

# Operations & Maintenance Manual



## Standup Polishing Unit

**Model: SPU-2X4-BA & Junior Polishing Unit  
Premium Brushless Standup Polishing Series**

### 1.0 IMPORTANT:

Save shipping box and foam for future service. Shipping without proper foam will cause damage to unit.

### 2.0 SAFETY PRECAUTIONS

Carefully read instructions in this manual before operation (keep manual as it contains information for proper operation and maintenance). Keep all fastening hardware tight to ensure that the unit is in safe working condition. Familiarise yourself with the way in which the special filter is removed, installed, and serviced. Filter must be in place whenever this machine is in operation. Use only on grounded electrical circuit; do not use two-wire electrical prong adapters to defeat the three-pronged plug on the end of the cord. When servicing motor, be careful when touching exterior of motor when it is turned off; it may be hot enough to be painful or cause injury. **Do not substitute any other filter for the one supplied, as it will alter the design characteristics. UNPLUG UNIT FROM ITS POWER SUPPLY PRIOR TO SERVICING UNIT!**

**Caution: Never use this product without proper instruction. Wear safety glasses and proper safety attire. Keep loose clothing, gloves, hair, or other loose objects away from shafts, buffs, wheels, etc. Entanglement could result in serious injury.**

### 3.0 PRINCIPLE OF OPERATION.....SPU

The **SPU** features a threefold method of operation:

a) Dust Pad knockout plate forces heavier particles to tray; b) Filter Bag captures & holds debris; c) HEPA Filter captures dangerous submicron particles  
This unit features 2 SEPARATE AIRSTREAMS with 2 SEPARATE COLLECTION BAGS. Your separate your metals in each workstation for easy recovery.

### PRINCIPLE OF OPERATION.....JUNIOR POLISHING UNIT

The **Junior Unit** features a 2-fold method of operation: a) Filter Bag captures & holds debris; b) HEPA Filter captures dangerous submicron particles.

### 4.0 SYSTEM COMPONENTS

Description	SPU 2X4-BA	SPU 2X4-BA-240	Junior, JR-1X2-B (w/Hood)	Junior, JR-1C2-B (w/Clearview)
Nominal Airflow	500	500	250	250
Dust Pad Filter, Part No.:	AG044 (20/box)	AG044 (20/box)	n/a	AG044 (20/box)
Dust Pad Bulk Kit, Part No.:	AG055 (500/box)	AG055 (500/box)	n/a	AG055 (500/box)
High Capacity Filter Bag, Part No.:	AG149 (6/box)	AG149 (6/box)	AG149 (6/box)	AG149 (6/box)
HEPA Filter, Part No.:	F074ea	F074ea	F074ea	F074ea
Dimensions, Height:	53" (1347mm)	53" (1347mm)	45" 1143mm)	45" 1143mm)
Dimensions, Width:	40" (1016mm)	40" (1016mm)	17" (432mm)	17" (432mm)
Dimensions Depth:	21" (533mm)	20" (533mm)	18" (457mm)	18" (457mm)
Voltage / Current:	120/1/60, 9.2amps	<b>240/1/50</b>	120/1/60, 9.2amps	120/1/60, 9.2amps
Max. Power, approx. Weight:	740watts, 180lbs (82kgs)	740watts, 180lbs (82kgs)	740watts, 90lbs (41kgs)	740watts, 90lbs (41kgs)
Polishing Lathe	1/4HP-2speed, Baldor Lathe	1/4HP-2speed, Baldor Lathe	1/4HP-2speed, Quatro Lathe	1/4HP-2speed, Quatro Lathe

### 5.0 UNIT INSPECTION

Upon receipt, inspect unit for either visible or concealed damage. Damage should be immediately reported to the transport company.

**If you suspect concealed damages inside the box indicate so on the transport companies' shipping documents.**

Unit is in a single box, c/w all components: 6-foot long, 2.5" dia. or 3" dia. hose (per station) inside the box; (2) hose clamps per port, power cord.

### 6.0 SPU ASSEMBLY

Unit is shipped in 1 box:

- Remove cardboard packaging
- Lift unit off the pallet and place in required location
- Install (2) Clearview Light systems (PN: AA028) to top of Clearview into any 1 of 4 hole positions (see photo)
- Plug (2) lights into plugs provided on control panel, and plug unit into wall
- Lathe (if included) is plugged into wall separately
- Additional Dust Pads have been provided



Light can be mounted as shown, or in 3 other positions corresponding to screws on top of Clearview, however through extensive testing we've found that the light in the **FRONT LATHE SIDE POSITION** works best as it eliminates most shadows.

## 6.0 Junior ASSEMBLY

Unit is shipped in 1 Piece:

- Plug the Illuminated Hood into control panel, and LATHE & UNIT PLUG directly into the wall.

## 7.0 PRE START-UP CHECKLIST

- Check that all internal components are present and are adequately supported;
- Open Front Filter Access Door and ensure filters are positioned as per photo below
- Check that labels and serial numbers are present for future identification;
- Verify power supply is compatible with equipment (120-volt/1 phase/60hz). Check that the unit is plugged into a grounded receptacle;
- Ensure that rubber grommets are tight and secure prior to placing unit on the floor.

## 8.0 START-UP

- Ensure door closes tightly;
- Insert male end of cord into wall outlet. Unit should be connected to an independent circuit;
- Switch power toggle to "ON" position to ensure system operation.

**WARNING: DO NOT OPERATE UNIT UNLESS FILTER IS IN PLACE, AS MOTOR MAY BURN-OUT.**

## 9.0 EQUIPMENT MAINTENANCE PROCEDURES

Proper maintenance is critical in extending life of unit. The information presented below outlines basic maintenance procedures ensuring the **SPU** unit will provide trouble-free operation in future. The **SPU** is designed to allow quick access to HICAP-Bag and HEPA Filters.

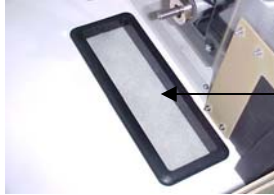
Blowers and motors which **DO NOT** require service on a regular basis, are located underneath the unit.

### 9.1 SPU DUST PADS (AG044/box of 20, AG055/box of 500) (not utilized on JUNIOR Polishing Unit)

Dust Pad is located on top counter in each of the Clearviews. This pad **SIGNIFICANTLY** extends the life of the HICAP Filter Bag. The SPU does not require to operate with these filters, however these filters allow the unit to operate at peak efficiency.

It is very difficult to predetermine a specific maintenance schedule as the rate of dust loading will vary for each application.

As a rule of thumb, replace this filter when you feel that you are losing suction capacity slightly.



(2) **DUST PADS (AG044)** located in the Clearview below Polishing Motor Shaft

### 9.2 HICAP FILTER BAG(S) (PN: AG149)

Filter Bag(s) are located inside the unit, behind the hinged door.

**SPU** - Each bag is isolated with the Clearview workstation above it. As such if one Clearview workstation is not being utilized, it's filter bag should be empty.

**JUNIOR**: Bag collects particles from Illuminated Hood above

To replace filter, open its door, pull down top of bag from it's collar, remove and replace.

Replace these bags when dust level reaches 50% of bag.



**HICAP Filter Bags (AG149)** located behind front access door (one for each Clearview workstation) Or one for JUNIOR unit.

(1) **HEPA Filter (F074)** located behind front access door (guarantees ALL PRECIOUS METALS are captured in the unit)

### 9.3 HEPA FILTER (PN: F074)

The HEPA filter is located below the filter bag. This filter captures very fine particles. It should be replaced when both the bag filters and Dust Pads have been replaced and suction capacity is lower than normal.

Warning: If filter bag breaks due to negligence in not replacing filter when full, the HEPA must be replaced as well.

When replacing, open hinged door, move filter bags out of the way, and lift HEPA filter up and out of unit and replace.

### 9.4 BLOWER MAINTENANCE

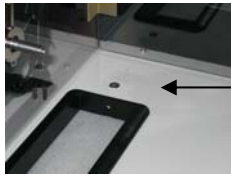
**WARNING: Switch unit off and unplug power cord from wall before servicing the blower.**

Motor is equipped with special ball bearings and lubricant, assuring long life and quiet operation. Additional maintenance is NOT required.

### 9.5 ACCESS TO UNDERNEATH THE COUNTER

Counter beneath the Polishing Motor can be removed as follows:

- Unscrew the (4) screws on the top of the counter which secure the counter to the main unit
- Lift and remove the counter



(4) Screws secure the counter top to main unit casing



2 separate chambers underneath the counter

## 9.6 ANNUAL GENERAL INSPECTION

The sealing integrity of the **SPU** and **JUNIOR** is essential. Every 12 months, verify that all gaskets are in proper condition. Should the door gaskets adhere slightly to the unit when opening a door, lubricate its surface with a transparent grease or petroleum jelly. Should unit be moved on occasion, ensure that rubber grommets are tightly fastened. The acoustical integrity is important. **Disconnect the unit by unplugging the power cord from the wall**, and access the fan section. Verify the acoustical insulation is well fastened to walls of the unit. In the event of a problem, call your authorised distributor for spare parts and replace immediately.

## 9.7 TROUBLESHOOTING GUIDE

Symptoms	Possible Cause	Suggested Solution
If motor (dust collector) IS NOT operating But Lights ARE NOT operating	Blown Fuse, Loose wire	Replace Fuse Check wires
If motor (dust collector) IS operating, But Lights ARE NOT operating	Defective Light	Replace Light Bulb
If motor (dust collector) IS NOT operating, But Lights ARE operating	Defective Motor	Replace Motor
Unit will not start	- Faulty Power supply - Blown fuse - Unit not plugged into receptacle	- Check breaker box - Replace fuse - Plug unit in
Excessive noise	- Blower wheel contacting blower, housing or cone - Motor bearings are worn	- Realign/replace wheel - replace motor
Insufficient airflow	- Obstruction in system - Clogged Dust Pad - Clogged Filter Bag - Clogged HEPA Filter	- Remove obstruction - Replace filters - Replace filters - Replace filter
Motor Shuts off, then back on after 30 minutes	- input amperage too high	- ensure filter is in place
Excessive airflow	- Filter not in place	- Install filter

## 10.0 WARRANTY

QUATRO Air Technologies warrants its equipment to be free from defect in material and workmanship under normal use and service for a period of one year from date of shipment. QUATRO's obligation under this warranty shall be limited to replacing any parts, thereof, which shall be demonstrated to have been defective. This is expressly in lieu of all other warranties, express or implied, including the warranties of merchantability and fitness.

QUATRO claims no warranty as to merchantability or as to the fitness of the merchandise for any particular use and shall not be liable for any loss or damage. No person, firm or corporation is authorised to assume for QUATRO any other liability in connection with the sale of these goods. Equipment, parts and material manufactured by others and incorporated in QUATRO's equipment are warranted by QUATRO only to the extent of the original manufacturer's liability to QUATRO Air Technologies Inc.

Conditions and Limitations: **This warranty does not cover** abuse, misuse, maintenance negligence, improper assembly, acts of vandalism, acts of God, fear wear, modifications of the equipment or installation of a part not recommended by QUATRO Air Technologies, as well as operation of the equipment at voltages other than those specified by QUATRO Air Technologies Inc.

## 11.0 SPARE PARTS

SPU-2X4				JUNIOR-JR				
Qty	Description	Part	Qty	Description	Part	Qty	Description	Part
1	Toggle Switch	E035	2	Clearview Lights	AA028		HICAP Filter Bag (6/set)	AG149
1	Fuse	E084	2	Light Bulbs	E204		HEPA Filter	F074
1	1/8" Gasket Roll (40')	H006	2	Replacement Clearview Door	M018-3	1	Wheel/Motor Assy	AB006
2	Clearview Lights	AA028	2	Repl. Clearview Front Wiper	H446	1		
2	Light Bulbs	E204	2	Dust Pad Holding Frame-Plastic	H508	1	Toggle Switch	E035
2	Replacement Clearview Door	M018-3	2	Dust Pad Support Frame-Metal	M105	1	Fuse	E084
	Dust Pad, box of 20	AG044	1	Wheel/Motor Assy, 120v	A003	1	1/8" Gasket Roll (40')	H006
	Dust Pad, box of 500	AG055	1	Pre-wired Motor only, 120v	A004	2	Light Bulbs	E204
	HICAP Filter Bag (6/set)	AG149	1	Wheel/Motor Assy – 240v	AB008	1	Replacement Shield on Hood	M087-01
	HEPA Filter	F074	1	Pre-wired Motor only, 240v	AB009	1	2-Speed Lathe, 120v	B151
2	Repl. Clearview Front Wiper	H446	1	2-Speed Lathe, 120v	B095			
2	Repl. Clearview Side Wiper	H445	1	2-speed 240v Lathe, 240v	B096			