

# DH182, DH212, DH252, DH302, DH362 Draper Headers

## Service Manual

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# **DH182, DH212, DH252, DH302, DH362 SERVICE MANUAL CONTENTS**

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**SECTION 35 - HYDRAULICS**

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The sections used through out all Case IH product Service manuals may not be used for each product. Each Service manual will be made up of one or several books. Each book will be labeled as to which sections are in the overall Service manual and which sections are in each book.

The sections listed above are the sections utilized for the DH182, DH212, DH252, DH302 and DH362.

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# PRECAUTIONARY STATEMENTS

## PERSONAL SAFETY

Throughout this manual and on machine decals, you will find precautionary statements (“**DANGER**”, “**WARNING**”, and “**CAUTION**”) followed by specific instructions. These precautions are intended for the personal safety of you and those working with you. Please take the time to read them.

---

 **DANGER** 

---

This word “**DANGER**” indicates an immediate hazardous situation that, if not avoided, will result in death or serious injury. The color associated with Danger is RED.

M1169

---

 **WARNING** 

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This word “**WARNING**” indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury. The color associated with Warning is ORANGE.

M1170

---

 **CAUTION** 

---

This word “**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. The color associated with Caution is YELLOW.

M1171

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**FAILURE TO FOLLOW THE “DANGER”, “WARNING”, AND “CAUTION” INSTRUCTIONS MAY RESULT IN DEATH OR SERIOUS BODILY INJURY.**

## MACHINE SAFETY

The precautionary statement (“**NOTICE**”) is followed by specific instructions. This statement is intended for machine safety.

**NOTICE:** The word “**NOTICE**” is used to inform the reader of something he needs to know to prevent minor machine damage if a certain procedure is not followed.

## INFORMATION

**NOTICE:** Instructions used to identify and present supplementary information.

# SAFETY

## PRECAUTIONARY STATEMENTS

A careful operator is the best operator. Most accidents can be avoided by observing certain precautions. To help prevent accidents, read the following precautions before operating this equipment. Equipment should be operated only by those who are responsible and instructed to do so.

Carefully review the procedures given in this manual with all operators. It is important that all operators be familiar with and follow safety precautions.

1. When transporting the machine on public roads, make sure the machine has lights in compliance with ASAE S279.13 standard and the machine is in compliance with all local road regulations.
2. Before operating the unit, be sure that it is assembled correctly and in good operating condition.
3. If machine maintenance work, repairs or adjustments must be done in the field, they should be done at a spot where the ground is firm and level. Turn off the tractor and apply the parking brake. Use the proper tools and wear suitable protection (safety goggles, work gloves, etc.).
4. If any maintenance work, repairs or adjustments are done which require disassembly, always make sure that everything is re-assembled or retightened as it had been prior to making repairs or adjustments.
5. Follow the schedule provided for maintenance. By following these suggestions, it will be possible to keep the machine operating safely and efficiently, to the benefit of the user.
6. General checking of bolts, security pins and split pins must be carried out initially after the first 8 hours of use. Subsequently, check every 50 hours and whenever the machine is laid up for extended periods.
7. Before applying pressure to the system, be sure all connections are tight and that hoses and connections are not damaged.
8. Fluid under pressure can have sufficient force to penetrate the skin, causing serious personal injury. Always protect the skin and eyes from escaping fluid under pressure. If injured by escaping fluid, obtain medical assistance at once. Serious infection or reaction can develop if medical treatment is not administered immediately.
9. Do not weld on wheels. Welding on wheels may cause high stress and a wheel failure.
10. Do not weld on wheels with a mounted tire. Welding on wheels with a mounted tire may cause the tire to burst, causing serious injury or death.
11. Before leaving the cab, engage the parking brake, shut down the engine, and wait for all moving parts to stop.
12. Always keep bystanders away from machine during operation. Rotating elements may cause serious bodily injury.
13. Do not attempt to remove material from the draper header while it is in operation. Shut off the tractor and allow all rotating parts to stop before leaving the tractor.
14. Be sure the tractor header lift locks are engaged before working on or around a raised header.
15. Engage the lift locks or lower the header to the ground before performing any maintenance or lubrication.
16. Replace any damage knives or knife hardware immediately to prevent an accident.
17. Always wear heavy canvas or leather gloves when working with the knife.
18. Always engage the reel lift cylinder locks and header lift locks before working under or around a raised reel. Do not rely on the windrower hydraulic system for support. A rupture or a leak in any part of the system will allow the table to lower if the proper stops are not in place.
19. When mounting to a windrower, make sure the ends of the lift arms are securely in the mounting brackets under the header. Failure to do so could allow the header to fall or slide off the arms, causing damage to the header or personal injury.



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## GENERAL SAFETY

YOU are responsible for the safe operation and maintenance of your model DH Series draper header. YOU must ensure that you and anyone else who is going to operate, maintain or work around the draper header be familiar with the operating and maintenance procedures and related safety information contained in this manual.

Remember YOU are the key to safety. Good safety practices not only protect you, but also the people around you. Make these practices a working part of your safety program. Most accidents can be prevented. Do not risk injury or death by ignoring good safety practices.

Review the operating instructions for this header at least once a year per OSHA regulations 1928.57. Know the meaning and location of each decal before operating the draper header.

Watch for this symbol in this manual and on the draper header:



It will draw your attention to hazards that could cause injury or death.

1. Keep the hydraulic pump, gearbox and motors clean of all chaff and straw to prevent any possibility of fire.
2. Carry a multipurpose fire extinguisher in the machine in case of fire and know how to use it. Check the extinguisher regularly and keep it maintained.

3. Provide a first aid kit in the cab for emergencies and know how to use it.
4. Wear appropriate protective gear.
  - A hard hat
  - Protective shoes with slip resistant soles
  - Protective glasses or goggles
  - Leather gloves
  - Hearing protection
  - Respirator or filter mask
5. Do not allow any one to ride on the header while it is in motion.
6. Make certain that the park brake is engaged, and the power unit is in neutral before starting the engine.
7. Clear the area of bystanders, especially small children before starting the power unit.
8. Do not allow anyone to operate the header who has not been instructed in how to operate the machine.
9. All operators should familiarize themselves with the safety section in the power unit operator's manual.
10. Some pictures or illustrations may not show protective shields in place. Make certain that all protective shields are in place before operating the machines.

## OPERATING AND MAINTENANCE SAFETY

1. STOP the power unit, engage the parking brake, place the power unit in neutral, remove the key, and wait for all movement to stop before leaving the cab.
2. Either lower both the table and reel or raise the header to its full height and use platform locks before leaving the power unit or servicing the header. If working under reel, use reel cylinder locks. A sudden loss of hydraulic pressure could cause the header and reel to fall.
3. NEVER operate the power unit and the header while tired, sick, or impaired.
4. DANGER, DO NOT stand between the power unit and the header while raising or lowering the header.
5. Do not operate the header in crowded or confined areas.
6. Ensure that all the pressure is released from the hydraulic lines before repairing. Replace or repair damaged hoses immediately.
7. Care should be taken when maintaining the knife. The sickle sections are very sharp and can easily cause injury. Use heavy leather or canvas gloves when working with the knife.

## HYDRAULIC SAFETY

Release all the pressure from the hydraulic lines before making any repairs. Replace or repair damaged hoses immediately.



## WARNING



**Hydraulic oil leaking under pressure can penetrate the skin and cause infection or other injury.**

### To Prevent Personal Injury:

- Relieve all hydraulic pressure, before disconnecting fluid lines.
- Before applying pressure, make sure all connections are tight and components are in good condition.
- Never use your hand to check for suspected leaks under pressure. Use a piece of cardboard or wood for this purpose.
- If injured by leaking fluid, seek medical attention immediately.

**Failure to comply could result in death or serious injury.**

M587A

## WELDING SAFETY

DO NOT weld on wheels. Welding on wheels may cause high stress and wheel failure.

DO NOT weld on wheels with a mounted tire. Welding on wheels with a mounted tire may cause the tire to burst, causing serious injury or death.

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