

Bead Roller Operating, Servicing, and Safety Instruction Manual



24" Throat Depth Power Drive Bead Roller Model 210-24



36" Throat Depth Power Drive Bead Roller Model 200-36



36" Throat Depth High Throat Power Drive Bead Roller Model 204-36

CAUTION: Read and Understand

These Operating, Servicing, and
Safety Instructions, Before Using
This Machine.

1-800-467-2464

10 Cooperative Way Wright City, MO 63390

P.O. Box 110 Foristell, MO 63348

1-636-745-7757 Fax 1-636-745-2874

www.mittlerbros.com

Table of Contents

- Safety Pg.3
-
- Machine Set Up Pg.4-6
- Operation Pg.7
- Technical Diagrams Pg.8-12
- Bead Roller Accessories Pg.13
- Depth Stop Installation Instructions Pg.14

SAFETY

The purpose of the safety section of this manual is to inform operators and maintenance personnel of the precautions to be taken while operating or servicing the machine. The following are a few basic guidelines to follow, but as with any type of machinery good judgment and a safe attitude should be applied at all times.

1. Always disconnect power, lock-out and tag-out machine per OSHA regulations before attempting to service this machine.
2. Always wear safety glasses or other approved eye protection while operating or servicing the machine.
3. Keep all body parts and any foreign objects away from moving parts. Do not reach into the machine without first disconnecting all power sources.
4. Do not attempt to override any safety device on the machine.
5. Do not operate the machine if it has been damaged or is not operating properly.
6. Do not wear jewelry (watches, rings, necklaces, etc.), or loose fitting clothing while operating or servicing the machine.
7. The machine should only be operated or serviced by properly trained, authorized personnel.
8. Replacement parts should have the same specification and operation as the original parts on the machine.
9. All guards and covers must be in place before operating the machine.
10. Before starting the machine be sure it is set up properly.
11. Make sure the machine is properly grounded.
12. The machine and work area should be kept neat and clean.
13. Do not operate or service any machine while under the influence of drugs or alcohol.

NOTE: THESE SAFETY RULES ARE FOR YOUR BENEFIT TO HELP PREVENT INJURY TO YOURSELF AND/OR YOUR CO-WORKERS. REVIEW ALL SETUP AND OPERATING PROCEDURES, WHETHER COVERED OR NOT, IN THIS MANUAL TO HELP INSURE SAFE OPERATION OF THE MACHINE.

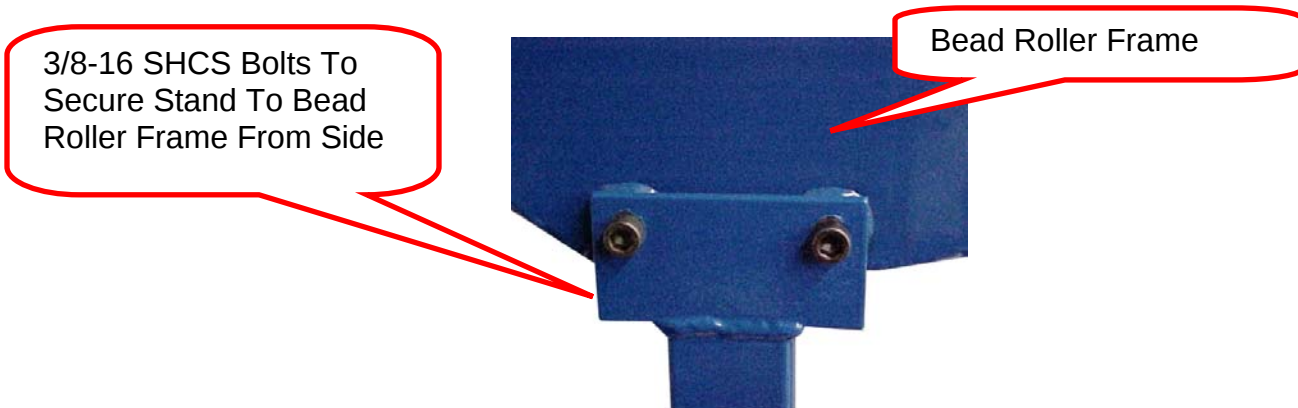
MACHINE SET UP

Floor Stand Assembly Instructions

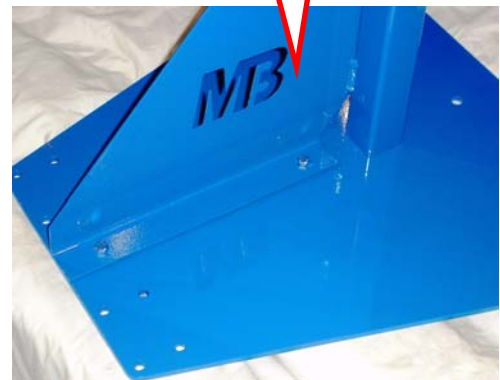
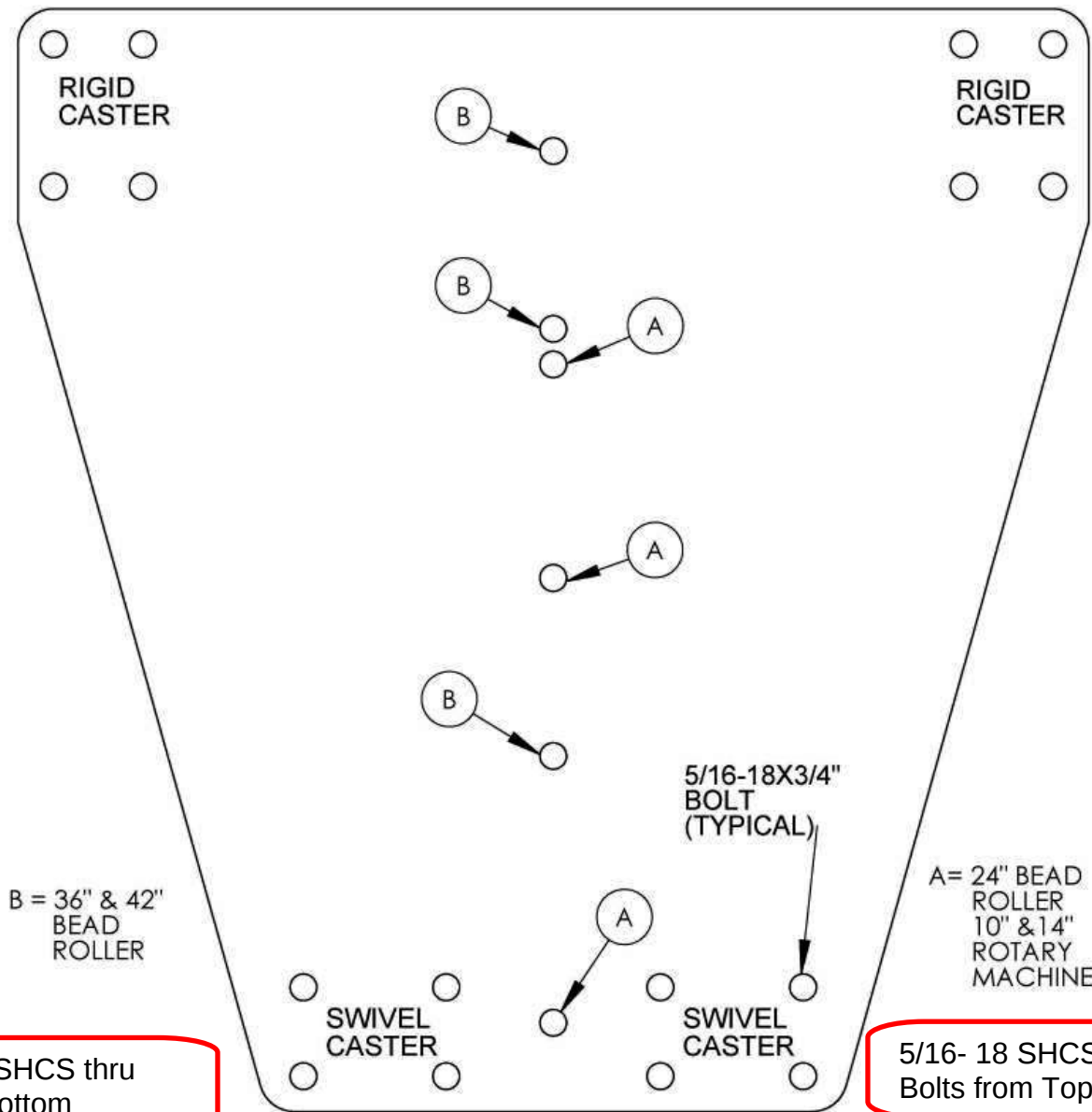
1. Remove machine from packaging.
2. Assemble stand by installing 1/2-13 socket head cap screw (SHCS) through the bottom of the H-frame or caster base plate.
3. Install 2) 5/16-18 bolts through top of gusset.
4. Install rigid casters on back of base plate.
5. Install swivel casters on front of base plate.
6. Place machine on top of the bead roller stand and secure using (2) 3/8-16 x 1" socket head cap screws.

Stationary Floor Stand Assembly

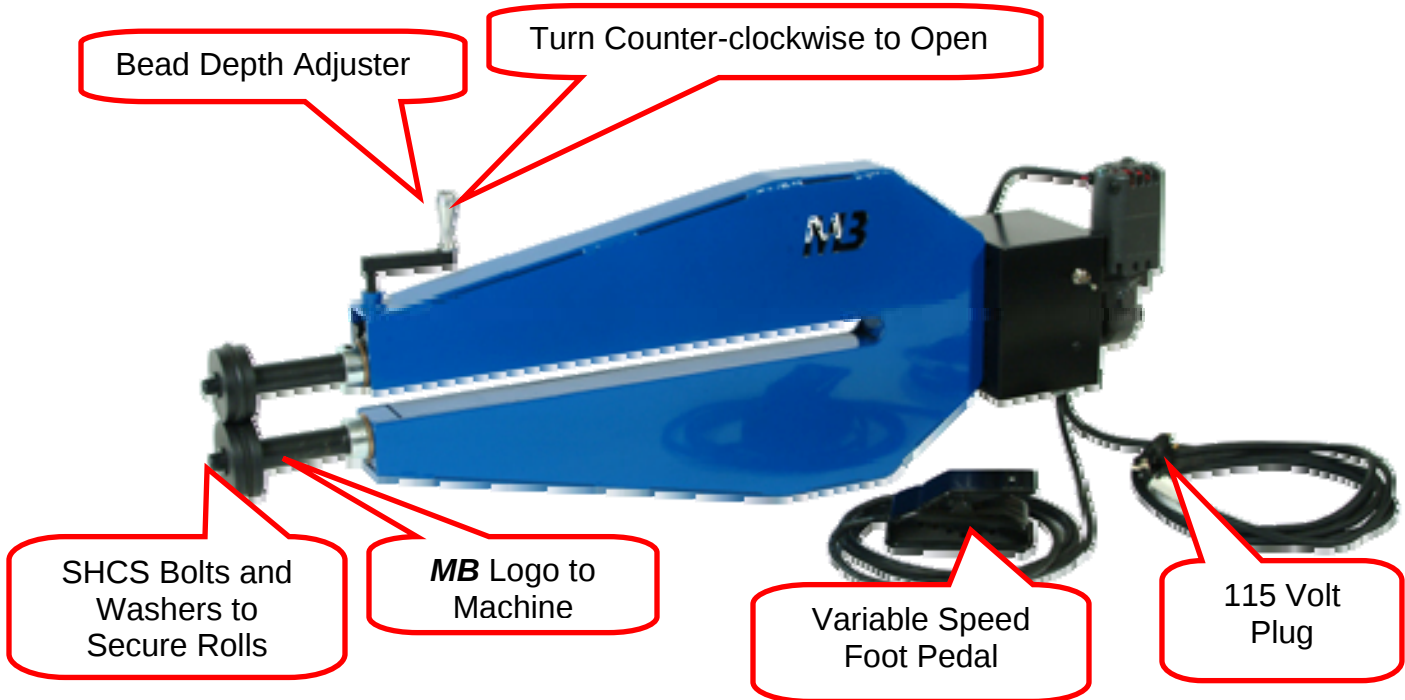
#200-031



FLOOR STAND with CASTERS #200-150



MACHINE SET UP (cont.)



1. Remove shoulder bolt holding the aluminum handle to bottom of the bead depth adjuster.
2. Install aluminum handle on top of bead depth adjuster and secure using the shoulder bolt.
3. Remove the (2) 3/8-16 x 1" bolts and washers from the ends of the shafts.
4. Turn the bead depth adjuster counter-clockwise a 1 - 2 turns to allow clearance for rolls to slide onto the shafts.
5. Place the bead rolls on the shafts with the **MB** logo stamp facing toward the machine. Either roll can be put on either shaft, but we usually recommend the male Bead Roll go on the top.

Note: On 1-1/2" or 2" wide Bead Rolls, the socket head cap screw (SHCS) & washer **MUST** be installed in the Bead Roll recessed cavity.

6. Secure the rolls to the shafts with the SHCS & washers removed in step #7 and tighten both SHCS.
7. Place power cord and variable speed foot pedal on floor.
8. Plug into 115 volt, 1 phase, 60 hertz power outlet.
9. Machine is now ready for use.

OPERATION



1. Step on the foot pedal to determine the direction Bead Rolls are turning.

Note: The foot pedal controls the speed – variable speed.

2. Release the foot pedal to stop machine.

3. Flip the forward / reverse switch to change bead roll rotation.

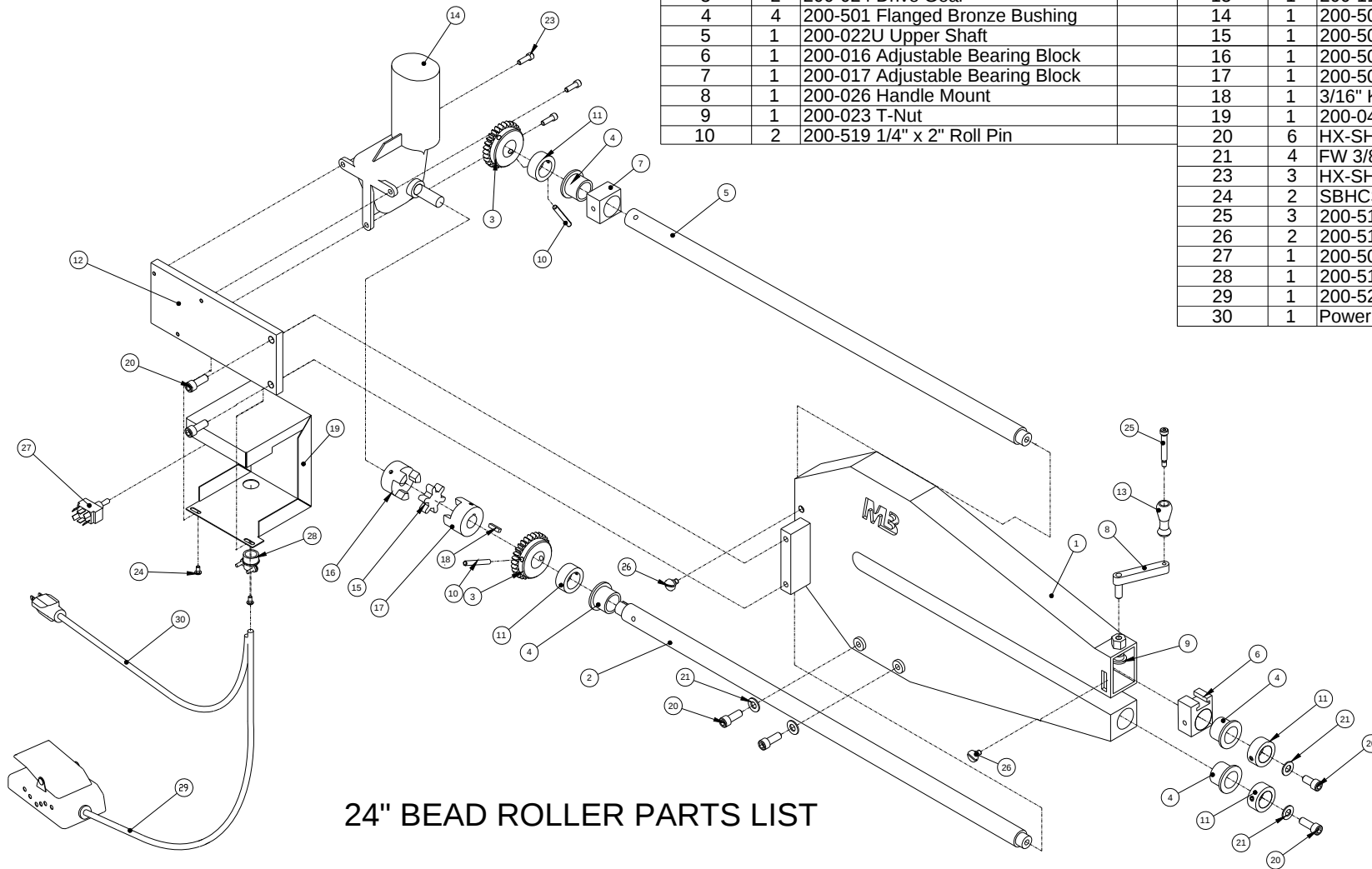
Caution: Release the foot pedal to stop the machine before changing from forward to reverse direction.

Note: Some experimentation will be required to become comfortable with regulating the foot pedal variable speed and determining the proper bead depth. It is recommended that you use a scrap piece of the same material you want to bead roll.

4. Place a scrap piece of metal between the open Bead Rolls. **Note:** Do not start with the rolls completely closed as you may find that the rolls are too close together and it is difficult to feed the metal.
5. Turn the Bead Depth Adjuster handle clockwise to lower the upper Bead Roll until the Bead Rolls contacts the metal.
6. Rotate Bead Depth Adjuster clockwise $\frac{1}{2}$ additional turn to force pressure on metal.
7. Lightly step on the foot pedal and feed the metal between the rolls for approximately 2" of travel and release the foot pedal to stop machine.
8. Rotate Bead Depth Adjuster another $\frac{1}{2}$ " turn clockwise (tighten pressure) and run another 2" of travel. Continue turning Bead Depth Adjuster in $\frac{1}{2}$ " turn increments and run 2" long increments until you can not turn the Bead Depth Adjuster any further.

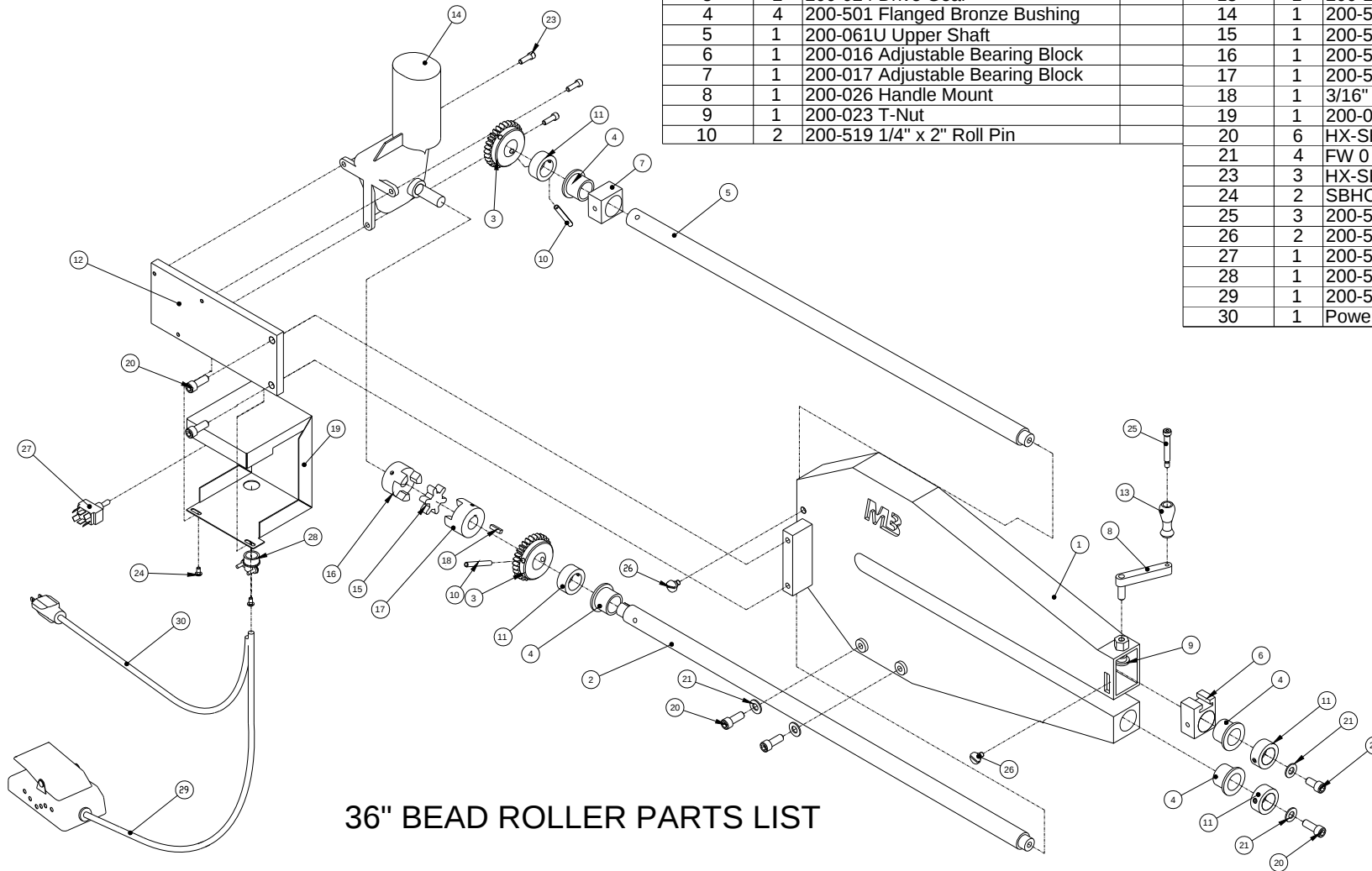
Note: This will allow you to determine how many turns on the Bead Depth Adjuster are required to obtain the desired Bead Pattern depth. Usually 1 to 2 turns will provide the desired Bead depth.

ITEM NO.	QTY	PART NO.	PRICE	ITEM NO.	QTY	PART NO.
1	1	200-060 Frame		11	4	200-502 Set Collar
2	1	200-022L Lower Shaft		12	1	200-013 Motor Mount Plate
3	2	200-024 Drive Gear		13	1	200-110 Aluminum Handle
4	4	200-501 Flanged Bronze Bushing		14	1	200-506 Motor
5	1	200-022U Upper Shaft		15	1	200-505 Spider
6	1	200-016 Adjustable Bearing Block		16	1	200-503 1/2" Coupling Half
7	1	200-017 Adjustable Bearing Block		17	1	200-504 3/4" Coupling Half
8	1	200-026 Handle Mount		18	1	3/16" Key Stock
9	1	200-023 T-Nut		19	1	200-048 Switch Box Cover
10	2	200-519 1/4" x 2" Roll Pin		20	6	HX-SHCS 3/8"-16x1"
				21	4	FW 3/8"
				23	3	HX-SHCS 1/4"-20x3/4
				24	2	SBHCSCREW 10-32x3/8"
				25	3	200-516 5/16" x 1 3/4" Handle Bolt
				26	2	200-514 Lock Screw
				27	1	200-507 Reversing Switch
				28	1	200-517 1/2" Romex Connector
				29	1	200-520 Foot Pedal, Variable Speed
				30	1	Power Cord 16/3



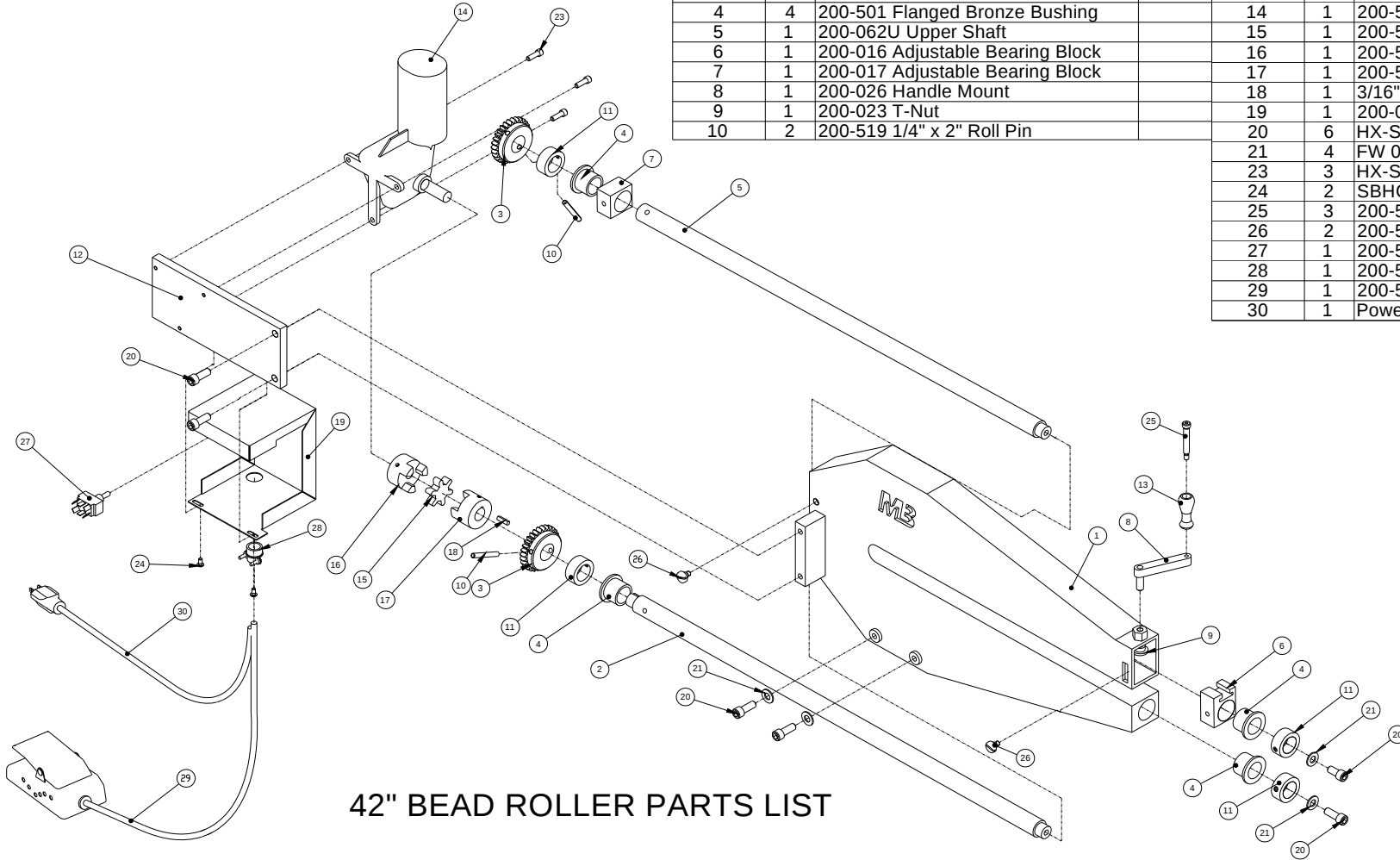
24" BEAD ROLLER PARTS LIST

ITEM NO.	QTY.	PART NO.	PRICE	ITEM NO.	QTY.	PART NO.
1	1	200-070 Frame		11	4	200-502 Set Collar
2	1	200-061L Lower Shaft		12	1	200-013 Motor Mount Plate
3	2	200-024 Drive Gear		13	1	200-110 Aluminum Handle
4	4	200-501 Flanged Bronze Bushing		14	1	200-506 Motor
5	1	200-061U Upper Shaft		15	1	200-505 Spider
6	1	200-016 Adjustable Bearing Block		16	1	200-503 1/2" Coupling Half
7	1	200-017 Adjustable Bearing Block		17	1	200-504 3/4" Coupling Half
8	1	200-026 Handle Mount		18	1	3/16" Key Stock
9	1	200-023 T-Nut		19	1	200-048 Switch Box Cover
10	2	200-519 1/4" x 2" Roll Pin		20	6	HX-SHCS 3/8"-16x1"
				21	4	FW 0 3/8"
				23	3	HX-SHCS 1/4"-20x3/4"
				24	2	SBHCSCREW 10-32x3/8"
				25	3	200-516 5/16" x 1 3/4" Handle Bolt
				26	2	200-514 Lock Screw
				27	1	200-507 Reversing Switch
				28	1	200-517 1/2" Romex Connector
				29	1	200-520 Foot Pedal, Variable Speed
				30	1	Power Cord 16/3



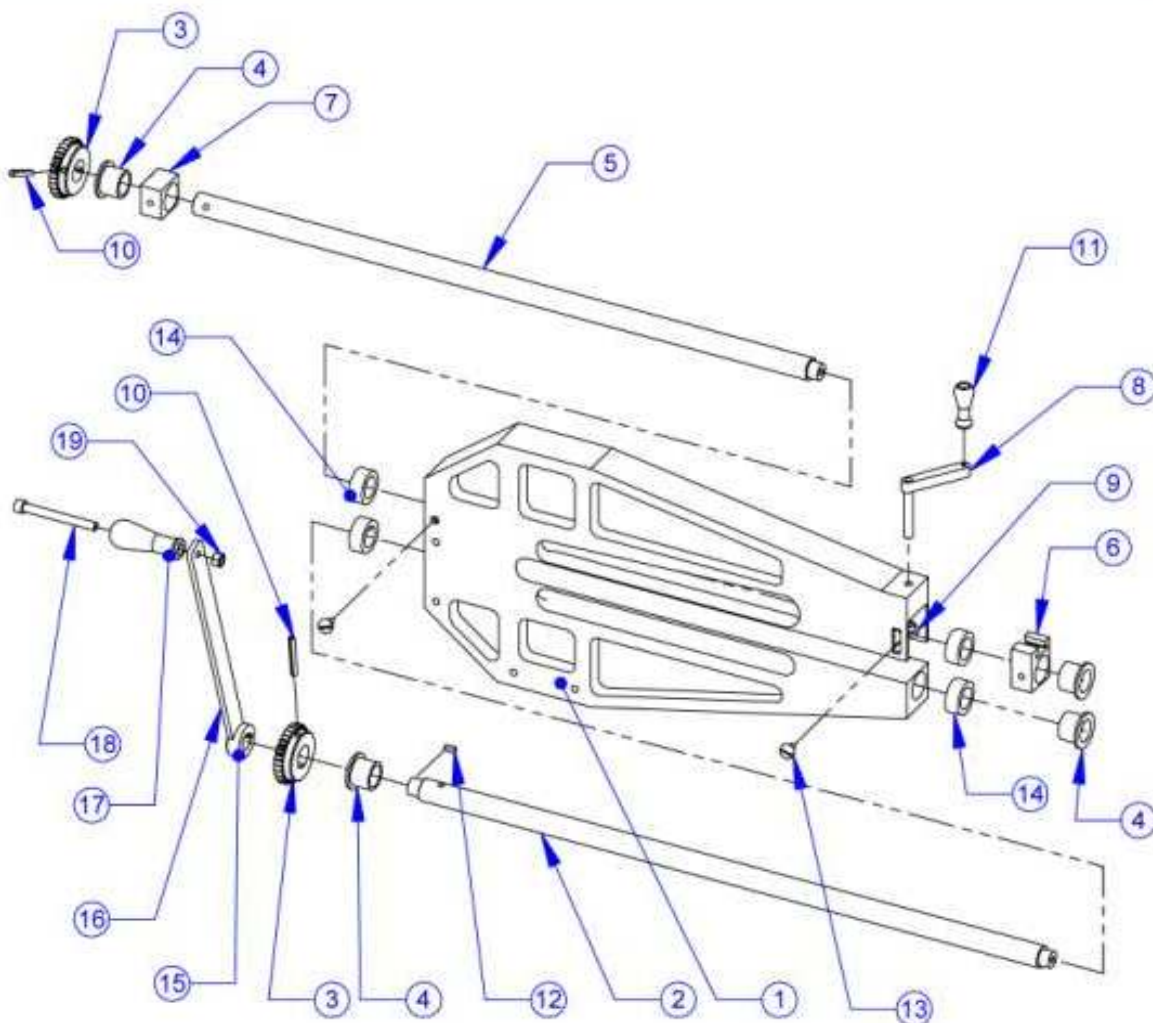
36" BEAD ROLLER PARTS LIST

ITEM NO.	QTY.	PART NO.	PRICE	ITEM NO.	QTY.	PART NO.
1	1	200-071 Frame		11	4	200-502 Set Collar
2	1	200-062L Lower Shaft		12	1	200-013 Motor Mount Plate
3	2	200-024 Drive Gear		13	1	200-110 Aluminum Handle
4	4	200-501 Flanged Bronze Bushing		14	1	200-506 Motor
5	1	200-062U Upper Shaft		15	1	200-505 Spider
6	1	200-016 Adjustable Bearing Block		16	1	200-503 1/2" Coupling Half
7	1	200-017 Adjustable Bearing Block		17	1	200-504 3/4" Coupling Half
8	1	200-026 Handle Mount		18	1	3/16" Key Stock
9	1	200-023 T-Nut		19	1	200-048 Switch Box Cover
10	2	200-519 1/4" x 2" Roll Pin		20	6	HX-SHCS 3/8"-16x1"
				21	4	FW 0 3/8"
				23	3	HX-SHCS 1/4"-20x3/4"
				24	2	SBHCSCREW 10-32x3/8"
				25	3	200-516 5/16" x 1 3/4" Handle Bolt
				26	2	200-514 Lock Screw
				27	1	200-507 Reversing Switch
				28	1	200-517 1/2" Romex Connector
				29	1	200-520 Foot Pedal, Variable Speed
				30	1	Power Cord 16/3



42" BEAD ROLLER PARTS LIST

ITEM NO.	PART NUMBER	Description	QTY.
1	210-060	Solid Alum. Body	1
2	200-022-L	Lower Drive Shaft	1
3	200-024	Gear	2
4	200-501	Flanged Bronze Bushing	4
5	200-022-U	Upper Shaft	1
6	200-016	Adj Upper Bearing Block	1
7	200-017	Upper Bearing Block	1
8	200-026	Handle Mount	1
9	200-023	T-Nut	1
10	200-519	Roll Pin	2
11	200-110	Alum. Handle	1
12	200-112	Key Stock	1
13	200-514	Lock Screw	2
14	200-502	Set Collar	4
15	200-055	Crank Handle End - Manual Roller	1
16	200-056	Crank Handle - Manual Roller	1
17	200-109	3-1/4" Handle	1
18	SHCS	3-1/2" SHCS	1
19	NUT	Hex Nut	1

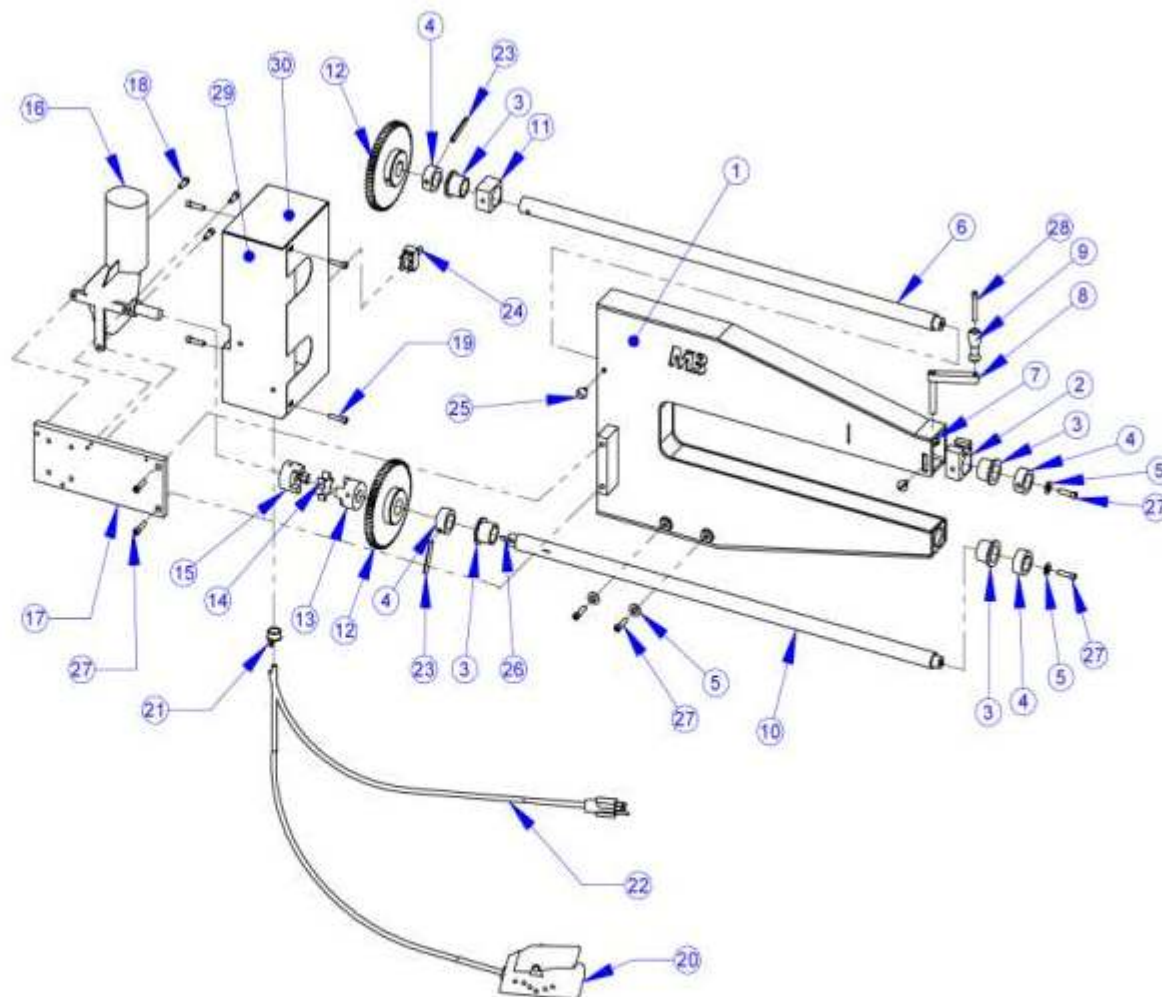


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		UNLESS OTHERWISE SPECIFIED:		NAME		DATE
		DIMENSIONS ARE IN INCHES		DRAWN		BAB 2/17/11
		TOLERANCES:		CHECKED		
		FRACTIONAL ±.015		ENG APPR.		
		ONE PLACE DECIMAL ±.015		MFG APPR.		
		TWO PLACE DECIMAL ±.010		Q.A.		
		THREE PLACE DECIMAL ±.005		COMMENTS		
		ANGULAR ±.0°				
		QUANTITY				
		MATERIAL				
		FINISH				
NEXT ASSY	USED ON					
APPLICATION		DO NOT SCALE DRAWING				
M3 MITTLER BROS. MACHINE & TOOL 10 Cooperative Way, Wright City, MO. 63390 (636)745-7757 Fax (636)745-2874						
TITLE: 24" Manual Bead Roller						
SIZE	DWG. NO.				REV	
A	210-24M					
SCALE: 1:8		WEIGHT:		SHEET 1 OF 1		

BOM Table

ITEM NO.	PART NUMBER	Description	QTY.
1	204-24-Frame	Frame Weldment	1
2	200-016	Adj Upper Bearing Block	1
3	200-501	Flanged Bronze Bushing	4
4	200-502	Set Collar	4
5	Flat Washer	Flat Washer 3/8"	4
6	200-022-U	Upper Shaft	1
7	200-023	T-Nut	1
8	200-026	Handle Mount	1
9	200-110	Alum. Handle	1
10	200-022-L	Lower Drive Shaft	1
11	200-017	Upper Bearing Block	1
12	204-024	Gear for 4" Throat	2
13	200-504	3/4" Coupling Half	1
14	200-505	Spider (Lovejoy)	1
15	200-503	1/2" Coupling Half	1
16	200-506	Motor	1
17	200-013	Motor Mount Plate	1
18	HX-SHCS 0.25-20x0.75x0.75-N	socket head cap screw	3
19	HX-SHCS 0.25-20x1	socket head cap screw	4
20	200-520	Foot Pedal, Variable Speed	1
21	200-517	1/2" Romex Connector	1
22	200-542	Electrical Cord	1
23	200-519	Roll Pin 1/4 x 2"	2
24	200-507	Reversing Switch	1
25	200-514	Lock Screw	2
26	Key Stock	3/16" Key Stock	1
27	HX-SHCS 0.375-16X1	socket head cap screw	6
28	200-516	5/16" x 1 3/4" Handle Bolt	1
29	204-406A	Gear Guard Inside	1
30	204-406B	Gear Guard Outside	1



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		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES		DRAWN	BAB
		TOLERANCES:		CHECKED	
		FRACTIONAL 1/16		ENG APPR.	
		ONE PLACE DECIMAL 0.015		MFG APPR.	
		TWO PLACE DECIMAL 0.010		Q.A.	
		THREE PLACE DECIMAL 0.005		COMMENTS	
		ANGULAR 0.1°			
		QUANTITY			
		MATERIAL			
		FINISH			
NEXT ASSY	USED ON				
APPLICATION		DO NOT SCALE DRAWING			

MITTLER BROS. MACHINE & TOOL		
10 Cooperative Way, Wright City, MO. 63390		
(636)745-7757 Fax (636)745-2874		
TITLE:		
24" - 4" Deep Bead Roller		
SIZE	DWG. NO.	REV
A	204-24-000	
SCALE: 1/24	WEIGHT:	SHEET 1 OF 1

Bead Roller Accessories

Roll Holder

Slips over our bead roller stand



Roll Holder
(Standard Bead Roller)
Model 200-RH



Roll Holder
(High Throat Bead Roller)
Model 204-RH

Depth Stop



Depth Stop
(Fits all Standard Bead
Rollers & Rotary Machines)
Model 200-009



Depth Stop
(Fits High Throat Bead Roller)
Model 204-009

Voltage Converter



Power Converter required when operating power drive bead roller on power source other than 110 volts.

110, 200, 220 & 240 Volt Input / 110 or 220 Volt Output

500 Watt (5 Amp) Voltage Converter *Model 200-552*

2000 Watt (16 Amp) Voltage Converter *Model 200-558*

STD. Motor to Industrial Motor Conversion Kit *Model 200-300*

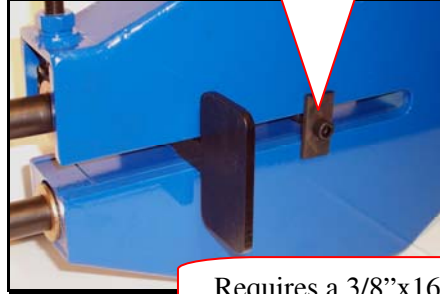
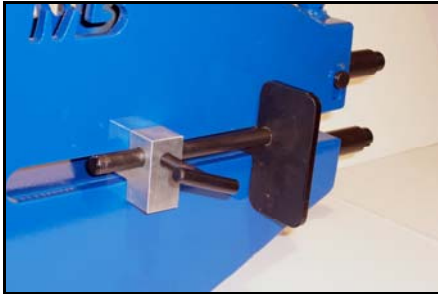
(Easy bolt on conversion kit to upgrade for 16 Ga. Mild steel Capacity)

#200-009 Depth Stop Installation Instructions

Purpose: Edge guide surface for flat or curved panels to assist in creating straight line bead profiles.

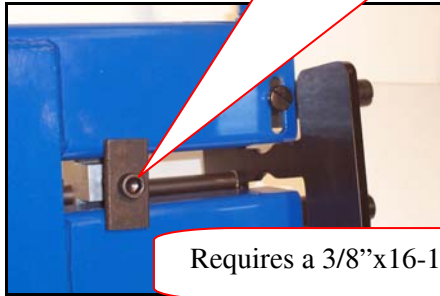
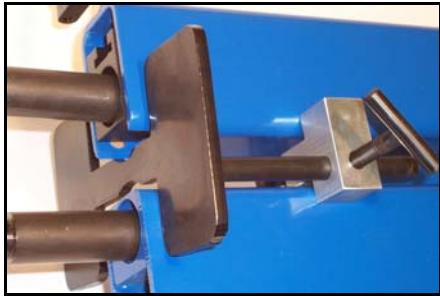
Requires a 3/8"x16-2 1/4" SHCS

#200-14NV Rotary



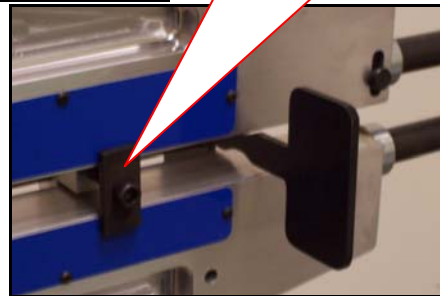
Requires a 3/8"x16-1 3/4" SHCS

#200-10NV) Rotary



Requires a 3/8"x16-1 3/4" SHCS

#210-24, #200-36, #200-42



INSTRUCTIONS:

1. Insert aluminum "T" block into machine throat opening from the right hand side.
2. (Looking at machine from bead roll end with motor in back).
3. Install proper length bolt and flat strap from the left hand side.
 - a. NOTE: The aluminum "T" block can be located anywhere within the length of the machine throat to correspond with desired straight line position for creating a bead profile in metal.
4. Install round rod into the aluminum "T" block. NOTE: Round rod will telescope through "T" block to allow for fine-tuning desired location.
5. Tighten "T" handle to secure round rod and edge guide surfaces at desired location.

CAUTION: Read and Understand

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Safety Instructions, Before Using
This Machine.

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