

Owner's Manual & Safety Instructions

Save This Manual Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

201

AVANTI™

3 & 5 STAGE HVLP TURBINE PAINT SPRAYERS

NOTICE

CLEAN IMMEDIATELY

Clean the Spray Gun IMMEDIATELY after EVERY use and when it will be idle for more than 30 minutes.

Delayed or inadequate cleaning will permanently clog the Spray Gun.



Visit our website at: <http://www.harborfreight.com>
Email our technical support at: productsupport@harborfreight.com

58479 58149

When unpacking, make sure that the product is intact and undamaged. If any parts are missing or broken, please call 1-888-866-5797 as soon as possible.

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No portion of this manual or any artwork contained herein may be reproduced in any shape or form without the express written consent of Harbor Freight Tools. Diagrams within this manual may not be drawn proportionally. Due to continuing improvements, actual product may differ slightly from the product described herein.
Tools required for assembly and service may not be included.

⚠ WARNING

Read this material before using this product.
Failure to do so can result in serious injury.
SAVE THIS MANUAL.

NOTICE






Clean the Spray Gun Body and Cup **IMMEDIATELY** after **EVERY** use and when it will be idle for more than 30 minutes. Delayed or inadequate cleaning will permanently clog the Spray Gun. Paint hardens quickly and permanently inside Spray Gun.

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WARNING SYMBOLS AND DEFINITIONS

	This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.
	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
	Addresses practices not related to personal injury.


IMPORTANT SAFETY INSTRUCTIONS

Personal Safety

- Stay alert. Watch what you are doing and use common sense when operating the tool. Do not use the tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating the tool increases the risk of injury to persons.
- Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair increases the risk of injury to persons as a result of being caught in moving parts.
- Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the tool in unexpected situations.

NOTICE

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4.  **Use safety equipment.**
Wear protective paint spraying gloves and a NIOSH-approved respirator during use.
Non-skid safety shoes and a hard hat must be used for the applicable conditions.
5.  **Always wear eye protection.**
Wear ANSI-approved safety goggles.

Tool Use and Care

1. **Do not force the tool.** Use the correct tool for the application. The correct tool will do the job better and safer at the rate for which the tool is designed.
2. **Unplug the tool before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool unintentionally. Turn off unplug the sprayer, safely discharge any residual air pressure, and release the throttle and/or turn the switch to its off position before leaving the work area.
3. **Store the tool when it is idle out of reach of children and other untrained persons.** A tool is dangerous in the hands of untrained users.
4. **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that affects the tool's operation.** If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools. There is a risk of bursting if the tool is damaged.
5. **Use only accessories that are identified by the manufacturer for the specific tool model.** Use of an accessory not intended for use with the specific tool model, increases the risk of injury to persons.

Service

- a. **Tool service must be performed only by qualified repair personnel.**
- b. **When servicing a tool, use only identical replacement parts. Use only authorized parts.**

Specific Safety Instructions

1. **To reduce the risk of electric shock, do not expose to rain. Store indoors.**
2. **Risk of Explosion – Do not spray flammable liquids.**
3. **Do not spray or clean with liquids having a flash point less than 38°C (100°F).**
4. Connect to GFCI-protected outlet only.
5. Spray area must be well ventilated. Keep turbine assembly in a well ventilated area at least 20 feet (6.1m) from the spraying area. Do not spray turbine assembly.
6. Follow instructions for fluid being sprayed.
7. Do not direct spray at people or animals.
8. Read all of the information concerning coating products and cleaning solvents. **Do not use chlorinated solvents (e.g. 1-1-1 trichloroethylene and dichloromethane, also known as methylene chloride) to clean spray guns. Many spray guns contain aluminum, which reacts strongly to chlorinated solvents.** Contact the solvent or coating manufacturer as needed regarding potential chemical reactions.
9. Risk of injection—Do not point spray gun at any person or any part of the body. In case of skin injection, seek medical attention immediately.
10. Spraying hazardous materials may result in serious injury or death. Do not spray pesticide, acid, corrosive material, fertilizer, or toxic chemicals.
11. Paints and solvents may be harmful or fatal if swallowed or inhaled. Avoid prolonged skin contact with solvents or paints as they will irritate skin. After any contact, immediately wash off exposed area with hot, soapy water.

NOTICE

Clean the Spray Gun Body and Cup **IMMEDIATELY** after **EVERY** use and when it will be idle for more than 30 minutes. Delayed or inadequate cleaning will permanently clog the Spray Gun. Paint hardens quickly and permanently inside Spray Gun.

SAFETY

12. **To reduce the risk of electric shock**, do not expose to rain. Store indoors.
13. Attach all accessories properly to the tool before plugging in the tool. A loose accessory may detach or break during operation.
14. Maintain labels and nameplates on the tool. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
15. Avoid unintentional starting. Prepare to begin work before turning on the tool.
16. Do not leave the tool unattended when it is plugged into an electrical outlet. Turn off the tool, and unplug it from its electrical outlet before leaving.
17. This product is not a toy. Keep it out of reach of children.
18. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure. In addition, people with pacemakers should:
 - Avoid operating alone.
 - Do not use with power switch locked on.
 - Properly maintain and inspect to avoid electrical shock.
 - Properly ground power cord. Ground Fault Circuit Interrupter (GFCI) should also be implemented – it prevents sustained electrical shock.
19. The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

SETUP

OPERATION

MAINTENANCE





SAVE THESE INSTRUCTIONS.




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NOTICE

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Symbol Definitions

Symbol	Property or Statement
VAC	Volts Alternating Current
A	Amperes
	WARNING marking concerning Risk of Eye Injury. Wear ANSI-approved eye protection.
	WARNING marking concerning Risk of Respiratory Injury. Wear NIOSH-approved respirator.

Symbol	Property or Statement
	WARNING marking concerning Risk of Explosion.
	WARNING marking concerning Risk of Fire. Do not use solvents improperly.
	WARNING marking concerning Risk of Electric Shock. Properly connect power cord to appropriate outlet.

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NOTICE

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GROUNDING INSTRUCTIONS

This product must be grounded. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current. This product is equipped with a cord having a grounding wire with an appropriate grounding plug. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes and ordinances.

⚠ WARNING



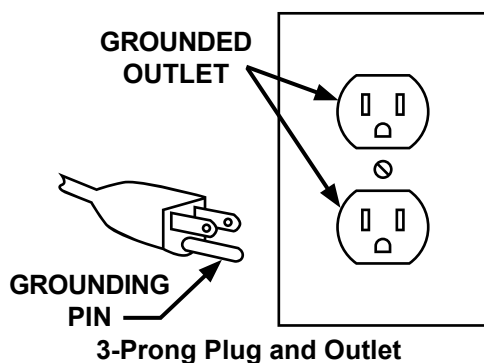
TO PREVENT ELECTRIC SHOCK AND DEATH FROM INCORRECT GROUNDING WIRE CONNECTION:

Improper installation of the grounding plug is able to result in a risk of electric shock. When repair or replacement of the cord or plug is required, do not connect the grounding wire to either flat blade terminal. The wire with insulation having an outer surface that is green with or without yellow stripes is the grounding wire.

Check with a qualified electrician or serviceman when the grounding instructions are not completely understood, or when in doubt as to whether the product is properly grounded. Do not modify the plug provided; if it does not fit the outlet, have the proper outlet installed by a qualified electrician.

Grounded Tools: Tools with Three Prong Plugs

This product is for use on a nominal 120-V circuit and has a grounding plug similar to the plug illustrated in **3-Prong Plug and Outlet**. Only connect the product to an outlet having the same configuration as the plug. Do not use an adapter with this product.



1. Tools marked with "Grounding Required" have a three wire cord and three prong grounding plug. The plug must be connected to a properly grounded outlet. If the tool should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user, reducing the risk of electric shock. **(See 3-Prong Plug and Outlet.)**
2. The grounding prong in the plug is connected through the green wire inside the cord to the grounding system in the tool. The green wire in the cord must be the only wire connected to the tool's grounding system and must never be attached to an electrically "live" terminal. **(See 3-Prong Plug and Outlet.)**
3. The tool must be plugged into an appropriate outlet, properly installed and grounded in accordance with all codes and ordinances. The plug and outlet should look like those in the preceding illustration. **(See 3-Prong Plug and Outlet.)**

NOTICE

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Extension Cords

1. Grounded tools require a three wire extension cord. Double Insulated tools can use either a two or three wire extension cord.
2. As the distance from the supply outlet increases, you must use a heavier gauge extension cord. Using extension cords with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible tool damage. **(See Table A.)**
3. The smaller the gauge number of the wire, the greater the capacity of the cord. For example, a 14 gauge cord can carry a higher current than a 16 gauge cord. **(See Table A.)**
4. When using more than one extension cord to make up the total length, make sure each cord contains at least the minimum wire size required. **(See Table A.)**
5. If you are using one extension cord for more than one tool, add the nameplate amperes and use the sum to determine the required minimum cord size. **(See Table A.)**
6. If you are using an extension cord outdoors, make sure it is marked with the suffix "W-A" ("W" in Canada) to indicate it is acceptable for outdoor use.
7. Make sure the extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified electrician before using it.
8. Protect the extension cords from sharp objects, excessive heat, and damp or wet areas.

Table A: Recommended Minimum Wire Gauge for Extension Cords* (120/240 Volt)					
NAMEPLATE AMPERES (at full load)	EXTENSION CORD LENGTH				
	25'	50'	75'	100'	150'
0 – 2.0	18	18	18	18	16
2.1 – 3.4	18	18	18	16	14
3.5 – 5.0	18	18	16	14	12
5.1 – 7.0	18	16	14	12	12
7.1 – 12.0	18	14	12	10	-
12.1 – 16.0	14	12	10	-	-
16.1 – 20.0	12	10	-	-	-

* Based on limiting the line voltage drop to five volts at 150% of the rated amperes.

Specifications

	58479 3 Stage	58149 5 Stage
Electrical Rating	120VAC/60Hz/11A	120VAC/60Hz/13A
Cup Capacity	32 fl. oz.	
Tip Size	1.3mm	1.3mm & 1.8mm

NOZZLE CHART			
Nozzle Size	Material Thickness		
	Thin	Medium	Thick
0.8 mm	X		
1.3 mm		X	
1.8 mm		X	
2.2 mm			X

HOUSEHOLD USE ONLY.

NOTICE

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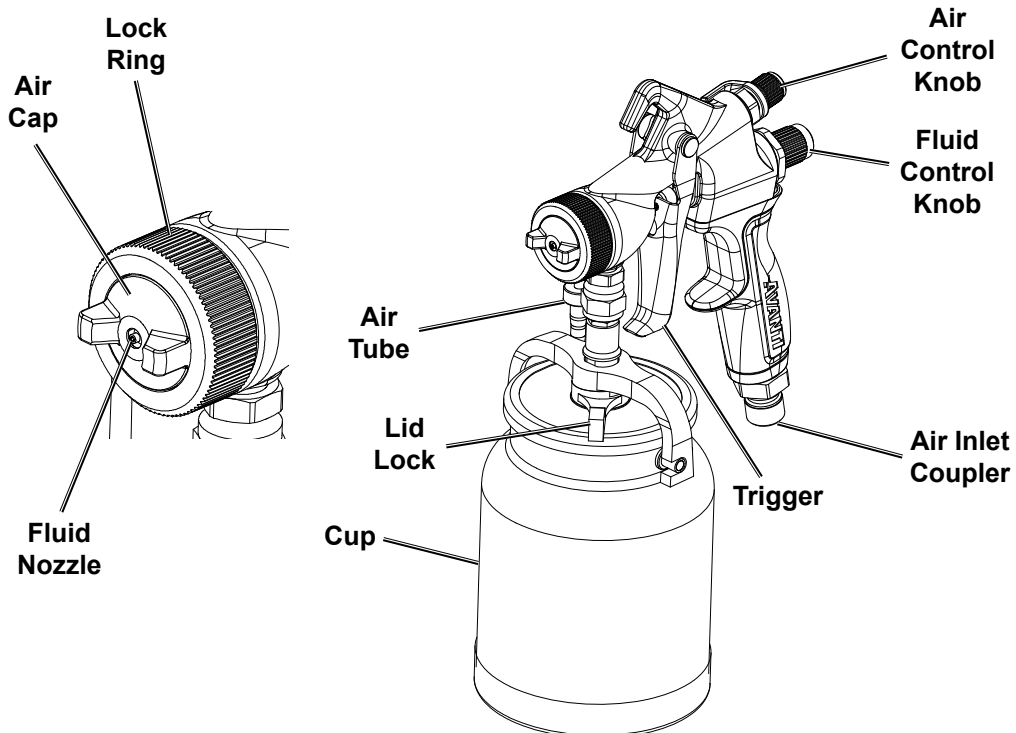
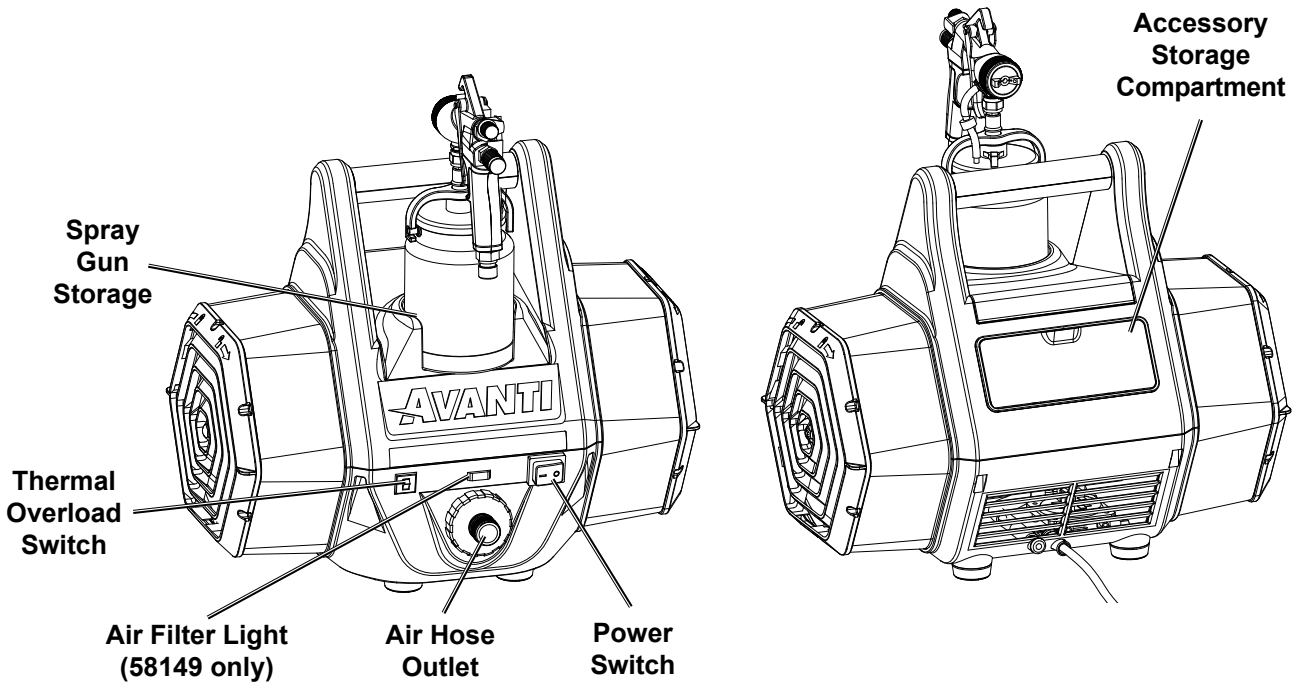
SAFETY

Set-Up: Before Use



Read the **ENTIRE** IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

Components and Controls



SETUP

OPERATION

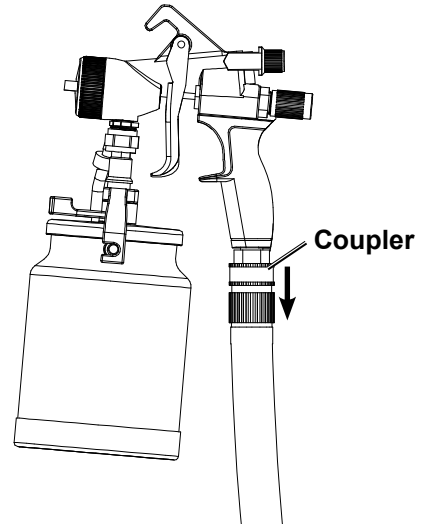
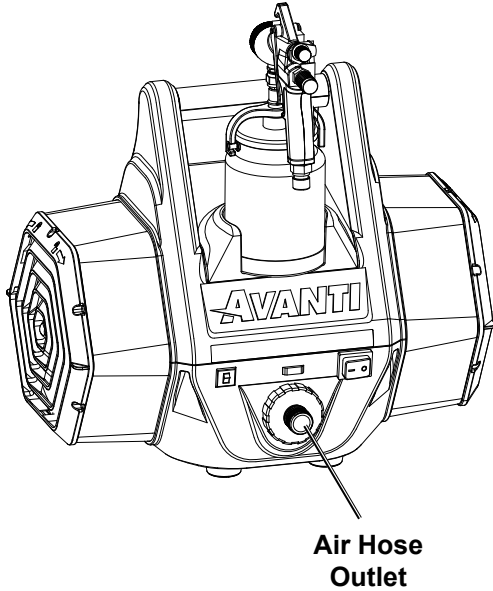
MAINTENANCE

NOTICE

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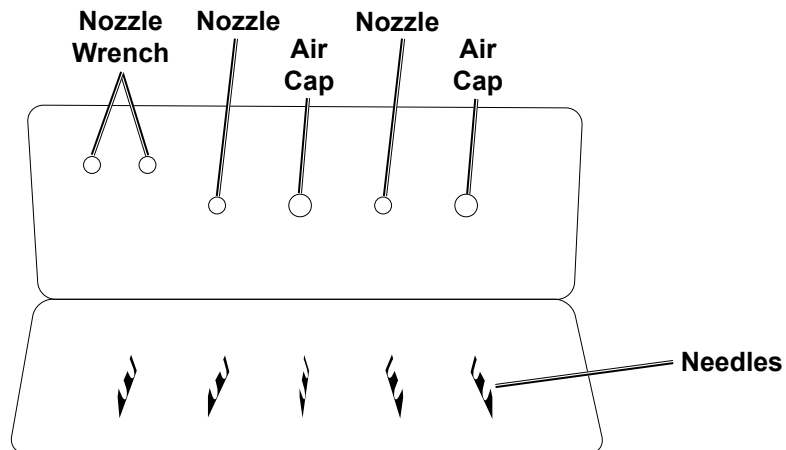
Assembly

1. Thread Air Hose onto Spray Hose Outlet by hand until secure. (58149 has additional Whip Hose attached to end of Air Hose.)
2. Attach Spray Gun to Air Hose by pulling down Coupler, inserting Spray Gun Coupler fully into Air Hose, then releasing Coupler. Pull on Air Hose to make sure Spray Gun is fully seated.



Accessory Storage Compartment

Use compartment on back of Sprayer to store two Nozzle-Needle Sets and Nozzle Wrench.



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Operating Instructions



Read the ENTIRE IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

Inspect tool before use, looking for damaged, loose, and missing parts. If any problems are found, do not use tool until repaired. Damaged or missing parts can increase risk of electric shock.

Before First Use



TO PREVENT SERIOUS INJURY: Do not adjust or tamper with any control or component in a way not specifically explained within this manual. Improper adjustment can result in tool failure or other serious hazards.

NOTICE: Before first use, clean the Spray Gun thoroughly.

If not removed, the material used for testing and corrosion prevention will contaminate paint.

Workpiece and Work Area Set Up

1. Designate a work area that is clean and well lit. The work area must not allow access by children or pets to prevent distraction and injury.
2. Before spraying, mask nearby objects not being sprayed and lay cloths (not included) on the floors.

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NOTICE

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Pre-Cleaning



**RISK OF EXPLOSION -
DO NOT SPRAY FLAMMABLE LIQUIDS.**

a. Follow solvent manufacturer's clean up instructions and safety precautions.

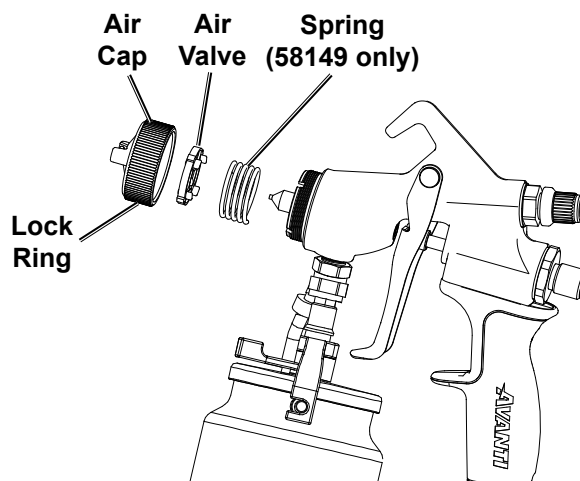
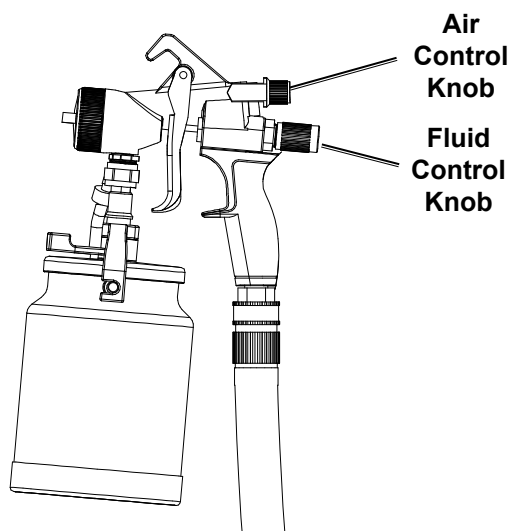
- b. If collecting flushed solvents in metal container, transfer to nonmetal container, and flush metal container.
- c. Work far away from any ignition sources in a vapor free area.
- d. Keep class ABC fire extinguisher nearby.

WARNING! TO PREVENT SERIOUS INJURY: Do not spray or clean with liquids having a flash point less than 38°C (100°F).

Only use water or mineral spirits for priming and cleaning.
Only use water-based or oil-based paint for spraying.

NOTICE: Do not immerse Spray Gun Body in solvent. Do not allow solvent to enter the air inlet.

1. Designate a container for waste.
2. Remove Cup and fill with mineral spirits (sold separately) until a quarter full.
3. Replace Cup.
4. Turn Air Control Knob clockwise until it stops. It will be fully open.
5. Turn Fluid Control Knob counterclockwise until two threads are showing.
7. Point Spray Gun at interior side of waste container. Depress Trigger and slightly shake Spray Gun while spraying solvent into the container.
8. Turn off and unplug Sprayer, point Spray Gun into waste container and depress Trigger again to make sure no air pressure remains.
9. Remove Cup and Lid, wipe with clean cloth, and allow to dry.
10. Turn Lock Ring counterclockwise by hand to remove, then remove Air Cap, Air Valve, and Spring (58149 only) and allow them to dry.



6. Plug Sprayer into grounded 120VAC outlet, then turn Sprayer on.

11. Reassemble Spray Gun.

NOTICE: Do not use any kind of lubricant. The lubricant will mix with paint, causing poor results.

Waste Disposal

After cleaning, dispose of waste according to the solvent manufacturer's directions and local hazardous waste standards.

NOTICE

Clean the Spray Gun Body and Cup IMMEDIATELY after EVERY use and when it will be idle for more than 30 minutes. Delayed or inadequate cleaning will permanently clog the Spray Gun. Paint hardens quickly and permanently inside Spray Gun.

Spray Gun Setup and Adjustment

⚠️ WARNING

TO PREVENT SERIOUS INJURY: Do not adjust or tamper with any control or component in a way not specifically explained within this manual. Improper adjustment can result in tool failure or other serious hazards.



**RISK OF EXPLOSION -
DO NOT SPRAY FLAMMABLE LIQUIDS.**

WARNING! TO PREVENT SERIOUS INJURY: Do not spray or clean with liquids having a flash point less than 38°C (100°F).

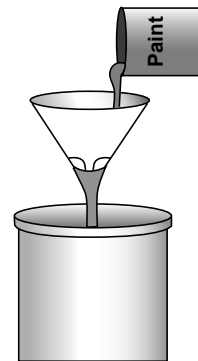
Only use water or mineral spirits for priming and cleaning.

Only use water-based or oil-based paint for spraying.

Paint Preparation and Filling

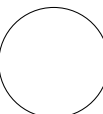
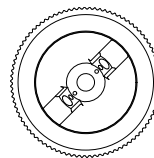
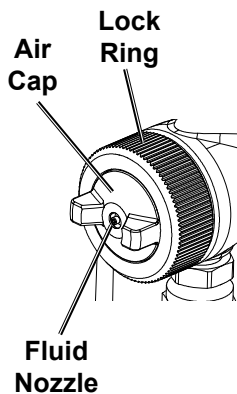
Note: Proper paint mixture is essential. Follow paint manufacturer's directions for thinning. Most paints will spray easily if they are thinned properly.

1. Thin paint according to manufacturer's directions and mix thoroughly.
2. Remove Cup.
3. Carefully strain the paint into the Cup through a paint strainer or a piece of cheesecloth. Fill the Cup 3/4 full.
4. Replace Cup.

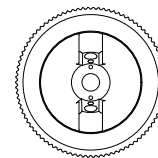


Fan Pattern

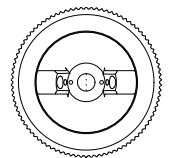
1. To change fan pattern:
 - a. **58149:** Lock Ring will be loose. Keep Fluid Nozzle flush with Air Cap unless adjusting Pattern (*see Pattern Adjustment (58149 only) on page 14*). Turn Air Cap clockwise until desired fan pattern is selected.



Cone



Horizontal



Vertical

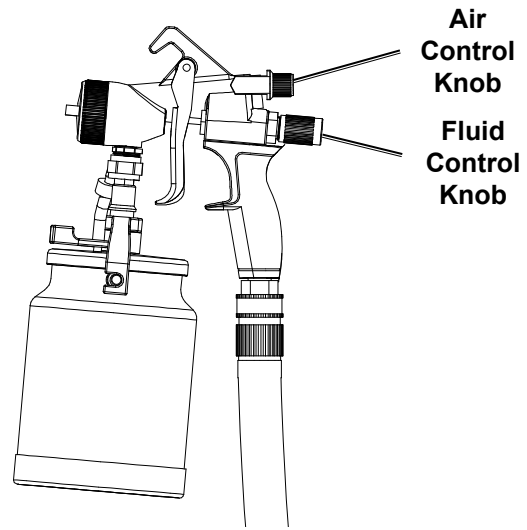
- b. **58479:** Loosen Lock Ring by hand until Air Cap moves freely in clockwise direction, then Turn Air Cap clockwise until desired fan pattern is selected. Tighten Air Cap.

NOTICE

Clean the Spray Gun Body and Cup IMMEDIATELY after EVERY use and when it will be idle for more than 30 minutes. Delayed or inadequate cleaning will permanently clog the Spray Gun. Paint hardens quickly and permanently inside Spray Gun.

Fluid/Air Adjustment

1. Turn Air Control Knob clockwise until it stops. It will be fully open.
2. Turn Fluid Control Knob counterclockwise until two threads are showing.
3. Plug Sprayer into grounded 120VAC outlet, then turn Sprayer on.
4. Spray on piece of scrap material in short bursts, then check consistency.
5. If necessary, slowly adjust Fluid Control Knob and/or Air Control Knob, then spray on scrap material until desired consistency is achieved.
6. If paint is too thick, thin paint according to manufacturer's instructions and repeat instructions above.



SAFETY

SETUP

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NOTICE

Clean the Spray Gun Body and Cup **IMMEDIATELY** after **EVERY** use and when it will be idle for more than 30 minutes. Delayed or inadequate cleaning will permanently clog the Spray Gun. Paint hardens quickly and permanently inside Spray Gun.

Spraying



**RISK OF EXPLOSION -
DO NOT SPRAY FLAMMABLE LIQUIDS.**

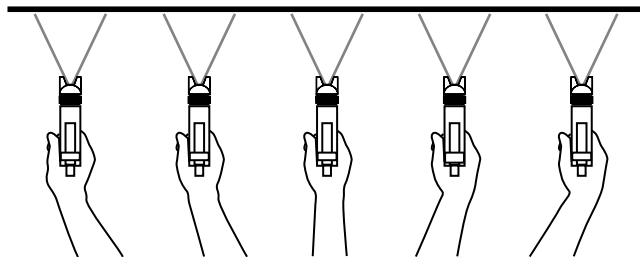
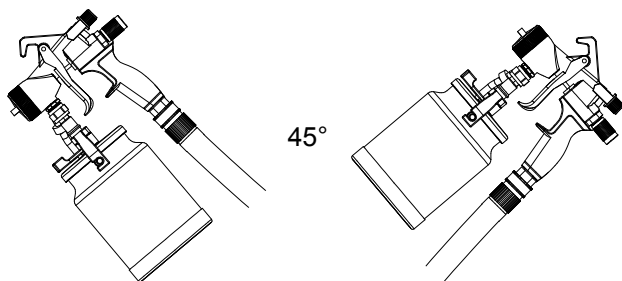
WARNING! TO PREVENT SERIOUS INJURY: Do not spray or clean with liquids having a flash point less than 38°C (100°F).

Only use water or mineral spirits for priming and cleaning.

Only use water-based or oil-based paint for spraying.

Proper Spraying Techniques

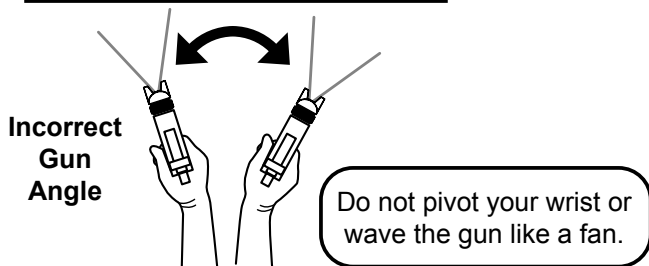
Keep the Spray Gun within 45° up or down from the workpiece. Keep Cup full, if Spray Gun sputters, refill Cup.



Correct Gun Angle

Move your arm, not just your wrist.

Point gun directly towards the surface and maintain an even, steady distance and speed.



Pattern Adjustment (58149 only)

While Spray Gun is facing forward and Trigger is released:

- To increase pattern size, turn Air Cap clockwise.
- To decrease pattern size, turn Air Cap counterclockwise.

To Avoid Paint Build Up

Apply two thin coats rather than one thick coat. Overlap 1/3 to 1/2 on second coat.

Start moving the Spray Gun before fully depressing Trigger.

Fully depress Trigger before contacting the workpiece.

When finished with the stroke, release the Trigger while still moving the Spray Gun and after passing the workpiece.

- Depress Trigger fully and move Spray Gun in parallel strokes to the workpiece.
- Keep the distance from the workpiece between 6" and 8".

Note: Do not stop moving the Spray Gun while spraying. If the Spray Gun stops even briefly while spraying the paint will build up and run down the workpiece.

To avoid clogs, check Fluid Nozzle regularly for dried paint and remove with a cloth as needed.

Note: The motor has thermal overload protection. If unit overheats, allow approximately 30 minutes for unit to cool, then press Thermal Overload Switch. If Air Filter Light (58149 only) comes on, check Air Filters according to ***Air Filter Maintenance on page 17.***

Note: The stroke speed and Fluid Control Knob adjustment will determine how much paint is being applied.

- To prevent accidents, after use, release Trigger, turn off and unplug Sprayer, safely discharge any residual air pressure, and release Trigger again.
- Clean the Spray Gun and Cup IMMEDIATELY after EVERY use and when it will be idle for more than 30 minutes. Delayed or inadequate cleaning will permanently clog the Spray Gun.**

NOTICE

Clean the Spray Gun Body and Cup IMMEDIATELY after EVERY use and when it will be idle for more than 30 minutes. Delayed or inadequate cleaning will permanently clog the Spray Gun. Paint hardens quickly and permanently inside Spray Gun.

After Every Use



**RISK OF EXPLOSION -
DO NOT SPRAY FLAMMABLE LIQUIDS.**

- a. Follow solvent manufacturer's clean up instructions and safety precautions.

WARNING! TO PREVENT SERIOUS INJURY: Do not spray or clean with liquids having a flash point less than 38°C (100°F).

Only use water or mineral spirits for priming and cleaning.

Only use water-based or oil-based paint for spraying.

Post-Cleaning

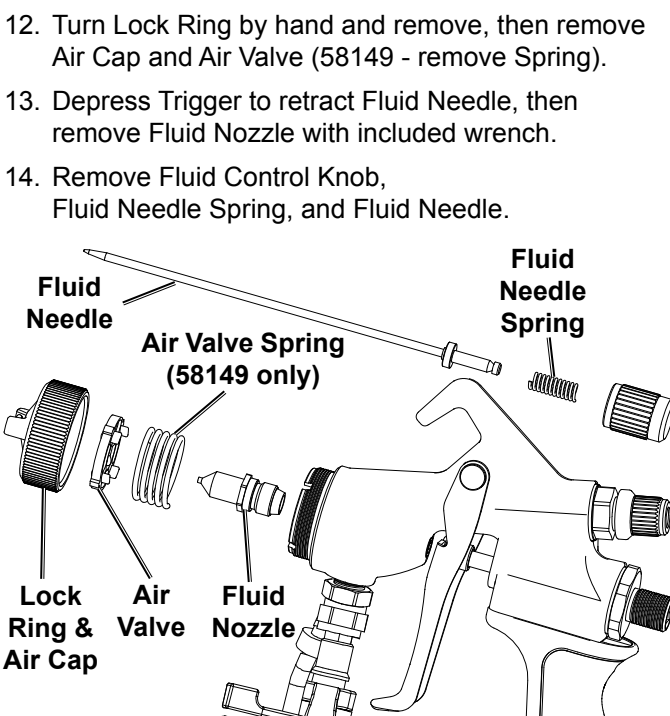
NOTICE: Do not immerse Spray Gun Body in solvent. Do not allow solvent to enter the air inlet.

1. Use solvent recommended by paint manufacturer.
2. Designate container for waste.
3. Remove Cup, then remove paint from Cup and dispose of properly.
4. Add 1/4 cup solvent (sold separately) to Cup. Replace Cup, then shake Spray Gun for several seconds.
5. Remove Cup, pour solvent into waste container and wipe away any paint residue from Cup and Lid with clean cloth.
6. Add solvent to Cup until one quarter full. Replace Cup.
7. Turn Air Control Knob clockwise until it stops. It will be fully open.
8. Turn Fluid Control Knob counterclockwise until two threads are showing.
9. Plug Sprayer into grounded 120VAC outlet, then turn Sprayer on.
10. Point Spray Gun at interior side of waste container. Depress Trigger and slightly shake Spray Gun while spraying solvent into the container. Once the Cup is empty, repeat the process until the solvent comes out clean.
11. Turn off and unplug Sprayer, point Spray Gun into waste container and depress Trigger again to make sure no air pressure remains.

Waste Disposal

After cleaning, dispose of waste according to the solvent manufacturer's directions and local hazardous waste standards.

- b. If collecting flushed solvents in metal container, transfer to nonmetal container, and flush metal container.
- c. Work far away from any ignition sources in a vapor free area.
- d. Keep class ABC fire extinguisher nearby.



12. Turn Lock Ring by hand and remove, then remove Air Cap and Air Valve (58149 - remove Spring).
 13. Depress Trigger to retract Fluid Needle, then remove Fluid Nozzle with included wrench.
 14. Remove Fluid Control Knob, Fluid Needle Spring, and Fluid Needle.
 15. Inspect parts and soak in solvent as necessary. Use included brush and nozzle cleaning tool to remove any paint.
- Note:** To prevent damage, do not bend Fluid Needle.
16. Wipe down Spray Gun Body with a clean cloth and solvent.
 17. Make sure all parts are dry and free from residual paint, then reassemble Spray Gun.

NOTICE: Do not use any kind of lubricant. The lubricant will mix with paint, causing poor results.

NOTICE

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User-Maintenance Instructions



Procedures not specifically explained in this manual must be performed only by a qualified technician.

⚠ WARNING

TO PREVENT SERIOUS INJURY:

Turn off and unplug sprayer and safely discharge any residual air pressure in the tool before performing any inspection, maintenance, or cleaning procedures.

TO PREVENT SERIOUS INJURY FROM TOOL FAILURE: Do not use damaged equipment.

If abnormal noise, vibration, or leaking air occurs, have the problem corrected before further use.

Inspection

Note: These procedures are in addition to the regular checks and maintenance explained as part of the regular operation of the tool.

BEFORE EACH USE, inspect the general condition of the tool. Check for:

- damaged cord/electrical wiring,
- loose hardware,
- misalignment or binding of moving parts,
- clogged fluid nozzle or air cap,
- cracked or broken parts, and
- any other condition that may affect its safe operation.

Lubrication

Do not use any kind of lubricant in Spray Gun.

Auto Shutoff

The motor has thermal overload protection. If unit overheats, allow approximately 30 minutes for unit to cool, then press Thermal Overload Switch.

Storage

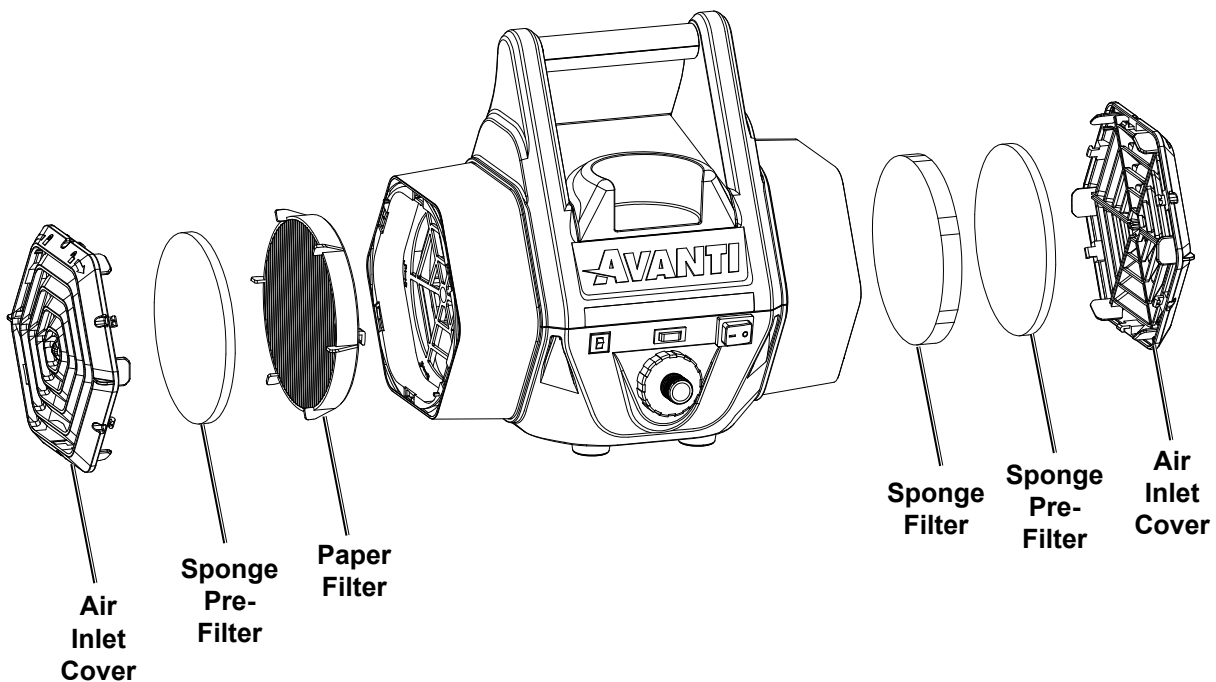
Store in a dry, secure area out of reach of children.

NOTICE

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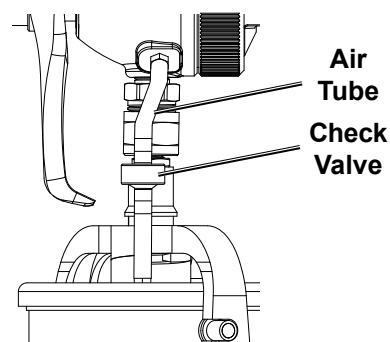
Air Filter Maintenance

1. Remove Air Inlet Covers by turning counterclockwise.
2. Remove and inspect Filters. Clean Filters as necessary. Replace Filters if they cannot be cleaned sufficiently.
3. **Cleaning:**
 - a. Sponge Filters - Wash in warm water and mild detergent several times. Rinse. Squeeze out excess water and allow to dry completely.
 - b. Paper Filter - To prevent injury from dust and debris, wear ANSI-approved safety goggles, NIOSH-approved dust mask/respirator, and heavy-duty work gloves. In a well ventilated area, away from bystanders, use pressurized air (no more than 15 PSI) to blow dust out of the Filter.
4. Install Filters and replace Air Inlet Covers by turning clockwise.



Replace Air Tube

1. Remove Air Tube from Spray Gun and Cup Lid.
2. Orient new Air Tube so that tapered end of Check Valve is facing down.
3. Push ends of new Air Tube over fittings on Spray Gun and Cup Lid. If necessary, add a small amount of water as lubricant to interior of tube.





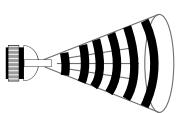



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Troubleshooting - Spray Pattern Diagnosis

Note: The drawings on the left below resemble symptoms of spray pattern problems. Refer to the accompanying possible causes and likely solutions to the right.

Problem		Possible Causes	Likely Solutions
	Heavy center pattern	<ol style="list-style-type: none"> 1. Fluid Control Knob needs adjustment. 2. Air Control Knob needs adjustment. 3. The paint is too thick. 	<ol style="list-style-type: none"> 1. Turn Fluid Control Knob counterclockwise. 2. Turn Air Control Knob clockwise until it stops. 3. Thin paint according to the manufacturer's instructions.
	Light center pattern	<ol style="list-style-type: none"> 1. Fluid Control Knob needs adjustment. 2. Air Control Knob needs adjustment. 3. Dried paint on Nozzle. 4. Needle and/or Nozzle damaged. 	<ol style="list-style-type: none"> 1. Turn Fluid Control Knob clockwise. 2. Turn Air Control Knob counterclockwise. 3. Clean Nozzle. 4. Inspect Needle and Nozzle for damage. Replace as necessary.
	Heavy top/ bottom pattern	<ol style="list-style-type: none"> 1. Air Cap plugged. 2. Lock Ring loose. 3. Dried paint on Nozzle. 4. Needle and/or Nozzle damaged. 	<ol style="list-style-type: none"> 1. Clean Air Cap. 2. Tighten Lock Ring. 3. Clean Nozzle. 4. Inspect Needle and Nozzle for damage. Replace as necessary.
	Pattern on right or left only	Dried paint or debris on Nozzle.	Clean Nozzle.
	Jerky or Fluttering Spray	<ol style="list-style-type: none"> 1. Loose or damaged Air Cap. 2. Paint level low. 3. Cup and/or Lid loose. 4. Clogged Check Valve. 	<ol style="list-style-type: none"> 1. Tighten Air Cap. 2. Refill paint Cup. 3. Tighten Cup and/or Lid. 4. Clean Check Valve.
 <p>Follow all safety precautions whenever diagnosing or servicing the tool. Disconnect power supply before service.</p>			

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General Troubleshooting Chart

Problem	Possible Causes	Likely Solutions
Sputtering Spray	<ol style="list-style-type: none"> 1. Low paint level. 2. Cup tipped. 3. Cup and/or Lid loose. 4. Clogged Check Valve. 5. Air Hose loose. 6. Nozzle Seal damaged. 	<ol style="list-style-type: none"> 1. Refill. 2. Hold upright. 3. Tighten Cup and/or Lid. 4. Replace Air Hose. 5. Tighten Air Hose. 6. Have qualified technician replace seal.
Will Not Spray	<ol style="list-style-type: none"> 1. No power at Spray Gun. 2. Thermal overload tripped. 3. Fluid too thick. 4. Cup and/or Lid loose. 5. Clogged Check Valve. 	<ol style="list-style-type: none"> 1. Check Power Cord. 2. Reset Thermal Overload Switch. 3. Thin fluid. 4. Tighten Cup and/or Lid. 5. Clean Check Valve.
Overspray (Paint drifting to unintended objects.)	<ol style="list-style-type: none"> 1. Improper application speed. 2. Improper distance from workpiece. 3. Airflow too high. 4. Clogged Check Valve. 	<ol style="list-style-type: none"> 1. Move moderately and parallel. 2. Adjust distance. 3. Reduce Airflow. 4. Replace Air Hose.
Air Filter Light comes on (58149 only)	Dirty filter(s)	Clean or replace filters
 <p>Follow all safety precautions whenever diagnosing or servicing the tool. Disconnect power supply before service.</p>		

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PLEASE READ THE FOLLOWING CAREFULLY

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Parts Lists and Diagrams

Spray Gun Parts List

Part	Description	Qty	Part	Description	Qty
1	Gun Body	1	23	Fluid Needle Sleeve	1
2	Fluid Nozzle	1	24	Air Valve	1
3	Spring (58149 only)	1	25	Fluid Needle Compression Ring	1
4	Air Valve	1	26	Needle Plug Sleeve Sealing Gasket1	1
5	Air Cap	1	27	Fluid Needle Protective Sleeve	1
6	Gasket	1	28	Fluid Needle Sealing Screw	1
7	Lock Ring	1	29	Fluid Needle Sealing Spring	1
8	Vent Screw	2	30	Fluid Needle Plug Seal	1
9	Plug	1	31	Screw	1
10	Fluid Inlet	1	32	Air Control Knob	1
11	Handle	1	33	Gasket 14*17*0.4mm	1
12	Handle Tube	1	34	Airflow Adjustment Seat	1
13	Handle Cover	1	35	O-Ring 7.5*1.8	1
14	Air Inlet	1	36	Airflow Adjustment Valve	1
15	Trigger Pin	1	37	Washer	1
16	Trigger	1	38	C-Clip	1
17	Fluid Control Knob	1	39	Cup Cover Assembly	1
18	Fluid Needle Spring	1	40	Air Tube	2
19	Fluid Needle Assembly	1	41	Check Valve	1
20	Fluid Needle Adjustment Seat	1	42	Sealing Gasket	1
21	Fluid Needle Sealing Gasket	1	43	Cup Assembly	1
22	Air Valve Spring	1			

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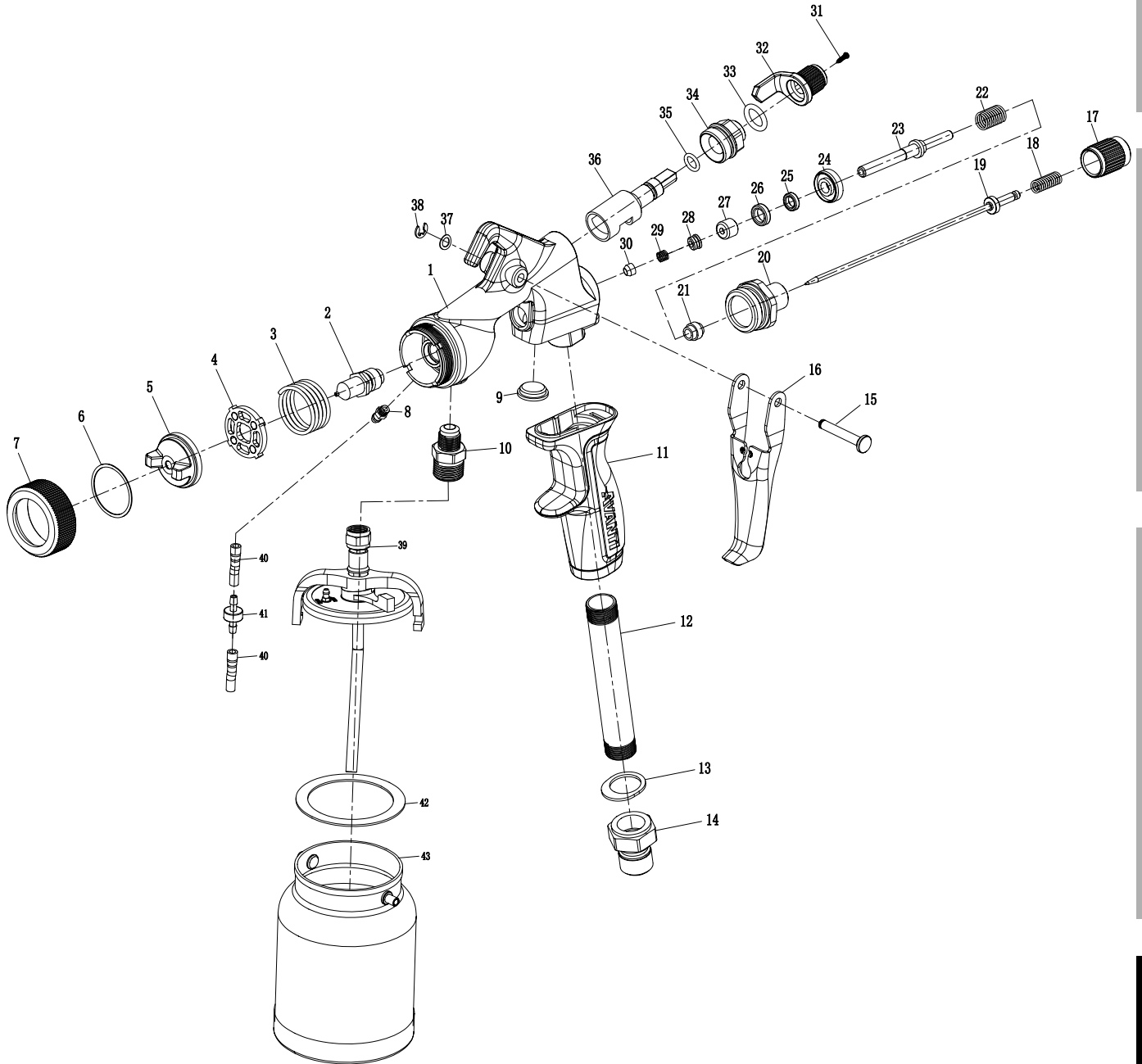
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Spray Gun Assembly Diagram



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Sprayer Parts List

Part	Description	Qty	Part	Description	Qty
1	Air Inlet Cover	1	18	Sponge Block	1
2	Sponge Pre-Filter	2	19	Paper Filter	1
3	Sponge Filter	1	20	Spray Hose Outlet Cover	1
4	Filter Case	2	21	Air Filter Sensor (58149 only)	1
5	Screw	12	22	Bottom Housing	1
6	Cover	2	23	Thermal Overload Switch	1
7	Sponge Seal	2	24	Air Filter Light (58149 only)	1
8	Sponge Block	1	25	Power Switch	1
9	Sponge Strip	2	26	Screw	4
10a	3 Stage Motor Assembly (58479 only)	1	27	Foot	4
10b	5 Stage Motor Assembly (58149 only)		28	Screw	4
11	Spray Gun Holder	1	29	Power Cord Clamp	1
12	Screw	3	30	Screw	2
13	Handle	2	31	Power Cord	1
14	Sponge Seal	4	32	Power Cord Sleeve	1
15	Upper Housing	1	33	Spray Gun	1
16	Accessory Storage Box	1	34	Hose Assembly	1
17	Accessory Storage Cover	1	35	Whip Hose (not shown)	1

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Record Product's Serial Number Here: _____

Note: If product has no serial number, record month and year of purchase instead.

Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts. Parts may not be interchangeable. Specify UPC number when ordering:

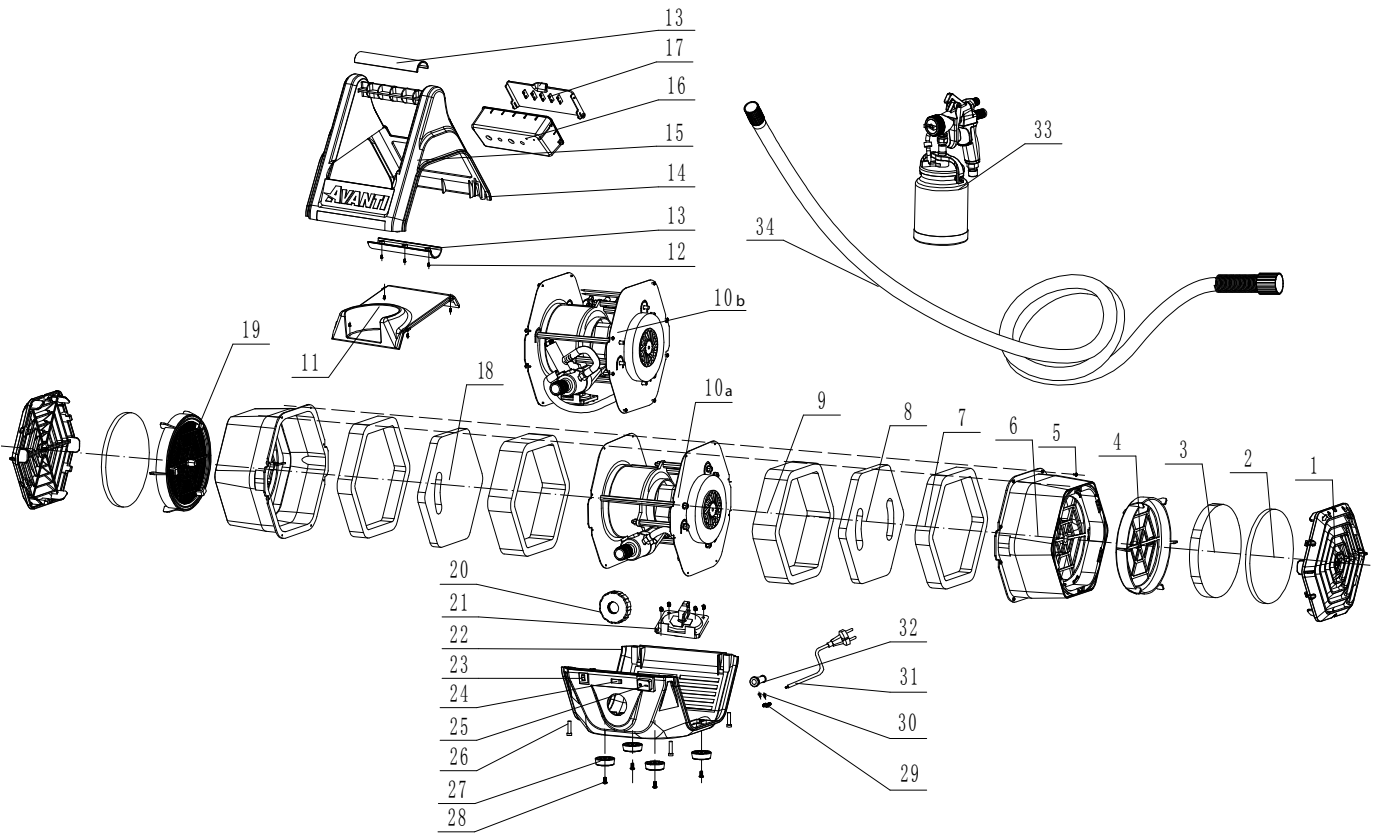
58479 3 Stage: 193175440082

58149 5 Stage: 193175432933

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Sprayer Assembly Diagram



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Limited 90 Day Warranty

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

The logo for AVANTI features the word "AVANTI" in a bold, black, sans-serif font. A stylized white arrowhead or wing shape is positioned to the left of the letter 'A', pointing towards the right. A small trademark symbol (TM) is located at the bottom right of the word.

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