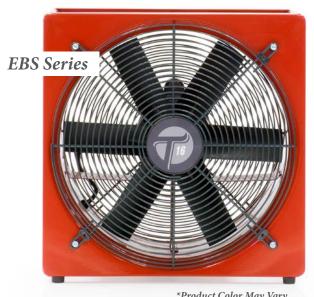


# **OWNER'S MANUAL**

Confined Space Smoke Ejector / EBS





\*Product Color May Vary

# **INTRODUCTION**

Thank you for choosing Tempest Technology Corporation for your ventilation needs. With this manual we hope to help you operate your Tempest product safely and to its full potential. Maintained according to the specifications set in this manual it is not uncommon to receive many years of use and operation out of your Tempest equipment.

This manual is produced solely for the use of purchasers and operators of Tempest Technology Corporation equipment. Any reproduction, retransmission, or other use of the contents of this manual without written consent of Tempest Technology Corporation is strictly prohibited.

It is the intent of this manual to provide the owner/operator of Tempest Technology Corporation products with both general and specific information regarding the safe and proper operation and maintenance of the equipment described within.

#### **CONTACT**

If after careful review, any questions arise concerning any portion of this manual, please contact Tempest Technology Corporation for assistance:

TEMPEST TECHNOLOGY CORP. 4708 N. BLYTHE AVENUE FRESNO, CA 93722

Toll Free: 800.346.2143 t: 559.277.7577 f: 559.277.7579

response@tempest.us.com www.tempest.us.com

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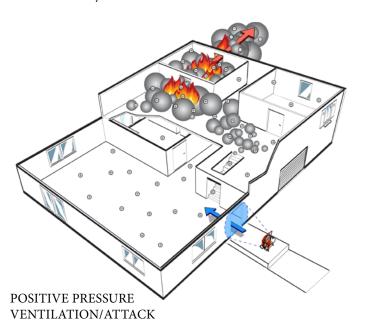
## ABOUT TEMPEST

Tempest Technology Corporation is the leading manufacturer of products and accessories for environmental management in firefighting and industrial applications.

Tempest began as a manufacturer of gasoline and electric powered blowers for the fire service. Fire departments use the *Tempest Power Blower<sup>TM</sup>* to provide "Positive Pressure Ventilation / Attack" (PPV/PPA) to remove heat, gases and smoke from the interior of a burning structure.

Tempest has expanded into other industries and found new applications for its products. The *Tempest Power Blower*<sup>TM</sup> and PPV/PPA are used by industrial applications to control dust, fumes and unhealthy gases like carbon monoxide, greatly improving safety in confined spaces.

Tempest Technology Corporation has earned a reputation as a leader and innovator in the air movement industry and continues in that role today.



## **SAFETY GUIDE**

Failure to follow the operating, maintenance and lubrication requirements set forth in this manual may result in serious personal injury or death and/or damage to equipment or property.

The following WARNING statements indicate potentially hazardous conditions for operators and equipment. Make certain that anyone who works on or around the blower has read and fully understands the safety precautions listed.

- 1. Carefully read this owner's manual before attempting to operate, service or disassemble any part of your Tempest *EBS*.
- **2. DO NOT** operate the unit when mentally or physically fatigued or impaired.
- 3. Stay away from rotating parts; avoid wearing loose jackets, shirts, and ties. Keep hands and feet away from moving parts.
- 4. Keep all unauthorized personnel at a safe distance from the blower.
- Keep all guards in place. DO NOT make repairs while the unit is running. DO NOT operate if any guard or grille is not in place.
- 6. Always wear eye protection. Loose debris can be picked up in the air stream and flown in the air.
- Hearing protection is required. Engine and air noise may exceed safe dB levels.
- 8. Always ensure proper voltage and amperage is delivered to your *EBS*.
- 9. Only a qualified technician should perform repairs or maintenance on electric components.
- 10. Never operate your *EBS* with electric components exposed.
- 11. Never operate your *EBS* with damaged, exposed or frayed wiring.
- 12. It is the sole responsibility of the owner/operator to develop procedures for proper use of the *EBS* in accordance with generally accepted ventilation techniques as well as the organization's own operating procedures, before placing the unit into service.





## **GENERAL INFORMATION**

#### **FAN IDENTIFICATION**

Each *EBS* has a part number as well as a serial number. The part number identifies the type of unit (size, drive, etc.) while the serial number relates to information referencing the date of manufacture. This information is useful should it become necessary to contact the factory regarding your *EBS*.

#### SERIAL NUMBER LOCATIONS

The serial number is located on the cord wrap frame.

Please write the Serial Number of your *EBS* in the spaces below. This will aid us in identifying which model you have when assisting you.

Model (Part No.)		
Date		
Serial No.		

#### WARRANTY

Warranty information on your unit can be found on the back page of this manual. For further information, please contact Tempest Technology Corp.

# CONFINED SPACE FAN / SMOKE EJECTOR DATA

TYPE: Negative Pressure Ventilation Fan - Confined Space / Smoke Ejector

**DRIVE:** Direct-Drive Single Speed 110-120V, 60Hz or 220-230V, 50Hz Electric Motor, GFCI Compatible

**EP OPTION:** Hazardous Locations Class I, Group C & D and Class II, Group F & G Environments

BLADE: AirFlex Fiberglass Reinforced Polyamide Blades

BUSHING: Keyed Shaft and Set or Cap Screws

**SHROUD:** Integral Component of Frame

**FRAME:** Formed and Welded Steel Sheet Metal Construction with Durable Powder-Coat Finish

GRILLE: Continuous Circular-Wound, External-Weld Steel Wire with 4 Tie Points for Additional Safety

Meets UL & European CE Safety Standards

EBS SPECIFICATIONS:	Model No.	Part No.	Size	HP	CFM	Dimensions (WxDxH)	Weight
	EB-16-S-0.3	911-1000	16"	0.3	3,200	18.75" x 14.25" x 19.50"	46 lbs.
	EB-16-S-0.3-EP	911-1001	16"	0.3	3,200	18.75" x 14.25" x 19.50"	51 lbs.
	EB-16-S-1.0	911-1005	16"	1.0	7,513	18.75" x 14.75" x 19.50"	55 lbs.
	EB-16-S-1.0-EP	911-1006	16"	1.0	7,513	18.75" x 15.75" x 19.50"	60 lbs.
	EB-16-S-1.5	911-1010	16"	1.5	11,804	18.75" x 14.75" x 19.50"	59 lbs.

## **OPERATING PROCEDURES**

#### PRE-OPERATION

After receiving and unpacking your *EBS*, be sure to carefully inspect it for any damage that might have occurred during shipping. Should you find any damage: PLEASE NOTIFY TEMPEST TECHNOLOGY CORP. IMMEDIATELY AT 800.346.2143 OR RESPONSE@TEMPEST.US.COM.

#### **OPERATION**

#### SET-UP, STARTING AND STOPPING

Assuming the previous Pre-Operation and safety instructions have been followed, the fan is now ready to run.





WHEN USING A GENERATOR, IT IS IMPERATIVE THAT THE GENERATOR BE RUNNING AT FULL CAPACITY BEFORE PLUGGING IN ANY ELECTRIC FAN. ALWAYS VERIFY SUFFICIENT GENERATOR OUTPUT BEFORE USE. IMPROPER VOLTAGE SUPPLY MAY DAMAGE UNIT AND VOID WARRANTY.

<u>CAUTION</u>: **DO NOT** MOVE THE BLOWER WHILE IT IS IN OPERATION. SEVERE PERSONAL INJURY IS POSSIBLE AS WELL AS DAMAGE TO THE FAN.

**ALWAYS SHUT-DOWN** THE FAN PRIOR TO MOVING.

#### SET-UP

Position the fan in the desired location, making sure it is placed in a debris free area. If hung, ensure its mounting platform is securely in place.

#### **STARTING**

**No Switch:** Plug fan into power source. Unit will begin running automatically.

## With Switch:

- 1. Ensure blower toggle is switched to the OFF position.
- 2. Plug blower into power source.
- 3. Switch toggle to the ON position.

#### STOPPING

**No Switch:** Unplug unit from power source or switch off power source.

**With Switch:** Stop unit before unplugging from power source. Make sure toggle switch is set to STOP.

# SINGLE SPEED REQUIREMENTS Based on 110-120V fan on 20 amp circuit.

Motor HP 0.3 1.0 1.5 Starting Amps 10.9 48.0 54.6 **Starting Watts** 1300 6,000 6,300 Runnings Amps 6.3 13.4 14.2

756

2,100

1,900

# MAXIMUM POWER CORD LENGTH Based on 1 fan on 20 amp circuit.

**Runnings Watts** 

Motor HP	0.3	1.0	1.5
14 Gauge	215'	60'	45'
12 Gauge	330'	95'	65'
10 Gauge	550'	150'	115'
8 Gauge	850'	240'	190'
6 Gauge	1,350'	380'	300'

# **MAINTENANCE PROCEDURES**

Although Tempest electric *EBS* fans are designed to eliminate most maintenance issues, it is imperative that the blowers be inspected before startup on each use. Please review the following list before using this product.

#### MAINTENANCE SCHEDULE

#### **EVERY USE**

- INSPECT FAN FOR DAMAGE AND FIX IF ANY
- TIGHTEN/REPLACE ANY LOOSE OR MISSING PARTS

#### **EVERY MONTH OR 10 HOURS**

• INSPECT & CLEAN SHROUD & GRILLES

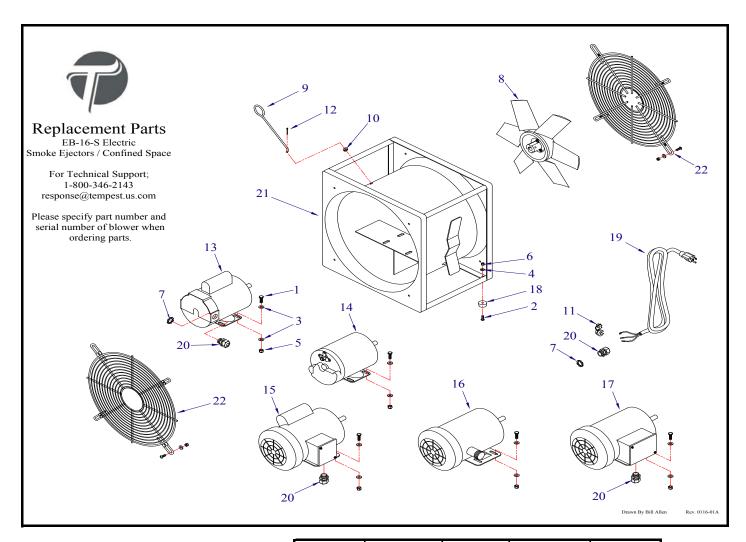
IMPORTANT: Always operate the fan in an area free of debris which may be pulled into the unit's blades. If you suspect the fan's blade may have contacted a hard object, thorough inspection of the blade assembly should be conducted immediately to ensure safety. You may contact Tempest Technology Corp. in order to find out how to properly inspect the blade assembly.

# **EBS TROUBLESHOOTING**

Various factors can contribute to or be the sole cause of problems for electric fans. This section will identify some of these problems and provide solutions to correct them.

#### **FAN FAILS TO START**

- Make sure the unit is connected to the power source.
- Thoroughly check the power cord. If the cord shows any signs
  of serious wear it may need to be replaced before running
  properly.
- Many fans are equipped with an "automatic reset." This reset will kill power to the fan when the unit is at risk of overheating. Let the *EBS* cool and attempt to start it again.
- There may be damage to the internal wiring. Have a qualified technician or electronics specialists examine the fan circuitry and wiring and make any necessary repairs.
- If your Tempest *EBS* is not running after pursuing the steps mentioned above, please contact us at 800.346.2143 or response@tempest.us.com.



		EB-16-S-0.3	EB-16-S-EP-0.3	EB-16-S-1.0	EB-16-S-1.0-EP	EB-16-S-1.5
		911-1000	911-1001	911-1005	911-1006	911-1010
		913-1000	913-1001	913-1005	913-1006	913-1010
Item #	Description	Part No.	Part No.	Part No.	Part No.	Part No.
1	BOLT 5/16-18 X 1 GR5 Z	100-046	100-046	100-046	100-046	100-046
2	BOLT 10-32 X 5/8 SHCS	100-099	100-099	100-099	100-099	100-099
3	WASHER 5/16 X 7/8 HEAVY F/W	120-008	120-008	120-008	120-008	120-008
4	WASHER #10	120-031	120-031	120-031	120-031	120-031
5	NUT 5/16-18 NYLOCK	130-001	130-001	130-001	130-001	130-001
6	NUT 10-32 NYLOCK	130-002	130-002	130-002	130-002	130-002
7	NUT 1/2 FITTING #141 T&B	130-010	-	130-010	-	130-010
8*	BLADE ASSEMBLY	260-070	260-070	705-292	705-292	705-272
9	ROD SWITCH LINK EBS16-EP	-	300-114	1	-	-
10	GROMMET EB-16-S-EP-0.3	-	300-116	ı	-	-
11	BUSHING CORD GRIP EBS16	300-119	300-119	-	-	-
12	PIN COTTER 3/32 X 1	-	300-127	1	-	-
13	MOTOR ELECTRIC 0.3 HP	360-033	-	1	-	-
14	MOTOR ELECTRIC 0.3 HP EP	-	360-037	ı	-	-
15	MOTOR ELECTRIC 1.0 HP	-	-	360-026	-	-
16	MOTOR ELECTRIC 1.0 HP EP	-	-	-	360-008	-
17	MOTOR ELECTRIC 1.5 HP	-	-	-	-	360-038
18	PAD FOOT EBS 16 ZB-1013-MI	580-009	580-009	580-009	580-009	580-009
19	CORD ELECTRIC	581-006	581-006	581-162	581-162	581-162
20	STRAIN RELIEF CD16NR-BK NYLO	581-058	-	581-058	581-058	581-058
21	FRAME WELDMENT EB-16-S RED	600-223	600-223	600-248	610-1319	600-248
21	FRAME WELDMENT EB-16-S YELLOW	600-733	600-733	600-247	610-1318	600-247
22*	GRILLE WITH HARDWARE EB-16-S	610-1402K	610-1402K	610-1402K	610-1402K	610-1402K

<sup>\*</sup> denotes item includes necessary hardware for installation

NI Not Illustrated

# WARRANTY INFORMATION

Except as otherwise set forth below, any claim by Customer with reference to the Goods sold shall be deemed waived by the Customer unless submitted in writing to Tempest within the earlier of (i) five (5) business days following the date Customer discovered, or by reasonable inspection should have discovered, any claimed breach of the foregoing warranty, or (ii) thirty (30) calendar days following the date of shipment. Any cause of action for breach of the foregoing warranty shall be brought within one (1) year from the date the alleged breach was discovered or should have been discovered, whichever occurs first.

#### **Limited Power Blower Warranty**

Tempest warrants to the original purchaser that all Tempest gasoline and electric powered blowers (except the engine or motor and drive) will be free from original defects in workmanship and material, under normal-use conditions, and Tempest will replace any defective power blower part (except the engine or motor and drive) if returned during the applicable warranty period, for the time frame indicated below:

Firefighting Industry:
Five (5) years from date of shipment
Industrial/Rental Industry:
One (1) year from date of shipment

#### Blower Engine / Motor & Drive Warranty

The engines manufactured by Honda® and Briggs & Stratton® are covered by a separate manufacturer's warranty for a period of two (2) years. Electric motors manufactured by Magnetek, Marathon, Baldor, Franklin Electric and Multi-Fan are covered by a separate manufacturer's warranty for a period of one (1) year.

Note: Unauthorized repair or modification of the factory assembly or parts voids the warranty.

All information provided in this operations manual is subject to change without notice. Please refer to our website for the most recent sales terms and conditions.



# **Tempest Technology Corporation**

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