

WELCOME TO



POWER CUTTER REFERENCE MANUAL
for Standard and Special Power Cutters,
Options and Extra Equipment

MODEL 22 SERIES

MODEL 1433 SERIES

MODEL 3334 SERIES

MODEL 44 SERIES

MODEL 4436 SERIES

SERVING THE
MEAT-FISH-FOOD INDUSTRY

THE BIRO MANUFACTURING COMPANY • MARBLEHEAD, OHIO 43440-2099 U.S.A.—SINCE 1921

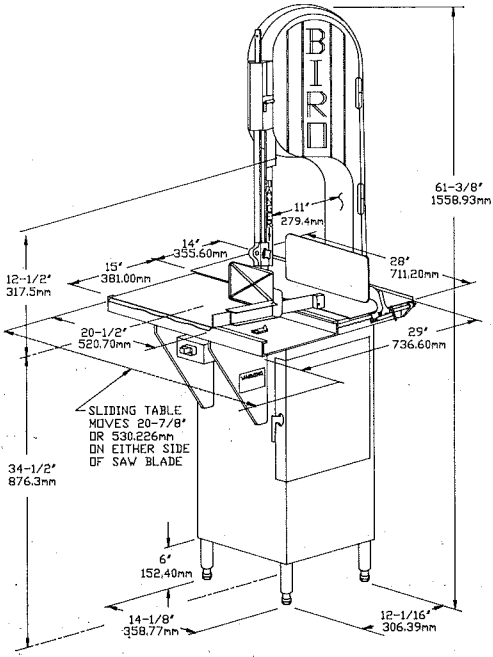
Since 1921, the BIRO® Manufacturing Company has developed and manufactured food processing equipment to meet the various requirements of the food processing industry. BIRO® also designs and builds special food processing machines according to customer specification. A wide variety of models is available from which to select as well as a number of electrical motor and controller options. It is important that electrical specification for your particular application be specified when inquiring. If additional assistance is needed regardless whether the equipment is standard or special, contact our authorized distributor covering your locality or the Sales Department of the BIRO® Manufacturing Company, Marblehead, Ohio 43440-2099 U.S.A. Phone (419) 798-4451 Fax (419) 798-9106

BIRO® is the registered trademark of the BIRO® Manufacturing Company, Marblehead, Ohio as applied to power driven meat, fish and bone cutting machines, meat grinders, tenderizers, chippers, slicers, and cutters; automatic power feeds and conveyors; all purpose flakers and slicers; power spray washers and blades and parts therefore of its manufacture or design for use in the food processing industry.

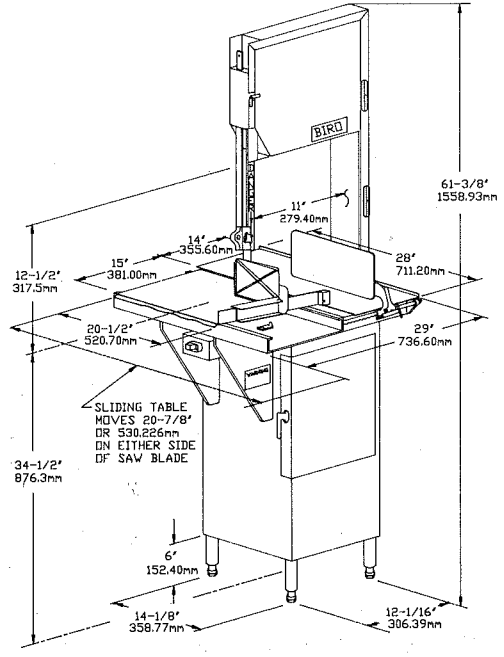
THE INFORMATION AND FINDINGS CONTAINED HEREIN REPRESENT OUR BEST JUDGMENT BASED ON WORK DONE AND TESTS PERFORMED. THE BIRO® MANUFACTURING CO. ASSUMES NO LIABILITY WHATSOEVER IN CONNECTION WITH ITS USE. ALL SPECIFICATIONS CONTAINED HEREIN ARE SUBJECT TO CHANGE WITHOUT NOTIFICATION.

MODEL 22 SERIES

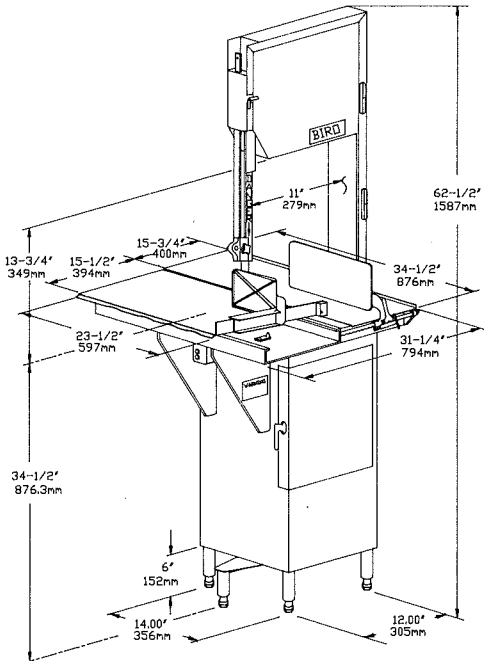
Blade Length 91" Unless Noted Otherwise



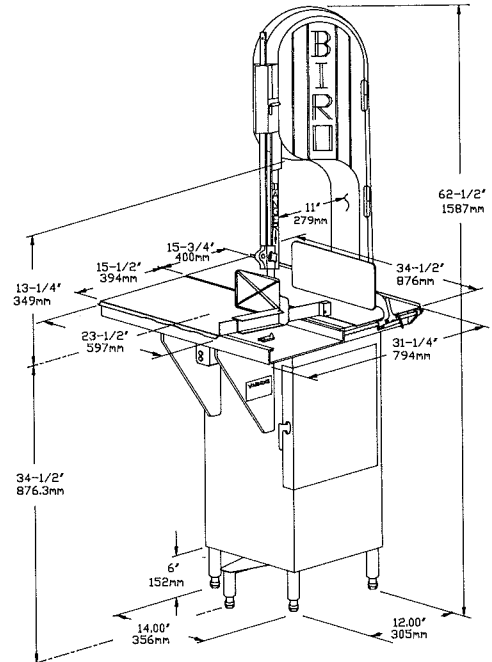
**Model 22
Standard Configuration
Right Hand Feed**



**Model 22
Standard Configuration
Right Hand Feed
Stainless Steel Head Structure**

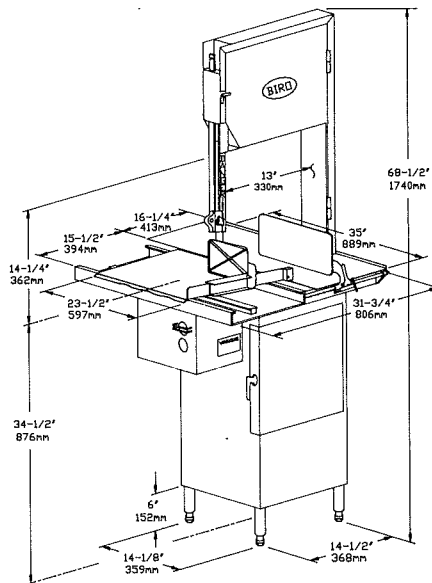


**Model 22 Box Beef Saw
Right Hand Feed
Stainless Steel Head And Door Structure
Blade Length 95"
Moving Carriage—15 1/2" x 23 1/2"
Rear Stationary Platter—15 3/4" x 34 1/2"
Vertical Cutting Clearance—13 3/4"**



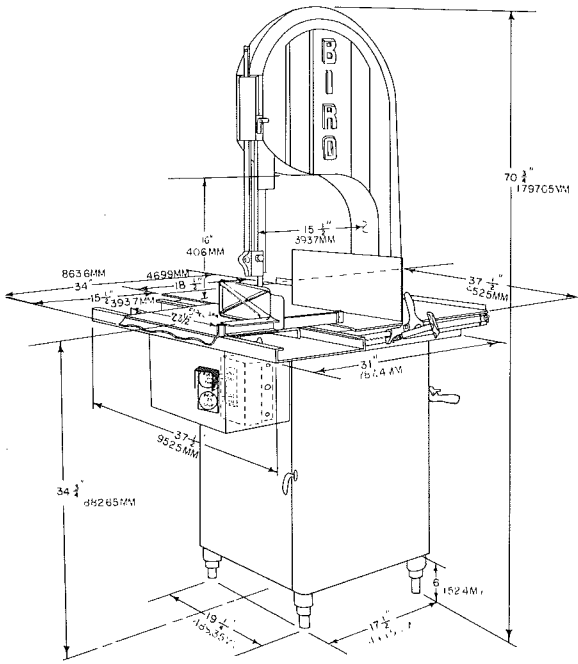
**Model 22 Box Beef Saw
Right Hand Feed
Standard Alum. Head And Door Structure
Blade Length—95"
Moving Carriage 15 1/2" x 23 1/2"
Rear Stationary Table—15 3/4" x 34 1/2"
Vertical Cutting Clearance—13 3/4"**

Model 1433

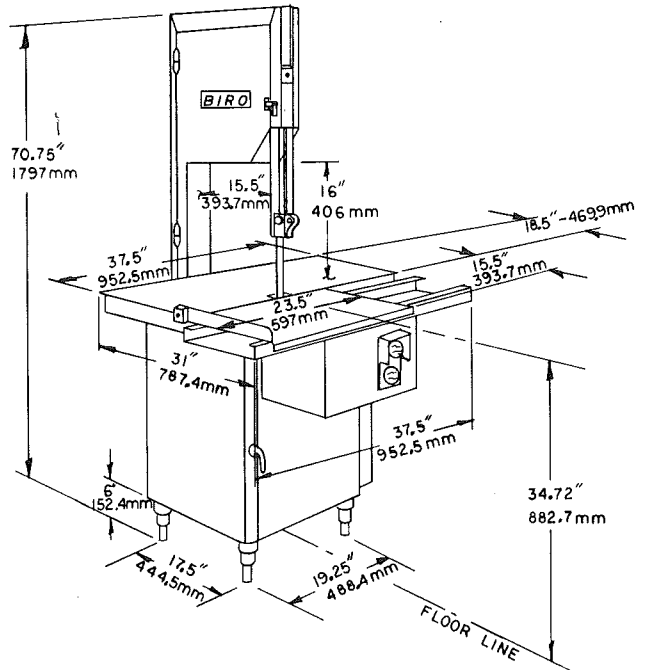


Model 1433
Right Hand Feed
Standard Steel Head Structure
Blade Length—108"
Moving Carriage—15 1/2" x 23 1/2"
Rear Stationary Table—16 1/4" x 35"
Vertical Cutting Clearance—14 1/4"

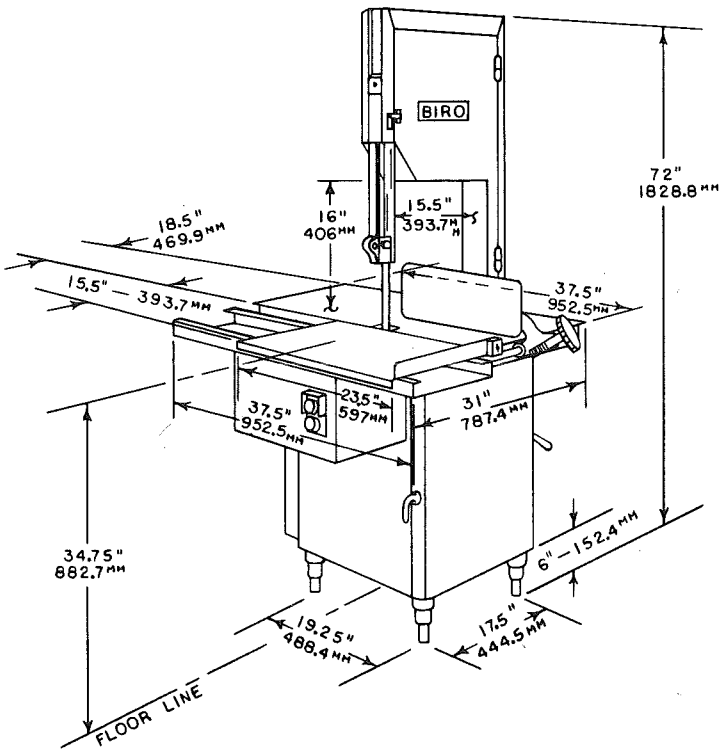
MODEL 3334 SERIES
Blade Length 124" Unless Noted Otherwise



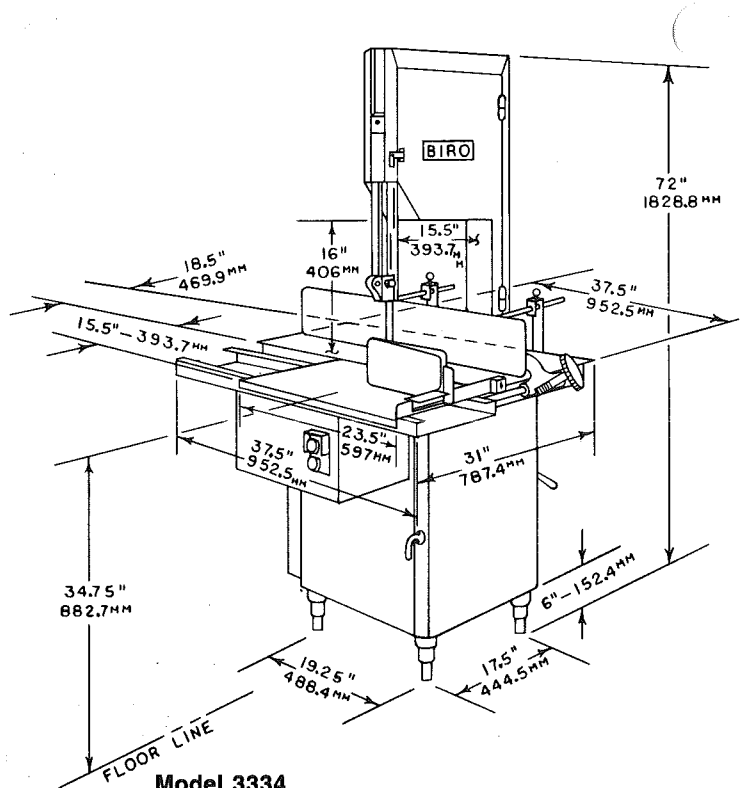
Model 3334
Right Hand Feed
Standard Configuration



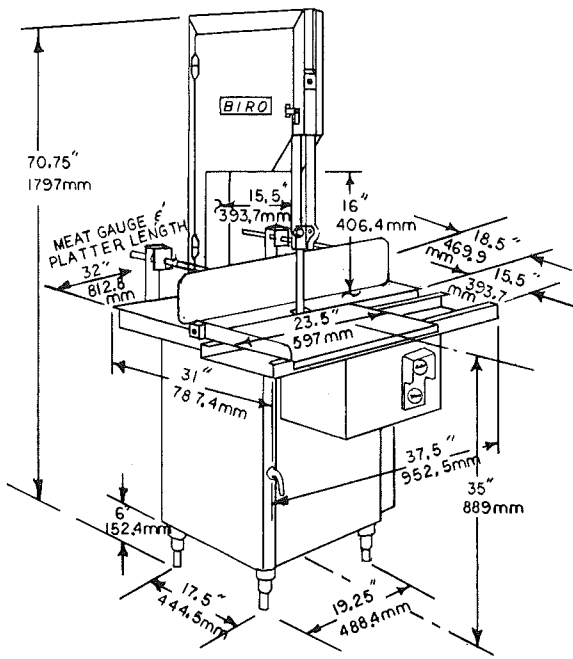
Model 3334
True Left Hand Feed
Less Meat Gauge Plate Assembly
Stainless Steel Head and Door Structure



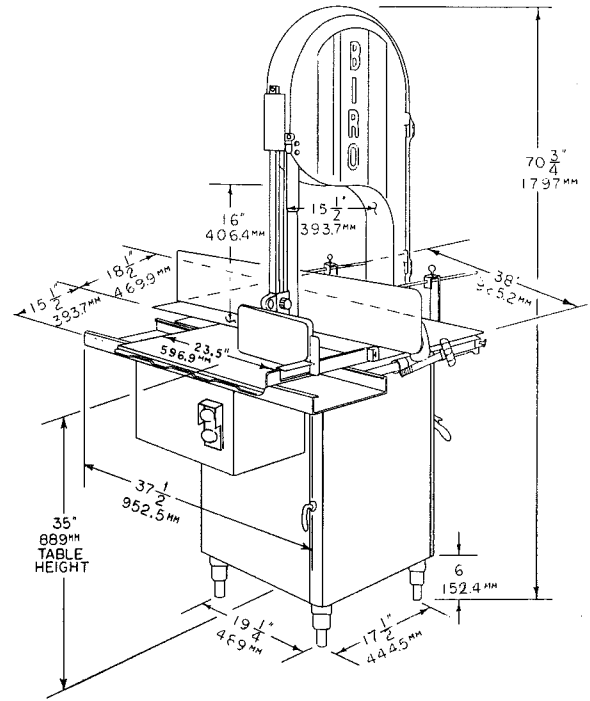
Model 3334
Right Hand Feed
Stainless Steel Head And Door Structure



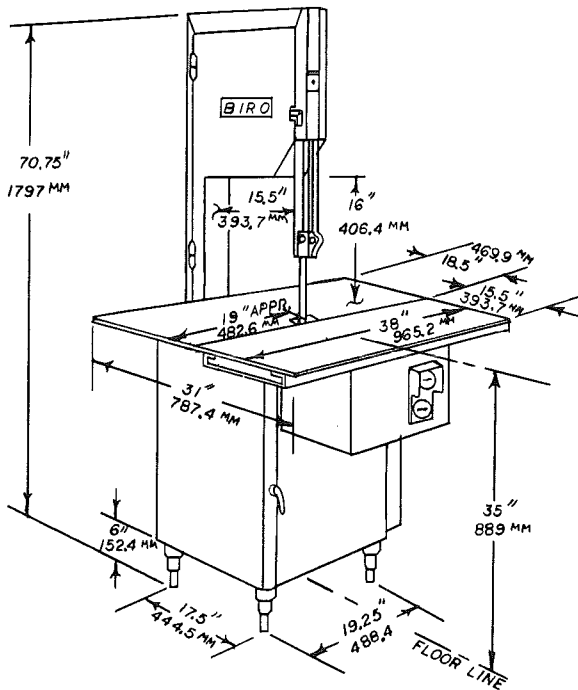
Model 3334
Right Hand Feed
Stainless Steel Head And Door Structure
Portion Control Gauge Plate Full Length of
Platter
Meat Gauge Stabilizers



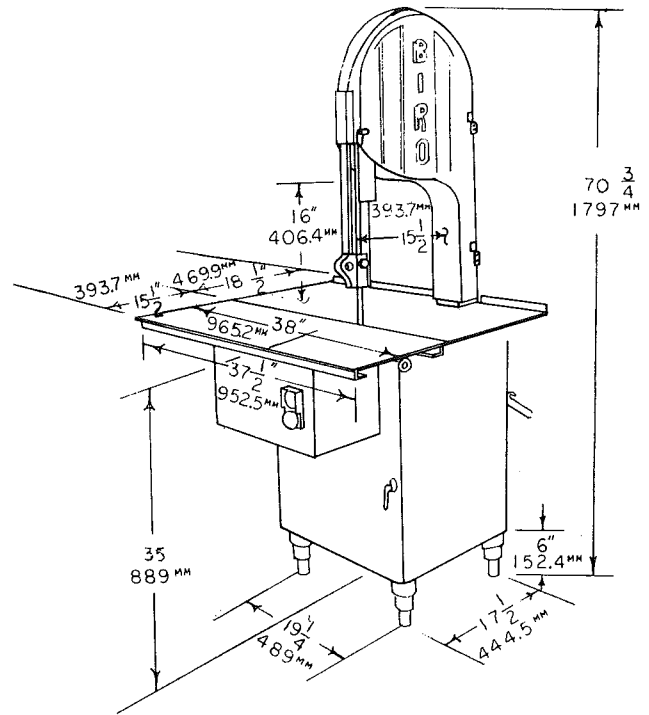
Model 3334
True Left Hand Feed
Stainless Steel Head And Door Structure
Portion Control Gauge Full Length of Platter
Meat Gauge Stabilizers



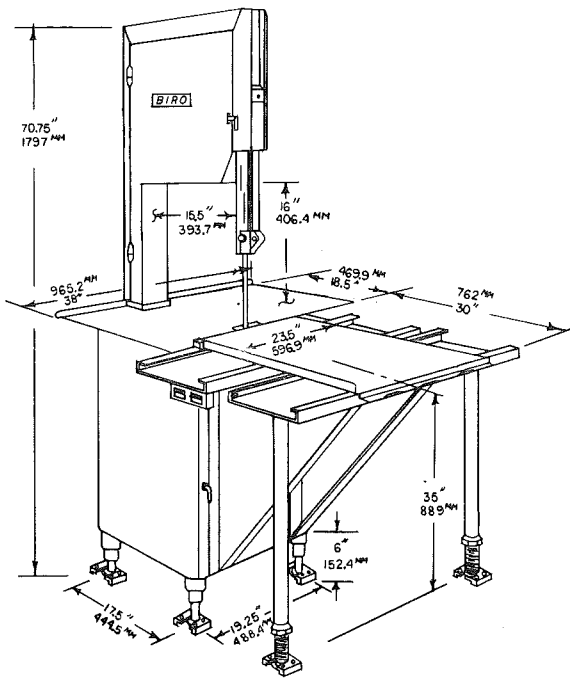
Model 3334
Right Hand Feed
Portion Control Gauge Plate Full Length of Platter
Meat Gauge Stabilizers



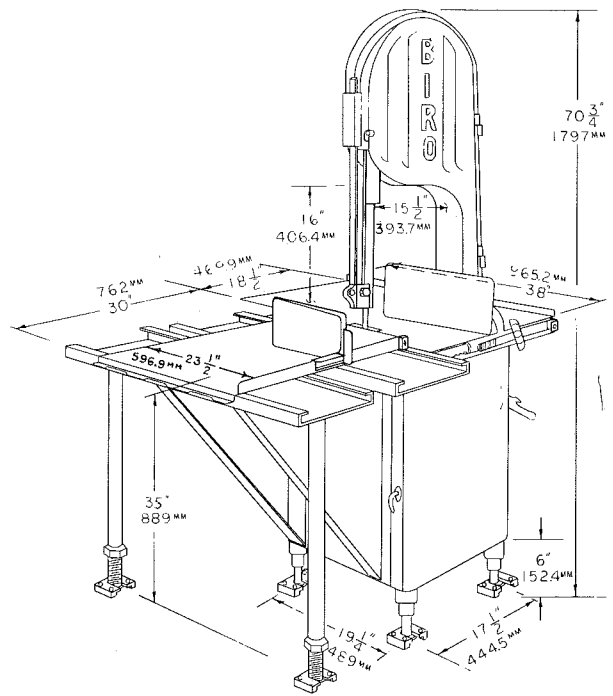
Model 3334 Trim Cutter
True Left Hand Feed
Stationary Front Table
Less Meat Gauge Plate Assembly
Stainless Steel Head and Door Structure



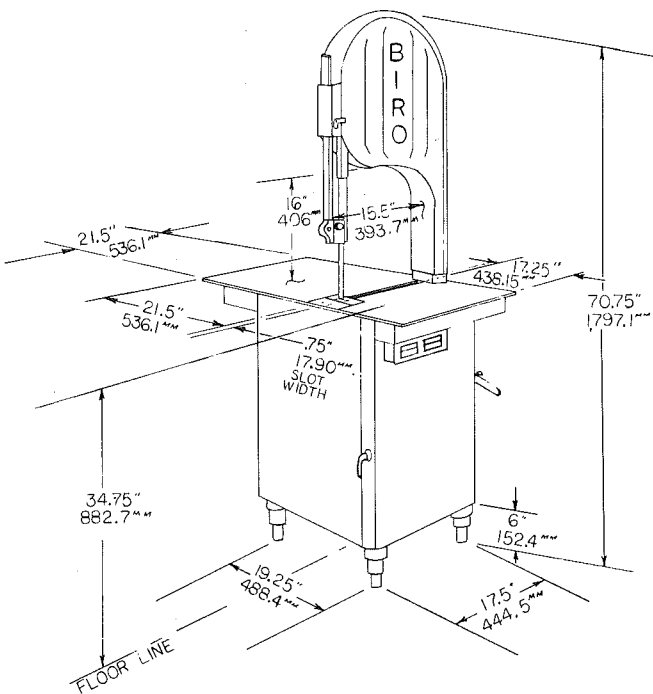
Model 3334 Trim Cutter
Right Hand Feed
Stationary Front Table 15 1/2" x 38"
Meat Gauge Plate Assembly Available



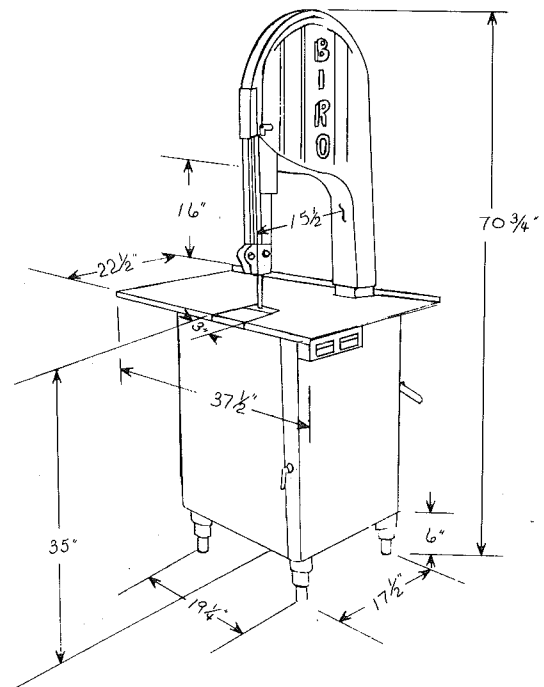
Model 3334
True Left Hand Feed
Stainless Steel Head And Door Structure
Double Front Carriage System 23 1/4" x 30"
Stainless Steel Legs With Floor Chocks
Less Meat Gauge Plate Assembly



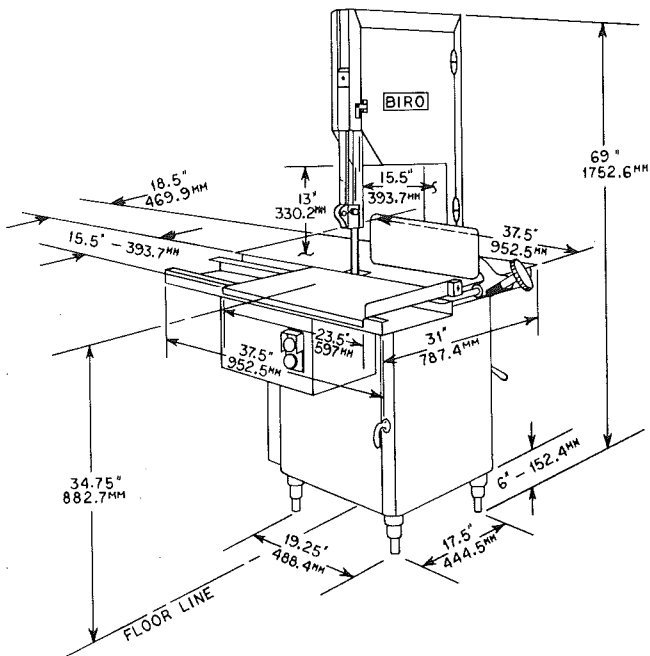
Model 3334
Right Hand Feed
Double Front Carriage 23 1/2" x 30"
Stainless Steel Legs With Floor Chocks
With Meat Gauge Plate Assembly



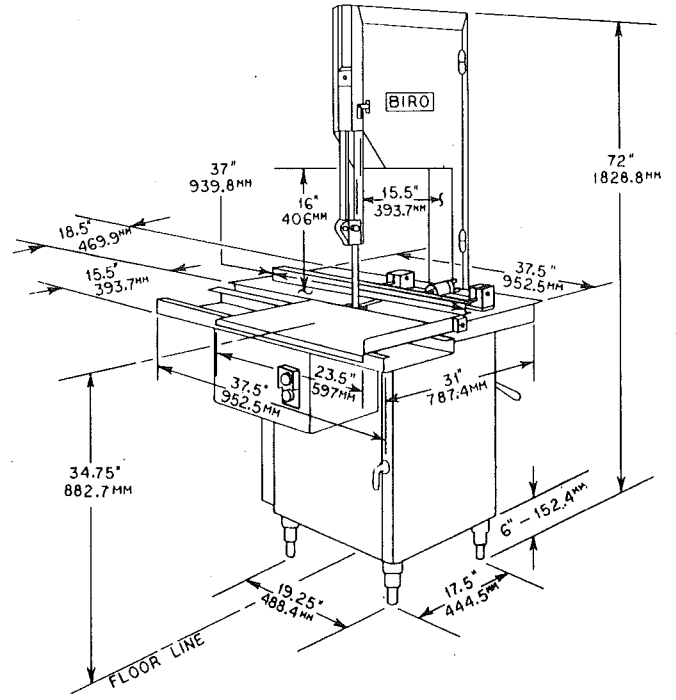
Model 3334
Right Hand Feed
Split Platter For Blade Changing
Less Front Carriage System
Less Meat Gauge Plate Assembly



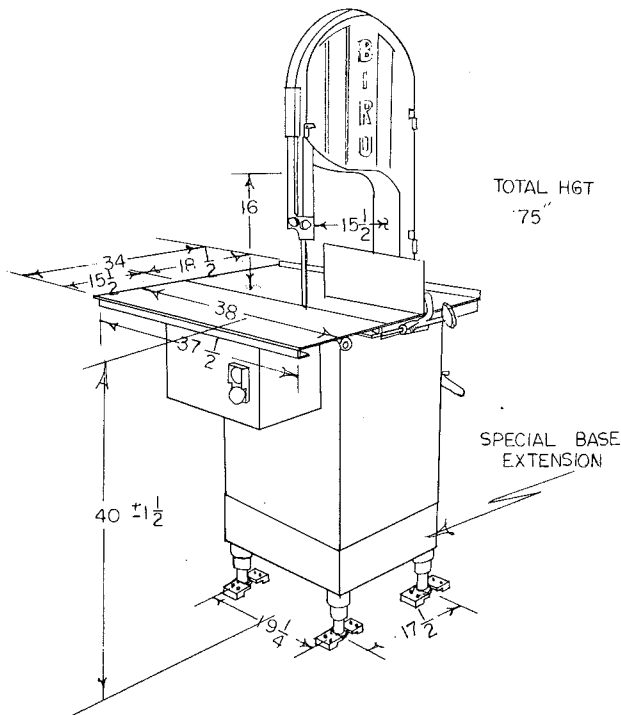
Model 3334
Right Hand Feed
One Piece Platter
Less Front Carriage System
Less Meat Gauge Plate Assembly



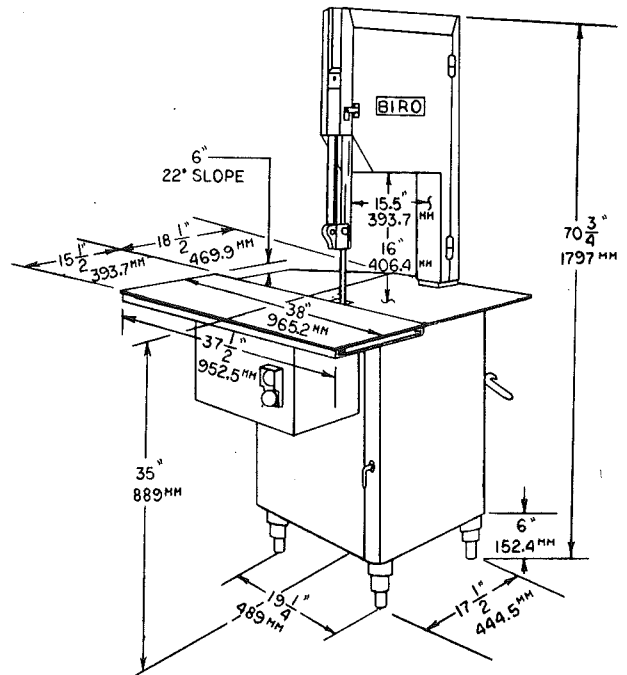
Model 3334
Right Hand Feed
Low Profile Stainless Steel Head And Door
Structure
Standard Front Moving Carriage
Gauge Plate Assembly
Blade Length—116"



Model 3334
Right Hand Feed
Stainless Steel Head And Door Structure
Split Platter
Precision Gauging Fence—Full Length

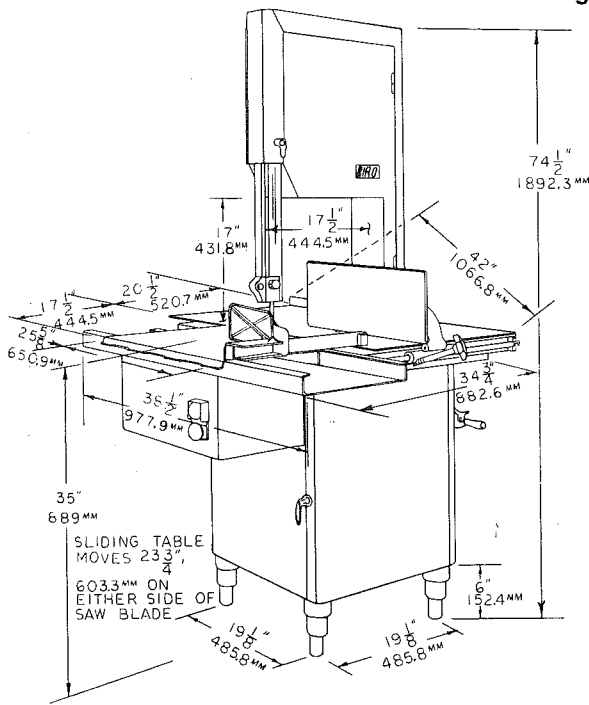


Model 3334
Right Hand Feed
Stationary Front Table
Meat Gauge Plate Assembly
Stainless Steel Base Extension
Stainless Steel Legs With Floor Chocks

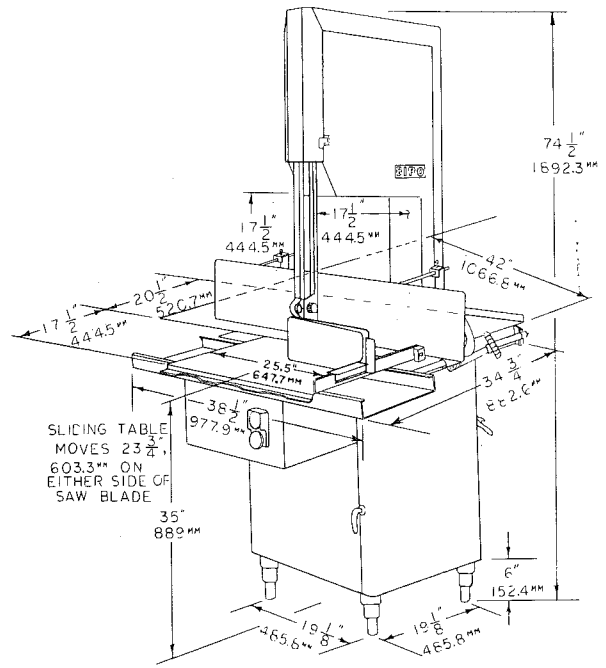


Model 3334
Right Hand Feed
Stainless Steel Head And Door Structure
Stationary Front Table 15 1/2" x 38"
Sloped Rear Platter For Conveyor Take-away

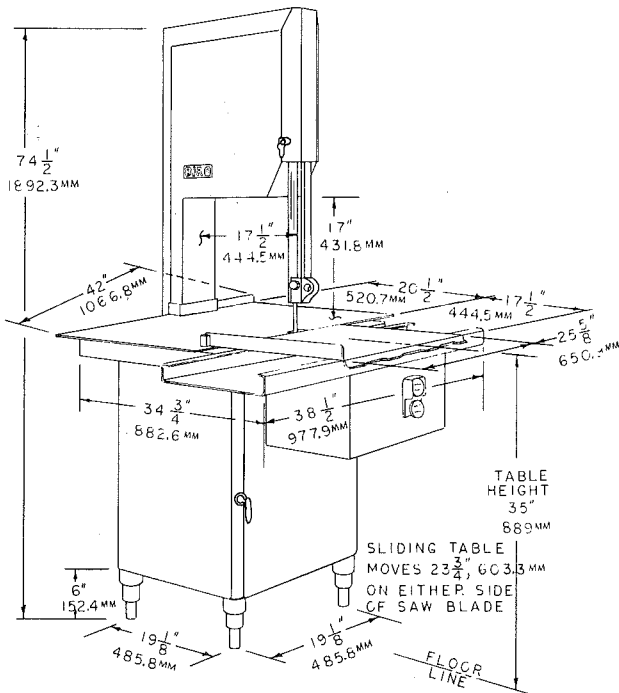
MODEL 44 SERIES
Blade Length 135" Unless Noted Otherwise



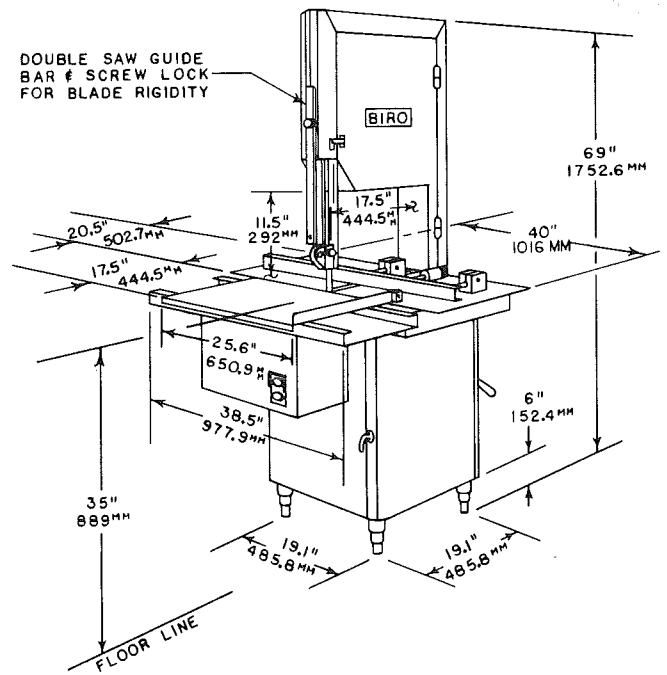
Model 44
Right Hand Feed
Standard Configuration



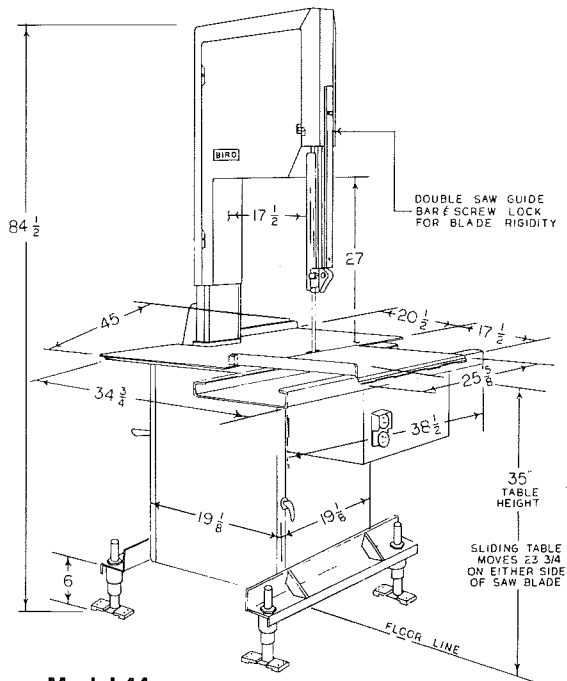
Model 44
Right Hand Feed
Standard Configuration With Portion Control
Gauge Plate Full Length
Meat Gauge Stabilizers



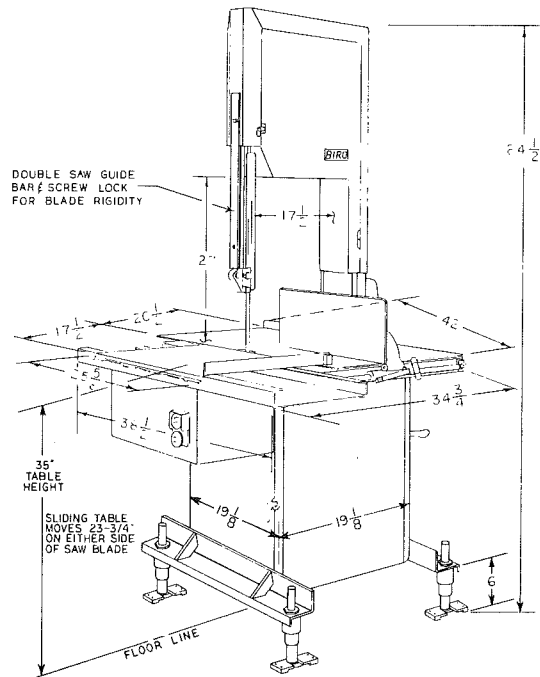
Model 44
True Left Hand Feed
Less Meat Gauge Plate Assembly



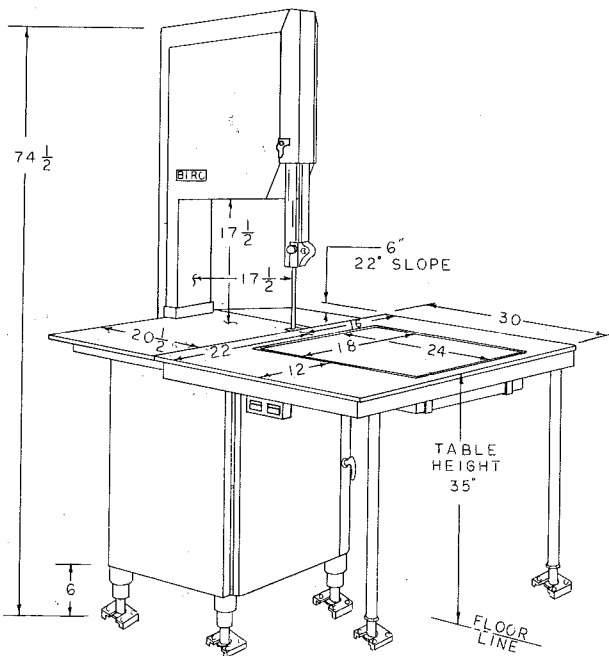
Model 44
Right Hand Feed
Low Profile Head And Door Structure
Split Platter For Blade Change
Precision Gauging Fence
Blade Length—124"



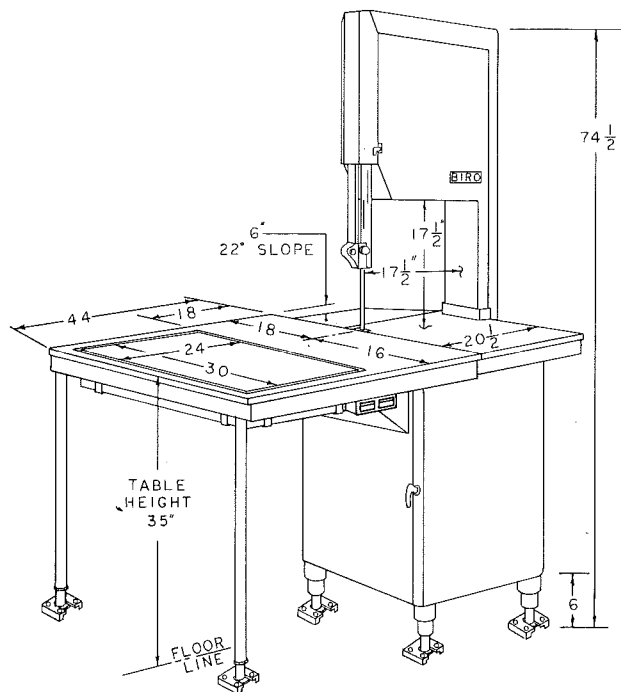
Model 44
True Left Hand Feed
Standard Front Carriage And Channel
Double Saw Guide Bar
Extended Head And Door Structure
Stabilizing Support System
Stainless Steel Legs With Floor Chocks
Less Meat Gauge Plate Assembly
Blade Length—156"



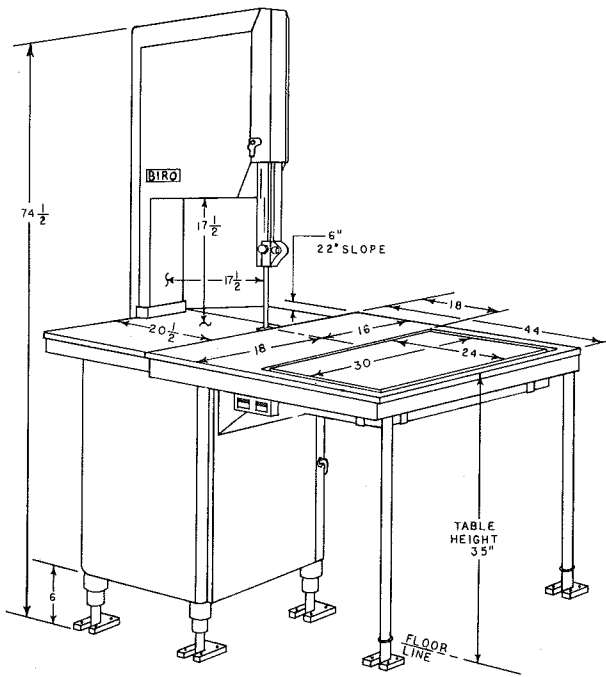
Model 44
Right Hand Feed
Standard Front Carriage And Channel
Double Saw Guide Bar
Extended Head And Door Structure
Stabilizing Support System
Stainless Steel Legs With Floor Chocks
Standard Meat Gauge Plate Assembly
Blade Length—156"



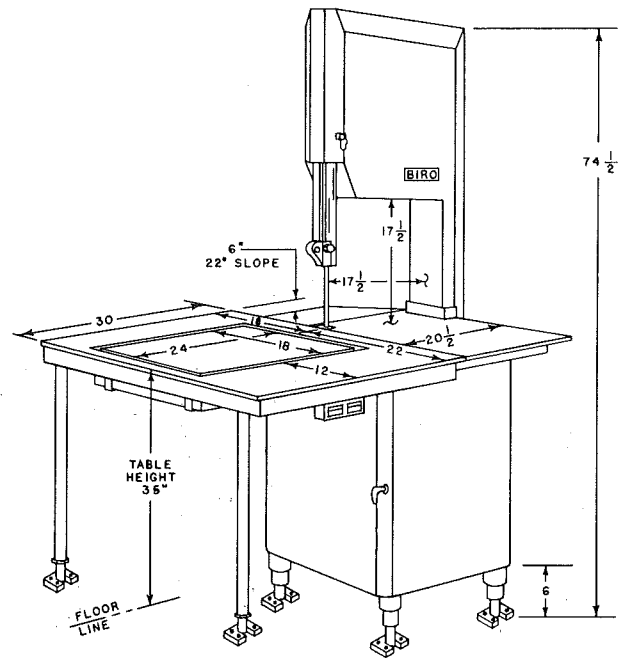
Model 44
True Left Hand Feed
Stationary Front Table With Inserted Load Cell
Scale Platform
Stainless Steel Legs With Floor Chocks



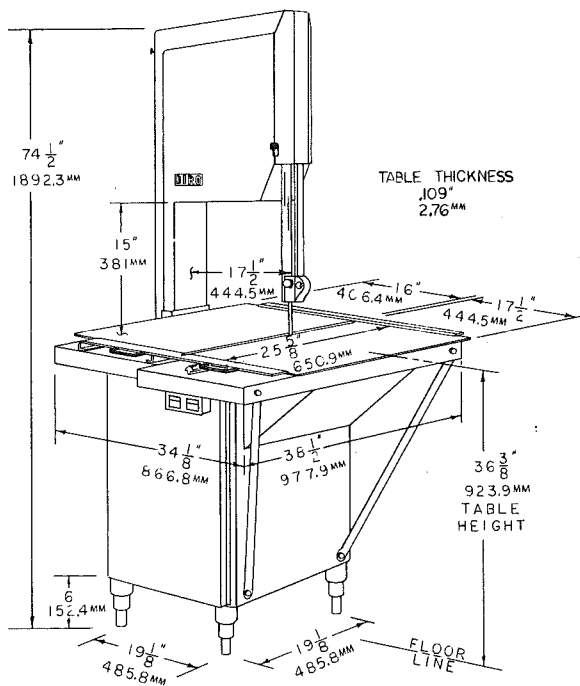
Model 44
Right Hand Feed
Stationary Front Table With Inserted Load Cell
Scale Platform
Stainless Steel Legs With Floor Chocks



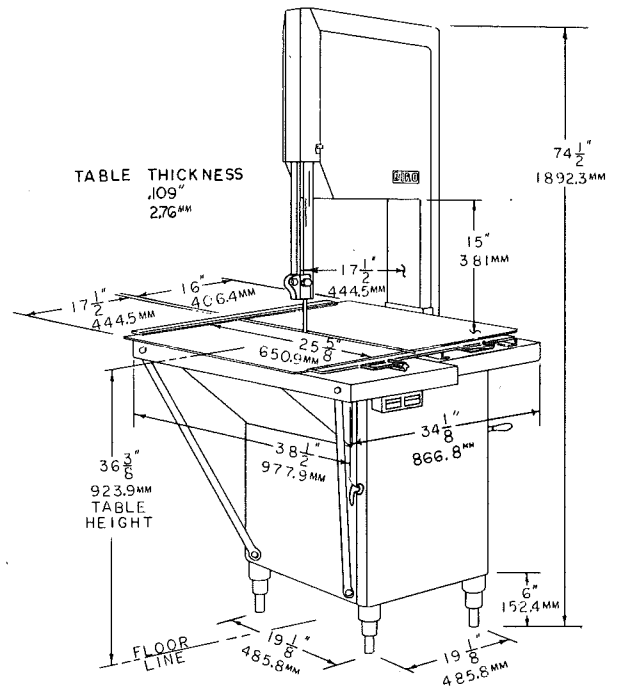
Model 44
True Left Hand Feed
Stationary Front Table With Inserted Load Cell
Platform
Stainless Steel Legs With Floor Chocks



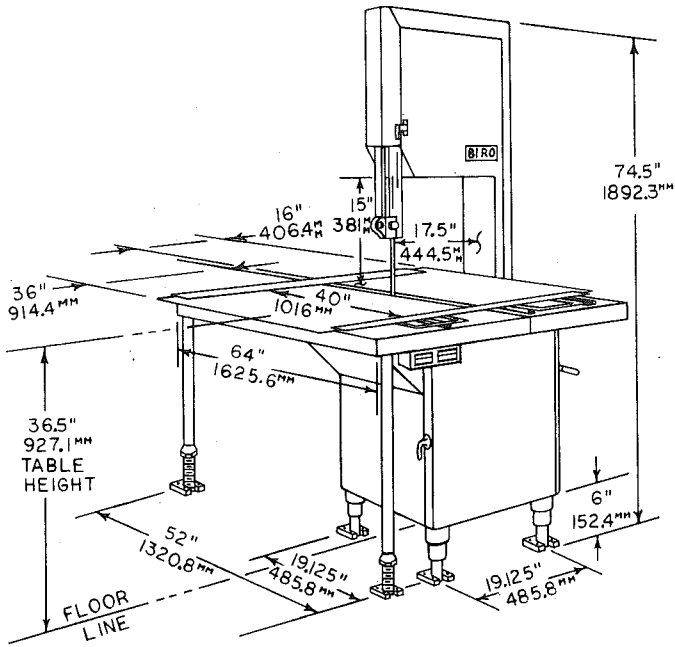
Model 44
Right Hand Feed
Stationary Front Table With Inserted Load Cell
Platform
Stainless Steel Legs With Floor Chocks



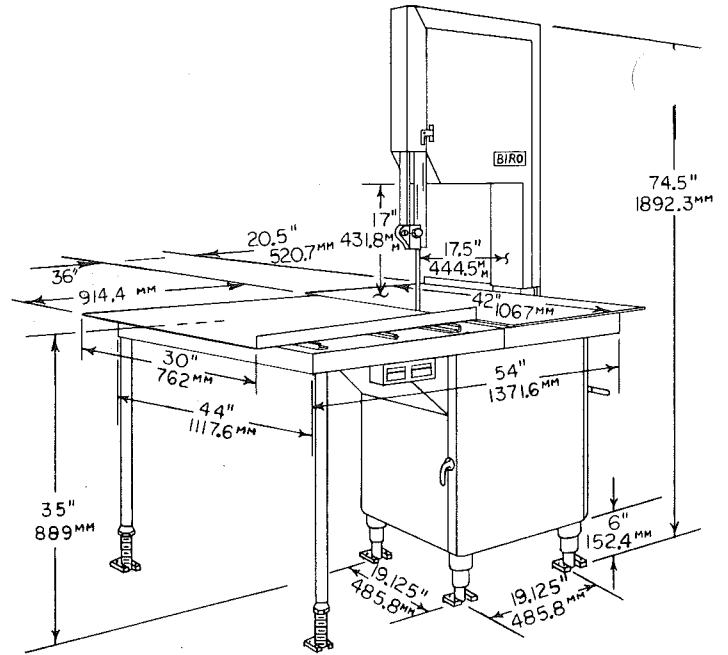
Model 44
True Left Hand Feed
Double Moving Tables



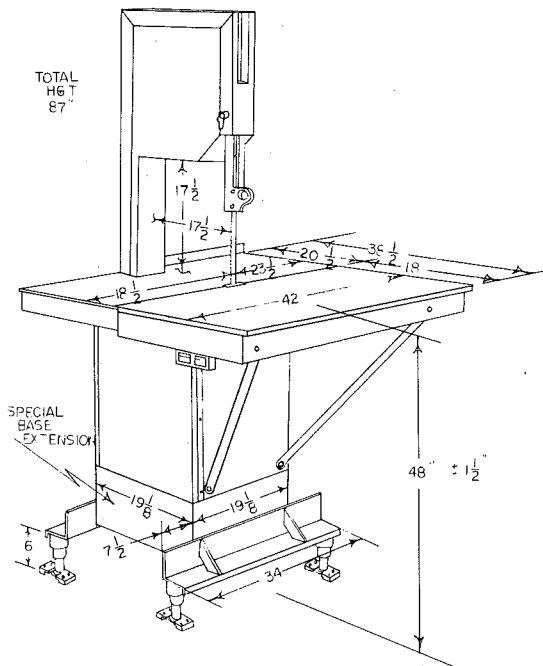
Model 44
Right Hand Feed
Double Moving Carriages



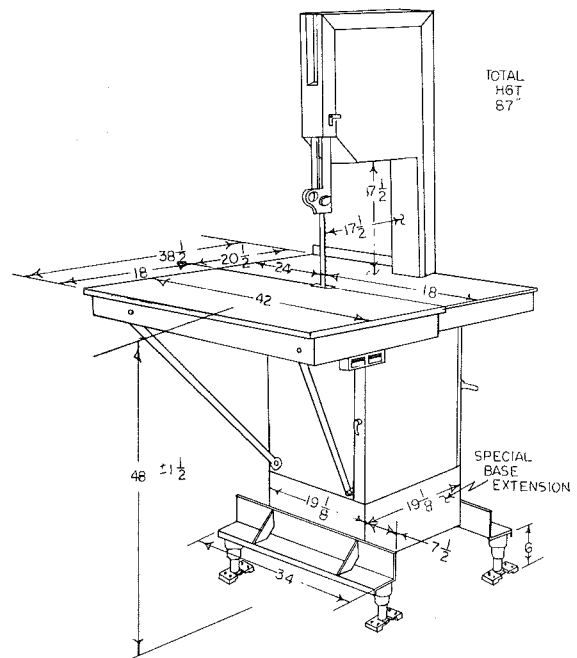
Model 44
Right Hand Feed
Double Moving Carriages
Stainless Steel Legs with Floor Chocks



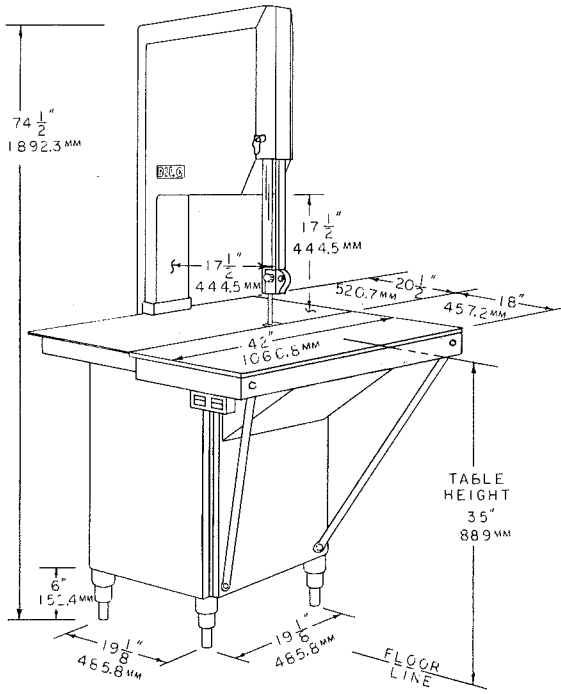
Model 44
Right Hand Feed
Double Moving Carriages—Extra Wide Front
Carriage
Stainless Steel Legs With Floor Chocks



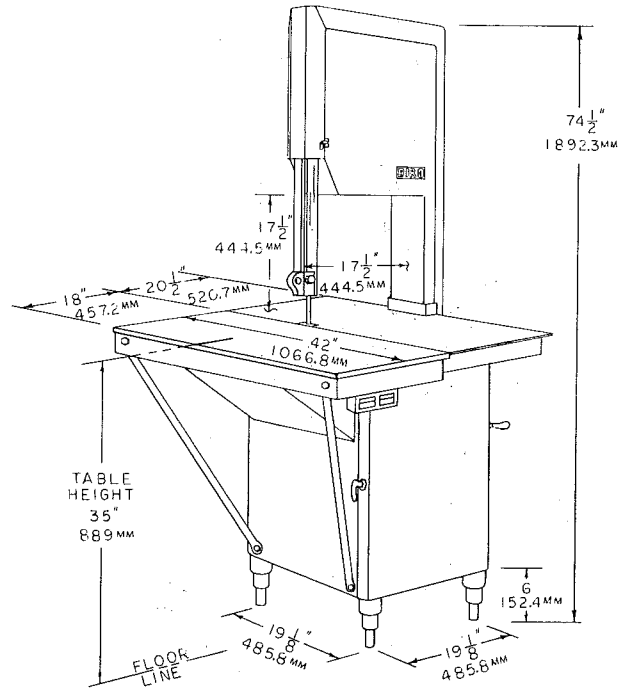
Model 44
True Left Hand Feed
Stainless Steel Base Skirt Extension
Stainless Steel Support System
Stainless Steel Legs With Floor Chocks



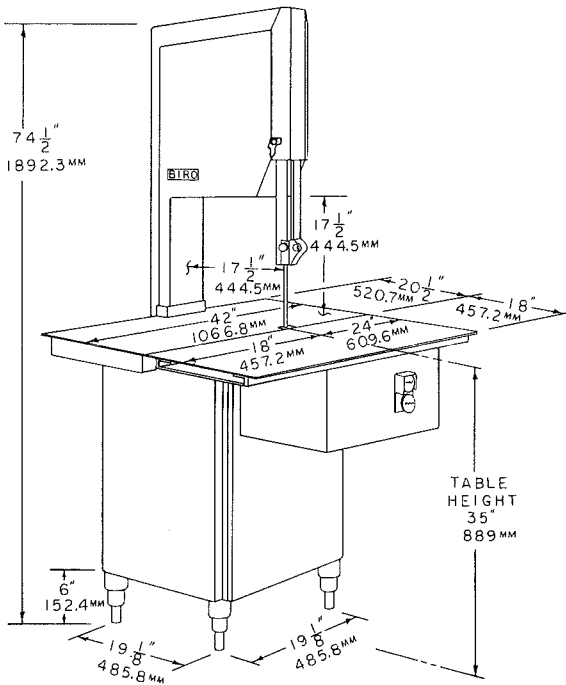
Model 44
Right Hand Feed
Heavy Duty Stationary Tables
Stainless Steel Base Skirt Extension
Stabilizing Support System
Stainless Steel Legs With Floor Chocks



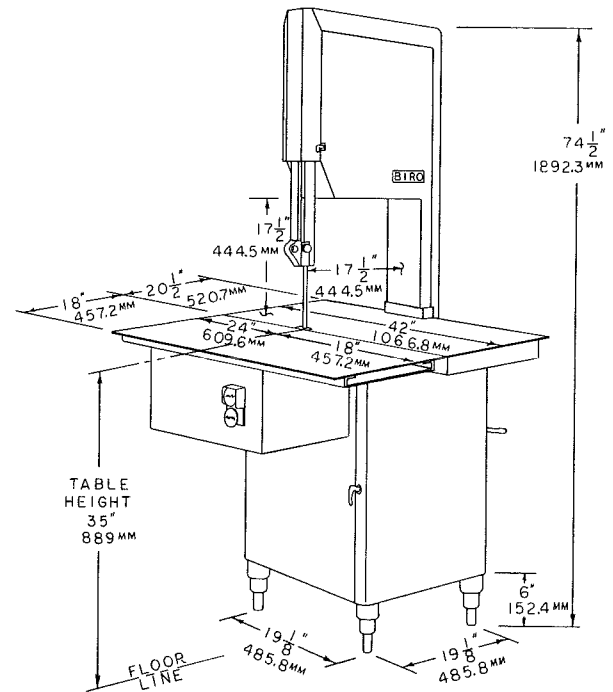
Model 44
True Left Hand Feed
Heavy Duty Stationary Tables



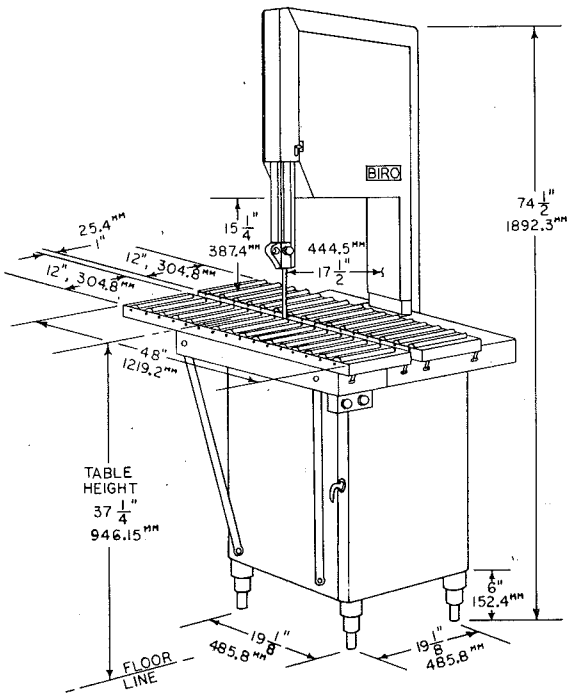
Model 44
Right Hand Feed
Heavy Duty Stationary Tables



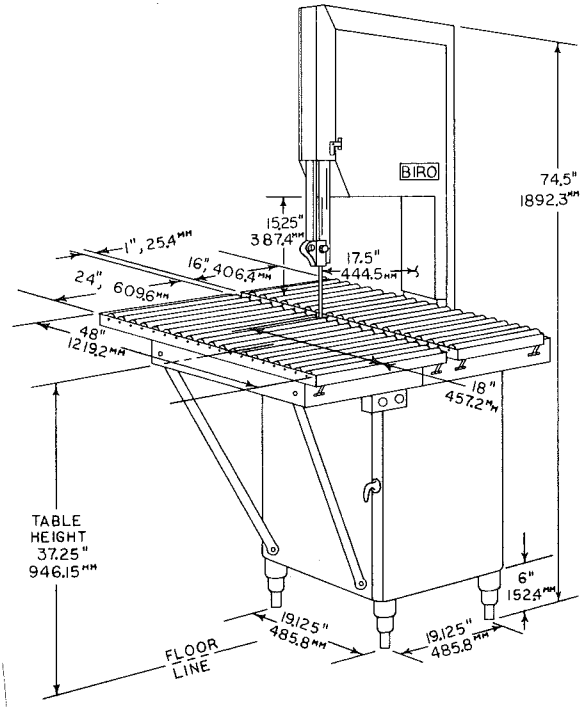
Model 44
True Left Hand Feed
Stationary Tables



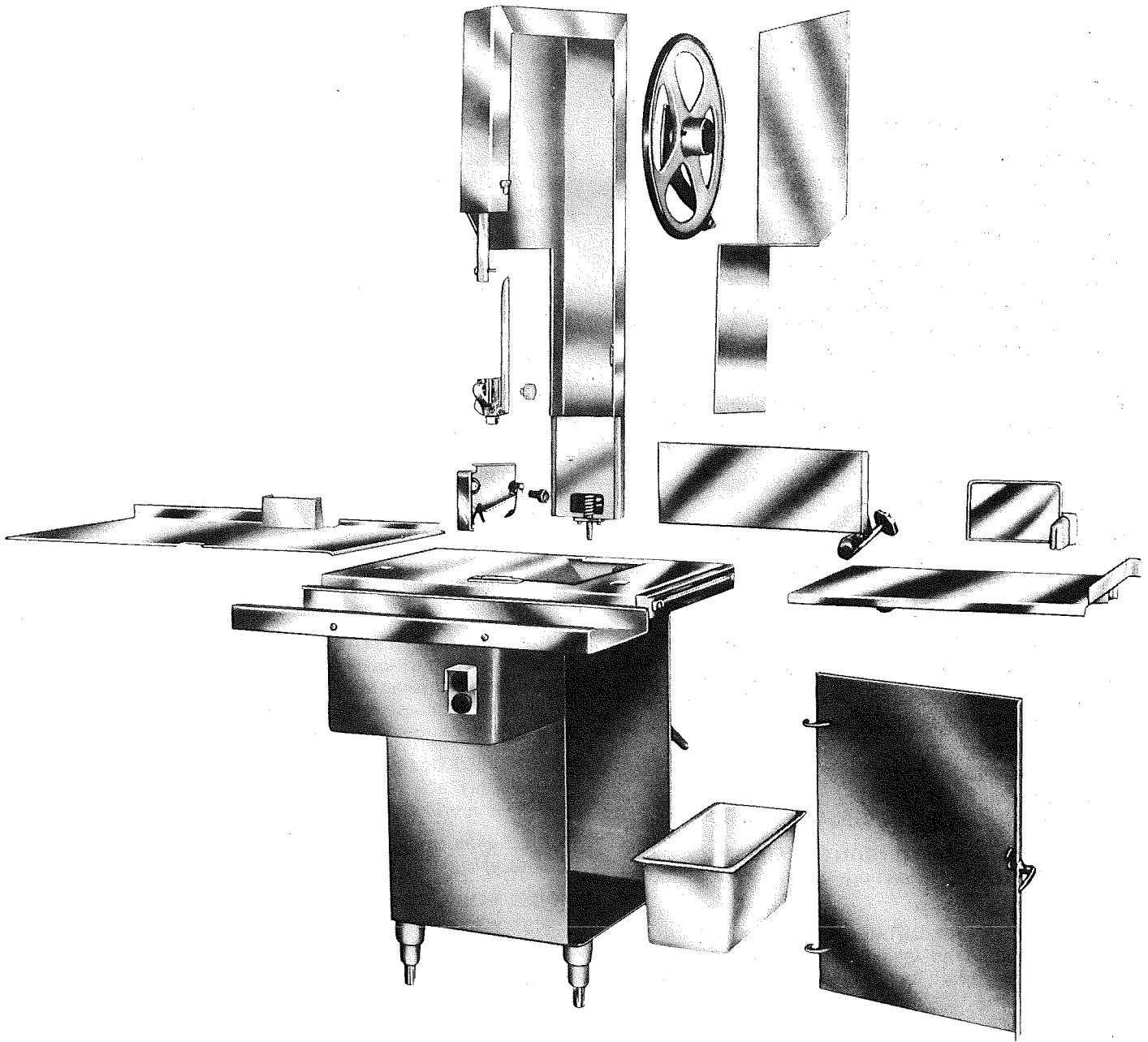
Model 44
Right Hand Feed
Stationary Tables



**Model 44
Right Hand Feed
Roller Conveyor Tops**



**Model 44
Right Hand Feed
Roller Conveyor Tops**



MODEL 4436 SERIES BREAKING AND FABRICATING POWER CUTTERS—UTILIZING THE STANDARD $\frac{5}{8}$ INCH WIDE BLADE OR AVAILABLE OPTION NET EXTRA 1 INCH WIDE BLADE.

— GENERAL SPECIFICATIONS —

NOTE: Designs No. 1, 3, 5 etc. are right hand feed units.
Design No. 2, 4, 6 etc. are true left hand feed units.

CONSTRUCTION: Stainless Steel Standard on all units including head structure—some components are non-stainless steel plated material.

MOTOR—ELECTRIC: 3HP, 208-220-440 Volts, 50-60 cycle, 3 Phase industrial type encapsulated motor, standard on designs 1 through 12 TL. 5HP (same specifications as above) is standard on all Md 4436 series units from Design 13 and up. 5HP (same specifications as above) optional net extra available for designs 1 through 12 TL. (TL = True Left)

SWITCH: 3HP or 5HP, rated magnetic thermal overload with under voltage control—watertight push button control station.

OPTION: Second watertight push button station opposite operator, available. Net extra.

DRIVE SYSTEM: Dual non slipping V-belt system—Standard on all model 4436 cutters.

MOTOR COMPARTMENT: Sealed from meat contact areas accessible by removing motor panel. Standard on all Model 4436 units.

CLEANING UNITS: Longer life carbide guide bearings, stainless steel saw cleaners, and wheel cleaners all removable as a unit for easy cleaning—Standard on all Model 4436 cutters.

UPPER BLADE GUIDE: Upper guide assembly removable steel guide with long life carbide back up guide insert—Standard on all Model 4436 cutters.

POLYURETHANE WASTE CONTAINERS: Extra large, easily removed for cleaning—Standard on all Model 4436 cutters.

BLADE TENSION ADJUSTMENT: Gear type cam control embodying pound tested spring coated tension is positive—Standard on all right hand Model 4436 cutters.

HEAVY DUTY ROLLER BEARINGS: In upper wheel assembly and lower bearing housing—Standard on all Model 4436 cutters where applicable.

BLADE: 3 point, Hardened Blade type, .025. Blade length on D1 through D12, $164\frac{1}{2}'' + \frac{1}{4}'' - 0'' \times \frac{5}{8}''$ —on D13 and 14, $178\frac{1}{2}''$ —on D15 and D16, 199''. Other type blades available from .016 to .035 thick. Guides may be changed accordingly. Optional Net Extra: 1 inch wide

blade and appropriate guides, and wheels and 5HP motor.

DOUBLE BLADE CLEANING SYSTEM: Standard on all Model 4436 cutters.

EXTRA HEAVY DUTY STAINLESS STEEL CARRIAGE BEARINGS: Standard on Model 4436 with moving tables.

STABILIZING SUPPORT SYSTEM: Standard on Model 4436 design 11 and up. Available net extra option for designs 1 through 10 TL except on some D5 and 6TL Series.

TABLE HEIGHTS: Heights other than shown are available on all Model 4436 cutters upon request.

STAINLESS STEEL LEGS: With floor discs and floor bolt down plates—Standard on all Model 4436 cutters.

ACCEPTANCE: U.S.D.A., N.S.F., C.S.A. All Model 4436 cutters shown. Meets applicable O.S.H.A. standards.

MODEL 4436 Design 1B and 2B-TL—Breaking cutter—applicable for pork breaking, beef flank removal, rib cutting—a space saver for the small purveyor.

MODEL 4436 Design 3 and 4 TL—Dual purpose breaking and retail cutter—conventional type cutter for quarter breaking and retail fabricating of beef, pork and lamb by small processors and commissaries—Design 4TL less meat gauge plate assembly.

MODEL 4436 Designs 5 and 6 TL—Breaking cutter—Stationary tables or roller conveyor tops for beef, pork and lamb breaking and heavy trim operations.

MODEL 4436 Designs 7 and 8 TL—Breaking cutter—Special breaking unit for automated plants.

MODEL 4436 Designs 9 and 10 TL—Breaking cutter for high volume beef and lamb quarter breaking when used with a product drop table.

MODEL 4436 Designs 11 and 12 TL—Breaking cutter for high volume beef and lamb quarter breaking—Product drop table not necessarily required.

MODEL 4436 Designs 13B and 14B-TL—Breaking cutter with $19\frac{3}{4}''$ cutting clearance for high volume beef quarter breaking—Product drop table not necessarily required.

MODEL 4436 Designs 15 and 16 TL—Breaking cutter with greater throat width and vertical cutting clearance is required.