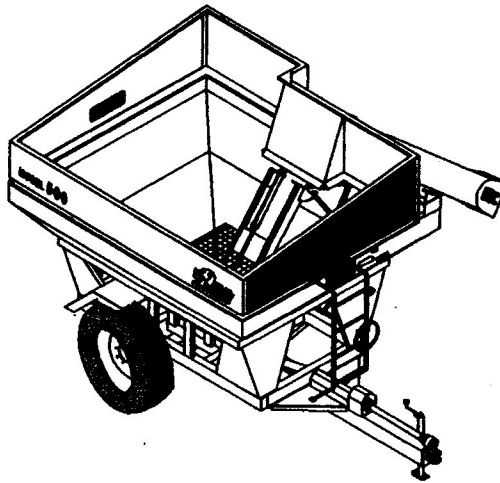


OPERATORS MANUAL AND PARTS BOOK

REVISED 1998



475 500 700 850
GRAIN CARTS

WARNING

Do not attempt to clean, adjust, lubricate, or enter the grain cart while any part is in operation.

Do not start the machine without all guards & shields in place & in good working condition.

Do not operate on public roads unless equipped with proper lighting or warning devices.

It is the responsibility of the user & owner to install lighting or other equipment as required by state & federal laws.

Do not allow children to play on or around the grain cart.

OPERATION

The indicator flag on the front of the cart shows the position of the inner door.

When engaging the PTO, the door should be closed, & the tractor should be running at low RPM's to prolong the life of the driveline & gearbox.

With the auger running, open the door to begin unloading grain. Do not exceed 750 PTO RPM for maximum efficiency & auger life.

When the cart is nearly empty, the door can be partially closed to provide better clean out.

Overtightening of the shear bolt on the front PTO yoke creates excessive friction which drastically increases shear torque and can damage or result in pre-mature failure of the gearbox. Always use a locknut on the shearbolt and leave the nut loose enough that you can turn the bolt with your fingers.

The top auger must remain locked in the unloading position while the PTO is engaged. Folding the top auger while the auger is turning can cause damage to the augers.

The top auger is equipped with an over-center lock to hold the auger in unloading position. If the auger will not fold down, the lock may be going too far over center. To correct this, a shim can be placed between the square bar & the stop pin on the linkage bars.

The top auger should have only 1 drive dog. 2 drive dogs can cause the auger to bind & vibrate.

To remove the auger screws on models prior to 1997, first remove the bottom screw, then raise the top auger & lower the top screw with a chain or cable into the bottom tube.

MAINTENANCE

Grease regularly:

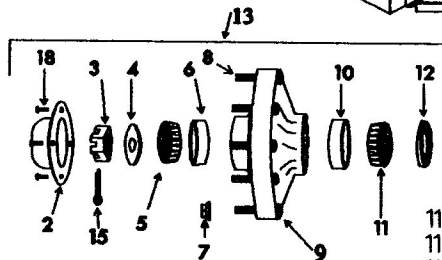
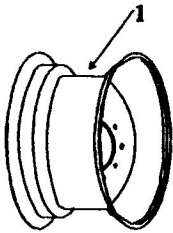
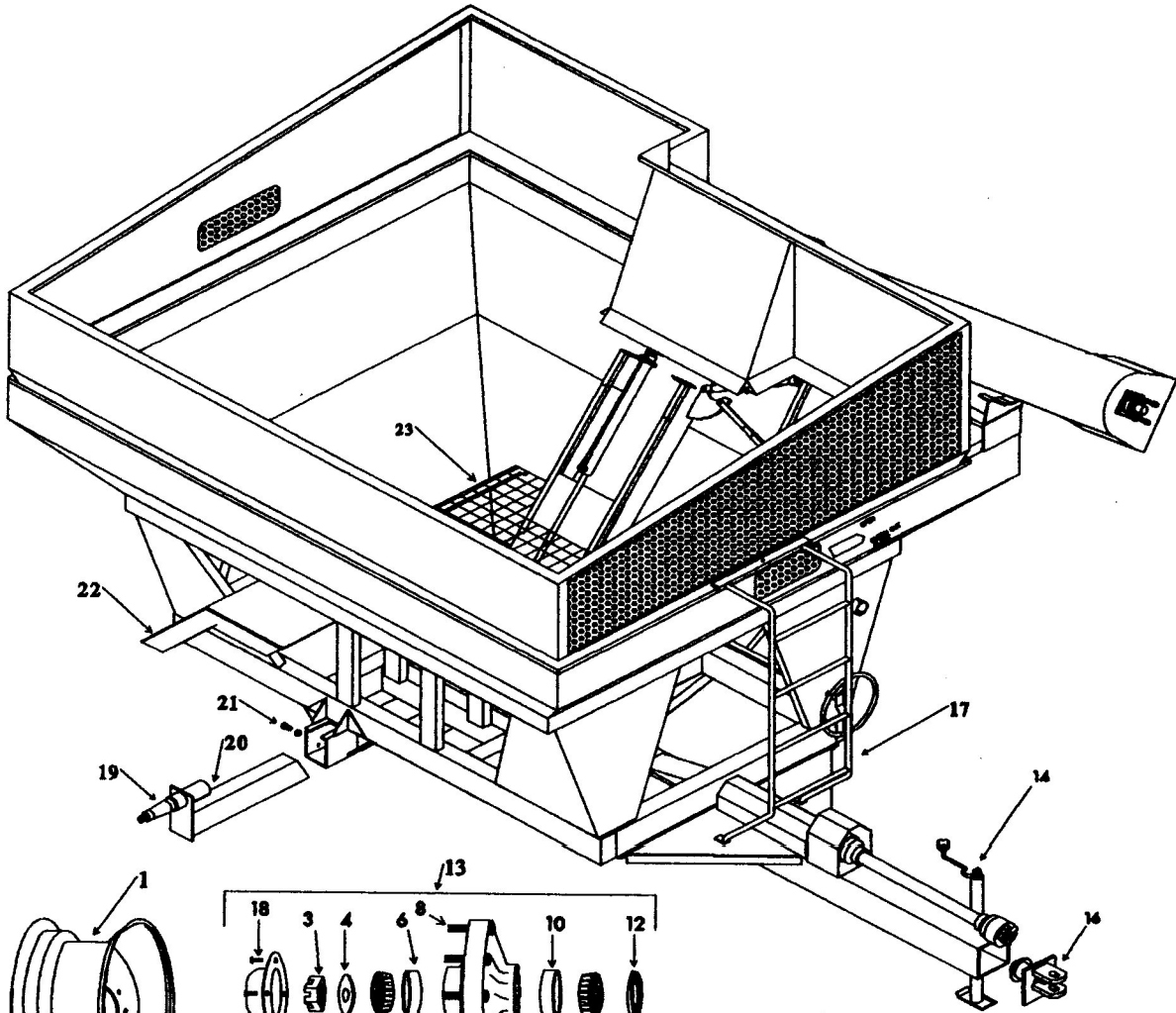
- * PTO Shaft
- * U-joint at Gearbox
- * Bearing at Top of Lower Auger
- * Bearing at Top of Top Auger
- * Auger Hinge
- * Auger Over-Center Lock
- * Swivel Hitch

Approximate Tire Inflation:

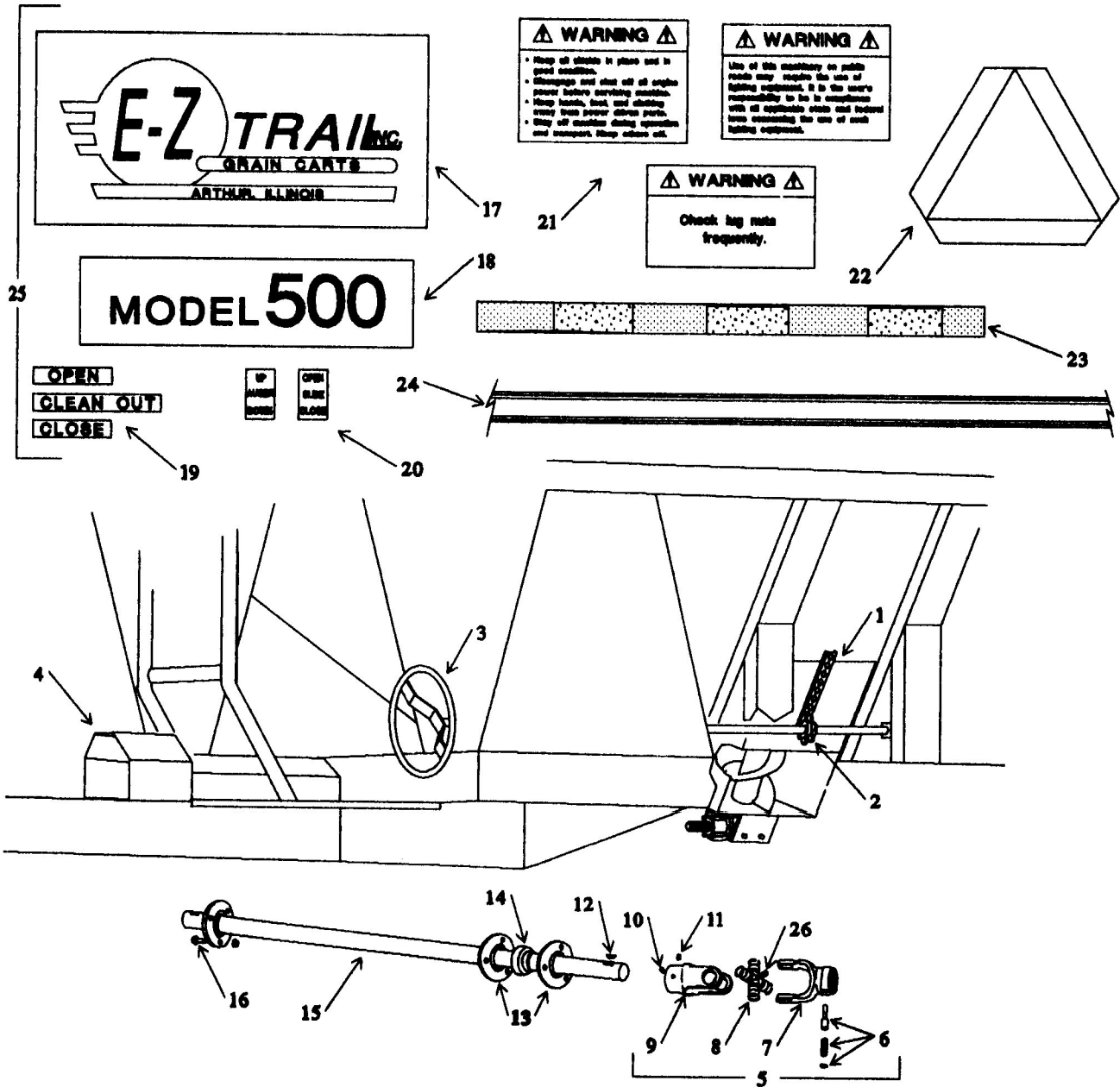
- 18.4 x 26 35 PSI
- 23.1 x 26 33 PSI
- 24.5 x 32 30 PSI
- 30.5 x 32 30 PSI

Before first use, then annually:

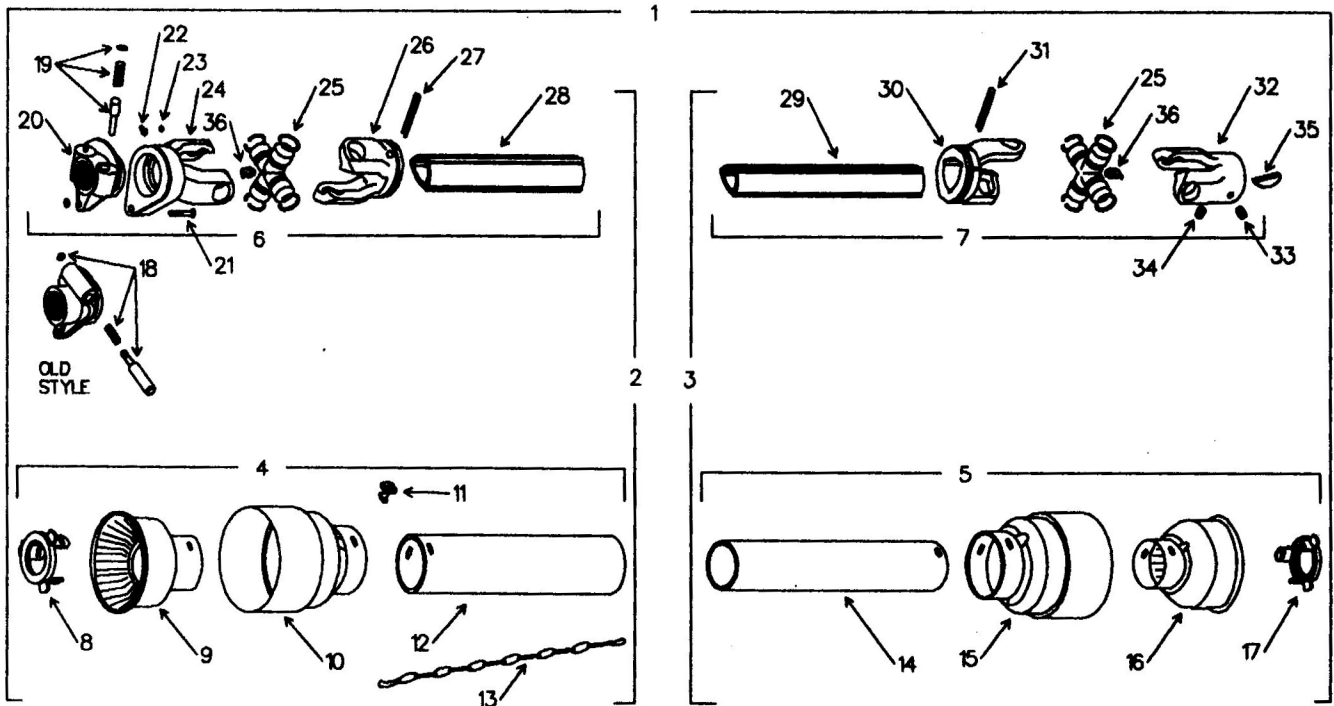
- * Check gearbox oil level, use 90W oil.
- * Check wheel bearings for sufficient grease & proper adjustment.



#	Part#	Qty.	Description
1	50416	2	Wheel 16 x 26-18.4
1	50420	2	Wheel 20 x 26-23.1
1	50418	2	Wheel 18 x 38-20.8
1	50425	2	Wheel 25 x 26-28L
1	50621	2	Wheel 21 x 32-24.5
1	50627	2	Wheel 27 x 32-30.5
1	50636	2	Wheel 36 x 25-Terra
2	50455	2	Hub Cap 475,500
2	50653	2	Hub Cap 700,850
3	50452	2	Slotted Nut 475,500
3	50652	2	Slotted Nut 700,850
4	50451	2	Washer 475,500
4	50651	2	Washer 700,850
5	50460	2	Outer Bearing 475,500
5	50659	2	Outer Bearing 700,850
6	50453	2	Outer Race 475,500
6	50611	2	Outer Race 700,850
7	50655	20	Wheel Nut
8	50542	20	Wheel Stud
9	50449	2	Hub 475
9	50549	2	Hub 500
9	50649	2	Hub 700,850
10	50470	2	Inner Race 475
10	50540	2	Inner Race 500
10	50610	2	Inner Race 700,850
		11	50485 2 Inner Bearing 475
		11	50545 2 Inner Bearing 500
		11	50648 2 Inner Bearing 700,850
		12	50487 2 Grease Seal 475
		12	50541 2 Grease Seal 500
		12	50671 2 Grease Seal 700,850
		13	50448 2 Hub Assembly 475
		13	50548 2 Hub Assembly 500
		13	50658 2 Hub Assembly 700,850
		14	50576 1 Jack Assembly
		15	50458 2 Cotter Pin, 475,500
		15	50656 2 Cotter Pin, 700,850
		16	50609 1 Swivel Hitch Assembly
		17	50441 1 Ladder 475,500
		17	50638 1 Ladder 700,850
		18	50459 8 5/16 x 1/2 Bolt
		19	50450 2 Spindle 475
		19	50550 2 Spindle 500
		19	50650 2 Spindle 700,850
		20	50456 1 RH Axle Assembly 475
		20	50457 1 LH Axle Assembly 475
		20	50556 1 RH Axle Assembly 500
		20	50557 1 LH Axle Assembly 500
			50558 1 RH Drop Axle, 500 w/38" Wheel
			50559 1 LH Drop Axle, 500 w/38" Wheel
		21	50386 6 3/4 x 2 Bolt W/ Jam Nut
		22	50442 1 RH Fender 475,500
		22	50443 1 LH Fender 475,500
		23	50577 1 Safety Grate Assembly



#	Part#	Qty.	Description	#	Part#	Qty.	Description
1	50240	1	Outer Door	15	50472	1	72-1/2" Drive Shaft 475.500
2	4241	1	6 Tooth Pinion Gear	15	50686	1	86" Drive Shaft 700.850
3	50242	1	Handwheel & Shaft	16		6	3/8 x 3/4 Bolt W/Nut
4	50243	1	"Doghouse" PTO Guard	17	50246	2	E-Z Trail Decal
5	50622	1	U-Joint Assy.	18	50247	2	Model 500 Decal
6	50278	1	Push Pin Set N.S.	18	50248	2	Model 700 Decal
7	50298	1	Gearbox Yoke W/Pin	18	50249	2	Model 850 Decal
8	50284	1	Cross Kit	19	50250	1	Indicator Decal Set
9	50291	1	Machine Yoke	20	50251	1	Hose Decal Set
10	50292	1	Set Screw 3/8 x 3/8	21	50252	1	Warning Decal Set
11	50293	1	Set Screw 3/8 x 1/2	22	50253	1	SMV Decal
12	50294	1	Half Moon Key 5/16 x 1-1/4	23	50254	7 1/2 ft.	Reflector Tape
13	50476	4	3 Hole Flange	24	50255	53 ft.	Stripe
14	50477	2	1-1/4 Bearing W/Collar	25	50256	1	Grain Cart Decal Set
				26	50295	1	Grease Zerk



#	Part#	Qty.	Description
1	50615	1	1000 RPM, 1-3/8 PTO Assy.
2	50616	1	Front 1/2 PTO
3	50617	1	Rear 1/2 PTO
4	50618	1	Front Shield Assy.
5	50619	1	Rear Shield Assy.
6	50265	1	Front Shaft Assy.
7	50266	1	Rear Shaft Assy.
8	50267	1	Front Shield Retaining Collar
9	50268	1	Front Shield Inner Bell
10	50269	1	Front Shield Outer Bell
11	50270	6	Shield Retaining Clips
12	50271	1	Front Shield Tube
13	50272	2	Safety Chains
14	50273	1	Rear Shield Tube
15	50274	1	Rear Shield Outer Bell
16	50275	1	Rear Shield Inner Bell
17	50276	1	Rear Shield Retaining Collar

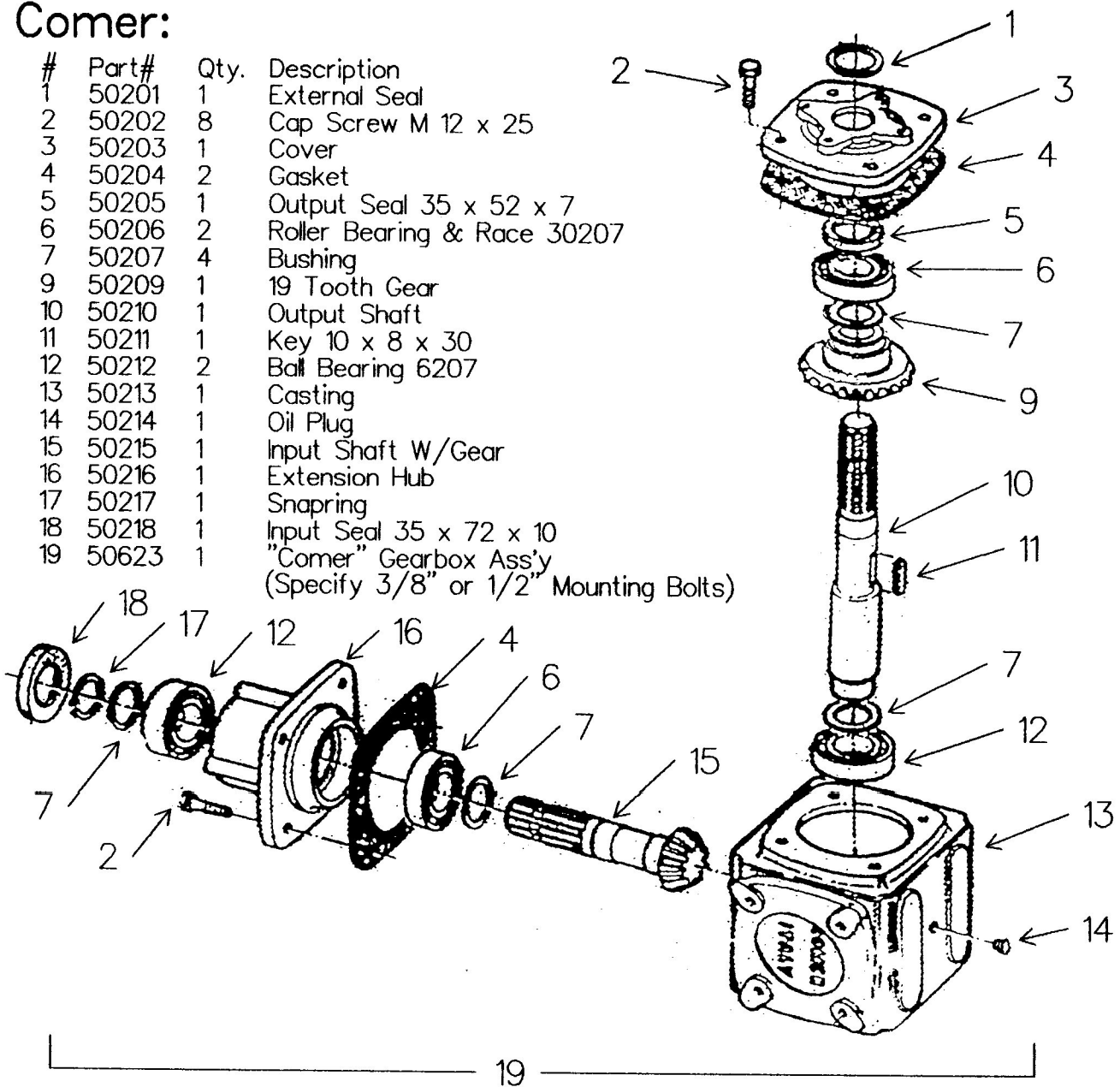
#	Part#	Qty.	Description
18	50277	1	Push Pin Set O.S.
19	50278	2	Push Pin Set N.S.
20	50279	1	Front Spine, W/Pins
21	50280	1	Shear Bolt w/locknut
22	50281	1	Grease Zerk
23	50282	1	Set of Balls (24)
24	50283	1	Tractor Yoke
25	50284	2	Cross Kit
26	50285	1	Front Yoke
27	50286	1	Roll Pin
28	50287	1	Front Shaft
29	50288	1	Rear Shaft
30	50289	1	Rear Yoke
31	50290	1	Roll Pin
32	50291	1	Machine Yoke
33	50292	1	Set Screw 3/8 x 3/8
34	50293	1	Set Screw 3/8 x 1/2
35	50294	1	Half Moon Key 5/16 x 1-1/4
36	50295	2	Grease Zerk, 45°, 8mm

Optional 1000 RPM, 1-3/4 PTO:

1	50315	1	1000 RPM, 1-3/8 PTO Assy.
2	50316	1	Front 1/2 PTO
3	50317	1	Rear 1/2 PTO
4	50318	1	Front Shield Assy.
5	50319	1	Rear Shield Assy.
6	50365	1	Front Shaft Assy.
7	50366	1	Rear Shaft Assy.
25	50384	2	Cross Kit

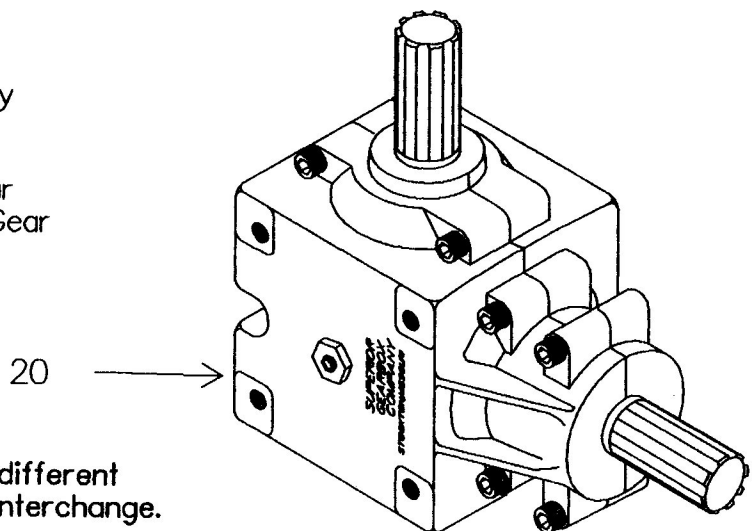
Comer:

#	Part#	Qty.	Description
1	50201	1	External Seal
2	50202	8	Cap Screw M 12 x 25
3	50203	1	Cover
4	50204	2	Gasket
5	50205	1	Output Seal 35 x 52 x 7
6	50206	2	Roller Bearing & Race 30207
7	50207	4	Bushing
9	50209	1	19 Tooth Gear
10	50210	1	Output Shaft
11	50211	1	Key 10 x 8 x 30
12	50212	2	Ball Bearing 6207
13	50213	1	Casting
14	50214	1	Oil Plug
15	50215	1	Input Shaft W/Gear
16	50216	1	Extension Hub
17	50217	1	Snapring
18	50218	1	Input Seal 35 x 72 x 10
19	50623	1	"Comer" Gearbox Ass'y (Specify 3/8" or 1/2" Mounting Bolts)

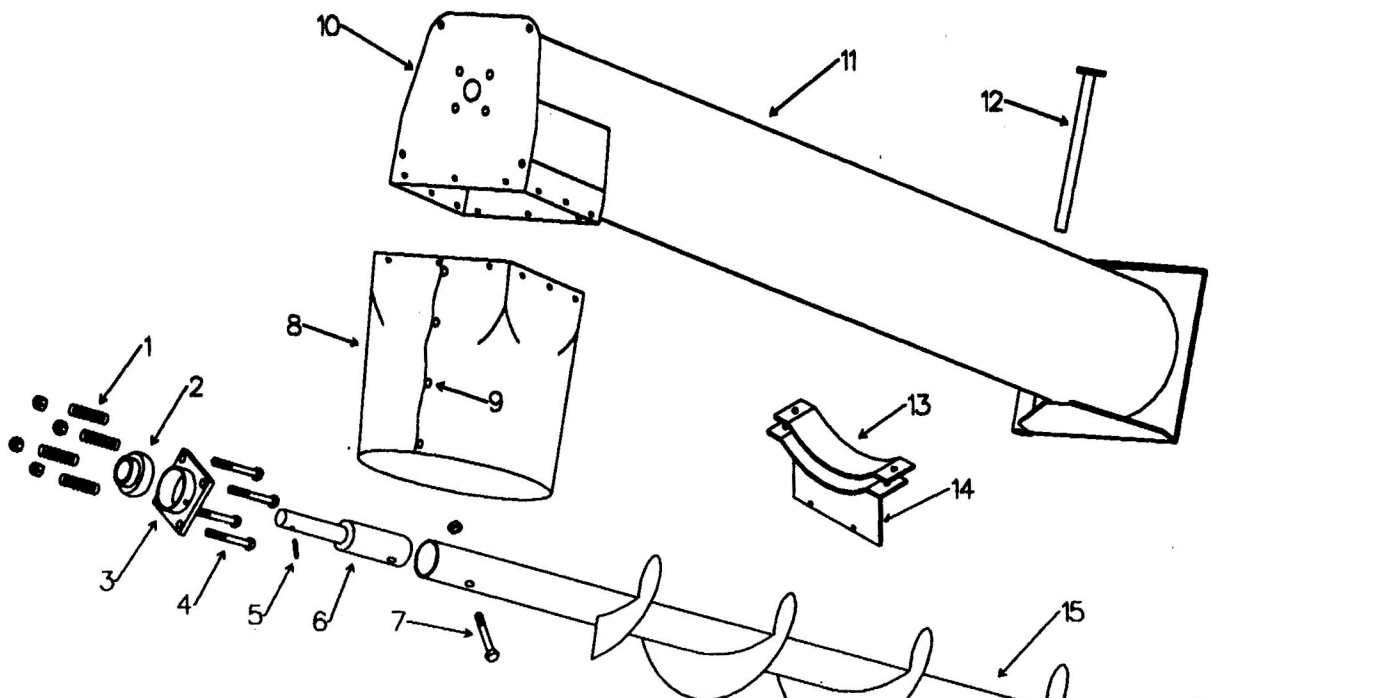


Superior:

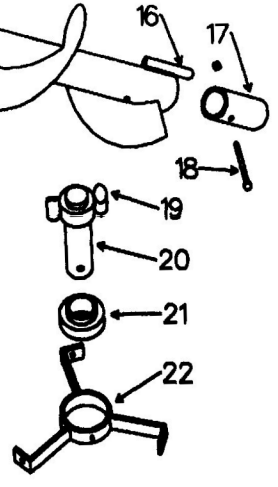
20	50223	1	Superior Gearbox Ass'y
	50224	1	Superior Input Shaft
	50225	1	Superior Output Shaft
	50226	1	Superior 17T Input Gear
	50227	1	Superior 23T Output Gear
	50228	4	Superior Roller Bearing
	50229	4	Superior Race
	50230	2	Superior Seal
	50231	1	Superior Key



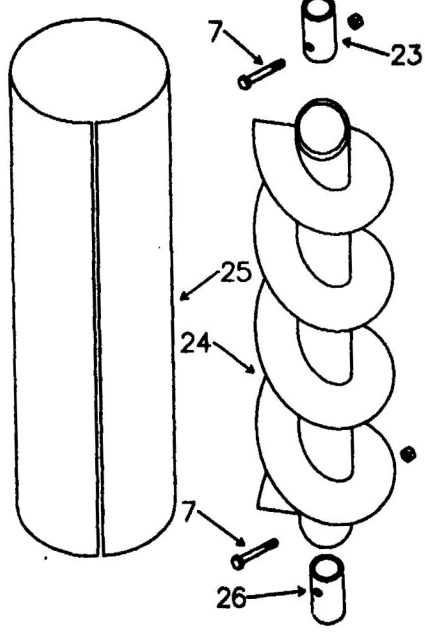
Note: Mounting brackets for Comer are different than Superior, gearboxes will not interchange.

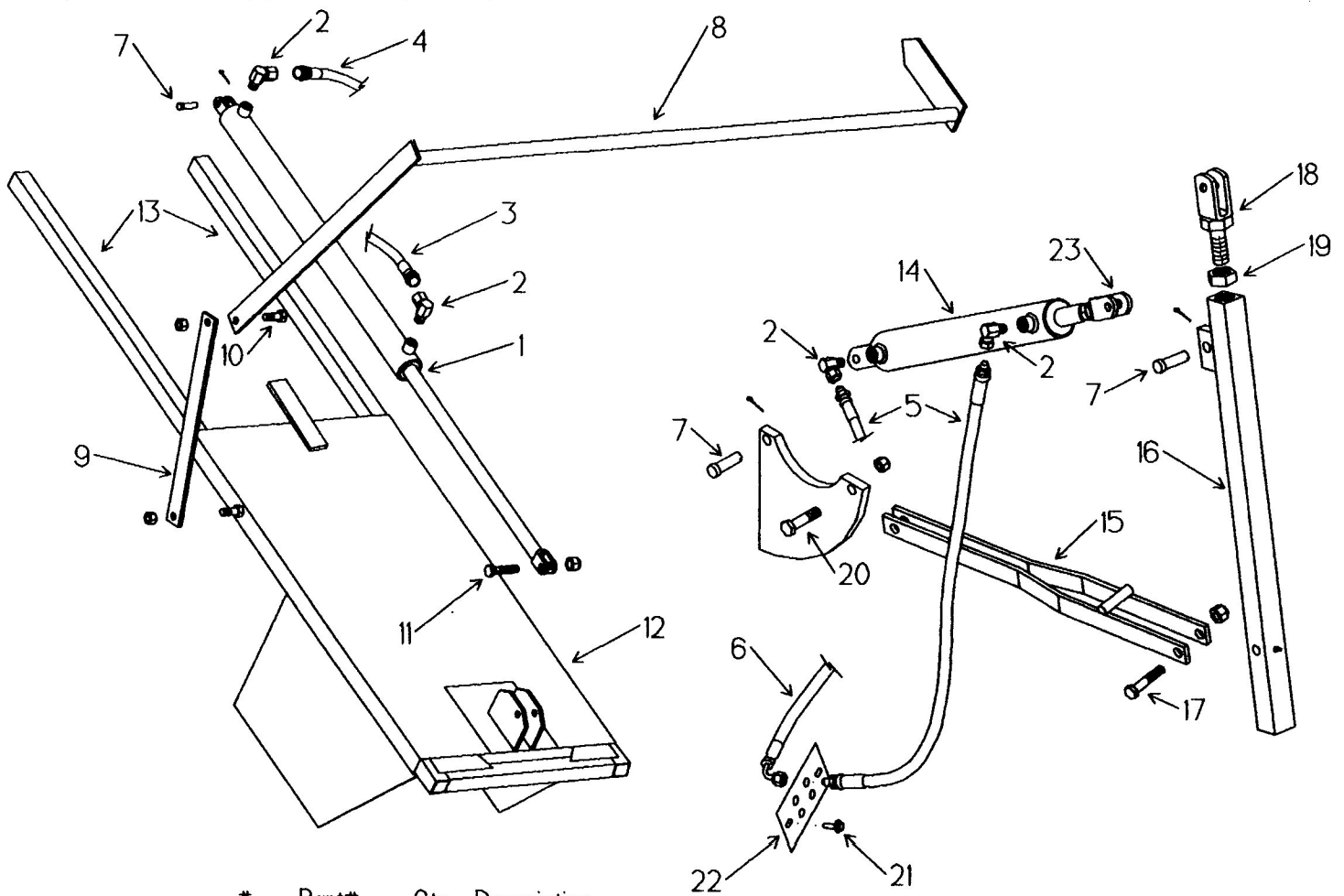


#	Part#	Qty.	Description
1	50635	4	Spring
2	50634	1	1-1/2" Bearing
3	50633	1	Cast Bearing Holder
4		4	5/8 x 4-1/2 Bolt w/Locknut
5	4245	1	1/4 x 1-3/4 Roll Pin
6	50641	1	Top Stub Shaft
7		3	5/8 x 3-1/2 Bolt w/Locknut
8	50646	1	Rubber Spout
9	50389	16	1/4 x 1 Step Bolt w/Flange nut
10	50479	1	Top Auger Tube End Plate
11	50461	1	Top Auger Tube Assy. (Specify Front or Rear Fold)
12	50462	1	Hinge Pin
13	50463	1	Rubber Rest Pad
14	50464	1	Auger Support Bracket
15	50625H	1	Top Auger Screw w/Drive Dog & Hard Surfaced Flighting



16	50465	1	Top Drive Dog
17	50466	1	Sleeve
18		1	3/8 x 3-1/4 Bolt w/Locknut
19	50467	2	Bottom Drive Dog
20	50630	1	Pointed Male Shaft w/Drive Dogs
21	50629	1	2" Bearing
22	50628	1	3-Way Bearing Hanger
23	50469	1	Sleeve
24	50426H	1	84" Lower Auger w/Hard Surfaced Flighting, 500, 475 '87 & Later
24	50427H		88-1/2" Lower Auger w/Hard Surfaced Flighting, 475 Old Style
24	50647H	1	98" Lower Auger w/Hard Surfaced Flighting, 700,850
24	50645H		105-1/2" Lower Auger w/Hard Surfaced Flighting, 675 Old Style
25	50481		Lower Auger Tube Insert, 475,500 (Use 1/2" undersize screw)
25	50642		Lower Auger Tube Insert, 700,850 (Use 1/2" undersize screw)
26	50624	1	Splined Sleeve





#	Part#	Qty.	Description
1	50632	1	2" x 32" Cylinder
	50613	2	2" Cylinder Seal Kit (Specify 1" or 1-1/8" Rod dia.)
2	50410	4	90° Fitting
3	50403	1	67" Hyd. Line
4	50402	1	40" Hyd. Line
5	50401	2	32" Hyd. Line
6	50406	4	84" Hyd. Line 90° Ends 475,500 Front Fold Auger
6	50603	4	112" Hyd. Line 90° Ends 700,850 Front Fold Auger
6	50405	4	116" Hyd. Line 90° Ends 475 Rear Fold Auger
6	50605	4	146" Hyd Line 90° Ends 675 Rear Fold Auger
	50604	4	112" Hyd. Line to Tractor
7	50412	4	Clevis Pin W/Cotter Pin
8	50431	1	Indicator
9	50433	1	Indicator Linkage Arm
10		1	1/2 x 1 Bolt W/Lock Nut
11		1	1/2 x 2-1/2 Bolt W/Lock Nut
12	50614	1	Inside Door Assy.
13	50430	2	Door Slide Rail
14	50612	1	2" x 12" Cylinder (Includes #23)
15	50606	1	Auger Lock Linkage Bars
16	50608	1	Auger Lock Square Bar
17		1	1/2 x 3 Bolt W/Lock Nut
18	50607	1	7/8" Clevis Bolt
19	50601	1	7/8" Jam Nut
20		1	1/2 x 2-1/4 Bolt W/Lock Nut
21		4	3/8 x 3/4 Flange Bolt
22	50411	2	Hose Plate
23	50673	1	5/8" Clevis Bolt