

OWNER'S MANUAL

SINGLE CHAMBER BLAST MACHINE ABSC-1028

IMPORTANT WARNING FOR SAFER BLAST CLEANING

1. Use protective equipment: Abrasive-resistant clothing, safety shoes, leather gloves, ear protection, CE-approved air-fed helmet. Air for helmet must be supplied by a breathing air compressor or through a helmet air filter.
2. Check for possible silicosis hazards. Avoid dust.
3. Do not blast with damaged or worn equipment.
4. Point nozzle only at area being cleaned.
5. Use only proper dry and well-screened abrasives specifically intended for blasting.
6. Keep unprotected workers out of the blast area.
7. Before blasting:
 - Check fittings and hose for wear.
 - Safety-wire couplings together.
 - Check helmet filters and air supply.
 - Check pop-up valve for alignment.
 - Test remote controls.
 - Make sure blast machine is adequately grounded.
8. Do not weld on blast machine, this voids approval.
9. Do not substitute Airblast parts or modified equipment in any way.



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SINGLE CHAMBER BLAST MACHINE ABSC-1028

1.0 INTRODUCTION: This manual covers the set-up, maintenance of the Model ABSC-1028 pressure type blast machine.

2.0 OPERATION SET-UP

2.1 Set-up

The set-up procedure for manual controlled blasting (without the use of a remote control system) is as follows:

- a. Make sure that the compressor is located upwind from the blasting area. Start the compressor and bring it up to operating pressure and temperature before beginning the blast cleaning operation.
- b. Open the bleed-off and choke valves (handles in parallel position with piping).
- c. Close the air inlet valve at the abrasive valve.
Closed valves:
 - sand valve : extreme position of handle to either side of the center of the valve.
 - grit valve : full clockwise position of the handle.
- d. Connect the compressed air line to the air inlet valve (for optimum blast cleaning performance use $\frac{3}{4}$ " ID air line or larger).
- e. Connect the blast hose quick connect coupling to the machine quick coupling. Check condition and proper placing of the rubber coupling gaskets.
- g. Fill the concave head of the machine with abrasive. The abrasive will pass the filling port into the machine.
- g. Put on all protective clothing.

2.2 Operation: To blast clean, the machine tender:

- a. Puts pressure to the air line of the blast machine.
- b. Closes the bleed-off valve.
- c. Opens the air inlet valve, when the blasting operator signals that he is ready. This causes sealing of the filling port by the pop-up valve and the blast machine will pressurize. Only air will come out of the nozzle.
- d. Adjusts the abrasive valve for proper air/abrasive mixture. **General rule:** use as little abrasive as possible. The abrasive

stream coming out of the blast nozzle should hardly discolor the air when seen against whatever light source.

- e. Closes the air inlet valve and quickly opens the bleed-off valve to stop blasting.

2.3 Shut-down

When shutting down for the day: empty the blast machine of all abrasive by removing the nozzle and putting the blast hose in a suitable waste container. Close the choke valve and put the handle of the abrasive valve in full open position. Then put pressure to the machine by opening the air inlet valve.

The blast machine should be covered if left out at site, in order to prevent moist abrasive to cause trouble when starting up blasting again.

ONLY USE ABRASIVE SPECIFICALLY MEANT FOR BLASTING, NEVER USE UN-SCREENED OR MOIST ABRASIVES.

3.0 MAINTENANCE

3.1 Replacement of the Pop-up valve

Remove the inspection door assembly in order to get access to the Pop-up valve. Unscrew the Pop-up guide (page 3, item 8) by counter-clockwise turning. Remove both Pop-up valve and guide from the blast machine. Put the new Pop-up valve in the valve guide and then install them inside of the machine.

It is recommended to replace the inspection door gasket at the same time.

Do not forget to tighten the inspection door assembly back onto the machine.

3.2 Replacement of the Pop-up O-ring

Put your fingers between the Pop-up O-ring and the retainer and slowly remove the old O-ring. If necessary, use a screwdriver.

Push the new Pop-up O-ring trough the filling port and fit it into the retainer.

Pull up on the O-ring in order to get it into position.

4.0 TROUBLESHOOTING

4.1 Blockages

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If neither abrasives nor air comes out of the blast nozzle, first depressurize the machine and then check if the nozzle is clogged. If only air comes out and no abrasive, fully open the abrasive valve and then quickly open and close the choke valve. If this fails, depressurize the machine, remove the inspection door assembly and check the inside of the machine for foreign objects (paper, etc.).

4.2 Abrasive surge

When starting up, surge of abrasive is normal to some extent. However, if the abrasive surge should continue, the flow of abrasive can usually be stabilized by the quick opening and closing of the choke valve.

An intermittent abrasive flow is sometimes caused by an excess of moisture in the blasting system. This problem in practice can be solved by installing a moisture/water

separator in the air line, closest to the machine as possible.

4.3 Removal of moist abrasive

In order to remove moist abrasive from the system, the blast hose has to be disconnected and the rubber gasket in the quick coupling on the machine has to be removed. The next step is to close the choke valve and open the abrasive valve. Force out any moist abrasive by pressurizing the machine.

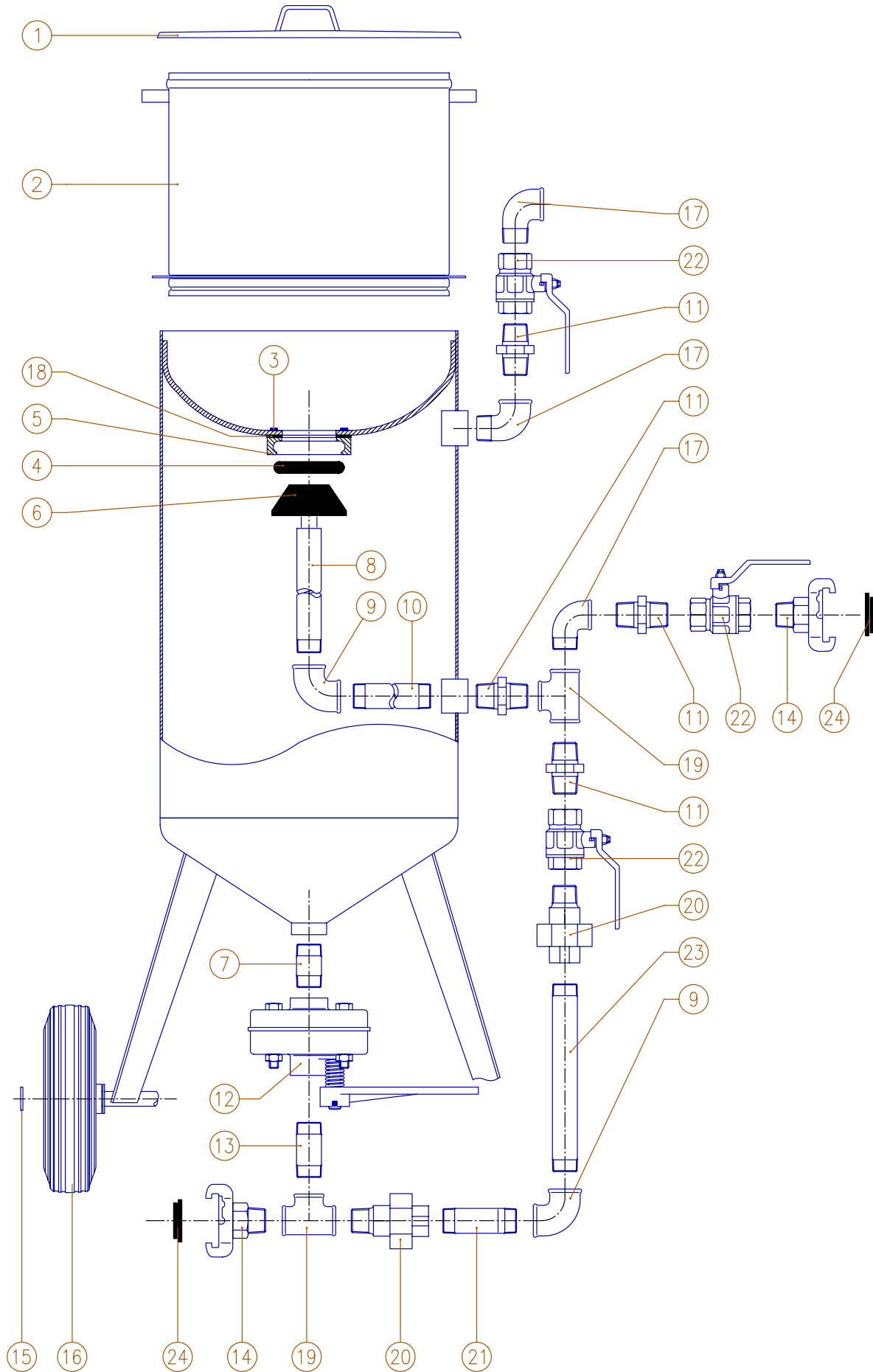
See separate Instruction-Parts List for Remote Control Systems.

4.0 SPARE PARTS

ART.NR.	MODEL	DESCRIPTION				
01)	10700	Cover for 1028 (17 L)				(1)
02)	10710	Screen for 1028 (17 L)				(1)
03)	10720	Pop-up valve seat retainer bolt				(4)
04)	10730	AP-5	Pop-up O-ring			(1)
05)	10740	AP-5	Pop-up valve seat retainer			(1)
06)	10750	AP-2	Pop-up valve with shaft			(1)
07)	22253		Pipe ½" l = 45 mm, can be replaced by (11)			(1)
08)	10770		Inner pipe ½" for 1028 (17 L)			(1)
09)	21973		Elbow ½" FF no. 90			(2)
10)	10790		Inner pipe ½" for 1028 (17 L)			(1)
11)	22253		Hex nipple ½"			(4)
12)	60260	AP-7	Abrasive control valve ½"			(1)
13)	10810		Pipe ½" for 1028 (17 L)			(1)
14)	21702	KAG-12	Quick coupling ½" with outside thread			(2)
15)	10820		Lock ring axle set			(2)
16)	10830		Wheel for 1028 (17 L)			(2)
17)	21993		Elbow ½" FM no. 092			(3)
18)	10950		Gasket for pop-up valve seat retainer			(1)
19)	22113		T-piece ½" FFF no. 130			(2)
20)	22493		Union ½" FM no. 341			(2)
21)	10870		Pipe ½" for 1028 (17 L)			(1)
22)	10900	AP-1	Air valve ½"			(3)
23)	10890		Pipe ½" for 1028 (17 L)			(1)
24)	21640	CQG-0	Rubber coupling gasket			(2)

All parts required in quantities shown ()

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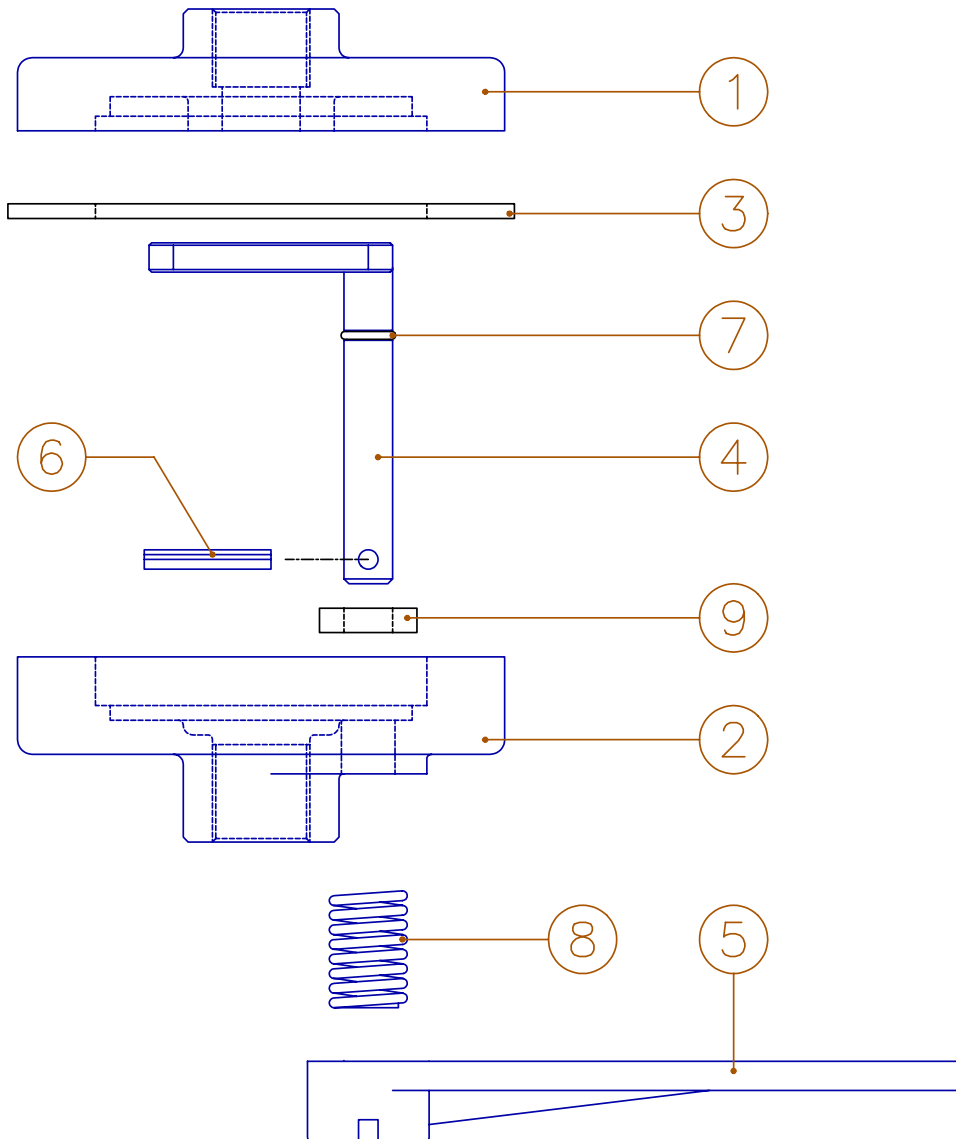


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6.0 SPARE PARTS

ART.NR.	MODEL	DESCRIPTION	
60260	AP-7	½" Abrasive control valve, complete	
01)	60270	Top casting	(1)
02)	60280	Bottom casting	(1)
03)	60290	Valve body gasket	(1)
04)	60300	Metering plate and stem	(1)
05)	60310	Handle	(1)
06)	60320	Spring pin	(1)
07)	60330	O-ring	(1)
08)	60340	Spring	(1)
09)	60350	Washer (nylon)	(1)

All parts required in quantities shown()



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