

# Massey Ferguson®

9540 / 9550 / 9560  
Rotary Combine

## SERVICE MANUAL 4283447M2

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**Massey Ferguson®**

**9540 / 9550 / 9560  
Rotary Combine**

**SERVICE MANUAL  
4283447M2**

**01 - General Information**

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# 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 the machine. The safety alert symbol will direct you to information that includes your safety and the safety of others.

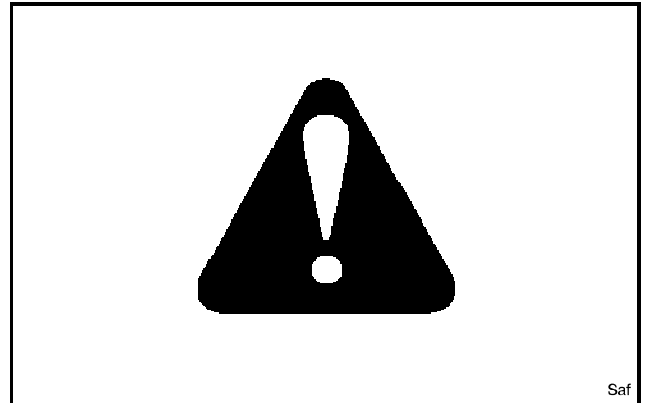




FIG. 1

## SAFETY MESSAGES

**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.

 **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, can result in DEATH OR SERIOUS INJURY.

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



FIG. 2

## INFORMATIONAL MESSAGES

The words IMPORTANT and NOTE are not connected 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, can result in damage to or destruction of the machine, process, or the surroundings.*

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

## Safety

### A WORD TO THE OPERATOR

**FIG. 3:** It is YOUR responsibility to read and understand the safety section in this manual and the manual for all attachments before operating this machine. Remember YOU are the key to safety. Good safety practices not only protect you, but also the people around you.

Study the features in this manual and make them a working part of your safety program. Keep in mind that this safety section is written only for this type of machine. Practice all other usual and customary safe working precautions, and above all REMEMBER - SAFETY IS YOUR RESPONSIBILITY. YOU CAN PREVENT SERIOUS INJURY OR DEATH.

This safety section is intended to point out some of the basic safety situations that may be encountered during the normal operation and maintenance of your machine. This section also suggests possible ways of dealing with these situations. This section is NOT a replacement for other safety practices featured in other sections of this manual.

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

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 safety signs affixed to the machine and all attachments. Use only approved attachments and equipment.

Make sure your machine has the correct equipment needed by the local regulations.



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



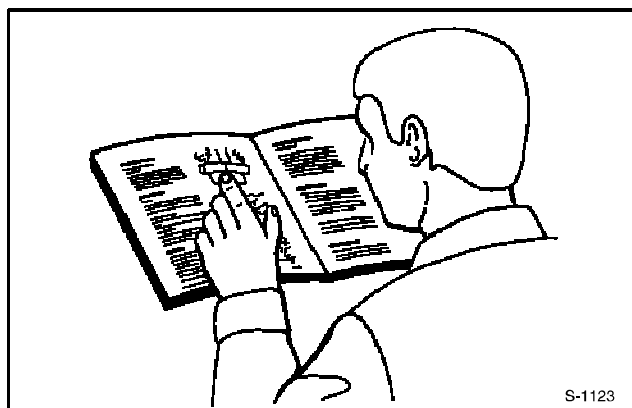
**CAUTION:** If any attachments used on this equipment have a separate Operator Manual, see that manual for other important safety information.



**CAUTION:** See the engine Operation and Maintenance Manual for other important safety information.



**CAUTION:** See the combine Operator Manual for other important safety information.



S-1123

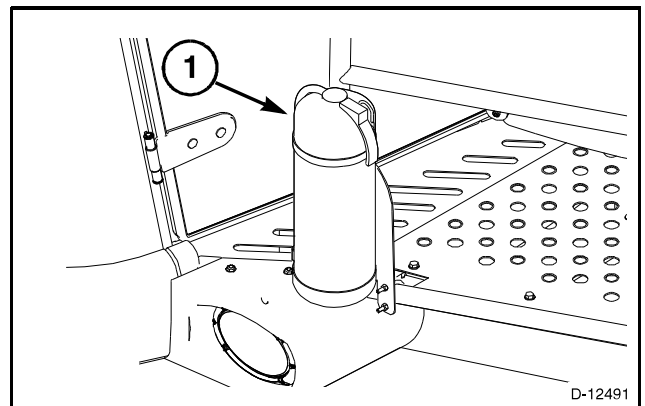
**FIG. 3**

## FIRE PREVENTION AND FIRST AID

**FIG. 4:** If equipped, a fire extinguisher (1) will be install on the front of the left-hand combine platform.

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 make sure the fire extinguishers are properly charged and in operating condition.

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

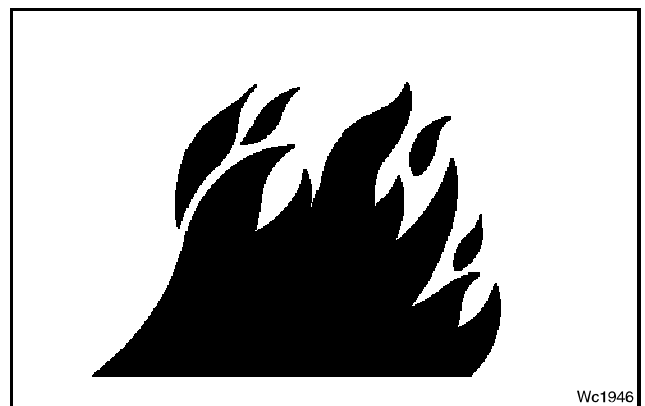


**FIG. 4**

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

- Check for over heated components
- Frequently clean the engine compartment of any chaff and crop debris
- Frequently 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 combine is in the proper operating condition as shown in the combine operator 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 sure that all controls are in neutral and the parking brake is engaged before starting the machine. Make sure 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 permit operation. Never operate the machine at high speeds in crowded locations.



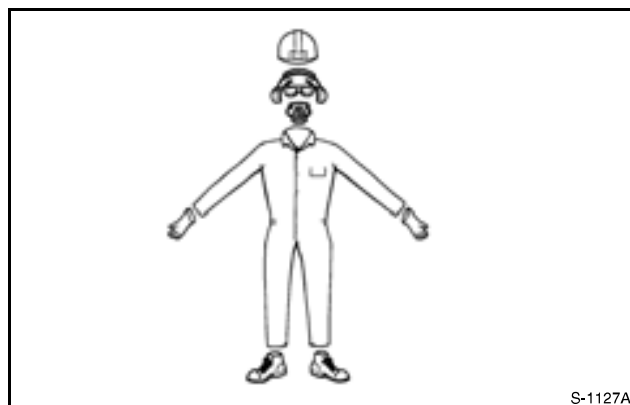
# Safety

## OPERATION



**WARNING:** In order to provide a better view, photographs and illustrations in this manual can show an assembly with the shield removed. Do not operate the combine unless all shields are in location. Replace the shields immediately after completion of inspection, repairs, cleaning or adjustments and before operation begins.

**FIG. 6:** Wear close fitting clothing and personal protection equipment for operating or doing lubrication and maintenance on the combine. Tie up long hair to prevent hair from becoming entangled in moving parts.



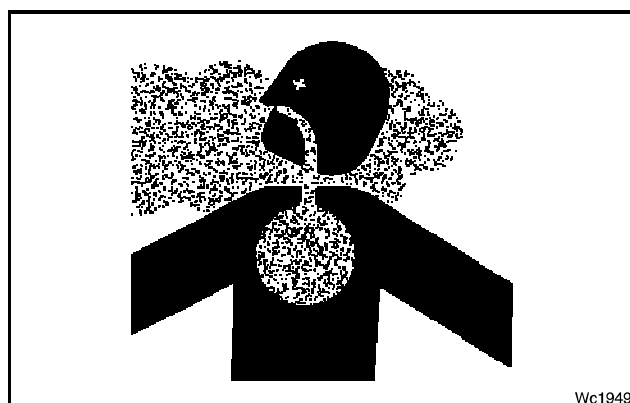
**FIG. 6**

**FIG. 7:** Face the ladder and use the handrails when getting on or off the combine.



**FIG. 7**

**FIG. 8:** Never operate the engine in a closed building unless the exhaust is vented outside.



**FIG. 8**

**FIG. 9:** Always wear the seat belt when the combine is moving. If another person is riding in the instructor seat, make sure the person wears a seat belt. Seat belts must be worn fitted tightly around the hips and not twisted.

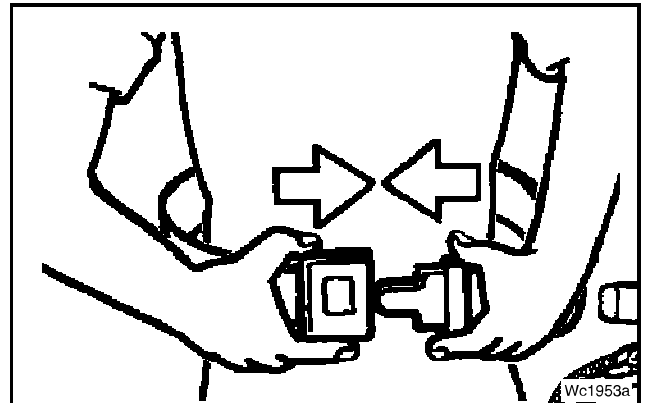


FIG. 9

**FIG. 10:** Never permit anyone on any part of the combine or attachments except in the operator seat and the instructor seat when the engine is running.

Do not get on or off the combine while the combine is moving.

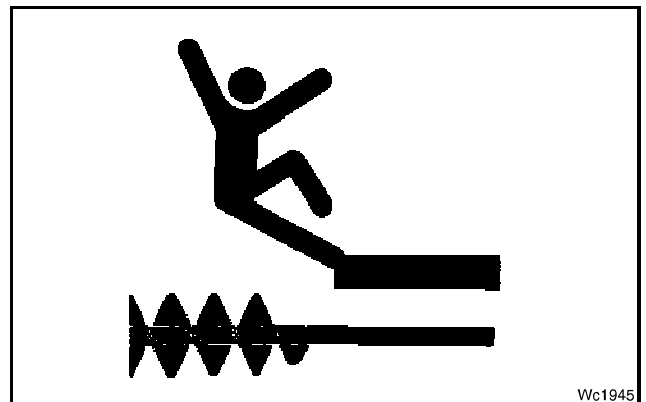


FIG. 10

**FIG. 11:** Prevent contact with electrical power lines. Always put the grain tank unloader tube in the transport position and lower the radio aerial before moving the combine near electrical wires. Contact with electrical power lines can cause electrical shock, resulting in very serious injury or death.

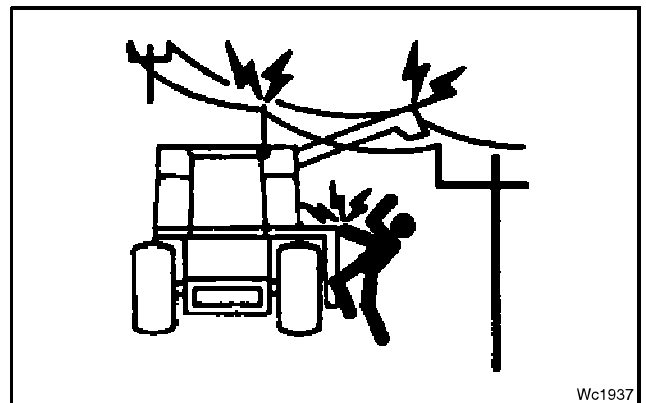


FIG. 11

**FIG. 12:** Use extra care and reduce speed when operating on hillsides or near ditches or embankments especially with a full grain tank to prevent rollover. Travel speed must be such that complete control and machine stability is kept at all times. Shift to a lower gear before going down a steep hill.

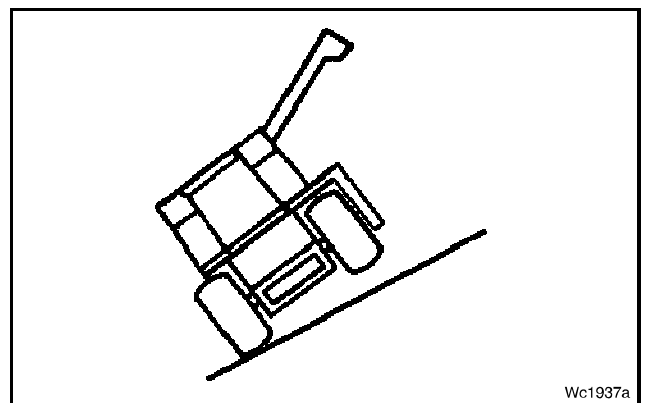
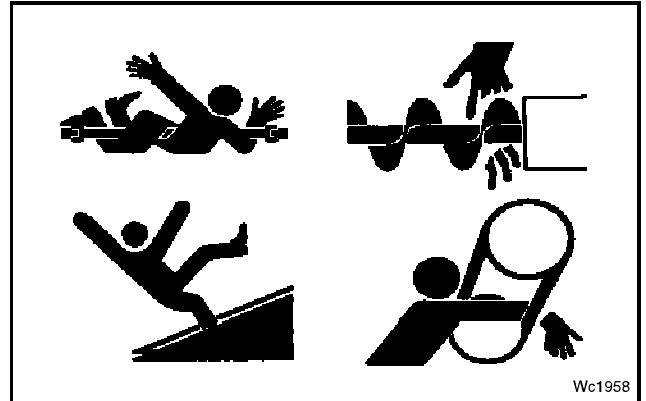


FIG. 12

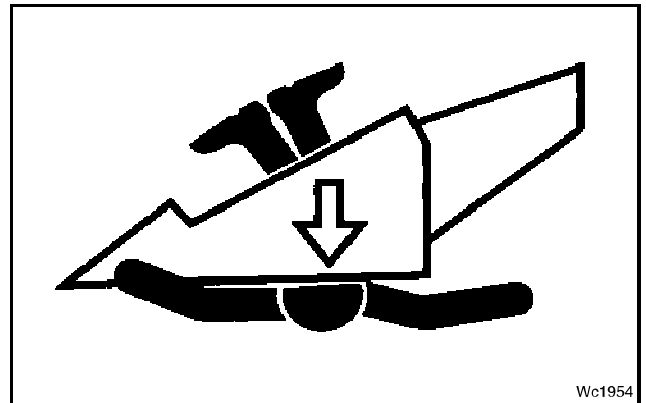
## Safety

**FIG. 13:** Always turn off the engine, shift the transmission to neutral, set the parking brake and remove the start key before leaving the operator cab or before permitting inspection, cleaning, lubrication, adjustment or repair of any part of the combine or attachments unless specifically shown in this manual. Never leave the combine while the engine is operating.



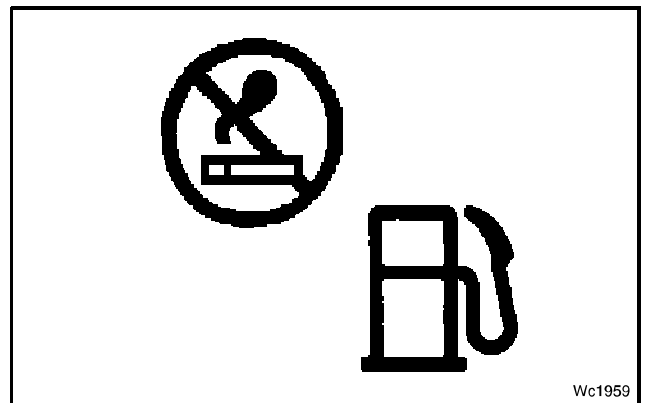
**FIG. 13**

**FIG. 14:** Never work under the header or 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. 14**

**FIG. 15:** Always stop the combine engine before fueling. Do not smoke while fueling.



**FIG. 15**

## TRANSPORTING COMBINE ON PUBLIC ROADS

**FIG. 16:** Consult your local law enforcement agency for local regulations about the movement of farm equipment on public roads.

- Use head lights, flashing warning lights, tail lights, and turn signals day and night unless not permitted by local law. Make sure the lights, reflectors, and SMV emblem (if required) are installed, in good condition, and wiped clean.
- Check to make sure all combine road lights (especially the amber flashers and red tail lights) are working.
- Lock the brake pedals together with the locking strap so that both front wheel brakes will be applied at the same time.
- Empty the grain bin.
- Position the unloading auger tube in the folded (transport) position.
- Remove the header if possible. If the header is to remain on the combine during transport, position header so the operator can see as good as possible. Make sure the header has enough ground and road clearance.

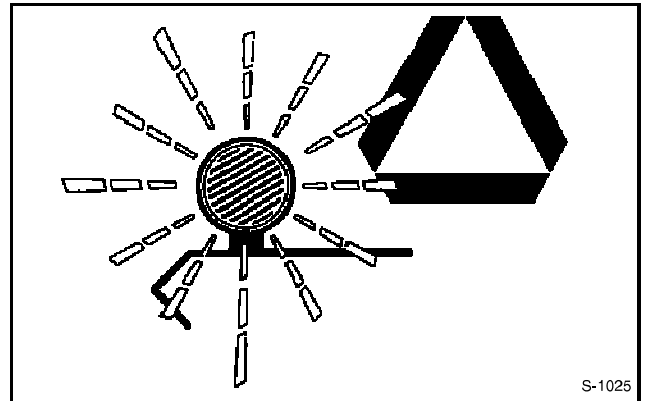
*IMPORTANT: Do not carry the header at a height more than approximately 610 mm (24 in) off of the ground or road surface.*

- Open the hydraulic accumulator shut off valve before transporting the combine. This will reduce header movement and combine loping when moving on rough roads.



**CAUTION: Maintain proper tire pressure at all times to make sure of stability during road travel.**

- Measure the overall width and height of the combine. These measurements are important when transporting along narrow roads and where under passes can be found.
- Be aware of the other vehicles on the road. Keep well over to your side of the road, and pull over when possible, to let faster vehicles pass.
- Adjust travel speed to keep control at all times. Never permit the combine to coast down hills.
- Reduce the speed of the combine by slowly pulling the hydrostatic control lever to neutral, before applying the brakes. Do not apply the brakes quickly, especially if the combine is equipped with a large header, since weight movement (during rapid braking) can cause the rear wheels to come off the ground and result in loss of steering control.



**FIG. 16**

## Safety

- When taking the combine to a complete stop, slowly move the hydrostatic control lever to the neutral position, then push the hydrostatic high pressure release valve pedal and apply the brakes (if necessary).
- Make all turns slowly. The combine is steered by the rear wheels and can lose control if turned quickly at transport speeds. This condition will be seen more when a large header is installed on the combine.
- Remember steering to the right moves the rear of the combine to the left and vice versa.
- If the engine is not running, the steering will become manual and be very difficult to handle. Difficult steering also can result in loss of control.
- Drive component damage can result from towing.

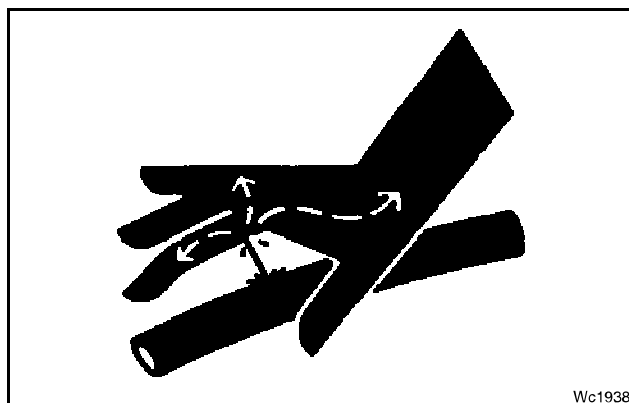


**CAUTION: Do not tow the combine on a public road.**

## MAINTENANCE

**FIG. 17:** Escaping fluid under high pressure can be almost invisible but penetrate the skin causing serious injury.

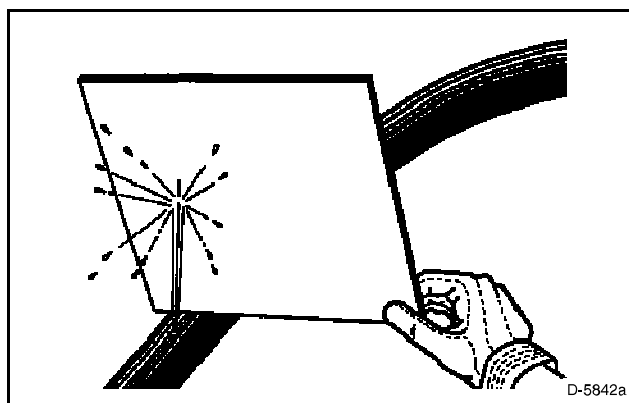
Consult a doctor immediately if you receive an injury by escaping fluids. Fluid injected into the skin must be surgically removed within a small number of hours or gangrene can result.



**FIG. 17**

**FIG. 18:** Use a piece of cardboard or wood to look for possible leaks, never use your hands.

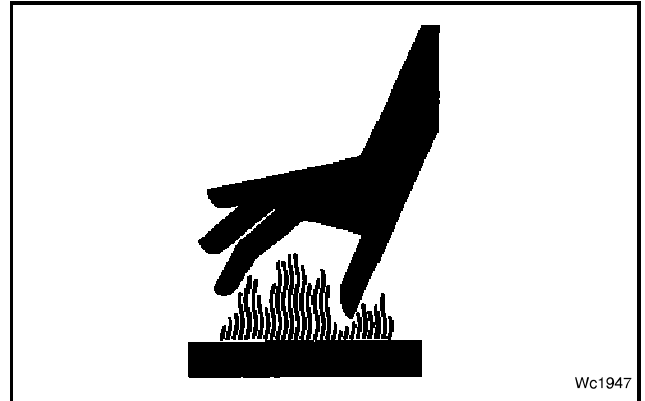
Relieve pressure from the hydraulic and fuel injection systems by lowering raised equipment, turning off accumulator valve and turning off the engine before loosening any part of the systems. Tighten all connections before applying pressure.



**FIG. 18**

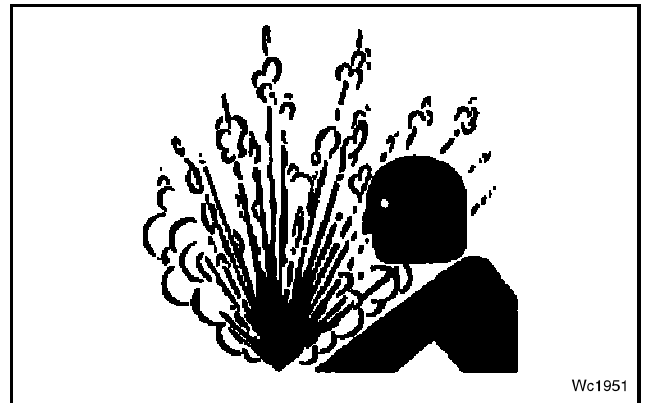
**FIG. 19:** Be aware that the surfaces in and around the engine compartment will be hot if the engine has been running, even for a short time.

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



**FIG. 19**

**FIG. 20:** 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 cap slowly to the first notch to relieve pressure, then remove the cap.



**FIG. 20**

**FIG. 21:** Remove spilled oil, antifreeze, or fuel immediately from the operator ladder and platform and other access areas.

Keep all access areas clean and free of obstructions.



**FIG. 21**

**Thank you very much for your reading. Please Click Here. Then Get COMPLETE MANUAL. NO WAITING**



**NOTE:**

**If there is no response to click on the link above, please download the PDF document first and then click on it.**

## Safety

### ENGINE SAFETY

**FIG. 22:** Make sure that all shields, guards, and access doors are in location and properly closed before starting the engine.

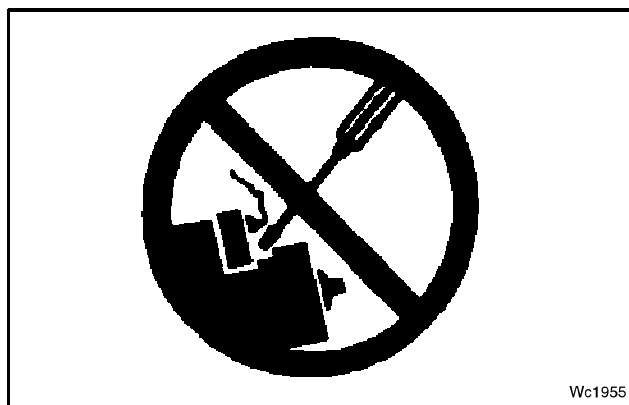
Start the engine from the operator seat only. Be sure that the transmission is in neutral and the header, separator, and unloader clutches are disengaged.

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

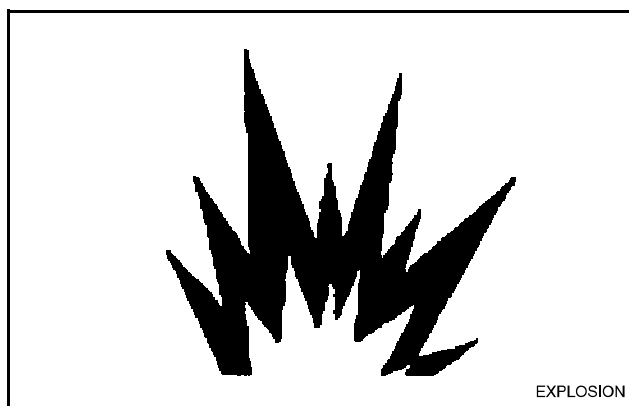
Do not bypass the neutral start system. The neutral start system is designed to prevent starting the machine in gear. Any manual override of this system can cause death or serious injury.

Never connect booster cables to the starter terminals or short across the starter terminals.

**FIG. 23:** 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. 22**



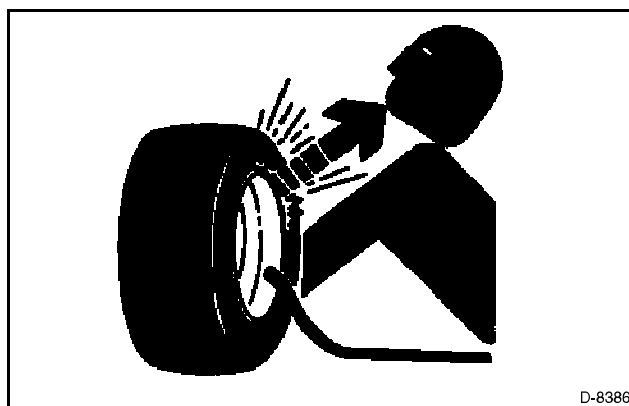
**FIG. 23**

### TIRE SAFETY

**FIG. 24:** Tire explosion and serious injury can result from over inflation. Do not exceed the tire inflation pressures. See the Operator's manual 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 Operator's manual for the correct tire 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. 24**

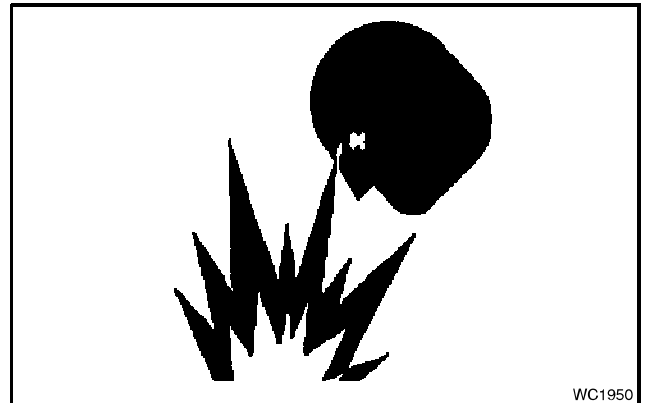


## BATTERY SAFETY

**FIG. 25:** 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 the booster cables to the combine batteries. Electrical component damage or battery explosion can result if the booster cables are not installed correctly.

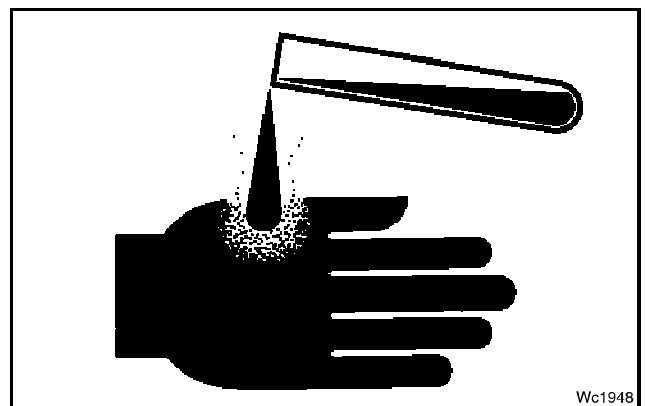
Do not charge a frozen battery as the battery can explode. Warm the battery to 16°C (60°F).



**FIG. 25**

WC1950

**FIG. 26:** Fluid in the 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. 26**

Wc1948

## DIESEL EXHAUST FLUID SAFETY

**FIG. 27:** The Diesel Exhaust Fluid (DEF) is stored in the DEF storage tank (1).

Avoid all contact of DEF with eyes, skin and clothing.

DEF is classified as non-hazardous by the EPA.

DEF is very corrosive and must be handled with care. DEF must not contact any parts or containers made of aluminum.

In the event of spillage, rinse the area with water and wipe dry.

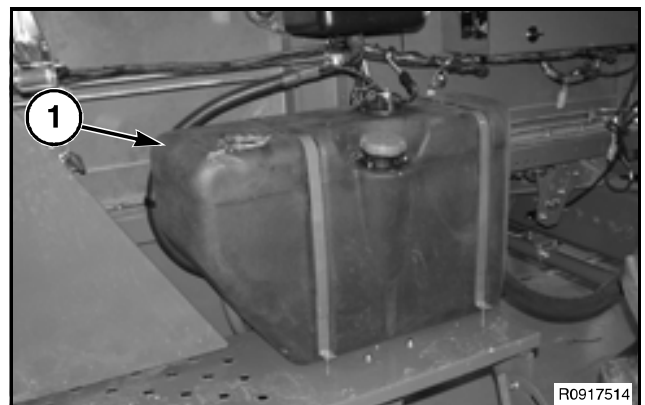
If large quantities of DEF is swallowed, see medical attention immediately. Do not induce vomiting unless indicated to do so by a medical professional. Do not give liquid to a person who is unconscious.

In case of contact with the eyes, rinse the eyes immediately under running water. In the event of irritation, seek medical attention.

In case of skin contact, rinse the area with water and remove contaminated clothing.

Prevent DEF from coming in contact with other chemicals.

Do not pour or wash DEF down drains.




**FIG. 27**

R0917514

## Safety

### ACCUMULATOR SAFETY

 **DANGER: Charging or replacing the accumulator must be performed by an authorized dealer only.**

**FIG. 28:** The accumulator (1) is charged with dry nitrogen gas. Use only dry nitrogen when charging the accumulator. Do not use air or oxygen or an explosion will occur.

Nitrogen gas when released can cause localized freezing. Always wear protective gloves and glasses when handling nitrogen.

Do not drop the accumulator. A charged accumulator contains nitrogen under pressure. If the shut off valve breaks away from the accumulator, the escaping nitrogen will propel the accumulator at a high rate of speed.

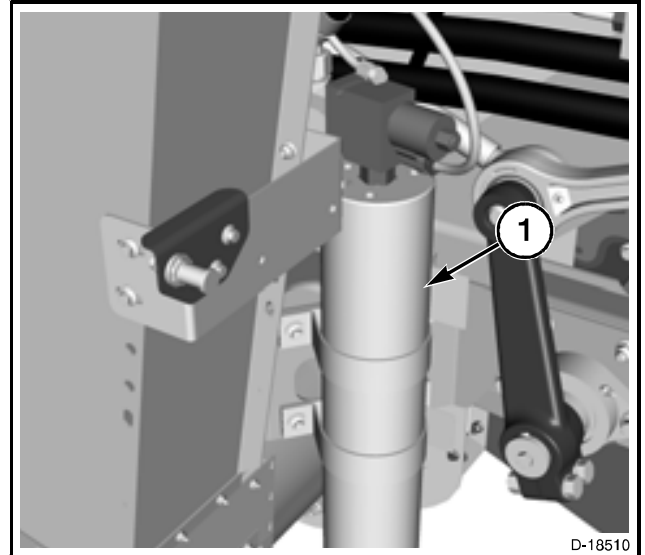


FIG. 28

### SAFETY EQUIPMENT

#### Hazard Lamps

**FIG. 29:** The combine is equipped with amber hazard lamps. Use the hazard lamps in accordance with local traffic and roadway regulations.

The hazard lamp switch (1) is used to activate the hazard lamps. Refer to the Operation section for more information.

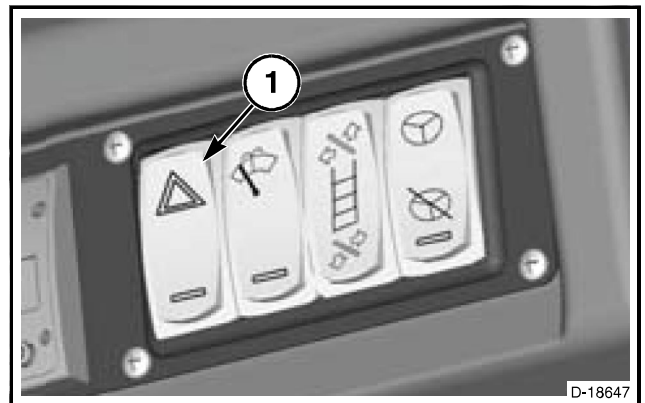


FIG. 29

#### Beacon Lamps

**FIG. 30:** The combine can be equipped with optional beacon lamps on the front and rear of the combine. Use the beacon lamps in accordance with local traffic and roadway regulations.

The first position of the beacon lamp switch (1) activates the beacon lamps for road use. Refer to the Operation section for more information.

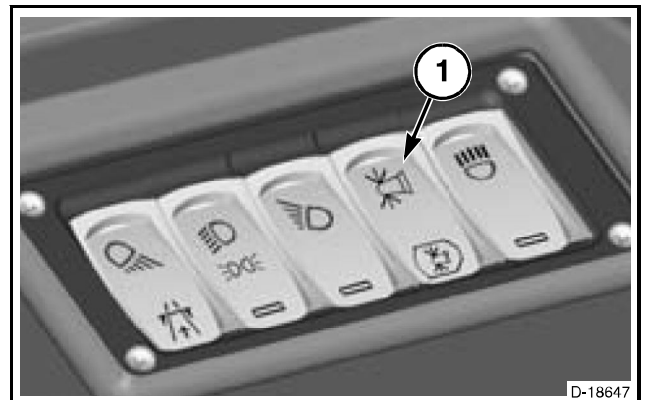


FIG. 30