

# MODEL 3334FH & 3334-4003FH 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.

### NOTICE TO OWNERS AND OPERATORS

BIRO 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 you supervisor.

This Manual contains a number of safe practices in the SAFETY TIPS section. Additional warnings are placed throughout the Manual. Warning 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 machine. If any warning label, wall chart, of Manual becomes misplaces, damaged, or illegible, please contact your nearest Authorized 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 all 3334FH & 3334-4003FH Power Meat Cutters with Fixed Head.

### **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 Operating And Parts Manual BEFORE Operating, Cleaning Or Servicing.

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

**ONLY** Use A Qualified Electrician To Install According To Local Building Codes: Machines **MUST** Be Properly Grounded.

**ONLY** Install On Level, Non-Skid Surface In A Clean Well-Lighted Area Away From Children And Visitors.

**DO NOT** Attempt To Operate This Machine Until It Has Been Inspected And Demonstrated By The Seller—Recognized **BIRO** Representative.

**DO NOT** Alter OR Modify This Machine In Any Way From Its Original Form. This Machine In Its Original Form Meets The Intent Of O.S.H.A. Applicable Standards.

**NEVER** Operate With Saw Guard On Saw Guide Bar In The Raised Position Or The Saw Guard Removed From The Saw Guide Bar.

ALWAYS Adjust The Saw Guide Bar With Saw Guard To Within 1/2" Of Product To Be Cut.

**ALWAYS** Use Supplied Safety End Cut Pusher Plate For Smaller Products Or The Last Cuts Of Product.

DO NOT Use This Machine For Non-Food Products.

DO NOT Use This Machine To Cut Pigs Feet.

DO NOT Wear Gloves While Operating.

**ALWAYS** Turn Off, Unplug From Power Source And Perform Lockout/Tag out Procedures To This Machine **BEFORE** Removing Shrouds, Removable Guards, Cover, 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 Part 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 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.

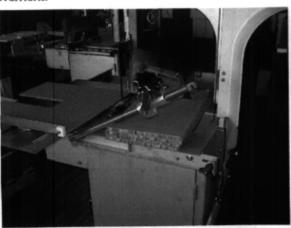
USE ONLY BIRO Part And Accessories Properly Installed.

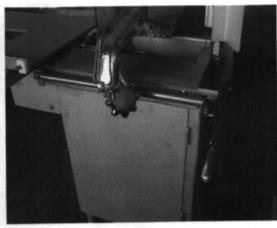
- Read this Manual thoroughly before installation and operation. Do not proceed with installation and operation if you
  have any questions or do not understand anything in this Manual. Contact you local Distributor or Biro first.
- 2. Install machine on a level, solid, non-skid surface in a well-lighted work area away from children and visitors.



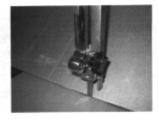
### ALWAYS LEVEL MACHINE BEFORE USING

- 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. 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.



### FINGERLIFT ASSEMBLY

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

#### 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 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.

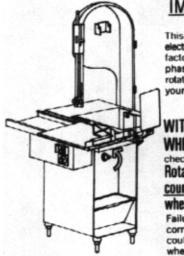


NOTE TO OWNER AND ELECTRICIAN: IF THIS MACHINE IS NOT CORD AND PLUG CONNECTED TO THE ELECTRICAL SUPPLY SOURCE, THEN IT SHOULD BE EQUIPED WITH, OR CONNECTED TO A LOCKABLE, MANUALLY-OPERATED DISCONNECT SWITCH (OSHA 1010.147).

8. All machines are tested at the factory, but electrical phasing for proper rotation may not match your electrical supply. Some Model 3334 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 machine with removable lower wheel will display the following decal on the right hinged base door.



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



### **IMPORTANT**

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

### WITH LOWER SAW WHEEL REMOVED,

check rotation of shaft Rotation must be counterclockwise when facing shaft.

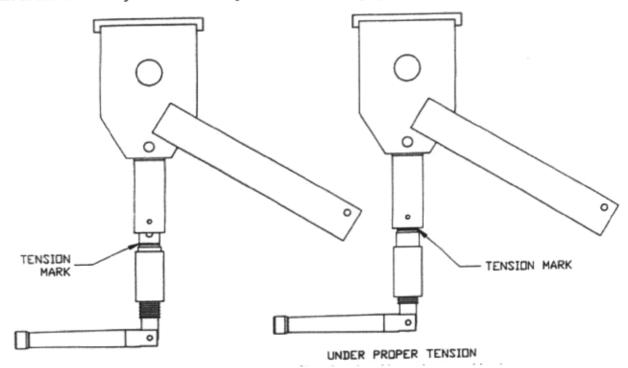
Failure to confirm correct rotation could result in the wheel dislodging.

NOT TO SCALE



### 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.



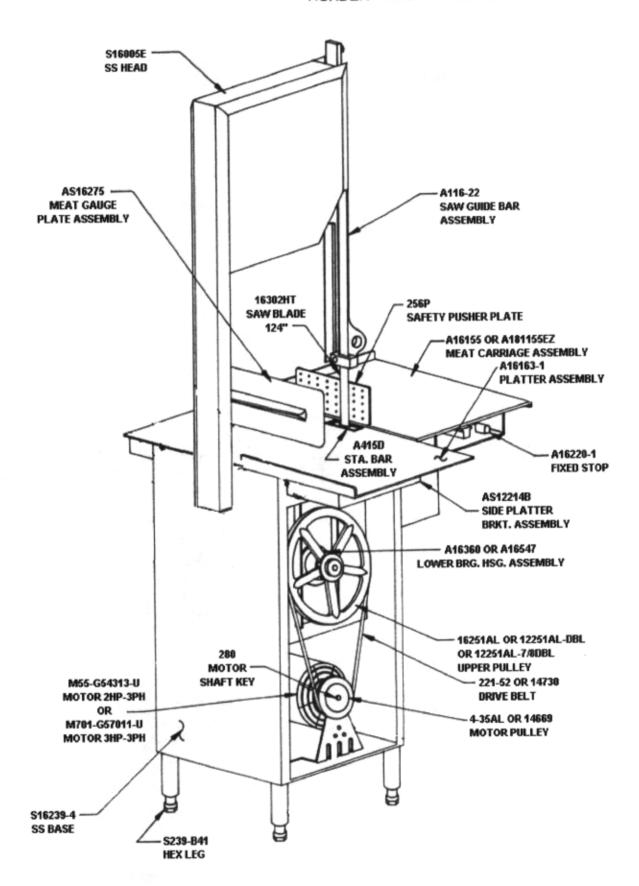
- 11. The stationary platter is placed on top of the base structure and held in place by two platter hold down catches located in the base structure.
- 12. The sliding meat carriage assembly is installed on the channel. Start by turning the movable stop assembly clockwise. After the carriage assembly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

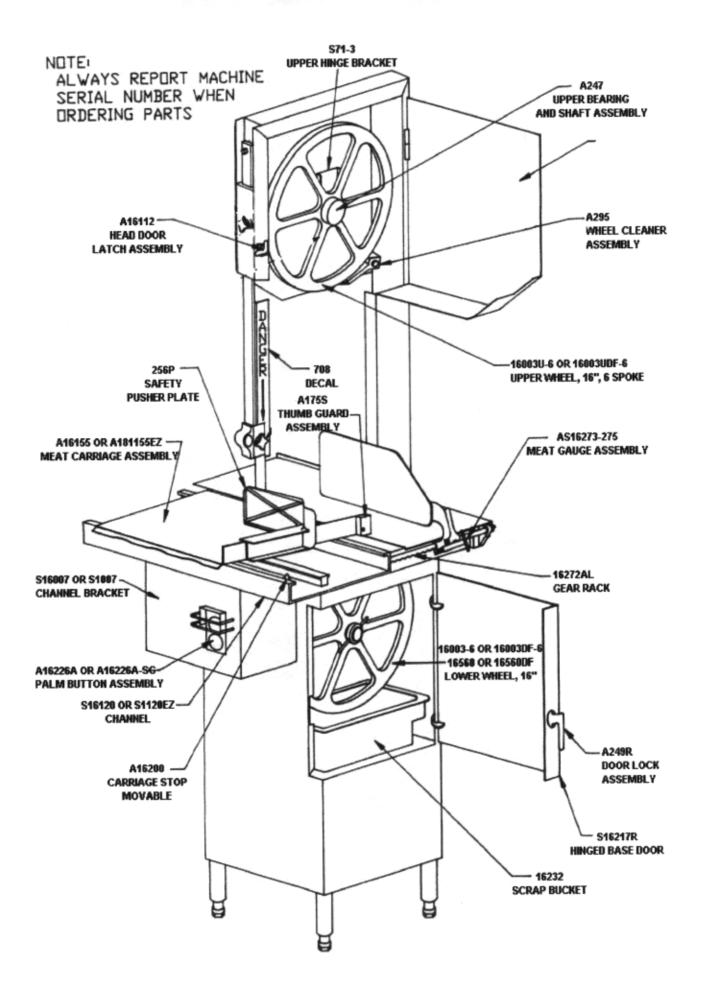


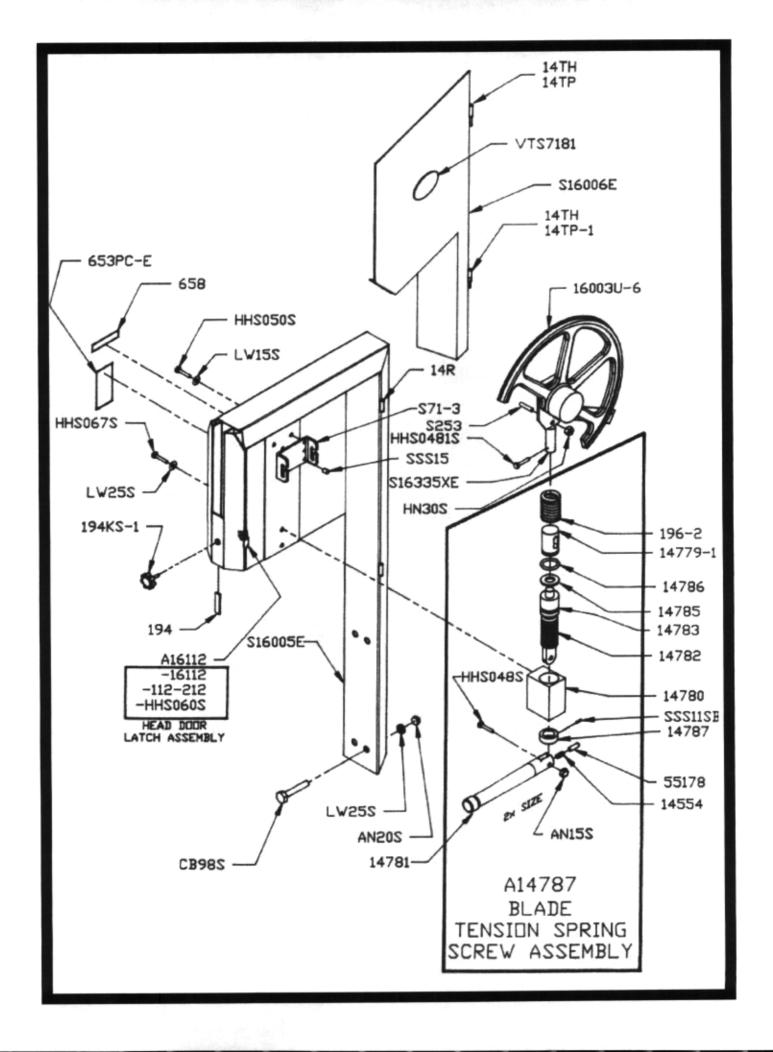
### KEEP HANDS CLEAR OF SHARP MOVING BAND TYPE SAW BLADE.

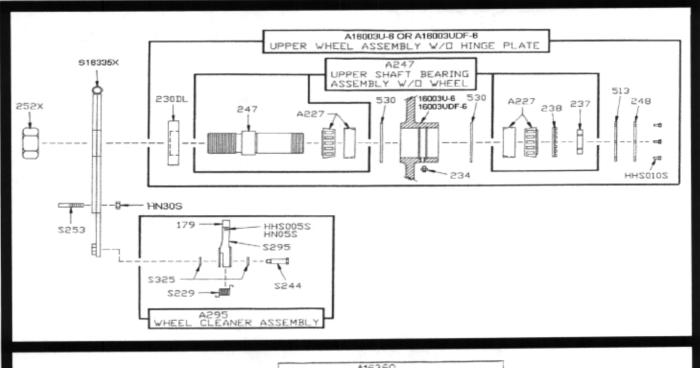
- 14. Push the start button. Check for proper phasing of the motor and proper tracking of the saw blade in the saw guides. Back of the blade should be centered in the lower saw guide in the stationary bar. Blade should be moving down through the guide. Push the stop button to stop the machine.
- 15. 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.

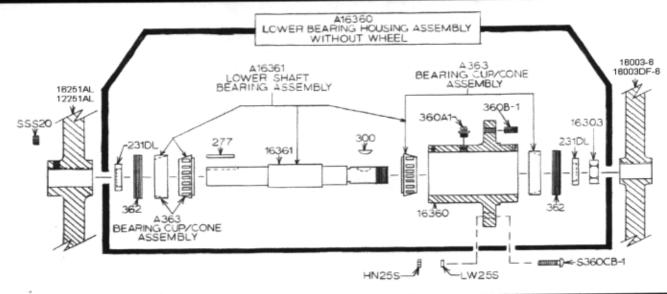
ALWAYS REPORT MACHINE SERIAL NUMBER WHEN ORDERING PARTS.

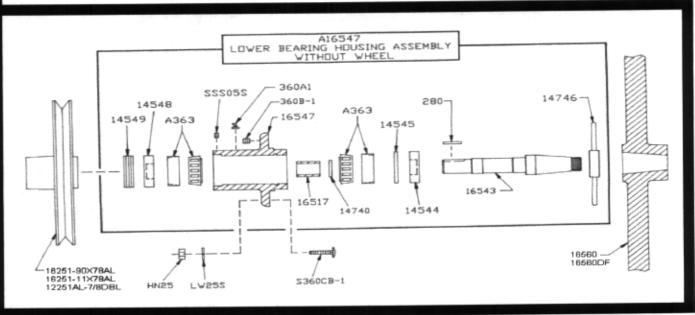


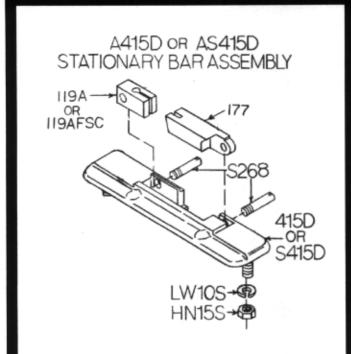


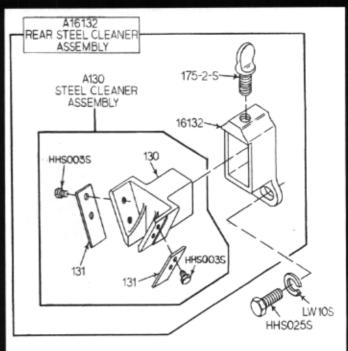


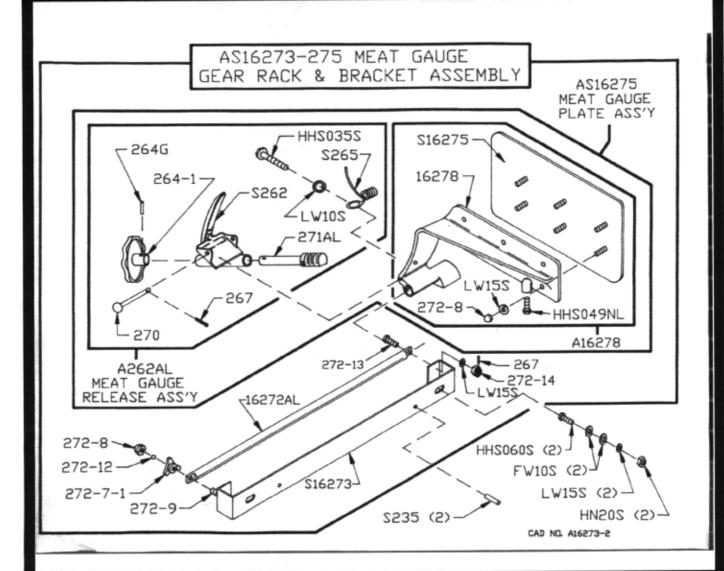


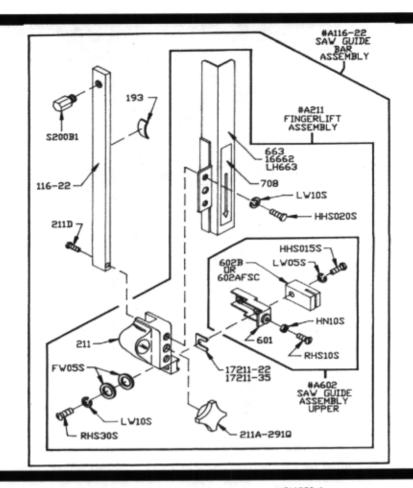


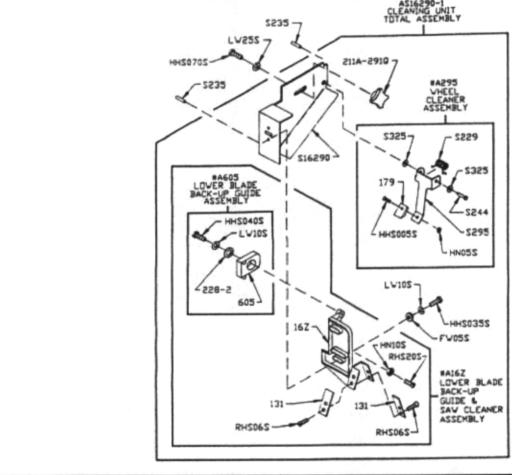




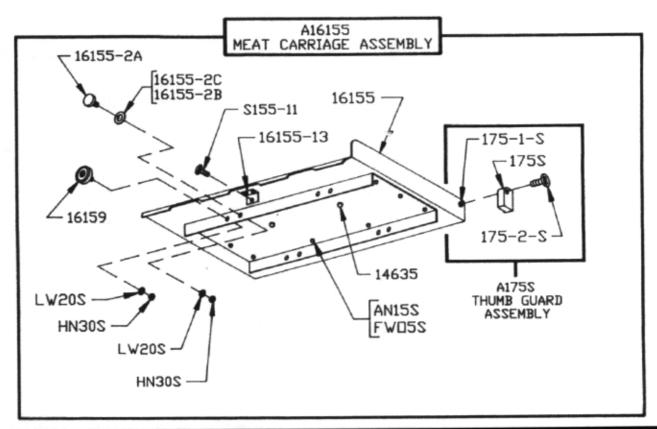


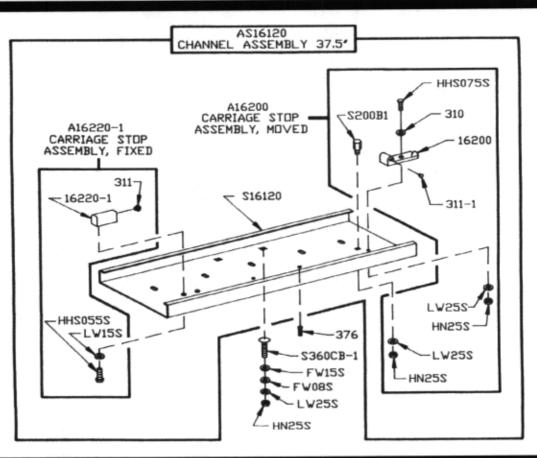




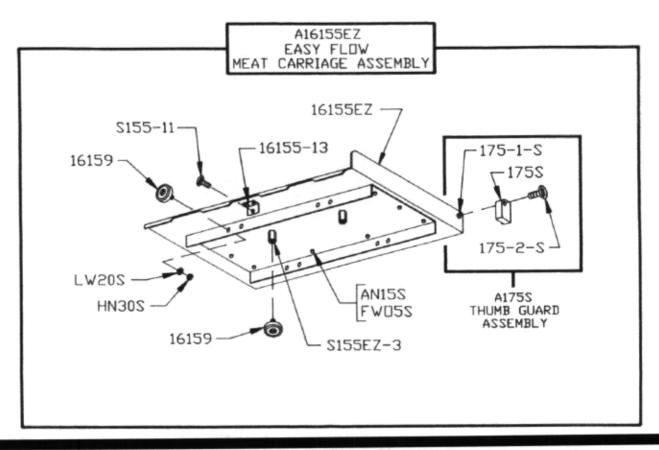


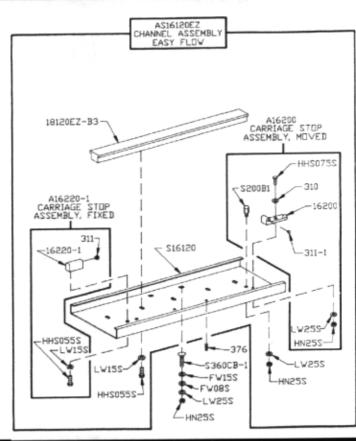
### STANDARD 3334 MEAT CARRIAGE & CHANNEL



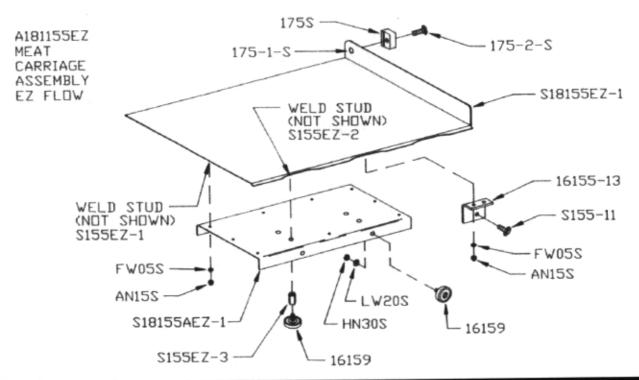


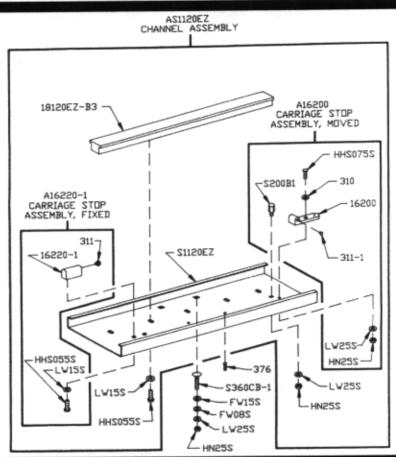
### OPTIONAL 3334 EZ FLOW MEAT CARRIAGE & CHANNEL



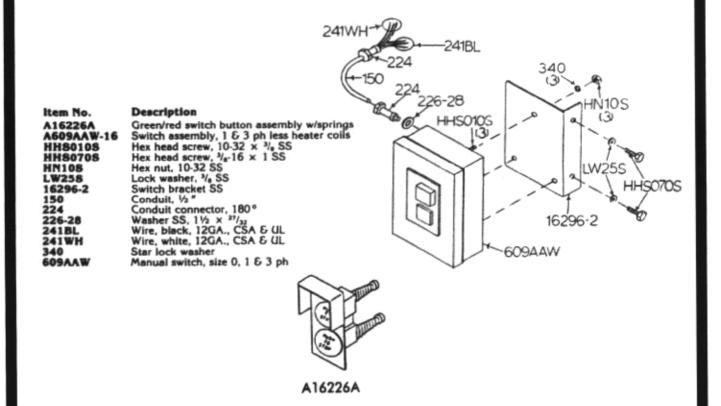


### STANDARD 3334-4003 EZ FLOW MEAT CARRIAGE & CHANNEL ALSO OPTIONAL ON ALL OTHER 3334

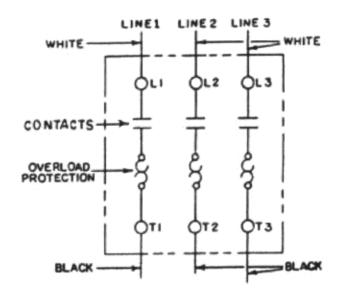




### A609AAW-16 SWITCH ASSEMBLY



### **609AAW**



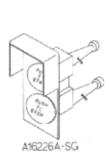
## WATERTIGHT MAGNETIC SWITCH ASSEMBLIES (AEG) INCLUDES MOUNTING BRACKET AND WIRES

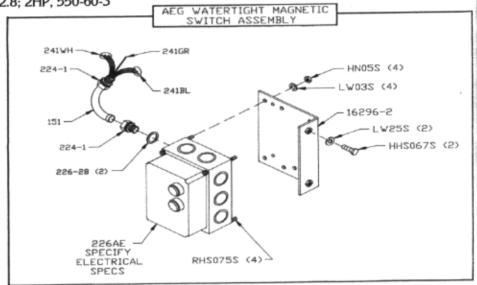
item mo.	Description
A22616AE-514	BAEG/PC-PB/C8; 2HP, 208/220/230-
	50/60-3
A22616AE-516	BAEG/PC-PB/E4; 2HP, 440/460-60-3
A22616AE-518	BAEG/PC-PB/D6; 2HP, 380/415-50-3
A22616AE-522	BAEG/PC-PB/C12; 3HP, 208/220/230-
	50/60-1
A22616AE-524	BAEG/PC-PB/A32; 2HP, 115-60-1
A22616AE-526	BAEG/PC-PB/C17; 2HP, 230-60-1
A22616AE-530	BAEG/PC-PB/F2.8; 2HP, 550-60-3

Description

Item No.

Item No.	Description
A22616AE-534	BAEG/PC-PB/E6; 3HP, 440/460-60-3
A22616AE-536	BAEG/PC-PB/D8; 3HP, 38-/415-50-3
A22616AE-538	BAEG/PC-PB/F4; 3HP, 550-60-3
A22616AE-540	BAEG/PC-PB/C23; 5HP, 208/220/230-
	50/60-3
A22616AE-543	BAEG/PC-PB/E8; 5HP, 440-60-3
A22616AE-546	BAEG/PC-PB/D12; 5HP, 38-/415-50-3
A22616AE-548	BAEG/PC-PB/F8; 5HP, 550-60-3

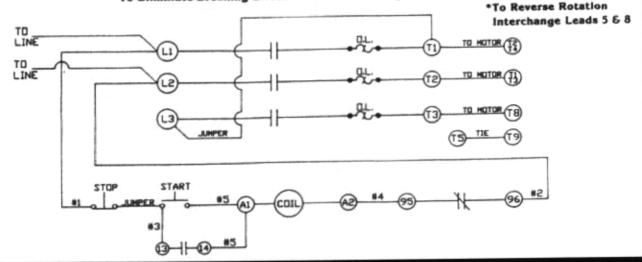




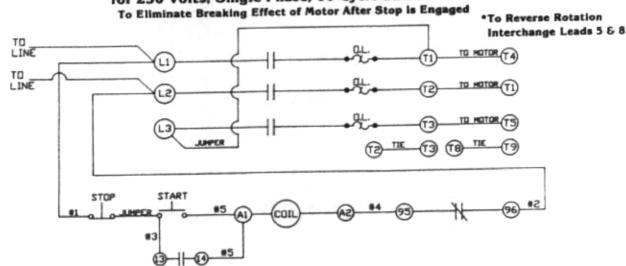
Item No.	Description	Item No.	Description
A16226A-SG	Green/red switch button assembly	226AE-D0	Contactor, SP17.10-D0, 380/415V
HHS070S	Hex head screw, 3/8-16 X 1, SS	226AE-E0	Contactor, SP17.10-E0, 440/460V
HN05S	Hex nut, 8-32, SS	226AE-F0	Contactor, SP17.10-F0, 550V
LW03S	Lock washer, #8, SS	226AE-514	BAEG/PC-PB/C8
LW25S	Lock washer, 3/8, SS	226AE-516	BAEG/PC-PB/E4
RHS075S	Round head screw, 8-32 X 3/4, SS	226AE-518	BAEG/PC-PB/D6
14256	Junction box, plastic w/cover	226AE-522	BARG/PC-PB/C12
14257	Junction box, metal	226AE-524	BAEG/PC-PB/A32
14258	Junction box cover, metal	226AE-526	BAEG/PC-PB/C17
16296-2	Switch bracket, SS	226AE-530	BAEG/PC-PB/F2.8
151	Watertight conduit	226AE-534	BAEG/PC-PB/E6
224-1	Conduit connector, WT, 180 deg.	226AE-536	BAEG/PC-PB/D8
226AE-ENCL-PB	Enclosure with button holes	226AE-538	BAEG/PC-PB/F4
226AE-OL02H	Overload, B17S-H (1.8-2.8A)	226AE-540	BAEG/PC-PB/C23
226AE-OL04I	Overload, B17S-I (2.8-4A)	226AE-543	BAEG/PC-PB/E8
226AE-OL06K	Overload, B17S-K (4-6A)	226AE-546	BAEG/PC-PB/D12
226AE-OL08L	Overload, B17S-L (5.6-8A)	226AE-548	BAEG/PC-PB/F8
226AE-OL12M	Overload, B17S-M (8-12A)	226-28	Washer, 1-1/2 X 27/32, SS
226AE-OL17N	Overload, B17S-N (11-17A)	241BL	Wire, black, 12 GA. CSA & UL
226AE-OL23O	Overload, B17S-O (15-23A)	241GR	Wire, green, 12 GA. CSA & UL
226AE-OL32P	Overload, B17S-P (22-32A)	241RD	Wire, red, 12 GA. CSA & UL
226AE-A0	Contactor, SP17.10-A0, 110V	241WH	Wire, white, 12 GA. CSA & UL
226AE-C0	Contactor, SP17.10-C0, 208/220/230V		

### Model 3334 Schematic Using 3PH AEG W.T. Magnetic Switch for 115 Volts, Single Phase, 60 Cycle Baldor Motor

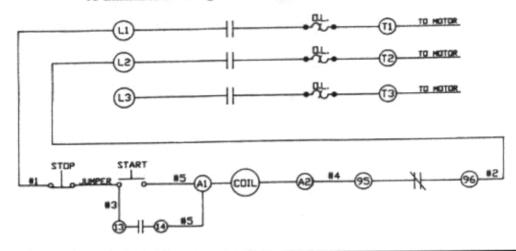
To Eliminate Breaking Effect of Motor After Stop is Engaged



### Model 3334 Schematic Using 3PH AEG W.T. Magnetic Switch for 230 Volts, Single Phase, 60 Cycle Baldor Motor



### Model 3334 Schematic Using 3PH AEG W.T. Magnetic Switch for 220/440 Volts, Three Phase, 60 Cycle Baldor Motor To Eliminate Breaking Effect of Motor After Stop is Engaged



WARNING LABEL LOCATIONS ON MACHINE



ATTACH TO CHANNEL BRACKET NEXT TO SWITCH CONTROL BUTTONS

ALWAYS LOWER GUARD



ATTACH ON HEAD STRUCTURE BELOW MODEL/SERIAL NUMBER TAG

D

TO HEIGHT OF PRODUC

ATTACH TO SAW GUARD ON SAW GUIDE BAR D X A O S E C A O E C R

**WARNING** 

DO NOT Use Unless Trained and Authorized By Supervisor And Over 18 Years Old

18 Years Old Read Operation Manual Thoroughly Before Operating ALWAYS Keep Hands Clear of Saw Blade and Other Moving Parts. Turn Off Saw when Firsthed Cutting. ALWAYS Keep Blade Guard Adjusted to 12" Above the Product being Cut. ALWAYS Use End Cut Pusher Plate When Cutting Smaller Piece of Product.

Product.
DO NOT Use Saw if it is Altered,
DO NOT Use Saw if it is Altered,
Damaged, Improperly Maintained, or
If Warnings Are lilegible or Missing.
ALWAYS Disconnect and Unplug from
Mais Power Source and Perforit
LOCKOUT!

#653PC-6

BLADE TENSION

SAMELY SE MOVED.

P/N 710 "BLADE

TENSION" DECAL ATTACH TO HEAD DOOR AS SHOWN

P/N 708 "DANGER EXPOSED BLADE" DECAL



"" 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 proper rotation may not make?

WITH LOWER SAW WHEEL REMOVED, check retation of shaft. Rotation must be counterclockwise when facing shaft. Failure to confirm correct rotation



ATTACH TO HINGED RIGHT BASE DOOR

P/N 16716 CAUTION LABEL

### MODEL 3334FH & 3334-4003FH PART NUMBERS AND DESCRIPTIONS

### MODEL & SERIAL NO. REQUIRED WHEN ORDERING PARTS

	Description	Item No.	Description
Item No.	Description	S16015-1	Motor base plate adj. stud, SS
AN15S	Acom nut, 1/4-20, SS		Channel
AN20S	Acom nut, 3/8-16, SS	S16120	Left base panel, SS
CB98S	Carriage bolt, 3/8-16 X 2-3/4, SS	S16217L	Left tapered base panel, SS
FW05S	Flat washer, 1/4, SS	S16217LTP	
FW08S	Flat washer, 3/8ID X 1"OD, SS	S16217R-3	Right hinged base door, SS
FW10S	Flat washer, 5/16, SS	S16239-4	Base, fixed head, SS
FW15S	Flat washer, 1/2, SS	S16273	Meat gauge bracket, SS
HHS003S	Hex head screw, 8-32 X 1/4, SS	S16275	Meat gauge plate, SS
HHS005S	Hex head screw, 10-32 X 3/8, SS	S16290	Cleaning unit, SS
HHS010S	Hex head screw, 8-32 X 1/2, SS	S16335XE	Upper wheel hinge plate, SS
HHS015S	Hex head screw, 10-32 X 7/8, SS	S163F	Platter spacer weld button, SS
HHS020S	Hex head screw, 1/4-20 X 3/8, SS	S181155EZ	Meat carriage, EZ flow, (3334-4003)
HHS025S	Hex head screw, 1/4-20 X 1/2, SS	S200B1	Stop stud on saw guide bar
HHS035S	Hex head screw, 1/4-20 X 5/8, SS	S229	Wheel cleaner arm spring, SS
HHS040S	Hex head screw, 1/4-20 X 3/4, SS	S235	Taper pin, 4 X 3/4, SS
HHS048S	Hex head screw, 1/4-20 X 1-1/4, SS	S239-B40	Base foot, welded, SS
HHS0481S	Hex head screw, 1/4-20 X 1-1/2, SS	S239-B41	Adjustable leg bolt, SS
HHS049NL	Hex head screw, 5/16-18 X 1/2, nylon	S244	Wheel cleaner arm stud
HHS050S	Hex head screw, 5/16-18 X 5/8, SS	S253	Upper wheel aligning screw, SS
HHS055S	Hex head screw, 5/16-18 X 3/4, SS	S262	Meat gauge release handle, SS
HHS060S	Hex head screw, 5/16-18 X1, SS	S265	Meat gauge release spring, SS
HHS067S	Hex head screw, 3/8-16 X 3/4, SS	S268	Stationary bar headless screw, SS
HHS070S	Hex head screw, 3/8-16 X 1, SS	S295	Wheel cleaner arm, SS
HHS075S	Hex head screw, 3/8-16 X 1-1/4, SS	S325	Wheel cleaner arm washer, SS
	Hex nut, 8-32, SS	S360CB-1	Carriage bolt, 3/8-16 X 1-1/4, SS
HN05S	Hex nut, 10-32, SS	S415D	Stationary bar, SS
HN10S		S416	Platter locator button, SS
HN15S	Hex nut, 1/4-20, SS	S71-3	Upper wheel hinge bracket, fixed head
HN20S	Hex nut, 5/16-18, SS	VTS7181	BIRO logo oval decal
HN25	Hex nut, 3/8-16, plated	112-212	Waved washer
HN25S	Hex nut, 3/8-16, SS	116-22	Saw guide bar, 22"
HN30S	Hex nut, 3/8-16 light jam, SS		Saw guide bar, 22 Saw guide in stationary bar
HN35S	Hex nut, 3/8-16, heavy jam, SS	119A	Saw guide in stationary bar, fish
LW05S	Lock washer, #10, SS	119AFSC	Upper pulley, double-V, 9 X 1
LW10S	Lock washer, 1/4, SS	12251AL-DBL	
LW15S	Lock washer, 5/16, SS	12251AL-7/8DBL	Upper Pulley, double-V, 9 X 7/8
LW20S	Lock washer, 3/8, light, SS	131	Saw cleaner
LW25S	Lock washer, 3/8, heavy, SS	14GP	Hinge pin, 1-1/2"
M55-G54313-U	Motor, 2HP, 208/220/440-50/60-3 open	14GP-1	Hinge pin, 1-1/4"
M65-L3605-B	Motor, 2HP, 115/230-60-1 TE	14R	Hinge receiver
M66-L1322T-B	Motor, 2HP, 115/230-60-1, open	14TH	Hinge pin holder
M68-67385-D	Motor, 2HP, 208/220/440/50/60-3 TE	14544	Grease seal, 1.5 O.D.
M701-G57011-U	Motor, 3HP, 208/230/440-50/60-3 TE	14545	Retaining ring, internal, 2-7/16 I.D.
SSS11SB	Set screw, 1/4-20 X 1/4, w/brass tip	14548	Grease seal, 7/8 I.D.
SSS15	Set screw, 5/16-18 X 5/16, cup point	14549	Lower bearing housing cap
S1007	Channel bracket, SS (3334-4003)	14554	Compression spring
S1120EZ	Channel, SS (3334-4003)	14669	Pulley, double-V, 5 X 1-1/8
S12214B	Side platter bracket	14730	Belt, double-V, 2/7M1120
S155-11	Meat carriage stop thumb screw, SS	14746	T-handle lock, lower wheel
S155B-1	Meat carriage stop, welded	14779-1	Blade tension cap gauge
S155EZ-3	Hex stand off	14780	Blade tension adjustment housing
S16005E	Head, fixed, SS	14781	Blade tension adjustment handle
S16005E S16006E	Head door, fixed head, SS	14782	Blade tension screw, SS
	Channel bracket	14783	O-Ring
S16007	Charlie Diacket	. 1100	9

### PART NUMBERS AND DESCRIPTIONS (cont.)

Item No.	Description	Item No.	Description
14785	Plastic washer	196-2	Blade tension spring, fixed head
14786	O-Ring for gauge	211	Finger lift
14787	Tension screw top collar	211A-291Q	Lock knob, 3/8-16
151	Conduit, watertight, per inch	211D	Finger lift fastener bolt
16Z	Lower gde. brkt. saw cleaner holder	221-52	V-belt, 52"
16003-6	Lower wheel	230DL	Upper shaft seal, double lip
16003DF-6	Lower wheel, double flange	231DL	Lower shaft seal, double lip
16003U-6	Upper wheel	234	Grease fitting
16003UDF-6	Upper wheel, double flange	237	Upper shaft castellated lock nut
16015-11	Adj. motor base plate	238	Upper shaft castellated lock washer
16015-2	Motor base plate stud nut	242R	Base door lock
16015-3	Motor base plate wing nut	248	Upper wheel hub cap
16015-4	Motor base plate lock washer	249	Base door lock handle
16112	Head door latch	252X	Upper shaft lock nut
16132	Saw cleaner bracket holder rear	256P	Safety pusher plate
16154CE	Table extension	264-1	Meat gauge release hand wheel
16155	Meat carriage	264G	Hand wheel groove pin
16155EZ	Meat carriage, EZ flow	270	Meat gauge release pin
16155-13	Carriage stop angle, SS	271AL	Worm gear, Ali.
16155-2A	Meat carriage guide	272-7-1	Knob, 3 point, 5/16-18
16155-2B	Guide shim, 1/64	272-8	Acorn nut, 5/16-18, SS
16155-2C	Guide shim, 1/32	272-9	Hex bolt, 5/16-18 X 2, SS
16159	Carriage bearing	272-13	Hex bolt, meat gauge bracket
16163A	Platter hold down clip	272-14	Castle nut, 5/16-18, SS
16163B	Platter neck guard	277	Lower shaft key
16200	Carriage stop w/bumper, movable	280	Motor shaft key
16212	Platter latch	300	Lower shaft woodruff key
16220-1	Carriage stop w/bumper, fixed	310	Waved washer
16226A-6	Switch button speed nut	311	Rubber bumper
16232	Scrap bucket	311-1	Rubber bumper
16239-16	Base interlock plate	324	Motor shim, 1/16" TK
16251AL	Upper v-belt pulley, 11.7 X 1	324A	Motor shim, 1/8" TK
16272AL	Meat gauge gear rack	331	Platter bracket bumper
16278	Meat gauge arm, Ali.	360A1	Angled grease fitting
16296-2	Switch bracket	360B-1	Set screw, 1/2-13
16301	Model & S/N plate	362	Lower bearing housing adjusting cap
16302HT	Saw blade, hard tooth, 124"	375	Drive screw, nameplate
16303	Lower shaft nut	376	Drive screw, #10 x 1/2
16313FH	Owner/Operator manual	4-35AL	Motor pulley, 5 X 7/8
16360	Lower bearing housing	415D	Stationary bar
16361	Lower shaft	513	Upper wheel hub cap gasket
16517	Inner race spacer	530	Retaining ring
16543	Lower shaft	55178	Plunger pin
16547	Lower bearing housing	601	Upper guide bracket
16560	Lower removable wheel	602B	Upper blade back up guide
16560DF	Lower removable wheel, double flange	602AFSC	Upper blade back up guide, narrow
17211-22	Finger lift shim, .022	605	Lower blade back up guide
17211-35	Finger lift shim, .035	653PC-E	Warning label, English
175-1-S	Thumb screw, 1/4-20 X 1/2	653PC-FR	Warning label, French
175-2-S	Thumb guard nut, SS	653PC-SP	Warning label, Spanish
175S	Thumb guard, nylon	708	Danger Exposed Blade decal
177	Nylon filler in stationary bar		
179	Wheel cleaner		
10120E7 D2	Cuido har E7 flow Tichanod		

Guide bar, EZ flow, T-shaped

Saw guide bar lock pad, brass

Saw guide bar lock knob

18120EZ-B3

194 194KS-1

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

Item No.	Description	Item No.	Description
AS1120EZ	Channel assembly (3334-4003)	A16155	Meat carriage assembly
AS16005E	Head assembly	A16155EZ	Meat carriage assembly, EZ flow
AS16006E	Head door assembly	A16163-1	Stationary platter assembly
AS16120	Channel assembly	A16200	Carriage stop assembly, movable
AS16120EZ	Channel assembly, EZ flow	A16220-1	Carriage stop assembly, fixed
AS16273-275	Meat gauge assembly	A16247	Upper shaft & bearing assembly
AS16275	Meat gauge plate assembly	A16360	Lower bearing housing assembly
AS16290	Cleaning unit stamping assembly	A16547	Lower bearing housing assembly
AS415D	Stainless stationary bar assembly	A175S	Thumb guard assembly
A116-22SS	Saw guide bar assembly	A181155EZ	Meat carriage assembly (3334-4003)
A130	Steel cleaner assembly	A211	Finger lift assembly
A16Z	Guide bracket saw cleaner assembly	A227	Upper bearing cup/cone assembly
A16003U-6	Upper wheel assembly	A247	Upper shaft and bearing assembly
A16003UDF-6	Upper wheel assembly, double flange	A249R	Base door lock assembly, right
A16003U335-6	Upper wheel assembly w/hinge plate	A262	Meat gauge release assembly
A16003UDF335-6	Upper wheel assembly w/hinge plate, DF	A295	Wheel cleaner assembly
A16112	Head door latch assembly	A363	Lower bearing cup/cone assembly
A16132	Steel cleaner assembly	A415D	Stationary bar assembly
		A602	Saw guide assembly, upper

### LIMITED WARRANTY

**WARRANTY:** The BIRO Manufacturing Company warrants that the Models 3334FH & 3334-4003FH 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 & 605), 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 yellow 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.

ITEM NO.: 16313FH-305 PTCT: MD 3334FH-01-00-1