FARMALL 110A FARMALL 120A FARMALL 130A Tractor

OPERATOR'S MANUAL

Part number 47952265

Ist edition English March 2016

Replaces part number 84589015



Contents

| 1 GENERAL INFORMATION NOTE TO THE OWNER | |
|--|------------|
| Engine identification | |
| Product identification plate | |
| Ecology and the environment | |
| Run in period of a new machine | |
| International symbols | |
| | 1-0 |
| 2 SAFETY INFORMATION | 2.4 |
| Safety rules | |
| Roll - over protective structure (ROPS) | |
| Safety decale. Cab models | |
| Safety decals - Cab models | |
| Safety decals – Models without cab | |
| Before operating the tractor | |
| Driving the vehicle | |
| Machine operation | |
| Servicing | |
| Diesel fuel | |
| Fire or explosion prevention | |
| Intended use statement | |
| 3 CONTROLS AND INSTRUMENTS ACCESS TO OPERATOR'S PLATFORM General check Introduction Platform - Overview | 3-2 3-4 |
| OPERATOR'S SEAT | |
| Operator seat | |
| | |
| INSTRUCTOR'S SEAT Passenger's seat | 3-8 |
| Passenger's seat | |
| Passenger's seat | 3-8 |
| FORWARD CONTROLS Ignition switch Warning lights | 3-8 3-9 |
| Passenger's seat FORWARD CONTROLS Ignition switch Warning lights Service light | |
| FORWARD CONTROLS Ignition switch Warning lights | |

| Clutch pedal | 3-11 |
|--|-------|
| Foot throttle pedal | 3-11 |
| Foot pedals of brake | 3-11 |
| Steering column | 3-12 |
| | |
| | |
| LEFT-HAND SIDE CONTROLS | |
| Parking brake | 3-12 |
| Power Take-Off (PTO) | 3-12 |
| Diagnostic socket | 3-13 |
| · · · · · · · · · · · · · · · · · · · | |
| DIQUE HAND OIDE CONTDOLO | |
| RIGHT-HAND SIDE CONTROLS | |
| Right side post controls | |
| Power Take-Off (PTO) | |
| Planters block valve switch | |
| Switch – Cruise control | |
| Air conditioner | |
| Differential lock | |
| Hand throttle | |
| Traction Front Wheel Drive (FWD) | |
| Creeper | |
| Performance monitor | |
| Control levers of the hydraulic system | |
| Control levers of the remote valves | |
| Transmission controls | |
| Radio (if equipped) | |
| Auxiliary electrical outlet | 3-23 |
| | |
| REARWARD CONTROLS | |
| Harness routing of the monitor | 3-24 |
| G . | |
| Instrument panel | |
| Instrument panel | 3-25 |
| Gauges | |
| ŭ | |
| ODEDATING INICTOLICATIONS | |
| OPERATING INSTRUCTIONS | |
| COMMISSIONING THE UNIT | |
| General instructions | . 4-1 |
| Filling the fuel tank | . 4-1 |
| | |
| | |
| STARTING THE UNIT | |
| Starting the engine | |
| Booster battery procedure | . 4-4 |
| | |
| STOPPING THE UNIT | |
| | |
| Stopping the engine | 4 5 |

| MOVING THE UNIT Machine direction - General safety recommendations for driving the machine | 4-5 |
|---|------------|
| 5 TRANSPORT OPERATIONS | |
| PREPARING FOR ROAD TRANSPORT | |
| Machine loading | 5-1 |
| RECOVERY TRANSPORT Towing the machine | 5 1 |
| Towning the machine | ט-1 |
| 6 WORKING OPERATIONS | |
| GENERAL INFORMATION | |
| Traction Front Wheel Drive (FWD) | 6-1 |
| Differential lock system | 6-2 |
| TRANSMISSION | |
| Transmission operation Synchro Shuttle™ - 8x8 | 6-3 |
| Travel speeds - Synchro Shuttle™ Transmission - 8x8 | |
| Transmission operation Power shuttle™ - 8x8 (optional) | |
| Travel speeds - Power Shuttle™ Transmission - 8x8 (optional) | |
| Transmission operation Power Shuttle™ - 16 x 8 (optional) | 6-7 |
| Travel speeds - Power Shuttle™ Transmission - 16 x 8 (optional) | 6-9 |
| Reverse Alarm and Light | |
| Operation the creeper (Optional) | |
| Decal information speeds | 6-11 |
| POWER TAKE OFF (PTO) | |
| Power Take-Off (PTO) safety rules | 6-13 |
| Power Take-Off (PTO) Independent | |
| Power Take-Off (PTO) operation | |
| PTO interchangable shaft | |
| HYDRAULICS | |
| Hydraulics | 6-17 |
| Operation in position control | |
| Operation in sensitivity control | |
| HYDRAULIC REMOTE CONTROL VALVES | |
| Hydraulic remote control valves | 6-19 |
| Remote control valves – Planter function | 6-21 |
| Operating continuous flow hydraulic equipment | |
| Operating single-acting hydraulic cylinders | |
| Operating double-acting hydraulic cylinders | |
| Operating two or more remote control valves | |

| Remote control valves – Motor kit (when present) | 6-27 |
|--|------|
| Hydraulic oil free-flow return | 6-28 |
| Bleeding the hydraulic system | 6-28 |
| Installing attachments | 6-29 |
| | |
| THREE-POINT HITCH | |
| Attach the implement on the hydraulic lift | 6-32 |
| Adjustments of the three-point hydraulic lift | |
| Setups the telescopic stabilizer | |
| Quick hitch (when available) | |
| Quick filton (which available) | 0 00 |
| The standard duranth an | |
| Tractor drawbar | 6.20 |
| Attaching a trailer | |
| Safety chain | |
| Adjusting the drawbar sliding | 6-40 |
| NAME TO A OLGA DILLOTATE NET | |
| WHEEL TRACK ADJUSTMENT | 0.44 |
| Front wheel tread settings | |
| Adjustments the front axle stops | |
| Front wheel alignment | |
| Front wheel fenders | 6-45 |
| Rear axle bar type (where fitted) | |
| Dual rear wheels (where fitted) | |
| Duai real wheels (where inted) | 0-52 |
| BALLASTING AND TIRES | |
| Tires – Wheels | 6-53 |
| Tires | |
| Tires – Parts of the tire | |
| Tire types – For the application | 6-57 |
| Tires – General features | |
| Tires – Compatibility of front x rear tires | |
| Tractor ballasting | |
| Tractor ballasting | |
| Tires - Compatibility table | |
| Ballasting solid | |
| Liquid ballast | |
| Liquid ballast – Capacity table | |
| Tires – Recommendations for calibration | |
| Tires - Calibration | 6-80 |
| Tire pressures and permissible loads | ზ-გე |
| ALIVILIA DV DOMED CONNECTIONS | |
| AUXILIARY POWER CONNECTIONS Auxiliary electrical outlet | 6-83 |
| Adminity Gloculous Guilet | 0-00 |

7 MAINTENANCE

| GENERAL INFORMATION | |
|---|------|
| Introduction | |
| Fuel handling precautions | |
| Diesel fuel | 7-5 |
| Specifications – Biodiesel fuel | |
| Fluids and lubricants | |
| Protective devices | |
| 1 101001110 0011000 | / 10 |
| NAME TO A NOT OUT OF THE PARTY | |
| MAINTENANCE CHART | 7.40 |
| Maintenance chart | /-12 |
| WHEN THE WARNING LAMP LIGHTS | |
| Air filter - Cleaning | 7-14 |
| Drain the fuel system water separator | 7-16 |
| | |
| | |
| EVERY 10 HOURS OR DAILY SERVICE | 7 17 |
| Checking the engine oil level | |
| Cleaning the radiators | |
| Engine coolant level | |
| Battery Observe | |
| Air conditioning filter drier – Check | |
| Drain the fuel system water separator | 1-22 |
| | |
| FIRST 50 HOURS | |
| Initial 50 hours | 7-23 |
| | |
| EVERY 50 HOURS | |
| Cab air filter | 7-24 |
| Cab air recirculation filter - Cleaning | |
| Tires and wheels | |
| Lubrication points | |
| Fuel system - Drain | 7-28 |
| Hydraulic oil level transmission - Check | 7-29 |
| Brake fluid reservoir - Check | 7-29 |
| | |
| EVERY 300 HOURS | |
| EVERT 300 HOORS Engine Oil & Filter | 7 31 |
| Fuel filters | |
| Front Axle Oil – Check | |
| Service brakes - Adjustment | 7-33 |
| Belt - Check | |
| Front axle grease fittings - Lubricate | 7-34 |
| Park brake - Adjustment | |
| Activated charcoal filter – (when installed) | |
| , | |

| EVERY 600 HOURS | - 0- |
|---|------|
| Engine air filter - Outer element | |
| Cab air filter - Replace | |
| Cab air recirculation filter | |
| Engine valve clearance | |
| Fuel injection system - Cleaning | |
| Wheel hub - Change fluid | |
| | |
| EVERY 1200 HOURS OR ANNUALLY | |
| Fuel injectors – Check | 7-42 |
| Rear axle oil reservoir | |
| Front Axle Oil - Replace | |
| Engine air filter - Inner element | |
| Autopilot valve - Replace Filter | |
| | |
| EVERY 1200 HOURS OR EVERY 2 YEARS | |
| Engine coolant replacement | 7-45 |
| g | |
| CENTED AL MAINITENIANICE | |
| GENERAL MAINTENANCE Windshield washer reservoir – Check | 7 48 |
| Work lights and lights - Adjustment | |
| Air conditioning - Check | |
| Bleeding the brake system | |
| Fuel injection system - Bleed | |
| Lamps and bulbs - Replace | |
| Battery – Check | |
| Fuel tank vent filter - Cleaning | |
| Fuse and relay box - Check Models without cab | |
| Fuse and relay box - Check Cab Models | |
| Fuse and relay box - Check Models with cab and with Auto Guidance | |
| Cab – Check | |
| Protecting the electronic and electrical systems during welding or battery charging | 7-64 |
| STORAGE | |
| Storing the machine | 7-66 |
| Preparation for use after Storage | |
| | |
| TROUBLESHOOTING | |
| | |
| SYMPTOM(S) | |
| Engine | |
| Hydraulic System | |
| Three-point hitch | |
| Cab | 8-3 |
| Electrical System | 8-3 |

| 9 SPECIFICATIONS | |
|---|-------|
| Machine overall dimensions | . 9-1 |
| Weight from the machine | . 9-3 |
| Capacities | . 9-3 |
| Engine | . 9-5 |
| Transmission | |
| Power Take-Off (PTO) | . 9-5 |
| Steering general specifications | . 9-5 |
| Hydraulics | |
| Three-point hitch | . 9-6 |
| Brakes | |
| Electrical system | |
| Radio (if equipped) | . 9-7 |
| 10 ACCESSORIES | |
| Rear license plate holder - Localization overview | 10_1 |
| real notice plate holder Localization overview | 10 1 |

1 - GENERAL INFORMATION

NOTE 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 machine, and for its maintenance. Read this manual carefully. Your machine is designed to be used in normal and customary agricultural applications.

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

The specification are provided for your information and guidance. For further information concerning your machine and equipment, consult your CASE IH dealer.

All data given in this book is subject to production variations. Dimensions and weight are approximate only. The illustrations do not necessarily show machines in standard condition or imply that these features are available in all countries. For exact information about a particular machine, see your CASE IH dealer.

Your machine 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 machine was carefully inspected, both at the factory and by your dealer, to ensure that it reaches you in optimum condition. To keep it in this condition and guarantee that its operation is problem-free, it is important that routine service procedures, as specified in the maintenance table on page **7-12**, are carried out at the recommended intervals.

Operator's manual storage

The operator's manual supplied with your machine is an important source of information and should be stored safely.

The manual has been written specifically for your tractor so it is important that you make a note of the print number and issue date, which can be found on the cover. In the event the manual is lost or damaged it can be replaced with the correct version.

About this manual

This manual gives information for use of your machine, as intended and under the conditions foreseen by the manufacturer during normal operation and routine service and maintenance.

Read and understand it; keep it in good condition and always keep it in a safe place.

This manual does not contain all the information related to periodical service, converting and repairs to be carried out by CASE IHprofessional service personnel.

The Table of Contents page(s) are provided to have an overview of main manual's topics. A detailed alphabetic index is available at the end of this manual for locating specific items.

Normal Operation

- Normal operation means the use of the machine for the purpose intended by the manufacturer by an operator familiar with the machine and the mounted or towed equipment and complying with the information for operation and safe practices, as specified by the manufacturer in this manual and by the decals on the machine and the equipment.
- Normal operation includes preparing and storing the machine, swinging components into and out of work position, adding and removing ballast, and connecting and removing accessories.
- Normal operation includes adjusting and setting up the machine and equipment, for the specific condition of the field and/or the crop.

Routine service

Routine servicing and maintenance means activities
that must be performed daily by an operator familiar
with the machine's characteristics and in compliance
with the routine servicing information and with safe
practice, as specified by the manufacturer in this
manual and by decals on the machine, in order to
keep it working properly. The routine service includes
activities such as filling up, cleaning, washing, topping
up fluid, applying grease, and replacing consumable
items such as bulbs.

Converting, periodical service and repair

- Periodic servicing means activities that must be performed at given intervals by trained personnel familiar with the machine's characteristics and in compliance with the periodic servicing information and with safe practice, as specified by the manufacturer in this manual and in other company literature, in order for the machine to keep to its expected working lifespan.
- Conversion means activities that must be performed by professional service personnel familiar with the machine's characteristics and in compliance with the conversion information, as specified by the manufacturer in this manual, as well as with other company instructions or literature, in order to prepare the machine for a specific configuration.

Repair means activities that must be performed by professional service personnel familiar with the machine's characteristics and in compliance with the repair information, as specified by the manufacturer in the dealer's manual, in order to restore the machine to correct working order following a fault or reduced performance.

Cleaning the machine

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

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

Safety

The pages in Section 2 list the precautions to be observed to ensure your safety and the safety of others. Read the safety precautions and follow the advice offered before operating the machine.

Replacement parts

It should be pointed out that genuine parts have been examined and approved by the Company. Fitting and/or

using non-genuine products could have negative effects on the design characteristics of your machine, thereby affecting its safety. The Company is not liable for any damage caused by the use of 'non-genuine' parts and accessories. Only genuine replacement parts should be used. The use of non-genuine parts may invalidate legal approvals associated with this product.

Making any modifications to the machine is prohibited, without specific written authorization from the manufacturer's After Sales Service department.

Warranty

Your machine is warranted according to legal rights in your country and the contractual agreement with the selling dealer. No warranty shall, however, apply if the machine has not been used, adjusted and maintained as per the instructions given in this operator's manual.

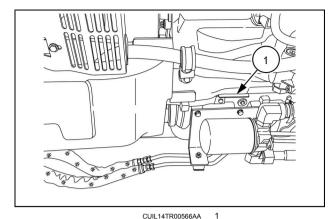
Using Biodiesel

Before using biodiesel in your machine, refer to the information on page **7-6** as regards storing and using biodiesel.

Engine identification

The engine identification code is stamped on the left-hand side of the engine. Make a note of the code in the space below.

Engine identification code:



Product identification plate

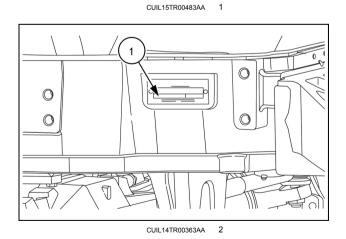
Your machine and its main components are identified by codes. These codes facilitate identification of your machine. You must give them to your CASE IH dealer when requesting replacement parts or servicing. The following information indicates where the identification codes are stamped.

Machine identification plate

The plaque with the Product Identification Number (PIN) is on the right-hand side of the front axle support.



Identification plate (1) on the front axle support.



A plate in the rear of the cab/platform provides information about the Rollover Protective Structure (ROPS) and the maximum permissible weight of the machine.

Figure 3: Location for models without cab.

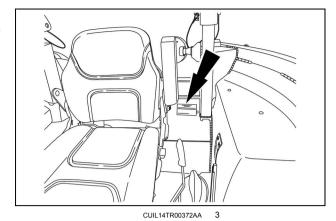
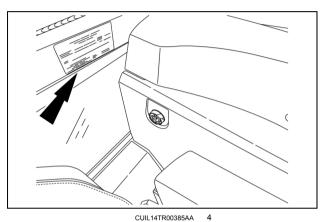


Figure 4: Location for models with cab.



Ecology and the environment

Soil, air, and water quality is important for all industries and life in general. When legislation does not yet rule the treatment of some of the substances that advanced technology requires, sound judgment should govern the use and disposal of products of a chemical and petrochemical nature.

Familiarize yourself with the relative legislation applicable to your country, and make sure that you understand this legislation. Where no legislation exists, obtain information from suppliers of oils, filters, batteries, fuels, anti-freeze, cleaning agents, etc., with regard to the effect of these substances on man and nature and how to safely store, use, and dispose of these substances. Your CASE IH dealer can also provide assistance.

Helpful hints

- Avoid the use of cans or other inappropriate pressurized fuel delivery systems to fill tanks. Such delivery systems may cause considerable spillage.
- In general, avoid skin contact with all fuels, oils, acids, solvents, etc. Most of these products contain substances that 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 you drain fluids such as used engine coolant mixtures, engine oil, hydraulic fluid, brake fluid, etc. Do not mix drained brake fluids or fuels with lubricants. Store all drained fluids safely until you can dispose of the fluids in a proper way that complies with all local legislation and available resources.
- Do not allow coolant mixtures to get into the soil. Collect and dispose of coolant mixtures properly.
- Do not open the air-conditioning system yourself. It contains gases that should not be released into the atmosphere. Your CASE IH dealer or air-conditioning specialist has a special extractor for this purpose and can recharge the system properly.
- Repair any leaks or defects in the engine cooling system or hydraulic system immediately.
- Do not increase the pressure in a pressurized circuit as this may lead to a component failure.

Battery recycling

Batteries and electric accumulators contain several substances that can have a harmful effect on the environment if the batteries are not properly recycled after use. Improper disposal of batteries can contaminate the soil, groundwater, and waterways. CASE IH strongly recommends that you return all used batteries to a CASE IH dealer, who will dispose of the used batteries or recycle the used batteries properly. In some countries, this is a legal requirement.



NHIL14GEN0038AA

Mandatory battery recycling

NOTE: The following requirements are mandatory in Brazil.

Batteries are made of lead plates and a sulfuric acid solution. Because batteries contain heavy metals such as lead, CONAMA Resolution 401/2008 requires you to return all used batteries to the battery dealer when you replace any batteries. Do not dispose of batteries in your household garbage.

Points of sale are obliged to:

- · Accept the return of your used batteries
- · Store the returned batteries in a suitable location
- Send the returned batteries to the battery manufacturer for recycling

Run in period of a new machine

Your new machine will provide long and reliable service if given proper care during the first 50-hour running-in period and if serviced at the recommended intervals.

Run-in recommendations

Avoid overloading the engine. Operating in too high a gear under heavy load may cause excessive engine overloading. Overloading occurs when the engine will not respond to a throttle increase.

Do not operate without a load on the engine. This can be as harmful to the engine as overloading. Vary the type of operation carried out so the engine is submitted to a mix of heavy and light loads during the running-in period.

Use the lower gear ratios when towing heavy loads and avoid continuous operation at constant engine speeds. Operating the tractor in too low a gear with a light load and high engine speed will waste fuel. Select the correct transmission ratio for each particular operation to save fuel and reduce engine wear.

Check the instruments and warning lights frequently and keep the radiator and oil reservoirs topped up to the recommended levels.

Fuel saving tips

- 1. Store fuel in properly cleaned, rust and contaminant free containers.
- Always fill the reservoir tank at the end of each day to reduce overnight condensation of moisture in the air, so as to avoid damage to the fuel system.
- Fuel filters should be replaced as per recommended time schedule as the filtering capacity is not retained after this specified time. It may allow harmful contamination and damage the fuel injection system. Follow the maintenance schedule to drain the water from the filters and clean the supply pump filter.
- Always use genuine fuel filters. See your CASE IH dealer.

- 5. Repair diesel leaks, if any, immediately.
- 6. Dirt particles that may enter the engine cause premature wear of lining and piston rings. This causes loss of power and excessive consumption of engine oil and fuel. Make sure that there are no leaks from the hoses and that the seal of the air filter chamber is in good condition. Keep the hose clamps tightened.
- 7. Follow the run-in procedure provided in this manual to achieve optimal performance of your tractor.
- 8. If you keep the engine running at idle speed unnecessarily for long periods, this wastes fuel.
- Do not rest your foot on the clutch pedal as this will cause clutch slippage, loss of engine power and increased fuel consumption. Maintain the specified play in the clutch pedal.
- Always drive the tractor in the proper gear. Use a lower gear to drive down a slope and use the brakes sparingly.
- 11. Maintain the proper tire pressures for field work as well as for roadwork. Refer the tyre pressure chart given in this manual. Worn out tyres cause wheel slippage and waste fuel. Either retread or discard the full set of tires if they are very worn. Adhere to tyre ballasting as and when required to reduce wheel slippage and fuel consumption.
- Always use the appropriate implements to reduce diesel fuel wastage. Implements should be maintained in good condition, as usage of worn out implements will waste fuel.
- 13. Always plough length wise and plan your field run to reduce fuel consumption. Adjust the wheel gauge to suit the implement and avoid overlap when you work in the field.
- Adjust the proper engine rotation when you work with equipment powered by Power Take-Off (PTO). If you select the wrong rotation, it will result in excess fuel consumption.



Our support email: ebooklibonline@outlook.com