

TEXAS PNEUMATIC TOOLS, INC.

Service, Operation AND Parts Manual

TORNADO BLOWERS



P E R F O R M A N C E S P E C I F I C A T I O N S

MODEL #	HORSEPOWER	VOLTAGE	HERTZ	WEIGHT	LENGTH	BODY DIAMETER	INLET/OUTLET DIAMETER
TB-8-EXP TB-8-TEFC	1 hp	115v / 230v	50 / 60	72 lbs. 32.7 kg	40" 101.6 cm	10.5" 26.7 cm	8" 20 cm
TB-12-EXP TB-12-TEFC	1 hp	115v / 230v	50 / 60	80 lbs. 36.3 kg	40" 101.6 cm	12.5" 31.8 cm	12" 31 cm
TB-16-EXP TB-16-TEFC TB-16-EXP-220-3 TB-16-TEFC-220-3	2 hp	115v / 230v	50 / 60	170 lbs. 77.1 kg	35" 88.9 cm	18.0" 45.7 cm	16" 41 cm

MODEL #	AIR FLOW (FREE FLOW) CFM / M ³ /Hr	CFM / M ³ /Hr AGAINST STATIC PRESSURE				RPM	DECIBEL LEVELS (@5 FEET)*
		0.5	1.0	1.5	2		
TB-8-EXP TB-8-TEFC	2,090 / 3,540	1,900 / 3,208	1,580 / 2,682	1,380 / 2,345	N/A	3,450	91
TB-12-EXP TB-12-TEFC	2,980 / 5,064	2,720 / 4,621	2,440 / 4,145	2,020 / 3,432	N/A	3,450	90
TB-16-EXP TB-16-TEFC TB-16-EXP-220-3 TB-16-TEFC-220-3	6,950 / 11,808	6,300 / 10,704	5,490 / 9,330	4,550 / 7,728	3,130 / 5,316	3,450	95

* No Ducting Attached. Decibel levels much lower with ducting attached to inlet/outlet.

~ Made in U.S.A. ~

www.airtools.com

Email: tptinfo@airtools.com

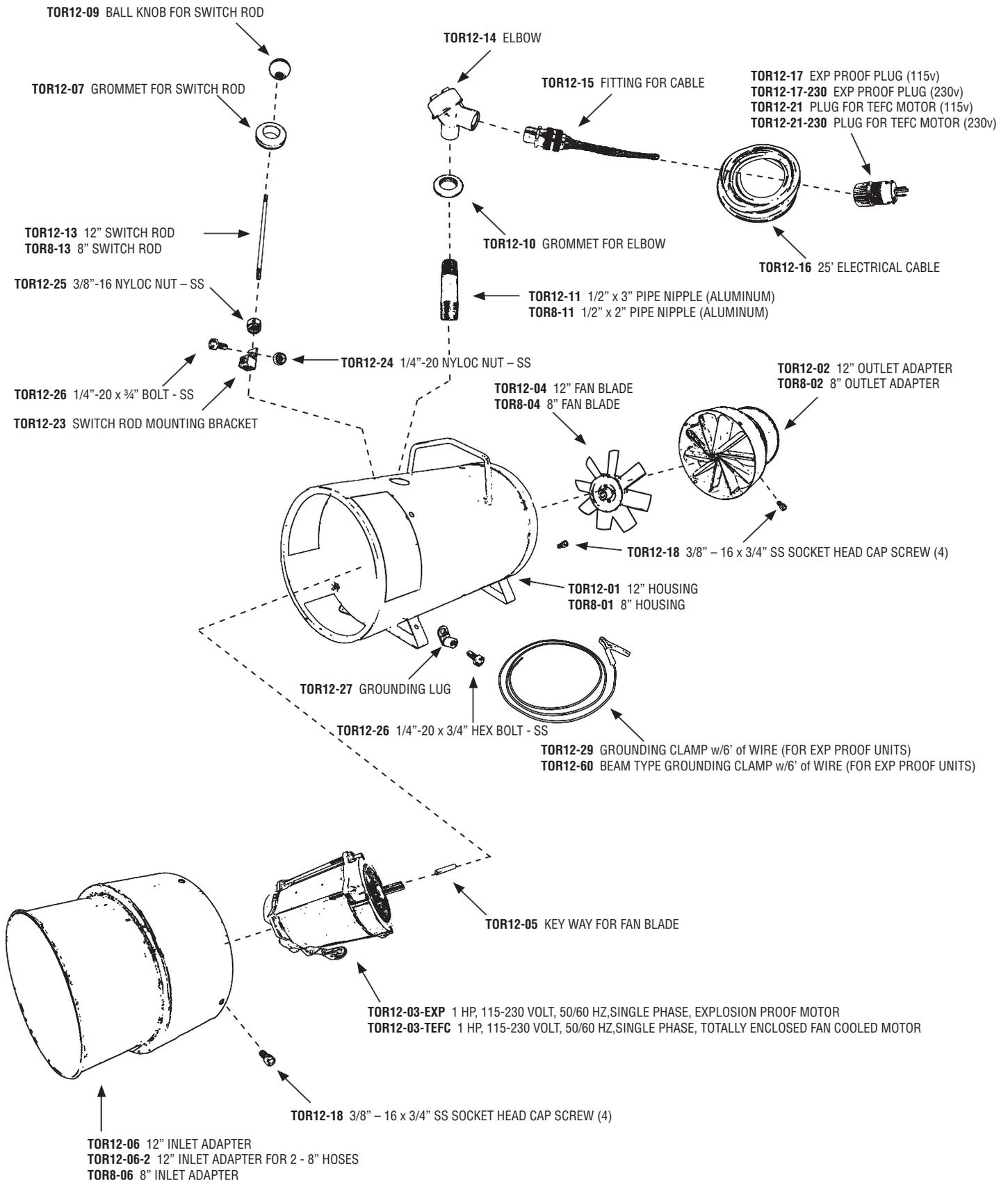
TEXAS
1-800-231-9740
254-587-2533 (Int'l calls)

NEVADA
1-800-858-1222

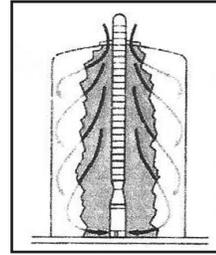
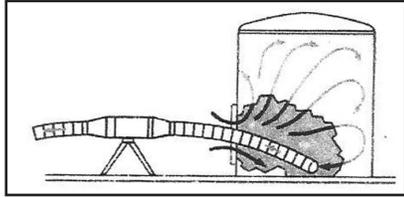
VIRGINIA
1-800-626-1091

MICHIGAN
1-877-575-5733

TORNADO BLOWER (8" & 12")



The Tornado 8, 12 and 16 are “heavy duty” vane-axial blower/exhausters designed and manufactured to meet the most rigorous industrial demands. They are intended for portable applications of fresh air supply or for exhausting noxious or hazardous fumes. Ducting may be attached to the inlet or outlet to provide additional utility and versatility. The Inlet Adapter (TOR8-06 or TOR12-06) on the Tornado 8 and 12 may be removed, and the unit can be positioned upright to draw fumes directly off the floor. *Please Note: Explosion proof motors are required for applications where there is a possibility of vapors or gases.*



Electrical Specifications: Check motor to ensure proper electrical characteristics for the power source to be used. When making electrical connections, the motor must be connected to the proper power source as indicated by the motor data plate or by the switch located on the rear of the motor. See “Changing Voltage” section to change motor voltage from low (115v) to high (230v) or vice versa. For three phase motors, a qualified electrician should strictly adhere to the wiring diagram on the motor data plate or in the motor terminal box. Special attention should be given to make sure a single phase motor is connected to a single phase electrical supply of proper voltage, and that a three phase motor will only operate on three phase electrical supply. Electric motors will burn out and fail immediately if improperly connected.

Totally Enclosed Motors (TEFC):

- All totally enclosed fan cooled motors (TEFC) have automatic reset thermal overload protection.
- Units rated at a voltage of 115 or 230 (1-phase) are provided with an internal on/off switch. All 3-phase units are supplied with waterproof switches, junction boxes, cords and plugs.
- All power cords have a ground conductor identifiable by insulation of continuous green color or a continuous green color with one or more yellow stripes. A grounding type plug suitable for wet locations (TOR12-21 or TOR12-21-230) should always be used and is included when shipped new from the manufacturer.
- All service on the electrical components of this blower must be restricted to electricians or qualified service personnel.
- All motors are rated for 50/60 hertz operation. The RPM's of the motor are reduced when operating at 50 HZ.

Explosion Proof Motors (EXP):

- All explosion proof motors (EXP) have automatic reset thermal overload protection.
- Units rated at a voltage of 115 or 230 (1-phase) are provided with an internal on/off switch. All 3-phase units are supplied with explosion proof switches, junction boxes, cords and explosion proof plugs.
- All power cords have a ground conductor identifiable by insulation of continuous green color or a continuous green color with one or more yellow stripes. An explosion proof grounding type plug (TOR12-17 or TOR12-17-230) should always be used and is included when shipped new from the manufacturer.
- To maintain the explosion proof rating of the motor, any changes to the assembly must conform to the National Electric Code (NEC). Any service on an explosion proof motor must be performed by an authorized service dealer. Any service by unauthorized service centers will void any warranty or liability, either expressed or implied, and may create a hazardous condition.
- All motors are rated for 50/60 hertz operation. The RPM's of the motor are reduced when operating at 50 HZ.

CAUTION: Do not work on electrically powered blowers unless the power cord is disconnected. Always have screens and the outlet adapter with guide vanes in place if it is to be operated. All service on the electrical components of the Tornado Blower must be restricted to qualified personnel. Power cords must have ground wire and be used with grounding type plug. Explosion proof motors must have explosion proof plugs to maintain the explosion proof rating of the motor.

General Maintenance: The Tornado 8, 12 and 16 are vane-axial ventilators designed for maximum use in industrial service. Before starting the unit, visually check to see if the fan blades clear the housing in case of damage during shipment. If using a 3-phase motor, check the fan rotation and have qualified electrical service personnel interchange two leads if necessary. The rotation of the fan blade for Tornado 8 and 12 units is counter clockwise when facing the blade. The rotation of Tornado 16 units is clockwise when facing the blade. The electrical motors have sealed bearings for long life. Motor manufacturers supply general instructions which are shipped with the Blower. The Tornado fan blade has a close, slip fit on the shaft and is held in place with 2 set screws. The screws can be accessed via a hole under the data sticker on top of the unit. One set screw applies pressure on the keyway and one set screw applies pressure directly to the shaft.

With exception to 3-phase motors, all motors are designed for use with 115 or 230 volt power. These motors are designed so the voltage can easily be changed if desired. See “Changing Voltage” below. Three-phase motors are designed for 230 volts or higher.

TORNADO BLOWER

Service and Operations

WARNING: *These motors are thermally protected with automatic restart. The motor will restart without warning if protector trips. Be sure that power is disconnected before servicing the motor.*

Changing Voltage: The motors may be wired for 115v or 230v and can run on 50 Hz or 60 Hz systems. To change the motor voltage, simply loosen the set screw on the back of the motor and turn the switch to the desired voltage setting. Tighten the set screw to secure setting. (see photo below) The low voltage setting is 115v and the high voltage setting is 230v. The voltage setting can be determined by the location of the set screw which is adjacent to the mark. If the voltage is changed from the setting as originally shipped from the factory, it is important and required to change the plug. Explosion proof plugs must be used with explosion proof motors in order to maintain the explosion proof rating of the motor.



CAUTION: *The correct plug type must be used with the voltage selected. Explosion proof plugs must be used with explosion proof motors to maintain the explosion proof rating of the motor.*

Replacement Parts: Please reference the unit's serial number when ordering parts. The serial number can be found inside the leg of the 8 and 12 inch units and inside the base of the 16 inch unit. (see pictures below)

8 & 12" Unit



16" Unit



Warranty Information: Tornado Blowers are warranted against defects of material and workmanship, under normal use and service for a period of twelve (12) months from date of sale. This warranty does not cover ordinary wear and tear, abuse, misuse, over-loading, altered products, systems or materials not of Seller's manufacture. Expenses incurred by Buyer(s) in repairing or replacing any defective product will not be allowed except where authorized in writing by the Seller.

Obligations under this warranty are limited to repairing, replacing or allowing credit at our option, without cost of our factory any part or parts thereof which shall, within such warranty period, be returned to Texas Pneumatic Tools, Inc. with transportation charges prepaid and which our examination shall disclose to our satisfaction to have been defective.

This warranty does not apply to any such Texas Pneumatic Tools, Inc. products or parts which have failed as a result of faulty installation or abuse, or incorrect electrical connections or alterations made by others, or use under abnormal operating conditions or misapplication of the products and parts.

Except as specifically provided above, there are no other warranties, express or implied, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose.

On equipment furnished by Seller, but manufactured by others, such as electric motors, seller extends the same warranty as Seller receives from the manufacturer thereof.

Prime-Air Blowers and Texas Pneumatic Tools, Inc. assumes no responsibility for material returned to our facility without written permission.

SAFETY ACCESSORIES WARNING: *The responsibility for providing safety accessories for any Tornado Blower is that of the installer and user of this equipment.*

The user, in making its determination as to the appropriate safety accessories to be installed and any warning notices, should consider (1) the location of the installation. (2) the accessibility of employees and other persons to this equipment. (3) any adjacent equipment. (4) applicable building codes, and (5) requirements of the State Bureau of Safety and Health, and Federal Occupational Safety and Health Act (OSHA).