INTERNATIONAL LTD
THERMAL RESEARCH

Inspection Check Sheet

***The* Oasis™ Heating Module** **March 1, 2005**

NOTICE

No warranty will be extended to unapproved, unauthorized or improper installations. Use of any materials or equipment unsuited for their intended use will result in a voided warranty for The Oasis™ Heating Module.

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 Oasis™ Heating Module is permitted unless it has been pre-approved by ITR.

1. Before Start-up **Hour Meter Reading** _____

✓	Step	1. Before Start-up
	1	The heater and all components are mounted in appropriate location according to ITR recommended guidelines, with required clearances for maintenance (minimum 3" for all open panels and unrestricted access to the front).
	2	All components, accessories and materials are ITR manufactured or appropriate for intended use.
	3	Length, routing and sizing of water hoses, fuel lines, air vents, combustion air intake hose, and exhaust tubing are of a suitable type and have been installed and connected according to the installation guide standards.
	4	The Oasis™ Heating Module is properly exhausted (i.e. no exhaust fumes from unit will infiltrate the living area).
	5	The combustion inlet is drawing 100% outside air and is unrestricted.
	6	No exhaust parts are close to, touching or passing through any combustible material (unless fire-protected).
	7	All exhaust connections and fittings are secure and airtight. Proper clamps are used and no hoses are kinked or pinched. Exhaust must be thermally shielded and insulated from surrounding surfaces.
	8	Fuel supply has a dedicated pickup from main diesel fuel tank with no more than 60" of lift.
	9	Fuel lines do not pass through areas of excess heat and are separated from water lines.
	10	Fuel lines are secure with no risk of becoming pinched, kinked, or damaged during normal operation.
	11	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).
	12	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).

✓	Step	1. Before Start-up
	13	Battery connection is secure and, direct from the Oasis™ Heating Module to house battery bank, with correct polarity.
	14	Battery connection is protected with a circuit breaker or heavy-duty fuse that is properly sized to the total system load and is protected from accidental disconnect.
	15	All external electrical connections are properly grounded.
	16	Circulation lines are properly insulated from cold and protected from solvents where necessary.
	17	The Thru hull and exhaust must be installed in such a way as to preclude water ingestion into the Oasis™ Heating Module through the combustion fan intake or exhaust pipe due to wave action, the vessels wake or spray. For motor home applications ensure the exhaust collar is installed with adequate clearance.
	18	If the air intake is attached to the thru hull ensure that it is placed between 10 o'clock and 2 o'clock and goosed necked similar to the exhaust to avoid water intake.
	19	Circulation system is full of 50/50 mix of non toxic antifreeze and water.

Comments: _____

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Inspection #1 completed by: _____

Print name Signature Date

2. Initial Start-up

! DANGER

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

✓	Step	2. Initial Start-up
	20	Turn the voltage at the main power feed to the Oasis™ Heating Module on and ensure the voltage is between 11 VDC and 15 VDC. Turn on the power on/off button on the Oasis™ Heating Module and the green power LED on the heater should light up.
	21	Turn on the AC elements circuit breaker and the AC LED should light up on the Oasis™ Heating Module

✓	Step	2. Initial Start-up
	22	Turn on the Oasis™ Heating Module at the remote operating panel and the green burner LED should light. It may be necessary to restart the Oasis™ Heating Module (Press reset Button) to bleed the air from the fuel system after the fuel line is initially hooked up. Since this is the initial start up the water in the tank should be cold enough for the burner to start. The indicator LED's for the burner components will light as the burner goes though its ignition sequence
	23	Ensure these signs of normal operation appear: • The green compressor, fuel pump, combustion fan, and igniter LED's on the Oasis™ Heating Module should be lit. (The igniter shuts off 30 seconds after ignition). • The red flame out, voltage, and low water LED's on the Oasis™ Heating Module should not be lit. If they are lit correct the situation per the Installation and Operating Manual.
	24	Ensure no leaks are present (check all hosing, connections, etc.).

Comments: _____

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Inspection #2 completed by: _____

Print name Signature Date

3. Normal Operation

✓	Step	3. Normal Operation
	25	If the Oasis™ Distribution Module is being used, ensure the thermostats are not calling for heat. Allow the burner to fire and check that it cycles off on its own (when operating temperature is reached).
	26	Turn on the thermostats to draw heat from the Oasis™ Heating module. When enough heat has been drawn, check that the burner fires again to compensate for the heat loss.

Comments: _____

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Inspection #3 completed by: _____

Print name Signature Date

4. Shutdown

✓	Step	4. Shutdown
	27	When the Oasis™ Heating Module is running and is turned off at the remote indicator panel the heater should run through its two minute purge cycle.
	28	If the heater will not be operated in low temperature conditions, drain the domestic water system completely to avoid freezing and damaging any components.

Hour Meter Reading at completion of check out _____

Comments: _____

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Inspection #4 completed by: _____
Print name Signature Date

The Oasis™ Heating Module Serial No.

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Type of Installation (Marine or RV)

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Owners Name / Address / Telephone Numbers

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Supervisor and final sign-off: _____
Print name Signature Date