#### **ORIGINAL INSTRUCTIONS**

Rowtrac<sup>™</sup> 370 Rowtrac<sup>™</sup> 420 Rowtrac<sup>™</sup> 470 Rowtrac<sup>™</sup> 500 Steiger® 370 Steiger® 420 Steiger® 470 Steiger® 500 Steiger® 540 Steiger® 580 Steiger® 620 Quadtrac® 470 Quadtrac® 500 Quadtrac® 540 Quadtrac® 580 Quadtrac® 620 Tier 4B (final) **Tractor** 

PIN ZHF3 I 1500 and above

# **OPERATOR'S MANUAL**



# Contents

	ENERAL INFORMATION	
	ote to the owner	
	tended use	
	NH Industrial America LLC technical manuals	
Fle	ectro-Magnetic Compatibility (EMC)	1-5
	oduct identification	
	perator's manual storage on the machine	
	achine orientation	
	omponent location	
Se	elective Catalytic Reduction (SCR) system	. 1-14
2 SA	AFETY INFORMATION	
	afety alert symbol and signal word definition	2-1
	oposition 65	
	afety rules	
	otective structures	
	nergency exit	
	ticulation cylinder locking blocks	
	afety signs	
A	ccess to operator's platform  Cab access/exit	3-1
0	PERATOR'S SEAT	
	Overview	
	Control identification	3-4
IN	ISTRUCTOR'S SEAT	
	Overview	3-7
F	ORWARD CONTROLS	
	Steering column controls	
	Front console controls	
	Pedal controls	
	Ventilation Front sun shade	
<b>P</b> I	IGHT-HAND SIDE CONTROLS	
T\	Armrest console	3-17
	Multi-function handle	. 3-18
	Control panel	
	Remote valve controls	. 3-28
	Joystick	. 3-29

Armrest compartment	
REARWARD CONTROLS Rear sun shade	3-33
OVERHEAD CONTROLS	
Overview	
Automatic Temperature Control (ATC)	
Automatic Temperature Control (ATC) operation	
Center panel controls	
Radio (if equipped)	
Interior and access lights	
Interior rear-view mirror	3-48
EXTERIOR CONTROLS	
Exterior hitch control	
Outside extendable mirrors	3-49
INSTRUMENT CLUSTER	
Overview	3-50
Gauges	3-50
Status and warning icons	
Upper display	
Diesel Exhaust Fluid (DEF)/AdBlue® level	
Diesel Exhaust Fluid (DEF)/AdBlue® display warnings	
Lower display	
Keypad	
Instrumentation - setup menu	
Instrumentation - adjust menu	
Performance instrumentation	3-83
4 OPERATING INSTRUCTIONS	
COMMISSIONING THE UNIT  Before starting the engine	1 1
before starting the engine	4-1
STARTING THE UNIT	
Normal engine starting	4-5
Cold temperature operation	
STOPPING THE UNIT	
Stopping the machine and the engine	4-9
MOVING THE UNIT	
Powershift transmission	
Selective Catalytic Reduction (SCR) system	4-18
Electronic steering system	4-20

Automatic Productivity Management (APM™) 4-2	1:
Differential lock system	1
Power management	5
Constant engine speed 4-3	
Electronic end-of-row system4-3	8
Engine compression brake (if equipped)	
5 TRANSPORT OPERATIONS	
ROAD TRANSPORT	
Tractor warning lamps and Slow Moving Vehicle (SMV) symbol 5-	
Wide transport marker light 5-	
Operating the tractor warning lamps 5-	
Safe transport speed 5-	
Implement warning lamps and Slow Moving Vehicle (SMV) symbol 5-	
Safety chain 5-	.7
SHIPPING TRANSPORT	
Securing the tractor for shipping 5-	Ω
Securing the tractor for shipping	·O
RECOVERY TRANSPORT	
Safety rules 5-	.9
Towing the tractor 5-1	
6 WORKING OPERATIONS	
GENERAL INFORMATION	
Product overview 6-	-1
REAR POWER TAKE-OFF (PTO)	
Power Take-Off (PTO) safety rules 6-	-2
Connecting the Power Take-Off (PTO) 6-	
Power Take-Off (PTO) operation 6-	
THREE-POINT HITCH	
Identification 6-	
Link adjustment6-	
Sway block adjustment	
Mechanical float adjustment	
Hitch quick coupler - Category IVN	
Transport lock	
Hitch operation	
Rear remote hitch switch	
Slip control operation	
Olip Collitol Operation	.J
DRAWBARS AND TOWING ATTACHMENTS	
Safety rules	27

	Drawbar capacities	
	Scraper operation 6	)-32
TRAI	LER BRAKE COUPLER	
	Safety rules	
AUXI	LIARY POWER CONNECTIONS  External power and lighting connections	S-34
	Cab power connections	
HYDI	RAULIC REMOTE CONTROL VALVES	
	Valve couplers and connections	
	Hydraulic remote valve transport lock	
	Right-hand armrest controls	
	Operating the lever controls	
	Operating the Joystick control	
	Remote valve display screens	
	Auto auxiliary mode operation	
BALL	ASTING THE TRACTOR Guidelines 6 Weights, cast metal and liquid 6 Wheel slip 6	3-71
FROI	NT AND REAR AXLE	
	Tire safety	
	Wheel installation 6	
	Wheel tread settings6	
	Pre-conditioning rubber tracks 6-	102
7 MAIN	TENANCE	
	ERAL INFORMATION	
	vicegine hood	
	gine side shields	
	ening the right-hand service door	
	ttery access	
	wer cut-off switch	
	ing the fuel tankel tank capacityel tank capacity	
	ing the Diesel Exhaust Fluid (DEF)/AdBlue® tank	
	esel Exhaust Fluid (DEF)/AdBlue® tank capacity	

Tire and rim service  Tractor jacking points	
Lubricants and capacities	
Engine oils	
General specification - Diesel fuel	
General specification - Biodiesel fuels	
Organic Acid Technology (OAT) coolant	
Electrical specifications	
Battery system	
Auxiliary battery connections	
Maintenance chart notes	
Maintenance chart notes	7-20
MAINTENANCE CHART	
Maintenance chart	7-29
At warning message display	
Air cleaner	7_31
Primary fuel filter	
Fuel supply restricted (13L engines only)	
3 3,	
Every 10 hours or daily	
Engine oil level	7-33
Wheel bolt torque	
Weight bolt torque	
Transmission oil level	
Hydraulic and axle oil level	
Engine coolant level	7-36
Secondary cooling system level	7-36
Fuel level	
Diesel Exhaust Fluid (DEF)/AdBlue® level	
General tractor inspection	7-38
Even, 50 hours	
Every 50 hours	7 00
Fuel tank and fuel filter	
Articulation hinge - Upper front	
Oscillation hinge - Rear	
Articulation hinge - Lower	
Articulation cylinder - Front, left hand, right hand	
Articulation cylinder - Rear, left hand and right hand	
Hitch cylinder pin - Upper (if equipped)	
Hitch cylinder pin - Lower (if equipped)	
Hitch rockshaft - Left-hand and right hand	
Hitch lift links and top link	
Driveshaft carrier bearing	<i>1</i> -44
First 100 hours	
Powershift transmission clutches	7-45

Every 600 hours	
Engine oil and filter (see Note 3)	7-51
Engine fuel filter (see Note 4)	
Engine fuel pre-filter	
Fuel tank vent (see Note 6)	
Battery electrolyte level	
Cab air filter, outside (see Note 1)	
Air tubing - Éngine	
Alternator - Water pump belt	
Power Take Off (PTO) carrier bearing	
Power Take Off (PTO) slip joint	
Radiator and coolers	
Saddle tanks	7-67
Cab recirculation filter	7-67
Every 600 hours or yearly	
Diesel Exhaust Fluid (DEF)/AdBlue® tank filter (if equipped)	7-68
Every 1000 hours or yearly	
Powershift transmission clutches	7 70
Powersniπ transmission clutches	
Every 1200 hours	
Engine crankcase breather filter	7-71
Transmission oil and filter (see Note 4)	7-75
Transmission vent	
Engine air filters (see Note 2)	7-77
Diesel Exhaust Fluid (DEF)/AdBlue® supply module filter	7-83
Door lock and hinges	7-86
Every 1800 hours	
	7 97
Hydraulic oil and filters (see note 4)	
Cab air filter, outside (see Note 1)	
Engine air tubing	
Lingine all tubing	
Every 2400 hours	
Engine coolant drain and flush	7-92
Secondary cooling system drain and flush	7-95
Idler and roller wheel oil (see Note 5)	7-98
As required	
Vehicle fire prevention	7 00
Remote valve couplers	
Pressure cooling system hoses	
Hydraulic system hoses	
riyaradilo əyəlciri rioəcə	<i>i</i> -100

Tire pressure	7-100
Engine fan belt	7-101
	7-101
	rque
<u> </u>	7-106
•	7-108
<u> </u>	ation
	g light
	7-121
	7-123
	7-124
Interior lights	7-125
Fuse and relay location	10
	7-128
ruse and relay locations	
STORAGE	
Placing in storage	7-136
Removing from storage	
8 TROUBLESHOOTING	
	JTION
FAULT CODE RESOLU	JTION 8-1
FAULT CODE RESOLU	
FAULT CODE RESOLU Fault code retrieval	
FAULT CODE RESOLUTION Fault code retrieval	8-1
FAULT CODE RESOLU Fault code retrieval  ALARM(S)  Display warnings	
FAULT CODE RESOLU Fault code retrieval  ALARM(S)  Display warnings	8-1
FAULT CODE RESOLU Fault code retrieval  ALARM(S)  Display warnings	
FAULT CODE RESOLU Fault code retrieval  ALARM(S)  Display warnings	
FAULT CODE RESOLUTIONS  Fault code retrieval  ALARM(S)  Display warnings  Transmission disen  9 SPECIFICATIONS	
FAULT CODE RESOLUTIONS  Fault code retrieval  ALARM(S)  Display warnings  Transmission disen  9 SPECIFICATIONS  Engine specifications	
FAULT CODE RESOLUTE Fault code retrieval  ALARM(S) Display warnings Transmission disen  9 SPECIFICATIONS Engine specifications Power train and hydraulics	
FAULT CODE RESOLUTE Fault code retrieval  ALARM(S) Display warnings Transmission disen  9 SPECIFICATIONS Engine specifications	8-1
FAULT CODE RESOLUTE Fault code retrieval  ALARM(S) Display warnings Transmission disen  9 SPECIFICATIONS Engine specifications Power train and hydraulics Lubricants and capacities Speed charts	8-1 gages; neutral icon flashes 8-15 
FAULT CODE RESOLUTE Fault code retrieval  ALARM(S) Display warnings Transmission disen  9 SPECIFICATIONS Engine specifications Power train and hydraulics Lubricants and capacities Speed charts Vehicle dimensions and shippin	8-1
FAULT CODE RESOLUTE Fault code retrieval  ALARM(S) Display warnings Transmission disen  9 SPECIFICATIONS Engine specifications Power train and hydraulics Lubricants and capacities Speed charts Vehicle dimensions and shippin	8-1  8-3 gages; neutral icon flashes 8-15  9-1 9-3 9-6 9-7 ng weight 9-13
FAULT CODE RESOLUTE Fault code retrieval  ALARM(S) Display warnings Transmission disen  9 SPECIFICATIONS Engine specifications Power train and hydraulics Lubricants and capacities Speed charts Vehicle dimensions and shipping Maximum operating weight	8-1  8-3 gages; neutral icon flashes 8-15  9-1 9-3 9-6 9-7 ng weight 9-13
FAULT CODE RESOLUTE Fault code retrieval  ALARM(S) Display warnings	8-3 gages; neutral icon flashes 8-15  9-1 9-3 9-6 9-7 ng weight 9-13 9-17
FAULT CODE RESOLUTE Fault code retrieval  ALARM(S)  Display warnings  Transmission disen  9 SPECIFICATIONS  Engine specifications  Power train and hydraulics  Lubricants and capacities  Speed charts  Vehicle dimensions and shipping Maximum operating weight  10 ACCESSORIES  Farming system displays	8-3 gages; neutral icon flashes 8-15  9-1 9-3 9-6 9-7 ng weight 9-13 9-17
FAULT CODE RESOLUTE Fault code retrieval  ALARM(S) Display warnings	8-3 gages; neutral icon flashes 8-15  9-1 9-3 9-6 9-7 ng weight 9-13 9-17

### 1 - GENERAL INFORMATION

#### Note to the owner

This manual contains important information about the safe operation, adjustment, and routine maintenance of your tractor. The manual is divided into ten chapters as outlined on the Contents page. Refer to the index at the end of this manual for locating specific items about your tractor.

Do NOT operate or permit anyone to operate or service this machine until you or the other persons have read this manual. Use only trained operators who have demonstrated the ability to operate and service this machine correctly and safely.

Store this operator's manual in the manual compartment behind the operator's seat in the vehicle. Make sure this manual is in good condition. Contact your dealer to obtain additional manuals. Your dealer will instruct you in the general operation of your new equipment. 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. Go to www.caseih.com.

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!

#### Intended use

Steiger®, Quadtrac®, and Rowtrac™ series tractors with standard equipment and authorized attachments, are intended to be used for customary farming, land leveling and related agriculture operations (intended use). This tractor is not intended for forestry use or for use with loaders. The cab on this tractor does not offer sufficient protection for forestry work.

Installation of utility (dozer) blades, tile plows, front loaders or push bars on the tractor is not approved. 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 Industrial 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 manufacture accepts no liability for

any damage or injury resulting from this misuse and these risks must be born solely by the user.

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

#### CNH Industrial America LLC technical manuals

Manuals are available from your dealer for your machine. Your dealer can expedite your order for operator manuals and parts catalogs.

Always give the machine name, model and Product Identification Number (PIN) of your machine so your dealer can provide the correct manuals for your machine.

The company is continually striving to improve its products and therefore reserves the right to make improvements and changes when it becomes practical and possible to do so, without incurring any obligation to make changes or additions to the equipment sold previously. All data given in this manual is subject to production variations.

**NOTICE:** Operating and service messages displayed on the electronic operating panel may vary from what is shown in the manual. If this occurs, heed the latest instructions on the electronic operating panel.

Dimensions and weights are approximate only and the illustrations do not necessarily show the machine in standard condition. For exact information about any particular machine, please consult your dealer.

#### Manual scope and required training level

This manual provides information on the intended use of your tractor under the conditions foreseen by the manufacturer during normal operation, routine service and maintenance and periodic service and maintenance.

Normal operation is use of the tractor for the purpose intended by the manufacturer by an owner/operator who is familiar with the tractor and the mounted or towed equipment, and who is complying with the information on operation and safe practices, provided in this manual and by the decals on the tractor and the equipment.

Normal operation includes such actions as preparing the tractor for storage and removing the tractor from storage, adding or removing ballast, connecting and disconnecting mounted or towed equipment, raising and lowering components into or out of work position, adjusting tractor settings for specific field or crop settings, etc.

Routine service and maintenance are those actions which must be performed daily to maintain proper tractor function by an owner/operator who is familiar with tractor characteristics, and who is complying with the information on routine service and safe practices in this manual and in the decals on the tractor.

Routine service and maintenance includes such actions as fueling, cleaning, washing, topping off fluid levels, greasing, and replacing consumable articles such as lamp bulbs.

Periodic service and maintenance are those actions which must be performed at regularly defined intervals

to maintain proper tractor function by an owner/operator who is familiar with tractor characteristics, and who is complying with the information on periodic service and safe practices in this manual and in the decals on the tractor.

Periodic service and maintenance includes such actions as checking, cleaning and changing air filters, changing engine oil and filters, changing transmission oil and filters, changing front axle and wheel hub fluids, changing coolant, etc.

Some actions in the periodic service and maintenance chart are beyond the knowledge and skills of the owner/operator: for example, engine valve adjustment, fuel injector nozzles. For these actions, the manual instructs the owner/operator to have the action performed by their authorized dealer.

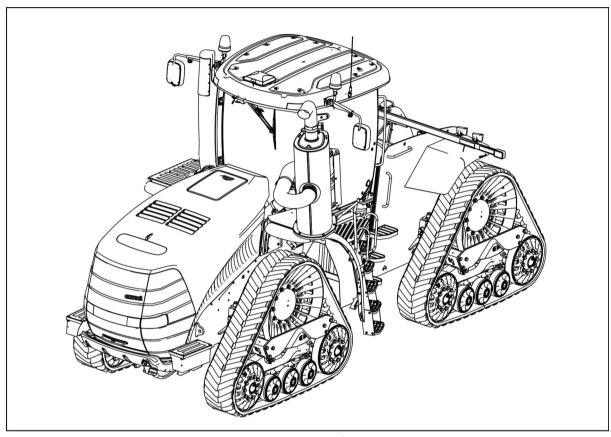
This manual does not contain all the information related to periodical service and maintenance, converting and repairs to be carried out by professional service personnel. These actions require special facilities, technical skills, and/or tools which are not supplied with the machine.

Converting is changing the tractor configuration for a specific crop or soil condition and requires rebuilding or adding components to the vehicle: for example, installation of dual wheels. Repairing is the disassembly and assembly of the tractor to restore proper operation after a component failure or degradation of performance.

### Your tractor

This manual covers the **Steiger**® 370, 420, 470, 500, 540, 580, 620, **Rowtrac™** 370, 420, 470, 500, and **Quadtrac**® 470, 500, 540, 580, 620 models.

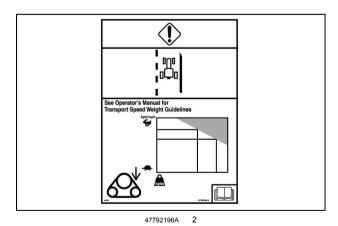
References are made within this manual of "row crop models" and "high power models". Row crop models include **Steiger**® 370, 420, 470, and all **Rowtrac™** models. High power models include **Steiger**® 500, 540, 580, 620 and all **Quadtrac**® models.

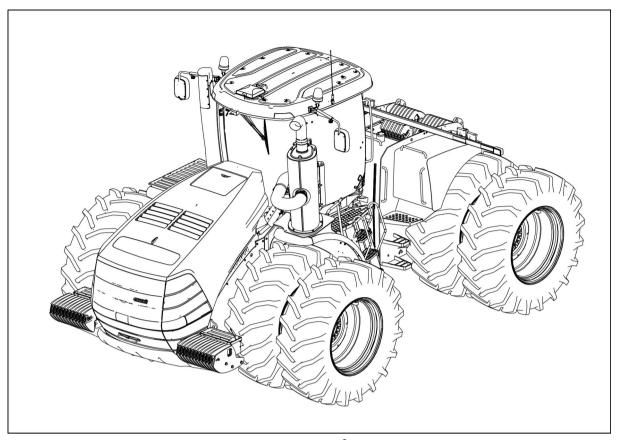


RAIL15TR00819FA 1

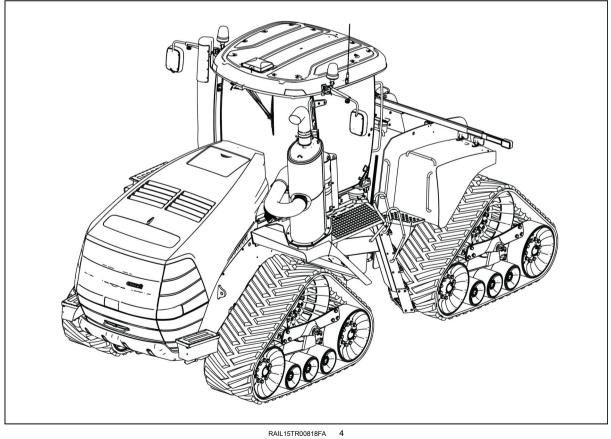
Rowtrac<sup>TM</sup> models

On **Rowtrac™** models, refer to information starting on page **9-7** for transport speed weight guidelines.





RAIL13TR04784FA 3
Steiger® models



Quadtrac® models

## Electro-Magnetic Compatibility (EMC)

Interference may arise as a result of add-on equipment that 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:

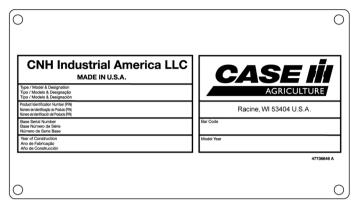
- The maximum power of emission equipment (radio, telephones, etc.) must not exceed the limits imposed by the national authorities of the country where you use the machine
- The electro-magnetic field generated by the add-on system should not exceed **24 V/m** at any time and at any location in the proximity of electronic components
- The add-on equipment must not interfere with the functioning of the on board electronics

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

## Product identification

#### Tractor model and product identification number

Write your model number, Product Identification Number (PIN), and serial number of major components on the lines provided. If needed, give these numbers to your dealer when you need parts or information for your machine.

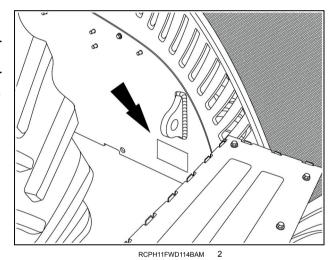


RAIL14TR02261EA 1

Model:

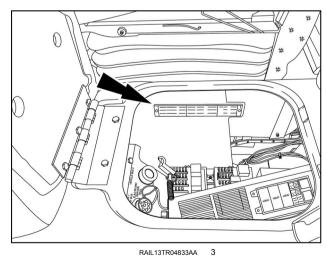
PIN:

**NOTE:** Located on the front right-hand side plate in front of front axle.



# Roll Over Protective Structure (ROPS) serial number

NOTE: Located under the instructional seat.





Our support email: ebooklibonline@outlook.com