

# MODEL 3334FH & 3334-4003FH FIXED HEAD POWER MEAT CUTTER OPERATING AND SERVICE MANUAL



#### ☆ IMPORTANT NOTICE

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

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#### **NOTICE TO OWNERS AND OPERATORS**

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

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

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



OR



Warnings related to possible damage are indicated by:



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

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

This Manual applies to 3334FH & 3334-4003FH Power Meat Cutters with Fixed Heads.

#### - NOTE -

A copy of this manual is included with each MODEL 3334FH & 3334-4003FH FIXED HEAD POWER MEAT 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 ½" of Product to be Cut.

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

**DO NOT** Use This Machine for Non-Food Products.

**DO NOT** Use This Machine to Cut Pigs Feet.

**DO NOT** Wear Gloves While Operating.

**ALWAYS** Turn Off, Unplug From Power Source and Perform Lockout/Tagout Procedure to This Machine **BEFORE** Removing Shrouds, Removable Guards, Covers, Doors, Fences or Panels for Cleaning, Servicing or Any Other Reason.

**NEVER** Leave Machine Unattended While Operating.

**PROMPTLY REPLACE** Any Worn or Illegible Warning Labels.

**USE ONLY BIRO** Parts and Accessories Properly Installed.

#### INSTALLATION



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

**ALWAYS** Read Operating and Parts Manual **BEFORE** Installation.

ALWAYS Use Qualified Technician and Electrician for Installation.

**ALWAYS** Install Equipment in Work area with Adequate Light and Space.

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

**DO NOT** Attempt to Operate This Machine Until It has been Inspected and demonstrated by the Seller – Recognized BIRO Representative.

**DO NOT** Alter or Modify This Machine in Any Way from its Original Form. This Machine in its Original Form Meets the Intent of O.S.H.A. Applicable Standards.

**NEVER** Operate with Saw Guard 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 Guard to Within ½" of Product to be Cut.

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

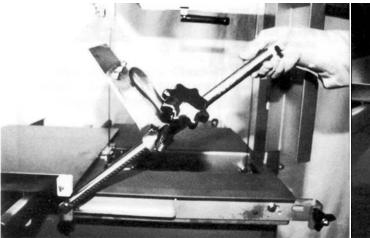
**USE ONLY** BIRO Parts and Accessories Properly Installed.

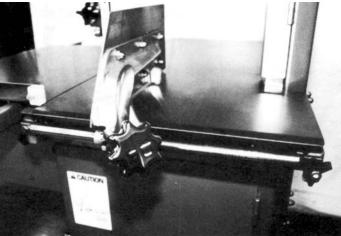
- Read this Manual thoroughly before installation and operation. Do not proceed with installation and operation if you have any questions or do not understand anything in this Manual. Contact your local Distributor, or BIRO first.
- 2. Install machine on a level, solid, non-skid surface in a well-lighted 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.
- 4. To install the meat gauge plate assembly to the machine. Loosen the lock knob. Raise the gear rack. Slide the meat gauge arm over the gear rack. Be sure to hold meat gauge arm so that the release handle is depressed. Lower the gear rack to original position. Tighten the lock knob. Keep gear rack well oiled with a food grade oil to ensure free movement.





- Place removable finger lift with saw guard assembly on the saw guide bar and fasten in place with four point finger lift fastener knob.
- The side platter bracket is packed loose in the machine and must be installed on the left side of the base structure with the supplied hardware and checked for proper adjustment.
- 7. Machine MUST be properly grounded. Use qualified electrician to install according to building codes.

#### FINGERLIFT ASSEMBLY

#### WIRING MOTOR

- (1) Interchange of motor current is made in motor outlet box. Leads are properly marked. Changing instructions are on motor plate or inside junction box cover.
- (2) All saws 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 no less than No. 12 wire. If the leads are too light, machine may not have sufficient cutting power and/or speed.
- (5) The drive 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).

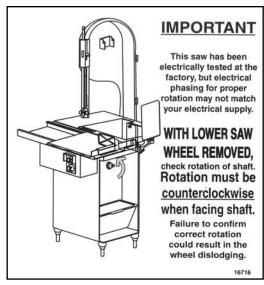
8. All machines are tested at the factory, but electrical phasing for proper rotation may not match your electrical supply. Some Model 3334's have removable lower wheel when the option is ordered from the factory. All machines with removable lower wheel must be first test run for proper phasing with the lower wheel removed. Failure to remove the lower wheel could cause the wheel to become dislodged during testing.

All machines with removable lower wheel will display the following decal on the right hinged base door.



\*\*This saw has been equipped with a "REMOVABLE" lower wheel\*\*

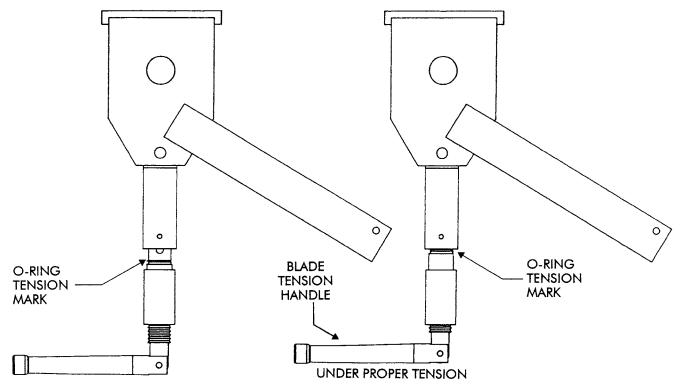
ATTENTION: ELECTRICIAN/SERVICE TECHNICIAN
\*\* READ FIRST BEFORE STARTING POWER CUTTER \*





#### SHARP SAW BLADE. HANDLE WITH EXTREME CAUTION.

- 9. Placing blade on cutter: Unpack upper wheel assembly and hang on the hinge bracket in the head structure. Lift the nylon filler in the stationary bar. Hang the blade on the upper wheel and hold with right hand. With the left hand force the back of the blade between the front blade scrapers, located below the stationary bar. Lower the nylon filler. Be sure the blade is in the upper saw guide. The blade has dropped over the lower wheel. Switch hands holding the blade on the upper wheel. With the right hand, force the blade between the rear blade scrapers. The blade is now ready to be tightened.
- 10. Turn the blade tensioning handle clockwise until the tension mark is even with the bottom of the upper wheel hinge plate as shown. Carefully turn saw wheels by hand and watch for proper tracking of blade on the wheels.



- 11. The stationary platter is placed on top of the base structure and held in place by two platter hold down catches located in the base structure.
- 12. The sliding meat carriage assembly is installed on the channel. Start by turning the movable stop assembly clockwise. After the carriage assembly has been installed on the channel for operation, turn the movable stop assembly counterclockwise to lock.
- 13. Make sure saw guide bar with saw guard is in its lowest position. Close head and base doors.



## KEEP HANDS CLEAR OF SHARP MOVING BAND TYPE SAW BLADE

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

#### WARNING LABELS FOR BIRO POWER 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: ALL SAWS 1 ea. Attached to Head Below S/N Plate 1 ea. Attached to Channel Bracket



#### 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

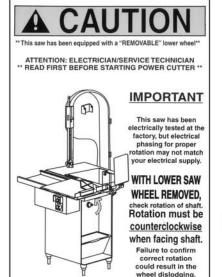
SIEMPRE Haga Uso de la Place de Empuje Para Cortes de Extremos al Cortar Trocitos Pequenos. NO Utilice la Sierra si se Halla Alterada, Danadao si No ha Sido Debidamente Mantanido o si la Advertencia es Alegible o si Falta Esta.

SIEMPRE Desconnecte el Equippo Decenchifandolo de la Fuente de Fuerza. Dejelo Bajo Llave o con Etiqueta que Prohiba su Uso Antes de Limpiarlo o Hacer Trabajos de Mantenimento.

#653PC-SP

ITEM No. 653PC-SP: ALL SAWS 1 ea. Attached to Channel Bracket

#### \* \* \* NOT TO SCALE \* \* \*



ITEM No. 708: ALL SAWS Attached to saw Guard on Saw Guide Bar D E X P O S E D B L A D E

ALWAYS

LOWER

**GUARD** 

TO

HEIGHT

ITEM No. 708

ITEM No. 16716 Applied to Right Hinged Base Door on All Model 1433 and Model 3334 with Lower Removable Wheel

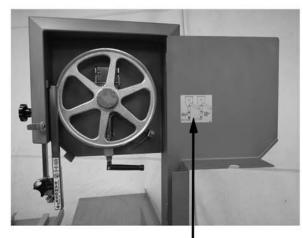
#### WARNING LABEL LOCATIONS ON MACHINE



ATTACH TO CHANNEL BRACKET NEXT TO SWITCH BUTTONS

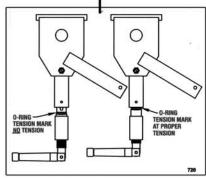


ATTACH ON HEAD STRUCTURE BELOW MODEL/SERIAL NUMBER TAG



P/N 720 BLADE TENSION ADJUSTMENT DECAL

> LOCATED INSIDE HEADDOOR



708 ALWAYS LOWER

**GUARD** TO HEIGHT 0F **PRODUCT** 



DĀ 0 Е D Е

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 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

Failure to comply with warning could result in serious bodily injury.

#653PC-E

P/N 708 "DANGER EXPOSED BLADE" DECAL

ATTACHED TO SAW GUARD ON SAW GUIDE BAR

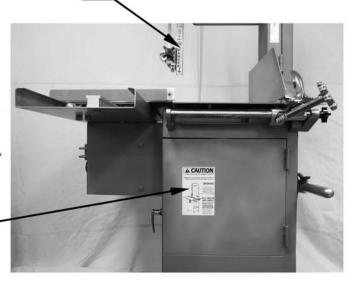


electrically tested at the factory, but electrical phasing for proper rotation may not match your electrical supply.

WITH LOWER SAW WHEEL REMOVED. Rotation must be counterclockwise when facing shaft. Failure to confirm correct rotation could result in the wheel dislodging.

P/N 16716 "CAUTION" LABEL USE ON MACHINES WITH REMOVABLE LOWER WHEEL

> ATTACH TO HINGED RIGHT BASE DOOR



## ITEM NUMBER 671 WALL CHART "BAND SAW SAFETY GUIDELINES" ATTACH TO WALL IN VICINITY OF MACHINE IN EASY VIEW OF OPERATOR

## **WARNING**

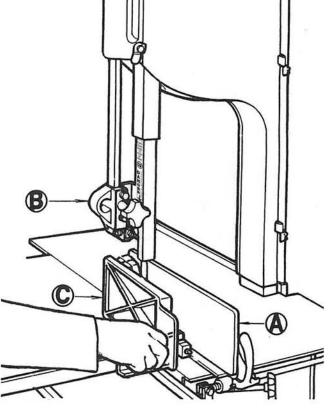
## ONLY PROPERLY TRAINED PERSONNEL SHOULD USE THIS EQUIPMENT

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 ½ 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 © 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.



#### **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 Type Saw 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 ½" 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.

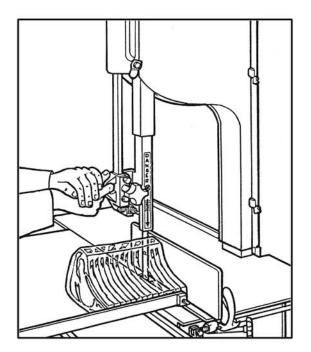
**NEVER** Operate Without All Warning Labels Properly Affixed to Machine.

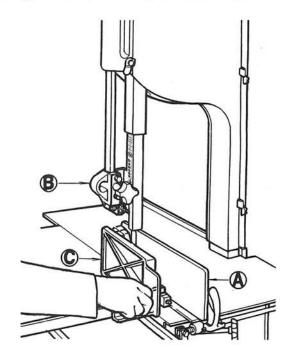
#### A. FOOD HANDLING TO PREVENT CONTAMINATION

- 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 ½" 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. 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 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

- 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.



#### **MAINTENANCE**



## TO AVOID SERIOUS PERSONAL INJURY



**ALWAYS** Turn Off, Unplug From Power Source and Perform Lockout/Tag Out 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.

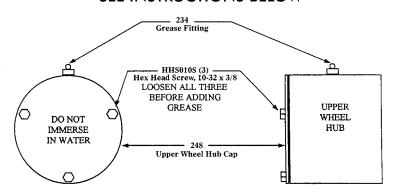
#### A. GENERAL

- 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.
  - b. WHEEL CLEANER ASSEMBLIES: Check condition of fiber cleaner, change every four (4) weeks.
  - 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, replace every 6 months. Check adjustment of upper saw guide. Should be 1/32" between back of blade and saw guide carbide.
  - d. SAW GUIDE BAR: Check condition of bar for wear, replace if necessary.
  - e. STATIONARY BAR ASSEMBLY: Check condition of nylon filler, change every 4 weeks. Check condition of saw guide, check tracking of blade through guide, back of blade should be centered in hole, replace every 6 months.
  - f. SAW CLEANERS: Check condition of blade cleaners, replace every 4 weeks.
  - g. 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.
  - j. MEAT CARRIAGE ASSEMBLY: Check free movement through full range of travel. Check side to side for excessive clearance, adjust as necessary. Check condition of 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 and legible. Model and Serial Number plate is affixed and legible. Manual accessible to operator.

#### B. LUBRICATION

- UPPER WHEEL BEARINGS: Grease every four (4) months. Change grease every twelve (12) months. (See instructions at right.)
- 2. **LOWER BEARING HOUSING:** Grease every four (4) months. Change grease every twelve (12) months.
- 3. **MEAT CARRIAGE BEARINGS:** Grease every four (4) weeks.
- 4. **SAW GUIDE BAR:** Oil daily with food machine oil.
- MEAT GAUGE GEAR RACK: Oil daily with food machine oil.
- 6. BLADE TENSION SPRING SCREW
  ASSEMBLY: Grease every 4 weeks –
  NOTE: Remove upper wheel and turn
  #14782 Blade Tension screw clockwise
  until it bottoms out against #14781 Blade
  Tension Handle then fill the cavity under
  the O-Ring on the #14782 Blade Tension
  Screw with #374 Shell Cassida Grease
  EPS-2 and re-assemble.

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



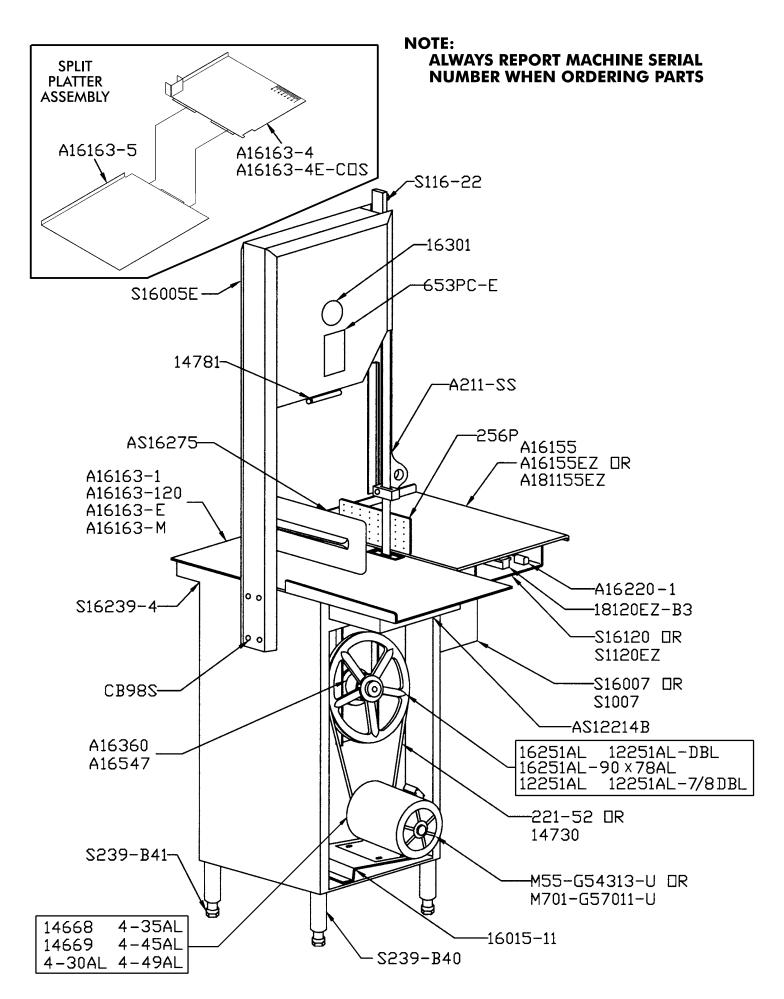
When lubricating the upper wheel bearing it is important that the three hex head screws securing the upper wheel hub cap be loosened slightly before attempting to pump grease into the grease fitting. Loosening the screws allows for an escape of old broken down grease and air from the bearing cavity. Failure to loosen the 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.

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.

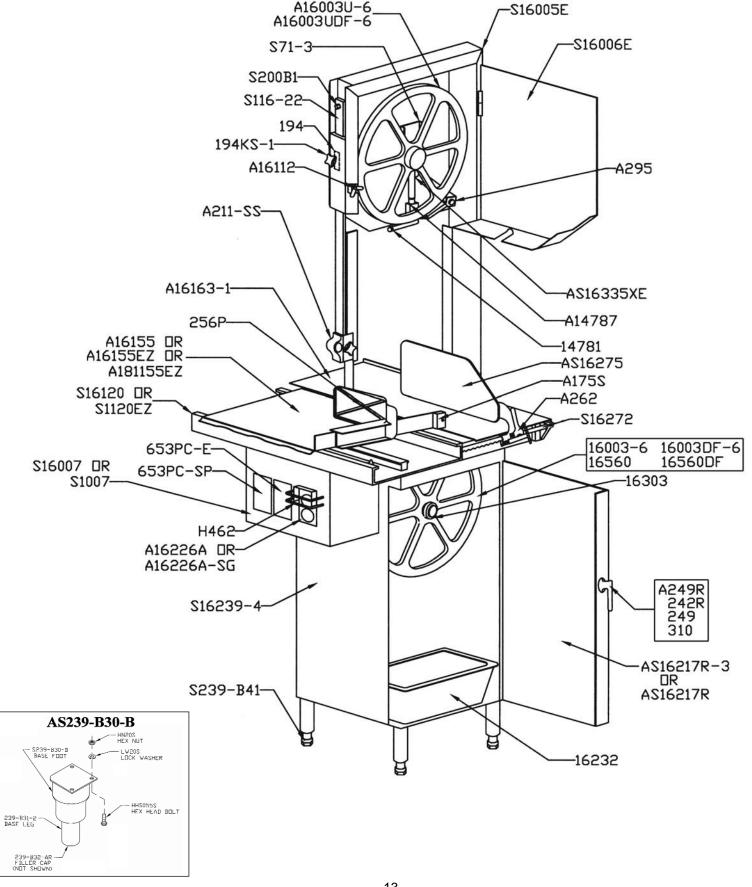
A high grade ball or roller bearing grease should be used. recommended grease for standard service conditions is Polyrex EM (Exxon Mobil).

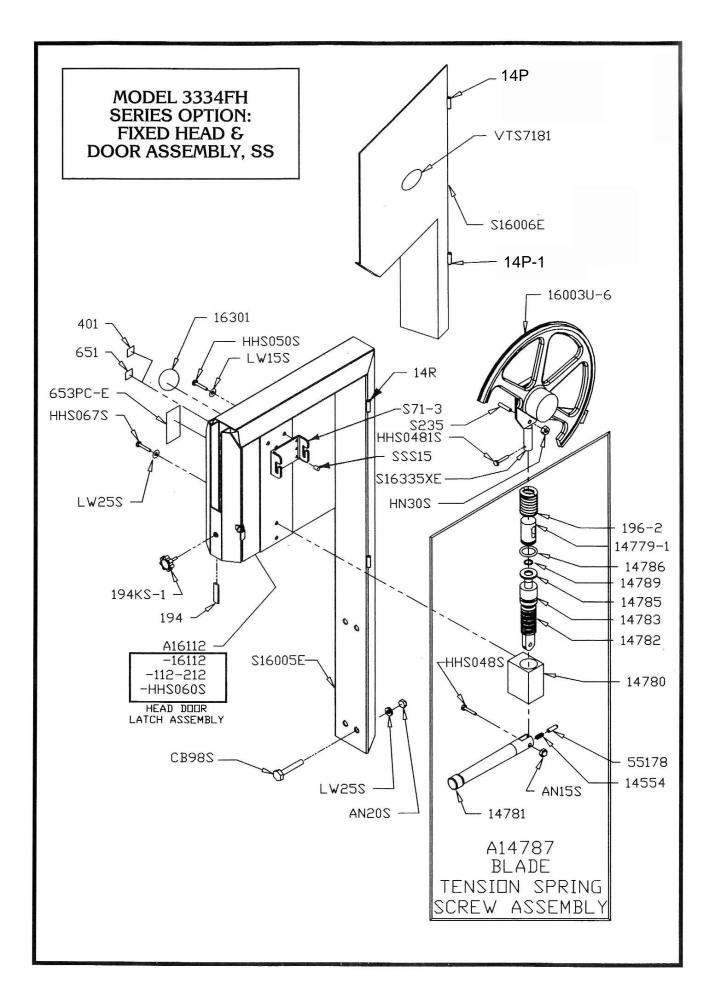
Equivalent and compatible greases include: Texaco Polystar, Rykon Premium #2, Pennzoil Pen 2 Lube, and Chevron SRI

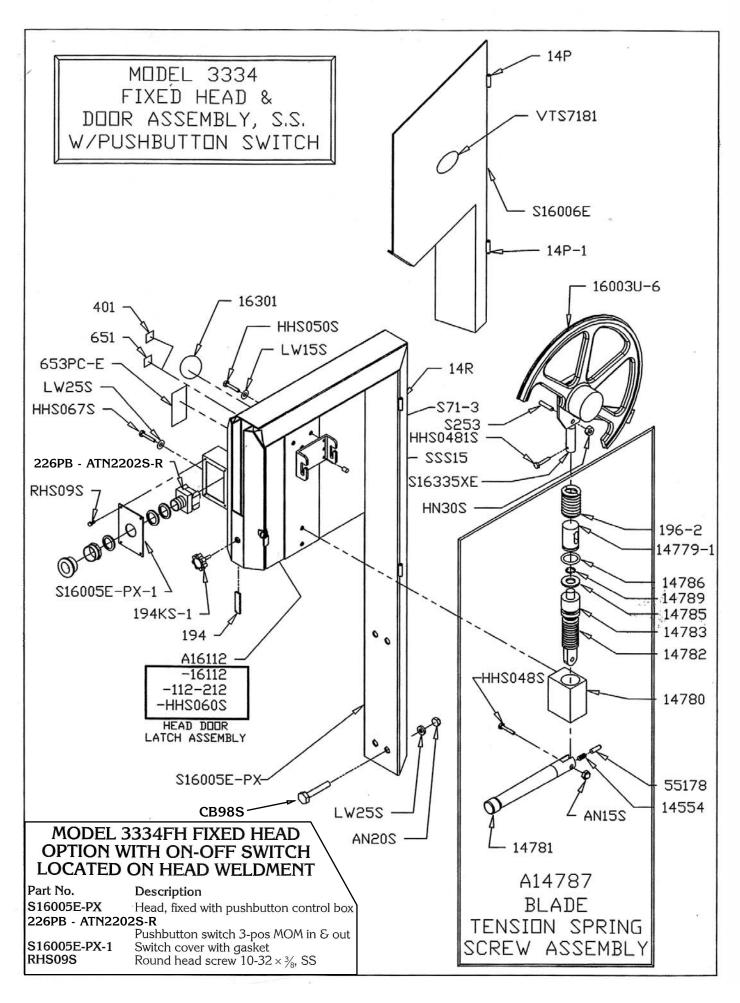
Recommended lubrications intervals is every 9 months with the equivalent of two (2) teaspoons of grease.



#### NOTE: **ALWAYS REPORT MACHINE SERIAL** NUMBER WHEN ORDERING PARTS







#### ITEM No.: 14782K Blade Tension Screw Conversion Kit

#### **INSTALLATION INSTRUCTIONS**

Disconnect the machine from main power supply.

Loosen tension on the saw blade and remove the upper wheel assembly

Unbolt the (A) tensioning handle from the (B) blade tension screw.

At the bottom handle mount turn the (B) blade tension screw clockwise until it can be lifted out of the (C) housing.

Apply a good food grade grease to the replacement (D) tension screw and install into the (C) housing turning counterclockwise until it bottoms out.

Replace the (A) tensioning handle. Be sure the (E) spring and (F) plunger pin are still present in the end of the (A) handle.

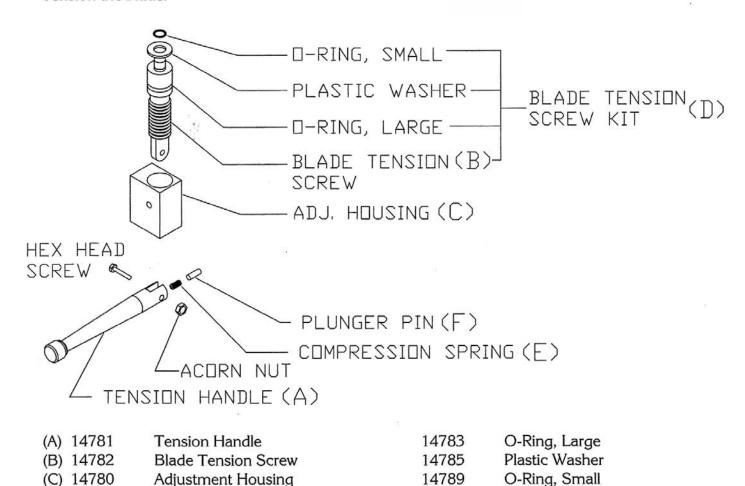
Replace the upper wheel assembly and the blade.

Tension the blade.

(D) 14782K

(E) 14554

(F) 55178



AN15S

HHS048S

Acorn Nut, 1/4-20

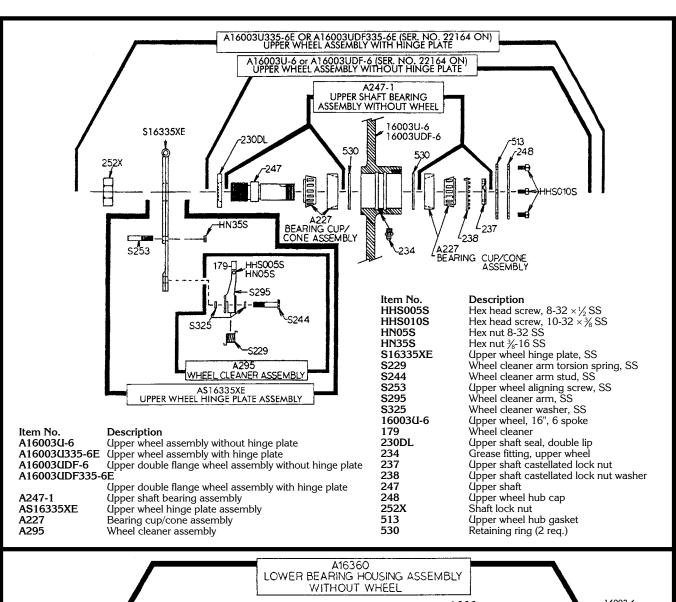
Hex Head Screw 1/4-20 × 11/4

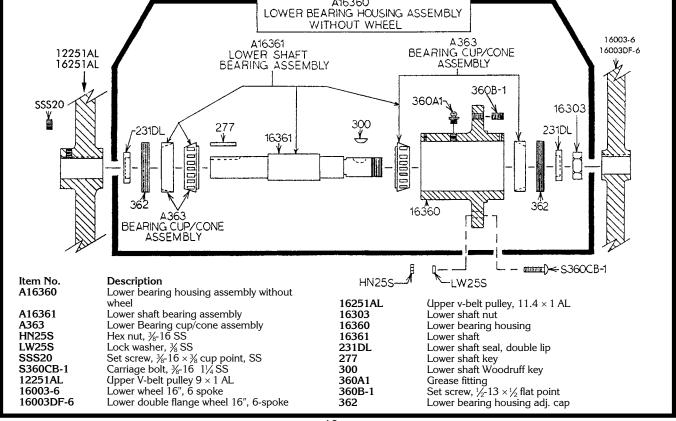
Blade Tension Screw Kit

Compression Spring

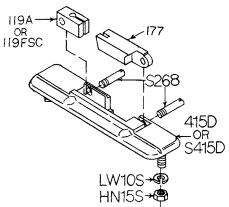
Plunger Pin

### - OPERATOR'S NOTES -





#### A415D STATIONARY BAR ASSEMBLY



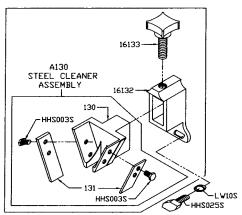
Item No. A415D HN15S LW10S S268 119A 119FSC 177 415D

Description

Stationary bar assembly
Hex nut ¼-20 SS
Lock washer, ¼ SS
Stationary bar headless screw
Saw guide in stationary bar
Saw guide in stationary bar – fish

Nylon filler Stationary bar

#### A16132 REAR STEEL CLEANER ASSEMBLY

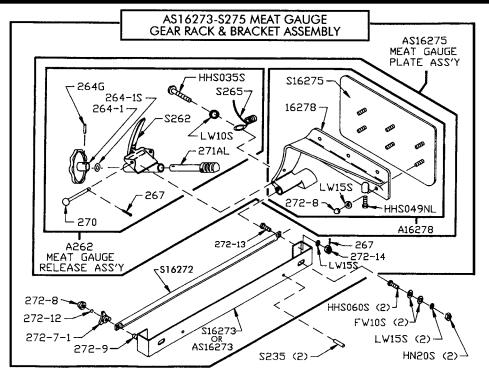


Item No. A130 A16132 HHS003S HHS025S LW10S 130 131 16132

175-2-S 16133 Description
Saw cleaner assembly
Steel cleaner assembly, rear
Trimmed hex head screw 8-32 × ½, SS
Hex head screw, ½, 20 × ½ SS
Lock washer, ¼ SS
Saw cleaner bracket rear

Saw cleaner bracket holder, rear Thumb screw,  $\frac{1}{4}$ -20 ×  $\frac{1}{2}$  Fastener knob – 4 point

Saw cleaner SS



Item No. S235 Item No. Description Description Meat gauge plate assembly less release assembly Taper pin,  $4 \times \frac{3}{4}$ , SS A16278 S262 Meat gauge release handle, SS A262 Meat gauge release assembly S265 Meat gauge release spring AS16273 Meat gauge bracket assembly 16278 Meat gauge arm AS16273-S275 Meat gauge assembly 264G Meat gauge hand wheel groove pin AS16275 Meat gauge plate assembly with release 264-1 Meat gauge hand wheel assembly 264-1S Hand wheel shim Flat washer, 5/16, SS **FW10S** 267 Meat gauge release cotter key Hex head screw  $\frac{1}{4}$ -20  $\times \frac{5}{8}$ Hex head screw,  $\frac{5}{16}$ -18  $\times \frac{1}{2}$ , nylon HHS035S 270 Meat gauge release pin HHS049NL HHS060S Meat gauge worm gear, aluminum 271AL Hex head screw,  $\frac{1}{16}$  18 × 1, SS Hex nut,  $\frac{1}{16}$  18, SS Lock washer,  $\frac{1}{4}$ , SS Lock washer,  $\frac{1}{6}$ , SS 272-7-1 Lock knob, 5/16-18, 3 point Cap nut, 5/16-18 SS Hex bolt, 5/16-18 × 2 SS HN20S 272-8 LW10S 272-9 **LW15S** 272-12 Brass ball Meat gauge gear rack, stainless Meat gauge bracket, SS S16272 272-13 Hex head screw,  $\frac{5}{16}$ -18  $\times$  1 $\frac{1}{4}$ , SS S16273 272-14 Castellated nut, 5/16-18, SS S16275 Meat gauge plate, SS

#### SAW GUIDE BAR ASSEMBLY

Item No. Description

AS116-22SS Saw guide bar assem. with lock knob 22" –

stainless

A116-22SS
AS116-22-COS
AS116-22-COS
A211-SS
A211-COS
Saw guide bar assembly 22" – stainless
Saw guide bar assembly – 22" SS special
Finger lift assembly, removable – stainless
Finger lift assembly – removable SS special

A602 Saw guide assembly, upper FW05S Flat washer, ¼ SS

 HHS015S
 Hex head screw,  $10-32 \times \%$  SS

 HHS020S
 Hex head screw,  $\frac{1}{4}-20 \times \frac{3}{8}$  SS

 HHS083S
 Hex head screw,  $\frac{3}{8}-16 \times 1\frac{3}{4}$  SS

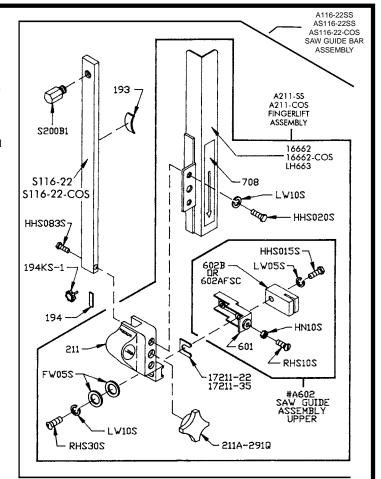
HN10S Hex nut, 10-32 SS

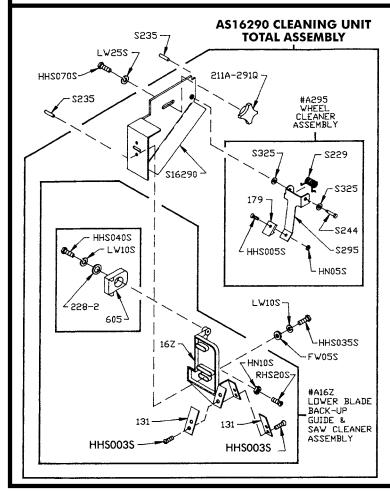
LH663 Saw guard for true left head LW058 Lock washer, #10 SS LW108 Lock washer, ½ SS

RHS10S Round head screw,  $10-32 \times \frac{3}{4}$  SS RHS30S Round head screw,  $\frac{1}{4}$ -20  $\times \frac{3}{8}$  SS S200B1 Stop stud on guide bar

193 Saw guide bar spring
194 Saw guide bar lock pad
194KS-1 Saw guide bar lock knob
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"



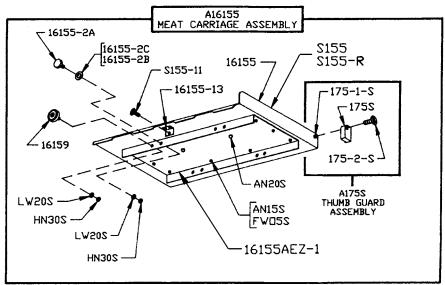


Item No. A16Z A295 AS16290 FW05S **HHS003S HHS005S** HHS035S **HHS040S HHS070S HN05S** HN10S LW10S LW25S **HHS003S** RHS20S S16290 S229 S235 S244 S295 S325 131 167 179 211A-291Q 228-2

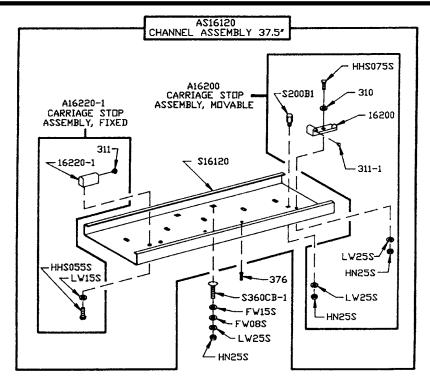
605

Description Guide bracket saw cleaner assembly Wheel cleaner assembly Cleaning unit total assembly Flat washer, 1/4 SS Trimmed hex head screw 8-32  $\times \frac{1}{4}$ , SS Hex head screw,  $8-32 \times \frac{1}{2}$  SS Hex head screw,  $\frac{1}{4}$ -20  $\times \frac{5}{8}$  SS Hex head screw,  $\frac{1}{4}$ -20  $\times \frac{3}{4}$  SS Hex head screw,  $\frac{3}{6}$ -16 × 1 SS Hex nut, 8-32 SS Hex nut, 10-32 SS Lock washer, 1/4 SS Lock washer, 3/8 SS Hex head screw,  $10-32 \times 1\frac{1}{8}$  SS Round head screw  $10-32 \times 1\frac{1}{8}$  SS Cleaning unit stamping, SS Wheel cleaner arm torsion spring SS Taper pin  $4 \times \frac{3}{4}$ , SS Wheel cleaner arm stud SS Wheel cleaner arm SS Wheel cleaner washer SS Saw cleaner SS Lower guide bracket saw cleaner holder Wheel cleaner Fastener knob, 4 point Lower guide washer Saw guide lower blade back-up

#### STANDARD 3334FH MEAT CARRIAGE & CHANNEL

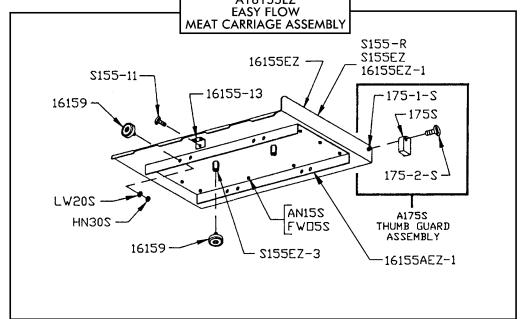


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Item No.	Description	Item No.	Description
A16155	Meat carriage assembly complete	16155	Meat carriage top & angle only
A175S	Thumb guard assembly	16155-2A	Meat carriage guide
FW05S	Flat washer, ¼ SS	16155-2B	Meat carriage guide spacer, ½4TK
AN15S	Acorn nut, $\frac{1}{4}$ -20 SS	16155-2C	Meat carriage guide spacer, ½2TK
AN20S	Acorn nut, 3/8-16 SS	16155-13	Carriage stop angle SS, welded
HN30S	Hex nut, %-16 light jam SS	16155AEZ-1	Meat carriage angle plate (DNS)
LW20S	Lock washer 3/8 regular SS	16159	Meat carriage bearing SS
S155-11	Meat carriage stop thumb screw	175S	Thumb guard, nylon
S155	Meat carriage top only (NSS)	175-1-S	Thumb guard nut SS
S155-R	Raw meat carriage top only (DNS)	175-2-S	Thumb screw $\frac{1}{4}$ -20 $\times \frac{1}{2}$

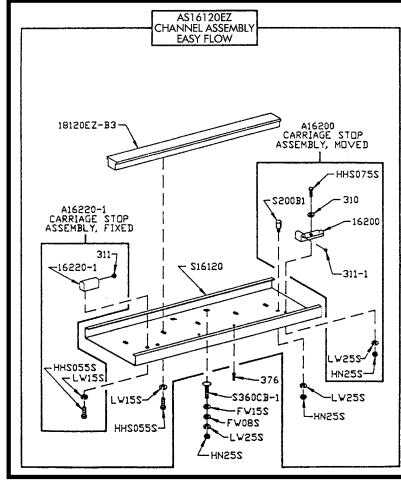


Item No.	Description	Item No.	Description
A16200	Carriage stop assembly, movable	S16120	Channel, 37" SS
A16220-1	Carriage stop assembly, fixed	S200B1	Stop stud SS, guide bar & carriage stop
AS16120	Channel assembly, 37"	S360CB-1	Carriage bolt, $\frac{3}{8}$ -16 × 1 $\frac{1}{4}$ SS
FW08S	Flat washer, ¾ SŠ	16200	Carriage stop, movable
FW15S	Flat washer, ½ SS	16220-1	Carriage stop, fixed
HHS055S	Hex head screw, $\frac{5}{16}$ -18 × $\frac{3}{4}$ SS	310	Waved washer
HHS075S	Hex head screw, $\frac{3}{6}$ -16 × $\frac{11}{4}$ SS	311	Rubber bumper, fixed stop
HN25S	Hex nut, 3/8-16 SS	311-1	Rubber bumper, movable stop
LW15S	Lock washer, 5/16 SS	376	Drive screw 10 × 1/2 SS
LW25S	Lock washer, 3/8 SS		

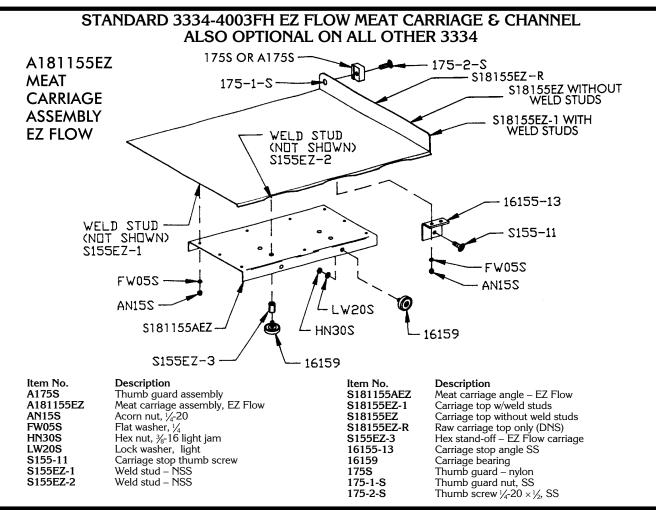
#### OPTIONAL 3334FH EZ FLOW MEAT CARRIAGE & CHANNEL A16155EZ EASY FLOW MEAT CARRIAGE ASSEMBLY S155-R

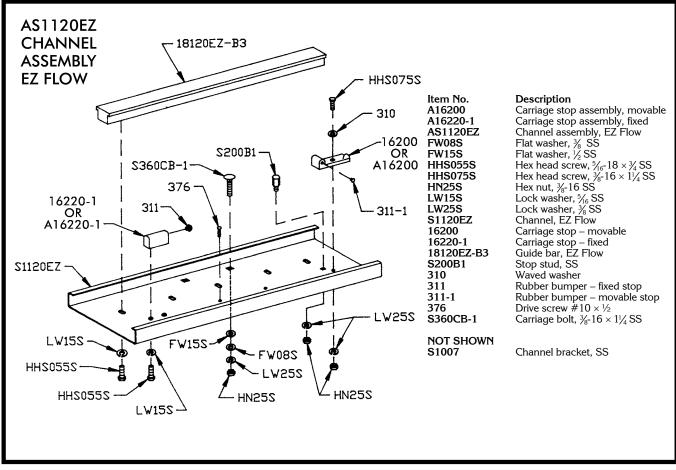


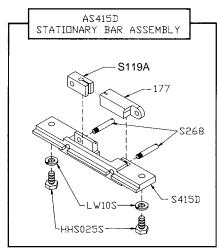
Description Item No. Description Item No. Meat carriage assembly complete – EZ Flow Thumb guard assembly S155EZ-3 16155EZ A16155EZ Hex stand-off, EZ Flow carriage Meat carriage top & angle only A175S Flat washer, ¼ SS Acorn nut, ¼-20 SS Hex nut, ¾-16 light jam SS FW05S 16155EZ-1 Meat carriage top only w/weld studs (DNS) **AN15S** 16155-13 Carriage stop angle SS **HN30S** 16155AEZ-1 Meat carriage angle plate Lock washer % regular SS
Meat carriage stop thumb screw **LW20S** 16159 Meat carriage bearing SS S155-11 175S Thumb guard, nylon Raw meat carriage top only (DNS) Meat carriage top only (NSS) 175-1-S 175-2-S Thumb guard nut SS Thumb screw 1/4-20 × 1/2, SS S155-R S155EZ



Item No. Description A16200 Carriage stop assembly, movable A16220-1 Carriage stop assembly, fixed Channel assembly, 37" – EZ Flow AS16120EZ Flat washer, % SS **FW08S** FW158 Flat washer, ½ SS Hex head screw,  $\frac{5}{16}$ -18 ×  $\frac{3}{4}$  SS Hex head screw,  $\frac{3}{8}$ -16 ×  $\frac{11}{4}$  SS **HHS055S HHS075S** Hex nut, 3/8-16 SS Lock washer, 5/16 SS **HN25S** LW15S Lock washer, % SS Channel, 37" SS LW25S S16120 Stop stud SS, guide bar & S200B1 carriage stop S360CB-1 Carriage bolt,  $\frac{3}{8}$ -16 ×  $\frac{11}{4}$  SS 16200 Carriage stop, movable Carriage stop, fixed Guide bar – EZ Flow 16220-1 18120EZ-B3 Waved washer 310 Rubber bumper, fixed stop 311 311-1 Rubber bumper, movable stop Drive screw 10 × ½ SS 376



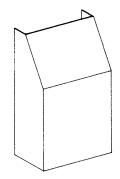




Item No. AS415D HHS025S LW10S S268 S119A 177 S415D

Description

Stationary bar assembly SS Hex head screw, ½-20 × ½ SS Lock washer, ½ SS Stationary bar headless screw Saw guide in stationary bar-stainless steel Nylon filler Stationary bar SS



S16217LTP Base Door, Left Tapered Panel, SS



#### **USE WITH**

Motor Mfg.	Model No.	Specifications
Doerr	XR72927	1½HP, 220/440-50/60-3 open
Doerr	R72929	2HP, 220/440-50/60-3 open
U.S. Motor	G54313	2HP, 220/440-50/60-3 open
Doerr	73020	2HP, 550-60-3 open
U.S. Motor	G57016	2HP, 550-60-3 open

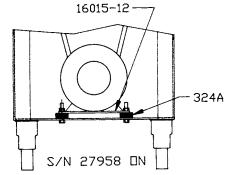
#### **USE WITH**

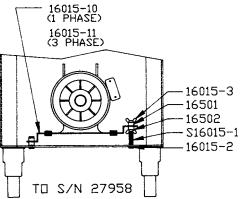
Motor	Model	
Mfg.	No.	Specifications
Doerr	73032	1½HP, 115/230-50-1 open
U.S. Motor	G57347	1½HP, 115/230-50-1 open
Doerr	72933	1½HP, 115/230-60-1 open
Baldor	L3605	2HP, 115/230-60-1 TE
Baldor	L3605-50	2HP, 115/230-50-1 TE
Baldor	L1322T	2HP, 115/230-60-1 open
Doerr	67385	2HP, 208/220/440-50/60-3 TE
Baldor	M3558T-5	2HP, 550-60-3 TE
Baldor	M3558T-50	2HP, 220/380/415-50-3 TE
Baldor	M3558T-8	2HP, 200-60-3 TE
Doerr	72540	3HP, 220/440-50/60-3 TE
Doerr	75425	3HP, 220/440-50/60-3 TE
U.S. Motor	G57011	3HP, 220/440-50/60-3 TE
Baldor	M3611	3HP, 220/440-50/60-3 TE
Baldor	M3611T-50	3HP, 220/380/440-50-3 TE
Baldor	M3611T-8	3HP, 200-60-3 TE
Doerr	73031	5HP, 220/440-50/60-3 TE
Doerr	A907	5HP, 220/440-50/60-3 TE

#### **MOTOR ADJUSTMENT**

#### **ADJUSTMENTS**

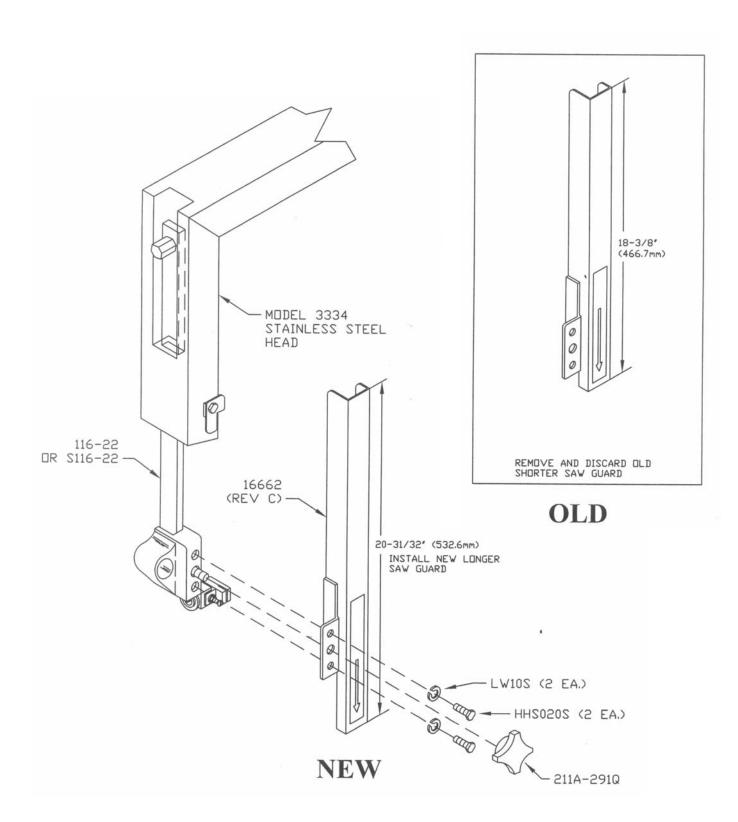
- 1. For tightening motor V-belt on rigid base plate, remove appropriate quantity of shims (Part No. 324A) under the motor until the desired total flex of the V-belt is approximately ½".
- 1. For tightening motor V-belt on floating adjustable motor mounting plates (Part No. 16015-10 or 16015-11), loosen the upper wing nuts (Part No. 16015-3). Then loosen the bottom wing nuts (Part No. 16015-3) which are located under the mounting plate. This enables the motor mounting plate to drop to the desired belt tension. Re-tighten the upper wing nuts evenly so that the motor stays horizontal. Do not tighten belt to extremes. This will cause undue pressure on and premature failure of the motor bearings.

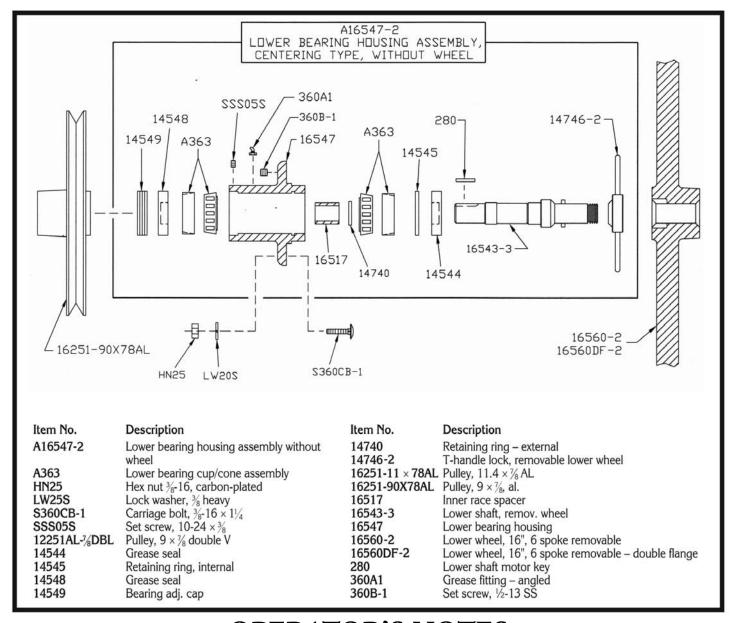




### LONGER SAW GUARD KIT Item No. 16662K

This longer guard is for replacement on existing saws. Install the new guard with the 1/4" dia. Screws supplied with the Saw Guard Kit, Item No. 16662K





### - OPERATOR'S NOTES -

#### **REMOVAL and INSTALLATION**

## for Self-Centering Lower Removable Wheels (Model 3334 and 3334FH)

**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. 14746-2, T-Handle Lock and Remove from Lower Shaft.





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

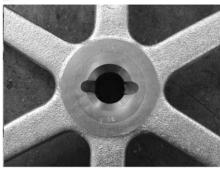


#### INSTALLATION

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.

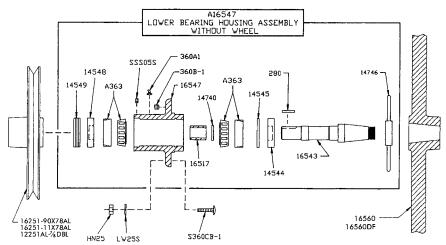
Align and engage the groove of the lower wheel and the anti-rotation pin as the wheel is being installed.





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



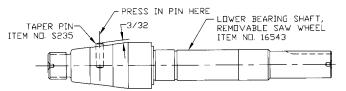


Item No. A16547 A363 HN25 LW25S S360CB-1 SSS05S 12251AL-%DBL 14544 14545 14548	Description Lower bearing housing assembly without wheel Lower bearing cup/cone assembly Hex nut 1/6-16, carbon-plated Lock washer, 1/6 heavy Carriage bolt, 1/6-16 × 11/4 Set screw, 10-24 × 1/8 Pulley, 9 × 1/8 double-V Grease seal Retaining ring, internal Grease seal Lower bearing housing cap	16251-90 × 78AL 16517 16543 16547 16560 16560DF 280 360A1	Inner race spacer Lower shaft, remov. wheel Lower bearing housing Lower wheel, 16", 6 spoke removable Lower wheel, 16", 6 spoke removable – double flange Lower shaft motor key Grease fitting – angled
14546 14549 14740	Lower bearing housing cap Retaining ring – external	360B-1	Set screw, ½-13 SS

#### Item No. 16543 - Lower Shaft for Removable Wheel

The Model 3334 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.

## LOWER REMOVABLE WHEEL INSTALLATION AND REMOVAL INSTRUCTIONS FOR MODEL 1433 AND MODEL 3334SS

**ALWAYS** Turn Off, Unplug 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 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.

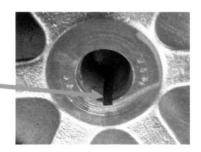


14746 T-Handle Lock



#### 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.

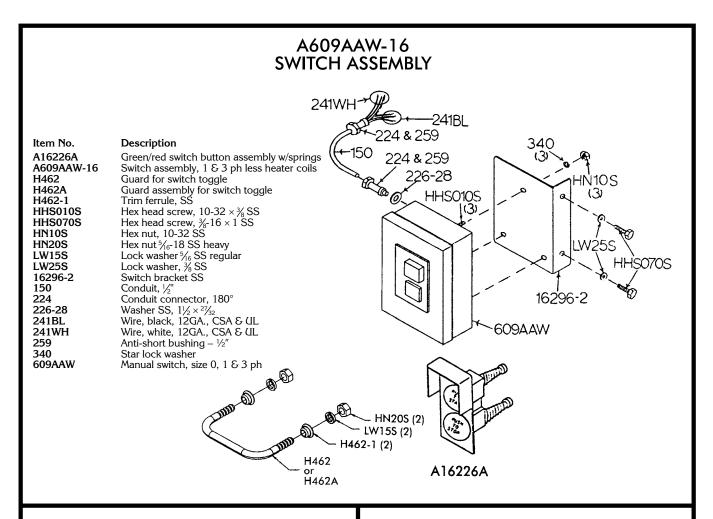


NOTE:
TO ENSURE PROPER SAW WHEEL
ALIGNMENT, WHEEL MUST BE
REINSTALLED ON SAME
MACHINE FROM WHICH IT WAS
REMOVED.

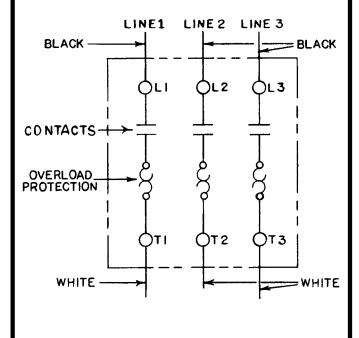
Replace the T-Handle Lock **HAND TIGHTEN ONLY** Reassemble the machine.



### - OPERATOR'S NOTES -

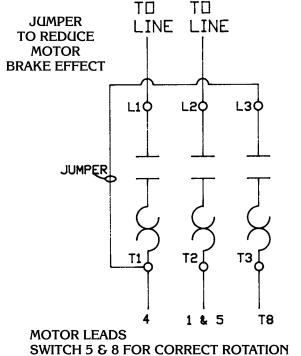






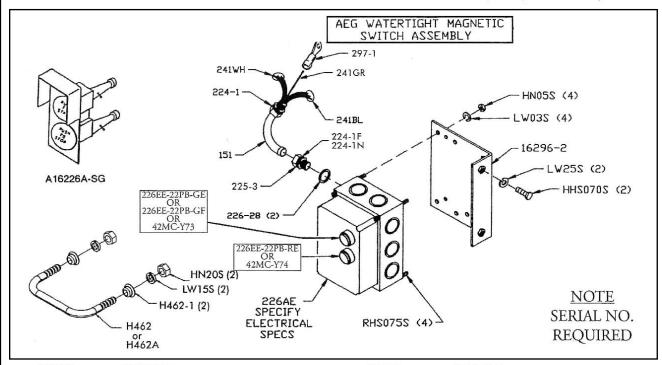
Wire Diagram for Baldor Motor –Spec. No. 35M388S508 –

230V/1 Phase/50Hz Used with 609 AAW Starter, A-B

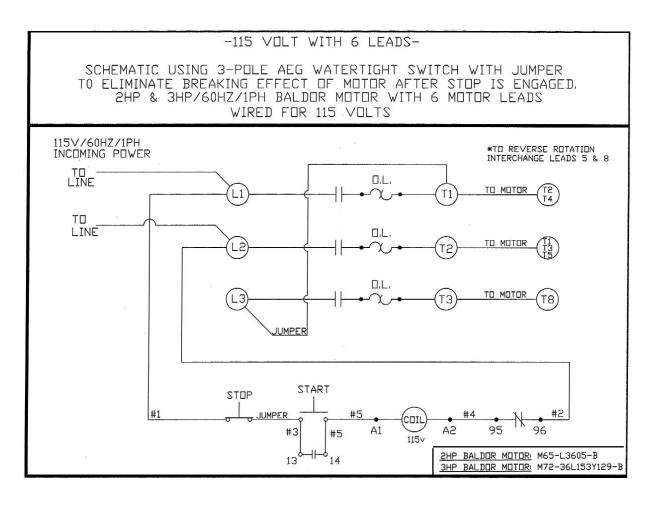


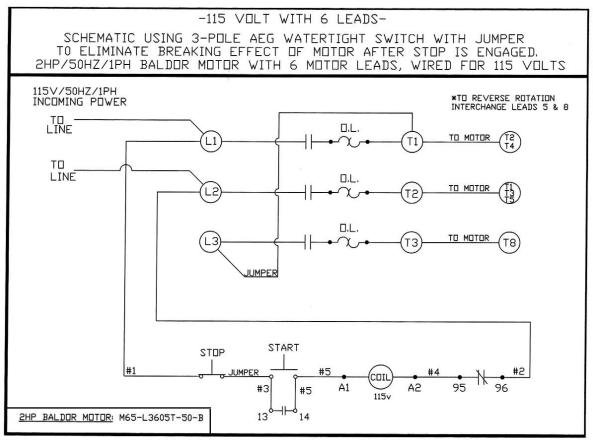
## WATERTIGHT MAGNETIC SWITCH ASSEMBLIES (AEG) INCLUDES MOUNTING BRACKET AND WIRES

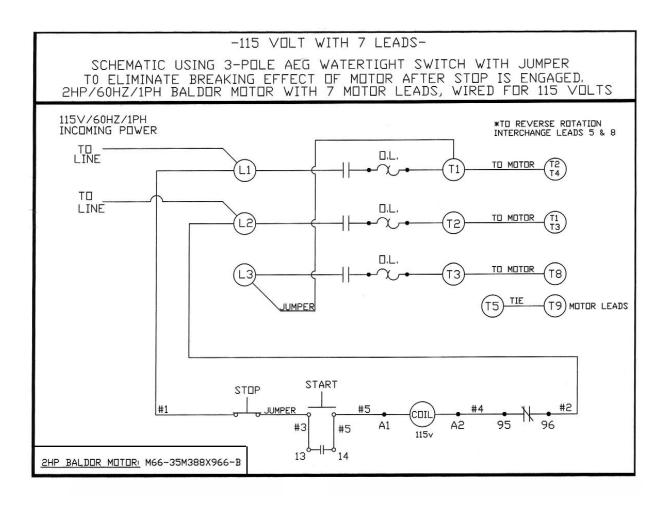
Item No.	Description	Item No.	Description
A22616EE-514	BAEG/MS-PB/05-C8 2HP 208-220-50/60-3	A22616EE-530	BAEG/MS-PB/05-F3.2 2HP 550/575-3
A22616EE-516	BAEG/MS-PB/05-E4.7 2HP 440/460-3	A22616EE-534	BAEG/MS-PB/05-E6.3 3HP 440/460-60-3
A22616EE-518	BAEG/MS-PB/05-D4.7 1.5HP-2HP 380/415-50-3	A22616EE-536	BAEG/MS-PB/05-D8 3HP 380-60-3
A22616EE-522	BAEG/MS-PB/05-C14 3HP 220-230-50/60-3	A22616EE-538	BAEG/MS-PB/05-F4.7 3HP 550-60-3
A22616EE-5221	BAEG/MS-PB/05-CS14 1.5HP 220/230-50/60-1	A22616EE-540	BAEG/MS-PB/C18 5HP 220-60-3
A22616EE-5241	BAEG/MS-PB/A26 1.5HP-2HP 104/115/60-1	A22616EE-544	BAEG/MS-PB/05-E8 5HP 440/460-60-3
A22616EE-5261	BAEG/MS-PB/CS16 2HP 230-60-1	A22616EE-546	BAEG/MS-PB/05-D14 5HP 380/415-50-3
		A22616EE-548	BAEG/MS-PB/05-F8 5HP 550/575-60-3

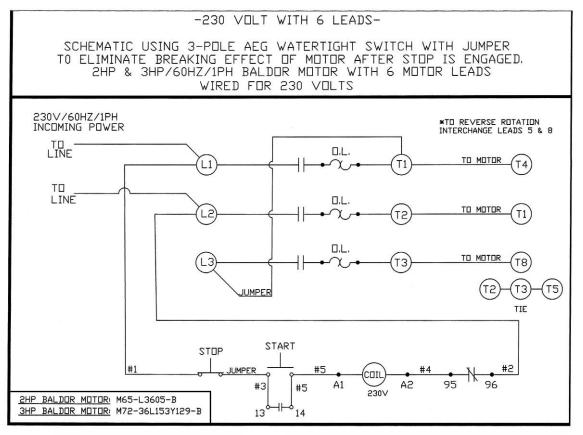


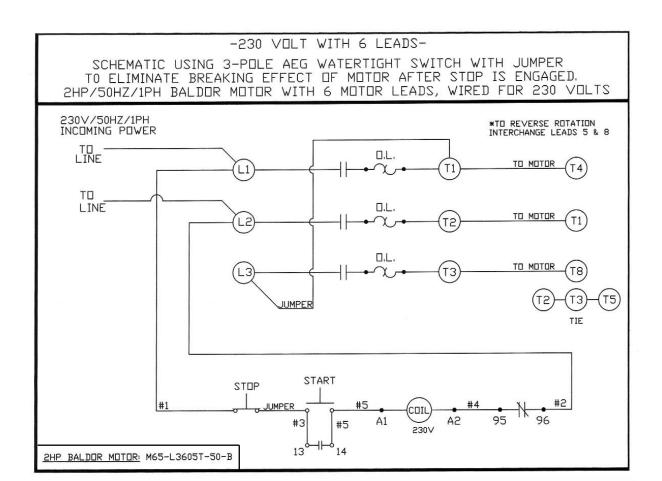
Item No.	Description	Item No.	Description
A16226A-SG	Green/red switch button assembly	226EE-EO	Contactor, LS05.10-EO 440-480V
H462	Guard for switch toggle	226EE-FO	Contactor, LS05.10-FO, 550V
H462A	Guard assembly for switch toggle	226EE-506	BAEG/MS-PBF/05-C6.3 1HP 220-50/60-3
H462-1	Trim ferrule S.S.	226EE-514	BAEG/MS-PB/05-C8 2HP 220-50/60-3
HHS070S	Hex head screw, 3/8-16 x 1 SS	226EE-516	BAEG/MS-PB/05-E4.7 2HP 440-60-3
HN05S	Hex nut, 8-32 SS	226EE-516F	BAEG/MS-PBF/05-E4.7 1-1/2-2HP 440-60-
HN20S	Hex nut 5/16-18 SS	226EE-518	BAEG/MS-PB/05-D4.7 2HP 380-50-3
LW03S	Lock washer, #8 SS	226EE-5201	BAEG/MS-PBF/A26 1-1/2 & 2HP 60-1
LW15S	Lock washer 5/16, SS	226EE-522	BAEG/MS-PB/05-C14 3HP 230-50/60-3
LW25S	lock washer, 3/8 heavy SS	226EE-5241	BAEG-MS-PB/A26 2HP 120-60-1
RHS075S	Round head screw, 8-32 x % SS	226EE-5261	BAEG-MS-PB/CS16 2HP 230-60-1
16296-2	Switch bracket SS	226EE-530	BAEG-MS-PB/05-F3.2 2HP 550-60-3
151	Watertight conduit	226EE-534	BAEG/MS-PB/05-E6.3 3HP 440-60-3
224-1	Conduit connector, WT, 180°	226EE-536	BAEG/MS-PB/05-D8 3HP 380-50-3
224-1F	Conduit ferrule for watertight connector	226EE-538	BAEG/PC-PB/05-F4.7 3HP 550-60-3
224-1N	Conduit nut for watertight connector	226EE-540	BAEG/MS-PB/C18 5HP 220-60-3
226EE-ENCL-PB30	Enclosure w/pushbutton 30mm holes	226EE-544	BAEG/MS-PB/05-E8 5HP 440-60-3
226EE-OL01.9G	Overload B18K-G, 1.3-1.9A	226EE-546	BAEG/MS-PB/D14 5HP 380-415-50-3
226EE-OL41	Overload B18K-I, 2.5-4A	226EE-548	BAEG/MS-PB/05-F8 5HP 550-60-3
H281EE-51	Overload B18K-K, 4-6.3A	226-28	Washer, 1-1/2 x 27/32 SS
226EE-OL08.5L	Overload B18K-L, 5.5-8.5A	241BL	Wire, black 12 GA., CSA & UL
226EE-OL12M	Overload B18K-M, 8-12A	241GR	Wire, green, 12 GA., CSA & UL
226EE-OL180	Overload B18K-O, 14.5-18A	241WH	Wire, White, 12 GA., CSA & UL
226EE-OL26ON	Overload B18K-ON,21-26A	297-1	Wire terminal eyelet for 12 GA wire
226EE-AO	Contactor, LS05.10-AO, 120V	42MC-Y73	Green start push button assembly
226EE-CO	Contactor, LS05.10-CO, 208-230V	42MC-Y74	Red Stop push button assembly
226EE-DO	Contactor, LS05.10-DO, 380-415V		@ 12

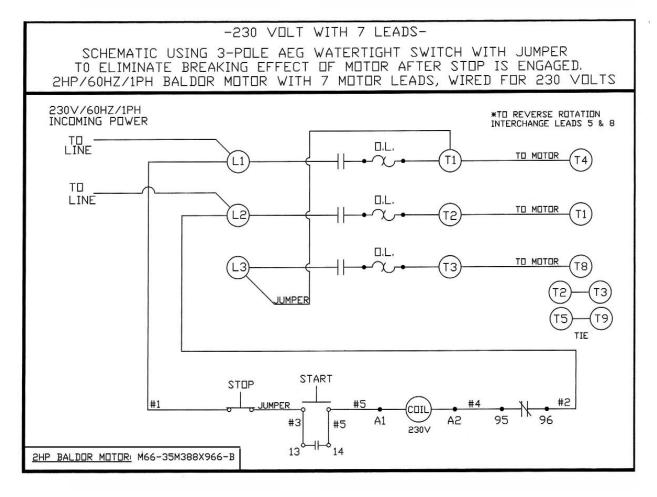


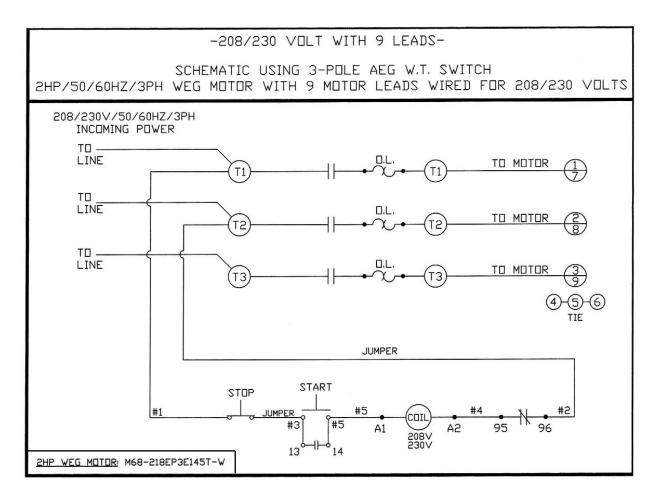


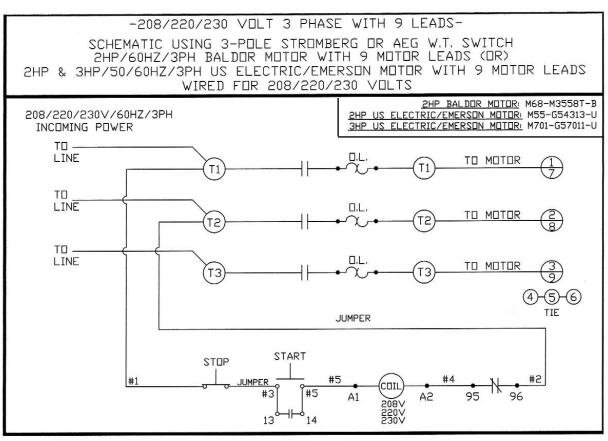


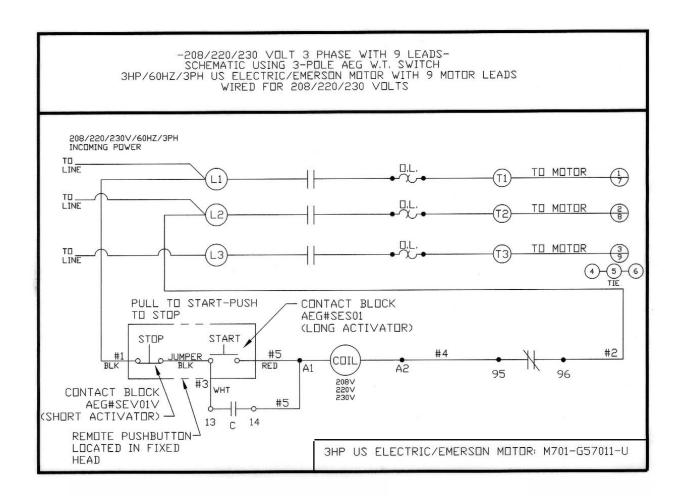


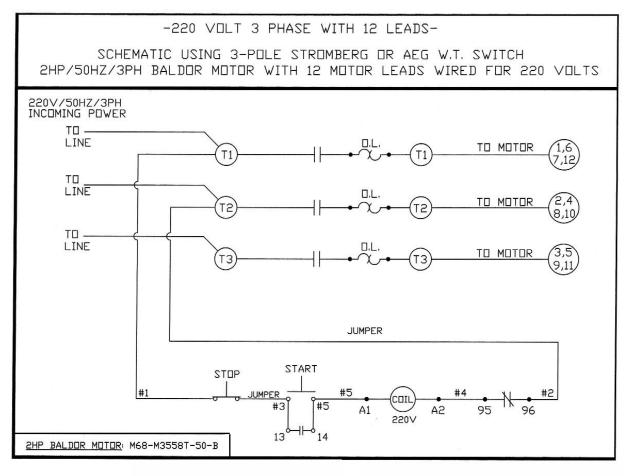


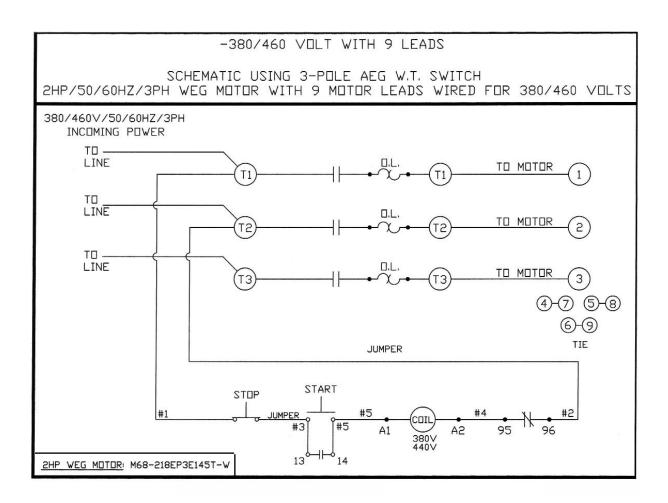


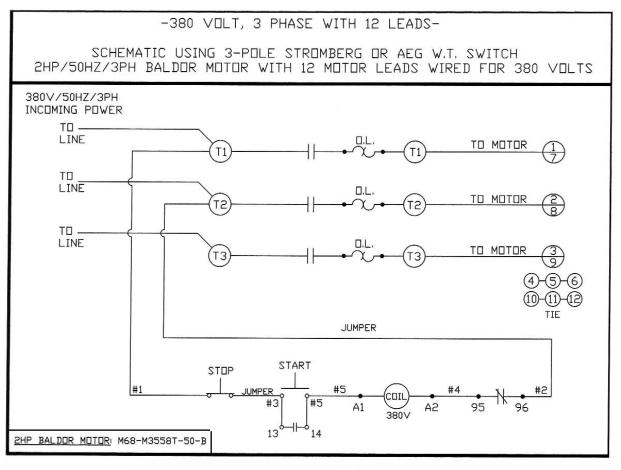


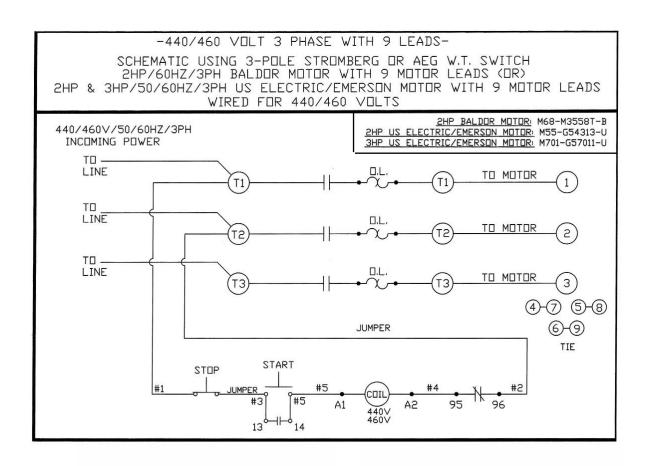


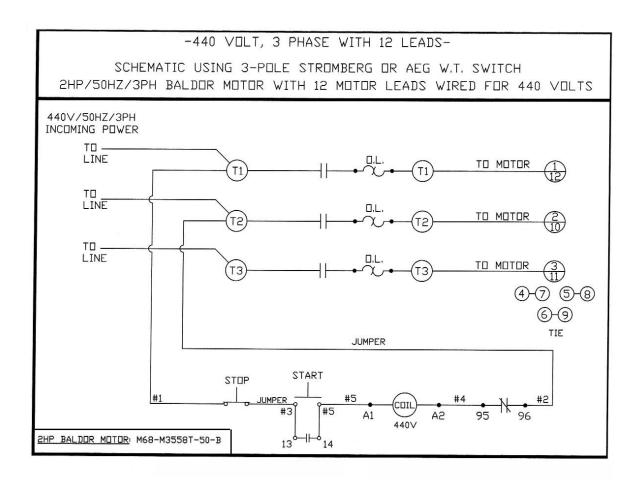












# - OPERATOR'S NOTES -

### **CLEANING**



### SHARP MOVING BAND TYPE SAW BLADE

### TO AVOID SERIOUS PERSONAL INJURY

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

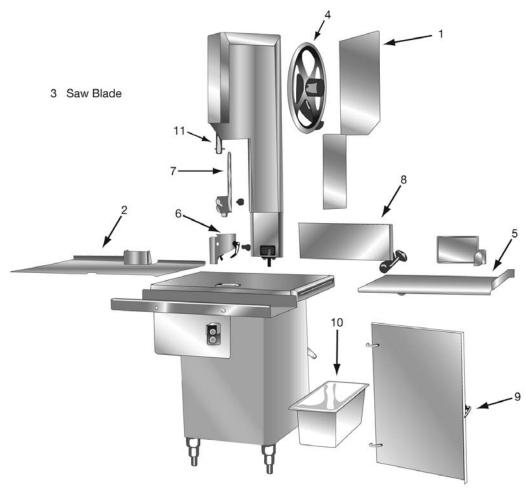
**ONLY** Use Recommended Cleaning Equipment, Materials and Procedures.

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

**ALWAYS** Thoroughly Clean Equipment at Least Daily.

#### CLEANING THE BIRO POWER CUTTER:

Disconnect electrical power to the machine before cleaning. Parts to be removed have been made accessible and can be removed without tools. Notice in the drawing below that all parts are numbered. Each part should be removed for cleaning in the numbered sequence shown. To ensure cleaner cuts, keep the 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. 119A), Upper Saw Guide (Part No. 602B), Lower Blade Back-Up Guide (Part No. 605) and Nylon Filler (Part No. 177).



# MODEL 3334FH & 3334-4003FH PART NUMBERS AND DESCRIPTIONS MODEL & SERIAL NO. REQUIRED WHEN ORDERING PARTS

Item No.	Description	Item No.	Description	
AN15S	Acorn nut, ½-20, SS	S16290	Cleaning unit, SS	
AN20S	Acorn nut, %-16, SS	S16335XE	Upper wheel hinge plate, SS	
AN21S CB98S	Acorn nut, high crown SS $\frac{3}{8}$ -16 Carriage bolt, $\frac{3}{8}$ -16 × 2 $\frac{3}{4}$ , SS	S163F S181155AEZ	Platter spacer weld button, SS Meat carriage angle, EZ flow (order	
FW05S	Flat washer, $\frac{1}{4}$ , SS	SIGIISSALL	S18155EZ-1)	
FW07S	Flat washer $\frac{3}{8}$ SAW $\frac{7}{8} \times \frac{13}{32} \times \frac{1}{16}$ , SS	S18155EZ	Carriage top only (order S18155EZ-1)	
FW08S	Flat washer, $\frac{3}{8}$ ID × 1"OD, SS	S18155EZ-1	Carriage top w/weld studs	
FW10S	Flat washer, <sup>5</sup> / <sub>16</sub> , SS	S200B1	Stop stud, guide bar & carriage stop	
FW15S HHS003S	Flat washer, ½, SS Hex head screw, 8-32 ×¼, SS	\$229 \$235	Wheel cleaner arm spring, SS Taper pin, $4 \times \frac{3}{4}$ , SS	
HHS005S	Hex head screw, $8-32 \times \frac{1}{2}$ , SS	S239-B40	Base foot, welded, SS	
HHS010S	Hex head screw, $10-32 \times \frac{3}{8}$ , SS	S239-B41	Adjustable leg bolt, SS	
HHS015S	Hex head screw, 10-32 × ½, SS	S244	Wheel cleaner arm stud	
HHS020S HHS025S	Hex head screw, $\frac{1}{4}$ -20 × $\frac{3}{8}$ , SS Hex head screw, $\frac{1}{4}$ -20 × $\frac{1}{2}$ , SS	\$253 \$262	Upper wheel aligning screw, SS Meat gauge release handle, SS	
HHS035S	Hex head screw, $\frac{1}{4}$ -20 $\times \frac{5}{8}$ , SS	S265	Meat gauge release spring, SS	
HHS040S	Hex head screw, $\frac{1}{4}$ -20 × $\frac{3}{4}$ , SS	S268	Stationary bar headless screw, SS	
HHS048S	Hex head screw, ½-20 × 1¼, SS	S270	Meat gauge release pin w/hole, SS	
HHS0481S HHS049NL	Hex head screw, $\frac{1}{4}$ -20 × $\frac{1}{2}$ , SS Hex head screw, $\frac{5}{16}$ -18 × $\frac{1}{2}$ , nylon	\$295 \$325	Wheel cleaner arm, stainless Wheel cleaner arm washer, SS	
HHS050S	Hex head screw, $\frac{5}{6}$ -18 $\times \frac{5}{8}$ , SS	S360CB-1	Carriage bolt %-16 × 11/4 SS	
HHS055S	Hex head screw, $\frac{5}{16}$ -18 $\times \frac{3}{4}$ , SS	S415D	Stainless stationary bar	
HHS060S	Hex head screw, $\frac{5}{16}$ -18 × 1, SS	S416	Platter locator weld pin, SS	
HHS067S HHS070S	Hex head screw, $\frac{1}{6}$ -16 × $\frac{3}{4}$ , SS Hex head screw, $\frac{3}{6}$ -16 × 1, SS	S71-3 VTS7181	Upper wheel hinge bracket, fixed head BIRO logo oval decal – NSS	
HHS075S	Hex head screw, $\frac{3}{8}$ -16 × 1½, SS	112-212	Waved washer, <sup>21</sup> / <sub>64</sub> ID, <sup>5</sup> / <sub>8</sub> OD	
HHS083S	Hex head cap screw, $\frac{3}{8}$ -16 × 1½, SS	116-22	Saw guide bar 22 inch	
HN05S	Hex nut, 8-32, SS	116-22-COS	Saw guide bar, SS, special	
HN10S HN15S	Hex nut, 10-32, SS	119A	Saw guide	
HN20S	Hex nut, ½-20, SS Hex nut, ½-18, SS	119FSC 12251AL	Saw guide, fish Upper V-belt pulley 9.0 × 1, aluminum	
HN25	Hex nut, 3/8-16, plated	12251AL-DBL	Upper pulley, double-V, 9 × 1	
HN258	Hex nut, 3/8-16, SS	12251AL-7/8DBL	Pulley, $9 \times \frac{7}{8}$ , aluminum, double V	
HN30S	Hex nut, %-16, light jam, SS	130	Saw cleaner bracket, rear	
HN35S HNNL15S	Hex nut, %-16, heavy jam, SS Hex nut, ½-20 SS heavy nylok	131 14GP	Saw cleaner Hinge pin, 1½"	
HNNL25S	Hex nut, %-16 SS nylok	14GP-1	Hinge pin, $1\frac{1}{4}$ "	
LH663	Left hand saw guard	14R	Hinge receiver	
LW05S LW10S	Lock washer, #10, SS	14TH 14TP	Hinge pin holder	
LW103 LW15S	Lock washer, ¼, SS Lock washer, 5/6, SS	141P 14TP-1	Head door hinge pin, long Head door hinge pin, short	
LW20S	Lock washer, 3/8, regular, SS	14544	Grease seal, 1.5 I.D.	
LW258	Lock washer, heavy 3/8, SS	14545	Ret. ring, internal	
M55-G54313-U M65-L3605-B	Motor, 2HP 208/220/440-50/60-3, open Motor, 2HP, 115/230-60-1 TE	14548 14549	Grease seal	
M68-M3558T-B	Motor 2HP 208/220/230/440/460-60-3 TE	14549 14554	Lower bearing housing cap Compression spring	
M701-G57011-U	Motor, 3HP, 220/440-50/60-3, TE	14668	Motor pulley, double-V $6 \times 1\frac{1}{8}$	
M66-35M388X966-B		14669	Pulley, double-V, $5 \times 1\frac{1}{8}$	
M72-36L153Y129-B RHS09S	Motor, 3HP, 115/208/230-60-1, TE Round head screw, 10-32 × 1/8, SS	14730 14740	Belt, double-V, 44" 2/7M1120 Retaining ring, external 25mm	
RHS075S	Round head screw, $10-32 \times 7_8$ , 33 Round head screw, $8-32 \times 3/4$ , SS	14746	T-handle lock, lower removable wheel	
RHS10S	Round head screw, 10-32 × 3/4, SS	14779-1	Blade tension cap gauge	
RHS20S	Round head screw, $10-32 \times 1\frac{1}{8}$ , SS	14780	Blade tension adjustment housing	
RHS30S SSS05S	Round head screw, $\frac{1}{4}$ -20 × $\frac{7}{4}$ , SS Set screw, cup, 10-24 × $\frac{7}{4}$ , SS	14781 14782	Blade tension adjustment handle Blade tension screw, SS	
SSS15	Set screw, $\frac{5}{16}$ $18 \times \frac{5}{16}$ , cup point	14783	O-ring for blade tension screw	
SSS15S	Set screw. $\frac{5}{6}$ -18 $\times \frac{5}{6}$ . SS cup point	14785	Plastic washer	
SSS20	Set screw, $\frac{3}{8}$ -16 $\times \frac{3}{8}$ , knurled cup point	14786	O-ring for gauge	
\$1007 \$1120EZ	Channel bracket, SS (3334-4003 only) Channel, SS (3334-4003 only) EZ-Flow	14787 14789	Tension screw top collar O-ring, washer retention	
S112022 S116-22	Saw guide bar, 22" SS	151	Conduit, watertight, per inch	
S12214B	Side platter bracket	16 <b>Z</b>	Lower gde. brkt. saw cleaner holder	
S155-11	Meat carriage stop thumb screw, SS	16003-6	Lower wheel	
S155EZ-3 S16005E	Hex standoff – EZ Flow carriage Head, fixed, SS	16003DF-6 16003U-6	Lower wheel, double flange Upper wheel	
S16005E-PX	Fixed head, w/push button enclosure	16003UDF-6	Upper wheel, double flange	
S16005E-PX-1	Cover, push button enclosure	16015-11	Adj. motor base plate	
S16006E	Head door, fixed head, SS	16015-2	Motor base plate stud nut	
S16007 S16015-1	Channel bracket SS  Motor base plate adjusting stud, SS	16015-3 16015-4	Motor base plate wing nut Motor base plate lock washer	
S16120	Channel, SS	16015-4	Motor base plate lock washer  Motor base plate, 1PH	
S16217L	Left base panel, SS	16015-12	Motor base plate, special	
\$16217LTP	Left tapered base panel, SS	16112	Head door latch	
S16217R-3 S16239-4	Right hinged base door, SS Base, fixed head, SS (NSS)	16132 16133	Saw cleaner brkt holder rear Fastener knob, 4 point	
S16272	Meat gauge gear rack, SS	16154-CE	Table extension	
S16273	Meat gauge bracket SS (order AS16273)	16155	Meat carriage top & angle	
S16275	Meat gauge plate, SS	16155EZ	Meat carriage top & angle, EZ flow	

# PART NUMBERS AND DESCRIPTIONS (Cont.)

			10 (001111)		
Item No.	Description	Item No.	Description		
16155-13	Carriage stop angle SS	237	Up shaft castellated lock nut		
16155-2A	Meat carriage guide	238	Up shaft castld lock nut washer		
16155-2B	Meat carriage guide spacer 1/64	242R	Base door lock, right		
16155-2C	Meat carriage guide spacer $\frac{1}{32}$	247	Upper shaft		
16159	Meat carriage bearing	248	Upper wheel hub cap		
16163A	Platter hold down clip	249	Base door lock handle		
16163B	Platter neck guard, SS	252X	Shaft lock nut		
16200	Carriage stop movable	256P	Safety pusher plate		
16212	Platter latch	264-1	Meat gauge release hand wheel		
16220-1	Carriage stop fixed	264-1S	Hand wheel shim		
16226A-6	Switch button speed nut	264G	Hand wheel groove pin		
16232	Scrap bucket	267	Meat gauge rlease cotter pin		
16239-16	Base interlock plte, SS, England	270	Meat gauge release pin		
16251AL	Upper v-belt pulley $11.4 \times 1$	271AL	Meat gauge worm gear		
16251-11X78AL	Pulley, $11.4 \times \frac{7}{8}$ , aluminum	272-7-1	Knob, 3-point, $\frac{5}{16}$ -18		
16251-90X78AL	Pulley, $9 \times \frac{7}{8}$ , aluminum	272-8	Cap nut, $\frac{5}{16}$ -18, SS		
16278	Meat gauge arm	272-9	Hex bolt, $\frac{5}{16}$ -18 × 2, SS		
16296-2	Switch bracket, SS	272-12	Brass ball, $\frac{7}{32}$ dia.		
16301	Model & S/N plate	272-13	Hex bolt, $\frac{5}{16}$ -18 × 1 $\frac{1}{4}$		
16302HT	Saw blade, hard tooth, 124"	272-14	Castle nut, 5/16-18, SS		
16303	Lower shaft nut	277	Lower shaft key		
16313FH-305	Owner/operator manual	280	Motor shaft key		
16360	Lower bearing housing	300	Lower shaft woodruff key		
16361	Lower shaft	310	Waved washer		
16501	Rubber motor mount 1PH	311	Rubber bumper – fixed stop		
16502	Motor mount washer 1PH	311-1	Rubber bumper – movable stop		
16508	Motor mount star washer 1PH	324	Motor shim ½" thick		
16517	Inner race spacer	324A	Motor shim 1/8" thick		
16543	Lower shaft for removable wheel	331	Platter bracket bumper		
16547	Lower bearing housing	360A1	Angled grease fitting		
16560	Lower removable wheel	360B-1	Set screw, ½-13		
16560DF	Lower removable wheel, double flange	362	Lower bearing housing adjusting cap		
16662	Safety saw guard for SS head	374	Shell Cassida grease EPS-2		
16662-COS	Safety saw guard, Costco	375	Drive screw, nameplate		
17211-22	Finger lift shim .022	376	Drive screw $#10 \times \frac{1}{2}$		
17211-35	Finger lift shim .035	4-30AL	Motor pulley, single-V $5 \times \frac{3}{4}$ bore		
175-1-S	Thumb guard nut, SS	4-35AL	Motor pulley, single-V $5 \times \frac{74}{8}$ bore		
175-2-S	Thumb guard screw $\frac{1}{4}$ -20 × $\frac{1}{2}$	4-45AL	Motor pulley, single-V $6 \times \frac{3}{4}$ bore		
175S	Thumb guard, nylon	4-49AL	Motor pulley, single-V $6 \times \frac{7}{8}$ bore		
177	Nylon filler in stationary bar	415D	Stationary bar		
179	Wheel cleaner	513	Upper wheel hub cap gasket		
18120EZ-B3	Guide bar, EZ flow, T-shaped	530	Retaining ring		
193	Saw guide bar spring	55178	Plunger pin, blade tension handle		
194	Saw guide bar lock pad, brass	601	Upper guide bracket		
194KS-1	Saw guide bar lock knob	602B	Upper blade back up guide		
196-2	Blade tension spring, fixed head	602AFSC	Upper blade back up guide, narrow		
211	Finger lift bracket	605	Lower blade back up guide, narrow		
211A-291Q	Fastener knob, $\frac{3}{8}$ -16 × 4 point	653PC-E	Warning label, English		
221-52	V-belt, 52"	653PC-FR	Warning label, English Warning label, French		
228-2	Lower saw guide washer $\frac{1}{4} \times 1$ O.D.	653PC-SP	Warning label, French Warning label, Spanish		
230DL	Upper shaft seal, double lip	706SW	Saw warning notice tag – orange		
231DL	Lower shaft seal, double lip	7003W 708	Danger Exposed Blade decal		
231DL 234	Grease fitting upper wheel	800H-FRXN6A7-PX	Push button 3-pos. mom. in & out		
234	diease iitilig upper wheel	GOOT - I ION ION I - PX	r asir battori 5-pos. mom. iii 6 out		

## COMPLETE ASSEMBLIES FOR MODELS 3334FH & 3334-4003FH

Item No.	Description	Item No.	Description
AS1120EZ	Channel assembly (3334-4003) EZ Flow	A16132	Steel cleaner assembly – rear
AS16006E	Head door assembly	A16155	Meat carriage assembly
AS16120	Channel assembly	A16155EZ	Meat carriage assembly, EZ flow
AS16120EZ	Channel assembly, EZ Flow	A16163-1	Stationary platter assembly
AS16217R	Hinged base door – old style	A16200	Carriage stop assembly, movable
AS16217R-3	Hinged base door – new style	A16220-1	Carriage stop assembly, fixed
AS16273	Meat gauge bracket assembly	A16278	Meat gauge plate assembly, less release
AS16273-S275	Meat gauge assembly	A16360	Lower bearing housing assembly w/o wheel
AS16275	Meat gauge plate assembly	A16361	Lower shaft bearing assembly
AS16290	Cleaning unit stamping assembly	A16547	Lower bearing housing assembly for
AS16335XE	Upper hinge plate assembly, fixed head		removable wheel
AS415D	Stationary bar assembly, SS	A175S	Thumb guard assembly
A116-22-COS	Saw guide bar assembly, 22" Costco	A181155EZ	Meat carriage assembly (3334-4003) EZ Flow
A116-22SS	Saw guide bar assembly	A211-COS	Finger lift assembly, removable, special
A130	Steel cleaner assembly	A211-SS	Finger lift assembly, removable SS
A14787	Blade tension spring – screw assembly	A227	Upper bearing cup/cone assembly
A16Z	Guide bracket saw cleaner assembly	A247	Upper shaft and bearing assembly
A16003U-6	Upper wheel assembly, w/o hinge plate	A247-1	Upper shaft brg. assembly w/o wheel & spacer
A16003UDF-6	Upper wheel assembly, double flange, w/o	A249R	Base door lock assembly, right
	hinge plate	A262	Meat gauge release assembly
A16003U335-6E	Upper wheel assembly w/hinge plate	A295	Wheel cleaner assembly
A16003UDF335-6E	Upper wheel assembly w/hinge plate, double	A363	Lower bearing cup/cone assembly
	flange	A415D	Stationary bar assembly
A16112	Head door latch assembly	A602	Saw guide assembly, upper

# 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



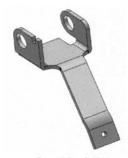
Item No. 177 NYLON FILLER ALL SAWS



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. S268



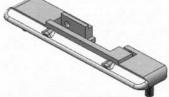
Item No. 179 WHEEL CLEANER ALL SAWS



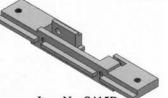
Item No. S244
WHEEL CLEANER ARM STUD
ALL SAWS



Item No. S229 WHEEL CLEANER ARM SPRING ALL SAWS



Item No. 415D STATIONARY BAR ALL SAWS



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

FILLER & GUIDE STUD ALL SAWS

- USE PARTS REPAIR KIT PART NO. 16700 -

## **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 Models 33334FH & 3334-4003FH 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.

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 cleaners (Item No. 131), blade backup guides (ItemNo's.602B, 605 & 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 entity 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. Co. for the authorized service entity (250 plus worldwide) in your area.

### THE BIRO MANUFACTURING COMPANY

1114 Main Street Marblehead, Ohio 43440-2099 Ph. 419-798-4451 Fax 419-798-9106

E-mail: service@birosaw.com Web: http://www.birosaw.com

ITEM NO.: 16313FH-305

PTCT: MD 3334FH-10-14-13 PPD