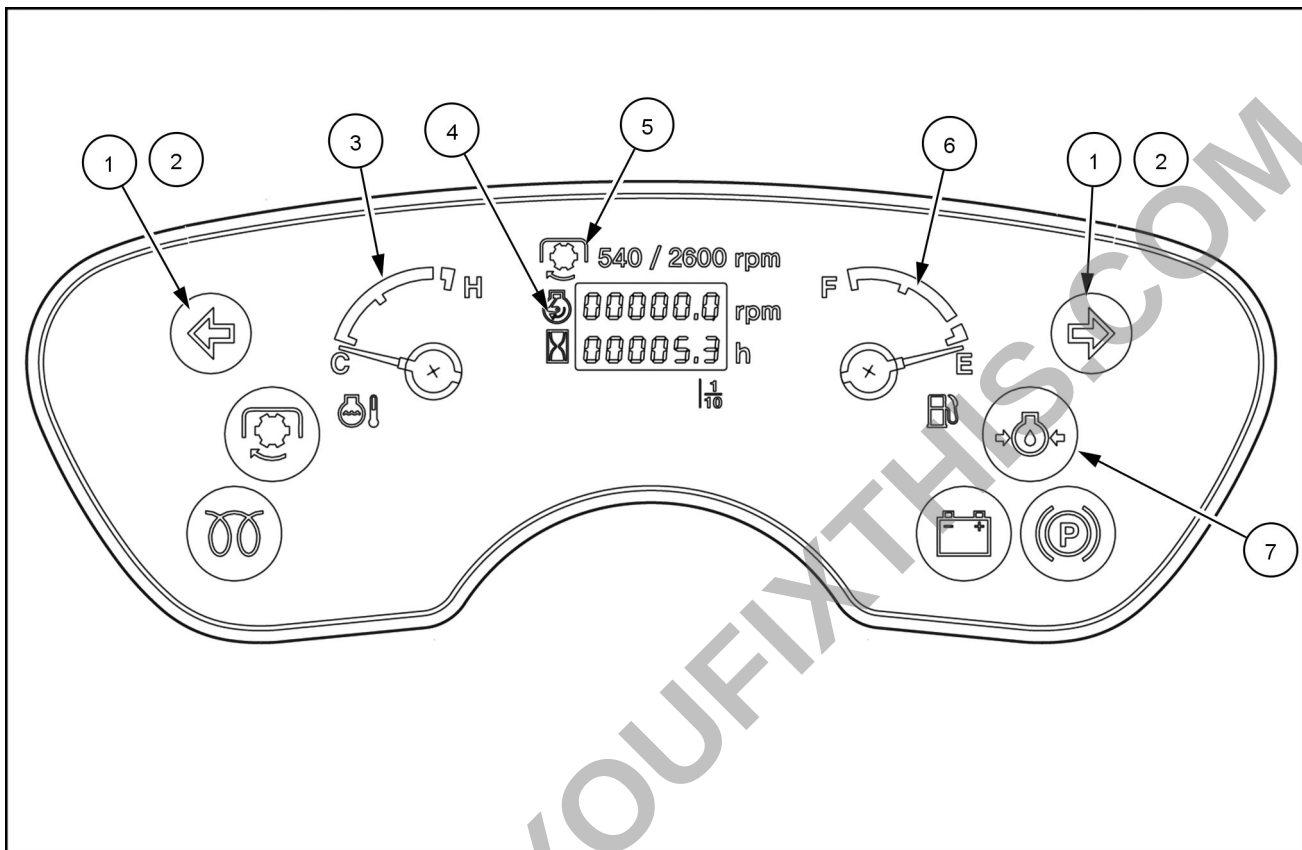


FORWARD CONTROLS

Instrument panel



NHIL14CT00534FA 1

1. Flasher Warning Lights - Operate when the multifunction switch is turned on, regardless of the key switch position. Use the flasher warning lights, road lights and the SMV sign when traveling on public roads, day or night.
2. Flasher Turn Lights - Operate when the multifunction switch lever is moved upwards for right turns the right arrow will flash and moved downwards for left turns the left arrow will flash. The key switch has to be in the "ON" or "START" positions.
3. Temperature Gauge - Indicates coolant temperature. It is activated when the key switch is turned to the "ON" position. The gauge will register cold with the key switch in the "OFF" position. If the needle registers in the white range of the gauge, this indicates a normal operating temperature. If the needle moves to the red portion of the gauge, this indicates an overheated condition. Stop the tractor engine immediately and investigate the cause.
4. Tachometer - Registers engine rpm (Revolutions Per Minute). The display will return to zero when the engine is not running.
5. PTO Speed Indicator - Determined by the engine speed indicated on the tachometer. The tachometer reading of **2600 RPM** indicates **540 RPM** rear PTO speed. The tachometer reading of **2660 RPM** indicates **2000 RPM** mid PTO speed. If the tachometer registers higher than **2600 RPM** for rear PTO operation or **2660 RPM** for mid PTO operation, this indicates a dangerous over speed condition, and the engine speed should be reduced immediately.
6. Fuel Gauge - Indicates the amount of diesel fuel remaining in the tank. The gauge is activated when the key switch is in the "ON" position. It will register "empty" with the key switch in the "OFF" position.
7. Engine Oil Pressure Warning Light - Illuminates with the key switch in the "ON" position and remains lit for a short period of time after the engine is started. The light indicates oil pressure only and goes out when sufficient oil pressure is present at the oil sender. If the bulb becomes lit during operation, stop the tractor engine immediately and investigate the cause.

4 - OPERATING INSTRUCTIONS

COMMISSIONING THE UNIT

Engine break-in procedure

Your tractor will provide long and dependable service if given proper care during the first 50-hour break-in period. During the first 50 hours of operation:

1. Avoid "lugging" the engine. Operating in too high a gear under heavy load may cause engine lugging, which is indicated when the engine will not respond to a throttle increase.
2. Use the lower gear ratios when pulling heavy loads and avoid continuous operation at constant engine speeds. You will save fuel and minimize engine wear by selecting the correct gear ratio for a particular operation. Operating the tractor in low gear with a light load and high engine speed wastes fuel.
3. Avoid prolonged operation at either high or low engine speeds without a load on the engine.
4. Check the instruments frequently and keep the radiator and oil reservoirs filled to recommended levels. Daily checks include the engine oil level, radiator coolant, and air cleaner.
5. After the first 50 hours of use, be sure to perform the maintenance items listed in the maintenance schedule.

7 - MAINTENANCE

GENERAL INFORMATION

General information

Adequate lubrication and maintenance on a regular schedule is vital to maintaining your equipment. To ensure long service and efficient operation, follow the lubrication and maintenance schedules outlined in this manual. The use of proper fuels, oils, grease and filters, as well as keeping the systems clean, will also extend machine and component life.

NOTICE: Always use genuine NEW HOLLAND replacement parts, oils and filters to ensure proper operation, filtration of engine and hydraulic systems. See your NEW HOLLAND dealer for additional oil quantities.

Regular lubrication is the best insurance against delays and repairs. Proper lubrication will extend machine life.

⚠ WARNING

Entanglement hazard!

Disengage the Power Take-Off (PTO), turn off the engine, and remove the key. Wait for all movement to stop before leaving the operator's position. Never adjust, lubricate, clean, or unplug machine with the engine running. Failure to comply could result in death or serious injury.

W0227A

⚠ 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

Always clean the area around dipsticks, fill caps, and check plugs when checking fluid levels. Failure to clean these areas may allow contamination to enter the system.

Refer to the following charts for lubricants and service intervals.

NOTICE: Failure to complete the required maintenance at the recommended intervals can cause unnecessary downtime.

The intervals listed in the Lubrication Chart are guidelines to be used when operating in normal conditions. Adjust the intervals for operating in adverse environmental and working conditions. The intervals should be shortened for sandy, dusty and extremely hot operating conditions.

Drain, flush and refill the system any time you suspect it is contaminated.

8 - TROUBLESHOOTING

SYMPTOM(S)

Engine - Troubleshooting

Problem	Possible Cause	Correction
The start motor does not rotate with the key switch in the (START) position.	Low battery charge	Charge or replace
	Loose battery or starter cable terminals	Tighten the terminal
	Key switch faulty	Repair or replace switch
	Safety start switch not completing circuit	Depress clutch pedal fully
	PTO safety switch is not in "OFF" position	Place PTO switch in "OFF" position
	Starter motor faulty	Repair or replace starter motor
The start motor rotates but the engine does not start	Low battery charge	Charge or replace battery
	Air in fuel system	Bleed out the air
	Fuel filter clogged	Clean or replace the filter
	Fuel shutoff valve on fuel filter in closed position	Open the valve
	Fuel shutoff solenoid on fuel injection pump stuck in off position	Check solenoid for proper operation, repair as needed
Engine speed is irregular	Air in fuel system	Bleed the fuel system
	Fuel filter clogged	Clean or replace the filter
	Injection nozzle clogged	Repair or replace nozzle
	Fuel leakage	Repair fuel system
	Irregular fuel injection	Repair or replace fuel injection pump
Engine speed is more than maximum rated high idle speed	Governor malfunction	Repair injection pump as needed
Engine stops suddenly during operation	Fuel shortage	Add fuel and bleed air from fuel system
	Faulty fuel injector	Repair or replace injector
	Faulty fuel injection pump	Repair or replace injection pump
	Internal parts of engine seized due to lack of lubrication	Repair engine as needed
Engine stops at low speed	Faulty injection pump	Repair or replace injection pump as needed
	Engine valve gap is not correct	Adjust the gap
	Low fuel injector pressure	Repair fuel injector as needed
Engine overheating	Lack of coolant	Add coolant as needed
	Fan belt slipping or belt is broken	Adjust belt tension or replace belt
	Dirt attached to the radiator or prescreen	Clean radiator fins or screen as needed
The color of exhaust smoke is white	Low engine operating temperature	Allow engine to obtain higher operating temperature
	Engine burning engine oil	Repair engine as needed
	Engine coolant entering engine exhaust	Repair engine as needed
The color of exhaust gas is black.	Air filter clogged	Clean or replace engine air filter
	Excessive fuel supply	Repair fuel injection pump as needed
	Faulty fuel injector	Repair or replace fuel injector
Low engine power	Fuel injector nozzle clogged	Repair injector as needed
	Carbon accumulation on valve seat	Repair valve and seats as needed
	Incorrect valve gap adjustment	Adjust valve gap to correct amount
	Incorrect fuel injection timing	Check and adjust fuel injection timing as needed
	Lack of fuel supply	Check fuel system for restriction
	Air filter clogged	Clean or replace air filter

9 - SPECIFICATIONS

Wheel tread settings

NOTE: Tread settings are measured from center of tire to center of tire.

Blurred on purpose. The manual you buy has this page in full quality.

Contents

1 GENERAL INFORMATION

Note to the Owner	1-1
Tractor intended use	1-2
Electro-magnetic compatibility (EMC)	1-4
Manual scope	1-5
Product identification	1-6
Operator's manual storage	1-7
Machine orientation	1-8
General specification - Biodiesel fuels	1-9

2 SAFETY INFORMATION

Precautionary statements	2-1
Safety rules	2-2
Do not operate tag	2-11
Ecology and the environment	2-12
Safety signs	2-13
Instructional signs	2-22
International symbols	2-29
Proposition 65	2-30

3 CONTROLS AND INSTRUMENTS

OPERATOR'S SEAT

Seat belt	3-1
Seat controls	3-1
Roll Over Protective Structure (ROPS)	3-2

FORWARD CONTROLS

Instrument panel	3-4
Brake pedal	3-6
Park brake	3-6
Hand throttle	3-7
Power Take-Off (PTO) switch	3-7
Key switch	3-7
Differential lock pedal	3-8
Hydrostatic transmission control pedals	3-9
Multifunctional light switch	3-9

LEFT-HAND SIDE CONTROLS

Transmission range selector lever	3-10
Front wheel drive selector lever	3-10

RIGHT-HAND SIDE CONTROLS

Hydraulic power lift (HPL)	3-11
Hydraulic power lift (HPL) drop rate control valve	3-11

2 - SAFETY INFORMATION

Precautionary statements

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 safety signs, 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 that, if not avoided, will result in death or serious injury. The color associated with DANGER is RED.

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

⚠ CAUTION indicates a hazardous situation that, 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 that, if not avoided, could result in machine damage 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 damage or property damage. The word Notice is used to address practices not related to personal safety.

Information

NOTE: Note indicates additional information that 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.

Index

A	
Air cleaner	7-22
Air cleaner element	7-27
Alternator	7-40
Attaching three-point hitch equipment	4-5
B	
Battery	7-39
Biodiesel fuel - approved blend ratio	7-3
Brake controls	4-15
Brake light operation	5-6
Brake pedal	3-6
Brake pedal free play	7-18, 7-47
Brakes and controls - Park	4-20
C	
Carrying the tractor on a transporter	5-9
Cold starting aids	4-9
Consumables	7-6
D	
Delivery report - dealer copy	10-5
Delivery report - owner copy	10-3
Differential lock pedal	3-8
Do not operate tag	2-11
Drawbar Hitch	4-8
Driving the vehicle	5-8
E	
Ecology and the environment	2-12
Electrical system - Troubleshooting	8-4
Electro-magnetic compatibility (EMC)	1-4
Emergency stopping	4-14
Engine break-in procedure	4-1
Engine coolant	7-32
Engine cooling system	7-10
Engine oil and filter	7-11, 7-25
Engine oil level	7-8
Engine - Troubleshooting	8-1
External lighting - Identification	5-1
F	
Fan belt	7-18, 7-25, 7-38
Front axle differential fluid	7-30
Front axle differential fluid level	7-21
Front wheel drive selector lever	3-10
Front wheels toe-in	7-26, 7-47
Fuel filter	7-12, 7-24, 7-25
Fuel injection system - Bleed	7-33
Fuel injectors - Bleed	7-35
Fuses	7-41
G	
General information	7-1
General specification - Biodiesel fuels	1-9
General specifications	9-3
Grease fittings	7-17

SHIPPING TRANSPORT

Carrying the tractor on a transporter	5-9
---	-----

RECOVERY TRANSPORT

Towing	5-9
--------------	-----

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 - approved blend ratio	7-3
Refueling the tractor	7-4
Organic Acid Technology (OAT) coolant	7-5
Consumables	7-6

MAINTENANCE CHART

Maintenance Chart	7-7
-------------------------	-----

Every 10 hours or daily

Engine oil level	7-8
Engine cooling system	7-10

After the first 50 hours of operation

Engine oil and filter	7-11
Fuel filter	7-12
Hydraulic oil filter	7-13
Hydrostatic (HST) oil filter	7-13
Roll Over Protective Structure (ROPS)	7-14
Wheels bolt/nut	7-16

Every 50 hours

Grease fittings	7-17
Transmission fluid level	7-18
Brake pedal free play	7-18
Hydrostatic Transmission (HST) neutral adjustment	7-18
Fan belt	7-18
Tires and wheels	7-19
Front axle differential fluid level	7-21
Air cleaner	7-22

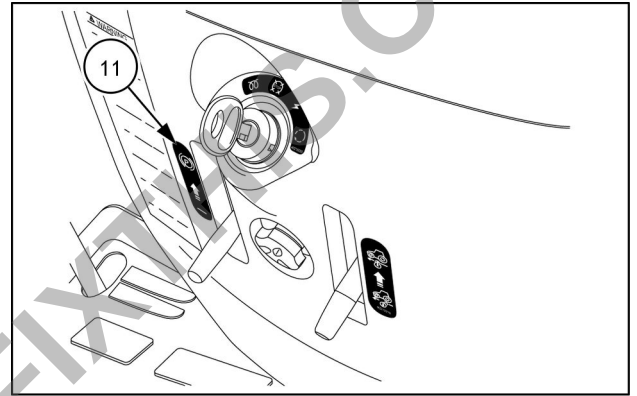
Park brake lever

Quantity 1
English: MT40236789



40236789A 22

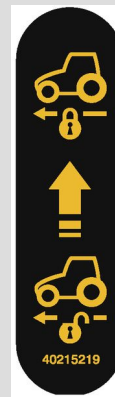
(11) Located on steering wheel shroud.



83114145 23

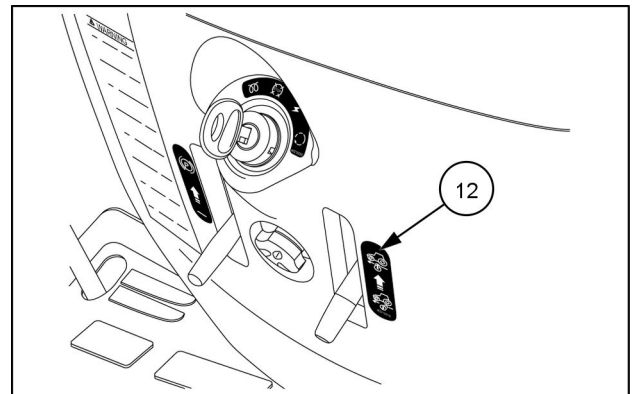
HST cruise control

Quantity 1
English: MT40215219



40215219A 24

(12) Located on steering wheel shroud.



83114145 25

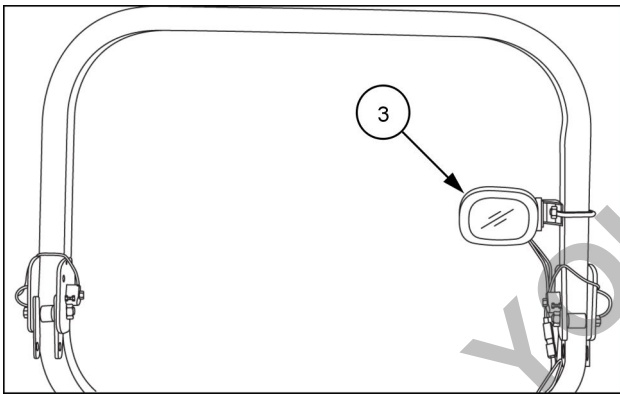
5 - TRANSPORT OPERATIONS

ROAD TRANSPORT

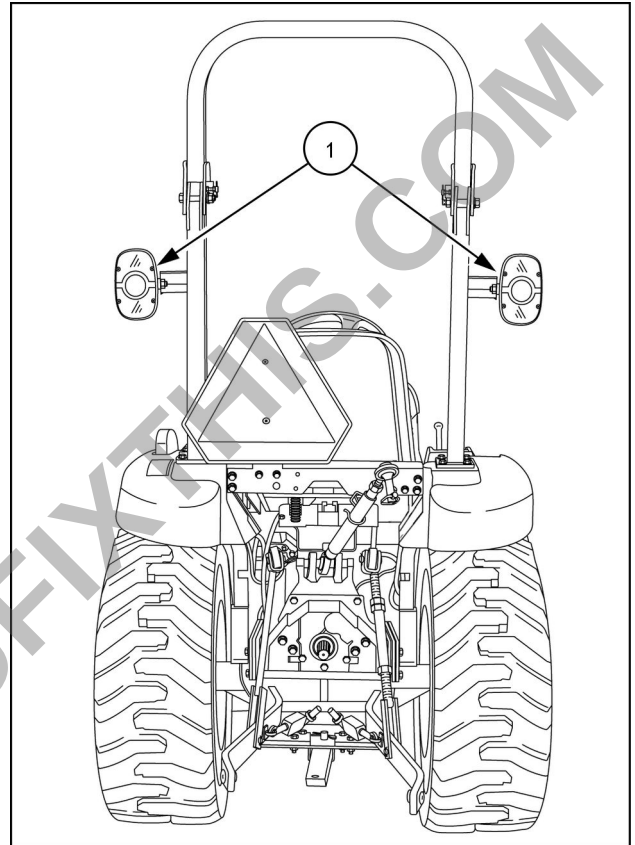
External lighting - Identification

Your tractor is equipped with:

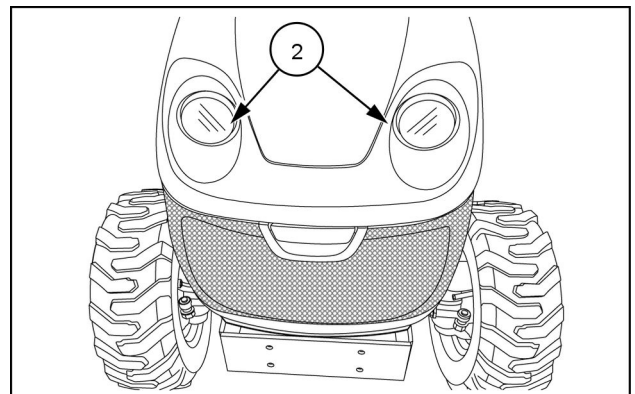
- The combination turn signal / hazard warning / tail lights **(1)**.
- Road / Work lights **(2)**.
- Rear Work Light (55 watt) **(3)** (Optional) mounted on the ROPS.



93110379 1



83114164A 2

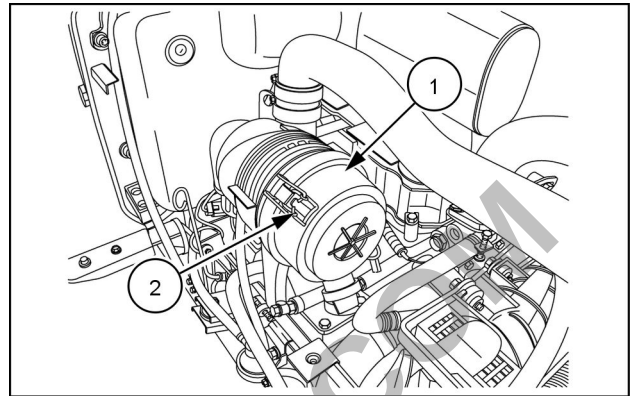


83114207 3

Air cleaner element

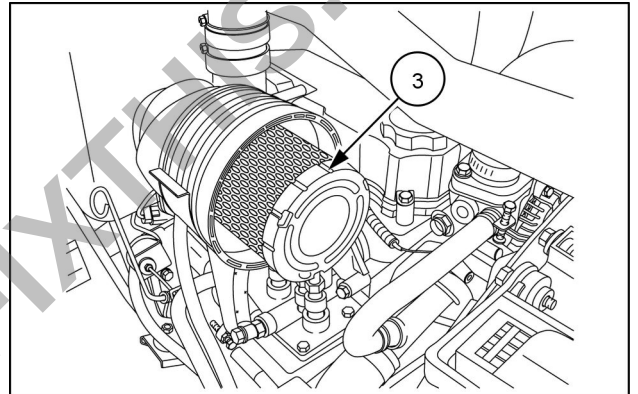
The air cleaner (1) is accessed by opening the tractor hood. The air cleaner assembly contains one element.

1. To remove the filter element, release the clips (2) on the end cap.



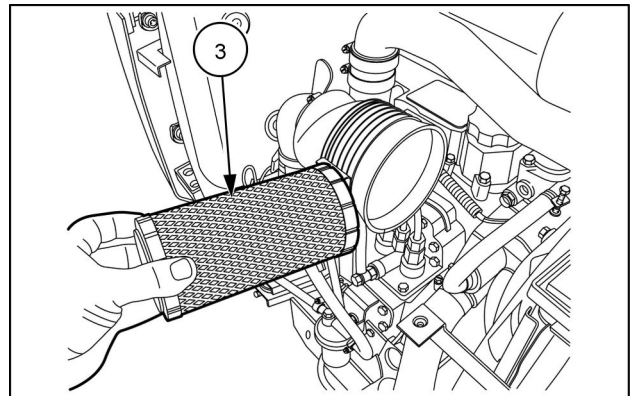
83114152 1

2. Remove the end cap from the air cleaner body to expose the filter element (3).



83114153 2

3. Pull the filter element (3) from the canister. Clean any loose dirt from the canister and inspect the end of the canister for dirt which may prevent the new element from sealing properly.



83114199 3

PREVIEW ONLY

You're viewing 12 of 166 pages

The full manual includes:

- All 166 pages, complete
 - Searchable PDF (find any keyword)
 - No watermarks
 - Instant download
 - Print-ready quality
-

GET FULL MANUAL NOW

New Holland Boomer 24 Operator Manual



Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual