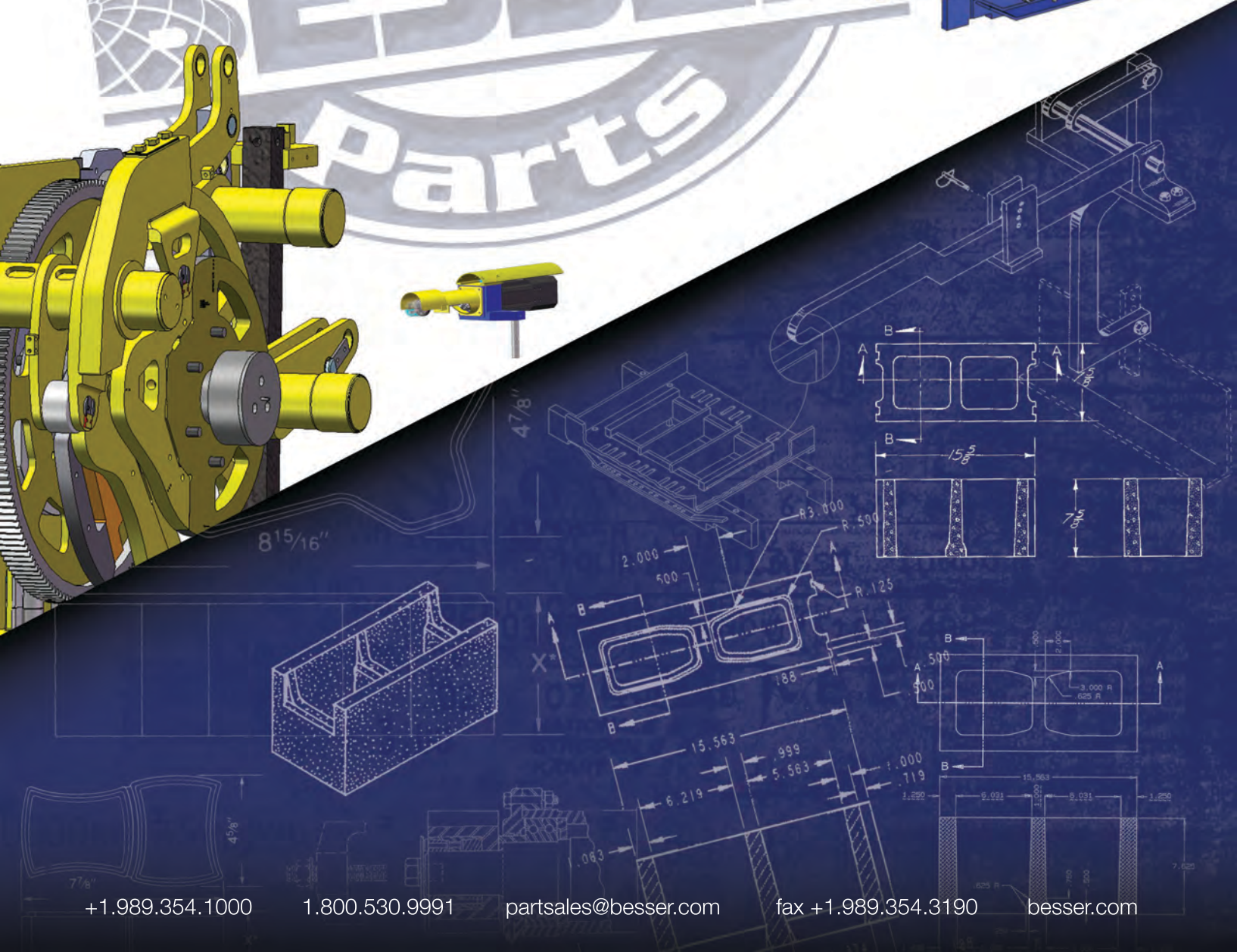
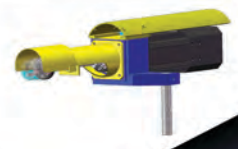
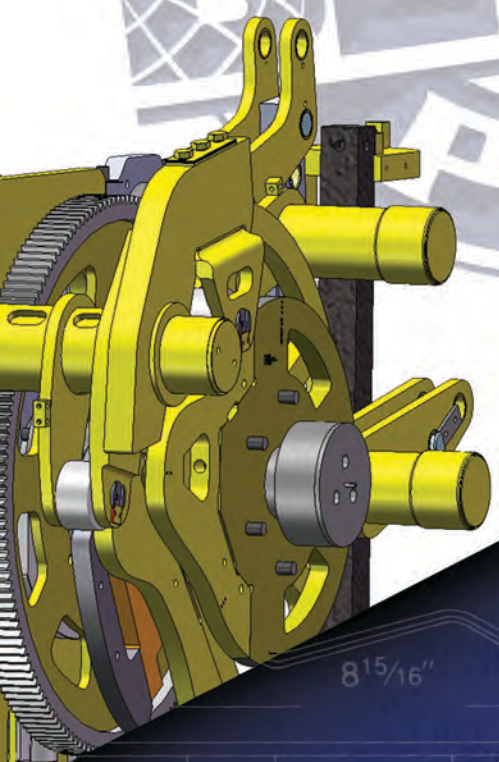


Parts & Accessories



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 assessed 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 However, a large number of parts listed in older Besser catalogs and manuals have been replaced by new numbers based on vendor changes and equipment upgrades.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.



Parts & Accessories Catalog 2016

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BESSER TERMINOLOGY

















AAT - at-a-time
cu ft - cubic foot
cu yd - cubic yard
D - depth
ETI - equivalent thickness
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:

-  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.

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™ 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™ Plus 6 Graphic Terminal with New Application
- New PanelView™ 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

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

 **WARNING**

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"



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



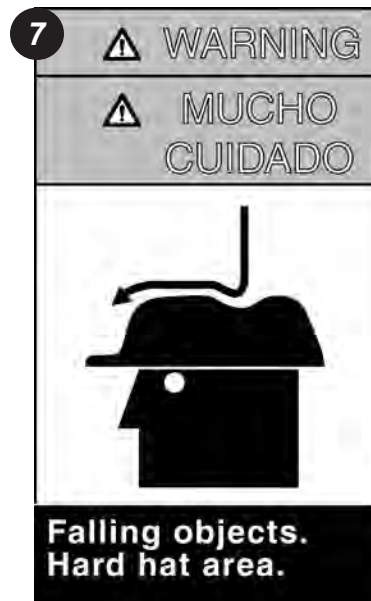
02-114692F1006
Nip Points
Width 5-3/4"
Height 9-1/2"



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"
Height 5-3/4"



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

10 **⚠ DANGER**
⚠ PELIGRO



Crush hazard. Stay clear of transfer area. Follow lockout procedure before servicing.

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

11 **⚠ DANGER**
⚠ PELIGRO



Falling objects. Stay clear of transfer area. Follow lockout procedure before servicing.

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

12 **⚠ DANGER**
⚠ PELIGRO



Shear hazard. Fall hazard. Stay clear. Follow lockout procedure before servicing.

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

13 **SAFETY INSTRUCTIONS**
INSTRUCCIONES DE SEGURIDAD

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 sources.
8. Clear machine of personnel before restarting machine.

02-113249F0410
Safety Instructions Decal –
Suggested Lockout Procedure
Width 4"
Height 10"

14



⚠ DANGER
⚠ PELIGRO

Crush hazard. Stay clear of machine. Follow lockout procedure before servicing.

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

17



⚠ WARNING
⚠ MUCHO CUIDADO

Nip hazard. stay clear of conveyor. Follow lockout procedure before servicing.

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

15



⚠ DANGER
⚠ PELIGRO

Crush hazard. Stay clear of transfer area. Follow lockout procedure before servicing.

02-113248F1006
Crush Hazard
Width 10"
Height 6"

18



⚠ DANGER
⚠ PELIGRO

Crush hazard. Follow lockout procedure and secure elevator before servicing.

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

16



⚠ DANGER
⚠ PELIGRO

Crush and pinch points. Stay clear of machine. Follow lockout procedure before servicing.

01599-400001
Crush and Pinch Points
Width 6-5/8"
Height 4"

19



⚠ DANGER
⚠ PELIGRO

Crush and pinch-points. Stay off conveyor. Follow lockout procedure before servicing.

01539-400084
Crush and Pinch 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.

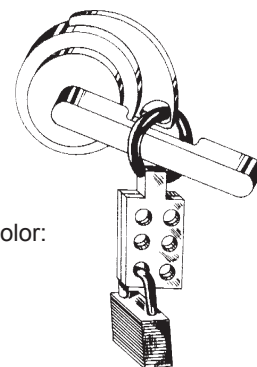
ENGLISH	CHINESE	FRENCH	ITALIAN	RUSSIAN	SPANISH
02-113236F0409	02-113236F0404CH	02-113236F0404FR	02-113236F0404IT	02-113236F0404RU	02-113236F0404ES
02-113237F0410	02-113237F0405CH	02-113237F0405FR	02-113237F0405IT	02-113237F0405RU	02-113237F0405ES
02-113238F1005	02-113238F0405CH	02-113238F0405FR	02-113238F0405IT	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

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.

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

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®
- 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.

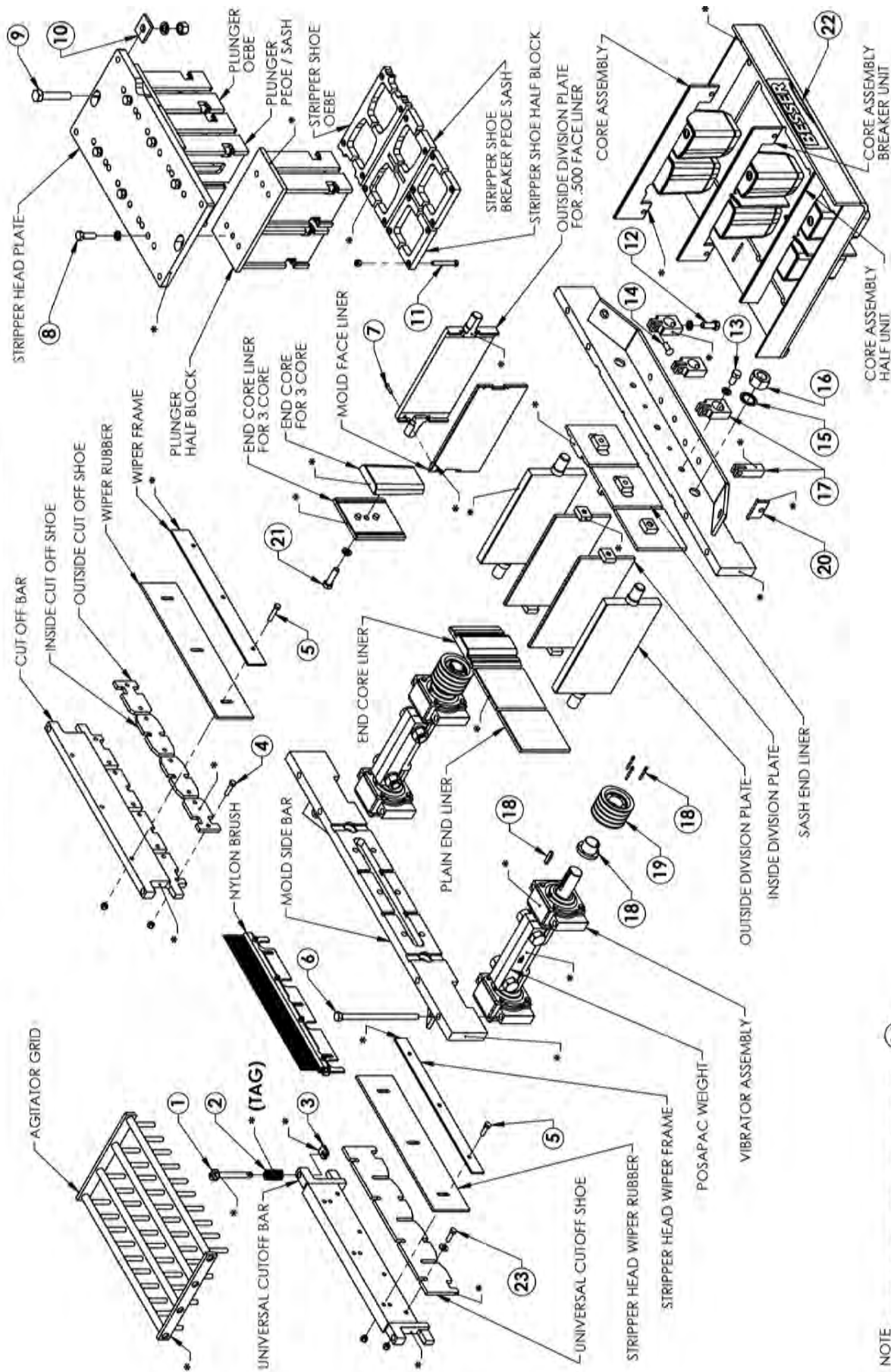
- Service Bulletins
- Preventive Maintenance
- Equipment Manuals
- Safety Information

Molds for Licensed Concrete Products

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

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

BESSER MOLD PARTS



NOTE
 ATC SMARTPAC VIBRATOR ALSO AVAILABLE **(24)**
 * PART NUMBER LOCATION

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)	
	02-055851	Hex head cap screw - 3/4" x 1-1/2" L (drilled for lockwire)	
	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)	

Besser Mold Assembly & Torque Requirements

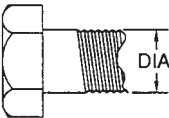
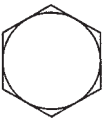

Longer mold life can be achieved by observing a few basic rules. Be sure to clean all parts and matting surfaces thoroughly before assembly. Always be sure parts are properly aligned and use proper torque requirements. To assure that parts are square, start with a good working surface (mold jig). A visual 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.

1. 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

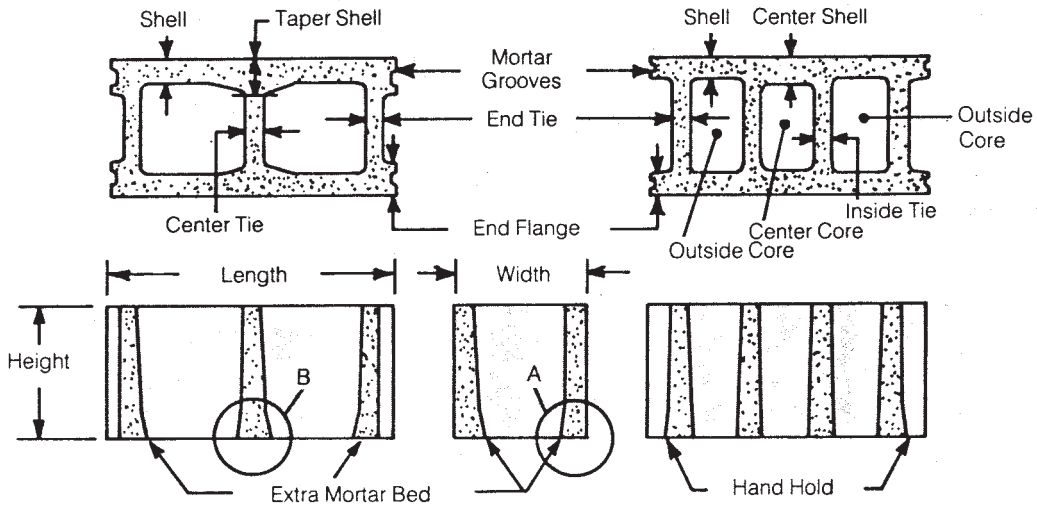
Threaded Diameter 	S. A. E. Grade 2 	S. A. E. Grade 5 
1/4"	60 - 80 inch lbs	100 - 120 inch lbs
3/8"	20 - 30 ft lbs	30 - 40 ft lbs
1/2"	40 - 60 ft lbs	65 - 85 ft lbs
5/8"	90 - 110 ft lbs	140 - 160 ft lbs
3/4"	145 - 165 ft lbs	250 - 270 ft lbs
7/8"	165 - 185 ft lbs	420 - 440 ft lbs
1"	230 - 250 ft lbs	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

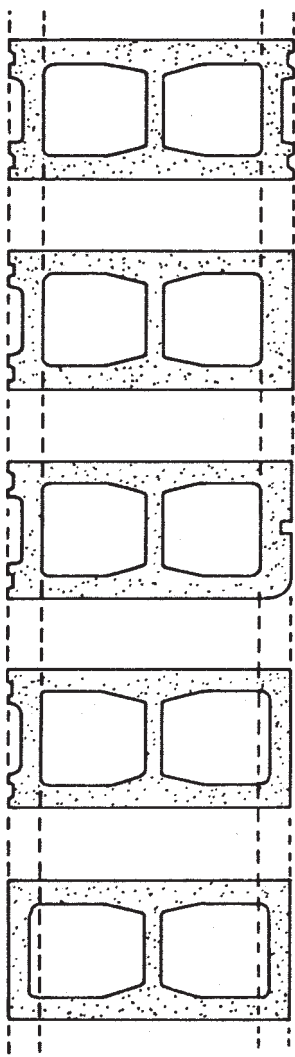
These high quality tools are a must when working with your block production equipment.

- 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.



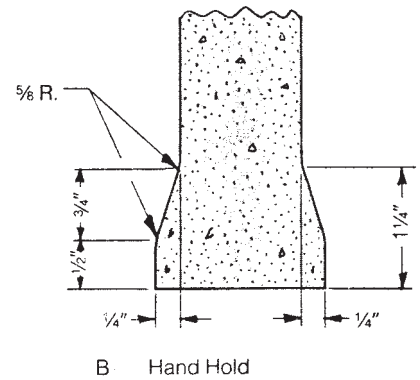
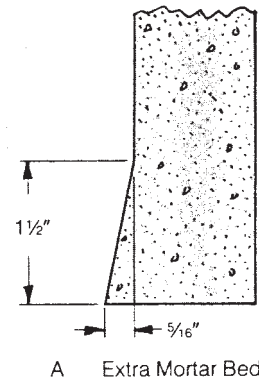
OEBE
Open ends both ends

OEEO-POE
One end one end – plain other end (notice thickness of plain end, unlike permanent plain end)

OEEO-SSOE
Open end with one end – steel sash other end (also pictured is a bullnose corner 1" & 2" radius available on any plain end corner)

OEEO-PPOE
Open end one end – permanent plain other end (notice thickness of permanent plain end, unlike plain end)

PPBE
Permanent plain both ends



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

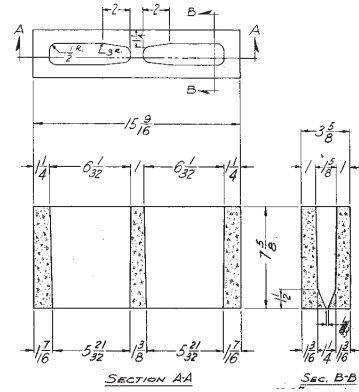
Pear shaped cores
1" to 1-1/4" face shell
1" center tie
1 1/4" end tie with extra mortar bed face shell only

No hand holds
8-1/4" high mold

Part Number	Description
02-018217	Plain end liner
02-040770J0010	Core assembly
02-040695	Stripper shoe
02-058802	Removable plunger

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)
318.60 net cubic inches



Unit No. 02-020514

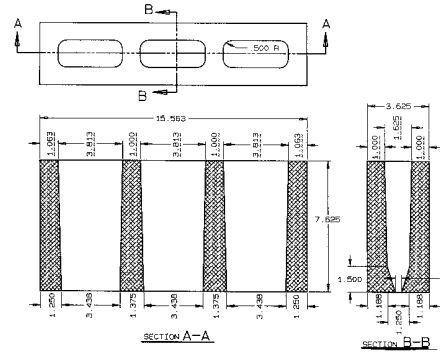
3 core
1" face shell and inside tie
1-1/16" end tie
With extra mortar bed face shell only

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)
320.36 net cubic inches



Standard 6" Units

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

Unit No. 02-020531

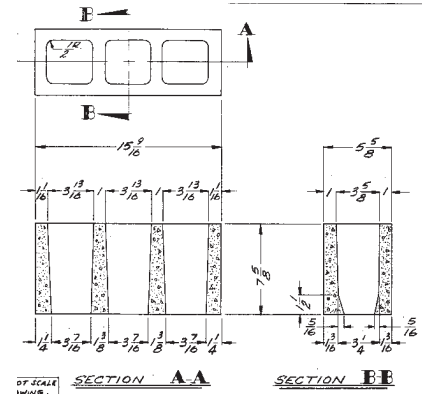
3 core
1" shell and inside tie
1-1/16" end tie
With extra mortar bed face shell only

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

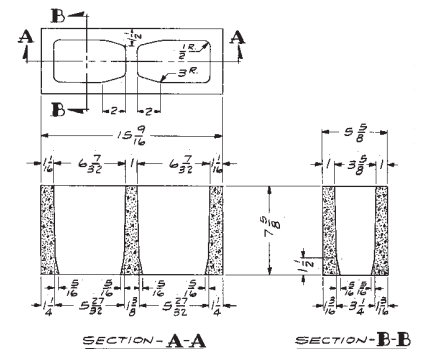
Pear shaped cores
1" to 1-1/2" face shell
1" center tie
1-1/16" end tie

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)
378.45 net cubic inches



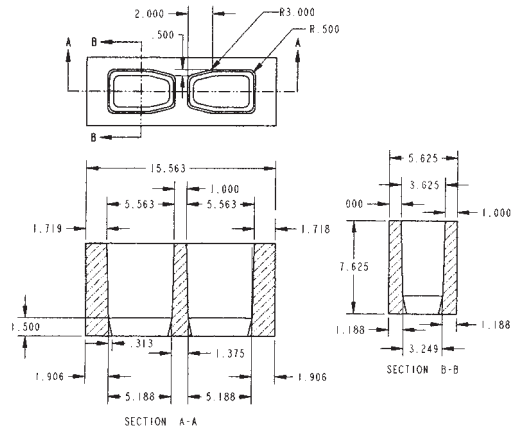
ETI - equivalent thickness in inches

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	Description
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

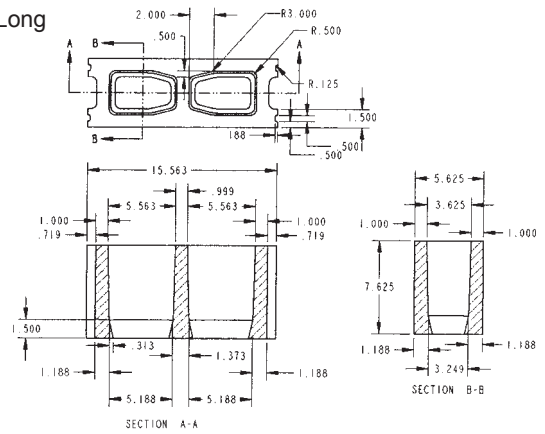
5-5/8" Wide x 7-5/8" High x 15-5/8" Long
 OEBE (open ends both ends)

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

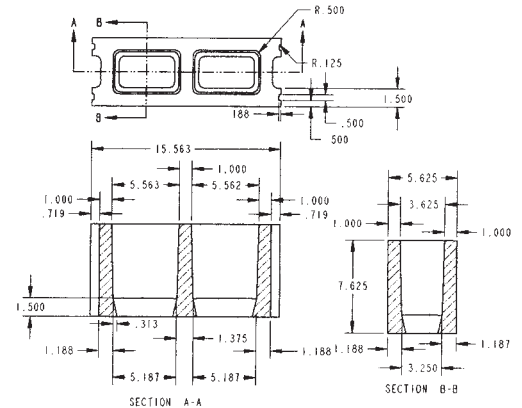


Unit No. 02-419976

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

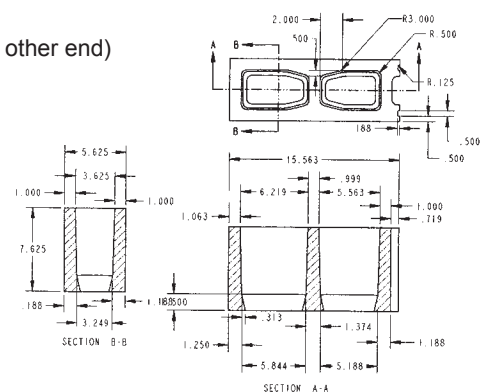
5-5/8" Wide x 7-5/8" High x 15-5/8" Long
 PPOE-OEOE (permanent plain one end - open end other end)

Unit No. 02-058695

Pear shaped cores
 1" to 1-1/2" shell
 1" tie
With extra mortar bed
No hand holds

Part Number	Description
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

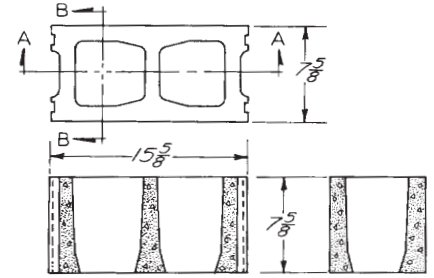
No hand holds

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

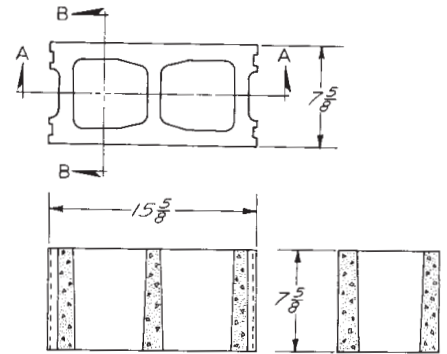
No hand holds

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

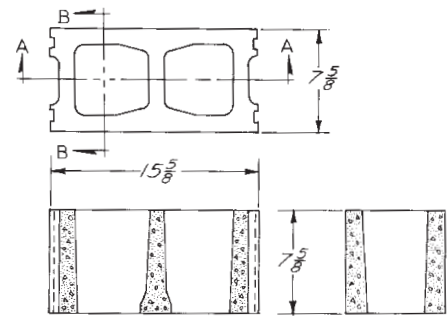
Hand hold center tie only

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

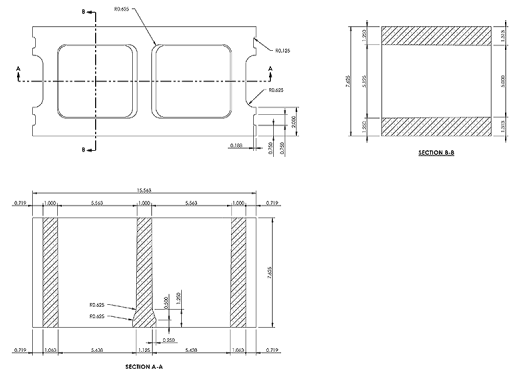
Hand hold center tie only

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

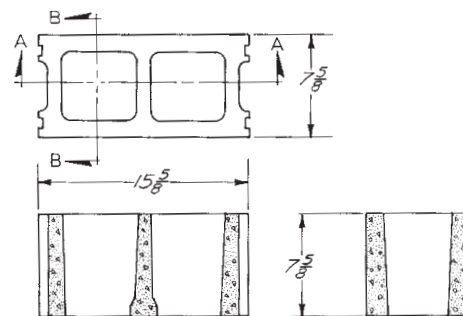
Hand hold center tie or web only

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)
 465.86 net cubic inches


Standard 8" Units

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

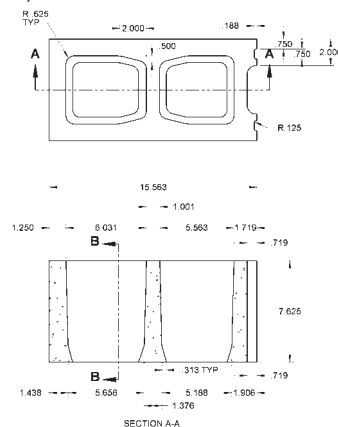
No hand hold

8-1/4" high molds

Part Number	Description
02-017712	Plain end liner
02-043986	Mold end liner
02-046699J0520	Core assembly
02-057791J0900	Stripper shoe
02-057874	Removable plunger

Unit calculations

49.90% solid (top)
 53.29% solid (middle)
 23.53 lbs lightweight concrete
 39.09 lbs normal weight concrete
 3.81 ETI (top)
 4.06 ETI (middle)
 491.53 net cubic inches


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

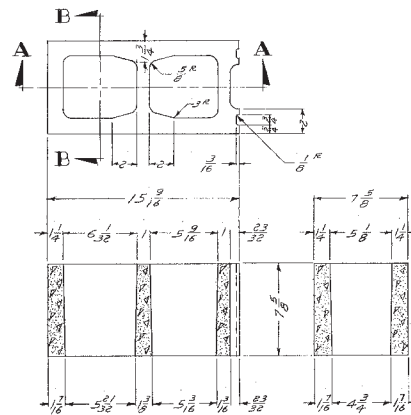
No hand hold

8-1/4" high mold

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

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

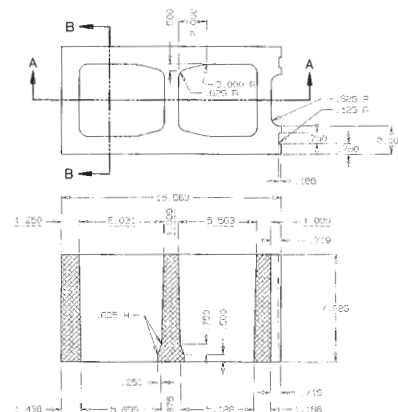
Hand hold center tie or web only

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

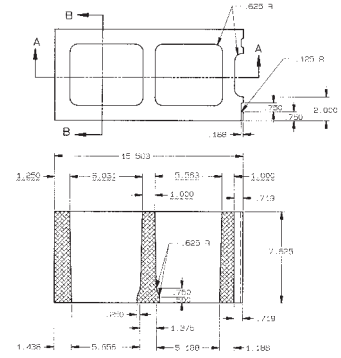
Unit No. 02-251206

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)
 469.33 net cubic inches



Standard 8" Units

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

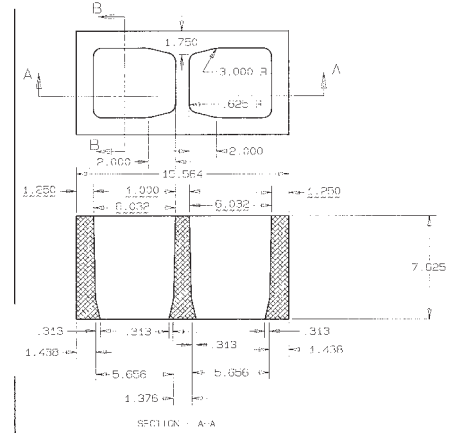
Unit No. 02-024109

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	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



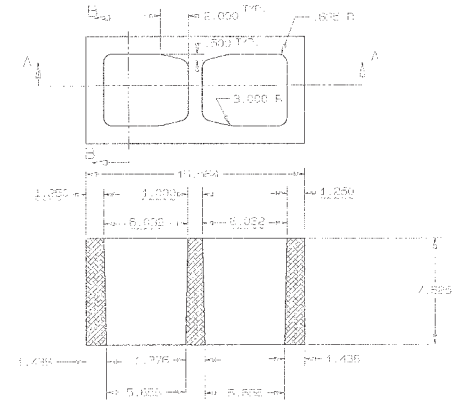
Unit No. 02-050148

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
02-020704	Stripper shoe
02-020705	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



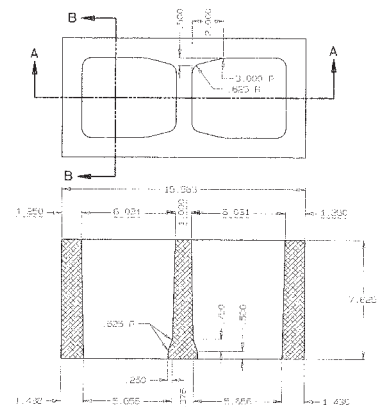
Unit No. 02-066050

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

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



ETI - equivalent thickness in inches

Unit No. 02-376108

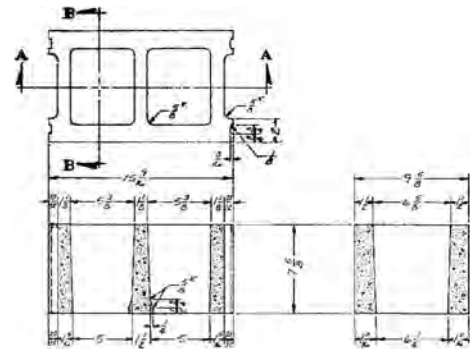
Rectangular cores
1-1/2" shell
1-1/8" tie

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

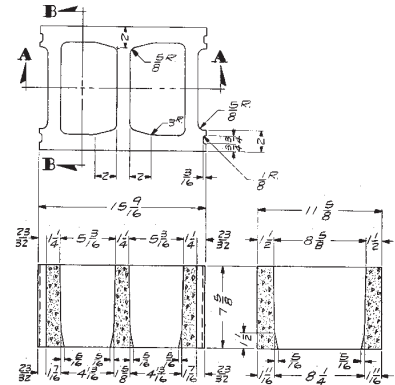
Pear shaped cores
1-1/2" to 2" shell
1-1/4" tie

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

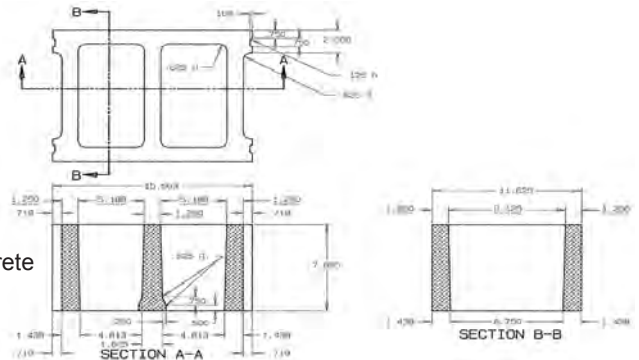
Rectangular cores
1-1/4" face shell
1-1/4" tie

No extra mortar bed
Hand hold center tie only
8-1/4" high mold

Part Number	Description
02-045215	End liner
02-724854	Core assembly
02-724989	Stripper shoe
02-726633	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

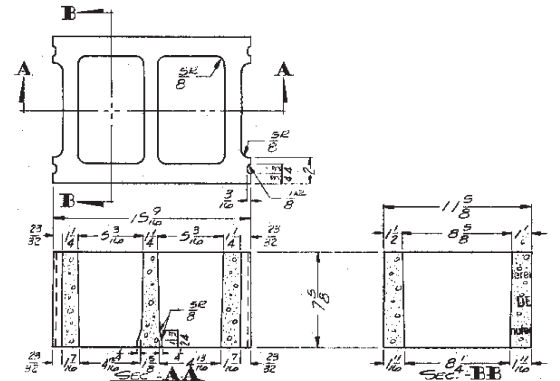
Rectangular cores
1-1/2" face shell
1-1/4" tie
1-1/2" end flange

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)
660.16 net cubic inches



Concave Cores for Sash Units

4-5/8" Wide x 7-5/8" High x 15-5/8" Long

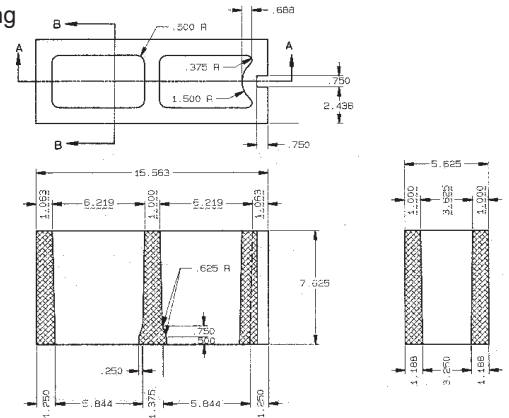
Unit No. 02-397182

- 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

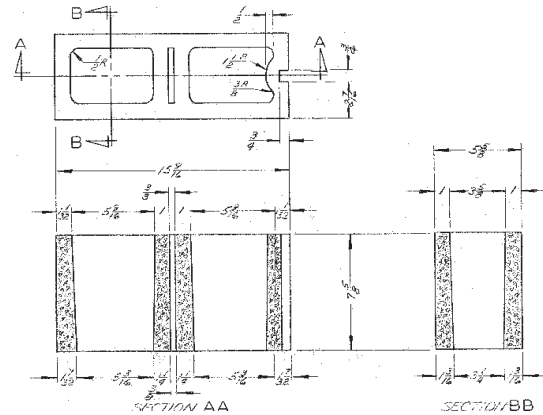
Unit No. 02-441953

- 2 core breaker
- 1" face shell
- 1" inside tie
- 1-1/32" end tie
- No extra mortar bed**
- No hand held**
- 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



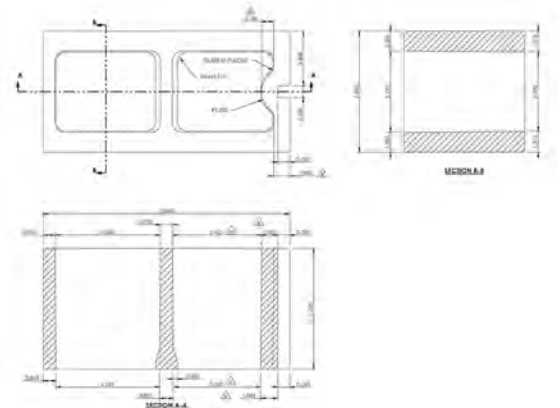
Unit No. 02-724467

- 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 plunger

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



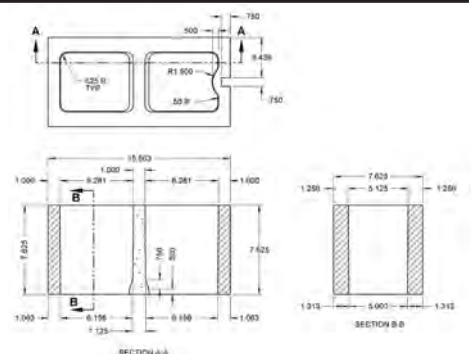
Unit No. 02-720371

- 2 core
- 1-1/4" face shell
- 1" tie
- No extra mortar bed**
- Hand hold center tie only**
- 8-1/4" high mold

Part Number	Description
02-017712	Plain end liner
02-017712J0090	Steel sash line
02-720445	Core assembly
02-720448	Stripper shoe
02-020705	Removable plunger

Unit Calculations

- 46.31% solid (top)
- 47.50% solid (middle)
- 25.11 lbs lightweight concrete
- 34.39 lbs normal weight concrete
- 3.53 ETI (top)
- 3.62 ETI (middle)
- 433.82 net cubic inches



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

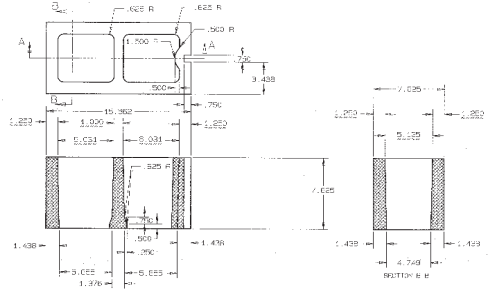
- 2 core
- 1-1/4" face shell
- 1" center tie
- 1-1/4" end tie

No extra mortar bed
Hand held center tie only
 8-1/4" high mold

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

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

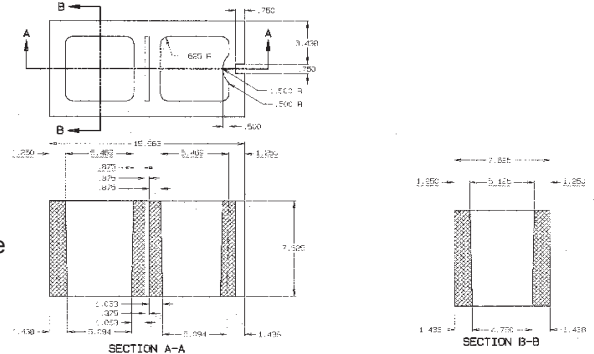
- 2 core breaker
- 1-1/4" face shell
- 7/8" inside tie
- 1-1/4" end tie

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

- 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)
- 499.95 net cubic inches



Concave Cores for Sash Units

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

Unit No. 02-432223

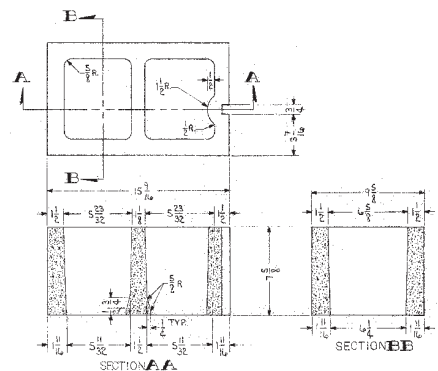
- 2 core
- 1-1/2" face shell
- 1-1/8" center tie
- 1-1/2" end tie

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. 02-481082

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
02-211469	Removable plunger

Unit Calculations

46.57% solid (top)

49.49% solid (middle)

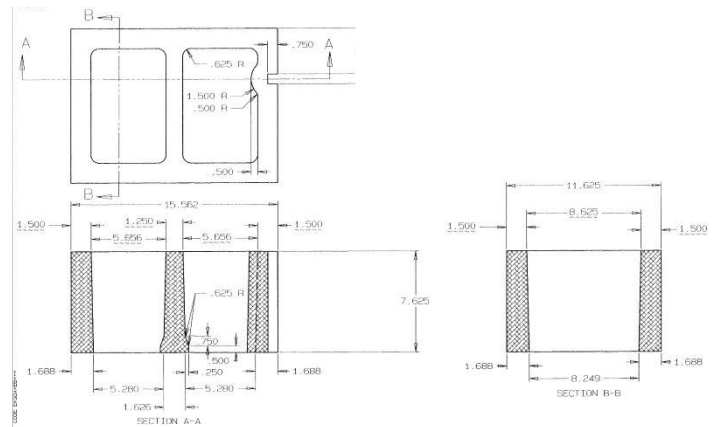
39.74 lbs lightweight concrete

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)

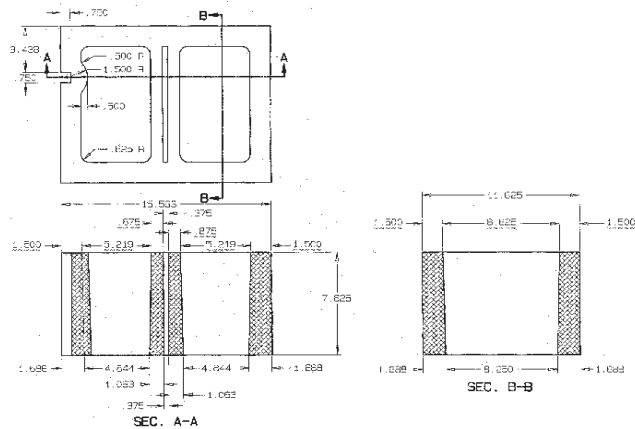
41.37 lbs lightweight concrete

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)

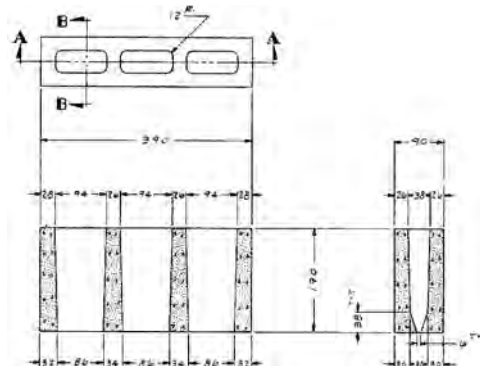
Unit No. 02-324397

3 core
26 mm shell and tie
With extra mortar bed
232 mm high division plates
206 mm high mold

Part Number	Description
02-338207M	Plain end liner
02-338935M0010	Core assembly
02-324406	Stripper shoe
02-324408	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)

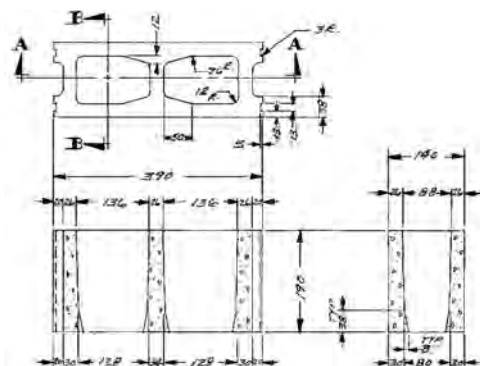
Unit No. 02-336308

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

Part Number	Description
02-338873M	Mold end liner
02-338874M0010	Core assembly
02-340971M0140	Stripper shoe
02-336315M	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)

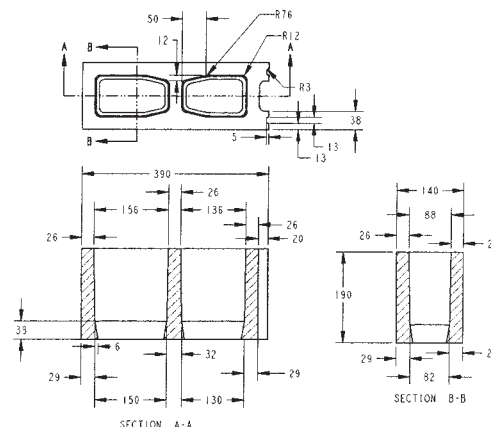
Unit No. 02-339161

2 core
Pear shaped cores
26 mm to 38 mm shell
26 mm tie
With extra mortar bed

Part Number	Description
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

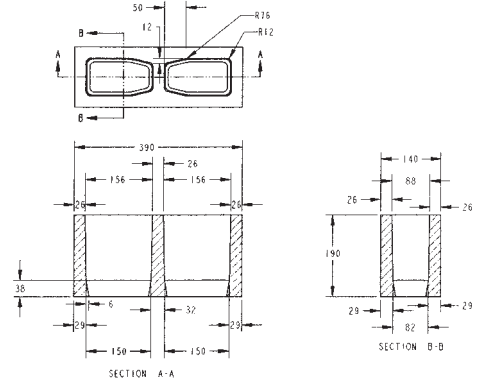
Pear shaped cores
26mm - 38 mm shell
26 mm tie

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

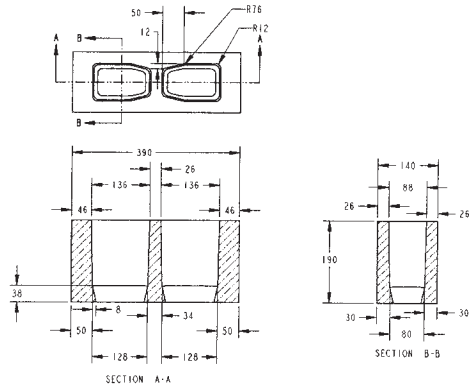
Pear shaped cores
26 mm - 38 mm shell
26 mm tie

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 weight 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

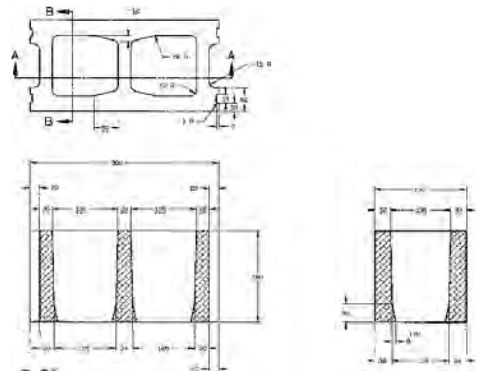
With extra mortar bed

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 No. 02-338896

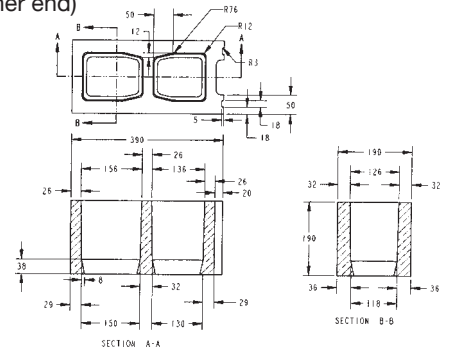
Pear shaped cores
32 mm to 44 mm face shell
26 mm tie

With extra mortar bed

Part Number	Description
02-338205M	Plain end liner
02-338898M	Mold end liner
02-338899M0520	Core assembly
02-338901M0900	Stripper shoe
02-338903M	Removable plunger

Unit Calculations

50.74% solid (top)
53.60% solid (middle)
12.29 kg lightweight concrete
16.83 kg normal weight concrete
96.41 ETMM (top)
101.85 ETMM (middle)
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

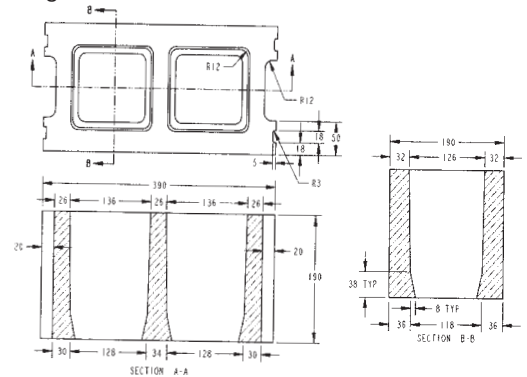
Rectangular cores
32 mm shell
26 mm tie

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



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

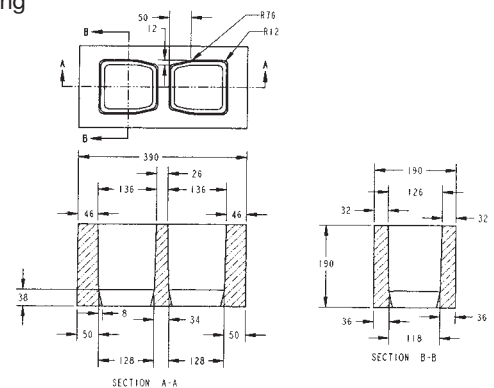
Pear shaped cores
32 mm - 44 mm shell
26 mm tie

With extra mortar bed

Part Number	Description
02-338205M	Plain end liner
02-338899M0010	Core assembly
02-340692M0100	Stripper shoe
02-323948	Removable plunger

Unit Calculations

54.08% solid (top)
56.87% solid (middle)
13.02 kg lightweight concrete
17.83 kg normal weight concrete
102.76 ETMM (top)
108.05 ETMM (middle)
8125.92 net cubic centimeters



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

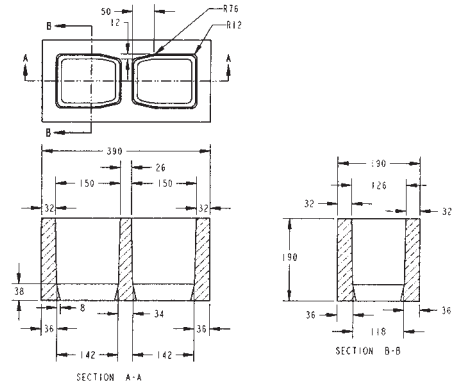
Unit No. 02-356151

Pear shaped cores
32 mm to 44 mm face shell
26 mm tie
With extra mortar bed

Part Number	Description
02-338205M	Plain end liner
02-338900M0010	Core assembly
02-356152M	Stripper shoe
02-356156M	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



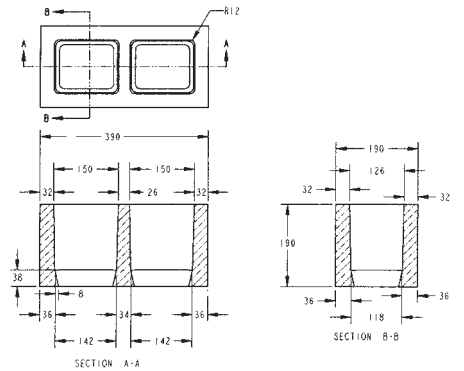
Unit No. 02-395925

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)

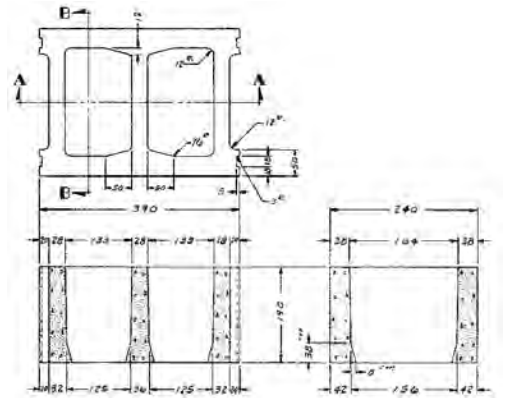
Unit No. 02-345321

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 plunger

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)

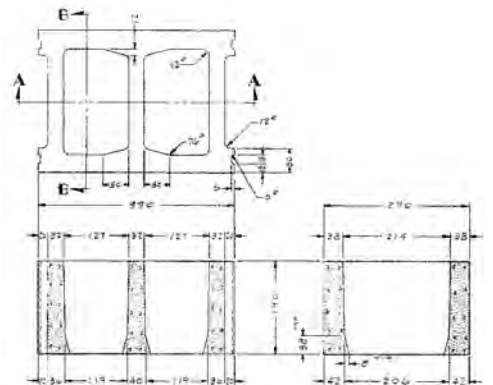
Unit No. 02-345201

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

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



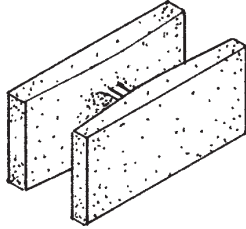
ETMM - equivalent thickness in millimeters
ETI - equivalent thickness in inches

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.

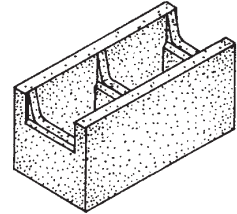
Fully Open End - Bond Beam

- 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



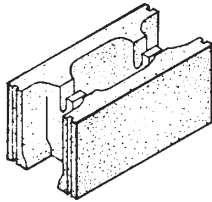
Restricted Bond Beam

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



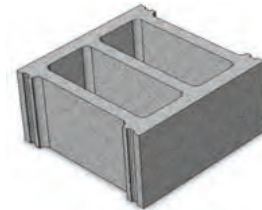
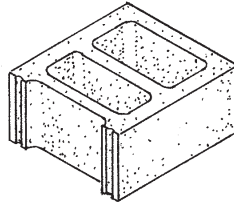
Rebar

- 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



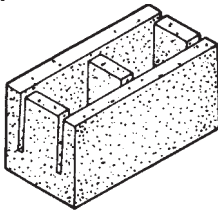
13-5/8" and 15-5/8" Wide Units

- Unit No. 02-395423 13-5/8" W x 7-5/8" H x 15-5/8" L
- Unit No. 02-374888 15-5/8" W x 7-5/8" H x 15-5/8" L
- Unit No. 02-387465 13-5/8" W x 7-5/8" H x 15-5/8" L- OEBE 2 Core
- Unit No. 02-442510 15-5/8" W x 7-5/8" H x 15-5/8" L- OEBE 2 Core



Special Applications Units

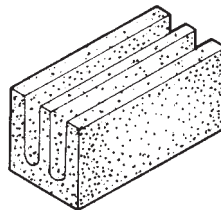
**Knock-Out Bond Beam
Open Bottom**



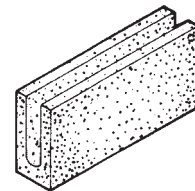
- Unit No. 02-054554 5-5/8"W x 7-5/8" H x 15-5/8" L
- Unit No. 02-039598 7-5/8" W x 7-5/8" H x 15-5/8" L
- Unit No. 02-419978 7-5/8" W x 7-5/8" H x 15-5/8" L (3-1/2" deep cut-out)
- Unit No. 02-056485 9-5/8" W x 7-5/8" H x 15-5/8" L
- Unit No. 02-041663 11-5/8" W x 7-5/8" H x 15-5/8" L

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

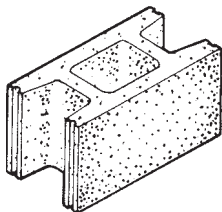


Bond Beam - Single Core



- Unit No. 02-056234 3-5/8" x 7-5/8" x 15-5/8"
- Unit No. 02-056227 5-5/8"W x 7-5/8" H x 15-5/8" L
- Unit No. 02-018594 7-5/8" W x 7-5/8" H x 15-5/8" L

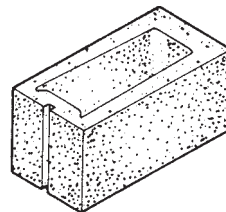
Fully Open Both Ends



- Unit No. 02-438682 5-5/8"W x 7-5/8" H x 15-5/8" L
- Unit No. 02-383225 7-5/8" W x 7-5/8" H x 15-5/8" L
- Unit No. 02-410186 9-5/8" W x 7-5/8" H x 15-5/8" L
- Unit No. 02-383228 11-5/8" W x 7-5/8" H x 15-5/8" L

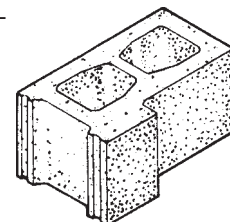
Knock-Out Lintel

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



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

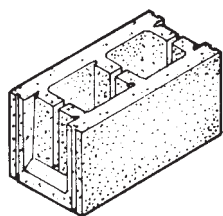
"L" Corner



- 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

Special Application Units

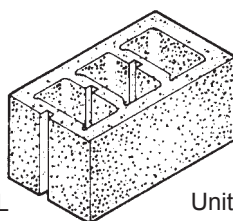
Combination Bond Beam Cap



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

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

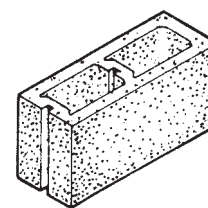
Conduit - 3 Core



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

Conduit - 2 Core

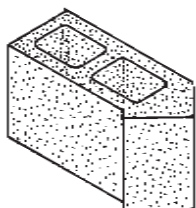


Unit No. 02-358394
Unit No. 02-281154
Unit No. 02-326849

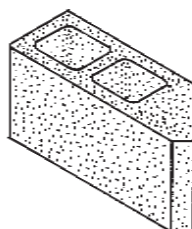
5-5/8" W x 7-5/8" H x 15-5/8" L
7-5/8" W x 7-5/8" H x 15-5/8" L
11-5/8" W x 7-5/8" H x 15-5/8" L

Bevel Units

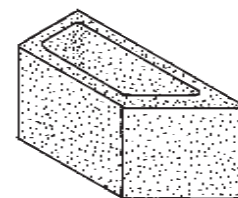
The units shown below are a sample of the many different beveled units used in correctional facilities. (Concrete unit drawing numbers are listed below)



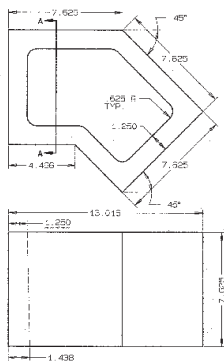
Unit No. 02-418284 5-5/8" W



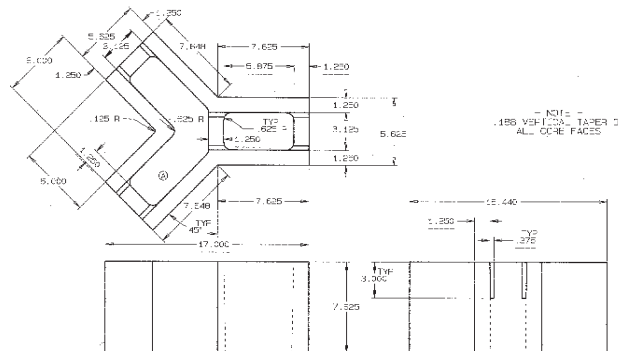
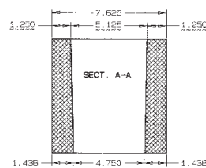
Unit No. 02-439346 5-5/8" W



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



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



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

Universal Split Corner Units



RH UNIT

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

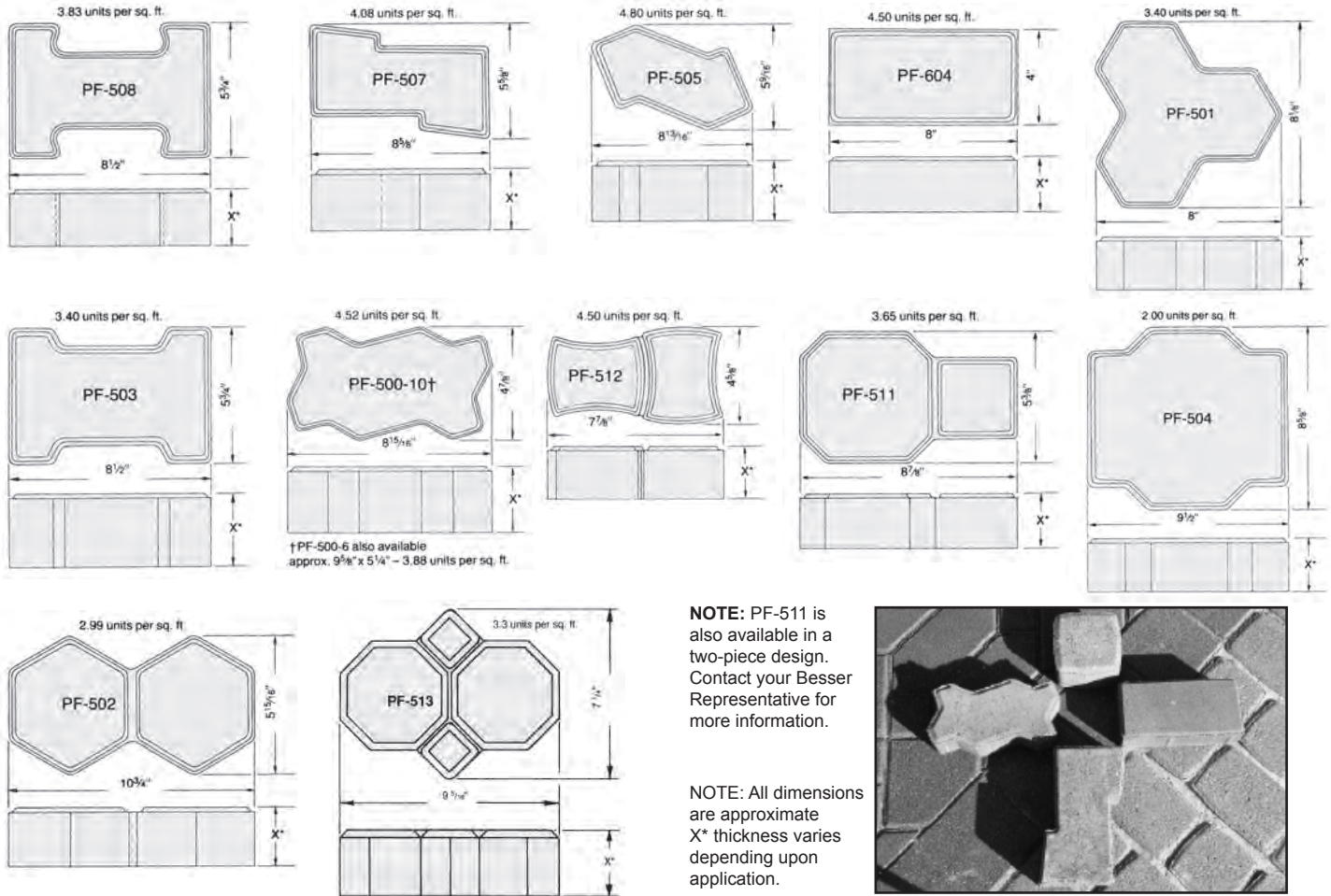


LH UNIT

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

Concrete Paving Stone

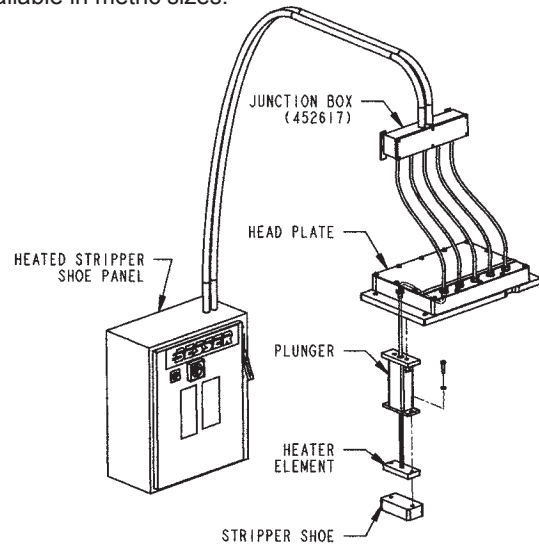
Besser offers a wide variety of paving stone molds for various applications. Some popular styles are shown below. All dimensions are approximate and thicknesses vary depending upon application. NOTE: PF-511 is a patented unit, therefore mold parts for paving stone PF-511 can only be sold to authorized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

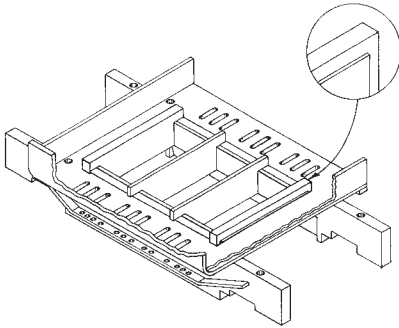


Universal Half High Mold 3-5/8" High
For use on Besser 3 AAT Concrete Products Machines

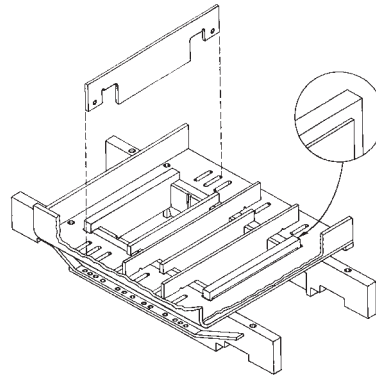
This mold was designed to run 3-5/8" wide units six-at-a-time, 5-5/8" wide units four-at-a-time, 7-5/8" wide units three-at-a-time, 9-5/8" wide units two-at-a-time or 11-5/8" wide units two-at-a-time – while using stripper head (plungers) from present full height molds. To achieve width interchangeability 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 x 3-5/8" H x 15-5/8" L units. Notice that each outside division plate has a 1/16" build-up which faces away from the 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
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

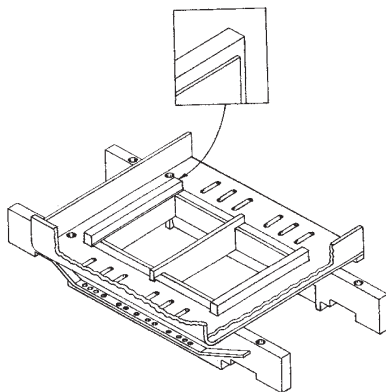
Qty	Part Number	Description
3	02-035479	Suspended division plate
6	02-238127J0250	End liner - grooved

For mold example see 02-518335

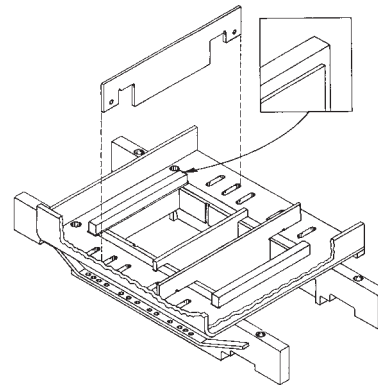
For mold example see 02-506695

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.



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
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

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

For example mold see 02-511882

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

Example "C" shown on page 35.

Example "C"

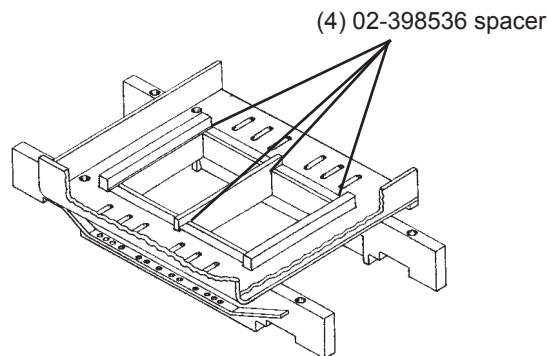
9-5/8" wide units

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)

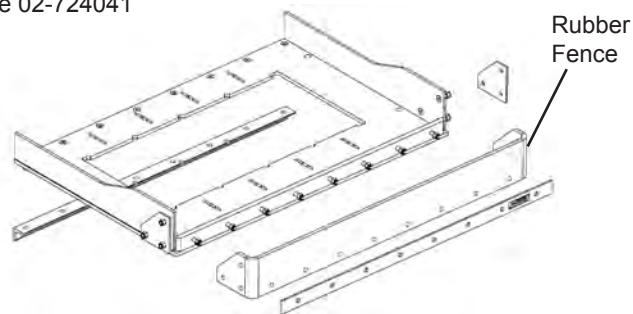


Mold Top Plates

Rubber Fence Mold Top Plates

15-5/8" Long Unit Width

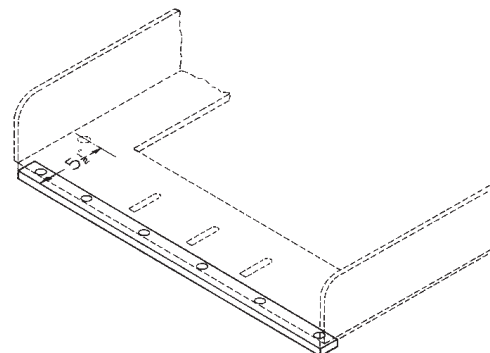
02-724036	7-5/8" 4 AAT (Ultracac 18-1/2" x 38-1/2" pallet) / Fence 02-724041
02-723796	3-5/8" 12 AAT (Superpac) / Fence 02-724520
02-723815	5-5/8" 8 AAT (Superpac) / Fence 02-724520
02-522733	7-5/8" 6 AAT (Superpac) / Fence 02-724520
02-522740	11-5/8" 4 AAT (Superpac) / Fence 02-724520



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, V3R, and all
V3-12 Vibrapacs
(18-1/2" x 26" Pallet)

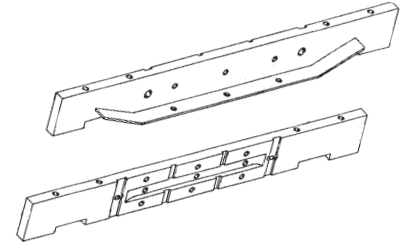
Part Number	Width
02-017736	3-5/8"
02-017942	5-5/8"
02-017524	7-5/8"
02-018011	9-5/8"
02-017809	11-5/8"

Ultrapac
(18-1/2" x 38-1/2" Pallet)

Part Number	Width
02-447789	3-5/8"
02-447798	5-5/8"
02-438875	7-5/8"
02-447809	9-5/8"
02-447818	11-5/8"

Superpac
(18-1/2" x 52" Pallet)

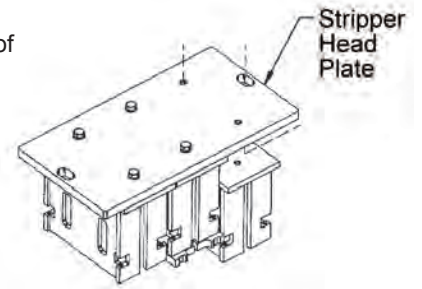
Part Number	Width
02-389508	7-5/8"
02-393260	11-5/8"



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.

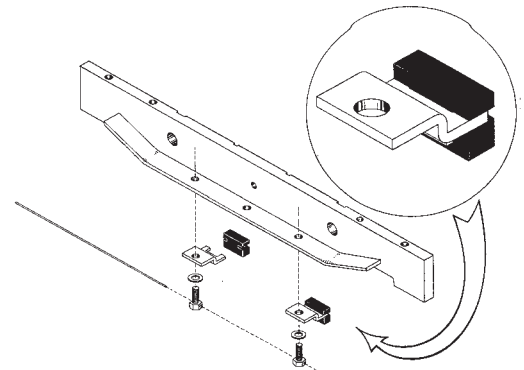
Part Number	Description
02-054194	Stripper head plate - 3-5/8" or 5-5/8" wide units
02-059016	Stripper head plate - 7-5/8" wide units with swing type plungers
02-024901	Stripper head plate - 7-5/8", 9-5/8" or 11-5/8" W x 15-5/8" L
02-343774	Stripper head plate - 3-5/8", 5-5/8", 7-5/8", 9-5/8" or 11-5/8"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



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)

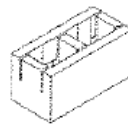
For 29" wide feedbox (18-1/2" x 26" pallet)

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	_____	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	_____	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 suspended 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

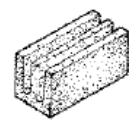
Core Bar Center



KOBB - Knockout Bond Beam



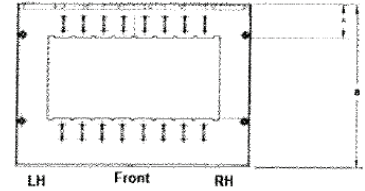
TCBB - Twin Core Bond Beam



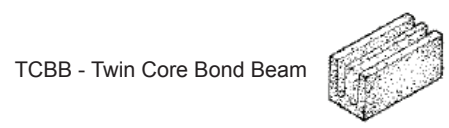
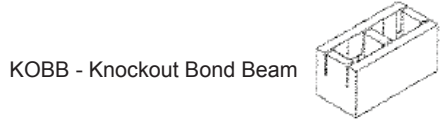
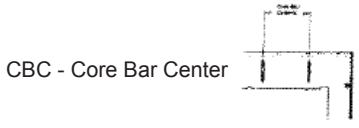
Mold Top Plates- 4 AAT Machines

Besser Standard Mold Top (rolled bullnose type front)

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

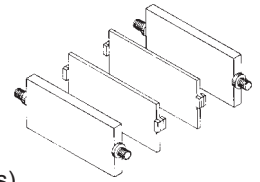


15-5/8" Long	17-5/8" Long	"A"	"B"	Unit Width
02-469105	_____	6-1/8"	30"	3-5/8" 8 AAT
02-447862	_____	6-1/8"	30"	3-5/8" 8 AAT, use with 3/8" inside division plates
02-447791	_____	6-1/8"	30"	3-5/8" 8 AAT, use with 3/4" center division plates
02-481925	_____	7-1/8"	34"	3-5/8" 8 AAT, use with 3/4" center 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 beam 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 beam 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 suspended 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 suspended division plates
02-487272	_____	7-1/8"	32"	7-5/8" 4 AAT, use with suspended division plates 02-226034 and 02-226036 face liner
02-492401	_____	7-1/8"	34"	7-5/8" 4 AAT, with slots for KOBBS RH compartment (4.25" core bar centers)
02-467674	_____	6-1/8"	30"	7-5/8" 4 AAT, with slots for KOBBS all compartments (4.25" core bar centers)
02-481966	_____	7-1/8"	32"	7-5/8" 4 AAT, with slots for KOBBS all compartments (4.25" core bar centers)
02-724036	_____	6-1/8"	32"	7-5/8" 4 AAT, with replaceable rubber front fence 02-724041
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 centers) 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 KOBBS (4.938" core bar centers) each compartment
02-467655	_____	6-1/8"	30"	11-5/8" 3 AAT, with slots for KOBBS (7.750" core bar centers) each compartment
02-500697	_____	7-1/8"	34"	11-5/8" 3 AAT, with slots for TCBB (4.938" core bar centers) RH compartment
02-486022	_____	7-1/8"	32"	11-5/8" 3 AAT, with slots for TCBB (4.938" core bar centers) each compartment



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.

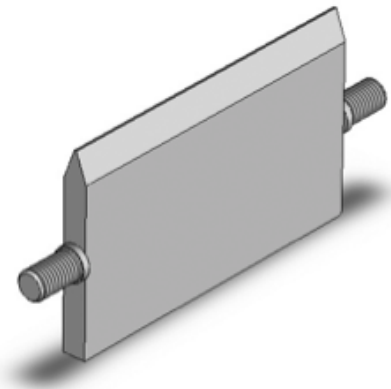


STANDARD DIVISION PLATES - 8-1/4" HIGH MOLDS (*Mold side bar center to center at vibrator bolt holes)

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 02-406314 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

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).

Part Number Description

8-1/4" High

- 02-072665 Division plate & liner assembly - 15-5/8" long mold
- 02-070159 Division plate only (replacement item) - 15-5/8" long mold
- 02-070160 Face liner only (replacement item) - 15-5/8" long mold
- 02-072666 Division plate & liner assembly - 17-5/8" long mold
- 02-071123 Division plate only (replacement item) 17-5/8" long mold
- 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
- 02-200545 Division plate only - 15-5/8" long
- 02-072238 Face liner only - 15-5/8" long
- 02-310012 Division plate only - 17-5/8" long
- 02-072926 Face liner only - 17-5/8" long

10-1/4" High

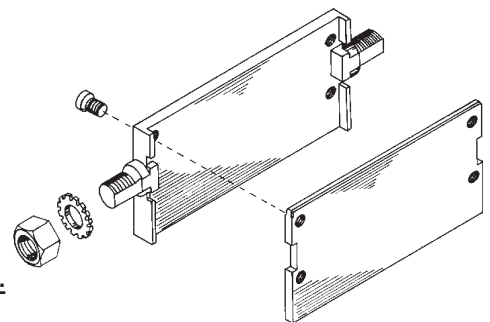
- 02-079034 Face liner only - 15-5/8" long (2" higher at top)

4-7/8" High (Low Height)

- 02-281515 Division plate only - 15-5/8" or 17-5/8" long
- 02-327714 Face liner only - 15-5/8" or 17-5/8" long

Metric Part No.

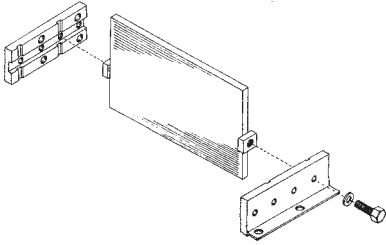
- 02-341585M
- 02-341588M
- 02-355815M
- 02-355816M



ADDITIONAL PARTS

Part Number	Description
02-103702	Socket head cap screw w/ Nylok (4 required per liner)
02-087814	Hex nut - 1-1/2"
02-087910	Shakeproof washer - 1-1/2"

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



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)
02-443076	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)

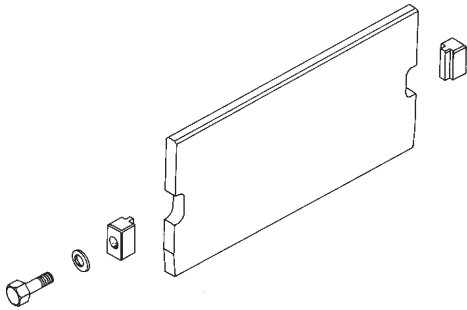
NOTE: Threaded

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).

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	Description
02-321980	Quick change plate - 8-1/4" high
02-292981	Quick change plate - 9-1/4" high
*Holding block not included with quick change plates	

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

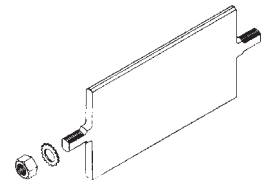
Use this division plate to prevent spreading of the mold side bars when producing solids or other difficult units. It is necessary to drill the side bars to accommodate these plates. Additional sizes and styles are available, including metric sizes.

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

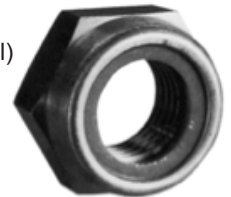
Part Number	Description
02-079497	Inside division plate with threaded tangs for 7-5/8" H x 15-5/8" L units
02-234025	Inside division plate with threaded tangs for 7-5/8" H x 17-5/8" L units
02-087810	Hex nut - 1"
02-087908	Shakeproof washer - 1"



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.

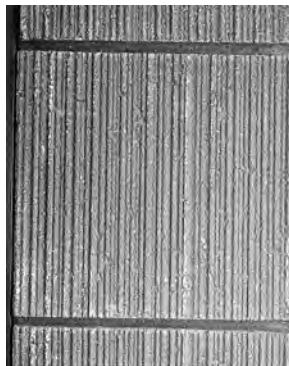
Part Number	Description
02-104587	Self locking nut - 3/8"
02-102794	Self locking nut - 3/8" (thinwall)
02- 087700	Self locking nut - 3/4"
02-104591	Self locking nut - 1"
02-087707	Self locking nut -1-1/2"
02-087814	Standard hex nut - 1-1/2"
02-087810	Standard hex nut -1"



Stri-Face Division Plates, Face Liners and End Liners

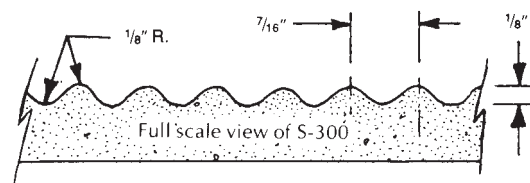
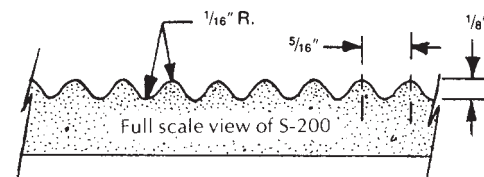
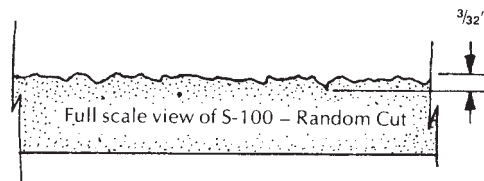
A special process permits the manufacturing of modular division plates with vertical grooves that produce a brush-finish design on the block face. Matching end liners form corner units in either single or double end design. Manufacturing templates assure continuity of the stri-face pattern. NOTE: Stri-face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

DIVISION PLATES	
Part Number	Description
Inside Division Plate - 3-7/8" High	
02-251328	S-100 both sides
Inside Division 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 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



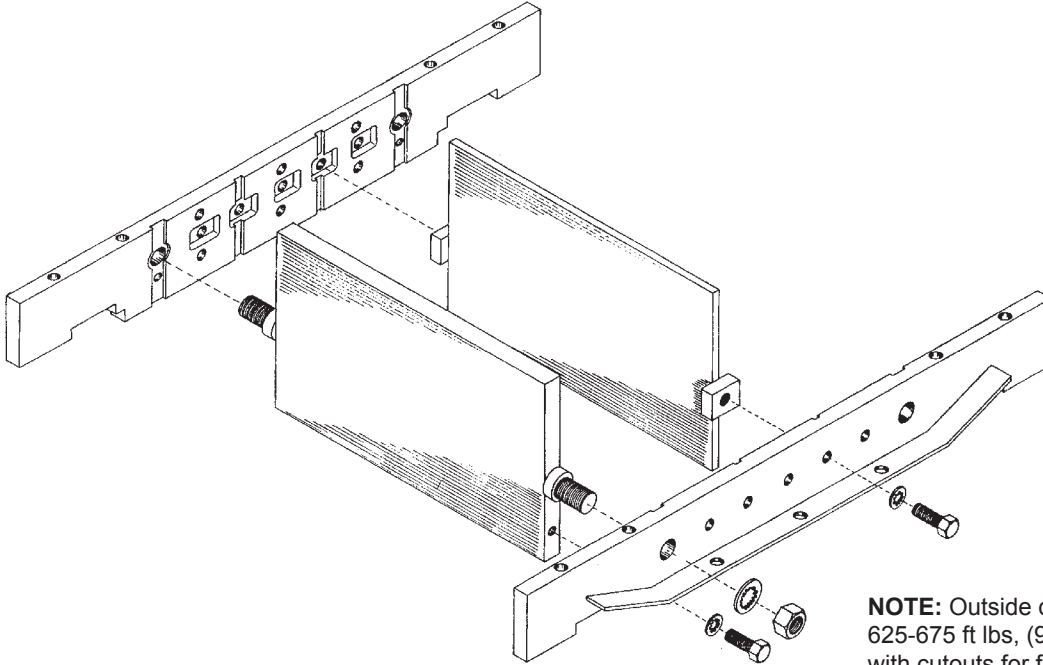
S-100

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


NOTE: 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).

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

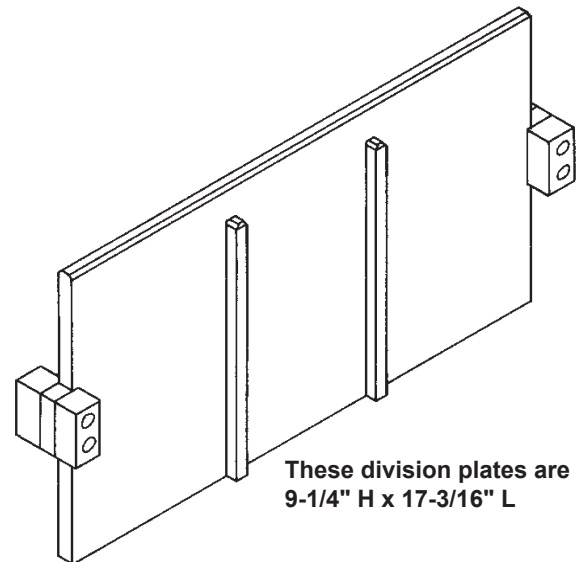
Face liners with single or multiple ribs are designed for use on outside division plate 02-200545 for 15-5/8" long units. All face liners are 9-1/4" high. Additional sizes and styles are available, including metric sizes.

Part Number	Description
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" sq ribs one side

Ribbed Inside Division Plates 1/2" Thick

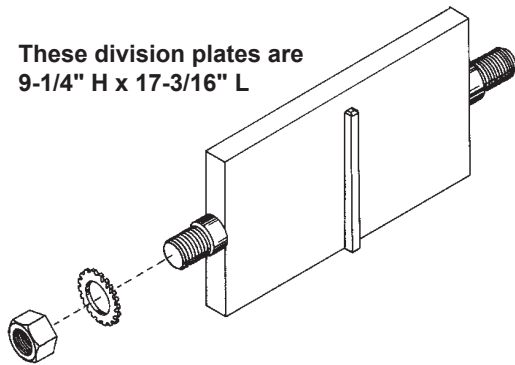
Listed below are several division plates to make a vertical groove on the face of the unit. Many other division plates are available to make single and multiple grooves. Order stripper shoes to match the division plates and state the size of unit, thickness of shell and ties, number of cores and types 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
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 one 1/2" 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.



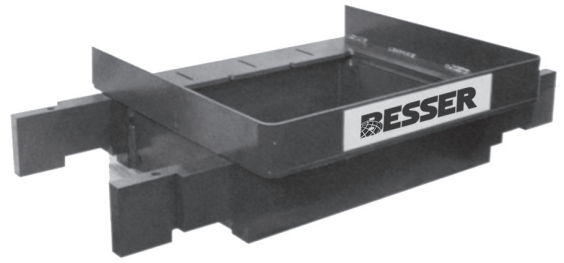
Part Number	Description
02-200106	With one 3/8" sq rib one side
02-203291	With one 3/8" sq rib both sides
02-233328	With two 3/8" sq ribs one side
02-415993	With two 3/8" sq ribs both sides
02-269955	With three 3/8" sq ribs one side
02-282920	With three 3/8" sq ribs both sides
02-237552	With five 3/8" sq ribs one side
02-296016	With seven 3/8" sq ribs one side
02-087814	Nut 1-1/2"
02-087910	Shakeproof washer 1-1/2"
02-051887	Replacement rib only
02-207658	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.

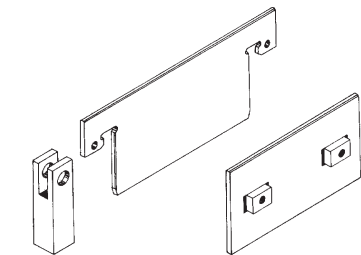
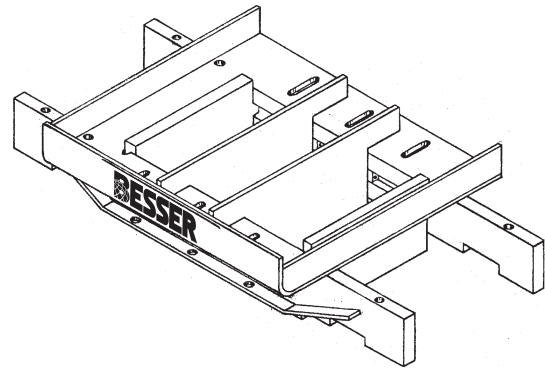


Mold Frame Assembly with Suspended Division Plates and Face Liners

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.

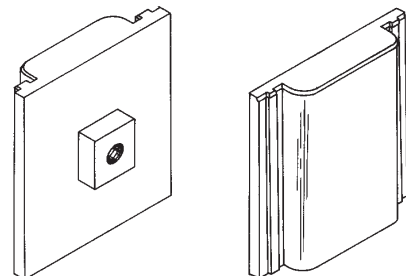
Part Number **Description**

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)

Part Number	with mortar groove		without mortar groove	
	Width	Part Number	Width	Part Number
02-045265	5-5/8"	02-202417	5-5/8"	02-202417
02-043986	7-5/8"	02-077595	7-5/8"	02-077595
02-045700	9-5/8"	02-074280	9-5/8"	02-074280
02-045215	11-5/8"	02-066053	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)
02-284812	7-5/8" W x 7-5/8" H x 15-5/8" L (replaces 02-017712J0020 end core liner and end cores 02-017706 and 02-029722)
02-337582	7-5/8" W x 7-5/8" H x 15-5/8" L (without mortar ribs)
02-337584	9-5/8" W x 7-5/8" H x 15-5/8" L (with mortar ribs)
02-301645	11-5/8" W x 7-5/8" H x 15-5/8" L (with mortar ribs)



Bull Nose End Liners with 1" Radius

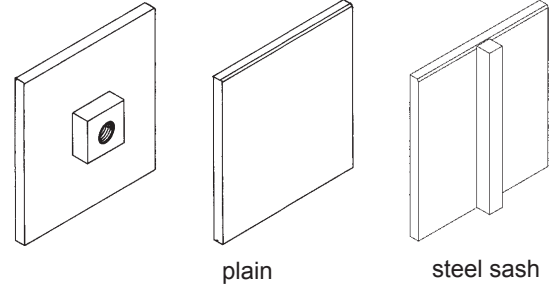
<u>Part Number</u>	<u>Description</u>	<u>Part Number</u>	<u>Description</u>
02-018217J0481	3-5/8" RH	02-017712J0470	7-5/8" double
02-018217J0482	3-5/8" LH	02-018013J0481	9-5/8" RH
02-018217J0470	3-5/8" double	02-018013J0482	9-5/8" LH
02-017945J0481	5-5/8" RH	02-018013J0470	9-5/8" double
02-017945J0482	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" LH		

Besser Standard Plain End Liners and Steel Sash Liners

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

<u>Plain</u>	<u>Width</u>	<u>Steel Sash</u>
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.

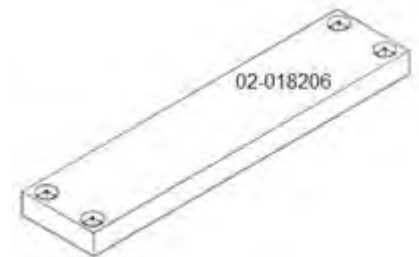


plain

steel sash

Solid Stripper Shoe

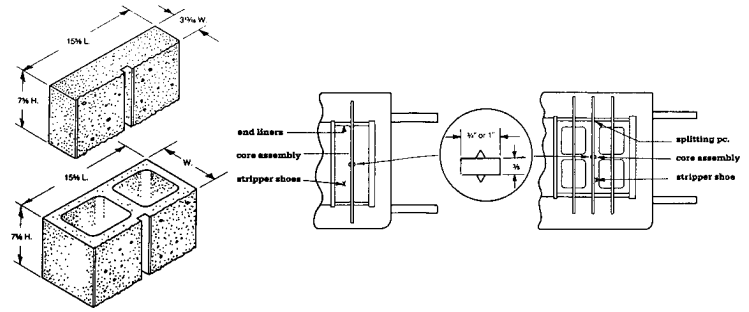
<u>Part Number</u>	<u>Description</u>	<u>For use with removable *plunger(s)</u>	<u>Hole Center</u>
02-024326	1-5/8" W x 15-5/8" L	02-053771, 02-056387, 02-058802, 02-469107	14.313"
02-018206	3-5/8" W x 15-5/8" L	02-053771, 02-056387, 02-058802, 02-469107	14.313"
02-066795	5-5/8" W x 15-5/8" L	02-053393	12.875"
02-021728	5-5/8" W x 15-5/8" L	02-051357, 02-058864, 02-255303, 02-469443, 02-473729	14.313"
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"
02-239720	9-5/8" W x 15-5/8" L	02-511217	14.313"
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"



*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:

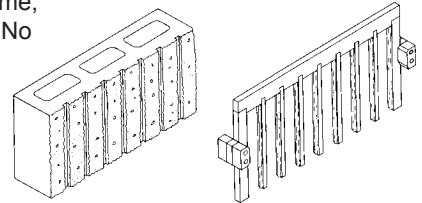


NOTE: 3-5/8", 5-5/8", 7-5/8", 9-5/8" or 11-5/8" W x 15-5/8" L compartment. New or reworked mold top plate and cutoff parts and new or reworked plungers may be necessary. This can be done in metric as well, 190 mm wide becomes 196.5 mm wide.

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.

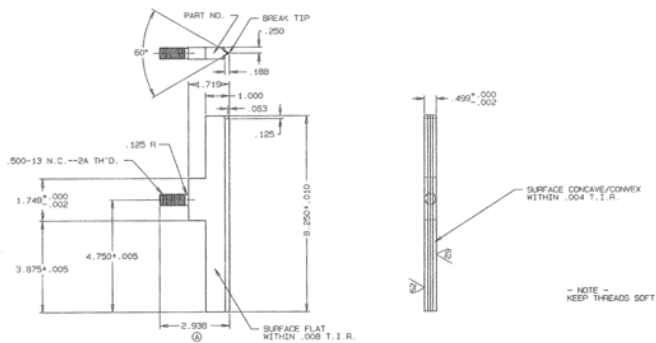
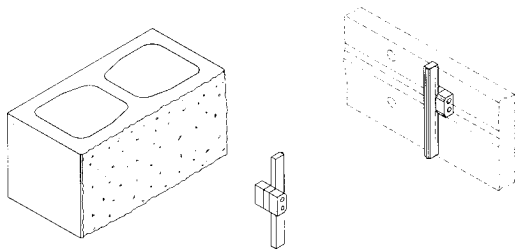


02-309197 Inside division plate 9-1/4" high - for a 7-5/8" H x 15-5/8" L unit

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

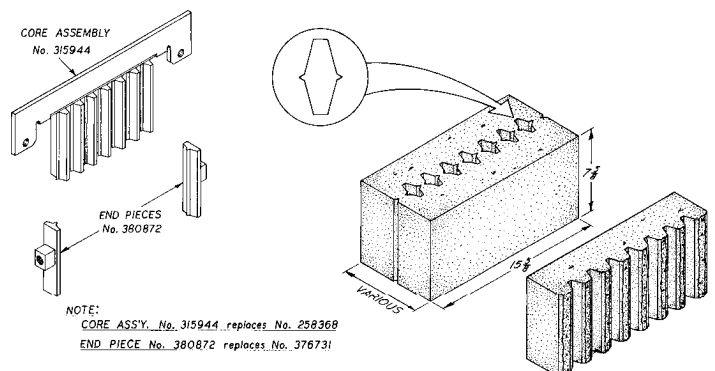


Split Fluted (8 flute shown)

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



Standard grids for:

Unit Width	V4	V5	V6
3-5/8"	02-447795	02-421218	02-402436
5-5/8"	02-447805	02-421254	02-440453
7-5/8"	02-438886	02-465656	02-389520
9-5/8"	02-447815	02-438322	02-393282
11-5/8"	02-447824	02-421204	02-393268

Grids with 2" shorter fingers than standard for use with 10-1/4" high suspended division plates

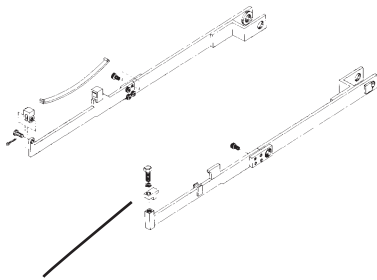
Part Number	Unit Width	Number of Fingers
02-226183	3-5/8"	28
02-216763	5-5/8"	20
02-201700	7-5/8"	40
02-264683	9-5/8"	28
02-264670	11-5/8"	28

OTHER AGITATOR GRIDS

Part Number	Description
02-018839	Agitator grid frame only - no fingers
02-053096	Agitator grid - 3 bar- no fingers
02-070757	Universal all purpose grid-with fingers- 4", 5-5/8", 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.



02-218441 CLAMP

Part Number Qty Description

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

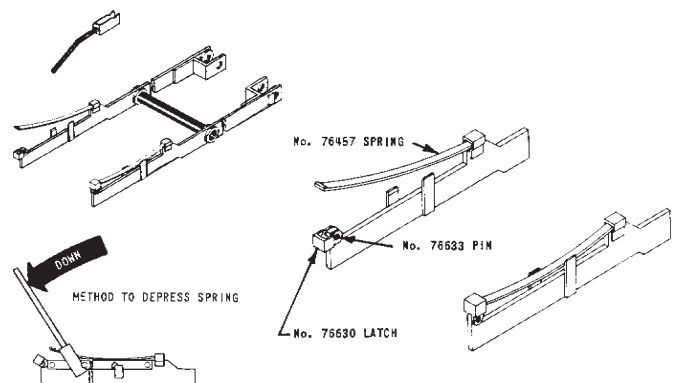
These agitator grid support bars are hardened along the entire wear surface. A steel bushing is used to connect the grid bars and serves as a full length bearing. Grid bars are available with front clamp blocks or with spring type clamps. Also available are the front sections only, ready for welding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

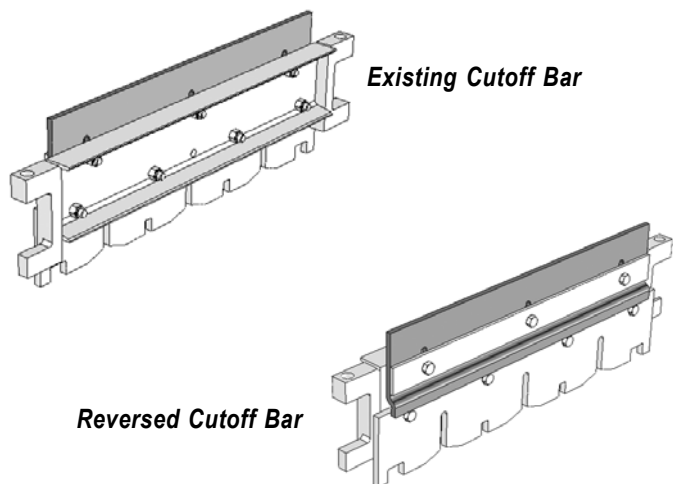
Spring Type

02-078702	Right hand grid bar with spring
02-078704	Left hand grid bar with spring
02-076457	Spring only
02-076630	Front latch
02-076632	Rear 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.



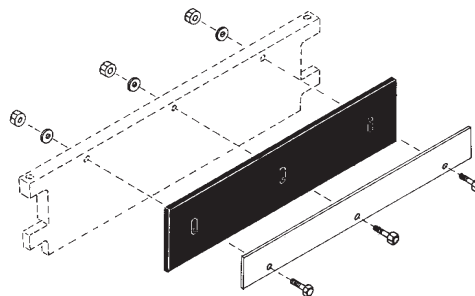
These images are viewed from the front of the block machine.

V3		V4
Part Number	Description	Part Number
02-410969	Cut off bar assembly - 3-5/8" wide	02-484584
02-410970	Cut off bar assembly - 5-5/8" wide	02-484587
02-346135	Cut off bar assembly - 7-5/8" wide	02-477016
02-408000	Cut off bar assembly - 9-5/8" wide	02-484585
02-408001	Cut off bar assembly - 11-5/8" wide	02-484586
02-346132	Cut off bar only	02-450297
02-469624	Reversed cut off bar only	02-483268
02-346134	Wiper frame only	02-453500
02-017166	Wiper rubber only	02-438883
02-107680	Lock screw	02-107680
02-104588	Nylon insert lock nut	02-104588
02-087881	Lock washer - 1/2"	02-087881
02-346136	One piece cut off shoe - 3-5/8" wide	02-453505
02-346137	One piece cut off shoe - 5-5/8" wide	02-453610
02-346133	One piece cut off shoe - 7-5/8" wide	02-453501
02-346138	One piece cut off shoe - 9-5/8" wide	02-453608
02-346139	One piece cut off shoe - 11-5/8" wide	02-453520
02-369725	Blank shoe only	02-453643

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
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"
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 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



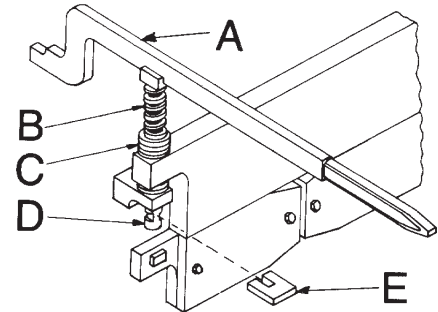
Quick Release Clamp For Cutoff Bar

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)*
02-087932	16	Washer "C"
02-214161	2	Pin "D" (order 02-61389 for machine without auto feed)*
02-061390	2	Lock "E" *

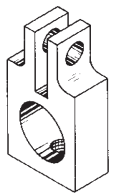
For a complete set of parts, order:

02-603189	SOP quick release clamp for machine with auto feed
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, 02-061397 pry bar and 02-087934 plain washer)



*Also for V3 and V4 concrete products machines

Hold Down Blocks for Core Assemblies



02-014128
OPTIONAL



02-014129
STANDARD

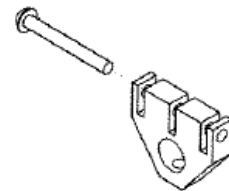


02-022523
STANDARD

Part Number	Description
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
02-516036	Rivet with hole 5/8" x 2" L
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

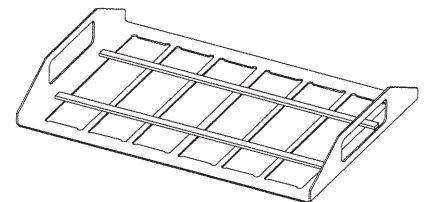
Hold Down	Pin/Rivet	Unit Width
02-059023	02-089086	5-5/8" W
02-049429	02-089077	7-5/8" W
02-303333	02-303244	11-5/8" W



Stripper Shoe Set-Up Gauge

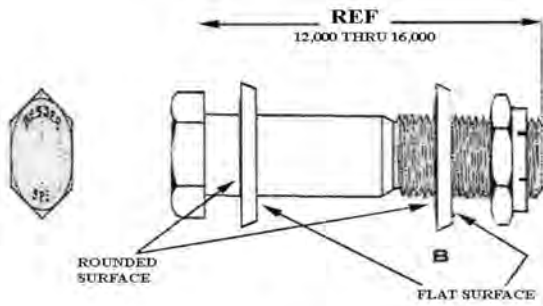
Stripper shoes for 15-5/8" long units are quickly spaced and aligned with this precision set-up gauge. Correct spacing and alignment will reduce wear on division plates, end liners, and related parts. A set-up gauge doubles in usefulness as a guide to indicate bent plungers. The savings in mold parts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

V3	Description	V4	V6
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 halves		
02-725373	Set-up gauge for 11-5/8" W x 11-5/8" L 2 AAT		
02-725371	Set-up gauge for 15-5/8" W x 11-5/8" L 1 AAT		



Improvement Over Lock Washers and Standard Units

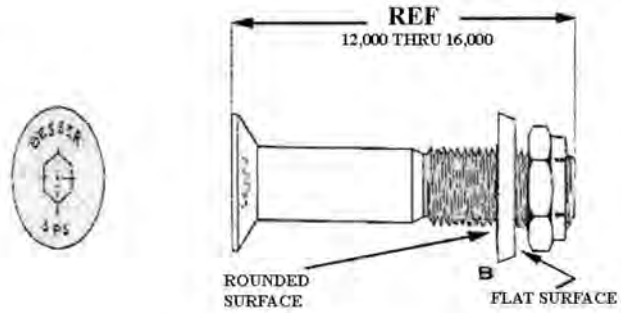
Hex Head Fastener



02-490710

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

Flat Head Fastener



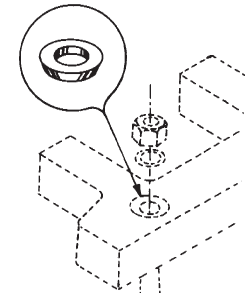
02-490711

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

Stripper Shoe Countersink Insert

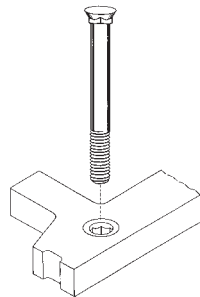
If the plunger upright does not hold stripper shoes level because stripper shoe holes are worn, insert these countersink inserts into the holes, tighten the stripper shoe bolts, and the shoe will once again be level. This condition exists more often in shoes for 3-5/8" wide permanent plain end units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

Part Number	Description
02-290424	Stripper shoe countersink insert - 1/2" bolt
02-375631	Stripper shoe countersink - 3/8" bolt



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



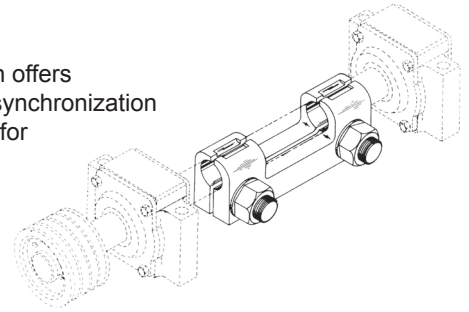
NOTE: Use only with stripper shoes with square shoulder type holes.

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 identification. Recommendations for the use of vibrator weights are available in the service bulletin section of besser.com.



Posapac Weight

Standard	*For ASV Systems		2800 RPM Centrifugal Force
02-283177	02-526796	Orange	7,495 lbs
02-278328	02-526798	Blue	9,400 lbs
02-278329	02-526799	Yellow	10,200 lbs
02-301697	02-526795	White	6,365 lbs
02-301699	02-526797	Gray	9,113 lbs
02-342539	02-526800	Green V-6	13,794 lbs
02-389578	02-526801	Red V-6	15,145 lbs

Compare To:

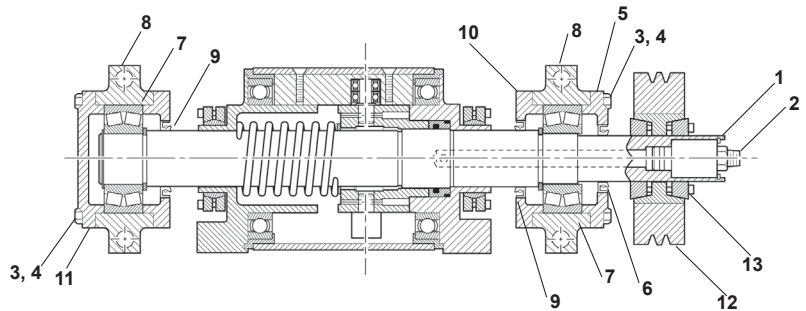
Two 3" sq x 4-3/4" L, eccentric weights - pavers
 Two 3-1/2" sq x 5" L, eccentric weights - standard
 Three 3" sq x 4-3/4" L, eccentric weights - brick mold
 Two 3" sq x 4-3/4" L eccentric weights
 Two 3" sq x 4-3/4" L, & one 3" sq x 4-1/2" L, eccentric weights
 Three 3-1/2" sq x 5" L, eccentric weights
 Comparison data not available

* 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	Rotary 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

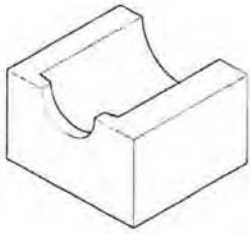
Consider taking advantage of the SmartPac rapid exchange program the next time you find it necessary to rebuild your existing SmartPac unit. To participate in this program please follow the following procedure:

- 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

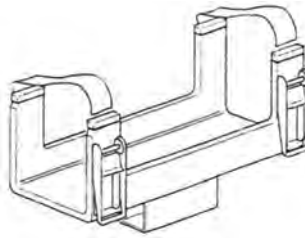
Holding fixture, FB-2328 - part of arbor press tooling used to hold position during pin installation.



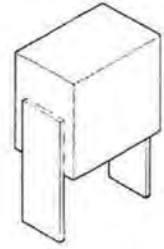
Pressing device, MB-505 - part of arbor press tooling to press spherical roller bearing into bearing housing. Also serves as a depth gauge.



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

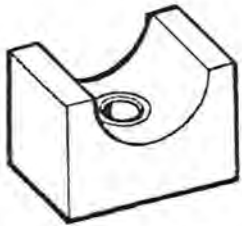


Spacer Block, bench vise - supports vibrator shaft when shaft is clamped in vise.

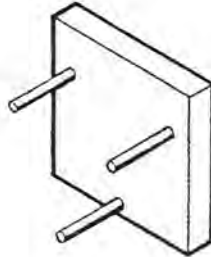


PV-2 Tools

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.



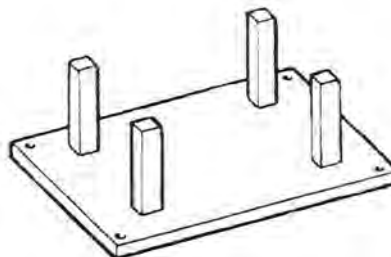
02-507449
Trantorque and ring assembly - use as a positive stop when testing the newly installed piston for leaks.



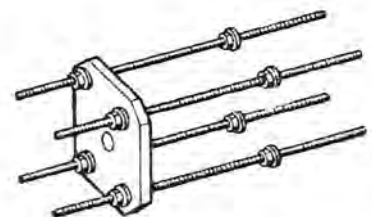
02-507450
Dowel pin remover - use to remove the 4 dowel pins from the front hub and the 2 dowel pins from the piston.



02-507451
SmartPac support fixture - use to support the SmartPac vibrator shaft assembly to align the rear hub with the front hub.



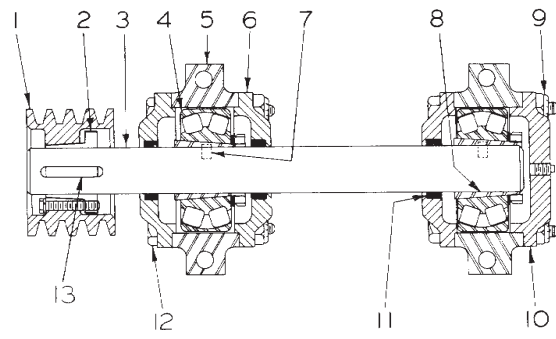
02-507452
Front bearing puller - use to remove the front main shaft bearing from the vibrator shaft.



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.

Key	Part Number	Pcs	Description
1	02-105905	1	Quick detachable sheave - 4.95 OD - "B" sec.
2	01594-000028	1	Tapered bushing - 1-15/16" bore
3	02-225070	1	Vibrator shaft - 1-15/16" diameter (15-5/8")
	02-225071	1	Vibrator shaft - 1-15/16" diameter (17-5/8")
4	01503-000037	2	Bearing
5	02-011532	2	Bearing holder
6	02-225044	3	Inside closure (includes key 11)
7	02-202560	2	Locater pin - 5/16" diameter X 5/8" L
8	02-081553	2	Adaptor
9	02-087846	8	FLEXLOC nut - 3/8"
10	02-224908	1	Outside closure
11	02-086755	3	Neoprene seal
12	02-088027	8	Hex cap screw - 3/8" x 4" L
13	02-291893	1	Key - taperlock bushing



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

*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.

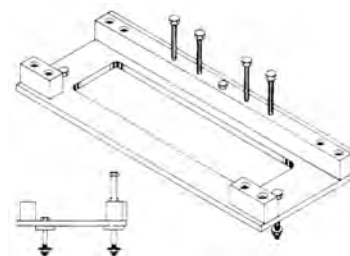
Part Number	Description
02-607066	Vibrator shaft with sheave and bushing (15-5/8")
02-607068	Vibrator shaft with sheave and bushing (17-5/8")
02-105905	Sheave only
01594-000028	Taperlock bushing kit - 1-15/16" bore
02-225070	Shaft only (15-5/8")
02-225071	Shaft only (17-5/8")



Vibrator Shaft Fixture

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

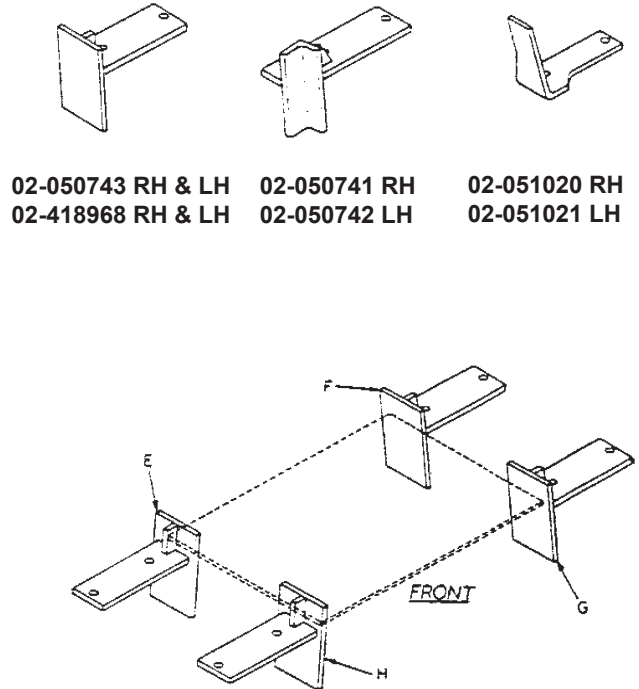
The time needed to change molds is shortened and simplified with the mold insertion device. This pneumatically powered mechanism lifts/lowers the entire mold assembly off/onto the mold throat. The mold assembly is manually rolled into/out of the mold throat area.

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



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.

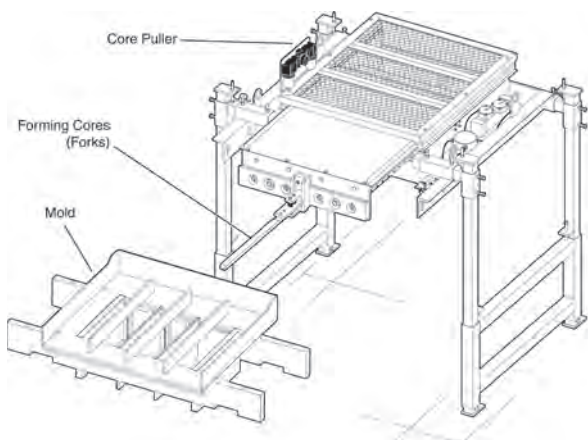


Air-Operated Core Puller (Standard 5" Bore)

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

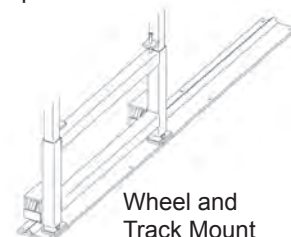
Core pullers are comprised of a drawer, which is activated by twin pneumatic cylinders to which the tools (forming cores or "forks") required to form the horizontal cores are attached. The core puller is equipped with a ball bearing guide way system for reliable horizontal movement. The forming forks 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.

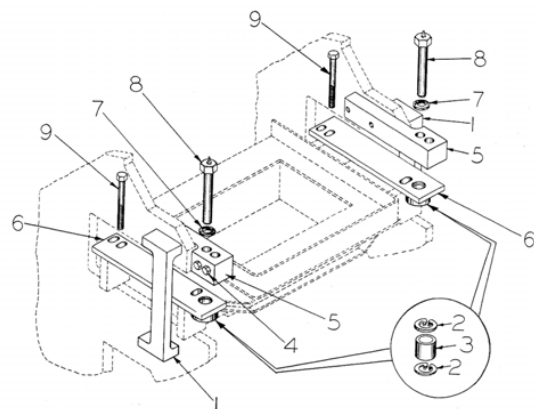
Part Number	Description
02-MT556790	Air-operated core puller
02-MT556808	Wheel and track mount for easy roll away (option 02)
05-504306	Use with Advanced Servo Vibration (ASV)



Pin Type Mold Guidance System

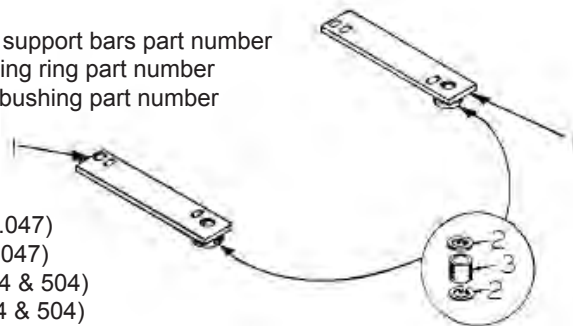
This pin type mold guidance system controls the motion of the mold in horizontal directions. After the initial alignment of stripper head to mold, alignment is maintained cycle after cycle. This feature will reduce the wear on mold parts and shoes. The sets of parts numbers listed includes one left hand 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
2	02-081377	2	Retaining ring
3	02-399095	1	Nylon bushing
4	02-088062	2	Hex cap screw - 3/4" x 1-1/2" L
5	02-395341	1	RH - pin guide support
	02-395342	1	LH - pin guide support
6	02-399097	1	RH - lower support
	02-399099	1	LH - lower support
7	02-086507	1	O-ring 1/8" x 1 3/4" ID
8	02-386372	2	Replacement mold guidance pin, 12" for V6
	02-395584	2	Replacement mold guidance pin, 10-3/4" L for V3-12
	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 lever
	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 (lower support)	Key 2 (retaining ring)	Key 3 (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 rework mold throat and feedbox track supports to work with pin type guides and autofeed with hand lever
02-642369	Service SOP for pin-type mold guidance system (for V3R, V3-12, MK1 & MK2) SOP includes 02-399097 RH and 02-399099 LH lower support bar, 02-215656 bolt, 02-087871 hex nut and 02-087883 lock washer
02-386372	Replacement mold guidance pin — 12" L (for V6)
02-395584	Replacement mold guidance pin — 10-3/4" L (for V3-12)
02-396372	Replacement mold guidance pin — 9-1/2" (for V3-12)

Pin Supports for Pin-Type Mold Guidance System

Part Number	Description
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)

Combo Units

With a combo unit, compressed air is filtered which helps to remove contaminants, 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	Description
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)



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 Description

02-297379 1 Complete Jack Shaft assembly

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

Includes the following 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

02-245000 2 Collar

Part Number Qty Description

02-103541 2 Retainer plate

02-084988 1 Brush holder

02-084087 4 Brush spring

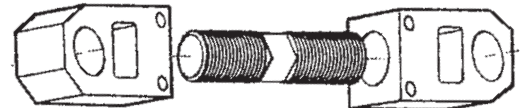


Belt Tensioner

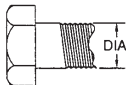


The belt tensioner promotes the extended life of drive motor components on Dynapac, Ultrapac and Superpac concrete products machines and aids in maintaining consistent belt tension. SOP includes installation drawing.

Part Number Description

02-454053 SOP to install belt tensioner for main drive motor on Dynapac, Ultrapac and Superpac concrete products machines



Bolt Torque Chart

Threaded Diameter	S. A. E. Grade 2	S. A. E. Grade 5
		
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

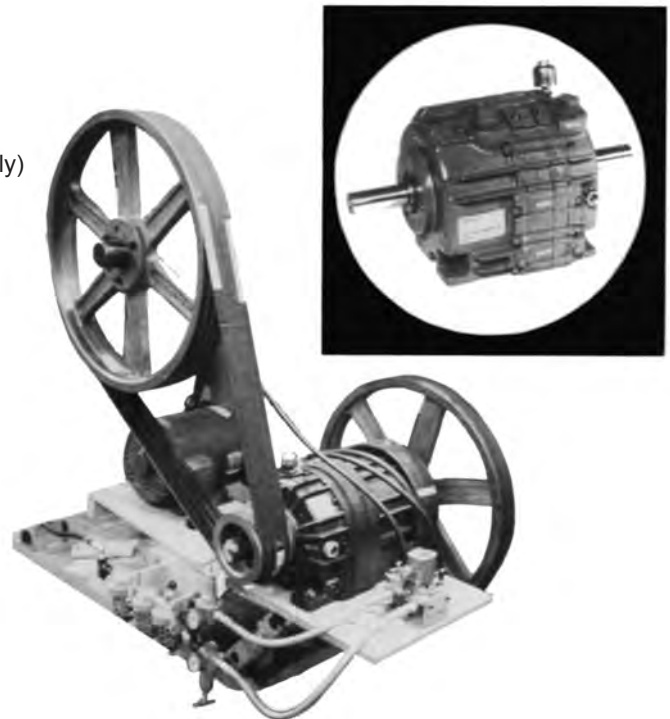
**When servicing your Bescodyne make sure to use only:
MULTI-PURPOSE ATF 210 AUTOMATIC TRANSMISSION FLUID AIR PRESSURES - 70 PSI for clutch; Use 50-55 PSI for brake.**

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

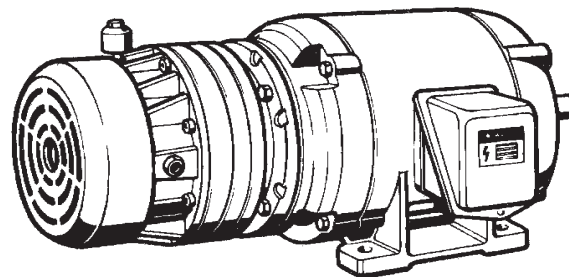


BESCOSTOP™ Brakes

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%.

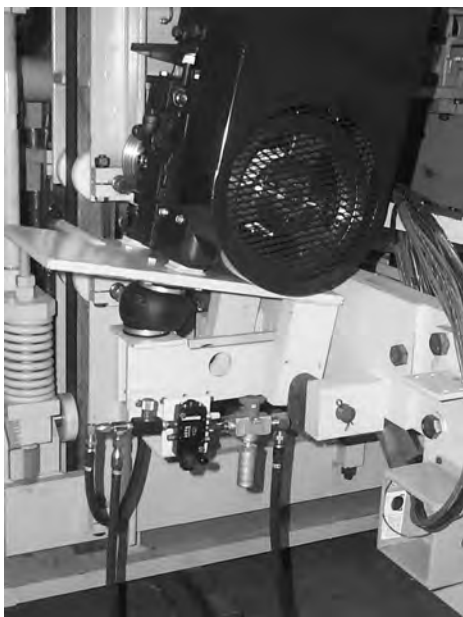
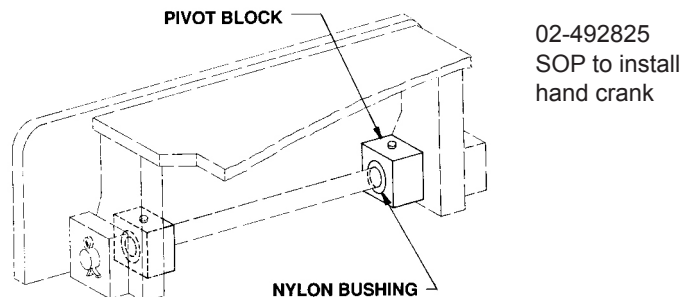


Part Number	Qty	Description
02-646155	1	SOP to install Bescostop brakes on V3R, V3-12 and Bescopac concrete products machines
02-453232	1	Electrical modification & instructions to change from DC to AC powered vibrator brakes
02-113759	2	Brake - oil shear type
02-113763	1	Air filter and regulator - combination 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
02-603370	Vibrator motor base pivot blocks (V3 & V3-12) (Includes quantity for both motor bases)
02-310298	Instruction drawing
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



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.

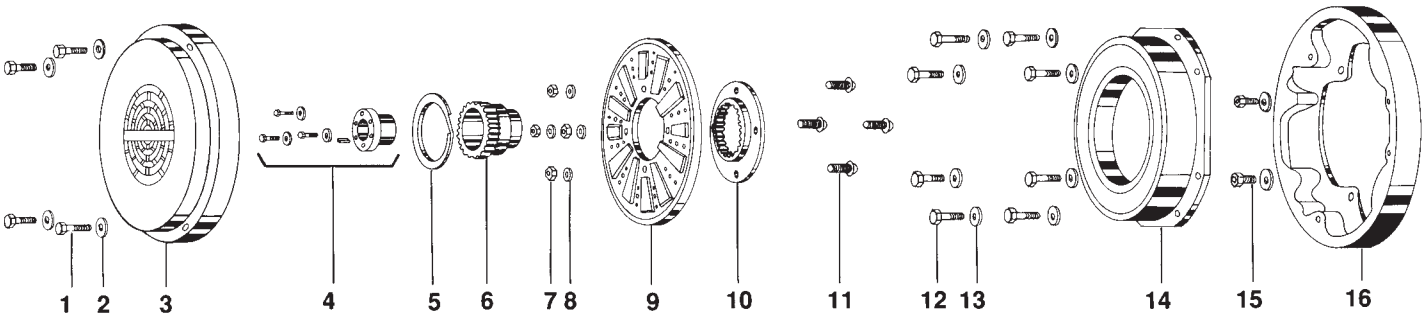
SOP includes, support brackets, control valve assembly, air bags, hoses and fittings. A structural channel is included to protect the hoses that cross the front of the machine.

Part Number	Description
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.*

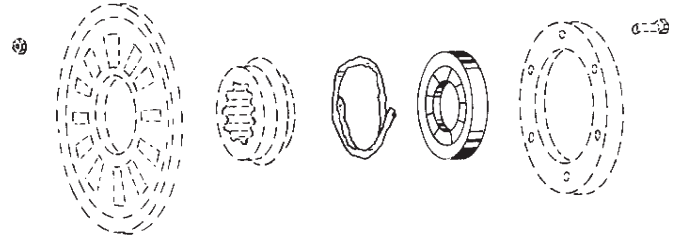


Key	Part Number	Pcs	Description
	02-602710	1	SOP for Warner electric brake No. 1225
	Includes the following parts:		
1	02-089614	4	Allen socket head cap screw - 1/4" x 3/4" L
2	02-087877	4	Lock washer - 1/4"
3	02-084322	1	Assembly cover
4	01594-400004	1	Browning bushing - 1-5/8" bore - type 2 with 3/8" 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)



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.

Part 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	Description
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

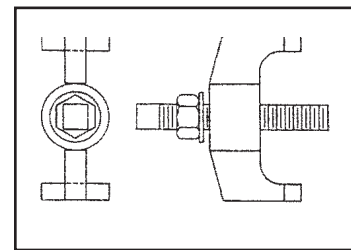


Fig. 4 - Tool 02-467006 torque to 90 ft lbs, (135 newton-meters)

Part Number	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

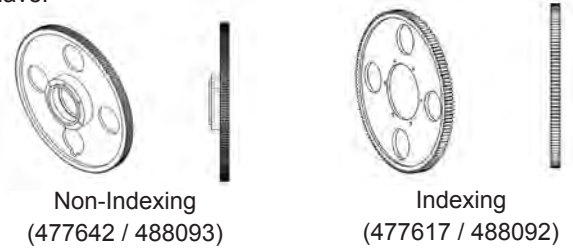
Hunting Tooth Bull Gears & Pinions

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:

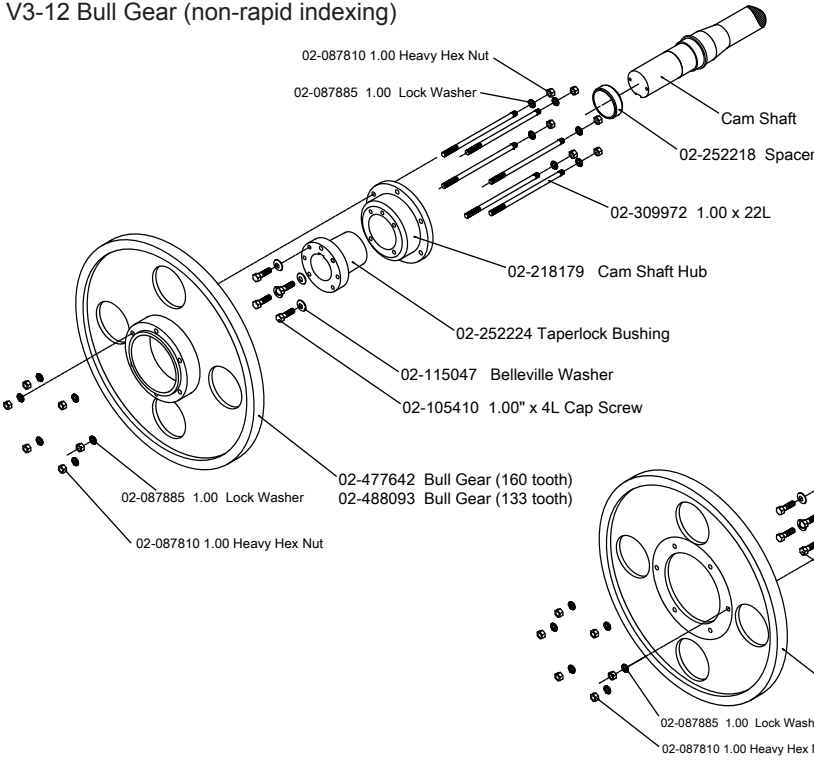
160 tooth to change to 133 teeth, depending upon which bull gear you have.

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

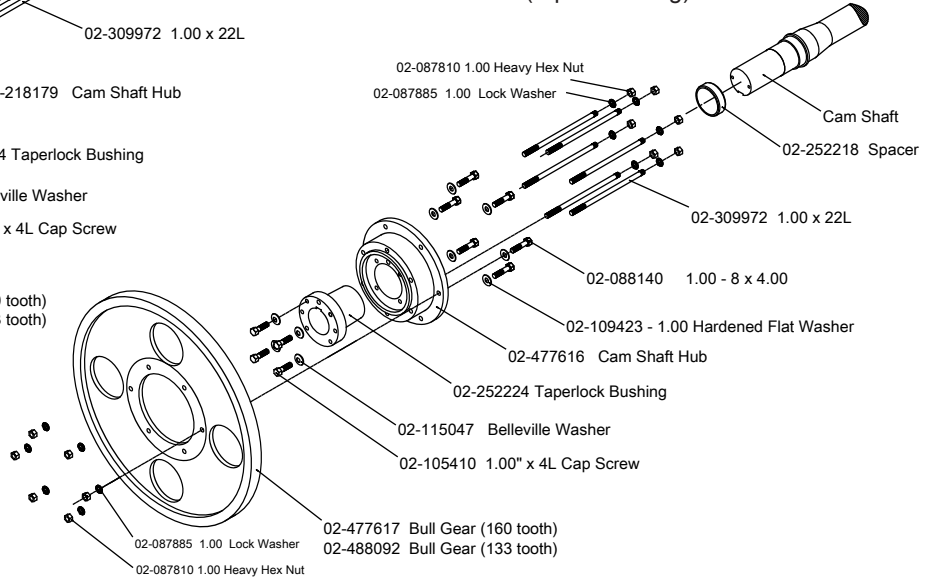


See the following print when ordering the gears: 484208 for torques

V3-12 Bull Gear (non-rapid indexing)



V3-12 Bull Gear (rapid indexing)

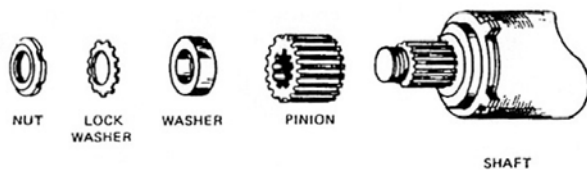
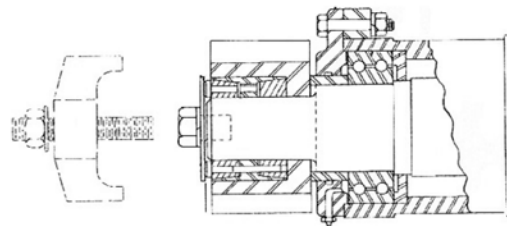


Hunting Tooth Pinions

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

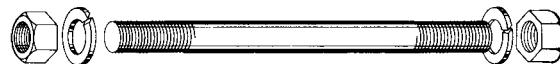
02-488089 with smooth bore pinion for use with locking assembly - see drawing 464229

02-488090 with splined gear inside - see drawing 266857



Bearing Cap Stud Bolts

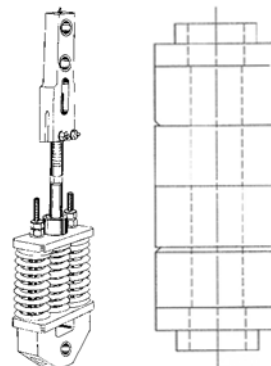
Part Number	Description	Part Number	Description
02-234538	1" x 9" L	02-234542	1-1/4" x 15" L
02-234539	1" x 11" L	02-253628	1-1/4" x 17" L
02-054332	1" x 11-1/2" L	02-309972	1" x 22" L
02-023864	1" x 12-1/2" L	02-087810	Hex nut - 1"
02-023863	1" x 15-1/4" L	02-087885	Lock washer - 1"
02-237363	1" x 16"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

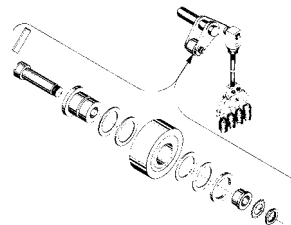
Part Number	Description
02-284898	Triple spring link assembly (2 req'd)
02-029375	Spring only - 5-1/8" OD x 12-7/8" free length (3 req'd)
02-366116	Spacer - 1" ID x 11" long (2 req'd)
02-283835	Lower spring support - 1-1/2" thick (1 req'd)
02-467413	SOP - boot for pallet receiver spring - spacer - for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



Anti-Friction Roller

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 before installation.

Part Number	Description
02-607155	SOP for anti-friction roller for V3M, V3R and V3-12
02-602762	SOP 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.

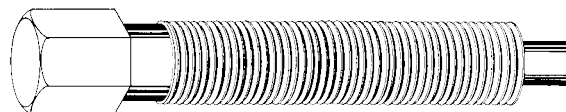
Part Number	Description
02-488140	Crowned height pin (2 req'd)



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.

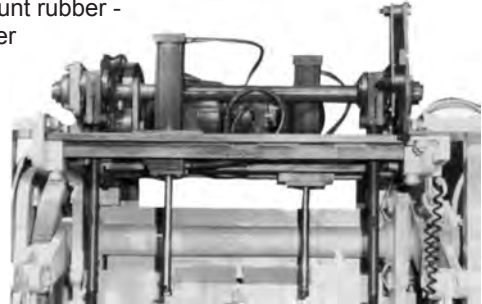
Part Number Description

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



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).

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 Description

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

Bolt-on Uprights for the Stripper Head Frame

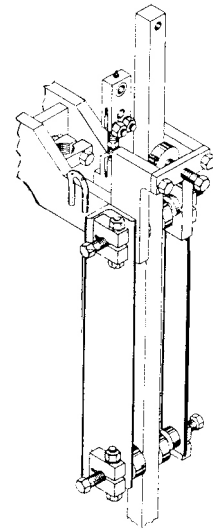
Part Number Description

02-466335	SOP to bolt-on uprights for stripper head frame on a V3-12
02-466334	Front upright
02-466333	Rear upright
02-466332	Bar - frame tie

Block Adjustment Screw

Part Number Description

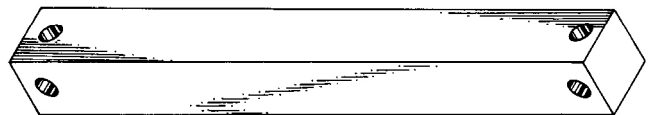
Stripper head frame - For service only	
02-040574	V3
02-395952	V3-12 and Dynapac
Pallet receiver frame - For service only	
02-054994	V3
02-424985	V3-12



Square Slide Shafts

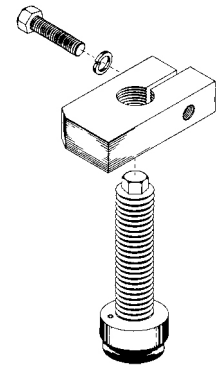
Part Number Description

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.

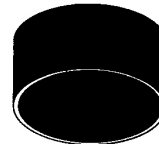


Part Number	Description
02-607123	Shock absorber for stripper head frame (Vibrapac)
02-242272	Rubber pad 3" diameter (black - 2 req'd)
02-282177	Shock absorber - V2-H 3" diameter x 18 1/2" L (includes 02-242272 pad)
02-356439	Rubber pad - V4 5" diameter (2 req'd)
02-242269	Shock absorber 3" diameter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

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.

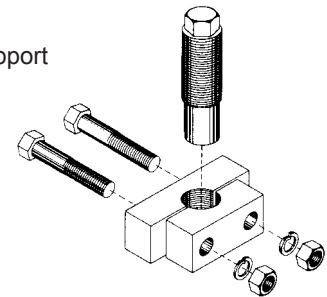
Part Number	Description
02-609340	SOP bounceless shock absorber pads - includes an instruction drawing for creating the steel supports.
02-345887	Bounceless pads 3" diameter (replacement)



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.

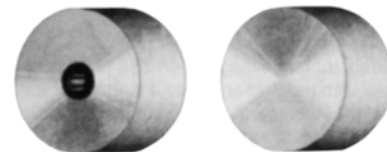
Part Number	Description
02-609006	SOP to install anti-deflection screw - V3-12 instructions drawing 02-314903
02-647245	SOP to install anti-deflection screw - Dynapac instructions drawing 02-470805
02-491705	Anti-deflection screw - Ultrapac (up to 7-5/8" units)
02-468360	Adjustment wrench (for anti-deflection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

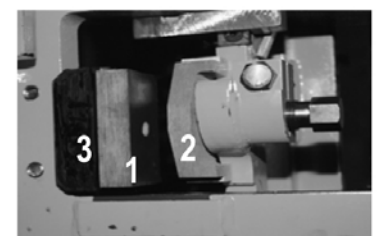
Part Number	Description
02-464277	3" guide liners for Dynapac and Ultrapac
02-307098	4" guide liner for V3R and V3-12
02-320460	5" guide liner for Dynapac and Ultrapac



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.

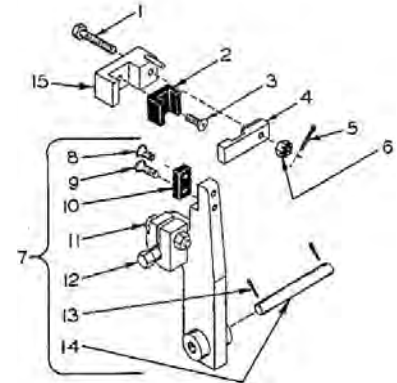
Part Number	Description
02-239614	Mold throat Nytex liner only (spare) - key 1
02-089689	Socket head cap screw - 3/4" x 2" L - not shown (bolts liner to throat liner)
02-328472	Front mold lock fiber liner-key 2 (includes bushing - 5/8" ID x 1" OD x 5/8" L - part number 02-214556)
02-293576	Mold throat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



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			Description
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.

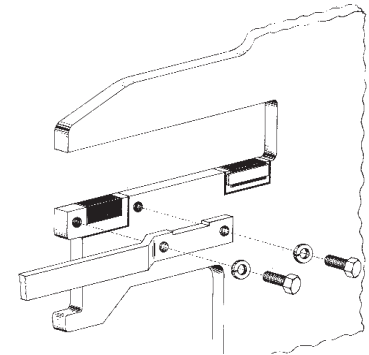
Resilient Mold Throat Insert

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:

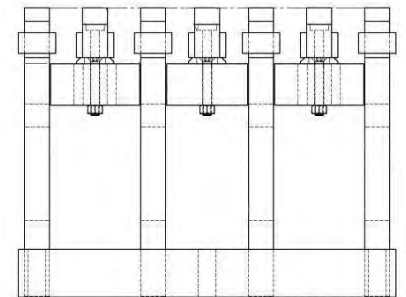
Part Number	Qty	Description
02-212588	2	Plate (not shown)
02-293381	2	Holder
02-293383	2	Holder sub-assembly
02-293384	1	Mold throat extension RH
02-293385	1	Mold throat extension LH
02-373688	4	Resilient insert
02-376771	1	Mold throat extension RH (for V3-12F and above)
02-376770	1	Mold throat extension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



Additional Anvil Rubbers for V3-12s and Dynapacs

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.

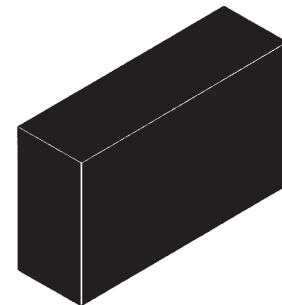
02-522181	V3-12 Vibrapac
02-522365	Dynapac



Pallet Receiver Rubbers

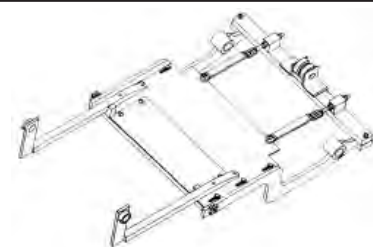
The durometer of hardness of the pallet receiver rubbers will affect the smoothness of machine operation. Because of different mold and material weights and speed of the machine, it is often necessary to change to a different durometer of pallet receiver rubbers.

	<u>Part Number</u>	<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, V3-12, V4, and V6	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)
For Bescopac	02-362209	Complete set of pallet receiver rubbers (includes parts shown below)
	02- 028777	Rubber - 1-1/2" x 3" x 5" L - 60 durometer (hard) (10 req'd)
	02- 362207	Rubber - 1-1/2" sq x 4" L (spacer) - 60 durometer (hard) (8 req'd)
	02- 362208	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 efficiency of your operation by making apron plate adjustment simpler.



V3-12

<u>Part Number</u>	<u>Description</u>
02-647189	SOP to install adjustable apron plate
Includes:	
02-466988	Adjustable apron plate assembly
02-467001	Instructions and installation drawing of adjustable apron plate six spacers
02-051616	Hardened wear strip
02-492808	Deluxe apron plate with removable inserts
02-377344	Front insert (manganese)
02-492806	Rear insert (manganese)
02-504962	One piece manganese plate
02-466987	Apron plate with single insert

Dynapac

<u>Part Number</u>	<u>Description</u>
02-500001	SOP to install adjustable apron plate
Replacement Apron Plate Assembly	
02-500003	Back apron plate assembly (includes inserts)
02-078286	Front insert
02-500012	Rear insert

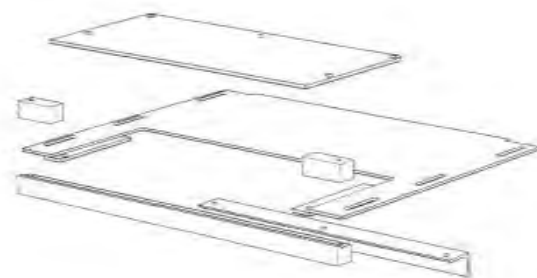
Ultrapac

02-504950	SOP to install adjustable apron plate
02-477634	Plug- 2 sq x 6-5/8"
02-439017	Apron plate wearing piece
02-439014	Insert
02-504952	Back apron plate

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.

<u>Part Number</u>	<u>Description</u>
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)
02-488087	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

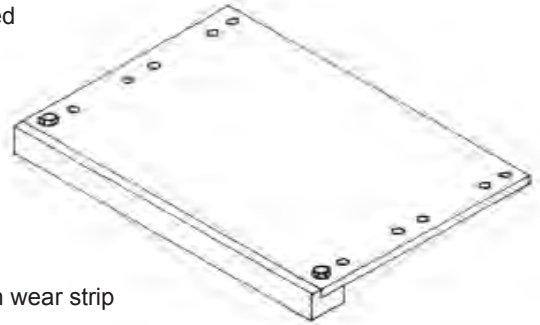


Back Apron Wearing Plate

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
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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)

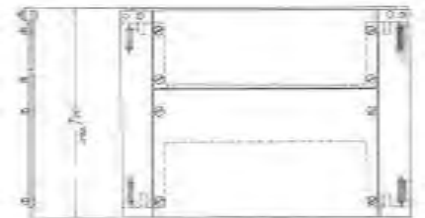


Deluxe Apron Plates

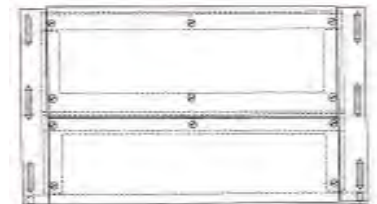
This deluxe apron plate assembly design offers reversible front and rear inserts and interchanges with all apron plates for 3 and 4 AAT machines. Other features include independent adjustments of hardened inserts, rigid support member for lifetime service and quick insert removal for reversing or replacement. 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
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02-378180	Deluxe apron plate with removable inserts for V3R and V3-12 Includes: 02-377344 Front insert (manganese) 02-377343 Rear insert (manganese) 02-051616 Hardened wear strip
02-309053	Deluxe apron plate with removable inserts for V3R and V3-12 Includes: 02-078286 Front insert 02-309052 Rear insert 02-051616 Hardened wear strip
02-319633	Deluxe apron plate with removable inserts for Dynapac Includes: 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 plate with removable inserts for Ultrapac Includes: 02-488087 Front wear strip 02-490749 Rear wear strip 02-439017 Hardened wear strip



V3R, V3-12, Dynapac

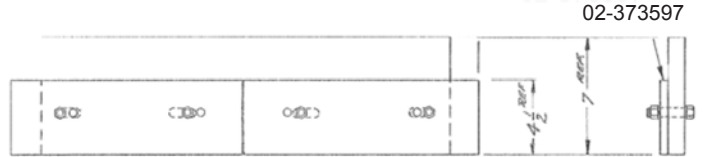
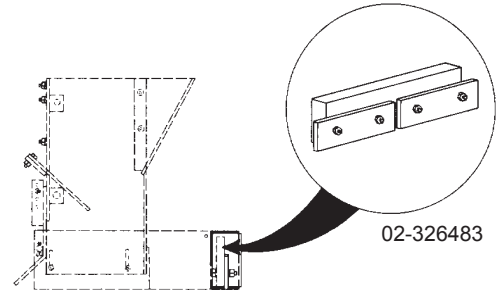


Ultrapac

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.

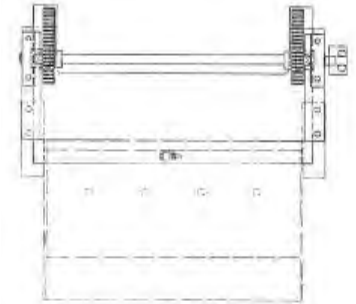
<u>Part Number</u>	<u>Description</u>
02-609129	SOP for hopper loose back plate for V3-12
02-373597	Loose back plate - hopper - heavy-duty - assembly
02-438967	Heavy-duty for Ultrapac (V4)
02-324303	For Dynapac (not heavy-duty)



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

<u>Part Number</u>	<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)

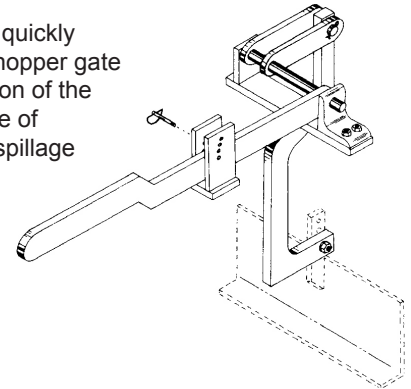


Adjustable Hopper Gate Mechanism

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.

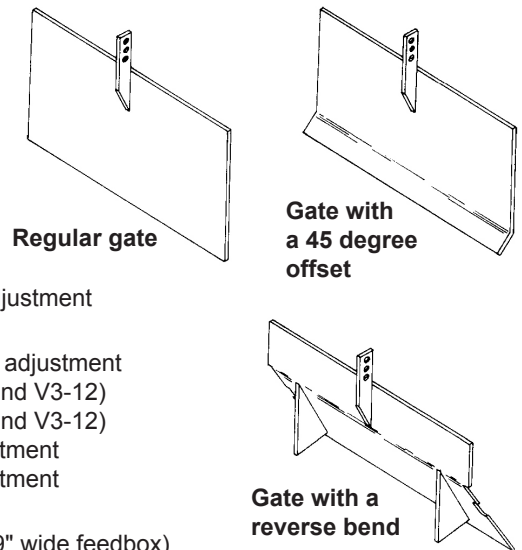
<u>Part Number</u>	<u>Description</u>
02-609298	SOP to install adjustable hopper gate mechanism



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

Vibrapac (for 29" wide feedbox, V3-12, and V3-12, 26" x 26")

- 02-225801 Special hopper gate with reverse bend for ramp type mold with 3 hole adjustment
- 02-328520 Regular hopper gate - 24-7/8" wide with three hole adjustment (V3R and V3-12)
- 02-013608 Regular hopper gate - 25-3/8" wide with three hole adjustment (V3R and V3-12)
- 02-253702 Hopper gate - 24-7/8" wide with 45 degree offset and three hole adjustment
- 02-058955 Hopper gate - 25-3/8" wide with 45 degree offset and three hole adjustment

Dynapac

- 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)
- 02-368516 Hopper gate with 45 degree offset and with six hole adjustment 19-1/4" overall height dimension (for 29" wide feedbox)
- 02-423811 Hopper gate with reverse bend with nine hole adjustment 22-1/4" overall height dimension (for 29" wide feedbox)
- 02-368515 Regular hopper gate with six hole adjustment (for 29" wide feedbox)

Superpac

- 02-421536 Regular hopper gate with six hole adjustment (for 42" wide pallets) (for 45" wide feedbox)
- 02-386354 Regular hopper gate with six hole adjustment (for 55" wide feedbox)
- 02-399793 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
- 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

Dynapac

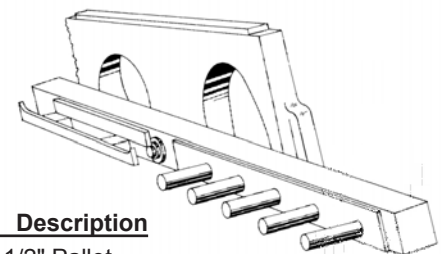
- 02-641730 1 SOP for pallet finger & pallet cradle
- 02-388848 2 Finger assembly
- 02-388850 1 Cradle assembly - RH
- 02-388851 1 Cradle assembly - LH
- 02-318139 2 Nylon V-guide

Ultrapac (V4) 37" x 18-5/8" Pallet

- 02-438972 2 Finger assembly
- 02-438970 5 Hose only - 5 per finger assembly
- 02-440984 1 Cradle assembly - RH pallet
- 02-440985 1 Cradle assembly - LH pallet

Ultrapac (V4) 37-3/4" x 18-1/2" Pallet

- 02-438972 2 Finger assembly
- 02-438970 5 Hose only - 5 per finger assembly
- 02-438974 1 Cradle assembly - RH
- 02-438975 1 Cradle assembly - LH



Part Number Qty Description

Ultrapac V-4 38-1/2" x 18-1/2" Pallet

- 02-452328 2 Finger assembly pal placing bar 38-1/2
- 02-448857 5 Hose only - 5 per finger assembly
- 02-452329 1 Cradle assembly - RH pallet moving
- 02-452330 1 Cradle assembly - LH pallet moving

Superpac (V5) 42-5/8" x 26" Pallet

- 02-485349 2 Finger assembly - V5/V6-26D
- 02-485448 5 Hose only - 5 per finger assembly
- 02-485435 1 Cradle assembly pallet support - RH
- 02-485436 1 Cradle assembly pallet support - LH

Superpac (V6) 52" x 18-1/2" Pallet

- 02-386148 2 Finger assembly
- 02-386150 5 Hose only - 5 per assembly
- 02-386152 1 Cradle for pallet support - RH
- 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

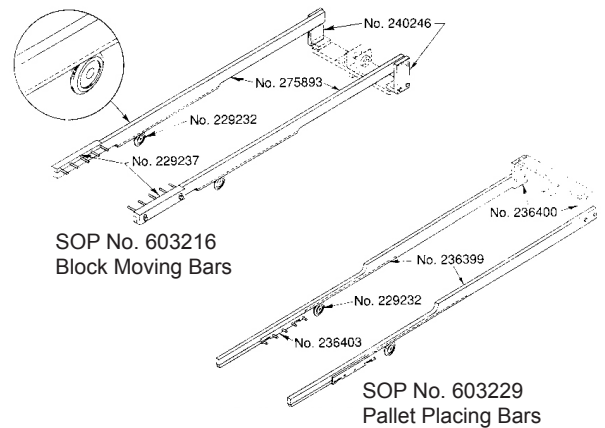
Includes the following parts:

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
02-603229	SOP Pallet placing bars with removable sections and Vee Guide Rollers - V3R No. 882 and up

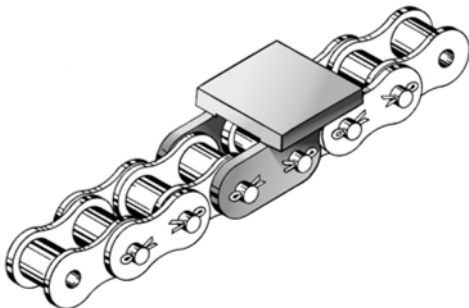
Includes the following parts:

02-229232	Vee roller (2 req'd)
02-236399	Pallet placing bar (2 req'd)
02-236400	Plate (2 req'd)
02-236403	Insert (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.

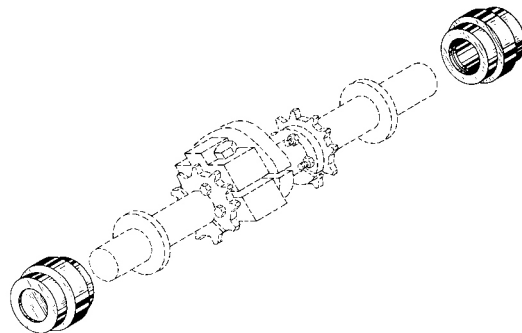


Part Number	Description
02-290170	Deluxe lug link assembly (includes 02-019795)
02-497628	Chain tool assembly
02-295725	Lug link with chain section
02-019795	Lug link pin - 3/8" x 2-1/16" L
02-320487	Chain assembly with deluxe link for Dynapac
02-290581	Chain assembly with deluxe link for V3-12
02-290582	Chain assembly with deluxe link for V3R-two stop
02-301808	Chain assembly with deluxe link for V3R-continuous cycle
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)

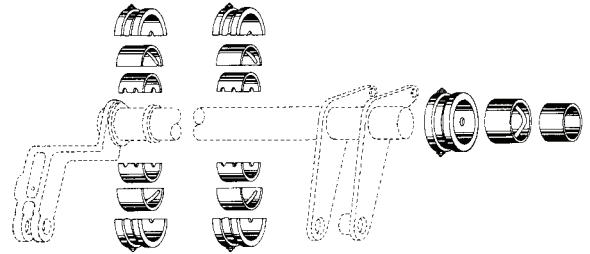


SOP to Install Sleeves on Main Shafts - V3-12

Part Number	Qty	Description
02-648370	1	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)		
02-077179	1	Solid steel sleeve 6" OD
02-244827	1	Solid bearing housing 6" bore (includes 02-244212 bushing)
Cam Shaft Extension - LH (instruction drawing 02-472949)		
02-366750	1	Solid steel sleeve 6-1/2" OD
02-366525	1	Solid bearing assembly 6-1/2" bore (includes 02-366522 bushing)

Bearings and Nylon Bushings for 5" Main Shafting

Description	5" Shaft (No Sleeve) Part Number	5" Shaft (With Sleeve) 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 Shaft - 5" Diameter		Qty
02-244827	Solid bearing - 8" OD x 6" B x 4" L	2
02-077177	Housing	
02-244212	Bushing	
02-077179	Sleeve	
02-244828	Split Bearing - 8" OD x 6" B x 4" L	1
02-076770	Housing	
02-244213	Bushing	
02-076771	Sleeve	
Feed Arm Shaft - 6" Diameter		Qty
02-366525	Solid Bearing - 8" OD x 6.5" B x 4" L	2
02-366524	Housing	
02-366522	Bushing	
02-366750	Sleeve	
02-366490	Split bearing - 8" OD x 6.5" B x 4" L	1
02-366488	Housing	
02-366489	Bushing	
02-315600	Sleeve	
Pallet Receiver Shaft - 5" Diameter		Qty
02-244827	Solid Bearing - 8" OD x 6" B x 4" L	1
02-077177	Housing	
02-244212	Bushing	
02-077179	Sleeve	
02-244828	Split bearing - 8" OD x 6" B x 4" L	2
02-076770	Housing	
02-244213	Bushing	
02-076771	Sleeve	

Stripper Head Shaft - 5" Diameter		Qty
02-244827	Solid Bearing - 8" OD x 6" B x 4" L	1
02-077177	Housing	
02-244212	Bushing	
02-077179	Sleeve	
02-244828	Split Bearing - 8" OD x 6" B x 4" L	2
02-076770	Housing	
02-244213	Bushing	
02-076771	Sleeve	
Pallet Moving Shaft - 5" Diameter		Qty
02-244827	Solid Bearing - 8" OD x 6" B x 4" L	2
02-077177	Housing	
02-244212	Bushing	
02-077179	Sleeve	
02-244828	Split Bearing - 8" OD x 6" B x 4" L	1
02-076770	Housing	
02-244213	Bushing	
02-076771	Sleeve	
Pallet Lowering Shaft - 4" Diameter		Qty
02-244825	Solid Bearing - 8" OD x 5" B x 4" L	2
02-003063	Housing	
02-244214	Bushing	
02-210094	Sleeve	
02-244826	Split Bearing - 8" OD x 5" B x 4" L	2
02-035850	Housing	
02-244215	Bushing	
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	
	solid sleeves (02-464763)	2
	split sleeves (02-374408)	1
	collar (02-374407)	3
Bearing assembly		
02-324375	Solid bearing assembly solid bushing (02-324376)	2
02-324370	Split bearing assembly split bushing (02-324369)	1
Feed Arm Shaft 6" 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 solid bushing (02-324376)	2
02-324370	Split bearing split bushing (02-324376)	1
Pallet Receiver Shaft 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 solid bushing (02-315176)	2
02-324370	Split bearing split bushing (02-324376)	2
Stripper Head Shaft 6" Diameter		
02-449111	Stripper head shaft - with Trabon	
02-449112	Stripper head shaft - with rollers & pins	
02-449113	Stripper head shaft - with sleeves	
	solid sleeve (02-315176)	2
	split sleeve (02-315177)	2
	collar (02-319671)	1
	collar (02-320432)	1
Bearing assembly		
02-324375	Solid bearing solid bushing (02-324376)	2
02-324370	Split bearing split bushing (02-324369)	2

Pallet Moving Shaft 4" Diameter		Qty
02-388241	Pallet moving shaft old style without sleeves	
Bearing Assembly		
02-253544	Solid bearing solid bushing (02-244216)	1
02-355908	Split bearing split bushing (02-355907)	1
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)	2
	collar (02-351103)	2
Bearing assembly		
02-244827	Solid bearing solid bushing (02-244212)	2
Pallet Raising & Lowering Shaft 4" Diameter		
02-353432	Pallet raising & lowering shaft - with sleeves	
	solid sleeve (02-319599)	2
	collar (02-351103)	2
Bearing assembly		
02-244827	Solid bearing solid bushing (02-244212)	2
Pallet Feeder Drive Shaft - 3-1/2" Diameter		
02-318978	Pallet feeder drive shaft - 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) Garlock seal (02-105102)	2
Pallet Feeder Back Shaft - 3-1/2" Diameter		
02-318981	Pallet feeder back shaft - complete	
02-318980	Pallet feeder back shaft - with sleeves	
	solid sleeve (02-322996)	2
	collar (02-319581)	2
Bearing assembly		
02-319590	Solid bearing assembly Torrington bearing (02-103253) Garlock seal (02-105102)	2

Ultrapac - V4 - 18" and 26" Deep Pallets

Feed Arm Shaft - 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
02-374408	Steel sleeve - split	1
02-374407	Collar	3
Bearing assembly		
02-324375	Solid bearing assembly solid bushing (02-324376) pin (02-292818)	2
02-324370	Split bearing assembly split bushing (02-324369)	1
Pallet Receiver 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
02-389984	Split sleeve - 5-1/4" L	1
02-374407	Collar	2
Bearing assembly		
02-324375	Solid bearing solid bushing (02-324376) pin (02-292818)	2
02-324370	Split Bearing split bushing (02-324369)	2
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	Split sleeves	2
02-320432	Collar	1
02-374407	Collar	1
Bearing assembly		
02-324375	Solid bearing assembly solid bushing (02-324376) pin (02-292818)	2
02-324370	Split bearing assembly split bushing (02-324369)	2

Pallet Moving Shaft - 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
Pallet Raising & Lowering Shaft Assembly - 4" Diameter		
02-439040	Pallet raising & lowering shaft	
02-439039	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

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

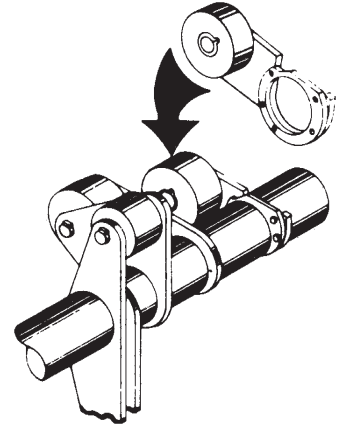
Feed Arm Shaft - 7" Diameter		Qty
02-386093	with Trabon	
02-386094	with rollers	
02-386095	with sleeves	
	solid sleeves (02-464763)	2
	split sleeves (02-374408)	1
	collar (02-374407)	
Bearing assembly		
02-324375	Solid bearing assembly solid bushing (02-324376) pin (02-292818)	2
02-324370	Split bearing assembly split bushing (02-324369)	1
Pallet Receiver Shaft - 7" Diameter		
02-386114	with rollers and pins	
02-386115	with sleeves	
	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
Bearing assembly		
02-324375	Solid bearing assembly solid bushing (02-324376) pin (02-292818)	2
02-324370	Split bearing assembly split bushing (02-324369)	2
Stripper Head Shaft - 7" Diameter		
02-386104	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 Assembly		
02-324375	Solid bearing assembly solid bushing (02-324376) pin (02-292818)	2
02-324370	Split bearing assembly split bushing (02-324369)	2
Pallet Moving Shaft - 5" Diameter		
Pallet 52" W - 6 AAT		
02-388663	with Trabon	
02-388662	with sleeve	
	solid sleeve (02-319599)	2
Bearing Assembly		
02-244827	Solid bearing solid bushing (02-244212) pin (02-292818)	2
Pallet 42" W - 5 AAT		
02-421550	with Trabon	
02-421549	with sleeve	
	solid sleeve (02-319599)	2
Bearing Assembly		
02-244827	Solid bearing solid bushing (02-244212) pin (02-292818)	2

Pallet Raising & Lowering Shaft - 5" Diameter		Qty
Pallet raising & lowering shaft		
02-388673	with Trabon	
02-388672	with sleeves	
	solid sleeve (02-077179)	2
Bearing assembly		
02-244827	Solid bearing assembly solid bushing (02-244212) pin (02-292818)	2
Pallet Feeder Front Shaft Assembly		
Pallet feeder front shaft for 42" W - 5 AAT		
02-486695	with sprockets	
02-486694	with hub & sleeves	
	solid sleeve (02-386193)	2
Bearing assembly		
02-386291	Solid bearing Torrington (02-107960) Garlock seal (02-113991)	2
Pallet feeder front shaft for 52" W - 6 AAT		
02-386286	with sprockets	
02-386287	with hub & sleeves	
	solid sleeve (02-386193)	2
Bearing assembly		
02-386291	Solid bearing Torrington (02-107960) Garlock seal (02-113991)	2
Pallet Feeder Back Shaft - 4" Diameter		
Pallet feeder back shaft		
02-386188	with trunion	
02-386189	with hub and sleeve	
	solid sleeve (02-386193)	2
Bearing assembly		
02-386196	Solid bearing assembly Torrington (02-107960) Garlock seal (02-107958)	2
Cam Shaft Assembly		
02-386009	Cam shaft assembly	
02-386102	Cam shaft only	
Bearings used		
02-104653	Torrington bearing (2, one each end)	
02-104652	Torrington inner race (2, one each end)	
02-104650	Garlock seal (4, two each end)	
02-104651	Torrington bearing (2, center bearing)	
02-104649	Garlock seal (4, center bearing)	
Cam shaft gear		
02-386121	Bull gear	
Pinion Shaft		
02-386039	Pinion shaft bearing assembly (02-374084) bearing (02-109967)	2

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.

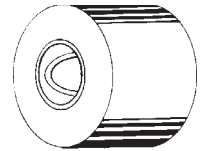
Part Number	Description
02-602205	Removable roller arm for V3R includes the following parts:
02-291904	Collar
02-089699	Socket head cap screw - 1" x 3-1/2" L
02-292082	Removable arm
02-087885	Lock washer - 1"
02-602872	Removable roller arm for V3-12 includes the following parts:
02-291904	Collar
02-292082	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.

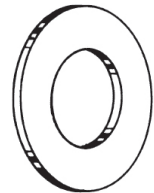
Part Number	Description
02-253731	Roller - 5" OD for feedbox and cam (includes 02-214061 nylon bushing)
02-288001	Roller - 5" OD for feedbox and cam (includes steel bushing)



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.

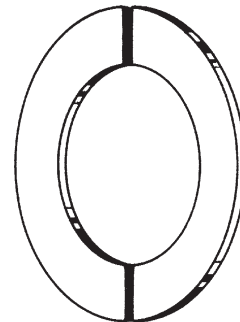
Part Number	Description
02-041444	Spacer - 4" OD x 2" ID x 1/8" thick
02-200859	Spacer - 4-3/4" OD x 2-3/8" ID x 3/16" thick



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	Description
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)

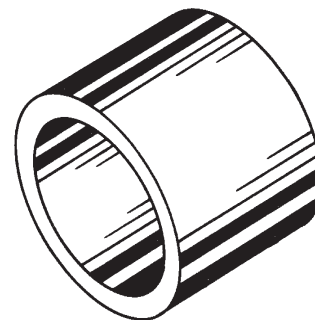


Nylon Bushings

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.

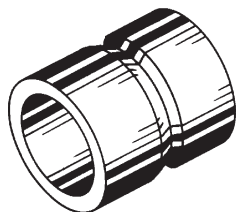
Part Number	Description
02-222234	Nylon bushing - 1-1/2" OD x 1-3/8" L x 1" ID
02-266723	Nylon bushing - 1-1/2" OD x 1-1/2" L x 1" ID
02-222233	Nylon bushing - 1-1/2" OD x 2" L x 1" ID
02-282124	Nylon bushing - 1-15/16" OD x 1" L x 1-7/16" ID
02-226498	Nylon bushing - 1-15/16" OD x 2" L x 1-17/16" ID
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

Part Number	Description
02-019349	1-7/16" x 3-1/2" L
02-017510	1-7/16" x 5" L
02-019348	1-7/16" x 5-1/2" L
02-004151	1-15/16" x 4-1/2" L
02-004098	1-15/16" x 5" L
02-004125	1-15/16" x 5-1/4" L
02-010384	1-15/16" x 5-3/4" L
02-023998	1-15/16" x 6-1/4" L
02-017308	1-15/16" x 6-3/4" L
02-018496	1-15/16" x 9-1/4" L

Plain Pin

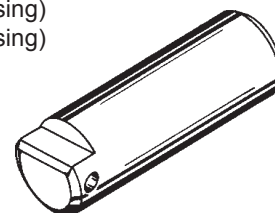
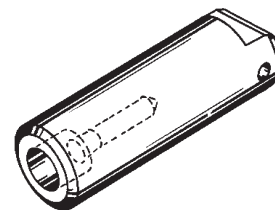
Part Number	Description
02-017232	1" x 7-1/4" L

Notched Pins with Grease Fitting in Plain End

Part Number	Description
02-028902	1-15/16" x 5-3/4" L
02-044103	1-15/16" x 4-1/2" L
02-222720	1-15/16" x 7-1/4" L

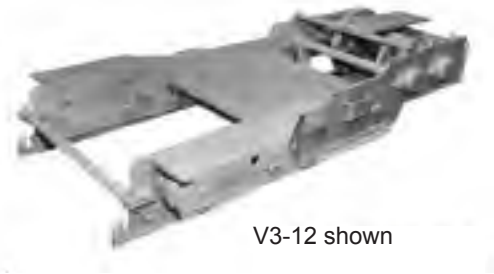
Notched Pins with Grease Fitting in Notched End

Part Number	Description
02-025615	1-15/16" x 6-3/4" L
02-029257	1-15/16" x 8-1/4" L (old style - one port greasing)
02-029258	1-15/16" x 8-1/4" L (old style - one port greasing)
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)



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.



V3-12 shown

Part Number	Description
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

Part Number	Description
02-391190	Feedbox assembly - 29" W with front liners and wear shoes (Dynapac)
02-391191	Feedbox assembly - 29" W with clamp type agitator grid bars with front and rear wear liners and wear shoes (Dynapac)
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	Description
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)

Besser Feedbox Assemblies for Superpac and V5

Part Number	Description
02-386227	Basic feedbox assembly
02-401437	Basic feedbox assembly with Trabon system
02-421504	45" W basic feedbox assembly

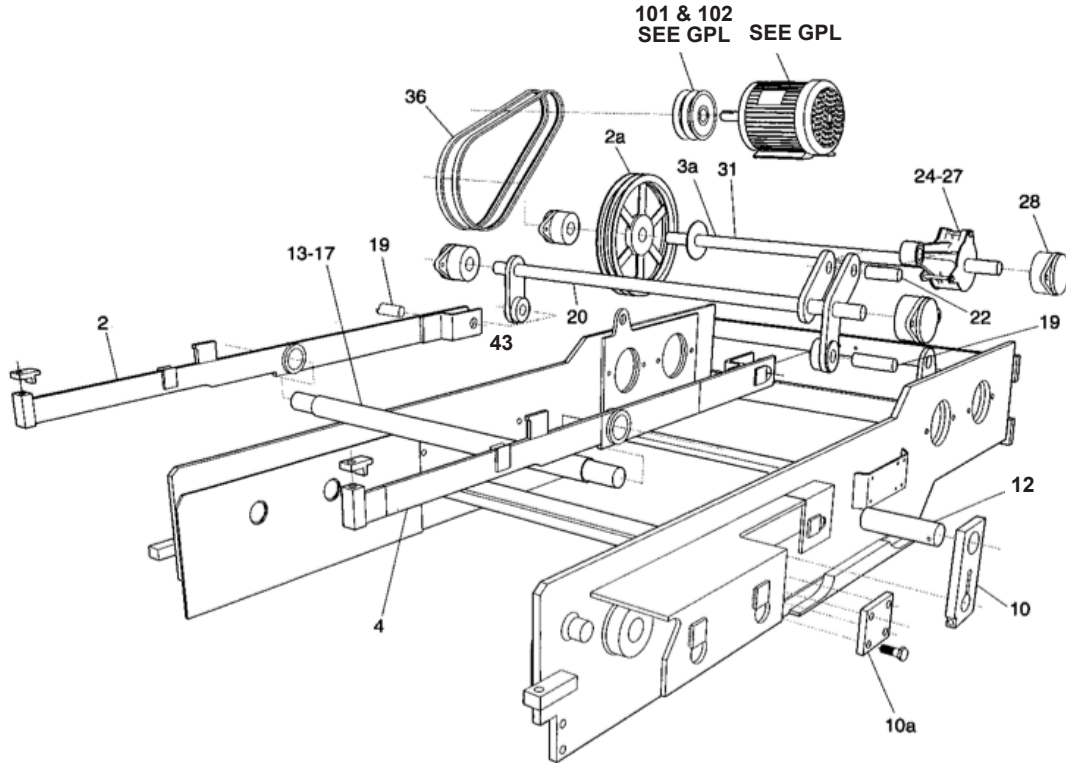
Feedbox Wear Parts Overhaul Kit

Part Number	Description
02-648346	V3-12 Vibrapac feedbox wear parts overhaul kit (see page 81)
02-648359	Dynapac feedbox wear parts overhaul kit
02-648374	Ultrapac or Autopac feedbox wear parts overhaul kit
02-607104	SOP to install feedbox wear shoes for V3R and V3-12

Contact your Besser representative or the customer service department by phone at +1.989.354.1000

Vibrapac Feedbox 02-287555

All parts 29" with clamp type agitator



Nylon Bushings for V3-12 and Dynapac Feedboxes

Front Pin - Key 7 - 02-306598 - 8.25 L

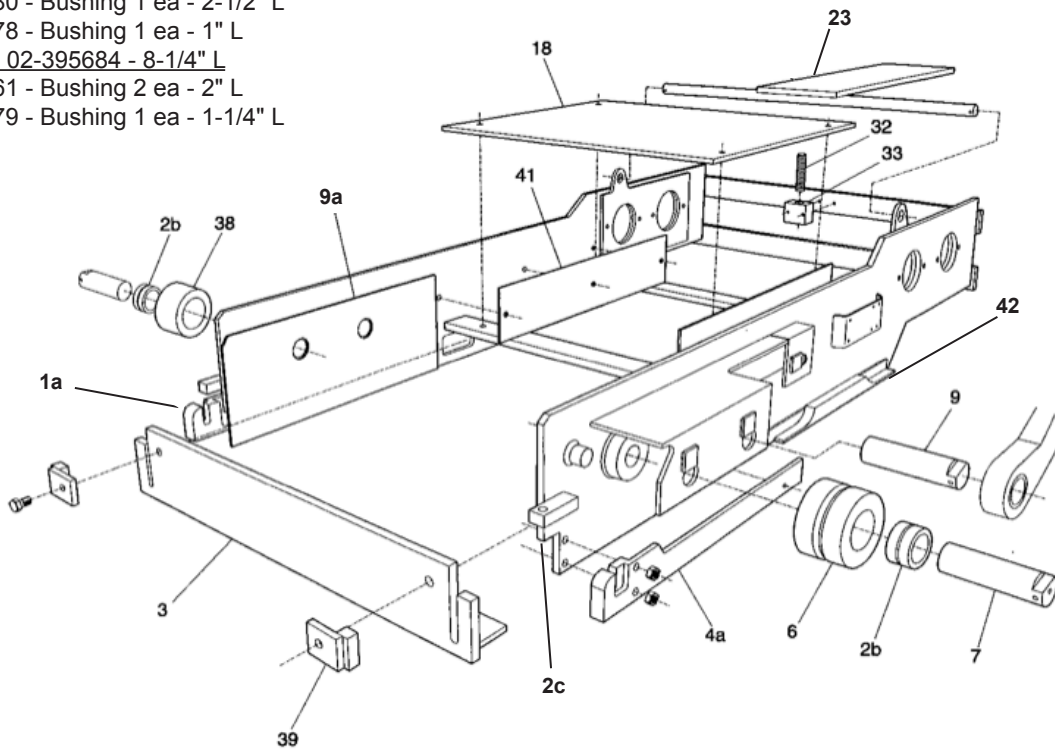
02-497280 - Bushing 1 ea - 2-1/2" L

02-497278 - Bushing 1 ea - 1" L

Back Pin - Key 9 - 02-395684 - 8-1/4" L

02-214061 - Bushing 2 ea - 2" L

02-497279 - Bushing 1 ea - 1-1/4" L



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

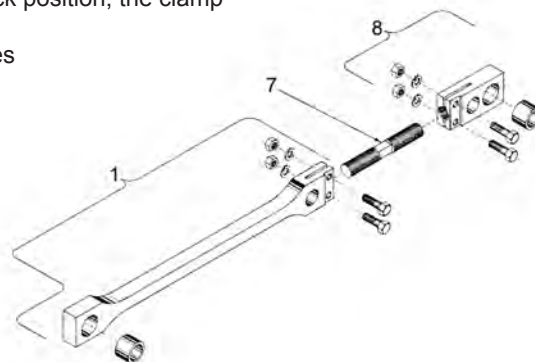
Key #	Part Number	Qty	Description
Not shown	02-088478	4	5/8" - 11 x 2" slotted flat head machine screw
Not shown	02-088435	2	1/2" -13 x 2-1/4" slotted flat head machine screw
Not shown	02-089672	12	1/2" -13 x 2" slotted flat head machine screw
Not shown	02-088432	4	1/2" - 13 x 1-1/2" slotted flat head 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

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 (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			

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

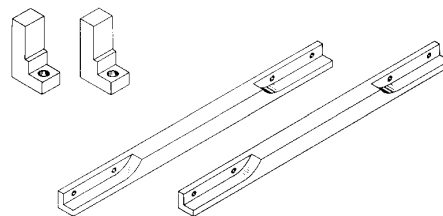
02-640452	Special link ends and rods for V3-12 (keys 1 and 7)
02-374901	Special link end only for V3-12, LH thread (key 1) includes nylon bushing 02-214061
02-388401	Special link end only for V6, LH thread (key 1) includes nylon bushing 02-318126
02-642867	Special link end and rods for Dynapac (keys 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 Description

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"

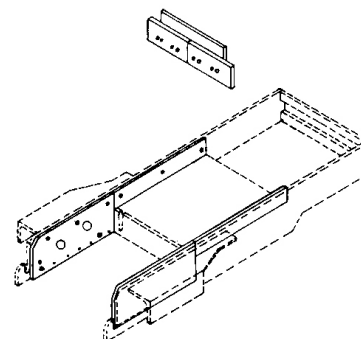


Feedbox 02-287555 Wear Liners

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 Description

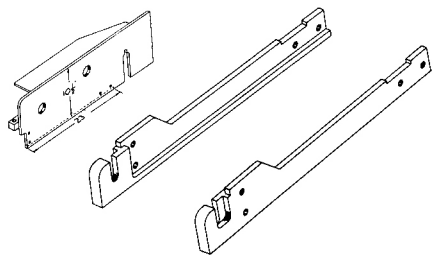
02-639679	Feedbox wear liners with cap screws
02-642128	Feedbox wear liners with three holes for tack welding
02-373597	Hopper loose back plate
02-053101	Rear liner (2 req'd)
02-053100	Front liner (2 req'd)
02-402999	Front liner with holes for tack welding



NOTE: 02-073602, 02-053101 and 02-053100 are included in SOP 02-639679, 02-073602, 02-053101 and 02-402999 are included in SOP 02-642128

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	Description
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

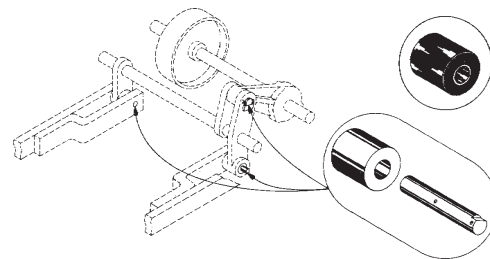
Rubber bushings are molded to exact specifications for peak performance, allowing for continued use of automatic lubrication.

Part Number	Description
02--228148	Rubber bushings (3 req'd)
02-242460	Agitator shaft only

Nylon Bushings for Agitator Back Shafts

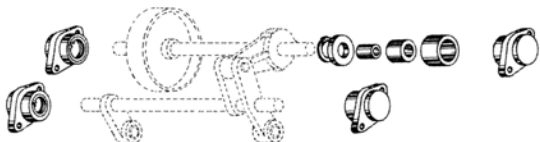
Nylon bushings and steel pins are designed to give longer life at three points on the agitator back shaft. Nylon bushings require periodic manual lubrication and are interchangeable with the rubber bushings listed above.

Part Number	Description
02-609311	Nylon bushing and steel notched pins
02-344146	Pin 5" L (spare)
02-344147	Pin 5-1/2" L (spare)
02-344143	Nylon bushing only (spare)



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	Bushing and closure for above bearing

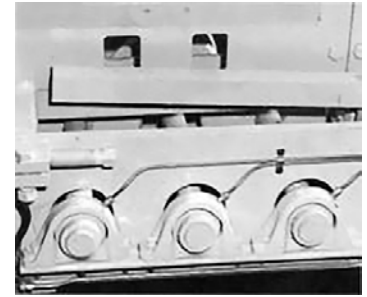
V3-12 Agitator Motor Support with Bushing

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.

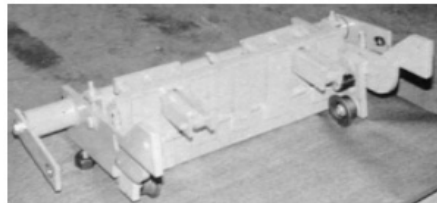
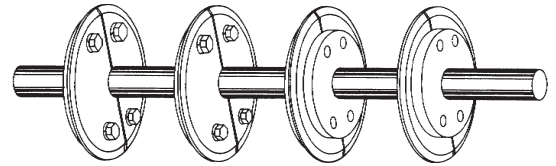


<u>Part Number</u>	<u>Description</u>
02-639792	Adjustable magazine shaft assembly with solid one piece roller
02-639791	Adjustable magazine shaft assembly with two piece replaceable roller sections

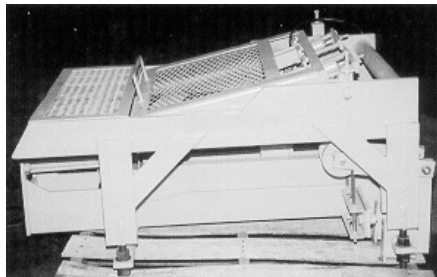
Anvil Shaft with Replaceable Rollers

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

<u>Part Number</u>	<u>Description</u>
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.

<u>Part Number</u>	<u>Description</u>
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.

Motorized Block Finishing Brush

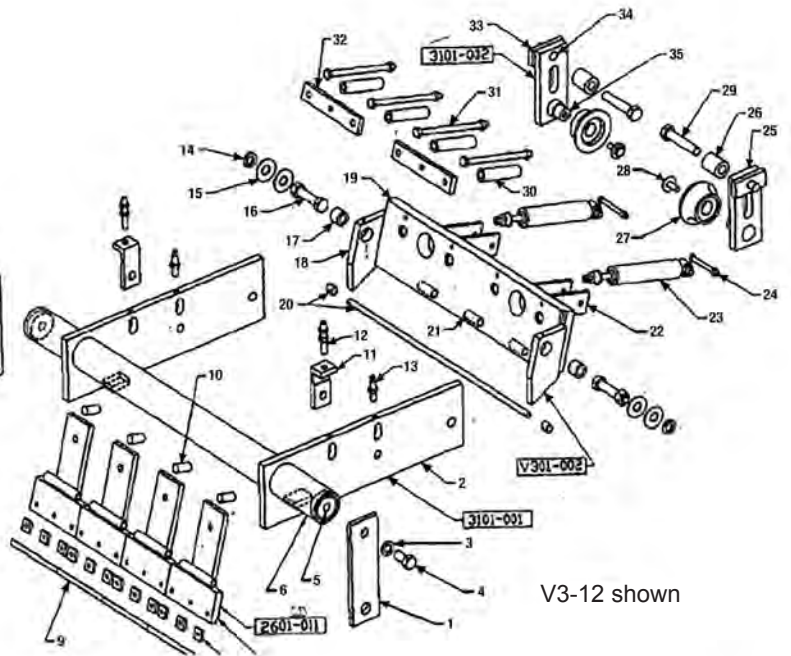
This motorized block finishing brush sweeps crumbs from the tops of green block. The complete brush assembly is bolted to the mold throat extensions where it will not interfere with mold adjustments or changes. It can also be mounted on the front delivery conveyor of Besser-Matics. Two styles of brushes 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	Description
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 & 02-087860	2	Set screw, square head & nut
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 & 02-087879 & 02-087803	2	Bolt/nut shock anchoring
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



V3-12 shown

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 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

02-114997
Pump for Ultrapac

02-115653
**Pump for Superpac/
Ultrapac and Dynapac**



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

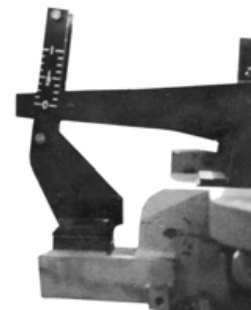
02-090178 EP No. 1 Shell Alvania grease - 120 lb keg

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

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.

Part Number	Description
02-609370	Autofeed indicator and guards for V3R and V3-12



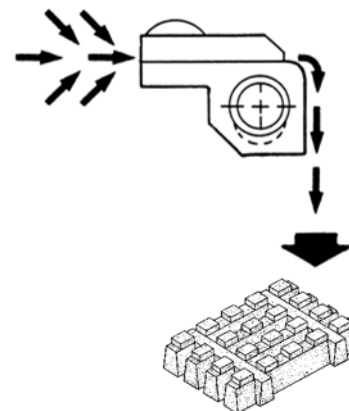
Air Knife

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.

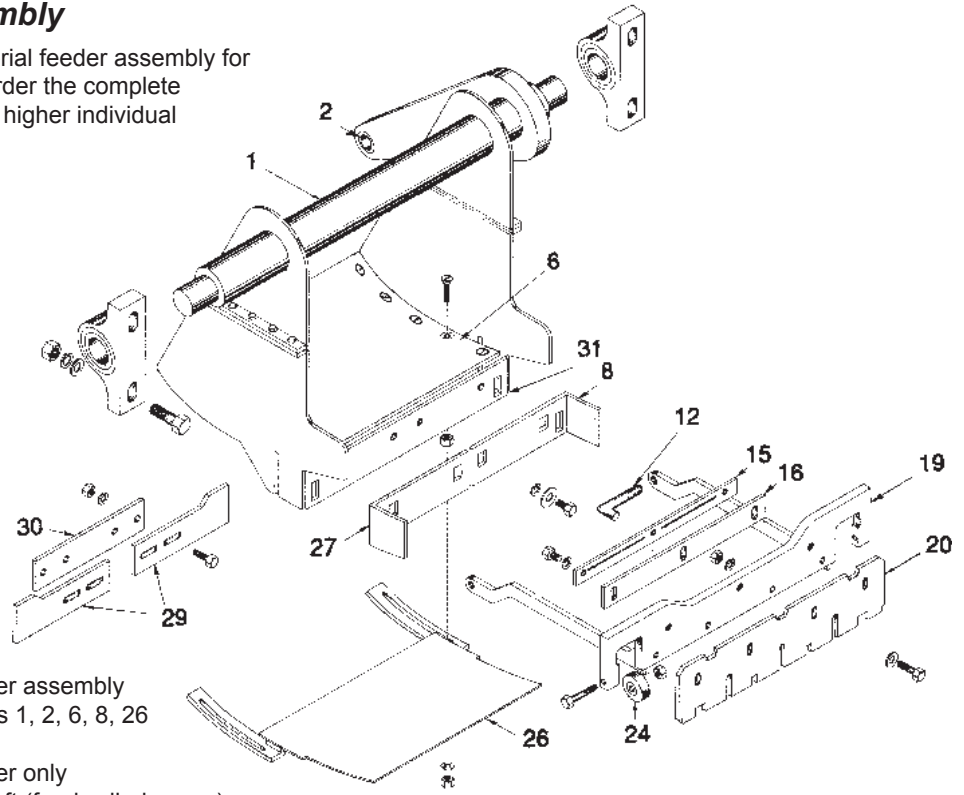
Part Number	Description
02-462423	SOP to add air knife station - Up to 29" W pallet (includes air knife, support, hoses, fittings and filter regulator)
02-114133	Air knife only - up to 29" W pallet
02-468505	37" or 39" W pallet Ultrapac

For other sizes contact your Besser Representative.



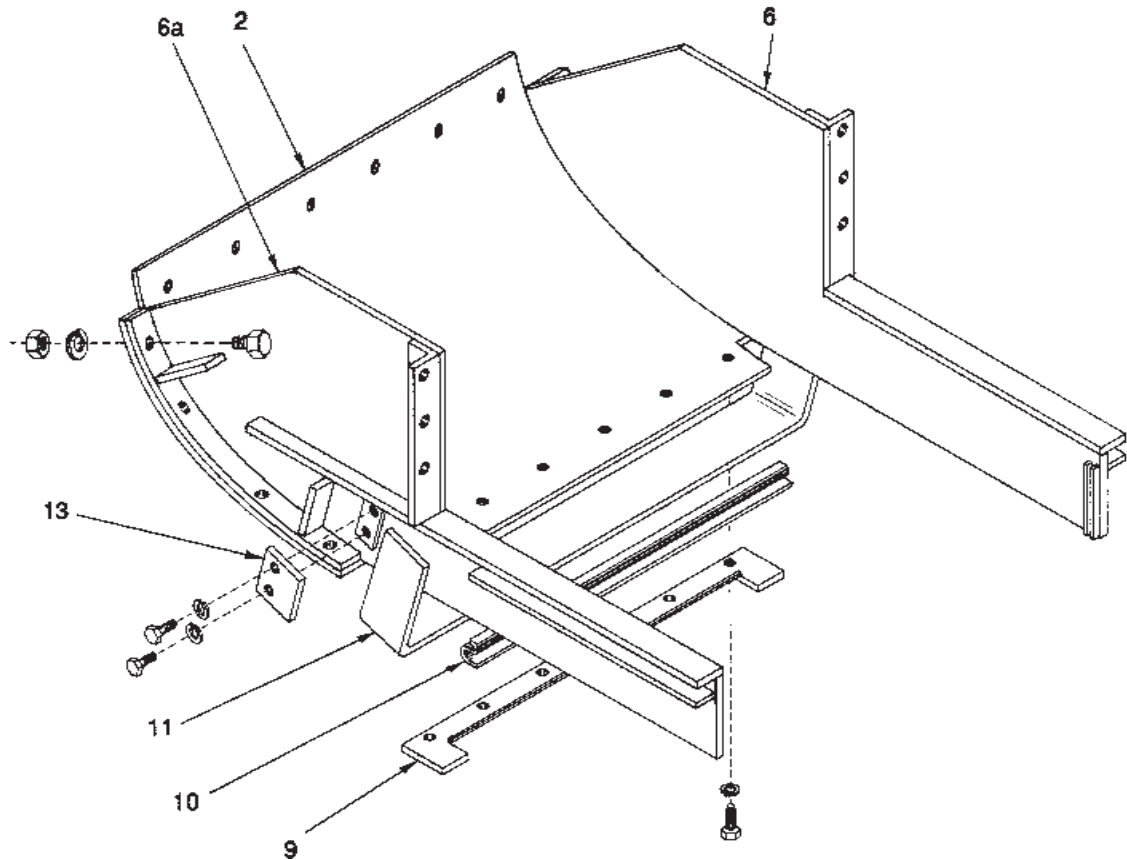
Bescopac Material Feeder Assembly

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.



Key	Part Number	Qty	Description
	02-421583	1	Material feeder assembly (includes keys 1, 2, 6, 8, 26 and 27)
1	02-421582	1	Material feeder only
	02-421580	1	Feed arm shaft (feed cylinder arm)
	02-421581	1	Material feeder (removable lower section)
2	01503-000009	1	Ball bushing
6	02-357276	1	Material feeder bottom
8	02-380996	1	Pusher wear plate - RH
12	02-357267	2	Pin - 3/4" x 6-1/2" L
15	02-358095	1	Retaining plate - 3/8" x 2" x 25" L
16	02-358093	1	Wiper rubber - 3/8" x 3" x 25" L
19	02-373796	1	Strike off frame only
20	02-363752	1	Cut off bar blank
	02-363753	1	Cut off bar - 3-5/8" W
	02-363754	1	Cut off bar - 5-5/8" W
	02-363750	1	Cut off bar - 7-5/8" W
	02-363757	1	Cut off bar - 7-5/8" W (UPT)
	02-363751	1	Cut off bar - 8" W
	02-363755	1	Cut off bar - 9-5/8" W
	02-363756	1	Cut off bar - 11-5/8" W
	02-363758	1	Cut off bar - 11-5/8" W (UPT)
24	01506-000012	2	Camrol
26	02-357262	1	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
30	02-357286	1	Scraper center plate - 3/8" x 4" x 16-1/2" L
31	02-380995	1	Pusher back plate - 1/2" thick x 31-1/8" L

Bescopac Material Retainer Assembly



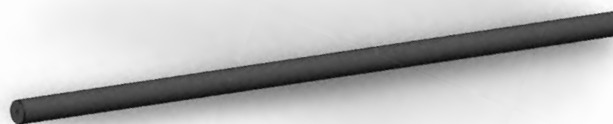
Key	Part Number	Qty	Description
	02-421592	1	Material retainer assembly (includes keys 2, 6, 6a, 9 and 13)
2	02-421586	1	Retainer bottom reversible - 36" L
6	02-421591	1	Material retainer side assembly - RH
6a	02-421590	1	Material retainer side assembly - LH
9	02-360321	1	Retainer plate
10	02-358086	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)

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	Description
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

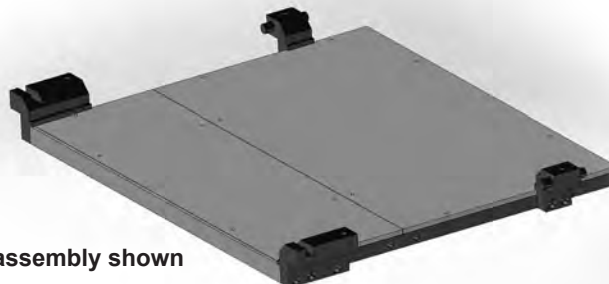
Concrete products plants interested in minimizing maintenance and downtime costs have selected our back apron plates. As much as five times more production life can be gained, even when using the most abrasive aggregates. The Besser back apron plates are furnished with a hardened replaceable wear strip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

3 AAT

Part Number	Description
05-228658 & 05-228657	Two piece
05-228884	Wear strip
05-228657	One piece

4 AAT

Part Number	Description
05-228655 & 05-228654	Two piece
05-228651	Wear strip
05-225993	One piece



Complete assembly shown

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.

Part Number	Description
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
05-224853_0		Back bar guide - LH
05-224854_0		Back bar guide - RH
05-227718 x2		Feedbox bearing for agitator grid
01500-000055	2	1.9375 bearing
01501-500002	2	1.9375 flange bearing
01504-000006	2	1.50 thrust bearing
01506-500004	2	4.50 V-Camrol
01506-500005	4	3.50 Camrol
01507-700001	4	1.377 flange bushing
01508-200001	3	1.438, 2.563, 2.625 bushing
01508-200002	4	1.438, 1.938, 1.75 bushing
01295-500004		Compression spring

3 AAT & 4 AAT Models only

02-101932	2	.50 Bearing
05-227712	2	Feedbox liner - front
05-228837		Wear shoe - RH front
05-228838		Wear shoe - LH front
05-228841	2	Feedbox back wear shoe
05-228842	2	Feedbox scraper block
01508-000088	2	.375 Steel bushing
01508-000055	6	1.00, 1.25, 2.00 bushing
01508-000089	2	1.00, 1.50, 1.00 bushing

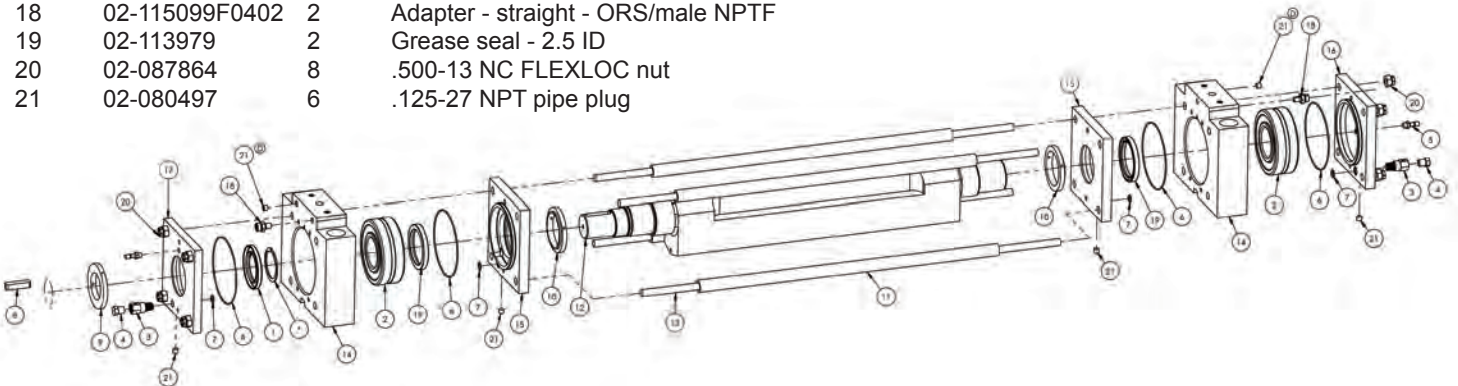
Part Number	Qty	Description
3 AAT only		
05-464278		Feedbox liner - back
4 AAT only		
05-462350_0		Feedbox liner - back
6 AAT		
05-228989	2	Wear shoe, back Servopac
05-232296	4	Bushing - Autofeed arm
05-233008		Wear shoe - rh front
05-233009		Wear shoe - lh front
05-233040	2	Feedbox liner - front
05-465992		Feedbox liner - back
01508-000055		1.00, 1.25, 2.00 bushing
01508-000101	4	16.5mm bushing



Servopac Vibrator Module

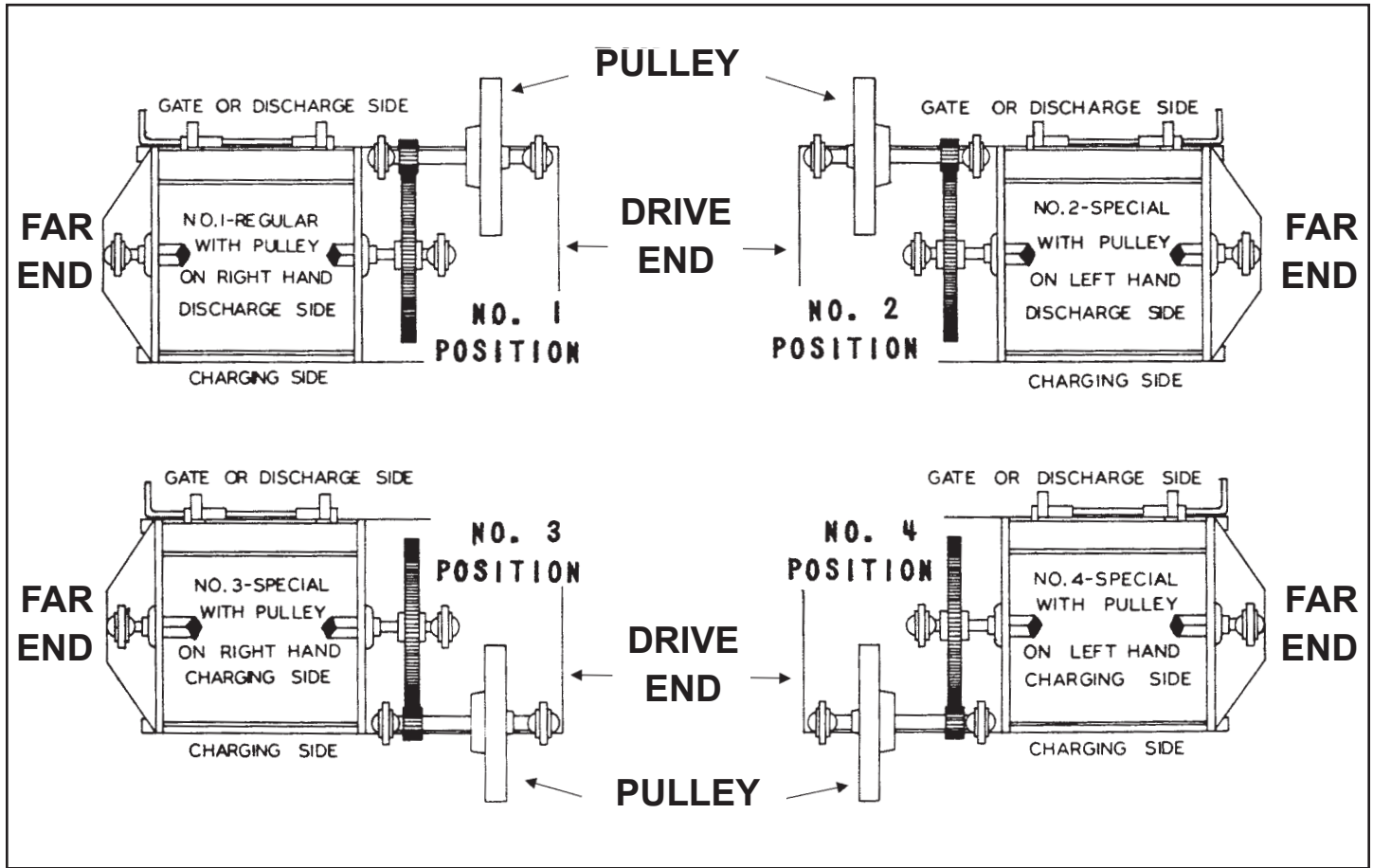
Part Number	Description
05-465674	Shaft assembly

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 orifice - .035 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 rod - .500
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



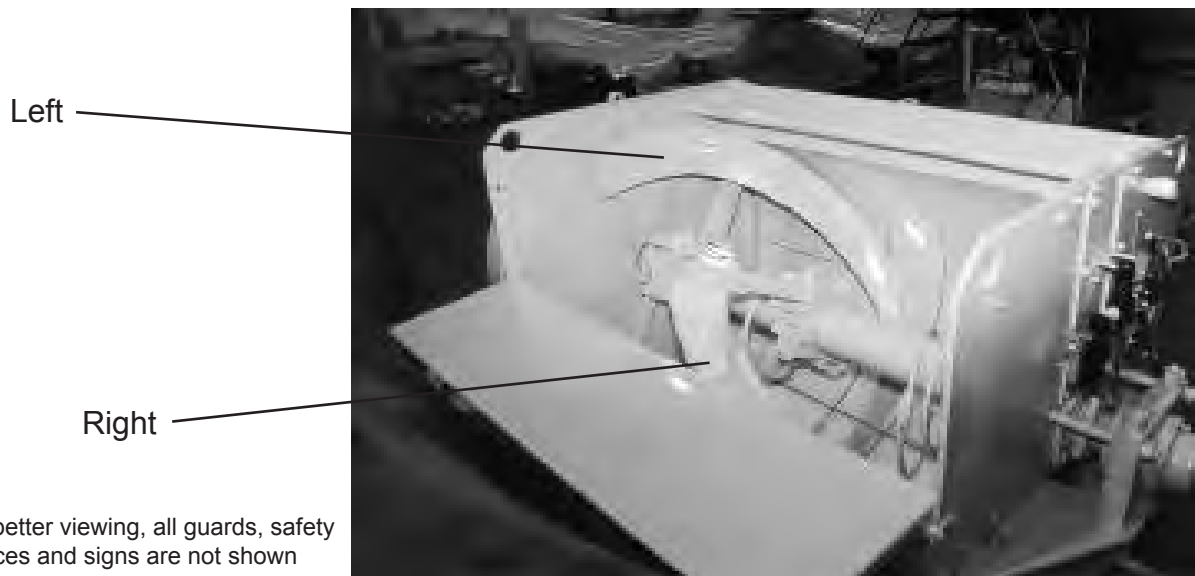
Besser Mixer Drive Positions

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.



For better viewing, all guards, safety devices and signs are not shown

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



Part Number	Qty	Description
02-642931	1	SOP to install Besser standard trough liners in place of moisture probe liners (three liners)

Includes the following parts:

02-002263	1	Besser liner only - 12" L
02-002228	2	Besser 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 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 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
02-642930	1	SOP to install Le Sueur moisture probe trough liner with two probes

Includes the following parts:

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	Description
02-642895	1	SOP to install Le Sueur moisture probe trough liner with two probes

Includes the following 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
02-642929	1	SOP to install Ramsey moisture probe trough liners with one probe each liner

Includes the following 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"



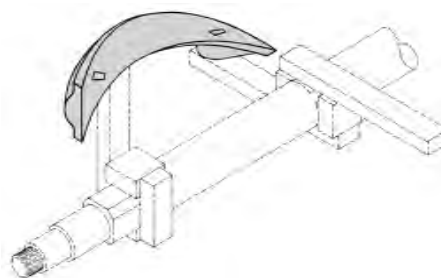
Part Number	Qty	Description
02-642894	1	SOP to install Ramsey moisture probe trough liners with one probe for each liner

Includes the following 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"

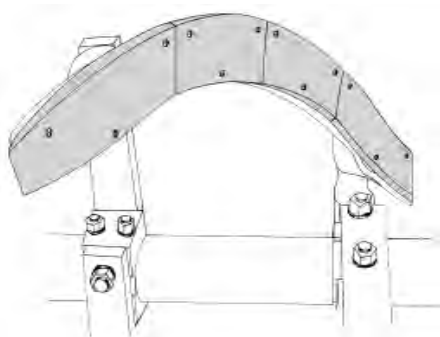
Standard Mixer Blades

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	02-644840	02-644842	02-644846	02-644850	//////////
Standard LH blade	02-644841	02-644843	02-644847	02-644851	//////////
Set of parts for both blades	//////////	02-640594	02-640595	//////////	//////////
Eccentrics	02-229070	02-229070	02-242144	02-305928	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)	////	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

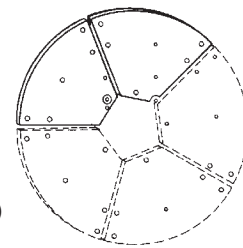
With a combo unit, compressed air is filtered which helps to remove contaminants, regulated to maintain proper air pressure, and lubricated to help prevent internal damage providing longer trouble-free operation of air cylinders, air hoists, etc. Additional sizes and styles are available.

Part Number Description

- 02-358505 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)

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.

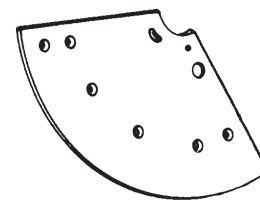


Part Number	Qty	Description
02-618545	1	SOP to install additional liners for full coverage of head (80,100 & 120 cu ft mixers)
Includes the following parts:		
02-344260	2	Head liner - charging side (for 80, 100, & 120 cu ft mixers)
02-344261	2	Head liner - top side (for 80, 100, & 120 cu ft mixers)
02-088435	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.

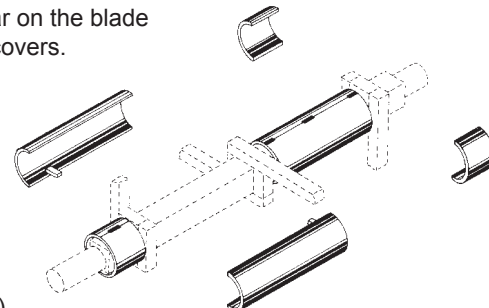
Part Number	Qty	Description
02-310873	4	Head liner for 12 cu ft mixer
02-318839	4	Head liner for 18 cu ft mixer
02-312503	4	Head liner for 25 & 30 cu ft mixers
02-296905	4	Steel head liner for 40, 50 & 60 cu ft mixers
02-295868	4	Steel head liner for 70 cu ft mixer
02-328805	6	Steel head liner for 80, 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 mixers
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
02-490932	2	Special end cover for 50 & 60 cu ft mixers 5" square & 7" round 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
02-497289	2	Center cover for 80,100 & 120 cu ft mixers 8-1/2" diameter shaft, and for 3 & 4 cu yd slump mixers
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
02-497290	4	Blade Shaft Cover for 10 cu yd mixer

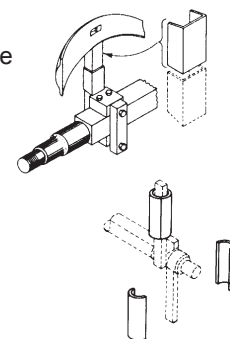


Note: Mixer Blade shaft covers are sold as matched sets

Mixer Blade Arm Covers

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)



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
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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

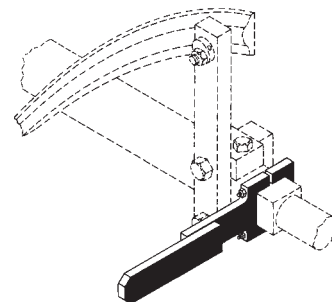
02-482358	Blade arm with slotted mount holes
02-648344	SOP to convert all four standard mixer blade arms to slotted arms (includes blade arms 02-482358)

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
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
02-619021	1	SOP mixer scraper for 6 cu ft slump mixer & 10 slump mixer
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

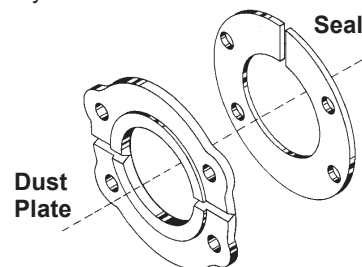


Dust Plates and Rubber Seals (For Semi-Dry Batch Mixers)

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

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
02-045003	Dust hub for 80, 100 & 120 cu ft mixers
02-263278	Retainer plate for 80, 100 & 120 cu ft mixers



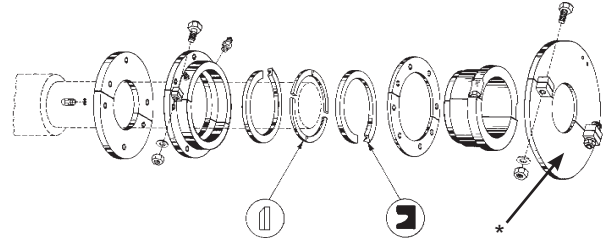
Add Air Purging to Grease Purged Dust Hubs (For Slump Mixers)

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*



*Does not include the collar plate shown

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

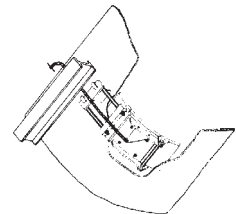
BLOW OUT DISCS

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

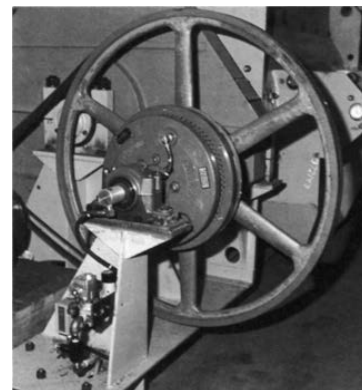
*filter, regulator, lubricator and dump/lockout valve assembly are not included.



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

Convert from 100 cu ft to 120 cu ft mixer

02-282998	Tension straps
02-305614	Reinforced shell
02-642181	Motor

Air requirements = 1.25 cu ft at 60 P.S.I. for each actuation of clutch.

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.

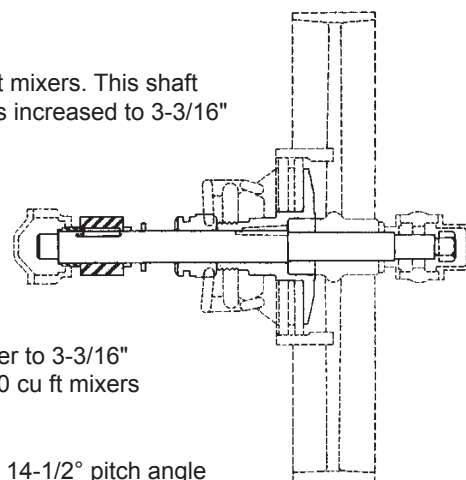
Note: The heavy-duty shaft is also available completely assembled, ready for installation, with pulley, clutch, bearings and related hardware.

Order SOP 02-618033 which includes: a pinion, spacers, keys, hex nut, clutch hub, split sliding collar and closure for gear guard. Installation instructions are included.

Part Number	Description
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 plus 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



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.

<u>Part Number</u>	<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-assembly on 80/100 cu ft mixer. Interchangeable with 02-461410 & 02-490902 oil retainer assemblies only.

<u>Part Number</u>	<u>Description</u>
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.

<u>Part Number</u>	<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

<u>Part Number</u>	<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.

<u>Part Number</u>	<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

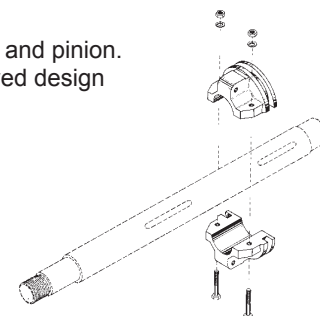


NOTE: BESSER RECOMMENDS REPLACING EXPANDED METAL GUARDS WITH GUARDS CONSTRUCTED OF SHEET METAL.

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.

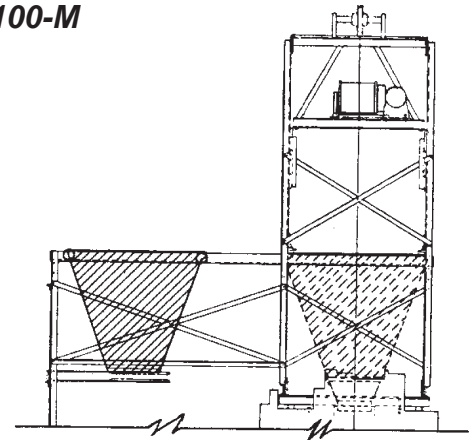
<u>Part Number</u>	<u>Description</u>
02-258458	Split sliding clutch collar - 2-15/16" bore
02-292027	Clutch collar - 3-3/16" bore
02-001180	Split clutch band



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.

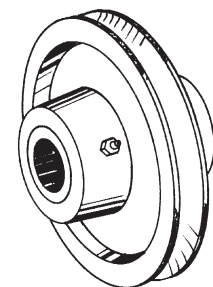


Part Number Description

- 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 req'd)

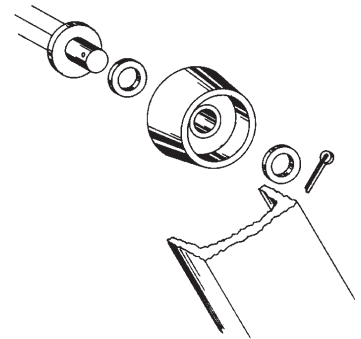
Sheave with High Capacity Bearing

Part Number Description

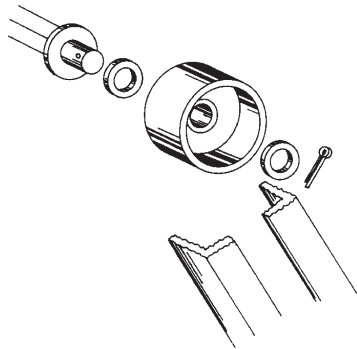
- 02-648368 SOP to upgrade SL-120/160 skip loader top sheave with high capacity bearing. Requires rework on existing sheave 02-458887.
- 02-485535 Sheave with high capacity bearing to replace sheave sub-assembly 02-458887

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.

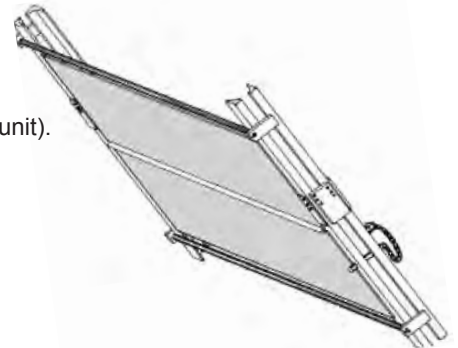
Safety Guards and Safety Stops

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)

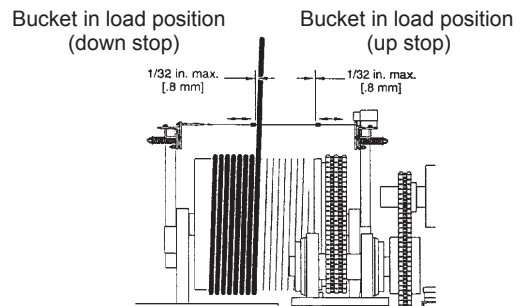


Skip Loader Cable Limit Switch

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	Description
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.

<u>Part Number</u>	<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)

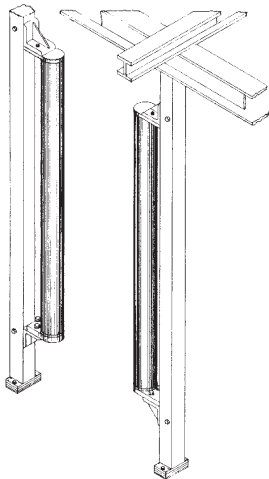
Multi-Spade Besser-Matic Barrier Gates

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.

<u>Part Number</u>	<u>Description</u>
02-645599	SOP to install safety gate on loader and unloader accumulator (one SOP required per Multi-Spade Besser-Matic)



**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.

<u>Part Number</u>	<u>Description</u>
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.



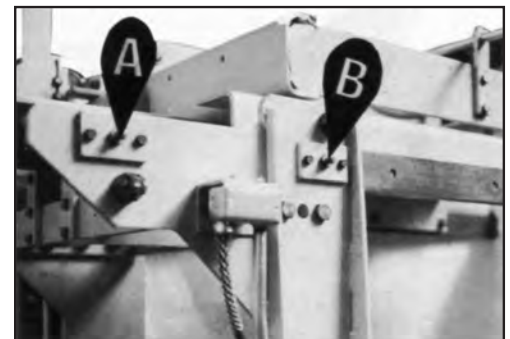
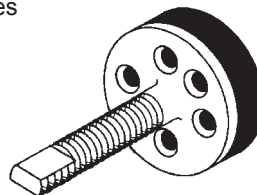
<u>Part Number</u>	<u>Description</u>
02-646065	SOP to add positive stop to front delivery conveyor
02-113221	Shock absorber with nut (2 req'd)

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.

<u>Part Number</u>	<u>Description</u>
02-631224	Nylon carriage guides
02-266991	Nylon guides (for replacement)



Replacement Warner Brakes

Fail Safe Warner Brake with Power Supply

<u>Part Number</u>	<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

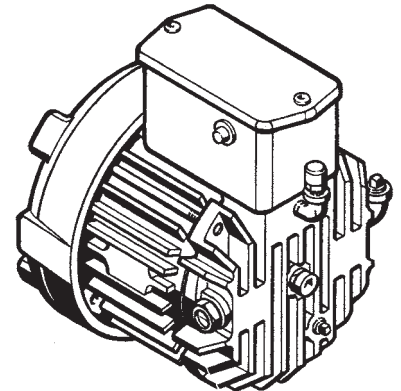
<u>Part Number</u>	<u>Description</u>
02-113881	Brake assembly for loader/unloader transfer motor without power supply - (use with frequency drives) 5/8" diameter motor shaft (10.5 ft lb)
02-115012	Brake assembly for loader/unloader stacker motor (3 AAT - Standard height) - 5/8" diameter motor shaft (21.0 ft lb) EUM-100
02-115013	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
02-114099	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 Warner Brake

<u>Part Number</u>	<u>Description</u>
02-112142	EM-50 non-fail safe Warner brake (for turn and transfer motors)

Power Supply

<u>Part Number</u>	<u>Description</u>
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



Brake Accessories

<u>Part Number</u>	<u>Description</u>
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

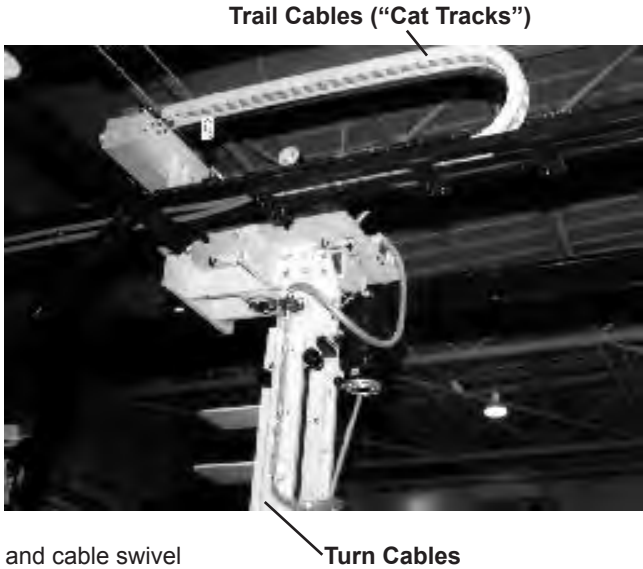
<u>Application</u>	<u>Warner Part #</u>	<u>Besser *SOP #</u>	<u>Rebuild Kit Part #</u>
Turn, transfer, conveyors, rollover 5/8" shaft diameter	02-115014 02-113881	02-648224	02-115332F0002
MS-10 (3 AAT) accumulator 5/8" shaft diameter	02-115012	02-648225	02-115332F0002
MS-10 (3 AAT) accumulator 7/8" shaft 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

* includes brake, circuit breaker, cable connector and instruction drawing

Sets of Parts to Improve Performance of Existing Multi-Spade Besser-Matics

Part Number Description

02-646049	SOP to replace existing PRS-3 (accumulator full) with pancake proximity sensor
02-645972	SOP to replace existing (two deep) loader/unloader trail 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")
02-645975	SOP to replace existing (six deep) loader/unloader trail cables with cable and hose carriers ("cat tracks")
02-645618	SOP to replace existing RH loader turn cables with sealtite and cable swivel
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 sealtite and cable swivel
02- 645850	SOP to install pallet roller guides to the unloader accumulator
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
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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
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Combo Units

With a combo unit, compressed air is filtered which helps to remove contaminants, 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)
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LSC-40A & C Updates

Part Number	Description
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

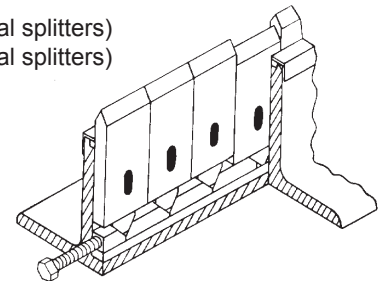
Note: Oversize LSC wheels are available for some models. These wheels are helpful when the kiln rails have worn down. Contact your Besser Sales Representative for additional information.

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)

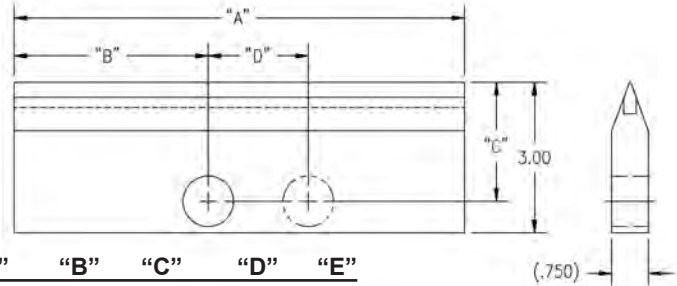


6209, 6386 and S63 Splitter Self-Leveling Blades

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

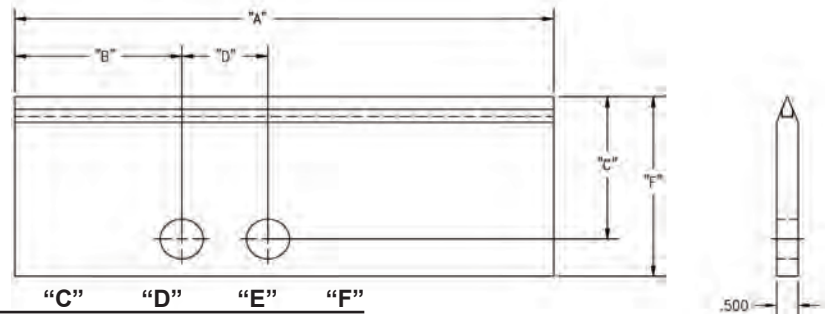


Part Number Non-Carbide Tip	Part Number Carbide Tip	Description	"A"	"B"	"C"	"D"	"E"
05-21725326	05-21978801	Blade (9 inch)	9.00	3.875	2.375	-	1
05-21725302	05-21978802	Blade, lower (13 inch)	13.00	3.875	2.375	2.000	2
05-21725305	05-21978803	Blade, side (4 inch)	2.625	1.312	2.000	-	1
05-21725306	05-21978804	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

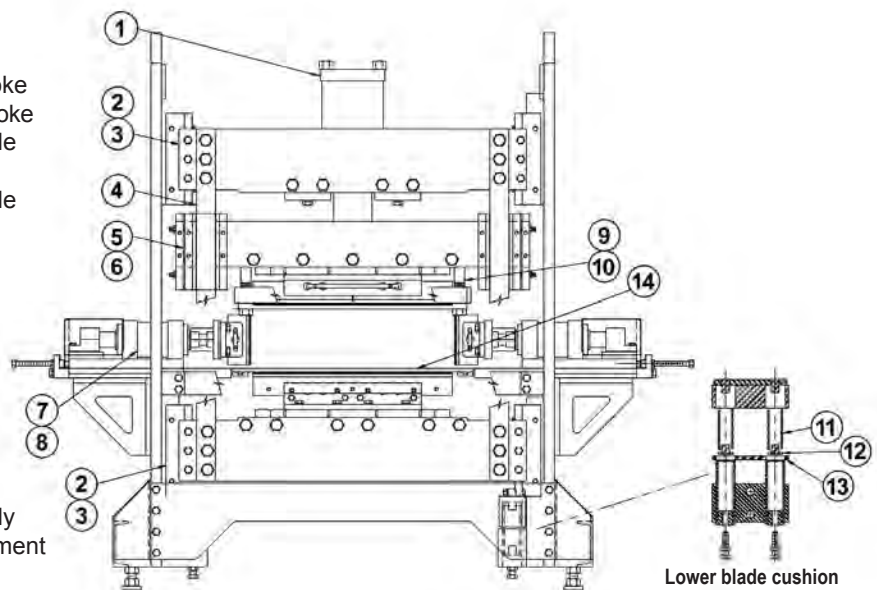


Part Number Carbide Tip	Description	"A"	"B"	"C"	"D"	"E"	"F"
05-220054_0	Blade, side (6")	5"	2-1/2"	3-1/8"	-	1	4"
05-220075_0	Blade, side (8")	6-5/8"	3-5/16"	3-9/16"	-	1	4-1/2"
05-220074_0	Blade, top/bottom	13"	3-7/8"	3-9/16"	2"	2	4-1/2"
05-220267_0	Blade, top/bottom	9"	3-7/8"	3-9/16"	-	1	4-1/2"
05-221644_0	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

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)
4	4	05-217742_0	Vertical tie bar (8 & 12" splitters)
5	8	05-214745_0	Blade carrier gib slide (2 per tie bar)
6	4	05-203258_0	Blade carrier gib slide (1 per tie bar)
7	2	05-100101_0	Side knife cylinder
8	4	01506-000060	Side knife guide roller (2 per side)
9	1	05-502675_0	Block hold down assembly
10	4	05-150615_0	Block hold down replacement spring
11	4	05-150551_0	Cushion spring
12	4	05-203341_0	Spring adjustment plunger
13	2	05-203338_0	Neoprene pad
14	1	05-216369C0	Wear plate, straight split

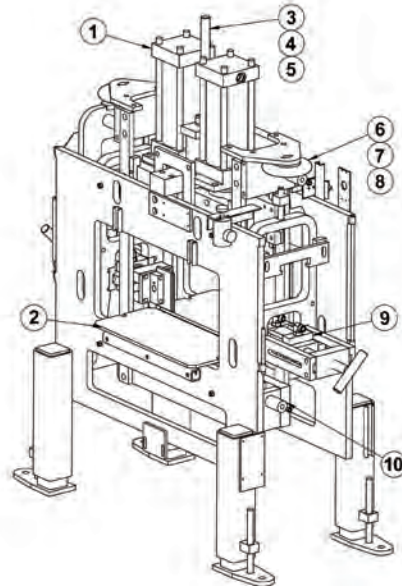


Lower blade cushion assembly - 1 assembly located on each side of the splitter

S63 EZ Block Splitter

Key	Qty	Part Number	Description
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

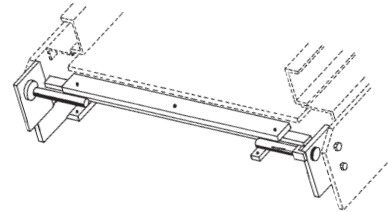
The hydraulic components listed above are Hydroline brand. For machines using Parker brand components, contact your Besser Customer Service Representative.



Flipper Plate

This flipper plate installs between the depalletter 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 depalletter
02-105657	2	Flange plate - replacement
02-334564	1	Wear plate
02-640714	1	Flipper plate - BTO-6 for standard depalletter
02-105657	2	Flange bearing - replacement
02-369658	1	Wear strip - replacement



Bar Conveyor Assembly

Key	Qty	Part Number	Description
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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

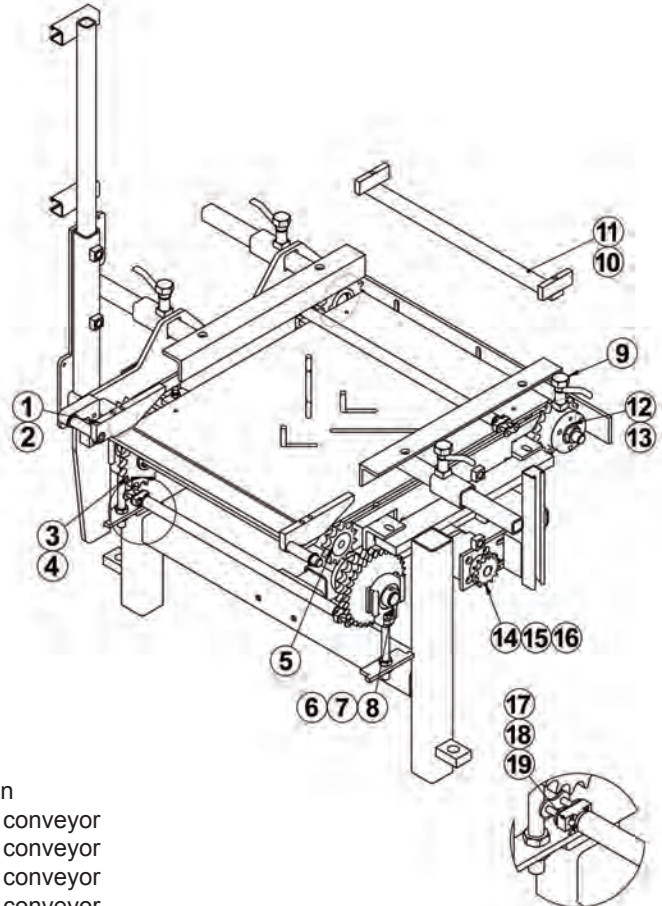
10	1	05-456676_0	Filler plate assembly
11	1	05-214516_0	Replacement wear plate

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

Bar Conveyor Chain and Bar Components

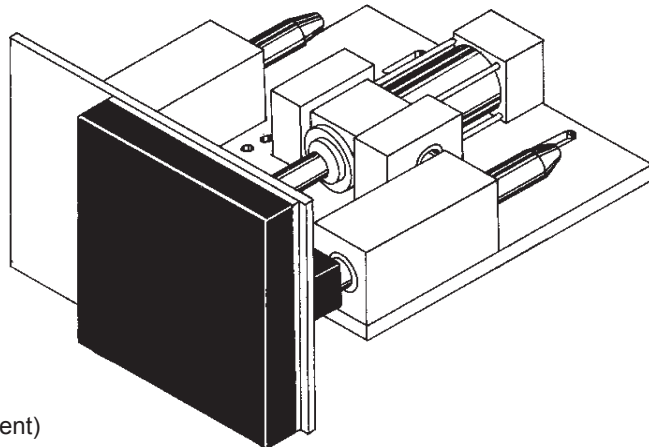
17	2	05-214165_0	Bar conveyor pusher bar
18	4	05-457223_0	Pin and lug assembly, 80 lb chain
19	4	05-456867_0	Chain connecting link, modified, 80 lb chain
		05-456404_0	Preassembled chain and bar - 3 block bar conveyor
		05-456405_0	Preassembled chain and bar - 4 block bar conveyor
		05-456406_0	Preassembled 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

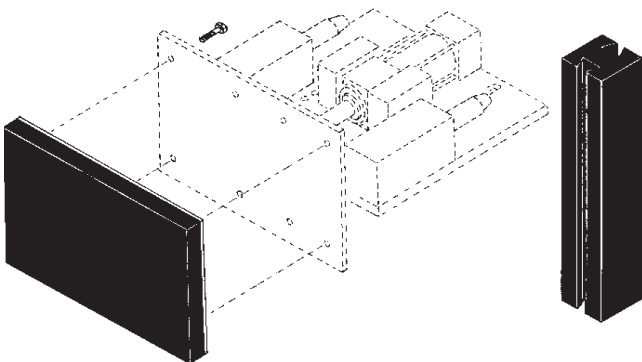
Update your clamp type block turnovers by installing pneumatic air cylinders. The use of pneumatic cylinders is the most popular method used today to effectively clamp block. This SOP is easy to install and is designed to use your present air supply system. The pneumatic clamp assembly SOP includes right 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)

Clamp Pads for Block Turnover

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.

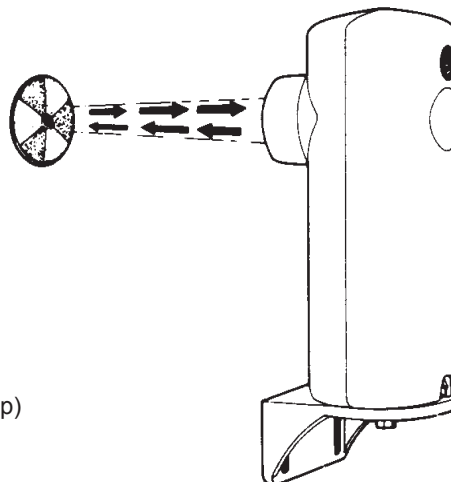


Part Number	Description
02-424906	Rubber faced steel plate clamp pad for 6" block
02-424908	Rubber faced steel plate clamp pad for 8" block (slight modification needed)
02-424910	Rubber faced steel plate clamp pad for 10" block
02-424912	Rubber faced steel plate clamp pad for 12" block
02-107389	Urethane 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)

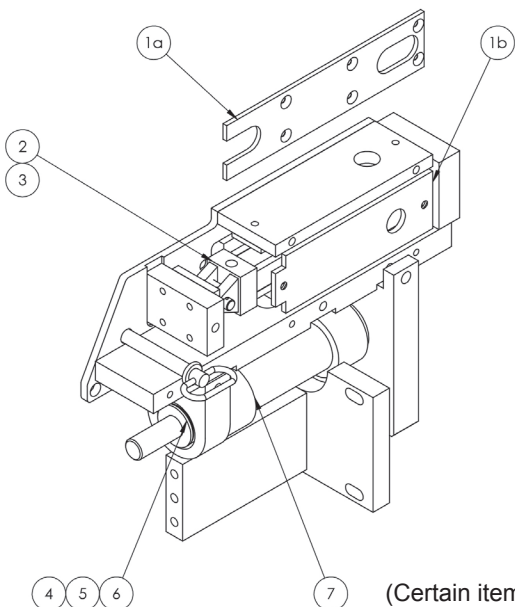
Modulated Photo Switch with Reflector

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 up)



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

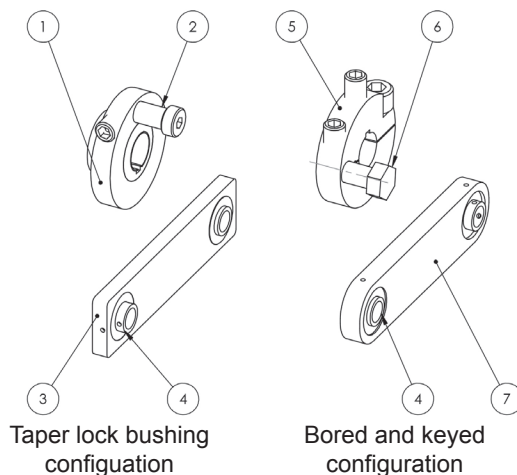
Reference the parts manual specific to your equipment for any items not included in the above list.

(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



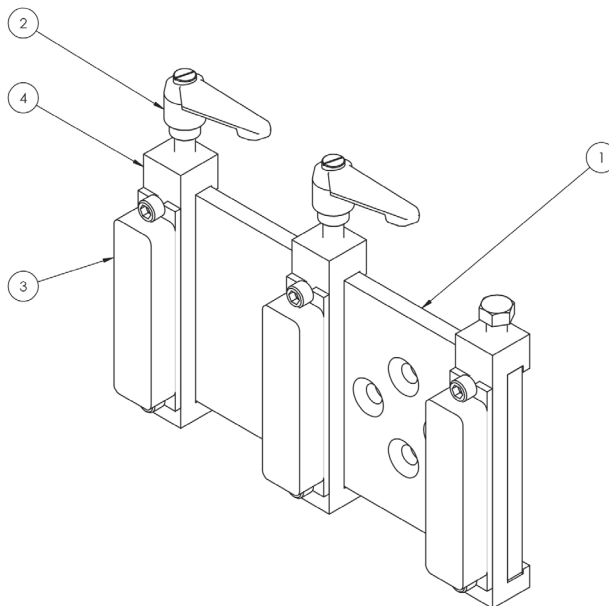
Quick Adjust Turnover Clamp Pads

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

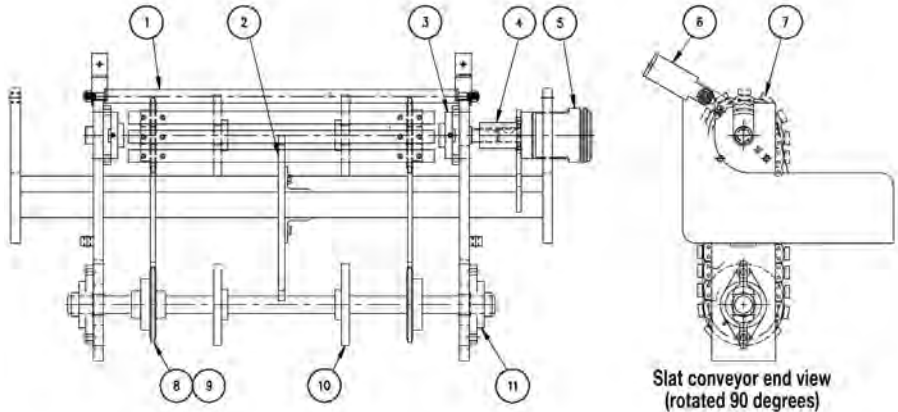
Components can be purchased as complete SOP (SOP includes components for two pad assemblies).

- 05-459413_0 16" or 18" quick adjust clamp pad
- 05-459412_0 24" quick adjust clamp pad



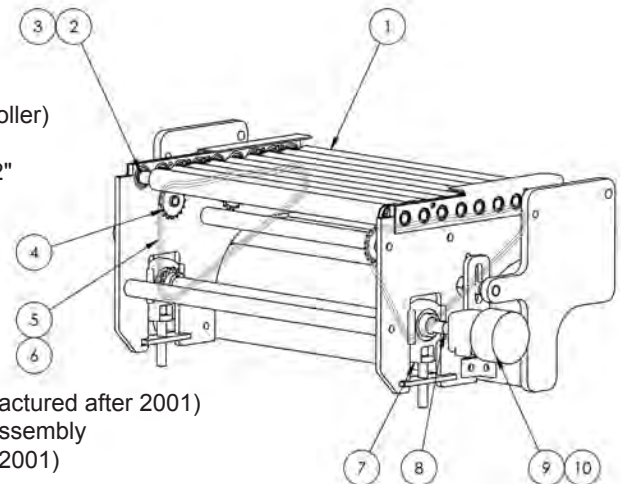
Turnover Discharge Conveyor - Slat Conveyor Configuration

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
		01359-500008	Replacement seal kit
6	2	05-454323_0	Roller adjuster
7	4	05-453937_0	Chain and slat assembly
	29	05-207760_0	Conveyor slat
8	4	05-16056642	Conveyor sprocket
9	2	01592-000026	Set collar
10	4	05-460596_0	Slat support disc
11	2	01501-000058	Two bolt flange bearing



Turnover Discharge Conveyor - Powered Roller Configuration

Key	Qty	Part Number	Description
1	1	05-465032	Idle roller assembly (includes bearings)
2	8	05-465030	Powered roller assembly (includes bearings)
3	1	01502-000033	Replacement roller bearing (bearing only) (2/roller)
4	6	01556-000001	Idler sprocket
5	89	01557-000091	Single strand roller chain, two chains at 44-1/2"
6	2	01557-000067	Spring clip connecting link
7	2	01502-000029	Take up bearing
8	1	01591-000010	Motor coupling
9	1	01330-000009	Hydraulic motor
10	1	01359-500008	Hydraulic motor seal kit
		05-465251	Complete turnover powered discharge roller assembly (this SOP is for models manufactured after 2001)
		05-466115	Complete turnover powered discharge roller assembly (this SOP is for models manufactured prior to 2001)



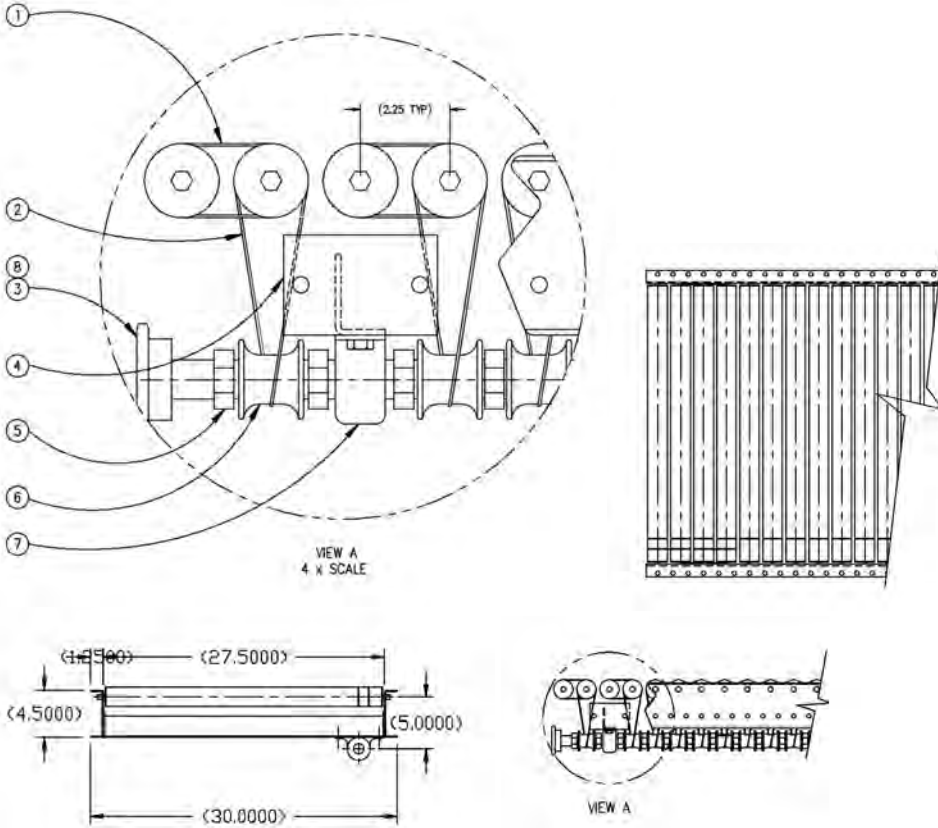
This conveyor assembly can also be retrofitted into older model turnovers to replace the slat style discharge conveyor. The assembly is designed to fit directly in place of the existing slat conveyor frame and reuse the existing hydraulic control valves and hosing.

* Please verify the model and serial number of your turnover before placing an order.

Line Shaft Conveyor Components

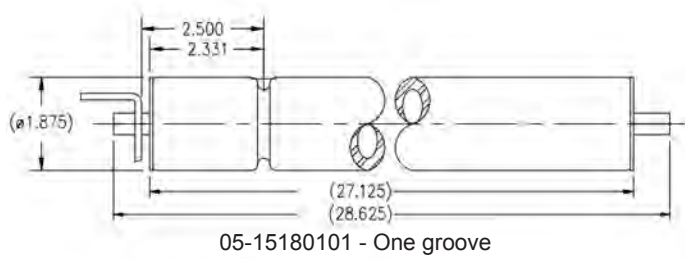
Key	Qty	Part Number	Description
1	1	05-151007_0	Belt, roller to roller
2	1	05-151115_0	Belt, roller to spool, continuous
	1	05-152412_0	Belt, roller to spool, twist lock
3	1	01551-000004	Sprocket
4	1	05-152414_0	Weldment cross member
5	1	05-152410_0	Collar, spool spacer, open type
6	1	05-152105_0	Drive 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

Side Channel Length	Number of Rollers
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

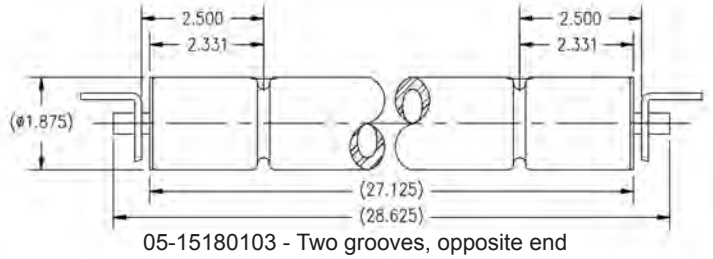


Complete line shaft conveyor assemblies are available. Reference the list above for available lengths. Contact your Besser Representative for more information.

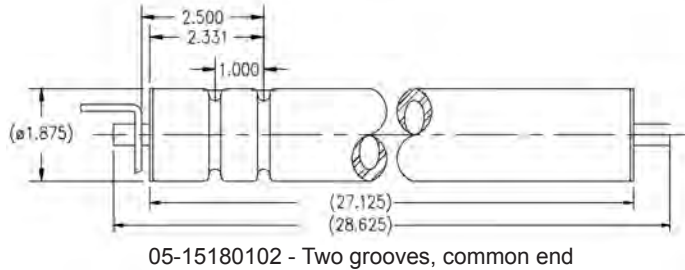
Replacement Line Shaft Conveyor Rollers



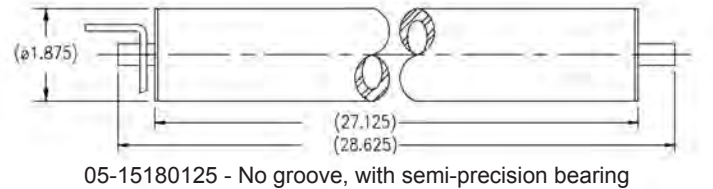
05-15180101 - One groove



05-15180103 - Two grooves, opposite end



05-15180102 - Two grooves, common end



05-15180125 - No groove, with semi-precision bearing

Ask your Besser Customer Service Representative about heavier-duty rollers.

Quick Change Spool Kits

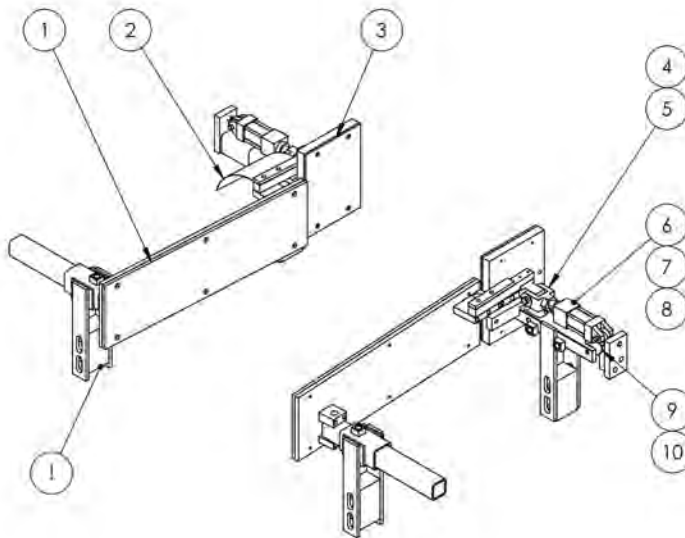
This quick change spool for your lineshaft conveyor was designed to save time when doing maintenance. The quick change spools are two piece units that connect together with two self-tapping screws. This allows you to clamp the new spool around the drive shaft without actually removing it. The replacement 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	Quick change spool kit includes 20 spools and 20 belts
05-152412_0	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

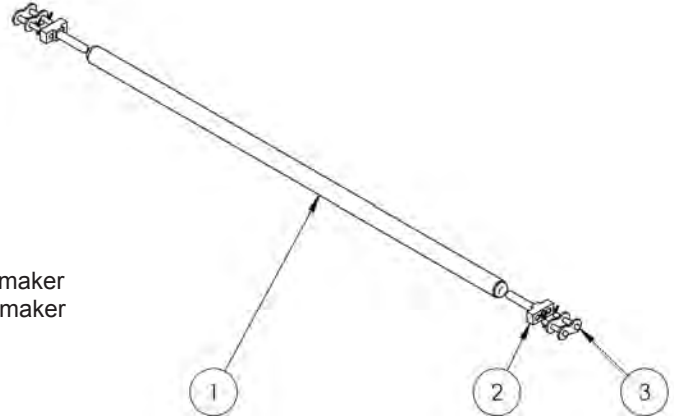
05-504285 This simplified and robust design can be retrofitted onto older model power feed conveyors. Clamping components mount onto the existing frame using existing mounting blocks and are controlled by existing hydraulic valves. (reference diagram on page 112)

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.

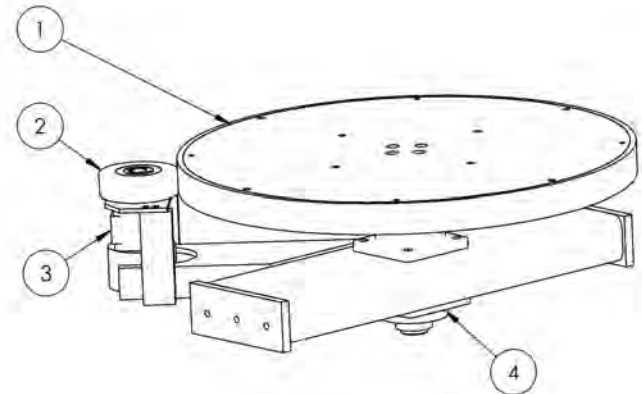
- 05-458248_0 Chain and bar assembly, triple turntable patternmaker
- 05-458895_0 Chain and bar assembly, quad turntable patternmaker



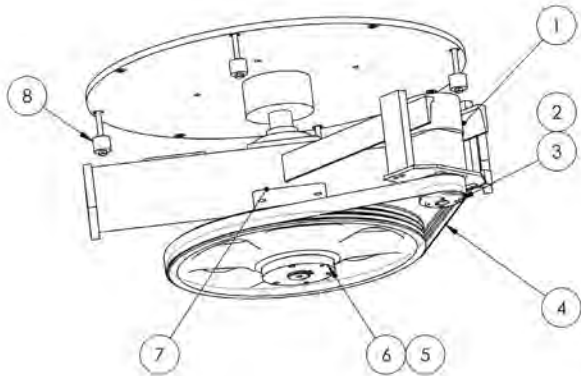
Patternmaker Turntable Assembly (Drive Wheel Configuration)

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

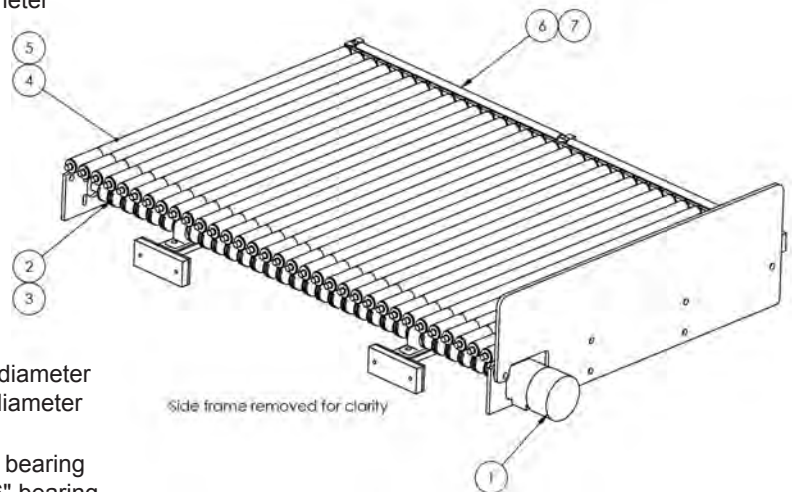
Key	Part Number	Description (Quantities of rollers vary per cuber design)
1	01330-000009	Hydraulic motor
	01359-500008	Hydraulic motor seal kit
2	05-153303_0	Belt drive spool (sold as 1/2 spools - 2 halves = 1 spool)
	05-152105_0	Belt drive spool, "yellow" spool - can substitute for 05-153303_0
3	05-152106_0	Roller drive belt, continuous belt, 8-1/4" long

For cubers with powered 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, 1/2" diameter bearing
	05-458612_0	Cross roller, 54" cuber, 25-1/2" long, 1/2" diameter bearing
	05-458614_0	Cross roller, 64" cuber, 30 1/2" long, 1/2" diameter bearing
	05-453584_0	Cross roller, 64" cuber, 30 3/8" long, 1/2" diameter bearing
	05-CU6583	Cross roller, 54" cuber, 25-3/4" long, 7/16" diameter bearing
	05-CU6786	Cross roller, 64" cuber, 30-3/4" long, 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

For cubers with non-powered side feed rollers:

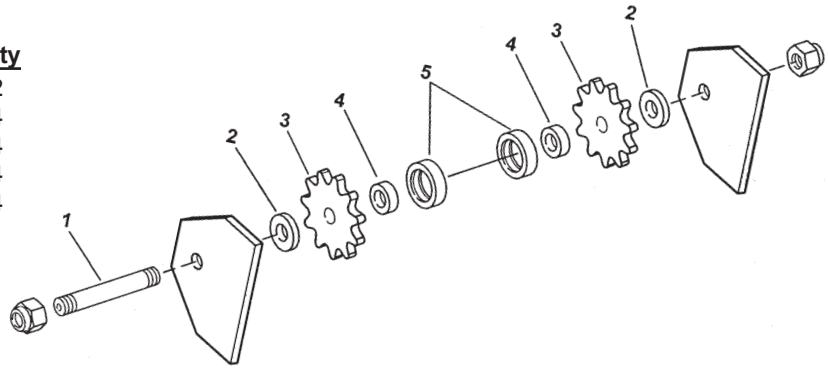
6	05-453313_0	Sidefeed idle roller, 34-3/4" long, 1/2" bearing
	05-CU5049	Sidefeed idle roller, 34-3/4" long, 7/16" bearing



Chain Lift Assembly for Besser Cubers Using Crossover Elevator Leveling Chains

Part No. 05-453324_0 (includes the following)

Key	Part Number	Description	Qty
1	05-206469_0	Shaft	2
2	05-300226_0	Bronze spacer	4
3	05-205611_0	Sprocket	4
4	05-150970_0	Inner race	4
5	05-150971_0	Needle bearing cup	4

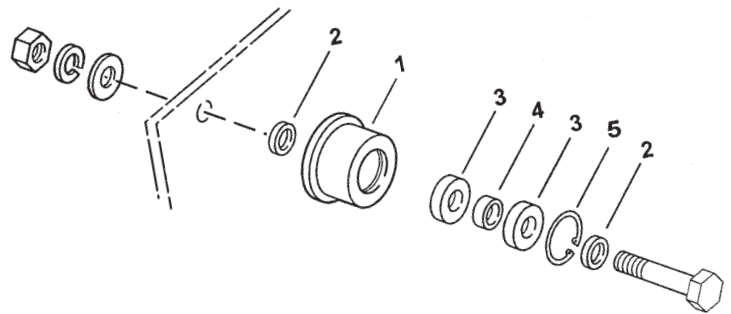


Flanged Wheel Assembly for Cuber Lift and Cuber Carriage

Part No. 05-450130_0 SOP flanged wheel assembly (includes enough of the following parts for one wheel)

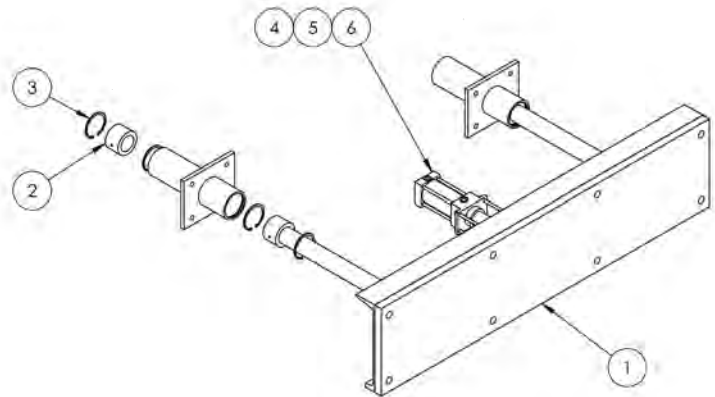
Key	Part Number	Description	Qty
1	05-200444_0	Flanged wheel	1
2	05-212953_0	Guide wheel spacer	2
3	05-16005723	Wheel bearing	2
4	05-200489_0	Inner wheel spacer	1
5	05-16050252	Retaining ring	1
6	05-450130_0	Wheel assembly	8

(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

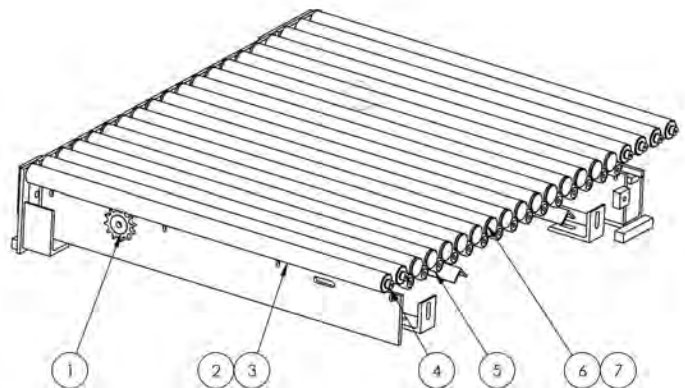


Consult your parts manual to verify numbers. (Clamp cylinder components may vary per vintage of machine.)

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)

Quantities may vary per cube table design.



Wear Bars - SF-7 and SF-7W-64 Cubers

Ref Dwg	Qty	Part Number	Description
02-416587	1	////////// 02-405785	Side plate - sub-assembly and weldment - LH elevator Wear bar - 51" L
	1	02-406655	Wear bar - 6" L
	1	02-406655	Wear bar - 6" L
02-414540	1	////////// 02-406653	Side plate - LH Wear bar - 88" L
	1	02-405778	Wear bar - 143" L
	1	02-405778	Wear bar - 143" L
02-416586	1	////////// 02-405785	Side plate - sub-assembly and weldment - RH elevator Wear bar - 51" L (same part used above)
	1	02-406655	Wear bar - 6" L (same part used above)
	1	02-406655	Wear bar - 6" L (same part used above)
02-414541	1	////////// 02-406653	Side plate - sub-assembly - RH Wear bar - 88" L
	1	02-405778	Wear bar - 143" L
	1	02-405778	Wear bar - 143" L
02-417334	2	////////// 02-406655	Elevator frame - sub-assembly and weldment Wear bar - 6" L
	2	02-405786	Wear bar - 55" L
	2	02-405786	Wear bar - 55" L

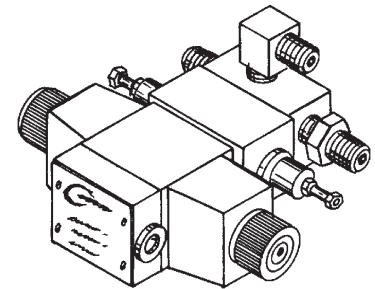
NOTE:
Reference drawings are listed to show Besser Representatives where and how wear bars are installed. Part quantities shown are parts required for reference drawing listed. Add quantity of the same part to get total for elevator.

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.

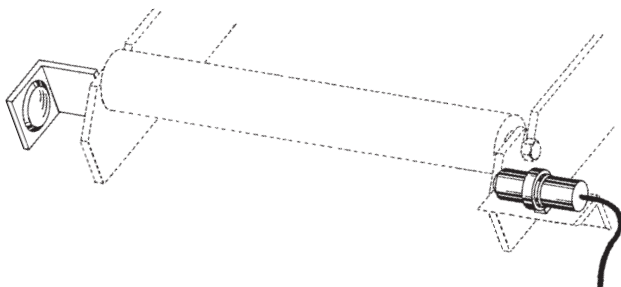
Part Number	Description
02-644231	Inboard/outboard conveyor valve



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	Description
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.

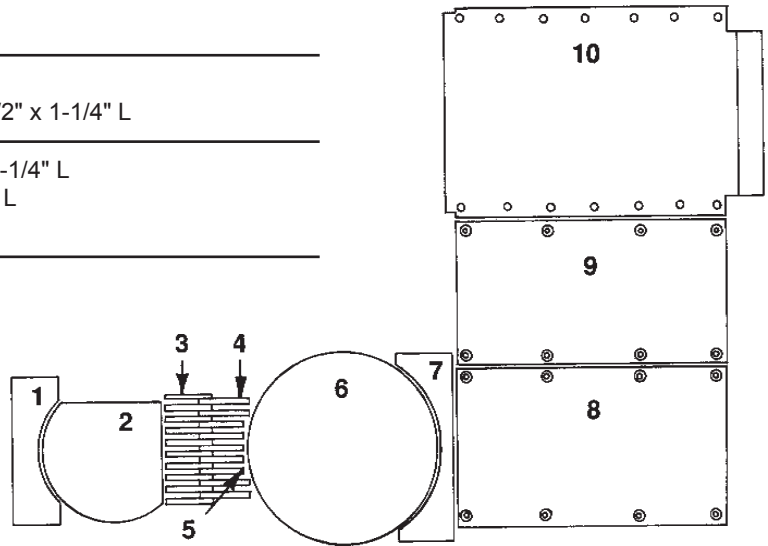
Part Number	Description
02-643219	Slat conveyor photocell

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"
	02-087806	4	Nut - 1/2"
2	02-419893	1	Small turntable wear plate
	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
	02-088026	20	Hex head cap screw - 3/8" x 3" L
	02-087879	20	Lock washer - 3/8"
4	02-419854	4	Trolley wear strip - 3/4" x 1" x 9-1/8" L
	02-088020	8	Long hex head cap screw - 3/8" x 2" L
	02-087879	8	Lock washer - 3/8"
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
	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	02-419872	1	Large turntable apron plate for AF-7 - 3/8" x 7-3/4" x 27" L
	02-421328	1	Large turntable apron plate for AF-7B - 3/8" x 10" x 33" L
	02-089657	6	Screw
	02-087930	6	Washer
8	02-419452	1	Accumulator plate for 48" model - 3/8" x 26" x 48" L
	02-421314	1	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"
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
9	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"
	02-087806	10	Nut - 1/2"
10	02-439943	1	Slider plate for SF-7 48" model - 57" x 54-1/2" L
	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"
	02-087879	18	Lock washer - 3/8"



Wear Strips for Cuber Frame Channels

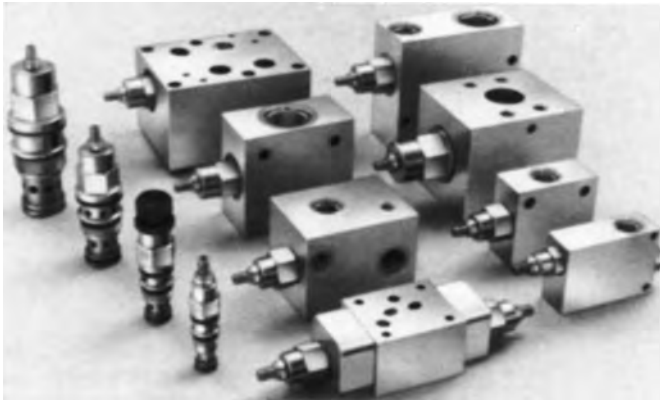
This set of wear strips for the mast and mast extensions is installed on model SF-1 and SF-2 cubers. The SOP also includes four 2-1/2" diameter cam rollers that mount to the elevator assembly. These wear strips bolt and weld to the vertical frame channels and provide new smooth surfaces for the roller. Wear strips are replaceable.



<u>Part Number</u>	<u>Qty</u>	<u>Description</u>
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

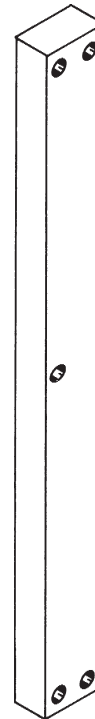
SOP for pressure reducing valves used on tier clamps of Besser SF-7 series cubers are available. Contact your Besser Representative.



Elevator Slide Shafts (For SF-7 & SF-7W Cubers)

Replace worn slide shafts and make your elevator assemblies like new again.

<u>Part Number</u>	<u>Description</u>
02-405864	Elevator slide shaft (2 req'd)

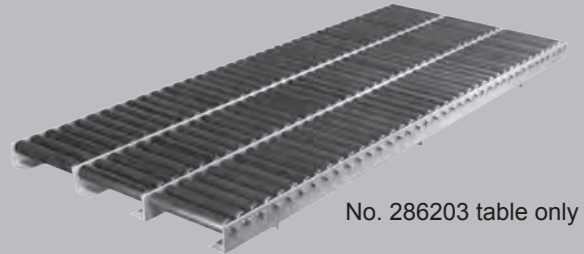


These conveyors were originally supplied with SF and AF model cubers. Please refer to your parts manual to verify your model before ordering.

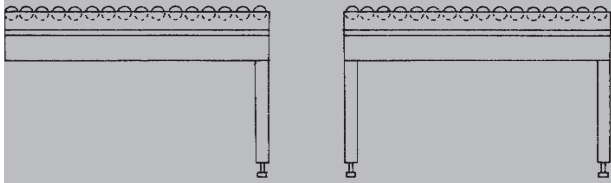
Three Lane Arranging Conveyor Table

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



No. 286203 table only

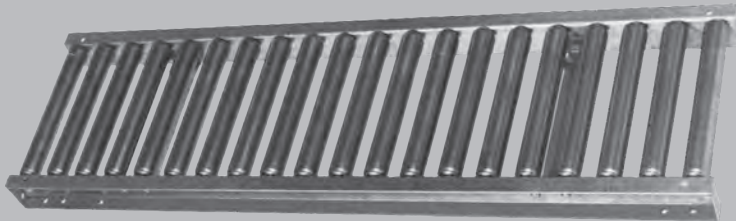


02-301374 single leg table

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

Support Legs For 29" Wide Conveyor Section

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)

Block Runout - 35" Wide Conveyors

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

Support Legs For 35" Wide Conveyors

Part Number	Description
02-201021	Support leg (14" - 18" high)
02-394041	Adjustable support leg (18" - 42" high)
02-079265	Single 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" OAC
01530-400002	Conveyor roller - 2 groove 1-7/8" OD x 26-1/2" OAC
02-114558	Retaining clip



Live roller conveyor

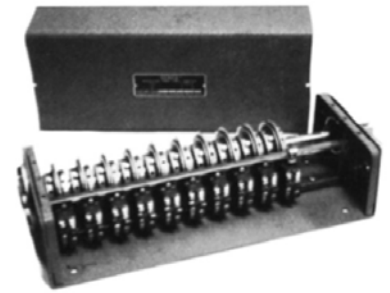
Gravity Offload Roller Conveyor

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)

Rotary Switch for V3R & V3-12 Vibrapacs

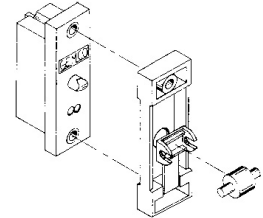
The rotary switch for V3R and V3-12 Vibrapacs, interchanges with the old design. Individually adjustable cams in the assembly allow precise control of each machine function. These enclosed type switches prevent dirt from getting on the contacts.



<u>Part Number</u>	<u>Description</u>
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

<u>Part Number</u>	<u>Description</u>
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.

<u>Part Number</u>	<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/M - .50 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

<u>Part Number</u>	<u>Description</u>
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.

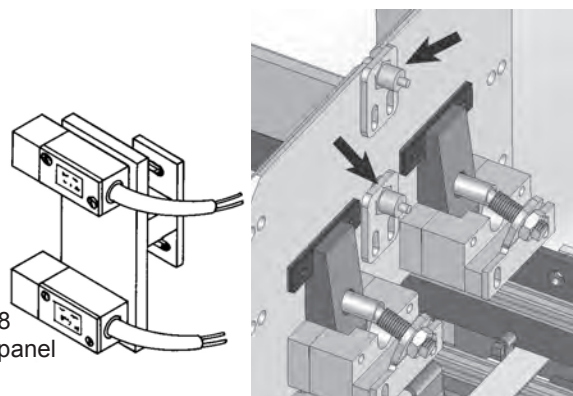


Part Number	Description
02-645367	SOP to add radio control to concrete products machines
02-112343	Receiver (replacement)
02-112344	Transmitter (replacement)

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



02-385368
For 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.

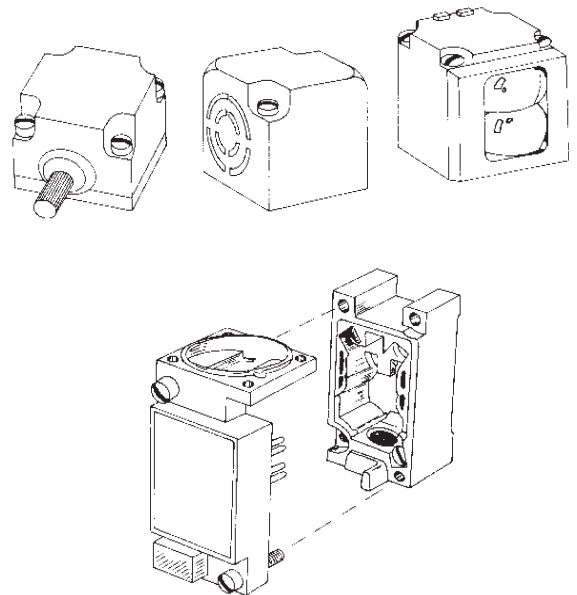
Part Number	Description
02-643667	SOP to change from photo switch to Cutler Hammer Photocell
01620-000005	Photocell receptacle (use with emitter)
02-110638	Photocell body
02-110639	Photocell receptacle (use with detector)
02-111909	Photocell head receiver E51DC1
02-111910	Photocell emitter E51DEL
02-112289	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

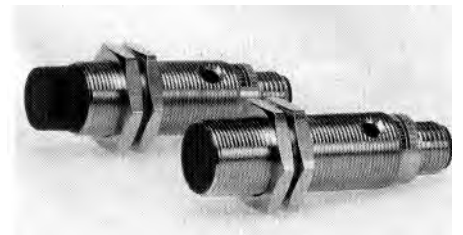
When electrical switches require replacement, insist on this plug in design. Model E- 50 switches are composed of a base, body and head. The switch body quickly detaches for replacement or electrical testing. It interchanges with other style switches.

<u>Part Number</u>	<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)

<u>Part Number</u>	<u>Description</u>
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
01621-000090	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



*To replace Namco sensors: Order Qty 1 - 02-113553 and Qty 1 - 02-113664 Watertite Connector & Cable

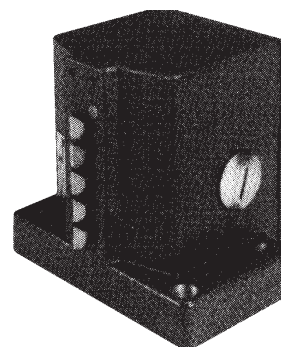
Photo Electric Sensors - Cylindrical (Quick Disconnect)

<u>Part Number</u>	<u>Description</u>
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°
02-114620	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

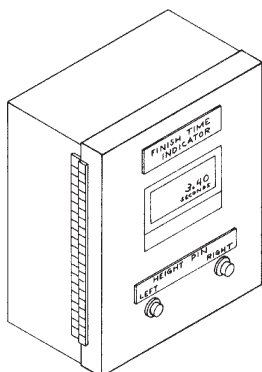
<u>Part Number</u>	<u>Description</u>
02-113166F0001	Limit switch - multiple assembly
02-113166F3001	Snap switch (replacement)
02-113166F3002	Safety switch (replacement)
02-113166F3003	Plunger - chisel type
02-113166F3004	Proximity switch (replacement), for AC systems only
02-113166F1001	Cam - 1" long
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.)

<u>Part Number</u>	<u>Description</u>
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.

<u>Part Number</u>	<u>Description</u>
02-642259	Digital finish time indicator (for V3R, V3-12, Dynapac, Superpac and Bescopac)
02-114609	Clock
01644-000077	Relay

Allen-Bradley I.E.C. Motor Contactors (Nonreversing AC-3)

Besser Part Number	Allen-Bradley Part Number	Description
01642-000004	100-C09D10	9 AMP contactor
01642-000007	100-C12D10	12 AMP contactor
01642-000010	100-C16D10	16 AMP contactor
01642-000014	100-C23D10	23 AMP contactor
01642-000018	100-C30D10	30 AMP contactor
01642-000021	100-C37D10	37 AMP contactor
01642-000024	100-C43D10	43 AMP contactor
01642-000027	100-C60D10	60 AMP contactor
01642-000030	100-C72D10	73 AMP contactor
01642-000033	100-C85D10	85 AMP contactor

Allen-Bradley I.E.C. Motor Contactors (Reversing AC-3)

Besser Part Number	Allen-Bradley 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)

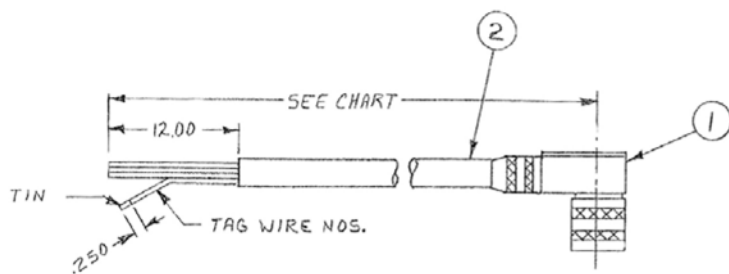
Besser Part Number	Allen-Bradley Part Number	Description
01641-000001	140M-C2E-A16	.10 - .16 AMP overload release
01641-000002	140M-C2E-A25	.16 - .25 AMP overload release
01641-000003	140M-C2E-A40	.25 - .40 AMP overload release
01641-000004	140M-C2E-A63	.40 - .63 AMP overload release
01641-000005	140M-C2E-B10	.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

Allen-Bradley I.E.C. Motor Protectors & Accessories (Nonreversing AC-3)

Besser Part Number	Allen-Bradley 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

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
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Parts for SLC-150

02-112664F1500	1745-LP151	Processor unit
02-112665F1510	1745-E151	I/O expansion unit
02-112666	1745TCAT	Timer counter access terminal
01652-000064	1745-MI	EEPROM memory module
02-112667	1745-B-1	Battery assembly
02-112693F0100		Fuse 315 MA
02-112778	1745-PT1	Hand hold programmer

**Parts are obsolete.
Limited quantities available.
Call for assistance.**

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 encoder
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 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) - <i>this part is obsolete, contact Besser for an upgrade.</i>
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

Fused Disconnect Switch Line Operating Handles

01602-000025
Standard orientation with
defeater (Model 194R-HM4E)



01602-000037
With defeater
(Model 194R-HS4E)



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

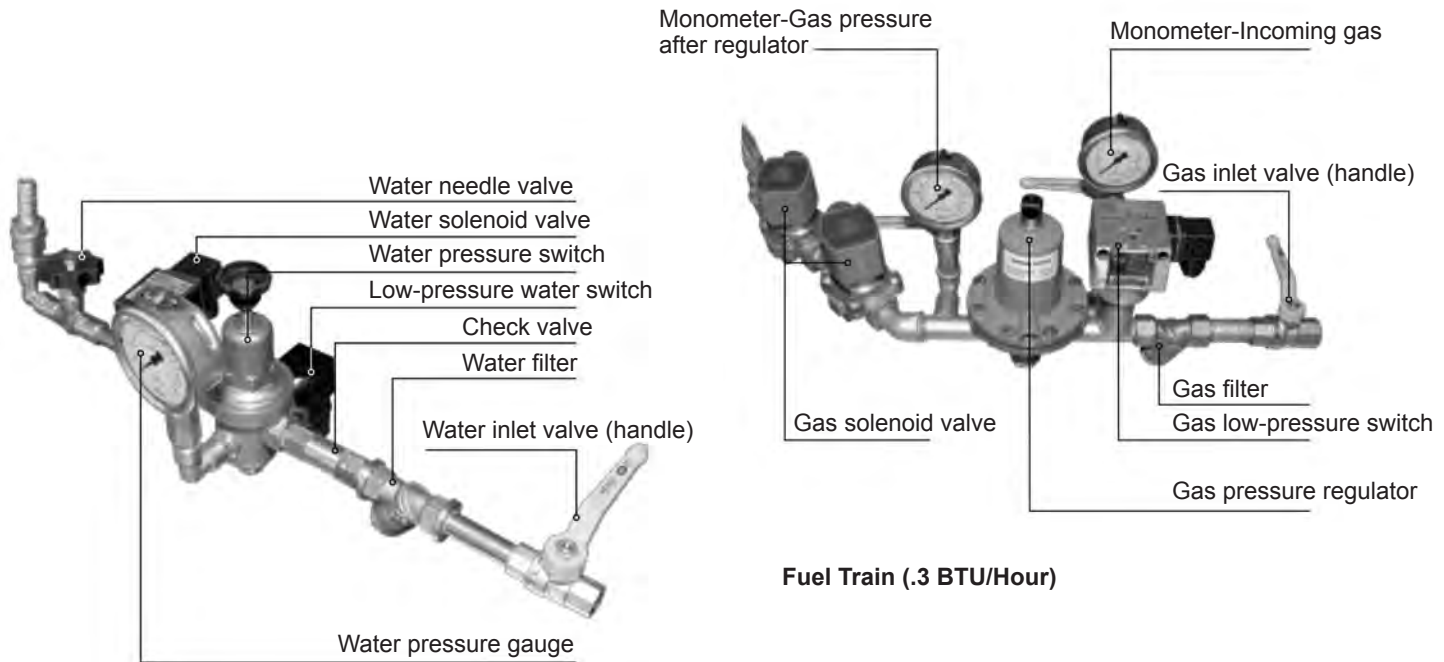
Part Number	Model	Description
01650-000006	1747-L524	Central processor unit (CPU) - SLC - 5/02 (obsolete, limited quantities are available)
01650-000007	1747-L532	Central processor unit (CPU) - SLC - 5/03
01650-000009	1747-L542	Central processor unit (CPU) - SLC - 5/04
01650-000010	1747-L552	Central processor unit (CPU) - SLC/505
02-515393	1747-L20B	Processor - 20 1/0 fixed hardware style
02-113773FL30B	1747-L30B	Processor - 30 1/0 fixed hardware style
02-113773FL40B	1747-L40B	Processor - 40 1/0 fixed hardware style
01651-000019	1746-A4	Rack - 4 Slot - modular hardware style
01651-000020	1746-A7	Rack - 7 Slot - modular hardware style
01651-000016	1746-A10	Rack - 10 Slot - modular hardware style
01651-000017	1746-A13	Rack - 13 Slot - modular hardware style
01651-000018	1746-A2	Rack expansion - 2 slot - fixed
01652-000044	1746-IA	Input module - 8 inputs 100/120 VAC
01652-000039	1746-1A16	Input module - 16 inputs 100/120 VAC
01652-000059	1746-OA8	Output module - 8 Triac - 120/240 VAC
01652-000051	1746-OAP12	Output module - 12 output 120 VAC (obsolete, limited quantities are available)
01652-000041	1746-1TB16	Input module - fast response
01652-000038	1746-NT4	Input module thermocouple (obsolete, limited quantities are available)
01652-000033	1746-N1041	Module - analog - 2 inputs - 2 outputs
01652-000052	1746-OW16	Module - relay output - 16 outputs
01652-000047	1746-1O12	Module - combination input/output (obsolete, limited quantities are available)
01653-000009	1746-P2	Power supply - rack mount 120/240 VAC
02-113773F0P1C	1746-P1C	Interface convertor - RS232/DH 485
02-113773F00BA	1747-BA	Battery - lithium - for RAM memory ret.
01652-000049	1747-M2	Module - memory - EEPROM - 4K (obsolete, limited quantities are available)
01652-000050	1747-M13	Module - memory - EEPROM - 64K
02-111847	MDJQ-3	Fuse - glass body time delay - 3.0 amp
01652-000040	1746-IB16	Input module - 16 inputs - 24 VDC
02-115297	1542	Resolver module - AMCI - for use with resolver
02-115484	MS-8	Phoenix connector for resolver module

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	2	Quartz glass - 1" diameter x 1/16" thick
82-9908210006	2	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
82-9908210002	1	Sight glass, 1/2"
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	Solenoid valve, water - 1/4"

These images provide useful information for indentifying parts.



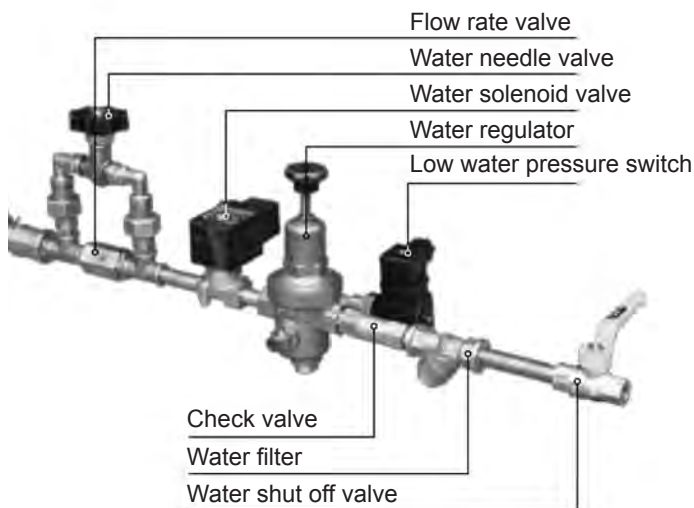
Water Train (.3 BTU/Hour)

Fuel Train (.3 BTU/Hour)

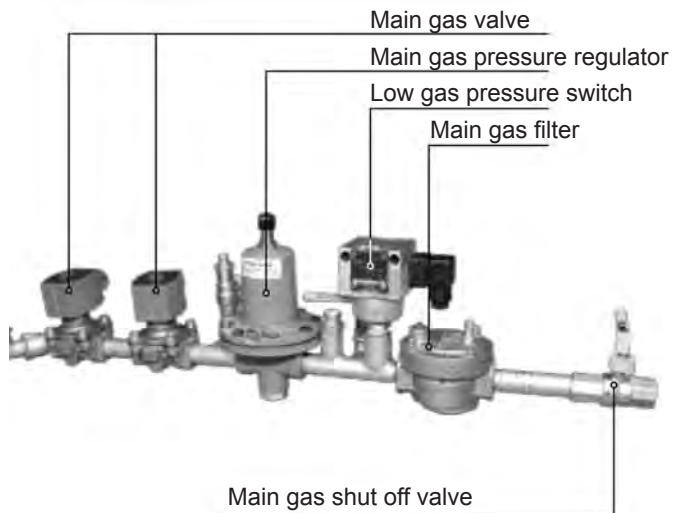
Vapor Generator .5 BTU/Hour

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"

These images provide useful information for indentifying parts.



Water Train (.5 BTU/Hour)

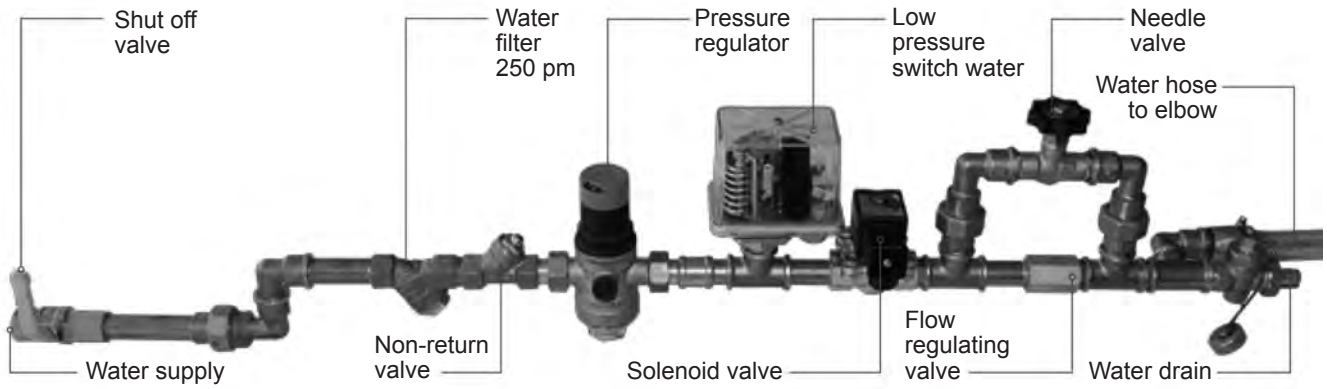


Fuel Line Train (.5 BTU/Hour)

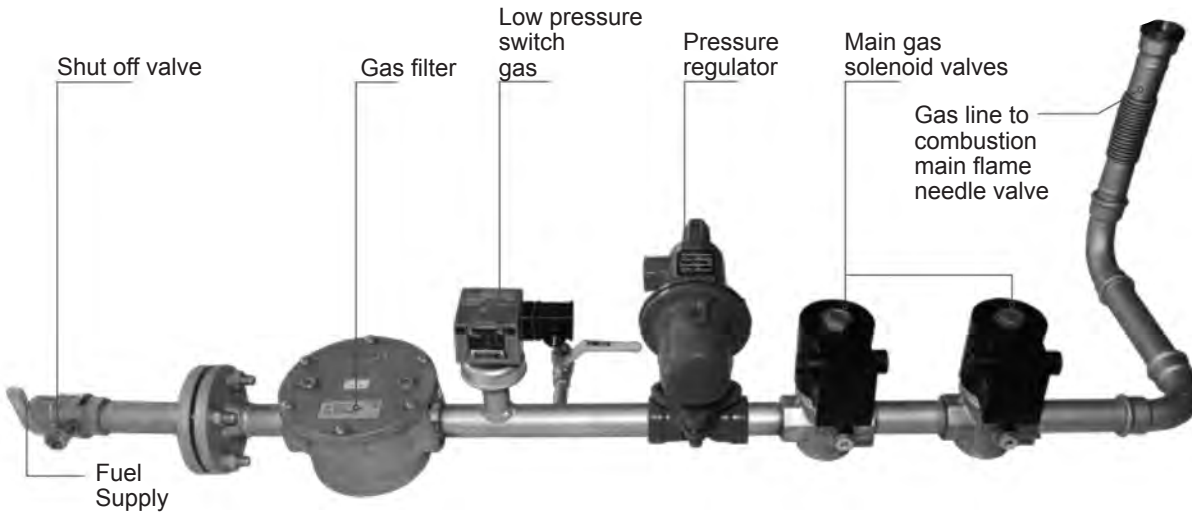
Vapor Generator 1.0 - 2.0 BTU/Hour

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	Solenoid valve, gas - 1-1/2" (2 for gas boosted)
82-9902430019	2	Solenoid valve, gas - 1"
82-9902430011	1	Solenoid valve, water - 1/2"
82-9902430020	1	Solenoid valve, gas 1/4" (pilot flame)

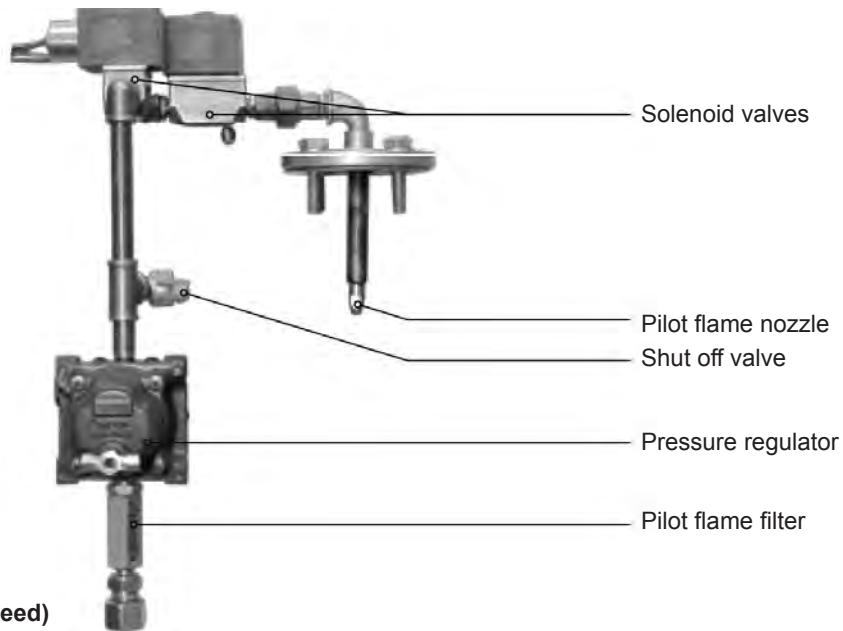
These images provide useful information for indentifying parts.



Water Train (Single Speed)



Fuel Train (Single Speed)

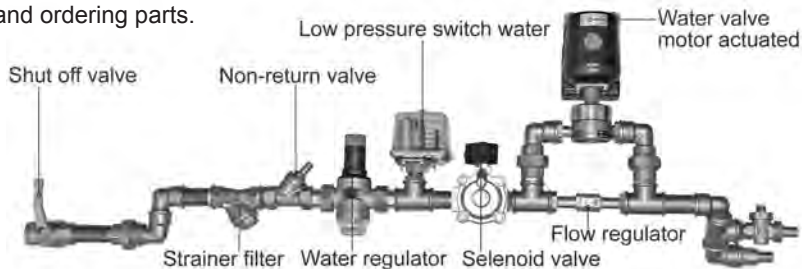


Pilot Flame Train (Single Speed)

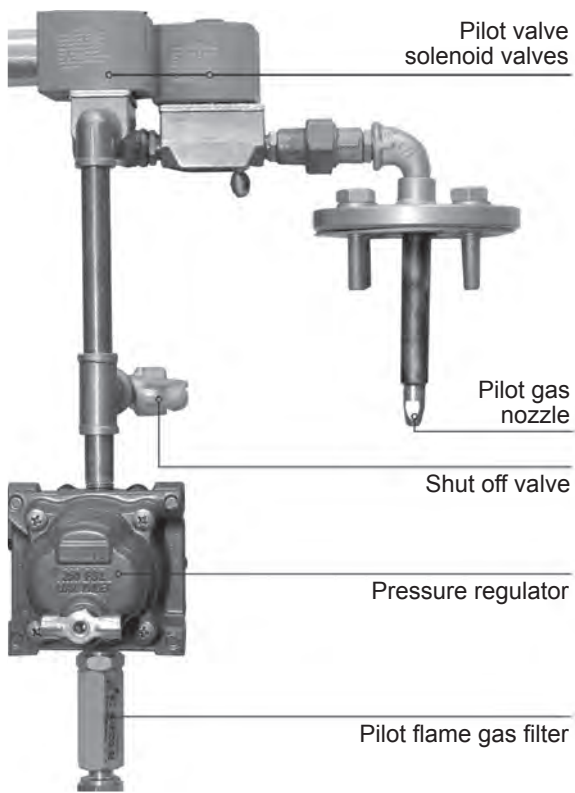
Dual Speed/Variable Speed 2.5 - 8.0 BTU/Hour

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, 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
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	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	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
82-9902470003	1	Flow regulating valve 3 LPM/.80 GPM
82-9902470004	1	Flow regulating valve 4 LPM/1.0 GPM
82-9902470005	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	Solenoid valve, water - 1/2"
82-9902430020	1	Solenoid valve, gas 1/4" (pilot flame)
82-990240008	1	Solenoid valve, water - 3/4"
01306-000001	1	Solenoid valve, water - 1"

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.



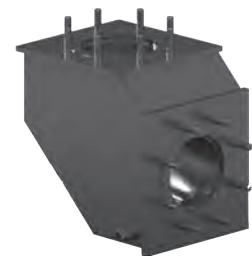
Main flame nozzle



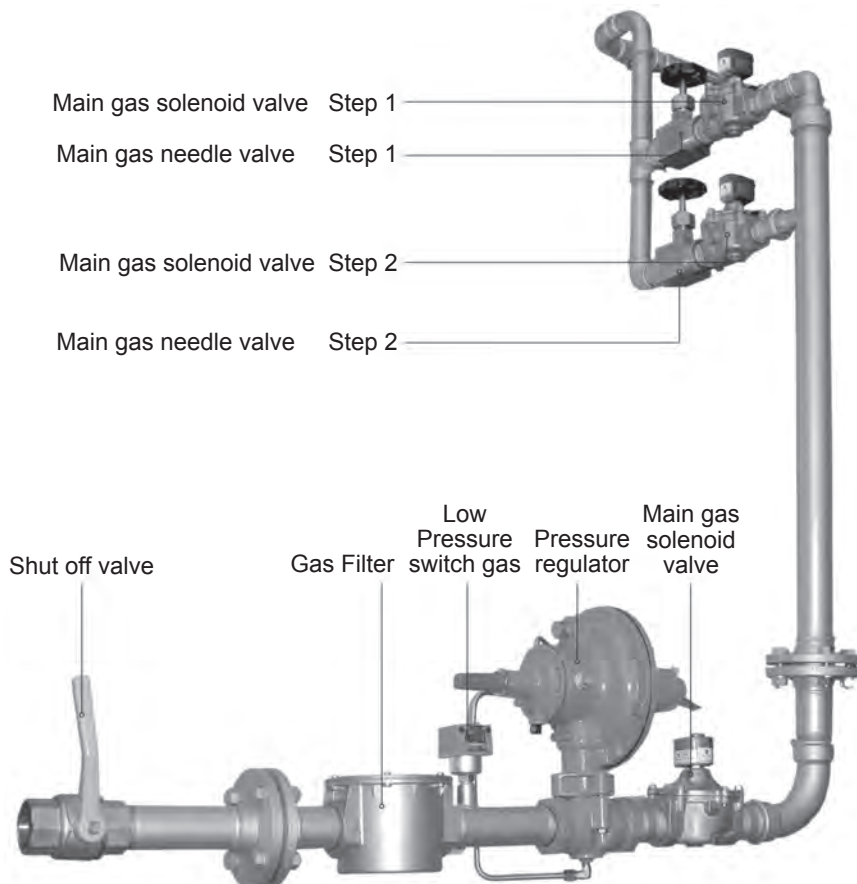
Mixer burner



Combustion chamber



Water cooled elbow

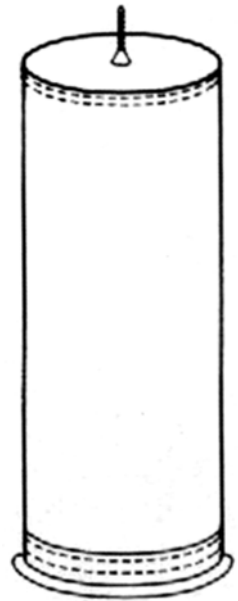


Fuel Train (Dual Speed/Variable Speed)

Dust Collection Bags for Dust Collectors

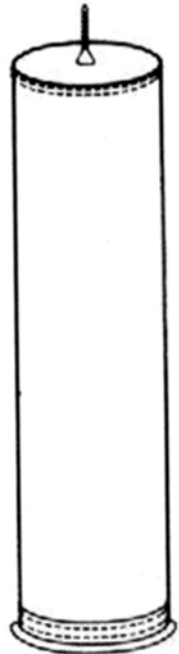


Part Number	Qty	Description
01999-400012	12	Polyester sateen cloth, fiber disc with threaded stud in top, beaded cuff bottom; for model DCS-150 dust collector.
01999-400013	30	Polyester sateen cloth, fiber disc with threaded stud in top, beaded cuff bottom; for model DCS-150 dust collector.



Part Number	Qty	Description
01999-400007		Polyester sateen cloth, disposable metal cap top, metal anti-collapse ring sewn in outside of tube, double bead snap ring bottom
	16	For model 1640 dust collector
	17	For model 1740 dust collector

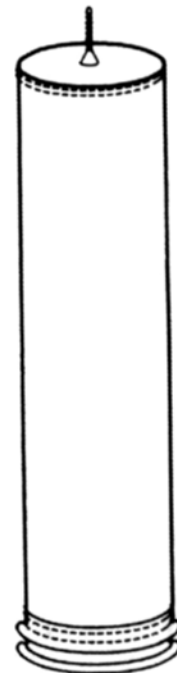
Part Number	Qty	Description
01999-400014	16	Polyester sateen cloth, disposable metal cap top, metal anti-collapse ring sewn to outside of tube, beaded cuff bottom; for model 1640 dust collector



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

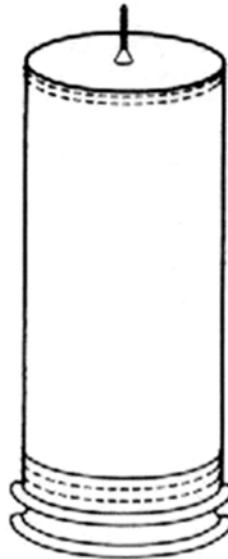


Part Number	Qty	Description
01999-400008	42	Polyester sateen cloth, fiber disc with threaded stud in top, double bead snap ring bottom; for model DSC-260 dust collector

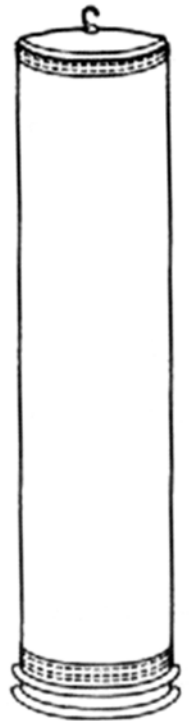


Dust Collection Bags for Batcher Vent

Part Number	Qty	Description
01999-400018	14	Polyester sateen cloth, fiber disc with threaded stud in top, beaded cuff bottom; for model DCS-14 batcher vent (old style)



Part Number	Qty	Description
01999-400019	7	Polyester sateen cloth, metal disposable cap in top, beaded cuff bottom. Double bead snap ring bottom; for model DCS 7-24 batcher vent.



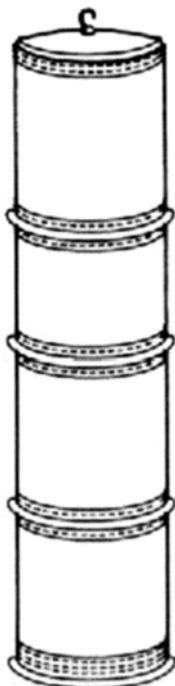
Part Number	Qty	Description
01999-400006	14	Polyester sateen cloth, fiber disc with threaded stud in top, double bead snap ring bottom; for model DCS-14S batcher vent

Dust Collection Bags for Bag House

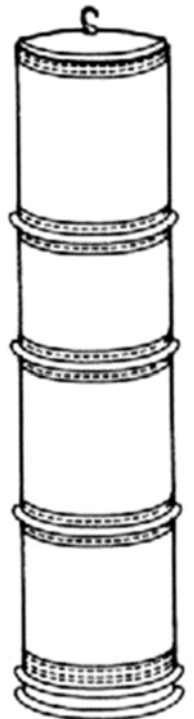


Part Number	Qty	Description
01999-400017	168	Polyester sateen cloth, felt top, raw edge bottom for use with cage; for model 1492 bag house

Part Number	Qty	Description
01999-400009	60	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	Description
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

<u>Part Number</u>	<u>Description</u>
01999-400106	Door latch for model DCS-1740 dust collector



Yoke Ends with Pins

<u>Part Number</u>	<u>Description</u>
01999-400108	Bag suspension frame for models DCS-150, DCS-250 and DCS-260 dust collectors



Eccentric Arm

<u>Part Number</u>	<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 DCS-260 eccentric arm



Rod End Bearing Assembly

<u>Part Number</u>	<u>Description</u>
01508-400002	1/2" for shaker mechanism on DCS-250 dust collectors



Eccentric Shafts



<u>Part Number</u>	<u>Description</u>
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

<u>Part Number</u>	<u>Description</u>
0450-0270011	Backing disc
0450-0270012	Rubber seal disc

See page 145 for cylinder 01431-000036



V-Belt

<u>Part Number</u>	<u>Description</u>
01512-400003	Shaker mechanism on model DCS-1640, 1740, 250 and 260 dust collectors



Driven Sheave

<u>Part Number</u>	<u>Description</u>
01512-400001	For model DCS-260 dust collectors



<u>Part Number</u>	<u>Description</u>
01512-400004	Shaker mechanism on model DCS-260, DCS-1640 and DCS-1740 dust collectors



Bushings

<u>Part Number</u>	<u>Description</u>
01999-400109	Bushings for yoke ends on DCS-150, DCS-250 and DCS-260 dust collectors



<u>Part Number</u>	<u>Description</u>
01594-400003	Sheave bushing for DCS-260
01594-700006	Sheave bushing for DCS-1640 and 1740 dust collectors



Pillow Block Bearing

<u>Part Number</u>	<u>Description</u>
01509-400014	3/4" for shaker mechanism on DCS-150, DCS-250 and DCS-260 dust collectors



<u>Part Number</u>	<u>Description</u>
01509-400016	For shaker mechanism for models DCS-1640 and DCS-1740 dust collectors



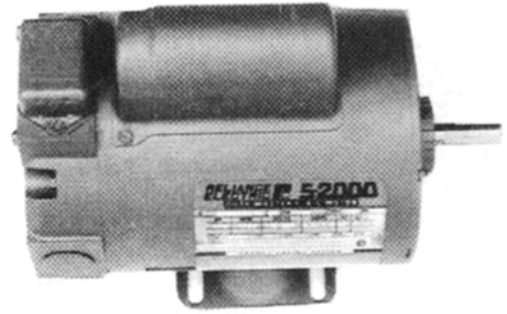
Eccentric Bearing

<u>Part Number</u>	<u>Description</u>
01509-400001	For shaker mechanism on DCS-640 and DCS-1740 dust collectors



Electric Motor

<u>Part Number</u>	<u>Description</u>
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**

<u>Part Number</u>	<u>Description</u>
0420-0290025	Control unit - use with DCS-60-7000 bag house

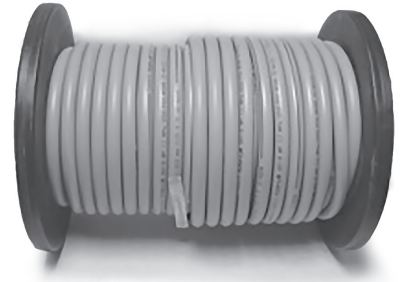
**Besser Dust Collector Timer Control**

<u>Part Number</u>	<u>Description</u>
0420-0290026	Timer control - use with DCS-150, DCS-250, DCS-260, DCS-1640 and DCS-1740 dust collectors



Push Lock Air Hose

<u>Part Number</u>	<u>Description</u>
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.

<u>Part Number</u>	<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

<u>Part Number</u>	<u>Description</u>
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



H0



12



9

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.

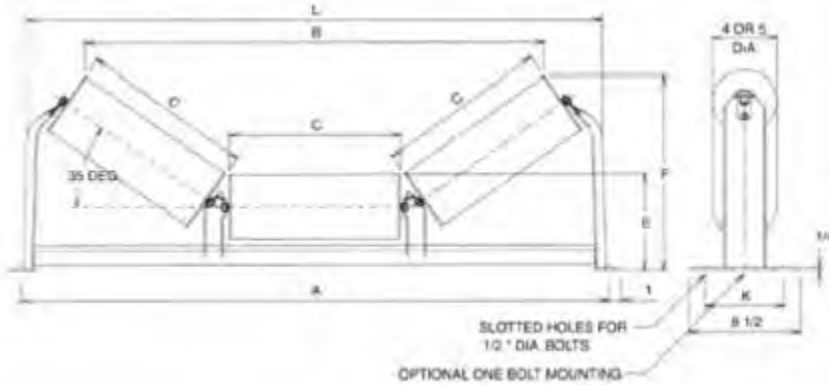
Part Number	Description
01530-000016	24" wide, 20°
01530-000017	30" wide, 20°
01530-000018	36" wide, 20°
01530-000008	24" wide, 35°
01530-000009	30" wide, 35°
01530-000010	36" wide, 35°



20°



35°



REFERENCE DIMENSIONS												
BW	A	B		C	E		F		K	L	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°, 4" roll for batching and radial stacking belt conveyor and training conveyor belt.

Part Number	Description
01530-400004	24" wide
01530-400005	30" wide
01530-400006	36" wide



Return Idler

CEMA B4, sealed, 4" roll with standard 2/3" drop hangers for batching and radial stacking belt conveyor.

Part Number	Description
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.

<u>Part Number</u>	<u>Description</u>
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

REFERENCE DIMENSIONS				
BW	A	C	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

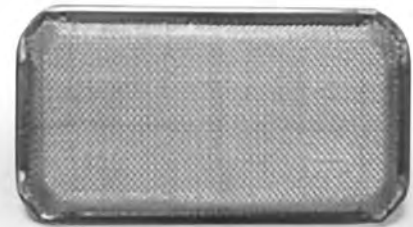
Aerator Pad and Mount 5" Round

<u>Part Number</u>	<u>Description</u>
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

<u>Part Number</u>	<u>Description</u>
01429-400005	For cement silo aeration



Mounting Kit

<u>Part Number</u>	<u>Description</u>
01429-400006	Mounting kit for external mounting of aerator pad



Air Jet

<u>Part Number</u>	<u>Description</u>
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

<u>Part Number</u>	<u>Description</u>
01429-400003	Cotton diaphragm fro repairs to round aerator pad



Foam Rubber Gasket

<u>Part Number</u>	<u>Description</u>
01429-400004	Foam rubber gasket for repairs to aerator pad



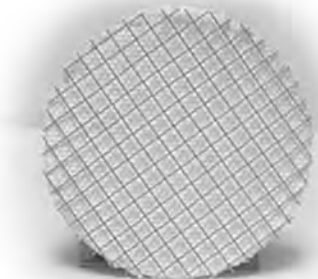
Neoprene Gasket

<u>Part Number</u>	<u>Description</u>
01429-400001	Neoprene gasket



Replacement Screen

<u>Part Number</u>	<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.

<u>Part Number</u>	<u>Description</u>
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.

<u>Part Number</u>	<u>Description</u>
01431-000018	10" stroke
01431-000019	15" stroke
01431-000020	18" stroke

See below for magnetic reed switch and mounts.



Use with aggregate bin and weigh batcher gates. 2MA series non-lube NFPA.

<u>Part Number</u>	<u>Description</u>
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 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.

<u>Part Number</u>	<u>Description</u>
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

<u>Part Number</u>	<u>Description</u>
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.

<u>Part Number</u>	<u>Description</u>
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



01439-400001

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 Number	Description
01431-000036	1-1/2" bore x 6" stroke Air Cylinder with foot-mounted kits assembled to cylinder
01400-000008	Tr-valve solenoid

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 stroke - 4" bore
0440-0680043	Gate stop assembly for adjusting cylinder stroke - 5" bore

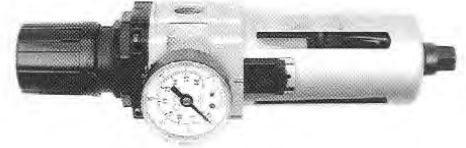


Filters/Regulators

Regulates/filters plant air - aeration pads - low pressure.

<u>Part Number</u>	<u>Description</u>
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

<u>Part Number</u>	<u>Description</u>
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.

<u>Part Number</u>	<u>Description</u>
01499-400002	Replacement elements for Besser #400 moisture trap



Lubricator

<u>Part Number</u>	<u>Description</u>
01499-000001	1/2" NPT lubricator
01499-400001	3/4" NPT lubricator



Butterfly Valve

Water on/off control.

<u>Part Number</u>	<u>Description</u>
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.

<u>Part Number</u>	<u>Description</u>
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
01402-400002	3" (water) actuator assembly
01402-000005	4" (water) actuator assembly
01402-400006	6" (water) actuator assembly
01402-400008	8" actuator assembly
01402-400010	10" actuator assembly
01402-400004	12" actuator assembly

Weigh batcher using magnetic reed switch

Part Number	Description
01402-400015	4" (water) actuator assembly
01402-400024	6" (water) actuator assembly
01402-400050	8" actuator assembly
01402-400025	10" actuator assembly
01402-400026	12" actuator assembly
01621-000041	Reed switch
01621-400015	Mount 3" - 6" cylinder mount
01621-600043	Mount 8" - 12" cylinder mount



Limit Switch Rod Lever

Part Number	Description
01620-000074	Rod lever for use with limit switch, aggregate gate and chute position indication



Limit Switch

Part Number	Description
01620-400001	For position indication of gates, valves and chutes



Limit Switch Roller Lever

Part Number	Description
06-EC-3X03-KI200	Roller lever for use with limit switch, cement and water butterfly valve position indication



Castings

<u>Part Number</u>	<u>Description</u>
0420-0680054	Universal 9" radius casting assembly replaces both left and right castings
01599-400002	Steel casting for clamshell gate Replaces left: 01599-600002 Replaces right: 01599-600003



0420-0680054



01599-400002

Clamshell Gate Pin

<u>Part Number</u>	<u>Description</u>
01539-400022	Gate pin round head, 1" diameter - 3"
01539-400169	Gate pin round head, 1" diameter - 4"



Water Meters

Concrete batching system - hot water application for use with CB-20 batch controller.

<u>Part Number</u>	<u>Description</u>
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

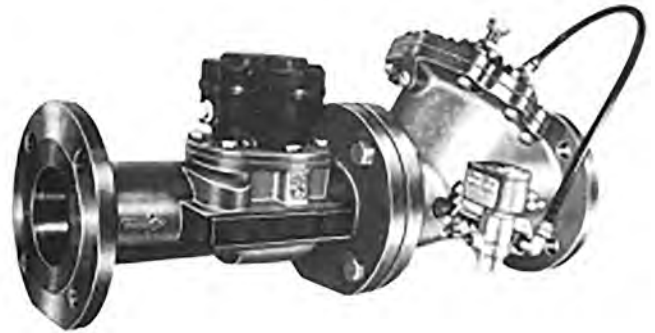


Concrete batching system - hot water application for use with Aceco "Scorpion" batch controller.

<u>Part Number</u>	<u>Description</u>
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.

<u>Part Number</u>	<u>Description</u>
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.

<u>Part Number</u>	<u>Description</u>
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

<u>Part Number</u>	<u>Description</u>
01999-400066	Model CB-20



Vibrator - Ball

<u>Part Number</u>	<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**

<u>Part Number</u>	<u>Description</u>
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**

<u>Part Number</u>	<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**

<u>Part Number</u>	<u>Description</u>
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

<u>Part Number</u>	<u>Description</u>
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

<u>Part Number</u>	<u>Description</u>
01539-400152	24" wide
01539-400154	30" wide
01539-400155	36" wide

Torsion Tube Style Conveyor Belt Wiper Assembly

<u>Part Number</u>	<u>Description</u>
01539-000002	24" wide
01539-000003	30" wide
01539-000004	36" wide

Replacement Blades

<u>Part Number</u>	<u>Description</u>
01539-400077	24" wide
01539-400074	30" wide
01539-400001	36" wide

Replacement Torsion Tubes

<u>Part Number</u>	<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.

<u>Part Number</u>	<u>Description</u>
01621-400009	Aggregate
01621-400010	Cement fly ash
0440-0140001	Optional weld flange



Bindicator Power Pak

Replacement for damaged Roto Bindicator power pak.

<u>Part Number</u>	<u>Description</u>
01629-400001	Power Pak



Bindicator Shaft Coupling

<u>Part Number</u>	<u>Description</u>
01621-400003	Shaft coupling for installing flexible shaft to Roto-Bindicator
01621-400005	Shaft coupling for installing flexible shaft to Roto-Bindicator



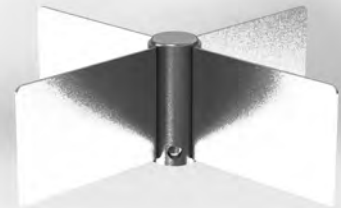
01621-400003



01621-400005

Bin Indicator Paddle

<u>Part Number</u>	<u>Description</u>
01621-400002	Bin indicator 2" x 7" stainless steel paddle, use with Roto-Bindicator



Torque Motor

<u>Part Number</u>	<u>Description</u>
01621-400006	Replacement torque motor for model R Roto Bindicator

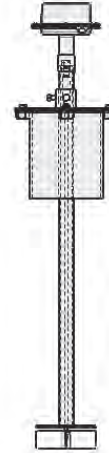


Roto Bindicator with Adjustable Extension Assembly

Use with aggregate/cement high level indicator-use with Roto Bindicator.

<u>Part Number</u>	<u>Description</u>
0420-0140003	6"
0420-0140004	6' - 6"
0420-0140005	15'

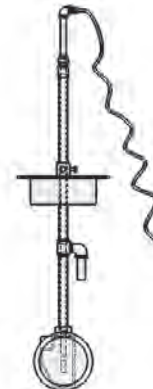
Other sizes are available, ask your Sales Representative for details.



High Bin Signal Limit Switch for Cement, Fly Ash

<u>Part Number</u>	<u>Description</u>
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.

<u>Part Number</u>	<u>Description</u>
01621-400008	Aggregate
01621-000042	5' cement/fly ash



Signal Unit

Besser combination light/horn signal indicator unit; use with high bin indicator.

<u>Part Number</u>	<u>Description</u>
0420-0290005	Combination light/horn signal indicator unit



Dust Transfer Vent Hose

<u>Part Number</u>	<u>Description</u>
01469-400022	2" diameter
01469-400023	3" diameter
01469-400024	4" diameter
01469-400005	6" diameter
01469-400009	10" diameter
01469-400048	12" diameter



Custom sizes are available, contact your Besser Customer Service Representative.

Gum Rubber Hose-Two Ply

<u>Part Number</u>	<u>Description</u>
01469-400002	6-5/8" ID for cement discharge
01469-400003	9" ID for cement discharge
01469-400007	20" ID for aggregate discharge
01469-400001	24" ID for aggregate discharge



Additional sizes are available, contact your Besser Sales or Customer Service Representative for assistance.

Elephant Trunk Hose-Two Ply

<u>Part Number</u>	<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

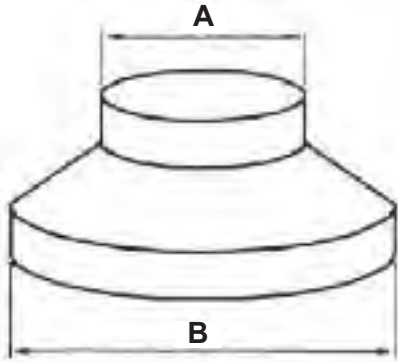
For discharge hoses and vinyl connectors.

<u>Part Number</u>	<u>Reference</u>	<u>To Fit:</u>
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
01999-400092	BA-9	17" OD ring
	BA-10	23-3/8" OD ring - 01999-400121
01999-400092	BA-11	18" OD ring - 01999-400110
	BA-12	7" ID pipe
01999-400092	BA-13	16-1/2" ring
	BA-14	24" ID ring
01999-400052	BA-15	11-1/2" OD ring - 01999-400127
	BA-16	18-1/2" OD ring
01999-400097	BA-17	20" ID ring
	BA-18	6-1/2" OD plate ring
01999-400097	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
01999-400054		Custom size



Band Clamps- 000097-BA18, 00052-BA16

**Vinyl Connectors for Cement/
Fly Ash Batching Systems**



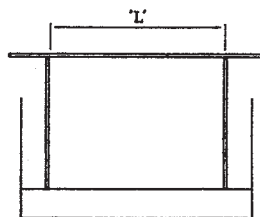
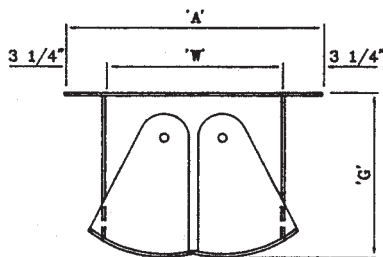
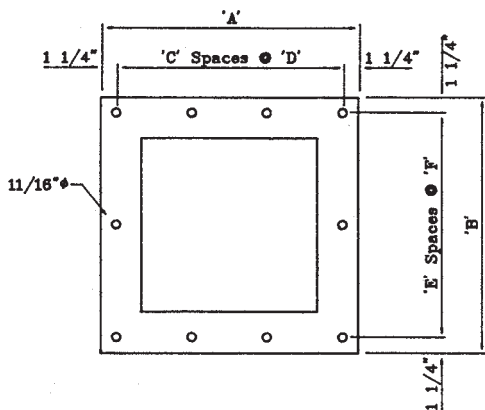
Example:
VC = 1011
A = 10
B = 11

These vinyl connectors help to contain dust within charging systems and prevent water damage to cement batchers.

Clamshell Gates

W	L	A	B	C	D	E	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	A	B
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.

<u>Part Number</u>	<u>Description</u>
01400-000005	1-Position valve



Double Solenoid Valve

Use with aggregate and cement discharge.

<u>Part Number</u>	<u>Description</u>
01400-000006	2-Position valve



Ceram™ Valve

Use with aggregate, cement water fill/discharge, aeration and vibration.

<u>Part Number</u>	<u>Description</u>
01409-400002	Size II single solenoid 4-way (interchange for 01409-400015 and 01409-400003 ½" Type "D" pilot air valves)



Ceram™ Valve

Use with aggregate and cement discharge.

<u>Part Number</u>	<u>Description</u>
01409-400001	Size II double solenoid 4-way (interchange for 01409-400004 ½" type "d" pilot air valves)



Strain Relief

Use with Size II Ceram™ valve, wiring to solenoid coil using SO cord.

<u>Part Number</u>	<u>Description</u>
01499-400009	Connector strain relief



Pilot Air Valve

Use with aeration and vibration.

<u>Part Number</u>	<u>Description</u>
01499-400015	½" "D" pilot air valve, single solenoid operated control valve

**Pilot Air Valve**

Use with aggregate cement, water fill/cut off.

<u>Part Number</u>	<u>Description</u>
01409-400003	½" "D" pilot air valve, single solenoid operated control valve

**Pilot Air Valve**

Use with aggregate cement batcher discharge.

<u>Part Number</u>	<u>Description</u>
01409-400004	½" "D" pilot air valve, double solenoid operated control valve

**Pilot Air Valve**

Use with aggregate and cement batcher discharge.

<u>Part Number</u>	<u>Description</u>
01499-400014	½" "D" pilot air valve, inching manual operated control valve



Station Segment

Use with Size II Ceram™ valve and ISO II valves, to be used when a series of valves are assembled in a bank.

<u>Part Number</u>	<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.

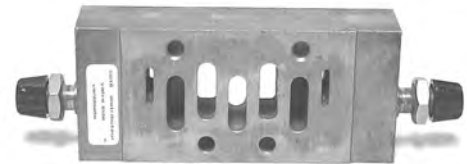
<u>Part Number</u>	<u>Description</u>
01499-400016	End plate kit (includes L&R), end ported manifold - use with Size II Ceram™ manifold segments
01409-000004	Left end plate (requires right), end ported manifold - use with ISO II manifold segments
01409-000005	Right end plate (requires left), end ported manifold - use with ISO II manifold segments



Speed Control

Use with Size II Ceram™ valves, for speed control of air cylinders.

<u>Part Number</u>	<u>Description</u>
01429-400010	Sandwich speed control



Sub Base

Use with Size II Ceram™ valve and ISO II valves when mounted as single units.

<u>Part Number</u>	<u>Description</u>
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 1/2" type "D" pilot air valve, one required per solenoid end.

<u>Part Number</u>	<u>Description</u>
01409-400006	O-ring



Repair Kit

Use in repairs to 1/2" type "D" pilot air valve.

<u>Part Number</u>	<u>Description</u>
01409-400005	Minor repair kit. contains: packing rings, retainers and lube-grease



Solenoid Coil

Use in repairs to ½" type "D" pilot air valve solenoid end.

<u>Part Number</u>	<u>Description</u>
01499-400011	Solenoid coil – 115VAC – P61920



Solenoid Assembly

Use in repairs to ½" type "D" pilot air valve solenoid end.

<u>Part Number</u>	<u>Description</u>
01499-400007	Solenoid assembly – 115VAC



Solenoid Coil

Use in repairs to Size II Ceram™ valves.

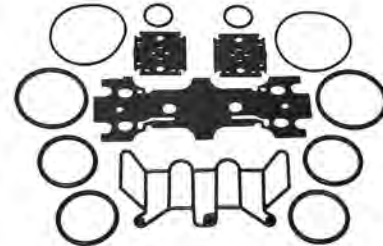
<u>Part Number</u>	<u>Description</u>
01409-400009	Solenoid coil only 120 volt



Seal Kit

Use in minor repairs to "GA" series, Size II Ceram™ valve.

<u>Part Number</u>	<u>Description</u>
01499-400017	Rubber seal kit



Repair Kit

Repairs to single solenoid valve 2-position series.

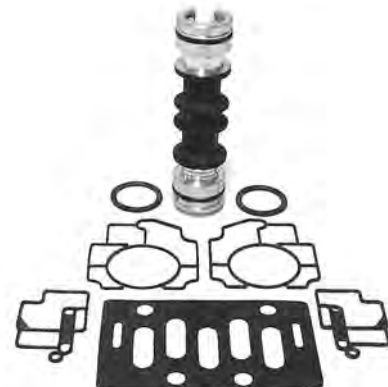
<u>Part Number</u>	<u>Description</u>
01499-400013	Single solenoid 2-position repair kit



Repair Kit

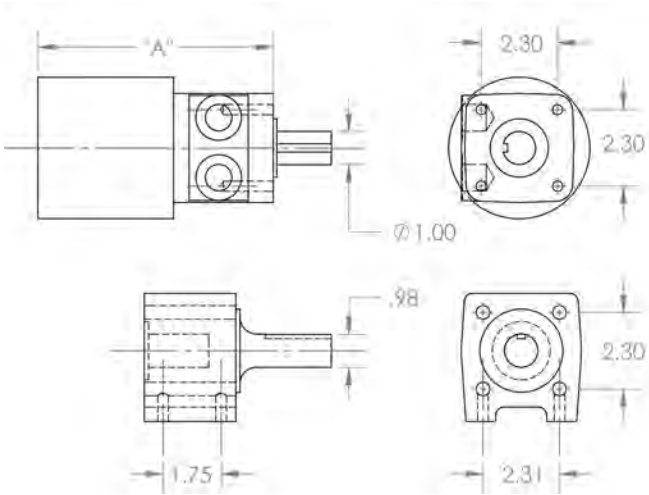
Repairs to double solenoid valve 2-position series.

<u>Part Number</u>	<u>Description</u>
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 throughout cubing and splitting production lines.



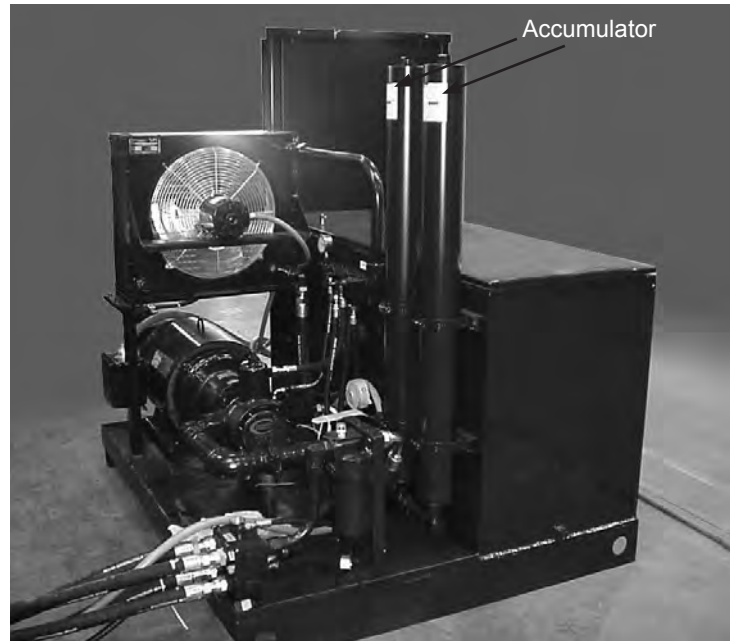
Part Number	Description
01330-000009	Hydraulic motor, 4.5 cubic inch A=5-1/2"
01330-000010	Hydraulic motor, 9.7 cubic inch A=6"
01330-000011	Hydraulic motor, 14.1 cubic inch A=6-7/20"
01330-000012	Hydraulic motor, 22.6 cubic inch A=7-1/10"
01359-500008	Replacement seal kit (fits all motors listed above)
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	Description
01312-000001	Accumulator
05-K5920W	Rebuild kit (replacement seals for the piston)



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	Replacement element - 25 micron - S-29
01321-000026	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	Description
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)

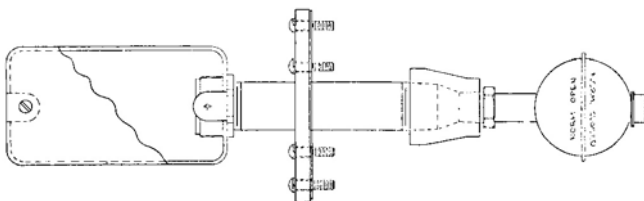


Additional heater and filter configurations are available. If you do not find components matching your existing components listed above, contact your Besser Representative for more information.

Liquid Level Safety Switch

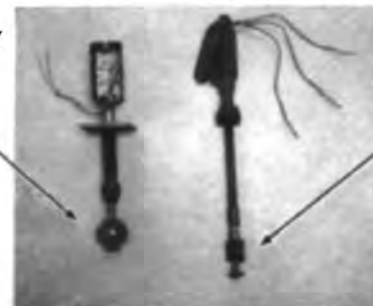
This liquid level safety switch will shut off power to the hydraulic pump's electric motor when the oil in the reservoir gets below the safety zone. This prevents damage to the hydraulic pump. It provides built in protection in case a hydraulic hose bursts or is accidentally severed. Installation instructions 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 gallon reservoir
02-107273	Liquid level switch only
02-113104	Float and temperature switch



SWITCH ONLY
NO. 107273

SWITCH ONLY
NO. 113104

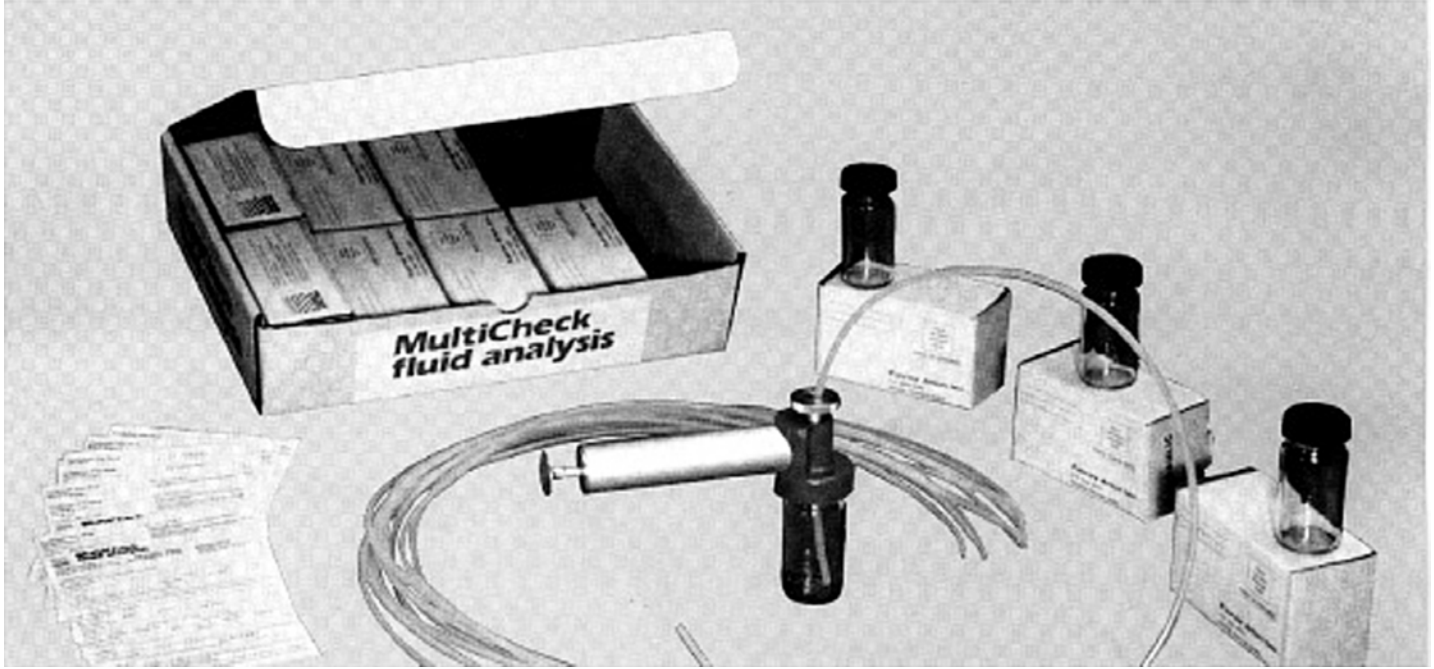


Multicheck Fluid Analysis

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.

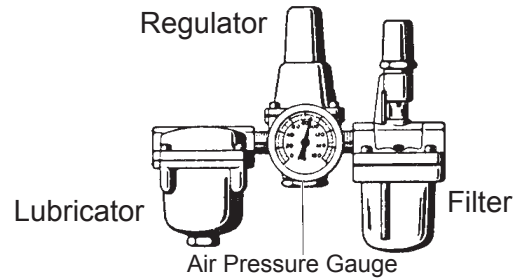


WORK SAFELY: Be sure that the machinery is properly locked out before taking the oil samples from the hydraulic reservoir.

<u>Part Number</u>	<u>Description</u>
02-114546	Four test kits (contains forms, four sample bottles with mailing boxes and tubes)
02-114547	Oil pump (hand operated)

Boston Combo Units

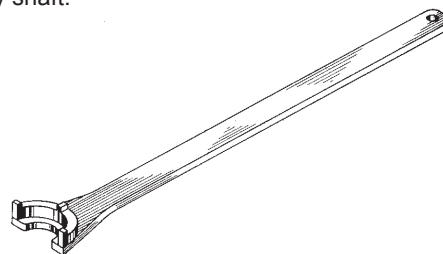
<u>Part Number</u>	<u>Description</u>
02-107968	Lubricator - 1/2" NPT (Boston No. EN43340 - standard)
02-107967	Air filter - 1/2" NPT (Boston No. EN41340 - standard)
02-107963	Regulator - 1/2" NPT (Boston No. EN42340 - standard)
02-107645	Regulator - 1" NPT (Boston No. EN42460 - jumbo)
02-//////////	Repair kit (Boston No. EN42409)



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)



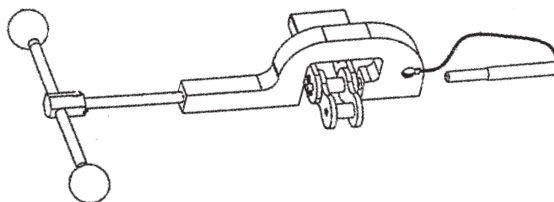
Spud Wrenches

Part Number	Description	Part Number	Description
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



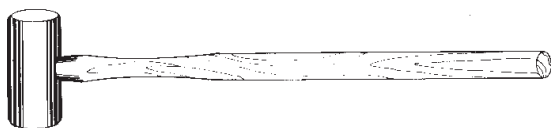
Block Height Gauge

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	Part Number	Description
02-486725F0225	2-1/4"	02-486725F0575	5-3/4"
02-400938	60 mm	02-436166	6"
02-486725F0300	3"	02-355906	190 mm
02-442194	80 mm	02-070314	7-5/8"
02-202158	3-5/8"	02-079066	7-5/8 & 8"
02-464219	4"	02-486725F0800	8"
02-486725F0463	4-5/8"		
02-214677	5"		
02-486725F0525	5-1/4"		
02-215471	5-5/8"		



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 programs and a practical addition to any block plant. Quality wood handle. High grade brass head beveled to minimize mushrooming and chipping.

Part Number	Description
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.

<u>Part Number</u>	<u>Description</u>
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



Digital



Analog

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.

<u>Part Number</u>	<u>Description</u>
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.

<u>Part Number</u>	<u>Description</u>
02-112641	Amprobe ammeter

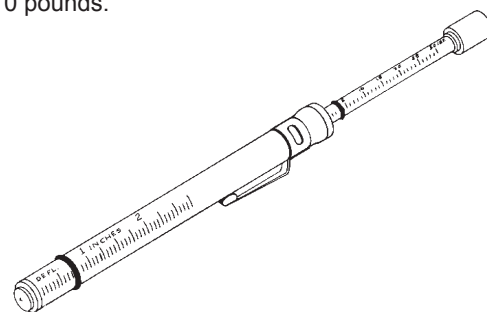


Belt Tensiometer

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.

<u>Part Number</u>	<u>Description</u>
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.

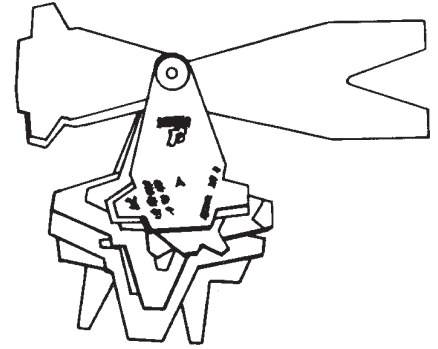
<u>Part Number</u>	<u>Description</u>
02-211931	Besser core removal tool



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.

<u>Part Number</u>	<u>Description</u>
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)

<u>Part Number</u>	<u>Description</u>
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

<u>Part Number</u>	<u>Description</u>
02-355981	Mold sling chain (2 req'd)

For 6 AAT

<u>Part Number</u>	<u>Description</u>
02-484160	Mold 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.

<u>Part Number</u>	<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 deceleration 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.

Advanced Servo Assembly Vibrator Shaft

<u>Part number</u>	<u>Qty</u>	<u>Description</u>
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

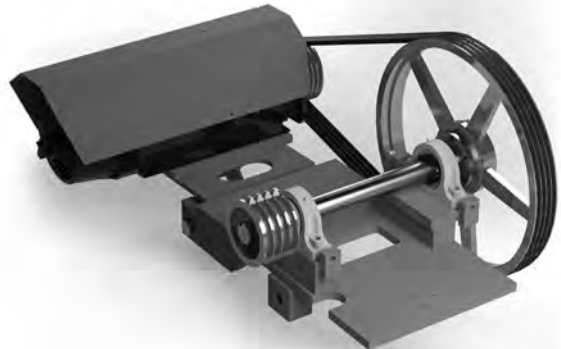
<u>Part number</u>	<u>Qty</u>	<u>Description</u>
02-523899	2	Splined shaft assembly
05-K-091-01400	4	Rubber disc coupling
01503-500009	2	Bearing
01591-000075	2	Coupling elastomer
Core Puller		
05-504306	1	Use with Advanced Servo Vibration

(refer to page 56)



Servo Main Drive (SMD) Replacement Parts

<u>Part number</u>	<u>Qty</u>	<u>Description</u>
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.

<u>Part Number</u>	<u>Description</u>
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

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