

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.

21a

CENTRAL PNEUMATIC®

3/4" Heavy Duty Air Impact Wrench



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

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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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⚠ WARNING

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

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 INFORMATION

General Power Tool Safety Warnings

WARNING

Read all safety warnings and all 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 term "power tool" in the warnings refers to your power tool.

Work Area Safety

- Keep work area clean and well lit.**
Cluttered or dark areas invite accidents.
- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** *Power tools create sparks which may ignite the dust or fumes.*
- Keep children and bystanders away while operating a power tool.**
Distractions can cause you to lose control.

Personal Safety

- Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.**
A moment of inattention while operating power tools may result in serious personal injury.
- Use personal protective equipment. Always wear eye protection.** *Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.*

3. **Prevent unintentional starting. Ensure the Trigger is in the off-position before connecting to power source, picking up or carrying the tool.**
Carrying power tools with your finger on the Trigger or energizing power tools that have the Trigger on invites accidents.
4. **Remove any adjusting key or wrench before turning the power tool on.**
A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
5. **Do not overreach. Keep proper footing and balance at all times.** *This enables better control of the power tool in unexpected situations.*
6. **Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts.** *Loose clothes, jewelry or long hair can be caught in moving parts.*
7. **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** *Use of dust collection can reduce dust-related hazards.*
8. **Only use safety equipment that has been approved by an appropriate standards agency.** *Unapproved safety equipment may not provide adequate protection. Eye protection must be ANSI-approved and breathing protection must be NIOSH-approved for the specific hazards in the work area.*

Power Tool Use and Care

1. **Do not force the power tool. Use the correct power tool for your application.**
The correct power tool will do the job better and safer at the rate for which it was designed.
2. **Do not use the power tool if the Trigger does not turn it on and off.**
Any power tool that cannot be controlled with the Trigger is dangerous and must be repaired.
3. **Disconnect the before making any adjustments, changing accessories, or storing power tools.** *Such preventive safety measures reduce the risk of starting the power tool accidentally.*
4. **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.**
Power tools are dangerous in the hands of untrained users.
5. **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** *Many accidents are caused by poorly maintained power tools.*
6. **Keep cutting tools sharp and clean.**
Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
7. **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** *Use of the power tool for operations different from those intended could result in a hazardous situation.*

Service

Have your power tool serviced by a qualified repair person using only identical replacement parts.

This will ensure that the safety of the power tool is maintained.

Impact Wrench Safety Warnings

1. **Hold power tools by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord.** *Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.*
2. The amount of actual torque may vary depending on the cleanness and condition of the threads and other factors. If tightening critical components, check the actual torque applied to the fastener with a mechanical torque wrench (not supplied).
3. Maintain labels and nameplates on the tool. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
4. Avoid unintentional starting. Prepare to begin work before turning on the tool.
5. Do not lay the tool down until it has come to a complete stop. Moving parts can grab the surface and pull the tool out of your control.
6. When using a handheld power tool, maintain a firm grip on the tool with both hands to resist starting torque.
7. Do not leave the tool unattended when. Turn off the tool, and before leaving.
8. This product is not a toy. Keep it out of reach of children.
9. 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.
10. 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.

Vibration Safety

This tool vibrates during use. Repeated or long-term exposure to vibration may cause temporary or permanent physical injury, particularly to the hands, arms and shoulders. To reduce the risk of vibration-related injury:

1. Anyone using vibrating tools regularly or for an extended period should first be examined by a doctor and then have regular medical check-ups to ensure medical problems are not being caused or worsened from use. Pregnant women or people who have impaired blood circulation to the hand, past hand injuries, nervous system disorders, diabetes, or Raynaud's Disease should not use this tool. If you feel any symptoms related to vibration (such as tingling, numbness, and white or blue fingers), seek medical advice as soon as possible.
2. Do not smoke during use. Nicotine reduces the blood supply to the hands and fingers, increasing the risk of vibration-related injury.
3. Wear suitable gloves to reduce the vibration effects on the user.

4. Use tools with the lowest vibration when there is a choice.
5. Include vibration-free periods each day of work.
6. Grip tool as lightly as possible (while still keeping safe control of it). Let the tool do the work.
7. To reduce vibration, maintain the tool as explained in this manual. If any abnormal vibration occurs, stop use immediately.



SAVE THESE INSTRUCTIONS.

Symbology

n_o	No-load speed
.../min	Revolutions or reciprocation per minute
PSI	Pounds per square inch of pressure
ft-lb	Foot-pounds of torque
BPM	Blows per minute
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

	WARNING marking concerning Risk of Eye Injury. Wear ANSI-approved eye protection.
	WARNING marking concerning Risk of Hearing Loss. Wear hearing protection.
	WARNING marking concerning Risk of Respiratory Injury. Wear NIOSH-approved dust mask/respirator.
	WARNING marking concerning Risk of Explosion. Use only clean, dry, regulated, compressed air to power this tool. Do not use oxygen, carbon dioxide, combustible gases, or any other bottled gas as a power source for this tool.

Specifications

Maximum Air Pressure	90 PSI
Air Inlet	3/8" -18 NPT
Drive Size	3/4" Square Drive
Maximum Speed*	762 BPM (Blows Per Minute)
Average Air Consumption	7 CFM @ 90 PSI
Maximum Torque	1000 ft-lb

* Maximum speed at stated maximum air pressure.
Excess air pressure is hazardous and may cause the tool to exceed stated maximum speed.
Required Air Hose: 1/2" (Not Supplied)

Initial Tool Set Up/Assembly



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.

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

Air Supply

⚠ WARNING



TO PREVENT EXPLOSION:

Use only clean, dry, regulated, compressed air to power this tool. Do not use oxygen, carbon dioxide, combustible gases, or any other bottled gas as a power source for this tool.

1. Incorporate a filter, regulator with pressure gauge, oiler, in-line shutoff valve, and quick coupler for best service, as shown in the air tool setup examples at the end of this section. **An in-line shutoff ball valve is an important safety device because it controls the air supply even if the air hose is ruptured. The shutoff valve should be a ball valve because it can be closed quickly.**
2. Attach an air hose to the compressor's air outlet. Connect the air hose to the air inlet of the tool. Other components, such as a connector and quick coupler, will make operation more efficient, but are not required.

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

⚠ WARNING! TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

Do not install a female quick coupler on the tool. Such a coupler contains an air valve that will allow the air tool to retain pressure and operate accidentally after the air supply is disconnected.

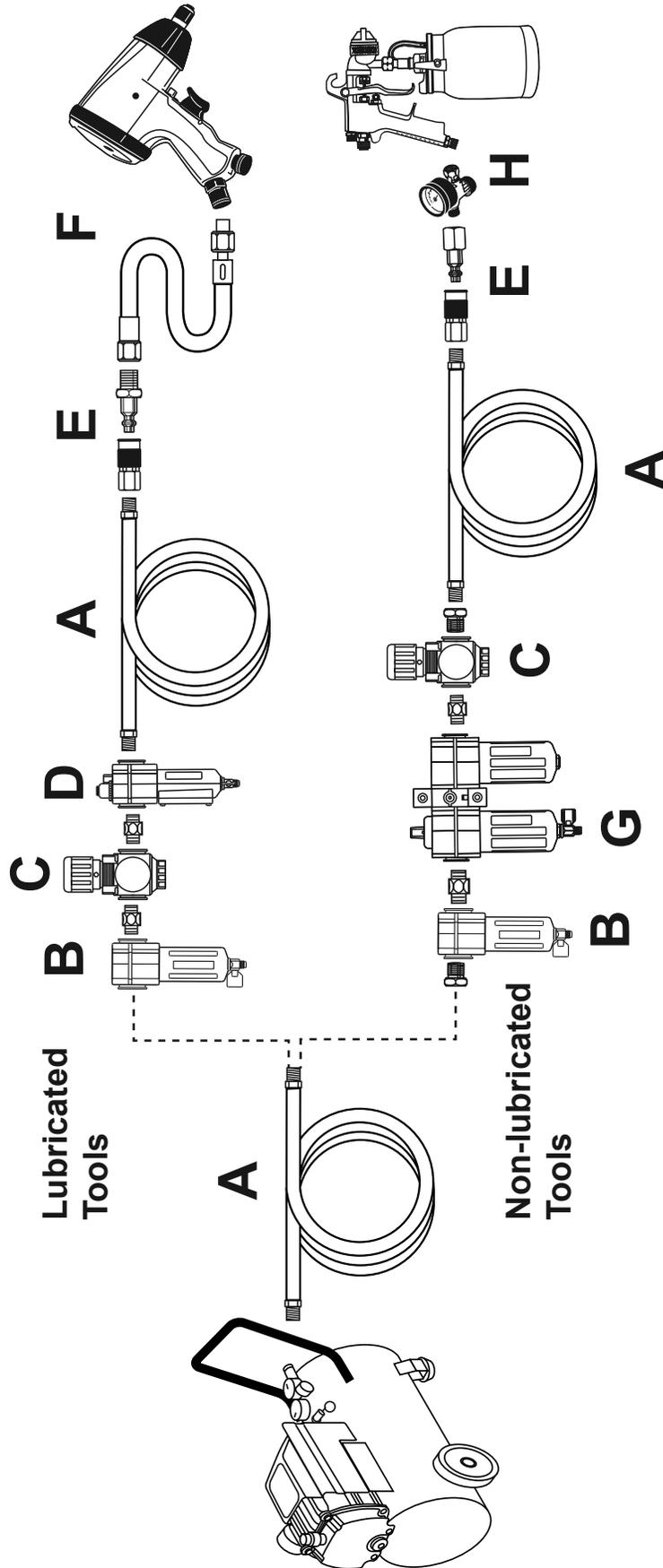
Note: Air flow, and therefore tool performance, can be hindered by undersized air supply components.

3. The air hose must be long enough to reach the work area with enough extra length to allow free movement while working.
4. Release the tool's Trigger (39); refer to Operation section for description of controls.
5. Close the in-line safety valve between the compressor and the tool.
6. Turn on air compressor according to manufacturer's directions and allow it to build up pressure until it cycles off.
7. Adjust the air compressor's output regulator so that the air output is enough to properly power the tool, but the output will not exceed the tool's maximum air pressure at any time. Adjust the pressure gradually, while checking the air output gauge to set the right pressure range.
8. Inspect the air connections for leaks. Repair any leaks found.
9. If the tool will not be used at this time, release the Trigger, close the shut-off valve, and detach it from the air supply, safely discharge any residual air pressure.

Note: Residual air pressure should not be present after the tool is disconnected from the air supply. However, it is a good safety measure to attempt to discharge the tool in a safe fashion after disconnecting to ensure that the tool is disconnected and unpowered.

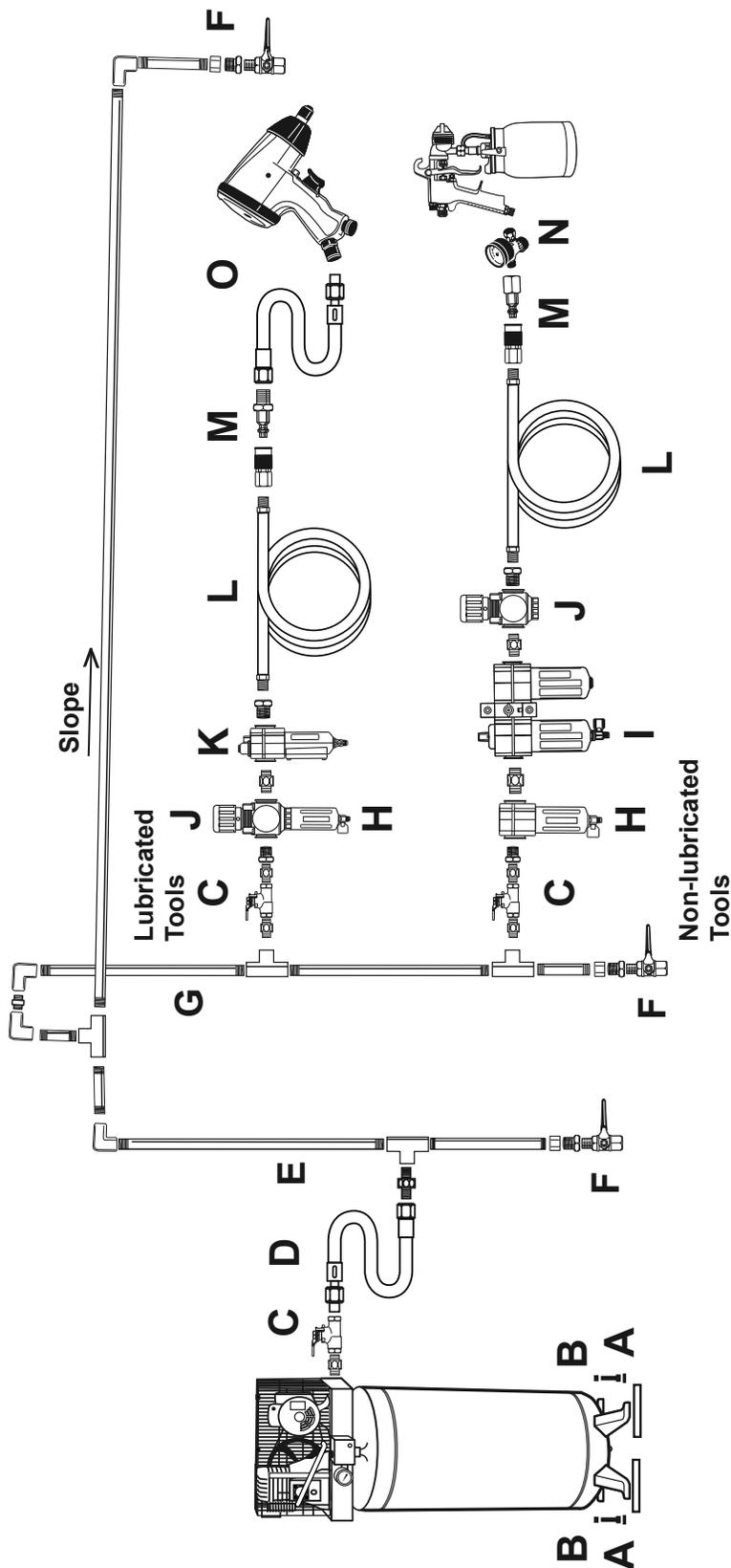
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Air Tool & Spray Gun Portable Setup



Description	Function
A Air Hose	Connects air to tool
B Filter	Prevents dirt and condensation from damaging tool or work piece
C Regulator	Adjusts air pressure to tool
D Lubricator (optional)	For air tool lubrication
E Coupler and Plug	Provides each connections
F Leader Hose (optional)	Increases coupler life
G Air Cleaner / Dryer (optional)	Prevents water vapor from damaging work piece
H Air Adjusting Valve (optional)	For fine tuning airflow at tool

Air Tool & Spray Gun Stationary Setup



Description	Function
A Vibration Pads	For noise and vibration reduction
B Anchor Bolts	Secures air compressor in place
C Ball Valve	Isolates sections of system for maintenance
D Isolation Hose	For vibration reduction
E Main Air Line - 3/4" minimum recommended	Distributes air to branch lines
F Ball Valve	To drain moisture from system
G Branch Air Line - 1/2" minimum recommended	Brings air to point of use
H Filter	Prevents dirt and condensation from damaging tool or work piece
I Air Cleaner / Dryer (optional)	Prevents water vapor from damaging work piece
J Regulator	Adjusts air pressure to tool
K Lubricator	For air tool lubrication
L Air Hose	Connects air to tool
M Coupler and Plug	Provides each connections
N Air Adjusting Valve	For fine tuning airflow at tool
O Leader Hose	Increases coupler life

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.

Tool Set Up

WARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

Turn off the tool, detach the air supply, safely discharge any residual air pressure in the tool, and release the throttle and/or turn the switch to its off position before performing any inspection, maintenance, or cleaning procedures.

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

Work Piece 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 injury and distraction.
 2. Route air hose along a safe route to reach work area without creating a tripping hazard or exposing air hose to possible damage.
 3. The air hose must be long enough to reach the work area with enough extra length to allow free movement while working.
 4. There must not be hazardous objects (such as utility lines) nearby that will present a hazard while working.
- Also avoid sharp bends and do not place items on hose during use.

General Operating Instructions

5. **CAUTION!** Use only 3/4" Drive Impact type sockets (not supplied).
6. If an automatic oiler is not used, add a few drops of Pneumatic Tool Oil to the airline connection before use. Add a few drops more after each hour of continual use.
7. Push and snap socket (not included) onto Anvil (8). See **Assembly Diagram** on page 12.
8. This Wrench can be used in either Forward or Reverse direction. To operate in Forward, turn the Regulator Knob (33) counterclockwise or to the right. **NOTE:**
9. For Reverse, turn the Regulator Knob to clockwise or to the left. **NOTE:** There are three torque settings for the Reverse direction.
10. To tighten, place the socket over the nut you wish to tighten.
11. Hold the handle firmly and place other hand on top of Housing (13). Then gently squeeze the Trigger (39).
12. To loosen, set the Regulator Knob to the Reverse setting.

13. Place socket (not included) over desired nut, hold handle firmly and gently squeeze Trigger.
14. If tool requires more force to accomplish task in Forward or Reverse setting, verify that the tool receives sufficient, unobstructed airflow (CFM) and increase the pressure (PSI) output of regulator up to maximum air pressure rating of tool.
CAUTION! TO PREVENT TOOL AND ACCESSORY FAILURE, RESULTING IN INJURY:
Do not exceed tool's maximum air pressure rating (90 PSI).
If tool still does not have sufficient force at maximum pressure and sufficient airflow, then a larger tool may be required.
15. When the nut is tightened or loosened, release the Trigger.
16. To prevent accidents, turn off tool, detach air supply, safely discharge any residual air pressure in tool, and release Trigger after use. Clean external surfaces of tool with clean, dry cloth, and apply a thin coat of tool oil to the driver end. Store indoors out of children's reach.

User-Maintenance Instructions



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

WARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION: Turn off tool, detach air supply, safely discharge any residual air pressure in tool, and release Trigger 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 problem corrected before further use.



TO PREVENT EXPLOSION: Lubricate tool only with specified lubricants. Lubricate the air inlet using only pneumatic tool oil. Lubricate the internal mechanism using only white lithium grease. Other lubricants may damage the mechanism and may be highly flammable, causing an explosion.

Cleaning, Maintenance, and Lubrication

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

1. **Daily - Air Supply Maintenance:**
Every day, perform maintenance on the air supply according to the component manufacturers' instructions. Lubricator's oil level needs to be maintained and the moisture filter must be regularly drained. Performing routine maintenance on the air supply will allow tool to operate more safely and will also reduce wear on tool.
2. **Quarterly (every 3 months) - Tool Disassembly, Cleaning, and Inspection:**
Have internal mechanism cleaned, inspected, and lubricated by a qualified technician.
3. When storing, always store Impact Wrench in clean, dry and safe location out of reach of children.

Troubleshooting

Problem	Possible Causes	Likely Solutions
Decreased output.	<ol style="list-style-type: none"> 1. Not enough air pressure and/or air flow. 2. Obstructed trigger. 3. Incorrect lubrication or not enough lubrication. 4. Blocked air inlet screen (if equipped). 5. Air leaking from loose housing, hose or connections. 6. Mechanism contaminated. 7. Vane wear or damage. 	<ol style="list-style-type: none"> 1. Check for loose connections and make sure that air supply is providing enough air flow (CFM) at required pressure (PSI) to the tool's air inlet. Do not exceed maximum air pressure. 2. Clean around trigger to ensure free movement. 3. Lubricate using air tool oil and grease according to directions. 4. Clean air inlet screen of buildup. 5. Make sure housing is properly assembled and tight. Repair hose/connection air leaks. 6. Have qualified technician clean and lubricate mechanism. Install in-line filter in air supply as stated in Initial Set Up: Air Supply. 7. Replace all vanes.
Housing heats during use.	<ol style="list-style-type: none"> 1. Incorrect lubrication or not enough lubrication. 2. Worn parts. 	<ol style="list-style-type: none"> 1. Lubricate using air tool oil and grease according to directions. 2. Have qualified technician inspect internal mechanism and replace parts as needed.
Severe air leakage. (Slight air leakage is normal, especially on older tools.)	<ol style="list-style-type: none"> 1. Cross-threaded housing components. 2. Loose housing. 3. Damaged valve or housing. 4. Dirty, worn or damaged valve. 	<ol style="list-style-type: none"> 1. Check for incorrect alignment and uneven gaps. If cross-threaded, disassemble and replace damaged parts before use. 2. Tighten housing assembly. If housing cannot tighten properly, internal parts may be misaligned. 3. Replace damaged components. 4. Clean or replace valve assembly.



Follow all safety precautions whenever diagnosing or servicing the tool. Disconnect air supply before service.

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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.

Record Product's Serial Number Here: _____

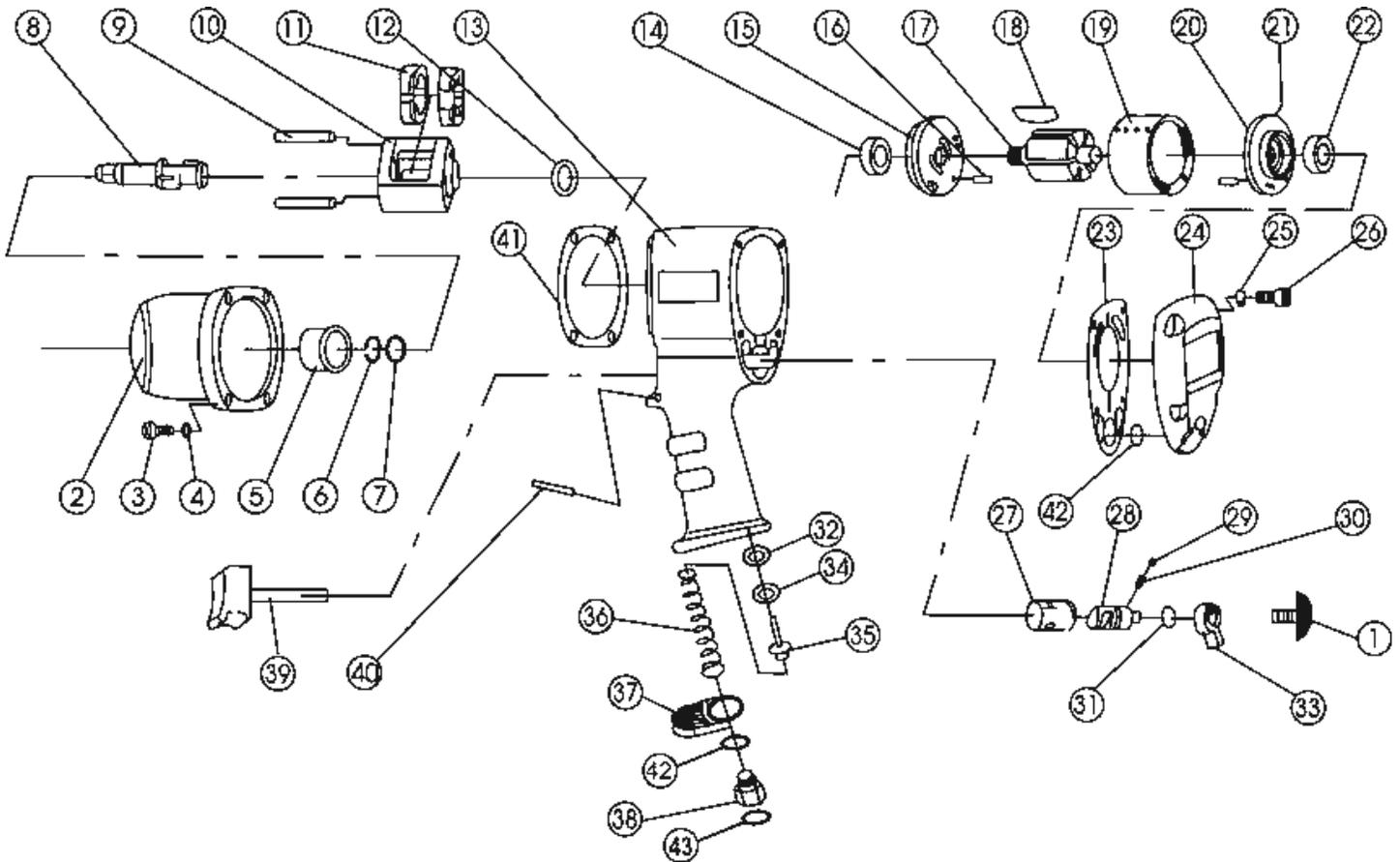
Note: If product has no serial number, record month and year of purchase instead.

Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts. Specify UPC 792363669849 when ordering parts.

Parts List and Diagram

Part	Description	Qty
1	Screw	1
2	Hammer Case	1
3	Screw	4
4	Washer	4
5	Anvil Bushing	1
6	Hog Ring	1
7	O-Ring	1
8	Anvil	1
9	Pin	2
10	Hammer Cage	1
11	Hammer	2
12	Gasket	1
13	Housing	1
14	Bearing	1
15	Front End Plate	1
16	Pin	1
17	Rotor	1
18	Vane	6
19	Cylinder	1
20	Rear End Plate	1
21	Pin	1
22	Bearing	1

Part	Description	Qty
23	Gasket	1
24	Rear End Plate	1
25	Gasket	4
26	Screw	4
27	Valve Bushing	1
28	Valve	1
29	Steel Ball	1
30	Spring	1
31	O-Ring	1
32	Inlet Gasket	1
33	Regulator Knob	1
34	Rubber Gasket	1
35	Air Inlet Valve	1
36	Spring	1
37	Cover	1
38	Air Inlet	1
39	Trigger	1
40	Pin	1
41	Gasket	1
42	O-Ring	1
43	Air Inlet Screen	1



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.

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