DIXIE GRINDERS INC.

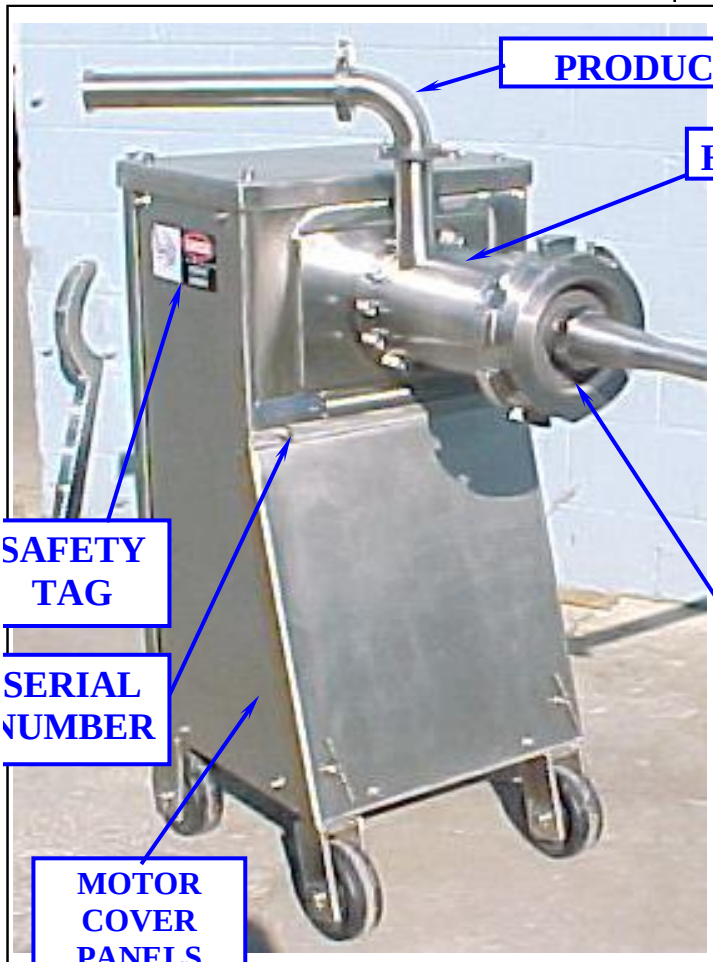
1324 RAILROAD AVENUE GUNTERSVILLE, AL 35976
(800) 745-0586 (256) 582-0477 FAX (256) 582-0478

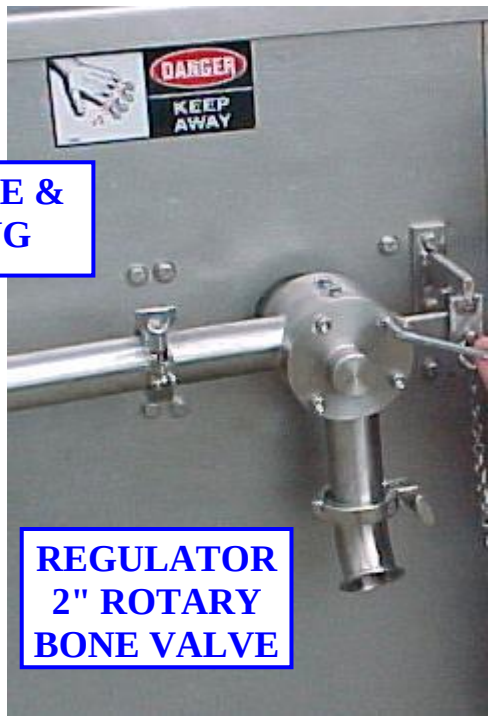
MODEL 6-6 160MM IN-LINE GRINDER WITH REGULATOR™ ROTARY BONE VALVE

CAUTION

THIS MANUAL MUST BE READ TO, OR BY EACH PERSON, BEFORE THAT PERSON OR DEPARTMENT UNCRATES, OPERATES, MAINTAINS, OR SUPERVISES USE OF THIS MACHINE IN ANY WAY.

SAFETY INSTALLATION OPERATION MAINTENANCE





TYPICAL DIXIE 160MM IN-LINE GRINDER

LISTED BELOW IS THE DEFINITION OF THE HAZARD LEVEL USED ON THE SAFETY STICKERS.

DANGER

IMMEDIATE HAZARDS WHICH WILL RESULT IN SEVERE PERSONAL INJURY

KNOW YOUR MACHINE

READ OPERATING & SERVICE INSTRUCTIONS BEFORE INSTALLING PARTS OR SERVICING MACHINE IN ANY MANNER, BE SURE THAT MACHINE IS STOPPED AND ALL POWER IS OFF AND LOCKED OUT. THIS INCLUDES ELECTRICAL, HYDRAULIC, AIR, STEAM, ETC. FAILURE TO FOLLOW THIS RULE, OR TO PRACTICE SAFE OPERATING PROCEDURES CAN RESULT IN SEVERE PHYSICAL INJURY.

INTRODUCTION

A Grinder Unit is a type of size reduction machine. Its primary purpose is to grind meat, meat by-products, and other similar products.

The primary grinding components are a plate retaining ring, orifice plate, plate bushing, knifeholder with knife inserts, centering pin, spring or springs, head, and feedscrew. An electric motor drives the grinder unit.

This unit is mounted on a undermount frame (as shown on cover) or sidemount frame.

Standard safety equipment includes a belt guard. This unit uses a C-face motor, but the gearbox and motor are completely enclosed.
For this application, a 1/16" diameter hole plate is supplied. Therefore a plate guard is not required, if other diameter holes are used a plate guard may be necessary. Consult Dixie Grinders if other diameter plates are to be used. If a transition funnel is used, the plate guard is also not required.

It is important that your application, and/or installation does not render these guards ineffective. If for any reason you believe these guards are not adequate, do not use the machine and call Dixie Grinders Inc. at once. (256) 582-0477 OR (800) 745-0586.

This machine was sold for a specific application. If you are not familiar with the application that this unit was sold for, check with Dixie Grinders Inc. before using the machine.

All operators and sanitation personnel should read this manual and understand it.

FAILURE TO USE GUARDS WHILE THE GRINDER UNIT IS IN OPERATION MAY RESULT IN SEVERE INJURY OR DEATH!

REPLACE SAFETY TAGS WHEN NECESSARY! CALL DIXIE GRINDERS INC. FOR REPLACEMENT SAFETY TAGS.

Caroline (age 8) and Johnson (age 6) will demonstrate how easy our 160mm In-Line Grinder with Regulator™ Rotary Bone Valve can be disassembled and assembled.

TAG A 2 EA. (ON SIDES OF CABINET)

TAG B 1 EA. (ON BACK COVER)

"THE GRINDER HAS ARRIVED"

LIFT EQUIPMENT REQUIRED:
We recommend using a 2,000 pound capacity fork lift with 48" or longer forks. Only authorized and properly trained equipment movers should attempt to unload the grinder unit. Remember to Work Safely!

PRE-UNLOADING INSPECTION:
Before the grinder unit is unloaded, inspect the unit for any damage before unloading. If the machine is damaged consult your management, the trucking company, and Dixie Grinders Inc. before unloading the machine!

UNLOADING GRINDER UNIT:
With the commercial van properly chocked and secured to the loading dock, and using only approved and adequate dock plates should any attempt be made to unload this machine. The forks should be long enough to extend beyond the end of the frame a safe distance. Unload the grinder unit and all parts that have been shipped with the grinder unit. Consult the packing slip to insure that all pieces have been unloaded.

UNPACKING:
When the grinder has been properly unloaded it should be placed in a suitable location for unpacking. The belt guard protector and the shipping skids may be removed. Use appropriate equipment and appropriate personal safety equipment in this process. Remember to Work Safely!

SITE CONSIDERATIONS:
It is important that the permanent position of the grinder unit provides clearance of several feet behind, to either side, and approximately eight feet or more in front of the grinder unit.

If the grinder is set on a stand, or leg extensions are attached, an adequate platform must be provided to provide safe access to the grinder unit. It will be necessary to have an approved platform or device to provide access so the unit can be properly sanitized, disassembled, assembled, and maintained. Consideration must be given to allow for complete service to the grinder unit.

The grinder frame is not to be used as a personal stand, and under no circumstances should anyone be allowed to climb on it or use it as a platform. Remember to Work Safely!

HEIGHT ADJUSTMENT:
The legs on the grinder are adjustable. To adjust the height of the grinder, loosen the set screws, move the legs to the desired height, and retighten the set screws. Make sure that the set screws are tightened securely! Be sure to tighten the set screws after moving the grinder! After you have adjusted the legs to the desired height, weld the legs in place! Failure to do so may cause the grinder to tip over!

INSTALLATION:
The machine can be installed in its permanent position after the skidding has been removed. Use only adequate equipment and properly trained personnel to install the grinder in its permanent position. Use great care in moving this equipment, it is heavy and must not be tipped, tilted, jarred or jammed into position. We recommend a 1° slope to allow water to drain from the grinder unit.

Dixie Grinders Inc. does not supply motor controls, starters, stop/start stations, disconnects, or other related equipment that is required to control the function of the grinder unit.

We recommend serious consideration is given to the location of the start/stop station.

We strongly recommend that additional stop stations are located where deemed appropriate.

Disconnects that can be locked out should be so located that employees that have to operate, service, and sanitize the unit can lock the unit out. Each employee that has to work on this machine should be given a lock and key and trained in proper procedures for LOCK OUT/TAG OUT!

Please consult with your Safety Engineer, your Electrical Engineer, and O.S.H.A. for all regulations related to the controls and wiring for this machine.

We strongly recommend the use of a frequency controller for this machine and it's application. By the use of a frequency controller the grinders capacity can be matched to the expel rate of the bone collector that is feeding this grinder.

It has been proven that if this unit is energized by the primary grinder that the ease of operation is greatly simplified. However precautions must be taken to insure that this machine is not started while it is being worked on. We strongly recommend that this machine is provided with a disconnect or power cord so the operator or persons that are assembling this machine can lock the power out!

POWER LOCKED OUT!

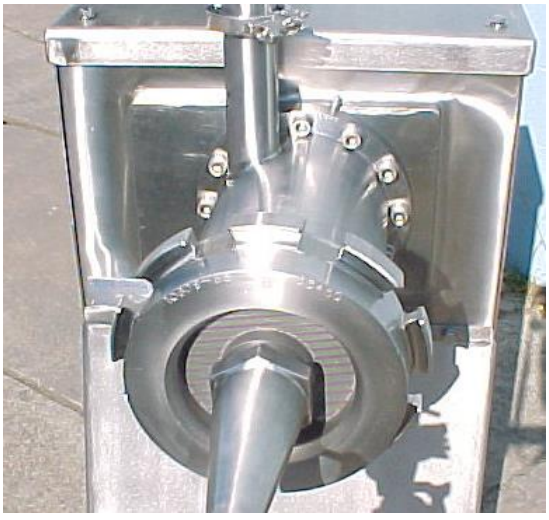
DISASSEMBLY TOOLS:
If the grinder is not located on floor level make no attempt to disassemble the grinder unit without an adequate platform or provisions provided by the installation contractor, plant engineer, or plant safety officer. The grinder has many parts that have square edges and cutting edges. Adequate safety equipment should be used at all times!

After the grinder has been installed in its permanent position, it can be disassembled.

The tools described below are for both disassembly and assembly of the grinder unit.

Ring Wrench
The Ring Wrench fits over the lugs of ring and is used to loosen the ring (counter clockwise), or tighten the ring (clockwise)

The end of the ring wrench fits into the end of the feedscrew and it can be used to engage the feedscrew to the drive spline.



Note:
Wear appropriate safety equipment and remember to always "Work Safely".

GRINDER UNIT DISASSEMBLY:

When the grinder unit has been properly secured, disassembly can begin.
Step 1. Removing pipe and clamps from the bushing holder to the Regulator™ Bone Valve.

Note, although this machine is simple to disassemble and assemble, we do not recommend the use of children to do so.

The parts may be slipery, and two sets of hands are better than one.

<u>Step 2.</u> Loosen the Grinder ring using the

Then turn the ring by hand.

Then remove the ring.

POWER LOCKED OUT!

<u>Step 3.</u> Loosen the bushing holder while the plate is still in the grinder.

Then pull the plate, bushing holder and bushing from the grinder.

Unscrew the bushing holder, remove the bushing from the plate.

Step 4. **Remove the knifeholder**

Examine the knife inserts. We recommend changing them each time the plate is sharpened.

Step 5. **Remove the knife tension springs.**

Note the back to back orientation.

Step 6. **Remove the centering pin. There is a hole provided at the end of the pin to aid in pin removal. Do not pull so hard that the feedscrew comes out of the machine and falls on your foot.**

POWER LOCKED OUT!

Step 6 continued. **Remove the pin key before it falls on the floor and is washed down the drain.**

Then remove the pin from the grinder feedscrew.

Pin Key (10010-1)

Pin part no. 10536

Step 7. **Remove the grinder feedscrew. This feedscrew weighs 58 pounds, if it is too heavy for you, get help.**

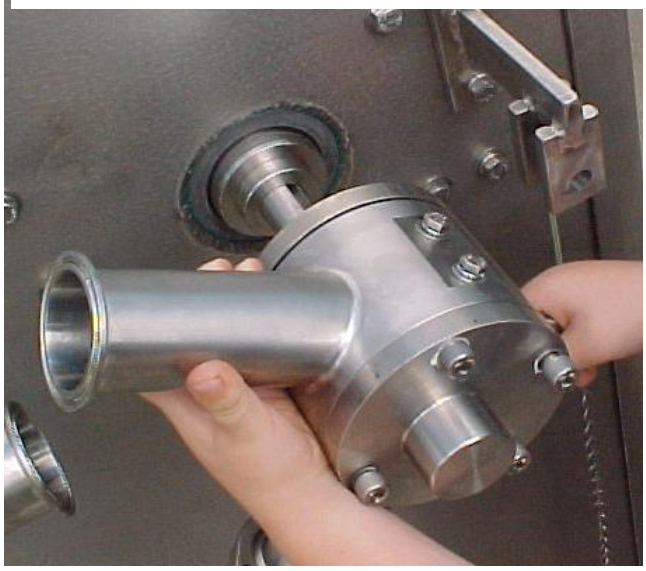
Step 8. **Remove the excluder seal.**

Step 9. **Inspect the adjustment bolt.**

POWER LOCKED OUT!

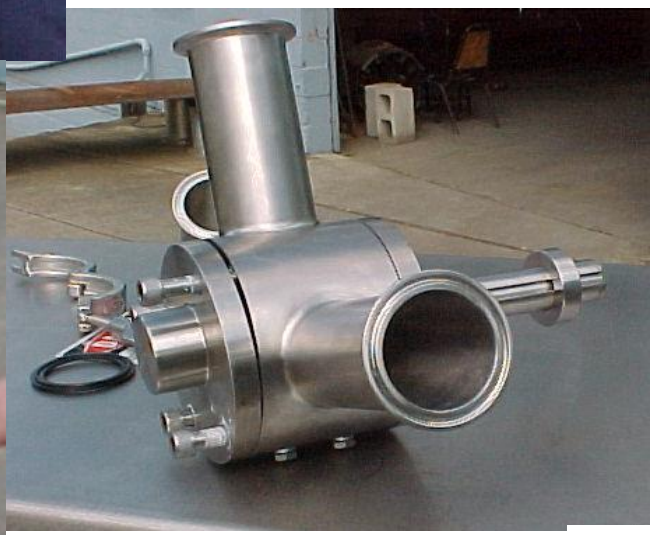
Regulator™ Bone Valve disassembly.
Using the 3/8" allen wrench (supplied) loosen the 4 ea. allen head cap screws.

With a firm grip on the Regulator Bone Valve, pull the from the machine.



Pull the fas-pin that connects the Regulator Bone Valve to the cabinet.

Set the Regulator bone valve on a flat surface and loosen the 4 allen head cap screws.



POWER LOCKED OUT!

Please note the spacer mounted on shaft. This spaces the Regulator Bone Valve from the gearbox.

SPACER
Part No. 10639

Remove the cover, the impeller cap will probably come along with it. No tools should be required to remove the cap. If you decide to pry it apart anyway, file the nicks and burrs you generate.

Remove the vanes from the impeller. Note the orintation. The vanes only go one way.

POWER LOCKED OUT!

ITEM	DESCRIPTION	DRWG. NO. / MATERIAL	PART NO.	WT.	QTY.
14		`	`	`	`
13	`	`	`	`	`
12	Cut parts and master material list	GV 1054-D	`	`	1
11	2" RBV Gearbox Spacer	GV 1041-A	10639	`	1
10	2" RBV Torque Arm	GV 1048-C	10651	`	1
9	Alignment Sleeve	GV 1053-B	10680	`	1
8	2" RBV Bushing	GV 1038-A	10634	`	2
7	3/8-16 Allen Head Cap Screw 4" Lg.	92196A640	10635	`	4
6	2" RBV Vanes	GV 1037-B	10633	`	2
5	2" RBV Impeller Cap	GV 1036-B	10632	`	1
4	2" RBV Impeller & Impeller Machining	GV1035-C/GV1055-C	10631	`	1
3	2" RBV Drive Cover	GV 1034-B	10630	`	1
2	2" RBV Cover	GV 1033-B	10629	`	1
1	2" RBV Housing	GV 1032-D	10628	`	1

NO.	DATE	BY
6	`	`
5	`	`
4	`	`
3	`	`
2	`	`
1	`	`

REVISION

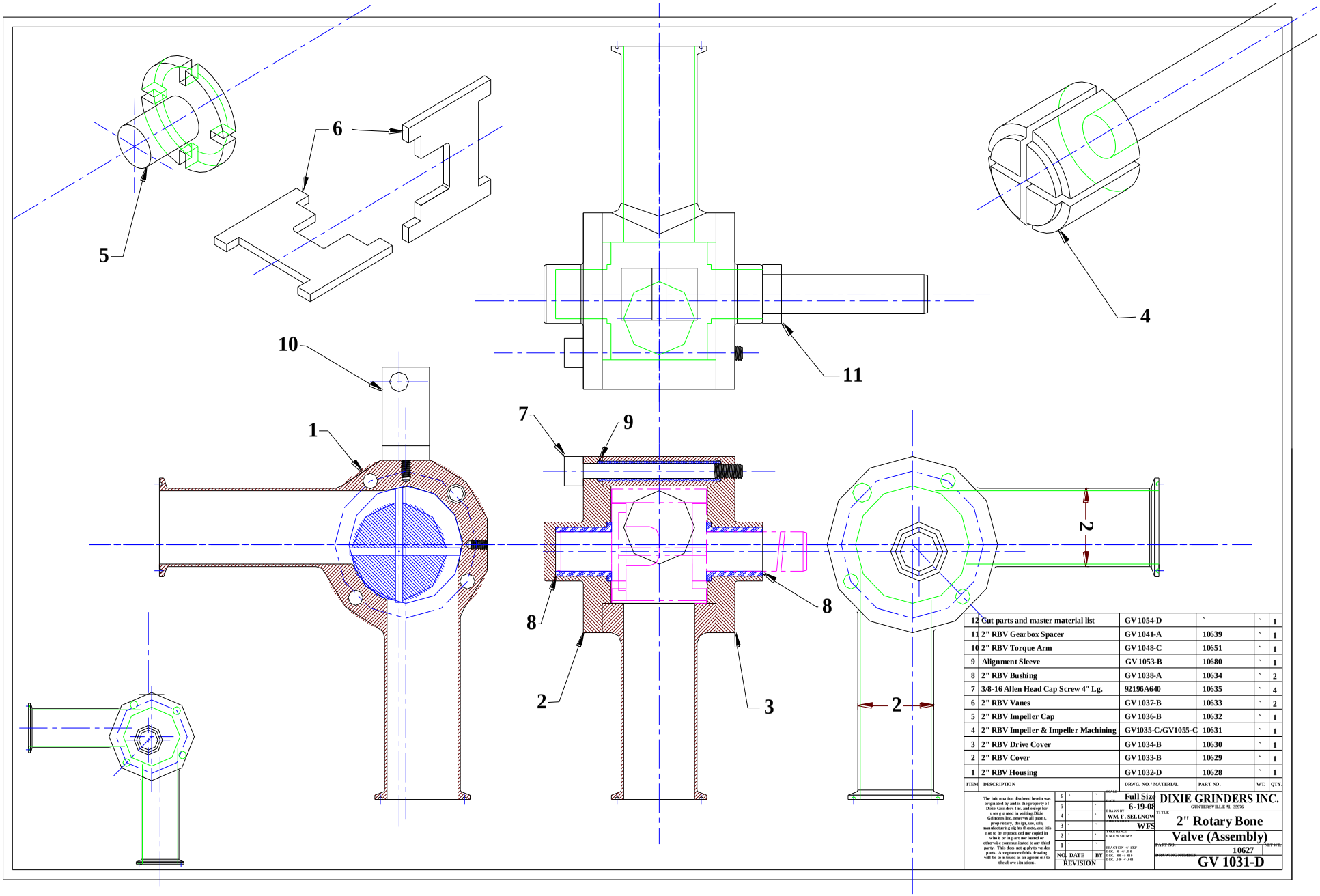
SCALE: Full Size
DATE: 6-19-08
DRAWN BY: WM. F. SELLNOW
APPROVED BY: WFS
TOLERANCE UNLESS SHOWN
FRACTION +/- 1/32"
DEC. .0 +/- .050
DEC. .00 +/- .010
DEC. .000 +/- .003

DIXIE GRINDERS INC.
GUNTERSVILLE AL 35976

TITLE
2" Rotary Bone Valve (Assembly)

PART NO. 10627
NET WT.

DRAWING NUMBER
GV 1031-D



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7	3/8-16 Allen Head Cap Screw 4" Lg.	92196A640	10635	`	4
6	2" RBV Vanes	GV 1037-B	10633	`	2
5	2" RBV Impeller Cap	GV 1036-B	10632	`	1
4	2" RBV Impeller & Impeller Machining	GV1035-C/GV1055-C	10631	`	1
3	2" RBV Drive Cover	GV 1034-B	10630	`	1
2	2" RBV Cover	GV 1033-B	10629	`	1
1	2" RBV Housing	GV 1032-D	10628	`	1

NO.	DATE	BY	REVISION
6	`	`	`
5	`	`	`
4	`	`	`
3	`	`	`
2	`	`	`
1	`	`	`

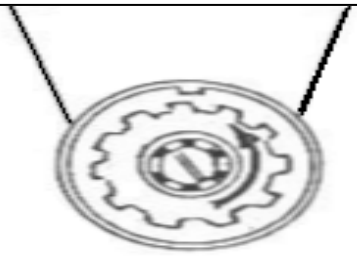
SCALE: Full Size
DATE: 6-19-08
DRAWN BY: WM. F. SELLNOW
APPROVED BY: WFS
TOLERANCE UNLESS SHOWN
FRACTION +/- 1/32"
DEC. .# +/- .01
DEC. .## +/- .010
DEC. .### +/- .005

DIXIE GRINDERS INC.
GUNTERSVILLE AL 35976

TITLE: 2" Rotary Bone Valve (Assembly)

PART NO. 10627 SET PART

DRAWING NUMBER: GV 1031-D



ROTATION: When the grinder unit has been disassembled, and then wired according to all applicable codes and regulations, rotation can be checked. Do not turn the unit on until you are positive that no one is in harms way! The grinder feedscrew should turn counterclockwise! After the rotation has been checked LOCK OUT THE POWER!

SANITATION: Appropriate clothing should be worn, and all safety precautions should be taken before cleaning any equipment. The feedscrew, head and ring are stainless steel. The knife inserts, pin and orifice plate high carbon or tool steel. Use appropriate cleaning agents. If acid rince is required, rince with clear water. Do not use high pressure streams of water to clean a grinder unit. It is possible to drive water past the oil seals and damage the gearbox.

The grinder inserts, pin and orifice plate should be placed in mineral oil, or completely dried and kept in a dry place until needed.

If the machine is not going to be used for an extended period, apply a coat of edible grease to all surfaces and wrap the grinder in plastic.

SANITIZERS: Iodine sanitizers. Iodine reacts with tin. If the Iodine is in sufficient strength and has been on the tin plated surfaces long enough it will turn anything that touches the surface deep purple. Other sanitizers also may react with tin plated or stainless steel surfaces. Check label instructions before using.

UNIT ASSEMBLY: Please study all of the grinder parts shown on the exploded view before you attempt to assemble the grinder unit. The exploded view is at the rear of the maintenance instructions. (These instructions assume that the grinder unit has not been disassembled any further than the instructions already given.)

MAKE SURE THE POWER IS STILL LOCKED OUT BEFORE ASSEMBLY.

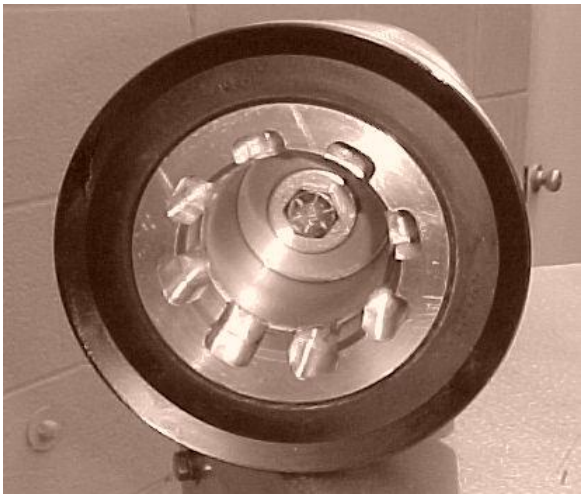
POWER LOCKED OUT!

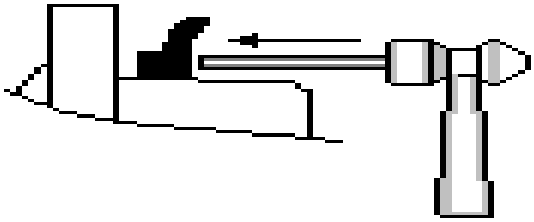
UNIT ASSEMBLY:

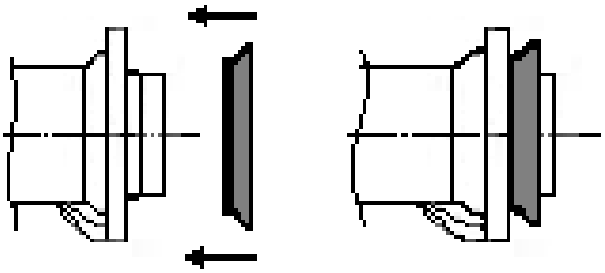
Please study all the grinder parts shown on the exploded view before you attempt to assemble the grinder unit. (The exploded view follows the Maintenance section.) **(These instructions assume that the grinder unit has not been disassembled any further than the instructions have already given.)**

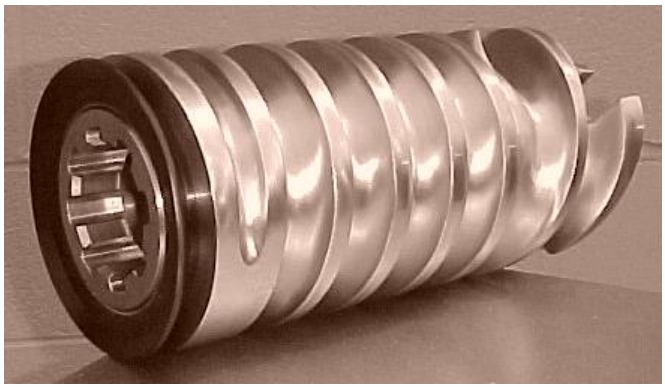
<u>Step 1.</u> Inspect the excluder seal. It should be clean and free of nicks, cracks, or tears. If the excluder seal is damaged it should be replaced.

It may be necessary to tap the excluder seal in position. Use a rounded punch and soft taps to help it in its proper position. Do not use a screw driver or other pointed objects. Push only around the center of the seal, do not push on the soft lip. Apply force at the hub of the seal, as shown. The lip of the excluder seal faces out, and contacts the hopper flange.







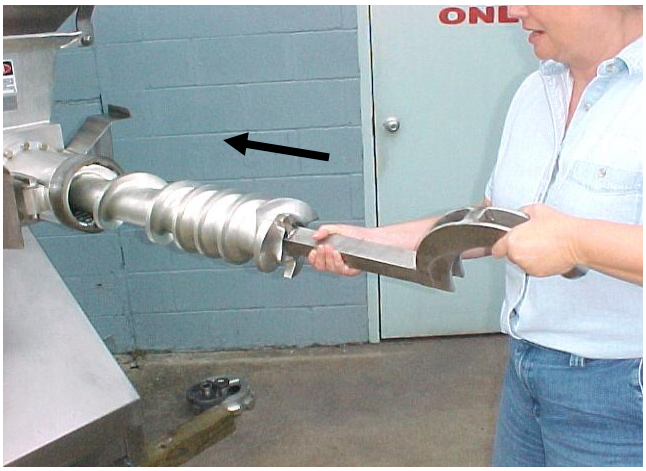


Apply a small amount of edible grease, vegetable shortening, tallow, lard, chicken fat, bear fat, or some other lubricant to the face of the seal. **(Check with your Quality Control Dept. and your USDA representative for approved material**

Apply a small amount of the same lubricant to the spline teeth.

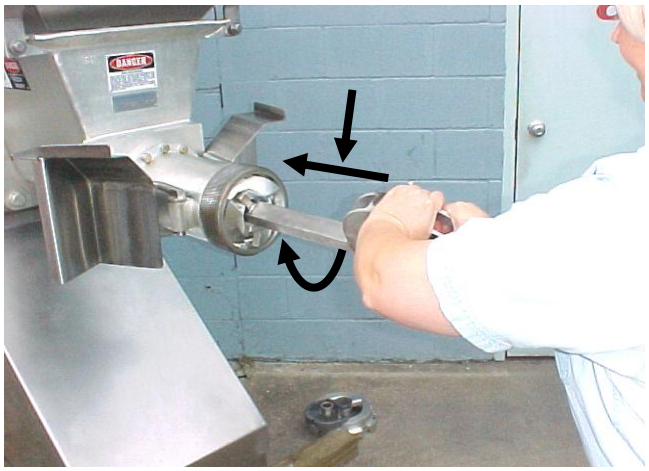
POWER LOCKED OUT!

Step 2. Place the feedscrew into the grinder head as shown. Using the end of the ring wrench, lift up, and push the feedscrew further into the unit.



Continue to push the feedscrew in while lifting up on the handle.

Power Locked Out!



The feedscrew may stop before it is engaged on the drive spline. Push down, in, and turn the feedscrew. You will feel the feedscrew slide into place on the drive spline.

When the feedscrew is installed properly the feedscrew will be 3/4" (19mm) from the end of the head. If this distance varies, check the thrust screw, add or subtract washers to obtain the 3/4" dimension.

Power Locked Out!

POWER LOCKED OUT!

<u>Step 3.</u> INSTALL CENTERING PIN. Inspect the pin to make sure it is clean and free of nicks and burrs. Replace the pin when it shows wear grooves, checks, or is worn.

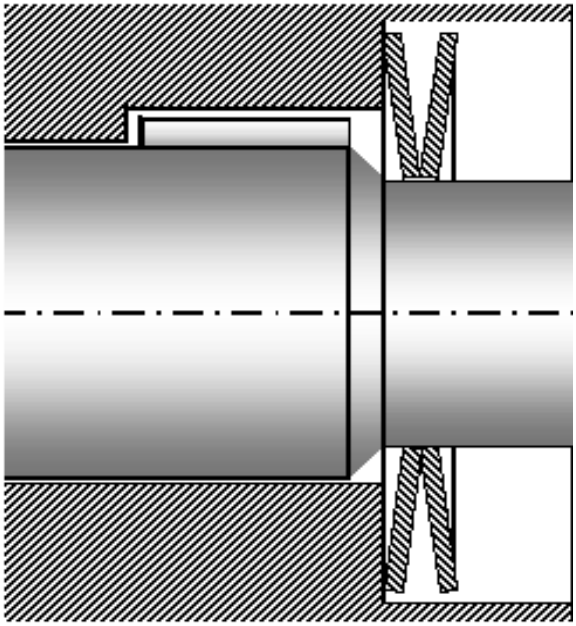
<u>Step 4.</u> Install the springs, they go in back to back.

Place the pin key into the slot in the centering pin.

The first spring cup is facing down, the second spring is cup facing out.

Do not tap the pin into place, it should slide in. The key may need to be tilted slightly so that it fits properly, but do not beat the pin into place with a hammer, it will be just about impossible to remove the pin if you do.

POWER LOCKED OUT!

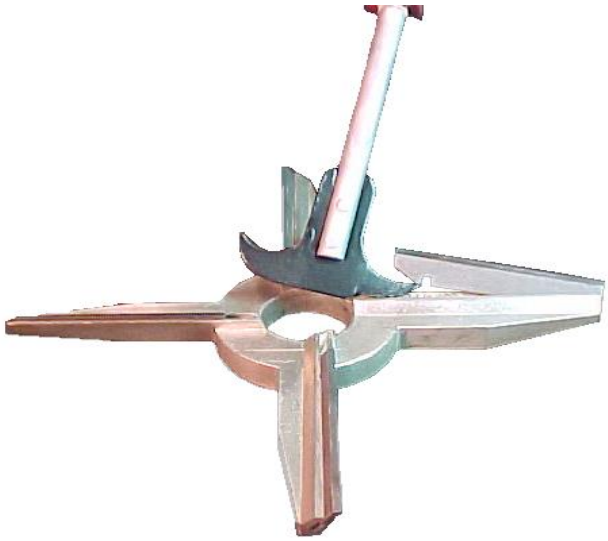


In the above illustration notice that the face at the outer diameter of the first spring is touching the counter bore in the face of the feedscrew. The second spring is opposite and will contact the knife in the same fashion. Do not stack the springs one on top of the other like dishes, this doubles the spring force and will provide too much force against the knife inserts. Do not use more than two springs.

The Belleville springs provide a better power curve than coil type springs, and are designed to provide near uniform power over the life of the knife inserts.

POWER LOCKED OUT!

Step 5. REPLACE INSERTS



Inserting the pointed end of our insert remover into the slot of the knifeholder provides a quick and easy way to remove the knife inserts. Removing them in this manner minimizes damage to the insert locating pins found in the bottom of the insert slots in the knifeholder. We recommend starting with fresh inserts at every plate change! This includes when turning the plate around.

Step 6. INSTALL KNIFEHOLDER.

The knifeholder with fresh inserts simply slides over the pin and contacts the spring. The inserts face out! Be careful, the inserts are sharp.

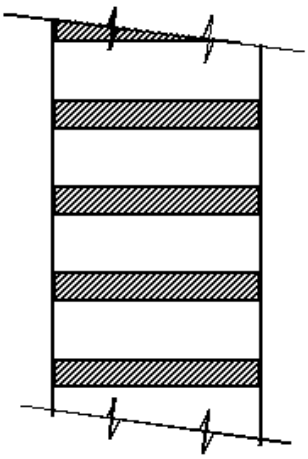
We recommend that a fresh plate surface should be used every 8 hours of operation. Operations that run empty or with hard to grind materials may have to change plate surfaces every 4 hours.

Grinder Plates should be sharpened with a vertical type surface grinder, typically called a "Blanchard Type". With this type of surface grinder the plate should be placed directly over the center of the table. We do not recommend sharpening the plates when they are placed out on the table, not directly over the center of the table.

We recommend using our grinding wheels to sharpen the plate. These specialized grinding wheels produce the correct surface finish to provide clean, cool, cutting. Plates that are not sharpened correctly will not grind even the softest of meats. The plates must be flooded with coolant when they are ground. The horsepower rating of your surface grinder will determine feed rate. The plate should be sharpened enough to restore the edge of the hole, and remove any discoloration from running empty (see Maintenance Instructions, Grinder Plates). Nicks and gouges should be ground out.

The plates should be ground perfectly flat, or slightly concave, .002 per side max.

<u>Step 7.</u> INSPECT THE ORIFICE PLATE:
(This inspection is performed with the plate out of the machine.)
Sharp plates may cut you, be careful!
MIMIMUM RECOMMEND PLATE THICKNESS IS 3/4".
Inspect the plate before each use.
Inspect the edge of the holes, they should form sharp corners.
The plate should be clean.
Check for discolored plates, do not use a plate with a deep blue coloring between the holes.
Check for cracks, especially between the holes. If cracks are present, do not use the plate.
Check for grooves, broken holes, and any other defect.
Do not use defective orifice plates.



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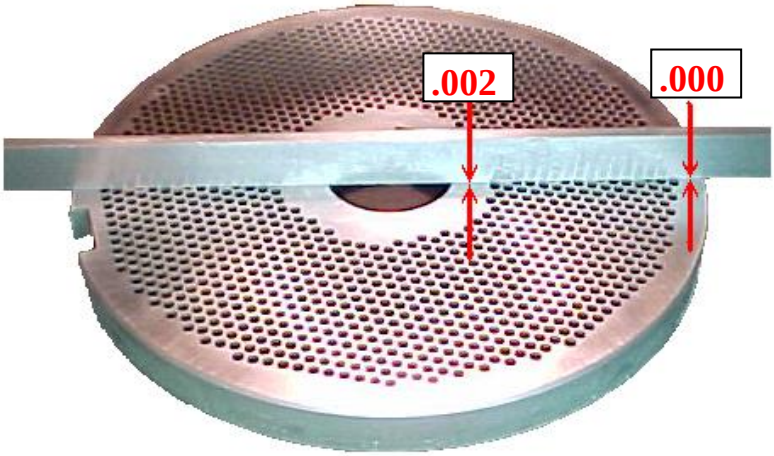
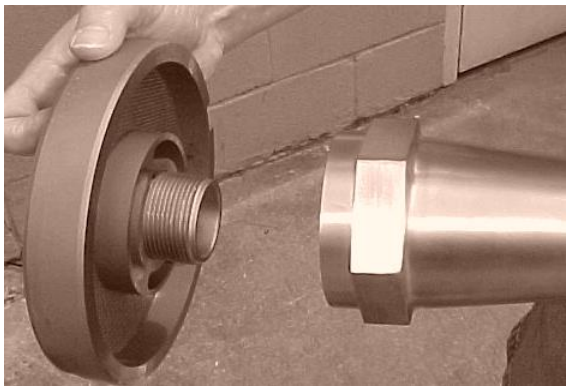


Step 8 **INSPECT THE PLATE BUSHING.**
The plate bushing should be clean, and free of nicks and burrs. Inspect the inside diameter, it is common to show wear because the bushing supports the weight of the feedscrew. Replace the bushing when there is .025 wear, or the inside diameter measures 1.280.
Apply a generous portion of edible grease, vegetable shortening, tallow, lard, chicken fat, goose grease, bear fat, or some other lubricant to the inside diameter of the bushing. (Check with your Quality Control Dept. and your USDA representative for approved materials.)

Step 9. **INSTALL PLATE BUSHING.**
Install plate bushing into orifice plate. Then lubricate the inside surface of the grinder plate. (The side that will be in contact with the knife inserts). Note, the lip of the bushing is to the inside. The knifeholder and inserts will not touch the lip of the bushing.

Screw the Bushing Holder onto the bushing. Turn the bushing hand tight for now.



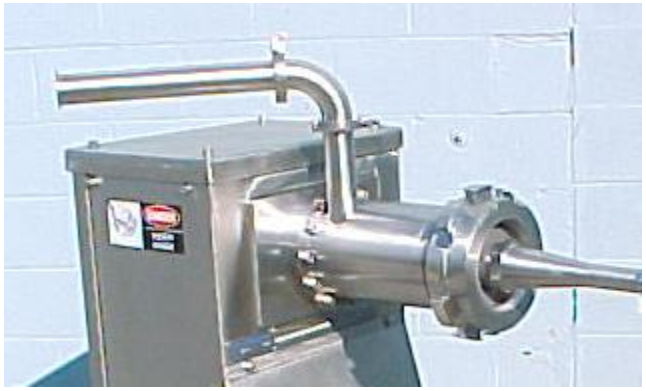
Step 10. **Install plate, bushing, and bushing holder.**

Give the plate a litte push up, while lifting on the pin and the plate should slide right into the machine.

Step 11. **Install the Ring.**
Apply a few dabs of bear grease to the threads on the head or ring. Screw the ring on, remember, righy tighty, lefty loosey.

Beleta is shown backing the ring up!

<u>STEP 12.</u> Tighten the ring by hand. Using the ring wrench, fully tighten ring, there is no need to pound on the wrench! Do not tip the machine over while tightening the ring. Back the ring up about one distance of one of the plate lugs. That's it, just back it up a little.



<u>Step 13.</u> Install Inlet pipes and bone collector valve. It is important to use the sanitary gaskets, the fittings will not tighten properly without them.

POWER LOCKED OUT!

OPERATING INSTRUCTIONS.

The grinder unit should never be left unattended while running. If you have to be away from your work station, turn the grinder off. If for any reason the grinder has to be taken apart, the POWER SHOULD BE LOCKED OUT! We recommend a strict policy that states *"Touching the grinder while the power is not locked out will result in immediate termination!"* This includes a plate change, or even removing the plate guard.

This is a specialized machine, intended to rework product from the bone collection of a larger grinder. If this unit does not resemble the above picture you have the wrong manual or the wrong grinder. The grinder unit should be turned on only when product begins to exit the plate of the larger feeding grinder.

The grinder should be turned off when product stops coming out of the grinder. If the grinder is left running without product, the knife inserts will rapidly dull and generate undesirable heat. The heat generated by the inserts will damage the plate. The pin and bushing rely on the product to supply lubrication and cooling. If the grinder is left running without product, the pin and bushing will also heat up and in some instances they weld together.

Do not grind products that were not intended for this machine. All grinder units are designed for a specific purpose. Do not attempt to feed product by hand into the inlet pipe or use this machine in any manner other than described above.

If you are unsure of what product this grinder was designed for, please call Dixie Grinders Inc. at (800) 745-0586 or (256) 582-0477.

Reassemble the Regulator™ Bone Valve. Find the female key and slide the keyed impeller shaft into the gearbox.

Reconnect the pipe. Tighten clamps only enough to join the parts until all clamps are in place.

Push in the quick release pin that connects the Regulator Bone Valve to the cabinet.

When all the clamps are in position, tighten all clamps and make sure the allen head cap screws are properly tightened.

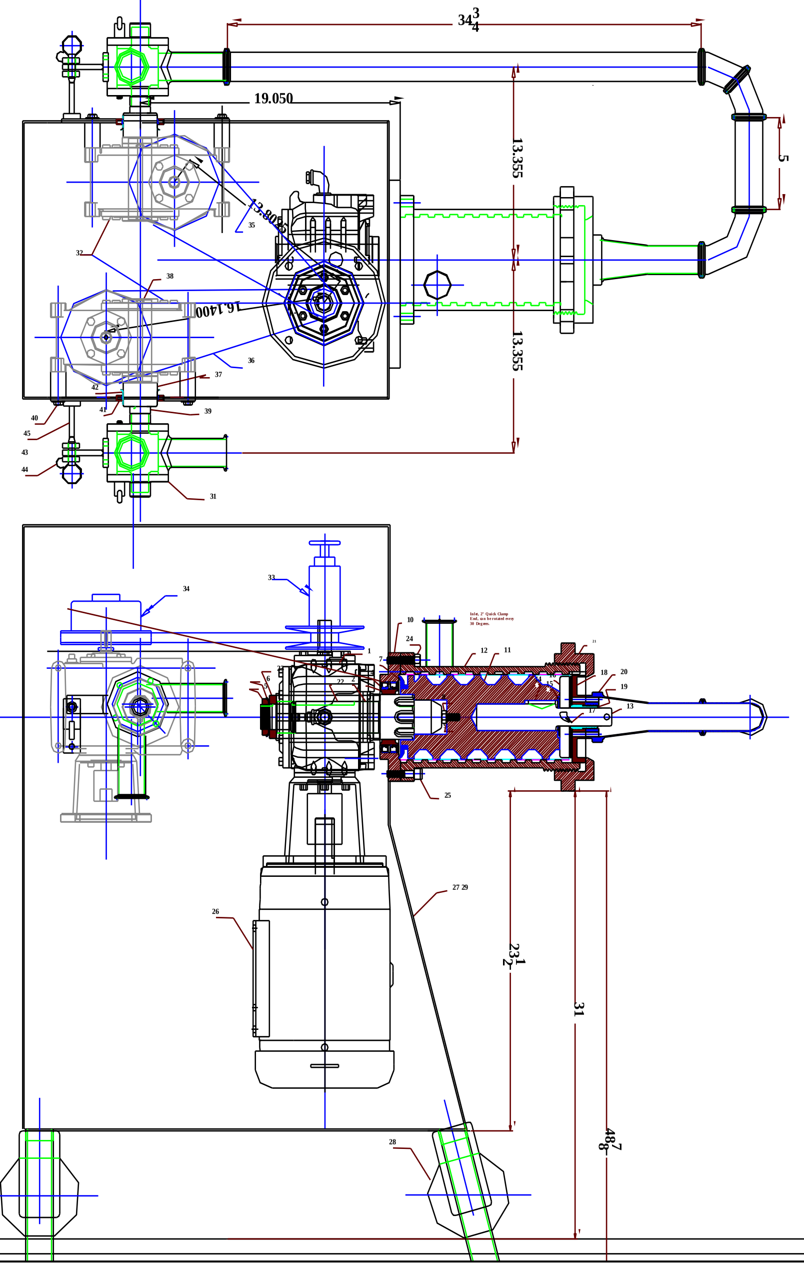
Speed Range:
Grinder 175 RPM (60 Hertz), 18.8 Pounds per minute,
Bone Valve 9.4 RPM 2.85 Lbs/Min To 53.57 RPM, 16.234 Lbs/Min.

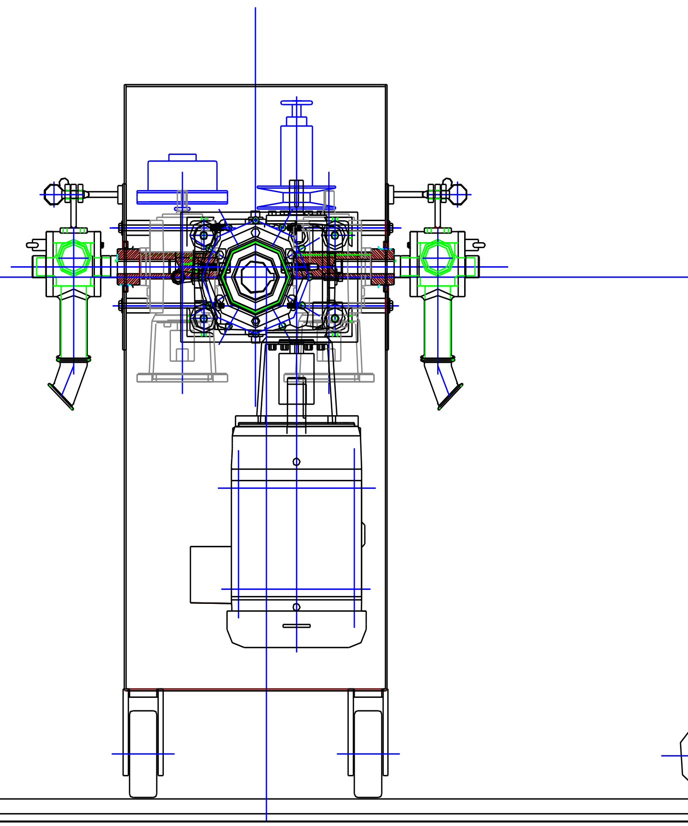
Grinder 131 RPM (45 Hertz), 14.1 Pounds per minute,
Bone Valve 7.0 RPM 2.13 Lbs/Min To 40.18 RPM, 12.18 Lbs/Min.

Grinder 87.5 RPM (30 Hertz), 9.4 Pounds per minute,
Bone Valve 4.7 RPM 1.43 Lbs/Min To 26.79 RPM, 8.12 Lbs/Min.

Grinder 70 RPM (24 Hertz), 7.5 Pounds per minute,
Bone Valve 3.76 RPM 1.14 Lbs/Min To 21.43 RPM, 6.49 Lbs/Min.

Frequency controller / electric controls / disconnect, not supplied.
We recommend unit to be energized with primary grinder.
Only one bone valve supplied per unit.





ITEM	DESCRIPTION	DRWG. NO. / MATERIAL	PART NO.	WT.	QTY.
51	2" 45° Elbow		2454		3
50	2" Tube Extension 34-3/4" Long		10678		1
49	2" Tube Extension 5" Long		10677		1
48	2" Clamp		2451		7
47	2" Gasket		2450		7
46	2" Stainless Elbow		2453		1
45	Cabinet Torque Arm	GV 1048-C	10652		1
44	No. 12 Single Jack Chain, 18"	3617T5			
43	5/16" Hex L-Key (allen wrench) SS	53855A16			
42	Speedi Sleeve, (1992-5HA) Pinion Sleeve	CR99250			1
41	Oil Seal, (1992-5HA) pinion shaft	CR 2488	1403		1
40	3/8-16 x 7-1/2" Lg. Bolt w Nut & LW	18-8	92198A651		4
39	2" Rotary Valve Gearbox Spacer	GV 1041-A	10639		1
38	Adapter Shaft Keeper	GV 1050-A	10657		1
37	Adapter Shaft	GV 1046-D	10650		1
36	BX 44 Drive Belt				1
35	BX 39 Drive Belt				1
34	HI-LO 66TBR (3/4" Bore) Driven Pulley				1
33	HI-LO MCV57 (1" Bore) Drive Pulley				1
32	MSHV25 X0B 60:1 1-1//16" Bore	GB 1141-D	10656		1
31	2" Rotary Bone Valve Assy.	GV 1031-D	10627		1
30	160MM RING WRENCH	GR 1199-D	10610		1
29	160MM Grinder Frame Covers	GF 1087-D			1
28	6" Wheel, Polyolefin	01357946	HD-636-RB		4
27	160MM Grinder Frame	GF 1090-D	10676		1
26	7-1/2HP 230/460 1770RPM, 213TC	CSWDM3710T			1
25	1/2-13 Allen Head Cap Screw, 2" Lg.	McMaster-Carr	92196A720		11
24	1/2-13 x 2-1/2" Stud with 1/2-13 Nut	95412A722	91847A520		1
23	Mainshaft Collar	GB 1131-A	10624		1
22	1/2" Key, 4" Lg.				1
21	160MM Ring	GR 1198-C	10609		1
20	200MM Bushing Nut w Con Reducer	GP 1091-C	10647		1
19	200MM BCA Bushing	GP 1083-B	10523		1
18	160MM Grinder Thin BCA Plate	OP 1056-C	10601		1
17	Knife Insert	GK 1008-B	1972		3
16	160MM 3-Bladed Knifeholder	GK 1048-C	10602		1
15	200MM Springs	GP 1088-A	10543		2
14	Pin Key		10010-1		1
13	200MM Centering Pin	GP 1086-C	10536		1
12	160MM head	HD 1170-D	10606		1
11	160MM Feedscrew	GW 1251-D	DGW 2-13-74		1
10	Mounting Plate	GB 1129-D	10607		1
9	1/2" Flat Washer				1
8	1/2-13 Hex Bolt, 1" Lg.				1
7	Manville Excluder Seal, 0393-14613 SSW		10603		1
6	W-09 Lock Washer		1022		1
5	N-09 Lock Nut		1021		1
4	National Oil Seal, 417211		1030		2
3	Wear Collar, Chrome Plated	GB 1050-B	1037		1
2	1780-6HB Mainshaft	GB 1045-C	2878		1
1	Cone Drive Gearmotor 10:1, 7-1/2 HP	GB 1140-D	10675		1

NO.	DATE	BY
6		
5		
4		
3		
2		
1		

REVISION

SCALE Quarter Size
DATE 1-5-08
DRAWN BY WM. F. SELLNOW
APPROVED BY WFS
TOLERANCE UNLESS SHOWN
FRACTION +/- 1/32"
DEC. .0 +/- .050
DEC. .00 +/- .010
DEC. .000 +/- .003

DIXIE GRINDERS INC.
GUNTERSVILLE AL 35976

TITLE
160MM In-Line Grinder Assembly
with ambidextrous Regulator mounting

DRAWING NUMBER
BD 1072-D-1

51	2" 45° Elbow	`	2454	`	3
50	2" Tube Extension 34-3/4" Long	`	10678	`	1
49	2" Tube Extension 5" Long	`	10677	`	1
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47	2" Gasket	`	2450	`	7
46	2" Stainless Elbow	`	2453	`	1
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