

SERVICE MANUAL

Speedrower[®] 200

Speedrower[®] 240

Tier 3

Self-Propelled Windrower

PINYGG677501 and above

Part number 48143361

1st edition English

April 2017



Link Product / Engine

| Product | Market Product | Engine |
|--|-----------------------|---------------|
| Speedrower® 200 Tier 3, Canada [YGG677501 -] | North America | F4HE9687 |
| Speedrower® 240 Tier 3, Canada [YGG677501 -] | North America | F4HE9687 |

Contents

INTRODUCTION

| | |
|--|------|
| Engine..... | 10 |
| [10.202] Air cleaners and lines | 10.1 |
| [10.218] Fuel injection system..... | 10.2 |
| [10.400] Engine cooling system | 10.3 |
| [10.414] Fan and drive | 10.4 |
| [10.250] Turbocharger and lines..... | 10.5 |
| [10.304] Engine lubrication system..... | 10.6 |
| Front axle system | 25 |
| [25.310] Final drives | 25.1 |
| Rear axle system..... | 27 |
| [27.550] Non-powered rear axle..... | 27.1 |
| Hydrostatic drive..... | 29 |
| [29.100] Transmission and steering hydrostatic control | 29.1 |
| [29.130] Neutralizer plate assembly..... | 29.2 |
| [29.202] Hydrostatic transmission | 29.3 |
| [29.218] Pump and motor components..... | 29.4 |
| Brakes and controls | 33 |
| [33.110] Parking brake or parking lock | 33.1 |
| Hydraulic systems..... | 35 |
| [35.000] Hydraulic systems..... | 35.1 |
| [35.100] Main lift system..... | 35.2 |
| [35.105] Charge pump..... | 35.3 |
| [35.128] Auxiliary hydraulic function control | 35.4 |
| [35.220] Auxiliary hydraulic pump | 35.5 |
| [35.300] Reservoir, cooler, and filters..... | 35.6 |

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| | |
|---|-----------|
| [35.304] Combination pump units | 35.7 |
| [35.410] Header or attachment height system | 35.8 |
| [35.602] Header or attachment leveling system | 35.9 |
| [35.760] Header reverser drive | 35.10 |
| [35.910] Head and header hydraulic drive | 35.11 |
| Frames and ballasting | 39 |
| [39.105] Lift arm | 39.1 |
| [39.140] Ballasts and supports | 39.2 |
| Steering..... | 41 |
| [41.101] Steering control | 41.1 |
| [41.200] Hydraulic control components..... | 41.2 |
| [41.432] Autoguidance steering | 41.3 |
| Wheels | 44 |
| [44.511] Front wheels..... | 44.1 |
| Cab climate control | 50 |
| [50.200] Air conditioning | 50.1 |
| Electrical systems | 55 |
| [55.670] Header leveling control..... | 55.1 |
| [55.000] Electrical system | 55.2 |
| [55.100] Harnesses and connectors..... | 55.3 |
| [55.015] Engine control system..... | 55.4 |
| [55.201] Engine starting system | 55.5 |
| [55.301] Alternator | 55.6 |
| [55.302] Battery..... | 55.7 |
| [55.202] Cold start aid | 55.8 |
| [55.011] Fuel tank system | 55.9 |
| [55.010] Fuel injection system..... | 55.10 |
| [55.014] Engine intake and exhaust system..... | 55.11 |

| | |
|---|-----------|
| [55.013] Engine oil system | 55.12 |
| [55.640] Electronic modules | 55.13 |
| [55.640] Electronic modules | 55.14 |
| [55.019] Hydrostatic drive control system | 55.15 |
| [55.522] Cab Power Take-Off (PTO) controls | 55.16 |
| [55.031] Parking brake electrical system | 55.17 |
| [55.512] Cab controls | 55.18 |
| [55.036] Hydraulic system control | 55.19 |
| [55.050] Heating, Ventilation, and Air-Conditioning (HVAC) control system | 55.20 |
| [55.047] Steering control system | 55.21 |
| [55.661] Cab header controls | 55.22 |
| [55.662] Header height control | 55.23 |
| [55.634] Merger electrical control system | 55.24 |
| [55.785] Precision farming system | 55.25 |
| [55.911] Satellite navigation systems | 55.26 |
| [55.518] Wiper and washer system | 55.27 |
| [55.404] External lighting | 55.28 |
| [55.405] External lighting switches and relays | 55.29 |
| [55.510] Cab or platform harnesses and connectors | 55.30 |
| [55.680] Autopilot/Autoguidance | 55.31 |
| [55.DTC] FAULT CODES | 55.32 |
| Platform, cab, bodywork, and decals | 90 |
| [90.124] Pneumatically-adjusted operator seat | 90.1 |
| [90.150] Cab | 90.2 |
| [90.151] Cab interior | 90.3 |
| [90.154] Cab doors and hatches | 90.4 |



INTRODUCTION

Safety rules


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 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.

 WARNING indicates a hazardous situation that, if not avoided, could result in death or serious injury.

 CAUTION indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.

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 or property damage.

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 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.

Safety rules

General safety rules

Use caution when operating the machine on slopes. Raised equipment, full tanks and other loads will change the center of gravity of the machine. The machine can tip or roll over when near ditches and embankments or uneven surfaces.

- Only skilled operators who are familiar with all the controls and harvesting techniques should use the equipment. It is recommended to operate on cultivated land with slopes no greater than **26%** (**15°**) uphill and downhill.
- If necessary, when driving downhill change into a lower gear before starting the descent. Machine must be stopped to downshift into a lower gear.

Never permit anyone other than the operator to ride on the machine.

Never operate the machine under the influence of alcohol, drugs, or while otherwise impaired.

Pay attention to overhead power lines and hanging obstacles. High voltage lines may require significant clearance for safety.

Hydraulic oil or diesel fuel leaking under pressure can penetrate the skin, causing serious injury or infection.

- DO NOT use your hand to check for leaks. Use a piece of cardboard or paper.
- Stop engine, remove key and relieve the pressure before connecting or disconnecting fluid lines.
- Make sure all components are in good condition and tighten all connections before starting the engine or pressurizing the system.
- If hydraulic fluid or diesel fuel penetrates the skin, seek medical attention immediately.
- Continuous long term contact with hydraulic fluid may cause skin cancer. Avoid long term contact and wash the skin promptly with soap and water.

Keep clear of moving parts. Loose clothing, jewelry, watches, long hair, and other loose or hanging items can become entangled in moving parts.

Wear protective equipment when appropriate.

DO NOT attempt to remove material from any part of the machine while it is being operated or components are in motion.

Make sure all guards and shields are in good condition and properly installed before operating the machine. Never operate the machine with shields removed. Always close access doors or panels before operating the machine.

Dirty or slippery steps, ladders, walkways, and platforms can cause falls. Make sure these surfaces remain clean and clear of debris.

A person or pet within the operating area of a machine can be struck or crushed by the machine or its equipment. DO NOT allow anyone to enter the work area.

Raised equipment and/or loads can fall unexpectedly and crush persons underneath. Never allow anyone to enter the area underneath raised equipment during operation.

Never operate engine in enclosed spaces as harmful exhaust gases may build up.

Before starting the machine, be sure that all controls are in neutral or park lock position.

Start the engine only from the operator's seat. If the safety start switch is bypassed, the engine can start with the transmission in gear. Do not connect or short across terminals on the starter solenoid. Attach jumper cables as described in the manual. Starting in gear may cause death or serious injury.

Always keep windows, mirrors, all lighting, and Slow Moving Vehicle (SMV) emblem clean to provide the best possible visibility while operating the machine.

Operate controls only when seated in the operator's seat, except for those controls expressly intended for use from other locations.

Before leaving the machine:

1. Park machine on a firm level surface.
2. Put all controls in neutral or park lock position.
3. Engage park brake, use wheel chocks if required.
4. Lower all hydraulic equipment — Implements, header, etc.
5. Turn off engine and remove key.

When, due to exceptional circumstances, you would decide to keep the engine running after leaving the operator's station, then the following precautions must be followed:

1. Bring the engine to low idle speed.
2. Disengage all drive systems.

3. **▲ WARNING**

**Some components may continue to run down after you disengage drive systems.
Make sure all drive systems are fully disengaged.
Failure to comply could result in death or serious injury.**

W0113A

Shift the transmission into neutral.

4. Apply the parking brake.

▲ General maintenance safety ▲

Keep area used for servicing the machine clean and dry. Clean up spilled fluids.

Service machine on a firm level surface.

Install guards and shields after servicing the machine.

Close all access doors and install all panels after servicing the machine.

Do not attempt to clean, lubricate, clear obstructions or make adjustments to the machine while it is in motion or while the engine is running.

Always make sure working area is clear of tools, parts, other persons and pets before you start operating the machine.

Unsupported hydraulic cylinders can lose pressure and drop the equipment causing a crushing hazard. Do not leave equipment in a raised position while parked or during service, unless securely supported.

Jack or lift the machine only at jack or lift points indicated in this manual.

Incorrect towing procedures can cause accidents. When towing a disabled machine follow the procedure in this manual. Use only rigid tow bars.

Stop the engine, remove key and relieve pressure before disconnecting or connecting fluid lines.

Stop the engine and remove key before disconnecting or connecting electrical connections.

Scalding can result from incorrect removal of coolant caps. Cooling system operates under pressure. Hot coolant can spray out if a cap is removed while the system is hot. Allow system to cool before removing cap. When removing a cap turn it slowly to allow pressure to escape before completely removing the cap.

Replace damaged or worn tubes, hoses, electrical wiring, etc.

Engine, transmission, exhaust components, and hydraulic lines may become hot during operation. Take care when servicing such components. Allow surfaces to cool before handling or disconnecting hot components. Wear protective equipment when appropriate.

When welding, follow this instructions in the manual. Always disconnect the battery before welding on the machine. Always wash your hands after handling battery components.

Wheels and tires

Make sure tires are correctly inflated. Do not exceed recommended load or pressure. Follow instructions in the manual for proper tire inflation.

Tires are heavy. Handling tires without proper equipment could cause death or serious injury.

Always have a qualified tire technician service the tires and wheels. If a tire has lost all pressure, take the tire and wheel to a tire shop or your dealer for service. Explosive separation of the tire can cause serious injury.

DO NOT weld to a wheel or rim until the tire is completely removed. Inflated tires can generate a gas mixture with the air than can be ignited by high temperatures from welding procedures performed on the wheel or rim. Removing the air or loosening the tire on the rim (breaking the bead) will NOT eliminate the hazard. This condition can exist whether tires are inflated or deflated. The tire MUST be completely removed from the wheel or rim prior to welding the wheel or rim.

Driving on public roads and general transportation safety

Comply with local laws and regulations.

Use appropriate lighting to meet local regulations.

Make sure SMV emblem is visible.

Lift implements and attachments high enough above ground to prevent accidental contact with road.

When transporting equipment or machine on a transport trailer, make sure it is properly secured. Be sure the SMV emblem on the equipment or machine is covered while being transported on a trailer.

Be aware of overhead structures or power lines and make sure the machine and/or attachments can pass safely under.

Travel speed should be such that complete control and machine stability is maintained at all times.

Slow down and signal before turning.

Pull over to allow faster traffic to pass.

Follow correct towing procedure for equipment with or without brakes.

Fire and explosion prevention

Fuel or oil leaked or spills on hot surfaces or electrical components can cause a fire.

Crop materials, trash, debris, bird nests, or flammable material can ignite on hot surfaces.

Always have a fire extinguisher on or near the machine.

At least once each day and at the end of the day remove all trash and debris from the machine especially around hot components such as engine, transmission, exhaust, battery, etc. More frequent cleaning of your machine may be necessary depending on the operating environment and conditions.

At least once each day, remove debris accumulation around moving components such as bearings, pulleys, belts, gears, cleaning fan, etc. More frequent cleaning of your machine may be necessary depending on the operating environment and conditions.

Inspect the electrical system for loose connections or frayed insulation. Repair or replace loose or damaged parts.

Do not store oily rags or other flammable material on the machine.



SERVICE MANUAL

Engine

Speedrower® 200 Tier 3, Canada [YGG677501 -]
Speedrower® 240 Tier 3, Canada [YGG677501 -]

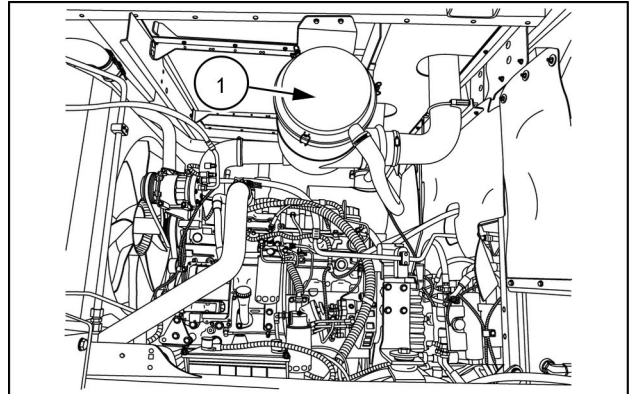
Replace primary (outer) air filter

The display will indicate when you must perform routine service for the air filter.

Replace both the outer and inner filters annually.

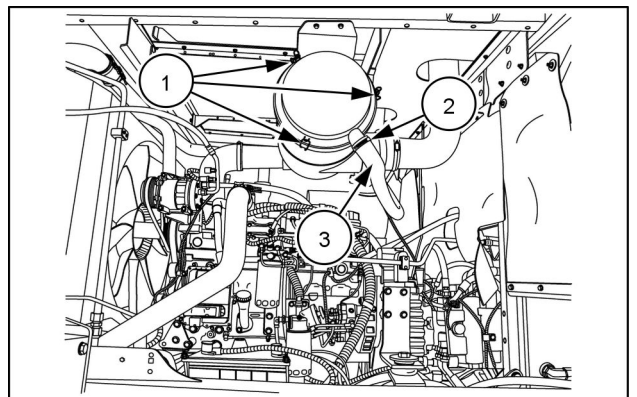
NOTICE: Do not clean the inner filter.

1. The air filter (1) is located under the right engine bay door.



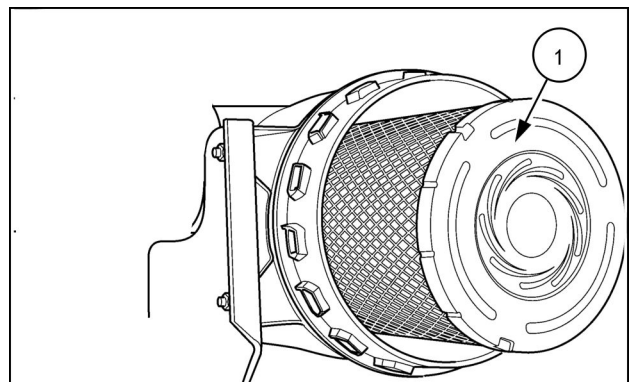
NHIL14WR00357AA 1

2. To remove the element, release the three latches (1).
3. Remove the hose clamp (2) on the bottom of the cover.
4. Remove the hose (3) from the cover.
5. Pull the cover off.



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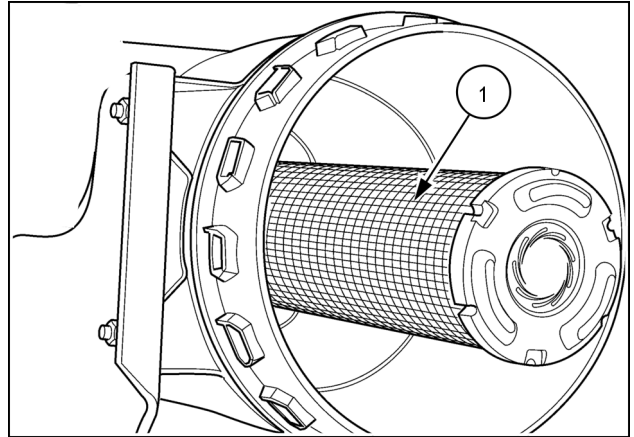
6. Pull the outer filter (1) out.



10041166 3

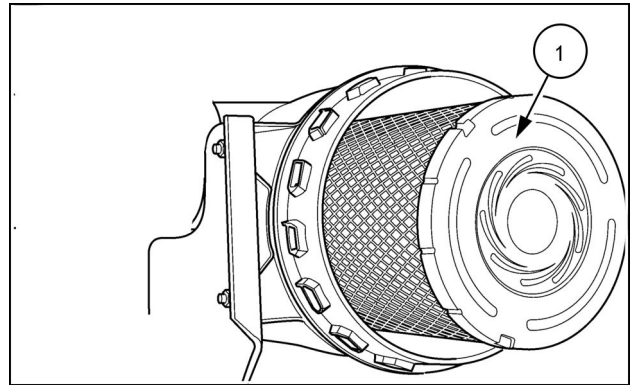
7. Clean the inside of the air cleaner housing and cover using a damp, lint-free cloth.

NOTICE: Do not remove or disturb the inner element (1). The inner element must be replaced if there is any sign of dirt on it. The inner element should not be cleaned, but only replaced.



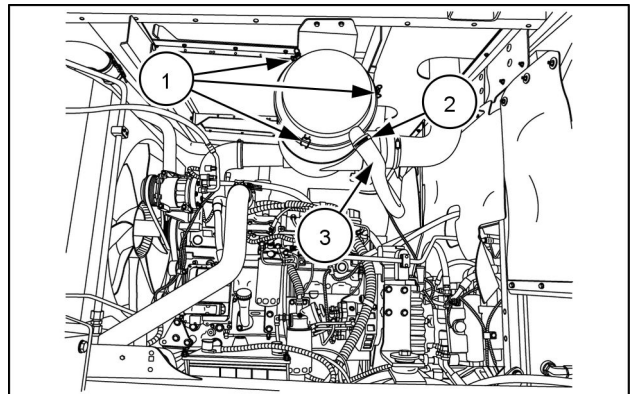
10041167 4

8. Install the outer element (1). Push the element in all the way.



10041166 5

9. Install the cover at the angle at which it was removed.
10. Secure the cover with the three latches (1).
11. Install the hose (3) back onto the cover.
12. Secure the hose to the cover with hose clamp (2).



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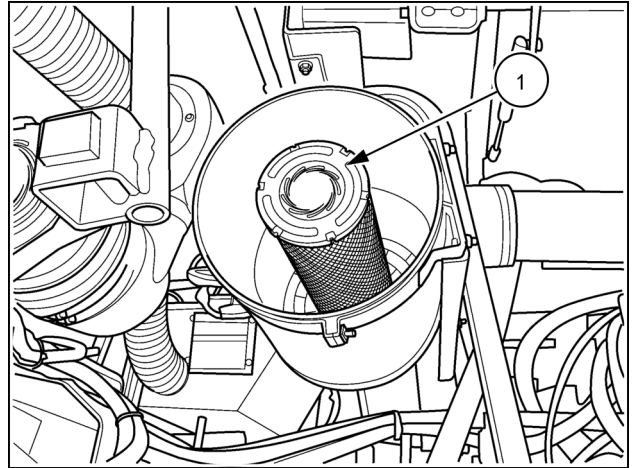
Replace secondary (inner) air filter

The display will indicate when you must perform routine service for the air filter.

Replace both the outer and inner filters annually.

NOTICE: Do not clean the inner filter.

1. Remove the outer filter as described in **Replace primary (outer) air filter (10.202)**.
2. Pull the inner filter **(1)** out. Some wiggling may be necessary.
3. Clean the inside of the air cleaner housing and the cover with a damp, lint-free cloth.
4. Install the new inner filter. Push the filter in until it is seated.
5. Install the outer filter and close the housing as described in **Replace primary (outer) air filter (10.202)**.



10041425 1

Radiator - Check - Coolant level

Speedrower® 200
Speedrower® 240

NA
NA

⚠ WARNING

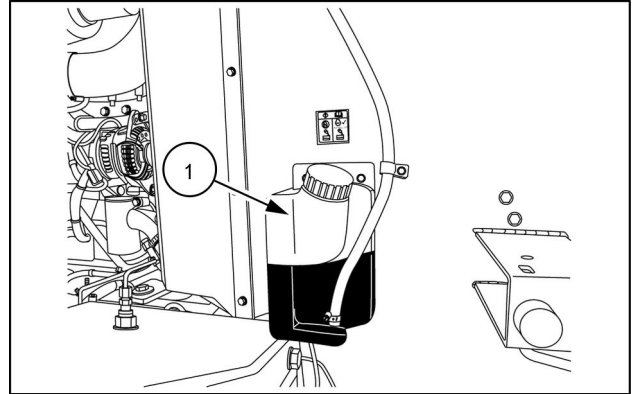
Hot liquid under pressure!

Never remove the filler cap or the recovery tank cap while the engine is running or the coolant is hot. Let the system cool. Turn the filler cap to the first notch and allow any pressure to escape, and then remove the filler cap. Loosen the recovery tank cap slowly to allow any pressure to escape. Failure to comply could result in death or serious injury.

W0296A

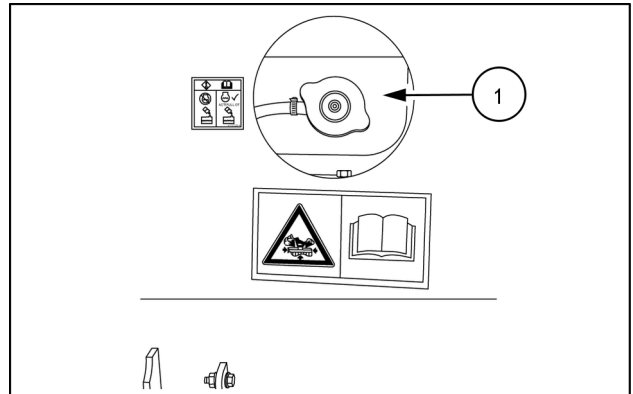
The cooling system operates under pressure controlled by the recovery tank and radiator caps.

1. The coolant level should be at the full mark on the coolant recovery tank **(1)** when the coolant is cold. As the coolant is heated it will rise above the full mark.
2. If the recovery tank is empty, first add coolant to the radiator. Then fill the recovery tank to the full mark.
3. The radiator **(1)** must be full for the recovery tank to function properly.



NHIL15WR00387AA 1

NOTE: The coolant is a mixture of **50% water and 50% NEW HOLLAND AMBRA ACTIFULL™ OT EXTENDED LIFE COOLANT.**



NHIL15WR00471AA 2

Radiator - Replace - Engine coolant

⚠ WARNING

Hot liquid under pressure!

Never remove the filler cap or the recovery tank cap while the engine is running or the coolant is hot. Let the system cool. Turn the filler cap to the first notch and allow any pressure to escape, and then remove the filler cap. Loosen the recovery tank cap slowly to allow any pressure to escape.

Failure to comply could result in death or serious injury.

W0296A

⚠ WARNING

Hazardous chemicals!

Coolant can be toxic. Avoid contact with skin, eyes, and clothing. Antidotes:

EXTERNAL - Rinse thoroughly with water. Remove soiled clothing.

INTERNAL - Rinse the mouth with water. **DO NOT** induce vomiting. Seek immediate medical attention.

EYES - Flush with water. Seek immediate medical attention.

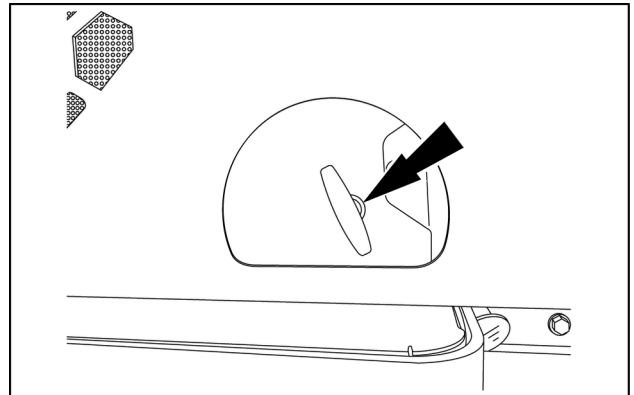
Failure to comply could result in death or serious injury.

W0282A

Park the windrower on level ground and engage the park brake.

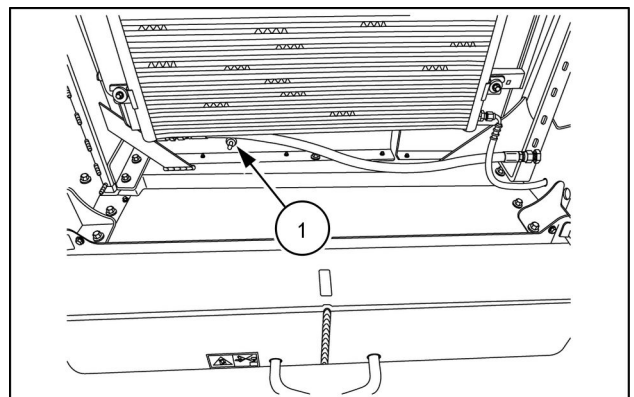
NOTICE: Refer to *Engine cooling system - Localization overview - Organic Acid Technology (OAT) coolant (10.400)* if changing coolant types.

1. Rotate both handles on the rear cover counter-clockwise. Open the rear cover to access the radiator drain valve.



NHIL14WR00324AA 1

2. Turn the valve (1) at the bottom of the radiator counter-clockwise. The valve is on the left side of the cooler box assembly. Catch the coolant (up to **32 L (8.5 US gal)**) in a suitable container.



NHIL14WR00316AA 2



Suggest:

If the above button click is invalid.

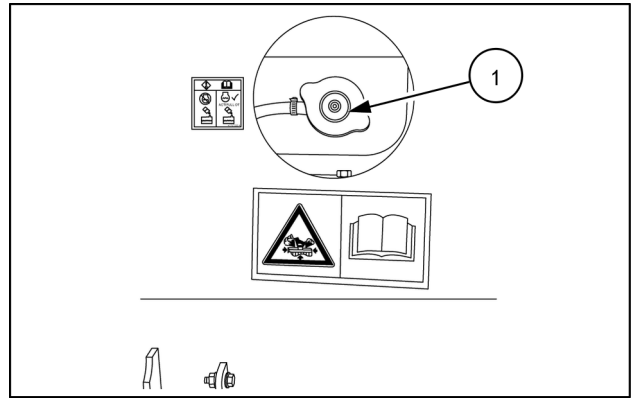
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first, and then click the above link

to download the complete manual.

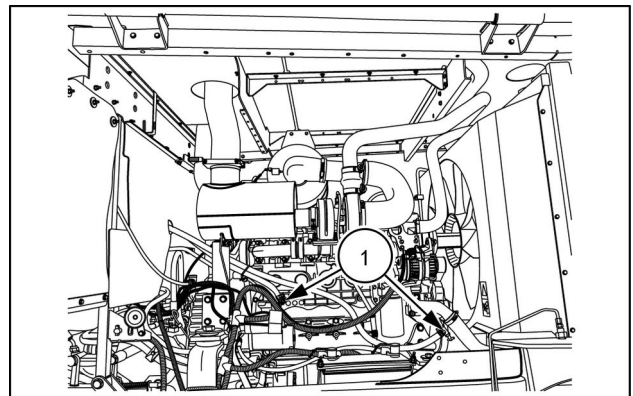
Thank you so much for reading

3. Remove the radiator cap (1) to allow the coolant to flow faster.



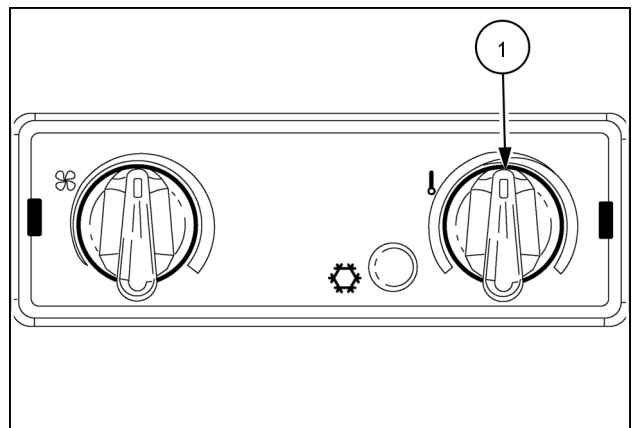
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4. Open the heater shutoff valve (1) on the left side of the engine.



NHIL14WR00356AA 4

5. Turn the key switch to the "RUN" position.
6. The heater control knob (1) must be turned to maximum heat. This will open the valve and allow coolant to drain from the heater core. After 10 seconds turn the key switch to the "OFF" position.



36082789 5

7. Run some clean water through the radiator to clean it out.
8. Allow all the coolant to drain out and dispose of it in an acceptable manner.
9. Close the petcock on the bottom of the radiator.

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