CASE



PUMA 165 Multi-Controller PUMA 180 Multi-Controller PUMA 195 Multi-Controller PUMA 210 Multi-Controller

TRACTORS

OPERATOR'S MANUAL





Electro-Magnetic Compatibility (EMC)

This tractor complies strictly with the European Regulations on electro-magnetic emissions. However, interference may arise as a result of add-on equipment which may not necessarily meet the required standards. As such interference can result in serious malfunction of the unit and/or create unsafe situations, you must observe the following:

- Ensure that each piece of non-Case IH equipment fitted to the tractor bears the CE mark.
- The maximum power of emission equipment (radio, telephones, etc.) must not exceed the limits imposed by the national authorities of the country where you use the tractor.
- The electro-magnetic field generated by the add-on system should not exceed 24 V/m at any time and at any location in the proximity of electronic components.

Failure to comply with these rules will render the Case IH warranty null and void.

TABLE OF CONTENTS

SECTION 1	
GENERAL INFORMATION AND SAFETY TO THE OWNER	1.1
END USER LICENCE AGREEMENT TERMS	
PRODUCT IDENTIFICATION	
ECOLOGY AND THE ENVIRONMENT	
SAFETY INFORMATION	
SAFETY DECALS	
INTERNATIONAL SYMBOLS	
AIRBORNE NOISE EMISSION	
SECTION 2	
LAYOUT AND FUNCTION OF THE CONTROLS AND INSTRUMENTS CAB	2-4
ELECTRICAL POWER PANEL	
DRIVER'S SEAT	2-23
PARKING BRAKE, THROTTLE AND FOOT PEDALS	2-31
CONTROL ELEMENTS ON THE STEERING COLUMN	2-33
INTEGRATED CONTROL UNIT (ICU)	2-36
POWERSHIFT TRANSMISSION SYSTEM	2-76
DIFFERENTIAL LOCK	2-97
FOUR WHEEL DRIVE	2-99
FRONT AXLE SUSPENSION (where fitted)	2-101
SECTION 3	
WORKING WITH THE TRACTOR	• •
IMPORTANT NOTES	
CONNECTING JUMP LEADS TO THE BATTERY	
STARTING THE ENGINE	
STOPPING THE ENGINE	
POWER MANAGEMENT (PM) CONSTANT ENGINE SPEED	
HEADLAND MANAGEMENT CONTROL (HMC)	
TURN ASSIST (WHERE FITTED)	
REAR PTO	
FRONT PTO AND THREE-POINT HITCH (where fitted)	
ELECTRONIC DRAFT CONTROL (EDC)	
ELECTRO HYDRAULIC REMOTES	
THREE-POINT HITCH	
QUICK HITCH	
LINKAGE STABILISERS	
DRAWBARS AND TOWING ATTACHMENTS	
TRAILER BRAKING SYSTEMS (where fitted)	
WHEEL TRACKS	
BALLASTING AND TYRES	3-134

SECTION 4

LUBRICATION AND MAINTENANCE GENERAL INFORMATION	4-1
PROTECTIVE GUARDS	
LUBRICATION AND MAINTENANCE CHART	4-10
WHEN THE WARNING SYMBOL APPEARS	
EVERY 10 HOURS OF OPERATION OR DAILY	
EVERY 50 HOURS	4-17
EVERY 100 HOURS	4-28
EVERY 300 HOURS	4-29
EVERY 600 HOURS	4-33
EVERY 1200 HOURS OR 12 MONTHS	4-40
EVERY 1200 HOURS OR 2 YEARS	4-46
EVERY 3 YEARS	4-54
GENERAL MAINTENANCE	4-55
STORING THE TRACTOR	4-73
SECTION 5	
FAULT FINDING	
INTRODUCTION	
ENGINE	5-4
TRANSMISSION	
HYDRAULICS	
THREE-POINT HITCH	5-9
BRAKES	5-10
CAB	
ELECTRICAL SYSTEM	5-11
SECTION 6	
ACCESSORIES	
AFS 200 MONITOR (where fitted)	
COOLANT IMMERSION HEATER	
TRANSMISSION OIL HEATER	
ROTATING BEACON	
AUXILIARY HEADLIGHTS	
ADDITIONAL 40 AMP SOCKET	
BATTERY ISOLATOR SWITCH	
DVNAMIC FRONT FENDERS	6_7

SECTION 7

SPECIFICATIONS OF NET ALL DIMENSIONS ALL MODELS	7.0
GENERAL DIMENSIONS ALL MODELS	
VEHICLE WEIGHTS	7-5
CAPACITIES	7-6
ENGINE	7-7
FUEL SYSTEM	7-7
COOLING SYSTEM	7-8
TRANSMISSION	7-8
MAXIMUM OPERATING ANGLE	7-9
REAR POWER TAKE OFF	7-9
FRONT POWER TAKE OFF	7-9
HYDRAULIC SYSTEM	7-10
REMOTE CONTROL VALVES	7-14
FRONT 3-POINT HITCH	7-14
BRAKES	7-15
STEERING	7-15
ELECTRICAL EQUIPMENT	7-16
MINIMUM HARDWARE TIGHTENING TORQUES	7-17
MINIMUM HARDWARE TIGHTENING TORQUES	7-18

SECTION 8

FIRST SERVICE SHEETS

SECTION 9

INDEX

SECTION 1 GENERAL INFORMATION AND SAFETY

TO THE OWNER

GENERAL INFORMATION

This Manual has been prepared to assist you in the correct procedure for running-in, driving and operating your new tractor and how to maintain it. Read this Manual carefully. Your tractor is intended for use in normal and customary agricultural applications.

If at any time you require advice concerning your tractor, do not hesitate to contact your authorised dealer. The dealer has factory trained personnel, genuine manufacturers' parts and the necessary equipment to carry out all your service requirements.

Your tractor has been designed and built to give maximum performance, economy and ease of operation under a wide variety of operating conditions. Prior to delivery, the tractor was carefully inspected, both at the factory and by your dealer to ensure that it reaches you in optimum condition. To maintain this condition and ensure trouble-free operation, it is important that the routine services, as specified in Section 4 of this Manual, are carried out at the recommended intervals.

OPERATOR'S MANUAL STORAGE

A storage pocket for the Operator's Manual can be found on the rear of the seat. The manual should be kept to hand in this pocket at all times.

CLEANING THE TRACTOR

Your tractor is a state-of-the-art machine with sophisticated electronic controls. This should be borne in mind when cleaning the tractor, particularly if using a high pressure washer. Even though every precaution has been taken to safeguard electronic components and connections, the pressure generated by some of these machines is such that complete protection against water ingress cannot be guaranteed.

When using a high pressure washer, do not stand too close to the tractor and avoid directing the jet at electronic components, electrical connections, breathers, seals, filler caps, etc. Never direct a cold water jet at a hot engine or exhaust.

SAFETY

Pages 1-7 to 1-13 inclusive list the precautions to be observed to ensure your safety and the safety of others. Read the safety precautions and observe the advice given **before**operating the tractor.

SERVICE AFTER FIRST 50 HOURS WORK

In Section 9, at the back of this Manual, you will find the 50-hour service reports.

After you have operated the tractor for 50 hours, take your tractor, together with this Manual, to your dealer. He will then perform the manufacturer's recommended 50 hour service and complete the service report sheets (pages 9-1 and 9-3). The first sheet (page 9-1) is the dealer's copy and should be removed by the dealer after the service has been carried out. The second page (page 9-3) is your copy of the service performed. **Ensure that you and the dealer sign both copies.**

SERVICE PARTS

It should be pointed out that genuine parts have been examined and approved by the Company. The installation and/or use of "non-genuine" products could have negative effects upon the design characteristics of your tractor and thereby affect its safety. CASE IH is not liable for any damage caused by the use of "non-genuine" parts and accessories. Only genuine Case IH replacement parts should be used.

The use of non-genuine parts may invalidate legal approvals associated with this product.

It is prohibited to carry out any modifications to the tractor unless specifically authorised, in writing, by the After Sales Service department of the CASE IH.

WARRANTY

Your tractor is warranted according to legal regulations in your country and the contractual agreement with the selling dealer. No warranty shall, however, apply if the tractor has not been used, adjusted and maintained according to the instructions given in the Operator's Manual.

END USER LICENCE AGREEMENT TERMS

- You have acquired a device ("DEVICE") that includes Software licensed by CHN America LLC from Microsoft Licensing, GP or its affiliates ("MS"). Those installed software products of MS origin, as well as associated media, printed materials and "on-line" or electronic documentation ("SOFTWARE") are protected by international intellectual property laws and treaties. The SOFTWARE is licensed, not sold. All rights reserved.
- IF YOU DO NOT ACCEPT THIS END USER LICENCE AGREEMENT ("EULA"), YOU MAY NOT USE THE DEVICE OR COPY THE SOFTWARE. IN THS CASE, CONTACT CNH AMERICA LLC, TO OBTAIN INSTRUCTIONS ON THE RETURN OF THE UNUSED DEVICE FOR A REFUND. ANY USE OF THE SOFTWARE INCLUDING BUT NOT LIMITED TO USE ON THE DEVICE, WILL CONSTITUTE YOUR AGREEMENT TO THIS END USER LICENCE AGREEMENT (OR RATIFICATION OF ANY PREVIOUS CONSENT).
- GRANT OF SOFTWARE LICENCE. This EULA grants you the following licence:
 - You may use the SOFTWARE only on the DEVICE.
 - **NOT FAULT TOLERANT.** THE SOFTWARE IS NOT FAULT TOLERANT. CNH AMERICA LLC HAS INDEPENDENTLY DETERMINED HOW TO USE THE SOFTWARE IN THE DEVICE, AND MS HAS RELIED UPON CNH AMERICA LLC TO CONDUCT SUFFICIENT TESTING TO DETERMINE THAT THE SOFTWARE IS SUITABLE FOR SUCH USE.
 - NO WARRANTY FOR THE SOFTWARE. THE SOFTWARE is provided "AS IS" and with all faults. THE ENTIRE RISK AS TO SATISFACTORY QUALITY, PERFORMANCE, ACCURACY AND EFFORT (INCLUDING LACK OF NEGLIGENCE) IS WITH YOU. IN ADDITION THERE IS NO WARRANTY AGAINST INTERRUPTIONS IN YOUR USE OF THE SOFTWARE OR AGAINST ADVERSE EFFECTS. IF YOU HAVE OBTAINED WARRANTIES WITH REGARD TO THE DEVICE OR THE SOFTWARE, THESE DO NOT ORIGINATE FROM MS AND ARE NOT BINDING FOR MS.
 - No Liability for Certain Damages. EXCEPT AS PROHIBITED BY LAW, MS SHALL HAVE NO LIABILITY FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL OR INCIDENTAL DAMAGES OF ANY KIND WHATSOEVER ARISING FROM OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE SOFTWARE. THIS LIMITATION SHALL APPLY EVEN IF ANY REMEDY FAILS OF ITS ESSENTIAL PURPOSE. IN NO EVENT SHALL MS BE LIABLE FOR ANY AMOUNT IN EXCESS OF TWO HUNDRED AND FIFTY US DOLLARS (\$ 250.00).
 - **Limitations on Reverse Engineering, Decompilation, and Disassembly of the Software.** You may not reverse engineer, decompile, or disassemble the SOFTWARE, except and only to the extent that such activity is expressly permitted by application law notwithstanding this limitation.
 - SOFTWARE TRANSFER ALLOWED BUT WITH RESTRICTIONS. You may permanently transfer rights under this EULA only as part of a permanent sale or transfer of the DEVICE, and only if the recipient agrees to the terms and conditions of this EULA. If the SOFTWARE is an upgrade, any transfer must also include all prior versions of the SOFTWARE.

PRODUCT IDENTIFICATION

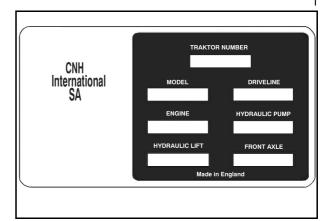
The tractor and its major components are identified using serial numbers and/or manufacturing codes. These serial numbers and/or manufacturing codes are required by the dealer for ordering spare parts and servicing. In addition they make it possible to identify the tractor in the event of a theft.

The following provides the locations of the individual identification plates on the tractor.

BSE 3682A

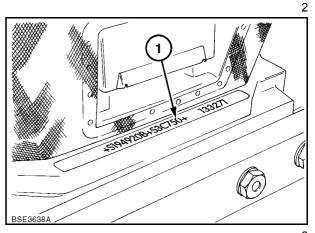
Vehicle identification plate

The tractor nameplate (1) is located on left-hand radiator support. Please record the information on the sample nameplate provided here.



Identification of the tractor

The serial number and vehicle identification information is stamped on the right-hand side of the front support (1). These numbers are also repeated on the vehicle identification plate reproduced above.



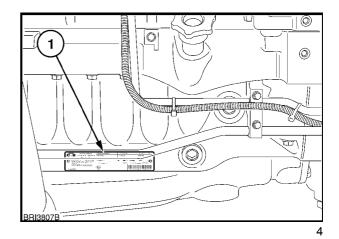
3

1 - 3

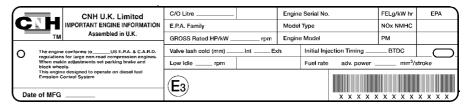
Engine Information

The engine serial number and date of manufacture are stamped on the engine information plate located on the left side of the engine oil pan.

Engine serial no.



Further information relating to engine adjustments and emission level compliance are also shown on this plate.

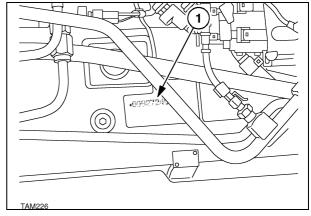


5

Identification of the of the Driveline

The factory plate with the serial numbers (1) is located on the transmission casing. Access to the number can be gained by removing the plate in the floor of the cab as shown in the illustration. This number is repeated on the vehicle identification plate. Record the information below for quick reference.

Driveline Serial No.....



6

Identification of the cab

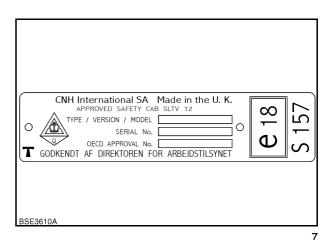
The cab serial number and other information is on the OECD certification plate. This plate can be found on the right-hand side of the cab trim panel, below the rear window. Record the cab serial number below for quick reference.

Cab Serial No.

Vehicle weight information

The Vehicle Weighting Plate provides important information on permitted tractor and towed equipment weight combinations. This plate can be found on the right-hand side of the cab trim panel, below the rear window.

The figures shown are the maximum permissible weights and should not be exceeded, to do so may affect the safe operation of the tractor.



Made in AUSTRIA CNH International SA **TYPE** No. IDENTIFICATION No. TOTAL PERMISSIBLE MASS KG PERMISSIBLE FRONT AXLE LOAD: KG PERMISSIBLE REAR AXLE LOAD : KG O PERMISSIBLE TOWABLE MASS 0 UNBRAKED TOWABLE MASS: KG KG C € INDEPENDENTLY - BRAKED INERTIA - BRAKED ASSISTED BRAKE lKG 3612A

8

ECOLOGY AND THE ENVIRONMENT

Soil, air and water are vital factors of agriculture and life in general. Where legislation does not yet rule the treatment of some of the substances which are required by advanced technology, common sense should govern the use and disposal of products of a chemical and petrochemical nature.

The following are recommendations which may be of assistance:

- Become acquainted with and ensure that you understand the relative environmental legislation applicable to your country.
- Where no legislation exists, obtain information from suppliers of oils, filters, batteries, fuels, antifreeze, cleaning agents, etc., with regard to the effects of these substances on man and nature and how they should be safely stores, uses and disposes of. Agricultural consultants will, in many cases, be able to help you as well.

HELPFUL HINTS

- Avoid filling tanks with fuel using unsuitable containers or inappropriate pressurised fuel delivery systems which may cause considerable spillage of fuel.
- 2. In general, avoid skin contact with all fuels, oils, acids, solvents, etc. Most of them contain substances which can be harmful to your health.
- 3. Modern oils contain additives. Do not burn contaminated fuels and/or waste oils in ordinary heating systems.

- 4. The containers must not spill over when draining used engine coolant mixtures, engine, gearbox and hydraulic oils, brake fluids, etc. Avoid spillage. Do not mix drained brake fluids or fuels with lubricants. Store them safely until they can be disposed of in a proper way to comply with local legislation.
- Modern coolant mixtures, e. g. antifreeze and other additives, should be replaced every two years. They should not be allowed to get into the soil but should be collected and disposed of according to the regulations.
- 6. Do not open the air-conditioning system yourself. It contains gases which should not be released into the atmosphere. Your farm machinery dealer or air conditioning specialist has special machines to extract the coolant mixture and to fill air conditioning units, and only he can recharge the air conditioning system.
- 7. Repair any leaks or defects in the engine cooling or hydraulic system immediately.
- 8. Do not increase the pressure in a pressurised circuit as this may lead to theaffected components bursting.
- Protect hoses during welding, as penetrating weld splatter may burn a hole or weaken hose lines or sleeves, causing the loss of oils, coolant, etc.

SAFETY INFORMATION

A careful operator is the best operator. Most accidents can be avoided by observing certain precautions. Please help to prevent accidents. Read and take the following precautions, **before** driving, operating or servicing the tractor. The tractor and it equipment should be operated only by those who are responsible and instructed to do so.

SAFETY INFORMATION

Throughout this Manual you will see text, preceded by the wordsNOTE, ATTENTION, IMPORTANT, CAUTION, WARNING or DANGER. Such text has the following significance:

VEHICLE SAFETY

NOTE: This text explains the correct operating technique or procedure.

WARNING: This text warns the operator of potential machine damage if a certain procedure is not followed.

IMPORTANT: This text informs the user of something that he needs to know to prevent minor machine damage if a certain procedure is not followed.

OPERTOR SAFETY



CAUTION



The word CAUTION is used where a safe behavioural practice, according to operating and maintenance instructions and common safety practices will protect the operator and others from accident involvement.



WARNING



The word WARNING denotes a potential or hidden hazard which could possibly cause serious injury. It is used to warn operators and others to exercise due care and attention to avoid a accidents with the tractor.



DANGER



The word DANGER denotes a forbidden practice in connection with a serious hazard.

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

THE TRACTOR

- Read the Operator's Manual carefully before using the tractor. Lack of operating knowledge can lead to accidents.
- 2. Only allow properly trained and qualified persons to operate the tractor.
- 3. To prevent falls, use the handrails and step plates when getting on and off the tractor. Keep steps and platform clear of mud and debris.
- 4. Replace missing, illegible or damaged safety decals.
- 5. Keep safety decals clean of dirt and grime.



- 6. Do not permit anyone but the operator to ride on the tractor except for driver training or instruction. When used for these purposes an additional seat may be fitted in the cab. Passengers should not be carried on the tractor at any time.
- 7. Keep children away from the tractor and from farm machinery at all times.
- 8. Do not modify or retrofit the tractor or any of its components or any unit function without first consulting your CIH dealer. Do not permit anyone else to modify or retrofit the vehicle.
- 9. Install all guards before starting the engine or operating the tractor.

DRIVING THE TRACTOR

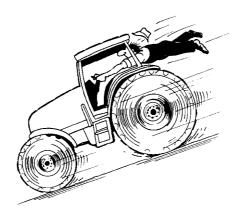
- 1. Always sit in the driver's seat while starting or driving the tractor.
- When driving on public roads, have consideration for other road users. Pull in to the side of the road occasionally to allow any following traffic to pass. Do not exceed the legal speed limit set in your country for agricultural tractors.
- 3. Use a rotating beacon and/or Slow Moving Vehicle warning when driving on public roads to indicate that the vehicle is slow moving and is a possible hazard.

IMPORTANT: Local regulations should be observed regarding the use of rotating beacons.

- 4. Dip the tractor lights when meeting a vehicle at night. Make sure the dipped beam is adjusted to prevent blinding the driver of an oncoming vehicle.
- 5. Reduce speed before turning or applying the brakes. Brake both wheels simultaneously when making an emergency stop. Ensure that both brake pedals are locked together when travelling at road speeds or when on public roads to ensure correct operation of trailer brakes, balanced operation of the tractor brakes and four wheel braking (4WD tractors only)



- 6. On four wheel drive tractors, the drive to the front axle is automatically engaged when both footbrakes are applied. Owners should be aware of the effectiveness of four wheel braking which greatly enhances braking performance. Appropriate care should be exercised during heavy braking.
- 7. Use extreme caution and avoid sudden braking when towing heavy loads at road speeds.



- 8. Keep the tractor in the same gear when going downhill as would be used when going uphill. Do not coast or freewheel down hills.
- For safe operation any towed vehicle whose total weight exceeds that of the towing tractor must for safety reasons be equipped with a braking system that complies with the legal requirements the country in which it is operating.
- 10. Never apply the differential lock when turning. When engaged, the differential lock will prevent the tractor from turning.
- 11. Always check overhead clearance, especially when transporting the tractor. Watch the terrain and watch where you are going, especially at row ends, on roads and around trees and low overhanging obstacles.
- 12. To avoid overturning, drive the tractor with care and at speeds compatible with safety, especially when operating over rough ground, when crossing ditches or slopes and when turning corners.



- 13. Use extreme caution when operating the tractor on steep slopes.
- 14. If the tractor becomes stuck or the tyres spin, reverse the tractor out to prevent overturning.



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