## 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.

20j

## **CENTRALPNEUMATIC**®

## oilless airbrush compressor



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

93657

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.

Copyright<sup>©</sup> 2005 by Harbor Freight Tools<sup>®</sup>. All rights reserved.

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.

#### **AWARNING**

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

### **Table of Contents**

Safety2	Maintenance 8
Setup 6	Parts List and Diagram10
Specifications6	Warranty12
Operation 7	

WARNING SYMBOLS AND DEFINITIONS		
lack	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.	
<b>▲</b> DANGER	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.	
<b>AWARNING</b>	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.	
<b>ACAUTION</b>	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.	
NOTICE CAUTION	Addresses practices not related to personal injury.	

## **IMPORTANT SAFETY INFORMATION**

### **General Safety Warnings**



WARNING Read all safety warnings and instructions.

Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury. Save all warnings and instructions for future reference.

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.

#### 1. Work area safety

- a. Keep work area clean and well lit.
   Cluttered or dark areas invite accidents.
- b. Do not operate the Compressor in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.
   Compressor motors produce sparks which may ignite the dust or fumes.
- c. Keep children and bystanders away from an operating compressor.

#### 2. Electrical safety

- a. Compressor plugs must match the outlet.
   Never modify the plug in any way.
   Do not use any adapter plugs with grounded compressors. Standard plugs and matching outlets will reduce risk of electric shock.
- b. Do not expose compressor to rain or wet conditions. Water entering a compressor will increase the risk of electric shock.
- c. Do not abuse the cord. Never use the cord for unplugging the compressor. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.

#### 3. Personal safety

- a. Stay alert, watch what you are doing and use common sense when operating this compressor. Do not use this compressor while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating a compressor may result in serious personal injury.
- b. Use personal protective equipment. Always wear ANSI-approved eye protection during setup and use.
- c. Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source or moving the compressor.

#### 4. Compressor use and care

- a. Do not use the compressor if the switch does not turn it on and off. Any compressor that cannot be controlled with the switch is dangerous and must be repaired.
- b. Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the compressor.
   Such preventive safety measures reduce the risk of starting the compressor accidentally.
- c. Store an idle compressor out of the reach of children and do not allow persons unfamiliar with the compressor or these instructions to operate it. A compressor is dangerous in the hands of untrained users.
- d. Maintain the compressor. Keep the compressor clean for better and safer performance. Follow instructions for lubricating and changing accessories. Keep dry, clean and free from oil and grease. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the compressor's operation. If damaged, have the compressor repaired before use. Many accidents are caused by a poorly maintained compressor.
- e. Use the compressor in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the compressor for operations different from those intended could result in a hazardous situation.

#### 5. Service

a. Have your compressor serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the compressor is maintained.

### **Air Compressor Safety Warnings**

- Risk of fire or explosion do not spray flammable liquid in a confined area or towards a hot surface. Spray area must be well-ventilated. Do not smoke while spraying or spray where spark or flame is present. Arcing parts - keep compressor at least 20 feet away from explosive vapors, such as when spraying with a spray gun.
- 2. Risk of bursting do not adjust regulator higher than marked maximum pressure of attachment.
- Risk of injury do not direct air stream at people or animals.
- 4. Do not use to supply breathing air.
- Do not leave compressor unattended for an extended period while plugged in. Unplug compressor after working.
- 6. Keep compressor well-ventilated.
  Do not cover compressor during use.
- 7. Drain Tank daily and after use.
- 8. Do not remove the valve cover or adjust internal components.
- Compressor head gets hot during operation.
   Do not touch it or allow children nearby during or immediately following operation.
- 10. Do not use the air hose to move the compressor.
- The use of accessories or attachments not recommended by the manufacturer may result in a risk of injury to persons.
- 12. All air line components, including hoses, pipe, connectors, filters, etc., must be rated for a minimum working pressure of 150 PSI, or 150% of the maximum system pressure, whichever is greater.

13. USE OF AN EXTENSION CORD IS NOT RECOMMENDED. If you choose to use an extension cord, use the following guidelines:

TABLE A: RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS (120 VOLT)				
NAMEPLATE AMPERES	EXTENSION CORD LENGTH			
(at full load)	25′	50′	100'	150′
0 – 6	18	16	16	14
6.1 – 10	18	16	Do not use.	
10.1 – 12	16	16	Do not use.	
12.1 – 16	14	12	Do not use.	

- a. Make sure your extension cord is in good condition.
- b. Be sure to use an extension cord which is heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table A shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.
- 14. Industrial applications must follow OSHA guidelines.
- 15. Maintain labels and nameplates on the compressor. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
- This product is not a toy.Keep it out of reach of children.
- 17. Operate unit on level surface.
- 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.
- 19. This Compressor will automatically shut off on overload or under excessive heat. Should this occur, turn the Power Switch (34) to its "OFF" position. Wait until the Compressor cools. Then, turn the Power Switch to its "ON" position to resume work.
- 20. **Spray painting only.** Never use this unit with gasoline, kerosene, or any other flammable solvent.



## SAVE THESE INSTRUCTIONS.

#### Grounding





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

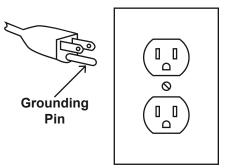
Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the compressor.

Never remove the grounding prong from the plug. Do not use the compressor if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

## 110-120 VAC Grounded Compressors: Compressors with Three Prong Plugs

- In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This compressor is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.
- 2. Do not modify the plug provided if it will not fit the outlet, have the proper outlet installed by a qualified electrician.
- 3. Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.
- Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the compressor is properly grounded.
- Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the compressor's plug.

6. Repair or replace damaged or worn cord immediately.



125 VAC 3-Prong Plug and Outlet (for up to 125 VAC and up to 15 A)

- 7. This compressor is intended for use on a circuit that has an outlet that looks like the one illustrated above in 125 VAC 3-Prong Plug and Outlet. The compressor has a grounding plug that looks like the plug illustrated above in 125 VAC 3-Prong Plug and Outlet.
- 8. The outlet must be properly installed and grounded in accordance with all codes and ordinances.
- 9. Do not use an adapter to connect this compressor to a different outlet.

### **Symbology**

PSI	Pounds per square inch of pressure		
CFM	Cubic Feet per Minute flow		
SCFM	Cubic Feet per Minute flow at standard conditions		
NPT	National pipe thread, tapered		

NPS	National pipe thread, straight	
	Double Insulated	
VAC Volts Alternating Current		
Α	Amperes	

#### **Specifications**

Electrical Rating	120VAC / 60Hz / 2A
Motor	1,750 RPM
Power Cord	6' Long Power Cord (18AWG x 3C)
Thermal Protection	Automatic shut-off on overload/overheat and automatic reset
Maximum Air Pressure / Automatic Shut Off	58 PSI
Automatic Restart	43 PSI
Air Output	.5 CFM @ 20 PSI
Air Outlet Size	1/8"-28 NPS Air Outlet with 1/4"-18 NPT Male Adapter
Hose Dimensions	.236" OD x .157" ID x 10' Long (1/8"-28 NPS Female Adapter - both sides)
Base Dimensions	7-3/8" L x 5-3/8" W x 1" H

#### Setup - Before use:



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

## **AWARNING**

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

Turn the Power Switch "OFF" and unplug the Air Compressor from its electrical outlet before assembling or making any adjustments to the compressor.

**Note:** For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram near the end of this manual.

Before operating, make sure the Air Compressor is set up in a well-ventilated area, on a flat, level, solid surface well away from any flammable objects, such as drapes. Never paint in an area without proper ventilation, or near possible ignition sources.

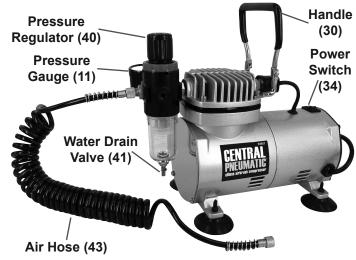


Figure A: Functions

#### Operating Instructions



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

### **Compressor Area Set Up**

- Designate a work area that is clean and well-lit.
   The work area must not allow access by children or pets to prevent injury.
- 2. Locate the Compressor on a flat level surface to ensure proper pump lubrication and to prevent damage to the unit. Keep at least 12" of space around the unit to allow air circulation.
- 3. Route the power cord from the compressor to the grounded wall outlet, along a safe path without creating a tripping hazard or exposing the power cord to possible damage.

### **General Operation**

- 1. Insert the Power Cord Plug (35) into the nearest 120 volt, grounded, electrical outlet.
- 2. Connect an Air Brush (not included) to the Air Hose (43) of the Compressor. Use Hose Adapter (44) if needed.

**Note:** Use this Compressor only with air brushes; do not use this compressor with any other type of painting equipment.

3. Turn the Power Switch (34) on.

Note: The Compressor will automatically begin to run when the air pressure falls below 43 PSI. When the maximum air pressure (58 PSI) is reached, the Compressor will automatically switch to idle and the Compressor will stop operating. The Compressor will automatically restart when the air pressure falls below 43 PSI.

- 4. Adjust the regulated air pressure output as shown on the Pressure Gauge (11) by lifting the Regulator Knob (40), turning it to the desired pressure and pressing it back down.
- When finished using the Air Compressor, turn its Power Switch (34) off. Release any remaining air in a safe fashion and disconnect the Air Brush. Briefly depress the Water Drain Valve (41) to empty the unit of water after each use.
- 6. Store the Air Compressor in a clean, dry, safe location out of reach of children and other unauthorized people.

#### Maintenance and Servicing



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

### **AWARNING**

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

Turn the Power Switch "OFF" and unplug the Compressor from its electrical outlet before performing any inspection, maintenance, or cleaning procedures.

#### TO PREVENT SERIOUS INJURY FROM COMPRESSOR FAILURE:

Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

#### Cleaning, Maintenance, and Lubrication

- BEFORE EACH USE, inspect the general condition of the Air Compressor.
   Check for loose hardware, misalignment or binding of moving parts, damaged belts, cracked or broken parts, damaged electrical wiring, and any other condition that may affect its safe operation.
- 2. **AFTER USE,** push the Water Drain Valve (41) under the Filter Cup to drain out the moisture. Also, wipe external surfaces of the compressor with a clean cloth.
- 3. Store the Air Compressor in a clean, dry, safe location out of reach of children and other unauthorized people.
- 4. AWARNING! TO PREVENT SERIOUS INJURY: If the supply cord of this compressor is damaged, it must be replaced only by a qualified service technician.

## **Troubleshooting**

Problem	Possible Causes	Likely Solutions
The motor does not work.	No electrical power.	Plug the power cord into a working,     120VAC, grounded, electrical outlet.
	2. Damaged power cord.	Have a qualified service technician replace the power cord.
	Electrical wiring within the unit is defective.	Have a qualified service technician replace electric wiring.
	4. Power switch is defective.	Have a qualified service technician replace power switch.
The motor runs, but it makes	Bearing is loose or damaged.	Have a qualified service technician replace the bearing.
irregular noises or a knocking noise.	Screws in the connection rod are loose.	2. Tighten the screws, or replace them if necessary.
Not enough pressure when	Loose air connection(s).	Check all air connections, and tighten them if necessary
painting or	2. Air hose is damaged.	2. Replace air hose.
spraying.	3. Screws on cylinder cover are loose.	3. Tighten screws.
Poor spray pattern.	Loose air connections(s).	Check all air connections, and tighten them if necessary.
	2. The paint is too thick.	2. Add paint thinner and mix thoroughly.
	The air brush nozzle is plugged or dirty.	3. Clean or change the nozzle.
Motor runs properly, but no air pressure or lack	1. Valve plate is loose or out of place.	Open the front cover and make sure the valve plate is in the proper position.  Tighten the screws if necessary.
of air delivery.	Retainer ring is damaged after excessive use at high pressure.	Have a qualified service technician replace the retainer ring.



Follow all safety precautions whenever diagnosing or servicing the compressor. Disconnect power supply before service.

#### PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR 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.

#### **Parts List**

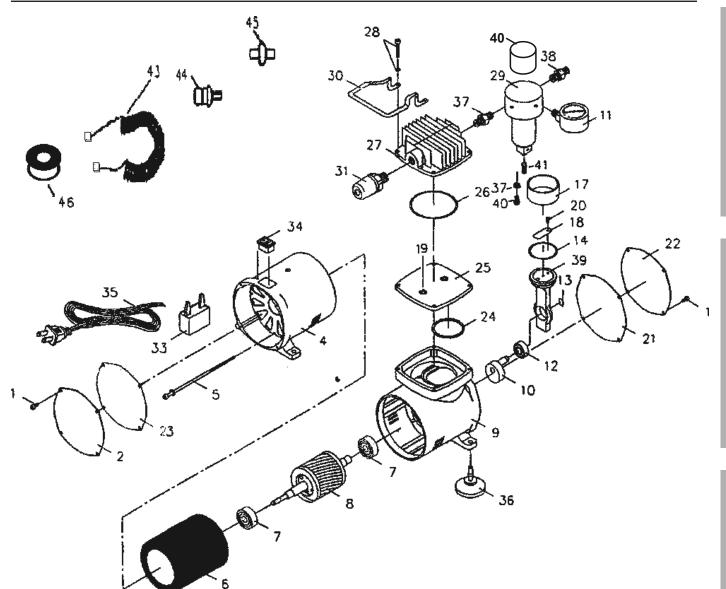
Part	Description	Qty
1	Screw	8
2	Rear Cover	1
4	Rear Body	1
5	Screw	4
6	Stationary Motor	1
7	Bearing	2
8	Rotary Motor	1
9	Front Body	1
10	Counterweight	1
11	Pressure Gauge	1
12	Bearing	1
13	Retainer Ring	1
14	Compression Ring	1
17	Cylinder	1
18	Valve Plate	2
19	Valve	1
20	Screw	1
21	Front Gasket	1
22	Front Cover	1
23	Rear Gasket	1
24	O-Ring	1

Part	Description	Qty
25	Cylinder Block	1
26	O-Ring	1
27	Cylinder Head	1
28	Cap Screw	4
29	Filter	1
30	Handle	1
31	Pressure Switch	1
33	Condenser	1
34	Power Switch	1
35	Power Cord/Plug	1
36	Rubber Pad	4
37	Connector	1
38	Air Outlet	1
39	Link	1
40	Pressure Regulator	1
41	Water Drain Valve	1
43	Air Hose	1
44	Hose Adapter for Air Brush	1
45	Male Adapter 1/4"-18 NPT	1
46	Thread Seal Tape	1

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. Specify UPC 792363936576 when ordering parts.



#### **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.

