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INSTRUCTION MANUAL

DEWALT®

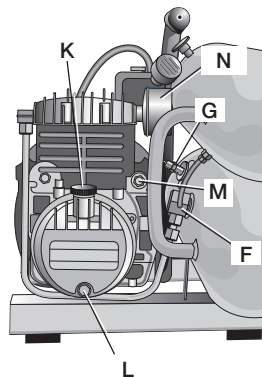
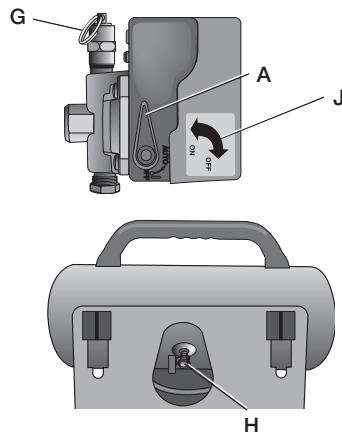
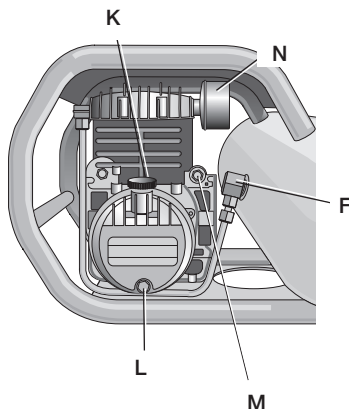
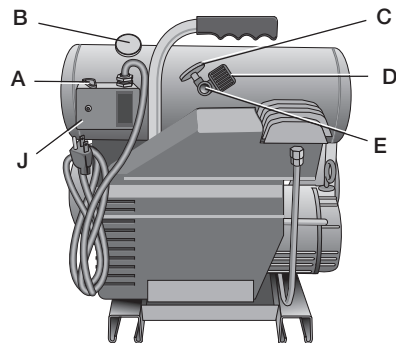
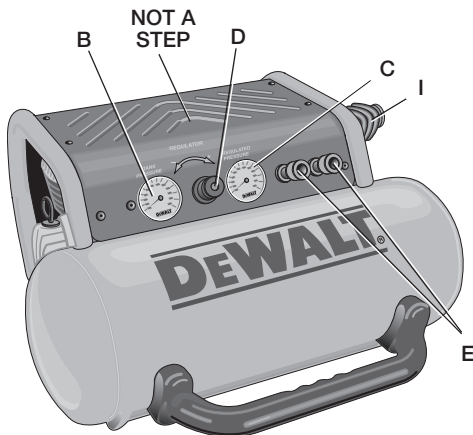
D55151, D55152, D55153, D55155

Contractor's Electric 4 Gallon Hand Carry Air Compressor


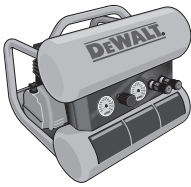

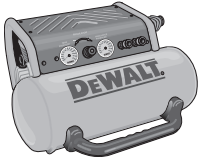
Air Compressor

- A. On/Off Switch
- B. Air Tank Pressure Gauge
- C. Regulated Pressure Gauge
- D. Pressure Regulator
- E. Quick Connects (if equipped)
- F. Check Valve
- G. Safety Valve
- H. Air Tank Drain Valve
- I. Power Cord Wrap
- J. Pressure Switch
- K. Pump Oil Dipstick
- L. Pump Oil Drain Plug
- M. Motor Reset
- N. Air Intake Filter

FIG. 1

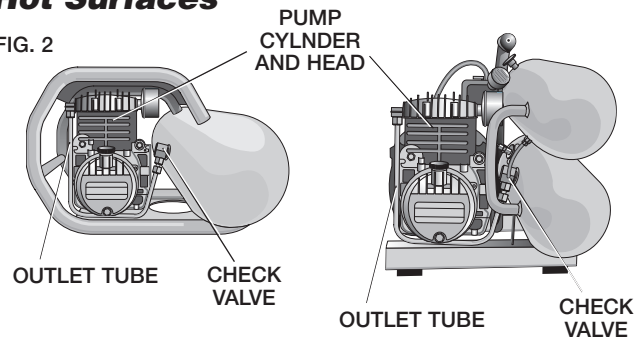


Specifications

MODEL	D55151	D55152	D55153	D55155
				
WEIGHT	56 lbs. (25.4 kg)	65 lbs. (29.5 kg)	58 lbs. (28.3 kg)	61 lbs. (27.7 kg)
HEIGHT	16.75" (425.5 mm)	16.0" (406.4 mm)	16.75" (501.7 mm)	12.5" (317.5 mm)
WIDTH	18.0" (457.2 mm)	18.0" (457.2 mm)	18.0" (457.2 mm)	21.75" (552.5 mm)
LENGTH	15.0 (381 mm)	18.0" (457.2 mm)	15.0 (381 mm)	21.75" (552.5 mm)
AIR TANK CAPACITY (GALLONS)	4.0 (15.1 liters)	4.0 (15.1 liters)	4.0 (15.1 liters)	4.0 (15.1 liters)
APPROX CUT-IN PRESSURE	95 PSI (655 kPa)	95 PSI (655 kPa)	95 PSI (655 kPa)	100 PSI (689.5 kPa)
APPROX. CUT-OUT PRESSURE	125 PSI (861.8 kPa)	125 PSI (861.8 kPa)	125 PSI (861.8 kPa)	125 PSI (861.8 kPa)
SCFM @ 100 PSI (689.5 kPa)	3.2	3.8	3.8	4.5
MOTOR	1.1 HP (continuous)	1.1 HP (continuous)	1.1 HP (continuous)	1.2 HP (continuous)
Volts/Amps/Hertz	120V/12.5 A/60 Hz.	120V/14 A/60 Hz.	120V/14 A/60 Hz.	120V/15 A/60 Hz.
RPM	3450	3450	3450	3450
Minumum Branch Circuit Requirement	15 Amp	15 Amp	15 Amp	15 Amp
PUMP OIL CAPACITY	6 oz. (177.4 ml)	12 oz. (354.9 ml)	12 oz. (354.9 ml)	4 oz. (118.3 ml)
DUTY CYCLE	5 MINUTES ON / 5 MINUTES OFF	5 MINUTES ON / 5 MINUTES OFF	5 MINUTES ON / 5 MINUTES OFF	5 MINUTES ON / 5 MINUTES OFF

Hot Surfaces

FIG. 2



Definitions: Safety Guidelines

The definitions below describe the level of severity for each signal word. Please read the manual and pay attention to these symbols.

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

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

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

CAUTION: Used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, **may** result in **property damage**.

IF YOU HAVE ANY QUESTIONS OR COMMENTS ABOUT THIS OR ANY DeWALT TOOL, CALL US TOLL FREE AT: 1-800-4-DeWALT (1-800-433-9258)

Important Safety Instructions

▲WARNING: Do not operate this unit until you read and understand this instruction manual for safety, operation and maintenance 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: work in a well ventilated area, and work with approved safety equipment, always wear OSHA/MSHA/NIOSH approved, properly fitting face mask or respirator when using such tools. When using air tools, basic safety precautions should always be followed to reduce the risk of of personal injury.

▲WARNING: This product contains chemicals, including lead, known to the State of California to cause cancer, and birth defects or other reproductive harm. Wash hands after handling.

SAVE THESE INSTRUCTION



⚠ DANGER: RISK OF EXPLOSION OR FIRE

WHAT CAN HAPPEN

- It is normal for electrical contacts within the motor and pressure switch to spark.
- If electrical sparks from compressor come into contact with flammable vapors, they may ignite, causing fire or explosion.

HOW TO PREVENT IT

- Always operate the compressor in a well ventilated area free of combustible materials, gasoline, or solvent vapors.
- If spraying flammable materials, locate compressor at least 20 feet (6.1 m) 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" (30.5 cm) 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 turn off and unplug unit when not in use.



⚠ DANGER: RISK TO BREATHING (ASPHYXIATION)

WHAT CAN HAPPEN

- 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 air tank. Breathing these contaminants can cause serious injury or death.

HOW TO PREVENT IT

- 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, 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 materials you are spraying. Always use certified safety equipment: OSHA/MSHA/NIOSH respiratory protection designed for use with your specific application.



⚠ DANGER: RISK OF INJURY OR PROPERTY DAMAGE WHEN TRANSPORTING OR STORING

WHAT CAN HAPPEN

- Oil can leak or spill and could result in fire or breathing hazard; serious injury or death can result. Oil leaks will damage carpet, paint or other surfaces in vehicles or trailers.

HOW TO PREVENT IT

- 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. Always keep compressor level and never lie on its side.



⚠ WARNING: RISK OF BURSTING

Air Tank: The air tank on your Air Compressor is designed and may be UM coded (for units with air tanks greater than 6 inch diameter) according to ASME Section VIII, Div. 1 rules. All pressure vessels should be inspected once every two years. To find your state pressure vessels inspector, look under the Division of Labor and Industries in the government section of a phone book or call 1-800-4-DEWALT for assistance.

The following conditions could lead to a weakening of the air tank, and result in a violent air tank explosion:

WHAT CAN HAPPEN

- Failure to properly drain condensed water from air tank, causing rust and thinning of the steel air tank.
- Modifications or attempted repairs to the air tank.
- Unauthorized modifications to the safety valve or any other components which control air tank pressure.

HOW TO PREVENT IT

- Drain air tank daily or after each use. If air tank develops a leak, replace it immediately with a new air tank or replace the entire compressor.
- Never drill into, weld, or make any modifications to the air tank or its attachments. Never attempt to repair a damaged or leaking air tank. Replace with a new air tank.
- The air tank is designed to withstand specific operating pressures. Never make adjustments or parts substitutions to alter the factory set operating pressures.

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.
- 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.



⚠ WARNING: RISK OF ELECTRICAL SHOCK

WHAT CAN HAPPEN

- Your air compressor is powered by electricity. Like any other electrically powered device, If it is not used properly it may cause electric shock.
- Repairs attempted by unqualified personnel can result in serious injury or death by electrocution.
- **Electrical Grounding:** Failure to provide adequate grounding to this product could result in serious injury or death from electrocution. See **Grounding Instructions** under *Installation*.

HOW TO PREVENT IT

- Never operate the compressor outdoors when it is raining or in wet conditions.
- Never operate compressor with protective covers removed or damaged.
- Any electrical wiring or repairs required on this product should be performed by a DEWALT factory service center or a DEWALT authorized service center in accordance with national and local electrical codes.
- Make certain that the electrical circuit to which the compressor is connected provides proper electrical grounding, correct voltage and adequate fuse protection.



⚠ WARNING: RISK FROM FLYING OBJECTS

WHAT CAN HAPPEN

- 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.

HOW TO PREVENT IT

- Always wear certified safety equipment: ANSI Z87.1 eye protection (CAN/CSA Z94.3) 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 air tank before attempting maintenance, attaching tools or accessories.



⚠ WARNING: RISK OF HOT SURFACES

WHAT CAN HAPPEN

- Touching exposed metal such as the compressor head, engine head, engine exhaust or outlet tubes, can result in serious burns.

HOW TO PREVENT IT

- 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.



⚠ WARNING: RISK FROM MOVING PARTS

WHAT CAN HAPPEN

- Moving parts such as the pulley, flywheel, and belt can cause serious injury if they come into contact with you or your clothing.

HOW TO PREVENT IT

- Never operate the compressor with guards or covers which are damaged or removed.
- Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.
- Air vents may cover moving parts and should be avoided as well.

- 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.
- Any repairs required on this product should be performed by a DEWALT factory service center or a DEWALT authorized service center.



⚠ WARNING: RISK OF UNSAFE OPERATION

WHAT CAN HAPPEN

- Unsafe operation of your air compressor could lead to serious injury or death to you or others.

HOW TO PREVENT IT

- 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.



⚠ WARNING: RISK OF FALLING

WHAT CAN HAPPEN

- 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.

HOW TO PREVENT IT

- 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.



⚠ CAUTION: RISK FROM NOISE

WHAT CAN HAPPEN

- Under some conditions and duration of use, noise from this product may contribute to hearing loss.

HOW TO PREVENT IT

- Always wear certified safety equipment: ANSI S12.6 (S3.19) hearing protection.

SAVE THESE INSTRUCTIONS FOR FUTURE USE

FEATURES (Fig. 1)

ON/OFF SWITCH

Place this switch (A) in the ON position to provide automatic power to the pressure switch and OFF to remove power at the end of each use.

PRESSURE SWITCH

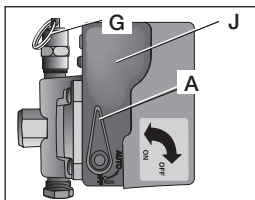
The pressure switch (J) automatically starts the motor when the air tank pressure drops below the factory set cut-in pressure. It stops the motor when the air tank pressure reaches the factory set cut-out pressure.

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.

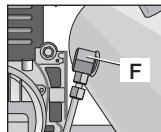
SAFETY VALVE

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



CHECK VALVE

When the air compressor is operating, the check valve (F) 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.



TANK PRESSURE GAUGE

The tank pressure gauge (B) indicates the reserve air pressure in the tank.

OUTLET PRESSURE GAUGE

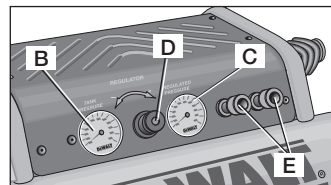
The outlet pressure gauge (C) indicates the air pressure available at the outlet side of the regulator. This pressure is controlled by the regulator and is always less than or equal to the tank pressure.

REGULATOR

The regulator (D) controls the air pressure shown on the outlet pressure gauge. Turn regulator knob clockwise to increase pressure and counterclockwise to decrease pressure.

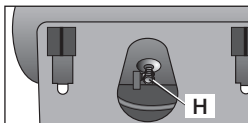
UNIVERSAL QUICK CONNECT BODIES (IF EQUIPPED)

The universal quick connect body (E) accepts the three most popular styles of quick connect plugs: Industrial, automotive, and ARO. One hand push-to-connect operation makes connections simple and easy. The two quick connect bodies allow the use of two tools at the same time.



DRAIN VALVE

The drain valve (H) is located at the base of the air tank and is used to drain condensation at the end of each use. See **Draining Air Tank** under *Maintenance*.



COOLING SYSTEM

This compressor contains an advanced design cooling system. It is normal for this fan to blow air through the vent holes in large amounts. The cooling system is working when air is expelled.

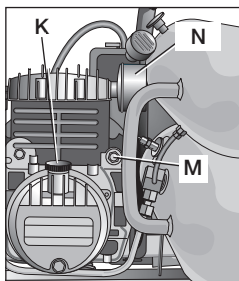
AIR COMPRESSOR PUMP

The pump 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.

MOTOR OVERLOAD PROTECTOR

This motor has a manual 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. To restart:

1. Ensure the On/Off switch (A) is in the OFF position.
2. Allow the motor to cool.
3. Depress the reset button (M) on the motor.



OIL DIPSTICK

The oil dipstick (K) indicates the amount of oil in the pump. Check pump oil daily, see **Compressor Pump Oil** under *Maintenance*.

AIR INTAKE FILTER

The filter (N) is designed to clean air entering the pump. To ensure the pump continually receives a clean, cool, and dry air supply the filter must always be clean and the filter intake must be free from obstructions.

INSTALLATION

Assembly

INSTALLING HOSES

▲ WARNING: Risk of unsafe operation. Firmly grasp hose in hand when installing or disconnecting to prevent hose whip.

1. Ensure regulated pressure gauge reads 0 PSI (0 kPa).
2. Grasp the hose at the quick connect plug and push the plug into the quick connect body (E). Coupler will snap into place.
3. Grasp the hose and pull to ensure coupler is seated.

DISCONNECTING HOSES

▲ WARNING: Risk of unsafe operation. Firmly grasp hose in hand when installing or disconnecting to prevent hose whip.

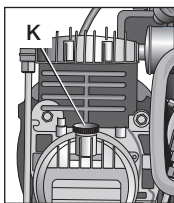
1. Ensure regulated pressure gauge reads 0 PSI (0 kPa).
2. Pull coupler on quick connect body back to release quick connect plug on hose.

Lubrication and Oil

CAUTION: The compressor was shipped with oil in the crankcase. A shipping plug is used to prevent oil from leaking during shipment. Do not attempt to operate this air compressor without first checking the oil level. Serious damage can result from even limited operation unless filled with oil and broken in correctly. Closely follow **Initial Set-up** under *Operation*.

CAUTION: Multi-viscosity motor oils, like 10W30, should not be used in an air compressor. They leave carbon deposits on critical components, thus reducing performance and compressor life. Use SAE 40, non-detergent air compressor oil only.

1. Place unit on a level surface.
2. Remove the shipping plug and install the dipstick.
3. Remove the dipstick (K) and check the oil level. Oil should not exceed top raised line on dipstick. If oil is below lower mark see Checking Oil under **Compressor Pump Oil** under *Maintenance*. **NOTE:** See Specifications for pump oil capacity.



CAUTION: Risk of unsafe operation. Overfilling with oil will cause premature compressor failure. Do not overfill.

4. Replace dipstick.

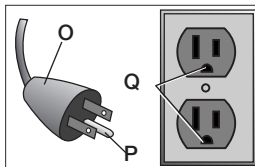
Grounding Instructions

▲ 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.

1. The cord set and plug (O) with this unit contains a grounding pin (P). This plug **MUST** be used with a grounded outlet (Q).

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

2. Ensure the outlet being used has the same configuration as the grounded plug. **DO NOT USE AN ADAPTER.**



3. Inspect the plug and cord before each use. Do not use if there are signs of damage.
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: Risk of electrical shock. 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 an extension cord, increase the working reach of the air hose by attaching another length of hose to its end. Attach additional lengths of hose as needed.

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 (15,2 m)
- 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 **Voltage and Minimum Branch Circuit Requirements** under *Specifications*.

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

- *Voltage supply to circuit must comply with the National Electrical Code.*
- *Circuit is not used to supply any other electrical needs.*
- *Extension cords comply with specifications.*
- *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.

Compatibility

Air tools and accessories that are run off the compressor must be compatible with petroleum-based products. If you suspect that a material is not compatible with petroleum products, an air line filter for removal of moisture and oil vapor in compressed air is required.

NOTE: Always use an air line filter to remove moisture and oil vapor when spraying paint.

Location

Place the air compressor in a clean, dry and well ventilated area at least 12" (30.5 cm) away from the wall or other obstructions that will interfere with the flow of air. Keep the compressor away from areas that have dirt and/or volatile fumes in the atmosphere. These impurities may clog the intake filter and valves, causing inefficient operation.

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.

Place the air compressor on a flat surface resting on the rubber feet.

NOISE CONSIDERATIONS

Consult local officials for information regarding acceptable noise levels in your area. To reduce excessive noise, use vibration mounts or silencers, relocate the unit or construct total enclosures or baffle walls. Contact a DeWALT service center or call 1-800-4-DeWALT for assistance.

ELECTRICAL

Refer to all safety instructions before using unit. Observe extension cord safety instructions if necessary. Always move the On/Off switch (A) to the OFF position before removing the plug from the outlet.

TRANSPORTING

When transporting the compressor in a vehicle, trailer, etc., ensure that the tank is drained and the unit is secured. Use care when driving to avoid tipping the unit over in the vehicle. Damage can occur to the compressor or surrounding items if the compressor is tipped.

MOVING

When moving the compressor, grasp the handle and carry the compressor as close to the body as possible.

▲ WARNING: Risk of unsafe operation. Ensure proper footing and use caution when carrying compressor to avoid a loss of balance.

PREPARATION FOR USE

Pre-Start Checklist (Fig. 1)

1. Ensure the On/Off switch (A) is in the OFF position.
2. Plug the power cord into the correct branch circuit receptacle. See **Voltage and Circuit Protection** under *Installation*.
3. Ensure air tank is drained, see **Draining Air Tank** under *Maintenance*.
4. Ensure the drain valve (H) is closed.
5. Ensure safety valve (G) is functioning properly, see **Checking Safety Valve** under *Maintenance*.
6. Check pump oil level, see **Compressor Pump Oil** under *Maintenance*.

CAUTION: Do not operate without oil or with inadequate oil. DEWALT is not responsible for compressor failure caused by inadequate oil.

7. Turn regulator knob (D) counterclockwise until fully closed. Ensure regulated pressure gauge reads 0 PSI (0 kPa).
8. Attach hose and accessories.

▲ WARNING: Risk of unsafe operation. Firmly grasp hose in hand when installing or disconnecting to prevent hose whip.

9. Ensure all covers and labels are in place, legible (for labels) and securely mounted. Do not use compressor until all items have been verified.

▲ WARNING: Risk of bursting. 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.

Initial Set-up (Fig. 1)

▲ WARNING: Do not operate this unit until you read and understand this instruction manual for safety, operation and maintenance instructions.

BREAK-IN PROCEDURE

▲ 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 for the first time and when the check valve or a compressor pump/motor has been replaced.

1. Ensure the On/Off switch (A) is in the OFF position.

NOTE: If hose is not connected to Quick Connect body, 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. See **Voltage and Circuit Protection** under *Installation*.
3. Open the drain valves (counter-clockwise) fully to permit air to escape and prevent air pressure build up in the air tank during the break-in period.
4. Move the On/Off switch to the ON position. The compressor will start.
5. Run the compressor for 20 minutes.
6. After 20 minutes, close the drain valves by turning clockwise. The tank will fill to cut-out pressure and the motor will stop.
7. Compressed air will be available until it is used or bled off.

OPERATING PROCEDURES

Start-up (Fig. 1)

1. Follow **Pre-Start Checklist** under *Preparation for Use*.
2. Move the On/Off switch to the ON position and allow tank pressure to build. Motor will stop when tank pressure reaches **cut-out** pressure.

CAUTION: Risk of unsafe operation. Compressed air from the unit may contain water condensation and oil mist. Do not spray unfiltered air at an item that could be damaged by moisture. Some air operated tools or devices may require filtered air. Read the instructions for the air tool or device.

3. Adjust regulator (D) to desired setting. See **Regulator** under *Features*.

Shut-down (Fig. 1)

1. Move On/Off switch (A) is in the OFF position. **NOTE:** If finished using compressor, follow Steps 2 - 6.
2. Turn regulator knob (D) counterclockwise until fully closed. Ensure regulated pressure gauge reads 0 PSI (0 kPa).
3. Remove hose and accessory.
4. Drain the air tank, see **Draining Air Tank** under *Maintenance*. Ensure air tank pressure gauge reads 0 PSI (0 kPa).

▲ WARNING: Risk of bursting. Drain air tank daily. Water will condense in air tank. If not drained, water will corrode and weaken the air tank causing a risk of air tank rupture.

5. Allow the compressor to cool down.
6. Wipe air compressor clean and store in a safe, non-freezing area.

MAINTENANCE

The following procedures must be followed when maintenance or service is performed on the air compressor.

1. Ensure On/Off switch is in the OFF position.
2. Remove air compressor plug from outlet.
3. Drain air tank.
4. Allow air compressor to cool down before starting service.

NOTE: All compressed air systems contain maintenance parts (e.g., oil, filters, separators) that are periodically replaced. These used parts may contain substances that are regulated and must be disposed of in accordance with local, state, and federal laws and regulations.

NOTE: Take note of the positions and locations of parts during disassembly to make reassembly easier.

NOTE: Any service operations not included in this section should be performed by a DeWALT factory service center or a DeWALT authorized service center.

Maintenance Chart

Procedure	Daily	Weekly	Monthly	1 year or 200 Hours
Check safety valve	X			
Inspect air filter +		X		
Drain air tank	X			
Check pump oil level	X			
Change pump oil***				X
Oil leak inspection	X			
Check for unusual noise/vibration	X			
Check for air leaks*	X			
Clean compressor exterior		X		
* To check for air leaks apply a solution of soapy water around joints. While compressor is pumping to pressure and after pressure cuts out, look for air bubbles to form.				
** The pump oil must be changed after the first 20 hours of operation. Thereafter, when using DEWALT synthetic or SAE 40, non-detergent air compressor oil, change oil every 200 hours of operation or once a year, whichever comes first.				
+ Perform more frequent in dusty or humid conditions				

Checking Safety Valve (Fig. 1)

▲WARNING: Hot surfaces. Risk of burn. Aftercooler, pump head, and surrounding parts are very hot, do not touch (see the Hot Surfaces identified in Fig. 2). Allow compressor to cool prior to servicing.

▲WARNING: Risk of bursting. 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.

Checking Air Filter Element (Fig. 1)

▲WARNING: Hot surfaces. Risk of burn. Aftercooler, pump head, and surrounding parts are very hot, do not touch (see the Hot Surfaces identified in Fig. 2). Allow compressor to cool prior to servicing.

1. Ensure the On/Off switch (A) is in the OFF position.
2. Allow unit to cool.
3. Remove air filter (N) from unit.
4. Carefully pry filter top from base.
5. Remove element from filter base.
6. If element needs cleaning, blow out with air. Replace if needed. Purchase replacement parts from your local dealer or authorized service center. Always use identical replacement parts.
7. Place element back in filter base.
8. Snap filter top to filter base.
9. Reassemble air filter to unit. Ensure exhaust outlet points down.

▲CAUTION: Risk of unsafe operation. Do not operate without air inlet filter

Draining Air Tank (Fig. 1)

▲WARNING: Risk of unsafe operation. Risk from noise. Air tanks contain high pressure air. Keep face and other body parts away from outlet of drain. Use safety glasses [ANSI Z87.1 (CAN/CSA Z94.3)] when draining as debris can be kicked up into face. Use ear protection [ANSI S12.6 (S3.19)] as air flow noise is loud when draining.

NOTE: All compressed air systems generate condensate that accumulates in any drain point (e.g. tanks, filter, aftercoolers, dryers). This condensate contains lubricating oil and/or substances which may be regulated and must be disposed of in accordance with local, state, and federal laws and regulations.

1. Ensure On/Off switch is in the OFF position.
2. Move compressor into an inclined position so drain valve (H) is at the lowest point (this will assist in removing moisture, dirt, etc. from air tanks)
3. Place a suitable container under the drain valve to catch discharge.
4. Grasp knurled knob on drain valve.
5. Slowly rotate knob to gradually bleed air from air tank.

▲WARNING: Risk of bursting. Drain air tank daily. Water will condense in air tank. If not drained, water will corrode and weaken the air tank causing a risk of air tank rupture.

CAUTION: Risk of property damage. Drain water from air tank may contain oil and rust, which can cause stains.

6. When air tank pressure gauge reads 10 PSI (68,9 kPa), rotate valve to the fully open position.
7. Close drain valve when finished.

Compressor Pump Oil (Fig. 1)

CHECKING OIL

▲WARNING: Hot surfaces. Risk of burn. Aftercooler, pump head, and surrounding parts are very hot, do not touch (see the Hot Surfaces identified in Fig. 2). Allow compressor to cool prior to servicing.

1. Ensure On/Off switch is in the OFF position.
2. Place unit on a flat level surface.
3. Remove dipstick (K) and wipe clean.
4. Reinsert dipstick fully into oil fill port for a few seconds to allow oil to collect on the dipstick.
5. Remove oil dipstick to read oil level. Oil should not exceed top raised line on dipstick. If oil is below lower mark, add same type of oil in crankcase and follow Steps 4 - 6.

NOTE: When filling the crankcase, the oil flows very slowly into the pump. If the oil is added too quickly, it will overflow and appear to be full.

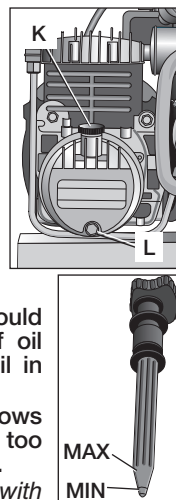
▲CAUTION: Risk of unsafe operation. Overfilling with oil will cause premature compressor failure. Do not overfill.

6. Replace dipstick.

CHANGING OIL

NOTE: Pump oil contains substances that are regulated and must be disposed of in accordance with local, state and federal laws and regulations.

▲WARNING: Hot surfaces. Risk of burn. Aftercooler, pump head, and surrounding parts are very hot, do not touch (see the Hot Surfaces identified in Fig. 2). Allow compressor to cool prior to servicing.



- ## ACCESSORIES

⚠ CAUTION: The use of any other accessory not recommended for use with this tool could be hazardous. Use only accessories rated equal to or higher than the rating of the air compressor.

SERVICE INFORMATION

Please have the following information available for all service calls:
 Model Number _____ Serial Number _____
 Date and Place of Purchase _____

Repairs

To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustment should be performed by a DEWALT factory service center, a DEWALT authorized service center or other qualified service personnel. Always use identical replacement parts.

Full One Year Warranty

DEWALT heavy duty industrial tools are warranted for one year from date of purchase. We will repair, without charge, any defects due to faulty materials or workmanship. For warranty repair information, call 1-800-4-DEWALT. This warranty does not apply to accessories or damage caused where repairs have been made or attempted by others. This warranty gives you specific legal rights and you may have other rights which vary in certain states or provinces.

LATIN AMERICA: This warranty does not apply to products sold in Latin America. For products sold in Latin America, see country specific warranty information contained either in the packaging, call the local company or see website for warranty information.

FREE WARNING LABEL REPLACEMENT: If your warning labels become illegible or are missing, call 1-800-4-DEWALT for a free replacement.

[illegible]

GLOSSARY

CFM: Cubic feet per minute.

SCFM: Standard cubic feet per minute; a unit of measure of air delivery.

PSI: Pounds per square inch; a unit of measure of pressure.

kPa (kilopascal): Metric pressure measurement. 1 kilopascal equal 1000 pascals.

Code Certification: Products that bear one or more of the following marks: UL, CUL, ETL, CETL, have been evaluated by OSHA certified independent safety laboratories and meet the applicable Underwriters Laboratories Standards for Safety.

Cut-In Pressure: While the motor is off, air tank pressure drops when accessory is used. When the tank pressure drops to a certain low level the motor will restart automatically. The low pressure at which the motor automatically restarts is called **cut-in** pressure.

Cut-Out Pressure: When an air compressor is turned on and begins to run, air pressure in the air tank begins to build. It builds to a certain high pressure before the motor automatically shuts off, protecting your air tank from pressure higher than its capacity. The high pressure at which the motor shuts off is called **cut-out** pressure.

Branch Circuit: The circuit carrying electricity from electrical panel to outlet.

Duty Cycle: For proper operation of your air compressor, it is recommended that a 50% duty cycle be maintained; that is, the air compressor should not run more than 5 minutes in any 10 minute period.

Troubleshooting Guide

This section provides a list of the more frequently encountered malfunctions, their causes and corrective actions. The operator or maintenance personnel can perform some corrective actions, and others may require the assistance of a qualified DeWALT technician or your dealer.

Problem	Code
Excessive air tank pressure-safety valve pops off	1,2
Air leaks	3
Air leaks in air tank or at air tank welds	4
Air leaks between head and valve plate	5
Air leaks from safety valve	6
Knocking Noise.....	6,16,17
Pressure reading on the regulated pressure gauge drops when an accessory is used	7
Compressor is not supplying enough air to operate accessories.....	8,9,10,11,12,15
Regulator knob has continuous air leak.....	13
Regulator will not shut off air outlet	13
Moisture in pump crankcase	14,18
Motor will not run	11,19,20,21,22,23,24,25,26

Troubleshooting Codes

CODE	POSSIBLE CAUSE	POSSIBLE SOLUTION
1	Pressure switch does not shut off motor when compressor reaches cut-out pressure	Set the On/Off switch to OFF, if the unit does not shut off contact a DeWALT factory service center or a DeWALT authorized service center.
2	Pressure switch cut-out too high	Contact a DeWALT factory service center or a DeWALT authorized service center.
3	Tube fittings are not tight enough	Tighten fittings where air can be heard escaping. Check fittings with soapy water solution. Do Not Overtighten.

CODE	POSSIBLE CAUSE	POSSIBLE SOLUTION
4	Defective air tank	Air tank must be replaced. Do not repair the leak. ⚠ WARNING: Risk of bursting. Do not drill into, weld or otherwise modify air tank or it will weaken. The air tank can rupture or explode.
5	Leaking seals	Contact a DEWALT factory service center or a DEWALT authorized service center.
6	Defective safety valve	Operate safety valve manually by pulling on ring. If valve still leaks, it must be replaced.
7	Regulator is not adjusted correctly for accessory being used	It is normal for some pressure drop to occur when an accessory is used, adjust the regulator as instructed in Regulator under <i>Features</i> if pressure drop is excessive. NOTE: Adjust the regulated pressure under flow conditions while accessory is being used.
8	Prolonged excessive use of air	Decrease amount of air usage.
9	Compressor is not large enough for accessory	Check the accessory air requirement. If it is higher than the SCFM or pressure supplied by your air compressor, a larger compressor is needed to operate accessory.
10	Hole in air hose	Replace air hose.
11	Check valve restricted	Remove, clean or replace.
12	Air leaks	Tighten fittings.
13	Regulator is damaged	Replace.
14	Unit operating in damp or humid conditions	Move unit to a dry well ventilated area
15	Restricted air intake filter	Clean or replace air intake filter
16	Pump oil is low	Add same type of oil in crankcase to pump. See Compressor Pump Oil under <i>Maintenance</i> .

CODE	POSSIBLE CAUSE	POSSIBLE SOLUTION
17	Carbon build-up in pump.	Contact a DeWALT factory service center or a DeWALT authorized service center.
18	Detergent type oil being used in pump	Drain oil and refill pump using DeWALT synthetic or SAE 40, non-detergent air compressor oil.
19	Motor overload protection switch has tripped	See Motor Overload under <i>Features</i> .
20	Extension cord is wrong length or gauge	Check for proper gauge wire and cord length. See Extension Cords under <i>Installation</i> .
21	Loose electrical connections	Contact a DeWALT factory service center or a DeWALT authorized service center.
22	Possible defective motor or starting capacitor	Contact a DeWALT factory service center or a DeWALT authorized service center.
23	Paint spray on internal motor parts	Contact a DeWALT factory service center or a DeWALT authorized service center. Do not operate the compressor in the paint spray area. See flammable vapor warning.
24	Fuse blown, circuit breaker tripped	<ol style="list-style-type: none"> 1. 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. 2. Check for proper fuse. Use only a time delay fuse. 3. Check for low voltage conditions and/or proper extension cord. 4. Disconnect the other electrical appliances from circuit or operate the compressor on its own branch circuit.
25	Tank pressure exceeds pressure switch cut-in pressure	Motor will start automatically when tank pressure drops below cut-in pressure of pressure switch.
26	Pressure release valve on pressure switch has not unloaded head pressure	Set the On/Off switch to OFF. If the valve does not open, replace switch. Contact a DeWALT factory service center or a DeWALT authorized service center.

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