Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain instructions for future reference.

Speedaire® Permanently Lubricated Twin Cylinder Air Compressor

Description

Speedaire twin cylinder, direct drive, oil free air compressor designed for durability and no maintenance. Featuring a 25 gallon tank, high flow air regulator, and a larger air regulated pressure gauge this unit is for home, farm, and medium duty industrial use at a 50/50 duty cycle.

Specifications

Horsepower	1.6
Cylinders	2
Air Delivery - SCFM @ 90	5.1
Maximum Air Pressure(psi)	175
Tank Size (gallons)	25
Voltage @ 60 Hz., 1- Phase	120
Amperage (Amps)	15

Overall Dimensions

L	W	H	Weight
23"	23"	53"	150 lbs.

Unpacking

1. Remove all packaging leaving the air compressor on the pallet.
2. Remove and discard the (4) screws holding the air compressor to the pallet.

⚠CAUTION ***It may be necessary to brace or support one side of the air compressor when removing the pallet because the air compressor will have a tendency to tip.***

3. Carefully remove the air compressor from the pallet.

After unpacking unit, inspect carefully for any damage that may have occurred during transit. Check for loose, missing, or damaged parts. Shipping damage claim must be filed with carrier.

Form 5S4673

Printed in U.S.A.
03465
1001/183/VCPVP

D24848

Speedaire® Permanently Lubricated Twin Cylinder Air Compressor

ENGLISH

Safety Guidelines - Definitions

⚠CAUTION ***Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.***

⚠WARNING **Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.**

⚠DANGER ***Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.***

NOTE: Indicates special instructions, which are important but not related to hazards.

IMPORTANT: Indicates factors concerned with assembly, installation, operation, or maintenance, which could result in damage to the machine or equipment if ignored.

This manual contains information that is important for you to know and understand. This information relates to protecting **YOUR SAFETY** and **PREVENTING EQUIPMENT PROBLEMS**. To help you recognize this information, we use the symbols below. Please read the manual and pay attention to these sections.

Important Safety Instructions

⚠WARNING ***Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known (to the State of California) to cause cancer, birth defects or other reproductive harm. Some example of these chemicals are:***

- ***lead from lead-based paints***
- ***crystalline silica from bricks and cement and other masonry products***
- ***arsenic and chromium from chemically-treated lumber***

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals when using such tools:

- ***work in a well ventilated area***
- ***work with approved safety equipment***
- ***always wear MSHA/NIOSH approved, properly fitting face mask or respirator.***

When using air tools, basic safety precautions should always be followed to reduce the risk of personal injury.

Model 1WC95

SAVE THESE INSTRUCTIONS

IMPROPER OPERATION OR MAINTENANCE OF THIS PRODUCT COULD RESULT IN SERIOUS INJURY AND PROPERTY DAMAGE. READ AND UNDERSTAND ALL WARNINGS AND OPERATING INSTRUCTIONS BEFORE USING THIS EQUIPMENT.

HAZARD

RISK OF EXPLOSION OR FIRE

WHAT CAN HAPPEN	HOW TO PREVENT IT
IT IS NORMAL FOR ELECTRICAL CONTACTS WITHIN THE MOTOR AND PRESSURE SWITCH **TO SPARK.**	ALWAYS **OPERATE THE COMPRESSOR IN A** WELL VENTILATED **AREA FREE OF COMBUSTIBLE MATERIALS, GASOLINE OR SOLVENT VAPORS.**
IF ELECTRICAL **SPARKS** FROM COMPRESSOR **COME INTO CONTACT WITH FLAMMABLE VAPORS, THEY MAY IGNITE, CAUSING FIRE OR EXPLOSION.**	IF SPRAYING FLAMMABLE MATERIALS, **LOCATE COMPRESSOR AT LEAST 20 FEET AWAY FROM SPRAY AREA.** AN ADDITIONAL LENGTH OF HOSE MAY BE REQUIRED. **STORE FLAMMABLE MATERIALS IN A SECURE LOCATION AWAY FROM COMPRESSOR.**
RESTRICTING ANY OF THE **COMPRESSOR VENTILATION OPENINGS** WILL CAUSE SERIOUS OVERHEATING AND **COULD CAUSE FIRE.**	**NEVER PLACE OBJECTS AGAINST OR ON TOP OF COMPRESSOR. OPERATE COMPRESSOR** IN AN OPEN AREA **AT LEAST 12 INCHES AWAY FROM** ANY WALL OR **OBSTRUCTION** THAT WOULD RESTRICT THE FLOW OF FRESH AIR TO THE VENTILATION OPENINGS. OPERATE COMPRESSOR IN A CLEAN, DRY, WELL VENTILATED AREA. **DO NOT OPERATE UNIT INDOORS OR IN ANY CONFINED AREA.**
UNATTENDED OPERATION OF THIS PRODUCT **COULD RESULT IN PERSONAL INJURY OR PROPERTY DAMAGE. TO REDUCE THE RISK OF FIRE, DO NOT ALLOW THE COMPRESSOR TO OPERATE UNATTENDED.**	**ALWAYS REMAIN IN ATTENDANCE** WITH THE PRODUCT WHEN IT IS OPERATING. **ALWAYS DISCONNECT ELECTRICAL POWER BY MOVING PRESSURE SWITCH LEVER TO THE OFF POSITION AND DRAIN TANK DAILY OR AFTER EACH USE.**

Speedaire® Permanently Lubricated Twin Cylinder Air Compressor

ENGLISH

HAZARD

RISK OF BURSTING

AIR TANK: **THE FOLLOWING CONDITIONS COULD LEAD TO A WEAKENING OF THE TANK, AND RESULT IN A VIOLENT TANK EXPLOSION AND COULD CAUSE PROPERTY DAMAGE OR SERIOUS INJURY.**

WHAT CAN HAPPEN	HOW TO PREVENT IT
1. FAILURE TO PROPERLY DRAIN CONDENSED WATER FROM THE TANK, CAUSING RUST AND THINNING OF THE STEEL TANK.	**DRAIN TANK DAILY OR AFTER EACH USE.** IF TANK DEVELOPS A LEAK, REPLACE IT IMMEDIATELY WITH A NEW TANK OR REPLACE THE ENTIRE COMPRESSOR.
2. MODIFICATIONS OR ATTEMPTED REPAIRS TO THE TANK.	**NEVER** DRILL INTO, WELD, OR **MAKE ANY MODIFICATIONS TO THE TANK** OR ITS ATTACHMENTS.
3. UNAUTHORIZED MODIFICATIONS TO THE UNLOADER VALVE, SAFETY VALVE, OR ANY OTHER COMPONENTS WHICH CONTROL TANK PRESSURE.	THE TANK IS DESIGNED TO WITHSTAND SPECIFIC OPERATING PRESSURES. **NEVER MAKE ADJUSTMENTS OR PARTS SUBSTITUTIONS TO ALTER THE FACTORY SET OPERATING PRESSURES.**
4. EXCESSIVE VIBRATION CAN WEAKEN THE AIR TANK AND CAUSE RUPTURE OR EXPLOSION.	
ATTACHMENTS & ACCESSORIES:	
EXCEEDING THE PRESSURE RATING OF AIR TOOLS, SPRAY GUNS, AIR OPERATED ACCESSORIES, TIRES AND OTHER INFLATABLES **CAN CAUSE THEM TO EXPLODE** OR FLY APART, AND COULD RESULT IN SERIOUS INJURY.	FOR ESSENTIAL CONTROL OF AIR PRESSURE,**YOU MUST INSTALL A PRESSURE REGULATOR AND PRESSURE GAUGE TO THE AIR OUTLET (IF NOT EQUIPPED)** OF YOUR COMPRESSOR. FOLLOW THE EQUIPMENT MANUFACTURERS RECOMMENDATION AND NEVER EXCEED THE MAXIMUM ALLOWABLE PRESSURE RATING OF ATTACHMENTS. **NEVER USE COMPRESSOR TO INFLATE SMALL LOW-PRESSURE OBJECTS SUCH AS CHILDREN'S TOYS, FOOTBALLS, BASKETBALLS, ETC.**

Model 1WC95

HAZARD

RISK FROM FLYING OBJECTS

WHAT CAN HAPPEN	HOW TO PREVENT IT
THE **COMPRESSED AIR** STREAM **CAN CAUSE SOFT TISSUE DAMAGE** TO EXPOSED SKIN **AND CAN PROPEL** DIRT, CHIPS, **LOOSE PARTICLES** AND SMALL OBJECTS **AT HIGH SPEED,** RESULTING IN PROPERTY DAMAGE OR PERSONAL INJURY.	ALWAYS **WEAR ANSI Z87.1 APPROVED SAFETY GLASSES WITH SIDE SHIELDS** WHEN USING THE COMPRESSOR. **NEVER POINT** ANY **NOZZLE OR SPRAYER TOWARD** ANY PART OF THE BODY OR AT OTHER **PEOPLE OR ANIMALS.** ALWAYS **TURN THE COMPRESSOR OFF AND BLEED PRESSURE** FROM THE AIR HOSE AND TANK BEFORE ATTEMPTING MAINTENANCE, ATTACHING TOOLS, OR ACCESSORIES.

HAZARD

RISK OF ELECTRICAL SHOCK

WHAT CAN HAPPEN	HOW TO PREVENT IT
YOUR **AIR COMPRESSOR IS POWERED BY ELECTRICITY.** LIKE ANY OTHER ELECTRICALLY POWERED DEVICE, **IF IT IS NOT USED PROPERLY, IT MAY CAUSE ELECTRIC SHOCK.**	NEVER OPERATE THE COMPRESSOR OUTDOORS WHEN IT IS RAINING OR IN WET CONDITIONS. **NEVER OPERATE COMPRESSOR WITH PROTECTIVE COVERS REMOVED** OR DAMAGED.
REPAIRS ATTEMPTED **BY UNQUALIFIED PERSONNEL CAN RESULT IN SERIOUS INJURY OR DEATH BY ELECTROCUTION.**	ANY **ELECTRICAL WIRING OR REPAIRS** REQUIRED ON THIS PRODUCT **SHOULD BE PERFORMED BY AUTHORIZED SERVICE CENTER PERSONNEL** IN ACCORDANCE WITH NATIONAL AND LOCAL ELECTRICAL CODES.
ELECTRICAL GROUNDING: **FAILURE TO PROVIDE ADEQUATE GROUNDING TO THIS PRODUCT COULD RESULT IN SERIOUS INJURY OR DEATH FROM ELECTROCUTION.** SEE GROUNDING INSTRUCTIONS.	**MAKE CERTAIN THAT THE ELECTRICAL CIRCUIT** TO WHICH THE COMPRESSOR IS CONNECTED **PROVIDES PROPER ELECTRICAL GROUNDING, CORRECT VOLTAGE AND ADEQUATE FUSE PROTECTION.**

Speedaire® Permanently Lubricated Twin Cylinder Air Compressor

ENGLISH

HAZARD

RISK TO BREATHING

WHAT CAN HAPPEN	HOW TO PREVENT IT
THE **COMPRESSED AIR** DIRECTLY FROM YOUR COMPRESSOR **IS NOT SAFE FOR BREATHING**. THE **AIR STREAM MAY CONTAIN CARBON MONOXIDE, TOXIC VAPORS, OR SOLID PARTICLES** FROM THE TANK. **BREATHING** THESE **CONTAMINANTS CAN CAUSE SERIOUS INJURY OR DEATH.**	**AIR** OBTAINED DIRECTLY FROM THE COMPRESSOR **SHOULD NEVER BE USED TO SUPPLY AIR FOR HUMAN CONSUMPTION.** IN ORDER TO USE AIR PRODUCED BY THIS COMPRESSOR FOR BREATHING, SUITABLE **FILTERS AND** IN-LINE **SAFETY EQUIPMENT MUST BE PROPERLY INSTALLED**. IN-LINE **FILTERS AND SAFETY EQUIPMENT** USED IN CONJUNCTION WITH THE COMPRESSOR **MUST BE CAPABLE OF TREATING AIR TO ALL APPLICABLE LOCAL AND FEDERAL CODES PRIOR TO HUMAN CONSUMPTION.**
SPRAYED MATERIALS SUCH AS PAINT, PAINT SOLVENTS, PAINT REMOVER, INSECTICIDES, AND WEED KILLERS, MAY **CONTAIN HARMFUL VAPORS AND POISONS.**	**WORK IN AN AREA WITH GOOD CROSS-VENTILATION.** READ AND **FOLLOW THE SAFETY INSTRUCTIONS** PROVIDED ON THE LABEL OR SAFETY DATA SHEETS **FOR THE MATERIAL YOU ARE SPRAYING. USE A NIOSH/MSHA APPROVED RESPIRATOR** DESIGNED FOR USE WITH YOUR SPECIFIC APPLICATION.

HAZARD

RISK OF BURNS

WHAT CAN HAPPEN	HOW TO PREVENT IT
TOUCHING EXPOSED METAL, SUCH AS THE COMPRESSOR HEAD OR OUTLET TUBES, **CAN RESULT IN SERIOUS BURNS.**	**NEVER TOUCH ANY EXPOSED METAL PARTS ON COMPRESSOR** DURING OR IMMEDIATELY AFTER OPERATION. **COMPRESSOR WILL REMAIN HOT** FOR SEVERAL MINUTES AFTER OPERATION. **DO NOT** REACH AROUND PROTECTIVE SHROUDS OR **ATTEMPT MAINTENANCE UNTIL UNIT HAS BEEN ALLOWED TO COOL.**

Model 1WC95

HAZARD

RISK FROM MOVING PARTS

WHAT CAN HAPPEN	HOW TO PREVENT IT
MOVING PARTS SUCH AS THE PULLEY, FLYWHEEL AND BELT **CAN CAUSE SERIOUS INJURY** IF THEY COME INTO CONTACT WITH YOU OR YOUR CLOTHING. **ATTEMPTING TO OPERATE** COMPRESSOR **WITH DAMAGED OR MISSING PARTS** OR ATTEMPTING TO REPAIR COMPRESSOR WITH PROTECTIVE SHROUDS REMOVED CAN EXPOSE YOU TO MOVING PARTS AND **CAN RESULT IN SERIOUS INJURY.**	**NEVER OPERATE THE COMPRESSOR WITH GUARDS** OR COVERS WHICH ARE **DAMAGED OR REMOVED.** ANY **REPAIRS** REQUIRED ON THIS PRODUCT **SHOULD BE PERFORMED BY AUTHORIZED SERVICE CENTER PERSONNEL.**

HAZARD

RISK OF FALLING

WHAT CAN HAPPEN	HOW TO PREVENT IT
A PORTABLE **COMPRESSOR CAN FALL** FROM A TABLE, WORKBENCH OR ROOF **CAUSING DAMAGE TO THE COMPRESSOR AND COULD RESULT IN SERIOUS INJURY OR DEATH TO THE OPERATOR.**	ALWAYS **OPERATE COMPRESSOR IN A STABLE SECURE POSITION** TO PREVENT ACCIDENTAL MOVEMENT OF THE UNIT. **NEVER OPERATE COMPRESSOR ON A ROOF OR OTHER ELEVATED POSITION. USE ADDITIONAL AIR HOSE TO REACH HIGH LOCATIONS.**

HAZARD

RISK OF PROPERTY DAMAGE WHEN TRANSPORTING COMPRESSOR

(Fire, Inhalation, Damage to Vehicle Surfaces)

WHAT CAN HAPPEN	HOW TO PREVENT IT
OIL CAN LEAK OR SPILL CAUSING FIRE OR BREATHING HAZARD. SERIOUS INJURY OR DEATH CAN RESULT. OIL LEAKS WILL DAMAGE CARPET, PAINT OR OTHER SURFACES IN VEHICLES OR TRAILERS.	ALWAYS **PLACE COMPRESSOR ON A PROTECTIVE MAT WHEN TRANSPORTING** TO PROTECT AGAINST DAMAGE TO VEHICLE FROM LEAKS. REMOVE COMPRESSOR FROM VEHICLE IMMEDIATELY UPON ARRIVAL AT YOUR DESTINATION.

Speedaire® Permanently Lubricated Twin Cylinder Air Compressor

ENGLISH

HAZARD

RISK OF UNSAFE OPERATION

WHAT CAN HAPPEN	HOW TO PREVENT IT
UNSAFE OPERATION OF YOUR AIR COMPRESSOR **COULD LEAD TO SERIOUS INJURY OR DEATH TO YOU OR OTHERS.**	**REVIEW AND UNDERSTAND** ALL INSTRUCTIONS AND **WARNINGS** IN THIS MANUAL. **BECOME FAMILIAR WITH THE OPERATION AND CONTROLS** OF THE AIR COMPRESSOR. **KEEP OPERATING AREA CLEAR** OF ALL PERSONS, PETS, AND OBSTACLES. **KEEP CHILDREN AWAY** FROM THE AIR COMPRESSOR **AT ALL TIMES**. **DO NOT OPERATE** THE PRODUCT **WHEN FATIGUED OR UNDER THE INFLUENCE OF ALCOHOL OR DRUGS. STAY ALERT AT ALL TIMES.** **NEVER DEFEAT THE SAFETY FEATURES** OF THIS PRODUCT. **EQUIP AREA OF OPERATION WITH A FIRE EXTINGUISHER.** **DO NOT OPERATE MACHINE WITH MISSING, BROKEN, OR UNAUTHORIZED PARTS.**

Model 1WC95

Assembly

CONTENTS OF CARTON

1 -Air Compressor
2 -Wheels
2 -3/8-16 Shoulder Bolts
2 -3/8-16 Hex Nuts
2 -Rubber Bumpers
2 -1/4-20 x .75" Screws

TOOLS REQUIRED FOR ASSEMBLY

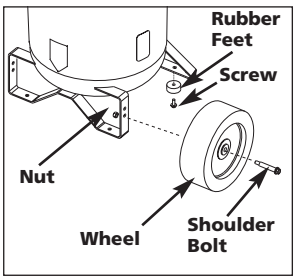
1 - 9/16" socket or open end wrench

1 - 1/2" socket or open end wrench

ASSEMBLE WHEELS

⚠CAUTION ***It will be necessary to brace or support one side of the compressor when installing the wheels because the compressor will have a tendency to tip.***

1. Attach wheels with shoulder bolts and nuts as shown.



2. Tighten securely.

NOTE: The compressor will sit level if the wheels are properly installed.

⚠CAUTION ***The wheels and handle do not provide adequate clearance, stability or support for pulling the unit up and down stairs or steps. The unit must be lifted, or pushed up a ramp.***

ASSEMBLE RUBBER FEET

1. Attach rubber feet with the screws provided as shown in previous figure.
2. Tighten securely.

Installation

LOCATION OF THE AIR COMPRESSOR

Locate the air compressor in a clean, dry and well ventilated area. The air compressor should be located at least 12" away from the wall or other obstructions that will interfere with the flow of air. The air compressor pump and shroud are designed to allow for proper cooling. The ventilation openings on the compressor are necessary to maintain proper operating temperature. Do not place rags or other containers on or near these openings. The air filter must be kept clear of obstructions which could reduce air flow to the air compressor.

GROUNDING INSTRUCTIONS

⚠WARNING ***RISK OF ELECTRICAL SHOCK. In the event of a short circuit, grounding reduces the risk of shock by providing an escape wire for the electric current. This air compressor must be properly grounded.***

The portable air compressor is equipped with a cord having a grounding wire with an appropriate grounding plug (see following illustrations). The plug must be used with an outlet that has been installed and grounded in accordance with all local codes and ordinances.

1. The cord set and plug with this unit contains a grounding pin. This plug MUST be used with a grounded outlet.

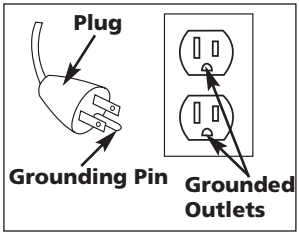
IMPORTANT: The outlet being used must be installed and grounded in accordance with all local codes and ordinances.

2. Make sure the outlet being used has the same configuration as the grounded plug. **DO NOT USE AN ADAPTER.** See illustration.
3. Inspect the plug and cord before each use. Do not use if there are signs of damage.

Speedaire® Permanently Lubricated Twin Cylinder Air Compressor

ENGLISH

Installation (Continued)



4. If these grounding instructions are not completely understood, or if in doubt as to whether the compressor is properly grounded, have the installation checked by a qualified electrician.

⚠DANGER ***IMPROPER GROUNDING CAN RESULT IN ELECTRICAL SHOCK.***

Do not modify the plug provided. If it does not fit the available outlet, a correct outlet should be installed by a qualified electrician.

Repairs to the cord set or plug MUST be made by a qualified electrician.

EXTENSION CORDS

Using extension cords is not recommended. The use of extension cords will cause voltage to drop resulting in power loss to the motor and overheating.

Instead of using extension cords attach extra air hoses to each other starting at the air outlet.

If an extension cord must be used, be sure it is:

- a 3-wire extension cord that has a 3-blade grounding plug, and a 3-slot receptacle that will accept the plug on the product
- in good condition
- no longer than 50 feet
- 12 gauge (AWG) or larger. (Wire size increases as gauge number decreases. 10 AWG and 8 AWG may also be used. DO NOT USE 14 OR 16 AWG.)

VOLTAGE AND CIRCUIT PROTECTION

Refer to the specificaitons chart for the voltage and minimum branch circuit requirements.

Certain air compressors can be operated on a 15 amp circuit if the following conditions are met.

1. Voltage supply through branch circuit is 15 amps.
2. Circuit is not used to supply any other electrical needs (lights, appliances, etc.).
3. Extension cords comply with specifications.
4. Circuit is equipped with a 15 amp circuit breaker or 15 amp time delay fuse. **NOTE:** If compressor is connected to a circuit protected by fuses, use only time delay fuses. Time delay fuses should be marked "D" in Canada and "T" in the US.

If any of the above conditions cannot be met, or if operation of the compressor repeatedly causes interruption of the power, it may be necessary to operate it from a 20 amp circuit. It is not necessary to change the cord set.

Operation

KNOW YOUR AIR COMPRESSOR

READ THIS OWNER'S MANUAL AND SAFETY RULES BEFORE OPERATING YOUR UNIT. Compare the illustrations with your unit to familiarize yourself with the location of various controls and adjustments. Save this manual for future reference.

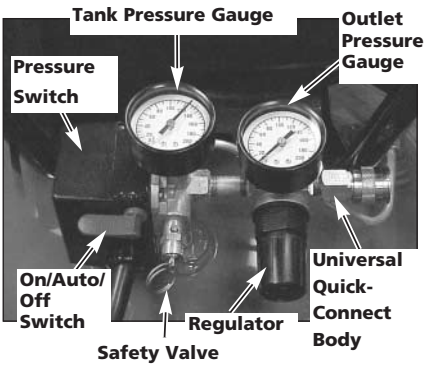
DESCRIPTION OF OPERATION

Become familiar with these controls before operating the unit.

On/Auto/Off Switch: Turn this switch ON to provide automatic power to the pressure switch and OFF to remove power at the end of each use.

Pressure Switch: The pressure switch automatically starts the motor when the air tank pressure drops below the factory set "cut-in" pressure. It stops the motor when the air tank pressure reaches the factory set "cut-out" pressure.

Model 1WC95



Operation (Continued)

Safety Valve: If the pressure switch does not shut off the air compressor at its "cut-out" pressure setting, the safety valve will protect against high pressure by "popping out" at its factory set pressure (slightly higher than the pressure switch "cut-out" setting).

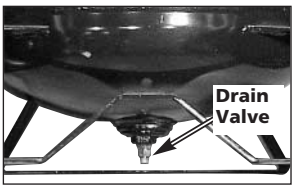
Outlet Pressure Gauge: The outlet pressure gauge indicates the air pressure available at the outlet side of the regulator. This pressure is controlled by the regulator and is always less than or equal to the tank pressure.

Tank Pressure Gauge: The tank pressure gauge indicates the reserve air pressure in the tank.

Regulator: Controls the air pressure shown on the outlet pressure gauge. Pull the knob out and turn clockwise to increase pressure and counterclockwise to decrease pressure. When the desired pressure is reached push knob in to lock in place.

Universal Quick-Connect Body: The universal quick-connect body accepts the three most popular styles of quick-connect plugs: Industrial, automotive (Truflate), and ARO. One hand push-to-connect operation makes connections simple and easy.

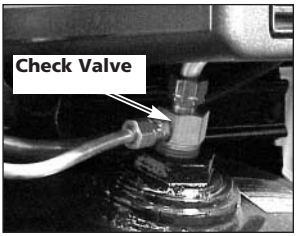
Drain Valve: The drain valve is located at the base of the air tank and is used to drain condensation at the end of each use.



Cooling System (not shown): This compressor contains an advanced design cooling system. At the heart of this cooling system is an engineered fan. It is perfectly normal for this fan to blow air through the vent holes in large amounts. You know that the cooling system is working when air is being expelled.

Air Compressor Pump (not shown): Compresses air into the air tank. Working air is not available until the compressor has raised the air tank pressure above that required at the air outlet.

Check Valve: When the air compressor is operating, the check valve is "open", allowing compressed air to enter the air tank. When the air compressor reaches "cut-out" pressure, the check valve "closes", allowing air pressure to remain inside the air tank.



Speedaire® Permanently Lubricated Twin Cylinder Air Compressor

Operation (Continued)

Pressure Release Valve: The pressure release valve located on the side of the pressure switch, is designed to automatically release compressed air from the compressor head and the outlet tube when the air compressor reaches "cut-out" pressure or is shut off. The pressure release valve allows the motor to restart freely. When the motor stops running, air will be heard escaping from this valve for a few seconds. No air should be heard leaking when the motor is running or after the unit reaches "cut-out" pressure.

Motor Overload Protector (not shown): The motor has an automatic reset thermal overload protector. If the motor overheats for any reason, the overload protector will shut off the motor. The motor must be allowed to cool down before restarting. The compressor will automatically restart after the motor cools.

If the overload protector shuts the motor off frequently, check for a possible voltage problem. Low voltage can also be suspected when:

1. The motor does not get up to full power or speed.
2. Fuses blow out when starting the motor; lights dim and remain dim when motor is started and is running.

HOW TO USE YOUR UNIT

HOW TO STOP:

Set the On/Auto/Off lever to "OFF".

BEFORE FIRST START-UP

⚠WARNING ***Serious damage may result if the following break-in instructions are not closely followed.***

This procedure is required **before** the air compressor is put into service and when the check valve or a complete compressor pump has been replaced.

1. Make sure the On/Auto/Off lever is in the "OFF" position.

NOTE: If quick connect is installed, pull coupler back until it clicks to prevent air from escaping through the quick connect.

2. Plug the power cord into the correct branch circuit receptacle. (Refer to Voltage and Circuit Protection paragraph in the Installation section of this manual.)
3. Open the drain valve fully (counterclockwise) to permit air to escape and prevent air pressure build up in the air tank during the break-in period.

NOTE: Always drain tank on a washable surface or in a suitable container to prevent damaging or staining surfaces.

4. Move the On/Auto/Off lever to "ON/AUTO" position. The compressor will start.
5. Run the compressor for 15 minutes. Make sure the drain valve is open and there is minimal air pressure build-up in tank.
6. After 15 minutes, close the drain valve (clockwise). The air receiver will fill to "cut-out" pressure and the motor will stop.

The compressor is now ready for use.

BEFORE EACH START-UP:

1. Place On/Auto/Off lever to "OFF".
2. Pull regulator knob out, turn counterclockwise until it stops. Push knob in to lock in place.
3. Attach hose and accessories.

NOTE: The hose or accessory will require a quick connect plug if the air outlet is equipped with a quick connect.

Model 1WC95

Operation (Continued)

⚠WARNING ***Too much air pressure causes a hazardous risk of bursting. Check the manufacturer's maximum pressure rating for air tools and accessories. The regulator outlet pressure must never exceed the maximum pressure rating.***

HOW TO START:

1. Turn the On/Auto/Off lever to "AUTO" and allow tank pressure to build. Motor will stop when tank pressure reaches "cut-out" pressure.
2. Pull the regulator knob out and turn clockwise to increase pressure. When the desired pressure is reached push knob in to lock in place. The compressor is ready for use.

NOTE: Always operate the air compressor in well-ventilated areas free of gasoline or other combustible vapors. If the compressor is being used to operate a sprayer DO NOT place near the spray area.

Maintenace

CUSTOMER RESPONSIBILITIES

	Before each use	Daily or after each use	Every 40 hours	Every 100 hours	Yearly
Check Safety Valve	●				
Drain Tank		●			
Air Filter			●[1]	●	
Air compressor pump intake and exhaust valves					●
(1)- more frequent in dusty or humid conditions					

⚠WARNING ***Unit cycles automatically when power is on. When performing maintenance, you may be exposed to voltage sources, compressed air, or moving parts. Personal injuries can occur. Before performing any maintenance or repair, disconnect power source from the compressor and bleed off all air pressure.***

To ensure efficient operation and longer life of the air compressor, a routine maintenance schedule should be prepared and followed. The following routine maintenance schedule is geared to an air compressor in a normal working environment operating on a daily basis. If necessary, the schedule should be modified to suit the conditions under which your air compressor is used. The modifications will depend upon the hours of operation and the working environment. An air compressor in an extremely dirty and/or hostile environment will require a greater frequency of all maintenance checks.

NOTE: See "Operation" section for the location of controls.

Speedaire® Permanently Lubricated Twin Cylinder Air Compressor

ENGLISH

Maintenance (Continued)

TO CHECK SAFETY VALVE

⚠WARNING ***If the safety valve does not work properly, over-pressurization may occur, causing air tank rupture or an explosion.***

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, it must be replaced with the same type of valve.

TO DRAIN TANK

1. Set the On/Auto/Off lever to "OFF".
2. Pull the regulator knob out and turn clockwise to set the outlet pressure to zero.
3. Remove the air tool or accessory.
4. Pull ring on safety valve allowing air to bleed from the tank until tank pressure is approximately 20 psi. Release safety valve ring.
5. Drain water from air tank by opening drain valve (counter-clockwise) on bottom of tank.

⚠WARNING ***Water will condense in the air tank. If not drained, water will corrode and weaken the air tank causing a risk of air tank rupture.***

6. After the water has been drained, close the drain valve (clockwise). The air compressor can now be stored.

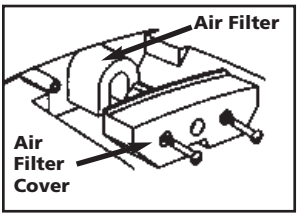
NOTE: If drain valve is clogged, release all air pressure. The valve can then be removed, cleaned, and then reinstalled.

AIR FILTER INSPECTION AND REPLACEMENT

⚠WARNING ***Hot surfaces. Risk of burn. Compressor heads are exposed when filter cover is removed. Allow compressor to cool prior to servicing.***

A dirty air filter will not allow the compressor to operate at full capacity. Keep the air filter clean at all times.

1. Remove the air filter cover.



2. Remove the air filter and make sure it is clean.

IMPORTANT: Do not operate the compressor with the air filter removed.

3. If dirty, rinse air filter with warm water and squeeze dry.
4. Replace air filter and air filter cover.

NOTE: If the air filter is extremely dirty it will need to be replaced. Refer to the "Repair Parts" for the correct part number.

AIR COMPRESSOR PUMP INTAKE AND EXHAUST VALVES

Once a year have a Trained Service Technician check the air compressor pump intake and exhaust valves.

Service and Adjustments

⚠WARNING ***Unit cycles automatically when power is on. When doing maintenance, you may be exposed to voltage sources, compressed air or moving parts. Personal injuries can occur. Before performing any maintenance or repair, unplug the compressor and bleed off all air pressure.***

ALL MAINTENANCE AND REPAIR OPERATIONS NOT LISTED MUST BE PERFORMED BY A TRAINED SERVICE TECHNICIAN.

TO REPLACE OR CLEAN CHECK VALVE

1. Release all air pressure from air tank. See "To Drain Tank" in the Maintenance section.

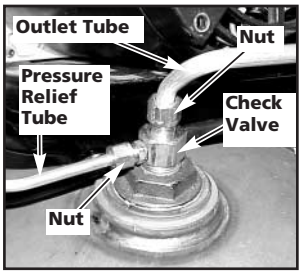
Model 1WC95

Service and Adjustments (Continued)

2. Unplug air compressor.
3. Using a phillips screwdriver, remove the air filter cover.

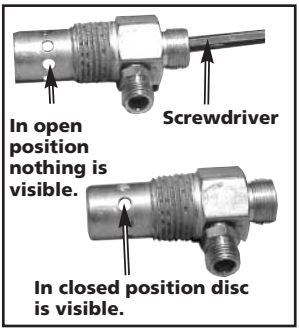
4. Remove the rear shrouds using T-20 torx wrench.

5. Using an adjustable wrench, loosen outlet tube nut at air tank. Carefully move outlet tube away from check valve.



6. Using an adjustable wrench loosen pressure relief tube nut at air tank. Carefully move pressure relief tube away from check valve.
7. Unscrew the check valve (turn counterclockwise) using a 7/8" open end wrench. Note the orientation for reassembly.
8. Using a screwdriver, carefully push the valve disc up and down.

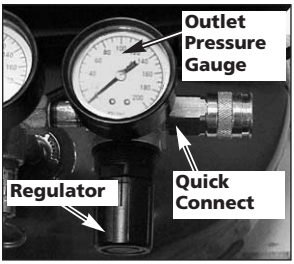
NOTE: The valve disc should move freely up and down on a spring which holds the valve disc in the closed position; if not the check valve needs to be cleaned or replaced.



9. Clean or replace the check valve. A solvent, such as paint or varnish remover can be used to clean the check valve.
10. Apply sealant to the check valve threads. Reinstall the check valve (turn clockwise).
11. Replace the pressure release tube. Tighten nut.
12. Replace the outlet tube and tighten nut.
13. Replace the shroud and air filter.
14. Perform the Break-in Procedure. See "Break-in Procedure" in the Operation section.

TO REPLACE REGULATOR

1. Release all air pressure from air tank. See "To Drain Tank" in the Maintenance section.
2. Unplug compressor.
3. Remove the outlet pressure gauge and quick connect (if equipped) from the regulator.

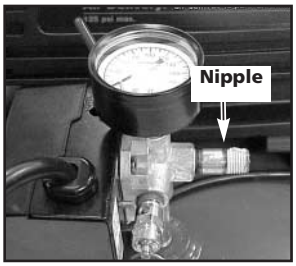


4. Remove the regulator.

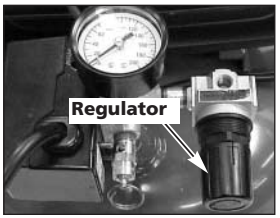
Speedaire® Permanently Lubricated Twin Cylinder Air Compressor

Service and Adjustments (Continued)

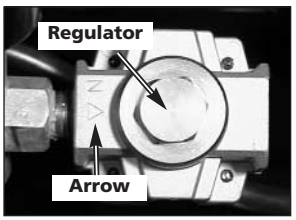
5. Apply pipe sealant tape to the nipple.



6. Assemble the regulator and orient as shown.



NOTE: Arrow indicates flow of air. Make sure it is pointing in the direction of air flow.



7. Reapply pipe sealant to outlet pressure gauge and quick connect.
8. Reassemble outlet pressure gauge and quick connect. Orient outlet pressure gauge to read correctly. Tighten quick connect with wrench.

STORAGE

Before you store the air compressor, make sure you do the following:

1. Review the "Maintenance" section on the preceding pages and perform scheduled maintenance as necessary.
2. Set the On/Auto/Off lever to “OFF”.
3. Turn the regulator counterclockwise and set the outlet pressure to zero.
4. Remove the air tool or accessory.
5. Pull ring on safety valve allowing air to bleed from the tank until tank pressure is approximately 20 psi. Release safety valve ring.
6. Drain water from air tank by opening drain valve on bottom of tank.

⚠WARNING ***Water will condense in the air tank. If not drained, water will corrode and weaken the air tank causing a risk of air tank rupture.***

7. After the water has been drained, close the drain or drain valve.

NOTE: If drain valve is plugged, release all air pressure. The valve can then be removed, cleaned, then reinstalled.

8. Protect the electrical cord and air hose from damage (such as being stepped on or run over). Wind them loosely around the compressor handle.

Store the air compressor in a clean and dry location.

Model 1WC95

Troubleshooting Chart

⚠WARNING ***Voltage sources, moving parts, or compressed air sources are exposed when repairing the compressor. Personal injury can occur. Unplug the compressor before attempting any repairs.***

Symptom (s)	Possible Causes (s)	Corrective Actions (s)
Excessive tank pressure - safety valve pops off	1. Pressure switch does not shut off motor when compressor reaches "cut-out" pressure 2. Pressure switch "cut-out" too high	1. Move On/Auto/Off lever to the "OFF" position, if the air compressor does not shut off contact a Trained Service Technician 2. Contact a trained service technician
Air leaks at fittings	Tube fittings are not tight enough.	Tighten fittings where air can be heard escaping. Check fittings with soapy water solution. **Do Not Overtighten**
Air leaks at or inside check valve	Check valve seat damaged	A defective check valve results in a constant air leak at the pressure release valve when there is pressure in the tank and the compressor is shut off. Replace check valve. Refer to the "To Replace or Clean Check Valve" in the "Service and Adjustment" section
Air leaks at pressure switch release valve	Defective pressure switch release valve	Contact a trained service technician
Air leaks in air tank or at air tank welds	Defective air tank	Air tank must be replaced. Do not repair the leak **⚠WARNING** ***Do not drill into, weld or otherwise modify air tank or it will weaken. The tank can rupture or explode.***

Speedaire® Permanently Lubricated Twin Cylinder Air Compressor

Troubleshooting Chart (Continued)

Symptom (s)	Possible Causes (s)	Corrective Actions (s)
Air leaks between head and valve plate	Leaking seal	Contact a trained service technician
Pressure reading on the regulated pressure gauge drops when an accessory is used	It is normal for "some" pressure drop to occur	If there is an excessive amount of pressure drop when the accessory is used, adjust the regulator following the instructions in the "Description of Operation" paragraph in the "Operation Section **NOTE:** Adjust the regulated pressure under flow conditions (while accessory is being used)
Knocking Noise	1. Possible defect in safety valve	1. Operate safety valve manually by pulling on ring. If valve still leaks, it should be replaced
	2. Defective check valve	2. Remove and clean, or replace
Compressor is not supplying enough air to operate accessories	1. Prolonged excessive use of air	1. Decrease amount of air usage
	2. Compressor is not large enough for air requirement	2. Check the accessory air requirement. If it is higher than the SCFM or pressure supplied by your air compressor, you need a larger compressor
	3. Hole in hose	3. Check and replace if required
	4. Check valve restricted	4. Remove and clean, or replace
	5. Air leaks	5. Tighten fittings
	6. Restricted air intake filter	6. Clean or replace air intake filter. Do not operate the air compressor with the filter removed. Refer to the "Air Filter" paragraph in the "Maintenance " section

Model 1WC95

Troubleshooting Chart (Continued)

Symptom (s)	Possible Causes (s)	Corrective Actions (s)
Regulator knob has continuous air leak	Damaged regulator	Replace
Regulator will not shut off air outlet	Damaged regulator	Replace
Motor will not run	1. Motor overload protection switch has tripped	1. Let motor cool off and overload switch will automatically reset
	2. Tank pressure exceeds pressure switch "cut-in" pressure	2. Motor will start automatically when tank pressure drops below "cut-in" pressure of pressure switch
	3. Extension cord is wrong length or gauge	3. Check for proper gauge wire and cord length
	4. Check valve stuck open	4. Remove and clean, or replace
	5. Loose electrical connections	5. Check wiring connection inside pressure switch and terminal box area
	6. Possible defective motor or starting capacitor	6. Have checked by a trained service technician
	7. Paint spray on internal motor parts	7. Have checked by a trained service technician. Do not operate the compressor in the paint spray area. See flammable vapor warning
	8. Pressure release valve on pressure switch has not unloaded head pressure	8. Bleed the line by pushing the lever on the pressure switch to the "off" position; if the valve does not open, replace switch

Speedaire® Permanently Lubricated Twin Cylinder Air Compressor

Troubleshooting Chart (Continued)

Symptom (s)	Possible Causes (s)	Corrective Actions (s)
Motor will not run (Continued)	9. Fuse blown, circuit breaker tripped	9a. Check fuse box for blown fuse and replace as necessary. Reset circuit breaker. Do not use a fuse or circuit breaker with higher rating than that specified for your particular branch circuit b. Check for proper fuse. You should use a time delay fuse c. Check for low voltage conditions and/or proper extension cord d. Disconnect the other electrical appliances from circuit or operate the compressor on its own branch circuit

Model 1WC95

Limited Warranty

DAYTON TWO-YEAR LIMITED WARRANTY. Speedaire® Permanently Lubricated Twin Cylinder Air Compressor, Models covered in this manual, are warranted by Dayton Electric Mfg. Co. (Dayton) to the original user against defects in workmanship or materials under normal use. The compressor pump on this Speedaire Air Compressor is warranted for two years from date of purchase, all other components are warranted for one year from date of purchase. Any part which is determined to be defective in material or workmanship and returned to an authorized service location, as Dayton designates, shipping costs prepaid, will be, as the exclusive remedy, repaired or replaced at Dayton's option. For limited warranty claim procedures, see PROMPT DISPOSITION below. This limited warranty gives purchasers specific legal rights, which vary from jurisdiction to jurisdiction.

LIMITATION OF LIABILITY. To the extent allowable under applicable law, Dayton's liability for consequential and incidental damages is expressly disclaimed. Dayton's liability in all events is limited to and shall not exceed the purchase price paid.

Warranty disclaimer. Dayton has made a diligent effort to provide product information and illustrate the products in this literature accurately; however, such information and illustrations are for the sole purpose of identification, and do not express or imply a warranty that the products are MERCHANTABLE, or FIT FOR A PARTICULAR PURPOSE, or that the products will necessarily conform to the illustrations or descriptions. Except as provided below, no warranty or affirmation of fact, expressed or implied, other than as stated in the "LIMITED WARRANTY" above is made or authorized by Dayton.

PRODUCT SUITABILITY. Many jurisdictions have codes and regulations governing sales, construction, installation, and/or use of products for certain purposes, which may vary from those in neighboring areas. While Dayton attempts to assure that its products comply with such codes, it cannot guarantee compliance, and cannot be responsible for how the product is installed or used. Before purchase and use of a product, review the product applications, and all applicable national and local codes and regulations, and be sure that the product, installation, and use will comply with them.

Certain aspects of disclaimers are not applicable to consumer products; e.g., (a) some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you; (b) also, some jurisdictions do not allow a limitation on how long an implied warranty last, consequently the above limitation may not apply to you; and (c) by law, during the period of the Limited Warranty, any implied warranties of implied merchantability or fitness for a particular purpose applicable to consumer products purchased by consumers, may not be excluded or otherwise disclaimed.

PROMP DISPOSITION. Dayton will make a good faith effort for prompt correction or other adjustment with respect to any product, which proves to be defective within limited warranty. For any product believed to be defective within limited warranty, first write or call dealer from whom the product was purchased. Dealer will give additional directions. If unable to solve satisfactorily, write to Dayton at address below, giving dealer's name, address, date, and number of dealer's invoice, and describing the nature of the defect. Title and risk of loss pass to buyer on delivery to common carrier. If product was damaged in transit to you, file claim with carrier.

Manufactured for Dayton Electric Mfg. Co., 5959 W. Howard St., Niles, Illinois 60714 U.S.A.

For Repair Parts, call 1-800-323-0620

24 hours a day – 365 days a year

Please provide the following information:
-Model number
-Serial number (if any)
-Part description and number as shown in parts list

Address parts correspondence to:
Grainger Parts
P.O. Box 3074
1657 Shermer Road
Northbrook, IL 60065-3074 U.S.A.

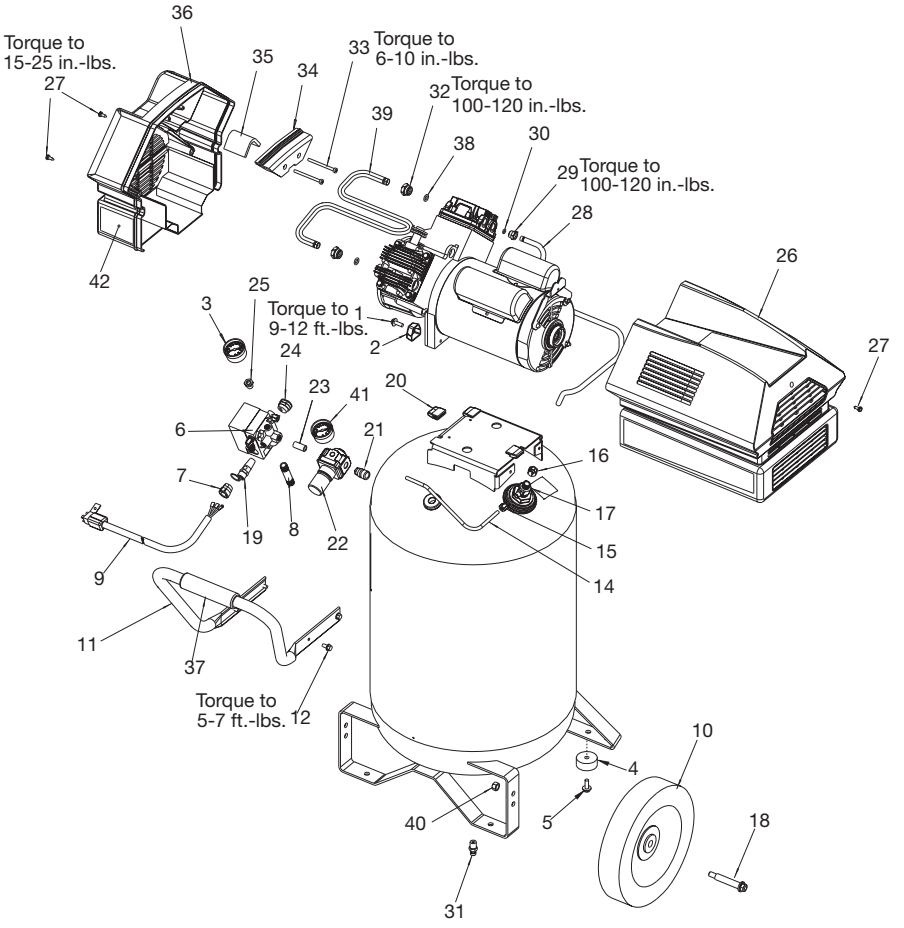


Figure 1 – Repair Parts Illustration

Repair Parts List

Please provide the following information:
-Model number
-Serial number (if any)
-Part description and number as shown in parts list

Address parts correspondence to:
Grainger Parts
P.O. Box 3074
1657 Shermer Road
Northbrook, IL 60065-3074 U.S.A.

Ref. No.	Description	Part Number	Qty.
1	1/4-20 UNC x 1.25" THD Screw	SSF-990	2
2	Cup Saddle Mount	ACG-18	2
3	Gauge	Z-GA-373	1
4	Rubber Bumper	SST-107	2
5	1/4-20 x 1.50" THD Screw	SSF-630	2
6	Pressure Switch	Z-AC-0789	1
7	3/8" Connector Conduit	SSW-7482	1
8	1/4-18 NPT x 2.50"Nipple	SSP-480	1
9	Power Cord Assembly	SUDL-413-2	1
10	Wheel	D23138	2
11	Handle	AC-0609	1
12	1/4-14 x .50" Hex HD Self Tapping Screw	SSF-981	4
14	Pressure Relief Tube	AC-0630	1
15	1/4" Nut Sleeve Assembly	SSP-7811	1
16	3/8" Nut Sleeve Assembly	SSP-7813	1
17	Check Valve	AC-0631	1
18	3/8-16 UNC x 2.25" Shoulder Bolt	CAC-60	2
19	Safety Valve	TIA-4200	1
20	Isolator	AC-0774	3
21	Quick Connect	D20675	1
22	Regulator	D20643	1
23	1/4-18 NPT x 1.50" Nipple	SS-2071	1
24	Bushing Strain Relief	SSW-7367	1
25	1/8-1/4 NPT Bushing Reducer	SSP-6021	1
26	Shroud, Rear	DAC-243	1
27	Fastener Assembly	ACG-408	3
28	Outlet Tube	AC-0803	1
29	3/8" Nut Tubing	SSP-7821-1	1
30	O-Ring	SSG-3105	1
31	Drain Valve	SS-2707	1
32	1/2" Nut Tubing	AC-0780	2
33	10-14 x 2.50" Screw	SSF-554	2
34	Intake Muffler Cover	AC-0783	1
35	Element Intake Filter	ACG-12	1
36	Shroud, Front	DAC-244	1
37	Grip	AC-0558	1
38	O-Ring	AC-0781	2
39	Interconnecting Tube	AC-0802	1
40	3/8-16 UNC Hex Nut	SSF-8080-ZN	2
41	Gauge	D21929	1

ENGLISH

For Repair Parts, call 1-800-323-0620

24 hours a day – 365 days a year

Please provide the following information:
-Model number
-Serial number (if any)
-Part description and number as shown in parts list

Address parts correspondence to:
Grainger Parts
P.O. Box 3074
1657 Shermer Road
Northbrook, IL 60065-3074 U.S.A.

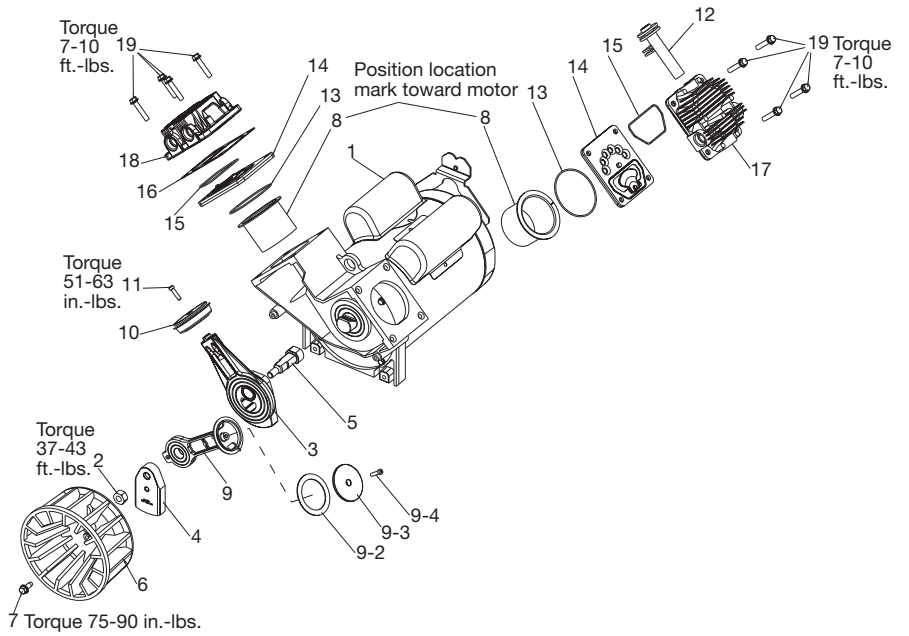


Figure 2 – Repair Parts Illustration

Repair Parts List

Please provide the following information:
-Model number
-Serial number (if any)
-Part description and number as shown in parts list

Address parts correspondence to:
Grainger Parts
P.O. Box 3074
1657 Shermer Road
Northbrook, IL 60065-3074 U.S.A.

Ref. No.		Description	Part Number	Qty.
1		Motor	Z-MO-9089	1
2		Nut, Eccentic Pin	AC-0797	1
3	■	Eccentric Rod Bearing	AC-0800	1
4		Eccentric Outer	AC-0793	1
5		Eccentric Pin	AC-0794	1
6		Fan	ACG-22	1
7		1/4 x .625" Screw Self Tap	39124607	1
8	▲●◆	Cylinder Sleeve	AC-0788	2
9	▲	Connecting Rod Assembly	--------	1
9-2	▲◆	Pre-formed Compression Ring	DAC-308	1
9-3	▲	Connecting Rod Cap	ACG-29	1
9-4	▲◆	#10-24 x .75" Screw	SSF-3158-1	1
10	●	Piston Assembly	AC-0810	1
11	●■	10-24 x .75", T25 Torx Screw	D20605	1
12		Intake Muffler	ACG-11	1
13	▲●■◆	O-Ring	SSG-8156	2
14		Valve Plate Assembly	Z-AC-0032	2
15	▲●■◆	O-Ring	ACG-45	2
16	●■	Head Gasket	AC-0779	1
17		Head - Low Pressure	AC-0805	1
18		Head - High Pressure	AC-0784	1
19		1/4-20 x 1.25" Screw	AC-0798	8

▲	Connecting Rod Kit	K-0651
	Includes K-0650	
◆	Compression Ring Replacement Kit	K-0650
■	Connecting Rod Kit- High Pressure	K-0649
●	Compression Ring HP Replacement Kit	K-0648

ENGLISH

Notes

Manufactured for Dayton Electric Mfg. Co.
Niles, Illinois 60714 U.S.A.