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Operating Manual & Parts List Models 3624 & 4224 & 4040 Abrasive Blast Cabinets

WARNING: Cyclone Blast cabinets produce a powerful flow of abrasive particles. To avoid personal injury and property damage, read this manual thoroughly before operating. Keep manual handy for future reference and replacement parts list. These units are made for use with dry abrasive media only! Never mix fluids with blast media.

Introduction

Cyclone Manufacturing abrasive blast cabinets are designed for cleaning, polishing and finishing with dry abrasives such as glass beads, aluminum oxide, blasting garnet and silica sand. An exterior switch controls the interior light and the optional dust collection system. The cabinets are sealed at all openings, such as the lid, window and bottom hopper. The blasting system can produce finishes from dull to shiny. An interior trigger gun controls air flow, depressing the trigger allows air flow into the mixing head where it is mixed with the blasting media and forced out the nozzle.

Warnings and Check List

- Always close cabinet door before blasting.
- Check to make sure all air connections are secure.
- **NEVER OPERATE OVER 120 PSI.**
- Clean up abrasive media from floor and around blasting area. Media is very slippery and can be very hazardous if not cleaned up.
- **CHECK THE DUST COLLECTOR FREQUENTLY AND CLEAN OFTEN.**
- **TO PREPARE THE SYSTEM, POUR 10-15 LBS. OF ABRASIVE MEDIA INTO HOPPER.**
- Excessive air pressure could strain the air supply system and cause rapid deterioration of the media.
- Clean soft metals and delicate parts at lower pressures to prevent undesirable peening. Higher pressures may be used for harder or non-critical parts that require rapid cleaning.
- For best results and to insure even finishing, keep the blast stream moving across all surfaces. A circular motion works well. Hard to clean areas require a more concentrated blast.
- Do not use steel shot in blast cabinets. It could cause damage to the blast cabinet.

* Use of silica sand is not suggested, due to the silicosis hazard.

How to Assemble and Install Blast Cabinet

- 1) Open side door, reach into cabinet and screw a max 70 watt flood lamp into socket located just inside the door opening (for model 4224). Take chain & spring from bag. The chain should be connected to each floor leg extension of the cabinet. Open cabinet so that the spring hangs away from the cabinet. Put 'S' hook from the bottom of the spring assembly through the middle of the chain assembly (that was attached to the skid). This will help assist you in 'easing' the lid back to open it, rather than allowing it to slam or fall abruptly.
- 2) Take the dust collection system out of the cabinet and assemble according to manufacturer's directions. The dust system hose will fit into the 2 1/4" hole found on the upper left hand side of blast unit. It just slides in - no holding device. Plug dust system and cabinet into a grounded outlet. Both the dust system and blast cabinet have 3 pronged grounded plugs to guard against electric shock. If only 2 pronged receptacle is available, a ground adaptor can be used. Make sure the green lead from the adaptor is properly attached to a grounded wire system. If any extension cords are used, be sure they are in good condition. Note: The Canadian Electrical Code prohibits the use of 3 pronged adaptors.

3.) Air Attachment

For Model 4040: Attach air supply from your compressor to the rear of the 1/2" NPT safety valve. attach the hose (already attached to the foot pedal) to the 1/4" NPT coupler welded into the cabinet. Attach the extra hose assembly to the front of the ball valve (the 1/2" NPT end) and attach the other end (1/4" NPT end) to the port on the foot pedal.

For the 4224: Attach your air supply from your compressor to the safety valve assembly (1 1/2" NPT).

For the 3624: Attach your air supply from your compressor to the safety valve on the left of the cabinet (1/2" NPT).

Suggestions

- Obey all applicable electrical and safety codes including the National Electric Code (NEC) and the Occupational Safety & Health Act (OSHA).
- Use extension cords that are in good condition to avoid electrical shock.
- Read Manual before operating or plugging in abrasive blast cabinet.
- Always unplug blaster before changing light bulb to avoid electrical shock or damage to lamp holder.
- Always check air vents in rear of cabinet for blockage.
- Abrasive media can wear out. Replace when it is powdery, creates excessive dust, or if it is not cleaning well.

Maintenance: This is NOT a Maintenance Free Machine

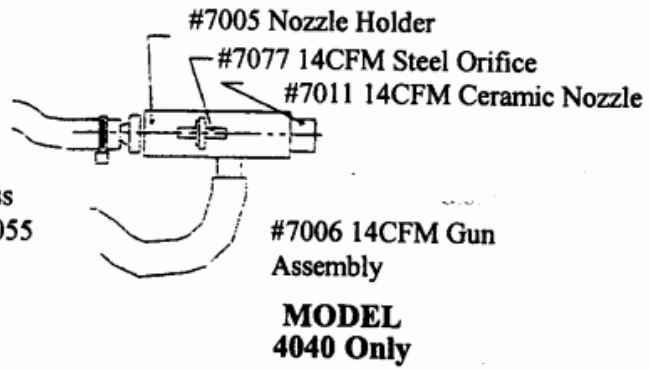
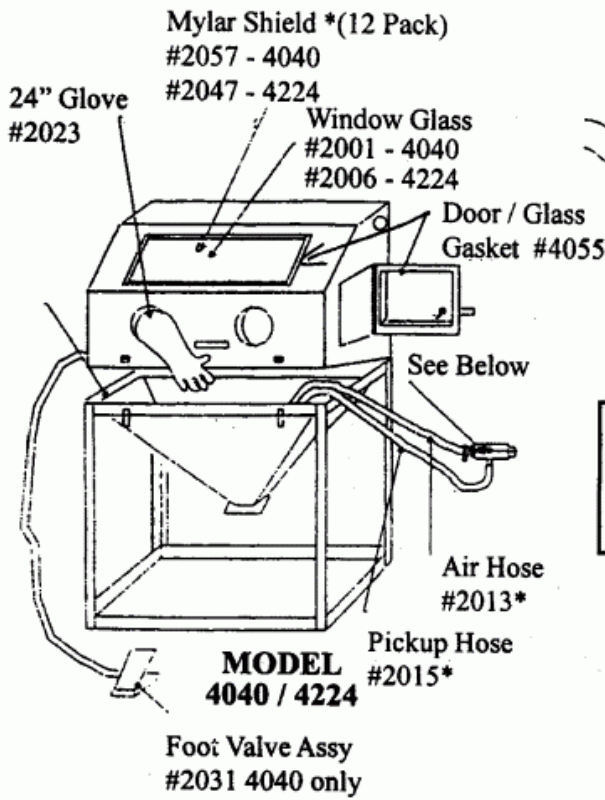
- Disconnect air and power before beginning or providing maintenance.
- Clean inside of cabinet periodically. Detach abrasive hose from gun. Use air supply to dislodge any media deposits in cabinet.
- The view window may become frosted or cloudy causing decreased visibility. Replacement windows are available at your Cyclone dealership.
- Empty canister dust collection system often and inspect filter bag. Replacement filter bags are available at your Cyclone dealership. An unclean canister could result in motor burnout!

IMPORTANT!

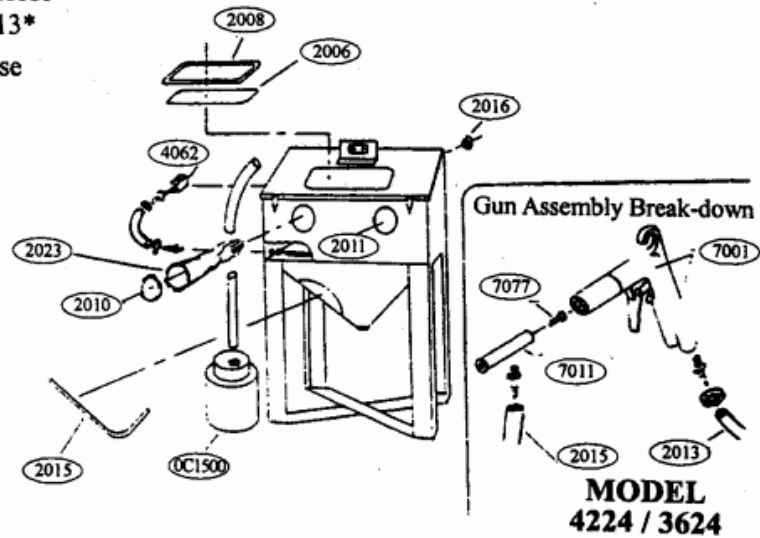
FAILURE TO FOLLOW MAINTENANCE PROCEDURES WILL RESULT IN POOR WORK QUALITY OF BLASTER, POSSIBLE DUST COLLECTOR FAILURE, AND EXCESSIVE DUST IN AND AROUND CABINET. THIS WILL NOT BE COVERED BY WARRANTY.

TROUBLE-SHOOTING YOUR BLASTER

Problem	Cause	Remedy
Excessive Dust	Dust collection system malfunctioning	Empty canister & replace, or clean filter bag
	Abrasive media worn out	Replace media
	Too much media	Remove excess
Uneven blasting action	Too much media	Remove excess media
	Moisture present in air line	Install moisture trap
	End of abrasive hose is covered	Move media away from end of tube
Inadequate speed or efficiency of blast	Media worn out	Replace media
	Worn out gun parts	Inspect parts; adjust or replace
Poor blast pattern	Nozzle worn	Replace nozzle
Static electricity	Dry weather conditions	Install static electricity band



Note: Where the part # has an * behind it - please specify the model of the unit!



Warranty:

Cyclone abrasive blast cabinets are warranted against defects in workmanship or materials in accord with the following terms and conditions:

- Warranty extends to the original owner only and does not cover cabinets used in commercial rentals
- Warranty is valid for one year (1) following the date of purchase.
- Warranty does not cover normal wear parts such as nozzles, orifices, windows or abrasive media.
- Warranty does not cover misuse or operation not in compliance with these instructions.
- Warranty does not cover blast unit if altered or otherwise changed from original state from the factory.
- **WARRANTY DOES NOT COVER DAMAGES IN TRANSIT, IN CASES OF SUCH DAMAGE, REFUSE SHIPMENT AND CALL THE FREIGHT COMPANY IMMEDIATELY! THEN FILE A CLAIM WITH THE FREIGHT COMPANY. FAILING TO OPEN BOXES UPON DELIVERY CAN LEAD TO CONCEALED DAMAGE - WHICH MOST FREIGHT COMPANIES WON'T PAY FOR!**

Users should call the Cyclone dealer upon inspection of a problem. A Cyclone technical person will assist you.

This warranty grants the user(s) certain legal rights. Users and purchasers may also be protected by other rights which vary with location.

Note: Except for the warranties set forth above, CYCLONE makes no other warranties of any kind, express or implied. Including warranties of merchantability of fitness of product for a particular purpose.

Replacement Parts List

(Parts may be listed that are not included in standard units.)

2001	Window glass (4040)	2031	Foot Floor Control Valve (4040)
2006	View Window	2047*	Pack of 12 View Shields
2003*	Static Electricity Band	2057*	Pack of 12 Mylar Shields (4040)
2010	Glove Clamp	2013	Air Hose
2011	Plastic Glove Insert		
101	Safety Valve Assembly	7001	14 CFM Trigger Gun Assembly
2015	Abrasive Supply Hose & spec. model	7002*	5 CFM Trigger Gun Assembly
2016	3" Vent	7005	Nozzle Holder (foot valve)
2023	24' Rubber Gloves	7006	Gun Assembly for (Foot Pedal)
2008	Window Frame	7009*	5 CFM Ceramic Nozzle
2027	Window Frame (4040)	7077	14 CFM Steel Orifice
7080*	14 CFM Tungsten Carbide Nozzle	7076*	5 CFM Steel Orifice
7084*	5 CFM Tungsten Carbide Nozzle		
7011	14 CFM Ceramic Nozzle		

Parts for DC1500 - See DC1500 Manual

***Accessories - NOT STANDARD w/units**