



5827402

Owner's Manual 5-Gallon Oil-Free Air Compressor

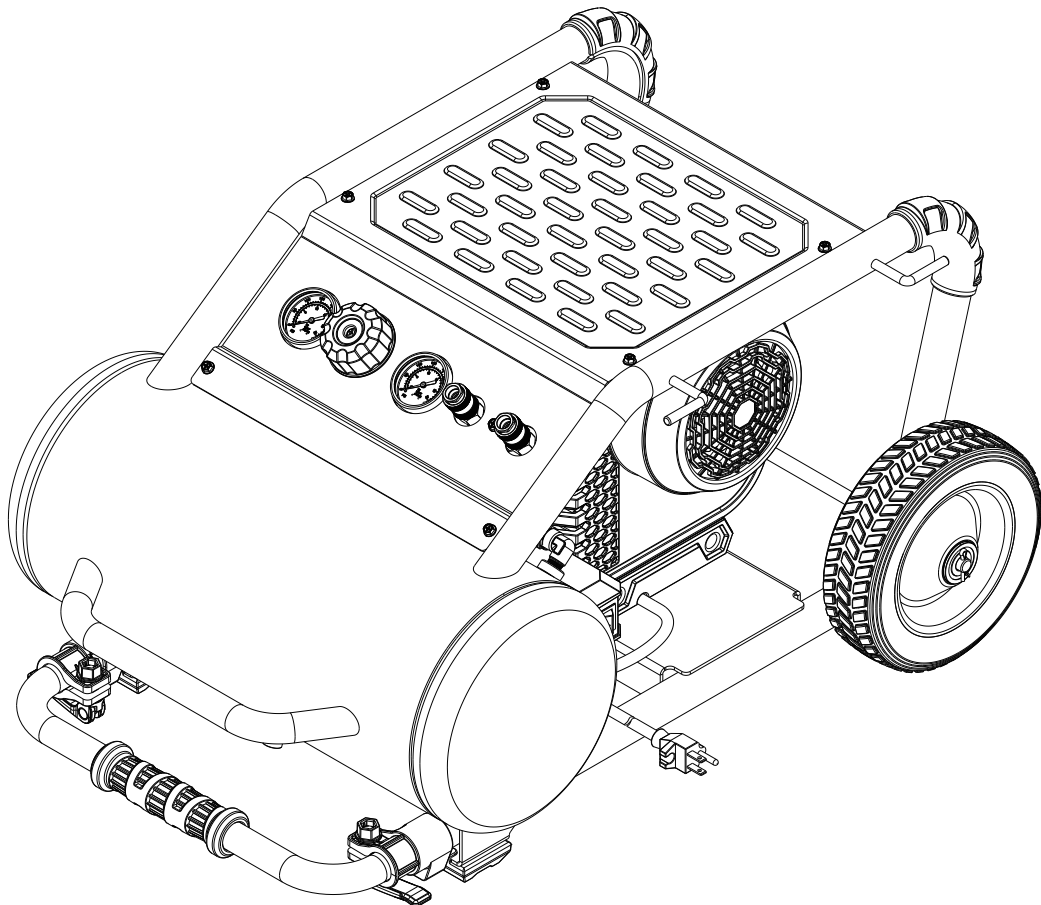


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About Your Air Compressor

Thank you for purchasing a NorthStar air compressor! It is designed for long life, dependability, and top performance.

Intended Use. It provides compressed air primarily used for operating air tools and pressurizing other non-tool objects such as tires. Special precautions are necessary when used for cleaning. It is not to be used to supply breathing air.

Note: Do not use for other purposes, as unforeseen hazards or equipment damage may result.

Power Source. The air compressor is powered by a gasoline engine.

Supplies Required. Normal operation will require you to supply:

- Personal Protection Equipment

See “*Specifications*” section of this manual for more detail.

Site Location. Intended for outdoor use only.

Personal Protection. Wear safety apparel during operation, including safety glasses with side and top protection. Ear protection is also recommended if working near any operating engine.

Adult control only. Only trained adults should set up and operate the air compressor. Do not let children operate.

Under The Influence. Never operate, or let anyone else operate, the air compressor while fatigued or under the influence of alcohol, drugs, or medication.

Keep this manual for reference and review.

ATTENTION: Rental Companies and Private Owners who loan this equipment to others!

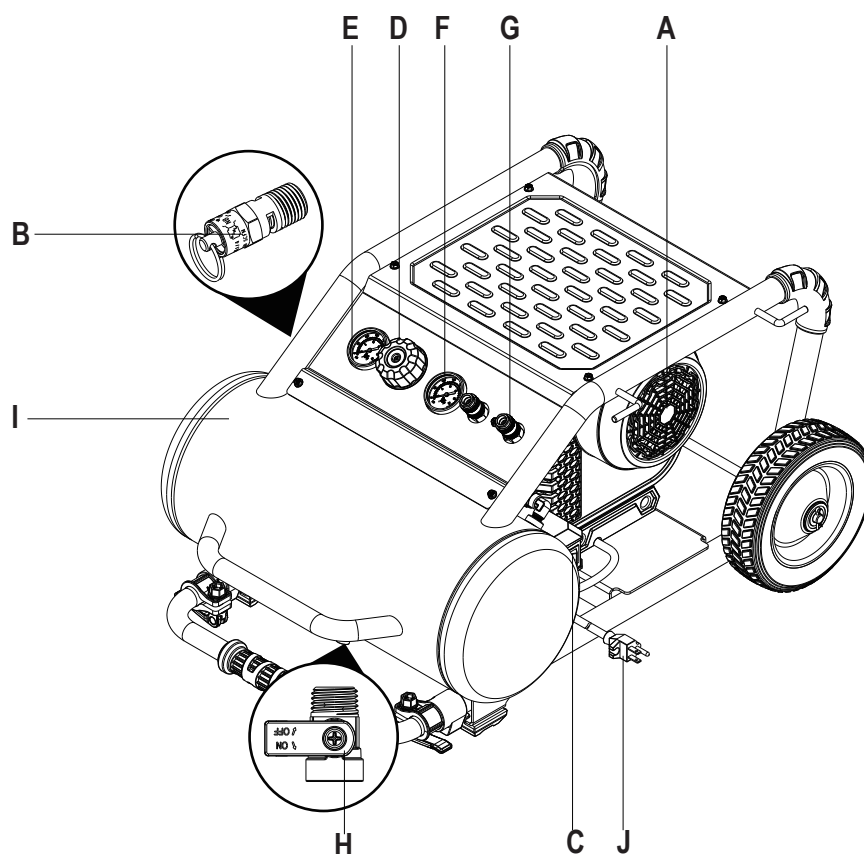
All persons to whom you rent/loan this air compressor must have access to and read this manual. Keep this owner's manual with the air compressor at all times and advise all persons who will operate the machine to read it. You must also provide personal instruction on how to safely set-up and operate the air compressor and remain available to answer any questions a renter/borrower might have. Owner's Manuals are available from NorthStar at 1-800-270-0810.

Specifications

MODEL	
Model #	5827402
FLOW OUTPUT	
Max. Pressure Rating	225 PSI
Volume Rating @ 90 PSI	5.2 CFM
Volume Rating @ 40 PSI	6.5 CFM
Receiver Capacity	5 gal.
Motor	2.0 hp
Voltage/Amps/Hz	120/15/60
Pump	Oil free
Power Cord	SJT14AWG x 12 ft.

Key Parts Diagram

OVERVIEW



A.	Motor & Pump	F.	Outlet Pressure Gauge
B.	Safety Valve	G.	Quick Coupler (Universal Coupler)
C.	Power Switch	H.	Drain Valve
D.	Pressure Regulator	I.	Air Tank
E.	Tank Pressure Gauge	J.	Power Cord

Parts Description

A. Electric Motor

The motor is used to power the pump. It is equipped with a thermal overload protector. If the motor overheats for any reason, the thermal overload protector will shut it down in order to prevent the motor from being damaged.

Air Compressor Pump

The pump compresses the air and discharges it into the tank via the piston that moves up and down in the cylinder.

B. Safety Valve

This valve is used to prevent the compressor from building too much pressure. If the pressure reaches the preset level of the motor, it will automatically pop open. You can also pull the ring on the valve to open manually.

C. Power Switch

The Switch turns the compressor on and off manually. Always set this switch to the OFF position when the compressor is not being used and before unplugging.

D. Pressure Regulator

The regulator is used to adjust the pressure inside the line to the tool that is being used. Turn the knob clockwise to increase the pressure and counter-clockwise to decrease the pressure.

E. Tank Pressure Gauge

The gauge measures the pressure level of the air that is stored in the tank. It cannot be adjusted by the operator and it does not indicate the pressure inside the line.

F. Outlet Pressure Gauge

The gauge measures the regulated outlet pressure.

G. Quick Coupler (Universal Coupler)

The quick coupler is connected to the 1/4" (6.4 mm) NPT air hose.

H. Drain Valve

The drain valve is used to remove moisture from the air tank after the compressor is shut off.

I. Air Tank

The tank is where the compressed air is stored.

J. Power Cord

This compressor should be used on a nominal 120V grounded circuit. Use a power cord that is equipped with a grounding plug. Verify that the compressor is plugged into an outlet that has the same configuration as the plug. Do not use an adaptor with this compressor.

Safety Guidelines




General Safety Warnings

Important Safety Instructions

Read and understand all safety and operational instructions. Failure to follow the safety rules listed below and other basic safety precautions may result in serious personal injury. Keep this manual, sales receipts and applicable warranty forms for future reference.

Safety Symbols

The purpose of safety symbols is to alert you of the potential safety RISKS. Recognize and understand them. Follow the instructions provided.

SYMBOL	MEANING
 DANGER	Failure to obey a DANGER safety alert WILL result in serious personal injury or death to you or to others. Always obey all messages following this symbol to reduce the risk of serious personal injury or death.
 WARNING	Failure to obey a WARNING safety alert MAY result in serious personal injury or death to you or to others. Always obey all messages following this symbol to reduce the risk of potential serious personal injury or death.
 CAUTION	Failure to obey a CAUTION safety alert MAY result in personal injury or property damage to you or to others. Always obey all messages following this symbol to reduce the risk of personal injury or property damage.
NOTICE	Notice indicates important information, that if not followed, may cause damage to equipment.

Specific Safety Instructions for 5 Gal Air Compressor

Save This Manual For Future Reference

- The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols, and the explanations with them, deserve your careful attention and understanding. The symbol warnings do not by themselves eliminate any danger. The instructions and warnings they give are no substitutes for proper accident prevention measures.
- Be sure to read and understand all safety instructions in this manual, including all safety alert symbols such as “DANGER”, “WARNING” and “CAUTION”, before using this compressor. Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury.

Safety Instructions

Work Area Safety

- Keep your work area clean and well lit. Cluttered workbenches and 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 bystanders, children and visitors away while operating a power tool. Distractions can cause you to lose control.
- Make your workshop childproof with padlocks and master switches. Lock tools away when not in use.
- Make sure the work area has ample lighting so you can see the work and that there are no obstructions that will interfere with safe operation before using your power tool.

Work Area Safety

- Know your power tool. Read the operator’s manual carefully. Learn the power tools applications and limitations, as well as the specific potential hazards related to this tool.
- Stay alert, watch what you are doing and use common sense when operating a power tool.
- Do not use tool while tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.

Safety Guidelines

- Dress properly. Do not wear loose clothing or jewelry. Pull back long hair. Keep your hair, clothing, and gloves away from moving parts. Air vents often cover moving parts and should also be avoided. Loose clothing, jewelry or long hair can be caught in moving parts.
- Avoid accidental starting. Be sure switch is in “OFF” position before plugging in. Do not carry tools with your finger on the switch. Carrying tools with your finger on the switch or plugging in tools that have the switch in the “ON” position invites accidents.
- Remove adjusting keys or wrenches before turning the tool “ON”. A wrench that is left attached to a rotating part of the tool may result in personal injury.
- Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enables better control of the tool in unexpected situations.
- Always secure your work. Use clamps or a vise to hold work when practical. It is safer than using your hand and frees both hands to operate tool.
- Use safety equipment. Always wear eye protection. Dust mask, non-skid safety shoes, hard hat or hearing protection must be used for appropriate conditions.
- Do not use on a ladder or unstable support. Stable footing on a solid surface enables better control of the tool in unexpected situations.

TOOL USE AND CARE SAFETY

⚠WARNING

Be sure to read and understand all instruction before operating this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury.

- Always use clamps or other practical ways to secure and support the work piece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control.
- Do not force the tool. Use the correct tool and blade for your application. The correct tool and blade will do the job better and safer at the rate for which it is designed.
- Do not use the tool if switch does not turn it “ON” or “OFF”. Any tool that cannot be controlled with the switch is dangerous and must be repaired
- Disconnect the plug from the power source before making any adjustments, changing accessories or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.
- Never leave the tool running. Always turn it off. Do not leave the tool until it comes to a complete stop.
- Store idle tools out of the reach of children and other untrained persons. Tools are dangerous in the hands of untrained users.
- Maintain tools with care. Keep cutting tools sharp and clean. Properly maintained tools with sharp cutting edges are less likely to bind and are easier to control.
- Check for misalignment or binding of moving parts, breakage of parts, and the tool serviced before using. Many accidents are caused by poorly maintained tools.
- Use only accessories that are recommended for this tool. Accessories that may be suitable for one tool may become hazardous when used on another tool.

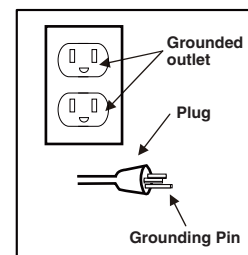
ELECTRICAL SAFETY

- Avoid body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerators. There is an increased risk of electric shock if your body is grounded.
- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- Do not abuse the cord. Never use the cord to carry the tool or pull the plug from an outlet. Keep the cord away from heat, oil, sharp edges, and moving parts.
- Replace damaged cords immediately. Damaged cords increase the risk of electric shock.

Safety Guidelines

NOTE

This compressor should be used on a nominal 120V grounded circuit. Use a power cord that is equipped with a grounding plug. Verify that the compressor is plugged into an outlet that has the same configuration as the plug. Do not use an adaptor with this compressor.



EXTENSION CORDS

⚠CAUTION

Keep the extension cord clear of the working area. Position the cord so that it will not get caught on lumber, tools or other obstructions while you are working with a power tool.

⚠WARNING

Check extension cords before each use. If damaged replace immediately. Never use tool with a damaged cord since toughing the damaged area could cause electrical shock, resulting in serious injury.

Use a proper extension cord. Only use cords listed by Underwriters Laboratories (UL). Other extension cords can cause a drop in line voltage, resulting in a loss of power and overheating of tool. When operating a power tool outdoors, use an outdoor extension cord marked "W-A" or "W". These cords are rated for outdoor use and reduce the risk of electric shock.

MINIMUM GAUGE FOR EXTENSION CORDS

(When using 120 volts only)

Ampere Rating		Total Length Of Cord			
More Than<	>Less Than	25ft.	50ft.	100ft.	150ft.
0	6	18	16	16	14
6	10	18	16	14	12
10	12	16	16	14	12
12	16	14	12	Not Recommended	

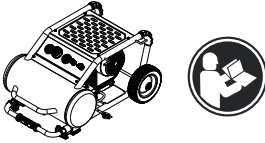
Assembly / Maintenance

Assembly

- Unpack the air compressor unit. Inspect the unit for damage. If the unit has been damaged, contact the retailer immediately.
- Check the air compressor's identification label to ensure that you have purchased the intended model and that it has the required pressure rating for its intended use.

The carton should contain:

- Air compressor
- Owner's manual

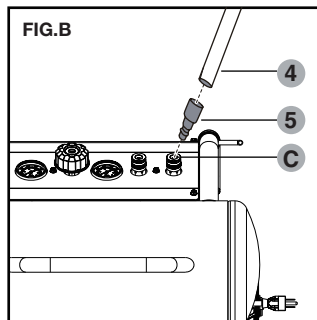
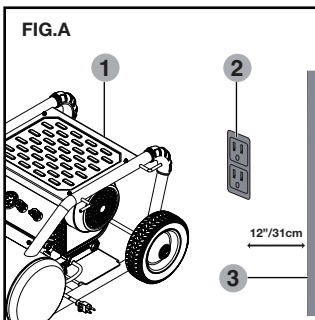


Positioning Of The Air Compressor

1. Position the air compressor ① near an electrical outlet ② (FIG. A).
2. The compressor must be at least 12"(31cm) from any wall ③ or obstruction, in a clean, well-ventilated area to ensure sufficient air flow and cooling (FIG.A).
3. Place the air compressor on the floor or a hard level surface.
4. Connect the air hose ④ to the compressor's quick coupler (universal coupler) ⑤ with the universal ⑤ quick plug FIG. B).

NOTE

Attach air hose and accessories (not provided). Apply plumber's tape on all the threads to prevent air leakage.



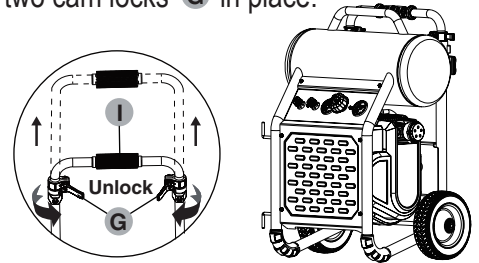
Maintenance

⚠ CAUTION

To avoid personal injury, DO NOT grab only the sliding handle ① to lift the whole unit. If you want to lift the unit, please make sure you grab both the tank and sliding handle ①.

Use the following instructions to use the sliding handle ① and wheels to move the unit.

1. Unlock the two cam locks ⑥ as shown in the illustration.
2. Slide the handle ① upward to the desired height.
3. Lock the two cam locks ⑥ in place.



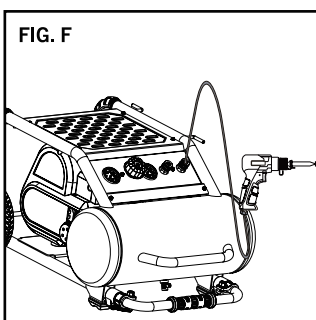
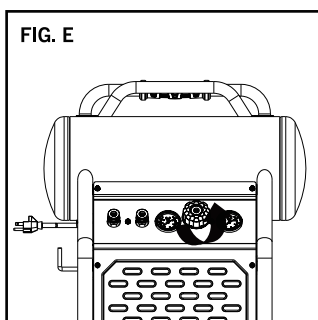
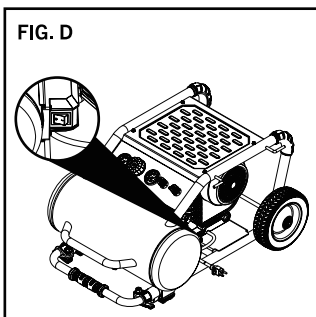
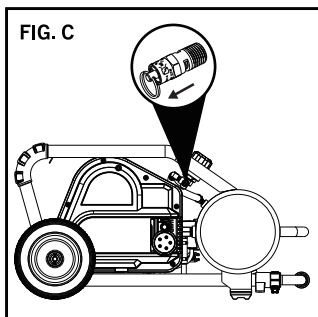
ITEM	DESCRIPTION	SERVICE INTERVAL
Drain the tank	Through normal operation of your air compressor, condensation water will accumulate in the tank. To prevent corrosion of the tank from the inside, condensation must be drained at the end of every workday. Be sure to wear protective goggles. Relieve the air pressure in the system then open the drain valve on the bottom of the tank to drain. Under cold conditions it is especially important to drain the tank after each use to reduce the chance of problems resulting from the freezing of condensation water. NOTE: Refer to instructions on how to drain tank.	Daily
Check the valve	Pull/actuate the safety valve daily to ensure that it is operating properly and to clear the valve of any possible obstructions.	Daily
Test for leaks	Check that all connections are tight. Small leaks in the tank, hoses, connections or transfer tubes will substantially reduce the air compressor and tool performance. Spray a small amount of soapy water around the area of suspected leaks with a spray bottle. If bubbles appear, repair: replace or reseal the faulty component. Do not over-tighten any connections.	Monthly
Storage	Before storing the air compressor: <ul style="list-style-type: none"> • Drain tank. • Use an air blow gun to clean all dust and debris from the compressor. • Disconnect and wind up the power cord. • Clean the ventilation openings on the motor enclosure with a damp cloth. • Drain all moisture from the tank. • Pull the pressure safety valve to release all pressure from the tank. • Cover the entire unit to protect it from moisture and dust. • Store the air compressor in a clean and dry location. • In cold weather, store the compressor in a warm building when it is not in use. This will reduce problems related to starting the motor and the freezing of water condensation. 	Prior to storing

Operating Instructions

Check Safety Valve

Before starting compressor, pull the ring on the safety valve to make sure that the safety valve operates freely. If the valve is stuck or does not operate smoothly, contact a trained service technician(Fig. C).

1. Set the power switch to the OFF position (Fig. D).
2. Turn the air pressure regulator knob counter-clockwise until it stops(Fig. E).
3. Attach hose and accessories (FIG. F).



NOTE

Risk of property damage. Do not operate in vertical position! Vertical position is for storage only!

⚠ WARNING



High pressure air could result in death or serious injury. Never operate above maximum operating pressure of the spray gun or tool.

⚠ WARNING



Hot compressor surfaces could result in serious injury. Allow compressor to cool before touching.

NOTICE

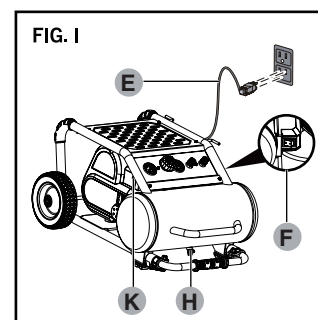
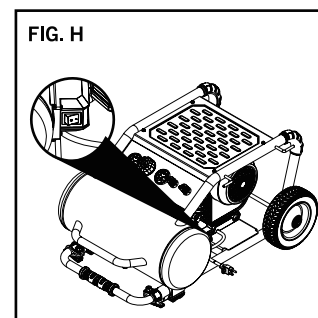
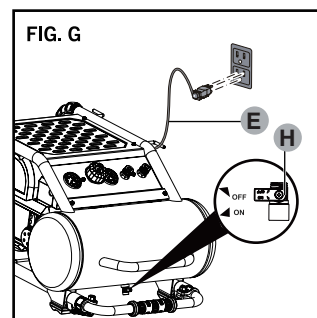
If the pump has been transported or turned upside down (even partially), allow the pump to sit in a normal, upright position (FIG. A) for approximately 10 minutes before starting.

4. Close the tank ball valve **H** . Plug-in the power cord **E** (FIG. G).

5. Set the power switch to the ON position and allow the tank pressure to build. Motor will stop when tank pressure reaches cut-out pressure (Fig H).

Shut Down

1. Set the power switch **F** to the OFF position.
2. Unplug the power cord **E** .
3. Reduce the pressure in the tank through the outlet hose. Pulling the safety valve ring **K** and keeping it open will also reduce the pressure in the tank (Fig. I).
4. Set tank drain valve **H** to OFF to ensure tank is drained.



⚠ WARNING



Risk of serious eye injury from moisture and debris. Always wear ANSI Z87.1 safety goggles when opening drain valve.

⚠ WARNING



High pressure air could result in death or serious injury. Shut off unit unplug and release air pressure prior to servicing.

⚠ CAUTION



High pressure air containing water condensation could result in minor or moderate injury. Do not spray at any person.

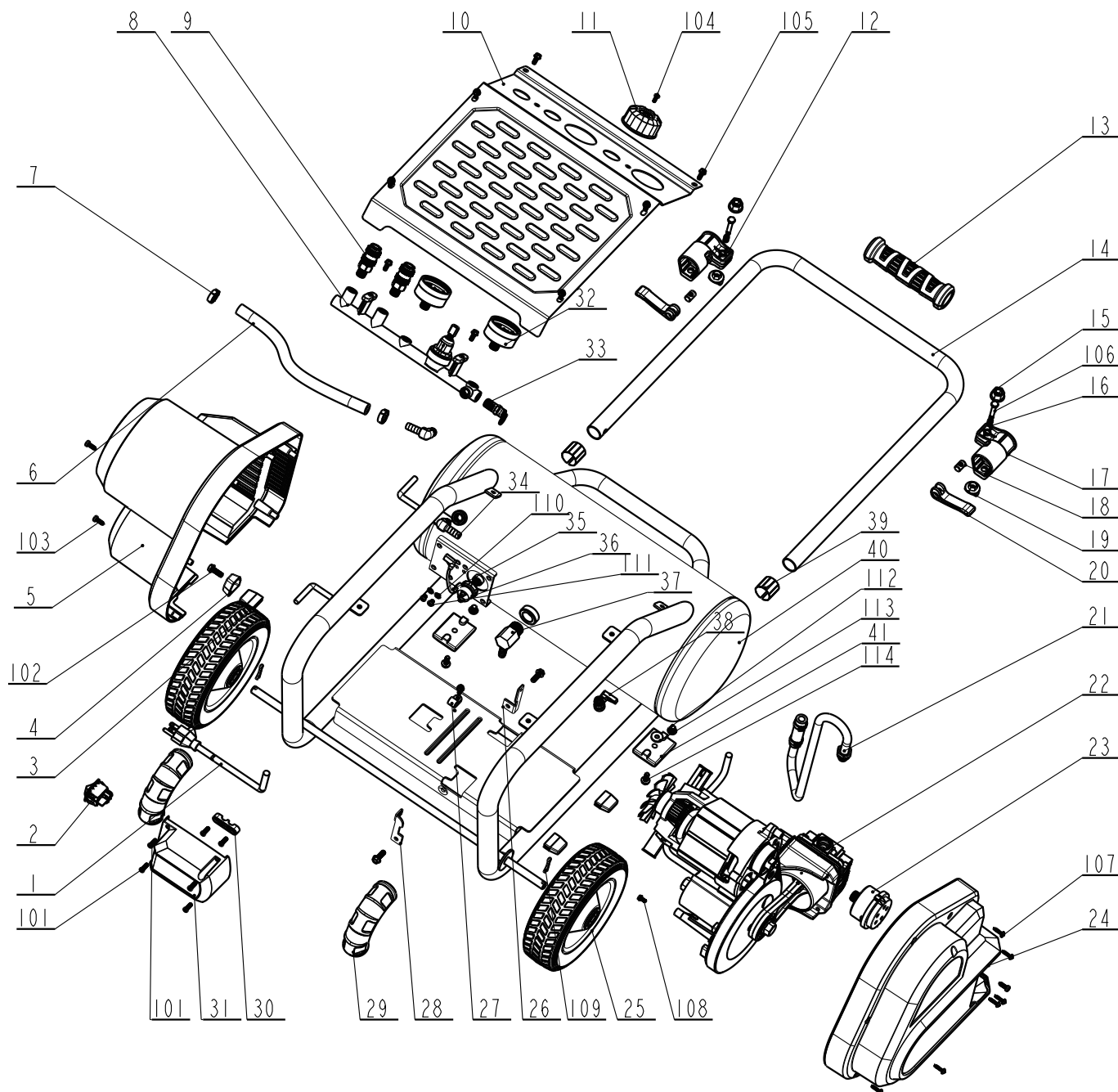
Drain The Tank

1. Set the power switch to the O (OFF) position.
2. Turn air pressure regulator knob counter-clockwise to set the outlet pressure to zero.
3. Pull and hold ring on safety valve, allowing air to bleed from the tank until air pressure is minimized.

Troubleshooting

PROBLEM	POSSIBLE CAUSE	SOLUTIONS
The motor will not run or start.	The power cord is not plugged in.	Plug the power cord into a grounded outlet.
	The power switch is in the O (OFF) position.	Set the power switch to the ON position.
	The extension cord is the wrong wire gauge or is too long.	Check extension cord information for the proper wire gauge and cord length.
	The motor's thermal overload protection has tripped.	Turn the air compressor off , unplug the power cord and wait until the motor has cooled down. Plug in the power cord only after the motor has cooled down, and wait for at least 15 minutes to make sure the thermal overload protector has recovered.
	A fuse has blown or a circuit breaker has been tripped.	Replace the fuse or reset the circuit breaker.
		Verify that the fuse has the proper amperage.
		Check for low voltage conditions.
		Disconnect any other electrical appliances from the circuit or operate the compressor on a dedicated circuit.
	The air tank pressure exceeds the preset power switch limit.	The motor will start automatically when the tank pressure drops below the cut-in pressure.
The motor runs continuously when the power switch is in the ON position.	The safety valve is stuck open.	Clean or replace the safety valve.
	Electrical connections are loose.	Contact an authorized service center.
	The motor, capacitor, or safety valve is defective.	Contact an authorized service center.
	The power switch does not shut off the motor when the air compressor reaches the cut-out pressure and the safety valve activates.	Set the power switch to the OFF position. If the motor does not shut off, unplug the air compressor. If the power switch is defective, replace it.
	The compressor's capacity is not enough.	Check the air requirements of the accessory that is being used. If it is higher than the CFM (Cubic Feet per Minute) and pressure supplied by the compressor, a larger capacity air compressor is needed. Most accessories are rated at 25% of actual CFM while running continuously.
	The regulator does not regulate the pressure.	The regulator or its internal parts are dirty or damaged.
		Replace the regulator.
	The pressure is low or there is not enough air.	There is a leak at one of the fittings.
		Check the fittings with soapy water. Tighten or reseal leaking fittings (apply plumber's tape on threads). Do not over tighten.
The pressure is low or there is not enough air.	The drain valve is open.	Close the drain valve.
	The air intake is restricted.	Clean or replace the air filter element.
	Prolonged excessive use of air.	Decrease the amount of air used.
	There is a hole in the air hose.	Check the air hose and replace it if necessary.
	The tank leaks.	Replace the tank immediately. Do not attempt to repair it. Replace the tank
	The valve is leaking.	Check for worn parts and replace them if necessary. Check for worn parts and replace them if necessary.
	There is moisture in the discharge air.	There is condensation in the air tank caused by a high level of atmospheric humidity or because the air compressor has not been running long enough.
The compressor overheats.		Drain the air tank after each use. Drain the air tank more often in humid weather and use an air-line filter.
	The ventilation is inadequate.	Relocate the compressor to an area with cool, dry and well-circulated air.
	Cooling surfaces are dirty.	Clean all cooling surfaces on the pump and the motor thoroughly.
	The valve is leaking.	Replace worn parts and reassemble using new plumber's tape.

Exploded View



Parts List

ITEM	DESCRIPTION	QTY.
1	Power Cord	1
2	Power Switch	1
3	Cushion Pad	3
4	Retainer	1
5	Left Shroud	1
6	Rubber Hose	1
7	Clamps	2
8	Pressure Regulator	1
9	Quick Coupler	2
10	Control Panel	1
11	Pressure Regulator Knob	1
12	Cam Lock (L)	1
13	Handgrip	1
14	Handle	1
15	Nut	2
16	Spring	2
17	Cam Lock (R)	1
18	Lock Nut	2
19	Plastic Washer	2
20	Lever	2
21	Rubber Aluminum Tube	1
22	Motor Pump Assembly	1
23	Air Filter	1
24	Right Shroud	1
25	Wheel	2
26	Motor Retaining Plate (Rear)	1
27	Cable Clip	1
28	Motor Retaining Plate (Front)	1

ITEM	DESCRIPTION	QTY.
29	Steel Pipe Sheath	2
30	Clamp	1
31	Switch Box	1
32	Pressure Gauge	2
33	Safety Valve	1
34	Elbow Fitting	2
35	Connection Cable	1
36	Pressure Switch	1
37	Check Valve	1
38	Drain Valve	1
39	Sliding Sleeve	2
40	Air Tank	1
41	Rubber Foot	2
101	Screw M5x14	6
102	Screw 1/4-20x31	3
103	Screw 10#x15	3
104	Screw M4x10	1
105	Bolt M5x12	9
106	Bolt M6x34	2
107	Screw ST3.9x16F	6
108	Screw 8#x9	2
109	Cotter Pin	2
110	Lock Washer $\varnothing 5$	2
111	Screw M5x6	2
112	Screw M8x8	2
113	Large Washer $\varnothing 6$	2
114	Bolt M6x16	2

Limited Warranty

Dear Valued Customer:

The NorthStar Product you just purchased is built with the finest material and craftsmanship. Use this product properly and enjoy the benefits from its high performance. By purchasing a NorthStar product, you show a desire for quality and durability. Like all mechanical equipment this unit requires a due amount of care. Treat this unit like the high quality piece of machinery it is. Neglect and improper handling may impair its performance. Please thoroughly read the instructions and understand the operation before using your product. Always contact NorthStar Product Support at 1-800-270-0810 prior to having any service or warranty work performed, as some services performed by parties other than NorthStar approved service centers may void this warranty. This warranty is in lieu of any other warranty expressed or implied and NorthStar assumes no other responsibility or liability outside that expressed within this warranty.

Limited Warranty

NorthStar shall warranty any piece of equipment manufactured, or parts of equipment manufactured, to be free from defects in material or workmanship for a period of:

NorthStar Warranty		
Item #	Consumer Warranty Period	Commercial Warranty Period
459382	4 years from date of purchase by user	2 years from date of purchase by user

Engine Warranty		
Item #	Consumer Warranty Period	Commercial Warranty Period
459382	3 years from date of purchase by user	3 years from date of purchase by user

"Consumer use" means personal residential household use by a consumer. "Commercial use" means all other uses, including use for commercial, income producing or rental purposes or when purchased by a business.

This warranty applies to the original purchaser of the equipment (verification of purchase, in the form of a receipt, is the responsibility of the buyer), is non-transferable, and covers parts and labor. Parts will be replaced or repaired at no charge, except when the equipment has failed due to lack of proper maintenance. If a part is no longer available, the part may be replaced with a similar part of equal function. Any misuse, abuse, alteration or improper installation or operations will void warranty. Determining whether a part is to be replaced or repaired is the sole decision of NorthStar. NorthStar will not provide for replacement of complete products due to defective parts. Any costs incurred due to replacement or repair of items outside of a NorthStar approved facility is the responsibility of the buyer and not covered under warranty. Transportation costs to and from service center is the responsibility of the customer.

In addition to the normal warranty, NorthStar shall warrant any normal wear item from defects in material or workmanship for a period of 90 days from the date of purchase by user. Normal wear items include, but are not limited to, belts and filter elements.

This warranty specifically excludes the following; failure of parts due to damage caused by accident, fire, flood, windstorm, acts of God, applications not approved by NorthStar in writing, corrosion caused by chemicals, use of replacement parts which do not conform to manufacturer's specifications, damage to accessory parts such as starting batteries, damage related to rodent and/or insect infestation and damage caused by vandalism. Additional exclusions: loss of running time, inconvenience, loss of income, or loss of use, including any implied warranty of merchantability of fitness for a specific use. Also, Outdoor Power Equipment needs periodic parts and service to perform well, and this warranty does not cover instances when normal use has exhausted the life of a component or the engine.

This warranty does not cover any personal injury or damage to surrounding property caused by failure of any part. Repair or replacement of parts does not extend the warranty period.

The engine warranty is covered under the terms and conditions as outlined by the engine manufacturer's warranty contained herein and is the sole responsibility of the engine manufacturer. Normal engine maintenance such as spark plugs, air filters, adjustments, fuel system cleaning and obstruction due to build up is not covered by this NorthStar warranty.

Please fill in the following information and have it on hand when you call in on a warranty claim.

Customer Number: _____

Date of Purchase: _____

NorthStar Serial Number: _____

Item Number: _____

⚠ WARNING: This product can expose you to chemicals including gasoline engine exhaust, which is known to the State of California to cause cancer, and carbon monoxide, which is known to the State of California to cause birth defects or other reproductive harm.

For more information go to www.P65Warnings.ca.gov.



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