MX Series Magnum Tractors
MX215, MX245, MX275 and MX305
Operator’s Manual
If Safety Decals on this machine use the words **Danger, Warning or Caution**, which are defined as follows:

- **DANGER**: Indicates an immediate hazardous situation that, if not avoided, will result in death or serious injury. The color associated with Danger is RED.

- **WARNING**: Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury. The color associated with Warning is ORANGE.

- **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.

If Safety Decals on this machine are ISO two panel pictorial, 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 color is YELLOW.
- Prohibition symbols such as \(\text{\ding{52}}\) and \(\text{STOP}\) if used, are RED.

## WARNING

**IMPROPER OPERATION OF THIS MACHINE CAN CAUSE DEATH OR SERIOUS INJURY. BEFORE USING THIS MACHINE, 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.

© 2006 CNH America LLC

87393890
January, 2006

CASE and IH are registered trade marks of CNH America LLC
CASE IH TECHNICAL MANUALS

Manuals are available from your Dealer for the operation, service and repair of your machine. For prompt, convenient service, contact your Dealer for assistance in obtaining the manuals for your machine.

Your Dealer can expedite your order for operator's manuals, parts catalogs, service manuals and maintenance records.

Always give the Machine Name, Model and P.I.N. (product identification number) or S.N. (serial number) of your machine so your Dealer can provide the correct manuals for your machine.

CALIFORNIA
Proposition 65 Warning

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

Battery posts, terminals and related accessories contain lead and lead compounds. Wash hands after handling.

NOTE: CNH America LLC reserves the right to make improvements in design or changes in specifications at any time without incurring any obligation to install them on units previously sold.
# GENERAL TABLE OF CONTENTS

## 1 – TO THE OWNER
- Statement of Tractor Intended Use ........................................... 1
- Operator’s Manual Storage Compartment .................................... 1
- Product Identification and Serial Numbers ................................ 3
- Machine Components .......................................................... 5
- Business Band Radios ....................................................... 7

## 2 – SAFETY/DECALS
- Safety Rules ........................................................................... 9
- Personal Safety ........................................................................ 12
- Instructional Seat Safety ........................................................ 12
- Maintenance Safety ............................................................. 13
- Fire Safety ............................................................................. 13
- Battery Safety ......................................................................... 13
- Machine Operation and Roll-Over Safety .................................. 14
- Hazardous Chemicals ............................................................. 14
- Safety Decals ........................................................................ 15
- Rollover Protective Structure (ROPS) ........................................ 20
- Cab Structural Frame (CSF) ..................................................... 20
- Cleaning Cab Windows ........................................................... 21
- Interior Rear View Mirror ....................................................... 21
- Seat Belts ................................................................................ 22
- Tractor Warning Lamps and Slow Moving Vehicle (SMV) Symbol 23
- Implement Warning Lamps and SMV Symbol ......................... 26
- Safety Chain ......................................................................... 27

## 3 – OPERATING CONTROLS
- Tractor Access ........................................................................ 29
- Operator Seat Controls ........................................................ 30
- Instructional Seat (If Equipped) ................................................. 32
- Steering Column Controls ....................................................... 33
- Center Console Controls ....................................................... 35
- Foot pedals ............................................................................. 37
- Right Hand Console Controls ................................................ 38
- Armland Console Controls ...................................................... 45
- Right Hand Fender Controls .................................................... 48
- Automatic Temperature Control System (If Equipped) .......... 54
- Rear Window ......................................................................... 59
- Dome Lamp ............................................................................ 59
- Map Lamp (If Equipped) ......................................................... 60
- CD Player - 6-Disc (If Equipped) ............................................ 60
- Radio (If Equipped) .............................................................. 60
- Sun Shade (If Equipped) ......................................................... 61
- Interior Rear View Mirror ...................................................... 61
- Extendable Mirrors (If Equipped) ........................................... 61
- Utility Console ....................................................................... 62

## 4 – INSTRUMENTATION
- Instrumentation Cluster ....................................................... 63
- Programming the Display Monitor ........................................ 69
- Operator Adjust Menu ........................................................ 74
- Warning/Fault Displays ......................................................... 77
- Instrumentation Cluster ....................................................... 83
5 – OPERATING INSTRUCTIONS
BEFORE STARTING THE ENGINE .................................................. 97
SERVICE INDICATOR LAMPS AND DISPLAYS .............................. 98
SEAT BELTS .............................................................................. 99
STARTING THE ENGINE ......................................................... 100
STOPPING THE ENGINE ......................................................... 102
COLD TEMPERATURE OPERATION ........................................... 103
POWER SHIFT TRANSmission ................................................. 106
transmission ............................................................................. 107
SHUTTLE SHIFTING ................................................................... 110
AUTOSHIFT OPERATION ........................................................... 113
SUSPENDED MFD AXLE OPERATION (IF EQUIPPED) .................... 117
AUTOSHIFT OPERATION ........................................................... 113
TRANSMISSION ....................................................................... 107
POWER SHIFT TRANSMISSION ................................................. 106
STOPPING THE ENGINE ......................................................... 102
STARTING THE ENGINE ......................................................... 100
SEAT BELTS .............................................................................. 99
HOW TO TRANSPORT THE TRACTOR ....................................... 121
TOWING THE TRACTOR ........................................................... 121
MECHANICAL FRONT DRIVE (MFD) AXLES ............................... 237
POWER HOP ............................................................................. 236
WHEEL SLIP .............................................................................. 234
DIFFERENTIAL LOCK .................................................................. 234
MFD OPERATION ....................................................................... 206
BALLASTING YOUR TRACTOR FOR OPTIMUM PERFORMANCE .... 210
WHEEL SLIP .............................................................................. 234
POWER HOP .............................................................................. 236
MECHANICAL FRONT DRIVE (MFD) AXLES ............................... 237
MFD STEERING AND OSCILLATION STOPS ............................... 244
FRONT WHEEL FENDERS (IF EQUIPPED) .................................... 252
REAR AXLE ............................................................................. 256
TRACTOR JACKING POINTS ...................................................... 259
REAR WHEEL TREAD SETTING - SINGLES ............................. 261
REAR WHEEL TREAD SETTING - DUALS .................................... 263
REAR WHEEL TREAD SETTING - TRIPLES ............................... 272

6 – FIELD OPERATION ................................................................ 125
GENERAL PROCEDURES FOR CONNECTING IMPLEMENT ......... 125
POWER TAKEOFF (PTO) .............................................................. 127
THREE POINT HITCH ................................................................. 136
HITCH OPERATION ..................................................................... 152
DRAWBAR PREPARATION .......................................................... 167
REMOTE HYDRAULICS .............................................................. 173
LOADER OPERATION .................................................................. 190
CHEMICAL TANK MOUNTING ................................................... 191
AUXILIARY POWER CONNECTIONS ......................................... 193
MONITOR MOUNTING ............................................................... 196
GROUND SPEED SENSOR CONNECTOR ...................................... 197
TRAILER BRAKE CONNECTOR (IF EQUIPPED) ......................... 198
CAB STEPS .............................................................................. 200

7 – IN-FIELD PERFORMANCE ..................................................... 203
DIFFERENTIAL LOCK .................................................................. 203
MFD OPERATION ....................................................................... 206
BALLASTING YOUR TRACTOR FOR OPTIMUM PERFORMANCE .... 210
WHEEL SLIP .............................................................................. 234
POWER HOP .............................................................................. 236
MECHANICAL FRONT DRIVE (MFD) AXLES ............................... 237
MFD STEERING AND OSCILLATION STOPS ............................... 244
FRONT WHEEL FENDERS (IF EQUIPPED) .................................... 252
REAR AXLE ............................................................................. 256
TRACTOR JACKING POINTS ...................................................... 259
REAR WHEEL TREAD SETTING - SINGLES ............................. 261
REAR WHEEL TREAD SETTING - DUALS .................................... 263
REAR WHEEL TREAD SETTING - TRIPLES ............................... 272

8 – LUBRICATION/FILTERS/FLUIDS/MAINTENANCE ................. 275
ENVIRONMENT .......................................................................... 275
PLASTIC AND RESIN PARTS ...................................................... 275
TOOL BOX (IF EQUIPPED) ......................................................... 275
SYSTEM CAPACITIES .................................................................. 276
OPENING THE HOOD ................................................................. 280
LUBRICATION/MAINTENANCE CHART ....................................... 282
Buy now
Case magnum MX215, MX245, MX275 and MX305 PDF Operation manual
With Instant Download