



ATD-8401

40LB SANDBLASTER INSTRUCTION MANUAL

DESCRIPTION:

ATD sandblasting equipment is designed for cleaning and removing rust, scale, paint and dirt. It is the ideal method for stripping, polishing and etching projects. This equipment can be used with abrasive powders and liquids. This model is equipped with the standard use ceramic nozzle.

SAFETY WARNING & CAUTIONS:

Warning: When using pneumatic equipment, basic safety precautions should always be followed to reduce the risk of personal injury and hazards due to over pressurization.

READ ALL INSTRUCTIONS BEFORE USING:

1. Keep work area clean. Cluttered areas invite injuries.
2. Observe work area conditions. Do not use unit in damp, wet or poorly lit locations. Don't expose to rain. Keep work area well lit. Do not use electrically powered air compressors in the presence of flammable gases or liquids.
3. Keep children away. Children must never be allowed in the work area.
4. Do not use inappropriate attachments in an attempt to exceed the unit capacities.
5. Dress properly. Do not wear loose clothing or jewelry as they can be caught in moving parts. Non-skid footwear is recommended. Always wear the hood (included), a dust mask and heavy-duty canvas gloves.
6. Use eye and ear protection. Always wear ANSI approved chemical splash goggles when working with chemicals. Wear an ANSI approved dust mask or respirator when working around metal, wood and chemical dusts and mists.
7. Do not overreach. Keep proper footing and balance at all times. Do not reach over or across running machines.

8. Keep machine clean for better and safer performance. Follow the instructions for lubricating and changing accessories. Inspect compressors cord periodically and if damaged have it repaired by a qualified technician. Inspect all hoses for leak prior to use. The handle must be kept clean, dry and free from oil and grease at all times.
9. Be sure that keys and adjusting wrenches are removed from the unit or work surface before using.
10. Make sure the air pressure adjustment is set at "0 PSI" and the shut off valve is in the off position when not in use and before attaching the air compressor.
11. Do not operate the unit when tired or under the influence of alcohol or drugs.
12. Before using check for alignment and binding of moving parts, any broken parts or mounting fixtures and any other conditions that may affect proper operation. Do not use the unit if any switch does not turn on or off properly.
13. When servicing only use parts and accessories intended for use with this unit.
14. Drain water trapped in the air pressure adjuster periodically.
15. Do not allow sand blaster to be pressurized while unattended or not in use.
16. Make sure all equipment is rated to the appropriate capacity. Make sure that regulator is set no higher than 125PSI.
17. Periodically check the abrasive medium delivery equipment. Valves, hoses and nozzles that carry the abrasive medium after it leaves the pressure tank are subjected to the sandblasting action and will wear out more quickly than other components.
18. Release the air pressure in the tank before opening. Open the shut off valve to release pressure. Make sure pressure gauge reads "0 PSI" before opening the tank. Do not attempt any repairs to the sandblaster until the gauge reads "0 PSI".
19. Maintain correct air pressure whenever working. Do not allow pressure to exceed 125PSI. If the safety valve does not release excess air pressure, stop all work and open the shut off valve to release pressure in the tank.

WARNING:

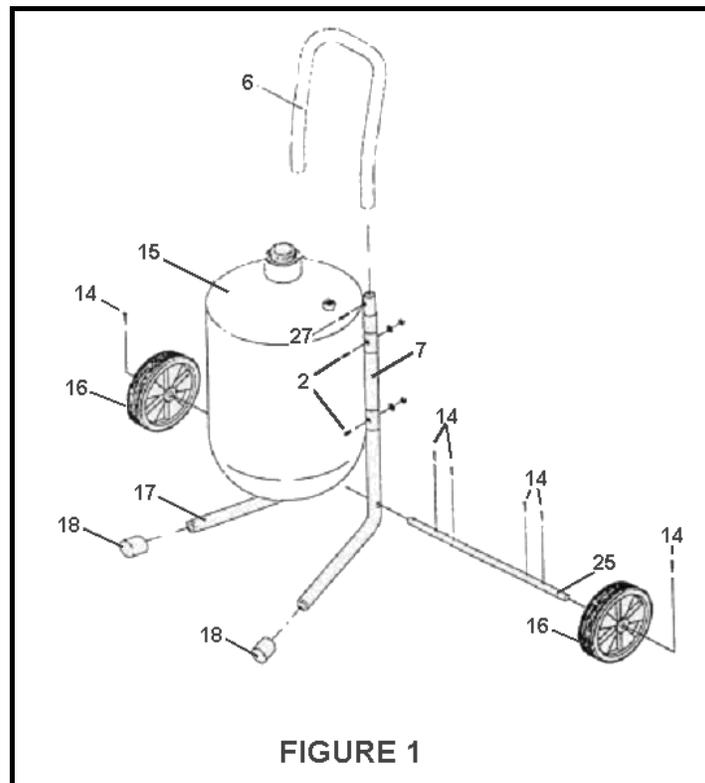
The warnings and cautions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors that cannot be built into this product but must be supplied by the operator.

ASSEMBLY:

NOTE: Use Teflon pipe tape on all threaded joints. Make sure all joints are securely tightened.

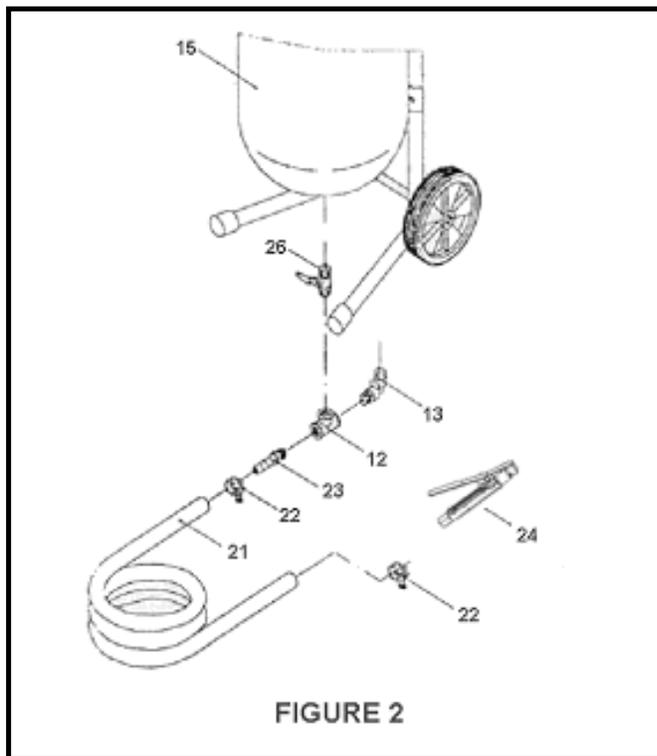
Legs, Wheels and Handle Bar Assembly (Refer to Fig 1):

1. Attach both the left leg (#7) and the right leg (#17) to the tank (#15) using the four screws & nuts. The bottom section of the two legs must point outward respectively and the holes in the bottom of the legs must be parallel to each other to accommodate the axle (#25).
2. Attach one of the wheels (#16) to the axle (#25) using one of the cotter pins (#14).
3. Slide the axle through the holes in the bottom of the two legs, using four cotter pins (#14) to fix the position of the axle.
4. Attach the other wheel (#16) to the axle (#25) using the remaining cotter pin (#14).
5. Slide the handle bar (#6) onto the left leg (#7) and the right leg (#17) and secure it with two self-tapping screws.
6. Slide the two end caps (#18) over the ends of the legs (# 7 & # 17)



Sand Metering Valve and Sanding Gun Assembly (Refer to Fig 2):

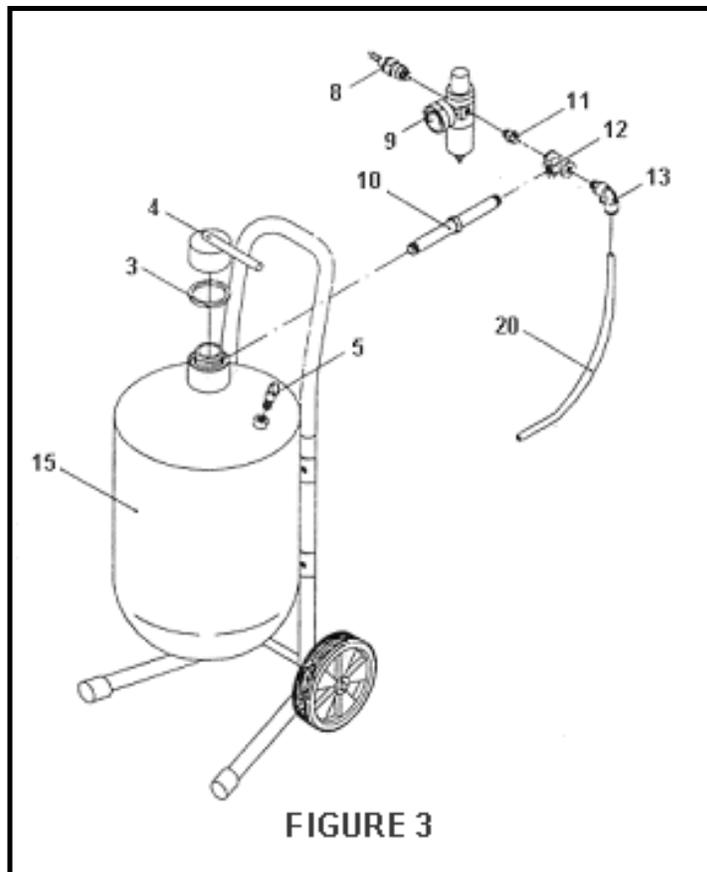
1. Attach the sand metering valve (#26) to the side hole of the intake manifold (#12). Attach one of the elbow connectors(#13) and one of the hose adaptor (#23) to either remaining hole of the intake manifold (#12)
2. Attach the other side of the sand metering valve (#26) to the bottom of the tank.
3. Slide the hose clamp (#22) over either side of the sand hose (#21). Do not tighten yet.
4. Slide the two ends of the sand hose (#21) onto the sanding gun (#24) respectively. Tighten the hose clamps (#22) very securely.



Air Pressure Adjuster and Safety Valve Assembly (Refer to Fig 3):

Use PTFE tape on all air fitting threads.

1. Attach the connector (#8) to one of the side inlets of the air pressure adjuster (#9). Attach the intake manifold (#12) to the other side of the nipple connector (#11). Make sure the pressure gauge on the air pressure adjuster and the front inlet of the intake manifold face the same direction, as in figure 3.
2. Attach the joint pipe (#10) to the front intake of the intake manifold (#12). Attach the other side of the joint pipe to the threaded port on the top of the tank (#15).
3. Attach the safety valve (#5) onto the threaded port on top of the tank (#15).
4. Screw the tank filler cap (#4) onto the filler opening with o-ring (#3) in between to ensure an airtight seal.
5. Attach the elbow connector (#13) to the remaining side port of the intake manifold (#12). Make sure the other end of the elbow connector points to the other elbow connector in the bottom assembly (#13 from figure 2).
6. Attach the two ends of the air hose (#20) to the two elbow connectors (#13) in the top assembly and the bottom assembly respectively.



OPERATION:

WARNING:

Always wear your hood, dust mask and heavy-duty canvas gloves when operating.

1. Close the sand metering valve (#26), pour about 25 lbs of abrasive medium into the tank. Then close the tank filler cap (#4) securely, assuring that o-ring (#3) is in place.
2. Turn the air pressure adjuster (#9) counter-clockwise (lowest pressure) fully. With the air compressor off, attach the connector (#8) to an air supply hose coming from the air compressor. Tighten securely with a hose clamp.
3. Switch on power to start up the air compressor. Check for leaks at the tank filler cap (#4) and along all hoses and fittings as pressurization begins.
4. Turn the air pressure adjuster (#9) slowly clockwise until the pressure gauge reads a desired value.
5. Open the sand metering valve (#26) and push down the control level of the sanding gun (#24) to an appropriate position to gain a desired sand flow.
6. To shut the unit down, close the sand metering valve (#26) and turn the air pressure adjuster (#9) counter-clockwise until the pressure gauge reads "0 PSI". Push down the control level of the sanding gun (#24) to release any extra air, and to be sure that the air supply is off.
7. If there is too much water trapped in the air pressure adjuster (#9), open the bottom valve to drain the water.

AIR/SAND SUPPLY REQUIREMENTS

Hose ID	Hose Length	Nozzle ID	Compressor HP	CFM @125PSI	Sand Use per Hour
3/8"	50ft	0.076"	2	6	30lbs
3/8"	25ft	0.098"	4	12	80lbs
1/2"	50ft	0.118"	7	20	120lbs
1/2"	25ft	0.132"	10	25	150lbs

MAINTENANCE:

1. Keep your sandblaster clean and protect from damage.
2. Depressurize after using.
3. When initially pressurizing, check for leaks at the tank top and at all hoses and fittings. Leaking joints may be repaired by replacing worn or damaged Teflon tape at joints.
4. Check for worn sand hose and fittings. The sand metering valve, manifold and all parts after the sand is ejected from the tank are subject to rapid wear, due to the flow of abrasive sand. Watch especially for leaks, blistering bulging or thinness of the hose. Replace any parts which appear worn.

ABRASIVE SELECTION:

The kind of sand you choose will greatly influence the amount of time needed to clean a given surface area. Sandblasting materials include silicon carbide, alumina, silica sand and others.

Be sure that the sand you use is thoroughly dry. Damp sand can cause clogging of your sandblaster.

While you may reuse abrasive sand, remember that sand does wear out. After using, sand becomes smoother and rounder, thus reducing abrasive effectiveness.

Reusing abrasive sand may also cause clogging due to debris contained in the mixture from prior use.

ABRASIVE FLOW ADJUSTMENT

Choose a larger nozzle for a broader spray pattern. Choose a smaller nozzle for more focused sandblasting.

Adjust air pressure with the air pressure adjuster (#9). Adjust sand flow with sand metering valve (#26).

Watch for sand clogging. Depressurize if necessary and replace the sand with drier or cleaner abrasive.

SAFETY AND HEALTH CONSIDERATIONS

Before opening tank be sure that it is not pressurized. Be sure that the gauge reads "0 PSI". Depressurize the tank before opening it by exhausting pressure through the sanding gun (#24).

Disconnect the air compressor before opening tank.

Protect yourself and those around you from "overspray". Remember that your portable sandblaster is shooting a powerful spray of abrasive material. Do not point it at yourself or anyone around you.

Wear a filter or mask over your mouth when using this unit. You will create a cloud of abrasive material and debris which is dangerous to inhale.

Remove cover or protect anything around you that might be damaged from direct or indirect contact with the abrasive spray or particles. Anything subject to contamination damage (computers, electronics, etc) or anything with a fine surface (automobiles, furniture, etc.) should NOT be near your sandblaster.

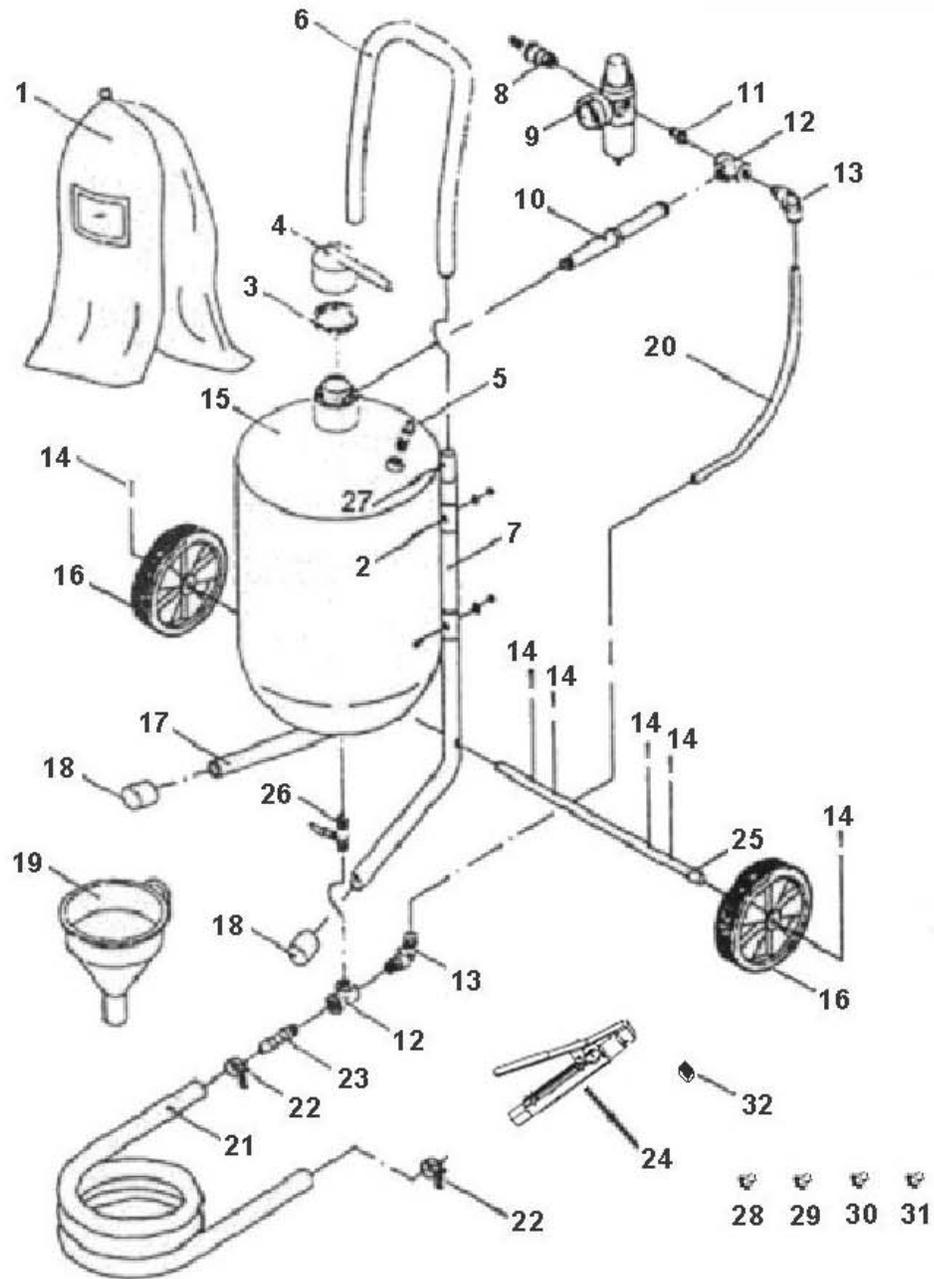
CAUTION:

1. Pay particular attention to the sand hose (#21), sanding gun (#24) as they will wear out much more quickly than others pieces.
2. The sand hose needs replacing when its side walls develop leaks or show blisters in the surface. Do not use if any of these problem are present.

SPECIFICATION:

Model:	ATD-8401
Tank Volume:	5 Gallon
Hose Length:	8 Feet
Working Pressure	60-125PSI
Air Consumption:	6-25CFM
Overall Dimensions:	L:18.89" x W: 11.42" x H:32.68"
Weight:	27lbs

ATD-8401



ORDERING PART#	ITEM#	PART DESCRIPTION
PRT8401-01	01	HOOD
PRT8401-02	02	SCREW
PRT8401-03	03	O-RING
PRT8401-04	04	TANK FILLER CAP
PRT8401-05	05	SAFETY VALVE
PRT8401-06	06	HANDLE BAR
PRT8401-07	07	LEFT LEG
PRT8401-08	08	CONNECTOR
PRT8401-09	09	AIR PRESSURE ADJUSTER
PRT8401-10	10	JOINT PIPE
PRT8401-11	11	NIPPLE CONNECTOR
PRT8401-12	12	INTAKE MANIFOLD
PRT8401-13	13	ELBOW CONNECTOR
PRT8401-14	14	COTTER PIN
PRT8401-15	15	TANK
PRT5200-21	16	WHEEL
PRT8401-17	17	RIGHT LEG
PRT8401-18	18	LEG END CAP
PRT8401-19	19	FUNNEL
PRT8401-20	20	AIR HOSE
PRT8401-21	21	SAND HOSE
PRT8401-22	22	HOSE CLAMP
PRT8401-23	23	HOSE ADAPTOR
PRT8401-24	24	SANDING GUN
PRT8401-25	25	AXLE
PRT8401-26	26	SAND METERING VALVE
PRT8401-27	27	SELF-TAPPING SCREW
PRT8401-28	28	NOZZLE, 2.0mm
PRT8401-29	29	NOZZLE, 2.5mm
PRT8401-30	30	NOZZLE, 3.0mm
PRT8401-31	31	NOZZLE, 3.5mm
PRT8401-32	32	RUBBER PAD (SHUT OFF BLOCK)