

CENTRAL PNEUMATIC
Professional®

Gravity Feed Spray Gun

(High Volume - Low Pressure)

Model 43430

ASSEMBLY AND OPERATING INSTRUCTIONS



Diagrams within this manual may not be drawn proportionally.
Due to continuing improvements, actual product may differ slightly from the product described herein.
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Read this material before using this product.
Failure to do so can result in serious injury.
SAVE THIS MANUAL.

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For technical questions or replacement parts, please call 1-800-444-3353.

UNPACKING

When unpacking, check to make sure that the product is intact and undamaged. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

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.

IMPORTANT SAFETY INFORMATION

In this manual, on the labeling, and all other information provided with this product:



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.

DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to personal injury.

CAUTION

CAUTION, without the safety alert symbol, is used to address practices not related to personal injury.

Specifications

Nozzle Size	0.0546 inches (1.4 mm)
Air Inlet	1/4 inch NPS
Required Pressure	15 to 50 PSI
Air Consumption	9.5 to 14.8 CFM
Material Output	1 to 3 cubic inches per minute
Cup Size	20 oz.
Weight	2 lbs.

Save This Manual

You will need the manual for the safety warnings and precautions, assembly instructions, operating and maintenance procedures, parts list and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep the manual and invoice in a safe and dry place for future reference.

Safety Warnings and Precautions

WARNING: When using tool, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment.

Read all instructions before using this tool!

1. **Keep work area clean.** Cluttered areas invite injuries.
2. **Observe work area conditions.** Do not use machines or power tools in damp or wet locations. Don't expose to rain. Keep work area well lighted. Do not use electrically powered tools in the presence of flammable gases or liquids.
3. **Keep children away.** Children must never be allowed in the work area. Do not let them handle machines, tools, or extension cords.
4. **Store idle equipment.** When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
5. **Do not force tool.** It will do the job better and more safely at the rate for which it was intended. Do not use inappropriate attachments in an attempt to exceed the tool capacity.
6. **Use the right tool for the job.** Do not attempt to force a small tool or attachment to do the work of a larger industrial tool. There are certain applications for which this tool was designed. Do not modify this tool and do not use this tool for a purpose for which it was not intended.
7. **Dress properly.** Do not wear loose clothing or jewelry. Protective, electrically non-conductive clothes and non-skid footwear are recommended when working. Wear restrictive hair covering to contain long hair.

8. **Use eye and ear protection.** Always wear ANSI approved chemical splash safety goggles.
9. **Use breathing protection.** Wear an OSHA or NIOSH approved dual filter dust mask or respirator mask when working around metal, wood, and chemical dusts and paint mists. Be sure the mask fits. Beards and facial hair may keep masks from sealing properly. Change filters often. **Disposable paper masks are not adequate.**
10. **Do not overreach.** Keep proper footing and balance at all times. Do not reach over or across running machines.
11. **Maintain tools with care.** Keep tools clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and, if damaged, have them repaired by an authorized technician. The handles must be kept clean, dry, and free from oil and grease at all times.
12. **Remove adjusting keys and wrenches.** Check that keys and adjusting wrenches are removed from the tool or machine work before using.
13. **Stay alert.** Watch what you are doing, use common sense. Do not operate any tool when you are tired.
14. **Check for damaged parts.** Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts; any broken parts or mounting fixtures; and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician. Do not use the tool if any switch does not turn On and Off properly.
15. **Replacement parts and accessories.** When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with this tool. Approved accessories are available from Harbor Freight Tools.
16. **Do not operate tool if under the influence of alcohol or drugs.** Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.
17. **Avoid Lead-based paints.** Before beginning any paint removal process, determine whether the paint contains lead. This can be done by the local health department or paint professional using a paint analyzer to check the lead content of the paint to be removed. **Lead-based paint should only be removed by a professional and should not be removed by using a heat gun.**
18. **Clean sprayer with care.** Use nonflammable solvents. Avoid solvents that can be forcibly ejected from the sprayer nozzle and air passages.
19. **Do not spray near open flames, pilot lights, stoves, heaters, or any other heat source.** Most solvents and coatings are highly flammable, particularly when spraying. The work area must always have adequate ventilation.
20. **Do not smoke while spraying.** Most solvents and coatings are highly flammable, especially when spraying.

21. **Read all information concerning coating products and cleaning solvents.** Chlorinated solvents (e.g., 1-1-1 Trichlorethylene and Methylene Chloride, also known as methyl chloride) can chemically react with aluminum and may explode. Many paint sprayers contain aluminum. If you have any doubt about potential chemical reactions, contact the solvent or coating manufacturer.
22. **Materials used when painting or cleaning may be harmful or fatal if inhaled or swallowed.** Use only in an area with adequate ventilation. Use a respirator or mask when painting or using cleaning solvents (see number 9 of this list).
23. **Never release the sprayer lid while the cup is pressurized.** The paint could burst out and contaminate your body.
24. **Be aware of other people and animals.** Do not use the sprayer near children or animals. Keep all visitors away from the work area. Do not let children or visitors handle tools.
25. **Industrial applications must follow OSHA requirements.**
26. **Be aware of air hoses and their connections.** Do not trip over hoses. Make sure all connections are tight.
27. **Maintenance.** For your safety, maintenance should be performed regularly by a qualified technician.

Warning: The warnings, cautions, 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.

Warning: The brass components of this product contain lead, a chemical known to the State of California to cause birth defects (or other reproductive harm). (California Health & Safety code § 25249.5, *et seq.*)

Unpacking

When unpacking, check to make sure that all the parts are included. (See the Parts List and Assembly Drawing at the end of this manual.) If any parts are missing or broken, please call Harbor Freight Tools at the number on the cover of this manual as soon as possible.

Assembly

During the following procedure, refer to the Assembly Drawing on page 10.

1. Before operation, check all sprayer seals before connecting to the air supply.
2. Insert the Filter (8) into the Paint Connector (25).
3. Attach and fully secure the Plastic Cup (9) to the Paint Connector (25).
4. Attach and fully secure the Regulator (16) to the Air Connector (7). Attach the Air Connector to the Gun Body (26) .

5. While holding the open end of the air supply hose, momentarily turn on the compressor air to clean out any debris within the hose.
7. Connect the air supply hose to the Air Regulator on the Sprayer and secure.
8. Tighten the Fluid Nozzle (18) using the Spanner Wrench (12).
9. Clean the sprayer out by flushing with a nonflammable solvent.

Operation

Filling and Adjusting the Air Spray Gun

1. Remove the Cover (10) and fill the Plastic Cup with the material to be sprayed.
2. Replace and tighten the Cup Cover.
3. Prepare a spraying test area.
4. Turn on the air supply and adjust the Air Regulator (16) on the Gun Body to between 15 and 50 PSI.
5. Point the Air Nozzle in the direction of the spray test area and press the Trigger (4).
6. Adjust the spray pattern (horizontal or vertical) by turning the Nozzle (17).
7. Adjust the air-to-material mixture by adjusting the Air Adjusting Valve (15).
8. Adjust the spray width using the Fluid Control Knob (2). Do not unscrew completely.

Paint and Materials Preparation

Verify with the paint or materials supplier the percentage of thinning required for use with a High Volume-Low Pressure (HVLP) Sprayer. Try thinning a small amount and testing the spray action. Thoroughly mix material before testing.

Viscosity

Viscosity is the technical term used to indicate the liquidity (thickness or thinness) of the material to be sprayed. Viscosity is measured in the number of seconds required for the material to pass through a Viscosimeter. This Sprayer can spray materials with a viscosity ranging from 10, to a maximum of 60. Material with a higher viscosity can be used only with water-soluble products (outdoor and indoor wall applications). Use high quality products. The following table gives some guidelines on thinning.

PAINT OR MATERIAL	VISCOSITY	THINNING RE- QUIREMENTS
Filler	10 to 20	No thinning
Wood Stain	15 to 25	No thinning
2-Pack Paint	20 to 35	See manufacturer guidelines
Oil Base Paint	35 to 40	See manufacturer guidelines
Water-soluble or Fin- ishing Products	40 and higher	See manufacturer guidelines

To test the viscosity of a material:

1. Place your finger over a Viscosimeter (not supplied) output hole.
2. Fill the Viscosimeter to the top with the material to be sprayed.
3. While holding the Viscosimeter over the material source can, let go of the output hole and count the number of seconds it takes for it to empty completely. The number of seconds is the viscosity rating.

Spraying Techniques

1. While spraying, move the Air Spray Gun in parallel strokes to the object being painted.
2. Keep the distance from the Air Spray Gun to the object being painted to 4 to 12 inches. This may be slightly different depending on the flow adjustment and the material being sprayed.
3. Release the Trigger (4) at the end of each forward movement; Pull the Trigger again on the return movement.

4. When using a vertical pattern, move the Spray Gun in a horizontal motion; With a horizontal pattern, move the Spray Gun in a vertical motion. The round pattern requires a greater distance from the object being painted.

Maintenance

The Air Spray Gun must be thoroughly cleaned immediately after use. If the paint dries inside the Air Spray Gun, cleaning is much more difficult and it may no longer be possible to use it. While doing this, refer to the Assembly Drawing on the last page.

Warning: Do this procedure in a well ventilated area, away from flames.

To clean the **Air Spray Gun**:

1. Remove the paint Plastic Cup (9) from the Air Spray Gun.
2. Remove Cup Cover (10) and pour any residual paint into the paint container and seal it.
3. Pour thinner (nonflammable) into the Cup. Or, if water-based paint was used, add water. Replace Lid.
4. Reattach the Plastic Cup to the Air Spray Gun and shake liquid inside Cup.
5. Turn on the Air Supply and spray the liquid on a piece of scrap material.
6. Repeat this procedure until the spray output is free of paint.

To Clean the Air Nozzle and Paint Needle

This procedure need only be done if the Air Spray Gun becomes clogged. To clean the Nozzle (17) and Paint Needle (32):

1. Unscrew the Air Nozzle (17).
2. Remove the Fluid Nozzle (18).
3. Completely loosen (turn counterclockwise) the Fluid Control Knob (2).
4. Remove the Teflon Seal (20) and needle Spring (22).
5. Push out the Paint Needle (32).

Do not use any tools to do this. The needle could be damaged. If the needle does not come out easily, loosen the Screw for Teflon Seal (20). The Needle Guide Hose can remain inside.

Caution: Materials used when painting or cleaning may be harmful or fatal if inhaled or swallowed. Use only in an area with adequate ventilation. Use a respirator or mask when painting or using cleaning solvents. Do not use around flames.

6. Put all components in a container and clean using the Brush (14) and clean thinner or water. The inside of the Air Spray Gun and Air Hose should also be cleaned.

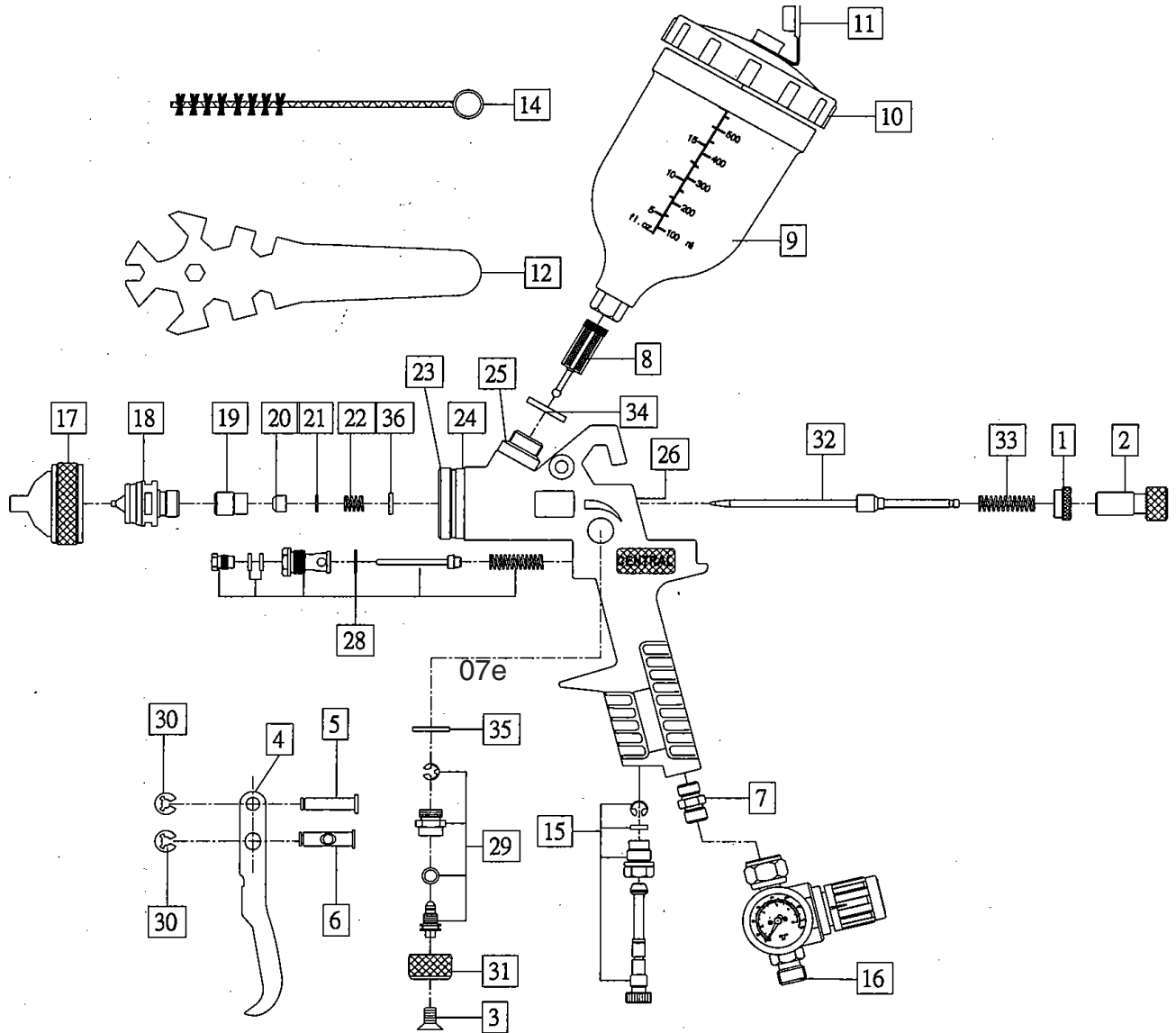
Note: It is recommended to mount the Nozzle (17) first, then the Paint Needle (32).

7. Place a drop of grease on the Screw for Teflon Seal (20). Tighten screw in place. Verify the needle moves freely.

Troubleshooting

PROBLEM	CAUSE	REMEDY
Paint drips on the object being painted	<ul style="list-style-type: none"> - Paint too diluted - Improper spray adjustment - Too much air flow - Holding Trigger (4) too long - Spraying too close 	<ul style="list-style-type: none"> - Add undiluted product - Reduce paint flow by tightening Fluid Control Knob (2) - Reduce air flow by turning Air Valve Assy (15) to minus (-) - Release Trigger on back stroke - Increase distance between nozzle and object
Paint application weak or irregular	<ul style="list-style-type: none"> - Paint too diluted - Improper spray adjustment - Air flow too weak - Spray movement too fast - Gun clogged - Spray distance too far 	<ul style="list-style-type: none"> - Add undiluted product - Increase paint flow by loosening Fluid Control Knob (2) - Increase air flow by turning Air Valve Assy (15) to plus (+). - Move Spray Gun more slowly - Clean components as previously described - Spray closer to object
Spray Gun not operating	<ul style="list-style-type: none"> - Paint not thinned enough - Spray Gun clogged - Air Hose is leaking - Air Filter clogged - Paint Cup not fully closed 	<ul style="list-style-type: none"> - Add thinner (check viscosity) - Clean components as previously described - Replace Air Hose - Clean or replace Air Filter - Tighten Plastic Cup and Cover. Check Filter (8).

Assembly Diagram



Parts List

Part	Description	Qty	Part	Description	Qty
1	Lockout for Fluid Control Knob	1	19	Compression Screw	1
2	Fluid Control Knob	1	20	Sealing for air Piston	1
3	Screw	1	21	Gasket	1
4	Trigger	1	22	Compression Spring For Needle Seal	1
5	Trigger Bolt	1	23	Air Diversion Ring	1
6	Trigger Sleeve	1	24	Piston Pad	1
7	Air Connection	1	25	Paint Connection	1
8	Filter	1	26	Gun Body	1
9	Plastic Cup	1	28	Air Valve Assembly	1
10	Cover	1	29	Spray Regulating Nut	1
11	Non-drip Control Tip	1	30	E-ring	2
12	Spanner Wrench	1	31	Control Knob	1
14	Brush	1	32	Paint Needle	1
15	Air Adjusting Valve Assembly	1	33	Spring for Paint Needle	1
16	Regulator	1	34	Gasket	1
17	Air Nozzle with Brass Cap	1	35	Gasket	1
18	Fluid Nozzle	1	36	Washer	1

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER NOR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

NOTE: Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.

LIMITED 1 YEAR 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 one year from the date of purchase (90 days if used by a professional contractor or if used as rental equipment). This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, 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.

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