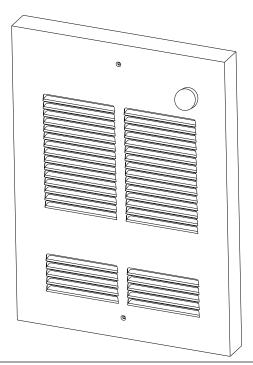




# D Series Fan Forced Wall & Ceiling Heaters



# Installation & Maintenance Instructions

## Dear Owner,

Congratulations! Thank you for purchasing this Marley Engineered Products product. You have made a wise investment selecting the highest quality product in the heating industry. Please carefully read the installation and maintenance directions shown in this manual. You should enjoy years of efficient heating comfort with this product from Marley Engineered Products... the industry's leader in design, manufacturing, quality and service.

... The Employees of Marley Engineered Products



## WARNING



**Read Carefully** - These instructions are written to help you prevent difficulties that might arise during installation. Studying the instructions first may save you considerable time and money later. Observe the following procedures, and cut your installation time to a minimum. **TO REDUCE RISK OF FIRE OR ELECTRIC SHOCK:** 

- Disconnect all power coming to heater at main service panel before wiring or servicing.
- All wiring must be in accordance with National and Local Electrical Codes and the heater must be grounded.
- Verify the power supply voltage coming to heater matches the ratings printed on the heater nameplate before energizing.
- This heater is hot when in use. To avoid burns, do not let bare skin touch hot surfaces.

- Do not insert or allow foreign objects to enter any ventilation or exhaust opening as this may cause an electric shock, fire, or damage to the heater.
- Do not block air intakes or exhaust in any manner. Keep combustible materials, such as crates, drapes, etc., away from heater. Do not install behind doors, furniture, towels, or boxes. Do not install in ceiling at wattage greater than 1000.
- A heater has hot and arcing or sparking parts inside. Do not use it in areas where gasoline, paint, or flammable liquids are used or stored.
- Use this heater only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock, or injury to persons.
- 9. This heater is not approved for use in corrosive atmospheres such as marine, green house, or chemical storage areas.

## SAVE THESE INSTRUCTIONS

## CAUTION

TO REDUCE RISK OF FIRE, ELECTRIC SHOCK, OR DAMAGE TO HEATER, OBSERVE THE FOLLOWING:

- 1. Do not install heater without backbox.
- 2. Observe the following minimum clearances:

For wall mounting:

Heater to floor - 4.5" (114 mm)

Heater to any adjacent surface - 4.5" (114 mm)

Heater to ceiling - 12" (305 mm)

For ceiling mounting:

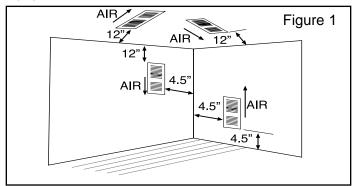
Heater to adjacent wall - 12" (305 mm)

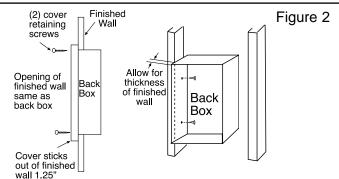
- The heater is hot when in use. Do not install heater behind door, behind towel rack, in closet, where curtains or drapes could touch or be damaged by the heat.
- Keep electrical cords, bedding, furniture, and other combustibles away from heater.

The D-Series heaters are designed for recessed installation in 2 x 4 or larger wall studs or ceiling joists using the model D-BB back box with the discharge grille (the smaller grille) to the top or bottom (see Figure 1). The heater may be wired using standard building (60 degrees C minimum) wire. Refer to the specification chart for appropriate wire size for the heater to be used.

All units in the D series rated 1000 watts and less may be installed recessed in the ceiling. If installed in the ceiling the heater may be oriented in any direction.

Heaters are also approved for surface mounting on walls or ceilings. Refer to instructions for installation of the DSMK Surface Mounting Frame.





# INSTALLATION OF BACK BOX IN NEW CONSTRUCTION

**NOTE A:** If the finished wall is already up, follow instructions for "INSTALLATION OF BACK BOX IN EXISTING CONSTRUCTION."

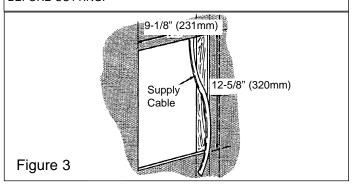
- 1. Determine which side of the back box is to be mounted against a stud or ceiling joist. (see Figure 2). Allow for the thickness of the finished surface when installing the back box. The edge of the back box must be installed flush with the finished surface. Markings on the side of the back box for 1/2" or 5/8" finishing wall are provided.
- 2. Remove fan deck from back box by removing 2 screws.
- 3. Position the back box on the stud or joist location desired and secure using two nails or screws as shown in figure 2.
- Remove one knockout in the back box for entry of supply wiring cable.

5. Bring power supply wiring cable to the back box. Install a cable clamp and install into the back box, leaving at least 6" (152mm) of cable inside the back box for connection to the heater lead wires.

NOTE B: Lead holes for a #8 sheet metal screw have been provided in the

## CAUTION /1

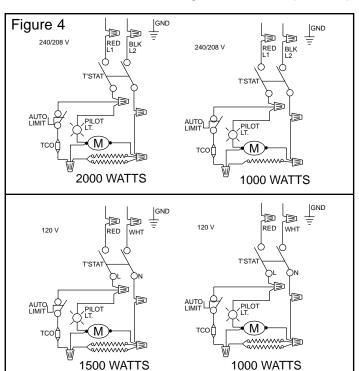
AN ELECTRICAL SHOCK, FIRE, OR WATER DAMAGE COULD RESULT IF WIRING OR PIPING IS DAMAGED DURING CUTTING. MAKE SURE ALL WIRING AND PIPING ARE CLEAR OF AREA BEFORE CUTTING.



sides of the back box. (See Figure 2).

# INSTALLATION OF BACK BOX IN EXISTING CONSTRUCTION

- Determine which side of the back box is to be mounted against a wall stud or ceiling joist. See Figure 2.
- Carefully mark and cut a hole in the wall or ceiling measuring 9-1/8" (231mm) wide by 12-5/8" (320mm) high with one side of the hole along the edge of a wall stud or ceiling joist. See Figure 3
- 3. Bring the power supply wiring cable to the heater mounting location, allowing approximately 10" (254mm) length for use in installation.
- 4. Remove fan deck from back box by removing 2 screws.
- 5. Remove knockout in the back box, install a cable clamp onto power supply cable and install the cable into the back box, leaving approximately 6" (152mm) of cable inside the back box for connection to the heater lead wires.
- Fit the back box into the opening by sliding the supply wiring cable into position. Back box must be installed with front edge flush with the finished surface. Secure the back box to stud using two nails or screws. (See note B).



# INSTALLATION OF HEATER ASSEMBLY INTO BACK BOX

- 1. Re-install fan deck using two screws.
- Connect field supply wiring to heater pigtail leads (See figure 4).Connect field ground wire to green ground lead wire.
- 3. Install front cover. Push on thermostat knob.



To insure proper grounding of heater and prevent a possible electric shock, the field supply ground wire must be attached to heater green ground lead wire.

#### CHECK OPERATION AND SET THERMOSTAT

- 1. Switch on power supply to heater.
- Rotate thermostat knob fully clockwise. Heating element and fan should come on, causing warm air to flow from discharge grille.
- Allow heater to operate until room is comfortable, then rotate thermostat counter-clockwise until thermostat clicks. The unit will continue to cycle on and off to maintain temperature.
- Increase or decrease the setting as required until the desired room temperature is maintained.

For best results, the heater should be left "ON" constantly during the heating season as the thermostat, when properly set, will maintain the desired room temperature. In the counter-clockwise position, the heater will remain off. This unit was shipped with a plug button to render the thermostat tamper resistant. Remove the thermostat knob and insert plug button in clearance hole guide.

For ceiling mounted units, a remote wall mounted line voltage thermostat may be installed to control the unit. Follow instructions for the wall thermostat. Turn the thermostat knob on the unit to full clockwise position for

maximum heat, remove the knob and insert plug button in clearance hole guide. Set your wall thermostat to desired set point.

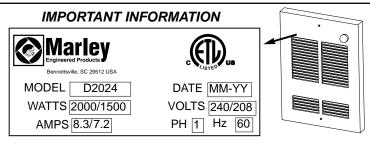
SPECIFICATIONS					
MODEL NO.	VOLTS	AMPS	WATTS	BTU/HR	WIRE SIZE
D1012C	120	8.3	1000	3413	14 awg
D1512	120	12.6	1500	5120	12 awg
D1024C	208	3.6	750	2560	14 awg
	240	4.2	1000	3413	14 awg
D2024	208 240	7.2 8.3	1500 2000	5120 6826	14 awg 14 awg

## **OPERATION NOTICE**

Your heater is equipped with an automatic reset limit control that will automatically turn the heater OFF to prevent a fire if the heater overheats. Should this occur, the indicator light will illuminate and will continue to shine until the limit resets.



THE ILLUMINATED INDICATOR LIGHT SIGNIFIES THE HEATER HAS BEEN SUBJECTED TO SOME ABNORMAL CONDITION CAUSING IT TO OVERHEAT. CHECK HEATER TO INSURE THAT IT HAS NOT BEEN BLOCKED IN ANY MANNER (IF SO, REMOVE BLOCKAGE). IF THERE IS NO INDICATION OF BLOCKAGE, IT IS RECOMMENDED THAT HEATER BE CHECKED BY A REPUTABLE ELECTRICIAN OR REPAIR SERVICE TO INSURE THE HEATER HAS NOT BEEN DAMAGED.



## LIMITED WARRANTY

All products manufactured by Marley Engineered Products are warranted against defects in workmanship and materials for one year from date of installation This warranty does not apply to damage from accident, misuse, or alteration; nor where the connected voltage is more than 5% above the nameplate voltage; nor to equipment improperly installed or wired or maintained in violation of the product's installation instructions. All claims for warranty work must be accompanied by proof of the date of installation.

The customer shall be responsible for all costs incurred in the removal or reinstallation of products, including labor costs, and shipping costs incurred to return products to Marley Engineered Products Service Center. Within the limitations of this warranty, inoperative units should be returned to the nearest Marley authorized service center or the Marley Engineered Products Service Center, and we will repair or replace, at our option, at no charge to you with return freight paid by Marley. It is agreed that such repair or replacement is the exclusive remedy available from Marley Engineered Products.

THE ABOVE WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHICH EXCEED THE AFORESAID EXPRESSED WARRANTIES ARE HEREBY DISCLAIMED AND EXCLUDED FROM THIS AGREEMENT. MARLEY ENGINEERED PRODUCTS SHALL NOT BE LIABLE FOR CONSEQUENTIAL DAMAGES ARISING WITH RESPECT TO THE PRODUCT, WHETHER BASED UPON NEGLIGENCE, TORT, STRICT LIABILITY, OR CONTRACT.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion or limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

For the address of your nearest authorized service center, contact Marley Engineered Products in Bennettsville, SC, at 1-800-642-4328. Merchandise returned to the factory must be accompanied by a return authorization and service identification tag, both available from Marley Engineered Products. When requesting return authorization, include all catalog numbers shown on the products.

3

## **HOW TO ORDER REPAIR PARTS**

In order to obtain any needed repair or replacement parts, warranty service or technical information, please contact Marley Engineered Products Service Center toll-free by calling 1-800-642-HEAT.

When ordering repair parts, always give the information listed as follows:

- 1. The Part Number
- 2. The Model Number
- 3. The Part Description
- 4. Date of Manufacture



SPX Corporation 470 Beauty Spot Rd. East Bennettsville, SC 29512 USA

Part No. 5200-2469-001 9-00 ECR 34527