



## Maintenance Checklist for your Berner Air Curtain

A properly installed and maintained Berner Air Curtain can provide many years of benefits such as:

- Energy and Cost Savings
- Interior Thermal Comfort Protection
- Flying Insect Control
- Keeping Smoke and Vehicle Exhaust Fumes Out
- Reduce Humidity Infiltration
- Deter Debris and Contaminants
- and Much More

Berner air curtains require minimal maintenance. However, scheduled cleanings of your air curtain at least once every three months will ensure that it works properly, maintaining airflow for the highest effectiveness, and will also extend the life of the unit. There are some components that are common to all air curtains, and some components that will be unique to other types and models. Therefore, different units will require more maintenance than others. Extremely dirty, dusty, or greasy environments could require a more aggressive cleaning schedule. When cleaning the unit, it is especially important that all debris be removed to prevent injury or undesirable aerosolization of particles into the space.

### Checklist for the Most Common Maintenance Items to Address Regularly

- √ **Verify Operation** – Verify the existing sequence is being used, ensure door switches and interlocks are cycling the unit and/or heat on/off as intended.  
*Note: You can find installation and maintenance instructions on [Berner.com](http://Berner.com).*
- √ **Turn power off at the service panel – safety first!**
- √ **Visual Inspection** – seems simple enough, but sometimes the easiest solutions come from observing a component that needs to be cleaned or repaired.
- √ **Exterior Cabinet** – Wipe or clean exterior cabinet to remove dust and/ or dirt before it can be drawn into the intake.
- √ **Air Discharge Nozzle Vanes** - These vanes direct the flow of air exiting an air curtain. They are installed at the factory and require little maintenance. However, they may need to be adjusted if the air curtain is not directing air in the correct direction. Mechanical contractors installing air curtains should be able to adjust the vanes if needed. Once the proper angle is achieved, it should not need to be altered. Wipe down vanes if they are dirty.
- √ **Air Intake Grill and Filters** – Wipe down intake grill(s) if they are dirty. If the unit is equipped with filters, unscrew and remove the air intake grill. Vacuum and scrape (if necessary) to remove the buildup of dirt and debris. The function of the filter is to prevent dust and debris from entering the air intake into the unit, keeping the rest of the air curtain clean and functioning properly. Some filters are simple, disposable types; they can simply be thrown out and replaced



with new ones. Most Berner air curtain filters are aluminum and can be washed and re-used. Reusable filters can also be cleaned with water and soap. When the filter becomes dirty or dusty, it needs to be removed and cleaned or replaced. In areas where there is high dust, debris and/or grease levels, filters should be cleaned more frequently or replaced more often.

- √ **Belts** - Air curtains with belt-driven fans require frequent belt checks, tension adjustments and occasionally belt replacement. Belts should be inspected for proper tension and physical conditions. Belts should not have cracks or slack. Deteriorated belts should be replaced. Proper belt tension should be set according to the installation instructions. Direct drive fans do not require belts (Berner Industrial Belt Drive 16, Berner Industrial Belt Drive 20, Berner Industrial Belt Drive 30, Berner Industrial Belt Drive 40, and Berner Industrial Belt Drive 50).
- √ **Blower Motor and Bearings** – The blower motor turns the fan so that the air flow can work properly. It's very important to keep the blower motor(s) clean. If excessive dust accumulates on the motor, it could cause overheating. If the motor bearings are noisy, they might need attention. Some blower motors have bearings that can easily be lubricated, while others have sealed bearings that cannot. Contact Berner if you are unsure whether or not your air curtain's bearings are sealed. If a sealed bearing breaks down, the motor needs to be replaced. If a blower motor with bearings that aren't sealed, thus permanently lubricated, breaks down, then the bearings may be taken out by a certified motor shop, cleaned, and lubricated. Another option is to replace the motor.  
*Note: It is more common for bearings to break down because of too much lubrication rather than insufficient lubrication. Therefore, it is important not to over-lubricate the bearings.*
- √ **Fans** - As the fan is one of the primary components responsible for moving air, it's essential that it is in good condition. Cleanliness is key. Vacuum and scrape (if necessary) to remove the buildup of dirt and debris. Dirty fans can cause vibrations, noise, and excessive wear to the motor bearings. The exteriors of the fan should be cleaned thoroughly. Fan bolts and screws should be checked for tightness and tightened if loose.
- √ **Electrical Connections** - Electrical connections can be found at each motor, power supply, and controls such as switches and thermometers. These must be checked periodically. Any signs of corrosion or insulation discoloration should be inspected and fixed by an experienced electrician. Within a control panel, check for loose wires and that terminal points are torqued properly.
- √ **Reassembly** – Verify that all fasteners have been replaced and secured/tightened down properly and that all disconnects and/or switches are put back to normal operation. You may then safely turn the power back on. CAUTION: STAND CLEAR OF THE UNIT AND WEAR SAFETY GLASSES AS LOOSE DEBRIS MAY BE PRESENT AND EXIT THE NOZZLE WHEN TURNED ON AFTER CLEANING.

While the maintenance procedures for all Berner Air Curtain models could not be addressed in this checklist. However, the list above reflects the most common maintenance items to address regularly. Following these common practices will keep your air curtain in good working order during its lifetime.



As you address maintenance concerns, keep in mind the age and repair costs of the unit. In some cases, it might be more prudent to replace the air curtain. If you have any questions, you can always [contact our qualified Berner technical support team!](#)