

# **BUFFALO TURBINE LLC**

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## **BUFFALO TURBINE'S CYCLONE 8000 OPERATOR'S MANUAL AND PARTS BOOK Kohler Engine Model BT-CYC8KK**

# BUFFALO TURBINE LLC

## WARRANTY REGISTRATION FORM & INSPECTION REPORT

Any units not registered with Buffalo Turbine are not eligible for warranty claims

### WARRANTY REGISTRATION

FAX TO: 716-592-2460

This form must be filled out by the dealer and signed by both the dealer and the customer at the time of delivery

Customer's Name \_\_\_\_\_ Dealer's Name \_\_\_\_\_

Address \_\_\_\_\_ Address \_\_\_\_\_

City, State, \_\_\_\_\_ City, State, \_\_\_\_\_

Zip, Country \_\_\_\_\_ Zip, Country \_\_\_\_\_

Email Address (important) \_\_\_\_\_ Email Address \_\_\_\_\_

Telephone Number \_\_\_\_\_

Blower Model \_\_\_\_\_

Circle one:

Serial Number \_\_\_\_\_

Commercial Use

Delivery Date \_\_\_\_\_

Private Use

### DEALER INSPECTION REPORT

### SAFETY CHECKS

\_\_\_\_\_ Tire Pressure Check – Model KB

\_\_\_\_\_ All Decals Installed

\_\_\_\_\_ Wheel Bolts

\_\_\_\_\_ Review Operating and

\_\_\_\_\_ Belt Tension

Safety Instructions

\_\_\_\_\_ Lubricate Machine

\_\_\_\_\_ Guards in Place

\_\_\_\_\_ Fasteners Tight

\_\_\_\_\_ Trailer assembly bolts properly installed  
and tightened

I have thoroughly instructed the buyer on the above described equipment which reviews the included Operator's Manual content, equipment care, adjustments, safe operation and applicable warranty policy.

Date \_\_\_\_\_ Dealer's Rep. Signature \_\_\_\_\_

The above equipment and Operator's Manual has been received by me and I have been thoroughly instructed as to the care, adjustments, safe operation and applicable warranty policy.

Date \_\_\_\_\_ Owner's Signature \_\_\_\_\_

**PLEASE FAX A COPY TO BUFFALO TURBINE AT 716 592 2460**

Always give your dealer the serial number of your Debris Blower when ordering parts or requesting service or other information.

The serial number plate(s) is located where indicated in the pictures below. Please document the number in the space provided for easy reference.

## SERIAL NUMBER LOCATION

Direction of travel determines front or rear of blower unit



**CYCLONE 8000**    Serial Number: \_\_\_\_\_

# **BUFFALO TURBINE DEBRIS BLOWERS**

## **WARRANTY**

Buffalo Turbine LLC, Inc. warrants the DEBRIS BLOWER to be free from defects in material and workmanship, under normal use and service. Obligation under this warranty shall extend for a period of 1 year (12 months) and shall be limited to, at the option of Buffalo Turbine, replacement of any parts found, upon inspection by Buffalo Turbine, to be defective.

Buffalo Turbine reserves the right to incorporate improvements in material and design of its products without notice and is not obligated to make the same improvements to equipment previously manufactured.

## **WARRANTY CLAIMS**

The purchaser claiming under this warranty shall submit a warranty claim by contacting Buffalo Turbine service department at (716) 592-2700 for approval by an Authorized company representative.

**Factory ordered Buffalo Turbine parts must be used when filing a warranty claim.**

## **LIMITATIONS OF LIABILITY**

This warranty is expressly in lieu of all other warranties expressed or implied and all other obligations or liabilities on our part of any kind or character, including liabilities for alleged representations or negligence. We neither assume nor authorize any other person to assume on our behalf, any liability in connection with the subsequent sale of the **DEBRIS BLOWER**.

This warranty shall not apply to any DEBRIS BLOWER, which has been altered outside the factory in any way so as, in the judgment of Buffalo Turbine, to affect its operation or reliability, or which has been subject to misuse, neglect, or accident.

This warranty does not cover engines, parts and accessories, which are under separate warantee from the manufacturers and service or reimbursement can be, obtained from their service facilities. No warranty is extended to regular service items such as lubricants, belts, paint and the like.

## **OPERATION MANUAL**

The Purchaser acknowledges having read this operator's manual in regards to the safe operation of the DEBRIS BLOWER and further acknowledges that Buffalo Turbine does not assume any liability resulting from the operation of the DEBRIS BLOWER in any manner other than described in the Operator's Manual supplied at the time of purchase.

## **WARRANTY VOID IF NOT REGISTERED**

If there are any questions regarding any of our products call Buffalo Turbine at 716 592 2700.

**DO NOT SPLIT THE TURBINE HOUSING FOR ANY REASON.**

**DO NOT ATTEMPT TO SERVICE OR DISASSEMBLE THE TURBINE BLOWER.**

**DO NOT USE THE TOP OF THE TURBINE HOUSING TO STRAP OR TIE DOWN BLOWER UNITS.**

**\*\*\* Unauthorized service work on the Turbine Blower will null and void all warranties. \*\*\***



## 1. INTRODUCTION

Congratulations on your choice of a Buffalo Turbine Debris Blower. This equipment has been designed and manufactured to meet the needs of a variety of industries and applications.

Safe, efficient and trouble-free operation of your Buffalo Turbine Blower requires that you and anyone else, who will be operating or maintaining the Blower, read and understand all of the safety, operation, maintenance and trouble-shooting information contained within this Operator's manual.

This Manual covers the Cyclone 8000 Turbine Blower.

Keep this manual handy for frequent reference and to pass on to new operators or owners. Call your Buffalo Turbine dealer or distributor if you need assistance, information, or additional copies of the manuals.



**OPERATOR ORIENTATION** – The directions left, right, front and rear, as mentioned throughout the manual, are as seen from the driver's seat and facing in the direction of travel.

Why is **SAFETY** important to you?



**3 Big Reasons:**

**Accidents Disable and Kill  
Accidents Cost  
Accidents Can Be Avoided**

Why is **SAFETY** important to you?

**SIGNAL WORDS:** Note the use of the signal words **DANGER**, **WARNING** and **CAUTION** with the safety messages. The appropriate signal word for each message has been selected using the following guidelines:

1. **DANGER** – An immediate and specific hazard that **WILL** result in severe personal injury or death if the proper precautions are not taken.
2. **WARNING** – A specific hazard or unsafe practice that **COULD** result in severe personal injury or death if proper precautions are not taken.
3. **CAUTION** – Unsafe practices that **COULD** result in personal injury if proper practices are not taken, or as a reminder of good safety.

## 2. SAFETY

**YOU** are responsible for the **SAFE** operation and maintenance of your Buffalo Turbine Debris Blower. **YOU** must ensure that you and anyone else who is going to operate, maintain or work around the Buffalo Turbine Blower be familiar with the operating and maintenance procedures and related **SAFETY** information contained in this manual. This manual will take you step-by-step through your working day and alerts you to all good safety practice while operating the Blower.

Remember **YOU** are the key to safety. Good safety practices not only protect you but also the people around you. Make these practices a working part of your safety program. Be certain that **EVERYONE** operating this machine is familiar with the procedures recommended and follows safety precautions. Remember most accidents can be prevented. Do not risk injury or death by ignoring good safety practices.

- ♦ Blower owners must give operating instructions to operators or employees before allowing them to operate the Blower, and at least annually thereafter.
- ♦ The most important safety device on this equipment is a **SAFE** operator. It is the operator's responsibility to read and understand ALL Safety and Operating instructions in the manual and to follow these. All accidents can be avoided.
- ♦ A person who has not read and understood all operating instructions is not qualified to operate the machine. An untrained operator exposes themselves and bystanders to possible serious injury or death.
- ♦ Do not modify the equipment in any way. Unauthorized modification may impair the function and/or safety which could affect the life of the equipment.

Think **SAFETY!** Work **SAFELY!**

### 2.1 GENERAL SAFETY

1. Read and understand the Operator's Manual and all safety signs before operating, maintaining, and adjusting.
2. Provide a first-aid kit for use in case of an

accident. Store in a highly visible place.

3. Provide a fire extinguisher for use in case of an accident. Store in a highly visible place.
4. Wear appropriate protective gear. This list includes but is not limited to:
  - ♦ A hard hat
  - ♦ Protective shoes with slip resistant soles
  - ♦ Protective glasses or goggles
  - ♦ Heavy gloves
  - ♦ Wet weather gear
  - ♦ Hearing protection
5. Do not operate without guards or shields properly installed.
6. Do not allow riders.
7. **Wear appropriate ear protection for prolonged exposure to excessive noise.**
8. **Set Blower on the ground, stop engine, set park brake, remove ignition key and wait for all moving parts to stop before dismounting to service or adjust.**
9. Clear the area of people, especially small children, before starting the unit.
10. Review all safety related items annually with all personnel who will be operating or maintaining the Blower.
11. Keep hands, feet, hair and clothing away from moving parts.
12. Operate equipment only while seated in the operator's seat.

### 2.2 OPERATING SAFETY

1. Read and understand the Operator's Manual and all safety signs before operating, servicing or adjusting.
2. Before servicing or repairing the model Cyclone 8000 **Turn Off Engine.**

## 2.3 MAINTENANCE SAFETY

1. Read and follow ALL general, operating, maintenance and safety information in this manual.
2. Support the machine with blocks or safety stands when changing tires or working beneath it.
3. (All Models) Set Blower on the ground, stop engine, set park brake, remove ignition key and wait for all moving parts to stop before operating, servicing or adjusting.
4. Do not adjust the drive belt while it is still rotating.
5. Make sure all guards are in place and properly secured when operating or maintaining the Blower.

## 2.4 TRANSPORT SAFETY

1. Make sure you are in compliance with all local DOT regulations regarding transporting Buffalo Turbine equipment on public roads and highways. DOT APPROVED TRAILERS ARE AVAILABLE FROM BUFFALO TURBINE.
2. **ALL SKID MOUNTED UNITS MUST BE SECURELY ANCHORED TO THE VEHICLE BEING USED BEFORE TRANSPORTING OR OPERATING.**

## 2.5 STORAGE SAFETY

1. Store the Blower on a firm, level surface.
2. Store away from areas of human activity. Do not permit children to play on or around the stored machine.
3. Make sure the unit is sitting, or blocked up firm and solid and will not tip or sink into a soft area.
4. Cover with a weatherproof tarpaulin and tie down securely.

## 2.6 TIRE SAFETY

1. Do not attempt to mount a tire unless you have the proper equipment and experience to do the job.
2. Have a qualified tire dealer or repair service perform required tire maintenance.

## 2.7 SAFETY DECALS

Keep safety decals and signs clean and legible at all times.

1. Replace safety decals and signs that are missing or have become illegible.
2. Replaced parts that displayed a safety sign should also display the current sign.
3. Safety decals or signs are available from your Dealer Parts Department.

## 2.8 SIGN-OFF FORM

Buffalo Turbine recommends that anyone who will be operating and/or maintaining the Buffalo Turbine Blower must read and clearly understand ALL Safety, Operating and Maintenance information presented in this manual.

Do not operate or allow anyone else to operate this equipment until such information has been reviewed. Annually review this information before the season start-up.

Make these periodic reviews of SAFETY and OPERATION a standard practice for all of your equipment. We feel that an untrained operator is unqualified to operate this machine.

A sign-off sheet is provided for your record keeping to show that all personnel who will be working with the equipment have read and understand the information in the Operator's Manual and have been instructed in the operation of the equipment.

## SIGN-OFF FORM

[illegible]



## SAFETY DECALS

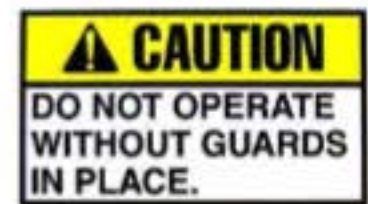
The types of decals on the blower unit are shown below. For locations of each label, see parts reference in the back of this manual.

Good safety requires that you familiarize yourself with the various Safety Decals, the type of warning and the area, or particular function related to that area that requires your **SAFETY AWARENESS**.

### THINK SAFETY! WORK SAFELY!

#### !ATTENTION!

1. KEEP HANDS, FEET AND CLOTHING AWAY FROM POWER DRIVEN PARTS.
2. STOP ENGINE BEFORE LEAVING OPERATOR'S POSITION.
3. MACHINE MUST COME TO A COMPLETE STOP BEFORE ANY MAINTENANCE, TO INCLUDE
4. ADJUSTING, LUBRICATING OR CLEANING, IS PERFORMED.
5. KEEP PEOPLE AND PETS AT SAFE DISTANCE FROM MACHINE.
6. KEEP ALL GUARDS AND SHIELDS IN PLACE.



**REMEMBER** – If safety Decals have been damaged, removed, become illegible or parts replaced without decals, new decals must be applied. New decals are available from your authorized dealer.

## 4. OPERATIONS

### 4.1 TO THE NEW OPERATOR OR OWNER

Buffalo Turbine Debris Blowers are designed to quickly and efficiently, blow away leaves, cuttings and other debris, as well as many other air moving applications. The material is conveyed on a stream of high volume and velocity of air to remove it from the area of concern. When the material is removed, it gives a neat, professional look to the working area.

Many of the features incorporated into the machine are the result of suggestions made by customers like you. Read the manual carefully to learn to operate the machine safely and how to set it to provide maximum efficiency. The manual will take you step-by-step through your working day. By following the operating instructions in conjunction with a good maintenance program, your Blower will provide many years of trouble-free service.

### 4.2 BREAK-IN

Although there are no operational restrictions on the Blower when it is used for the first time, it is recommended that the following mechanical items be checked:

- A. Operating for first hour
  - 1. Re-torque all wheel bolts, axle nuts and trailer mounting bolts and nuts.
  - 2. Re-torque all other fasteners and hardware.
- B. Operating for first 5 hours
  - 1. Re-torque all hardware and fasteners.

- 2. Check the tension of the input drive belt. Adjust as required.
- 3. Go to the normal servicing and maintenance schedule as defined in the Maintenance Section of the manual.

### 4.3 PRE-OPERATION CHECKLIST

Efficient and safe operation of the Buffalo Turbine Blower requires that each operator reads and understands the operating procedures and all related safety precautions outlined in this section. A pre-operation checklist is provided for the operator. It is important for both personal safety and maintaining the good mechanical condition of the machine that this checklist is followed.

Before Operating the Blower and each time thereafter, the following areas should be checked off.

- 1. For fuel, oil, and operating information of the Kohler Engine, refer to the manufacturers specs included with this manual.
- 2. The Cyclone 8000 trailer package is not designed for highway towing. For highway use or speeds above 15 mph (24k) an optional DOT approved trailer must be used.
- 3. Insure the Blower unit is attached to a proper receiver mounted on the towing vehicle. A pin hitch receptacle is standard with the Cyclone 8000. **Attach the Cyclone 8000 trailer using the proper size hitch pin with a locking presto pin.**
- 4. Make sure all guards and shields are in place, secured and functioning as designed.

The control box contains a rocker switch for the remote nozzle. The momentary toggle or rocker switch will shut off the power when it is released. The nozzle control adjusts the rotation of the nozzle assembly (360° in either direction).

## 4.4 Turf Trailer Assembly Cyclone 8000

Turf Trailer assembly instructions

1. Attach 1 stub axle assy. (Part # 2422) to frame with 2 U bolts (Part # 1707) and tighten.
2. Attach 2<sup>nd</sup> stub axle (Part # 2422) to frame with 2 U bolts and tighten.
3. Attach the trailer tongue (part # 2421) using 2 U-bolts (part # 1707).
4. Recheck the trailer mounting bolts to assure they are tightened securely.
5. Bolt on tires and rims.

### **USE PRESTO PIN TO KEEP HITCH PIN IN PLACE WHILE OPERATING**

## 4.5 OPERATING PROCEDURES

Moving light material, such as dry leaves, requires less wind than wet or heavier material.

Always try to blow with the wind.

The Blower can be used for a wide variety of applications to move leaves, grass clippings, aeration plugs and debris. Drying wet areas has been another use with these powerful Debris Blowers.

Moving the rocker switch in either direction on the hand held control box changes the air stream direction. The nozzle will stop turning by releasing the rocker switch.

USE CAUTION WHEN OPERATING THE NOZZLE IN THE DOWN POSITION DUE TO MINIMAL GROUND CLEARANCE (360 degree rotation)

**OPERATION SAFETY –**  
Do not direct debris blower towards people, pets, autos, windows, etc.

**NOTE:** Make sure the Control Box cable is clear of all moving parts.

## 5. TRANSPORTING

### 5.1 Transporting the Cyclone 8000

**Turf Trailer Receptacle Uses A Pin Hitch Only. Use Presto Pin. Do Not Exceed 15 MPH (24 k) At Any Time. Use a DOT approved trailer for Highway Use and for speeds exceeding 15 MPH (24 k).**

The Skid Model can easily be transported and operated in the bed of a standard pick-up truck or utility vehicle. Be sure to block, anchor and secure the unit before operating or transporting. **Do not use the top of the Turbine housing to strap or tie down blower unit.**

### 5.2 STORAGE

At the end of the working season or before storing the blower unit, prepare the machine by following this procedure:

1. Select a storage area that is dry, level and free of debris.
2. Thoroughly wash the machine with a water hose to remove all debris and residue.
3. Lubricate the grease fitting with one shot of grease to displace any accumulated water.
4. Run the machine at low RPM to dry the Blower Components.
5. Touch up all paint chips and scratches to prevent rusting.
6. Inspect for worn or failed components. Order the replacement parts and repair the blower unit when time allows. This will eliminate unnecessary down time at the start of next season.
7. Store in an enclosed building. If space is not available, cover with a waterproof tarpaulin and tie it down securely.
8. Store the machine away from areas of human activity.
9. Do not allow children to play around the stored unit.
10. Add fuel stabilizer as per Manufacturers instructions.

### 5.3 SERVICE & MAINTENANCE

#### ! MAINTENANCE SAFETY !

1. Set Blower on a level surface, stop engine, set park brake and wait for all moving parts to stop before dismounting to service, adjust or repair.
2. Reinstall and secure all shields removed for servicing before starting to use machine again.
3. Securely support machine with blocks or safety stands when changing tires or working beneath it.

### 5.4 FLUIDS & MAINTENANCE

#### Grease

Use SAE multi-purpose high temperature grease for all applications. SAE multi-purpose lithium base grease is also acceptable. If necessary use a Teflon spray lubricant only on the nozzle base and slides provides for freer rotation.

#### USE ONLY CLEAN LUBRICANTS

Change oil per Manufacturer's specification (see engine owner's manual section).

### 5.5 Servicing Interval

Grease the fitting on your new Cyclone 8000 after the first 8 hours of operation.

#### 40 Hours

1. Flange bearing - approx. 2 shots of grease. Use a grease gun extension. The holes in the top of the guard line up with the pillow block grease fittings. Removal of guards is not necessary to grease pillow block. (See page 14)
2. **DO NOT OVER GREASE**
3. Periodic Teflon spray lubricant on the elbow base and slides will assure smooth operation of nozzle.



## 5.6 SERVICE RECORD

See Lubrication and Maintenance sections for details of service. Copy this page to continue record.

**TURN OFF, BEFORE SERVICING BLOWER UNIT**

CODE: LUBRICATE-(L) / CHECK-(\*)  
CHANGE-(C) / REPLACE-(B) / CLEAN-(CL)

**SCHEDULED MAINTENANCE HOURS** \_\_\_\_\_

**SERVICED BY** \_\_\_\_\_

### **MAINTENANCE**

#### **8 hrs or daily**

ALL UNITS – Remove all debris that has settled between the blower wheel fan and the stationary vanes. Helps maintain peak performance.

#### **40 hours**

(L) Flange bearing greasing (1)

(L) Clean Nozzle base and slides (Teflon spray can be used if necessary)

(\*) Belt tension- SEE SECTION 5.8

(\*) Wash and Clean any dirt or grime build up that has accumulated on blower wheel fan blades. Helps to minimize vibration balance and maintain peak performance.

#### **200hrs or annually**

(CL) Machine

**DO NOT OPERATE BLOWER UNIT WITHOUT GUARDS SECURELY ATTACHED**

## MAINTENANCE

### 5.7 BELT TENSION

Efficient machine operation requires that the belt always be properly tensioned. To adjust the belt tension, follow this procedure:

Shut off blower before removing guards.

Remove the guards around belt and pulleys.

The flange bearing (Figure 1) is fixed and pinned.

This will be your starting point for belt adjustment. Do not loosen the bolts on the flange bearing unless you are planning on replacing this bearing.

Loosen (4) engine mounting bolts (Figure 3) .

These are located at the base of the engine, securing engine to frame. Leave a slight tension on the bolts. This will prevent unnecessary movement. Tighten belt per spec and tighten 4 engine mounting bolts. Check pulley alignment using straight edge (Figure 2).

Replace guards.



### 5.8 REPLACING THE BELT

USE THE ILLUSTRATION FROM ABOVE FOR REFERENCE

After using the Blower unit for a long period of time, the belt will stretch and wear.

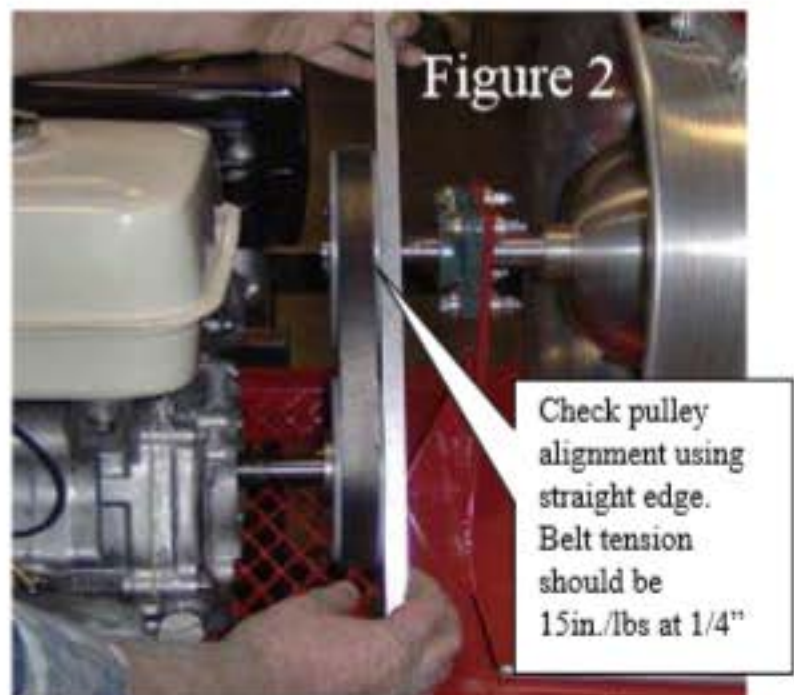
To change the belt follow this procedure:

Remove the guards around belt and pulleys.

Loosen (4) motor mounting bolts (Figure 3) .

Slide motor towards blower shaft until you are able to remove belt.

Replace with belt type (3VX355).



## 6. TROUBLE SHOOTING

The Buffalo Turbine Debris Blower uses a high volume and velocity of air to move material from one place to another. The system is simple and reliable requiring minimal maintenance.

In the following section, we have listed many of the problems, causes and solutions to the problems that you may encounter.

If you encounter a problem that is difficult to solve, even after reading through this trouble shooting section, please call your local dealer or distributor. **Before calling, please have this Operator's Manual and the serial number from your Blower ready.**

**TURN OFF ENGINE BEFORE SERVICING BLOWER UNITS. INSTALL GUARDS BEFORE OPERATING.**

PROBLEM	CAUSE	SOLUTION
Blower does not turn	Belt slipping	Adjust belt tension
Blower does not turn	Belt broken	Replace belt
Belt or pulleys overheat	Belts slipping	Adjust belt tension
No airflow	Blower fan not turning	See solutions above
Reduced or no air flow	Blower fan turns	Air intake or exhaust restricted Shut off engine– Removed re- strictions. Debris cannot be allowed to build up between the blower fan and stationary vanes.
Machine vibrates or unusual sounds	Bearing failure	Replace bearing
Machine vibrates or unusual sounds	Out-of-balance	Check blower for damaged blades Wash and clean blower fan blades

### **SenDEC Maintenance Meter / Flash Alert -- Option for Cyclone 8000.**

Flash Alert is designed as a reminder to service actual maintenance. Intervals may vary by manufacturer -- read your owner's manual for actual recommended service intervals.

#### **Functions:**

*Hour Meter* - Records actual running of engine. Non-erasable.

*Tachometer* - Shows engine RPMs (reads up to 9,000 RPMs).

*Flash Alert* - Alerts you to LUBE (grease) & CHANGE OIL (25 hour intervals).

#### **Operation:**

*Fully Automatic* - Upon engine start, meter will show RPMs, at engine shut down meter displays total accumulated running time.

Flash Alert Alarms will flash automatically for a 2 hour period (2 hours of engine run time) at 25 hour intervals as a service reminder.

Installation: Find a convenient mounting location, be sure the pick-up wire will reach the spark plug wire. If not, substitute with a wire of the same outside diameter of no less than 22 gauge, up to 8' long. DO NOT mount meter where surface temperature exceeds 125 degrees F. As a general guide line, if you can place your hand on the mounting surface without discomfort while equipment is at full operating temperature, then it will be suitable for mounting in that location.

Wrap pick-up wire around spark plug wire 4 to 5 times. Secure with the supplied tie-wrap.

DO NOT DRILL INTO GAS TANKS OR ENGINE CRANKCASE. Contact your dealer with any questions.

### **Specifications**

Length	95" ( from end of trailer arm to nozzle end )
Width	44" ( includes stub axle and 18.5x8.50-8 tires )
Height	37" ( includes stub axle and 18.5x8.50-8 tires )
Weight	360 lbs.
Fuel Capacity	1.7 gal
Tires	18.5 x 8.50-8
Electrical System	12V Electric remote
Input Power	Kohler 14 HP
Outlet Size	12"



### Cyclone 8000 Parts List

<b>Options:</b>	SenDec Maintenance Meter.....1372
	Fitted Waterproof Protective Cover.....BT-PC-1
	Rectangular Nozzle 19".....1425

Reference #	Qty	Description	Part#
1	1	KOHLER ENGINE, 14 hp	3077
2	1	FRAME, CYCLONE 8000	2418
3	1	TONGUE, CYC8K	2421
4	1	ELBOW BASE, SHORT	1141
5	1	CLAMP BAND W/ BOLT & NUT	1173
6	1	GUARD, BT-CYC8KK Kohler Engine	2470
7	1	BLOWER ASSEMBLY, CYC8K	2424
8	1	GEARMOTOR	1143
9	1	ROTATION MOTOR BRACKET	1144
10	1	A-54 V-BELT	1142
11	1	SHEAVE AK32 X 1/2	1145
12	1	14-221-D1 BELLMOUTH	1119
13	2	PLASTIC SLIDES	1138
14	1	WARNING-EYE PROTECTION DECAL	1184
15	1	WARNING-EAR PROTECTION DECAL	1185
16	1	4 X 4 BT DECAL	1182
17	1	CAUTION DO NOT OPERATE DECAL	1186
	1	AMERICA & SAFETY FIRST DECAL	1233
18	1	2/3V6.90 SDS SHEAVE	2295
19	1	1" SDS BUSHING	1353
20	1	1" FLANGE BEARING DODGE F4BVSC100	1352
21	1	2/3V6.00 QD SHEAVE	2426
22	1	1" SH BUSHING	1355
23	1	2/3VX355 POWERBAND BELT	2425
	6	3/8-24 X 1-1/4 HHCS ZINC GR 5	1100
	5	3/8-24 X 1-1/2 HHCS ZINC GRADE 5	1101
	5	3/8-24 X 1-3/4 HHCS ZINC	1102
	1	3/8-24 X 2 FACED HEAD SCREW MAKE FROM 1104	1103
	5	3/8-24 X 2 HHCS ZINC GRADE 5	1104
	22	3/8-24 HEX NUT ZINC PLATED GRADE 5	1105
	18	SPACER-3/8 X 3/16 THICK WASHER	1106
	22	3/8 LOCK WASHER ZINC PLATED	1107
	12	3/8 FLAT WASHER ZINC PLATED	1108
	2	KEY, 1/4 X 1-3/4	1110
	4	3/8 NOTCHED WASHER	1139
	4	10-32 X 5/8 SHCS	1146
	2	1"-14 CASTLE NUT YOUR P/N: 10665	1151
	2	1/8 X 1-1/2" COTTER PIN	1152
	2	HUB WITH STUDS,RACES	1153
	1	COV 5/16 X 1/4 WIRE CLAMP	1167
	3	1/4-20 X 1 HHCS ZINC	1169
	4	1/4 BLACK HEAT SHRINK P/N: HS-1/4B-100' SPOOLS	1177
	8	3/8 BLACK HEAT SHRINK P/N: HS-3/8B-100' SPOOLS	1178
	12	1/2-13 NYLOC NUT ZINC	1180
	2	3/16 X 1 ROLL PIN	1236
	3	1/4 LOCK WASHER, ZINC	1259
24	1	AEROSPACE POLYMER NOZZLE	2851

2	BEARING CAP FOR HUB YOUR P/N: 17094	1575
8	1/2-20 LUG NUT YOUR P/N:10641	1576
4	1/4-20 X .055 HEAD INSERT	1669
4	1-1/16 TAPER ROLLER BEARING TIM L44649	1690
2	1-1/4 X 1.98 X 1/4 SEAL SAE S12519825BS	1691
6	U BOLT, 3" X 1/2" SQUARE BEND PLATED	1707
2	18 1/2" X 8 1/2" X 8" 4PLY TRANSMASTER TIRE ON 8X7	2019
2	STUB AXLE / HUB ASSEMBLY	2504
1	CYC8K - WIRING HARNESS	2449
1	LOWER FRONT CYC8K GUARD, FINISHED	2443

### **MODEL BT-CYC8K Assembly Instructions**

1. Fill engine oil to proper level. (overseas shipments only)
2. Attach (2) Stub axles to frame using (2) U bolts and tighten.
3. Attach the tongue using the 2 U-bolts, center on the frame locate for desired tongue weight, then tighten evenly. Equal pressure must be applied on each hex. Note: The tongue is reversible and will allow for 2 different heights. Determine the desired height before attaching the tongue.
4. Recheck all mounting bolts to assure that they are tight.
5. Bolt on tires.



Part # 2504  
Stub Axle Assy.  
with Hub installed

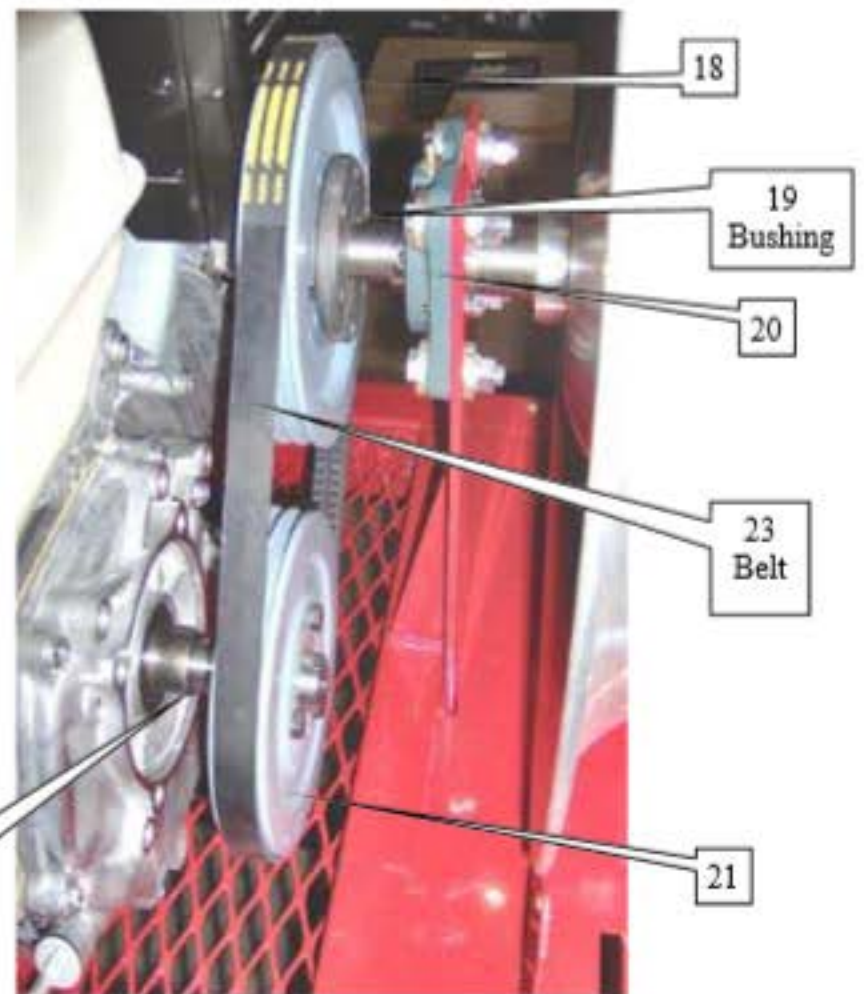
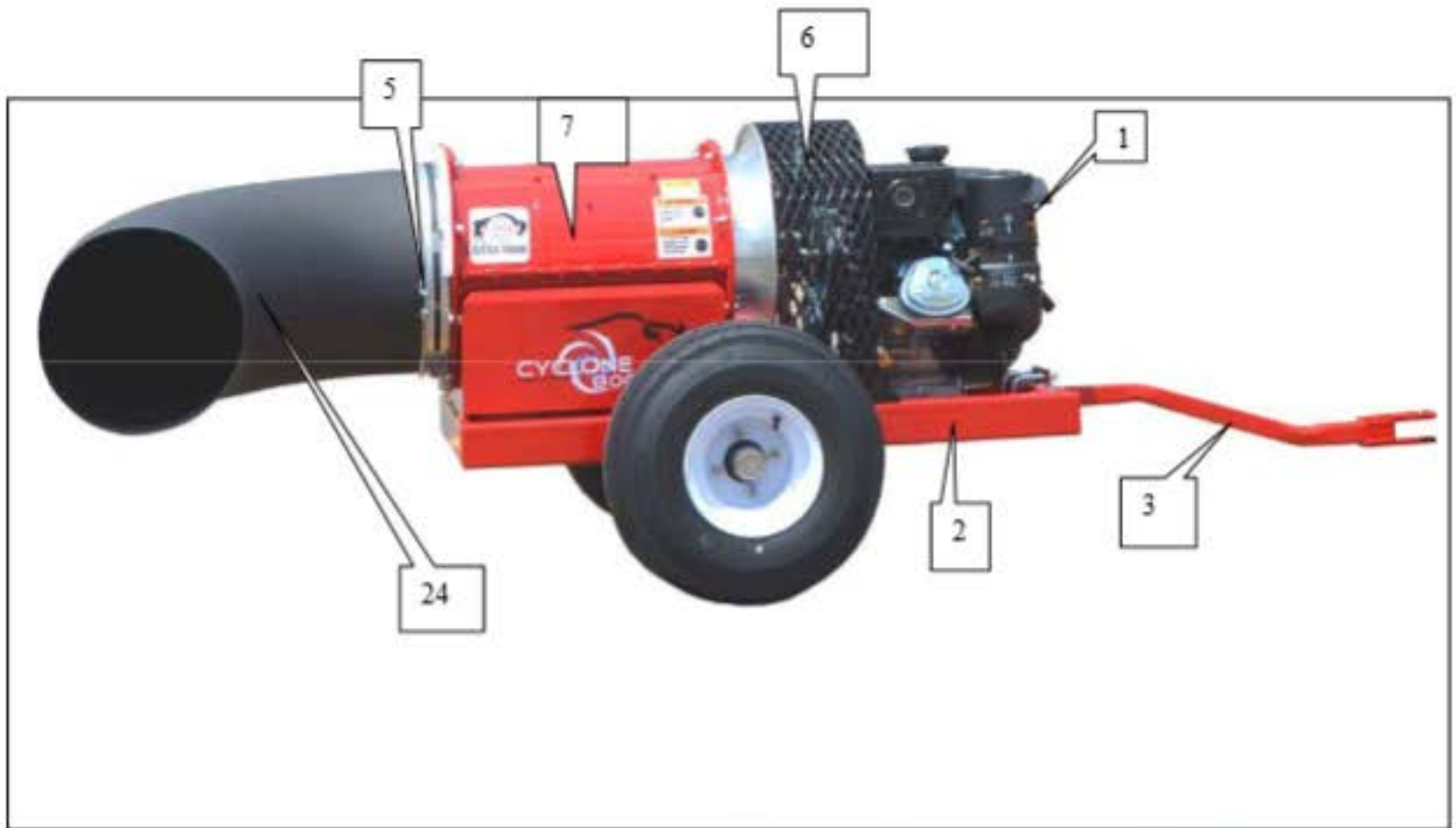
Part # 2421  
Tongue

**WHEEL HUB ASSY.**  
Part # 1153 – includes only the hub,  
races, bearings (2) and seal  
1690 – Bearing 2 req'd  
1691 – Seal (1)  
1151 – Nut (1)  
1575 – Cap (1)  
1576 – Lug Nuts (4)

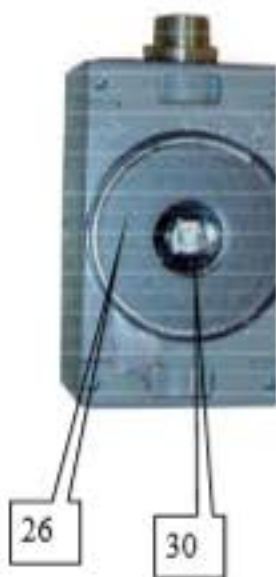
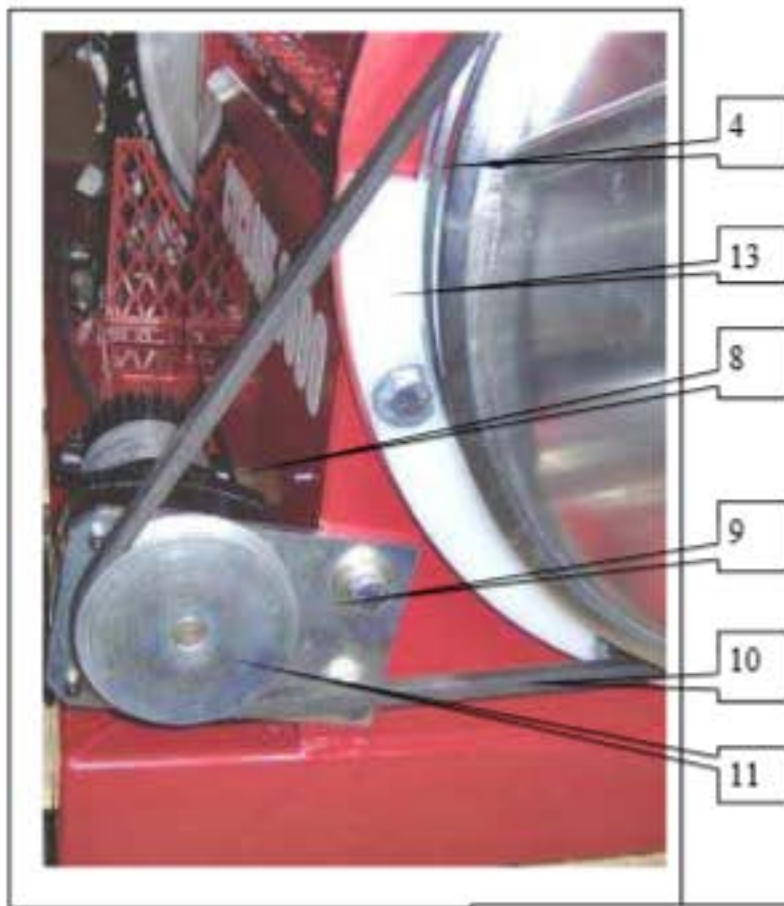


U bolts # 1707 and  
1/2 Nyloc nuts # 1180

"U Bolts"  
Part # 1707  
1/2 "Nyloc nuts  
#1180







Ref #	Part #	Description
25	1281	Control Box Housing
26	1300	Magnet
27	1537	16/2 Wire, (204") Control Box to Blower (72") Control Box to Battery
28	2449	Control Box Assy. Complete w/ 72" AND 204" Cable
29	1279	6-32 x 1/2" Phillip head screws
30	1258	1/4-20 x 3/4 screw to attach magnet to control box
31	1304	Control Box Cover Nozzle only
32	1769	Rocker Switch

**Part 1537  
16/2 Wire  
MUST SPECIFY  
LENGTH OF WIRE-  
NEEDED WHEN  
ORDERING  
REPLACEMENT  
WIRE**



**CE Certified Guard and Label  
Kit**

**Cyclone 8000 Units  
Part # 2501**



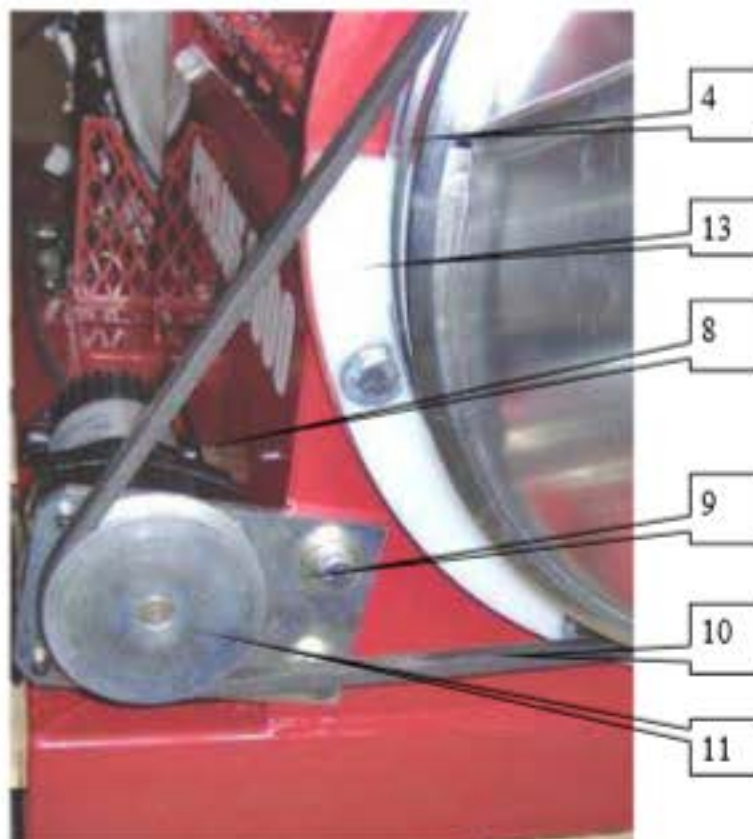
**Part # 1783  
CE Label**



**Part # 1784**



**Rotation Belt Guard Part # 1785  
(CE units only)**



**Guards removed for clarity  
(CE unit only)**

*Debris Blowers, Sprayers, Dusters, Dust Suppression Systems, Top Dressers  
 And the SANDEVIL™ Attachment*

## EC Declaration of Conformity



We, Buffalo Turbine LLC of Springville, New York, USA

Declare that:

Debris blower, model Cyclone 8000

In accordance with the following directives:

Machinery Directive 98/37/EC and it's amending directives

Noise in the Environment Directive 2000/14/EC and it's amending directives

Has been designed and manufactured to the following specifications:

ISO 11094:1991

With a measured sound power level of:

Lwa 115 dB

With a guaranteed sound power level of:

Lwa 120dB

Buffalo Turbine certifies that the equipment named above has been designed to comply with the relevant sections of the above referenced specifications. The units comply with all essential requirements of the directives.



Part # 1783



Part # 1784

ATTENTION ALL BUFFALO TURBINE PRODUCT USERS,  
DEALERS, DISTRIBUTORS, SERVICE AND EQUIPMENT  
MANAGERS, AND MAINTENANCE PERSONNEL.

ANY ENGINE SERVICE, ENGINE PARTS OR ENGINE WAR-  
RANTY CONCERNS, CONTACT YOUR LOCAL KOHLER OR  
HONDA REPRESENTATIVE.

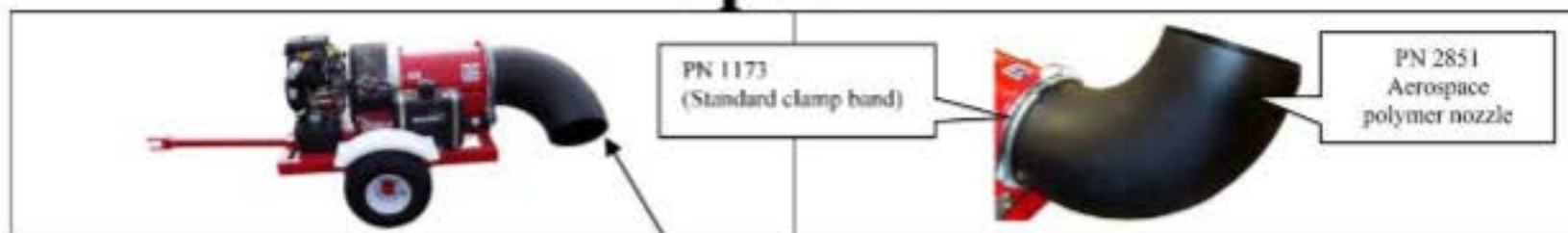
REPAIR PARTS MUST BE ORDERED THROUGH YOUR BUF-  
FALO TURBINE DEALER.

PLEASE CONTACT BUFFALO TURBINE'S SERVICE DEPART-  
MENT AT 716-592-2700 FOR ANY SERVICE QUESTIONS YOU  
MAY HAVE REGARDING THE BUFFALO TURBINE BLOW-  
ERS OR SPRAYERS.

THANK YOU FOR YOUR COOPERATION.



# Options



Aerospace Polymer Nozzle - Part # 2851  
Standard on all models **\*Except Truckster Mounted Blower\***



**Fishtail Nozzle – Part # 1743**

5" x 30" (wide angle) opening  
Distributes a large volume of air at a lower velocity over a wide area. Easily converts blower into a "GREENS FAN". Adaptable to all models. Not as effective in moving debris.



**12" Round – Part # 1172**



**Rectangular Nozzle – Part # 1425**

5.5" x 15" opening - Extra Length / More Concentrated airflow. Uses – heavy wet debris, plugs, top dressing. **No** ground clearance in the down vertical position



Optional Aluminum Nozzles **WILL NOT** connect to the Standard Aerospace Polymer nozzle (Part # 2851)

**Requires: Two 45 degree Elbow Segments Part # 1171 &  
Two additional Clamp Bands Part # 1173**

Nozzle extensions are available in sizes from 10" to 20" (Will connect to the flanged end of the polymer nozzle only.)



**Short Rectangular Nozzle - Part # 1469**

5.5" x 15" opening – Same uses as #1425  
Ground clearance in all positions\*\*



**10" Round Nozzle – Part # 1417**

Improves air velocity with lower horsepower and hydraulic blower units.



**11" Round Extended Nozzle – Part # 1320**

Same uses as # 1172 but with an extended length. No ground clearance in the down vertical position



**Heavy Duty Air Cleaner Kit - Part # 1846**  
(Includes PN: 1847 & 1848)



**SenDec Maintenance Meter - Part # 1372**



(Guard removed for clarity)  
**Monsoon Atomizer Nozzle - Part # 2547**

**\*\*Ground undulations, mounds and curbs may affect ground clearance with all nozzles**



## “Buffalo Turbine Products”



The Cyclone 8410 Debris Blower is strategically priced to fit most budgets. This little powerhouse is already proving its worthiness in saving Time and Labor.



The word “MEGA” is defined as Impressive, Extreme and Mammoth. The NEW Buffalo Turbine MEGA lives up to its name!



The Cyclone PFC incorporates an “Advanced” direct drive gearbox which significantly reduces routine maintenance. At 278 lbs., it's the lightest, nearest turbine style PFC blower available!



The Cyclone Squared with its “Twin Turbines”, and wireless controlled dual independent nozzles, in most cases can kill twice the work in half the time. This versatile powerhouse is already a favorite on Golf courses, Race tracks, and the Paving Industry.



The New Cyclone K14 with its “More Powerful” 27hp Kohler Engine and a “State of the Art” Wireless Remote System is the most powerful KB unit to date. “We Dare to Compare”



The NEW Hydraulic debris blower features our built in “Flow and pressure” control system and easily attaches to most skid steers. This handy attachment comes complete with mounting plate and bolts.



[www.buffaloturbine.com](http://www.buffaloturbine.com)



Find us on  
**Facebook**



The Sandevis™ Attachment is designed to capture the “Turbine Powered Air” produced by the model KB blower and distribute a variety of top dressing material into the turf canopy and aeration holes, greatly reducing the damage caused by drag mats or brushes.

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