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Safety rules

Personal safety



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible death or injury.

Throughout this manual you will find the signal words DANGER, WARNING, and CAUTION followed by special instructions. These precautions are intended for the personal safety of you and those working with you.

Read and understand all the safety messages in this manual before you operate or service the machine.

DANGER indicates a hazardous situation that, if not avoided, will result in death or serious injury.

WARNING indicates a hazardous situation that, if not avoided, could result in death or serious injury.

CAUTION indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.

FAILURE TO FOLLOW DANGER, WARNING, AND CAUTION MESSAGES COULD RESULT IN DEATH OR SERIOUS INJURY.

Machine safety

NOTICE: *Notice indicates a situation that, if not avoided, could result in machine or property damage.*

Throughout this manual you will find the signal word Notice followed by special instructions to prevent machine or property damage. The word Notice is used to address practices not related to personal safety.

Information

NOTE: *Note indicates additional information that clarifies steps, procedures, or other information in this manual.*

Throughout this manual you will find the word Note followed by additional information about a step, procedure, or other information in the manual. The word Note is not intended to address personal safety or property damage.

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⚠ Wheels and tires ⚠

You MUST completely remove the tire from the wheel or rim prior to welding the wheel or rim. DO NOT weld to a wheel or rim until you completely remove the tire from the wheel or rim. Inflated tires can generate a gas mixture with the air that can ignite from high temperatures from welding procedures performed on the wheel or rim. Deflating the tire or loosening the tire on the rim (breaking the bead) will NOT eliminate the hazard. This condition can exist whether tires are inflated or deflated.

Make sure that you correctly inflate the tires within the manufacturer's specifications. Do not exceed recommended load or pressure. Follow instructions in the manual for proper tire inflation

Never inflate tires using flammable gases, as this can result in an explosion and injury to bystanders.

Deflate the tire before removing any objects that are have punctured into the tire tread.

Tires are heavy. Handling tires without proper equipment could cause death or serious injury.

Always have a qualified tire technician service the tires and wheels. If a tire has lost all pressure, take the tire and wheel to a tire shop or your dealer for service. Explosive separation of the tire can cause serious injury.

When installing wheels:

1. Install all the wheel lug hardware finger tight or slightly tighter with a socket set.
2. Torque the wheel lug hardware incrementally and in a crisscross pattern for the best equal torque distribution. Torque the wheel lug hardware to the specifications for the tire size as listed in the wheel torque table.
3. Torque the wheel lug hardware daily until the wheel lug hardware maintains the torque specification.

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⚠ Fire and explosion prevention ⚠

General safety

⚠ WARNING

Fire hazard! Crop materials are flammable and present a high risk of fire.
Frequently remove accumulated crop or wrapping material from the machine. Inspect the machine for oil leaks and overheated bearings or other moving parts. Immediately service the machine when required; DO NOT continue to use machine until service is complete.
Failure to comply could result in death or serious injury.

W0392A

⚠ WARNING

Burn hazard!
Stop baling immediately if you notice a scorched odor, an unusual sound, or the sight of smoke or flames. Do not attempt to extinguish a fire that is too far advanced.
Failure to comply could result in death or serious injury.

W0186A

Establish a "No-Smoking" policy around the baler or when baling for operators or bystanders.

Stop baling immediately if you notice a change in performance, a scorched odor, an unusual sound, or the sight of smoke or flames. Poor performance may be an indication of part failure. Stop the machine immediately to limit the damage that is already done and to reduce the temperature of the parts below the point of fire ignition.

Fuel or oil leaked or spilled on hot surfaces or electrical components can cause a fire.

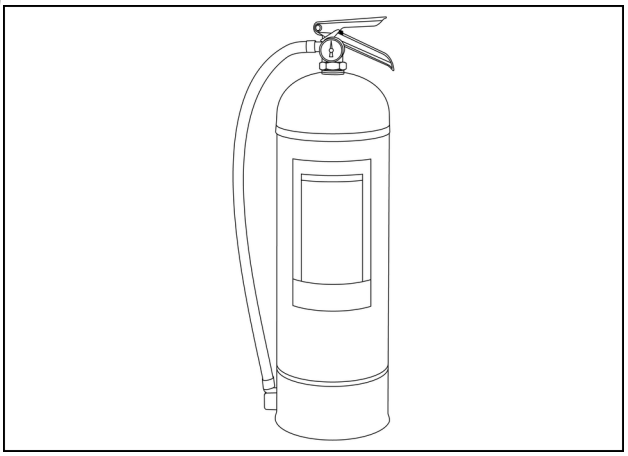
Crop materials, trash, debris, bird nests, or flammable material can ignite on hot surfaces.

Always have a fire extinguisher easily accessible near the machine. A large capacity water-type extinguisher is recommended.

The water can cool hot parts to prevent a fire. In case of fire, the water will drown flames, cool hot parts, and prevent rekindling of a fire.

Train all operators on the proper use of the fire extinguisher.

Make sure that you maintain and service the fire extinguisher according to the manufacturer’s instructions.



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At least once each day and at the end of the day, remove all trash and debris from the machine especially around hot components such as engine, transmission, exhaust, battery, etc. More frequent cleaning of your machine may be necessary depending on the operating environment and conditions.

At least once each day, remove debris accumulation around moving components such as bearings, pulleys, belts, gears, cleaning fan, etc. More frequent cleaning of your machine may be necessary depending on the operating environment and conditions.

Inspect the electrical system for loose connections or frayed insulation. Repair or replace loose or damaged parts.

Do not store oily rags or other flammable material on the machine.

Do not weld or flame cut any items that contain flammable material. Clean items thoroughly with nonflammable solvents before welding or flame-cutting.

Do not expose the machine to flames, burning brush, or explosives.

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⚠ Do Not Operate tag ⚠

⚠ WARNING

Maintenance hazard!
Before you start servicing the machine, always attach a DO NOT OPERATE warning tag to the machine in a visible area.
Failure to comply could result in death or serious injury.

W0004B

Before you start servicing the machine, attach a ‘Do Not Operate’ warning tag to the machine in an area that will be visible.

1. Obtain DO NOT OPERATE tags from your CASE IH Service Parts Dealer.
2. Attach a DO NOT OPERATE tag to the machine in an area that is clearly visible whenever the machine is not operating properly and/or requires service.
3. Complete the DO NOT OPERATE tag information for the reason or maintenance hazard for the DO NOT OPERATE tag that you are attaching. Describe the malfunction or service required. Validate the reason for attaching the DO NOT OPERATE tag by signing your name in the designated area on the DO NOT OPERATE tag.
4. Only the person who signed and attached the DO NOT OPERATE tag should remove the DO NOT OPERATE tag, after validating the repairs or services are complete.

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Safety rules - Ecology and the environment

Soil, air, and water quality is important for all industries and life in general. When legislation does not yet rule the treatment of some of the substances that advanced technology requires, sound judgment should govern the use and disposal of products of a chemical and petrochemical nature.

Familiarize yourself with the relative legislation applicable to your country, and make sure that you understand this legislation. Where no legislation exists, obtain information from suppliers of oils, filters, batteries, fuels, anti-freeze, cleaning agents, etc., with regard to the effect of these substances on man and nature and how to safely store, use, and dispose of these substances.

Helpful hints

- Avoid the use of cans or other inappropriate pressurized fuel delivery systems to fill tanks. Such delivery systems may cause considerable spillage.
- In general, avoid skin contact with all fuels, oils, acids, solvents, etc. Most of these products contain substances that may be harmful to your health.
- Modern oils contain additives. Do not burn contaminated fuels and or waste oils in ordinary heating systems.
- Avoid spillage when you drain fluids such as used engine coolant mixtures, engine oil, hydraulic fluid, brake fluid, etc. Do not mix drained brake fluids or fuels with lubricants. Store all drained fluids safely until you can dispose of the fluids in a proper way that complies with all local legislation and available resources.
- Do not allow coolant mixtures to get into the soil. Collect and dispose of coolant mixtures properly.
- The air-conditioning system contains gases that should not be released into the atmosphere. Consult an air-conditioning specialist or use a special extractor to recharge the system properly.
- Repair any leaks or defects in the engine cooling system or hydraulic system immediately.
- Do not increase the pressure in a pressurized circuit as this may lead to a component failure.
- Protect hoses during welding. Penetrating weld splatter may burn a hole or weaken hoses, allowing the loss of oils, coolant, etc.

Battery recycling

Batteries and electric accumulators contain several substances that can have a harmful effect on the environment if the batteries are not properly recycled after use. Improper disposal of batteries can contaminate the soil, groundwater, and waterways. CASE IH strongly recommends that you return all used batteries to a CASE IH dealer, who will dispose of the used batteries or recycle the used batteries properly. In some countries, this is a legal requirement.



Mandatory battery recycling

NOTE: *The following requirements are mandatory in Brazil.*

Batteries are made of lead plates and a sulfuric acid solution. Because batteries contain heavy metals such as lead, CONAMA Resolution 401/2008 requires you to return all used batteries to the battery dealer when you replace any batteries. Do not dispose of batteries in your household garbage.

Points of sale are obliged to:

- Accept the return of your used batteries
- Store the returned batteries in a suitable location
- Send the returned batteries to the battery manufacturer for recycling

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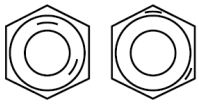
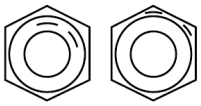
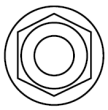
Identification marking

Grades of inch bolts and free-spinning nuts

SAE (J995) bolt head and nut grade identification

Grade identification marking	Grade Marking description
	**Grade 2** No line marks
	**Grade 5** Three line marks
	**Grade 8** Six line marks
	**Grade 2** No circumferential line marks
	**Grade 5** Two circumferential line marks located 120° apart
	**Grade 2** Two circumferential line marks located 60° apart
	**Grade 2** No circumferential line marks
	**Grade 5** Two circumferential line marks located 120° apart
	**Grade 8** Two circumferential line marks located 60° apart

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Protecting the electronic and/or electrical systems during charging and welding

To avoid damage to the electronic and/or electrical systems, always observe the following practices:

1. Never make or break any of the charging circuit connections when the engine is running, including the battery connections.
2. Never short any of the charging components to ground.
3. Always disconnect the ground cable from the battery before arc welding on the machine or on any machine attachment.
   - Position the welder ground clamp as close to the welding area as possible.
   - If you weld in close proximity to a computer module, then you should remove the module from the machine.
   - Never allow welding cables to lie on, near, or across any electrical wiring or electronic component while you weld.
4. Always disconnect the negative cable from the battery when charging the battery in the machine with a battery charger.

   NOTICE: *If you must weld on the unit, you must disconnect the battery ground cable from the machine battery. The electronic monitoring system and charging system will be damaged if this is not done.*
5. Remove the battery ground cable. Reconnect the cable when you complete welding.

⚠ WARNING

Battery acid causes burns. Batteries contain sulfuric acid.
Avoid contact with skin, eyes or clothing. Antidote (external): Flush with water. Antidote (eyes): flush with water for 15 minutes and seek medical attention immediately. Antidote (internal): Drink large quantities of water or milk. Do not induce vomiting. Seek medical attention immediately.
Failure to comply could result in death or serious injury.

W0111A

Special tools

The special tools that CASE IH suggests and illustrate in this manual have been specifically researched and designed for use with CASE IH machines. The special tools are essential for reliable repair operations. The special tools are accurately built and rigorously tested to offer efficient and long-lasting operation.

By using these tools, repair personnel will benefit from:

- Operating in optimal technical conditions
- Obtaining the best results
- Saving time and effort
- Working in safe conditions

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Plunger	
Speed	93 plunger strokes/minute @ **540 RPM**
Stroke	**762 mm** (**30 in**)
Needle protection latch	Contacts crank arm
Rollers	6 sealed ball bearings – 3 adjustable and 2 slide blocks
Crank pin	Sealed ball bearing
Plunger pin	Sealed spherical ball bearings
Main drive	
Flywheel diameter	**559 mm** (**22 in**)
Protection	Shear bolt
Bearings	Tapered roller
Gearbox	Alloy steel hypoid gears running in oil
Gearbox ratio	6/35
Tractor power recommendation	**60 kW** (**82 Hp**)

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