

MODEL 450C GRAIN CONVEYOR WAGON OPERATOR & PARTS MANUAL

M0143

Rev. 3/98

This manual is applicable to: Model: CW
Serial Number: 550000 and on

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

Model Number _____ CW _____

Serial Number _____

Date Purchased _____

SERIAL NUMBER

The serial number provides important information about your 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 any-time correspondence is made with KINZE Manufacturing, Inc.

61455-94



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PREDELIVERY/DELIVERY CHECK LIST

TO THE DEALER

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

PREDELIVERY CHECK LIST

After the wagon has been completely assembled, use the following check list and inspect the wagon. Check off each item as it is found satisfactory or after proper adjustment is made.

- Shipping wheels are removed and tire assemblies installed. (See "Dealer Setup" on following pages.)
- Axles are adjusted to specification. (See "Axle Adjustment" in Maintenance Section.)
- Top tapered extension and corner braces have been installed. (See "Dealer Setup" on following pages.)
- Discharge spout has been installed. (See "Dealer Setup" on following pages.)
- Wheel nuts are torqued to 425 ft. lbs.
- Tires are inflated to specified PSI air pressure.
- Grease fittings are in place and lubricated.
- Safety decals are correctly located and legible. Replace if damaged.
- Red reflectors and amber reflectors are correctly located.
- SMV sign is in place. (See "Dealer Setup" on following pages.)
- Safety/warning lights are working properly.
- The conveyor has been test run.
- Safety screen in grain tank is in place.
- All parts scratched in shipment have been painted.

This wagon has been thoroughly checked and to the best of my knowledge is ready for delivery to the customer.

(Signature Of Set-Up Person/Dealer Name/Date)

OWNER REGISTER

Name _____ Date Sold _____

Street Address _____ Model _____

City, State/Province & ZIP _____ Serial Number _____

Dealer Name _____ Dealer Number _____

DELIVERY CHECK LIST

At the time the wagon is delivered, the following check list is a reminder of very important information which should 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 & Parts 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.
- Along with the customer check to be sure the red reflectors, amber reflectors and SMV sign are clearly visible with the wagon attached to the tractor. Check to be sure the flashing 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.
- Complete Warranty And Delivery Report form.
- Give the Operator & Parts 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/Dealer Name/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 adherence with all 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 properly.
- Check to be sure recommended lubrication procedures are being followed.

(Signature Of Follow-Up Person/Dealer Name/Date)

**RETURN THIS COMPLETED FORM TO KINZE® IMMEDIATELY, along with Warranty and Delivery Report.
Retain copy of this form at dealership for After Delivery Check.**

DEALER SETUP

Read completely through this setup instruction before beginning.

Unload wagon from the transport vehicle and park it on a flat level surface in an area large enough to complete shipping wheel removal and tire installation.

SMV SIGN INSTALLATION

Install SMV sign supplied in Hardware Box onto bracket at rear of conveyor wagon using two 1/4" x 1/2" cap screws and lock nuts.

SHIPPING WHEEL REMOVAL/ TIRE INSTALLATION



WARNING: Always remove the shipping wheel and install tire on conveyor side of wagon first.

Step 1 Beginning on the conveyor side of the wagon (L.H. side), place a jack as shown under the frame in front of the shipping wheel. Raise the wagon high enough to allow room to place the jack under the axle behind the shipping wheel. Install blocks under the shipping wheel.

70951-4



Step 2 Place the jack under the axle behind the shipping wheel as shown. **Raise the wagon several inches.**

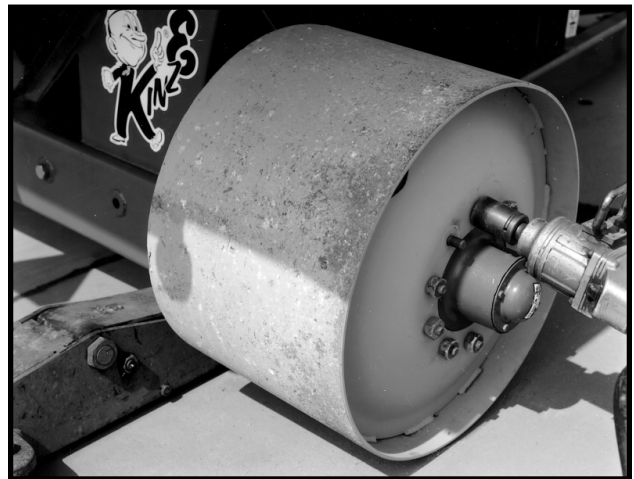
70951-6



Step 3 Loosen shipping wheel nuts and remove shipping wheel.

NOTE: The axles are shipped in the 120" position (120" Width - Tire Center To Center). If the wagon is going to be setup for the 144" width (recommended only for wide row ridge-till), adjust axles before installing tires. See "Axle Adjustment" in the Maintenance Section.

70951-14



DEALER SETUP

Step 4 Raise the wagon high enough to allow installation of the tire. Install tire and torque wheel nuts to 425 ft. lbs. Remove jack.

70951-10



Step 5 Repeat Steps 2 through 4 on R.H. side of wagon.

70951-16



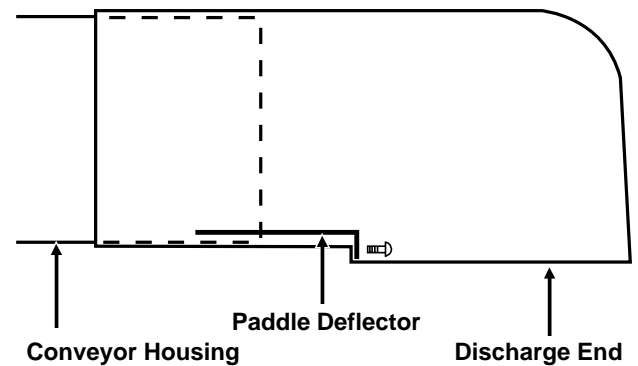
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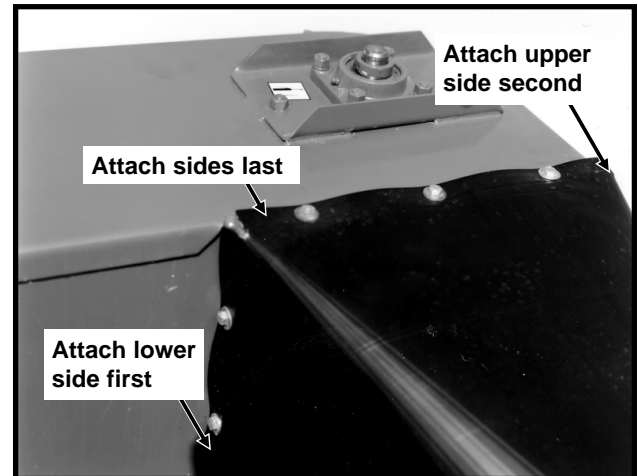
DISCHARGE SPOUT INSTALLATION

Position the discharge spout onto the conveyor discharge end with the edge that is trimmed down 1/4" located on the lower side. (Remove cap screws which hold paddle deflector in place during shipment.) Install carriage bolts from the inside through the conveyor discharge end and spout. Install flat washer, lock washer and nut. Attach lower side first as shown below. Then secure upper side second and sides last.

(CONV1)



61455-80



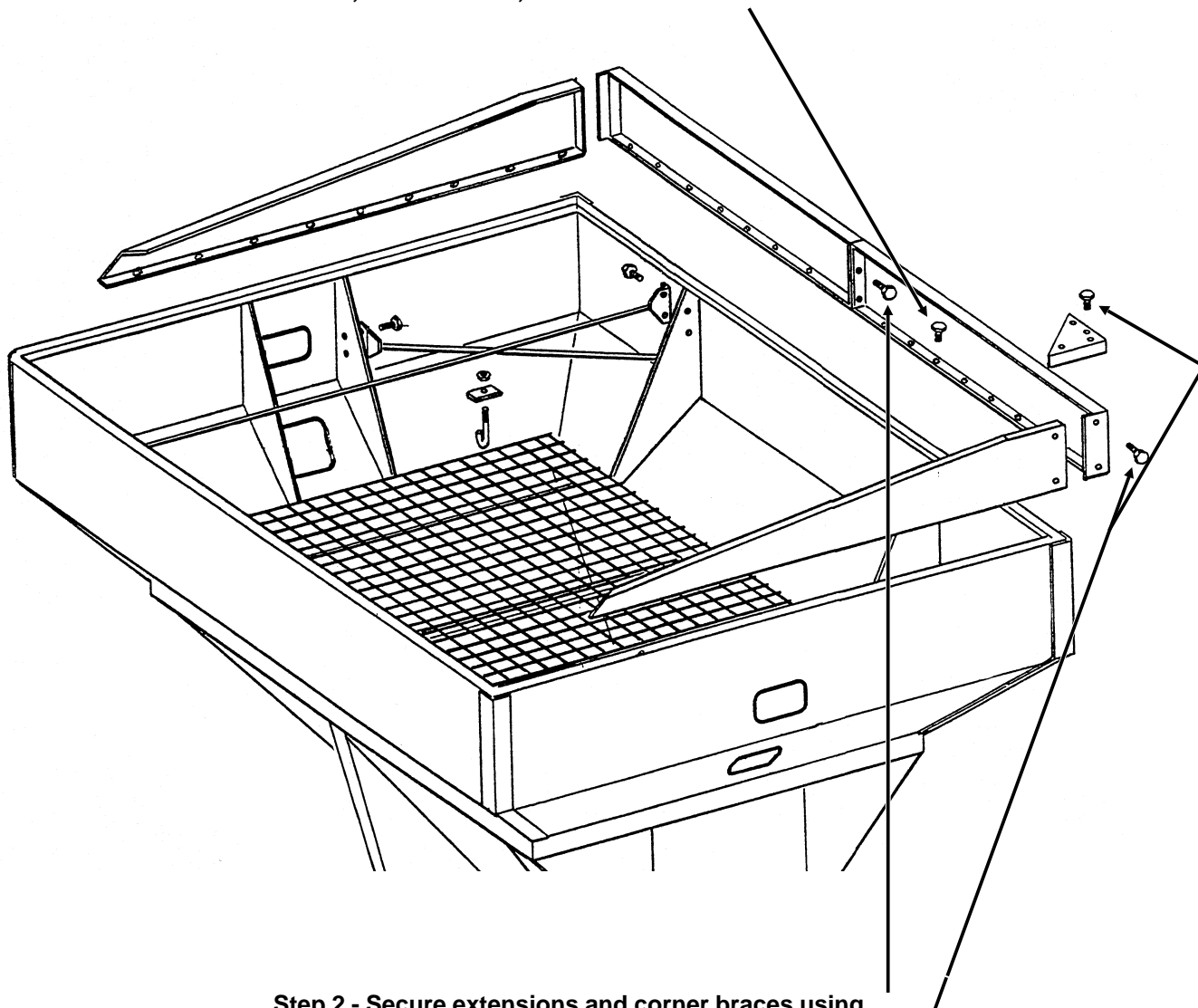
DEALER SETUP

INSTALLATION OF EXTENSIONS AND CORNER BRACES

- Step 1** Install extensions onto wagon as shown below using $\frac{3}{8}$ " x 1" carriage bolts. Install USS washer, lock washer and hex nut on the bottom side. **DO NOT TIGHTEN** hardware until corner braces are installed and extensions are bolted together.
- Step 2** Position corner braces. Install $\frac{3}{8}$ " x 1" cap screws to secure extensions and corner braces. Install USS washers, lock washers and hex nuts.
- Step 3** Tighten hardware.

WAC014/WAS018(CONV35)

Step 1 - Install extensions onto wagon using $\frac{3}{8}$ " x 1" carriage bolts, USS washers, lock washers and hex nuts.



Step 2 - Secure extensions and corner braces using $\frac{3}{8}$ " x 1" cap screws, USS washers, lock washers and hex nuts.


DEALER SETUP

IMPORTANT INFORMATION

KINZE Manufacturing, Inc. would like to thank you for your patronage. We appreciate your confidence in KINZE® farm machinery. Your KINZE® 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 wagon. It should be considered a permanent part of the machine and remain with the machine when you sell it.

It is the responsibility of the user to read and understand the Operator & Parts 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 & Parts 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 on public roadways. It is the operator's responsibility to be aware of and follow federal, state/provincial and local regulations in this regard.

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 Manufacturing, Inc. Registration must be completed and sent to KINZE Manufacturing, Inc. within 30 days of delivery of the KINZE® product to the retail purchaser. KINZE Manufacturing, Inc. 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.

INTRODUCTION

This manual has been written to cover the KINZE® 450C Grain Conveyor Wagon.

GENERAL INFORMATION

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, 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 unless otherwise stated.

61455-77



450C Conveyor Wagon

LFA33-96



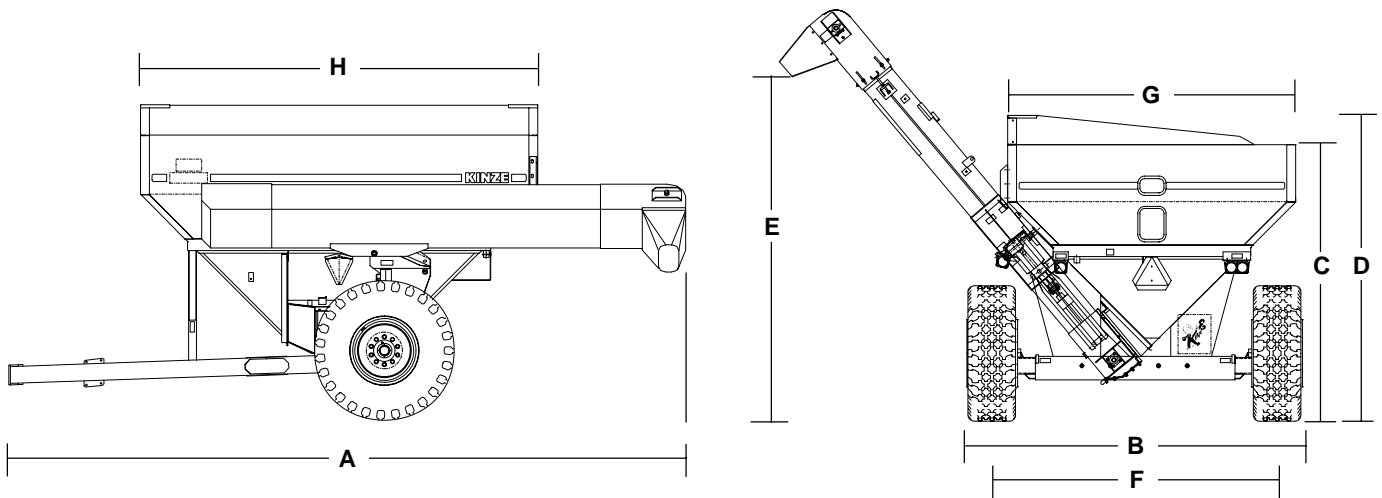
450C Sof-Trak Conveyor Wagon

INTRODUCTION

SPECIFICATIONS

450C

A6036(CONV38e/CONV39e)



	Serial No. 550000-550176	Serial No. 550177 & On
OVERALL DIMENSIONS		
(A) Total Length	23' 2" (Conveyor Folded)	
(B) Total Width (Folded)	12' 10"	12' 10" or 14' 10"
(C) Height (To Top Of Grain Tank)	9' 6" (Combine Side)	
(D) Height (To Top Of Grain Tank)	10' 6" (Extension Side)	
(E) Height (To Tip Of Spout)*	11' 7" (13' 3/4" W/Conveyor Extension Package)	
(F) Width (Tire Center To Center)	120" Field 108" Shipping	120" or 144" Field 120" Shipping
GRAIN TANK SPECIFICATIONS		
(G) Total Width	10' 1"	
(H) Total Length	13' 6"	
Total Capacity (15% Moisture Corn)	490 Bu.	
Construction	Full 12 Gauge Construction	
WEIGHTS		
Empty Hitch Weight **	570 Lbs.	
Loaded Hitch Weight	3700 Lbs.	
Total Wagon Weight - Empty	6273 Lbs.	
BUSHEL/MINUTE	175 BPM - Hyd.***	
TRACTOR REQUIREMENTS	90-125 HP	
SUSPENSION		
Spindle	3 1/2" Dia.	
Hub	10 Bolt	
Wheel	20" x 26"	
Tire Size ****	23.1" x 26", 12 Ply (R-3)	
	23.1" x 26", 10 Ply (R-1)	
FRAME	4" x 7" x 1/4" Tubular Steel	
CONVEYOR DRIVE/FOLD	Hydraulic	
FLOW CONTROL	Hydraulic Grain Door	
CONVEYOR PADDLE	37 - 5 1/2" x 19 1/2"	
ELECTRONIC SCALE	Optional	

* Spout tip extension is standard equipment on all models.

** Weight with conveyor folded to transport position. Empty hitch weight increases to 910 lbs. with conveyor in unloading position.

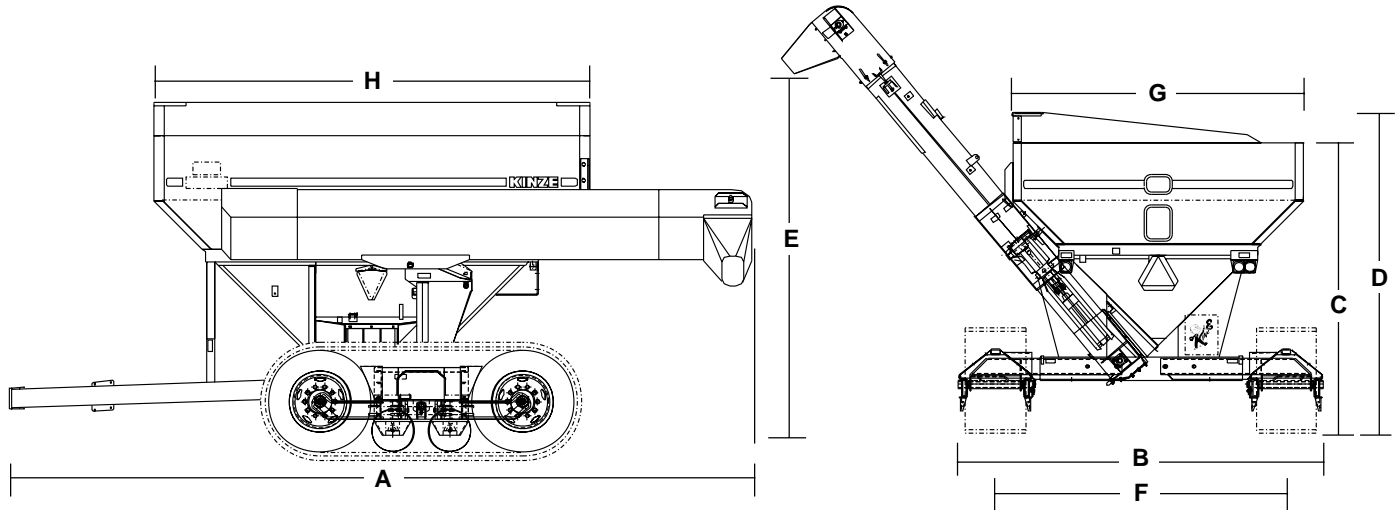
*** At 18 gallons per minute and 1800 PSI. Time and bushels/minute vary with moisture content of grain.

**** R-1 traction-tread or R-3 diamond-tread.

SPECIFICATIONS

450C SOF-TRAK

A6036(CONV27e/CONV40e)



	Serial No. 550000-550176	Serial No. 550177 & On
OVERALL DIMENSIONS		
(A) Total Length	23' 2" (Conveyor Folded)	
(B) Total Width (Folded)	12' 11"	12' 11"
(C) Height (To Top Of Grain Tank)	9' 6" (Combine Side)	
(D) Height (To Top Of Grain Tank)	10' 6" (Extension Side)	
(E) Height (To Tip Of Spout)*	11' 7" (13' 3/4" W/Conveyor Extension Package)	
(F) Width (Tire Center To Center)	120" Field 108" Shipping	120" or 144" Field 120" Shipping
GRAIN TANK SPECIFICATIONS		
(G) Total Width	10' 1"	
(H) Total Length	13' 6"	
Total Capacity (15% Moisture Corn)	490 Bu.	
Construction	Full 12 Gauge Construction	
WEIGHTS		
Empty Hitch Weight **	570 Lbs.	
Loaded Hitch Weight	3700 Lbs.	
Total Wagon Weight - Empty	11,423 Lbs.	
BUSHEL/MINUTE	175 BPM - Hyd.***	
TRACTOR REQUIREMENTS	90-125 HP	
TRACK		
Spindle Width	24"	
Hub Length - Overall	119"	
Wheel Length - Contact	76"	
End Wheels	9" x 22.5" (8)	
Mid Wheels	16" Steel (4)	
FRAME	4" x 7" x 1/4" Tubular Steel	
CONVEYOR DRIVE/FOLD	Hydraulic	
FLOW CONTROL	Hydraulic Grain Door	
CONVEYOR PADDLE	37 - 5 1/2" x 19 1/2"	
ELECTRONIC SCALE	Not Available	

* Spout tip extension is standard equipment on all models.

** Weight with conveyor folded to transport position. Empty hitch weight increases to 910 lbs. with conveyor in unloading position.

*** At 18 gallons per minute and 1800 PSI. Time and bushels/minute vary with moisture content of grain.

SAFETY PRECAUTIONS

Safe and careful operation of the tractor and wagon at all times will contribute significantly to the prevention of accidents.

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



At all times keep children off of and out of the wagon.



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 keep hands, feet and clothing away from moving parts. Do not wear loose fitting clothing which may catch in moving parts.



Always wear protective clothing, substantial shoes and suitable hearing and eye sight protectors applicable for the situation.



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



Be aware of bystanders, particularly children! Always look around to make sure it is safe to start the engine of the towing vehicle or move the wagon. This is particularly important with higher noise levels and quiet cabs, as you may not hear people shouting.



Do not allow anyone to stand between the tongue or hitch and the towing vehicle when backing up to the wagon.



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



If the wagon is going to be transported on a public highway, a safety chain should be obtained and installed. Always follow federal, state/provincial and local regulations regarding a safety chain when towing farm equipment on a public highway. Only a safety chain (not an elastic or nylon/plastic tow strap) should be used to retain the connection between the towing and towed machines in the event of separation of the primary attaching system.



Always drive at a safe speed relative to local conditions and ensure your speed is low enough for an emergency stop to be safe and secure. Keep speed to a minimum.



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



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



Be a safe and courteous driver. Always yield to oncoming traffic in all situations, including narrow bridges, intersections, etc.



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/provincial and local regulations in this regard.



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.



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



Always fold conveyor to down position before transporting wagon.



Reduce speed prior to turns to avoid the risk of overturning.



Allow for unit length when making turns.



Use a tractor equipped with a roll-over-protective-system and fasten your seatbelt prior to starting the engine.





Avoid sudden uphill turns on steep slopes.




Make sure the parked machine is on a hard, level surface. Wheel chocks may be needed to prevent unit from rolling.


SAFETY PRECAUTIONS


 Always keep the tractor in gear to provide engine braking when going downhill. Do not coast.

 Store the wagon in an area away from human activity. **DO NOT** permit children to play in or around the stored unit.

 Always disengage power system and shut off tractor engine before:

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


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

 This machine has been designed and built with your safety in mind. Do not make any alterations or changes to this machine. Any alteration to the design or construction may create safety hazards.

 Good maintenance is your responsibility. Poor maintenance is an invitation to trouble.

61455-10



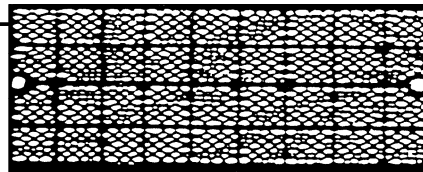
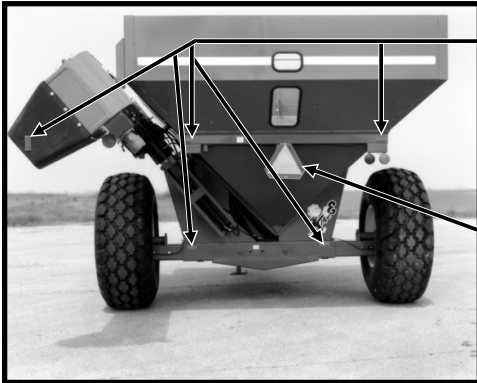
 If the safety screen is removed for any reason, replace before using the wagon. Never operate the wagon with the safety screen removed.

SAFETY WARNING SIGNS

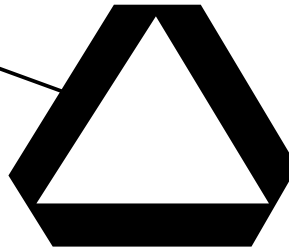
The “WARNING” signs illustrated on these pages are placed on the machine to warn of hazards. The warnings found on these signs are for your personal safety and those around you. **OBSERVE THESE WARNINGS!**

- 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 sign 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.

67273-3

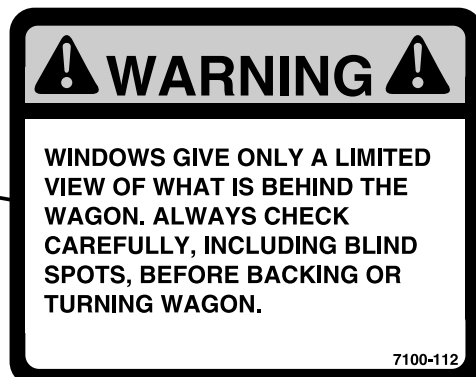
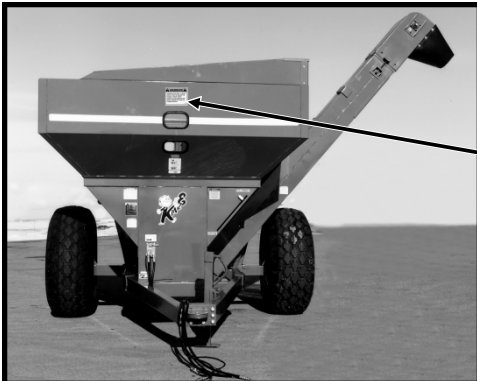


Part No. G7200-03 Red Reflector



Part No. GD2199 SMV Sign

61455-6



Part No. G7100-112

SAFETY WARNING SIGNS

WARNING

1. Read and understand the Operator's Manual.
2. Stop the tractor engine before leaving the operator's platform.
3. Keep riders off the machine.
4. Make certain everyone is clear of the machine before starting the tractor engine and operating.
5. Keep all shields in place.
6. Never lubricate, adjust, unplug or service the machine with tractor engine running.
7. Wait for all movement to stop before servicing.
8. Keep hands, feet and clothing away from moving parts.
9. Use flashing warning lights when operating on highways except when prohibited by law.

7100-46

Part No. G7100-46

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.

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


7100-82

Part No. G7100-82


DANGER

FLOWING GRAIN TRAPS AND SUFFOCATES VICTIM IN SECONDS!


NEVER PLAY IN OR ON THIS WAGON!



YOU CAN DIE IN SECONDS IN FLOWING GRAIN!



Farm Safety For



7100-134

Part No. G7100-134

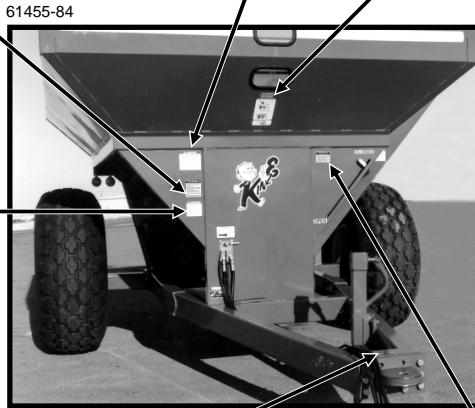
DANGER

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.
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.
4. Know and obey all laws and regulations.

7100-120

Part No. G7100-120



WARNING

TOW ONLY WITH FARM TRACTOR

7100-56

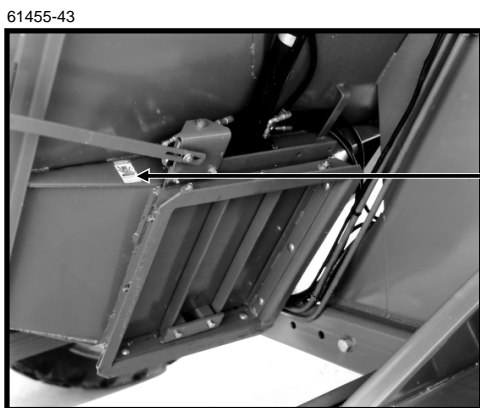
Part No. G7100-56

WARNING

THIS MACHINE HAS BEEN DESIGNED AND BUILT WITH YOUR SAFETY IN MIND. DO NOT MAKE ANY ALTERATIONS OR CHANGES TO THIS MACHINE. ANY ALTERATION TO THE DESIGN OR CONSTRUCTION MAY CREATE SAFETY HAZARDS.

7100-90

Part No. G7100-90



DANGER



**HYDRAULIC DOOR
KEEP OUT**

7100-170

Part No. G7100-170

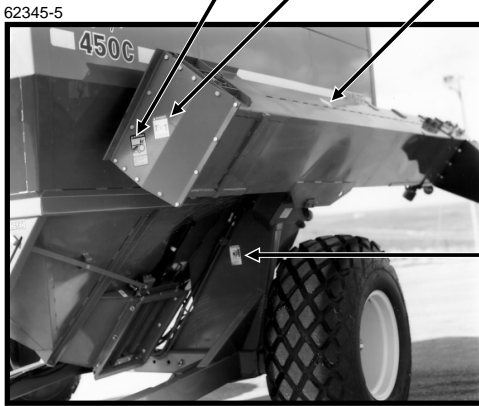
SAFETY WARNING SIGNS



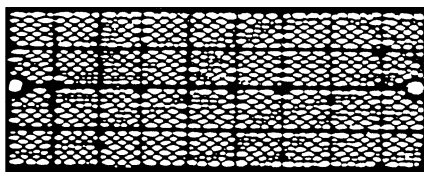
Part No. G7100-172



Part No. G7100-175



Part No. G7100-171



Part No. G7200-02 Amber Reflector



SAFETY WARNING SIGNS

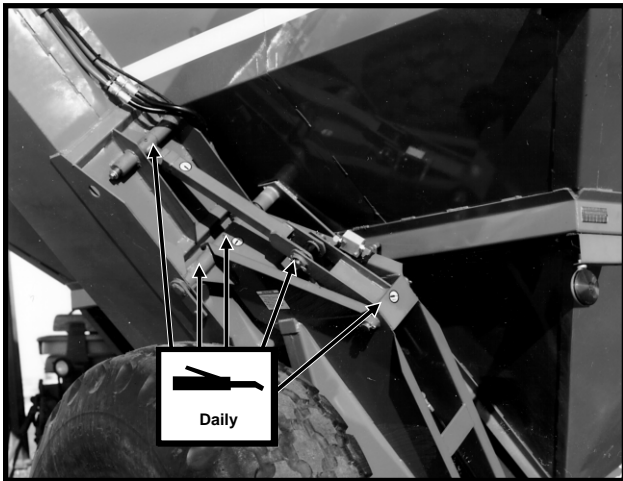
LUBRICATION

This page shows the locations of all lubrication points. Proper lubrication of all moving parts will help ensure efficient operation of your KINZE® wagon and prolong the life of friction producing parts.

GREASE FITTINGS

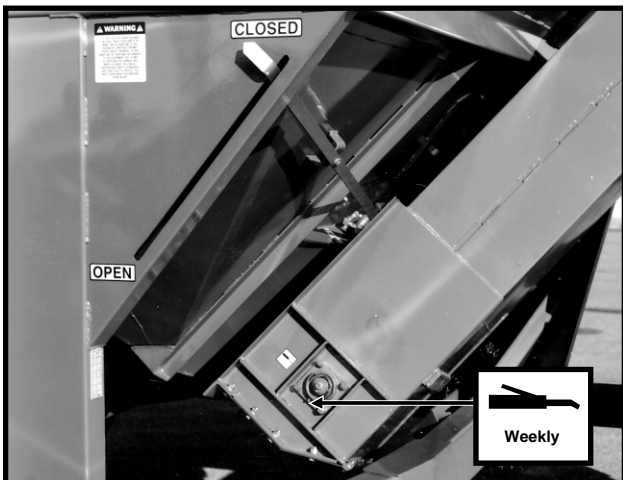
Those parts equipped with grease fittings should be lubricated at the frequency indicated with an SAE multipurpose type grease. Be sure to clean the fitting thoroughly before using grease gun. The frequency of lubrication recommended is based on normal operating conditions. Severe or unusual conditions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

61455-60



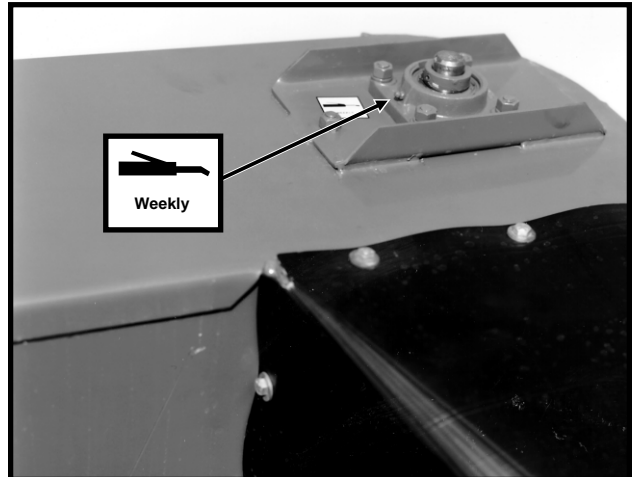
Conveyor Fold - 5 Zerks

61455-51



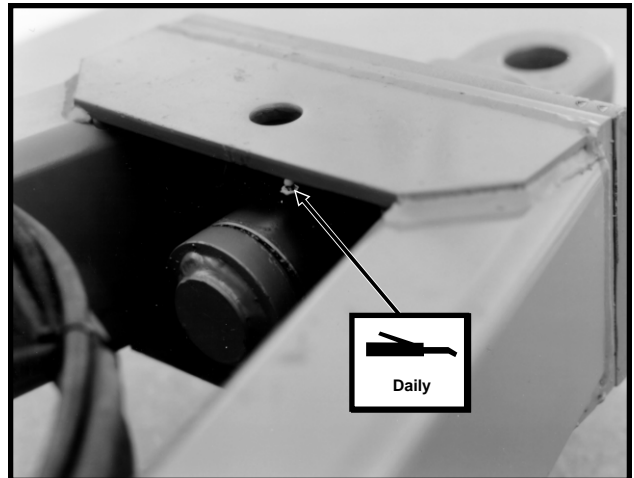
**Flange Bearings (Lower Section) - 2 Bearings/
1 Zerk Per Bearing**

61455-80



**Flange Bearings (Upper Section) - 2 Bearings/
1 Zerk Per Bearing**

71428-14

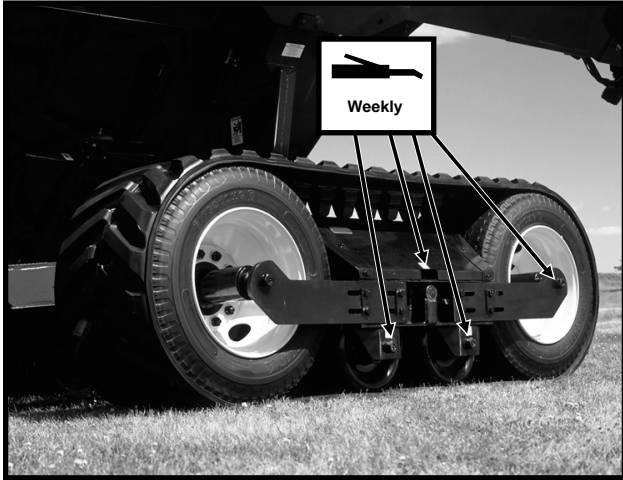


Optional Single Clevis Swivel Hitch - 1 Zerk

LUBRICATION

SOF-TRAK WAGON

LFA46-96



***Midwheel Spindle Bolt (2 Per Midwheel Assembly)**
***Endwheel Spindle Bolt (2 Per Endwheel Assembly)**
Axle (2 per side)

*** Pump grease into hub until grease comes out around the seals.**

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

CONVEYOR CHAIN

No lubrication required.

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.

OPERATION

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

Lubricate the 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.

HYDRAULIC OPERATION

The conveyor fold and grain door are operated from one SCV outlet. The hydraulic motor which runs the unloading conveyor is run by a second SCV outlet.

A check valve in the motor hydraulic circuit allows the motor to turn only in one direction to prevent accidentally running the conveyor in reverse.

TRACTOR PREPARATION AND HOOKUP

1. Slide tractor drawbar in as far as possible.
2. Connect wagon to tractor hitch using a 1 1/8" minimum diameter (2" if equipped with electronic scale) high quality hitch pin of sufficient length. Secure pin with a locking device.

NOTE: The wagon may be equipped with either a single clevis (wheatland style), a double clevis or swivel hitch. If the single clevis hitch is used the tractor should be equipped with a hammer strap drawbar and the hitch pin used should be the pin recommended and/or supplied by the tractor manufacturer.

3. 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.

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



DANGER: 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.

4. Raise jack to maximum height to prevent damage in uneven field conditions.

61455-78



5. 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 the clearance lights and signal lights are working properly.



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/provincial and local regulations in this regard.

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

An auxiliary attaching system (safety chain) is available through your KINZE® Dealer.



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

OPERATION

UNLOADING OPERATION

1. After checking to see that there are no power lines or other obstacles in the way, move the tractor hydraulic lever to fold the conveyor into the unloading position. Hold the hydraulic lever until the grain door indicator starts to move off the “closed” position. This will indicate the conveyor is fully upright and the folding linkage locked over center.

61455-51



NOTE: The operator can stop at any point in the sequence and restart or reverse without affecting the sequence of operation.

2. Increase tractor RPM and engage conveyor. Operate tractor at $\frac{3}{4}$ throttle for hydraulic motor operation
3. Operate tractor hydraulic lever to open grain door.
4. At the end of the load, reduce tractor RPM and slow conveyor speed.
5. Hold the tractor hydraulic lever long enough to close the door. The door position indicator shows when the door is fully closed. Release the tractor hydraulic lever before the conveyor begins to fold.

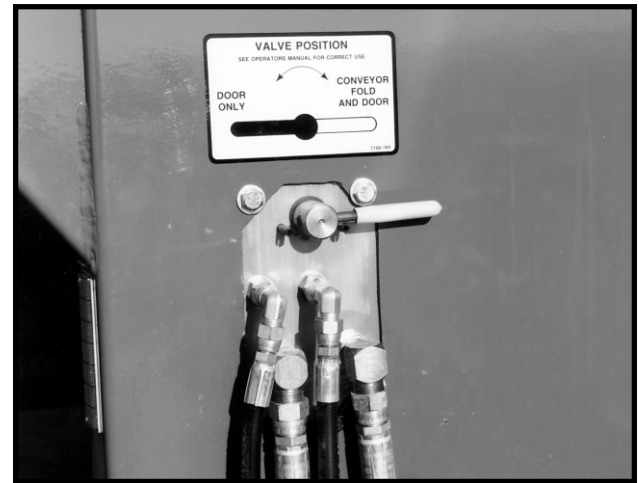
61455-50



6. Run the conveyor for a short time to clean out the conveyor lower end. This is especially important if there is still a partial load in the tub.

IMPORTANT: Failure to adequately clean the conveyor after closing the dump door will cause grain to be dumped on the ground as the conveyor assembly folds.

61455-1



NOTE: A HAND VALVE LOCATED AT THE FRONT OF THE WAGON allows selection of “conveyor fold and door” operation or “door only” operation for pit dumping. See “Hydraulic Diagram” in the Maintenance Section for circuit operation.



WARNING: If the wagon is used around power lines, buildings, trees or other obstacles or if the wagon is being used in rough field conditions, the unloading conveyor should be folded to the transport position after unloading.



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

NOTE: Unloading speed will vary with moisture content of the grain, conveyor speed and tractor hydraulic pressure and volume.

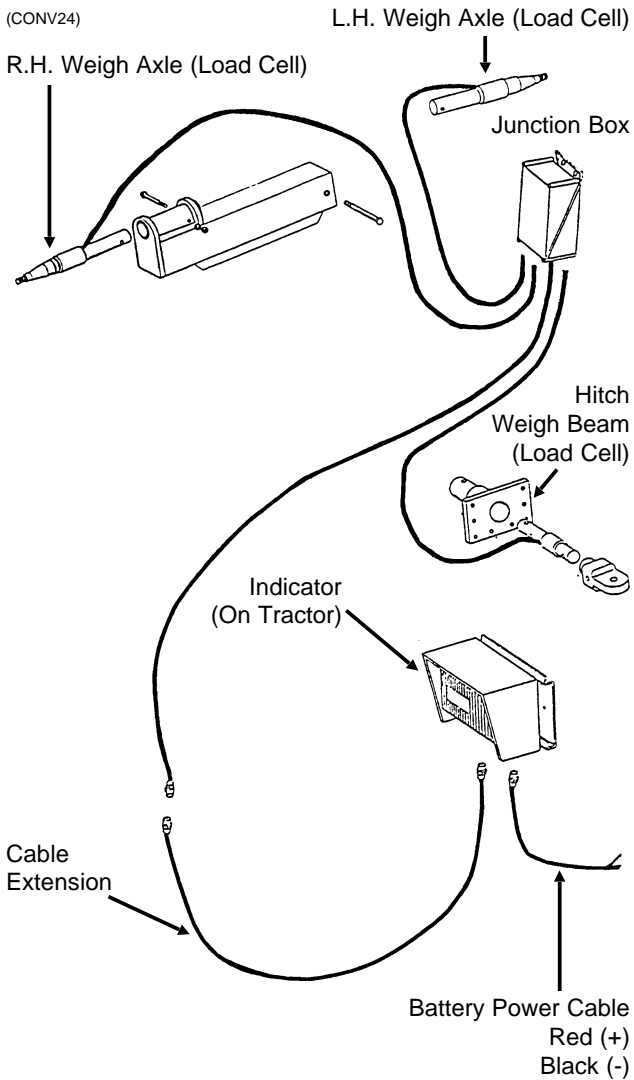
OPERATION

ELECTRONIC SCALE

(Wheel Wagon Only)

The electronic scale option includes two weigh axles, one hitch weigh beam, a scale indicator console for tractor mounting and the required cables, brackets and hardware for mounting.

(CONV24)



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".

Step 3 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.

OPERATION

MAINTENANCE

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 Diameter	Grade 2		Grade 5		Grade 8	
	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.

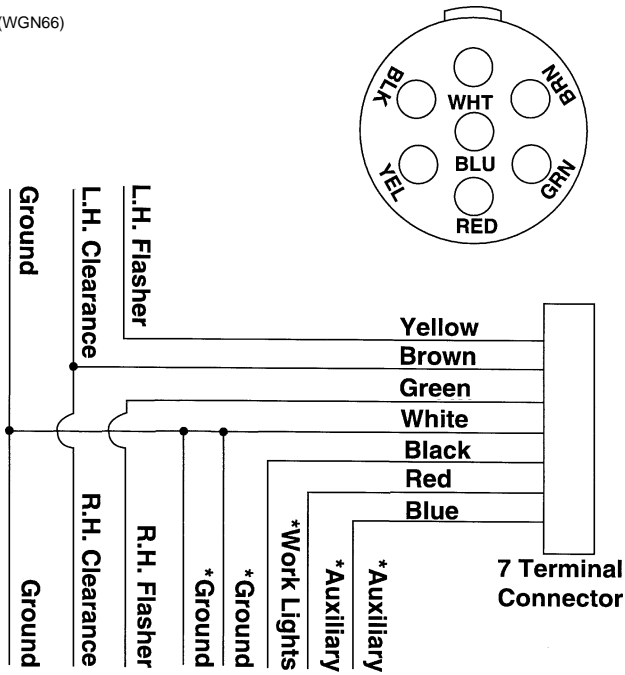
NOTE: Unplated hardware and bolts with lock nuts should be torqued approximately 1/3 higher than the above values. Bolts lubricated prior to installation should be torqued to 70% of value shown in chart.

	GRADE 2 No Marks		GRADE 5 3 Marks		GRADE 8 6 Marks
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MAINTENANCE

WIRING DIAGRAM

(WGN66)



* Optional lights are available from KINZE® which may be wired into existing auxiliary and work light wires in harness.

Light package supplied on the 450C grain conveyor wagon meets ASAE standards. For the correct wiring harness to be wired into the lights on your tractor, check with the tractor manufacturer.

69922-35



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.

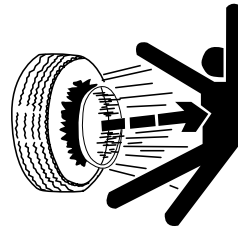
Tighten wheel nuts to 425 ft. lbs. torque and check nuts periodically to ensure tightness.

TIRE PRESSURE

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

23.1" x 26"; 10 Ply 35 Min. - 40 Max. PSI
 9" x 22.5"; Sof-Trak *85 PSI

*All tire pressures must be equal.



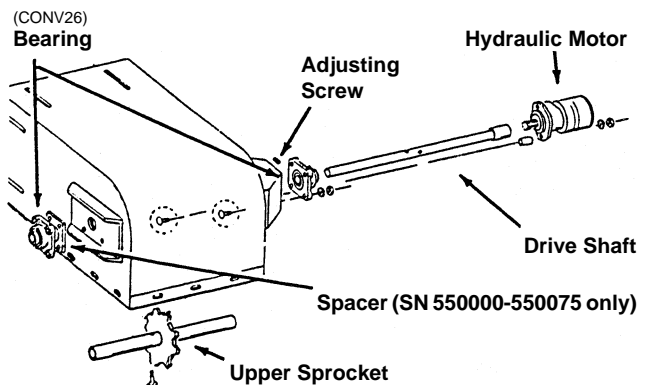
Rim and tire servicing can be dangerous. Explosive separation of a tire and rim parts can cause serious injury or death. Do not attempt to mount a tire unless you have the proper equipment and experience to perform the job. This should

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.

REPLACING CONVEYOR TOP SHAFT COMPONENTS

Install the drive shaft through the upper sprocket and install cap screws through shaft. Install bearings onto the shaft. Snug up the nuts on the bearing mounting bolts. **DO NOT** torque. Slide the hydraulic motor splined shaft into the drive shaft and check fit of the hydraulic motor mounting bolts. If the motor will not fit or bolts will not fit, adjust the adjusting screws on the bearing housing, up-to or away-from the bearing to align the motor with the center of the drive shaft. Torque bolts in bearing mounts. Torque motor mounting bolts.

NOTE: Alignment of bearings and hydraulic motor on the shaft will extend the wear life of the components.

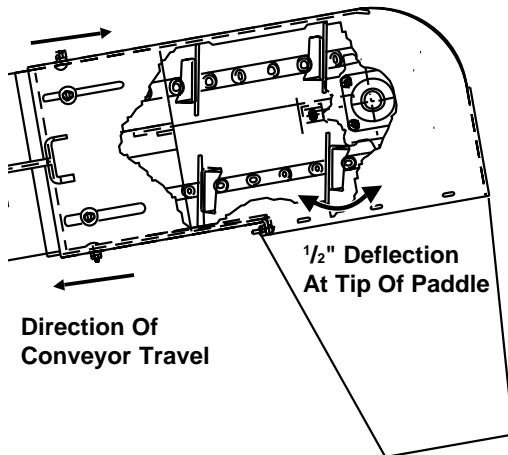


MAINTENANCE

CONVEYOR CHAIN TENSION

1/2" of deflection at the tip of the paddle should be maintained. Check paddle deflection with the conveyor in the transport position.

A5974a(CONV34en)



DANGER: Always disengage power system and shut off tractor engine before checking or adjusting conveyor chain tension.

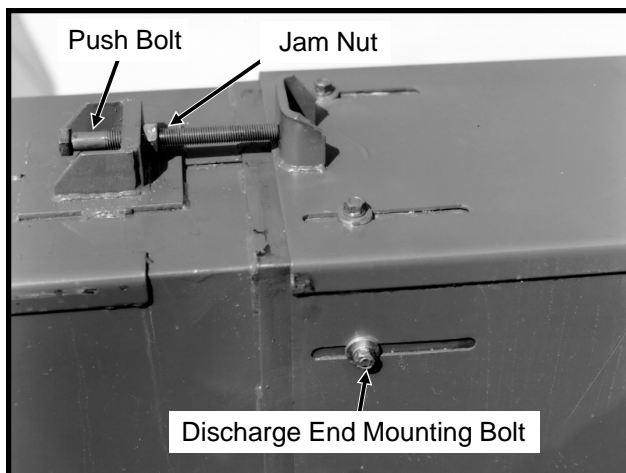


DANGER: Always keep hands, feet and clothing away from moving parts.

To tighten chain:

1. Loosen each of the eight 1/2" discharge end mounting bolts.
2. Loosen jam nut on push bolt.
3. Turn push bolt clockwise to adjust discharge end outward until proper chain tension is obtained. Discharge end must be adjusted equally on both sides to maintain proper alignment.
4. After adjustment has been made, tighten push bolt jam nuts and discharge end mounting hardware.

61455-76



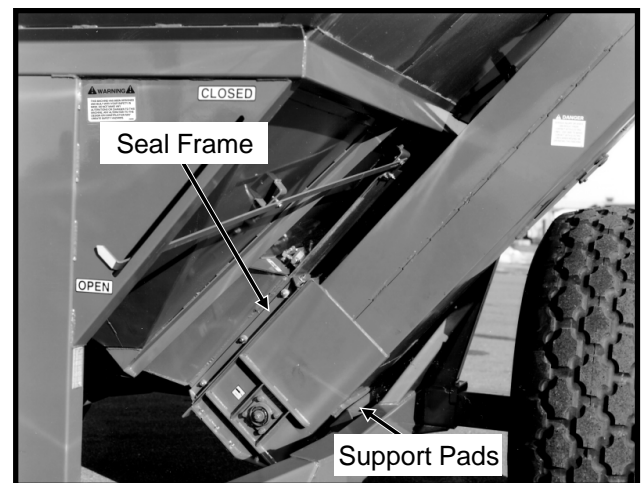
DUMP CHUTE/CONVEYOR ADJUSTMENT

The dump chute/conveyor seal is adjustable and may need adjustment to maintain a grain tight seal.

To adjust:

1. Fold conveyor assembly to the unloading position.
2. Loosen each of the twelve seal frame mounting bolts.
3. Draw the seal frame down to the conveyor assembly with clamps.
4. Check the conveyor support pads welded to the conveyor and wagon frame to make sure the conveyor assembly is contacting them.
5. Tighten the seal frame mounting bolts.

61455-57



AXLE ADJUSTMENT (SN 550000-550176)

The narrow 108" width axle adjustment is for shipping purposes only.

After adjusting axles to the 120" field position, install axle bolts with the head of the bolt to the front of the wagon.



CAUTION: Be sure the axles are adjusted to the 120" field position before operating the wagon. Conveyor will strike tire when folding to unloading position with axle in 108" position.

AXLE ADJUSTMENT (Serial No. 550177 & On)

The conveyor wagon is shipped with the axles set at 120". If desired they can be adjusted out to 144"

After adjusting axles to the 144" field position, install axle bolts with the head of the bolt to the front of the wagon.

MAINTENANCE

MUD SCRAPER ADJUSTMENT

(Sof-Trak Wagon)

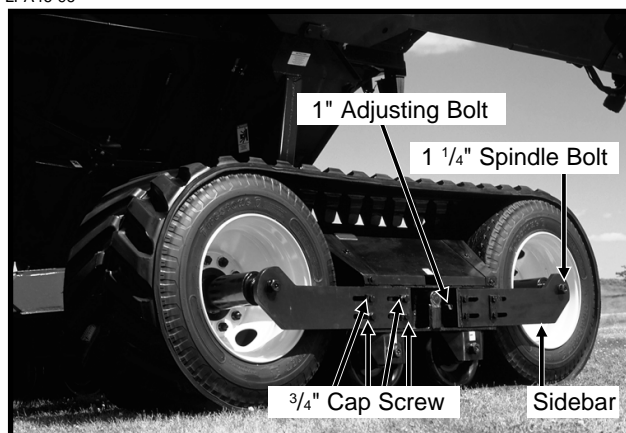
LFA46-96



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

TRACK TENSION (Sof-Trak Wagon)

LFA46-96



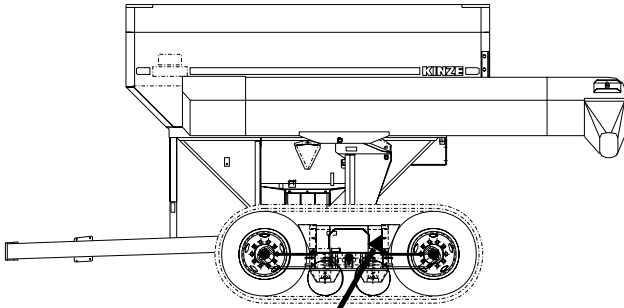
There should be approximately $\frac{1}{4}$ " to $\frac{3}{8}$ " of sag in the track at the midpoint between the front and back tires. To check for proper tension, lay a straight edge across the complete length of the track. Measure the distance between the track and the straight edge at the midpoint.

If adjustment is needed, loosen the four $\frac{3}{4}$ " attachment cap screws on the inside sidebar and the four $\frac{3}{4}$ " attachment cap screws on the outside sidebar on one end (front or rear) of the machine. Turn the 1" adjusting bolt on the end of each sidebar in or out equal amounts according to the adjustment needed. Retighten the four $\frac{3}{4}$ " 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.

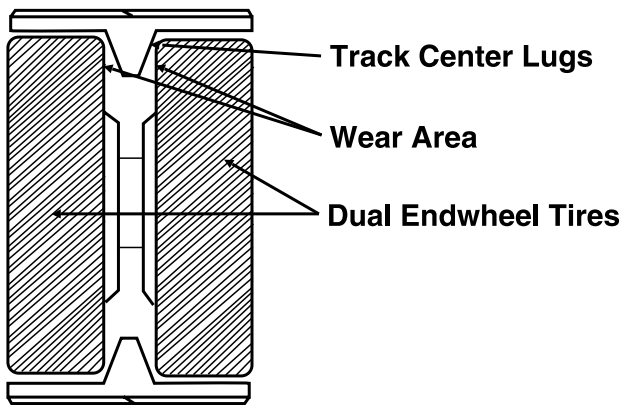
MAINTENANCE

TRACK ALIGNMENT (Sof-Trak Wagon)

RH490(CONV40e)



RH050390(WGN16)



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 $\frac{3}{4}$ " 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 the sidebar (turning the 1" adjusting bolt counterclockwise) on the tire on the opposite side will move the lugs away from the tire. Retighten the four $\frac{3}{4}$ " 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 machine. Remove mud scraper.

Mark the position of both the inside and outside sidebars nearest the tire being removed. Loosen the four $\frac{3}{4}$ " cap screws and 1 $\frac{1}{4}$ " 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.

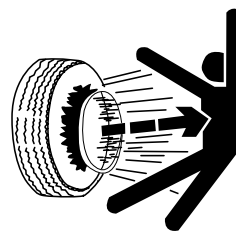
After the tire has been reinstalled and the wheel nuts torqued to 425 ft. lbs., reinstall the sidebar. Extend sidebars to the previously marked positions and tighten all hardware. Torque $\frac{3}{4}$ " cap screws to 220 ft. lbs. and 1 $\frac{1}{4}$ " spindle bolt to 1360 ft. lbs. Replace mud scraper. Check track alignment, track tension and mud scraper clearance. Adjust if necessary.

NOTE: Retorque wheel nuts as follows:

- After 4 hours use.
- After 16 hours use.
- Weekly during season.



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



The multipiece rim used on some Sof-Trak wagons require that specific procedures and safety instructions 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.

MAINTENANCE

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 machine, remove mud scraper, release track tension and remove inner and outer sidebars nearest the endwheel being serviced.

Midwheel Procedure:

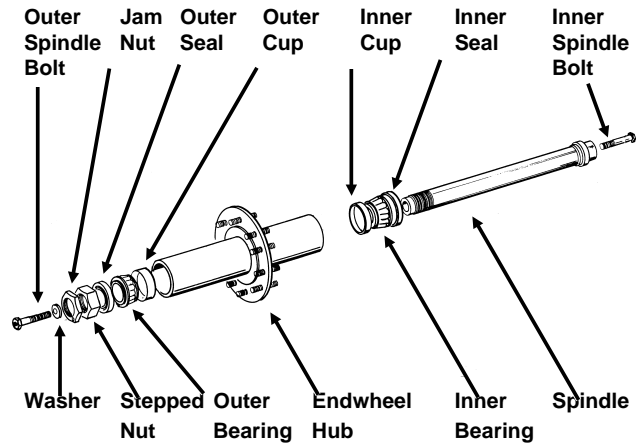
Follow the procedure described in "Tire Repair (Sof-Trak Wagon)" to raise machine, remove mud scraper, release track tension, remove inner and outer sidebars and both endwheels nearest midwheel being serviced. Drop the midwheel to clear the track carriage and roll it to the closest end of the track for removal.

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 $\frac{1}{4}$ 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.

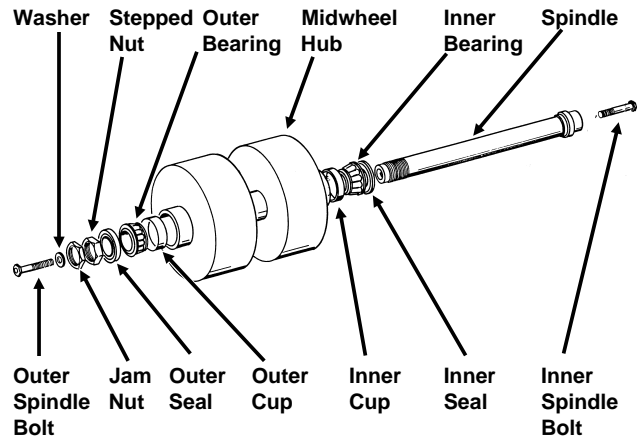
(WGN18)



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.

(WGN62)



MAINTENANCE

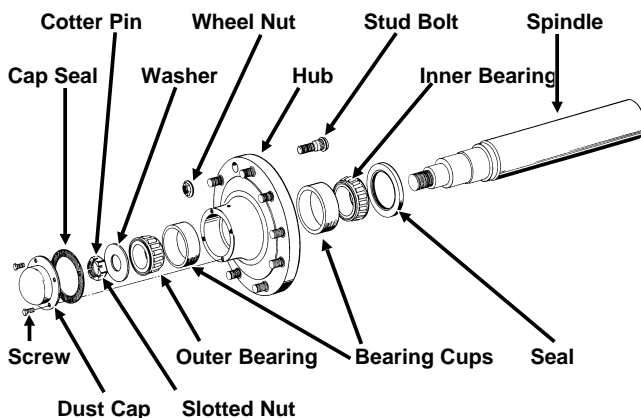
WHEEL BEARING REPLACEMENT (Wheel Wagon)

1. Raise tire clear of ground and remove wheel.
2. Remove dust 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 dust cap half full of wheel bearing grease and install on hub with attaching bolts.
12. Install wheel. Install and tighten wheel nuts. Lower tire to the ground. Torque wheel nuts to 425 ft. lbs.

PREPARATION FOR STORAGE

- Always store the 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.
- Open dump door and clean out all accumulated grain and debris from grain chamber.
- Wash wagon inside and out.
- Lubricate 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.

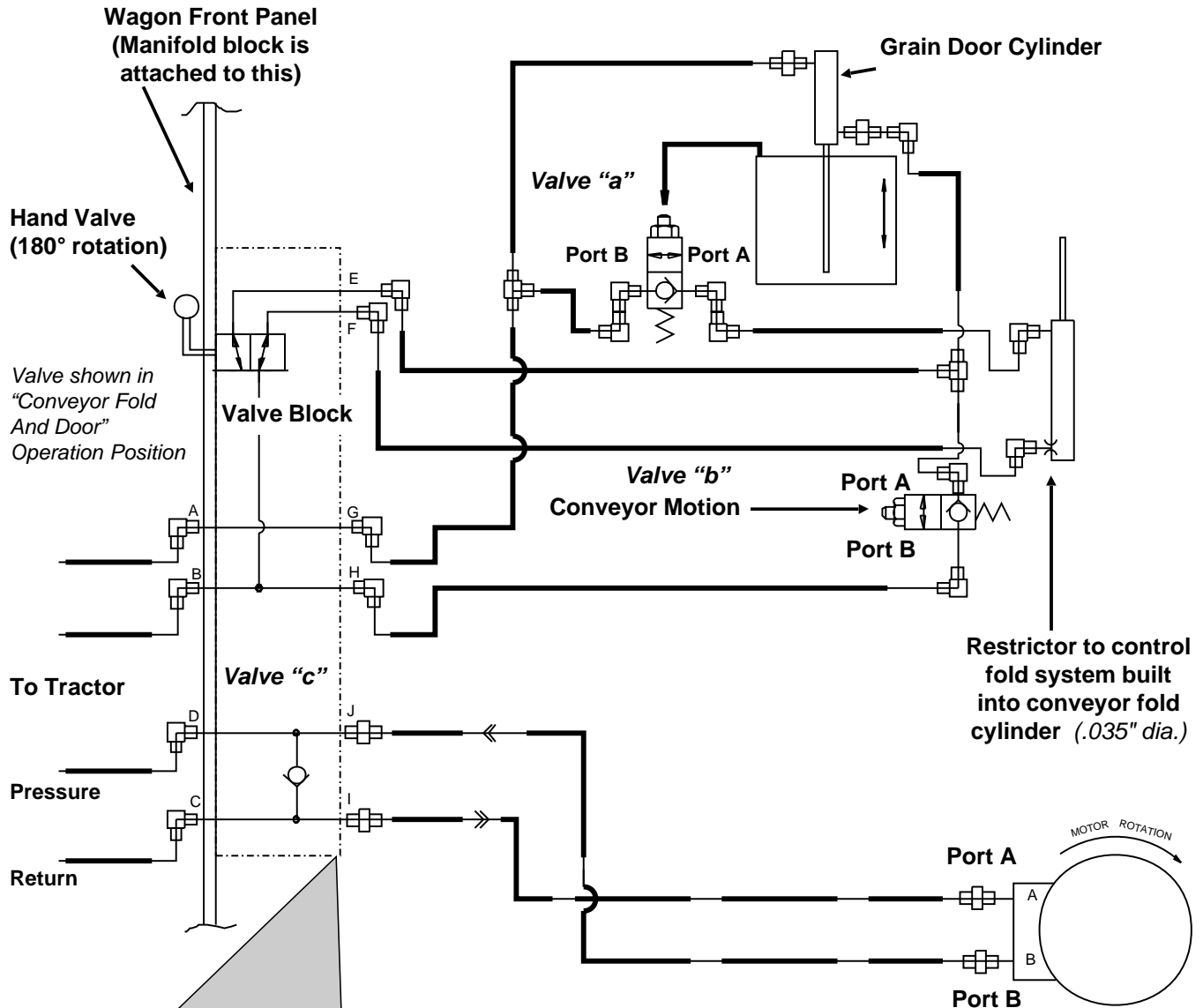
HTA002(WGN19)



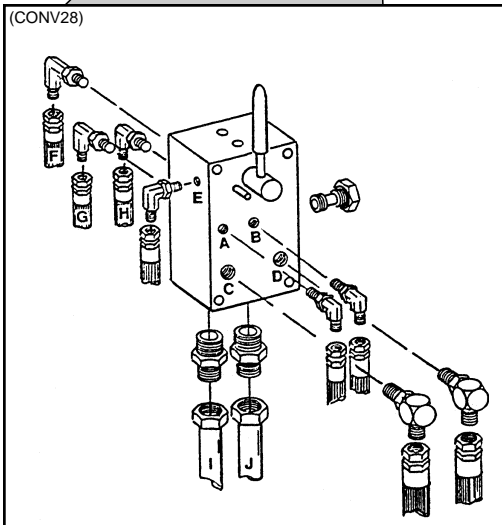
MAINTENANCE

A6036(CONV31en)

HYDRAULIC DIAGRAM



(CONV28)

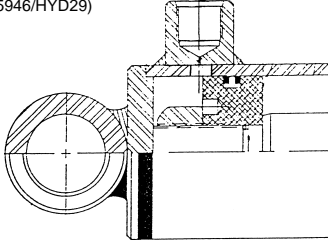


Circuit Operation

1. Dump door must be closed and plunger on Valve "a" must be depressed before conveyor cylinder can move. Hand valve must be in the "Conveyor Fold And Door" position as shown above for conveyor cylinder to retract.
2. Conveyor must be in unload position and plunger on Valve "b" must be depressed for dump door cylinder to retract with hand valve in the "Conveyor Fold And Door" position as shown above.
3. Moving the hand valve to its alternate position, "Door Only", locks the conveyor fold cylinder and allows only the grain door cylinder to operate.
4. Check Valve "c" prevents reverse operation of the hydraulic motor driving the conveyor chain.

MAINTENANCE

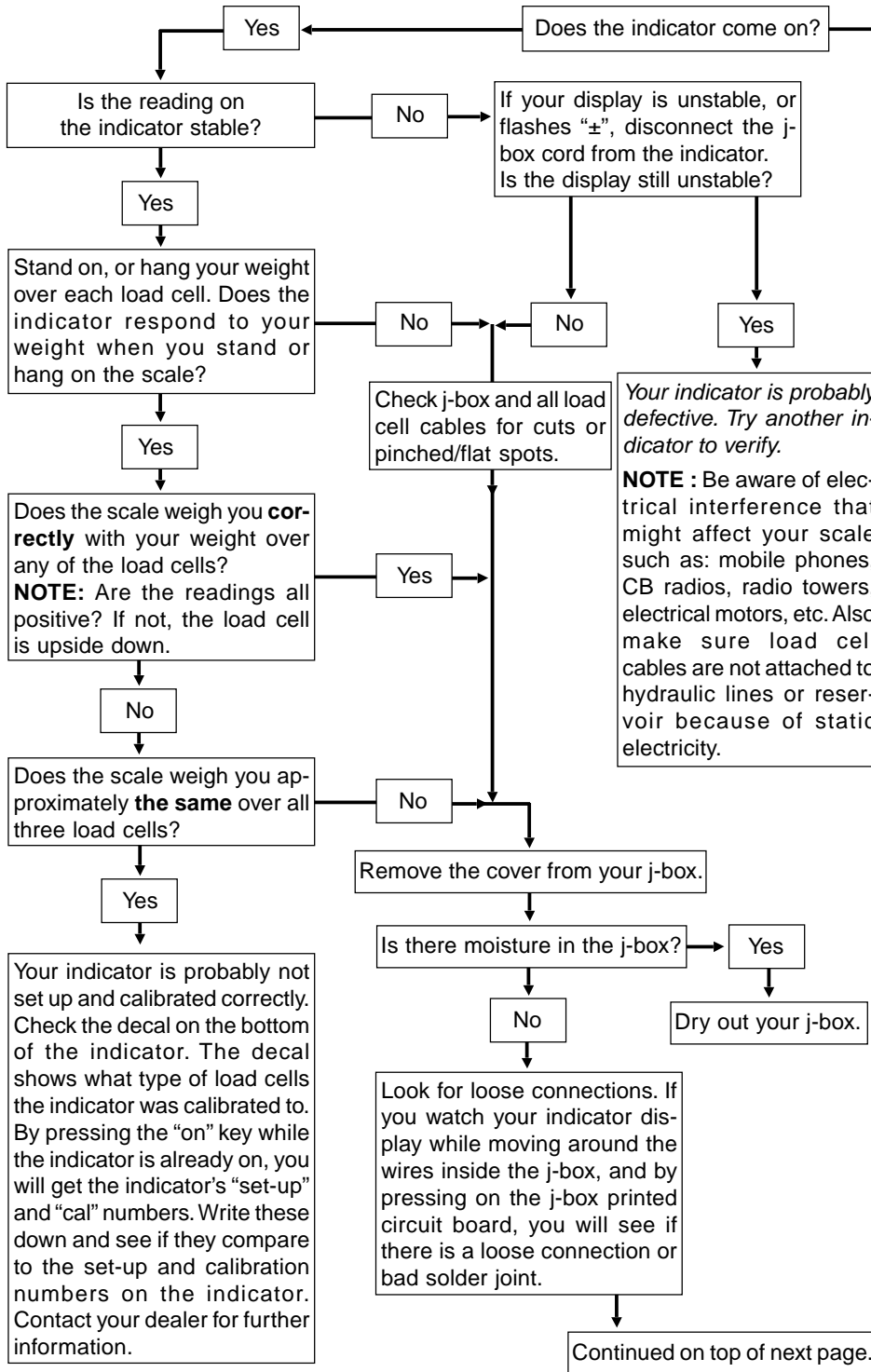
HYDRAULIC TROUBLESHOOTING

SYMPTOM	PROBABLE CAUSE	ACTION REQUIRED
<p>Unloading speed slow.</p>	<p>Flow control valve set to minimum on tractor.</p> <p>Restriction in hoses or couplers.</p> <p>Low gallonage or low pressure output from tractor hydraulic system.</p> <p>Hydraulic motor worn.</p> <p>Check valve in manifold not seating.</p>	<p>Check and set to maximum.</p> <p>Check and correct.</p> <p>Check tractor output with a flow meter and pressure gauge. Satisfactory operation requires a minimum of 9 gallons per minute at 1800 psi.</p> <p>With flow meter installed check rpm of lower shaft while unloading. Should have 8 to 9 RPM for each 1 gpm of flow from tractor. EXAMPLE: 80-90 RPM at 10 gpm flow.</p> <p>Remove, inspect for damage or foreign material.</p>
<p>Conveyor does not fold or unfold.</p>	<p>Valve in "Door Only" position.</p> <p>Restricted hoses or couplers.</p> <p>Door not completely closed.</p> <p>Plunger on door valve not compressed.</p> <p>Restrictor orifice in base end of conveyor cylinder blocked.</p> <p>(A5946/HYD29)</p> 	<p>Move valve to "Conveyor Fold And Door" position.</p> <p>Check and correct.</p> <p>Check for foreign material under door.</p> <p>When door is completely closed plunger on door valve should be depressed 1/4" to 3/8". Adjust contact bolt as required.</p> <p>Remove fitting in base end of conveyor fold cylinder and check for blockage. Clean if necessary. (Orifice size is .035" dia.)</p>
<p>Door will not operate.</p>	<p>Conveyor linkage not locking</p> <p>Tab on linkage not depressing plunger on valve.</p>	<p>Check for binding or interference of linkage or conveyor body and correct.</p> <p>With linkage over center, adjust valve so plunger is depressed 1/4" to 3/8".</p>

NOTE: If the hydraulic hoses have been disconnected from the cylinders or if a cylinder has not been used before, air may have gotten trapped in the hydraulic system. To remove the air, operate the hydraulic system several times until all functions operate smoothly.

MAINTENANCE

ELECTRONIC SCALE TROUBLESHOOTING



Bad Indicator: If you suspect a bad indicator, the easiest way to check is to try another indicator. Even if the indicator is a different model, or is set-up for a different scale, it at least should come on.

Poor Connection: Poor connections can be tricky. In doubt, Don't just tighten the connection, take them apart and clean them first. Any connection with rust or paint should be sanded or wire brushed.

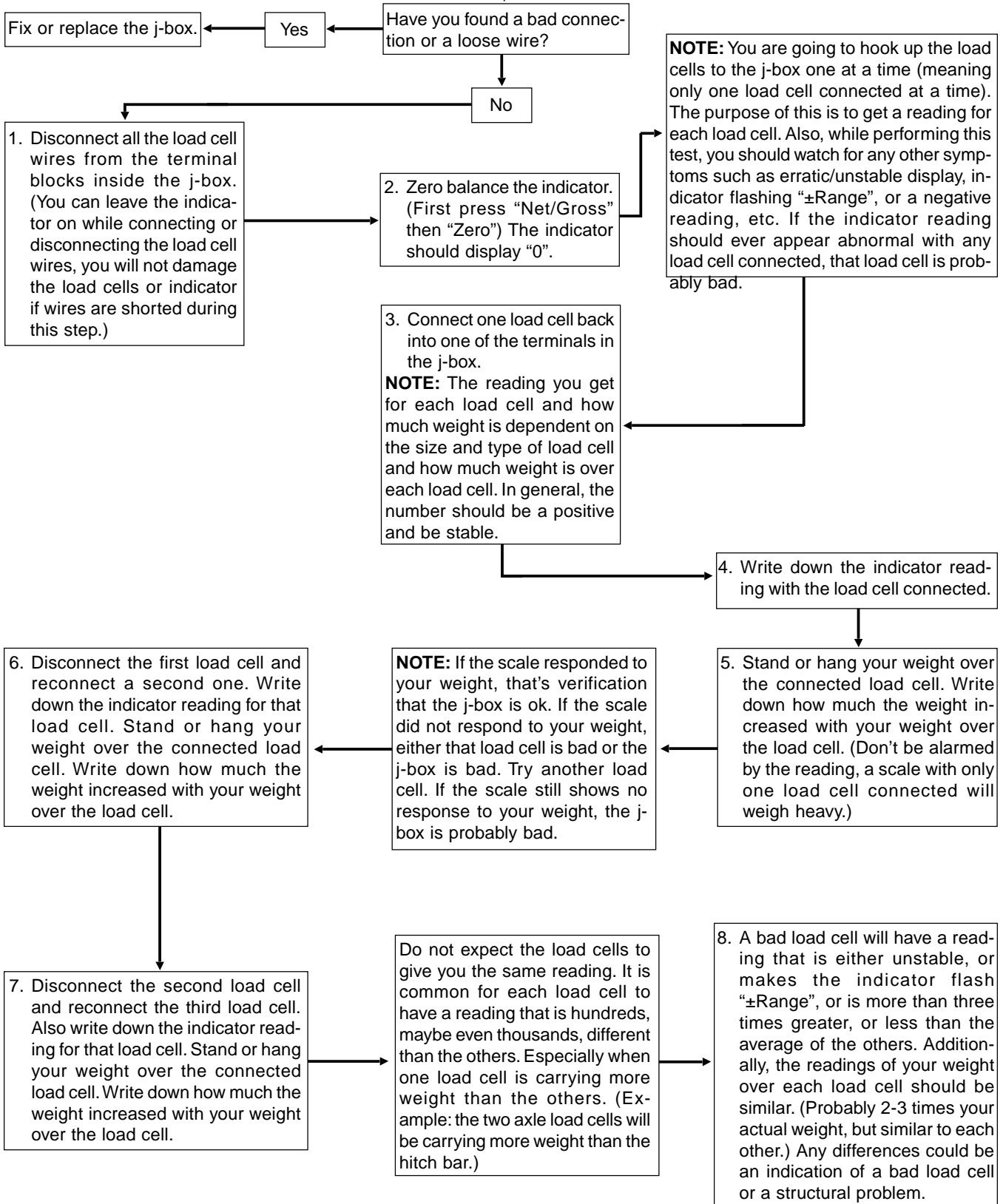
Bad Battery: If you suspect the battery, try replacing it with another one. Don't be fooled if using a voltmeter to test your battery. A weak battery may test good if checked when there is no load on the battery.

Bad Power Cord: Make sure the power cord's red wire is connected to the plus (+) positive side of the battery, and the black (-) negative wire is connected to the negative side of the battery. If using a multimeter to check for voltage, measure between pin 1 (pos) and pin 2 (neg). The meter should read between 10.5 and 14.5 volts DC. If using a tractor power cord, the black wire on the tractor power cord is positive and the white wire is negative.

MAINTENANCE

ELECTRONIC SCALE TROUBLESHOOTING

Continued from bottom of previous page.



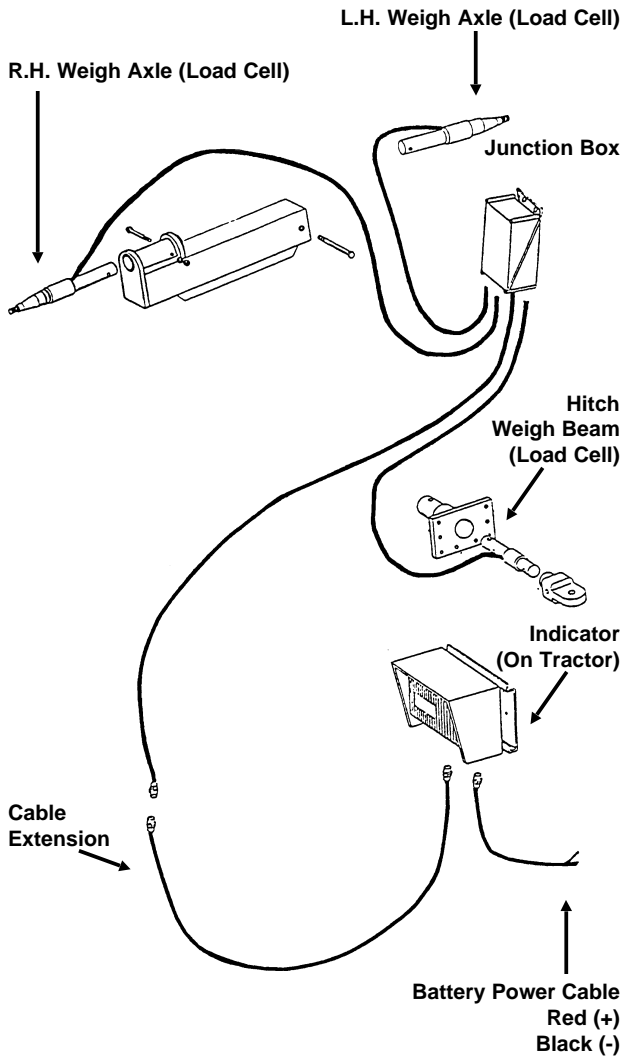
MAINTENANCE

ELECTRONIC SCALE

(Wheel Wagon Only)

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

(CONV24)



The preceding 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:

- Small screwdriver (straight blade)
- No. 2 Phillips screwdriver

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Grain Door Cylinder	P24

MAIN FRAME

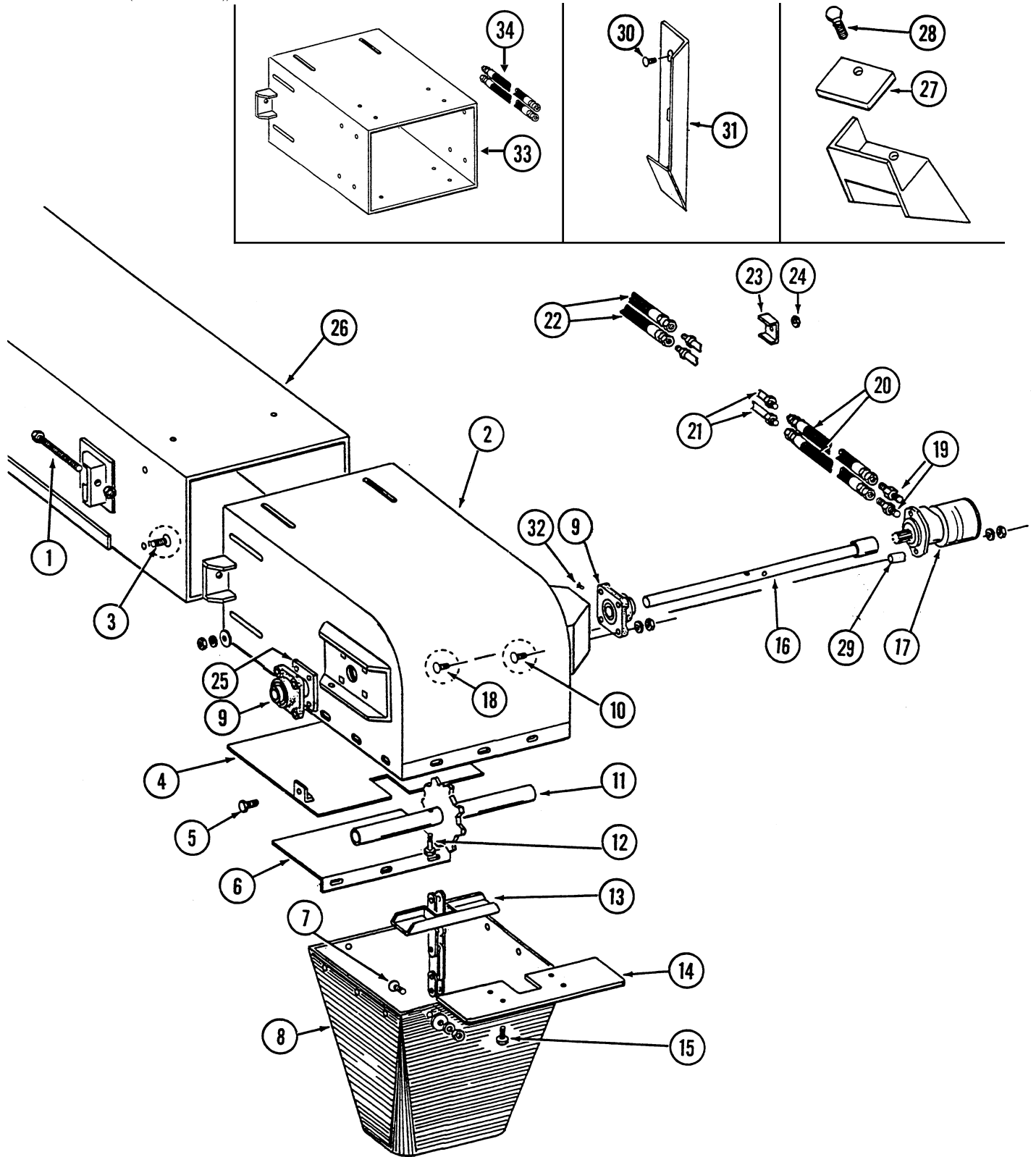
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CONVEYOR (UPPER SECTION) AND HYDRAULIC MOTOR

WVA016/WVA017(CONV8/CONV41)



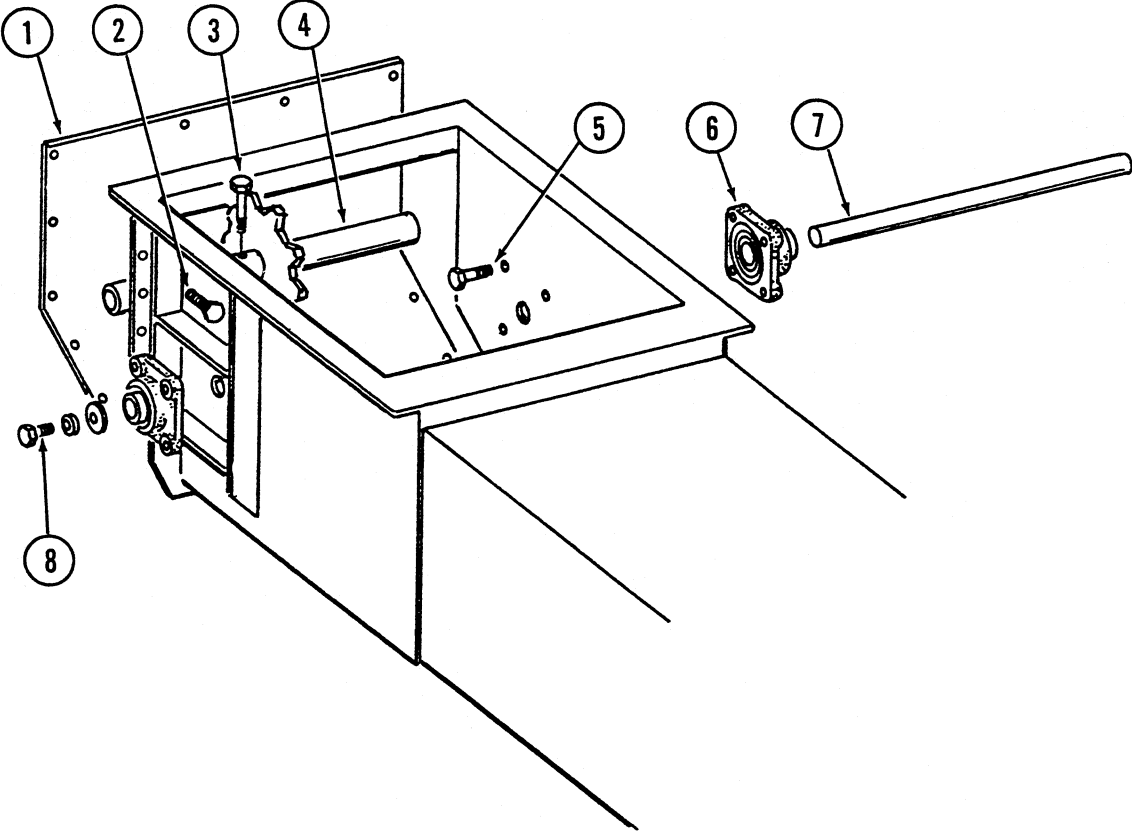
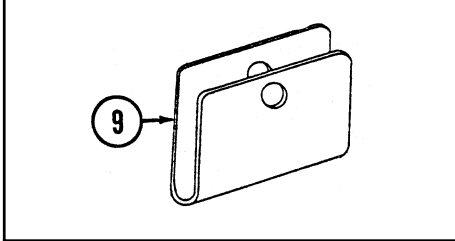
CONVEYOR (UPPER SECTION) AND HYDRAULIC MOTOR

ITEM	PART NO.	QTY.	DESCRIPTION
1.	GD8360	2	Special Bolt
	G10105	2	Hex Nut, 3/4"-10
2.	GA5933	1	Discharge End
3.	G10574	8	Carriage Bolt, 1/2"-13 x 1 1/4"
	G10228	8	Lock Washer, 1/2"
	G10168	8	Machine Bushing
	G10102	8	Hex Nut, 1/2"-13
4.	GA5929	1	Inside Sheet, 18"
	GA7819	-	Long Inside Sheet, 41" (Use With Conveyor Extension)
5.	G10037	2	Hex Head Cap Screw, 1/2"-13 x 1 1/4"
	G10228	2	Lock Washer, 1/2"
	G10102	2	Hex Nut, 1/2"-13
6.	GD8545	1	Paddle Deflector, 10"
	GD10802	-	Long Paddle Deflector, 31 1/2" (Used With Conveyor Extension)
7.	G10305	12	Carriage Bolt, 3/8"-16 x 1"
	G10229	12	Lock Washer, 3/8"
	G10210	12	Washer, 3/8" USS
	G10101	12	Hex Nut, 3/8"-16
8.	GD8489	1	Discharge Spout
9.	GA5962	2	Flange Bearing W/Grease Fitting And Set Screws, 1 1/4"
	G10640	-	Grease Fitting, 1/4"-20
	G10639	-	Set Screw, 5/16"-24 x 5/16"
10.	G10636	8	Carriage Bolt, 1/2"-13 x 1 1/2"
	G10228	8	Lock Washer, 1/2"
	G10102	8	Hex Nut, 1/2"-13
11.	GA5989	1	Upper Sprocket, 9 Tooth
12.	G10049	2	Hex Head Cap Screw, 3/8"-16 x 2 1/2"
	G10108	2	Lock Nut, 3/8"-16
13.	GA5923	1	Chain With 37 Attachments, 148 Links
	GA7823	-	Chain With 4 Attachments, 16 Links (Used With Conveyor Extension)
	GR1097	-	Connector Link
	GR1098	-	Chain Section
14.	GD7622	37-41	Paddle
15.	G10305	148	Carriage Bolt, 3/8"-16 x 1"
	G10229	148	Lock Washer, 3/8"
	G10101	148	Hex Nut, 3/8"-16
16.	GA7315	1	Shaft, 28 5/8"
17.	GA5969	1	Hydraulic Motor
	GR1202	-	Seal Kit, Includes Shaft Seal And Instruction Sheet
18.	G10016	2	Hex Head Cap Screw, 1/2"-13 x 2"
	G10216	2	Washer, 1/2" USS
	G10111	2	Lock Nut, 1/2"-13
19.	G6400-10	2	Connector, 7/8"-14 JIC Male To 7/8"-14 O-Ring
20.	*A1479	2	Hose Assembly, 1/2" x 20"
21.	GA5968	2	Steel Hydraulic Line, 72"
22.	*A1480	2	Hose Assembly, 1/2" x 56"
23.	GD6027	-	Hose Clamp
24.	G10108	-	Lock Nut, 3/8"-16
25.	GD8755	-	Spacer (Serial No. 550000-550075)
26.	GA5928	1	Housing
27.	GD8748	1	Shim, 2" x 3"
28.	G10047	1	Hex Head Cap Screw, 3/8"-16 x 1 3/4"
	G10229	1	Lock Washer, 3/8"
	G10101	1	Hex Nut, 3/8"-16
29.	GD8900	-	Spacer
30.	G10574	2	Carriage Bolt, 1/2"-13 x 1 1/4"
	G10216	2	Washer, 1/2" USS
	G10228	2	Lock Washer, 1/2"
	G10102	2	Hex Nut, 1/2"-13
31.	GA6335	1	Catcher
32.	G10535	-	Adjusting Screw, 3/8"-16 x 3/4"
33.	-	-	Conveyor Extension (See Item B)
34.	*A1459	2	Hose Assembly, 1/2" x 24" (Used With Conveyor Extension)
A.	GA5939	-	Conveyor Chain Complete (Items 13-15)
B.	G7468X	-	Conveyor Extension Package (Items 3, 6, 13, 14, 33 And 34)

*Hydraulic hose is not stocked by KINZE® Repair Parts, but can be made available on a special order basis. Call for quote.

CONVEYOR (LOWER SECTION)

WVA015(CONV3)



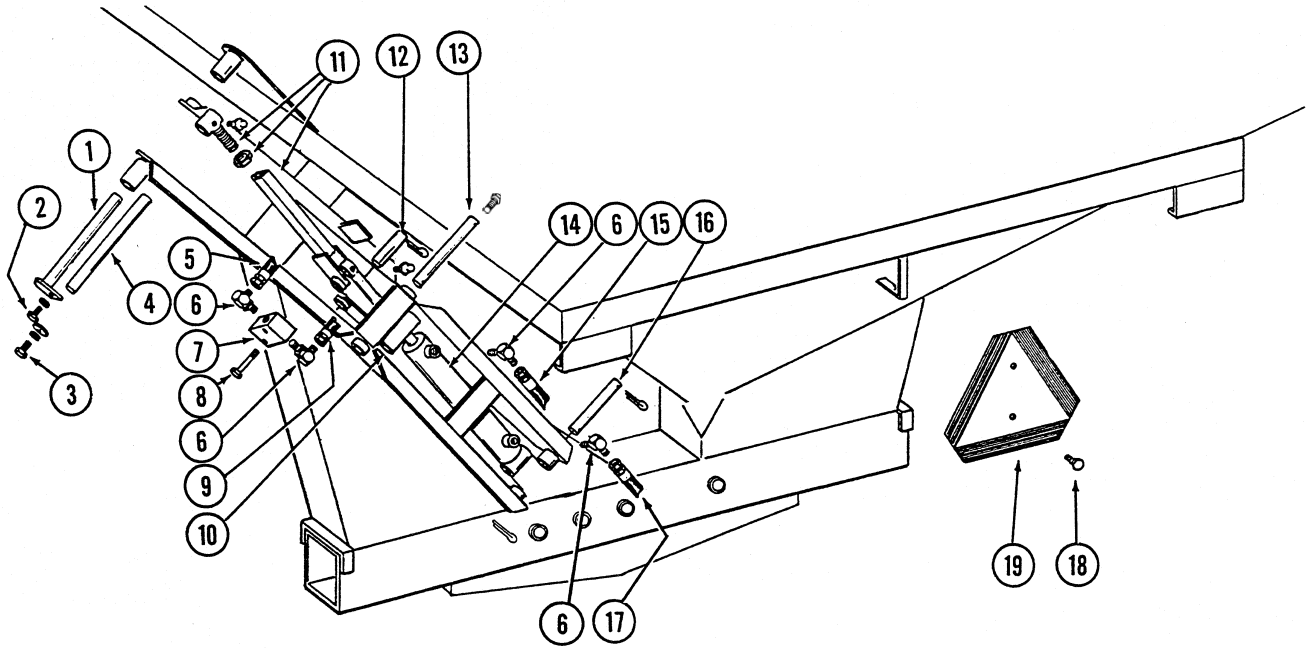
CONVEYOR (LOWER SECTION)

ITEM	PART NO.	QTY.	DESCRIPTION
1.	GD8335	1	End Cover
2.	G10037	16	Hex Head Cap Screw, 1/2"-13 x 1 1/4"
	G10017	-	Hex Head Cap Screw, 1/2"-13 x 1 1/2"
	G10228	16	Lock Washer, 1/2"
	G10102	16	Hex Nut, 1/2"-13
3.	G10049	2	Hex Head Cap Screw, 3/8"-16 x 2 1/2"
	G10108	2	Lock Nut, 3/8"-16
4.	GA5943	1	Lower Sprocket, 10 Tooth
5.	G10636	8	Carriage Bolt, 1/2"-13 x 1 1/2"
	G10228	8	Lock Washer, 1/2"
	G10102	8	Hex Nut, 1/2"-13
6.	GA5962	2	Flange Bearing W/Grease Fitting And Set Screws, 1 1/4"
	G10640	-	Grease Fitting, 1/4"-20
	G10639	-	Set Screw, 5/16"-24 x 5/16"
7.	GD8393	1	Intake Shaft, 1 1/4" x 25"
8.	G10438	2	Hex Head Cap Screw, 1/2"-13 x 3/4"
	G10228	2	Lock Washer, 1/2"
	G10216	2	Washer, 1/2" USS
9.	GD8918	1	Rubber Corner Protector

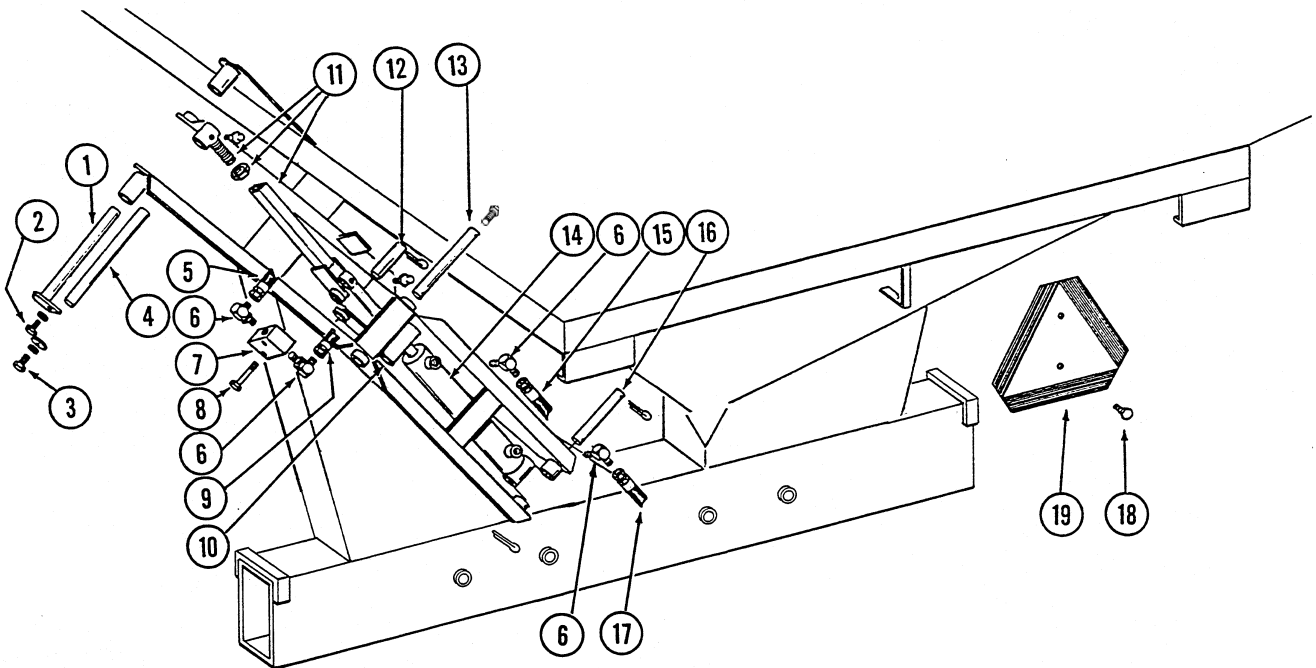
CONVEYOR FOLD

WVA013/WAC018(CONV4)

Serial No. 550000 - 550176



Serial No. 550177 & On



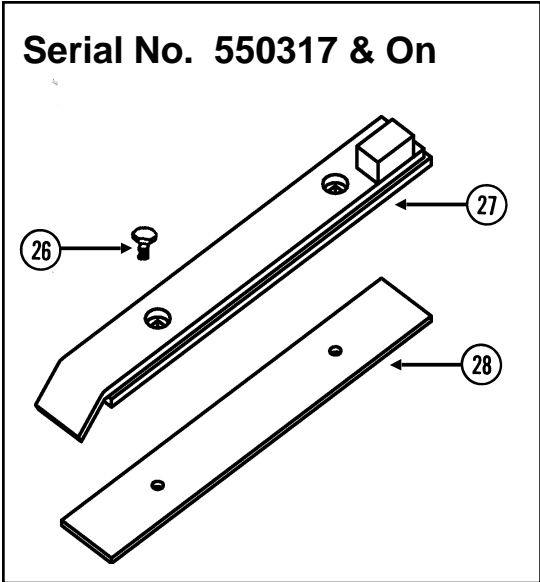
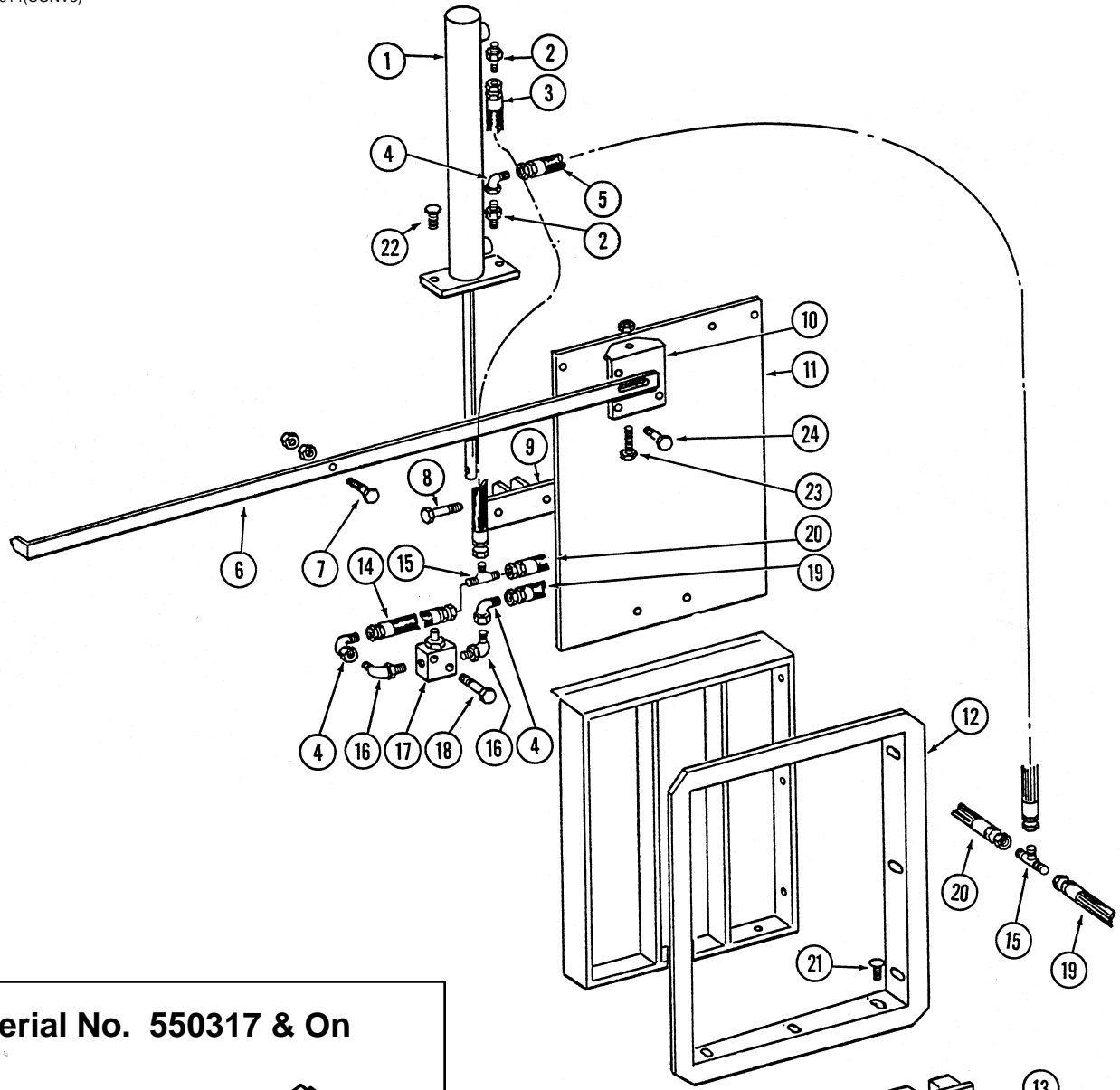
CONVEYOR FOLD

ITEM	PART NO.	QTY.	DESCRIPTION
1.	GA5941	1	Hammer Strap
2.	G10016	1	Hex Head Cap Screw, 1/2"-13 x 2"
	G10228	1	Lock Washer, 1/2"
	G10102	1	Hex Nut, 1/2"-13
3.	G10438	2	Hex Head Cap Screw, 1/2"-13 x 3/4"
	G10228	2	Lock Washer, 1/2"
	GD9739	1	Shim
4.	GD8549	1	Pin, 1 1/4" x 12"
5.	*A1154	1	Hose Assembly, 1/4" x 72"
6.	G6801-06-08	2	Elbow, 9/16"-18 JIC Male To 3/4"-16 O-Ring
7.		-	See "Check Valve Assembly", Page P11
8.	G10041	2	Hex Head Cap Screw, 5/16"-18 x 2"
	G10219	2	Washer, 5/16" USS
	G10232	2	Lock Washer, 5/16"
	G10106	2	Hex Nut, 5/16"-18
9.		-	See "Control Manifold Block Assembly", Page 10
10.	GA5940	1	Control Link W/Grease Fitting
	G10641	-	Grease Fitting, 1/8" NPT
11.	GA5942	1	Fold Arm W/Grease Fitting
	G10641	-	Grease Fitting, 1/8" NPT
	G10087	-	Jam Nut, 1 1/2"-12
12.	GD8370	1	Pin, 1 1/4" x 5 1/2"
	G10460	2	Cotter Pin, 1/4" x 2"
13.	GD10722	1	Pin, 1 1/4" x 9 1/2"
	G10216	2	Washer, 1/2"
	G10228	2	Lock Washer, 1/2"
	G10438	2	Hex Head Cap Screw, 1/2"-13 x 3/4"
14.		-	See "Conveyor Fold Cylinder", Page P22
15.	*A1188	1	Hose Assembly, 1/4" x 66"
16.	GD0653	1	Pin, 1 1/4" x 7 3/4"
	G10460	2	Cotter Pin, 1/4" x 2"
17.		-	See "Control Manifold Block Assembly", Page P10
18.	G10022	2	Hex Head Cap Screw, 1/4"-20 x 1/2"
	G10110	2	Lock Nut, 1/4"-20
19.	GD2199	1	SMV Sign

* Hydraulic hose is not stocked by KINZE® Repair Parts, but can be made available on a special order basis. Call for quote.

GRAIN DOOR

WVA014(CONV5)



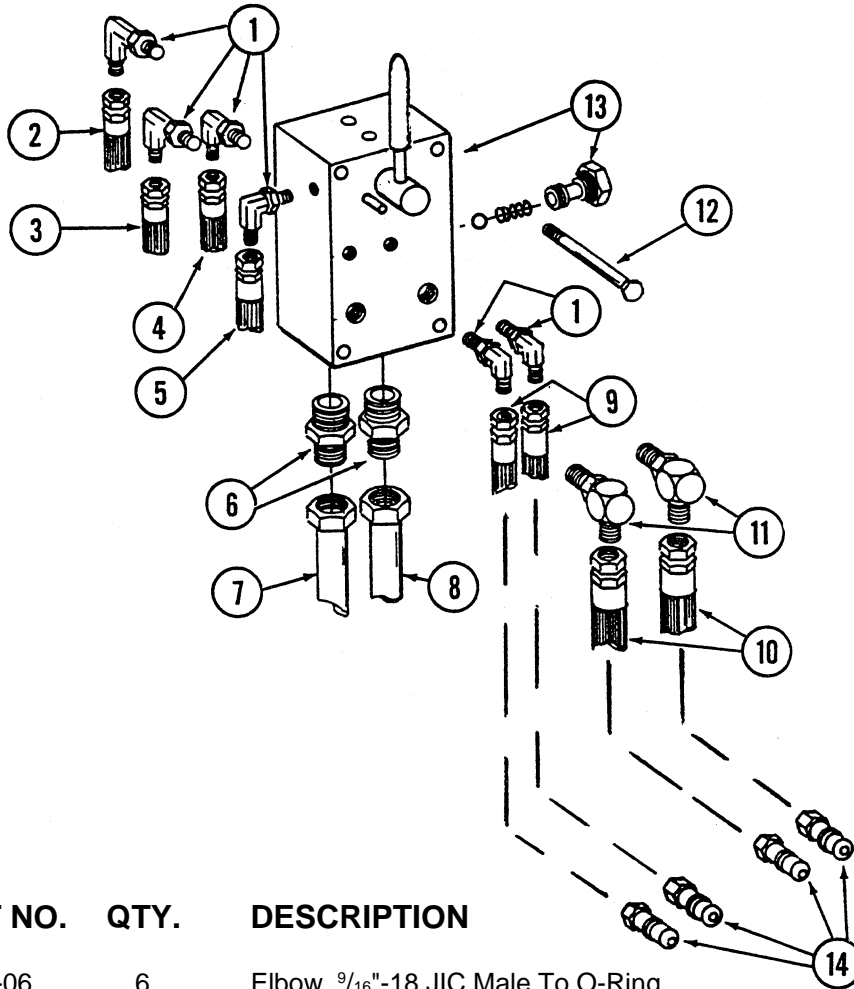
GRAIN DOOR

ITEM	PART NO.	QTY.	DESCRIPTION
1.		-	See "Grain Door Cylinder", Page P23
2.	G6400-06-08	2	Connector, 3/4"-16 Male O-Ring To 9/16"-18 JIC
3.	*A1192	1	Hose Assembly, 1/4" x 20"
4.	G6500-06	3	Swivel Elbow, 90°, 9/16"-18 JIC Male To Female
5.	*A1189	1	Hose Assembly, 1/4" x 36"
6.	GD8494	1	Door Indicator
7.	G10003	1	Hex Head Cap Screw, 3/8"-16 x 1 1/2"
	G10203	1	Washer, 3/8" SAE
	G10101	1	Hex Nut, 3/8"-16
8.	G10009	1	Hex Head Cap Screw, 5/8"-11 x 2 1/2"
	G10107	1	Lock Nut, 5/8"-11
9.	GA5948	1	Cylinder Anchor
10.	GD8441	1	Stop Bolt Mount
11.	GD8442	1	Grain Door
12.	GA5789	1	Seal Frame
13.	GA5949	1	Door Mounting Clamp
14.	*A1146	1	Hose Assembly, 1/4" x 12"
15.	G2603-06	2	Tee, 7/8"-14 JIC Male
16.	G6801-06-08	2	Elbow, 9/16"-18 JIC Male To 3/4"-16 O-Ring
17.		-	See "Check Valve Assembly", Page P11
18.	G10041	2	Hex Head Cap Screw, 5/16"-18 x 2"
	G10219	2	Washer, 5/16" USS
	G10232	2	Lock Washer, 5/16"
	G10106	2	Hex Nut, 5/16"-18
19.		-	See "Conveyor Fold", Pages P6 And P7
20.		-	See "Control Manifold Block Assembly", Page P10
21.	G10574	12	Carriage Bolt, 1/2"-13 x 1 1/4"
	G10216	12	Washer, 1/2" USS
	G10228	12	Lock Washer, 1/2"
	G10102	12	Hex Nut, 1/2"-13
22.	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
23.	G10371	1	Hex Head Cap Screw, 1/2"-13 x 3", Full Thread
	G10102	1	Hex Nut, 1/2"-13
24.	G10001	3	Hex Head Cap Screw, 3/8"-16 x 1"
	G10229	4	Lock Washer, 3/8"
	G10101	4	Hex Nut, 3/8"-16
25.	G10585	2	Hex Head Cap Screw, 1/2"-13 x 3 1/4"
	G10228	2	Lock Washer, 1/2"
	G10102	2	Hex Nut, 1/2"-13
26.	G10747	2	Carriage Bolt, 1/2"-13 x 2"
	G10228	2	Lock Washer, 1/2"
	G10102	2	Hex Nut, 1/2"-13
27.	GA7588	1	Wear Pad
28.	GD10719	-	Shim (As Required)

* Hydraulic hose is not stocked by KINZE® Repair Parts, but can be made available on a special order basis. Call for quote.

CONTROL MANIFOLD BLOCK ASSEMBLY

VVB026(CONV6)

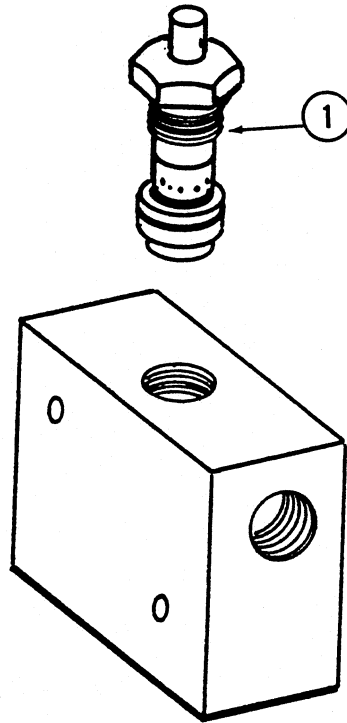


ITEM	PART NO.	QTY.	DESCRIPTION
1.	G6801-06	6	Elbow, $\frac{9}{16}$ "-18 JIC Male To O-Ring
2.	*A1107	1	Hose Assembly, $\frac{1}{4}$ " x 140" (To Butt End Of Conveyor Fold Cylinder)
3.	*A1110	1	Hose Assembly, $\frac{1}{4}$ " x 150" (To Tee Fitting Above Grain Door)
4.	*A1184	1	Hose Assembly, $\frac{1}{4}$ " x 173" (To Check Valve On Conveyor Fold)
5.	*A1103	1	Hose Assembly, $\frac{1}{4}$ " x 110" (To Tee Fitting Beside Grain Door)
6.	G6400-12	2	Connector, 1 $\frac{1}{16}$ "-12 JIC Male To 1 $\frac{1}{16}$ "-12 O-Ring
7.	GA5966	1	Steel Hydraulic Line, 76" (To Hydraulic Motor - See "Grain Tank Extensions" Pages P12 And P13 And "Conveyor And Hydraulic Motor" Pages P2 And P3)
8.	GA5967	1	Steel Hydraulic Line, 64" (To Hydraulic Motor-See "Grain Tank Extensions" Pages P12 And P13 And "Conveyor And Hydraulic Motor" Pages P2 And P3)
9.	*A1108	2	Hose Assembly, $\frac{1}{4}$ " x 140"
10.	*A1423	2	Hose Assembly, $\frac{1}{2}$ " x 140"
11.	G6801-10	2	Elbow, $\frac{7}{8}$ "-14 JIC Male To O-Ring
12.	G10326	4	Hex Head Cap Screw, $\frac{3}{8}$ "-16 x 3 $\frac{3}{4}$ "
	G10004	-	Hex Head Cap Screw, $\frac{3}{8}$ "-16 x 1 $\frac{1}{4}$ " (Used On Manifold Block With Threaded Holes)
	G10229	4	Lock Washer, $\frac{3}{8}$ "
	G10210	4	Washer, $\frac{3}{8}$ " USS
	G10101	4	Hex Nut, $\frac{3}{8}$ "-16
13.	GA5964	1	Control Manifold Block
	GR1096	-	Seal Kit, Includes: (2)O-Rings, (2)Retaining Rings, (2)Teflon BU Rings
	GR1095	-	Check Valve Repair Kit, Includes: (1)Check Valve, (1)Ball, (1)Spring
	GR1094	-	Spool W/Pin And Vinyl Sleeve
14.	GD4086	4	Pioneer (ISO) Tip

* Hydraulic hose is not stocked by KINZE® Repair Parts, but can be made available on a special order basis. Call for quote.

CHECK VALVE ASSEMBLY

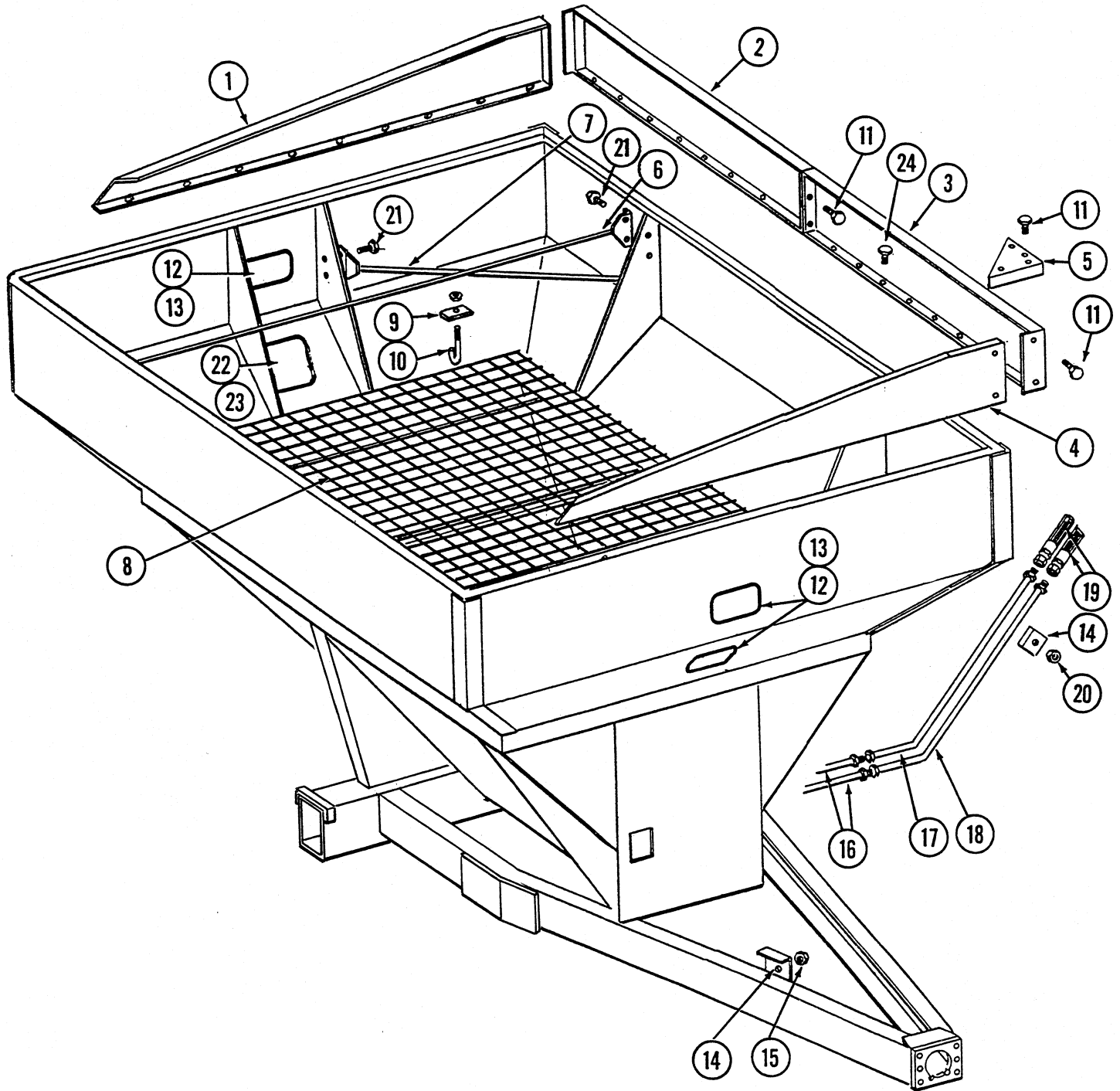
VVB027(CONV7)



ITEM	PART NO.	QTY.	DESCRIPTION
1.	GR1092	-	Check Valve Repair Kit
A.	GA5963	2	Check Valve Assembly Complete
B.	GR1260	-	Seal Kit, Includes: (3)O-Rings, (2)BU Rings

GRAIN TANK EXTENSIONS AND SCREEN

WAC014/WAC018(CONV9)

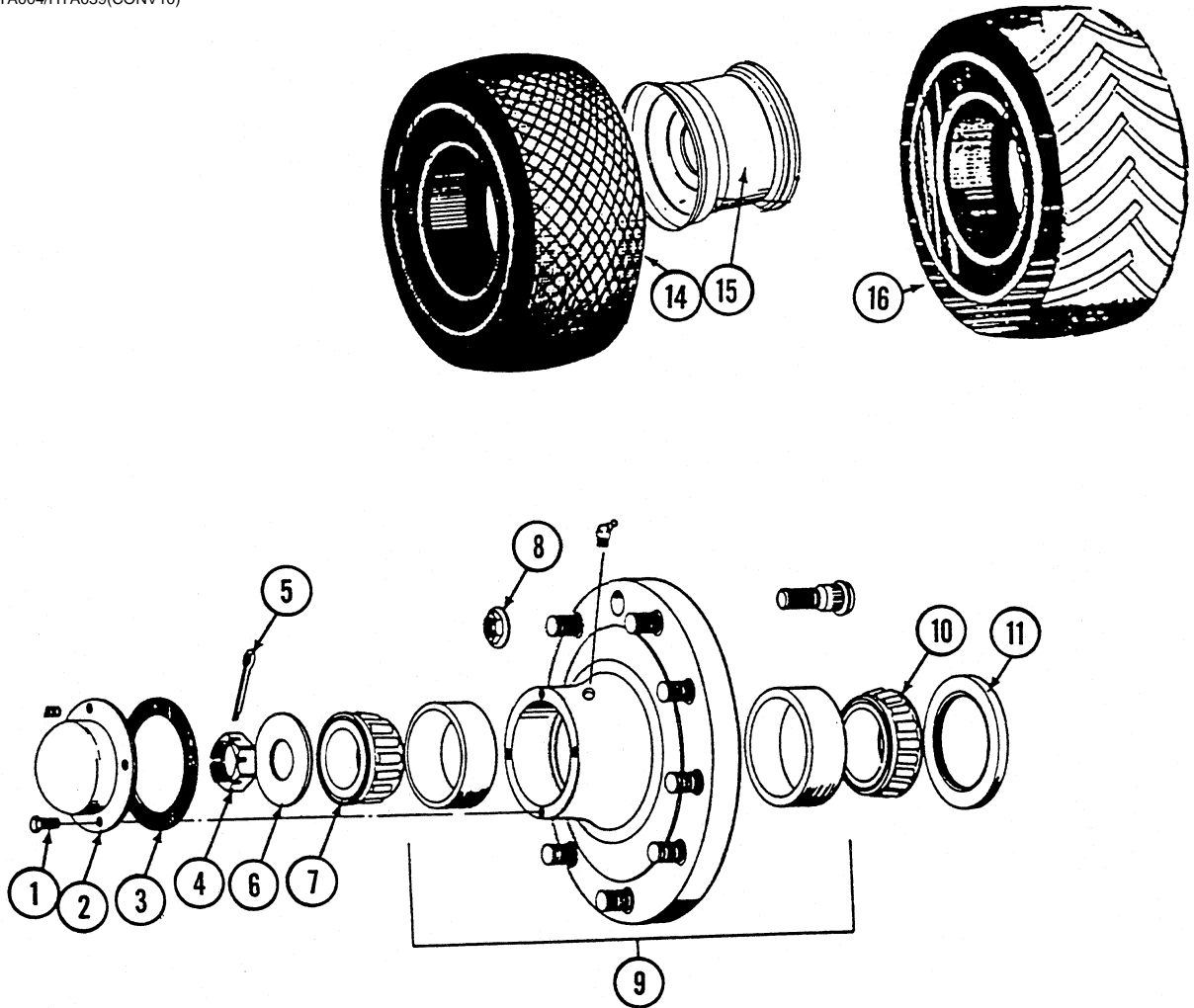


GRAIN TANK EXTENSIONS AND SCREEN

ITEM	PART NO.	QTY.	DESCRIPTION
1.	GA6003	1	Tapered Rear Extension
2.	GA5990	1	Side Extension (Rear)
3.	GA5959	1	Side Extension (Front)
4.	GA6002	1	Tapered Front Extension
5.	GD0327	2	Corner Brace
6.	GA0437	2	Cross Brace
7.	GA5958	4	Corner Cross Brace
8.	GD8459	1	Screen
9.	GD8535	8	Plate
10.	GD1337	8	J-Bolt
	G10232	8	Lock Washer, $\frac{5}{16}$ "
	G10106	8	Hex Nut, $\frac{5}{16}$ "-18
11.	G10001	-	Hex Head Cap Screw, $\frac{3}{8}$ "-16 x 1"
	G10210	-	Washer, $\frac{3}{8}$ " USS
	G10229	-	Lock Washer, $\frac{3}{8}$ "
	G10101	-	Hex Nut, $\frac{3}{8}$ "-16
12.	GD6460	3	Window, 6 $\frac{1}{2}$ " x 10 $\frac{1}{2}$ "
13.	GD6461-01	3	Window Molding
14.	GD5875	-	Hose Clamp, $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " x 2"
	GD5892	-	Hose Clamp, $\frac{1}{2}$ " x 1 $\frac{1}{2}$ " x 1 $\frac{1}{2}$ "
	GD6027	-	Hose Clamp, $\frac{3}{4}$ " x 2 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ "
15.	G10108	-	Lock Nut, $\frac{3}{8}$ "-16
16.		-	See "Control Manifold Block Assembly", Page P10
17.	GA6016	1	Steel Hydraulic Line, 82 $\frac{3}{4}$ "
18.	GA6017	1	Steel Hydraulic Line, 90 $\frac{5}{8}$ "
19.		-	See "Conveyor (Upper Section) And Hydraulic Motor" Pages P2 And P3
20.	G10229	-	Lock Washer, $\frac{3}{8}$ "
	G10101	-	Hex Nut, $\frac{3}{8}$ "-16
21.	G10037	16	Hex Head Cap Screw, $\frac{1}{2}$ "-13 x 1 $\frac{1}{4}$ "
	G10216	16	Washer, $\frac{1}{2}$ " USS
	G10228	16	Lock Washer, $\frac{1}{2}$ "
	G10102	16	Hex Nut, $\frac{1}{2}$ "-13
22.	GD6487	1	Window, 10" x 19 $\frac{1}{4}$ "
23.	GD6461-02	1	Window Molding
24.	G10305	-	Carriage Bolt, $\frac{3}{8}$ "-16 x 1"
	G10210	-	Washer, $\frac{3}{8}$ " USS
	G10229	-	Lock Washer, $\frac{3}{8}$ "
	G10101	-	Hex Nut, $\frac{3}{8}$ "-16

HUB AND TIRE ASSEMBLY

HTA002/HTA004/HTA039(CONV10)

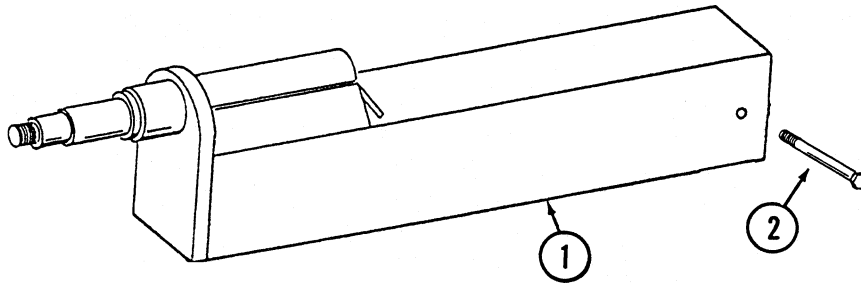


ITEM	PART NO.	QTY.	DESCRIPTION
		(Per Assy.)	
1.	G10376	4	Hex Head Cap Screw, $\frac{5}{16}$ "-18 x $\frac{3}{4}$ "
2.	GD1529	1	Dust Cap
3.	GD1536	1	Seal
4.	G10070	1	Slotted Hex Nut, 1 $\frac{1}{4}$ "-12
5.	G10460	1	Cotter Pin, $\frac{1}{4}$ " x 2"
6.	G10139	-	Washer, 1 $\frac{1}{4}$ " (Quantity 2 Used With Weigh Axle)
7.	GA0705	1	Outer Bearing
8.	GR0256	10	Lug Nut, $\frac{3}{4}$ "-16
9.	GA5965	1	Hub W/Cups, Grease Fitting And Stud Bolts (10 Bolt)
	GR0322	-	Outer Cup
	GD8532	-	Inner Cup
	G10373	-	Grease Fitting, $\frac{1}{8}$ "-27, 45°
	GR0257	-	Stud Bolt, $\frac{3}{4}$ "-16 x 2 $\frac{1}{2}$ "
10.	GA5987	1	Inner Bearing
11.	GA5988	1	Seal
12.	GA6128	-	Valve Stem (Not Shown)
13.	GA5447	-	Brass Plug (Not Shown)
14.	D2365	-	Tire, 23.1" x 26" R-3 Diamond-Type Tread, 12 Ply (Non-Stock Item)
15.	GA0461	-	Wheel, 20" x 26"
16.	D8539	-	Tire, 23.1" x 26" R-1 Traction-Type Tread, 10 Ply (Non-Stock Item)

ADJUSTABLE AXLE

HTA038(CONV15)

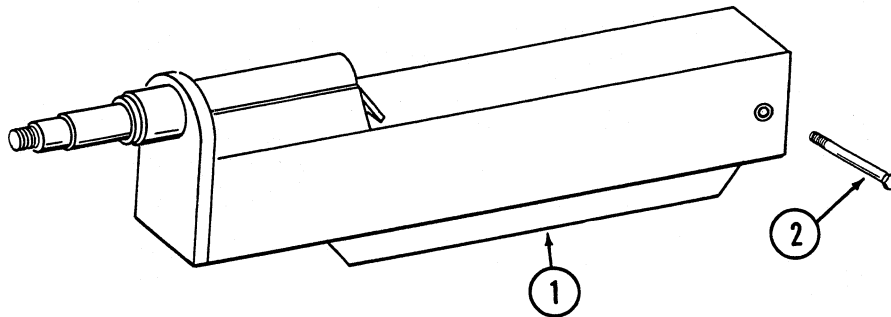
Serial No. 550000 - 550176



ITEM	PART NO.	QTY.	DESCRIPTION
1.	GA5932	2	Stub Axle Complete
	G1K246	-	Spindle Replacement Kit, Includes Spindle, Braces And Instructions
2.	G10635	-	Hex Head Cap Screw, 1"-8 x 9 1/2"
	G10118	-	Lock Washer, 1"
	G10117	-	Hex Nut, 1"-8

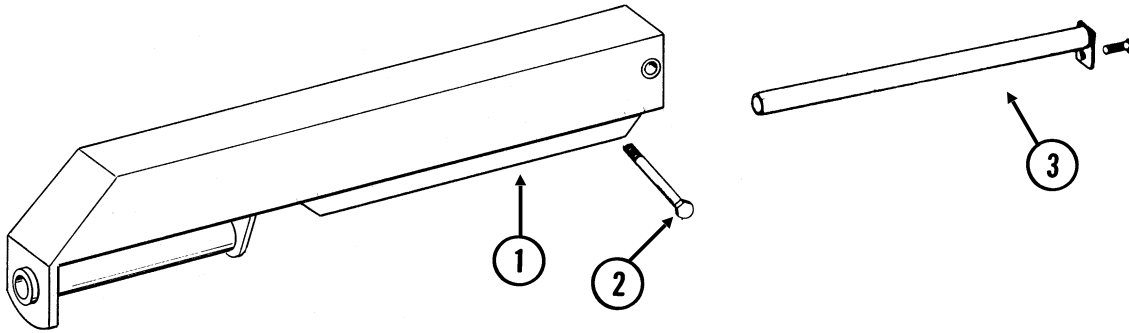
WAC018(CONV16)

Serial No. 550177 & On



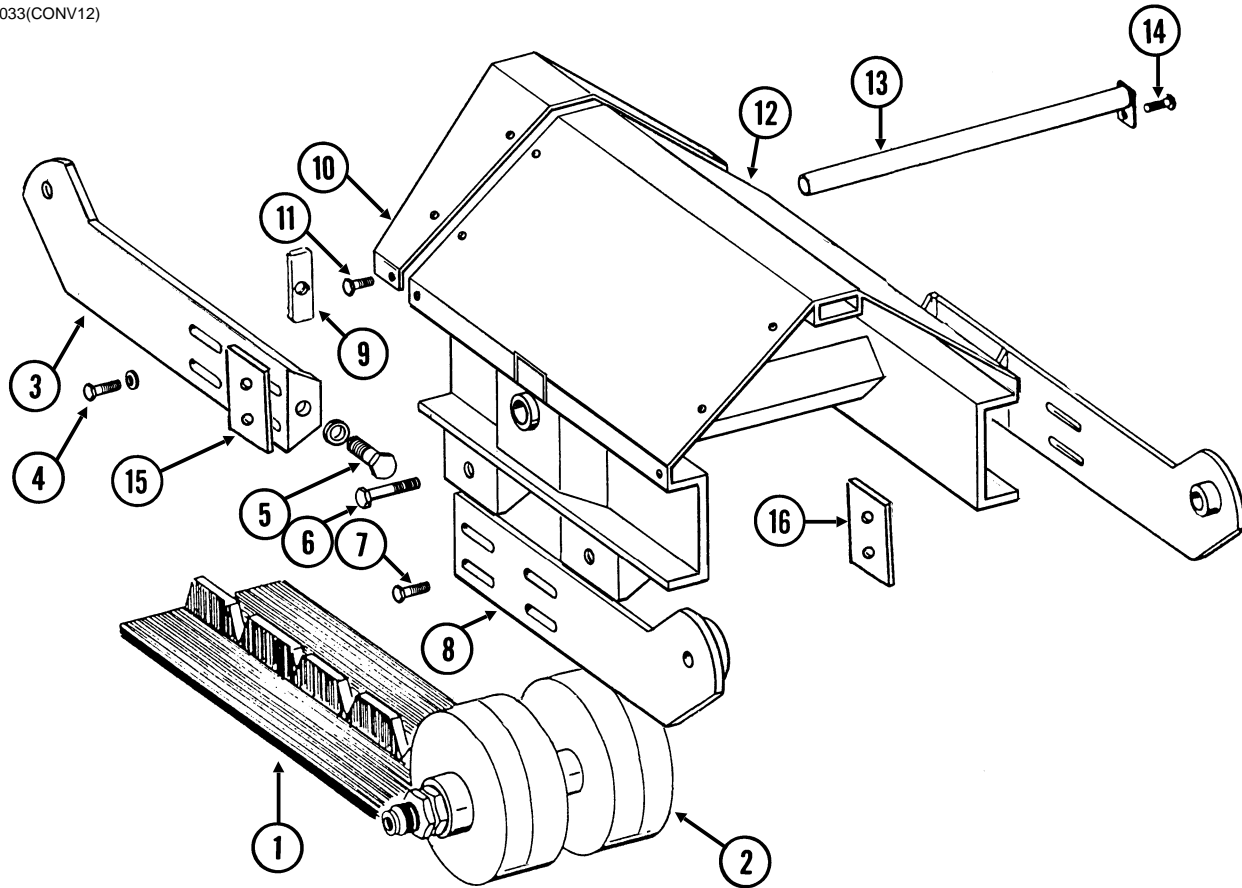
ITEM	PART NO.	QTY.	DESCRIPTION
1.	GA6690	2	Stub Axle Complete
	G1K246	-	Spindle Replacement Kit, Includes Spindle, Braces And Instructions
2.	G10635	-	Hex Head Cap Screw, 1"-8 x 9 1/2"
	G10118	-	Lock Washer, 1"
	G10117	-	Hex Nut, 1"-8

HTA033HTA036(CONV11)



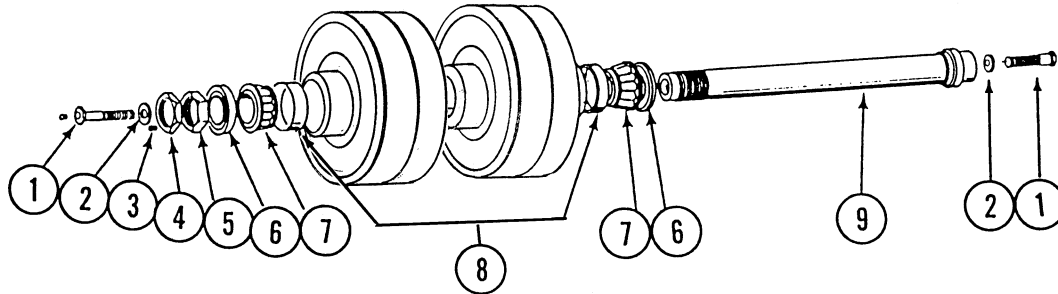
ITEM	PART NO.	QTY.	DESCRIPTION
		(Per Wagon)	
1.	GA6936	2	Stub Axle W/Grease Fittings
	G10641	-	Grease Fitting, 1/8" NPT
2.	G10635	2	Hex Head Cap Screw, 1"-8 x 9 1/2"
	G10118	2	Lock Washer, 1"
3.	G10117	-	See "Track And Carriage", Page P17

HTA033(CONV12)



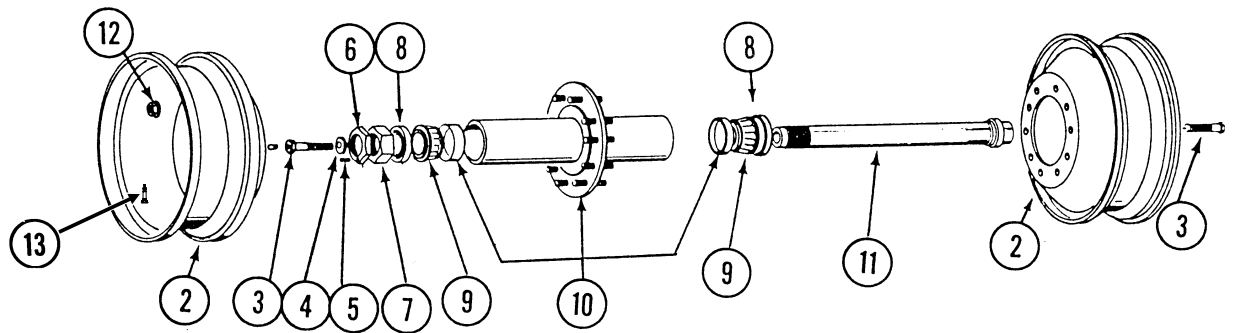
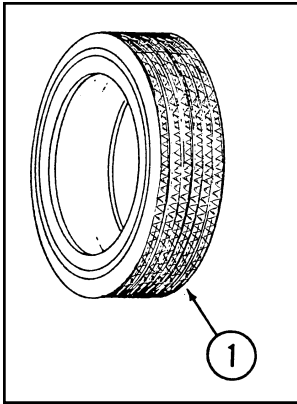
ITEM	PART NO.	QTY.	DESCRIPTION
		(Per Assy.)	
1.	GD9864	1	Rubber Track, 24"
2.		-	See "Midwheel", Page P18
3.	GA6931	2	Sidebar, L.H.
4.	G10537	8	Hex Head Cap Screw, 3/4"-16 x 2 1/2"
5.	G10539	4	Hex Head Adjusting Bolt, 1"-14 x 7"
	G10082	4	Washer, 1" SAE
6.		4	See "Midwheel", Page P18
7.	G10538	8	Hex Head Cap Screw, 3/4"-16 x 4 1/2"
8.	GA6930	2	Sidebar, R.H.
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.	A6935	-	Track And Carriage (Non-Stock Item)
13.	GA5514	1	Pin
14.	G10005	1	Hex Head Cap Screw, 5/8"-11 x 1 3/4"
15.	GD8279	8	Plate, 2" x 4 1/2"
16.	GD10136	8	Threaded Plate

HTA035(CONV13)



ITEM	PART NO.	QTY.	DESCRIPTION
		(Per Assy.)	
1.	GA5487	2	Bolt W/Grease Fitting, 1 1/4" x 3 1/2", Grade 8
	G10641	-	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.	GA6889	-	Midwheel W/Cups
	GR0323	-	Cup
9.	GA4999	1	Spindle

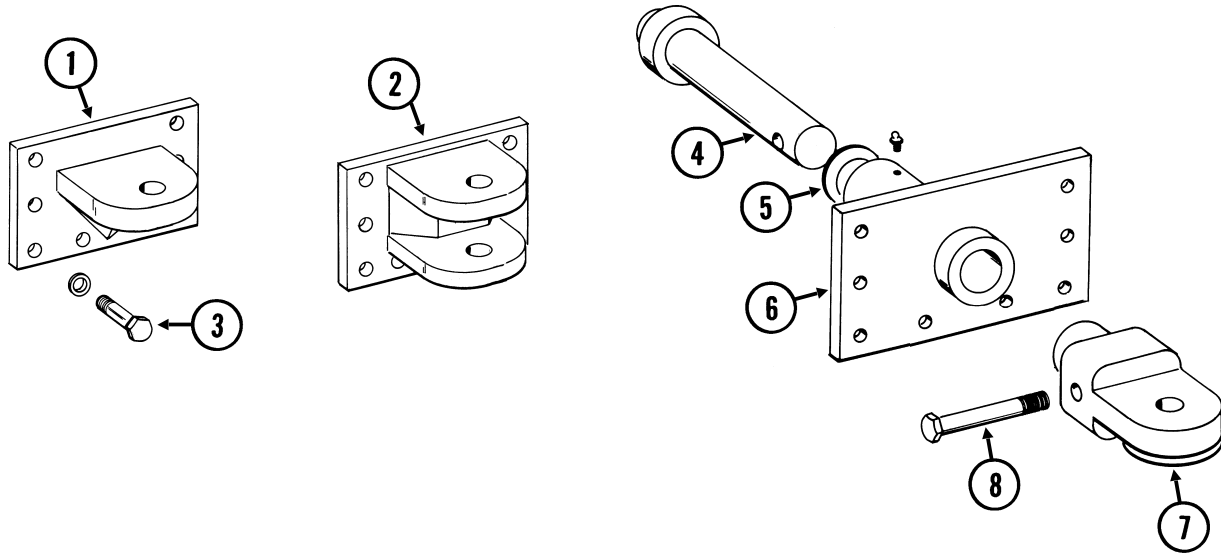
HTA034(CONV14/WGN73A)



ITEM	PART NO.	QTY.	DESCRIPTION
		(Per Assy.)	
1.	D10044	-	Tubeless Tire, 9" x 22.5", 10 Ply Treaded Truck (Non-Stock Item)
2.	GD10045	-	Rim, Use With GD10044
3.	GA5487	2	Bolt W/Grease Fitting, 1 1/4" x 3 1/2", Grade 8
	G01641	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	1	Stepped Nut, 2 1/2"-12
8.	GD7452	2	Seal
9.	GA0779	2	Bearing
10.	GA5484	1	Hub W/Cups And Bolts
	GR0323	-	Cup
	GD7489	-	Bolt (10 Bolt Hub), Threaded Both Ends
	GR0257	-	Bolt (20 Bolt Hub)
11.	GA4999	1	Spindle
12.	GR0256	20	Lug Nut, 3/4"-16
13.	GD9479	-	Valve Stem, Use With GD10044 Tubeless Tire

CLEVIS HITCH

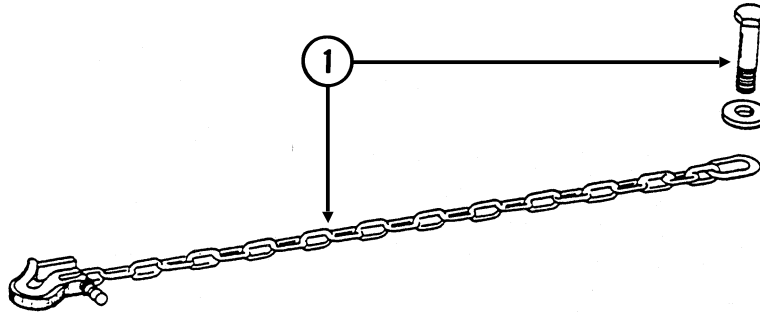
WAC004/WAC017(CONV22/CONV32)



ITEM	PART NO.	QTY.	DESCRIPTION
1.	GA5961	-	Single Clevis Hitch
2.	GA5960	-	Double Clevis Hitch
3.	G10441	8	Hex Head Cap Screw, 7/8"-9 x 3", Grade 8
	G10330	8	Lock Washer, 7/8"
	G10084	8	Special Washer
	G10442	8	Hex Nut, 7/8"-9
4.	GA7955	-	Swivel Pin
5.	G10360	-	Machine Bushing
6.	GA6674	-	Plate W/Grease Fitting
	G10641	-	Grease Fitting, 1/8" NPT
7.	GA6521	-	Single Clevis Swivel Hitch
	G1K271	-	Washer Kit, Includes: (1)Washer And (1)Instruction Sheet
8.	G10151	-	Hex Head Cap Screw, 1"-8 x 6"
	G10396	-	Lock Nut, 1"-8

OPTIONAL SAFETY CHAIN

WAC011(CONV17)

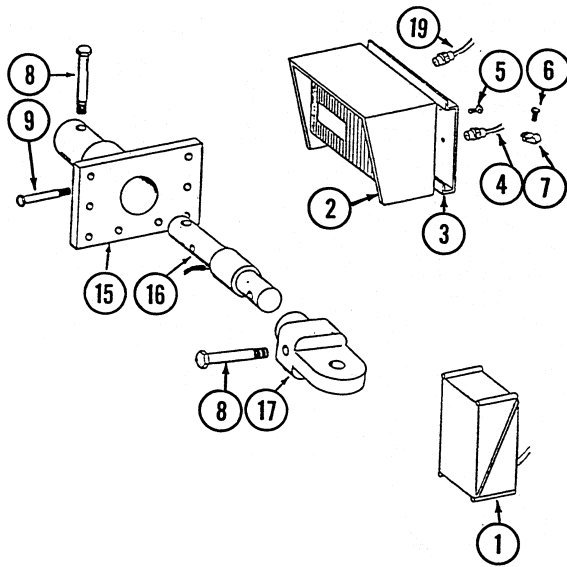
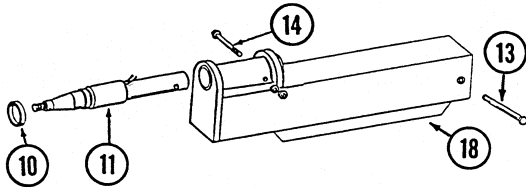


ITEM	PART NO.	QTY.	DESCRIPTION
1.	G1K175	1	Safety Chain Kit W/Hardware, 1/2"
	G10238	1	Hex Head Cap Screw, 1 1/4"-7 x 4"
	G10139	1	Washer, 1 1/4" USS
	G10236	1	Lock Washer, 1 1/4"
	G10239	1	Hex Nut, 1 1/4"-7

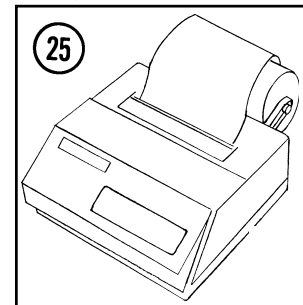
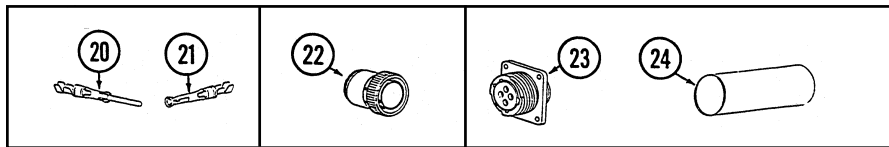
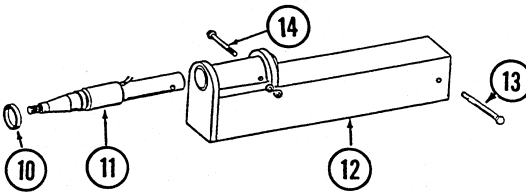
ELECTRONIC SCALE W/ADJUSTABLE AXLE

ECP014/WAC012/WAC013/HTA030/WAC018(CONV18a/WGN54)

Serial No. 550177 & On



Serial No. 550000 - 550176

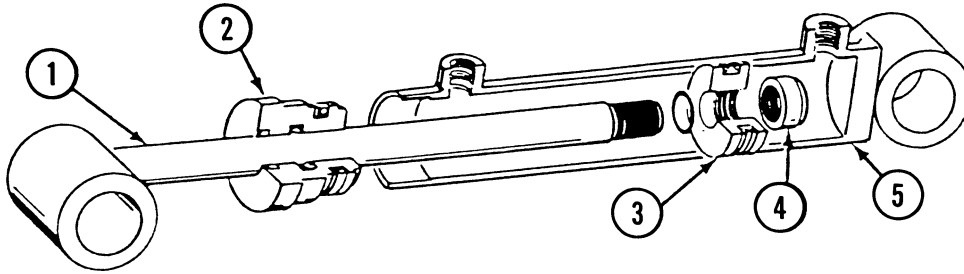


ELECTRONIC SCALE W/ADJUSTABLE AXLE

ITEM	PART NO.	QTY.	DESCRIPTION
1.	GA5692	1	Junction Box W/30' Cable
	GR1431	-	Cable, 30' (If Applicable)
2.	G7287X	1	Indicator, EZ150
	G7382X	1	Indicator, EZ210 (Optional), Factory Calibration Required
	GR1175	-	Housing Assembly (Plastic)
3.	GD7826	1	Mounting Bracket
4.	GA4683	1	Cable Extension (To Junction Box Cable)
5.	G10023	-	Hex Head Cap Screw, 1/4"-20 x 3/4"
	G10110	-	Lock Nut, 1/4"-20
6.	G10522	-	Screw, 1/4"-14 x 3/4"
7.	GD6291	-	Insulated Clamp
8.	G10648	-	Hex Head Cap Screw, 1"-8 x 6", Grade 8
	G10647	-	Hex Nut, 1"-8, Grade 8
9.	G10050	-	Hex Head Cap Screw, 3/4"-10 x 5"
	G10112	-	Lock Nut, 3/4"-10
10.	GD8540	-	Spacer Ring, 3 1/2"
11.	GA6000	-	Weigh Axle, 2 7/8"
12.	GA5994	-	Stub Axle (Serial No. 550000 - 550176)
13.	G10635	-	Hex Head Cap Screw, 1"-8 x 9 1/2"
	G10118	-	Lock Washer, 1"
	G10117	-	Hex Nut, 1"-8
14.	G10318	-	Hex Head Cap Screw, 5/8"-11 x 4 1/2"
	G10230	-	Lock Washer, 5/8"
	G10104	-	Hex Nut, 5/8"-11
15.	GA6001	-	Hitch Plate
16.	GA4681	-	Weigh Beam, 2 1/2"
17.	GA6521	-	Clevis
18.	GA6692	-	Stub Axle (Serial No. 550177 & On)
19.	GA5663	1	Battery Power Cable
20.	GR1067	-	Pin
21.	GR1171	-	Female Socket Contact
22.	GR1068	-	Connector, Male
23.	GR1170	-	Connector, Female
24.	GR1069	-	Shrink Tube, 2 1/2"
25.	G7383X	1	Printer (Optional) For Use With EZ210

CONVEYOR FOLD CYLINDER

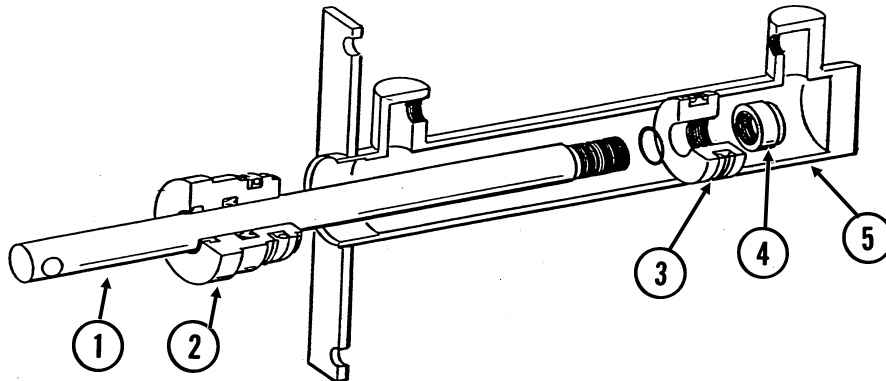
CYL032(CYL5)



ITEM	PART NO.	QTY.	DESCRIPTION
1.	GA6032	1	Rod W/Grease Fitting
	G10449	-	Grease Fitting
2.	GD5954	1	Gland
3.	GD4525	1	Piston
4.	GR1049	1	Lock Nut, 7/8"-14
5.	GA6031	1	Barrel
A.	GA5946	-	Cylinder Complete, 2 1/2" x 20 1/16"
B.	GR0963	-	Seal Kit, Includes: (1)T Seal, (2)O-Rings, (1)BU Ring, (1)U-Cup, (1)Wiper

GRAIN DOOR CYLINDER

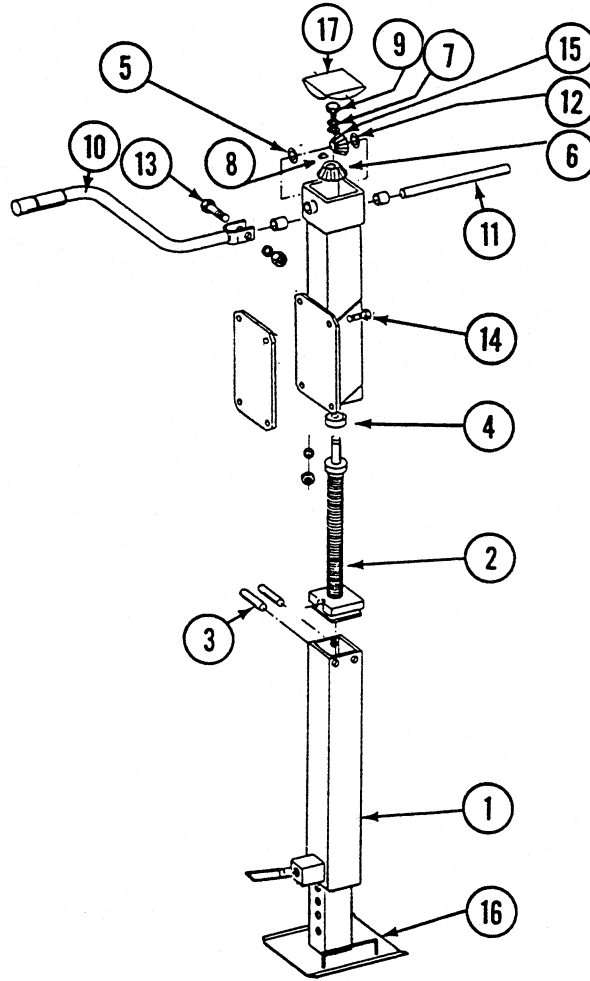
CYL051(CYL28)



ITEM	PART NO.	QTY.	DESCRIPTION
1.	GD8606	1	Rod
2.	GD5949	1	Gland
3.	GD4632	1	Piston
4.	GR0959	1	Lock Nut, 3/4"-16
5.	GA6033	1	Barrel
A.	GA5945	-	Cylinder Complete, 2" x 20 1/16"
B.	GR0927	-	Seal Kit, Includes: (1)T Seal, (2)O-Rings, (1)Back-Up, (1)U-Cup, (1)Rod Wiper

JACK ASSEMBLY

WAC002/WAC003(CONV19)

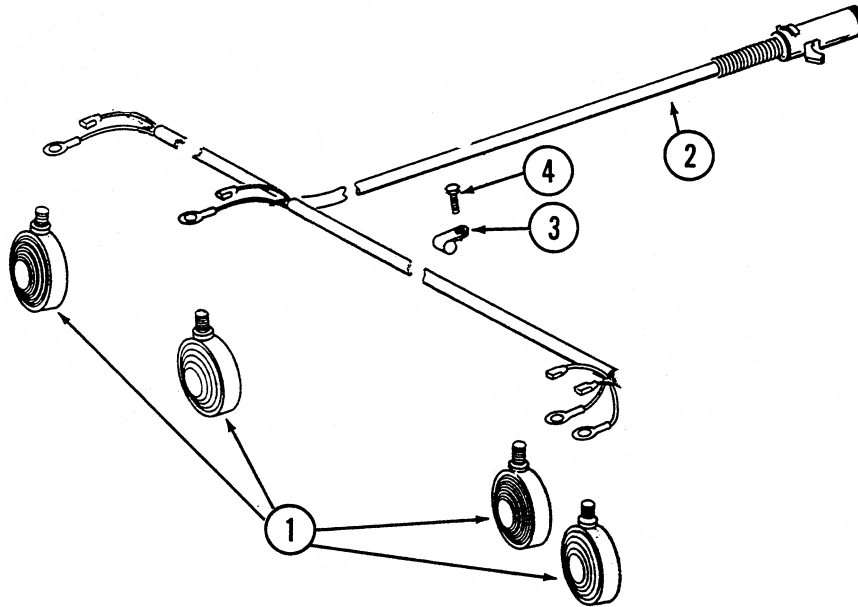


ITEM	PART NO.	QTY.	DESCRIPTION
1.	GR1009	1	Secondary W/Lock Assembly
2.	GR0974	1	Nut And Screw Assembly
3.	GR0976	2	Pin
4.	GR0691	1	Bearing
5.	GR0692	3	Machine Washer, 1" x 2" x 18 Gauge
6.	GR0693	1	Gear, 18 Tooth
7.	GR0702	2	Retaining Washer, 1/2"
8.	GR0694	2	Key
9.	GR0703	1	Retaining Hex Head Cap Screw
10.	GD1350	1	Handle
11.	GR0977	1	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	1	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	1	Lid
A.	G1K168	-	Jack Replacement Kit

SAFETY/WARNING LIGHTS

ECP010/WAC017(CONV20)

Serial No. 550000 - 550176

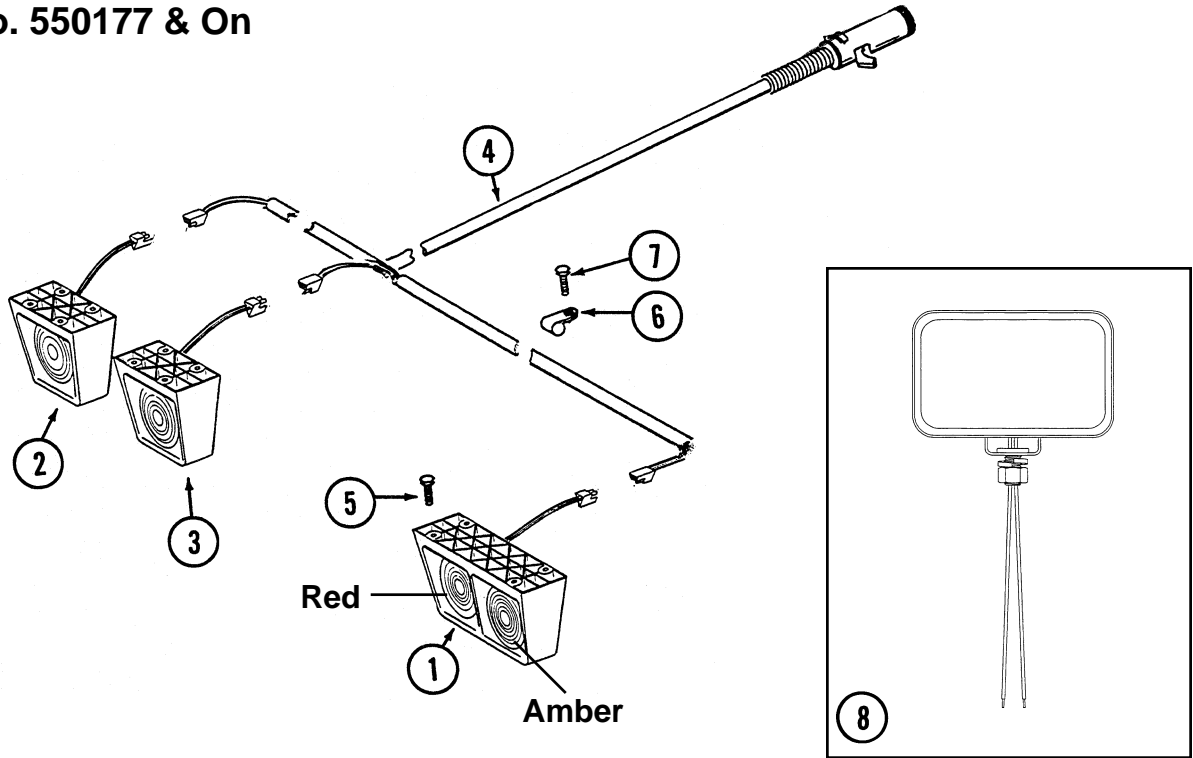


ITEM	PART NO.	QTY.	DESCRIPTION	
1.	GA4122	2	Single Red Light Assembly Complete W/Female Terminal	
	GA4123	2	Double Amber Light Assembly Complete W/Male Terminal	
	GR0968	-	Bulb, No. 1156	
	GR0970	-	Red Lens	
	GR0969	-	Amber Lens	
	G10289	-	Hex Nut, 1/2"-20	
	G10525	-	Star Washer, 1/2"	
	-	-	Rubber Washer (Non-Stock Item)	
	GR0971	-	O-Ring Gasket	
	GR0972	-	Pigtail	
	G10266	-	Female Terminal	
	G10269	-	Male Terminal	
	2.	GA5981	1	Wiring Harness
	3.	GD6291	-	Clamp
4.	G10522	-	Tapping Screw, 1/4"-14 x 3/4"	

SAFETY/WARNING AND WORK LIGHTS

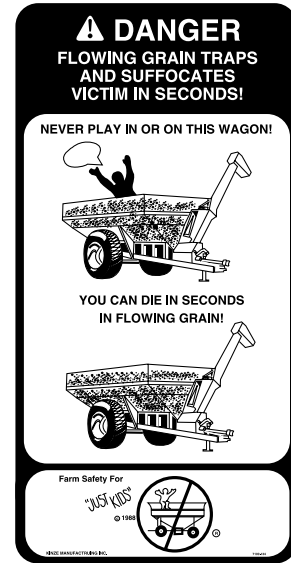
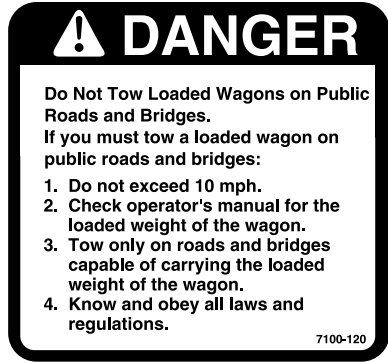
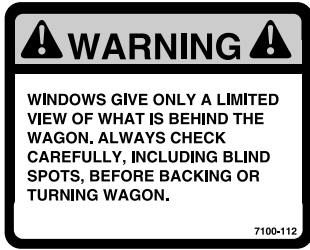
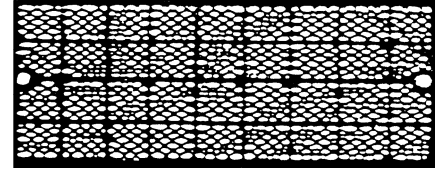
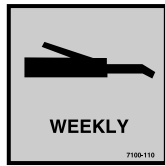
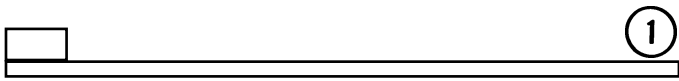
ECP010/WAC017(CONV21/WGN67)

Serial No. 550177 & On



ITEM	PART NO.	QTY.	DESCRIPTION
1.	GA6700	1	Double Light Assembly
	GR1203	-	Red Lens
	GR1204	-	Amber Lens
	GR1205	-	Cover
	GR1206	-	Rubber Grommet (4)
	GR1207	-	Lamp Unit
	GR1208	-	Bulb
2.	GA6701	1	Single Amber Light Assembly
	GR1204	-	Amber Lens
	GR1206	-	Rubber Grommet (4)
	GR1207	-	Lamp Unit
	GR1208	-	Bulb
3.	GA6702	1	Single Red Light Assembly
	GR1203	-	Red Lens
	GR1205	-	Cover
	GR1206	-	Rubber Grommet (4)
	GR1207	-	Lamp Unit
4.	GA7582	1	Wiring Harness Assembly
	GA5385	1	7 Terminal Female Connector
5.	G10064	12	Hex Head Cap Screw, 1/4"-20 x 1"
	G10209	12	Washer, 1/4" USS
	G10110	12	Lock Nut, 1/4"-20
6.	GD6291	-	Clamp
7.	G10522	-	Tapping Screw, 1/4"-14 x 3/4"
8.	GR1360	-	Halogen Replacement Lamp, 50W

DECALS, REFLECTORS AND TIE STRAPS

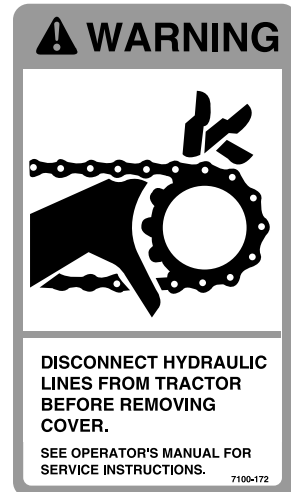
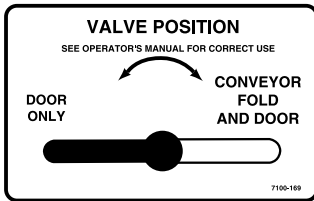


450C

CLOSED

Conveyor

OPEN



DECALS, REFLECTORS AND TIE STRAPS



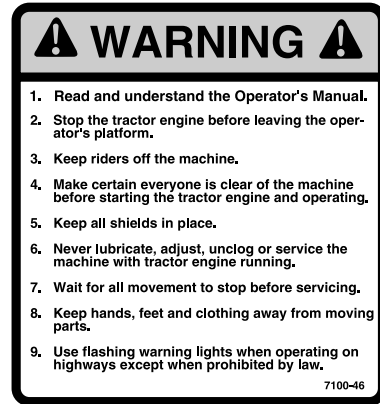
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KINZE

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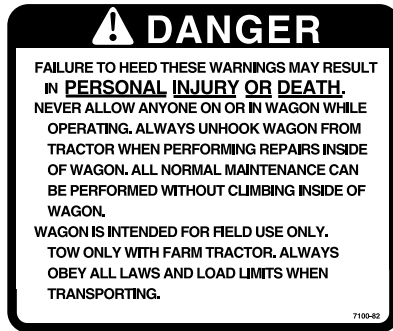
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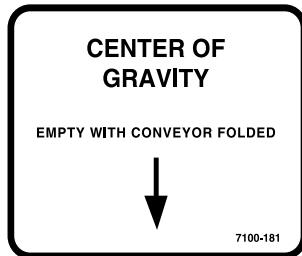
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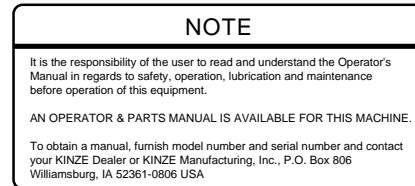
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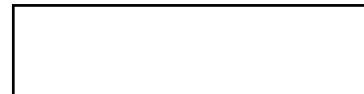
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30

Sof-Trak

28



31

ITEM	PART NO.	QTY.	DESCRIPTION
1.	GD1512	-	Tie Strap, 6"
	GD2117	-	Tie Strap, 14 1/2"
2.	GR0155	-	Blue Paint, Aerosol
3.	G7200-03	4	Reflector, Red
	G7200-04	3	Reflector, Amber
4.	G7100-107	2	Decal, Logo
5.	G7100-110	4	Decal, Grease
6.	G7100-116	3	Decal, Grease
7.	G7100-130	-	Decal, Electronic Scale
8.	G7100-112	1	Decal, Warning
9.	G7100-120	1	Decal, Danger

(Continued)

DECALS, REFLECTORS AND TIE STRAPS

ITEM	PART NO.	QTY.	DESCRIPTION
10.	G7100-165	2	Decal, 450C
11.	G7100-167	1	Decal, Closed
12.	G7100-134	1	Decal, Danger
13.	G7100-166	2	Decal, Conveyor
14.	G7100-168	1	Decal, Open
15.	G7100-169	1	Decal, Inspection
16.	G7100-170	1	Decal, Danger
17.	G7100-172	1	Decal, Warning
18.	G7100-171	1	Decal, Danger
19.	G7100-173	2	Decal, Instruction
20.	G7100-174	-	Decal, Instruction (Serial No. 550000 - 550176 Only)
21.	G7100-54	2	Decal, KINZE®
22.	G7100-175	2	Decal, Danger
23.	G7100-46	1	Decal, Warning
24.	G7100-56	1	Decal, Warning
25.	G7100-82	1	Decal, Danger
26.	G7100-90	1	Decal, Warning
27.	G7100-119	-	Decal, Instruction
28.	G7100-131	2	Decal, Sof-Trak
29.	G7100-181	1	Decal, Instruction
30.	G7100-217	-	Decal, Note
31.	G7100-93	-	White Striping, 3" x 100 Yards
	GR1172-01	-	White Striping, Per Foot

NUMERICAL INDEX

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A1108	P10	G10005	P17, P25	G10442	P20
A1110	P10	G10009	P9	G10449	P24
A1146	P9	G10014	P17	G10460	P7, P14
A1154	P7	G10016	P3, P7	G10522	P23, P26, P27
A1184	P10	G10017	P5	G10525	P26
A1188	P7	G10022	P7	G10535	P3, P18, P19
A1189	P9	G10023	P23	G10537	P17
A1192	P9	G10027	P3	G10538	P17
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A1480	P3	G10039	P9	G10635	P15, P16, P23
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