

**AXIAL-FLOW® 7230**  
**AXIAL-FLOW® 8230**  
**AXIAL-FLOW® 9230**  
Rotary Combine

**SERVICE MANUAL**

Part number 48040837

English

August 2017

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## **SERVICE MANUAL**

**AXIAL-FLOW® 7230 Machine Standard Tier III produced in Brazil.,  
AXIAL-FLOW® 7230 Machine with Power Guide Axle Tier III produced in  
Brazil, AXIAL-FLOW® 8230 Machine Standard Tier III produced in Brazil.,  
AXIAL-FLOW® 8230 Machine with Power Guide Axle Tier III produced in  
Brazil. , AXIAL-FLOW® 9230 Machine Standard Tier III produced in Brazil.,  
AXIAL-FLOW® 9230 Machine with Power Guide Axle Tier III produced in  
Brazil.**

## Link Product / Engine

<b>Product</b>	<b>Market Product</b>	<b>Engine</b>
AXIAL-FLOW® 7230 Máquina com Power Guide Axle Tier III produzida no Brasil	Latin America	F3AE9684A*E001
AXIAL-FLOW® 7230 Máquina com Power Guide Axle Tier III produzida no Brasil	Latin America	F3AE9684A*E001
AXIAL-FLOW® 8230 Máquina com Power Guide Axle Tier III produzida no Brasil.	Latin America	F3BE3684A*E001
AXIAL-FLOW® 8230 Máquina com Power Guide Axle Tier III produzida no Brasil.	Latin America	F3BE3684A*E001
AXIAL-FLOW® 9230 Máquina com Power Guide Axle Tier III produzida no Brasil.	Latin America	F3BE3684B*E002
AXIAL-FLOW® 9230 Máquina com Power Guide Axle Tier III produzida no Brasil.	Latin America	F3BE3684B*E002

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# INTRODUCTION

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## Safety rules Signal word definitions


### 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.

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## Personal safety

AXIAL-FLOW® 9230

LA

### **⚠ WARNING**

**Risk of harm during maintenance of the machine!**

**Before you start servicing the machine, attach a DO NOT OPERATE warning tag to the machine in a visible area.**

**Failure to comply could result in death or serious injury.**

W1242A

Attach a DO NOT OPERATE (TAG) to the machine in an area that is clearly visible whenever the machine is not operating properly and/or requires service.

Complete the tag information for the "REASON" the tag is attached by describing the malfunction or service required. Validate the reason for attaching the tag by signing your name in the designated area on the tag.

The tag should only be removed by the person who signed and attached the tag, after validating the repairs or services have been completed.

---

## Safety rules - 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.

### 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.
- The air-conditioning system contains gases that should not be released into the atmosphere. Consult an air-conditioning specialist or use a special extractor to 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.
- Protect hoses during welding. Penetrating weld splatter may burn a hole or weaken hoses, allowing the loss of oils, coolant, etc.

### 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.



### 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



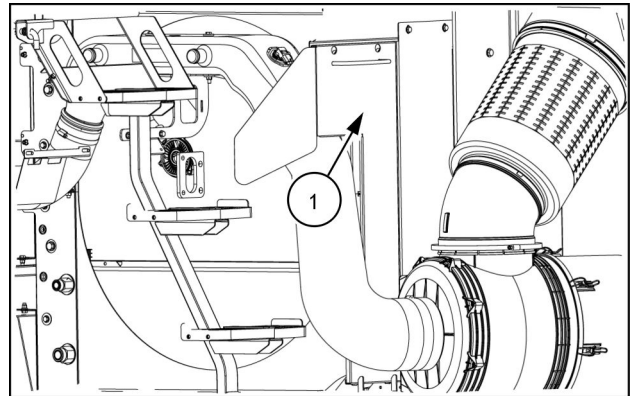
## **SERVICE MANUAL**

### **Engine**

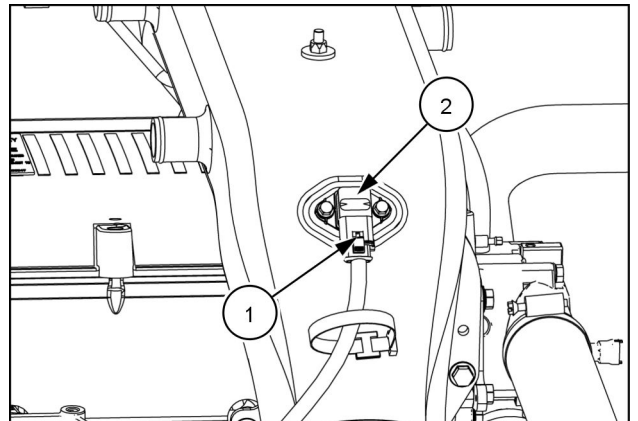
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AXIAL-FLOW® 9230 Machine with Power Guide Axle Tier III produced in  
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## Air intake system - Remove from 8230 and 9230

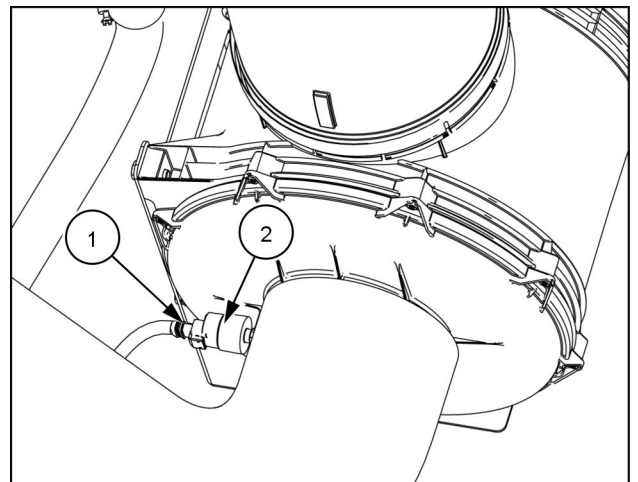
1. Remove the rear left end shield (1) by pulling out and lifting up. This panel is secured by two ball studs located on cover frame that latch onto two spring clips on the shield.



2. Remove the connector from the restriction sensor (1) on the air intake tube (2).

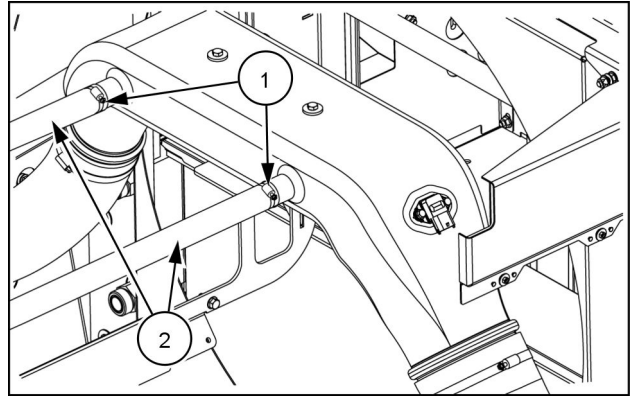


3. Remove the harness connector (1) from the pressure switch (2) on the air filter housing.



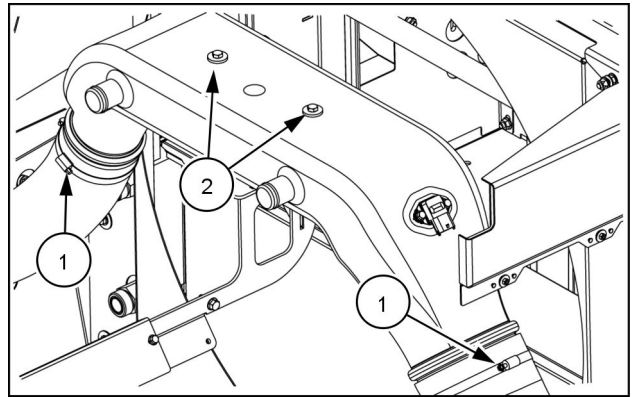
4. Loosen the two hose clamps (1) and remove the two tubes (2) from the air intake tube.

**NOTE:** there will only be a second hose connection only if the combine is equipped with the engine blow off kit installed.



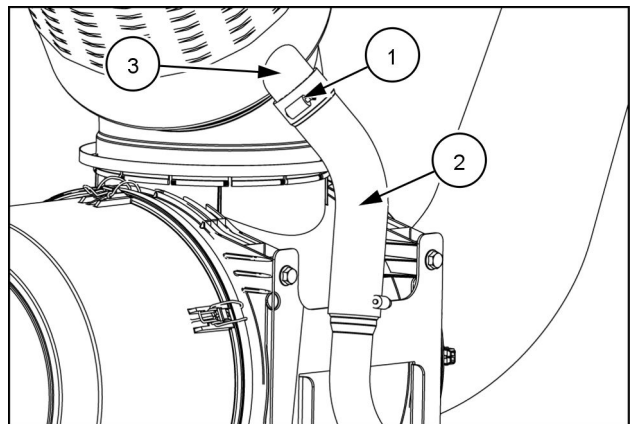
NHPE13AF00446AB 4

5. Loosen the two air intake tube clamps (1) to the turbo charger and the air intake assembly.
6. Remove the two bolts and washers (2) and carefully remove the air intake tube from the engine compartment.



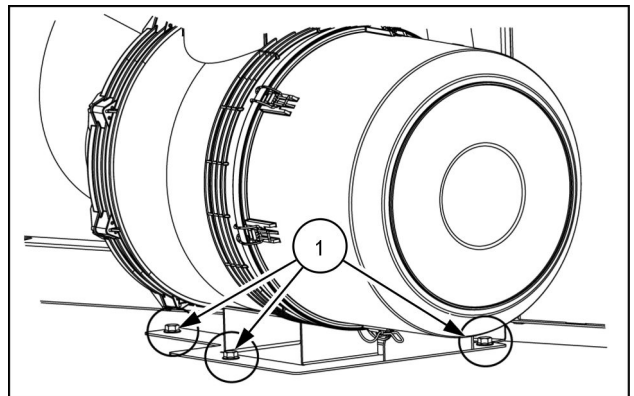
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7. Loosen clamp (1) connecting the exhaust aspirator hose (2) to the filter housing tube (3). Slide hose off of the filter housing tube.



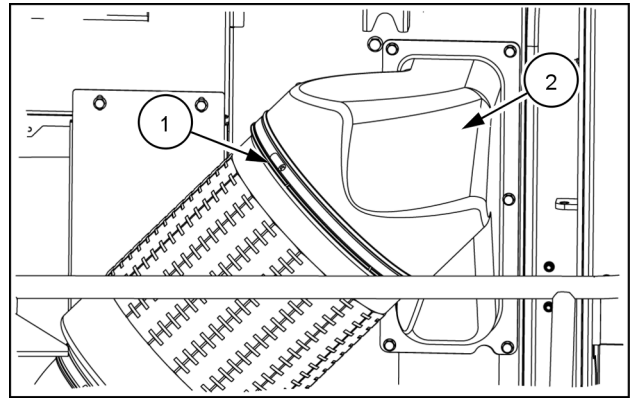
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8. Remove the three bolts (1) securing the air box frame to the deck. The bolts are secured by weld nuts in platform so they can be removed easily by one person.



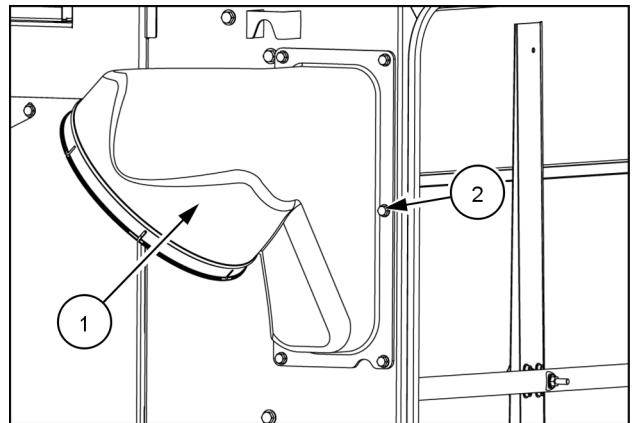
NHPE13AF00449AA 7

9. Loosen clamp (1) at the air plenum (2).
10. Carefully work the air cleaner off of the plenum and remove the air cleaner and set aside, out of the way and in a safe place.



NHPE13AF00448AA 8

11. If removing the air plenum (1), remove the six flange bolts (2) securing the air plenum to the cooler box.



NHPE13AF00539AA 9

**Next operation:**  
**Air intake system - Install to 8230 and 9230 (10.202)**



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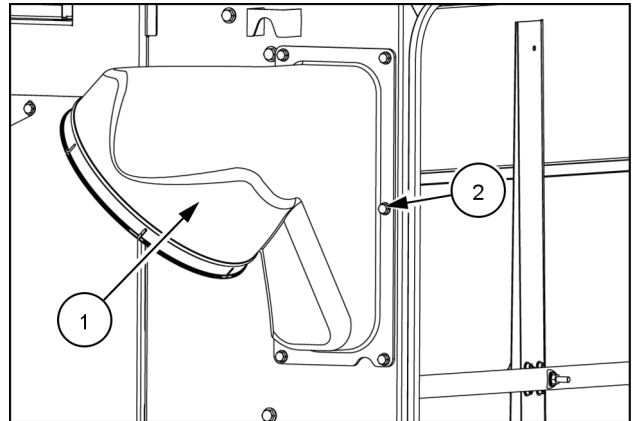
**Thank you so much for reading**

## Air intake system - Install to 8230 and 9230

### Prior operation:

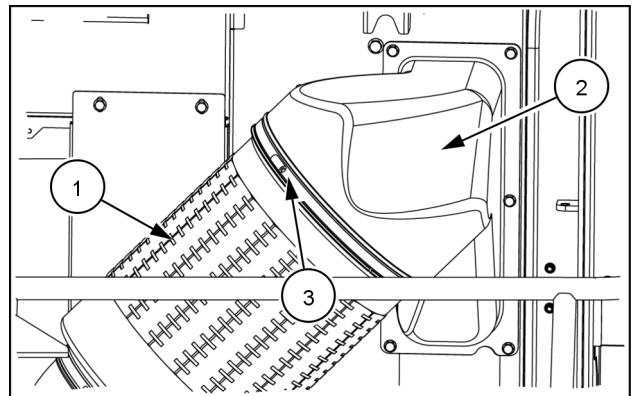
#### Air intake system - Remove from 8230 and 9230 (10.202)

1. If the air plenum (1) was removed, position it to the cooler box and install the six flange bolts (2) securing the air plenum to the cooler box. Torque to **6 N·m (4 lb ft) ± 2 N·m (1 lb ft)**



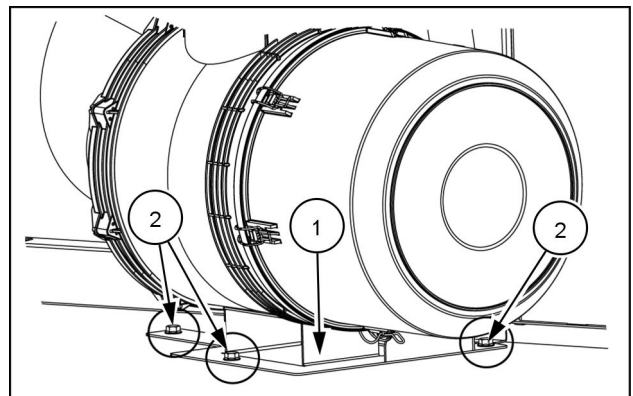
NHPE13AF00539AA 1

2. Carefully install the air cleaner assembly (1) onto the air plenum (2) and position the clamp (3). Tighten the clamp.



NHPE13AF00448AA 2

3. To install the air filter housing, align the air cleaner base (1) to the existing mounting holes in the rear platform and install three M10 x 25mm (2) flange bolts. Tighten to standard torque.



NHPE13AF00449AA 3

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