

Magnum
225
250
280
310
Technical
Installation Manual

87529896



CASE IH

Magnum

225

250

280

310

TECHNICAL INSTALLATION MANUAL



CONTENTS

INTRODUCTION	4
PRE INSTALLATION	5
SAFETY PRECAUTIONS	6
5 POINT PLAN	14
POINT ONE – REAR OF TRACTOR	15
POINT TWO – RIGHT SIDE OF TRACTOR	33
POINT THREE – FRONT OF TRACTOR	45
POINT FOUR – LEFT SIDE OF TRACTOR	57
POINT FIVE – CAB	67
POINT FIVE – ILLUSTRATION 1 – CAB CONTROLS	68
– ILLUSTRATION 2 – FRONT CONSOLE CONTROLS	76
– ILLUSTRATION 3 – INSTRUMENTATION CLUSTER	82
– ILLUSTRATION 4 – RIGHT HAND CONSOLE CONTROLS	90
– ILLUSTRATION 5 – ARMREST CONSOLE CONTROLS	106
– ILLUSTRATION 6 – RIGHT HAND FENDER CONTROLS	110
– ILLUSTRATION 7 – ROOF MOUNTED CONTROLS	118

INTRODUCTION

This manual is designed to assist Dealer and CASE IH personnel with the installation of the MAGNUM SERIES tractors.

It is based around the “5 Point Plan” whereby the installer explains the important points of the unit. Starting at point 1 –“rear of unit” – travelling in anti clockwise direction, finishing at point 5 – “cab”.

Chapters Point One to Point Five of this booklet correspond with the relevant point on this 5-point plan and contain a diagram with the important components for discussion having a location number. Each location is detailed in the following way:

LOCATION	DESCRIPTION	OPERATION	SERVICE
7	Engine Oil Filter	-	Section 8, pages 301 & 302
<p>The engine oil and filter must be changed every 300 hours.</p> <p><i>NOTE: Refer to the Operator's Manual page 282 for the system capacity, and page 283 and 284 for the correct oil specification.</i></p>			

- LOCATION NUMBER:** Location of component.
- DESCRIPTION:** Description of component.
- OPERATION:** Section and page of Operator’s Manual where the operation of the component is explained.
- SERVICE:** Section and page of maintenance section of Operator’s Manual where service of the component is explained.

This manual should be used as a “Quick Reference Guide” to aid the installer to discuss the important points of the unit.

All relevant information to the operation and maintenance of this product is comprehensively explained in the Operator’s Manual. It is important that reference is constantly made to the Operator’s Manual throughout the installation to ensure its use is promoted to the customer.

PRE INSTALLATION

Prior to delivering the new product to the customer, it is very important that the following is carried out.

Completing the checklist will ensure the installer is fully prepared to deliver and install the unit in a professional manner, thereby enabling the customer to operate his recent purchase with optimum results.

Installation Checklist

Ensure that:

1. The Customer Profile has been reviewed, and discussed with the Salesman.
2. "Pre Delivery Inspection" has been reviewed, and corrective action has been taken on the faulty items detected; the "Pre Delivery Inspection Certificate" section of the After Sales Logbook (if available) has been completed and signed.
3. Technical Installation Manual and Operator's Manual have been read and fully understood to be able to provide a professional presentation.
4. The "Product" and "Your CASE IH Dealer" sections of the After Sales Logbook (if available) are completed.
5. Unit is in excellent condition.
6. The Product is ready for transportation.
7. Appointment confirmed, and the location for delivery and installation agreed upon.
8. There is sufficient fuel for operating the unit during installation.
9. The Operator's Manual and After Sales Logbook (if available) are within the unit.

SAFETY PRECAUTIONS

Personal safety is of utmost importance whilst operating this product. During its installation, full emphasis must be made to the precautionary statements and safety decal location.

In order to assist the installer with this important subject, the “Safety” information from the Operator's Manual has been included for ease of reference. The safety decal location and details are outlined at the start of each point of the 5-point plan.

SAFETY

Understand that your safety and the safety of other persons is measured by how you service and operate this machine. Know the positions and operation of all controls before you try to operate. **MAKE SURE YOU CHECK ALL CONTROLS IN A SAFE AREA BEFORE STARTING YOUR WORK.**

READ THE OPERATOR'S MANUAL COMPLETELY and make sure you understand the controls. All equipment has limits. Make sure you understand the speed, brakes, steering stability and load characteristics of this machine before you start to operate.

The safety information given in the Operator's Manual does not replace safety codes, insurance needs, federal, state and local laws. Make sure your machine has the correct equipment needed by the local laws and regulations.

CASE IH is continuing to work for your safety by making tractors with better protection and by providing these rules for safe operation.



WARNING: THIS SAFETY ALERT SYMBOL INDICATES IMPORTANT SAFETY MESSAGES IN THE OPERATOR'S MANUAL. WHEN YOU SEE THIS SYMBOL, CAREFULLY READ THE MESSAGE THAT FOLLOWS AND BE ALERT TO THE POSSIBILITY OF PERSONAL INJURY OR DEATH.



Intended Use



The tractor is designed solely for use in customary agricultural operation (intended use).

Use in any other way is considered as contrary to the intended use. The manufacturer accepts no liability for any damage or injury resulting from this misuse and these risks must be born solely by the user.

Compliance with and strict adherence to the conditions of operation, service and repair as specified by the manufacturer also constitute essential elements for the intended use.

This tractor must be operated, serviced and repaired only by persons familiar with all its particular characteristics and acquainted with relevant safety rules (accidental prevention).

The accident prevention regulations, all other generally recognised regulations on safety and occupational medicine and the road traffic regulations must be observed at all times.

Any arbitrary modifications carried out on the tractor will relieve the manufacturer of all liability for any resulting damage or injury.



Personal Safety



Throughout the Operator's Manual and on the machine's safety decals, you will find precautionary statements: **DANGER**, **WARNING** or **CAUTION** followed by specific instructions or ISO two panel safety pictorial symbols. These precautions are intended for your personal safety.

Failure to follow the **DANGER**, **WARNING** or **CAUTION** instructions may result in serious bodily injury or death.




DANGER, **WARNING** or **CAUTION** are defined as follows:

- **DANGER:** Indicates an immediate hazardous situation that, if not avoided, will result in death or serious injury. The colour associated with Danger is RED.
- **WARNING:** Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury. The colour associated with Warning is YELLOW.

- **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 colour associated with Caution is YELLOW.

ISO two panel **pictorial symbol decals** are defined as follows:

- The first panel indicates the nature of the hazard.
- The second panel indicates the appropriate avoidance of the hazard.
- Background colour is YELLOW.

Prohibition symbols such as   and  if used, are RED.



General Safety and Accident Prevention Regulations



- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • In addition to the instructions contained in the Operator's Manual, also observe the general safety and accident prevention regulations. • Always comply with local traffic regulations when driving on public roads. • Before starting work, familiarize yourself with all the controls and instruments and their functions. During work is too late. • Start the engine only from the operator's seat. • Never attempt to start the engine by shorting across the starting terminals as the machine may immediately start to move. • Before moving away, always check the immediate vicinity of the machine (e.g. for children). Ensure adequate visibility. | <ul style="list-style-type: none"> • Never run the engine in a closed building. Proper ventilation is required. • Clothing worn by the operator must be close fitting. Avoid wearing loose jackets, shirts or ties. • Handle fuel with care as it is highly flammable. Never refuel the machine in the vicinity of naked flames or sparks. Do not smoke during refuelling. • Always stop the engine and remove the main switch key before refuelling. Fill fuel tank outdoors. Clean up any spilled fuel immediately. • Prevent fires by keeping the machine clean. • Take care when handling brake fluid and battery acid (toxic and corrosive). |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



Hazardous Chemicals



- If you are exposed to or come in contact with hazardous chemicals you can be seriously injured. The fluids, lubricants, paints, adhesives, coolants, etc., used with your machine can be hazardous, ALWAYS follow the chemical manufacturers instructions thoroughly.
- Before you service this machine and before you dispose of the old fluids and lubricants, always remember the environment. DO NOT put oil or fluids into the ground or into containers that can leak.
- Check with your local environmental or recycling centre or your dealer for correct disposal information.



Operation



- Always adapt your ground speed to the ground conditions. Avoid making sharp turns when driving up or down slopes or when driving across the slope. Do not attempt to turn the machine with the differential lock engaged. When driving down slopes, never depress the clutch and change gear.
- Observe maximum permissible axle loads and total weights.
- Attach trailers and/or implements correctly. The operating, steering and braking behaviour will be affected by attaching implements, trailers and ballast weights. Therefore ensure adequate steering and braking power.
- When making turns with towed or mounted implements, always take into consideration the width and inertia of the implement.



Basic Rule



- ALWAYS check the operation and road safety of the tractor before starting.
- ALWAYS sound horn before starting the machine.
- ALWAYS make sure working area is clear of other persons, pets, tools, etc. before you start operating this machine. NEVER allow anybody in work area during machine operation.



Machine Operation and Roll-Over Safety



- DO NOT allow other persons to ride on the machine. Other persons can fall or can cause an accident.
- DO NOT operate the machine while under the influence of alcohol or drugs.
- Be alert and always know the location of all workers in your area. Keep all other persons completely away from your machine. Injury or death can result if you do not follow these instructions.
- Stay away from hazardous areas such as ditches and inclines. Walk around the work area before you start and look for hazards.
- **Roll-Over Hazard** - Operating this machine on steep grades may result in a machine overturn. It is the operator's responsibility to make a judgment if weather, road or ground conditions will permit safe operation on a hillside, ramp, ditch or rough ground.



PTO Operation



- Always shut off engine before connecting or disconnecting drive shaft.
 - When operating the PTO, no one is allowed to remain in the vicinity of the rotating PTO stub shaft or drive shaft.
 - Guards for drive shaft and PTO stub shaft must be fitted.
 - High-inertia implements do not become stationary immediately when PTO is disengaged. Allow sufficient time for implement to "coast down" to a halt before cleaning or adjusting.
- As soon as drive shaft has been removed, install guard over PTO stub shaft.



Battery Safety



- DO NOT make sparks or use an open flame near the battery.
- When disconnecting battery terminals, remove the Negative (-) cable first; then remove the Positive (+). When connecting cables, connect the Positive (+) cable first, then connect the Negative (-).
- Disconnect the battery (both terminals) before welding on any part of the machine. Failure to do so may cause damage to sensitive electrical components.
- When working around storage batteries, remember that all of the exposed metal parts are "live". Never lay a metal object across the terminals because a spark, short circuit, explosion or personal injury may result.
- **BATTERY ACID CAUSES SEVERE BURNS.** Batteries contain sulphuric acid. Avoid contact with skin, eyes or clothing. Antidote: EXTERNAL - flush with water. INTERNAL - Drink large quantities of water or milk. DO NOT induce vomiting. Seek medical attention immediately. EYES - Flush with water for 15 minutes and seek medical attention immediately. BATTERIES PRODUCE EXPLOSIVE GASES. Keep sparks, flame, cigars and cigarettes away. Ventilate when charging or using in enclosed area. Always wear eye protection when working near batteries. Wash hands after handling. KEEP OUT OF REACH OF CHILDREN.
- Battery posts, terminals and related accessories contain lead and lead compounds. **Wash hands after handling.**



Implements



- Attach implements and trailers to the tractor only using the prescribed drawbars or hitches.
- Use only recommended hardware for hitch connections. Verify the integrity of the connection.
- Prevent trailer and implement from moving when detached from the tractor.
- Operate tractor only when all guards are fitted and in their correct position.
- Properly connect the auxiliary brake system.
- Properly connect the auxiliary lighting harness.



Fire Safety



- Fire risks can be minimized by frequent removal of accumulated crop material, trash or debris from the machine.
- Remove all crop material, trash or debris from the machine each day. Especially check the engine area and exhaust system.
- Engine fuel can cause an explosion or fire. DO NOT fill the fuel tank with the engine running; if you are near an open fire; or if you are welding, smoking, etc.
- Equipping the tractor with a fire extinguisher is considered a good practice.

Refer to Fire Prevention in the Maintenance Section of the Operator's Manual for additional information.



Instructional Seat Safety



- Children, are NOT permitted to ride on the machine.
- The Instructional Seat is used:
 - A. When training a new operator.
 - B. When a service technician is diagnosing a mechanical problem.
 - C. When local regulations allow a passenger to ride, only if the machine is equipped with an Instructional Seat. The carrying of a passenger is otherwise not permitted.
- A frequent cause of personal injury or death is persons falling off and being run over. DO NOT permit others to ride, except in designated Instructional Seat.
- When the Instructional Seat is occupied, the following precautions must be taken:
 - A. Machine should be driven at a slower speed and on level ground.
 - B. Avoid driving on highways or public roads.
 - C. Avoid quick starts or stops.
 - D. Avoid sharp turns.



WARNING: Before starting the engine make sure seat belts are securely fastened. The seat belt can help insure your safety if it is used and properly maintained. Never wear a seat belt loosely or with slack in the belt system. Never wear the belt in a twisted condition or pinched between the seat structural members.



WARNING: A frequent cause of personal injury or death is persons falling off and being run over. DO NOT permit others to ride, except in designated instructional seat. Instructor must wear the instructional seat belt.



Leaving the Tractor



- When leaving the tractor, ensure that it will not roll away (apply park brake, wheel wedges) stop the engine and remove key.
- Remove the main switch key and lock the operator's cab.
- Never leave the tractor unattended as long as the engine is still running.
- Never leave the operator's platform/cab when driving.
- Lower implement or equipment to the ground before leaving the tractor.



Service



- Do not service the tractor with the engine running. Follow the instructions in the Operator's Manual or see your dealer.
- Escaping fluid (fuel or hydraulic oil) under high pressure can penetrate the skin and cause serious injury. If any fluid is injected into the skin, consult a doctor immediately as otherwise serious infections may result.
- Dispose of oil, fuel and filters in accordance with local regulations. Do not drain the oil on the ground or into a drain. Be responsible for the environment.
- Do not attempt to mount a tyre unless you have the proper equipment and experience to perform the job safely.
- Do not attempt to lift the tractor to remove a wheel without using the recommended jacking procedure.
- Retighten wheel nuts after the specified hours in this manual.
- Always disconnect the battery ground strap(s) before carrying out any electrical repairs on the machine.
- Use original manufacturer's parts. Spare parts/service parts must comply with the manufacturers technical specifications.
- Always keep safety and informational decals clean and visible. Replace decals that are damaged, lost, painted over or can not be read.
- When assembling, operating or servicing the machine, wear protective clothing and personal safety devices that are necessary for the particular procedure. Some personal safety devices that may be necessary are protective shoes, face and/or eye protection, hard hat, heavy gloves, filter mask and hearing protection.
- DO NOT wear jewellery or loose fitting clothing that may get caught in moving parts. Always wear close fitting clothing. Keep hand, feet, clothing and hair away from moving parts.
- Never attempt to clear obstructions or objects from the machine while the engine is running.
- Always stop the engine and remove the key from the key switch when leaving the operator's seat or the machine.
- When servicing the machine, always have the machine on a firm level surface.
- If shields or guards are removed or opened for service, always replace them before operating the machine. Never operate machine with missing or open shields or guards.
- Keep the area used for servicing the machine clean and dry. Wet or oily floors are slippery. Wet spots can be dangerous when working with electrical equipment. Be sure all electrical outlets and tools are properly grounded.

Buy Now



Our support email:

ebooklibonline@outlook.com