

GENERAL MANUAL FOR MODEL JOHN DEERE 4900 SERIES L3220G4 / MULTAPPLIERS



**SAFETY GUIDELINES
INSTALLATION
OPERATION
MAINTENANCE
TROUBLESHOOTING
PARTS LIST**

Dealer Sticker

This unit may have been built with SPECIAL FEATURES. Provide SERIAL NUMBER when ordering parts.

SERIAL NO. _____

IMPORTANT: READ THE SAFETY GUIDELINES AND ALL INSTRUCTIONS CAREFULLY BEFORE OPERATING

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Please Give Part No., Description and Unit Serial No.

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Please Give Part No., Description and Unit Serial No.

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**INSERT CURRENT
NEW LEADER WARRANTY**

PREFACE

PLEASE! ALWAYS THINK SAFETY FIRST!!

The purpose of this manual is to familiarize the person (or persons) using this unit with the information necessary to properly install, operate, and maintain this system. These instructions cannot replace the following: the fundamental knowledge that must be possessed by the installer or operator, the knowledge of a qualified person, or the clear thinking necessary to install and operate this equipment. Since the life of any machine depends largely upon the care it is given, we suggest that this manual be read thoroughly and referred to frequently. If for any reason you do not understand the instructions, please call your authorized dealer or our Cedar Rapids, Iowa, Product Support Department at (319) 363-8281.

It has been our experience that by following these installation instructions, and by observing the operation of the spreader, you will have sufficient understanding of the machine enabling you to troubleshoot and correct all normal problems that you may encounter. Again, we urge you to call your authorized dealer or our Cedar Rapids Product Support Department if you find the unit is not operating properly, or if you are having trouble with repairs, installation, or removal of this machine.

We urge you to protect your investment by using genuine HECO parts and our authorized dealers for all work other than routine care and adjustments.

Highway Equipment Company reserves the right to make alterations or modifications to this equipment at any time. The manufacturer shall not be obligated to make such changes to machines already in the field.

This Safety Section should be read thoroughly and referred to frequently.

ACCIDENTS HURT!!!

ACCIDENTS COST!!!

ACCIDENTS CAN BE AVOIDED!!!



Please Give Part No., Description and Unit Serial No.

SAFETY



TAKE NOTE! THIS SAFETY ALERT SYMBOL FOUND THROUGHOUT THE OPERATION MANUAL IS USED TO CALL YOUR ATTENTION TO INSTRUCTIONS INVOLVING YOUR PERSONAL SAFETY AND THAT OF OTHERS. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN INJURY OR DEATH.

In this manual and on the safety signs placed on the unit, the words “DANGER,” “WARNING,” “CAUTION,” and “IMPORTANT” are used to indicate the following:



DANGER

Indicates an imminently hazardous situation that, if not avoided, **WILL** result in death or serious injury. This signal word is to be limited to the most extreme situations typically for machine components that, for functional purposes, cannot be guarded.



WARNING

Indicates a potentially hazardous situation that, if not avoided, **COULD** result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.



CAUTION

Indicates a potentially hazardous situation that, if not avoided, **MAY** result in minor or moderate injury. It may also be used to alert against unsafe practices.

IMPORTANT!

Is used for informational purposes in areas that may involve damage or deterioration to unit but generally would not involve the potential for personal injury.

The need for safety cannot be stressed strongly enough in this manual. At Highway Equipment Company, we urge you to make safety your top priority when operating any equipment. We firmly advise that anyone allowed to operate this machine be thoroughly trained and tested to prove they understand the fundamentals of safe operation.

The following guidelines are intended to cover general usage and to assist you in avoiding accidents. There will be times when you will run into situations that are not covered in this section. At those times the best standard to use is common sense. If, at any time, you have question concerning these guidelines, please call your authorized dealer or our factory at (319) 363-8281.



SAFETY

AVOID ACCIDENTS

Most accidents, whether they occur in industry, on the farm, at home, or on the highway, are caused by the failure of some individual to follow simple and fundamental safety rules or precautions. For this reason, most accidents can be prevented by recognizing the real cause and doing something about it before the accident occurs.

Regardless of the care used in the design and construction of any type of equipment, there are many conditions that cannot be completely safeguarded against without interfering with reasonable accessibility and efficient operation.

A CAREFUL OPERATOR IS THE BEST INSURANCE AGAINST AN ACCIDENT. THE COMPLETE OBSERVANCE OF ONE SIMPLE RULE WOULD PREVENT MANY THOUSAND SERIOUS INJURIES EACH YEAR. THAT RULE IS:

NEVER ATTEMPT TO CLEAN, OIL OR ADJUST A MACHINE WHILE IT IS IN MOTION.

NATIONAL SAFETY COUNCIL



CAUTION

If spreader is used to transport chemicals, check with your chemical supplier regarding DOT (Department of Transportation) requirements.



Please Give Part No., Description and Unit Serial No.

SAFETY DECALS

MAINTENANCE INSTRUCTIONS

1. Keep safety decals and signs clean and legible at all times.
2. Replace safety decals and signs that are missing or have become illegible.
3. Replaced parts that displayed a safety sign should also display the current sign.
4. Safety decals or signs are available from your dealer's Parts Department or our Cedar Rapids factory.


INSTALLATION INSTRUCTIONS

1. **Clean Surface**
Wash the installation surface with a synthetic, free-rinsing detergent. Avoid washing the surface with a soap containing creams or lotion. Allow to dry.
2. **Position Safety Decal**
Decide on the exact position before application. Application marks may be made on the top or side edge of the substrate with a lead pencil, marking pen, or small pieces of masking tape. **NOTE:** Do not use chalk line, china marker, or grease pencil. Safety decals will not adhere to these.
3. **Remove the Liner**
A small bend at the corner or edge will cause the liner to separate from the decal. Pull the liner away in a continuous motion at a 180-degree angle. If the liner is scored, bend at score and remove.
4. **Apply Safety Decal**
 - a. Tack decal in place with thumb pressure in upper corners.
 - b. Using firm initial squeegee pressure, begin at the center of the decal and work outward in all directions with overlapping strokes. **NOTE:** Keep squeegee blade even—nicked edges will leave application bubbles.
 - c. Pull up tack points before squeegeeing over them to avoid wrinkles.
5. **Remove Pre-mask**
If safety decal has a pre-mask cover remove it at this time by pulling it away from the decal at a 180 degree angle. **NOTE:** It is important that the pre-mask covering is removed before the decal is exposed to sunlight to avoid the pre-mask from permanently adhering to the decal.
6. **Remove Air Pockets**
Inspect the decal in the flat areas for bubbles. To eliminate the bubbles, puncture the decal at one end of the bubble with a pin (never a razor blade) and press out entrapped air with thumb moving toward the puncture.
7. **Re-Squeegee All Edges.**



SAFETY DECALS

CAUTION


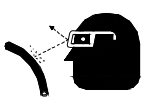


TO AVOID INJURY OR MACHINE DAMAGE:

- Do not operate or work on this machine without reading and understanding the operators manual.
- Keep hands, feet, hair and clothing away from moving parts.
- Do not allow riders on machine.
- Avoid unsafe operation or maintenance.
- Disengage power takeoff and shut off engine before removing guards, servicing or unclogging machine.
- Keep unauthorized people away from machine.
- Keep all guards in place when machine is in use.
- If manual is missing, contact dealer for replacement.

150034

WARNING


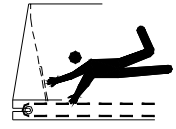



HIGH PRESSURE FLUID HAZARD
To prevent death or serious injury:

- Relieve pressure on system before repairing, adjusting, or disconnecting.
- Keep all lines, fittings and couplers tight and free of leaks.
- Wear proper hand and eye protection when searching for leaks. Use wood or cardboard instead of hands.
- Do not use hydraulic lines for hand holds or steps.
- Components may be hot.

39138

DANGER


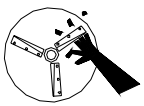



MOVING PART HAZARD
To prevent death or serious injury:

- Stay out of box while conveyor is moving.
- Disconnect and lockout power source before adjusting or servicing.
- Do not ride on spreader.

364

DANGER

FLYING MATERIAL & ROTATING SPINNER HAZARD
To prevent death or serious injury:

- Wear eye protection.
- Stop machine before servicing or adjusting.
- Keep bystanders at least 60 feet away.

368

IMPORTANT

Spinner assembly and material flow divider have NOT been adjusted at the factory. Before assembling machine, read and follow assembly instructions in the operation and maintenance manual for this machine.

Before spreading material, spread pattern tests must be conducted to properly adjust the spread pattern. Refer to the operation & maintenance manual for adjustment instructions. A spread pattern test kit, part number 70889, is available for this purpose. THE MANUFACTURER OF THIS SPREADER WILL NOT BE LIABLE FOR MISAPPLIED MATERIAL DUE TO AN IMPROPERLY ADJUSTED SPREADER.

It is recommended that spread pattern tests be conducted prior to each spreading season, after any spreader maintenance, and periodically during the spreading season. Spread pattern tests must be conducted whenever a new product is to be applied.

71526

CAUTION

HAZARDOUS MATERIALS
To avoid injury or machine damage:

- Materials to be spread can be dangerous.
- Improper selection, application, use or handling may be a hazard to persons, animals, crops or other property.
- Follow instructions and precautions given by the material manufacturer.

321

WARNING

MOVING PART HAZARD
To prevent death or serious injury:

- Close and secure guards before starting.
- Do not stand or climb on machine.
- Disconnect and lockout power source before adjusting or servicing.
- Keep hands, feet and hair away from moving parts.

55631

WARNING




FALLING HAZARD
To prevent death, serious injury or machine damage:

- Do not stand or climb on guard.

55630

WARNING



To prevent death or serious injury:

- Do not place objects on fenders.
- Keep off fenders. They are not intended to carry loads.

39200





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GENERAL SAFETY RULES

Operation Section

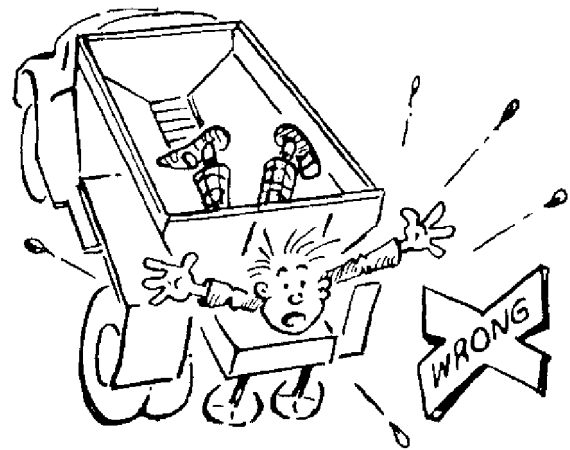
1. Before attempting to operate this unit, read and be sure you understand the operation and maintenance manual. Locate all controls and determine the use of each. Know what you are doing!
2. When leaving the unit unattended for any reason, be sure to:

- a. Take power take-off out of gear.
- b. Shut off conveyor and spinner drives.
- c. Shut off vehicle engine and unit engine (if so equipped).
- d. Place transmission of the vehicle in “neutral” or “park”.
- e. Set parking brake firmly.
- f. Lock ignition and take keys with you.
- g. Lock vehicle cab.
- h. If on steep grade, block wheels.

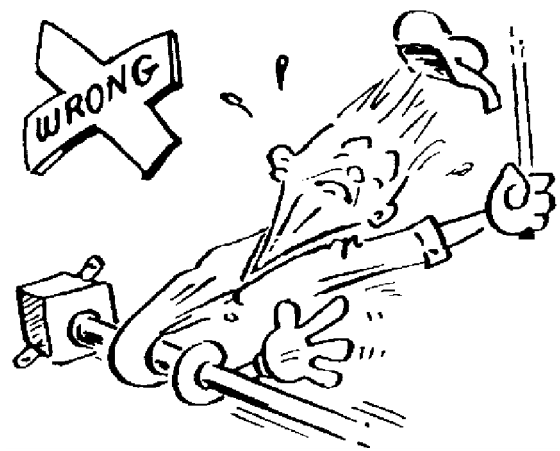
These actions are recommended to avoid unauthorized use, runaway, vandalism, theft and unexpected operation during start-up.



3. Do not read, eat, talk on a mobile phone or take your attention away while operating the unit. Operating is a full-time job.
4. Stay out of the body while conveyor is operating. If it is necessary to get into the body for any reason, be sure all power is shut off, vehicle brakes are set, and the engine starting switch is locked and keys removed. All controls should be tagged to prohibit operation and tags should be placed and later removed only by the person who was working in the body.



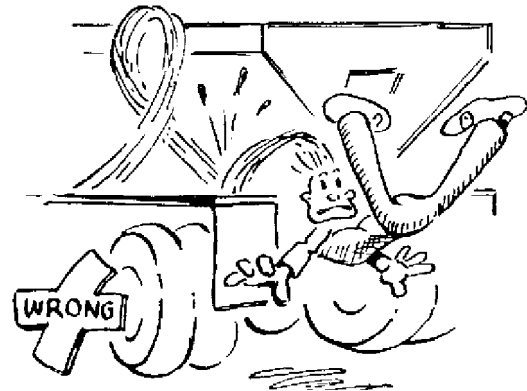
5. Guards and covers are provided to help avoid injury. Stop all machinery before removing them. Replace guards and covers before starting spreader operation.
6. Stay clear of any moving members, such as shafts, couplings and universal joints. Make adjustments in small steps, shutting down all motions for each adjustment.
7. Before starting unit, be sure everyone is clear and out of the way.



GENERAL SAFETY RULES

Operation Section

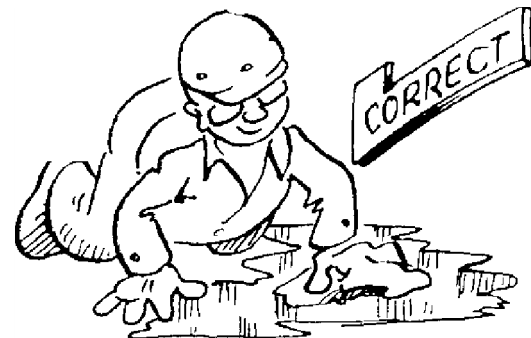
8. Be careful in getting on and off this unit, especially in wet, icy, snowy or muddy conditions. Clean mud, snow or ice from steps and footwear.
9. Do not allow anyone to ride on any part of unit for any reason.



10. Keep away from spinners while they are turning:
 - a. Serious injury can occur if spinners touch you.
 - b. Rocks, scrap metal or other material can be thrown off the spinner violently. Stay out of discharge area.



11. Inspect spinner fins, spinner frame mounting and spinner fin nuts and screws every day. Look for missing fasteners, looseness, wear and cracks. Replace immediately if required. Use only new SAE grade 5 or grade 8 screws and new self-locking nuts.



12. Inspect all bolts, screws, fasteners, keys, chain drives, body mountings and other attachments periodically. Replace any missing or damaged parts with proper specification items. Tighten all bolts, nuts and screws to specified torques according to the torque chart in this manual.

13. Shut off engine before filling fuel and oil tanks. Do not allow overflow. Wipe up all spills. Do not smoke. Stay away from open flame. FIRE HAZARD!



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