## M0142

# OPERATOR & PARTS MANUAL

## 40 SERIES GRAIN AUGER WAGONS

This manual is applicable to: 640, 840 and 1040 Grain Auger Wagons

Model: AW

Serial Number: 2433 and on

Record the model number and serial number of your grain auger wagon with date purchased:

Model Number	
Serial Number	
Date Purchase	d

#### SERIAL NUMBER

The serial number provides important information about your auger wagon and may be required to obtain the correct replacement part.

The serial number plate is located on the front right hand corner of the wagon frame. It is suggested that the serial number be recorded in the space provided above. Always provide the serial number and model number when ordering parts from your KINZE Dealer or anytime correspondence is made with KINZE Manufacturing, Inc.



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## PREDELIVERY/DELIVERY CHECK LIST

#### TO THE DEALER

Predelivery service includes assembly, lubrication, adjustment and test. This service assures that the wagon will be delivered to the customer ready for field use.

#### PREDELIVERY CHECK LIST

h .	
After the wagon has been completely assettem as it is found satisfactory or after pro	embled, use the following check list and inspect the wagon. Check off each oper adjustment is made.
☐ Wheel nuts are torqued to 425 ft. lbs.	Axles adjusted from shipping position to desired operating position.
Tires are inflated to specified PSI of air	r pressure.
☐ Chains are aligned and properly tensio	oned.
All grease fittings have been lubricated	d, gearbox oil level checked and chain oiler filled.
☐ Check to be sure all safety decals are	correctly located and legible. Replace if damaged.
☐ Check to be sure the red reflectors and	amber reflectors are correctly located.
☐ Check to be sure SMV decal is in place	e and shipping cover removed.
☐ Check to be sure safety/warning lights	are working.
☐ Test run the augers.	
☐ Check auger timing (840/1040 Models)	). See "Auger Timing" in Maintenance Section.
☐ Check to be sure safety screens over h	norizontal augers are in place.
☐ Paint all parts scratched in shipment.	
This wagon has been thoroughly che customer.	cked and to the best of my knowledge is ready for delivery to the
(Signature of Set-up Person/Date)	
OWNER REGISTER	
Name	
Street Address	Model
City & State	Sorial Number

#### **DELIVERY CHECK LIST**

be conveyed directly to the customer. Check off each item as it is fully explained to the customer.
☐ Advise the customer that the durability and longevity of this or any other machine is dependent on regular maintenance as directed in the operator's manual.
☐ Tell the customer about all safety precautions that must be observed while using this wagon.
☐ Advise the customer of the specified tractor requirement for use with this wagon.
☐ Check axle spacing with customer to be sure axle is adjusted to desired operating width.
☐ Along with the customer check to be sure the red and amber reflectors and SMV decal are clearly visible with the auger wagon attached to the tractor. Check to be sure the safety/warning lights are in working condition. Tell the customer to check and follow federal, state/provincial and local regulations before towing on a road or highway.
☐ Along with the customer check to be sure the hitch height when attached to the tractor is sufficient to prevent severe bends in PTO U-joint angles. Check to be sure PTO is correct length for making turns and operating on uneven terrain.
☐ Complete Warranty And Delivery Report Form.
☐ Give the operator's manual to the customer and explain all operating adjustments.
To the best of my knowledge this machine has been delivered ready for field use and customer has been fully informed as to proper care and operation.
(Signature of Delivery Person/Date)
AFTER DELIVERY CHECK LIST
The following is a list of items we suggest to check during the first season of use of the equipment.
☐ Check with the customer as to the performance of the wagon.
☐ Review with the customer the importance of proper maintenance and safety precautions.
☐ Check for parts that may need to be adjusted or replaced.
☐ Retorque all wheel nuts to 425 ft. lbs.
☐ Check to be sure all safety shields and screens are in place.
☐ Check to be sure all safety decals, reflectors and the SMV sign are correctly located and legible. Replace if damaged or missing.
☐ Check to be sure safety/warning lights are working.
☐ Check to be sure recommended lubrication procedures are being followed.
(Signature of Follow-up Person/Date)
RETURN THIS COMPLETED FORM TO KINZE® IMMEDIATELY, along with Warranty And Delivery Report.

Tear Along Perforation

Retain photocopy of this form at dealership for After Delivery Check.

## TO THE OWNER

KINZE Manufacturing, Inc. would like to thank you for your patronage. We appreciate your confidence in KINZE® farm machinery. Your KINZE® auger wagon has been carefully designed and sturdily built to provide dependable operation in return for your investment.

This manual has been prepared to aid you in the operation and maintenance of the auger wagon and should be considered a permanent part of the machine and should remain with the machine when you sell it.

It is the responsibility of the user to read and understand the Operator's Manual in regards to safety, operation, lubrication and maintenance prior to operation of this equipment. It is the user's responsibility to inspect and service the machine routinely as directed in the Operator's Manual. We have attempted to cover all areas of safety, operation, lubrication and maintenance; however, there may be times when special care must be taken to fit your conditions.

Throughout this manual the symbol and the words, NOTE, CAUTION, WARNING and DANGER are used to call your attention to important safety information. The definition of each of these terms used follows:

NOTE: Indicates a special point of information.

CAUTION: Indicates that a failure to observe can cause damage to the machine or equipment.

WARNING: Indicates that a failure to observe can cause damage to the machine or equipment and/or personal injury.

DANGER: Indicates that a failure to observe can cause most serious damage to the machine or equipment and/or most serious personal injury.

WARNING: Some photos in this manual may show safety covers or shields removed for visual clarity. NEVER OPERATE the machine without all safety covers and shields in place.

NOTE: Some photos in this manual may have been taken of prototype machines. Production machines may vary in appearance.

NOTE: Some photos and illustrations in this manual show optional attachments installed. Contact your KINZE Dealer for purchase of optional attachments.

DANGER: Because of load capacities on bridges and roads and because the wagon is not equipped with brakes, the wagon is not intended for hauling loads on public roadways. It is the operator's responsibility to be aware of and follow federal, state and local regulations in this regard.

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#### WARRANTY

The KINZE Limited Warranty for your new machine is stated on the back of the retail purchaser's copy of the Warranty And Delivery Report form.

Warranty, within the warranty period, is provided as part of KINZE's support program for registered KINZE products which have been operated and maintained as described in this manual. Evidence of equipment abuse or modification beyond original factory specifications will void the warranty. Normal maintenance, service and repair is not covered by KINZE warranty.

To register your KINZE product for warranty, a Warranty And Delivery Report form must be completed by the KINZE Dealer and signed by the retail purchaser, with copies to the Dealer, to the retail purchaser and to KINZE. Registration must be completed and sent to KINZE within 30 days of delivery of the KINZE product to the retail purchaser. KINZE reserves the right to refuse warranty on serial numbered products which have not been properly registered.

Additional copies of the Limited Warranty can be obtained through your KINZE Dealer.

If service or replacement of failed parts which are covered by the Limited Warranty are required, it is the user's responsibility to deliver the machine along with the retail purchaser's copy of the Warranty And Delivery Report to the KINZE Dealer for service. KINZE warranty does not include cost of travel time, mileage, hauling or labor. Any prior arrangement made between the Dealer and the retail purchaser in which the Dealer agrees to absorb all or part of this expense should be considered a courtesy to the retail purchaser.

KINZE warranty does not include cost of travel time, mileage, hauling or labor.

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## INTRODUCTION

This manual has been written to cover the 640, 840 and 1040 Model KINZE Auger Wagons.

The information and photos used in this manual were current at the time of printing. However, due to KINZE's continual attempt to improve its product, possible on-line production changes may cause your machine to appear slightly different in detail. KINZE Manufacturing, Inc. reserves the right to change specifications or design without notice and without incurring obligation to install the same on machines previously manufactured.

Right hand and left hand as used throughout this manual is determined by facing in the direction the machine will travel when in use.



640 Wheel Wagon





840 Wheel Wagon



840 Row Crop Wagon



640 Sof-Trak Wagon



840 Sof-Trak Wagon



1040 Row Crop Wagon

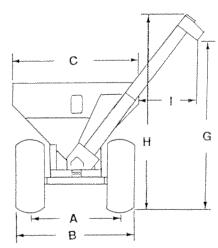
2-1 4/90

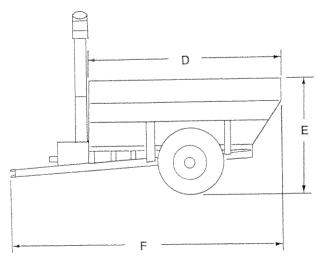
# INTRODUCTION

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## **SPECIFICATIONS**

RH490





MODEL	640 Wheel	840 Wheel
(A) Tire Center To Center(Adjustable)	108" or 120"	108" or 120"
(B) Transport Width, 108" Axle	11'0" (24.5" x 32" Tires)	11'6'
Transport Width, 120" Axle	12' 0" (24.5" x 32" Tires)	12"6"
(C) Width - Grain Tank	10' 0"	10' 0"
(D) Length - Grain Tank	16' 0"	20.0.
(E) Height - Grain Tank	9' 2"	9' 6"
(F) Total Length	23' 2"	27' 0"
(G) Height - Auger Discharge	12' 3"	11' 10"
(H) Height - Top Of Auger	15' 0"	15.5"
(I) Side Of Wagon To Tip Of Spout	4' 7"	5' 0"
Wagon Weight - Empty	8122 Lbs.	11,634 Lbs.
Hitch Weight - Empty	1760 Lbs.	2200 Lbs.
Hitch Weight - Loaded	3920 Lbs.	5950 Lbs.
Total Capacity*	625 Bu.	825 Bu.
Bushels/Minute - Max.*	210 Bu./Min.	290 Bu./Min.
Vertical Auger	14" Full Pitch R.H.	16" Full Pitch R.H.
Horizontal Auger Front	12" Full Pitch L.H.	12" Full Pitch L.H.
ili ili a ili all'ili all'il Rear (1) di di distribiti	12"-2/3 Pitch L.H.	12"-2/3 Pitch L.H.
Flighting 12"-14"	3/8" Helicoid	3/8" Helicoid
16"		7/16" Helicoid
Gearbox	A-11 Heavy Duty	A-76 Heavy Duty
Chain	No. 80 Roller	Double No. 80 Roller
Sprockets		apered Lock Bushings
Bearings	1 1/2" - 2"	2" - 2 7/16"
PTO - 1000 RPM (U-Joint W/Shaft Shear)	80 HP Rated	160 HP Rated
PTO Yoke	1 3/8"-21 Spline or 1 3	/4"-20" Spline
Hydraulic Flow Control	Standard	Standard
Tires (NOTE: 30.5" x 32" tire on 640 wagon	**24.5" x 32" 12 Ply (2)	**30.5" x 32" 12 Ply (2)
requires 120" axle setting.)	**30.5" x 32" 12 Ply (2)	ultr
Spindle/Hub	4 1/2" - 10 Bolt (2)	
Hitch Clevis	Bolt-on Single Or Doubl	e Clevis - All Models
Windows	Standard Front And F	Rear - All Models
Chain/Oiler/Lube Bank	Standard	Standard
Parking Jack	7,000 Lb. Drop Leg	
Lights	Rear Mtd. Safety/Warning	W/SAE Std. Connector
Scale Option	Factory Or Field	Installation
Tractor Requirement (Minimum)	125 - 175 HP	175 HP 2WD/4WD

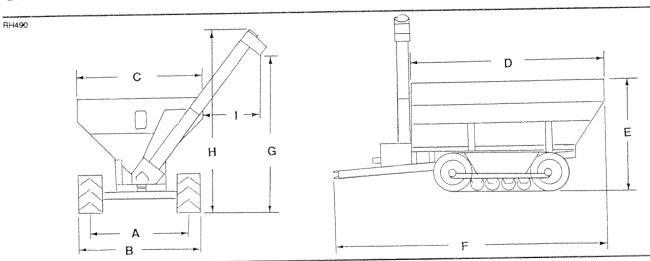
<sup>\*</sup> Approximate with 15% moisture corn. Bushels and bushels/minute will vary with moisture content of grain and/or RPM.

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<sup>\*\*</sup> R-1 traction-tread or R-3 diamond-tread.

# **SPECIFICATIONS**



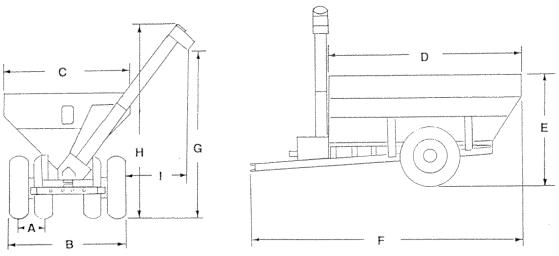
MODEL		640 Sof-Trak	840 Sof-Trak
(A) Track Center To Center(Adjusta	ble)	108" or 120"	108" or 120"
(B) Transport Width, 108" Axle		11' 9"	11' 9"
Transport Width, 120" Axle		12' 9"	12' 9"
(C) Width - Grain Tank		10' 0"	<b>10' 0"</b> Wasan wan wasan san san sa wasan wan wijiran di Bara in san d
(D) Length - Grain Tank		16' 0"	20' 0"
(E) Height - Grain Tank		9' 2"	<b>9' 6"</b>
(F) Total Length		23' 2"	27" 0"
(G) Height - Auger Discharge		12' 3"	11' 10"
(H) Height - Top Of Auger		15' 0"	<b>15'.5"</b>
(I) Side Of Wagon To Tip Of Spout		4' 7"	5' 0"
Wagon Weight - Empty		15,103 Lbs.	18,245 Lbs.
Hitch Weight - Empty		1760 Lbs.	2200 Lbs.
Hitch Weight - Loaded		3920 Lbs.	5950 Lbs.
Total Capacity*		625 Bu.	825 Bu.
Bushels/Minute - Max.*		210 Bu./Min.	290 Bu./Min.
Vertical Auger		14" Full Pitch R.H.	16" Full Pitch R.H.
Horizontal Auger	Front	12" Full Pitch L.H.	12" Full Pitch L.H.
[Florizontal Auger	Rear	12"-2/3 Pitch L.H.	12"-2/3 Pitch L.H.
Cliabtina	12"-14"	3/8" Helicoid	3/8" Helicoid
Flighting	16"	ш	7/16" Helicoid
Gearbox		A-11 Heavy Duty	A-76 Heavy Duty
		No. 80 Roller	Double No. 80 Roller
Chain		Industrial Grade Wit	h Tapered Lock Bushings
Sprockets		1 1/2" - 2"	2" - 2 7/16"
Bearings PTO - 1000 RPM (U-Joint W/Shaft	Chaort	80 HP Rated	160 HP Rated
	Offically and the second	1 3/8"-21 Spline or 1	1 3/4"-20" Spline
PTO Yoke		Standard	Standard
Hydraulic Flow Control	Width	24"	24"
Track	Length - Overall	153"	153"
reprintation of the control of the c	Length - Contact	108"	108"
us described	End Wheels	**8.25" x 20" (8)	**8.25" x 20" (8)
The second secon	Mid Wheels	16" Steel (8)	16" Steel (8)
	IAIM AAIIGGIS	Rollion Single Or D	ouble Clevis - All Models
Hitch Clevis		Standard Front And	Rear - All Models
Windows		Standard	しょうてい 編しる がんねん たいみんつおき デージル・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・
Chain/Oiler/Lube Bank		7,000 Lb. Drop Leg	Terminal association of the second of the se
Parking Jack		Dans Mad Cofoty/A	arning W/SAE Std. Connector
Lights		Not Available	Not Available
Scale Option	A STATE OF THE STA	Not Available 125 - 175 HP	175 HP 2WD/4WD
Tractor Requirement (Minimum)  * Approximate with 15% moisture con		125 - 175 mm	

Approximate with 15% moisture corn. Bushels and bushels/minute will vary with moisture content of grain and/or RPM.

<sup>\*\*</sup> Smooth or treaded truck tire.

## **SPECIFICATIONS**

RH490



MODEL		840 Row Crop	1040 Row Crop	
(A) Tire Center To Center(Adjusta	ble)**	30" or 34 1/2"	30" or 34 1/2"	
(B) Transport Width, 30" Row		11' 9"	1119"	
Transport Width, Wide Row		13' 11"	13' 11"	
(C) Width - Grain Tank		10' 0"	11' 0"	
(D) Length - Grain Tank		20' 0"	20' 0"	
(E) Height - Grain Tank		9' 8"	10' 8"	
(F) Total Length		27' 0"	27' 0"	
(G) Height - Auger Discharge		11' 10"	11' 10"	
(H) Height - Top Of Auger		15' 5"	15' 5"	
(I) Side Of Tire To Tip Of Spout	30" Row	4' 6"	4' 6"	
	Wide Row	3' 3"	3' 3"	
Wagon Weight - Empty		15,640 Lbs.	15,780 Lbs.	
Hitch Weight - Empty	and a second of the second of	2200 Lbs.	2640 Lbs.	
Hitch Weight - Loaded		5950 Lbs.	7240 Lbs.	
Total Capacity*	والمرافقة المرازات المرازات المرازات	810 Bu.	970 Bu.	
Bushels/Minute - Max.*		290 Bu./Min.	290 Bu./Min.	
Vertical Auger	r zaka mod kam	16" Full Pitch R.H.	16" Full Pitch R.H.	
Horizontal Auger	Front	12" Full Pitch L.H.	12" Full Pitch L.H.	
	Rear	12"-2/3 Pitch L.H.	12"-2/3 Pitch L.H.	
Flighting	12"	3/8" Helicoid	3/8" Helicoid	
	16"	7/16" Helicoid	7/16" Helicoid	
Gearbox		A-76 Heavy Duty		
Chain		Double No. 80 Roller	Double No. 80 Roller	
Sprockets		Industrial Grade With Tap		
Bearings		2" - 2 7/16"	2" - 2 7/16"	
PTO - 1000 RPM (U-Joint W/Shaf	Shear)		160 HP Rated	
PTO Yoke		1 3/8"-21 Spline or 1 3/4"		
Hydraulic Flow Control			Standard	
Tires		***18.4" x 38" 10 Ply (4)		
Spindle/Hub		4 1/2" - 10 Bolt (4)		
Hitch Clevis		Bolt-on Single Or Double Clevis - All Models		
Windows		Standard Front And Re		
Chain/Oiler/Lube Bank		Standard	Standard	
Parking Jack		10,000 Lb. Drop Leg		
Lights		Rear Mtd. Safety/Warning		
Scale Option		Factory Or Field In	and the second s	
Tractor Requirement (Minimum)		175 HP 2WD/4WD	225 HP 4WD	

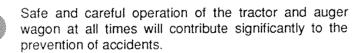
- Approximate with 15% moisture corn. Bushels and bushels/minute will vary with moisture content of grain and/or RPM.
   Duals may be adjusted to center over 30"or wide rows.

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<sup>\*\*\*</sup> R-1 traction-tread.

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## SAFETY PRECAUTIONS A



Since a large portion of farm accidents occur as a result of fatique or carelessness, safety practices should be of utmost concern. Read and understand the instructions provided in this manual. Listed below are a few other safety suggestions that should become common practice.

before:

Always disengage PTO and shut off tractor engine

- Leaving tractor seat.
  - 2. Lubricating the auger wagon.
  - 3. Cleaning out debris.

Always keep hands, feet and clothing away from moving parts.

Make certain tractor is in safe operating condition with adequate braking capabilities, especially when operating on uneven terrain.

Never operate the auger wagon without PTO guards, tractor master shield and implement guards in place. Make certain PTO guards turn freely and are properly attached.

Always make certain U-joint yokes are securely locked on tractor and implement shaft before operating wagon.

Grease telescoping PTO shaft regularly to minimize thrust forces.

Never exceed 1000 PTO RPM or operate the PTO at full RPM with the augers empty.

Always use adequate lights or safety warnings when transporting the wagon on public roads and after dark. Check with local law enforcement agencies for specific requirements.

Always make certain there is adequate overhead clearance before folding or unfolding the unloading auger.

Limit towing speed to 15 MPH when empty and 10 MPH when loaded.

Never permit any persons other than the operator to ride on the tractor and never permit persons to ride on or in the wagon at any time.

Always fold unloading auger to down position before transporting wagon.

This machine has been designed and built with your safety in mind. Any alteration to the design or construction may create safety hazards. Do not make any alterations or changes to the equipment, but if any alterations or changes are made you must follow all appropriate safety standards and practices to protect you and others near this machine from injury.

Before applying pressure to the hydraulic system, make sure all connections are tight and that hoses and fittings have not been damaged. Hydraulic fluid escaping under pressure can have sufficient force to penetrate skin, causing injury or infection.

Because of load capacities on bridges and roads and because the wagon is not equipped with brakes, the wagon is not intended for hauling loads on public roadways. It is the operator's responsibility to be aware of and follow federal, state and local regulations in this regard.

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# SAFETY PRECAUTIONS

wagon.

At all times keep children off of and out of auger

Rim and tire servicing can be dangerous. Explosive separation of a tire and rim parts can cause serious injury or death. The multipiece rim used on the Sof-Trak wagon requires that specific procedures and safety instruction be followed in mounting and demounting of the tires. Do not attempt to mount a tire unless you have the proper equipment and experience to perform the job. This should only be done by persons properly trained and equipped to do the job. Always maintain the correct tire pressure. Do not inflate the tires above the recommended pressure. When inflating tires, use a clip-on air chuck and extension hose long enough to allow you to stand to one side and NOT in front of or over the tire assembly. Use a safety cage to enclose the tire and rim assembly when inflating. Inspect tires and wheels daily. Do not operate with low pressure, cuts, bubbles, damaged rims or missing lug bolts and nuts.

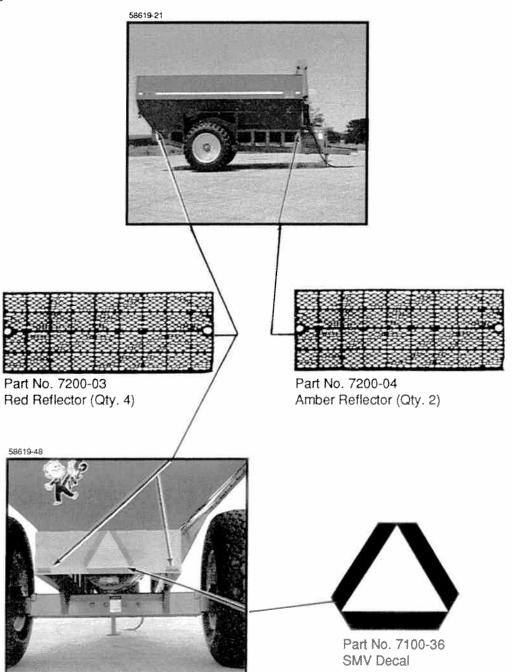
Never transport Row Crop wagon or load Row Crop wagon with grain with outer wheels removed.

Windows give only a limited view of what is behind the wagon. Always check carefully, including blind spots, before backing or turning the wagon.

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The "WARNING" signs illustrated on these pages are placed on the machine to warn of hazards. "The warnings found on these signs are for your personal safety and those around you." OBSERVE THESE WARNINGS!

- •Keep these signs clean so they can be observed readily. Wash with soap and water or cleaning solution as required.
- •Replace "WARNING" signs should they become damaged, painted over or if they are missing.
- •Check the SMV decal periodically. Replace if it shows loss of any of its reflective property.
- •When replacing decals, clean the machine surface thoroughly using soap and water or cleaning solution to remove all dirt and grease.



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## CAUTION

- Read and understand the Operator's Ma
- Stop the tractor engine before leaving the operator's platform.
- 3. Keep riders off the machine.
- ke certain everyone is clear of the more starting the tractor engine and
- r tubricate, adjust, unclog or service the
- ement to stop before servicing

Part No. 7100-46



HYDRAULIC FOLDING AUGER

FAILURE TO HEED THIS WARNING MAY RESULT IN PERSONAL INJURY OR DEATH.

KEEP CLOTHING, YOURSELF AND OTHERS WELL CLEAR WHEN FOLDING AND UNFOLDING AUGER.

7186-81

Part No. 7100-81

## DANGER

SERIOUS INJURY OR DEATH CAN RESULT FROM CONTACT WITH ELECTRIC LINES. USE CARE TO AVOID CONTACT WITH ELECTRIC LINES WHEN MOVING OR OPERATING THIS MACHINE.

Part No. 7100-117

WINDOWS GIVE ONLY A LIMITED VIEW OF WHAT IS BEHIND THE WAGON, ALWAYS CHECK CAREFULLY, INCLUDING BLIND SPOTS, BEFORE BACKING OR TURNING WAGON.

Part No. 7100-112

Do Not Tow Loaded Wagons on Public Roads and Bridges. If you must tow a loaded wagon on

public roads and bridges: 1. Do not exceed 10 mph.

- 2. Check operator's manual for the loaded weight of the wagon.
- 3. Tow only on roads and bridges capable of carrying the loaded weight of the wagon.
- Know and obey all laws and regulations.

7100-120

Part No. 7100-120

## 

FAILURE TO HEED THESE WARNINGS MAY RESULT IN PERSONAL INJURY OR DEATH. NEVER ALLOW ANYONE ON OR IN WAGON WHILE OPERATING. ALWAYS UNHOOK WAGON FROM TRACTOR WHEN PERFORMING REPAIRS INSIDE OF WAGON, ALL NORMAL MAINTENANCE CAN BE PERFORMED WITHOUT CLIMBING INSIDE OF WAGON

WAGON IS INTENDED FOR FIELD USE ONLY. TOW ONLY WITH FARM TRACTOR, ALWAYS OBEY ALL LAWS AND LOAD LIMITS WHEN TRANSPORTING.

Part No. 7100-82

# **WARNING**

TOW ONLY WITH FARM TRACTOR.

Part No. 7100-56

# WARNING A

THIS MACHINE HAS BEEN DESIGNED AND BUILT WITH YOUR SAFETY IN MIND ANY ALTERATION TO THE DESIGN OR CONSTRUCTION MAY CREATE SAFETY HAZAROS, DO NOT MAKE ANY ALTERATIONS OR CHANGES TO THE EQUIPMENT, BUT IF ANY ALTERATIONS OR CHANGES ARE MADE YOU MUST FOLLOW ALL APPROPRIATE SAFETY STANDARDS AND PRACTICE TO PROTECT YOU AND OTHERS NEAR THIS MACHINE FROM INJURY.

Part No. 7100-134

A WARNING A **NEVER OPERATE WAGON** 

WHEN INSPECTION COVER IS REMOVED.

Part No. 7100-80



ROTATING DRIVE LINE CIAIN CAN RISULI INOM INTANCLEMENT

- REED PEOPLE AND CLOTHING WELL CLEAR CONDIDERNIA HISTORY
  - · DRIVE HIM! CHARGS
  - · Unioni Statio In Table

    · In a Cid Mastir Shiil B

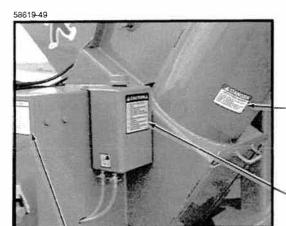
    · U JOINTS (DC AID ID TA CTOR

    AND IMPLIMINI SHAFTS

Part No. 7100-67

Part No. 7100-90





WHEN OPERATING DUMP DOOR KEEP CLOTHING. YOURSELF AND OTHERS WELL CLEAR

**ROTATING AUGER** -

Part No. 7100-142

# A CAUTION A

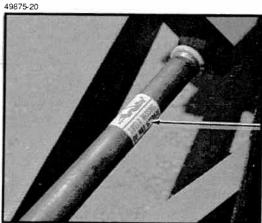
- 1. SHUT OFF PTO AND TRACTOR ENGINE.
- 2. OPEN BRASS VALVES LOCATED UNDER OILER TANK.
- 3. START TRACTOR ENGINE AND ENGAGE PTO AT IDLE FOR A SHORT TIME.
- 4. REMAIN ON/IN TRACTOR WHILE PTO IS RUNNING.
- 5. DISENGAGE PTO AND SHUT OFF TRACTOR ENGINE.
- CLOSE BRASS VALVES LOCATED UNDER OILER TANK.

Part No. 7100-118

## A WARNING A

NEVER OPERATE PTO SHAFT ABOVE 1000 PTO RPM. **NEVER RUN WAGON AUGERS** AT FULL RPM WHEN EMPTY.

Part No. 7100-79





Part No. 7100-86

DANGE





## WARNING A

**NEVER OPERATE WAGON** WHEN INSPECTION COVER IS REMOVED.

Part No. 7100-80





# A DANGER

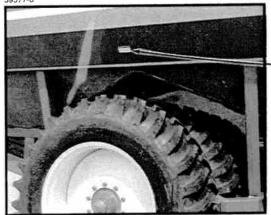
#### NEVER TRANSPORT WAGON OR LOAD WAGON WITH GRAIN WITH OUTER WHEELS REMOVED

The two outer wheels on Row Crop wagons are removed to allow narrower width for truck shipment. Using extreme caution, unload wagon in level area. Tipping may occur because of narrow wheel base! Install outer wheels immediately.

F100-141

Part No. 7100-161 Row Crop Wagon Only (Temporary shipping warning)

59577-8





NEVER TRANSPORT WAGON OR LOAD WAGON WITH GRAIN WITH OUTER WHEELS REMOVED

7100-162

Part No. 7100-162 Row Crop Wagon Only (1 on each side of wagon)

5-4 4/90

The following pages show the location of all lubrication points. Proper lubrication of all moving parts will help ensure efficient operation of your KINZE auger wagon and prolong the life of friction producing parts.

#### AUGER BEARINGS, HINGE AND PTO

Those parts equipped with grease fittings should be lubricated at the frequency indicated with an SAE multipurpose type grease. Be sure to clean the fitting thoroughly before using grease gun. The frequency of lubrication recommended is based on normal operating conditions. Severe or unusual conditions may require more frequent attention.

#### **DRIVE CHAINS**



The auger wagon is equipped with a one gallon capacity chain oiler system that enables you to safely and conveniently lubricate the drive chains without removing the inspection cover. A quality engine oil or equivalent SAE 30 weight oil should be used. The chains should be lubricated at least daily or more frequently if desired, particularly under extreme operating conditions.

#### CHAIN OILER OPERATION:

- 1. Shut off PTO and tractor engine.
- Open brass valves located under oiler tank.
- 3. Start tractor engine and engage PTO at idle for a short time.

DANGER: Remain on/in tractor while PTO is running.

- 4. Disengage PTO and shut off tractor engine.
- Close brass valves located under oiler tank.

DANGER: Never turn oiler on or work around PTO, gearbox or chains and sprockets or allow anyone else to do so while PTO is running. CAUTION: Extreme operating conditions such as dirt, temperature or speed may require more frequent lubrication.

DANGER: NEVER REACH UNDER THE WAGON TO OIL CHAINS WHILE THE CHAINS ARE MOVING. THE SPROCKETS AND CHAINS COULD PULL YOU INTO THE DRIVELINE RESULTING IN SEVERE INJURY OR DEATH!

DANGER: DO NOT OPERATE WAGON WITH INSPECTION COVER REMOVED.

#### WHEEL BEARINGS

Wheel bearings should be checked and lubricated annually.

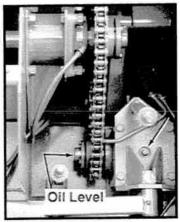
Raise wheel off the ground and remove the dirt cap. Check for endplay in the bearings by moving the tire in and out. Rotate the tire to check for roughness in the bearings. If bearings sound rough, the hub should be removed and the bearings inspected and replaced if necessary. See "Wheel Bearing Replacement" in the Maintenance Section of this manual.

If bearing replacement is not necessary, while the wheel is raised and the dirt cap removed, pump grease into the hub until grease comes out through the bearing rollers. Replace dirt cap.

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#### **GEARBOX**

46331-8



640 Models - To check oil level remove plug.



840/1040 Models - Style A To check oil level remove plug, elbows and nipple.

Oil Level

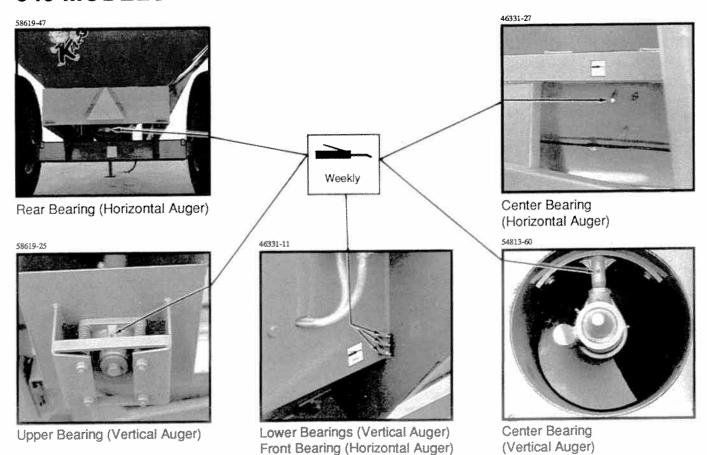
71484-2

840/1040 Models - Style B To check oil level remove plug.

Using a clean piece of wire as a dip stick measure oil level to be sure it is **half way up** on the horizontal cross shaft. Fill as needed with SAE 90 oil.

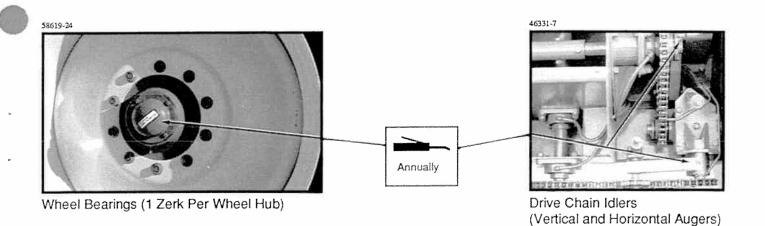
NOTE: Oil level should never exceed more than half way up on the cross shaft.

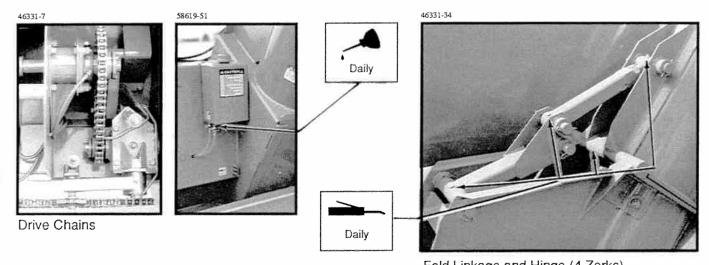
## 640 MODELS



CAUTION: Extreme operating conditions such as dirt, temperature or speed may require more frequent lubrication.

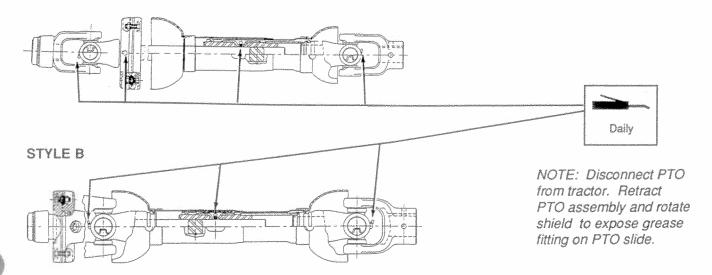
6-2 Rev. 4/93





Fold Linkage and Hinge (4 Zerks)

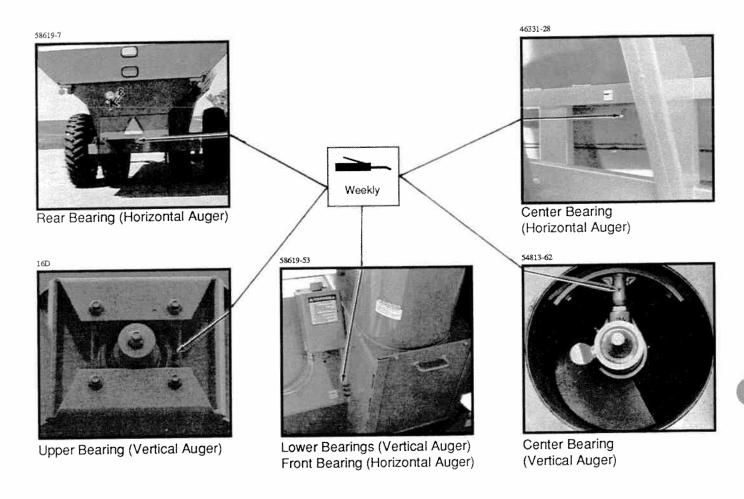
#### STYLE A

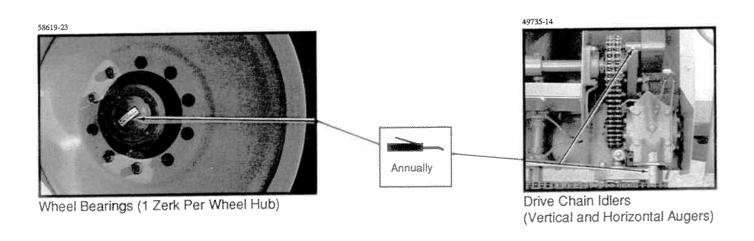


CAUTION: Extreme operating conditions such as dirt, temperature or speed may require more frequent lubrication.

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## 840/1040 MODELS



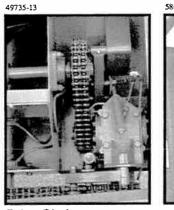


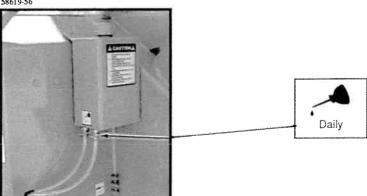
CAUTION: Extreme operating conditions such as dirt, temperature or speed may require more frequent lubrication.

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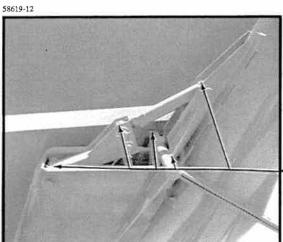
840/1040

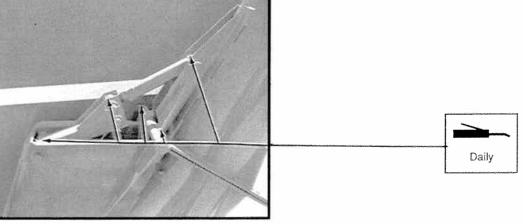
## **LUBRICATION**



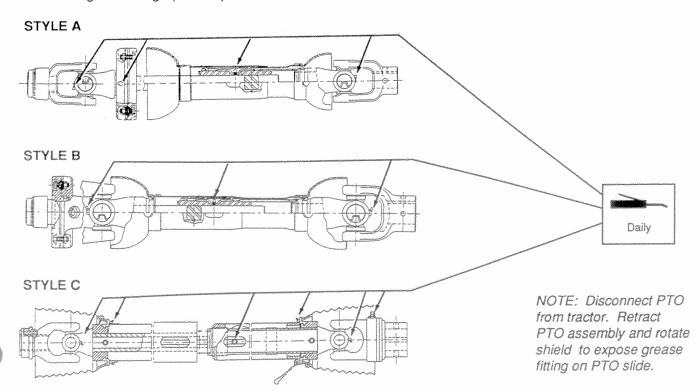


**Drive Chains** 





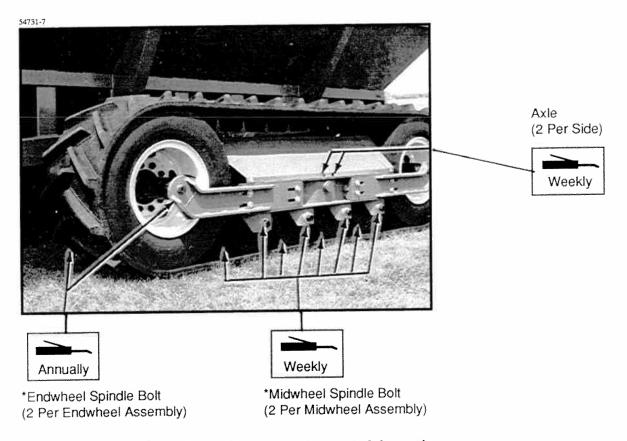
Fold Linkage and Hinge (5 Zerks)



CAUTION: Extreme operating conditions such as dirt, temperature or speed may require more frequent lubrication.

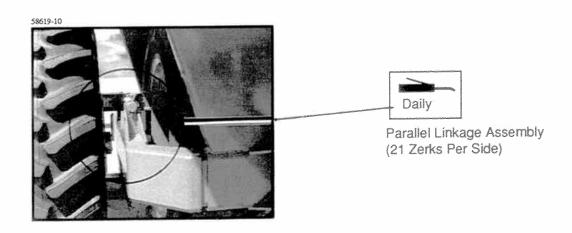
6-5 Rev. 4/93

# SOF-TRAK Wagon Track and Carriage



<sup>\*</sup> Pump grease into hub until grease comes out around the seals.

## **ROW CROP Wagon Axle**



CAUTION: Extreme operating conditions such as dirt, temperature or speed may require more frequent lubrication.

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The following information is general in nature and was written to aid the operator in preparing the tractor and auger wagon for use and to provide general operating procedures.

#### INITIAL PREPARATION OF THE WAGON

Lubricate the auger wagon per the lubrication information in this manual prior to initial operation and at prescribed intervals thereafter. Make sure all tires have been properly inflated prior to each use. Check all drive chains for proper tension and lubrication.

#### TRACTOR PREPARATION AND HOOKUP

- 1. Slide tractor drawbar in as far as possible and still allow PTO shaft to have sufficient clearance to prevent damage to drive line components when making sharp turns and operating over uneven ground.
- 2. Connect auger wagon to tractor hitch using a high quality hitch pin of sufficient length and secure pin with a locking device.

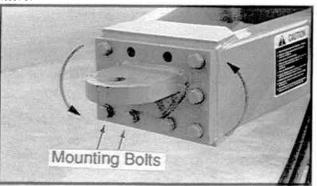
Recommended pin diameter:

Single Clevis ......Pin recommended and supplied by the tractor manufacturer. (Max. 1 3/4")

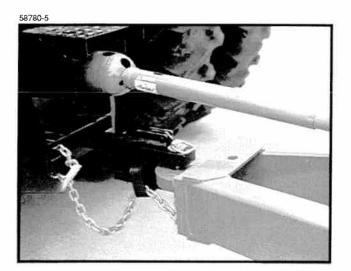
Double Clevis ......Min. 1 3/8"/Max. 1 1/2"

NOTE: The single clevis hitch can be turned over for an additional 1 1/2" hitch height adjustment. (Recommended mounting bolt torque - 380 ft. lbs.)





NOTE: Auxiliary attaching systems (safety chains) are available from KINZE Repair Parts. Check state and local regulations for requirements.



3. Attach wagon PTO connecting yoke to tractor PTO shaft. Be sure spring loaded yoke pin engages groove in tractor PTO shaft. Check that slip tube grease fitting is visible through hole of outer tube.

CAUTION: Ensure hitch height is sufficient to prevent severe bends in PTO U-joint angles.

4. Attach quick disconnect fitting to ends of hydraulic hoses to match tractor hydraulic ports. (ISO couplers standard equipment) Connect hydraulic hoses to tractor ports in a sequence which is both familiar and comfortable to the operator.

WARNING: Before applying pressure to the hydraulic system, make sure all connections are tight and hoses and fittings have not been damaged. Hydraulic fluid escaping under pressure can have sufficient force to penetrate skin, causing injury or infection.

IMPORTANT: Always wipe hose ends to remove any dirt before connecting couplers to tractor ports.

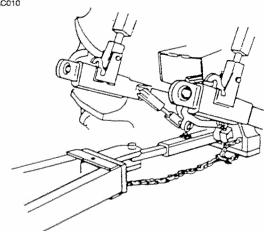
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- Raise parking jack to maximum height to prevent damage in uneven field conditions.
- 6. Connect the seven terminal breakaway connector receptacle for the light package on the wagon to the seven pin connector on the tractor. If your tractor is not equipped with the SAE Standard 7-pin connector, obtain through your local tractor supply dealer. Check to be sure clearance lights and signal lights are working.

DANGER: Because of load capacities on bridges and roads and because the wagon is not equipped with brakes, the wagon is not intended for hauling on public roadways. It is the operator's responsibility to be aware of and follow federal, state and local regulations in this regard.

NOTE: If using an auxiliary attaching system to retain the connection between the auger wagon and tractor hitch, be sure the auxiliary attaching system is of sufficient strength and length and correctly attached. Also be aware of PTO clearance.

**WAC010** 



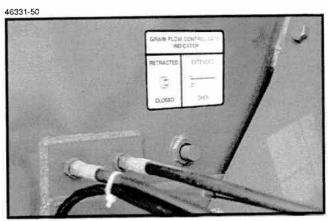
An auxiliary attaching system (safety chain) is available from KINZE Repair Parts through your Kinze Dealer.

DANGER: Windows give only a limited view of what is behind the wagon. The use of a rearview mirror is recommended to aid the operator in seeing behind the wagon. Always check carefully, including blind spots, before backing or turning the wagon.

#### **UNLOADING**

The unloading speed will vary with the moisture content of the grain and the PTO speed. The amount of opening on the grain flow control gate can also be used to adjust unloading speed.

- 1. After checking to see there are no power lines or other obstacles in the way, fold the unloading auger into the unloading position. The cylinder should be fully extended and the folding linkage locked over center to lock the augers in place. It is not necessary that the housing be bolted together. Check the speed at which the auger folds and if necessary adjust the tractor flow control. If the auger folds too fast it could damage the hinge assembly or force the spring loaded bearing at the upper end of the auger out of adjustment.
- 2. With clutch disengaged and tractor idling, engage PTO.
- 3. Open grain flow control gate. The amount of opening can be determined by the position of the control gate indicator on the front of the grain tank.



4. Increase tractor RPM to the desired speed. (Not to exceed 1000 PTO RPM.)

CAUTION: If the auger wagon is being unloaded on the move, disengage PTO before making any sharp turns.

5. As grain flow slows, reduce tractor RPM to idle.

CAUTION: Do not operate tractor PTO at full speed with the augers empty.

- 6. When grain flow stops, close the grain flow control gate.
- 7. Disengage PTO.

NOTE: If wagon is used around power lines, buildings, trees or other obstacles or if the wagon is being used in rough field conditions, the unloading auger should be folded after unloading.

DANGER: Care must be taken when operating wagon and/or folding unloading auger around power lines.

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#### **CLEANOUT DOOR**

DANGER: Never open cleanout door while PTO and/or augers are running.

All models are equipped with a dump door that is designed primarily for clean out purposes. However, the door can be used for pit dumping.

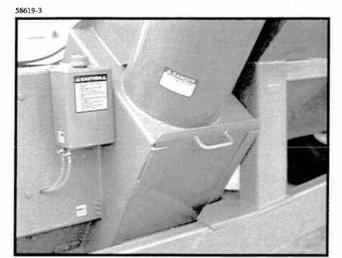
At the end of each season or extended use, the clean out door should be removed and the auger chamber cleaned of all debris and accumulated grain to prevent rust and mold.

#### Pit Dumping

If the wagon is being used strictly for pit dumping, it is important that the vertical auger drive chain be removed.

With the PTO disengaged and the tractor engine shut off, remove the clean out door. Start tractor engine and engage PTO. Regulate grain flow using grain flow control gate.

DANGER: Never work around PTO, gearbox or chains and sprockets or allow anyone else to do so while PTO is running.



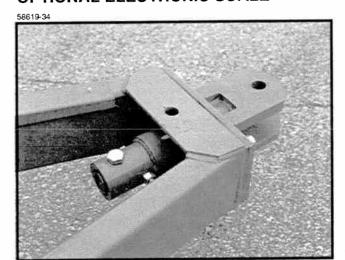
640 Model

58619-54

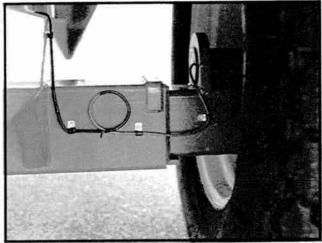


840/1040 Models

#### OPTIONAL ELECTRONIC SCALE



58619-30



An electronic scale option is available for 640 and 840 Wheel auger wagons and 840 and 1040 Row Crop wagons (Not available for Sof-Trak models). The electronic scale option includes two weigh axles (four on Row Crop models), one hitch weigh beam, a scale indicator console for tractor mounting and the required cables, brackets and hardware for mounting.

#### **Suggested Operation Procedures**

NOTE: Movement of the wagon will cause the scale indicator reading to fluctuate.

Step 1 Press "ON" to turn scale on.

NOTE: Allow 10 to 30 minutes for the scale to warm up.

Step 2 Prior to unloading the wagon, press "TARE".

<u>Step 3</u> Unload wagon. The negative reading on the scale indicator is pounds unloaded. Record weight.

Repeat Steps 2 and 3 each time the wagon is unloaded.

Consult scale manufacturer's manual provided for additional information.

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#### MOUNTING BOLTS AND HARDWARE

Before operating the wagon for the first time, check to be sure all nuts and bolts are tight. Check all nuts and bolts again after approximately the first 50 hours of operation and at the beginning of each season thereafter.

All bolts used on the KINZE wagon are Grade 5 (high strength) unless otherwise noted. Refer to the torque values chart when tightening bolts.

NOTE: Over tightening bolts can cause as much damage as under tightening. Tightening a bolt beyond the recommended range can reduce its shock load capacity.

TORQUE VALUES CHART - PLATED HARDWARE						
Bolt	Grade 2		Grade 5		Grade 8	
Diameter	Coarse	Fine	Coarse	Fine	Coarse	Fine
1/4"	50 In. Lbs.	56 In. Lbs.	76 In. Lbs.	87 In. Lbs.	9 Ft. Lbs.	10 Ft. Lbs.
5/16"	8 Ft. Lbs.	9 Ft. Lbs.	13 Ft. Lbs.	14 Ft. Lbs.	18 Ft. Lbs.	20 Ft. Lbs.
3/8"	15 Ft. Lbs.	17 Ft. Lbs.	23 Ft. Lbs.	26 Ft. Lbs.	33 Ft. Lbs.	37 Ft. Lbs.
7/16"	25 Ft. Lbs.	27 Ft. Lbs.	37 Ft. Lbs.	41 Ft. Lbs.	52 Ft. Lbs.	58 Ft. Lbs.
1/2"	35 Ft. Lbs.	40 Ft. Lbs.	57 Ft. Lbs.	64 Ft. Lbs.	80 Ft. Lbs.	90 Ft. Lbs.
9/16"	50 Ft. Lbs.	60 Ft. Lbs.	80 Ft. Lbs.	90 Ft. Lbs.	115 Ft. Lbs.	130 Ft. Lbs.
5/8"	70 Ft. Lbs.	80 Ft. Lbs.	110 Ft. Lbs.	125 Ft. Lbs.	160 Ft. Lbs.	180 Ft. Lbs.
3/4"	130 Ft. Lbs.	145 Ft. Lbs.	200 Ft. Lbs.	220 Ft. Lbs.	280 Ft. Lbs.	315 Ft. Lbs.
7/8"	125 Ft. Lbs.	140 Ft. Lbs.	320 Ft. Lbs.	350 Ft. Lbs.	450 Ft. Lbs.	500 Ft. Lbs.
1"	190 Ft. Lbs.	205 Ft. Lbs.	480 Ft. Lbs.	530 Ft. Lbs.	675 Ft. Lbs.	750 Ft. Lbs.
1 1/8"	265 Ft. Lbs.	300 Ft. Lbs.	600 Ft. Lbs.	670 Ft. Lbs.	960 Ft. Lbs.	1075 Ft. Lbs.
1 1/4"	375 Ft. Lbs.	415 Ft. Lbs.	840 Ft. Lbs.	930 Ft. Lbs.	1360 Ft. Lbs.	1500 Ft. Lbs.
1 3/8"	490 Ft. Lbs.	560 Ft. Lbs.	1100 Ft. Lbs.	1250 Ft. Lbs.	1780 Ft. Lbs.	2030 Ft. Lbs.
1 1/2"	650 Ft. Lbs.	730 Ft. Lbs.	1450 Ft. Lbs.	1650 Ft. Lbs.	2307 Ft. Lbs.	2670 Ft. Lbs.

NOTE: Unplated bolts should be torqued aproximately 1/3 higher than the above values. Bolts having lock nuts should be tightened to approximately 50% of amounts shown in chart. Bolts lubricated prior to installation should be torqued to 70% of value shown on chart.



GRADE 2 No Marks



GRADE 5 3 Marks



GRADE 8 6 Marks

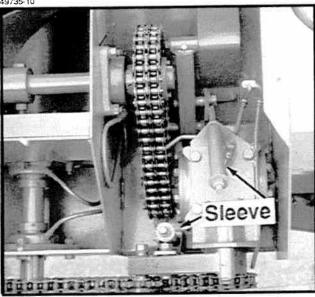
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#### AUGER DRIVE CHAINS ADJUSTMENT

To prevent excessive wear on the auger drive chains and sprockets, the chains must be maintained and properly tensioned.

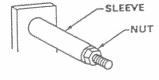
Adjust horizontal chain tension and vertical chain tension as follows:

49735-10



DANGER: Never run chains with inspection cover removed.

- 1. Tighten 5/8" lock nut until spring housing sleeve bottoms out.
- 2. Back off lock nut until spring housing sleeve can be rotated freely by hand.



CAUTION: Chain idler spring adjustment nuts MUST NOT BE OVER TIGHTENED. Sleeve around spring must always turn freely by hand. After nut is tightened, if sleeve does not turn freely, loosen adjustment nut until it does.

#### **VERTICAL AUGER FOLD**

The vertical auger fold is preset at the factory and should require no additional adjustment. However, if the auger housing or cylinder is replaced, adjustment may be necessary.

When properly adjusted, the folding linkage should "snap" over-center at the end of the extended stroke of the cylinder. This over-center action holds the unloading auger in position without the need for hydraulic pressure from the cylinder.

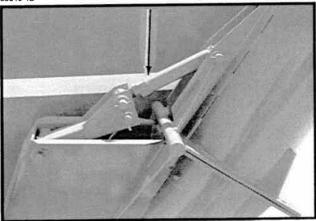


#### DANGER: Stand clear when folding auger.

To adjust the folding linkage, loosen jam nut, remove pin from one end of linkage arm and rotate the arm in or out as required.

If the linkage arm is adjusted, the auger housing stop bracket (located on the grain tank and used when the auger is folded for transport) will need to be adjusted.

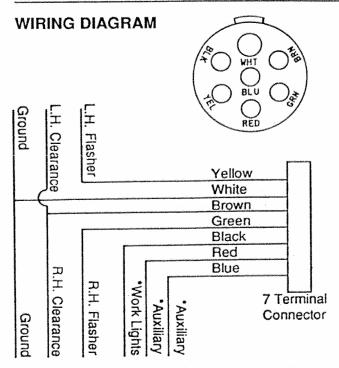
58619-12



58619-58



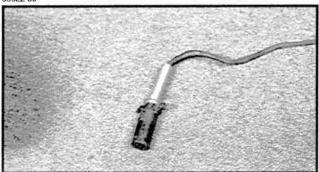
8-2 Rev. 4/93



\*Optional lights (to be supplied by customer) may be wired into existing auxiliary and work light wires in harness.

Light package supplied on the 40 Series grain auger wagon meets ASAE standards. For the correct wiring harness to be wired into the lights on your tractor, check with the tractor manufacturer.



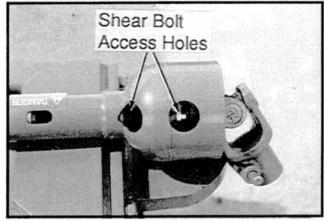


#### SHEAR BOLT PROTECTION

To ensure driveline and gearbox protection, all KINZE auger wagons are equipped with a shear bolt yoke in the PTO shaft. Should the auger become obstructed, the yoke is designed to shear the connecting bolt(s) before further damage can occur.

NOTE: Always use identical quantity, size and grade of bolt(s) for replacement.

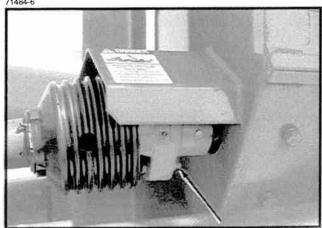
46331-15



Style A PTO assembly (shown above) is equipped with access holes in the PTO shield to permit replace of the shear bolts without removal of the guard.

Style B PTO assembly (not shown) shear bolts accessible from end of PTO shield. (Similar to Style A)

71484-6



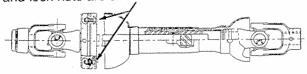
Style C PTO assembly shear bolt shown above.

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NOTE: Always use identical quantity, size and grade of bolt(s) for replacement.

#### 640 MODEL

**Style A** - Shear is located in tractor half of PTO assembly. Two  $5/16"-18 \times 1\ 1/2"$  Grade 5 cap screws and lock nuts are used.

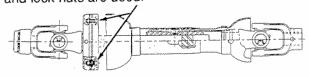


Style B - Shear is located in tractor half of PTO assembly. Two 3/8"-16 x 1" Grade 5 cap screws and lock nuts are used.

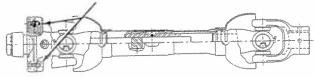


#### 840/1040 MODELS

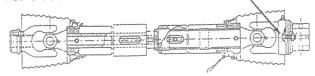
<u>Style A</u> - Shear is located in tractor half of PTO assembly. Two 5/16"- $18 \times 1 \ 1/2$ " Grade 5 cap screws and lock nuts are used.



Style B - Shear is located in tractor half of PTO assembly. Two 3/8"-16 x 1" Grade 5 cap screws and lock nuts are used.



Style C - Shear is located in wagon half of PTO assembly. One 3/8"-16 x 2 1/2" Grade 5 cap screw and lock nut is used.



#### WHEEL NUTS

The wheels are attached to the hubs with press fit bolts through the hub flanges and wheel nuts. Upon any removal and installation of the wheel, clean threads with a wire brush and oil lightly to retard corrosion.

Tighten wheel nuts to 425 foot pounds torque and retorque periodically thereafter as follows:

- a. After 4 hours use.
- b. After 16 hours use.
- c. Weekly during season.

#### TIRE PRESSURE

Tire pressure should be checked regularly and prior to each use of the wagon and maintained as follows:

N	/linimum/Maximum
18.4 x 38; 10 Ply	35 PSI/40PSI
24.5 x 32; 12 Ply	35 PSI/40 PSI
30.5 x 32; 12 Ply	35 PSI/40 PSI
*8.25 x 20; Sof-Trak Wagon	*55 PSI

\*All tire pressures must be equal.

DANGER: Rim and tire servicing can be dangerous. Explosive separation of a tire and rim parts can cause serious injury or death.

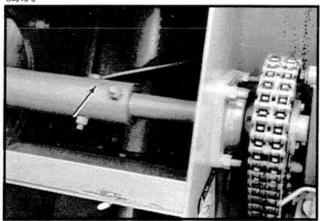


The multipiece rimused on the Sof-Trak wagon requires that specific procedures and safety instruction be followed in mounting and demounting of the tires. Do not attempt to mount a tire unless you have the proper equipment

and experience to perform the job. This should only be done by persons properly trained and equipped to do the job. Always maintain the correct tire pressure. Do not inflate the tires above the recommended pressure. When inflating tires, use a clip-on air chuck and extension hose long enough to allow you to stand to one side and NOT in front of or over the tire assembly. Use a safety cage to enclose the tire and rim assembly when inflating. Inspect tires and wheels daily. Do not operate with low pressure, cuts, bubbles, damaged rims or missing wheel bolts and nuts.

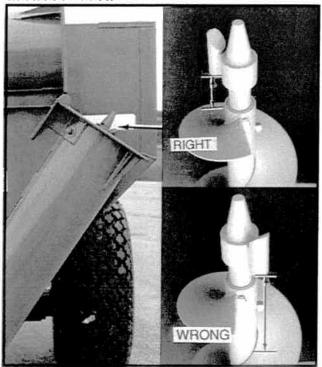
#### **AUGER TIMING**

Any time chains have been removed, check by rotating horizontal and vertical augers by hand to be sure the bolts on the front of the horizontal auger do not strike lower vertical auger flighting. (840/1040 Only)



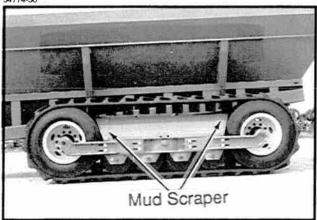
If vertical augers or bullet assembly have been removed for any reason, special care must be taken to reinstall bullet assembly in the proper position. It is possible to install the bullet assembly in two positions 180° apart. One position will place the auger assembly out of time and restrict the flow of grain between the upper and lower auger. The proper location is noted in the photo below. A properly installed bullet assembly places the drive pin where it is closest to the flighting on the auger when measuring down the drive pin to the flighting on the auger.

58619-39/54813-41/54813-38



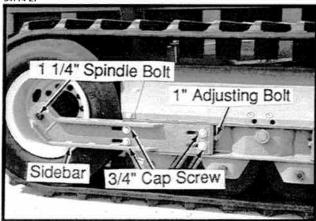
#### MUD SCRAPER ADJUSTMENT

(Sof-Trak Wagon)



Slotted attachment holes on the scrapers allow for scraper adjustment. Each scraper should be adjusted to maintain 1/8" clearance between the scraper and tires.

#### TRACK TENSION (Sof-Trak Wagon)

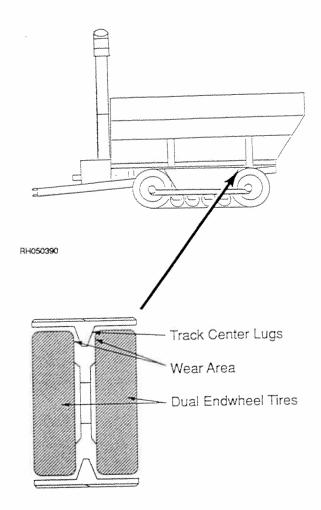


There should be approximately 1/4" to 3/8" of sag in the track at the midpoint between the front and back tires. To check for proper tension, lay a straight edge across the complete length of the track. Measure the distance between the track and the straight edge at the midpoint.

If adjustment is needed, loosen the four 3/4" attachment cap screws on the inside sidebar and the four 3/4" attachment cap screws on the outside sidebar on one end (front or rear) of the wagon. Turn the 1" adjusting bolt on the end of each sidebar in or out equal amounts according to the adjustment needed. Retighten the four 3/4" cap screws on each sidebar. Torque to 220 ft. lbs. For additional adjustment it may be necessary to repeat the above procedure on the opposite end of the track.

#### TRACK ALIGNMENT (Sof-Trak Wagon)

RH490



When properly aligned, the track center lugs should run centered between the dual endwheel tires as the lugs enter the tires when the tracks are rotated. Proper track alignment is important and should be *checked daily* to insure maximum life of the tires and tracks.

Misalignment will cause heat build up and scuffing of the rubber on the inside of the tires.

Equal tire pressure is important to insure proper track alignment. See "Tire Pressure".

Alignment adjustment is made by loosening the four 3/4" cap screws on each sidebar and extending or retracting the sidebar(s) until proper alignment is obtained. Extending the sidebar (Turning 1" adjusting bolt clockwise) closest to the tire showing wear or retracting (Turning the 1" adjusting bolt counterclockwise) the sidebar on the tire on the opposite side will move the lugs away from the tire. Retighten the four 3/4" cap screws on each sidebar. Torque to 220 ft. lbs.

#### TIRE REPAIR (Sof-Trak Wagon)

To remove a tire for repair, position a jack at the axle and raise the side of the wagon. Remove mud scraper.

Mark the position of both the inside and outside sidebars nearest the tire being removed. Loosen the four 3/4" cap screws and 1 1/4" spindle bolt on each sidebar. Loosen the 1" adjusting bolt on each sidebar. Remove the sidebar on the side next to the tire being repaired. Remove wheel nuts and remove tire.

After the tire has been reinstalled and the wheel nuts torqued to 425 ft. lbs., reinstall the sidebar. Extend sidebars to the previously marked positions and tighten all hardware. Torque 3/4" cap screws to 220 ft. lbs. and 11/4" spindle bolt to 1360 ft. lbs. Replace mud scraper. Check track alignment, track tension and mud scraper clearance. Adjust if necessary.

NOTE: Retorque wheel nuts as follows:

- a. After 4 hours use.
- b. After 16 hours use.
- c. Weekly during season.

DANGER: Rim and tire servicing can be dangerous. Explosive separation of a tire and rim parts can cause serious injury or death.



The multiplece rim used on the Sof-Trak wagon requires that specific procedures and safety instruction be followed in mounting and demounting of the tires. Do not attempt to mount a tire unless you have the proper equipment and experience

to perform the job. This should only be done by persons properly trained and equipped to do the job. Always maintain the correct tire pressure. Do not inflate the tires above the recommended pressure. When inflating tires, use a clip-on air chuck and extension hose long enough to allow you to stand to one side and NOT in front of or over the tire assembly. Use a safety cage to enclose the tire and rim assembly when inflating. Inspect tires and wheels daily. Do not operate with low pressure, cuts, bubbles, damaged rims or missing wheel bolts and nuts.

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# INSIDE TIRE REPAIR OR REMOVAL (Row Crop Wagon)

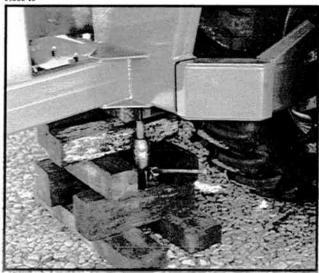
In order to repair or remove the inside tire on the Row Crop wagon, the complete tire/axle assembly on that side of the wagon must be removed.

# IMPORTANT: If there is grain on the wagon, it must be unloaded.

Make sure the wagon is on level ground that is firm enough to support the weight of the wagon while the wagon is raised. Hitch the wagon to a tractor to stabilize the wagon fore and aft.

Remove the two 1" x 8" cap screws on the center axles. Place a hydraulic jack under the wagon frame just ahead of the tire/axle assembly and raise the wagon until weight is removed from the assembly. Place blocking under the wagon at the front axle/frame to support the wagon and lower the jack until the frame is supported by the blocking. There will be some side pressure on the wagon when the tire/axle assembly is being removed and reinstalled. Therefore, the blocking must be placed in such a way as to give a wide base of support as shown below.

59536-13



To remove the tire/axle assembly, attach a chain around the top pivot pin and using a forklift or loader, raise the tire/axle assembly slightly and slowly back up. If the assembly won't slide out, move it up and down to free it.



IMPORTANT: Care must be taken to prevent pulling or pushing the wagon off the support blocking while removing and installing the assembly.

DANGER: Never work around or under the wagon with the tire/axle assembly removed.

Remove wheel nuts and remove tire from hub.

DANGER: Rim and tire servicing can be dangerous. Explosive separation of a tire and rim parts can cause serious injury or death.

After tire repair is completed, reinstall tire onto hub and torque wheel nuts to 425 ft. lbs.

NOTE: Be sure tire is reinstalled with the offset in the rim to the same side as previously installed.

Reposition tire/axle assembly under wagon at desired axle adjustment. Install the two 1" x 8" cap screws and torque to 480 ft. lbs.

NOTE: Retorque wheel nuts as follows:

- a. After 4 hours use.
- b. After 16 hours use.
- c. Weekly during season.

DANGER: Nevertransport Row Crop wagon or load Row Crop wagon with grain with outer wheels removed.

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#### **AXLE ADJUSTMENT (Row Crop Wagon)**

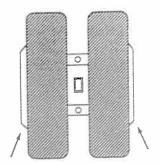
The tire width on Row Crop wagons can be set for 30" row spacing or wide (36" - 38") row spacing. Row spacing is determined by axle adjustment and tire rim position.

DANGER: Nevertransport Row Crop wagon or load Row Crop wagon with grain with outer wheels removed.

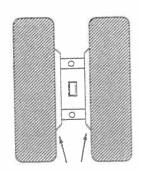
Row Crop wagons are shipped with the outer wheel and hub assembly on each side of the wagon removed and the axle and inner wheel rims installed for 30" row spacing. For field operation with 30" row spacing, install the outer wheel assembly onto each side of the wagon with the offset in the rim to the outside as shown below. Torque wheel nuts to 425 ft. lbs.

If wide (36" - 38") row spacing is desired, remove the two 1" cap screws and complete tire/axle asssembly and reverse the inner wheel so the offset in the rim is to the outside of the wagon as shown below. Follow the procedure described in "Inside Tire Repair Or Removal" for raising the wagon and removing the inside tire. Reposition tire/axle assembly approximately 12" outward from the 30" row spacing location. See illustration in next column. Torque 1" bolts to 480 ft. lbs. Install outer wheels with offset in rim to the inside. Torque wheel nuts to 425 ft. lbs. Repeat procedure on opposite side of wagon.

RH050490

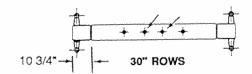


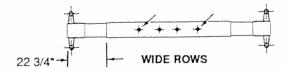
Dual wheel installation with offset in rims positioned for 30" row spacing.



Dual wheel installation with offset in rims positioned for wide (36" - 38") row spacing.

L0112-29





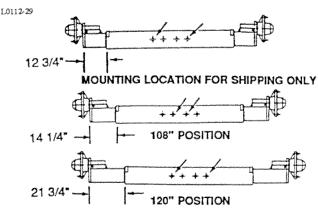
NOTE: Retorque wheel nuts as follows:

- a. After 4 hours use.
- b. After 16 hours use.
- c. Weekly during season.

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#### **AXLE ADJUSTMENT (Wheel Wagon)**

The wheel wagon is factory assembled with the axle in the **shipping position** and **must be extended** to the 108" or 120" operating position. Adjustment holes in the center axle allow for the axle width to be adjusted.

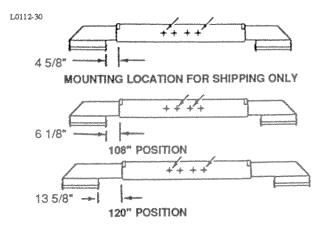


Remove the 1" x 12" cap screws on the center axle. Slide the axle stubs out approximately 1 1/2" and reinstall cap screws in inner set of holes for 108" axle width. Slide axle stubs out approximately 9" and reinstall cap screws in outer set of holes for 120" axle width. Torque bolts to 480 ft. lbs.

NOTE: Use of 30.5" x 32" tires on the 640 wagon requires 120" axle setting.

#### **AXLE ADJUSTMENT** (Sof-Trak Wagon)

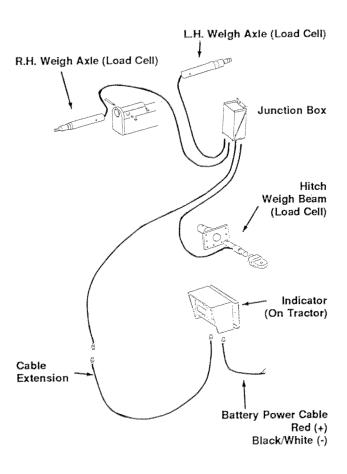
The Sof-Trak wagon is factory assembled with the axle in the **shipping position** and **must be extended** to the 108" or 120" operating position. Adjustment holes in the center axle allow for the axle width to be adjusted.



Remove the 1" x 12" cap screws on the center axle. Slide the axle stubs out approximately 1 1/2" and reinstall cap screws in inner set of holes for 108" axle width. Slide axle stubs out approximately 9" and reinstall cap screws in outer set of holes for 120" axle width. Torque bolts to 480 ft. lbs.

#### **OPTIONAL ELECTRONIC SCALE**

The basic elements of the electronic scale are the indicator, 3 or 5 load cells (two or four weigh axles and one hitch weigh beam), the junction box and the battery power supply.



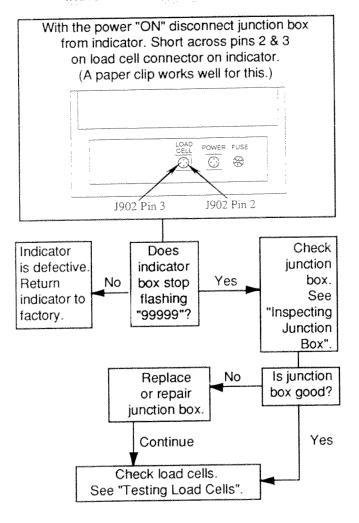
The following information includes troubleshooting charts and step by step procedures for troubleshooting problems commonly found with the electronic scale.

The only tools required are as follows:

- Multimeter (AC/DC volts and resistance)
- · Small screwdriver (straight blade)
- · No. 2 Phillips screwdriver

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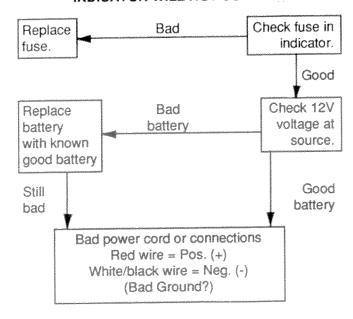
#### INDICATOR FLASHES "99999"



Two conditions cause the indicator not to come on. They are no power to the indicator or a bad indicator.

- 1. No power to indicator.
  - Check for power to indicator.
    - Measure the DC output of the battery using a multimeter. The indicator requires between 10.5 and 16 volts DC.
    - Make sure battery terminals are tight.
    - Check the fuse on the power supply.
    - Make sure the RED wire is connected to the positive terminal and the BLACK/WHITE wire connected to the negative terminal on the battery.
    - Remove the power connector from the indicator and use multimeter to measure between PIN 1 (POS) and PIN 2 (NEG). The meter should read between 10.5 and 16 volts DC.
  - · Check fuse.
    - Remove the fuse from the indicator to make sure it is OK. Model 5 requires a 4 amp fuse. Model EZ150 requires an internal 2.5 amp slow blow fuse.
- 2. Bad indicator. If the power checks are OK, replace the indicator.

#### INDICATOR WILL NOT COME ON



#### INDICATOR UNSTABLE (DRIFTS)

Variations of 50 Lbs. are normal for most scale systems with daily temperature changes. Balance indicator before use to prevent drift from causing inaccurate weight readings.

Uneven terrain causes weight shifts. Always seek smooth flat terrain to make weight readings. Wheel alignment (toe-in/toe-out) can cause weight shift when the unit moves even on smooth flat terrain.

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#### SYSTEM INACCURATE

Usually caused by:

- Indicator with wrong set-up. (An indicator that was set up for another scale application)
- · Defective load cell.
- · Load cell up-side down (new installations).
- 1. Determine if the inaccuracy is caused by the indicator or something else. Stand over or hang on each load cell and note each reading. If the readings are all within one display count, the indicator is causing the problem. If one or more of the readings are more than two display counts different from the the others, continue to next possibility.
- 2. Make sure wheels are on a level surface (not more than 6°) and there is no draw bar pull on tongue. Side pressure on a wheel or tongue can cause inaccurate readings.
- 3. Check for defective load cell. If you suspect you have a defective load cell, test them using the procedures in "Testing Load cells".
- 4. Check to be sure load cells are installed correctly. If one load cell is mounted upside down, the corner with the upside down cell will read negative. The side marked "up" on the weigh axles must be "up". The hitch weigh beam must be positioned with the black arrow on the decal "up".

#### INDICATOR WILL NOT BALANCE (ZERO)

Observe the display and watch for the "Zero" indicator to appear for two seconds after performing a balance to verify that the indicator has balanced.

NOTE: Zero is indicated on Model 5 when a small "bal" appears on the LCD display.

- 1. The indicator will not balance if the battery is low (less than 10.5 volts loaded). "LO BAT" should appear in the bottom of your display. Check the ground connections on the wagon if voltage reads above 10.5 volts and "LO BAT" is indicated on the display.
- 2. If battery is OK. Inspect the junction box wiring. See Step 5 in "Inspect Junction Box".
- 3. If the motion detection feature is turned ON and the display is unstable the indicators will not allow you to balance.

NOTE: The bell symbol "A" on the upper side of the display will be flashing to signify the unstable condition on a Model 5 indicator. On Model EZ150 indicators, a "A" will appear under the word "Motion".

#### INSPECTING THE JUNCTION BOX

- Step 1. Connect the junction box to the indicator.
- **Step 2**. Short between the white and green on any terminal block in the junction box.
- **Step 3.** If the display continues to flash "99999" and the indicator checked out OK, the junction box is defective. Replace the junction box and continue to test load cells to assure that they have not been damaged. (See "Testing Load Cells".
- **Step 4.** If the display stops flashing and stabilizes at a weight, the junction box is OK. Test load cells.
- **Step 5.** Open the junction box cover and check wiring for the following:
  - Wires connected to proper connection point, by color code.
  - Terminal blocks are clamped onto metal lead, not insulation.
  - · Connections are tight.

**Step 6.** Check for water or condensation in the junction box. If damp, dry the entire box and printed circuit board thoroughly with a hair dryer.

NOTE: No hazardous voltages are present in the junction box.

## TESTING LOAD CELLS (Using working Indicator & junction box)

- Step 1. Disconnect all load cells from the junction box.
- **Step 2**. Balance indicator. (short load cell jack pins 2 and 3 on Model 5)
- **Step 3.** Connect one load cell to any junction box terminal. Be sure connections are tight and connected to proper locations by color code.
- **Step 4.** Observe a **positive weight change** after each load cell is connected. Record the reading of each load cell.

Load cell is bad if it causes:

- · Indicator to flash "99999"
- Indicator to display a negative weight (check for upside down load cell)
- Indicator to become unstable
- **Step 5.** Stand over or hang on each load cell and observe increase in weight reading on the indicator (display weight will not be correct).
- **Step 6.** Disconnect load cell and repeat steps 3 through 6 for each load cell.
- **Step 7.** After all load cells are checked, compare the readings. If one cell is substantially different than the others, it is bad.

NOTE: Be sure to check each load cell to insure there are not two bad cells.

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# ENDWHEEL/MIDWHEEL BEARING REPLACEMENT (Sof-Trak Wagon)

NOTE: Each midwheel and endwheel assembly is equipped with a grease fitting for lubrication. The below procedure is used only for bearing replacement.

#### 1. Endwheel Procedure:

Follow the procedure described in "Tire Repair (Sof-Trak Wagon)" to raise wagon, remove mud scraper, release track tension and remove inner and outer sidebars nearest the endwheel being serviced.

#### Midwheel Procedure:

Follow the procedure described in "Tire Repair (Sof-Trak Wagon)" to raise wagon, remove mud scraper, release track tension, remove inner and outer sidebars and both endwheels nearest midwheel being serviced. Drop the midwheel to clear the track carriage and roll it to the closest end of the track for removal. If there is a midwheel between the endwheel and the midwheel being serviced, it must be removed also.

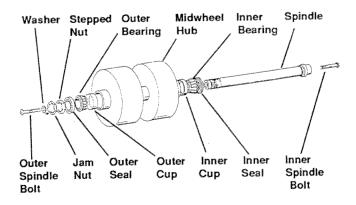
- 2. Remove double nuts and slide spindle from hub.
- 3. Remove bearings, seals and cups and discard. Clean and dry hub.
- 4. Press in new bearing cups with thickest edge facing in.
- 5. Pack bearings with heavy duty wheel bearing grease thoroughly forcing grease between roller cone and bearing cage. Also fill the space between the bearing cups in the hub with grease.
- 6. Place inner bearing in place and install seal.
- 7. Clean spindle and install in hub.
- 8. Install outer bearing, seal and stepped nut. Tighten stepped nut until there is some drag when the spindle is rotated. This assures that all bearing surfaces are in contact. Back off stepped nut 1/4 turn or until there is only slight drag when rotating the hub. Install jam nut to lock against stepped nut.

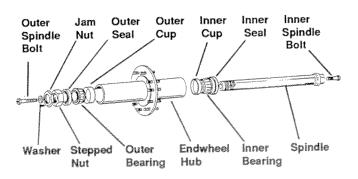
#### 9. Endwheel Procedure:

Follow the procedure described in "Tire Repair (Sof-Trak Wagon)" to reinstall the sidebars and mud scraper. Check track alignment, track tension and mud scraper clearance after completing the procedure.

#### Midwheel Procedure:

Raise midwheel assembly into position under the track carriage, install inner and outer spindle bolts and torque to 1360 ft. lbs. Follow the procedure described in "Tire Repair (Sof-Trak Wagon)" to reinstall endwheel assembly, sidebars, track tension and mud scraper. Check track alignment, track tension and mud scraper clearance after completing the procedure.

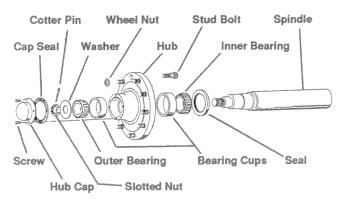




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# WHEEL BEARING REPLACEMENT (Wheel/Row Crop Wagon)

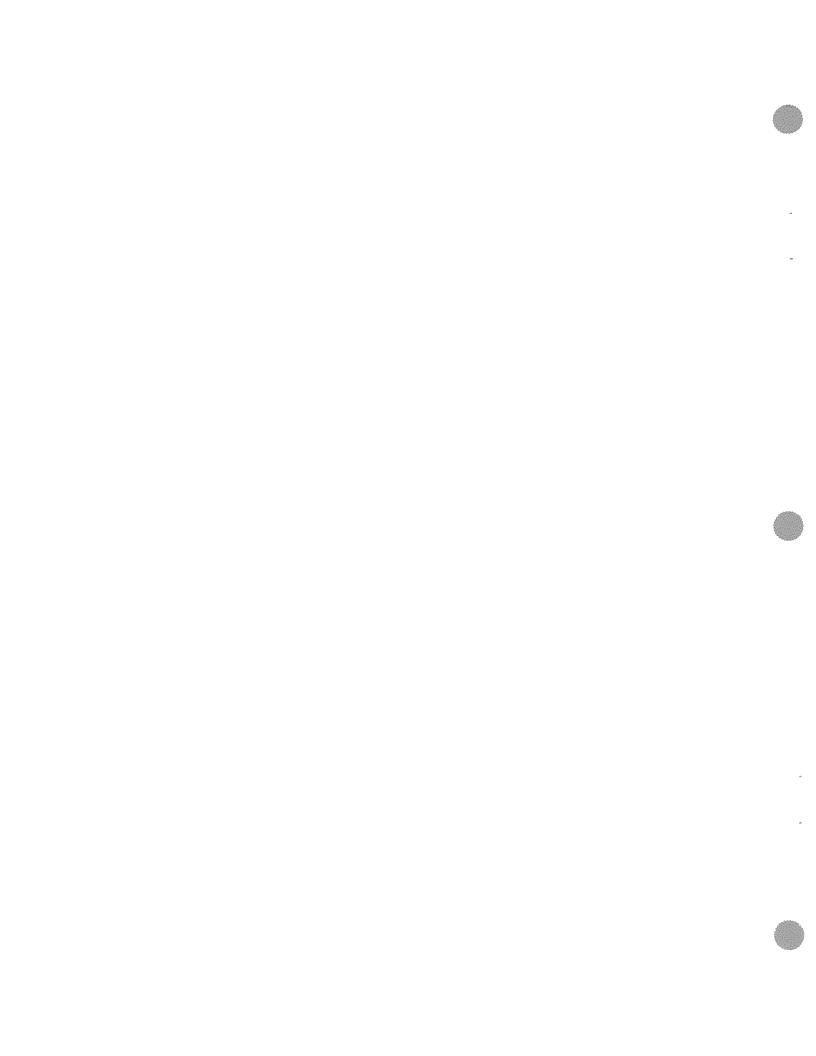
- 1. Raise tire clear of ground and remove wheel.
- 2. Remove hub cap attachment hardware and remove cap from wheel hub.
- 3. Remove cotter pin, axle nut and 2" washer.
- 4. Slide hub from axle spindle, using a hub puller if necessary.
- 5. Remove bearings and cups from hub and discard. Thoroughly clean and dry wheel hub.
- 6. Press in new bearing cups with thickest edges facing in.
- 7. Pack bearing with heavy-duty wheel bearing grease, thoroughly forcing grease between roller cone and bearing cage. Also fill the space between the bearing cups in the hub with grease.
- 8. Place inner bearing in hub and press in new grease seal with lip pointing towards bearing.
- 9. Clean axle spindle and install hub.
- 10. Install outer bearing, 2" washer and slotted hex nut. Tighten slotted hex nut while rotating the hub until there is some drag. This assures that all bearing surfaces are in contact. Back off slotted nut to nearest locking slot and install cotter pin. Check for endplay in bearings.
- 11. Fill hub cap half full of wheel bearing grease and install on hub with attachment bolts.
- 12. Install wheel and remove jack. Torque wheel nuts to 425 ft. lbs.



#### PREPARATION FOR STORAGE

- Always store the auger wagon in a dry sheltered area if possible.
- Remove all trash that may be wrapped on sprockets or shafts and remove dirt that can draw moisture.
- Remove dump door and clean out all accumulated grain and debris from auger chamber.
- · Wash wagon inside and out.
- Clean all drive chains and coat with a rust preventative spray or remove chains and submerge in oil.
- · Lubricate auger wagon at all lubrication points.
- If possible, remove weight from all tires, particularly if the unit is being stored outdoors.
- Repaint any areas where paint has been removed.
  This is particularly important in the inside of the grain
  tank. Rust in this area will shorten the life of the wagon
  as well as prevent grain from smoothly sliding to the
  bottom of the tank.
- Inspect the wagon for parts that are in need of replacement and order during the "off" season.
- Coat exposed surface of all cylinder piston rods with grease or rust preventative spray.

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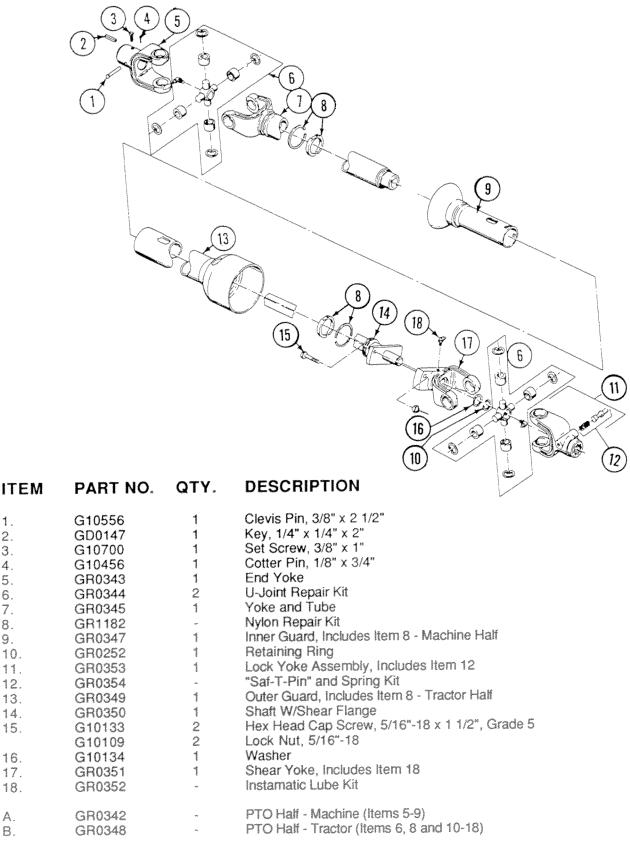
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WAC008

#### STYLE A

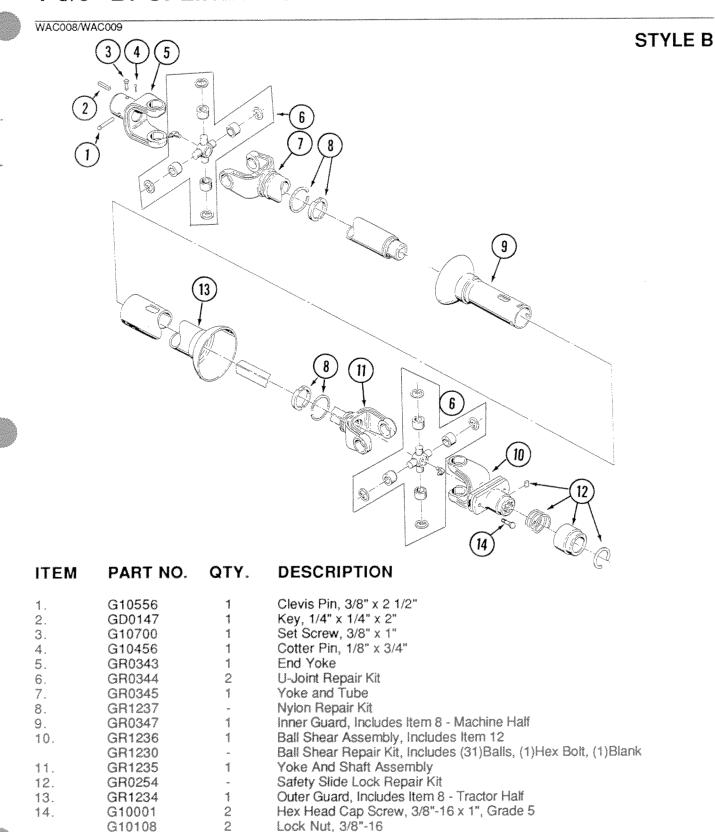


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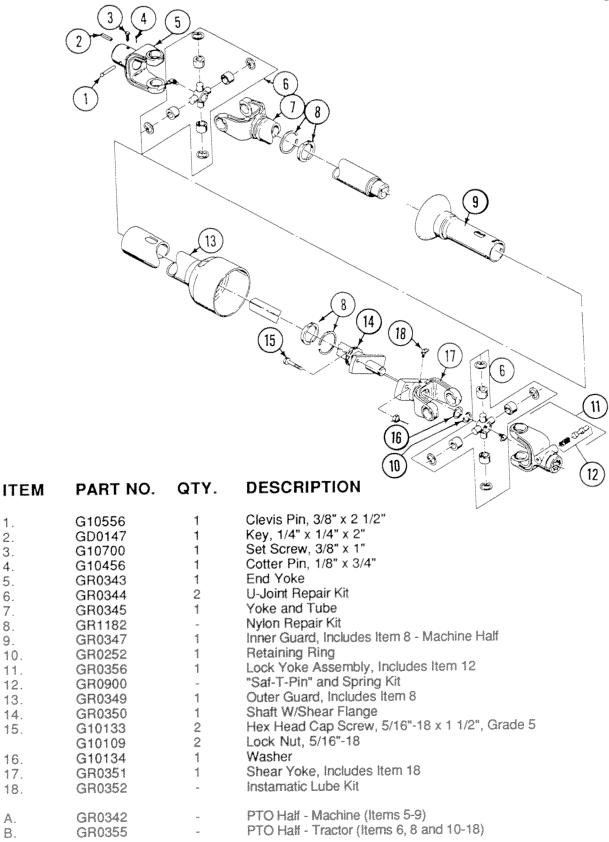


PTO Half - Machine (Items 5-9)

PTO Half - Tractor (Items 6, 8 and 10-14)

WAC008

#### STYLE A



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WAC008/WAC009

ITEM

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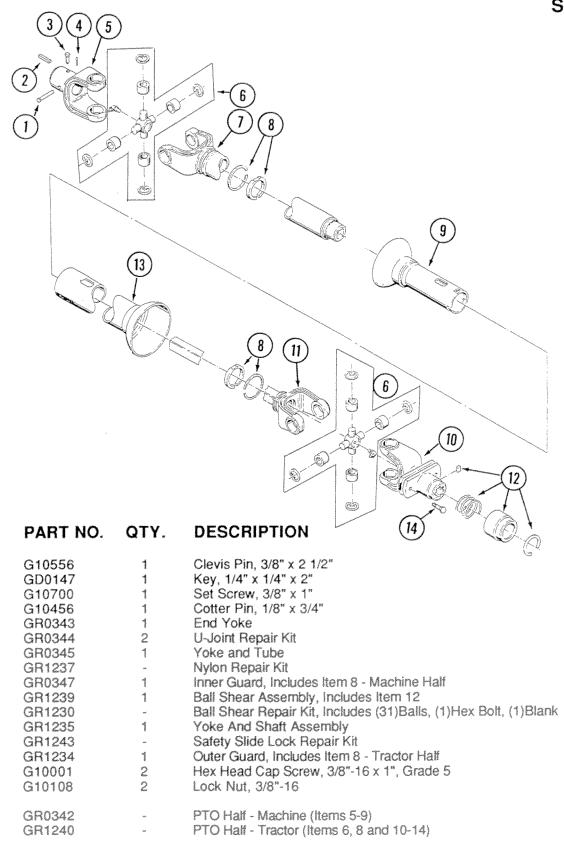
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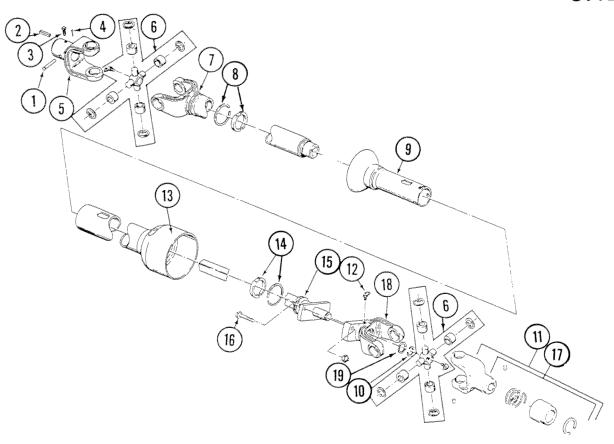
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STYLE B



WACOO9 STYLE A



ITEM	PART NO.	QTY.	DESCRIPTION
1.	G10563	1	Clevis Pin, 3/8" x 3 1/4"
2.	GD0144	1	Key, 3/8" x 3/8" x 2 1/2"
3.	G10700	1	Set Screw, 3/8" x 1"
4.	G10456	1	Cotter Pin, 1/8" x 3/4"
5.	GR0239	1	End Yoke
6.	GR0241	2	U-Joint Repair Kit
7.	GR0242	1	Yoke and Tube
8.	GR1181	wb.	Nylon Repair Kit
9.	GR0238	1	Inner Guard, Includes Items 8 - Machine Half
10.	GR0252	4	Retaining Ring
11.	GR0253	1	Lock Yoke Assembly, Includes Item 17
12.	GR0251	400	Instamatic Lube Kit
13.	GR0237	1	Outer Guard, Includes Item 14 - Tractor Half
14.	GR1182	**	Nylon Repair Kit
15.	GR0248	1	Shaft W/Shear Flange
16.	G10133	2	Hex Head Cap Screw, 5/16"-18 x 1 1/2", Grade 5
	G10109	2	Lock Nut, 5/16"-18
17.	GR0254	~	Safety Slide Lock Repair Kit
18.	GR0249	4	Shear Yoke, Includes Item 12
19.	G10134	4	Washer
A. B.	GR0240 GR0245	sub-	PTO Half - Machine (Items 5-9) PTO Half - Tractor (Items 10-19)
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WAC008/WAC009

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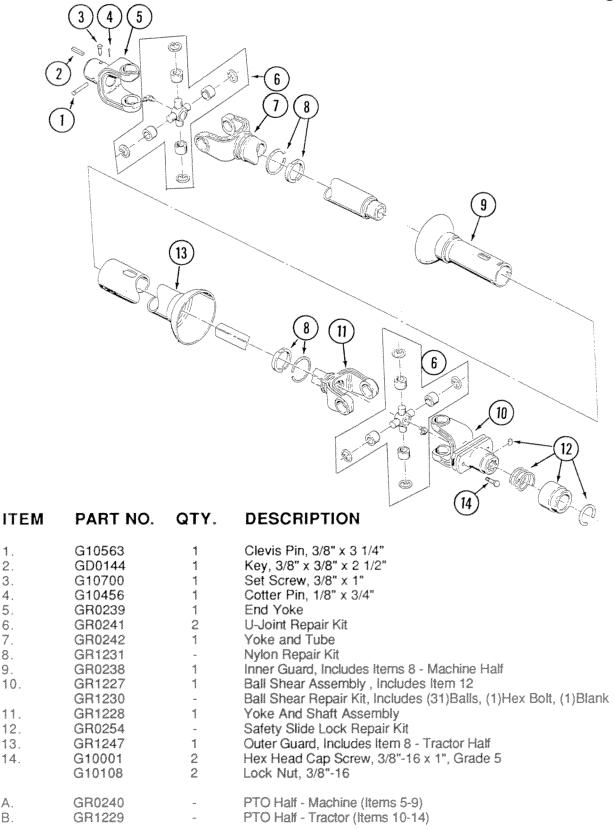
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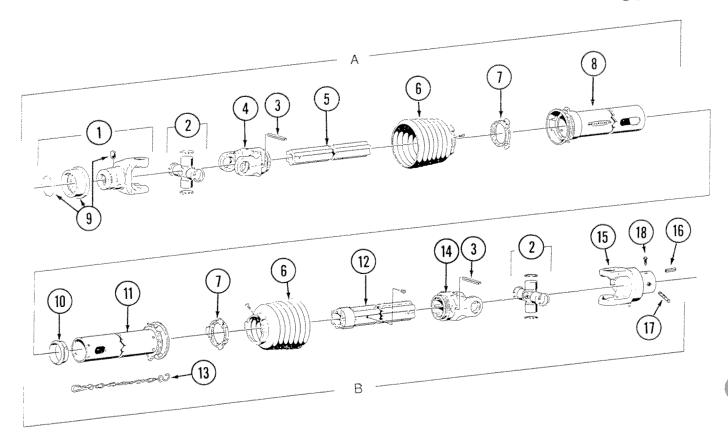
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STYLE B



WAC009

## STYLE C



ITEM	PART NO.	QTY.	DESCRIPTION
1.	GR1209	1	Yoke, Includes Item 9
2.	GR1210	2	Cross And Bearing Kit
3.	GR1211	2	Spring Pin
4.	GR1212	1	Inboard Yoke
5.	GR1213	1	Inner Profile
6.	GR1217	2	Shield Cone W/Screw
7.	GR1220	2	Bearing Ring
8.	GR1218	4	Outer Shield Tube
9.	GR1245	-	Quick Disconnect Kit
10.	GR1222	1	Support Bearing
11.	GR1219	4	Inner Shield Tube
12.	GR1214	age easi	Profile And Sleeve W/Grease Fitting
13.	GR1221	Amount	Safety Chain
14.	GR1215	4	Inboard Yoke
15.	GR1216	4	Clutch W/Shear Bolt And Nut
	G10049	-	Hex Head Cap Screw, 3/8"-16 x 2 1/2", Grade 5
	G10108	NE	Lock Nut, 3/8"-16
16.	GD0144	4	Key, 3/8" x 3/8" X 2 1/2"
17.	G10326	1	Hex Head Cap Screw, 3/8"-16 x 3 3/4"
	G10108	1	Lock Nut, 3/8"-16
18.	G10700	1	Set Screw, 3/8" x 1"
Α.	GR1225	**	PTO Half - Tractor (Items 1-9)
В.	GR1224	wb.	PTO Half - Machine (Items 2, 3, 6, 7 And 10-15)

WAC008

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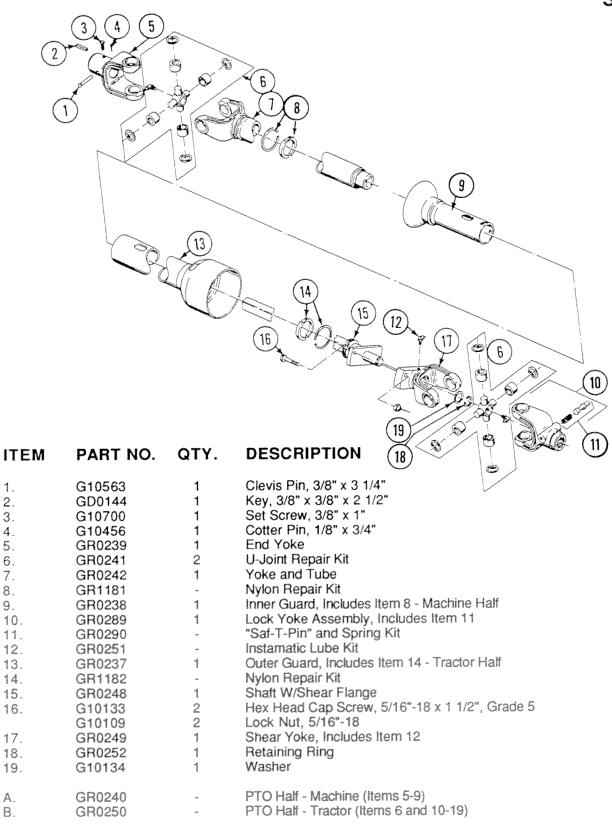
18.

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STYLE A



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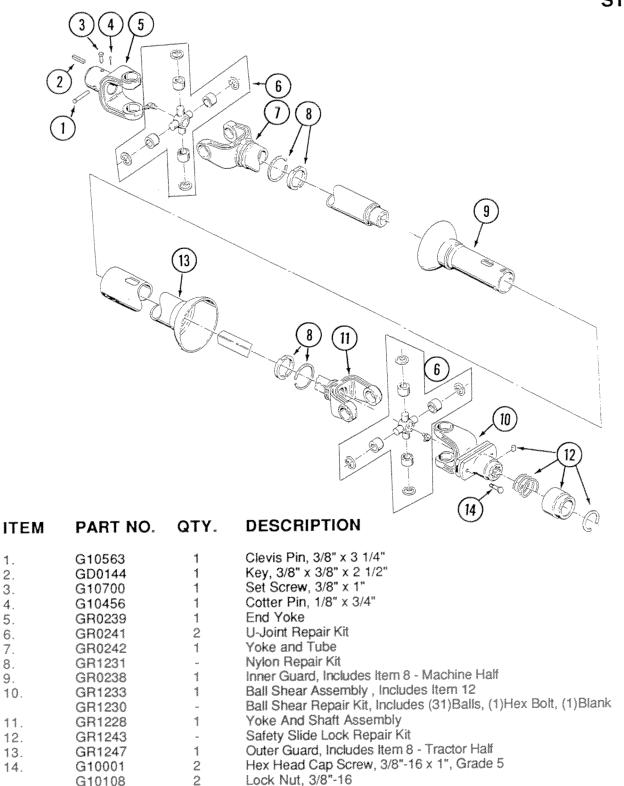
В.

GR0240

GR1232

840/1040

WAC008/WAC009 STYLE B



PTO Half - Machine (Items 5-9)

PTO Half - Tractor (Items 8 and 10-14)

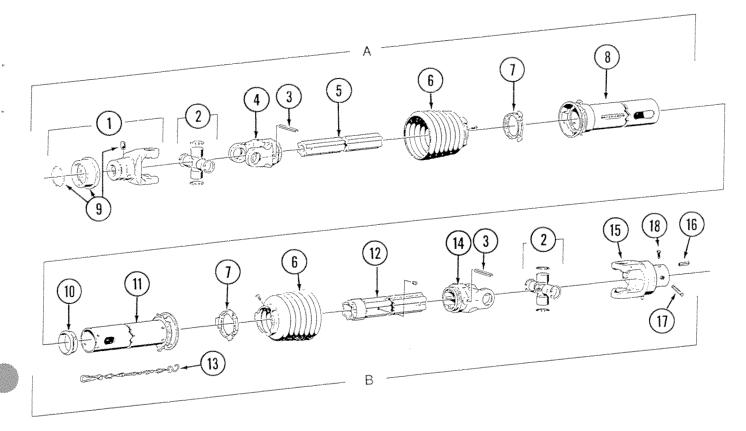
4/93 P5a

## PTO ASSEMBLY HEAVY DUTY 1 3/4"-20 SPLINED YOKE

840/1040

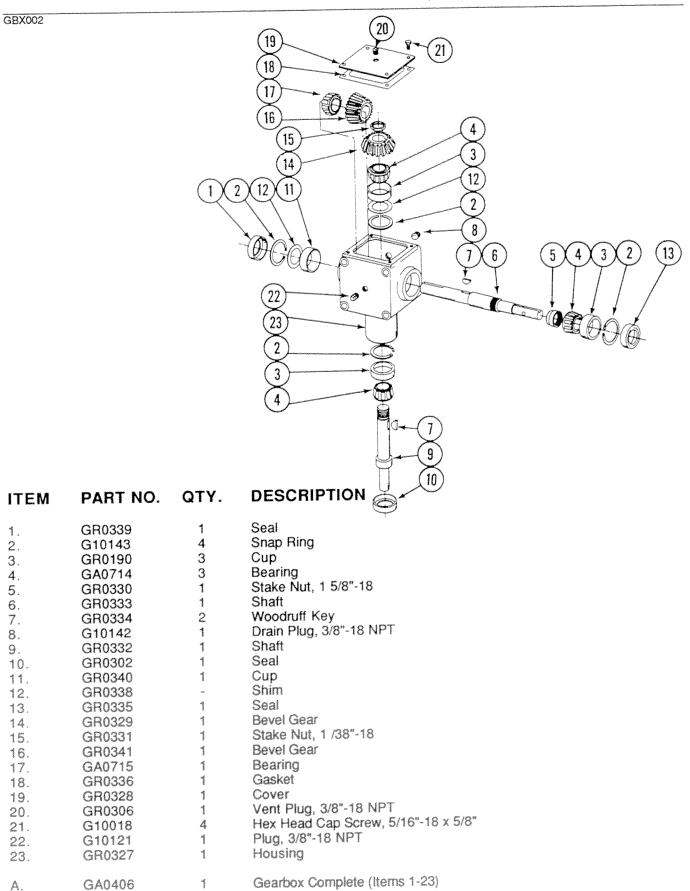
WAC008

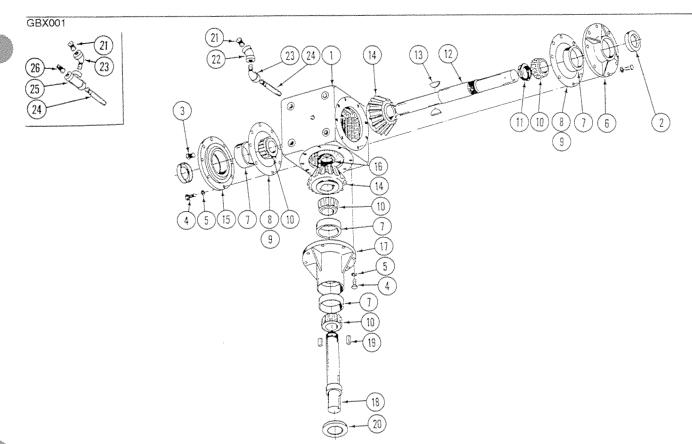
### STYLE C



ITEM	PART NO.	QTY.	DESCRIPTION
1.	GR1223	1	Yoke, Includes Item 9
2.	GR1210	2	Cross And Bearing Kit
3.	GR1211	2	Spring Pin
4.	GR1212	1	Inboard Yoke
5.	GR1213	1	Inner Profile
6.	GR1217	2	Shield Cone W/Screw
7.	GR1220	2	Bearing Ring
8.	GR1218	1	Outer Shield Tube
9.	GR1246	-	Quick Disconnect Kit
10.	GR1222	4	Support Bearing
11.	GR1219	1	Inner Shield Tube
12.	GR1214	- de	Profile And Sleeve W/Grease Fitting
13.	GR1221	4	Safety Chain
14.	GR1215	4	Inboard Yoke
15.	GR1216	April 1	Clutch W/Shear Bolt And Nut
	G10049	ten.	Hex Head Cap Screw, 3/8"-16 x 2 1/2", Grade 5
	G10108	880	Lock Nut, 3/8"-16
16.	GD0144	1	Key, 3/8" x 3/8" X 2 1/2"
17.	G10326	₹ <sub>0</sub>	Hex Head Cap Screw, 3/8"-16 x 3 3/4"
	G10108	of the same	Lock Nut, 3/8"-16
18.	G10700	Mysselv	Set Screw, 3/8" x 1"
Α.	GR1226	and-	PTO Half - Tractor (Items 1-9)
В.	GR1224	1004	PTO Half - Machine (Items 2, 3, 6, 7 And 10-15)

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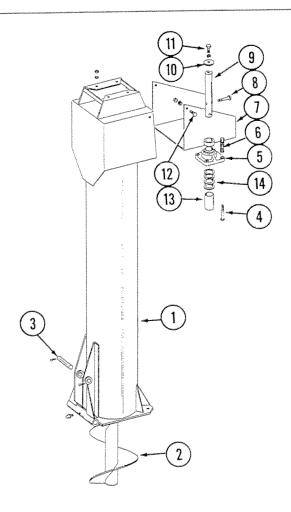




ITEM	PART NO.	QTY.	DESCRIPTION
1.	GR0291	1	Housing
2.	GR0302	2	Seal
3.	G10135	1	Plug, 1/4"-18 NPT
4.	G10037	24	Hex Head Cap Screw, 1/2"-13 x 1 1/4"
5.	G10228	24	Lock Washer, 1/2"
6.	GR0292	1	Cover
7.	GR0296	4	Cup
8.	GR0304	***	Shim
9.	GR0305	3	Gasket
10.	GA0699	4	Bearing
11.	GR0298	1	Stake Nut, 2"-18
12.	GR0300	1	Shaft
13.	GR0297	2	Woodruff Key, "G"
14.	GR0295	2	Bevel Gear
15.	GR0293	American	Cover
16.	GR0299	Apres	Stake Nut, 1 3/4"-18
17.	GR0294	Agents .	Hub
18.	GR0301	Amme A	Shaft
19.	GR0307	2	Key, 3/8" x 3/8" x 1 3/8"
20.	GR0303	1	Seal
21.	GR0306	4	Vent Plug, 3/8"-18 NPT
22.	G10122	-	Elbow, 45°
23.	G10123	1	Elbow, 3/8" 90°
24.	G10124	1	Pipe Nipple, 3/8"
25.	G10749	44	Pipe Tee, 3/8"
26.	G10142	, sin-	Hex Socket Plug, 3/8"
Α.	GA0624	Mar	Gearbox Complete (Items 1-21)

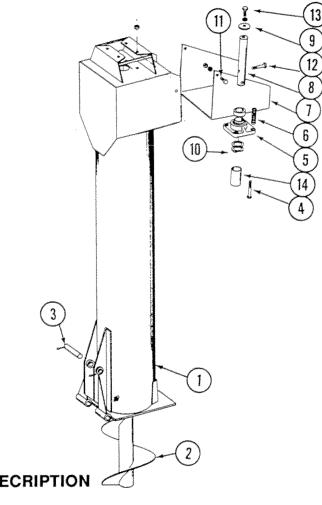
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WVA007



ITEM	PART NO.	QTY.	DESCRIPTION
1.	GR0966	1	Housing W/Grease Fitting
	G10641	ne	Grease Fitting, 1/8" NPT
2.	GA4534	1	Auger, Right Hand, 14" x 8'
3.	GD2161	1	Pin, 1 1/4" x 8 1/4"
	G10460	2	Cotter Pin, 1/4" x 2"
4.	GD6462	4	Special Bolt, 5/8"-11 x 7"
	G10107	4	Lock Nut, 5/8"-11
5.	GA0449	1	Bearing W/Lock Collar and Grease Fitting, 2"
	G10641	**	Grease Fitting, 1/8" NPT
	GR0265	94	Lock Collar W/Set Screw
	G10080	Art	Set Screw, 7/16"-14 x 7/16"
6.	GD6433	4	Spring
7.	GD6420	1	Extension
8.	G10013	2	Hex Head Cap Screw, 5/8"-11 x 3 1/2"
	G10107	2	Lock Nut, 5/8"-11
9.	GD6388	Province	Shaft, 2" x 14 3/4"
10.	GD2456	1	Washer
11.	G10025	1	Hex Head Cap Screw, 3/4"-10 x 1 1/2"
	G10231	1	Lock Washer, 3/4"
12.	G10001	2	Hex Head Cap Screw, 3/8"-16 x 1"
* *************************************	G10108	2	Lock Nut, 3/8"-16
13.	GD3457-06	*	Sleeve, 7 1/4"
14.	G10234	ale.	Machine Bushing, 10 Gauge (As Required)

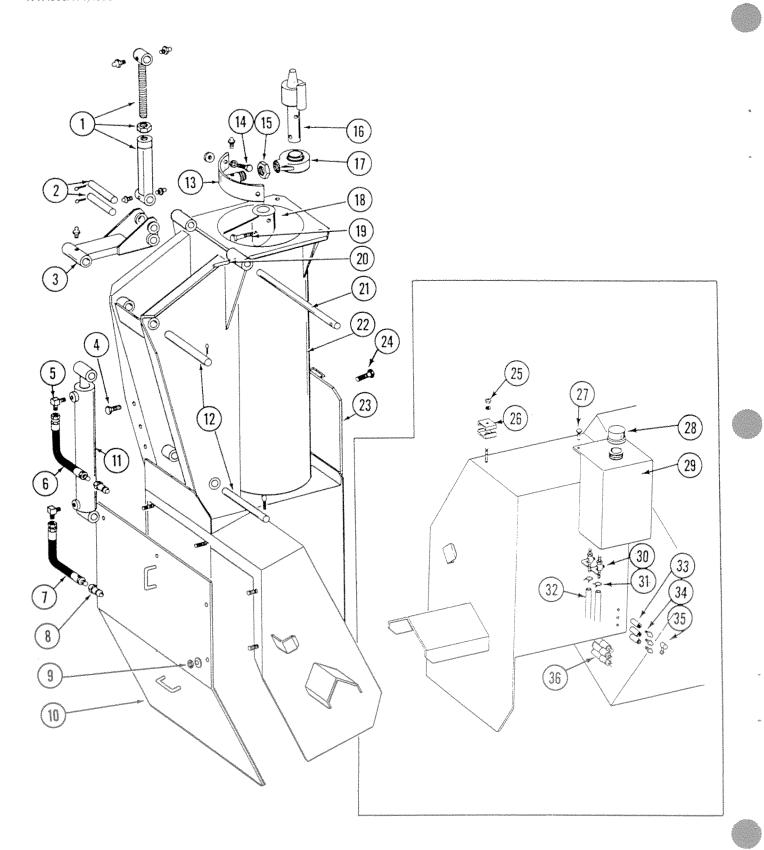
WVA004/WVA010



ITEM	PART NO.	QTY.	DECRIPTION $\angle$
1.	GR1060	1	Housing W/Grease Fittings
	G10641	dor	Grease Fittings, 1/8" NPT
2.	GA4538	1	Auger, Right Hand, 16" x 8'
3.	GD0653	1	Pin, 1 1/4" x 7 3/4"
	G10460	2	Cotter Pin, 1/4" x 2"
4.	GD6462	4	Special Bolt, 5/8"-11 x 7"
	G10107	4	Lock Nut, 5/8"-11
5.	GA0448	1	Bearing W/Lock Collar and Grease Fittings, 2 7/16"
	G10641	49	Grease Fitting, 1/8" NPT
	GR0264	No	Lock Collar W/Set Screw
	G10080	-	Set Screw, 7/16"-14 x 7/16"
6.	GD6433	4	Spring
7.	GD8017	4	Extension
8.	GD7069	1	Shaft, 2 7/16" x 11 1/2"
9.	GD2456	4	Washer
10.	G10359	46	Machine Bushing, 18 Gauge (As Required)
	G10360	**	Machine Bushing, 10 Gauge (As Required)
44.	G10001	2	Hex Head Cap Screw, 3/8"-16 x 1"
	G10108	2	Lock Nut, 3/8"-16
12.	G10011	2	Hex Head Cap Screw, 5/8"-11 x 5 1/2"
	G10107	2	Lock Nut, 5/8"-11
13.	G10025	of the state of th	Hex Head Cap Screw, 3/4"-10 x 1 1/2"
	G10231	desce	Lock Washer, 3/4"
14.	GD8038-02	No.	Sleeve, 3 1/4", (Where Applicable)
	GD8038-04	700-	Sleeve, 3" (Where Applicable)

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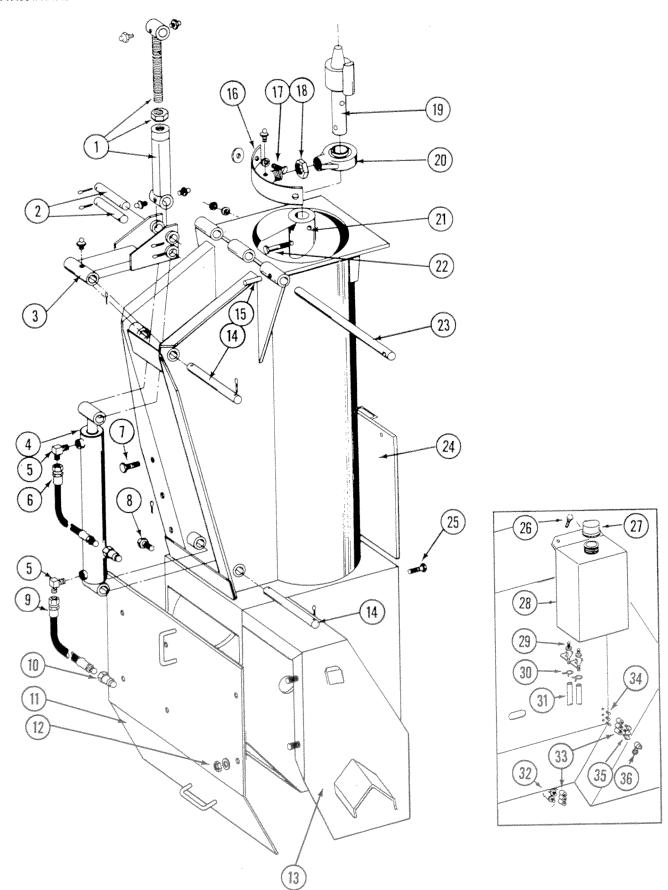
WVA008/WVA006



ITEM	PART NO.	QTY.	DESCRIPTION
1.	GA4160	1	Fold Arm W/Grease Fittings and Jam Nut
	G10641	*	Grease Fitting, 1/8" NPT
	G10087	**	Jam Nut, 1 1/2"-12
2.	GD4108	2	Pin, 1 1/4" x 7"
	G10460	4	Cotter Pin, 1/4" x 2"
3.	GA4174	1	Folding Link W/Grease Fitting
	G10641	**	Grease Fitting, 1/8" NPT
4.	G10007	-	Hex Head Cap Screw, 5/8"-11 x 1 1/2"
	G10230	•	Lock Washer, 5/8"
	G10104	rise	Hex Nut, 5/8"-11
5.	G6801-06-08	2	Elbow, 9/16"-18 JIC to 3/4"-16 O-Ring
6.	GA1112	1	Hose Assembly, 1/4" x 138"
7.	GA1111	1	Hose Assembly, 1/4" x 120"
8.	GD4086	2	Pioneer Tip
9.	G10229	6	Lock Washer, 3/8"
	G10101	6	Hex Nut, 3/8"-16
10.	GA4208	1	Cover
11.	004044	~	See "Vertical Auger Fold Cylinder, 640"
12.	GD4014	2	Pin, 1 1/4" x 12"
40	G10460	4 1	Cotter Pin, 1/4" x 2"
13.	GR0965		Bearing Hanger W/Grease Fitting
4.4	G10641	2	Grease Fitting, 1/8" NPT Hex Head Cap Screw, 5/8"-11 x 2"
14.	G10008	2	Washer, 5/8" USS
	G10218 G10230	2	Lock Washer, 5/8"
	G10230	2	Hex Nut, 5/8"-11
15.	G10104 G10115	1	Lock Nut, 1" NPT
16.	GA4163	1	Bullet
17.	GA4103 GA0451	1	Bearing, 2"
18.	GA4535	1	Auger, Right Hand, 14" x 6' 1"
19.	G10013	2	Hex Head Cap Screw, 5/8"-11 x 3 1/2"
13.	G10013	2	Lock Nut, 5/8"-11
20.	G10610	1	Spring Pin, 3/8" x 2"
21.	GD6417	1	Shaft, 1 1/4" x 17"
22.	GR0967	1	Housing
23.	GA4168	1	Door
24.	G10017	2	Hex Head Cap Screw, 1/2"-13 x 1 1/2"
Sour Tr.	G10228	2	Lock Washer, 1/2"
	G10102	2	Hex Nut, 1/2"-13
25.	G10232	-01	Lock Washer, 5/16"
~ ·	G10106	800	Hex Nut, 5/16"-18
26.	GD5892	400*	Hose Clamp
27.	G10019	2	Hex Head Cap Screw, 5/16"-18 x 1"
Radio V v	G10232	2	Lock Washer, 5/16"
	G10219	2	Washer, 5/16" USS
	G10106	2	Hex Nut, 5/16"-18
28.	GA4112	1	Vented Cap, 1 1/2"
29.	GA4189	1	Tank
30.	GA4110	2	Hose Cock, Brass
31.	G10426	2	Hose Clamp
32.	GD6279-04	- Ann	Clear Plastic Hose, 17"
33.	G10125	3	Pipe Coupling
34.	G10641	3	Grease Fitting, 1/8" NPT
35.	G10434	3	Cap Plug
36.	GA0504	3	Grease Hose, 24"
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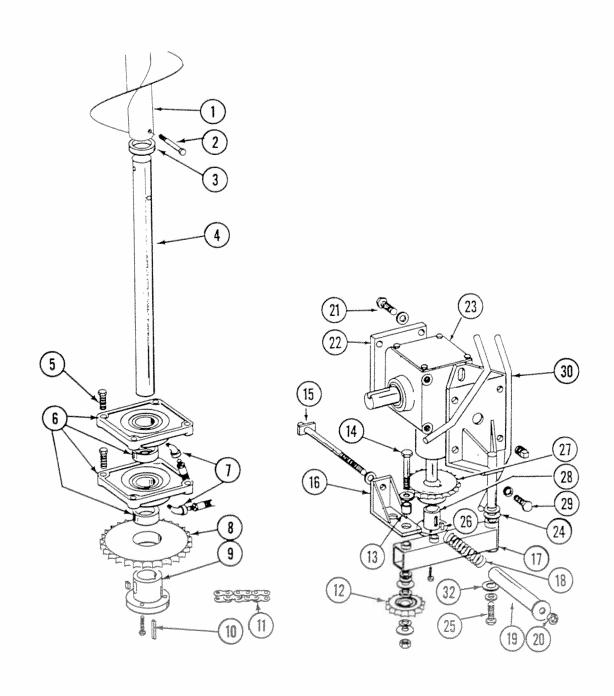
WVA001/WVA011



P12

ITEM	PART NO.	QTY.	DESCRIPTION
1.	GA4160	1	Fold Arm W/ Grease Fittings and Jam Nut
	G10641	197	Grease Fitting, 1/8" NPT
	G10087	*	Jam Nut, 1 1/2"-12
2.	GD4108	2	Pin, 1 1/4" x 7"
	G10460	4	Cotter Pin, 1/4" x 2"
3.	GA4174	1	Linkage W/Grease Fitting Grease Fitting, 1/8" NPT
4.	G10641	and a	See "Vertical Auger Fold Cylinder, 840/1040"
5.	G6801-08	2	Elbow, 3/4"-16 JIC to 3/4"-16 O-Ring
6.	GA1015	1	Hose Assembly, 3/8" x 138"
7.	G10007	486	Hex Head Cap Screw, 5/8"-11 x 1 1/2"
	G10230	-	Lock Washer, 5/8"
	G10104	**	Hex Nut, 5/8"-11
8.	G10025	**	Hex Head Cap Screw, 3/4"-10 x 1 1/2"
	G10231	-	Lock Washer, 3/4"
0	G10105	w .4	Hex Nut, 3/4"-10 Hose Assembly, 3/8" x 120"
9. 10.	GA1014 GD4086	1 2	Pioneer Tip
11.	GA5769	1	Cover
12.	G10229	6	Lock Washer, 3/8"
* 5000 +	G10101	6	Hex Nut, 3/8"-16
13.	GR1061	1	Housing
14.	GD4014	2	Pin, 1 1/4" x 12"
	G10460	4	Cotter Pin, 1/4" x 2"
15.	G10610	1	Spring Pin, 3/8" x 2"
16.	GA0511	1	Mount W/Grease Fitting
17.	G10641	2	Grease Fitting, 1/8" NPT Hex Head Cap Screw, 1/2"-13 x 2"
1/.	G10016 G10216	2	Washer, 1/2" USS
	G10210	2	Lock Washer, 1/2"
	G10102	2	Hex Nut, 1/2"-13
18.	G10116	1	Lock Nut, 1 1/4" NPT
19.	GA0423	1	Bullet
20.	GA0452	1	Bearing W/Grease Fitting, 2 7/16"
	G10641	-	Grease Fitting, 1/8" NPT
21.	GA4539	1	Auger, Right Hand, 16" x 5'6"
22.	G10011	2	Hex Head Cap Screw, 5/8"-11 x 5 1/2"
00	G10107	2	Lock Nut, 5/8"-11 Shaft, 1 1/4" x 22 3/4"
23. 24.	GD4012 GA5773	4	Door
25.	G10017	2	Hex Head Cap Screw, 1/2"-13 x 1 1/2"
	G10228	2	Lock Washer, 1/2"
	G10102	2	Hex Nut, 1/2"-13
26.	G10019	2	Hex Head Cap Screw, 5/16"-18 x 1"
	G10232	2	Lock Washer, 5/16"
	G10219	2	Washer, 5/16" USS
	G10106	2	Hex Nut, 5/16"-18
27.	GA4112	1	Vented Cap, 1 1/2"
28.	GA4108	1 2	Tank
29. 30.	GA4110 G10426	2	Hose Cock, Brass Hose Clamp
31.	GD6279-04	en.	Clear Plastic Hose, 17"
32.	GA0504	3	Grease Hose, 24"
33.	G10125	3	Pipe Coupling
34.	G10127	3	Close Nipple, 1/8" NPT x 1 1/2"
35.	G10641	3	Grease Fitting, 1/8" NPT
36.	G10434	3	Cap Plug

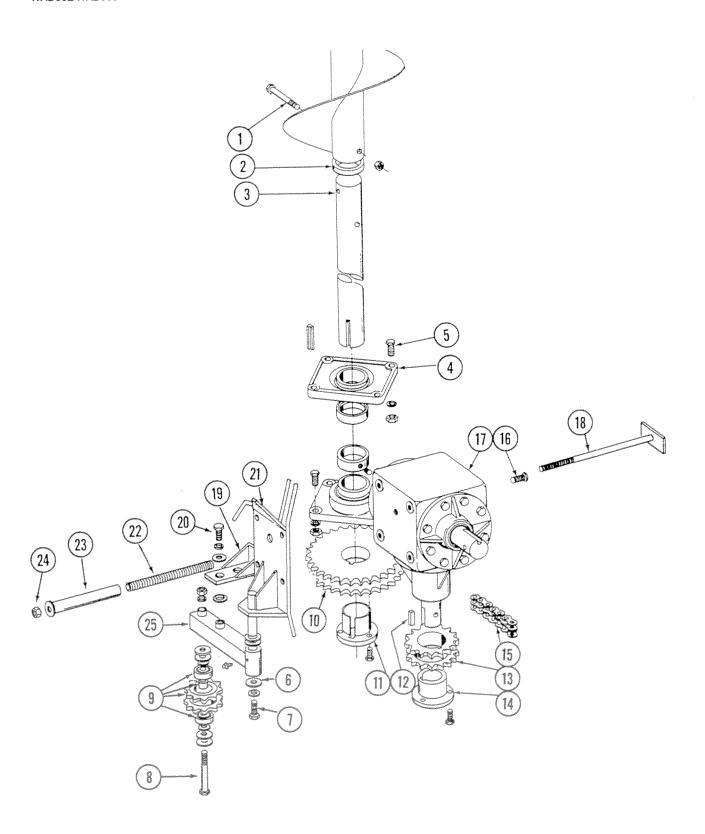
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	ITEM	PART NO.	QTY.	DESCRIPTION
athlia	1.		-	See "Vertical Auger/Lower Section, 640"
	2.	G10013	2	Hex Head Cap Screw, 5/8"-11 x 3 1/2"
	News 2	G10107	2	Lock Nut, 5/8"-11
	3.	GD3457-04	1	Sleeve
	4.	GD6387	1	Shaft, 2" x 20"
	5.	G10008	8	Hex Head Cap Screw, 5/8"-11 x 2"
	J.	G10230	8	Lock Washer, 5/8"
		G10104	8	Hex Nut, 5/8"-11
,	6.	GA0449	2	Bearing W/Lock Collar, 2"
	0.	GR0265	Eur.	Lock Collar W/Set Screws
		G10080		Set Screw, 7/16"-14 x 7/16"
	7		2	Elbow, 1/8" NPT
	7.	G10423	1	Sprocket, 26 Tooth
	8.	GD4117	a de la companya de l	Bushing W/HHCSs and Set Screw, 2"
	9.	GA0713	3	Hex Head Cap Screw, 3/8"-16 x 1 1/4"
		G10004	-	
		G10141		Set Screw, 1/4"-20 x 3/4"
	10.	GD0148	1	Key, 1/2" x 1/2" x 2 1/2"
	11.	G3304-63	1	Chain, No. 80, 63 Pitch Including Connector Link and
				Offset Link
		GR0197	ws.	Connector Link, No. 80
		GR0202	MA.	Offset Link, No. 80
	12.	GD4119	1	Idler Sprocket W/Bearing, 12 Tooth
		GA0593	20%	Bearing
	13.	GD6425-01	1	Bushing
	14.	G10058	1	Hex Head Cap Screw, 3/4"-10 x 5 1/2"
		G10215	5	Machine Bushing, 3/4"
		G10218	3	Washer, 3/4" USS
		G10112	1	Lock Nut, 3/4"-10
	15.	GA4178	1	Idler Bolt
		G10217	1	Washer, 5/8" USS
	16.	GA4179	1	Bracket
	17.	GA4690	1	Arm W/Grease Fitting
		G10641	*	Grease Fitting, 1/8" NPT
	18.	GD6337	1	Spring
	19.	GA4180	1	Spring Housing
	20.	G10730	1	Nylon Lock Nut, 5/8"-11
	21.	G10039	4	Hex Head Cap Screw, 1/2"-13 x 1 3/4"
	and a	G10228	4	Lock Washer, 1/2"
	22.	GD6408	1	Spacer
	23.		***	See "Gearbox, 640"
	24.	G10233	1000	Machine Bushing, 10 Gauge (As Required)
	See TV ,	G10526		Machine Bushing, 16 Gauge (As Required)
	25.	G10438	4	Hex Head Cap Screw, 1/2"-13 x 3/4"
	&- <b>♥</b> .	G10228	1	Lock Washer, 1/2"
	26.	GD0147	ar Marie	Key, 1/4" x 1/4" x 2"
			49	Sprocket, 15 Tooth
	27.	GD4118	1	Bushing W/HHCSs, 1 1/4"
	28.	GD4121	8	Hex Head Cap Screw, 5/16"-16 x 1"
	00	G10019	4	
	29.	G10438	1	Hex Head Cap Screw, 1/2"-13 x 3/4"
	0.0	G10228	1	Lock Washer, 1/2"
	30.	GA4734	April 1	Idler Plate

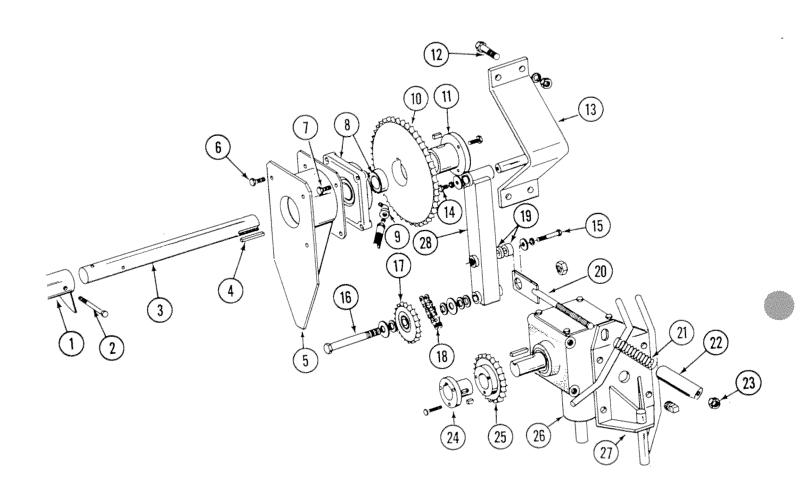
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WAD002/WAD006



ITEM	PART NO.	QTY.	DESCRIPTION
1.	G10011	2	Hex Head Cap Screw, 5/8"-11 x 5 1/2"
	G10107	2	Lock Nut, 5/8"-11
2.	GD8038-03	1	Spacer, 1 3/4"
3.	GD6885	1	Shaft, 2 7/16" x 22"
4.	GA0448	2	Bearing W/Lock Collar, Set Screw and Grease Fitting, 2 7/16"
	GR0264	-	Lock Collar, 2 7/16"
	G10080	with	Set Screw, 7/16"-14 x 7/16"
	G10641	**	Grease Fitting, 1/8" NPT
5.	G10008	8	Hex Head Cap Screw, 5/8"-11 x 2"
	G10230	8	Lock Washer, 5/8"
	G10104	8	Hex Nut, 5/8"-11
6.	G10233	Store	Machine Bushing, 10 Gauge (As Required)
	G10526		Machine Bushing, 18 Gauge (As Required)
7.	G10438	1	Hex Head Cap Screw, 1/2"-13 x 3/4"
	G10228	1	Lock Washer, 1/2"
8.	G10058	1_	Hex Head Cap Screw, 3/4"-10 x 5 1/2"
	G10215	5	Machine Bushing, 3/4"
	G10218	3	Washer, 3/4" USS
_	G10112	1	Lock Nut, 3/4"-10
9.	GA0447	1	Idler Sprocket W/Spacer and Bearings
	GR0259	w w	Spacer
	GA0593	**	Bearing Spreaket 20 Teeth
10.	GD1357	1	Sprocket, 30 Tooth
11.	GD1358	1	Bushing W/HHCSs and Key, 2 7/16"
	GR0258	1000	Offset Key Hex Head Cap Screw, 3/8"-16 x 1 1/4"
10	G10004	4	Key, 3/8" x 3/8" x 2 1/2"
12.	GD0144	1 -	Key, 3/8" x 3/8" x 1 7/8"
10	GD9231		Sprocket, 16 Tooth
13.	GD4077 GD4079	1	Bushing W/HHCSs, 1 3/4"
14.	G10004	*	Hex Head Cap Screw, 3/8"-16 x 1 1/4"
15.	G3301-65	1	Chain, No. 80-2, 65 Pitch Including Connector
15.	G3301-03	1	and Offset Link
	GR0206	Aller	Offset Link, No. 80-2
	GR0198	**	Connector Link, No. 80-2
16.	G10055	4	Hex Head Cap Screw, 5/8"-11 x 1 1/4"
17.	G10055	***	See "Gearbox, 840/1040"
18.	GA4178	1	Idler Bracket
19.	GA4691	1	Bracket
20.	G10543	4	Hex Head Adjusting Bolt, 3/4"-10 x 3"
20.	G10231	1	Lock Washer, 3/4"
	G10231	2	Washer, 3/4" USS
21.	GA4692	1	Idler Plate
22.	GD6337	4	Spring
23.	GA4180	1	Spring Housing
24.	G10730	1	Nylon Lock Nut, 5/8"-11
25.	GA4690	4	Arm W/Grease Fitting
tus W.F.	G10641	8.	Grease Fitting, 1/8" NPT

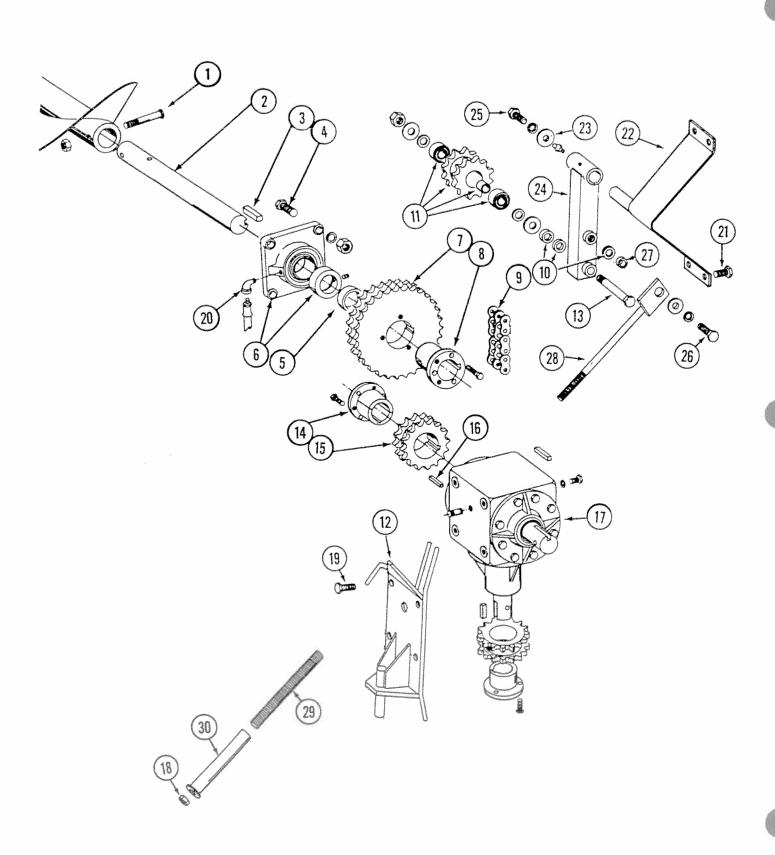
WADOO4



ITEM	PART NO.	QTY.	DESCRIPTION
1.		***	See "Horizontal Augers And Bearings, 640"
2.	G10013	2	Hex Head Cap Screw, 5/8"-11 x 3 1/2"
	G10107	2	Lock Nut, 5/8"-11
3.	GD1346	1	Shaft, 2" x 18 1/2"
4.	GD0148	1	Key, 1/2" x 1/2" x 2 1/2"
5.	GA4171	1	Bearing Spacer
6.	G10055	4	Hex Head Cap Screw, 5/8"-11 x 1 1/4"
	G10230	4	Lock Washer, 5/8"
	G10104	4	Hex Nut, 5/8"-11
7.	G10005	4	Hex Head Cap Screw, 5/8"-11 x 1 3/4"
	G10230	4	Lock Washer, 5/8"
	G10104	4	Hex Nut, 5/8"-11
8.	GA0449	1	Bearing W/Lock Collar, 2"
	GR0265	nor .	Lock Collar W/Set Screws
	G10080	and .	Set Screw, 7/16"-14 x 7/16"
9.	G10423	1	Elbow, 1/8" NPT
10.	GD6392	1	Sprocket, 34 Tooth
11.	GD4123	1	Bushing W/HHCSs, 2"
	G10004	-de	Hex Head Cap Screw, 3/8"-16 x 1 1/4"
12.	G10017	4	Hex Head Cap Screw, 1/2"-13 x 1 1/2"
	G10228	4	Lock Washer, 1/2"
	G10102	4	Hex Nut, 1/2"-13
13.	GA4182	1	Upper Mounting Plate
14.	G10438	1	Hex Head Cap Screw, 1/2"-13 x 3/4"
	G10228	1	Lock Washer, 1/2"
15.	G10028	1	Hex Head Cap Screw, 3/4"-10 x 3"
	G10215	1	Machine Bushing, 3/4"
	G10218	1	Washer, 3/4" USS
16.	G10058	1	Hex Head Cap Screw, 3/4"-10 x 5 1/2"
	G10215	5	Machine Bushing, 3/4"
	G10218	3	Washer, 3/4" USS
	G10112	1	Lock Nut, 3/4"-10
17.	GD4119	1	Idler Sprocket W/Bearing
	GA0531	464	Bearing .
18.	G3304-51	1	Chain, No. 80, 51 Pitch Including Connector Link and
			Offset Link
	GR0197	tie .	Connector Link, No. 80
	GR0202		Offset Link, No. 80
19.	GD6425-01	2	Bushing
20.	GA4177	1	Idler Bar
21.	GD6337	1	Spring
22.	GA4180	4	Spring Housing
23.	G10730	48	Nylon Lock Nut, 5/8"-11
24.	GD4120	1	Bushing W/HHCSs and Key, 1 1/2"
	G10019	-	Hex Head Cap Screw, 5/16"-16 x 1"
_	GR0361	**	Key
25.	GD4118	1	Sprocket, 15 Tooth
26.		-	See "Gearbox, 640"
27.		**	See "Vertical Auger Drive, 640"
	CAACOO	1	Arm W/Grease Fitting
28.	GA4690 G10641		Grease Fitting, 1/8" NPT

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WAD003/WAD006WHA002

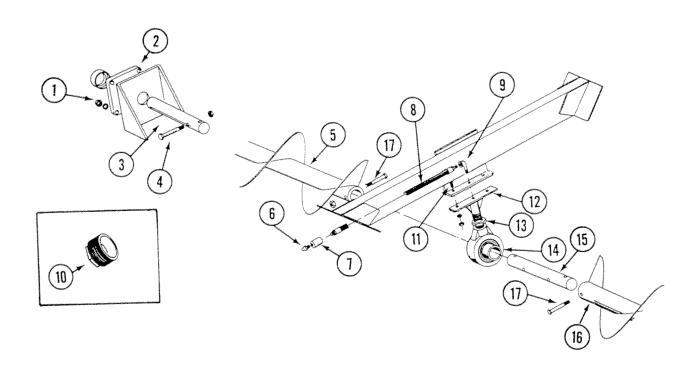


## HORIZONTAL AUGER DRIVE

ITEM	PART NO.	QTY.	DESCRIPTION
1.	G10036	2	Hex Head Cap Screw, 5/8"-11 x 4"
	G10107	2	Lock Nut, 5/8"-11
2.	GD1346	1	Shaft, 2" x 18 1/2"
3.	GD1435	1	Key, 1/2" x 1/2" x 3"
4.	G10009	4	Hex Head Cap Screw, 5/8"-11 x 2 1/2"
	G10230	4	Lock Washer, 5/8"
	G10104	4	Hex Nut, 5/8"-11
5.	GD4016	1	Spacer
6.	GA0449	1	Bearing W/Lock Collar, 2"
	GR0265	6064	Lock Collar W/Set Screws
	G10080	with	Set Screw, 7/16"-14 x 7/16"
7.	GD1357	1	Sprocket, 30 Tooth
8.	GD4123	1	Bushing W/HHCSs, 2"
	G10004	660	Hex Head Cap Screw, 3/8"-16 x 1 1/4"
9.	G3301-47	1	Chain, No. 80-2, 47 Pitch Including Connector
			and Offset Link
	GR0206	66	Offset Link, No. 80-2
	GR0198	***	Connector Link, No. 80-2
10.	GD2951	3	Sleeve
11.	GA0447	1	Sprocket W/Spacer and Bearings
	GA0593	Ner	Bearing
	GR0259		Spacer
12.		MA.	See "Vertical Auger Drive, 840"
13.	G10400	*	Hex Head Cap Screw, 3/4"-10 x 6 1/2"
	G10215	2	Machine Bushing, 3/4"
	G10218	2	Washer, 3/4" USS
	G10112	4	Lock Nut, 3/4"-10
14.	GD4079	1	Bushing W/HHCSs, 1 3/4"
	G10004	alace .	Hex Head Cap Screw, 3/8"-16 x 1 1/4"
15.	GD4077	1	Sprocket, 16 Tooth
16.	GD0144	1	Key, 3/8" x 3/8" x 2 1/2"
	GD9221	wak	Key, 3/8" x 3/8" x 1 7/8"
17.		m×	See "Gearbox, 840/1040"
18.	G10730	1	Nylon Lock Nut, 5/8"-11
19.	G10443	4	Hex Head Cap Screw, 5/8"-11 x 1"
20.	G10423	1	Elbow, 1/8" NPT
21.	G10017	4	Hex Head Cap Screw, 1/2"-13 x 1 1/2"
	G10228	4	Lock Washer, 1/2"
	G10102	4	Hex Nut, 1/2"-13
22.	GA4182		Upper Mounting Plate
23.	G10233	sele	Machine Bushing, 10 Gauge (As Required)
	G10526	46e	Machine Bushing, 18 Gauge (As Required)
24.	GA4690	4	Arm W/Grease Fitting
	G10641	es.	Grease Fitting, 1/8" NPT
25.	G10438	1	Hex Head Cap Screw, 1/2"-13 x 3/4"
	G10228	Agrana .	Lock Washer, 1/2"
26.	G10028	4	Hex Head Cap Screw, 3/4"-10 x 3"
	G10231	1	Lock Washer, 3/4"
	G10218	1	Washer, 3/4" USS
27.	GD6425-01	1	Bushing
28.	GA4177	- sample	Idler Bar
29.	GD6337	Appara 4	Spring
30.	GA4180	4	Spring Housing

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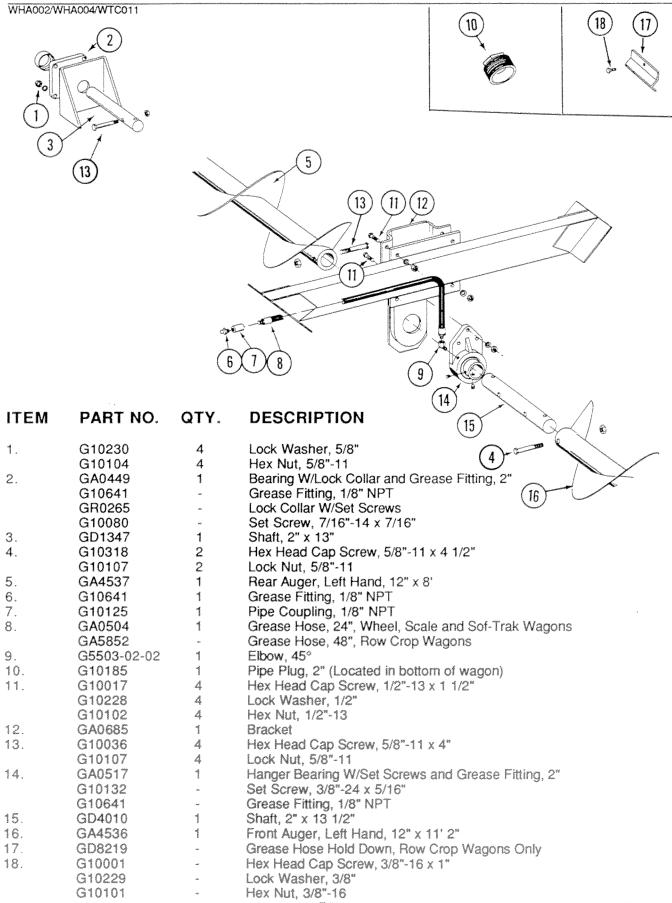
WHA003/WHA004



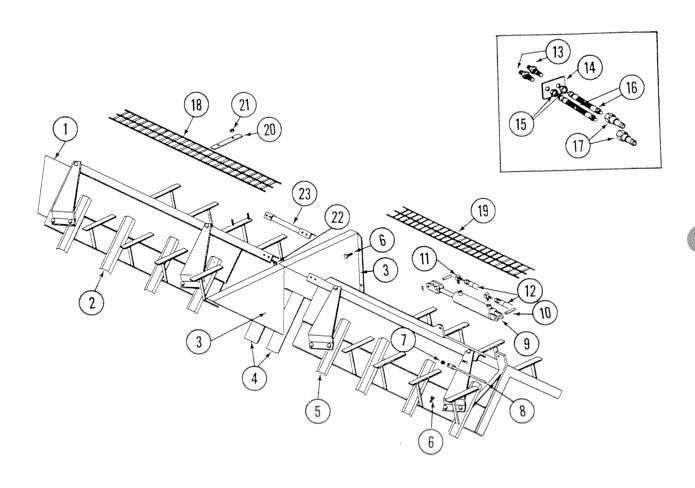
ITEM	PART NO.	QTY.	DESCRIPTION
1.	G10228	4	Lock Washer, 1/2"
• •	G10102	4	Hex Nut, 1/2"-13
2.	GA0450	1	Bearing W/Lock Collar and Grease Fitting, 1 1/2"
mae e	G10641	60-	Grease Fitting, 1/8" NPT
	GR0266	**	Lock Collar W/Set Screws
	G10072	40	Set Screw, 3/8"-16 x 3/8"
3.	GD1447	1	Shaft, 1 1/2" x 16 1/2"
4.	G10033	2	Hex Head Cap Screw, 1/2"-13 x 3 1/2"
4.	G10111	2	Lock Nut, 1/2"-13
5.	GA4533	4	Rear Auger, Left Hand, 12" x 6'
6.	G10641	4	Grease Fitting, 1/8" NPT
7.	G10125	1	Pipe Coupling, 1/8" NPT
8.	GA0504	1	Grease Hose, 24"
9.	G10423	4	Elbow, 1/8"
10.	G10185	and the same of th	Pipe Plug, 2" (Located in bottom of wagon)
11.	G10039	2	Hex Head Cap Screw, 1/2"-13 x 1 3/4"
* * *	G10228	2	Lock Washer, 1/2"
	G10102	2	Hex Nut, 1/2"-13
12.	GA4147	***	Bracket
13.	G10115	dece	Lock Nut, 1" NPT
14.	GA0451	4	Hanger Bearing, 2"
15.	GD4010	1	Shaft, 2" x 13 1/2"
16.	GA4532	1	Front Auger, Left Hand, 12" x 7' 2 1/2"
17.	G10036	4	Hex Head Cap Screw, 5/8"-11 x 4"
*	G10107	4	Lock Nut, 5/8"-11

### HORIZONTAL AUGERS AND BEARINGS

#### 840/1040



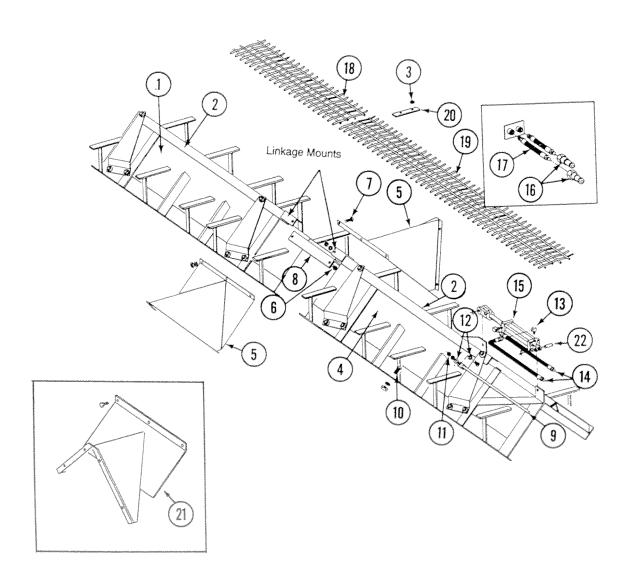
WTC003/WTC006



ITEM	PART NO.	QTY.	DESCRIPTION
1.	GD6307	4	Сар
2.	GA4134	1	Rear Tunnel Cover Assembly
3.	GD6308	2	Bearing Cover
4.	GD6309	1	Plate, 6"
	GD6985	1	Plate, 7"
5.	GA4135	1	Front Tunnel Cover Assembly
6.	G10001	16	Hex Head Cap Screw, 3/8"-16 x 1"
	G10229	16	Lock Washer, 3/8"
	G10101	16	Hex Nut, 3/8"-16
7.	G10111	1	Lock Nut, 1/2"-13
8.	GA4085	1	Sight Gauge Rod
9.			See "Grain Flow Control Cylinder, 640"
10.	GR0962	2	Pin, 1" x 3 3/8"
	GR0193	4	Hair Pin Clip
11.	G6801-06-08	2	Elbow
12.	GA1137	2 2 1	Hose Assembly, 1/4" x 23"
13.	G2700-06-06	2	Bulkhead Tube Unit, 9/16"-18
14.	GD6322	1	Plate
15.	G306-06	2	Lock Nut, 9/16"-18
16.	GA1111	2 2 2	Hose Assembly, 1/4" x 120"
17.	GD4086		Pioneer Tip
18.	GA4186	1	Rear Screen, 78"
19.	GA4185	1	Front Screen, 66"
20.	GD6447	12	Clamp
21.	G10108	24	Lock Nut, 3/8"-16
22.	G10017	8	Hex Head Cap Screw, 1/2"-13 x 1 1/2"
	G10228	8	Lock Washer, 1/2"
	G10102	8	Hex Nut, 1/2"-13
23.	GA4088	1	Tie

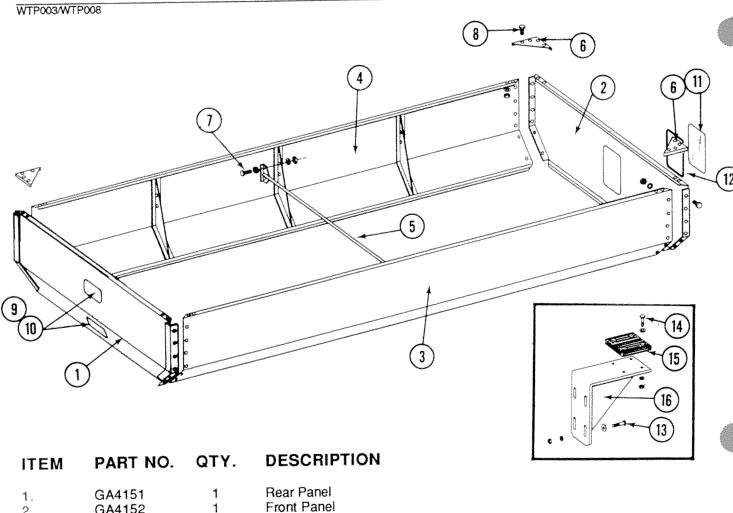
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WTC007/WTC011



1. GA4719 1 Rear Tunnel Cover Assembly (Includes Item 2 Less Linkage Mount), Wheel, Scale and Sof-Trak Wagons (Shown) Row Crop Wagons 2. GA1539 2 Linkage Arm 3. G10108 16 Lock Nut, 3/8"-16 4. GA4718 1 Front Tunnel Cover Assembly (Includes Item 2 Less Linkage Mount), Wheel, Scale and Sof-Trak Wagons (Shown) GA5859 - Front Tunnel Cover Assembly (Includes Item 2 Less Linkage Mount), Wheel, Scale and Sof-Trak Wagons (Shown) 5. GA0696 2 Bearing Cover, Wheel, Scale and Sof-Trak Wagons 6. G10025 4 Hex Head Cap Screw, 3/4"-10 x 1 1/2" G10231 4 Lock Washer, 3/4" G10105 4 Hex Nut, 3/4"-10 7. G10001 6 Hex Head Cap Screw, 3/8"-16 x 1" G10229 6 Lock Washer, 3/8" G10101 6 Hex Nut, 3/8"-16 8. GD4061 1 Connector Arm 9. GA0686 1 Rod 10. G10004 36 Hex Head Cap Screw, 3/8"-16 x 1 1/4" G10229 36 Lock Washer, 3/8" G10101 36 Hex Nut, 3/8"-16 11. G10102 1 Hex Nut, 1/2"-13 12. G10216 2 Washer, 1/2" USS Elbow, 90°
GA5860 - Rear Tunnel Cover Assembly (Includes Item 2 Less Linkage Mount), Row Crop Wagons 2. GA1539 2 Linkage Arm 3. G10108 16 Lock Nut, 3/8"-16 4. GA4718 1 Front Tunnel Cover Assembly (Includes Item 2 Less Linkage Mount), Wheel, Scale and Sof-Trak Wagons (Shown) Front Tunnel Cover Assembly (Includes Item 2 Less Linkage Mount), Row Crop Wagons 5. GA0696 2 Bearing Cover, Wheel, Scale and Sof-Trak Wagons 6. G10025 4 Hex Head Cap Screw, 3/4"-10 x 1 1/2" G10105 4 Hex Nut, 3/4"-10 7. G10001 6 Hex Head Cap Screw, 3/8"-16 x 1" G10229 6 Lock Washer, 3/8" G10101 6 Hex Nut, 3/8"-16 8. GD4061 1 Connector Arm 9. GA0686 1 Rod 10. G10004 36 Hex Head Cap Screw, 3/8"-16 x 1 1/4" G10229 36 Lock Washer, 3/8" G10101 36 Hex Head Cap Screw, 3/8"-16 x 1 1/4" G10229 36 Lock Washer, 3/8" G10101 36 Hex Nut, 3/8"-16 11. G10102 1 Hex Nut, 3/8"-16 11. G10102 1 Hex Nut, 1/2"-13 12. G10216 2 Washer, 1/2" USS
3. G10108 16 Lock Nut, 3/8"-16 4. GA4718 1 Front Tunnel Cover Assembly (Includes Item 2 Less Linkage Mount), Wheel, Scale and Sof-Trak Wagons (Shown)  GA5859 - Front Tunnel Cover Assembly (Includes Item 2 Less Linkage Mount), Row Crop Wagons  5. GA0696 2 Bearing Cover, Wheel, Scale and Sof-Trak Wagons  6. G10025 4 Hex Head Cap Screw, 3/4"-10 x 1 1/2"  G10231 4 Lock Washer, 3/4"  G10105 4 Hex Nut, 3/4"-10  7. G10001 6 Hex Head Cap Screw, 3/8"-16 x 1"  G10229 6 Lock Washer, 3/8"  G10101 6 Hex Nut, 3/8"-16  8. GD4061 1 Connector Arm  9. GA0686 1 Rod  10. G10004 36 Hex Head Cap Screw, 3/8"-16 x 1 1/4"  G10229 36 Lock Washer, 3/8"  G10101 36 Hex Nut, 3/8"-16  11. G10102 1 Hex Nut, 3/8"-16  11. G10102 1 Hex Nut, 1/2"-13  12. G10216 2 Washer, 1/2" USS
4. GA4718 1 Front Tunnel Cover Assembly (Includes Item 2 Less Linkage Mount), Wheel, Scale and Sof-Trak Wagons (Shown)  GA5859 - Front Tunnel Cover Assembly (Includes Item 2 Less Linkage Mount), Row Crop Wagons  5. GA0696 2 Bearing Cover, Wheel, Scale and Sof-Trak Wagons  6. G10025 4 Hex Head Cap Screw, 3/4"-10 x 1 1/2"  G10231 4 Lock Washer, 3/4"  G10105 4 Hex Nut, 3/4"-10  7. G10001 6 Hex Head Cap Screw, 3/8"-16 x 1"  G10229 6 Lock Washer, 3/8"  G10101 6 Hex Nut, 3/8"-16  8. GD4061 1 Connector Arm  9. GA0686 1 Rod  10. G10004 36 Hex Head Cap Screw, 3/8"-16 x 1 1/4"  G10229 36 Lock Washer, 3/8"  G10101 36 Hex Nut, 3/8"-16  11. G10102 1 Hex Nut, 3/8"-16  12. G10216 2 Washer, 1/2" USS
Wheel, Scale and Sof-Trak Wagons (Shown)
Row Crop Wagons
6. G10025 4 Hex Head Cap Screw, 3/4"-10 x 1 1/2" G10231 4 Lock Washer, 3/4" G10105 4 Hex Nut, 3/4"-10  7. G10001 6 Hex Head Cap Screw, 3/8"-16 x 1" G10229 6 Lock Washer, 3/8" G10101 6 Hex Nut, 3/8"-16  8. GD4061 1 Connector Arm  9. GA0686 1 Rod  10. G10004 36 Hex Head Cap Screw, 3/8"-16 x 1 1/4" G10229 36 Lock Washer, 3/8" G10101 36 Hex Nut, 3/8"-16  11. G10102 1 Hex Nut, 1/2"-13  12. G10216 2 Washer, 1/2" USS
G10231 4 Lock Washer, 3/4" G10105 4 Hex Nut, 3/4"-10  7. G10001 6 Hex Head Cap Screw, 3/8"-16 x 1" G10229 6 Lock Washer, 3/8" G10101 6 Hex Nut, 3/8"-16  8. GD4061 1 Connector Arm  9. GA0686 1 Rod  10. G10004 36 Hex Head Cap Screw, 3/8"-16 x 1 1/4" G10229 36 Lock Washer, 3/8" G10101 36 Hex Nut, 3/8"-16  11. G10102 1 Hex Nut, 1/2"-13  12. G10216 2 Washer, 1/2" USS
G10105 4 Hex Nut, 3/4"-10 7. G10001 6 Hex Head Cap Screw, 3/8"-16 x 1" G10229 6 Lock Washer, 3/8" G10101 6 Hex Nut, 3/8"-16  8. GD4061 1 Connector Arm 9. GA0686 1 Rod 10. G10004 36 Hex Head Cap Screw, 3/8"-16 x 1 1/4" G10229 36 Lock Washer, 3/8" G10101 36 Hex Nut, 3/8"-16  11. G10102 1 Hex Nut, 1/2"-13 12. G10216 2 Washer, 1/2" USS
7. G10001 6 Hex Head Cap Screw, 3/8"-16 x 1" G10229 6 Lock Washer, 3/8" G10101 6 Hex Nut, 3/8"-16  8. GD4061 1 Connector Arm 9. GA0686 1 Rod 10. G10004 36 Hex Head Cap Screw, 3/8"-16 x 1 1/4" G10229 36 Lock Washer, 3/8" G10101 36 Hex Nut, 3/8"-16  11. G10102 1 Hex Nut, 1/2"-13 12. G10216 2 Washer, 1/2" USS
G10229 6 Lock Washer, 3/8" G10101 6 Hex Nut, 3/8"-16  8. GD4061 1 Connector Arm  9. GA0686 1 Rod  10. G10004 36 Hex Head Cap Screw, 3/8"-16 x 1 1/4" G10229 36 Lock Washer, 3/8" G10101 36 Hex Nut, 3/8"-16  11. G10102 1 Hex Nut, 1/2"-13  12. G10216 2 Washer, 1/2" USS
G10101 6 Hex Nut, 3/8"-16  8. GD4061 1 Connector Arm  9. GA0686 1 Rod  10. G10004 36 Hex Head Cap Screw, 3/8"-16 x 1 1/4"  G10229 36 Lock Washer, 3/8"  G10101 36 Hex Nut, 3/8"-16  11. G10102 1 Hex Nut, 1/2"-13  12. G10216 2 Washer, 1/2" USS
8. GD4061 1 Connector Arm 9. GA0686 1 Rod 10. G10004 36 Hex Head Cap Screw, 3/8"-16 x 1 1/4" G10229 36 Lock Washer, 3/8" G10101 36 Hex Nut, 3/8"-16 11. G10102 1 Hex Nut, 1/2"-13 12. G10216 2 Washer, 1/2" USS
9. GA0686 1 Rod 10. G10004 36 Hex Head Cap Screw, 3/8"-16 x 1 1/4" G10229 36 Lock Washer, 3/8" G10101 36 Hex Nut, 3/8"-16 11. G10102 1 Hex Nut, 1/2"-13 12. G10216 2 Washer, 1/2" USS
9. GA0686 1 Rod 10. G10004 36 Hex Head Cap Screw, 3/8"-16 x 1 1/4" G10229 36 Lock Washer, 3/8" G10101 36 Hex Nut, 3/8"-16 11. G10102 1 Hex Nut, 1/2"-13 12. G10216 2 Washer, 1/2" USS
10. G10004 36 Hex Head Cap Screw, 3/8"-16 x 1 1/4" G10229 36 Lock Washer, 3/8" G10101 36 Hex Nut, 3/8"-16  11. G10102 1 Hex Nut, 1/2"-13  12. G10216 2 Washer, 1/2" USS
G10101 36 Hex Nut, 3/8"-16 11. G10102 1 Hex Nut, 1/2"-13 12. G10216 2 Washer, 1/2" USS
11. G10102 1 Hex Nut, 1/2"-13 12. G10216 2 Washer, 1/2" USS
12. G10216 2 Washer, 1/2" USS
13 G6801-08 2 Elbow, 90°
the managerous me minaritara
14. GA1017 2 Hose Assembly, 3/8" x 24"
15. See "Grain Flow Control Gate Cylinder, 840/1040"
16. GD4086 2 Pioneer Tip
17. GA1016 2 Hose Assembly, 3/8" x 120"
18. GA4698 1 Rear Screen, 96", Wheel, Scale and Sof-Trak Wagons (Shown)
GA5858 - Rear Screen, 96", Row Crop Wagons
19. GA4697 1 Front Screen, 108", Wheel, Scale and Sof-Trak Wagons (Shown)
GA5857 - Front Screen, 108", Row Crop Wagons
20. GD7071 8 Clamp, 1" x 10 1/2"
GD8221 2 Clamp, 1" x 5 1/4", Row Crop Wagons Only
21. GA5813 2 Bearing Cover, Row Crop Wagons Only
22. GR0962 2 Pin, 1" x 3 3/8"
GR0193 4 Hair Pin Clip

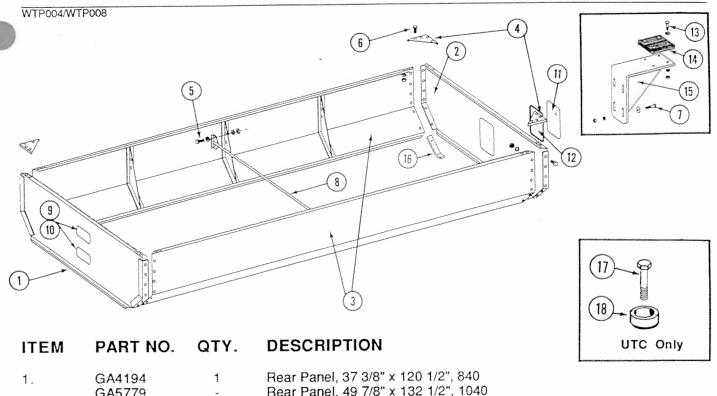
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1.	GA4151	1	Rear Panel
2.	GA4152	1	Front Panel
3.	GA4156	1	Side Panel, R.H.
4.	GA4155	1	Side Panel, L.H.
5.	GA4688	3	Cross Brace, 119"
6.	GD0327	4	Corner Cap
7.	G10017	-	Hex Head Cap Screw, 1/2"-13 x 1 1/2"
, .	G10216	***	Washer, 1/2" USS
	G10228	_	Lock Washer, 1/2"
	G10102	-	Hex Nut, 1/2"-13
8.	G10001	16	Hex Head Cap Screw, 3/8"-16 x 1"
0.	G10229	16	Lock Washer, 3/8"
	G10101	16	Hex Nut, 3/8"-16
9.	GD6460	2	Rear Window, 6 1/2" x 10 1/2"
10.	GD6461-01	2	Rear Window Molding
11.	GD6487	1	Front Window, 10 1/2" x 19 1/4"
12.	GD6461-02	- War	Front Window Molding
13.	G10017	4	Hex Head Cap Screw, 1/2"-13 x 1 1/2"
10.	G10228	4	Lock Washer, 1/2"
	G10216	4	Washer, 1/2" USS
	G10102	4	Hex Nut, 1/2"-13
14.	G10003	4	Hex Head Cap Screw, 3/8"-16 x 1 1/2"
17.	G10210	4	Washer, 3/8" USS
	G10229	4	Lock Washer, 3/8"
	G10101	4	Hex Nut, 3/8"-16
15.	GD6978	4	Rubber Stop
16.	GA4664	1	Adjustable Bracket
10.	1000 1 1 10 10 1	*	*

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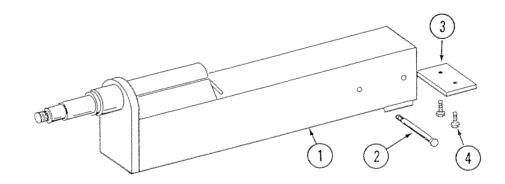
## **GRAIN TANK PANELS**



1.	GA4194	1	Rear Panel, 37 3/8" x 120 1/2", 840
• •	GA5779	-	Rear Panel, 49 7/8" x 132 1/2", 1040
2.	GA5772	1	Front Panel, 37 3/8" x 120 1/2", 840
	GA5780	-	Front Panel, 49 7/8" x 132 1/2", 1040
3.	GA4196	2	Side Panel, 37 3/8" x 239 1/2", 840
b	GA5776	**	Side Panel, 49 7/8" x 239 1/2", 1040
4.	GD0327	4	Corner Cap
5.	G10017	asy.	Hex Head Cap Screw, 1/2"-13 x 1 1/2"
	G10228	**	Lock Washer, 1/2"
	G10102		Hex Nut, 1/2"-13
6.	G10001	16	Hex Head Cap Screw, 3/8"-16 x 1"
- ·	G10229	16	Lock Washer, 3/8"
	G10101	16	Hex Nut, 3/8"-16
7.	G10017	4	Hex Head Cap Screw, 1/2"-13 x 1 1/2"
	G10228	4	Lock Washer, 1/2"
	G10216	4	Washer, 1/2" USS
	G10102	4	Hex Nut, 1/2"-13
8.	GA0437	3	Cross Brace, 119 1/2", 840
	GA5778	4	Cross Brace, 131 1/2", 1040
9.	GD6460	2	Rear Window, 6 1/2" x 10 1/2"
10	. GD6461-01	2	Rear Window Molding
11	. GD6487	- Park	Front Window, 10 1/2" x 19 1/4"
12	. GD6461-02	- Paris	Front Window Molding
13	. G10003	4	Hex Head Cap Screw, 3/8"-16 x 1 1/2"
	G10210	4	Washer, 3/8" USS
	G10229	4	Lock Washer, 3/8"
	G10101	4	Hex-Nut, 3/8"-16
14	. GD6978	1	Rubber Stop
15	. GA4664	1	Adjustable Bracket
16	. GD4173	-	Corner Patch, 2 1/2" x 7 1/2", Wheel, Scale and Sof-Trak Wagons
	GD8225	40.	Corner Patch, 2 1/2" x 10", Row Crop Wagons
17	. G10028	4	Hex Head Cap Screw, 3/4"-10 x 3" (Secures Grain Wagon
			To Utility Tracked Chassis)
	G10231	4	Lock Washer, 3/4"
	G10105	4	Hex Nut, 3/4"-10
18	GD9602-02	4	Sleeve (Between Grain Wagon And Utility Tracked Chassis)

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HTA038

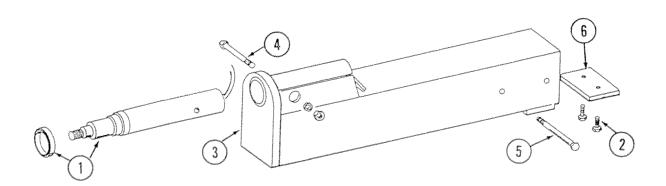


ITEM	PART NO.	QTY. Per Wagon	DESCRIPTION
1.	GA5734	2	Stub Axle
2.	G10540	2	Hex Head Cap Screw, 1"-8 x 12"
Sear A	G10118	2	Lock Washer, 1"
	G10117	2	Hex Nut, 1"-8
3.	GD7538	2	Shim
4.	G10014	4	Hex Head Cap Screw, 1/2"-13 x 1"
	G10228	4	Lock Washer, 1/2"

#### **AXLE**

# 640/840 WHEEL SCALE WAGON

HTA030

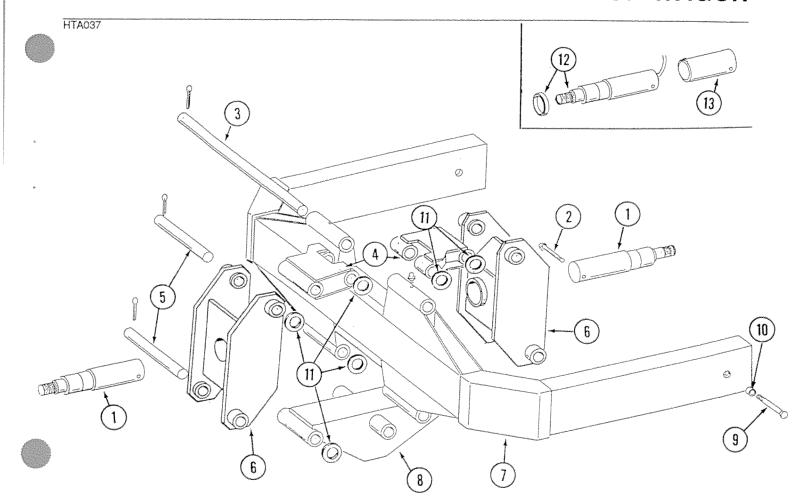


ITEM	PART NO.	QTY.	DESCRIPTION
		Per Wagon	
1.	GA4687	2	Weigh Axle W/Spacer, 4 1/2"
	GD6996	***	Spacer
2.	G10014	4	Hex Head Cap Screw, 1/2"-13 x 1"
	G10228	4	Lock Washer, 1/2"
3.	GA5736	4	Stub Axle, R.H.
	GA5737	4	Stub Axle, L.H.
4.	G10011	2	Hex Head Cap Screw, 5/8"-11 x 5 1/2"
**	G10107	2	Lock Nut, 5/8"-11
5.	G10540	2	Hex Head Cap Screw, 1"-8 x 12"
· .	G10118	2	Lock Washer, 1"
	G10117	2	Hex Nut, 1"-8
6.	GD7538	2	Shim

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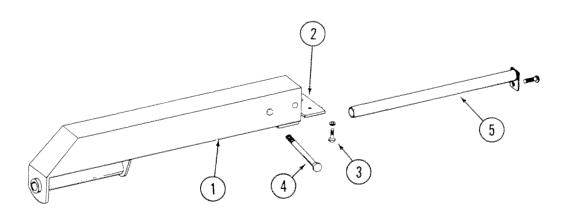
#### **AXLE**

## **840/1040 ROW CROP WAGON**



ITEM	PART NO.	QTY.	DESCRIPTION	
		Per Wagon		
<b>*</b>	GD8037	4	Spindle, 4 1/2"	
2.	G10400	4	Hex Head Cap Screw, 3/4"-10 x 6 1/2"	
	G10112	4	Lock Nut, 3/4"-10	
3.	GD8140	2	Pin, 2 1/8" x 36 1/2"	
	G10461	4	Cotter Pin, 3/8" x 3"	
4.	GA5797	4	Top Link Arm W/Grease Fittings	
	G10641	-	Grease Fitting, 1/8" NPT	
5.	GD8119	8	Pin, 2 1/8" x 16 1/4"	
	G10461	16	Cotter Pin, 3/8" x 3"	
6.	GA5790	4	Link Plate W/Grease Fittings (SN 2433 - 499999/SN 500292 & C	On)
	GA6042	nin-	Link Plate W/Grease Fittings (SN 500000 - 500291)	
	G10641	800	Grease Fitting, 1/8" NPT	
7.	GA5806	2	Extension Axle W/Grease Fittings	
	G10641	***	Grease Fitting, 1/8" NPT	
8.	GA5789	2	Bottom Link Arm W/Grease Fittings	
	G10640	**	Grease Fitting, 1/4"-28	
9.	G10402	4	Hex Head Cap Screw, 1"-8 x 8"	
	G10396	4	Lock Nut, 1"-8	
10.	GD7585-02	ille	Sleeve, 1 1/4" (Where Applicable)	
	GD7585-06		Sleeve, 1 3/4" (Where Applicable)	
11.	G10234	volt	Machine Bushing, 10 Gauge (As Required)	
	G10336	40	Machine Bushing, 16 Gauge (As Required)	
12.	GA6752	w.	Weigh Axle W/Spacer, 4 1/2", Scale Wagon	
	GD6996	44	Spacer	
13.	GD9594	aer	Sieeve, 8 7/16", Scale Wagon	
				Rev. 4/93

HTA033/HTA036

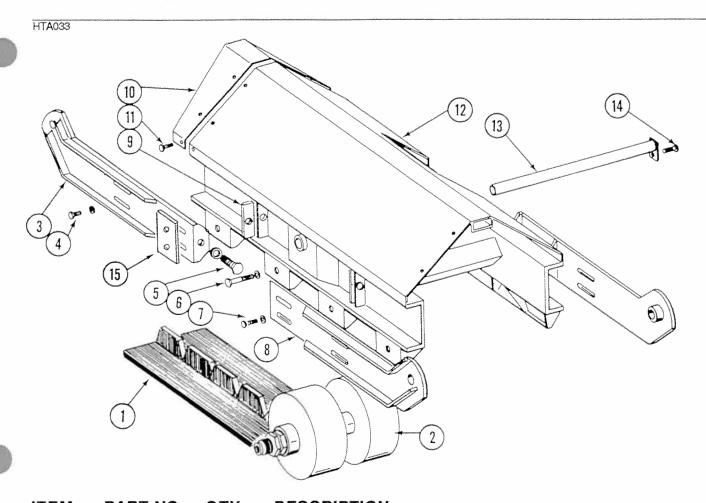


ITEM	PART NO.	QTY. Per Wagon	DESCRIPTION
1.	GA5489	2	Stub Axle W/Grease Fittings
, ,	G10641	nik	Grease Fitting, 1/8" NPT
2.	GD7538	2	Shim, 5" x 8"
3.	G10014	4	Hex Head Cap Screw, 1/2"-13 x 1"
<b>.</b>	G10228	4	Lock Washer, 1/2"
4.	G10540	2	Hex Head Cap Screw, 1"-8 x 12"
~v.	G10118	2	Lock Washer, 1"
	G10117	2	Hex Nut, 1"-8
5.	~ · · · · · ·	and disp	See "Track And Carriage"

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#### TRACK AND CARRIAGE

#### 640/840 SOF-TRAK WAGON



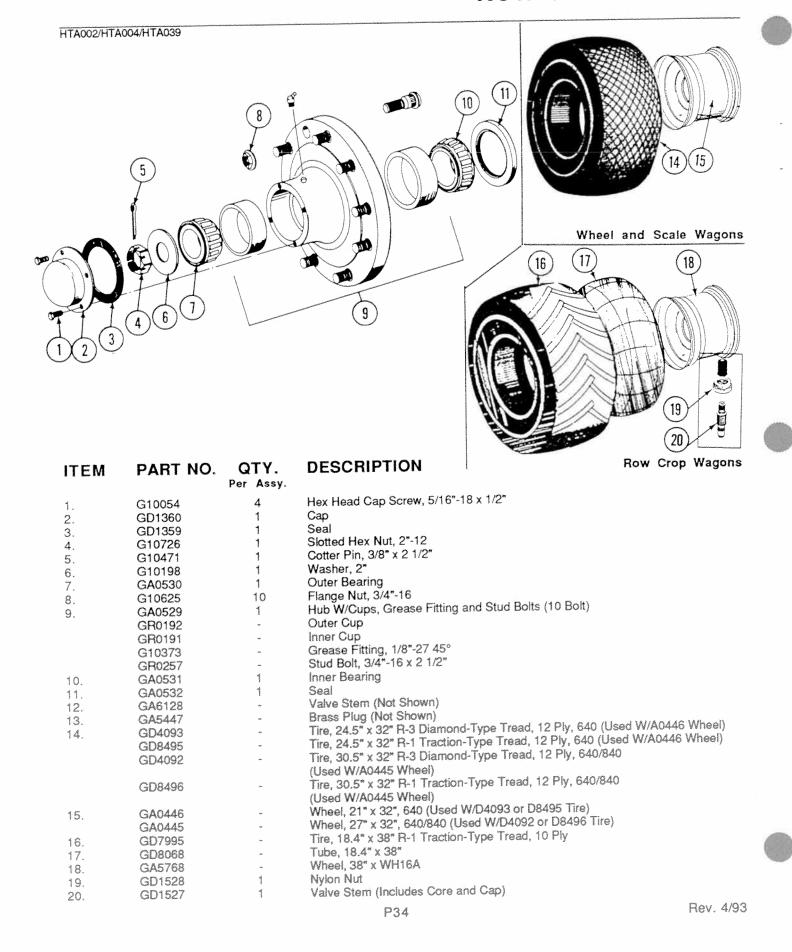
ITEM	PART NO.	QTY. Per Assy.	DESCRIPTION
der .	GD7096	Tel Assy.	Rubber Track
2.	QD7000	-	See "Midwheel, Sof-Trak"
3.	GA5477	2	Sidebar, L.H. (SN Prior To 600377 Order A5477 And A5476)*
4.	G10537	8	Hex Head Cap Screw, 3/4"-16 x 2 1/2"
78.5	G10218	-	Washer, 3/4" USS (Sub D8279 Plate)
	G10231	8	Lock Washer, 3/4"
	G10327	8	Hex Nut, 3/4"-16
5.	G10539	4	Hex Head Adjusting Bolt, 1"-14 x 7"
	G10082	4	Washer, 1" SAE
6.	C	4	See "Midwheel, Sof-Trak"
<b>7</b> .	G10611	8	Hex Head Cap Screw, 3/4"-16 x 5"
	G10218	8	Washer, 3/4" USS (Sub D8279 Plate)
	G10231	8	Lock Washer, 3/4"
	G10327	8	Hex Nut, 3/4"-16
8.	GA5476	2	Sidebar, R.H. (SN Prior To 600377 Order A5477 And A5476)*
9.	GD8860	4	Tap Block
10.	GD7521	2	Mud Scraper
11.	G10014	12	Hex Head Cap Screw, 1/2"-13 x 1"
	G10216	12	Washer, 1/2" USS
	G10228	12	Lock Washer, 1/2"
	G10102	12	Hex Nut, 1/2"-13
12.		***	Track and Carriage (Non-Stock Item)
13.	GA5514	***	Pin
14.	G10005	4	Hex Head Cap Screw, 5/8"-11 x 1 3/4"
15.	GD8279	8	Plate, 2" x 4 1/2"

<sup>\*</sup> NOTE: Specifications changed at SN 600377.

P33

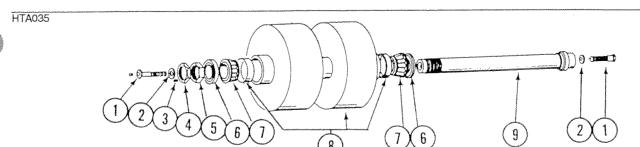
#### **HUB AND TIRE ASSEMBLY**

#### WHEEL, SCALE AND ROW CROP WAGONS



#### **MIDWHEEL**

#### **SOF-TRAK WAGON**

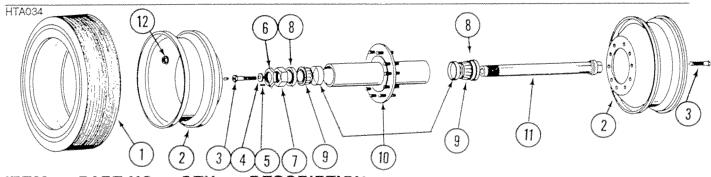


ITEM	PART NO.	QTY. Per Assy.	DESCRIPTION
1.	GA5487	2	Bolt W/Grease Fitting, 1 1/4" x 3 1/2", Grade 8
	G10641	Alle	Grease Fitting, 1/8" NPT
2.	G10236	2	Lock Washer, 1 1/4"
3.	G10535	1	Set Screw, 3/8"-16 x 3/4"
4.	GD7460	1	Jam Nut, 2 1/2"-12
5.	GD7451	1	Stepped Nut, 2 1/2"-12
6.	GD7452	2	Seal
7.	GA0779	2	Bearing
8.	GA5486	1	Midwheel W/Cups
	GR0323	w	Cup
9.	GA4999	1	Spindle

#### **ENDWHEEL**

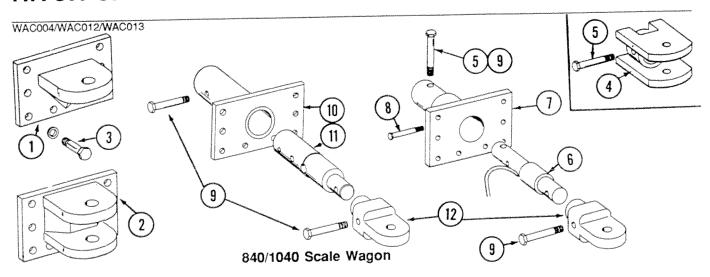
#### **SOF-TRAK WAGON**

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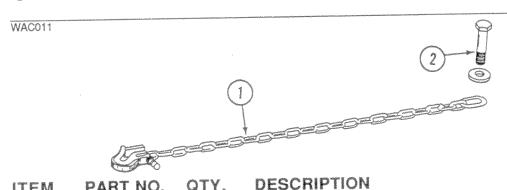
			<u> </u>
ITEM	PART NO.	QTY.	DESCRIPTION
		Per Assy.	
A .	GD7640	2	Tire, 8.25" x 20" , Smooth
	GA5574	**	Tube W/Insert, Use With D7640
	GD9307	**	Tire, 8.25" x 20", Treaded Truck
	GD9308	-	Tube, Use With D9307
2.	GA5490	2	Rim
3.	GA5487	2	Bolt W/Grease Fitting, 1 1/4" x 3 1/2", Grade 8
	G10641	1	Grease Fitting, 1/8" NPT
4.	G10236	2	Lock Washer, 1 1/4"
5.	G10535	1	Set Screw, 3/8"-16 x 3/4"
6.	GD7460	1	Jam Nut, 2 1/2"-12
7.	GD7451	4	Stepped Nut, 2 1/2"-12
8.	GD7452	2	Seal
9.	GA0779	2	Bearing
10.	GA5484	- Agenta	Hub W/Cups and Bolts
	GR0323	460	Cup
	GD7489	MA.	Bolt (10 Bolt Hub), Threaded Both Ends
	GR0257	, solve	Bolt (20 Bolt Hub)
11.	GA4999	*	Spindle
12.	GR0256	20	Flange Nut, 3/4"-16
			P35

#### HITCH CAP/PLATE



ITEM	PART NO.	QTY.	DESCRIPTION	640 Scale Wagon
1. 2. 3. 4. 5. 6. 7. 8.	GA4206 GA4214 G10441 G10330 G10442 GA4677 G10263 G10396 GA4681 GA4680 G10050	8 8 8	Hitch Cap, Single Clevis Hitch Cap, Double Clevis Hex Head Cap Screw, 7/8"-9 x 3", Grade 8 Lock Washer, 7/8" Hex Nut, 7/8"-9 Double Clevis, 640 Scale Wagon Hex Head Cap Screw, 1"-8 x 5" Lock Nut, 1"-8 Weigh Beam, 2 1/2", 640 Scale Wagon Hitch Plate, 640 Scale Wagon Hex Head Cap Screw, 3/4"-10 x 5"	Ç
9. 10. 11. 12.	G10112 G10648 G10647 GA6022 GA6025 GA6521	-	Lock Nut, 3/4"-10 Hex Head Cap Screw, 1"-8 x 6", Grade 8 Hex Nut, 1"-8, Grade 8 Hitch Plate, 840/1040 Scale Wagon Weigh Beam, 3 3/4", 840/1040 Scale Wagon Single Clevis, 640/840/1040 Scale Wagon	

# **OPTIONAL SAFETY CHAIN**

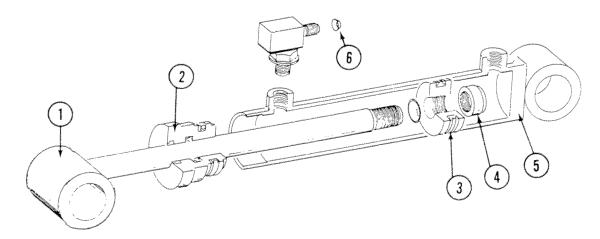


ITEM	PART NO.	QTY.	DESCRIPTION
1. 2.	GA4774 G10238 G10139 G10236 G10239	and mile and mile and	Safety Chain Hex Head Cap Screw, 1 1/4"-7 x 4" Washer, 1 1/4" USS Lock Washer, 1 1/4" Hex Nut, 1 1/4"-7 P36

Rev. 4/93

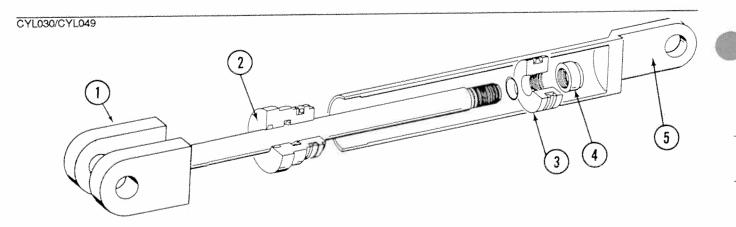
#### VERTICAL AUGER FOLD CYLINDER

CYL032



IIEM	PART NO.	QIY.	DESCRIPTION
1.	GA4193	1	Rod
2.	GD5954	1	Gland
3.	GD4525	1	Piston
4.	GR0964	1	Special Jam Nut
5.	GA4192	1	Barrel
6.	GD6323	*	Restrictor
Α.	GA4115	noor .	Cylinder Complete, 2 1/2" x 20 1/16" (Less Restrictor)
B.	GR0963	de	Seal Kit, Includes: (1) T Seal, (2) O-Ring, (1) BU Ring, (1) U-Cup, (1) Wiper

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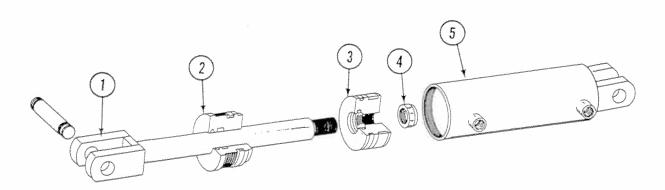


ITEM	PART NO.	QTY.	DESCRIPTION
1. 2. 3. 4. 5.	GA4188 GD5949 GD4632 GR0959 GA4187	1 1 1 1	Rod Gland Piston Lock Nut, 3/4"-16 Barrel
A. B.	GA4129 GR0927	hair Ann	Cylinder Complete, 2" x 8" Seal Kit, Includes: (1) T Seal, (2) O-Rings, (1) BU Ring, (1) U-Cup, (1) Wiper

# GRAIN FLOW CONTROL GATE CYLINDER

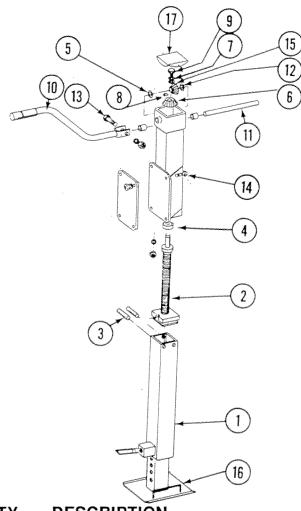
840/1040

CYL044



ITEM	PART NO.	QTY.	DESCRIPTION
1. 2. 3. 4. 5.	GA4757 GD5954 GD5956 GR0986 GA4756	cuch such such coch	Rod Gland Piston Thin Nut, 1"-14 Barrel
A. B.	GA4255 GR0930	sir-	Cylinder Complete, 2 1/2" x 10" Seal Kit, Includes: (1) Wear Ring, (1) T Seal, (2) O-Rings, (1) U-Cup, (1) BU Ring, (1) Wiper

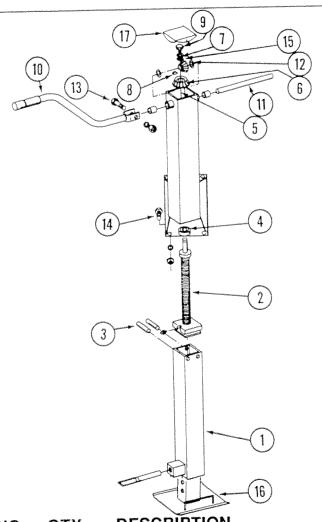
WAC002/WAC003



ITEM	PART NO.	QTY.	DESCRIPTION
*	GR1009	1	Secondary W/Lock Assembly
2.	GR0974	1	Nut and Screw Assembly
3.	GR0976	2	Pin
4.	GR0691	1	Bearing
5.	GR0692	3	Machine Washer, 1" x 2" x 18 Gauge
6.	GR0693	1	Gear, 18 Tooth
7.	GR0702	2	Retaining Washer, 1/2"
8.	GR0694	2	Key
9.	GR0703	4	Retaining Hex Head Cap Screw
10.	GD1350	**	Handle
11.	GR0977	of the second	Shaft
12.	GR0704	1	Snap Ring
13.	G10049	1	Hex Head Cap Screw, 3/8"-16 x 2 1/2"
	G10210	2	Washer, 3/8" USS
	G10108	ego-	Lock Nut, 3/8"-16
14.	G10005	4	Hex Head Cap Screw, 5/8"-11 x 1 3/4"
	G10230	4	Lock Washer, 5/8"
	G10104	4	Hex Nut, 5/8"-11
15.	GR0698	1	Gear, 12 Tooth
16.	GR1008	1	Drop Tube
17.	GR0700	- Francisco	Lid
Α.	G1K168	er e	Jack Replacement Kit

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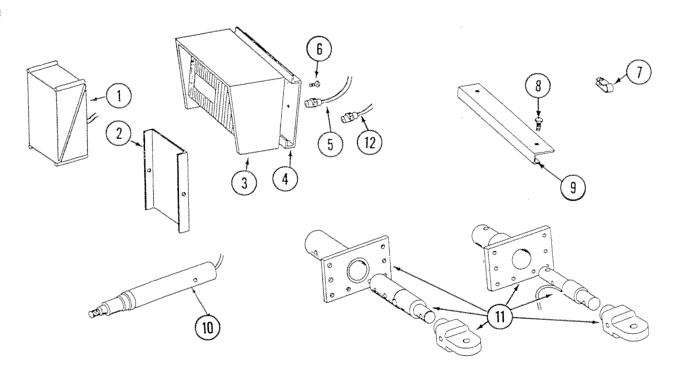
WAC003

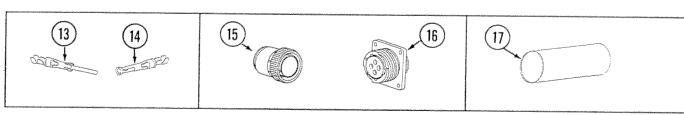


ITEM	PART NO.	QTY.	DESCRIPTION
1.	GR1011	4	Secondary W/Lock Assembly
2.	GR0689	1	Nut and Screw Assembly
3.	GR0690	2	Pin
4.	GR0691	1	Bearing
5.	GR0692	3	Machine Washer, 1" x 2" x 18 Gauge
6.	GR0693	1	Gear, 18 Tooth
7.	GR0702	2	Retaining Washer, 1/2"
8.	GR0694	2	Key
9.	GR0703	1	Retaining Hex Head Cap Screw
10.	GD1350	1	Handle
11.	GR0696	4	Shaft
12.	GR0704	1	Snap Ring
13.	G10049	4	Hex Head Cap Screw, 3/8"-16 x 2 1/2"
	G10210	2	Washer, 3/8" USS
	G10108	Access	Lock Nut, 3/8"-16
14.	G10005	4	Hex Head Cap Screw, 5/8"-11 x 1 3/4"
	G10230	4	Lock Washer, 5/8"
	G10104	4	Hex Nut, 5/8"-11
15.	GR0698	1	Gear, 12 Tooth
16.	GR1010	1	Drop Tube
17.	GR0700	4	Lid
Α.	GR0449	alio	Jack Replacement Kit

## **ELECTRONIC SCALE COMPONENTS**

ECP014/WAC012/HTA030/WAC013

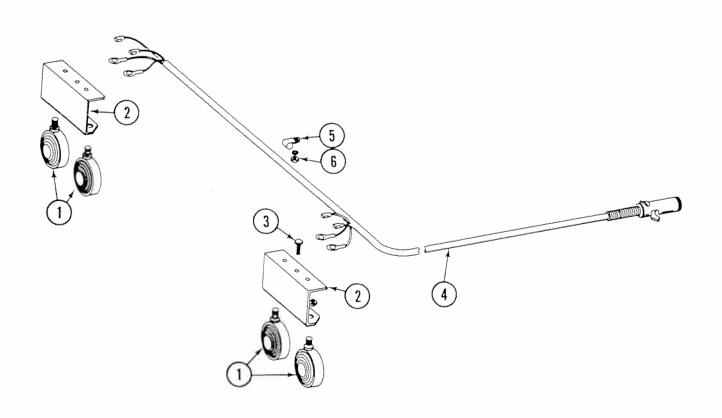




ITEM	PART NO.	QTY.	DESCRIPTION	
4	GA5692	1	Junction Box W/ Cable	
2.	GD7008	1	Cover	
3.	GA6717	1	Indicator, EZ150, 640 Wheel Wagon	
	GA6718	466	Indicator, EZ150, 840 Wheel Wagon	
	GA6753	100	Indicator, EZ150, 840/1040 Row Crop Wagon	
	GR1175	104	Plastic Housing (Not Shown)	
4.	GD7826	1	Mounting Bracket	
5.	GA4683	4	Cable Extension (To Junction Box Cable)	
6.	G10023	**	Hex Head Cap Screw, 1/4"-20 x 3/4"	
	G10110	-	Lock Nut, 1/4"-20	
7.	GD6291	mp.	Insulated Clamp	
8.	G10522	Me	Screw, 1/4"-14 x 3/4"	
9.	GD7138	~	Cover, 28"	
. 150	GD7139		Cover, 20"	
10.		w.	See "Axle, 640/840 Scale Wheel Wagon" or	
			"Axle, 840/1040 Row Crop Wagon"	
11.	0.45000	-	See "Hitch Cap/Plate"	
12.	GA5663	1	Battery Power Cable, 640/840 Wheel Wagon	
4.0	GA6772	400	Battery Power Cable, 840/1040 Row Crop Wagon	
13.	GR1067	486	Pin	
14.	GR1171	dav	Female Socket Contact	
15.	GR1068	*	Connector, Male	
16.	GR1170	-	Connector, Female	
17.	GR1069	400	Shrink Tube, 2 1/2"	Rev. 4/93
			P41	nev. 4/93

ECP010

Serial No. 2433 - 500376

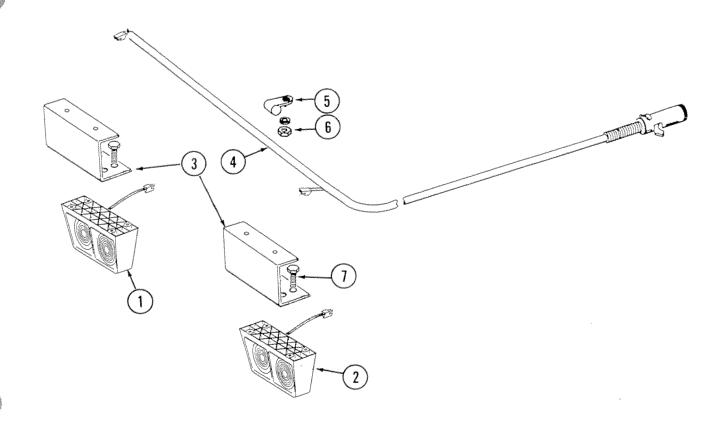


ITEM	PART NO.	QTY.	DESCRIPTION
1. 2. 3.	GA4122 GA4123 GR0968 GR0970 GR0969 G10289 G10525 GR0971 GR0972 G10266 G10269 GD6273 G10001 G10229 G10101	2 2 2 2 4 4 4 4	Single Red Light Assembly Complete W/Female Terminal Double Amber Light Assembly Complete W/Male Terminal Bulb, No. 1156 Red Lens Amber Lens Hex Nut, 1/2"-20 Star Washer, 1/2" Rubber Washer (Non-Stock Item) O-Ring Gasket Pigtail Female Terminal Male Terminal Mount Hex Head Cap Screw, 3/8"-16 x 1" Lock Washer, 3/8" Hex Nut, 3/8"-16
4.	GA4121 GA4127	and the second	Wiring Harness Assembly, 640 Wiring Harness Assembly, 840/1040
5. 6.	GD6291 G10229 G10101	90 40 40	Clamp Lock Washer, 3/8" Hex Nut, 3/8"-16

#### LIGHT PACKAGE

ECP010/WAC017

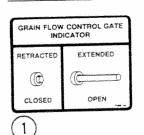
Serial No. 500377 & On

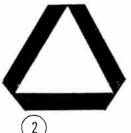


ITEM	PART NO.	QTY.	DESCRIPTION
1.	GA6699	1	Double Light Assembly, L.H.
	GR1203	sin	Red Lens
	GR1204	**	Amber Lens
	GR1205	**	Cover
	GR1206	alr	Rubber Grommet (4)
	GR1207	40	Lamp Unit
	GR1208	NO.	Bulb
2.	GA6700	1	Double Light Assembly, R.H.
	GR1203	800	Red Lens
	GR1204	alie	Amber Lens
	GR1205	100	Cover
	GR1206	ete-	Rubber Grommet (4)
	GR1207	ale	Lamp Unit
	GR1208	200	Bulb
3.	GD9425	2	Mount
4.	GA6703	1	Wiring Harness Assembly, 640
	GA6697	→	Wiring Harness Assembly, 840/1040
5.	GD6291	delt	Clamp
6.	G10229	**	Lock Washer, 3/8"
	G10101	into	Hex Nut, 3/8"-16
7.	G10064	8	Hex Head Cap Screw, 1/4"-20 x 1"
	G10110	8	Lock Nut, 1/4"-20
Α.	G1K156	*	Light Package, Includes Light Assemblies, Mounts, Wiring Harness, Clamps, Tie Straps And Hardware

P42a 4/93

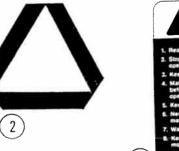
# DECALS, REFLECTORS AND TIE STRAPS





7

8















3

NEVER OPERATE PTO SHAFT ABOVE 1000 PTO RPM. **NEVER RUN WAGON AUGERS** AT FULL RPM WHEN EMPTY.

#### f A WARNING f A

NEVER OPERATE WAGON WHEN INSPECTION COVER IS REMOVED.

710G-80

HYDRAULIC FOLDING AUGER

FAILURE TO HEED THIS WARNING MAY RESULT IN PERSONAL INJURY OR DEATH.

KEEP CLOTHING, YOURSELF AND OTHERS WELL CLEAR WHEN FOLDING AND UNFOLDING AUGER.

7100-81

9

#### DANGER

FAILURE TO HEED THESE WARNINGS MAY RESULT IN PERSONAL INJURY OR DEATH. NEVER ALLOW ANYONE ON OR IN WAGON WHILE OPERATING. ALWAYS UNHOOK WAGON FROM TRACTOR WHEN PERFORMING REPAIRS INSIDE OF WAGON, ALL NORMAL MAINTENANCE CAN BE PERFORMED WITHOUT CLIMBING INSIDE OF

WAGON IS INTENDED FOR FIELD USE ONLY. TOW ONLY WITH FARM TRACTOR, ALWAYS OBEY ALL LAWS AND LOAD LIMITS WHEN TRANSPORTING.

#### INSTRUCTION

TIGHTEN WHEEL NUTS TO 425 FOOT-POUNDS TORQUE AND CHECK PERIODICALLY. MAINTAIN TIRE PRESSURE AT LUBRICATE AUGER HINGE, PTO SHAFT AND DRIVE CHAINS DAILY. SEE OPERATORS MANUAL FOR ADDITIONAL MAINTENANCE TO BE PERFORMED ANNUALLY.



SHIELD MISSING DO NOT OPERATE

DANGER



SHIELD MISSING DO NOT OPERATE

DANGER

12

#### 10

THIS MACHINE HAS BEEN DESIGNED AND BUILT WITH YOUR SAFETY IN MIND. ANY ALTERATION TO THE DESIGN OR CONSTRUCTION MAY CREATE SAFETY HAZARDS, DO NOT MAKE ANY ALTERATIONS OR CHANGES TO THE EQUIPMENT, BUT IF ANY ALTERATIONS OR CHANGES ARE MADE YOU MUST FOLLOW ALL APPROPRIATE SAFETY STANDARDS AND PRACTICE TO PROTECT YOU AND OTHERS NEAR THIS MACHINE FROM INJURY.







## DECALS, REFLECTORS AND TIE STRAPS



(18)



**ACAUTION** 

WINDOWS GIVE ONLY A LIMITED VIEW OF WHAT IS BEHIND THE WAGON. ALWAYS CHECK CAREFULLY, INCLUDING BLIND SPOTS, BEFORE BACKING OR TURNING WAGON.

20)



(21)

#### **A DANGER**

SERIOUS INJURY OR DEATH
CAN RESULT FROM
CONTACT WITH ELECTRIC
LINES. USE CARE TO AVOID
CONTACT WITH ELECTRIC
LINES WHEN MOVING OR
OPERATING THIS MACHINE.

22

(19)

#### A CAUTION A

- 1. SHUT OFF PTO AND TRACTOR FNGINE
- 2. OPEN BRASS VALVES LOCATED UNDER OILER TANK.
- 3. START TRACTOR ENGINE AND ENGAGE PTO AT IDLE FOR A SHORT TIME.
- REMAIN ON/IN TRACTOR WHILE PTO IS RUNNING.
- 5. DISENGAGE PTO AND SHUT OFF
- TRACTOR ENGINE.

  6. CLOSE BRASS VALVES LOCATED

ectronic

UNDER OILER TANK.

1180-118

23)

26

INFLATE TO 35 MIN - 40 MAX PSI 7100-119

(24)



[28]

#### **A** DANGER

Do Not Tow Loaded Wagons on Public Roads and Bridges. If you must tow a loaded wagon on public roads and bridges:

- 1. Do not exceed 10 mph.
- Check operator's manual for the loaded weight of the wagon.
   Tow only on roads and bridges
- Tow only on roads and bridges capable of carrying the loaded weight of the wagon.
- Know and obey all laws and regulations.

1100-120

25

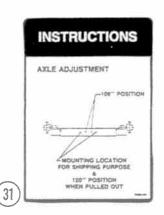
#### **A DANGER**

- ROTATING AUGER - NEVER OPEN OR CLOSE WITH AUGER RUNNING. WHEN OPERATING DUMP DOOR KEEP CLOTHING, YOURSELF AND OTHERS WELL CLEAR.

29

# Sof-Trak

Row Crop



1040

P44 4/90

# DECALS, REFLECTORS AND TIE STRAPS

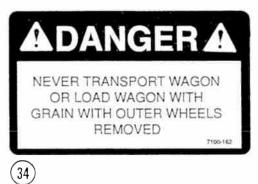
## **A DANGER**

NEVER TRANSPORT WAGON OR LOAD WAGON WITH GRAIN WITH OUTER WHEELS REMOVED

The two outer wheels on Row Crop wagons are removed to allow narrower width for truck shipment. Using extreme caution, unload wagon in level area. Tipping may occur because of narrow wheel basel Install outer wheels immediately.

(33)

a have





(35)

(36)



ITEM	PART NO.	QTY.	DESCRIPTION
1.	G7100-19	1	Decal, Grain Flow Indicator
2.	G7100-36	i	SMV Emblem
3.	G7100-46	i	Decal, Caution
4.	G7100-54	2	Decal, KINZE
5.	G7100-56	1	Decal, Warning
6.	G7100-67	1	Decal, Danger
7.	G7100-79	1	Decal, Warning
8.	G7100-80	2	Decal, Warning
9.	G7100-81	1	Decal, Danger
10.	G7100-82	1	Decal, Danger
11.	G7100-85	1	Decal, Instructions
12.	G7100-86	1	Decal, Danger
13.	G7100-90	1	Decal, Warning
14.	G7100-93	**	White Striping, 3" x 100 Yards (Not Shown)
	GR1172-01	***	White Striping, Per Foot (Not Shown)
15.	G7100-105	2	Decal, 640
16.	G7100-106	2	Decal, 840
17.	G7100-107	2	Decal, KINZE Logo
18.	G7100-110		Decal, Grease
19.	G7100-111	40°	Decal, Oil
20.	G7100-112	1	Decal, Caution
21.	G7100-113	1	Decal, Caution
22.	G7100-117	1	Decal, Danger
23.	G7100-118	1	Decal, Caution
24.	G7100-119	2	Decal, Instructions
25.	G7100-120	1	Decal, Danger
26.	G7100-130	2	Decal, Electronic Scale
27.	G7100-131	2	Decal, Sof-Trak
28.	G7100-134	1	Decal, Danger
29.	G7100-142	1	Decal, Danger
30.	G7100-150	2	Decal, Row Crop
31.	G7100-151	1	Decal, Instructions
32.	G7100-152	2	Decal, 1040
33.	G7100-161	1	Decal, Danger
34.	G7100-162	2	Decal, Danger, Row Crop Reflector, Red
35.	G7200-03	2	Reflector, Amber
20	G7200-04	ben n	Tie Strap, 6"
36.	GD1512	***	Tie Strap, 14 1/2"
^7	GD2117		Blue Paint, Aerosol (Not Shown)
37.	GR0155		Blue Paint, Quart (Not Shown)
	GR0439 GR0440	san.	Blue Paint, Gallon (Not Shown)
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