HEADER

SERVICE MANUAL

GLEANER®

7200 Rigid / 8200 Flex
Grain Header

Gleaner®
7200 Rigid / 8200 Flex
79032956 A Rev.

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GENERAL INFORMATION

SAFETY

Safety Alert Symbol

FIG. 1: The safety alert symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

Look for the safety alert symbol both in this manual and on safety signs on this machine. The safety alert symbol will direct your attention to information that involves your safety and the safety of others.

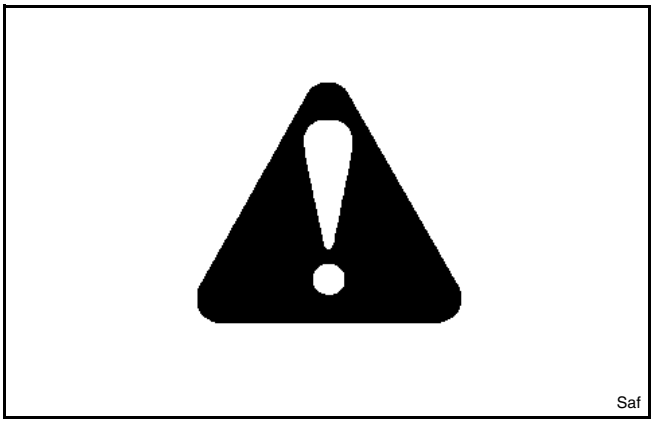

FIG. 1

Signal Words

FIG. 2: The words DANGER, WARNING or CAUTION are used with the safety alert symbol. Learn to recognize these safety alerts and follow the recommended precautions and safety practices.

FIG. 2

DANGER: Indicates an imminently hazardous situation that, if not avoided, will result in DEATH OR VERY SERIOUS INJURY.

WARNING: Indicates a potentially hazardous situation that, if not avoided, could result in DEATH OR SERIOUS INJURY.

CAUTION: Indicates a potentially hazardous situation that, if not avoided, may result in MINOR INJURY.

Informational Messages

The words IMPORTANT and NOTE are not related to personal safety, but are used to give additional information and tips for operating or servicing this equipment.

IMPORTANT: Identifies special instructions or procedures which, if not strictly observed, could result in damage to or destruction of the machine, process, or its surroundings.

NOTE: Identifies points of particular interest for more efficient and convenient repair or operation.

Safety Signs

WARNING: Do not remove or obscure Danger, Warning or Caution signs. Replace any Danger, Warning or Caution signs that are not readable or are missing. Replacement signs are available from your dealer in the event of loss or damage. The actual location of the safety signs is illustrated at the end of this section.

If a used machine has been purchased, make sure all safety signs are in the correct location and can be read.

See Safety Sign Location of this section for illustrations.

Replace any safety signs that cannot be read or are missing. Replacement safety signs are available from your dealer.

A Word to the Operator

FIG. 3: Read and understand this manual and the manual for all attachments before operating the machine.

Learn how to operate the machine and how to use the controls properly.

Do not let anyone operate the machine without instruction and training.

For your personal safety and the personal safety of others, follow all safety precautions and instructions found in the manuals and on decals affixed to the machine and attachments.

Personal injury or death may result if these precautions are not followed.

WARNING: An operator must not use alcohol or drugs, which can affect their alertness or coordination. An operator taking prescription or over the counter drugs needs medical advice on whether or not they can properly operate machines.

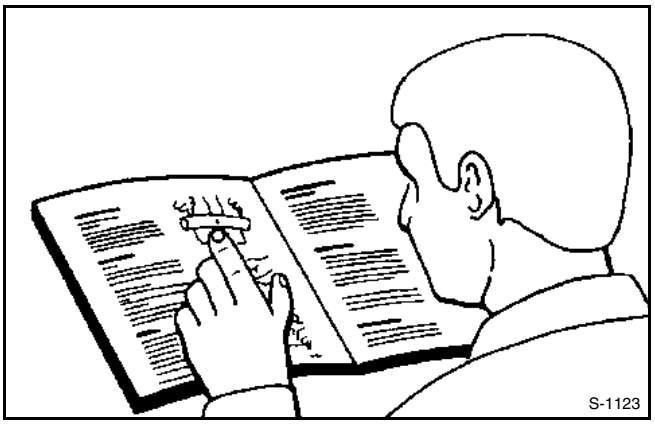

FIG. 3

IT IS TOO LATE TO REMEMBER WHAT SHOULD HAVE BEEN DONE AFTER THE ACCIDENT HAS HAPPENED.

- **READ** the Operator's Manuals carefully to acquaint yourself with the header and the machine. Operating unfamiliar equipment can cause accidents.
- **ALWAYS** shift the transmission to neutral, stop the engine, set the brake and remove the start key before leaving the operator's station, or before permitting anyone to inspect, clean, lubricate, adjust or repair any part of the machine or its attachments, unless otherwise specifically recommended in the Service Manual or the Operator's Manual.
- **NEVER** permit anyone to work under the header or the feeder housing or between the header and the machine **UNLESS** the lift ram stop is fully engaged on the lift ram, the engine is stopped, the brake is set, the key is removed from the start switch, and the header is latched securely to the feeder housing.
- **NEVER** permit the operator or another person to engage or disengage the lift ram stop UNLESS the engine is stopped, the brake is set, and the key is removed from the start switch while that person is between the header and the machine or under the feeder housing.
- **NEVER** permit anyone to get under the reel **UNLESS BOTH THE RIGHT HAND and LEFT HAND** reel lift ram stops are fully engaged over the lift ram rods and against the ends of the lift ram barrels, the engine is stopped, the brake is set, and the start key is removed.
- **BE SURE** that everyone is clear of the machine before starting the engine and mechanism or its attachments.
- **ALWAYS** be sure that all shields, guards and access doors are in place when the header is in operation.
- **DO NOT** try to clean, adjust, or service the header while the header or the machine is running.
- **KEEP** all belts and chains in alignment and at the proper tension.
- **NEVER** turn the header conveyor or drives unless **ALL** parts of the body and articles of clothing are well clear of the sickle, chains, gears, and other moving parts.
- **FOR YOUR SAFETY** and the safety of others, all **SAFETY AND OPERATIONAL DECALS** that become damaged, faded, or come off should be replaced immediately.
- **REMEMBER** that safe operation is no accident.
- **ALWAYS** lower the Grain Head to the ground, or block, or lock the Grain Head up securely before disconnecting or servicing any part of the hydraulic system.
- **ALWAYS** keep the drives, moving parts, and shields clean of chaff and straw buildup to reduce the possibility of fire.
- **BEFORE** attaching, adjusting or working on the driveline, disengage the header drive, lower the header to the ground, stop engine, remove starter key and set the parking brake.
- **BEFORE** engaging the header drive, carefully engage and lower the header to check the clearance, driveline shaft slide range, and articulation.
- BE SURE that all drivelines have the correct guards and that they are in good operating condition.
- **NEVER** use the drive line as a step.
- **NEVER** wear loose fitting clothing and keep at least your height in distance away from a rotating drive line.

Fire Prevention and First Aid

FIG. 4: Be prepared for emergencies. Always carry one or more suitable fire extinguishers - ABC rating, dry chemical, 2.2 KG (5 lb). Check fire extinguishers regularly to be sure the fire extinguishers are properly charged and in operating condition.

Mounting a fire extinguisher near the operator's cab and a fire extinguisher near the engine compartment is recommended.

To reduce the risk of fire, frequently remove accumulated crop material from the machine and engine deck and check for overheated components.

Keep a first aid kit handy for treatment of minor cuts and scratches.

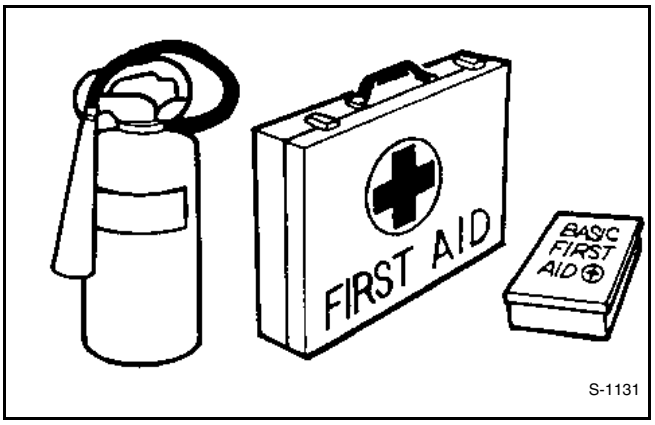

FIG. 4

FIG. 5: To reduce the risk of fire or damage if fire occurs:

- Make sure the engine compartment is free of chaff and crop debris
- Clean areas of the machine & header where crop can accumulate
- Mount a fire extinguisher within easy reach at the front and rear of the machine

If any flame cutting, welding, or arc welding is to be done on the machine or header, make sure to clear any crop material or debris from around the area. Make sure the area below the work area is clear of any flammable material as falling molten metal or sparks can ignite the material.

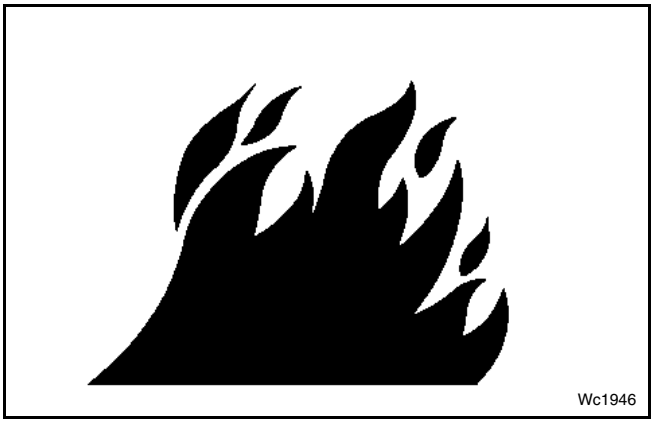

FIG. 5

Prepare for Operation

Make sure the machine is in the proper operating condition as stated in the operator's manual. Make sure the machine has the correct equipment needed by local regulations.

Read and understand all operating instructions and precautions in this manual before operating or servicing the machine. Make sure you know and understand the positions and operations of all controls.

Make certain that all controls are in neutral and the parking brake is engaged before starting the machine. Make certain that all people are well away from your area of work before starting and operating the machine.

All equipment has a limit. Make sure you understand the speed, brakes, steering, stability, and load characteristics of the machine before you start. Check all controls in an area clear of people and obstacles before starting your work.

Be aware of the machine size and have enough space available to allow for operation. Never operate the machine at high speeds in crowded places.

Road and Highway Operation

FIG. 6: COMPLY with your state and local **LAWS** and **REGULATIONS** governing highway safety when moving machinery on a highway.

- **ALWAYS** travel at a reasonable speed for road or field conditions. Whenever possible, avoid traveling near ditches, embankments and holes. Reduce speed when turning, crossing slopes, and or rough, slick or muddy surfaces.
- **AVOID** transporting the machine on the road with grain in the tank. Extra caution and slower speeds need to be used if the machine must be transported with grain in the tank.
- **ALWAYS** reduce your speed **GRADUALLY** to maintain adequate weight for stability on the rear (steering) wheels whenever:
  a. Slowing the **ENGINE** speed.
  b. Slowing the **HYDRO-TRACTION** drive.
  c. Applying the **BRAKES**.
- **BRAKES** must be locked together during road travel. **NEVER** apply individual wheel brakes for turning assist during road or highway operation.
- **TOWING** of the machine is NOT recommended. But if the machine must be towed, refer to the Operator's Manual for proper towing procedures.
- **ROTATE** the header extremity lights
- **CHECK** clearance **CAREFULLY** before driving the machine and header under electric lines, over bridges, or other obstructions along the highway.

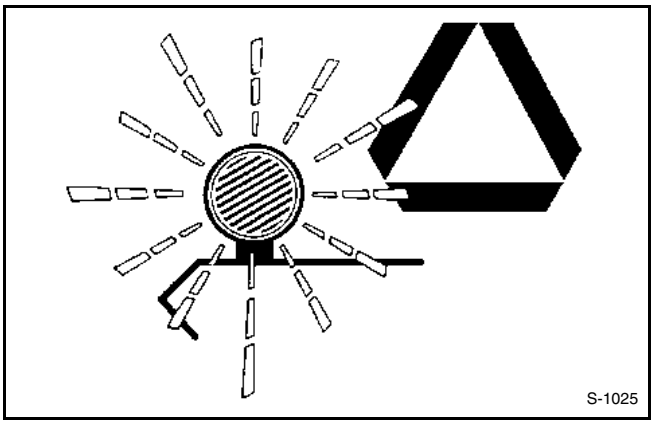

FIG. 6

Header Transport Tie-Down

FIG. 7: Hooking locations are provided on the header to allow for proper tie-down for transport. The following section outlines recommended attaching points and chain direction of pull.

One lower center rear tie-down slot (1) is located just below the center of the feeder house opening. Insert a grab hook (2) into the lower frame slot as shown in the figure.

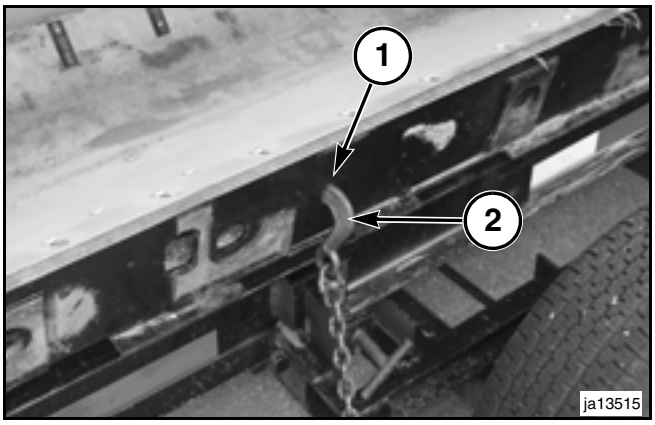

FIG. 7

FIG. 8: One lower center rear tie-down slot (1) is located on either side of center just outside of the feed house opening. Insert a grab hook (2) into the lower frame slot as shown in the figure.

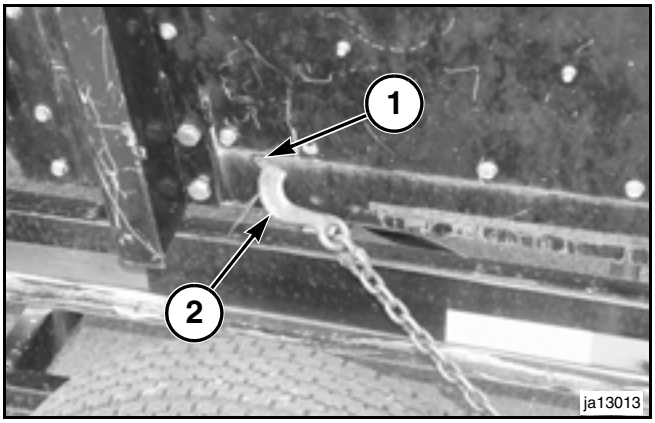

FIG. 8

FIG. 9: One lower outer end rear tie-down (1) is located at the right-hand and left-hand outer ends of the lower frame. Insert the hook (2) into the lower frame slot as shown in the figure.

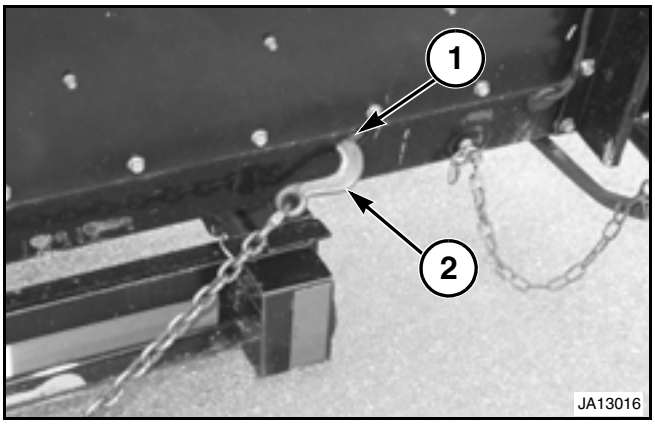

FIG. 9

FIG. 10: Wrap a nylon strap (1) around the truss assembly above the feeder house opening, attach a chain (2) and (3) to each end of the strap, and then tie-down forward and to the sides as shown in the figure.

NOTE: The chains must clear the auger.

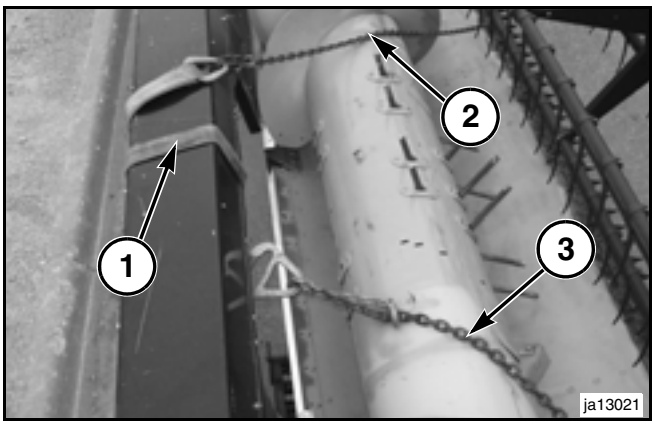

FIG. 10

Operation

WARNING: In order to provide a better view, certain photographs and illustrations in this manual may show an assembly with the shield removed. Do not operate the machine and attachments unless all shields are in place. Replace shields immediately upon completion of inspection, repairs, cleaning or adjustments and before operation begins/resumes.

FIG. 11: Wear close fitting clothing and personal protection equipment appropriate for operating and/or performing lubrication and maintenance. Tie up long hair to prevent hair from becoming entangled in moving parts.

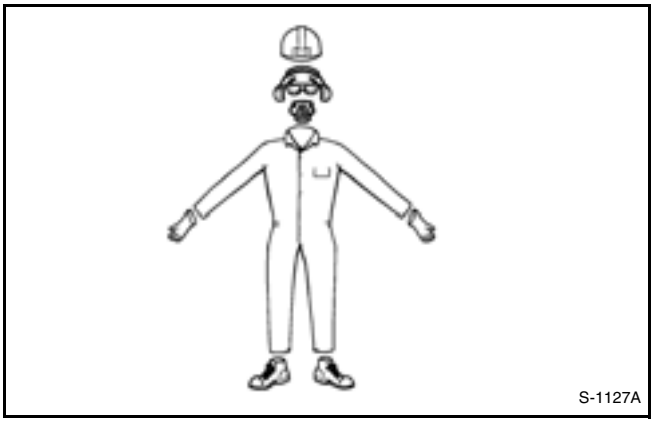

FIG. 11

FIG. 12: Face the ladder and use the handrails when getting on or off the machine.

FIG. 12

FIG. 13: Never operate the engine in a closed building unless exhaust is vented outside.

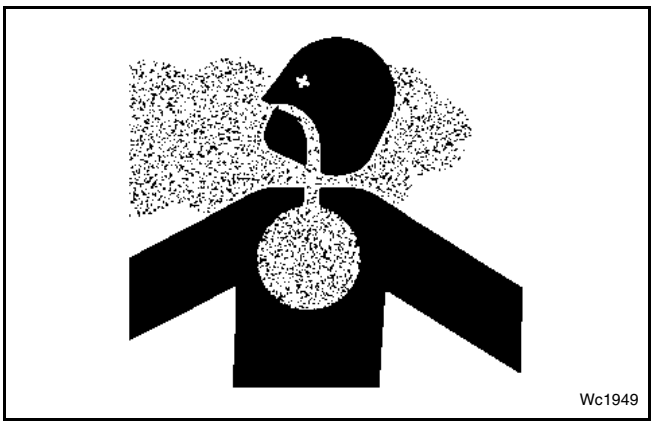

FIG. 13

FIG. 14: Always wear the seat belt when the machine is moving. If another person is riding in the instructor's seat, make sure the person wears a seat belt. Seat belts must be worn fitted snugly around the hips and not twisted.

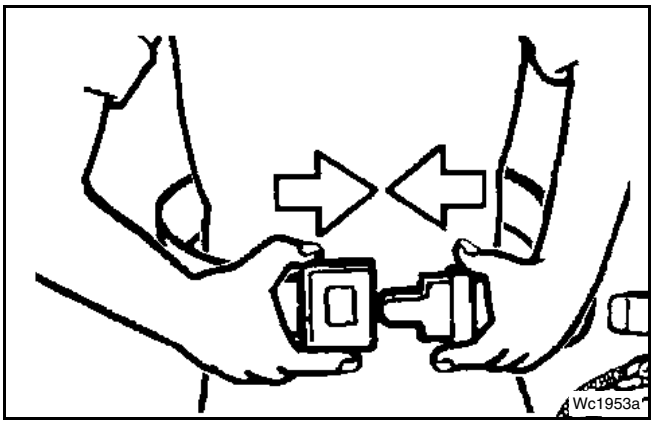

FIG. 14

FIG. 15: Never allow anyone on any part of the machine or attachments except in the operator's seat and the instructor's seat when the engine is running.

Do not attempt to get on or off the machine while the machine is moving.

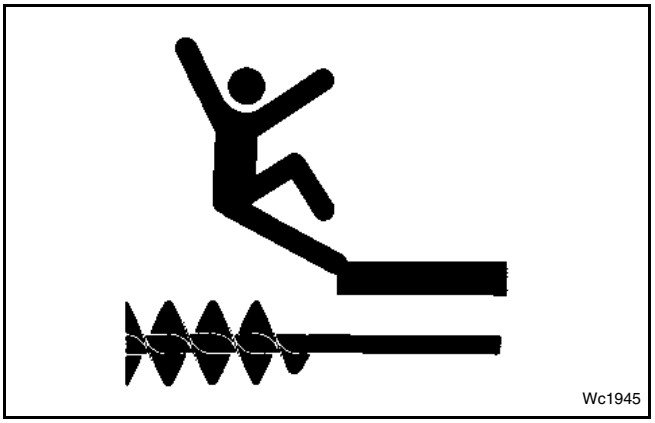

FIG. 15

FIG. 16: Avoid contact with electrical power lines. Always put the grain tank unloader tube in the transport position and lower the radio aerial before moving the machine near electrical wires. Contact with electrical power lines can cause electrical shock, resulting in very serious injury or death.

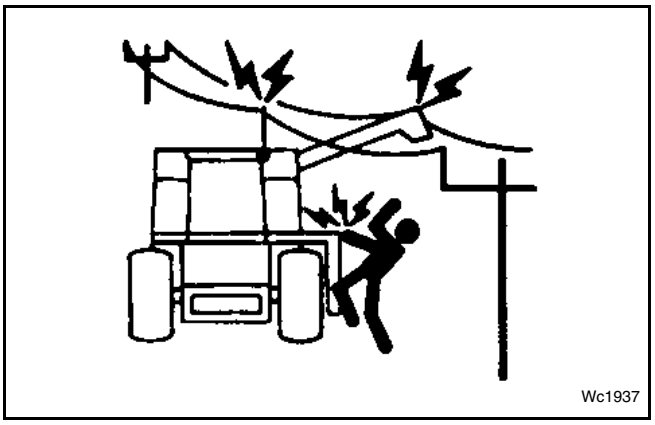

FIG. 16

FIG. 17: Use extra care and reduce speed when operating on hillsides or near ditches or embankments especially with a full grain tank to avoid rollover. Travel speed must be such that complete control and machine stability is maintained at all times. Shift to a lower gear before descending a steep hill.

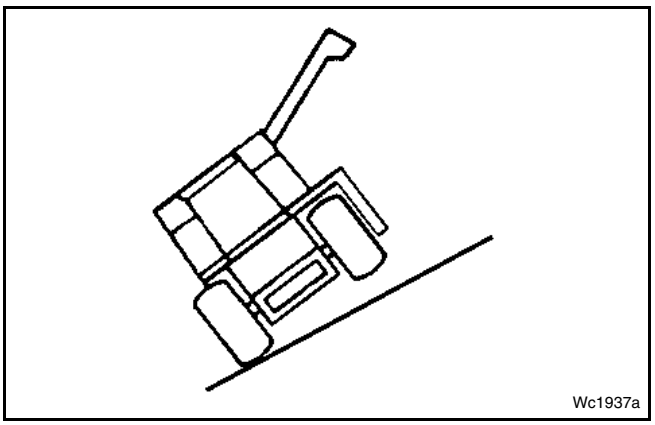

FIG. 17

FIG. 18: Always shut off the engine, shift the transmission to neutral, set the parking brake and remove the start key before leaving the operator's station or before permitting anyone to inspect, clean, lubricate, adjust or repair any part of the combine or attachments unless specifically instructed otherwise in this manual. Never leave the machine unattended while the engine is operating.

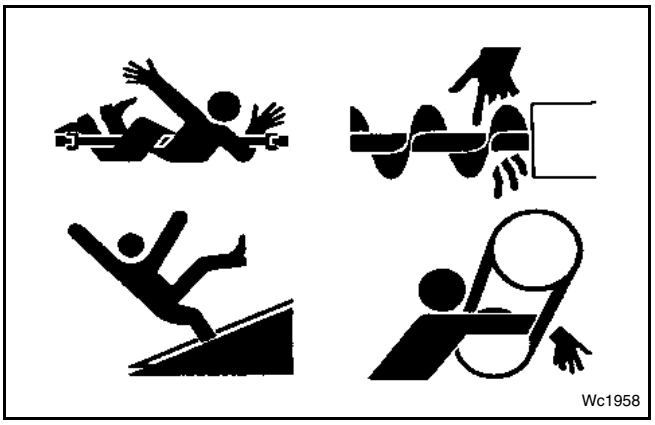

FIG. 18

FIG. 19: Never permit anyone to work under the header or the feeder house, unless the stop is properly engaged on the header lift cylinder, the engine is stopped, the parking brake is set, and the start key is removed from the start switch.

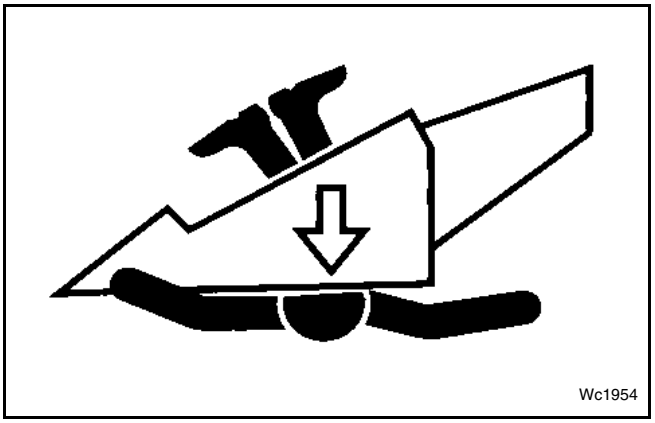

FIG. 19

FIG. 20: Always stop the engine before refueling. Do not smoke while refueling.

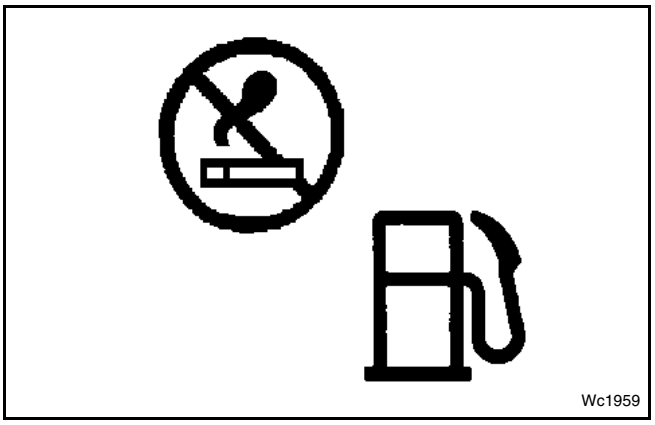

FIG. 20

Maintenance

FIG. 21: Escaping fluid under high pressure can be almost invisible but penetrate the skin causing serious injury.

Consult a doctor immediately if you sustain an injury by escaping fluids. Fluid injected into the skin must be surgically removed within a few hours or gangrene may result.

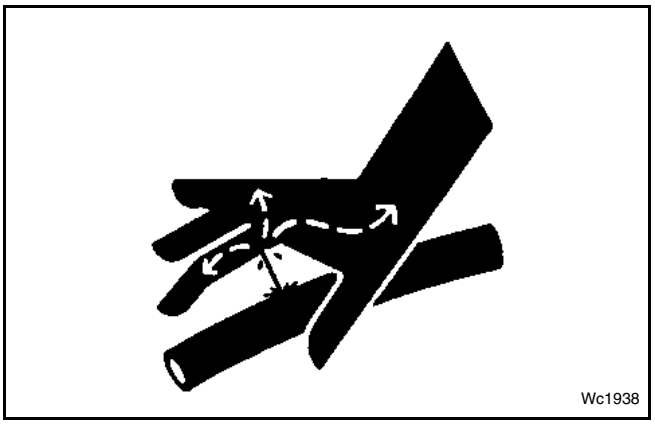

FIG. 21

FIG. 22: Use a piece of cardboard or wood to search for possible leaks, never use your hands.

Relieve pressure from the hydraulic and fuel injection systems by lowering raised equipment, shutting off accumulator valve and shutting off the engine before loosening any part of the systems. Tighten all connections securely before applying pressure.

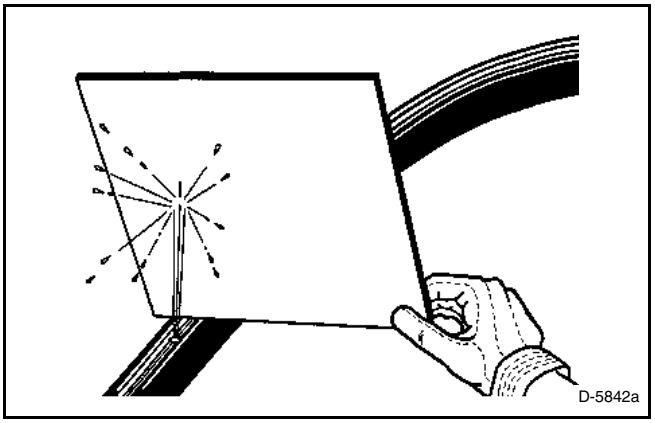

FIG. 22

FIG. 23: Be aware that the surfaces in and around the engine compartment will be hot if the engine has been running, even for a short time.

Always permit parts that contain hot fluid to cool before handling or disconnecting.

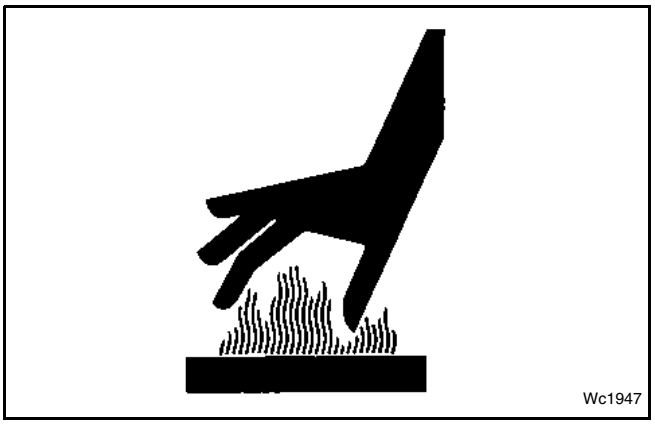

FIG. 23

FIG. 24: Do not remove the radiator cap if the engine is hot. Only remove the cap when the cap is cool enough to touch with bare hands. Loosen the cap slowly to the first notch to relieve pressure, then remove the cap.

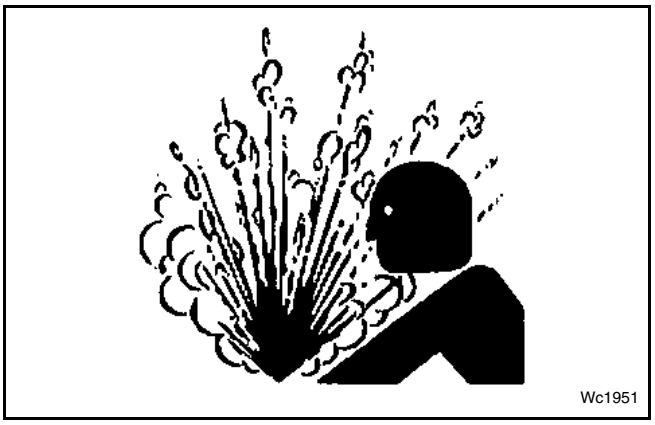

FIG. 24

FIG. 25: Remove spilled oil, antifreeze or fuel immediately from operator's ladder and platform and other access areas.

Keep all access areas clean and free of obstructions.

FIG. 25

Engine Safety

FIG. 26: Make sure that all shields, guards and access doors are in place and properly closed before starting the engine.

Start the engine from the operator's seat only. Be sure that the transmission is in neutral and the header, separator and unloader clutches are disengaged.

Be sure that all bystanders are clear of the combine before starting the engine.

FIG. 26

FIG. 27: Engine is equipped with an electric starting aid. Do not use aerosol starting fluid! Use of this fluid can cause an explosion that can result in severe injury or death.

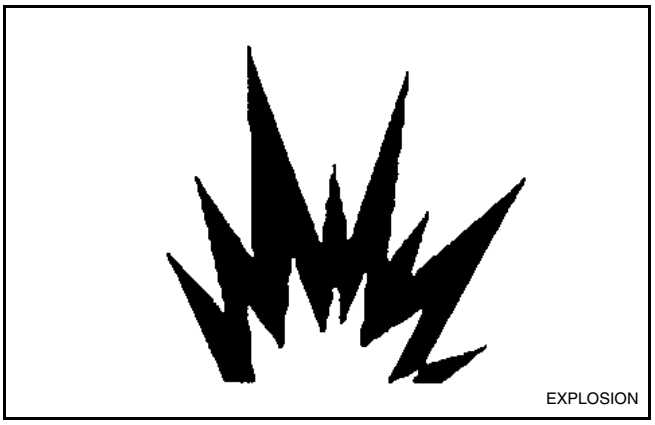

FIG. 27

Tire Safety

FIG. 28: Tire explosion and/or serious injury can result from over inflation. Do no exceed the tire inflation pressures. See the Specifications Section for the correct tire pressure.

Replace worn or damaged tires. When tire service is needed, have a qualified tire mechanic service the tire. See the Specifications Section for the correct size.

Do not weld on the rim when a tire is installed. Welding will cause an explosive air/gas mixture that will ignite with high temperatures. This can happen to tires that are inflated or deflated. Removing the air or breaking the bead is not enough.

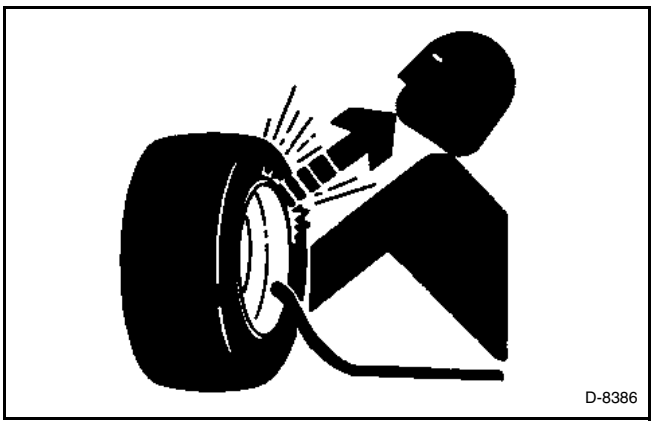

FIG. 28

Battery Safety

FIG. 29: Electrical storage batteries give off highly flammable hydrogen gas. Keep lighted smoking material and open flame or electrical sparks away from the battery. Do not lay tools or other conductive materials on the battery.

Be careful when connecting booster cables to batteries. Electrical component damage or battery explosion can result if booster cables are not installed correctly.

Do not charge a frozen battery as the battery can explode. Warm battery to 16 degrees C (60 degrees F).

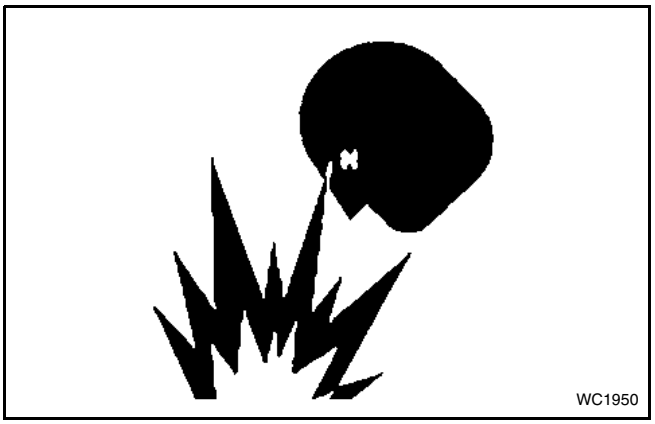

FIG. 29

FIG. 30: Fluid in electrical storage batteries contains sulfuric acid. Avoid all contact of fluid with eyes, skin or clothing. If contact does occur, flush off immediately with large amounts of water.

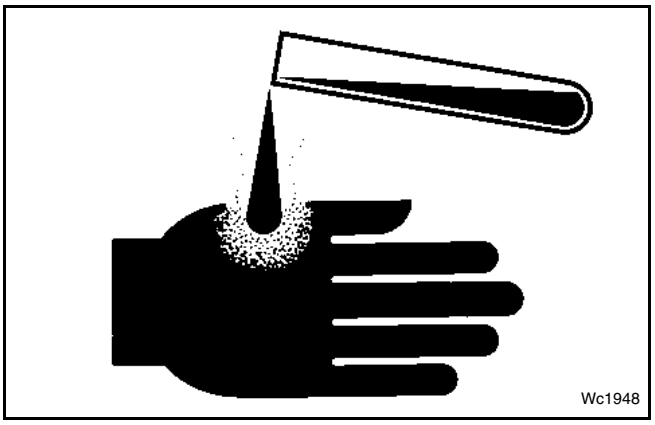

FIG. 30

Cylinder Stops

Reel Lift Cylinder Stops

A reel lift cylinder stop is supplied for the reel lift cylinder on both sides of the machine. Install both reel lift cylinder stops to prevent lowering of the reel.

Engaging Lift Cylinder Stop

FIG. 31: Put the header on the ground and raise the reel to maximum height. Stop the engine, set the parking brake and remove the start key.

Release the stop (1) from the carrying strap (2). Swing the stop forward until the retaining spring snaps around the ram rod.

Repeat this procedure for both sides of the header.

Start the engine and lower the reel lift rams until the stops are supported on the upper ends of the reel lift ram barrels.

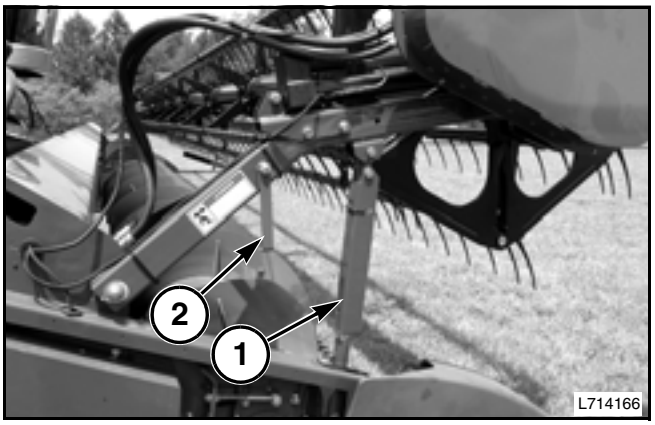

FIG. 31

Disengaging Lift Cylinder Stop

FIG. 32: Put the header on the ground and raise the reel to maximum height. Stop the engine, set the parking brake and remove the start key.

Return the stops (1) to the carrying straps (2).

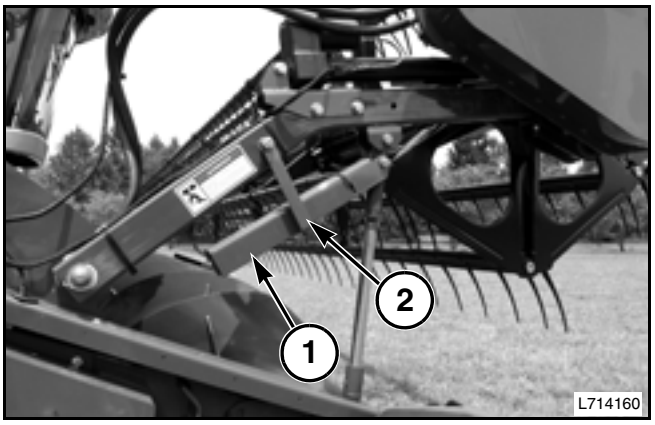

FIG. 32

Header Lift Cylinder Stop

FIG. 33: Disengage Lift Cylinder Stop: A lift cylinder stop (1) is located on the left-hand header lift cylinder of the machine. Photo of the lift cylinder stop (1) in the disengaged position.

DANGER: NEVER permit anyone to work under the header or feeder housing or between the header and combine UNLESS the header lift cylinder stop is fully engaged on the lift ram, the engine is stopped, the brake is set, the key is removed from the start switch, and the header is latched securely to the feeder housing.

FIG. 33

FIG. 34: Engage Lift Cylinder Stop: Header lift cylinder stop (1) in the engaged position.

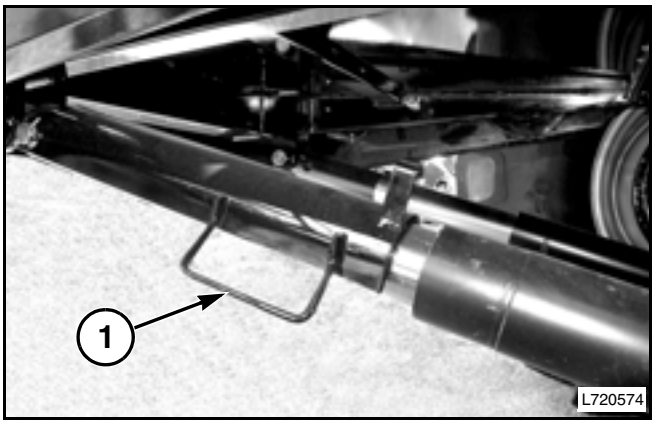

FIG. 34

Shields

NOTE: Pictures in this manual may show shields removed for visibility or access to parts of the header. Numerous shields must be opened and/or removed to perform normal service and adjustment procedures.

WARNING: Never operate the machine or allow others to operate the machine unless all shields supplied with the machine and attachments are properly in place.

When using the rigid or flex cutterbar header, always follow the following safety precautions:

CAUTION: Do not operate unless all shields are in place.

WARNING: Do not leave the operator's platform unless the brake is set, the engine is stopped and the key is removed.

DANGER: Never permit anyone to examine, clean, lubricate or adjust any part of the flex cutterbar, the header automatic lift, the reel or the header unless:

The header is lowered until the header is setting on the ground, the reel lift rams are either fully retracted or have the reel lift ram stops properly engaged over the ram rods of the right-hand and left-hand reel lift rams, the engine is stopped, the brake is set and the key is removed from the start switch.

OR

The header is raised, the ram stop is fully engaged on the header lift ram, the reel lift rams are either fully retracted or have the reel lift ram stops properly engaged over the ram rods of the right-hand and left-hand reel lift rams, the engine is stopped, the brake is set and the key is removed from the start switch.

DANGER: When operating in muddy conditions or where debris will possibly occur, the finger sensors may become jammed in the raised position and not permit the header to drop in automatic operation.

When this or any malfunction occurs, do not attempt to free or move the fingers unless the header lift cylinder stop is engaged as instructed on the danger decal for the lift cylinder stop. To do so can cause the header to drop suddenly and cause serious injury.

FIGS. 35–36: The end shields (1) shown in the closed position.

The divider shields (2) shown in the operating position.

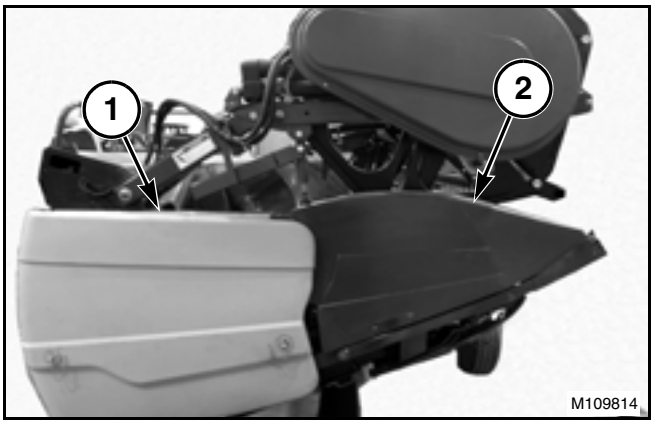

FIG. 35

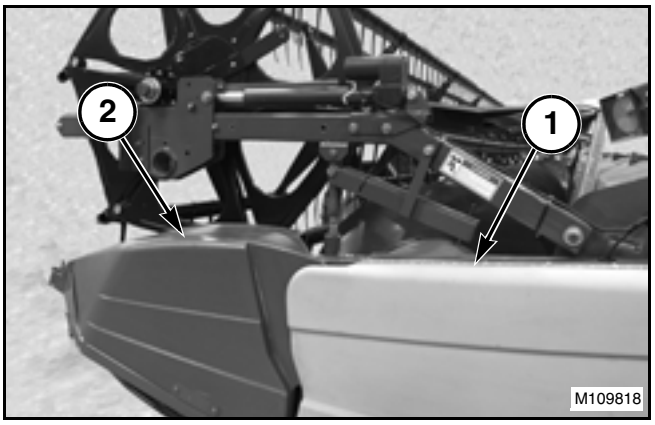

FIG. 36

FIG. 37: To raise the end shields (1) release the latches and raise the shield. Engage the prop rod (2) in the bracket slot.

To lower the shield, reverse the procedure.

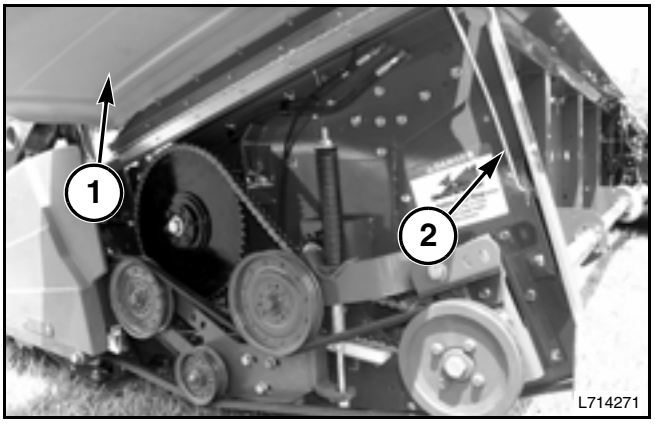

FIG. 37

FIG. 38: To remove a divider shield (1), remove the capscrew (2) at the front of the shield. Lift up on the front of the divider shield and pull forward to disengage the shield mounts.

To install the shield, reverse the procedure.

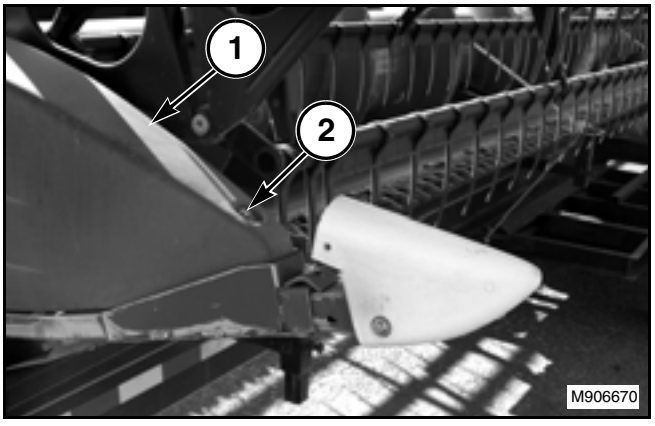

FIG. 38

FIG. 39: Right-hand reel drive shield (1) can only be removed by removing the mounting bolts and removing the shield from the mounting bracket.

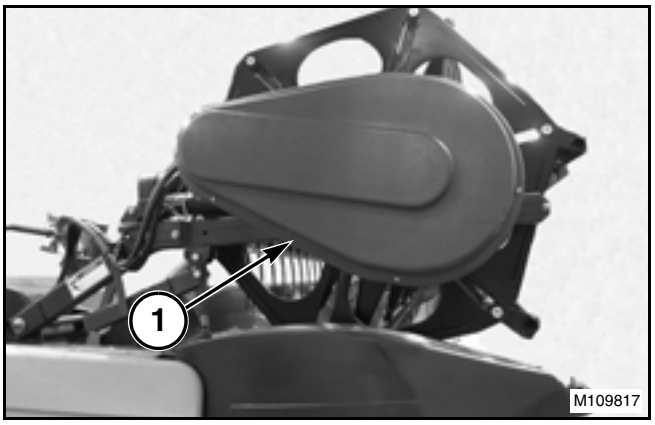

FIG. 39

INTRODUCTION

The information contained in this manual covers service information for of the rigid and the flex headers.

The header operator's manual as well as the machine operator's manual must be kept at hand for reference at all times.

Replacement Parts

To receive efficient service, always give the following information:

- Correct part description or part number.
- Model number of the machine.
- Serial number of the machine.

Recommended Header/Machine Usage

General

All models are equipped with hydrostatic reel drive.

Rigid Headers

Rigid headers can be equipped with Smartrac sensor mounting to sense left and right tilt and header height.

NOTE: Rigid headers without lateral tilt have no sensors installed. The header height position or Return to Cut is determined by the feeder house potentiometer.

Rigid cutterbar headers, when fitted with a bat or a pickup reel, are used to harvest crops where flex cutterbar headers are not needed.

Flex Headers

Flex headers are equipped with a flexible cutterbar and Automatic Header Height Control (AHHC). The sensors (potentiometers) installed on each end of the header are specifically designed to operate with the AHHC control module installed in the machine.

These headers are recommended for use in beans, peas, cereal grains, and low bearing crops and can be used with the cutterbar locked up or in the float position depending on the application.

Optional, long floating dividers are available for use in down crops and heavy weed infestation.

Machine Identification

FIG. 40: Each machine is identified by a model and serial number on the serial number plate (1). The serial number plate on the header is located on the left-hand end panel.

NOTE: Always give the model number and serial number in any communication.

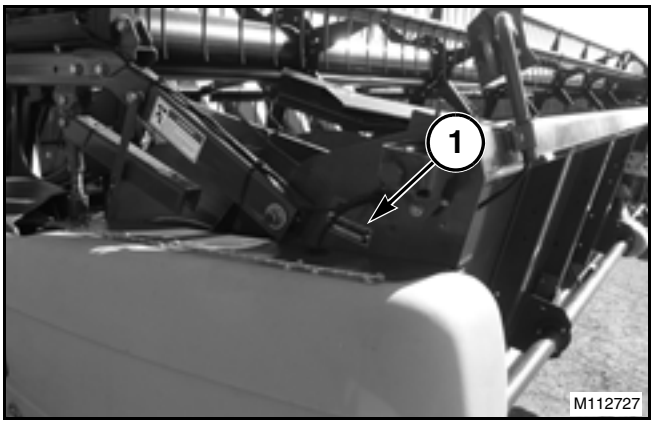

FIG. 40

Headers

Family.....W7 is the 7200 Series Rigid Header

.....W8 is the 8200 Series Flex Header

Gleaner Transverse

Example.....Model 7200-30R

.....Serial Number HSW7101

Gleaner Axial

Example.....Model 7200-30

.....Serial Number HSW7101

Massey Ferguson

Example.....Model 7200-30

.....Serial Number 7200-30-HSW7101

Challenger

Example.....Model RHB-30

.....Serial Number HSW7101

.....Model FHB-30

.....Serial Number HSW8101

OPERATION

Checklists

Daily

- Complete the service items due as given in the Lubrication and Maintenance section. Visually inspect all lubrication points to make sure lubrication is being received.
- Check for damage and excessive wear of parts. Make a general inspection of nuts, bolts, and other fasteners to make sure the fasteners are tight.
- Check all hydraulic lines and connections for leaks. See the Safety section for proper procedures to check for hydraulic leaks.
- Make sure the reel is level, the reel lift cylinders are in phase, and the tension of the reel drive chain is correct.
- Make sure all shields and guards are in position and the fasteners are tight. Replace any shields and guards that are missing or damaged.
- Make sure all safety signs are in the correct position and can be read. Replace any safety signs that are missing or damaged. See Safety Sign Location in the Safety section.
- Make sure all flashing amber warning lamps work correctly.
- Check the header to machine connections for security and operation of controls.
- Make sure the correct operating adjustments have been made.
- Remove all crop debris from the header and wipe off any oil or dirt at the end of the day.

Before Each Season

- Read the Safety section.
- Do all items on the Daily Checklist.
- With machine operating in a stationary position, have another person watch the operation of moving parts. Watch for any signs of faulty operation, overheated bearings, and listen for any sounds that are not normal.

End of Season

- Replace any damaged or worn parts.
- Remove all crop debris from the header. Crop debris will hold moisture and cause rust. Make sure to remove any crop wrapped on a shaft and lodged against the bearings.
- Wipe off any oil or dirt and wash the header. Make sure to remove crop residue from the cutterbar.
- Store the header in a dry sheltered area.
- Lubricate all grease fittings to force out any water that is present. See Grease Fittings in the Lubrication and Maintenance section.
- Brush a medium weight oil on the knife sections and the reel drive adjustment bolt.
- Paint any areas where paint has been damaged.

HEADERS - GENERAL

Removing Header

FIG. 41: Select a level area on which to set the header.

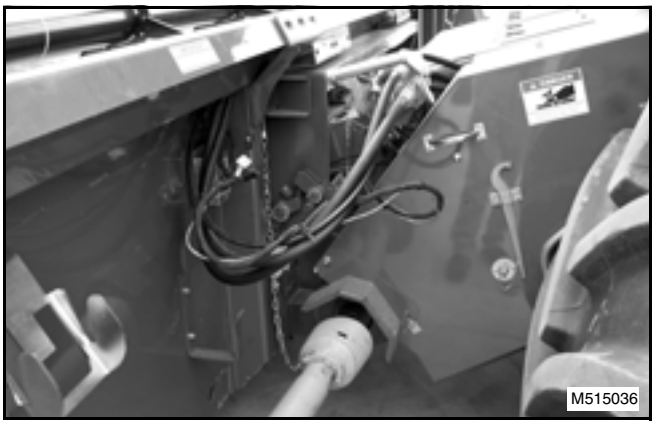

FIG. 41

FIG. 42: Engage Header Lift Cylinder Stop: Lift the header to fully extend the lift cylinders, stop the engine, set the brake, and remove the start key.

Release the stop support hook from the slot in the feeder housing side, swing the stop (1) downward until the stop fully contacts and surrounds three sides of the lift cylinder rod.

Start the engine and lower the header until the stop is supported on the upper end of the cylinder barrel.

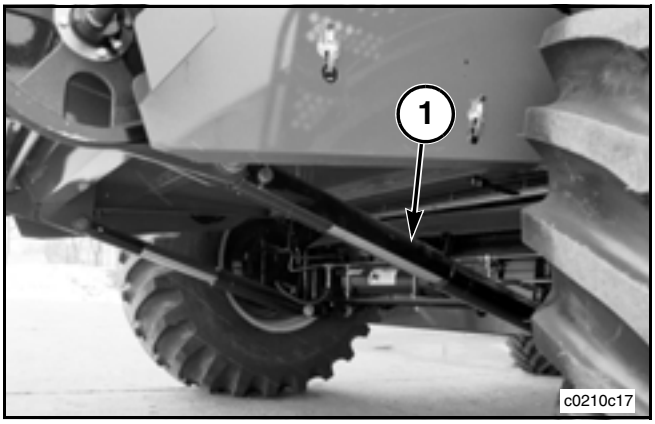

FIG. 42

FIG. 43: With the lift cylinder stop (1) securely engaged, again stop the engine, make sure that the parking brake is set, and remove the start key.

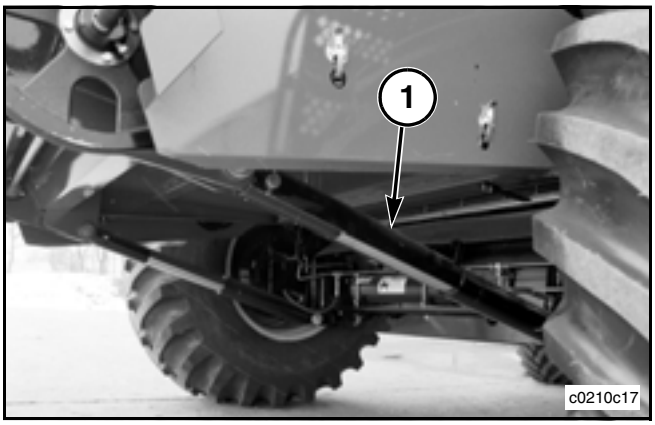

FIG. 43

FIG. 44: Slide the PTO drive shaft slide collar (1) to the left to release and then slide the drive shaft outward far enough to expose the left-hand end of the feed house drive shaft.

Place the right-hand end of the PTO drive line into the storage bracket (2).

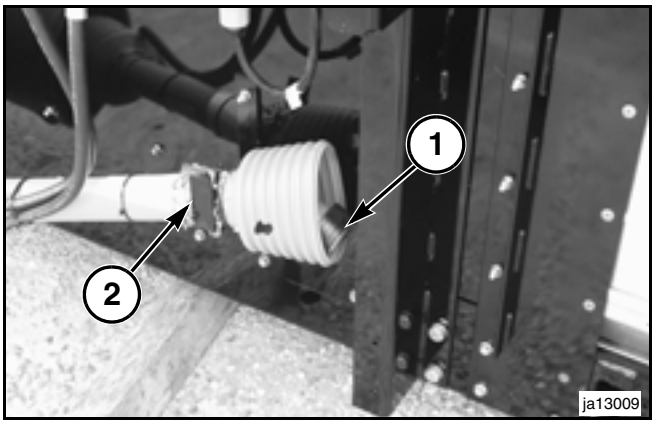

FIG. 44

FIG. 45: Disconnect the single point header connector (1) from the single point connector on the machine by raising the over center latch handle (2).

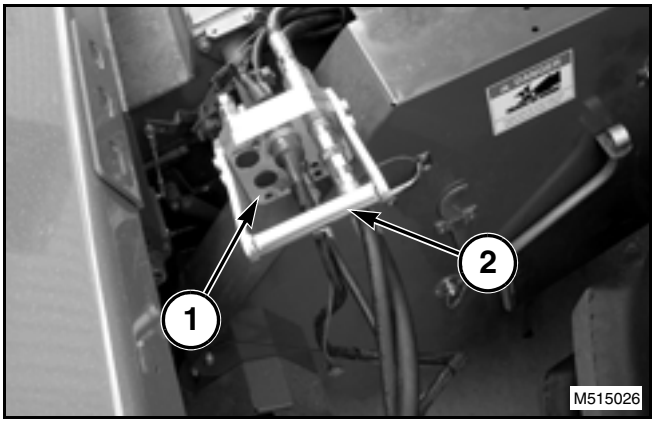

FIG. 45

FIG. 46: Put the single point header connector (1) into the coupler storage bracket (2) when not in use.

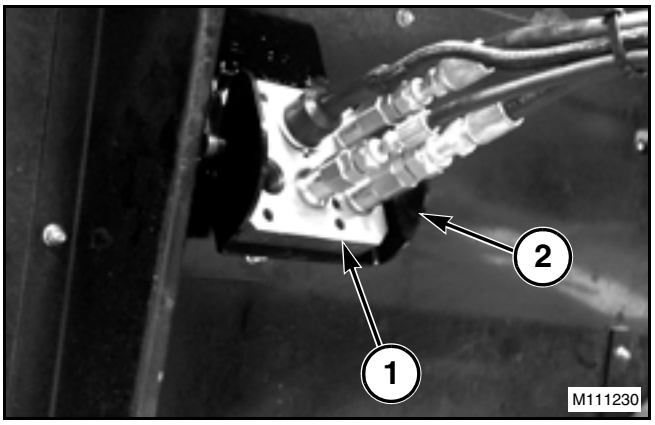

FIG. 46

FIG. 47: If a corn head is going to be attached to the machine, disconnect the reel lift quick coupler (1) and connect the female quick coupler to the male coupler (2) for the header variable speed sheave.

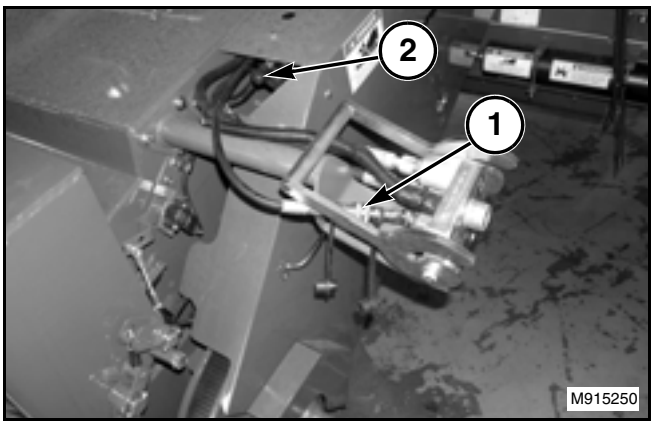

FIG. 47

FIG. 48: Axial Rotor with Lateral Tilt Shown: Install the socket of the concave door tool over the hex stub (1) of the feed house latch linkage. Move the concave door tool rearward to unlock the feed house hooks from the header.

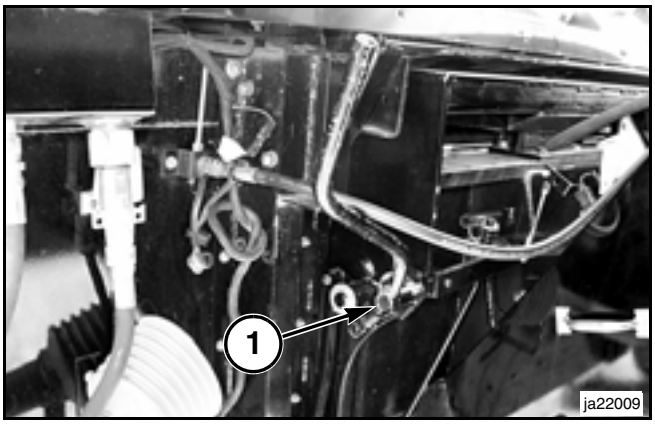

FIG. 48

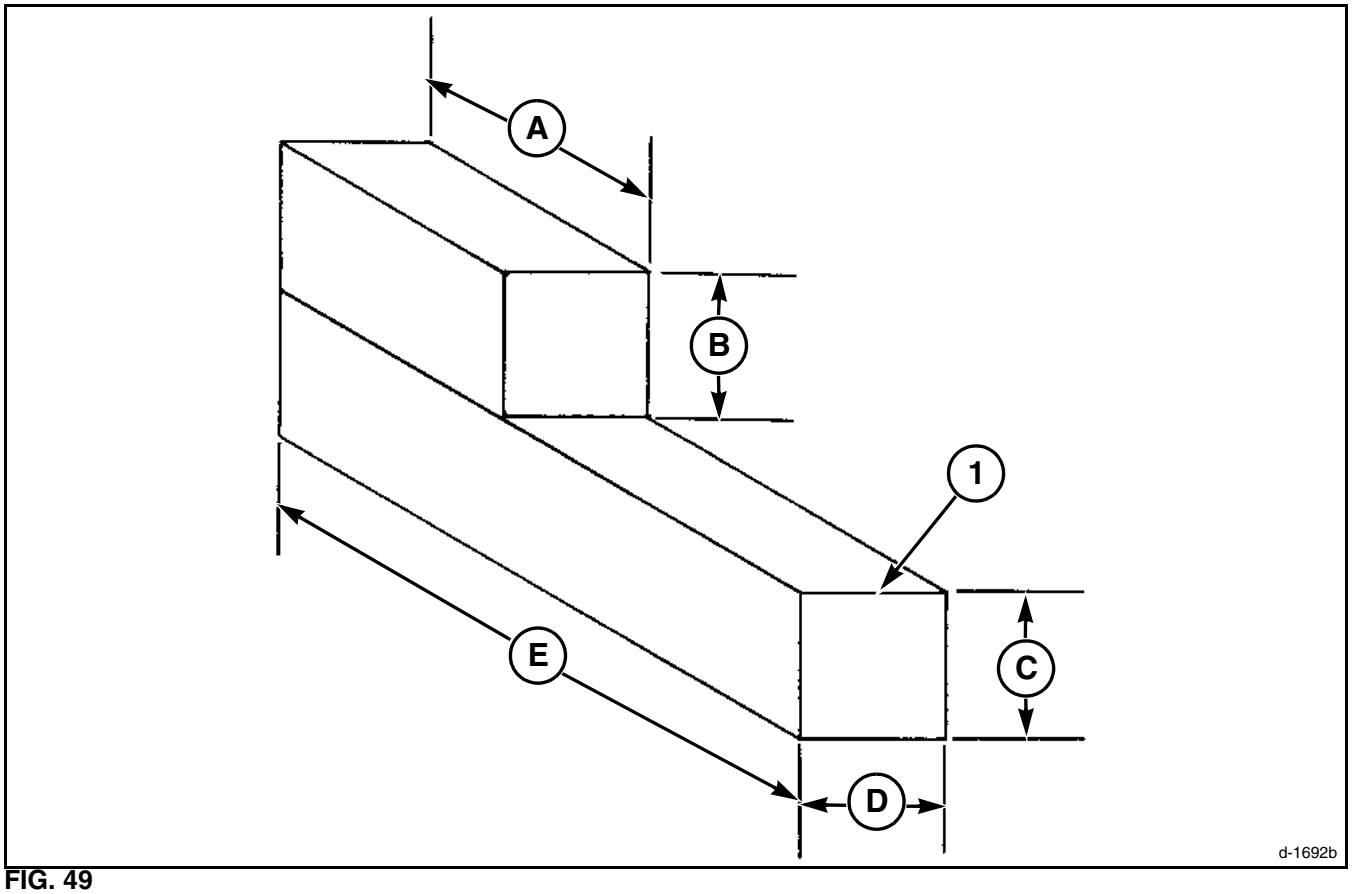

FIG. 49

FIG. 49: Position two header support blocks under the header with the 102 mm (4.0 in) section (1) to the rear. Place each support block an equal distance to the Left and Right of the feeder house opening in the head.

a. 355 mm (14 in)

b. 102 mm (4.0 in)

c. 102 mm (4.0 in)

d. 102 mm (4.0 in)

e. 1320 mm (52 in)

FIG. 50: Disengage the lift ram stop and lower the header completely onto the support blocks until the header disengages from the truss cradle on top of the feeder housing and back the machine away from the header.

FIG. 50

Attaching Header

FIG. 51: Rotate the feeder housing latches (1) back into the feeder housing. Lower the feeder housing.

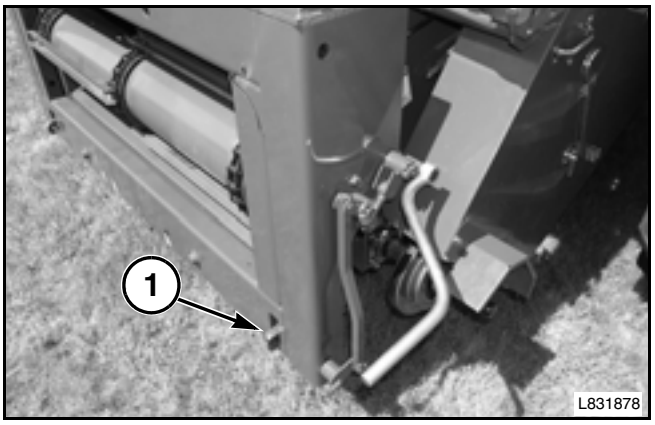

FIG. 51

FIG. 52: Align the left-hand front corner of the feeder housing with the left-hand guide flange (1) in the header opening. Drive the machine squarely into the header.

Raise the feeder housing, picking up the header and letting the lower pins enter the holes in the header back. Raise the header to full height and engage the header lift cylinder stop.

DANGER: Always follow this procedure to engage the header lift cylinder stop:

Raise the header to maximum height. Stop the engine, set brake and remove the start key.

Position the cylinder stop over the lift ram rod. Start the engine and lower the header until the cylinder stop engages the front end of the lift cylinder barrel.

With the header lift cylinder stop securely engaged, again stop the engine, make sure the brake is set and remove the start key.

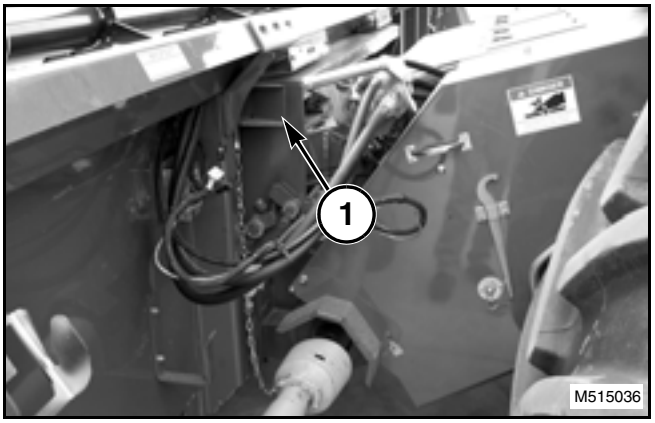

FIG. 52

FIG. 53: Install the concave door tool (1) onto the latch crank and rotate the upper latch assembly counterclockwise to lock the hooks into the header. Make certain the latch is rotated over center to securely lock the hooks.

If the hooks do not latch, check that the lower pins are seated in the header back. If the lower pins are not seated, put a block under the left-hand end of the header and lower the header to reset the pins. Latch the hooks.

Raise and lower the header against the ground multiple times before raising the header to full height and engaging the header lift cylinder stop. This lets the header completely settle in the feeder housing before aligning and connecting the header drive shaft.

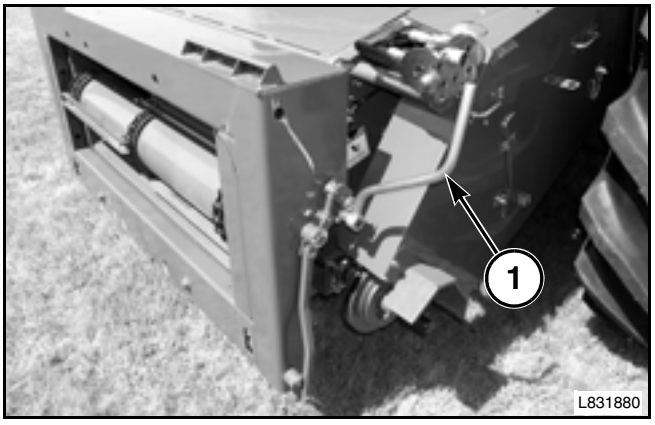

FIG. 53

FIG. 54: Transverse Heads Only: Start the engine, lift the header, and disengage the header lift cylinder stop. Raise the header and lower the header against the ground a few times before raising the header to full height and engaging the header lift cylinder stop.

This allows the header to completely settle in the feeder housing before measuring the distance between the limit bar (1) and the feeder house and placing shims between the limit bar and the header (2).

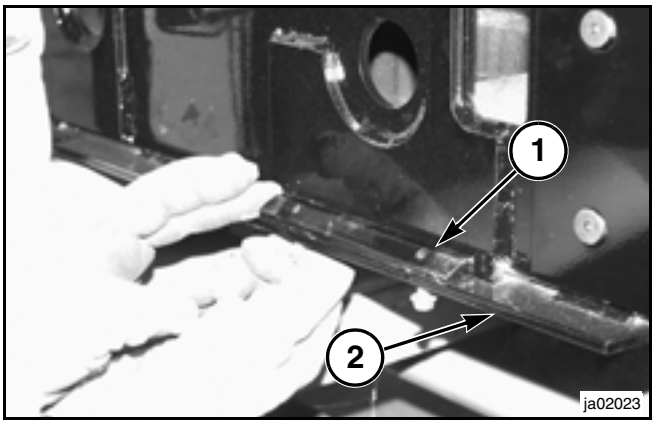

FIG. 54

FIG. 55: Transverse Heads Only: Measure the distance between the limit bar (1) and the feeder house. If required, loosen the limit bar bolts (3) and relocate shim spacers (2) from under the heads of the bolts to between the limit bar and the bar support equal to the gap. Locate any remaining shims under the head of the bolts and tighten the bolts.

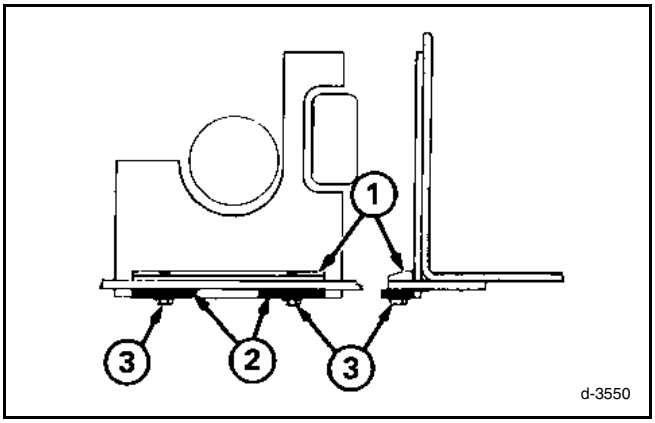

FIG. 55

FIG. 56: Headers are equipped with a PTO type of driveline.

Remove the driveline (1) from the storage bracket. Install the driveline onto the end of the countershaft in the feeder house.

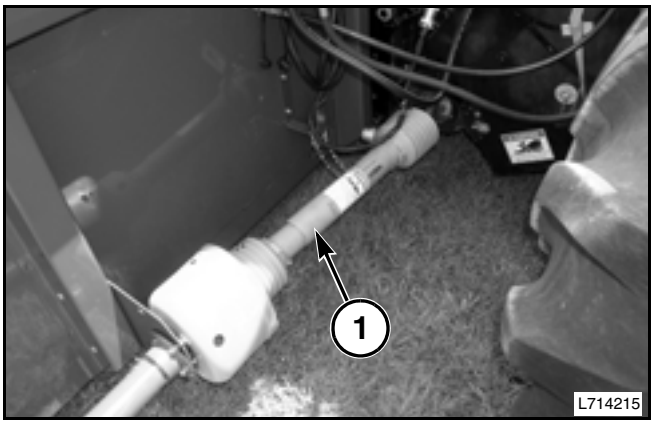

FIG. 56

FIG. 57: Release the locking ring (3) on the end of the PTO drive shaft by pulling the ring onto the coupling and then slide the coupling (2) over the shaft (5) on the feeder housing. Release the locking ring and pull back and forth on the shaft to make sure that the coupling is securely locked in the annular groove (4) on the feeder housing shaft.

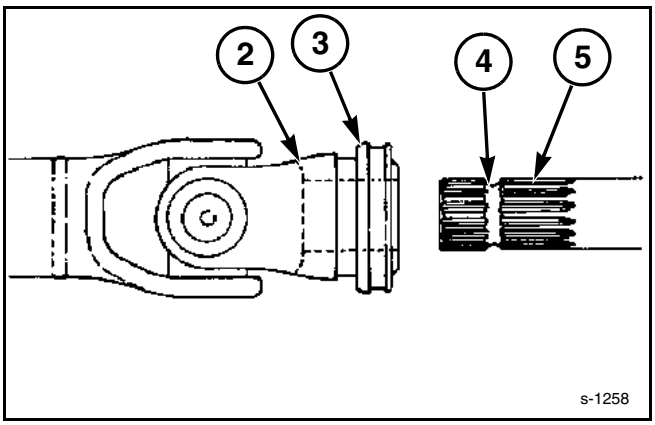

FIG. 57

FIG. 58: Connect the single point header (1) connector to the single point connector on the machine by aligning the header connector with the machine connector and locking the overcenter latch.

NOTE: To install the header on a machine without a single point connector, an adapter is needed.

Refer to the appropriate sections to set the proper cutter bar tilt for the drive tires used on the machine, to level the header, set the auger flighting clearance, seal adjustments, and to bleed the reel lift arms.

WARNING: DO NOT operate the machine unless ALL shields are in place.

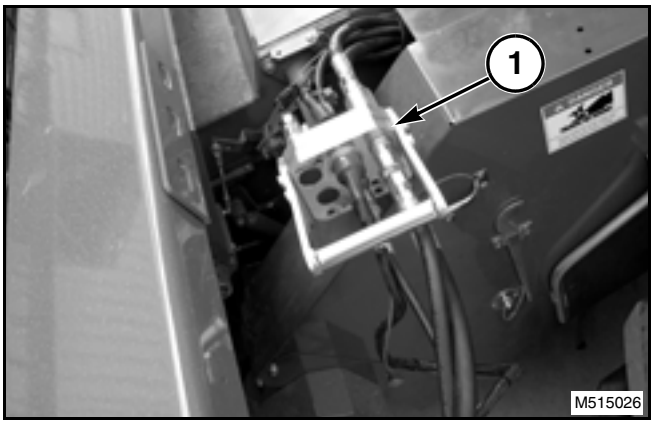

FIG. 58

Leveling the Header (Non-lateral Tilt)

The header is properly installed on the feeder house when the header is level with the ground. If the header does not look level at first, make sure this is not caused by tire pressures that are not equal or that the machine is not setting on ground that is not level.

Raise the header high enough that the header angle can be compared to the machine axle (or load carrying member). If the header is not in line with the axle, adjustment is needed.

FIG. 59: Located under each header mounting bracket (1) on the feeder house are two spacers.

In order to level the header, remove the hardware holding the brackets (1) and position one to four spacers under the bracket on the low side, to level the header.

Tighten the hardware securely.

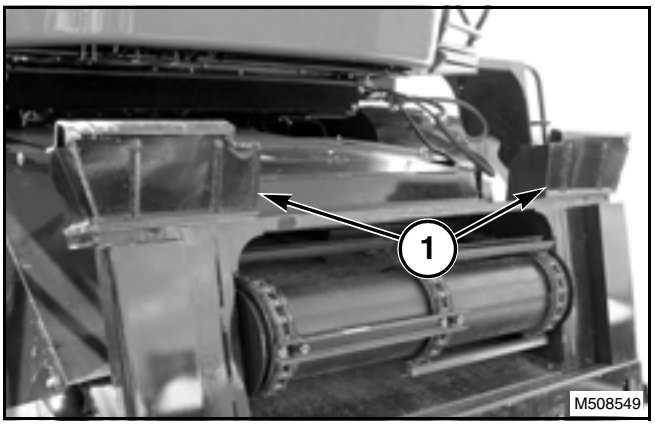

FIG. 59

Header Weight, Right-hand End

FIG. 60: Header weights (1) are installed at the factory to help in leveling the header.

CAUTION: When installing or removing header weights, caution must be used.

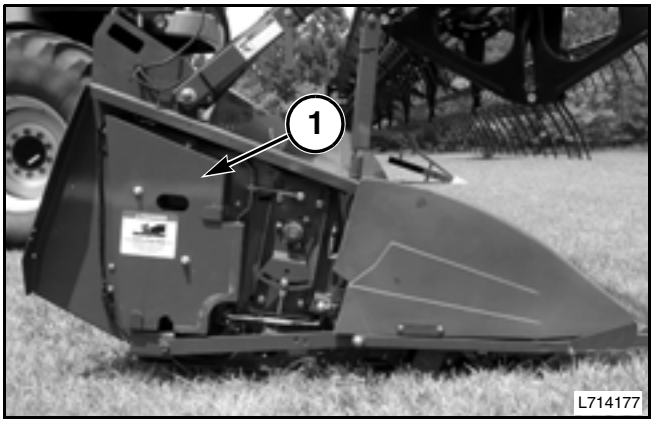

FIG. 60

Header Extremity Lights

FIG. 61: Header extremity lights (1) are factory installed. When transporting with the header installed on the machine, pivot the left-hand and right-hand lights to the position shown.

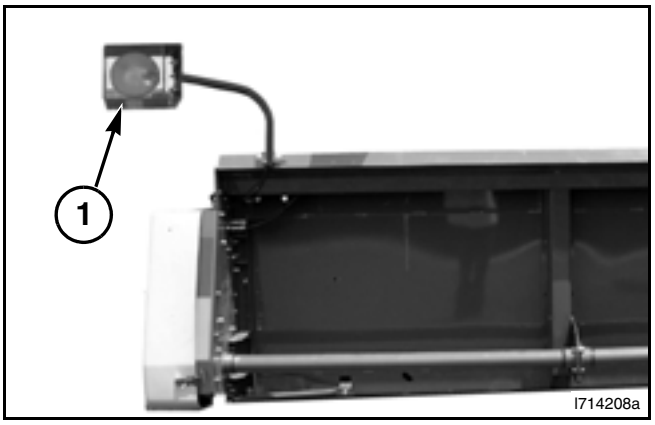

FIG. 61

Reel Position

Fore and Aft

FIGS. 62–64: The reel can be moved forward or rearward on the reel arm, from the operator's platform by pressing the switch to activate the reel adjusting electric motors (1) located on each reel arm.

A scale is used on both motors as a visual guide to set the reel for your crop conditions. Align the marks to the rear edge of the position indicator (2).

The rocker switch (3) is located on the multi-function control handle and controls the reel raise and lower movement.

The buttons to the Left and Right of the rocker switch controls the reel fore and aft movement. Press the Left button to move the reel forward. Press the Right button to move the reel rearward.

IMPORTANT: If the electrical actuators get out of fore and aft adjustment by 12 mm (0.50 in) or more, extend both motors forward until the reel supports contact the stop bolt (4) in front of the reel arm. Then move the reel rearward to the operating position.

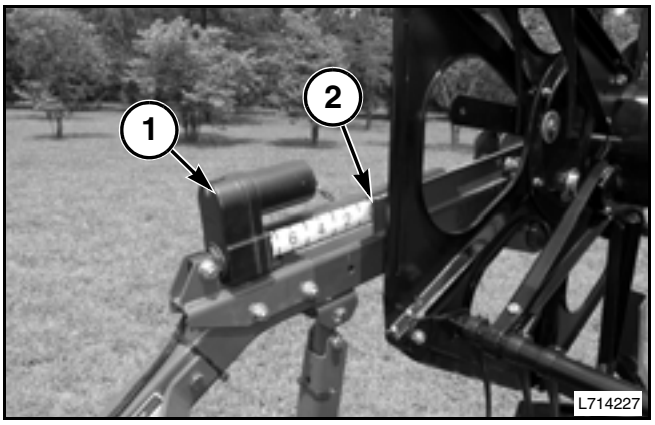

FIG. 62

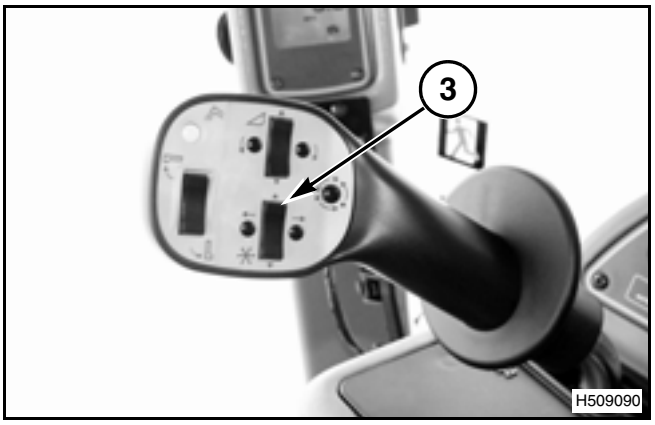

FIG. 63

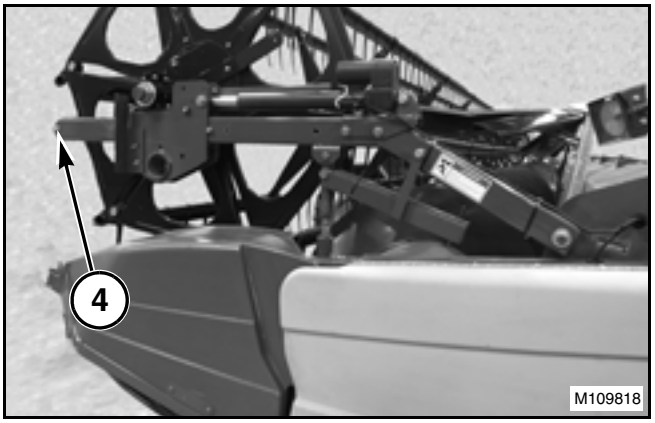

FIG. 64

Reel Height

FIG. 65: To set the minimum reel height, first completely lower the header to the ground. Then operate the reel height control in the operator's area to lower the reel until both reel lift rams (1) are completely retracted.

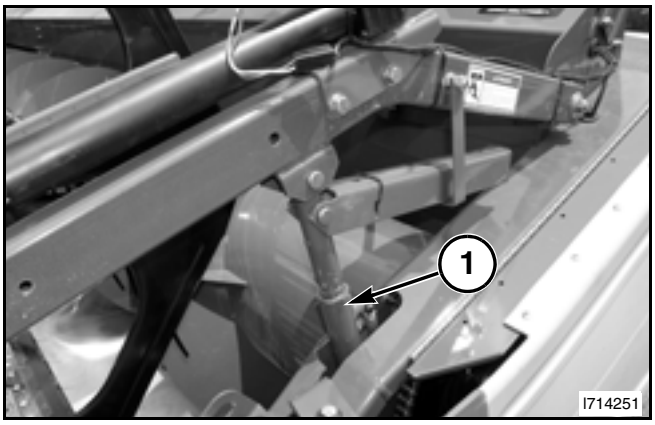

FIG. 65

FIG. 66: Loosen the jam nuts (1) on the cylinder rod and turn the cylinder rod as required to set the reel finger tips to 38 mm (1-1/2 in) minimum clearance with the sickle. Check this clearance over the full length of the reel and make sure both ends are adjusted evenly. Tighten the jam nuts.

NOTE: The lower end of the reel lift cylinders can be moved in the mounting brackets (2) on the end panels for added height adjustment.

- Pickup reels must be adjusted to keep a minimum clearance of 38 mm (1-1/2 in) between the ends of the fingers and the sickle and guards. On flex headers, this clearance must be adjusted with the cutterbar in the cutterbar's highest position. If the reel is set too high, feeding problems will result.

IMPORTANT: Any change in reel position, finger pitch or cutterbar tilt will change this clearance. If any of these are changed, the finger tip to sickle clearance must be checked.

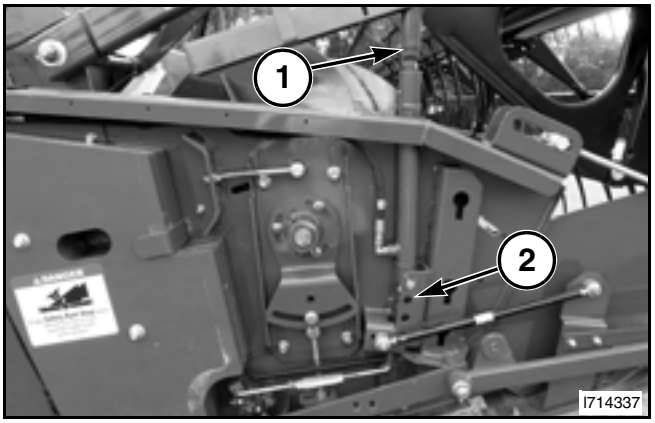

FIG. 66

Reel Speed Control Valve

FIG. 67: For service information on the Reel Speed Control Valve function, operation, control, disassembly, assembly, etc., refer to Hydraulics division…Reel Speed Control Valve section.

FIG. 67

Torque Limiter (Adjustable Relief Valve)

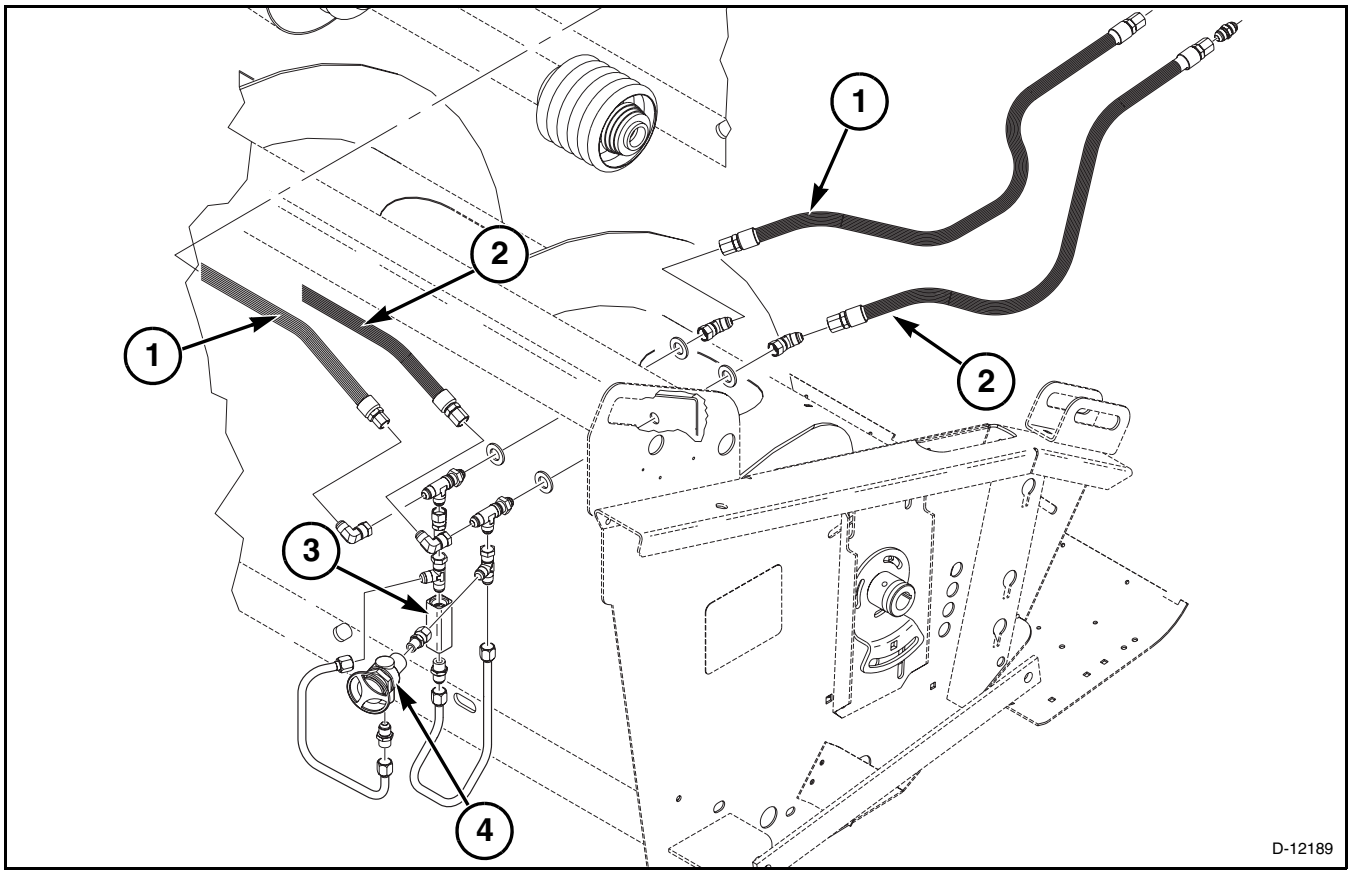

FIG. 68

FIG. 68: Hydraulic Lines and Fittings: When the header (reel drive) is disconnected from the machine, the motor hoses connected to the single point hydraulic coupler are protected from contamination.

The check valve (3), teed into the motor return line (1), should be mounted with the arrow pointing downward as shown to provide a closed loop to the motor inlet preventing cavitation.

An adjustable relief valve (4) is teed into the pressure line (2) to the motor to limit the reel drive torque.

FIG. 69: Reel motor inlet (pressure) is port (A).

Reel motor return is port (B).

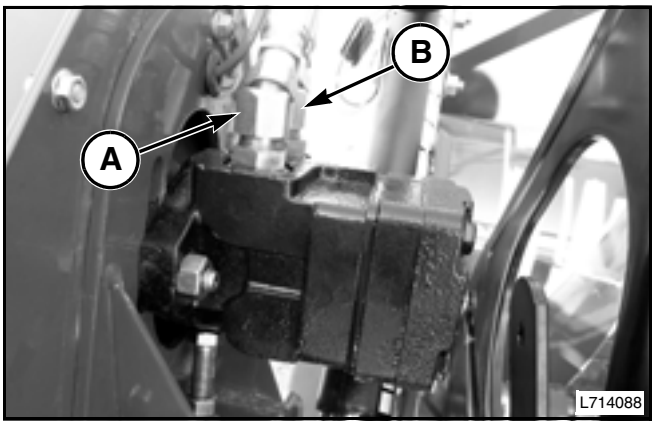

FIG. 69

FIG. 70: Adjustable Relief Valve: A reel drive torque limiter (adjustable relief valve) (1) is located below the truss near the Right Hand end of the header.

Adjust the relief pressure (torque) by turning valve stem IN (clockwise) to increase torque (pressure) and OUT (counterclockwise) to decrease torque (pressure).

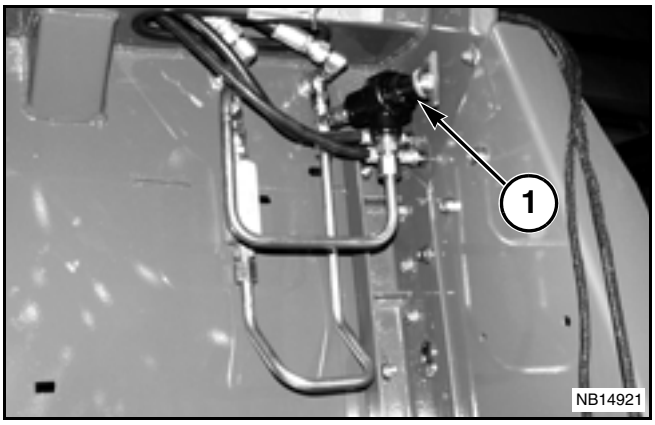

FIG. 70

Reel Lift Arms

FIG. 71: The reel lift cylinders must be synchronized hydraulically so both ends of the reel operate together. To synchronize the reel cylinders:

- Be sure the system is free of air - To remove air, loosen the bleed screw (1) located in the single phase ram (2) at the left-hand end of the header. Start the engine and slowly raise the reel until oil can be seen at the bleed screw. Turn the engine off and tighten the screw. Lower the reel and repeat the procedure until all air is removed from the system.

If the reel lift rams get out of phase, that is if one lifts higher than the other, the rams must be rephased.

- Lift the reel to the highest position and hold down on the raise switch for several more seconds with the engine running.
- Then lower the reel completely and hold down the lower switch for several seconds.
- If necessary, repeat this lift/lower cycle until the reel ends raise to an equal height.

This procedure permits oil to balance in the two ends of the double acting ram (right lift cylinder) giving equal lift distance.

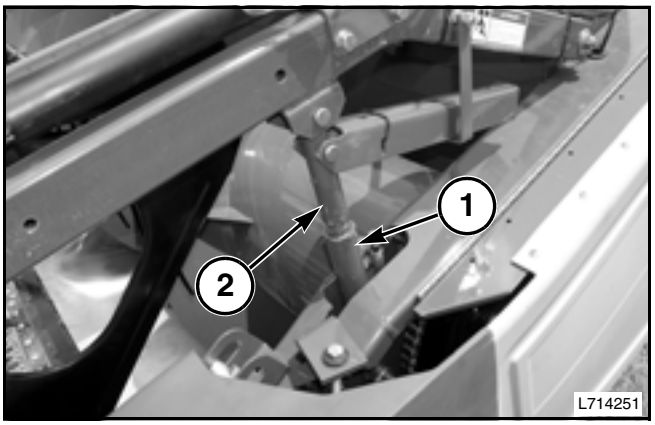

FIG. 71