MENSCH

SIDE SHOOTER

PART # 023417

OWNERS MANUAL

BUCKET SIDE-SHOOTER

800.945.6678 Tel
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1H

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Warranty

What is covered:
Mensch Manufacturing, LLC warrants only products of its manufacture against operational failure caused by defective material or workmanship which occur during normal use, during the period described below.

Duration of Coverage:
Within 12 months from the date of purchase by Mensch Manufacturing's customer. All components not manufactured by Mensch Manufacturing will be warranted to the extent of the original manufacturer's warranty. Mensch Manufacturing is to replace free of charge any part that upon inspection shows to be defective excluding transportation costs and all other costs such as removal and installation expense.

Conditions:
Warranty coverage becomes available upon proper registration of the product. Routine maintenance outlined in the Operation and Maintenance sections must be performed timely in order to maintain warranty coverage. Mensch Manufacturing reserves the right to make warranty coverage contingent upon proof of proper maintenance.

What Mensch Manufacturing Will Do:
Mensch's sole and exclusive obligation under this warranty is limited to, at our option, repairing a defective part, replacing such part or parts with new or re-manufactured parts, or refunding the purchase price of the Mensch product. Mensch Manufacturing reserves the right to improve or modify products at any time without assuming an obligation to modify products previously manufactured.

How to Obtain Warranty Coverage:
Upon purchasing Mensch products please fill out the warranty card you are given and return it to Mensch Manufacturing. All warranty claims must be approved by Mensch Manufacturing before repairs begin. The warranty registration card is the only valid registration identification and must be in Mensch Manufacturing's possession. Mensch Manufacturing must have pictures of the part(s) that you are requesting warranted. Mensch Manufacturing must approve all warranty's.

What is Not Covered:

Labor	*Travel Time*	*Routine Maintenance Items*
Adjustments	*Normal Wear and tear*	*Damage caused by abuse*
Abnormal Use	*Neglect*	*Accident*
Improper Installation	*Improper Service*	*Alteration or removal of parts*

Damage to product from insufficient maintenance.
Use of accessory or part not manufactured or sold by Mensch Manufacturing, LLC

Mensch shall not be liable for loss of time, manufacturing costs, labor, materials, loss of profits, consequential damages, direct or indirect, because of defective products, whether due to rights arising under the contract of sale or independently thereof, and whether or not such claim is based on contract, tort or warranty. Our limited warranty does not apply to any damage to our products caused by the installation or use of parts and accessories, which are not manufactured or sold by Mensch Manufacturing, LLC. Failures which are not related to the use of those parts or accessories are covered under warranty if they otherwise meet the terms of the limited warranty for that product.

A Word to Operators

NOTE: All information, specifications and illustrations in this manual are on the basis of the latest date obtainable at the time of the publication. Mensch Manufacturing reserves the right to make changes or improvements at any time without notice.

This booklet is designed to acquaint you with the many features of your new Mensch Manufacturing Side-Shooter. Maintenance and operation procedures are outlined, as well as technical information. We urge you to follow the recommendations contained in this booklet, so that the Side-Shooter will remain free of trouble throughout its working life. Please familiarize yourself with this booklet, and refer to it when necessary.

If you encounter any problems with your Mensch Side-Shooter, contact the authorized Side-Shooter dealer in your area, or contact the factory direct at the address listed below:

MENSCH MANUFACTURING
P.O. BOX 418
2499 SOUTH HWY M-37
HASTINGS, MI 49058-0418 U.S.A.
PH: (616) 945-5300 (800) 945-6678
FAX (616) 945-5584

Technical Support

Normal Business Hours Call 1-800-945-6678

General Operating Tips

Read and understand this owner's manual completely before operating your machine. If time lapses between uses, it would be good to re-acquaint yourself with this manual.

Understand decals located in areas where moving parts are involved.

Before operating become familiar with all the controls and what the different functions do.

When operating become aware of all the safety devices and where they are located.

Be sure humans and animals keep a safe distance from the machine when In operation.

Conveyor Removal

With the use of a skid-steer or a forklift, position bucket as shown ***(Fig 1)***. Place pail under hydraulic motor to catch oil and remove hydraulic lines from motor ***(Fig 2***).

Fig 1

Fig 2

Place caps over hydraulic fittings on motor to prevent damage to threads and keep contaminates from entering the system ***(Fig 3)***. Place the bucket so that the conveyor is in the vertical position ***(Fig 4)***, Loosen and remove all four or six bolts holding the conveyor to the bucket ***(Fig 4)*** ***(Fig 5)***.

Caution: Do not get under the bucket or lift arms when removing bolts.

Fig 3

Fig 4

After the four to six bolts have been removed slide conveyor out of bucket as shown ***(Fig 6)***. Using a set of forks on a skidsteer or forklift and the help of another person is the safest way to remove the conveyor.

Fig 5

Fig 6

Removing Conveyor Belt

Loosen the jam nut on the motor side of the threaded rod welded ear. Holding the nut that is facing the take up end of the conveyor on the other side of the welded ear, turn the threaded rod counter clockwise ***(Fig 1)***. Do the same to both sides of the conveyor on the take up end. When the tension is off conveyor belt, pick conveyor up as shown in ***(Fig 2)*** remove belt over pulleys.

Note: Always be careful with conveyor on its side as it may tip easily.

Fig 1

Fig 2

Removal of Drive Motor and Pulley

To remove drive pulley loosen 2 drive motor bolts ***(Fig 2).*** Loosen set screws on double chain coupler ***(Fig 3)***. With use of prybar remove the drive motor from the conveyor ***(Fig 4).***

Note: When re-installing chain coupler make sure that blue lock tight is applied to the set screws before tighting set screws.

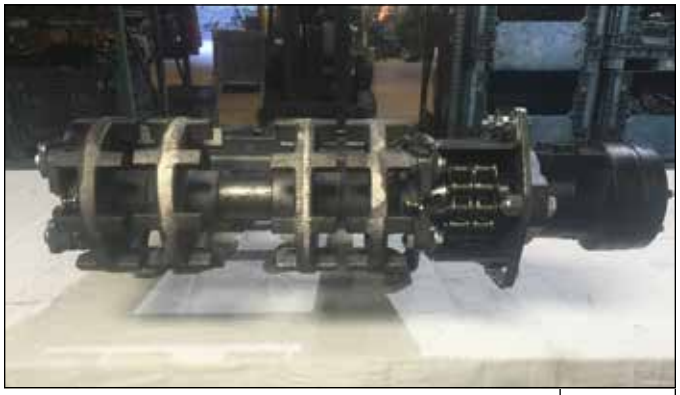


Fig 1

Fig 2

Fig 3

Fig 4

Next remove the chain coupler from the drive end of pulley. Make sure to note which way the chain coupler was placed in the unit and mark one end so you can replace in the same direction. ***(Fig 1)***

Remove the key and the spacer from the drive shaft and set aside ***(Fig 2)*** Loosen the bolts on both of the four bolt flange bearings on the drive end ***(Fig 3)***. and remove the drive shaft. You will have to loosen the set screws on the four bolt flange bearings to remove them from the shaft. Now all the parts for the drive end are apart and seperated ***(Fig 4)*** If desired you can remove the drive wheels from the drive shaft if desired by removing the e-clip from one end and sliding wheels off from shaft.

Fig 1

Fig 2

Fig 3

Fig 4

Take Up Pulley Removal

To remove take up end pulley loosen bearing bolts on both sides of pulley ***(Fig 1)*** and ***(Fig 2)***. Slide still assembled pulley up off from the bearing mounts and slide out to the side of belt. ***(Fig 3)*** Loosen set screws on pillow block bearings both sides ***(Fig 4)***.

Fig 1

Fig 2

Fig 3

Fig 4

Remove bearing mounts noting that the “small” side goes down and the “large” side goes up. ***(Fig 1)*** Next remove the threaded rod, you will first need to remove the jam nut that was loosened earlier to loosen the belt. ***(Fig 2)*** Remove the springs from the bearing mount tubes, there will be two springs in each tube. ***(Fig 3)***

Fig 1

Fig 2

Fig 3

Assembling Drive Pulley

Before assembling drive pulley familiarize yourself with how the assembly goes together. Components are shown in ***(Fig 1)***,

(1) Four Bolt Flange Bearing (010139)
(2) Drive Shaft Spacer
(3) Cast Drive Wheel Center (010216)
(4) Cast Drive Wheel Outside (010217)
(5) Hex Drive Shaft (010215)
(6) Four Bolt Flange Bearing (010139)
(7) Small Spacer
(8) Key (010202)
(9) Double Chain Coupler (00096)
(10) Drive Motor: 3.6cu. (00060) - 4.9cu. (00061)
6.2cu. (00066)

Start assembling by mounting flange bearing to the hex drive shaft ***(Fig 2)***. Take sub-assembled drive shaft and place in-between head pulley mounting ears. ***(Fig 3)***.
Snug up, do not tighten the bolts on the flange bearings. Next place framing square inside the conveyor frame, you may need to cut the square down and modify the square to fit properly. Square the head pulley with one side of the conveyor and THEN tighten the bearing bolts all the way. ***(Fig 4)***

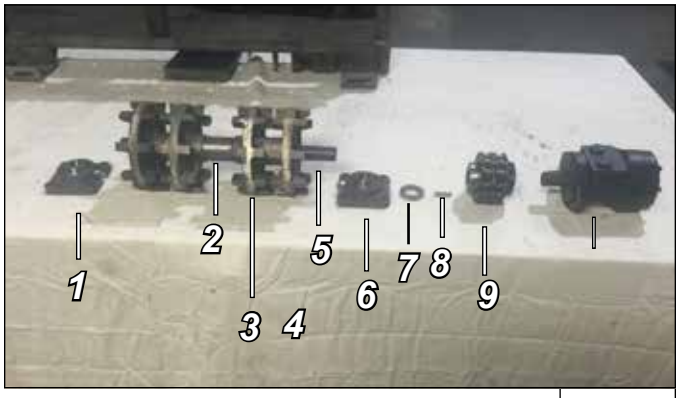


Fig 1


Fig 2


Fig 3


Fig 4

Place small spacer on keyed drive end of hex drive shaft. ***(Fig 1)***
Place square key in key slot of hex drive shaft and install chain coupler ***(Fig 2+3)***.

Fig 1

Fig 2

Fig 3

Drive Pulley Assembly

Lay conveyor back down and put motor back onto the drive end, making sure not to dislodge key from motor shaft and remember to tighten motor mount bolts. ***(Fig 1)***

Tighten set screws up on both the motor side and the bearing side of the double chain coupler. ***(Fig 2)***

Tighten set screws on both of the four bolt flange bearings. ***(Fig 3)***

Fig 1

Fig 2

Fig 3

All bearings are pre-greased and will not require additional greasing upon arrival of new Mensch bearings. The number one cause of bearing failure is OVER GREASING, grease sparingly.

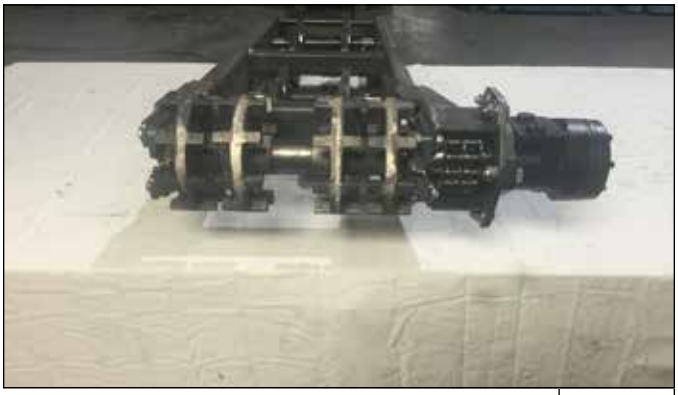


Fig 1

Bogie Assembly

Bogie Welded Assembly fits snugly in conveyor frame. Place 2-bolt flange bearings on bogie shaft and do not tighten set screws at this time ***(Fig 1)***. Place the bogey assembly in the conveyor and tighten bolts into the bearings on one side only and make sure that the bogey assembly is square with the frame the same as shown for the drive pulley. ***(Fig 2)***

Next make sure that the bogie wheels are centered in the conveyor frame using a tape measure, once the bogie is centered tighten the set screws on the bearings to hold the bogie in place. ***(Fig 4)*** :Note to place blue locktite on bearing set screws

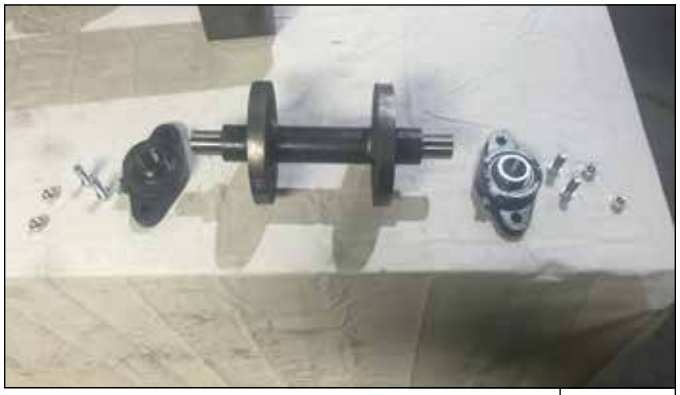


Fig 1

Fig 2

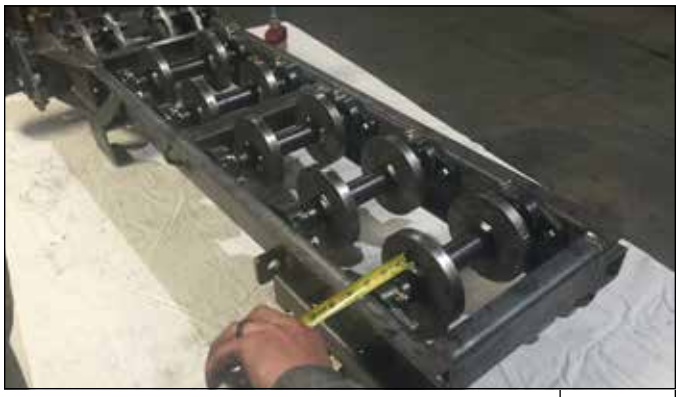


Fig 3

Fig 4

Take Up Pulley Assembly and Installation

Take Notice of all required parts ***(Fig 1)***

Place the threaded rod in with the tension nut on what will be the uptake side of the welded ear. ***(Fig 2)***

Drop in the two springs into the bearing mount tube and slide the bearing mount tube in with taking care to note that the small side points toward the bottom of the conveyor. ***(Fig 3)***

Slide the two uptake Pillow block bearings on to the uptake shaft ***(Fig 4)***

Fig 1

Fig 2

Fig 3

Fig 4

Uptake Installation:

Prior to mounting the uptake shaft assembly to the place the belt over the drive end and line up in conveyor ***(Fig 1+2)***.

Pull belt up near uptake end and place uptake assembly in hole and slide down over the bearing mount tubes ***(Fig 3)***.

While belt is still loose tighten the bearings into the bearing mount tubes ***(Fig 4)***

Fig 1

Fig 2

Fig 3

Fig 4

Setting The Belt:

To tighten the belt place wrench on the tension nut on threaded rod on the uptake side of the welded ear and begin to tension until belt is CLOSE to being snug ***(Fig 1)***

Adjust the opposite side adjusting rod to a similar measurement and continue alternating sides until belt is somewhat tight. There is no correct measurement but you do want the same measurement on each side to make sure the uptake end is running square to the conveyor.***(fig 2)***

You are looking for the belt to be suspended in the middle of the conveyor without being to tight. You should be able to pull up in the middle of the belt without much resistance. If the belt is to tight it will take excessive horsepower to turn it and the belt will run slower than desired. A belt that is to tight will also wear and stretch prematurely. ***(Fig 3)***

Tighten the lock nut on the motor side of the threaded rod welded ear to ensure the tensionsers will not move during operation.***(Fig 3)***.

Belt will not sag and touch table when tightened correctly and yet will spin with minimal effort to ensure proper RPM.***(Fig 4)***

•Proper belt tracking is ensured by visually checking the spacing in-between the outter uptake wheels and the drive cogs on the outside of the wheels. Tighten the tension threaded rod on the opposite side that you need to move the belt towards. Be careful during this procedure that you do not overtighten the belt. The same result for moving the belt can be made by looseing the same side that you want the belt to move towards.

Fig 1

Fig 2

Fig 3

Fig 4

Replacing Conveyor:

Place the conveyor in the bucket as shown in ***(Fig 1)*** and slide in until conveyor is centered in the bucket

Tilt the bucket forward as shown in ***(fig 2)*** and align holes in feet with holes in bucket and snug up mounting feet.***(Fig 2+3)***

Adjust the conveyor so that it is centered in the bucket and finish tightening the conveyor mounting bolts. ***(Fig 4)***.

Caution: Do not get under the bucket or lift arms when tightening bolts.

Fig 1

Fig 2

Fig 3

Fig 4

Adjustment for Rubber Skirting:

You adjust the rubber skirting by loosing the bolts shown in ***(Fig 1)*** The bolts run the length of the skirting on both sides of the bucket. ***(Fig 1)***.

Move the skirting up or down depending on how large the gap is in-between the rubber skirting and the belt. The gap should not be less than a 1/16 inch, and not more than 3/16” inch from belt, ***(Fig 2)***

If skirting is too close to the belting it will cause too much friction between skirting and the conveyor belt, this could cause the belt to not function properly or not to rotate at all.

Fig 1

Fig 2

Adjusting Side-Shooter Doors:

The side doors are adjustable so the flow of material from the belt can be reduced or increased.

To adjust the side doors, loosen the handles shown ***(Fig 1)*** then move the door up or down. ***(Fig 2)*** At the desired position tighten the door handles.

Fig 1

Fig 2

Installing Cutting Edge Bar:

Align cutter bar with the holes in the bucket (use some means to hold cutter bar while aligning) place bolts from underside so nuts are on the top ***(Fig 3)***.

Note: When installing bolts make sure that the square part of bolt fits into the cutter bar properly before tighten completely.

Note: tighten bolts evenly across the bucket to make sure that the bolts seat properly.

Fig 3

Removing Sprockets:

To remove the sprocket first remove the allen screws holding the tapered bushing to the agitator sprocket ***(Fig 1)***. Next place one of the same screws into the removal hole in the bushing to seperate the bushing from the sprocket ***(Fig 2)***, Next remove chain from sprockets ***(Fig 3)***.

Note: For tapered bushing information on removal and replacement see the bulletin on tapered bushings in the data section of this manual.

(Fig 4) shows the components on agitator drive end. Starting from right to left

(1) flange bearing
(2) spacer
(3) 60-48 sprocket
(4) tapered bushing
(5) 60-13 sprocket
(6) tapered bushing
(7) agitator drive motor

Fig 1

Fig 2

Fig 3

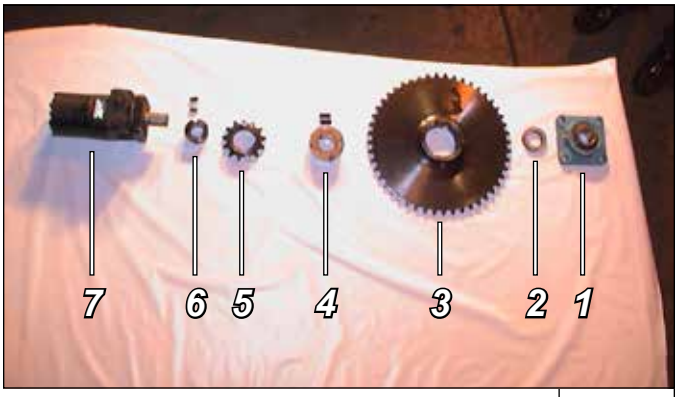
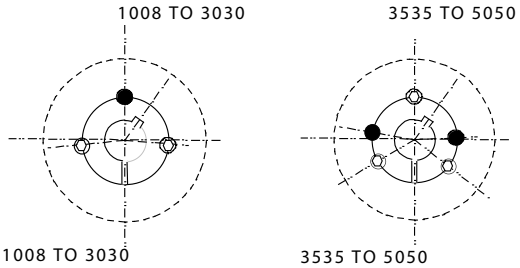


Fig 4

Taper Bushing

Taper Bushing #	Set Screws	Wrench Torque (in - lbs.)
1008	1/4	55
1210	3/8	175
1610	3/8	175
2012	7/16	280
2517	1/2	430
3020,3030	5/8	800
3535	1/2	1000



TO INSTALL

1. Clean shaft, bore and outside of bushing, and bore of hub (taking bushing from hub if already assembled). Remove any oil, lacquer or dirt. Place bushing in hub and match half holes to make complete holes (each complete hole will be threaded one side only).

2. Oil thread and point of set screws or thread and under head of cap screws. Place screws loosely in holes that are threaded on hub side—as shown in diagrams below and above.

3. Make sure bushing is free in hub. Slip assembly onto shaft and locate in position desired.

4. Tighten screws alternately and evenly until all are pulled up very tightly. Use a piece of pipe on wrench to increase leverage. (see table for wrench torque)

5. The screws go into the blind holes in the bushing that are threaded in the installed component.

6. Recheck screw torques after initial run-in, and periodically thereafter.

7. In order to eliminate the ingress of dirt fill all empty holes with grease.

TO REMOVE

1. Remove all screws. Oil thread and point of set screws or thread and under head of cap screws.

2. Insert screws in holes that are threaded on bushing side (shown above in diagram and represented as the black circle below). Note that one screw is left over and is not used in this loosening operation as shown in diagrams above.

3. Tighten screws alternately until bushing is loosened in hub. If bushing does not loosen immediately, tap on hub.

Removing Agitator Drive Motor:

Remove the hydraulic lines from the motor, and then remove the motor mount bolts ***(Fig 1&2)***. Remove the sprocket allen screws and place one screw in removal spot on sprocket. ***(Fig 3)***. Now motor can be removed from motor mount ***(Fig 4)***.

Fig 1

Fig 2

Fig 3

Fig 4

Sawdust Agitator Removal and Assembly:

To remove the agitator, first loosen and remove the bolts holding the flange bearings onto the Side Shooter ***(Fig 1)***
Next loosen both allen set screws on each bearing ***(Fig 2)***
Then remove agitator from Side Shooter ***(Fig 3)***

For re-assembly slide bearings onto the agitator shaft while the agitator is outside of the bucket. ***(Fig 4)***

Set agitator with bearings on it into the shaft holes in the Side Shooter. ***(Fig 3)***

With the agitator shafts centered in the mounting holes in the side of the Side Shooter tighten the bearing mount bolts that hold the agitator in place. ***(Fig 2)***

Note: You will need to leave the set screws loose in the bearings until the agitator drive sprocket is in place and spaced to run in line with the motor sprocket. Only then can you tighten the bearing set screws.

Fig 1

Fig 2

Fig 3

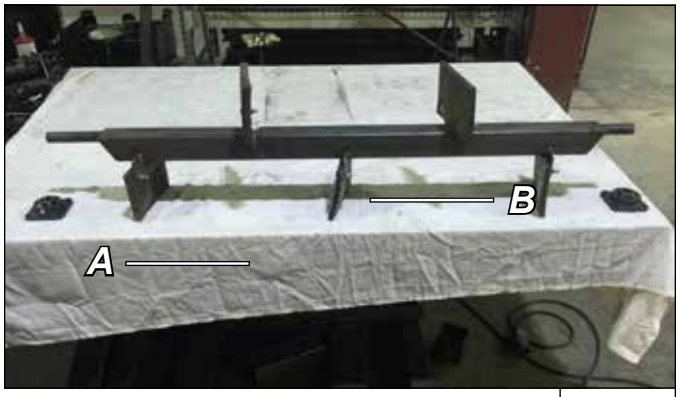


Fig 4

Motor Re-Assembly:
First place motor into the motor mount and tighten four bolts to hold in place
(Fig 1)

Then place the sprocket and the taper bushing on the motor shaft, tightening evenly with the end of the shaft and alternating allen screws to make sure that the bushing is tightened evenly to ensure complete lock.
(Fig 2)

Place the motor assembly on the Side Shooter and keep mounting bolts loose for adjustments to position later.

Place the agitator drive chain on the agitator sprocket and hang off from the motor drive sprocket. So the agitator sprocket is on the agitator shaft
(Fig3)

Place the center bushing on the agitator drive shaft with key and tighten evenly with two allen screws, keeping bushing even with the end of the agitator shaft
(Fig 3)

Align the motor and the agitator sprockets and tighten the motor mount and the agitator bearing set screws, making sure that the non-drive end of the agitator shaft is all the way in the bearing on the non-drive side.

Fig 1

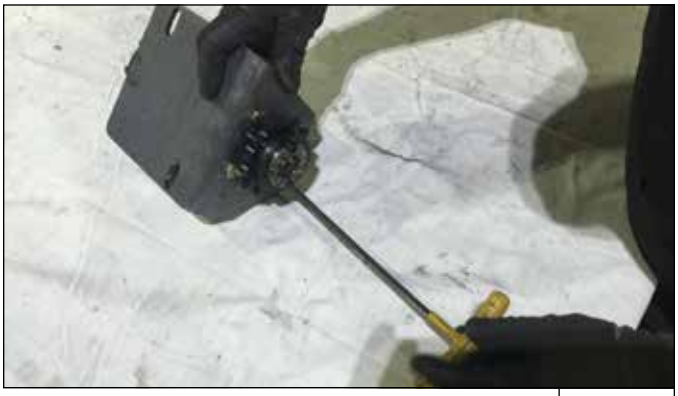


Fig 2

Fig 3

Maintenance Guidelines:

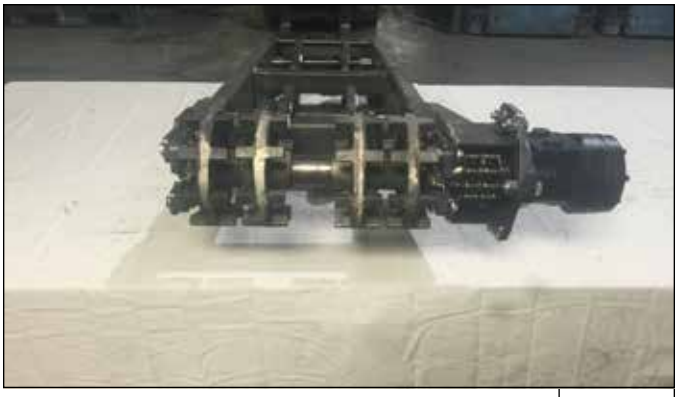


Fig 1

Fig 2

• Grease four bolt flange bearings on drive end of conveyor ***(Fig 1)*** and both pillow block bearings ***(Fig 2)*** at the take up end of conveyor.

Note: It is important that greasing is done on a regular schedule, approximately every 15 working hours. The number one cause for bearing failure on a sealed bearing is over-greasing.

• Check the tension on the conveyor belt after the first 10 loads for sawdust, and after the first hour, of running the side shooter conveyor for sand. After that check on a regular schedule to insure proper belt tension and prevent pre-mature belt wear. For tighten instructions see page 19 of this manual.

• Check belt for tracking on a regular bases, this will prevent pre-mature wearing of the belt. For tighten instructions see page 19 of this manual. It is recommended that belt be checked every 15 working hours.

• In cold weather if there is any frozen material, ice, snow, and etc. in the bucket or on the conveyor this should be removed or thawed out before starting the conveyor. This will prevent any pre-mature damage or failure to the conveyor or other components of the machine.

Note: Maintenance guidelines apply to both the sand and sawdust side shooter conveyor. The conveyors are the same for both. On the sawdust bucket there are two additional flange bearings, one on each side of the bucket. The bearing on the agitator motor side is greased from underneath with a grease zerk extension.

Troubleshooting Relief Valve

•Possible slow belt speeds usually only in one direction.

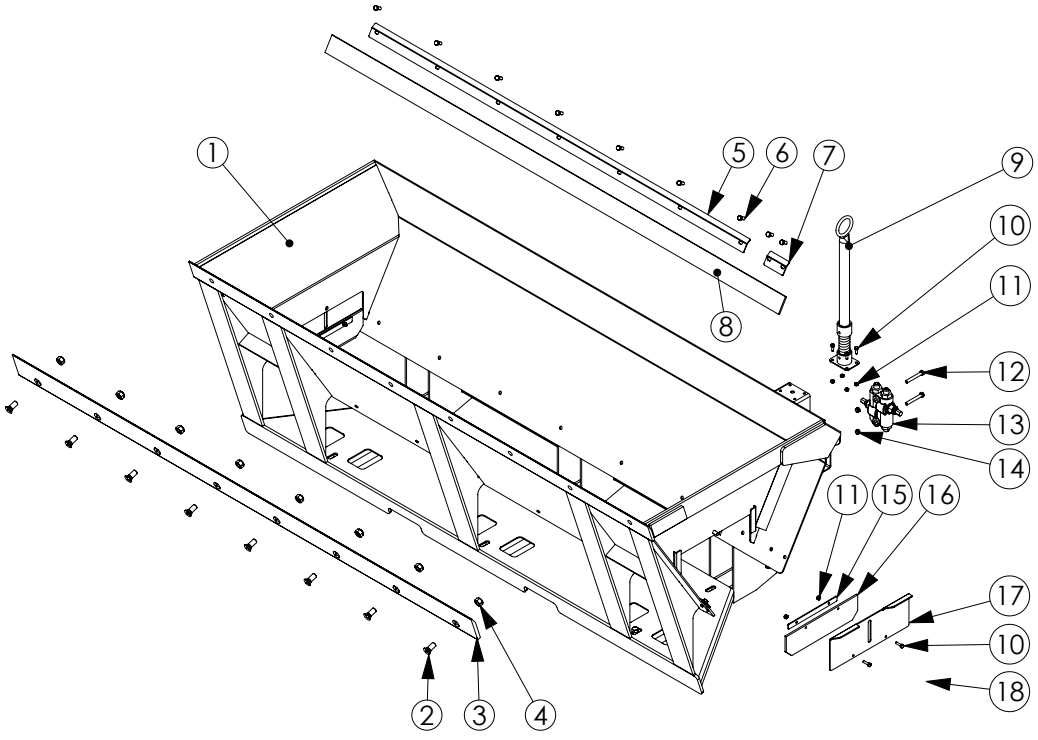
• Pull out the poppets located on the sides of dual cross-over relief valve and visually check to make sure there is no obvious damage.

• If there is no obvious damage to poppet clean with solvent and visually inspect springs and look for foreign material in relief.

•A small punch pressed into the end should acctuate poppet and possibly loosen any foreign material after solvent.

Sand Bucket

Item #	Part #	Description	Qty 5’	Qty 6’	Qty 7’	Qty 8’	Item #	Part #	Description	Qty 5’	Qty 6’	Qty 7’	Qty 8’
1	011374	5’ Sand Bucket	1				7	010127	Outer Skirt Clamp	2			
	011375	6’ Sand Bucket		1			8	010132	5’ Skirt Rubber	2			
	011376	7’ Sand Bucket			1			010133	6’ Skirt Rubber		2		
	—	8’ Sand Bucket				1		010134	7‘ Skirt Rubber			2	
2	010106	5/8-11 x 1.5 Plow Bolt	6	7	8			010135	8‘ Skirt Rubber				2
	—	1-8 x 3 Plow Bolt				16	9	010157	Hydraulic Hose Holder	1			
3	010112	5’ Bolt On Cutting Edge	1				10	010153	1/4-20 x 1 Hex Bolt	8			
	010113	6’ Bolt On Cutting Edge		1			11	010101	1/4-20 Nut	8			
	010114	7’ Bolt On Cutting Edge			1		12	011552	3/8-16 x 3 Hex Bolt	2			
	010115	8’ Bolt On Cutting Edge				1	13	00040	Differential Relief Valve	1			
	010107	5/8-11 Nut	6	7	8		13	00042	Differential Poppet Relief Cartridge	2			
4	—	1-8 Nut				16	14	010051	3/8-16 Nut	2			
5	010128	5’ Center Skirt Clamp	1				15	011561	Door Rubber Clamp	2			
	010129	6’ Center Skirt Clamp		1			16	11002	Door Rubber	2			
	010130	7’ Center Skirt Clamp			1		17	012953	Door - Bucket Side Shooter Sand	2			
	010131	8’ Center Skirt Clamp				1	18	012954	Door Lock	2			
6	011211	5/16-18 x 1 Bolt	18	20	22	24							



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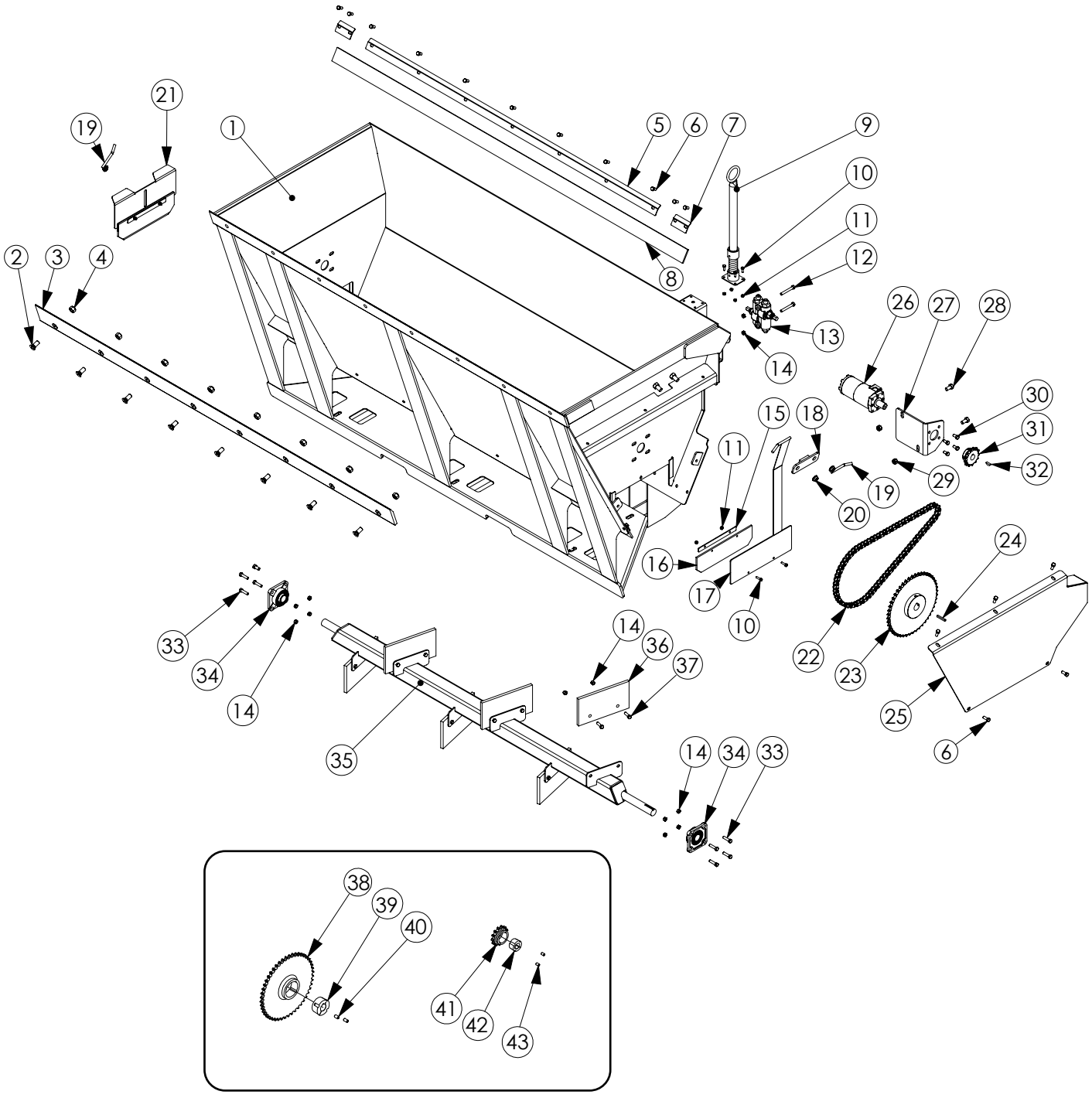
Sawdust Bucket

Item #	Part #	Description	Qty 5’	6’	7’	8’
1	012955	5’ Sawdust Bucket	1			
	012956	6’ Sawdust Bucket		1		
	012957	7’ Sawdust Bucket			1	
	012958	8’ Sawdust Bucket				1
2	010106	5/8-11 x 1.5 Plow Bolt	6	7	8	
	—	1-8 x 3 Plow Bolt				16
3	010112	5’ Bolt On Cutting Edge	1			
	010113	6’ Bolt On Cutting Edge		1		
	010114	7’ Bolt On Cutting Edge			1	
	010115	8’ Bolt On Cutting Edge				1
4	010107	5/8-11 Nut	6	7	8	
	—	1-8 Nut				16
5	010128	5’ Center Skirt Clamp	1			
	010129	6’ Center Skirt Clamp		1		
	010130	7’ Center Skirt Clamp			1	
	010131	8’ Center Skirt Clamp				1
6	011211	5/16-18 x 1 Bolt	23	25	27	29
7	010127	Outer Skirt Clamp	2			
8	010132	5’ Skirt Rubber	2			
	010133	6’ Skirt Rubber		2		
	010134	7‘ Skirt Rubber			2	
	010135	8‘ Skirt Rubber				2
9	010157	Hydraulic Hose Holder	1			
10	010153	1/4-20 x 1 Hex Bolt	8			
11	010101	1/4-20 Nut	8			
12	011552	3/8-16 x 3 Hex Bolt	2			
13	00040	Differential Relief Valve	1			
13	00042	Differential Poppet Relief Cartridge	2			
14	010051	3/8-16 Nut	12			
15	011561	Door Rubber Clamp	2			
16	11002	Door Rubber	2			
17	012960	Door Sprocket Side	1			
18	012959	Door Lock Clamp	1			
19	012954	Door Lock	2			
20	011209	1/2-13 Serrated Flange Nut	1			

Item #	Part #	Description	Qty 5’	6’	7’	8’
21	012953	Door - Non Sprocket Side	2			
22	010122	Chain 60	1			
	011285	Chain 80				1
23	—	Sprocket 60-48	1			
	012525	Sprocket 80-48				1
24	010202	Key Sq 1/4 x 1 1/4	1			
	010446	Key Sq 1/2				1
25	011000	Cover	1			
26	00059	Motor - 22.6 cu T-Series	1			
	—	Motor - 2000 Series	—			
	—	Motor - 6000 Series	—			
27	010126	Motor Mount T-Series	1			
28	010007	1/2-13 x 1 Bolt	2			
29	010091	1/2-13 Nut	2			
30	010110	3/8-16 x 7/8 Bolt	4			
31	012789	Sprocket 60-13	1			
	011287	Sprocket 80-14				1
32	010203	Woodruff Key 1/4	1			
	010444	Key Sq 5/16	—			
	011478	Key Sq 3/8				1
33	0102810	3/8-16 x 1 1/2 Serrated Flange Bolt	4			
34	010033	Bearing - F206 1-1/4	2			
	010072	Bearing - F210 2				2
35	00043	Agitator 5’	1			
	00044	Agitator 6’		1		
	00045	Agitator 7’			1	
	00046	Agitator 8’				1
36	010366	Agitator Paddle Rubber	4	5	6	7
37	010050	3/8-16 x 1 1/4 Bolt	8	10	12	14
38	010118	Sprocket 60-48 - Taper Lock	—			
39	010119	Hub - Taper Lock 1 1/4	—			
40	—	Set Screw	—			
41	010125	Sprocket 60-13 - Taper Lock	—			
42	010124	Hub - Taper Lock 1	—			
43	—	Set Screw	—			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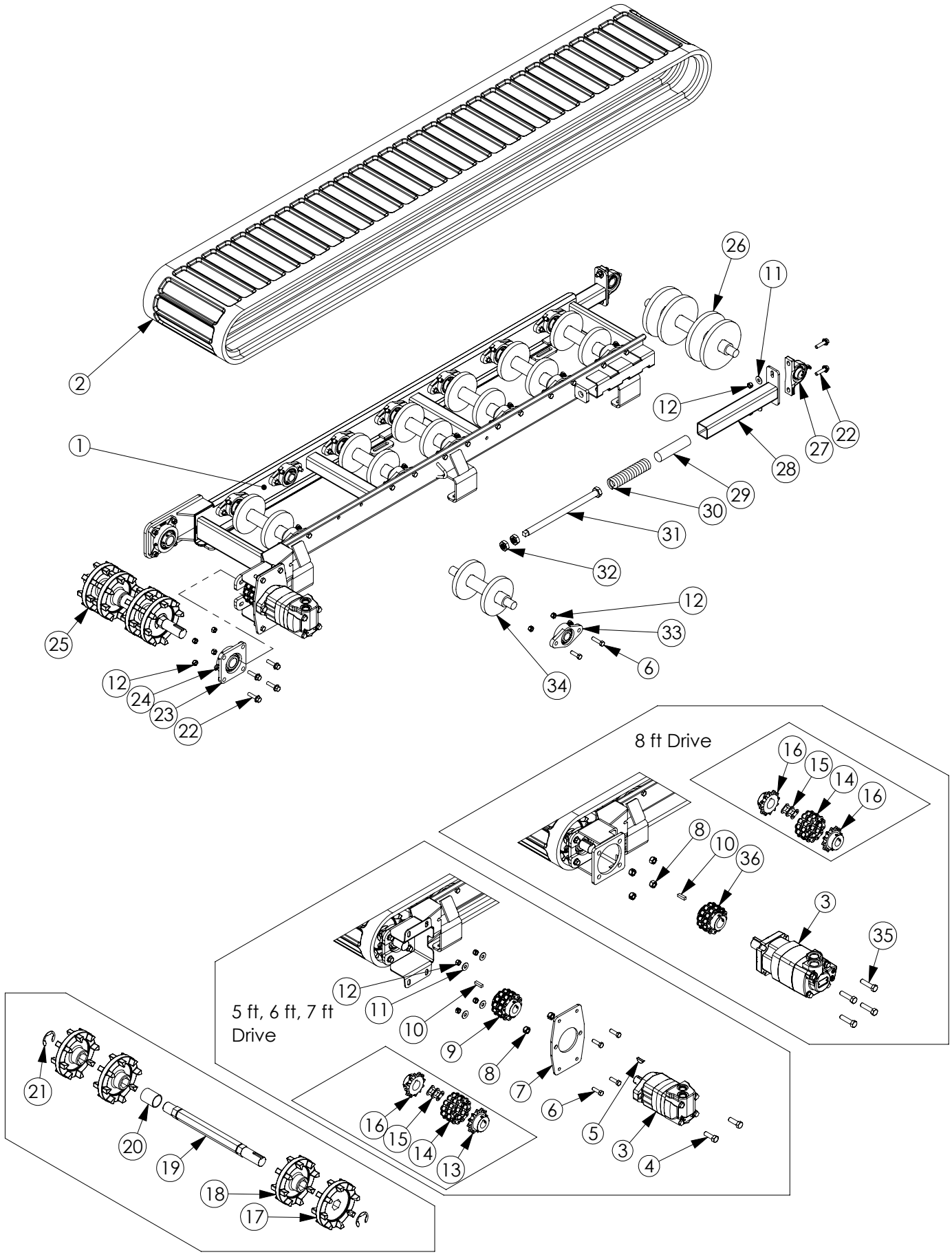
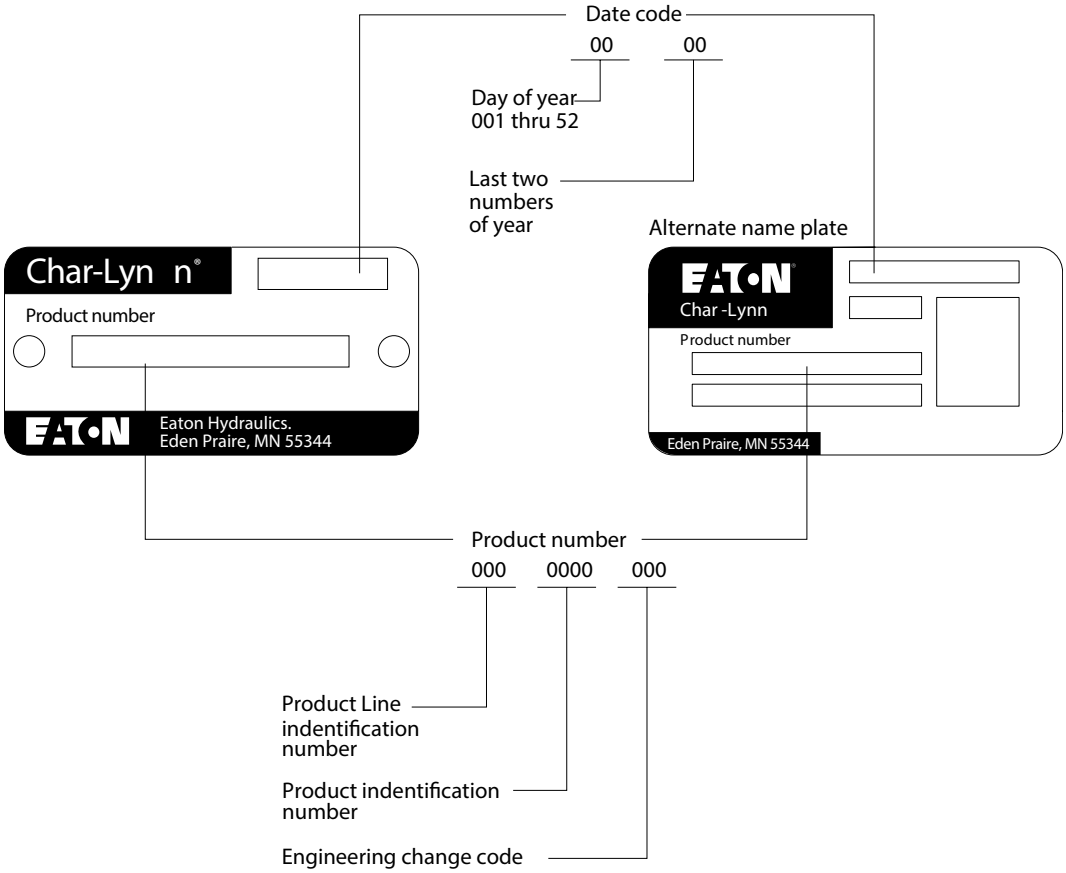
Bucket Side-Shooter H.D. Conveyor - 029787

Item #	Part #	Description	Qty							
			5ft		6ft		7ft		8ft	
			Sand	Saw	Sand	Saw	Sand	Saw	Sand	Saw
1	020932	5’ Conveyor - Welded Frame HD	1							
	020933	6’ Conveyor - Welded Frame HD			1					
	020934	7’ Conveyor - Welded Frame HD					1			
	020935	8’ Conveyor - Welded Frame HD							1	
2	010190	5’ Track	1							
	010191	6’ Track			1					
	010192	7’ Track					1			
	010193	8’ Track							1	
3	00060	Motor 3.6 cu	1							
	00061	Motor 4.9 cu				1		1		
	00062	Motor 6.2 cu			1		1			
	011630	Motor 7.9 cu							1	
4	010625	1/2-13 x 1.5 Hex Bolt	2							
5	010203	Woodruff Key 1/4 x 1	1							
6	010050	3/8-16 x 1 1/4 Hex Bolt	24		28		32		36	
7	020313	Motor Mount Plate HD	1		1		1			
8	013499	1/2-13 Hex Locknut	2						4	
9	00097	Double Chain Coupler 1 1/4” to 1”	1							
10	010202	Key 1/4 x 1 1/4	1							
11	012793	3/8 Washer	8							
12	013447	3/8-16 Hex Locknut	36		40		44		48	
13	010201	Double Chain Coupler Gear 1” ID	1							
14	010200	Double Chain Coupler Chain	1							
15	010360	Double Chain Coupler Master Link	1							
16	010223	Double Chain Coupler Gear 1 1/4” ID	1						2	
17	030361	Drive Sprocket (Lateral - Half)	2							
18	030360	Drive Sprocket (Center - Full)	2							
19	028815	Hex Shaft Drive 1 1/4”	1							
20	011248	Spacer	1							
21	010194	e Clip 1 1/4”	2							
22	013711	3/8-16 x 1 1/2 Serrated Flange Bolt	12							
23	010033	Flange Bearing F-206	2							
24	011627	Grease Zerk 1/8-27 NPT 45°	2							
25	029807	Cast Drive Assembly HD (1 1/4” Shaft)	1							
26	012342	Take Up Pulley	1							
27	012236	Bearing Pillow Block	2							
28	012345	Take Up Arm (Offset)	2							
29	032340	Take Up Spacer	2							
30	010034	Tension Spring	2							
31	012945	Threaded Rod 10”	2							
32	010085	3/4-10 Jam Nut	4							
33	012933	Bearing - 2 Bolt Flange	10		12		14		16	
34	012370	Bogie Wheel Assembly	5		6		7		8	
35	010304	1/2-13 x 2 Hex Bolt							4	
36	020936	Double Chain Coupler 1 1/4” to 1 1/4””							1	


8 ft Drive
5 ft, 6 ft, 7 ft
Drive

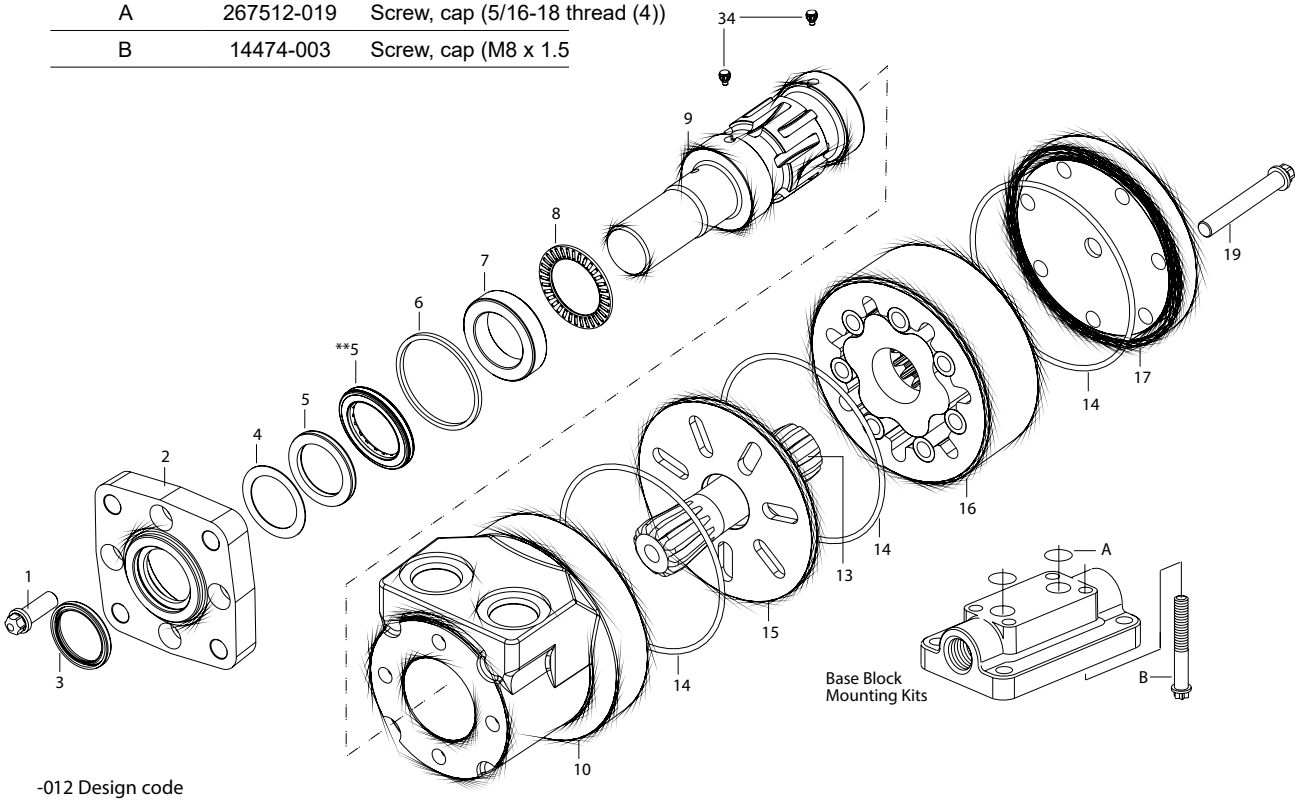
How to order motor replacement parts



Eaton
Hydraulics Group USA
14615 Lone Oak Road
Eden Prairie, MN 55344
USA
Tel: 952-937-9800
Fax: 952-294-7722
www.eaton.com/hydraulics

S-Series Motor

Item #	Part #	Description	Qty
1	16292-088	Screw, cap (6 Point (E10) drive 5/16-24 x 7/8)	4
2	22000-001	Flange mounting (2 Bolt) AA	1
3	9121-002	Seal, exclusion	1
4	22002-000	Washer, backup	1
5*	9057-014	Seal, pressure	1
6	9091-001	Seal	1
7	7462-000	Race, thrust bearing	1
8	7537-000	Bearing, thrust needle	1
9	201616-001	Shaft, output (1” dia. straight with woodruff key slot)	1
	14193-000	Key, woodruff (1” dia. straight shaft)	1
10	4993789-001	Housing, 7/8-14 O-ring ports AA	1
13	*	Drive	1
14	4993784-001	Seal	3
15	4993682-001	Plate, spacer	1
16	*	Geroler sub-assembly	1
17	4997139-001	Cap, end (no port)	1
	4997139-002	Cap, end (with drain port 7/16-20 O-ring)	1
19	*	Screw, cap (6 point (E10) drive 5/16-24)	7
20	9072-003	Plug/O-ring (7/16-20 drain port)	1
	250003-904	O-ring for 7/16-20 drain port plug	1
21	9900101-000	Seal kit (Buna N) - contains poppet	
	9900100-000	Seal Kit (Viton) - contains poppet	
34	201971-001	Poppet	2
Mounting kit	123-1008	Base blocking mounting kit (7/8-14 O-ring ports (manifold mount motors only)	
A	267512-019	Screw, cap (5/16-18 thread (4))	
B	14474-003	Screw, cap (M8 x 1.5	

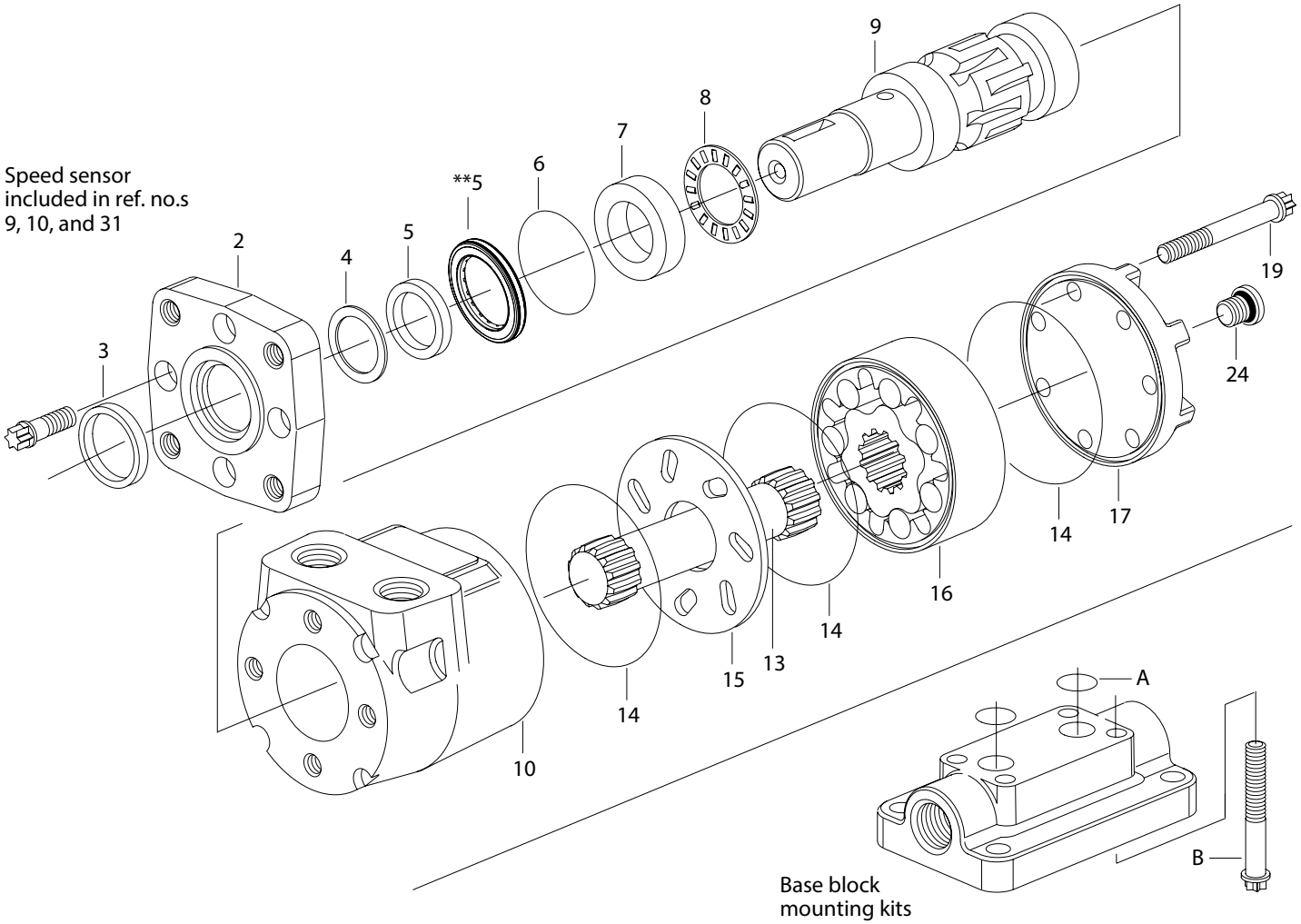


-012 Design code

Displacement	Ref no. 13 drive		Ref no. 16 Geroler ® sub-assembly		Ref no. 19 (6 pt. drive) Screw cap	
cm^3/r [in^3/r]		Length mm [in]		Width mm [in]		Length mm [in]
58 [3.6]	4993244-001	77,7 [3.06]	4999415-001	7,6 [0.30]	16294-150	38,1 [1.50]

T-Series Motor - Agitator

	Item #	Part #	Description	Qty
	1	16292-088	Screw, cap (6 point (E10) drive 5/16-24 x 7/8)	4
	2	22000-002	Flange mounting (4 bolt) 3/8-16 UNC	1
X	3	9121-002	Washer, backup	1
X	4	22002-000	Seal, pressure	1
	5*	9057-014	Seal	1
X	6	9091-001	Seal, exclusion	1
	7	7462-000	Race, thrust bearing	1
	8	7537-000	Bearing, thrust needle	1
	9	7360-001	Shaft, output (1 in dia w/ woodruff)	1
	10	201285-003	Housing, 1/2 NPTF ports	1
X	11	N/A	O-ring	1
X	12	N/A	Plug	1
	13	*	Drive	1
X	14	5996785-001	Seal	3
	15	22808-000	Plate, spacer	1
	16	*	Geroler	1
	17	23986-002	Cap, end (with drain port 7/16-20 O-ring)	1
X	18	-	Seal, washer	7
	19	*	Screw, cap (6 point (E10) drive 5/16-24)	7
	24	9072-003	Plug/ O-ring (7/16-20 drain port)	1
X		9170-002	O-ring (7/16-20 drain port)	
	31	60564-000	Seal kit (Buna N) — contains parts indicated by X	
		60565-000	Seal kit (same as above with one exception - shaft seal is Viton)	
		60566-000	Seal kit (Viton) — contains parts indicated by X (part no.s differ from those shown)	
		123-1008	Base block mounting kit (7/8-14 O-ring ports (manifold mount motors only))	
		15058-000	Seal, O-ring (2)	
X	A	267512-019	Screw, cap (5/16-18 thread (4))	
	B	14474-003	Screw, cap (M8 x 1.5) thread (4))	


Speed sensor
included in ref. no.s
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A
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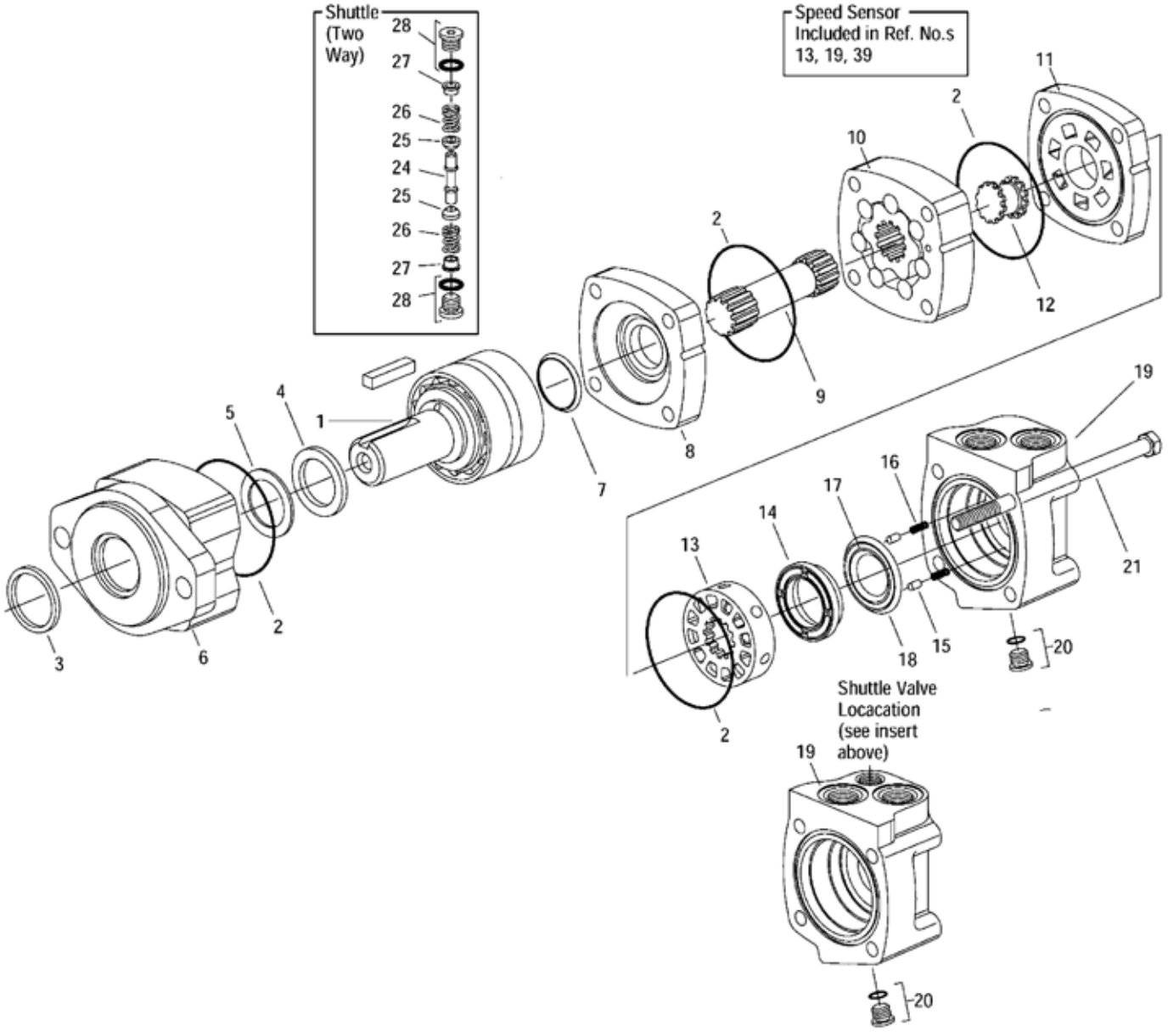
Base block
mounting kits

2000 Series Motor

	Item #	Part #	Description	Qty
	1	21618-001	Shaft and Bearing Kit (1 inch Straight)	1
		14193-000	Key (for 1 Straight Shaft)	1
		21618-002	Shaft and Bearing Kit (1.25 inch Straight)	1
		14392-008	Key (for 1.25 Straight Shaft)	1
ł	2	14559-006	Seal	4
ł	3	9121-001	Seal, Exclusion	1
ł	4	9057-009	Seal, Shaft	1
ł	5	7382-000	Ring, Back-up	1
	6	21578-001	Housing, Bearing, SAE B (Two Bolt)	1
ł	7	9050-000	Seal, Shaft Face	1
	8	22102-000	Plate, Wear	1
	9	*	Drive, main	1
	10	*	Geroler	1
	11	22134-000	Plate, Valve	1
	12	8433-000	Drive, Valve	1
	13	21466-000	Valve	1
	14	8915-000	Balance Ring	1
	15	14351-000	Pin, Balance Ring	2
	16	7383-000	Spring, Compression	2
ł	17	9049-001	Seal, Face, Inner	1
ł	18	9135-002	Seal, Face, Outer	1
	19	21564-001	Housing, Valve	1
	20	9072-003	Plug Assembly (7/16-20 Case Drain Plug	1
ł		250003-904	O-ring	1
	21	*	Screw, Cap	4
	24	8566-000	Piston Shuttle	1
	25	8567-000	Poppet	2
	26	530079-000	Spring	2
	27	8755-000	Sleeve, Dash Pot	2
	28	9072-005	Plug Assembly (9/16-18 Shuttle Valve End)	2
		250003-906	O-ring	2
		61258-000	Seal Kit (Std. and Whl. Motors) - Contains Parts Indicated by ł	
		61263-000	Seal Kit, Viton** (Std. and Whl. Motors) - Contains Parts Indicated by ł	

** - Viton Seal Parts Numbers Differ from Part Numbers Shown above. Note: Backup Ring Item 5 is not used with Viton Shaft Seals Item 4.

Displacement cm³/r [in³/r]	Drive, Main Item No. 9 —Part No./Length		Geroler® Item No. 10 —Part No./Width		Screw, Cap (Standard/Wheel) Item No. 21 —Part No./Length	
	Part No.	mm [inch]	Part No.	mm [inch]	Part No.	mm [in.]
80 [4.9]	21371-009	76,2 [3.00]	21625-001	17,8 [.70]	14384-004	127,3 [5.01]
100 [6.2]	21371-010	80,8 [3.18]	21625-002	22,5 [.88]	14384-006	135,4 [5.33]
130 [8.0]	21371-004	87,2 [3.43]	21625-003	28,9 [1.14]	14384-007	138,4 [5.45]
160 [9.6]	21371-004	87,2 [3.43]	21625-004	28,9 [1.14]	14384-007	138,4 [5.45]
195 [11.9]	21371-005	94,0 [3.70]	21625-005	35,6 [1.40]	14384-008	144,8 [5.70]
245 [14.9]	21371-006	103,1 [4.06]	21625-006	44,7 [1.76]	14384-010	154,9 [6.10]
305 [18.7]	21371-007	114,4 [4.51]	21625-007	56,0 [2.21]	14384-012	164,5 [6.48]
395 [24.0]	21371-008	130,4 [5.13]	21625-008	72,0 [2.83]	14384-014	182,4 [7.18]
490 [29.8]	21371-012	147,9 [5.82]	21625-010	89,4 [3.52]	14384-019	199,6 [7.86]

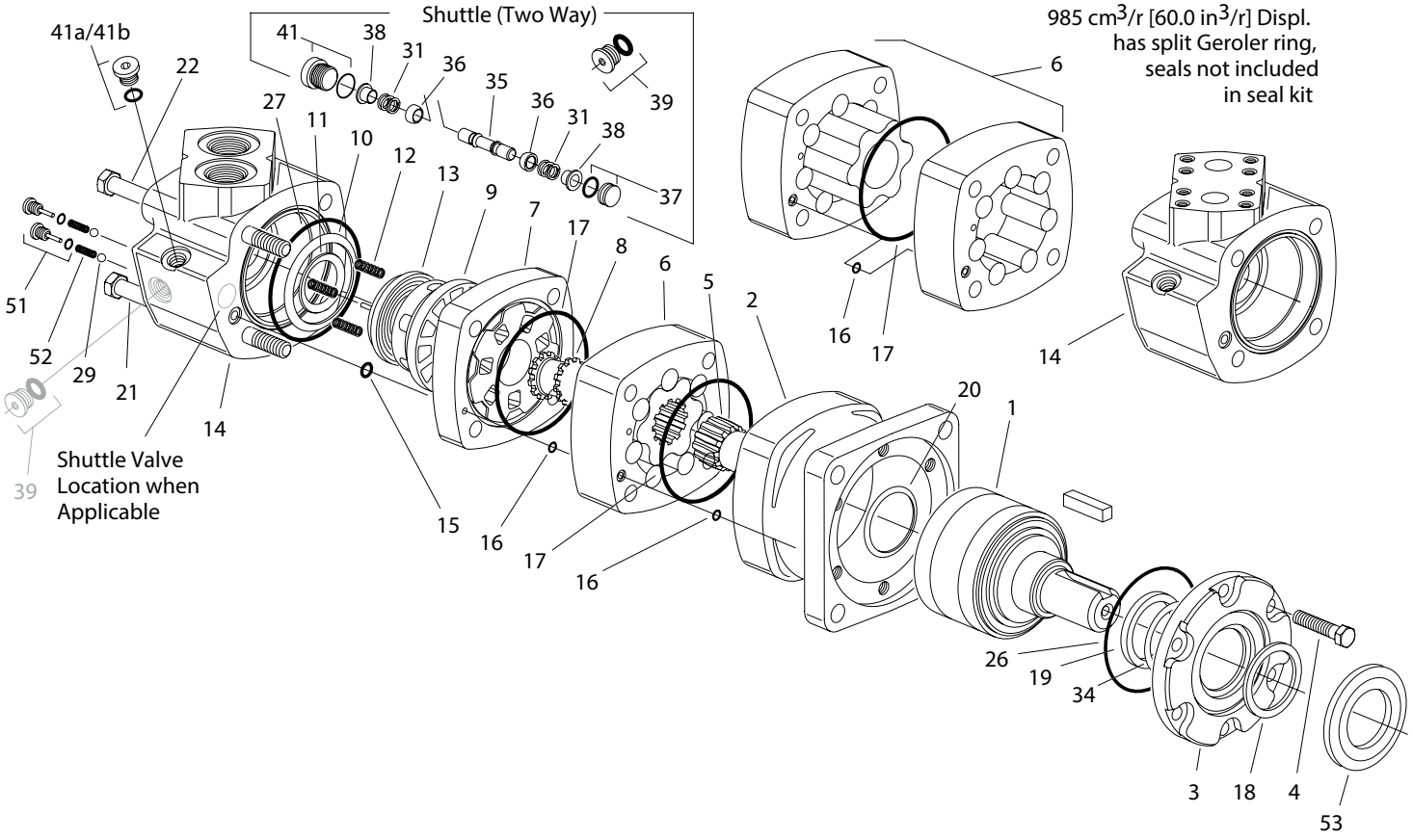


6000 Series Motor

	Item #	Part #	Description	Qty
	1	201837-001	Shaft and Bearing Kit (1-1/2 inch Straight)	1
		14393-010	Key (for 1-1/2 Straight Shaft)	1
	2	201839-001	Housing, Bearing (Standard)	1
	3	201840-001	Retainer, Front	1
	4	14253-000	Screw, Cap	6
	5	*	Drive, Main	1
	6	*	Geroler	1
	7	21666-000	Plate, Valve	1
	8	8508-000	Drive, Valve	1
	9	8497-000	Valve	1
X	10	6992-000	Seal, Face, Outer	1
X	11	6993-000	Seal, Face, Inner	1
	12	6203-000	Spring, Compression	3
	13	21317-000	Balance Ring w/ Pins	1
	14	8502-004	Housing, Valve	1
X	15	15006-000	Seal	1
X	16	8765-010	Seal	2
X ł	17	250052-044	Seal	2
ł	18	9039-001	Dust Seal	1
ł	19	9057-013	Seal, Shaft	1
ł	20	9080-001	Seal, Shaft Face	1
	21	*	Screw, Cap	2
	22	*	Screw, Cap	2
X	26	16039-000	Seal	1
X	27	15062-000	Seal	1
	29	18026-000	Ball, Steel	2
	31	230079-000	Spring	2
ł	34	6991-000	Ring, Back-up	1
	35	8566-000	Piston Shuttle	1
	36	8567-000	Poppet	2
	37	201868-002	Plug Assembly	1
		14502-012	O-ring	1
	38	8755-000	Sleeve, Dash Pot	1
	39	9072-002	Plug Assembly	1
		250003-903	O-ring	1
	41a	9266-003	Plug Assembly (7/16-20 Case Drain Plug)	1
		25003-904	O-ring	1
	51	8350-000	Check Plug Assembly	2
X		25003-903	O-ring	2
	52	6464-000	Spring, Compression	2
	53	14628-007	Guard, Seal	1
		61238-000	Seal Kit, Rear (Std. and Whl. Motors) - Contains Parts Indicated by X	
		61237-000	Seal Kit, Shaft (Std. and Whl. Motors) - Contains Parts Indicated by ł	
		61285-000	Seal Kit, Complete Buna N w/ Viton Shaft Sheal (Std. and Whl. Motors) - Contains Parts Indicated by X and ł	
		61246-000	Seal Kit, Viton (Std. and Whl. Motors) - Contains Parts Indicated by X and ł	

** - Viton Seal Parts Numbers Differ from Part Numbers Shown above. Note: Backup Ring Item 34 is not used with Viton Shaft Seals Item 19.

Displacement cm³/r [in³/r]	Drive, Main Item No. 5—Part No./Length		Gerolei® Item No. 6—Part No./Width		Screw, Cap Item No. 21 —Part No./Length		Screw, Cap Item No. 22—Part No./Length	
	Part No.	mm [inch]	Part No.	mm [inch]	Part No.	mm [in.]	Part No.	mm [in.]
195 [11.9]	21373-001	105,1 [4.14]	8507-001	21,7 [.85]	14409-001	125,7 [4.95]	14409-005	159,7 [6.29]
245 [15.0]	21373-002	110,7 [4.36]	8507-002	27,3 [1.07]	14409-002	132,1 [5.20]	14409-006	166,1 [6.54]
310 [19.0]	21373-003	118,1 [4.65]	8507-003	34,6 [1.36]	14409-003	138,4 [5.45]	14409-007	172,4 [6.79]
390 [23.9]	21373-004	127,0 [5.00]	8507-004	43,4 [1.71]	14409-004	148,1 [5.83]	14409-008	181,8 [7.16]
490 [30.0]	21373-005	138,2 [5.44]	8507-005	54,4 [2.14]	14409-005	159,7 [6.29]	14409-010	193,3 [7.61]
625 [38.0]	21373-007	152,8 [6.02]	8507-007	69,1 [2.72]	14409-007	172,4 [6.79]	14409-014	208,5 [8.21]
985 [60.0]	21373-006	192,8 [7.59]	8507-006	108,9 [4.29]	14409-012	213,6 [8.41]	14409-013	245,4 [9.66]



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Part # 023417