

NORTHLANDER

INDUSTRIES

Canada's Leader in Cottage/RV Lifestyle

OWNER'S MANUAL

Park Model



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*Thank you for selecting
a Northlander!*

Your decision to own a Northlander enables you to experience the quality, durability and performance that have been synonymous with the Northlander name since 1964.

This manual is intended solely for the purpose of providing instructions regarding the operation and maintenance of your unit. While most features are common in all Northlander units, some features mentioned in this manual may not apply to your specific unit; this manual is not intended as a complete reference to all matters relating to your unit.

This manual does not represent any warranty, neither expressed nor implied; the only warranty by Northlander is set forth in the limited warranty applicable to your unit. Read and refer to all manufacturers' documents associated with your appliances.

The Limited Warranty and limited warranties issued by the component manufacturers stipulate periodic service and maintenance. Failure by the owner to provide such services and/or maintenance may result in loss of warranty coverage. The owner should review Northlander's limited warranty and those of component manufacturers associated with the product. Component manufacturers' literature should take precedence if information or instructions differ from this manual.

IMPORTANT!

**COMPLETE THE WARRANTY REGISTRATION CARD
PROVIDED BY THE DEALER - RETURN TO NORTHLANDER
WITHIN 10 DAYS OF DATE OF DELIVERY**

This manual is based on the latest information available at the time of publication. Due to continuous product development and improvements, Northlander reserves the right to make changes in product specifications and components without prior notice. Some of the features shown in this manual may be optional and not included in your unit.

*Your park model has been
crafted for lasting enjoyment.
Welcome to the
Northlander lifestyle!*

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1. Warranty Information

Northlander takes great pride in its record for superior customer and dealer satisfaction. We build strong Owner confidence that leads to lasting relationships and repeat business.

Principal Warranty Statement

533438 ONTARIO LIMITED O/A NORTHLANDER INDUSTRIES warrants every unit to the original consumer owner ("Owner") for a period of one (1) year and five (5) years on structure, under normal (non-commercial) use and service, to be free of substantial defects in material and workmanship.

Five (5) Year Structural Warranty - warrants the components and performance relating to the base structure: structural integrity, the building envelope (weather penetration), electrical distribution system, plumbing and heat/cool delivery systems and window/door performance, excluding fixtures.

Warranty exclusions:

1. Any unit which has been modified, altered, damaged; by anyone outside the factory so that in the sole opinion of Northlander Industries, it has been affected with regard to safe use, material effectiveness and integrity or C.S.A. certification. Please contact Northlander or your Dealer for additional information should you be considering a modification.
2. The Northlander warranty excludes appliance and component manufacturers who have their own warranty coverage. Please refer to the manufacturer warranty coverage.
3. Minor imperfections which do not affect the suitability of the unit for its intended use.
4. Warranty claims arising from or being compounded by neglect, accident, misuse or fraud.
5. Compensation for loss of use and enjoyment, time, commercial loss, incidental charges, communication expense, alternate accommodation, rescheduling or any consequential damage resulting from matters of warranty.
6. Normal wear and tear and climatic exposure during reasonable use.
7. Soiling, fading and discolouration of fabric materials due to use and direct sunlight.
8. After the first 90 days of the warranty period, normal maintenance and minor adjustments to windows, doors, appliances, latches, moldings, seals, gas regulators and cleaning are not considered to be warranty matters.
9. Damage resulting from failure to do, or have done, regular maintenance.
10. This unit is not intended for commercial use or rental. Such activity voids the warranty.
11. Warranty coverage is not a substitution for proper Owner's insurance coverage or common sense and appropriate use.
12. Any damage created by shipping or improper set-up.
13. Any damage caused by occupancy outside what the unit was designed for.

There is no warranty of any nature beyond that contained in this warranty.

Failure by the owner to immediately provide notice or take action to mitigate the problem in a timely manner that results in additional damage, is in the opinion of most warranting parties an act of neglect, indifference or abuse that could result in the owner accepting the responsibility for the remedial action or replacement.

Warranty Registration

A Northlander Warranty Registration Card is to be completed by the owner within 10 days of delivery and forwarded to Northlander. The owner must complete and forward warranty registration documents directly to any component suppliers offering additional Manufacturer's warranty coverage



Important: The 5 year warranty will become effective ONLY if a warranty activation form is properly filled out and returned to Northlander Industries.

Obtaining Warranty Service

Owners should direct all questions and warranty claims directly to their Dealer, who will coordinate a resolution through the Service Manager at Northlander. The selling Dealer is responsible for performing minor touch-up and adjustments as part of their Dealer obligations.

The Dealer shall submit a “notice of claim” complete with purchaser’s written details of all required action and the serial number of the unit. Also included should be the Owner’s invoiced date or purchase and any supporting photographs when possible. Upon receipt of notice of a claim, Northlander will at their sole discretion repair or replace any parts or components which we determine are defective. Our obligation is limited to such repair or replacement. Warranty work must be pre-approved by the Service Manager. **Northlander Industries maintains an in-house service department to support our warranty commitment.**

Claims arising from the coverage period must be submitted no later than 10 days after day 365.

Component Parts Warranty

Several component suppliers extend warranty privileges through to the original and in some cases subsequent Owner for periods which may be greater than the Northlander 1 year period. There are various time limitations and in some cases, pro-rating of coverages for parts, parts and labour, labour and other considerations. Northlander is not responsible for the coverage or consequential matters relating to warranty by others. It is necessary that the Owner forward all other warranty cards to those manufacturers. Any service contract extensions purchased by the Owner from a parts manufacturer are outside of any agreement or obligation with Northlander and the Dealer. Your Dealer and Northlander are pleased to provide assistance to Owners to resolve warranty matters relating to component suppliers.

Owner Pre-Delivery Responsibilities

Pre-delivery inspection, transportation, setup, initial appliance start-up and where applicable, zoning, building code and bylaw compliance:

The preceding matters must be performed by qualified persons under the authority and direction of the Owner as a condition and obligation to be eligible for warranty coverage. Select someone who is reputable, insured and guaranteed. The Owner shall satisfy their self of the competency of action and recommendations of such service providers and deem them on their behalf to be their qualified service provider, trade or installer capable of and familiar with matters of installation, repair, alteration and use.



Owner Maintenance Responsibility

It is incumbent upon the Owner to perform typically expected occupant maintenance and self inspections. The Owner is required to fulfill some basic responsibilities in order to receive full coverage when a warranty matter is confirmed.

The general expectations of the owner's responsibility are to:

- Immediately call your dealer with notice of problems or to ask if you are not sure about a condition.
- Use your good common sense when using the unit.
- Don't allow a situation to deteriorate into a worsening state.
- Maintain and care for the product following the manufacturer's instructions.
- Hire qualified service providers.
- Inspect the unit during the warranty period and subsequently.
- Use the fixtures and appliances for their intended purpose.
- Fill out all warranty registration cards. Keep records for reference.

Owners are responsible for proper maintenance and care of the unit which includes:

- Northlander warranty support is conditional (or dependant) that each unit has been transported without damage and set up on adequate lot conditions (by one of several acceptable and municipally approved methods) by a service provider qualified to carry out the administrative, construction and methods necessary. This expectation and responsibility is extended to include any winterization, maintenance or utilities connections and supply.
- Use appropriate measures to regulate water vapour and the undesirable effects of condensation. Do not circumvent or decommission any factory designed or installed features. Refer to the appendix "Controlling Condensation and Moisture".
- Clean furnace filters on models equipped with filters as necessary.
- Change filter on return air grills as necessary.
- Clean filter in the range hood exhaust fan as necessary if applicable.
- Make sure outside covered and screen vents to inlet or exhaust air are free from lint, debris, webs, nests or vegetation.
- After year one and thereafter periodically check the home for level. Depending on the method of foundation/pad support, the necessity for re-leveling may become apparent due to sticking doors, cracking or separation of some components or connection and relationship of the unit to external connections or features. Resolving a leveling matter should be done by a qualified person and should not result in lasting problems if dealt with in a timely and professional manner
- Check service connections to fuel source if there is any reason to believe there has been damage or tampering.
- Trim branches from coming into contact with the any part of your unit.
- Ensure skirting is vented below unit.
- At least twice a year, check or have checked, the roof flashing, shingles which may have blown up, any penetrations through the roof (stacks, pipes etc.)
- Repair any rodent, pest, pet or insect damage.
- Wear and tear, damage, cleaning and stain removal from flooring material should be dealt with in the same way you would expect to use any quality residential flooring product. Read and follow the product care literature, restrictions and product warranties.
- Monitor for leaks or drips in plumbing fixtures or any unexplained wet spots, stains or discolouration on ceiling, wall, floor or any areas by a window, door or skylight. Report any observations immediately. Water problems are infrequent but can be troublesome and cause ongoing issues if not addressed. Allow your Dealer



the best opportunity possible to have this type of problem fixed. The repair may be quite simple whereas the results of neglect could be severe and possibly unwarranted if you ignore the problem.

- Make sure window drains are free of debris.
- Wind damage or damage from an outside force or occurrence should be repaired as soon as possible. Some matters may be covered by your property insurance policy, but may, with prior approval from your insurance agent, be repaired by your Dealer.
- Keep the roof free of excess winter snow, wet snow, ice or leaves. Use care to prevent damage to roof or vents.
- Understand the proper positions and functions of electrical switches, plumbing valves and their functions.
- Report any aspect of the unit's materials or workmanship which your observations indicate a change of function or appearance etc.
- Replace bulbs or lamps with equally rated bulbs. Over sizing may lead to harmful damage which would not be covered by warranty.
- Your unit is constructed from wood products. Even kiln dried lumber, trim, flooring and miscellaneous wood products will dry to lower moisture content which may result in a degree of shrinkage. Minor cracks, splits and separation can result and are of no cause for alarm. Minor squeaks may also result.
- Use only cleaners and methods suitable for the surface or material being cleaned. It is your responsibility to purchase the appropriate products and use them in the prescribed manner as labeled.
- Do not overload electrical circuits. Repeated tripping of a circuit breaker indicates a need to make a change in use or have a qualified professional investigate for a system fault.
- Some water service supplies will result in long term and recurring build-ups, staining or problems. Your dealer or park can make recommendations of maintenance or replacement if applicable. Problems may occur in lines, sinks, tubs/showers, taps, fixtures and water heating tanks. Water quality related issues would be non-warranty covered matters.
- As assistance, a schedule of General Maintenance Guidelines is provided in the appendix.

Winter Occupancy

Your unit may not be intended for 12 month, continuous or sub zero winter occupancy. The Owner has the sole responsibility and discretion to ensure safe winter use. A winterization checklist is provided however we recommend the use of a qualified technician.



2. Appliances and Equipment

General Information

The following instructions are general in nature and may vary from the appliance in your unit. Each appliance should have an individual owner's manual and operating instructions supplied with the unit. Please refer to these manuals for more detailed instructions and information on the operation of your particular appliance.

Each appliance is warranted by their respective manufacturer. It is extremely important that you review all of the literature provided in the manufacturer's information package provided. Be sure to have your dealer go over the operation of the appliances with you, and report any shortages of literature that you have at the time. You must complete and mail any warranty registration cards required by the appliance manufacturer at the time of your purchase.

It is important to carefully read all the manufacturers literature provided regarding both the operation and maintenance of the appliance. If the instructions for the operation and maintenance of the appliance differ from instructions outlined in this manual, please rely on the information provided with the appliance.

Be sure to keep all literature, including this manual, in your unit for easy reference. If service of the appliance is required, contact your dealer or the authorized service representative of the appliance manufacturer. Most appliance manufacturers have toll free service telephone numbers or website access for your convenience.

This manual provides general maintenance tips that are not specific to an appliance.

IMPORTANT!

MAKE SURE TO READ THE OWNER'S MANUAL FOR COMPLETE INSTRUCTIONS REGARDING THE OPERATION, SAFETY PRECAUTIONS AND MAINTENANCE OF YOUR APPLIANCE.



Refrigerator

The refrigerator and freezer controls should be set at 5 degrees during start up and initial operation. After the unit has run for 12-24 hours allowing the refrigerator to cool, the thermostat should be adjusted to the desired temperature range. Allow 12 hours after each adjustment for temperature to be reached.

If equipped with either an automatic ice maker or water dispenser, winterization will require the water system to be disconnected and the unit drained. Refer to the manufacturer's manual for recommended cleaning and maintenance procedures.

Stainless steel or clean steel appliances should be cleaned using a manufacturer recommended cleaner.

Water Heaters

The water heater is automatically filled when the unit is connected to an outside water supply. The unit may be equipped with a by-pass kit. The by-pass valve must be closed and the flow valves must be open to allow the water heater to fill (see diagrams on page 15 for details).

Make sure that the water heater is filled before attempting to light or heat by electricity, otherwise the heating element will be damaged.

Read all the literature on the water heater before using it. Pay particular attention to any precautions or warnings associated with its use.

Range

Never leave the range unattended when lit.

Lighting of Natural Gas or Propane Range Burners:

Gas and propane ranges are equipped with either an electric or a spark ignition system. It is necessary to ensure that the gas or propane supply is turned on.

The initial hookup of the gas or propane to the range **MUST BE DONE** by a licensed installer. As part of the installation the installer should start the range to verify its safe operation.

Range Hood/Microwave

Charcoal filtered range hoods (non-vented) circulate the air and cooking odors from the kitchen area, as well as provides light for cooking and countertop activities. The exhaust fan filter screen should be replaced annually. Be sure the fan is turned off when replacing filters. Optional external exhaust vents will automatically open when the exhaust fan is operated.



Microwave Oven

Make sure that the turntable (where applicable) is in place before operating, and that the movement is not restricted. It is important that you select the proper power level for the various foods and operations you will be using. The microwave should not be adjusted or repaired by anyone except properly qualified personnel.

Air Conditioner (Opt.)

The unit is factory equipped with the wiring necessary to install an air conditioner on site.

Air conditioning consumes a large portion of the electric power available to the unit, so efficient operation is an important consideration. Efficiency can be increased by closing all windows, blinds and curtains.

Furnace

Your unit is equipped with a central heating system that is made up of a furnace, thermostat, and ducting to carry the heat throughout the unit.

The furnace is vented to the outside by an exhaust vent. Never store anything in the furnace compartment or block the outside exhaust vents. Have the entire heating system inspected annually by a qualified service agency to ensure the safe and efficient operation. If you suspect a problem at any time with the system, immediately arrange for service. Power to the furnace can be turned off by a switch that is often located near an entrance door and mounted higher than a light switch and marked as furnace switch.

Safety Equipment

The best way to reduce the risk of fire is through prevention. Follow the manufacturer's instructions on the use of all appliances and observe all safety warnings and instructions included.

Smoke Detector

All units are equipped with smoke detectors in the bedroom/hall area. Smoke detectors should be tested regularly.

Gas Detector

See the Gas System section of the manual.



Dishwasher (Opt.)

The filter combination must be emptied and cleaned regularly.

If wash results deteriorate noticeably, the spray arm jets should be checked and cleaned.

Provided the correct type of detergent is used and the unit is operated correctly, dishwashers do not need any special care as the wash baskets and cabinet are self-cleaning during normal everyday use.

The rubber seals around the door should be cleaned regularly with damp cloth to remove food residue.

Winterization will require the water system to be disconnected and the unit drained. Refer to the manufacturer's manual for recommended cleaning and maintenance procedures.

Washer (Opt.)

Water-fill hoses should be checked periodically for any sign of wear or weakness. Most manufacturers recommend replacement every 5 years.

If your washing machine is not level, it may vibrate strongly and even "walk" across the room, during the spin cycle. The adjustable legs should be used to level the unit.

Use a damp rag to clean its surfaces.

Most washing machines collect lint during the wash cycle and send it down the drain during the drain cycle. Some machines however have lint filters. If your machine is equipped with a lint filter, it should be cleaned regularly.

Winterization will require the water system to be disconnected and the unit drained. Refer to the manufacturer's manual for recommended cleaning and maintenance procedures.

Dryer (Opt.)

The lint produced by your clothes tumbling in the dryer is usually trapped in the lint filter. However, some lint invariably escapes and accumulates in the vent or the interior of the cabinet. The lint filter should be cleaned after each use. If the filter has any rips or tears, it should be replaced.

At least once a year, check the entire length of your vent and your cabinet for lint build-up. Remove the lint from the duct.



Fireplace (Opt.)

Gas fireplaces are clean burning and require little maintenance. An annual inspection by a qualified professional who can inspect the burner, fan, venting, pilot light and thermostat and even clean the glass is recommended. Alternately, check with your owner's manual for instructions for cleaning glass doors. Typical glass cleaners are not as effective as products specifically made to clean the stains on the inside of fireplace glass.

Electric fireplaces are virtually care free and allow "flames" in the summer by turning off the heating element.



3. Electrical Systems

General Information

The electrical power supply provided is designed to operate with a 110V, 120V or an optional 120/240V power supply. When the 110V system is operational, it allows for the use of all functions within the unit.

Circuit Breakers

The electrical system is protected by circuit breakers which automatically shuts off the circuit if the circuit load is too heavy, or a short circuit occurs. If a circuit breaker is tripped, do not reset the breaker until the cause of the problem has been identified and corrected by a qualified electrician .

Power Supply and Voltage Awareness

Voltage too Low (Incoming Electrical Service to your Northlander)

Periodic Low Voltage or fluctuations from your “park hook-up” power source may affect performance or be the reason for some unexplained difficulties or failures. Items under warranty will not be covered if the problem resulted from “low voltage” damage.

Equipment affected by low voltage:

Microwave ovens, televisions, computers, any appliances with motors, air conditioners and built in motor driven units such as furnace and fans.

If your power supply is subject to low voltage conditions, you will have to learn how to operate within the situation that exists. Only you can control the load demand through your main power cord. This is done by coordinating the times at which you turn electrical appliances on.

NOTE: Your circuits are required by Codes to be protected from **EXCESSIVE AMPERAGE DRAW**. The breakers “kick out” if you plug in too many appliances. Unfortunately you have no built-in protection from an insufficient power supply.

An obvious sign of low power or high Amperage draw is a sudden visible change in the lights. Signs of low voltage are not always as apparent. A reading may be taken by an electrician. This represents the voltage at the specific time of reading. If you know of or suspect a persistent problem that exists, you may wish to install a volt meter to constantly monitor the voltage in your system. You may then regulate your demands for power accordingly.

Voltage too High (Spikes and Surges)

We are all familiar with the use of surge protectors on computers and satellite dishes: These same devices are of use to all electrical devices. Utility suppliers and some insurance policies deny damage claims resulting from power surges, lightning, spikes or even low power “brown outs”. Buy good/sensitive surge protectors. You can protect individual appliances or the entire incoming electrical source.

To protect against spikes, you could acquire aftermarket 30 and 50 amp power cord devices that provide low voltage “brown out” protection, GFCI safety, as well as surge protection. Ask your Dealer.



4. Gas System

General Information

Your unit is quipped with either a liquid propane or natural gas system designed for clean, efficient and safe operation when properly maintained and safety precautions are observed. Both systems are historically safe but can be hazardous so they must be treated with respect. Most individuals are familiar with natural gas since it is the primary fuel used to heat homes. Gas installations and appliance hookups should be completed by properly licensed individuals and safety precautions observed.

CAUTION

- Natural gas is lighter than air and is potentially lethal and highly flammable.
- LP Gas is heavier than air and will settle into low areas and flow on a surface like water.
- Both give off a noxious odour due to an additive.
- In a confined space, both are highly explosive.
- An improper combustion setting burns more oxygen content from the interior air available for occupants.
- Your Northlander is provided with operable windows and roof vents in some products. You must leave one or more of these sources open a small amount for precautionary safety to provide external combustion air (for some gas burning appliances) and fresh air for habitants.
- Never use a range/stove to provide space heating in your park model.
- The use of additional (non-electric) space heating devices is not recommended and may be an unsafe practice.

Gas Leaks

If the smell of gas is present inside your unit, no matter how faint;

- Open the doors and windows to air out the room.
- Check to see if any appliances have been left on accidentally or if the pilot light has been extinguished.
- Most appliances have safety shut-offs to control the escape of natural gas if the pilot goes out.
- All appliances should have a shut-off from the natural gas supply. Close the shut-off valve.
- If the leak is appliance specific, have a specialist look at the appliance.
- If the smell gets stronger or if you hear a hissing sound, leave the unit immediately.
- Upon evacuation, leave the door open.
- Call your natural gas provider immediately from a neighbour's phone.

DO NOT:

- Smoke or strike a match
- Operate any electrical switches or appliance controls. If a switch is on, leave it on: if it's off leave it off.
- Pull any plugs from outlets.
- Use a telephone or cell phone from the unit.
- Use a flashlight or lighter.



LP Gas Safety Precautions

The liquid petroleum (LP) gas system in your unit is a clean, efficient, safe form of energy when properly handled and safety precautions are observed. The gas is stored under extreme pressure in a tank and reduced in pressure as it passes through the regulator to your appliance.

The regulator has been pre-set by the manufacturer of the regulator and adjustment should not be necessary. If adjustment should be required **DO NOT** attempt to adjust it yourself. Adjustments must be made with special equipment by a qualified LP gas service technician. If you believe the regulator has been damaged or is not functioning, have it replaced by an authorized LP serviceman.

Have the regulator checked annually. Because air is required for operation of the regulator, it is important that the regulator vent is kept clean and free of dirt and debris. A toothbrush may be used to clean the regulator should it become blocked in any manner. Your LP system is designed to accept propane.

Because LP gas can be dangerous to use if not handled properly, some basic practices for safe usage of your LPG system are recommended:

1. Have your tanks filled at authorized or licensed LP gas station or service. Proper purging of an empty tank will ensure correct fuel consistency and purity. Tanks are designed for maximum fill levels, typically 80% max. with 20% vapour space. There are aspects of filling or refilling which should be done only by qualified persons.
2. Propane hoses have counter-clockwise rotating threads to tighten to tank.
3. Check all tank line connections each time you fill or change over the two stage regulator to be sure they are tight. When testing for leaks use soapy water and watch for bubble formation. **Do not test with a lit match!**
4. Under no circumstances should the LPG regulator be adjusted, except by an authorized or licensed LPG service person.
5. When transporting tanks for refilling, secure them against falling or rolling. Never transport, install or store any propane tank inside your Northlander, your home or RV.
6. Never install a lock or device requiring a key or impedance to opening the storage location of the LPG tank or the operation of the valve should emergency access and shut-down be required.
7. Never use an upright tank in the horizontal position, or lay down as an upright tank. Tanks are designed to draw vapour off the top of the liquified gas. Drawing liquid into your system and appliances must be avoided.
8. It is recommended that the system is shut off at the tank during unit transport or relocation.
9. If an odour of gas is present, do not light any of the appliances until the leak has been professionally repaired.
10. Practice safety at all times. If you have any questions about the operation of your appliances or the LP system, contact your dealer or your local gas service provider or licensed technician.
11. Your LPG system has been designed and tested under factory control conditions and the applicable codes and regulations. Do not modify the system. Do not replace or add appliances unless certified by an approved certification company such as CSA, Warnock Hersey, CUL or ULC. Maintain or service with qualified service people, parts and methods.
12. Do not use rusted supply tanks or fill tanks which are beyond their regulated term of service life.
13. Always have adult supervision when children are involved with any matter dealing with the LPG system.
14. Make sure appliances are off prior to turning system on at tank.

Read and refer to all manufacturers' literature associated with your LP-Gas fuelled appliances. The manufacture's literature should take precedence if information or instructions differ from this manual. This information is not intended to be a complete reference to all matters relating to LP-Gas and appliances.

Propane gas system start-up, use and refilling should be done with care and caution, respecting the characteristics of the fuel, appliances and procedures required.



Repair or Replacement of Range or Dryer

In the event that an appliance such as a range or dryer is disconnected for repair, the service representative should be aware of the following:

- Park Model units with propane do not have individual shut off valves at each appliance. Prior to any disconnect the gas source must be shut off to the entire unit.
- Park Model units connected to natural gas are required to have individual shut off valves at each appliance. The individual appliance can be disconnected when the valve is turned off.

It is the responsibility of all service representatives to ensure the appliance is not reconnected unless:

A. For PROPANE fuel sources

- The work is performed by the holder of an **RV.1 CERTIFICATE** or the lesser qualified **RV.2 CERTIFICATE** (Or the holder of a **G1** or **G2 CERTIFICATE** qualified for propane and/or natural gas)
- If during the required leak test a leak is found, the **RV.2 CERTIFICATE HOLDER** is not permitted to repair the malfunction.

B. For NATURAL GAS fuel sources

- The work is performed by the holder of a **G1** or **G2 CERTIFICATE** qualified for natural gas.
- In the case of natural gas, the holder of a **G1** or **G2 CERTIFICATE** has the right / obligation to review the gas installation from the meter to appliance, including other gas appliances and heating equipment not directly associated with the appliance being connected.

Upon Completion of the service work or appliance replacement:

It may be necessary to re-light other appliances and ensure the whole system is functioning.

The service representative shall ensure and coordinate all that is required to ensure the unit has been made safe by a gas certificate holder. In the event the qualified gas certificate holder has not yet arrived on site, the service representative shall make the area safe by preparing a written note and posting the sign in a prominent location to state the propane to the unit has been shut off and must remain off until turned on by a qualified gas certificate holder or in the case of a natural gas fuel source; the note should state the fuel has been shut off at the appliance only. State that no one shall tamper with the fuel source. Provide a telephone contact number for the service staff and the gas certificate holder who has been contacted to complete the re-connection.

In all cases where any valve has been turned to the “off position” and there is an open supply pipe or hose, the fitting end or flared fitting must be capped with a threaded plug to prevent fuel escaping in case the valve is accidentally turned on.

There is no such thing as a simple gas hook up. The work is governed by regulations not by personal opinions. All work must be done by qualified certificate holders. The person doing work such as floor repair, appliance install or appliance replacement is responsible to the customer and general safety principles. Always ensure you know how and when the job will be totally and safely completed, and let all parties know as well.



5. Plumbing System

Water Heater

Dependant upon the model installed, the water heater can be gas, gas/electric or electric. For specific water heater instructions, please consult the Owner's Manual provided by the manufacturer. Make sure that the water heater is filled before attempting to light or heat by electricity, otherwise the heating element will be damaged.

Care and Maintenance

Proper maintenance of the water heater relies on inspection and awareness. (Full maintenance requirements are listed within the manufacturer's user's manual.)

A qualified technician should do any repairs that are required. On gas water heaters, if soot is present anywhere, immediately shut down the unit and contact a qualified service technician. Soot is a sign of incomplete combustion and must be corrected before operating the water heater.

Pressure Relief Valve – Weeping or Dripping

The water heater is equipped with a relief valve designed to open when the water temperature is too high or excessive pressure has built up. In these circumstances the relief valve will open and water will drip from the valve. The valve will close automatically once the situation corrects itself. If dripping is continuous it would indicate a malfunctioning or defective valve.

Draining for Non-Use or Winterization

When not using the water heater for long periods of time, or storing for the winter months, it must be drained to avoid deterioration from mineral content in the water supply or freezing. To drain the tank, please follow these guidelines.

To drain the tank:

- Turn the power off to the water heater at the switch or the main breaker. **Warning:** draining the water heater with the power on will damage the water heater.
- Shut off the gas supply.
- Open all fixtures, both hot and cold throughout the unit.
- If equipped, turn the valve on the water heater by-pass kit to the by-pass position. (see addition sheet on water heater by-pass operation)
- If equipped with an RV style water heater; remove/open the water heater door on the outside of the unit and remove the anode rod from the tank. The water will drain out of the tank. Consult the owner's manual for details and be sure to allow the water to have cooled off first to avoid injury.
- For water heaters not equipped with an exterior door or anode tube, a garden hose must be attached to the drain valve located at the bottom of the water heater. Avoid damage to the interior of the unit from leaking water.

Water Heater By-Pass Kit



Serious water heater damage can result from a lack of winterizing maintenance. Ensure electric power is turned off to avoid element burn out. Consult your water heater literature or a qualified maintenance person for complete details beyond valve settings described here.

Diagram # 1: Normal Operation

(also for blowing out lines with compressed air for preparation to winterize)

Valve #1 (hot water outlet) to be fully open. Valve #3 (cold water inlet) to be fully open. Valve #2 (by-pass link) closed to restrict flow. Arrows show direction of water flow. Shaded areas indicate pipes not in use.

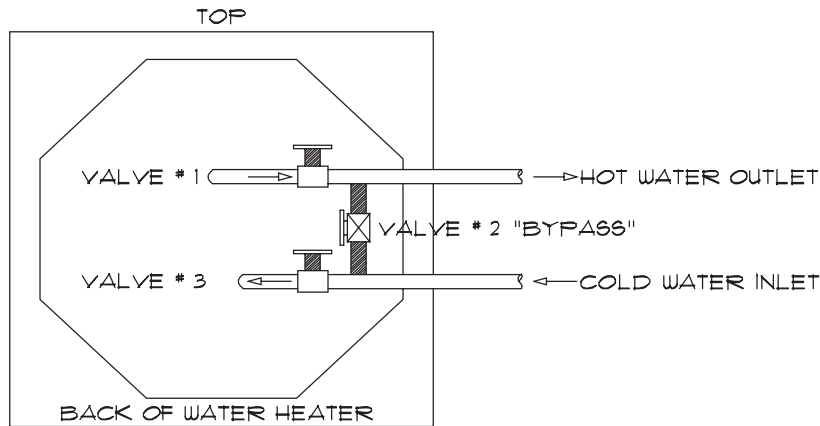
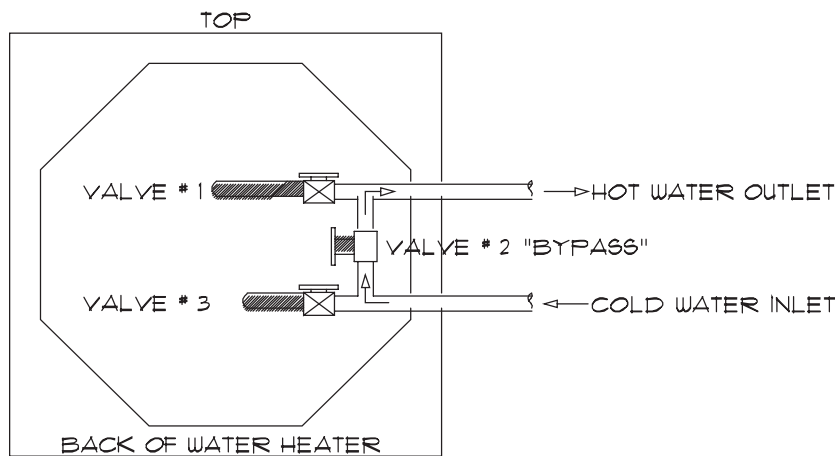


Diagram # 2: winterizing procedure & the addition of potable non-toxic antifreeze

Valve #1 (hot water outlet) to be closed. Valve #3 (cold water inlet) to be closed.

Valve #2 (bypass link) fully opened.

When lines are filled with antifreeze, slightly open valve #1 to allow some antifreeze into the water heater, then close valve #1 fully. Arrows show direction of water flow. Shaded areas indicate pipes not in use.



Note: When preparing to use unit in spring, completely flush lines and water heater to discharge anti-freeze fluids. This unit is not manufactured to be a place of permanent residence. It is intended for recreational use to be occupied on a non-permanent basis. Please refer to conditions of warranty coverage which will be limited if any issues arise during use in the winter season.



Winterization Information

This represents a general winterization procedure. Protecting the plumbing system and its related components from freezing is crucial. Damages due to weather are not covered under Northlander's warranty policy at any time. Please refer to the owner's manual of the appliances for further information. It is recommended that a qualified experienced technician is used to winterize the unit but many owners choose to do this themselves.

Water Heater

The water heater installed in the unit will either be gas, gas/electric, or electric. For specific instructions please consult the owner's manual provided in the information envelope included with the unit.

When not using the water heater for long periods of time, or for storing in the winter months, it must be drained to avoid deterioration from mineral content in the water supply or freezing. To drain the tank, please follow these guidelines...

- Turn the power off to the water heater at the switch or the main breaker. Warning: draining the water heater with the power on will damage the water heater.
- Shut off the gas supply.
- Open all fixtures, both hot and cold throughout the unit.
- If equipped, turn the valve on the water heater by-pass kit to the by-pass position. (see addition sheet on water heater by-pass operation)
- If equipped with an RV style water heater; remove/open the water heater door on the outside of the unit and remove the anode rod from the tank. The water will drain out of the tank. Consult the owner's manual for details and be sure to allow the water to have cooled off first to avoid injury.
- For water heaters not equipped with an exterior door or anode tube, a garden hose must be attached to the drain valve located at the bottom of the water heater. Avoid damage to the interior of the unit from leaking water.

Water lines

Although not necessary some customers may choose to have non-toxic anti-freeze put into their water lines for additional protection. If the lines are blown out properly, there is technically no need to have any additive in the water lines.

- Turn the power off to the water heater at the switch or the main breaker.
- Turn the fuel supply off to the water heater.
- Turn the water supply off to the unit.
- If equipped, turn the valve on the water heater by-pass to the by-pass position. (see addition sheet on water heater by-pass operation)
- Drain the water heater. (See instructions on page 1 of winterizing information.)
- If installed, remove the water filter from the assembly and discard. Install diverter if included.
- Open all fixtures, both hot and cold throughout the unit including the shower head sprayer, toilet flushing device and any other closed water line.
- Remove the water from the toilet bowl and tank.
- Attach an air hose to the unit at the water inlet using a connecting adapter.
- With the air pressure set no greater than 30 PSI, blow out the water lines until there is no more water coming out of the fixtures and water lines.
- Prop up the float valve in the toilet tank to close the water supply to the tank.
- Pour RV anti-freeze into all the sink drains so there is enough to protect the 'p' traps. Be sure to include the toilet bowl and pour some into the bottom of the toilet tank as well.



Should anti-freeze be used in water lines please add these additional steps.

- With all the faucets still open, using an adapter, pour 1 to 2 gal of non-toxic RV antifreeze into the kitchen faucet through the tap.
- Using the air hose again at no greater than 30 PSI, circulate the anti-freeze through the lines.
- Have a second person close each faucet as anti-freeze begins to come out of the tap.
- Once the anti-freeze has reached all water outlets, turn off the air pressure and then re-open all faucets.

Waste Water System (applicable for units with a tank)

Wastewater is divided into two categories: Black water and grey water. The term black water refers to waste flushed down a toilet and stored in a separate tank referred to as a black water tank. Grey water is wastewater from the sinks, tub and shower drains and is continuously drained.

The dump valve should remain closed even if connected to an exterior sewer hook up. For proper dumping, empty tanks only when they are near full. The idea is to send a large volume of water through the tanks and hose at the same time to assist the solid waste in the flushing system.

Perform the following procedures when dumping a waste tank system:

1. Open the black tank terminator and drain.
2. Flush the toilet to help flush the tank after it is empty.
3. Close termination valves.
4. Add chemical deodorant/breakdown agent approved for RV use.

After the sewage tank has been emptied, close the gate valves and put approximately 5 gallons of water into the sewage holding tank. This will help solids from building up. The addition of a deodorizing agent will prevent odors. Be sure the tank is fully drained for winter storage.



6. Care and Maintenance

The instructions and recommendations located within this manual and the accompanying manufacturer's component literature should be read. Failure to perform necessary and preventive maintenance may limit or void all or part of a specific warranty.

If uncertain or unfamiliar with any of the preventive maintenance items appearing in this manual, please contact your Dealer.

General

Proper care and maintenance is an essential step to maintaining the safety, dependability and appearance of both the interior and exterior of the unit. Preventive maintenance is important to the long-term continued enjoyment of your unit since many problems can be detected and remedied before they occur.

The care and maintenance of appliances are discussed within the Appliance chapter. Always refer to the manufacturer's recommendations provided with the appliance.

Facts About Mould

Moulds are microscopic organisms that naturally occur in virtually every environment. Mould growth inside your unit can result in a break down of the natural materials such as wood products and fabrics. It is important that the Owner is aware of the risks of mould and protects their investment from damage.

For mould to grow the temperature must be between 5 and 38 degrees Celsius and also have a source of moisture such as humidity, standing water, damp materials, etc. Rapid growth occurs under warm and humid conditions.

For additional information on controlling moisture, please read "Controlling Condensation and Moisture" located in the Appendix of this manual.

Exterior Care and Maintenance

Vinyl:

A mild solution of soap and water should be used when cleaning. When using any product ensure that it is recommended for use on vinyl. Avoid harsh abrasive cleaners, ammonia or citric-based products as discolouration may result. Avoid use of pressure washer.

Shingled Roof:

The roof shingles are covered under the manufacturer's warranty. Maintenance is limited to ensuring that it is free from debris.

Inspect the roof every six months especially around vents or skylights where sealants may become ineffective.

Exposure to the elements may cause sealants to deteriorate over time. Inspection and periodic resealing is essential to preventive maintenance.



Steel Roof:

In areas where heavy dirt deposits dull the surface, a solution of water and detergent may be used (100ml. of typical laundry detergent per 4 litres of water). A soft bristle brush may be used for scrubbing followed by a clear water rinse.

Mildew may occur in areas subject to high humidity. To remove mildew along with dirt a general suggestion is 100 ml. of typical laundry detergent, 200 ml. of TSP, 1 litre of 5% sodium hydrochloric solution (laundry bleach) and 3 litres of water. Follow with a clear water rinse.

Solvent and abrasive cleaners should be avoided.

Seals and Adhesives:

Sealants and adhesives are important to ensuring that water, moisture and mould damage does not occur. Close inspection and routine maintenance are critical to the longevity of the unit. Exposure to the elements as well as regional variances in climate can vary the lifetime of the seals and adhesives. Therefore, an inspection of all seals is recommended every six months.

Vinyl Windows - Exterior:

If an interior leak is noticed it is recommended that you contact an authorized dealer immediately. Periodically, use a vacuum attachment to clean any debris out of the weep holes, which are necessary to drain any condensation or moisture that may collect. Screens should be cleaned with a damp cloth or soft flat brush designed for that purpose.

Use a liquid solution of mild household soap applied with a sponge to wipe down the sash and frame components. Never use abrasive cleaning agents, paint removers or solvents to clean vinyl components. If stubborn stains still exist, refer to the window manufacturers recommended procedures specific to that stain.

Vents Doors and Screens:

Lubricate all hinges, locks, window mechanisms and springs periodically. In the event of damaged vents, or vent pipes it is a good practice to replace at your earliest convenience.



INTERIOR CARE AND MAINTENANCE

Countertops:

Most countertops are made of high-pressure plastic laminates and are highly resistant to normal spills and scuffs. Soap and lukewarm water or a mild non-abrasive cleaner are recommended. Avoid the use of abrasive pads and scouring powders, which can dull the surface and make it more stain prone. Always use a cutting board or chopping block when using knives. Pots and pans straight from the burner or oven should be placed on lined hot pads and not directly on the counter surface. Do not use products containing bleach since it could cause discoloration of the countertop.

Draperies:

Draperies and upholstery fabric should always be cleaned by a competent dry cleaning establishment. Spots and stains should be removed with a non-water based stain remover manufactured for this purpose.

Faucets and Fixtures:

To protect the finish on your kitchen and bathroom faucets and fixtures, only use a damp soft cloth or sponge. Do not use abrasive cleaners or material that can damage the finish.

Flooring – Carpet:

Frequent vacuuming will quickly remove loose dirt and sand. Should the carpet become more soiled, consult a flooring professional.

Flooring – Vinyl:

For routine cleaning, sweep and vacuum regularly. Follow by using a damp mop with warm water. Rinse the mop frequently as to not redistribute any dirt picked up. If washing is required, use a quality product designed for non-wax flooring. To polish the floor use only polishes recommended by the manufacturer. With any resilient vinyl flooring, the flooring can be distorted by moving heavy objects resulting in a raised area or “pucker” in the material. Heavy objects should always be lifted and otherwise moved in a manner that prevents dragging across the surface.

Flooring – Laminate:

Ordinarily vacuuming or sweeping is usually sufficient to keep the floor clean. If needed, occasionally clean with a cloth or mop (micro-fiber or terrycloth hooded) slightly moistened with a manufacturer recommended cleaning product.

IMPORTANT TIPS

- Never flood the floor with water.
- Do not use soap-based detergents, as these may leave a dull finish on your floor.
- Do not use abrasive cleaners, steel wool or scouring powder, as these may scratch your floor.
- Never wax, polish, sand or lacquer the floor.
- In very sandy areas sweep or vacuum more frequently.
- Use doormats outside each entrance to your home to prevent dirt, sand, grit and other substances such as oil, asphalt and driveway sealer from being tracked onto your floor.
- For furnishings, use wide-bearing, non-staining floor protectors, such as clear, hard plastic or non-staining felt protectors, for heavy furnishings.
- Promptly remove all liquid spills, including pet urine.
- Remove tough spots like shoe polish, tar and asphalt driveway sealer with a rag dampened with alcohol or nail polish remover containing acetone and spot clean. Then wipe with a damp cloth.



Flooring- Hardwood:

Only use cleaners approved by the floor manufacturer. Use of an unapproved cleaner will void the warranty. The use of protective coasters and casters will protect the floor covering.

DO NOT

- Mop the floor.
- Let sand or grit build up on the surface.
- Use wax, oil soaps or household cleaners.

Glass and Mirrors:

Clean glass and mirrors as you would at home. To reduce “spotting” on outside windows, use a squeegee promptly after rinsing with water.

Paneling and Cabinets:

Your wall board and cabinets contain a vinyl-covered finish for durability and easy maintenance. Clean these surfaces with a mild detergent and warm water using a soft cloth or sponge. Under no circumstance use abrasive cleaners or solvents containing bleach, alcohol, citrus oils, harsh chemicals, oil based spray cleaners or similar products. Direct sunlight can result in fading and discolouration so closing blinds and reducing harsh sunlight is advisable.

Fabric and Upholstery:

Blot up stains promptly and use an upholstery cleaner or mild solvent depending on the stain. Do not laundry upholstery fabric. Never soak the fabric and always use as little water as possible. Blot rather than rub. Towel dry or have professionally cleaned. Upholstery can be vacuumed regularly with a soft brush attachment.

Duvet Covers:

Remove duvet before cleaning. Dry cleaning is recommended. If washing do so by hand or gentle cycle with cold water and no fabric softener. Do not iron. Hang cover until completely dry (8-10) hours.

Sinks and Toilets:

Many of these products are made of acrylics, plastics or composite materials and the use of non-abrasive cleaners is recommended. The use of harsh cleaning products can result in deterioration and/or yellowing of the surface finish.

Bathroom Tubs and Showers:

Major bathroom components on most models are made of durable fiberglass. To clean, use a mild detergent solution. For stubborn stains, an automotive liquid cleaner is ideal. Never use abrasive or solvent cleaners, steel wool, ammonia or similar cleaners as these can scratch and dull the finish. To retain the original shine, apply automotive wax and buff with a soft, dry cloth.

Windows - Interior:

Moving parts on windows and latches should be maintained and adjusted. Lubricate the windows with a light oil or powder graphite at least once a year. The screws holding the windows should be periodically checked and tightened.

Locksets and Latches:

Annual lubrication of locksets and latches with a suitable lubricant is recommended.



Stainless Steel Surfaces:

Cleaning with a household liquid detergent and water followed by a thorough rinsing is all that is required. After cleaning, wipe dry to prevent water spotting. For persistent stains, use a cleaner that is recommended by the manufacturer.

Never use scouring powder, scouring pads, or steel wool. Also avoid leaving salt, mustard, ketchup or mayonnaise spills in contact with stainless steel since they may cause pitting of the surface.

Wooden Furniture Care:

The beauty of furniture care is that it helps to protect your investment. Fine furniture is an important purchase. Proper care will help maintain your furniture's finish and ensure that it looks great year after year.

Caring for Furniture

Caring for furniture is easy. Following a few simple guidelines will help extend the life of your furniture.

- Always dust with a polish moistened cloth. Do not wipe with a dry cloth. Polish cushions the cloth eliminating the scratching that occurs with dry dusting. Dust will scratch the furniture surface if not removed quickly. Use a soft, clean cloth that won't scratch the surface.
- Avoid using soap and water on furniture. Water can penetrate the finish and raise the grain of the wood, causing damage.

The enemies of Furniture

Many common problems in the furniture care are caused by the elements. If you are aware of these troublemakers, the resulting damage can easily be avoided.

- Sunlight's ultraviolet rays can damage wood finishes.
- Arrange furniture out of direct sunlight.
- Use sun screening drapes or blinds during intense sunlight hours.
- Rotate furniture in place and in room arrangements.
- Liquid spills will damage furniture if not removed promptly. Use coasters under beverage glasses, saucers under cups & flowerpots. If a spill occurs, immediately blot it gently without rubbing the surface.
- Heat creates a chemical change in the furniture finish, which can result in a white spot. Use protective pads under hot dishes, utensils or cooking appliances.
- Cyclic changes in temperature can damage furniture. Hot blasts of air such as those found from central heating, should be avoided because they cause extreme localized drying of wood.

Tips for Better Dusting

- Be sure to use the same type of polish consistently. Your furniture will appear cloudy or streaky if oil-based and wax-based polishes are interchanged.
- Always use a fine furniture polish when dusting. Never dry dust, as it could cause microscopic scratches on your furniture surface.
- Spray your furniture surface evenly, but not too generously. Wipe in a circular motion with a soft, clean cloth to clean and loosen the old polish then buff until completely dry for a beautiful shine and a smudge-resistant finish. For wood trim, spray polish on the cloth first and then dust.



9. Appendix

For your convenience, additional information and checklists have been included that many owners have found to be of assistance. In this Appendix you will find:

1. Tips on Controlling Condensation and Moisture
2. Winterization Checklist
3. General Maintenance Guidelines Chart
4. Personal Records and Component Parts Listing
5. Component Manufacturer Listing



Condensation and Moisture

Moisture is present in all homes, but when it becomes excessive, homeowners need to take an active role in protecting their investment. The relatively small spatial volume and air tight construction of the units means that normal living activities of even a few occupants could lead to rapid saturation of the air volume resulting in visible moisture condensation, especially in cold weather.

Humidity and Condensation

Humidity is a measure of the amount of water vapour in the air. When interior humidity levels are too high relative to cooler outdoor temperatures, condensation can form on the coldest surface in a room – often the glass in a window or door. While windows and doors do not cause condensation, they may be one of the first places it shows up.

What Causes Condensation

Excess humidity is typically the cause of condensation. There are many sources for moisture in a home: showers, dishwashers, clothes washers and dryers, house plants, humans and pets, among others. In newly built homes, additional moisture may escape from building materials for up to three heating seasons, even with proper airflow and temperature management.

Measuring and Controlling Humidity

A way to monitor the interior humidity level is to watch your windows. When interior condensation begins to form, reduce the humidity by opening windows, running exhaust fans or dehumidifiers, or minimizing sources of moisture. Promote air circulation by use of a fan to keep air circulating within your unit.

You can reduce or eliminate interior moisture to varying degrees by the following procedures:

- **Ventilate with Outside Air Year Round:** On dry days or extremely cold days only, partially open one or more windows to provide control through ventilation of outside air. This will greatly decrease or eliminate condensation from water vapour in the inside atmosphere of the unit.
- **Reduce Moisture Released Inside Your Northlander:** Run the range hood fan if outside vented when cooking and the bath fan when bathing. Run fans longer than would be your custom in your permanent residence. This vents the moisture from the source to the outside before it dissipates into the general environment of the interior. Avoid making steam from excessive boiling for cooking, tea kettles and vaporizers. Avoid drying of clothes, by hanging inside and excessive steaming up from bathing and the use of humidifiers. (Prolonged use of the gas range or oven will in itself contribute to free moisture.) Never use an appliance for space heating! Keep drapery opened to allow air circulation on windows.
- **Ventilate Closets, Cabinets and Enclosed Spaces:** Use of your park model during very cold weather may require that you open closets and enclosed spaces to promote air circulation to the interior surface of cold walls to lessen or avoid condensation, leading to mildew possibilities, frost and possible ice formation at condensed water droplets. Air out your park model daily. Do not leave closets and storage areas lightly packed during close-up.
- Use of dehumidifiers is recommended, especially when stove or microwave range hood are not vented outside.
- Humidity levels should be monitored using a hygrometer



Hard Roof, Awnings, Florida Rooms and Decks

The Northlander warranty does not cover modifications and alterations that affect the safe use, material effectiveness and integrity of the unit. Therefore, it is the responsibility of the Owner, in conjunction with the Dealer, to perform a comprehensive analysis of the effects an added structural element will have on the Northlander prior to constructing or modifying any structural element.

It is the sole responsibility of the person engaging any work to be done, to ensure full design considerations have been undertaken prior to authorizing or beginning construction. Each project must be addressed independently and separately for its own merits and unique circumstances. Northlander Industries has no blanket process or approval available for such undertaking.

There are no universal answers relating to the construction of a modification. The factors and considerations are too numerous and variable by location to provide a comprehensive list. Below however are some of the common factors for consideration.

- In all circumstances a deck, roof or added room shall be supported on its own foundation and not bear added loads on the original structure.
- An addition or awning roof installed at a lower pitch or rise than the Northlander roof can result in a snow build up or drift line. This can add considerable weight in winter resulting in potentially dangerous conditions for structural failure.

You may have seen promotional pictures showing various forms of aftermarket packaged systems and contractor constructed structural elements associated with a Northlander. This does not mean Northlander endorses or promotes the use or construction of any method or class of structural element beyond that which has been constructed by Northlander. We assume that a full review of the structural effects and construction solution has been done in a competent manner. We also assume that any applicable permits and approvals have been obtained prior to construction where required by authorities. We encourage all work to be done by fully insured trades or contractors.

Please contact Northlander or your Dealer for additional information should you be considering a modification.



Winterization Checklist

The unit you have purchased from your dealer may not be intended for 12 month, continuous or sub-zero winter occupancy. The purchaser has sole responsibility and discretion to ensure safe winter use. The plumbing drainage, water supply system and park connections (if available during off season use) must be kept from freezing.

- | | |
|---|---|
| <p><input type="checkbox"/> Plumbing Lines (see Winterization)
Drain and blow out</p> <p><input type="checkbox"/> Water Filter (if equipped):
Remove filter and discard.
Replace it with a new one in the spring.</p> <p><input type="checkbox"/> Water Heater (see Winterization)
Drain and By-pass
Cover exterior vents.</p> | <p><input type="checkbox"/> Countertops and Cabinets
Clean. Remove any bottles or cans that could be damaged by freezing
Leave cabinet doors open.</p> <p><input type="checkbox"/> Windows
Clean and inspect for damage.
Cover windows on inside that do not have blinds to prevent sun fade on interior fabrics.</p> |
| <p><input type="checkbox"/> Toilet
See winterization procedures.
Drain tank and bowl.</p> <p><input type="checkbox"/> Drain Traps
See winterization procedures.
Add anti-freeze.</p> <p><input type="checkbox"/> Sinks
Clean the sinks, be sure nothing is left in them.</p> | <p><input type="checkbox"/> Curtains and Blinds
Clean and close</p> <p><input type="checkbox"/> Exterior Walls
Wash as recommended.</p> <p><input type="checkbox"/> Roof
Remove any debris.
Keep clear of heavy snow loads. Use care to prevent damage.</p> |
| <p><input type="checkbox"/> Refrigerator
Clean and defrost. Prop door(s) open.
Automatic ice maker and/or water dispenser-
Disconnect water supply and drain.</p> <p><input type="checkbox"/> Air Conditioner
Clean or replace all filters.</p> | <p><input type="checkbox"/> Vents
Remove any debris. Cover and secure.</p> <p><input type="checkbox"/> Stored Items
Remove all liquids.
Freezing could cause eventual spillage that can damage cabinets, countertops and flooring.</p> |
| <p><input type="checkbox"/> Washing Machine and Dishwasher
Disconnect water supply and drain.</p> | |

Note : The above checklist represents general winterization procedures. Please check with the local dealer or park owner for additional requirements that are specific to your geographic or park location as well as the manufacturer's manual.



General Maintenance Guidelines/Chart

	Monthly	Every 90 Days	Every 6 months	Every 12 months	As Necessary
EXTERIOR					
General					
Check home for level					X
Ensure skirting is vented					X
Repair any damage by pests & insects					X
Aluminium Siding					
Wash		X			
Wax			X		
Vinyl Siding					
Wash with warm water & mild detergent		X			
Roof					
Clean debris					X
Inspect flashing, shingles & roof stacks			X		
Trim branches from contact					X
Clear off snow					X
Seals & Ahesive					
Inspect			X		
Replace					X
Windows					
Inspect			X		
Clean out debris in Weep Holes					X
Lubricate moving parts					X
Replace Sealant					X
Repair Leaks					X
Doors					
Lubricate door hinges.					X
Lubricate door locks & strike pocket					X

	Monthly	Every 90 Days	Every 6 months	Every 12 months	As Necessary
ELECTRICAL					
Breakers & Connections					
Inspect				X	
Replace					X

	Monthly	Every 90 Days	Every 6 months	Every 12 months	As Necessary
LP SYSTEM					
System Pressure					
Set System pressure at 11" WC				X	
Lines & Fitting					
Leak test system			X		
Check holes & fittings				X	
LP Regulator					
Clear Vent Screen of Debris				X	



	<i>Monthly</i>	<i>Every 90 Days</i>	<i>Every 6 months</i>	<i>Every 12 months</i>	<i>As Necessary</i>
PLUMBING SYSTEM					
Lines & Fittings					
Inspect & Tighten					X
Winterize system					X
Water heater					
Manufacturer Maintenance Instructions					X
Inspect & Clean Exterior Vent Screen	X				
Check for soot			X		
Replenish Air Pocket					X

	<i>Monthly</i>	<i>Every 90 Days</i>	<i>Every 6 months</i>	<i>Every 12 months</i>	<i>As Necessary</i>
APPLIANCES & EQUIPMENT					
Air Conditioner					
Manufacturer Maintenance Instructions					X
Clean return air filter					X
Furnace					
Manufacturer Maintenance Instructions					X
Range					
Manufacturer Maintenance Instructions					X
Inspect & Clean Burner Assembly					X
Refrigerator					
Manufacturer Maintenance Instructions					X
Inspect & Clean Exterior Vent Screen					X
Soft Brush Clean Off Coils		X			
Defrost			X		



Personal Records - Unit Information

Unit Information

Serial # _____
 V.I.N. # _____ Year _____
 Date of Purchase ____/____/____
 Selling Dealer _____ Phone # _____

Appliance information

	Manufacturer	Model #	Serial #
Air Conditioner	_____	_____	_____
Furnace	_____	_____	_____
Hot Water Heater	_____	_____	_____
Range	_____	_____	_____
Refrigerator	_____	_____	_____
Microwave	_____	_____	_____
Stereo	_____	_____	_____
Television	_____	_____	_____
DVD Player	_____	_____	_____
Washer	_____	_____	_____
Dryer	_____	_____	_____
Dishwasher	_____	_____	_____
Central Vac	_____	_____	_____
Range Hood	_____	_____	_____
Fire Extinguisher	_____	_____	_____
Fireplace	_____	_____	_____
Air Exchanger	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Insurance Information

Company/Agent _____ Phone # _____
 Policy Number _____ Claims Phone # _____
 Renewal Dates _____



