NOTICE

No warranty will be extended to unapproved, unauthorized or improper installations. Use of any materials or equipment unsuited for their intended use will void the warranty for The Oasis™ Heater.

This Inspection Check Sheet is intended for use after the ITR heating products have been installed; it should also be used informally to monitor progress during the installation. Only authorized personnel may carry out the inspection and testing.

No rewiring of the heater is permitted unless it has been pre-approved by ITR.

1. Before Start-up

Hour Meter Reading _____

✓		Before starting the burner ensure:
	1	The heater and all components are mounted in an appropriate location, and have the required clearances for maintenance, as specified in the installation manual.
	2	The heater is installed in a compartment completely isolated from living spaces.
	3	The heater is not installed or operated in any compartment with flammable gases. The combustion air is drawn from an outside source and will not draw-in any combustible gases.
	4	All components, accessories and materials are manufactured by ITR or are appropriate for their intended use.
	5	Pex tubing, hoses, fuel lines, air vents, combustion air intake hose, and exhaust tubing are the proper type and size. And these have been installed and connected according to the installation guide standards.
	6	The combustion inlet is unrestricted and drawing 100% outside air.
	7	The heater is properly exhausted (i.e., no exhaust fumes from the heater can enter the living area). The exhaust outlet must be located in accordance with current RV industry standards.
	8	No exhaust parts are close to, touching or passing through any combustible material (unless fire-protected).
	9	All exhaust connections and fittings are secure and airtight. Proper exhaust system clamps are used, exhaust runs are not kinked or pinched and are thermally shielded from surrounding surfaces.
	10	The heater fuel supply line has a dedicated pickup from the main diesel fuel tank with no more than 60” of lift.
	11	Fuel lines do not pass-through areas of excess heat and are separated from water lines.
	12	Fuel lines are secure with no risk of becoming pinched, kinked, or damaged during normal operation.
	14	All DC wiring connections are correctly secured, sized and installed according to normally-accepted wiring practices and applicable standards (CSA Standard C22, Canadian Electrical code Part I or the National Electrical Code).
	15	All AC electrical connections are correctly secured and sized to applicable standards (CSA Standard C22, Canadian Electrical code Part I or the National Electrical Code).

✓		Before starting the burner ensure:
	16	Battery connection is secure and, direct from the heater to the house battery bank, with correct polarity.
	17	Battery connection is protected with a circuit breaker or heavy-duty fuse that is properly sized for the total system load and is protected from accidental disconnect.
	18	All external electrical connections are properly grounded.
	19	Heat transfer fluid circulation lines are properly insulated from cold and protected from solvents where necessary.
	20	The heater, and circulation system is full of non-toxic, propylene glycol-based heat transfer fluid with additives recognized as safe "GRAS" by the FDA.
	21	The heat transfer fluid has the appropriate freeze protection rating for the climate (temperature) in which the heater will be operated. Refer to the heat transfer fluid manufacturer's recommendation for this rating.

Comments: _____

_____

_____

Inspection #1 completed by: Print name Signature Date

2. Initial Start-up

! DANGER

Never
- operate the heater in an enclosed area without adequate ventilation
- shut off the heater power via an inline battery or master switch while system is running
- disconnect battery when the heater is running
- disconnect battery when inverter is on
- leave the heater running in bypass mode while unattended (service technician only).

✓		Initial burner start-up
	1	Turn the voltage at the main power feed to the heater on and ensure the voltage is between 11 VDC and 15 VDC. Press the power button on the front panel of the heater and the green power LED at the top of the row of LED's should light up.
	2	Turn on the AC elements circuit breaker and the AC LED should light up on the front panel of the heater
	3	Turn on the burner switch at the remote operating panel inside the coach; the green burner LED on the remote panel will light. The indicator LED's on the front panel of the heater for each burner component will light as the burner goes through its ignition sequence. The burner may fire and then flame-out as there may be air in the fuel line after initial hooked up. The heater will attempt to re-light without assistance 2 times. If it does not continue to run after the second attempt it will be necessary to restart the heater by pressing the reset button on the front panel.
	4	Ensure normal operation by checking that the following green LED's are illuminated: • Power • Ignitor (Note: the ignitor LED will turn off after 30 seconds) • Compressor • fuel pump • combustion fan A Red LED indicating flame out, voltage, or low water should not be luminated. If they are, correct the situation per the Installation and Operating Manual.
	5	Ensure there are no leaks at the heat transfer fluid connection points and check all fuel connections for leaks.
	6	Let the heater come-up to its cycling temperature and shut off

Comments: _____

_____

_____

Inspection #2 completed by: Print name Signature Date

3. Normal Operation

✓		Normal burner operation
	1	Turn on the thermostats to draw heat from the heater. Check the zone board to see if the corresponding thermostat, zone fan and pump LED's illuminate.
	2	Check all of the space heating fans in each heating zone for heat.
	3	Turn off/down the thermostats, the fans should turn off; check the zone board to see if the thermostat, zone fan and pump LED's are no longer illuminated.
	4	Turn on the hot water and check that it is at the appropriate temperature. The Summer Pump and Domestic water LED's on the zone board should be illuminated.
	5	At this point, the heater may have fired as heat has been removed from the system. If the heater has not fired continue to run the hot water until the heater fires.
	6	Turn off the hot water and let the heater cycle-off

Comments:

_____

_____

_____

Inspection #3 completed by: Print name Signature Date

4. Burner Shutdown

✓	Step	Burner Shutdown
	1	While the burner is operating and the burner switch is turned off at the remote panel, the green LED on the panel will turn off and the burner will stop. The combustion fan will continue to run for two-minutes to complete the heaters purge cycle then shut-off. During the purge cycle the combustion fan LED on the front panel of the heater will be illuminated. Once the cycle is complete it will turn off and the only LED illuminated on the front panel of the heater will be the power light.
	2	If the heater will not be operated in low temperature conditions, drain the domestic water system completely to avoid freezing and damaging any components.

Comments:

_____

_____

_____

Inspection #4 completed by: Print name Signature Date

5. AC Electric Element Operation

✓	Step	Before operating the AC electric elements ensure:
	1	The coach is plugged into an appropriate AC outlet capable of suppling at least 30 amps.
	2	The heater is not cycling (up to operating temperature and cycled off). If the heater has cycled, turn on the burner switch, remove heat from the system by running hot water and wait for the burner to start. Turn off the burner and allow the water to run for a minute or two to ensure the temperature of the heat transfer fluid has dropped below the heater cycling temperature and then turn off the water.
	3	Verify the AC Power LED on the front panel of the heater is illuminated.
	4	On the remote switch in the coach turn on AC I and verify the current draw. This can be seen on the on-board current draw meter. The current draw should be about 12.5 amps and the AC LED next to the switch should be illuminated.
	5	On the remote switch in the coach turn on AC I&II and verify the current draw. The current draw should be about 25.0 amps and the AC LED next to the switch should be illuminated.
	6	Verify the AC LED on the front panel of the heater is still illuminated.
	7	Allow the heater to cycle. The AC LED next to the switch on the remote panel will go out. The AC LED on the front panel of the heater will also go out.

NOTE: Function of the AC Heat LED's - *The AC power light on the front panel of the heater will be illuminated when AC is connected to the coach and the heater has not cycled off. This light will go out when the heater cycles; the burner is off and the electric element(s) are no longer energized (drawing current). The AC LED on the remote switch works the same way but will only be illuminated when the switch is in AC I or AC I&II position.*

Hour Meter Reading at completion of check out _____

Comments: _____

_____

_____

Inspection #5 completed by: Print name Signature Date

Heater Model and Serial No. _____

Type of Installation (Model of RV and length)

_____

Owners Name / Address / Telephone Numbers

_____

Supervisor and final sign-off: _____