



***STAINLESS STEEL V-BOTTOM SPREADERS***

**Parts List  
&  
Service Manual**

MFG BY : SMITH METAL WORKS OF NEWARK , INC.  
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ALL Stainless Steel "V" Bottom Spreaders come equipped with a name plate attached to it. The model and serial numbers are stamped on the name plate. Always use the model and serial numbers in all correspondence regarding parts and or operation .

# **OPERATING INSTRUCTIONS**

## **STAINLESS STEEL V-BOTTOM SPREADERS**

### **Safety:**

- 1. Insure that all personnel involved with operation and maintenance of the Smith Stainless Steel Spreader are properly instructed.**
- 2. Always disconnect all power sources before servicing.**
- 3. Always use sander tie downs when transporting or operating the machine.**
- 4. Keep limbs free of pinch points and moving parts when operating the spreader.**
- 5. Avoid wearing loose clothing which could become entagled in moving parts.**
- 6. Insure all personnel are clear when loading and unloading spreader.**
- 7. Read operating instructions completely before operating spreader.**
- 8. When traveling, especially fully loaded, this spreader may have a high center of gravity, and care should be exercised when turning or driving on banked surfaces.**
- 9. When loading and unloading of unit use lifting rings provided on hopper side. Only attempt to lift the unit when the hopper is empty. NEVER STAND BENEATH a spreader being lifted.**
- 10. Caution: On auger models, all guards must be left in place as body and body parts could become entrapped in auger, causing severe injury or dismemberment.**

### **Installation Instruction:**

- 1. Attach lifting chains or cables to the lifting rings provided on the hopper sides. Place the spreader on the truck centered and as far forward as possible. Tie down the spreader with chains to lift hooks or with optional tie downs.**

### **Operating Instructions:**

- 1. Once your spreader is properly installed, we recommend a "dry run" with the hopper empty. Check for any obvious poor or faulty operation.**

2. Load the hopper with your desired material and adjust the spreader for proper "spread". Volume is controlled by the sluice gate opening, while the direction and range is controlled by position of the internal chute and external deflectors. Always observe all safety rules when performing adjustments.
3. An inverted "V" is included as standard equipment . The purpose of the inverted "V" is to reduce load down pressure on the conveyor there by easing start-up power requirements . If the load exhibits excessive "bridging", the operator may elect to remove the inverted "V" sacrificing power consumption for improved product flow. In order to reduce power consumption on start-ups it is recommended that payload not be left in hopper over extended period. (This might cause material freeze up.)

### **Maintenance:**

1. Proper scheduled and performed operator maintenance is the key for successful operation.
2. Proper lubrication consists of keeping all grease fittings serviced. Also insure that the lubricant level in the gearbox is at the check plug level. (Use sae 80w - 120 weight gear oil in the gearbox.)
3. Frequent lubrication of the roller chain is also recommended.
4. Cleanliness of the unit helps minimize friction. Always flush off the unit after operation to prevent build-up and binding.
5. Proper adjustments will keep the unit operating freely. Provide only the necessary conveyor chain tension to maintain smooth operation. Excessive chain tension could result in overloading.

### **Off-Season Maintenance (Summer Storage)**

1. Thoroughly flush the entire unit clean of salt and sand. Lube all bearings and check gearbox oil level. We strongly recommend removal of conveyor chain and store immersed in oil. Failure to remove and thoroughly lubricate chain may result in an inoperative spreader next season.

# COMPLETE WARRANTY PROVISIONS

## A. PARTS REPLACEMENT AND REPAIR:

Smith Metal Works manufacturing warrants its manufactured products to be free from defects in material or workmanship for a period of 1 (one) year from time of purchase. This warranty is limited to the repair or replacement of products failing under normal use and operation of equipment. The defective part (s) and a copy of the original paid invoice or bill of sale must be returned to the factory for repair or replacement.

## B. EXCLUSIONS:

1. This warranty is expressly limited to parts replacement and repair, and is not transferable. Any expressed warranty not herein provided, and any remedy for breach of contract is excluded and disclaimed. The implied warranties of merchantability and of fitness for any particular purpose are limited to one year from delivery to the original user.
2. Any component or part manufactured by others will carry that manufacturer's warranty, and in no case will Smith Metal Works be liable, either expressed or implied, for warranties in excess of those made by the original manufacturer.
3. Under no circumstances will Smith Metal Works be liable to the purchaser, or any other person, for any incidental or consequential damages. The user assumes liability for all personal injury or property damage resulting from the handling, possession, or use of the product.
4. Repairs or modifications done by others, or parts from other sources outside the company's factory are not covered by this warranty.
5. No agent, employee, or representative of Smith Metal Works has any authority to make any affirmation, representation, or warranty concerning Smith Metal Works products, except as specifically stated above.

# S/S V-BOTTOM

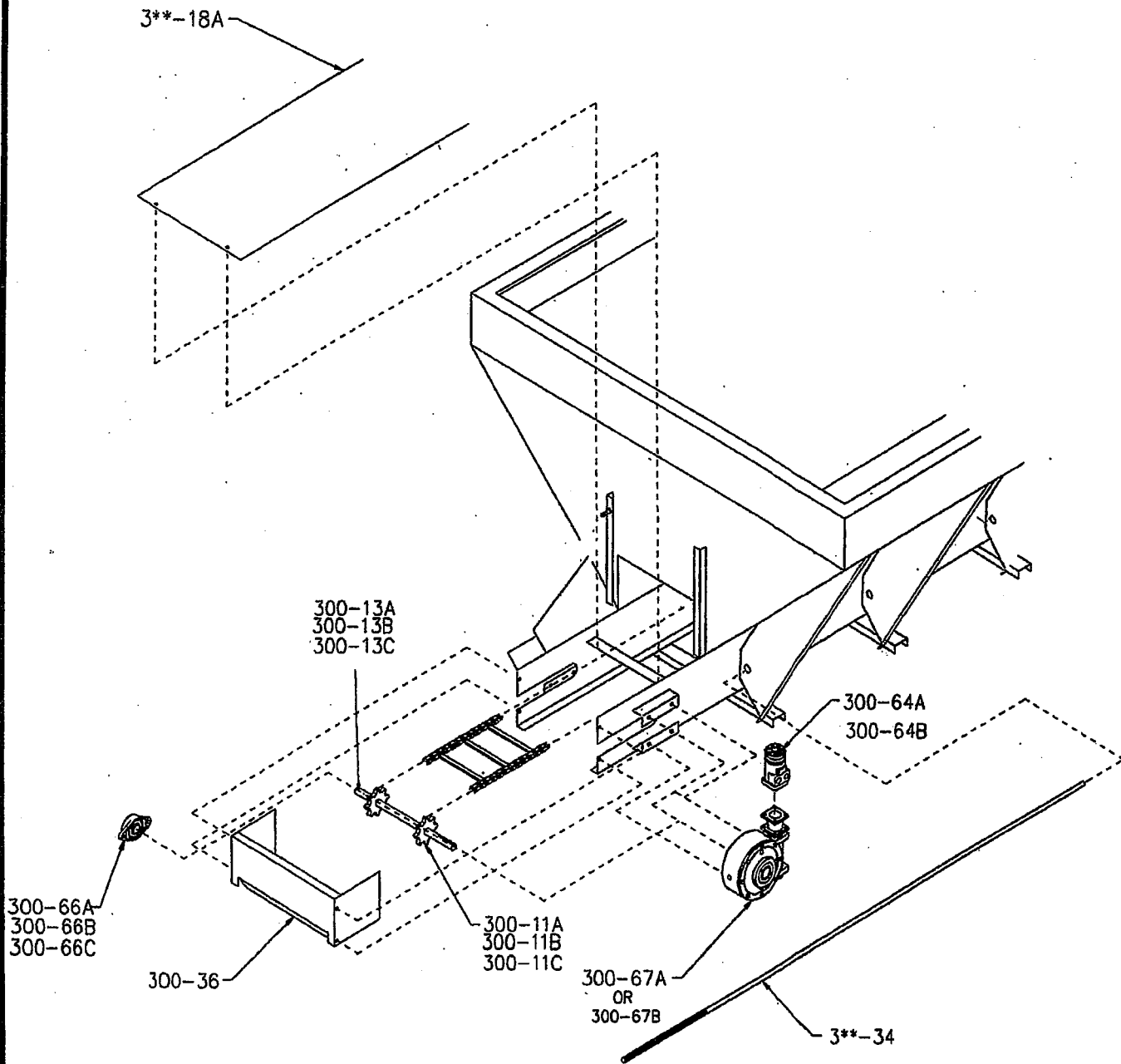
# PARTS LIST

<u>PART #</u>	<u>DESCRIPTION</u>	<u>REQUIRED</u>	<u>PART #</u>	<u>DESCRIPTION</u>	<u>REQUIRED</u>
309-9	Conveyor Chain (9 Foot)	1	314-18b	Auger Bed (14 Foot)	1
310-9	Conveyor Chain (10 Foot)	1	300-19	Slider Bed Ramp	2
311-9	Conveyor Chain (11 Foot)	1	300-22	Bearing Mount (Auger)	1
312-9	Conveyor Chain (12 Foot)	1	300-23	Hydraulic Motor Mount (Auger)	1
313-9	Conveyor Chain (13 Foot)	1	300-24	Spinner Housing	1
314-9	Conveyor Chain (14 Foot)	1	300-25	Discharge Chute	1
300-10	Return Chain Wiper	1	300-26	Flappers	4
300-11A	Drive sprocket- welded	2	300-27	Internal Flappers	2
300-11B	Drive sprocket- Cast - 1 3/4"	2	300-28	Pusher Screws (Flappers)	2
300-11C	Drive sprocket- Cast - 2"	2	300-31	Spinner Shaft	1
300-12A	Idler Shaft 1 1/2 w/welded spkt	1	309-32	Top Screens (9 Foot)	4
300-12B	Idler Shaft 1 3/4 w/cast spkt	1	310-33	Top Screens (10 Foot)	4
300-13A	Drive Shaft-1 1/2 w/welded spk	1	311-32	Top Screens (11 Foot)	4
300-13B	Drive Shaft - 1 3/4 (keyed)	1	312-32	Top Screens (12 Foot)	4
300-13C	Drive Shaft - 2" (keyed)	1	313-32	Top Screens (13 Foot)	4
300-14a	Door Ass'y (Chain)	1	314-32	Top Screens (14 Foot)	4
300-14b	Door Ass'y (Auger)	1	309-33	Top Screen Support (9 Foot)	1
300-14c	Door Ass'y (Screw Jack)	1	310-33	Top Screen Support (10 Foot)	1
300-16	Door Handle	1	311-33	Top Screen Support (11 Foot)	1
300-17	Door Lock Nut	1	312-33	Top Screen Support (12 Foot)	1
309-18a	Slider Bed (9 Foot) Chain	1	313-33	Top Screen Support (13 Foot)	1
310-18a	Slider Bed (10 Foot) Chain	1	314-33	Top Screen Support (14 Foot)	1
311-18a	Slider Bed (11 Foot) Chain	1	309-34	Chain Take-Up (9 Foot)	1
312-18a	Slider Bed (12 Foot) Chain	1	310-34	Chain Take-Up (10 Foot)	1
313-18a	Slider Bed (13 Foot) Chain	1	311-34	Chain Take-Up (11 Foot)	1
314-18a	Slider Bed (14 Foot) Chain	1	312-34	Chain Take-Up (12 Foot)	1
309-18b	Auger Bed (9 Foot)	1	313-34	Chain Take-Up (13 Foot)	1
310-18b	Auger Bed (10 Foot)	1	314-34	Chain Take-Up (14 Foot)	1
311-18b	Auger Bed (11 Foot)	1			
312-18b	Auger Bed (12 Foot)	1			
313-18b	Auger Bed (13 Foot)	1			

## S/S V-BOTTOM PARTS LIST

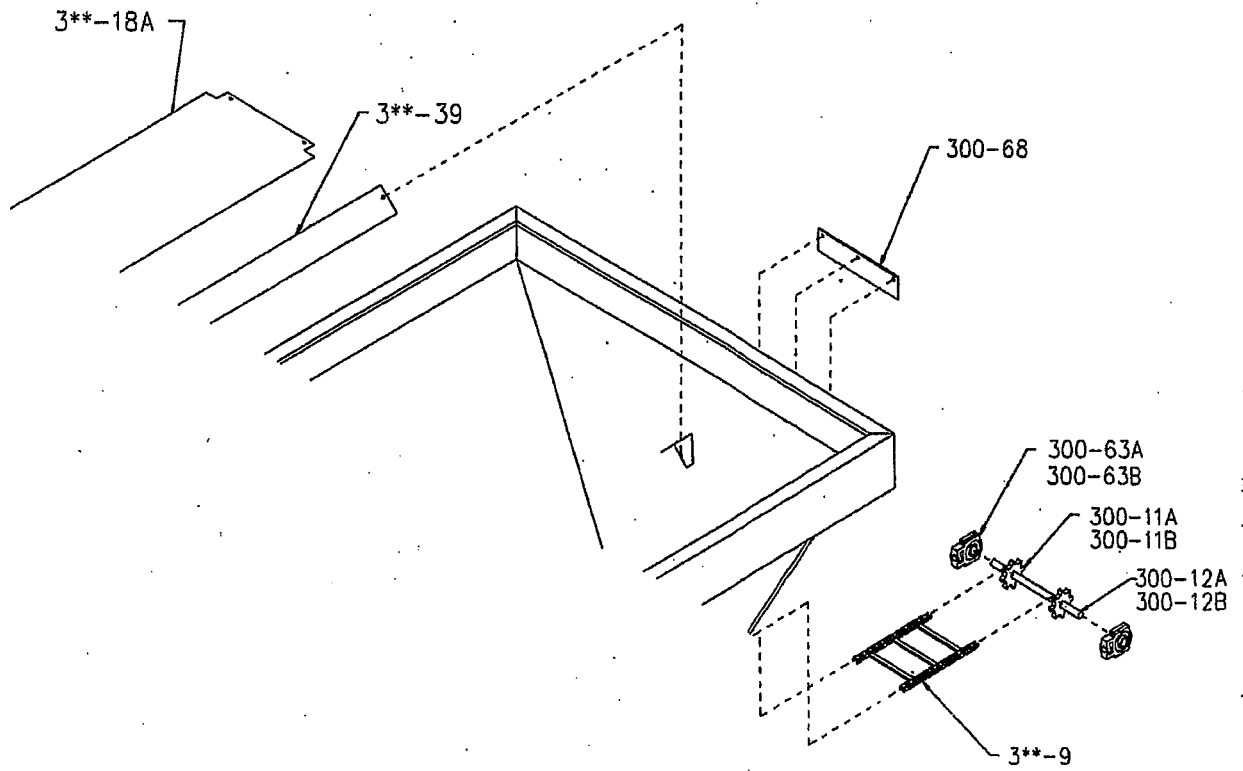
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300-35	Crash Guard (Auger)	1	300-60	Handle Lock Linkage	1
300-36	Chassis End Guard	1	300-61	Hydraulic Motor 4000 ser.(auger)	1
300-38	Chute Mounting Rod	2	300-62	Hydraulic Motor 6000 ser.(auger)	1
309-39	Inverted V (9 Foot)	1	300-57	Door Jack Assembly	1
310-39	Inverted V (10 Foot)	1	300-57-01	Jack Gearbox	1
311-39	Inverted V (11 Foot)	1	300-57-02	Jack Rack	1
312-39	Inverted V (12 Foot)	1	300-63A	Idler Sprocket Bearing - 1 1/2"	2
313-39	Inverted V (13 Foot)	1	300-63B	Idler Sprocket Bearing - 1 3/4"	2
314-39	Inverted V (14 Foot)	1	300-64A	Hydraulic Motor - #1002	1
300-40	Safety Grating (Auger)	1	300-64B	Hydraulic Motor - #1003	1
300-41	Offset Chute (Mid)	1	300-65	Spinner Disc	1
300-42	Offset Chute (Upper)	1	300-66A	4 Bolt Flange Bearing- 1 1/2	1
300-43	Offset Chute (Lower)	1	300-66B	4 Bolt Flange Bearing - 1 3/4	1
300-45	Offset Chute (UHMW)	1	300-66C	4 Bolt Flange Bearing - 2"	1
309-46	Grease Line (9 Foot)	2	300-67A	Gearbox (Durst A-26-7624) 1 1/2	1
310-46	Grease Line (10 Foot)	2	300-67B	Gearbox (Durst A-26-7737) 1 3/4	1
311-46	Grease Line (11 Foot)	2	300-68	Chain Wiper	2
312-46	Grease Line (12 Foot)	2	300-69	Spinner Bearing	1
313-46	Grease Line (13 Foot)	2	300-70-01	Screw Jack Handle	1
314-46	Grease Line (14 Foot)	2	300-70-02	Handle Mounting Bracket	1
309-47	Auger (9 Foot)	1	300-70-03	U-Joint	1
310-47	Auger (10 Foot)	1			
311-47	Auger (11 Foot)	1			
312-47	Auger (12 Foot)	1			
313-47	Auger (13 Foot)	1			
314-47	Auger (14 Foot)	1			

HOPPER SUBASSEMBLY



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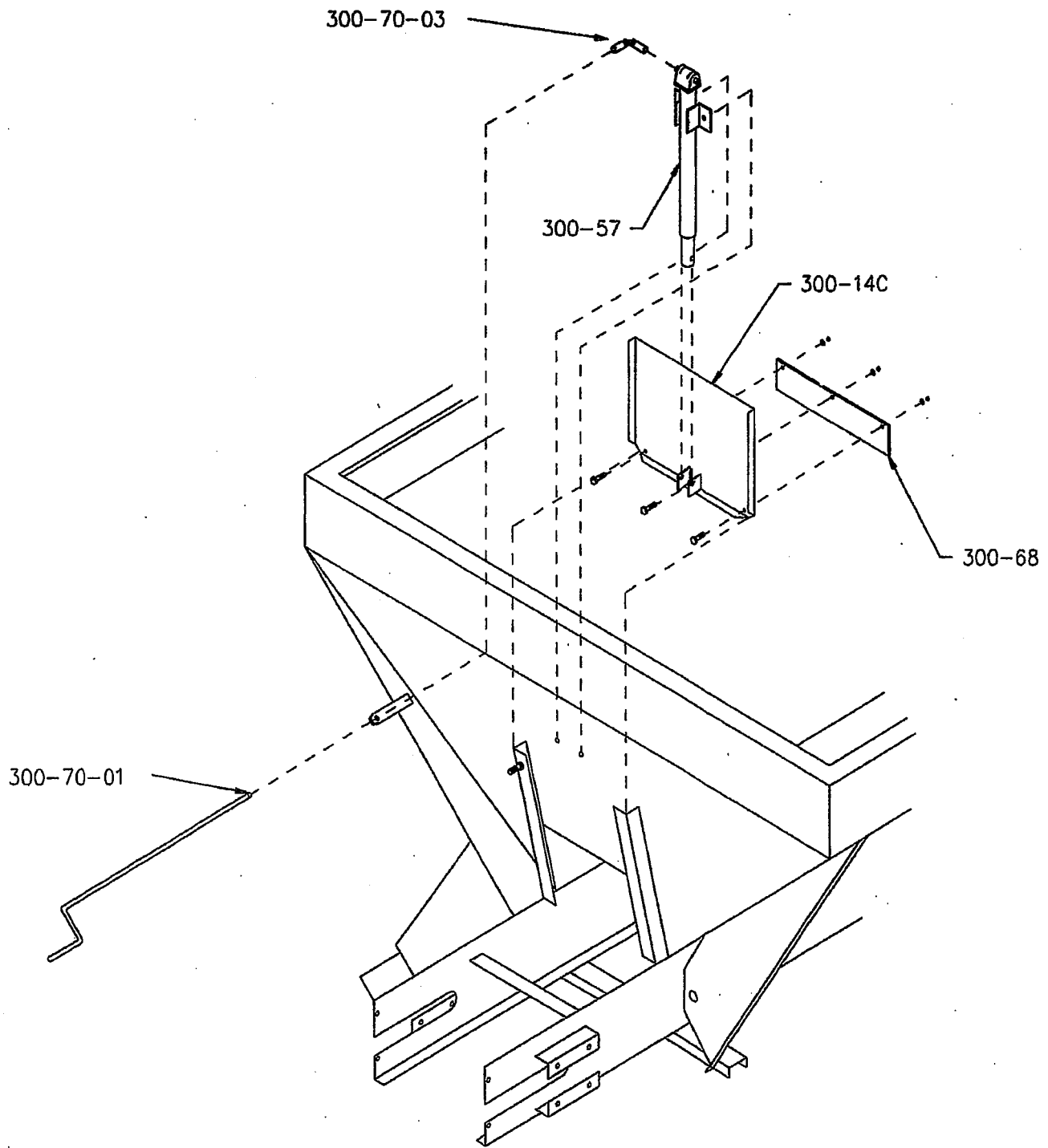
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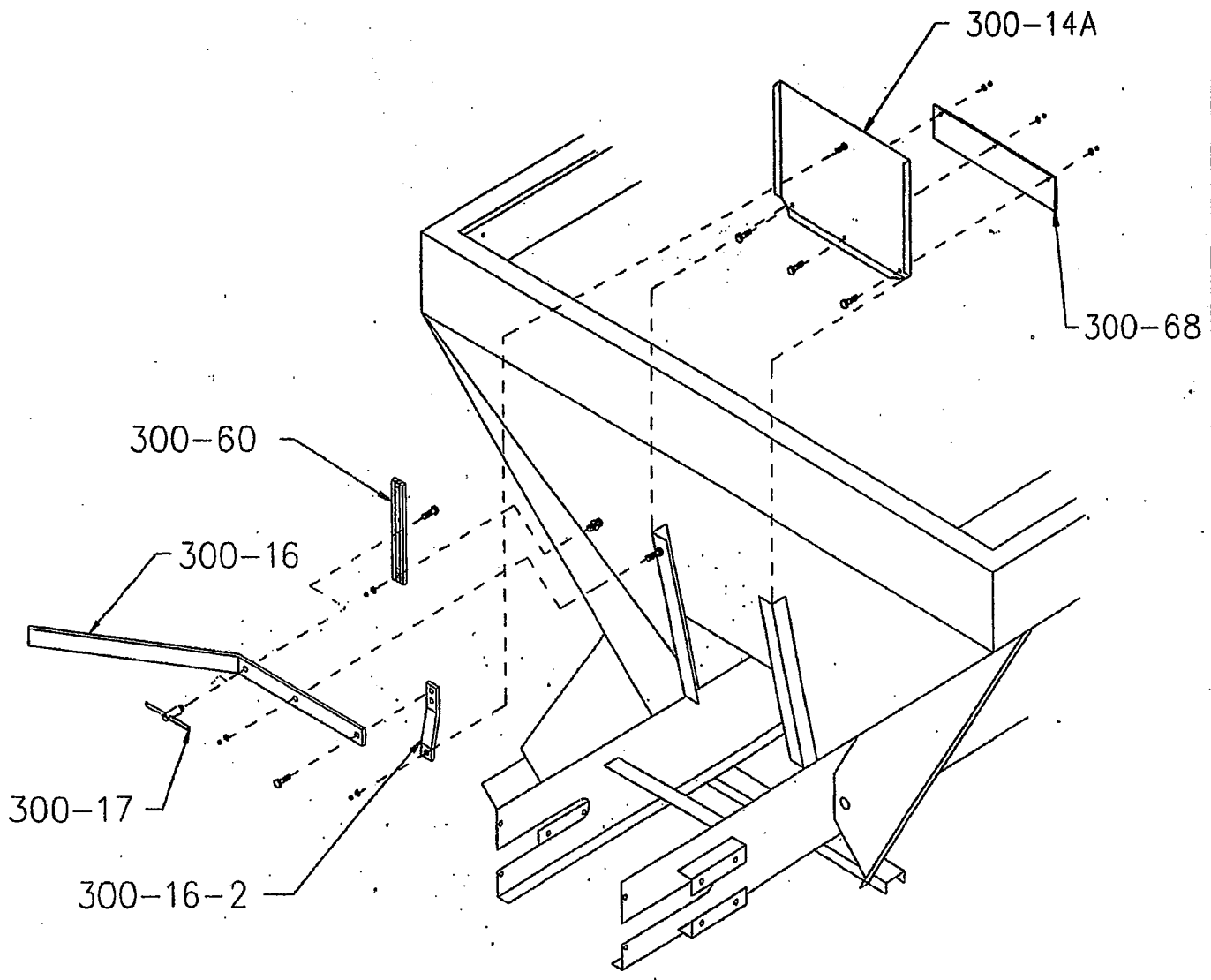
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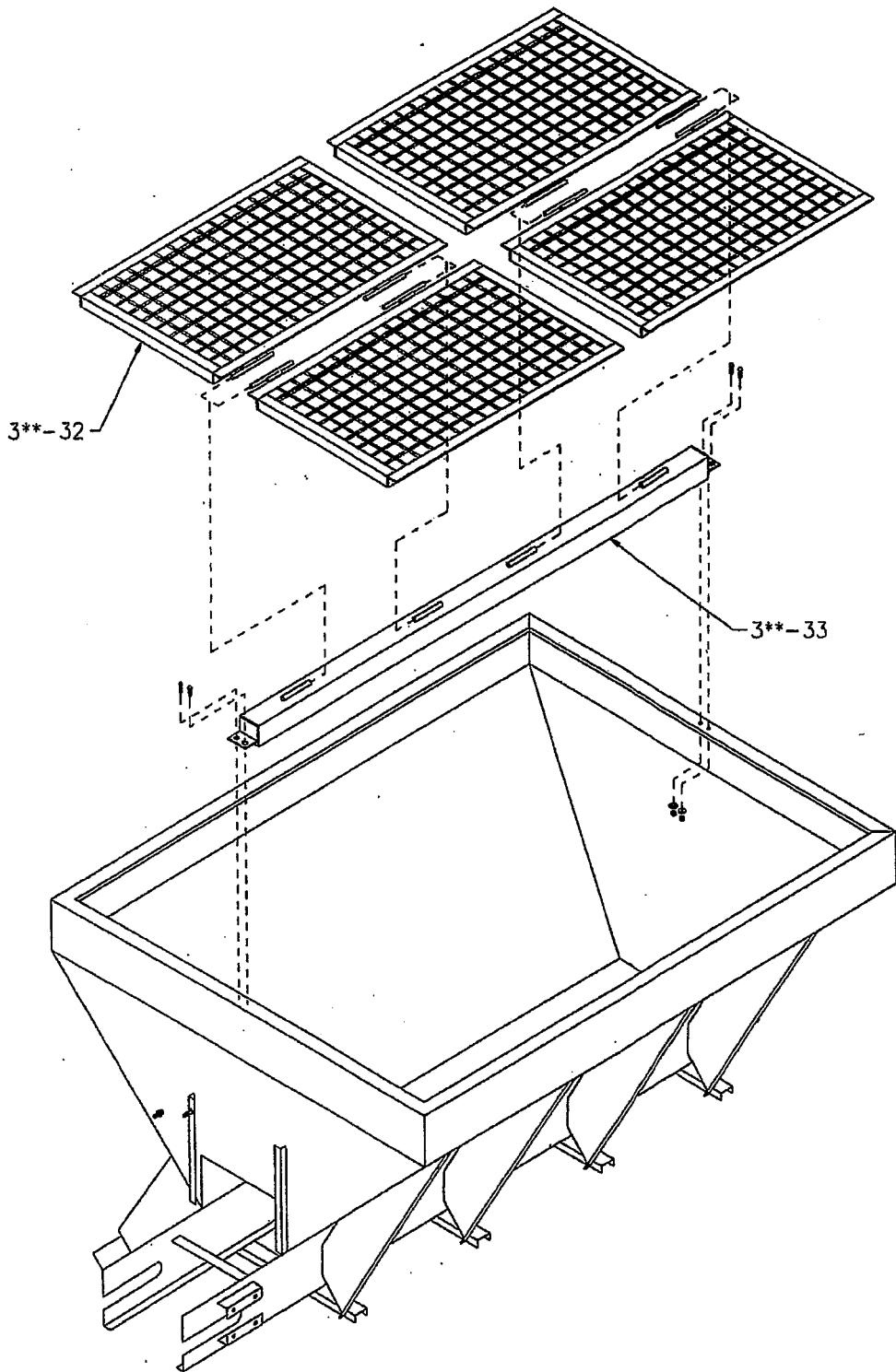
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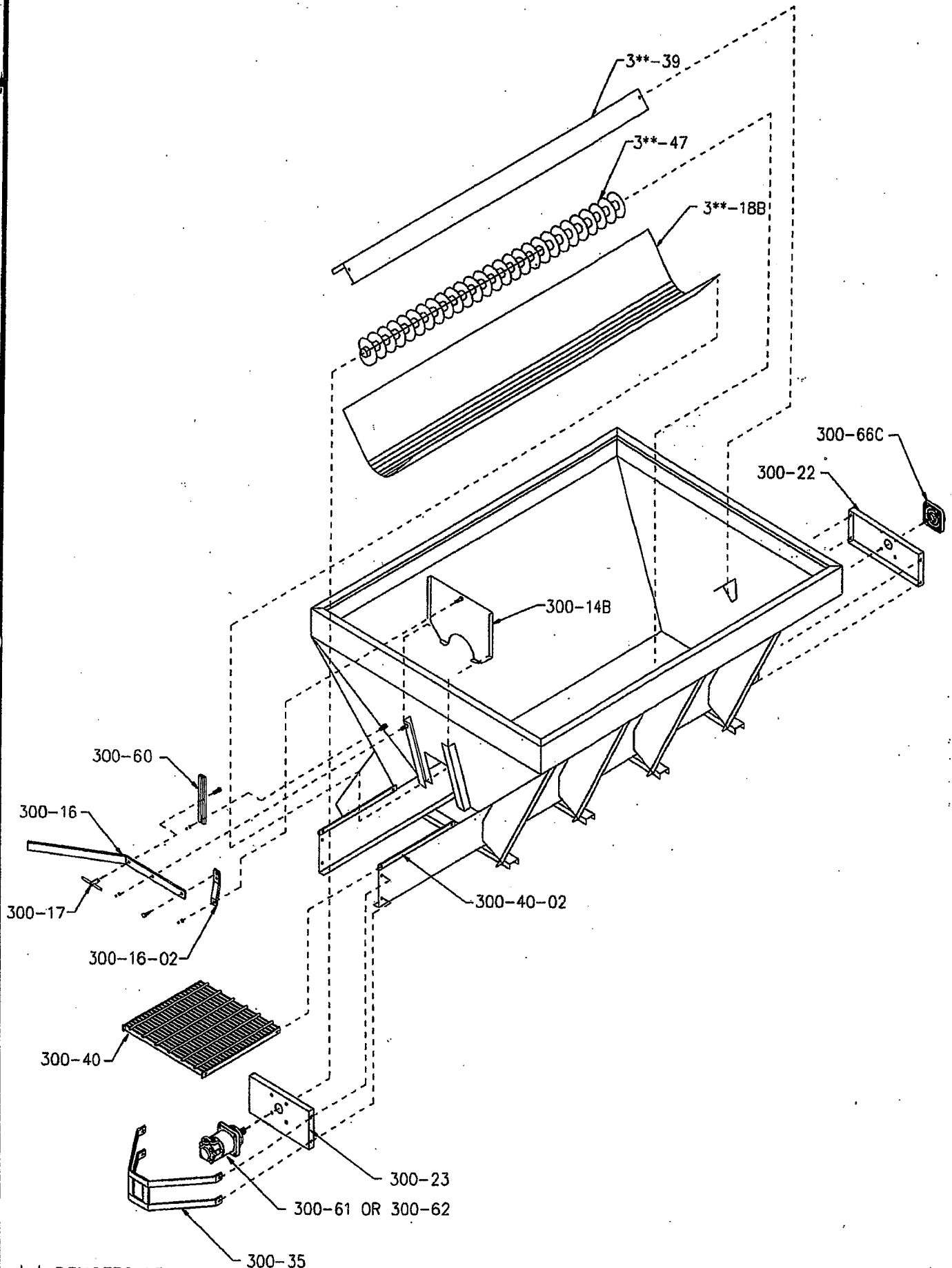


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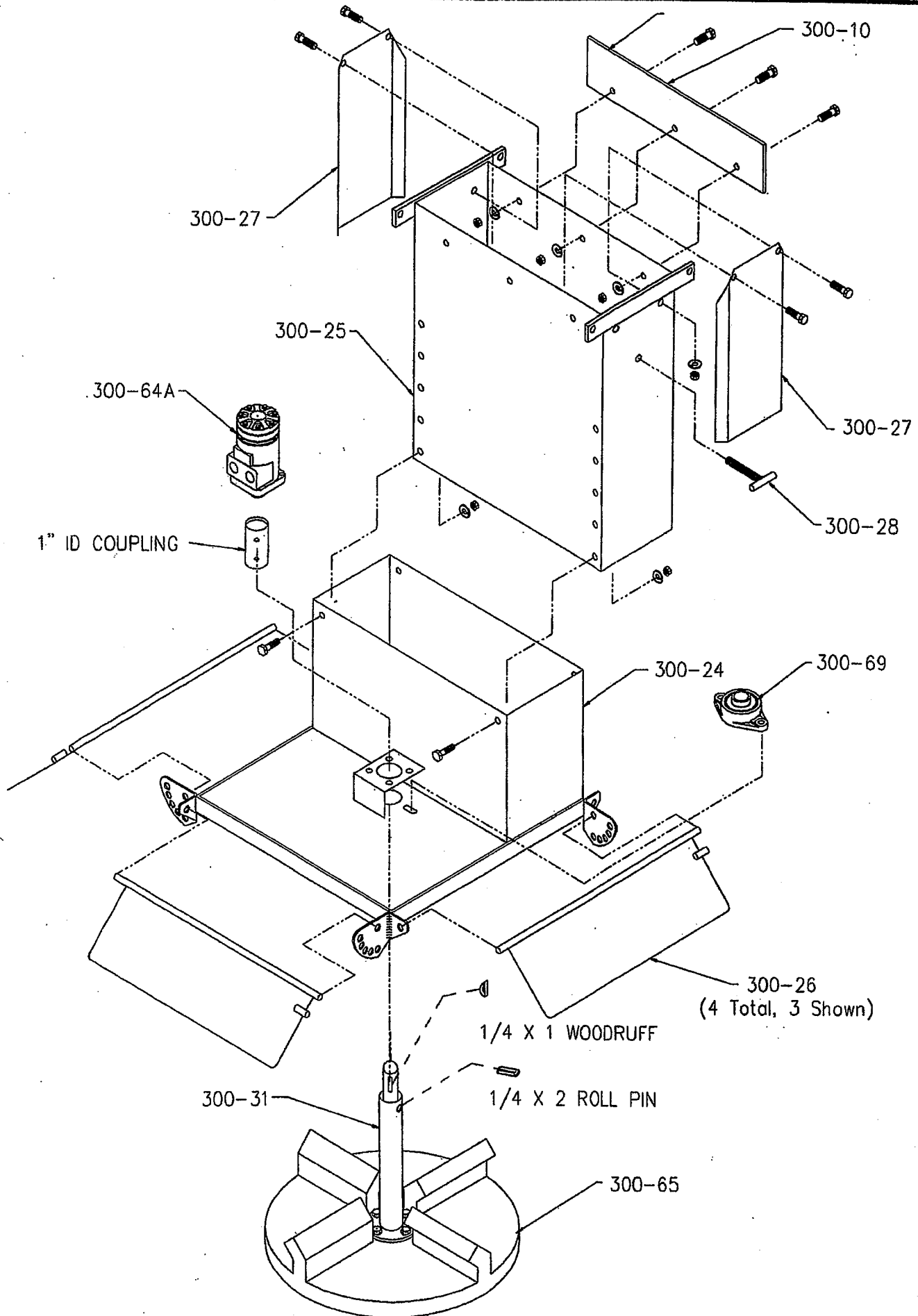
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# HOPPER SUBASSEMBLY

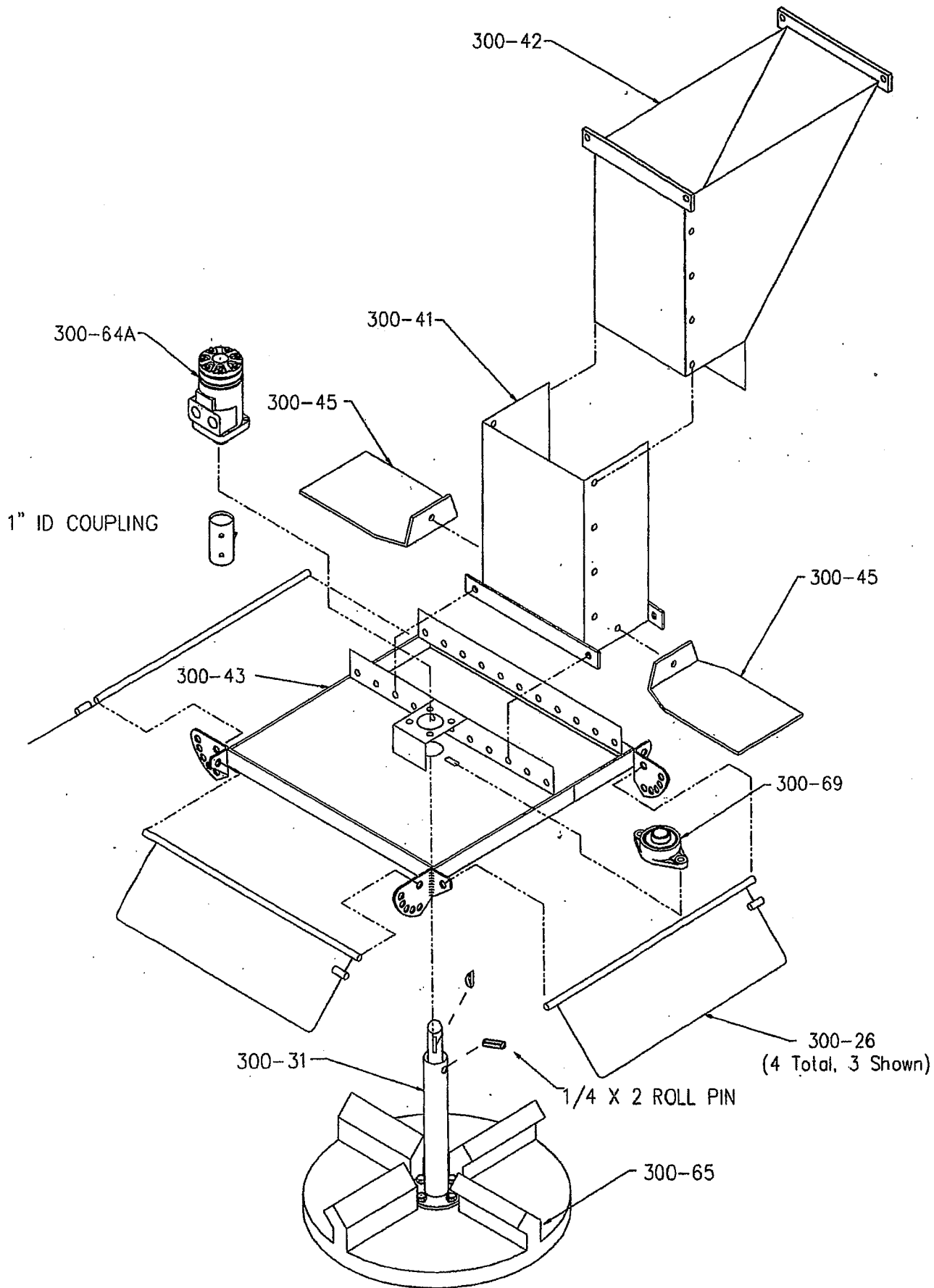


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DISCHARGE SUBASSEMBLY WITH HYDRAULIC MOTOR



DISCHARGE SUBASSEMBLY WITH HYDRAULIC MOTOR

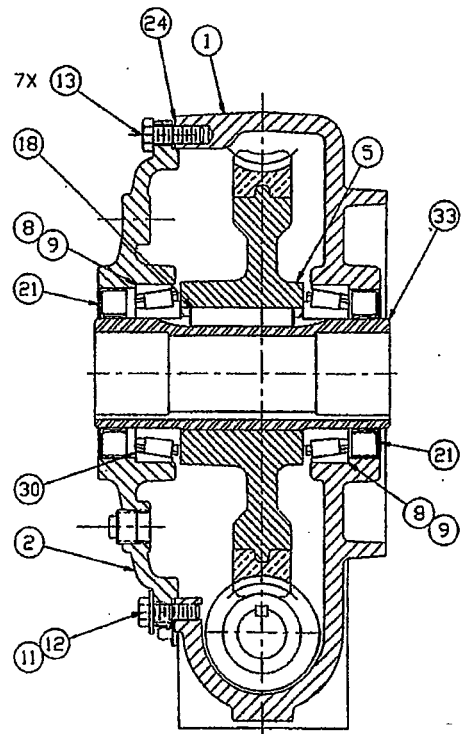
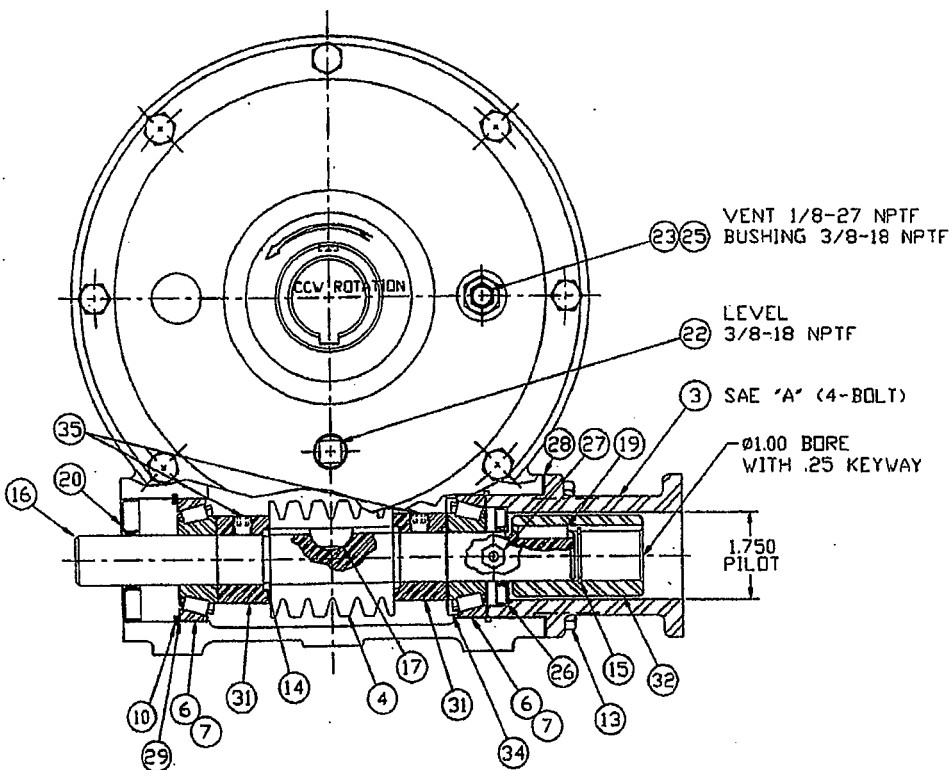


# DURST A26 GEARBOX

Model A26-7624 - 1 1/2" Bore

## PARTS LIST

PART #	DESCRIPTION	QTY.
300-67A-		
1	HOUSING	1
2	COVER	1
3	HYDRAULIC ADAPTER (4 BOLT)	1
4	WORM	1
5	WORM GEAR	1
6	BEARING CONE -INPUT (TIMKEN 151	2
7	BEARING CUP - INPUT (TIMKEN 15245)	2
8	BEARING CUP - OUTPUT (JLM506810)	2
9	BEARING CONE - OUTPUT (JLM506849	2
10	SNAP RING (1208-8)	1
11	CAPSCREW - 5/16-18 UNC X 1	1
12	WASHER	1
13	CAPSCREW 3/8-16 X 1	11
14	SNAP RING (1208-8)	1
15	SNAP RING (N5000-100)	1
16	SHAFT - INPUT	1
17	WOODRUFF KEY "A" (807)	1
18	KEY, 3/8 SQ. X 2 1/8	1
19	KEY, 1/4 X 1"	1
20	SEAL, INPUT	1
21	SEAL, OUTPUT	2
22	PLUG (LEVEL)	1
23	BUSHING (VENT)	1
24	GASKET (COVER)	1
25	PLUG (VENT)	1
26	SEAL (HYD. ADAPTER)	1
27	GREASE ZERK 1/4" DRIVE	1
28	GASKET (HYDRAULIC ADAPTER	1
29	SHIM (.020)	A/R
30	SHIM (.020)	A/R
31	SPACER (INPUT)	2
32	COUPLING	1
33	SLEEVE, OUTPUT	1
34	NILOS RING	1
35	SET SCREW 3/8-16 X 3/8	2

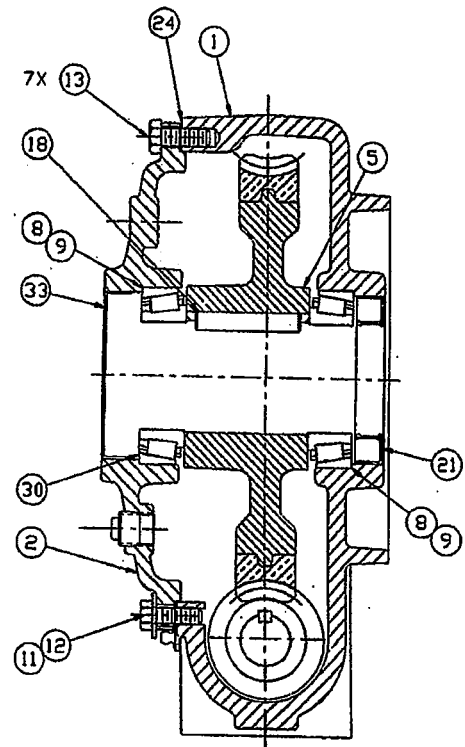
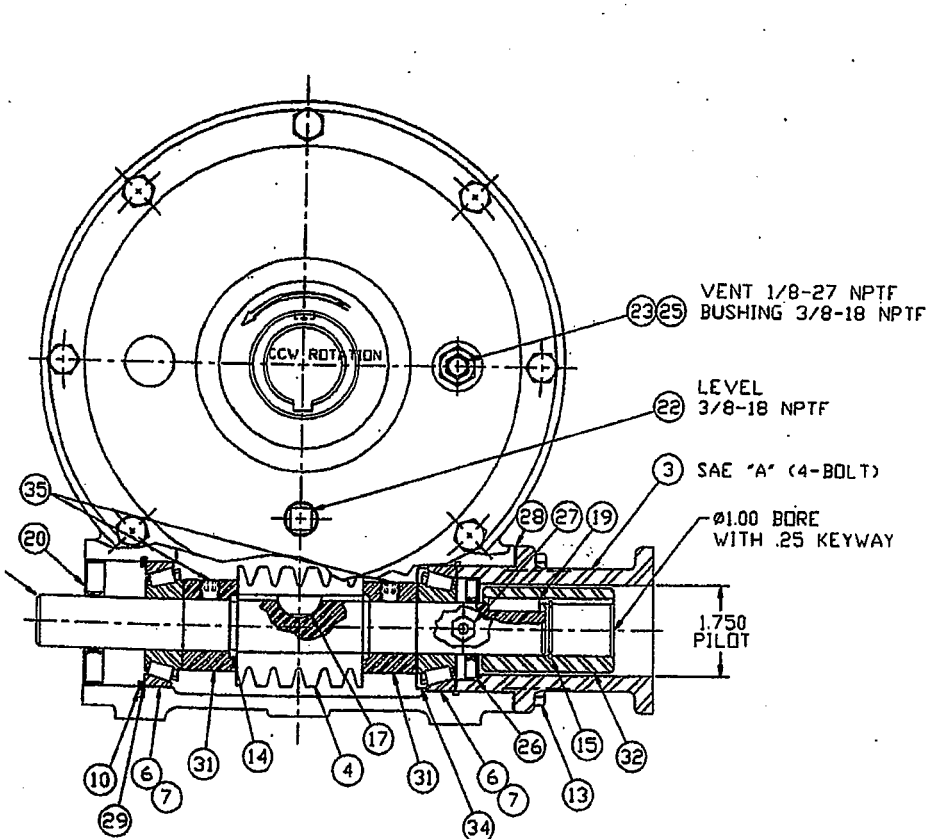


# DURST A26 GEARBOX

Model A26-7737 - 1 3/4" Bore

## PARTS LIST

PART #	DESCRIPTION	QTY.
300-67B-		
1	HOUSING	1
2	COVER	1
3	HYDRAULIC ADAPTER (4 BOLT)	1
4	WORM	1
5	WORM GEAR	1
6	BEARING CONE -INPUT (TIMKEN 151	2
7	BEARING CUP - INPUT (TIMKEN 15245)	2
8	BEARING CUP - OUTPUT (25520)	2
9	BEARING CONE - OUTPUT (25581)	2
10	SNAP RING (1208-8)	1
11	CAPSCREW - 5/16-18 UNC X 1	1
12	WASHER	1
13	CAPSCREW 3/8-16 X 1	11
14	SNAP RING (1208-8)	1
15	SNAP RING (N5000-100)	1
16	SHAFT - INPUT	1
17	WOODRUFF KEY "A" (807)	1
18	KEY, 3/8 SQ. X 2 1/8	1
19	KEY, 1/4 X 1"	1
20	SEAL, INPUT	1
21	SEAL, OUTPUT (NOK AE2596-E	2
22	PLUG (LEVEL)	1
23	BUSHING (VENT)	1
24	GASKET (COVER)	1
25	PLUG (VENT)	1
26	SEAL (HYD. ADAPTER)	1
27	GREASE ZERK 1/4" DRIVE	1
28	GASKET (HYDRAULIC ADAPTER	1
29	SHIM (.020)	A/R
30	SHIM (.020)	A/R
31	SPACER (INPUT)	2
32	COUPLING	1
33	STEEL CAP	1
34	NILOS RING	1
35	SET SCREW 3/8-16 X 3/8	2
36	PLUG, 1/4" DIA BALL	2



**DURST**  
DIVISION OF REGAL-BELOIT CORPORATION  
MODEL A26-7737 1 3/4 BORE



ASSEMBLY & DIS-ASSEMBLY  
INSTRUCTIONS A26 GEARBOXES

The first step in the assembly of an A26 is the pre-assembly. First, pre-assemble the housing. Insert the output bearing cup or race by using a cup driver or a brass drift. Next, insert the snapping in the input bore opposite the hydraulic adapter. Next, press the input cup tight against the snapping. Insert the plugs in the proper location using a sealant on the drain plugs.

Second, pre-assemble the cover. Press the bearing cup in tight to the bottom of the bore. Then insert the plugs in the proper location.

Third, pre-assemble the output shaft. Add a snapping to the groove provided. Then put the straight key into the keyway.

Pre-assemble the input shaft. First add a snapping in the slot provided. Then put the woodruff key into the keyway. Slide the worm gear on tight to the snapping making sure the key does not fall out. Then slide a spacer over the shaft on each end so the grooves are against the gear. Then slide a bearing tight to the spacers.

Now you are ready for assembly.

Insert the input shaft into housing, be sure extensions are out the proper sides. Next press a bearing cup and snapping into input bore. Adjust the bearings by lightly tapping each end of the shaft with a soft hammer. If end play exists, add shims under snapping and repeat adjustment until shaft spins freely with no end play.

Next, put output bearing in cup and insert gear in housing. Then slide output shaft through gear being sure not to scratch shaft. Add a bearing to the top of shaft making sure snapping is tight to gears.

Next, put a gasket on cover and seat on top of housing. Tighten down snug and adjust the bearings in the same manner as the input.

Then add seals. Make sure a seal protector is used so not to cut the seal on keyway. Next add the caps using a sealant around the outside and in the housing.

Inspection: Remove vent plug and force air into housing, about 3 pounds. Brush a soap and water mix over seals and caps and gaskets to check for leaks. Then add a woodruff key to the input shaft for the coupling to fasten on.

Next bolt the hydraulic adapter to housing, making sure mounting holes are correct.

#### Dis-Assembly Instructions:

Reverse the assembly instructions making sure not to damage the bearings upon removal. A light tap on the bearing cups may be needed to remove snapping.

Durst Division of  
Regal-Beloit Corp.