



MODEL 1433 POWER MEAT CUTTER OPERATING AND SERVICE MANUAL



★ **IMPORTANT NOTICE** ★

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

TABLE OF CONTENTS

	Page
NOTICE TO OWNERS AND OPERATORS.....	1
SAFETY TIPS.....	2
INSTALLATION.....	3-6
OPERATION.....	7
TO PROCESS PRODUCT.....	8
CLEANING PROCEDURE.....	9
MAINTENANCE.....	10
GENERAL.....	10
LUBRICATION.....	11-12
WALL CHART (PART NO. 671).....	12
OPERATOR'S NOTES.....	13
PARTS DIAGRAM.....	14-22
OPERATOR'S NOTES.....	16
SWITCH ASSEMBLIES AND SERVICE PARTS.....	23
WIRING DIAGRAMS.....	24-28
WARNING LABEL LOCATIONS ON MACHINE.....	29
WEARABLE SAW PARTS.....	30
PARTS LIST/ORDERING.....	31
PARTS ASSEMBLIES LIST/ORDERING.....	32
OPERATOR'S SIGNATURE PAGE.....	33
LIMITED WARRANTY.....	34

NOTICE TO OWNERS AND OPERATORS

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

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

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



OR



Warnings related to possible damage are indicated by:



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

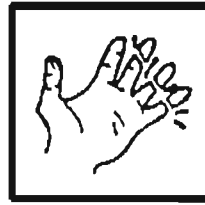
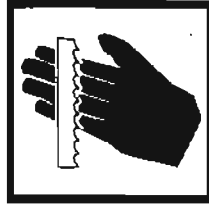
Remember, however, this Manual or the warning labels do not replace the need to be alert and to use your common sense when using this equipment.

- NOTE -

A copy of this manual is included with each Model 1433 saw.

**The descriptions and illustrations contained in this manual are not binding.
The manufacturer reserves the right to introduce any modification without
updating the manual.**

SAFETY TIPS



SHARP MOVING BAND TYPE SAW BLADE TO AVOID SERIOUS PERSONAL INJURY

- NEVER Touch This Machine Without Training and Authorization By Your Supervisor.*
- ALWAYS Read Operation and Parts Manual **BEFORE** Operating, Cleaning or Servicing.*
- ALWAYS Keep Hands Clear of Sharp Band Type Saw Blade and Other Moving Parts.*
- ONLY Use a Qualified Electrician to Install According to Local Building Codes: Machines **MUST** Be Properly Grounded.*
- ONLY Install on Level, Non-Skid Surface in a Clean, Well-Lighted Area Away From Children and Visitors.*
- DO NOT Attempt to Operate This Machine Until it has Been Inspected and Demonstrated by the Seller – Recognized **BIRO** Representative.*
- DO NOT Alter or Modify This Machine in any Way From its Original Form. This Machine in its Original Form Meets the Intent of O.S.H.A. Applicable Standards.*
- NEVER Operate with Saw Guard on Saw Guide Bar in the Raised Position or the Saw Guard Removed from the Saw Guide Bar.*
- ALWAYS Adjust the Saw Guide Bar with Saw Guard to Within $\frac{1}{2}$ " of Product to be Cut.*
- ALWAYS Use Supplied Safety End Cut Pusher Plate for Smaller Products or The Last Cuts of Product.*
- DO NOT Use This Machine for Non-Food Products.*
- DO NOT Use This Machine to Cut Pigs Feet.*
- DO NOT Wear Gloves While Operating.*
- ALWAYS Turn Off, Unplug From Power Source and Perform Lockout/Tagout Procedure to This Machine **BEFORE** Removing Shrouds, Removable Guards, Covers, Doors, Fences or Panels for Cleaning, Servicing or Any Other Reason.*
- NEVER Leave Machine Unattended While 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** Use Qualified Technician and Electrician for Installation.
 - **ALWAYS** Install Equipment in Work area with Adequate Light and Space.
 - **ONLY** Operate on a Solid, Level, Non-Skid Surface.
 - **NEVER** Operate with Saw Guard 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 $\frac{1}{2}$ " of Product to be Cut.
 - **NEVER** Operate Without all Warning Labels Attached and Wall Chart Posted.
1. Read this Manual thoroughly before installation and operation. Do not proceed with installation and operation if you have any questions or do not understand anything in this Manual. Contact your local Distributor, or BIRO first.
 2. Install machine on a level, solid, non-skid surface in a well-lighted work area away from children and visitors.

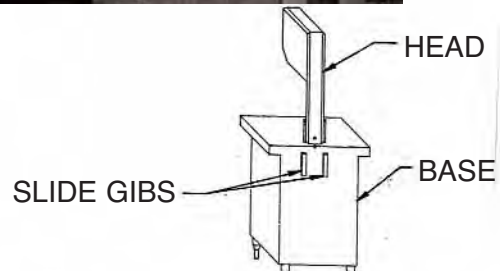


ALWAYS LEVEL MACHINE BEFORE USING

3. After installing machine in operational area, it is imperative that the four adjusting leg hex bolts be adjusted to level the machine and also to eliminate rocking.
4. To assemble meat gauge plate (Part No. A14275) to the machine; Loosen the lock knob (Part No. 272-10) on the right side meat gauge bracket. Remove the meat gauge gear rack (Part No. 14272) and insert into the meat gauge plate. Be sure to hold meat gauge arm so that the release handle is depressed. Re-install the gear rack by first inserting the rectangle end into the left hand meat gauge bracket, then swing the right hollow round end of the gear rack into the original lock position. Upon aligning the gear rack with the capscrew (Part No. 272-11), tighten the lock knob clockwise, fastening the locking cap screw into the hollow end to the gear rack, **CHECKING** for a secure assembly. Keep gear rack well oiled with food grade oil to ensure free movement.

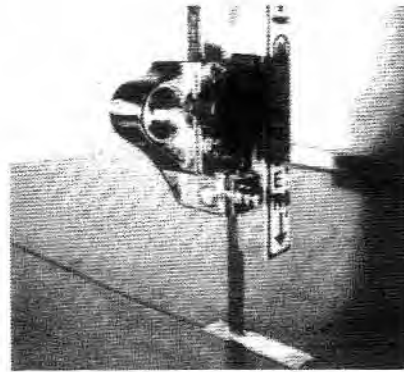


5. The stainless steel head (Part No. S14005C) comes detached from the base. Slip the head into the slide gibs (Part No. 260) located on the back of the base structure. Make sure the slide gibs are oiled or greased to ensure free vertical movement of the head structure.



6. Place removable finger lift with saw guard assembly (Part No. A14211) on the saw guide bar (Part No. 116-22) and fasten in place with finger lift fastener knob (Part No. 211A-291Q).

7. See Lower Removable Wheel Installation and Removal Instructions for Model 1433 below.



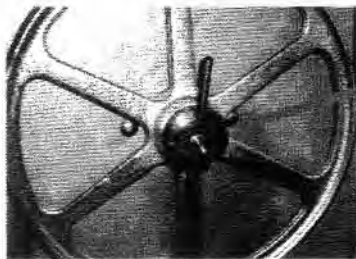
FINGERLIFT ASSEMBLY

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.

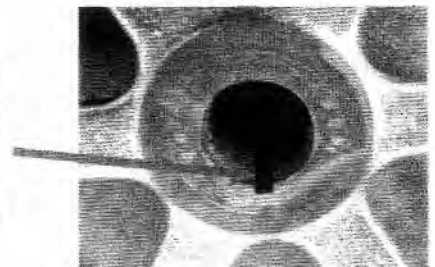


14746 T-Handle Lock



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.

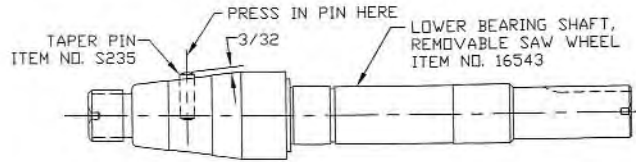


Item No. 16543 – Lower Shaft for Removable Wheel

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

NOTE – If the saw in which a new shaft is to be installed has a groove (keyway) in the bore of the lower wheel, press the taper pin (provided "loose") into the hole in the side of the shaft (see sketch).

If there is no groove (keyway) in the bore of the lower wheel, discard the taper pin and use the shaft without the pin.



SHARP SAW BLADE. HANDLE WITH EXTREME CAUTION.

8. Placing blade on cutter: Hang upper wheel assembly (Part No. A14003U335-6) on the hinge bracket (Part No. 71-1). Lift the nylon filler (Part No. 177). Hang blade on the upper wheel and hold with right hand. With left hand force the back of the blade between the front blade cleaners (Part No. 131), located below the nylon filler. Lower the nylon filler and insert the back of the blade in the upper saw guide (Part No. 602B). The blade has already dropped over the lower wheel. With right hand force the back of the blade between the rear blade cleaners (Part No. 131). The blade is now ready to be tightened. Press down on the ratchet arm (Part No. 10-1) located at the rear of the base structure. Turn the upper wheel slowly by hand to ensure proper tracking of the saw blade on the wheels. Tighten to proper tension. When the tension gauge (Part No. 197), located at the bottom rear of the head becomes tight laterally the blade is at proper tension.
9. The side platter bracket (Part No. S14214) is packed loose in the machine and must be installed on the left side of the base structure with the supplied hardware and checked for proper adjustment. Stationary platter must be flat.
10. The stationary platter (Part No. A14163) is placed on top of the base structure and held in place by two push-pull hold down rods (Part No. 14212W), located at the rear of the base.
11. The sliding meat carriage assembly (Part No. A16155EZ) is installed by turning the movable stop assembly (Part No. A16200) clockwise. After the carriage assembly is in the channel for operation, turn the movable stop counterclockwise to lock.
12. Post SAFETY TIPS wall chart within easy view of operator. Keep Manual available to operator.
13. Machine **MUST** be properly grounded. Use qualified electrician to install according to building codes.

WIRING MOTOR

- (A) Interchange of motor current is made in motor outlet box. Leads are properly marked. Changing instructions are on motor plate or motor outlet box.
- (B) All cutters are wired 220 volts unless otherwise specified. Be sure motor specifications (voltage, cycle, phase) match power supply line. Be sure line voltage is up to specification.
- (C) Connect leads to machine in a manner that will be approved by local electrical inspectors.
- (D) We recommend no less than No. 12 Ga. wire. If the leads are too light, machine may not have sufficient cutting power and/or speed.
- (E) The V-belt is packed loose in machine to prevent deformation, and must be installed on pulleys at time of wiring motor.
- (F) The BIRO Manufacturing Company is not responsible for permanent wiring, connection or installations.



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



KEEP HANDS CLEAR OF SHARP MOVING BAND TYPE SAW BLADE.

14. Make sure saw guide bar with saw guard is in its lowest position. Close head and base doors.
15. Push start button and check for proper phasing of motor. Blade should be traveling down through saw guide.
16. Watch for proper tracking of blade. Back of blade should be centered in hole in saw guide in stationary bar (Part No. 119A). Push stop button to stop machine.
17. Check placement of all warning labels, wall chart and Manual. Machine is ready for trained operators to process product.
18. Contact your local Distributor or BIRO directly if you have any questions or problems with the installation or operation of this machine.

WARNING LABELS AND WALL CHART FOR BIRO POWER CUTTERS

SEE PAGE 12 AND 29 FOR LOCATIONS ON THIS MACHINE

WARNING

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

Read Operation Manual Thoroughly Before Operating.

ALWAYS Keep Hands Clear of Saw Blade and Other Moving Parts. Turn Off Saw when Finished Cutting.

ALWAYS Keep Blade Guard Adjusted to 1/2" Above the Product being Cut.

ALWAYS Use End Cut Pusher Plate When Cutting Smaller Piece of Product.

DO NOT Use Saw if it is Altered, Damaged, Improperly Maintained, or If Warnings Are Illegible or Missing.

ALWAYS Disconnect and Unplug from Main Power Source and Perform LOCKOUT/TAGOUT Before Cleaning or Servicing.

#653PC-E

Item No. 653PC-E

MUCHO CUIDADO

NO Opere Esta Sierra Sin Haber Sido Entrenado Para Ello Ni Tampoco Sin Autorizacion de un Supervisor. Uno Tiene que Haber Cumplido 18 Anos Para Operarla.

LEA Cuidadosamente el Manual de Operacion Antes de Usar Este Equipo.

SIEMPRE Guarde las Manos a Salvo de la Hoja de Serrar y de Otras Partes Moviles. Cirre el Interruptor Despues de Terminar de Cortar.

SIEMPRE Tenga Ajustado el Guardasierra Para que Quede a 1/2" Por Encima del Producto que se Corta.

SIEMPRE Haga Uso de la Placa de Empuje Para Cortes de Extremos al Cortar Trocitos Pequenos.

NO Utilice la Sierra si se Halla Alterada, Danadao si No ha Sido Debidamente Mantenido o si la Advertencia es Alegible o si Falta Esta.

SIEMPRE Desconecte el Equipo Decenchifandolo de la Fuente de Fuerza. Dejelo Bajo Llave o con Etiqueta que Prohiba su Uso Antes de Limpiarlo o Hacer Trabajos de Mantenimiento.

#653PC-SP

Item No. 653PC-SP

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 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 wheel dislodging.

Item No. 16716

BLADE TENSION

PROPER TENSION IS ACHIEVED WHEN GAUGE CAN JUST BARELY BE MOVED

Item No. 710

ALWAYS LOWER GUARD TO HEIGHT OF PRODUCT

D
A
N
G
E
R

E
X
P
O
S
E
D
B
L
A
D
E

Item No. 708

6

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 $\frac{1}{2}$ " of Product to be Cut.

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

DO NOT Use This Machine for Non-Food Products.

DO NOT Use This Machine to Cut Pigs Feet.

DO NOT Wear Gloves While Operating.

ALWAYS Turn Off, Unplug from Power Source and Perform Lockout/Tag Out Procedures Before Cleaning, Servicing or When Not in Use.

NEVER Leave Machine Unattended While Operating.

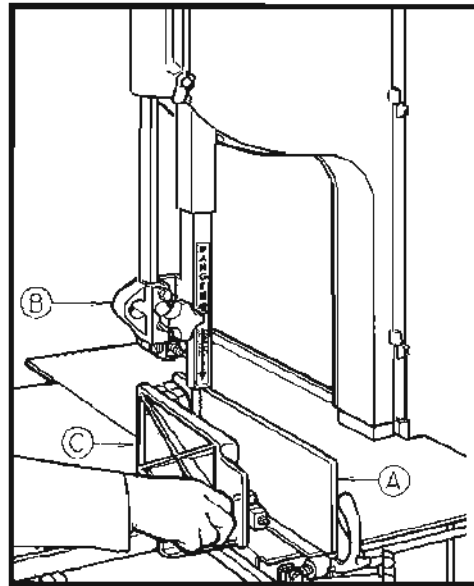
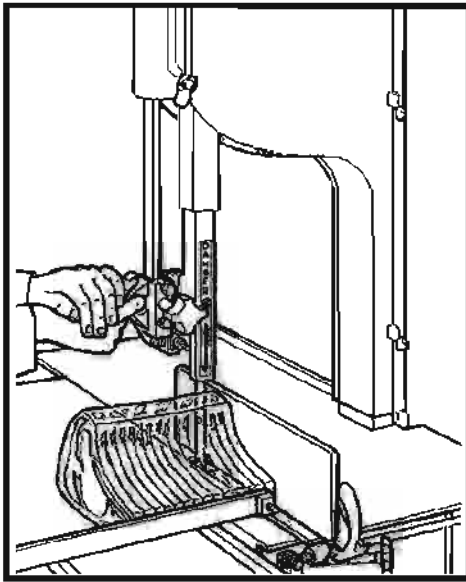
NEVER Operate Without All Warning Labels Properly Affixed to Machine.

A. FOOD HANDLING TO PREVENT CONTAMINATION

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

B. TO PROCESS PRODUCT

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



DO NOT WEAR GLOVES WHILE OPERATING

2. Make sure all doors are closed and locked.
3. Adjust meat gauge plate forward to desired thickness of cut. "A"
4. Push start button and watch blade for proper tracking.
5. 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

6. ALWAYS use the Safety End Cut Pusher Plate for smaller products or the last cuts of product. "C"
The pusher plate is supplied as standard on all BIRO power cutters.
7. When finished cutting, push stop button. Perform lockout/tag out procedure.

CLEANING

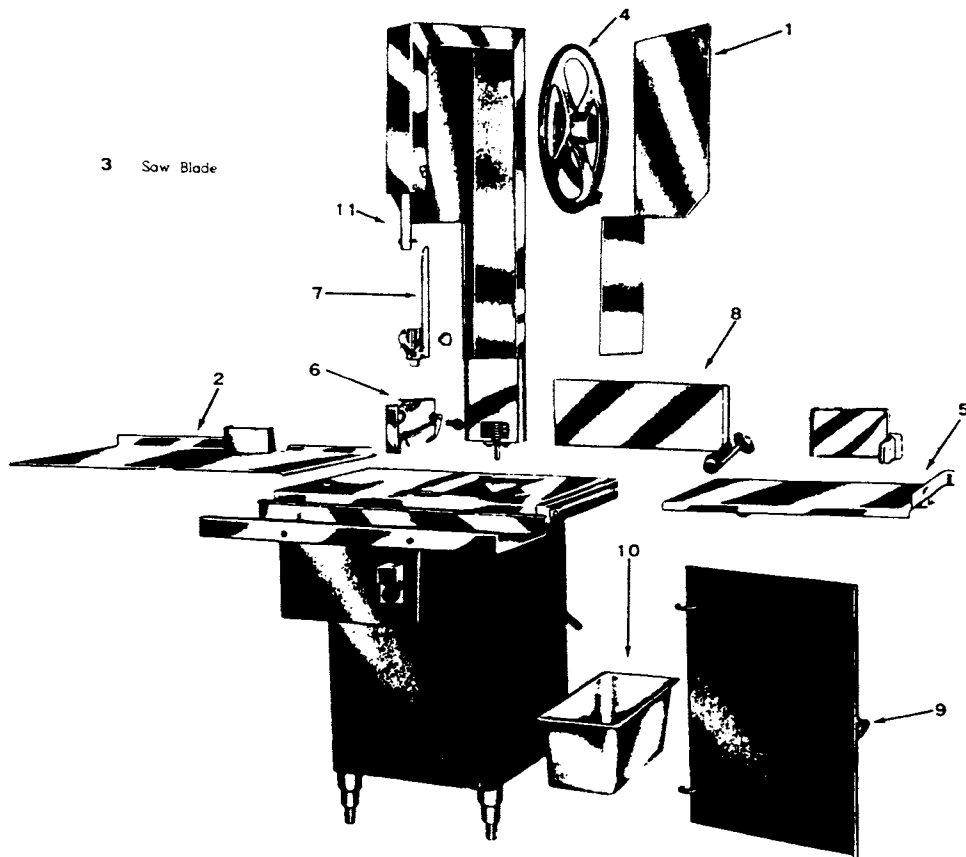


SHARP MOVING BAND TYPE SAW BLADE TO AVOID SERIOUS PERSONAL INJURY

- **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. S608) and Nylon Filler (Part No. 177).





MAINTENANCE



SHARP MOVING BAND TYPE SAW BLADE

TO AVOID SERIOUS PERSONAL INJURY

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



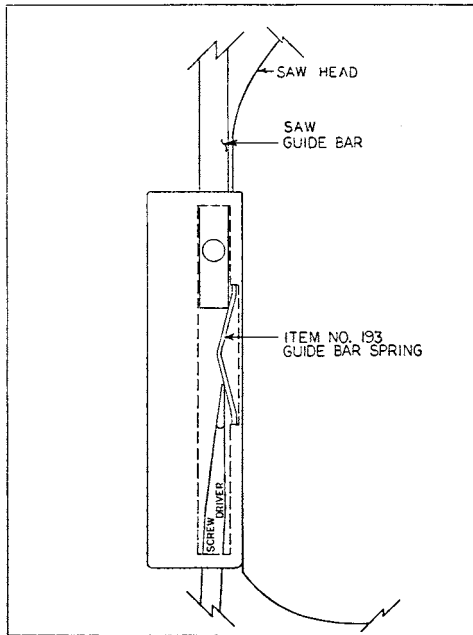
DO NOT IMMERSE UPPER WHEEL ASSEMBLY IN WATER

- b. **WHEEL CLEANER ASSEMBLIES:** Check condition of fiber cleaner, change every four (4) weeks. Check condition of tension spring, replace as needed.
- c. **REMOVABLE FINGER LIFT ASSEMBLY:** Check condition of saw guard, make sure mounting bolts are tight and the "DANGER EXPOSED BLADE" decal is affixed and legible. Check condition of upper saw guide (Part No. 602B), replace every six (6) months. Check adjustment of upper saw guide. Should be $\frac{1}{32}$ " between back of blade and saw guide carbide.



NEVER USE THIS MACHINE WITHOUT PROPERLY INSTALLED AND FUNCTIONING SAW GUIDE BAR AND SAW GUARD

- d. **SAW GUIDE BAR:** Check condition of bar for coating peeling and wear, replace as necessary. Check saw guide bar spring for proper tension. The spring should hold the bar in any desired position in its travel. Replace saw guide bar spring (Part No. 193) as necessary using instructions on following page.



1. Remove the finger lift fastener knob and the fingerlift assembly.
2. Remove the finger lift fastener stud.
3. Push the saw guide bar up and out of the top of the head structure.
4. Remove the saw guide bar spring.
5. Clean and lubricate the babbitt pocket area (the square indented area that seats the saw guide bar spring).
6. Lower the new saw guide bar spring through the top of the babbitt pocket area and guide the spring into position with a standard screwdriver. (NOTE: Drawing)
7. While holding the saw guide bar spring in position, re-enter the saw guide bar from the top compressing the saw guide bar spring slightly until the saw guide bar slides past the spring.
8. Replace the finger lift fastener stud, the finger lift assembly and the finger lift fastener knob.
9. Test by making several adjustments.

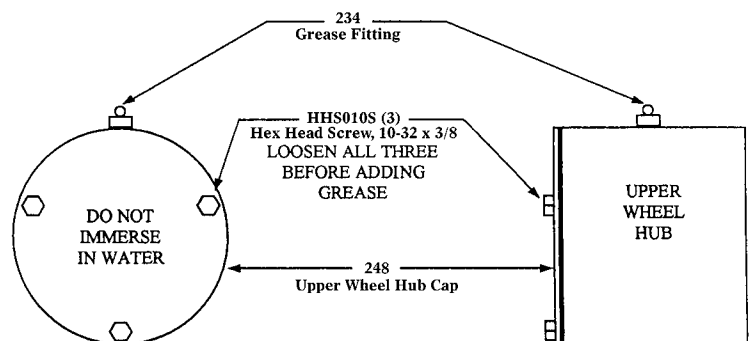
- e. **STATIONARY BAR ASSEMBLY:** Check condition of nylon filler (Part No. 177), change every four (4) weeks. Check condition of saw guide (Part No. 119A), check tracking of blade through guide, back of blade should be centered in hole, replace every six (6) months. Check condition of lower blade back-up guide (Part No. S608). Check adjustment of back-up guide, should have $\frac{1}{32}$ " gap between back of blade and saw guide carbide. Replace every six (6) months.
- f. **SAW CLEANERS:** Check condition of blade cleaners, replace every four (4) weeks.
- g. **RATCHET ASSEMBLY:** Check for smooth operation through full range of travel. Check condition of trigger spring, replace as necessary.
- h. **SLIDE GIBS:** Check that head structure moves freely up and down. Check for side to side and front to rear tolerance. Adjust as required. Grease every four (4) weeks.
- i. **MEAT GAUGE ASSEMBLY:** Check free movement of meat gauge plate on gear rack. Gear rack to be kept lubricated at all times with light food grade oil. Check operation of release handle. Check that worm gear engages properly with gear rack. Check tension of release handle spring, replace as necessary.
- j. **MEAT CARRIAGE ASSEMBLY:** Check for free movement through full range of travel. Check for side to side tolerance, adjust as necessary. Check condition and grease bearings, replace as necessary. Check condition of thumb guard, replace as necessary.
- k. **SAFETY ITEMS:** Safety end cut pusher plate is with machine and accessible. All warning labels are present, properly affixed and legible. Model and Serial Number plate properly affixed and legible. Wall poster within operator's view from machine. Manual accessible to operator.

B. LUBRICATION

1. **UPPER WHEEL BEARINGS:** Grease every four (4) months. Change grease every twelve (12) months.
2. **LOWER BEARING HOUSING:** Grease every four (4) months. Change grease every twelve (12) months.
3. **SLIDE GIBS:** Grease every four (4) weeks.
4. **MEAT CARRIAGE BEARINGS:** Grease every four (4) weeks.
5. **SAW GUIDE BAR:** Oil daily with food machine oil.
6. **MEAT GAUGE GEAR RACK:** Oil daily with food machine oil.

— NOTE —
USE SHELL CASSIDA
GREASE EPS-2

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



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

7. **MOTOR BEARINGS:** Bearing grease will lose its lubricating ability over time, not suddenly. The lubricating ability of a grease (over time) depends primarily on the type of grease, the size of the bearing, the speed at which the bearing operates and the severity of the operating conditions. Good results can be obtained if the following recommendations are used in your maintenance program.

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

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

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

PART NUMBER 671

WALL CHART “BAND SAW SAFETY GUIDELINES”

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



WARNING

ONLY PROPERLY TRAINED PERSONNEL SHOULD USE THIS EQUIPMENT

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

1. Before Using, Make Sure:

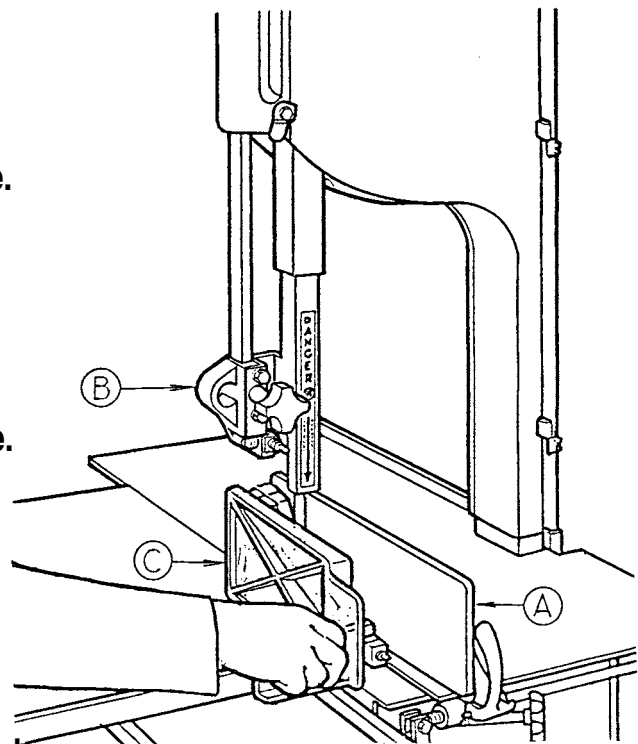
- Gauge Plate (A) And Other Components Are Secure.
- All Warning Labels and Guards Are In Place.
- The Guide Bar (B) Is Adjusted To $\frac{1}{2}$ Inch Above The Product To Be Cut.

2. While Cutting:

- Keep Hands and Fingers Away From Blade.
- Keep Product Securely Against Gauge Plate.
- Use End Cut Pusher (C) When Making Final Cuts. Item No. 256P.

3. Before Cleaning:

- Turn Off Power And Unplug.
- Remove Saw Blade.
- Use Extra Care When Handling The Saw Blade.



USE YOUR BIRO MEAT SAW SAFELY!

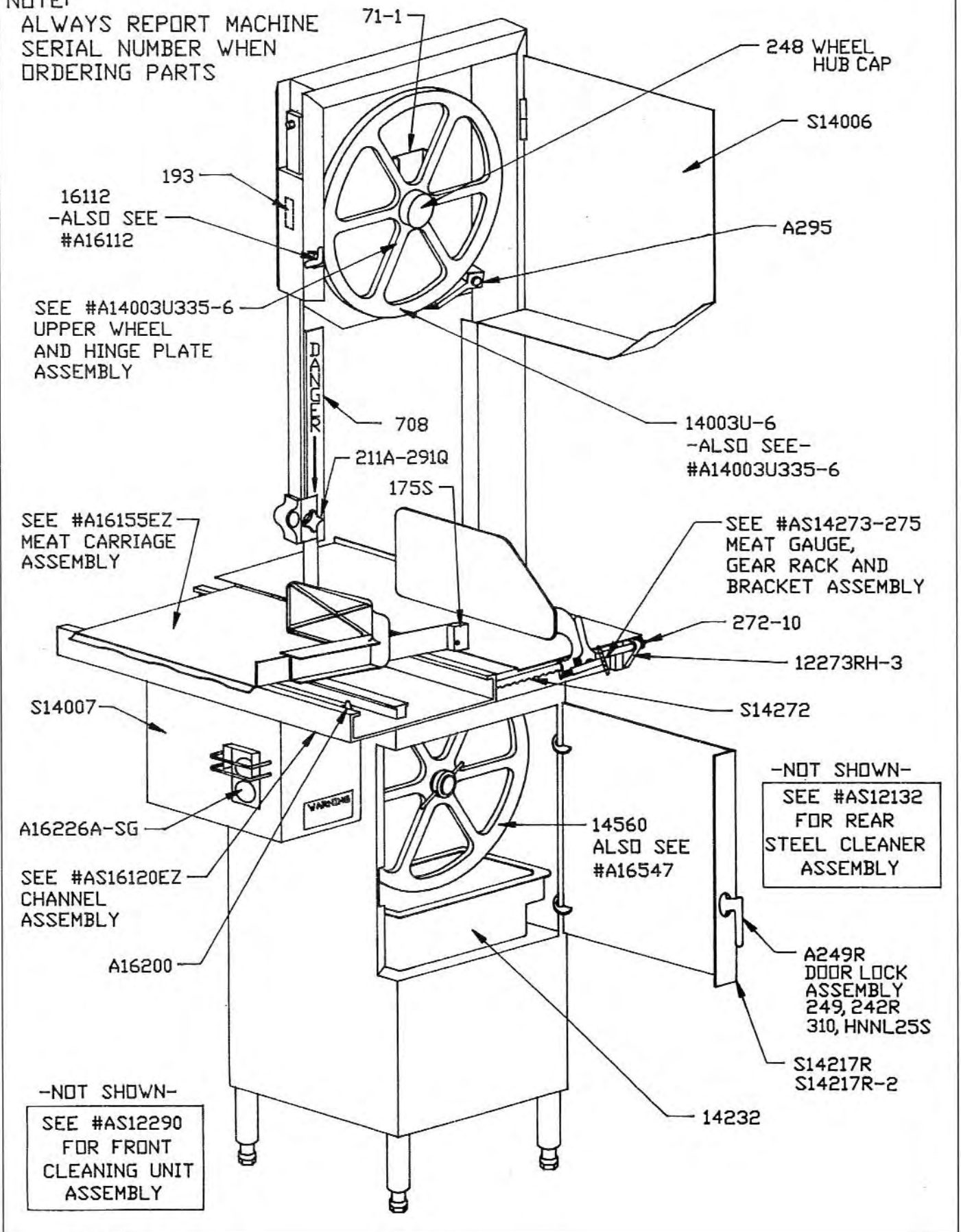
SEE PARTS AND SERVICE MANUAL SUPPLIED WITH MACHINE FOR ADDITIONAL SAFETY INFORMATION.

BIRO #671

- NOTES -

NOTE:

ALWAYS REPORT MACHINE
SERIAL NUMBER WHEN
ORDERING PARTS

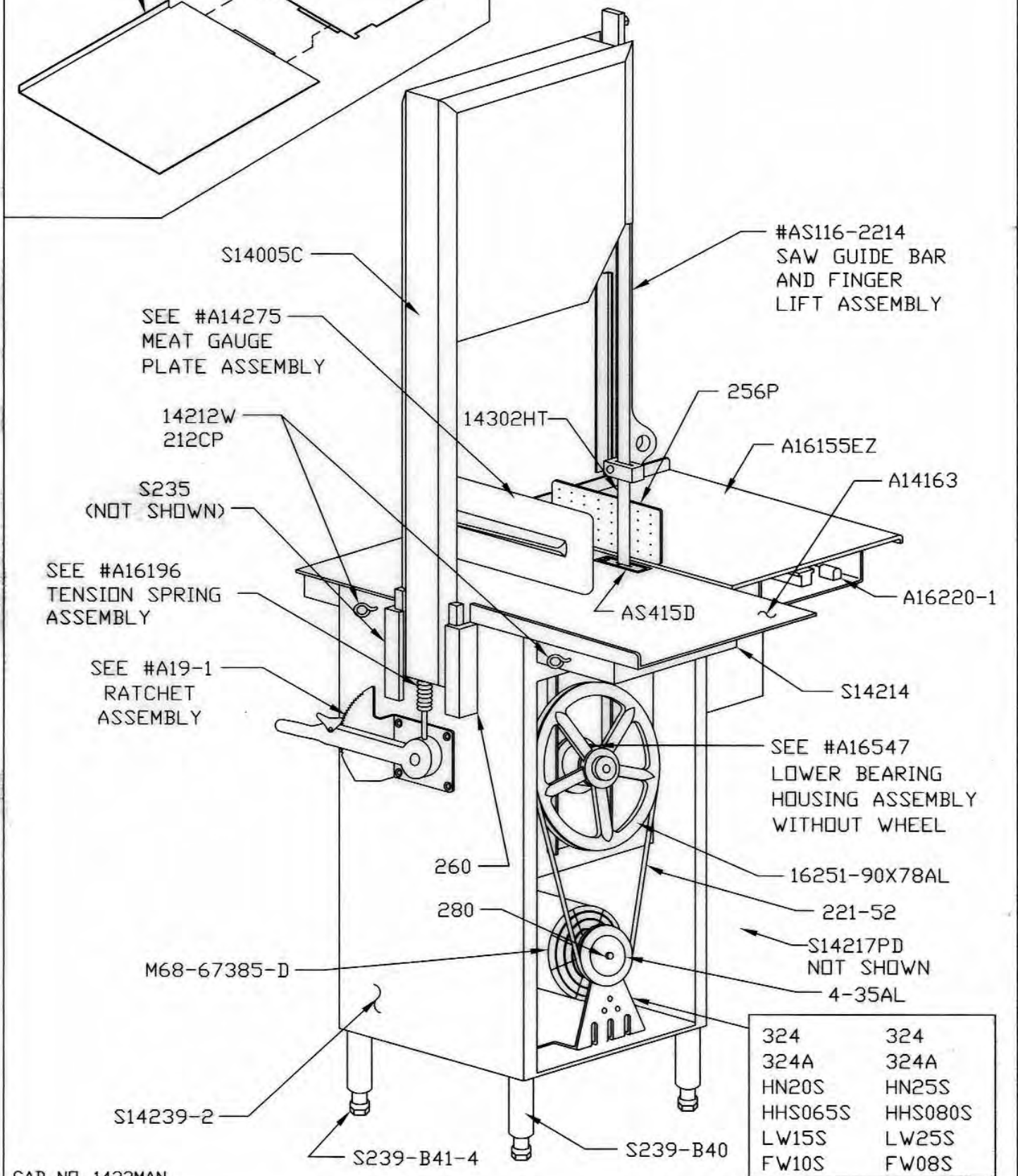


SPLIT
PLATTER
ASSEMBLY

A14163-4

A14163-5

NOTE:
ALWAYS REPORT MACHINE SERIAL
NUMBER WHEN ORDERING PARTS.



S14005C

SEE #A14275
MEAT GAUGE
PLATE ASSEMBLY

14212W
212CP

S235
(NOT SHOWN)

SEE #A16196
TENSION SPRING
ASSEMBLY

SEE #A19-1
RATCHET
ASSEMBLY

S14239-2

M68-67385-D

S239-B41-4

260

280

14302HT

256P

#AS116-2214
SAW GUIDE BAR
AND FINGER
LIFT ASSEMBLY

A16155EZ

A14163

AS415D

A16220-1

S14214

SEE #A16547
LOWER BEARING
HOUSING ASSEMBLY
WITHOUT WHEEL

16251-90X78AL

221-52

S14217PD
NOT SHOWN

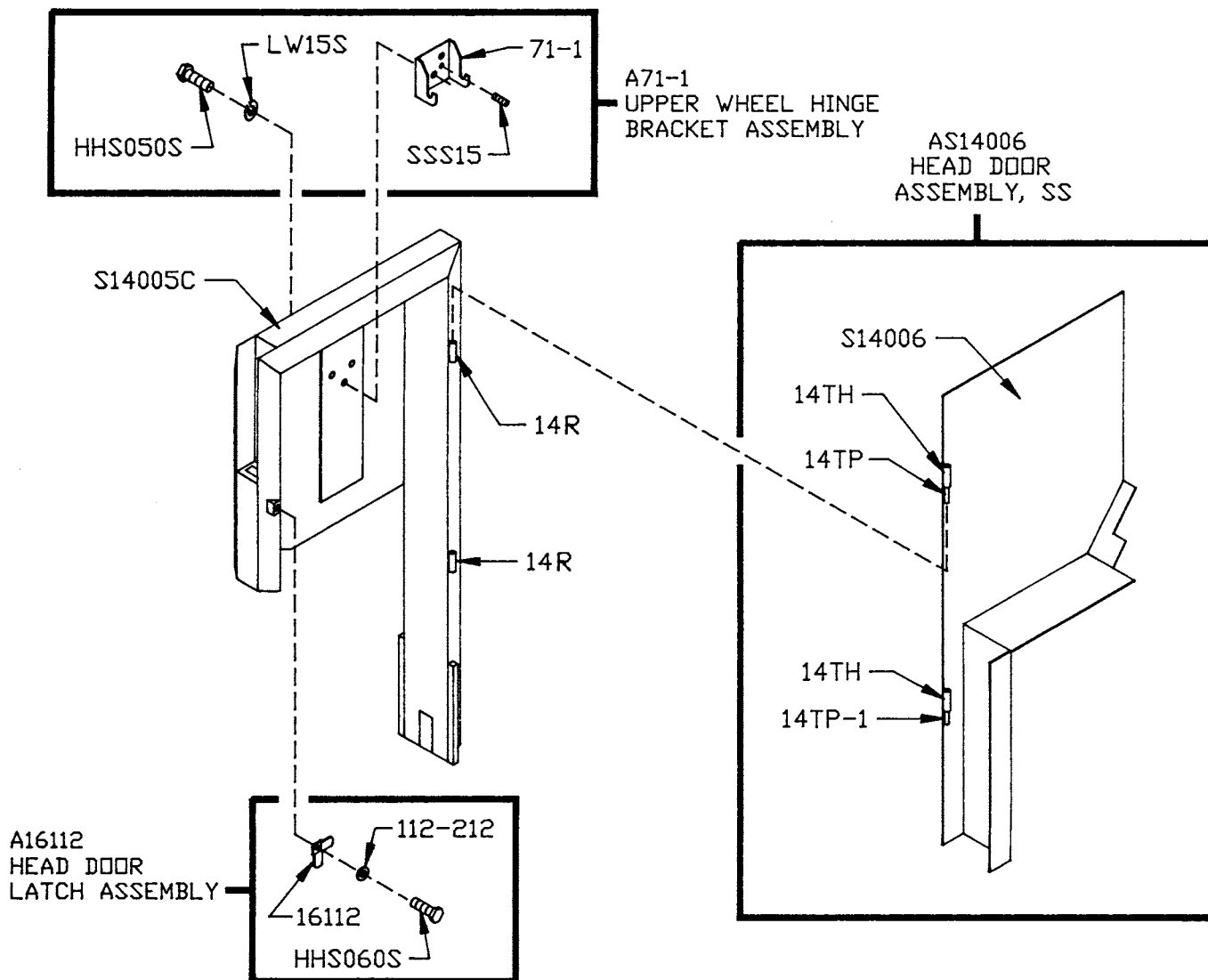
4-35AL

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

CAD NO. 1433MAN

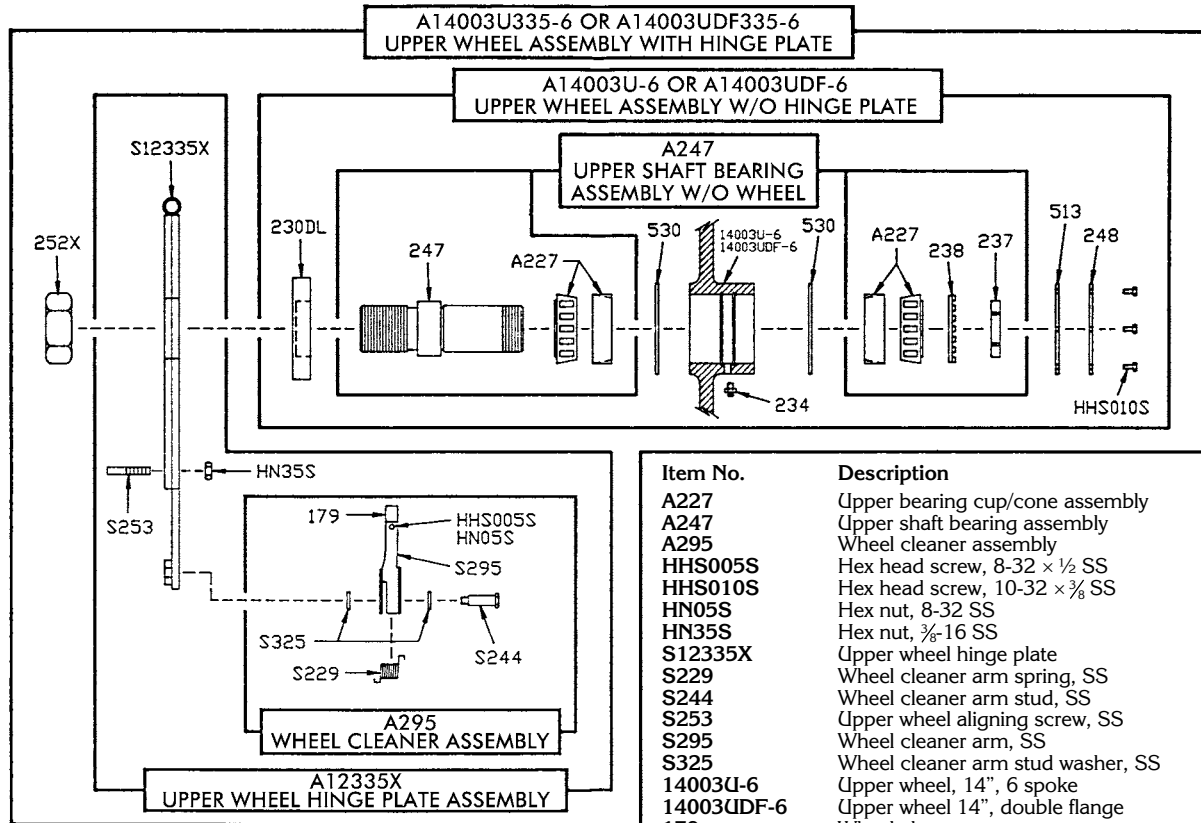
- NOTES -

AS14005C STAINLESS STEEL HEAD & DOOR ASSEMBLY



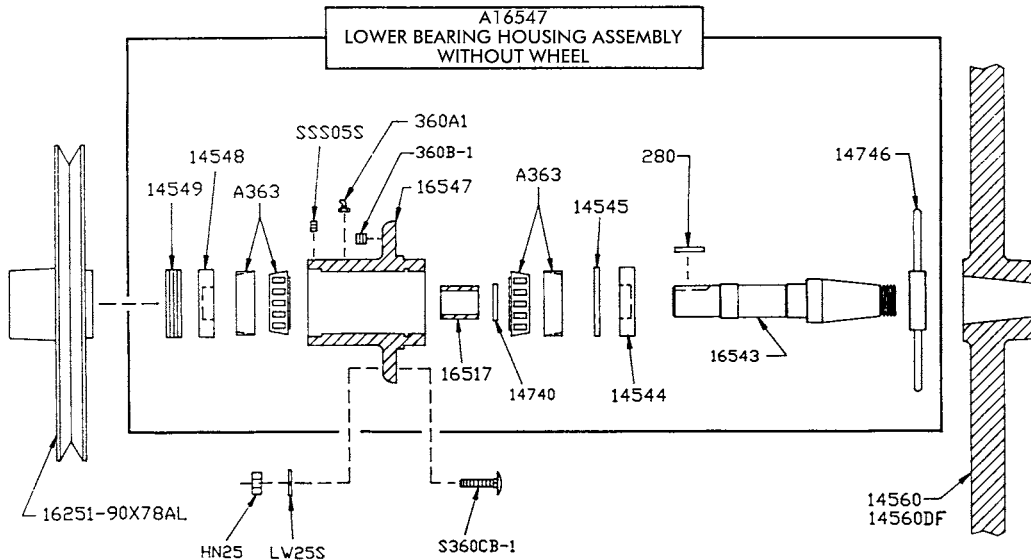
Item No.	Description
A16112	Head door latch assembly
AS14005C	Head & door assembly, SS
AS14006	Head door assembly, SS
A71-1	Upper wheel hinge bracket assembly
HHS050S	Hex head screw, $\frac{5}{16}$ -18 x $\frac{5}{8}$ SS
LW15S	Lock washer, $\frac{5}{16}$ SS
S14005C	Head SS
S14006	Head door SS

Item No.	Description
SSS15	Set screw, $\frac{5}{16}$ -18 x $\frac{5}{16}$ cup point
14TH	Head door hinge welded
14TP	Head door hinge pin, 1 1/2"
14TP-1	Head door hinge pin, 1 1/4"
14R	Head door hinge - welded
112-212	Waved washer
16112	Head door latch
71-1	Upper wheel hinge bracket



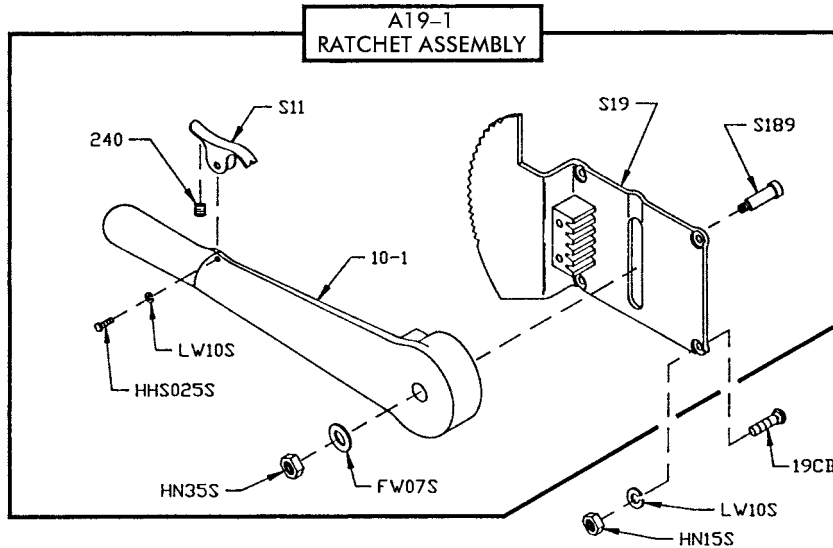
Item No.	Description
A14003U335-6	Upper wheel assembly w/hinge plate
A14003UDF335-6	Upper wheel assembly – double flange with hinge plate
A14003U-6	Upper wheel assembly w/o hinge plate
A14003UDF-6	Upper wheel assembly – double flange without hinge plate
A12335X	Upper wheel hinge plate assembly

Item No.	Description
A227	Upper bearing cup/cone assembly
A247	Upper shaft bearing assembly
A295	Wheel cleaner assembly
HHS005S	Hex head screw, 8-32 x 1/2 SS
HHS010S	Hex head screw, 10-32 x 3/8 SS
HN05S	Hex nut, 8-32 SS
HN35S	Hex nut, 3/8-16 SS
S12335X	Upper wheel hinge plate
S229	Wheel cleaner arm spring, SS
S244	Wheel cleaner arm stud, SS
S253	Upper wheel aligning screw, SS
S295	Wheel cleaner arm, SS
S325	Wheel cleaner arm stud washer, SS
14003U-6	Upper wheel, 14", 6 spoke
14003UDF-6	Upper wheel 14", double flange
179	Wheel cleaner
230DL	Upper shaft seal, double lip
234	Grease fitting
237	Upper shaft castellated lock nut
238	Upper shaft castellated lock washer
247	Upper shaft
248	Upper wheel hub cap
252X	Upper shaft nut
513	Upper wheel hub gasket
530	Retaining ring (2 req.)

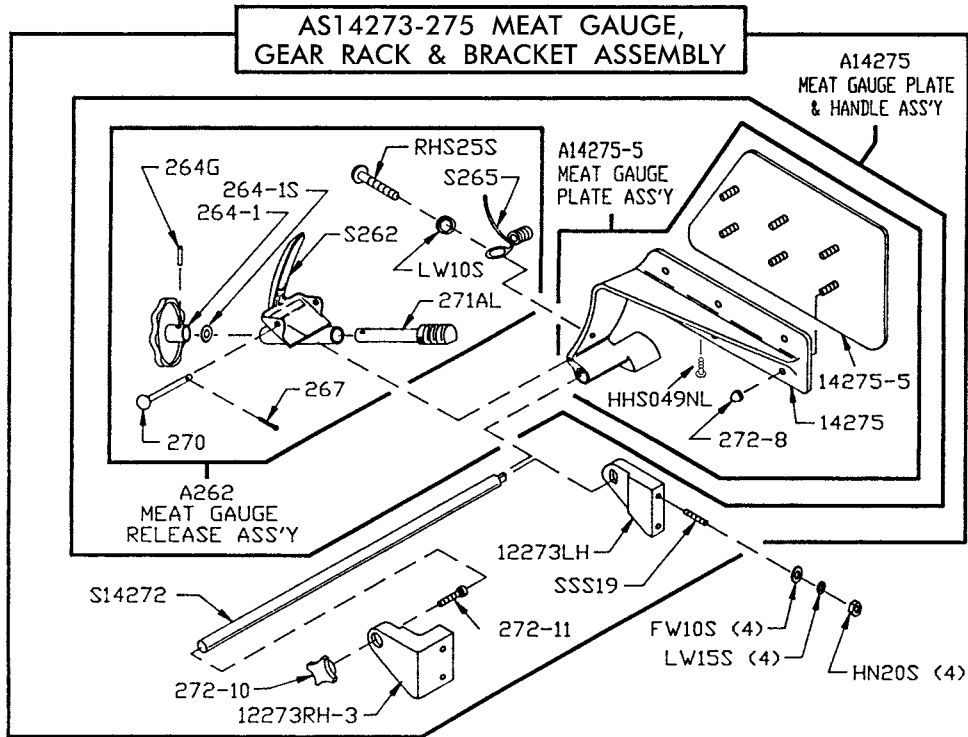


Item No.	Description
A16547	Lower bearing housing assembly w/o wheel
A363	Lower bearing cup/cone assembly
HN35S	Hex nut, 3/8-16, SS
LW20S	Lock washer, 3/8, SS
SSS05S	Set screw cup, SS, 10-24 x 3/8
14544	Grease seal, 1.50 ID
14545	Retaining ring, internal, 2 1/16 ID
14548	Grease seal, 3/8 ID
14549	Lower bearing housing cap
14550	Adjustment screw, lower bearing housing
14551	Hex jam nut, 3/8-11, SS

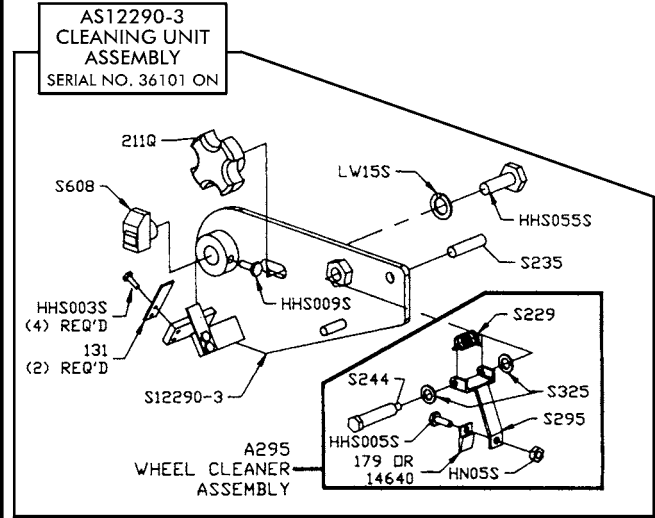
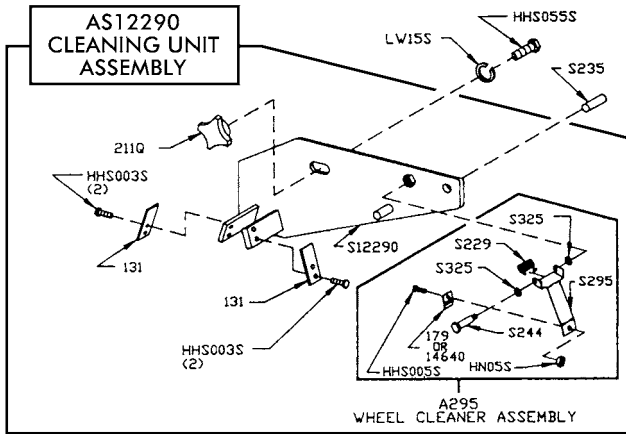
Item No.	Description
14560	Lower saw wheel, 14"
14560DF	Lower saw wheel 14", double flange
14740	Retaining ring – external
14746	T-handle lock, removable lower wheel
16251-90X78AL	Pulley, upper V-belt 9.0 x 3/8, AL
16517	Inner race spacer, removable wheel
16543	Shaft, lower saw wheel
16547	Lower bearing housing, removable wheel
280	Key
360A1	Grease fitting angular
360B-1	Set screw 1/2-13



Item No.	Description	Item No.	Description
A19-1	Ratchet assembly	S11	Ratchet trigger SS
FW07S	Flat washer, $\frac{3}{8}$ SS	S189	Ratchet arm stud SS
HHS025S	Hex head screw, $\frac{1}{4}$ -20 \times $\frac{1}{2}$ SS	S19	Ratchet base SS
HN15S	Hex nut, $\frac{1}{4}$ -20 SS	10-1	Ratchet arm
HN35S	Hex nut, $\frac{3}{8}$ -16 SS	19CB	Carriage bolt $\frac{1}{4}$ -20 \times $\frac{3}{4}$ SS
LW10S	Lock washer, $\frac{1}{4}$ SS	240	Ratchet trigger spring



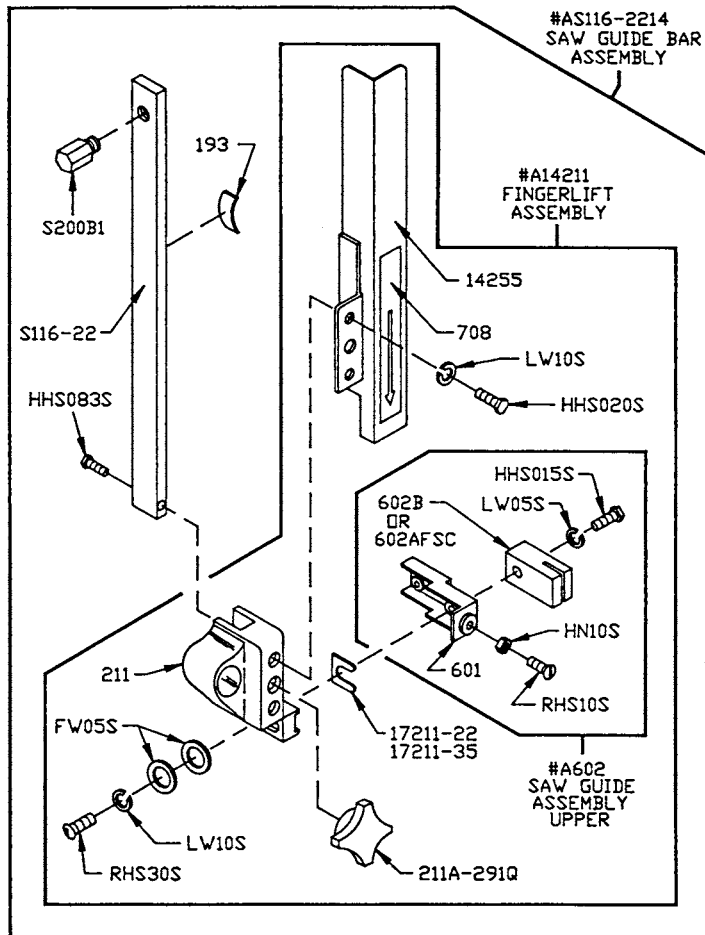
Item No.	Description	Item No.	Description
AS14273-275	Meat gauge assembly	12273LH	Meat gauge brkt. — LH
A14275	Meat gauge plate assembly	12273RH-3	Meat gauge brkt. — RH
A262	Meat gauge release assembly	14275	Meat gauge arm
FW10S	Flat washer, $\frac{3}{16}$ SS	14275-5	Meat gauge plate, SS
HHS049NL	Hex screw — nylon $\frac{3}{16}$ -18 \times $\frac{1}{2}$ lg.	264G	Meat gauge hand wheel groove pin
HN20S	Hex nut, $\frac{3}{16}$ -18 SS	264-1	Meat gauge hand wheel
LW10S	Lock washer, $\frac{1}{4}$ SS	264-1S	Hand wheel shim
LW15S	Lock washer, $\frac{5}{16}$ SS	267	Meat gauge release cotter key
RHS25S	Round head screw, $\frac{1}{4}$ -20 \times $\frac{3}{4}$ SS	270	Meat gauge release pin
SSS19	Set screw, cup point, $\frac{3}{16}$ -18 \times $\frac{1}{2}$, SS	271AL	Meat gauge worm gear, Aluminum
S235	Taper pin, 4 \times $\frac{3}{4}$ SS	272-8	Cap nut, $\frac{3}{16}$ -18 SS
S262	Meat gauge release handle, SS	272-10	Lock knob $\frac{3}{8}$ -16, 4 point
S265	Meat gauge release spring, SS	272-11	Allen head cap screw $\frac{3}{16}$ \times $\frac{1}{2}$ lg.
S14272	Meat gauge gear rack, SS		

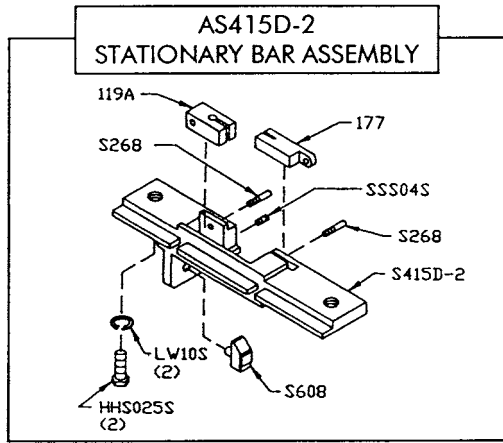


Item No.	Description
AS12290	Cleaning unit assembly
AS12290-3	Cleaning unit assembly
A295	Wheel cleaner assembly
HHS003S	Hex head screw, 8-32 x 1/4 trimmed SS
HHS005S	Hex head screw, 8-32 x 1/2 SS
HHS009S	Hex head screw, 10-24 x 1/4 SS
HHS055S	Hex head screw, 3/16-18 x 3/4 SS
HN05S	Hex nut, 8-32 SS
LW15S	Lock washer, 5/16 SS
S12290	Cleaning unit
S12290-3	Cleaning unit
S229	Wheel cleaner arm spring, SS

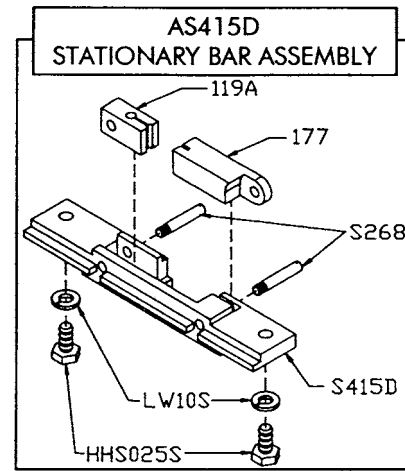
Item No.	Description
S235	Taper, pin, #4 x 3/4 SS
S244	Wheel cleaner arm stud, SS
S295	Wheel cleaner arm, SS
S325	Wheel cleaner arm stud washer, SS
S608	Saw back-up guide w/607 carbide
131	Saw cleaner, SS
131N	Blade cleaner, nylene
131SHORT	Blade cleaner, SHORT SS, 1 1/16 LG
131SS/NYL	Blade cleaner combo,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

Item No.	Description
AS116-2214	Saw guide bar assembly 22"
A14211	Finger lift assembly, removable
A602	Saw guide assembly, upper
FW05S	Flat washer, 1/4 SS
HHS015S	Hex head screw, 10-32 x 7/8 SS
HHS020S	Hex head screw, 1/4-20 x 3/8 SS
HHS083S	Hex head screw, 3/8-16 x 1 3/4 SS
HN10S	Hex nut, 10-32 SS
LW05S	Lock washer, #10 SS
LW10S	Lock washer, 1/4 SS
RHS10S	Round head screw, 10-32 x 3/4 SS
RHS30S	Round head screw, 1/4-20 x 1/8 SS
S200B1	Stop stud on guide bar
S116-22	Saw guide bar, 22", SS
14255	Saw guard
17211-22	Finger lift shim, .022
17211-35	Finger lift shim, .035
193	Saw guide bar spring
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"

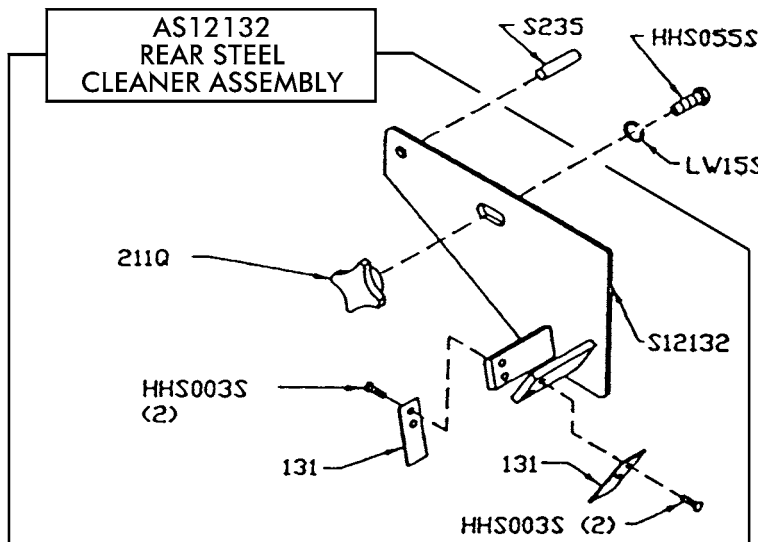




Item No.	Description
AS415D-2	Stationary bar assembly
HHS025S	Hex head screw, 1/4-20 x 1/2 SS
LW10S	Lock washer, 1/4 SS
S268	Stationary bar headless screw
119A	Saw guide in stationary bar
177	Nylon filler
S415D-2	Stationary bar
S608	Back-up guide, carbide
SSS04S	Set screw, 10-24 x 1/4 SS, cup point

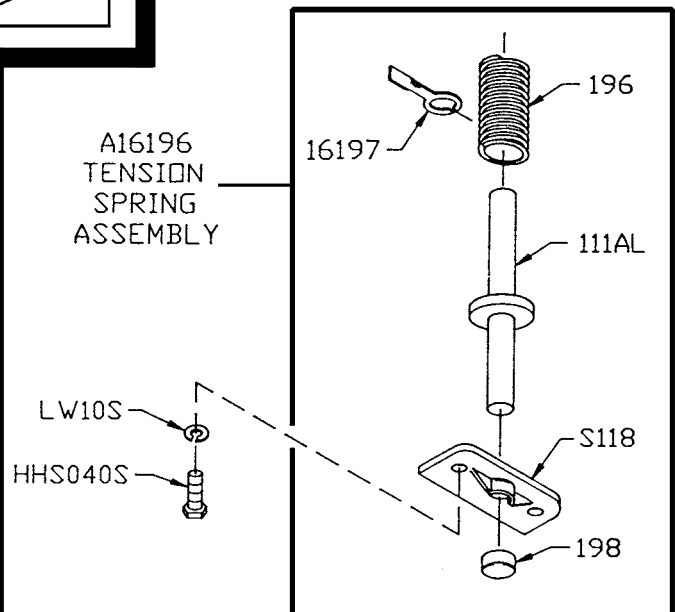


Item No.	Description
AS415D	Stationary bar assembly
HHS025S	Hex head screw, 1/4-20 x 1/2 SS
LW10S	Lock washer, 1/4 SS
S268	Stationary bar headless screw
119A	Saw guide in stationary bar
177	Nylon filler
S415D	Stationary bar

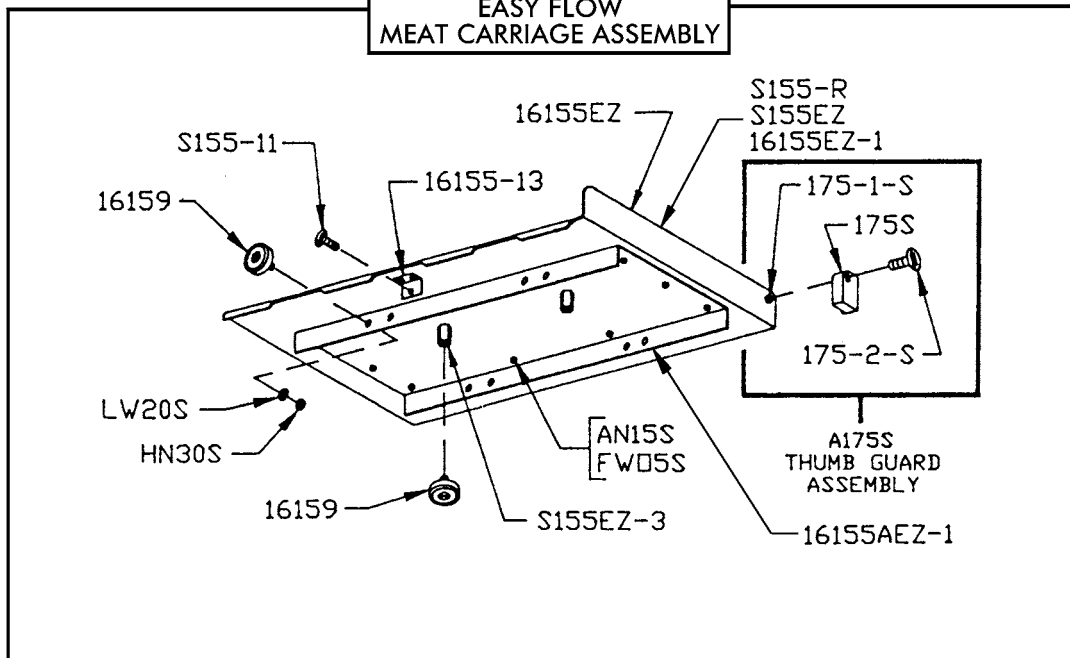


Item No.	Description
AS12132	Steel cleaner assembly, rear
HHS003S	Hex head screw, 8-32 x 1/4 SS
HHS055S	Hex head screw, 5/16-18 x 3/4 SS
LW15S	Lock washer, 5/16 SS
S12132	Cleaning unit, rear
S235	Taper pin, #4 x 3/4 SS
131	Blade cleaner, SS
211Q	Lock knob, 5/16-18, 4 point

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

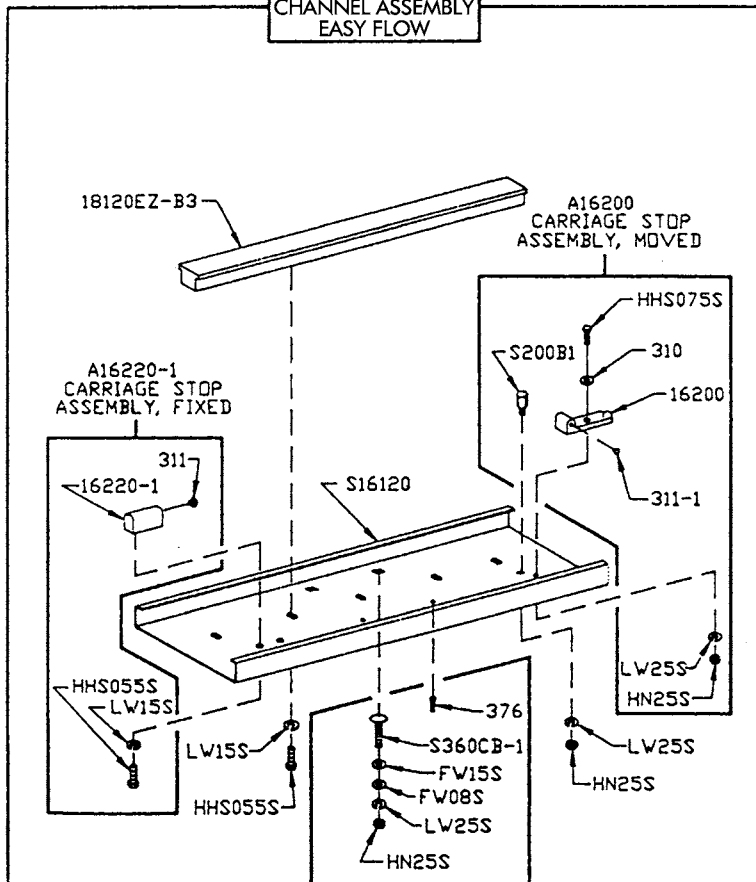


**A16155EZ
EASY FLOW
MEAT CARRIAGE ASSEMBLY**



Item No.	Description	Item No.	Description
A16155EZ	Meat carriage assembly complete – EZ Flow	S155EZ-3	Hex standoff, easy flow carriage
A175S	Thumb guard assembly	16155EZ	Meat carriage top & angle only
FW05S	Flat washer, ¼ SS	16155EZ-1	Meat carriage top only w/weld studs (DNS)
AN15S	Acorn nut, ¼-20, SS	16155-13	Carriage stop angle SS
HN30S	Hex nut, ⅜-16 light jam SS	16155AEZ-1	Meat carriage angle plate
LW20S	Lock washer, ⅜ regular SS	16159	Meat carriage bearing SS
S155-11	Meat carriage stop thumb screw	175S	Thumb guard, nylon
S155-R	Raw meat carriage top only (DNS)	175-1-S	Thumb guard nut, SS
S155EZ	Meat carriage top only (NSS)	175-2-S	Thumb screw, ¼-20 × ½, SS

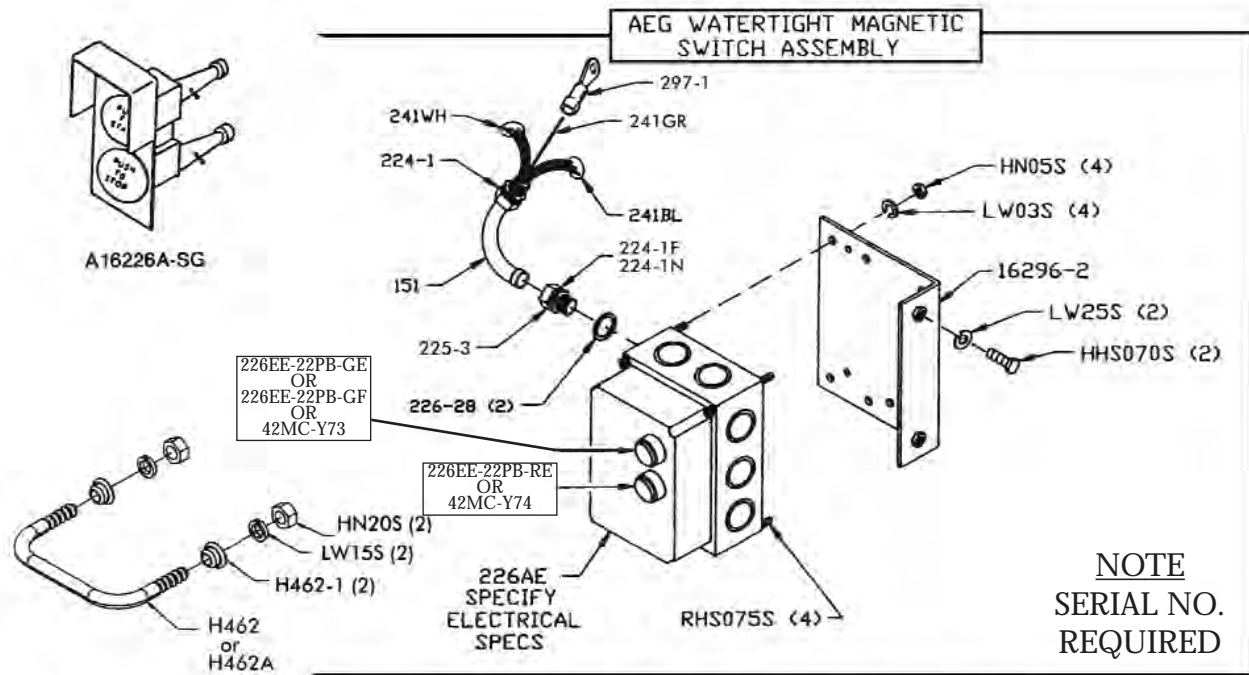
**AS16120EZ
CHANNEL ASSEMBLY
EASY FLOW**



Item No.	Description
A16200	Channel stop assembly, movable
A16220-1	Channel stop assembly, fixed
AS16120EZ	Channel assembly with center guide
FW08S	Flat washer, ⅜, SS
FW15S	Flat washer, ½, SS
HHS055S	Hex head screw, ⅜-18 × ¼ SS
HHS075S	Hex head screw, ⅜-18 × 1¼ SS
HN25S	Hex nut, ⅜-16, SS
LW15S	Lock washer, ⅜, SS
LW25S	Lock washer, ½, SS
S16120	Channel, SS
S200B1	Stop stud, carriage stop, SS
S360CB-1	Carriage bolt, ⅜-16 × 1¼, SS
16200	Carriage stop, movable w/#311-1
16220-1	Carriage stop, fixed w/#311
18120EZ-B3	Guide bar, EZ flow, T-shaped
310	Waved washer, movable carriage stop
311	Rubber bumper for #16220-1 stop
311-1	Rubber bumper for #16200 stop
376	Drive screw, #10 × ½ lg., SS

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

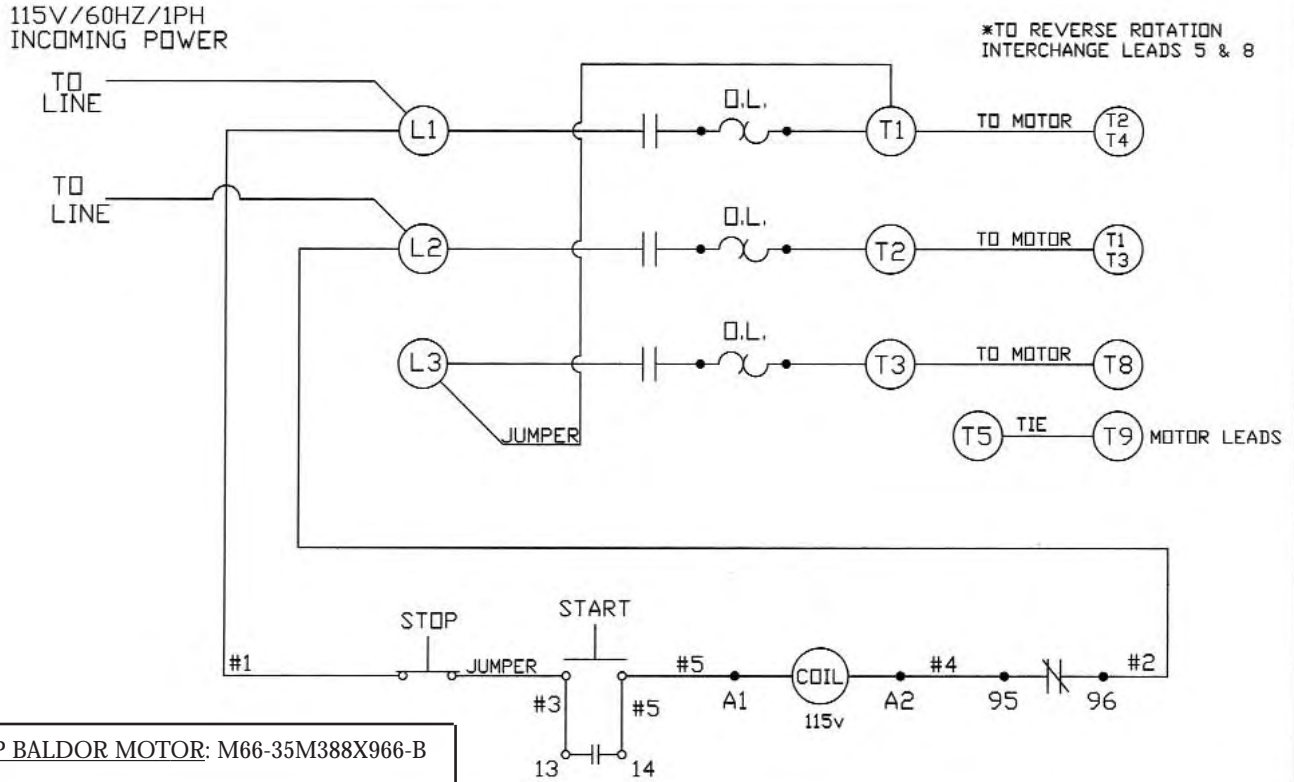
Item No.	Description
A22616EE-514	BAEG/MS-PB/05-C8 2HP 208-220-50/60-3
A22616EE-516	BAEG/MS-PB/05-E4.7 2HP 440/460-3
A22616EE-518	BAEG/MS-PB/05-D4.7 1.5HP-2HP 380/415-50-3
A22616EE-522	BAEG/MS-PB/05-C14 3HP 220-230-50/60-3
A22616EE-5221	BAEG/MS-PB/05-CS14 1.5HP 220/230-50/60-1
A22616EE-5241	BAEG/MS-PB/A26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



Item No.	Description	Item No.	Description
A16226A-SG	Green/red switch button assembly	226EE-OL12M	OVERLOAD B18K-M, 8-12A
H462A	Guard assembly for switch buttons	H281EE-31	OVERLOAD B18K-N, 10-16A
H462	Guard for switch buttons	226EE-OL26ON	OVERLOAD B18K-ON, 21-26A
H462-1	Trim ferrule - SS	226EE-AO11K	CONTACTOR, LS11K.11S-AO, 120V
HHS070S	Hex head screw, $\frac{3}{8}$ -16 x 1 SS	226EE-CO11K	CONTACTOR, LS11K.11S-CO, 208-230V
HN05S	Hex nut, 8-32 SS	226EE-EO11K	CONTACTOR, LS11K.11S-CO 480V, 60HZ-380V 50HZ
HN20S	Hex nut $\frac{5}{16}$ -18 SS	226EE-FO11K	CONTACTOR, LS11K.11S-FO, 575V
LW03S	Lock washer, #8 SS	226EE-22PB-GE	START P/B, 22MM EXT W/NO CONTACT BLK
LW15S	Lock washer $\frac{5}{16}$ SS	226EE-22PB-GF	START P/B, 22MM FLUSH W/NO CONTACT BLK
LW25S	Lock washer, $\frac{3}{8}$ heavy SS	226EE-22PB-RE	STOP P/B, 22 MM EXT W/NO CONTACT BLOCK
RHS075S	Round head screw, 8-32 x $\frac{3}{4}$ SS	226EE-514	BAEG/MS-PB/05-C8 2HP 220-50/60-3
14256	Junction box, plastic w/cover	226EE-516F	BAEG/MS-PB/05-E 4.7 1-1/2, 2HP, 440-60-3
14257	Junction box, metal	226EE-518	BAEG/MS-PB/05-D4.7 2HP-380-50-3
14258	Junction box cover, metal	226EE-5221	BAEG/MS-PB/05-CS14 1.5HP 230-50/60-1
16296-2	Switch bracket SS	226EE-5241	BAEG/MS-PB/A26 2HP 120-60-1
151	Watertight conduit	226EE-5261	BAEG/MS-PB/CS16 2HP 230-60-1
225-3	Conduit connector, WT, 45°	226EE-530	BAEG/MS-PB/05-F3.2 2HP 550-60-3
226EE-ENCL-PB30	ENCLOSURE WITH PUSHBUTTON 30MM HOLES	226EE-534	BAEG/MS-PB/05-E6.3 3HP 440-60-3
226EE-OL02.4H	OVERLOAD B05-H, 1.7-2.4A	226EE-536	BAEG/MS-PB/05-D8 3HP 380-50-3
226EE-OL41	OVERLOAD B18K-1, 2.5-4A	226-28	WASHER, 1-1/2 X 27/32 SS
H281EE-51	OVERLOAD B18K-K, 4-6.3 A	241BL	WIRE, BLACK, 12 GA., CSA & UL
226EE-OL08.5L	OVERLOAD B 18K-L, 5.5-8.5A	241 GR	WIRE, GREEN, 12 GA., CSA & UL
		241 RD	WIRE, RED, 12 GA., CSA & UL
		241 WH	WIRE, WHITE, 12 GA., CSA & UL
		42MC-Y73	GREEN START BUTTON
		42MC-Y74	RED STOP BUTTON

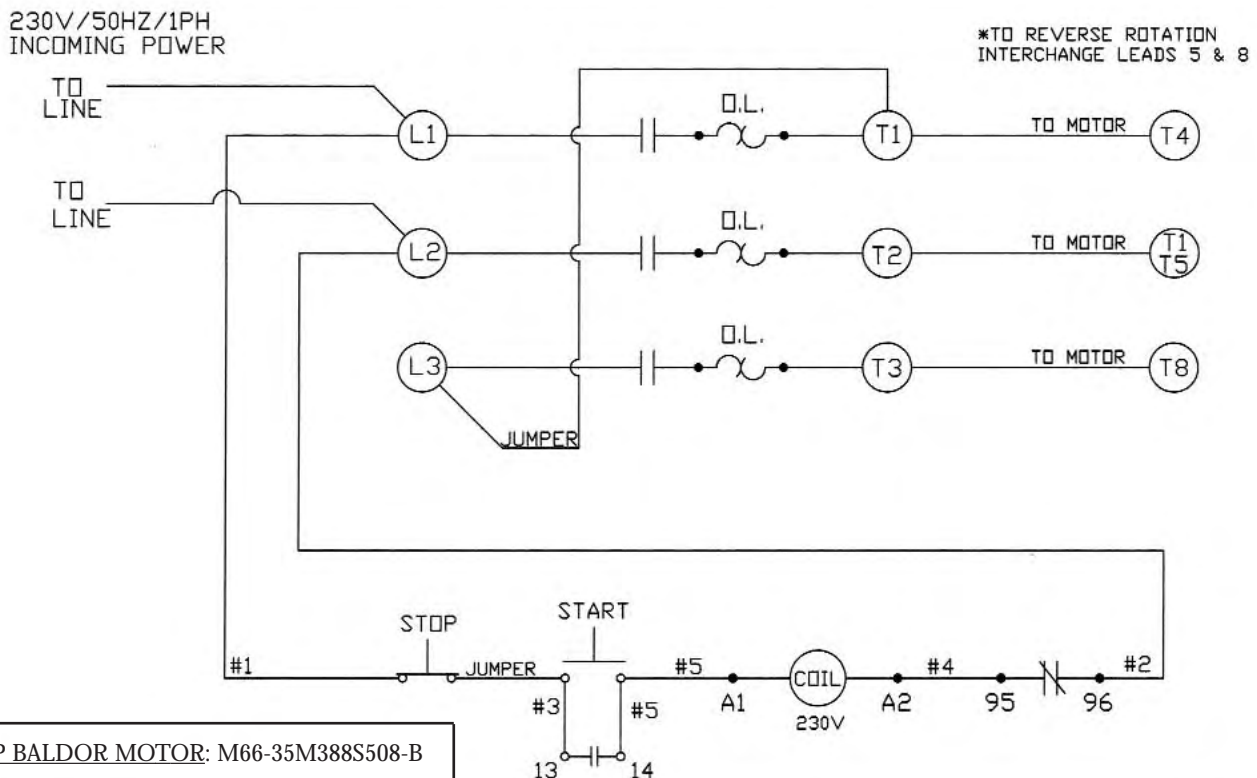
-115 VOLT WITH 7 LEADS-

SCHEMATIC USING 3-POLE AEG WATERTIGHT SWITCH WITH JUMPER
TO ELIMINATE BREAKING EFFECT OF MOTOR AFTER STOP IS ENGAGED.
2HP/60HZ/1PH BALDOR MOTOR WITH 7 MOTOR LEADS, WIRED FOR 115 VOLTS



-230 VOLT WITH 4 LEADS-

SCHEMATIC USING 3-POLE AEG WATERTIGHT SWITCH WITH JUMPER
TO ELIMINATE BREAKING EFFECT OF MOTOR AFTER STOP IS ENGAGED.
2HP/50HZ/1PH BALDOR MOTOR WITH 4 MOTOR LEADS, WIRED FOR 230 VOLTS

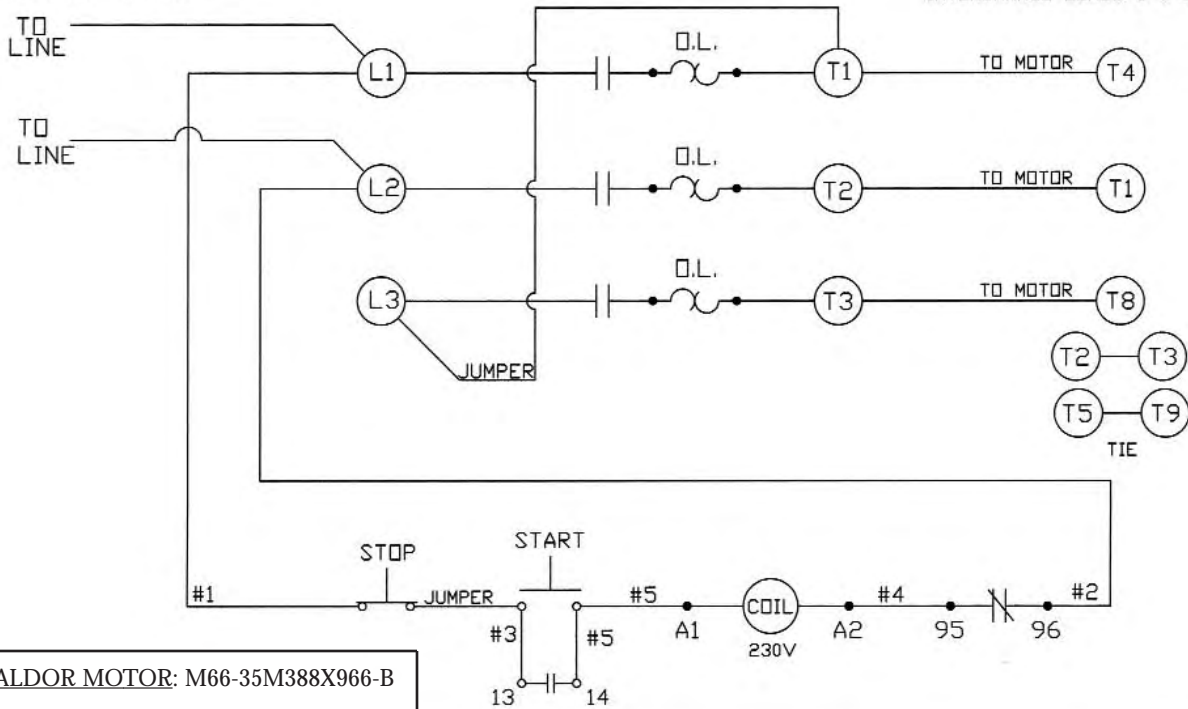


-230 VOLT WITH 7 LEADS-

SCHEMATIC USING 3-POLE AEG WATERTIGHT SWITCH WITH JUMPER TO ELIMINATE BREAKING EFFECT OF MOTOR AFTER STOP IS ENGAGED. 2HP/60HZ/1PH BALDOR MOTOR WITH 7 MOTOR LEADS, WIRED FOR 230 VOLTS

230V/60HZ/1PH
INCOMING POWER

*TO REVERSE ROTATION
INTERCHANGE LEADS 5 & 8

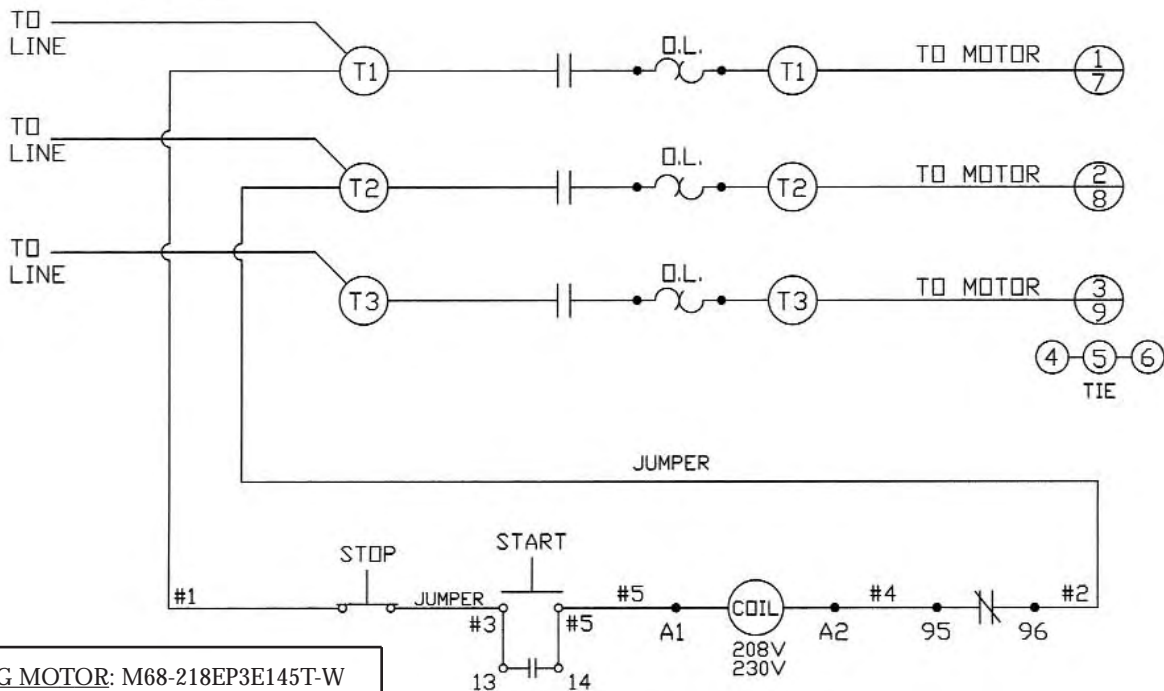


2HP BALDOR MOTOR: M66-35M388X966-B

-208/230 VOLT WITH 9 LEADS-

SCHEMATIC USING 3-POLE AEG W.T. SWITCH 2HP/50/60HZ/3PH WEG MOTOR WITH 9 MOTOR LEADS WIRED FOR 208/230 VOLTS

208/230V/50/60HZ/3PH
INCOMING POWER

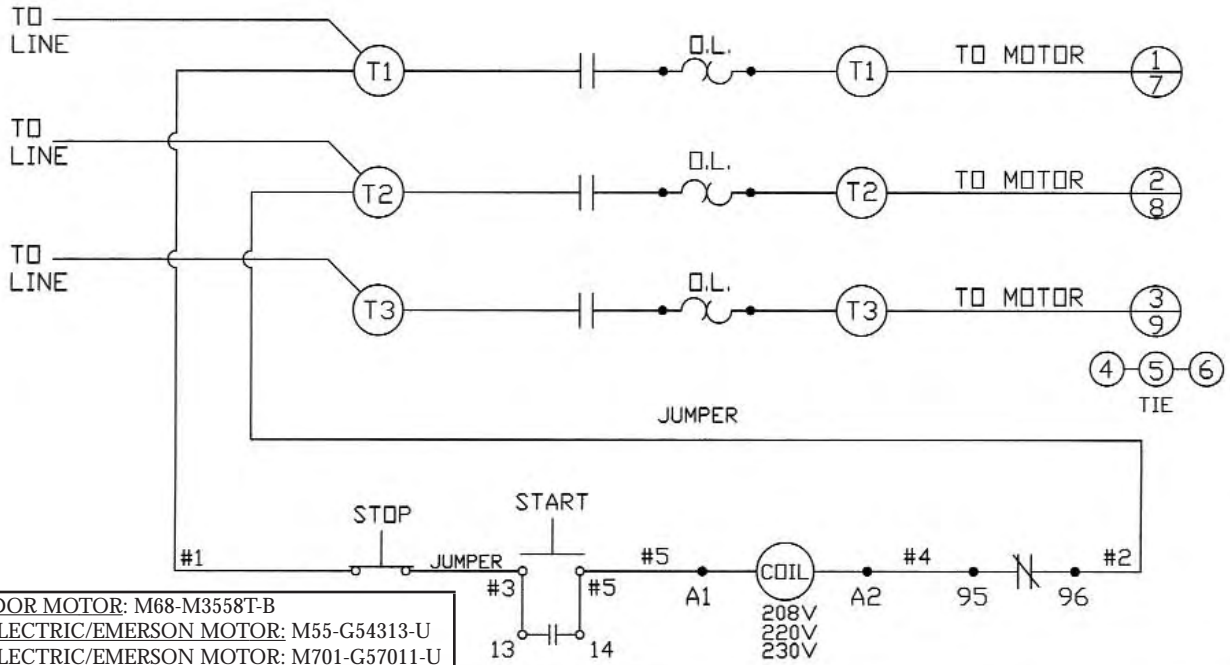


2HP WEG MOTOR: M68-218EP3E145T-W

-208/220/230 VOLT 3 PHASE WITH 9 LEADS-

SCHEMATIC USING 3-POLE STROMBERG OR AEG W.T. SWITCH
 2HP/60HZ/3PH BALDOR MOTOR WITH 9 MOTOR LEADS (OR)
 2HP & 3HP/50/60HZ/3PH US ELECTRIC/EMERSON MOTOR WITH 9 MOTOR LEADS
 WIRED FOR 208/220/230 VOLTS

208/220/230V/60HZ/3PH
 INCOMING POWER

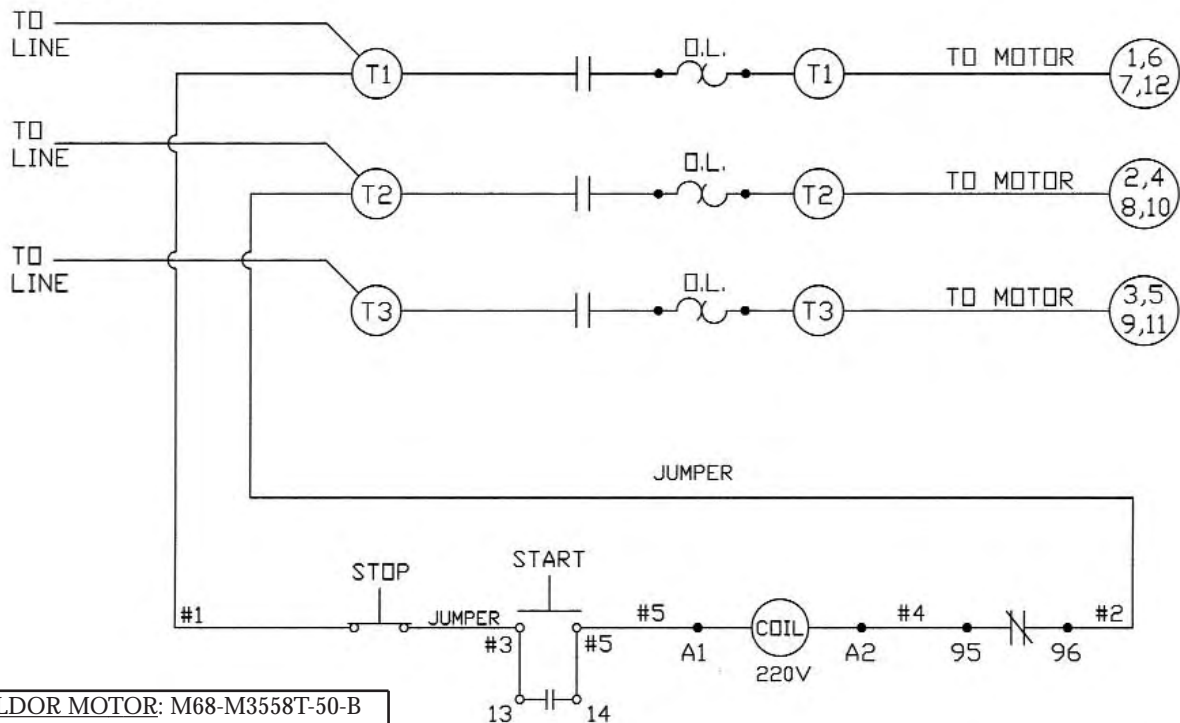


2HP BALDOR MOTOR: M68-M3558T-B
 2HP US ELECTRIC/EMERSON MOTOR: M55-G54313-U
 3HP US ELECTRIC/EMERSON MOTOR: M701-G57011-U

-220 VOLT 3 PHASE WITH 12 LEADS-

SCHEMATIC USING 3-POLE STROMBERG OR AEG W.T. SWITCH
 2HP/50HZ/3PH BALDOR MOTOR WITH 12 MOTOR LEADS WIRED FOR 220 VOLTS

220V/50HZ/3PH
 INCOMING POWER

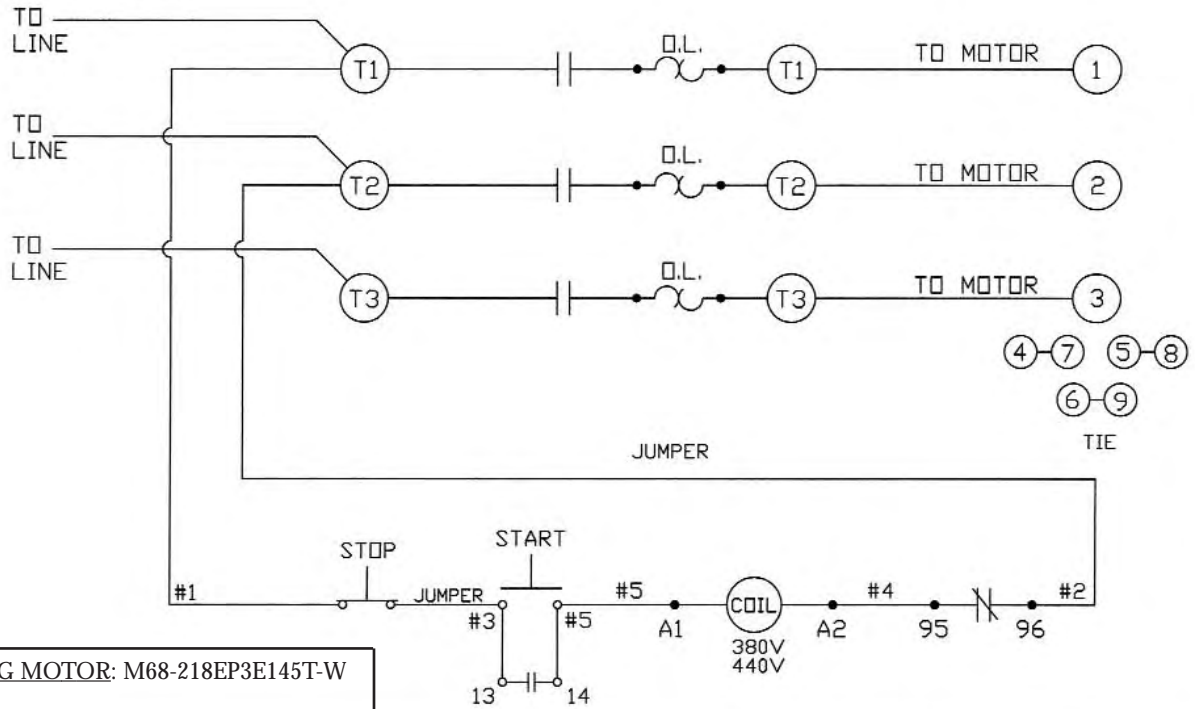


2HP BALDOR MOTOR: M68-M3558T-50-B

-380/460 VOLT WITH 9 LEADS

SCHMATIC USING 3-POLE AEG W.T. SWITCH
 2HP/50/60HZ/3PH WEG MOTOR WITH 9 MOTOR LEADS WIRED FOR 380/460 VOLTS

380/460V/50/60HZ/3PH
 INCOMING POWER

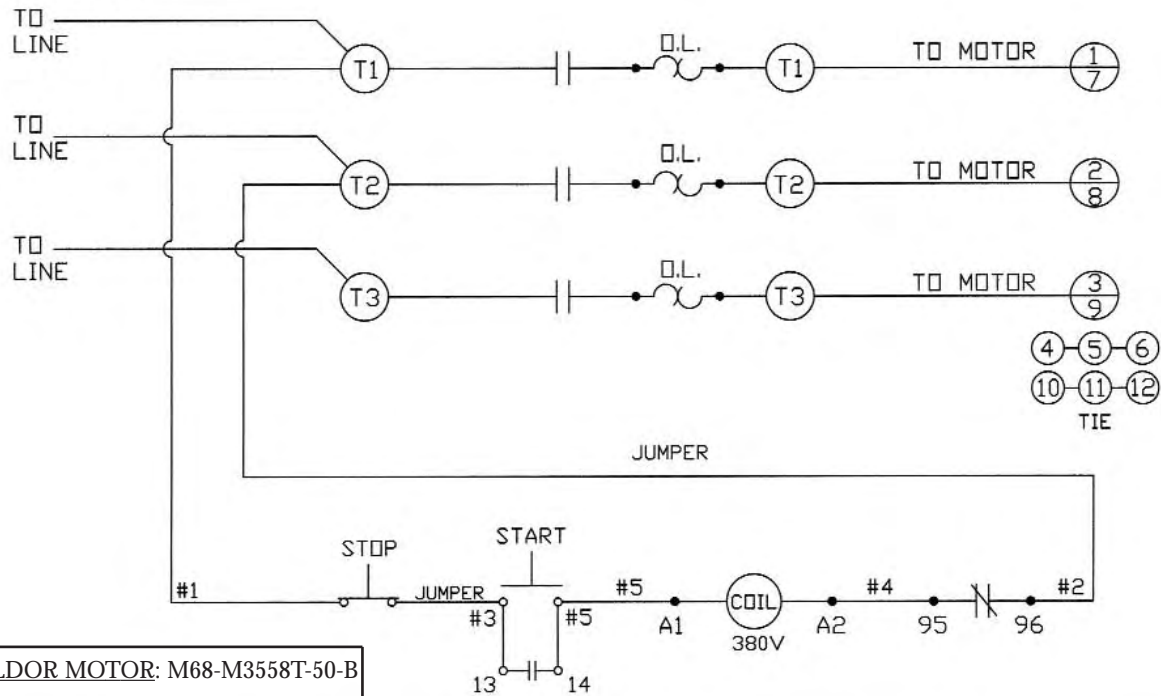


2HP WEG MOTOR: M68-218EP3E145T-W

-380 VOLT, 3 PHASE WITH 12 LEADS-

SCHMATIC USING 3-POLE STROMBERG OR AEG W.T. SWITCH
 2HP/50HZ/3PH BALDOR MOTOR WITH 12 MOTOR LEADS WIRED FOR 380 VOLTS

380V/50HZ/3PH
 INCOMING POWER

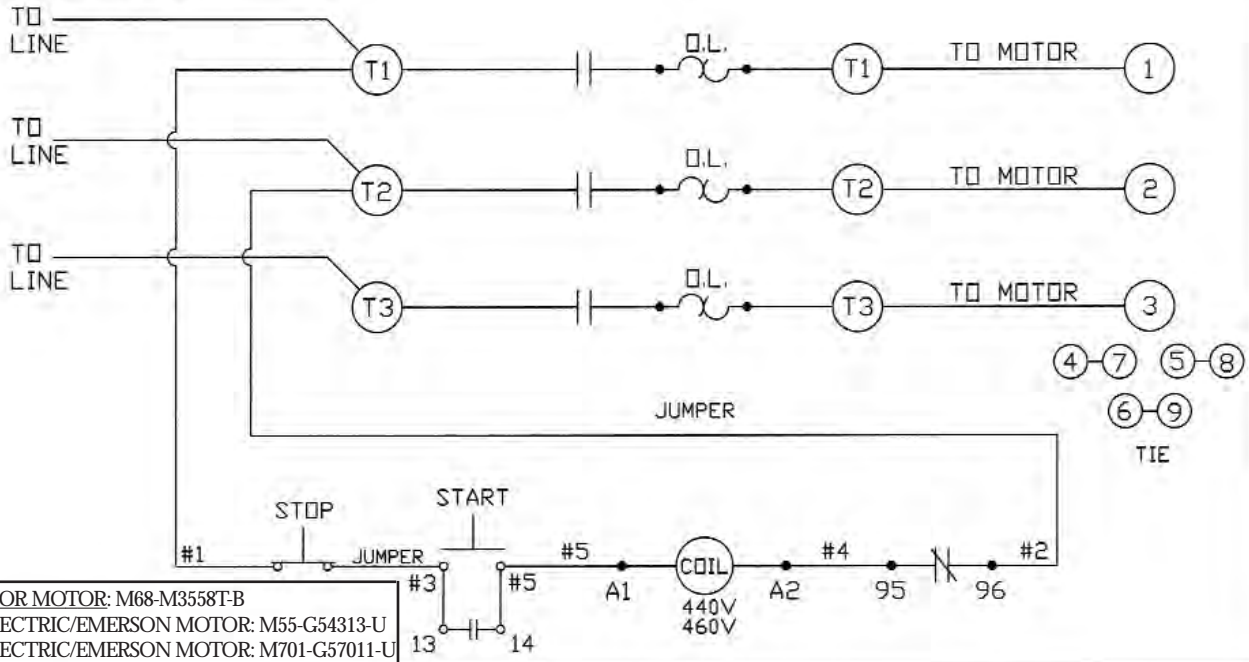


2HP BALDOR MOTOR: M68-M3558T-50-B

-440/460 VOLT 3 PHASE WITH 9 LEADS-

SCHEMATIC USING 3-POLE STROMBERG OR AEG W.T. SWITCH
 2HP/60HZ/3PH BALDOR MOTOR WITH 9 MOTOR LEADS (OR)
 2HP & 3HP/50/60HZ/3PH US ELECTRIC/EMERSON MOTOR WITH 9 MOTOR LEADS
 WIRED FOR 440/460 VOLTS

440/460V/50/60HZ/3PH
 INCOMING POWER

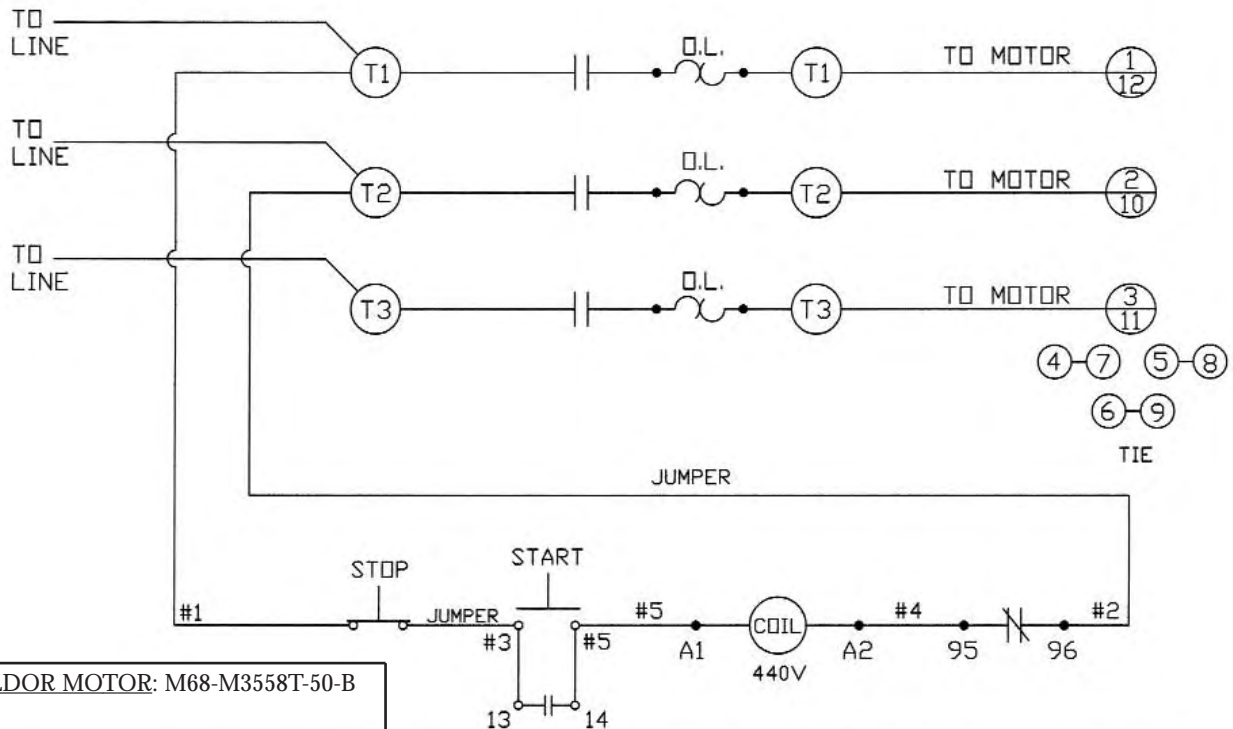


2HP BALDOR MOTOR: M68-M3558T-B
 2HP US ELECTRIC/EMERSON MOTOR: M55-G54313-U
 3HP US ELECTRIC/EMERSON MOTOR: M701-G57011-U

-440 VOLT, 3 PHASE WITH 12 LEADS-

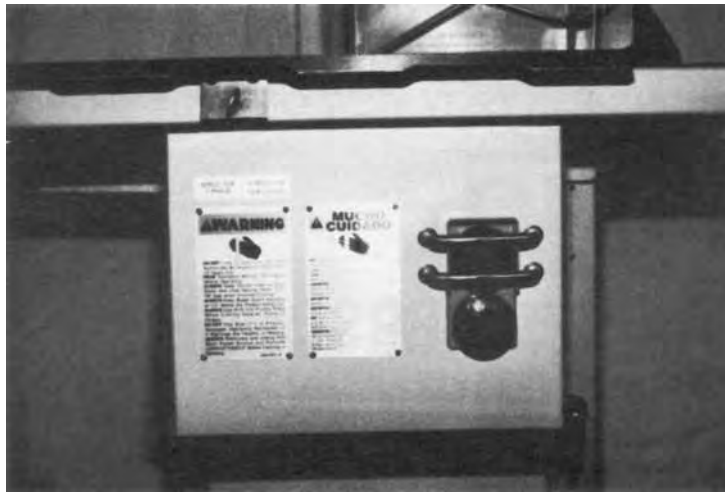
SCHEMATIC USING 3-POLE STROMBERG OR AEG W.T. SWITCH
 2HP/50HZ/3PH BALDOR MOTOR WITH 12 MOTOR LEADS WIRED FOR 440 VOLTS

440V/50HZ/3PH
 INCOMING POWER

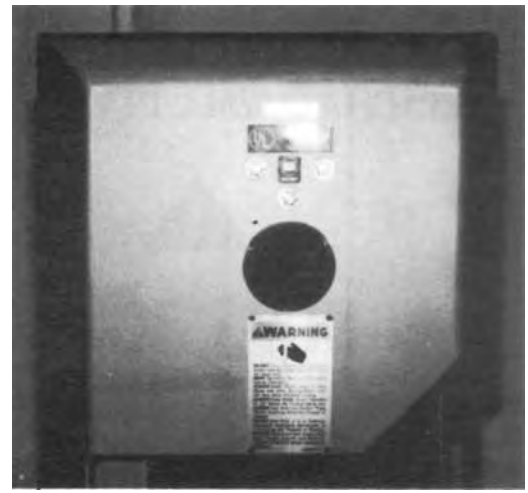


2HP BALDOR MOTOR: M68-M3558T-50-B

WARNING LABEL LOCATIONS ON MACHINE



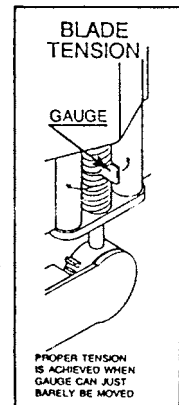
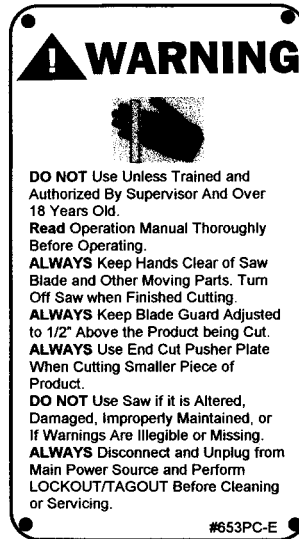
ATTACH TO CHANNEL BRACKET NEXT TO SWITCH CONTROL BUTTONS



ATTACH ON HEAD STRUCTURE BELOW MODEL/SERIAL NUMBER TAG



P/N 708 "DANGER EXPOSED BLADE" DECAL



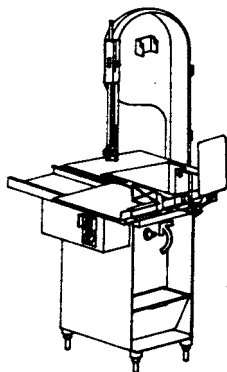
P/N 710 "BLADE TENSION" DECAL

ATTACH TO HEAD DOOR AS SHOWN



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

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



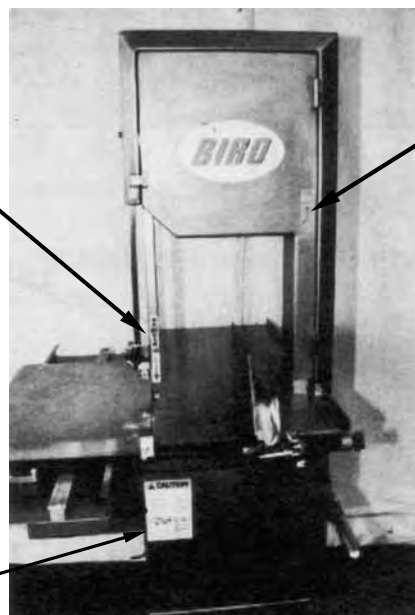
P/N 16716 CAUTION LABEL

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.

ATTACH TO HINGED RIGHT BASE DOOR



**WEARABLE SAW PARTS THAT WILL FIT BIRO POWER CUTTERS
MODELS**

11-22-1433-33-34-3334-44-4436-55

— EXCEPT WHERE NOTED OTHERWISE —

**CONTACT YOUR NEAREST BIRO AUTHORIZED DISTRIBUTOR
OR CONTACT BIRO MANUFACTURING**

Ph.: 419-798-4451 E.Mail: service@birosaw.com



**Item No. 130
SAW CLEANER BRACKET
ALL SAWS**



**Item No. 131
STEEL BLADE CLEANER
ALL SAWS**



**Item No. 159
CARRIAGE BEARING
11-22-33**



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



**Item No. 601
UPPER SAW GUIDE BRACKET
ALL SAWS**



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



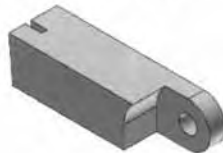
**Item No. S265
MEAT GAUGE SPRING
ALL SAWS**



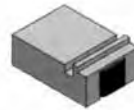
**Item No. S608
LOWER BLADE BACKUP
W/CARBIDE
22 (after S/N 35301)-1433-55**



**Item No. 119A
LOWER SAW GUIDE
ALL SAWS**



**Item No. 177
NYLON FILLER
ALL SAWS**



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



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



**Item No. S295
WHEEL CLEANER ARM
ALL SAWS**



**Item No. 179
WHEEL CLEANER
ALL SAWS**



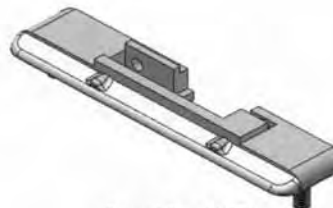
**Item No. S244
WHEEL CLEANER ARM STUD
ALL SAWS**



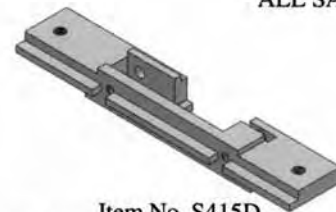
**Item No. S229
WHEEL CLEANER
ARM SPRING
ALL SAWS**



**Item No. S268
FILLER & GUIDE STUD
ALL SAWS**



**Item No. 415D
STATIONARY BAR
ALL SAWS**



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

— USE PARTS REPAIR KIT PART NO. 16700 —

MODEL 1433 PART NUMBERS AND DESCRIPTIONS

MODEL NO. AND SERIAL NO. REQUIRED WHEN ORDERING PARTS

Item No.	Description	Item No.	Description
HHS049NL	Hex screw, nylon, $\frac{5}{16}$ -18 x $\frac{1}{2}$ LG	14TP-1	Head door hinge pin, short, $1\frac{1}{4}$ "
M66-35M388S508-B	Motor, 2HP, 230-50-1 open	14003U-6	Upper wheel, 14"
M66-35M388X966-B	Motor, 2HP-115/230-60-1 open	14003UDF-6	Upper wheel 14" double flange
M68-67385-D	Motor, 2HP, 208/220/440-50/60-3, TE $\frac{7}{8}$	14212W	Platter rod
S11	Ratchet trigger, SS	14232	Scrap bucket
S19	Ratchet base, SS	14255	Saw guard on saw guide bar w/708 decal
S12132	Cleaning unit, rear	14256	Junction box
S12290	Front blade, wheel cleaning unit	S14272	Meat gauge gear rack, SS
S12335X	Upper wheel hinge plate, SS	14275	Meat gauge arm
S14005C	Head, SS	14275-5	Meat gauge plate, SS
S14006	Head door, SS	14301	Serial number plate (serial no. req'd)
S14007	Channel bracket, SS	14302HT	Saw blade, 108"
S14214	Side platter bracket, SS	14313-266	Operating and service manual
S14217PD	Base door left, SS, bolt on	14544	Grease seal, 1.50 ID
S14217R	Base door right, SS, hinged	14545	Retaining ring, internal, $2\frac{7}{16}$ ID
S14239	Base, SS	14548	Grease seal, $\frac{7}{8}$ ID
S155-11	Meat carriage stop thumb screw, SS	14549	Lower bearing housing cap
S155B-1	Meat carriage stop, welded	14550	Adjustment screw, lower bearing housing
S155EZ-3	Hex stand off	14551	Hex jam nut, $\frac{5}{8}$ -11, SS
S16120	Channel	14560	Lower saw wheel, removable
S163F	Platter spacer weld button, SS	14560DF	Lower saw wheel 14" double flange
S189	Ratchet arm stud, SS	14662	Saw guard, w/708, SS head
S19	Ratchet base	14746	T-handle lock, removable lower wheel
S200B1	Stop stud on saw guide bar	150	Conduit, flexible, metal, per inch
S217C	Base door hinge pin, long, SS	151	Conduit, watertight, per inch
S217E	Base door hinge pin, short, SS	16112	Head door latch
S229	Wheel cleaner arm torsion spring, SS	16155EZ	Meat carriage, EZ flow
S235	Taper pin, SS, $4 \times \frac{3}{4}$	16159	Meat carriage bearing
S239-B40	Base foot welded, short, SS	16163B	Platter neck guard
S239-B41-4	Adjustable leg bolt, SS	16200	Carriage stop, movable
S244	Wheel cleaner arm stud, SS	16220-1	Carriage stop, fixed
S253	Upper wheel aligning screw, SS	16251-90X78AL	Upper v-belt pulley $9 \times \frac{7}{8}$, aluminum
S262	Meat gauge release handle, SS	163A	Platter rod clip
S268	Stationary bar headless screw, SS	16517	Inner race spacer, removable wheel
S295	Wheel cleaner arm, SS	16543	Lower shaft
S325	Wheel cleaner arm washer, SS	16547	Lower bearing housing, removable wheel
S360CB-1	Carriage bolt, $\frac{3}{8}$ -16 x $1\frac{1}{4}$, SS	17211-22	Finger lift shim, .022
S415D-2	Stationary bar, SS	17211-35	Finger lift shim, .035
S416	Platter locator weld pin, SS	175-1-S	Thumb screw, $\frac{1}{4}$ D x $\frac{1}{2}$
S608	Lower blade back-up guide w/carbide	175-2-S	Thumb guard screw $\frac{1}{4}$ -20
10-1	Ratchet arm	175S	Thumb guard, nylon
111AL	Tension spring pin	177	Stationary bar nylon filler
112-212	Waved washer	179	Wheel cleaner
S116-22	Saw guide bar, 22"	18120EZ-B3	Guide bar, EZ flow, T-shaped
118	Tension spring plate	19CB	Ratchet base carriage bolt, $\frac{3}{8}$ -16 x $1\frac{3}{4}$
119A	Saw guide in stationary bar	193	Saw guide bar spring
119FSC	Saw guide in stationary bar, fish	196	Saw tension spring
12273LH	Meat gauge bracket, LH	197	Tension spring gauge
12273RH-3	Meat gauge bracket, RH	198	Cap, tension spring pin
12700-2	Wearable parts replacement kit	211	Finger lift bracket
131	Saw cleaner, SS		
14TP	Head door hinge pin, long, $1\frac{1}{2}$ "		

MODEL 1433 PART NUMBERS AND DESCRIPTIONS (Cont.)

Item No.	Description	Item No.	Description
211A-291Q	Finger lift fastener knob, 4-point	265	Meat gauge release spring
211D	Finger lift fastener bolt	267	Meat gauge release cotter key
211Q	Fastener knob 4 pt., 5/16-18	270	Meat gauge release pin
212CP	Platter rod cotter pin	271P	Meat gauge worm gear, Delrin
221-52	V-belt, 52"	272-8	Cap nut 5/16-18
221-53	V-belt, 53"	272-10	Meat gauge lock knob, 4-point
224	Conduit connector, straight	272-11	Lock knob socket screw
224-1	Conduit connector, WT, straight	280	Key
225	Conduit connector, 90 degree	310	Waved washer
225-1	Conduit connector, WT, 90 degree	311	Rubber bumper for #16220-1 stop
225-2	Conduit connector, 45 degree	311-1	Rubber bumper for #16200 stop
226-28	Conduit connector washer	324	Motor shim, 1/16"
230DL	Upper shaft seal, double lip	324A	Motor shim, 1/8"
231DL	Lower shaft seal, double lip	331	Platter bracket rubber bumper
234	Grease fitting, upper wheel	340	Star lock washer
237	Upper shaft castellated lock nut	360A1	Bearing housing angled grease fitting
238	Upper shaft castellated lock nut washer	374	Shell Cassida grease EPS-2
240	Ratchet trigger spring	375	Drive screw for name plate
242R	Base door lock, right	376	Drive screw, SS, #10 x 1/2
247	Upper shaft	4-30AL	Motor pulley, Al, 60 cy, 5 x 3/4
248	Upper wheel hub cap	4-35AL	Motor pulley, Al, 60 cy, 5 x 7/8
249	Base door handle	4-45AL	Motor pulley, Al, 50 cy, 6 x 3/4
252X	Upper shaft lock nut	4-49AL	Motor pulley, AL, 50 cy, 6 x 7/8
256P	Safety pusher plate, composite	513	Upper wheel hub gasket
256PM	Safety pusher plate, aluminum	530	Retaining snap ring
259	Conduit anti-short bushing	601	Upper saw guide bracket
260	Aluminum slide gib	602B	Saw guide, upper
260ALS	Shim for slide gib	602AFSC	Saw guide, upper, fish
264-1	Meat gauge release hand wheel	708	Decal "DANGER EXPOSED BLADE"
264G	Hand wheel groove pin	71-1	Upper wheel hinge bracket

COMPLETE ASSEMBLIES FOR MODEL 1433

Item No.	Description	Item No.	Description
AS12132	Rear cleaning unit assembly	A16112	Head door latch assembly
AS12290	Front cleaning unit assembly	A16155EZ	Meat carriage assembly, EZ flow
AS14005C	Head and door assembly	A16200	Carriage stop assembly, movable
AS14006	Head door assembly	A16220-1	Carriage stop assembly, fixed
AS14217R	Base door assembly, hinged right	A16547	Lower bearing housing assembly without wheel
AS16120EZ	Channel assembly, EZ flow	A19-1	Ratchet assembly
AS415D-2	Stationary bar assembly	A196	Tension spring assembly
A116-2214	Saw guide bar assembly	A227	Upper bearing cup/cone assembly
A14003U-6	Upper wheel assembly without hinge plate	A247	Upper shaft bearing assembly without wheel
A14003U335-6	Upper wheel assembly with hinge plate	A249R	Base door lock handle assembly, right
A14163	Stationary platter assembly	A262	Meat gauge release assembly
A14211	Fingerlift assembly w/guard	A295	Wheel cleaner assembly
AS14273-275	Meat gauge assembly	A363	Lower bearing cup/cone assembly
A14275	Meat gauge plate assembly	A71-1	Upper wheel hinge bracket assembly

OPERATOR'S SIGNATURE PAGE

WARNING
READ AND UNDERSTAND THIS ENTIRE
MANUAL BEFORE SIGNING BELOW

MY SIGNATURE ATTESTS THAT I HAVE COMPLETELY READ AND UNDERSTAND THIS MANUAL. I REALIZE THAT THIS MACHINE, IF OPERATED CARELESSLY, CAN CAUSE SERIOUS INJURY TO MYSELF AND OTHERS.

NAME (PRINT)	SIGNATURE	SUPERVISOR'S INITIALS	DATE

LIMITED WARRANTY:

WARRANTY: The BIRO Manufacturing Company warrants that Model 1433 will be free from defects in material and workmanship under normal use and with recommended service. BIRO will replace defective parts, which are covered by this limited warranty, provided that the defective parts are authorized for return, shipping charges prepaid, to a designated factory for inspection and/or testing.

DURATION OF WARRANTY: The warranty period for all parts covered by this limited warranty is one (1) year from date of Inspection/Demonstration advised on the returned Warranty Registration card, or eighteen (18) months from original factory ship date, whichever occurs first, except as noted below.

PARTS NOT COVERED BY WARRANTY: The following are **not** covered by this limited warranty: wearable parts on the cleaning system such as wheel cleaners (Item No. 179), saw blade cleaners (Item No. 131), blade backup guides (Item No's. 602B, 605 and 119A), and the nylon filler (Item No. 177). This limited warranty does not apply to machines sold as used, rebuilt, modified, or altered from the original construction in which the machine was shipped from the factory. (WATER CONTAMINATED ELECTRICAL SYSTEMS ARE NOT COVERED UNDER THIS LIMITED WARRANTY.) BIRO is not responsible for electrical connection of equipment, adjustments to switch controls or any other electrical requirements, which must be performed only by a certified electrician. BIRO is not responsible for service charges or labor required to replace any part covered by this limited warranty or for any damages resulting from misuse, abuse, lack of proper or recommended service.

EXCLUSION OF WARRANTIES AND LIMITATION OF REMEDIES: BIRO gives no warranties other than those expressly stated in this limited warranty. THE IMPLIED WARRANTY OF MERCHANTABILITY, THE IMPLIED WARRANTY OF FITNESS FOR PROCESSING FOOD PRODUCTS, AND ALL OTHER IMPLIED WARRANTIES ARE SPECIFICALLY EXCLUDED. BIRO IS NOT LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, EXPENSES, OR LOSSES. THE REMEDIES PROVIDED IN THIS BIRO LIMITED WARRANTY ARE PURCHASER'S SOLE AND EXCLUSIVE REMEDIES AGAINST BIRO.

REGISTRATION CARDS: You must sign, date and complete the warranty registration card supplied with each machine. The warranty card must be returned to The Biro Manufacturing Company for proper registration. If no warranty card is returned to BIRO, the warranty period will begin from the date the machine was originally shipped from the factory.

HOW TO GET SERVICE:

1. Contact the agency from whom you purchased the machine; or
2. Consult the yellow pages of the phone directory for the nearest authorized dealer; or
3. Contact Biro Mfg. Company for the nearest authorized service entity (250 plus worldwide) in your area.

THE BIRO MANUFACTURING COMPANY

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.: 14313-266

PTCT: MD 1433-266-7-07-7 ACME