AeroCharge® Pneumatic Manual Powder Spray Gun Control Unit

Customer Product Manual
Part 1015365C
Issued 7/02

For parts and technical support, call the Industrial Coating Systems Customer Support Center at (800) 433-9319 or contact your local Nordson representative.

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AeroCharge Pneumatic Manual Powder Spray Gun Control Unit

Safety

Read and follow these safety instructions. Task- and equipment-specific warnings, cautions, and instructions are included in equipment documentation where appropriate.

Make sure all equipment documentation, including these instructions, is accessible to all persons operating or servicing equipment.

Qualified Personnel

Equipment owners are responsible for making sure that Nordson equipment is installed, operated, and serviced by qualified personnel. Qualified personnel are those employees or contractors who are trained to safely perform their assigned tasks. They are familiar with all relevant safety rules and regulations and are physically capable of performing their assigned tasks.

Intended Use

Use of Nordson equipment in ways other than those described in the documentation supplied with the equipment may result in injury to persons or damage to property.

Some examples of unintended use of equipment include

- using incompatible materials
- making unauthorized modifications
- removing or bypassing safety guards or interlocks
- using incompatible or damaged parts
- using unapproved auxiliary equipment
- operating equipment in excess of maximum ratings

Regulations and Approvals

Make sure all equipment is rated and approved for the environment in which it is used. Any approvals obtained for Nordson equipment will be voided if instructions for installation, operation, and service are not followed.

All phases of equipment installation must comply with all federal, state, and local codes.

Personal Safety

To prevent injury follow these instructions.

- Do not operate or service equipment unless you are qualified.

- Do not operate equipment unless safety guards, doors, or covers are intact and automatic interlocks are operating properly. Do not bypass or disarm any safety devices.

- Keep clear of moving equipment. Before adjusting or servicing any moving equipment, shut off the power supply and wait until the equipment comes to a complete stop. Lock out power and secure the equipment to prevent unexpected movement.

- Relieve (bleed off) hydraulic and pneumatic pressure before adjusting or servicing pressurized systems or components. Disconnect, lock out, and tag switches before servicing electrical equipment.

- Obtain and read Material Safety Data Sheets (MSDS) for all materials used. Follow the manufacturer's instructions for safe handling and use of materials, and use recommended personal protection devices.

- To prevent injury, be aware of less-obvious dangers in the workplace that often cannot be completely eliminated, such as hot surfaces, sharp edges, energized electrical circuits, and moving parts that cannot be enclosed or otherwise guarded for practical reasons.

Fire Safety

To avoid a fire or explosion, follow these instructions.

- Do not smoke, weld, grind, or use open flames where flammable materials are being used or stored.

- Provide adequate ventilation to prevent dangerous concentrations of volatile materials or vapors. Refer to local codes or your material MSDS for guidance.

- Do not disconnect live electrical circuits while working with flammable materials. Shut off power at a disconnect switch first to prevent sparking.

- Know where emergency stop buttons, shutoff valves, and fire extinguishers are located. If a fire starts in a spray booth, immediately shut off the spray system and exhaust fans.

- Clean, maintain, test, and repair equipment according to the instructions in your equipment documentation.

- Use only replacement parts that are designed for use with original equipment. Contact your Nordson representative for parts information and advice.

Grounding

⚠ **WARNING:** Operating faulty electrostatic equipment is hazardous and can cause electrocution, fire, or explosion. Make resistance checks part of your periodic maintenance program. If you receive even a slight electrical shock or notice static sparking or arcing, shut down all electrical or electrostatic equipment immediately. Do not restart the equipment until the problem has been identified and corrected.

All work conducted inside the spray booth or within 1 m (3 ft) of booth openings is considered within a Class 2, Division 1 or 2 Hazardous location and must comply with NFPA 33, NFPA 70 (NEC articles 500, 502, and 516), and NFPA 77, latest conditions.

- All electrically conductive objects in the spray areas shall be electrically connected to ground with a resistance of not more than 1 megohm as measured with an instrument that applies at least 500 volts to the circuit being evaluated.

- Equipment to be grounded includes, but is not limited to, the floor of the spray area, operator platforms, hoppers, photoeye supports, and blow-off nozzles. Personnel working in the spray area must be grounded.

- There is a possible ignition potential from the charged human body. Personnel standing on a painted surface, such as an operator platform, or wearing non-conductive shoes, are not grounded. Personnel must wear shoes with conductive soles or use a ground strap to maintain a connection to ground when working with or around electrostatic equipment.

- Operators must maintain skin-to-handle contact between their hand and the gun handle to prevent shocks while operating manual electrostatic spray guns. If gloves must be worn, cut away the palm or fingers, wear electrically conductive gloves, or wear a grounding strap connected to the gun handle or other true earth ground.

- Shut off electrostatic power supplies and ground gun electrodes before making adjustments or cleaning powder spray guns.

- Connect all disconnected equipment, ground cables, and wires after servicing equipment.

Action in the Event of a Malfunction

If a system or any equipment in a system malfunctions, shut off the system immediately and perform the following steps:

- Disconnect and lock out electrical power. Close pneumatic shutoff valves and relieve pressures.

- Identify the reason for the malfunction and correct it before restarting the equipment.

Disposal

Dispose of equipment and materials used in operation and servicing according to local codes.

Description

The AeroCharge pneumatic manual powder spray gun control unit provides

- pneumatic control for the AeroCharge pneumatic manual powder spray gun;
- flow rate and atomizing air pressures to the powder pump; and
- fluidizing air pressure to the feed hopper.

As compressed air moves through the spray gun, the air is forced through air jet holes in a powder inlet sleeve, electrostatically charging the powder coating.

Specifications

NOTE: The main air regulator in the control unit is factory set to 6 bar (90 psi), which is the minimum input air pressure for this control unit.

Typical Air Consumption	
Spray Gun	209.5 l/min (7.4 cfm)
Hopper (50 lb)	113.25 l/min (4.0 cfm)
Input Air Pressure	
Minimum	6 bar (90 psi)
Maximum	7 bar (100 psi)
Air Quality Requirements	

Powder spray systems require clean, dry, oil-free operating air. Moist or oil-contaminated air can cause the powder to clog in the pump's venturi throat, powder feed hose, or spray gun powder path.

Use 3-micron filter/separators with automatic drains and a refrigerated or regenerative desiccant-type air dryer that can produce a 3.4 °C (38 °F) or lower dewpoint at 7 bar (100 psi).

Front Panel

See Figure 1.

The front panel of the control unit has three main components: the atomizing air regulator (5), the flow rate air regulator (4), and the display window (3). An indicator ball (1) floats within the display window to identify the air flow that is being supplied to the spray gun.

The green zone (2) indicates the recommended balance of flow and atomizing air pressure. For optimum powder flow and charge, the indicator ball should float in or near the green zone during operation.
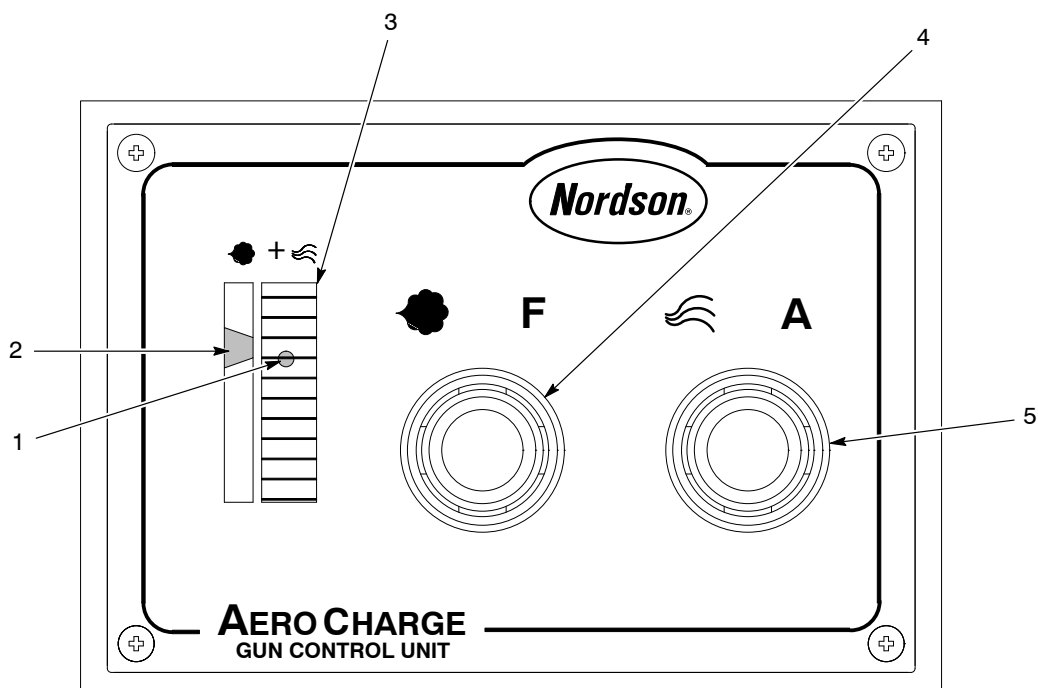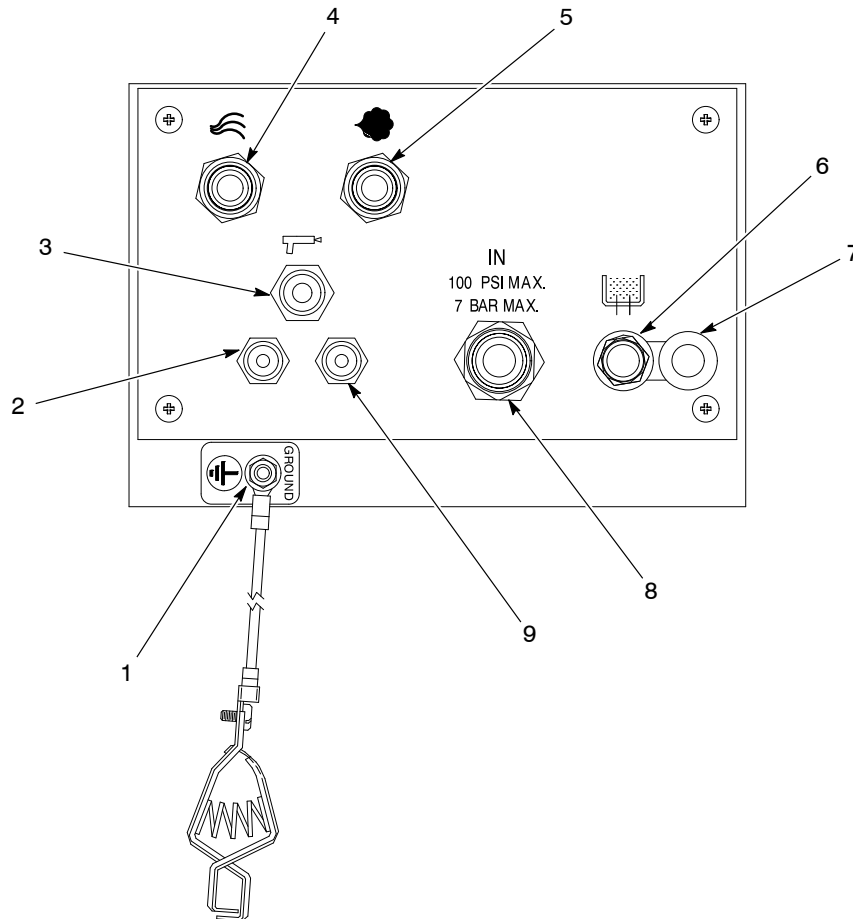

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Figure 1   Front Panel

1. Indicator ball
2. Green zone
3. Display window
4. Flow rate air regulator
5. Atomizing air regulator

Back Panel

See Figure 2.

The back panel of the control unit allows for all of the air connections to the system. Refer to *Connections* for information on how to make all of the connections.

Figure 2 Back Panel

1. Ground stud
2. Black trigger (out) air fitting
3. Gun jet air fitting
4. Atomizing air fitting
5. Flow rate air fitting
6. Fluidizing air valve
7. Fluidizing air fitting
8. IN (supply) air fitting
9. White trigger (in) air fitting

Installation

WARNING: Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation.

Use the following information to mount and connect the control unit.

Optional Mounting Brackets

Three optional kits are available to mount the control unit. The kits must be ordered separately. Refer to *Parts* for ordering information.

NOTE: Disregard the following procedures if you did not order one of the optional mounting brackets. Go directly to the *Connections* procedure if you do not have an optional mounting bracket.

Universal Mounting Bracket

See Figure 3.

The universal mounting bracket can be mounted on a mounting rail or on a dolly.

1. Secure the mounting bracket (1) to the back of the mounting rail (7) or dolly with the four M6 pan-head screws (2) and lock washers (3).

2. Set the control unit onto the mounting bracket and line up the four mounting holes on the bottom of the bracket with the four mounting holes on the bottom of the control unit.

3. Secure the control unit to the mounting bracket with the four M5 hex-head screws (6), lock washers (5), and flat washers (4).
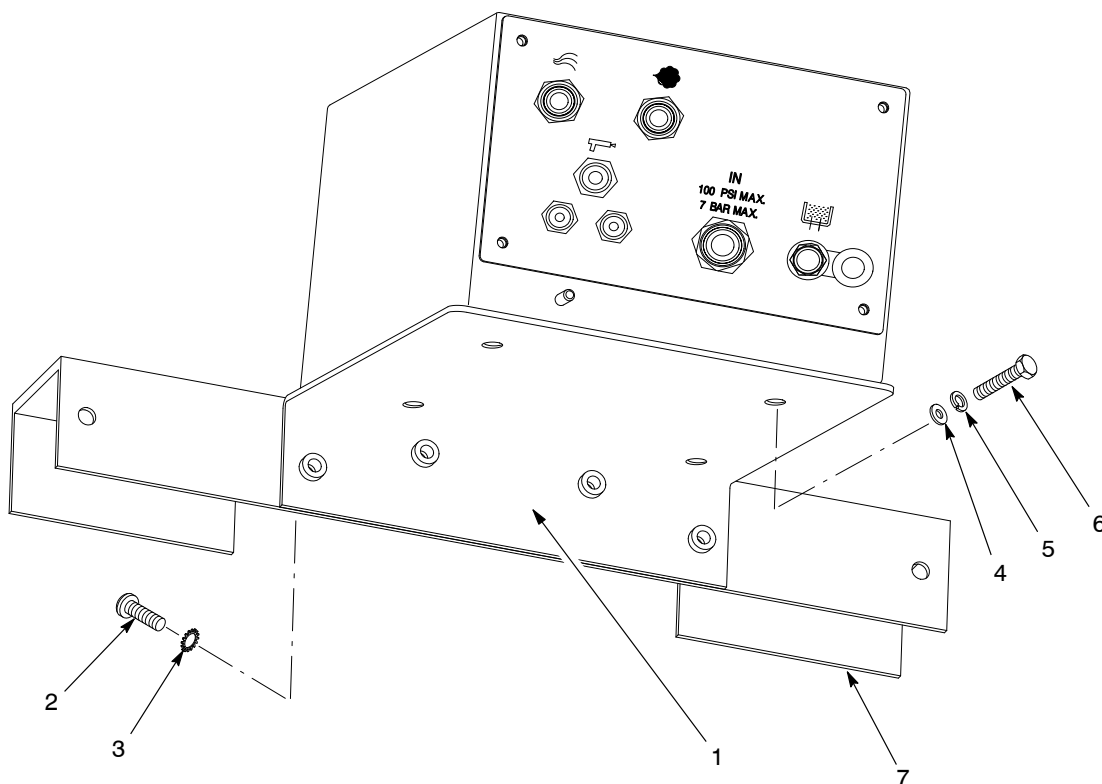
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Figure 3   Universal Mounting Bracket (Shown with Mounting Rail)

1. Mounting bracket
2. M6 Pan-head screw
3. M6 Lock washer
4. M5 Flat washer
5. M5 Lock washer
6. M5 Hex-head screw
7. Mounting rail

*Note:* The mounting rail (7) must be ordered separately.

Wall Mounting Bracket

See Figure 4

The wall mounting bracket allows you to mount the control unit at a 45-degree right or left angle for better viewing.

NOTE: When installing the wall mounting bracket, the slotted screws must face inside of the booth and the washers and hex nuts must face out.

1. Secure the mounting bracket (1) to the booth wall with the four slotted screws, lock washers, and hex nuts (4).

2. Set the control unit (2) onto the mounting bracket and turn it in the direction you wish it to face.

3. Line up the mounting holes on the bottom of the mounting bracket with the mounting holes on the bottom of the control unit as shown in Figure 4.

4. Secure the control unit to the mounting bracket with the three hex-head screws, lock washers, and flat washers (3).
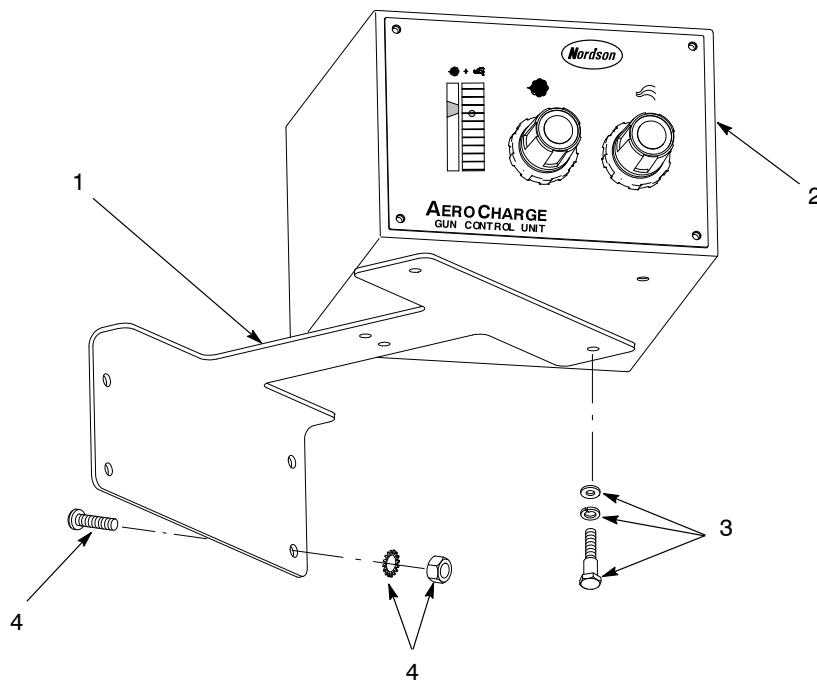
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Figure 4   Wall Mounting Bracket

1. Mounting bracket
2. Control unit
3. Hex-head screws, lock washers, and flat washers
4. Slotted screws, lock washers, and hex nuts
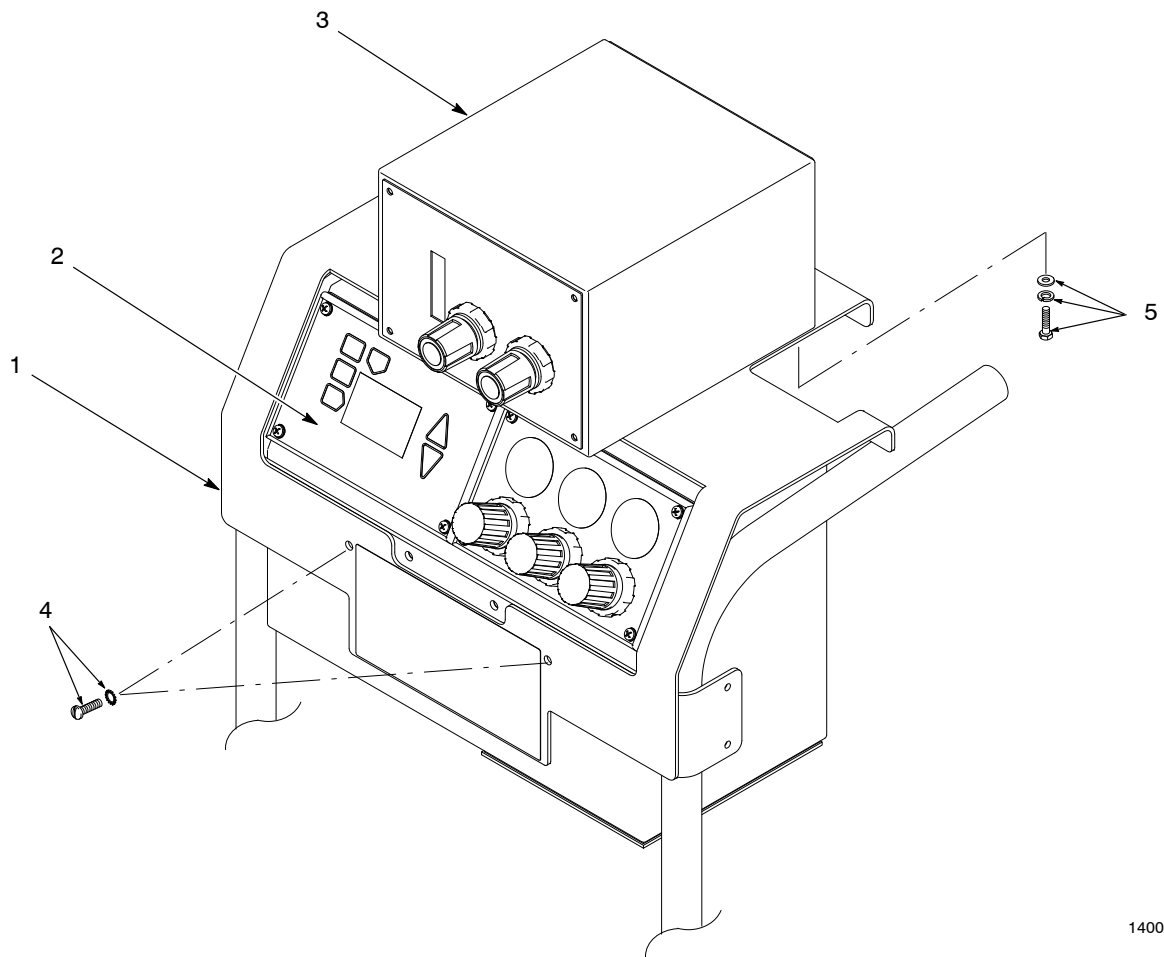
Sure Coat Dolly Mounting Bracket

See Figure 5.

This installation allows you to add the AeroCharge spray gun and control unit to an existing Sure Coat spray gun and control unit dolly system.

1. Set the control unit (3) onto the mounting bracket (1) and line up the four mounting holes on the bottom of the bracket with the four mounting holes on the bottom of the control unit.

2. Secure the control unit to the mounting bracket with the four hex-head screws, lock washers, and flat washers (5).

3. Remove the two pan-head screws and lock washers (4) from the front of the Sure Coat control unit (2).

4. Place the mounting bracket on the Sure Coat dolly system, making sure that the Sure Coat control panel is visible through the large window in the bracket.

5. Secure the mounting bracket to the dolly system with the two pan-head screws and washers that you removed from the Sure Coat control unit.

   NOTE: If the two screws are not long enough to secure the mounting bracket, use the two pan-head screws included in the Sure Coat dolly mounting bracket kit.

6. Cut the air tubing connected to the IN air fitting of the Sure Coat control unit. Cut the tubing approximately 50−75 mm (2−3 in.) from the Sure Coat control unit.

7. Reconnect the Sure Coat control unit air tubing by installing the union tee (supplied with the mounting bracket kit) between the cut ends.

8. Connect the polyurethane tubing (supplied with the mounting bracket kit) from the union tee to the IN air fitting on the back of the AeroCharge control unit.

9. Two Select Charge labels (English and Spanish) are included in the mounting bracket kit. Apply the appropriate label to the front of the mounting bracket, beneath the Sure Coat control panel.

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Figure 5   Sure Coat Dolly Mounting Bracket

1. Mounting bracket
2. Sure Coat control unit
3. AeroCharge control unit
4. Pan-head screws and lock washers
5. Hex-head screws, lock washers, and flat washers

Connections

Refer to Table 1.

See Figure 6.

The gun ground wire and the following air tubing are contained in the AeroCharge pneumatic manual spray gun's cable:

• Black, 4-mm trigger air tubing

• White, 4-mm trigger air tubing

• Blue, 6-mm gun jet air tubing

Other than the air tubing contained in the gun's pneumatic cable, all air tubing is customer supplied.

Table 1 Connections—Back Panel

Item	Description	Connection for:
1	Ground stud	Spray gun ground wire in the spray gun pneumatic cable **NOTE:** The ground wire with clamp (10) is already installed on the control unit. Remove the hex nut (11) and lock washer (12) to connect the spray gun ground wire (13) to the ground stud.
2	Black trigger fitting (to spray gun)	Black, 4-mm air tubing in the spray gun pneumatic cable
3	Gun air fitting	Blue, 6-mm air tubing in the spray gun pneumatic cable
4	Atomizing air fitting	Blue, 8-mm air tubing to the atomizing air fitting on the powder pump **NOTE:** The check valve supplied with the control unit must be installed in the atomizing air line near the pump. Refer to *Check Valve Installation* for more information.
5	Flow rate air fitting	Black, 8-mm air tubing to the flow rate air fitting on the powder pump
7	Fluidizing air fitting	10-mm air tubing to the hopper fluidizing drum air fitting
8	IN air fitting	10-mm air tubing to the main air supply
9	White trigger air fitting (from spray gun)	White, 4-mm air tubing in the spray gun pneumatic cable
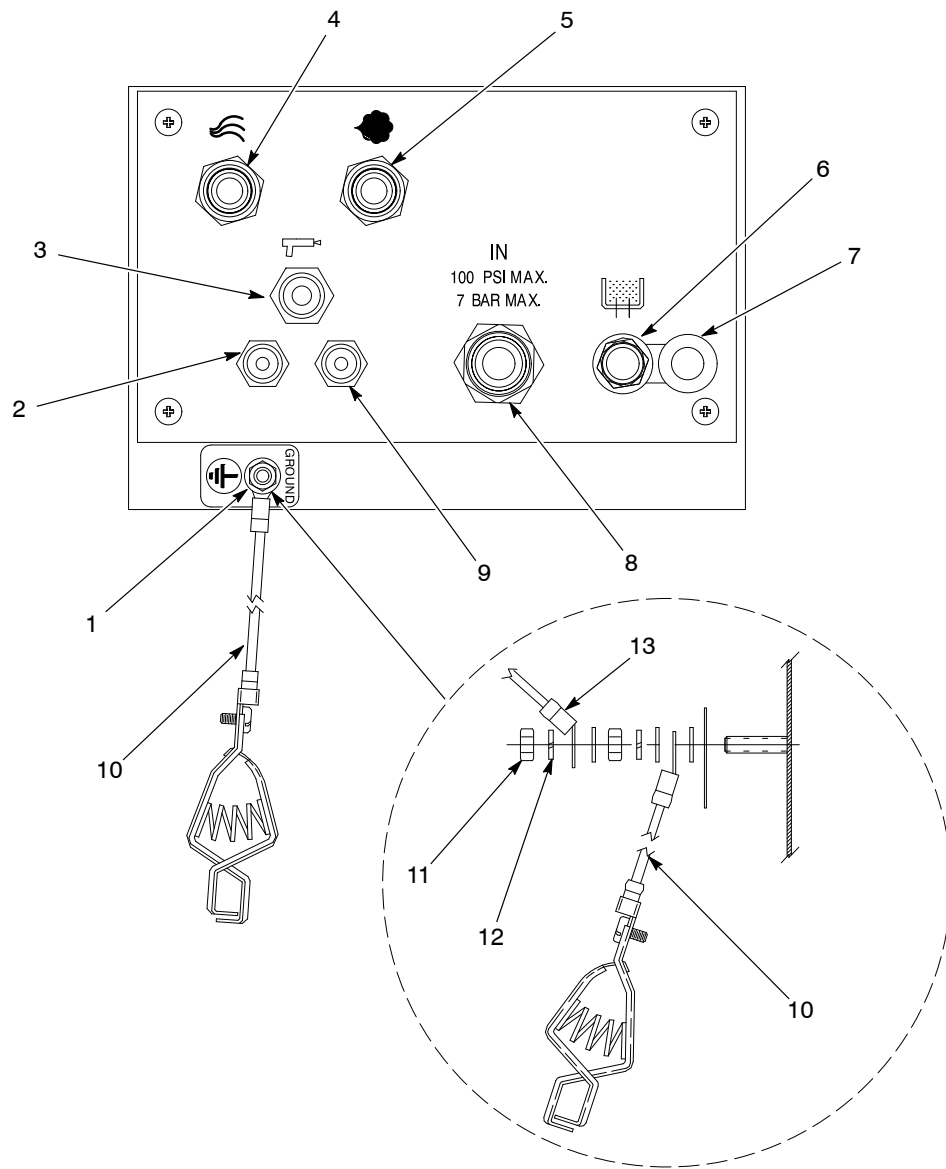
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Figure 6   Connections—Back Panel

1. Ground stud
2. 4-mm black air fitting (trigger out)
3. 6-mm gun air fitting
4. 8-mm atomizing air fitting
5. 8-mm flow rate air fitting

6. Fluidizing air valve
7. 10-mm fluidizing air fitting
8. 10-mm IN air fitting
9. 4-mm white air fitting (trigger in)

10. Ground wire with clamp
11. Hex nut
12. Lock washer
13. Gun ground wire

Check Valve Installation

The check valve supplied with the control unit must be installed in the atomizing air line. Use this procedure to install the check valve.

See Figure 7.

1. Cut a 25.4-mm (1-in.) length of blue, 8-mm air tubing (4).

2. Install the 25.4-mm (1-in.) piece of air tubing into the fitting marked A on the powder pump (3).

3. Install the check valve (2) onto the 25.4-mm (1-in.) piece of air tubing. Make sure that the symbol on the check valve is oriented as shown in Figure 7.

4. Cut another length of blue, 8-mm air tubing to the appropriate length, and connect it between the check valve and the control unit's atomizing air fitting (1).
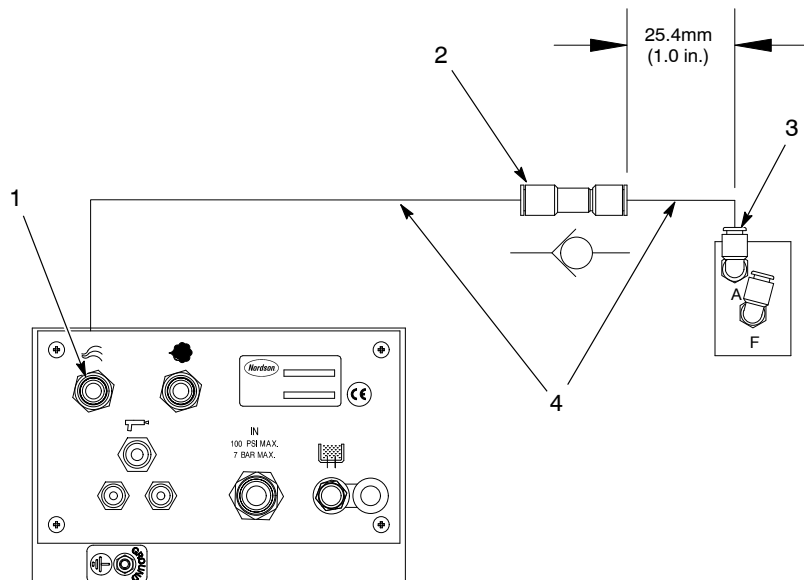
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Figure 7   Check Valve Installation

1. Atomizing air fitting
2. Check valve
3. Powder pump fitting A
4. Blue, 8-mm air tubing

Operation

⚠ **WARNING:** Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation.

⚠ **WARNING:** This equipment can be dangerous unless it is used in accordance with the rules laid down in this manual.

⚠ **WARNING:** Use appropriate respiratory protection. Breathing certain airborne dusts (including finishing powders) may be hazardous to your health. For specific guidance, ask the powder manufacturer for a Material Safety Data Sheet (MSDS).

⚡ **WARNING:** All conductive equipment in the spray area must be grounded. Ungrounded or poorly grounded equipment can store an electrostatic charge which can give personnel a severe shock or arc and cause a fire or explosion.

NOTE: The AeroCharge manual spray gun control unit must be used with the AeroCharge pneumatic manual powder spray gun. Refer to the *AeroCharge Pneumatic Manual Powder Spray Gun* manual for more information on how to operate the equipment.

Startup

1. Make sure that the booth exhaust fan and powder recovery system are operating.

See Figure 6.

2. Connect the ground wire with clamp (10) to a true earth ground.

3. Fill the feed hopper is $^2/_3$ full with new powder.

4. Turn on the main air supply.

5. Turn the fluidizing air valve (6) counterclockwise approximately $^1/_2$ turn. Allow the powder in the hopper to thoroughly fluidize.

Startup *(contd)*

See Figure 8.

NOTE: The atomizing and flow rate air can be adjusted only while the spray gun is triggered.

6. Point the spray gun into the booth and trigger it. Turn the atomizing air regulator (5) clockwise until the the indicator ball (1) in the display window (3) begins to move.

7. Trigger the spray gun and turn the flow rate air regulator (4) clockwise until a steady stream of powder exits the spray gun.

8. Increase the atomizing air if the the indicator ball is below the green zone (2).

NOTE: When the atomizing and flow rate air are adjusted properly the indicator ball should float in or near the green zone. If the indicator ball is low, increase the atomizing air. Never fully turn off the atomizing air during operation.

9. Trigger the spray gun to test for an acceptable spray pattern, powder coverage, film build, and finish coverage. Adjust the atomizing and flow rate air as necessary.
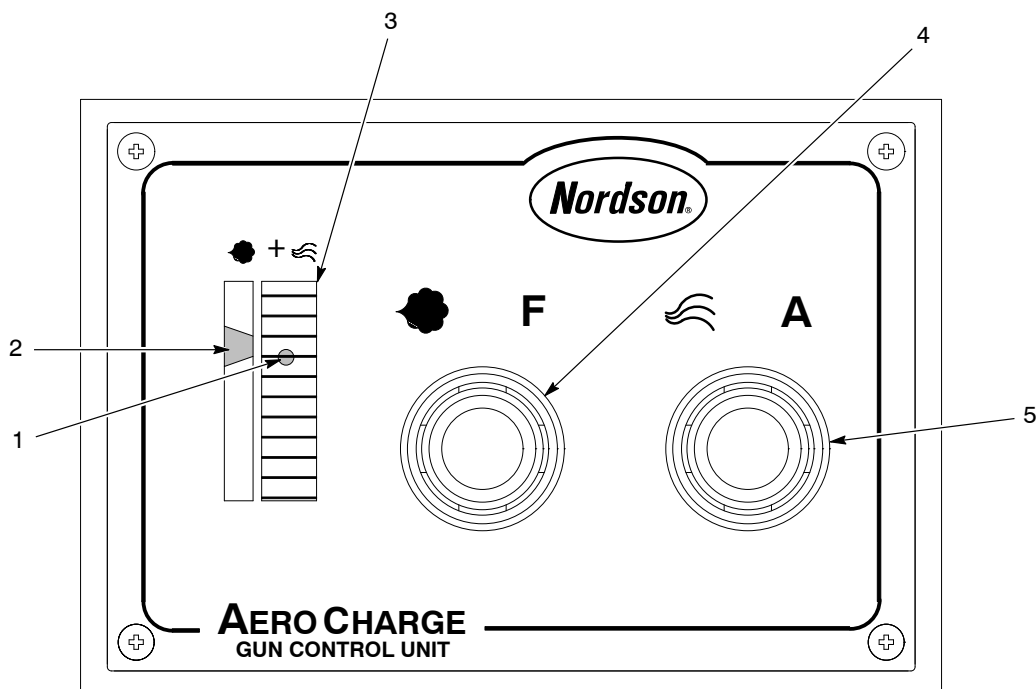
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Figure 8   Control Unit Operation

1. Indicator ball	3. Display window	5. Atomizing air regulator
2. Green zone	4. Flow rate air regulator	

Shutdown

1. Turn off and relieve the system air pressure.

2. Turn the fluidizing air valve fully clockwise.

3. Perform the *Daily Maintenance* procedure.

Daily Maintenance

WARNING: Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation.

WARNING: Check all ground connections thoroughly. Ungrounded equipment and parts may accumulate a charge that could arc and cause a fire or explosion. Failure to observe this warning could cause serious injury.

1. Check all ground connections, including part grounds.

2. Check all air tubing connections.

3. Make sure supply air is clean and dry.

4. Wipe powder and dust off the control unit with a clean, dry cloth.

Troubleshooting

See Figure 9.

If you cannot solve a problem after adjusting the air pressures, checking connections on the back panel, and using the schematic, contact your Nordson representative for assistance.
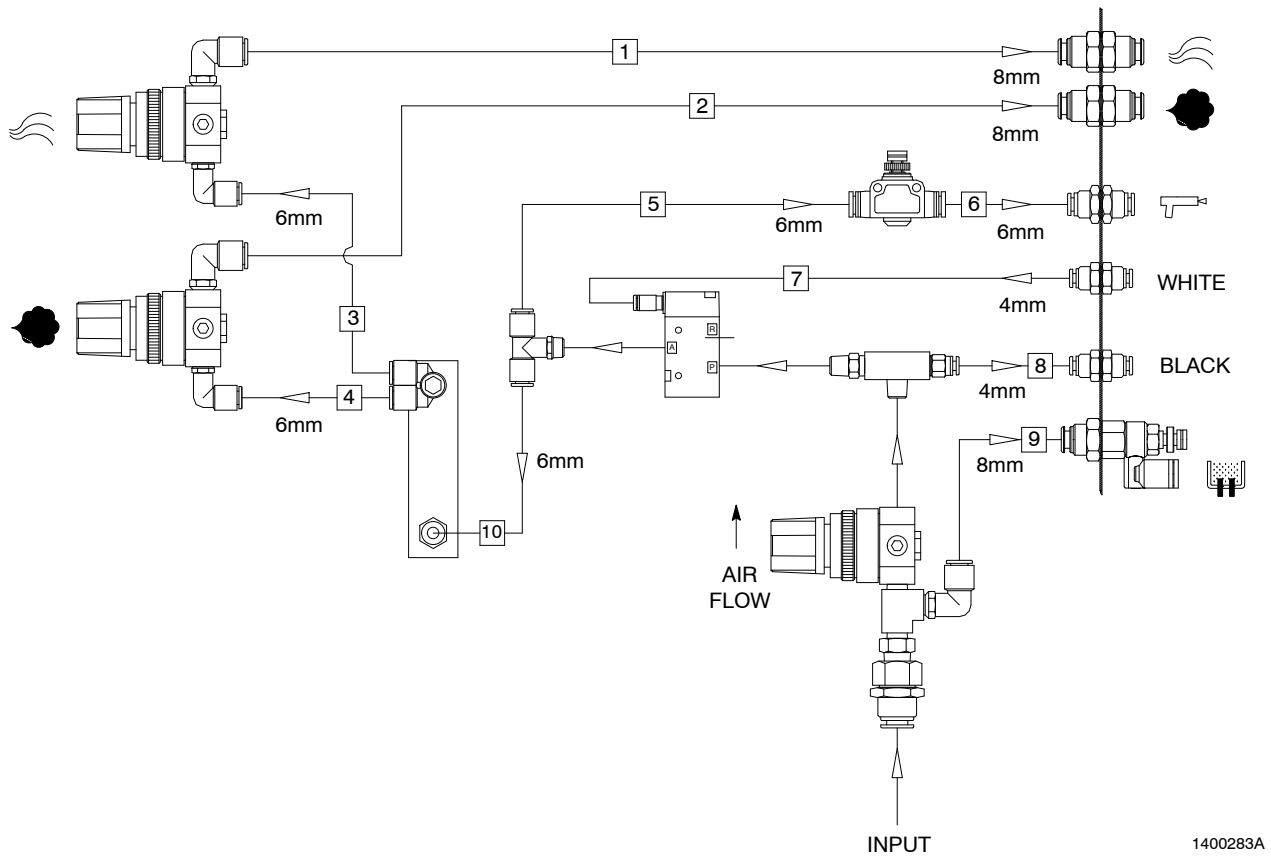
Figure 9   AeroCharge Pneumatic Manual Powder Spray Gun Control Unit Schematic

Repair

This procedure covers only basic removal and installation of the control unit's main pneumatic assembly. Contact your Nordson representative for further assistance.

See Figure 10.

1. Remove the four screws (24) securing the rear panel to the control unit cabinet.

2. Carefully pull the rear panel away from the control unit cabinet, being careful not to disconnect any air tubing inside the control unit.

3. Tag the air tubing inside the control unit as shown in See Figure 9.

4. Disconnect the air tubing from the tube fittings (7, 8, 12, 2) on the main pneumatic assembly.

5. Loosen the retaining nut securing the IN air fitting (14) to the rear panel. Carefully remove the main pneumatic assembly from the control unit cabinet.

NOTE: If you remove any threaded fittings from the main pneumatic assembly, clean their threads and apply 2−3 layers of new PTFE tape before installing them.

6. Disassemble and replace the necessary components in the main pneumatic assembly.

7. Secure the main pneumatic assembly to the rear panel using the IN air fitting's retaining nut.

8. Connect the air tubing to the main pneumatic assembly. See Figure 9 for tubing connection guidelines.

9. Carefully position the rear panel in place on the control unit cabinet, being careful not to pinch any air tubing.

10. Secure the rear panel to the control unit cabinet using the four screws removed in step 1.

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Parts

To order parts, call the Nordson Customer Service Center or your local Nordson representative. Use this five-column parts list, and the accompanying illustration, to describe and locate parts correctly.

Using the Illustrated Parts List

Numbers in the Item column correspond to numbers that identify parts in illustrations following each parts list. The code NS (not shown) indicates that a listed part is not illustrated. A dash (—) is used when the part number applies to all parts in the illustration.

The number in the Part column is the Nordson Corporation part number. A series of dashes in this column (- - - - - -) means the part cannot be ordered separately.

The Description column gives the part name, as well as its dimensions and other characteristics when appropriate. Indentions show the relationships between assemblies, subassemblies, and parts.

- If you order the assembly, items 1 and 2 will be included.
- If you order item 1, item 2 will be included.
- If you order item 2, you will receive item 2 only.

The number in the Quantity column is the quantity required per unit, assembly, or subassembly. The code AR (As Required) is used if the part number is a bulk item ordered in quantities or if the quantity per assembly depends on the product version or model.

Letters in the Note column refer to notes at the end of each parts list. Notes contain important information about usage and ordering. Special attention should be given to notes.

Item	Part	Description	Quantity	Note
—	0000000	Assembly	1	
1	000000	• Subassembly	2	A
2	000000	• • Part	1	

AeroCharge Pneumatic Manual Powder Spray Gun Control Unit Parts

See Figure 10.

Item	Part	Description	Quantity	Note
—	1017299	CONTROL UNIT, pneumatic, AeroCharge	1	
1	901493	• REGULATOR, air, 0–100 psi, $^1/_8$-in. NPT	2	
2	972276	• ELBOW, male, 8 mm x $^1/_8$-in. universal	3	
3	1017283	• ELBOW, male, branch, universal, 6 mm	1	
4	1017282	• FLOWMETER, 10–100 scfh, $^1/_8$-in. NPT port	1	
5	972141	• CONNECTOR, male, 6-mm tube x $^1/_8$-in. universal	1	
6	972126	• ELBOW, male, 6-mm tube x $^1/_8$-in. universal	2	
7	1005178	• TEE, male branch, 6-mm tube x $^1/_8$-in. universal	1	
8	972398	• CONNECTOR, round, male, M4 tubing x M5 thread	1	
9	1017281	• VALVE, 3 port, piloted, $^1/_8$-in. NPT	1	
10	282853	• NIPPLE, hex, $^1/_8$-in. NPT x 1.06-in. long	1	
11	973630	• TEE, male branch, auto, $^1/_8$ in., steel, zinc	1	
12	333570	• FITTING, tube, 4 mm x $^1/_8$-in. NPT, male connector	1	
13	973564	• NIPPLE, hex, $^1/_4$ x $^1/_8$ x 1.188 in., steel, zinc	1	
14	1005068	• CONNECTOR, bulkhead, 10-mm tube x $^1/_4$-in. NPT	1	
15	973335	• TEE, street, brass, $^1/_8$-in. NPT	1	
16	1005067	• CONNECTOR, bulkhead, 8-mm tube x $^1/_4$-in. RPT	1	
17	1017673	• VALVE, needle, straight, $^1/_4$-in. RPT x 10-mm tube	1	
18	1002711	• FITTING, tube, push in, bulkhead union, 8-mm tubing	2	
19	1013412	• UNION, bulkhead, 4-mm tubing	2	
20	- - - - - -	• CAP, color, tube fitting, 4 mm, white	1	
21	139377	• WIRE, with clamp, ground	1	
22	- - - - - -	• CAP, color, tube fitting, 4 mm, black	1	
23	971778	• UNION, bulkhead, 6-mm tubing	1	
24	982825	• SCREW, pan, recessed, M4 x 12, with internal lock washer bezel	8	
25	- - - - - -	• VALVE, needle, 6-mm tube	1	A
NS	1018227	• VALVE, check, 8-mm tube	1	
NOTE A: The needle valve and internal main air regulator are not user-serviceable parts. Contact your Nordson representative for assistance with these parts.				
NS: Not Shown				
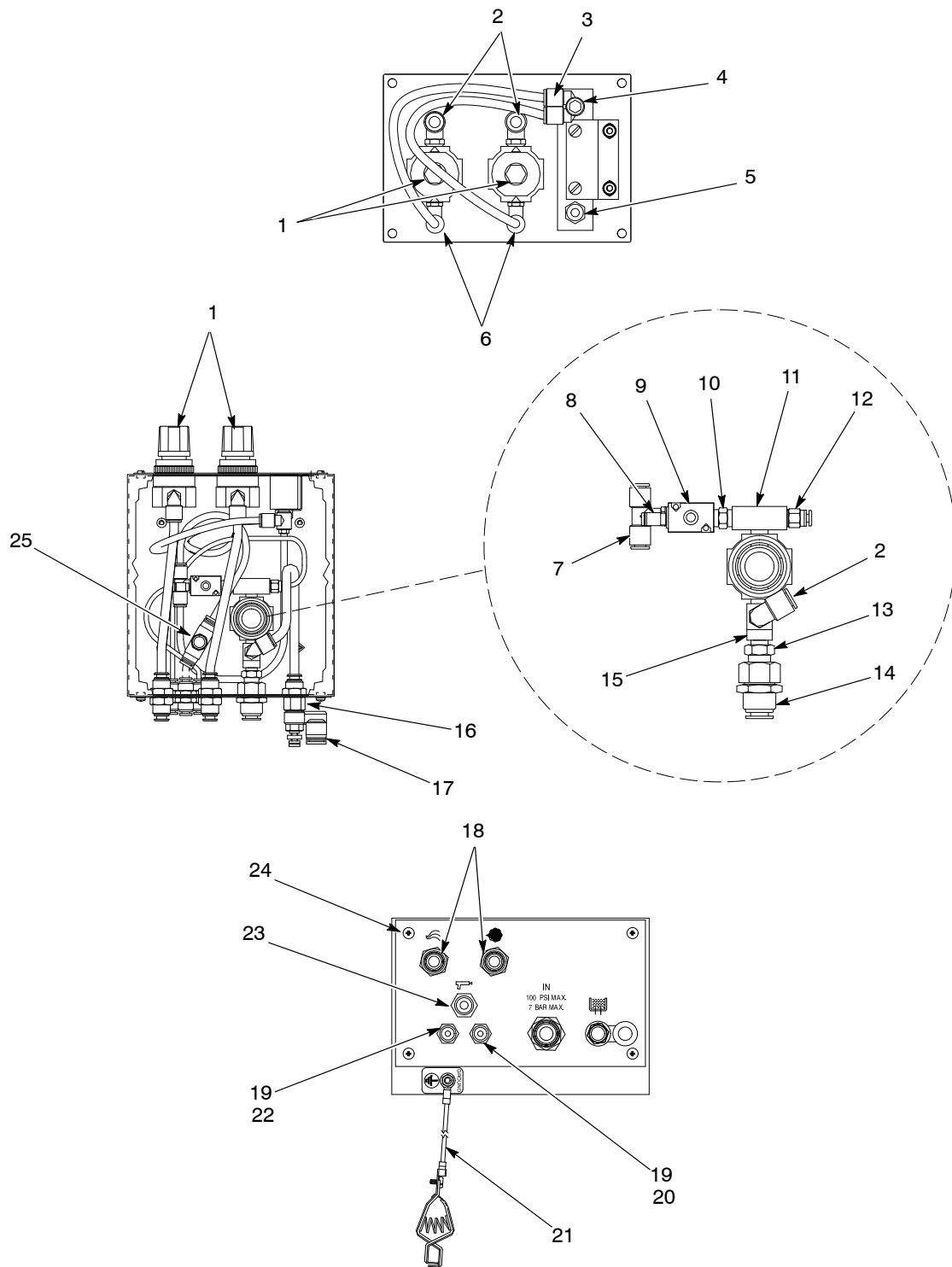
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Figure 10 AeroCharge Pneumatic Manual Powder Spray Gun Control Unit Parts
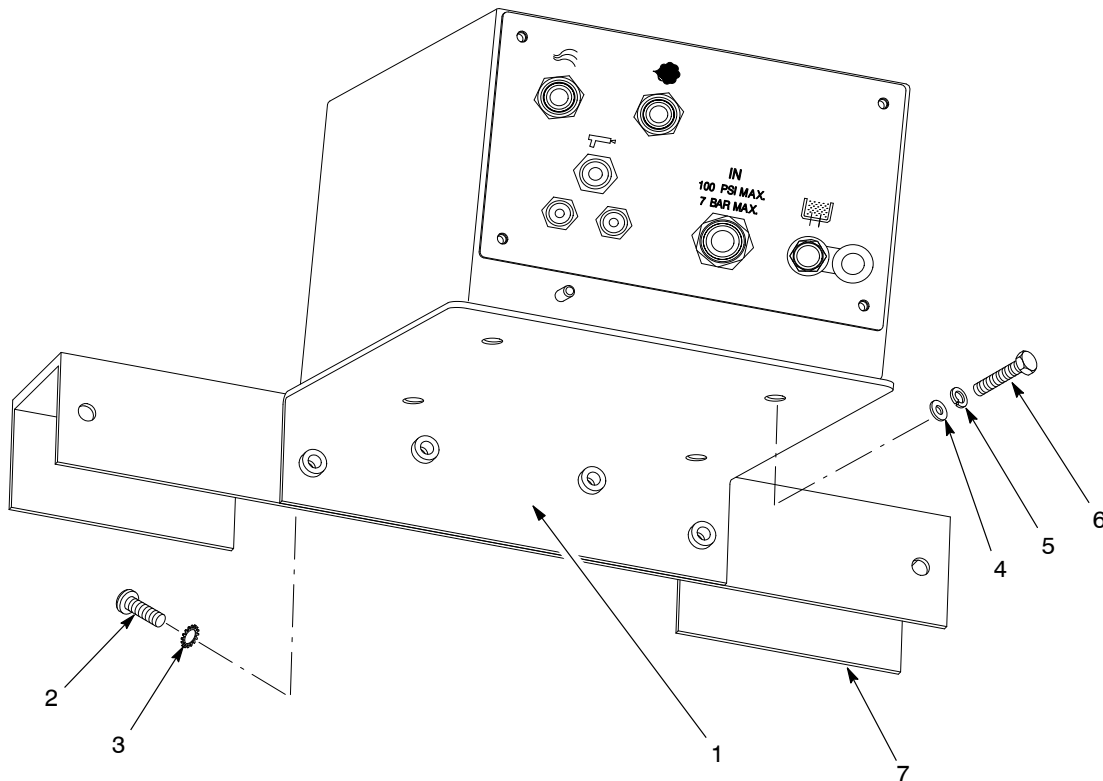
Optional Mounting Bracket Kits

Universal Mounting Bracket Kit

See Figure 11.

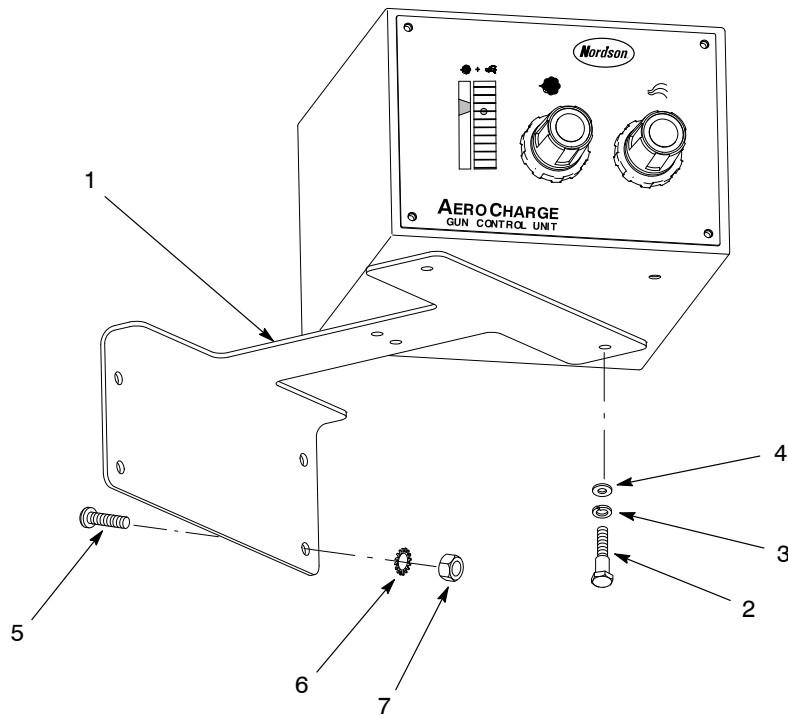| Item	Part	Description	Quantity	Note
—	1017871	KIT, bracket, mounting, universal AeroCharge	1	
1	1015635	• BRACKET , mounting, universal, AeroCharge	1	
2	982499	• SCREW, pan, slot, M6 x 12, zinc	4	
3	983128	• WASHER, lock, M, internal, M6, steel, zinc	4	
4	983408	• WASHER, flat, M narrow, M5, steel, zinc	4	
5	983401	• WASHER, lock, M, split, M5, steel, zinc	4	
6	982046	• SCREW, hex, cap, M5 x 14, black	4	
—	288828	KIT, bracket, mounting rail	1	A
7	- - - - - -	• BRACKET, mounting, manual control	1	
NS	982128	• SCREW, hex head, machined, M6 x 10, zinc	4	
NS	983409	• WASHER, lock, M, split, M6, steel, zinc	4	
NS	125112	• NUT, hex, jam, M8, steel, zinc	2	
NS	982589	• SCREW, hex, machine, M8 x 40, zinc	2	
NOTE A: The mounting rail bracket kit, part 288828, is not included with the universal mounting bracket kit, part 1017871. You must order the mounting rail kit separately.				
NS: Not Shown				

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Figure 11 Universal Pneumatic Mounting Bracket Kit

Wall Mounting Bracket Kit

See Figure 12.

| Item	Part	Description	Quantity	Note
—	1018968	KIT, bracket, wallmount, AeroCharge	1	
1	1018967	• BRACKET, wallmount, AeroCharge	1	
2	982046	• SCREW, hex, cap, M5 x 14, black	3	
3	983401	• WASHER, lock, M, split, M5, steel, zinc	3	
4	983408	• WASHER, flat, M narrow, M5, steel, zinc	3	
5	982315	• SCREW, fillister, slotted, M6 x 30, zinc	4	
6	983128	• WASHER, lock, M, internal, M6, steel, zinc	4	
7	984703	• NUT, hex, M6, steel, zinc	4	

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Figure 12 Wall Mounting Bracket Kit

Sure Coat Dolly Mounting Bracket Kit

See Figure 13.

Item	Part	Description	Quantity	Note
—	1017872	KIT, bracket, mounting, with Sure Coat dolly, AeroCharge	1	
1	1015636	• BRACKET, mounting, AeroCharge, with Sure Coat dolly	1	
2	982046	• SCREW, hex, cap, M5 x 14, black	4	
3	983401	• WASHER, lock, M, split, M5, steel, zinc	4	
4	983408	• WASHER, flat, M narrow, M5, steel, zinc	4	
5	982112	• SCREW, pan, slotted, M6 x 16, zinc	2	
6	983128	• WASHER, lock, M, internal, M6, steel, zinc	2	
NS	231989	• BRACKET, gun, dolly system	1	A
NS	126336	• SCREW, pan head, slotted, M5 x 12, steel, zinc	2	A
NS	983127	• WASHER, lock, internal, M5, zinc	2	A
NS	900740	• TUBING, polyurethane, 10/6.5–7 mm	2 ft	
NS	971115	• UNION, tee, 10-mm tube x 10-mm tube	1	
NOTE A: Part of a bracket assembly to hold the powder spray gun. Mount where possible on the dolly system.				
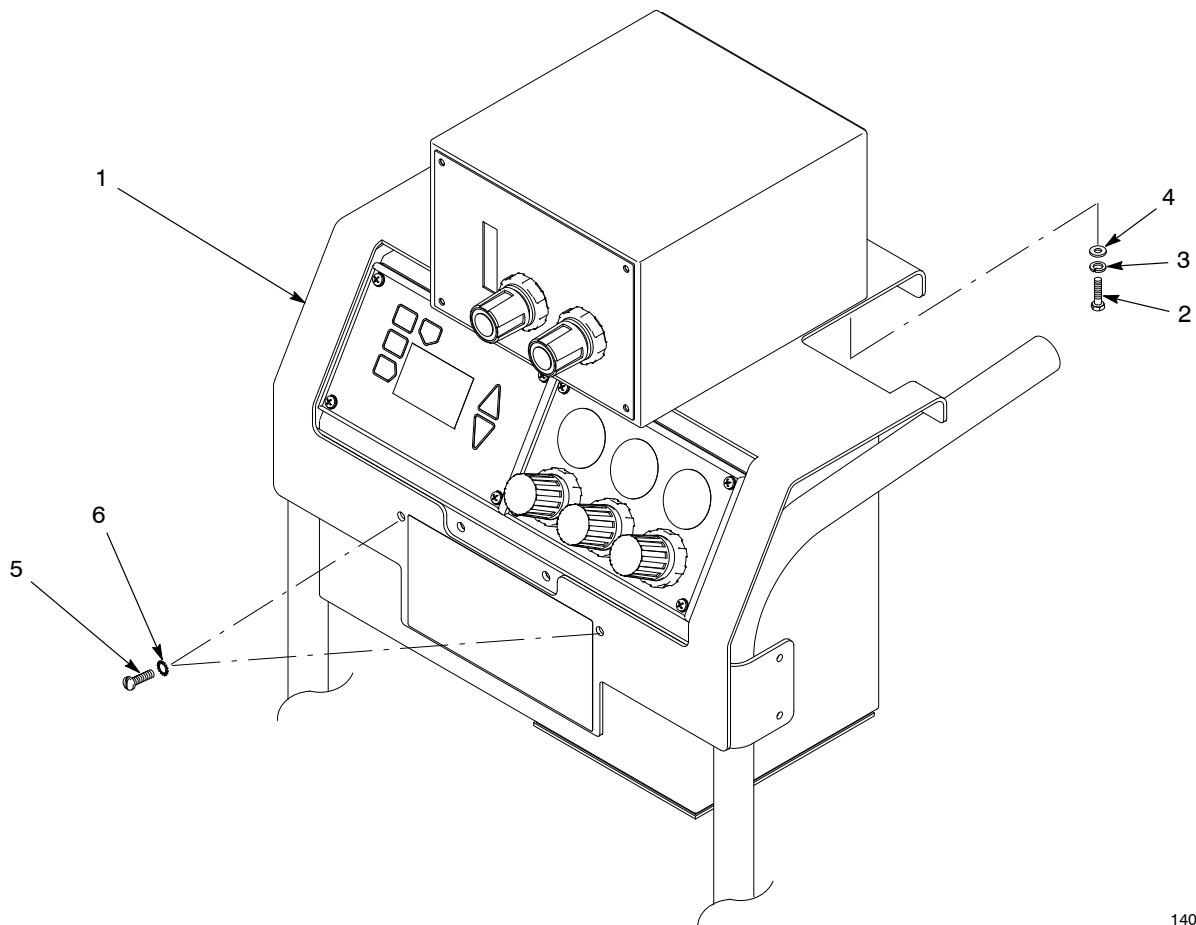
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Figure 13 Sure Coat Dolly Mounting Bracket Kit