

MODEL 1433 POWER MEAT CUTTER OPERATING AND SERVICE MANUAL



\swarrow IMPORTANT NOTICE \checkmark

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

> PTCT: MD 1433 ITEM # 266-3-16-12-B

TABLE OF CONTENTS

Page
NOTICE TO OWNERS AND OPERATORS 1
SAFETY TIPS
INSTALLATION
OPERATION
TO PROCESS PRODUCT
CLEANING PROCEDURE
MAINTENANCE
GENERAL
LUBRICATION 12-13
WALL CHART (PART #671)
PARTS DIAGRAM
BASE DOOR HINGE SYSTEM
SWITCH ASSEMBLIES AND SERVICE PARTS
WIRING DIAGRAMS
WARNING LABEL LOCATIONS ON MACHINE
WEARABLE SAW PARTS
PARTS LIST/ORDERING
PARTS ASSEMBLIES LIST /ORDERING
OPERATOR'S NOTES
OPERATOR'S SIGNATURE PAGE
LIMITED WARRANTY

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.

- NOTE - A copy of this manual is included with each Model 1433 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: Machines **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 1/2" 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 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 Saw Guard Bar on Saw Guide Bar in the Raised Position or the Saw Guard Removed from the Saw Guide Bar.
- ALWAYS Adjust Saw Guide Bar with Saw Guide to Within 1/2" of Product to be Cut.
- **NEVER** Operate Without all Warning Labels Attached and Wall Chart Posted.
 - 1. Read this Manual thoroughly before installation and operation. Do not proceed with installation and operation if you have any questions or do not understand anything in this Manual. Contact your local Distributor, or BIRO first.
 - 2. Install machine on a level, solid, non-skid surface in a well-lighted work area away from children and visitors.



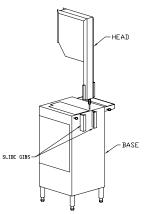
ALWAYS LEVEL MACHINE BEFORE USING

- 3. After installing machine in operational area, it is imperative that the four adjusting leg hex bolts be adjusted to level the machine and also to eliminate rocking.
- 4. To assemble meat gauge plate (Part No. A14275) to the machine; Loosen the lock knob (Part No. 272-10) on the right side meat gauge bracket. Remove the meat gauge gear rack (Part No. 14272) 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 (Part 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 stainless steel head (Part No. S14005C) comes detached from the base. Slide the head into the slide gibs (Part No. 260) located on the back of the base structure. Make sure the slide gibs are oiled or greased to ensure free vertical movement of the head structure.





- 6. Place removable finger lift with saw guard assembly (Part No. A14211) on the saw guide bar (Part No. 116-22) and fasten in place with finger lift fastener knob (Part No. 211A-291Q).
- 7. See Lower Removable Wheel Installation and Removal Instructions for Model 1433 below.

<u>REMOVAL and INSTALLATION</u> for Self-Centering Lower Removable Wheels (Part No. 14560-1 and 14560DF-1)



FINGERLIFT ASSEMBLY

ALWAYS Turn off, unplug Machine From Power Source and Perform Lockout/Tagout Procedure to the Machine **BEFORE** Cleaning or Servicing.

Follow disassembly procedures in the Cleaning Section of the Operating and Service Manual. Removal of the T-Handle and Lower Wheel will be the last 2 parts removed in the number sequence.

REMOVAL

Loosen Item No. 14746-1, T-Handle and Remove from Lower Shaft.



Using both hands @ 3 and 9 o-clock Positions, Pull wheel towards you with a even smooth motion.

INSTALLATION

There is a anti-rotation pin located on the lower shaft, there is a anti-rotation groove located on the back side of the lower wheel.

Align and engage the groove of the lower wheel and the anti-rotation pin as the wheel is being installed.





Install T-Handle Lock onto Lower Shaft, Hand Tighten <u>SECURELY</u>







REMOVAL and INSTALLATION INSTRUCTIONS for TAPERED BORE LOWER WHEELS 14560 and 14560DF

ALWAYS Turn off, unplug Machine From Power Source and Perform Lockout/Tagout Procedure to the Machine **BEFORE** Cleaning or Servicing.

Follow Disassembly Procedures in the Cleaning Section of the Operating and Service Manual. Removal of the Lower Wheel will be the last procedure.

REMOVAL

Loosen the Item No. 14746 T-Handle lock, DO NOT REMOVE COMPLETELY FROM SHAFT.



14746 T-Handle Lock



T-Handle Loosened

Using thumbs for leverage, pull wheel toward you with an even-smooth motion. Wheel is mounted in slip fit fashion on a tapered shaft. When the wheel is loose, complete removing T-handle lock and wheel.



14746 T-Handle Lock



INSTALLATION

There is an alignment pin on the lower shaft. And a mating alignment groove in the hub of the lower wheel. Align the two as the ______ wheel is being installed on the tapered shaft.



NOTE: TO ENSURE PROPER SAW WHEEL ALIGNMENT, WHEEL MUST BE REINSTALLED ON SAME MACHINE FROM WHICH IT WAS REMOVED.

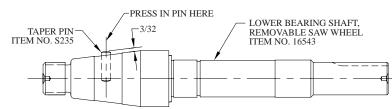
Replace the T-Handle Lock HAND TIGHTEN ONLY Reassemble the machine.



Item No. 16543 - Lower Shaft for Removable Wheel

7A. The Model 1433 Lower Removable Wheel has been revised to include a keyway in the bore. Also an anti rotation pin is now pressed into the lower shaft to prevent any inadvertent "spinning" of the wheel on the shaft.

NOTE- If the saw in which a new shaft is to be installed has a groove (keyway) in the bore of the lower wheel, press the taper pin (provided "loose") into the hole in the side of the shaft (see sketch). If there is no groove (keyway) in the bore of the lower wheel, discard the taper pin and use the shaft <u>without</u> the pin.





SHARP SAW BLADE. HANDLE WITH EXTREME CAUTION.

- 8. Place blade on cutter: Hang upper wheel assembly (Part No. A14003u335-6) on the hinge bracket (Part No. 71-1). Lift the nylon filler (Part No. 177). Hang blade on the upper wheel and hold with right hand. With the left hand force 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 the right hand force the back of 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 blade is at proper tension.
- 9. The side platter bracket (Part No. S14214) 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 (Part No. A14163) is placed on top of the base structure and held in place by two push-pull hold down rods (Part No. 14212W), located at the rear of the base.
- 11. The sliding meat carriage assembly (Part No. A16155EZ) is installed by turning the movable stop assembly (Part No. A16200) 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.
- 13. Machine MUST be properly grounded. Use qualified electrician to install according to building codes.

WIRING MOTOR

- 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 that 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 pulley 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).



KEEP HANDS CLEAR OF SHARP MOVING BAND TYPE SAW BLADE.

- 14. Make sure saw guide bar with saw guard is in its lowest position. Close head and base doors.
- 15. Push button and check for proper phasing of motor. Blade should be traveling down through saw guide.
- 16. Watch for proper tracking of blade. Back of blade should be centered in hole in saw guide in stationary bar (Part No S119A). Push stop button to stop machine.
- 17. Check placement of all warning labels, wall chart and Manual. Machine is ready for trained operators to process product.
- 18. Contact your local Distributor or BIRO directly if you have any questions or problems with the installation or operation of this machine.

WARNING LABELS AND WALL CHART FOR BIRO POWER CUTTERS

SEE PAGE 30 FOR LOCATIONS ON THIS MACHINE



A CUIDADO

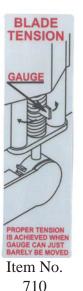
NO Opere Esta Sierra Sin Haber Sido Entrenado Para Ello Ni Tampoco Sin Autorización de un Supervisor. Uno Tiene que Haber Cumplido 18 Anos Para Operarla. LEA Cuidadosamente el Manual de Operación Antes de Usar Este Equipo.

SIEMPRE Guarde las Manos a Salvo de la Hoja de Serrar y de Otras Partes Móviles. Cierre el Interruptor Después 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, Danada o si No ha Sido Debidamente Mantenida o si la Advertencia es Ilegible o si Falta Ésta. SIEMPRE Desconecte el Equipo Decenchufándolo de la Fuente de Fuerza. Déjelo Bajo Llave o con Etiqueta que Prohiba su Uso Antes de Limpiarlo o Hacer Trabajos de Mantenimento.

#653PC-SP

Item No. 653PC-SP





Item No. 708

7

OPERATION





SHARP MOVING BAND TYPE SAW BLADE TO AVOID SERIOUS PERSONAL INJURY

ONLY Properly Trained Personnel Should Use This Equipment.

ALWAYS Read Operating and Parts Manual BEFORE Operating.

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

DO NOT Tamper With, Bypass, Alter, or Modify this Equipment in Any Way or Form.

- **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 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/Tag Out Procedures Before Cleaning, Servicing or When Not in Use.

NEVER Leave Machine Unattended While the Saw is Running.

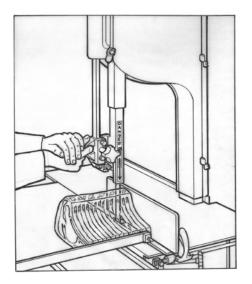
NEVER Operate Without All Warning Labels Properly Affixed to Machine.

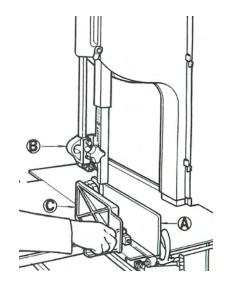
A. FOOD HANDLING TO PREVENT CONTAMINATION

- 1. **ALWAYS** wash hands thoroughly with warm soap and water before and after handling raw fish, poultry or meats.
- 2. ALWAYS clean and sanitize all utensils and surfaces that have been in contact with raw products.
- 3. ALWAYS store cold foods at or below 45 deg. F (7.2 deg. C).

B. TO PROCESS PRODUCT

1. Before starting power cutter, adjust saw guide bar with saw guard to within 1/2" of product to be cut. "B"







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 start button and watch blade for proper tracking.
- 5. Stand 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 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 for smaller products or the last cuts of product. "C" The pusher plate is supplied as standard on all BIRO power cutters.
- 7. When finished cutting, push stop button. Perform lockout/tag out procedure.



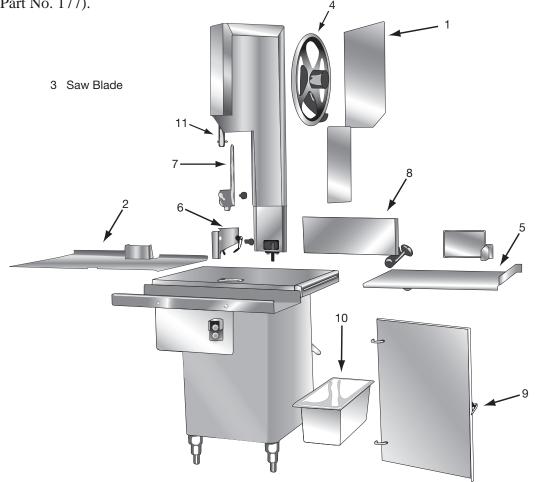


SHARP MOVING BAND TYPE SAW BLADE TO AVOID SERIOUS PERSONAL INJURY

- ALWAYS Turn Off, Unplug From Power Source and Perform Lockout/Tagout Procedure to This Machine **BEFORE** Cleaning or Servicing.
- **ONLY** Use Recommended Cleaning Equipment, Materials and Procedures.
- **NEVER** Spray Water or Other Liquid Substances directly at Motor, Power Switch or any Other Electrical Components.
- ALWAYS Thoroughly Clean Equipment at Least Daily.

CLEANING THE BIRO POWER CUTTER:

Disconnect electrical power to the machine before cleaning. Parts to be removed have been made accessible and can be removed without tools. Notice in the drawing below that all parts are numbered. Each part should be removed for cleaning in the numbered sequence shown. To ensure cleaner cuts, keep the 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. 602B), Lower Blade Back-Up Guide (Part No. S608), and Nylon Filler (Part No. 177).



MAINTENANCE







SHARP MOVING BAND TYPE SAW BLADE TO AVOID SERIOUS PERSONAL INJURY

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



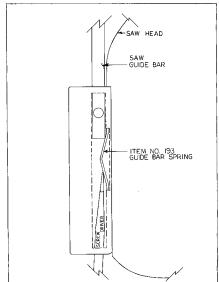
DO NOT IMMERSE UPPER WHEEL ASSEMBLY IN WATER

- 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. 602B), replace every six(6) months. Check adjustment of upper saw guide. Should be 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 using instructions on following page.



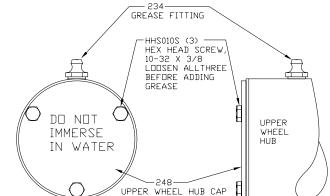
- 1. Remove the finger lift fastener knob and the finger lift assembly.
- 2. Remove the finger lift fastener stud.
- 3. Push the saw guide bar up and out of the top of the head structure.
- 4. Remove the saw guide bar spring.
- 5. Clean and lubricate the babbitt pocket area (the square indented area 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 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 front to rear 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 9 months with the equivalent of two (2) teaspoons of grease.

PART NUMBER 671

WALL CHART "BAND SAW SAFETY GUIDELINES"

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



ONLY TRAINED OPERATORS SHOULD USE THIS EQUIPMENT

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

1. Inspect Before Operating:

- Gauge Plate ④ 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 ④. S
- 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.

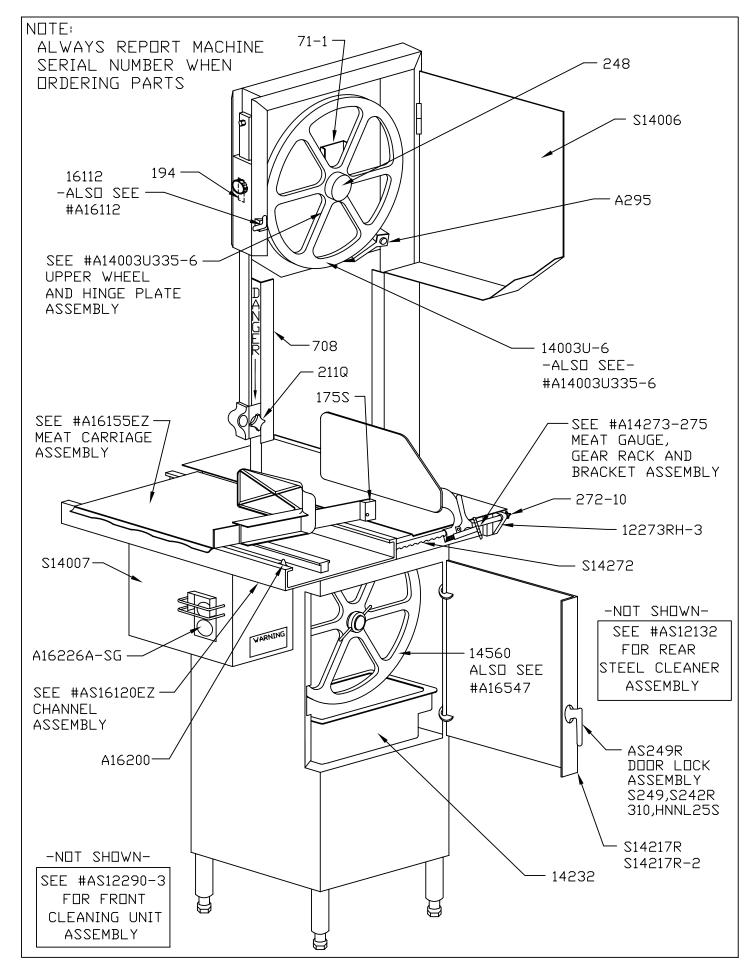
USE YOUR MEAT SAW SAFELY!

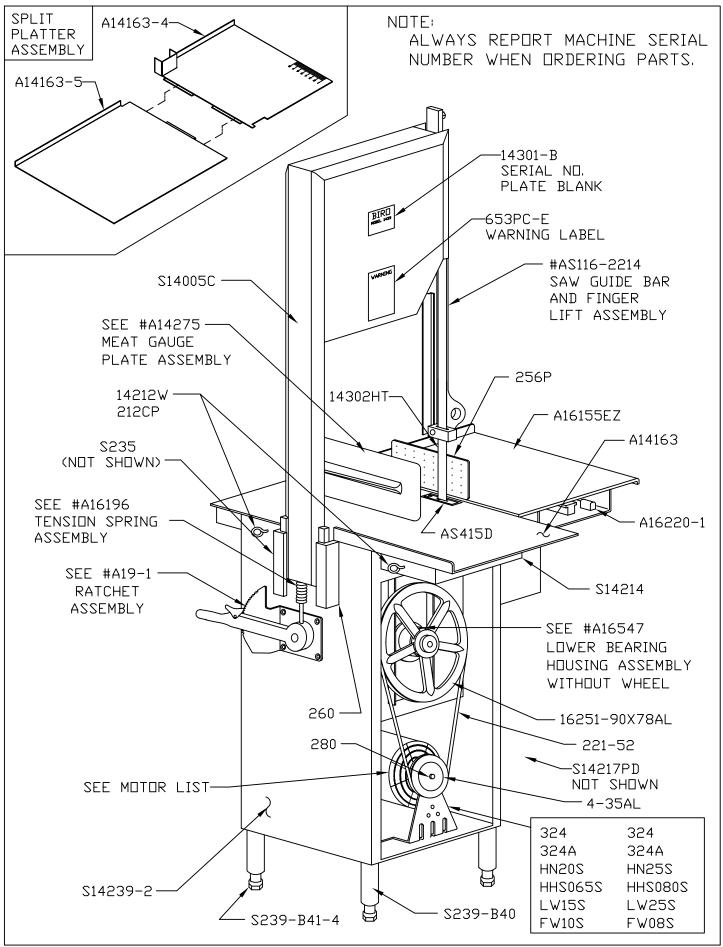
B

 (\mathbf{C})

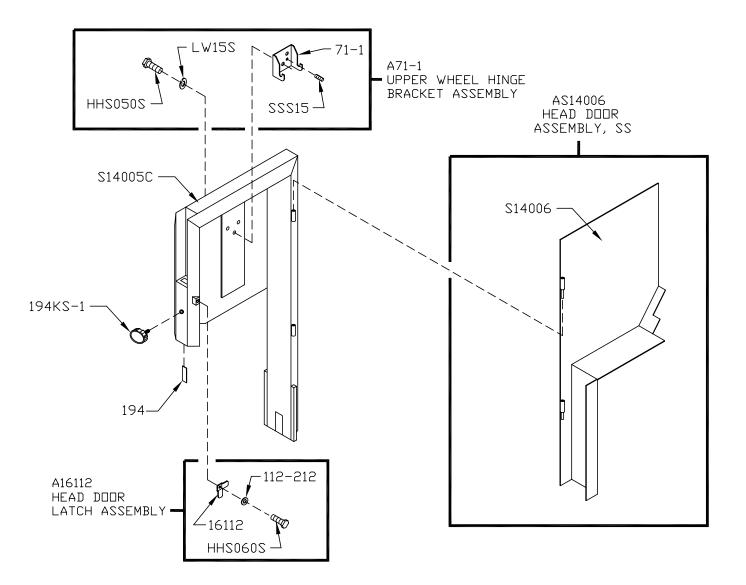
671

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

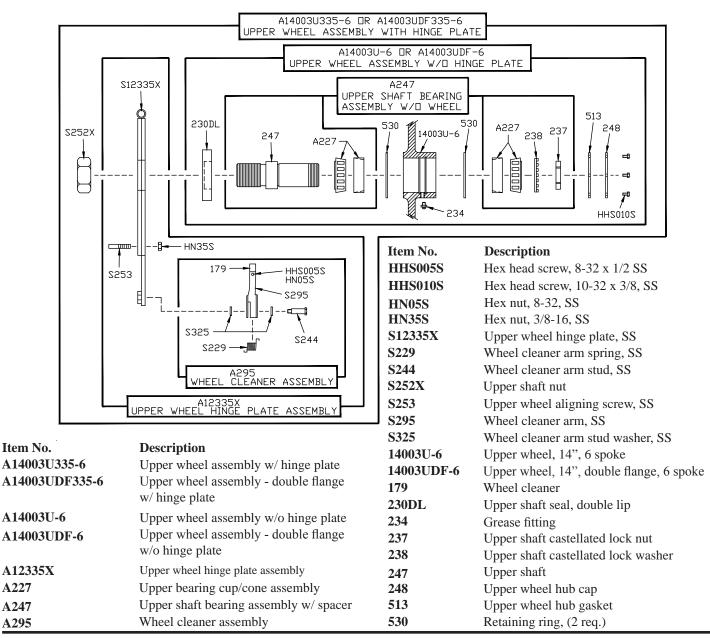




AS14005C STAINLESS STEEL HEAD & DOOR ASSEMBLY



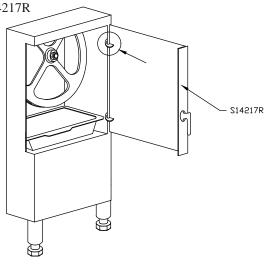
Item No.	Description	Item No.	Description
A16112	Head door latch assembly	S14006	Head door SS
AS14005C	Head & door assembly, SS	SSS15	Set screw, 5/16-18 x 5/16 cup point
AS14006	Head door assembly, SS	112-212	Waved washer
A71-1	Upper wheel hinge bracket assembly	16112	Head door latch
HHS050S	Hex head screw, 5/16-18 x 5/8 SS	194	Saw guide bar lock pad, brass
LW15S	Lock washer, 5/16 SS	194KS-1	Saw guide bar lock knob assembly
S14005C	Head, SS	71-1	Upper wheel hinge bracket



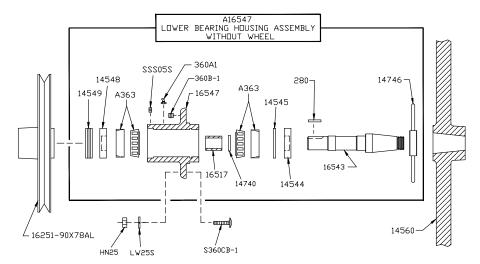
Base Door Hinge System on the Model 1433 and 1433FH Series has been changed from an internal "plate & pin" system to an external "barrel & pin" system (see sketch below).

Old Style

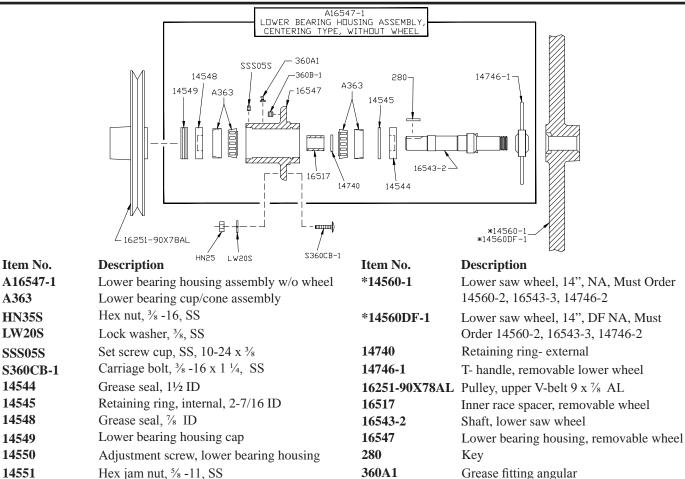
Hinged Base Door - #S14217R Before Serial No. 2218







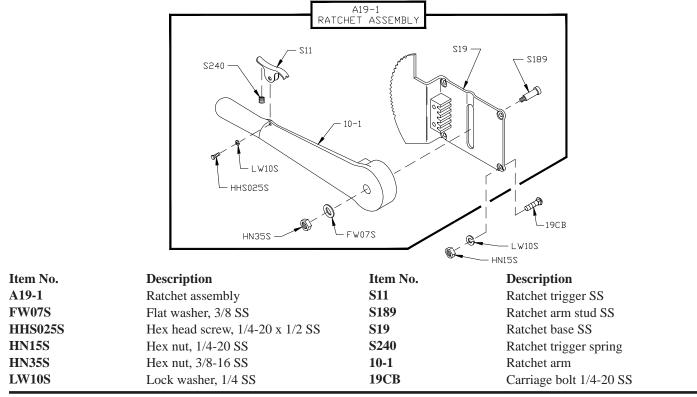
Item No.DescriptionA16547Lower bearing housing assembly w/o wheelA363Lower bearing cup/cone assemblyHN355Hex nut, ¾ -16, SSLW205Lock washer, ¾, SSSSS055Set screw cup, SS, 10-24 x ¾14544Grease seal, 1½ ID14545Retaining ring, internal, 2-7/16 ID14548Grease seal, ⅔ ID14549Lower bearing housing cap14550Adjustment screw, lower bearing housing14551Hex jam nut, ⅔ -11, SS	Item No. 14560 14560DF 14740 14746 16251-90X78AL 16517 16543 16547 280 360A1 360B-1	Description Lower saw wheel, 14" Lower saw wheel, 14", double flange Retaining ring- external T- handle lock, removable lower wheel Pulley, upper V-belt 9 x 7/8 AL Inner race spacer, removable wheel Shaft, lower saw wheel Lower bearing housing, removable wheel Key Grease fitting angular Set screw ½-13
--	--	---

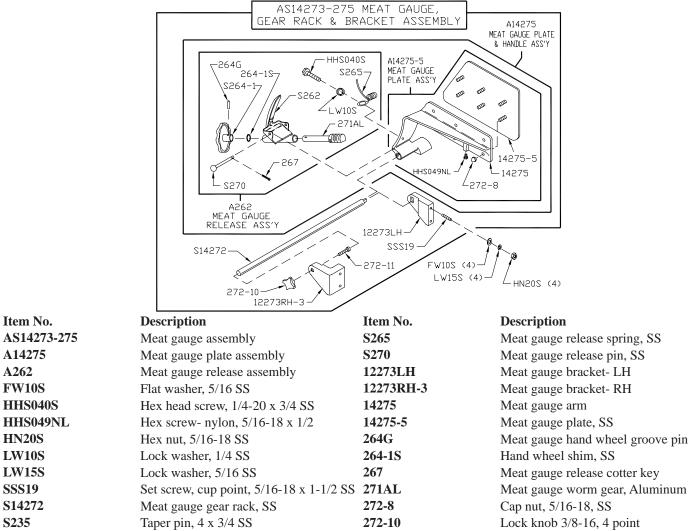


18

360B-1

Set screw 1/2-13





Item No.

A14275

FW10S

HN20S

LW10S

LW15S

SSS19

S14272

S235

S262

S264-1

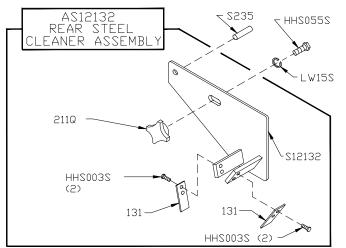
A262

272-11

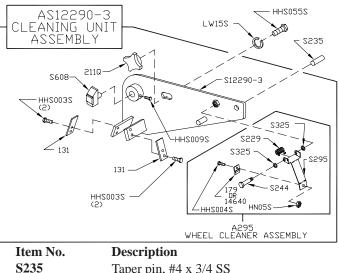
Allen head cap screw 3/8-16 x 1-1/2

Meat gauge release handle, SS

Meat gauge hand wheel, SS

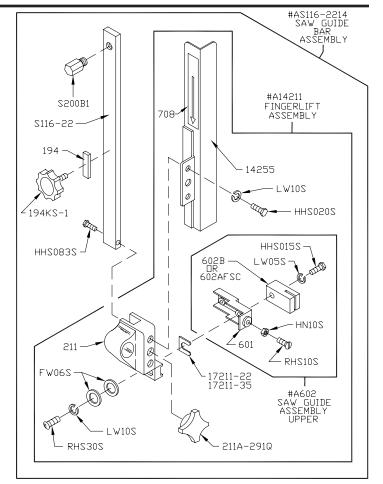


Item No.	Description
AS12132	Steel cleaner assembly, rear
AS12290-3	Cleaning unit assembly
A295	Wheel cleaner assembly
HHS003S	Hex head screw, 8-32 x 1/4 trimmed, SS
HHS004S	Hex head screw, 8-32 x 3/8, SS
HHS009S	Hex head screw, 10-24 x 1/4, SS
HHS055S	Hex head screw, 5/16-18 x 3/4, SS
HN05S	Hex nut,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

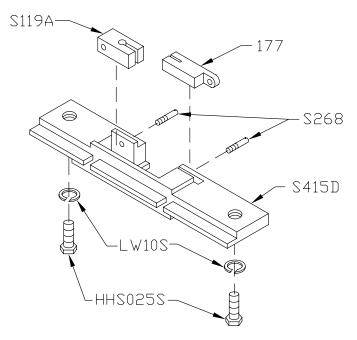


Item No.	Description
S235	Taper pin, #4 x 3/4 SS
S244	Wheel cleaner arm stud, SS
S295	Wheel cleaner arm, SS
S325	Wheel cleaner arm stud washer, SS
S608	Saw back-up guide w/607 carbide
131	Blade cleaner, SS
131N	Blade cleaner, nyleen
131SHORT	Blade cleaner, Short SS, 1-9/16
131SS-NYL	Blade cleaner combo, Short, SS & Nyleen
179	Wheel cleaner
211Q	Lock knob, 5/16-18, 4 point
14640	Wheel cleaner, Rulon

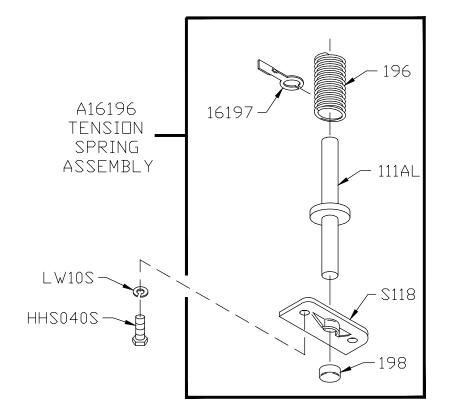
Item No.	Description
AS116-2214	Saw guide bar assembly 22"
A14211	Finger lift assembly, removable
A602	Saw guide assembly, upper
FW06S	Flat washer, 1/4 SS
HHS015S	Hex head screw, 10-32 x 7/8, SS
HHS020S	Hex head screw, 1/4-20 x 3/8, SS
HHS083S	Hex head screw, 3/8-16 x 1-3/4, SS
HN10S	Hex nut, 10-32 SS
LW05S	Lock washer, #10 SS
LW10S	Lock washer, 1/4 SS
RHS10S	Round head screw, 10-32 x 3/4 SS
RHS30S	Round head screw, 1/4-20 x 7/8 SS
S200B1	Stop stud on guide bar
S116-22	Saw guide bar, 22" SS
14255	Saw guard
17211-22	Finger lift shim, .022
17211-35	Finger lift shim, .035
194	Saw guide bar lock pad, brass
194KS-1	Saw guide bar lock knob assembly
211	Finger lift bracket
211A-291Q	Fastener knob, 4 point
601	Upper saw guide bracket
602B	Upper saw guide with carbide
602AFSC	Upper saw guide, narrow, fish
708	Decal "DANGER EXPOSED BLADE"



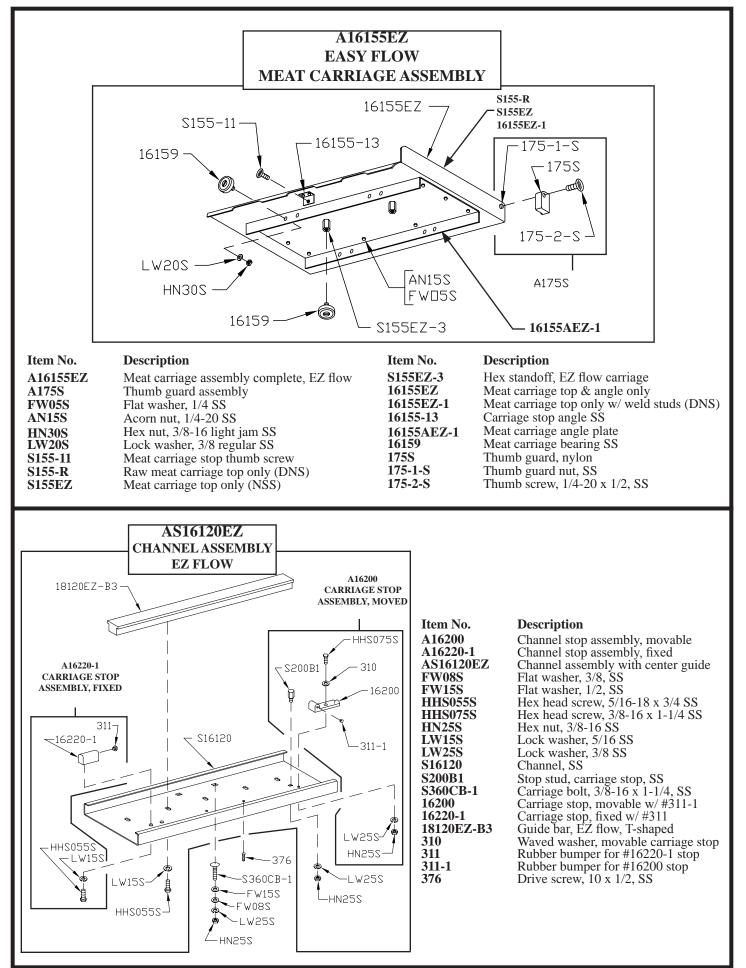
AS415D STATIONARY BAR ASSEMBLY



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
177	Nylon filler
S415D	Stationary bar, SS



Description Fension spring assembly Hex head screw, 1/4-20 x 3/4 SS
Lock washer, 1/4 SS Fension spring plate, SS Fension spring pin Fension spring gauge Saw tension spring Fension pin cap

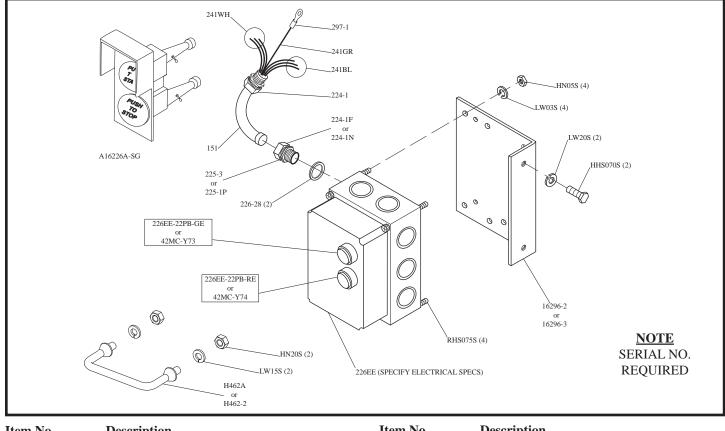


WATERTIGHT MAGNETIC SWITCH ASSEMBLIES

(AEG)

INCLUDES MOUNTING BRACKET AND WIRES

Item No. Description A22616EE-514 BAEG/MS-PB/05-C8 2HP 208-220-50/60-3 A22616EE-516 BAEG/MS-PB/05-E4.7 2HP 440/460-3 A22616EE-518 BAEG/MS-PB/05-D4.7 1.5-2HP 380/415-50-3 A22616EE-522 BAEG/MS-PB/05-C14 3HP 220-230-50/60-3 A22616EE-5221 BAEG/MS-PB/05-CS14 1.5HP 220/230-50/60-1 Item No. Description A22616EE-5241 BAEG/MS-PB/A26 1.5-2HP 104/115-60-1 A22616EE-5261 BAEG/MS-PB/CS16 2HP 230-60-1 A22616EE-530 BAEG/MS-PB/05-F3.2 2HP 550/575-3 A22616EE-534 BAEG/MS-PB/05-E6.3 3HP 440/460-60-3 A22616EE-536 BAEG/MS-PB/05-D8 3HP 380-60-3



A16226A-SG Green/red switch button assembly H462A Guard assembly for switch buttons **HHS070S** Hex head screw, 3/8-16 x 1, SS HN05S Hex nut, 8-32 SS **HN20S** Hex nut, 5/16-18 SS I W03S Lock washer #8 SS

Description

Item No.

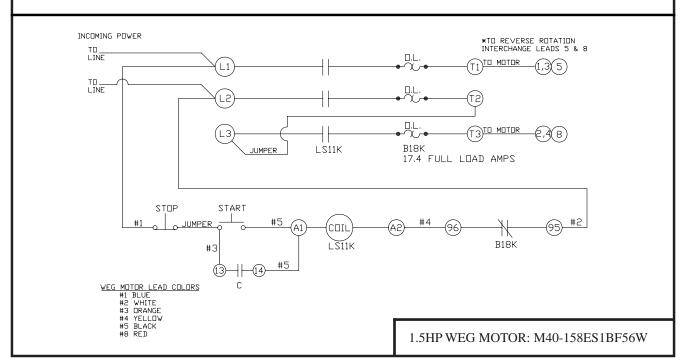
LW03S	Lock washer, #8 SS
LW15S	Lock washer, 5/16 SS
LW25S	Lock washer, 3/8 heavy SS
RHS075S	Round head screw, 8-32 x 3/4 SS
14256	Junction box, plastic w/ cover
14257	Junction box, metal
14258	Junction box cover, metal
16296-2	Switch bracket, SS
151	Watertight conduit
225-3	Conduit connector, WT, 45 ^o
226EE-ENCL	Enclosure w/ pushbutton, 30mm holes
-PB22	
226EE-OL02.4H	Overload, B05-H, 1.7-2.4A
226EE-OL4I	Overload, B18K-I, 2.5-4A
H281EE-51	Overload, B18K-K, 4-6.3A
226EE-OL08.5L	Overload, B18K-L, 5.5-8.5A
226EE-OL12M	Overload, B18K-M, 8-12A
H281EE-31	Overload, B18K-N, 10-16A
226EE-OL26ON	Overload, B18K-ON, 21-26A

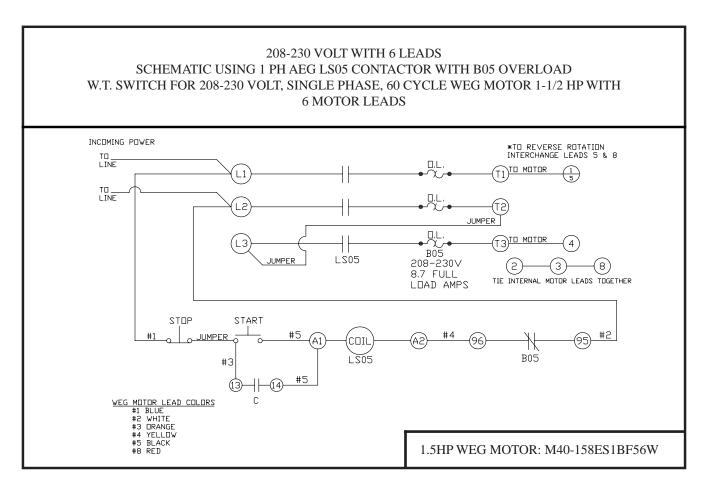
Description

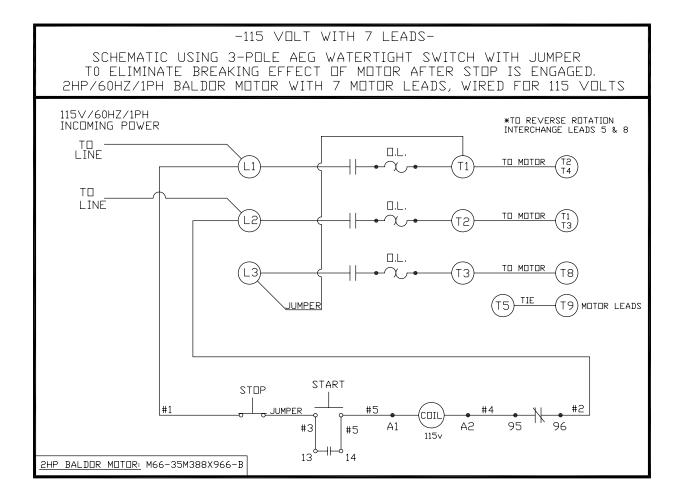
Item No.	Description
226EE-AO11K	Contactor, LS11K.11S-AO, 120V
226EE-CO11K	Contactor, LS11K.11S-CO, 208-230V
226EE-EO11K	Contactor, LS11K.11S-EO, 380-415V-50hz
226EE-FO11K	Contactor, LS11K.11S-FO, 575V
226EE-22PB-GE	Start P/B, 22mm Ext w/ NO contact block
226EE-22PB-GF	Start P/B, 22mm Flush w/ NO contact block
226EE-22PB-RE	Stop P/B, 22mm Flush w/ NC contact block
226EE-514	BAEG/MS-PB/05-C8 2HP 220-50/60-3
226EE-516F	BAEG/MS-PBF/05-E4.7 1-1/2-2HP 440-60-3
226EE-518	BAEG/MS-PB/05-D4.7 2HP 380-50-3
226EE-5221	BAEG/MS-PSF/05-CS14 1.5HP 230-50/60-1
226EE-5241	BAEG/MS-PB/A26 2HP 120-60-1
226EE-5261	BAEG/MS-PB/CS16 2HP 230-60-1
226EE-530	BAEG/MS-PB/05-F3.2 2HP 550-60-3
226EE-534	BAEG/MS-PB/05-E6.3 3HP 440-60-3
226EE-536	BAEG/MS-PB/05-D8 3HP 380-50-3
226-28	Washer, 1-1/2 x 27/32 SS
241BL	Wire, Black, 12 GA., CSA & UL
241GR	Wire, Green, 12 GA., CSA & UL
241RD	Wire, Red, 12 GA., CSA & UL
241WH	Wire, White, 12 GA., CSA & UL
297-1	Wire terminal eyelet, 12 GA.
42MC-Y73	Green start button, 30mm
42MC-Y74	Red stop button, 30mm

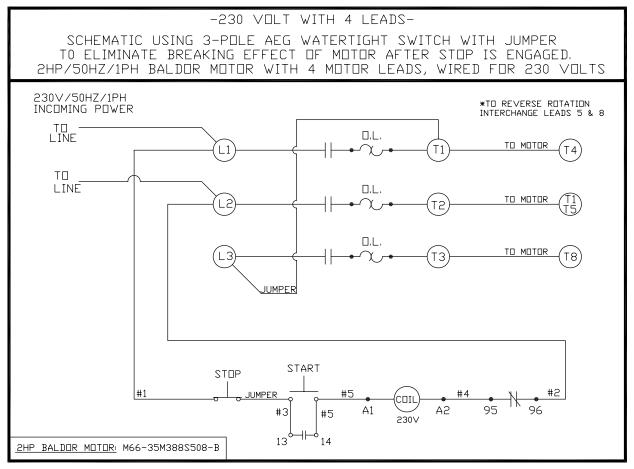
115 VOLT WITH 6 LEADS

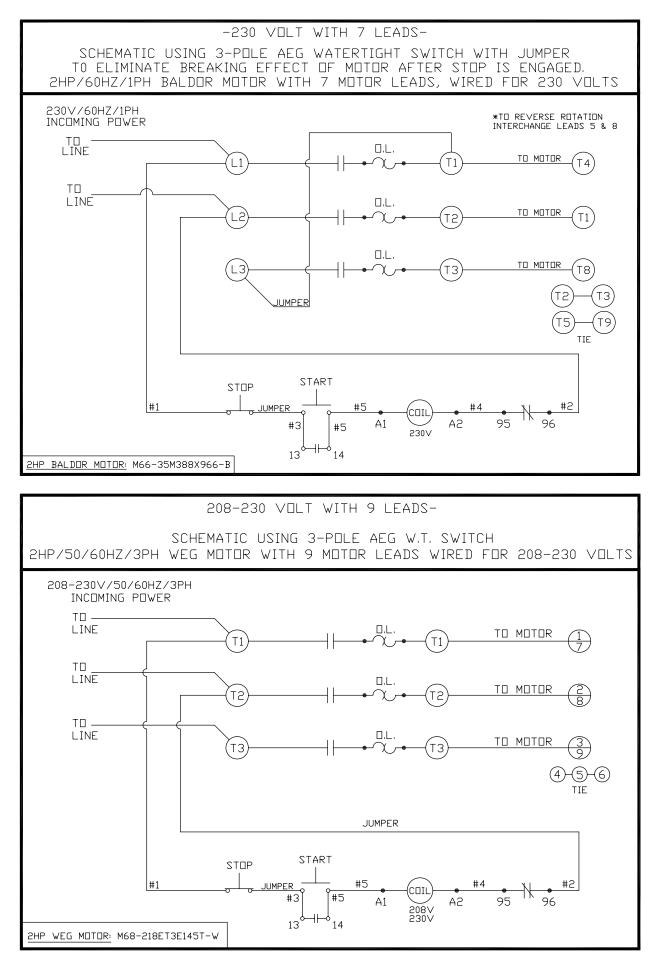
SCHEMATIC USING 1 PH AEG LS11K CONTACTOR WITH B18K OVERLOAD W.T. SWITCH FOR 115 VOLT, SINGLE PHASE, 60 CYCLE WEG MOTOR 1-1/2HP WITH 6 MOTOR LEADS

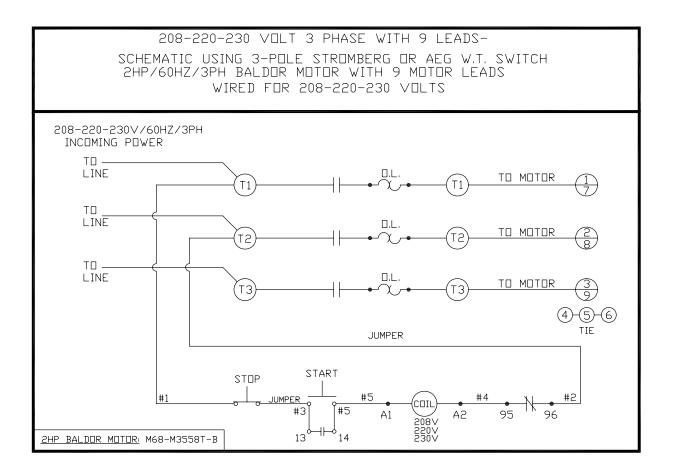


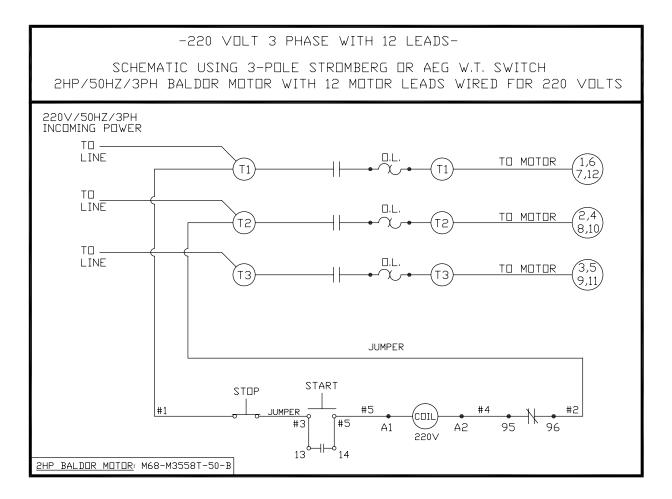


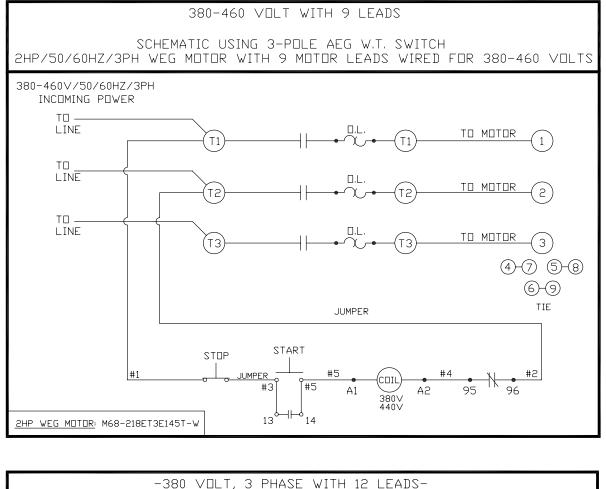


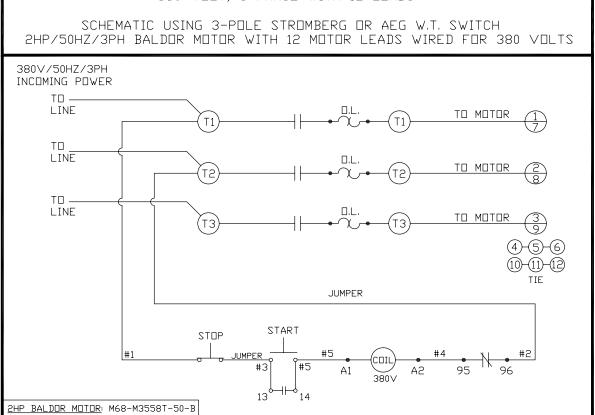


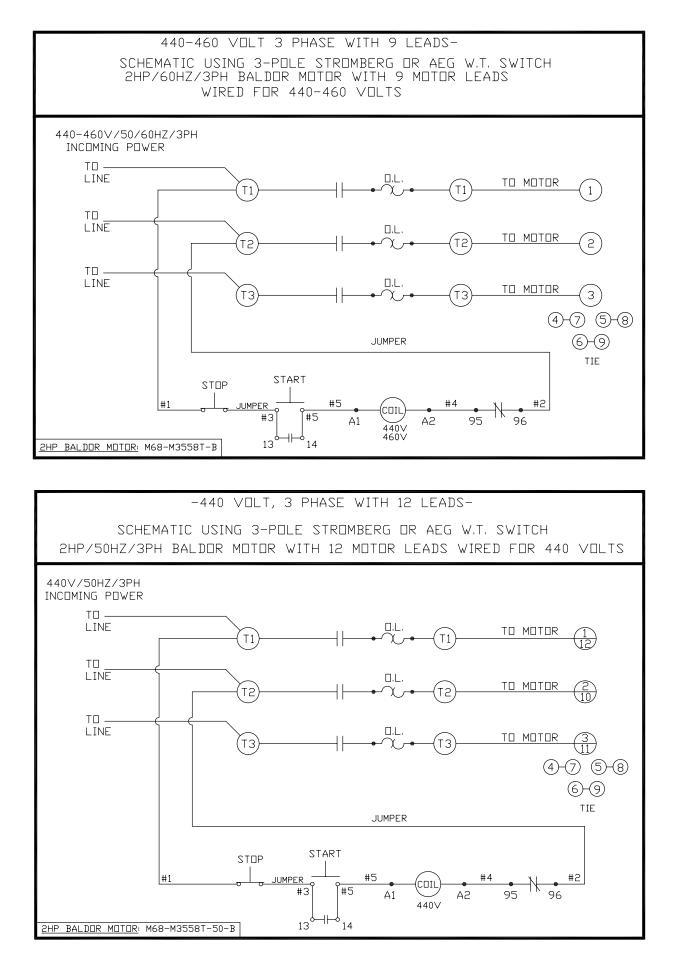




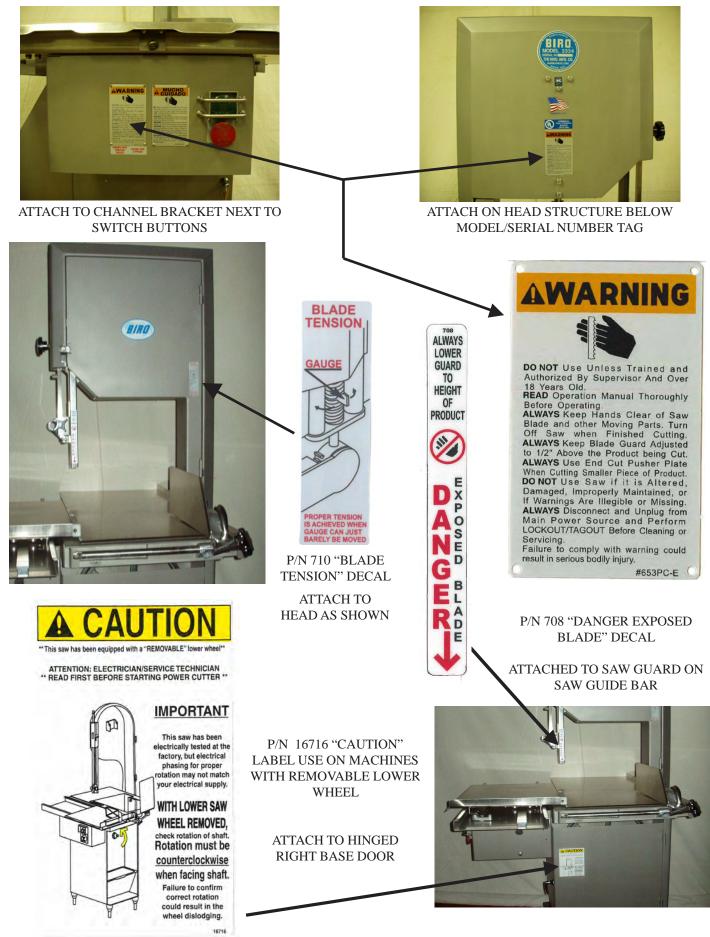








WARNING LABEL LOCATIONS ON MACHINE



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. 601 UPPER SAW GUIDE BRACKET ALL SAWS



Item No. 119A LOWER SAW GUIDE ALL SAWS



Item No. S295 WHEEL CLEANER ARM ALL SAWS



Item No. S268 FILLER & GUIDE STUD ALL SAWS



Item No. 131 STEEL BLADE CLEANER ALL SAWS



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



Item No. 177 NYLON FILLER ALL SAWS



Item No. 179 WHEEL CLEANER ALL SAWS



Item No. 415D STATIONARY BAR ALL SAWS



Item No. 159 CARRIAGE BEARING 11-22-33



Item No. S265 MEAT GAUGE SPRING ALL SAWS



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



Item No. S244 WHEEL CLEANER ARM STUD ALL SAWS



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



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



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



Item No. S229 WHEEL CLEANER ARM SPRING 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. 12700-2

MODEL 1433 PART NUMBERS AND DESCRIPTIONS MODEL NO. AND SERIAL NO. REQUIRED WHEN ORDERING PARTS

Item no. HHS049NL M66-35M388S508-B M66-35M388X966-B M68-M3558T-B S11 S116-22 S118	Description Hex screw, nylon, 5/16-18 x 1/2 Motor, 2HP 230-50-1 open Motor, 2HP 115/230-60-1 open Motor, 2HP 208-230/440-460-60-3 TEFC Ratchet trigger, SS Saw guide bar 22", SS Tension spring plate, SS	Item no. 12273RH-3 12700-2 131 14TP 14TP-1 14003U-6 14003UDF-6	Description Meat gauge bracket, RH Wearable parts replacement kit Saw cleaner, SS Head door hinge pin, long, 1-1/2" Head door hinge pin, short, 1-1/4" Upper wheel, 14" Upper wheel, 14", double flange
S119A S12132	Saw guide in stationary bar Cleaning unit, rear	14212W 14232	Platter rod Scrap bucket
S12290-3	Front blade, wheel cleaning unit	14255	Saw guard on saw guide bar w/ 708 decal
S12335X S14005C	Upper wheel hinge plate, SS Head, SS	14256 14275	Junction box Meat gauge arm
S14006	Head door, SS	14275-5	Meat gauge plate, SS
S14007 S14214	Channel bracket, SS Side platter bracket, SS	14301-B 14302HT	Name & model plate (Serial number req'd) Saw blade, 108"
S14217 S14217PD	Base door left, SS, bolt on	14313-266	Operating and service manual
S14217R	Base door right, SS, hinged	14544	Grease seal, 1.50 ID
S14272 S14239	Meat gauge gear rack, SS Base, SS (DNS)	14545 14548	Retaining ring, internal, 2-7/16 ID Grease seal, 7/8 ID
S14237 S155-11	Meat carriage stop thumb screw, SS	14549	Lower bearing housing cap
S155B-1	Meat carriage stop, welded	14550	Adjustment screw, lower bearing housing
S155EZ-3 S16120	Hex stand off Channel	14551 14560	Hex jam nut, 5/8-11, SS
S16120 S163F	Platter spacer weld button, SS	14560DF	Lower saw wheel, removable Lower saw wheel, removable, double flange
S189	Ratchet arm stud, SS	14746	T-handle lock, removable lower wheel
S19	Ratchet base, SS	150	Conduit, flexible metal, per inch
S200B1	Stop stud on saw guide bar	151	Conduit, watertight, per inch
S217C S217E	Base door hinge pin, long, SS Base door hinge pin, short, SS	16112 16155EZ	Head door latch Meat carriage, EZ flow
S229	Wheel cleaner arm torsion spring, SS	16159	Meat carriage bearing
S235	Taper pin, SS 4 x 3/4	16163B	Platter neck guard
S239-B40	Base foot welded, short, SS	16200	Carriage stop, movable
S239-B41-4 S240	Adjustable leg bolt, SS Ratchet trigger spring, SS	16220-1 16251-90X78AI	Carriage stop, fixed Upper V-belt pulley, 9 x 7/8, aluminum
S240 S242R	Base door lock, right, SS	16231-90X78AL	Platter rod clip
S244	Wheel cleaner arm stud, SS	16517	Inner race spacer, removable wheel
S249	Base door handle	16543	Lower shaft
S253 S262	Upper wheel aligning screw, SS Meat gauge release handle, SS	16547 17211-22	Lower bearing housing, removable wheel
S262- S264-1	Meat gauge release hand wheel	17211-22	Finger lift shim, .022 Finger lift shim, .035
S265	Meat gauge release spring, SS	175-1-S	Thumb guard nut
S268	Stationary bar headless screw, SS	175-2-S	Thumb guard screw 1/4-20
S270 S295	Meat gauge release pin w/ holes, SS	175S 177	Thumb guard, nylon Stationery har nylon filler
S275 S325	Wheel cleaner arm, SS Wheel cleaner arm washer, SS	179	Stationary bar nylon filler Wheel cleaner
S360CB-1	Carriage bolt, $3/8-16 \times 1-1/4$, SS	18120EZ-B3	Guide bar, EZ flow, T-shaped
S415D	Stationary bar, SS	19CB	Ratchet base carriage bolt, 3/8-16 x 1-3/4
S416 S608	Platter locator weld pin, SS	194 194KS-1	Saw guide bar lock pad, brass
10-1	Lower blade back-up guide w/ carbide Ratchet arm	194KS-1 196	Saw guide bar lock knob assembly Saw tension spring
111AL	Tension spring pin	197	Tension spring gauge
112-212	Waved washer	198	Cap, tension spring pin
119FSC 12273LH	Saw guide in stationary bar, fish Meat gauge bracket, LH	211	Finger lift bracket

MODEL 1433 PART NUMBERS AND DESCRIPTIONS (Cont.)

COMPLETE ASSEMBLIES FOR MODEL 1433

Item no.	Description	Item no.	Description
AS12132	Rear cleaning unit assembly	A14275	Meat gauge plate assembly
AS12290-3	Front cleaning unit assembly	A16112	Head door latch assembly
AS14005C	Head and door assembly	A16155EZ	Meat carriage assembly, EZ flow
AS14006	Head door assembly	A16196	Tension spring assembly
AS14217R	Base door assembly, hinged right	A16200	Carriage stop assembly, movable
AS16120EZ	Channel assembly, EZ flow	A16220-1	Carriage stop assembly, fixed
AS249R	Base door lock handle assembly, right	A16547	Lower bearing housing assembly without
AS415D	Stationary bar assembly		wheel
A116-2214	Saw guide bar assembly	A19-1	Ratchet assembly
A14003U-6	Upper wheel assembly w/out hinge plate	A227	Upper bearing cup/cone assembly
A14003U335-6	Upper wheel assembly w/ hinge plate	A247	Upper shaft bearing assembly with spacer
A14163	Stationary platter assembly		without wheel
A14211	Fingerlift assembly with guard	A262	Meat gauge release assembly
AS14273-275	Meat gauge assembly	A295	Wheel cleaner assembly
		A363	Lower bearing cup/cone assembly
		A71-1	Upper wheel hinge bracket assembly

OPERATOR'S NOTES

OPERATOR'S NOTES

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 1433 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 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 W. Main St Marblehead, OH 43440 Ph. 419-798-4451 Fax 419-798-9106 E-mail: Service@birosaw.com Web: www.birosaw.com

Item No.: 14313-266 PTCT: MD 1433-266-3-16-12-B