

CLEANFIX-KIT FOR JOHN DEERE 6R110 / 6R120 / 6R130 / 6R140 / 6R150 Model year 2022

Operating instructions





https://cleanfix.org/instructions-jd

EN: Scan QR-Code to get instructions in other languages.

 $\textbf{DE:} \ \mathsf{QR-Code} \ \mathsf{scannen} \ \mathsf{um} \ \mathsf{Anleitung} \ \mathsf{in} \ \mathsf{weiteren} \ \mathsf{Sprachen} \ \mathsf{zu} \ \mathsf{erhalten}.$

FR: Scanner le code QR pour obtenir des instructions dans d'autres langues.

IT: Scansione QR-Code per ottenere istruzioni in altre lingue.

ES: Escanea el Código QR para obtener instrucciones en otros idiomas.

PT: Digitalize o Código QR para obter instruções noutras línguas.

TR: Diğer dillerdeki talimatlar için QR kodunu tarayın.





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1 General information

1.1 Legal notice

1.1.1 Copyright

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1.1.2 Manufacturer and service address



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For additional information, feel free to contact our customer service team and our worldwide representatives at any time.



1.2 Introduction

Before installing or operating the Cleanfix® Kit for John Deere, familiarize yourself with the contents of these operating instructions. This will help you achieve optimal results and work safely. The operating instructions are a component of the product and must always be close at hand. By doing so, you will:

- prevent accidents.
- comply with the warranty terms.

1.2.1 Target group of these operating instructions

These operating instructions are intended exclusively for mechanics trained on agricultural machinery.

The product may be installed and started up only by persons who are familiar with the operating instructions, the product, as well as the national laws and regulations concerning work, safety, and accident prevention.

1.2.2 Liability and damages

Since we are not included in technical service updates from the manufacturer, you may be required to make adjustments when installing this product. Hägele GmbH does not assume responsibility for installation and modification costs.

On account of the information provided in these operating instructions, the manufacturer accepts no liability for direct damages or indirect losses arising from improper operation or maintenance. We disclaim all liability for personal injury or property damage caused by untrained personnel or through failure to comply with regulations concerning work, safety, and accident prevention.

No claims for modification of products that have already been delivered may be made on the basis of the data, illustrations, and descriptions in these operating instructions.

For your safety, use only original spare parts and original accessories.

We assume no liability for the use of other products and any resulting damages.

- Inspect delivery for damage in transit and for completeness.
- Immediately document in writing any defects and damages.
- Photograph damaged components.
- Send in a written damage report.



1.2.3 Validity

These instructions contain information required for installing and starting up the product.

In addition to the description of the equipment, the instructions also contain some abstractions. The product features may therefore partially deviate from the descriptions and depictions.

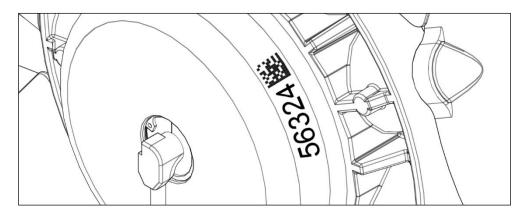
1.2.4 Product identification

The following information is necessary for inquiries to the manufacturer:

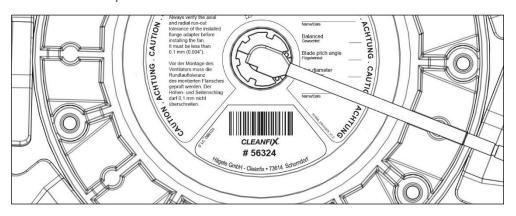
(1) Fan serial number:

• On the side edge of the front housing

Serial number:	#			



• Or on the top of the fan.



(2) Vehicle:

Manufacturer:	
Model:	
Operating hours:	

(3) Photo of the fan:



1.2.5 Typographical conventions

The following symbols and terms are used in these operating instructions:

- A dot is used for bulleted lists.
- ► A triangle is used for actions to be performed.
- > An arrowhead is used for measures to avoid risks.
- [+] A plus sign indicates an optional feature that is not included in the standard features.
- (1) (1) A number in parentheses is used for labeling illustrations.



The "Information" pictograph points out tips and additional information.



The "Additional information" pictograph points out cross-references to information from other documentation.

1.2.6 Safety information in the text

The safety information warns users about risks and informs them how to avoid the risks.

General safety information is provided at the beginning of these instructions in chapter 2.

Specific warning information appears before a dangerous step.

Safety and warning information that must be followed is highlighted as follows:

Danger to people



Warns of an extremely dangerous situation in which failure to observe the hazard warning will result in death or major irreversible injury.

MARNING!

Warns of a dangerous situation in which failure to observe the hazard warning may result in death or major irreversible injury.

↑ CAUTION!

Warns of a dangerous situation in which failure to observe the hazard warning may result in death or major irreversible injury.



Danger to property

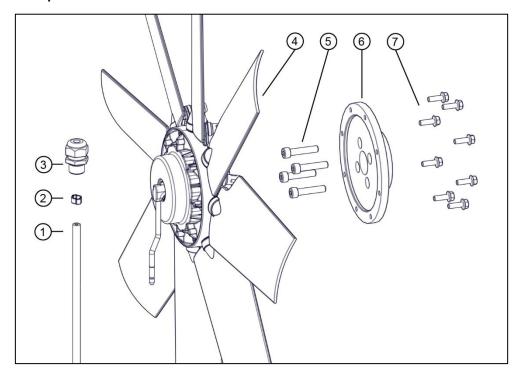
NOTE

Warns of situations in which failure to observe the information may result in property damage.

In addition, the information and safety rules provided by the manufacturer in the respective vehicle documentation must be observed.

1.3 Product description

1.3.1 Pneumatic fan components



- (1) Pressure hose
- (2) Hose clamp
- (3) Strain relief
- (4) Fan
- (5) Flange screws
- (6) Flange
- (7) Mounting srews



1.3.2 Cleanfix® electrical components

Cleanfix® offers a number of control solutions. The reversing function is activated pneumatically or hydraulically and controlled electronically.

	For machines with compressed air system	For machines without compressed air system
Cleanfix® electrical component	Valve unit 4.0	Control unit 4.0
Reversing function	Timer 4.0	
	Switching from cooling to cleaning and back is controlled by the set interval, for example, every 30 minutes. This time period can be changed as desired via the Cleanfix control app. Intermediate cleaning can be performed manually at any time by pressing the push button or via the Cleanfix control app.	



2 Safety

This chapter provides general safety information. The individual chapters of the operating instructions also contain specific safety information that is not provided in the "Safety" chapter. Observe the safety information:

- for your own safety.
- for the safety of others.
- to ensure machine safety.

When commercial vehicles are involved, a number of risks can arise due to improper behavior. For this reason, work very carefully and never under time pressure.

2.1 Intended use

The product may be used only for the following purposes:

- For cooling commercial vehicles.
- For cleaning the radiators of commercial vehicles

Only persons authorized by the manufacturer may make modifications, alterations, and repairs.

As a general principle, unauthorized modifications, alterations, or improper use exempt the manufacturer from liability for resulting damages.

2.2 Other regulations

In addition to these instructions, the respective national laws and regulations as amended must be observed (e.g., protective clothing, accident prevention regulations, and occupational health and environmental rules).

2.3 Warnings

↑ WARNING!

Rolling of the machine may result in serious injury or death!

An unsecured machine can run over or crush you. This can result in serious injury or death.

- Turn off the vehicle.
- Remove the ignition key.
- Secure the vehicle against rolling.



Wearing loose-fitting work clothes may result in serious injury or death!

Do not wear loose-fitting clothes because they can become entangled in rotating parts.

Wear work and protective clothing stipulated by the employer's liability insurance association.

Working on a machine while it is running may result in serious injury or death!

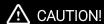
No work may be performed on the machine while it is running. Objects or persons may be caught, pulled in, or crushed.

Work only on machines that have been turned off.

Modifications to the fan may result in serious injury or death!

Unauthorized modifications may impair the functioning and/or safety and the service life of the fan. Unauthorized modifications to the fan terminate the manufacturer's warranty and liability. This may result in damage to the machine as well as to serious injury or death.

Absolutely no modifications may be made to the fan.



Failure to resolve malfunctions may result in accidents or damage!

Operation of a defective fan or fan component may lead to accidents or damage.

- > Immediately stop the machine.
- > Shut down the machine.
- Secure the machine.
- Resolve the fault promptly or engage a vehicle shop.

Activation of the reversing function while persons are standing in front of the vehicle may result in accidents!

The fan generates strong air currents when it is in the cleaning position. Persons standing in front of the vehicle may be struck by flying dirt when the reversing function is activated.

Make sure that no persons are standing in front of the vehicle.





Activation of the reversing function in closed rooms may result in accidents!

The fan generates strong air currents when it is in the cleaning position. In closed rooms, this may generate dust and result in damage or accidents due to flying parts.

Use the reversing function only in a safe location and only outside of rooms.

Damage caused by lines or tubes that are too loose or are attached to moving parts!

During travel, the installed lines and tubes are subjected to vibrations. As a result, lines or nearby parts may be damaged due to friction.

➤ All lines and tubes must be securely fastened and must not make contact with moving parts.

NOTE

Property damage may result if the fan is installed directly on the crankshaft or when the fan is driven by a spur gear!

Torsional vibrations from the crankshaft or the spur gear will damage the fan and may cause damage to the vehicle.

Install Cleanfix® vibration dampers between the fan and the crankshaft or the spur gear.

Reversing the fan while the vehicle is in the red temperature range may result in property damage!

The cooling effect is interrupted when the reversing function is activated. Reversing the fan while the vehicle is in the red temperature range causes the engine to overheat.

- Avoid reversing the fan while the vehicle is in the red temperature range.
- Park the vehicle and open the hood so that the vehicle can cool down.



3 Required tools

Flange installation

- Magnetic or clamp type dial gauge
- 45 Nm torque wrench

Fan installation

- 20 Nm torque wrench
- Locking pliers
- Standard tools

Pressure hose installation and connection

- Lubricant
- Pincers
- Standard tools for pressure hose fitting

Electrical component installation and connection

Standard electrical and hand tools



4 Removing the manufacturer's components

∴ CAUTION!

Risk of injury due to the hot engine!

A hot engine can burn hands or other body parts.

- > Turn off the engine.
- > Allow the engine to cool down.
- > Remove the ignition key.
- > Disconnect the battery.
- ► Remove the fan guard and safety components as needed to gain access to the installed fan.
- ► Loosen any belts that drive the fan pulley.
- ► Remove the fan and fan shroud.
- Remove the stud bolts.





5 Installing the Cleanfix® fan components

5.1 Installing the Cleanfix® flange

- ► Clean the fan drive mounting surface for the flange to remove all dirt and rust.
- ► Attach the flange to the fan drive using the four supplied M10 socket cap screw.
- ► Tighten socket cap screw to 45 Nm





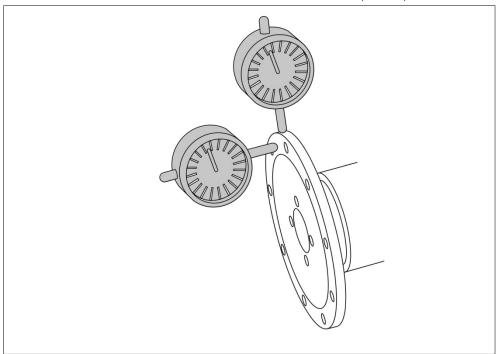
5.3 Checking the flange axial and radial circular runout

↑ WARNING!

Property damage due to axial and radial circular runout!

Imbalances damage the fan and may result in vehicle damage and serious injury.

- ➤ The axial and radial circular runout must be checked using a dial gauge and must not exceed 0.1 mm (0.004").
- Check the fan drive mounting surface and the flange for contamination and clean accordingly.
- ➤ If necessary, rotate the flange to the next hole and install and measure again.
- ► Loosen any belts that drive the fan pulley. This will allow for a more accurate axial and radial circular runout measurement.
- ► Check the axial and radial circular runout using a dial gauge. The axial and radial circular runout must not exceed 0.1 mm (0.004").



5.4 Attaching the pressure hose to the fan

NOTE

Property damage due to bending of the air intake tube!

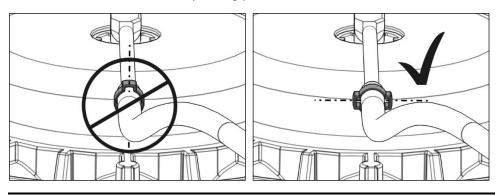
If the air intake tube of the air intake assembly is bent down toward the blades during installation, the fan blades will hit the hose during operation.

➤ Manually bend the air intake tube of the air intake assembly into the original position.

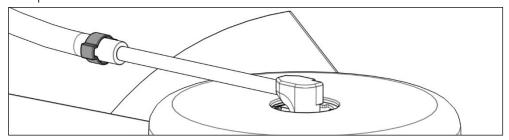
Collision due to incorrectly installed hose clamp!

The hose clamp must be parallel to the fan as pictured. If the ears of the hose clamp point up and down, the fan blades can hit the hose clamp during operation.

Rotate the hose clamp using pliers.



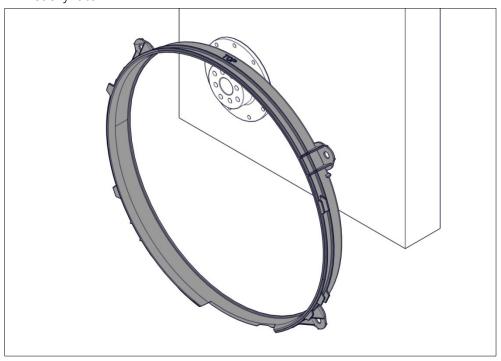
- ► Apply a thin layer of lubricant to the end of the air intake tube to make it easier to slide the pressure hose over the air intake tube.
- ► Slide the hose clamp over the pressure hose.
- ➤ Slide the pressure hose up to the side marks (25 mm; 1") on the air intake tube of the air intake assembly.
- ▶ Position the hose clamp as shown in the picture.
- ➤ Secure the pressure hose by pinching the ears of the hose clamp with pincers.



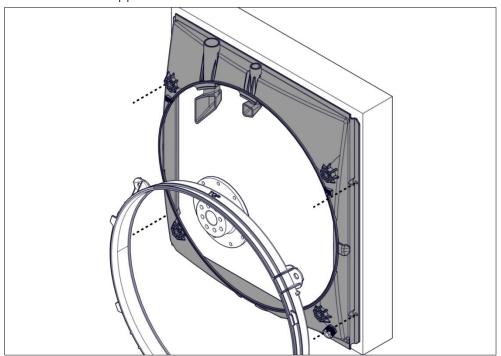


5.5 Installing the Cleanfix® reversible fan and fan shroud

► Hang the supplied ring over the flange so that you can mount it more easily later.

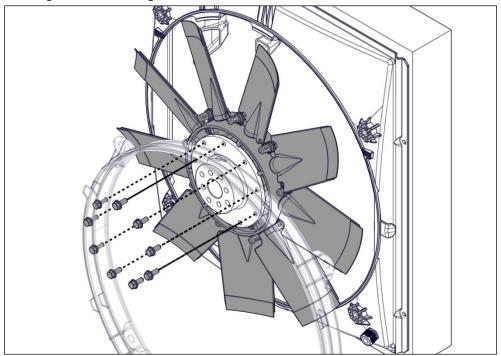


► Attach the supplied fan shroud to the radiator.

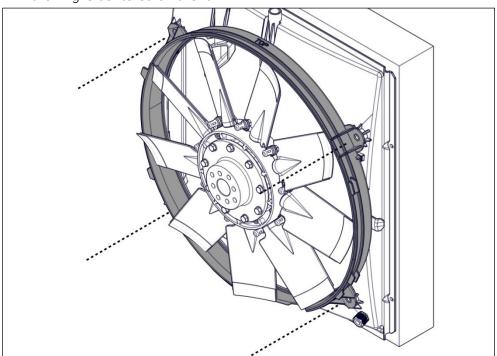


► Attach the Cleanfix® reversible fan to the flange using the supplied locking screws.

► Tighten the locking screws to 20 Nm.

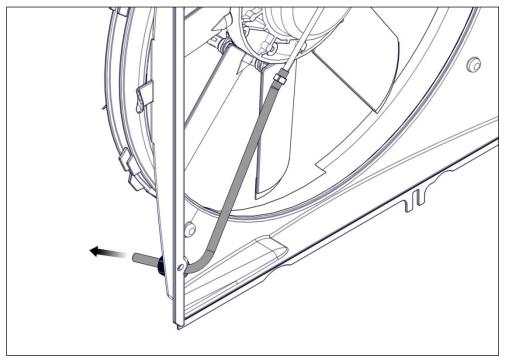


► Mount the ring using the supplied screws and washers. Make sure that the ring is centered on the fan.



INSTALLING THE CLEANFIX® REVERSIBLE FAN AND FAN SHROUD

► Route the pressure hose from the inside of the shroud through the hose screw connection.



NOTE

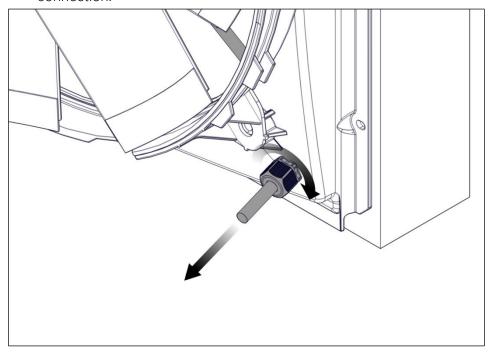
Property damage due to excessive tension on the pressure hose!

If the air intake assembly on the fan is under tension from the hose, the seals on the air intake assembly will wear out and the fan will start leaking.

- ➤ If necessary, open the hose screw connection, adjust the hose tension, and close the hose screw connection again.
- Pull the pressure hose through the hose screw connection so that it does not catch on the blades.
- ► Make sure that the pressure hose is not kinked behind the hose screw connection.

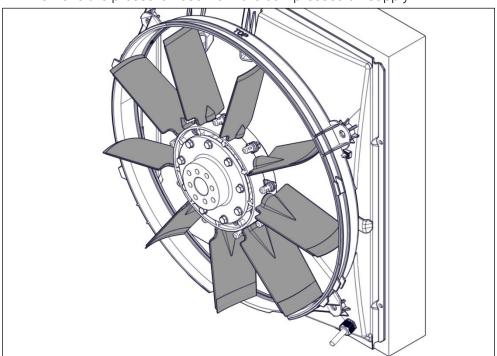


► Secure the hose with the compression nut of the hose screw connection.



5.6 Checking the smooth movement of the Cleanfix® reversible fan

- ► Supply compressed air (max. 10 bar or 140 psi) to the fan until the blades turn to their cross position.
- ► Use locking pliers to pinch the pressure hose, which will trap the air in the system.
- ▶ Remove the pressure hose from the compressed air supply.

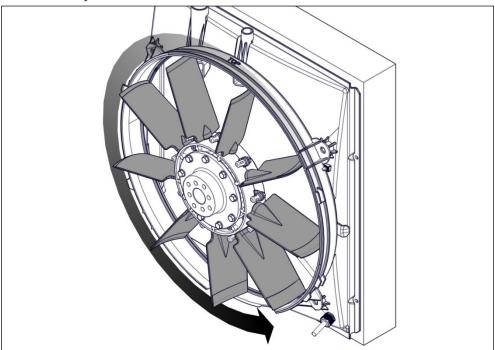


NOTE

Property damage due to rotation of the fan with tight drive belts!

Rotation of the fan with tight belts results in excessive force and may result in damage to the fan and drive.

- > Loosen the drive belts.
- Manually rotate the fan.
- ▶ Make sure that the blades do not come into contact with any objects.
- ► Make adjustments as needed.



- ► Remove the locking pincers to vent the fan.
- ► Re-tension the drive belt.

⚠ WARNING!

Pulling in of loose objects!

Loose objects can be pulled into the fan during operation, which may result in damage to the fan and vehicle and cause serious injury!

Remove loose objects or secure them with plastic ties.



6 Installing the Cleanfix® electrical components



Damage caused by lines or tubes that are too loose or are attached to moving parts!

During travel, the installed lines and tubes are subjected to vibrations. As a result, lines or nearby parts may be damaged due to friction.

➤ All lines and tubes must be securely fastened and must not make contact with moving parts.

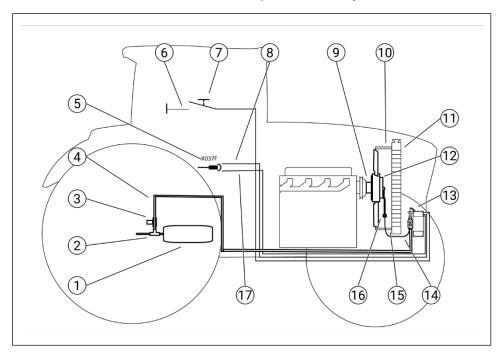
Overview of the Cleanfix® electrical components

The Cleanfix® electrical components are installed as described in the following sections. The relevant section must be taken into account depending on the delivered version.

	For machines with compressed air system	For machines without compressed air system
Cleanfix®	Valve unit 4.0	Control unit 4.0
electrical component	→ Installation see section 6.1	→ Installation see section 6.2



6.1 Cleanfix® valve unit 4.0 / for machines with compressed air system



- (1) Compressed air reservoir
- (2) Tee
- (3) Overflow valve (min. 6.5 bar or 94 psi, max. 7.0 bar or 102 psi)
- (4) Pressure hose (overflow valve valve unit)
- (5) X037F-3 connector (in the side console at the lower right)
- (6) Machine ground (terminal 31) [grey cable]
- (7) Switch (push button)
- (8) Keyed power (terminal 15) [red cable]
- (9) Adapter flange
- (10) Shroud
- (11) Radiator
- (12) Cleanfix[®] reversible fan (pneumatic)
- (13) Cleanfix® valve unit
- (14) Pressure hose (valve unit fan)
- (15) Strain relief
- (16) Hose clamp
- (17) Machine ground (terminal 31) [black cable]





6.1.1 Installing the tee and overflow valve

Remove the right rear wheel to access the vehicle's compressed air



- Remove the compressed air tube from the compressed air reservoir.
- Mount the tee on the compressed air reservoir.
- Shorten the compressed air tube as needed and reconnect it to the compressed air reservoir via the tee.
- Connect the overflow valve to the arm of the tee.
- Align the tee and overflow valve and screw down the connections.



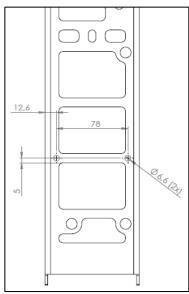


CLEANFIX.

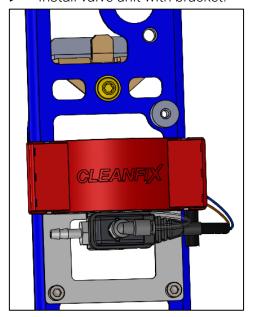
6.1.2 Installing the Cleanfix® valve unit

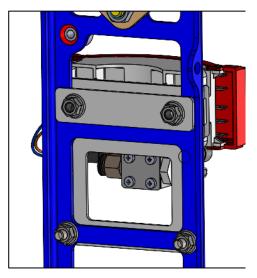
▶ Drill two Ø6.6 mm (0.26") holes on the bracket in front of the radiator as shown. Dimensions see figure.





► Install valve unit with bracket.







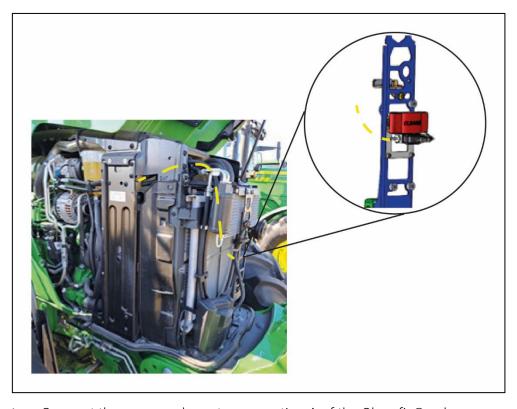


6.1.3 Routing the pressure hose of the Cleanfix® reversible fan to the Cleanfix® valve unit

- Run the pressure hose with corrugated tube as shown.
- Use the supplied rubber pipe clamp to attach to the trim mounting near the fan shroud.







Connect the pressure hose to connection A of the Cleanfix® valve.







6.1.4 Connecting the pressure hose to the overflow valve and the Cleanfix® valve unit

Connect the pressure hose with corrugated tube to the overflow valve.



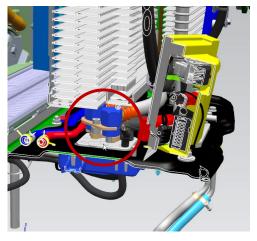


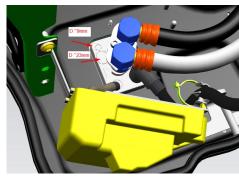
Run the pressure hose with corrugated tube as shown.



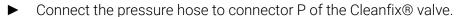














NOTE

Property damage due to contact of the corrugated tube with hot pipes!

- ➤ The minimum clearance of 10 mm (0.4") to other cables and tubes must be observed.
- ► Use the supplied rotatable corrugated tube holders to attach the corrugated tube to adjacent cables or tubes.



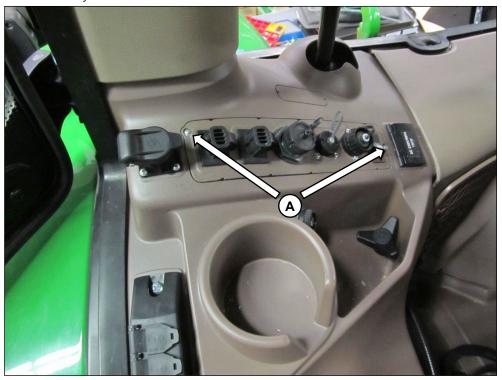






6.1.5 Preparing electrical installation

- ► Remove the screws (A) from the connector holder.
- ► Carefully lift out the connector holder.



► Lift out and remove the cover plate for the switch from the connector holder.





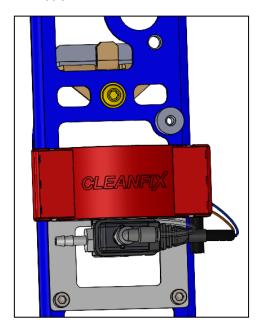
6.1.6 Connecting the Cleanfix® valve unit and switch to the machine's power supply

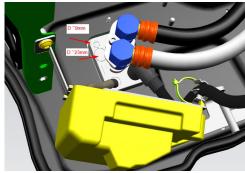
↑ CAUTION!

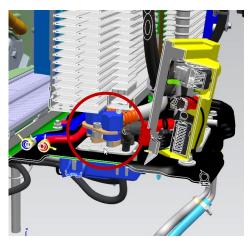
Damage caused by lines or tubes that are too loose or are attached to moving parts!

During travel, the installed lines and tubes are subjected to vibrations. As a result, lines or nearby parts may be damaged due to friction.

- ➤ All lines and tubes must be securely fastened and must not make contact with moving parts.
- ► Run the supplied cable harness between the valve unit and the driver's cab.



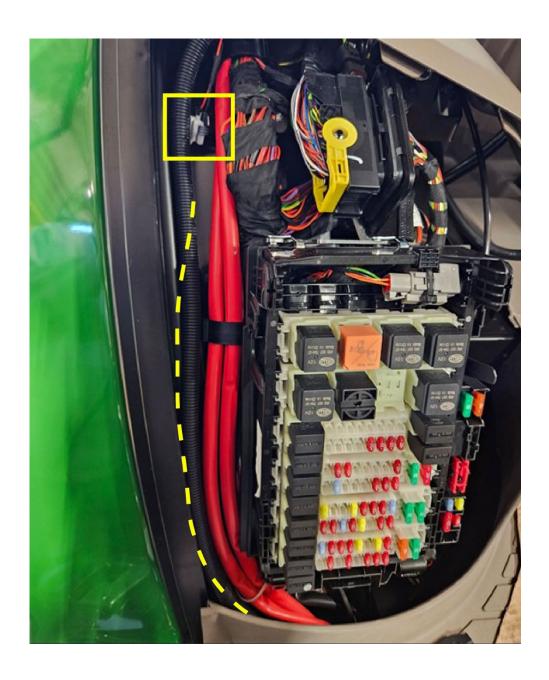


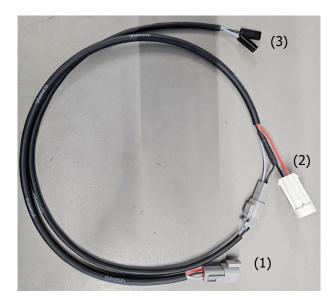




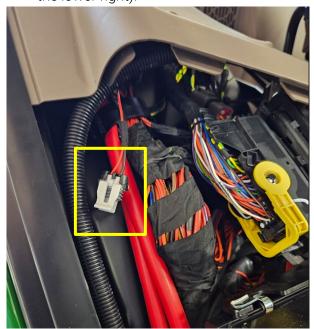






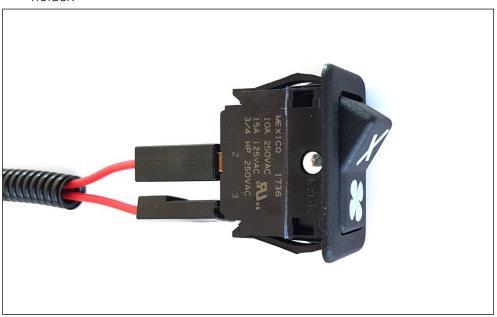


- (1) Connector for valve unit
- (2) Connector for X037F-3 plug in the side console at the lower right
- (3) Connector for switch
- ► Connect the cable harness to the X037F-3 plug (in the side console at the lower right).





Connect the switch to the cable harness and mount it in the connector holder.

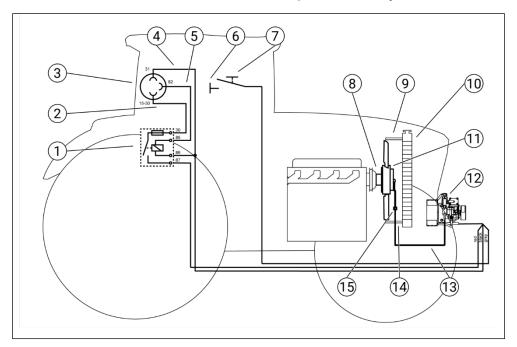


- Reinstall the connector holder.
- Attach the Cleanfix label above the switch.





6.2 Cleanfix® control unit 4.0 / for machines without compressed air system

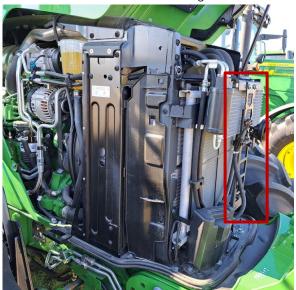


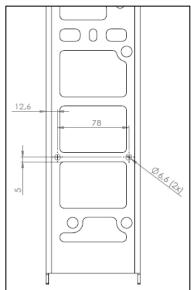
- (1) Relay
- (2) Power supply
- (3) 3-pole outlet in the control console
- (4) Machine ground (terminal 31) [black cable]
- (5) Keyed power (terminal 15) [red cable]
- (6) Machine ground (terminal 31) [grey cable]
- (7) Switch (push button)
- (8) Adapter flange
- (9) Shroud
- (10) Radiator
- (11) Cleanfix® reversible fan (pneumatic)
- (12) Cleanfix® control unit
- (13) Pressure hose
- (14) Strain relief
- (15) Hose clamp



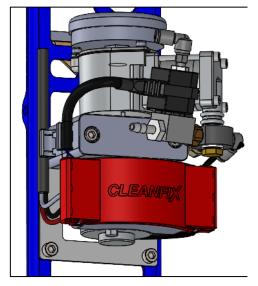
Installing Cleanfix® control unit 6.2.1

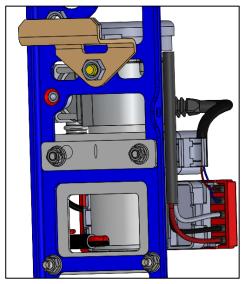
Drill two Ø6.6 mm (0.26") holes in the bracket in front of the radiator as shown. Dimensions see figure.





Install control unit with bracket.



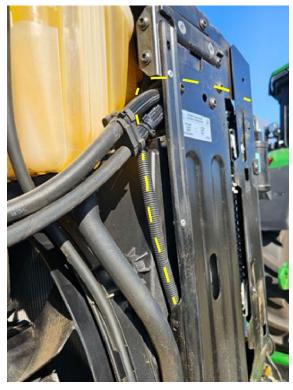


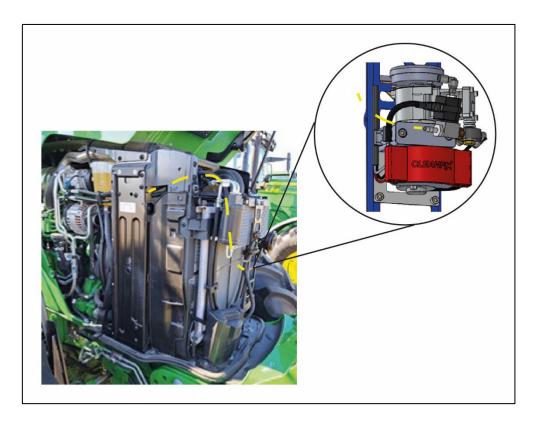


6.2.2 Routing the pressure hose of the Cleanfix® reversible fan to the Cleanfix® control unit

- ► Run the pressure hose with corrugated tube as shown.
- ► Use the supplied rubber pipe clamp to attach to the trim mounting near the fan shroud.









NOTE

Property damage due to contact of the corrugated tube with hot pipes!

- ➤ The minimum clearance of 10 mm (0.4") to other cables and tubes must be observed.
- Use the supplied rotatable corrugated tube holders to attach the corrugated tube to adjacent cables or pipes.







6.2.3 Preparing electrical installation

- Remove the screws (A) from the connector holder.
- Carefully lift out the connector holder.





► Lift out and remove the cover plate for the switch from the connector holder.



- ► Remove the screws on the socket.
- ► Lift out the socket.



▶ Remove the cover below the connector holder.



► Run the corrugated tube with cables for the Cleanfix® control unit to the driver's cab below the connector holder.

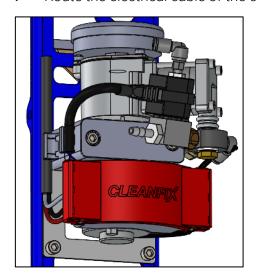


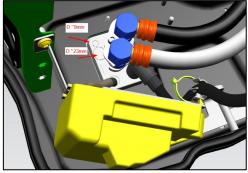


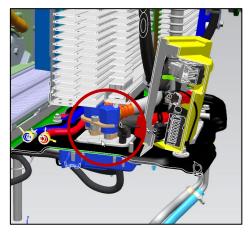


6.2.4 Connecting the cable of the Cleanfix® control unit to the relay

▶ Route the electrical cable of the control unit to the driver's cab.









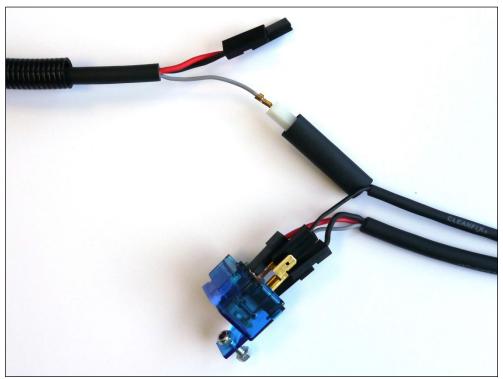






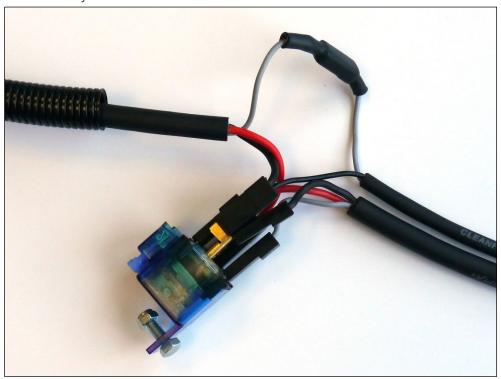


► Connect the grey cable of the Cleanfix® control unit with the grey cable of the switch.



- ► Slide the shrink hose over the push-on connection and use heat to shrink it.
- ► Connect the red cable of the Cleanfix® control unit to terminal 87 of the relay.

► Connect the black cable of the Cleanfix® control unit to terminal 86 of the relay.



► Install the relay below the connector holder.

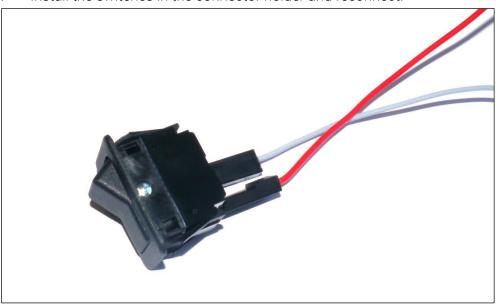






6.2.5 Connecting Cleanfix® control unit and switch with the power supply of the machine

- ► Run the cables for the switch and outlet from the relay upward to the connector holder.
- ▶ Install the switches in the connector holder and reconnect.

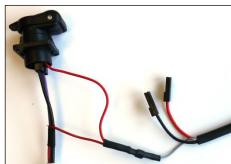


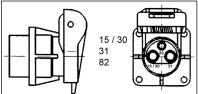




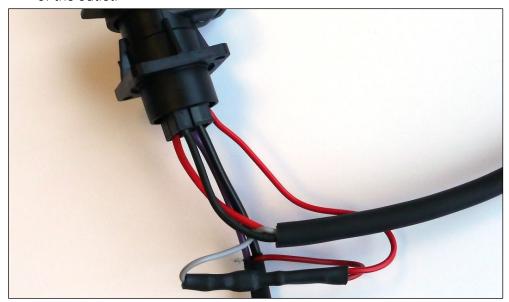
- Pull the red cable from the outlet.
- Connect the removed red cable to the push-on plug distributor of the gray cable on the cable harness.
- Slide the shrink hose over the push-on connection and use heat to shrink it.
- Connect the red cable of the cable harness to connector 82 (keyed power) of the outlet.







- Connect the black cable of the cable harness to connector 31 (ground) of the outlet.
- Connect the red cable of the cable harness to connector 15/30 (power) of the outlet.



Reinstall the outlet and connector holder.



► Attach the "CAUTION!" label to the outlet cover because the outlet is limited to max. 10 A due to the connection of the Cleanfix® control unit!



► Attach the Cleanfix label above the switch.





7 Switching off the Visco fan control

For models manufactured in 2018 and later, the Visco fan control must be switched off.

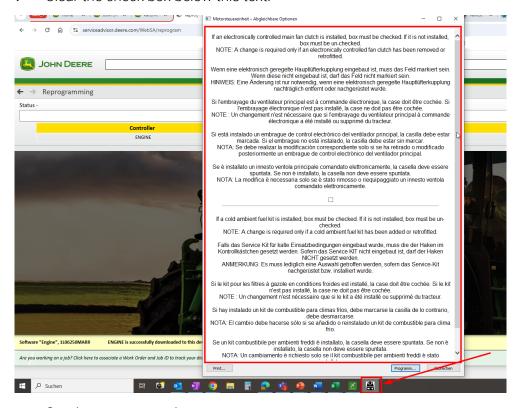
- ▶ Download the engine software using the JD Service Advisor.
- ► Start programming the engine software.

A dialog box with the following text appears:

(Manchmal kommt das nicht in den Vordergrund, aber das schwarz/weiße Symbol in der Taskleiste sollte angezeigt werden.)

"If an electronically controlled main fan clutch is installed, box must be checked. If it is not installed, box must be unchecked."

► Clear the check box below this text.



► Continue programming.

Rarely, this selection of engine options may not be displayed during programming.

If this is the case, dealers have the following options:

- ► Follow Service Advisor Dealer Information 82982.
- ► Contact JD Support DTAC (Dealer Technical Assistance Center), which can make the adjustment manually.



8 Initial start-up

! WARNING!

Flying parts may result in serious injury or death!

Loose parts can be drawn in by the fan and may cause serious injury or death as well as machine damage.

- > Remove tools and loose objects.
- > Reliably secure components near the fan.
- ► Start the engine.
- Reverse the fan three times in neutral.



If Flex-Tips are used, slight abrasion of material will occur.

- ► Reverse the fan once at approx. 1/3 of the max. rotational speed.
- Reverse the fan once at approx. 2/3 of the max. rotational speed.
- Reverse the fan once at full rotational speed.



9 Operation (push button)



Flying dirt may cause injuries!

Persons near the radiator may be hit by flying dirt.

- ➤ Before activating the reversing function, make sure that nobody is in the vicinity of the radiator.
- ➤ Before activating the reversing function, make sure that the machine is not in a closed space.

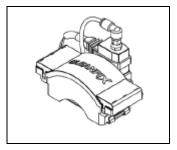
NOTE

Reversing the fan while the machine is in the red temperature range may result in damage!

The cooling effect is interrupted when the reversing function is activated. Reversing the fan while the machine is in the red temperature range causes the engine to overheat.

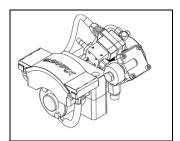
- ➤ Do not reverse the fan when the machine is in the red temperature range.
- > Park the machine and open the hood so that it can cool down.

9.1 Cleanfix® valve unit for machine with compressed air system



Briefly press the switch to automatically change from cooling to cleaning and back again.

9.2 Cleanfix® control unit for machine without compressed air system



Briefly press the switch to automatically change from cooling to cleaning and back again.



10 Operation (Cleanfix control app)

! WARNING!

Using the app while driving may cause major injuries or death!

Using the app in traffic on public roads impairs traffic safety.

- > Do not use the app in traffic on public roads.
- > Do not reverse the fan in traffic on public roads.

∴ CAUTION!

Flying dirt may cause injuries!

Persons near the radiator may be hit by flying dirt.

- ➤ Before activating the reversing function, make sure that nobody is in the vicinity of the radiator.
- ➤ Before activating the reversing function, make sure that the machine is not in a closed space.

NOTE

Reversing the fan while the machine is in the red temperature range may result in damage!

The cooling effect is interrupted when the reversing function is activated. Reversing the fan while the machine is in the red temperature range causes the engine to overheat.

- ➤ Do not reverse the fan when the machine is in the red temperature range.
- Park the machine and open the hood so that it can cool down.

Cleanfix offers an app that can be used to operate the electronic components with timer and to make settings.

The Cleanfix control app provides the following functions:

- Switching between automatic and manual operation
- Setting the cycle time
- Pausing cleaning
- Pairing with the device
- Monitoring the air filter status
- Performing manual cleaning
- Performing a system check



10.1 Downloading the app

- Open the app store on your mobile device.
- ➤ Search for Cleanfix control app in the app store.
- ▶ Download the Cleanfix control app.
- ► Open the Cleanfix control app.

Mobile device access

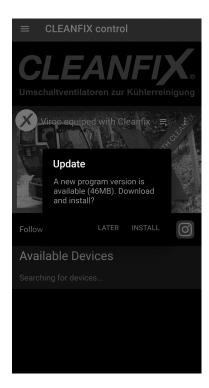
So that the app can access certain functions on your mobile device, you must accept the permissions.

The app requires Bluetooth access. Access might not be available in every country.

- ► Follow the instructions on your mobile device.
- ► If necessary, install the update.

i Updates

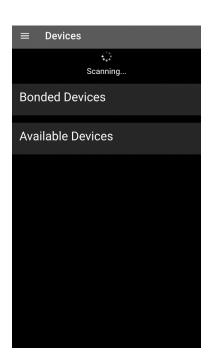
To ensure that the app will function optimally and is the current version, install all updates.



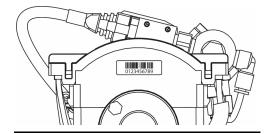


10.2 Pairing the device

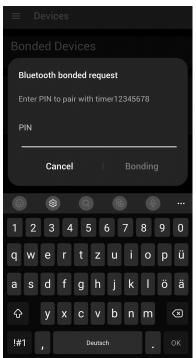
- ightharpoonup Tap the \equiv button to open the menu.
- ► Select [Devices].
- For subsequent steps, the device must be turned on.
 - ➤ If necessary, turn on the ignition.
 - ➤ Swipe downward to start the search for devices.
 - ► Select the relevant device.



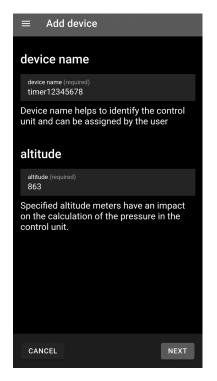
- ► Enter the PIN.
- The PIN consists of the last six digits of the device serial number.



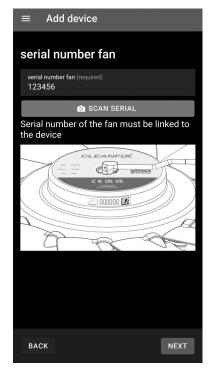
► Tap [Pairing] to confirm.



- ▶ Define the [device name].
- ► Enter the average [altitude] of the working environment.
- ► Tap [next] to confirm.

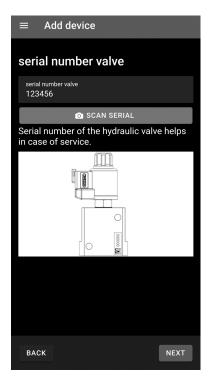


- ► Enter or scan the [serial number fan].
- ► Tap [next] to confirm.





- ► Optionally, enter or scan the [serial number valve].
- ► Tap [next] to confirm.



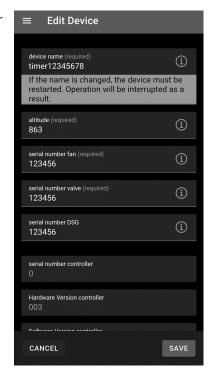
- Optionally, enter or scan the [serial number DSG].
- ► Tap [save] to confirm.





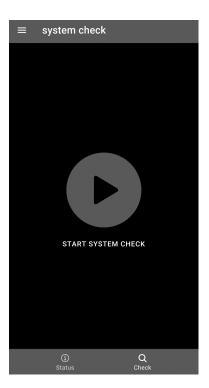
10.3 Editing the device

- ➤ Select the device from the [Devices] or the main screen.
- ► Tap the � button to open the [Edit Device] dialog.
- ► Adapt the information accordingly.
- ► Tap [save] to confirm.



10.4 Performing a system check

- ➤ Select the device from the [Devices] or the main screen.
- ► Tap the Q button to open the [Check] dialog.
- ► Tap the button to start the system check.
- The system check is performed.
 The result is shown when the check is complete.



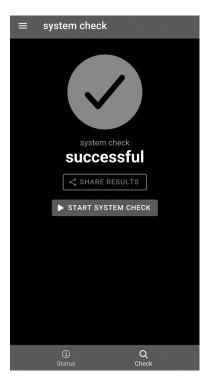


A) System check successful

i Sharing the results

The result of the system check can be transmitted or saved as a PDF file via the [

share results] button.



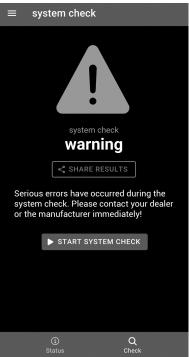
B) System check failed

> Contact the dealer or manufacturer.

i Sharing the results

The result of the system check can be transmitted or saved as a PDF file via the [

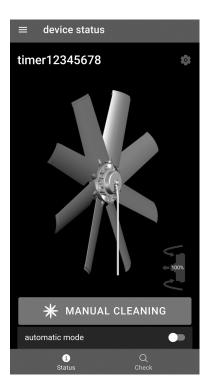
share results] button.





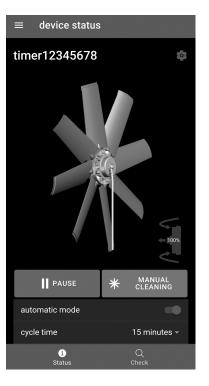
10.5 Performing manual cleaning

- ➤ Select the device from the [Devices] or the main screen.
- ➤ Tap the [★ manual cleaning] button to performing manual cleaning.
- If [* manual cleaning] is tapped during automatic operation, intermediate cleaning is performed. The cycle time then starts over.



10.6 Turning automatic operation on/off

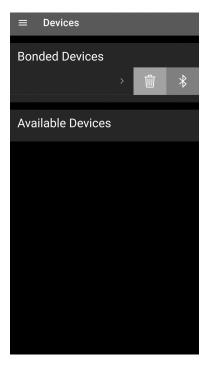
- ➤ Select the device from the [Devices] or the main screen.
- ► In the [automatic mode] dialog, tap the switch to turn automatic operation on or off.
- ➤ Select the [cycle time] dialog to set the cycle time.
- ➤ Select a cycle time between 5 and 120 minutes.
- You can pause automatic operation by tapping the [II pause] button and then resume automatic operation by tapping the [> resume] button.





10.7 Removing a device

- ightharpoonup Tap the \equiv button to open the menu.
- ► Select the [Devices] menu screen.
- Swipe the corresponding device to the left to display options.
- ► Tap the 🗓 button to remove the device.



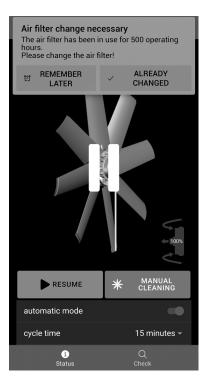
10.8 Showing the air filter status

The air filter on the device becomes clogged in the course of operation. This occurs depending on the operating time and the number of times the fan is reversed.

The indicator on the filter symbol

shows the air filter status. If the value falls below 10%, a corresponding message appears and filter replacement is recommended (see section 12.2).

- ➤ Select the device from the [Devices] or the main screen.
- ➤ Tap the **3** button to show the air filter status.
- ► Tap [OK] to confirm.







11 Maintenance

11.1 Servicing the Cleanfix® reversible fan

Cleanfix® reversible fans are maintenance-free.

11.2 Servicing the Cleanfix® electrical components

Valve unit 4.0: Cleanfix® valve units are maintenance-free.

Control unit 4.0: For pneumatic electronic components with a compressor, the filter must be replaced at every maintenance interval of the machine, but at least after 500 operating hours.



12 Troubleshooting (Cleanfix® reversible fans)

12.1 Blades do not rotate to the cleaning position

No or low pressure supply (for pneumatic or hydraulic system)

Check	Comment	Action
Check the pressure supply.	Pressure of min. 6.5 bar / 94.27 psi to max. 8 bar / 116.03 psi must be applied to the electronic component. Hydraulic system Pressure of min. 20 bar (H222, H252) or 42 bar (H162) must be applied to the electronic component. Max. 50 bar / 725.19 psi may be applied.	Set the pressure supply.
Check the valve function.	The valve must click softly when the power supply is switched on and off. If necessary, connect an external power supply. Note: observe voltage of 12 V/ 24 V.	If the valve does not click, it must be replaced.
Check the pressure hose.	Pneumatic system If necessary, pull the pressure hose from the valve and connect it to the vehicle shop compressed air supply (max. 8 bar / 116.03 psi) to locate possible leaks faster. Hydraulic system Check the pressure hose for leaks.	If the hose leaks, it must be replaced. If the fan leaks, an appropriate seal kit must be ordered.
Mechanical fault	If all the above conditions are met and the blades do not rotate, there is likely a mechanical fault.	Contact the manufacturer. Service address: See section 1.1.2



No or low pressure supply (for electronic components with compressor)

Check	Comment	Action
Check the compressor function.	When the compressor builds up pressure, the voltage may fall to max. 0.5 V below the rated voltage.	If necessary, install the electronic component in a stabler manner (different cross section, shorter cables, etc.).
Check the compressor pressure build-up.	Check the pressure build-up of the compressor (max. 15 s / min. 6.5 bar / 94.27 psi) with the fan connected.	If insufficient pressure is built up, the compressor must be replaced.
Check the valve function.	The valve must click softly when the power supply is switched on and off. If necessary, connect an external power supply. Note: observe voltage of 12 V/ 24 V.	If the valve does not click, it must be replaced.
Check the pressure hose.	If necessary, pull the pressure hose from the valve and connect it to the vehicle shop compressed air supply (max. 8 bar / 116.03 psi) to locate possible leaks faster.	If the hose leaks, it must be replaced. If the fan leaks, an appropriate seal kit must be ordered.
Mechanical fault	If all the above conditions are met and the blades do not rotate, there is likely a mechanical fault.	Contact the manufacturer. Service address: See section 1.1.2



12.2 Blades do not rotate to the cooling position

Fan speed is too high

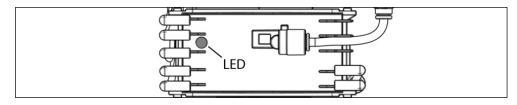
Check	Comment	Action
Check the reversing function at a reduced speed.	Reducing the speed reduces the aerodynamic force acting on the blades.	Reduce the speed while reversing the fan or install additional springs in the fan. Service address: See section 1.1.2

Fan does not vent / Oil does not flow back

Check	Comment	Action
Check the pressure hose.	The pressure hose must not be bent or pinched.	Eliminate bends and pinch points
		If the pressure hose is damaged, it must be replaced.
Check the valve function.	The valve must click softly when the power supply is switched on and off. If necessary, connect an external power	If the valve does not click, it must be replaced.
	supply.	
	Note: observe voltage of 12 V/ 24 V.	
Mechanical fault	If the fan with hose disconnected does not switch back in idle, there is likely a	Contact the manufacturer.
	mechanical fault.	Service address: See section 1.1.2



Troubleshooting (electronic components) 13



LED error code	Cause of error
	Check the operating voltage
Does not flash	

Green LED error code	Cause of error
	Normal status without Bluetooth connection
Permanently lit green	
	Normal status with Bluetooth connection
Lit green for 3 sec.	
MMMMMM.	[automatic mode] paused
Permanently flashing green quickly	In the Cleanfix control app, tap the [► resume] button to resume [automatic mode] (see section 11.6).

Red LED error code	Cause of error	
Л	Air filter status is below 10%	
Flashing red 1x	Pair the device with the Cleanfix control app.	
	► Follow the instructions in the app (see section 11.8).	
ЛЛ	Increased temperature	
Flashing red 2x	► Pair the device with the Cleanfix control app.	
Triadining roa zix	Acknowledge the error message in the app.	
	The service life of the device is impaired at a temperature of 65° or higher.	
	If necessary, change the installation position of the device.	
ллл	The pressure sensor values are faulty	
Flashing red 3x	► Turn the ignition off and on.	
Triadining red ox	► If the error persists, contact the manufacturer.	
	Service address: See section 1.1.2	



	Short circuit, excess temperature, or broken valve cable
Flashing red 4x	► Turn the ignition off and on.
	► If the error persists, contact the manufacturer.
	Service address: See section 1.1.2
	Short circuit or broken compressor cable
Flashing red 5x	► Turn the ignition off and on.
Tridoming red ox	▶ If the error persists, contact the manufacturer.
	Service address: See section 1.1.2
ллллл	Critical temperature / temperature shutdown
Permanently flashing red	The device switches off at a critical temperature. When the device has cooled off, it switches on again.
	▶ If the error occurs repeatedly, move the device to a cooler location.
	Short circuit in the push button in the driver's cab or the pressure switch
Permanently flashing red quickly	► Turn the ignition off and on.
	▶ If the error persists, contact the manufacturer.
	Service address: See section 1.1.2
	Multiple error messages present
Permanently lit red	Pair the device with the Cleanfix control app to call up all error messages.

Red/green LED error code	Cause of error
липпипипипипипипипипипипипипипипипипипи	Faulty memory readout
Permanently flashing alternately red and green	► Contact the manufacturer.
	Service address: See section 1.1.2