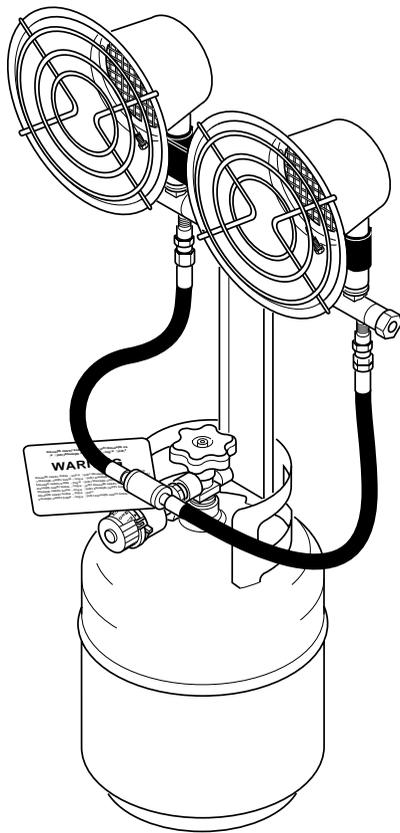


# Infra-Red Tank Top Heater Owner's Manual Models HD24B and TT24B



Heater Size: 8,000 – 24,000 Btu/Hr

## Safety Information

Make certain you read and understand all warnings. Do not allow anyone who has not read this manual to operate this heater. Keep this manual for reference. It is your guide to safe and proper operation of this heater.

1. Read and understand this manual before assembling or using this heater. Improper use of this heater can cause serious injury.
2. For outdoor use only. Do not use inside house, camper, tent, vehicle, or any type of unvented or enclosed area.
3. Never operate heater while sleeping or unattended. Keep children and animals away from heater.
4. This heater produces carbon monoxide, which is listed by the state of California as a reproductive toxin under Proposition 65.
5. Minimum heater clearances from combustibles:  
Top and Front: 5 Ft. Sides and Rear: 3 Ft.
6. Use only in well-vented areas.
7. Use only propane gas set up for vapor withdrawal.
8. Before connecting heater to propane tank, make sure heater regulator knob is in the "OFF" position. Always connect and light heater in areas free of open flames.
9. Before each use, check heater for leaks. Never use an open flame to check for a leak. Apply a mixture of liquid soap and water to all joints. Bubbles forming show a leak. Correct all leaks at once.
10. Locate propane tank on a stable and level surface. The heater burners must be at least two feet above the floor. Always attach heater to propane tank in an upright position. Never operate heater on its side or attach to propane tank in a horizontal position. This could lead to dangerous flare-ups or fire.
11. Do not use heater in basement or below ground level. Propane is heavier than air. If a leak occurs, propane gas will sink to the lowest possible level. If you smell gas or suspect a leak, shut off the propane tank valve at once and ventilate the area. Do not strike match or create any flame or electric spark. Find and correct leak before attempting to light any appliance. If you cannot correct leak, do not tamper with heater. Return heater to nearest authorized service center or to address on back page of this manual, freight prepaid.
12. Do not move or handle a hot or operating heater. Do not attach or remove a propane tank from a hot or operating heater. Severe burns may result.
13. Always remove heater from propane tank after each use. Always store propane tank outdoors. Never store propane tank in an enclosed area. Never store propane tank near high heat, open flame, or where temperatures exceed 100°F.
14. Keep all connections and fittings clean. Make sure propane tank valve outlet is clean. Check the "O" ring on the heater inlet fuel connector for damage before each use. Replace if worn or damaged.
15. Do not attempt to light one burner off of the other. Use one match per burner.
16. Do not overlap or point burners at each other.
17. Do not raise burner heads and cover air inlet holes in mixing tube with burner head bracket.
18. Wing nuts and burner heads become very hot during operation. Do not attempt to adjust burner position while heater is operating. Allow 15 minutes to cool.
19. Check heater for damage before each use. Do not use a damaged heater. Do not alter heater. Keep heater in its original state. Do not use heater if altered.

## Assembly

1. Place each burner head onto the burner bracket as shown in Figure 1. **CAUTION: The burner heads should be positioned as far down on the burner bracket as possible. Make sure the air inlet holes in the mixing tube on the burner head are not covered by the burner bracket**

2. Insert two bolts through square holes and then through round holes in burner bracket.
3. Place two flat washers onto bolts. Thread wing nuts onto bolts.
4. Carefully thread mounting bolt into tank collar bracket on the lower portion of the post.

## Connecting Heater To Propane Tank

Read and understand all safety information before connecting heater to propane tank.

1. Place heater onto tank with tank collar bracket over tank collar (see Figure 2). Mounting bolt should be positioned to the outside of tank collar.
2. Firmly secure to tank by hand-tighten mounting bolt. Do not over-tightening mounting bolt.
3. Make sure heater regulator knob is in the "OFF" position.
4. Wrench tighten the fuel connector nut into the propane tank valve with both gas hose fittings in a horizontal position (see Figure 3). Turn fuel connector nut counterclockwise to tighten. Threads are left-handed.
5. Connect both hoses to inlet connectors (see Figure 3). Tighten firmly using wrench. Make sure both hoses are connected before opening the tank valve.
6. Open propane tank valve slowly.
7. Check all fittings for leaks. Apply a mixture of liquid soap and water to all joints. Bubbles forming show a leak. Correct all leaks at once. **WARNING: Never use an open flame to check for a leak.**
8. Always remove propane tank from heater after each use. Do not store heater while attached to propane tank.

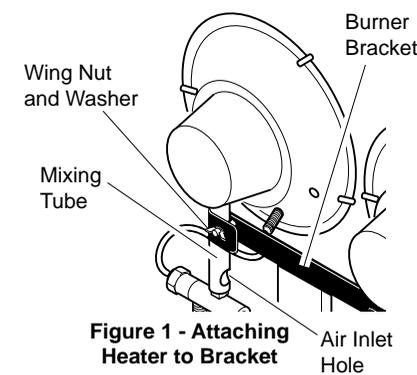


Figure 1 - Attaching Heater to Bracket

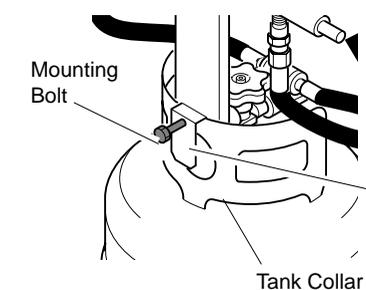


Figure 2 - Assembling Heater

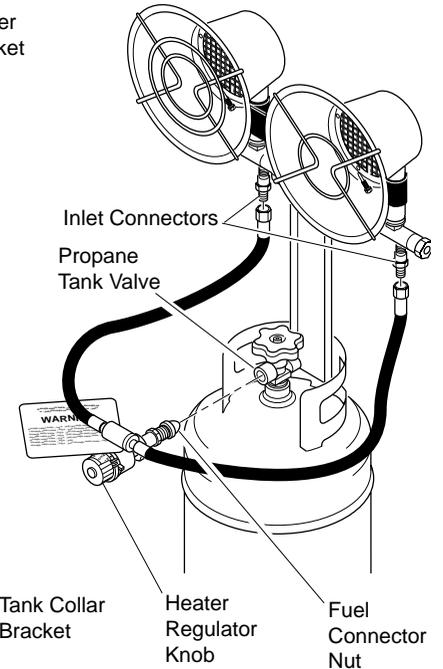


Figure 3 - Connecting Heater to Propane Tank

Continued

## To Light Heater

Read and understand all safety information before operating heater.

- Adjust burners to desired position by loosening wing nuts on back of burner head bracket. **WARNING: Wing nuts and burner heads become very hot during operation. Do not attempt to adjust burner position while heater is operating. Allow 15 minutes to cool. WARNING: Do not raise burner heads and cover air inlet holes in mixing tube with burner bracket. Firmly tighten wing nuts to secure burners. Do not overlap or direct burners at each other.**
- WARNING: Make sure there is no open flame in the area.** Fully open the propane tank valve.
- Turn heater regulator knob counterclockwise to the "HI" position (see Figure 4).
- WARNING: Stand to the side of unit while lighting. Do not stand or have any part of your body over or in front of heater while lighting. Do not attempt to light one burner off of the other. Use one match per burner.** Locate ignition hole in underside of burner (see Figure 5). Hold a lit match under ignition hole. **CAUTION: Do not insert match into air inlet holes in mixing tube.** Push in the safety shutoff valve plunger (see Figure 5). **WARNING: Do not push in safety shutoff valve plunger before inserting lit match.** Burner should light. Mesh screen on burner glows red when lit. After burner is lit, continue holding in safety shutoff valve plunger (about 10 to 30 seconds) until heater stays lit.
- If the burner does not light within 30 seconds, turn regulator knob to the "OFF" position. Wait at least two minutes for the gas to dissipate before relighting.
- If heater will not light after repeated tries, do not attempt to repair heater. Return heater to nearest authorized service center or to address on back panel of this manual, freight prepaid.

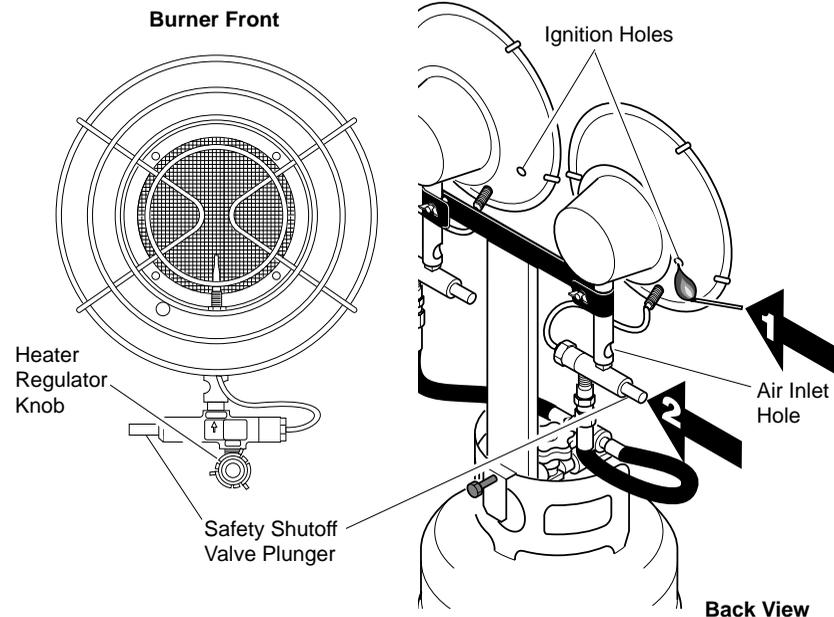


Figure 4

Figure 5

- After burner lights, turn the heater regulator knob to the desired heat setting (LOW, MED, or HI).
- Light both burners when maximum heat is needed. Use one burner to conserve fuel. Repeat above steps to light second burner.

## To Turn Off Heater

- Tightly close propane tank valve by turning clockwise.
- Turn the heater regulator knob to the "OFF" position. Wait at least 15 minutes for the heater to cool before handling heater.
- Always remove the heater from the propane tank after each use. Do not store heater while attached to propane tank. Always store propane tank outdoors. Never store propane tank in an enclosed area.

## Technical Service and Replacement Parts

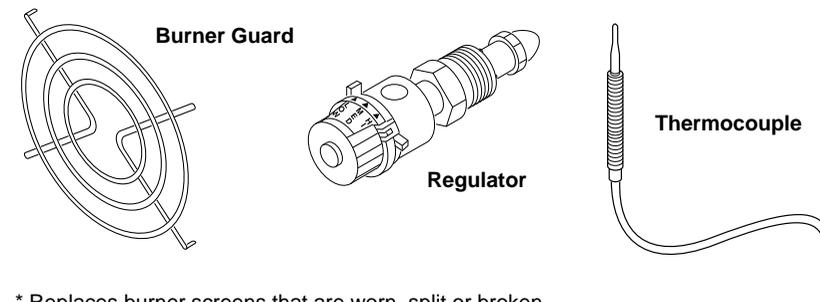
For assistance in servicing your heater and parts under warranty, contact the Technical Service Department at 1-800-323-5190 or visit our web site at [www.desatech.com](http://www.desatech.com).

**Parts Under Warranty:** Contact authorized dealers of this product. If they can't supply original replacement parts, either contact your nearest authorized service center or call DESA International's Technical Service Department at 1-800-323-5190.

**Parts Not Under Warranty:** Contact authorized dealers of this product. If they can not supply these accessories or parts, either contact your nearest Parts Central or DESA International for referral information. Parts Centrals are listed in the Authorized Service Center booklet supplied with heater. Call DESA International's Parts Department at 1-800-972-7879 for referral information.

## Replacement Parts

Item	Description	Part Number	Model
1	Burner Guard	100911-01	All
2	Thermocouple	100886-01	All
3	Regulator with Fuel Gas Connector	LPA2025	All
4	Hose Assembly (not shown)	101807-01	All
5	Owner's Manual (not shown)	100926-01	All
6	Operation Tag (not shown)	101860-04	HD24B
		101860-06	TT24B
7	Burner Replacement Kit* (not shown)	LPA5050	All



\* Replaces burner screens that are worn, split or broken.

## Heater Information

Btu Input	One Burner	Two Burners
HI	12,000 Btu/Hr	24,000 Btu/Hr
MED	10,000 Btu/Hr	20,000 Btu/Hr
LOW	8,000 Btu/Hr	16,000 Btu/Hr
Length of Operation		
20 lb. Propane Tank	36 hours	18 hours

## Warranty Information

### Propane Infra-Red Tank Top Heater Limited Warranty

DESA International warrants this product and any parts thereof, to be free from defects in material and workmanship for one year from the date of first purchase, provided that the product has been properly installed, operated, and maintained in accordance with all applicable instructions. To make a claim under this warranty, the bill of sale or proof of purchase must be presented.

This warranty is extended only to the original retail purchaser. This warranty covers only the cost of parts required to restore this heater to proper operating condition. Warranty parts must be obtained through authorized dealers of this product and/or DESA International who will provide original factory replacement parts. Failure to use original factory replacement parts voids this warranty. The heater must be used in accordance with all local codes and instructions furnished with the unit.

This warranty does not apply to parts that are not in original condition because of normal wear and tear, or parts that fail or become damaged as a result of misuse, accidents, lack of proper maintenance, alteration, tampering, contaminated fuels, or defects caused by improper installation. Travel, transportation and incidental costs associated with warranty repair are not reimbursable under this warranty and are the responsibility of the owner.

TO THE FULL EXTENT ALLOWED BY THE LAW OF THE JURISDICTION THAT GOVERNS THE SALE OF THE PRODUCT: THIS EXPRESS WARRANTY EXCLUDES ANY AND ALL OTHER EXPRESSED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE TO ONE YEAR FROM THE DATE OF FIRST PURCHASE: AND DESA INTERNATIONAL'S LIABILITY IS HEREBY LIMITED TO THE PURCHASE PRICE OF THE PRODUCT AND DESA INTERNATIONAL SHALL NOT BE LIABLE FOR ANY OTHER DAMAGES WHATSOEVER INCLUDING INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some states do not allow a limitation on how long an implied warranty lasts or an exclusion or limitation of incidental or consequential damages, so the above limitation on implied warranties, or exclusion or limitation on damages may not apply to you.

This warranty provides the original retail purchaser with specific legal rights. For specific information regarding those rights, please consult the applicable state laws.

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