



PRESS WHEEL TRUCK SPEADER OPERATORS MANUAL



1-800-277-4337

WWW.GFESPEEDYSPREAD.COM

IMPORTANT CONTACT INFORMATION

TOLL FREE NUMBER: 800-277-4337

LOCAL NUMBER: (336) 299-4711

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SHIPPING ADDRESS:

GFE

429 EDWARDIA DR.

GREENSBORO, NC 27409

BILLING ADDRESS:

GFE

PO BOX 19409

GREENSBORO, NC 27419

PLEASE NOTE

**PARTS ORDERS PLACED BY 2 PM WILL BE SHIPPED
SAME DAY (AS ITEMS ARE AVAILABLE)**

VISIT US ON THE WEB AT:

WWW.SPEEDYSPREAD.COM

INTRODUCTION

Congratulations! You have just purchased the finest, most trouble-free spreader on the American market today. The Speedy Spread truck spreader was designed with experience gained in over 25 years of building spreaders. This unit was designed for simplicity of operation, superior spread accuracy and low maintenance requirements. Like any piece of equipment, operator attention and required maintenance will result in better application and longer life; these points will be explained in the following pages.

OPERATION OF SPREADER

The Speedy Spread spreader requires very few controls to operate. To start the spreader, first engage the truck PTO. This is done by disengaging the clutch; pulling out the PTO knob; and then releasing the clutch. This will start the PTO driven hydraulic pump. Nothing on the unit will operate until this is accomplished. Next start the spinners by pulling the handle on the spinner control valve. This valve is mounted on the left walkboard just outside the truck door. Make sure the valve is always turned completely on or off.

The conveyor chain on the Speedy Spread spreader is driven by a small tire pressed against the rear truck drive tire. This press tire is engaged by a hydraulic cylinder which is controlled by a toggle switch mounted on the PTO stand or on the dashboard. Push the switch to ON to engage the press tires and to OFF to disengage it. Remember that the truck PTO pump must be turning in order to either engage or disengage the press tire. Always disengage the press tire before backing up or disengaging the PTO. Raise the presswheel tire and disengage the PTO before traveling on the highway.

SETTING RATE

There are several steps in setting the rate. First, the weight per cubic foot of the material being spread should be determined. After determining the weight, find the gate setting on the rate chart for the amount desired per acre. Be sure the roller chain on the two-speed presswheel sprocket ratio is on the correct sprockets. Fertilizer should be spread on low ratio (14T to 65T) and lime on high ratio (26T to 54T). The outside sprockets are the high ratio. After setting the gate at the correct number, adjust the fertilizer delivery chute. For fertilizer, set the fertilizer delivery chute on the same number as the gate setting. For lime, set the delivery chute at "LIME". Always install the fertilizer insert when spreading fertilizer. This part sets on top of the chute V. It is carried on a carrier on the right side of the hopper. The rate chart is for a 50' spread swath on fertilizer and 40' on lime. The spread swath is the distance from center of tire track to center of the next tire track. Make sure the gate comes down the same on both sides; if it does not, adjust guides.

When setting the rate, crank the gate down below the number desired; then bring it up to the desired setting. This removes any lost motion in the gate setting mechanism.

SPREAD PATTERN

The one most important goal to achieve with a truck spreader is spread pattern accuracy. Several factors influence spread pattern. These include blade design, blade pitch, material placement on spinners, spinner speed, material being spread, and swath width. These items can all be adjusted to some degree.

Material placement on the spinners is one of the most important adjustments. This is accomplished by the crank at the rear of the spreader. Bringing the delivery chute toward the crank (rear) results in less material behind the truck and more material out to the sides. The desired pattern for one pass is a slight pyramid with the highest point at the truck center and tapered out to the edge. See diagram under "How to Check Your Speed Pattern." Be sure the fertilizer insert is installed in the delivery chute when spreading fertilizer.

Another important item is spinner speed. Generally, spinner speed should not exceed 715 RPM. There is a center countersink hole in the lower end of the spinner shaft. With the spinners turning, insert the rubber tip on the hand-held tachometer into the countersink hole on the end of the spinner shaft and read the RPM of the shaft. Spinner speed is adjusted by turning the hydraulic speed control valve. This valve is mounted on top of the spinner off-on valve. Turning the knob to a higher number increases the spinner speed. The PTO should be engaged and the truck engine turning at operating speed while this adjustment is being made.

Swath width is one of the most often neglected spread factors. Incorrect swath widths result in incorrect spread patterns as well as giving incorrect rates. Care should be made in keeping the width constant. Drivers should periodically check their width to make sure they are keeping it constant. A complete overlap improves distribution and helps to reduce driver error.

Material blend is something over which the spreader operator has little control. Material with fine particle size will not spread well, therefore care should be taken to limit "fines". Care should also be taken to make sure material is not allowed to sift through body openings and miss the spinners. After several years of use this may require replacing the pan notches at the conveyor sprocket. DO NOT operate the spreader with holes in the blades or loose blades. Check the chute to make sure it is centered and both sections are clean.

LUBRICATION

There are very few lubrication points on the GFE spreader. There are 12 Zerk type grease fittings which should be greased every 20 hours with a hand grease gun. There are two on the front take-up bearing; two on the rear conveyor shaft; seven on the presswheel assembly and one on the fertilizer delivery chute bearing. The roller chains are self lube type and should only be greased if the unit is allowed to stand idle for an extended period of time. No lubricant should be used on the take-up rods or conveyor chain.

ADJUSTMENTS

The Speedy Spread body has very few adjustments. The tension on the conveyor chain is adjusted by use of the 1" stainless take-up rods behind the truck cab. Make sure the chain is adjusted equally on each side. The chain is tight enough when it does not touch the cross bars on the undercarriage as it travels under the hopper floor. It may become necessary to shorten the conveyor chain by cutting 2 connecting pins, removing a section of chain and reconnecting the chain with a threaded connecting pin.

Roller chains are tightened by use of the idler pulleys and slotted holes.

The tension on the drive tire is important to keep it from slipping. Proper tension on the presswheel is obtained when approximately 1/3 of the side of the presswheel tire is against the truck tire. This tension is adjusted by use of the nuts on the hydraulic cylinder rod. The air pressure in the press tire should be 28 PSI.

HYDRAULIC SYSTEM

The Speedy Spread hydraulic system is a group of high quality components that have been sized and matched for efficient operation. All lines and fittings should be checked for leaks. Hoses should not be allowed to chafe against other hoses or metal parts. The return line filter should be changed on a new body after the first 20 hours of service and every 200 operating hours thereafter. The oil tank should be filled to the bottom of the sight plug with Gulf Harmony 46 AW oil or an equivalent light weight hydraulic oil. There is a shut off valve on the tank outlet that should be fully open any time the truck is operating.

The hydraulic system includes a pressure relief valve. It is located on the left side of the hydraulic oil tank behind the oil filter. It is preset at the factory at 1650 PSI. Pressure can be checked by putting a pressure gauge (dead-head) into the hydraulic line that attaches to the back of the spinner on/off valve

when the PTO is engaged and the truck engine turning at spreading RPM's. To adjust the pressure, loosen the lock nut around the threaded stem. Turn the stem clockwise to increase or counter clockwise to decrease the pressure. Reset the lock nut tight around the stem. If this pressure cannot be reached, the pump is probably weak. The lock valve for locking the presswheel is located on the hopper gusset above the hydraulic cylinder. If the presswheel creeps up or down, replace the lock valve.

The PTO hydraulic pump is Birotational - meaning it can be run in either direction by switching the hoses. For units without an unloading motor, the hose coming out of the side of the on/off valve must be disconnected, and the valve plugged to check the pressure.

The solenoid valve that controls the presswheel is mounted behind the spinner on/off valve. If the presswheel fails to operate, check wiring first and then remove and clean the solenoid valve cartridge.

OPTIONAL SIDE MOTOR

On units with optional side motor for unloading while truck is stationary, operate as follows: with truck in neutral and parking brake locked, engage truck PTO. With spinners stopped and presswheel disengaged, close valve at unloading motor until conveyor chain runs at desired speed.

* Notes *

TROUBLE SHOOTING

1. PROBLEM : Material heavy behind truck
CAUSE : Spinners too slow – not throwing material
CORRECTION: Increase spinners speed with valve, check with tachometer (725RPM)

2. PROBLEM : Material heavy behind truck
CAUSE : Material getting on spinners too early
CORRECTION: Move delivery chute toward crank

3. PROBLEM : Material heavy behind truck
CAUSE : Material sliding off spinner blades too quickly
CORRECTION: Advance spinner blades ahead (check all other possible adjustments first)

4. PROBLEM : Material heavy behind truck (especially fines)
CAUSE : Spinners too fast – air blasting material rather than spreading
CORRECTION: Slow spinners down with valve and tachometer

5. PROBLEM : Material falling underneath truck
CAUSE : Falling through sprocket slots in trough
CORRECTION: Replaced slotted end of trough with repair patch

6. PROBLEM : Material too light behind truck
CAUSE : See 1 thru 4 above and reverse corrections

7. PROBLEM : Material too heavy behind truck
CAUSE : Insert not installed
CORRECTION: Install insert

8. PROBLEM : Material heavier on one side
CAUSE : Gate higher on one side
CORRECTION: Adjust gate guides to correct

9. PROBLEM : Material heavier on one side
CAUSE : Chute not centered
CORRECTION: Adjust chute until centered

HYDRAULIC SYSTEM

1. PROBLEM : Presswheel will not engage
CAUSE : Electrical problem
CORRECTION: Check switch, wiring and coil on solenoid valve
2. PROBLEM : Presswheel will not engage
CAUSE : Solenoid valve jammed
CORRECTION: Remove solenoid cartridge and clean
3. PROBLEM : Presswheel will not stay disengaged
CAUSE : Check valve jammed
CORRECTION: Remove lock valve, cartridges and clean
4. PROBLEM : Oil heats
CAUSE : Relief valve set too low or jammed open
CORRECTION: Clean or adjust per instructions under adjustments
5. PROBLEM : Oil heats, system runs rough
CAUSE : Air in system
CORRECTION: Check for leaks especially pump seal and suction line

GFE Body Serial No. _____ GFE Pump Model No. _____

GFE Trailer Serial No. _____ GFE PTO Model No. _____

PTO Rotation _____ PTO Rotation % _____

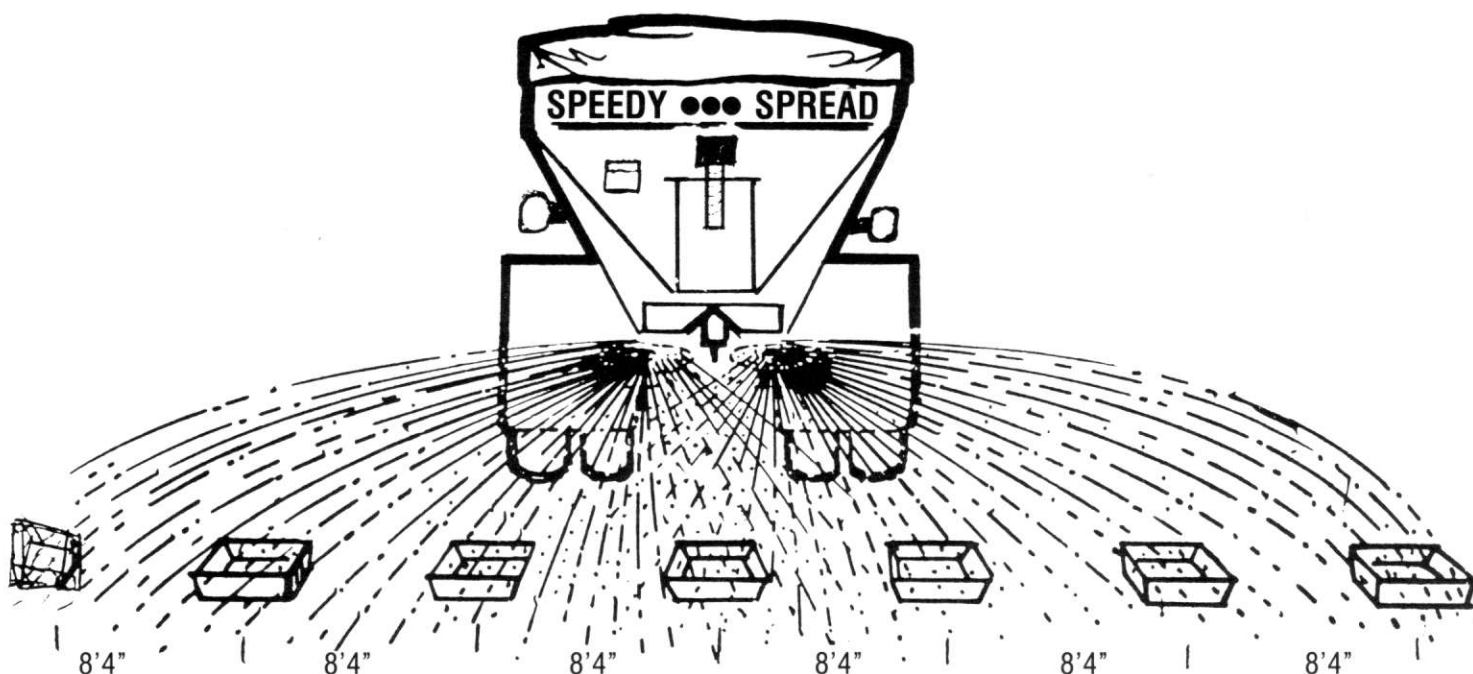
Transmission Model No. _____ Truck Serial No. _____

Dealer _____ Address _____

Customer _____ Address _____

Authorized GFE Signature

_____ Date _____



HOW TO CHECK YOUR SPREAD PATTERN

1. Secure seven (7) **square** cake pans—the largest you can buy or plastic green house trays.
2. Find seven (7) rain gauge tubes or similar clear plastic or glass cylinders.
3. Arrange your cake pans evenly in a line as wide as your spread pattern. Make sure the ground is **flat**, free from plant growth higher than the pans, and pans are **perfectly level**.
4. Drive over and between your pans at your usual speed, spreading your regular fertilizer material at one of your usual settings. Straddle the center pan. Do this several times **always** in the same direction, until you have enough material in one or more of the pans to at least half fill a cylinder.
5. Pour pan number 1 in cylinder number 1, pan number 2 in cylinder number 2, etc. Set your cylinders in a row. You can see which cylinders have more than others. The amount you see in each cylinder is an indication of what you are putting on the ground.

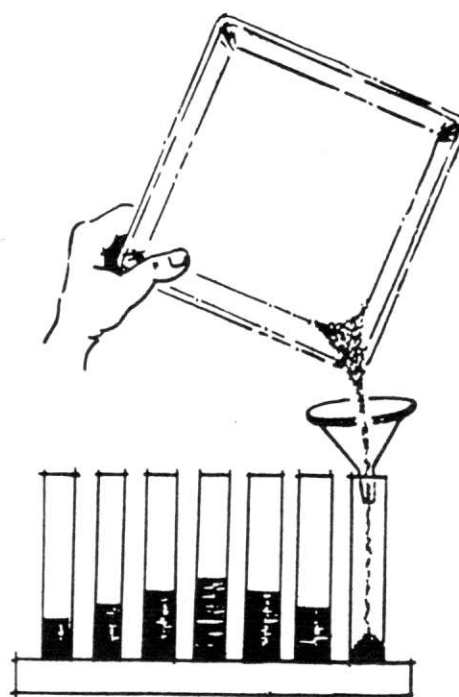
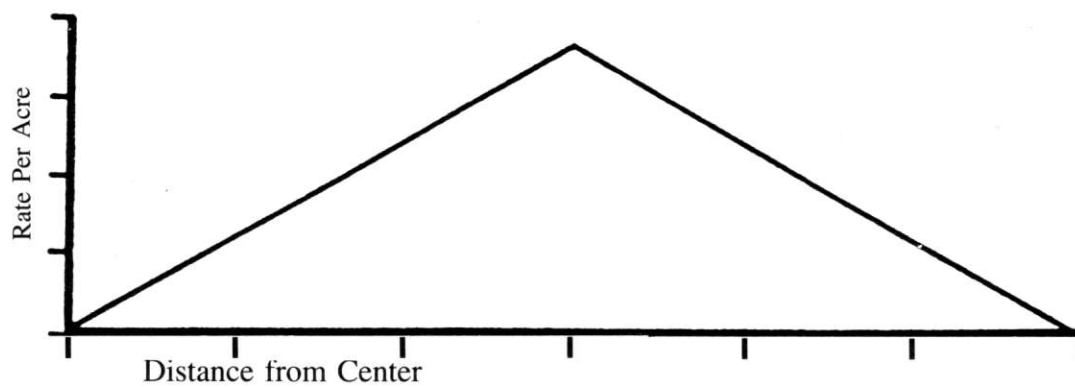
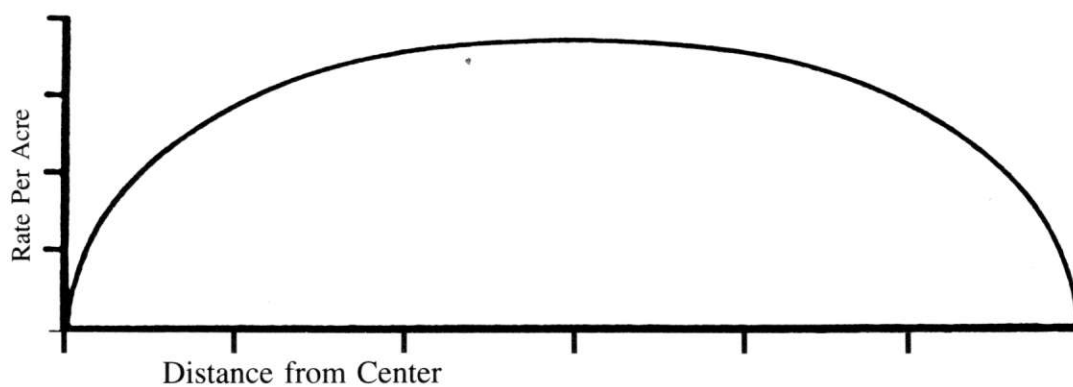


Figure what the average height of material should be in all cylinders. Compare this average with what you have in each cylinder. This tells you how far each portion of your swath is off—also how close together you must drive on each pass. Make a record of each pattern you check. Note the application rate and material so that you can compare it against future spread pattern checks.

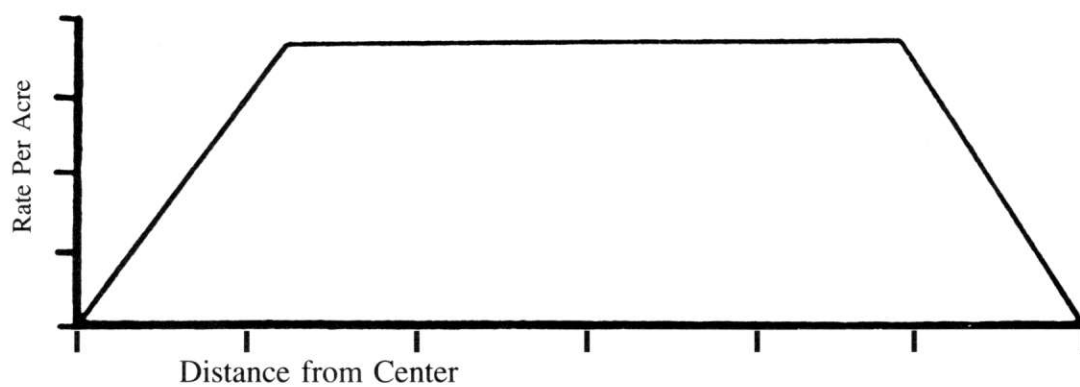
TRIANGLE – BEST



OVAL – BETTER



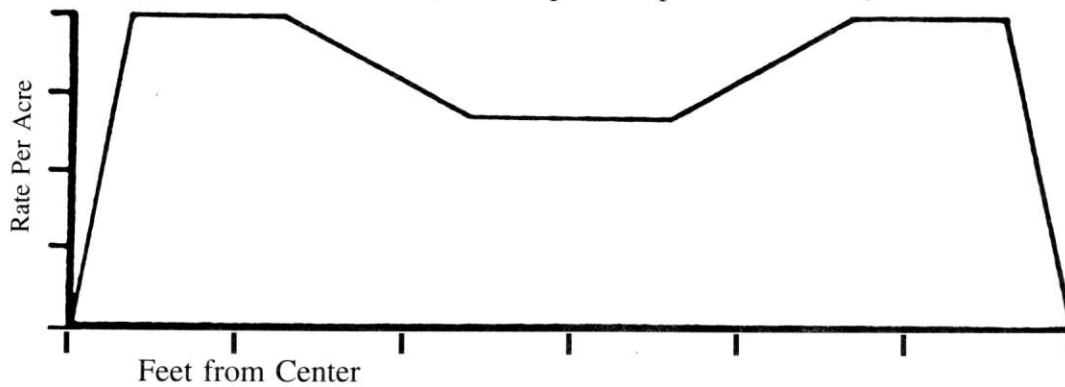
FLAT TOP – GOOD



Desirable Application Patterns

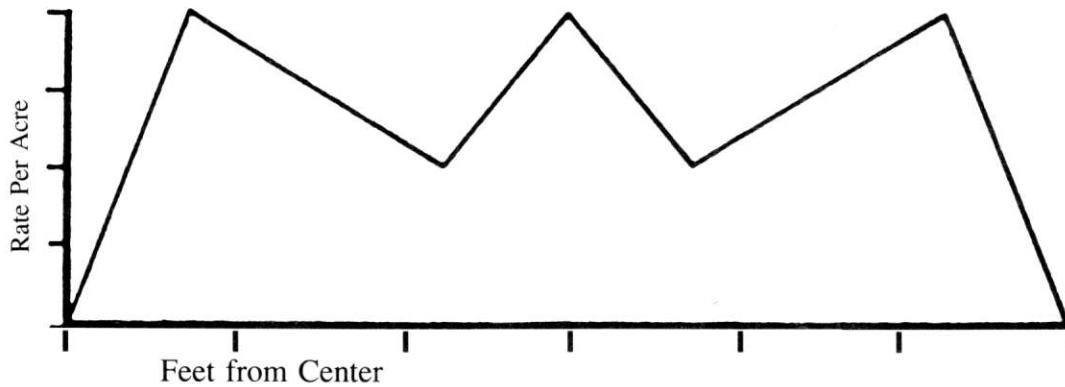
“M”

Too Light Behind Applicator – Move Delivery Chute Toward Truck Cab
(Check Spinner Speed - 725RPM)



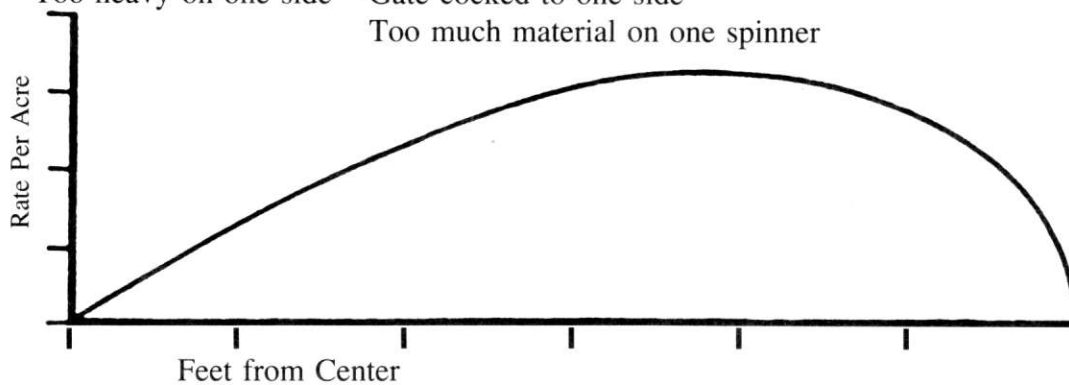
“W”

Too Heavy Behind Applicator – Move Delivery Chute Toward Backplate.



OFFSIDE

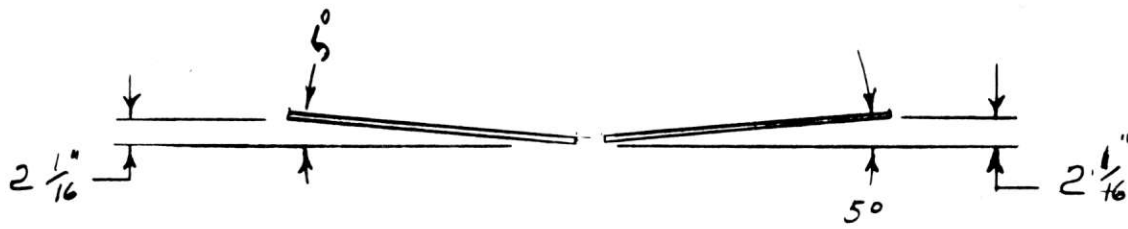
Too heavy on one side – Gate cocked to one side
Too much material on one spinner



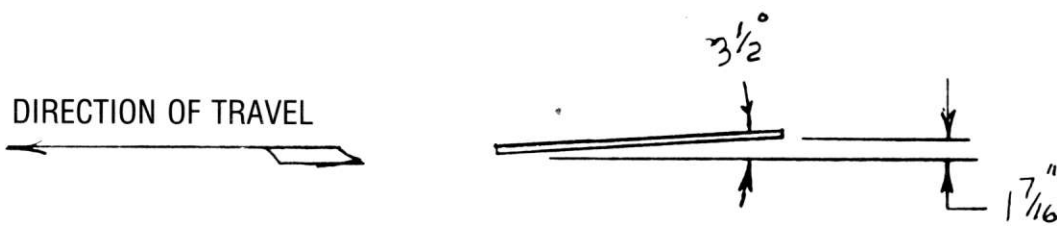
Unsatisfactory Spread Patterns

SPEEDY SPREAD

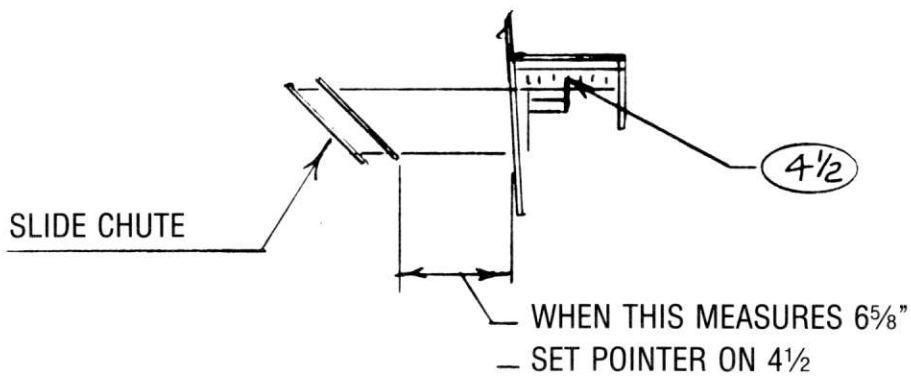
DIMENSIONS



REAR VIEW
SHOWING SPINNER SIDE TILT



SIDE VIEW
SHOWING FORWARD
TILT OF SPINNER



ALIGNMENT OF CHUTE POINTER

GATE SETTINGS FOR 40TH CONVEYOR SPROCKET

SPREAD RATE CHART RATES IN POUNDS PER ACRE

GATE SETTING	FERTILIZER						LIME
	50' SWATH			LOW SPROCKET RATIO			40' SWATH
	MATERIAL WEIGHT PER CUBIC FOOT						HIGH SPKT. RATIO
	50	55	60	65	70	75	100 lb./cu. ft.
1	96	106	115	124	134	144	536
1 1/2	144	159	172	186	201	216	804
2	192	212	230	248	268	288	1072
2 1/2	240	265	288	310	335	360	1332
3	288	318	345	372	402	432	1592
3 1/2	336	371	403	434	469	504	1846
4	384	424	460	496	536	576	2101
4 1/2	432	477	520	558	603	648	2319
5	480	530	575	620	670	720	2569
5 1/2	528	583	633	682	737	792	2819
6	576	636	690	744	804	864	3080
6 1/2	624	689	748	806	871	936	3330
7	672	742	805	868	938	1008	3580
7 1/2	720	795	863	930	1005	1080	3830
8	768	848	920	992	1072	1152	4080
8 1/2	816	901	978	1054	1139	1224	4330

INSTRUCTIONS:

1. DETERMINE PRODUCT WEIGHT WITH DENSITY METER
2. INSTALL CHAIN ON CORRECT SPROCKET RATIO: OUTSIDE (HIGH) FOR LIME - INSIDE (LOW) FOR FERTILIZER
3. SET GATE FOR DESIRED AMOUNT PER ABOVE CHART
4. INSTALL INSERT WHEN SPREADING FERTILIZER
5. FOR FERTILIZER ALIGN CHUTE POINTER WITH SAME NUMBER AS GATE
6. FOR LIME ALIGN CHUTE POINTER WITH "LIME"
7. RAISE BACKPLATE OPENING FOR LIME
8. SWATH WIDTH IS DISTANCE FROM CENTER OF TRACK TO CENTER OF TRACK
9. FOR FERTILIZER ON HIGH RATIO - MULTIPLY AMOUNT SHOWN BY 2.24
10. FOR LIME ON LOW - MULTIPLY AMOUNT SHOWN BY .446



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PART NO: 19-1-15

GATE SETTINGS FOR 54TH CONVEYOR SPROCKET

SPEEDY RATE CHART RATES IN POUNDS PER ACRE

GATE SETTING	FERTILIZER						LIME
	50' SWATH		LOW SPROCKET RATIO				40' SWATH
	MATERIAL WEIGHT PER CUBIC FOOT						HIGH SPKT. RATIO
	50	55	60	65	70	75	100 lb./cu. ft.
1	71	78	85	92	99	107	397
1 1/2	107	118	127	138	149	160	595
2	142	157	170	184	198	213	793
2 1/2	178	196	213	229	248	266	986
3	213	235	255	275	298	320	1178
3 1/2	249	275	298	321	347	373	1366
4	284	314	340	367	397	426	1555
4 1/2	320	353	385	413	446	480	1716
5	355	392	426	459	496	533	1901
5 1/2	391	431	468	505	545	586	2086
6	426	471	511	551	595	639	2279
6 1/2	462	510	554	596	645	693	2464
7	497	549	596	642	693	746	2649
7 1/2	533	588	639	688	744	799	2834
8	568	628	681	734	793	852	3019
8 1/2	604	667	724	780	843	906	3204

INSTRUCTIONS:

1. DETERMINE PRODUCT WEIGHT WITH DENSITY METER
2. INSTALL CHAIN ON CORRECT SPROCKET RATIO: OUTSIDE (HIGH) FOR LIME - INSIDE (LOW) FOR FERTILIZER
3. SET GATE FOR DESIRED AMOUNT PER ABOVE CHART
4. INSTALL INSERT WHEN SPREADING FERTILIZER
5. FOR FERTILIZER ALIGN CHUTE POINTER WITH SAME NUMBER AS GATE
6. FOR LIME ALIGN CHUTE POINTER WITH "LIME"
7. RAISE BACKPLATE OPENING FOR LIME
8. SWATH WIDTH IS DISTANCE FROM CENTER OF TRACK TO CENTER OF TRACK
9. FOR FERTILIZER ON HIGH RATIO - MULTIPLY AMOUNT SHOWN BY 2.24
10. FOR LIME ON LOW - MULTIPLY AMOUNT SHOWN BY .446



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PART NO: 19-1-15

SMALL GRAIN CHART

POUNDS PER ACRE

Gate Setting

Oats

Rye

Wheat

1	65.5	76	83
1½	98.5	114.5	125
2	131	152	166
2½	164	190.5	208
3	196.5	228	249.5
3½	228	264.5	289
4	262	304	332.5
4½	295	342.5	374.5
5	327	380.5	416

37#/bu.

43#/bu.

47#/bu.

GENERAL FERTILIZER EQUIPMENT, INC.

SALES POLICY

ORDERING PROCEDURES

Orders may be placed direct with our Parts/Customer Service Department by calling our toll free number 1-800-277-4337. Our normal working hours are from 8:00 am to 5:00 pm daily with extended hours during planting seasons. To expedite the ordering process, give the person taking your order the exact quantities and GFE part numbers. Please give a purchase order number or a person's name.

MINIMUM ORDER

Minimum invoice charge is \$10.00 net on charge sales and \$5.00 net on over-the-counter cash sales. These minimums are exclusive of any shipping or insurance charges.

SALES TAXES

Any governmental (Federal, State, or Local) sales or excise tax or charge upon the sale or distribution of parts or complete units shall be deemed to be for the account of the end user and shall be separately stated, billed to and collected from the buyer according to the provision of the law. Any customer wishing relief from sales taxes must provide a Sales Tax Exempt Number on a properly executed tax exempt form. Customers who qualify for a special farm tax, must complete an affidavit stating that the item(s) is for farm use.

SHIPPING

All complete units and parts are sold f.o.b. Greensboro, NC or f.o.b. manufacturing point on direct shipments. All orders will be shipped by United Parcel Service unless otherwise specified by the customer or the size and weight are prohibitive. All shipping charges will be prepaid and added to the invoice total except shipments by common carrier. Common carrier shipments will be collect unless otherwise specified. A packing and handling fee will be added to the shipping charge with additional charges being added for bus shipments.

TERMS OF SALE

All open account shipments are subject to prior credit approval. Initial orders will be shipped on a cash or COD basis. To open an account, call 1-800-277-4337 and request a credit application. Terms of sale are indicated on all invoices. A cash discount of 2% will be allowed on all invoices if paid within 10 days from the date of invoice. This allowance period will be strictly followed based on the invoice date. All invoices are net due 30 days from date of invoice. All accounts will be placed on a COD basis when any unauthorized balance becomes sixty-one (61) days past due. A service charge of 1½% per month or an annual percentage rate of 18% will be assessed on all past due accounts. A \$15.00 fee will be charged on all returned checks due to insufficient funds.

RETURN GOODS AUTHORIZATION

No merchandise is to be returned for credit without prior authorization. With prior approval, customers may return merchandise purchased within 30 days. Items being returned must be shipped prepaid and include a copy of the invoice or packing slip stating the reason for returning the merchandise. All merchandise returned after 30 days of purchase will be assessed a 15% restocking charge. Defective merchandise and warranty items will be handled according to the manufacturers warranty. Freight charges on all returned items are for the account of the purchaser. All returned shipments without prior authorization will be refused and returned freight collect.

PRICING AND BILLING

All prices are f.o.b. Greensboro, NC. Prices are subject to change without notice. All orders will be billed according to the price in effect on the date of shipment.

LIMITED WARRANTY AND REMEDIES

General Fertilizer Equipment, Inc., warrants each of its products for a period of 90 days from the date of purchase by the original customer (end-user) under normal use and service.

This warranty provides that all products are free of defective materials and workmanship, however, it is limited to the replacement of any parts or the allowance of credit thereof, which within 90 days from the date of purchase by the original customer, have been returned to GFE, transportation charges prepaid, and found to our satisfaction to be defective.

This warranty is void when repairs or alterations have been made to GFE products outside our factory.

Normal use and service does not include misuse, accident, vandalism, civil disturbance, war, flood, fire, earthquake or other acts of God.

This warranty does not extend to the contents of any GFE machines, tanks or containers or damages for injury to person or property caused by leakage or misapplication of such contents.

This warranty is the sole warranty of GFE, Inc. The remedies herein are exclusive and in lieu of all other buyer remedies, either expressed or implied.

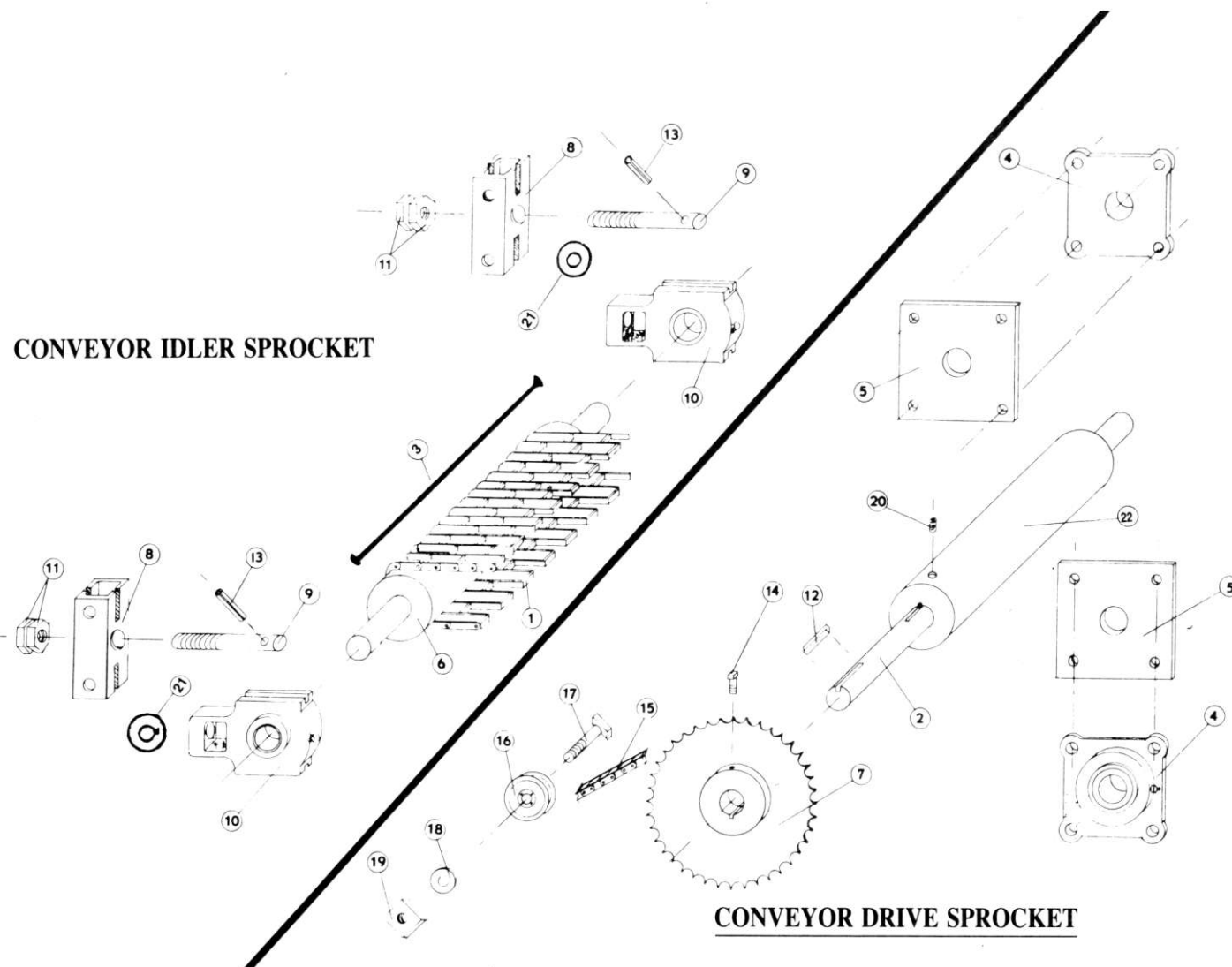
TRUCK SPREADER PARTS

SECTION S

CONVEYOR ASSEMBLY

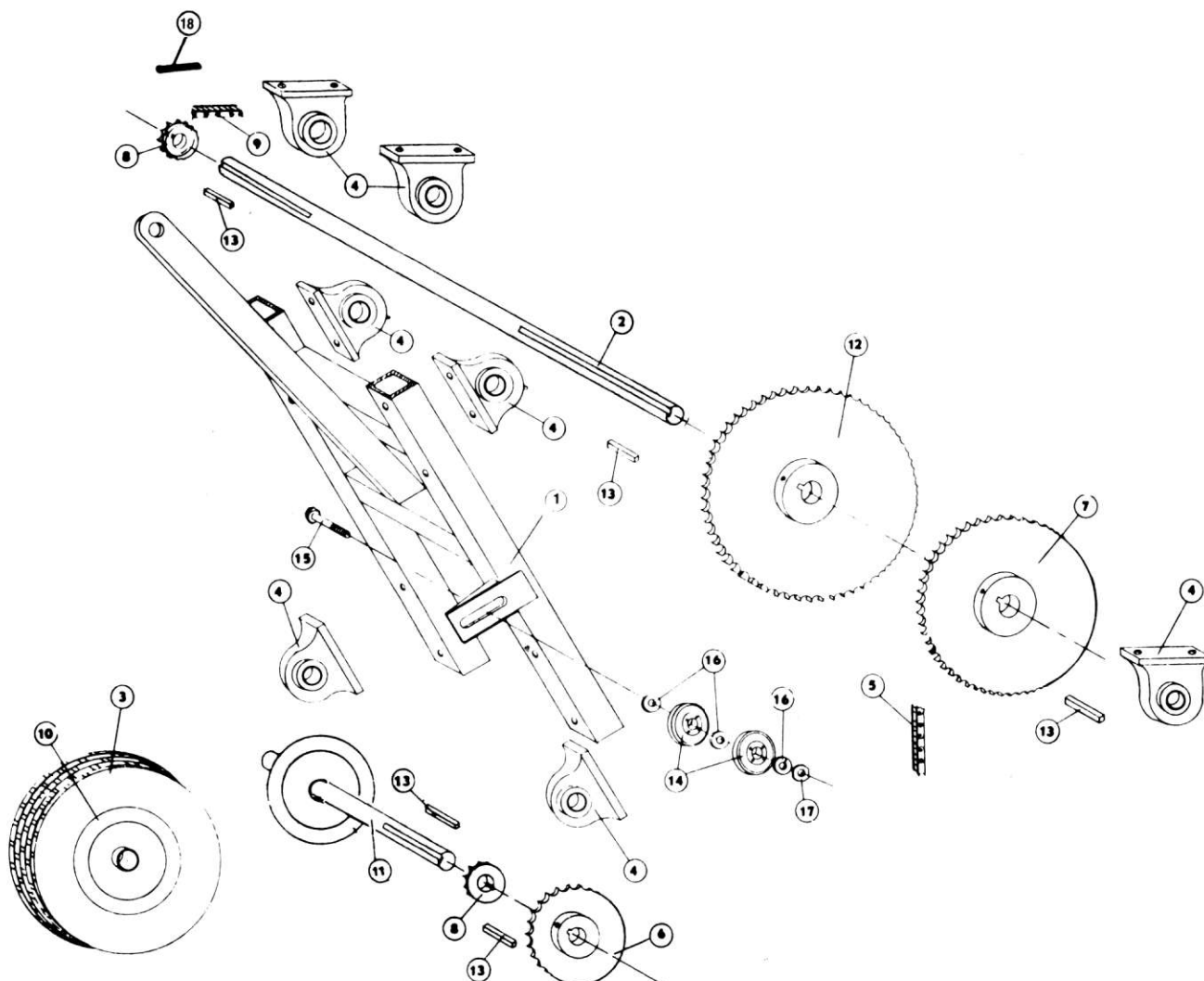
CONVEYOR IDLER SPROCKET

CONVEYOR DRIVE SPROCKET



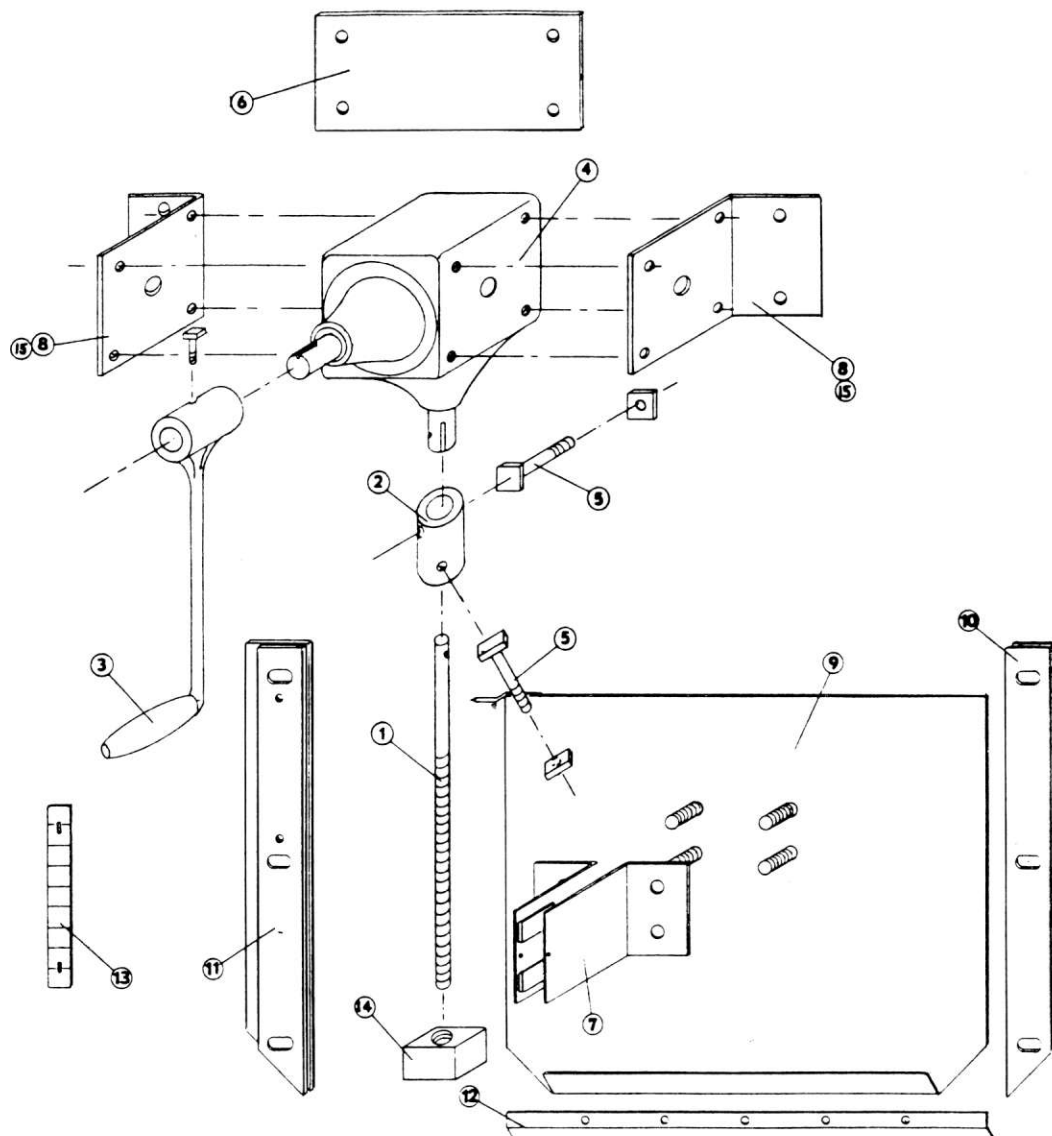
Ref.	Qty.	Part No.	Description
1	1	S-2-1	Conveyor Chain For 11'
1	1	S-2-27	Conveyor Chain For 13'
2	1	S-2-2	Rear Conveyor Shaft
3	1	S-2-15	Connecting Pin
4	2	S-2-4	1 1/2" Flange Bearing
5	2	S-2-5	Bearing Back Plate
6	1	S-2-21	Idler Sprocket w/Shaft
7	1	S-2-7	Conveyor Input Sprocket
8	2	S-2-8	Take Up Member
9	2	S-2-17	Take Up Rod
10	2	S-2-10	1 1/2" Take Up Bearing
11	4	S-2-18	1" Hex Nuts
12	3	S-2-12	3/8" Key

Ref.	Qty.	Part No.	Description
13	2	S-2-22	3/8" x 2" Roll Pin
14	2	S-2-16	3/8" x 1 1/4" Set Screw
15	1	S-3-27	#60 Chain (96 Pitches)
16	1	S-3-20	Idler Pulley
17	1	N-38-0200	1/2" x 2" Carriage Bolt
18	4	N-18-0003	1/2" Flatwasher
19	1	N-18-0001	1/2" Hex Nut
20	4	S-4-7	3/8" Set Screw
21	2	S-2-19	1" Flatwasher-SS
22		S-2-6	Conveyor Sprocket
N/S	1	S-3-16	# Connecting Link
N/S	1	S-3-17	#60 Offset Link
N/S		S-2-14	Conveyor Chain by Foot



DRIVE WHEEL ASSEMBLY

<u>Ref.</u>	<u>Qty.</u>	<u>Part No.</u>	<u>Description</u>	<u>Ref.</u>	<u>Qty.</u>	<u>Part No.</u>	<u>Description</u>
1	1	S-3-1	Presswheel Frame	13	5	S-3-18	5/16" Key
2	1	S-3-2	Countershaft	14	2	S-3-20	Idler Pulley
3	1	S-3-3	Tire Only	15	1	N-38-0400	1/2" x 4" Carriage Bolt
4	7	S-3-4	Pillowblock Bearings	16	10	N-18-0003	1/2" Flatwasher
5	1	S-3-32	#60 Chain 104 Pitches	17	1	N-18-0001	1/2" Nut
6	1	S-3-6	26T Sprocket	18	1	S-5-15	5/16" Roll Pin
7	1	S-3-7	54T Sprocket	N/S	1	S-3-7	54T Sprocket-Unloading Motor
8	2	S-3-8	14T Sprocket	N/S	1	S-3-35	Wheel Frame for Outside Tire
9	1	S-3-27	#60 Chain 96 Pitches	N/S	1	S-3-33	Wheel Frame for Flotation Tire
10	1	S-3-10A	Tire with Wheel	N/S	1	S-3-34	Axle w/Double Flange for S-3-33
11	1	S-3-36	Axle with Flange	N/S	6	N-18-0350	1/2" x 3 1/2" Bolt
12	1	S-3-12	65T Sprocket	N/S	8	N-18-0200	1/2" x 2" Bolt

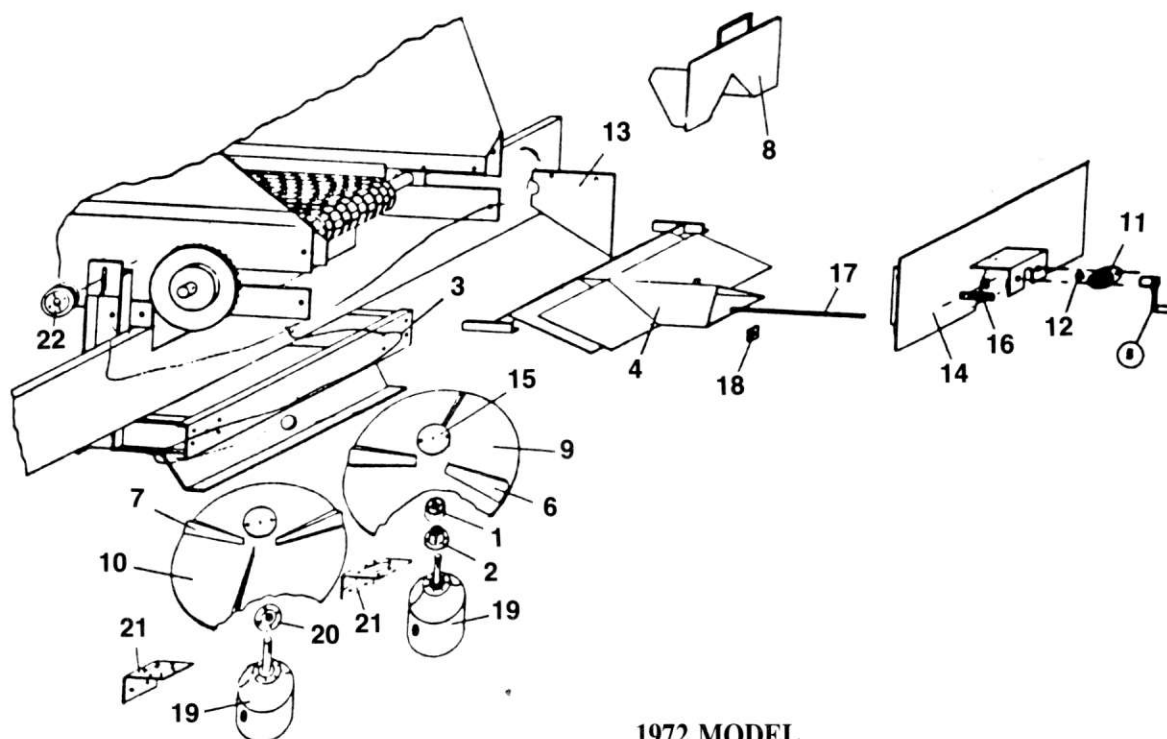


GATE OPERATING ASSEMBLY

<u>Ref.</u>	<u>Qty.</u>	<u>Part No.</u>	<u>Description</u>	<u>Ref.</u>	<u>Qty.</u>	<u>Part No.</u>	<u>Description</u>
1	1	S-1-33	Gate Operating Rod	9	1	S-1-38	Gate
2	1	S-1-36	Gate Rod Coupling	10	1	S-1-98R	Right Gate Track
3	1	S-1-10	Crank	11	1	S-1-98L	Left Gate Track
4	1	S-1-4	Gearbox	12	1	S-1-23	Gate Shear Strip
5	2	N-18-0200	1/4 x 2 Bolt	13	1	S-1-5	Gate Scale
6	1	S-1-19	Back Plate, Stainless	14	1	S-1-34	Nut
8	2	S-1-8	Gearbox Bracket	15	2	S-1-18	Stainless Gearbox Bracket
7	1	S-1-35	Gate Nut Bracket	MS	2	S-1-5A	Roundhead Screws
N/S	1	S-1-35A	3/16 x 2 1/2 5.5 Cotter Pin				

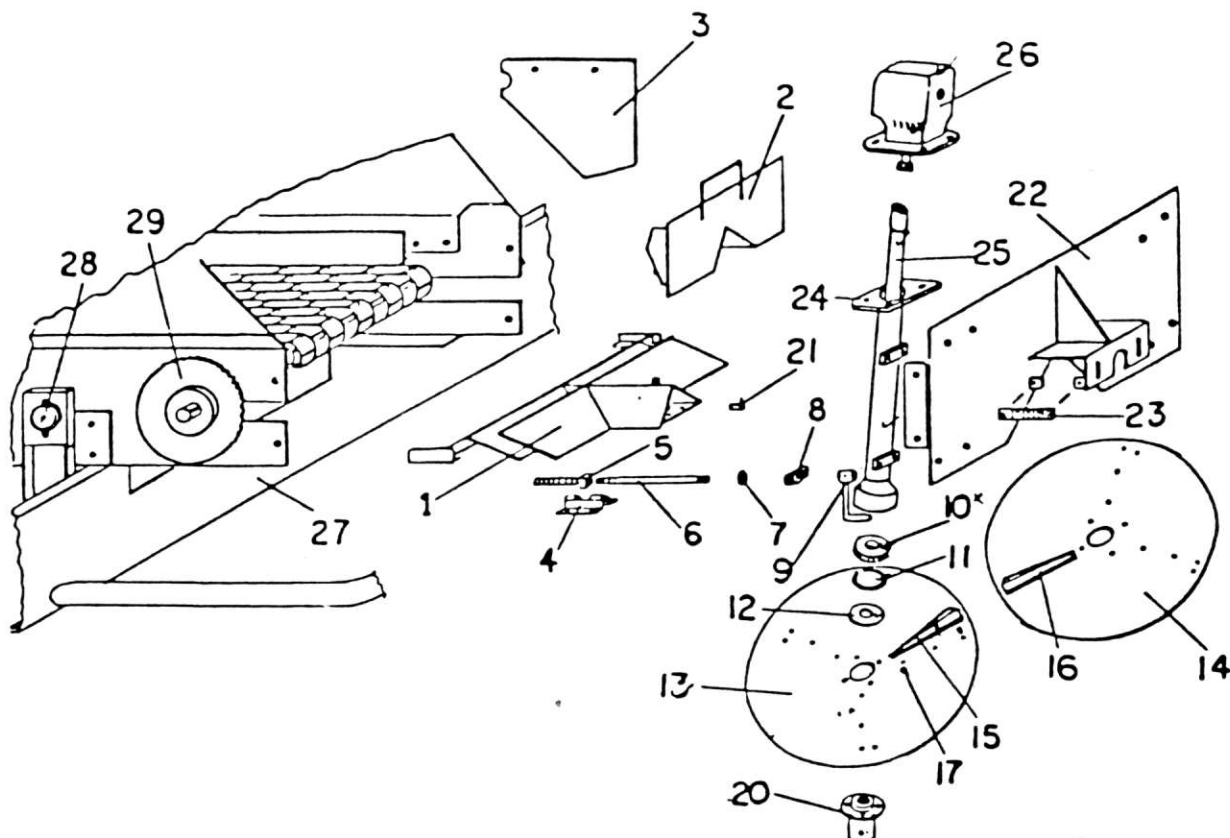
SINGLE BRACKET GEARBOX ASSEMBLY

<u>Ref.</u>	<u>Qty.</u>	<u>Part No.</u>	<u>Description</u>
N/S	1	S-1-130	Gearbox Bracket
N/S	1	R-4-12	Gearbox



1972 MODEL
DISTRIBUTION ASSEMBLY

<u>REFERENCE</u>	<u>QUANTITY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1 & 2	2	R-5-10	Hub & Bushing (Matched Set)
3	1	S-4-23	Spinner Support Frame
4	1	S-4-41	Adjustable Slide
5	1	S-4-55	Adjusting Crank
6	3	S-4-26	Right Spinner Blade
7	3	S-4-27	Left Spinner Blade
8	1	S-4-42	Fertilizer Insert
9	1	S-4-29	24" Right Spinner Plate
10	1	S-4-30	24" Left Spinner Plate
11	1	S-4-53	3/4" Adjusting Rod Bearing
12	1	S-4-54	3/4" Set Collar
13	2	S-4-33	Side Shields
14	1	S-4-65	Slide Bearing Support
15	2	R-5-12	Spinner Plate Cap
16	1	S-4-36	Slide Scale
17	1	S-1-33	3/4" Gate Operating Rod
18	1	S-1-34	3/4" Gate Rod Nut
19	2	S-6-100	Hydraulic Motor
20	2	S-6-108	Seal Assembly
21	2	S-6-101	Motor Bracket
22	1	S-3-20	Idler Pulley
6	3	S-4-80	Right Blade Hardened
7	3	S-4-81	Left Blade Hardened

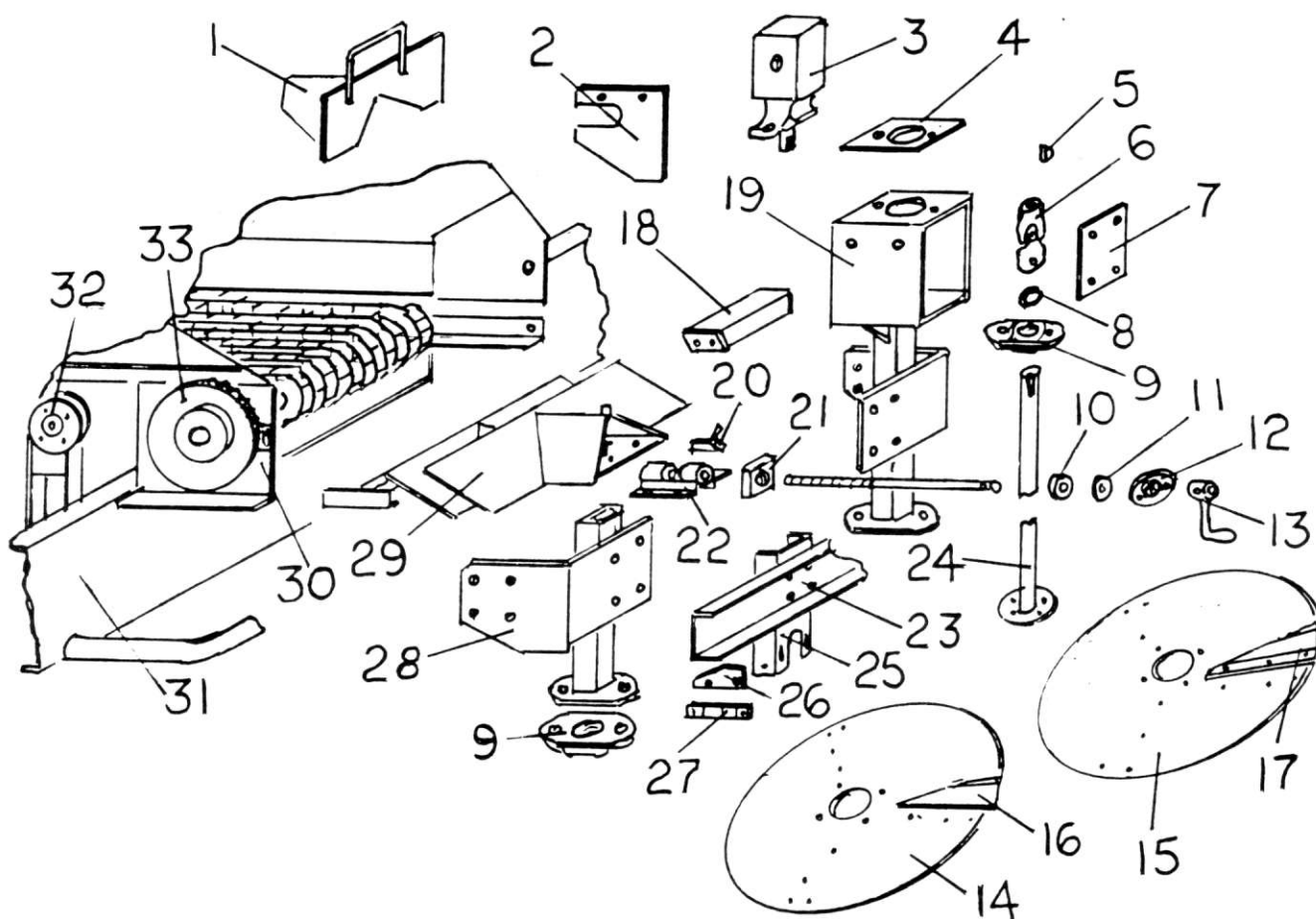


STANDARD DISTRIBUTION ASSEMBLY

Ref.	Qty.	Part No.	Description	Ref.	Qty.	Part No.	Description
1	1	S-4-41	Stainless Slide	16	3	S-4-26	Right Blade
2	1	S-4-42	Fertilizer Insert	16	3	S-4-80	Right Blade Hardened
3	2	S-4-33	Slide Shields	17	1	S-4-68	Blade Bolt Kit
4	1	S-4-56	Slide Nut Holder	20	2	S-5-11	Spinner Hub
5	1	S-1-34	Nut	21	1	S-4-66	Slide Pointer
6	1	S-1-33	Gate Rod	22	1	S-4-65	Back Plate
7	1	S-4-54	Set Collar	23	1	S-4-36	Slide Scale
8	1	S-4-53	Bearing	24	2	S-5-10	Drive Housing
9	1	S-4-55	Crank	25	2	S-5-9	Drive Shaft
10	2	S-5-4	Thrust Bearing	26	2	S-6-111	Motor
11	2	S-5-7	Lock Ring	27	1	S-4-64	Spatterboard
12	2	S-5-5	Seal	28	1	S-3-20	Idler
13	1	S-4-30	Left Spinner Plate	29	1	S-2-7	40T Sprocket
14	1	S-4-29	Right Spinner Plate	N/S	2	S-5-6	Key Stock
15	3	S-4-27	Left Blade	N/S	2	S-5-15	Roll Pin
15	3	S-4-81	Left Blade Hardened	N/S	2	S-6-111A	HPI Motor Repair Kit
				N/S	2	S-6-111W	HPI Splined Shaft

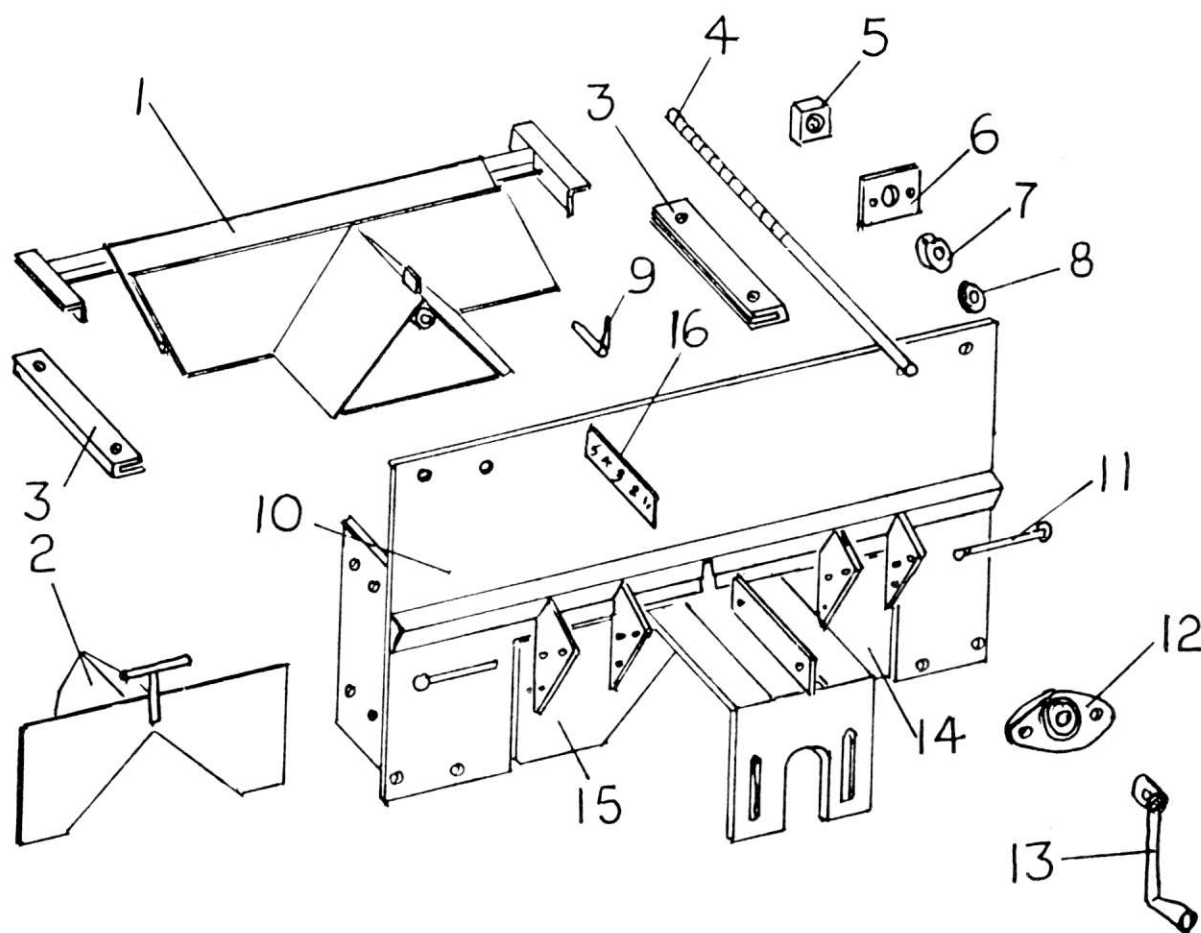
6 SPLINED DRIVE SHAFT ASSEMBLY

Ref.	Qty.	Part No.	Description
24	2	SG-5-10	Drive Housing
25	2	SG-5-3	Drive Shaft
26	2	S-7-19	6 Splined Motor
N/S	2	S-7-17A	Motor Repair Kit



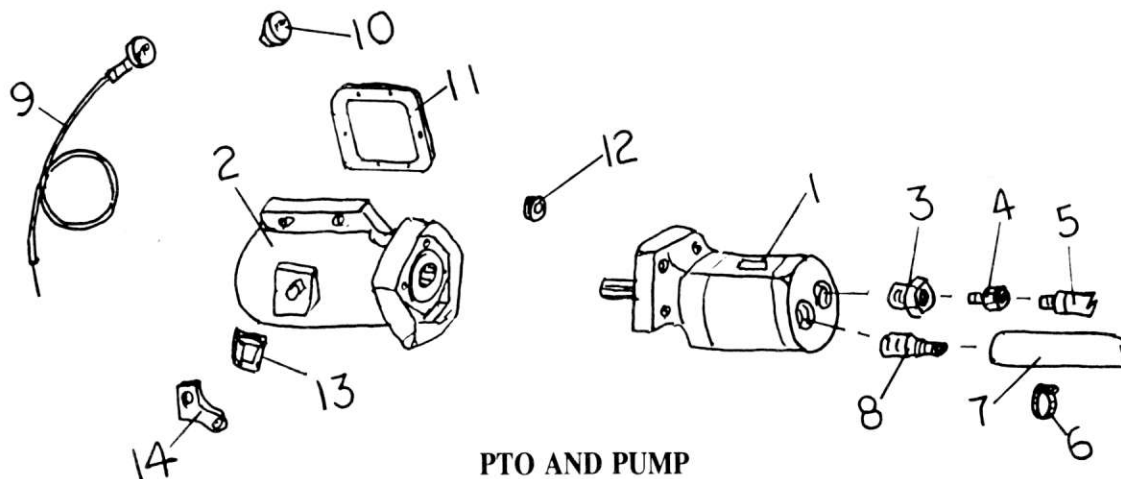
1985 DISTRIBUTION SYSTEM

<u>Ref.</u>	<u>Qty.</u>	<u>Part No.</u>	<u>Description</u>	<u>Ref.</u>	<u>Qty.</u>	<u>Part No.</u>	<u>Description</u>
1	1	S-4-42	Fertilizer Insert	20	1	S-4-66	Pointer
2	2	S-4-33	Side Shields	21	1	S-1-34	Nut
3	2	S-7-17	Hydraulic Motor	22	1	S-4-56	Slide Nut Holder
4	2	S-5-29	Motor Shim	23	1	S-4-49	Bearing Support
5	4	L-17	Woodruff Key	24	2	S-5-18	Spinner Shaft
6	2	S-5-20	U-Joint	25	1	S-4-48	Bearing Mount
7	4	S-5-17B	Housing Cover	26	1	S-4-77	Scale Support
8	2	S-5-22	Snap Ring	27	1	S-4-36	Slide Scale
9	4	S-5-19	Bearing	28	1	S-5-17	LH Drive Housing
10	1	S-4-54	Set Collar	29	1	S-4-41	Slide Chute
11	1	S-6-32	3/4" SS Flat Washer	30	1	S-1-105	LH Stiffner
12	1	S-4-53	Bearing	N/S	1	S-1-104	RH Stiffner
13	1	S-4-55	Crank	31	1	S-4-64	Spatter Board
14	1	S-4-30	LH Spinner Plate	32	1	S-3-20	Idler
15	1	S-4-29	RH Spinner Plate	33	1	S-2-7	40T Sprocket
16	3	S-4-27	LH Spinner Blade	N/S		S-7-17A	Hydraulic Motor Repair Kit
17	3	S-4-26	RH Spinner Blade	N/S	3	S-4-80	RH Hardened Blade
18	1	S-5-28	Housing Brace	N/S	3	S-4-81	LH Hardened Blade
19	1	S-5-16	RH Drive Housing				



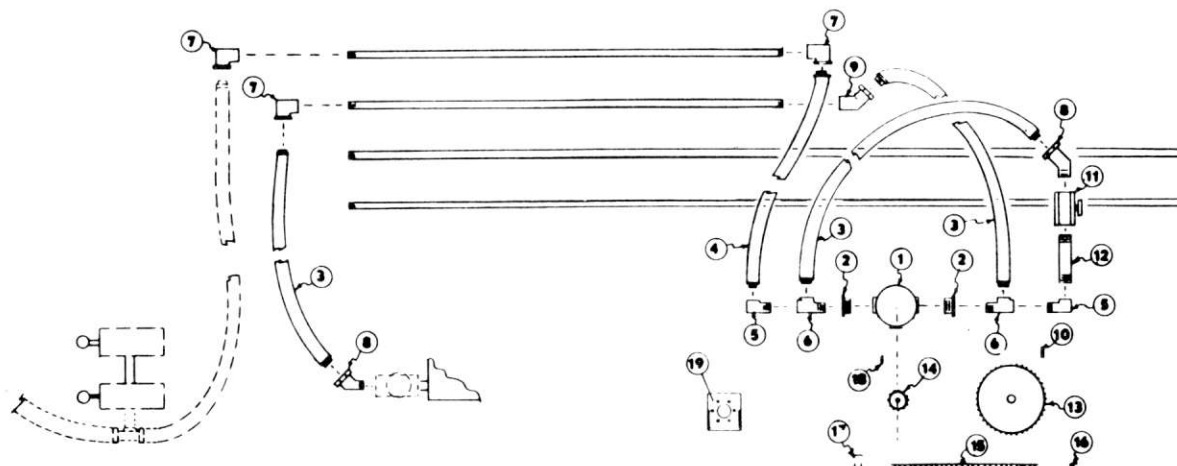
GFE DELIVERY CHUTE

<u>REFERENCE</u>	<u>QUANTITY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	S-4-41	Adjustable Slide
2	1	S-4-42	Fertilizer Insert
3	2	S-4-25	Slide Track
4	4	N-26-0150	3/8" x 1 1/2" SS Bolts
4	1	S-1-33	Operating Rod
5	1	S-1-34	Gate Nut
6	1	S-4-41A	Nut Cover Plate
7	1	S-4-54	Set Collar
8	1	S-6-32	3/4" Flatwasher
9	1	SG-4-41B	Pointer
10	1	SG-4-69	Back Plate Complete
	8	N-18-0100	1/2" x 1" Bolts
11	4	SG-4-72	Flap Pin
12	1	S-4-53	Bearing
13	1	S-4-55	Crank
14	1	SG-4-69A	Right Flap
15	1	SG-4-69B	Left Flap
16	1	S-4-36	Slide Scale



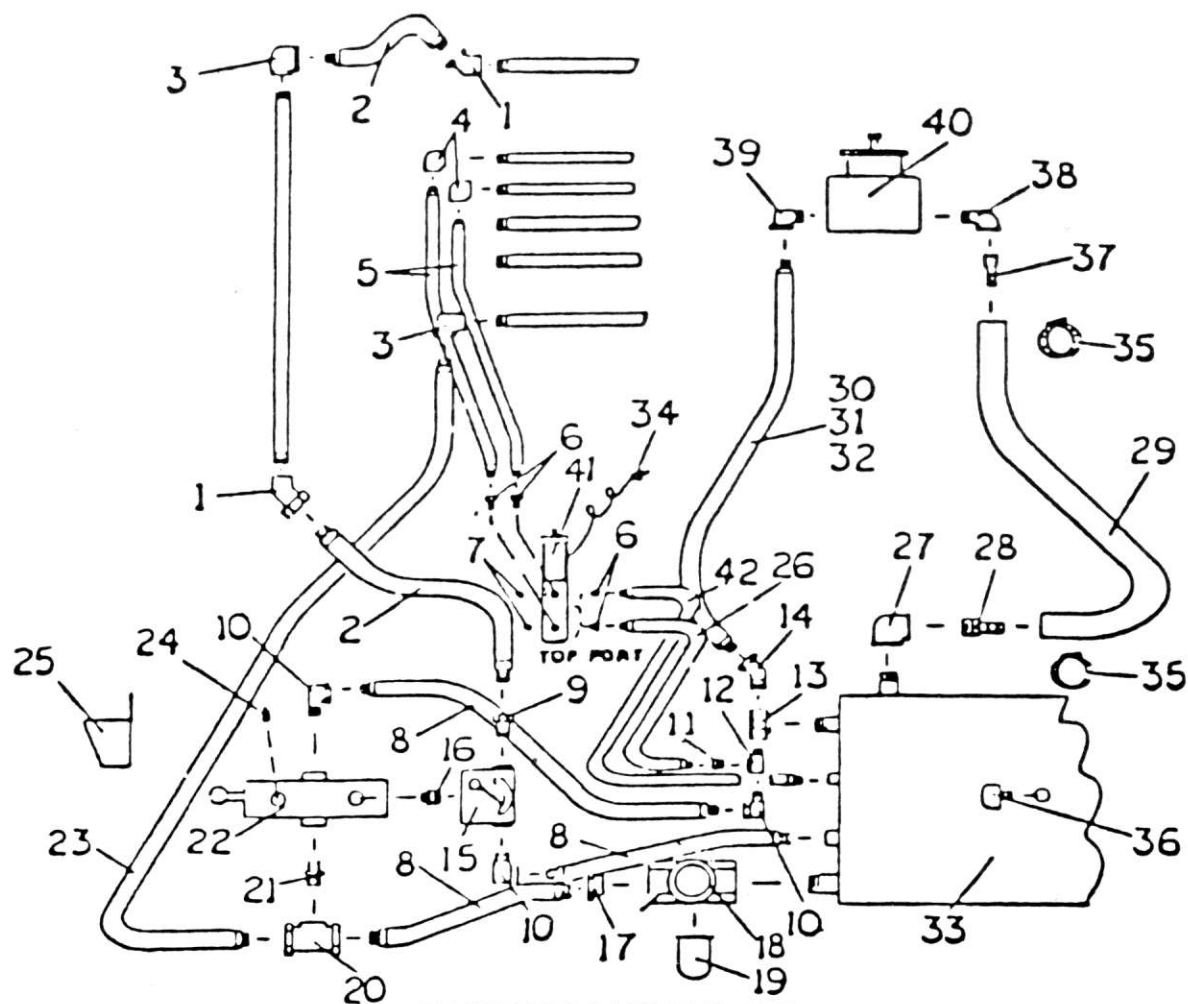
PTO AND PUMP

Ref.	Qty.	Part No.	Description	Ref.	Qty.	Part No.	Description
1	1	S-6-190	19 GPM Birotational Pump	8	1	F-100	1 1/4" Hose Nipple
1	1	S-6-189	13 GPM Birotational Pump	9	1	S-17-3	Control Cable
2	1	S-17	PTO Cable Shift	10	1	S-17-1	PTO Knob
2	1	S-18	PTO Air Shift	11	1	S-17-2	PTO Gasket Set (includes 11, 12, & 13)
3	1	S-6-11	1 1/4" x 3/4" Bushing	12	1	S-17-5	PTO Seal
4	1	S-6-47	3/4" Straight Adaptor	13	1	S-17-9	Shifter Cover Gasket
5	1	S-6-29	3/4" x 84" Hose	14	1	S-17-6	Lever Arm
6	2	F-118	1 1/4" Clamp	N/S	1	S-6-189A	Pump Repair Kit
7	1	S-6-63	1 1/4" Suction Hose	N/S	1	S-6-190A	Pump Repair Kit



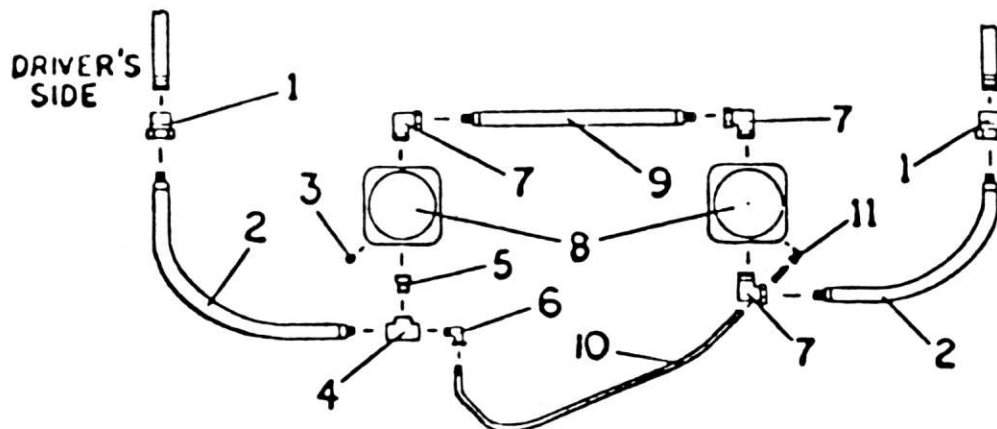
SIDE UNLOADING MOTOR ASSEMBLY

Ref.	Qty.	Part No.	Description	Ref.	Qty.	Part No.	Description
1	1	S-6-111	Splined Motor	10	1	S-3-18	5/16 Key
1	1	S-7-17	Keyed Motor	11	1	S-6-34	3/4 Valve
2	2	S-6-116	1 x 3/4 Bushing	12	1	S-6-97	3/4 Hex Nipple
3	3	S-6-27	3/4 x 26 Hose	13	1	S-3-7	54T Sprocket
4	1	S-6-39	3/4 x 15 Hose	14	1	S-16-2	Splined Sprocket
5	2	S-6-12	3/4 St. Ell	14	1	S-3-13	10TH Keyed Sprocket
6	2	S-6-16	3/4 Service Tee	15	1	S-3-28	#60 Chain 67 Pitches
7	3	S-6-53	3/4 90° Female Union	16	1	S-3-17	#60 Offset Link
8	2	S-6-54	3/4 45° Male Union	17	1	S-3-16	#60 Connecting Link
9	1	S-6-61	3/4 45° Female Union	18	1	S-16-3	#Motor Mount



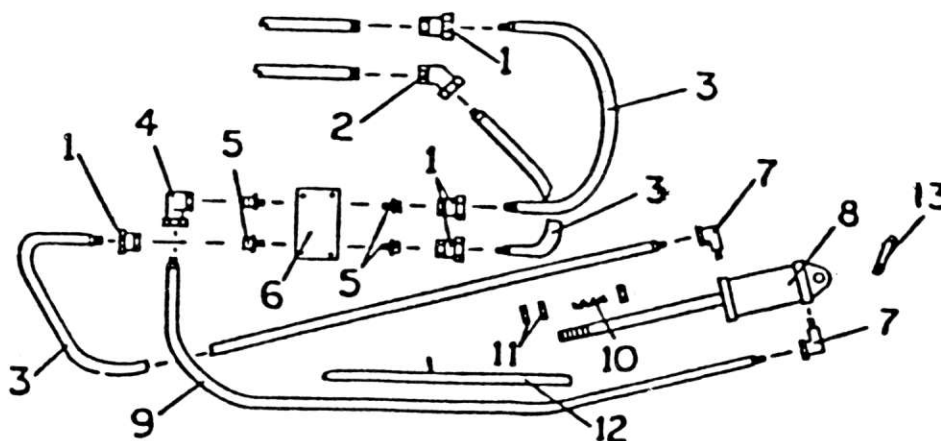
FRONT HYDRAULIC PIPING

Ref.	Qty.	Part No.	Description	Ref.	Qty.	Part No.	Description
1	2	S-6-61	3/4 45 Female Union	22	1	S-6-59	Spinner Control Valve
2	2	S-6-39	3/4 x 15 Hose	23	1	S-6-26	3/4 x 36 Hose
3	2	S-6-53	3/4 90 Female Union	24	1	S-6-40	1/2 Plug
4	2	S-6-42	1/2 90 Elbow	25	1	S-6-2	Control Bracket
5	2	S-6-25	1/2 x 20 Hose	26	1	S-6-96	1/2 x 12 Hose
6	4	S-6-67	3/8 x 1/2 Adaptor	27	1	G-701	1 1/4 Elbow
7	2	S-6-68	3/8 Plug	28	1	F-100	1 1/4 Hose Nipple
8	3	S-6-27	3/4 x 26 Hose	29	1	S-6-63	1 1/4 Suction Hose
9	1	S-6-47	3/4 Male Union	30	1	S-6-29	3/4 x 84 Hose
10	3	S-6-50	3/4 90 Male Union	31	1	S-6-60	3/4 x 96 Hose
11	1	S-6-55	3/4 x 1/2 Male Union	32	1	S-6-73	3/4 x 108 Hose
12	1	S-6-16	3/4 Service Tee	33	1	S-6-1	Oil Tank
13	1	S-6-6	Relief Valve	34	1	S-6-66	Switch
14	1	S-6-54	3/4 45 Male Union	35	2	F-118	Hose Clamp
15	1	S-6-120	Speed Control Valve	36	1	S-6-98	Tank Breather
16	1	S-6-95	1/2 x 3/4 Hex Nipple	37	1	F-100	1 x 1 1/4 Hose Nipple
17	1	S-6-11	1 1/4 x 3/4 Bushing	38	1	G-489	1 St. Elbow
18	1	S-6-142	Filter Complete	39	1	S-6-119	1 x 3/4 90 Male
19	2	S-6-114	Filter Element	40	1	S-6-190	19GPM
20	1	S-6-56	3/4 Female Tee	41	1	S-6-64	Solenoid Valve
21	1	S-6-97	3/4 Hex Nipple	42	1	S-6-31	1/2 x 17 Hose
N/S	1	S-6-33	Oil Tank Valve	N/S	1	S-6-64A	Coil Only (Waterman)
				N/S	1	S-6-7D	Coil Only (Delta)



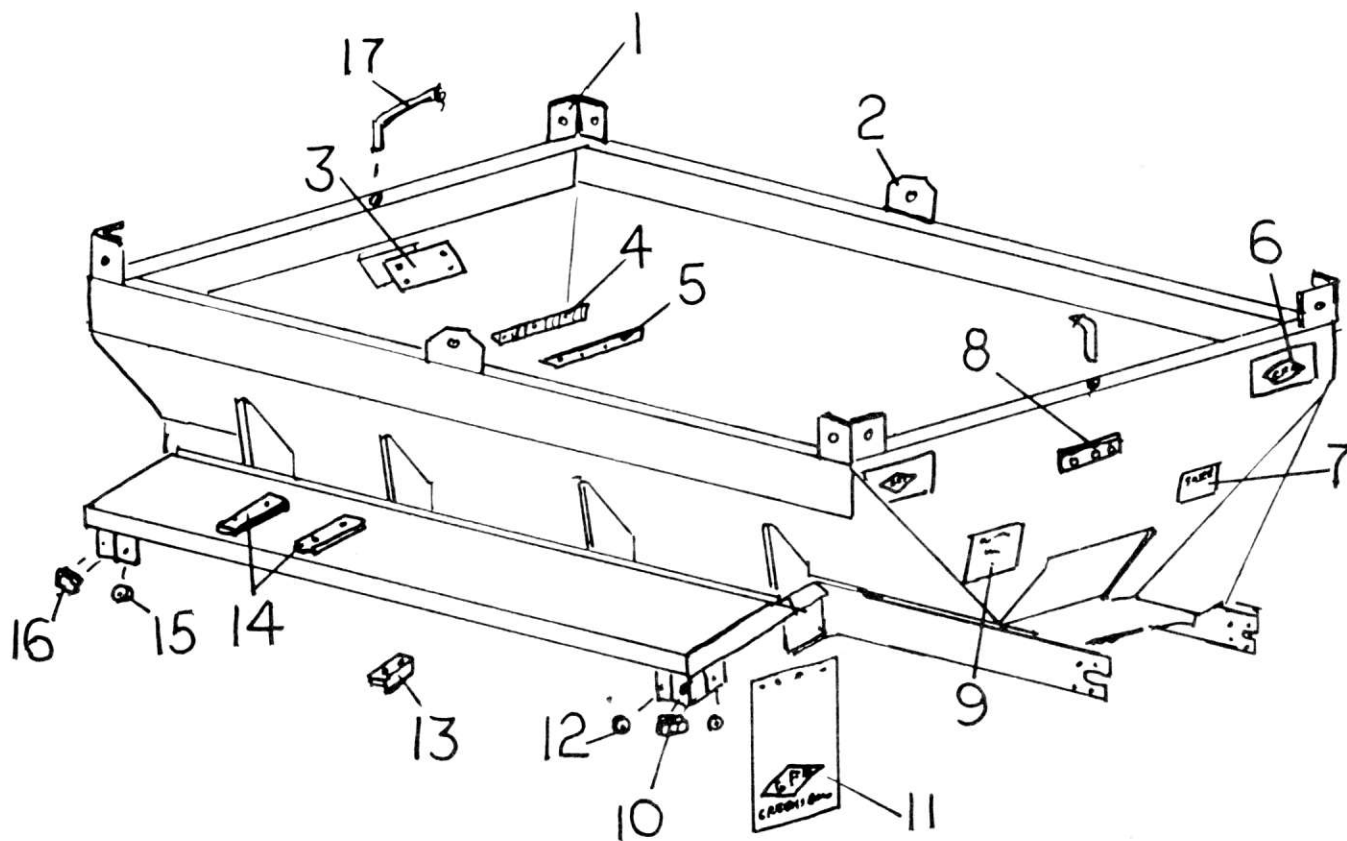
SPINNER MOTOR PIPING

Ref.	Qty.	Part No.	Description	Ref.	Qty.	Part No.	Description
1	2	S-6-49	3/4 St. Female Union	7	3	S-6-119	1 x 3/4 90 Degree Male Union
2	2	S-6-27	3/4 x 26" Hose	8	2	S-6-111	Splined Motor, HPI
3	1	G-144	1/4 Plug	9	1	S-6-121	3/4 x 18" Hose
4	1	S-6-35	3/4 Tee	10	1	S-6-122	1/4 x 25" Hose
5	1	S-6-117	1 x 3/4 Hex Nipple	11	1	S-6-128	1/4 90 Degree Male Union
6	1	S-6-127	3/4 x 3/8 90 Degree Male Union	N/S	1	S-6-111A	Repair Kit
				N/S	1	S-6-111W	Splined Motor Shaft



PRESS WHEEL CYLINDER PIPING

Ref.	Qty.	Part No.	Description	Ref.	Qty.	Part No.	Description
1	4	S-6-48	1/2 St. Female Union	8	1	S-6-5	Cylinder
2	1	S-6-55	1/2 45 Degree Female Union	9	1	S-6-25	1/2 x 20 Hose
3	3	S-6-31	1/2 x 17 Hose	10	1	S-3-21	Spring
4	1	S-6-125	1/2 90 Degree Female Union	11	3	S-6-43	1 1/8 NF Nuts
5	4	S-6-123	1/4 x 1/2 Hex Nipple	12	1	S-6-23	Cylinder Anchor
6	1	S-6-113	Lock Valve	13	1	S-6-76	Cylinder Pin
7	2	S-6-52	3/8 x 1/2 90 Degree Male Union	14	1	S-6-99	Cylinder Repair Kit



BODY PARTS

<u>REFERENCE</u>	<u>QUANTITY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	4	S-1-37A	Steel Corner Extensions
1	4	S-1-45A	Stainless Corner Extensions
2	2	S-1-37B	Steel Side Extensions
2	2	S-1-45B	Stainless Side Extensions
3	1	S-1-7	Plexiglass Window
4	1	S-1-32	Front Belt
5	1	S-1-25	Front Belt Holder
6	2	SG-1-16	GFE Decal
7	1	S-1-47	Safety Decal
8	1	S-14-3	3-Light Bar
9	1	SG-1-15	Rate Decal
10	2	S-14-2	Red Corner Light
11	2	S-9	Mudflaps
12	4	S-14-4	Red Reflector
13	5	S-1-24	Body Anchor Angle
14	2	S-1-100	Insert Holder
15	2	S-14-5	Amber Reflector
16	2	S-14-1	Amber Corner Light
17	1	S-12-1	Tarp Bow
18	2	S-1-20	Side Decal

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