

# MODEL 1433FH FIXED HEAD POWER MEAT CUTTER OPERATING AND PARTS MANUAL



#### IMPORTANT NOTICE



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

#### 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 Install 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.

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

USE ONLY BIRO Part 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 you 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**

- 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 and remove 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. Replace the gear rack in mounting brackets. 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.



#### FINGERLIFT ASSEMBLY

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

#### WIRING MOTOR

- 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 cutters are wired for 220 volts unless otherwise specified. Be sure motor specifications (voltage, cycle, phase) match power supply line. Be sure line voltage is up to specifications.
- (3) Connect leads to machine in a manner that is approved by local electrical inspectors.
- (4) We recommend no less that No. 12 wire. If 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 installation.



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

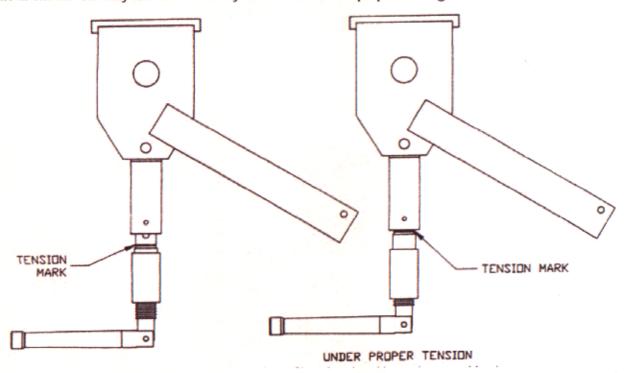
8. All machines are tested at the factory, but electrical phasing for proper rotation may not match your electrical supply. All Model 1433 have removable lower wheel. All machines with removable lower wheel must be first test run for proper phasing with the lower wheel removed. Failure to remove the lower wheel could cause the wheel to become dislodged during testing. All machine with removable lower wheel will display the following decal on the right hinged base door.





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

- 9. Placing blade on cutter: (Inpack 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.



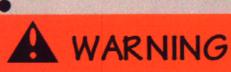
- 11. The stationary platter is placed on top of the base structure and held in place by two push-pull catch rods or platter hold down catches located in the base structure.
- 12. The sliding meat carriage assembly is installed on the channel. Start by turning the movable stop assembly clockwise. After the carriage assembly has been installed on the channel for operation, turn the movable stop assembly counterclockwise to lock.
- 13. Make sure the 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 now ready for trained operators to process product.
- 16 Contact your local Distributor or BIRO directly if you have any question or problems with the installation or operation of this machine.

#### WARNING LABELS FOR BIRO POWER CUTTERS





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



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 Slerra 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

#653PC-SP

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

A CAUTION

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

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



#### IMPORTANT

This saw has been electrically tested at the factory, but electrical phasing for porper roation may not match your electrical supply.

WITH LOWER SAW WHEEL REMOVED check rotation of shaft. Rotation must be counterclockwise

when facing shaft. Failure to confirm correct rotation could result in wheel dislodging. \*\*\* NOT TO SCALE\*\*\*

Item No. 708: ALL SAWS Attached to Saw Guard on Saw Guide Bar

Item No. 16716 Applied to Right Hinged Base Door on All Model 1433 and Model 3334 With Lower Removable Wheel ALWAYS
LOWER
GUARD
TO
HEIGHT
OF
PRODUCT



D<sub>X</sub> A<sub>p</sub>

N S

D

G E B



#### **MAINTENANCE**



#### TO AVOID SERIOUS PERSONAL INJURY

ALWAYS Turn Off, Unplug From Power Source And Perform Lockout/Tag Out Procedures To This Machine BEFORE Cleaning Or Servicing.

NEVER Tough This Machine Without Training And Authorization By Supervisor.

ALWAYS Keep Hands Clear Of Band Type Saw Blade And Other Moving Parts.

NEVER Bypass, Alter Or Modify This Equipment In Any Form From Its Original Condition.

PROMPTLY REPLACE Any Worn Or Illegible Warning Labels.

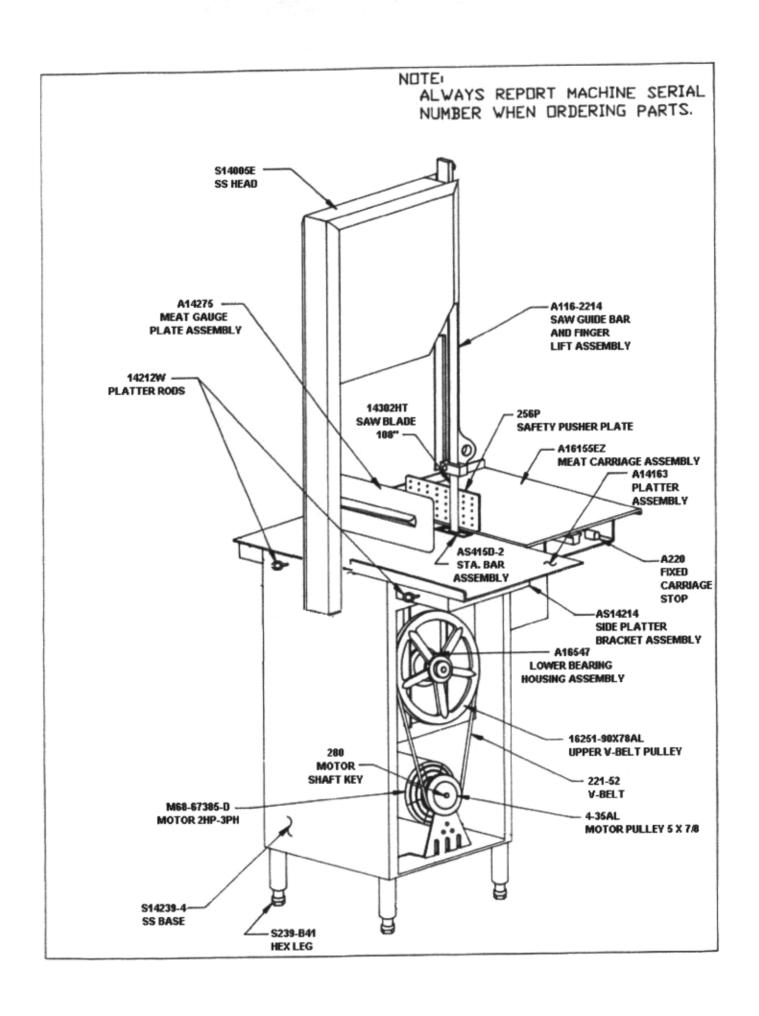
USE ONLY GENUINE BIRO Part And Accessories Properly Installed.

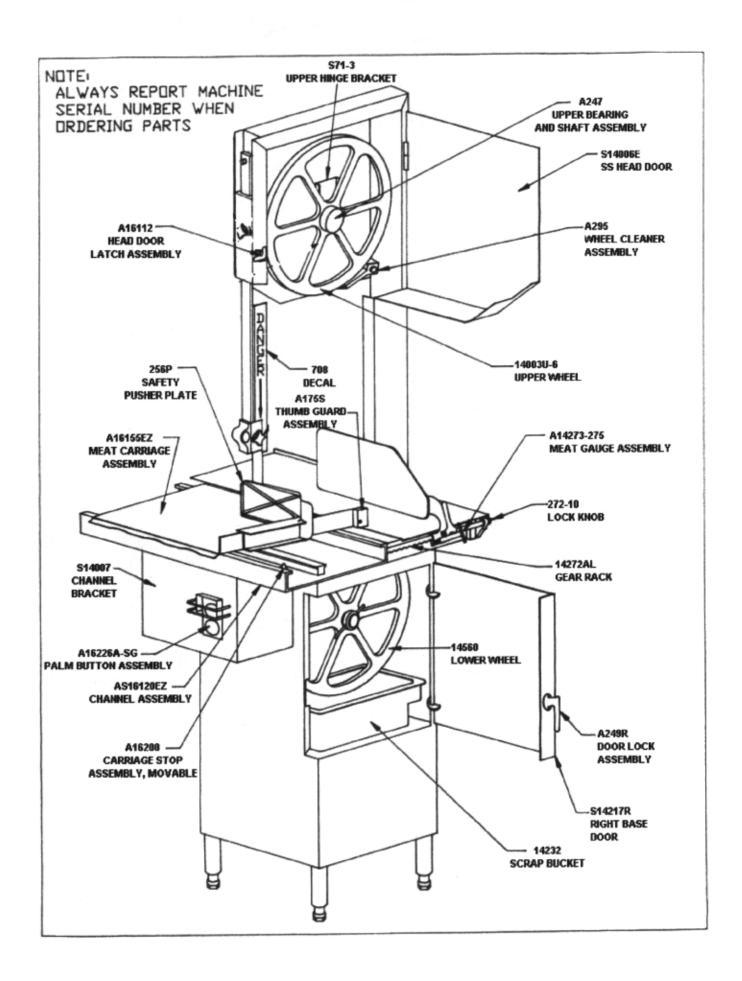
#### A. GENERAL

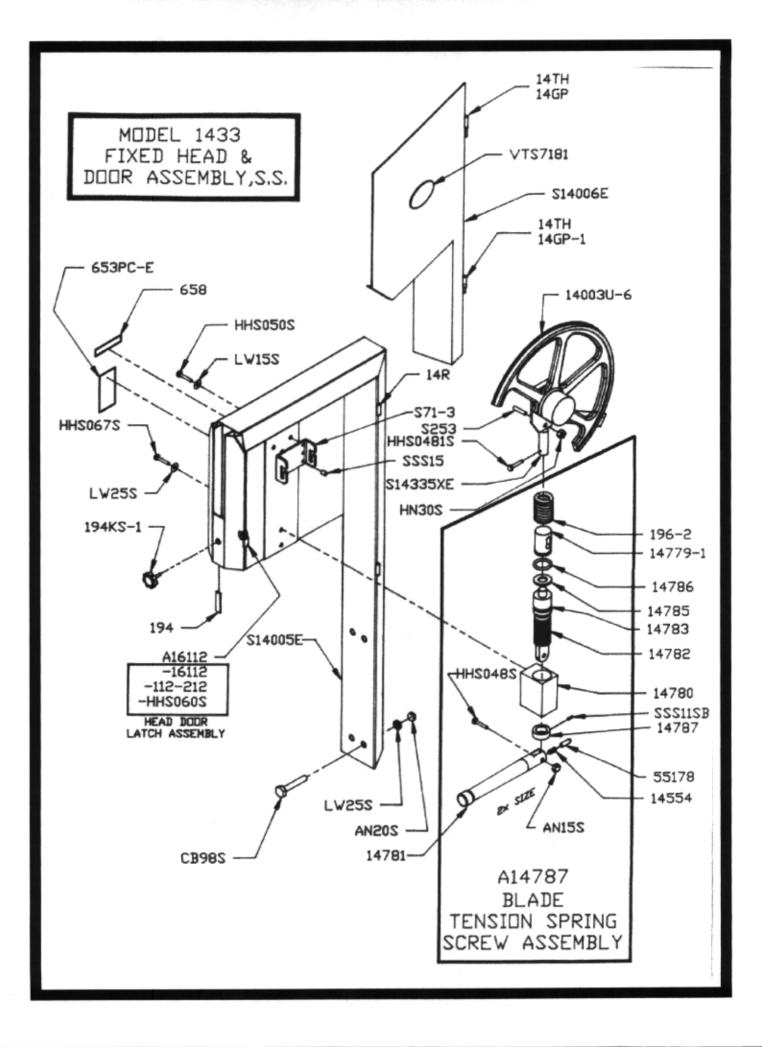
- Machine should be generally inspected every time it is cleaned (at least daily) to ensure that it is in good condition and has not been damaged or tampered with.
  - a. SAW WHEELS: Clean outer diameter grooves daily Check for cracks, gouges or wear on the flange and grooves.
  - b. WHEEL CLEANER ASSEMBLIES: Check condition of fiber cleaner, change every 4 weeks.
  - c. REMOVABLE FINGERLIFT ASSEMBLY: Check condition of saw guard, make sure mounting bolts are tight, the "DANGER EXPOSED BLADE" decal if 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, bock 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 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.
  - h. MEAT CARRIAGE ASSEMBLY: Check free movement through full range of travel. Check side to side slop, adjust as necessary. Check condition of and grease bearings, replace as necessary. Check condition of thumb guard, replace as necessary.
  - I. 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 is available to operator.

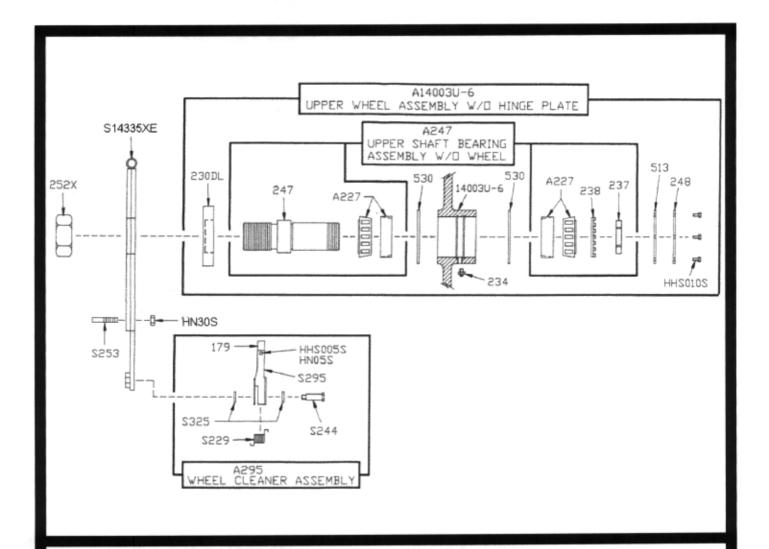
#### **B. LUBRICATION**

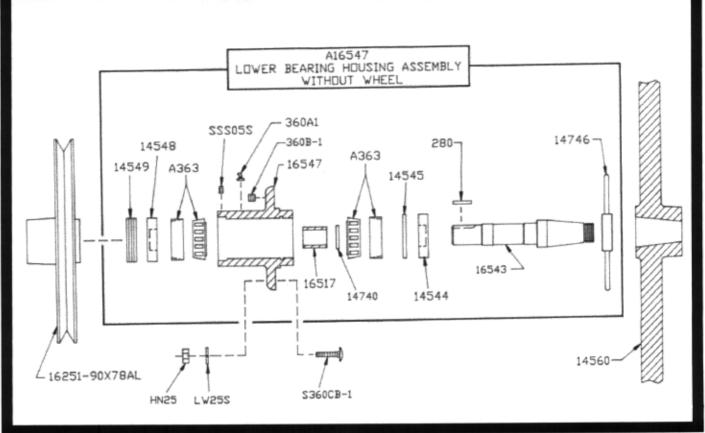
- 1. UPPER WHEEL BEARINGS: Grease every 4 months. Change grease every 12 months.
- 2. MEAT CARRIAGE BEARINGS: Grease every 4 weeks.
- SAW GUIDE BAR: Oil daily with food machine oil.
- MEAT GAUGE GEAR RACK: Oil daily with food machine oil.

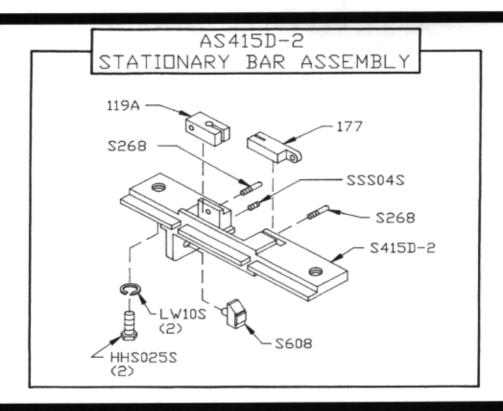


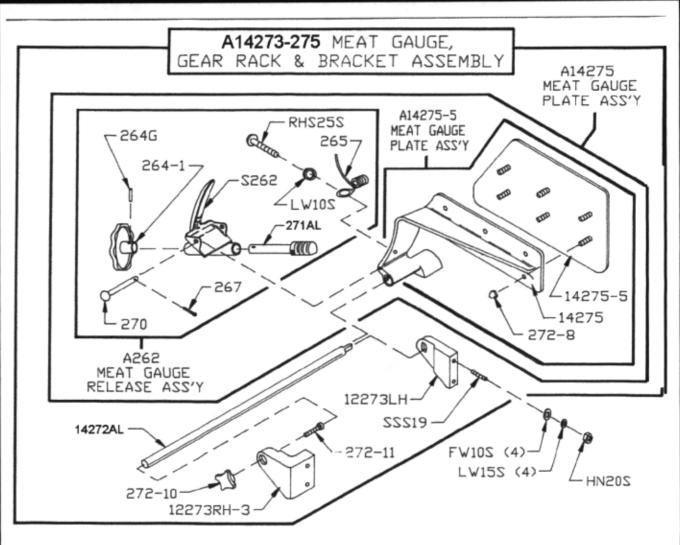


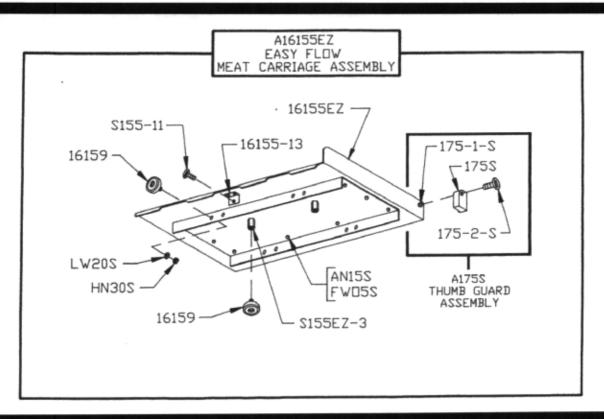


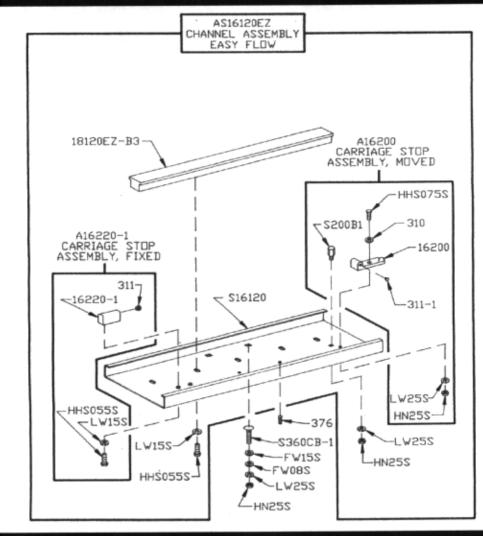


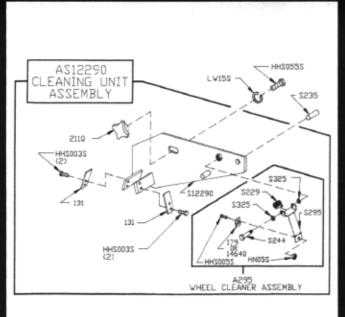


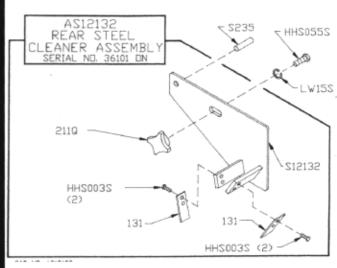


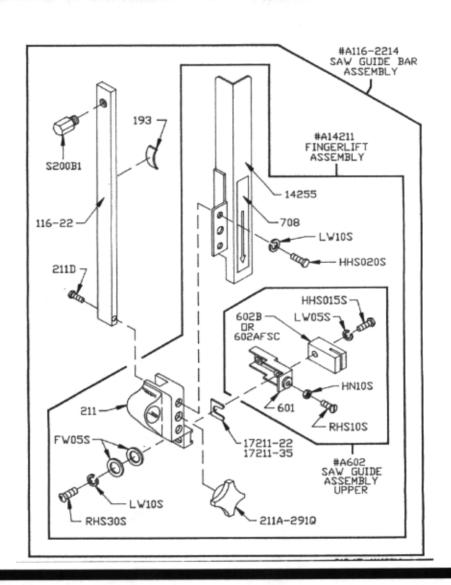






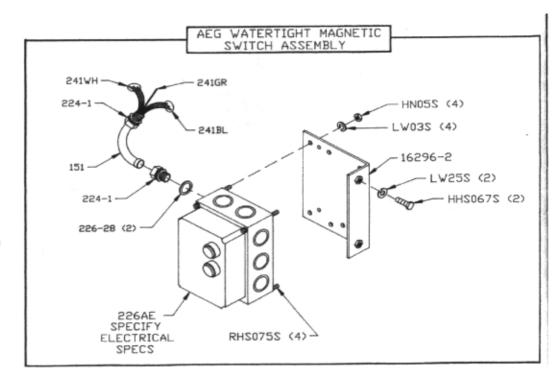


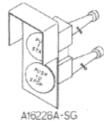




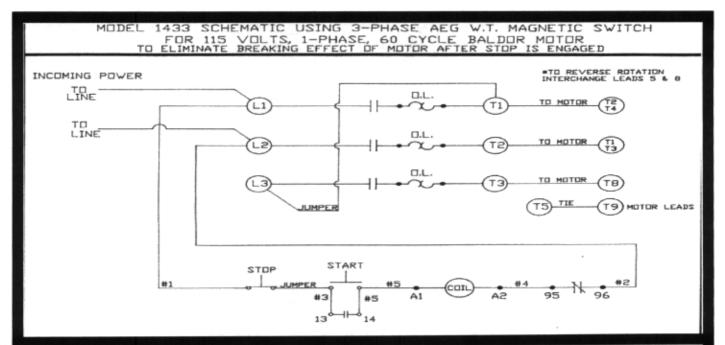
# WATERTIGHT MAGNETIC SWITCH ASSEMBLIES (AEG) INCLUDES MOUNTING BRACKET AND WIRES

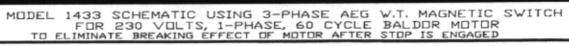
Item No.	Description
A22616AE-514	BAEG/PC-PB/C8; 2HP, 208/220/230-50/60-3
A22616AE-516	BAEG/PC-PB/E4; 2HP, 440/460-60-3
A22616AE-518	BAEG/PC-PB/D6; 2HP, 380/415-50-3
A22616AE-524	BAEG/PC-PB/A32; 2HP, 115-60-1
A22616AE-526	BAEG/PC-PB/C17; 2HP, 230-60-1
A22616AE-530	BAEG/PC-PB/F2.8; 2HP, 550-60-3

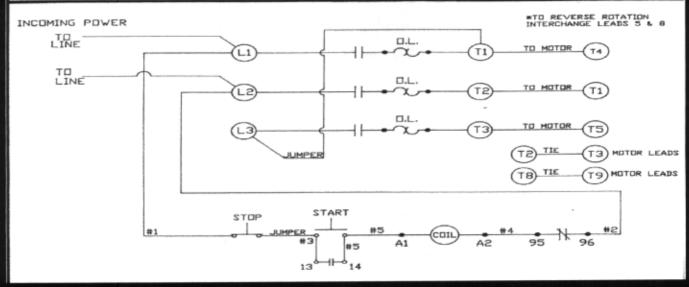




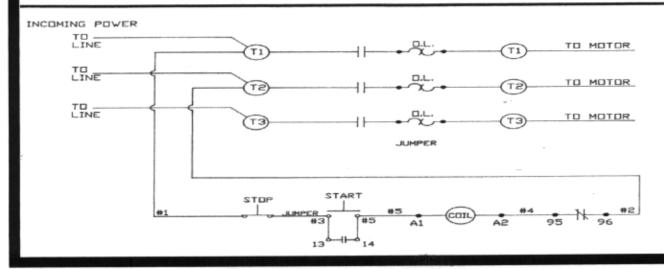
Item No.	Description	Item No.	Description
A16226A-SG	Green/red switch button assembly	226AE-OL23O	Overload, B17S-O (15-23A)
HHS070S	Hex head screw, 3/8-16 X 1, SS	226AE-OL32P	Overload, B17S-P (22-32A)
HN05S	Hex nut, 8-32, SS	226AE-A0	Contactor, SP17.10-A0, 110V
LW03S	Lock washer, #8, SS	226AE-C0	Contactor, SP17.10-C0, 208/220/230V
LW25S	Lock washer, 3/8, SS	226AE-D0	Contactor, SP17.10-D0, 380/415V
RHS075S	Round head screw, 8-32 X 3/4, SS	226AE-E0	Contactor, SP17.10-E0, 440/460V
14256	Junction box, plastic w/cover	226AE-F0	Contactor, SP17.10-F0, 550V
14257	Junction box, metal	226AE-514	BAEG/PC-PB/C8
14258	Junction box cover, metal	226AE-516	BAEG/PC-PB/E4
16296-2	Switch bracket, SS	226AE-518	BAEB/PC-PB/D6
151	Watertight conduit	226AE-524	BAEG/PC-PB/A32
224-1	Conduit connector, WT, 180 deg.	226AE-526	BAEG/PC-PB/C17
226AE-ENCL-PB	Enclosure with button holes	226AE-530	BAEG/PC-PB/F2.8
226AE-OL04I	Overload, B17S-I (2.8-4A)	226-28	Washer, 1-1/2 X 27/32, SS
226AE-OL06K	Overload, B17S-K (4-6A)	241BL	Wire, black, 12 GA. CSA & UL
226AE-OL08L	Overload, B17S-L (5.6-8A)	241GR	Wire, green, 12 GA. CSA & UL
226AE-OL12M	Overload, B17S-M (8-12A)	241RD	Wire, red, 12 GA. CSA & UL
226AE-OL17N	Overload, B17S-N (11-17A)	241WH	Wire, white, 12 GA. CSA & UL







MODEL 1433 SCHEMATIC USING 3-PHASE AEG W.T. MAGNETIC SWITCH FOR 230/460 VOLTS, 3-PHASE, 60 CYCLE MOTOR

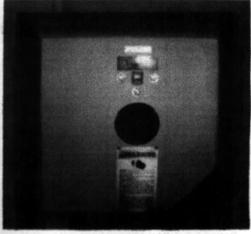


WARNING LABEL LOCATIONS ON MACHINE



ATTACH TO CHANNEL BRACKET NEXT TO **SWITCH CONTROL BUTTONS** 

ALWAYS



ATTACH ON HEAD STRUCTURE BELOW MODEL/SERIAL NUMBER TAG

LOWER TO HEIGHT OF

ATTACH TO SAW GUARD ON SAW **GUIDE BAR** 



WARNING



Authorized By Supervisor And Over 16 Years Old

16 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 Place of Product.

Product. DO NOT Use Saw if it is Altered, DO NOT Use Saw if it is Aftered, Damaged, Impropely Maintained, or if Warnings Are Begible or Missing ALWAYS Disconnect and Unglug from Main Power Source and Perform LOCKOUT/TAGOUT Before Cleaning or Servicing.

BLADE TENSION

P/N 710 "BLADE TENSION" DECAL ATTACH TO HEAD

DOOR AS SHOWN

P/N 708 "DANGER EXPOSED BLADE" DECAL

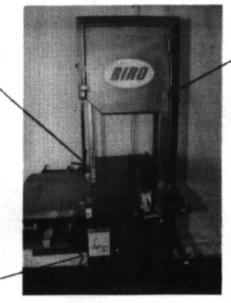


ATTENTION: ELECTRICIAN / SERVICE TECHNICIAN \*\*\* READ FIRST BEFORE STARTING POWER CLITTER \*\*\*



#### IMPORTANT

WITH LOWER SAW WHEEL REMOVED.



ATTACH TO HINGED RIGHT BASE DOOR

P/N 16716 CAUTION LABEL

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

Item No.	Description	Item No.	Description
AN 15S	Acorn nut, 1/4-20, SS	12273LH	Meat gauge bracket, left
AN20S	Acorn nut, 3/8-16, SS	12273RH-3	Meat gauge bracket, right
CB98S	Carriage bolt, 3/8-16 X 2-3/4, SS	131	Saw cleaner, SS
HHS048S	Hex head screw, 1/4-20 X 1-1/4, SS	14GP	Hinge pin, 1-1/2"
HHS0481S	Hex head screw, 1/4-20 X 1-1/2, SS	14GP-1	Hinge pin, 1-1/4"
HHS050S	Hex head screw, 5/16-18 X 5/8, SS	14R	Hinge receiver
HHS060S	Hex head screw, 5/16-18 X1, SS	14TH	Hinge pin holder
HHS067S	Hex head screw, 3/8-16 X 3/4, SS	14003U-6	Upper wheel, 14", 6 spoke
HN30S	Hex nut, 3/8-16 light jam, SS	14212W	Platter rod, SS
LW15S	Lock washer, 5/16, SS	14232	Scrap bucket
LW25S	Lock washer, 3/8, heavy, SS	14255	Saw guard on saw guide bar w/708 decal
M66-35M388S508-B		14272AL	Meat gauge gear rack
M66-35M388X966-B		14275	Meat gauge arm
M68-67385-D	Motor, 2HP, 208/220/230/440-50/60-3	14275-5	Meat gauge plate w/weld studs
SSS11SB	Set screw, 1/4-20 X 1/4, w/brass tip	14301	Model & S/N plate
SSS 15	Set screw, 5/16-18 X 5/16, cup point	14302	Saw blade, 108"
S12132	Cleaning unit rear	14313FH	Operating and parts manual
S12290	Front blade, wheel cleaner unit	14544	Grease seal, 1.5 OD
S14005E	Fixed head, SS	14545	Retaining ring, internal, 2-7/16 ID
S14005E	Head door for fixed head, SS	14548	Grease seal, 7/8 ID
S14000E S14007	Channel bracket, SS	14549	Lower bearing housing cap
S14007 S14214	Side platter bracket, SS	14554	Compression spring
S14214 S14217PD	Base door, left, bolt on, SS	14560	Lower wheel, removable, 14", 6 spoke
		14746	T-handle lock, lower wheel
S14217R	Base door, right, hinged, SS	14779-1	Blade tension cap gauge
S14239-4 S14335XE	Base, for fixed head, SS Upper hinge bracket, fixed head, SS	14780	Blade tension adjustment housing
S155-11	Meat carriage stop thumb screw, SS	14781	Blade tension adjustment handle
S155B-1	Meat carriage stop, welded	14782	Blade tension screw, SS
S155EZ-3	Hex stand off	14783	O-ring
S16120	Channel	14785	Plastic washer
S163F	Platter spacer weld button, SS	14786	O-ring for gauge
S200B1	Stop stud on saw guide bar	14787	Tension screw top collar
S229	Wheel cleaner arm spring, SS	151	Conduit, watertight, per inch
S235	Taper pin, 4 X 3/4, SS	16112	Head door latch
S239-B40	Base foot, welded, SS	16155EZ	Meat carriage, EZ flow
		16159	Carriage bearing
S239-B41 S244	Adjustable leg bolt, SS Wheel cleaner arm stud	16163B	Platter neck guard
		16200	Carriage stop w/bumper, movable
S253	Upper wheel aligning screw, SS	16220-1	Carriage stop w/bumper, fixed
S262	Meat gauge release handle, SS	16251-90X78AL	Upper v-belt pulley, 9 X 7/8
S265	Meat gauge release spring, SS	163A	Platter hold down clip
S268	Stationary bar headless screw, SS	16517	
S295	Wheel cleaner arm, SS		Inner race spacer Lower shaft
S325	Wheel cleaner arm washer, SS	16543	Lower shart Lower bearing housing
S360CB-1	Carriage bolt, 3/8-16 X 1-1/4, SS	16547 17211-22	Finger lift shim, .022
S415D-2	Stationary bar, SS	17211-22	Finger lift shim, .035
S416	Platter locator button, SS		Thumb screw, 1/4-20 X 1/2
S71-3	Upper wheel hinge bracket, fixed head	175-1-S 175-2-S	Thumb guard nut, SS
S608	Lower blade back-up guide w/carbide	175-2-3 1758	
VTS7181	BIRO logo oval decal	177	Thumb guard, nylon
112-212	Waved washer	177	Nylon filler in stationary bar Wheel cleaner
116-22	Saw guide bar, 22"	18120EZ-B3	Guide bar, EZ flow, T-shaped
119A	Saw guide in stationary bar	194	Saw guide bar lock pad, brass
119AFSC	Saw quide in stationary bar, fish	194	COW CHICK DOLICE'S DOC. DIOSS

### MODEL 1433FH PART NUMBERS AND DESCRIPTIONS (Cont.) MODEL & SERIAL NO. REQUIRED WHEN ORDERING PARTS

Item No.	Description	Item No.	Description
194KS-1	Saw guide bar lock knob	271AL	Meat gauge worm gear
196-2	Blade tension spring, fixed head	272-8	Cap nut, 5/16-18
211	Finger lift bracket	272-10	Meat gauge lock knob, 4 point
211A-291Q	Fastener knob, 4 point, 3/8-16	272-11	Lock knob socket screw
211D	Finger lift fastener bolt	280	Key
211Q	Fastener knob, 4 point, 5/16-18	310	Waved washer
212CP	Platter rod cotter pin	311	Rubber bumper for fixed stop
221-52	V-belt, 52"	311-1	Rubber bumper for movable stop
221-53	V-belt, 53"	324	Motor shim, 1/16"
224-1	Conduit connector, WT, 180 deg.	324A	Motor shim, 1/8"
225-1	Conduit connector, WT, 90 deg.	331	Platter bracket rubber bumper
225-2	Conduit connector, WT, 45 deg.	360A1	Angled grease fitting
226-28	Conduit connector washer	375	Nameplate drive screw
230DL	Upper shaft seal, double lip	376	Drive screw, #10 X 1/2, SS
234	Grease fitting	4-30AL	Motor pulley, 5 X 3/4, 60 HZ, ali.
237	Upper shaft castellated nut	4-35AL	Motor pulley, 5 X 7/8, 60 HZ, ali.
238	Upper shaft castellated lock washer	4-45AL	Motor pulley, 6 X 3/4, 50 HZ, ali.
242R	Base door lock, right	4-49AL	Motor pulley, 5 X 37/8, 50 HZ, ali.
247	Upper shaft	513	Upper wheel hub gasket
248	Upper wheel hub cap	55178	Plunger pin
249	Base door handle	601	Upper guide bracket
252X	Upper shaft lock nut	602B	Saw guide, upper
256P	Safety pusher plate	602AFSC	Saw guide, upper, fish
264-1	Meat gauge release hand wheel	653PC-E	Warning label, English
264G	Hand wheel groove pin	653PC-FR	Warning label, French
267	Meat gauge release cotter key	653PC-SP	Warning label, Spanish
270	Meat gauge release pin	658	Label, Made In USA
		708	Decal "Danger Exposed Blade"

#### COMPLETE ASSEMBLIES FOR MODEL 1433FH

Item No.	Description	Item No.	Description
AS12132	Rear cleaning unit assembly	A14275	Meat gauge plate assembly
AS12290	Front cleaning unit assembly	A14787	Blade tension spring-screw assembly
AS14005E	Head assembly	A16112	Head door latch assembly
AS14006E	Head door assembly	A16155EZ	Meat carriage assembly, EZ flow
AS14217R	Base door assembly, right	A16200	Carriage stop assembly, movable
AS16120EZ	Channel assembly, EZ flow	A16220-1	Carriage stop assembly, fixed
AS415D-2	Stationary bar assembly	A16547	Lower bearing housing assembly
A116-2214	Saw guide bar assembly	A227	Upper bearing cup/cone assembly
A14003U-6	Upper wheel assembly w/o hinge plate	A247	Upper shaft and bearing assembly
A14003U335-6	Upper wheel assembly w/hinge plate	A249R	Base door lock assembly, right
A14163	Stationary platter assembly	A262	Meat gauge release assembly
A14211	Finger lift assembly	A295	Wheel cleaner assembly
A14273-275-3	Meat gauge assembly	A363	Lower bearing cup/cone assembly

#### LIMITED WARRANTY

WARRANTY: The BIRO Manufacturing Company warrants that the Model 1433FH will be free from defects in material and workmanship under normal use and with recommended service. BIRO will replace defective parts, whish are covered by this limited warrant, 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 eighteen (18) months from date of Inspection/Demonstration advised on the returned Warranty Registration card, or two (2) years from original factory ship date, whichever occurs first, except as noted.

PARTS NOT COVERED BY THIS 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 (Item No's. 602B & S608), 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 (INDER THIS LIMITED WARRANTY) Biro is not responsible for electrical connection of equipment, adjustments to switch gear 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 and recommended service.

EXCLUSION OF WARRANTIES AND LIMITATION OF REMEDIES: Biro gives now 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 CONSEQUETIAL OR INCIDENTAL DAMAGES, EXPENSES, OR LOSSES. THE REMEDIES PROVIDED IN THIS BIRO LIMITED WARRANTY ARE THE PURCHASER'S SOLE AND EXCLUSIVE REMEDIES AGAINST BIRO.

**REGISTRATION CARDS:** You must sign, date and complete 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:

- Contact the agency from whom you purchased the machine.
- 2. Consult the vellow pages of the phone directory for the nearest authorized dealer.
- Of call BIRO Service Department (419) 798-4451 who will put you in contact with the nearest authorized service agency.

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