OPERATOR'S MANUAL

Model 500-14 Grain Cart
Model 675-14 Grain Cart

J & M Mfg. Co. Inc.
Railroad Street Box 547
Ft. Recovery, OH 45846

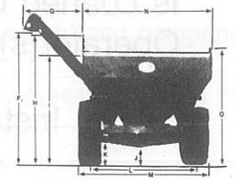
INTRODUCTION:

J & M Models 500-14 and 675-14 Grain Carts are designed, manufactured and sold for farm use. It is not for use on highways except as incidental to farm use.

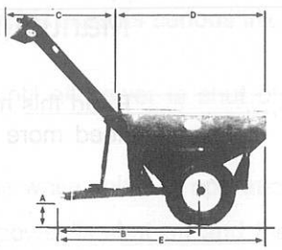
The manufacturer reserves the right to make product design and material changes at any time without notice. They shall not incur any obligation or liability to incorporate such changes and improvements in products previously sold to any customer, nor shall they be obligated or liable for the replacement of previously sold products with products or parts incorporating such changes.

SPECIFICATIONS	500-14	675-14
Capacity	up to 500 bu.	up to 675 bu.
Auger, one vertical	14"	14"
Wheels	20 x 26, 20 x 30, or 21 x 32	21 x 32 or 27 x 32
Hubs	10 Bolt	10 Bolt
Spindles	3⅞"	4½"
Weight: (approx.)	5,640#	7,200#
PTO	1,000 rpm	1,000 rpm
Tire Size	23.1 x 26, 10 ply; 23.1 x 30, 10 ply; or 24.5 x 32, 10 ply	24.5 x 32, 12 ply; or 30.5 x 32, 12 ply
Tongue Weight: Empty	950#	1,100#
Tongue Weight: Loaded	1,950#	2,700#
Construction:		
Hopper	12 GA Steel	12 GA Steel
Undercarriage	8 x 4 x 3/16" Thick Tubing	8 x 4 x ¼" Thick Tubing
Axle	5" x 5" x ½" Thick Tubing	5" x 5" x ½" Thick Tubing
Unloading Time* (approx.)	3½ min.	4½ min.

*Time varies with rpm and moisture content of grain.



DIMENSIONS	500-14	675-14
A	17"	18"
B	154"	153"
C	84"	76"
D	144"	168"
E	217"	229"
F	156"	156"
G	84"	73"
H	124"	136"
I	103"	120"
J	14"	18"
K	19"	24"
L	109"/120"	120"/144"
M	133"/144"	144"/160"
N	120"	141"
O	113"	125"



Specifications are subject to change without notice or obligation.

(fill in the following for future reference)

Serial No. _____

Date of Purchase _____

Purchased From _____

TO THE OWNER

THIS SAFETY ALERT SYMBOL INDICATES IMPORTANT SAFETY MESSAGES IN THIS MANUAL. WHEN YOU SEE THIS SYMBOL, CAREFULLY READ THE MESSAGE THAT FOLLOWS AND BE ALERT TO THE POSSIBILITY OF PERSONAL INJURY OR DEATH.

IMPORTANT

If This Machine Is Used By An Employee Or Is Loaned Or Rented, Make Certain That The Operator(s), Prior To Operating:

1. Is Instructed In Safe And Proper Use.
2. Reviews And Understands The Manual(s) Pertaining To The Machine.

Read this manual before you operate the machine. If you need more information, see your J & M dealer.

SAFETY

Understand that your safety and the safety of other persons is measured by how you service, and operate this machine. Know the positions and functions of all controls before you try to operate them. Make sure to check all controls in a safe area before starting your work.

The safety information given in this manual does not replace safety codes, federal, state and local laws. Make certain your machine has the proper equipment needed as designated by local laws and regulations.

A frequent cause of personal injury or death is from persons falling off equipment and being run over. Do not permit persons to ride on this machine.

Travel speed should be such that complete control and machine stability is maintained at all times. Where possible, avoid operating near ditches, embankments and holes. Reduce speed when turning, crossing slopes, and rough, slick, or muddy surfaces.

Collision of high speed road traffic and slow moving machines can cause personal injury or death. On roads, use flasher lights according to local laws. Keep slow-moving-vehicle emblem visible. Pull over to let faster traffic pass.

Hydraulic oil leaking under pressure can penetrate the skin and cause infection or other injury.
To Prevent Personal Injury:
Relieve all pressure, before disconnecting fluid lines.
Before applying pressure, make sure all connections are tight and components are in good condition.
Never use your hand to check for suspected leaks under pressure. Use a piece of cardboard or wood for this purpose.
If injured by leaking fluid, see your doctor immediately.

When transporting grain cart, always keep auger in the stow position.
Use care when moving or operating grain cart near electric lines as serious injury or death can result from contact.

Never adjust, service, clean, or lubricate grain cart until all power is shut off.

Keep all safety shields in place.

Keep hands, feet, and clothing away from moving parts while unit is in operation.

If you must climb into grain tank, be certain that all power is shut off and then use extreme caution when climbing into grain cart.

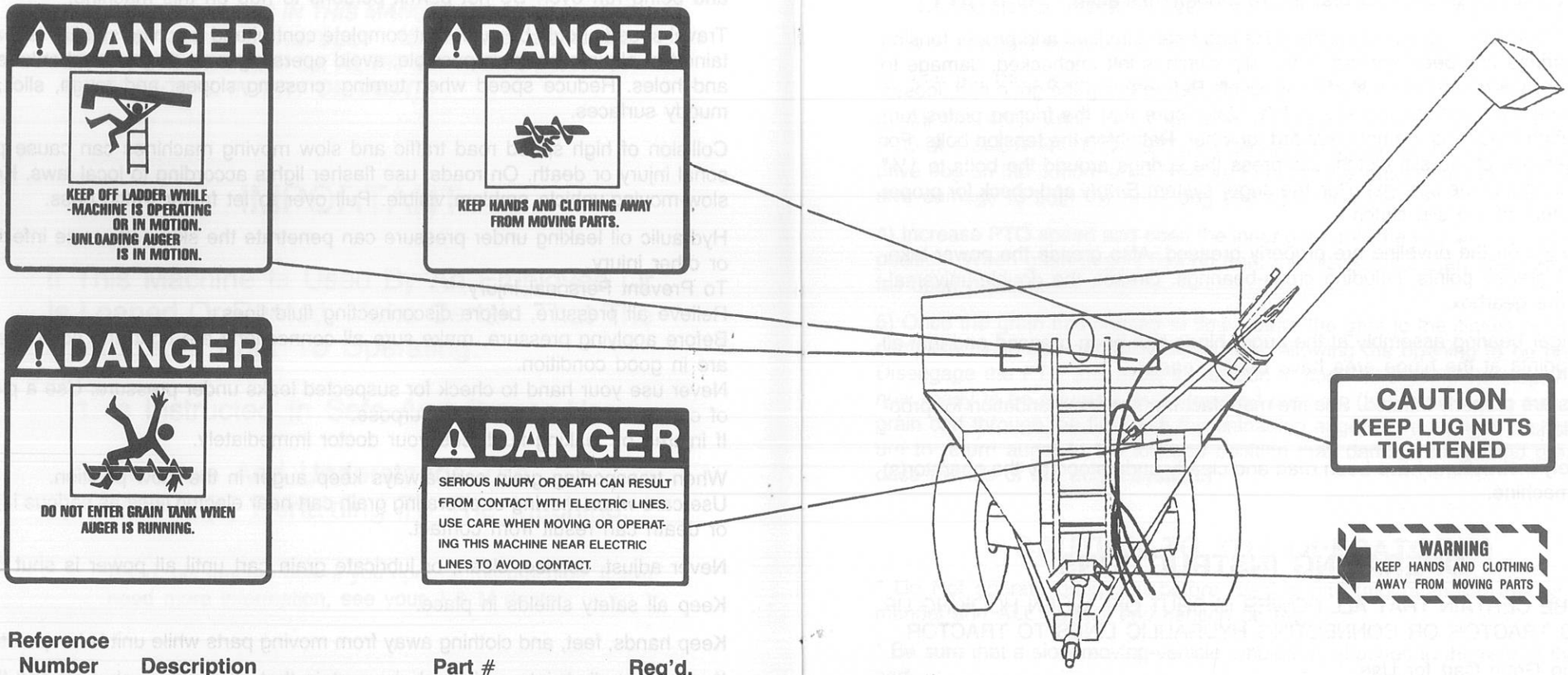
Make sure that everyone is clear of equipment before applying power or moving the machine.

Make sure that the grain cart is fastened securely to the tractor by using the proper hitch pin, clip and safety chains.

DECALS

IMPORTANT: *Install new decals if the old decals are destroyed, lost, painted over or cannot be read. When parts are replaced that have decals, make sure you install a new decal with each new part. New decals are available from your J & M dealer or write to:*

J & M Mfg. Co. Inc.
Parts Department
Railroad Street, Box 547
Ft. Recovery, OH 45846



Reference Number	Description	Part #	Req'd.
1	Decal, Danger	DD-1	1
2	Decal, Danger	DD-2	2
3	Decal, Danger	DD-3	3
4	Decal, Danger	DD-4	1
5	Decal, Caution	DC-5	2
6	Decal, Important	DI-6	1
7	Decal, Warning	DW-7	10
8	Decal, Farm Use	DF-8	1
9	Decal, Open	DO-9	1
10	Decal, Closed	DC-10	1

Reference Number	Description	Part #	Req'd.
11	Decal, J&M-Sm.	DD-11	2
12	Decal, J&M-Lg.	DD-12	4
13	Decal, Vinyl	DV-13	1

INITIAL OPERATION/MAINTENANCE

NOTE: BE CERTAIN THAT ALL POWER IS SHUT OFF BEFORE SERVICING THE GRAIN CART.

Before the grain cart is put into service, make certain that:

The gearbox is properly filled with EP 80-90 gearbox lubricant.

The wheel nuts are properly fastened (torque to 380 ft. lbs.) They should be checked after each load during initial operation of cart and then after every 10 hours of use.

All nuts, bolts, bearings, and braces are properly fastened.

IMPORTANT: The slip clutch on the PTO has been serviced and proper tension to the springs has been applied. If the slip clutch is left unchecked, damage to the power-take-off and drive shaft may result. Before using the grain cart, loosen the tension bolts around the slip clutch. Make sure that the friction plates turn free of each other and are not corroded together. Retighten the tension bolts. For proper tension of the slip clutch, compress the springs around the bolts to 1⅛" (overall length of the springs). Run the auger system *Empty* and check for proper engagement of the slip clutch.

All bearings on the driveline are properly greased. Also grease the power-take-off at all grease points including cross-bearings. Grease the double-universal-joint at the gearbox.

The hanger bearing assembly at the auger hinge has been greased and that all grease points at the hinge area have been greased.

The tires are properly inflated. See tire manufacturer's recommendation for proper inflation.

The safety instructions have been read and clearly understood by the operator(s) of this machine.

OPERATING INSTRUCTIONS

NOTE: BE CERTAIN THAT ALL POWER IS SHUT OFF WHEN HOOKING UP PTO TO TRACTOR OR CONNECTING HYDRAULIC LINES TO TRACTOR.

Preparing Grain Cart for Use

Model 500-14 Grain Cart requires 90 hp tractor or larger.
Model 675-14 Grain Cart requires 130 hp tractor or larger.

1) Hook-up grain cart to tractor using a good quality hitch pin.

2) Attach power-take-off shaft (540 or 1000 rpm) to tractor. PTO must have at least 5" of engagement. Check tractor drawbar for clearance and length and adjust if needed.

3) Make sure that jack stand is removed from lower support position before cart is moved.

4) Be sure that no debris or foreign objects are in grain cart.

5) Attach hydraulic lines to tractor. Two hydraulic lines operate the gate mechanism. Connect these lines to one service outlet on the tractor. The remaining two lines operate the folding mechanism of the auger. Connect these lines to a second service outlet on the tractor. Make sure that air is bled from hydraulic cylinders and lines.

6) Run auger system EMPTY before actual use. Make certain that slip clutch is operating and that upper and lower augers engage properly.

LOADING AND UNLOADING THE GRAIN CART

1) With the gate indicator in the closed position, fill the box with grain.

2) With the PTO disengaged, fold discharge auger to upright position.

3) IMPORTANT: After the auger is in the upright position, be sure to start the PTO at a *SLOW RATE OF SPEED* until the pin on the upper auger engages the drive dog on the bottom auger (failure to follow this procedure may cause extensive damage to both the drive dog and drive line).

4) Increase PTO speed and open the inner gate until the pointer is in the halfway position. When grain begins flowing from the discharge auger, open gate to the full open position.

5) Once the grain has ceased to flow, return the gate to the closed position (for complete clean-out, gradually close gate, allowing the opening to be reduced). Disengage the PTO and allow its rotation to come to a complete stop. Auger is now ready to be returned to the lowered position. (Important — Do Not pull the grain cart through the field with the unloading auger in the upright position. Failure to return auger to the lowered position may damage hinge and greatly reduce the life of the auger system.)

CAUTION TO THE OPERATOR(S)

* Do Not operate grain cart before reading and understanding the operator's manual and ALL danger and caution decals.

* Be sure that a slow-moving-vehicle emblem is attached to the rear of the grain cart.

* Never exceed 1,000 rpm on the system.

* Never fold or extend the auger until PTO has come to a complete stop.

* Never fill grain cart unless gate indicator is in the closed position.

* Never allow foreign objects (shovels, etc.) to be placed inside the grain cart.

* Never engage pin and drive dog when system is moving at a high rate of speed.

* Never maintain or service cart with tractor running.

LUBRICATION SERVICE SCHEDULE

Your J & M grain cart has grease fittings at all critical points. These should be serviced before the cart is put into operation. **BE CERTAIN THAT ALL POWER IS SHUT OFF BEFORE SERVICING THE GRAIN CART.**

Hitch: There is a grease fitting located on the pivot shaft of the swivel hitch.

PTO & Drive Line: The grease fittings on the PTO should be serviced after every 8 hours of use (see accompanying pamphlet for further lubrication of PTO). Service the grease fittings on each of the drive line bearings and also the double universal joint after every 8 hours of use.

Folding Mechanism of Auger: One grease fitting is located on the pivot pin of the folding auger. This fitting should be serviced after every 8 hours of use. Service the grease fitting on the hanger bracket assembly (top end of the lower auger assembly) after every 8 hours of use or as needed.

Spring Loaded Top Auger Bearing: Service the grease fitting on the upper auger bearing (located on the top end of the upper auger assembly) after every 8 hours of use. Lubricate springs and retaining bolts on the bearing before prolonged storage of the grain cart.

Gearbox: Gearbox lubricant has been added to the gearbox during final assembly. Recheck lubricant level before initial operation of the cart. The fluid level should be checked from time to time. An inspection plug is located in the center of the top of the gearbox mount plate. The gearbox contains the proper amount of fluid when the fluid is visible through the inspection port. DO NOT OVERFILL. Use only EP 80-90 gearbox lubricant.

ROUTINE MAINTENANCE/TROUBLE SHOOTING/ ADJUSTMENTS

IMPORTANT — WHEN SERVICING THE GRAIN CART, BE CERTAIN THAT ALL POWER IS SHUT OFF.

* Repack the wheel bearings at least once a year. Use Bearing Gard MK 1 or equivalent lubricant. Also check the seal for wear and replace if necessary.

* Check the grain cart periodically for cracks in welds and for other structural damage. Have cracked welds fixed immediately. Failure to do so could result in extensive damage to the grain cart and greatly reduce the life of the cart.

* Lubricate the slides on the clean-out door.

* Check hydraulic hoses for wear and replace if needed.

* Make sure that the tires are properly inflated. Inflate according to tire manufacturers recommendations.

* Check PTO for wear of plates in safety clutch. Replace if needed.

* Make sure that all guards and shields are in place before operating the grain cart.

TROUBLE SHOOTING

IMPORTANT — MAKE SURE THAT ALL POWER IS SHUT OFF BEFORE SERVICING THE GRAIN CART. MAINTENANCE AND REPAIR SERVICE WORK TO BE PERFORMED BY QUALIFIED SERVICEMEN ONLY.

Trouble . . .	Possible Cause . . .	Possible Remedy . . .
Auger will not return to down position or move from stow position	Dirt in restricter	Remove restricter fittings from outside hydraulic cylinder and clean out dirt
"	Upper flighting and lower flighting locked together	Bearing on top of upper flighting needs adjusting. When auger is in engaged position, there must be ⅛" gap between bottom of top bearing and top of upper tube assy. (see ADJUSTING THE UPPER FLIGHTING)
Safety clutch not working properly	Pressure plates (lining) corroded together	Loosen bolts around safety clutch, remove dirt and corrosion, and retighten bolts to proper tension
Hanger bearing at top of lower flighting is hot	Top of hanger bearing assy. is rubbing against drive-dog	Adjust position of hanger bearing assy.
"	"	Remove lower flighting assy. and place a shim between spline and gearbox
Excessive Vibration	Auger flighting or shaft is bent	Straighten or replace auger flighting assy.
	Drive shaft is bent	Replace or straighten drive shaft
Grain flow stoppage	Pins sheared in drive-dog	Replace pins in drive-dog. Engage upper and lower flighting at a slow rate of speed. (Drive-dog and pins are being engaged at too fast a rate of speed)

Grain flow stoppage	Pins sheared in drive-dog	Upper and lower flighting are disengaged before auger comes to a complete stop. Replace pins in drive-dog. Never engage or disengage upper and lower flighting until auger comes to a complete stop
"	Slip clutch not properly working	Adjust slip clutch to proper tension
"	PTO key slipped	Replace key and tighten set screw
Auger tube breaking away from grain cart at hinge	Auger is extended in upright position while traveling in field	Lower auger to stow position after unloading

ADJUSTING THE SLIP CLUTCH

NOTE: MAKE SURE THAT ALL POWER IS SHUT OFF BEFORE ADJUSTING THE SLIP CLUTCH.

The slip clutch will need to be adjusted periodically. If the grain cart is not operated over a period of time and the slip clutch is exposed to outdoor weather conditions, the friction plates in the clutch may have corroded (froze) together. If left unchecked, damage to the power-take-off and drive-line may occur.

Loosen the bolts (8) around the slip clutch and allow the friction plates to separate. Inspect friction plates for wear and replace if necessary. Remove any dirt or corrosion from the friction plates. Tighten the bolts surrounding the clutch. Adjust the spring tension on the clutch by compressing the springs to 1⅛" length (overall compressed length of the springs).

The grain cart should first be run EMPTY and the slip clutch checked for proper engagement before running the cart under a load.

If the grain cart is to be put into storage for a period of time, the slip clutch will need to be loosened. *See storage of grain cart.

ADJUSTING THE LOWER FLIGHTING AND HANGER BEARING

NOTE: MAKE SURE THAT ALL POWER IS SHUT OFF BEFORE ADJUSTING THE FLIGHTING ASSEMBLY.

If the drive-dog and hanger bearing are becoming excessively hot during unloading, the lower flighting and/or hanger bearing may need adjusting. The hanger

bearing assembly has elongated holes where it attaches to the outer tube assembly. Loosen the two ⅜" bolts on the hanger bearing assy. Adjust the hanger bearing either up or down and locate in center between flighting center and drive-dog. Retighten the bolts. (Make certain that the flighting center and drive-dog does not rub the hanger bearing causing them to become hot.)

If the hanger bearing can no longer be adjusted by moving it up or down on the elongated holes, both the hanger bearing and lower flighting will have to be removed. After removing them from the tube assembly, place a shim (⅛" — 3/16") between where the gearbox and the spline coupler (welded to lower flighting) meet. Replace the lower flighting and attach hanger bearing to tube assembly. Readjust the hanger bearing assembly. (NOTE: The bottom of the lower flighting is not attached to the gearbox with any bolts or set screws but may be "froze" fast. Be careful when removing the lower flighting from the gearbox.)

After adjusting the lower flighting, check the upper flighting for readjustment.

ADJUSTING THE UPPER FLIGHTING

NOTE: MAKE SURE POWER IS SHUT OFF BEFORE ADJUSTING THE FLIGHTING ASSEMBLY.

If the upper and lower flighting does not properly separate during the unfolding sequence, the upper flighting may need adjusting. Before making adjustment to upper flighting, check to see if the pins and drive-dog are locking together (If not, dirt in the restricter of hydraulic cylinder on the upper tube may be the cause of the problem. *See instruction for removing dirt from the restricter).

Fold the upper tube assembly into upright position. Position upper flighting in engaged position with lower flighting. Locate 4-hole flange bearing on top of the upper tube housing. With the upper flighting *in the engaged position,* check the spacing between the upper bearing and the upper tube housing. There must be a ⅛" space between the base of the 4-hole flange bearing and the upper tube housing. If there is NOT a space between the bearing and the upper tube housing, a shim washer will have to be taken from the *top* of the bearing and placed *below* the bearing.

To do this, return auger to the down position. Remove the ⅜" x 1" bolt and shims from the upper end of the upper flighting shaft. Loosen the set screws on the top bearing and pull the flighting back from the upper tube housing. Take a shim washer from the top of the upper bearing and place it on the shaft below the bearing. Return the shaft to the bearing and upper tube housing and attach ⅜" bolt and shims. Check for a gap between the bearing and the tube housing. If there is still not a ⅛" gap between the bearing and the auger tube housing, take another shim washer from the top of the bearing and place it below the bearing. Once the gap has been set, retighten the set screws on the bearing and reassemble the spring compression housing.

If there is too much gap between the bearing and the upper tube housing, a shim washer will have to be removed from *below* the bearing and placed on *top* of the bearing (follow previous instructions).

If the upper and lower flighting still does not separate properly during the unfolding sequence, a small bevel may need to be ground out of the inside of the pins where they meet the drive-dog. Grind approximately 1/8" off of the corner of the pins where they touch against the drive-dog.

REMOVING DIRT FROM RESTRICTERS ON HYDRAULIC CYLINDER

NOTE: MAKE SURE POWER IS SHUT OFF AND THE UPPER AUGER TUBE IS IN THE DOWN POSITION BEFORE REMOVING THE RESTRICTERS.

Remove restricters (ref. #49) from 90° street elbow on hydraulic cylinder. Remove dirt from fitting to allow hydraulic oil to flow freely through the restricter. Reattach the restricter to the street elbow. Use teflon sealant tape or equivalent on the treads of the restricter before attaching.

If restricter continues to plug with dirt, replace or filter the hydraulic oil in your system.

STORAGE PREPARATION

When the grain cart is not going to be used for a length of time, store the cart in a dry, protected place. Leaving your grain cart outside, open to the weather, will shorten its life.

Follow the procedure below when your grain cart is placed in storage for periods up to six months.

1) Cover electronic monitor (if equipped) with plastic before washing the grain cart. Wash or clean and completely lubricate the grain cart. (*See the lubrication service section in this manual.)

2) Remove all grain from inside the grain tank, auger tube assemblies, and at the clean-out door.

3) Check gearbox oil in the gearbox and replace with new EP-80-90 gearbox lubricant if necessary.

4) Touch-up spots where paint has been worn away (use a good quality primer paint — especially before applying graphite paint to the inside of the grain tank).

5) Loosen the bolts around the slip clutch and make sure that the friction plates are separated.

6) Retract all hydraulic cylinders to prevent the piston rods from rusting.

7) If the grain cart is equipped with an electronic weigh system, fully charge the battery to prevent freezing. Disconnect the negative (-) ground cable at the battery to prevent possible discharge.

8) Clean the tires before storage. Inflate the tires at regular intervals.

9) Open the clean-out door at the base of the grain tank.

REMOVING FROM STORAGE

1) Readjust the slip clutch to the proper tension.

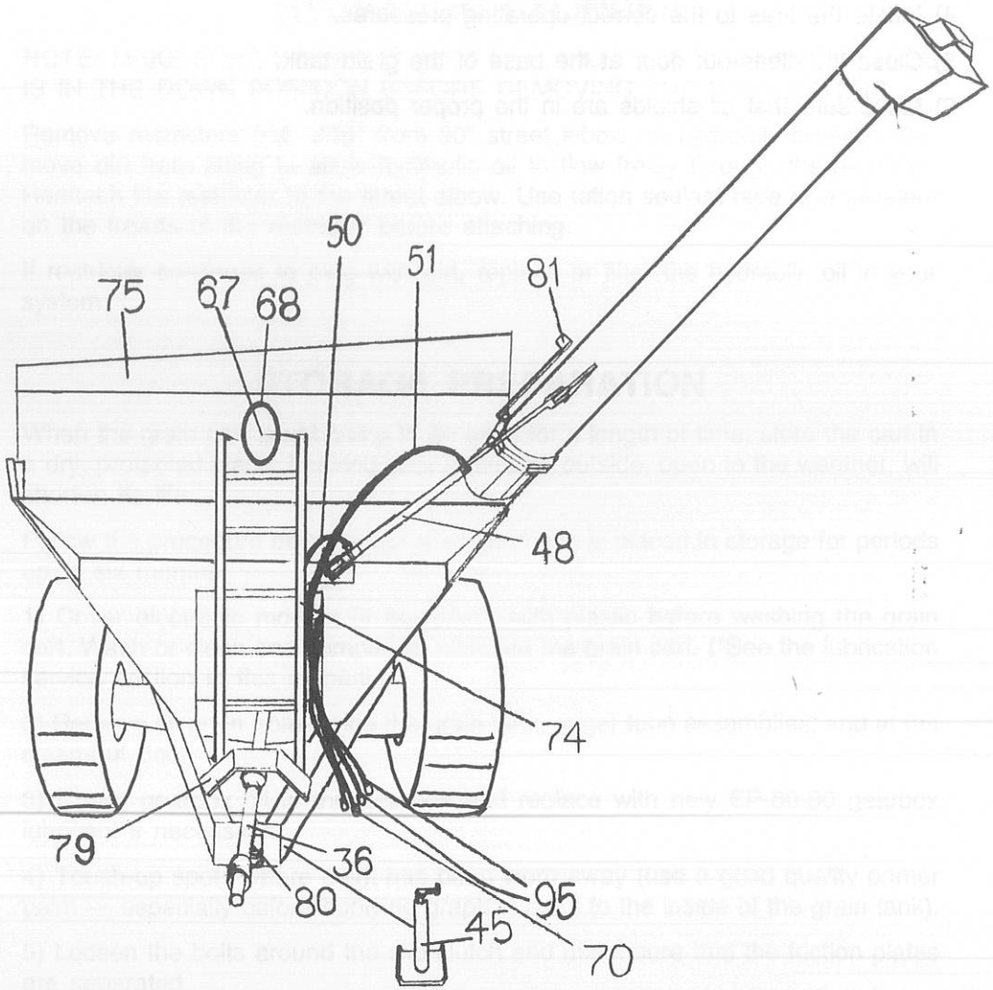
2) Check the oil in the gearbox.

3) Check the battery and make sure that it is fully charged (if equipped with an electronic weigh system). Reconnect the negative (-) cable.

4) Inflate the tires to the correct operating pressures.

5) Close the clean-out door at the base of the grain tank.

6) Make sure that all shields are in the proper position.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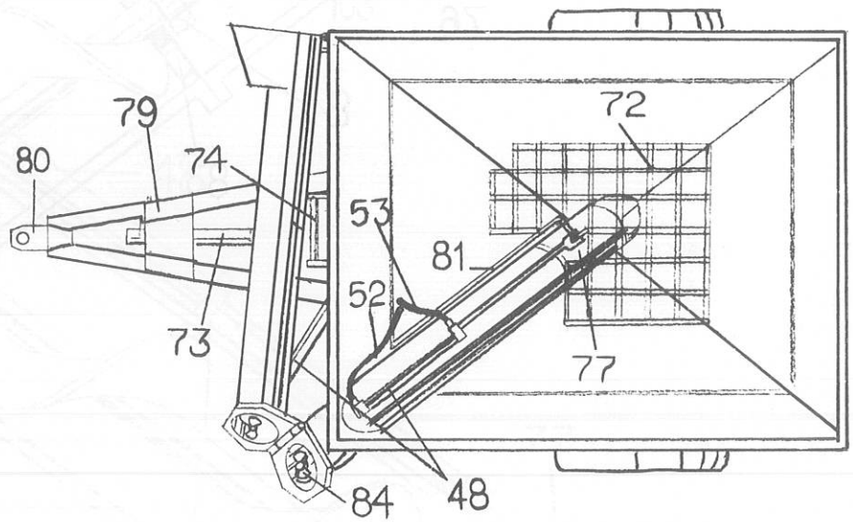
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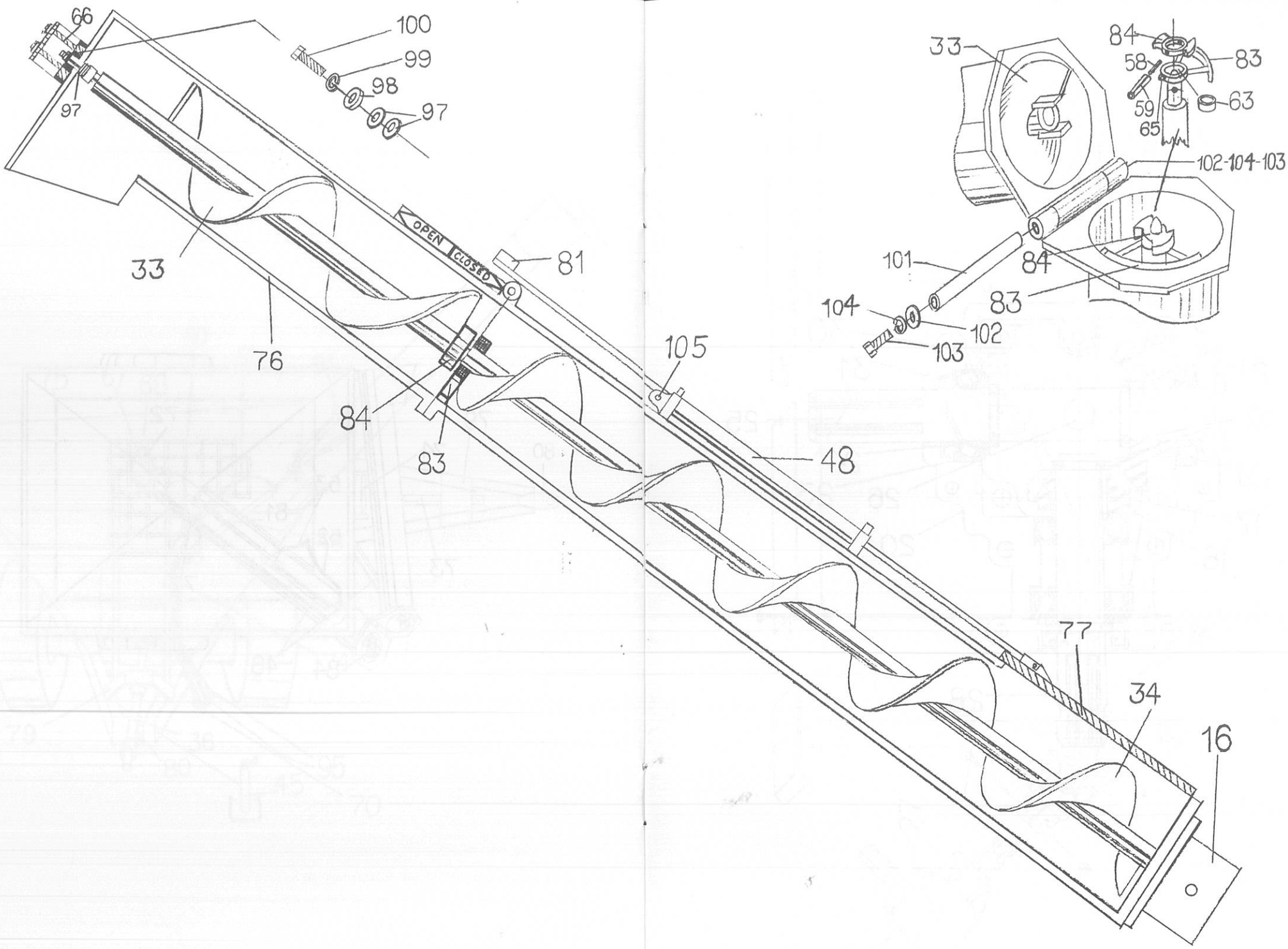
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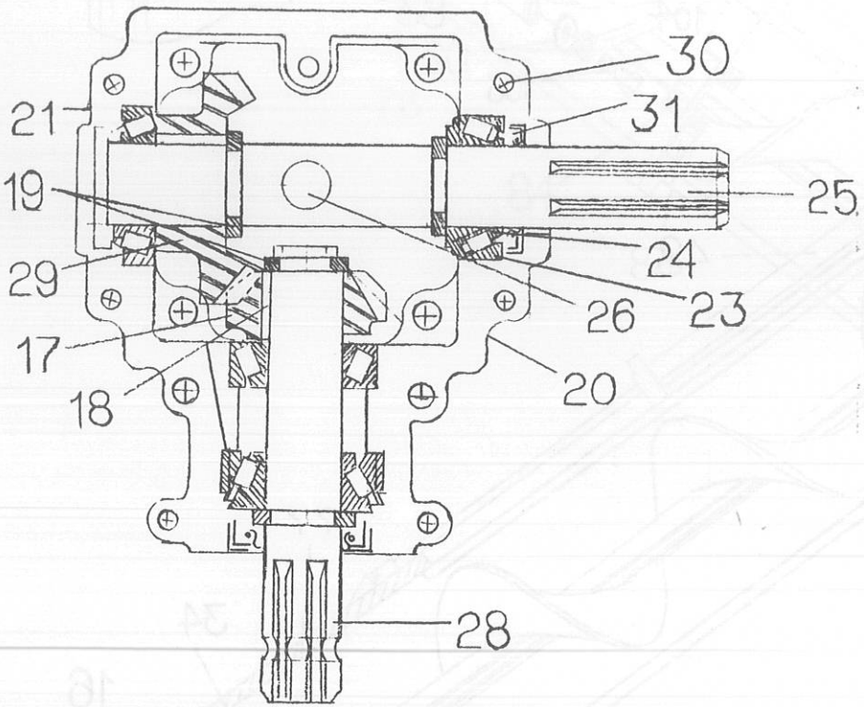
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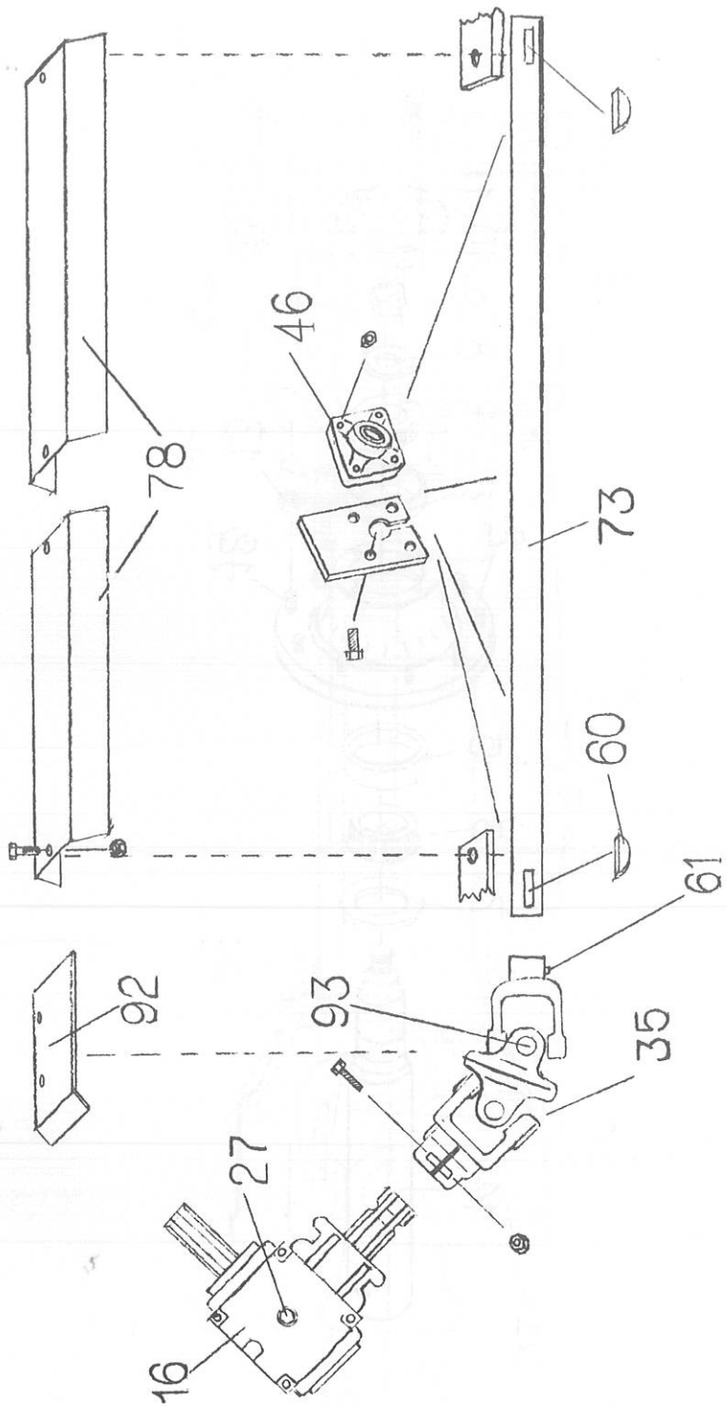
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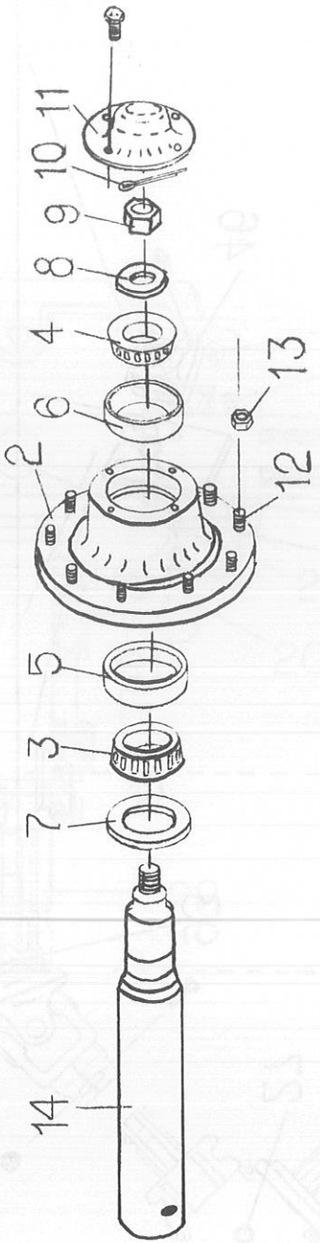
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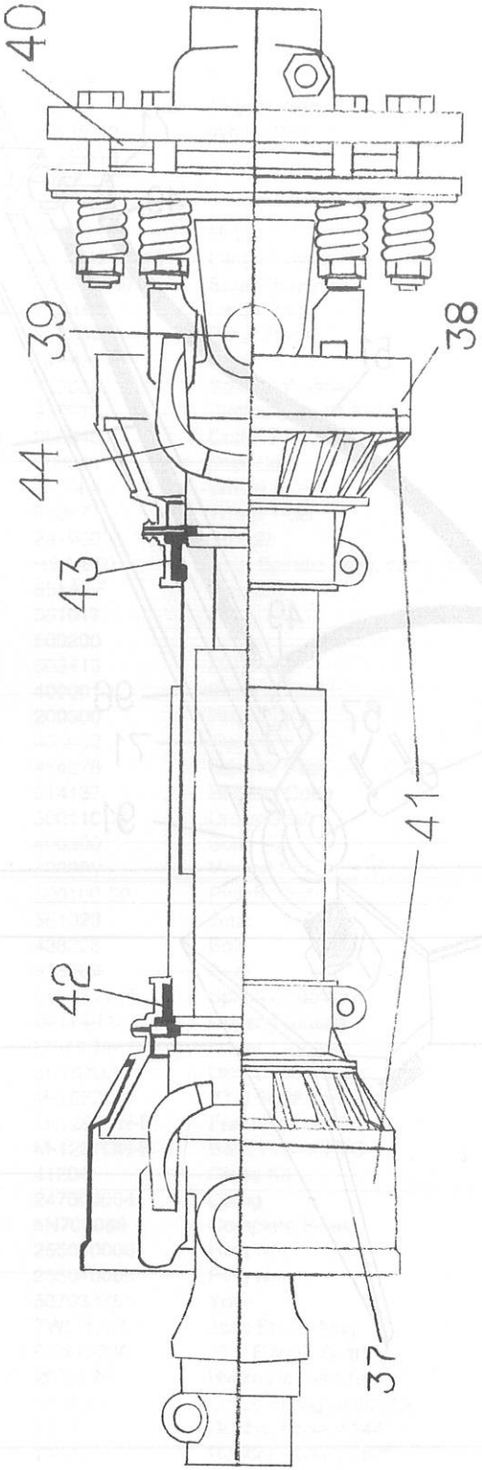
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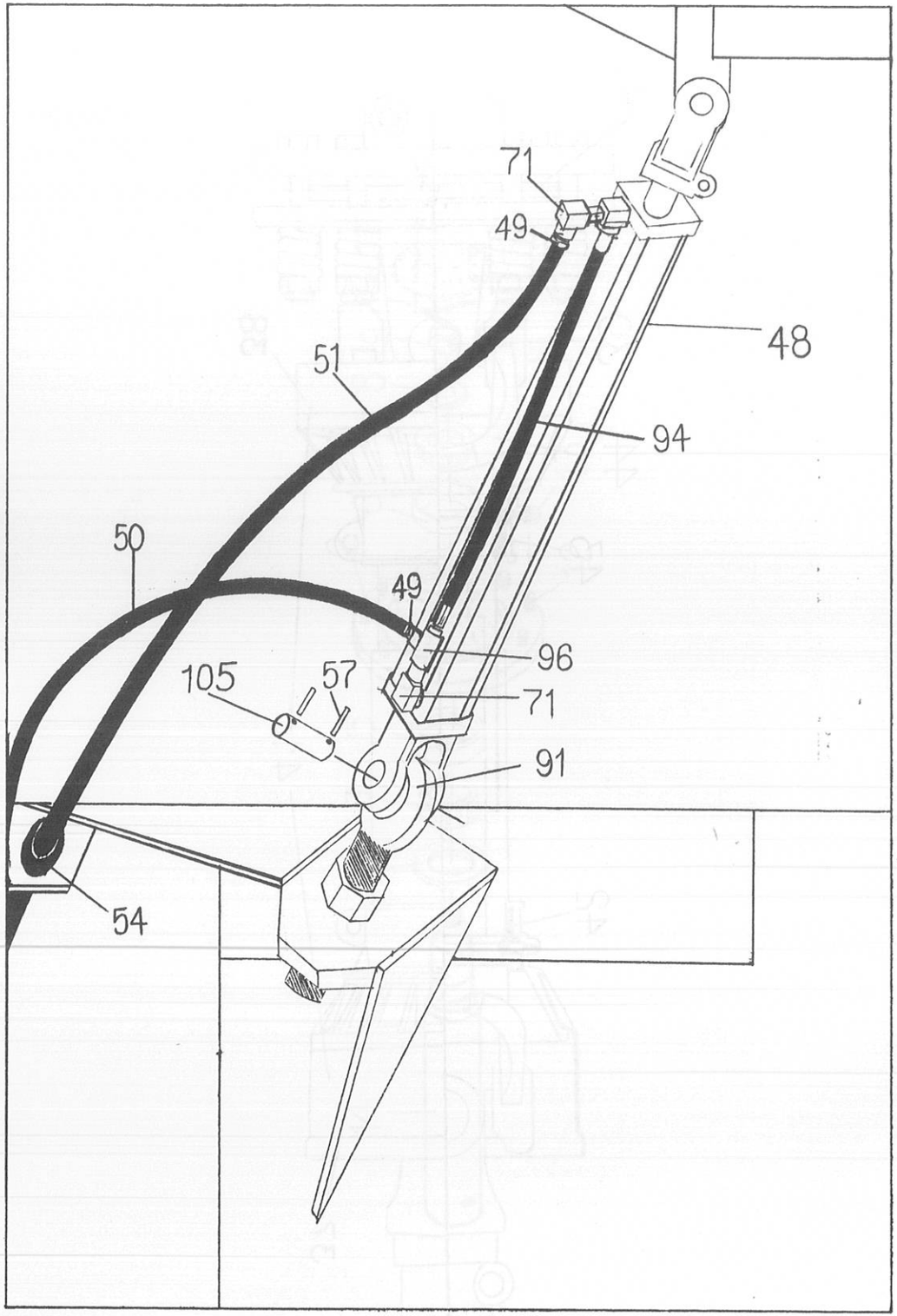

PARTS LIST

Ref. #	500-14 Part #	675-14 Part #	Description
1	20x26-10	21x32-10	Wheel Rim
	20x30-10	27x32-10	
	20x34-10		
	21x32-8.7		
2	W-871	W-881	Hub
3	4T-33275	4T-HM218248	Large Bearing
4	4T-460	HM212049	Small Bearing
5	910397	910344	Large Race
6	910332	910384	Small Race
7	CR-33772	CR-43771	Seal
8	913632	913635	Spindle Washer
9	912969	912973	Slotted Spindle Nut
10	905944	905945	Cotter Pin
11	909983	909921	Dust Cap
12	913564	913564	Wheel Studs
13	913571	913571	Wheel Nuts
14	286702	281900	Spindle
15	HSA-500	HSA-650	Hub, Spindle Assy. complete
16	551ABF	551ABF	Gearbox
17	551017	551017	Gear
18	500200	500200	Keys
19	503413	503413	Ret. Ring
20	400001-6	400001-6	Casting Mod
21	200300	200300	Plain Plg
22	400002	400002	Casting
23	414276	414276	Bearing Cup
24	514137	514137	Bearing Cone
25	500110-15	500110-15	Cross Shaft
26	400300	400300	Solid Plg
27	40030V	40030V	Vented Plg
28	500100-20	500100-20	Pinion Shaft
29	551023	551023	Gear
30	438225	438225	Bolt
31	513569	513569	Seal
32	SC-2X2716	SC-2X2716	Spline Coupler
33	UF-14-F5	UF-14-F6	Upper Flighting
34	LF-14-F5	LF-14-F6	Lower Flighting
35	35-RDUJ	35-RDUJ	DBL U-joint
36	M-1287ON	M-1287ON	PTO Shaft complete
37	M-1287ON-F	M-1287ON-F	Front Half of PTO
38	M-1287ON-B	M-1287ON-B	Back Half of PTO
39	41204	41204	Cross Kit
40	247000004	247000004	Lining
41	5N703088	5N703088	Complete Shield
42	255040006	255040006	Ring Nut
43	255040005	255040005	Ring Nut
44	507033751	507033751	Yoke
45	TWL-178T	TWL-178T	Jack Stand Assy.
46	GRAF-206	GRAF-206	1¼" Flange Bearing
48	20TR24	20TR-24	Hydraulic Cylinder
49	1404-045	1404-045	Orfice Fitting (restricter)
50	14144	14144	Rubber Hose x 144"
51	14160	14160	Rubber Hose x 160"

52	3841	3841	Rubber Hose x 41"
53	3829	3829	Rubber Hose x 29"
54	26012	26012	Rubber Grommet
57	14134EX	14134EX	Ex Pan Pin ¼" x 1¾"
58	516234EX	516234EX	Ex Pan Pin 5/16" x 2¾"
59	58234EX	58234EX	Ex Pan Pin ⅝" x 2¾"
60	516114	516114	Half Moon Key
61	SS-3812	SS-3812	⅜" x ½" Set Screw
63	EB-134	EB-134	Bronze Bushing
65	1610BL	1610BL	Grease Fitting
66	CMSUAA-4	CMSUAA-4	Compression Spring
67	PGW-71212	PGW-71212	Plexiglass Window
68	62095-7	62095-7	Window Molding
69	38BLCP	38BLCP	Coupling
70	1238SBU	1238SBU	Steel Bushing
71	38SE90	38SE90	90° Street Elbow
72	SG-500-F	SG-675	Safety Grate
73	DS-114-F	DS-114-F	Drive Shaft
74	LA-5S-F	LA-6S-F	Ladder Assy.
75	TE-4P-F	TE-3P	Tapered Top Extensions
76	UAH-14-5	UAH-14-6	Upper Auger Tube (housing)
77	AGC-500-F	AGC-675	Auger Gate Cover Assy.
78	GDS-114-F	GDS-114-F	Guard for Drive Shaft
79	GPDS-114	GPDS-114	Guard for PTO-Drive Shaft
80	SHW-112	SHW-112	Swivel Hitch Weldment
81	GI-12	GI-12-6	Gate Indicator
82	CODW-500	CODW675	Clean-out Door & Wheel Assy.
83	HBA-500-F	HBA-675	Hanger Bushing Assy.
84	DDW-134-F	DDW-134-F	Drive-Dog Weldment
85	RK20TR-112	RK20TR-112	Seal for Hyd. Cylinder
88	GF-70M	GF-70M	70° Grease Fitting (metric)
89	GF-90M	GF-90M	90° Grease Fitting (metric)
90	LKI-NI-F	LKI-NI-F	Light Kit (not installed)
91	BJW-114	BJW-114	Ball Joint Weldment w/Nut
92	3S-DUJ	3S-DUJ	Shield of DBL U-joint
93	CK-35R	CK-35R	Cross Kit
94	RH-1423	RH-1423	Rubber Hose x 23"
95	RH-14127	RH-14127	Rubber Hose x 127"
96	PC-37	PC-37	Check Valve
97	SW-114	SW-114	Spacer Washer
98	HW-114	HW-114	Hvy. Washer
99	LW-38	LW-38	⅜" Lock Washer
100	381-HB-5	381-HB-5	⅜" x 1" HHMB
101	114-PIH	114-PIH	1¼" Pin in Hinge Assy.
102	12-HW	12-HW	½" Hvy. Washer
103	12114HB-5	12114HB-5	½" x 1¼" HHMB
104	LW-12	LW-12	½" Lock Washer
105	1CR4	1CR4	1" x 4" Pin