

If you have questions or comments, contact us.

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INSTRUCTION MANUAL



Cordless Forced Air Propane Heater DXH70CFAV

SAVE THESE INSTRUCTIONS.

READ INSTRUCTIONS CAREFULLY: Read and follow all instructions. Place instructions in a safe place for future reference. Do not allow anyone who has not read these instructions to assemble, adjust or operate the heater.

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**.

NOTICE: Indicates a practice not related to personal injury which, if not avoided, **may** result in **property damage**.

⚠ **GENERAL HAZARD WARNING:**

FAILURE TO COMPLY WITH THE PRECAUTIONS AND INSTRUCTIONS PROVIDED WITH THIS HEATER, CAN RESULT IN DEATH, SERIOUS BODILY INJURY AND PROPERTY LOSS OR DAMAGE FROM HAZARDS OF FIRE EXPLOSION, BURN, ASPHYXIATION, CARBON MONOXIDE POISONING, AND / OR ELECTRICAL SHOCK.

ONLY PERSONS WHO CAN UNDERSTAND AND FOLLOW THE INSTRUCTIONS SHOULD USE OR SERVICE THIS HEATER.

IF YOU NEED ASSISTANCE OR HEATER INFORMATION SUCH AS AN INSTRUCTION MANUAL, LABEL, ETC. CONTACT THE MANUFACTURER.

⚠ **FIRE, BURN, INHALATION, AND**

EXPLOSION HAZARD. KEEP SOLID COMBUSTIBLES, SUCH AS BUILDING MATERIALS, PAPER OR CARDBOARD, A SAFE DISTANCE AWAY FROM THE HEATER AS RECOMMENDED BY THE INSTRUCTIONS NEVER USE THE HEATER IN SPACES WHICH DO OR MAY CONTAIN VOLATILE OR AIRBORNE COMBUSTIBLES, OR PRODUCTS SUCH AS GASOLINE, SOLVENTS, PAINT THINNER, DUST PARTICLES OR UNKNOWN CHEMICALS.

⚠ **WARNING:** NOT FOR HOME OR RECREATIONAL USE.

⚠ **WARNING:** FUELS USED IN LIQUEFIED PROPANE GAS APPLIANCES, AND THE PRODUCTS OF COMBUSTION OF SUCH FUEL, CAN EXPOSE YOU TO CHEMICALS INCLUDING BENZENE, WHICH IS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM, FOR MORE INFORMATION GO TO www.P65Warnings.ca.gov

THE HEATER IS DESIGNED AND APPROVED FOR USE AS A CONSTRUCTION HEATER IN ACCORDANCE WITH STANDARD ANSI Z83.7-CSA 2.14. CHECK WITH YOUR LOCAL FIRE SAFETY AUTHORITY IF YOU HAVE QUESTIONS ABOUT APPLICATIONS. OTHER STANDARDS GOVERN THE USE OF FUEL GASES AND HEAT PRODUCING PRODUCTS IN SPECIFIC APPLICATIONS. YOUR LOCAL AUTHORITY CAN ADVISE YOU ABOUT THESE.

⚠ WARNING: TO AVOID SERIOUS PERSONAL INJURY DO NOT OPERATE THIS HEATER UNTIL YOU READ AND UNDERSTAND THIS INSTRUCTION MANUAL FOR SAFETY, OPERATION, AND MAINTENANCE INSTRUCTIONS.

⚠ WARNING: Use of this heater in any means not described in this manual may cause fire, electric shock, personal injury and/or property damage.

⚠ CAUTION: This heater is hot when in use. To avoid burns, do not let bare skin touch hot surfaces. Keep combustible materials, such as furniture, pillows, bedding, papers, clothes, and curtains at least 6 feet (1.8 m) from the front of the heater and keep them at least 2 feet (.6 m) away from the sides and rear

⚠ WARNING: Do not insert or allow any foreign objects to enter the unit via the intake or exhaust vents on the unit. Failure to observe this warning may result in electric shock, fire or damage to the unit.

⚠ WARNING: To prevent fire do not block either the air intake or exhaust.

⚠ WARNING: Unit is equipped with internal active electrical components that spark during use. Do not use in areas where fumes from gasoline, paint or other flammable liquids may be present.

⚠ WARNING: Extreme caution must be used when any heater is used by or near children or invalids and whenever the heater is left operating and unattended.

⚠ WARNING: RISK OF FIRE OR EXPLOSION

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- WHAT TO DO IF YOU SMELL GAS:
 - Open windows.
 - DO NOT try to light any appliance.
 - DO NOT operate any electrical switches.
 - DO NOT use any telephone in building. Immediately call the local gas supplier from an outside telephone. Follow the gas supplier's instructions.
 - DO NOT touch any electrical switch; do not use any phone in your building.
 - If you cannot reach your gas supplier, call the Fire Department.

We are pleased that you have selected our product and take this opportunity to assure you that qualified service facilities are available if required. With the cooperation of independent dealers, a nationwide network of authorized servicing dealers is available for your servicing requirements. Should your product require servicing, read the section of the manual entitled "Servicing". Who gets the warranty? The warranty is limited to the consumer who originally purchases the product. What is covered? This limited warranty covers all imperfections in workmanship and material. What is not covered? This limited warranty does not cover damage resulting from accident, misuse or abuse, lack of proper maintenance, affixing of any attachments not provided with the products, or loss of parts. IN NO EVENT SHALL DeWalt® BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES NOR FOR ANY DAMAGES RESULTING FROM MISUSE OR MODIFICATION OF THIS PRODUCT.

⚠ WARNING: THIS PRODUCT CAN EXPOSE YOU TO CHEMICALS INCLUDING LEAD AND LEAD COMPOUNDS, WHICH ARE KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. FOR MORE INFORMATION VISIT www.P65Warnings.ca.gov

Specifications

MODEL:	DXH70CFAV
BURN RATE:	27,000-68,000 BTU/hr
SUPPLY PRESSURE TO REGULATOR:	MAX: 200 psi (1380 Kpa) MIN. 20 psi
REGULATOR PRESSURE:	20 psi WC 137.9 (kPa)
MANIFOLD PRESSURE:	20 psi WC 137.9 (kPa)
FUEL RATE:	3.24#/hr (1.47 kg/hr)
FUEL ORIFICE PORT SIZE:	.94mm
FAN RATING:	135 cfm
ELECTRICAL INPUT:	20Vdc / .6A
IGNITION:	Auto Spark/ Manual Gas Valve
PRIMARY FLAME CONTROL:	Thermocouple Operated Gas Valve
HIGH TEMPERATURE CONTROL:	221°F (105°C)

⚠ WARNING: CERTIFIED FOR USE WITH PROPANE ONLY

⚠ WARNING: CERTIFIED FOR USE WITH DEWALT RECHARGEABLE BATTERY PACKS REFER TO CHART BELOW A LIST OF APPROVED BATTERIES

Approved Battery Packs			
20V MAX*		FLEXVOLT®	
Size	Run Time**	Size	Run Time**
1.3Ah	2 hours	6.0Ah	10 hours
1.5Ah	2.5 hours	9.0Ah	15 hours
2.0Ah	3.2 hours	All run times are approximate. Actual run times may vary. State of charge, battery temperature and battery age will all affect actual runtime * Maximum initial battery voltage (measured without a workload) is 20 volts. Nominal voltage is 18. **Calculation assuming 73°F (23°C) ambient temp battery pack	
3.0Ah	5 hours		
4.0Ah	6.5 hours		
5.0Ah	8.3 hours		
6.0Ah	10 hours		

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MINIMUM CLEARANCE: From normal combustible material

Clearance

From floor.....	0 ft (0 M)
From outlet.....	6 ft (1.8 M)
From sides.....	4 ft (1.2 M)
From top.....	6 ft (1.8 M)

Locate 10' (2.4 M) from canvas or plastic tarpaulins or similar coverings and secure them to prevent flapping or movement due to wind action.

OPERATING PRECAUTIONS

WARNING

This is a propane, direct-fired, forced air heater. It's intended use is primarily temporary heating of buildings under construction, alteration or repair. Propane is heavier than air. If propane leaks from a connection or fitting, it sinks to the floor, collecting there with the surrounding air, forming a potentially explosive mixture. Read enclosed Odor Fade and Propane Sheet for additional information about detecting propane leaks. Leak check new connections or reconnection's with a soap and water solution.

Direct-Fired means that all of the combustion products enter the heated space. Even though this heater operates very close to 100 percent combustion efficiency, it still produces small amounts of carbon monoxide. Carbon monoxide (called CO) is toxic. CO can build up in a heated space and failure to provide adequate ventilation could result in death. The symptoms of inadequate ventilation are:

- Headache • Dizziness • Burning eyes and nose • Nausea
- Dry mouth or sore throat

Be sure to follow advice about ventilation in these operating instructions.

Forced Air means that a blower or fan pushes the air through the heater. Proper combustion depends upon this air flow; therefore, the heater must not be revised, modified or operated with parts removed or missing. Likewise, safety systems must not be circumvented or modified in order to operate the heater. When the heater is to be operated in the presence of other people the user is responsible for properly acquainting those present with the safety precautions and instructions, and of the hazards involved.

SAFETY PRECAUTIONS

WARNING

1. Check the heater thoroughly for damage. **DO NOT** operate a damaged heater.
2. **DO NOT** modify the heater or operate a heater which has been modified from its original condition.
3. Use only propane gas.
4. Use only **WITHDRAWAL** propane supply. If there is any question about vapor withdrawal, ask your propane dealer.

5. Mount the propane cylinders vertically (shutoff valve up). Secure them from falling or being knocked over and protect them from damage.
6. Locate propane containers at least (USA) 7 ft. (2.13m), (Canada) 10 ft. (3m) from the heater and do not direct exhaust toward containers within 20' (6m).
7. **IMPORTANT** Use only the hose and regulator assembly provided with the heater. Match the color stripe on the hang tag attached to the hose assembly with the color on the label located near the propane inlet fitting on the heater. Inspect hose assembly before each use of the heater. If there is excessive abrasion or wear, or hose is cut, replace with hose assembly listed on parts list before using heater.
8. For indoor use only. Adequate ventilation must be provided. Provide minimum openings of 1/2 sq. ft. (.046 m²) near the floor and 1/2 sq. ft. (.046 m²) near the ceiling (also see "Operating Precautions").
9. If at any time gas odor is detected, **IMMEDIATELY DISCONTINUE** operation until the source of gas has been located and corrected.
10. Install the heater such that it is not directly exposed to water, spray, rain and/or dripping water.
11. Maintain minimum clearance from normal combustible material (like paper) as follows: floor-0 ft. (0 m); outlet-6 ft. (1.83m); sides-4 ft. (.61m); top-6 ft. (1.83m). Locate 10 ft. (3m) from canvas or plastic tarpaulins or similar coverings and secure them to prevent flapping or movement due to wind action.
12. Due to the high surface and exhaust temperatures, adults and children must observe clearances to avoid burns or clothing ignition.
13. Operate only on a stable, level surface.
14. Do not use with duct work. Do not restrict inlet or outlet.
15. Do not move, handle or service while hot or burning.
16. Use only in accordance with local codes or, in the absence of local codes, with the Standard for the Storage and Handling of Liquefied Petroleum Gases ANSI/NFPA 58 and CSA B149.1, Natural Gas and Propane Installation code.

ODOR FADE WARNING

DANGER

Asphyxiation Hazard

- Do not use this heater for heating human living quarters.
- Do not use in unventilated areas.
- The flow of combustion and air must not be obstructed.
- Proper ventilation air must be provided to support the combustion air requirements of the heater being used.
- Refer to the specification section of the heater's manual, heater data plate, or contact the factory to determine combustion air ventilation requirements of the heater.
- Lack of proper ventilation air will lead to improper combustion.
- Improper combustion can lead to carbon monoxide poisoning leading to serious injury or death. Symptoms of carbon monoxide poisoning can include headaches dizziness and difficulty in breathing.

FUEL GAS ODOR

LP gas and natural gas have man-made odorant added specifically for detection of fuel gas leaks. If a gas leak occurs you should be able to smell the fuel gas. Since Propane (LP) is heavier than air you should smell for the gas odor low to the floor. ANY GAS ODOR IS YOUR SIGNAL TO GO INTO IMMEDIATE ACTION!

- Do not take any action that could ignite the fuel gas. Do not operate any electrical switches. Do not remove the battery from the appliance. Do not pull any power supply or extension cords. Do not light matches or any other source of flame. Do not use your telephone.
- Get everyone out of the building and away from the area immediately
- Close all propane (LP) gas tank or cylinder fuel supply valves, or the main fuel supply valve located at the meter if you use natural gas
- Propane (LP) gas is heavier than air and may settle in low areas. When you have reason to suspect a propane leak, keep out of all low areas.
- Use your neighbor's phone and call your fuel gas supplier and your fire department. Do not re-enter the building or area.
- Stay out of the building and away from the area until declared safe by the firefighters and your fuel gas supplier.
- FINALLY, let the fuel gas service person and the firefighters check for escaped gas. Have them air out the building and area before you return.

Properly trained service people must repair any leaks, check for further leakages, and then relight the appliance for you.

ODOR FADING-NO ODOR DETECTED

- Some people cannot smell well. Some people cannot smell the odor of the man-made chemical added to propane (LP) or natural gas. You must determine if you can smell the odorant in these fuel gases.
- Learn to recognize the odor of propane (LP) gas and natural gas. Local propane (LP) gas dealers will be more than happy to give you a scratch and sniff pamphlet. Use it to become familiar with the fuel gas odor.
- Smoking can decrease your ability to smell. Being around an odor for a period of time can affect your sensitivity to that particular odor. Odors present in animal confinement buildings can mask fuel gas odor.
- The odorant in propane (LP) gas and natural gas is colorless and the intensity of its odor can fade under some circumstances.
- If there is an underground leak, the movement of gas through the soil can filter the odorant.
- Propane (LP) gas odor may differ in intensity at different levels. Since Propane (LP) gas is heavier than air, there may be more odor at lower levels.
- Always be sensitive to the slightest gas odor. If you continue to detect any gas odor, no matter how small, treat it as a serious leak. Immediately go into action as discussed previously.

ATTENTION-CRITICAL POINTS TO REMEMBER

- Propane (LP) gas has a distinctive odor. Learn to recognize these odors. (Reference Fuel Gas Odor and Odor Fading sections above).
- Even if you are not properly trained in the service and repair of the heater, ALWAYS be consciously aware of the odors of propane (LP) gas and natural gas.
- If you have not been properly trained in repair and service of propane (LP) gas then do not attempt to light heater, perform service or repairs, or make any adjustments to the heater on the propane (LP) gas fuel system.
- A periodic sniff test around the heater or at the heater's joints; i.e. hose, connections, etc., is a good safety practice under any conditions. If you smell even a small amount of gas, CONTACT YOUR FUEL GAS SUPPLIER IMMEDIATELY. DO NOT WAIT!

PREPARING FOR OPERATION

1. Check the heater for possible shipping damage. If any is found, immediately notify the factory.
2. Charge (Refer to Battery Charging Procedure Section) and install battery in the opening below the front opening. Battery simply slides into the opening.
3. Follow all of the "Precautions".
4. Connect the POL fitting of hose and regulator assembly to the propane cylinder by rotating the POL nut counterclockwise into the propane cylinder's valve outlet and securely tighten with a wrench.
5. Connect the hose to the heater by rotating the hose fitting clockwise.
6. Securely tighten all gas connections.
7. Slowly open the cylinder's gas valve and check all gas connections with a soap and water solution, looking for bubbles that would indicate a gas leak. Note: if tank valve is not opened slowly, the excess flow check valve on the propane tank may stop gas flow. **DO NOT USE A FLAME**
8. Close propane cylinder gas valve.

START:

1. The DXH70CFAV heater is equipped with a blower fan switch, located on the control panel of the heater. Press the on/off switch to start the blower fan. Once the fan has been turned on, the green LED light on the control panel will turn on solid, indicating that the fan is operating. The blower fan must be turned on before the gas/igniter valve is pressed to light the heater. **NOTICE: The fuel valve (black button) has a safety lockout and cannot be depressed until 3 seconds after the fan has been started.**
2. Open propane supply valve on propane tank slowly. Note: If not opened slowly, excess-flow check valve on propane tank will stop gas flow. If this happens, close propane supply valve and open again slowly. Wait 15 seconds before Step 3.
3. After the blower fan has been started, SLOWLY depress the black gas/ igniter valve button located on the control panel to ignite the heater. If the heater fails to light, release the black button and repeat this step. Keep the valve depressed for 30-60 seconds, after burner lights, then release and the heater will continue to operate. If the burner shuts off, wait 20 seconds and repeat these steps.

NOTICE: This heater is equipped with a safety solenoid lockout that prevents the gas valve being depressed until the heater is turned on and the fan is operating. This system allows 15 seconds for ignition attempts. After 15 seconds the heater must be reset for additional attempts. To reset, press the on/off switch.

STOP

1. Press the on/off switch to turn off the heater.
2. Turn off the gas supply at the cylinder when heater is not in use.

LOW BATTERY VOLTAGE LOCKOUT

This heater is equipped with a low battery voltage lockout that prevents operation if the battery voltage is too low.

FAN OPERATION MONITORING SYSTEM

This unit is equipped with a fan monitoring system. This system ensures that the fan/blower is operating properly. If the LED indicator light is flashing an error code of 2-flashes. This is an indication that the fan is not operating properly and service or adjustment is required. This can happen when

- Fan inlet blockage or contamination (drywall dust etc.)
- Fan locked rotor (something stopping the fan from rotating)
- Minimum RPM detected
- Failed fan component
- High winds or drafts

MAINTENANCE AND STORAGE

1. The heater should be inspected before each use, and at least annually by a qualified person.
2. Before each use, check the soft "O" ring seat at the bull-nose of the POL fitting. If the "O" ring is cut, scuffed, or otherwise damaged, replace it with part number F273786.
3. Turn off the gas at the LP-gas supply cylinder(s) when the heater is not in use.
4. When the heater is to be stored indoors, the connection between the LP-gas supply cylinder(s) and the heater must be disconnected and the cylinder(s) removed from the heater and stored out of doors and in accordance with Chapter 5 of the standard for Storage and Handling of Liquefied Petroleum Gases ANSI/NFPA 58 and CSA B149.1, Natural Gas and Propane Installation Code.

SERVICING

A hazardous condition may result if a heater is used that has been modified or is not functioning properly. When the heater is working properly:

- The flame is contained within the heater
- The flame is essentially blue with perhaps some yellow tipping.
- There is no strong disagreeable odor, eye burning or other physical discomfort.
- There is no smoke or soot internal or external to the heater
- There are no unplanned or unexplained shut downs of the heater

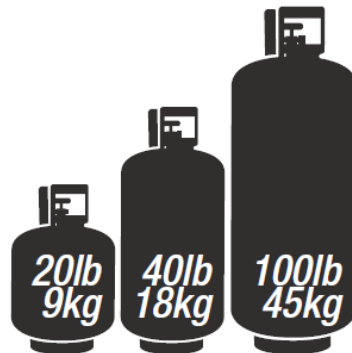
The parts lists and exploded view show the heater as it was constructed. Do not use a heater which is different from that shown. In this regard, use only the hose, regulator and cylinder connection fitting (called a POL fitting) supplied with the heater. **IMPORTANT** Match the color stripe on the hang tag attached to the hose assembly with the color on the label located near the propane inlet fitting on the heater. Do not use alternates. If there is any uncertainty about the regulator, have it checked or replaced with the one noted in the parts list in this manual. A heater which is not working right must be repaired, but only by a trained, experienced service person. In-warranty products will be repaired with no charge for either parts or labor. Please include a brief statement indicating date, place of purchase, the nature of the problem and proof of purchase. Out-of-warranty products will be repaired with a charge for parts, labor and shipping. When service or repair is required, it is recommended that you take your heater to an authorized service Center.

When servicing or replacing batteries, please note:

- Do not service the heater with battery connected
- Do not operate a damaged heater.
- Use only DEWalt original battery type.
- Do not dispose of the batteries in a fire. The cell may explode. See "Battery Recycling Information" below.
- Do not open or mutilate the batteries. Released electrolyte is corrosive and may cause damage to the eyes or skin. It may be toxic if swallowed.
- Exercise care in handling batteries in order not to short the battery with conducting materials such as rings, bracelets and/ or keys. The battery and/ or conductor may overheat and cause burns

SIZE AND CAPACITY OF PROPANE CYLINDERS REQUIRED

The following table shows the approximate run times of the various cylinder sizes suitable for use with these heaters. All heaters should have: Full cylinders, good air circulation and no frost on cylinders. Actual run times will vary depending on temperatures and variations in the tanks, the run times you experience may be longer or shorter. Run times stated below are for the estimation of consumption and run time capabilities from the LP supply tank. Heater operation times will depend on the DEWalt battery being used. For more information contact customer support at the number listed in this manual.

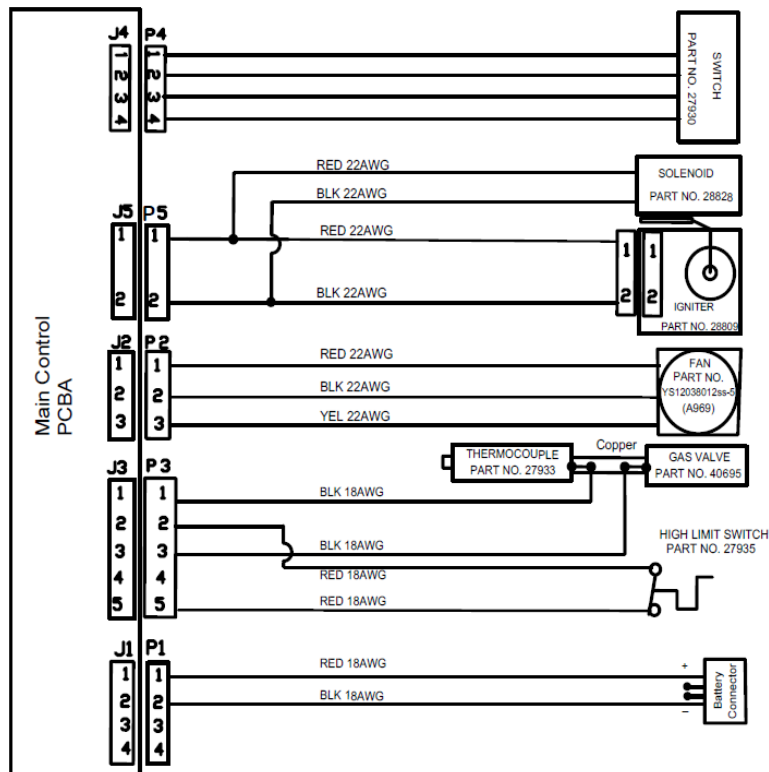


Run time (High and Low)			
BTU/HR	20lb (9kg)	40lb (18kg)	100lb (45kg)
68,000	6.17 Hours	12.34 Hours	30.84 Hours
27,000	14.39 Hours	28.79 Hours	71.97 Hours

BTU PER HOUR REQUIRED				
Cubic feet of space to be heated	Temperature Rise Required			
	20	30	40	50
5,000	14,000	20,000	27,999	34,000
7,000	19,000	28,000	38,000	47,000
10,000	27,000	40,000	54,000	67,000
15,000	40,000	60,000	80,000	100,000

Wiring Diagram DXH70CFAV

If any of the original wire supplied with appliance must be replaced, it must be replaced with type 18AWG/ 600V/105C wire or its equivalent.



IMPORTANT SAFETY INSTRUCTIONS FOR ALL BATTERY CHARGERS

SAVE THESE INSTRUCTIONS: This manual contains important safety and operating instructions for battery chargers.

- Before using the charger, read all instructions and cautionary markings on the charger, battery pack and product using the battery pack.

⚠ WARNING: Shock hazard. Do not allow any liquid to get inside the charger. Electric shock may result.

⚠ WARNING: Burn hazard. To reduce the risk of injury, charge only DEWALT rechargeable battery packs.

⚠ CAUTION: Other types of batteries may overheat and burst resulting in personal injury and property damage.

NOTICE: Under certain conditions, with the charger plugged into the power supply, the charger can be shorted by foreign material. Foreign materials of a conductive nature, such as, but not limited to, grinding dust, metal chips, steel wool, aluminum foil or any buildup of metallic particles should be kept away from the charger cavities. Always un-plug the charger from the power supply when there is no battery pack in the cavity. Unplug the charger before attempting to clean it.

⚠ WARNING:

- DO NOT attempt to charge the battery pack with any chargers other than the ones in this manual.** The charger and battery pack are specifically designed to work together.
- These chargers are not intended for any uses other than charging DeWALT rechargeable batteries.** Any other uses may result in risk of fire, electric shock or electrocution.
- Do not expose the charger to rain or snow.**
- Pull by the plug rather than the cord when disconnecting the charger.** This will reduce the risk of damage to the electric plug and cord.
- Make sure that the cord is located so that it will not be stepped on, tripped over or otherwise subjected to damage or stress.**
- Do not use an extension cord unless it is absolutely necessary.** Use of improper extension cord could result in risk of fire, electric shock

or electrocution.

- When operating a charger outdoors, always provide a dry location and use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- An extension cord must have adequate wire size (AWG or American Wire Gauge) for safety.** The smaller the gauge number of the wire, the greater the capacity of the cable, that is, 16 gauge has more capacity than 18 gauge. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. When using more than one extension to make up the total length, be sure each individual extension contains at least the minimum wire size. The following table shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The lower the gauge number, the heavier the cord.

Minimum Gauge for Cord Sets						
Amperage Rating		Volts	Total Length of Cord in Feet (meters)			
		120V	25 (7.6)	50 (15.2)	100 (30.5)	150 (45.7)
		240V	50 (15.2)	100 (30.5)	200 (61)	300 (91.4)
More Than	Not More Than	AWG				
0	6		18	16	16	14
6	10		18	16	14	12
10	12		16	16	14	12
12	16		14	12	Not Recommended	

- Do not place any object on top of the charger or place the charger on a soft surface that might block the ventilation slots and result in excessive internal heat.** Place the charger in a position away from any heat source. The charger is ventilated through slots in the top and the bottom of the housing.

- **Do not operate the charger with a damaged cord or plug.**
- **Do not operate the charger if it has received a sharp blow, been dropped or otherwise damaged in any way.** Take it to an authorized service center.
- **Do not disassemble the charger; take it to an authorized service center when service or repair is required.** Incorrect reassembly may result in a risk of electric shock, electrocution or fire.
- **Disconnect the charger from the outlet before attempting any cleaning. This will reduce the risk of electric shock.** Removing the battery pack will not reduce this risk.
- **NEVER attempt** to connect 2 chargers together.
- **The charger is designed to operate on standard 120V household electrical power. Do not attempt to use it on any other voltage.** This does not apply to the vehicular charger.

Regulatory Notices

- This Class B digital apparatus complies with Canadian ICES-003.
- This device complies with Part 15 of the FCC Rules and Industry Canada License-exempt RSS standard(s). Operation is subject to the following two conditions:
 - 1) This device may not cause harmful interference, and
 - 2) This device must accept any interference received, including interference that may cause undesired operation.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. **NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the

following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Introduction

The DCB107, DCB115 battery charger (Fig. 1) is designed to charge DeWALT 12–20V Max* lithium ion battery packs. This charger requires no adjustment and is designed to be as easy as possible to operate. Simply place your battery pack into a receptacle of a plugged in charger and it will automatically charge the pack. Consult the chart at the end of this manual for compatibility of chargers and battery packs.

IMPORTANT SAFETY INSTRUCTIONS FOR ALL BATTERY PACKS

When ordering replacement battery packs, be sure to include the catalog number and voltage. Consult the chart at the end of this manual for compatibility of chargers and battery packs.

The battery pack is not fully charged out of the carton. Before using the battery pack and charger, read the safety instructions below and then follow charging procedures outlined.

READ ALL INSTRUCTIONS

WARNING:

- **Do not charge or use the battery pack in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Inserting or removing the battery pack from the charger may ignite the dust or fumes.
- **NEVER force the battery pack into the charger. DO NOT modify the battery pack in any way to fit into a non-compatible charger as battery pack may rupture causing serious personal injury.** Consult the chart at the end of this manual for compatibility of batteries and chargers.
- Charge the battery packs only in designated DeWALT chargers.
- **DO NOT** splash or immerse in water or other liquids.

- **Do not store or use the tool and battery pack in locations where the temperature may reach or exceed 104 °F (40 °C) (such as outside sheds or metal buildings in summer).** For best life store battery packs in a cool, dry location. **NOTE: Do not store the battery pack in a tool with the trigger switch locked on. Never tape the trigger switch in the ON position.**

⚠ **WARNING:** Fire hazard. Never attempt to open the battery pack for any reason. If the battery pack case is cracked or damaged, do not insert into the charger. Do not crush, drop or damage the battery pack. Do not use a battery pack or charger that has received a sharp blow, been dropped, run over or damaged in any way (e.g., pierced with a nail, hit with a hammer, stepped on). Damaged battery packs should be returned to the service center for recycling.

⚠ **WARNING: Fire hazard. Do not store or carry the battery pack so that metal objects can contact exposed battery terminals.** For example, do not place the battery pack in aprons, pockets, tool boxes, product kit boxes, drawers, etc., with loose nails, screws, keys, etc. **Transporting batteries can possibly cause fires if the battery terminals inadvertently come in contact with conductive materials such as keys, coins, hand tools and the like.** The US Department of Transportation Hazardous Material Regulations (HMR) actually prohibit transporting batteries in commerce or on airplanes (e.g., packed in suitcases and carry-on luggage) UNLESS they are properly protected from short circuits. So when transporting individual battery packs, make sure that the battery terminals are protected and well insulated from materials that could contact them and cause a short circuit.

SPECIFIC SAFETY INSTRUCTIONS FOR LITHIUM ION (Li-Ion)

- **Do not incinerate the battery pack even if it is severely damaged or is completely worn out.** The battery pack can explode in a fire. Toxic fumes and materials are created when lithium ion battery packs are burned.
- **If battery contents come into contact with the skin, immediately wash area with mild soap and water.** If battery liquid gets into the eye, rinse water over the open eye for 15 minutes or until irritation ceases. If medical attention is needed, the battery electrolyte is composed of a mixture of liquid organic carbonates and lithium salts.
- **Contents of opened battery cells may cause respiratory irritation.**

Provide fresh air. If symptoms persist, seek medical attention.

⚠ **WARNING:** Burn hazard. Battery liquid may be flammable if exposed to spark or flame.

The RBRC® Seal

The RBRC® (Rechargeable Battery Recycling Corporation) Seal on the nickel cadmium, nickel metal hydride or lithium-ion batteries (or battery packs) indicates that the costs to recycle these batteries (or battery packs) at the end of their useful life have already been paid by DeWALT. In some areas, it is illegal to place spent nickel cadmium, nickel metal hydride or lithium-ion batteries in the trash or municipal solid waste stream and the Call 2 Recycle® program provides an environmentally conscious alternative.

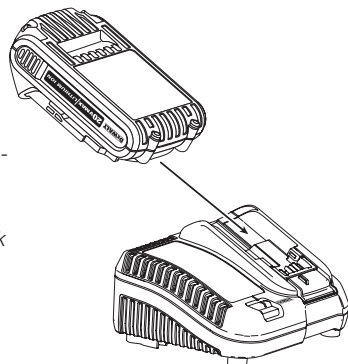
Call 2 Recycle, Inc., in cooperation with DeWALT and other battery users, has established the program in the United States and Canada to facilitate the collection of spent nickel cadmium, nickel metal hydride or lithium-ion batteries. Help protect our environment and conserve natural resources by returning the spent nickel cadmium, nickel metal hydride or lithium-ion batteries to an authorized DeWALT service center or to your local retailer for recycling. You may also contact your local recycling center for information on where to drop off the spent battery. RBRC® is a registered trademark of Call 2 Recycle, Inc.

Charger

Be sure to read all safety instructions before using your charger. Consult the chart at the end of this manual for compatibility of chargers and battery packs.

Charging a Battery (Fig. 1)

1. Plug the charger into an FIG. 1 appropriate outlet before inserting battery pack.
2. Insert the battery pack into the charger, making sure the battery pack is fully seated in the charger. The red (charging) light will blink continuously indicating that the charging process has started.



3. The completion of charge will be indicated by the red light remaining ON continuously. The battery pack is fully charged and may be used at this time or left in the charger.

NOTE: To ensure maximum performance and life of lithium-ion battery packs, charge the battery pack fully before first use.

CHARGE INDICATORS			
	CHARGING	— — — — —	
	FULLY CHARGED	—————	
	HOT/COLD PACK DELAY	- - - - ———	

Charger Operation

Refer to the indicators below for the charge status of the battery pack.

* The red light will continue to blink, but a yellow indicator light will be illuminated during this operation. Once the battery pack has reached an appropriate temperature, the yellow light will turn off and the charger will resume the charging procedure.

The charger will not charge a faulty battery pack. The charger will indicate faulty battery pack by refusing to light.

NOTE: This could also mean a problem with a charger.

If the charger indicates a problem, take the charger and battery pack to be tested at an authorized service center.

HOT/COLD PACK DELAY

When the charger detects a battery pack that is too hot or too cold, it automatically starts a Hot/Cold Pack Delay, suspending charging until the battery pack has reached an appropriate temperature. The charger then automatically switches to the pack charging mode. This feature ensures maximum battery pack life.

A cold battery pack will charge at a slower rate than a warm battery pack. The battery pack will charge at that slower rate throughout the entire charging cycle and will not return to maximum charge rate even if the battery pack warms.

LITHIUM-ION BATTERY PACKS ONLY

Li-Ion tools are designed with an Electronic Protection System that will protect the battery pack against overloading, overheating or deep discharge.

The tool will automatically turn off if the Electronic Protection System engages.

If this occurs, place the lithium-ion battery pack on the charger until it is fully charged.

Important Charging Notes

1. Longest life and best performance can be obtained if the battery pack is charged when the air temperature is between 65 °F and 75 °F (18° – 24 °C). DO NOT charge the battery pack in an air temperature below +40 °F (+4.5 °C), or above +104 °F (+40 °C). This is important and will prevent serious damage to the battery pack.
2. The charger and battery pack may become warm to the touch while charging. This is a normal condition, and does not indicate a problem. To facilitate the cooling of the battery pack after use, avoid placing the charger or battery pack in a warm environment such as in a metal shed or an uninsulated trailer.
3. If the battery pack does not charge properly:
 - Check operation of the receptacle by plugging in a lamp or other appliance;
 - Check to see if the receptacle is connected to a light switch which turns the power off when you turn out the lights;
 - Move the charger and battery pack to a location where the surrounding air temperature is approximately 65 °F – 75 °F (18° – 24 °C);
 - If charging problems persist, take the tool, battery pack and charger to your local service center.
4. The battery pack should be recharged when it fails to produce sufficient power on jobs which were easily done previously. DO NOT CONTINUE to use it under these conditions. Follow the charging procedure. You may also charge a partially used pack whenever you desire with no adverse effect on the battery pack.
5. Foreign materials of a conductive nature such as, but not limited to, grinding dust, metal chips, steel wool, aluminum foil, or any buildup of metallic particles should be kept away from charger cavities. Always unplug the charger from the power supply when there is no battery pack in the cavity. Unplug the charger before attempting to clean it.
6. Do not freeze or immerse the charger in water or any other liquid.
⚠ WARNING: Shock hazard. Don't allow any liquid to get inside the charger. Electric shock may result.
⚠ WARNING: Burn hazard. Do not submerge the battery pack in any liquid or allow any liquid to enter the battery pack. Never attempt to open the bat-

tery pack for any reason. If the plastic housing of the battery pack breaks or cracks, return it to a service center for recycling.

Wall Mounting

These chargers are designed to be wall mountable or to sit upright on a table or work surface. If wall mounting, locate the charger within reach of an electrical outlet, and away from a corner or other obstructions which may impede air flow. Use the back of the charger as a template for the location of the mounting screws on the wall. Mount the charger securely using drywall screws (purchased separately) at least 1" (25.4 mm) long, with a screw head diameter of 0.28–0.35" (7–9 mm), screwed into wood to an optimal depth leaving approximately 7/32" (5.5 mm) of the screw exposed. Align the slots on the back of the charger with the exposed screws and fully engage them in the slots.

Charger Cleaning Instructions

⚠ WARNING: Shock hazard. Disconnect the charger from the AC outlet before cleaning. Dirt and grease may be removed from the exterior of the charger using a cloth or soft non-metallic brush. Do not use water or any cleaning solutions.

Storage Recommendations

1. The best storage place is one that is cool and dry, away from direct sunlight and excess heat or cold.
2. For long storage, it is recommended to store a fully charged battery pack in a cool dry place out of the charger for optimal results.

NOTE: Battery packs should not be stored completely depleted of charge. The battery pack will need to be recharged before use.

SAVE THESE INSTRUCTIONS FOR FUTURE USE

Repairs

The charger and battery pack are not serviceable. There are no serviceable parts inside the charger or battery pack.

READ ALL OF THE INSTRUCTIONS IN THE BATTERY CHARGER SECTION OF THIS MANUAL BEFORE ATTEMPTING TO CHARGE THE BATTERY PACK FOR YOUR TOOL.

If you have any questions, call 1-800-4-DeWALT (1-800-433-9258).

Register Online

Thank you for your purchase. Register your product now for:

- **WARRANTY SERVICE:** Registering your product will help you obtain more efficient warranty service in case there is a problem with your product.

- **CONFIRMATION OF OWNERSHIP:** In case of an insurance loss, such as fire, flood or theft, your registration of ownership will serve as your proof of purchase.
- **FOR YOUR SAFETY:** Registering your product will allow us to contact you in the unlikely event a safety notification is required under the Federal Consumer Safety Act. Register Online at www.dewalt.com/register.

Three Year Limited Warranty

DeWALT will repair, without charge, any defects due to faulty materials or workmanship for three years from the date of purchase. This warranty does not cover part failure due to normal wear or tool abuse. For further detail of warranty coverage and warranty repair information, visit www.dewalt.com or call 1-800-4-DeWALT (1-800-433-9258). 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.

In addition to the warranty, DeWALT tools are covered by our:

1 YEAR FREE SERVICE

DeWALT will maintain the tool and replace worn parts caused by normal use, for free, any time during the first year after purchase.

2 YEARS FREE SERVICE ON DeWALT BATTERY PACKS

DC9071, DC9091, DC9096, DC9182, DC9280, DC9360,
DCB120, DCB127, DCB201, DCB203, DCB203BT, DCB207, DCB361

3 YEARS FREE SERVICE ON DeWALT BATTERY PACKS

DCB200, DCB204, DCB204BT, DCB205, DCB606
DeWALT BATTERY PACKS

Product warranty voided if the battery pack is tampered with in any way. DeWALT is not responsible for any injury caused by tampering and may prosecute warranty fraud to the fullest extent permitted by law.

90 DAY MONEY BACK GUARANTEE

If you are not completely satisfied with the performance of your DeWALT Power Tool, Laser, or Nailer for any reason, you can return it within 90 days from the date of purchase with a receipt for a full refund – no questions asked.

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 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 (1-800-433-9258) for a free replacement.

#	Description	Part #
1	Rear Plastic Guard	40664
2	Fan Assembly	40684
3	Steel Restraint Plate	40663
4	Valve Bracket	28805
5	Thermocouple Assembly	27933
6	Burner Mesh Assembly	40685
7	Upper Barrel Assembly	40661
8	Handle	40801
9	Radiation Shield	40686
10	Flame Holder	40687
11	High Limit Switch	40688
12	Ignition Electrode	40904
13	Fuel Tube Assembly	40689
14	Burner Orifice	40690
15	Orifice Holder	27450
16	Valve button	40667
17	Lockout Solenoid	28843
18	Rate control knob	40666
19	Lower Barrel Assembly	40662
20	Upper Base	40668
21	On/Off Switch W/LED	27930

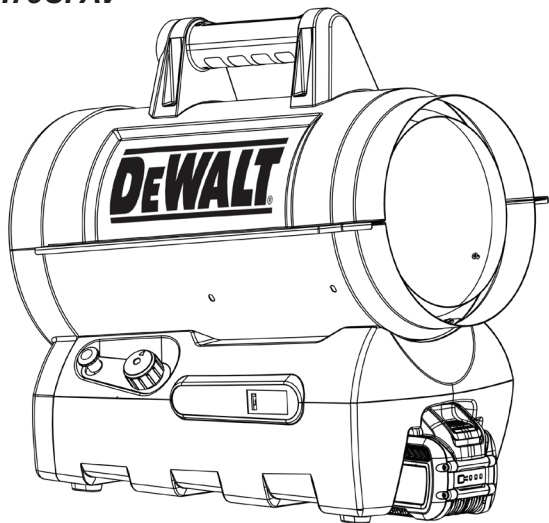
#	Description	Part #
22	Retainer clip	40691
23	Battery Connector	40692
24	Ignition Board	28809
25	Control Board	40693
26	Lower Base	40669
27	Fuel Inlet Fitting	40694
28	Main Gas Valve	40695
29	Valve Transition Adapter	40696
30	Variable Valve	27457
31	Wind Cover	40697
32	L Bracket	40698
33	Hose and Regulator assembly	21667-15

NOTES



INSTRUCTION MANUAL

CORDLESS FORCED AIR PROPANE CONSTRUCTION HEATER DXH70CFAV



Warning

USE ONLY MANUFACTURER'S REPLACEMENT PARTS. USE OF ANY OTHER PARTS COULD CAUSE INJURY OR DEATH. REPLACEMENT PARTS ARE ONLY AVAILABLE DIRECT FROM THE FACTORY AND MUST BE INSTALLED BY A QUALIFIED SERVICE AGENCY.

PARTS ORDERING INFORMATION:

PURCHASING: Accessories may be purchased at any DeWalt® local dealer or direct from the factory

FOR INFORMATION REGARDING SERVICE:

Please call Toll-Free 855-805-5745
www.dewalt.com

Our office hours are 8:00 AM – 5:00 PM, EST, Monday through Friday.

Please include the model number, date of purchase, and description of problem in all communication.

LIMITED WARRANTY

DeWalt® warrants its heaters and accessories to be free from defects in material and workmanship for a period of 1 year from date of purchase.

DeWalt® will repair or replace this product free of charge if it has been prove to be defective within the 1 year period, and is returned at customer expense with proof of purchase to DeWalt® within the warranty period.

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