

**CENTRAL PNEUMATIC®**

# 5" PALM GRIP SANDER

**Model 96445**

## OPERATION INSTRUCTIONS



Due to continuing improvements, actual product may differ slightly from the product described herein.



3491 Mission Oaks Blvd., Camarillo, CA 93011

Visit our website at: <http://www.harborfreight.com>

**TO PREVENT SERIOUS INJURY, READ AND UNDERSTAND  
ALL WARNINGS AND INSTRUCTIONS BEFORE USE.**

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

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## SPECIFICATIONS

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Overall Dimensions	6-1/2" L x 5" O.D. x 4-1/4" H
Sanding Pad Size	5" diameter
Maximum RPM	10,000 RPM
Air Inlet Size	1/4"-18 NPT
Arbor Size	5/16", 24 TPI
Handle Type	Palm style
Sanding Pad Fastening Method	Hook and Loop
Maximum PSI	90 PSI
Recommended Hose Size	3/8"
Weight	2.4 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.

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## SAFETY WARNINGS AND PRECAUTIONS

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**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 compressors 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, extension cords, or air hoses.
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. **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. It will do the job better and more safely at the rate for which it was intended. Do not modify this tool and do not use this tool for a purpose for which it was not intended.
6. **Dress properly.** Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically non-conductive clothes and non-skid footwear are recommended when working. Wear restrictive hair covering to contain long hair.

7.  **Use eye and ear protection.** Always wear ANSI-approved impact safety goggles and hearing protection. Wear a full face shield if you are producing metal filings or wood chips. Wear an ANSI-approved dust mask or respirator when working around metal, wood, and chemical dusts and mists.
8. **Do not overreach.** Keep proper footing and balance at all times. Do not reach over or across running machines or air hoses.
9. **Maintain tools with care.** Keep tools clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords and air hoses 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.
10. **Disconnect air supply.** Disconnect air hose when not in use.
11. **Remove adjusting wrenches.** Check that adjusting wrenches are removed from the tool or machine work surface before operating the tool.
12. **Avoid unintentional starting.** Be sure the trigger is released when not in use and before plugging in. Do not carry any tool with your finger on the trigger, whether it is plugged in or not.
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. **Guard against electric shock.** Prevent body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerator enclosures.
16. **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.
17. **Do not operate tool if under the influence of alcohol or drugs.** Read warning labels if taking prescription medicine to determine if your judgement or reflexes are impaired while taking drugs. If there is any doubt, do not operate the Sander.
18. **Maintenance.** For your safety, maintenance should be performed regularly by a qualified technician.
19. **Compressed air only.** Use clean, dry regulated, compressed air at 90 PSI. **Do not exceed max. 90 PSI.** Never use oxygen, carbon dioxide, combustible gases, or any other bottled gas as a power source for this tool.

20. **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.)**
21. **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.

**Note:** Performance of the compressor (if powered by line voltage) may vary depending on variations in local line voltage. Extension cord usage may also affect tool performance.

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## UNPACKING

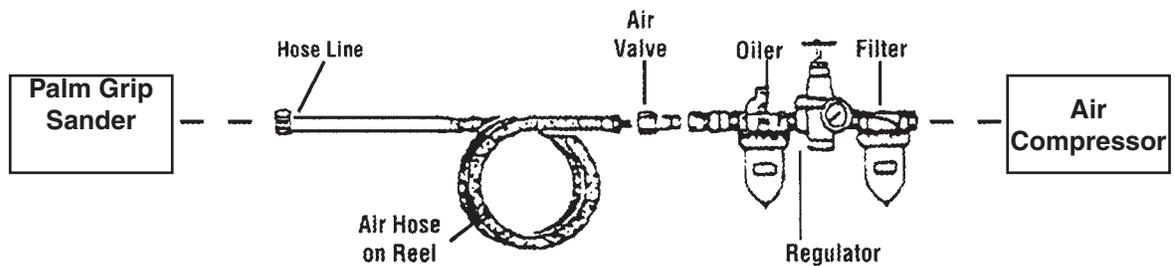
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When unpacking, check to make sure that the item is intact and undamaged. If any parts are missing or broken, please call Harbor Freight Tools at the number on the cover of this manual as soon as possible.

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## SETUP

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### Recommended Air Line Components

For best service you should incorporate an oiler, regulator, and inline filter, as shown in the diagram above. Hoses, couplers, oilers, regulators, and filters are all available at Harbor Freight Tools.

**Note:** If you are not using an automatic oiler system, before operation, add a few drops of Pneumatic Tool Oil to the airline connection. Add a few drops more after each hour of continual use.

1. You will need to prepare a  $\frac{1}{4}$ " male air connector (not included) to be attached to the Inlet Connector on the Palm Grip Sander. Wrap the  $\frac{1}{4}$ " air connector with pipe thread seal tape before threading it into the Inlet. Connect the  $\frac{3}{8}$ " ID Air Hose to a quick connect coupler (not included), and then to the Sander.
2. Set the air pressure on the regulator to 90 PSI. **Do not exceed the recommended air pressure of 90 PSI.**
3. Check the air connection for leaks.

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## **ASSEMBLY**

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### **Installing the Sanding Pad**

1. Disconnect the air hose from the tool.
2. Select the appropriate Sanding Pad (not included), and press it onto the Backing Pad (41). Firmly press the Sanding Pad onto the Backing Pad (41), making certain it is securely in place. Failure to properly secure the Sanding Pad may cause the Sanding Pad to come loose, possibly causing personal injury or property damage.

### **Installing the Backing Pad**

1. Disconnect tool from air supply.
2. Slide Wrench (39) under Cover (37) and onto the Tilting Axle (or Arbor) (28). Holding the Wrench firmly, rotate Tilting Axle (28) counterclockwise to remove.
3. To replace the Backing Pad (41), place Wrench (39) onto Tilting Axle (28) and hold firmly.
4. Place Backing Pad (41) onto Tilting Axle and turn clockwise to attach.
5. Hand tighten firmly.

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## **OPERATION**

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1. Turn the air compressor (not included) on and allow the air tank to come up to pressure. Set the compressor output regulator to no more than 90 PSI.
2. Attach the air supply hose (not included) to the tool.
3. Grip the base of the tool in one hand. The Trigger (1) will be under your palm. Squeeze the tool to depress the Trigger (1) and the tool will operate.
4. Place the tool on the work surface to begin sanding.
5. To stop sanding, lift the tool from the work surface, and relax your grip to allow the Trigger (1) to lift into the OFF position.
6. When you are done work, disconnect the air pressure hose from the tool and turn off the air compressor.

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## INSPECTION, MAINTENANCE AND CLEANING

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1. Make sure your Palm Grip Sander is disconnected from the air hose before attempting any maintenance.
2. Wipe the Palm Grip Sander down with a lint free cloth after each use.
3. If you do not use an inline oiler/filter system, lubricate the tool daily by holding it so that the Valve (12) is facing up. Squeeze the Trigger (1), and place one or two drops of oil into the Valve (12). Squeezing the Trigger (1) allows the oil to circulate in the motor.
4. Store in a safe and dry location out of the reach of children.

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## TROUBLESHOOTING

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Problem	Possible Causes	Probable Solutions
Tool will not operate	<ol style="list-style-type: none"><li>1. Low or no air pressure</li><li>2. Corroded Rotor</li><li>3. Damaged Seals or O-Rings</li></ol>	<ol style="list-style-type: none"><li>1. Check air compressor to be sure it is operating properly. Check air regulator. Check air lines for leaking or blockage.</li><li>2. Spray light weight penetrating oil into the regulator. If tool still won't operate, take it to a qualified service technician for repair.</li><li>3. Take it to a qualified service technician for repair.</li></ol>

### 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, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

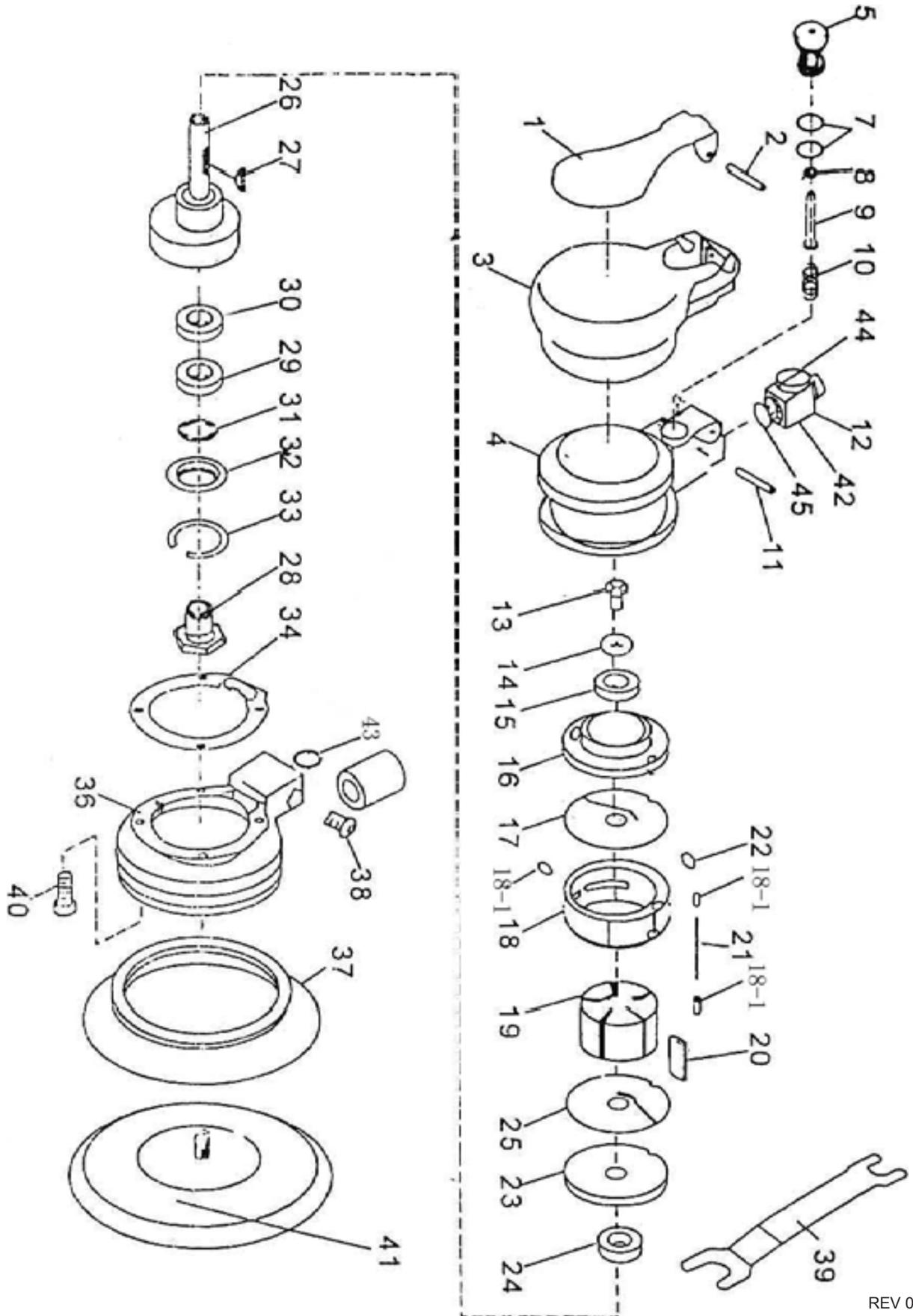
**Note:** Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.

## PARTS LIST

Part	Description	Q'ty
1	Trigger	1
2	Trigger Bolt	1
3	Outer Housing	1
4	Casing	1
5	Valve Core	1
7	Seal Ring	1
8	Seal Ring	1
9	Valve Needle	1
10	Spring	1
11	Bolt	1
12	Valve	1
13	Screw	2
14	Washer	1
15	Bearing	1
16	Rear Plate	1
17	Rear Spacer	1
18	Cylinder	1
18-1	Spring-Pin	1
19	Rotor	1
20	Blade	5
21	Bolt	3
22	Seal Ring	1
23	Front Plate	1

Part	Description	Q'ty
24	Bearing	1
25	Front Spacer	1
26	Main Axle	1
27	Shaft	1
28	Tilting Axle (Arbor)	1
29	Bearing	1
30	Bearing	1
31	Soft Washer	1
32	Cover	1
33	Clip Ring	1
34	Washer	1
35	Screw	1
36	Cover	1
37	Cover	1
38	Screw	1
39	Wrench	1
40	Hex Screw	4
41	Backing Pad	1
42	Air Regulator	1
43	Seal Ring	1
44	Air Regulator Knob	1
45	O-Ring	1

# ASSEMBLY DIAGRAM



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## LIMITED 90 DAY WARRANTY

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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.

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