer, .025
HN15S	Hexnut, 1/4-20 SS	155-4	Meat carriage guide spacer, .040
HN20S	Hex nut, 5/16-18 SS	159	Meat carriage bearing
LW10S	Lock washer, 1/4 SS	175S	Thumb guard, nylon
LW15S	Lock washer, 5/16 SS	175-1-S	Thumb guard nut SS
S10155	Meat carriage top only (not sold separately)	175-2-S	Thumb screw, 1/4-20 x 1/2

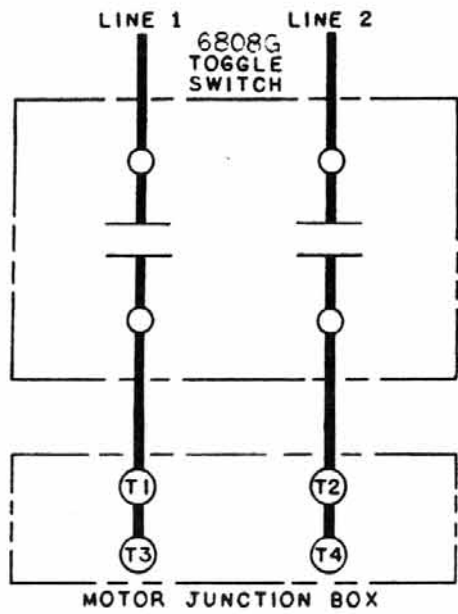


Item No.	Description	Item No.	Description
A10120	Channel assembly, 27"	10120	Channel, 27"
A200	Carriage stop assembly, movable	112-212	Waved washer
A220	Carriage stop assembly, fixed	120A	Pusher plate clamp, welded
FW10S	Flat washer, 5/16 SS	200	Carriage stop, movable
HHS050S	Hex head screw, 5/16-18 x 5/8 SS	200B	Stop stud carriage stop
HHS060S	Hex head screw, 5/16-18 x 1, SS	220	Carriage stop, fixed
HN15S	Hex nut, 1/4-20 SS	304	Shoulder screw carriage stop
HN20S	Hex nut, 5/16-18 SS	311	Carriage stop rubber bumper
LW10S	Lock washer, 1/4 SS	376	Drive screw, SS #10 x 1/2
LW15S	Lock washer, 5/16 SS		

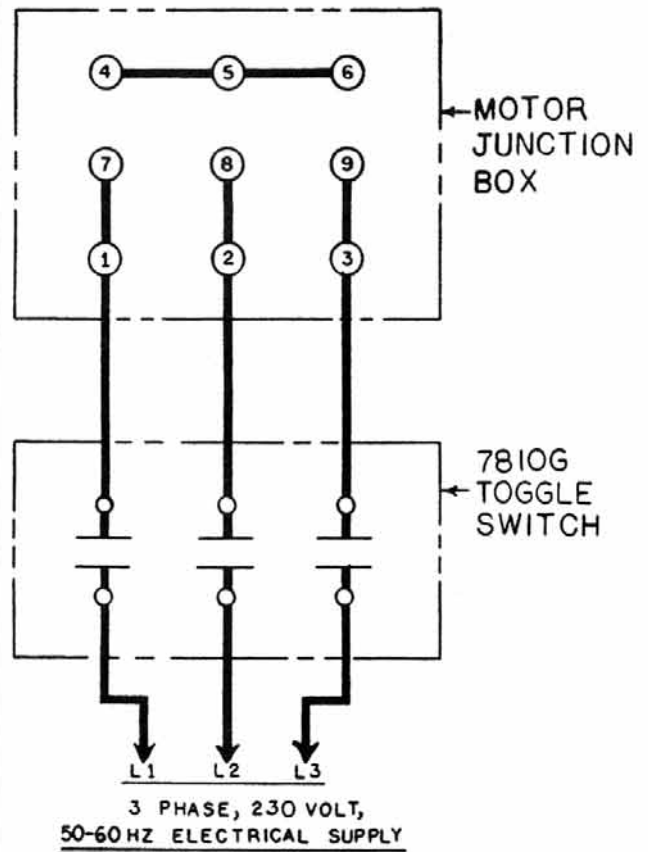
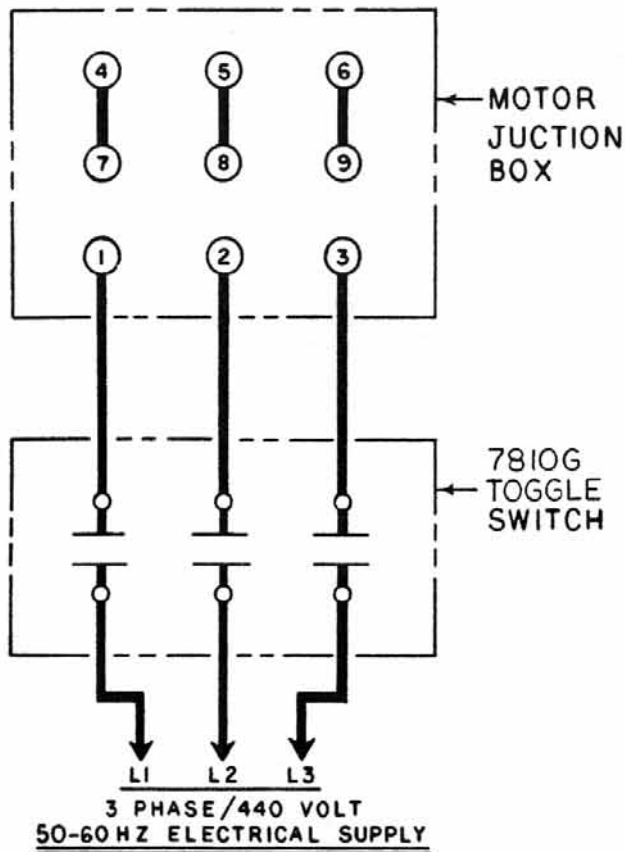
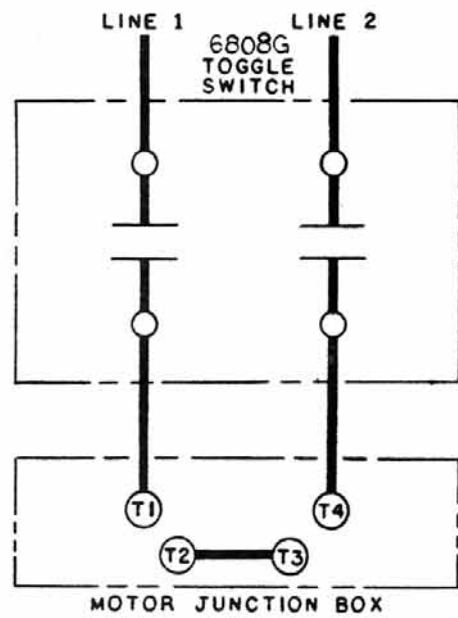


Item No.	Description
A6808-G-12	Toggle switch assembly, 1PH
A7810-G-12	Toggle switch assembly, 3PH
HHS010S	Hex head screw, 10-32 x 3/4 SS
HHS040S	Hex head screw, 1/4-20 x 3/4 SS
HN10S	Hex nut, 10-32 SS
LW10S	Lock washer, 1/4 SS
150	Conduit, 1/2"
225	Conduit connector, 90°
226-28	Washer, SS
241BL	Wire, black, 12GA, CSA & UL
241WH	Wire, white, 12GA, CSA & 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



PARTS LIST
MODEL 11 BIRO POWER MEAT CUTTER
SEND IN MODEL NO. AND SERIAL NO.
WHEN ORDERING PARTS

Item No.	Description	Item No.	Description
M47-M3154T-B	Mtr 1½HP, 208/220/440-50/60-3, open	10005	Head
M40-158ES1BF56W	Mtr, 1½HP, 115/208-230-60-1 TENV	10006	Head door (order A10006)
AN15S	Acorn nut, SS ¼-20	10120	Channel, 27 inch, #6147 on
FW06S	Flat washer, SS, ¼	10154	Table extension, stainless
FW07S	Flat washer, SS, ⅜ SAE	10155	Meat carriage top & angle
FW08S	Flat washer, SS, ⅜ × 1	10155-OS	Meat carriage, 6 brg., to #6146
FW10S	Flat washer, SS, ⅜	10163-1	Sta. pltr #6753 on (see A10163-1)
HHS003S	Hex head screw, SS, 8-32 × ¼	10163B	Platter neck guard
HHS005S	Hex head screw, SS, 8-32 × ½	10163B-1	Platter neck guard, England
HHS010S	Hex head screw, SS, 10-32 × ⅜	10212W	Platter rod
HHS015S	Hex head screw, SS, 10-32 × ⅝	10217L	Base door left #6153 thru 6752
HHS020S	Hex head screw, SS, ¼-20 × ⅜	10217PD	Base door left panel #6753 on
HHS025S	Hex head screw, SS, ¼-20 × ½	10217R	Base door right hinged #6153 on
HHS035S	Hex head screw, SS, ¼-20 × ⅝	10232	Scrap bucket
HHS040S	Hex head screw, SS, ¼-20 × ¾	10239-1	Base #6753 on
HHS049NL	Hex head screw ⅝-18 × ½, nylon	10251AL	Upper v-belt pulley 7.8 × 1, aluminum
HHS050S	Hex head screw, SS, ⅝-18 × ⅝	10273	Meat gauge bracket (order A10273)
HHS060S	Hex head screw, SS, ⅝-18 × 1	10301-2-B	Name Plate, s/n required
HHS065S	Hex head screw, SS, ⅝-18 × 1½	10302HT	Saw blade 78 inch, hard tooth
HHS080S	Hex head screw, SS, ⅝-16 × 1½	10308	Babbitt pocket shield
HN05S	Hex nut, SS, 8-32	10313-1-001	Operating manual
HN10S	Hex nut, SS, 10-32	111AL	Tension spring pin
HN15S	Hex nut, SS, ¼-20	112	Head door handle
HN20S	Hex nut, SS, ⅝-18	112-212	Waved washer, 2¼ ID, ⅝ OD
HN25S	Hex nut, SS, ⅝-16 heavy	116-13	Saw guide bar, 13"
HN35S	Hex nut, SS, ⅝-16 heavy jam	119A	Saw guide in stationary bar
LW05S	Lock washer, SS, #10	119FSC	Saw guide in stationary bar, fish
LW10S	Lock washer, SS, ¼ regular	120A	Pusher plate clamp, welded
LW15S	Lock washer, SS, ⅝ regular	12662-AL	Safety saw guard, SS w/708 decal
LW25S	Lock washer, SS, ⅝	130	Saw cleaner bracket, rear
RHS10S	Round head screw, SS, 10-32 × ¾	131	Saw cleaner, SS
RHS25S	Round head screw, SS, ¼-20 × ¾	14GP	Head door hinge pin, long, 1½"
S10272	Meat gauge gear rack, SS	14GP-1	Head door hinge pin, short, 1¼"
S10275	Meat gauge plate, 13½	14275	Meat gauge arm
S10335X	Upper wheel hinge plate, SS	143	Head door catch
S11	Ratchet trigger, SS	150	Conduit, flexible, metal, per inch
S118	Tension spring plate	151	Conduit, watertight, per inch
S19	Ratchet base, SS	155-1	Meat carriage guide
S163F	Platter spacer weld button, SS	155-3	Meat carriage guide spacer .025
S189	Ratchet arm stud, stainless	155-4	Meat carriage guide spacer .040
S229	Wheel cleaner arm torsion spring, SS	159	Meat carriage bearing
S235	Taper pin, SS, 4 × ⅜	163A	Platter rod clip
S239-B30	Base foot welded, SS	17-3	Fngrlift wshr, ⅝ × .276 × .104, use FW06S
S240	Ratchet trigger spring, SS	17211-22	Finger lift shim .022
S244	Wheel cleaner arm stud, SS	17211-35	Finger lift shim .035
S253	Upper wheel aligning screw, SS	175-1-S	Thumb guard nut, SS
S262	Meat gauge release handle, SS	175-2-S	Thumb screw ¼D × ½
S265	Meat gauge release spring	175S	Thumb guard, nylon
S268	Stationary bar hdless screw SS	177	Stationary bar nylon filler
S270	Meat gauge release pin, SS	179	Wheel cleaner
S295	Wheel cleaner arm, SS	19CB	Ratchet base carriage blt, ⅜SS
S325	Wheel cleaner arm washer, SS	193	Saw guide bar spring
S360CB-1	Carriage bolt ⅝-16 × 1¼	196	Saw tension spring
S415D	Stationary bar, SS	197	Tension spring gauge
S416	Platter locator weld pin, SS	198	Cap, for tension spring pin
SSS05S	Set screw, SS 10-24 × ⅝ cup point	200	Carriage stop, movable
SSS13	Set screw, SS ¼-20 × ⅝ cup point	200B	Stop stud carriage stop
SSS20	Set screw, SS ⅝-16 × ⅝ knurled cup	211MS	Finger lift bracket
1-0	Upper main bearing spacer	211Q	Finger lift fastener knob, 4 point
10-1	Ratchet arm	212CP	Hold down rod cotter
10003	Lower saw wheel, 10 inch	212W-E	Platter rod, England
10003U	Upper saw wheel, 10 inch	220	Carriage stop, fixed
		221-48	V-belt, 48"
		221-49	V-belt, 49"

MODEL 11 PARTS NUMBERS AND DESCRIPTIONS (Cont.)

Item No.	Description	Item No.	Description
221-50	V-belt, 50"	291-1	Cleaning unit fstnr knob $\frac{3}{8}$ long
223	Scrap bucket bumper	296	Toggle switch bracket
224	Conduit connector, 180°	299	Saw guide bar stop short
225	Conduit connector, 90°	300	Lower shaft Woodruff key
226-28	Cndt conctrwshr $1\frac{1}{2} \times \frac{27}{32}$, SS	303	Lower shaft nut
230DL	Upper shaft seal, double lip	304	Carriage stop shoulder screw
231DL	Lower shaft seal, double lip	305	Saw guide bar stop in head
234	Grease fitting, upper wheel	310	Waved wshr mvbl crg stp hddrick
237	Up shaft castellated locknut	311	Rubber bumper for carriage stops
238	Up shaft castld locknut washer	315	Lower guide bracket stud
239-B31-2	Pipe leg, aluminum, 6"	324	Motor shim, $\frac{1}{16}$ "
239-B32-AR	Pipe leg cap	324A	Motor shim $\frac{1}{8}$ "
239C30	Pipe leg	331K	Platter bracket rubber bumper
239C31	Pipe leg rubber plug	340	Star lock washer
242R	Base door lock, right	360	Lower bearing housing
247	Upper shaft	360A1	Bearing housing angled grease fitting
248	Upper wheel hub cap	360B-1	Set screw, $\frac{1}{2}$ -13 \times $\frac{1}{2}$ flat pt.
249	Base door handle	361	Lower shaft
252X	Shaft lock nut	361A	Washer convert 361 to 57 (2 req'd)
256P	Safety pusher plate, composition	362	Lower bearing housing cap
256PM	Safety pusher plate, aluminum	374	Grease, Shell Cassida No. EPS-2
259	Anti-short bushing $\frac{1}{2}$	375	Drive screw, for name plate
260	Aluminum slide gib	376	Drive screw, #10 \times $\frac{1}{2}$, SS
260ALS	Shim for aluminum slide gib	4-25AL	Motor pulley, 5 \times $\frac{5}{8}$, aluminum
261	Lower bearing housing to #2634	4-30AL	Motor pulley 5 \times $\frac{3}{4}$, aluminum
264-1	Meat gauge release hand wheel	415D	Stationary bar
264-1S	Meat gauge hand wheel shim	513	Upper wheel hub gasket
264G	Hand wheel groove pin	530	Retaining ring (2 req'd)
267	Meat gauge release cotter key	601	Upper saw guide bracket
271AL	Meat gauge worm gear, ALI.	602B	Saw guide, upper
272-6-S	Meat gauge bracket wing nut	602BFSC	Saw guide, upper bracket, fish
272-7-1	Lock knob $\frac{5}{16}$ -18, 4 point	603	Lower guide bracket
272-8	Cap nut, $\frac{5}{16}$ -18, SS	603-1	Pan head screw adjust guide
272-9	Hex head screw, $\frac{5}{16}$ -18 \times 2", SS	604	Saw guide lower blade back-up
272-12	Brass ball, $\frac{7}{32}$ " dia.	6808-G	Toggle switch, 1 phase
272-13	Hex head screw $\frac{5}{16}$ -18 \times $1\frac{1}{4}$, SS	7PC	Channel bracket, powder coated
272-14	Castellated nut $\frac{5}{16}$ -18, SS	S71-0	Upper wheel hinge bracket
277	Lower shaft key, v-belt side	708	Decal, "Danger Exposed Blade"
280	Motor shaft key	7810-G	Toggle switch, 3 phase
290CT	Cleaning unit casting		

COMPLETE ASSEMBLIES FOR MODEL 11

Item No.	Description	Item No.	Description
A10003U	Up whl assem w/o hinge plate	A220	Channel stop assembly, fixed
A10003U335	Up whl assem w/hinge plate	A227	Upper bearing cup/cone assembly
A10006	Head door assembly, new style	A247	Upper shaft brg assem w/o wheel
A10120	Channel assembly, 27"	A249L	Base door lock handle assembly, left
A10155	Meat carriage assembly	A249R	Base door lock handle assembly, right
A10155-OS	Meat crg. assem, 6 brg, to #6146	A260	Aluminum slide gib assembly
A10163-E1	Sta. platter assembly, England	A262	Meat gauge release assembly
A10163-1	Sta. platter assem. #6753 on	A290CT	Cleaning unit assembly, w/604
A10273	Meat gauge bracket assembly	A295	Wheel cleaner assembly
A10273-S275	Meat gauge gear rack & bracket assembly	A360	Lower bearing housing assembly
A10335X	Upper wheel hinge plate assembly	A361	Lower shaft bearing assembly
A112	Head door handle assembly	A363	Lower bearing cup/cone assembly
A116-13	Saw guide bar assembly	A415D	Stationary bar assembly, plated
A130	Saw cleaner assembly	A602	Saw guide assembly, upper
A14L	Head door hng assem, lwr, shrt pn	A603604	Lower blade bk-up guide assem
A14U	Head door hng assem, upr, long pn	A6808-G-12	Toggle sw. assem, 1 ph, w/harness
A175	Thumb guard assembly	A71	Upper wheel hinge bracket assembly
A19-1	Ratchet assembly	A7810-G-12	Toggle sw. assem. 3 ph, w/harness
A196	Tension spring assembly	AS10275	Meat gauge plate assembly
A200	Carriage stop assembly, movable	AS10275-5	Meat gauge plate & arm assembly
A211MS-AL	Finger lift assembly removable	AS415D	Stationary bar assembly, SS

**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**



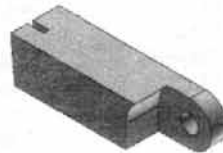
**Item No. S265
MEAT GAUGE SPRING
ALL SAWS**



**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**



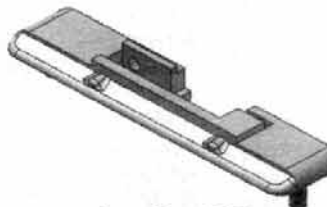
**Item No. S244
WHEEL CLEANER ARM STUD
ALL SAWS**



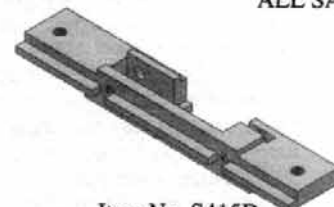
**Item No. S229
WHEEL CLEANER
ARM SPRING
ALL SAWS**



**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 -

LIMITED WARRANTY

WARRANTY: The BIRO Manufacturing Company warrants that Model 11 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 wheel cleaners (Item No. 179), saw blade cleaners (Item No. 131), blade backup guides (Item No's. 602B, 605 and 119A), 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 Mfg. Company for the nearest authorized service entity (250 plus worldwide) in your area.

THE BIRO MANUFACTURING COMPANY

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E-mail: Service@biro_saw.com
Web: <http://www.birosaw.com>