

**Farmall 30B**  
**Farmall 35B**  
Compact Tractor

**OPERATOR'S MANUAL**

**Part number 84275461**

1st edition English

August 2011



# Contents

---

## 1 GENERAL INFORMATION

Note to the Owner .....	1-1
Foreword Ecology and the Environment .....	1-2
General specification - Biodiesel Fuels .....	1-3
Proposition 65 .....	1-4
Advice .....	1-5
Product identification .....	1-6

## 2 SAFETY INFORMATION

Precautionary statements and signal word definitions .....	2-1
Safety rules .....	2-2
Personal safety .....	2-7
Safety rules .....	2-8
ROPS - Personal safety - Roll-over protective structure .....	2-10
Safety decals .....	2-11
Instructional decals .....	2-22
International symbols .....	2-28

## 3 CONTROLS/INSTRUMENTS

### OPERATOR'S SEAT

Seat belt .....	3-1
Seat controls .....	3-1
ROPS - Dynamic description .....	3-2

### FORWARD CONTROLS

Instrument panel .....	3-4
Cruise control .....	3-6
Transmission shuttle shift lever .....	3-6
Clutch pedal .....	3-7
Brake pedals .....	3-7
Foot throttle pedal .....	3-8
Hand throttle lever .....	3-8
Horn switch .....	3-8
PTO switch .....	3-9
Key switch .....	3-9
Differential lock pedal .....	3-10
HST foot pedals .....	3-11
Tilt steering lever .....	3-11
Multifunction light switch .....	3-12

### LEFT-HAND SIDE CONTROLS

Transmission range lever .....	3-13
Park brake .....	3-13
Front-wheel drive lever .....	3-14
Mid PTO lever .....	3-15

---

## RIGHT-HAND SIDE CONTROLS

Hydraulic power lift (HPL) .....	3-16
Draft control .....	3-17
Rear remote control valve(s) .....	3-18
Two-spool control valve .....	3-19
Transmission main shift lever.....	3-20

## EXTERIOR CONTROLS

Hood release lever .....	3-21
--------------------------	------

## 4 OPERATING INSTRUCTIONS

### COMMISSIONING THE UNIT

Engine break-in procedure .....	4-1
Power take-off (PTO) operation .....	4-2
Three-point linkage .....	4-4
Attaching three-point equipment .....	4-5
Extendible drawbar .....	4-8
Hydraulic lift rocker .....	4-9
HPL drop rate control valve .....	4-9

### STARTING THE UNIT

Key switch .....	4-10
Cold starting aids .....	4-10
Starting the engine .....	4-11
Starting the tractor with jumper cables .....	4-14

### STOPPING THE UNIT

Stopping the engine .....	4-15
Emergency stopping .....	4-16
Brakes .....	4-17

### MOVING THE UNIT

Steering wheel adjustment .....	4-19
Steering operation .....	4-20
Transmission operation at low ambient temperatures.....	4-21
Hydrostatic transmission (HST) operation.....	4-22
12 x 12 Synchronized transmission operation.....	4-24

### PARKING THE UNIT

Parking the tractor .....	4-26
---------------------------	------

## 5 TRANSPORT OPERATIONS

---

## ROAD TRANSPORT

Lighting system .....	5-1
Hazard warning light operation .....	5-2
Turn signal operation .....	5-2
Headlight/work light operation .....	5-3
Rear work light (optional) .....	5-4
Driving the vehicle .....	5-5

## SHIPPING TRANSPORT

Carrying the tractor on a transporter .....	5-6
---	-----

## RECOVERY TRANSPORT

Towing .....	5-6
--------------	-----

## 6 WORKING OPERATIONS

### GENERAL INFORMATION

Tractor ballasting .....	6-1
Tractor ballasting weights .....	6-2
Liquid Ballast .....	6-4

## 7 MAINTENANCE

### GENERAL INFORMATION

General Information .....	7-1
Safety rules Diesel Fuel .....	7-3
Biodiesel fuel .....	7-4
Refueling the tractor .....	7-5

### MAINTENANCE CHART

Maintenance Chart .....	7-6
-------------------------	-----

### LUBRICATION SYSTEM

Recommended lubricants and coolants .....	7-8
Grease fittings .....	7-9

### ENGINE

Check engine oil level .....	7-10
Change engine oil and filter .....	7-11

### FUEL AND INJECTION SYSTEM

Fuel filter system Fuel filter - Drain fluid .....	7-12
Fuel filter system Fuel filter - Replace .....	7-13
FUEL AND INJECTION SYSTEM - Bleed .....	7-14
Fuel injector - Bleed .....	7-15

---

## AIR INTAKE SYSTEM

Air cleaner - Check .....	7-16
Air cleaner - Cleaning - Primary element .....	7-17
Air cleaner - Replace - Inner safety element .....	7-18

## TRANSMISSION

Check transmission, rear axle and hydraulic system oil level .....	7-19
Change transmission, rear axle and hydraulic system oil - Rear axle and hydraulic system .....	7-20
Oil filter - Replace - Hydraulic system .....	7-21
Oil filter - Replace - HST system .....	7-22
Clutch Adjustment .....	7-23
HST Neutral Adjustment .....	7-24

## ENGINE COOLANT SYSTEM

ENGINE COOLANT SYSTEM - Check - Coolant level .....	7-25
Cooling system assembly - Drain fluid - And flush .....	7-26
Fan and drive Belt - Check .....	7-27
Fan and drive Belt - Adjust .....	7-27

## ROPS

ROPS - Check - Maintenance and inspection .....	7-28
ROPS - Replace - Possible damage .....	7-29

## ELECTRICAL POWER SYSTEM

Battery .....	7-30
Alternator - Check .....	7-31
Fuse identification .....	7-32
Maxi-Fuse Replacement .....	7-33

## LIGHTING SYSTEM

Head light - Replace .....	7-34
Tail/Brake light bulb replacement .....	7-34
Turn signal/Hazard light bulb replacement .....	7-35

## WHEELS AND TRACKS Wheels

Check wheels and tires .....	7-37
Tighten wheel hardware .....	7-39
Front wheel - Check - Toe-in .....	7-39
Front wheel - Adjust - Toe-in .....	7-40

## SERVICE BRAKE

SERVICE BRAKE - Adjust .....	7-41
------------------------------	------

## FRONT AXLE

---

Differential - Check - Front axle differential case and final reduction gear cases . . . . .	7-41
Differential - Change fluid - Front axle differential case and final reduction gear case oil .....	7-42

## STORAGE

Storage - Storing - Tractor .....	7-44
Storage - Check - Tractor .....	7-45

## 8 TROUBLESHOOTING

### SYMPTOM(S)

ENGINE - Troubleshooting .....	8-1
Clutch - Troubleshooting .....	8-2
SERVICE BRAKE - Troubleshooting .....	8-2
Hydraulic Lift System - Troubleshooting .....	8-2
STEERING - Troubleshooting .....	8-3
TRANSMISSION Hydrostatic - Troubleshooting .....	8-3
ELECTRICAL POWER SYSTEM - Troubleshooting .....	8-4

## 9 SPECIFICATIONS

WHEELS AND TRACKS - Tire ratios - Wheel tread settings .....	9-1
WHEELS AND TRACKS - Tire pressure .....	9-2
Liquid Ballast .....	9-3
General specifications .....	9-4
Tractor dimensions .....	9-7

## 10 ACCESSORIES

Optional equipment.....	10-1
-------------------------	------

## 11 FORMS AND DECLARATIONS

Delivery report - Owner Copy .....	11-1
Delivery report - Dealer Copy .....	11-3

---

# 1 - GENERAL INFORMATION

## Note to the Owner

This manual contains information concerning the adjustment and maintenance of your new equipment. You have purchased a dependable machine, but only by proper care and operation can you expect to receive the performance and long service built into this equipment. Please have all operators read this manual carefully and keep it available for ready reference.

Your CASE IH AGRICULTURE dealer will instruct you in the general operation of your new equipment. (Refer to the 'Delivery Report' at the back of this manual.) Your dealer's staff of factory-trained service technicians will be glad to answer any questions that may arise regarding the operation of your machine. Case IH Max Service is also available. Call 1-877-4CASEIH (1-877-422-7344) or email maxservice.na@cnh.com.

Your CASE IH AGRICULTURE dealer carries a complete line of genuine CASE IH AGRICULTURE service parts. These parts are manufactured and carefully inspected to insure high quality and accurate fitting of any necessary replacement parts. Be prepared to give your dealer the model and product identification number of your new equipment when ordering parts. Locate these numbers now and record them below. Refer to the 'General Information' section of this manual for the location of the model and product identification numbers of your machine.

### PLEASE RECORD THE FOLLOWING INFORMATION

**Model**

---

**Product Identification Number (PIN)**

---

**Date Purchased**

---

**Header Width (As Applicable)**


---

**Engine Model (As Applicable)**

---

**Engine PIN (As Applicable)**

---

	<p>This is the safety alert symbol. It is used with and without signal words to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible death or injury.</p>
---	---

### **⚠ WARNING**

**Illustrations in this manual may show protective shielding open or removed to better illustrate a particular feature or adjustment.**

**Replace all shields before operating the machine.**

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

W0012A

**ATTENTION:** *The engine and fuel system on your machine is designed and built to government emission standards. Tampering by dealer, customers, operators, and end 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 completed. Engine service and/or repairs must be done by a certified technician only!*

### IMPROVEMENTS

CNH America LLC is continually striving to improve its products. We reserve the right to make improvements or changes when it becomes practical and possible to do so, without incurring any obligation to make changes or additions to the equipment sold previously.

## Foreword Ecology and the Environment

Soil, air, and water are vital factors of agriculture and life in general. When 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.

**NOTICE:** *The following are recommendations which may be of assistance:*

- Become acquainted with and ensure that you understand the relative 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 their effect on man and nature and how to safely store, use and dispose of these substances.
- Agricultural consultants will, in many cases, be able to help you as well.

### HELPFUL HINTS

- Avoid filling tanks using cans or inappropriate pressurized fuel delivery systems which may cause considerable spillage.
- In general, avoid skin contact with all fuels, oils, acids, solvents, etc. Most of them contain substances which may be harmful to your health.
- Modern oils contain additives. Do not burn contaminated fuels and or waste oils in ordinary heating systems.
- Avoid spillage when draining off used engine coolant mixtures, engine, gearbox and hydraulic oils, brake fluids, etc. 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 and available resources.
- Modern coolant mixtures, i.e. 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 properly.
- Do not open the air-conditioning system yourself. It contains gases which should not be released into the atmosphere. Your CASE IH AGRICULTURE dealer or air conditioning specialist has a special extractor for this purpose and will have to recharge the system properly.
- Repair any leaks or defects in the engine cooling or hydraulic system immediately.
- Do not increase the pressure in a pressurized circuit as this may lead to a component failure.
- Protect hoses during welding as penetrating weld splatter may burn a hole or weaken them, allowing the loss of oils, coolant, etc.



## General specification - Biodiesel Fuels

Fatty Acid Methyl Ester Biodiesel (Biodiesel Fuel) consists of a family of fuels derived from vegetable oils treated with methyl esters.

**NOTICE:** *Biodiesel Fuel blends are approved for your engine only if they comply with EN14214 Specification Standards or ASTM D6751.*

**NOTICE:** *It is imperative that you check which blend is approved for your engine with your CASE IH AGRICULTURE dealer. Be aware that the use of Biodiesel Fuel that does not comply with the Standards mentioned above could lead to severe damage to the engine and fuel system of your machine. The use of fuels that are not approved may void CASE IH AGRICULTURE Warranty coverage.*

### Biodiesel Fuel Usage Conditions

**NOTICE:** *The Biodiesel Fuel must meet the fuel Specification mentioned above.*

Biodiesel Fuel must be purchased from a trusted supplier that understands the product and maintains good fuel quality. Biodiesel Fuel must be pre-blended by the supplier. Mixing Biodiesel Fuels on-site can result in incorrect mixture that can lead to problems with both engine and fuel system.

Engine performance is affected by the use of Biodiesel Fuel. There may be up to **12 %** reduction in power or torque depending on the blend used.

**NOTICE:** *DO NOT modify the engine and/or injection pump settings to recover the reduced performance.*

The reduced power must be accepted if using any Biodiesel Fuel blend.

Some modification may be required to allow your engine to run Biodiesel Fuel. Consult you dealer for complete information on these modifications.

Biodiesel Fuel has a higher cloud point than Diesel Fuel.

**NOTICE:** *The use of high Biodiesel Fuel blends are not recommended in cold weather conditions.*

With Biodiesel Fuels, it may be necessary to change the engine oil, engine oil filter and fuel filter elements more frequently than with Diesel Fuels. Biodiesel Fuel can remove rust and particles from the inside of on-site fuel storage tanks that would normally adhere to the sides of the tank. Like particle deposits that commonly occur with Diesel Fuel, these particles can become trapped by the machine fuel filters, causing blockage and shortening filter life. In cold weather, this is more likely to happen. Consult your CASE IH AGRICULTURE dealer for information on cold weather operation and proper maintenance intervals when using any Biodiesel Fuel blend.

When handling Biodiesel Fuel, care must be taken not to allow water into the fuel supply. Biodiesel Fuel will actually attract moisture from the atmosphere.

Fuel tanks must be kept as full as possible to limit the amount of air and water vapors in them. It may be necessary to drain the fuel filter water tap more frequently.

Potential oxidation and stability could be a problem with the fuel stored in the machine.

**NOTICE:** *Machines must not be stored for more than three months with Biodiesel Fuel blends in the fuel system.*

If long storage periods are necessary, the engine must run on Diesel Fuel for 20 hours to flush the Biodiesel Fuel out of the engine fuel system prior to storage.

**NOTICE:** *Biodiesel Fuel must not be stored in on-site storage tanks for more than three months.*

Any spillage of Biodiesel Fuel must be cleaned up immediately before it can cause damage to the environment and the paint finish of the machine.

Before using Biodiesel Fuel blends you should consult with your dealer to receive full information about the approved blend for your machine and any detailed conditions of its usage.

**NOTICE:** *Be aware that not fulfilling the requirements and conditions of Biodiesel Fuel usage will void your machine's CASE IH AGRICULTURE Warranty coverage.*

## Proposition 65

**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 post, terminals and related accessories contain lead and lead compounds.

**Wash hands after handling**

BT09A213 1

## Advice

This machine was designed to power and propel itself. It is intended for agricultural use to pull or carry tractor attachments or load and move materials when equipped with a front end loader with a variety of buckets.

### PROHIBITED USAGE

No parts or attachments should be fitted to this machine, which have not been released by CASE IH AGRICULTURE. They might affect machine operation, safety of the user or other people, stability or wear characteristics of the machine.

**NOTICE:** Use only approved accessories and attachments designed for your machine. Consult your dealer on changes, additions or modifications that may be required for your machine. Do not make any unauthorized modifications to your machine.

**NOTICE:** 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.

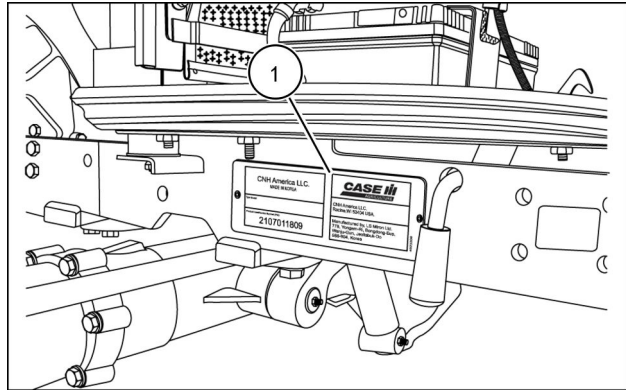
**NOTICE:** The engine and fuel system on your machine is designed and built to government emissions standards. Tampering by dealer, customers, operators and users is strictly prohibited by law. Failure to comply could result in government fines, rework charges, invalid warranty, legal action and possible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

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

## Product identification

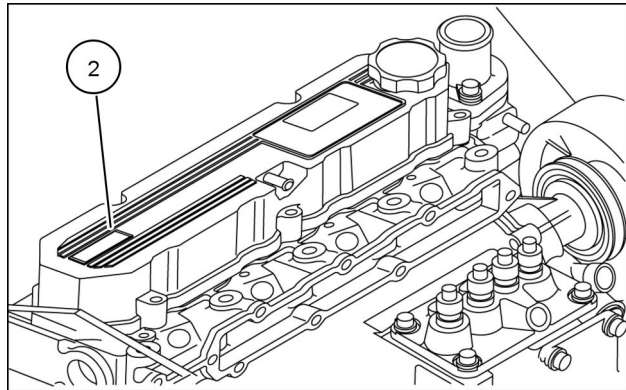
The Product Identification Plate **(1)** is located on the right-hand side of the frame, next to the hood release.

The numbers on the plate are important in the event your tractor should require future service.



76114219 1

The engine identification information plate **(2)** is located on the rearward end of the engine valve cover.



93101555 2

## 2 - SAFETY INFORMATION

### Precautionary statements 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.

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

 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.

### **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.

## Safety rules



**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 injury or death.**

### Precautionary Statements

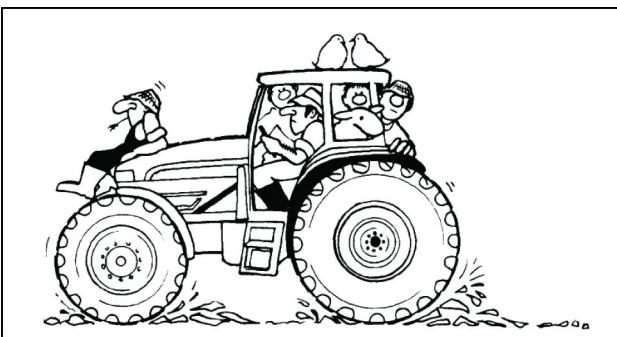
A careful operator is the best operator. Most accidents can be avoided by observing certain precautions. To help prevent accidents, read and take the following precautions before driving, operating or servicing the tractor. Equipment should be operated only by those who are responsible and instructed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

10. Tractor wheels are very heavy. They need to be handled with care. Ensure that they are stored at a place where they do not fall down & cause injury.

### Driving The Tractor

#### The Tractor

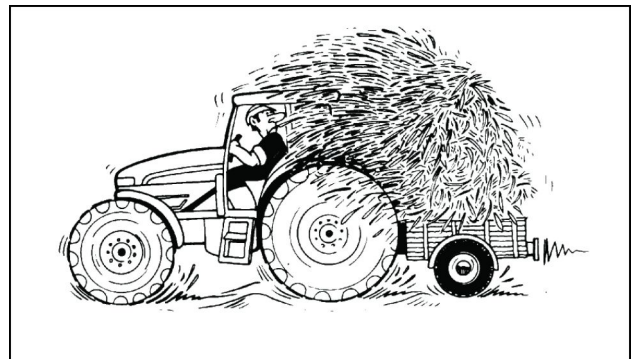
1. Read this Operator's Manual carefully before using the tractor. Lack of operating knowledge can lead to accidents.
2. Only allow properly trained and qualified persons to operate the tractor.
3. To prevent falls, use the handrails and step plates when getting on and off the tractor. Keep steps and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



200900793 1

6. Do not permit anyone but the operator to ride on the tractor. It is unsafe for extra passengers to travel.
7. Keep children away from the tractor and farm machinery at all times.
8. Do not modify or alter or permit anyone else to modify or alter the tractor or any of its components or any tractor function without first consulting your dealer.
9. Install all guards before starting the engine or operating the tractor.

1. Always sit in the driver's seat while starting or driving the tractor.
2. When driving on public roads, have consideration for other road users. Pull in to the right side of the road occasionally to allow any following traffic to pass. Do not exceed the legal speed limit set for agricultural tractors.
3. Dip the tractor lights when meeting a vehicle at night. Make sure the lights are adjusted to prevent blinding the driver of an oncoming vehicle.
4. 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 ensure correct operation of trailer brakes.



200900794 2

5. Use extreme caution and avoid hard application of the tractor brakes when towing heavy loads at road speeds.
6. Keep the tractor in the same gear when going downhill as would be used when going uphill. Do not coast or freewheel down hills.

**Buy Now**



Our support email:

[ebooklibonline@outlook.com](mailto:ebooklibonline@outlook.com)