

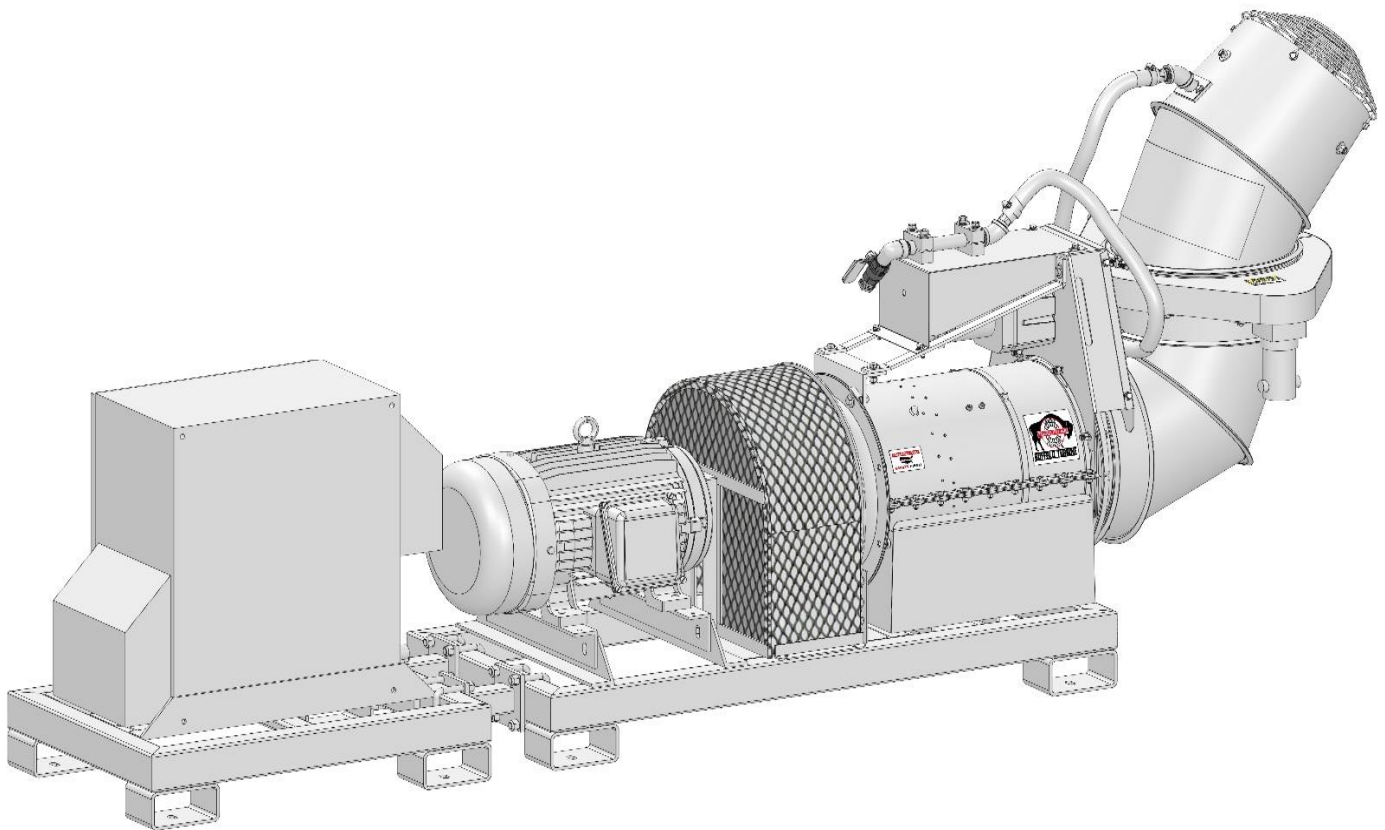
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BUFFALO TURBINE'S BT-MECV220 (after Serial # 31021) ORIGINAL INSTRUCTIONS AND PARTS MANUAL

03/26 -BT MAN

TABLE OF CONTENTS

Ref. Number	Description	Page Number
1.0	Introduction	2
2.0	Safety	3
2.1	Safety Decals	4
2.2	General Safety	4
2.3	Operating Safety	4
2.4	Maintenance Safety	4
2.5	Transport Safety	5
2.6	Storage Safety	5
2.7	Sign-off Form	5
3.0	Warranty Information	6
3.1	Warranty Registration Form	7
4.0	Operations	8
4.1	To the new operator or owner	8
4.2	Break-in	8
4.3	Pre-Operation Checks	8
4.4	Model BT-MECV220 Assembly Instructions	9-10
4.5	Field Operation	11
4.6	Operating RPM	11
4.7	Storage	11
5.0	Troubleshooting	11
6.0	Machine Specification	12
7.0	Maintenance	13
7.1	Maintenance Safety	13
7.2	Fluids	13
7.3	Service Checklist	13
	Moreflex Coupling Parts	14
	Moreflex Coupling Installation	15
	BT-MECV220 Parts Reference (After Serial # 32021)	16
	BT-MECV220 Trailer Package Parts Reference	17
	Oscillation Attachment Kit Parts Reference	18
	Gyratory Atomizing Nozzle Parts Reference	19
	Bill of Materials for BT-MECV220	20-21
	Nozzle Options	22
	Buffalo Turbine Additional Products	23

1.0 INTRODUCTION

Congratulations on your choice of a Buffalo Turbine Dust/Odor Controller. This equipment has been designed and manufactured to meet the needs of the construction/demolition industry.

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

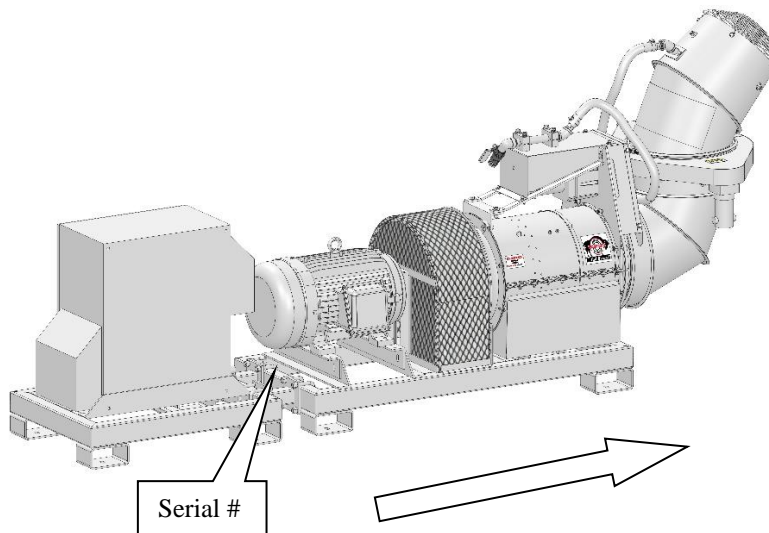
This Manual covers the BT-MECV220 Turbine Dust/Odor Controller.

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.

SERIAL NUMBER LOCATION

Always give your dealer the serial number of your Dust/Odor Controller 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.



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.

MODEL BT-MECV220 RIGHT FRONT TOP SURFACE OF FRAME

Serial Number: _____

2.0 SAFETY

YOU are responsible for the **SAFE** operation and maintenance of your Buffalo Turbine Dust/Odor Controller. **YOU** must ensure that you and anyone else, who is going to operate, maintain or work around the Buffalo Turbine Dust/Odor Controller 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 Monsoon.

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!**

This Safety Alert symbol means **ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**

The Safety Alert symbol identifies important safety messages on the Buffalo Turbine Blower and in the manual. When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety message.

Why is **SAFETY** important to you?



**3 Big Reasons: Accidents Disable and Kill
Accidents Cost
Accidents Can Be Avoided**

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** –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.

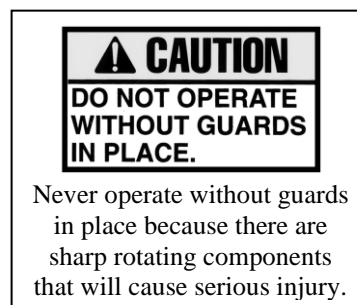
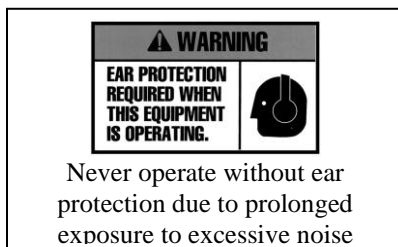
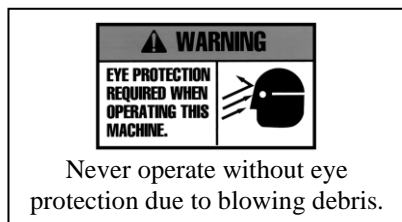
The Safety Alert symbol identifies important safety messages on the Buffalo Turbine Dust/Odor Controller and in the manual. When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety message.

2.1 SAFETY DECALS

The types of decals on the blower unit are shown below. 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 AND REMOVE KEY BEFORE LEAVING OPERATOR'S POSITION.**
3. **MACHINE MUST COME TO A COMPLETE STOP BEFORE ANY MAINTENANCE, TO INCLUDE ADJUSTING, LUBRICATING OR CLEANING, IS PERFORMED.**
4. **KEEP PEOPLE AND PETS AT SAFE DISTANCE FROM MACHINE.**
5. **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.

2.2 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. **(All Models) 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. Operate equipment only while seated in the operator's seat.

2.3 OPERATING SAFETY

1. Read and understand the Operator's Manual and all safety signs before operating, servicing or adjusting.
2. Before servicing or repairing, **Set blower on the ground, stop engine, set park brake, remove key, and wait for all moving parts to stop.**

2.4 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. 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. Make sure all guards are in place and properly secured when operating or maintaining the Blower.

Buffalo Turbine Warranty Policy

3.0 MACHINE WARRANTY INFORMATION

Buffalo Turbine warrants the DEBRIS BLOWER, to the original owner, to be free from defects in material and workmanship, under normal use and service. **All machines must have a completed registration form sent to Buffalo Turbine within 30 days of purchase for warranty to apply.** Obligation under this warranty shall extend for a period of 10 years from date of purchase and, at the option of Buffalo Turbine, replacement of any parts found, upon inspection by Buffalo Turbine, to be defective. Any parts replaced under warranty will have the remainder of the warranty from the original date of purchase.

Warranty parts during first 2 years will be shipped free of charge via standard ground shipping

If expedited shipping is required charges will be paid by the end user

Year 1: parts and labor

Year 2: parts only

Customer will be required to pay shipping charges for years 3-10

Year 3: Engine, per engine manufacturer's standard / Turbine Assembly / Frame (parts only)

Year 4-10: Turbine Assembly / Frame (parts will be prorated)

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.

ALL WARRANTY REPAIRS NEED PRE-APPROVAL BY A FACTORY PERSON (FROM BUFFALO TURBINE) PRIOR TO COMMENCING WITH A WARRANTY REPAIR TO INCLUDE SERIAL NUMBER AND HOURS FROM HOUR METER (IF EQUIPPED). PRE-APPROVAL WILL BE REQUIRED BY THE END USER AND DEALER/DISTRIBUTOR LEVEL.

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 parts and accessories, which are under separate guarantee from the manufacturers and service can be, obtained from their service facilities. No warranty is extended to regular service items such as lubricants, belts, paint and the like.

Original Instruction Manual

The Purchaser acknowledges having receiving training in 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 (see Page 2 for warranty registration form)

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.

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

3.1 Warranty Registration Form

BUFFALO TURBINE

WARRANTY REGISTRATION FORM & INSPECTION REPORT

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

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, Zip, Country _____ City, State, 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 Safety Instructions

_____ Belt Tension

_____ Guards in Place

_____ Lubricate Machine

_____ Fasteners Tight

_____ Trailer assembly bolts properly installed and tightened

ALL 3 POINT HITCH MODELS: PTO SHAFTS MUST TELESCOPE IN EVERY POSITION

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 EMAIL TO BUFFALO TURBINE AT - service@buffaloturbine.com

Or fax to 716 592 2460

4.0 OPERATIONS

4.1 TO THE NEW OPERATOR OR OWNER

Buffalo Turbine Dust/Odor Controller are designed to spray a fine mist of water particles to control dust. The material is conveyed on a stream of high volume and velocity of air and water to remove it from the area of concern.

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.

Potential Mechanical Hazards while operating your machine:

Never operate the debris blower around others to prevent the possibility of being run over by equipment.
Never ride on your debris blower to prevent the possibility of being thrown off the machine or hurt severely.

Potential Crushing Hazards while operating your machine:

Between Trailer Tongue and mounting hitch on towing vehicle



WARNING:

This Product can expose you to chemicals including carbon monoxide and benzene, which are known to the State of California to cause cancer and birth defects or other reproductive harm.

For more information go to www.P65Warnings.ca.gov.

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 ½ hour

1. Re-torque all wheel bolts, axle nuts and trailer mounting bolts and nuts.
2. Re-torque all other fasteners and hardware.
3. Check set screw (nozzle pulley) to ensure it tightened.

B. Operating for first 5 hours

1. Re-torque all hardware and fasteners.
2. Check set screw (nozzle pulley) to ensure it tightened.
3. Go to the normal servicing and maintenance schedule as defined in the Maintenance Section of the manual.

4.3 PRE-OPERATION CHECKS

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.

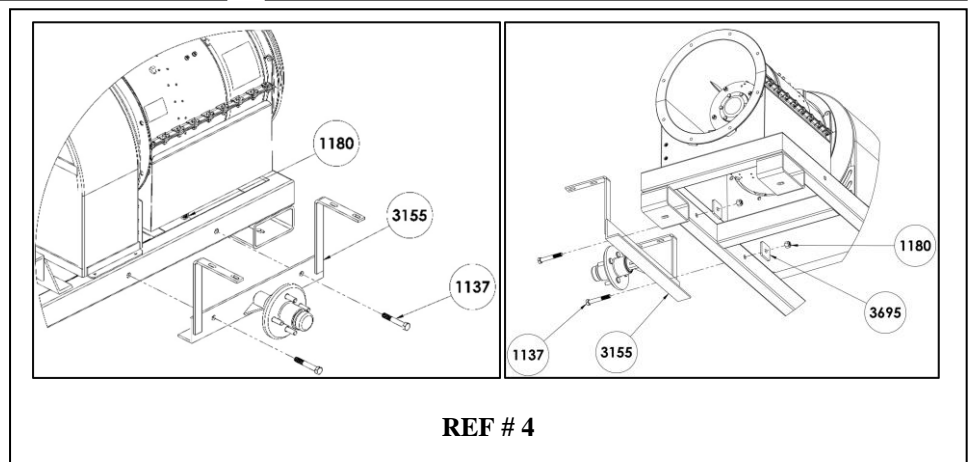
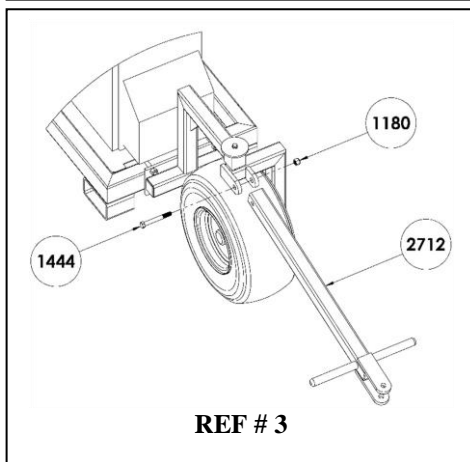
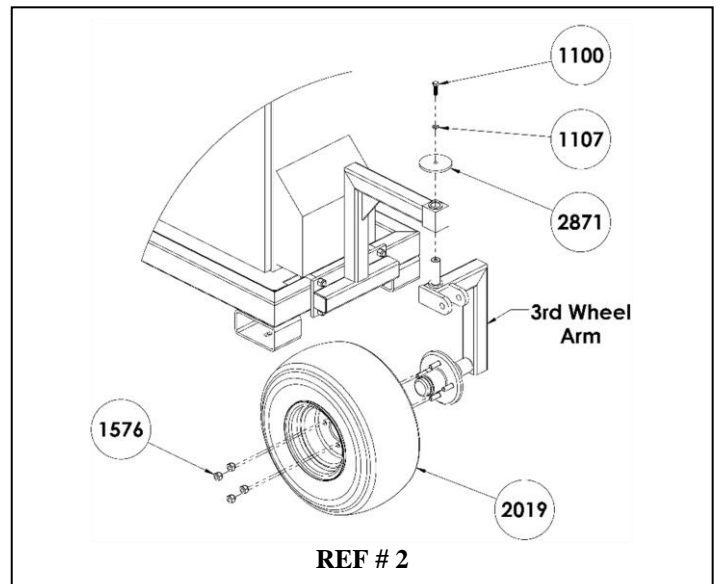
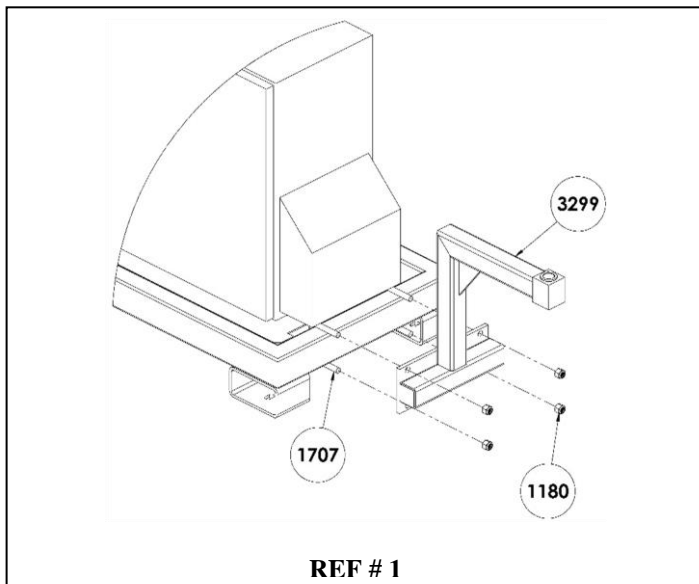
Before Operating the Blower and each time thereafter, the following areas should be checked off.

1. Refer to the Motor Manufacturers specs included with this manual.
2. Make sure all guards and shields are in place, secured and functioning as designed.
3. Check that all clamp bands are secure.
4. Check the belts and pulleys for proper tension and alignment.

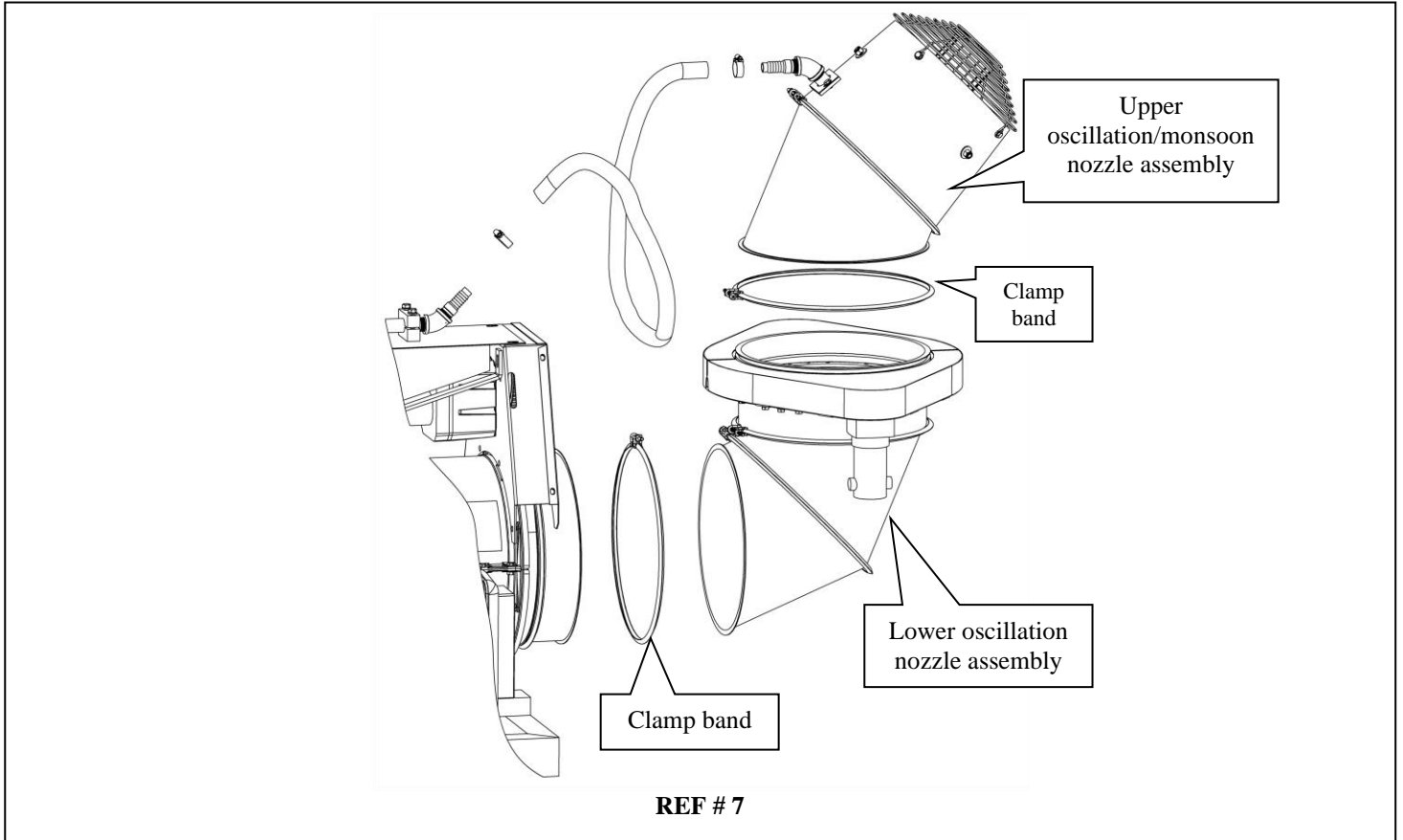
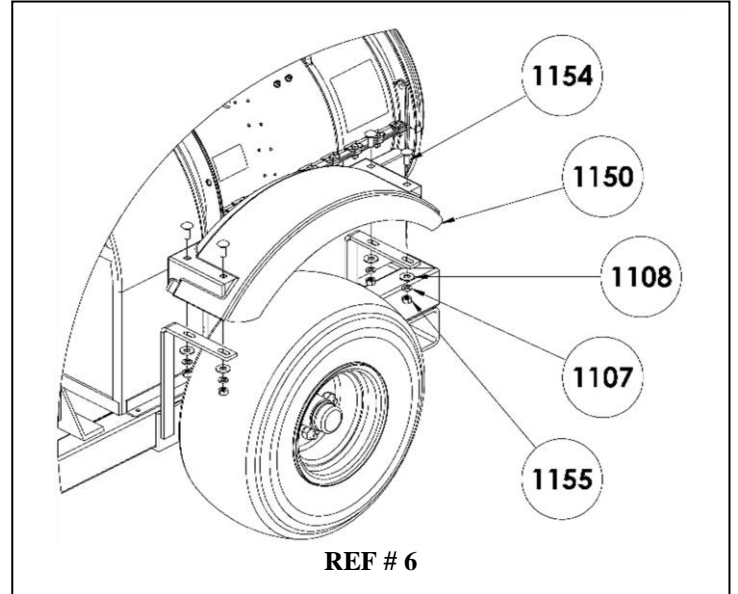
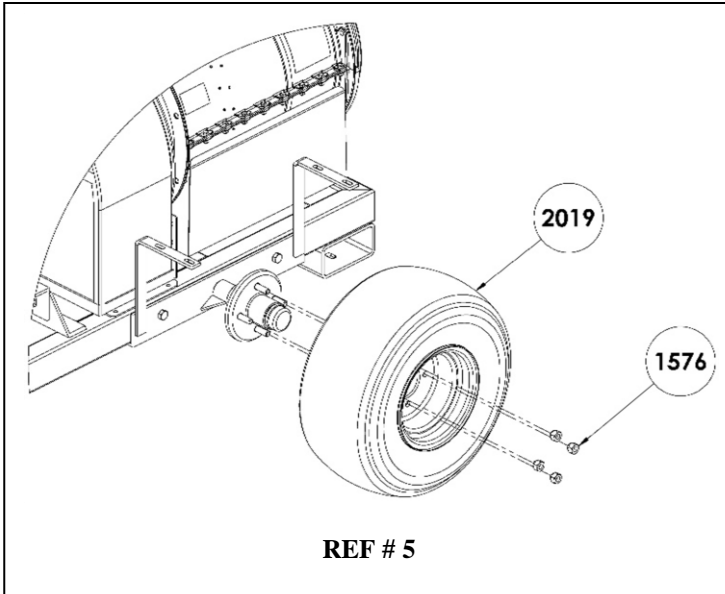
CAUTION! DO NOT ALLOW LEAVES OR DEBRIS TO ACCUMULATE ON OR NEAR THE ELECTRIC MOTOR

4.4 MODEL BT-MECV220S Assembly Instructions

1. Attach VFD skid to Frame (VFD skid can also be located in a separate location if desired)
2. Connect all electrical connections in compliance with National Electric Code or applicable codes. (It is recommended that an authorized electrician should make these connections)
3. **(Ref # 1)** Attach 3rd Wheel bracket (**part# 3299**) with 2 U-bolts each (**part# 1707 and part #1180**). Center (**Part # 3299**) with front of frame. One U-bolt will need to go through channel. Tighten Nyloc nuts (**part # 1180**)
4. Attach 3rd Wheel Arm to 3rd Wheel Bracket (**Ref # 2**) using (**part # 1100 / 1107 / 2871**)
5. **(Ref # 2)** Install Tire (**part # 2019**) with lug nuts (**part # 1576**). **Torque lug nuts to 80 ft/lbs.**
6. Attach Tow Bar/Handle (**part # 2712**) using the bolt (**part # 1444**) and nyloc nut (**part # 1180**). Tighten at this time.
7. Attach 2 axle weldments (**part# 3155**) with 2 bolts/nuts each (**part# 1137/3695/1180**). (**REF#4**)



8. Install Tire (**part # 2019**) with lug nuts (**part # 1576**). **Torque lug nuts to 80 Ft/lbs. (REF #5)**
9. Attach both fenders (**part # 1150**) using (4) 3/8-16 x 1" carriage bolts (**part # 1154**), (4) 3/8 Flat Washer (1108), (4) 3/8 lock washer (1107) and 3/8-16 hex nuts (**1155**) (**REF # 6**)
10. Recheck all mounting bolts to assure that they are tight.
11. Attach lower oscillation nozzle assembly (**REF # 7**) to elbow base ring.
12. Attach upper oscillation / monsoon nozzle (**REF # 7**) to lower oscillation nozzle assembly
13. Connect water hoses



4.5 FIELD OPERATION

1. Do not direct debris blower towards people, pets, autos, windows, etc.
2. **Starting blower unit:** Always start blower at a lower motor speed with nozzle pointed down or away.
3. **Stopping blower unit:** Shut motor off at lower motor speed.
4. Allow the blower fan speed to come to a complete stop before disconnecting from tow vehicle.

4.6 Operating RPM (All Models)

The motor manufacturers normally recommend the unit be run at a RPM that will insure efficient operation. The Blower can operate at a slower RPM if it can effectively move the debris. Increase engine RPM as needed.

Moving light material, such as dry leaves, requires much 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.

4.7 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. Run the machine at low RPM to dry the Blower Components.
4. Touch up all paint chips and scratches to prevent rusting.
5. 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.
6. Store in an enclosed building. If space is not available, cover with a waterproof tarpaulin and tie it down securely.
7. Store the machine away from areas of human activity.
8. Do not allow children to play around the stored unit.

5.0 TROUBLE SHOOTING

The Buffalo Turbine Dust/Odor Controller 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.

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.**

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

TURN OFF MOTOR, AND DISCONNECT FROM POWER SOURCE BEFORE SERVICING BLOWER UNITS. INSTALL GUARDS BEFORE OPERATING.

PROBLEM	CAUSE	SOLUTION
No air flow	Buildup of debris inside turbine	Remove nozzle and clean debris from inside turbine
	Broken coupling (KB Series)	Replace coupling
No air flow	Blower fan not turning	See solutions above
Reduced or no air flow	Blower fan turns	Air intake or exhaust restricted Shut off engine Blower or tractor – remove restrictions Debris cannot be allowed to build up between the blower fan and stationary vanes
Machine vibrates or Unusual sounds	Bearing or coupling failure Out-of-balance	Replace bearings or coupling Have your dealer check blower for damaged blades. Wash and clean blower fan blades

6.0 Machine Specifications

Model BT-MECV220 Series

Length:	96" With nozzle and VFD installed (without trailer package) 112" With Nozzle, VFD installed & Trailer package
Width:	22" Without Trailer Package 38" With Trailer Package
Height:	30" Without Trailer Package 42" With Trailer Package
Weight:	700 lbs Without Trailer Package 850 lbs With Trailer Package (VFD only weighs approx. 150lbs)
Electrical System:	220 VAC 60HZ
Input Power:	20 HP LEESON ELECTRIC MOTOR
Outlet Size:	Approximately 12"

7.0 MAINTENANCE SECTION

7.1 Maintenance Safety

1. Set Blower on a level surface, stop engine, set park brake, remove ignition key and wait for all moving parts to stop before dismounting to service, adjust or repair.
2. Reinstall and secure all guards removed for servicing before starting to use machine again. *We recommend wearing gloves when removing or installing the guard to avoid getting cut*
3. Securely support machine with blocks or safety stands when changing tires or working beneath it.

7.2 Fluids

Lubricate electric motor per Motor Manufacturer's specification (see Motor owner's manual section).

Use NLGI2 grease for Oscillation Bearing (2 fittings)

A Teflon spray type lubricant on the nozzle base and slides provides for freer rotation.

7.3 SERVICE CHECKLIST

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

TURN OFF ENGINE, REMOVE KEY & DISCONNECT BATTERY BEFORE SERVICING BLOWER UNIT

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

SCHEDULED MAINTENANCE HOURS _____

SERVICED BY _____

MAINTENANCE

8 hrs or daily

(*) Remove all debris that has settled between the blower wheel fan and the stationary vanes.

Helps maintain peak performance.

(*) Check engine oil and fill to proper level – Do not overfill

(*) Check air filter and precleaner

(CL) Clean debris from air intake and other cooling areas on the engine

(*) Check tire pressure (Max. 50 PSI)

(*) Check Clamp Band Bolt for tightness

(L) Grease oscillation ring (2fittings) ***monsoon nozzle needs to be removed and grease while rotating until you see grease coming out on the inside of nozzle. Then clean excess grease off nozzle***

40 hours or weekly

(L) Nozzle base slides (Teflon spray)

(*) Check set screw (nozzle pulley) to ensure it is tightened

(*) 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

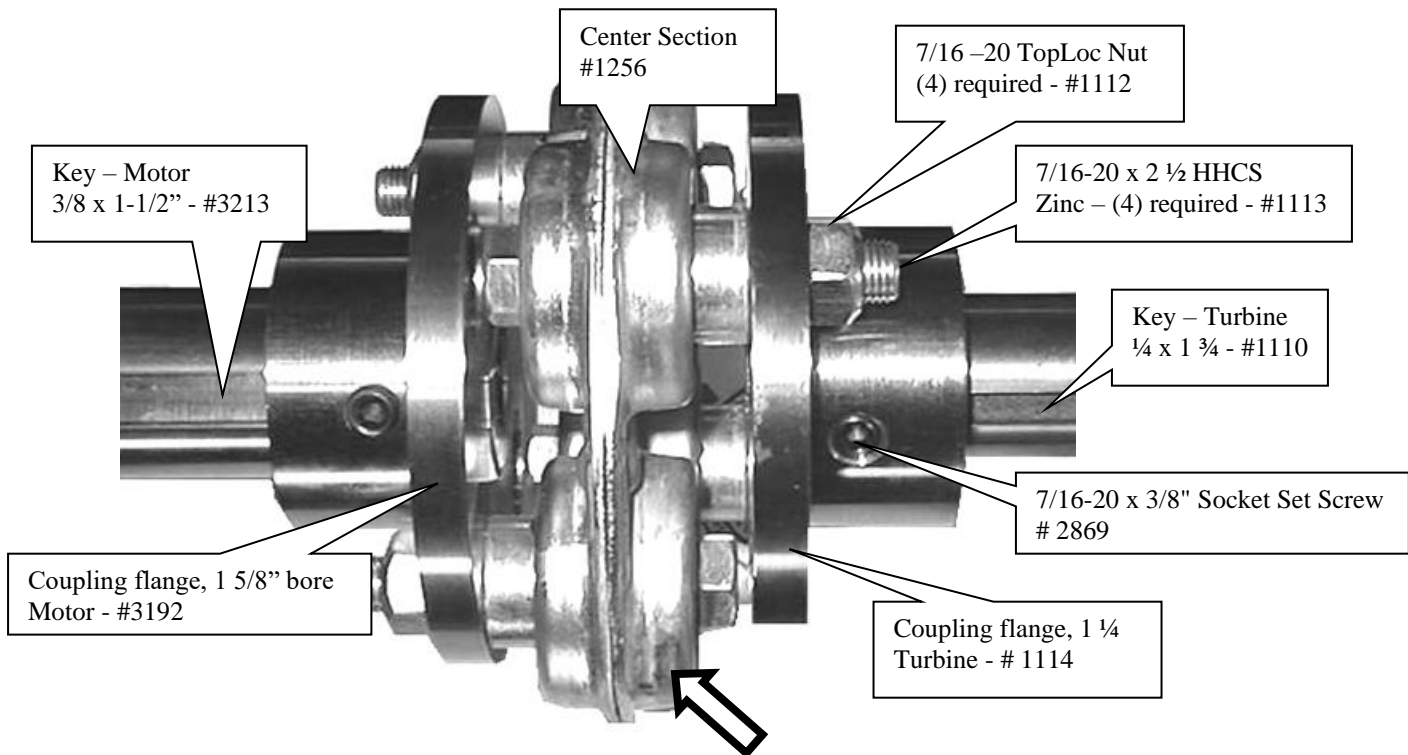
(CL) Machine

DO NOT OPERATE BLOWER UNIT WITHOUT GUARDS SECURELY ATTACHED

INSTALLATION INSTRUCTIONS & PARTS FOR THE MOREFLEX COUPLING

ALIGNMENT OF TURBINE SHAFT WITH SHAFT OF ENGINE IS CRITICAL

1. Install keys in both shafts.
2. Slide coupling flanges on both shafts (motor and turbine shafts)
3. Place Moreflex coupling CENTER SECTION between coupling flanges and secure with 4 bolts and TOPLOC nuts. The bolt heads are positioned against the coupling in alternating directions. Tighten all 4 bolts. DO NOT TIGHTEN SET SCREWS AT THIS TIME.
4. Check key for proper position under the set screw hole on both shafts.
5. Place several drops of Loctite 271 into these two holes only. Set screws and tapped screw holes must be free of dirt and oil for Loctite to work properly.
6. Install the set screws over the keys and tighten firmly.
7. Using a drill point, dimple each shaft through the other 2 set screw holes. Clean drill chips, oil and dirt before applying Loctite.
8. Place several drops of Loctite 271 in these 2 holes.
9. Install and tighten set screws in these 2 holes.
10. Check and retighten the 4 bolts that hold the coupling center section in place.
11. Visually inspect the unit and replace the guard. DO NOT OPERATE WITHOUT THE GUARDS IN PLACE.

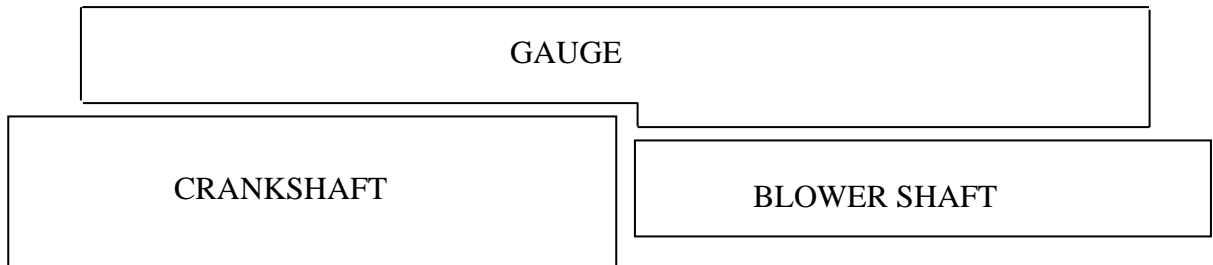


Part # 1256 (center section) is a **“WEAR”** item that should be visually checked each time the engine oil is changed. This coupling is equipped with special lock nuts. Occasionally check that all 4 nuts are securely fastened. **LOOK FOR CRACKS IN THE RUBBER COMPOSITION THAT SURROUNDS THE 4 BUSHINGS. Replace the center section when the rubber composition begins to show ANY signs of cracking OR an increase in vibration OR unusual sounds. When in doubt, call our Service Department.**

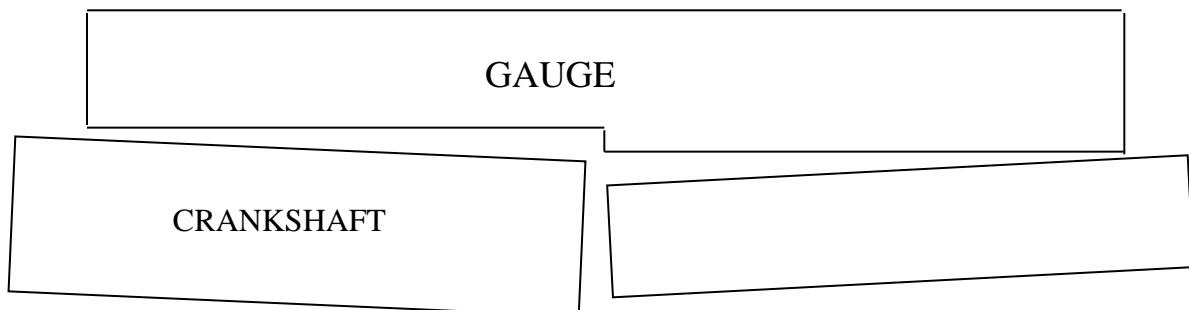
MOUNTING BLOWER ASSEMBLY ONTO FRAME **AND ALIGNMENT RECOMMENDATIONS**

1. Install blower assembly onto frame and tighten all of the bolts.
2. Remove all burrs and oil from the shafts and keyways (engine and blower shafts).
3. Using the supplied gauge, align the shafts parallel to each other (very important).
4. Check in four places around the shafts at 90° to each other.
5. When properly aligned, gauge should have little to no gap between itself and the shafts at any point along the gauge.
6. To adjust, move the engine. The 2 mounting brackets have tapped holes in each corner to help support and adjust the position of the engine. The 4 roll pins may need to be repositioned after alignment is completed and bolts are tightened.
7. Tighten all engine bolts and recheck alignment. Drill and install 4 roll pins in new position.

ACCEPTABLE



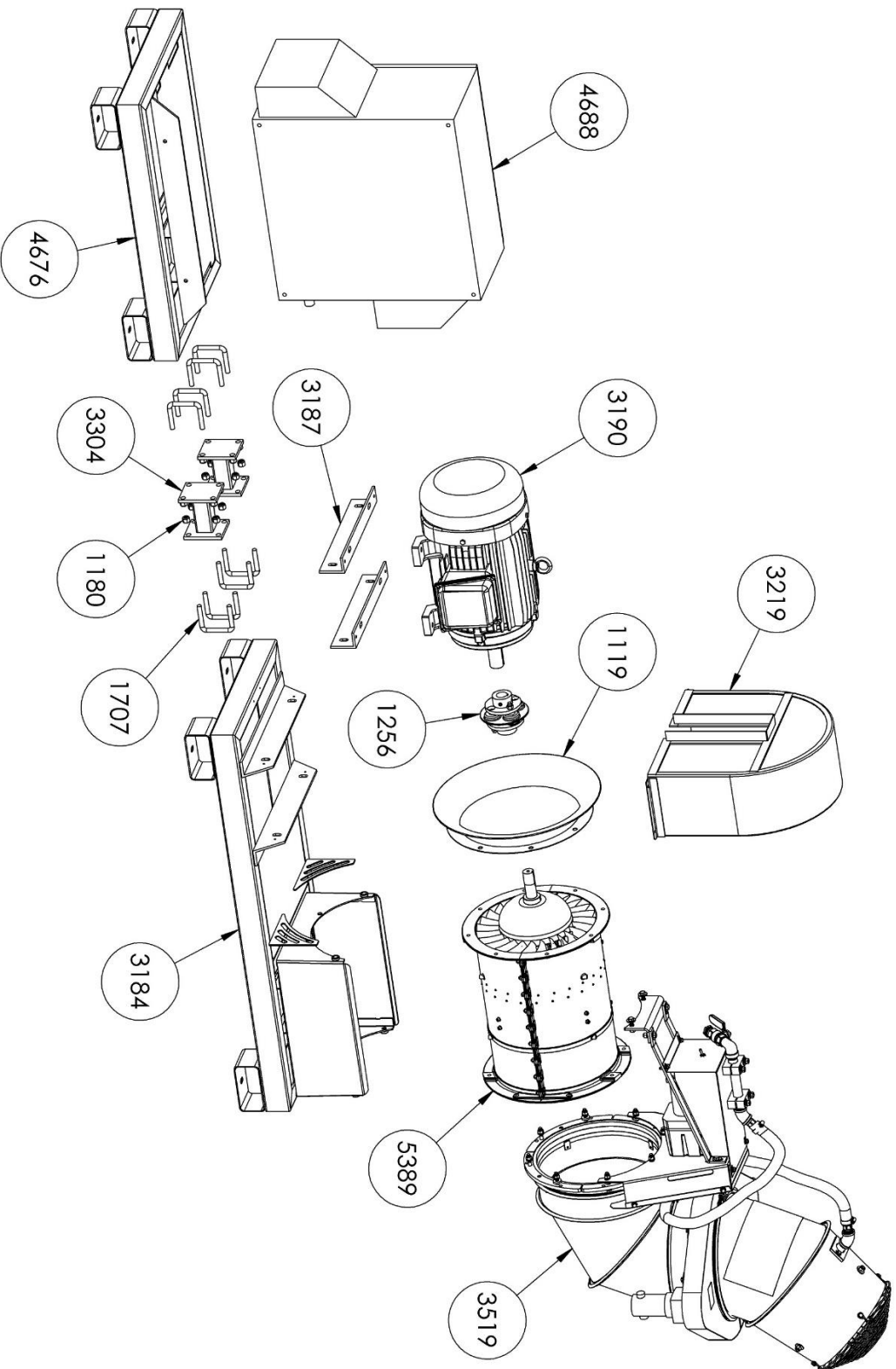
NOT ACCEPTABLE



SECURELY ATTACH GUARDS BEFORE OPERATING BLOWER UNITS

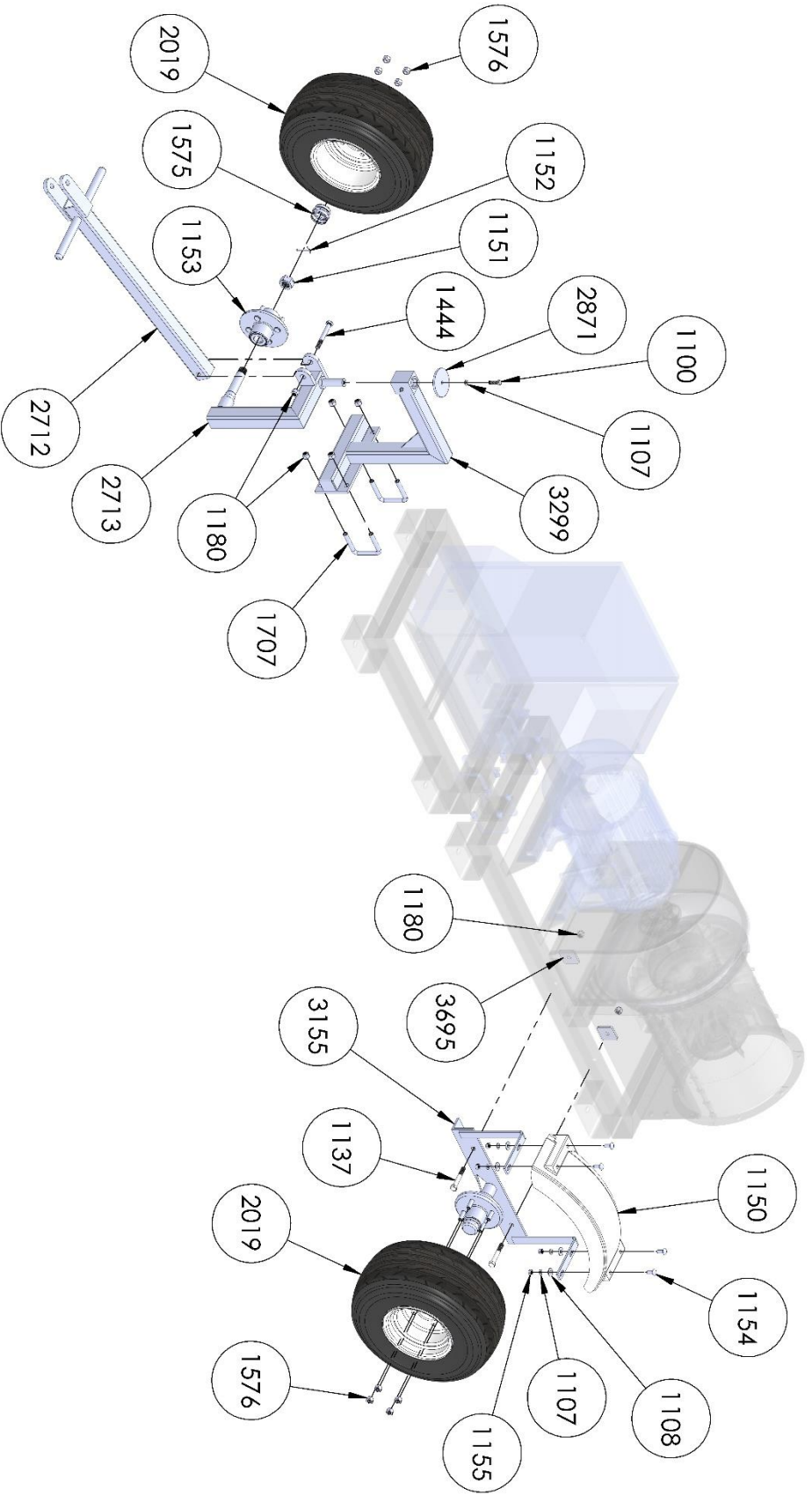
BT-MECV220 PARTS REFERENCE

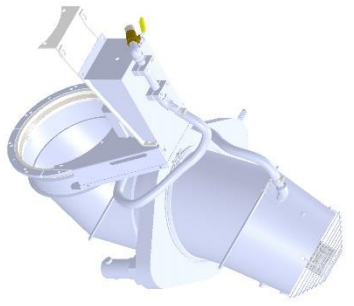
(BEGINNING WITH SERIAL #32021)



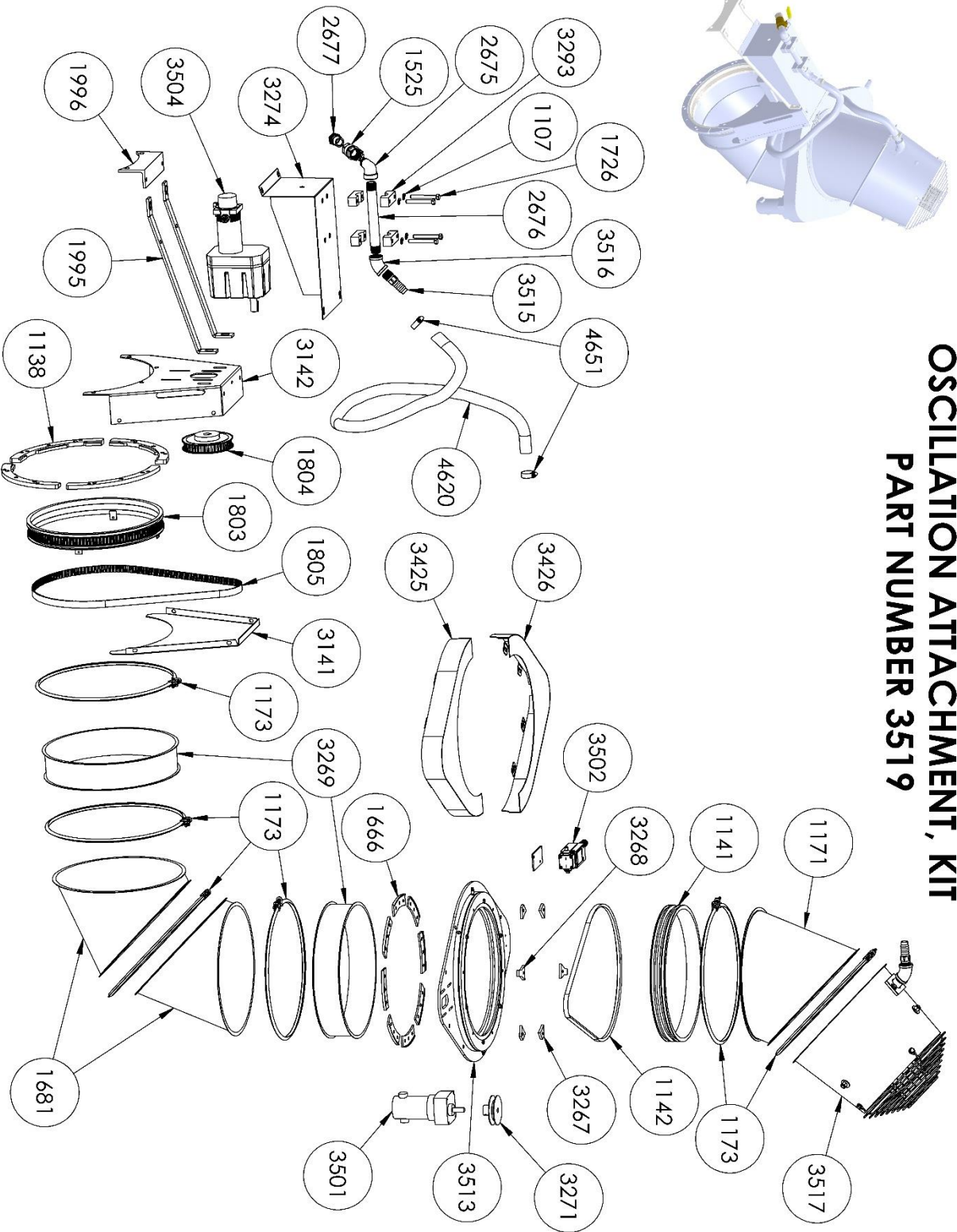
***NOT ALL HARDWARE AND WIRING IS SHOWN**

BT-MECV TRAILER PACKAGE PARTS REFERENCE (BEGINNING WITH SERIAL #32021)

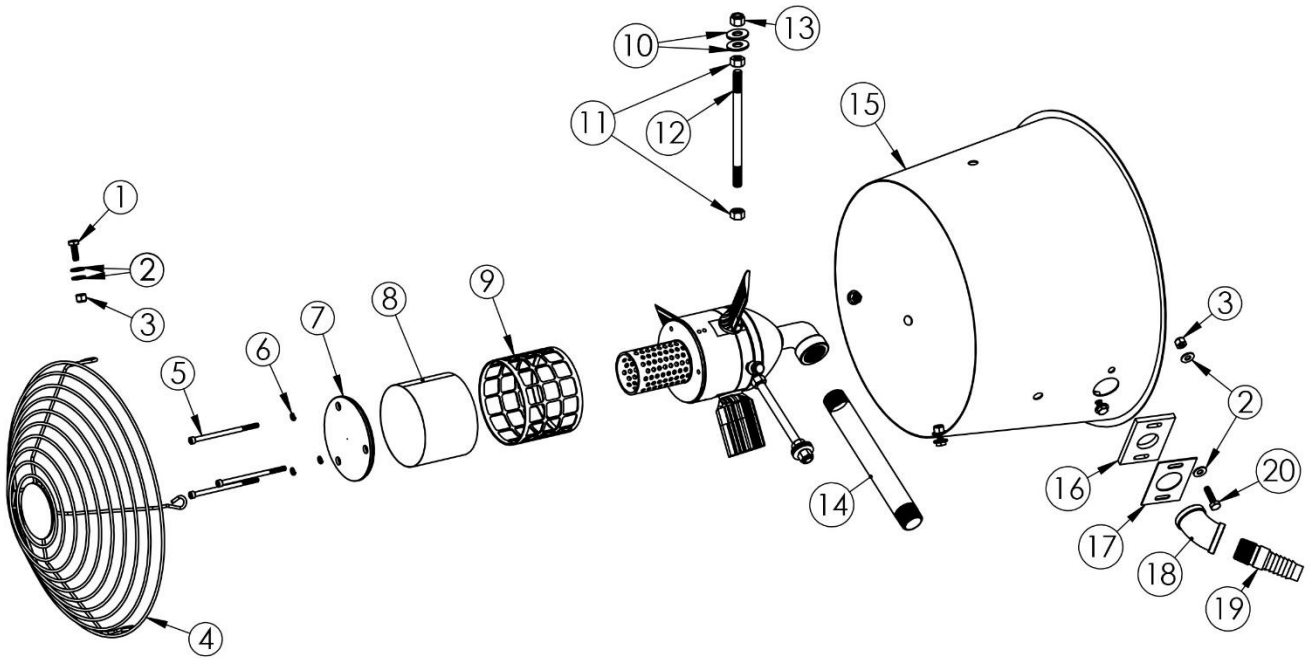




OSCILLATION ATTACHMENT, KIT PART NUMBER 3519



*ALL HARDWARE NOT SHOWN



Oscillation Gyrotory Atomizing Nozzle (Part #3517) Parts Reference

Ref #	Part #	Description	Qty.
1	1258	1/4-20 X 3/4 HHCS GR5 ZINC	4
2	1415	1/4" FLAT WASHER	12
3	1125	1/4-20 NYLOC NUT ZINC	6
4	2881	MONSOON NOZZLE GUARD	1
5	2663	10-32 X 3 1/2" LONG STAINLESS STEEL SHCS	3
6	2664	10-32 STAINLESS STEEL SPLIT LOCK WASHER	3
7	2574	CAGE END CAP, MONSOON	1
8	2711	SCREEN, STAINLESS MONSOON	1
9	2605	SCREEN CAGE, MONSOON ATOMIZER	1
10	1108	3/8 FLAT WASHER ZINC PLATED	6
11	1105	3/8-24 HEX NUT ZINC PLATED GRADE 5	6
12	2592	3/8" X 5.7" LONG SUPPORT ROD, MONSOON	3
13	1935	3/8-24 NYLOC NUT	3
14	2676	3/4" X 8" NIPPLE	1
15	2665	MONSOON NOZZLE	1
16	2678	RUBBER RETAINING GASKET, MONSOON	1
17	2679	GASKET RETAINER STAINLESS, MONSOON	1
18	3516	45 DEGREE 3/4" GALVANIZED STEEL ELBOW	1
19	3515	BARBED HOSE FITTING, 3/4" HOSE, 3/4" MALE NPT, ZINC PLATED	1
20	1169	1/4-20 X 1 HHCS ZINC	2

**PLEASE CONTACT BUFFALO TURBINE AT 716-592-2700
BEFORE ATTEMPTING TO SERVICE GYRATORY ATOMIZING NOZZLE.**

BILL OF MATERIALS FOR BT-MECV220			
REF PAGE #	PN	DESCRIPTION	QTY
17	1100	3/8-24 X 1-1/4 HHCS ZINC GR 5	6
	1101	3/8-24 X 1-1/2 HHCS ZINC GRADE 5	4
	1102	3/8-24 X 1-3/4 HHCS ZINC GRADE 5	2
	1104	3/8-24 X 2 HHCS ZINC	8
	1105	3/8-24 HEX NUT ZINC PLATED GRADE 5	20
	1106	SPACER 3/8 X 3/16 THICK WASHER	30
17,18	1107	3/8 LOCK WASHER ZINC PLATED	24
17	1108	3/8 FLAT WASHER ZINC PLATED	14
	1109	3/16" X 1/2" LONG ROLL PIN	4
	1110	KEY, 1/4 X 1-1/2	1
	1112	7/16-20 TOPLOC NUT GRADE 5	4
	1113	7/16-20 X 2-1/2 HHCS ZINC GRADE 5	4
	1114	COUPLING FLANGE, 1-1/4" BORE	1
16	1119	14-221-D1 BELLMOUTH	1
	1130	5/16-18 x 3/8" LONG SET SCREW	2
18	1138	PLASTIC SLIDE	4
	1139	3/8" NOTCHED WASHER	8
18	1141	ELBOW BASE RING, SHORT	1
18	1142	AX54 V-BELT	1
	1156	SERIAL TAG	1
	1166	COV 1/2" X 1/4" WIRE CLAMP	1
	1167	COV 5/16" X 1/4" WIRE CLAMP	2
	1169	1/4-20 X 1 HHCS ZINC	21
18	1171	ELBOW SEGMENT	1
18	1173	CLAMP BAND W/ BOLT & NUT	6
16,17	1180	1/2-13 NYLOC NUT ZINC	16
	1182	4 X 4 BT DECAL	2
	1186	CAUTION DO NOT OPERATE DECAL	3
	1221	1/2-20 X 2 HHCS ZINC GRADE 5	8
	1222	1/2 LOCKWASHER	8
	1226	1/2 FLAT WASHER	16
	1233	AMERICA & SAFETY FIRST DECAL	1
	1237	1/2-20 HEX NUT ZINC GRADE 5	8
16	1256	MOREFLEX 502 CENTER	1
	1258	1/4-20 X 3/4" LONG HHCS GR 5 ZINC	3
	1259	1/2 LOCKWASHER	24
	1275	BLACK CABLE TIES 8" LONG	5
	1415	1/4" FLAT WASHER	20
18	1525	3/4" BRASS BALL VALVE	1
	1540	5/16" LOCK WASHER, ZINC	38
	1541	5/16" FLAT WASHER, ZINC	8
18	1666	CLAMP	8
	1668	5/16-24 X 3/4" HHCS GR.5 ZINC	24
	1669	1/4-20 X .055 HEAD INSERT	12
	1673	#10 LOCK WASHER	4
	1674	#10 FLAT WASHER	4
18	1681	HEAVY GAUGE ELBOW SEGMENT	2
16,17	1707	U-BOLT	8
18	1726	3/8-24 X 3" HHCS GRADE 5 ZINC	4
18	1803	ELBOW BASE RING	1
18	1804	3/8" X 3/4" 44 TOOTH TIMING BELT PULLEY	1
18	1805	3/8" X 3/4" TIMING BELT 60 TEETH	1
	1812	10-32 X .625 HHCS	8
	1813	10-32 NYLOC NUT	4
	1820	5/16-18 X 3/4" LONG HHCS ZINC	8
	1838	1/2" HEAT SHRINK	2"
18	1996	SUPPORT MOUNT	1
	2023	16-14 FULLY INSULATED MALE QUICK DISCONNECT	2
18	2675	3/4" STREET "L"	1
18	2676	3/4" X 8" NIPPLE	1
18	2677	3/4" BRASS JPSE ADAPTER	1
	2869	7/16-20 X 3/8" SHCS	4
18	3141	BELT GUARD FRONT	1
18	3142	BELT GUARD BACK	1
	3181	MONSOON DECAL	3
16	3184	FRAME, EL12	1
16	3187	MOTOR MOUNTING RAIL	2
16	3190	20HP LEESON ELECTRIC MOTOR	1
	3192	COUPLING, 1-5/8" BORE	1



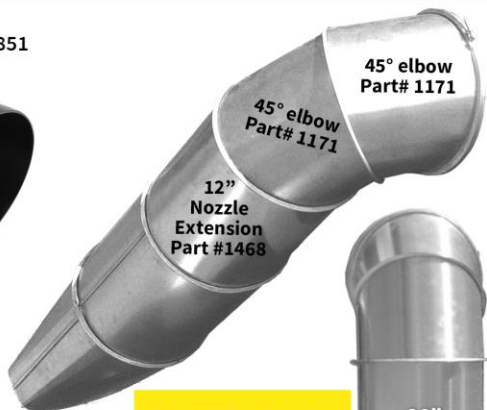
OPTIONS

 180 Zoar Valley Road
 Springville, NY 14141

NOZZLES +

ALUMINUM NOZZLES

Aerospace Polymer Nozzle - Part# 2851


Flexible Nozzle Assembly - Part# 3345
 Various lengths available.
 Ideal for rough terrain.


*Call sales and service to request custom nozzle configuration.


Gyratory Atomizing Nozzle - Part# 2547
 (Safety guard removed for clarity)

 Optional aluminum nozzles **will not** connect to the standard Aerospace Polymer Nozzle (Part# 2851). Requires: **Two 45° elbow segments (Part# 1171)** and two additional clamp bands (Part# 1173).

12" Extension - Part# 1468
20" Extension - Part# 1845
10" Round Nozzle - Part# 1417
12" Round Nozzle - Part# 1172
 Improves air velocity with lower horsepower and hydraulic blower units

10" Rectangular Nozzle - Part# 1469
19" Rectangular Nozzle - Part# 1425
 5.5"x15" opening - extra length/more concentrated air flow. Uses - heavy wet debris, plugs, top dressing. **No ground clearance** in the vertical down position.

Fishtail Nozzle - Part# 1743
 5"x30" (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 at moving debris.


CLAMP BAND W/ BOLT & NUT

Part# 1173



QUICK CONNECT CLAMP BAND

Part# 4935

Quickly remove or add nozzle with the barrel style clamp band.



FORK POCKETS

Part# 4552

Great for moving blowers around jobsites and bed mount / skid mount applications.



WARNING:
 Cancer & Reproductive Harm -
www.P65Warnings.ca.gov

BUFFALO TURBINE PRODUCTS

Cyclone eKB



Cyclone 8000 (& 8000 EFI)



Cyclone KB7



Cyclone MEGA



The **Original & Most Powerful**
Turbine Debris Blowers
since 1945



BLITZ (& BLITZ MEGA)



Cyclone SQUARED



Cyclone Hydraulic (& Hydraulic MEGA)



Cyclone PTO (& PTO MEGA)

Visit BuffaloTurbine.com for more product info