

Parts & Accessories



Trusted since 1904, Besser Company is recognized as the leader for quality concrete products equipment and parts for the masonry, hardscape, pipe and precast and wet cast markets of the industry. Our products are designed, manufactured and wholly supported by a team of talented employees.

Order parts by contacting your local Besser Representative, the Customer Service Department or e-mail partsales@besser.com.

**NAME PLATE DATA:** When ordering replacement parts, please provide the Besser machine model, serial number and any data found on a component's name plate, such as the manufacturer's name, model number and serial number.

**MERCHANDISE AVAILABILITY:** Besser maintains an inventory of mold and machine parts. Please contact Besser for parts availability.

**RETURN POLICY:** Beginning on 1 January 2016, a 20% restocking fee will be accessed on all parts returned due to errors caused by ordering from catalogs and manuals dated prior to 2000. Our goal is to provide you with the correct replacement parts the first time. However, a large number of parts listed in older Besser catalogs and manuals have been replaced by new numbers based on vendor changes and equipment upgrades. Older catalogs should simply be used for reference only. Please help us to help you by checking all part numbers from catalogs dated prior to 2000. When possible, compare the catalog part number with the number stamped on the existing part. Ultimately the best resource for part numbers is the original group parts list (GPL) that your Besser equipment was built to. If you are unsure of a part number, please feel free to contact your Besser Representative or the Customer Service Department before placing your order.

**AUTHORIZED RETURN PROGRAM:** Parts returned must have written authorization from Besser Company. Unauthorized return of parts will not be accepted at any Besser facility or by any Besser Representative. Shipments of parts to Besser and to the Buyer shall be paid by Buyer. Credit will be issued for the cost of freight and for the full value of such material when the circumstance is a result of a Besser error. Please inspect all merchandise upon receipt and notify Besser immediately of any claims, in writing, no later than 30 calendar days after receipt. Consult with your local Besser Representative or the Customer Service Department for further information.

**CANCELLATION:** Buyer may not cancel an equipment agreement if the equipment has already been shipped. Prior to shipment of the equipment, Buyer may cancel only upon written acceptance from Besser and upon Buyer agreeing to the following:

- a) In the case of standard equipment, Buyer shall pay Besser 20% of the Buyer's purchase price as cancellation charges.
- b) In the case of any product or system modified or made to order for the Buyer, the Buyer shall pay all the engineering and manufacturing costs up to the date of acceptance of the cancellation by Besser.
- c) Payment of cancellation charges shall be made by the Buyer upon receipt of a statement from Besser. Cancellation charges shall not exceed the purchase price.

The following are trademarks of Besser Company:
Bescopac, Besser, Besser-Matic, Blockmakers Workshop, Dynapac, Master Blockmaker, Servopac, SmartPac, Superpac, Ultrapac, Vibrapac and VIBRO-MAC.

Additional copies of this catalog are available by calling +1.989.354.1000 or 1.800.530.9991, to send your request by fax, +1.989.354.3190, e-mail: partsales@besser.com or it can be downloaded from our web site at www.besser.com/parts

Some photos and illustrations may vary slightly from actual product.

1

© 2016 by Besser Company



### Parts & Accessories Catalog **2016**

### **Table of Contents**

	Page
Air	162
Batching	145
Besser-Matics	102
Besser Signs/Decals	10
Bin Indicators	152
Block Machines	54
Conveyor Accessories	141
Cubers	112
Curing	129
Dust Collection	135
Electrical	121
Hydraulic	160
Index	168
Licensed Concrete Units	11
Line Shaft Conveyor	111
Miscellaneous	10
Mixers	92
Mold Parts	12
Paint	165
Patternmaker	113
Pneumatic	142
Safety	3
Service Bulletins	4
Servopac®	90
Skip Loaders	100
Splitters	105
Tools	163
Training	11
Transporters	150
Turnovers	
Upgrades	166
Vibrators	150

### **BESSER TERMINOLOGY**

AAT - at-a-time cu ft - cubic foot

cu yd - cubic yard

D - depth

ETI - equivalent thickness in inches

ETMM - equivalent thickness in millimeters

ft lb - foot pound

H - height

ID - inside diameter

L - length

LH - left hand

NM - Newton Meter

**OD** - outside diameter

req'd - required

RH - right hand

SOP - set of parts

sq - square

W - width

yd - yard

### SAFETY BULLETIN

This notice is issued to advise you that some previously accepted shop practices may not be keeping up with changing Federal and State Safety and Health Standards. Your current shop practices may not emphasize the need for proper precautions to insure safe operation and use of machines, tools, automatic loaders and allied equipment and/or warn against the use of certain solvents or other cleaning substances that are now considered unsafe or prohibited by law Since many shop practices may not reflect current safety practices and procedures, particularly with regard to the safe operation of equipment, it is important that you review your practices to ensure compliance with Federal and State Safety and Health Standards.

### / IMPORTANT

The operation of any machine or power-operated device can be extremely hazardous unless proper safety precautions are strictly observed. Observe the following safety precautions:

- riangle Always be sure proper guarding is in place for all pinch, catch, shear, crush and nip points.
- ⚠ Always be sure that all personnel are clear of the equipment before starting it.
- ⚠ Always be sure the equipment is properly grounded.
- Always turn the main electrical panel off and lock it out in accordance with published lockout/tagout procedures prior to making adjustments, repairs and maintenance.
- Always wear appropriate protective equipment such as safety glasses, safety shoes, hearing protection and hard hats.
- ⚠ Always keep chemical and flammable material away from electrical or operating equipment.
- Always maintain a safe work area that is free from slipping and tripping hazards.
- Always be sure appropriate safety devices are used when providing maintenance and repairs to all equipment.
- ⚠ Never exceed the rated capacity of a machine or tool.
- ⚠ Never modify machinery in any way without prior written approval of the Besser engineering department.
- ⚠ Never operate equipment unless proper maintenance has been regularly performed.
- ⚠ Never operate any equipment if unusual or excessive noise or vibration occurs.
- Never operate any equipment while any part of the body is in the proximity of potentially hazardous areas.
- ⚠ Never use any toxic flammable substance as a solvent cleaner.
- ⚠ Never allow the operation or repair of equipment by untrained personnel.
- ⚠ Never climb or stand on equipment when it is operational.

It is important that you review Federal and State Safety and Health Standards on a continual basis. All shop supervisors, maintenance personnel, machine operators, tool operators, and any other person involved in the set-up, operation, maintenance, repair or adjustment of Besser built equipment should read and understand this bulletin and Federal and State Safety and Health Standards on which this bulletin is based.

### **!** WARNING

Using the wrong replacement part(s) may create a hazard or undesired condition. Accordingly, play it safe and be certain in selecting your replacement parts. To help identify parts, this catalog is arranged in sections which are supplemented with many illustrations and pictures which may NOT reflect associated or nearby safety guards and signs. For machine safety related matters, consult your machine's operating manual or contact Besser directly.

REMEMBER: Turn off all power and lock out machine panels before servicing and DO NOT operate machinery without all guards in place.

© 2016 by Besser Company 3 SAFETY



### Service Bulletins

Besser equipment is engineered to provide years of dependable operation. We support you throughout the life of your equipment with 24/7 access to personal customer support and extensive documentation to help you safely operate, maintain and optimize your production equipment. The following Service Bulletins are available to provide you with important information regarding your equipment and the production of concrete

### ■ Batching & Mixing

- 6, 9 and 10 Yard Slump Mixer Air/Grease Purged Dust Hubs
- Breather Vent and Split Oil Seal (applicable to 80, 100 and 120 cu ft mixers)
- Dust Collector Maintenance and Troubleshooting Mixer Blade Sets of Parts and Installation Procedure Using Epoxy
- New Mixer Blade Sets of Parts and Installation Procedure
- Proper Tensioning of Drive Belts on Batch and Slump Mixers
- Screw Conveyor Operation and Maintenance

### ■ Block Machines

- Adjusting Second Stop on Besser Cam Operated Machines
- Adjustments for 5-5/8" High Units on a V4 or V4 (26" Deep) Machine
- Adjustments and Operation of the Automatic Feed Control
- AFC SmartPac® Operating Instructions
- Agitator Encoder Set-Points
- Bescodyne Drive Service Tip
- Besser NEMA and Current Transformer Type
- Bull Gear and Pinion Indexing and Replacement Recommendations
- Concrete Products Machine Height Change Procedure for Dynapac, Ultrapac and Superpac
- Concrete Products Machine Height Change Procedure
- Frequency Drive Set Up Instructions
- Installation of KAMCO BOX (to replace GEMCO BOX)
- How the Trabon Air Operated Grease Pump Works
- The Importance of Synchronizing Vibration
- Improved Pneumatic Control System for Bescodyne Vibrators
- Instructions to Move Electrical Box to Left Hand Side of Vibration Motor 02-312388
- New Style Crossport and Singling Plate
- Operation of the Automatic Feed Time Adjust
- Pallet Lug Link Pins
- Replacing a Broken Pallet Timing Bolt on a Dynapac, Ultrapac, V5 or Superpac
- Replacing the Main Shaft Bearings on a Block Machine
- SmartPac® Air/Hydraulic System Diagrams
- Terminology for Concrete Products Machine Changeover Procedures
- Tips to Extend Service Life of Bescodyne Units
- Check the Bescodyne Clutch/Brake Stacks for Wear

- Modify Air Compaction Device Air Cylinders to Reduce Rod Wear
- Update Bescodyne Clutch/Brake Units from Single to Double Air Flow Valve
- Troubleshooting the Digisolver for Allen-Bradley SLC-500 Programmable Logic Controllers
- Ultrapac Anvil Configuration
- Using the Encoder for Allen-Bradley PLC-2 Programmable Logic Controllers
- Using the Encoder for Allen-Bradley SLC-500 Programmable Logic Controllers
- V3-12 Pinion Shaft Assembly (Besser No. 02-464229) Installation with Locking Assembly
- Vibrator Motor Sheaves for Block Machines

### ■ Conveyors

- Conveyor Belt Storage
- Conveyor Belt Installing and Splicing Procedure
- Conveyor Belt Squaring and Cutting Procedure
- Conveyor Belt Troubleshooting Guide

### **■** Cubers

- Cuber Limit and Proximity Switch and Photo Eye Setup Guide
- Quick Reference Guide for Ordering AF-7 Wear Plates
- SF-7 and SF-7W Cuber Slider Plate, Drive Sprocket and Wear Bar Adjustments
- Wire Mesh Belt Installation and Adjustment Instructions

### ■ Electrical

- Allen-Bradley PanelView<sup>™</sup> Self Test Numbers
- Bescodyne Solenoid Valves
- Gemco Cam Limit Switch Boxes
- Installing Screen Program in PanelView™ 900/1000 with a Flash Card
- Load Existing PanelView<sup>TM</sup> Plus 6 Graphic Terminal with New Application
- New PanelView<sup>™</sup> Plus 6 Graphic Terminal Out of Box Setup
- New VersaView® Out of Box
- Open Rotor Test
- Procedure for Programming Allen-Bradley 1336
   Impact Frequency Drives When Used With AFC
   SmartPac® Vibration
- Putting Allen-Bradley SCL150 Controllers Back in the Run Mode

### Service Bulletins (continued)

- SLC-500 Error Codes
- SLC 500 Programmable Controller
- T30 Plant Floor Terminal Set Up Information
- Troubleshooting the Digisolver for Allen-Bradley SLC 500 Programmable Logic Controllers
- VersaView® Set IP Address
- VersaView® Start Up
- VersaView® Start Up, Part 2
- XYCOM 2050 Graphics Display Unit Set Up Information For Use with a PLC2

### ■ Hydraulic

- Achieving Peak Hydraulic System Efficiency
- Hydraulic Tank Liquid Level Switches

### ■ Loaders & Unloaders

- Boston Gear 700 Series Reducer Lubrication
- Proper Tensioning of Drive Belts on a Besser-Matic

### ■ Mix Design

■ Recommended Cement Content of Concrete **Masonry Units** 

### ■ Molds

- Besser Mold Assembly and Torque Requirements
- Bolt Torque Specifications
- Bull and Pinion Gear Clearance and Alignment Procedure for MK3 Style Pinion Shafts
- Concrete Industry Definitions for Mold Parts
- Examples of How to Order Mold Parts
- High Strength Vibrator Bolts
- Low Height Liners with 1" Keys
- Mold Adjustments
- Mold Compartment Clearance Dimensions
- Portable Mold Jig
- Quick Order Reference Guide for Mold Pallet Guides
- Quick Reference Guide for Ordering Agitator Grids
- Recommendations for Use of Vibrator Weights
- Solutions to Correct Deformed and Cracked Block

### ■ Splitters

- Splitting 8" Return Corners
- Splitter Blade Wear and Adjustment
- Splitter with Turnover Limit and Proximity Switch and Photo Eye Setup Guide

### ■ Transporter Systems

LSC-40 Rotating Cable Anchor



### Safety Decals

Vinyl permanent safety decals are available from Besser Company.

### **SAFETY SIGNS**

		Number of
Sign	Description	Decals Required
1	All Panels	1
2	Mixer	4
3	Concrete Products Machine	
	Depalleter	
4	Mixer	2
5	Skip Loader	4
6	Skip Loader/Mixer Platforms	8
7	Skip Loader/Mixer Platforms	8
8	Vertical: Pallet Transport System	
	Horizontal: LSC-40/LSC-100	6
	Pallet Transport System	
9	Concrete Products Machine	
10	Multi-Spade Besser-Matic	4
11	Multi-Spade Besser-Matic	4
12	Skip Loader	4
13	All Panels	
14	Overhead Block Transfer	4
15	Block Pusher	2
	Pallet Transfer System	
16	Concrete Products Machine	2
17	Conveyors	12
18	Cuber	8
19	Cuber	3
	Block Turnovers	2
	Slat Conveyors	2

Order safety decals by contacting your local Besser Representative or the Besser Customer Service Department.



The operation of any machine or power-operated device can be extremely hazardous unless you strictly observe the appropriate safety precautions. Besser recommends the use of a lockout/tagout program.



01679-400022 High Voltage Width 4-1/2 " Height 9-5/8"

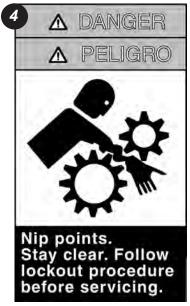


02-113237F0410 Mixer Blade Hazard Width 4-1/2" Height 10-1/4"



Stay clear of machine. Follow lockout procedure before servicing.

Vertical:01599-400091 Crush Hazard Width 3-1/2" Height 7-1/2" Horizontal:01599-400092 Crush Hazard Width 6-5/8" Height 4"



02-114692F1006 Nip Points Width 5-3/4" Height 9-1/2"



01999-400082 Crush Hazard Width 6-1/4" Height 9-1/2"



02-114689F0804 Fall Hazard Width 4-1/2" Height 7-3/4"



02-114690F0805 Falling Objects Width 4-3/4" Height 8"



Vertical: 01599-400095 Crush Hazard Width 4-1/2" Height 10" Horizontal: 01599-400093 Crush Hazard Width 10" Heiaht 5-3/4"



A DANGER — PELIGRO FEEDBOX RECOIL - STAY CLEAR



02-113078 Feedbox Recoil Width 16" Height 2-3/4"



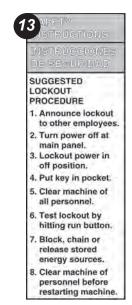
02-113242F0409 Crush Hazard Width 4-1/2" Height 9-5/8"



02-113243F0410 Falling Objects Width 4-1/2" Height 10"



02-114691F1006 Shear & Fall Hazards Width 5-3/4" Height 9-3/4"



02-113249F0410 Safety Instructions Decal -Suggested Lockout Procedure

Width 4" Height 10"



01599-400094 Crush Hazard Width 10" Height 5-3/4"

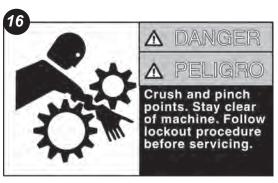


01557-400006 Nip Hazard Width 7" Height 4-1/2"



02-113247F1006 Crush Hazard Width 10" Height 6"





01559-400001 Crush and Pinch Points Width 6-5/8" Height 4"



01539-400084 Crush and Pinch Hazard Width 10" Height 6"

Crush Hazard

Width 10"

Height 6"



The safety signs consist of both a signal word (caution, warning or danger) and text in one of the six following languages: English, Chinese, French, Italian, Russian or Spanish. The signal word indicates the potential severity of the hazard while the text describes how to avoid the hazard. The Chinese, French, Italian, Russian and Spanish safety signs contain only the text and must be placed next to the English sign which carries the corresponding pictorial.

How to order the correct signs:

- 1. Determine which English safety signs are required for each piece of equipment.
- 2. Locate the correct part number(s) in the column labeled English.
- 3. Scan across the table to the right until the column label matches the additional language(s) that you need.

Warning: Under no circumstance should Chinese, French, Italian, Russian or Spanish signs be used without the English version carrying the pictorial.

ENGLISH	CHINESE	FRENCH	ITALIAN	RUSSIAN	SPANISH
02-113236F0409	02-113236F0404CH	02-113236F0404FR	02-113236F0404IT	02-113236F0404RU	02-113236F0404ES
02-113237F0410	02-113237F0405CH	02-113237F0405FR	02-113237F0405IT	02-113237F0405RU	02-113237F0405ES
02-113238F1005	02-113238F0405CH	02-113238F0405FR	02-113238F0405IT	02-113238F0405RU	02-113238F0405ES
02-113239F0604	02-113239F0303CH	02-113239F0303FR	02-113239F0303IT	02-113239F0303RU	02-113239F0303ES
02-113240F0307	02-113240F0303CH	02-113240F0303FR	02-113240F0303IT	02-113240F0303RU	02-113240F0303ES
02-113241F0605	02-113241F0303CH	02-113241F0303FR	02-113241F0303IT	02-113241F0303RU	02-113241F0303ES
02-113242F0409	02-113242F0404CH	02-113242F0404FR	02-113242F0404IT	02-113242F0404RU	02-113242F0404ES
02-113243F0410	02-113243F0404CH	02-113243F0404FR	02-113243F0404IT	02-113243F0404RU	02-113243F0404ES
02-113244F0410	02-113244F0404CH	02-113244F0404FR	02-113244F0404IT	02-113244F0404RU	02-113244F0404ES
02-113245F1005	02-113245F0405CH	02-113245F0405FR	02-113245F0405IT	02-113245F0405RU	02-113245F0405ES
02-113246F0704	02-113246F0303CH	02-113246F0303FR	02-113246F0303IT	02-113246F0303RU	02-113246F0303ES
02-113247F1006	02-113247F0405CH	02-113247F0405FR	02-113247F0405IT	02-113247F0405RU	02-113247F0405ES
02-113248F1006	02-113248F0405CH	02-113248F0405FR	02-113248F0405IT	02-113248F0405RU	02-113248F0405ES
02-113249F0410	02-113249F0409CH	02-113249F0409FR	02-113249F0409IT	02-113249F0409RU	02-113249F0409ES
02-113250F1006	02-113250F0405CH	02-113250F0405FR	02-113250F0405IT	02-113250F0405RU	02-113250F0405ES
02-114688F0906	02-114688F0404CH	02-114688F0404FR	02-114688F0404IT	02-114688F0404RU	02-114688F0404ES
02-114689F0804	02-114689F0303CH	02-114689F0303FR	02-114689F0303IT	02-114689F0303RU	02-114689F0303ES
02-114690F0805	02-114690F0303CH	02-114690F0303FR	02-114690F0303IT	02-114690F0303RU	02-114690F0303ES
02-114691F1006	02-114691F0404CH	02-114691F0404FR	02-114691F0404IT	02-114691F0404RU	02-114691F0404ES
02-114692F1006	02-114692F0404CH	02-114692F0404FR	02-114692F0404IT	02-114692F0404RU	02-114692F0404ES

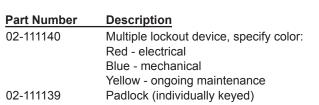
SAFETY 9 © 2016 by Besser Company

### Multiple Lockout Device

### SUGGESTED LOCKOUT PROCEDURE

- 1. Announce lockout to other employees.
- 2. Turn power off at main panel.
- 3. Lockout power in off position.
- 4. Put key in pocket.
- 5. Clear machine of all personnel.
- 6. Test lockout by hitting run button.
- 7. Block, chain or release stored energy.
- 8. Clear machine of personnel before restarting machine.

Part Number	Description
02-111140	Multiple lockout device, specify color:
	Red - electrical
	Blue - mechanical
	Yellow - ongoing maintenance
02-111139	Padlock (individually keyed)



### Danger — Automatic Equipment Safety Sign

This aluminum sign should be prominently displayed in front of all automatic equipment.

Danger — Automatic Equipment Safety Sign 15" W x 24" L 02-114971F2415

Besser recommends that this sign be posted at each entrance of the plant.



### Besser Metal Name Plates

The following name plates are for Besser concrete products machines:

Part Number	Description
02-113802F0001	Ultrapac name plate - 6" W x 17" L
02-113802F0002	Superpac name plate - 6" W x 17" L
02-113802F0003	Dynapac name plate - 6" W x 17" L
02-113802F0004	Vibrapac name plate - 6" W x 17" L
02-113802F0005	Bescopac name plate - 6" W x 17" L



### Besser Decals

4 mil vinyl, permanent decal.

Part Number	Description
02-112880F0105	Decal - 1" W x 5/8" L
02-112880F0209	Decal - 2" W x 7" L
02-112880F0314	Decal - 3" W x 11" L
02-112880F0418	Decal - 4" W x 14" L



### Start-Up Warning Horn

For SAFETY FIRST, update your concrete products machine with a warning horn. When the concrete products machine clutch switch is turned to the "ON" position, the safety horn will beep for seven seconds before the machine starts. The conduit and wire needed for installation is NOT furnished.

Part Number	Description
02-644565	SOP safety horn
02-644569	SOP safety horn (for concrete products machines equipped with relays or
	other type of controllers)
01609-400001	Safety horn only for LSC systems
02-107375	Safety horn only for concrete products machines





### **TRAINING & SUPPORT**

### **BLOCKMAKERS WORKSHOPS®**

The World Center for Concrete Technology (WCCT) is a state-of-the-art facility offering training, education, research and testing and conferences for the concrete products industry.

The WCCT offers several in-depth, specialized courses including:

- Concrete Masonry Technology
- Vibrapac<sup>®</sup>
- Dynapac®/Ultrapac®/Superpac®
- Product Handling

- Equipment Controls
- Electronic Controls
- Recycled Materials
- Executive Session

For more information call +1.989.354.1072 or e-mail training@besser.com



### In-Plant Training For Block & Pipe Producers

Your business is unique – your training should be too. Maximize your plant performance with training in your plant, tailored to meet your needs. Benefits include:

- Flexible location
- Flexible schedule
- Dedicated instructor(s)
- Customized training content
- Hands-on training on your equipment
- Overall training cost-savings
- No travel expenses for multiple employees
- Staff all attend the same training

To find out more contact Besser at +1.989.354.1072 or e-mail training@besser.com.

### **Online Training**

visit www.besser.com/why-besser/education-training to see the schedule of free upcoming online training.

### Online Support

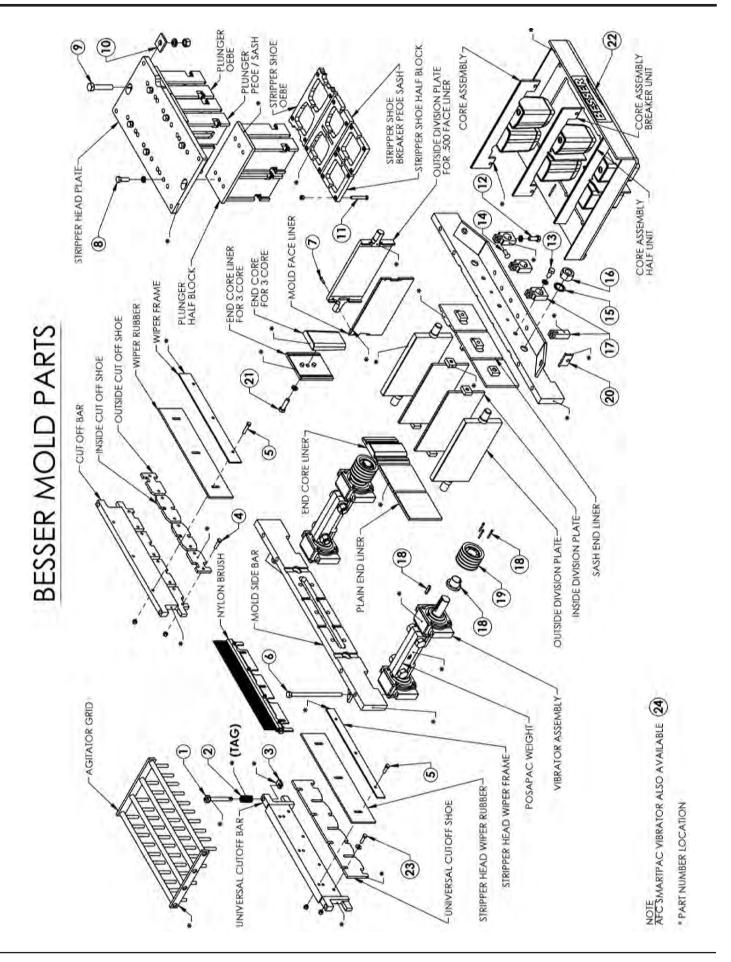
visit www.besser.com/support to download support documentation to assist you safely operate, maintain and optimize your equipment.

- Service Bulletins
- Equipment Manuals
- Preventive Maintenance
- Safety Information

### Molds for Licensed Concrete Products

Besser produces molds for licensed manufacturers of the following concrete products. This list changes occassionally. For additional information contact your Besser Representative or refer to besser.com

Allan Block	Habiterra	Prouduits
Anchor Wall Systems	Keystone Retaining Wall Systems	RidgeRock
Armortec	Newblock Corporation  Novabrik	Rockwood
Azar	Novabrik  Oldcastle (Permacon)	UBlock
Cornerstone Wall Solutions	Omni Block	Versa-Loc
Fusion	PaveDrain <sup>®</sup>	West Block





### **Besser Mold Parts**

(See illustration on page 12)

KEY	PART NO.	DESCRIPTION	PAGE#
1	02-214161	Pin - 3/4" x 6-1/2" L (for release clamp)	49
2	02-214162	Compression spring - 2-1/2" free length	49
3	02-061390	Locking block - 3/8" x 1-1/2" x 1-3/4" L	49
4	02-088035	Hex head cap screw - 1/2" x 2" L; nut 02-087806 and lock washer 02-087881	
5	02-088037	Hex head cap screw - 1/2" x 2-1/2" L; nut 02-087086 and lock washer 02-087881	
6	02-215652	Machine bolt - 3/4" x 12" L	50
	02-488059	Machine bolt - 3/4" x 13" L	50
	02-215656	Machine bolt - 3/4" x 14" L	50
	02-087871	Stover lock nut - 3/4"	50
	02-115333	Lock washer - 3/4"	50
7	02-103702	Socket head cap screw with Nylok	50
8	02-088065	Hex head cap screw - 3/4" x 2-1/4" L	
9	02-087125	Machine bolt - 1" x 5" L; nut 02-087818 and lock washer 02-087885 (for 3 ATT machine only)	
	02-087151	Machine bolt - 1-1/4" x 9" L; nut 02-087812 and lock washer 02-087887 (for V6 only)	
10	02-056886	Pad - 3/8" x 2-1/2" x 3" L (for stripper head bolt)	
11	02-078543	Stripper shoe bolt - 1/2" x 4" L nut 01211-400002 & lock washer 01233-400001 (for 1" thick stripper shoes)	51
	02-378484	Square head stripper shoe bolt - 1/2" x 4" L (for stripper shoes with square shoulder type holes)	51
12	02-088064	Hex head cap screw - 3/4" x 2" L & lock washer 02-087883	
13	02-088062	Hex head cap screw - 3/4" x 1-1/2" L & lock washer 02-087883 (for end liners)	1
	02-055851	Hex head cap screw - 3/4" x 1-1/2" L (drilled for lockwire)	1
	02-212963	Lockwire (not shown)	
14	02-089073	Round head rivet - 5/8" x 1-3/4" L	49
15	02-087910	Shakeproof lock washer - 1-1/2" (for outside division plates)	39
	02-087909	Shakeproof lock washer - 1-1/4"	
	02-087908	Shakeproof lock washer - 1" (for center division plates)	40
16	02-087814	Hex nut - 1-1/2" (for outside division plates)	40
	02-087812	Hex nut - 1-1/4"	
	02-087810	Hex nut - 1" (for center division plates)	40
17	02-014128	Hold down block - optional	49
	02-014129	Hold down block - standard	49
	02-022523	Hold down block - standard	49
18	01594-000028	Tapered bushing - 1-15/16" bore	
19	02-105905	Sheave only (for standard vibrators)	
	02-082002	Vee belts B-55 (furnished in matched sets)	
20	02-299747	Mold top plate filler (for 3-5/8" slot)	
21	02-110251	Hex head cap screw - 3/4" x 2-3/4" L (for end core liner)	
22	02-112880F0418	Besser decal - 4" x 18-3/4" L (4 mil vinyl permanent decal)	10
23	02-107680	Serrated flange bolt 1/2" - 13" x 1-3/4" L	
24	02-454001	2 groove sheave -or-	
	02-464246	4 groove sheave	
	02-113911	Double banded vee belts (for SmartPac)	

**MOLD PARTS** 13 © 2016 by Besser Company



### Besser Mold Assembly & Torque Requirements

Longer mold life can be achieved by observing a few basic rules. Be sure to clean all parts and matting surfaces thoroughly before assembly. Always be sure parts are properly aligned and use proper torque requirements. To assure that parts are square, start with a good working surface (mold jig). A visual inspection is suggested to make sure parts are not burred or scored.

NOTE: Always start with new lock washers and use only a brass hammer.

- Outside division plates should be torqued to 625 675 ft lbs, (930 1005 nm).
   Outside division plates with cutouts for face liners should be torqued to 175 195 ft lbs, (260 290 nm).
- 2. Vibrator bolts torque specifications: Consult factory.
- 3. Core bars should first be snugged initially front and back.
- 4. Then core bars should be torqued to 70 90 ft lbs, (105 135 nm). Align front and back as uniform as possible to the mold side bars. Check cores for center between division plates to assure uniform block dimensions. (A wire can be secured through the hold down bolt heads as a safety to prevent the bolts from coming loose during constant vibration).
- 5. Secure plungers to stripper head plate 100 140 ft lbs, (150 210 nm).
- 6. Align the stripper shoes.
- 7. Threaded inside division plates should be torqued to 40 50 ft lbs, (60 70 nm). Tanged inside division plates should be torqued to 100 120 ft lbs, (150 180 nm).
- 8. End liners should be torqued to 100 140 ft lbs, (150 210 nm).
- 9. Stripper shoes should be torqued to 65 75 ft lbs (100 100 nm).
- 10. Center Posapac vibrator weights as close as possible to assure uniform vibration and that the nuts face the outside of the mold.

The illustration shown on page 12 is designed to help you identify Besser mold parts by name. When ordering mold parts, always refer to the sets of parts or mold assembly drawing supplied with each mold.

### **Bolt Torque Chart**

Threaded Diameter	S. A. E. Grade 2	S. A. E. Grade 5
DIA		
1/4"	60 - 80 inch lbs	100 - 120 inch lbs
3/8"	20 - 30 ft lbs	30 - 40 ft lbs
1/2"	40 - 60 ft lbs	65 - 85 ft lbs
5/8"	90 - 110 ft lbs	140 - 160 ft lbs
3/4"	145 - 165 ft lbs	250 - 270 ft lbs
7/8"	165 - 185 ft lbs	420 - 440 ft lbs
1"	230 - 250 ft lbs	640 - 660 ft lbs
1-1/4"	500 - 520 ft lbs	1200 - 1250 ft lbs
1-1/2"	600 - 620 ft lbs	1400 - 1500 ft lbs

### **Torque Wrenches**

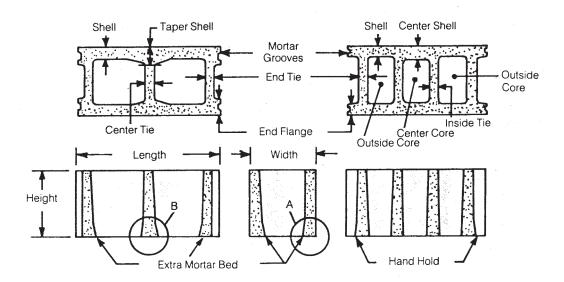
These high quality tools are a must when working with your block production equipment.

02-115179 1-1/2" drive Proto 6014 50-250 ft lb torque wrench

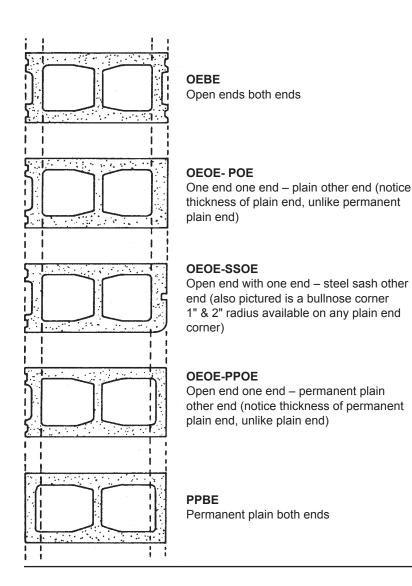
02-115180 1-1/2" drive Proto 6202A torque multiplier 750 ft lb torque wrench

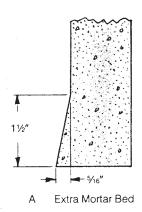


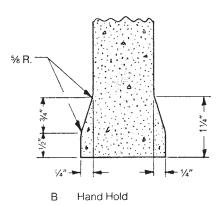
### Standard Block Nomenclature



NOTE: The following nomenclature is the same for 2 core and 3 core block. The 2 core is shown here for illustration.







Hand hold is optional on 2 and 3 core block. Dimensions of units: In practice, the first dimension of a concrete masonry unit represents the thickness; the second dimension, the height, the third, length.



### Standard 4" Units

3-5/8" Wide x 7-5/8" High x 15-5/8" Long PPBE (permanent plain both ends)

### Unit No. 02-041265

Pear shaped cores
1" to 1-1/4" face shell
1" center tie

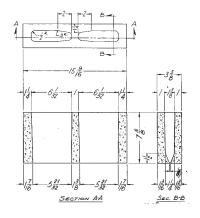
1 1/4" end tie with extra mortar bed face shell only

No hand holds 8-1/4" high mold

Part Number	Description	18.44 lbs lightweight con
02-018217	Plain end liner	25.26 lbs normal weight
02-040770J0010	Core assembly	2.46 ETI (top)
02-040695	Stripper shoe	2.64 ETI (middle)
02-058802	Removable plunger	318.60 net cubic inches

### **Unit Calculations**

67.79% solid (top)
72.75% solid (middle)
18.44 lbs lightweight concrete
25.26 lbs normal weight concrete
2.46 ETI (top)
2.64 ETI (middle)



### Unit No. 02-020514

3 core

1" face shell and inside tie

1-1/16" end tie

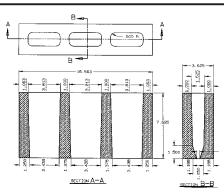
With extra mortar bed face shell only

No hand holds 8-1/4" high mold

Part Number	Description
02-018217	Plain end liner
02-020359J0010	Core assembly
02-017741	Stripper shoe
02-053771	Removable plunger

### **Unit Calculations**

68.19% solid (top)
73.43% solid (middle)
18.54 lbs lightweight concrete
25.40 lbs normal weight concrete
2.47 ETI (top)
2.66 ETI (middle)



### Standard 6" Units

320.36 net cubic inches

5-5/8" Wide x 7-5/8" High x 15-5/8" Long PPBE (permanent plain both ends)

### Unit No. 02-020531

3 core

1" shell and inside tie

1-1/16" end tie

With extra mortar bed face shell only No hand holds

8-1/4" high mold

Part Number	Description
02-017945	Plain end liner
02-017946J0010	Core assembly
02-017951	Stripper shoe
02-051357	Removable plunger

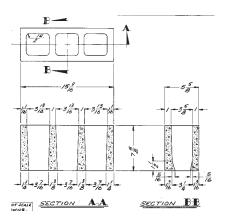
### **Unit Calculations**

53.37% solid (top) 58.03% solid (middle)

22.69 lbs lightweight concrete 31.09 lbs normal weight concrete

3.00 ETI (top) 3.26 ETI (middle)

392.11 net cubic inches



### Unit No. 02-058701

Pear shaped cores

1" to 1-1/2" face shell

1" center tie

1-1/16" end tie

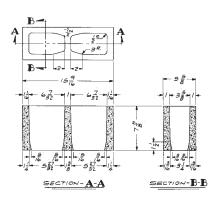
With extra mortar bed No hand holds

8-1/4" High mold

Part Number	Description
02-017945	Plain end liner
02-052435J0010	Core assembly
02-052467	Stripper shoe
02-058864	Removable plunger

### **Unit Calculations**

51.30% solid (top) 55.40% solid (middle) 21.84 lbs lightweight concrete 29.93 lbs normal weight concrete 2.88 ETI (top) 3.11 ETI (middle)



ETI - equivalent thickness in inches

378.45 net cubic inches

### **BESSER**

### Unit No. 02-078625

Pear shaped cores 1" to 1-1/2" face shell 1" center tie 23/32" end tie

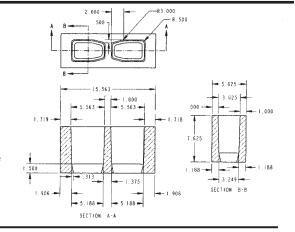
With extra mortar bed No hand holds

Part Number	<u>Description</u>
02-017945	Plain end liner
02-53342J0010	Core assembly
02-49495J0100	Stripper shoe
02-053393	Removable plunger

### **Unit Calculations**

56.71% solid (top) 60.56% solid (middle) 23.89 lbs lightweight concrete 32.73 lbs normal weight concrete 3.19 ETI (top)

3.41 ETI (middle) 412.85 net cubic inches



### Standard 6" Units

5-5/8" Wide x 7-5/8" High x 15-5/8" Long OEBE (open ends both ends)

### Unit No. 02-048345

Pear shaped cores 1" to 1-1/2" face shell 1" tie

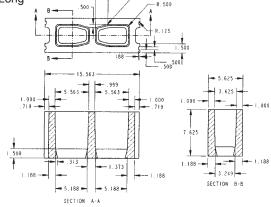
With extra mortar bed No hand holds

Part Number	Description
02-045265	Mold end liner
02-053342J0010	Core assembly
02-049495J0140	Stripper shoe
02-053393	Removable plunger

### **Unit Calculations**

52.25% solid (top) 56.11% solid (middle) 22.10 lbs lightweight concrete 30.28 lbs heavy weight concrete 2.93 ETI (top) 3.15 ETI (middle)

382.31 net cubic inches



### Unit No. 02-419976

Rectangular cores
1" straight shell
1" tie

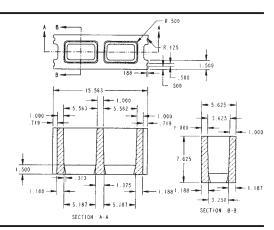
With extra mortar bed No hand holds

Part Number	Description
02-045265	Mold end liner
02-339352J0010	Core assembly
02-251657J0140	Stripper shoe
02-053393	Removable plunger

### **Unit Calculations**

49.96% solid (top) 53.81% solid (middle) 21.25 lbs lightweight concrete 29.12 lbs normal weight concrete

2.81 ETI (top)
3.03 ETI (middle)
367.24 net cubic inches



### Standard 6" Units

5-5/8" Wide x 7-5/8" High x 15-5/8" Long PPOE-OEOE (permanent plain one end - open end other end)

### Unit No. 02-058695

Pear shaped cores 1" to 1-1/2" shell 1" tie

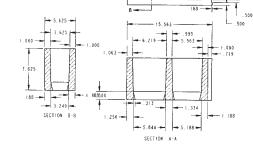
With extra mortar bed No hand holds

Part Number	<u>Description</u>
02-017945	Plain end liner
02-045265	Mold end liner
02-053342J0520	Core assembly
02-058698J0900	Stripper shoe
02-058699	Removable plunger

### **Unit Calculations**

52.73% solid (top) 56.69% solid (middle) 22.38 lbs lightweight concrete 30.67 lbs heavy weight concrete 2.97 ETI (top) 3.19 ETI (middle)

386.81 net cubic inches



ETI - equivalent thickness in inches

### Standard 8" Units

7-5/8" Wide x 7-5/8" High x 15-5/8" Long OEBE (open ends both ends)

### Unit No. 02-046602

Pear shaped cores 1-1/4" to 1-3/4" face shell 1" ties or webs With extra mortar bed

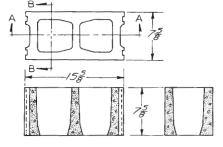
No hand holds 8-1/4 high mold

Part Number	Description
02-043986	Mold end liner
02-046699J0010	Core assembly
02-046700J0140	Stripper shoe
02-043992	Removable plunger

### **Unit Calculations**

49.64% solid (top) 52.96% solid (middle) 28.23 lbs lightweight concrete 38.68 lbs normal weight concrete

3.79 ETI (top) 4.04 ETI (middle) 487.87 net cubic inches



### Unit No. 02-068865

Pear shaped cores 1-1/4" to 1-3/4" face shell 1" tie

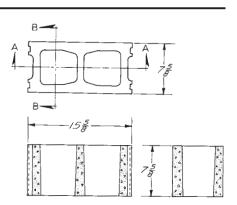
No extra mortar bed No hand holds 8-1/4" high mold

Part Number	Description
02-043986	Mold end liner
02-057633J0010	Core assembly
02-046700J0140	Stripper shoe
02-043992	Removable plunger

### **Unit Calculations**

49.64% solid (top) 52.96% solid (middle) 27.73 lbs lightweight concrete 37.99 lbs normal weight concrete 3.79 ETI (top)

4.04 ETI (middle) 479.20 net cubic inches



### Unit No. 02-214167

Pear shaped cores 1-1/4" to 1-3/4" face shell

1" tie

No extra mortar bed Hand hold center tie only

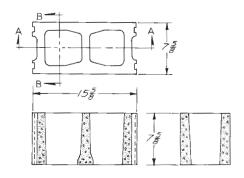
8-1/4" high mold

Part Number	Description
02-043986	Mold end liner
02-066607J0010	Core assembly
02-046700J0140	Stripper shoe
02-043992	Removable plunger

### **Unit Calculations**

49.64% solid (top) 52.96% solid (middle) 27.81 lbs lightweight concrete 38.10 lbs normal weight concrete 3.79 ETI (top)

4.05 ETI (middle) 481.11 net cubic inches



### Unit No. 02-724225

Rectangular cores 1-1/4" shell

1" tie

No extra mortar bed Hand hold center tie only

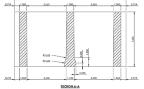
8-1/4" high mold

Part Number	Description
02-724846	Core assembly
02-239503J0140	Stripper shoe
02-043986	End liner
02-043992	Plunger

### **Unit Calculations**

47.96% solid (top) 49.08% solid (middle) 25.83 lbs lightweight concrete 35.38 lbs normal weight concrete 3.66 ETI (top) 3.74 ETI (middle)

446.26 net cubic inches







ETI - equivalent thickness in inches



### Unit No. 02-251205

Rectangular cores 1-1/4" face shell

1" tie

No extra mortar bed

Hand hold center tie or web only

8-1/4" high mold

Part Number	Description
02-043986	Mold end liner
02-251207J0010	Core assembly
02-239503J0140	Stripper shoe
02-043992	Removable plunger

### **Unit Calculations**

47.96% solid (top) 51.28% solid (middle) 26.93 lbs lightweight concrete 36.90 lbs normal weight concrete 3.66 ETI (top) 3.93 ETI (middle)

В

### Standard 8" Units

465.86 net cubic inches

7-5/8" Wide x 7-5/8" High x 15-5/8" Long PPOE-OEOE (permanent plain one end-open end other end)

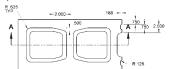
### Unit No. 02-057880

Pear shaped cores 1-1/4" to 1-3/4" face shell 1" center and open end tie 1-1/4" plain end tie

With extra mortar bed No hand hold

8-1/4" high molds

Part Number	Description	53.29% solid (middle)
02-017712	Plain end liner	23.53 lbs lightweight concrete
02-043986	Mold end liner	39.09 lbs normal weight concre
02-046699J0520	Core assembly	3.81 ETI (top)
02-057791J0900	Stripper shoe	4.06 ETI (middle)
02-057874	Removable plunger	491.53 net cubic inches



## - 5.188 -:1.906 ----: 1.376

### Unit No. 02-207731

Pear shaped cores 1-1/4" to 1-3/4" face shell

1" center and open end tie

1-1/4" plain end tie

No extra mortar bed No hand hold

8-1/4" high mold

og	
Part Number	Description
02-017712	Plain end liner
02-043986	Mold end liner
02-057633J0520	Core assembly
02-057791J0900	Stripper shoe
02-057874	Removable plunger

### **Unit Calculations**

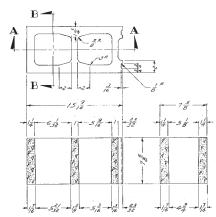
**Unit calculations** 

49.90% solid (top)

49.90% solid (top) 53.29% solid (middle) 27.87 lbs lightweight concrete 38.19 lbs normal weight concrete 3.81 ETI (top)

concrete

4.06 ETI (middle) 482.18 net cubic inches



### Unit No. 02-242047

Pear shaped cores 1-1/4" to 1-3/4" face shell

1" center and open end tie

1-1/4" plain end tie

No extra mortar bed

Hand hold center tie or web only

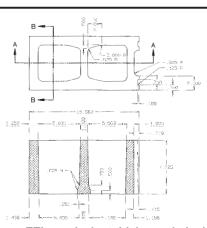
8-1/4" high mold

Part Number	Description
02-017712	Plain end liner
02-043986	Mold end liner
02-066607J0520	Core assembly
02-057791J0900	Stripper shoe
02-057874	Removable plunger

### **Unit Calculations**

49.90% solid (top) 53.29% solid (middle) 28.04 lbs lightweight concrete 38.42 lbs normal weight concrete

3.81 ETI (top) 4.06 ETI (middle) 483.98 net cubic inches



ETI - equivalent thickness in inches



### Unit No. 02-251206

Rectangular cores

1-1/4" face shell

1" center and open end tie

1-1/4" plain end tie

No extra mortar bed

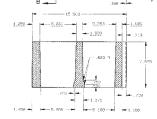
Hand hold center tie only

8-1/4" high mold

· ·	
Part Number	Description
02-017712	Plain end liner
02-043986	Mold end liner
02-251207J0520	Core assembly
02-251211J0900	Stripper shoe
02-057874	Removable plunger

### **Unit Calculations**

48.21% solid (top) 51.60% solid (middle) 27.61 lbs lightweight concrete 37.21 lbs normal weight concrete 3.68 ETI (top) 3.93 ETI (middle)



### Standard 8" Units

469.33 net cubic inches

7-5/8" Wide x 7-5/8" High x 15-5/8" Long PPBE (permanent plain both ends)

### Unit No. 02-024109

Pear shaped cores

1-1/4" to 1-3/4" face shell

1" center tie

1-1/4" end tie

With extra mortar bed

No hand hold

8-1/4" high mold

Part Number	Description
02-017712	Plain end liner
02-020703J0010	Core assembly
02-020704	Strinner shoe

02-020704 Stripper shoe 02-020705 Removable plunger **Unit Calculations** 

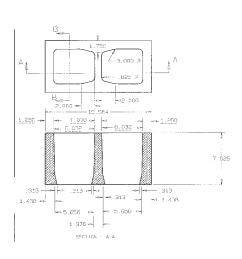
50.15% solid (top) 53.62% solid (middle)

28.93 lbs lightweight concrete 39.63 lbs normal weight concrete

3.82 ETI (top)

4.09 ETI (middle)

499.84 net cubic inches



### Unit No. 02-050148

Pear shaped cores

1-1/4" to 1-3/4" face shell

1" center tie

1-1/4" end tie

No extra mortar bed No hand holds

8-1/4" high mold

Part Number	Description
02-017712	Plain end liner
02-035440J0010	Core assembly
00 000704	04-1

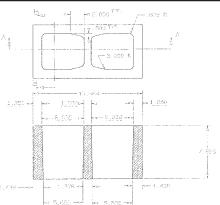
02-020704 02-020705 Stripper shoe Removable plunger **Unit Calculations** 

50.15% solid (top) 53.62% solid (middle)

28.04 lbs lightweight concrete 38.42 lbs normal weight concrete

3.82 ETI (top) 4.08 ETI (middle)

485.16 net cubic inches



### Unit No. 02-066050

Pear shaped cores

1-1/4" to 1-3/4" face shell

1" center tie

1-1/4" end tie

No extra mortar bed

Hand hold center tie or web only

8-1/4" high mold

Part Number	Description
02-017712	Plain end liner
02-063784J0010	Core assembly
02-020704	Stripper shoe
02-020705	Removable plunger

ETI - equivalent thickness in inches

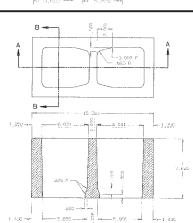
### **Unit Calculations**

50.15% solid (top) 53.62% solid (middle)

28.22 lbs lightweight concrete 38.66 lbs normal weight concrete

3.82 ETI (top) 4.09 ETI (middle)

487.56 net cubic inches



### **RESSER**

### Unit No. 02-722987

Rectangular cores 1-1/4" face shell 3/4" tie

Hand hold center tie only

8-1/4" high mold

Part Number	Description
02-723017	Plunger
02-723016	Stripper shoe
02-723014	Core assembly

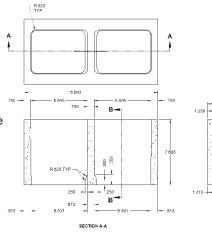
### **Unit Calculations**

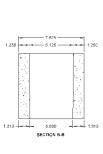
43.07% solid 44.30% solid

23.33 lbs lightweight concrete

31.96 lbs normal weight concrete

3.28 ETI (top)
3.38 ETI (middle)
403.07 net cubic inches





### Unit No. 02-489979

Rectangular cores 1-1/4" face shell 1" tie

No extra mortar bed Hand hold center tie only

8-1/4" high mold

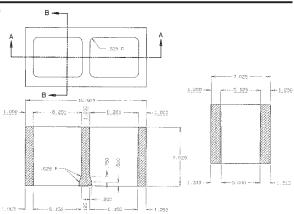
Part Number	Description
02-017712	Plain end liner
02-489983	Core assembly
02-489980	Stripper shoe
02-020705	Removable plunger

### **Unit Calculations**

46.31% solid (top) 47.51% solid (middle) 25.01 lbs lightweight concrete 34.27 lbs normal weight concrete

3.53 ETI (top)
3.62 ETI (middle)

432.24 net cubic inches



### Unit No. 02-223924

Rectangular cores 1-1/4" face shell 1" center tie

1-1/4" end tie

No extra mortar bed

Hand hold center tie or web only

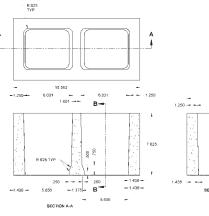
8-1/4" high mold

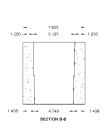
Part Number	Description
02-017712	Plain end liner
02-251721J0010	Core assembly
02-223565	Stripper shoe
02-020705	Removable plunger

### **Unit Calculations**

48.47% solid (top) 51.93% solid (middle) 27.32 lbs lightweight concrete 37.43 lbs normal weight concrete 3.70 ETI (top)

3.96 ETI (middle) 472.15 net cubic inches





### Standard 10" units

9-5/8" Wide x 7-5/8" High x 15-5/8" Long OEBE (open ends both ends)

### Unit No. 02-046698

Pear shaped cores 1-1/2" to 2" face shell 1-1/8" tie

With extra mortar bed

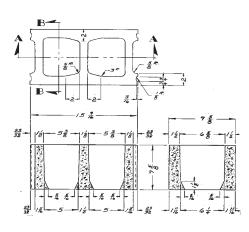
No hand hold 8-1/4" high mold

Part Number	Description
02-045700	Mold end liner
02-046702J0010	Core assembly
02-046703J0140	Stripper shoe
02-045705	Removable plunge

### **Unit Calculations**

48.70% solid (top)
51.70% solid (middle)
34.20 lbs lightweight concrete
46.80 lbs normal weight concrete
4.69 ETI (top)

4.97 ETI (middle) 605.81 net cubic inches



ETI - equivalent thickness in inches



### Unit No. 02-376108

Rectangular cores 1-1/2" shell

1-1/8" tie

No extra mortar bed Hand hold center tie only

8-1/4" high mold

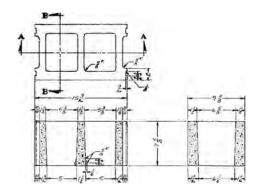
Part Number	Description
02-045700	Mold end liner
02-290181J0010	Core assembly
02-260707J0140	Stripper shoe
02-045705	Removable plunger

### **Unit Calculations**

47.37% solid (top) 50.33% solid (middle)

33.38 lbs lightweight concrete
45.47 lbs normal weight concrete

4.56 ETI (top)
4.84 ETI (middle)
577.54 net cubic inches



### Standard 12" Units

11-5/8" Wide x 7-5/8" High x 15-5/8" Long OEBE (open ends both ends)

### Unit No. 02-046706

Pear shaped cores 1-1/2" to 2" shell

1-1/4" tie

With extra mortar bed No hand hold 8-1/4" high mold

Part Number Description
02-045215 Mold end liner
02-046704J0010 Core assembly

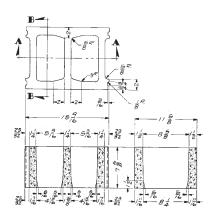
02-046705J0140 Stripper shoe 02-045221 Removable plunger

### **Unit Calculations**

45.84% solid (top) 48.67% solid (middle)

39.55 lbs lightweight concrete 54.19 lbs normal weight concrete

5.33 ETI (top) 5.66 ETI (middle) 683.45 net cubic inches



### Unit No. 02-304650

Rectangular cores 1-1/4" face shell

1-1/4" tie

No extra mortar bed Hand hold center tie only

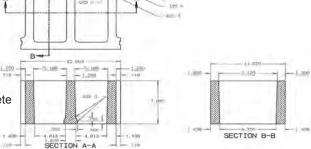
8-1/4" high mold

Description
End liner
Core assembly
Stripper shoe
Removable plunger

### **Unit Calculations**

39.51% solid (top)
43.67% solid (middle)
35.28 lbs lightweight concrete
48.34 lbs normal weight concrete

4.59 ETI (top) 5.14 ETI (middle) 610.37 net cubic inches



### Unit No. 02-312870

Rectangular cores

1-1/2" face shell

1-1/4" tie

1-1/2" end flange

No extra mortar bed Hand hold center tie only

8-1/4" high mold

Part Number	Description
02-045215	Mold end liner
02-267967J0010	Core assembly
02-260714J0140	Stripper shoe
02-045221	Removable plunger

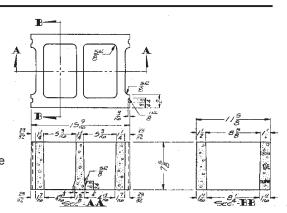
### **Unit Calculations**

44.74% solid (top) 47.56% solid (middle)

38.20 lbs lightweight concrete 52.34 lbs normal weight concrete

5.20 ETI (top) 5.53 ETI (middle)

5.53 ETT (middle) 660.16 net cubic inches



### Concave Cores for Sash Units 4-5/8" Wide x 7-5/8" High x 15-5/8" Long

### Unit No. 02-397182

2 core

1" face shell

1" center tie

1-1/16" end tie

No extra mortar bed Hand held center tie only

8-1/4" high mold

Part Number	Description
02-017945	Plain end liner
02-017945J0090	Steel sash liner
02-397184	Core assembly
02-397185	Stripper shoe
02-0588 64	Removable plunger

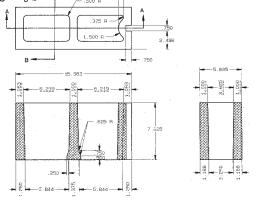
### **Unit Calculations**

47.43% solid (top) 51.57% solid (middle)

19.95 lbs lightweight concrete

27.34 lbs normal weight concrete 2.69 ETI (top)

2.91 ETI (middle) 345.14 net cubic inches



### **Concave Cores for Sash Units**

5-5/8" Wide x 7-5/8" High x 15-5/8" Long

### Unit No. 02-441953

2 core breaker

1" face shell

1" inside tie

1-1/32" end tie

### No extra mortar bed

No hand held Dant Normalian

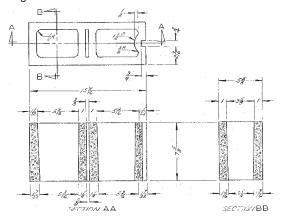
8-1/4" high mold

Part Number	Description
02-017945	Plain end liner
02-017945J0090	Steel sash liner
02-484554	Core assembly
02-441957J2640	Stripper shoe
02-056482	Removable plunger

### **Unit Calculations**

51.59% solid (top) 55.52% solid (middle) 21.42 lbs lightweight concrete 29.35 lbs normal weight concrete 2.90 ETI (top)

3.12 ETI (middle) 370.62 net cubic inches



### Unit No. 02-724467

2 core

1-1/4" shell

3/4" center and plain end tie

1" sash end tie

No extra mortar bed Hand held center tie only

8-1/4" high mold

Part Number	Description
02-724495	Core assembly
02-724498	Stripper shoe
02-723017	Removable plunge

### **Unit Calculations**

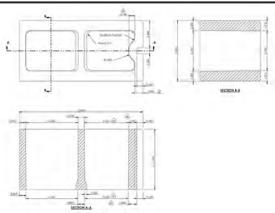
44.21% solid (top) 45.46% solid (middle)

23.93 lbs lightweight concrete

32.79 lbs normal weight concrete

3.37 ETI (top) 3.47 ETI (middle)

413.58 net cubic inches



### Unit No. 02-720371

2 core

1-1/4" face shell

1" tie

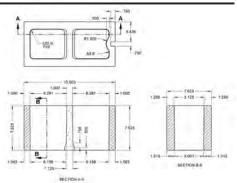
No extra mortar bed Hand hold center tie only

8-1/4" high mold

		TO.0 1 /0 30110 (top)
Part Number	Description	47.50% solid (middle)
02-017712	Plain end liner	25.11 lbs lightweight con
02-017712J0090	Steel sash line	34.39 lbs normal weight
02-720445	Core assembly	3.53 ETI (top)
02-720448	Stripper shoe	3.62 ETI (middle)
02-020705	Removable plunger	433.82 net cubic inches

### **Unit Calculations**

46.31% solid (top) 7.50% solid (middle) .11 lbs lightweight concrete .39 lbs normal weight concrete 53 ETI (top) 62 ETI (middle)



ETI - equivalent thickness in inches



### Concave Cores for Sash Units

7-5/8" Wide x 7-5/8" High x 15-5/8" Long

### Unit No. 02-353094

2 core

1-1/4" face shell

1" center tie

1-1/4" end tie

No extra mortar bed Hand held center tie only

8-1/4" high mold

Part Number	Description	5
02-017712	Plain end liner	2
02-017712J0090	Steel sash liner	3
02-318625	Core assembly	3
02-270584J2640	Stripper shoe	3
02-020705	Removable plunger	4

### **Unit Calculations**

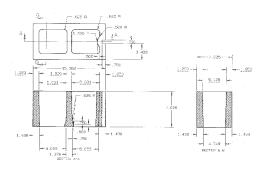
48.67% solid (top) 52.13% solid (middle)

27.44 lbs lightweight concrete

37.59 lbs normal weight concrete

3.71 ETI (top) 3.98 ETI (middle)

474.12 net cubic inches



### Unit No. 02-292387

2 core breaker 1-1/4" face shell 7/8" inside tie 1-1/4" end tie

No extra mortar bed Hand held center tie only

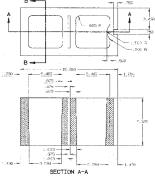
8-1/4" high mold

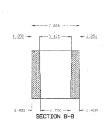
Part Number	Description
02-017712	Plain end liner
02-017712J0090	Steel sash liner
02-292379	Core assembly
02-296202J2640	Stripper shoe
02-232407	Removable plunger

### **Unit Calculations**

499.95 net cubic inches

51.91% solid (top) 55.25% solid (middle) 28.93 lbs lightweight concrete 39.64 lbs normal weight concrete 3.96 ETI (top) 4.21 ETI (middle)





### Concave Cores for Sash Units

9-5/8" Wide x 7-5/8" High x 15-5/8" Long

### Unit No. 02-432223

2 core

1-1/2" face shell

1-1/8" center tie

1-1/2" end tie

No extra mortar bed Hand held center tie only

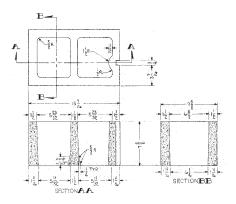
8-1/4" high mold

Part Number	Description
02-018013	Plain end liner
02-018013J0092	Steel sash liner
02-291286	Core assembly
02-260704	Stripper shoe PPBE
02-260705	Stripper shoe SSOE
02-260703	Removable Plunger

### **Unit Calculations**

50.00% solid (top) 53.04% solid (middle) 35.17 lbs lightweight concrete 48.20 lbs normal weight concrete 4.81 ETI (top)

5.10 ETI (middle) 608.53 net cubic inches





### Unit No. 02-724227

2 core

1-1/4" face shell

1-1/4" tie

### No extra mortar bed

Part Number	Description
02-017803	Plain end liner
02-017803J0092	End liner steel sash - Ih
02-724856	Core assembly
02-724859	Stripper shoe
02-724858	Stripper shoe
02-725146	Removable plunger

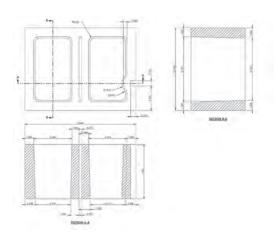
### **Unit Calculations**

44.70 % solid (top) 47.69 solid (middle)

38.06 lbs lightweight concrete 52.15 lbs normal weight concrete

5.20 ETI (top) 5.54 ETI (middle)

657.76 net cubic inches



### Concave Cores for Sash Units

9-5/8" Wide x 7-5/8" High x 15-5/8" Long

### Unit No. 02-440811

2 core

1-1/2" face shell

7/8" tie

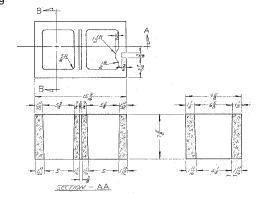
### No extra mortar bed

Part Number	Description
02-018013	Plain end liner
02-018013J0092	Steel sash liner
02-506219	Core assembly
02-440814	Stripper shoe PPBE
02-440815J2640	Stripper shoe SSOE
02-354141	Removable plunger

### **Unit Calculations**

48.12% solid (top) 51.19% solid (middle) 33.79 lbs lightweight concrete 46.30 lbs normal weight concrete 4.63 ETI (top)

4.93 ETI (middle) 584.66 net cubic inches



### Unit No. 02-402698

2 core

1-1/2" face shell

1-1/4" tie

### No extra mortar bed

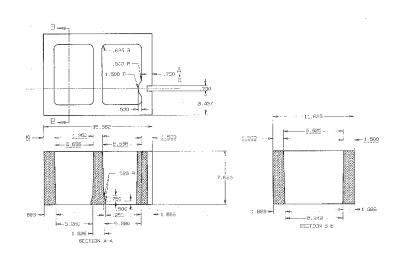
Part Number	Description
02-017803	Plain end liner
02-017803J0092	Steel sash liner
02-291281	Core assembly
02-260712	Stripper shoe SSOE
02-257384	Stripper shoe PPBE
02-211469	Removable plunger

### **Unit Calculations**

46.57% solid (top) 49.49% solid (middle)

39.74 lbs lightweight concrete 54.45 lbs normal weight concrete

5.41 ETI (top) 5.75 ETI (middle) 686.76 net cubic inches



ETI - equivalent thickness in inches



### Unit No. 02-481082

Rectangular cores

1-1/2" face shell

1-1/4" tie

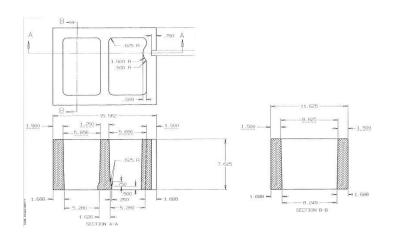
### Hand hold on center tie

8-1/4" high mold

Part Number	Description
02-017803	Plain end liner
02-017803J0091	Steel sash liner
02-453808	Core assembly
02-260712	Stripper shoe SSOE
02-257384	Stripper shoe PPBE
02 <b>-</b> 211469	Removable plunger

### **Unit Calculations**

46.57% solid (top) 49.49% solid (middle) 39.74 lbs lightweight concrete 54.45 lbs normal weight concrete 5.41 ETI (top) 5.75 ETI (middle) 686.76 net cubic inches



### Unit No. 02-395327

2 core

1-1/2" face shell

7/8" tie

### No extra mortar bed

Part Number	Description
02-017803	Plain end liner
02-017803J0092	Steel sash liner
02-395329	Core assembly
02-375899J2640	Stripper shoe SSOE
02-375898	Stripper shoe PPBE
02-241453	Removable plunger

### **Unit Calculations**

48.95% solid (top)

51.82% solid (middle)

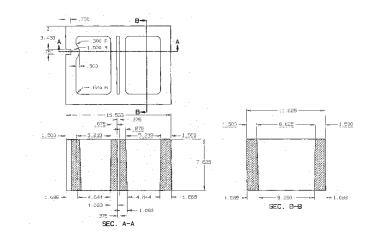
41.37 lbs lightweight concrete

56.68 lbs normal weight concrete

5.69 ETI (top)

6.02 ETI (middle)

714.88 net cubic inches



ETI - equivalent thickness in inches



### Standard 90 mm Wide Units

90 mm Wide x 190 mm High x 390 mm Long PPBE (permanent plain both ends)

### Unit No. 02-324397

3 core

26 mm shell and tie

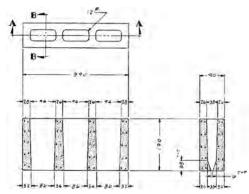
### With extra mortar bed

232 mm high division plates 206 mm high mold

200 mm mgm moid	
Part Number	Description
02-338207M	Plain end liner
02-338935M0010	Core assembly
02-324406	Stripper shoe
02 <b>-</b> 324408	Removable plunger

### **Unit Calculations**

70.53% solid (top) 74.62% solid (middle) 8.20 kg lightweight concrete 11.23 kg normal weight concrete 63.47 ETMM (top) 67.06 ETMM (middle) 5117.19 net cubic centimeters



### Standard 140 mm Wide Units

140 mm Wide x 190 mm High x 390 mm Long OEBE (open end both ends)

### Unit No. 02-336308

2 core

26 mm to 38 mm face shell 26 mm tie

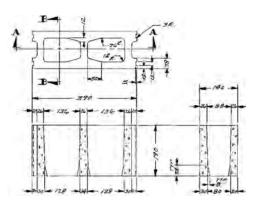
### With extra mortar bed

232 mm high division plates 206 mm high mold

<del>-</del>	
Part Number	Description
02-338873M	Mold end liner
02 <b>-</b> 338874M0010	Core assembly
02 <b>-</b> 340971M0140	Stripper shoe
02 <b>-</b> 336315M	Removable plunger

### **Unit Calculations**

53.90% solid (top) 57.13% solid (middle) 9.87 kg lightweight concrete 13.52 kg normal weight concrete 75.46 ETMM (top) 79.98 ETMM (middle) 6160.91 net cubic centimeters



### Standard 140 mm Wide Units

140 mm Wide x 190 mm High x 390 mm Long PPOE-OEOE (permanent plain one end-open end other end)

### Unit No. 02-339161

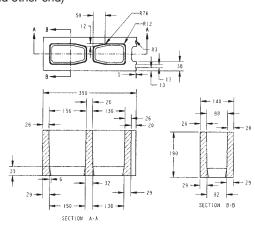
2 core Pear shaped cores 26 mm to 38 mm shell 26 mm tie

With extra mortar bed

Part Number	<u>Description</u>
02-338362M	Plain end liner
02-338873M	Mold end liner
02-338874M0520	Core assembly
02-339164M0900	Stripper shoe
02-339166M	Removable plunger

### **Unit Calculations**

50.94% solid (top) 54.31% solid (middle) 9.20 kg lightweight concrete 12.60 kg normal weight concrete 71.31 ETMM (top) 76.03 ETMM (middle) 5740.35 net cubic centimeters



ETI - equivalent thickness in inches



### Standard 140 mm Wide Units

140 mm Wide x 190 mm High x 390 mm Long PPBE (permanent plain both ends)

### Unit No. 02-339162

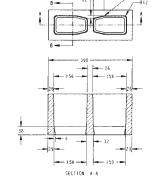
Pear shaped cores 26mm - 38 mm shell 26 mm tie

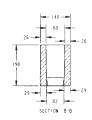
With extra mortar bed

Part Number	Description
02-338362M	Plain end liner
02-339163M0010	Core assembly
02-339165M	Stripper shoe
02-338366	Removable plunger

### **Unit Calculations**

52.36% solid (top)
55.88% solid (middle)
9.47 kg lightweight concrete
12.97 kg normal weight concrete
73.31 ETMM (top)
78.23 ETMM (middle)
5908.40 net cubic centimeters





### Unit No. 02-340973

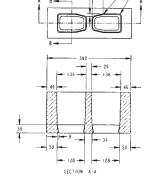
Pear shaped cores 26 mm - 38 mm shell 26 mm tie

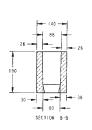
With extra mortar bed

Part Number	Description
02-338362M	Plain end liner
02-338874M0010	Core assembly
02-340971M0100	Stripper shoe
02-336315M	Removable plunger

### **Unit Calculations**

58.81% solid (top)
62.04% solid (middle)
10.47 kg lightweight concrete
14.35 kg normal ceight concrete
82.34 ETMM (top)
86.85 ETMM (middle)
6537.68 net cubic centimeters





### Standard 190 mm Wide Units

190 mm Wide x 190 mm High x 390 mm Long OEBE (open end both ends)

### Unit No. 02-324018

2 core

32 mm to 44 mm face shell

26 mm tie

With extra mortar bed

232 mm high division plates 206 mm high mold

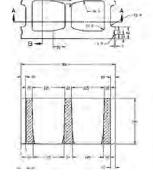
Part Number	Description
02-338898M	Mold end liner
02-338899M0010	Core assembly

02-340962M0140 Stripper shoe 02-323948 Removable plunger

### **Unit Calculations**

50.55% solid (top) 53.33% solid (middle) 12.47 kg lightweight concrete 17.08 kg normal weight concrete 96.04 ETMM (top) 101.33 ETMM (middle)

7783.05 net cubic centimeters





ETMM = equivalent thickness in millimeters



### Standard 190 mm Wide Units

190 mm Wide x 190 mm High x 390 mm Long PPOE-OEOE (permanent plain one end-open end other end)

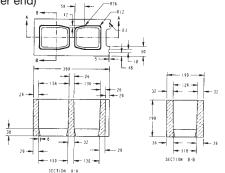
**Unit Calculations** 

### Unit No. 02-338896

Pear shaped cores 32 mm to 44 mm face shell 26 mm tie

With extra mortar bed

		50.74% solid (top)	
Part Number	Description	53.60% solid (middle)	
02-338205M	Plain end liner	12.29 kg lightweight concrete	
02-338898M	Mold end liner	16.83 kg normal weight concrete	
02-338899M0520	Core assembly	96.41 ETMM (top)	
02-338901M0900	Stripper shoe	101.85 ETMM (middle)	
02-338903M	Removable plunger	7669 61 net cubic centimeters	



### Standard 190 mm Wide Units

190 mm Wide x 190 mm High x 390 mm Long OEBE (open end both ends)

### Unit No. 02-495792

Rectangular cores 32 mm shell 26 mm tie

With extra mortar bed

Part Number	Description
02-338898M	Mold end liner
02-496134M0010	Core assembly
02-452572M0140	Stripper shoe
02-323948	Removable plunger

### **Unit Calculations**

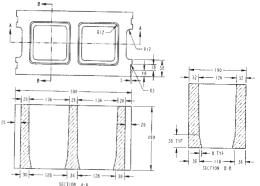
47.47% solid (top) 50.25% solid (middle) 11.59 kg lightweight concrete

15.88 kg normal weight concrete 90.19 ETMM (top)

95.48 ETMM (middle) 7234.57 net cubic centimeters

**Unit Calculations** 

54.08% solid (top)



### Standard 190 mm Wide Units

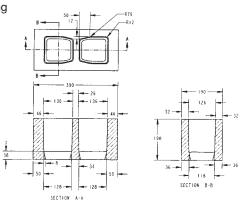
190 mm Wide x 190 mm High x 390 mm Long PPBE (permanent plain both ends)

### Unit No. 02-340964

Pear shaped cores 32 mm - 44 mm shell 26 mm tie

With extra mortar bed

		56.87% solid (middle)
Part Number	Description	13.02 kg lightweight concrete
02-338205M	Plain end liner	17.83 kg normal weight concrete
02-338899M0010	Core assembly	102.76 ETMM (top)
02-340692M0100	Stripper shoe	108.05 ETMM (middle)
02-323948	Removable plunger	8125.92 net cubic centimeters



ETMM - equivalent thickness in millimeters ETI - equivalent thickness in inches



### Unit No. 02-356151

Pear shaped cores

32 mm to 44 mm face shell

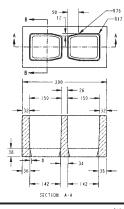
26 mm tie

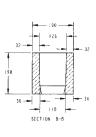
With extra mortar bed

Description
Plain end liner
Core assembly
Stripper shoe
Removable plunger

### **Unit Calculations**

50.94% solid (top) 53.88% solid (middle) 12.35 kg lightweight concrete 16.92 kg normal weight concrete 96.79 ETMM (top) 102.37 ETMM (middle) 7711.27 net cubic centimeters





### Unit No. 02-395925

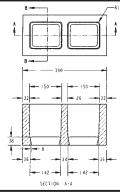
Rectangular cores 32 mm shell 26 mm tie

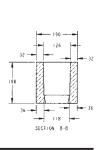
With extra mortar bed

Part Number	Description
02-338362M	Plain end liner
02-395926M0010	Core assembly
02-395490M	Stripper shoe
02-338214M	Removable plunger

### **Unit Calculations**

49.32% solid (top) 52.26% solid (middle) 11.99 kg lightweight concrete 16.42 kg normal weight concrete 93.71 ETMM (top) 99.29 ETMM (middle) 7483.27 net cubic centimeters





### Standard 240 mm Wide Units

240 mm Wide x 190 mm High x 390 mm Long OEBE (open end both ends)

### Unit No. 02-345321

2 core

38 mm to 50 mm face shell

28 mm tie

### With extra mortar bed

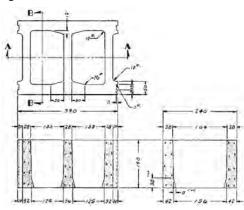
232 mm high division plates 206 mm high mold

Part Number	Description
02-345328M	Mold end liner
02-345330M0010	Core assembly
02-345332J0140	Stripper shoe
02-349364M	Removable plunge

### **Unit Calculations**

48.72% solid (top) 51.22% solid (middle) 15.09 kg lightweight concrete 20.68 kg normal weight concrete 116.93 ETMM (top)

122.94 ETMM (middle) 9421.05 net cubic centimeters



### Standard 290 mm Wide Units

290 mm Wide x 190 mm High x 390 mm Long OEBE (open end both ends)

### Unit No. 02-345201

2 core

38 mm to 50 mm face shell

32 mm tie

### With extra mortar bed

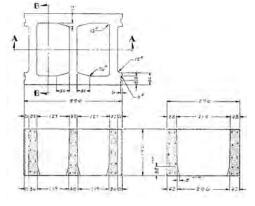
232 mm high division plates 206 mm high mold

Part Number	Description
02-345208M	Mold end liner
02-345210M0010	Core assembly
02-345212M0140	Stripper shoe
02-350741M	Removable plunger

### ETMM - equivalent thickness in millimeters ETI - equivalent thickness in inches

### **Unit Calculations**

46.30% solid (top) 48.69% solid (middle) 17.33 kg lightweight concrete 23.75 kg normal weight concrete 134.28 ETMM (top) 141.20 ETMM (middle) 10819.96 net cubic centimeters



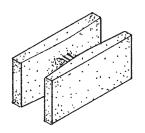


### Common Construction Shapes

Request kit #6555 from your Besser Sales or Customer Service Department, which lists the individual components included in each set of parts together with the concrete unit drawings. Concrete unit drawing numbers are listed.

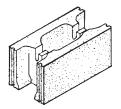
### Fully Open End - Bond Beam

Unit No. 02-412259 7-5/8" W x 7-5/8" H x 15-5/8" L Unit No. 02-420870 11-5/8" W x 7-5/8" H x 15-5/8" L



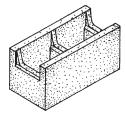
### Rebar

Unit No. 02-410587 7-5/8" W x 7-5/8" H x 15-5/8" L Unit No. 02-410590 11-5/8" W x 7-5/8" H x 15-5/8" L



### Restricted Bond Beam

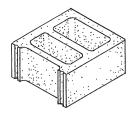
Unit No. 02-384010 5-5/8"W x 7-5/8" H x 15-5/8" L Unit No. 02-420110 7-5/8" W x 7-5/8" H x 15-5/8" L 9-5/8" W x 7-5/8" H x 15-5/8" L Unit No. 02-384022 Unit No. 02-373146 11-5/8" W x 7-5/8" H x 15-5/8" L



### 13-5/8" and 15-5/8" Wide Units

13-5/8" W x 7-5/8" H x 15-5/8" L Unit No. 02-395423 15-5/8" W x 7-5/8" H x 15-5/8" L Unit No. 02-374888

13-5/8" W x 7-5/8" H x 15-5/8" L- OEBE 2 Core Unit No. 02-387465 Unit No. 02-442510 15-5/8" W x 7-5/8" H x 15-5/8" L- OEBE 2 Core

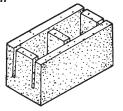




Bond Beam - Single Core

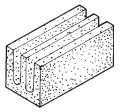
### Special Applications Units

**Knock-Out Bond Beam** Open Bottom



### Bond Beam - Twin Core

Unit No. 02-051307 9-5/8" W x 7-5/8" H x 15-5/8" L Unit No. 02-042644 11-5/8" W x 7-5/8" H x 15-5/8" L



Unit No. 02-056234

Unit No. 02-056227 Unit No. 02-018594 3-5/8" x 7-5/8" x 15-5/8" 5-5/8"W x 7-5/8" H x 15-5/8" L 7-5/8" W x 7-5/8" H x 15-5/8" L

Unit No. 02-054554 Unit No. 02-039598 Unit No. 02-419978

Unit No. 02-041663

Unit No. 02-056485

5-5/8"W x 7-5/8" H x 15-5/8" L 7-5/8" W x 7-5/8" H x 15-5/8" L

7-5/8" W x 7-5/8" H x 15-5/8" L (3-1/2" deep cut-out)

9-5/8" W x 7-5/8" H x 15-5/8" L 11-5/8" W x 7-5/8" H x 15-5/8" L

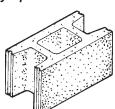
5-5/8"W x 7-5/8" H x 15-5/8" L

7-5/8" W x 7-5/8" H x 15-5/8" L

9-5/8" W x 7-5/8" H x 15-5/8" L

11-5/8" W x 7-5/8" H x 15-5/8" L

### Fully Open Both Ends

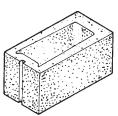


Unit No. 02-438682 Unit No. 02-383225

Unit No. 02-410186 Unit No. 02-383228

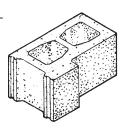
### **Knock-Out Lintel**

Unit No. 02-317487 Unit No. 02-358876 7-5/8" W x 7-5/8" H x 15-5/8" L 11-5/8" W x 7-5/8" H x 15-5/8" L



Unit No. 02-046814 Unit No. 02-046820

"L" Corner



9-5/8" W x 7-5/8" H x 15-5/8" L 11-5/8" W x 7-5/8" H x 15-5/8" L

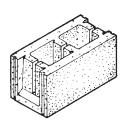


9-5/8" W x 7-5/8" H x 15-5/8" L

11-5/8" W x 7-5/8" H x 15-5/8" L

### Special Application Units

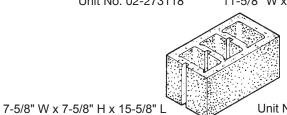
### Combination Bond Beam Cap



Unit No. 02-358529 Unit No. 02-362700 Unit No. 02-394297

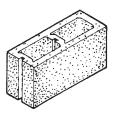
### Conduit - 3 Core

Unit No. 02-288662 Unit No. 02-375392 Unit No. 02-273118 7-5/8" W x 7-5/8" H x 15-5/8" L 9-5/8" W x 7-5/8" H x 15-5/8" L 11-5/8" W x 7-5/8" H x 15-5/8" L



Unit No. 02-358394 Unit No. 02-281154 Unit No. 02-326849

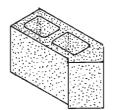
### Conduit - 2 Core



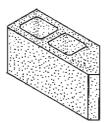
5-5/8"W x 7-5/8" H x 15-5/8" L 7-5/8" W x 7-5/8" H x 15-5/8" L 11-5/8" W x 7-5/8" H x 15-5/8" L

### **Bevel Units**

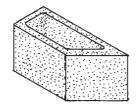
The units shown below are a sample of the many different beveled units used in correctional facilities. (Concrete unit drawing numbers are listed below)



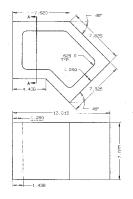
Unit No. 02-418284 5-5/8" W



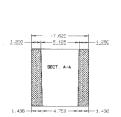
Unit No. 02-439346 5-5/8" W



Unit No. 02-430454 5-5/8" W



Unit No. 02-480675 7-5/8" W



Unit No. 02-447219 5-5/8" W

# 1.500 7.655

### **Universal Split Corner Units**



Unit No. 02-725114 7-5/8" W x 7-5/8" H x 15-5/8" L

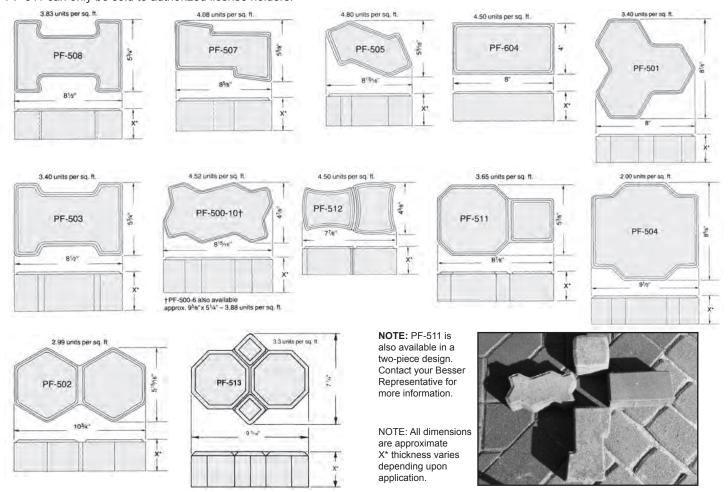


Unit No. 02-518225 7-25/32" W x 7-5/8" H x 15-7/8" L



### **Concrete Paving Stone**

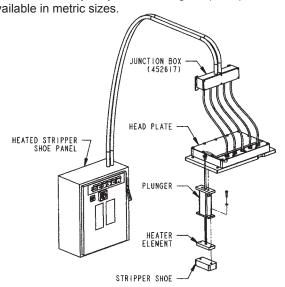
Besser offers a wide variety of paving stone molds for various applications. Some popular styles are shown below. All dimensions are approximate and thicknesses vary depending upon application. NOTE: PF-511 is a patented unit, therefore mold parts for paving stone PF-511 can only be sold to authorized license holders.



### Heated Stripper Shoe System

If you want to make top quality paving stone on your concrete products machine, use Besser heated stripper shoes. Heated stripper shoes help improve the quality of your paving stone by eliminating material sticking to the shoes and pulling the tops off the units. Heated stripper shoes allow you to run a wetter mix, which makes a denser unit with higher compressive strength and less absorption. A complete heated stripper shoe system is shown below. All items may not be necessary for your unit design or plant power requirements. Additional sizes and styles are available. Parts are also available in metric sizes.

PAVING STONE STYLE	REMOVABLE PLUNGER	STRIPPER SHOE HEATER
PF-500-6	02-361037	02-403612
PF-500-10	02-361037	02-403612
PF-501	02-353172	02-404033
PF-502	02-413202	02-410596
PF-503	02-361037	02-403612
PF-504	02-356077M	02-405383
PF-504-1	02-356077M	02-405383
PF-504-2	02-356077M	02-405384
PF-505	02-410027	02-421727
PF-507	02-361037	02-403612
PF-508	02-413202	02-410596
PF-511	02-361037	02-403612
PF-512	02-413202	02-410596
PF-513	02-361037	02-403612
PF-604	02-361037	02-403612



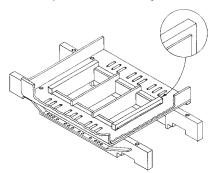


### Universal Half High Mold 3-5/8" High For use on Besser 3 AAT Concrete Products Machines

This mold was designed to run 3-5/8" wide units six-at-a-time, 5-5/8" wide units four-at-a-time, 7-5/8" wide units three-at-a-time, 9-5/8" wide units two-at-a-time or 11-5/8" wide units two-at-a-time — while using stripper head (plungers) from present full height molds. To achieve width interchangeability the mold will be set-up for 7-5/8" wide or 11-5/8" wide units. For more information on this mold contact your Besser Representative or our Mold Sales Representatives.

### Example "A"

The mold shown below is set up to produce three 7-5/8" W  $\times$  3-5/8" H  $\times$  15-5/8" L units. Notice that each outside division plate has a 1/16" build-up which faces away from the mold.

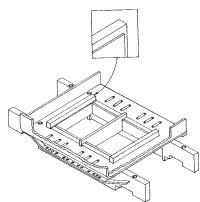


Qty	Part Number	<u>Description</u>
2	02-377143	Mold side bar
1	02-222506	3-5/8" wide 7-5/8" wide mold top plate
2	02-377144	Outside division plate
2	02-281891	Inside division plate
6	02-201506	7-5/8" wide mold end filler
6	02-238127	7-5/8" plain end liner

### For mold example see 02-506695

### Example "B"

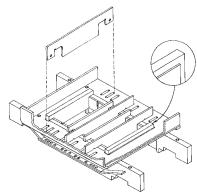
The mold shown below will produce two 11-5/8" W x 3-5/8" H x 15-5/8" L units. When set up for two 11-5/8" wide units the outside division plates are turned 180 degrees and the 1/16" build-up faces toward the mold.



Qty	Part Number	Description
1	02-271413	5-5/8" wide 11-5/8" wide mold top plate
4	02-204331	11-5/8" wide mold end filler
4	02-224016	11-5/8" wide plain end liner
		(269933 - liner OE w/ mortar groove)
6		7-5/8" plain end liner

NOTE: Illustrations shown are for a flat top non-ramp mold.

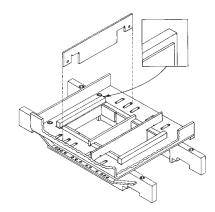
Use 7-5/8" wide slotted end liners and 3/8" thick suspended dividing plates and the mold shown below will produce six 3-5/8" W x 3-5/8" H x 15-5/8" L units.



Qty	Part Number	Description
3	02-035479	Suspended division plate
6	02-238127J0250	End liner - grooved

### For mold example see 02-518335

Use 11-5/8" wide slotted end liners and 3/8" thick suspended dividing plates and the mold shown below will produce four 5-5/8" W x 3-5/8" H x 15-5/8" L units.



Qty	Part Number	Description
2	02-035479	Suspended division plate
4	02-224016J0250	End liner - grooved

For example mold see 02-511882

Example "C" shown on page 35.



### Example "C"

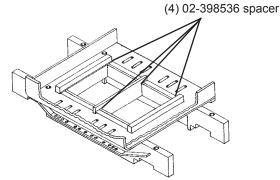
9-5/8" wide units

Use four 1" thick spacers and the 11-5/8" wide mold shown at left is set up to produce two 9-5/8" W x 3-5/8" H x 15-5/8" L units.

NOTE: Illustration shown is a flat top non-ramp mold.

Qty	Part Number	Description
4	02-398538	9-5/8" wide mold end filler
4	02-398536	1" division plate spacer
4	02-254918	9-5/8" wide plain end liner

For mold example see 02-487797 (solids 02-511939)



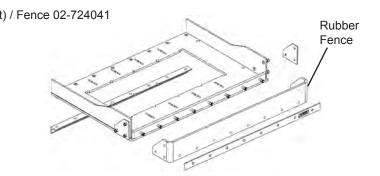
### Mold Top Plates

15-5/8" Long

### **Rubber Fence Mold Top Plates**

**Unit Width** 

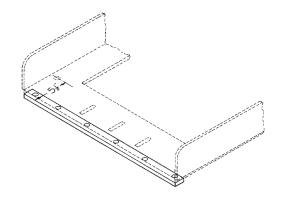
02-724036	7-5/8" 4 AAT (Ultrapac 18-1/2" x 38-1/2" pallet)
02-723796	3-5/8" 12 AAT (Superpac) / Fence 02-724520
02-723815	5-5/8" 8 AAT (Superpac) / Fence 02-724520
02-522733	7-5/8" 6 AAT (Superpac) / Fence 02-724520
02-522740	11-5/8" 4 AAT (Superpac) / Fence 02-724520



### Mold Top Plate Wearing Strip

Renew the critical 5-1/2" mold top plate dimension by adding the hardened wearing strip to the rear edge of all your mold top plates. The 5-1/2" dimension is measured from the rear holes in the top plate to the edge of the wear strip. After installing these hardened wear strips, adjustments will no longer be necessary to compensate for mold top plate wear. Additional sizes and styles are available.

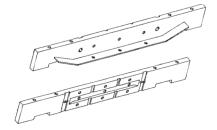
02-071452	Hardened wearing strip (for V3R & V3-12 series machines)
02-358086	Anti-spillage "S" strip - 3/8" slot x 1/2 slot" x 31-1/2" L (for BH-3 Bescopac machines)
02-449069	Anti-spillage "S" strip - 3/8" slot x 1-1/2" slot x 31-1/2" L (for BH-3 Bescopac machines)





#### Besser Standard Mold Side Bars

Bescopac, V3I V3-12 Vibrapa (18-1/2" x 26"	cs	Ultrapac (18-1/2" x 38-1	I/2" Pallet)	Superpac (18-1/2" x 52" Pallet)		
Part Number	Width	Part Number	Width	Part Number	Width	
02-017736	3-5/8"	02-447789	3-5/8"	02-389508	7-5/8"	
02-017942	5-5/8"	02-447798	5-5/8"	02-393260	11-5/8"	
02-017524	7-5/8"	02-438875	7-5/8"			
02-018011	9-5/8"	02-447809	9-5/8"			
02-017809	11-5/8"	02-447818	11-5/8"			



Stripper Head

Plate

# Stripper Head Plates

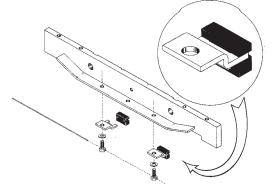
Besser stripper head plates are available in a variety of sizes to fit your needs. Listed are a few of the stripper head plates. Additional sizes / styles are available.

Part Number Description	
02-054194 Stripper head plate - 3-5/8" or 5-5/8" wide units	
02-059016 Stripper head plate - 7-5/8" wide units with swing type plungers	1
02-024901 Stripper head plate - 7-5/8", 9-5/8" or 11-5/8" W x 15-5/8" L	T
02-343774 Stripper head plate - 3-5/8", 5-5/8", 7-5/8", 9-5/8" or 11-5/8" wide units (V3)	T

# Pallet Snubbers for V3 only

Prevent the pallet from moving during vibration. These snubbers attach beneath the hold down angle and apply pressure on the pallet. Special cap screws and locking wire prevent loosening. Besser pallet snubbers fit all width molds that are 8-1/4" or 8-1/2" high. Parts include two pallet snubber assemblies with screws and wire.

Part Number	Description
02-607169	Pallet snubbers for 8-1/4" high molds
02-607170	Pallet snubbers for 8-1/2" high molds
02-280707	Replacement rubber block for 8-1/4" high molds
02-280722	Replacement rubber block for 8-1/2" high molds





# Mold Top Plates - 3 AAT Machines

Besser Standard Mold Top (6" high rolled bullnose type front)

For 29" wide feedbox (18-1/2" x 26" pallet)

15-5/8" Long	17-5/8" Long	Unit Width (Note: Wear strip 02-071452 is included)
02-017737	02-018467	3-5/8" STD
02-018216	02-029546	3-5/8" solid
02-017944	02-018481	5-5/8" STD
02-236901		5-5/8" 4 AAT, use with suspended division plates 02-226034
02-055634	02-078593	5-5/8" UPT
02-046200	02-474211	5-5/8" KOBB 4 AAT (2-3/4" core bar centers) - 1-1/4" shell
02-404373		5-5/8" KOBB 4 AAT (2-1/4" core bar centers) - 1-1/2" shell RH
02-404474		5-5/8" 3 AAT with KOBB RH compartment 1 AAT (2-3/4" core bar centers) -1-1/4" shell
02-017777	02-018277	7-5/8" STD
02-512295		7-5/8" same as 02-017777, but with 8" high fence
02-233558		7-5/8" 3 AAT for use with suspended division plates 02-226034
02-058986	02-058572	7-5/8" UPT
02-043954	02-462297	7-5/8" BB 3 AAT- KOBB (4-1/4" core bar centers) - 1-1/2" shell
02-045301	02-049381	7-5/8" 3 AAT RH compartment also has slots for KOBB (4-1/4" core bar centers) - 1-1/2" shell
02-409741		7-5/8" 3 AAT LH compartment also has slots for KOBB (4-1/4" core bar centers) - 1-1/2" shell
	02-483443	7-5/8" 3 AAT RH two compartments also have slots for KOBB (4-1/4" core bar centers) - 1-1/2" shell
02-063837		7-5/8" 3 AAT KOBB (4-3/4" core bar centers) - 1-1/4" shell
02-049504		7-5/8" 3 AAT with slots for KOBB all compartments - (4-1/4" core bar centers) 1-1/2" shell
02-270458		7-5/8" 3 AAT with slots for TCBB RH compartment - (2-7/8" core bar centers) 1-1/2" RH
02-058713		7-5/8" 3 AAT with slots for TCBB LH compartment - (2-7/8" core bar centers) 1-1/2" LH
02-054715		7-5/8" 3 AAT TCBB (2-7/8" core bar centers)
02-068278	02-338419	7-5/8" 3 AAT with slots for TCBB all compartments - (2-7/8" core bar centers)
02-251253		7-5/8" 3 AAT for use with inserts (inserts not included)
		02-253978 7-5/8" KOBB insert (4-1/4" core bar centers)
		02-253979 7-5/8" TCBB insert (2-7/8" core bar centers)
		02-269063 7-5/8" KOBB insert (3-3/4" core bar centers)
02-018012	02-018333	9-5/8" 2 AAT STD
02-056487	02 010000	9-5/8" 2 AAT and with slots for KOBB RH compartment (6-1/4" core bar centers) -1-1/2" shell
02-061586		9-5/8" 2 AAT and with slots for KOBB both compartments (6-1/4" core bar centers) -1-1/2" shell
02-051301	02-230448	9-5/8" 2 AAT and with slots for TCBB RH compartment (3.938" core bar centers) -1-1/2" shell
02-060553	02-230440	9-5/8" 2 AAT TCBB (3.938" core bar centers) -1-1/2" shell
02-017802	02-018288	11-5/8" STD (6.063 mold center to core bar center- 12.126 core bar centers)
02-356923		11-5/8" 2 AAT used with suspened division plate
02-030398		11-5/8" 2 AAT with slots for KOBB RH compartment (7-3/4" core bar centers) RH
02-409693		11-5/8" 2 AAT with slots for KOBB LH compartment (7-3/4" core bar centers) LH
02-303332		11-5/8" 2 AAT with slots for KOBB (7-3/4" core bar centers)
02-300547	02-483438	11-5/8" KOBB 2 AAT (7-3/4" core bar centers)
	02-462301	11-5/8" KOBB 2 AAT (7-5/8" core bar centers)
02-055751		11-5/8" TCBB 2 AAT (4.938" core bar centers)
02-208961		11-5/8" 2 AAT with slots for TCBB 1-1/2" shell RH compartment (4.938" core bar centers)
	02-418266	11-5/8" 2 AAT with slots for TCBB 1-1/2" shell LH compartment (4.938" core bar centers)
02-223072		11-5/8" 2 AAT with slots for TCBB 1-1/2" shell both compartments (4.938" core bar centers)
	02-465674	11-5/8" TCBB 2 AAT (4-7/8" core bar centers)
02-376472		11-5/8" 2 AAT with slots for TCBB -1-1/2" shell RH compartments (4.938" core bar centers)
02-433250		11-5/8" TCBB 2 AAT (4-15/16" core bar centers) - use with 02-226034 suspended division plate
Core Bar Center		KOBB - Knockout Bond Beam TCBB - Twin Core Bond Beam

© 2016 by Besser Company 37 **MOLD PARTS** 



# Mold Top Plates- 4 AAT Machines

**Besser Standard Mold Top (rolled bullnose type front)** 

For 41" wide feedbox (18-1/2" x 26" pallet)



15-5/8" Long	17-5/8" Long	"A"	"B"	Unit Width	LH Front RH
02-469105		6-1/8"	30"	3-5/8" 8 AAT	LH Front RH
02-447862		6-1/8"	30"	3-5/8" 8 AAT, use with 3/8" inside division plates	
02-447791		6-1/8"	30"	3-5/8" 8 AAT, use with 3/4" center division plates	
02-481925		7-1/8"	34"	3-5/8" 8 AAT, use with 3/4" center division plates	
02-489491		7-1/8"	34"	3-5/8" 8 AAT, with cutoff bar and hose storage	
02-481951		7-1/8"	34"	3-5/8" 9 AAT	
02-447800		6-1/8"	30"	5-5/8" 6 AAT	
02-455667		6-1/8"	30"	5-5/8" 6 AAT, use with 3/8" inside division plates	
02-469442		6-1/8"	30"	5-5/8" 6 AAT, with RH compartment slotted for bond b	eam RH
	02-463331	6-1/8"	32"	5-5/8" 6 AAT, use with 3/8" inside division plates	
	02-473726	6-1/8"	32"	5-5/8" 6 AAT, produced in a 11-5/8" wide mold with 3/	8" suspended division plate
02-481924		7-1/8"	34"	5-5/8" 6 AAT	
02-482178		7-1/8"	32"	5-5/8" 6 AAT	
02-489488		7-1/8"	34"	5-5/8" 6 AAT, with RH compartment slotted for bond b	eam RH
02-499224		7-1/8"	32"	5-5/8" 6 AAT, with with cutoff bar and hose storage	
02-503398		7-1/8"	34"	5-5/8" 6 AAT, produced in a 11-5/8" wide mold with 3/	8" suspended division
02-438878		6-1/8"	30"	7-5/8" 4 AAT	
02-481920		7-1/8"	34"	7-5/8" 4 AAT	
	02-474143	6-1/8"	32"	7-5/8" 4 AAT 3-5/8" high slotted for 3-5/8" units with s	uspended division plates
				(02-024404)	
02-489484		7-1/8"	34"	7-5/8" 4 AAT, with cutoff bar storage	
02-456192		6-1/8"	30"	7-5/8" 4 AAT mold using 3-3/4" inside division plates	
02-481818		7-1/8"	32"	7-5/8" 4 AAT slotted to run 3-5/8" wide - 8 AAT with su	uspended division plates
02-487272		7-1/8"	32"	7-5/8" 4 AAT, use with suspended division plates 02-2	26034 and 02-226036 face liner
02-492401		7-1/8"	34"	7-5/8" 4 AAT, with slots for KOBB RH compartment (4	.25" core bar centers)
02-467674		6-1/8"	30"	7-5/8" 4 AAT, with slots for KOBB all compartments (4	25" core bar centers)
02-481966		7-1/8"	32"	7-5/8" 4 AAT, with slots for KOBB all compartments (4	25" core bar centers)
02-724036		6-1/8"	32"	7-5/8" 4 AAT, with replaceable rubber front fence 02-7	'24041
02-447811		6-1/8"	30"	9-5/8" 3 AAT	
02-481922		7-1/8"	34"	9-5/8" 3 AAT	
02-500279		7-1/8"	32"	9-5/8" 3 AAT, with cutoff bar and hose storage	
02-467640		6-1/8"	30"	9-5/8" 3 AAT, with slots for TCBB (3.938 core bar cen	ters) each compartment
02-499225		7-1/8"	34"	11-5/8" 3 AAT, with cutoff bar storage	
02-456168		6-1/8"	30"	11-5/8" 3 AAT, use with 3/8" inside division plates	
02-467652		6-1/8"	30"	11-5/8" 3 AAT TCBB	
02-482411		7-1/8"	34"	11-5/8" 3 AAT TCBB	
02-469156		6-1/8"	30"	11-5/8" 3 AAT, with slots for KOBB (4.938" core bar ce	enters) each compartment
02-467655		6-1/8"	30"	11-5/8" 3 AAT, with slots for KOBB (7.750" core bar ce	
02-500697		7-1/8"	34"	11-5/8" 3 AAT, with slots for TCBB (4.938" core bar ce	enters) RH compartment
02-486022		7-1/8"	32"	11-5/8" 3 AAT, with slots for TCBB (4.938" core bar ce	enters) each compartment
				·	



KOBB - Knockout Bond Beam



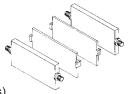
TCBB - Twin Core Bond Beam





# Besser Standard Division Plates & Uni-Pressed Top (UPT)

The charts below list standard division plates 8-1/4" and 9-1/4" high used in 8-1/4" high molds and 10-1/4" high plates used in 8-1/4" high molds. Additional sizes and styles are available. Parts are also available in metric sizes.

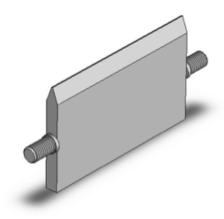


STANDARD DIVISION PLATES - 8-1/4" HIGH MOLDS (\*Mold side bar center to center at vibrator bolt holes)

MOLD WIDTH	MOLD LENGTH	OUTSIDE 8-1/4" HIGH	OUTSIDE 9-1/4" HIGH	INSIDE w/o LUGS 8-1/4" HIGH	INSIDE w/ LUGS 8-1/4" HIGH	INSIDE w/o LUGS 9-1/4" HIGH	INSIDE w/ LUGS 9-1/4" HIGH	CENTER 8-1/4" HIGH	CENTER 9-1/4" HIGH
3-5/8"	15-5/8" (*18.047)	02-011838	02-055312 02-389513 V6	02-011824	02-034693	02-055311	02-271371	02-017773	02-057589 02-389513 V6
5-5/8" 7-5/8" 9-5/8" 11-5/8"	15-5/8" (*18.047)	02-011838	02-055312 02-389513 V6	02-011824	02-034693	02-055311	02-443074 02-408314 V3/V6 Tang w/ lugs 02-722735 V6-Threaded Lug	N/A	02-389513 V6
3-5/8"	17-5/8" (*20.047)	02-012604	02-058967 02-396079 V6	02-011666	02-037831	02-058969	02-060590 V3/V4 02-722735 V6-Threaded Tang V6	02-018468	02-058968
5-5/8" 7-5/8" 9-5/8" 11-5/8"	17-5/8" (*20.047)	02-012604	02-058967 02-396079 V6	02-011666	02-037831	02-058969	02-060590 V3/V4 02-396080 w/ Threaded Tang V6	N/A	N/A

#### UNI-PRESSED TOP (UPT) 8-1/4" HIGH MOLDS - 10-1/4" HIGH DIVISION PLATE

MOLD WIDTH	MOLD LENGTH	OUTSIDE	INSIDE W/ THD. TANG	INSIDE PLAIN	INSIDE W/ LUGS	CENTER W THD. TANG
3-5/8"	15-5/8"	02-068780	N/A	02-071027	02-242691	02-068781
5-5/8" 7-5/8" 9-5/8" 11-5/8"	15-5/8"	02-068780	02-068781	N/A	N/A	N/A
3-5/8"	17-5/8"	02-068845	N/A	02-223636	02-301938	02-068846
5-5/8" 7-5/8" 9-5/8" 11-5/8"	17-5/8"	02-068845	02-068846	N/A	N/A	N/A



#### Outside Division Plate and Face Liner Combination

Part Number

Description

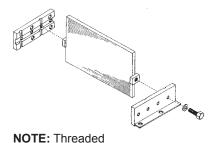
This design allows quick, easy changing or reversing of the mold face liner without disassembling the mold box. It also permits hardening to a greater depth which makes the liner more abrasion resistant without sacrificing flexibility. The liner has two usable surfaces doubling its service life. The face liner is available in any of the standard mold heights and lengths. Additional sizes and styles are available. Parts are also available in metric sizes. **NOTE:** Outside division plates with cutouts for face liners should be torqued to 175-195 ft lbs, (260-290 nm).

I dit Hullibei	Description			
8-1/4" High				
02-072665	Division plate & liner assembly - 15-5/8" long mold		<i>a</i>	
02-070159	Division plate only (replacement item) - 15-5/8" long r	mold		
02-070160	Face liner only (replacement item) - 15-5/8" long mole	d	<b>```</b>	
02-072666	Division plate & liner assembly - 17-5/8" long mold			
02-071123	Division plate only (replacement item) 17-5/8" long me	old		
02-071648	Face liner only (replacement item) 17-5/8" long mold			
9-1/4" High				
02-728411	SOP includes 02-200545, 02-072238 and hardware	Metric Part No	<u>0.</u>	
02-200545	Division plate only - 15-5/8" long	02-341585M		
02-072238	Face liner only - 15-5/8" long	02-341588M		
02-310012	Division plate only - 17-5/8" long	02-355815M		
02-072926	Face liner only - 17-5/8" long	02-355816M	ADDITIONAL P	PARTS
10-1/4" High			Part Number	<u>Description</u>
02-079034	Face liner only - 15-5/8" long (2" higher at top)		02-103702	Socket head cap screw
4-7/8" High (Lo	w Height)			w/ Nylok (4 required per liner)
02-281515	Division plate only - 15-5/8" or 17-5/8" long		02-087814	Hex nut - 1-1/2"
02-327714	Face liner only - 15-5/8" or 17-5/8" long		02-087910	Shakeproof washer - 1-1/2"



#### Inside Division Plate with Threaded Lug, 8-1/4" High Molds

02-443076



inside division plates should be

Tanged inside division plates should be torqued to

100-120 ft lbs, (150-180 nm).

torqued to 40-50 ft lbs, (60-70 nm).

This inside division plate with threaded lug for 8-1/4" high molds helps to prevent mold side bar from bowing and preserves the life of the horizontal and vertical mold side bar slots. Holes 9/16" in diameter must be drilled in mold side bars. Request drawing 02-290706 for instructions.

02-443074 9-1/4" high inside division plate with threaded lug for 8-1/4" H x 15-5/8" L mold (Equivalent to 02-058980 - 9-1/4" high division plate for 8-1/4" H x 15-5/8" L mold)

> 9-1/4" high inside division plate with threaded lug for 8-1/4" H x 17-5/8" L mold (Equivalent to 02-060590 - 9-1/4" high division plate for 8-1/4" H x 17-5/8" L mold)

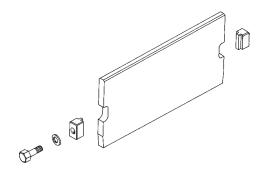
02-105386 Hex head cap screw - 1/2" x 1-1/4" L (2 required per plate)

02-087904 Shakeproof internal lock washer - 1/2" (2 required per plate)

02-456188M Metric inside division plate with threaded lug Request drawing 02-455122M for instructions for drilling metric mold side bars.

# Quick Change Division Plate

These quick change plates insert from the top and lock in position, allowing you to change the inside division plates without disassembling the mold frame. Use these division plates in combination with mold face liners and cut your mold maintenance time to a minimum. Quick change division plates increase the life of mold components and save money. When ordering, request drawing 02-290706 for drilling mold side bars. Additional sizes and styles are available, including metric sizes.



# For 15-5/8" Long Unit

Part Number	Description
*02-299514	Quick change plates - 8-1/4" high
*02-288396	Quick change plates - 9-1/4" high
*02-288395	Holding block (2 per plate)
02-105386	Hex head cap screw - 1/2" x 1-1/4" long
*02-288961	Quick change plate w/ one rib one side - 9-1/4" high
*02-288962	Quick change plate w/ one rib each side - 9-1/4" high

#### For 17-5/8" Long Unit

Part Number	<u>Description</u>
02-321980	Quick change plate - 8-1/4" high
02-292981	Quick change plate - 9-1/4" high
*Holding block not in	ncluded with quick change plates

# Center Division Plate with Threaded Tangs, 9-1/4" High x 3/4" Thick

Use this division plate to prevent spreading of the mold side bars when producing solids or other difficult units. It is necessary to drill the side bars to accommodate these plates. Additional sizes and styles are available, including metric sizes.

02-057589 Center division plate with threaded tangs for 7-5/8" H x 15-5/8" L units

#### Inside Division Plate with Threaded Tangs, 9-1/4" High x 1/2" Thick

Use this division plate to prevent spreading of the mold side bars when producing solids or other difficult units. It is necessary to drill the side bars to accommodate these plates. Additional sizes and styles are available, including metric sizes.

Part Number	Description	
02-079497	Inside division plate with threaded tangs for 7-5/8" H x 15-5/8" L units	
02-234025	Inside division plate with threaded tangs for 7-5/8" H x 17-5/8" L units	
02-087810	Hex nut - 1"	
02-087908	Shakeproof washer - 1"	

# Self-Locking Nut

Accept no substitutes. This self-locking nut was field tested on outside division plates under the most rigorous conditions and proved to be an extremely good replacement item. It is easily identified by the nylon collar built into its head. This special nut holds securely because the nylon collar produces a resistance against the tangs of the outside division plates.

Part Number	Description
02-104587	Self locking nut - 3/8"
02-102794	Self locking nut - 3/8" (thinwall)
02- 087700	Self locking nut - 3/4"
02-104591	Self locking nut - 1"
02-087707	Self locking nut -1-1/2"
02-087814	Standard hex nut - 1-1/2"
02-087810	Standard hex nut -1"





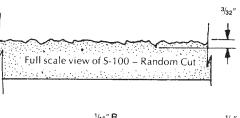
# Stri-Face Division Plates, Face Liners and End Liners

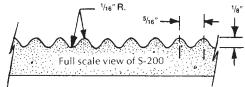
A special process permits the manufacturing of modular division plates with vertical grooves that produce a brush-finish design on the block face. Matching end liners form corner units in either single or double end design. Manufacturing templates assure continuity of the stri-face pattern. NOTE: Stri-face plates with ribs are available.

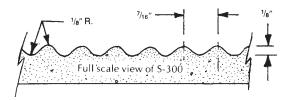
DIVISION PLATES				
Part Number	Description			
Inside Division P	Plate - 3-7/8" High			
02-251328	S-100 both sides			
Inside Division P	Plate - 8-1/4" High			
02-256342	S-200 one side			
02-256343	S-200 both sides			
02-263579	S-300 both sides			
Inside Division Plate	- 8-1/4" High w/ Lugs			
02-252659	S-100 one side			
02-252661	S-100 both sides			
02-263580	S-300 both sides			
Inside Division P	Plate - 9-1/4" High			
02-252341	S-100 one side			
02-257525	S-200 one side			
02-251324	S-100 both sides			
02-256368	S-300 one side			
02-256338	S-300 both sides			
Inside Division Plate	- 9-1/4" High w/ Lugs			
02-256212	S-100 one side			
02-251325	S-100 both sides			
02-258777	S-200 one side			
02-258773	S-200 both sides			
02-256369	S-300 one side			
02-256339	S-300 both sides			
Outside Division	Plate - 8-1/4" High			
02-265512	S-100 one side			
02-268064	S-300 one side			
Outside Division Plate - 9-1/4" High				
02-252681	S-100 one side			
02-254543	S-100 both sides			
02-256620	S-200 one side			
02-375001	S-200 both sides			



**NOTE:** It is recommended that striated stripper shoes be used when producing S-200 or S-300 product.



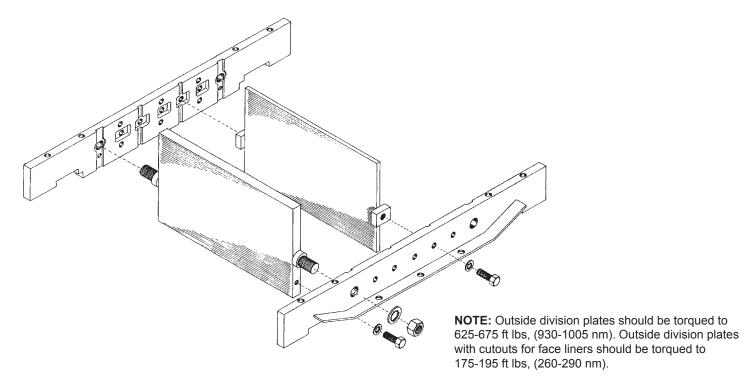




MOLD FACE LINERS				
Part Number Description				
Mold Face Liner - 9-1/4" High (For use with division plate 02-200545)				
02-251323       S-100 one side         02-259897       S-200 one side         02-322292       S-300 one side         02-330849       S-100 both sides				
Mold Face Liner - 8-1/4" High (For use with division plate 02-070159)				
02-319509 S-100 one side				

END LINERS						
WIDTH 3-5/8" 5-5/8" 7-5/8" 9-5/8" 11-5/8"						
S-100	02-257031	02-257033	02-242876	02-259403	02-259406	
S-200	02-280838	02-280840	02-256622		02-280842	
S-300	02-320550	02-271723	02-256341		02-312881	

#### Mold Frame



Threaded inside division plates should be torqued to 40-50 ft lbs, (60-70 nm).

Tanged inside division plates should be torqued to 100-120 ft lbs, (150-180 nm).

If you have difficulty maintaining perfect vertical alignment of end liners, this mold frame could be the answer. These mold side bars have a larger vertical section with extra 3/4" hole at the bottom of 1-1/4" wide division plate slots. The outside division plates also have an extra hole permitting additional holding power at the bottom of the frame.

Inside division plates also have threaded lugs with mold side bar drilled accordingly. (8-1/4" high mold with 9-1/4" high plates).

UNIT SIZE	Qty	3-5/8" WIDE	Qty	5-5/8" WIDE	Qty	7-5/8" WIDE	Qty	9-5/8" WIDE	Qty	11-5/8" WIDE
Mold side bar	2	02-443103	2	02-443106	2	02-443108	2	02-443110	2	02-443113
OS division plate - 15-5/8" long	2	02-443115	2	02-443115	2	02-443115	2	02-443115	2	02-443115
OS division plate - 17-5/8" long	2	02-443117	2	02-443117	2	02-443117	2	02-443117	2	02-443117
IS division plate - 15-5/8" long	4	02-443074	3	02-443074	2	02-443074	1	02-443074	1	02-443074
IS division plate - 17-5/8" long	4	02-443076	3	02-443076	2	02-443076	1	02-443076	1	02-443076
1-1/2" shakeproof lock washer	4	02-087910	4	02-087910	4	02-087910	4	02-087910	4	02-087910
1-1/2" nuts	4	02-087814	4	02-087814	4	02-087814	4	02-087814	4	02-087814
3/4 x 2" bolt	4	02-088064	4	02-088064	4	02-088064	4	02-088064	4	02-088064
3/4" shakeproof lock washer	4	02-087906	4	02-087906	4	02-087906	4	02-087906	4	02-087906
1/2" x 1" cap screw	8	02-088031	6	02-088031	4	02-088031	2	02-088031	2	02-088031
1/2" shakeproof lock washer	8	02-087904	6	02-087904	4	02-087904	2	02-087904	2	02-087904



#### Ribbed Mold Face Liners

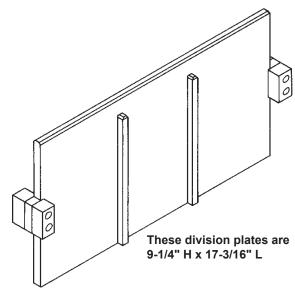
Face liners with single or multiple ribs are designed for use on outside division plate 02-200545 for 15-5/8" long units. All face liners are 9-1/4" high. Additional sizes and styles are available, including metric sizes.

Part Number	<u>Description</u>
02-103702	Socket head cap screw with Nylok
02-204687	With one 3/8" sq ribs one side
02-324659	With two 3/8" sq ribs one side
02-286593	With three 3/8" sq ribs one side
02-259327	With four 3/8" sq ribs one side
02-294277	With five 3/8" sq ribs one side
02-291628	With seven 3/8" sq ribs one side
02-338397	With nine 3/8" sa ribs one side

#### Ribbed Inside Division Plates 1/2" Thick

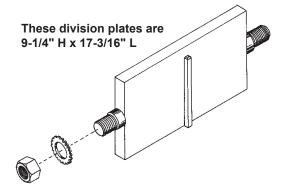
Listed below are several division plates to make a vertical groove on the face of the unit. Many other division plates are available to make single and multiple grooves. Order stripper shoes to match the division plates and state the size of unit, thickness of shell and ties, number of cores and types of ends. Grinding of removable plunger sides may be necessary. Special plungers will be made upon request. Additional sizes and styles are available, including metric sizes.

Part Number	Description
	<u>+</u>
02-074873	With one 3/8" sq rib one side with lugs
02-075915	With one 3/8" sq rib one side regular
02-208137	With one 3/8" sq rib both sides with lugs
02-236914	With one 3/8" sq rib both sides regular
02-247984	With two 3/8" sq ribs one side with lugs
02-247986	With two 3/8" sq ribs both sides with lugs
02-259766	With three 3/8" sq ribs one side with lugs
02-269956	With three 3/8" sq ribs one side regular
02-263456	With three 3/8" sq ribs both sides with lugs
02-271315	With five 3/8" sq ribs one side with lugs
02-271317	With five 3/8" sq ribs both sides with lugs
02-306238	With seven 3/8" sq ribs one side with lugs
02-294066	With seven 3/8" sq ribs both sides with lugs
02-210345	With one 7/16" W x 3/8" deep rib one side regular
02-210346	With one 7/16" W x 3/8" deep rib both sides regular
02-259439	With one 7/16" sq rib both sides regular
02-218135	With one1/2" W x 3/8" deep rib one side regular
02-214416	With one 1/2" W x 3/8" deep rib both sides regular
02-255198	With one 3/8" W x 1/4" deep rib both sides regular



#### Ribbed Outside Division Plates

Listed are several outside division plates that can be used to make a vertical groove on the face of the unit. These ribbed outside division plates are often used with the ribbed inside division plates shown above. Additional sizes and styles are available, including metric sizes.



Description
With one 3/8" sq rib one side
With one 3/8" sq rib both sides
With two 3/8" sq ribs one side
With two 3/8" sq ribs both sides
With three 3/8" sq ribs one side
With three 3/8" sq ribs both sides
With five 3/8" sq ribs one side
With seven 3/8" sq ribs one side
Nut 1-1/2"
Shakeproof washer 1-1/2"
Replacement rib only
Replacement rib only - slotted

NOTE: Outside division plates should be torqued to 625-675 ft lbs, (930-1005 nm).



#### Besser Mold Adapter Frames

(to replace mold adapter frames on competitive equipment)

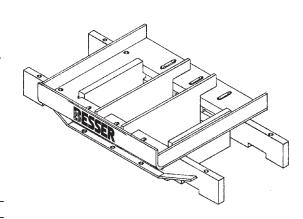
Do you have a considerable non-Besser mold inventory that you would like to use in a Besser concrete products machine? Besser can supply a mold adapter frame to suspend your non-Besser molds permitting them to be used in a Bescopac, V3-12, Dynapac or any other Besser 3 AAT concrete products machine. Contact your Besser Representative for more information.

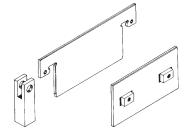


# Mold Frame Assembly with Suspended Division Plates and Face Liners

This mold box assembly with suspended division plates and face liners is a popular mold box design. When relining this mold, it is NOT necessary to disturb the basic frame or remove the top plate and vibrator shafts. Therefore, the mold box is held in a rigid assembly. Not shown, but also included with the frame is a cutoff bar with shoes, a wiper frame with rubber and an agitator grid.

Part Number	Description
02-264664	Mold frame assembly 3-5/8" W x 7-5/8" H x 15-5/8" L
02-264675	Mold frame assembly 5-5/8" W x 7-5/8" H x 15-5/8" L
02-264676	Mold frame assembly 7-5/8" W x 7-5/8" H x 15-5/8" L
02-264937	Mold frame assembly 11-5/8" W x 7-5/8" H x 15-5/8" L
02-408540M	Mold frame assembly 90 mm W x 190 mm H x 390 mm L
02-422367M	Mold frame assembly 140 mm W x 190 mm H x 390 mm L
02-408550M	Mold frame assembly 190 mm W x 190 mm H x 390 mm L





#### Suspended Division Plate and Mold Face Liner

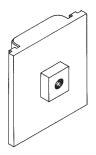
These parts are used in the mold assemblies shown above. The suspended division plate design and mold face liner design permits easy changing of replacement parts without complete disassembly of the mold box. This suspended division plate is held in place by the hold down block and the mold face liner is bolted to the mold end bar. The suspended division plate requires the appropriate mold top plate and cutoff bar parts. Additional sizes and styles are available.

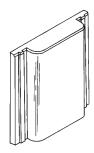
Part Number	<u>Description</u>
02-226034	Suspended division plate for 8-1/4" high mold (overall actual dimensions - 1/2" thick x 10-1/4" H x 24-1/4" L)
02-275394	Suspended division plate with 3/8" square rib - one side
02-275451	Suspended division plate with 3/8" square rib - both sides
02-226036	Mold face liner - for 8-1/4" high mold (overall actual dimensions - 1/2" thick x 9-1/4" H x 16-1/2" L)
02-022523	Hold down block for 1/2" core plate
02-276036	Suspended division plate 1/2" for 8-1/4" high mold - 17-5/8' long units (overall actual dimensions - 10-1/4" H x 26")
02-035479	Suspended division plate 3/8" for 3-5/8" high mold
02-024404	Suspended division plate 3/8" for 8-1/4" H x 15-5/8" L
02-034676	Suspended division plate 3/8" for 7-5/8" H x 15-5/8" L units in a 17-5/8" L mold cavity - V3
02-036358	Suspended division plate 3/8" for 7-5/8" H x 17-5/8" L units - V3

#### Besser Standard Mold End Liners

For 8-1/4" high molds (7-5/8" high unit)

	with mortar groove	without mortar groove
Part Number	Width	Part Number
02-045265	5-5/8"	02-202417
02-043986	7-5/8"	02-077595
02-045700	9-5/8"	02-074280
02-045215	11-5/8"	02-066053







#### Combination End Core & Liner

This combination end core and liner is specially designed for use by concrete products plants producing 3 core and old-style 2 core units. Combining the end core and liner into one part simplifies inventory and eliminates breakage of the end core because of handling or because of foreign objects in the mold. Designed without a taper to save material, these combination end core and liners are manufactured with full and uniform heat treat of the mortar rib. The keys are welded for maximum rigidity. Additional sizes and styles are available, including metric sizes.

#### Two and Three Core (8-1/4" high mold)

Part Number	Description	
02-322299	7-5/8" W x 7-5/8" H x 15-5/8" L (without mortar ribs)	1
02-284812	7-5/8" W x 7-5/8" H x 15-5/8" L	- 18
	(replaces 02-017712J0020 end core liner and end cores 02-017706 and 02-029722)	ш
02-337582	7-5/8" W x 7-5/8" H x 15-5/8" L (without mortar ribs)	ш
02-337584	9-5/8" W x 7-5/8" H x 15-5/8" L (with mortar ribs)	BH 1
02-301645	11-5/8" W x 7-5/8" H x 15-5/8" L (with mortar ribs)	Ш



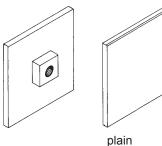
Part Number	Description	Part Number	Description
02-018217J0481	3-5/8" RH	02-017712J0470	7-5/8" double
02-018217J0482	3-5/8" LH	02-018013J0481	9-5/8" RH
02-018217J0470	3-5/8" double	02-018013J0482	9-5/8" LH
02-017945J0481	5-5/8" RH	02-018013J0470	9-5/8" double
02-017945J0482	5-5/8" LH	02-017803J0481	11-5/8" RH
02-017945J0470	5-5/8" double	02-017803J0482	11-5/8" LH
02-017712J0481	7-5/8" RH	02-017803J0470	11-5/8" double
02-017712J0482	7-5/8" I H		

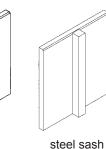
#### Besser Standard Plain End Liners and Steel Sash Liners

For 8-1/4" high molds (7-5/8" high unit)

Plain	Width	Steel Sash
02-018217	3-5/8"	02-018217J0090
02-017945	5-5/8"	02-017945J0090
02-017712	7-5/8"	02-017712J0090
02-018013	9-5/8"	02-018013J0091 RH & J0092 LH
02-017803	11-5/8"	02-017803J0091 RH & J0092 LH

NOTE: To determine left or right hand, hold the liner with the key facing you and whichever side the sash is on indicates whether it is left or right hand.





#### Solid Stripper Shoe

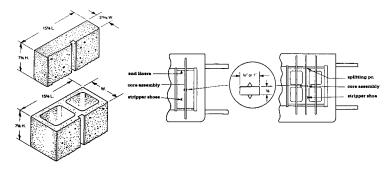
Part Number	Description	For use with removable *plunger(s)	<b>Hole Center</b>	
02-024326	1-5/8" W x 15-5/8" L	02-053771, 02-056387, 02-058802, 02-469107	14.313"	
02-018206	3-5/8" W x 15-5/8" L	02-053771, 02-056387, 02-058802, 02-469107	14.313"	
02-066795	5-5/8" W x 15-5/8" L	02-053393	12.875"	0
02-021728	5-5/8" W x 15-5/8" L	02-051357, 02-058864, 02-255303, 02-469443, 02-473729	14.313"	02-018206
02-045225	7-5/8" W x 15-5/8" L	02-043992	12.875"	
02-077712	7-5/8" W x 15-5/8" L	02-057874	13.594"	
02-054269	7-5/8" W x 15-5/8" L	02-020705, 02-207896	14.313"	/ //
02-210467	9-5/8" W x 15-5/8" L	02-043705	12.875"	2 ~ /
02-239720	9-5/8" W x 15-5/8" L	02-511217	14.313"	9
02-228186	11-5/8" W x 15-5/8" L	02-067931	13.594"	~
02-291825	11-5/8" W x 15-5/8" L	02-241453	14.313"	
02-066679	11-5/8" W x 15-5/8" L	02-045221	12.875"	

<sup>\*</sup>Also will work with a plunger of similar configuration and bolt hole pattern.



#### Simulated Split Face Halves

The practice of removing a division plate, making two units as a Siamese double and splitting to form a 7-7/8" W x 15-5/8" L split face is popular. Whether this method is used or a mold is designed specifically for producing "two" split face units at-a-time, a further step can be taken to enhance the appearance of these units: suspend a single score core assembly in the center of the two units. After splitting this gives the appearance of a half split face unit. The single score core has a splitting "V" attached to match the "V" on the end liners. Cores can be 3/8" x 3/4" (02-407573) or 3/8" x 1" (02-424156). The two methods are shown:



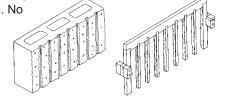
NOTE: 3-5/8", 5-5/8", 7-5/8", 9-5/8" or 11-5/8" W x 15-5/8" L compartment. New or reworked mold top plate and cutoff parts and new or reworked plungers may be necessary. This can be done in metric as well, 190 mm wide becomes 196.5 mm wide.

#### Split Fluted Division Plate

This special division plate replaces a standard 1/2" thick inside division plate in a 15-5/8" long frame, allowing material to flow between two compartments creating a Siamese double unit for splitting. No other special parts are necessary - standard shoes are used!

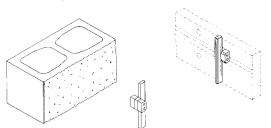
This division plate works in 3-5/8", 5-5/8", 7-5/8", 9-5/8" or 11-5/8" wide molds. The end product has seven flutes and is 1/4" wider than the modular compartment width, i.e., 3-7/8" wide in a 3-5/8" wide, etc. Additional sizes and styles are available, including metric sizes.

02-309197 Inside division plate 9-1/4" high - for a 7-5/8" H x 15-5/8" L unit



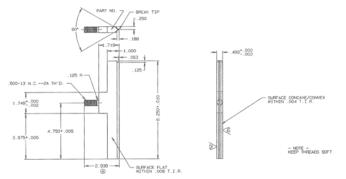
#### Splitting Block Division Plate Filler

This division plate filler closes the gap that is left when removing the 1/2" thick inside division plate in a 15-5/8" or 17-5/8" long frame. Along with the filler, order two stripper shoes with the same configuration as your present stripper shoes but 1/4" wider and compatible with one of the fillers listed below. These fillers will work in 3-5/8", 5-5/8", 7-5/8", 9-5/8" or 11-5/8" wide molds. The end product is 1/4" wider than the mold compartment (i.e., a 3-7/8" wide product will be made in a 3-5/8" wide compartment, etc.). Additional sizes and styles are available, including metric sizes.



02-052416 Plain division plate filler
02-066019 "V" division plate filler for use with division plate slot
02-415732 "V" division plate filler for use w/o division plate slot
02-065347 "V" division plate filler for use with division plate slot
1" key

02-487710 "V" division plate filler for use with division plate slot 1-1/4" key

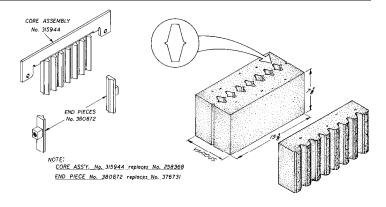


# Split Fluted (8 flute shown)

Some producers experience difficulty in splits not following a nearly straight line from the top to bottom of the unit. Many have found the "Extra Splitting Vee" to be helpful in solving this problem. Only the end pieces and core assembly require changing as the "V" falls under the core plate and does not affect stripper shoes. Additional sizes and styles are available.

NOTE: Parts listed are for 15-5/8" L molds.

02-315944 Core assembly 02-380872 End piece





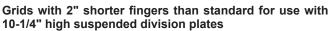
#### Round-Finger Agitator Grid

Round-finger agitator grids have proven advantageous in the feed of various aggregates and have improved the quality of concrete units. Listed below are round-finger agitator grids for use with 9-1/4" high division plates and suspended division plates. Additional sizes / styles are available. Parts are also available in metric sizes.

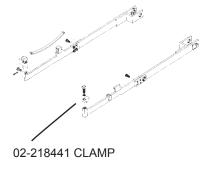
View the quick reference bulletin at www.besser.com/support

#### For use with 9-1/4" high division plates

Part Number	Unit Width	Number of Bars	Number of Fingers
02-058895	3-5/8"	4	28
02-062096	5-5/8"	4	20
02-058894	7-5/8"	4	40
02-062510	7-5/8"	3	30
02-063208	9-5/8"	4	28
02-058896	11-5/8"	4	28



10-1/4 High suspended division plates			11-5/8"	02-447824	02-421204	02-393268	
Part Number	Unit Width	Number of Fingers			02 447024	02 421204	02 030200
02-226183	3-5/8"	28	OTHER AGITA	TOR GRIDS			
02-216763	5-5/8"	20	Part Number	Description			
02-201700	7-5/8"	40	02-018839 Agitator grid frame only - no fingers				
02-264683	9-5/8"	28	02-053096	Agitator grid -	3 bar- no fingers	S	
02-264670	11-5/8"	28	02-070757 Universal all purpose grid-with fingers- 4", 5-5/8", 11-5/8", 1		5/8", 11-5/8", 12"		



# **Bolted Type Grid Support Bars**

This design of grid support bars bolt together to facilitate replacement of worn front sections. Right hand and left hand pieces are no longer required because parts interchange from side to side. Front sections are hardened to resist wear. New front grid clamp blocks are included with the set of parts.

Standard grids for:

**V4** 

02-447795

02-447805

02-438886

02-447815

**V5** 

02-421218

02-421254

02-465656

02-438322

V6

02-402436

02-440453

02-389520

02-393282

**Unit Width** 

3-5/8"

5-5/8"

7-5/8"

9-5/8"

Part Number	Qty	<u>Description</u>
02-639715	1	Bolt together grid bars - clamp type
02-366240	2	Front section only - clamp type (replacement)
02-640526	1	Bolt together grid bars - spring type
02-377703	2	Front section only - spring type (replacement) less latch, spring and pin
02-640525	1	Front section assembly - spring type (replacement)
02-377704	2	Front section only - spring type (replacement)

# Agitator Grid Support Bars

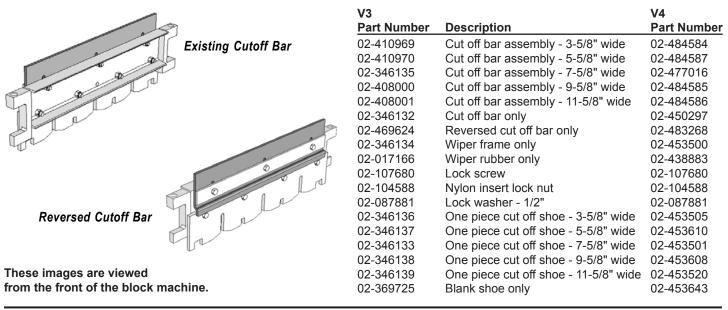
These agitator grid support bars are hardened along the entire wear surface. A steel bushing is used to connect the grid bars and serves as a full length bearing. Grid bars are available with front clamp blocks or with spring type clamps. Also available are the front sections only, ready for welding to useable rear sections.

Clamp Type		
02-218481	Right hand grid bar with clamp	
02-218482	Left hand grid bar with clamp	
02-218441	Clamp only	
02-249771	Front section with clamp block (weld-on)	No. 76457 SPRING
<b>Spring Type</b>		
02-078702	Right hand grid bar with spring	
02-078704	Left hand grid bar with spring	No. 76533 PIN
02-076457	Spring only	
02-076630	Front latch	METHOD TO DEPRESS SPRING
02-076632	Rear latch	∠NO. 76630 LATCH
02-076633	Latch pin	
02-049871	Steel bushing	
02-077303	Pry bar	



#### Universal Lightweight Cutoff Bar and Reversed Universal Lightweight Cutoff Bar

The lightweight design cutoff bar interchanges with all standard cutoff bars for popular width molds. Besser offers two styles of universal cutoff bars. The standard universal cutoff bar is manufactured so that when it is installed on the feedbox, the wiper and cutoff shoe are located towards the back. On the reversed universal cutoff bar, the wiper and cutoff shoe are located on the front when installed on the feedbox. One advantage of the reversed universal cutoff bar is when the feedbox comes forward to first machine stop, the cutoff bar will push the material that normally accumulates in the front of the mold top plate approximately 2-3/8" (60 mm) further forward. Many times this will allow the machine to reach second machine stop without this material rolling back, across and on top of the mold cavity.



# Wiper Frame and Rubber

The wiper rubber is made from the best grade of rubber available for this application. Elongated holes on the wiper rubber permit easy adjustment and allows the rubber to be reversed. This brings the otherwise wasted bottom edge into use, thereby doubling the wiper rubber's service life. Additional sizes and styles are available, including metric sizes.

Part Number	Description	© (a)
02-014133	Wiper frame	
02-017166	Wiper rubber	
02-087040	Hex head cap screw - 1/2" x 2-1/2" L	
02-087806	Hex nut - 1/2"	0
02-087881	Lockwasher - 1/2"	
02-386425	Wiper rubber for V6	
02-421201	Wiper rubber for V5	
02-453500	Wiper frame for V4	
02-438883	Wiper rubber for V4	

#### Nylon or Wire Brushes for Stripper Shoes

Two styles of stripper shoe brushes are available; one is made with nylon bristles and the other with wire bristles. Both brushes are designed to clean irregular surfaces on special stripper shoes. Either brush assembly will easily mount to the cutoff bar and is fully adjustable to compensate for bristle wear. Either assembly is ideally suited for use with the new style stripper head raising cam that allows the stripper shoes to be wiped in both directions. Older style cams only wiped the stripper shoes on the back stroke of the feedbox.

Part Number	Description
02-355245	Nylon bruch

02-355245	Nylon brush assembly (one brush)
02-103298	Replacement nylon brush only for above
02-364842	Wire brush assembly (one brush)
02-387681	Wire brush assembly (dual brushes)
02-392492	Wire brush assembly (dual brushes Bescopac)
02-364841	Replacement wire brush only (V3R, V3-12 & Bescopac)
02-450619	Wire brush assembly (V4)
02-450618	Replacement wire brush only (V4)
02-436940	Wire brush assembly (dual brushes V6)
02-436936	Replacement wire brush only (V6)
02-479365	Wire brush 0.625" x 4" x 26"
10-554185	Wire/nylon combo cutoff brush



MOLD PARTS 48 © 2016 by Besser Company

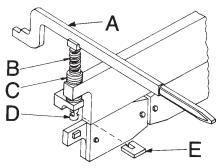


#### Quick Release Clamp For Cutoff Bar

For quick, easy changing and adjusting of the cutoff bar, order and install a quick release clamp. The components shown are interchangeable with those presently used.

	Part Number	Qty	Description	
02-061397 1 Set-up gauge/"Besser bar" "A"		~		
	02-214162	2	Spring "B" (order 02-59604 for machine without auto feed)*	$\infty$
	02-087932	16	Washer "C"	
	02-214161	2	Pin "D" (order 02-61389 for machine without auto feed)*	R-
	02-061390	2	Lock "E" *	0
	For a complete	e set of	parts, order:	
	02-603189		SOP quick release clamp for machine with auto feed	D-
	02-603086		SOP quick release clamp for machine without auto feed	
	02-641753		SOP quick release clamp for V6-12 (Includes 02-394106 rod,	
			02-394107 locking block, 02-109335 compression spring,	
			02.061307 pry har and 02.087034 plain washer)	

<sup>02-061397</sup> pry bar and 02-087934 plain washer)



#### Hold Down Blocks for Core Assemblies



**OPTIONAL** 



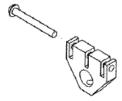


**Description Part Number** 02-014129 Hold down block - standard - for 3/8" thick core plate 02-022523 Hold down block - standard - for 1/2" thick core plate 02-014128 Hold down block - optional - used specifically for easy removal of end liners without core disassembly 02-089073 Rivet 5/8" x 1-3/4" L Rivet with hole 5/8" x 2" L 02-516036 02-055851 Hex head cap screw Additional sizes are available 02-017996 Hold down block - ramp type

# Yoke Style Core Bar Hold Down Blocks for Knock-Out Bond Beam

**STANDARD** 

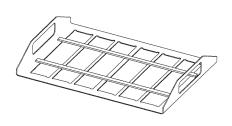
Hold Down	Pin/Rivet	Unit Width
02-059023	02-089086	5-5/8" W
02-049429	02-089077	7-5/8" W
02-303333	02-303244	11-5/8" W



#### Stripper Shoe Set-Up Gauge

Stripper shoes for 15-5/8" long units are quickly spaced and aligned with this precision set-up gauge. Correct spacing and alignment will reduce wear on division plates, end liners, and related parts. A set-up gauge doubles in usefulness as a guide to indicate bent plungers. The savings in mold parts alone will pay for a complete set of stripper shoe set-up gauges. Following used with 1/2" inside division plates.

V3	Description	V4	<u>V6</u>
02-724831	Set-up gauge for 3-5/8" wide	02-476870	
02-724616	Set-up gauge for 5-5/8" wide	02-448177	02-725340
02-724611	Set-up gauge for 7-5/8" wide	02-448179	02-462283
02-726162	Set-up gauge for 9-5/8" wide	02-448181	
02-724833	Set-up gauge for 11-5/8" wide	02-448183	
02-725369	Set-up gauge for 7-5/8" with L 6 AAT h	nalves	
02-725373	Set-up gauge for 11-5/8" W x 11-5/8" I	L 2 AAT	
02-725371	Set-up gauge for 15-5/8" W x 11-5/8"	L 1 AAT	



<sup>\*</sup>Also for V3 and V4 concrete products machines

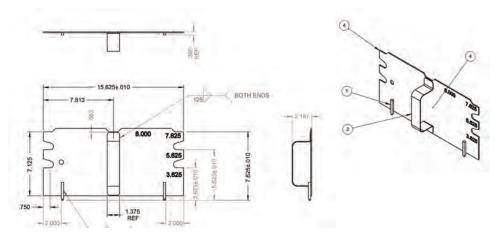


#### Multi Block Height Gauge

#### Part Number Description

02-517012 Multi block height gauge

(see page 163 for additional height gauges)



# High Strength Vibrator Bolts

This bolt is the standard for both Posapac and SmartPac vibrator shafts. It eliminates all previous bolt types, lock washers and standard nuts. The combination of standard high strength bolts, hardened washers and the FLEXLOC® nut provides a more robust fastening system for the demands of high vibration systems. Although the high strength bolt used in combination with the hardened washers and FLEXLOC® nut and fastening procedure is technologically advanced, it is not a fail-safe application if poor fastening procedures are used.

NOTE: Vibrator bolts, FLEXLOC nuts and hardened flat washers are rated for one time use only. Due to the special tooling and testing required to verify if a bolt has exceeded its stretch limitation prior to re-use, the vibrator bolts cannot be relied upon past one time use. All returns for warranty consideration for failure of any mold components, including vibrator shafts and vibrator bolts, resulting from loose or broken vibrator bolts, will be contingent on return for inspection and analysis of the vibrator bolts and its components.

Reasonable care must be taken when matching the mating surfaces of the mold top plates, mold side bars, bearing housings and pallet guides. These surfaces must be kept clean prior to assembly, be free from burns or rough edges around the hole, and they must be flat so full surface contact can be maintained. If any of the above conditions are not met, this will detract from the normal bolt stretch that keeps the fastener tight and may cause a failure in any fastening system. Careful inspection of all components must be done prior to assembly and any components showing the above conditions should be repaired or replaced. Observe the torque requirements found on page 58. These torque requirements must be achieved when tightening the fasteners as the resulting bolt stretch keep the fastener from loosening.

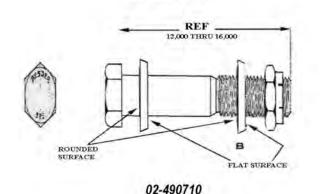
- The Magne finish, which is silver in color complies with EPA restrictions and meets the same requirements as the previous gold colored cadmium coating found on vibrator bolts. Some bolts may have a black finish but will meet the same specifications.
- A 1/4" thick hardened washer, part number 02-115333, will be placed above the nut of all fasteners and under the head of the hex head fasteners for a more rigid assembly. Non-hardened washers can adversely affect bolt stretch. The hardened washer also helps dissipate the load forces by offering a larger surface area. Note the orientation of the washers on page 51.
- A 3/4" FLEXLOC nut, part number 02-087871, is used with the fasteners. A FLEXLOC nut distributes the load evenly across the bolt threads, eliminating use of a lock washer.

Vibrator Shaft Bolts				
Part Number	Description	Part Number	Qty	Description
02-215652	3/4" x 12" L	02-648371	1	SOP fastening system for a complete Ultrapac V-4
02-215653	3/4" x 12-1/2" L			Mold Includes:
02-488059	3/4" x 13" L hex head cap screw	02-488059	4	3/4" x 13" L hex head bolt
02-215655	3/4" x 13-1/2" L			
02-488060	3/4" x 13-1/2" L flat socket head bolt	02-488060	4	3/4" x 13-1/4" flat head socket bolt
02-215656	3/4" x 14" L hex head cap screw	02-087871	8	3/4" - 10 full height FLEXLOC nut
02-227374	3/4" x 14-1/2" L	02-115333	12	Hardened washer
02-244651	3/4" x 15" L hex head cap screw	02-490710	1	Vibrator bolt assembly - hex head
02-397037	3/4" x 15-1/2" L	02-490711	1	Vibrator bolt assembly - flat head
02-109157	3/4" x 16" L hex head cap screw			•
02-087871	FLEXLOC nut			
02-115333	Hardened washer			



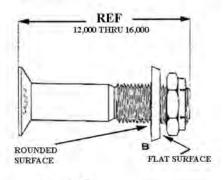
#### Improvement Over Lock Washers and Standard Units

#### Hex Head Fastener



\$5524 (1) 405

#### Flat Head Fastener



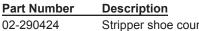
02-490711

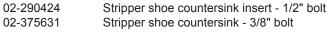
RECOMMENDED FLAT WASHER ORIENTATION AS SHOWN INSTALLATION TORQUE 285-300 FT LBS - TURNING THE NUT

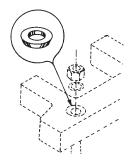
RECOMMENDED FLAT WASHER ORIENTATION AS SHOWN INSTALLATION TORQUE 285-300 FT LBS - TURNING THE NUT

# Stripper Shoe Countersink Insert

If the plunger upright does not hold stripper shoes level because stripper shoe holes are worn, insert these countersink inserts into the holes, tighten the stripper shoe bolts, and the shoe will once again be level. This condition exists more often in shoes for 3-5/8" wide permanent plain end units where the holes are located close to edge of shoe.



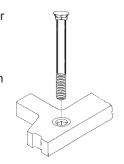




# Stripper Shoe Bolts (Square Shoulder Type)

# Part Number Description 02-378484 Stripper shoe bolt with square shoulder type head - 1/2" x 4" L 01233-400001 1/2" zinc lock washer 01211-400002 Hex nut

**NOTE:** Use only with stripper shoes with square shoulder type holes.



# Stripper Shoe Bolts (Slotted Head)

Part Number	Description
02-078543	Stripper shoe bolt - special alloy - 1/2" x 4" L
02-040201	Stripper shoe bolt - special alloy - 1/2" x 7" L
02-050581	Stripper shoe bolt - special alloy - 1/2" x 8" L
02-334877	Stripper shoe bolt - special alloy - 1/2" x 9" L
02-051480	Stripper shoe bolt - special alloy - 1/2" x 11" L
02-040202	Stripper shoe bolt - special alloy - 1/2" x 11-1/2" L
02-061659	Stripper shoe bolt - special alloy - 3/8" x 4" L
02-054961	Stripper shoe bolt - special alloy - 3/8" x 11" L



#### Posapac Weights

Posapac vibrator weight always remains in perfect alignment! The Posapac's unique design offers advantages that include faster starting of vibrators, extended bearing and brake life, quick synchronization of motors and an end to pallet creeping because of weight misalignment. Posapac weights for the V3, V3R, V3-12 and Bescopac concrete products machines are color coded for quick indentification. Recommendations for the use of vibrator weights are available in the service bulletin section of besser.com.

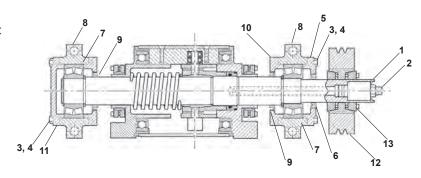
Posapac Weight			2800 RPM	/ // 02-
Standard	*For ASV Sys	<u>tems</u>	<b>Centrifugal Force</b>	Compare To:
02-283177	02-526796	Orange	7,495 lbs	Two 3" sq x 4-3/4" L, eccentric weights - pavers
02-278328	02-526798	Blue	9,400 lbs	Two 3-1/2" sq x 5" L, eccentric weights - standard
02-278329	02-526799	Yellow	10,200 lbs	Three 3" sq x 4-3/4" L, eccentric weights - brick mold
02-301697	02-526795	White	6,365 lbs	Two 3" sq x 4-3/4" L eccentric weights
02-301699	02-526797	Gray	9,113 lbs	Two 3" sq x 4-3/4" L, & one 3" sq x 4-1/2" L, eccentric weights
02-342539	02-526800	Green V-6	13,794 lbs	Three 3-1/2" sq x 5" L, eccentric weights
02-389578	02-526801	Red V-6	15,145 lbs	Comparison data not available

<sup>\*</sup> The weights intended for use with the ASV systems have been treated with a special coating to increase clamp holding power.

#### SmartPac® Vibrator Shaft Assembly

Use multi-purpose synthetic lubricant with Teflon to treat the interior of the assembly:

Part Number	Description
02-114044	Aerosol 11 oz can



Key	Part Number	Description	Qty
1	01241-000007	Retaining ring	1
2	02-113272	Rotarty union	1
3	02-114032	3/8" x 16" x 3-3/4" hex head cap screw grade 2	8
4	02-087903	3/8" shakeproof washer	8
5	02-458394	Closure - front bearing	1
6	02-113978	Seal - grease/oil - 2.125" ID - 3.005" OD	1
7	01503-000024	Bearing - roller 2.1654" B - 4.7244" OD	2
8	02-458385	Housing - vibrator bearing for SmartPac	2
9	02-113979	Seal - grease/oil 2.500" ID - 3.256" OD	2
10	02-458393	Closure - end bearing	2
11	02-458395	Closure - closed end for SmartPac	1
12	02-454001	Sheave - 2 groove	1
	02-464246	Sheave - 4 groove	1
13	02-112282F7021	Locking assembly	1

NOTE: For additional SmartPac components refer to the SmartPac overhaul/service manual PV-1: 02-466376F9901 or PV-1: 02-502-SP-001-00

02-114134 Purple grease (keg) 02-114135 Purple grease (tube) 30 Tubes/case

#### SmartPac® PV-II Rapid Exchange Program - US Customers Only

Consider taking advantage of the SmartPac rapid exchange program the next time you find it necessary to rebuild your existing SmartPac unit. To participate in this program please follow the following procedure:

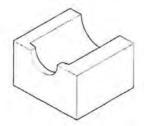
- 1) When ordering indicate that it is for the Rapid Exchange Program.
- 2) You have 15 business days to return the old unit (there is a penalty of US \$250/day for late return). This applies to both programs.
- 3) Units must be returned in the special crate, marked "RETURN TO FORCE CONTROL" (Crate charge of US \$350 will be billed if not returned in this crate).
- 4) Returned units must be sent FREIGHT PREPAID.
- 5) All units carry a 90 day limited warranty, beginning on the day of shipment.
- 6) This program does not apply to PV-I

Contact your Besser Representative or the Customer Service Department by phone at +1.989.354.1000 or 1.800.530.9991.



#### **PV-1 Tools**

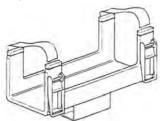
Holding fixture, FB-2328 - part of arbor press tooling used to hold position during pin installation.



Pressing device, MB-505 - part of arbor press tooling to press spherical roller bearing into bearing housing. Also serves as a depth gauge.



Attachment, BM -1406 - aligns and secures vibrator assembly before rear locking ring is installed.



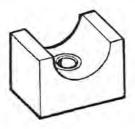
Spacer Block, bench vise supports vibrator shaft when shaft is clamped in vise.



#### **PV-2 Tools**

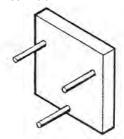
#### 02-507453

Cradle assembly tool - use to hold the piston when removing and installing the piston bearing assembly.



#### 02-507454

Bearing and bearing retainer removal tool - use to remove the large sleeve bearing and the bearing retainer from the front hub and the rear hub.



#### 02-507455

Bearing removal tool - use to remove the large sleeve bearing from the bearing retainer.



#### 02-507456

Arbor press tool - use to install the large sleeve bearing and the bearing retainer on the front hub and the rear hub.



#### 02-507448

Tapered assembly tool - use to erase installation of parts onto the vibrator shaft.



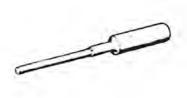
#### 02-507449

Trantorque and ring assembly - use as a positive stop when testing the newly installed piston for leaks.



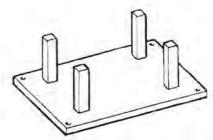
#### 02-507450

Dowel pin remover - use to remove the 4 dowel pins from the front hub and the 2 dowel pins from the piston.



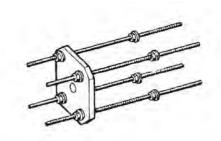
#### 02-507451

SmartPac support fixture - use to support the SmartPac vibrator shaft assembly to align the rear hub with the front hub.



#### 02-507452

Front bearing puller - use to remove the front main shaft bearing from the vibrator shaft.

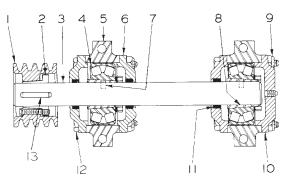




#### Standard Vibrator Shaft Assembly with Neoprene Seals

Need a new set or two of vibrator shafts? Besser vibrator shafts have neoprene seals at all bearing closures and quick detachable sheaves for easy maintenance. Neoprene seals allow grease expansion but prevent dirt and moisture from entering the bearing housing. Detachable sheaves allow quick replacement to maintain correct RPM of the vibrators.

Part Number	Pcs	Description
02-105905	1	Quick detachable sheave - 4.95 OD - "B" sec.
01594-000028	1	Tapered bushing - 1-15/16" bore
02-225070	1	Vibrator shaft - 1-15/16" diameter (15-5/8")
02-225071	1	Vibrator shaft - 1-15/16" diameter (17-5/8")
01503-000037	2	Bearing
02-011532	2	Bearing holder
02-225044	3	Inside closure (includes key 11)
02-202560	2	Locater pin - 5/16" diameter X 5/8" L
02-081553	2	Adaptor
02-087846	8	FLEXLOC nut - 3/8"
02-224908	1	Outside closure
02-086755	3	Neoprene seal
02-088027	8	Hex cap screw - 3/8" x 4" L
02-291893	1	Key - taperlock bushing
	02-105905 01594-000028 02-225070 02-225071 01503-000037 02-011532 02-225044 02-202560 02-081553 02-087846 02-224908 02-086755 02-088027	02-105905 1 01594-000028 1 02-225070 1 02-225071 1 01503-000037 2 02-011532 2 02-225044 3 02-202560 2 02-081553 2 02-087846 8 02-224908 1 02-086755 3 02-088027 8



#### **Vibrator Shaft Assembly without Weights**

Part Number	Description
02-256126	*15-5/8" long units
02-266818	*17-5/8" long units
02-340858M	*390 mm long units
02-340854M	*440 mm long units
*	brough 12

\*Includes keys 1 through 13

NOTE: 1) Vibrator shafts do not include weights.

NOTE: 2) Use royal purple grease on both AFC SmartPac and standard vibrators. Order Besser 02-114135 - 14 oz. tube.

# Vibrator Shaft with Quick Detachable Sheave & Bushing (for standard vibration only)

A Besser vibrator shaft with quick detachable sheave and bushing makes future replacement of worn sheaves quick and easy.

I dit Haiibei	Description
02-607066	Vibrator shaft with sheave and bushing (15-5/8")
02-607068	Vibrator shaft with sheave and bushing (17-5/8")
02-105905	Sheave only
01594-000028	Taperlock bushing kit - 1-15/16" bore
02-225070	Shaft only (15-5/8")

02-225070 Shaft only (15-5/8") 02-225071 Shaft only (17-5/8")



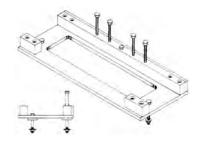
# Vibrator Shaft Fixture

Part Number Description

This rugged, precision made vibrator shaft fixture is a must on any workbench in plants that do not have a Besser mold jig, (page 55). This fixture accurately spaces the vibrator bearings and housings on both your 15-5/8" and 17-5/8" L vibrator shafts. Precision ground rails and accurately drilled and tapped holes insure correct spacing of the bearings.

#### Part Number Description

02-060303 Vibrator shaft fixture



#### Mold Insertion Device

The time needed to change molds is shortened and simplified with the mold insertion device. This pneumatically powered mechanism lifts/lowers the entire mold assembly off/onto the mold throat. The mold assembly is manually rolled into/out of the mold throat area.

#### Part Number Description

02-488007	Mold insertion device — all V3-12s
02-488006	Mold insertion device — Dynapac & Ultrapac (18-1/2" & 20-1/2" deep pallet)
02-488008	Mold insertion device — Ultrapac II (18-1/2" & 20-1/2" deep pallet)
02-490729	Mold insertion device — Ultrapac II (26" deep pallet)
02-481611	Mold insertion device — Superpac (18-1/2" & 20-1/2" deep pallet)



#### Mold Pallet Guides

Besser offers mold pallet guides in different sizes and styles to fit your needs. Mold pallet guides correctly position and hold the pallet under the mold during vibration. The chart below lists the standard mold pallet guides for various concrete products machines when using 3-7/8" or 8-1/4" high molds. A Quick Order Reference Guide For Mold Pallet Guides can be downloaded from www.besser.com/support.

Mold Pallet Guide Ordering Chart - 26" wide pallet				
Machine (mold)	LH Rear (E)	RH Rear (F)	RH Front (G)	LH Front (H)
V3M	02-050743	02-050743	02-050743	02-050743
V3R (3-7/8")	02-051021	02-051020	02-051020	02-051021
V3R (8-1/4")	02-050742	02-050741	02-050743	02-050743
V3-12 (3-7/8")	02-051021	02-051020	02-051020	02-051021
V3-12 (8-1/4")	02-050743	02-050743	02-050743	02-050743
Bescopac (3-7/8")	02-051021	02-051020	02-051020	02-051021
Bescopac (8-1/4")	02-050743	02-050743	02-050743	02-050743
Dynapac (3-7/8")	02-051021	02-051020	02-051020	02-051021
Dynapac (8-1/4")	02-418968	02-418968	02-418968	02-418968
Ultrapac (V4)	02-448619	02-448619	02-448619	02-448619
Superpac (V5)	02-421207	02-421207	02-421207	02-421207
Superpac (V6)	02-389522	02-389522	02-389522	02-389522



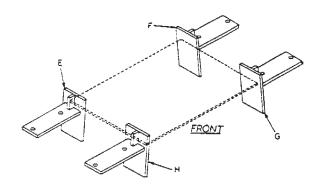




02-050743 RH & LH 02-418968 RH & LH

02-050741 RH 02-050742 LH

02-051020 RH 02-051021 LH



# Portable Mold Jig

The ruggedly built portable mold jig is one of the most useful tools ever designed for holding the mold while changing the liners, division plates, cores and vibrator shafts. When clamped in the jig, the mold can be revolved 360 degrees and locked in any one of eight positions. It holds the stripper head at workbench level for easy shoe changing. The precision rails hold three different lengths of (inch dimension) vibrator shafts, giving proper alignment of the bearings.

NOTICE: When using molds with SmartPac vibrator shafts attached, it is very important to properly balance the mold to help prevent POSSIBLE PINCH POINTS with rotation toward the operator. The additional length of the SmartPac shafts can cause this situation, if mold is not positioned properly.

Part Number	Description
02-472980	Portable mold jig for 3 AAT
	concrete products machines
02-440974	Portable mold jig for 4 AAT
	concrete products machines
02-386397	Portable mold jig for 6 AAT
	concrete products machines
02-383202	Indexing pin - 3/4" diameter
02-386399	Indexing pin - 1" diameter

Refer to Besser Service Bulletin, Portable Mold Jig at www.besser.com/support

NOTE: Portable mold jigs are built to accommodate the longer length of SmartPac weights.



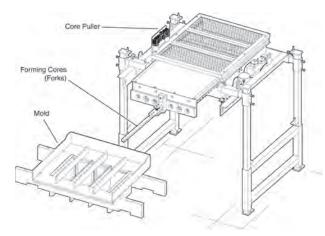


# Air-Operated Core Puller (Standard 5" Bore)

Expand your product line using this air-operated core puller. Many of the complex masonry units available on the market today feature horizontal openings that have been formed by this concrete products machine attachment. The shapes that can be made with a core puller are virtually limitless. Some examples are:

- cored brick, fabricated on edge with a wormed face, bark face or thumbprint face
- any type of concrete unit with side fake mortar grooves
- various retaining wall units with bottom key
- protrusion in water and erosion control block
- any type of unit with bottom key to match top edge key

Core pullers are comprised of a drawer, which is activated by twin pneumatic cylinders to which the tools (forming cores or "forks") required to form the horizontal cores are attached. The core puller is equipped with a ball bearing guide way system for reliable horizontal movement. The forming forks are mounted on spring pads in order to minimize transmission of vibration to the core puller mechanism. The shape and number of forks varies according to the design of the mold. A wheel and track mount is available for easy roll away. The operation cycle is approximately one second under 100 psi (7 bar) of air pressure.



NOTE: Special hardware and software are required for your concrete products machine's electrical panel in order to control the motion of the core puller.

Available in different sizes and strokes, the core puller can be engineered to fit any pallet size and most concrete products machines.

> Wheel and Track Mount

Part Number	<u>Description</u>
02-MT556790	Air-operated core puller
02-MT556808	Wheel and track mount
	for easy roll away (option 02)
05-504306	Use with Advanced Servo
	Vibration (ASV)

# Pin Type Mold Guidance System

This pin type mold guidance system controls the motion of the mold in horizontal directions. After the initial alignment of stripper head to mold, alignment is maintained cycle after cycle. This feature will reduce the wear on mold parts and shoes. The sets of parts numbers listed includes one left hand and one right hand lower support that fits on the mold side bars, enough for one mold. For other molds, it is necessary to order extra lower supports.

Key	Part Number	Pcs	Description	
1	02-399694	2	Support	9
2	02-081377	2	Retaining ring	8
3	02-399095	1	Nylon bushing	- 8
4	02-088062	2	Hex cap screw - 3/4" x 1-1/2" L	
5	02-395341	1	RH - pin guide support	5
	02-395342	1	LH - pin guide support	9
6	02-399097	1	RH - lower support	
	02-399099	1	LH - lower support	6
7	02-086507	1	O-ring 1/8" x 1 3/4" ID	The state of the s
8	02-386372	2	Replacement mold guidance pin, 12" for V6	
	02-395584	2	Replacement mold guidance pin,	5 @-2
			10-3/4" L for V3-12	4 0-3
	02-396372	2	Replacement mold guidance pin,	
			9-1/2" for V3-12	
9	02-215656	4	Hex mach bolt 3/4" x 14" L	
	02-641804		SOP V3-12 - Does not have autofeed with hand level	r
	02-641805		SOP V3-12 - With autofeed and hand lever	



# Lower Support Bars for Pin-Type Mold Guidance System

Key 1 = Lower support bars part number Key 2 = Retaining ring part number Key 3 = Nylon bushing part number

Key 1	Key 2	Key 3	70
(lower support)	(retaining ring)	(nylon bushing)	Description
02-389524	02-103187	02-440919	RH (for V6 - 18.047)
02-389526	02-103187	02-440919	LH (for V6 - 18.047)
02-395988M	02-081377	02-399095	RH (for V3 - 454 & 504)
02-395990M	02-081377	02-399095	LH (for V3 - 454 & 504)
02-397053	02-103187	02-440919	RH (for V6 - 20.047)
02-397055	02-103187	02-440919	LH (for V6 - 20.047)
02-399097	02-081377	02-399095	RH (for V3 - 18.047 & 20.047)
02-399099	02-081377	02-399095	LH (for V3 - 18.047 & 20.047)
02-432669	02-103187	02-440919	RH (for V6 - 504)
02-432671	02-103187	02-440919	LH (for V6 - 504)
02-434733	02-103187	02-440919	RH (for V6 - 454)
02-434735	02-103187	02-440919	LH (for V6 - 454)
02-444444	02-081377	02-399095	RH (for V3 - 554)
02-444446	02-081377	02-399095	LH (for V3 - 554)
02-465008M	02-081377	02-399095	RH (for V3 - 454 *OC)
02-465010M	02-081377	02-399095	LH (for V3 - 454 *OC)
02-465012M	02-081377	02-399095	RH (for V3 - 504 *OC)
02-465014M	02-081377	02-399095	LH (for V3 - 504 *OC)
02-465016M	02-081377	02-399095	RH (for V3 - 554 *OC)
02-465018M	02-081377	02-399095	LH (for V3 - 554 *OC)
Part Number	Description		
02-641805	Complete SOP to rewo	ork mold throat and fee	edbox track supports to work with pin type guides
	and autofeed with han		1 71 3
02-642369	Service SOP for pin-ty	pe mold guidance sys	tem (for V3R, V3-12, MK1 & MK2) SOP includes 02-399097 RH
			5656 bolt, 02-087871 hex nut and 02-087883 lock washer
02-386372	Replacement mold gui	idance pin — 12" L (fo	r V6)
02-395584	Replacement mold gui		

# Pin Supports for Pin-Type Mold Guidance System

Part Number	<u>Description</u>
02-420152	Pin support - for guiding mold assembly - RH (for service only, V6-12)
02-420155	Pin support - for guiding mold assembly - LH (for service only, V6-12)

Replacement mold guidance pin — 9-1/2" (for V3-12)

#### **Combo Units**

02-396372

With a combo unit, compressed air is filtered which helps to remove contaminates, regulated to maintain proper air pressure, and lubricated to help prevent internal damage providing longer trouble-free operation of air cylinders, air hoists, etc. Combo units are especially important on machines equipped with Bescodyne Drive units. Additional sizes and styles are available.

Part Number	<u>Description</u>
02-340383	Combo unit - 1/2" one lubricator, two regulators and two filters (for Vibrapac & Dynapac)
02-379983	Combo unit - 1/2" filter, regulator and lubricator (for air compaction device)
02-397043	Combo unit - 1/2" one lubricator, two regulators and two filters (for Dynapac)
02-380723	Combo unit - 3/4" filter, regulator and lubricator (for air compaction device on Dynapac)

© 2016 by Besser Company 57 BLOCK MACHINES





#### Pneumatic Control System for Bescodyne Vibrator Drive Units

Air pressure to the Dynapac, Ultrapac and five and six-at-a-time Superpac concrete products machines can be separately controlled by adding a regulator to each of the Bescodyne vibrator drive units. This pneumatic control system includes instructions for shifting the Bescodyne vibrators at lower operating pressures. The result is improved mold life, reduced wear on Bescodyne drives and smoother operation of concrete products machines.

Download service bulletin, Improved Pneumatic Control System for Bescodyne Vibrators, at www. besser.com/support.

#### Part Number Description

02-645656 Pneumatic control system for Bescodyne vibrator drive units

#### Replacement Components for V3R & V3-12 Vibrapacs Equipped with a Jack Shaft

Order a complete new assembly, as shown, or the necessary parts to rebuild your Jack Shaft. The rigid bearing design holds the shaft assembly in true alignment for longer life of components. Bearing and related parts are easily removed for servicing.

Part Number	Qty	<u>Description</u>
02-297379	1	Complete Jack
		Shaft assembly
Includes the fol	lowing	parts:
02-034566	1	Jack Shaft only - 3-1/4"
		round x 37-5/8" L
		(for V belt drive using
		Warner clutch/brake)
02-084086	1	Collector ring
02-101874	2	Magnet - 1525
02-101875	2	Armature - 1525
01242-000022	2	Retaining ring
02-218323	2	Splined armature adapter
02-218324	1	Splined double hub
02-222778	2	Adapter assembly

These miscellaneous Jack Shaft parts are available. Ask your Customer Service Representative for more information.

Part Number	Qty	Description
02-103541	2	Retainer plate
02-084988	1	Brush holder
02-084087	4	Brush spring



#### **Belt Tensioner**

2

The belt tensioner promotes the extended life of drive motor components on Dynapac, Ultrapac and Superpac concrete products machines and aids in maintaining consistent belt tension. SOP includes installation drawing.

#### **Part Number**

#### Description

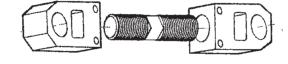
Collar

02-454053

02-245000

SOP to install belt tensioner for main drive motor on Dynapac, Ultrapac and Superpac concrete

products machines



Threaded Diameter	S. A. E. Grade 2	S. A. E. Grade 5
DIA		
1/4"	60 - 80 inch lbs	100 - 120 inch lbs
3/8"	20 - 30 ft lbs	30 - 40 ft lbs
1/2"	40 - 60 ft lbs	65 - 85 ft lbs
5/8"	90 - 110 ft lbs	140 - 160 ft lbs
3/4"	145 - 165 ft lbs	250 - 270 ft lbs
7/8"	165 - 185 ft lbs	420 - 440 ft lbs
1"	230 - 250 ft lbs	640 - 660 ft lbs
1-1/4"	500 - 520 ft lbs	1200 - 1250 ft lbs
1-1/2"	600 - 620 ft lbs	1400 - 1500 ft lbs

# **Torque Wrenches**

These high quality tools are a must when working with your block production equipment.

Part Number	Description
02-115179	1-1/2" drive Proto 6014 50-250 ft lb
	torque wrench
02-115180	1-1/2" drive Proto 6202A torque
	multiplier 750 ft lb torque wrench



#### Bescodyne Rapid Exchange Program - US Customers Only

Consider taking advantage of the Bescodyne Rapid Exchange Program the next time you find it necessary to rebuild your existing Bescodyne unit. To participate in this program please follow the following procedure:

- 1) When ordering indicate that it is for the Rapid Exchange Program.
- 2) You have 15 business days to return the old unit (there is a penalty of US \$250/day for late return). This applies to both programs.
- 3) Units must be returned in the special crate, marked "RETURN TO FORCE CONTROL" (Crate charge of US \$350 will be billed if not returned in this crate).
- 4) Returned units must be sent FREIGHT PREPAID.
- 5) All units carry a 90 day limited warranty, beginning on the day of shipment.

Contact your Besser Representative or the Customer Service Department by phone at +1.989.354.1000 or 1.800.530.9991.

#### Bescodyne Clutch/Brake

When servicing your Bescodyne make sure to use only:

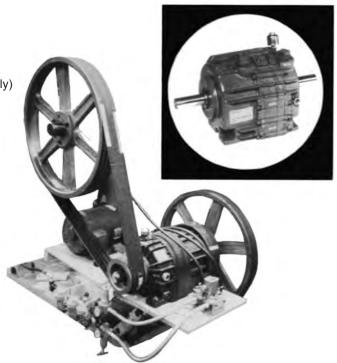
MULTI-PURPOSE ATF 210 AUTOMATIC TRANSMISSION FLUID AIR PRESSURES - 70 PSI for clutch; Use 50-55 PSI for brake.

Order the following set of parts that applies to your machine.

Part Number	Description
02-640548	SOP Bescodyne drive 60 Hz for V3R
02-640724	SOP Bescodyne drive 50 Hz for V3R
02-640549	SOP Bescodyne drive 60 Hz for V3-12
02-640550	SOP Bescodyne drive 60 Hz for V3-12A
02-640723	SOP Bescodyne drive 50 Hz for V3-12A
02-640551	SOP Bescodyne drive 60 Hz for V3-12B
02-640720	SOP Bescodyne drive 50 Hz for V3-12B
02-643554	SOP to use 28" OD sheave on pinion shaft for Dynapac drive
02-108170	Bescodyne drive Superpac 60 Hz - 20S Size
02-640206	Modification to add snap disconnect temperature switch for Dynapac
02-108678	Bescodyne vibrator drive size 10S for V6-12
02-106724	Bescodyne vibrator drive size 11S
02-105974	Bescodyne vibrator drive size 11SA for Dynapac
02-105588	Bescodyne vibrator drive size 5S for Dynapac
02-115220	14S Bescodyne
02-115887	14S Bescodyne minor overhaul kit
02-115878	14S Bescodyne major overhaul kit
02-639014	Major overhaul kit for 11S for Vibrapac
02-609404	Minor repair kit for 11S for Vibrapac & Dynapac
02-639901	Major overhaul kit for 5S for Dynapac
02-639900	Minor repair kit for 5S for Dynapac
02-639290	Major overhaul kit for 11S for Dynapac
02-609381	Convert 10S to 11S Bescodyne (for V3R and V3-12 only)
02-609362	Minor overhaul kit for 10S for Vibrapac & V6 Superpac
02-609363	Major overhaul kit for 10S for Vibrapac & V6 Superpac
02-641985	Minor overhaul kit for 20S drive for V6-Superpac
02-641986	Major overhaul kit for 20S drive for V6-Superpac
02-103916	Ross valve

NOTE: Besser has available a rapid one-day exchange program. Contact your Besser Representative for details. See above.

Customer must specify Bescodyne model



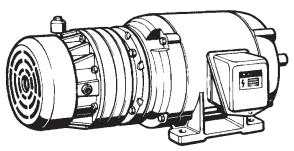


#### BESCOSTOP™ Brakes

#### Low Inertia Oil Shear Motor Brakes for Vibrator Drives

The Bescostop motor brake transmits torque by shearing fluid between multiple friction surfaces. The fluid cools and lubricates the friction surfaces for improved performance and longer service life. It also reduces engagement shock that results when dry friction type units are engaged. The multiple disc brake pack delivers high torque in low inertia package and has a much lower inertia than the previously used large diameter single surface dry friction units.

Brake portion of the system - Inertia with Bescostop low inertia oil shear motor brake is 3% versus inertia with old dry friction motor brake which is 24%.



Part Number	Qty	<u>Description</u>
02-646155	1	SOP to install Bescostop brakes on V3R, V3-12 and Bescopac concrete products machines
02-453232	1	Electrical modification & instructions to change from DC to AC powered vibrator brakes
02-113759	2	Brake - oil shear type
02-113763	1	Air filter and regulator - combination unit
02-437629F9303	1	Service manual Bescostop brake
02-113754	2	Major overhaul kit
02-113753	2	Minor overhaul kit replacement stack of brake discs
02-113807	2	One seal kit
02-113808	1	Control valve

#### Vibrator Motor Base Pivot Block

Observe the Vibrapac motor base plates during vibration. Worn pivot block and pivot shafts will not properly support the vibrator motors and can cause rapid V-belt and sheave wear. New nylon bushed pivot blocks are welded inboard of present blocks and will make your Vibrapac motor bases like new again. We suggest that new pivot pins be installed together with this set of parts.

Part Number	Description	PIVOT BLOCK	02 402025
02-603370	Vibrator motor base pivot blocks (V3 & V3-12)		02-492825 SOP to install
	(Includes quantity for both motor bases)		hand crank
02-310298	Instruction drawing		nano crank
02-310296	Pivot block with Nylon bushing		
02-310297	Nylon bushing only		
02-292818	Bronze pin - 1/4" diameter x 15/16" L		
	For new pivot pins, order:		
02-045311	Left hand pin - 1-1/4" x 26" L		
02-044765	Right hand pin - 1-1/4" x 24" L	NYLON BUSHING 2	





#### Vibrator Motor Air Bag Lift

The vibrator motor air bag lift is an easy and quick way to lift the vibrator motors for mold changes.

#### Standard Features

- The manual valve is located beneath the vibrator motor base plate on the operator's side which can be either left or right side of the machine. One valve operates both air bags.
- A needle valve is included to adjust the rate of air bag inflation.
- · A safety lockout device is included for maintenance.

SOP includes, support brackets, control valve assembly, air bags, hoses and fittings. A structural channel is included to protect the hoses that cross the front of the machine.

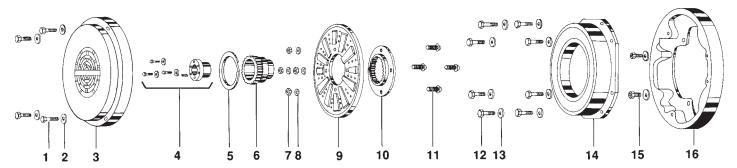
Part Number	<u>Description</u>
02-648256	All vibration (for V3-12)
02-648257	All vibration (Dynapac / Ultrapac II)
02-648662	All Vibration (Superpac)
02-115049	Replacement air bag

Contact your Besser Representative for vibrator motor air bag lift SOP for other Besser concrete products machines.



# Warner Vibrator Brake Assembly

Replace worn vibrator brake parts only with Besser parts. Serious accidents have occurred as a result of vibrator brake armatures breaking. The armature shown below is a safety design which is available only from Besser. This armature design is easily identified by a round hole in each of the four short flutes. Order and use these armatures only in pairs. These vibrator brake covers are made of cast steel and are available only from Besser. Aluminum brake covers should be immediately replaced with these cast steel brake covers to avoid serious injury that may result from armatures breaking.



Key	Part Number	Pcs	Description
	02-602710	1	SOP for Warner electric brake No. 1225
	Includes the follo	wing par	ts:
1	02-089614	4	Allen socket head cap screw - 1/4" x 3/4" L
2	02-087877	4	Lock washer - 1/4"
3	02-084322	1	Assembly cover
4	01594-400004	1	Browning bushing - 1-5/8" bore - type 2 with 3/8" x 7/16" x 1-7/8" L key, and 3 only
			of 5/16" x 1-1/4" L hex cap screws, and three - 5/16" lock washers
5	01241-000026	1	Spiro lox ring
6	02-218529	1	Splined hub
7	02-087870	4	Nut - 1/2"
8	02-087881	8	Lock washer - 1/2"
9	01599-400075	1	Armature
10	02-218528	1	Splined armature hub
11	02-089198	4	Parker-Kalon button head cap screw - 1/2" x 1-1/4" L
12	02-089626	8	Allen socket head cap screw - 5/16" x 3/4" L
13	02-087878	8	Lock washer - 5/16"
14	01599-400077	1	Magnet assembly - 90 Volt
15	02-089659	4	Allen socket head cap screw - 1/2" x 1" L
16	02-084321	1	Adapter
	02-609113	1	Auto gap accessory group

#### Auto Gap Accessory for Vibrator Motor Brakes

Auto gap accessory kits for the Warner armatures of vibrator motor brakes will extend the life of the armatures by providing proper running clearance when the armatures are not engaged. Each set of parts is sufficient for one Vibrapac and includes instructions for assembling the auto gap accessory.

**Part Number Description** 

02-609113 SOP for auto gap accessory for Vibrator motor brakes Includes the following parts:

02-324353 Instructions for assembly (1 piece)

02-105192 Auto gap accessory (5323-101-002) (2 pieces)

¢:=:3

#### Cam Shaft Bearing Seals

The cam shaft bearing felt seals have been replaced with lip-type polymer seals to improve performance. The seals prevent contamination and retain lubricants in the main cam shaft bearing helping to extend bearing life. Installation of the new bearing seals on V3-12s requires removal of the cam shaft.

<b>Part</b>	Number	Description

02-648065 SOP to install cam shaft bearing and closure with Garlock seal on V3-12

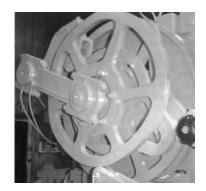


#### Feedbox Dual Cams for V3R & V3-12

Feedbox dual cams that control both the forward and reverse movements of the feedbox are standard on all V3R and V3-12 concrete products machines. Some of the important advantages are:

- 1. Elimination of feedbox spring or air cylinders.
- 2. Reduced air requirements if an air cylinder is replaced.
- 3. Reduced wear on the bull gear and pinion gear.
- 4. Reduced cam shaft bearing load.
- 5. Increased feed arm shaft and bushing life.
- 6. Increased feed cam life.
- 7. Provides positive control of all feedbox movements.
- 8. Reduces friction and increases machine speed.

This all adds up to less downtime, more production and an excellent return on investment. The set of parts includes new forward and reverse feed cams, new feed arm shaft, new pallet moving shaft, cam shaft extension, tie bar, bearings and necessary hardware. Identify the serial number of your machine and order your set of parts for feedbox dual cams today.



Part Number	<u>Description</u>
02-641954	Feedbox dual cams for V3R (give serial number of machine)
02-639761	Feedbox dual cams for V3-12 (serial number up through 531 excluding No. 527)
02-639767	Feedbox dual cams for V3-12 (serial number 527, 532 and up)
02-640043	Feedbox dual cams (eliminates single arm up thru serial number 215)
02-640044	Feedbox dual cams (eliminates forged right hand arm serial number 216 through 236)
02-639935	Feedbox dual cams for all V3-12D machines using 26" x 26" square pallet

#### V3-12 Pinion Shaft Assembly Installation with Locking Assembly

Easily remove and replace the pinion on your V3-12. Besser has a locking assembly for the V3-12 pinion shaft and gear which is interchangeable on all V3-12 concrete products machines. A description of installation follows:

Install the shaft assembly in the machine and tighten the bearing caps. Apply pressure to the drive end of shaft (pulley end) to assure that the shaft is fully seated against inner race. Slide pinion gear and locking device on the shaft. Use tool 02-467006 to make sure the shaft is seated to the bearing and pinion is tight against spacer. Then tighten the locking device per instructions enclosed in the package. These instructions titled, "Installation and Removal Instructions for Series B-112 Locking Assemblies," are in the shipping box or view V3-12 Pinion Shaft Assembly Installation with Locking Assembly at www.besser.com/support.



Fig. 1 - View of old style pinion



Fig. 2 - View of the locking assembly



Fig. 3 - View of new pinion with the new locking assembly

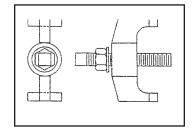


Fig. 4 - Tool 02-467006 torque to 90 ft lbs, (135 newton-meters)

Part Number	Otv	Description
Fart Number	Qty	Description
02-467006	1	Pinion loading tool
02-464229		Pinion shaft assembly
Includes the following parts:		
02-114289	1	Locking assembly
02-464228	1	Pinion - 16 tooth - 200 degree pressure angle
02-016700	2	Bearing spacer
02-016698J0010	2	Closure - sub-assembly
01503-000003	1	Fafnir bearing

Part Number	Qty	Description
02-016699	2	Inside bearing retainer
02-464227	1	Shaft
02-446624	1	Tubing - sub-assembly
02-110226	6	Hex head cap screw -
		1/2" x 2-1/4" L
01211-400002	6	Hex nut - 1/2" - 13 N.C.
01233-400001	6	Lock washer - 1/2"
01503-000021	1	Fafnir bearing - No. 215W
02-112161	1	Hex key - 6 mm



#### **Hunting Tooth Bull Gears & Pinions**

The Hunting Tooth bull gear for the V3-12 is similar to the Dynapac-style gear. It includes 133 larger teeth rather than the 160 smaller teeth previously used. Periodic bull gear indexing provides more even wear on the gears and conversely will have longer usage. Along with the more even wear on the bull gear, with indexing, the pinion also has 13 teeth which are larger and is continuously changing with the start and stop of the bull gear; this gives even wear around the pinion because the pinion indexes to a different tooth each time it stops/cycles.

When converting over to the new Hunting Tooth style bull gear, it is required that the pinion is also changed. The following bull gears can be replaced with the Hunting Tooth gears:

160 tooth to change to 133 teeth, depending upon which bull gear you have.

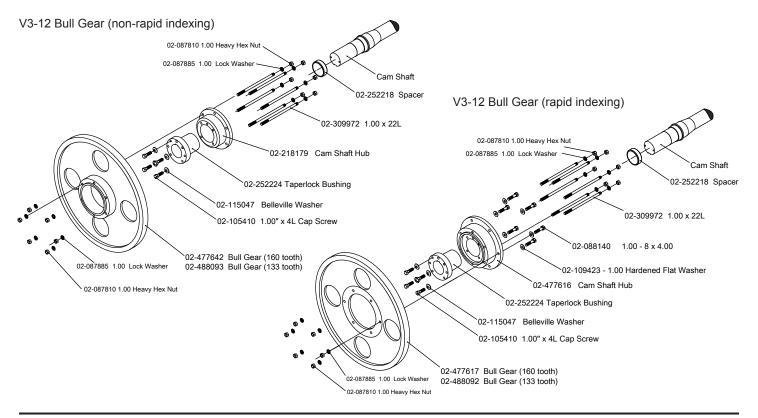
160	133	
02-477642	02-488093	This IS NOT rapid indexing -
		cams need to be removed
02-477617	02-488092	This IS rapid indexing -
		cams do not have to be removed

Non-Indexing (477642 / 488093)



Indexing (477617 / 488092)

See the following print when ordering the gears: 484208 for torques

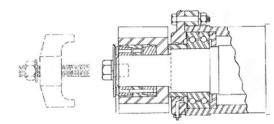


# **Hunting Tooth Pinions**

The pinions are offered in two styles of 13 teeth Hunting Tooth. They are:

02-488089 with smooth bore pinion for use with locking assembly - see drawing 464229

02-488090 with splined gear inside - see drawing 266857















SHAFT



#### Bearing Cap Stud Bolts

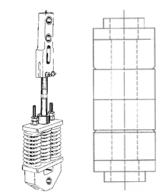
Part Number	Description	Part Number	Description
02-234538	1" x 9" L	02-234542	1-1/4" x 15" L
02-234539	1" x 11" L	02-253628	1-1/4" x 17" L
02-054332	1" x 11-1/2" L	02-309972	1" x 22" L
02-023864	1" x 12-1/2" L	02-087810	Hex nut - 1"
02-023863	1" x 15-1/4" L	02-087885	Lock washer - 1"
02-237363	1" x 16" L	02-087812	Hex nut - 1-1/4"
02-234540	1-1/4" x 12-1/2" L	02-087887	Lock washer - 1-1/4"
02-234541	1-1/4" x 14" L	02-253736	Keeper - 1-1/4"



# Triple Spring Link Assembly

This three spring pallet receiver link assembly is specially designed for the model V3R and V3-12 Vibrapacs. The triple spring link assembly assures contact between the pallet and mold during vibration and stripping. Heavy duty link rods add strength and the fully adjustable link ends allow a full range of adjustments for various height attachments. Less initial spring tension exists but the spring rate is increased to provide added support for heavy attachments, especially for the brick mold.

Part Number	Description
02-284898	Triple spring link assembly (2 req'd)
02-029375	Spring only - 5-1/8" OD x 12-7/8" free length (3 req'd)
02-366116	Spacer - 1" ID x 11" long (2 req'd)
02-283835	Lower spring support - 1-1/2" thick (1 req'd)
02-467413	SOP - boot for pallet receiver spring - spacer - for V3-12 & Dynapac



#### Anti-Friction Roller

before installation.

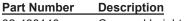
This special high load, thrust bearing anti-friction roller completely interchanges with the present roller assembly on the feed arm shaft of the Vibrapac concrete products machine. Larger rollers improve feedbox operation and give smoother tracking on the cam. The set of parts listed below includes longer link rods for the feedbox, special roller, pin and spacers.

Instructions are included for mounting and for pre-lubrication of the roller assembly

Part NumberDescription02-607155SOP for anti-friction roller for V3M, V3R and V3-1202-602762SOP for anti-friction roller for V3-12A and V3-12B

# Crowned Height Pin Cap

Crowned height pins are standard on all new Besser concrete products machines and are available as an enhancement to existing Besser concrete products machines. Crowned height pins eliminate the build up of dust and dirt on the height pins so that machine efficiency is maximized. The crowned height pins are directly interchangeable with standard height pins, part number 02-339674.



02-488140 Crowned height pin (2 req'd)

# 900

# Adjusting Screws and Dowel Pins

The hex head permits the use of a socket wrench for easy adjustment. Flame hardened tips assure long service.

Part Number	Used On
02-076117 - 1/2" tip	Pallet feeder
02-075221 - 5/8" tip	Mold locks
02-075820 - 5/8" tip	Stripper head
02-076118 - 1/2" tip	Vibrator motor support
02-076116 - 1/8" tip	Feedbox
02-076119 - 5/8" tip	Pallet receiver
02-076416 - 5/8" tip	Pallet receiver
02-447348 - plain tip	Stripper head frame (mold change device)



#### Removable Dowel Pins

Part Number	Used On
02-076260 - 1" tip	Pallet receiver
02-076259 - 5/8" tip	Pallet receiver
02-211810 - 1" tip	Stripper head
02-212917 - 5/8" tip	Stripper head
02-212918 - 5/8" tip	Pallet receiver



#### Air Compaction Device - Stripper Head Frame

This air compaction device helps keep the mold from bouncing. It will save on repair costs and reduce wear on your mold parts by decreasing the finish time. Save up to 1 second of finish time during each cycle and produce the same or an improved quality product. This amounts to a product increase of up to 150 concrete masonry units per hour! Twin cylinders mount on supports on the concrete products machine where they apply pressure to the stripper head frame during finish time. This allows the material to be compacted more rapidly, resulting in greater concrete unit strengths in less time. This air compaction device design allows it to be used on all height molds.

Part Number	Description
02-640506	Air compaction device for
	V3-12A, B, C, D & F
02-639964	Air compaction device for V3R with
	autofeed (for V3R without auto feed
	control, order numbers 02-639964 &
	02-639190)
02-640532	Air compaction device for V3-12 with
	26" square pallet
02-640144	Air compaction device for Dynapac
02-106370	Solenoid valve assembly for V3-12
02-105445	Pilot service kit
02-106094	Valve service kit
02-284898	Triple spring link assembly for pallet
	receiver frame
02-369507	Air compaction cylinder (V3-12)
02-462554	Electrical modification to reduce
	rod wear

Extend the life of your air compaction cylinders with this SOP and save money. These parts mount onto the end of each cylinder rod where contact is made with the stripper head frame, absorbing much of the vibration that typically travels up through the rod and into the cylinder.

Part Number	Description
02-114116	Sandwich mount rubber -
	3-1/8" diameter
02-462703	Rod adapter
	1 2 1 2 1
	180

**NOTE:** The concrete products machine should be equipped with triple spring link assemblies on the pallet receiver frame before installing the air compaction device. Air compaction requires approximately 18 standard cubic feet of air per minute (SCFM).

# Square Slide Shafts

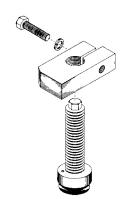
Part Number	Description
02-603238	SOP for 3" square slide shafts (installation
	instructions are included)
02-228320	Slide shaft for V3R, 3" x 3" x 101-3/4" L
02-240553	Slide shaft for V3-12, 3" x 3" x 106-1/2" L
02-318940	Slide shaft for Dynapac, 4" x 4" x 110-1/4" L
02-464927	Slide shaft for Ultrapac, 4" sq x 113-3/16" L
02-386040	Slide shaft for Superpac, 4" sq x 118-3/16" L



# Shock Absorbers for Stripper Head Frame

These shock absorbers are standard equipment on the V3R and V3-12 Vibrapac concrete products machines and are easily adaptable to many old style frames. Just weld the clamp blocks in position on your stripper head frame according to the instructions supplied. The clamp block is threaded to accept the adjusting screw that contains the pad. The cap screw positively clamps the adjusting screw at the desired setting. These shocks are easily adjusted for all mold height ranges.

Part Number	Description
02-607123	Shock absorber for stripper head frame (Vibrapac)
02-242272	Rubber pad 3" diameter (black - 2 req'd)
02-282177	Shock absorber - V2-H 3" diameter x 18 1/2" L (includes 02-242272 pad)
02-356439	Rubber pad - V4 5" diameter (2 req'd)
02-242269	Shock absorber 3" diameter x 10-3/4" L
02-253727	Shock absorber 3" diameter x 8-3/4" L



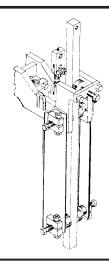
© 2016 by Besser Company 65 BLOCK MACHINES



# Weld-on Uprights for the Stripper Head Frame

This set of parts includes one left hand upright, one right hand upright and one strap. To install these uprights, remove the damaged uprights and grind the surfaces smooth. Use the pin to line up the holes in the upright with the side bar holes in the frame. Shim or grind to obtain a good fit between the upright and side plate. Then weld the uprights in place, check for square, and weld the strap across both uprights.

Part Number	<u>Description</u>
02-643812	SOP to weld-on uprights for stripper head frame on a V3-12
02-423822	Instructions to weld-on uprights
02-347658	Front upright - LH
02-347657	Front upright - RH
02-066602	Strap



02-500078 -

# V3-12 Bolt-On Uprights

#### Converting from weld-on to bolt-on uprights

02-466335 Set of parts - bolt-on uprights (V3-12)

Part Number	Description
02-466334	Front upright
02-466333	Rear upright

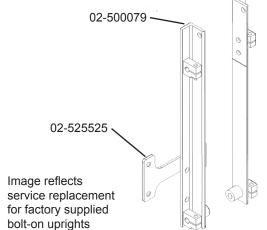
02-537572 Tie bar strap (3.00" x 16.50") – 2 bolt

Service replacement uprights for stripper head frame 02-500084 supplied from the factory with bolt-on uprights (shown).

Part Number	Description
02-500078	Rear upright
02-500079	Front upright
02-525525	Upright spreader - 4 bolt

Block Adjustment Screw for Stripper Heads & Pallet Receiver Frames

Part Number	Description
Stripper head frame	e - For service only
02-040574	V3
02-395952	V3-12 and Dynapac
Pallet receiver fram	ne - For service only
02-054994	V3
02-424985	V3-12





#### **Bounceless Shock Absorber Pads**

These bounceless shock absorber pads are interchangeable with the standard rubber pads found on the stripper head adjustable shock absorbers, upon installation of steel supports. These bounceless absorber pads will cushion the stripper head frame at the end of its travel and will reduce the impact that is transmitted to block delivery. The bounceless shock absorber pads rest upon the steel supports.

Part Number	<u>Description</u>
02-609340	SOP bounceless shock absorber pads - includes an
	instruction drawing for creating the steel supports.
02-345887	Bounceless pads 3" diameter (replacement)



#### Anti-Deflection Screw

Molding of dense units requires additional strength for the stripper head plate to prevent flexing. The anti-deflection screw and support block mounts within the stripper head frame to provide extra support at the middle of stripper head plate. This allows the stripper shoes to remain level for all compartments which results in units with more uniform height and width and will increase the life of mold components.

Part Number	Description	
02-609006	SOP to install anti-deflection screw - V3-12 instructions drawing 02-314903	
02-647245	SOP to install anti-deflection screw - Dynapac instructions drawing 02-470805	
02-491705	Anti-deflection screw - Ultrapac (up to 7-5/8" units)	* \
02-468360	Adjustment wrench (for anti-deflection screw on Ultrapac)	

#### **Guide Liners**

These super size liners increase the contact surface on the slide shaft to decrease wear. The hardened steel bushing in the back of the liner resists elongation. These liners perform satisfactorily with a minimum of lubricant.

Part Number	Description	and the	100 A 60
02-464277	3" guide liners for Dynapac and Ultrapac		
02-307098	4" guide liner for V3R and V3-12		- 2000
02-320460	5" guide liner for Dynapac and Ultrapac		

#### Mold Throat Liners & Mold Lock Liners

When surfaces of present mold throat adapter pieces become worn, insist on a replacement composed of Nytex. This wear resistant material adds longer life to surfaces of mold side bars and reduces noise levels.

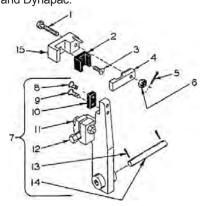
Part Number	Description	
02-239614	Mold throat Nytex liner only (spare) - key 1	
02-089689	Socket head cap screw - 3/4" x 2" L - not shown (bolts liner to throat liner)	3
02-328472	Front mold lock fiber liner-key 2	
	(includes bushing - 5/8" ID x 1" OD x 5/8" L - part number 02-214556)	3 2
02-293576	Mold throat blocking - key 3	2
		· ( Company of the co



#### Mold Lock Assemblies for V3Rs, V3-12s and Dynapacs

High production of quality units and trouble-free service from machine parts requires the mold box be held in constant alignment, and we have the replacement parts to do this job. The complete set of parts replaces worn mold locks and latches for both sides of the Vibrapac. Hardened steel inserts resist wear and make future replacement inexpensive. Both the latch and lock are made heavier for added support. New guides must be located and welded in place. These mold lock assemblies can be used on the V3R, V3-12 and Dynapac.

Part Number			<u>Description</u>	
02- 603381			SOP to install mold lock assemblies (for both sides)	
Key	Part Number	Qty	Description	
1	02-022447	2	Cap screw - 3/4" x 5" L	
2	02-313895	2	Hardened steel insert for guide	
3	02-089638	2	Socket head cap screw - 3/8" x 1" L	
4	02-313891	1	RH latch	
	02-313892	1	LH latch	
5	02-089753	2	Cotter pin - 3/16 x 1-1/2" L	
6	02-087849	2	Castellated nut	
7	02-313903	1	RH mold lock ass'y (includes keys 8 through 14)	
	02-313901	1	LH mold lock ass'y (includes keys 8 through 14)	
8	02-089637	2	Flat socket head cap screw - 3/8" x 3/4" L	
9	02-088523	2	Flat socket head cap screw - 3/8" x 1-1/4" L	
10	02-313894	2	Wear plate	
11	02-088069	2	Hex head cap screw - 3/4" x 3-1/2" L	
12	02-075221	2	Adjusting screw 1-1/4 x 5" L	
13	02-089778	4	Cotter pin - 3/8" x 2"	
14	02-017232	2	Pin - 1" x 7-1/4" L	
15	02-313897	1	RH guide with insert	
	02-313896	1	LH guide with insert	



NOTE: 02-645856 SOP to install mold lock assembly on machines using pin type mold guidance.

#### Resilient Mold Throat Insert

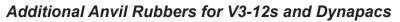
Renew worn areas in the machine throat by installing these resilient inserts. Set of parts 02-603337 includes the necessary items to install resilient inserts in the mold throat areas of Besser concrete products machines. Worn areas are burned out and the new fully machined holders are inserted and welded according to the furnished instructions. Level adjustments of the mold assembly are once again obtained and when the mold is set down during stripping action, noise and shock are reduced. The urethane insert may be individually replaced.

# Part Number Description

02-603337 SOP to rework mold throat for use with resilient mold throat insert (for V3R serial No.1090 and above and all V3-12 series machines)

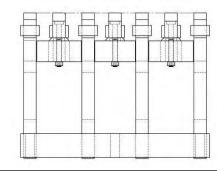
#### **SOP Includes:**

Part Number	Qty	Description	
02-212588	2	Plate (not shown)	
02-293381	2	Holder	
02-293383	2	Holder sub-assembly	
02-293384	1	Mold throat extension RH	Ţ
02-293385	1	Mold throat extension LH	l
02-373688	4	Resilient insert	
02-376771	1	Mold throat extension RH (for V3-12F and above)	
02-376770	1	Mold throat extension LH (for V3-12F and above)	
02-373688		Urethane insert only (for V3R serial No.1090 and above and all V3-12s)	ļ
02-321149		Urethane insert (for Dynapac, V4, V5 & V6)	
02-448803		Urethane insert (for Ultrapac model V4-26D and model V4-26D-2)	



Adding six additional to rubbers to the anvil of your Vibrapac or Dynapac will provide additional support for the pallet during production. The SOP includes the attaching blocks, the rubber block retainer, rubbers and all necessary fasteners.

02-522181 V3-12 Vibrapac 02-522365 Dynapac

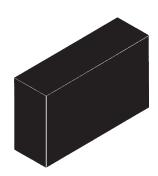




#### Pallet Receiver Rubbers

The durometer of hardness of the pallet receiver rubbers will affect the smoothness of machine operation. Because of different mold and material weights and speed of the machine, it is often necessary to change to a different durometer of pallet receiver rubbers.

	Part Number	<u>Description</u>
For V3M	02-252265	Rubber - 1" x 3" x 5" L - 50 durometer (soft)
	02-017564	Rubber - 1" x 3" x 5" L - 60 durometer (hard)
For V3R,	02-252266	Rubber - 1-1/2" x 3" x 5" L - 50 durometer (soft)
V3-12, V4,	02-028777	Rubber - 1-1/2" x 3" x 5" L - 60 durometer (hard)
and V6	02-353427	Oil resistant rubber - 1-1/2" x 3" x 5" L - 60 durometer (hard)
For Bescopad	2 02-362209 02- 028777 02- 362207 02- 362208	Complete set of pallet receiver rubbers (includes parts shown below) Rubber - 1-1/2" x 3" x 5" L - 60 durometer (hard) (10 req'd) Rubber - 1-1/2" sq x 4" L (spacer) - 60 durometer (hard) (8 req'd) Rubber - 1-1/2" sq x 5" L (spacer) - 60 durometer (hard) (2 req'd)



# Adjustable Apron Plate for V3-12, Dynapac and Ultrapac

The adjustable back apron plate allows adjustments to the apron plate to be made from the rear of your concrete products machine. Using two heavy-duty links, adjustments can be made quickly and easily. Installation of this apron plate eliminates the tedious work of removing the apron plate screws while lying beneath the machine. These screws have been replaced by spring loaded friction fasteners which are adjusted as the links are manipulated. Increase the effciency of your operation by making apron plate adjustment simpler.

		Бупарас	
V3-12		Part Number	Description
Part Number	Description	02-500001	SOP to install adjustable apron plate
02-647189	SOP to install adjustable apron plate	Replacement A	Apron Plate Assembly
Includes:		02-500003	Back apron plate assembly (includes inserts)
02-466988	Adjustable apron plate assembly	02-078286	Front insert
02-467001	Instructions and installation drawing of	02-500012	Rear insert
	adjustable apron plate six spacers	Ultrapac	
Options:		02-504950	SOP to install adjustable apron plate
02-051616	Hardened wear strip	02-477634	Plug- 2 sq x 6-5/8"
02-492808	Deluxe apron plate with removable inserts	02-439017	Apron plate wearing piece
02-377344	Front insert (manganese)	02-439014	Insert
02-492806	Rear insert (manganese)	02-504952	Back apron plate
02-504962	One piece manganese plate		
02-466987	Apron plate with single insert		

#### Back Apron Plate with Removable Insert

The back apron plate with removable insert will speed changeover time for header attachments. The inserts are easily changed without blocking or removing the feedbox. When ordering header inserts, be sure to state the size of unit, and the depth and width of the cutouts. Additional sizes and styles are available.

Part Number	Description	
02-078287	Back apron plate with plain removable insert	
02-078286	Plain removable insert for regular unit	
02-233375	Back apron plate insert (ramp type) 7-5/8" W x 3-5/8" H units	
02-439019	Back apron plate with plain removable insert (for V4 machines)	
02-439016	Back apron plate with high manganese removable insert (for V4 machine)	
02-488087	Plain removable insert (for Ultrapac machines)	
02-439017	Back apron plate wearing piece (for Ultrapac machines)	
02-386266	Back apron plate with removable plain insert (for V6-12 machines)	
02-386270	Plain removable insert (for Superpac machines)	
02-386271	Hardened wear strip	
02-386447	Plug	



#### **Back Apron Wearing Plate**

Concrete products plants interested in minimizing maintenance and downtime costs have selected our back apron plates. As much as five times more production life can be gained, even when using the most abrasive aggregates. The Besser back apron plates are furnished with a hardened replaceable wear strip on the front edge to help reduce spillage and wear and they are painted blue for easy identification. Also available is the standard hardened back apron plate (slotted) made of

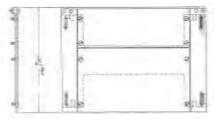
scientifically heat treated alloy material to give longer service. This plate is also fitted with the hardened wear strip on the front edge to help reduce spillage.

Part Number	Description
02-229492	Complete back apron wearing plate assembly - manganese
	(Includes items a and b listed below)
	a) 02-229491 Back apron wearing plate - Special manganese
	for use with hardened front wearing piece (painted orange for
	identification)
	b) 02-051616 Wear strip (replacement)
02-051617	Alloy back apron wearing plate (slotted), Standard one piece with wear strip
02-088066	Hex head cap screw - 3/4" x 2-1/2" L with nut & lock washer
02-379284	Back apron wearing plate - slotted (for Dynapac)
02-462701	Back apron wearing plate - one piece (for Ultrapac)

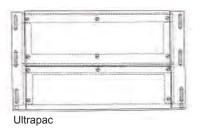
# **Deluxe Apron Plates**

This deluxe apron plate assembly design offers reversible front and rear inserts and interchanges with all apron plates for 3 and 4 AAT machines. Other features include independent adjustments of hardened inserts, rigid support member for lifetime service and quick insert removal for reversing or replacement. This apron plate assembly accepts all special inserts for header and ramped mold attachments and includes a hardened front wear strip. All of the following deluxe apron plates can be used with the mold pin guidance system.

Part Number	Description	
02-378180	Deluxe apron pla Includes:	te with removable inserts for V3R and V3-12
	02-377344	Front insert (manganese)
	02-377343	Rear insert (manganese)
	02-051616	Hardened wear strip
02- 309053	Deluxe apron pla Includes:	te with removable inserts for V3R and V3-12
	02-078286	Front insert
	02-309052	Rear insert
	02-051616	Hardened wear strip
02- 319633	Deluxe apron pla Includes:	te with removable inserts for Dynapac
	02-078286	Front insert
	02-319631	Rear insert
	02-051616	Hardened wear strip
	02-377344	Front insert (optional - manganese)
	02-404081	Rear insert (optional - manganese)
02- 490753	Deluxe apron pla Includes:	te with removable inserts for Ultrapac
	02-488087	Front wear strip
	02-490749	Rear wear strip
	02-439017	Hardened wear strip



V3R, V3-12, Dynapac

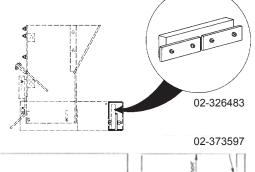




# Hopper Loose Back Plate

This special design heavy-duty hopper loose back plate is made heavier to eliminate spillage off the rear of the back top plate. The increased weight and thickness of plate provides greater contact and prevents material from working beneath the back top plate. Extra thickness gives greater strength and helps confine material in the feedbox for delivery to mold. Additional sizes and styles are available.

Part Number	<u>Description</u>
02-609129	SOP for hopper loose back plate for V3-12
02-373597	Loose back plate - hopper - heavy-duty - assembly
02-438967	Heavy-duty for Ultrapac (V4)
02-324303	For Dynapac (not heavy-duty)

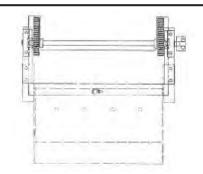




# Rack and Pinion Hopper Gate for Dynapac

The rack and pinion hopper gate makes adjustments quick and easy. This design improves the accessibility and ease of movement of the front hopper gate and is simple to install

Part Number	<u>Description</u>
02-646682	Rack and pinion hopper gate (for 29" wide pallet)
02-647269	Rack and pinion hopper gate (for 26" wide pallet)



# Adjustable Hopper Gate Mechanism

Make more quality concrete products faster - install our adjustable hopper gate mechanism to quickly regulate the exact amount of material carried in the feedbox of your Vibrapac. This adjustable hopper gate mechanism mounts to the Vibrapac in minutes without interfering with mold changes or operation of the automatic feed control. Removal of the locking pin permits quick change of gate in a wide range of heights. By controlling the correct amount of aggregate in the feedbox, a reduction in material spillage will result and less energy will be needed to operate the machine.

#### Gate not included.

Part Number	Description
02-609298	SOP to install adjustable hopper gate mechanism



### **Hopper Gates**

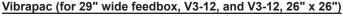
Gates are available in three designs to suit various feed conditions.

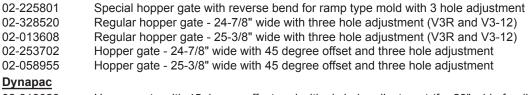
- 1. Regular gate is used primarily for production of regular block and slabs.
- 2. Gate with a 45 degree offset allows more material at the front of the mold.
- **3. Gate with a reverse bend** proves helpful in regulating material over low height molds. Selection of the proper gate can reduce spillage and allow greater production.

#### Part Number Description

#### Vibrapac (for 29" wide feedbox V3 and V3R)

02-253581 Hopper gate with 45 degree offset for 11-5/8" high units with 5 hole adjustment





02-319028
Hopper gate with 45 degree offset and with six hole adjustment (for 29" wide feedbox)
02-326527
Hopper gate with 45 degree offset and with six hole adjustment (for 32" wide feedbox)

O2-368516 Hopper gate with 45 degree offset and with six hole adjustment 19-1/4" overall height dimension (for 29" wide feedbox)

O2-423811 Hopper gate with reverse bend with nine hole adjustment 22-1/4" overall height dimension (for 29" wide feedbox)

O2-368515 Regular hopper gate with six hole adjustment (for 29" wide feedbox)

02-368515 Regular hopper gate with six hole adjustment (for 29" wide feedbox)
02-532164 Regular hopper gate with none hole adjustment (29" wide feedbox)

Superpac

O2-421536
O2-386354
Regular hopper gate with six hole adjustment (for 42" wide pallets) (for 45" wide feedbox)
Regular hopper gate with six hole adjustment (for 55" wide feedbox)
Hopper gate with reverse bend to inside of machine with six hole adjustment (for 55" wide feedbox)

02-401420 Regular hopper gate with six hole adjustment (for 20" x 52-3/4" lower hopper) (for 57" wide feedbox)

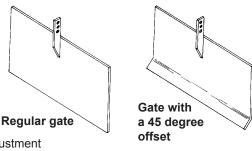
Ultrapac I & II

02-438961 Regular hopper gate with six hole adjustment (for 41" wide feedbox)
02-503028 Hopper Gate with reverse bend with six hole adjustment (for 41" wide feedbox)

### Pallet Finger and Pallet Cradle

Replace fingers and cradles with this new style is to create clearance between the pallet moving bars and the vibrator bearing housing bolts. This clearance is necessary when producing 3-5/8" high units but is not necessary for higher units. If you are not producing 3-5/8" high or lower units, your concrete products machine can be operated with the old style fingers and cradles or with the new style fingers and old style cradles. The pallet fingers and cradle assemblies listed below are raised 1/4" on the bars. This allows the bars to be adjusted down 1/4" to clear the bolts. Never operate your machine with old style fingers or cradles on one side and new style fingers or cradles on the other side because both incoming and outgoing pallets would not be level.

Part Number	Qty	Description			
V3-12 Vibrapac					
02-253509	2	Fingers for pallet support			151
02-448857	5	Hose only - (5 per support assembly)			
02-271160	1	Cradle for pallet support - RH			
02-271159	1	Cradle for pallet support - LH			
<u>Dynapac</u>			Part Number	Qty	<u>Description</u>
02-641730	1	SOP for pallet finger & pallet cradle	Ultrapac V-4 38	-1/2" x 18	3-1/2" Pallet
02-388848	2	Finger assembly	02-452328	2	Finger assembly pal placing bar 38-1/2
02-388850	1	Cradle assembly - RH	02-448857	5	Hose only - 5 per finger assembly
02-388851	1	Cradle assembly - LH	02-452329	1	Cradle assembly - RH pallet moving
02-318139	2	Nylon V-guide	02-452330	1	Cradle assembly - LH pallet moving
Ultrapac (V4) 37	"" x 18-5	/8" Pallet	Superpac (V5)	42-5/8" x	26" Pallet
02-438972	2	Finger assembly	02-485349	2	Finger assembly - V5/V6-26D
02-438970	5	Hose only - 5 per finger assembly	02-485448	5	Hose only - 5 per finger assembly
02-440984	1	Cradle assembly - RH pallet	02-485435	1	Cradle assembly pallet support - RH
02-440985	1	Cradle assembly - LH pallet	02-485436	1	Cradle assembly pallet support - LH
Ultrapac (V4) 37	′-3/4" x ′	18-1/2" Pallet	Superpac (V6)	52" x 18-	<u>1/2" Pallet</u>
02-438972	2	Finger assembly	02-386148	2	Finger assembly
02-438970	5	Hose only - 5 per finger assembly	02-386150	5	Hose only - 5 per assembly
02-438974	1	Cradle assembly - RH	02-386152	1	Cradle for pallet support - RH
02-438975	1	Cradle assembly - LH	02-386156	1	Cradle for pallet support - LH

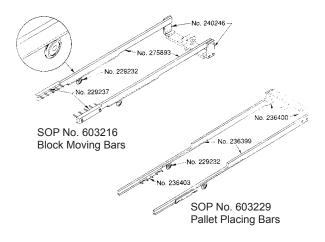




### Block Moving and Pallet Placing Bars

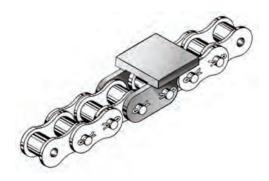
The block moving and pallet placing bars guide pallets from point of pickup to delivery on front conveyor belts. V-rollers prevent the bars from spreading. Block moving and pallet placing bars are kept in alignment for on-the-spot positioning of pallets during each cycle. The bars are designed with replaceable finger sections to allow adjustments for level handling of pallets. Prevent spilled pallets by installing block moving and pallet placing bars today.

Part Number	Description
02-603216	SOP block moving bars with removable front sections
	and Vee Guide Rollers - V3R Serial No. 882 and up
Includes the follow	ving parts:
02-229232	Vee roller (2 req'd)
02-275893	Block moving bar (2 req'd)
02-240246	Block moving plate (2 req'd)
02-229237	Support - front section - fingers (2 req'd)
Part Number	Description
Part Number 02-603229	Description SOP Pallet placing bars with removable sections and
	SOP Pallet placing bars with removable sections and Vee Guide Rollers - V3R No. 882 and up
02-603229	SOP Pallet placing bars with removable sections and Vee Guide Rollers - V3R No. 882 and up
02-603229 Includes the follow	SOP Pallet placing bars with removable sections and Vee Guide Rollers - V3R No. 882 and up wing parts:
02-603229 Includes the follow 02-229232	SOP Pallet placing bars with removable sections and Vee Guide Rollers - V3R No. 882 and up wing parts:  Vee roller (2 req'd)



### Deluxe Lug Link - One Piece

This solid one piece lug link, made from special hardened steel, gives greater pallet contact surface for more positive delivery of pallets. It interchanges with the old-style two piece design for models V3R and V3-12 Vibrapacs. These links will not work on V3M or Stave machines that have sprockets that mesh with the outside surfaces of the conveyor chain. Full hardness over entire lug link gives strength to top and sides and eliminates pin hole elongation. These lug links are standard on concrete products machines.

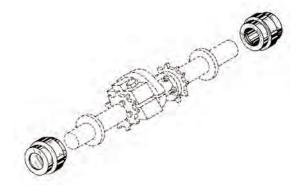


Part Number	Description
02-290170	Deluxe lug link assembly (includes 02-019795)
02-497628	Chain tool assembly
02-295725	Lug link with chain section
02-019795	Lug link pin - 3/8" x 2-1/16" L
02-320487	Chain assembly with deluxe link for Dynapac
02-290581	Chain assembly with deluxe link for V3-12
02-290582	Chain assembly with deluxe link for V3R-two stop
02-387889	Lug link sub-assembly for Superpac V6
02-386220	Chain assembly with lug link for Superpac V6
02-320487	Chain assembly with deluxe link for Ultrapac V4

### **Torrington Bearing Assembly**

Roller bearing assemblies are available for use on 3-1/2" diameter pallet feeder drive shafts for V3-12 Vibrapac concrete products machines. These bearing assemblies include inner races to renew the worn bearing surfaces of pallet feeder shafts. Order one each.

Part Number	Description
02-370274	Bearing assembly (both ends open)
02-370275	Bearing assembly (closed one end)





### SOP to Install Sleeves on Main Shafts - V3-12

Description 02-648370

SOP to install sleeves on cam shaft. Contains sleeves and bearing housings for the shafts listed below.

Cam Shaft Extension - RH (instruction drawing 02-472948)

Solid steel sleeve 6" OD 02-077179 1

**Part Number** 

02-244827 1 Solid bearing housing 6" bore (includes 02-244212 bushing)

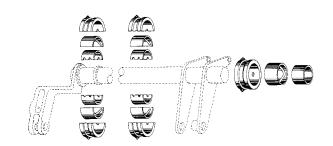
Cam Shaft Extension - LH (instruction drawing 02-472949)

Solid steel sleeve 6-1/2" OD 02-366750 1

02-366525 Solid bearing assembly 6-1/2" bore (includes 02-366522 bushing) 1

## Bearings and Nylon Bushings for 5" Main Shafting

	5" Shaft	5" Shaft
	(No Sleeve)	(With Sleeve)
Description	Part Number	Part Number
Split steel sleeve	///////////////////////////////////////	02-076771
Solid bearing assembly	02-244825	02-244827
Split bearing assembly	02-244826	02-244828
Solid nylon bushing	02-244214	02-244212
Split nylon bushing	02-244215	02-244213
Brass machine screw	02-089156 (1-1/4" L)	02-088425 (3/4" L)
Solid steel sleeve	////////////////	02-077179



## V3-12 Shaft Update - Bearings and Sleeves

Feed Arm Sha	aft - 5" Diameter	Qty
02-244827	Solid bearing - 8" OD x 6" B x 4" L 02-077177 Housing 02-244212 Bushing	2
02-077179	Sleeve	-
02-244828 02-076771	Split Bearing - 8" OD x 6" B x 4" L 02-076770 Housing 02-244213 Bushing Sleeve	1
	aft - 6" Diameter	
02-366525	Solid Bearing - 8" OD x 6.5" B x 4" L 02-366524 Housing 02-366522 Bushing	2
02-366750	Sleeve	
02-366490	Split bearing - 8" OD x 6.5" B x 4" L 02-366488 Housing 02-366489 Bushing	1
02-315600	Sleeve	
Pallet Receive	er Shaft - 5" Diameter	
02-244827	Solid Bearing - 8" OD x 6" B x 4" L 02-077177 Housing 02-244212 Bushing Sleeve	1
		+
02-244828	Split bearing - 8" OD x 6" B x 4" L 02-076770 Housing 02-244213 Bushing	2
02-076771	Sleeve	

Stripper Head	l Shaft - 5" Diameter	Qty
02-244827	Solid Bearing - 8" OD x 6" B x 4" L 02-077177 Housing 02-244212 Bushing Sleeve	1
02-244828 02-076771	Split Bearing - 8" OD x 6" B x 4" L 02-076770 Housing 02-244213 Bushing Sleeve	2
Pallet Moving	Shaft - 5" Diameter	
02-244827	Solid Bearing - 8" OD x 6" B x 4" L 02-077177 Housing 02-244212 Bushing Sleeve	2
02-077179		1
02-244626	Split Bearing - 8" OD x 6" B x 4" L 02-076770 Housing 02-244213 Bushing Sleeve	
Pallot Loweria	ng Shaft - 4" Diameter	
02-244825 02-210094	Solid Bearing - 8" OD x 5" B x 4" L 02-003063 Housing 02-244214 Bushing Sleeve	2
02-244826	Split Bearing - 8" OD x 5" B x 4" L 02-035850 Housing 02-244215 Bushing	2
02-231080	Sleeve	



## Dynapac Update - Bearings, Sleeves and Collars

Feed Arm Shaft -	7" - Diameter for Dual Cams	Qty
Feed arm shaft		
02-374468	with Trabon	
02-374417	with rollers & pins	
02-374409	with sleeves	
02-37 4403	solid sleeves (02-464763)	2
	split sleeves (02-374408)	1
	collar (02-374407)	3
Pooring accombly		13
Bearing assembly 02-324375		2
02-324373	Solid bearing assembly	-
02 224270	solid bushing (02-324376)	1
02-324370	Split bearing assembly	1
	split bushing (02-324369)	
Feed Arm Shaft 6	5" Diameter	
Feed arm shaft		
02-319663	Feed arm shaft - for dual feed	
	solid sleeve (02-315176)	2
	split sleeve (02-315177)	2
	collar (02-319671)	3
Bearing assembly	· · · · · · · · · · · · · · · · · · ·	+~
02-324375	Solid bearing	2
02 024010	solid bushing (02-324376)	-
02 224270		1
02-324370	Split bearing	2
	split bushing (02-324369)	
Pallet Receiver S	haft 6" Diameter	
02-319677	Pallet receiver shaft -	
	with rollers & pins	
02-319676	Pallet receiver shaft - with sleeves	
	solid sleeve (02-315176)	2
	split sleeve (02-315177)	2
	collar (02-319671)	2
Bearing assembly		
02-324375	Solid bearing	2
02 02 101 0	solid bushing (02-324376)	-
02-324370	Split bearing	2
02-324370	split bushing (02-324369)	-
	split bushing (02-324369)	
Stripper Head Sh	aft 6" Diameter	
02-449111	Stripper head shaft - with Trabon	
02-449112	Stripper head shaft -	
02 110112	with rollers & pins	
02-449113	Stripper head shaft - with sleeves	
0 <u>2</u> -770110	solid sleeve (02-315176)	2
	split sleeve (02-315177)	2
	collar (02-319671)	1
	•	1 1
Pooring assembly	collar (02-320432)	+-
Bearing assembly		2
02-324375	Solid bearing	2
	solid bushing (02-324376)	+_
02-324370	Split bearing	2
	split bushing (02-324369)	
		1

Pallet Moving Sha	ıft 4" Diameter	Qty
02-388241	Pallet moving shaft	
02 000211	old style without sleeves	
Bearing Assembly	old ctylic williams oldered	
02-253544	Solid bearing	1
	solid bushing (02-244216)	
02-355908	Split bearing	1
	split bushing (02-355907)	
02-388398	Pallet moving shaft - with Trabon	
02-388241	Pallet moving shaft - without Trabon	
02-388237	Pallet moving shaft - with sleeves	
	solid sleeve (02-319599) collar (02-351103)	2
Bearing assembly	Collai (02-351103)	-
02-244827	Solid bearing	2
02 244021	solid bushing (02-244212)	-
	3011d 2d31111g (02 2 1 12 12)	
Pallet Raising & L	owering Shaft 4" Diameter	
02-353432	Pallet raising & lowering shaft -	
	with sleeves	
	solid sleeve (02-319599)	2
	collar (02-351103)	2
Bearing assembly	0.1111	
02-244827	Solid bearing	2
	solid bushing (02-244212)	
Pallet Feeder Driv	re Shaft - 3-1/2" Diameter	
02-318978	Pallet feeder drive shaft -	
02 010070	with sprockets	
02-318977	Pallet feeder drive shaft -	
	with sleeve	
	solid sleeve (02-322996)	2
	collar (02-319581)	2
Bearing assembly		
02-319587	Solid bearing assembly	
	Torrington bearing (02-103253)	2
	Garlock seal (02-105102)	
Pallet Feeder Bac	k Shaft - 3-1/2" Diameter	
02-318981	Pallet feeder back shaft - complete	
02-318980	Pallet feeder back shaft - with sleeves	
02 010000	solid sleeve (02-322996)	2
	collar (02-319581)	2
Bearing assembly		
02-319590	Solid bearing assembly	2
	Torrington bearing (02-103253)	
	Garlock seal (02-105102)	

BLOCK MACHINES 74 © 2016 by Besser Company



## Ultrapac - V4 - 18" and 26" Deep Pallets

reeu Ami Siid	aft - 7"	Qty
02-439056	Feed arm assembly - with Trabon	
02-439055	Feed arm assembly - with rollers	
02-439054	Feed arm assembly - with arms	
02-464763	Steel sleeve - solid	2
		1
02-374408	Steel sleeve - split	<del></del>
02-374407	Collar	3
Bearing assem	•	_
02-324375	Solid bearing assembly	2
	solid bushing (02-324376)	
20.004070	pin (02-292818)	_
02-324370	Split bearing assembly	1
	split bushing (02-324369)	
Pallet Receive	er Shaft Assembly - 7" Diameter	
02-439064	Pallet receiver assembly with rollers	
02-439063	Pallet receiver assembly with pins &	
	bushing	
02-385108	Solid sleeve - 5-1/4" L	2
02-374408	Split sleeve - 5-1/64" L	1 1
02-389984	Split sleeve - 5-1/4" L	
02-374407	Collar	2
		-
Bearing assem 02-324375	•	2
02-3243/5	Solid bushing (02, 224276)	-
	solid bushing (02-324376)	
00 004070	pin (02-292818)	2
02-324370	Split Bearing	2
	split bushing (02-324369)	
Stripper Head	Shaft Assembly - 7" Diameter	
02-439060	Stripper head assembly with Trabon	
02-439062	Stripper head assembly with	
	pins & rollers	
02-439061	Stripper head assembly with sleeves	
02-385108	Solid sleeves	2
02.374408		2
	Split sleeves	_
02-320432	Collar	1
02-374407	Collar	1
Bearing assem	nbly	
02-324375	Solid bearing assembly	2
	solid bushing (02-324376)	
	pin (02-292818)	
02-324370	Split bearing assembly	2
	split bushing (02-324369)	

Pallet Moving Shaf	t - 4" Diameter	Qty
02-448833	Pallet moving shaft - 26" deep with removable arm	
02-448834	Pallet moving shaft - 26" deep with sleeve	
02-439100	Pallet moving shaft - 18" deep with removable arm	
02-439099	Pallet moving shaft - 18" deep with sleeve	
02-319599	Solid sleeve	2
02-351103	Collar	2
Bearing assembly 02-244827	Solid Solid bearing assembly solid bushing (02-244212) pin (02-292818)	2
Pallot Paising & Lo	woring Shaft Assambly 4" Diameter	
	wering Shaft Assembly - 4" Diameter	
02-439040 02-439039	Pallet raising & lowering shaft Pallet raising & lowering shaft with sleeves	
02-319599	Solid sleeve	2
02-351103	Collar	2
Bearing assembly 02-319587	Housing - bearing assembly Torrington bearing (02-103253)	2
Pallet Feeder Drive	Shaft - 3 1/2" Diameter	
02-439047	Pallet feeder drive shaft with sprocket	
02-439048	Pallet feeder drive shaft with sleeve	
02-322996	Solid sleeve	2
02-319581	Collar	2
Bearing assembly 02-319587	Housing - bearing assembly Torrington bearing (02-103253)	2

**BLOCK MACHINES** 75 © 2016 by Besser Company



## Superpac (V-5, V-6) Shaft and Bearing Update

	• ,	
Feed Arm Shaft	t - 7" Diameter	Qty
		Qty
02-386093	with Trabon	
02-386094	with rollers	
02-386095	with sleeves	
	solid sleeves (02-464763)	2
		4
	split sleeves (02-374408)	1
	collar (02-374407)	
Bearing assemb	lv	
02-324375	Solid bearing assembly	2
02-02-010		-
	solid bushing (02-324376)	
	pin (02-292818)	
02-324370	Split bearing assembly	1
	split bushing (02-324369)	
Dallat Danairea	01-# 71 Di	
Pallet Receiver	Shaft - 7" Diameter	
02-386114	with rollers and pins	
02-386115	with sleeves	
02-300113		١
	bushings (02-449114)	8
	solid sleeves - 5 1/4" L (02-385108)	2
	split sleeve 5 1/64" L (02-374408)	1
	split sleeve - 5 1/4" L (02-389984)	1
D		<u> </u>
Bearing assemb		
02-324375	Solid bearing assembly	2
	solid bushing (02-324376)	
	pin (02-292818)	
02-324370	Split bearing assembly	ر ا
02-324370		2
	split bushing (02-324369)	
02-386104	Shaft - 7" Diameter with Trabon	
02-386105	with roller and pins	
02-386106	with sleeve	
	bushings (02-449114)	8
	solid sleeves (02-385108)	
	split sleeve (02-374408)	
	. , ,	
Bearing Assemb	oly	
02-324375	Solid bearing assembly	2
	solid bushing (02-324376)	
	pin (02-292818)	
00 004070		۱ ٫
02-324370	Split bearing assembly	2
	split bushing (02-324369)	
		$\vdash$
Pallet Moving S	Shaft - 5" Diameter	
Pallet 52" W - 6		
02-388663	with Trabon	
02-388662	with sleeve	
	solid sleeve (02-319599)	2
Pooring Assault		<del>-</del>
Bearing Assemb		_
02-244827	Solid bearing	2
	solid bushing (02-244212)	
	pin (02-292818)	
Dollot 40" \\		
Pallet 42" W - 5		
02-421550	with Trabon	
02-421549	with sleeve	
-	solid sleeve (02-319599)	2
Pooring Assault	· · · · · · · · · · · · · · · · · · ·	<del>-</del>
Bearing Assemb		١.
02-244827	Solid bearing	2
	solid bushing (02-244212)	
	pin (02-292818)	
	piii (02 202010)	
		ı

Pallet Raising	& Lowering Shaft - 5" Diameter	Qty		
Pallet raising &	lowering shaft			
02-388673 with Trabon				
02-388672				
	solid sleeve (02-077179)	2		
Bearing assemb	bly			
02-244827	Solid bearing assembly	2		
	solid bushing (02-244212)			
	pin (02-292818)			
Pallet Feeder F	Front Shaft Assembly			
Pallet feeder fro	ont shaft for 42" W - 5 AAT			
02-486695	with sprockets			
02-486694	with hub & sleeves			
	solid sleeve (02-386193)	2		
Bearing assemi	bly			
02-386291	Solid bearing	2		
	Torrington (02-107960)			
	Garlock seal (02-113991)			
Pallet feeder fro	ont shaft for 52" W - 6 AAT			
02-386286	with sprockets			
02-386287	with hub & sleeves			
02 000201	solid sleeve (02-386193)	2		
Bearing assemb	·	+-		
02-386291	Solid bearing	2		
02 000201	Torrington (02-107960)	-		
	Garlock seal (02-113991)			
Pallet Feeder E	Back Shaft - 4" Diameter			
Pallet feeder ba	ack shaft			
02-386188	with trunion			
02-386189	with hub and sleeve			
	solid sleeve (02-386193)	2		
Bearing assemb	bly			
02-386196	Solid bearing assembly	2		
	Torrington (02-107960)			
	Garlock seal (02-113991)			
Cam Shaft Ass	sembly			
02-386009	Cam shaft assembly			
02-386102	Cam shaft only			
Bearings used	<b>-</b>			
02-104653	Torrington bearing			
10 1000	(2, one each end)			
02-104652	Torrington inner race			
02 10 <del>1</del> 002	(2, one each end)			
02-104650	Garlock seal (4, two each end)			
02-104651	Torrington bearing			
02 104640	(2, center bearing)			
02-104649	Garlock seal			
0	(4, center bearing)			
Cam shaft gear				
02-386121	Bull gear			
Pinion Shaft				
02-386039	Pinion shaft			
00000	bearing assembly (02-374084)	2		
	bearing (02-109967)	-		
	200g (02 100001)			

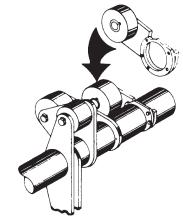
**BLOCK MACHINES** 76 © 2016 by Besser Company



#### Removable Roller Arm

Modernize the stripper head raising shaft of your concrete products machine by replacing the welded auxiliary arm and roller with this removable design. If poor alignment of the stripper head and mold results in a bent auxiliary arm, this design permits quick removal of the arm for straightening or replacement.

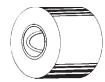
Part Number	Description
02-602205	Removable roller arm for V3R includes the following parts:
02-291904	Collar
02-089699	Socket head cap screw - 1" x 3-1/2" L
02-292082	Removable arm
02-087885	Lock washer - 1"
02-602872	Removable roller arm for V3-12 includes the following parts:
02-291904	Collar
02-292082	Removable arm
02-089699	Socket head cap screw - 1" x 3-1/2" L
02-087885	Lock washer - 1"
02-254120	Roller only - 3" W x 6-1/2" D
02-291624	Removable arm only
02-081374	Retaining ring



### Cam Rollers

Besser 5" outside diameter rollers for feedboxes and cams are made of special alloy and are hardened all the way through. Each cam roller is carefully inspected to give maximum service on your Vibrapac concrete products machine. Insist on Besser rollers and be assured of long service.

Part Number	Description	
02-253731	Roller - 5" OD for feedbox and cam	(includes 02-214061 nylon bushing)
02-288001	Roller - 5" OD for feedbox and cam	(includes steel bushing)



### Spacers for Shaft Arms

These special hardened spacers prevent the cam rollers from wearing into the shaft arms. Tack weld the spacer to the shaft arm.

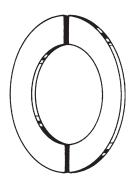
Part Number	Description
02-041444	Spacer - 4" OD x 2" ID x 1/8" thick
02-200859	Spacer - 4-3/4" OD x 2-3/8" ID x 3/16" thick



## Spacers for Main Shafting

By installing these spacers between the bearings and collars of 4" to 6" diameter shafts, excessive side movement can be eliminated. The spacers are split for easy installation and are available in various thicknesses and shaft sizes.

Part Number	<u>Description</u>
02-399526	Spacer 16 gauge x 9-3/4" x 7-1/4" (7" shaft)
02-399527	Spacer 10 gauge x 9-3/4" x 7-1/4" (7" shaft)
02-399528	Spacer 1/4" thick x 9-3/4" x 7-1/4" (7" shaft)
02-266204	Spacer 1/16" thick x 8" x 6-1/8" inside diameter (6" shaft)
02-051400	Spacer 1/4" thick x 7-1/4" x 5-1/8" ID (5" shaft)
02-070988	Spacer 3/16" thick x 7-1/4" x 5-1/8" ID (5" shaft)
02-051402	Spacer 1/8" thick x 7-1/4" x 5-1/8" ID (5" shaft)
02-051401	Spacer 1/16" thick x 7-1/4" x 5-1/8" ID (5" shaft)
02-386663	Spacer 16 gauge x 7-1/4" x 4-1/4" ID (4" shaft)
02-386664	Spacer 10 gauge x 7-1/4" x 4-1/4" ID (4" shaft)



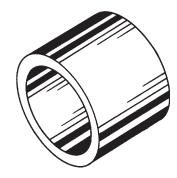


### **Nylon Bushings**

Nylon bushings assure long, trouble-free service under extremely rugged conditions and interchange with bronze bushings in most applications. No reaming is necessary. Frictionless properties of nylon require minimal greasing.

NOTE: During assembly be sure to drill nylon bushings to allow passage of the lubricant.

Part Number	Description
02-22234	Nylon bushing - 1-1/2" OD x 1-3/8" L x 1" ID
02-266723	Nylon bushing - 1-1/2" OD x 1-1/2" L x 1" ID
02-22233	Nylon bushing - 1-1/2" OD x 2" L x 1" ID
02-282124	Nylon bushing - 1-15/16" OD x 1" L x 1-7/16" ID
02-226498	Nylon bushing - 1-15/16" OD x 2" L x 1-17/16" ID
02-256039	Nylon bushing - 1-15/16" OD x 2-3/8" L x 1-7/16" ID
02-253657	Nylon bushing - 1-15/16" OD x 3" L x 1-7/16" ID
02-250900	Nylon bushing - 2" OD x 3" L x 1-1/2" ID
02- 214061	Nylon bushing - 2-7/16" OD x 2" L x 1-15/16" ID
02-214062	Nylon bushing - 2-7/16" OD x 3" L x 1-15/16" ID
02-214063	Nylon bushing - 2-7/16" OD x 4" L x 1-15/16" ID
02-283825	Nylon bushing - 2-1/2" OD x 3-1/2" L x 2" ID
02-244216	Nylon bushing - 4-1/2" OD x 4" L x 4" ID
02-244217	Split nylon bushing - 4-1/2" OD x 4" L x 4" ID
02-244218	Split nylon bushing - 4-1/2" OD x 6" L x 4" ID
02-264601	Nylon bushing - 5" OD x 4" L x 4-1/2" ID
02-264602	Nylon bushing - 5-1/2" OD x 6" L x 5" ID
02-271892	Nylon bushing - 2-15/16" OD x 2" L x 2-7/16" ID



NOTE: OD = Outside Diameter ID = Inside Diameter L = Long



### Hardened Steel Bushings

Besser hardened steel bushings will replace conventional type bushings in certain applications. Rigid tolerances during manufacturing permit installation without reaming. Equipment must be fitted with steel bushings. DO NOT attempt to replace nylon bushings with steel bushings.

Part Number	Description
02-077790	Steel bushing 2-7/16" OD x 2" L x 1-15/16" bore
02-248683	Steel bushing 2-7/16" OD x 3" L x 1-15/16" bore
02-449114	Steel bushing for V4, Dynapac, V6 stripper head shaft and pallet receiver shaft
02-446639	Steel bushing for V3-12 stripper head shaft and pallet receiver shaft

### **Notched Pins**

Besser offers a wide variety of notched pins; some are with and some are without grease fittings. These are some of the more standard pins. Other sizes are available. Refer to your machine parts catalog for the additional part numbers.

Plain Notched	Pins	Notched Pins	with Grease Fitting in Plain End
Part Number	Description	Part Number	Description
02-019349	1-7/16" x 3-1/2" L	02-028902	1-15/16" x 5-3/4" L
02-017510	1-7/16" x 5" L	02-044103	1-15/16" x 4-1/2" L
02-019348	1-7/16" x 5-1/2" L	02-222720	1-15/16" x 7-1/4" L
02-004151	1-15/16" x 4-1/2" L		
02-004098	1-15/16" x 5" L	Notched Pins	with Grease Fitting in Notched End
02-004125	1-15/16" x 5-1/4" L	Part Number	Description
02-010384	1-15/16" x 5-3/4" L	02-025615	1-15/16" x 6-3/4" L
02-023998	1-15/16" x 6-1/4" L	02-029257	1-15/16" x 8-1/4" L (old style - one port greasing)
02-017308	1-15/16" x 6-3/4" L	02-029258	1-15/16" x 8-1/4" L (old style - one port greasing)
02-018496	1-15/16" x 9-1/4" L	02-395684	1-15/16" x 8-1/4" L (new style - two port greasing)
		02-306598	1-15/16" x 8-1/4" L (new style - two port greasing)
Plain Pin			
Part Number	Description		
02-017232	1" x 7-1/4" L		



### Besser Feedbox Assemblies for V3R & V3-12 A - F

Besser feedbox assemblies are made with special alloy side plates, hardened pins, split type support links, hardened back bar guides, hardened back top plates, hardened wear liners, heavy-duty backshafts, and clamp type grid support bars (spring type bars are optional). These feedbox assemblies will give you maximum service with minimum maintenance. Link rods are not included. Additional sizes and styles are available.



Part Number	<u>Description</u>
02-643811	Feedbox assembly - 29" W with front and rear wear liners (no Trabon)
02-607137	Feedbox assembly - 29" W with wear liners, spring-type grid bars, nylon bushings and V-rollers (no Trabon)
02-287554	Basic feedbox only - 29" W with front wear liners (no Trabon)
02-420138	32" feedbox assembly with Trabon (V3-12)
02-420139	Feedbox assembly - 29" W with clamp-type grid bars, front and rear wear liners, nylon bushings, V-rollers and Trabon
02-287555	Feedbox assembly - 29" W with clamp-type grid bars, front and rear wear liners (no Trabon)
02-607129	Feedbox assembly - 29" W with wear liners, spring-type bars, nylon bushings, V-rollers and Trabon
02-304592	Basic feedbox only - 29" W with front wear liners and Trabon

Besser Feedbox Assemblies for Dynapac		Besser Feedbox Assemblies for	
Part Number	Description	Superpac a	nd V5
02-391190	Feedbox assembly - 29" W with front liners	Part Number	Description
00.004404	and wear shoes (Dynapac)	02-386227	Basic feedbox assembly
02-391191	Feedbox assembly - 29" W with clamp type agitator grid bars with front and rear wear liners and wear	02-401437	Basic feedbox assembly with Trabon system
00.400444	shoes (Dynapac)	02-421504	45" W basic feedbox assembly
02-420141	Feedbox assembly with Trabon system (Dynapac)		
02-328459	Feedbox track - RH		
02-326449	Feedbox track - LH		
02-420140	32" W feedbox assembly with Trabon		

### Besser Feedbox Assemblies for Ultrapac

Part Number	<u>Description</u>
02-448772	Feedbox assembly complete with Trabon - 26" deep (Ultrapac model V4-26D)
02-448771	Basic feedbox assembly - 26" deep (Ultrapac model V4-26D)
02-439111	Feedbox assembly - 41" W complete with Trabon system (Ultrapac model V4)
02-439112	Feedbox assembly without Trabon (Ultrapac model V4)
02-439115	Basic feedbox weldment (Ultrapac model V4)
02-470776	Basic feedbox weldment linear actuator autofeed (Ultrapac II)
02-470777	Feedbox assembly without Trabon linear actuator autofeed (Ultrapac II)
02-470778	Feedbox assembly with Trabon linear actuator autofeed (Ultrapac II)
02-489216	Basic feedbox weldment cam operated autofeed (Ultrapac II)
02-489226	Feedbox assembly without Trabon cam operated autofeed (Ultrapac II)
02-489254	Feedbox assembly with Trabon cam operated autofeed (Ultrapac II)

### Bolt-on Ears for Agitator Motor Plate

When rebuilding your feedbox replace the ears on the agitator motor with heavy-duty bolt-on pivot blocks outfitted with bushings.

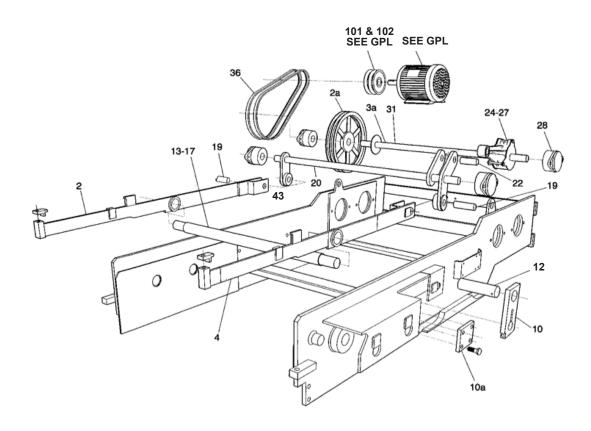
<b>, ,</b>		42
Part Number	Description	
02-529775	Bolt-on ears for agitator motor plate	

#### Feedbox Wear Parts Overhaul Kit

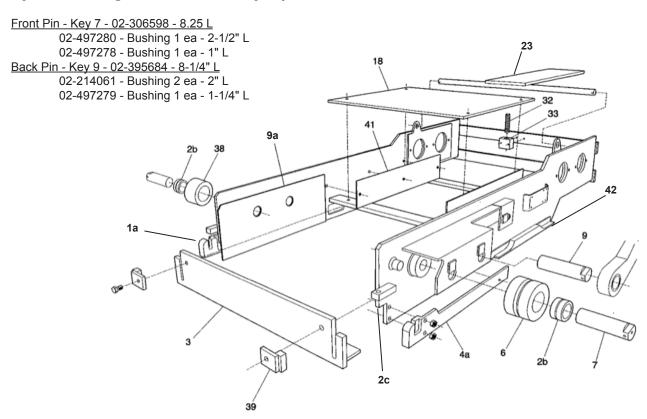
Part Number	Description	Contact your Besser
02-648346	V3-12 Vibrapac feedbox wear parts overhaul kit (see page 81)	representative or the customer
02-648359	Dynapac feedbox wear parts overhaul kit	service department by phone at
02-648374	Ultrapac or Autopac feedbox wear parts overhaul kit	+1.989.354.1000
02-607104	SOP to install feedbox wear shoes for V3R and V3-12	



### Vibrapac Feedbox 02-287555 All parts 29" with clamp type agitator



### Nylon Bushings for V3-12 and Dynapac Feedboxes





### Feedbox 02-287555 Parts List

Key#	Part Number	Qty	Description
	02-287554	1	Feedbox - 29" W - sub assembly
101	Refer to GPL	1	Sheave
102	Refer to GPL	1	Bushing - QD - type SH - 1-1/4" bore
1a	02-222568	1	Wear shoe - feedbox - LH
20	02-242460	1	Back shaft sub-assembly - feedbox agitator
23	02-017210	1	Plate - agitator motor support assembly
24	02-052382	1	Link - eccentric sub-assembly
27	02-016434	1	Eccentric - for agitator - 1" throw
28	02-202579	4	Bearing assembly - 1.938" bore-feedbox agitator
2a	02-082593	1	Sheave
2b	02-077790	4	Bushing 1-15/16" bore x 2" L
31	02-017212	1	Shaft assembly - feedbox agitator
32	02-076116	1	Adjusting screw - feedbox - 1-1/4" x 7-1/2" L
33	02-014854	1	Lock - feedbox adjusting screw
36	02-082050	2	V-belt - B55, 2 per set
3a	02-029160	1	Shaft - feedbox agitator pulley
7	02-306598	2	Pin - notched - w/ grease fitting - 1-15/16" D
9	02-395684	2	Pin - notched - 1-15/16" D x 8-1/4" L

## Major Overhaul Kit V3-12 Feedbox - 02-648346 SOP

Key#	Part Number	Qty	Description
Not shown	02-088478	4	5/8" - 11 x 2" slotted flat head machine screw
Not shown	02-088435	2	1/2" -13 x 2-1/4" slotted flat head machine screw
Not shown	02-089672	12	1/2" -13 x 2" slotted flat head machine screw
Not shown	02-088432	4	1/2" - 13 x 1-1/2" slotted flat head machine screw
Not shown	02-088062	8	3/4" - 10 x 1-1/2" hex head cap screw grade 2
Not shown	02-088031	2	1/2" - 13 x 1" hex head cap screw grade 2
Not shown	02-087883	8	3/4" medium lock washer
Not shown	02-087882	4	5/8" medium lock washer
Not shown	01233-400001	20	1/2" medium lock washer
Not shown	02-087808	8	3/4" - 10 heavy hex nut
Not shown	02-087807	4	5/8" - 11 heavy hex nut
Not shown	01211-400002	18	1/2" - 13 heavy hex nut
28	02-079273	4	Closure for bearing housing
28	02-079257	4	Bushing - outside - agitator back shaft
28	02-079256	4	Bushing - floating - agitator back shaft
28	02-079255	4	Bushing - agitator back shaft
10	02-055567	2	Link assembly - solid - feedbox front support
41	02-053101	2	Rear liner - feedbox
9a	02-053100	2	Front wear liner - feedbox
10a	02-051286	2	Guide - back bar - feedbox
17	02-049871	1	Bushing - agitator grid support bars
3	02-040901	1	Bar - feedbox back
39	02-371164	2	Plug - feedbox back bar
22	02-344147	1	Pin - notched 1-7/16" x 5-1/2"
19	02-344146	2	Notched pin - 1-7/16" D x 5" L
43	02-344143	3	Bushing - nylon - 1-7/16" bore x 2-5/8" L
2c	02-029054	2	Block - feedbox
38	02-288001	1	Roller assembly - feedbox
6	02-288000	2	V-roller assembly - feedbox
42	02-287318	2	Shoe - feedbox - bottom rear
Not shown	02-287317	2	Plug - apron plate
4a	02-222569	1	Wear shoe - feedbox - RH
1a	02-222568	1	Wear shoe - feedbox - LH
2	02-218482	1	Bar - agitator grid support assembly - LH
4	02-218481	1	Bar - agitator grid support assembly - RH
13	02-210012	1	Shaft - feedbox agitator front
12	02-019349	2	Pin - notched - 1-7/16" D x 3-3/8" L
18	02-017222	1	Top plate - feedbox back
7	02-306598	2	Pin - notched - w/ grease fitting - 1-15/16" D

**BLOCK MACHINES** 81 © 2016 by Besser Company



## Feedbox Replacement Parts

Qty	Description	V3R & V3-12 26" W	DYNAPAC MK I & II 26" W PALLET	SUPERPAC V6-AAT 52" W PALLET	ULTRAPAC 26" DEEP	ULTRAPAC 18-1/2" DEEP
1	Feedbox assembly	02-287554	02-391190	02-386226	02-448771	02-439112
1	Feedbox wear shoe, LH	02-222568	02-222568	02-386238	02-448770	02-439121
3	Cap screw, 1/2" x 2" L	02-088434	02-088434	02-088434	///////////////////////////////////////	//////////
3	Cap screw, 1/2" x 2-1/4" L	//////////	//////////	/////////	02-110226	02-110226
1	Feedbox wear shoe, RH	02-222569	02-222569	02-386239	02-448769	02-439122
3	Cap screw, 1/2" x 2" L	02-088434	02-088434	02-088434	02-088036	02-088036
2	Feedbox block for cutoff bar	02-029054	02-029054	02-393508	02-439116	02-439116
2	Front wear liners	02-053100	02-371159	02-386240	02-448767	02-371159
6	Cap screw - 1/2" x 2" L	02-088434	02-088434	/////////	02-088434	02-088434
4	Cap screw - 1/2" x 2-1/4" L	//////////	/////////	02-088435	///////////////////////////////////////	//////////
6	Cap screw - 1/2" x 3" L	/////////	//////////	02-088039	///////////////////////////////////////	//////////
2	Rear wear liners	02-053101	02-053101	02-053101	02-439119	02-439119
6	Cap screw - 1/2" x 1-1/2" L	02-088432	02-088432	/////////	02-088432	02-088432
2	Cap screw - 1/2" x 2-1/4" L	/////////	/////////	02-088435	///////////////////////////////////////	//////////
6	Cap screw - 1/2" x 3" L	/////////	/////////	02-088039	///////////////////////////////////////	/////////
2	Guides	02-051286	02-051286	02-051286	02-051286	02-051286
8	Cap screw - 3/4 x 1-1/2" L	02-088062	02-088062	02-088062	02-088061	02-088061
1	Back bar	02-040901	02-040901	02-386256	02-450042	02-439105
1	Back top plate	02-017222	02-017222	02-386263	02-439104	02-439104
4	Cap screw - 5/8" x 2" L	02-088478	02-088478	02-088478	02-088478	02-088478
4	Jamb nut	02-087807	02-087807	02-087807	02-087807	02-087807
2	Roller	02-288000	02-288000	/////////	02-288000	02-288000
1	Roller	02-288001	02-288001	02-386252	02-288001	02-288001
1	Roller	//////////	/////////	02-386244	///////////////////////////////////////	///////////////////////////////////////
1	Notched pin	02-028902	02-028902	02-028902	02-028902	02-028902
2	Notched pin with grease fitting	02-029258	/////////	/////////	///////////////////////////////////////	//////////
4	Notched pin with grease fitting	//////////	02-306598	02-386254	02-306598	02-306598
4	Cotter pin	//////////	02-089780	02-089780	02-089780	02-089780
2	Notched pin with grease fitting	02-029257	/////////	02-390932	02-306598	02-306598
4	Cotter pin	//////////	02-089780	02-089780	02-089780	02-089780
2	Apron plate plug	02-287317	02-371185	02-386447	///////////////////////////////////////	//////////
2	Rear wear shoes	02-287318	02-287318	02-287318	02-287318	02-287318
2	Back bar - plug	02-371164	02-371164	02-371164	02-371164	02-371164
2	Front wear liner					
I	(optional 3 hole for tack welding)	02-402999	//////////	//////////	///////////////////////////////////////	//////////
6	Cap screw - 1/2" x 1-1/2" L	02-088432	//////////	///////////////////////////////////////	///////////////////////////////////////	///////////////////////////////////////
6	Cap screw - 1/2" x 2" L	02-088434	/////////	//////////	///////////////////////////////////////	///////////////////////////////////////
1	Feedbox track, RH (02-376787 for V3-12F)	02-256636	02-328459	02-434464	02-328459	02-328459
1	Feedbox track, LH					
	(02-376791 for V3-12F)	02-060414	02-326449	02-436142	02-326449	02-326449
1	Grid support bar, RH	02-218481	02-218481	02-386250	02-448778	02-218481
1	Grid support bar, LH	02-218482	02-218482	02-386246	02-448777	02-218482
1	Bushing kit SOP	02-649331	02-649331			

**BLOCK MACHINES** 82 © 2016 by Besser Company



### Special Link Ends and Link Rods for Feedbox

These specially designed link ends and link rods move the clamping mechanism so it is within easy reach on the machine for safer, quicker and easier feedbox linkage adjustments. With the feedbox in the back position, the clamp

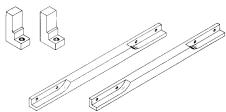
bolts are easily loosened for easy adjustment of link rods and easily retightened. The SOP contains two new link rods (1-1/2" x 11") and two new link end assemblies (2" x 4" x 39-3/8") with bushings, nuts and bolts. The special link assembly is completely interchangeable with present style link ends on all V3-12 Vibrapacs. Parts furnished permit use of your present right hand link ends to connect the special link assembly to the feed arms on each side of the machine.

Part Number	Description
02-640452	Special link ends and rods for V3-12 (keys 1 and 7)
02-374901	Special link end only for V3-12, LH thread (key 1)
	includes nylon bushing 02-214061
02-388401	Special link end only for V6, LH thread (key 1)
	includes nylon bushing 02-318126
02-642867	Special link end and rods for Dynapac (keys 1 and 7)
02-412856	Special link end only for Dynapac, LH thread (key 1) includes nylon bushing 02- 214061
02-214715	Rod only (key 7)
02-220418	Link end assembly RH thread (key 8) includes nylon bushing 02-214061
02-412857	Special Link End with both Link Ends For Dynapac (Includes keys 1, 7 and 8)
02-374898	Assembly (V3-12)

### Anti-Spillage Kit

Material not deposited in the mold for the production of quality units is wasted. Improper adjustment of the apron plate to the mold top plate, and other basic machine adjustments, may lead to material spillage. Install an anti-spillage kit to retain material within the feedbox and on the apron plate. These parts reduce cleanup and produce a greater yield from the blended material. Hardened bottom angles resist wear and provide protection for the feedbox.

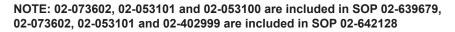
Part Number	<u>Description</u>	$\Diamond$
02-602726	Anti-spillage kit for V3, V3R & V3-12 (not available for V3-12F)	
Includes two each	of the following items:	
02-287318	Wearing shoes (feedbox rear)	^
02-287317	Plug (back apron plate)	
02-102918	Machine bolt - 3/4" - 10 NC x 3-1/4" L	
02-087808	Hex nut - 3/4" -10 NC	
02-087883	Lock washer - 3/4"	

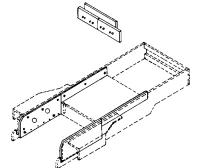


#### Feedbox 02-287555 Wear Liners

Worn feedbox sides can be renewed by installing hardened wear liners that will withstand the abrasive action of material. This will add years of usefulness to your feedbox assembly. Hardened liners are quickly and easily installed. Order today, don't wait until your feedbox is beyond repair. Additional sizes and styles are available.

Part Number	<u>Description</u>
02-639679	Feedbox wear liners with cap screws
02-642128	Feedbox wear liners with three holes for tack welding
02-373597	Hopper loose back plate
02-053101	Rear liner (2 req'd)
02-053100	Front liner (2 req'd)
02-402999	Front liner with holes for tack welding

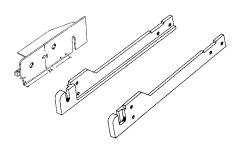






### Flange-Type Feedbox Front Wearing Shoe

Rebuild worn feedboxes with the flange type front wearing shoes which create a complete new hardened edge for the front section of feedbox sides. Flange-type wear shoes are designed for use with or without hardened wear liners. The bottom edge of the feedbox will require trimming to install these wear shoes. Additional sizes and styles are available.



Part Number	<u>Description</u>
02-222568	Flange wear shoe, LH (for V3R, V3-12, MK-1 & MK-2)
02-222569	Flange wear shoe, RH (for V3R, V3-12, MK-1 & MK-2)
02-607104	SOP includes bolts, shoes, & instructions for V3R & V3-12
02-301769	Flange wear shoe, RH (for V2H)
02-301770	Flange wear shoe, LH (for V2H)
02-604398	SOP includes bolts, shoes, & instructions (for V2H)
02-386239	Flange wear shoe, RH (for V6 Superpac)
02-386238	Flange wear shoe, LH (for V6 Superpac)
02-439121	Flange wear shoe, LH (for V4 Ultrapac- 18-1/2" pallet)
02-439122	Flange wear shoe, RH (for V4 Ultrapac - 18-1/2" pallet)

#### Autofeed Gear Motor

The autofeed splined gear motor has been replaced with a "C" Face motor and reducer. The result is lower cost and better availability of the motor. This new autofeed motor requires a new mounting hole pattern for V3-12s manufactured prior to 1989. Instruction drawing 484207 is available for reworking of existing mounting bars. If you prefer to purchase new auto feed mounting bars, order: 02-434451 or 02-434452

Part Number	Description
02-477640F0001	230/460-3-60 V
02-477640F0002	Through F0007 (specify voltage

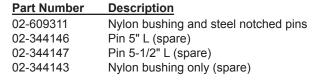
### Rubber Bushings for Agitator Back Shafts

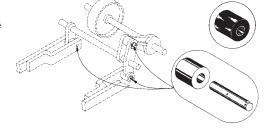
Rubber bushings are molded to exact specifications for peak performance, allowing for continued use of automatic lubrication.

Part Number	Description
02228148	Rubber bushings (3 req'd)
02-242460	Agitator shaft only

### Nylon Bushings for Agitator Back Shafts

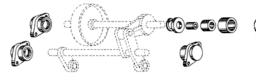
Nylon bushings and steel pins are designed to give longer life at three points on the agitator back shaft. Nylon bushings require periodic manual lubrication and are interchangeable with the rubber bushings listed above.





### Steel Sleeved Floating Type Bearing

Steel sleeved floating type bearings for the agitator back shaft and pulley shaft will reduce maintenance and help increase production. This floating type bearing has concentric sleeves of ground steel which will withstand long hard use.



Part Number	Description
02-202579	Steel sleeved floating type bearing assembly
	(includes housing, bearing, closure, snap ring and
	instructions)
02-640473	Rushing and closure for above hearing

### V3-12 Agitator Motor Support with Bushing

Besser engineering has created a SOP to replace the existing agitator motor support assembly on a standard V3-12 feedbox with a new agitator support with replaceable nylon bushings.

Part Number	Description
02-503125	SOP to install agitator motor support



### Magazine Roller Shafts

Modernize your V3-12 Vibrapac by installing adjustable magazine roller shafts and bearing assemblies that allow for independent shimming of the shafts to compensate for wear and to provide proper pallet spacing above the conveyor chains. Instructions are included for installing the pillow block supports and for shimming. Two sets of parts are available, one has shafts with solid one piece rollers and the other has shafts with two piece replaceable roller sections.

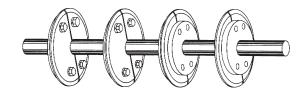
Part Number	Description
02-639792	Adjustable magazine shaft assembly with solid one piece roller
02-639791	Adjustable magazine shaft assembly with two piece replaceable
	roller sections



### Anvil Shaft with Replaceable Rollers

Replace the worn anvil shaft under your pallet cleaner with this anvil shaft with replaceable rollers so future replacement of the rollers is easy.

Part Number	Description
02-205832	Anvil shaft assembly (for V3R and V3-12 concrete
	products machines)
02-205834	Replaceable rollers (4 req'd)





For mounting on concrete products machines



For mounting on pallet return conveyors or on unloading conveyors

### Posa-Clean Pallet Scraper

Clean the build-up of aggregate from your pallets automatically during each machine cycle with the Besser mechanically operated pallet scraper. This scraper mounts just ahead of the pallet magazine on your V3R, V3-12 or Dynapac concrete products machine. As the lugs on the pallet feeder chain pull the pallet forward, the front edge of the pallet mechanically actuates the spring loaded scraper assembly to clean your pallets. The tension forcing the scraper blade down on the pallet is adjustable to meet your cleaning needs. This pallet scraper replaces the reciprocating pallet cleaner and uses standard replaceable carbide inserts 02-095721.

Part Number	Description
02-111788	Pallet scraper (Bescopac)
02-642705	Pallet scraper without Anvil shaft (V3-12)
02-642703	Pallet scraper with Anvil shaft (V3-12)
02-648476	Pallet scraper 29" wide with Anvil shaft (V3-12)
02-643744	Pallet scraper without Anvil shaft (Dynapac)
02-643078	Pallet scraper with Anvil shaft (Dynapac)
02-642704	Pallet scraper without Anvil shaft (V3-R)
02-642706	Pallet scraper with Anvil shaft (V3-R)
02-095721	Carbide insert only (for replacement, 4 req'd)
02-205387	Flanged roller only (for replacement, 2 req'd)
02-231336	Blade assembly only
02-231300	Clamp bar for part number 02-095721
02-109990	Shock
02-109970	Spring
02-087050	Bolt

The Posa-Clean pallet scraper shown above is available for mounting on most pallet return conveyors. Please contact your Besser Representative for more individual ordering information. Please advise serial number of conveyor.

© 2016 by Besser Company 85 BLOCK MACHINES



### Motorized Block Finishing Brush

This motorized block finishing brush sweeps crumbs from the tops of green block. The complete brush assembly is bolted to the mold throat extensions where it will not interfere with mold adjustments or changes. It can also be mounted on the front delivery conveyor of Besser-Matics. Two styles of brushes are available, horsehair and rubber. Electric and hydraulic block finishing brush assemblies are available for all types of front delivery conveyors. See your Besser Representative for proper brush mounting.

Part Number	<u>Description</u>
02-609015	SOP independent drive block finishing brush horsehair (V3-12A)
02-633446	SOP block finishing brush horsehair (mounted on Besser-Matic front delivery conveyor)
02-202724	Horsehair brush only - replacement (3 AAT)
02-437778	Horsehair brush only - replacement (4 AAT)
02-498327	Block finishing brush horsehair used with front delivery conveyor (6 AAT)
02-433513	Horsehair brush only - replacement (5 and 6 AAT)
02-340084	Electric gear motor - 50 HZ - replacement
02-314839	Electric gear motor - 60 HZ - replacement
01330-000004	Hydraulic motor (for replacement)
02-459529	Block finishing brush on front delivery conveyor for 26" and 29" pallets

NOTE: Do not use petroleum based cleaning products to clean rubber brushes

### Pallet Scraper

Key/Part Number	Qty	Description
1	2	Bracket, vertical mounting plate
2	2	Plate, side
3	2	Washer, locking, mounting plate
4 / 02-088139	2	Hex bolt, vertical mounting plate
5	2	Plug, end, main shaft
6	1	Shaft, main
7	4	Paddle, blade holder
8 / 02-399663	12	Clamp, blade
9 / 02-095721	4	Blade, carbide
10 / 02-506422	4	Plug, nylon, damping
11 / 02-506419	2	Bracket, head adjustment
12	2	Stud, adjusting, head bracket
13 / 02-089377 &	2	Set screw, square head & nut
02-087860		18 18
14 / 02-087808	2	Washer, locking
15 / 02-087883	4	Washer, head pivot plate
16 / 02-111297	2	Hex bolt, pivot, head
17 / 02-399665	2	Bushing, head pivot plate
18	2	Plate, side pivot
19	1	Body, scraper head
20 / 02-506421	1	Pin, hinge assembly head
21	3	Knuckle, spacer, head
22	4	Plate, shock tower
23 / 02-109990	2	Shock absorber head
24 / 02-088027 &	2	Bolt/nut shock anchoring V3-12 shown
02-087879 &		Shock absorber head Bolt/nut shock anchoring  V3-12 shown
02-087803 25	2	Plate, bracket, flange roller
26 / 02-109971	2	Spring, compression, bracket
27 / 02-205387	2	Roller, flanged/bearing
28	2	Bolt, washer, flange roller
29	4	Bolt, roller bracket
30 / 02-109970	4	Spring, compression, head
31	4	Bolt/nut blade holder
32	2	Plate, bolster, shocks
33	2	Spacer, bracket, flange roller
34	2	Pin, bracket, flange roller
35	2	Axle, bracket, flange roller
		, such presented, manage remot



### Air-Operated Lube Systems for Concrete Products Machines

The SOP 02-642871 includes an electrical modification drawing and electrical items: conduit, repeat cycle timer, fuse block, switch assembly and wire, plus a mechanical modification drawing, block, trabon pump, bushing, air hose and other hardware necessary for installation. Parts and drawings may differ for other than V3-12 concrete products machines.

Part Number	Description	
02-642871	SOP to add r	new style pump to V3-12 Vibrapacs
Includes:	02-110950	Pump assembly with single solenoid
	02-110965	Pump reservoir
	02-112183	Low level switch
	02-113144	Seal kit for pump model 02-25M
	02-113145	Seal kit for pump model 02-5M

Part Number	Description
02-643823	SOP to install air operated pump to V3R Vibrapacs
02-644247	SOP to install air operated pump to Dynapac
02-110950	Pump assembly with single solenoid

Ask for a copy of the Besser Trabon Pump Owner's Service Manual or view it on www.besser.com

02-090178 EP No. 1 Shell Alvania grease - 120 lb keg

2-114	997	•
ump	for	Ultrapac

02-115653 Pump for Superpac/ Ultrapac and Dynapac

BLOW OUT DISCS		
02- 108185	<b>Yellow</b> (1450 psi) -	
	.010 thick x 11/16" diameter	
02- 112715	Red (1750 psi) -	
	.012 thick x 11/16" diameter	
02- 111393	<b>Orange</b> (2050 psi) -	
	.0132 thick x 11/16" diameter	
02- 084801	Pink (2650 psi)018 thick -	
	for Trabon pump 02-084561	
02- 084870	Red (1750 psi)012 thick -	
	for 9249 indicator assembly	
	02-084869	

#### Autofeed Indicator and Guards

This autofeed height indicator will replace the manually operated lever (long arm) and height indicator gauge at the front of the Vibrapac. This assembly readily mounts to the frame and automatic feed near the top of machine. The area in front of the mold and stripper head is opened for ease of changing attachments and making mold adjustments. Included are new vibrator belt guards which more completely enclose the belts and sheaves.



02-609370 Autofeed indicator and guards for V3R and V3-12



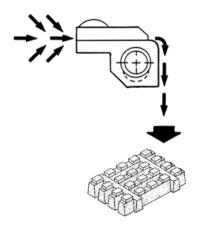
#### Air Knife

The air knife is a quiet, energy efficient way to blow crumbs off the top of concrete masonry units. Using small amounts of compressed air as a power source, the air knife pulls in a large volume of surrounding air to produce a high flow, high velocity curtain of air for blow off. The air knife is extremely useful on architectural and hardscaping units, when a block finishing brush cannot be used.

The air knife achieves amplification ratios of 30:1, compared to 3:1 for a drilled or slotted pipe. Air savings of 40-90% are possible when replacing "homemade" blow off devices. An added bonus is that typical noise level reduction is 10 dBA (decibels) or more.

Part Number	Description
02-462423	SOP to add air knife station - Up to 29" W pallet
	(includes air knife, support, hoses, fittings and filter regulator)
02-114133	Air knife only - up to 29" W pallet
02-468505	37" or 39" W pallet Ultrapac

For other sizes contact your Besser Representative.

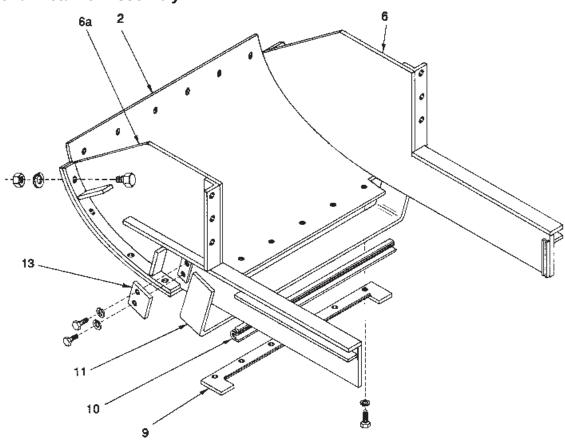




#### Bescopac Material Feeder Assembly When ordering replacement parts for the material feeder assembly for Bescopacs prior to serial No. 179, you must order the complete assembly 02-421583; serial numbers 180 and higher individual parts may be ordered. 12 **Part Number** Qty Description Key 02-421583 Material feeder assembly (includes keys 1, 2, 6, 8, 26 26 and 27) 02-421582 Material feeder only 1 1 Feed arm shaft (feed cylinder arm) 02-421580 1 02-421581 1 Material feeder (removable lower section) 2 01503-000009 1 Ball bushing Material feeder bottom 6 02-357276 1 Pusher wear plate - RH 8 02-380996 1 Pin - 3/4" x 6-1/2" L 2 12 02-357267 Retaining plate - 3/8" x 2" x 25" L 15 02-358095 Wiper rubber - 3/8" x 3" x 25" L 16 02-358093 Strike off frame only 19 02-373796 20 02-363752 Cut off bar blank 02-363753 1 Cut off bar - 3-5/8" W Cut off bar - 5-5/8" W 02-363754 Cut off bar - 7-5/8" W 02-363750 Cut off bar - 7-5/8" W (UPT) 02-363757 Cut off bar - 8" W 02-363751 Cut off bar - 9-5/8" W 02-363755 Cut off bar - 11-5/8" W 02-363756 Cut off bar - 11-5/8" W (UPT) 02-363758 24 01506-000012 2 Camrol 26 02-357262 Feed gate 27 02-380997 1 Pusher wear plate - LH 29 02-357288 2 Scraper bar - 3/8" x 5" x 14-1/2" L Scraper center plate - 3/8" x 4" x 16-1/2" L 30 02-357286 1 Pusher back plate - 1/2" thick x 31-1/8" L 31 02-380995



## Bescopac Material Retainer Assembly



Key	Part Number	Qty	Description
	02-421592	1	Material retainer assembly (includes keys 2, 6, 6a, 9 and 13)
2	02-421586	1	Retainer bottom reversible - 36" L
6	02-421591	1	Material retainer side assembly - RH
6a	02-421590	1	Material retainer side assembly - LH
9	02-360321	1	Retainer plate
10	02-358086	1	Anti-spillage "S" strip
11	02-358094	1	Anti-spillage rubber
13	02-360322	2	Clamp plate - 1/2" x 3" x 4" L
	02-642893	1	SOP to install wear strips on Bescopac pallet receiver frame

## Bescopac Updates

Part Number	Description
02-640313	SOP to increase speed of pallet receiver up stroke
02-641619	SOP for adding two stroke feedbox to Bescopac - BH3-1
02-641253	SOP for adding two stroke feedbox to Bescopac - BBH-V3
02-640552	SOP to adjust speed of feedbox reverse
02-641660	SOP to add air bleed valve to hydraulic power unit (prevents cavitating against dead-head pressure during priming of the pump)
02-641423	SOP to install pusher wear plates (used to prevent premature wear of material retainer side plates)

© 2016 by Besser Company 89 **BLOCK MACHINES** 



### Servopac Slide Shaft

Part Number Description
05 -224707 0 Round



#### Pallet Receiver Rubbers

The Durometer of hardness of the pallet receiver rubbers will affect the smoothness of machine operation. Because of different mold and material weights and speed of the machine, it is often necessary to change to a different durometer of pallet receiver rubbers.

Part Number	<u>Description</u>
02-252266	Rubber – 1-1/2" x 3" x 5" L – 50 durometer (soft)
02-028777	Rubber – 1-1/2" x 3 x 5" L – 60 durometer (hard)
02-353427	Oil resistant rubber – 1-1/2" x 3" x 5" L – 60 durometer (hard)

### **Back Apron Wearing Plate**

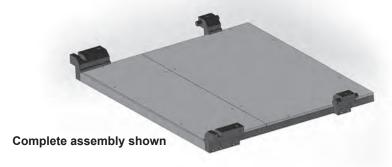
Concrete products plants interested in minimizing maintenance and downtime costs have selected our back apron plates. As much as five times more production life can be gained, even when using the most abrasive aggregates. The Besser back apron plates are furnished with a hardened replaceable wear strip on the font edge to help reduce spillage and wear and they are painted blue for easy identification.

#### **3 AAT**

Part Number	Description
05-228658(front) & 05-228659(rear)	Two piece
05-228884	Wear strip
05-228657	One piece

#### 4 AAT

Part Number	Description
05-228654(front) & 05-228655(rear)	Two piece
05-228651	Wear strip
05-225993	One piece



### Pallet Finger and Pallet Cradle

#### **3 AAT**

Part number	Qty	Description
05-228856	6	Finger
05-228857	6	Hose
05-226131	16	Cradle
05-226132	16	Cradle

#### 4 AAT

Part number	Qty	Description
05-226046	6	Finger
05-226041	6	Finger
05-226131	16	Cradle
05-226132	16	Cradle

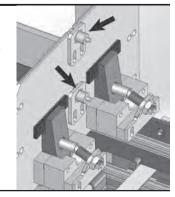


### Pallet Magazine High and Low Level Proximity Switches

The Besser pallet magazine high and low level proximity switch assembly is easily installed on your concrete products machine. The assembly uses two sensitive proximity switches: the "Low Limit Switch" stops the concrete products machine to prevent operating without sufficient pallets and the "High Limit Switch" stops the depalleter to prevent over filling of pallets in the magazine. Wiring and mechanical instructions are included with each order.

P	ar	t N	lum	bei	٢	D	es	cri	pti	on

01621-000016	Pallet high and low proximity switches for Servopac
01621-000021	Pallet high and low proximity switches for Servopac, stainless steel





## Servopac Feedbox Rebuild Parts

Part Number	Qty	Description	Part Number	Qty	Description
05-224853_0		Back bar guide - LH	3 AAT only		
05-224854_0		Back bar guide - RH	05-464278		Feedbox liner - back
05-227718 x2		Feedbox bearing for agitator grid			
01500-000055	2	1.9375 bearing	4 AAT only		
01501-500002	2	1.9375 flange bearing	05-462350 0		Feedbox liner - back
01504-000006	2	1.50 thrust bearing			
01506-500004	2	4.50 V-Camrol	6 AAT		
01506-500005	4	3.50 Camrol	05-228989	2	Wear shoe, back Servopac
01507-700001	4	1.377 flange bushing	05-232296	4	Bushing - Autofeed arm
01508-200001	3	1.438, 2.563, 2.625 bushing	05-233008	7	Wear shoe - rh front
01508-200002	4	1.438, 1.938, 1.75 bushing	05-233009		Wear shoe - Ih front
01295-500004		Compression spring	05-233040	2	Feedbox liner - front
3 AAT & 4 AAT	Models	only	05-465992	_	Feedbox liner - back
02-101932	2	.50 Bearing	01508-000055		1.00, 1.25, 2.00 bushing
05-227712	2	Feedbox liner - front	01508-000101	4	16.5mm bushing
05-228837	_	Wear shoe - RH front			3
05-228838		Wear shoe - LH front			
05-228841	2	Feedbox back wear shoe	/ 0 -		
05-228842	2	Feedbox scraper block	4		
01508-000088	2	.375 Steel bushing	10-		The Street
01508-000055	6	1.00, 1.25, 2.00 bushing		-	
01508-000089	2	1.00, 1.50, 1.00 bushing			

## Servopac Vibrator Module

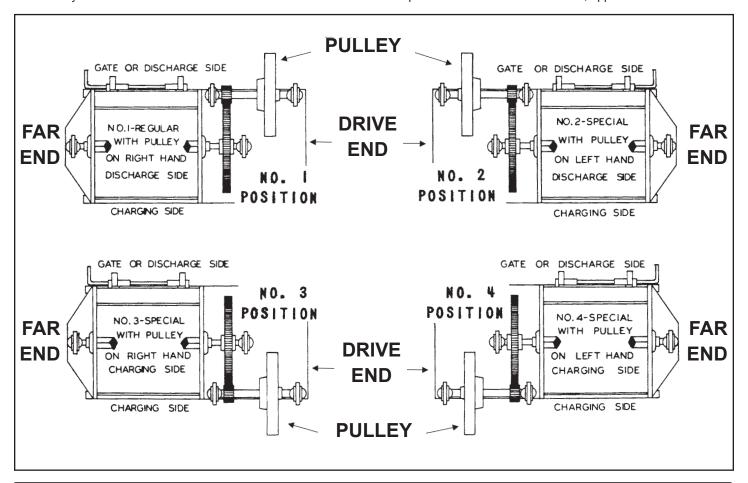
Part Number	Description
05-465674	Shaft assembly

05-46	5674 Shart as	Sembly			
Item	Part Number	Qty	Description		
1	01599-000092	1	Shaft seal, 50 mm ID, 80 mm OD, 8 mm thick		
2	01503-000024	2	Bearing		
3	01419-000003	2	.250-18 NPT check valve		
4	01419-000002	2	.250-18 NPT orifice035 diameter		
5	01413-000007	2	.125 snifter valve		
6	01359-000003	4	O-ring - 120 mm		
7	01359-000002	4	O-ring - 13 mm		
8	05-232456	1	Key		
9	05-232299	1	Small flinger - front		
10	05-232298	2	Large flinger		
11	05-232297	4	Spacer		
12	05-232290	1	Vibrator shaft 13000 pounds		
13	05-232289	4	Tie rod500		
14	05-232288	2	05-00080021		
15	05-232287	2	Inner closure - Servopac vibrator		
16	05-232286	1	Blank closure - Servopac vibrator		
17	05-232285	1	Closure - bearing - Servopac vibrator		
18	02-115099F0402	2	Adapter - straight - ORS/male NPTF		
19	02-113979	2	Grease seal - 2.5 ID		
20	02-087864	8	.500-13 NC FLEXLOC nut		
21	02-080497	6	.125-27 NPT pipe plug		
F64					



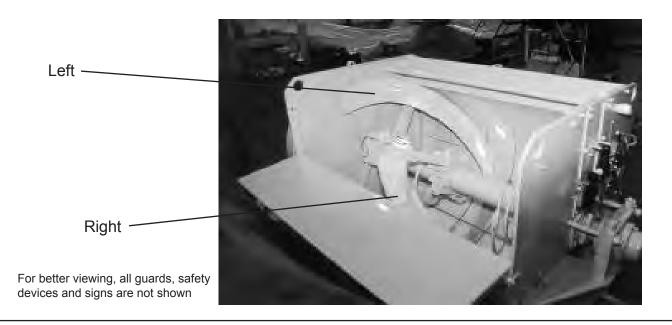
#### Besser Mixer Drive Positions

To assure correct replacement parts for your Besser mixer be sure to specify the position number as indicated below. Also, state serial number of your mixer. The serial number can be found on the mixer name plate located on the far end head, upper section.



### Properly Identifying Right Hand and Left Hand Mixer Blades

When ordering mixer blades stand behind the mixer to determine which are the right hand and left hand mixer blades. You can recognize the back of the mixer when you see the charging side inspection door. As you view the mixer from this location, the right hand blade will be located on the right side and the left hand blade located on the left side.



MIXERS 92 © 2016 by Besser Company



### Moisture Probes and Probe Liners

Besser offers a wide range of probe assemblies for 50, 60, 80, 100 and 120 cubic foot mixers. Liners are tough to withstand abrasive aggregates and are hardened throughout with no thin case to wear away.

### For 50 and 60 Cubic Foot Mixers

6

6

02-089462

02-087806

02-087881



Part Number	Qty	Description
02-642931	1	SOP to install Besser standard trough
		liners in place of moisture probe liners
		(three liners)
Includes the foll	lowing p	arts:
02-002263	1	Besser liner only - 12" L
02-002228	2	Besser liner only - 18" L

Hex nut - 1/2"

Lock washer - 1/2"

Plow bolt - 1/2" x 1-3/4" L



Part Number	Qty	Description	
02-642930	1	SOP to install Le Sueur moisture	
		probe trough liner with two probes	
Includes the foll	owing p	arts:	
02-109868	1	Le Sueur probe liner - 12" L	
		with two probes	
02-002228	2	Standard liner only - 18" L	
02-089462	6	Plow bolt - 1/2" x 1-3/4" L	
02-087806	6	Hex nut - 1/2"	
02-087881	6	Lock washer - 1/2"	
For Le Sueur replacement probe, order 02-109965			



Part Number	Qty	<u>Description</u>
02-642929	1	SOP to install Ramsey moisture probe trough liners with one probe each liner
Includes the follo	wing <sub> </sub>	parts:
02-302201	2	Probe liner -18" L (for one probe)
01679-400018	2	Ramsey probe assembly
02-002263	1	Liner only - 12" L
02-089462	6	Plow bolt - 1/2" x 1-3/4" L
02-087806	6	Hex nut - 1/2"
02-087881	6	Lock washer - 1/2"

### For 80, 100 and 120 Cubic Foot Mixers



Part Number Qty Description						
02-642901	1	SOP to install Besser standard trough liners in place of moisture probe liners				
Includes the fol	Includes the following parts:					
02-329719	1	Besser liner only - 12" L				
02-329720	2	Besser liner only - 18" L				
02-089462	12	Plow bolt - 1/2" x 1-3/4" L				
02-087806	12	Hex nut - 1/2"				
02-087881	12	Lock washer - 1/2"				



Part Number	Qty	Description
02-642895	1	SOP to install Le Sueur moisture probe
		trough liner with two probes
Includes the fol	lowing	parts:
02-109866	1	Le Sueur probe liner - 12" L with two
		probes
02-329720	2	Standard liner only - 18" L
02-089462	12	Plow bolt - 1/2" x 1-3/4" L
02-087806	12	Hex nut - 1/2"
02-087881	12	Lock washer - 1/2"

For Le Sueur replacement probe, order 01679-400026 For Le Sueur replacement liner, order 02-421595 02-648539 SOP to install two (2) 18" L

Le Sueur moisture probe trough liners (with 2 probes per liner) 02-115556 Le Sueur probe liner

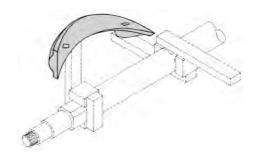


Part Number	Qty	Description
02-642894	1	SOP to install Ramsey moisture probe trough liners with one probe for each liner
Includes the follo	wing	parts:
02-329721	2	Probe Liner - 18" L (for one probe)
01679-400018	2	Ramsey probe assembly
02-329719	1	Liner only - 12" L
02-089462	12	Plow bolt - 1/2" X 1-3/4" L
02-087806	12	Hex nut - 1/2"
02-087881	12	Lock washer - 1/2"



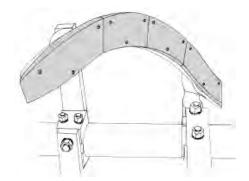
#### Standard Mixer Blades

Besser standard mixer blades are made from Ni-Hard cast steel for durability and long service life. All mixer blades sold separately or in pairs will be furnished as a complete SOP. Each SOP will include the blade(s), liners when applicable, and required mounting accessories. Instructions are included. Additional sizes and styles are available.



#### MIXER BLADES AND MIXER BLADE ASSEMBLIES CHART

Semi-Dry Mixer Model (cu ft)	40	50 & 60	80, 100 & 120	160	
Slump Mixer Model (cu yd)	N/A	2	3 & 4	6	9 & 10
Standard Blade Assembly (Solid - no liners) Standard RH blade Standard LH blade Set of parts for both blades Eccentrics	02-644840 02-644841 ////////// 02-229070	02-644842 02-644843 02-640594 02-229070	02-644846 02-644847 02-640595 02-242144	02-644850 02-644851 ///////// 02-305928	//////////////////////////////////////



#### Mixer Blades with Wear Liners

Ni-Hard liners and back up blades offer much savings over one piece blade design. Replacement of one or all wear surfaces is easier, freight charges are reduced and less storage is required for a spare set.

Wear liners are much easier to install and adjust, which adds up to more dollar savings.

You only purchase back up blades once. After the first installation it is only necessary to replace the Ni-Hard liners. A recommended installation procedure for new blades is included. Additional sizes and styles are available

#### MIXER BACK-UP BLADE ASSEMBLIES CHART

Semi-Dry Mixer Model (cu ft)	40	50 & 60	80, 100 & 120	160	
Slump Mixer Model (cu yd)	IIII	2	3 & 4	6	9 & 10
Back-Up Blade Assembly					
RH back-up blade only	///////////////////////////////////////	02-644844	02-644848	02-644852	02-644854
LH back-up blade only	///////////////////////////////////////	02-644845	02-644849	02-644853	02-644855
RH back-up blade (with liners)	///////////////////////////////////////	02-644871	02-644873	02-644875	02-644877
LH back-up blade (with liners)	///////////////////////////////////////	02-644872	02-644874	02-644876	02-644878
Replaceable blade wear liner assembly	///////////////////////////////////////	02-639248	02-639500	02-619036	02-639034
RH and LH blade (with liners)	///////////////////////////////////////	///////////////////////////////////////	02-639499	///////////////////////////////////////	///////////////////////////////////////
Eccentrics	02-229070	02-229070	02-242144	02-305928	02-305928

NOTE: The above parts lists includes blades and required mounting accessories

### Combo Units

With a combo unit, compressed air is filtered which helps to remove contaminates, regulated to maintain proper air pressure, and lubricated to help prevent internal damage providing longer trouble-free operation of air cylinders, air hoists, etc. Additional sizes and styles are available.

Part Number	<u>Description</u>
02-358505	Combo unit - 1/2" filter, regulator and lubricator with 1/2" tee (for 40 - 100 cu ft mixers)
02-379984	Combo unit - 1/2" filter, regulator and lubricator (for 40 - 100 cu ft mixers)
02-380722	Combo unit - 1" filter, regulator, and lubricator (for 6 - 10 yard slump mixers)

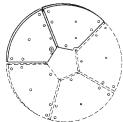
MIXERS 94 © 2016 by Besser Company



### Top Section Mixer Head Liner

These wear resistant liners reduce wear on the upper part of mixer heads. They are designed to fit on either head of most Besser mixers. These liners will retard rapid and abrupt wear at exposed edges of present liners! Full coverage liners give uniform surface throughout the entire blade travel area. The liners are drilled and countersunk for easy installation. Additional sizes and styles are available.

Part Number	Qty	Description
02-618545	1	SOP to install additional liners for full coverage of head (80,100 & 120 cu ft mixers)
Includes the follo	wing part	ts:
02-344260	2	Head liner - charging side (for 80, 100, & 120 cu ft mixers)
02-344261	2	Head liner - top side (for 80, 100, & 120 cu ft mixers)
02-088435	28	Flat head cap screw
01211-400002	28	Heavy nut - 1/2"
01233-400001	28	Split lock washer - 1/2"



### Steel Mixer Head Liner (1/2" Thick)

Hardened steel sectional type head liners. These abrasion resistant hardened steel liners offer enough flexibility so they can be properly attached to irregular surfaces. Additional sizes and styles are available.

Part Number	Qty	Description	
02-310873	4	Head liner for 12 cu ft mixer	
02-318839	4	Head liner for 18 cu ft mixer	0
02-312503	4	Head liner for 25 & 30 cu ft mixers	
02-296905	4	Steel head liner for 40, 50 & 60 cu ft mixers	0 0
02-295868	4	Steel head liner for 70 cu ft mixer	•
02-328805	6	Steel head liner for 80, 100 & 120 cu ft mixers, 3 & 4 cu yd mixers	
02-618535	1	Complete set, head liners for 80, 100 & 120 cu ft mixers, 3 & 4 cu yd slump mixe	ers
02-331773	1	Complete set, head liners for 6, 9 & 10 cu yd mixers	

#### Mixer Blade Shaft Covers

Install a full set of hardened blade shaft covers for an effective means to eliminate all wear on the blade shaft and reduce clean-up time, Less aggregate will adhere to the round surfaces of the covers.

Part Number	Qty	Description	
02-497293	2	Center cover for 40 cu ft mixer 5" square shaft	
02-490934	2	Center cover for 50 & 60 cu ft mixers 5" square & 7" round shaft	
02-490933	2	End cover for 50 & 60 cu ft mixers 5" square & 7" round shaft	1/11/4
02-490932	2	Special end cover for 50 & 60 cu ft mixers 5" square & 7" round	ere ere
		shaft (used with mixer scraper)	
02-497294	2	Center cover for 70 cu ft mixer 6" square shaft	
02-490935	2	End cover for 70 cu ft mixer 6" square shaft (not used with scraper)	
02-497295	2	Center cover for 80,100 & 120 cu ft mixers 7" square shaft and for 3 & 4 cu yd	
		slump mixers	Note: I
02-497289	2	Center cover for 80,100 & 120 cu ft mixers 8-1/2" diameter shaft, and for	covers
		3 & 4 cu yd slump mixers	match
02-497296	2	End cover for 80, 100 & 120 cu ft mixers 7" square shaft	
02-490936	2	End cover for 80, 100 & 120 cu ft mixers 8-1/2" diameter shaft	
02-497291	2	Center cover for 6 cu yd slump mixer	



Note: Mixer Blade shaf covers are sold as matched sets

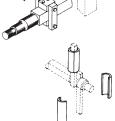
#### Mixer Blade Arm Covers

02-497290

Reduce excessive wear to your blade arms by installing these form fitting covers to the working side of each blade arm. Each cover is made of 1/4" thick abrasion resistant metal that is heat-treated to give long service and is accurately formed for easy tack welding to the blade arm. Additional sizes and styles are available.

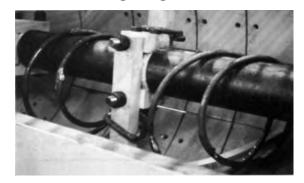
Part Number	Qty	Description
02-247822	8	Blade arm cover for 50 & 60 cu ft mixers
02-259372	4	Blade arm cover for 80, 100 & 120 cu ft mixers
02-497292	4	Round blade arm cover 7-1/2" OD for 80,100 & 120 cu ft mixers (request instruction print No. 02-317573)
02-495432	1	Blade arm cover for adjustable blade arm (part number 02-482358)

Blade Shaft Cover for 10 cu yd mixer





### Mixer Cleaning Rings



Eliminate time consuming clean-up at the end of the day's production. Cleaning rings for the shaft and arms will eliminate the build-up of material and allow longer mixing without stopping for clean-up. Arms that grow in size from material build-up also hinder proper blending of the mix. Installation instructions are included. Parts for Slump mixers include rings between arms and head liners. Additional sizes and styles are available.

#### Part Number Description

#### For Non-Slotted Arms

02-618034	Rings for 40, 50, 60 & 70 cu ft mixers
02-618510	Rings for 80, 100 & 120 cu ft mixers for square arm covers
02-640659	Rings for 80, 100 & 120 cu ft mixers for round arm covers
02-618522	Rings for 3 & 4 cu yd mixers
02-641522	Rings for 6 thru 10 cu yd slump mixers

#### **For Slotted Arms**

02-648517 Rings for 80, 100 & 120 cu ft mixers

### Mixer Blade Arms with Slotted Mount Holes - 80, 100, 120 Cu Ft Mixers

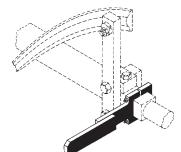
During blade installation the blade arm slots are used to initially position the blades. As a result, the mixer blade eccentrics will provide more adjustment to compensate for blade and trough liner wear because part of the eccentric adjustment was not used for the initial blade positioning.

Part Number	Description
02-482358	Blade arm with slotted mount holes
02-648344	SOP to convert all four standard mixer blade arms to slotted arms (includes blade arms 02-482358)

### Mixer Scraper

This mixer scraper will eliminate the excessive amount of concrete build-up on the head liners of your mixer and turn wasted material into profit by producing block instead of build-up. A mixer scraper will reduce costly cleaning time by eliminating the thick encrusted concrete left after each day of operation. Install a scraper at each end of your mixer. Additional sizes and styles are available.

Part Number	Qty	Description	
02-260186	2	Mixer scraper for 50, 60 & 70 cu ft mixers - 5" square shaft	
02-265237	2	Mixer scraper for 50, 60 & 70 cu ft mixers - 6" square & 7" diameter shaft	3
02-262742	2	Mixer scraper for 80, 100 & 120 cu ft mixers	
02-262743		Arm only - for mixer scraper for 80, 100 & 120 cu ft mixers	4/4/
02-619021	1	SOP mixer scraper for 6 cu ft slump mixer & 10 slump mixer	المالية
02-260187	2	Arm only for 50, 60 & 70 cu ft mixers	
02-260188	2	Holder only for 50 & 60 cu ft mixers - 5" shaft	
02-265238	2	Holder only for 50, 60 & 70 cu ft mixers - 6" square and 7" diameter shaft	
02-490932	2	Special end cover for 50 & 60 cu ft mixers - 5" diameter and 7" round shaft	



### Dust Plates and Rubber Seals (For Semi-Dry Batch Mixers)

Prevent premature wear on bearings and gears on your mixer by keeping the concrete mix from seeping out of the mixer at the blade shaft. Install dust plates and rubber seals with your standard dust hubs. Additional sizes and styles are available.

Part Number	Description	Seal
02-067301	Dust plate for 40, 50 & 60 cu ft mixers	
02-067302	Dust plate rubber seal for 40, 50 & 60 cu ft mixers	
02-002251	Dust hub for 40, 50 & 60 cu ft mixers	
02-045004	Dust plate for 80, 100 & 120 cu ft mixers	
02-225498	Dust plate Rubber Seal for 80, 100 & 120 cu ft mixers	Dust O
02-045003	Dust hub for 80, 100 & 120 cu ft mixers	Plate
02-263278	Retainer plate for 80, 100 & 120 cu ft mixers	



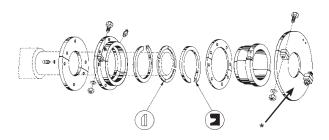
### Add Air Purging to Grease Purged Dust Hubs (For Slump Mixers)

Sets of Parts are available for slump mixers to add air purging to keep the slurry mix from seeping out of the mixer at the blade shaft. Install air purging to your existing grease purged dust hubs. Dust hubs are not included. Additional sizes and styles are available.

Part Number	Description
02-640685	SOP to install air purging for 2 cu yd slump mixer
02-640684	SOP to install air purging for 3 & 4 cu yd slump mixers
02-640670	SOP to install air purging for 6 cu yd slump mixer
02-640583	SOP to install air purging for 10 cu yd slump mixer

### Grease Purged Dust Hub Assemblies and Seals (For Slump Mixers)

Part Number	Description	
02-618540	Dust hub assembly for 3 & 4 cu yd slump mixers*	
02-619029	Dust hub assembly for 6 cu yd slump mixer*	
02-619030	Dust hub assembly for 9 & 10 cu yd slump mixers*	
The following sets of parts include the dust hubs and seals only.*		
	(Order one assembly for each side.)	
02-644976	Dust hub and seals for 3 & 4 cu yd slump mixers*	
02-644977	Dust hub and seals for 6 cu yd slump mixer*	
02-644978	Dust hub and seals for 9 & 10 cu yd slump mixers*	



Request a free copy of Besser Service Bulletin No. 89-1: 6, 9 and 10 yd slump mixer air/grease purged dust hubs.

### Air Operated Lube System for Mixers

Install an air-operated lube pump to automatically lubricate dust hubs and blade shaft bearings.



Part Number	Description
02-642991	SOP to install air-operated lube
	pump for 2, 3 and 4 cu yd mixers
02-642988	SOP to install air-operated lube pump
	for 6, 9, and 10 cu yd mixers
02-110950	Pump assembly with single solenoid
02-113032	Pump reservoir
02-090178	EP No.1 shell alvania grease 120 lb keg

BLOW OUT DISCS		
02- 108185	Yellow (1450 psi) - .010 thick x 11/16" diameter	
02- 112715	Red (1750 psi) - .012 thick x 11/16" diameter	
02- 111393	Orange (2050 psi) - .0132 thick x 11/16" diameter	
02- 084801	Pink (2650 psi)018 thick - for Trabon Pump 02-084561	
02- 084870	Red (1750 psi)012 thick - for 9249 indicator assembly 02-084869	

### **Bottom Cleanout Gate (Manual Control)**

Flush away the cleanup material from mixers through a bottom cleanout gate. A length of chain is used to restore the gate to the closed position. Heavy-duty dual latches lock the gate in position.

Part Number	Description
02-618028	SOP manually operated bottom cleanout gate for 50, 60 & 70 cu ft mixers
02-618505	SOP manually operated bottom cleanout gate for 80, 100 & 120 cu ft mixers



### **Bottom Cleanout Gate (Air Operated)**

Now it is possible to daily rinse away the cleanup material from the mixer through a bottom cleanout gate. This mechanism is adaptable to mixers above floor level or on a mezzanine and doubles in service when improperly proportioned batches must be diverted away from the machine hopper and mold.

A pneumatic cylinder closes the gate after dumping. Heavy-duty latches lock the gate closed during blending of materials. The cleanout gate shown fastens to 80 and 100 cu ft mixers. Other sizes are available on request.

Part Number	Description
02-618030	Air operated bottom cleanout gate for 50 & 60 cu ft mixers*
02-618500	Air operated bottom cleanout gate for 80,100 & 120 cu ft mixers*
02-648457	SOP to convert 45 degree air operated clean out gate to 90 degree

\*filter, regulator, lubricator and dump/lockout valve assembly are not included.

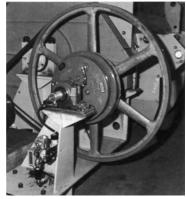
<sup>\*</sup>Does not include the collar plate shown



#### Drive Shaft with Witchita Clutch

The Witchita air clutch provides trouble-free operation and is ideal for plants that will automate the batching and mixing operations. Each Set of Parts includes a fully enclosed pulley guard.

Part Number	Description
02-639820	Witchita air clutch - 20 degree pitch angle pinion for 50 & 60 cu ft mixers No. 1 & 4 positions
02-642201	Witchita air clutch - 20 degree pitch angle pinion for 50 & 60 cu ft mixers No. 2 & 3 positions
02-639821	Witchita air clutch - 14-1/2 degree pitch angle pinion for 50 & 60 cu ft mixers No. 1 & 4 positions
02-642202	Witchita air clutch - 14-1/2 degree pitch angle pinion for 50 & 60 cu ft mixers No. 2 & 3 positions
02-110033	Witchita clutch assembly ATD-118 (50/60 cu ft)
02-110034	Witchita Clutch assembly ATD-218 (82/100 cu ft)
02-639216	Repair parts for Witchita air clutch ATD-218



#### Sets of Parts to Convert Dodge Clutch to Witchita Air Clutch

02-640032	Includes sheet metal guard for existing 8 groove sheave - 80, 100 & 120 cu ft mixers - No. 1 & 4 positions
02-642079	Includes sheet metal guard for existing 8 groove sheave - 80, 100 & 120 cu ft mixers - No. 2 & 3 positions
02-640033	Includes sheet metal guard for existing 10 groove sheave - 4 cu yd & 100 & 120 cu ft mixers - No. 1 & 4 positions
02-642092	Includes sheet metal guard for existing 10 groove sheave - 4 cu yd & 100 & 120 cu ft mixers - No. 2 & 3 positions
02-640019	Less sheet metal guard and 8 groove sheave - 80, 100 & 120 cu ft mixers - No. 1 & 4 positions
02-642198	Less sheet metal guard and 8 groove sheave - 80, 100 & 120 cu ft mixers - No. 2 & 3 positions
02-642199	Less sheet metal guard and 10 groove sheave - 4 cu yd & 100 & 120 cu ft mixers - No. 1 & 4 positions
02-642200	Less sheet metal guard and 10 groove sheave - 4 cu yd & 100 & 120 cu ft mixers - No. 2 & 3 positions
02-639216	Repair parts for Witchita air clutch (ATD-218)

Includes the following parts:

Part Number	Qty	Description
02-106991	1	Air tube
01580-400001	2	Friction disk
02-106995	12	Release springs

Air requirements = 1.25 cu ft at 60 P.S.I. for each actuation of clutch.

Convert from 100 cu ft to 120 cu ft mixer

02-282998 Tension straps 02-305614 Reinforced shell

02-642181 Motor

NOTE: BESSER RECOMMENDS REPLACING EXPANDED METAL **GUARDS WITH GUARDS CONSTRUCTED OF SHEET METAL** 

### Heavy-Duty Drive Shaft

(Does not apply to mixers with Wichita Clutch)

This extra heavy-duty drive shaft and related parts is specially made for Besser 40 - 70 cu ft mixers. This shaft interchanges with all shafts having a Hyatt A5314-TS bearing on the pinion end. The shaft is increased to 3-3/16" diameter in the clutch hub and pinion area to withstand stress and give longer service life.

Note: The heavy-duty shaft is also available completely assembled, ready for installation,

	ch, bearings and related hardware.
	618033 which includes: a pinion, spacers, keys, hex nut, clutch hub, split d closure for gear guard. Installation instructions are included.
Part Number	<u>Description</u>
02-618037	Heavy-duty drive shaft with parts required to change from 2-15/16" diameter to 3-3/16" diameter shaft - less the Timken bearing - 14-1/2° pitch angle for 40 thru 70 cu ft mixers
02-618047	Heavy-duty drive shaft - includes above parts <b>plus</b> the Timken bearing and housing - 14-1/2° pitch angle pinion for 40 - 70 cu ft mixers
02-641074	Heavy-duty drive shaft - includes above parts plus the Hyatt bearing and a 14-1/2° pitch angle pinion for 40 - 70 cu ft mixer
02-641076	Heavy-duty drive shaft - includes above parts plus the Hyatt bearing and a 20° pitch angle pinion for 40 - 70 cu ft mixer

Parts are also available to change from the old style 2-15/16" diameter shaft (light bearing D-212) to the 2-15/16" heavy-duty shaft, Hyatt bearing A5314-TS and a new pinion.

02-641073	Heavy-duty drive shaft - includes above parts for 14-1/2° pitch angle pinion for 40 - 70 cu ft mixers
02-641075	Heavy-duty drive shaft - includes above parts for 20° pitch angle pinion for 40 - 70 cu ft mixers

**MIXERS** 98 © 2016 by Besser Company



### Direct Air Operated Mixer Gate for 50 & 60 Cu Ft Mixers



This air operated mixer gate design moves the air cylinder and gate operating mechanism to the discharge side of mixers. More efficient and faster operation of the mixer gate is obtained. This air gate allows for effortless adjustments and smoother operation.

Part Number	<u>Description</u>
02-618018	SOP to change from manual gate to direct air gate (with manual valve)
02-618019	SOP to change from remote air to direct air gate
02-641469	SOP to install direct air gate (includes gate parts and air cylinder)

### Split Gear Case Oil Retainer

Set of parts to install split oil retainer sub-assemby on 80/100 cu ft mixer. Interchangeable with 02-461410 & 02-490902 oil retainer assemblies only.

Part Number	Description
02-648908	SOP to install split gear case oil retainer

### Remote Air Operated Mixer Gate

#### For 50 & 60 Cubic Foot Mixers

With a manual air valve, this Set of Parts allows you to go from manual operation (hand operated) to remote air operation.

Part Number	<u>Description</u>
02-618006	SOP to install air cylinder and manual valve for side discharge gate - No. 1 position
02-618007	SOP to install air cylinder and manual valve for side discharge gate - No. 2 position
02-618008	SOP to install air cylinder and manual valve for side discharge gate - No. 3 position
02-618009	SOP to install air cylinder and manual valve for side discharge gate - No. 4 position

### **Breather Vent**

Part Number	<u>Description</u>
02-647832	SOP to add breather vent and replace split oil seal for 80, 100 and 120 cu ft mixers. Includes breather vent,
	inspection cover and seal.
02-114912	Breather vent only

### Mixer Pulley Guard

This fully enclosed pulley guard is designed for installation on all Besser mixers in all positions. Insist on the best possible protection for your plant personnel; order a pulley guard today. The SOP includes a lubrication line for greasing the pulley hub through an access opening in the guard.

Part Number	<u>Description</u>
02-618534	SOP pulley guard for 8 groove pulley for 80, 100 & 120 cu ft mixers
02-322250	Pulley guard for 40, 50 & 60 cu ft mixers
02-371885	Pulley guard for 4 cu yd slump mixer

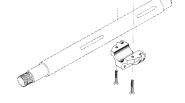


NOTE: BESSER RECOMMENDS REPLACING EXPANDED METAL GUARDS WITH GUARDS CONSTRUCTED OF SHEET METAL.

### Split Sliding Collar

Removal of the one piece sliding collar is difficult because it is necessary to pull off the bearing assembly and pinion. This split design sliding collar offers quicker removal and replacement of a worn clutch collar. This improved design will fit all Besser mixers from 18 - 70 cu ft sizes and is interchangeable with collars having 2-15/16" bore.

Part Number	Description
02-258458	Split sliding clutch collar - 2-15/16" bore
02-292027	Clutch collar - 3-3/16" bore
02-001180	Split clutch band



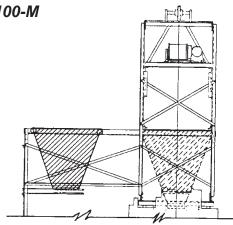


### Drive Mechanism for Skip Loader Movable Hoppers - SL-80/100-M

A gear motor (230/460-3-60V) enables powered movement of your material filled hopper. With this SOP, a movable hopper filled with material can be powered aside for unloading if it becomes necessary because of a production stoppage. The drive mechanism allows the hopper to be moved by personnel to dump sludge and concrete chips gathered during cleanup of the mixer and hopper, resulting in an easier and more efficient cleanup.

Air controls and installation instructions are included. Electrical controls and hopper are NOT included.

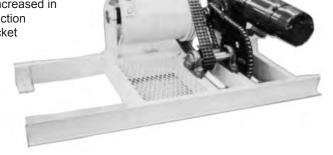
Part Number	Description
02-640519	Add drive to movable hopper (moves to the left)
02-640520	Add drive to movable hopper (moves to the right)



### Independent Skip Loader Drive Assembly

All independently driven model 56 and model 78 skip loaders can be converted to a new heavy-duty drive assembly as shown. The cable drum has been increased in diameter and is properly supported between the gear reducer and anti-friction bearing. Included with the assembly are the top sheave and support, bucket sheave holder and sheave and plow steel cable assembly.

Part Number	Description
02-643198	Kit to convert model 78 skip loader to 15 hp
	drive and sheaves
02-643197	Kit to convert model 56 skip loader to 10 hp
	model SL-50 drive and sheaves



### Skip Cable Sheave

This sheave has improved bronze bushings and interchanges with all 12-1/2" outside diameter sheaves having 2-7/16" bore nylon bushings. Smooth bore surfaces give full bearing contact on the pin for heavy-duty operation. A built-in grease reservoir insures long service.

Part Number	Description
02-296530	Skip cable sheave with bushings
02-296531	Bronze bushing only (replacement 2 reg'd)



### Sheave with High Capacity Bearing

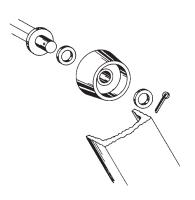
Part Number	Description
02-648368	SOP to upgrade SL-120/160 skip loader top sheave with high capacity bearing. Requires rework on existing sheave 02-458887.
02-485535	Sheave with high capacity bearing to replace sheave sub-assembly 02-458887

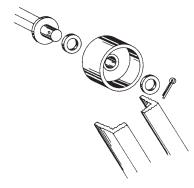


### Skip Bucket Roller Assembly

This roller is designed for use on skip buckets (SL-50/60/80/100) using "ship channel" for track, (C & S channel track). Install these rollers with the taper away from the bucket.

Part Number	Qty	Description
02-371693	4	Skip bucket roller assembly, includes: (for C & S channel)
		a) 02-371692 Roller only
		b) 02-103724 Bronze bushing only
		c) 02-084106 Grease fitting only
02-089779	2	Cotter pin
02-245079	2	Washer
02-648056	1	SOP to upgrade SL-120/160 bucket rollers with high capacity bearings
		Includes roller sub-assembly, axle sleeves and flat washers.





### Skip Bucket Modification Kit

Part Number	Description
02-608172	SOP to convert models 56 & 78 skip loader buckets to hardened steel rollers (Part 02-295962 - roller sub-assembly), and add guides for bucket rollers

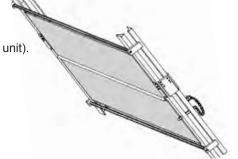
This SOP converts models SL-56 and SL-78 skip loader buckets to hardened steel rollers with bronze bushings, thrust washers, and larger diameter axles. Hardened rollers give longer life and prevent chipping. Heavy-duty bronze bushings withstand shock. Guide plates are included to insure that rollers return to the track after dumping.

### Safety Guards and Safety Stops

Metal guards are available to install on the skip loader track to help protect plant personnel. Guards install from 4" above floor level to a safe protective height.

Pin type safety stops attach to the track and holds the bucket elevated for pit cleaning. Pin stops are standard on skip loaders after serial no. 215. (The serial number is on the drive unit).

Part Number	Description
02-608115	Guards & safety stops
	(SL-50, SL-80 & SL-100 prior to serial no. 216)
02-608162	Guards only (SL-50, SL-80 & SL-100,
	serial no. 216 and higher with welded angle tracks)
02-333210	Safety stops only (prior to serial no. 216, 2 req'd)

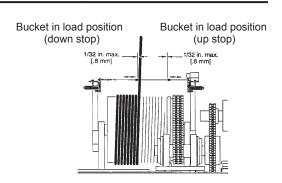


### Skip Loader Cable Limit Switch

As the skip loader cable winds and unwinds, it moves laterally (side to side) on the grooved cable drum. If the cable exceeds the travel limits set for the clamps and trip wire, the cable switch shuts down the skip loader drive.

Part Number	Description
02-646456	Skip loader cable limit switch (mechanical)

NOTE: Contact your batching controls supplier (reference Besser No. 02-458514 wiring diagram) to determine electrical parts and changes required.



### Skip Loader Drive Accessories

Part Number	<u>Description</u>
02-644913	SOP to replace standard skip loader (SL-80) drive cable drum with cable drum with removable sprocket.
02-647080	SOP to install chain tensioners on skip loader drive for SL-100
02-647144	SOP to install chain tensioners on skip loader drive for SL-80



### Unloading Conveyor Depalleter Brake

A SOP is available to install a brake on the depalleter drive of the unloading conveyor. This item is standard on all MS-9 (four-at-a-time) and MS-10 (three-at-a-time) Multi-Spade Besser-Matics.

Part Number	<u>Description</u>
02-459506	SOP to add brake to unloading conveyor gear motor (230/460-3-60 VAC)
02-456924	SOP to add brake to unloading conveyor gear motor (190/380/415-3-50 VAC)

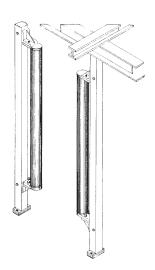
### Multi-Spade Besser-Matic Barrier Gates

Barrier gates are designed to prohibit plant personnel and visitors from passing between the accumulators and the rack conveyor. The gates are hinged so they may be raised to an upright position for easy access during maintenance. Both gates are electrically interlocked and will not allow the machine to operate unless they are in the down position. If either gate is lifted during operation, the Besser-Matic will automatically stop.

Part Number	Description
02-645599	SOP to install safety gate on loader and unloader accumulator (one SOP required per Multi-Spade Besser-Matic)
	(one con required per manus epinate account manus)



### Pallet Guide Rollers For Multi-Spade Besser-Matic



Pallet guide rollers are designed to guide loaded pallets into the rack bay. The rollers effectively align pallets without damaging "green" block and help eliminate unnecessary downtime from jammed pallets. These rollers are engineered for easy installation.

Part Number	Description
02-642866	SOP for loader stacker
02-645850	SOP to install pallet guide rollers on unloader
	stacker (Includes two rollers)

Consult your Besser Representative for your specific application

# Positive Soft Stop to Front Delivery Conveyor For Multi-Spade Besser-Matic

This SOP allows you to add positive soft stop to the front delivery conveyor of Multi-Spade Besser-Matics. Installation instructions included with each order.



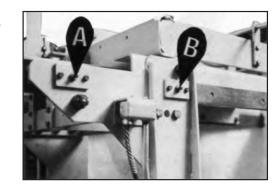
Part Number	Description
02-646065	SOP to add positive stop to front delivery
	conveyor
02-113221	Shock absorber with nut (2 req'd)

Consult your Besser Representative for your specific application

### Nylon Guides for Transfer Carriage

The Besser-Matic loader and unloader transfer forks must track properly to correctly handle pallets. Replace worn rollers and track surfaces to permit carriage assemblies to move precisely. Install these nylon guides for transfer carriage to insure positive movement. This set of guide liners with adjusting screws is similar to the factory installed guides shown at points "A" & "B". The field kit includes eight hex nuts that weld to carriage frames, eight nylon guide liners with screws, and eight jam nuts (enough for both the loader and unloader). Additional sizes and styles are available.

Part Number	Description
02-631224	Nylon carriage guides
02-266991	Nylon guides (for replacement)





### Replacement Warner Brakes

### Fail Safe Warner Brake with Power Supply

Part Number	<u>Description</u>
02-113820	Brake assembly for loader/unloader transfer motor or pallet return transfer motor - 5/8" diameter motor shaft (10.5 ft lb) EUM-50
02-113821	Brake assembly for loader/unloader stacker motor (3 AAT - standard height) - 5/8" diameter motor shaft (21.0 ft lb) EUM-100
02-113822	Brake assembly for loader/unloader elevator motor- (3 AAT - standard height) - or loader/unloader stacker motor EUM-180 (3 AAT - extra height) - 7/8" diameter motor shaft (21.0 ft lb) EUM-180
02-113823	Brake assembly for loader/unloader elevator motor (3 AAT - extra height) 1-1/8" diameter motor shaft (56.0 ft lb) EUM-210
02-115014	Brake assembly for loader/unloader transfer motor or pallet return transfer motor - 5/8" diameter motor shaft (10.5 ft lb) EUM-50

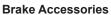
### Fail Safe Warner Brake without Power Supply

<u>Description</u>
Brake assembly for loader/unloader transfer motor without power
supply - (use with frequency drives) 5/8" diameter motor shaft (10.5 ft lb)
Brake assembly for loader/unloader stacker motor (3 AAT - Standard
height) - 5/8" diameter motor shaft (21.0 ft lb) EUM-100
Brake assembly for loader/unloader elevator motor- (3 AAT - standard height) - or loader/unloader stacker motor
EUM-180 (3 AAT-extra height) - 7/8" diameter motor shaft (21.0 ft lb) EUM-180
Brake assembly for loader/unloader elevator motor (3 AAT- extra height) 1-1/8" diameter motor shaft (56.0 ft lb)
EUM-210

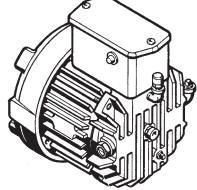
Non-Fail Safe V	Varner Brake	
Part Number	Description	
02-112142	EM-50 non-fail safe Warner brake (for turn and transfer motors)	

### **Power Supply**

Part Number	Description
02-103466	Power supply - 90 VDC (replacement) - panel mount
02-113074	Adjustable power supply (replacement) - panel mount CBC-300
02-114584	Warner brake power supply - all voltages and 50/60 Hz -
	brake mount CBC-160MV
02-114117	Warner brake power supply - 230 V/60 Hz - brake mount CBC-160-2
02-115015	Warner brake power supply - CBC-160-1 - brake mount



Part Number	Description
02-113036	Dust cover for EM-50 or EM-180 brake
02-113037	Dust cover for EM-210 brake



#### BescoShear Motor Brakes

#### **Standard Features**

- 115 VAC electric actuation
- Quick disconnect electrical connection
- Power on LED indicator light
- Oil shear multiple disc spring set braking
- · Superior heat dissipation
- Smooth "cushioned" stops to reduce system shock
- Keyless high torque collet hub to shaft connection
- · Internal surge protection
- · Two-year warranty

Warner to BescoShear Field Conversion						
Application	Warner Part #	Besser *SOP#	Rebuild Kit Part #			
Turn, transfer, conveyors, rollover 5/8" shaft diameter	02-115014 02-113881	02-648224	02-115332F0002			
MS-10 (3 AAT) accumulator 5/8" shaft diameter	02-115012	02-648225	02-115332F0002			
MS-10 (3 AAT) accumulator 7/8" shaft diameter	02-115013	02-648226	02-115332F0002			
MS-10 (3 AAT) elevator 7/8" shaft diameter	02-115013	02-648227	02-115332F0004			
MS-9 (4/5 AAT) accumulator 1-1/8" shaft diameter	02-114099	02-648228	02-115332F0006			
MS-9 (4/5 AAT) elevator 1-1/8" shaft diameter	02-114099	02-648229	02-115332F0006			

<sup>\*</sup> includes brake, circuit breaker, cable connector and instruction drawing

© 2016 by Besser Company 103 BESSER-MATICS



### Sets of Parts to Improve Performance of Existing Multi-Spade Besser-Matics

Part Number	Description	Trail Cables ("Cat Tracks")
02-646049	SOP to replace existing PRS-3 (accumulator full)	main subject ( sat masks )
	with pancake proximity sensor	Transaction -
02-645972	SOP to replace existing (two deep) loader/unloader trail	Territorio continue
	cables with cable and hose carriers ("cat tracks")	
02-645973	SOP to replace existing (four deep) loader/unloader trail	
	cables with cable and hose carriers ("cat tracks")	
02-645974	SOP to replace existing (five deep) loader/unloader trail	
	cables with cable and hose carriers ("cat tracks")	AT A
02-645975	SOP to replace existing (six deep) loader/unloader	
	trail cables with cable and hose carriers ("cat tracks")	- WORD 25
02-645618	SOP to replace existing RH loader turn cables with	
	sealtite and cable swivel	9 10
02-645616	SOP to replace existing RH unloader turn cables with	
	sealtite and cable swivel	
02-646844	SOP to replace thrust bearing and housing on MS-9	
	(4 AAT) ball screw to increase bearing life	
02- 645617	SOP to replace existing LH unloader turn cables with	
	sealtite and cable swivel	
02- 645615	SOP to replace existing LH loader turn cables with sealtit	
02- 645850	SOP to install pallet roller guides to the unloader accumul	
02- 644078	SOP to modify harmonic depalleter hydraulic trail hoses (	model no. DP-9), any model Multi-Spade Besser-Matic

### **Unloader Stacker Safety**

The addition of PRS-43 to the unloading conveyor will prevent the unloader stacker from setting one pallet on top of another. The unloader stacker will continue to index down as long as there is no pallet on the unloading conveyor, PRS-43. The current software indexes the stacker one time only when PRS-42 is tripped and released. When one pallet is missing, PRS-42 never gets tripped and consequently, the stacker doesn't lower another pallet. Once the pallet trips PRS-43, the stackers are disabled. After the pallet clears PRS-43, the stacker will index down. Consult your Besser Representative for additional information.

#### Part Number Description

02-464053 Unloader stacker safety

### Set of Parts for Replacing Ball Screw

Besser now offers a SOP for replacing the ball screw with a ball screw jack on the MS-7 and MS-10 Multi-Spade Besser-Matics manufactured after 1989 for use on three-at-a-time concrete products machines. In the previous design the screw surfaces were exposed to the environment in the plant, which caused significant wear on the screw and ball bearing surfaces. With the new design, the screw portion of the unit is protected from dirt and debris by a flexible boot and offers the following features:

- Self-contained worm gear ball jack
- Utilizes standard 1800 RPM electrical motor drive
- Protective bellows protects screw from dirt and dust
- No ball kits to replace
- Three-year limited warranty

### Part Number Description

02-503760 SOP for replacing ball screw

### Combo Units

With a combo unit, compressed air is filtered which helps to remove contaminates, regulated to maintain proper air pressure, and lubricated to help prevent internal damage providing longer trouble-free operation of air cylinders, air hoists, etc. Additional sizes and styles are available.

#### Part Number Description

02-379985 Combo unit - 1/2" filter, regulator and lubricator (for Trail-A-Rail)



### LSC-40A & C Updates

Part Number	<u>Description</u>
02-/////////	SOP to replace existing transfer car cable reel with overhead festoon system (consult with your Besser Sales
	Representative
02-646144	SOP to increase cable life with hydraulic driven cable reel
02-646112	SOP to install hardened wear tracks on transfer car (double flange wheels/bolt-on)
02-646113	SOP to install hardened wear tracks on side shifter (double flange wheels/bolt-on)
02-643506	SOP to install hardened wear track on car (single flange wheels/weld-on)
02-643533	SOP to install hardened wear track on side shifter (single flange wheels/weld-on)
02-645883	SOP to install hardened wear track on car (single flange wheels/bolt-on)
02-645951	SOP to install hardened wear track on side shifter (single flange wheels/bolt-on)
02-644009	SOP to install LSC-40 rail cleaning brushes
02-644461	SOP to add solid machine wheels to LSC-40 - trailer
02-645051	SOP to add rotating cable anchor to LSC-40 - car
02-470585	LSC-40/100 crawler panel water cover
02-507699F0244	Parker hydraulic wheel motor (must order in quantity of 2 if replacing CharLynn motor)

#### Repair parts for Parker hydraulic motors

01399-200001	Parker shaft seal kit
01399-200002	Parker shaft
01399-200003	Nut
01399-200004	Parker complete overhaul kit
	•

Note: Oversize LSC wheels are available for some models. These wheels are helpful when the kiln rails have have worn down. Contact your Besser Sales Representative for additional information.

### Repair kits for CharLynn hydraulic motors

02-113077 Locking nut 02-113256 Shaft & bearing kit

02-113596 Shaft seal kit (includes dust seal, shaft seal, o-ring and face seal)

### Contour-Matic (CM-24) Self-Leveling Blades

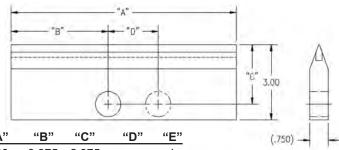
Part Number	Description
02-102204	End knife (B-32033) - 7-5/8" block (For CM-24 Hydrofeed and CM-24 Hydroversal splitters)
02-102205	End knife (B-32072) - 3-5/8" block (For CM-24 Hydrofeed and CM-24 Hydroversal splitters)
02-102206	Cross knife (A-28065) (For CM-24 high speed splitter)
02-102207	Cross knife 9" long (for CM-24 GF splitter (B-25145)
02-102178	Top or bottom knife - 1/2" x 2" x 4-1/2" long
02-113727	Top or bottom knife with hardened tip - 1/2" x 2" x 4-1/2" long
	(interchangeable with No. 102178)
02-102029	Top head blade assembly (for CM-24-GF splitter)
02-102006	Bottom head blade assembly (for CM-24-GF splitter)

### 6209, 6386 and S63 Splitter Self-Leveling Blades

Complete assemblies for self leveling blades are available as retrofits for 6209, 6386 and S63 model splitters. Contact your Besser Representative for information.

Part Number	Description
05-218711_0	Replacement blade 1/2" x 2" x 3"
05-214245_0	Replacement leveling cam (large)
05-214442_0	Replacement leveling cam (small)
05-215016 0	Replacement leveling cam (end)

### Straight Split Blades For 6209 and 6386 Model Block Splitters

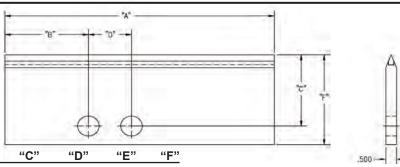


Part Number	Part Number						
Non-Carbide Tip	Carbide Tip	Description	"A"	"B"	"C"	"D"	"E"
05-21725326	05-21978801	Blade (9 inch)	9.00	3.875	2.375	_	1
05-21725302	05-21978802	Blade, lower (13 inch)	13.00	3.875	2.375	2.000	2
05-21725305	05-21978803	Blade, side (4 inch)	2.625	1.312	2.000	-	1
05-21725306	05-21978804	Blade, side (6 inch)	4.625	2.312	2.000	-	1
05-21725307	05-21978805	Blade, side (8 inch)	6.625	3.312	2.000	-	1
05-21725310	05-21978807	Blade, upper (13 inch)	13.000	3.875	2.000	2.000	2
05-21725304	05-21978809	Blade, lower (26 inch)	26.000	9.062	2.375	7.875	2
05-21725303	05-21978810	Blade, upper (26 inch)	26.000	9.062	2.000	7.875	2
05-21725301	05-21978816	Blade, lower (10 inch)	10.000	3.875	2.375	-	1
05-21725321	05-21978815	Blade, upper (10 inch)	10.000	3.875	2.000	-	1

"E" indicates the number of mounting holes

NOTE: Additional non-standard lengths are available. Ask your Besser Customer Service Representative for details.

### Straight Split Blades For S63 EZ Model Block Splitters



Part Number							
Carbide Tip	Description	"A"	"B"	"C"	"D"	"E"	"F"
05-220054_0	Blade, side (6")	5"	2-1/2"	3-1/8"	-	1	4"
05-220075_0	Blade, side (8")	6-5/8"	3-5/16"	3-9/16"	-	1	4-1/2"
05-220074_0	Blade, top/bottom	13"	3-7/8"	3-9/16"	2"	2	4-1/2"
05-220267_0	Blade, top/bottom	9"	3-7/8"	3-9/16"	-	1	4-1/2"
05-221644_0	Blade, top/bottom	24-1/2"	6-5/16"	3-9/16"	11-7/8"	2	4-1/2"
05-222711_0	Blade, top/bottom	12-1/4"	3-7/8"	3-9/16"	2"	2	4-1/2"

"E" indicates the number of mounting holes

### 6386 Block Splitter

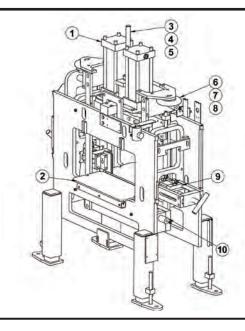
638	6 BI	ock Splitter		
Key	Qty	Part Number	Description	
1	1	05-100433_0	Hydraulic cylinder, 8" stroke	
		05-101398_0	Hydraulic cylinder, 12" stroke	
2	4	05-214746_0	Upper/lower head gib slide	
			(1 per side)	
3	8	05-214747_0	Upper/lower head gib slide	
			(2 per side) <b>(5)</b>	
4	4	05-217742_0	Vertical tie bar (8 & 12" splitters)	<b>a</b>
_	0	05 044745 0	(o si i = opiitioi o)	9
5	8	05-214745_0	Blade carrier gib slide	
6	1	05-203258 0	(2 per tie bar) Blade carrier gib slide	( manufil)
U	7	03-203230_0	(1 per tie bar)	
7	2	05-100101 0	Cide lysife adjudes	11 11 11
8	4	01506-000060	Side kriffe guide roller	12
			(2 per side)	13
9	1	05-502675_0	Block hold down assembly 3 6 6	
10	4	05-150615_0	Block hold down replacement	
			spring H H H	Lower blade cushion
11	4	05-150551_0	Cushion spring	assembly - 1 assembly located on each side of
12	4	05-203341_0	Spring adjustment plunger	the splitter
13	2	05-203338_0	Neoprene pad	•
14	1	05-216369C0	Wear plate, straight split	



# S63 EZ Block Splitter

Key	Qty	Part Number	<u>Description</u>
1	2	05-101824_0	Hydraulic cylinder, 12" stroke
2	2	05-220263_0	Straight split wear plate
3	1	05-461557_0	Upper knife positive stop assembly
4	1	05-460918_0	Positive stop nut retainer
5	1	01216-000001	Square nut, positive stop
6	2	05-153895_0	Pneumatic cushion
7	1	05-153904_0	Pneumatic regulator
8	1	05-153914_0	Pressure gate
9	2	05-101825_0	Hydraulic cylinder side knife
10	12	05-300290_0	Round, UHMW guide block

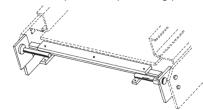
The hydraulic components listed above are Hydroline brand. For machines using Parker brand components, contact your Besser Customer Service Representative.



# Flipper Plate

This flipper plate installs between the depalleter and the block turnover. Closing up this area is helpful when producing patio slabs and brick.

Part Number	Qty	Description
02-634803	1	Flipper plate - BTO-5 for standard depalleter
02-105657	2	Flange plate - replacement
02-334564	1	Wear plate
02-640714	1	Flipper plate - BTO-6 for standard depalleter
02-105657	2	Flange bearing - replacement
02-369658	1	Wear strip - replacement



# Bar Conveyor Assembly

Key Qty Part Number Descrip	ption
-----------------------------	-------

#### **Infeed Flipper Plate**

(design can vary by vintage of bar conveyor)

1 1 05-219824\_0 Infeed flipper wear plate 2 2 01507-000012 Flanged bushing

#### **Discharge Filler Plate**

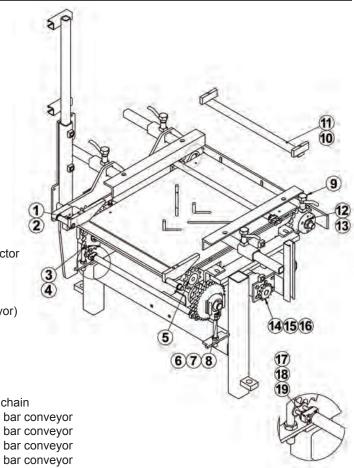
10	1	05-456676_0	Filler plate assembly
11	1	05-214516 0	Replacement wear plate

#### **Drive Components**

3	1	05-211390_0	Drive sprocket	
4	1	05-151916_0	Sprocket locking ring	
5	2	01556-000003	Idler sprocket	
6	2	01502-000029	Take up bearing	
7	1	01626-000031	Rotary encoder, 600 pulse	
8	1	01691-000038	Replacement encoder cable w/ connector	
12	2	01553-000013	Front idler sprocket	
13	2	01594-500018	Idler bushing	
14	1	01551-000006	Drive sprocket	
15	1	01330-000010	Hydraulic motor (3 and 4 block conveyor)	
		01330-000011	Hydraulic motor (6 block conveyor)	
16	1	01359-500008	Hydraulic motor seal kit	
Par Canyayar Chain and Par Campananta				

#### Bar Conveyor Chain and Bar Components

17	2	05-214165_0	Bar conveyor pusher bar
18	4	05-457223_0	Pin and lug assembly, 80 lb chain
19	4	05-456867_0	Chain connecting link, modified, 80 lb chain
		05-456404_0	Preassembled chain and bar - 3 block bar conveyor
		05-456405_0	Preassembled chain and bar - 4 block bar conveyor
		05-456406_0	Preassembled chain and bar - 5 block bar conveyor
		05-456407_0	Preassembled chain and bar - 6 block bar conveyor



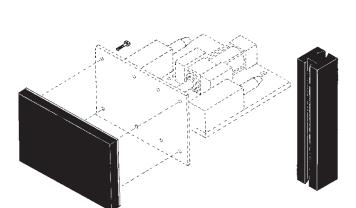


Check your machine's serial number before ordering parts for your block turnover. Parts vary between models manufactured before and after 1995.

# **Block Clamping Assembly**

Update your clamp type block turnovers by installing pneumatic air cylinders. The use of pneumatic cylinders is the most popular method used today to effectively clamp block. This SOP is easy to install and is designed to use your present air supply system. The pneumatic clamp assembly SOP includes right hand and left hand 2" diameter clamp cylinders, guides, plates, pads, mounting hardware and instruction drawings. A SOP for replacement hydraulic clamp assemblies is also available and includes right and left hand 1-1/2" diameter clamp cylinders, guides, plates, pads, mounting hardware and instruction drawings.

Part Number	Description
02-640511	SOP for block clamping assemblies to convert from
	hydraulic to pneumatic
02-640217	SOP for hydraulic block clamping assemblies (replacement)





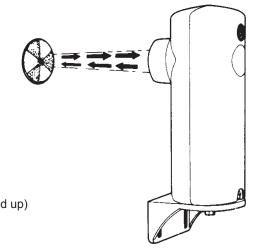
These rubber faced steel plate clamp pads are designed as one piece for secure positioning. One piece steel plates are faced with vulcanized rubber for exceptional durability and long service life. Different sizes are available for running different size block. These clamp pads are completely interchangeable on all Besser block turnovers. The old style urethane reinforced clamp pads and H-rubber clamp pads are still available for the BTO-5 and BTO-6A & B.

Part Number	Description
02-424906	Rubber faced steel plate clamp pad for 6" block
02-424908	Rubber faced steel plate clamp pad for 8" block
	(slight modification needed)
02-424910	Rubber faced steel plate clamp pad for 10" block
02-424912	Rubber faced steel plate clamp pad for 12" block
02-107389	Urethane block pads with 4-1/2" hole centers
02-332411	H-rubber with holder
05-217362_0	Steel-backed rubber pad for "Lithibar"-style turnover
02-105456	H-rubber pad material (sold by the foot)

#### Modulated Photo Switch with Reflector

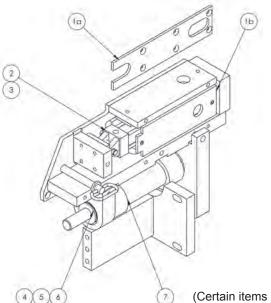
The modulated photo switch with reflector is ideal for use as a cube height sensor. This photo switch will readily replace the OPCON cube height sensor.

Part Number	Description
02-643098	SOP to install modulated photo switch with reflector
02-108292	Photocell (42 RLL-4000)
02-108293	Photocell (42 RLR-4000)
02-107083	Photocell (42 RLU-4000)
02-104743	Bracket (for photocell)
05-05037201	Reflector - 3" (76 mm) diameter all plastic (92-39P)
02-110711	Reflector - 3.3" (84 mm) diameter (E-51KR84)
02-107583	Plug-in relay (for above photocells)
02-106051	ATC bracket
02-108171	Detector - No. 1260-1-B-B (used on Bescodyne drive - V3-12D and





#### Turnover Turn Arm Assembly



Key	Qty	Part Number	Description
1a	4	05-216967_0	Clamp arm slide bearing
1b	4	05-218018_0	Clamp arm slide bearing
			(turnovers manufactured after 2000)
2	1	01332-000041	Hydraulic cylinder
		05-SKR551203	Piston seal kit
		02-101963	Rod seal kit
3	1	05-10003602	Cylinder clevis pin
4	1	05-150973_0	Thrust bearing
5	1	05-150976_0	Thrust bearing
6	1	05-151990_0	O-ring
7	2	05-216972_0	Turn arm bushing

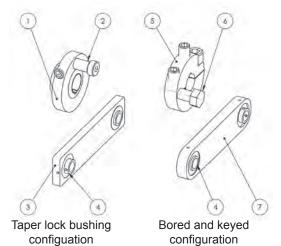
Reference the parts manual specific to your equipment for any items not included in the above list.

(Certain items have been removed for clarity)

# **Turnover Turn Arm Link Component**

NOTE: Quantities listed reflect items required for one arm.

Key	Qty	Part Number	Description
1	1	05-461206_0	Turn arm linkage wheel, taper lock bushing
2	1	05-153696_0	Shoulder bolt (included with 05-461206_0)
3	1	05-461060_0	Turn arm linkage assembly
4	2	05-150974_0	Turn arm bearing
5	1	05-453958_0	Turn arm linkage wheel, bored and keyed
6	1	05-216963_0	Shoulder bolt
7	1	05-458238_0	Turn arm linkage assembly, right hand configuration
	1	05-458239_0	Turn arm linkage assembly, left hand configuration
4	2	05-150974_0	Turn arm bearing



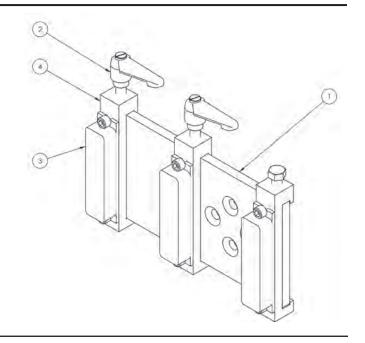
# **Quick Adjust Turnover Clamp Pads**

Pad assemblies are designed to for quick position adjustment when changing product clamping requirements. Items shown below are included with each new turnover however can be easily retrofitted onto older models. Pad assemblies can be quickly added or removed as needed.

Key	Qty	Part Number	Description
1	1	05-217876_0	Clamp back plate, up to 18" product
	1	05-217889_0	Clamp back plate, up to 24" product
2	2	05-153304_0	Quick adjust handle
3	3	05-217362_0	Turnover clamp pad, 40 durometer
	3	05-230751	Turnover clamp pad, 70 durometer
4	3	05-217877B0	Clamp pad mounting bracket

Components can be purchased as complete SOP (SOP includes components for two pad assemblies).

05-459413\_0 16" or 18" quick adjust clamp pad 05-459412 0 24" quick adjust clamp pad

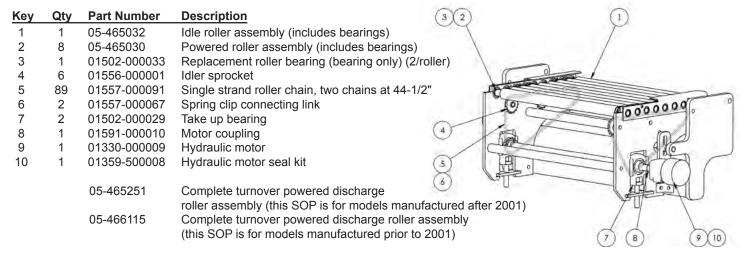




#### Turnover Discharge Conveyor - Slat Conveyor Configuration

Key	Qty	Part Number	Description
1	1	05-502225_0	Discharge roller, 25-1/8" long
	1	05-460012_0	Discharge roller, 27-1/2" long
2	1	05-219818_0	Slat support track
3	2	01501-000064	Four bolt flange bearing
4	1	01591-000010	Shaft coupling
5	1	01330-000009	Hydraulic motor (1) (2) (3) (4)(5) (6) (7)
		01359-500008	Replacement seal kit
6	2	05-454323_0	Roller adjuster
7	4	05-453937_0	Chain and slat
			assembly The state of the state
	29	05-207760_0	Conveyor slat
8	4	05-16056642	Conveyor sprocket Spr
9	2	01592-000026	Set collar
10	4	05-460596_0	Slat support disc
11	2	01501-000058	Two bolt flange
			bearing
			Slat conveyor end view
			(rotated 90 degrees)

# Turnover Discharge Conveyor - Powered Roller Configuration



This conveyor assembly can also be retrofitted into older model turnovers to replace the slat style discharge conveyor. The assembly is designed to fit directly in place of the existing slat conveyor frame and reuse the existing hydraulic control valves and hosing.

TURNOVERS 110 © 2016 by Besser Company

<sup>\*</sup> Please verify the model and serial number of your turnover before placing an order.

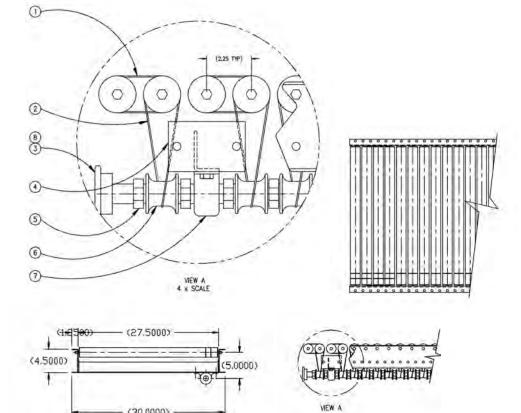
Side Channel Length

**Number of Rollers** 



# **Line Shaft Conveyor Components**

Key	Qty	Part Number	<u>Description</u>
1	1	05-151007_0	Belt, roller to roller
2	1	05-151115_0	Belt, roller to spool, continuous
	1	05-152412_0	Belt, roller to spool, twist lock
3	1	01551-000004	Sprocket
4	1	05-152414_0	Weldment cross member
5	1	05-152410_0	Collar, spool spacer, open type
_ , , ,		Drive spool, single piece "yellow" (interchangeable with 05-152105_0)	
	1	05-153303_0	Drive spool, split
7	1	05-152104_0	Bearing, pillow block
8	1	151798_0	Coupling, Delrin chain



Complete line shaft conveyor assemblies are available. Reference the list above for available lengths. Contact your Besser Representative for more information.

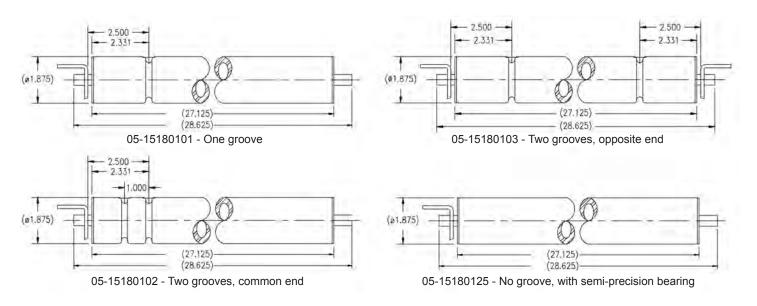
(30,0000)

nanner Length	Number of i
119-1/4"	53
117"	52
114-3/4"	51
112-1/2"	50
110-1/4"	49
108"	48
105-3/4"	47
103-1/2"	46
101-1/4"	45
99"	44
96-3/4"	43
94-1/2"	42
92-1/4"	41
90"	40
87-3/4"	39
85-1/2"	38
83-1/4"	37
81"	36
78-3/4"	35
76-1/2"	34
74-1/4"	33
72"	32
69-3/4"	31
67-1/2"	30
65-1/4"	29
63-1/4"	28
60-3/4"	27
58-1/2"	26
56-1/4"	25
54"	24
51-3/4"	23
49-1/2"	22
47-1/4"	21
45"	20
42-3/4"	19
40-1/2"	18
38-1/4"	17
36"	16
33-3/4"	15
31-1/2"	14
29-1/4"	13
27"	12
24-3/4"	11
22-1/2"	10
20-1/4"	9
18"	8
10	0

LINE SHAFT CONVEYOR



#### Replacement Line Shaft Conveyor Rollers



Ask your Besser Customer Service Representative about heavier-duty rollers.

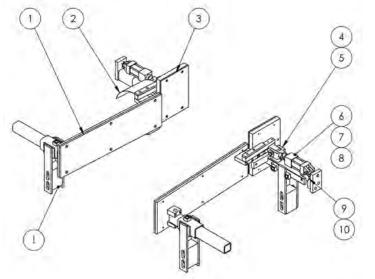
#### **Quick Change Spool Kits**

This quick change spool for your lineshaft conveyor was designed to save time when doing maintenance. The quick change spools are two piece units that connect together with two self-tapping screws. This allows you to clamp the new spool around the drive shaft without actually removing it. The replacement belt is then placed around the spool and roller. The two ends are connect together by and "S" hook.

Part Number	Description	
05-600969_0 05-152412_0	Quick change spool kit includes 20 spools and 20 belts Belt	
05-153303_0	1/2 Spool (qty 2 required to make 1 spool)	
05-31238	Screw (qty 2 required for each complete spool)	/ ~

#### Power Feed Conveyor Product Clamp Assembly

Parts may vary per vintage of power feed. Verify model number when placing an order.



Key	Qty	Part Number	Description	
1	2	05-218837_0	Product guide	
2	2	05-153764_0	Guard belt	
3	2	05-218820_0	Pusher pad	
			(also used on older models)	
4	2	05-10003403	Cylinder rod end clevis	
5	2	05-10003603	Rod end clevis pin	
6	2	01332-000037	Hydraulic cylinder	
7		05-SKR551203	Piston seal kit	
8		05-SKR268108	Rod seal kit	
9	2	01506-500006	Clamp guide cam roller,	
			1-1/2" diameter	
10	2	01506-000012	Clamp guide cam roller,	
			2" diameter	



# Complete Power Feed Clamp Retrofit Assembly

05-504285 This simplified and robust design can be retrofitted onto older model

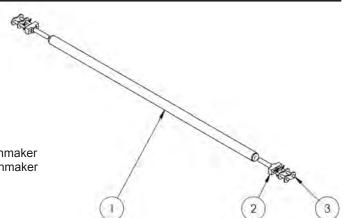
power feed conveyors. Clamping components mount onto the existing frame using existing mounting blocks and are controlled by existing hydraulic valves. (reference diagram on page 112)

# Patternmaker Pusher Bar Components

Key	Part Number	Description
1	05-214156_0	Pusher bar assembly, 35-1/4"
2	05-457223_0	Pin and lug assembly
3	05-456867_0	Modified connecting link

Complete patternmaker chain and bar assemblies are available.

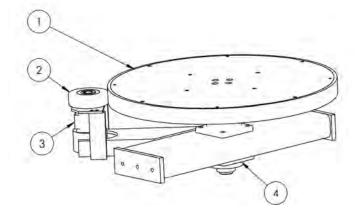
05-458248_0	Chain and bar assembly, triple turntable patternmaker
05-458895_0	Chain and bar assembly, quad turntable patternmaker



# Patternmaker Turntable Assembly (Drive Wheel Configuration)

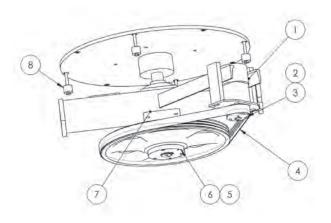
Key	Qty	Part Number	Description
1	1	05-451625_0	Turntable base plate assembly
			(Includes base table and shaft)
2	1	05-455004B0	Turntable drive wheel (blue wheel)
3	1	05-10000503	Hydraulic motor
		01359-500008	Hydraulic motor seal kit
4	2	01501-000072	Four bolt flange bearing
	4	05-TT2574	Limit switch tripper (not shown)

Parts shown are typical for patternmakers using friction drive wheel 05-455004B0 to rotate the turntable.





# Patternmaker Turntable Assembly (Belt Drive Configuration)



Key	Qty	Part Number	Description
1	1	01330-000010	Hydraulic motor
	1	01359-500008	Hydraulic motor seal kit
2	1	05-154088_0	Belt sheave
3	1	05-16022511	Bushing, 1" bore
4	1	05-154090_0	Ribbed belt
5	1	05-154089_0	Belt sheave
6	1	05-16022810	Bushing, 1.68" bore
7	2	01501-000072	Four bolt flange bearing
8	4	05-TT2574	Limit switch tripper

Parts shown are typical for patternmakers with turntable assemblies with drive belt configuration. The orientation of the items shown may vary per model of patternmaker.

#### Patternmaker Turntable Belt Drive Retrofit

05-466072

The updated, belt design turntable assembly can also be retrofitted into existing patternmakers using the friction drive wheel configuration. The SOP includes all items shown and fits directly in place of the existing turntable components. (reference diagram above)

# **Cuber Side Feed Infeed Roller Components**

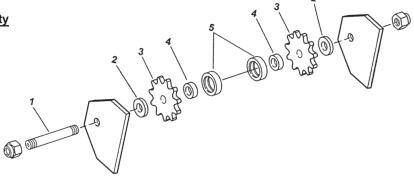
Key	Part Number	Description (Quantities of rollers vary per cuber design)		
1	01330-000009	Hydraulic motor		
	01359-500008	Hydraulic motor seal kit		
2	05-153303_0	Belt drive spool (sold as 1/2 spools - 2 halves = 1 spool)		
	05-152105_0	Belt drive spool, "yellow" spool - can substitue for 05-153303_0		
3	05-152106_0	Roller drive belt, continuous belt, 8-1/4" long		
For c	ubers with powe	red side feed rollers:		
4	05-453581_0	Sidefeed roller, 34-3/4" long, 1/2" diameter bearing		
	05-CU5029	Sidefeed roller, 34-3/4" long, 7/16" diameter bearing		
	05-458609_0	Sidefeed roller, 35-5/16" long, 1/2" diameter bearing		
5	05-206921_0	Roller shaft, 35-9/16" long, 1/2" diameter		
	05-217863_0	Roller shaft, 36-3/16" long, 1/2" diameter		
	05-CU5358	Roller shaft, 35-5/16" long, 7/16" diameter		
6	05-453314_0	Cross roller, 54" cuber, 25-1/4" long,		
	05 450040 0	1/2" diameter bearing		
	05-458612_0	Cross roller, 54" cuber, 25-1/2" long,		
	05 450047 0	1/2" diameter bearing		
	05-458617_0	Cross roller, 64" cuber,		
	05-453584 0	30 1/2" long, 1/2" diameter bearing Cross roller, 64" cuber, 30 3/8" long.		
	00-400004_0	1/2" diameter bearing		
	05-CU6583	Cross roller, 54" cuber, 25-3/4" long,		
	03-00000	7/16" diameter bearing		
	05-CU6786	Cross roller, 64" cuber, 30-3/4" long,		
	00 000100	7/16" diameter bearing		
7	05-208214 0	Cross roller shaft, 52-1/2" long, 1/2"" diameter		
	05-213667 0	Cross roller shaft, 60-1/2" long, 1/2" diameter Side frame removed for clority		
For cubers with non-powered side feed rollers:				
6	05-453313 0	Sidefeed idle roller, 34-3/4" long, 1/2" bearing		
	05-CU5049	Sidefeed idle roller, 34-3/4" long, 7/16" bearing		



# Chain Lift Assembly for Besser Cubers Using Crossover Elevator Leveling Chains

Part No. 05-453324\_0 (includes the following)

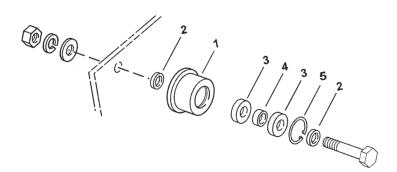
Part Number	Description	Qty
05-206469_0	Shaft	2
05-300226_0	Bronze spacer	4
05-205611_0	Sprocket	4
05-150970_0	Inner race	4
05-150971_0	Needle bearing cup	4
	05-206469_0 05-300226_0 05-205611_0 05-150970_0	05-206469_0 Shaft 05-300226_0 Bronze spacer 05-205611_0 Sprocket 05-150970_0 Inner race



# Flanged Wheel Assembly for Cuber Lift and Cuber Carriage

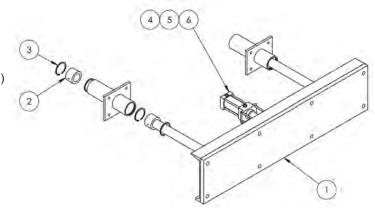
Part No. 05-450130\_0 SOP flanged wheel assembly (includes enough of the following parts for one wheel)

Key	Part Number	Description	Qty
1	05-200444_0	Flanged wheel	1
2	05-212953_0	Guide wheel spacer	2
3	05-16005723	Wheel bearing	2
4	05-200489_0	Inner wheel spacer	1
5	05-16050252	Retaining ring	1
6	05-450130_0	Wheel assembly	8
	(Must be sold as	an assembly)	



# **Cuber Clamp Components**

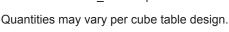
Key	Part Number	Description
1	05-200448_0	Clamp pad, 54" cuber (52" long)
	05-200816_0	Clamp pad, 64" cuber (62" long)
2	05-PA1051	Clamp guide rod bushing (white plastic)
	05-200447_0	Clamp guide rod bushing (gray composite)
3	01241-000004	Retaining ring (use with 05-PA1051)
	05-151235_0	Retaining ring (use with 05-200447_0)
4	01332-000120	Short clamp cylinder, 3-1/2" stroke
	01332-000119	Long clamp cylinder, 18" stroke
	05-101857_0	Long clamp cylinder, 18" stroke w/ LDT
	01332-000121	Long clamp cylinder, 31' stroke
	01332-000125	Long clamp cylinder, 31" stroke w/ LDT
5	02-104627	Piston seal kit
6	01338-000052	Rod seal kit

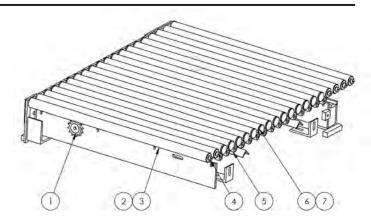


Consult your parts manual to verify numbers. (Clamp cylinder components may vary per vintage of machine.)

# Non-powered Cube Table Replacement Items

Key	Part Number	Description
1	01556-000003	Idle sprocket assembly (if equipped
		with pallet dispenser)
2	05-450192_0	Cube table end roller (with bearings),
		2-3/8" OD x 52-1/32" long
3	05-16008445	Replacement bearing for end roller
4	05-216866_0	End roller mounting shaft
5	01506-000008	Roller support cam roller
6	05-450188_0	Cube table roller, 2-3/8" OD x 52-1/32" long
7	05-153220_0	Replacement roller end cap (white)







#### Wear Bars - SF-7 and SF-7W-64 Cubers

Ref Dwg	Qty	Part Number	Description	
02-416587	1	////////// 02-405785 02-406655	Side plate - sub-assembly and weldment - LH elevator Wear bar - 51" L Wear bar - 6" L	
02-414540	1	////////// 02-406653 02-405778	Side plate - LH Wear bar - 88" L Wear bar - 143" L	
02-416586	1	////////// 02-405785 02-406655	Side plate - sub-assembly and weldment - RH elevator Wear bar - 51" L (same part used above) Wear bar - 6" L (same part used above)	
02-414541	1	////////// 02-406653 02-405778	Side plate - sub-assembly - RH Wear bar - 88" L Wear bar - 143" L	
02-417334	2 2	////////// 02-406655 02-405786	Elevator frame - sub-assembly and weldment Wear bar - 6" L Wear bar - 55" L	

#### NOTE:

Reference drawings are listed to show Besser Representatives where and how wear bars are installed. Part quantities shown are parts required for reference drawing listed. Add quantity of the same part to get total for elevator.

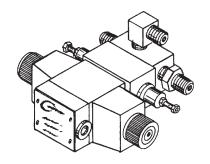
For SF-7 elevator frame sub-assembly and weldment refer to Besser drawing No. 02-416581.

# Inboard / Outboard Conveyor Valve (For SF-7 & SF-7W Cubers)

Add this inboard/outboard valve assembly to prevent conveyor lag under heavy loads. This additional valve will separate the hydraulic pressure control for the conveyors, thereby allowing you to maintain equal speed for both conveyors. This kit includes a directional valve, check valve, necessary connections and instruction drawing.

#### Part Number Description

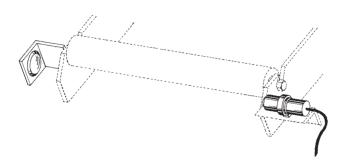
02-644231 Inboard/outboard conveyor valve



#### SF-7 Slider Plate Attachment Link Drive Chain

This heavy-duty chain is riveted to the mounting bar that bolts to the slider plate. This riveted design is superior in durability and will provide long service life.

Part Number	Qty	<u>Description</u>
SF-7 and SF-7W	- 48"	Cuber
02-464100	1	Bar support assembly
02-464095	1	Bar support assembly with actuator
SF-7 and SF-7W	- 64"	Cuber
02-464099	1	Bar support assembly
02-464098	1	Bar support assembly with actuator



# Slat Conveyor Photocell

When installed, this device sends a beam of light slightly below the cuber slat conveyor and the run-out-roller conveyor. Breaking the beam will safely shutdown the powered conveyor.

Part Number	<u>Description</u>
02-643219	Slat conveyor photocell



#### SF-7, SF-7W & AF-7 Cuber Wear Plates

This is a quick reference guide for ordering replacement wear plates. Wear resistant steel is used in the manufacture of these plates.

NOTE: There are different versions of the large turntable apron plate (key 7), the overhead block transfer accumulator plates (keys 8 & 9), and the cuber slider plate (key 10). Therefore, we recommend that you measure the dimensions of your old plate and compare them to the dimensions listed in the following parts list to make sure that you are ordering the proper size plate.

Key	Part Number	Qty	Description							
1	02-419897	1	Small turntable apron plate							
	02-089672	4	Flat socket head cap screw -1/2" x 2" L							
	02-087881	4	Lock washer - 1/2"							ī
	02-087806	4	Nut - 1/2"		l°	٥	10	0 (	, ,	$\vdash$
2	02-419893	1	Small turntable wear plate	_			10			
	02-089657	4	Flat socket head cap screw - 1/2" x 1-1/4" L							!
3	02-419853	10	Trolley wear strip - 5/8" x 1" x 8-1/4" L	-						
0	02-088026	20	Hex head cap screw - 3/8" x 3" L			_		•	0 0	للہ
	02-087879	20	Lock washer - 3/8"		Lo [@	)	0 0	0	©	ĺ
	02.410954		Tralley wear strip	-			9			ĺ
4	02-419854	4	Trolley wear strip - 3/4" x 1" x 9-1/8" L		1					
	02-088020	8	Long hex head cap screw - 3 4			A	Ø.	<b>@</b>	0	
	00 007070		3/8" x 2" L	6	7	)	0	0	9	ĺ
	02-087879	8	Lock washer - 3/8"	J			8			
5	02-419855	5	Trolley wear strip -		}					
			3/4" x 1" x 7-1/2" L							
	02-088020	10	Hex head cap screw - 3/8" x 2" L 5				⊚		0	İ
	02-087879	10	Lock washer - 3/8"							
				-						
6	02-419871	1	Large turntable wear plate							
	02-103357	4	Flat socket head cap screw - 1/2" x 1-1/2" L							
	02-087881	4	Lock washer - 1/2"							
	02-087806	4	Hex nut - 1/2"							
7	02 440972		Lorge turntable aprop plate for AE 7 2/9" v 7 2/4" v 27" L	-						
7	02-419872 02-421328	1 1	Large turntable apron plate for AF-7 - 3/8" x 7-3/4" x 27" L Large turntable apron plate for AF-7B - 3/8" x 10" x 33" L							
	02-089657	6	Screw							
	02-087930	6	Washer							
	02.410452		Accumulator plate for 49" model   2/9" v 26" v 49"	-						
8	02-419452 02-421314	1 1	Accumulator plate for 48" model - 3/8" x 26" x 48" L Accumulator plate for 48" model - 3/8" x 30" x 48" L							
	02-419453	1	Accumulator plate for 64" model - 3/8" x 26" x 64" L							
	02-421300	1	Accumulator plate for 64" model - 3/8" x 30" x 64" L							
	02-103357	10	Flat socket head cap screw - 1/2" x 1-1/2" L							
	02-087881	10	Lock washer - 1/2"							
	02-087806	10	Nut - 1/2"							
9	02-406861	1	Accumulator plate for 48" model - 3/8" x 29-7/16" x 48" L	-						
	02-406752	1	Accumulator plate for 64" model - 3/8" x 29-7/16" x 64" L							
	02-103357	10	Flat socket head cap screw - 1/2" x 1-1/2" L							
	02-087881	10	Lock washer - 1/2"							
	02-087806	10	Nut - 1/2"							
10	02-439943	1	Slider plate for SF-7 48" model - 57" x 54-1/2" L	-						
. 3	02-439888	1	Slider plate for SF-7W 48" model - 59" x 54-1/2" L							
	02-439946	1	Slider plate for SF-7 64" model - 57" x 70-1/2" L							
	02-439930	1	Slider plate for SF-7W 64" model - 59" x 70-1/2" L							
	02-110420	18	Hex head cap screw - 3/8" x 7/8" L							
	02-110803	18	Flat washer - 3/8"							
	02-087879	18	Lock washer - 3/8"							



#### Wear Strips for Cuber Frame Channels

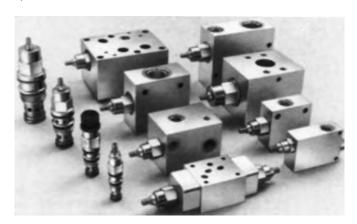
This set of wear strips for the mast and mast extensions is installed on model SF-1 and SF-2 cubers. The SOP also includes four 2-1/2" diameter cam rollers that mount to the elevator assembly. These wear strips bolt and weld to the vertical frame channels and provide new smooth surfaces for the roller. Wear strips are replaceable.

Part Number	Qty	Description
02-628435	1	SOP for wear strips with cam rollers for SF-1 and SF-2 cubers
02-285811	2	Rear wear strip for SF-1 and SF-2 cubers - 59" L - replacement
02-285812	4	Front wear strip for SF-1 and SF-2 cubers - 93" L - replacement
02-285810	4	Mast extension wear strip for SF-1 and SF-2 cubers - 6" L - replacement
02-285742	4	Wear strips for SF-3, SF-4 and SF-5 cubers - replacement



# Pressure Reducing Valves

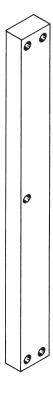
SOP for pressure reducing valves used on tier clamps of Besser SF-7 series cubers are available. Contact your Besser Representative.



# Elevator Slide Shafts (For SF-7 & SF-7W Cubers)

Replace worn slide shafts and make your elevator assemblies like new again.

Part Number	<u>Description</u>
02-405864	Elevator slide shaft (2 req'd)



CUBERS 118 © 2016 by Besser Company

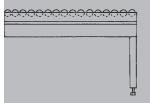


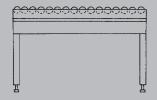
# These conveyors were originally supplied with SF and AF model cubers. Please refer to your parts manual to verify your model before ordering.

# Three Lane Arranging Conveyor Table

This arranging table is usually positioned before the overhead block transfer on semi-automatic SF-7 and SF-7W cubers. The table provides a place for the operator to manually arrange the cube tiers. The arranging table can also be used with the cuber speedup package where it is positioned before the belt feeder. The three lane roller design allows the concrete products to be efficiently arranged.

02-301374	Three lane arranging conveyor assembly - single leg table
02-415030	Three lane arranging conveyor assembly - double leg table
02-286203	Three lane roller conveyor - 66-1/2" long
02-112774	Replacement roller only
02-295756	Hex shaft only - 27" long





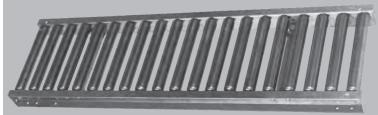
02-301374 single leg table

02-415030 double leg table

#### Models manufactured after 1995

05-150874_0	Complete 3 lane section
05-151244_0	Replacement rollers
05-15424-4	Replacement hex shaft

#### **Gravity Roller Conveyors**



Block Runout - 29" wide Conveyor				
Part Number	Description			
02-266969	Conveyor - 2' long			
02-266970	Conveyor - 5' long			
02-266971	Conveyor - 10' long			
02-102576	Replacement conveyor roller 1-3/8" diameter x			
	26-1/2" OAC (over-all-cones) for use with			
	standard gravity conveyor			
02-317168	Replacement conveyor roller (hardened)			
	1-3/8" diameter x 26" OAC for use with cuber			
	automation, BTO 5 and BTO 6			
02-267147	Conveyor 45 degree curve, 4'-6" outside radius			
02-267146	Conveyor 90 degree curve, 4'-6" outside radius			
02-104641	Conveyor rollers for 45 and 90 degree curves			

oappoit =ogo i oi	20 11.00 00.110/01 0000.01.
Part Number	Description
02-265303	Support leg (14" - 18" high)
02-265302	Support leg (18" - 22" high)
02-380494	Adjustable support leg (28-3/4" - 45-1/4" high)
02-265296	Support leg (42" - 46" high)
02-265295	Support leg (46" - 50" high)
02-079265	Single leg for curve (24" - 40" high)

Support Leas For 29" Wide Conveyor Section

Block Rullout - 35 Wide Collveyors		
Part Number	Description	
02-078166	Conveyor - 2' long	
02-078165	Conveyor - 5' long	
02-078164	Conveyor - 10' long	
02-084288	Replacement conveyor roller only -	
	2" diameter x 32-1/2" OAC (over-all-cones)	
02-078168	Conveyor 45 degree curve, 5'-11" outside radius	
02-078167	Conveyor 90 degree curve, 5'-11" outside radius	
02-083818	Replacement conveyor rollers for 45 and 90 degree curves	

No. 286203 table only

# Support Legs For 35" Wide ConveyorsPart NumberDescription02-201021Support leg (14" - 18" high)02-394041Adjustable support leg (18" - 42" high)02-079265Single leg for curve (24" - 40" high)

Cube Runout - 52" wide	
Part Number	Description
02-214130	Conveyor - 10' long (Does not include legs)
02-083815	Replacement conveyor roller only - 2-9/16"
	Diameter x 48" OAC (over-all-cones)
02-304390	Adjustable support legs (30" - 33" H)



# These conveyors were originally supplied with SF and AF model cubers. Please refer to your parts manual to verify your model before ordering.

Additional sizes and styles are available.

Part Number	Description
02-112287	Braided urethane drive belt 13" long with "S" hook (shaft to roller)
02-111861	Polyurethane drive belt 3/16" diameter x 13" long (shaft to roller)
01533-400002	Polyurethane belt 3/16" diameter x 7-3/4" long (roller to roller)
02-111864	Drive spool
02-111866	Conveyor roller - single groove 1-7/8" OD x 26-1/2" OA
01530-400002	Conveyor roller - 2 groove 1-7/8" OD x 26-1/2" OAC
02-114558	Retaining clip



# **Gravity Offload Roller Conveyor**

Part Number	Description
05-501394_0	Complete 10' L x 49" W between frames, cube offload conveyor
05-15202101	Replacement roller for offload conveyor

(Refer to photo on bottom of page 119)

CUBERS 120 © 2016 by Besser Company



# Rotary Switch for V3R & V3-12 Vibrapacs

The rotary switch for V3R and V3-12 Vibrapacs, interchanges with the old design. Individually adjustable cams in the assembly allow precise control of each machine function. These enclosed type switches prevent dirt from getting on the contacts.

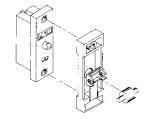
Part Number	Description
02-101211	Rotary cam limit switch box (8 circuit)
02-103128	Rotary cam limit switch box (10 circuit)
02-105710	Rotary cam limit switch box (12 circuit)



#### Parts for Gemco Rotary Switch

Part Number	Description
02-110927	Snap switch assembly
02-110928	Bracket with new style roller
02-110929	Cam adjusting tool (for 02-110927 snap switch)

Note: The Besser roller 02-442171 is no longer available



# **DuraCoder**® (DuraCoder is a registered trademark of AMCI Replacing Digisolver™)

The DuraCoder® features heavy-duty construction for hostile environments. Its operating temperature ranges from 10°F to 175°F, (-12°C to 80°C). It is extremely accurate and reliable.

Part Number	<u>Description</u>
02-451220	Cover
02-454009	Cable holder assembly
01626-000034	Replacement Duracoder used with SLC500 24V
02-116147	Replacement Duracoder used with PLC2 5V
02-113939	Cable connector
02-511438	SOP Duracoder assembly - MK, V4 and V6
02-511439	SOP Duracoder assembly - V3-12
02-514240	SOP Duracoder assembly - MK, V4 and V6 for PLC2 5V
02-514239	SOP Duracoder assembly - V3-12 for PLC2 5V
01652-000041	SLC 500 I/O card
02-114551	Sandwich mount, 3/8", 8-32 stud - M/M50 L cables from main panel to Duracoder
	Cables from main panel to DuraCoder
02-116146	Cable, 5 ft, w/ male connector on one end, female on other
02-115304	Cable to panel w/ connector 5'
02-113815	Cable to panel w/ connector 50' (includes 02-116146 cable)
02-114014	Cable to panel w/ connector 60' (includes 02-116146 cable)
02-114015	Cable to panel w/ connector 75' (includes 02-116146 cable)
02-115114	Cable to panel w/ connector 100' (includes 02-116146 cable)
02-114182	Cable to panel w/ connector 150' (includes 02-116146 cable)

#### Resolver

Part Number	Description
02-487945	Replacement Resolver used with an Allen-Bradley SLC/500
02-115297	SLC 500 Resolver card
02-115484	Phoenix connector
02-487947	SOP used w/ SLC 500, Resolver assembly - MK, V4 & V6
02-504948	SOP used w/ SLC 500, Resolver assembly - V3-12
02-113776	Sandwich mount, 1/4" - F/M stud - 20UNC - 2A stud + .50 L
	Cables from main panel to resolver
02-115334F1005	5' cable with male connector on one end, female on other
02-115334F0005	Cable to panel with connector 5'
02-115334F0050	Cable to panel with connector 50' (includes 02-115334F1005 cable)
02-115334F0075	Cable to panel with connector 75' (includes 02-115334F1005 cable)
02-115334F0100	Cable to panel with connector 100' (includes 02-115334F1005 cable)
02-115334F0125	Cable to panel with connector 125' (includes 02-115334F1005 cable)
02-115334F0150	Cable to panel with connector 150' (includes 02-115334F1005 cable)



#### Radio Control

Just a light touch on the button of this palm size transmitter sends a signal to a receiver that automatically stops machine operation. This handy battery-operated transmitter is easily carried in your pocket. The receiver and transmitter are factory tuned to correct frequency. Besser will customize your order with the parts necessary to install radio controls. Contact our customer technical service department for more information on this SOP to add radio controls to your equipment.

Part Number	<u>Description</u>
02-645367	SOP to add radio control to concrete products machines
02-112343	Receiver (replacement)
02-112344	Transmitter (replacement)
02-112343	Receiver (replacement)

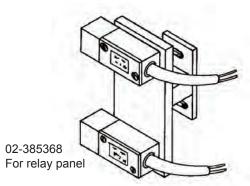




# Pallet Magazine High and Low Level Proximity Switches

The Besser pallet magazine high and low level proximity switch assembly is easily installed on your concrete products machine. The assembly uses two sensitive proximity switches: the "Low Limit Switch" stops the concrete products machine to prevent operating without sufficient pallets and the "High Limit Switch" stops the depalleter to prevent over filling of pallets in the magazine. Wiring and mechanical instructions are included with each order.

Part Number	Description
02-641993	Pallet high and low proximity switches for V3R (RH)
02-641992	Pallet high and low proximity switches for V3R (LH)
02-641234	Pallet high and low proximity switches for V3-12
02-641505	Pallet high and low proximity switches for Dynapac
02-111080	Proximity switch body (spare) - AC
02-115874	Proximity switch body (spare) - DC
01620-000005	Limit switch receptacle (spare) - AC
01620-000010	Limit switch receptacle (spare) DC
02-110094	Proximity switch head (spare) - AC/DC
01644-000077	Relay (spare)
02-101052	Timer (spare)
02-385368	SOP if you have an electrical panel or relay panel



# Besser DC Power Supply

It pays to have a spare DC power supply. Block plants have from two to six of these power units in use for control of the clutch and brakes. The model shown at left is a plug in relay and plug in rectifier for quick and easy maintenance. Order your spare power supply, plug in relays and plug in rectifiers today.

Part Number	Description
02-633317	SOP to install plug in rectifier
01653-000011	DC power supply
01653-000044	Plug in rectifier
01644-000077	Plug in relay - 120 V
01644-000014	Used with 02-113114F0001 base
	8 pin, add fuse cap 02-084083
02-084300	Rheostat



01653-000011 DC power supply

# Warner Electric Clutch/Brake Power Supply

Part Number Description

01653-000043 Warner electric clutch/brake current control model CBC-300



01653-000043 DC power supply

# **Cutler Hammer Limit Switch Type Photocells**

This modular type photocell is superior in operation where steam, smoke or dust exists.

Part Number	Description
02-643667	SOP to change from photo switch to Cutler Hammer Photocell
01620-000005	Photocell receptacle (use with emitter)
02-110638	Photocell body
02-110639	Photocell receptacle (use with detector)
02-111909	Photocell head receiver E51DC1
02-111910	Photocell emitter E51DEL
02-112289	Photocell head E51DP3
01622-000011	Photocell head E51DP1
02-110710	Photocell head E51DP2
02-111227	Photocell head E51DP4
02-110781	Photocell head, body, receptacle (high gain) E51CLP6
01620-000007	Photocell body E50RAS





# Cutler Hammer Plug-In Type E-50 Switches

When electrical switches require replacement, insist on this plug in design. Model E- 50 switches are composed of a base, body and head. The switch body quickly detaches for replacement or electrical testing. It interchanges with other style switches.

Part Number	<u>Description</u>
02-107182	Limit switch assembly - surface mount (E50-AR1)
01620-000005	Limit switch base (E50RA)
01620-000012	Limit switch body (E50SA)
01620-000020	Limit switch head (E50DLI) (15 degrees)
01620-000022	Limit switch head (E50DRI) (5 degrees)
02-107183	Limit switch assembly - manifold mount (E50-AR1M)
01620-000006	Limit switch base (E50RAM)
01620-000059	Limit switch arm - 3/4" roller - 1-1/2" L (E50-KL200)
01620-000053	Limit switch arm - adjustable (E50-KL201)
01620-000069	Limit switch arm (E50-KL226)
02-108290	Head-top sensor (E51DT1) - yellow sensor
02-110311	Head-side sensor (ext. range) (E51DS5) - yellow sensor
02-108291	Head-side sensor (E51DS1)
02-111370	Head-side sensor (E51DS6) - green sensor
02-110094	Head-top sensor (ext. range) (E51DT5) - yellow sensor
02-110864	Head-top sensor (E51DT2) - green sensor
02-111369	Head-top sensor (E51DT6) - green sensor
02-111080	Sensor body for proximity and photo heads (E51SAL )
02-110638	Sensor body for proximity and photo heads (E51SCL)
02-113478F0050	Pancake proximity sensor
01620-000018	Special clockwise/counterclockwise Multi-Spade Besser-Matic switch (head)
01620-000011	Special clockwise/counterclockwise Multi-Spade Besser-Matic switch (body)
01620-000008	Special clockwise/counterclockwise Multi-Spade Besser-Matic switch (recepticle)
02-115874	Sensor body for proximity and photo heads (E51-5PL) DC-PNP
01620-000010	Limit switch base (E51RN)

# Proximity Sensors - Cylindrical (Quick Disconnect)

Part Number	Description			
01621-000003	18 mm shielded - 5 mm sensing range (normally open contacts) 120 VAC power			
01621-000004	18 mm unshielded - 8 mm sensing range (normally open contacts) 120 VAC power			
01621-000007	30 mm shielded - 10 mm sensing range (normally open contacts) 120 VAC power			
01621-000011	30 mm unshielded - 15 mm sensing range (normally open contacts) - for AC power			
01621-000005	18 mm unshielded - 8 mm sensing range (normally closed contacts) 120 VAC power			
01621-000012	30 mm unshielded - 15 mm sensing range (normally closed contacts) 120 VAC power			
01621-000021	30 mm unshielded - 15 mm sensing range (normally open contacts) - for DC power, stainless steel			
01621-000010	30 mm semi - shielded - 22 mm sensing range (normally open contacts)			
01621-000008	30 mm semi - shielded - 22 mm sensing range (normally closed contacts) 120 VAC power			
01621-000014	30 mm shielded - 20 mm sensing range (normally open contacts) - for DC power			
01621-000020	30 mm semi - shielded - 22 mm sensing range (normally open contacts) - for DC power			
01621-000009	30 mm semi - shielded - 22 mm sensing range (normally open contacts) - for AC power			
02-115723F9005	Cable - 16.4' - 90° - for DC power			
02-114658F1250	1.25" probe - cylinder sensor			
02-114658F2062	2.06" probe - cylinder sensor			
02-114658F2875*	2.88" probe - cylinder sensor - low profile for LSC-40 lift cylinder			
02-113553	Cable - proximity sensor - 6' - str for AC power			
02-113554	Cable - proximity sensor - 6' - 90° - for AC power			
02-113478F0050	50 mm pancake - 50 mm sensing range			
02-114019	Cable - 12' - straight - for AC power			
02-114020	Cable - 12' - 90° - for AC power			

<sup>\*</sup>To replace Namco sensors: Order Qty 1 - 02-113553 and Qty 1 - 02-113664 Watertite Connector & Cable



#### Photo Electric Sensors - Cylindrical (Quick Disconnect)

Part Number	Description
01622-000013	18 mm retroreflective, 120 VAC power
01622-000002	18 mm diffused, 120 VAC power
02-113551	18 mm emitter - thru beam - fwd view, 120 VAC power
02-113552	18 mm receiver - thru beam - fwd view, 120 VAC power
02-114021	Cable sensor - 12' - str.
02-114022	Cable sensor -12' - 90°
02-114024	18 mm emitter -thru beam - wide beam - fwd view, 24 DC or 120 VAC power
02-113555	Cable - photo electric - 6' - str.
02-113556	Cable - photo electric - 6' - 90° 02-114822
02-114620	Emitter - 18mm - RT angle/view - wide beam, 24 DC or 120 VAC power
02-114822	Receiver - 18mm - RT angle/view - wide beam 24 DC or 120 VAC power

# **Balluff Multiple Limit Switch**

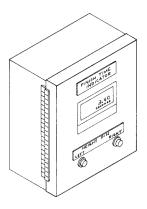
Part Number	Description
02-113166F0001	Limit switch - multiple assembly
02-113166F3001	Snap switch (replacement)
02-113166F3002	Safety switch (replacement)
02-113166F3003	Plunger - chisel type
02-113166F3004	Proximity switch (replacement), for AC systems only
02-113166F1001	Cam - 1" long
02-113166F1002	Cam - 3/8" long
02-113166F4001	Cam - 2-1/2" long
02-113166F4002	Proximity switch - multiple assembly - AC voltage only
	Note: to use for DC voltage, order
	Qty 4, 01621-000049
	Qty 1, 01620-000081
	Qty 1, 01620-000082
02-113166F4003	Cam for use with proximity switches
02-114780	Cable - 18 GA. w/ str. conn 8 pin - 15'
01621-000049	Proximity switch - DC voltage only
01620-000081	Male adapter, 8 pin, with pigtail for making 02-113166F4002 a 24V assembly
01620-000082	Metric reducer for installing 01620-000081 in multi-switch box

# **Electrical Insulating Compound**

The moisture barrier on electrical equipment provides extra protection when using quick disconnect cable assemblies. Grease-like silicone paste - 5.3 oz. (150 g) tube. Temperature range: -70° F. - 400° F. (-57° C. - 204° C.)

Part Number	Description
02-114644	Electrical insulating compound





# Digital Finish Time Indicator

The digital finish time indicator mounts on top of the machine panel for easy digital readout and gives you the exact finish time. The actual time recorded begins when the stripper shoes contact the material in the mold and ends when the height pins make contact under vibration. Panel modification drawings and a wiring diagram are included with each SOP.

Part Number	Description
02-642259	Digital finish time indicator (for V3R, V3-12, Dynapac, Superpac and Bescopac)
02-114609	Clock
01644-000077	Relay

ELECTRICAL 124 © 2016 by Besser Company



# Allen-Bradley I.E.C. Motor Contactors (Nonreversing AC-3)

Allen-Bradley	
Part Number	Description
100-C09D10	9 AMP contactor
100-C12D10	12 AMP contactor
100-C16D10	16 AMP contactor
100-C23D10	23 AMP contactor
100-C30D10	30 AMP contactor
100-C37D10	37 AMP contactor
100-C43D10	43 AMP contactor
100-C60D10	60 AMP contactor
100-C72D10	73 AMP contactor
100-C85D10	85 AMP contactor
	Part Number  100-C09D10 100-C12D10 100-C16D10 100-C23D10 100-C30D10 100-C37D10 100-C43D10 100-C60D10 100-C72D10

# Allen-Bradley I.E.C. Motor Contactors (Reversing AC-3)

Besser	Allen-Bradley	
Part Number	Part Number	Description
01642-000058	104-C09D22	9 AMP reversing contactor
01642-000034	104-C12D22	12 AMP reversing contactor
02-115125F1622	104-C16D22	16 AMP reversing contactor
01642-000035	104-C23D22	23 AMP reversing contactor
01642-000036	104-C30D22	30 AMP reversing contactor
01642-000037	104-C37D22	37 AMP reversing contactor
01642-000038	104-C43D22	43 AMP reversing contactor

# Allen-Bradley I.E.C. Manual Motor Starters / Protectors (Overloads)

Besser	Allen-Bradley	
Part Number	Part Number	Description
01641-000001	140M-C2E-A16	.1016 AMP overload release
01641-000002	140M-C2E-A25	.1625 AMP overload release
01641-000003	140M-C2E-A40	.2540 AMP overload release
01641-000004	140M-C2E-A63	.4063 AMP overload release
01641-000005	140M-C2E-B10	.63 - 1.0 AMP overload release
01641-000006	140M-C2E-B16	1.0 - 1.6 AMP overload release
01641-000007	140M-D8E-B25	1.6 - 2.5 AMP overload release
01641-000008	140M-D8E-B40	2.5 - 4.0 AMP overload release
01641-000009	140M-D8E-B63	4.0 - 6.3 AMP overload release
01641-000010	140M-D8E-C10	6.3 - 10.0 AMP overload release
01641-000011	140M-D8E-C16	10.0 - 16.0 AMP overload release
01641-000012	140M-D8E-C20	14.5 - 20.0 AMP overload release
01641-000013	140M-D8E-C25	18 - 25.0 AMP overload release
01640-000037	140-CMN-2500	16 - 25.0 AMP overload release
01640-000038	140-CMN-4000	25.0 - 40.0 AMP overload release
01640-000039	140-CMN-6300	40.0 - 63.0 AMP overload release
01640-000040	140-CMN-9000	63.0 - 90.0 AMP overload release
02-115115F0012	193-EEAB E1	Plus solid-state overload relays adjustment range from 0.1 - 0.5
02-115115F0022	193-EEBB E1	Plus solid-state overload relays adjustment range from 0.2 - 1.0
02-115115F0042	193-EECB E1	Plus solid-state overload relays adjustment range from 1.0 - 5.0
02-115115F0052	193-EEDB E1	Plus solid-state overload relays adjustment range from 3.2 - 16.0
02-115115F0062	193-EEEB E1	Plus solid-state overload relays adjustment range from 5.4 - 27.0
02-115115F0073	193-EEED E1	Plus solid-state overload relays adjustment range from 5.4 - 27.0
02-115115F0074	193-EEFD E1	Plus solid-state overload relays adjustment range from 9.0 - 45.0
02-115115F0082	193-EEGE E1	Plus solid-state overload relays adjustment range from 18.0 - 90.0

© 2016 by Besser Company 125 **ELECTRICAL** 



# Allen-Bradley I.E.C. Motor Protectors & Accessories (Nonreversing AC-3)

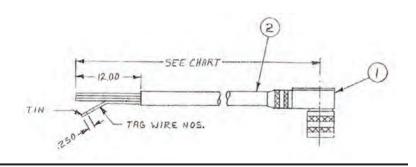
Besser	Allen-Bradley	
Part Number	Part Number	Description
02-115992FC025	140M-C2E-B25	1.60 to 2.50 AMP overload release
02-115992FC040	140M-C2E-B40	2.50 to 4.00 AMP overload release
02-115992FC063	140M-C2E-B63	4.00 to 6.30 AMP overload release
01640-000048	140M-C2E-C10	6.30 to 10.00 AMP overload release
02-115992FC160	140M-C2E-C16	10.00 to 16.00 AMP overload release
05-05055832	140M-C2E-C20	16.00 to 20.00 AMP overload release
02-115992FC250	140M-C2E-C25	20.00 to 25.00 AMP overload release
01649-000024	140M-C-PEC23	ECO connecting modules for use with 140M-C - 100-C09 - 100-C23
01649-000026	140M-D-PEC23	ECO connecting modules for use with 140M-D - 100-C09 - 100-C23
01649-000025	140M-C-PNC23	ECO connecting modules for use with 140M-C - 100-C09 - 100-C23
01649-000027	140M-D-PNC23	ECO connecting modules for use with 140M-D - 100-C09 - 100-C23
01649-000028	140M-D-PNC37	ECO connecting modules for use with 140M-D - 100-C30 - 100-C37
01649-000029	140M-F-PNC37	ECO connecting modules for use with 140M-F - 100-C30 - 100-C37
01649-000030	140M-F-PNC43	ECO connecting modules for use with 140M-F - 100-C43
01649-000020	140M-C-AFA10	Front-mounted auxiliary contact - N.O. Aux
01649-000019	140M-C-AFA01	Front-mounted auxiliary contact - N.C. Aux
01649-000023	140M-C-ASA20	Right side-mounted auxiliary contact - N.O. Aux
01649-000021	140M-C-ASA20	Right side-mounted auxiliary contact - N.C. Aux
01649-000022	140M-C-ASA11	Right side-mounted auxiliary contact - N.O. Aux/ N.C. Aux

**ELECTRICAL** 126 © 2016 by Besser Company



#### SmartPac Transducer Cable

Part Number	Description
02-502377F0050	Wire bundle - 50'
02-502377F0075	Wire bundle - 75'
02-502377F0100	Wire bundle - 100'
02-502377F0125	Wire bundle - 125'
02-502377F0150	Wire bundle - 150'
02-502377F0003	Wire bundle - 3'



# Allen-Bradley Replacement Parts

Part Number	Model	Description		
Parts for SLC-150				
02-112664F1500	1745-LP151	Processor unit		
02-112665F1510	1745-E151	I/O expansion unit	Parts are obsolete.	
02-112666	1745TCAT	Timer counter access terminal	Limited quantities available.	
01652-000064	1745-MI	EEPROM memory module	Call for assistance.	
02-112667	1745-B-1	Battery assembly		
02-112693F0100		Fuse 315 MA		
02-112778	1745-PT1	Hand hold programmer		
Parts for PLC-2				
01630-000013		2 amp fuse		
02-112803F0001	1770-X2	1/2 AA Lithium battery, 3.6 V		
02-112784F0004	1771-AIB	4-slot I/O chassis assembly		
02-112784F0001	1771-A4B	16-slot I/O chassis assembly		
02-112785F0001	1771-IA	120 V AC input module, 8"		
02-112785F0002	1771-IAD	120 V AC input module, 16"		
02-112785F0017	1771-IGD	16 input TTL module for use with PLC-2 with encod	er	
02-112786F0001	1771-OA	120 V AC output module, 8 output		
02-112786F0002	1771-OAD	120 V AC output module, 16 output		
02-112787F0001	1771-P4	Auxiliary power supply module (120 VAC input, 8A of	output)	
02-112922F0002	1771-WC	Field wiring arm, 10 terminals		
02-112664F2170	1772-LW	Mini PLC - 2/17 processor without power supply		
02-112664F2160	1772-LX	PLC-2/16 without power supply		
02-112788F0001	1772-MJ	4K EEPROM memory module (for PLC-2/16) - this p	part is obsolete, contact Besser for an upgrade.	
02-112788F0002	1785-MJ	8K EEPROM cartridge (for PLC-2/17)		
02-112786F0010	1771-OW	Hard contact output module 8 out		
02-112783	8330ABX	Register access panel		
01653-000034	8550	5 V power supply unit for TCAM		
02-112782	8569-10	Communication cable for TCAM		
01630-000015		3 amp Fuse AGC		
02-112800F0007	1771-CN	Data hwy processor cable - 1.5'		
02-112800F0001	1771-CO	Data hwy processor cable - 3.5'		
02-112801F0004	1771-KA2	Data hwy processor communication adapter module	e	

# Fused Disconnect Switch Line Operating Handles

01602-000025 Standard orientation with defeater (Model 194R-HM4E)



01602-000037 With defeater (Model194R-PY)



# Laptop Computer to Monitor and Program "PLC" Systems

02-648546 SOP includes laptop with RSLOGIX, a communication card and two communication cables



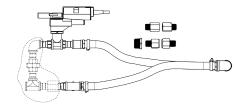
# Electrical Parts For Allen-Bradley SLC-500

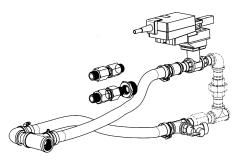
Part Number	Model	Description
01650-00006 01650-000007 01650-000009 01650-000010	1747-L524 1747-L532 1747-L542 1747-L552	Central processor unit (CPU) - SLC - 5/02 (obsolete, limited quantities are available) Central processor unit (CPU) - SLC - 5/03 Central processor unit (CPU) - SLC - 5/04 Central processor unit (CPU) - SLC/505
02-515393 02-113773FL30B 02-113773FL40B	1747-L20B 1747-L30B 1747-L40B	Processor - 20 1/0 fixed hardware style Processor - 30 1/0 fixed hardware style Processor - 40 1/0 fixed hardware style
01651-000019 01651-000020 01651-000016 01651-000017 01651-000018	1746-A4 1746-A7 1746-A10 1746-A13 1746-A2	Rack - 4 Slot - modular hardware style Rack - 7 Slot - modular hardware style Rack - 10 Slot - modular hardware style Rack - 13 Slot - modular hardware style Rack expansion - 2 slot - fixed
01652-000044 01652-000039 01652-000059 01652-000051 01652-000041 01652-000038 01652-000052 01652-000052 01652-000047 01653-00009 02-113773F0P1C 02-113773F0BA 01652-000049 01652-000050 02-111847 01652-000040 02-115297 02-115484	1746-IA 1746-1A16 1746-OA8 1746-OAP12 1746-ITB16 1746-NT4 1746-N1041 1746-OW16 1746-IO12 1746-P2 1746-P1C 1747-BA 1747-M2 1747-M13 MDJQ-3 1746-IB16 1542 MS-8	Input module - 8 inputs 100/120 VAC Input module - 16 inputs 100/120 VAC Output module - 8 Triac - 120/240 VAC Output module - 12 output 120 VAC (obsolete, limited quantities are available) Input module - fast response Input module thermocouple (obsolete, limited quantities are available) Module - analog - 2 inputs - 2 outputs Module - relay output - 16 outputs Module - combination input/output (obsolete, limited quantities are available) Power supply - rack mount 120/240 VAC Interface convertor - RS232/DH 485 Battery - lithium - for RAM memory ret. Module - memory - EEPROM - 4K (obsolete, limited quantities are available) Module - memory - EEPROM - 64K Fuse - glass body time delay - 3.0 amp Input module - 16 inputs - 24 VDC Resolver module - AMCI - for use with resolver Phoenix connector for resolver module

# Vapor Generator Water Valve Retrofit

Replace GEMU water valves or maintain vapor line tempuratures on 1 speed machines (1.0-2.0 mm BTU vapor generators) that have incoming water pressure fluctuations.

Part Number	Qty	Description
01540-000008	1	Valve, water, characterized control valve, vapor generator
01540-000009	1	Resistor, water valve, 500 OHM
01365-000006	1	Fitting, bras nipple, 3/4" NPT x 2"
01365-000007	1	Fitting, brass elbow, 3/4" NPT
01365-000008	1	Fitting, brass tee, 3/4" NPT, LP
01365-000009	2	Fitting, brass hose barb, 3/4" NPT x 3/4"
01365-000010	1	Fitting, brass reducing bushing, 1" NPT x 1/2" NPT
01365-000011	1	Fitting, brass coupling, 1/2" NPT
01365-000012	2	Fitting, brass hose barb, 1/2" NPT x 3/4"
01365-000017	3	Fitting, brass nipple, 1/2" NPT x 2"
01365-000019	1	Fitting, brass tee, 1/2" NPT, low pressure
01368-000008	2	Adapter, 1/2" MNPT x 1/2" BSPP
01368-000012	2	Adapter, 1/2" BSTP x 1/2" FNPT
82-9902410020	1	Valve, boiler drain, brass, 1/2" NPT
01369-000015	120	Tubing, braided PVC, 3/4" ID x 25' LG
02-115445F5016	4	Clamp, hose, HY-Gear, 0.750/1.500
02-101682	1	Teflon tape - 0.50 wide
*01679-000035	1	Temperature controller, PID, digital display, panel mount
*82-9816020203	1	Vapor line temperature probe
*82-9804020201	1	30' type K wire





\*Parts also required for 1 speed machine (1.0-2.0 mm BTU vapor genators without automated water valve)

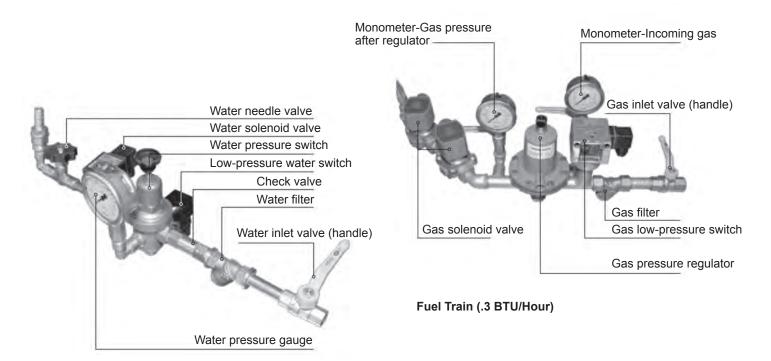


# Vapor Generator .3 BTU/Hour

The common replacement parts for curing systems are included in this section. Please determine the parts you need by referencing the table that includes the BTU rating of your Vapor Generator. Please contact your Besser Representative with any questions.

Part Number	Qty	Description
82-9908280002	1	High temperature switch, setpoint: 400°F, auto reset (on the mixer/burner)
82-9908280004	1	High temperature switch, setpoint: 800°F, auto reset (in the vapor line)
82-9802030004	1	UV scanner with flange and clamp
82-9908210005	1	Quartz glass - 1" diameter x 1/16" thick
82-9908210006	1	O-ring, for UV scanner assembly (gasket for quartz glass)
82-9820000001	1	Spark plug, type D
82-9804020240	3	Spark plug cable, per linear foot, 3' (required)
82-9908240003	1	Spark plug connector
82-9908210004	1	Sight glass, 3/8"
82-9901230002	1	2-1/2" flange gasket, metal flex
82-9902511003	1	Replacement air filter element
82-9815040002	1	Spark transformer, Krom Schroeder
82-9815040001	1	Spark transformer, Honeywell
82-9815040004	1	Ignition cable with straight boots for Honeywell transformer, 24"
82-9201000001	1	Temperature probe/30' heavy-duty cable/housing
82-9201000002	1	Temperature probe/50' heavy-duty cable/housing
82-9911210005	1	Oil-Kaeser Omega 220 synthetic, 1 quart
82-9902200018	1	Pressure switch, Antunes, air
82-9101200002	1	Pressure switch, gas
82-9102200002	1	Transducer, pressure switch, gas
82-9902200010	1	Pressure switch, water
82-9902430023	1	Solenoid valve, gas - 1/4"
82-9902430013	1	Selenoid valve, water - 1/4"

These images provide useful information for indentifying parts.



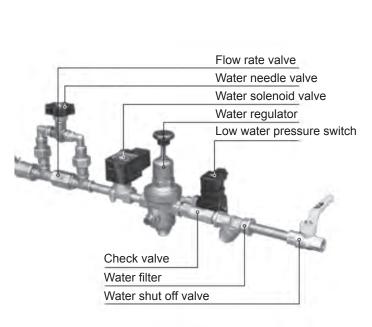
Water Train (.3 BTU/Hour)

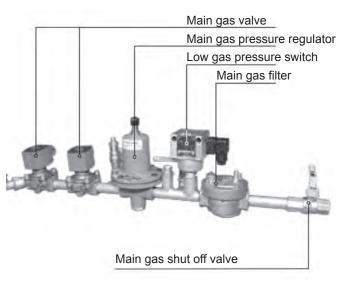


# Vapor Generator .5 - .7 BTU/Hour

Part Number	Qty	Description
82-9908280002	1	High temperature switch, setpoint: 400°F, auto reset (on the mixer/burner)
82-9908280004	1	High temperature switch, setpoint: 800°F, auto reset (in the vapor line)
82-9802020010	1	UV scanner with DIN plug, C7027A 1049S
82-9908210005	2	Quartz glass - 1" diameter x 1/16" thick
82-9908210006	2	O-ring, for UV scanner assembly (gasket for quartz glass)
82-9502100002	1	Spark plug, type C
82-9820000001	1	Spark plug, type D
82-9820000002	1	Spark plug, type M
82-9804020240	3	Spark plug cable (3' required)
82-9908240003	1	Spark plug connector
82-9908210002	1	Sight glass, 1/2"
82-9908210004	1	Sight glass, pilot flame, 3/8"
05-154865	1	MB36/40 pilot assembly contact tip 1 mm, 8 mm thread- new design
82-9901230002	1	2-1/2" flange gasket, metal flex
82-9902511001	1	Replacement air filter element
82-9815040002	1	Spark transformer, Krom Schroeder
82-9815040001	1	Spark transformer, Honeywell
82-9815040004	1	Ignition cable with straight boots for Honeywell transformer, 24"
82-9201000001	1	Temperature probe/30' heavy-duty cable/housing
82-9201000002	1	Temperature probe/50' heavy-duty cable/housing
82-9911210005	1	Oil-Kaeser Omega 220 synthetic, 1 quart
82-9902200018	1	Pressure switch, Antunes, air
82-9101200002	1	Pressure switch, gas
82-9102200002	1	Transducer, pressure switch, gas
82-9902200010	1	Pressure switch, water
82-9902470001	1	Flow regulating valve 1 LPM/.26
82-9902430020	2	Solenoid valve, gas - 1/4" (pilot flame)
82-9902430013	1	Solenoid valve, water - 1/4"
82-9901230003	1	3" Flange gasket, metal flex

These images provide useful information for indentifying parts.





Fuel Line Train (.5 BTU/Hour)

Water Train (.5 BTU/Hour)

CURING 130 © 2016 by Besser Company



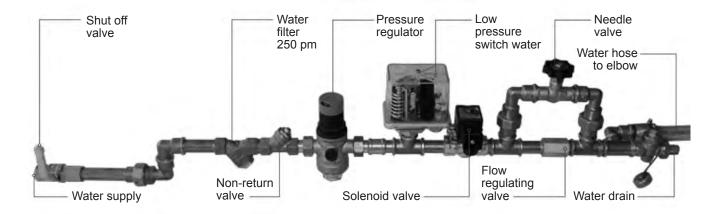
# Vapor Generator 1.0 - 2.0 BTU/Hour

Part Number	Qty	Description
82-9908280002	1	High temperature switch, setpoint: 400°F, auto reset (on the mixer/burner)
82-9908280004	1	High temperature switch, setpoint: 800°F, auto reset (in the vapor line)
82-9802020010	1	UV scanner with DIN plug, C7027A 1049S
82-9908210005	2	Quartz glass - 1" diameter x 1/16" thick
82-9908210006	2	O-ring, for UV scanner assembly (gasket for quartz glass)
82-9502100002	1	Spark plug, type C
82-9820000001	1	Spark plug, type D
82-9820000002	1	Spark plug, type M
82-9804020240	3	Spark plug cable (3' required)
82-9908240003	1	Spark plug connector
82-9908210001	1	Sight glass, 1"
82-9908210002	1	Sight glass, 1/2"
82-9908210004	1	Sight glass, pilot flame, 3/8"
82-9902120005	1	Filter cup, plastic, transparent, 1" and 1-1/4", water pressure regulator, with O-ring
82-9902120006	1	Filter cup, brass bottom for 1/2" and 3/4", with water pressure regulator, with O-ring
82-9902120009	1	Replacement water filter for 1/2" and 3/4" water pressure regulator
05-154865	1	MB36/40 pilot assembly contact tip 1 mm, 8 mm thread - new design
82-9901230002	1	2-1/2" flange gasket, metal flex
82-9901230003	1	3" flange gasket, metal flex
82-9901230004	1	4" flange gasket, metal flex
82-9901230005	1	5" flange gasket, metal flex
82-9902511002	1	Replacement air filter element for Vapor Generator 1.0-4.5 mm BTU
82-9815040002	1	Spark transformer, Krom Schroeder
82-9815040001	1	Spark transformer, Honeywell
82-9815040004	1	Ignition cable with straight boots, for Honeywell transformer, 24"
82-9816020202	1	Temperature probe/type K with transmitter/vapor line 122°F - 1200° F/cable not included
82-9201000001	1	Temperature probe/30' heavy-duty cable/housing
82-9201000002	1	Temperature probe 50' heavy-duty cable/housing
82-9911210005	2	Oil-Kaeser Omega 220 synthetic, 1 quart
82-9902200018	1	Pressure switch, Antunes, air
82-9101200002	1	Pressure switch, gas
82-9102200002	1	Transducer, pressure switch, gas
82-9902200004	1	Pressure switch MDR-F4H-S, range .22 - 4
82-9902470006	1	Flow regulating valve .5 LPM/.13 GPM
82-9902470001	1	Flow regulating valve 1 LPM/.26 GPM
82-9902470002	1	Flow regulating valve 2 LPM/.53 GPM
82-9902470003	1	Flow regulating valve 3 LPM/.80 GPM
82-9902470004	1	Flow regulating valve 4 LPM/1.0 GPM
82-9902430017	1	Selonoid valve, gas - 1-1/2" (2 for gas boosted)
82-9902430019	2	Selonoid valve, gas - 1"
82-9902430011	1	Selenoid valve, water - 1/2"
82-9902430020	1	Selenoid valve, gas 1/4" (pilot flame)

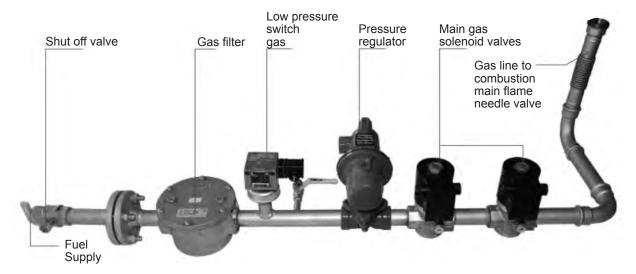
© 2016 by Besser Company 131 CURING



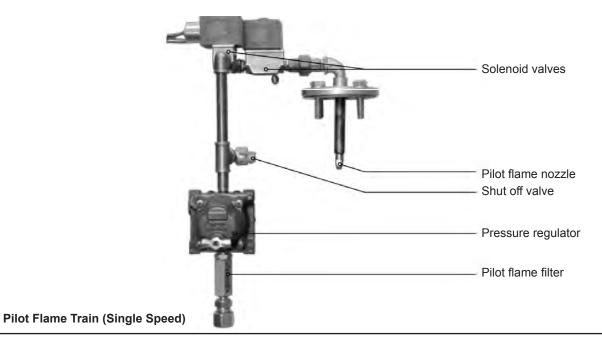
These images provide useful information for indentifying parts.



#### Water Train (Single Speed)



#### **Fuel Train (Single Speed)**



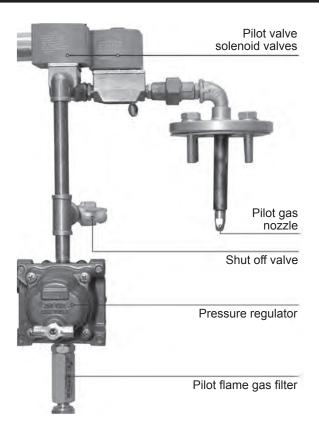


# Dual Speed/Variable Speed 2.0 - 8.0 BTU/Hour

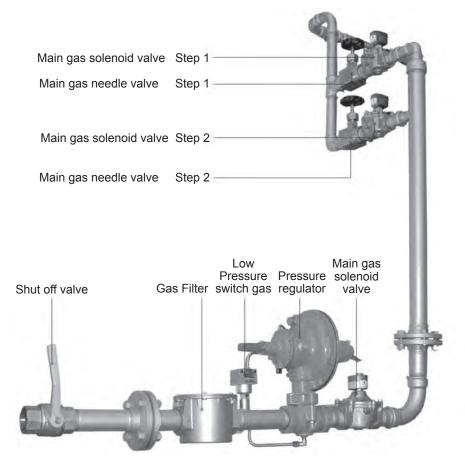
Part Number	Qty	Description					
82-9908280002	1	High temperature switch, setpoint: 400°F, auto reset (on the mixer/burner)					
82-9908280004	1	High temperature switch, setpoint: 800°F, auto reset (in the vapor line)					
82-9902460005	1	E-module 3-point controller					
82-9802020010	1	UV scanner with DIN plug, C7027A 1049S					
82-9908210005	2	Quartz glass - 1" diameter x 1/16" thick					
82-9908210006	2	O-ring, for UV scanner assembly (gasket for quartz glass)					
82-9502100002	1	Spark plug, type C					
82-9820000001	1	Spark plug, type D					
82-9820000002	1	Spark plug, type M					
82-9804020240	3	Spark plug cable (3' required)					
82-9908240003	1	Spark plug connector					
82-9908210001	1	Sight glass, main flame, 1"					
82-9908210002	1	Sight glass, 1/2"					
82-9908210004	1	Sight glass, pilot flame, 3/8"					
82-9902120005	1	Filter cup, brass bottom, 1" and 1-1/4", water pressure regulator, with O-ring					
82-9902120006	1	Filter cup, brass bottom for 1/2" and 3/4", with water pressure regulator, with O-ring					
82-9902120009	1	Replacement water filter for 1/2" and 3/4" water pressure regulator					
82-9902120008	1	Replacement water filter for 1" and 1/4" water pressure regulator					
05-154865	1	MB36/40 Pilot assembly contact tip 1 mm, 8 mm thread- new design					
82-9901230005	1	5" flange gasket, metal flex					
82-9901230006	1 1	6" flange gasket, metal flex					
82-9902511002	1	Replacement air filter element for Vapor Generator 1.0-4.5 mm BTU					
82-9902511004	1	Replacement air filter element for Vapor Generator 5.0-8.0 mm BTU					
82-9815040002	1 1	Spark transformer, Krom Schroeder					
82-9815040001	1 1	Spark transformer, Honeywell					
82-9815040004	1	Ignition cable with Straight boots for Honeywell transformer, 24"					
82-9816020202	1	Temperature probe/type K with transmitter/vapor line 122° F - 1200° F/cable not included					
82-9201000001	1	Temperature probe/30' heavy-duty cable/housing					
82-9201000002	1	Temperature probe/50' heavy-duty cable/housing					
82-9911210005	1-3	Oil-Kaeser Omega 220 synthetic, 1 quart					
82-9902200018	1	Pressure switch, Antunes, air					
82-9101200002	1	Pressure switch, gas					
82-9102200002	1	Transducer, pressure switch, gas					
01623-000011	1	Pressure switch, MDR - F4H - S, range .22 - 4					
82-9902470003	1	Flow regulating valve 3 LPM/.80 GPM					
82-9902470004	1	Flow regulating valve 4 LPM/1.0 GPM					
82-9902470005	1 1	Flow regulating valve 6 LPM/1.6 GPM					
82-9902430020	1	Solenoid valve, gas - 1/4" (pilot flame)					
82-9902430011	1	Solenoid valve, water - 1/2"					
82-990240008	1	Solenoid valve, water - 3/4"					
01306-000001	1	Solenoid valve, water - 1"					
82-9902430011	1	Selenoid valve, water - 1/2"					
82-9902430020	1 1	Selenoid valve, gas 1/4" (pilot flame)  Low pressure switch water water motor actuated					
82-990240008	1 1	Solenoid valve, water - 3/4"  Shut off valve  Non-return valve					
01306-000001	1 1	Solenoid valve, water - 3/4"  Solenoid valve, water - 1"					
82-9902460001	1 1	Gemu water valve 100					
82-9902460003	1 1	Gemu water valve 100  Gemu water valve 150					
82-9901230004	1 1	4" flance casket metal flav					
82-9901230004	1	Flow reg valve 2 LPM/.50 GPM					
02-3302410002	1 1	1 low Teg valve 2 LFIVI/.00 GFIVI					

These images provide useful information for indentifying and ordering parts.

Water Train (Dual Speed & Variable)



#### Pilot Flame Train (Dual Speed/Variable Speed)



#### **Combustion line parts:**

Most of the items below are in stock. Each is available in a wide variety of sizes. Contact the call center for assistance in determining the parts you require.



Main flame nozzle



Mixer burner



Combustion chamber



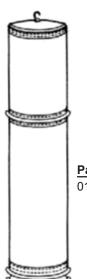
Water cooled elbow

Fuel Train (Dual Speed/Variable Speed)

CURING 134 © 2016 by Besser Company

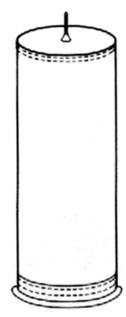


# **Dust Collection Bags for Dust Collectors**

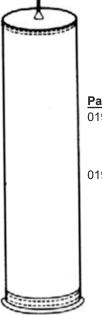


Part Number	Qty	Description
01999-400012	12	Polyester sateen cloth, fiber disc with threaded stud in top, beaded cuff
01999-400013	30	bottom; for model DCS-150 dust collector. Polyester sateen cloth, fiber disc with threaded stud in top, beaded cuff bottom; for model DCS-150 dust collector.

Part Number	Qty	Description
01999-400007	16 17	Polyester sateen cloth, disposable metal cap top, metal anti-collapse ring sewn in outside of tube, double bead snap ring bottom For model 1640 dust collector For model 1740 dust collector



Part Number	Qty	Description
01999-400014	16	Polyester sateen cloth, disposable metal cap top, metal anti-collapse ring sewn to outside of tube, beaded cuff bottom; for model 1640 dust collector



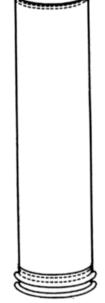
Part Number	Qty	Description
01999-400027	12	Polyester sateen cloth, fiber disc with threaded stud in top, beaded cuff bottom; for model DCS-250 dust collector
01999-400028	30	Polyester sateen cloth, fiber disc with threaded stud in top, beaded cuff bottom; for model DCS-250 dust collector

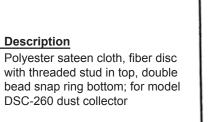
Qty

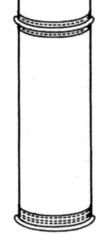
42

**Part Number** 

01999-400008







**DUST COLLECTION** 135 © 2016 by Besser Company

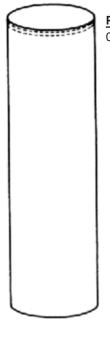
Description



# **Dust Collection Bags for Batcher Vent**

Part Number	Qty	Description		Part Numb	er	Qty	Description	
01999-400018	14	Polyester sateen clo fiber disc with thread stud in top, beaded of bottom; for model Do batcher vent (old sty	ded cuff CS-14	01999-400	019	7	Polyester sateen cloth, metal disposable cap in top, beaded cuff bottom. Double bead snap ring bottom; for model DCS 7-24 batcher vent.	
			Part Number			Description		
	,		01999-4000	06 14		disc with the	ateen cloth, fiber readed stud in top, d snap ring bottom; iCS-14S batcher vent	

# **Dust Collection Bags for Bag House**



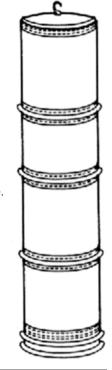
Part Number	Qty	Description
01999-400017	168	Polyester sateen cloth, felt top, raw edge bottom
		for use with cage; for model 1492 bag house

	Part Number	Qty
	01999-400009	60
_		

Description

Seamless polyester sateen tube, disposable metal cap top, metal anti-collapse rings sewn to outside of tube, beaded cuff bottom; for model 60-7000 bag house

Part Number	Qty	<u>Description</u>
01999-400011	60	Seamless polyester sateen tube, disposable metal cap top, metal anti-collapse rings sewn to outside of tube, double bead snap ring bottom; for model 60-7000A bag house.
 01999-400012	60	Hanger springs (one bag contains 60 pieces)





# Yoke End Assembly

#### Part Number Description

01999-400106 Door latch for model DCS-1740

dust collector



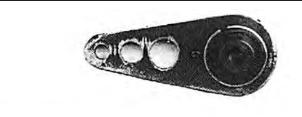
#### Yoke Ends with Pins

Part Number	Description
01999-400108	Bag suspension frame for models DCS-150, DCS-250 and DCS-260
	dust collectors



#### Eccentric Arm

Part Number	<u>Description</u>
01999-400045	Eccentric arm (without pins) for model
	DCS-260 dust collectors
01999-400067	Shaker mechanism on models 1640
	and 1740 dust collectors
01258-000002	Clevis pin for DCS-260 eccentric arm
01251-000001	Cotter pin for DSC-260 eccentric arm





# Rod End Bearing Assembly

Part Number Description

01508-400002 1/2" for shaker mechanism

on DCS-250 dust collectors



#### **Eccentric Shafts**



Part Number	Description
01999-400046	For model DCS-260 dust collectors
01999-400040	Shaker mechanism for models 1640
	and 1740 dust collectors
01999-400075	For models DCS-150 and
	DCS-250 dust collectors

#### Tri-Valve Disc & Seal

Repair your 60-7000(A) central dust collectors with this replacement seal and backing disc tri-valve

Part Number	Description
0450-0270011	Backing disc
0450-0270012	Rubber seal disc

See page 145 for cylinder 01431-000036







#### V-Belt

#### Part Number Description

01512-400003 Shaker mechanism on model DCS-1640,

Shaker mechanism on model DCS-1740, 250 and 260 dust collectors



#### **Driven Sheave**

Part NumberDescription01512-400001For model DCS-260 dust collectors



<u> </u>	<u>art</u>	Number	
C	)151	12-400004	

Description
Shaker mechanism on model
DCS-260, DCS-1640 and
DCS-1740 dust collectors



# **Bushings**

Part NumberDescription01999-400109Bushings for yoke ends on

DCS-150, DCS-250 and DCS-260 dust collectors



Part Number 01594-400003 01594-700006

Description
Sheave bushing for DCS-260
Sheave bushing for DCS-1640 and 1740 dust collectors



#### Pillow Block Bearing

Part Number Description
01509-400014 3/4" for shaker mechanism on
DCS-150, DCS-250 and DCS-260
dust collectors



# Part Number Description 01509-400016 For shaker mechanism for models DCS-1640 and DCS-1740 dust collectors



# **Eccentric Bearing**

Part NumberDescription01509-400001For shaker mechanism on DCS-640 and<br/>DCS-1740 dust collectors





#### **Electric Motor**

Part Number Description

01570-400001 1/3 hp, 60 Hz., 115 V, NEMA 48 frame model

D-1041 for model DCS-150, DCS-250 and

DCS-260 dust collectors



# Besser Bag House Control Unit

Part Number Description

0420-0290025 Control unit - use with DCS-60-7000

bag house



#### **Besser Dust Collector Timer Control**

Part Number Description

0420-0290026 Timer control - use with DCS-150,

DCS-250, DCS-260, DCS-1640 and

DCS-1740 dust collectors





#### Push Lock Air Hose

Part Number	Description
01460-000005	1/2" 801-8 push lock air hose adapter
	fitting SAE 45 degree - 3/8" MPT (use
	with push lock air hose 01461-000013)



# Push Lock Female Swivel Fitting

Use with push lock air hose.

Part Number	<u>Description</u>
01461-000009	Adapter fitting, SAE 45 degree - 1/2" MPT
	(use with push lock air hose 01461-000013)
01461-000013	1/2" female swivel fitting - SAE 45° - 1/2" MPT



# Adapter Fitting

Part Number	Description
01461-000009	Adapter fitting, 1/2" SAE 45 degree - 1/2" MNPT.
	Use the BB swivel hose fitting for push lock air hose
01461-000010	Adapter fitting, 1/2" SAE 45 degree - 1/4" MNPT.
	Use the BB swivel hose fitting for push lock air hose
01461-000012	Adapter fitting, 1/2" SAE 45 degree - 3/8" MNPT.
	Use the BB swivel hose fitting for push lock air hose







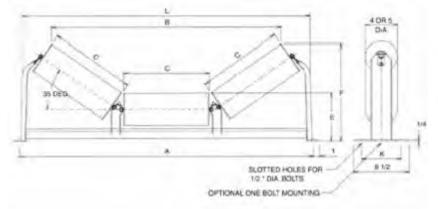


# Troughing Idler

CEMA B4, sealed, 4" roll for batching and radial stacking belt conveyor. Also available in 5" roll, ask your Besser Representative for more information.

Part Number	Description
01530-000016	24" wide, 20°
01530-000017	30" wide, 20°
01530-000018	36" wide, 20°
01530-000008	24" wide, 35°
01530-000009	30" wide, 35°
01530-000010	36" wide, 35°







REFERENCE DIMENSIONS												
BW	SW A B		}	С	E		F		К	L	WT	WT
		4" DIA	5" DIA		4" DIA	5" DIA	4" DIA	5" DIA			4"	5"
18	27	19-7/16	18-7/8	6-15/16	7	7-1/2	11-1/8	11-9/16	6	27-5/8	23	25
24	33	24-7/8	24-5/16	9	7	7-1/2	12-5/16	12-3/4	6	33	27	30
30	39	30-5/16	29-3/4	11-1/16	7	7-1/2	13-1/2	13-15/16	6	38-1/2	32	35
36	45	35-3/4	35-3/16	13-1/8	7	7-1/2	14-11/16	15-1/8	6	44	36	40
42	51	41	40- 7/16	15-1/8	7-1/4	7-3/4	16-1/8	16-1/2	7-1/2	49-1/4	44	49
48	57	46-5/16	45-3/4	17-1/8	7-1/4	7-3/4	17-1/4	17-11/16	7-1/2	54-1/2	49	54

# Troughing Trainer Idler

CEMA B4, sealed,  $35^{\circ}$ , 4" roll for batching and radial stacking belt conveyor and training conveyor belt.

Description
24" wide
30" wide
36" wide



# Return Idler

CEMA B4, sealed, 4" roll with standard 2/3" drop hangers for batching and radial stacking belt conveyor.

Part Number	<u>Description</u>
01530-000011	24" ID, 1-1/2" drop hangers
01530-000012	30" ID, 1-1/2" drop hangers
01530-000013	36" ID, 1-1/2" drop hangers
01530-000041	24" ID, 13/16" drop hangers
01530-000042	30" ID, 13/16" drop hangers
01530-000043	36" ID, 13/16" drop hangers

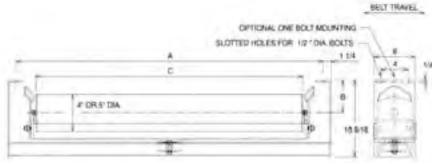




#### Return Trainer

Batching and radial stacking belt conveyor.

Part Number	Description
01530-400007	4" x 24"
01530-400008	4" x 30"
01530-400009	4" x 36"
01530-400010	5" x 24"
01530-400011	5" x 30"
01530-400012	5" x 36"



"B" DROP DIMENSION 1-1/2" STANDARD 4-1/2" OPTIONAL

RE	REFERENCE DIMENSIONS			
BW	Α	С	WT	WT
			4" DIA	5" DIA
18	27	21-1/8"	59	61
24	33	27-1/8"	68	71
30	39	33-1/8"	76	80
36	45	39-1/8"	86	90
42	51	45-1/8"	94	99
48	57	51-1/8"	103	108

# Aerator Pad and Mount 5" Round

Part Number	Description
0420-0680045	Replaces 01429-400009 for cement silo aeration (repairable)
0450-0680063	Silo weld flange for cement silo aeration (repairable)



# Aerator Pad and Mounting Kit

Part Number	Description
01429-400005	For coment sile agration



# **Mounting Kit**

Part Number	Description
01429-400006	Mounting kit for external mounting of aerator pad





## Air Jet

Part Number	Description
01429-600007	3/8" x 1/8" brass air jet for cement silo aeration
01429-600006	3/4" x 3/8" brass air jet for cement silo aeration



# Cotton Diaphragm

Part Number	Description
01429-400003	Cotton diaphragm fro repairs to round aerator pad



## Foam Rubber Gasket

Part Number	<u>Description</u>
01429-400004	Foam rubber gasket for repairs to aerator pad



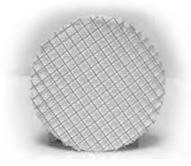
# Neoprene Gasket

Part Number	Description
01429-400001	Neoprene gasket



## Replacement Screen

Part Number	<u>Description</u>
01429-400002	Replacement screen for round aerator pad
01429-400003	Replacement cotton pad





## Air Flow Regulator

Use for speed control on air cylinders.

Part Number	Description
01402-000001	3/8"
01402-000002	1/2"



## Air Cylinder

Use with aggregate bin and weigh batcher gates. 5" bore x 10", 15" and 18" stroke air cylinder (magnetic) with eye mount, rod clevis and pivot pin.

Part Number	Description
01431-000018	10" stroke
01431-000019	15" stroke
01431-000020	18" stroke
0 1 1 6	

See below for magnetic reed switch and mounts.



Use with aggregate bin and weigh batcher gates. 2MA series non-lube NFPA.

Part Number	Description
01431-000030	3-1/4" x 6" (magnetic)
01431-000030	4" x 8" (magnetic)
01431-000030	4" x 10" (magnetic)
01431-000030	4" x 12" (magnetic)
01431-000030	3-1/4" x 6"
01431-000030	4" x 8"
01431-000030	4" x 10"
01431-000030	4" x 12"
See nage 158 and	150 for repair kits

See page 158 and 159 for repair kits.

See page below for magnetic reed switch and mounts.



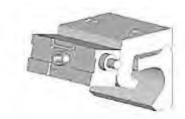
Use with two-stage cement silo cut-off assembly for 10" butterfly valve; two required per assembly.

Part Number	Description
01431-000028	3-1/4" bore x 4" stroke air cylinder with F2 rectangular
	flange kit, female rod clevis and pivot pin



## Magnetic Reed Switch & Mount

Part Number	Description
01621-000041	Reed switch mounts
01621-400016	Up to 2" cylinder
01621-400015	Up to 4-1/2" cylinder
01621-400017	Up to 5" cylinder



#### Rod End Clevis

Use with aggregate bin and weigh batcher gates.

Part Number	Description
01439-600001	Rod end clevis for a 4" air cylinder bore with pivot pin
01439-400001	Rod end clevis for a 5" air cylinder bore with pivot pin





01439-600001





### Air Cylinder

Use 2-1/2" x 6" with 2" - 6" diameter keystone butterfly valve and 3-1/2" x 8" with 8" - 12" butterfly valve. Pillar 2-1/2" bore x 6" and 3-1/2" bore x 8" stroke air cylinder with 7010 and 7011 clevis mounting kits and pivot pins.

Part Number	Description
01431-000010	2-1/2" x 6"
01431-000011	3-1/2" x 8"



## Air Cylinder-Magnetic

Use 2-1/2" x 6" with 2" - 6" diameter keystone butterfly valve and 3-1/2" x 8" with 8" - 12" butterfly valve.

Part Number	Description
01431-000008	2-1/2" x 6" (magnetic)
01431-000009	3-1/2" x 8" (magnetic)
01621-000041	Reed switch
01621-400015	Mount 2-1/2" x 6" cylinder
01621-600043	Mount 3-1/2" x 8" cylinder

## Air Cylinder

Use with damper valve on Besser 60-7000 and 60-7000(A) bag house.

Part NumberDescription01431-0000361-1/2" bore x 6" stroke Air Cylinder with foot-mounted kits assembled to cylinder01400-000008Tr-valve soleniod

NOTE: Reference page 139 for the tri-value disc and seal.



## **Gate Stop Assembly**

Part Number	Description
0440-0680001	Gate stop assembly for adjusting cylinder snoke - 4" bore
0440-0680043	Gate stop assembly for adjusting cylinder snoke - 5" bore





## Filters/Regulators

Regulates/filters plant air - aeration pads - low pressure.

Part Number	Description
01410-000009	Regulating/filtering plant air - aeration pads - low pressure - 60 PSI - 1/2" NPT
01410-000010	Regulating/filtering plant air - aeration pads - low pressure - 60 PSI - 3/4" NPT
01410-000007	Regulating/filtering plant air - high pressure - 160 PSI - 1/2" NPT
01410-000008	Regulating/filtering plant air - high pressure - 160 PSI - 3/4" NPT
Part Number	Description
06-AA-F12-400-A3TA	Filter for filtering plant air supply - auto drain - 1/2" NPT
06-AA-F12-600-A3TA	Filter for filtering plant air supply - auto drain - 3/4" NPT
01499-400002	Beach cylform filter replacement elements for #400 moisture trap

#### Filter Elements

Cylform filter elements.

Part Number	<u>Description</u>
01499-400002	Replacement elements for Besser #400 moisture trap



## Lubricator

Part Number	Description
01499-000001	1/2" NPT lubricator
01499-400001	3/4" NPT lubricator



## **Butterfly Valve**

Water on/off control.

Part Number	Description
01402-400023	2" butterfly valve (aluminum/bronze disc)
01402-400022	3" butterfly valve (aluminum/bronze disc)
01402-400017	4" butterfly valve (aluminum/bronze disc)
01402-400005	6" butterfly valve (aluminum/bronze disc)



## **Butterfly Valve**

Cement and fly ash control. Ductile iron disc, undercut disc.

Part Number	Description
01402-400007	8" Keystone figure AR-1 butterfly valve
01402-400009	10" Keystone figure AR-1 butterfly valve
01402-400003	12" Keystone figure AR-1 butterfly valve





#### Wrench Arm

Use with Keystone butterfly valves.

Part Number	Description
01402-400011	2" - 6" Keystone wrench arm
01402-400012	8" - 12" Keystone wrench arm



## Wrench Arm Adaptor

Use with Keystone butterfly valves for adapting valve stem to wrench arm.

Part Number	Description
01402-400032	2" keyed wrench arm adaptor
01402-400032	3" keyed wrench arm adaptor
01402-400033	4" keyed wrench arm adaptor
01402-400029	6" keyed wrench arm adaptor
01402-400034	8" keyed wrench arm adaptor

Part not required for 10" - 12" keyed wrench arm adaptor



## Actuator Assembly

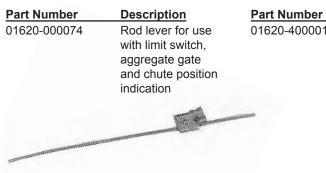
Weigh batcher and silo actuator assembly  Part Number Description		Weigh batcher using magnetic reed switch	
<u>Description</u>	Part Number	Description	
" (water) actuator assembly	01402-400015	4" (water) actuator assembly	
" (water) actuator assembly	01402-400024	6" (water) actuator assembly	
" (water) actuator assembly	01402-400050	8" actuator assembly	
s" actuator assembly	01402-400025	10" actuator assembly	
0" actuator assembly	01402-400026	12" actuator assembly	
400004 12" actuator assembly	01621-000041	Reed switch	
	01621-400015	Mount 3" - 6" cylinder mount Mount 8" - 12" cylinder mount	
3	" (water) actuator assembly " (water) actuator assembly " (water) actuator assembly " (water) actuator assembly " actuator assembly 0" actuator assembly	Part Number	



#### Limit Switch Rod Lever

# Limit Switch

Limit	Switch	Roller	Leve



rt Number	Description
620-400001	For position indicatio of gates, valves and chutes



Part Number	Description
06-EC-3X03-KI200	Roller lever
	for use with
	limit switch,
	cement and
	water butterfly
	valve position
	indication





## Castings

Part Number Description

0420-0680054 Universal 9" radius casting assembly replaces both left and right castings 01599-400002 Steel casting for clamshell gate

Steel casting for clamshell gate Replaces left: 01599-600002 Replaces right: 01599-600003





0420-0680054

01599-400002

#### Clamshell Gate Pin

Part Number	<u>Description</u>
01539-400022	Gate pin round head, 1" diameter - 3"
01539-400169	Gate pin round head, 1" diameter - 4"



**BATCHING** 148 © 2016 by Besser Company



#### Water Meters

Concrete batching system - hot water application for use with CB-20 batch controller.

Part Number	Description
01999-400060	2" turbo/butterfly valve water meter complete
	with PFT-3E unscaled transmitter
01999-400061	3" turbo/butterfly valve water meter complete
	with PFT-3E unscaled transmitter

Concrete batching system - hot water application for use with Aceco "Scorpion" batch controller.

Part Number	Description
01999-400041	2" turbo/butterfly valve water meter complete
	with PFT-4E scalable transmitter
01999-400039	3" turbo/butterfly valve water meter complete
	with PFT-4E scalable transmitter

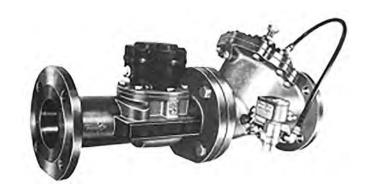


Concrete batching system - hot water application diaphragm valve for use with Aceco "Scorpion" batch controller.

Part Number	Description
01999-400062	2" turbo/valve water meter complete with
	PFT-4E scalable transmitter
01999-400063	3" turbo/valve water meter complete with
	PFT-4E scalable transmitter

Concrete batching system - hot water application diaphragm valve for use with GB-20 batch controller.

Part Number	Description
01999-400064	2" turbo/valve water meter complete with
	PFT-3E unsealed transmitter
01999-400065	3" turbo/valve water meter complete with
	PFT-3E unsealed transmitter



### **Batch Controller**

Part Number	<u>Description</u>
01999-400066	Model CB-20





#### Vibrator - Ball

Part Number	<u>Description</u>
01593-400009	16 for cement weigh batcher
01593-400010	19 for cement weigh batcher
01593-400011	35 for cement weigh batcher
01593-400003	41 for cement weigh batcher



## Piston Vibrator - Air Cushion

Part Number	Description
01593-400007	For aggregate weigh batcher and storage bins, 3-1/8" piston
01593-400008	For cement batcher, 2-1/4" piston



## Piston Vibrator - Impacting

Part Number	<u>Description</u>
01593-400002	Impacting piston vibrator for aggregate weigh
	batcher and storage. 3-1/8" piston impacting
01593-400001	Impacting piston vibrator for cement weigh
	batcher. 2-1/4" piston impacting





## Turbine Vibrator - Pneumatic

Part Number	Description
01593-000002	Model 250 For cement weigh batcher 2-1/4" piston
01593-400001	Model 510 For cement weigh batcher 2-1/4" piston





## Conveyor Belt Wiper Assembly

Part Number	Description
01539-600001	18" wide
01539-600002	24" wide
01539-600003	30" wide
01539-600004	36" wide
01539-600005	42" wide
01539-600006	48" wide
01539-600007	54" wide
01539-600008	60" wide

#### **Replacement Blades**

Part Number	Description
01539-400152	24" wide
01539-400154	30" wide
01539-400155	36" wide



# Torsion Tube Style Conveyor Belt Wiper Assembly

Part Number	Description
01539-000002	24" wide
01539-000003	30" wide
01539-000004	36" wide

#### **Replacement Blades**

Part Number	Description
01539-400077	24" wide
01539-400074	30" wide
01539-400001	36" wide



Part Number	<u>Description</u>
01539-400122	Torque tensioner core mini
01539-400145	Torque tensioner core #2





#### **Bin Indicator**

Proximity control bin indicator, flanged model; use with low bin indicator flanged for mounted to bin wall.

Part Number	Description
01621-400009	Aggregate
01621-400010	Cement fly ash
0440-0140001	Optional weld flange



#### **Bindicator Power Pak**

Replacement for damaged Roto Bindicator power pak.

Part Number	Description
01629-400001	Power Pak



## **Bindicator Shaft Coupling**

Part Number	Description
01621-400003	Shaft coupling for installing
	flexible shaft to Roto-Bindicator
01621-400005	Shaft coupling for installing
	flexible shaft to Roto-Bindicator





01621-400003

01621-400005

#### Bin Indicator Paddle

Part NumberDescription01621-400002Bin indicator 2" x 7" stainless steel paddle, use with Roto-Bindicator





#### **Torque Motor**

01621-400006 Replacement torque motor for model R Roto Bindicator

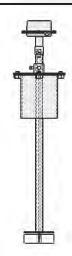


## Roto Bindicator with Adjustable Extension Assembly

Use with aggregate/cement high level indicator-use with Roto Bindicator.

<u>Description</u>
6"
6' - 6"
15'

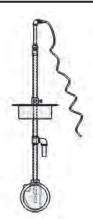
Other sizes are available, ask your Sales Representative for details.



## High Bin Signal Limit Switch for Cement, Fly Ash

Part Number	Description
0420-0140023	3' cement/fly ash
0420-0140022	5' cement/fly ash
0420-0140002	8' cement/fly ash

High bin signal limit switches are also available for aggregate, contact your Besser Sales or Customer Service Representative for more information.



## **Proximity Controls Bin Indicator Suspended Model**

The part is to be used with an extension assembly.

Part Number	Description
01621-400008	Aggregate
01621-000042	5' cement/fly ash



#### Signal Unit

Besser combination light/horn signal indicator unit; use with high bin indicator.

Part Number	Description
0420-0290005	Combination light/horn signal indicator unit





#### **Dust Transfer Vent Hose**

Description
2" diameter
3" diameter
4" diameter
6" diameter
10" diameter
12" diameter



Custom sizes are available, contact your Besser Customer Service Representative.

#### Gum Rubber Hose-Two Ply

<u>Description</u>
6-5/8" ID for cement discharge
9" ID for cement discharge
20" ID for aggregate discharge
24" ID for aggregate discharge



Additional sizes are available, contact your Besser Sales or Customer Service Representative for assistance.

## Elephant Trunk Hose-Two Ply

Part Number	<u>Description</u>
01469-400013	20" ID for aggregate discharge
01999-600003	24" ID for aggregate discharge
01469-400025	30" ID for aggregate discharge



NOTE: Contact your Besser Customer Service Representative for replacement standard and custom head chutes.

#### **Band Clamps**

01999-400054

For discharge hoses and vinyl connectors.

Part Number	Reference	To Fit:
01999-400098	BA-1	7" OD tube
	BA-2	10" OD valve body
01999-400091	BA-3	10" OD ring
	BA-4	18-1/2" OD ring
	BA-5	20" OD ring - 01999-400117
01999-600004	BA-6	24" OD ring
01999-400092	BA-7	8" ID pipe
	BA-8	30" OD ring - 01999-400118
	BA-9	17" OD ring
	BA-10	23-3/8" OD ring - 01999-400121
	BA-11	18" OD ring - 01999-400110
	BA-12	7" ID pipe
	BA-13	16-1/2" ring
	BA-14	24" ID ring
	BA-15	11-1/2" OD ring - 01999-400127
01999-400052	BA-16	18-1/2" OD ring
	BA-17	20" ID ring
01999-400097	BA-18	6-1/2" OD plate ring
	BA-19	9" OD ring - 01999-400055
	BA-20	12" butterfly valve body - 01999-400056
01999-400058	BA-21	16" OD ring
	BA-22	15" OD ring
01999-400059	BA-23	14" OD ring
01999-000013	BA-25	25-1/2" ID hose
01999-400051	BA-33	11" OD ring

Custom size

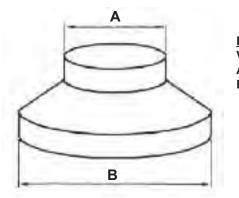


Band Clamps- 000097-BA18, 00052-BA16

**BATCHING** 154 © 2016 by Besser Company



# Vinyl Connectors for Cement/ Fly Ash Batching Systems



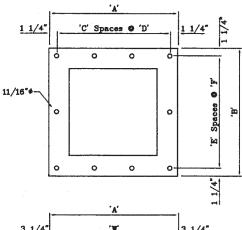
Example: VC = 1011 A = 10 B = 11

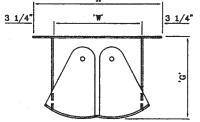
These vinyl connectors help to contain dust within charging systems and prevent water damage to cement batchers.

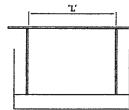
#### Clamshell Gates

W	L	Α	В	С	D	Е	F	G
12	12	18-1/2	18-1/2	2	8	2	8	13-1/4
14	14	20-1/2	20-1/2	2	9	3	6	13-1/4
16	12	22-1/2	18-1/2	4	5	2	8	13-1/4
16	20	22-1/2	26-1/2	4	5	4	6	13-1/4
16	24	22-1/2	30-1/2	4	5	4	7	13-1/4
16	30	22-1/2	36-1/2	4	5	4	8-1/2	13-1/4
16	36	22-1/2	42-1/2	4	5	5	8	12-1/4
18	30	24-1/2	36-1/2	4	5-1/2	4	8-1/2	13-1/4
18	36	24-1/2	42-1/2	4	5-1/2	5	8	13-1/4
24	24	30-1/2	30-1/2	4	7	4	7	17-3/4
8	8	12	12	2	5	2	5	8-3/8
12	24	18-1/2	30-1/2	2	8	4	7	13-1/4
12	16	18-1/2	22-1/2	2	8	4	5	13-1/4

Part numbers are not available. Specify length and width when ordering from you Besser Representative..







PART NUMBER	DESCRIPTION	Α	В
VC-711	711 VINYL BOOT	7.25	11.25
01539-400020	712 VINYL BOOT	7.25	12.25
01539-400019	715 VINYL BOOT	7.25	15.25
VC-718	718 VINYL BOOT	7.25	18.25
VC-1008	810 VINYL BOOT	8.25	10.25
01539-400142	811 VINYL BOOT	8.25	11.25
01539-400068	816 VINYL BOOT 12L	8.25	16.25
VC-816	816 VINYL BOOT	8.25	16.25
VC-911	911 VINYL BOOT	9.25	11.25
01539-400170	9.515 VINYL BOOT	9.75	15.25
VC-918	918 VINYL BOOT	9.25	18.25
VC-924	924 VINYL BOOT	9.25	24.25
VC-1008	810 VINYL BOOT	8.25	10.25
01539-400033	1011 VINYL BOOT	10.25	11.25
VC-1012	1012 VINYL BOOT	10.25	12.25
VC-1014	1014 VINYL BOOT	10.25	14.25
01539-400001	1015 VINYL BOOT	10.25	15.25
01539-400002	1016 VINYL BOOT	10.25	16.25
01539-400003	1018 VINYL BOOT	10.25	18.25
01539-400004	1020 VINYL BOOT	10.25	20.25
01539-400137	1020 VINYL BOOT 16L 22OZ	10.25	20.25
01539-400005	1024 VINYL BOOT	10.25	24.25
01539-400015	1112 VINYL BOOT	11.25	12.25
01539-400006	1114 VINYL BOOT	11.25	14.25
01539-400007	1115 VINYL BOOT	11.25	15.25
01539-400168	1116 VINYL BOOT	11.25	16.25
01539-400008	1118 VINYL BOOT	11.25	18.25
01539-400010	1120 VINYL BOOT	11.25	20.25
01539-400011	1124 VINYL BOOT	11.25	24.25
01539-400153	1130 VINYL BOOT	11.25	30.25
01539-400050	1132 VINYL BOOT	11.25	32.25
01539-400017	1216 VINYL BOOT	12.25	16.25
VC-1217	1217 VINYL BOOT	12.25	17.25
VC-1218	1218 VINYL BOOT	12.25	18.25
01539-400012	1220 VINYL BOOT	12.25	20.25
01539-000006	1221 VINYL BOOT	12.25	21.25
01539-000009	1222 VINYL BOOT	12.25	22.25
01539-400013	1224 VINYL BOOT	12.25	24.25
VC-1315	1315 VINYL BOOT	13.25	15.25
01539-400018	1316 VINYL BOOT	13.25	16.25
01539-400014	1318 VINYL BOOT	13.25	18.25
01539-400175	1318 VINYL BOOT 19L	13.25	18.25
VC-1320	1320 VINYL BOOT	13.25	20.25



### Single Solenoid Valve

Use with aggregate, cement water fill/discharge, aeration and vibration.

Part Number	Description
01400-000005	1-Position valve



#### **Double Solenoid Valve**

Use with aggregate and cement discharge.

Part Number	Description
01400-000006	2-Position valve



#### Ceram™ Valve

Use with aggregate, cement water fill/discharge, aeration and vibration.

Part Number	Description
01409-400002	Size II single solenoid 4-way
	(interchange for 01400, 400015

(interchange for 01409-400015 and 01409-400003 ½" Type "D" pilot air valves)



#### Ceram™ Valve

Use with aggregate and cement discharge.

01409-400001 Size II double solenoid 4-way

(interchange for 01409-400004 1/2"

type "d" pilot air valves)



#### Strain Relief

Use with Size II Ceram  $^{\text{TM}}$  valve, wiring to solenoid coil using SO cord.

Part Number Description

01499-400009 Connector strain relief





#### Pilot Air Valve

Use with aeration and vibration.

Part Number Description

01499-400015 ½" "D" pilot air valve, single solenoid

operated control valve



#### Pilot Air Valve

Use with aggregate cement, water fill/cut off.

Part Number Description

01409-400003 ½" "D" pilot air valve, single solenoid

operated control valve



#### Pilot Air Valve

Use with aggregate cement batcher discharge.

Part Number Description

01409-400004 ½" "D" pilot air valve, double solenoid

operated control valve



#### Pilot Air Valve

Use with aggregate and cement batcher discharge.

Part Number Description

01499-400014 ½" "D" pilot air valve, inching manual

operated control valve





#### Station Segment

Use with Size II Ceram  $^{\text{TM}}$  valve and ISO II valves, to be used when a series of valves are assembled in a bank.

Part Number	<u>Description</u>
01409-000006	Manifold segment - use with size II Ceram™ end plates
01409-400010	Manifold segment - use with ISO II end plates



#### **End Plates**

Use with Size II Ceram™ valves and ISO II valves end kit(s) manifold bank.

Part Number	Description
01499-400016	End plate kit (includes L&R), end ported manifold - use with Size II Ceram™ manifold segments
01409-000004	Left end plate (requires right), end ported manifold - use with ISO II manifold segments
01409-000005	Right end plate (requires left), end ported manifold - use with ISO II manifold segments



## **Speed Control**

Use with Size II Ceram™ valves, for speed control of air cylinders.

Part Number	Description
01429-400010	Sandwich speed control



#### Sub Base

Use with Size II Ceram™ valve and ISO II valves when mounted as single units.

Part Number	Description
01499-400008	Sub base, 1/2" NPT - use with Size II Ceram™ valves
01409-000003	Sub base, 1/2" NPT - use with ISO II valves



## **O-Ring**

Use in repairs to solenoid end piston on  $\frac{1}{2}$ " type "D" pilot air valve, one required per solenoid end.

Part Number	Description
01409-400006	O-ring



#### Repair Kit

Use in repairs to  $\frac{1}{2}$ " type "D" pilot air valve.

	<b>Part</b>	Number	Description
--	-------------	--------	-------------

01409-400005 Minor repair kit. contains: packing rings,

retainers and lube-grease



## **BESSER**

#### Solenoid Coil

Use in repairs to ½" type "D" pilot air valve solenoid end.

Part Number Description

01499-400011 Solenoid coil – 115VAC – P61920



## Solenoid Assembly

Use in repairs to ½" type "D" pilot air valve solenoid end.

Part Number Description

01499-400007 Solenoid assembly – 115VAC



#### Solenoid Coil

Use in repairs to Size II Ceram™ valves.

Part Number Description

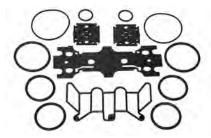
01409-400009 Solenoid coil only 120 volt



#### Seal Kit

Use in minor repairs to "GA" series, Size II Ceram™ valve.

Part NumberDescription01499-400017Rubber seal kit



#### Repair Kit

Repairs to single solenoid valve 2-position series.

Part Number Description

01499-400013 Single solenoid 2-position repair kit

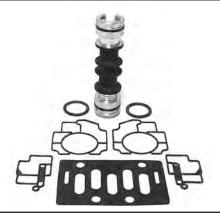


#### Repair Kit

Repairs to double solenoid valve 2-position series.

Part Number Description

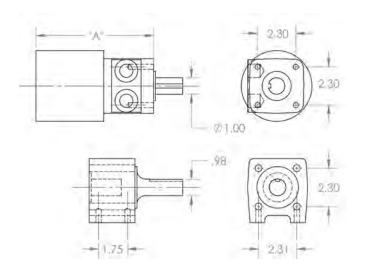
01499-400012 Double solenoid 2-position repair kit





## Hydraulic Motors and Accessories

The motors listed below are used in several places through out our cubing, splitting and conveyor systems. Reference dimensions below to verify motor features and sizing. Overhung load adapters are also used in several applications througout cubing and splitting production lines.



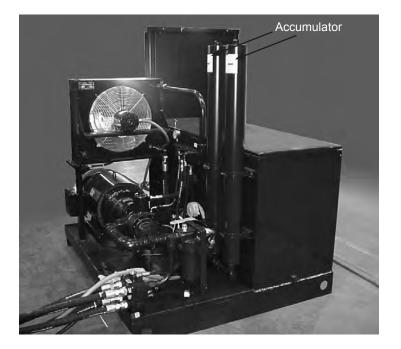
Part Number	Description
01330-000009	Hydraulic motor, 4.5 cubic inch A=5-1/2"
01330-000010	Hydraulic motor, 9.7 cubic inch A=6"
01330-000011	Hydraulic motor, 14.1 cubic inch A=6-7/20"
01330-000012	Hydraulic motor, 22.6 cubic inch A=7-1/10"
01359-500008	Replacement seal kit (fits all motors listed above)
05-100073_0	Over hung load adapter

NOTE: Electric components and hydraulic valves are available contact your Besser Representative for assistance.

#### **Accumulators**

Splitters, turnovers and cubers all use accumulators to absorb pressure spikes and supplement pressure drops in the operation of the equipment.

Part Number	<u>Description</u>	
01312-000001	Accumulator	
05-K5920W	Rebuild kit (replacement seals for	the pisto



HYDRAULIC 160 © 2024 by Besser Company



#### Return Line Oil Filter

Contaminated hydraulic oils should be prevented from returning to the oil reservoir. Each filter assembly includes hydraulic oil filter complete with gauge, element, pipe nipple and two replacement filter elements.



Part Number	Description
02-105965	Michigan Fluid Power filter assembly 1-1/4" NPT (for 50 gpm power units) (model SAF 59G20P-spin-a-filter)
02-105966	Replacement element - 25 micron - S-59
02-105967	Michigan Fluid Power dual filter assembly 1-1/2" NPT (for 70 gpm power unit (model TAF 59G24P - twin-a-filter)
02-105966	Replacement element - 25 micron - S-59
02-106578	Michigan Fluid Power assembly 1-1/4" NPT (for 80 gpm power units) (model SAF58G20S - spin-a-filter)
02-106579	Replacement element - 10 micron - SE-10
01320-000029	Michigan Fluid Power filter assembly (LSC-40 car and crawler (8 & 20 gpm power units, model SAF 29G16P - spin-a-filter)
02-108770 01321-000026	Replacement element - 25 micron - S-29 Replacement element - 14 micron

#### For Servopac

Filter	Description	Replacement Element
01320-000027	Filter head assembly, double element	01321-000023
01320-500004	Filter, return line, tank mounted	01321-500007
01320-000024	Filter, pressure, subplate mnt	01321-500008

#### Oil Heater

This Chromalox immersion type heater is thermostatically controlled to heat oil inside the cuber tank to the desired operating temperature. Simply select from a temperature range of 60°F - 150°F, (16°C - 66°C). Installation of heater to the tank side wall is easy.

Part Number	<u>Description</u>	
01353-000028	Oil heater - 120 V - 500 watt for PTS and LSC systems	
01353-000027	Oil heater - 240 V - 3000 watt for cuber	
01353-000035	Oil heater, 480 V - 2000 watt, 17.75 inches for cuber,	
	Servopac and big board machine power units	
02-115388	Replacement element 10 micron (LSC-40/100 with in-tank filters)	
02-113915	Filter assembly - 1" NPT (for PTS car/crawler)	
02-113916	Replacement element 10 micron (spin-on)	

Additional heater and filter configurations are available. If you do not find components matching your existing components listed above, contact your Besser Representative for more information.

#### Liquid Level Safety Switch

This liquid level safety switch will shut off power to the hydraulic pump's electric motor when the oil in the reservoir gets below the safety zone. This prevents damage to the hydraulic pump. It provides built in protection in case a hydraulic hose bursts or is accidentally severed. Installation instructions are included. For additional information request Service Bulletin No. 90-5 or view it online at www.besser.com/servicebulletins.

Part Number	Description		
02-640459	SOP to add liquid level switch to 100 and 150 gal	llon reservoir	
02-107273	Liquid level switch only	SWITCH ONLY	
02-113104	Float and temperature switch	NO. 107273 SWITCH ON NO. 113104	
(0)	THE STATE OF THE S	10.113104	

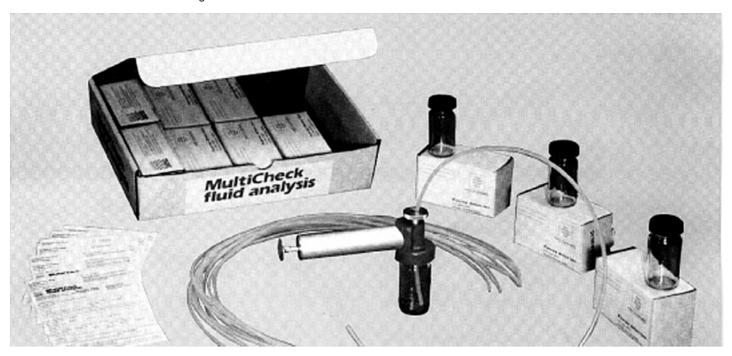


### Multicheck Fluid Analysis

## Did you know that 80% of hydraulic failures are caused by contamination?

The multicheck fluid analysis program provides insight into the current condition of your hydraulic systems. Testing the hydraulic oil in each piece of equipment, (contained in the reservoir for the Multi-Spade Besser-Matic, LSC-40 car and crawler and the cuber) will determine the condition of the oil. This type of analysis is a proven predictive and preventive maintenance tool.

The company performing the tests will send a complete, easy to read report about the sample, including particle counts, viscosity, wear metal and additive content and a diagnostic statement.



WORK SAFELY: Be sure that the machinery is properly locked out before taking the oil samples from the hydraulic reservoir.

Part Number	Description
02-114546	Four test kits (contains forms, four sample bottles with mailing boxes and tubes)
02-114547	Oil pump (hand operated)

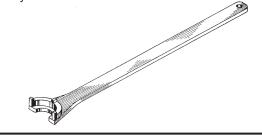
Boston Combo Units		Regulator
Part Number	Description	
02-107968	Lubricator - 1/2" NPT (Boston No. EN43340 - standard)	
02-107967	Air filter - 1/2" NPT (Boston No. EN41340 - standard)	
02-107963	Regulator - 1/2" NPT (Boston No. EN42340 - standard)	
02-107645	Regulator - 1" NPT (Boston No. EN42460 - jumbo)	Lubricator
02-/////////	Repair kit (Boston No. EN42409)	Lubricator
		Air Pressure Gauge



#### Spanner Wrenches

SKF nuts can only be properly tightened using a spanner wrench engineered for this specific use and strength. Our heavy-duty wrench for the N-11 SKF adapter nuts will help to insure long vibrator bearing life. A heavy-duty wrench for the N-15 SKF nuts makes servicing of the clutch / brake units easier. The standard wrench fits the N-14 locknut on the pulley shaft.

Part Number	Description
02-306031	Spanner wrench (for diamond "D" clutch)
02-103507	Spanner wrench (for horton clutch)
02-224995	Spanner wrench - heavy-duty (for N-11 nut & vibrator shafts)
02-293042	Spanner wrench - heavy-duty (for N-13 nut)
02-254841	Spanner wrench - heavy-duty (for N-15 nut)
02-043991	Spanner wrench (for N-14 nut & mixer blade eccentrics)



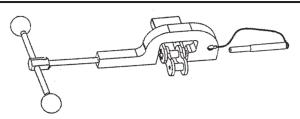
## Spud Wrenches

Part Number	Description	Part Number	<u>Description</u>
02-084001	1-1/8" open end spud wrench	02-084003	1-5/8" open end spud wrench
02-084002	1-1/4" open end spud wrench	02-084625	2" open end spud wrench
02-109729	1-1/2" open end spud wrench	02-084624	2-3/8" box end spud wrench



#### Pallet Feeder Chain Assembly Tool

Part Number	Description
02-497628	Pallet feeder chain assembly tool



#### **Block Height Gauge**

The Besser block height gauge allows a quick check of units for accurate height. The gauge is ruggedly constructed from heavy-duty metal with a full, easy-to-grasp handle and hardened feet that are slightly tapered for accurate contact with the pallet. Additional sizes and styles are available upon request.

Part Number	Description
02-486725F0225	2-1/4"
02-400938	60 mm
02-486725F0300	3"
02-442194	80 mm
02-202158	3-5/8"
02-464219	4"
02-486725F0463	4-5/8"
02-214677	5"
02-486725F0525	5-1/4"
02-215471	5-5/8"

Part Number	Description
02-486725F0575	5-3/4"
02-436166	6"
02-355906	190 mm
02-070314	7-5/8"
02-079066	7-5/8 & 8"
02-486725F0800	8"

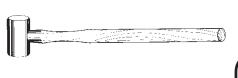


Multi block height gauge, 02-517012, refer to page 50.



#### Brass Hammer and Brass Sledge

Brass hammers and sledges are tops in value for safety progams and a practical addition to any block plant. Quality wood handle. High grade brass head beveled to minimize mushrooming and chipping.



Part Number	<u>Description</u>
02-084718	3 lb copper hammer
02-094106	6 lb copper sledge
02-094077	8 lb copper sledge



#### SAFETY FIRST

Prevent flying chips of metal that can cause serious injury. Always use a brass hammer or brass sledge when hammering on steel. Not for use on vibrator bearings.



### Hand-Held Digital Contact - Noncontact Tachometer

To assume that your vibrator shafts are turning at the proper RPM is no longer an acceptable practice. The hand held digital tachometer you can quickly and accurately measure the RPM speed of your vibrator shafts.

Part Number	Description
02-112910	Hand held digital tachometer
	Range: 6-99,999.9 RPM
	Reading distance: 50 - 300 mm
	Accuracy: ± 1 RPM
	Batteries: Four 1.5V AAA alkaline
02-115212	Analog Stroboscope for synchronizing vibrators - 110 V



# Fluke Digital Multi-Meter (Volt/Ohm/Amp)

In today's high production block plant, it is occasionally necessary to electrically troubleshoot equipment. A good dependable Volt/Ohm meter is essential. Besser now offers the Fluke Digital Multi-Meter, (Volt / Ohm / Amp) which is a good heavy-duty meter for block plant use.

#### Part Number Description

02-111295 Fluke industrial digital multi-meter



#### Digital Amprobe Ammeter

This digital amprobe ammeter assists with electrical troubleshooting. This digital clamp-on, Volt / Ohm / Amp meter is simple to use and a rugged heavy-duty tool.

Part Number	Description
02-112641	Amprobe ammeter

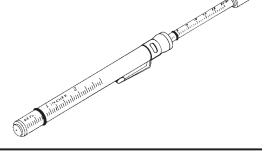
#### Belt Tensiometer

Ideal belt tension is the lowest tension at which the belts will not slip at peak load conditions. Under tensioning of belts can result in belt slippage and can shorten belt life. Over tensioning of belts shortens both belt and bearing life and could cause fatigue breakage of the Besocdyne output shaft. Check belt tension frequently during the first 24 to 48 hours of "run-in" operation. The average deflection force for Vibrapacs equipped with a Bescodyne Drive is 12 pounds and for the Dynapac it is 10 pounds.

Part Number Description
02-106666 Belt Tensiometer

#### **CAUTION:**

Be sure the Main Panel is "LOCKED-OUT" before checking belt tension!



#### Besser Core Removal Tool

Alternate up or down and end to end prying with a Besser core removal tool. It will easily extract stubborn core assemblies from molds. This tough tool was built for rough use. Save one core assembly from damage and the core puller has paid for itself.

Part Number Description

02-211931 Besser core removal tool



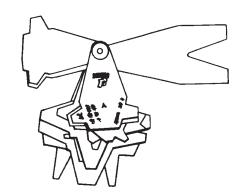


#### Belt and Groove Gauge

Worn sheaves and belts on drive components can lead to loss of efficiency and lost production. This set of gauges allows you to check your belts and sheaves so they can be replaced before becoming worn.

Part Number	Description

02-112541 Belt and groove gauge



#### Monorail Hoist

A two or three ton capacity electric monorail system is available for safe and convenient mold changing. The monorail system includes track, electric chain hoist, electrification rail and mold sling chain.



#### For 3 AAT and 4 AAT (Includes Part Number 02-355981)

Part Number	Description
02-445229F	Monorail hoist system - electrical - 2 ton - RH
02-445230F	Monorail hoist system - electrical - 2 ton - LH
02-445231F	Monorail hoist system - electrical - 3 ton - RH
02-445232F	Monorail hoist system - electrical - 3 ton - LH

**NOTE:** After the "F", add one of the groups of numbers below to the hoist number for voltage required when ordering.

0001 = 230/460-3-60 0002 = 380-3-50 0003 = 208-3-60 0004 = 575-3-60 0005 = 415-3-50 0006 = 220-3-50



#### For 3 AAT/4 AAT

Part Number Description
-------------------------

02-355981 Mold sling chain (2 req'd)

#### For 6 AAT

Part NumberDescription02-484160Mold sling chain

#### **Paint**

Restore the appearance of your Besser machine with Besser yellow or blue paint. Keep your machine looking like new. Paint is specially formulated for long wear and rust resistance. Use Xylene or Tolulol for thinner.

Part Number	<u>Description</u>
02-114801	Yellow paint (1 gallon)
02-114802	Blue paint (1 gallon)
02-113591	Yellow paint (5 gallons)
02-114858	Blue paint (5 gallons)
02-106332	Yellow spray can - 12 oz
02-106333	Blue spray can - 12 oz





## Advanced Servo Vibration & Servo Equipped Main Drive

These enhancements, through the use of Servo motors, smooth out the machine cycle resulting in the production of higher quality concrete products. Equally important, it extends the life of machine and mold parts.

Precisely controlling the acceleration and decelleration of the bull gear maximizes the life of machine parts by reducing the force to the machine components. Synchronizing vibration, by accurately controlling the movement of the vibrator shafts, increases mold parts life by 30% or more.

Operating the servo motor on the Main Drive creates power during deceleration. This power is sent to the main electrical panel for use by either the main drive during acceleration or by the Advanced Servo Vibration (ASV).



#### Advanced Servo Vibration (ASV)

ASV generates fully synchronized vibration starts and stops which:

- Provides more vertical vibration at the start of the cycle which aids in compaction of the material in the mold and potentially reduces feed time
- Provides uniform distribution of material throughout the feedbox, even to the bottom of the mold
- Higher speeds can provide a better product finish
- Feed and Finish times may be reduced resulting in a faster cycle rate
- The ability to decrease speed of stripping of product can reduce culls and aids in the manufacture of hard-to-form products such as thin-walled block
- Reduces material segregation
- Reduces material "jumping" out of the mold box
- Reduces horizontal mold movement during machine cycles for longer mold life
- Offers a dual vibration mode for hard to fill molds, reducing ragged top edges caused by material rolling back into the mold cavity

Since ASV is direct drive, there are no sheaves or belts to adjust or maintain and no air is required. Installation is simple and requires minimal changes to existing concrete products machines by utilizing mold guidance blocks or pin guidance.

#### Servo Main Drive (SMD)

- Replaces mechanical components (clutch and brake), and the related wear and tear, with electronic components
- Provides control of the machine cycle so operation can be tailored to the specific concrete units being produced, increasing overall cycle speed
  - Up to six different speed settings per machine cycle are possible
- Reduces pinion and bull gear maintenance
- Provides exceptionally smooth block delivery
- Provides the ability to run a wider range of products
- Reduces wear on feedbox shaft bushings

## Standard Features

- Bosch Rexroth servo motors: two for ASV, one for Main Drive (two for Superpac)
- Electrical panel containing drives, power supply, modem and disconnect
- Cables: two for ASV, one for Main Drive
- Software and operator interface modifications
- Mounting hardware
- Ethernet modem for remote Besser support

#### **ASV** only

- Quick disconnect drive shafts and couplings
- Cooling fans
- Guarding
- Dual accelerometers

#### Main Drive only

 Bescodyne Drive is replaced by a simple intermediate pulley shaft, bearing and belts

#### Installation

■ Up to 5 days for complete installation

#### **Specifications**

#### Power

■ 380-460 VAC (230 and 575 VAC requires a transformer)

Note: A clean, stable power source is necessary; a filter may be required

#### **Electrical Panel**

■ Minimum requirement: Allen-Bradley SLC5/02™ with color graphic touch human-machine interface (HMI)

#### **Vibrator Speeds**

- Up to 3100 RPM with standard vibrator bearings/housings
- Up to 4000 RPM with air/oil bearing/housings lubrication system (optional see below)

#### **Retrofits for Existing Besser Cam Machines**

■ Requires mold guidance blocks or pin guidance

#### Optional

Air/oil bearing lubrication system uses oil instead of grease allowing the vibrators to run at higher, fully controllable speeds, reducing cycle time. Fully automatic controls ensure regular lubrication.

UPGRADES 166 © 2024 by Besser Company



## Advanced Servo Assembly Vibrator Shaft

Part number	Qty	Description
02-524034	2	Vibrator shaft assembly, 18.047 centers, with flingers
02-524035	2	Vibrator shaft assembly, 20.047 centers, with flingers



## Advanced Servo Vibration (ASV) Replacement Parts

Part number	Qty	Description
02-523899	2	Splined shaft assembly
05-K-091-01400	4	Rubber disc coupling
01503-500009	2	Bearing
01591-000075	2	Coupling elastomer
Core Puller		
05-504306	1	Use with Advanced Servo Vibration

(refer to page 56)



## Servo Main Drive (SMD) Replacement Parts

Part number	Qty	Description
02-108615	2	Bearing, pillow block
02-103457	4	V-belt for V3-12
02-113617	4	V-belt for Dynapac, Ultrapac, Superpac



#### Servo Motors

New and refurbished servo motors are available. Rapid exchange is also available, ask your Besser Customer Service Representative for details.

Part Number	Description
01573-000003	Servo motor, 24.3 kW, 7500 RPM, 460 VAC, asynchronous
01573-000003EX	Refurbished servo motor, 24.3 kW, 7500 RPM, 460 VAC
01573-000004	Servo motor, 4600 RPM, 460 VAC, synchronous
01573-000004EX	Refurbished servo motor, 4600 RPM, 460 VAC
01573-000005	Servo motor fan unit, 115 VAC, 0.44 amp
01573-000006	Servo motor, 44 kW, 6000 RPM, asynchronous
01573-000006EX	Refurbished servo motor, 44 kW, 6000 RPM



Air		Besser-Matics	
Boston Combo Units	162	BescoShear Motor Brakes	103
		Multi-Spade Besser-Matic Barrier Gates	
Batching		Nylon Guides for Transfer Carriage	102
Actuator Assembly	147	Pallet Guide Rollers	
Band Clamps		Positive Soft Stop to Front Delivery Conveyor	102
Batch Controller		Replacement Warner Brakes	103
Bindicator Power Pak		SOP to Improve Performance of Existing	
Bin Indicator Shaft Cupling		Multi-Spade Besser-Matics	104
Bin Indicator		SOP for Replacing Ball Screw	104
Bin Indicator Paddle		Unloading Conveyor Depalleter Brake	102
Butterfly Valve		Unloader Stacker Safety	104
Castings			
Ceram™ Valve		Besser Signs	
Clamshell Gates		Metal Name Plates	10
Clamshell Gate Pin		Decals	
Conveyor Belt Wiper Assembly		Dodio	10
Double Solenoid Valve		Bin Indicators	
Dust Transfer Vent Hose			450
Elephant Trunk Hose - Two Ply		Bindicator Power Pak	
End Plates		Bindicator Shaft Coupling	
Filter Elements		Bin Indicator Paddle	152
Filters/Regulators		Plack Machines (Servence® coe negos 00	01)
Gate Stop Assembly		Block Machines (Servopac®, see pages 90-	
Gum Rubber Hose - Two Ply		Additional Anvil Rubbers for V3-12s and Dynapacs	67
High Bin Signal Limit Switch for Cement, Fly Ash		Adjusting Screws and Dowel Pins	64
Limit Switch		Adjustable Apron Plate for V3-12, Dynapac and Ultrapac	68
Limit Switch Rod Lever		Adjustable Hopper Gate Mechanism	70
Limit Switch Roller Lever		Air Compaction Device - Stripper Head Frame	65
Lubricator		Air Knife	87
		Air-Operated Core Puller (Standard 5" Bore)	56
O-Ring		Air Operated Lube Systems for Concrete	
Pilot Air Valve		Products Machines	87
Piston Vibrator - Air Cushion		Anti-Deflection Screw	66
Piston Vibrator - Impacting		Anti-Friction Roller	64
Proximity Controls Bin Indicator Suspended Model		Anti-Spillage Kit	83
Repair Kit - Pilot Air Valve		Anvil Shaft with Replaceable Rollers	
Repair Kits - Single and Double Solenoid Valve		Autofeed Gear Motor	
Roto Bindicator with Adjustable Extension Assembly		Autofeed Indicator and Guards	
Seal Kit		Auto Gap Accessory for Vibrator Motor Brakes	61
Signal Unit		Back Apron Plate with Removeable Insert	
Single Solenoid Valve		Back Apron Wearing Plates	
Solenoid Assembly		Bearings and Nylon Bushings for 5" Main Shafting	
Solenoid Coil		Bearing Cap Stud Bolts	
Speed Control		Belt Tensioner	
Station Segment		Bescodyne Clutch/Brake	
Strain Relief		Bescodyne Rapid Exchange Program	
Sub Base		Bescopac Material Feeder Assembly	
Torsion Tube Style Conveyor Belt Wiper Assembly		Bescopac Material Retainer Assembly	
Torque Motor		Bescopac Updates	
Turbine Vibrator - Pneumatic		BESCOSTOP™ Brakes	
Vibrator - Ball		Besser Metal Name Plates	
Vinyl Connectors for Cement/Fly Ash Batching Systems.		Block Moving and Pallet Placing Bars	
Water Meters		Bounceless Shock Absorber Pads	
Wrench Arm		Cam Rollers	
Wrench Arm Adaptor	147	Cam Shaft Bearing Seals	
		Combo Units	
		Crowned Height Pin Cap	
		Deluxe Apron Plates	
		Doiano Apron Flatos	

INDEX 168 © 2024 by Besser Company

Deluxe Lug Link - One Piece.....72



Pynapac Update - Bearings, Sleeves and Collars	80 81 83 81 60
reedbox Assemblies for Superpac and V5. 79 reedbox Assemblies for Ultrapac. 79 reedbox Assemblies for V3R & V3-12 A - F. 79 reedbox Assemblies for V3R & V3-12 A - F. 79 reedbox Dual Cams for V3R & V3-12 A - F. 79 reedbox Dual Cams for V3R & V3-12 A - F. 79 reedbox Packed Comment Packed Comm	81 83 81 60
vibrapac Feedbox Q2-287555 Wear Liners reedbox Assemblies for V3R & V3-12 A - F	83 81 60
Vibrapac Major Overhaul Kit Feedbox - 02-648346 SOI vibrator Motor Air Bag Lift vibrator Motor Base Pivot Block vibrator Shaft Fixture.  Vibrator Shaft Fixture.  19 Vibrator Shaft With Quick Detachable Sheave & Subde Liners and Sude Sude Sude Sude Sude Sude Sude Sud	81 60 60
vibrator Motor Air Bag Lift seedbox Replacement Parts seedbox Replacement Parts seedbox Replacement Parts seedbox Wear Parts Overhaul Kit. 79 lange-Type Feedbox Front Wearing Shoe 84 studie Liners 66 lardened Steel Bushings 87 lopper Lose Back Plate. 87 lunting Tooth Bull Gears & Pinions 63 lower Support Bars for Pin-Type Mold Guidance System 63 loude Liners 64 lold Lock Assemblies for V3Rs, V3-12 and Dynapacs 67 lold Pallet Guides 68 lottorized Block Finishing Brush 69 latel Fingers and Pallet Cradles 71 latel Receiver Rubbers 68 latel Scraper 70 lin Type Mold Guidance System 71 lin Type Mold Guidance System 72 lin Type Mold Guidance System 73 lin Type Mold Guidance System 74 lin Type Mold Guidance System 75 lin Type Mold Guidance System 76 lotter Gravity Offload Roller Components 77 lin Type Mold Guidance System 78 lotter Gravity Offload Roller Components 79 leveloach Mold Jig 79 leveloach Mold Jig 70 leveloach Mold System for Bescodyne Vibrator 70 lemoveable Roller Amm 70 lemoveable Roller Amm 71 leveloach Mold System for Bescodyne Vibrator 71 lemoveable Roller Mam 72 leveloach Mold System for Bescodyne Vibrator 73 lemoveable Roller Mam 74 leveloach Mold System for Bescodyne Vibrator 75 lemoveable Roller Amm 76 leveloach Mold System for Bescodyne Vibrator 77 lemoveable Roller Romonents for V3R & V3-12 Vibrapacs 80 leveloach Mold System for Bescodyne Vibrator 80 leveloach Mold System for Bescodyne Vibrator 80 leveloach Mold System for Bescodyne Vibrator 80 leveloach Mold System f	60 60
reedbox Replacement Parts	60
reedbox Wear Parts Overhaul Kit	
lange-Type Feedbox Front Wearing Shoe	
Bushing (for Standard Vibration Only).  Warner Vibrator Brake Assembly Welf-on Uprights for the Stripper Head Frame  Conveyor Accessories  Return Trainer. Assembly for Besser Cubers Using Crossove Elevator Leveling Chains. Cuber Clamp Components  Cuber Clamp Components Levator Slide Shafts (For SF-7 & SF-7W Cubers)  Cuber Side Feed Infeed Roller Components Levator Slide Shafts (For SF-7 & SF-7W Cubers)  Pallet Receiver Rubbers  Assembly on Bushings for V3-12 and Dynapac Feedboxes  Bushing for V3-12 and Dynapac Feedboxes  Couler Clamp Components  Cuber Clamp Components  Cuber Clamp Components  Cuber Clamp Components  Cuber Clamp Components  Elevator Slide Shafts (For SF-7 & SF-7W Cubers)  Cuber Slide Feed Infeed Roller Conveyor  Gravity Offload Roller Conveyor  Gravity Offload Roller Conveyor  For Slide Feed Infeed Roller Conveyor  For Slide Feed Infeed Roller Feedbox  For Slide	
Variety of State Bushings	54
topper Gates	
tunting Tooth Bull Gears & Pinions	
Hunting Tooth Bull Gears & Pinions	
Return Idler Return Trainer Troughing Idler Troughing Idler Troughing Idler Troughing Trainer Idler  **Cuber S**  **Cuber S**  **Cuber S**  Chain Lift Assembly for Besser Cubers Using Crossove Elevator Leveling Chains Cuber Clamp Components Cuber Side Feed Infeed Roller Components Elevator Side Shafts (For SF-7 & SF-7W Cubers). Flanged Wheel Assembly for Cuber Left and Cuber Carriage.  Gravity Offload Roller Conveyor. Gravity Roller Conveyor Valve (For SF-7 & SF-7W Cubers). Patternmaker Pusher Bar Components. Patternmaker Turntable Assembly (Belt Drive Configuration). Patternmaker Turntable Assembly (Drive Wheel Configuration). Patternmaker Turntable Belt Drive Retrofit. Power Feed Convey Product Clamp Assembly. Pressure Reducing Valves.  Sepacers for Main Shafting  77 Replacement Components for V3R & V3-12 Vibrapacs Resilient Mold Throat Insert  87 Respacers for Main Shafting  87 Return Trainer  78 Return Irainer  79 Return Irainer  70 Releason Union Bushings for V3Rs, V3-12 and Dynapacs  86 Resilient Mold Throat Insert  87 Return Irainer  88 Resilient Mold Suidance System  88 Resilient Mold Suidance System  89 Resilient Mold Throat Insert  89 Resilien	
Return Trainer.  Alagazine Roller Shafts Alagazine Roller Shafts Alold Insertion Device  54 Alold Lock Assemblies for V3Rs, V3-12 and Dynapacs Alold Lock Assemblies for V3Rs, V3-12 and Dynapacs Alold Throat Liners & Mold Lock Liners Alold Throat Liners Alo	
Adagazine Roller Shafts Adold Insertion Device	
Mold Insertion Device	
Mold Lock Assemblies for V3Rs, V3-12 and Dynapacs 67 Mold Pallet Guides 55 Mold Throat Liners & Mold Lock Liners 66 Motorized Block Finishing Brush 86 Notched Pins 78 Nylon Bushings 507 Agitator Back Shafts 84 Nylon Bushings for V3-12 and Dynapac Feedboxes 80 Pallet Fingers and Pallet Cradles 71 Pallet Receiver Rubbers 68 Ports Mold Guidance System 56 Promatic Control System for Bescodyne Vibrator 507 Port Units 700 Ports Polits 700 Posa-Clean Pallet Scraper 85 Portable Mold Jig 700 Posa-Clean Pallet Scraper 85 Posa-Clean Pallet Scr	
Mold Pallet Guides	141
And Throat Liners & Mold Lock Liners	
Motorized Block Finishing Brush	
Algon Bushings for Agitator Back Shafts	
Volone Bushings	115
Aylon Bushings for Agitator Back Shafts Aylon Bushings for V3-12 and Dynapac Feedboxes Ballet Fingers and Pallet Cradles Pallet Receiver Rubbers Pallet Receiver Rubbers Pallet Scraper Prin Type Mold Guidance System Prin Type Mold Guidance Prin	
Aylon Bushings for Agitator Back Shafts Aylon Bushings for V3-12 and Dynapac Feedboxes Apallet Fingers and Pallet Cradles Apallet Receiver Rubbers Apallet Scraper Apallet	
Fallet Fingers and Pallet Cradles Pallet Fingers and Pallet Cradles Pallet Receiver Rubbers Pallet Scraper Poin Supports for Pin-Type Mold Guidance System Preumatic Control System for Bescodyne Vibrator Prove Units Posa-Clean Pallet Scraper Removeable Roller Arm. Pallet Scraper Replacement Components for V3R & V3-12 Vibrapacs Equipped with a Jack Shaft Resilient Mold Throat Insert. Robock Absorbers for Stripper Head Frame Robock Absorbers for Stripper Head Frame Robock Sopt to Install Sleeves on Main Shafts - V3-12 Robocars for Shaft Arms.	
Flanged Wheel Assembly for Cuber Left and Cuber Carriage.  Flanged Mheel Assembly for Cuber Left and Cuber Carriage.  Flanged Mheel Assembly for Cuber Carriage.  Flanged Mheel Assembly for Cuber Carriage.  Flanged Mhe	
Pallet Receiver Rubbers	110
Callet Scraper	445
Fin Supports for Pin-Type Mold Guidance System 57 Pin Type Mold Guidance System 56 Preumatic Control System for Bescodyne Vibrator 56 Prove Units 58 Provided Mold Jig 55 Prosa-Clean Pallet Scraper 55 Proceding Provided For Dynapac 55 Proceding Provided For	
Printing Mold Guidance System 56 Preumatic Control System for Bescodyne Vibrator 57 Prive Units 58 Portable Mold Jig 55 Posa-Clean Pallet Scraper 58 Patternmaker Pusher Bar Components Items 58 Patternmaker Pusher Bar Components 59 Patternmaker Turntable Assembly (Belt Drive Configuration) 59 Patternmaker Turntable Assembly (Drive Wheel Configuration) 59 Patternmaker Turntable Belt Drive Retrofit 59 Patternmaker Turntable Assembly 59 Patternma	
Presumatic Control System for Bescodyne Vibrator Orive Units	119
Portable Mold Jig	
Portable Mold Jig	116
Posa-Clean Pallet Scraper	115
Rack and Pinion Hopper Gate for Dynapac	113
Removeable Roller Arm	
Replacement Components for V3R & V3-12 Vibrapacs Equipped with a Jack Shaft	114
(Drive Wheel Configuration)  Patternmaker Turntable Belt Drive Retrofit  Power Feed Conveyor Product Clamp Assembly  Pressure Reducing Valves  Quick Change Spool Kits  Spacers for Main Shafting  Pressure Reducing Valves  Quick Change Spool Kits  SF-7, SF-7W & AF-7 Cuber Wear Plates  SF-7 Slider Plate Attachment Link Drive Chain  Spacers for Shaft Arms  Spacers Slide Shafts  Sequare Slide Shafts  Standard Vibrator Shaft Assembly with Neoprone Scale  Wear Bars - SF-7 and SF-7W-64 Cubers	
Patternmaker Turntable Belt Drive Retrofit	113
Power Feed Conveyor Product Clamp Assembly	
Pressure Reducing Valves  Quick Change Spool Kits  Quick Change Spool Kits  Spacers for Main Shafting	
Spacers for Stripper Head Frame	
Spacers for Main Shafting	
Spacers for Main Snarting	
Spacers for Shaft Arms	
Square Slide Shafts	
Standard Vibrator Shaft Assembly with Neoprone Scale 54 Wear Bars - SF-7 and SF-7W-64 Cubers	
Standard Vibrator Shatt Accombly with Moonrono Soale 5/	
Steel Sleeved Floating Type Bearing84  Wear Strips for Cuber Frame Channels	118
70	
Forque Wrenches58  Corque Wrenches58	
Forrington Bearing Assembly	133
riple Spring Link Assembly64 Vapor Generator 1.0-2.0 BTU/Hour	
Tiple Opining Linky Goodinsty	
Strapas VI To and 20 Book I and to Boarings,	
noved and deliant	
/3-12 Agitator Motor Support with Bushing84	
/3-12 Pinion Shaft Assembly Installation with	
ocking Assembly62	



Dust Collection		Licensed Concrete Units	
Adaptor Fitting	140	Molds for Licensed Concrete Products	11
Besser Bag House Control Unit	139		
Besser Dust Collector Timer Control	139	Line Shaft Conveyor	
Bushings	138	Line Shaft Conveyor Components	111
Dust Collection Bags for Batcher Vent	136	Quick Change Spool Kit	
Dust Collection Bags for Dust Collectors	135	Replacement Line Shaft Conveyor Rollers	
Driver Sheave		Tropidocitionic Elito Origin Convoyor Trolloro	112
Eccentric Arm	137	Mixers	
Eccentric Bearing	138	Add Air Durains to Occase Durand Durat Hubs	
Eccentric Shafts	137	Add Air Purging to Grease Purged Dust Hubs	0.7
Electric Motor	139	(For Slump Mixers)	
Pillow Block Bearing	138	Air Operated Lube System for Mixers	
Push Lock Air Hose		Besser Mixer Drive Positions	
Push Lock Female Swivel Fitting		Bottom Cleanout Gate (Air Operated)	
Rod End Bearing Assembly		Bottom Cleanout Gate (Manual Control)	
Tri-Valve Disc and Seal		Breather Vent	99
V-Belt		Combo Units	94
Yoke End Assembly		Direct Air Operated Mixer Gate for 50 & 60 Cu Ft Mixers	99
Yoke Ends with Pins		Drive Shaft with Witchita Clutch	98
TORE ETIOS WILLT PILIS	137	Dust Plates and Rubber Seals (For Semi-Dry	
Electrical		Batch Mixers)	96
		Grease Purge Dust Hub Assemblies and Seals	
Allen-Bradley I.E.C. Manual Motor Starters/Protectors		(For Slump Mixers)	97
(Overloads)	125	Heavy-Duty Drive Shaft	
Allen-Bradley I.E.C. Motor Contractors		Mixer Blade Arm Covers	
(Nonreversing AC-3)	125	Mixer Blade Shaft Covers	
Allen-Bradley I.E.C. Motor Contractors (Reversing AC-3	3)125	Mixer Blade Arms with Slotted Mount Holes -	00
Allen-Bradley I.E.C. Motor Protectors & Accessories	,	80, 100, 120 Cu Ft Mixers	96
(Nonreversing AC-3)	126	Mixer Blades with Wear Liners	
Allen-Bradley Replacement Parts		Mixer Cleaning Rings	
Balluff Multiple Limit Switch		Mixer Scraper	
Besser DC Power Supply		Mixer Pulley Guard	
Cutler Hammer Limit Switch Type Photocells			
Cutler Hammer Plug-In Type E-50 Switches		Moisture Probes and Probe Liners	
Digital Finish Time Indicator		Remote Air Operated Mixer Gate	
DuraCoder®		Split Gear Case Oil Retainer	
Electrical Insulating Compound		Split Sliding Collar	
Electrical Parts for Allen-Bradley SLC-500		Standard Mixer Blades	
<del>-</del>		Steel Mixer Head Liner (1/2" Thick)	
Fused Disconnect Switch Line Operating Handles		Top Section Mixer Head Liner	95
Gemco Rotary Switch Parts		Mold Parts	
Laptop Computer to Monitor and Program "PLC" System		Wold Parts	
Pallet Magazine High and Low Level Proximity Switche		Agitator Grid Support Bars	47
Photo Electric Sensors - Cylindrical (Quick Disconnect)		Besser Decals	
Proximity Sensors - Cylindrical (Quick Disconnect)		Besser Mold Assembly & Torque Requirements	
Radio Control		Besser Mold Parts	
Resolver		Besser Mold Adapter Frames	
Rotary Switch for V3R & V3-12 Vibrapacs		Besser Standard Division Plates & Uni-Pressed Top (UPT)	
SmartPac® Transducer Cable		Besser Standard Mold End Liners	
Warner Electric Clutch/Brake Power Supply	122	Besser Standard Mold Side Bars	
		Besser Standard Plain End Liners and Steel Sash Liners	
Hydraulic			
Accumulators	160	Bevel Units	
Hydraulic Motors and Accessories		Block Height Gauge	
•		Bolted Type Grid Support Bars	
Liquid Level Safety Switch		Bull Nose End Liners with 1" Radius	45
Multicheck Fluid Analysis		Center Division Plates with Threaded Tangs,	
Oil Heater		9-1/4" High x 3/4" Thick	
Return Line Oil Filter	101	Common Construction Shapes	
		Combination End Core & Liner	45

Purged Dust Hubs .....97 for Mixers ......97 s......92 Operated)......97 nual Control)......97 .....99 .....94 ate for 50 & 60 Cu Ft Mixers .....99 utch ......98 als (For Semi-Dry .....96 semblies and Seals .....97 .....98 .....95 .....95 ted Mount Holes -.....96 ers......94 .....96 .....96 .....99 Liners......93 Gate ......99 r.....99 .....99 .....94 " Thick)......95 er ......95 .....47 ......10 orque Requirements ......14 .....12 es......44 Plates & Uni-Pressed Top (UPT)..39 Liners.....44 Bars ......36 Liners and Steel Sash Liners ....45 .....32 .....50 ars......47 " Radius ......45 Threaded Tangs. .....40 pes......31 oination End Core & Liner......45

INDEX 170 © 2024 by Besser Company

Concave Cores for Sash Units	23
High Strength Vibrator Bolts	
Heated Stripper Shoe System	
Hold Down Blocks for Core Assemblies	
Improvement Over Lock Washers and Standard Units	
Inside Division Plate with Threaded Lug, 8-1/2"	
High Molds	40
Inside Division Plate with Threaded Tangs,	
9-1/4" High x 1/2" Thick	40
Mold Frame	
Mold Frame Assembly with Suspended Division Plates	
and Face Liners	44
Mold Top Plates	
Mold Top Plates - 3 AAT Machines	
Mold Top Plates - 4 AAT Machines	
Mold Top Plate Wearing Strip	
Multi Block Height Gauge	
Nylon or Wire Brushes for Stripper Shoes	
Outside Division Plate and Face Liner Combination	
Pallet Snubbers for V3 Only	
Paving Stone	
Posapac Weights	
PV-1 and PV-2 Tools	
Quick Change Division Plate	
Quick Change Division Flate	
Ribbed Inside Division Plates 1/2" Thick	
Ribbed Mold Face Liners	
Ribbed Outside Division Plates	
Round-Finger Agitator Grid	
Self-Locking Nut	
Simulated Split Face Halves	
SmartPac® PV-11 Rapid Exchange Program	
SmartPac® Vibrator Shaft Assembly	
Solid Stripper Shoe	
Special Application Units	
Split Fluted	
Split Fluted Division Plate	
Splitting Block Division Plate Filler	
Standard Block Nomenclature	
Standard 90 mm Wide Units PPBE	
Standard 140 mm Wide Units OEBE	
Standard 140 mm Wide Units PPOE-OEOE	
Standard 140 mm Wide Units PPBE	
Standard 190 mm Wide Units OEBE	
Standard 190 mm Wide Units PPOE-OEOE	
Standard 190 mm Wide Units OEBE	
Standard 190 mm Wide Units PPBE	
Standard 240 mm Wide Units OEBE	
Standard 290 mm Wide Units OEBE	
Standard 4" Units PPBE	
Standard 6" Units PPBE	
Standard 6" Units OEBE	
Standard 6" Units PPOE-OEOE	
Standard 8" Units OEBE	
Standard 8" Units PPOE-OEOE	
Standard 8" Units PPBE	
Standard 10" Units OEBE	
Standard 12" Units OEBE	22

Stri-Face Division Plates, Face Liners and End Liners	
Stripper Head Plates	
Stripper Shoe Bolts (Slotted Head)	
Stripper Shoe Bolts (Square Shoulder Type)	5
Stripper Shoe Countersink Insert	
Stripper Shoe Set-Up Gauge	
Suspended Division Plate and Mold Face Liner	
Torque Wrenches	
Universal Half High Mold	34
Universal Lightweight Cutoff Bar and Reversed Universal Lightweight Cutoff Bar	15
Universal Split Corner Units	
Vibrator Shaft Bolts	
Wiper Frame and Rubber	
Yoke Style Core Bar Hold Down Blocks for	(
Knock-Out Bond Beam	40
Miscellaneous	
Besser Decals	
Besser Metal Name Plates	
Paint	165
Dottornmokor	
Patternmaker	
Patternmaker Pusher Bar Components	113
Patternmaker Turntable Assembly	
(Belt Drive Configuration)	
Patternmaker Turntable Assembly (Drive Wheel Configuration)	
Patternmaker Turntable Belt Drive Retrofit	114
Pneumatic	
Aerator Pad and Mounting Kit	142
Aerator Pad and Mount 5" Round	
Air Cylinder	144
Air Cylinder - Magnetic	
Air Flow Regulator	144
Air Flow RegulatorAir Jet	
Air JetCottom Diaphragm	143 143
Air Jet  Cottom Diaphragm  Foam Rubber Gasket	143 143 143
Air Jet	143 143 143 144
Air Jet	143 143 143 144 144
Air Jet Cottom Diaphragm Foam Rubber Gasket Magnetic Reed Switch & Mount Mounting Kit. Neoprene Gasket	143 143 143 144 142 143
Air Jet Cottom Diaphragm Foam Rubber Gasket Magnetic Reed Switch & Mount Mounting Kit. Neoprene Gasket Replacement Screen	143 143 144 144 143 143
Air Jet Cottom Diaphragm Foam Rubber Gasket Magnetic Reed Switch & Mount Mounting Kit. Neoprene Gasket	143 143 144 144 143 143
Air Jet Cottom Diaphragm Foam Rubber Gasket Magnetic Reed Switch & Mount Mounting Kit. Neoprene Gasket Replacement Screen	143 143 144 144 143 143
Air Jet Cottom Diaphragm Foam Rubber Gasket Magnetic Reed Switch & Mount Mounting Kit Neoprene Gasket Replacement Screen Rod End Clevis  Safety	143 143 144 142 143 143 144
Air Jet  Cottom Diaphragm  Foam Rubber Gasket  Magnetic Reed Switch & Mount  Mounting Kit.  Neoprene Gasket  Replacement Screen  Rod End Clevis   Safety  Danger - Automatic Equipment Safety Sign	143 143 144 142 143 144 144
Air Jet Cottom Diaphragm Foam Rubber Gasket Magnetic Reed Switch & Mount Mounting Kit. Neoprene Gasket Replacement Screen Rod End Clevis  Safety  Danger - Automatic Equipment Safety Sign MSBM Barrier Gates	143 143 144 142 143 144 144
Air Jet  Cottom Diaphragm  Foam Rubber Gasket  Magnetic Reed Switch & Mount  Mounting Kit.  Neoprene Gasket  Replacement Screen  Rod End Clevis   Safety  Danger - Automatic Equipment Safety Sign	143 143 144 142 143 143 144 10 102
Air Jet Cottom Diaphragm Foam Rubber Gasket Magnetic Reed Switch & Mount Mounting Kit. Neoprene Gasket Replacement Screen Rod End Clevis  Safety  Danger - Automatic Equipment Safety Sign MSBM Barrier Gates MSBM Unloader Stacker Safety	143 143 144 142 143 144 144 10 104 10
Air Jet Cottom Diaphragm Foam Rubber Gasket Magnetic Reed Switch & Mount Mounting Kit. Neoprene Gasket Replacement Screen Rod End Clevis  Safety  Danger - Automatic Equipment Safety Sign MSBM Barrier Gates MSBM Unloader Stacker Safety Multiple Lockout Device	143 143 144 143 143 144 144 10 10
Air Jet Cottom Diaphragm Foam Rubber Gasket Magnetic Reed Switch & Mount Mounting Kit Neoprene Gasket Replacement Screen Rod End Clevis  Safety  Danger - Automatic Equipment Safety Sign MSBM Barrier Gates MSBM Unloader Stacker Safety Multiple Lockout Device. Safety Bulletin	143 143 144 143 143 144 144 104 
Air Jet Cottom Diaphragm Foam Rubber Gasket Magnetic Reed Switch & Mount Mounting Kit Neoprene Gasket Replacement Screen Rod End Clevis  Safety  Danger - Automatic Equipment Safety Sign MSBM Barrier Gates MSBM Unloader Stacker Safety Multiple Lockout Device. Safety Bulletin Safety Decals	143 143 144 143 143 144 144 10 10 6 101



Service Bulletins
Service Bulletins6
Servopac <sup>®</sup>
Back Apron Wearing Plate90
Feedbox Rebuild Parts91
Pallet Finger and Pallet Cradle90
Pallet Magazine High and Low Level Proximity Switches90
Pallet Receiver Rubbers90
Slide Shaft 90
Vibrator Module91
Skip Loaders  Drive Machanism for Skip Loader Mayabla 100
Drive Mechanism for Skip Loader Movable
Independent Skip Loader Drive Assembly
Safety Guards and Safety Stops
Sheave with High Capacity Bearing
Skip Bucket Modification Kit
Skip Bucket Roller Assebly101
Skip Cable Sheave
Skip Loader Cable Limit Switch101
Skip Loader Drive Accessories101
Splitters
Contour-Matic (CM-24) Self-Leveling Blades105
6209, 6386 and S63 Splitter Self-Leveling Blades105
Straight Split Blades For 6209 and 6386106
Straight Split Blades For S63 EZ106
6386 Block Splitter106
S63 EZ Block Splitter107
Tools
Belt Tensiometer
Belt and Groove Gauge165
Besser Core Removal Tool
Block Height Gauge
Brass Hammer and Brass Sledge
Digital Amprobe Ammeter164
Fluke Digital Multi-Meter
Hand Held Digital Contact - Noncontact Tachometer164
Monorail Hoist
Pallet Feeder Chain Assembly Tool
PV-1 and PV-2 Tools
Spanner Wrenches
Spud Wrenches
Torque Wrenches
Training
Blockmakers Workshops®11
In-Plant Training for Block & Pipe Producers
Online Support
Online Support
-
Transporters
Combo Units (For Trail-A-Rail)
LSC-40A & C Updates105

## **Turnovers**

Block Clamping Assembly	108
Clamp Pads for Block Turnover	108
Modulated Photo Switch with Reflector	108
Quick Adjust Turnover Clamp Pads	109
Turnover Discharge Conveyor - Powered Roller	
Configuration	110
Turnover Discharge Conveyor - Slat Conveyor	
Configuration	
Turnover Turn Arm Assembly	
Turnover Turn Arm Link Component	109
Upgrades	
Advanced Servo Vibration (ASV) Replacement Parts	167
Advanced Servo Vibration & Servo Equipped Main Driv	ve166
Advanced Servo Assembly Vibrator Shaft	167
Servo Main Drive (SMD) Replacement Parts	167
Servo Motors	167
Vibrators	
Piston Vibrator - Air Cushion	150
Piston Vibrator - Impacting	150
Turbine Vibrator Pneumatic	150
Vibrator - Ball	150





+1.989.354.1000 1.800.530.9991 partsales@besser.com fax +1.989.354.3190 besser.com