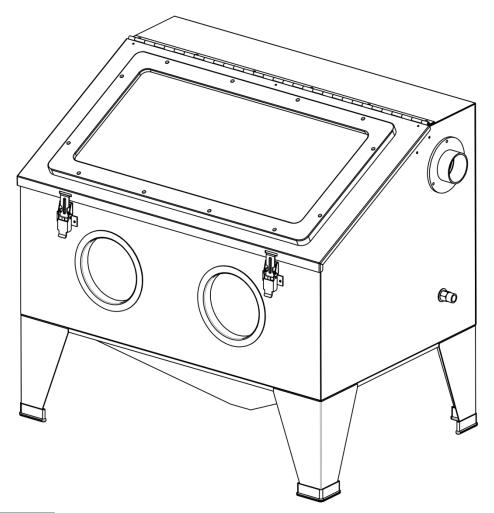


# TMG-ABC50 PRODUCT MANUAL v2023.09.11

# 50 GALLON TABLETOP CABINET SANDBLASTER



# **A WARNING**



- Please read and understand the product manual completely before assembly
- · Check against the parts list to make sure all parts are received
- · Wear proper safety goggles or other protective gears while in assembly
- Do not return the product to dealer. They are not equipped to handle your requests.

TOLL FREE:1-877-761-2819

#### Missing parts or questions on assembly?

Please call: 1-877-761-2819 or email: cs@tmgindustrial.com



This manual provides critical safety instructions on the proper setup, operation, maintenance, and service of this machine/tool. Save this document, refer to it often, and use it to instruct other operators.

Failure to read, understand and follow the instructions in this manual may result in fire or serious personal injury—including amputation, electrocution, or death.

The owner of this machine/tool is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, cutting/sanding/grinding tool integrity, and the usage of personal protective equipment.

The manufacturer will not beheld liable for injury or property damage from negligence, improper training, machine modifications or misuse.



#### **WARNING!**

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- · Lead from lead-based paints.
- · Crystalline silica from bricks, cement and other masonry products.
- · Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

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# **INTRODUCTION**

## **Manual Accuracy**

We are proud to offer this document with your new machine! We've made every effort to be exact with the instructions, specifications, drawings, and photographs of the machine we used when writing this manual. However, sometimes we still make an occasional mistake.

Also, owing to our policy of continuous improvement, your machine may not exactly match the manual. If you find this to be the case, and the difference between the manual and machine leaves you in doubt, immediately call our technical support for updates or clarification.

For your convenience, we post all available documentation on our website at www.tmgindustrial.com. Any updates to this document will be reflected on our website as soon as complete.

## **Contact Info**

We stand behind our machines! If you have questions or need help, contact us with the information below. Before contacting, make sure you get the **serial number** and **manufacture date** from the machine ID label. This will help us help you faster. Customer Support: 1-877-761-2819 cs@tmgindustrial.com

# **SECTION 1: SAFETY**

For Your Own Safety, Read Instruction Manual Before Operating This Machine

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures. Always use common sense and good judgment.



#### **DANGER**

Indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious



#### **WARNING**

Indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious



#### **CAUTION**

Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTICE- Alerts the user to useful information about proper operation of the machine to avoid machine damage.

## Safety Instructions for Machinery

OWNER'S MANUAL. Read and understand this owner's manual BEFORE using machine.

**TRAINED OPERATORS ONLY.** Untrained operators have a higher risk of being hurt or killed. Only allow trained/supervised people to use this machine. When machine is not being used, dis- connect power, remove switch keys, or lock-out machine to prevent unauthorized use—especially around children. Make your workshop kid proof!

**DANGEROUS ENVIRONMENTS.** Do not use machinery in areas that are wet, cluttered, or have poor lighting. Operating machinery in these areas greatly increases the risk of accidents and injury.

**MENTAL ALERTNESS REQUIRED.** Full mental alertness is required for safe operation of machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.

**ELECTRICAL EQUIPMENT INJURY RISKS.** You can be shocked, burned, or killed by touching live electrical components or improperly grounded machinery. To reduce this risk, only allow qualified service personnel to do electrical installation or repair work, and always disconnect power before accessing or exposing electrical equipment.

**DISCONNECT POWER FIRST.** Always disconnect machine from power supply BEFORE making adjustments, changing tooling, or servicing machine. This prevents an injury risk from unintended startup or contact with live electrical components.

**EYE PROTECTION.** Always wear ANSI-approved safety glasses or a face shield when operating or observing machinery to reduce the risk of eye injury or blindness from flying particles. Everyday eyeglasses are NOT approved safety glasses.

**WEARING PROPER APPAREL.** Do not wear clothing, apparel or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to reduce risk of slipping and losing control or accidentally contacting cutting tool or moving parts.

**HAZARDOUS DUST.** Dust created by machinery operations may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each workpiece mate-rial. Always wear a NIOSH-approved respirator to reduce your risk.

**HEARING PROTECTION.** Always wear hearing protection when operating or observing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.

**REMOVE ADJUSTING TOOLS.** Tools left on machinery can become dangerous projectiles upon startup. Never leave chuck keys, wrenches, or any other tools on machine. Always verify removal before starting!

**USE CORRECT TOOL FOR THE JOB.** Only use this tool for its intended purpose—do not force it or an attachment to do a job for which it was not designed. Never make unapproved modifications—modifying tool or using it differently than intended may result in malfunction or mechanical failure that can lead to personal injury or death!

**AWKWARD POSITIONS.** Keep proper footing and balance at all times when operating machine. Do not overreach! Avoid awkward hand positions that make workpiece control difficult or increase the risk of accidental injury.

**CHILDREN & BYSTANDERS.** Keep children and bystanders at a safe distance from the work area. Stop using machine if they become a distraction.

**GUARDS & COVERS.** Guards and covers reduce accidental contact with moving parts or flying debris. Make sure they are properly installed, undamaged, and working correctly BEFORE operating machine.

FORCING MACHINERY. Do not force machine. It will do the job safer and better at the rate for which it was designed.

NEVER STAND ON MACHINE. Serious injury may occur if machine is tipped or if the cutting tool is unintentionally contacted.

**STABLE MACHINE.** Unexpected movement during operation greatly increases risk of injury or loss of control. Before starting, verify machine is stable and mobile base (if used) is locked.

**USE RECOMMENDED ACCESSORIES.** Consult this owner's manual or the manufacturer for recommended accessories. Using improper accessories will increase the risk of serious injury.

**UNATTENDED OPERATION.** To reduce the risk of accidental injury, turn machine OFF and ensure all moving parts completely stop before walking away. Never leave machine running while unattended.

**MAINTAIN WITH CARE.** Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. A machine that is improperly maintained could malfunction, leading to serious personal injury or death.

**DAMAGED PARTS.** Regularly inspect machine for damaged, loose, or mis-adjusted parts—or any condition that could affect safe operation. Immediately repair/replace BEFORE operating machine. For your own safety, DO NOT operate machine with damaged parts!

MAINTAIN POWER CORDS. When disconnecting cord-connected machines from power, grab and pull the plug—NOT the cord. Pulling the cord may damage the wires inside. Do not handle cord/plug with wet hands. Avoid cord damage by keeping it away from heated surfaces, high traffic areas, harsh chemicals, and wet/damp locations.

**EXPERIENCING DIFFICULTIES.** If at any time you experience difficulties performing the intended operation, stop using the machine!

## Additional Safety for Sandblasters

USE CORRECT ABRASIVES. Never use wet abrasives in this sandblaster, it is designed for dry abrasives only.

PROTECT LUNGS. Make sure that you always use a respirator when using or cleaning the sand-blaster.

LEAVING THE AREA. Always disconnect air supply when leaving the sandblaster.

PROTECT EYES. Make sure that you always use safety glasses when using or cleaning the sandblaster.

PROTECT ENVIRONMENT. Always close and latch shut the sandblaster doors when not in use.

MAINTAIN COMPONENTS. Prior to each use, inspect nozzles, hoses, lenses, and gloves. To reduce the risk of respiratory damage or sand penetrating skin, all components MUST be free of cracks, leaks, or unacceptable wear. Immediately replace worn or leaking components.

MAINTAIN MACHINE. Check cabinet for any leaks, and reseal immediately.

**USE SAFETY WHEN SANDBLASTING.** Do not use system over the rated PSI. Always secure the door(s) before beginning sandblasting operations.

USE CORRECT LIGHTING. Do not use a light that uses over 60 watts.

**USE SAFETY LOADING & UNLOADING.** Disconnect the air supply before loading or unloading the workpiece from the sandblaster cabinet.

USE SAFETY DURING MAINTENANCE. Disconnect air supply and electrical before doing maintenance.

MAINTAIN WORK AREA SAFETY. Clean dust collector and filters often, and repair any suction hose leaks immediately.



## **WARNING**

Like all machinery there is potential danger when operating this machine. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to decrease the risk of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.



#### **CAUTION**

No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment, or poor work results.

# **SECTION 2: SETUP**

## Unpacking

This machine was carefully packaged for safe transport. When unpacking, separate all enclosed items from packaging materials and inspect them for shipping damage. If items are damaged, please call us immediately at 1-877-761-2819.

**IMPORTANT:** Save all packaging materials until you are completely satisfied with the machine and have resolved any issues between TMG INDUSTRIAL or the shipping agent.

You MUST have the original pack- aging to file a freight claim. It is also extremely helpful if you need to return your machine later.



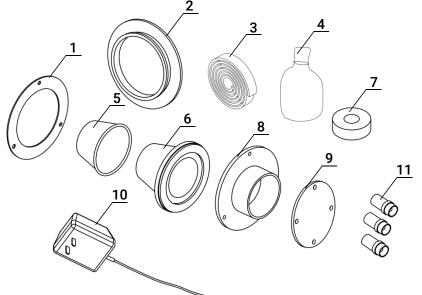
The following are needed to complete the setup process, but are not included with your machine.

De	escription Qty	/
•	Phillips Head Screwdriver #2 1	
•	Standard Screwdriver #2 1	
•	Wrench 19mm 1	
•	Wrench 14mm 1	
•	Wrench 10mm 1	
•	Wrench 7mm 1	

# **Assembly**

#### To assemble the sandblaster:

Check all components that need to be installed to ensure that the installation cannot be completed due to lack of parts.
 See the below photo

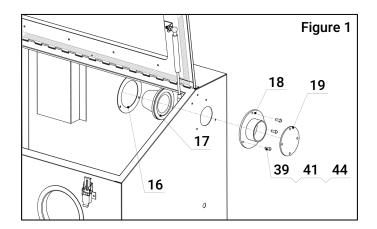


NO.	DESCRIPTION	QTY
1	Filter ring	1
2	Rear air intake cover	1
3	Sealing rubber strip	1
4	Screw, washer, nut kits	1
5	Sponge filter element	1
6	Filter	1
7	Teflon tape	2
8	Side vent seat	1
9	Side vent cover	1
10	AC/DC adaptor	1
11	Blast nozzle	3

<sup>\*.</sup> The number shown is not the correct part number, the correct part number is shown in the explosion diagram.

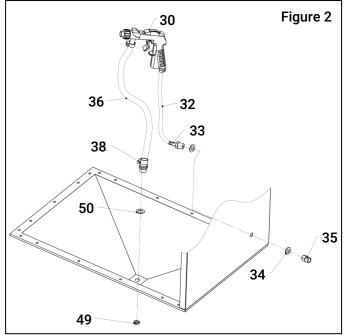
2. Install filter(16) and side vent seat(18) with filter ring (17), screws(39), washer (41) and nuts(44) (Figure 1).

**Noted:** When using the sandblaster, you need take off the Side vent cover(44).

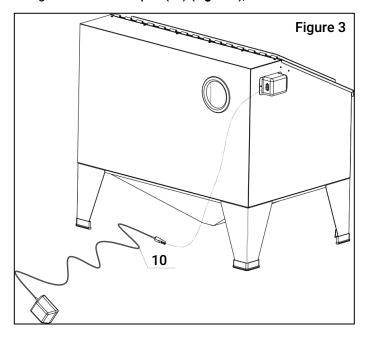


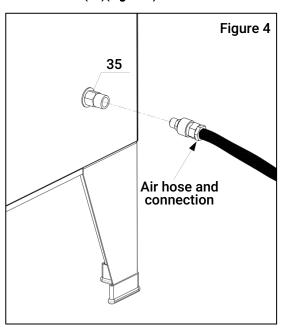
3. Install the air inlet connect (35) with plain washer (34). Attach the air supply hose and suction hose to the bulkhead fittings

and suction pipe with hose clamps (Figure 2).



4. Plug in the AC/DC adapter (10) (Figure 3), connect the air hose and air inlet connect(35)(Figure 4)





# **SECTION 3: OPERATIONS**

## **WARNING**

Sandblasting presents a real hazard of silicosis and other lung contamination injuries! These Injuries are permanent and can get worse over time. If you use sandblasting equipment without the proper protection, your lungs and eyes may become irreversibly contaminated. DO NOT use this sandblaster unless you know how to use it and protect yourself correctly. For types of protective equipment and acceptable respirator types, contact your local OSHA or NIOSH office.

## **Operation Safety**

#### **NOTICE**

If you have never used this type of machine or equipment before, WE STRONGLY REC- OMMEND that you read books, trade magazines, or get formal training before beginning any projects. Regardless of the content in this section, TMG Industrial will not be held liable for accidents caused by lack of training.

## **Basic Operation**

The Sandblaster is equipped with an industrial-duty blast gun with ceramic tip, a siphon hose, a built-in light, large viewing window, and sealed rubber gloves. The hopper recycles and stores the sandblasting media for reuse or easy removal. Safely blast away paint and rust without making a mess around your shop.

#### To use the sandblaster:

- 1. Wear safety glasses and respirator at all times when running and maintaining your sandblaster!
- 2. Plug in AC/DC transformer and turn ON light.
- 3. Install correct nozzle and air jet into gun for abrasive type you will use. Refer to Page 11 for options.
- 4. Carefully, without causing a hazardous dust cloud, pour or spade-in 10 lbs of abrasive into sandblaster. DO NOT over-fill, or sandblasting will be sluggish and very cloudy inside of cabinet.
- 5. Insert workpiece, close and lock loading door.
- 6. Adjust air supply regulator to 60-100 PSI at 5-14 CFM.
- 7. Turn ON your dust collection/vacuum system( If with it) and air compressor, insert your hands in the gloves, and begin sand blasting in a slow circular motion.

**Note:** A good starting point for tip distance is two inches away from the workpiece. Start out with a low air pressure setting to avoid excess peening and abrasive wear.

Note: Experiment with different pressures, abrasives, tips and jets to gain practical experience.

Note: Keep the sandblasting abrasives moisture-free, otherwise; the blast gun tip will frequently clog.

# **MARNING**

NEVER sand blast with the doors open, point the gun at yourself or anyone else, or attempt to service any part of this machine while it is plugged in or connected to air pressure. ALWAYS disconnect the blast cabinet from power and air pressure when not in use, or during maintenance or adjustments. Ignoring this warning may lead to severe injury.

TOLL FREE: 1-877-761-2819

## **Abrasive Options**

Below is a basic introduction to some of the most common blasting abrasives. Refer to magazines, trade articles, professionals, and the abrasive manufacturer for the specific surfaces that can be addressed with a type of abrasive. All abrasives have benefits and drawbacks like quality of surface finish, abrasive life, toxicity, and what precautions you must take to prevent environmental damage or personal injury to your respiratory system.

#### **Steel Type Abrasives**

This aggressive abrasive creates a rough finish that accepts paint well. The abrasive is very durable and has a long life, however; it MUST be kept very dry to prevent rusting.

#### **Alumina Type Abrasives**

This multi-purpose abrasive creates a smoother finish than the steel abrasives, but has a shorter life span. Less of the workpiece surface is removed with this more forgiving abrasive.

#### **Glass and Garnet Type Abrasives**

Typically this abrasive works well for soft metals and addressing surface issues with machine parts where tolerances cannot be affected. The life of this abrasive is limited and not well suited for repetitively recycling.

#### **Sand Type Abrasives**

This abrasive is easy to find, and gives an aver- age finish that is acceptable for most projects. Sand has a good recycling life and is very economical.

#### **Plastic Type Abrasives**

Applied at low pressures of 30 to 50PSI, plastic abrasives should be harder than the coating being removed, but softer than the workpiece to avoid damage. Plastic abrasive is excellent for addressing surface issues on aluminum, magnesium, copper, brass, thin steel, titanium, and composite surfaces and fiberglass.

#### Other Types of Abrasives Available

Ground walnut or peanut shells.

Ground corn cob.

Sodium bicarbonate.

Wheat starch.

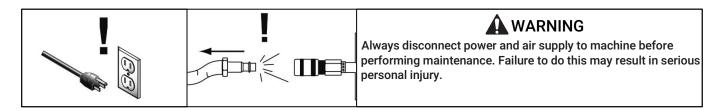
# **Nozzle/Jet Options**

Below is the suggested air jet and nozzle combination for an approximate abrasive flow. Refer to magazines, trade articles, professionals, and the abrasive manufacturer for the best combination that is required for your particular abrasive use.

#1 Air Jet Orifice Diameter: 5/64" **Nozzle Orifice Diameter:** 3/16" Abrasive Flow @ 60 PSI: 0.11 L/Min. #2 Air Jet Orifice Diameter: 7/64" Nozzle Orifice Diameter: 13/64" Abrasive Flow @ 60 PSI: 0.18 L/Min. Air Jet Orifice Diameter: 1/8" #3 15/64" Nozzle Orifice Diameter: Abrasive Flow @ 60 PSI: 0.25 L/Min. Air Jet Orifice Diameter: 5/32" #4 Nozzle Orifice Diameter: 9/32" Abrasive Flow @ 60 PSI: 0.36 L/Min.

# **SECTION 4: MAINTENANCE**

#### **Maintenance**

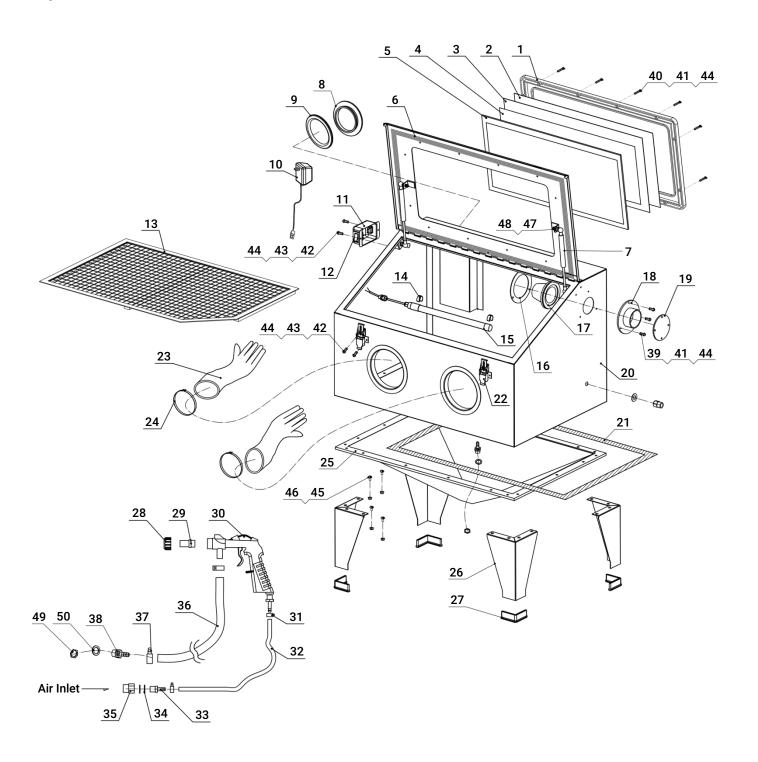


Depressurize the sandblaster, and check the following items each time you use the sandblaster and replace any parts immediately if found to be worn:

- Look for excessively worn or cracked nozzles.
- · Look for leaking thread fittings with soapy water and a spray bottle.
- · Look at the sand blasting hose for thin walls and bubbling.
- · Look for worn or leaking ball valves with soapy water and a spray bottle.

# **SECTION 5: EXPLODED VIEW & PARTS LIST**

# **Exploded View**



# Parts List

PART NO.	DESCRIPTION	QTY	PART NO.	DESCRIPTION	QTY
1	Front window frame	1	26	Legs	4
2	Outer front window	1	27	Plastic leg cover	4
3	Inner front window	1	28	Nozzle cap	1
4	Front window replacement film	1	29	Blast nozzle	1
5	Front window seal	1	30	Blast gun	1
6	Front door assembly	1	31	Hose clamp ø10-ø13	2
7	Top door support	2	32	Air hose ø6.2 (ID)	1
8	Rear air intake cover	1	33	Hose connector 1/4"	1
9	Rear air intake ring	1	34	Plain washer Ø13	2
10	AC/DC adaptor	1	35	Air inlet connect	1
11	Switch box	1	36	Sand hose ø1/2"	1
12	ON/OFF switch	1	37	Hose clamp ø22	2
13	Grid	1	38	Sand hose ø1/2"	1
14	Light bracket	2	39	PHILLIPS pan head screw M4x16	3
15	LED Light 18W	1	40	PHILLIPS pan head screw M4x25	12
16	Filter ring	1	41	Plain washer Ø4	19
17	Filter	1	42	PHILLIPS pan head screw M4x8	6
18	Side vent seat	1	43	Spring washer Ø4	2
19	Side vent cover	1	44	Hexagon nut M4	21
20	Blast cabinet	1	45	lentil-headed screw M6x12	28
21	Sealing joint strip 3mm	1	46	Self-locking nut M6	28
22	Latch aeeembly	2	47	Nut M8	2
23	Glove set left and right	1	48	Spring washer ø8	2
24	Glove clamp ø140	2	49	Nut M16	1
25	Bracket assembly	1	50	Plain washer ø16	1