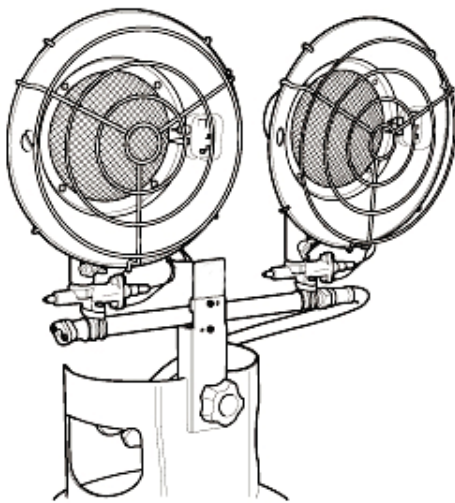




Model #s: PT-16-TTC (Single Burner),
PT-32-TTC (Double Burner),
PT-47-TTC (Triple Burner)



OUTDOOR USE ONLY



▲ 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 THE HAZARDS OF FIRE, EXPLOSION, BURN, ASPHYXIATION, CARBON MONOXIDE POISONING AND / OR ELECTRIC 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, LABELS, ETCETERA, CONTACT THE MANUFACTURER.

IMPORTANT: Read and understand all of the directions in this manual before assembling, starting or servicing the heater. Improper use of this heater can cause serious injury. Keep this manual for future reference.

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▲ WARNING **Carbon Monoxide Hazard** This heater produces carbon monoxide, which has no odor. Burning the heater in an enclosed space can kill you. Never use the heater in enclosed spaces such as a tent, a camper, any vehicle or recreational vehicle (RV), enclosed shelter, or any other enclosed areas.

▲ DANGER **Not for use in residential living areas or in non-adequately ventilated enclosed spaces. Never bring or store a propane cylinder indoors.**

CONSUMER: Retain this manual for future reference.

Pinnacle Products International, Inc. 668 Stony Hill Road #302 Yardley, PA 19067 USA
Phone: 215-891-8460 Fax: 215-891-8461 Web: www.pinnacleint.com Email: info@pinnacleint.com

NEVER LEAVE HEATER UNATTENDED WHILE BURNING OR WHILE CONNECTED TO A FUEL SOURCE



Propane Tank Top Heaters

▲ CAUTION This is an unvented portable heater. It uses air (oxygen) from the area which it is used. Ample combustion and ventilation air must be provided. See VENTILATION page 4.

▲ WARNING 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 THESE INSTRUCTIONS. NEVER USE THE HEATER IN SPACES WHICH DO OR MAY CONTAIN VOLATILE OR AIRBORNE COMBUSTIBLES, OR PRODUCTS SUCH AS GASOLINE, SOLVENTS, PAINT THINNERS, DUST PARTICLES OR UNKNOWN CHEMICALS.

▲ WARNING NOT FOR HOME OR RECREATIONAL USE.

This heater is designed and approved for use as a construction heater in accordance with **ANSI Z 83.7a/CSA2.14a-2007**

California Residents: Combustion by-products produced when using this product contain carbon monoxide, a chemical known to the state of California to cause cancer and birth defects (or other reproductive harm).

▲ WARNING 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:**
- Do not attempt to light heater
 - Extinguish any open flame
 - Shut off gas to heater
 - If odor continues, contact your local gas supplier or fire department.
 - Do not touch any electric switch, do not use any phone in your building
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions
 - If you can not reach your gas supplier, call the fire department
 - Service must be done by a qualified service agency or the gas supplier

Safety Information

Accidents can be avoided with care and good judgement. The following rules are sound practices you should follow for the safe and comfortable operation of your heater.

It is important that you read this entire User's Manual carefully and thoroughly before operating or servicing this heater. Keep this manual handy to use as a reference. It is your guide to safe and proper operation of this heater.

This heater is primarily intended for use for temporary heating of buildings or structures under construction, alteration or repair. This is a direct-fired heater. Direct-fired means that all of the combustion products enter the heated space. This heater is rated at 98% combustion efficiency, but still produces small amounts of carbon monoxide. Carbon monoxide is toxic. Humans can tolerate small amounts of carbon monoxide, and caution should be taken to provide adequate ventilation. Failure to provide adequate in accordance with this manual could result in death. Early signs of carbon monoxide poisoning resemble the flu. The symptoms of inadequate ventilation are:

- * headache * dizziness * burning of the nose and eyes * nausea * dry mouth * sore throat

If the heater is being used in the presence of others, be sure to inform them of the proper safety precautions, operating procedures and the hazards involved. Some people are more affected by carbon monoxide than others. These are pregnant women, people with heart or lung disease or anemia, those under the influence of alcohol or at high altitudes.

- Check the heater thoroughly for damage before each use. DO NOT operate a damaged heater.
- For outdoor use, and indoor use only in well ventilated areas. For this heater, provide a minimum of 48 square inches of open space by opening a window or door to provide fresh, outside air. For additional heaters, provide more ventilation.
- Provide at least 3 square feet of opening for ventilation per 100,000 Btu of rated operation.
- NEVER use heater in occupied dwellings.
- NEVER use heater in a tent.
- An LP cylinder not connected for use shall not be stored in the vicinity of this or any other appliance.

Minimum clearance from Combustibles:

Top	5 feet
Sides	3 feet
Front	5 feet
Rear	3 feet

Regulator Outlet Pressure: 17 PSI

- Keep children and animals away from heater.
- Keep heater area free from combustible materials such as gasoline, paint thinners and other flammable vapors and liquids. Dust is combustible. Do not use heater in areas of high dust concentration.
- Operate only on level and stable surfaces.
- Never operate heater while unattended or sleeping.
- Operate heater in a manner that will not directly expose it to water, rain or dripping water.
- NEVER leave heater unattended.
- Before connecting the heater to the propane cylinder, make sure that the heater regulator knob is in the "OFF" position.
- DO NOT modify this heater or operate a heater that has been modified from it's original state.

NEVER LEAVE HEATER UNATTENDED WHILE BURNING OR WHILE CONNECTED TO A FUEL SOURCE



Propane Tank Top Heaters

Safety Information (continued)

- Do not use this heater on LP gas cylinders larger than 20 lbs. capacity.
- Always disconnect and remove the heater from the LP cylinder after use.
- Always attach the heater in an upright (vertical) position. Never attach the heater in a horizontal position. This will lead to dangerous and improper operation.
- NEVER handle an operating or hot heater, as severe burns may result. Wing nuts and burner heads become very hot during operation. Do not attempt to adjust burner position while heater is operating. Always allow at least 15 minutes of cooling time before handling the heater.
- Be sure that all guards are replaced before use.

Product Identification

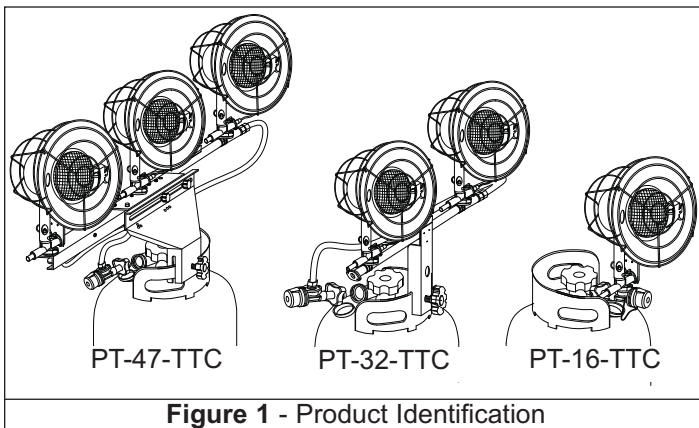


Figure 1 - Product Identification

Propane (LP) Supply

You must provide the propane gas cylinder(s). Use this heater only with a propane vapor withdrawal supply system. Refer to Chapter 5 of the Standard for Storage and Handling of Liquefied Petroleum Gas, ANSI/NFPA 58. Your local library or fire department will have this booklet.

- LP Characteristics - Flammable, explosive under pressure, heavier than air, and pools in low areas.
- In its natural state, propane has no odor, but for your safety an odorant that smells like rotten cabbage has been added.
- Contact of propane (LP) gas with the skin can cause freeze burns.
- Heater is manufactured for use with LP gas only. DO NOT attempt to convert to any other gas. Such modifications are dangerous, and will void warranty.
- When heater is not in use, LP cylinder must be turned OFF.
- Be sure that the LP cylinder is located on a level and stable surface. The burner should be at least 24 inches from the floor.
- Do not use this heater in a basement or below ground level. Propane (LP) is heavier than air, and will always seek the lowest level. If you suspect a leak, shut off the valve at the LP cylinder immediately.
- **Do not use a flame to check for leaks!** Use a 50/50 solution of dish soap and water to check for leaks. Repair any leaks before attempting to re-light the heater.
- Check the "O" ring on the heater inlet fuel connector for damage before each use. Replace if damaged or worn.
- Always store the LP cylinder outdoors, but not in an enclosed area. Never store the LP cylinder near high heat, direct sun-

- light or open flames. Never store the LP cylinder indoors.
- Do not direct heater discharge towards any propane cylinder located within 20 feet of the heater.
- The amount of LP gas used by this heater varies. The two factors that will determine this are as follows:
 1. The amount of gas in the cylinder.
 2. The temperature of the cylinder and surrounding area.

Ventilation

For this heater, provide a minimum of 48 square inches of space by opening a window or door to provide fresh, outside air. For additional heaters, provide more ventilation. Provide at least 3 square feet of opening for ventilation per 100,000 Btu of rated operation.

Assembly

- **Tools required:** Medium phillips screwdriver

Model PT-32-TTC

1. Place Tank Collar Bracket on top of Center Plate. Be sure Mounting Bolt Knob is on bottom as shown in Figure 2.
2. Insert Machine Screw into top hole using Phillips screwdriver.
3. Insert 2nd Machine screw into bottom hole. This will secure the Tank Collar Bracket to the Center Plate.

Model PT-47-TTC

1. Insert the Mounting Bolt knob into Tank Collar Bracket
 2. Place Tank Collar Bracket on the Swivel bracket
 3. Place the Plain Washer on the Tank Collar Bracket and then, insert the support bolt (see Figure 3 on Page 4).
 4. See Figure 4 on Page 4 for determining Burner position options.
- To have all 3 burners face front, Plane Washer should be to the right side of Tank Collar Bracket.
 - To have far left burner face back, Plane Washer should be to the left side of Tank Collar Bracket.

WARNING Do not adjust burner heads while heater is operating!

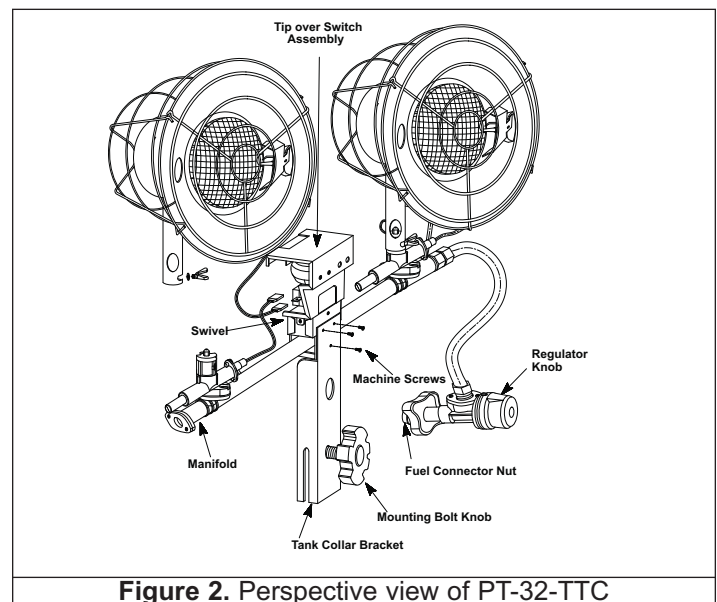


Figure 2. Perspective view of PT-32-TTC

**NEVER LEAVE HEATER
UNATTENDED WHILE BURN-
ING OR WHILE CONNECTED
TO A FUEL SOURCE**



Propane Tank Top Heaters

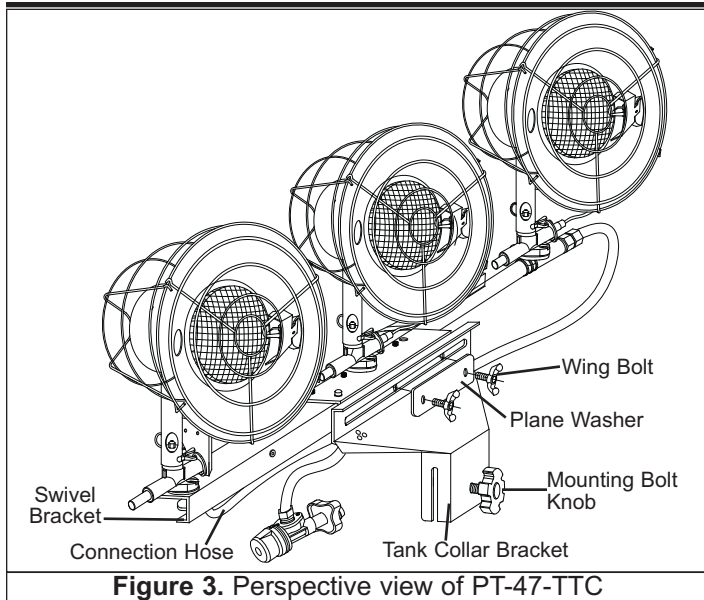


Figure 3. Perspective view of PT-47-TTC

Connecting Heater to LP Cylinder

Be sure to read and understand all of the Safety Information in this manual before connecting the heater to the LP cylinder. Installation must conform to local codes and with the Standard for the Storage and Handling of Liquefied Petroleum Gases and ANSI/NFPA 58

Inspect the hose and regulator prior to each use of the heater. If there is excessive abrasion or wear, or if the hose is cut, replace it with the proper assembly shown in the parts list prior to using the heater.

Model PT-16-TTC

1. Be sure that the control knob on the regulator is in the "OFF" position.
2. Line up the threads on the Fuel Connector Nut with the threads on the LP cylinder valve. Turn Fuel Connector Nut counterclockwise to tighten. Use a wrench to fully tighten the nut, being careful not to overtighten.
3. Slowly open the LP cylinder valve.
4. Check all connections for leaks using a 50/50 mixture of dish-soap and water. Any bubbles appearing show a leak. Remove and reconnect the Connector Nut to the valve.

Models PT-32-TTC & PT-47-TTC

1. Be sure that the control knob on the regulator is in the "OFF" position.
2. Line up the slots in the tank collar bracket with the tank collar ring and slide into place. Be sure the mounting knob is to the outside, and tighten.
3. Line up the threads on the Fuel Connector Nut with the threads on the LP cylinder valve. Turn Fuel Connector Nut counterclockwise to tighten. Use a wrench to fully tighten the nut, being careful not to overtighten.
4. Slowly open the LP cylinder valve.
5. Check all connections for leaks using a 50/50 mixture of dish-soap and water. Any bubbles appearing show a leak. Remove and reconnect the Connector Nut to the valve.
6. Do not direct heater discharge towards any propane cylinder located within 20 feet of the heater.

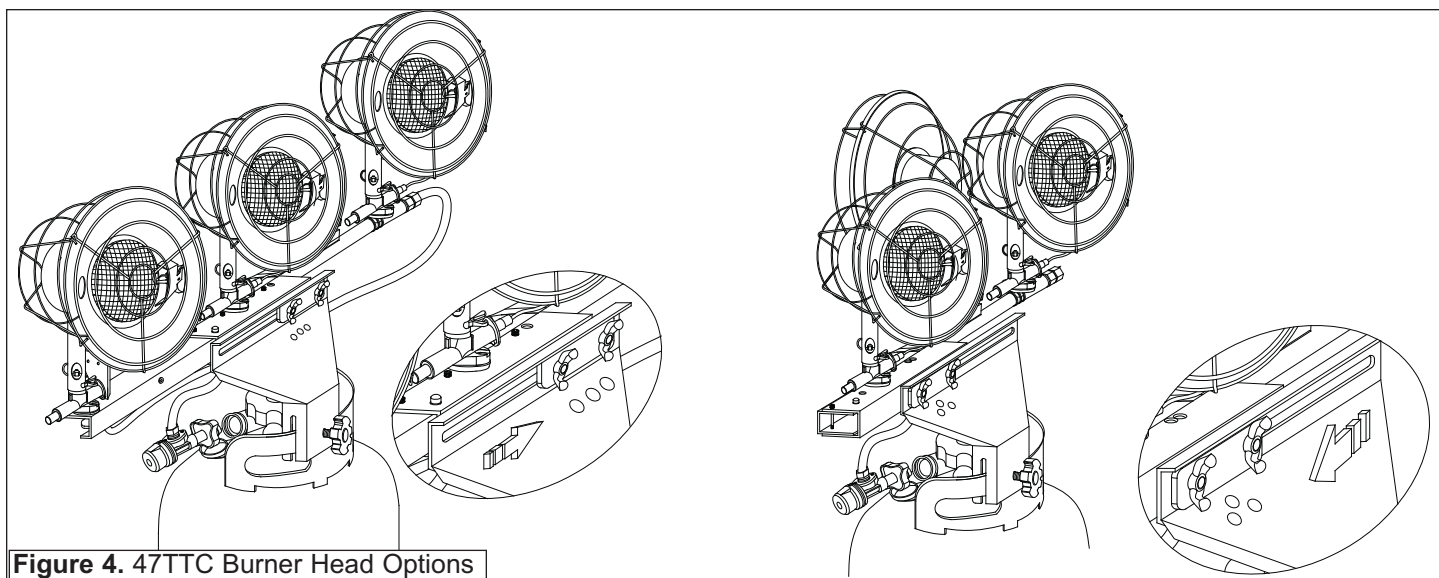


Figure 4. 47TTC Burner Head Options

**NEVER LEAVE HEATER
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PROTEMP®

**Propane
Tank Top Heaters**

Lighting Instructions

ALL MODELS

▲ WARNING *Be sure to read and understand all of the Safety Information in this manual before lighting this heater.*

▲ CAUTION *Heater has high surface temperatures. Be sure to keep children, pets and clothing away from the heater. Be sure to keep Burner and Heater Regulator clean and free from any debris. Maintain safe distances from heater as shown on Page 2.*

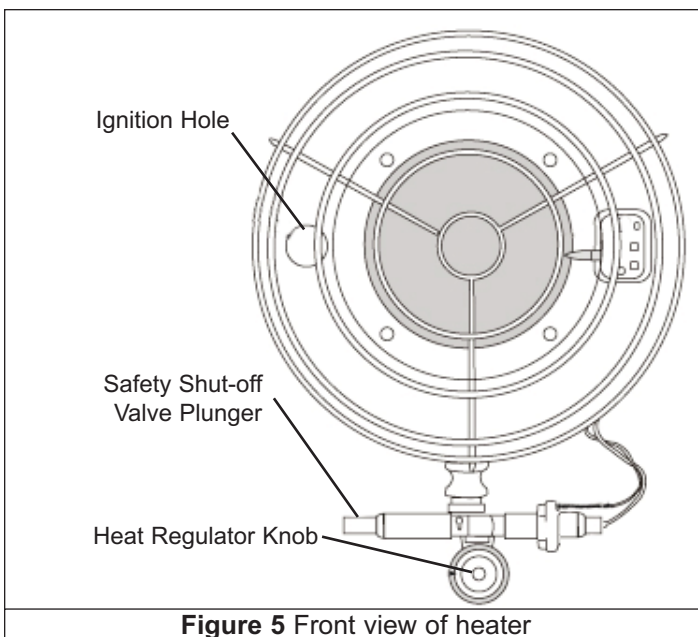
1. STOP! Be sure to read all of the Safety Instructions.
2. Check that the valve on the propane cylinder is open.
3. Turn the Heater Regulator Knob clockwise to the "OFF" position.
4. Wait five (5) minutes for any gas to clear. Smell for gas around the heater, including near the floor. If you do smell gas, STOP! Follow the Safety Instructions, and check for leaks. If there is no gas smell proceed to the next step.

▲ WARNING *Never use a flame to check for leaks.*

5. Turn the Heater Regulator Knob counter-clockwise to the "HI" position, and press in the Safety shut-off Valve Plunger for five (5) seconds.

NOTE: When the heater is first connected to the gas supply, the plunger should be depressed for approximately thirty (30) seconds to bleed any air from the hose, and release plunger.

6. Insert a lit match into the Ignition hole in the reflector, and the depress plunger until the burner lights (see Figure 5).



▲ CAUTION *Do not insert the lit match into the air inlet holes in the mixing tube.*

7. Keep the plunger depressed for about thirty (30) seconds after the burner lights. Then release the plunger, and if the burner stays lit, remove and extinguish the match. You will know that the burner is lit when the mesh screen begins to glow red.
8. If the Burner does not stay lit, repeat the lighting process. If the heater does not light after several attempts, be sure you are getting fuel to the burner. The faint smell of gas will tell you the fuel is flowing. If not, there may be a problem with your LP cylinder. Take it back to your local dealer for replacement.
9. Once the burner is lit, turn Regulator Control Knob to desired setting (HI, MED, LO).
10. Light all burners when maximum heat is desired. The second and third burner should be lit separately. Do not attempt to light second burner off first burner. Be sure NOT to point burners at one another.

▲ DANGER *Extremely hot during operation. Do not touch any metal components while in operation. Keep gasoline and any other flammable liquids away from heater. Not for use in residential living areas or in non-adequately ventilated enclosed spaces.*

▲ DANGER *Never bring or store a propane cylinder indoors.*

▲ WARNING *Never look over the top of the heater during ignition. The heater may produce a small puff of flame during ignition which can result in serious bodily injury.*

To Turn Off Heater

1. Turn the valve on the LP cylinder clockwise to stop the flow of fuel.
2. Turn the Heater Regulator Knob to the "OFF" position, and wait at least fifteen (15) minutes for the heater to cool.
3. Remove the heater from the LP cylinder by reversing the steps in **Connecting Heater to LP Cylinder** on Page 4. **Do not store the LP cylinder with the heater still attached, or in an enclosed area.**

BE SURE TO FOLLOW THE DIRECTIONS OUTLINED IN VENTILATION ON PAGE 3 OF THESE INSTRUCTIONS.

ALWAYS INSPECT HEATER BEFORE USE AND AT LEAST ANNUALLY BY A QUALIFIED SERVICE PERSON.

**NEVER LEAVE HEATER
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**Propane
Tank Top Heaters**

Maintenance and Storage

1. Inspect your heater before each use. Check all connections for leaks, following the procedure outlined on Pages 4 and 5. Check the Regulator Hose (dual burner models only) for any cracks, breaks or wear. If the hose is damaged replace it with the correct manufacturers part.

2. After use, always disconnect the heater from the LP cylinder, and store the heater separately from the tank. Be sure to close the tank valve after use, and before storage. The LP cylinder should be stored outdoors in accordance with chapter 5 of the Standard for Storage and Handling of Liquefied Petroleum Gasses (ANSI/INFP 58).

▲ DANGER *Never bring or store a propane cylinder indoors.*

▲ CAUTION *Always keep this heater out of the reach of children.*

Replacement Parts List

Item Number	Description	Part Number for Models:		
		PT-16-TTC	PT-32-TTC	PT-47-TTC
1	Regulator Assembly	20-032-0001	20-032-0002	20-032-0002
2	Hose Assembly	–	20-051-0001	20-051-0002
3	Manifold Assembly	–	20-111-0020	20-111-0025
4	Safety Valve Assembly	20-013-0001	20-013-0001	20-013-0001
5	Burner Assembly	20-023-0003	20-023-0003	20-023-0003
6	Front Guard	20-101-0001	20-101-0001	20-101-0001
7	Thermocouple	20-091-0002	20-091-0002	20-091-0002
8	Tank Collar Bracket	–	20-504-0001	20-504-0002
9	Mounting Bolt Knob	–	20-503-0001	20-503-0001
10	Rear Guard	20-101-0002	20-101-0002	20-101-0002
11	Manifold Bracket - A	–	20-111-0002	–
12	Manifold Spring	–	20-111-0003	–
13	Manifold Bracket - B	–	20-111-0004	–
14	Nozzle	20-005-0100	20-005-0100	20-005-0100
15	MPU Lead Wire - A	20-015-0001	20-015-0001	20-015-0001
16	MPU Lead Wire - B	–	20-015-0002	–
17	Wing Bolt	20-111-0006	20-111-0006	20-111-0006
18	Tipover Switch Bracket	20-095-0001	20-095-0002	20-095-0001
19	Tipover Switch	50-017-0001	50-017-0001	50-017-0001
20	Wind Cover	20-023-0005	20-023-0005	20-023-0005
21	Swivel Bracket - A	–	–	20-095-0020
22	Swivel Bracket - B	–	–	20-095-0025
23	Swivel Bracket - C	–	–	20-095-0030
24	Swivel Bracket Bolt	–	–	20-095-0035
25	Elbow	–	–	20-016-0150
26	Burner Assembly Hose	–	–	20-051-0010
27	Wing Bolt	–	–	20-503-0005
28	Bushing	–	–	20-505-0100
29	Plane Washer	–	–	20-505-0110

Pinnacle Products International, Inc. reserves the right to make any changes in materials, specifications, prices or design without notice. Pinnacle Products International, Inc. may also discontinue items at any time.

NEVER LEAVE HEATER
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Propane
Tank Top Heaters

Exploded View

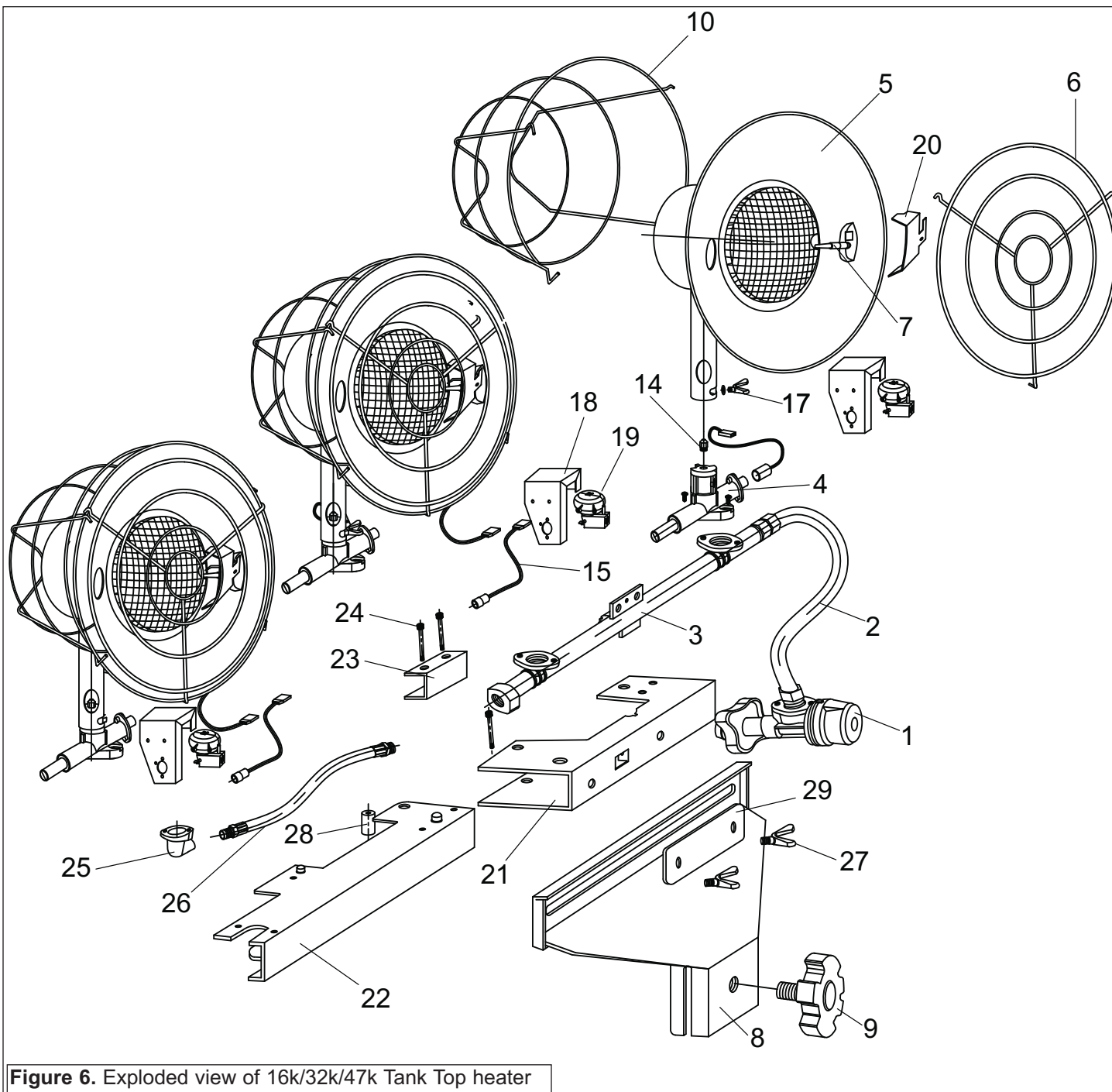


Figure 6. Exploded view of 16k/32k/47k Tank Top heater

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Propane
Tank Top Heaters

1 YEAR LIMITED WARRANTY

Pinnacle Products International, Inc. warrants this product to the original retail purchaser only, to be free from defects in and workmanship for a period of one (1) year from the date of initial purchase. This product must be properly installed, maintained and operated in accordance with the instructions provided. **Pinnacle Products International, Inc.** requires reasonable proof of your date of purchase from an authorized retailer or distributor. Therefore, you should keep your sales slip, invoice, or cancelled check from the original purchase. This Limited Warranty shall be limited to the repair or replacement of parts, which prove defective under normal use and service within the warranty period, and which **Pinnacle Products International, Inc.** shall determine at its reasonable discretion.

This warranty does not apply to products purchased for rental use.

This Limited Warranty does not cover any failures or operating difficulties due to normal wear and tear, accident, abuse, misuse, alteration, misapplication, improper installation or improper maintenance and service by you or any third party. Failure to perform normal and routine maintenance on the heater, shipping damage, damage related to insects, birds, or animals of any kind, and damage due to weather conditions are also not covered. In addition, the Limited Warranty does not cover damage to the finish, such as scratches, dents, discoloration, rust or other weather damage, after purchase.

All transportation costs for the return of the damaged product or parts will be the responsibility of the purchaser. Upon receipt of damaged item, **Pinnacle Products International, Inc.** will examine the item and determine if defective. **Pinnacle Products International, Inc.** will repair or replace and return the item, freight pre-paid. If **Pinnacle Products International, Inc.** finds the item to be in normal operating condition, or not defective, the item will be returned freight collect.

This Limited Warranty is in lieu of all other express warranties. **Pinnacle Products International, Inc.** disclaims all warranties for products that are purchased from sellers other than authorized retailers or distributors.

AFTER THE PERIOD OF THE ONE (1) YEAR LIMITED WARRANTY EXPIRES, **Pinnacle Products International, Inc.** DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR APPLICATION. FURTHER, **Pinnacle Products International, Inc.** SHALL HAVE NO LIABILITY WHATSOEVER TO PURCHASER OR ANY THIRD PARTY FOR ANY SPECIAL, INDIRECT, PUNITIVE, INCIDENTAL, OR CONSEQUENTIAL DAMAGES. **Pinnacle Products International, Inc.** assumes no responsibility for any defects caused by third parties. This Limited Warranty gives the purchaser specific legal rights; a purchaser may have other rights depending upon where he or she lives. Some states do not allow the exclusion or limitation of special, incidental or consequential damages, or limitations on how long a warranty lasts, so the above exclusion and limitations may not apply to you.

Pinnacle Products International, Inc. does not authorize any person or company to assume for it any other obligation or liability in connection with the sale, installation, use, removal, return, or replacement of its equipment, and no such representations are binding on **Pinnacle Products International, Inc.**

Always be sure to specify model number and serial number when making any claim with **Pinnacle Products International, Inc.** For your convenience use the space provided below to list this information:

Model #: _____

Serial #: _____

Date of Purchase: _____