

Magnum 255
Tractor

Operator's Manual

84244782

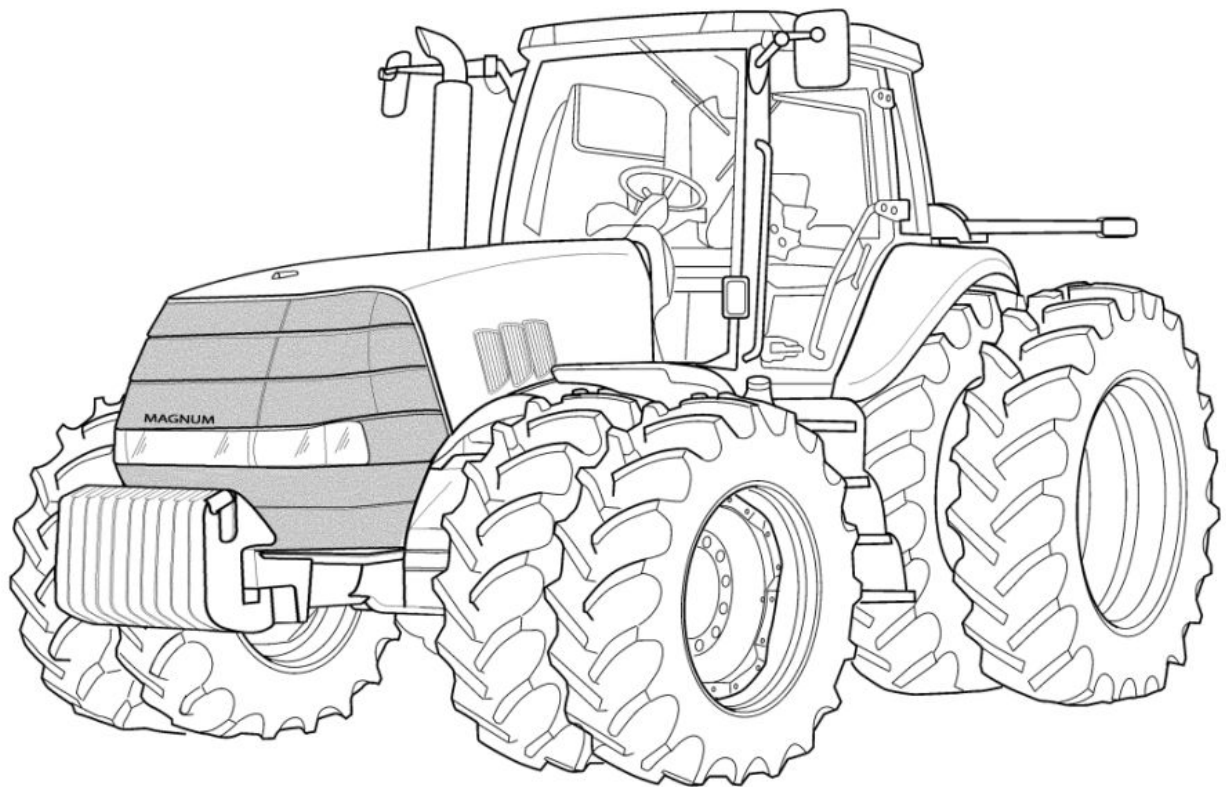
English 01/10

From serial number ZARZ01001 and after





OPERATOR'S MANUAL



Magnum 255

Contents

1 GENERAL INFORMATION

Safety rules and signal word definitions	1-1
Read the Operators Manual	1-2
Product identification	1-3
Tractor intended use	1-4
CNH America LLC technical manuals	1-5
Manual storage	1-6
Identification plates	1-7
Component location	1-9

2 SAFETY INFORMATION

Safety rules - General	2-1
Safety rules - Air conditioning system	2-1
Safety rules - Basic operating	2-2
Safety rules - Battery	2-2
Safety rules - Driving on public roads	2-3
Safety rules - Electrical storm safety	2-3
Safety rules - Fire prevention	2-4
Safety rules - General maintenance	2-4
Safety rules - Hazardous chemicals	2-5
Safety rules - Implements, tools and trailers	2-6
Safety rules - Instructional seat	2-6
Safety rules - Mounting and dismounting	2-7
Safety rules - Operator presence system	2-7
Safety rules - PTO operation	2-7
Safety rules - Roll over and tip over	2-8
Safety rules - Utility power lines	2-8
Safety rules - Vehicle vibration	2-10
Safety rules - Wheels and tires	2-11
ROPS and CSF	2-12
Safety decals	2-13

3 CONTROLS/INSTRUMENTS

ACCESS TO OPERATOR'S PLATFORM

Tractor access	3-1
----------------------	-----

OPERATOR'S SEAT

Overview	3-2
----------------	-----

INSTRUCTOR'S SEAT

Overview	3-3
----------------	-----

FORWARD CONTROLS

Steering column	3-4
Front console	3-7
Pedal controls	3-9

RH SIDE CONTROLS

Armrest console	3-11
Armrest compartment	3-19

Adjusting the armrest console	3-22
-------------------------------------	------

REARWARD CONTROLS

Fender console	3-23
Climate controls	3-28
Climate control system	3-29
Ventilation	3-30

OVERHEAD CONTROLS

Lamp controls	3-32
---------------------	------

EXTERIOR CONTROLS

Rear fender controls	3-33
----------------------------	------

INSTRUMENT CLUSTER

Overview	3-34
Gauges	3-35
Upper display	3-37
Keypad	3-39
Status and warning icons	3-41
Lower display	3-43
Display settings	3-63
Operator preferences	3-74
Icon legend	3-84

4 OPERATING INSTRUCTIONS

COMMISSIONING THE UNIT

Before starting the engine	4-1
----------------------------------	-----

STARTING THE UNIT

Normal engine starting	4-4
Engine starting with ether	4-7
Cold temperature operation	4-9

STOPPING THE UNIT

Stopping the engine	4-12
---------------------------	------

MOVING THE UNIT

Powershift transmission	4-13
Transmission default gears	4-14
Setting default gears	4-18
Best practices for prolonged transmission life	4-21
Transmission disengages; neutral icon flashes	4-22
Automatic productivity management (APM)	4-23
Mechanical front drive (MFD)	4-30
Differential lock system	4-34
Suspended axle	4-37
Ride control	4-45
Constant engine speed	4-48
Electronic end of row system	4-50

5 TRANSPORT OPERATIONS

ROAD TRANSPORT

Tractor warning lamps and SMV symbol	5-1
--	-----

Wide transport marker light.....	5-2
Tractor warning lamps.....	5-4
Safe transport speed	5-5
Implement warning lamps and SMV symbol	5-6
Safety chain	5-7
SHIPPING TRANSPORT	
Securing the tractor for shipping	5-8
RECOVERY TRANSPORT	
Safety rules.....	5-9
Towing the tractor.....	5-10
6 WORKING OPERATIONS	
GENERAL INFORMATION	
Overview	6-1
REAR PTO	
Safety rules.....	6-2
Connecting the PTO.....	6-5
Interchangeable PTO shaft.....	6-6
Reversible PTO shaft.....	6-12
PTO operation	6-14
PTO fender switch operation	6-18
Auto PTO operation	6-19
THREE POINT HITCH	
Identification	6-23
Link adjustment.....	6-24
Hitch high clearance adjustment	6-28
Hydraulic links	6-31
Sway limiter adjustment	6-32
Lower link block adjustment	6-33
Lower link block adjustment	6-34
Mechanical float adjustment.....	6-36
Hitch quick coupler - Category III/IIIN	6-37
Hitch quick coupler - Category IVN.....	6-42
Hitch operation	6-46
Hitch remote switch operation.....	6-52
Position control operation	6-53
Load control operation.....	6-55
Slip control operation	6-57
Hitch set point	6-60
DRAWBARS AND TOWING ATTACHMENTS	
Safety rules.....	6-63
Drawbar capacity/position	6-63
Adjusting the drawbar	6-68
AUXILIARY POWER CONNECTIONS	
Auxiliary power and lighting	6-70
Cab power connections	6-72

HYDRAULIC REMOTE CONTROL VALVES

Valve couplers and connections	6-74
Motor return circuit	6-77
Power beyond circuit	6-78
Overview	6-80
Operating the controls	6-81
Changing the functional mode.....	6-84
Remote hydraulic auto mode.....	6-88
Auto depth control	6-91

BALLASTING THE TRACTOR

Guidelines	6-94
Tire load and inflation charts	6-99
Weights, cast metal and liquid.....	6-107
Wheel slip and power hop performance	6-115

MECHANICAL FRONT DRIVE (MFD) AXLES

Tire combinations and tread positions.....	6-118
Steering and oscillation stops	6-125
Tread and fender settings - standard MFD axles.....	6-133
Tread and fender settings - saddle suspension axles	6-140
Tread and fender settings - heavy duty and 3 meter axles	6-148

REAR AXLE

Rear wheel installation	6-156
-------------------------------	-------

7 MAINTENANCE

GENERAL INFORMATION

Safety rules	7-1
Opening the hood	7-2
Battery access and service	7-4
Tire and rim service.....	7-5
Tractor jacking points.....	7-7
Capacities	7-9
Consumables	7-11
Electrical component location	7-15
Electrical system specification.....	7-19
Maintenance chart notes	7-20

MAINTENANCE CHART

Maintenance Chart	7-20
-------------------------	------

At warning message display

Air filter service icon/message.....	7-23
--------------------------------------	------

First 10 to 50 hours

Differential and planetary oil.....	7-24
Wheel bolt torque.....	7-24
Weight bolt torque	7-24

Every 10 hours or daily

Engine oil level	7-25
Transmission oil level.....	7-26

Engine coolant level	7-27
Engine auxiliary fuel filter	7-28
Air reservoir - Drain fluid	7-28
Rear hitch and front axle	7-28

Every 50 hours

Engine primary fuel filter	7-29
----------------------------------	------

Every 300 hours

Battery water level (Note E)	7-30
Engine air intake hoses	7-31
Engine coolant level - deaeration tank	7-32
Engine oil and filter	7-33
Wheel bolt torque	7-35
Weight bolt torque	7-35
Front axle (Note A)	7-36
Rear hitch (Note A)	7-43
Fuel tank	7-45
Differential and planetary oil level (Note B)	7-46
Transmission oil pressure oil pressure	7-48
Reversible 1000 RPM PTO shaft (Note D)	7-49

Every 600 hours

Engine coolant antifreeze protection	7-50
Engine coolant filter	7-51
Engine coolant hoses and clamps	7-52
Engine primary fuel filter	7-53
Fuel system bleeding	7-55
Changeable PTO internal splines	7-57

Every 1200 hours or annually

Differential and planetary oil	7-58
Engine air filters	7-62
Engine air precleaner	7-66

Every 1500 hours

Transmission oil	7-67
Transmission oil filter	7-69
Regulated transmission filter	7-70

Every 2100 hours

Engine coolant	7-71
Fuel injector nozzles (Note C)	7-74
Engine valve adjustment (Note C)	7-74

Every 3000 hours

Engine vibration damper (Note C)	7-75
--	------

As required

Vehicle fire prevention	7-76
Cab air filter	7-77
Engine primary air filter	7-80
Grille screen and radiator area	7-83

Fuel tank vent filter	7-85
Transmission clutch and accumulator	7-85
Tire pressure	7-85
Fan belt	7-86
Spark arresting muffler	7-87
Remote valve collection bottle.....	7-88
Engine auxiliary fuel filter	7-89
Cab fabric and carpet.....	7-91
Seat belt	7-92

STORAGE

Tractor storage	7-93
Removal from storage	7-93

ELECTRICAL SYSTEM

Radio or audio system.....	7-94
Battery removal and installation	7-95
Auxiliary battery connections	7-97
Head light - Replace	7-98
Flood and work light	7-104
Fender tail light and warning light	7-106
Roof front warning and work light	7-108
Roof rear warning light	7-111
High intensity work light	7-113
Wide transport marker light.....	7-115
Rotating beacon light	7-116
Interior light - Replace	7-117

8 TROUBLESHOOTING

ALARM(S)

Display warnings	8-1
------------------------	-----

9 SPECIFICATIONS

ENGINE - General specification.....	9-1
POWER TRAIN - General specification	9-2
TRAVELLING - Speeds	9-4
Vehicle dimensions and shipping weight	9-7
Maximum operating weight.....	9-8

10 ACCESSORIES

Front wheel fenders	10-1
Farming system displays	10-7
Chemical tank mounting.....	10-10
Loader connection and operation	10-12
Trailer brake connections.....	10-13
General accessories.....	10-16

1 - GENERAL INFORMATION

Safety rules and signal word definitions

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 and on machine decals, 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 which, if not avoided, will result in death or serious injury. The color associated with Danger is RED.

M1169A



WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury. The color associated with Warning is ORANGE.

M1170A



CAUTION, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury. The color associated with Caution is YELLOW.

M1171A

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

Machine safety

NOTICE: Notice indicates a situation which, if not avoided, could result in machine or property damage. The color associated with Notice is BLUE.

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 which 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.

Read the Operators Manual



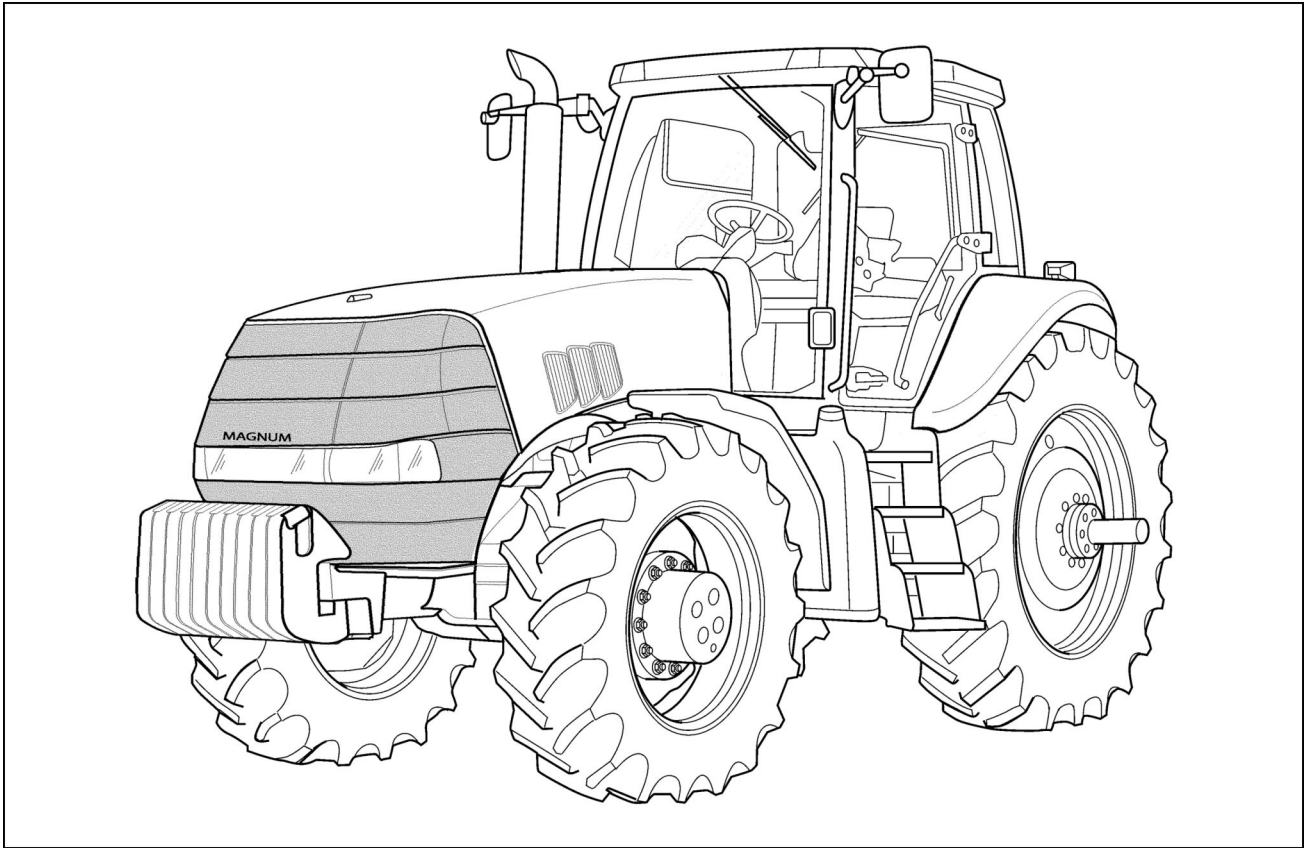
Improper operation of this vehicle can cause death or serious injury. Before using the vehicle, make certain that every operator:

- Is instructed in safe and proper use of the machine.
- Reads and understands the manual(s) pertaining to the machine.
- Reads and understands all safety decals on the machine.

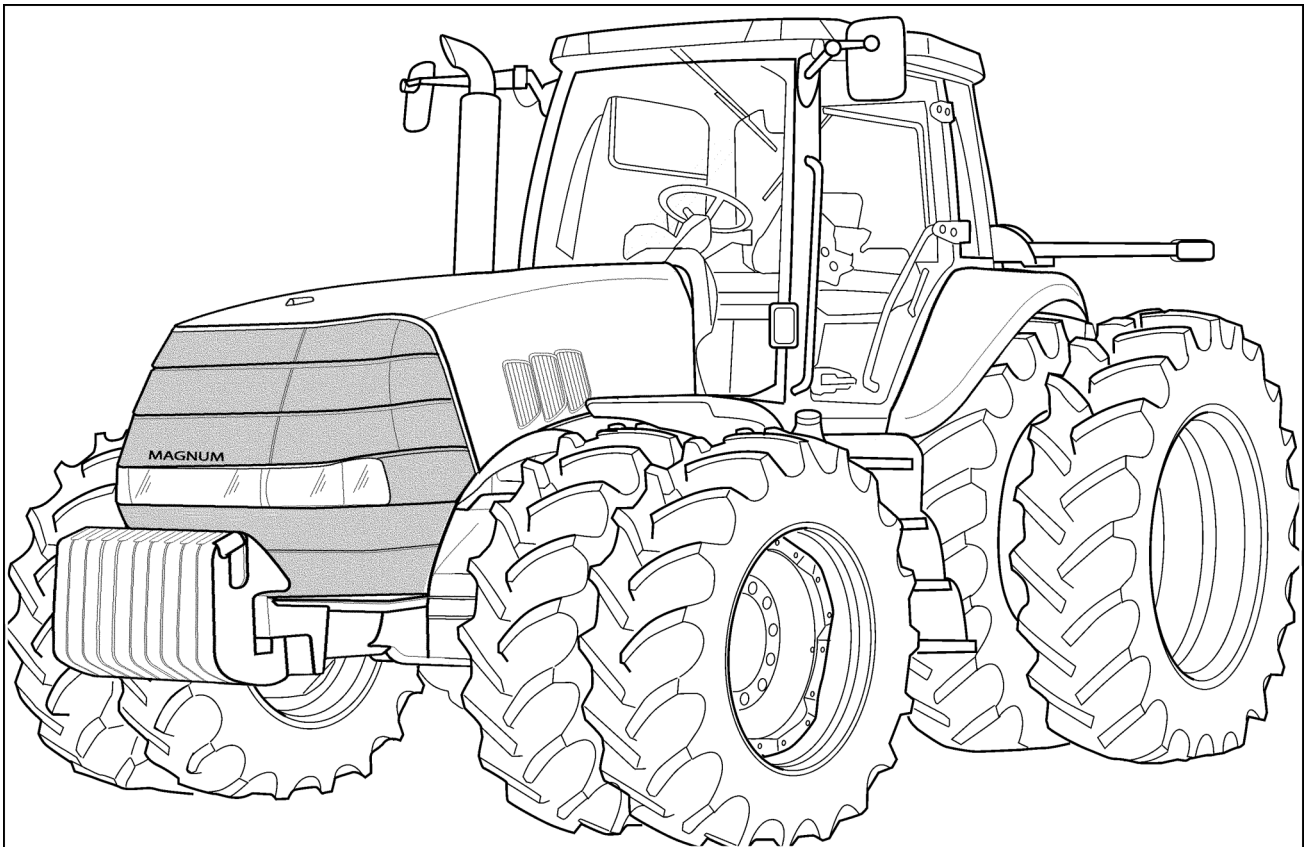
- Clears the area of other persons.
- Learns and practices safe use of machine controls in a safe, clear area before operating this machine on a job site.

It is your responsibility to observe pertinent laws and regulations and follow CNH America LLC instructions on machine operation and maintenance.

Product identification



RCPH07CCH014FAB 1



RCPH08CCH004FAB 2

Tractor intended use

Magnum series tractors with standard equipment and authorized attachments, are intended to be used for customary farming, land leveling and related agriculture operations (intended use). Installation of utility (dozer) blades, tile plows, or push bars on the tractor is not recommended. Any tractor damage resulting from the installation and/or use of such equipment is not covered by the tractor warranty.

Consult an authorized dealer or CNH America LLC on changes, additions or modifications that can be required for this machine to comply with various regulations and safety requirements. Unauthorized modifications will cause serious injury or death. Anyone making such unauthorized modifications is responsible for the consequences.

Do not use this machine for any purpose or in any manner other than as described in the manual, decals, or other product safety information provided with the machine. These materials define the machine's 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 borne solely by the user.

Compliance with and strict adherence to the conditions of operation, service and repair as specified by the manufac-

turer also constitute essential elements for the intended use.

All persons who will be operating this machine shall possess a valid local vehicle operating permit and/or other applicable local age work permits.

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

The accident prevention regulations, all other generally recognized 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.

ATTENTION: *The engine and fuel system on your machine is designed and built to government emissions standards. Tampering by dealers, customers, operators and users is strictly prohibited by law. Failure to comply could result in government fines, rework charges, invalid warranty, legal action and possible confiscation of the machine until rework to original condition is complete. Engine service and/or repairs must be done by a certified technician only!*

Buy Now



Our support email:

ebooklibonline@outlook.com