OWNER'S MANUAL

Thompson Valve II

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 Blastrite parts or modified equipment in any way.

Blastrite
SURFACE PREPARATION INNOVATION

Servicing your blasting and painting needs

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1.0 INTRODUCTION

Description: Thompson Valve II

The Thompson Valve II is an air-actuated metering valve designed to meter abrasive with precision. When air is sent to the valve, the valve opens, allowing blasting to begin. When the air signal is interrupted, the valve returns to the closed (off) position, the abrasive flow is stopped and blasting ceases.

When installed, operated and maintained properly, the THOMPSON VALVE II will prove to be a dependable and performance enhancing component in your blasting system. The air-actuated design of the THOMPSON VALVE II requires a minimum of **70 psi** and has a maximum pressure rating of **125 psi**.

Operational Requirements

Extensive design and field-testing have proven the THOMPSON VALVE II to be effective and durable under intended use conditions. The following are common mistakes, which cause safety hazards:

- Improper remote controls used in conjunction with the THOMPSON VALVE II
- Improper maintenance
- Improper disassembly and/or incorrect reassembly.
- Improper installation of the unit

Operating Instructions

The THOMPSON VALVE II is an important component of the blasting system. For best performance and safety, follow these guidelines:

Before using:

- Inspect all control line hoses verifying they are not cracked, abraded or damaged.
- Inspect THOMPSON VALVE II components, ensure there are no cracks, leaks or debris in the valve.
- Verify the pipe nipple and plunger are intact and not worn. The components are made of erosion resistant materials for durability, however the nature of abrasive blasting will cause these items to wear over time.

During use:

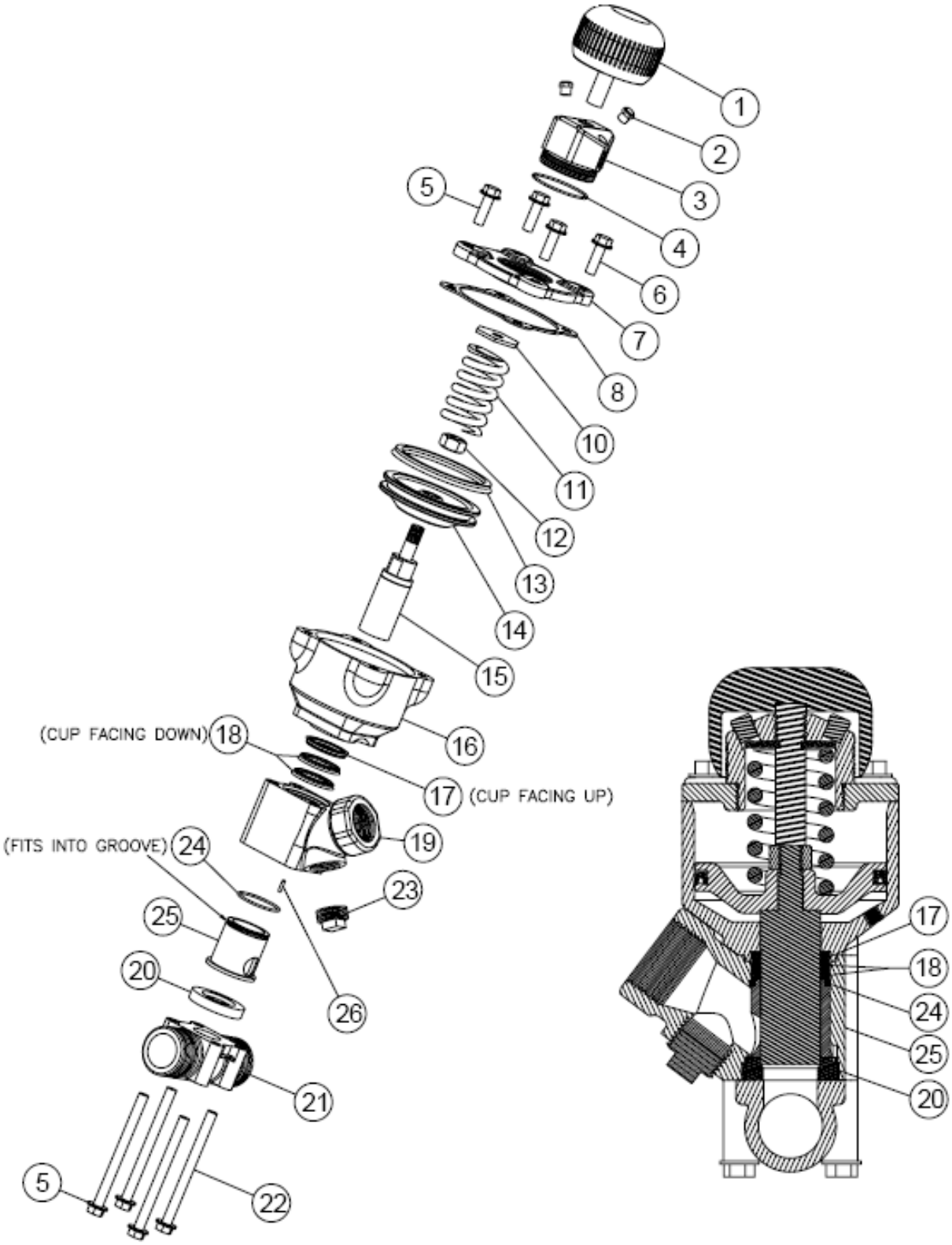
- Monitor the control air line to verify the flow can not be interrupted, route the hose in a location free from traffic and severing hazards.
- Ensure the air/abrasive mix is correct (see “Blue Flame” section of this manual).
  To adjust abrasive flow, disconnect control air flowing to the valve and turn knob counter-clockwise to increase abrasive flow and clockwise to decrease abrasive flow.
  NOTE: Control air must be disconnected.

Troubleshooting

If your THOMPSON VALVE II fails to function properly, check the following:

Symptom	Cause Action
Thompson Valve II fails to actuate	
Improper air supply	Inspect for restrictions and increase air pressure (70 TO 125 PSI).
Damaged piston gasket or plunger seal.	Replace (P/N's 60915 and 60919).
Malfunctioning remote controls.	See respective operator's manual for troubleshooting.
Incorrect controls or malfunctioning control switch.	Replace and/or see respective operator's manuals.
Clogged abrasive feed area.	Clean out abrasive and debris.
Improper Lubrication	Apply light coating of lithium based grease to cylinder walls.
Damaged/Worn Spring	Replace (P/N 60913).
Vent port in side of cap is blocked	Clean vent port with paper clip or toothpick
Abrasive Flow Continues (when remote is released)	
Worn or damaged sleeve, plunger or plunger seal 1014239	Replace any or all of the three (P/N's or 60929 and 60919).
Obstruction keeping plunger from closing	Remove any obstruction from inside of valve
Malfunctioning remote control system	See respective operator's manual
Air pressure set to high	Set air pressure at 70 to 125 psi.
Vent port in cap is blocked	Clean vent port with paperclip or

PART.NR.	MODEL	DESCRIPTION
2152-007	1 ¼” Valve with Tungsten Carbide Sleeve	
2152-107	1 ¼” Valve with Polyurethane Sleeve	
1)	2152-000-01	Knob
2)	2152-000-17	Breather Vent
3)	2152-000-12	Spring Retainer
4)*#	2152-000-18	O-Ring
5)	7027-503-02	Washer
6)	7010-507-07	Hex Bolt, 3/8" UNC x 1-1/4" Lg.
7)	2152-000-02	Cap Plate
8)*#	2152-000-16	Cap Gasket
10)	2152-000-25	Vibration Disc
11)	2152-000-03	Spring
12)	2149-000-08	Nut
13)*#	2149-000-04	Piston Seal
14)	2152-000-05	Piston
15)*#	2152-000-07	Tungsten Carbide Plunger
16)	2152-000-09	Cylinder
17)*#	2152-000-06	Plunger Seal, 1-req'd (Purple Urethane)
18)*#	2152-000-06	Plunger Seal, 2-req'd (Purple Urethane)
19)	2152-000-14	Body
20)*	2152-000-10	Seat (Not required with Polyurethane Model)
21)	2152-000-15	Base, 1 1/4" NPT
22)	7010-507-95	Hex Bolt, 3/8" UNC x 4 3/4" Lg.
23)	3014-506	Plug
24)*	2152-000-21	O-Ring (Not required with Polyurethane Model)
25)*#	2152-000-13	Tungsten Carbide Sleeve
	2152-100-13	Polyurethane Sleeve
26)	2149-000-16	Sleeve Pin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