

FARMALL® 50A
FARMALL® 60A
FARMALL® 70A
Tractor

OPERATOR'S MANUAL

Part number 47752713
1st edition English
May 2015



Contents

1 GENERAL INFORMATION

Note to the owner.....	1-1
Electro-magnetic compatibility (EMC).....	1-3
Product Identification Number (PIN).....	1-4
Machine orientation.....	1-6
Exhaust Gas Recirculation (EGR) - Diesel Particulate Filter (DPF) exhaust treatment - Product overview	1-7

2 SAFETY INFORMATION

Personal safety	2-1
Safety rules	2-2
Proposition 65	2-9
Ecology and the environment	2-10
Safety signs	2-11
Instructional signs	2-21

3 CONTROLS AND INSTRUMENTS

ACCESS TO OPERATOR'S PLATFORM

Before operating.....	3-1
-----------------------	-----

OPERATOR'S SEAT

Operator's seat	3-1
Seat belt	3-2

FORWARD CONTROLS

Instrument cluster - Localization overview	3-3
Hand controls and switches	3-8
Clutch pedal	3-11
Brake pedals - Control identification.....	3-12
Transmission - Control identification	3-13
Foot throttle control - Control identification	3-14

LEFT-HAND SIDE CONTROLS

Transmission - Control identification	3-15
Four-Wheel Drive (4WD)	3-16
Power Take-Off (PTO) - Control identification	3-17

RIGHT-HAND SIDE CONTROLS

Parking brake.....	3-18
Differential lock pedal.....	3-19
Transmission - Control identification	3-20

DISPLAY SETTINGS

Instrument cluster Analog-Digital Instrument Cluster (ADIC) - Program	3-21
---	------

Adjusting the dashboard/display brightness	3-22
Activating/deactivating buzzer	3-24
Programming maintenance work	3-25
Resetting the oil change counter	3-27
Viewing error codes	3-28

4 OPERATING INSTRUCTIONS

STARTING THE UNIT

Starting the tractor	4-1
----------------------------	-----

STOPPING THE UNIT

Shut off the engine	4-6
---------------------------	-----

MOVING THE UNIT

Roll Over Protective Structure (ROPS) frame - Basic instructions	4-6
--	-----

5 TRANSPORT OPERATIONS

ROAD TRANSPORT

Towing attachments	5-1
--------------------------	-----

RECOVERY TRANSPORT

Towing the tractor	5-2
--------------------------	-----

6 WORKING OPERATIONS

GENERAL INFORMATION

Field operation	6-1
-----------------------	-----

POWER TAKE OFF (PTO)

Two-speed rear Power Take-Off (PTO) - Grouped Safety Message	6-1
Attaching Power-Take Off (PTO) driven equipment	6-2
Power Take Off (PTO)	6-3

THREE POINT LINKAGE

Three-point linkage	6-6
Attaching three-point equipment	6-6
Detaching three-point equipment	6-8
Lift rods, lower links and top link	6-9

HYDRAULIC SYSTEM

Hydraulic systems - Operating	6-11
-------------------------------------	------

WHEEL TRACK ADJUSTMENT

Wheel tread settings	6-14
----------------------------	------

BALLASTING AND TIRES

Ballasting and tires	6-19
----------------------------	------

7 MAINTENANCE

GENERAL INFORMATION

Lubrication and maintenance general information	7-1
Refueling the tractor	7-3
Fuel saving tips for optimum performance	7-4
Biodiesel fuel	7-6
Machine shields and guards - Basic instructions	7-7
Consumables	7-8
Protecting the electrical system during charging or welding	7-9
General battery maintenance	7-10

MAINTENANCE CHART

Frame - Maintenance chart	7-11
---------------------------------	------

Every 10 hours of operation or daily

Engine oil level	7-13
Engine cooling system	7-13
Steering oil reservoir level	7-14

After the first 50 hours of operation

Clutch pedal free play	7-15
Brake pedal free play	7-15
Wheels and tires	7-15
Hydraulic oil filter	7-15

Every 50 hours

Clutch pedal free play	7-16
Brake pedal free play	7-16
Wheels and tires	7-17
Transmission oil level or hydraulic oil level	7-17
Front axle differential oil level	7-18
Front wheel hub oil level (4WD)	7-18
Air cleaner	7-19

Every 150 hours

Battery electrolyte level	7-20
---------------------------------	------

Every 300 hours

Engine oil and filter	7-20
Engine air cleaner outer element	7-22
Hydraulic oil filter	7-26

Power Take-Off (PTO) clutch	7-27
-----------------------------------	------

Every 600 hours

Transmission breather	7-28
Front wheel bearing - Two-Wheel Drive (2WD)	7-28
Fuel injectors - servicing	7-29
Fuel filter replacement	7-30
Hydraulic oil filter	7-31

EVERY 900 HOURS

Air cleaner restriction indicator	7-32
---	------

Every 1200 hours

Transmission/hydraulics oil level	7-32
Fuel tanks - Cleaning	7-33
Engine coolant	7-34
Steering - Change fluid	7-35
Four-Wheel Drive (4WD) front axle differential oil - Change fluid	7-36
Four-Wheel Drive (4WD) front axle hub oil - Change fluid	7-36
Air filter	7-37
Power Take-Off (PTO) clutch	7-39

Every 1800 hours

Fan and drive - Replace	7-40
-------------------------------	------

Every 4000 hours

Alternator - Replace	7-40
----------------------------	------

As required

Lubrication points	7-41
Headlights	7-44
Fuses	7-45
Bulbs	7-47

STORAGE

Tractor storage	7-48
-----------------------	------

8 TROUBLESHOOTING

SYMPTOM(S)

Viewing error codes	8-1
Engine - Troubleshooting	8-1
Electrical systems - Troubleshooting	8-4
Hydraulic systems - Troubleshooting	8-5
Brakes and controls - Troubleshooting	8-6
Error code identification	8-7

Fault code of digital instrument.....	8-8
---------------------------------------	-----

9 SPECIFICATIONS

General specification	9-1
Tractor dimensions - General	9-7

10 ACCESSORIES

Front-end loader.....	10-1
Control valve joystick - Overview.....	10-2

11 FORMS AND DECLARATIONS

Pre-delivery report - Owner's copy	11-1
Pre-delivery report - Dealer's copy	11-2

1 - GENERAL INFORMATION

Note to the owner

This manual contains information concerning the adjustment and maintenance of the tractors. 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 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 tractor. Case IH Max Service is also available. Call 1-877-4CASEIH (1-877-422-7344) or email maxservice.na@cnh.com.

Your CASE IH dealer carries a complete line of genuine CASE IH 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

Attachment model

Attachment model

	<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

Improvements

CNH Industrial N.V. 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.

Intended use

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 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.

ATTENTION: *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!*

Operator's age

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

WARNING

IMPROPER OPERATION OF THIS MACHINE CAN CAUSE DEATH OR SERIOUS INJURY.

MAKE SURE THAT EVERY OPERATOR:

-is instructed in the safe and proper use of this machine.

-reads and understands the operator's manual for this machine.

-reads and understands ALL safety signs on the machine.

Failure to comply could result in death or serious injury.

W0188A

Read and thoroughly understand this manual before operating this machine. If you are an inexperienced operator, study this manual and receive operating instructions from an experienced operator. Your dealer can assist you in learning machine operation and show you proper operating procedures. Keep this manual readily available, preferably with the machine. If the original manual is damaged, order a new one from your dealer.

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:

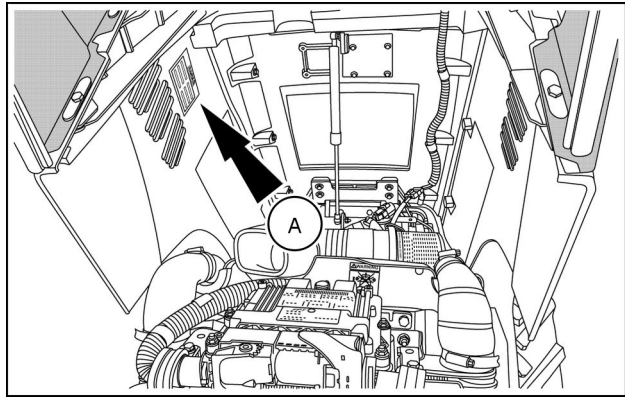
- The maximum power of emission equipment (radio, telephones, etc.) must not exceed the limits imposed by the national authorities of the country where you use the machine
- The electro-magnetic field generated by the add-on system should not exceed **24 V/m** at any time and at any location in the proximity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

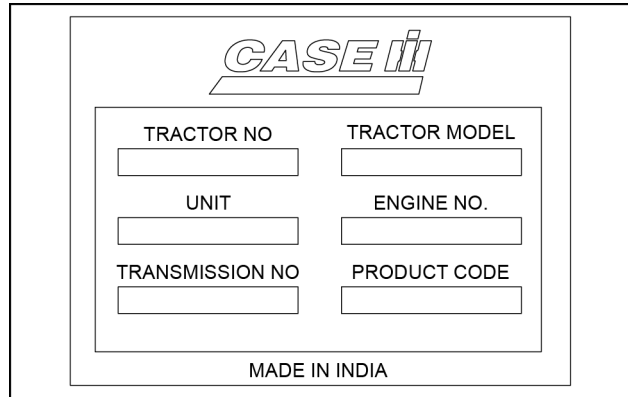
Product Identification Number (PIN)

Product Identification Number (PIN) plate

The tractor identification decal (A) is located on the right side under the front hood. The first line represents tractor serial number and model while the second line represents unit code and engine serial number followed by transmission serial number. Record the information that is on the decal for quick reference.



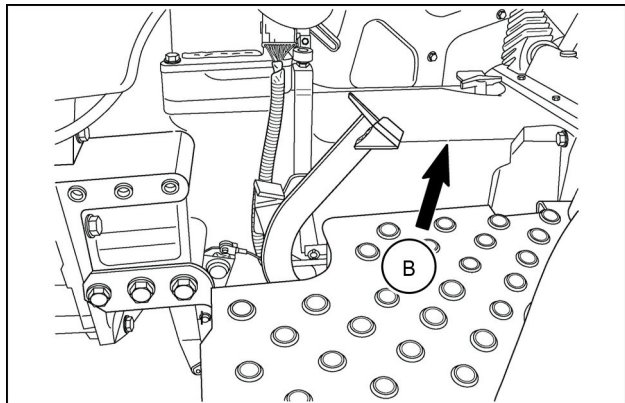
GNIL14TR00586AA 1



GNIL14TR00587AA 2

Product identification number location (Stamped)

The tractor serial number, unit code, and engine number are stamped on the top of the transmission housing at (B). These numbers are also repeated on the product identification number (PIN) plate reproduced above.
Tractor PIN.....

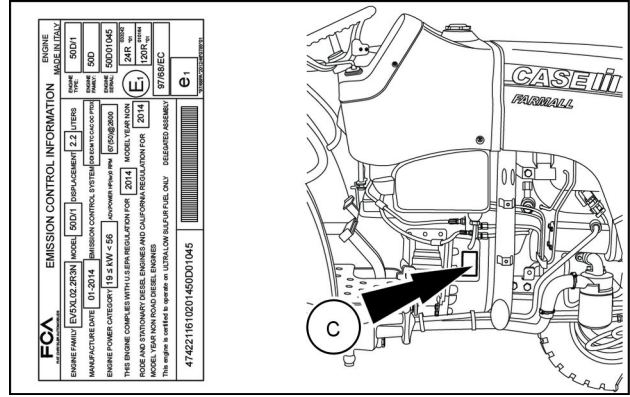


86090118NNN 3

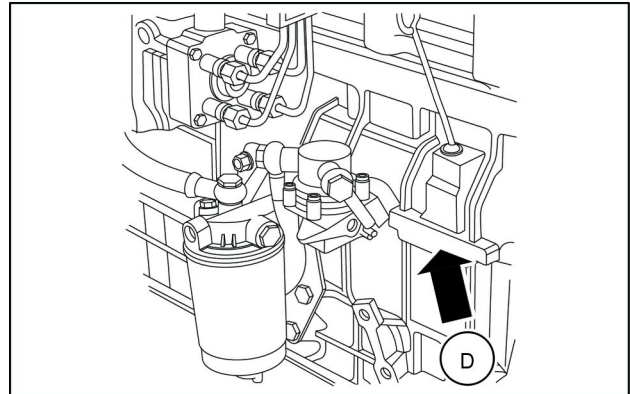
Engine Product Identification Number (PIN)

The engine PIN (C) placed on right-hand side of the engine flywheel block, just below the fuel tank. Engine PIN is stamped on the left-hand side (D) of the engine crankcase.

Engine PIN.....



GNIL14TR00510AB 4

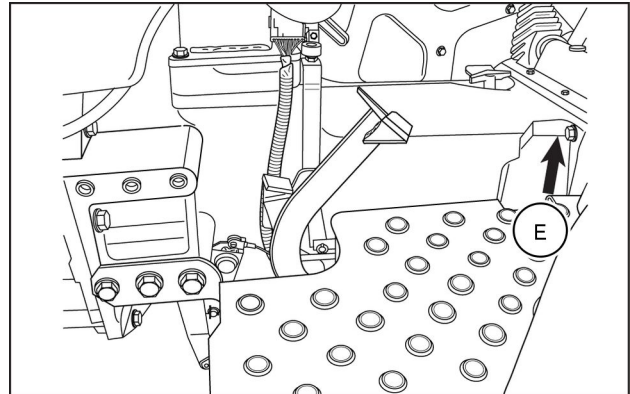


GNIL14TR00530AA 5

Transmission Product Identification Number (PIN)

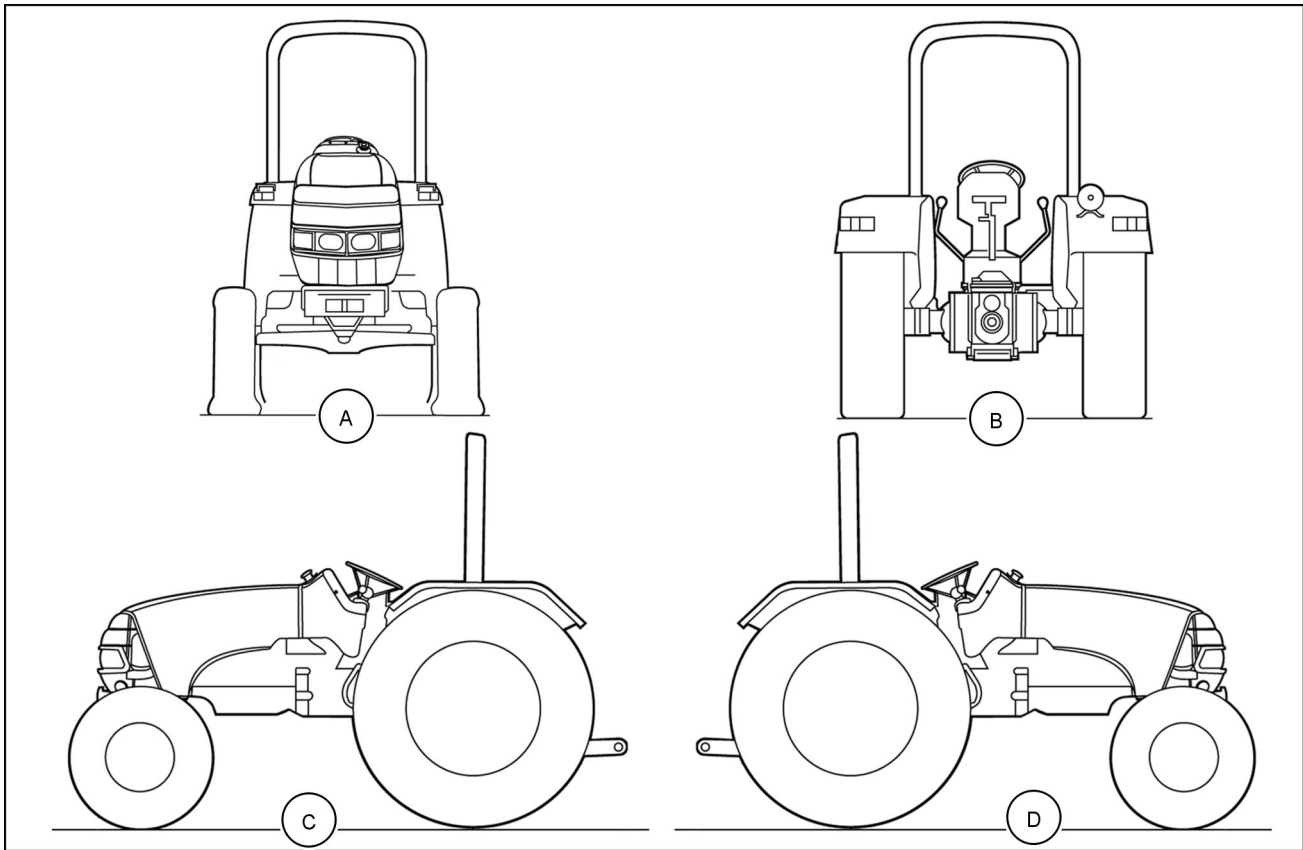
The transmission PIN (E) is stamped on left-hand side of transmission housing below driver seat. This information is repeated on tractor identification decal. Record the transmission PIN for quick reference.

Transmission PIN.....



NHIL13CT00547AA 6

Machine orientation



NHIL13CT00731FA 1

(A) Front

(C) Left-hand side

(B) Rear

(D) Right-hand side

Exhaust Gas Recirculation (EGR) - Diesel Particulate Filter (DPF) exhaust treatment - Product overview

What is Exhaust Gas Recirculation (EGR)?

Your CASE IH machine is equipped with additional components to comply with national and local exhaust emissions requirements. EGR works by recirculating a portion of the engine exhaust gasses back into the engine combustion chamber to lower combustion temperatures.

The main components of the EGR system include:

- EGR valve
- Diesel Oxidation Catalyst (DOC)
- Particulate Matter Catalyst (PM Cat)
- Exhaust gas temperature sensors
- Throttle valve actuator

What is a Particulate Matter Catalyst (PM Cat)?

A PM Cat is a high efficiency flow through filter that works based on an open flow design to allow exhaust gases to pass through. It is made up of alternating layers of corrugated metal foil on a porous metal fleece. The filter captures particulate matter long enough for catalytic oxidation. By design, a PM Cat cannot plug up, creating no risk of an uncontrolled regeneration.

How does it work?

When exhaust enters the DOC, many chemical reactions occur. Nitric Oxide (NO) gas enters the DOC to be oxidized to nitrogen dioxide (NO₂). When it enters the particulate matter catalyst, NO₂ oxidizes the particulate matter, creating a continuous, efficient, passive regeneration. This reaction occurs best between **220 - 480 °C (428 - 896 °F)**.

What if the exhaust isn't warm enough?

A special engine management system has been designed for off road applications to maintain the efficiency of the particulate matter catalyst, even in situations such as prolonged idling, or low-load applications. During these scenarios, the engine management software will activate an exhaust temperature management mode to maintain the efficiency of soot reduction. In this mode, the exhaust gas temperature is controlled via management of multiple injections and control of the air system. This design enhances passive regeneration in low load conditions, and reduces the need for an incinerating regeneration.

Manual regeneration

If the thermal management system is disabled for prolonged periods of time, depending on exhaust temperatures, soot may build up within the particulate matter catalyst. If the soot build-up reaches extreme levels, a manual regeneration initiated by the operator may be necessary. This is enabled through the instrument cluster, and takes about **15 min**. For these reasons, it is recommended to have the thermal management system remain enabled unless the tractor is in high fire-risk conditions.

Finding a cleaning facility

To find a CASE IH dealer that is fully equipped to service your system, call the number below.

Max Service: 1-877-422-7344
MaxService.na@cnh.com

Customer Assistance: 1-866-542-2736
casecustomerassistance.na@cnh.com

US Environmental Protection Agency (EPA) and California Emissions Control Warranty Statement

CASE IH warrants to the ultimate purchaser and each subsequent purchaser that the engine is designed, built and equipped so as to conform with US Environmental Protection Agency regulations applicable at the time of manufacture and that it is free from defects in workmanship or material which would cause it not to meet these regulations for a period of:

- 2 years or **1500 h** of operation, whichever occurs first, for engines less than **19 kW (25 Hp)**.
- 5 years or **3000 h** of operation, whichever occurs first, for engines greater than or equal to **19 kW (25 Hp)**.

NOTE: *This warranty applies to all units operated in the United States or Canada.*

Coverage

The model year, class of diesel engine, and emission application determination for your engine are identified on the Emission Control Information Label. This label is affixed to one of the following areas of the engine: the top of engine's rocker arm cover, the right-hand side of the oil pan, and the right-hand side of the engine front gear cover. The warranty period begins on the date the new equipment is sold to the first retail purchaser. The presence of the emission control label is the indication that the engine conforms to the applicable standards. Any emission control system parts which are proven defective during normal use will be repaired or replaced during the warranty period.

The engine owner has responsibility to perform all the required maintenance listed in the Owner's Manual. CASE IH will not deny an emission warranty claim solely because no record of maintenance exists; however, a claim may be denied if failure to perform maintenance resulted in the failure of a warranted part.

It is recommended that replacement parts used for maintenance or repairs be CASE IH Service Parts to maintain the quality originally designed into your emission certified engine. The use of non- CASE IH parts does not invalidate the warranty on other components unless the use of such parts causes damage to warranted parts.

The manufacturer is liable for damages to other engine components caused by the failure of any warranted emission control system part. CASE IH is not responsible for failures resulting from improper repair or the use of parts that are not genuine CASE IH or CASE IH approved parts.

Component coverage

New engines certified for sale and registered will have the following items covered by the emission warranty, depending on the emission level of the engine, if the items were first installed on the new engine as original equipment:

Fuel injection system

- Fuel injection pump
- Fuel injectors
- Fuel injection lines

Air induction system

- Intake manifold
- Turbocharger system (includes exhaust manifold)
- Charge air cooler

Positive crankcase ventilation system (if applicable)

- PCV valve
- Oil fill cap

Exhaust after treatment Devices (if applicable)

- Catalytic converter (DOC)
- Diesel particulate filter (DPF)
- Selective catalytic reduction (SCR)
- Diesel Exhaust Fluid (DEF) tank and dispensing systems
- Particulate Matter Catalyst (PM Cat)

Exhaust Gas Recirculation Systems (EGR)

- EGR valve assembly
- EGR cooler

Cold Start Enrichment Systems

Electronic Control Units, Sensors, Solenoids, and Wiring harnesses used in above systems

Emissions warranty does not cover

- Repairs arising from storage deterioration, failure to maintain the equipment, negligence, alteration, improper use of the equipment, collision or other accident, vandalism, or other casualty, or operation beyond rated capacity or specification.

Buy Now



Our support email:

ebooklibonline@outlook.com