













# TO THE HILT

We know how many options there are when it comes to picking an adventure vehicle, and we are so grateful you decided to choose the HILT to take you to the edge of your map and beyond.

Before we discuss the key features and functions of your new truck, let's talk a little bit about the core values that drive the design, engineering, craftsmanship, and overall experience of the HILT.

Our approach throughout the entire process of creating and manufacturing the HILT has been to deliver an innovative, inspiring, adventure-ready vehicle that is safe, fun, flexible, rugged and ready-to-go at all times!

## SAFE

You and your passengers can rest in the knowledge that your HILT has been designed and engineered in accordance with the best practices for our industry to meet or exceed the rigorous RVIA certification standards.

## SIMPLE

Your HILT features an uncomplicated, uncluttered, intuitive design that makes it easy for you and your crew to get into whatever kind of travel, camping, or exploring you are going for, without all the hassle and complexity associated with conventional RVs.

## FUN

Your HILT is designed for increased functionality using a number of additional features to allow you to have the ultimate experience. We hope that driving the HILT puts just as big of a smile on your face as it does ours.

## **FLEXIBLE**

The HILT is not a "one-trick pony"! We know our customers have demanding lives and they need their adventure vehicle to rise to the challenges that come along with being a weekend warrior, and a long-range traveler. Whether you are road tripping across the country with your family, camping off-grid with your crew. The HILT is meant to be your getaway vehicle of choice to help you flex between all aspects of a life fully lived.

## RUGGED

We know life on the open road and beyond can get a little messy. That's why we build our HILTs only with the highest quality components and materials to ensure that each of these elements will fully withstand the rigors of active use for years to come. The Zero Torsion Subframe means you'll put less stress on the capsule as you drive to Mars and back. We spent countless hours designing a vehicle that'll take you further and that'll help you live more luxuriously once you get there. The HILT is built to endure just about anything you can put it through.

## **READY-TO-GO**

And finally, we feel your HILT should be ready to perform and keep its promise on a moment's notice. So, we have made every effort to ensure the onboard systems and components are easy to maintain and readily serviceable by qualified technicians. The HILT is the first of its kind. best-in-class adventure truck with all the benefits of buying off Storyteller's production line - that means you can rely on our nationwide dealer sales and service network and our dedicated, internal after-sales support system to help in the field should you need assistance while traveling.

# SO THERE YOU HAVE IT!

These are the core values that drive our thinking in the development of each and every aspect of your HILT.

We are grateful for the opportunity to serve you and your crew, and we look forward to seeing you Live Free, Explore Endlessly and Tell Better Stories out on the open road and beyond!

Cheers to the road ahead!

offer c. Any

and your Storyteller Overland family

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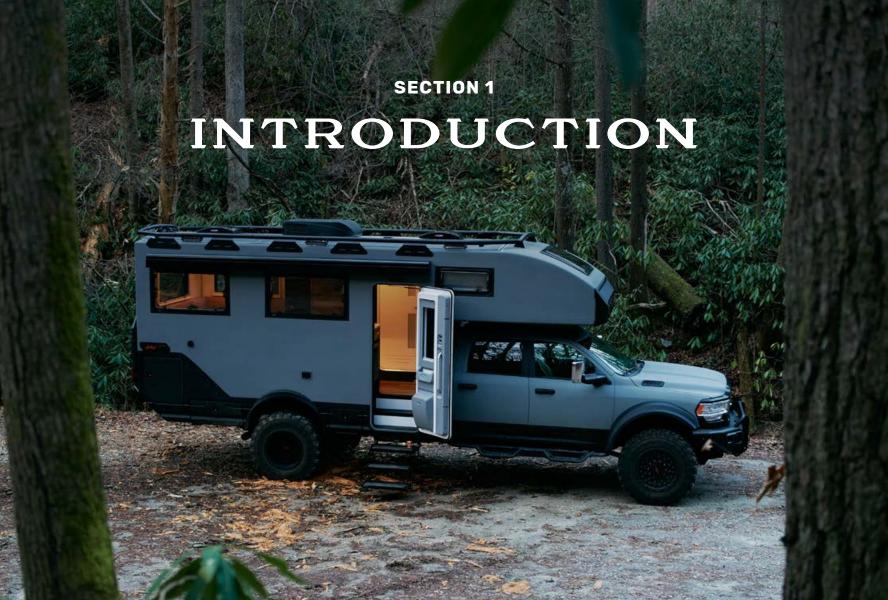
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Welcome to the family of Storyteller Overland owners! Before you begin your travels, please take some time to get to know your HILT's features and some of the tips and tricks provided in this User Guide.

## **About This User Guide**

This User Guide has information on how to operate and care for your HILT as well as general safety information to help you have the best experience possible.

NOTE: This User Guide is general in its coverage of the vehicle components and systems. Some equipment, features or functions may be different on your vehicle due to continuous product improvement or supply chain constraints. Descriptions, images, and specifications were correct at the time of publication, but Storyteller Overland reserves the right to make changes, without notice, and without obligation to install the same products previously manufactured.

You will find references throughout this User Guide to the vehicle chassis as well as the Operating Instructions for the RAM chassis. Please refer to the Owner's Manual for information regarding the operation, safety, and maintenance of the original vehicle chassis.

In addition to this User Guide and the vehicle's Owner's Manual, your HILT came with manufacturers' user manuals for various appliances and systems. Many of these systems are covered in this User Guide, but some information may only be found in the individual manufacturer's manuals. Please keep these documents handy should you have questions; most are also available on the manufacturer's websites.

# **Safety Messages**

This User Guide alerts you to common safety or vehicle hazards using the two following designations:

# **A WARNING**

Indicates a hazard that may endanger your health or life, or the health or life of others

# **CAUTION**

Indicates a risk which may lead to minor injury and/or your vehicle being damaged

# **Pre-Delivery Inspection**

Storyteller Overland takes pride in the quality of the products we build. We inspect every vehicle closely before shipping. Your dealer is responsible for completing a comprehensive pre-delivery inspection and for correcting any issues with the chassis or RV components prior to delivery.

# **Before Driving**

Familiarize yourself with all local and state laws as different areas may have laws that apply to your RV but which vary between regions.

## Service & Assistance

We are committed to our customers well after the purchase of their vehicle. Should you need service or technical assistance, please reach out at <a href="StorytellerOverland.com">StorytellerOverland.com</a> under Customer Support for

the fastest response, or call 1-888-999-7442. We will gladly help you get back on the road as quickly as possible.

# **Reporting of Safety Defects**

At Storyteller Overland, we strive to produce safe and reliable vehicles. If you feel there is a safety defect that could result in a crash, injury, or death, you should immediately contact the National Highway Traffic Safety Administration (NHTSA), as well as Storyteller Overland. If the NHTSA receives similar reports, they may choose to open an investigation and/or issue a safety recall and campaign.

#### To contact the NHTSA:

Call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY 1-800-424-9153); go to www.safecar.gov; or write to Administrator, NHTSA, 1200 New Jersey Avenue S.E., Washington, D.C. 20590.

#### To contact Storyteller Overland:

Call 1-888-999-7442, or, contact us via our website: StorytellerOverland.com.

# **Occupant & Cargo-Carrying Capacity**

An Occupant & Cargo-Carrying Capacity label is found in the passenger door area and shows the maximum weight capacity of the vehicle for all passengers and cargo, as well as the number of seat-belted riding positions.

MOTOR HOME OCCUPANT AND CARGO CARRYING CAPACITY VIN THE COMBINED WEIGHT OF OCCUPANTS

SAFETY BELT EQUIPPED SEATING CAPACITY

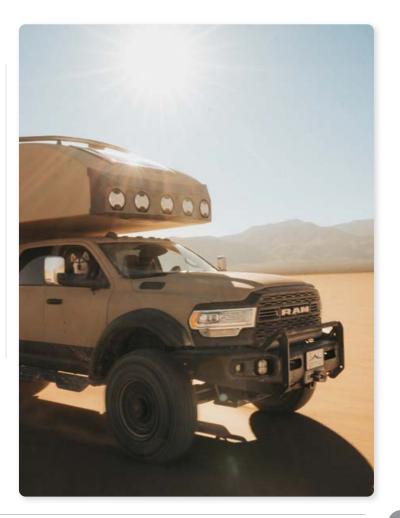
\_\_\_ OR \_\_\_\_\_

CAUTION

A FULL LOAD OF WATER EQUALS \_\_\_\_ OR \_\_\_\_ OF CARGO @ 1KG/L (8.3 LB/GAL)
AND THE TONGUE WEIGHT OF A TOWED TRALIER COUNTS AS CARGO.

# **CAUTION**

Water and trailer tongue weight count as cargo and factor into the available cargo weight. The weight of a full load of water for the vehicle is provided on the label. Failure to take these weights into consideration can result in overloading the vehicle and lead to compromised functionality and handling.



CHASSIS	RAM 5500
Length	27′
Exterior height <sup>1</sup>	12′7″
Exterior width	8′
Awning width	12'6"
Awning extension maximum	9'9"
Interior height	6'7"
Interior width	6'11"
Freshwater tank capacity <sup>2</sup>	120 gal
Grey water tank capacity <sup>2</sup>	45 gal
Cassette toilet capacity	4.75 gal
Wheelbase	197.4"
GVWR	19,500 lbs
GAWR – Front	7,000 lbs
GAWR - Rear	13,500 lbs
GCWR <sup>3</sup>	32,000 lbs
Fuel capacity	52 gal + 22 gal reserve tank (if equipped)

# **Specifications & Capacities\***

- 1. Measured to top of tallest standard feature; actual height may vary.
- **2.** Based on measurements prior to tank installation; slight variations are normal.
- 3. Actual towing capacity depends on particular loading and towing circumstances, including GVWR, GAWR, GCWR, and adequate trailer brakes. (Refer to your vehicle's Owner's Manual for further towing information.)

\*All Specifications and Capacities are estimated and based upon the most recent data available.

## **Vehicle Certification Label**

This label is found in the driver door area and contains the Vehicle Identification Number (VIN) label as well as essential vehicle information. MANUFACTURED BY: MFG DATE: 1 STORYTELLER OVERLAND, LLC. GVWR: 2

GAWR SUITABLE TIRE AND WHEEL COLD INFLATION PRESSURE FRONT: 3 5 6 7
REAR: 4 5 6 7

THIS VEHICLE CONFORMS TO ALL APPLICABLE U.S. FEDERAL MOTOR VEHICLE SAFETY STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE.

VIN: 8 TYPE: 9

## Vehicle Certification Data Explanation

- Date of completed alterations by Storyteller Overland
- 2 Gross Vehicle Weight Rating
- Gross Front Axle Weight Rating
- 4 Gross Rear Axle Weight Rating
- 5 Specified tire size for rating

- 6 Specified wheel size for rating
- 7 Tire pressure rating
- 8 Vehicle Identification Number (VIN)
- 9 NHTSA classification



See your vehicle's Owner's Manual for information on RAMspecific items such as: driving controls, instrumentation, cruise control, climate controls, wipers, lights, and other chassis-related features.

## **Seat Belts**

All seating positions in your RV have seat belts. While the vehicle is moving, passengers should only use these seats, and all seats should be locked in the travel position.

Pregnant women should never place the shoulder belt behind their back or under their arm. The lap belt should be adjusted across the hips/pelvis and below the belly, and the shoulder belt should be across the chest (between breasts) and away from the neck.

NOTE: After any serious accident, all seat belts in use during the accident must be inspected and, if necessary, replaced. (Also, see In the Event of an Accident at p. 54 of this User Guide.)

## **Child Restraints**

The proper use of child restraints is critical for the safe transport of children in your vehicle. Child restraints should always be installed properly according to the manufacturer's instructions. Incorrect installation or use increases the risk of injury to a child in the event of an accident or sudden maneuver.

Seats must be in the full upright position when child restraints are used and the vehicle is in motion.

# **Factory Dash Climate Controls**

Your HILT's dash climate controls are designed to heat and cool the front cabin area only, not the entire cabin. See your vehicle's Owner's Manual Instructions for details regarding dash A/C, heat, and defrost functions.

For details regarding the HILT's heating and cooling systems for the cabin, see Cabin Climate Control System at p. 26 of this User Guide.

# **Loading the HILT**

#### WHEN LOADING THE HILT:

- → Empty the gray water tank to reduce vehicle weight.
- Distribute weight evenly to help vehicle handling.
- Never exceed the GVWR (Gross Vehicle Weight Rating)¹ or the GAWR (Gross Axle Weight Rating)².
- The combined measured weight at the front wheels plus the measured rear wheel weight should never exceed the GVWR.
- Never exceed the GCWR (Gross Combination Weight Rating)<sup>3</sup>.
- Never exceed the individual tire weight ratings.

- The GVWR is the total allowable weight of the vehicle, including passengers, cargo (including water), and possible tongue weight of a towed trailer.
- 2. The GAWR is the weight the axle is rated for.
- The GCWR is the maximum total weight of the vehicle and anything towed.

NOTE: All of the above values specific to your vehicle can be located on the Vehicle Certification Label in the driver door area. See Vehicle Certification Label at p. 6 of this User Guide for more details.

# **Weighing the HILT**

Weigh your fully loaded HILT to determine the proper load distribution of cargo in your vehicle. Fully loaded is intended to include: fuel, fresh water, food, bedding, passengers, gear, and other items you will be transporting.

#### FINDING A SCALE

Commercial truck stops, as well as some other locations, have commercial scales you can use for a fee.

### WEIGHING PROCEDURE

Measure the following weights: front axle, rear axle, and total vehicle.

To get a front axle weight, drive only the front wheels onto the scale. To get a total vehicle weight, drive all wheels onto the scale. To get a rear axle weight, drive the rear wheels only on the scale.

Compare these measurements to the GVWR, and the GAWR for the front and rear axles, found on the Vehicle Certification label inside the driver door area.

# Front Axle Alignment

This is a solid axle vehicle equipped with Liquid Springs Suspension®. The HILT alignment should be checked with your expected full load, then periodically to help prevent uneven tire wear. Excessive or abnormal tire wear may indicate a worn or misaligned suspension, an unbalanced tire, or other problems.

The alignment facility needs to follow RAM Manufacturer Specifications for aligning the HILT.



# **Towing With the HILT**

It's your responsibility to know the weight of your vehicle and trailer.

- The rear GAWR is set by RAM at 13,500 lbs.
- The trailer tongue weight is set by the hitch manufacturer at 2,700 lbs.

Neither or these numbers can be exceeded by the end user.

The best way to determine your towing capacity is to establish a baseline rear axle weight. To accomplish this:

- First weigh the HILT at a scale fully loaded (and the trailer disconnected)
- Second attach the trailer and re-evaluate the rear axle weight. It shouldn't exceed 13,500 lbs, and it shouldn't have increased from the initial trailerless measurement by more than 2,700 lbs.

#### TONGUE WEIGHT EQUATION:

Loaded Vehicle Rear Axle Weight (with trailer) - Loaded Vehicle Rear Axle Weight (without trailer) = Trailer Tongue Weight

Here is another equation you can use:

Total Vehicle Weight + Total Trailer Weight = Gross Combined Weight (must be below 32,000lbs)

# **CAUTION**

Towing will affect vehicle handling, durability, and fuel economy.

Exceeding any of the listed Gross Weight Ratings will result in unacceptable overall vehicle performance and potentially danger.

When towing a trailer, make sure the trailer doesn't come in contact with the capsule. Remember that the capsule overhangs the trailer hitch.

#### HITCH ASSEMBLY

The actual tongue weight should never exceed the stated hitch vertical load. This is typically defined as the tongue weight of a towed vehicle hitch.

The trailer tongue weight is set by the hitch manufacturer at 2.700lbs.

### **Tires**

Your HILT is equipped with Hutchinson® 2660 wheels with 41" Multi Purpose Tires which feature a 3 piece bead lock wheel capable of extremely low PSI without de-beading.



Hutchinson 2260 Wheels bit.ly/3t1vH3G

NOTE: Improper tire pressure can cause abnormal or premature tire wear, as well as negatively affect vehicle handling and/or fuel economy.

#### RECOMMENDED TIRE PRESSURE ON THE HILT:

90 PSI Rear

→ 65 PSI Front

The wheel lug bolts need to be checked and torqued periodically and any time the wheels are removed and reinstalled.

- → Middle ring of lug nuts torque spec: 200 ft lbs
- \*\*Outer ring of lug nuts torque spec: 200 ft lbs (only loosen when changing tires or at 0 psi)

TIP: Using an accurate tire gauge, check your tires for proper inflation before each trip, as well as at least once a month.

# **A WARNING**

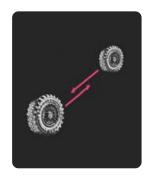
The outer ring of lug nuts should only be loosened at 0 psi or when changing tires. Loosening the outer ring of lug nuts when under pressure could lead to injury or death.



NOTE: HILT tire rotations are recommended every 3,000 to 5,000 miles for the best tire life.

#### HILT TIRE ROTATION:

When rotating tires, move the front wheels straight to the rear on the <u>same side</u> of the vehicle and turn 180°. Move the rear wheels straight to the front and rotate 180°. Remove the middle ring of lug nuts on the wheel, highlighted in blue. After the wheels are rotated, reinstall the middle ring of lug nuts and torque to 200 ft lbs.



# **Emergencies on the Road**

### **RECOVERY TOWING**

Due to modifications of the HILT from its original chassis specifications, notify the towing service of the length, height and weight of the HILT and that it is built on a RAM 5500 chassis as it may change how they recover the vehicle. Vehicle specifications are found on the Vehicle Certification Label inside the driver door area. As this is a 4WD vehicle, the drive shaft will usually need to be unbolted, depending on circumstances and tow method. Additionally, refer to the vehicle's Operating Instructions regarding towing the vehicle.

### **JUMP-STARTING**

Refer to the vehicle's Owner's Manual for information on iump-starting.

# **A WARNING**

Batteries produce flammable hydrogen gas during charging.

Any spark—particularly from jumper cables—can ignite the gas and cause the battery to explode. Extreme caution should always be taken when jump-starting a battery.

# **A WARNING**

California Proposition 65 WARNING:

Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the state of California to cause cancer and reproductive harm. Always wash hands after handling.

### FLAT TIRE ON MOVING VEHICLE

In the event you experience a flat tire while your HILT is moving, do your best not to panic, slam on the brakes, or jerk your foot off the accelerator. Instead, slowly and gently ease back on the accelerator. The deflated tire will slow the vehicle.

Further, the vehicle may pull towards the side with the failed tire. Firmly grip the steering wheel, and if necessary, counter-steer to compensate for the pull. Let the vehicle coast to a stop, gently steering to a safe location. Then activate the hazard flashers before carefully exiting the vehicle. Set out flares or other warning devices before inspecting the tire.

#### CHANGING A FLAT TIRE

In the event of a flat tire or other roadside emergency, we recommend you seek the aid of a professional road service due to the weight and size of the vehicle and the tire. If the situation requires you to change a flat tire yourself, be very careful and read the applicable information in your vehicle's Operating Instructions.

*NOTE: The HILT does not come from the factory with a jack.* 

#### SPARE TIRE ELECTRIC WINCH SYSTEM

Your HILT is supplied with a full-size spare tire mounted to the rear of the vehicle.



**COMEUP4s Carry On Winch** 

comeupwinch.com

# **A WARNING**

The spare tire is over 275 lbs, so this process must be handled with extreme caution. Familiarize yourself with this procedure and take extra care to keep yourself and others safe with no chance of being caught under the tire or in the winch mechanism.

#### SPARE TIRE REMOVAL INSTRUCTIONS

- Attach the supplied rear winch into the trailer hitch with the supplied adapter.
- 2. Slide the adapter tube into the hitch and attach the hitch pin.
- 3. Plug the winch power cord into the nearby power outlet.
- Use the two quick latch pins supplied to attach the pulley bracket assembly to the top of the spare tire dock.
- Plug in the winch remote control cable into the winch and unspool approximately 7 ft of rope.
- **6.** Drop the supplied bungee cord down from the top of the spare tire carrier tube so that it comes out the bottom.
- 7. Attach the winch rope to the bungee cord and pull the winch rope through the back of the spare tire carrier tube. Run it over the pulleys and attach the hook to the eyelet on the spare tire holder.
- 8. Run the winch in until there is tension in the rope.
- Remove the four ½" bolts in the center of the spare tire holder to free the spare tire from the vehicle.
- 10. Lower the tire to the ground using the winch.
- Remove the four ½" bolts holding the spare to the spare tire holder.

To reattach the spare tire, reverse these instructions making sure to torque all eight spare tire carrier bolts to 43 ft lbs with blue Loctite.



Helpful videos and the online version of this User Guide is available at the link below.



**HILT Owner Resources Page** 

bit.ly/hilt-owner-resources

# **A WARNING**

Failure to properly torque and Loctite® the spare tire attachment bolts may result in the spare tire disengaging, which may result in injury or death.

# **Carbon Monoxide Warnings**

Combustion engines emit carbon monoxide (CO), which can be harmful or deadly. Keep CO out of the cabin by maintaining the vehicle's exhaust and ventilation systems. In the event of any of the following, have your HILT's exhaust and ventilation systems inspected by a qualified service center:

- If the sound of the vehicle exhaust system changes
- When damage occurs to the exhaust, underbody, or rear of the vehicle
- When the vehicle is serviced

To allow for proper operation of the vehicle's ventilation system, keep the front grill clear of snow, leaves, or other obstructions.

# **A WARNING**

Do not occupy a parked vehicle with the engine running for an extended period. Do not run the engine in confined areas, such as a garage, except to move the vehicle in or out of the area as harmful exhaust fumes can lead to injury or death.

## **Vehicle Maintenance**

Your HILT's continued safe and efficient operation relies upon routine maintenance and service. These requirements are outlined in your RAM Owner's Manual.

# **A WARNING**

Operating, servicing, and maintaining this vehicle can expose you to various chemicals—including engine exhaust, carbon monoxide, phthalates, and lead—which are known to the state of California to cause cancer and birth defects or other reproductive harm. To minimize exposure:

- Avoid breathing exhaust.
- Do not idle the engine except as necessary.
- When servicing your vehicle, do so in a well-ventilated area, and wear gloves or wash your hands frequently.

For more information, go to: <a href="https://www.p65warnings.ca/gov/passenger-vehicle">www.p65warnings.ca/gov/passenger-vehicle</a>

**SECTION 3** 

# M-POWER SYSTEM

**POWERED BY LITHIONICS BATTERY®** 



Your HILT is equipped with the M-Power Energy System which powers most of the RV-side electrical systems and is located in the electrical cabinet on the driver side between the lavatory and bed. The M-Power System is independent of the chassis electrical system and does not provide power to the engine or chassis accessories.

M-Power consists of three voltage systems: 12V DC system, 51V DC system, and 110V AC system. It can be charged three ways: 30A shore power connection, an auxiliary alternator on the vehicle's engine, and solar panels on the roof.

See Operating the M-Power System—Charging at p. 20 for details.

## **Electrical Cautions**

Careless handling of electrical components can be fatal. Never touch or use electrical components or appliances while feet are bare, hands are wet, standing in water, or standing on wet ground.

When working with any of the HILT's electrical components, please note the following:

- Never use a standard extension cord for shore power connections.
   Only use an RV-rated 30A extension cord no longer than 50 feet.
- Be sure all electrical appliances use 3-prong plugs for proper grounding. Improper grounding can cause personal injury.

Avoid overloading electrical circuits. Replace circuit breakers with those of the same size and amperage rating only. Never use a higher-rated breaker.

# **A WARNING**

Never modify, tap into or otherwise alter any system or components of the M-Power System as that may damage the system, cause injury or death, or void the warranty.

# 12-Volt System & Components

The 12V system is powered by converters in the M-Power System. This system powers the 12V outlets, interior lights, awning, MISSION CONTROL display, exhaust fan, refrigerator, freezer, and heating system.

NOTE: To run the 12V system, the M-Power System must be on.

The inverters do not need to be on for the 12V system to operate, but many of the larger appliances only work when the inverter is on. See 110-Volt System & Components / Inverters below for information on how to turn the inverters off to save power.

#### 12-VOLT PROTECTION

Your HILT is equipped with three power distribution modules (PDMs). In the event of an overcurrent or short circuit, the PDMs automatically disable the circuit electronically.

To reset the system, turn it off, wait 30 seconds, then turn the system back on. If the issue persists, contact Storyteller Overland.

The MISSION CONTROL display is protected by a 12V circuit breaker located behind the panel beneath the MISSION CONTROL screen. Do not attempt to remove the panel without contacting Storyteller Overland.

# **51-Volt System & Components**

The M-Power System has two 51V batteries. The 51V portion of the system is not compatible with 12V electronics and should never be tampered with, modified, or used in any way other than as designed by Lithionics and Storyteller Overland.

# **A WARNING**

Never modify, tap into or otherwise alter any system or components of the M-Power System as that may damage the system, cause injury or death, or void the warranty.

# 110-Volt System & Components / Inverters

The 110V system is powered through two inverters, receiving energy from the M-Power System or from shore power. The inverters send power to the 110V wall outlets, refrigerator, freezer, rooftop A/C, and microwave. To run the 110V system, the M-Power System AND inverters must both be on.

NOTE: The M-Power System comes on automatically when the RV is plugged into shore power.

The inverters consume energy and can be switched off when not needed. To conserve energy and keep the refrigerator and freezer on, the inverters can be turned off as the refrigerator and freezer also get power from the 12V system.

The inverters are turned on and off on the MISSION CONTROL display. On the home screen, tap the jicon, then toggle the inverter on or off.

#### 110-VOLT BREAKERS

The 110V system has circuit breakers to help protect the system. If too much power is drawn by a device plugged into the 110V system, a breaker will trip and power will be cut to that circuit. Tripped breakers can be reset to restore power to the circuit.

All breakers are located in a compartment below the closet. If a 110V outlet or appliance is not working, check this location for tripped breakers.

NOTE: The M-Power warranty may be voided if any component of the M-Power System is altered or tampered with in any way.



## **GFCI Circuits**

The 110V outlets are protected by two ground-fault circuit interrupters (GFCIs) accessed through the GFCI Outlets. The first GFCI outlet is located on the drivers side underneath the dinette table. This GFCI outlet controls all plugs in the capsule. The second GFCI outlet is the exterior outlet to the left of the capsule door. To test or reset the GFCI outlet, make sure the inverters are on and there is power to the 110V system. Press the Test button on the outlet, and a light will illuminate if all systems are working. GFCI outlets should be reset and tested monthly.

# **A WARNING**

The GFCI may not completely eliminate the risk of electrical shock. Consider child-proofing plugs if children are present.

# **Chassis Battery**

The chassis battery is independent from the M-Power System and powers components such as the engine, dash, lights, auxiliary lighting, and other chassis accessories. Refer to your vehicle's Owner's Manual for more information.

# **Operating the M-Power Energy System**

TURNING ON THE M-POWER SYSTEM

Press and hold the round Power button for one second to turn the system on. The button will illuminate green and the MISSION CONTROL display will power on.

NOTE: The M-Power System comes on automatically when the HILT is plugged into shore power and will not turn off until shore power is disconnected and the system is powered down.

#### TURNING OFF THE M-POWER SYSTEM

Press and hold the Power button until the green light on the button flashes (about 3 seconds).

TIP: Due to the battery chemistry, the State of Charge (SoC) is an estimated value and recalibrates when the system reaches 100% SoC. Fully charging the system periodically using shore power helps ensure the estimated SoC is as accurate as possible.

TIP: Do not rapidly cycle the M-Power System on and off which can damage the system. Wait at least ten seconds between turning the system on and off.

NOTE: Anytime the M-Power System is off, the refrigerator and freezer will defrost. You must take precautions to absorb water caused by the defrosting refrigerator/freezer. Failure to do so can damage the vehicle and will not be covered under warranty.

## CHECKING M-POWER SYSTEM LEVELS

MISSION CONTROL displays the estimated time remaining at the current loads.

When power is shown as a positive value, energy is going into the batteries. When power is shown as a negative value, energy is being depleted from the batteries. Time Remaining calculates estimated time to depletion or to full charge, depending on power flow.

#### CHARGING

The M-Power System can be charged three ways:

- 1. Shore power charging port
- 2. Auxiliary alternator
- **3.** Solar panels

NOTE: The batteries will not take a charge when core temperatures are above 120°F.

#### 1. Charging Via Shore Power.

Plug the provided 30A shore power cord into the 110V/30A port on the driver side of the vehicle.

NOTE: Any shore power cord used must be 110V/30A rated and must not exceed 50 ft in length.

When plugged into shore power, the inverter/charger will automatically test incoming power to ensure certain requirements are met. If incoming power meets the requirements, the system will automatically begin charging. If the system does not accept power, the cause is likely poor-quality incoming power, or the shore power cord may be plugged into an electronic surge protector.

NOTE: Some electronic or processor-based surge protectors create a conflict, causing the system to reject the power source.

When connected to shore power, the system will provide power first to accessories drawing power from the system. The remaining current is then used to charge the battery system. If electrical loads exceed the shore power current available, Power Assist will be enabled. This allows the inverter to pull extra power from the batteries to maintain the load without overdrawing the shore circuit.

If electrical loads exceed the maximum branch amperage, the system will not charge.

# **CAUTION**

Only plug your shore power cable into a dedicated 30A power supply.

When plugged into a 30A shore power outlet, both inverters will have a minimum draw of 25A.

Carefully monitor loads on the MISSION CONTROL display to make sure there is positive power flow when on shore power.

Be careful not to exceed the shore power circuit limit or risk tripping the power source breaker, or worse, overheating the shore power circuit.

#### 2. Charging Via Auxiliary Alternator.

The auxiliary alternator is powered by the engine when high idling or when the engine is running above XX RPM. To engage the vehicle's High Idle, please refer to the vehicle's Owner's Manual.

# **A WARNING**

Due to exhaust fume hazards, never run the engine inside an enclosed space which can cause injury or death.

#### 3. Charging Via Solar Panels.

The HILT has 1320W of solar panels that add energy into the batteries when there is sufficient sunlight and the system is on. Power created by the solar panels is dependent on weather situations, cleanliness of the panels, sun position and other factors.

# **Lithionics Battery®**

SCAN OR CODE FOR MORE INFORMATION:



- Download the Lithionics Battery

  Monitor Bluetooth App
- Lithionics BatterySupport & Guides

#### Low State of Charge: NeverDie and Low Voltage Cutoff

The NeverDie™ Reserve is a Lithionics feature where at 10% SoC, the system will protect itself by shutting off. This helps protect reserve energy and helps prevent the battery modules from draining to a potentially damaging power level. The system can be restarted using the reserve power, but should be immediately charged via alternator or shore power. Restarting the system without recharging can drain the system to 0% SoC, and the system will enter into a Low Voltage Cutoff (LVC) and shut off again. However, if a charge source is not detected within 20 minutes, the system will shut off again.

# **CAUTION**

Attempting to restart the M-Power System at the Low Voltage Cutoff without a charge source can potentially fully drain and damage the batteries. Keep the system above 10% at all times to maximize battery life.

NOTE: Solar charging will not produce enough current to recover the system from low or 0% SoC.

#### STORING THE M-POWER SYSTEM

#### M-Power/Lithionics Storage.

Storing your battery properly helps keep the battery in the healthiest state possible for the fastest deployment when needed and to maintain maximum battery capacity and long-term cycle life.

#### COLD WEATHER STORAGE

#### **Battery Warmers.**

Lithionics batteries are equipped with efficient internal warmers that operate automatically when there is sufficient power supplied to them.

The internal battery warmers are powered by three sources. When the system is on, the batteries provide power to the warmers. When the vehicle's engine is running, the 12V chassis alternator powers the warmers. Shore power will override the batteries and engine alternator and power the warmers directly when connected.

#### Storage.

When storing in winter conditions, fully charge and turn off the system.

NOTE: It is not recommended to leave the unit unattended for long periods while connected to shore power in case shore power is lost, which may cause the batteries to be depleted to the point where the internal heaters have insufficient power to operate.

If the batteries are too cold to charge or power up, the internal warmers will still begin warming when the engine is running or shore power is connected. Depending on the core battery temperature, it could take several hours to bring the core to operating temperature.

#### **Battery Storage**

Follow the notes below, observing the important storage times versus temperature conditions. Storage outside of these temperatures reduces battery life.

#### **Storage Temperature & Humidity Range**

< 1 Month	– 4 to 95°F (–20 to 35°C), 45 to 75% RH
< 3 Months	14 to 86°F (-10 to 30°C), 45 to 75% RH
3-6 Month	> 32°F (0°C) Above freezing, < 86°F (30°C)

#### Short Term Storage (up to 3 months):

- Fully charge the battery. Record and maintain the storage VOLTAGE reading (not SoC %) for your warranty.
- Turn the M-Power System off.

#### Long Term Storage: >3 Months and <6 Months Maximum

Reduce the battery SoC to 3.3V/cell which is 50% ±10% SoC or a specific voltage of 52.5 to 53.0 V. These values can be found on the Lithionics Battery Monitor App. In order to maintain your warranty, record the voltage reading at the 3-month date, the point at which you reduced the state of charge.

NOTE: For some it may be inconvenient to access the battery system at the 3-month mark to perform a charge-discharge cycle. You may choose to keep the battery at full charge voltage for the entire 6-month time period. Studies show that a small loss of capacity may occur with all lithium ion batteries.

- Turn the system off.
- Every 6 months, charge the battery to 100% SoC, then discharge to 10% SoC, then charge back to 50% ±10% SoC. This cycle from full to reserve then up to the storage voltage is important for long life.

NOTE: Anytime the M-Power System is off, the refrigerator and freezer will defrost, so take precautions to absorb water caused by the defrosting refrigerator/freezer. Failure to do so can damage the vehicle and will not be covered under warranty.

# **SECTION 4**

# MISSION CONTROL DISPLAY



Your vehicle is equipped with the mighty MISSION CONTROL display to monitor and control many of the onboard systems. The M-Power system must be on for the display to illuminate.

Simply touch the display to wake it up. Put the display to sleep by touching the Moon and Z's icon or the GXV logo.

# **Interior & Exterior Lighting**

The M-Power System must be on to run the interior lights and most other accessories.

The main interior lighting is customizable using six user programmable presets.

Your HILT comes from the factory with the following base setting presets: (these presets are fully customizable to the end user)

- Preset 1: Lowlight setting, time for bed.
- Preset 2: All perimeter lights on.
- ◆ Preset 3: Full on/off Interior Lighting.
- ♦ Preset 4: Dinette Feature Lighting.
- Preset 5: Medium Lighting Intensity in Capsule.
- ♦ Preset 6: Exterior Lighting and Interior lights on.



NOTE: You can only edit the Preset currently highlighted on the display. Select the desired Preset, adjust the light settings and hit Save.

There is a *Master Light Dimmer* icon on the MISSION CONTROL display to turn on/off or dim all lights at once. This is active only when presets are not selected on the MISSION CONTROL display.

The lighting presets are also activated using lighting switches at the control panels. When using these switches:

- ♦ Single tap turns on/off
- Double tap all off including inside and outside channels
- Press and hold allows all inside active lighting channels to increase brightness to full brightness and return to preset

# **Cabin Climate Control System**

The HILT's cabin climate is controlled on the MISSION CONTROL display. Tap the *Climate* icon on the home screen.

NOTE: The M-Power System and the inverter must be on for the A/C system to work.

#### MAGIC CLIMATE

Magic Climate is an advanced feature that helps maintain desired temperatures by selecting either heat or A/C automatically.

- → Tap the Climate icon.
- → Then tap the Magic Climate icon.
- Utilizing the up/down arrows, select your target temperature.
- Once selected, the system can take several minutes to react.

Note: The temperature will never reach the exact set point on the MISSION CONTROL display. It will operate the heat and cooling system within a range of the target temperature set point.

#### AIR CONDITIONER

To operate the HILT's cabin air conditioner:

- Make sure 110V power is available from shore power or the inverter is on.
- → From the MISSION CONTROL home screen, tap the A/C icon.
- → Using the arrow keys, select your desired target temperature.



#### **Air Conditioner Filters**

The A/C system has integrated air filters which should be checked and cleaned frequently, especially in dusty environments. They are located on the underside of the air conditioning shroud and are serviceable from inside the vehicle.

For further information, refer to the manufacturer's instructions.



Mach 8 Roughneck
AC Operating Instructions
library.coleman-mach.com

### **VENT / EXHAUST FANS**

The HILT has two roof-mounted fans which are controlled on the MISSION CONTROL display and a lavatory vent fan controlled on the lavatory fan itself.

#### To operate the roof vent / exhaust fans:

- (A) On the MISSION CONTROL home screen, tap the Vent icon.
- Select desired fan, fan speed, air flow (in/out), vent cover (open/ closed), circulate, or auto.

NOTE: The fan Auto function will target 70° and will open/close and ramp fan speed automatically based on cabin temperature.



## MAXXFAN Deluxe Model K Roof Vent Operating Guide

bit.ly/hilt-maxxfan

#### To operate the lavatory exhaust fan:

- Push the small black button once to turn the fan on.
- Press it again to turn the fan off.



# MAXXFAN Dome Lavatory Exhaust Fan Operating Guide

bit.ly/Hilt-maxxfan-dome

#### **HEATING**

#### To operate the HILT's cabin heating system:

- → Touch the HVAC button to toggle the system on.
- From the Climate screen, tap the *Heat* icon.
- Select your desired target temperature.

- Select Fuel-fired Heating, Electric Heat, or Dual (both).
- Select additional options, including fan speed and ECO or COMFORT furnace setting.

NOTE: When using the ECO setting, the furnace shuts down when the target temperature is reached. In the COMFORT setting, the furnace stays on to keep the heating system at temperature, which is quieter, but less efficient.

NOTE: Auto Fan automatically ramps fan speed to attempt to reach target temperature.

NOTE: While the M-Power system must be on to use the fuel-fired heating system, the inverter can be off. The M-Power system must be on for the electric heat.

NOTE: Both the electric and fuel-fired heat take a few minutes to come to temperature. The fans for the fuel-fired heat will not start blowing until the system comes up to 60°C.

For more details, see Heating System at p. 27 of this User Guide.

# **Water System Controls**

On the MISSION CONTROL home page, there are two water system icons: ( $^{|}$ ) WATER PUMP and  $^{|}$ !!! HOT WATER.

These are discussed in Section 7: PLUMBING/WATER SYSTEMS, p. 43 and 46, respectively.

# **Tank Levels Monitoring**

The freshwater and gray water tank levels are monitored on the MISSION CONTROL home screen. Since the HILT has two freshwater tanks, the capacity is averaged together and displayed as a single value on the MISSION CONTROL display. When the freshwater tanks are below 20% or the gray water tank is above 80%, a warning box will appear on the Home screen.

NOTE: The warning box can be dismissed, but the  $\triangle$  icon will remain illuminated until the tank level is rectified.

NOTE: The gray water tank is much smaller than the freshwater tanks and will require much more frequent draining.



# MISSION CONTROL Settings and Diagnostics

Press the icon to change various settings such as display brightness, to view the Diagnostics screens, and to see your software version.

On the Diagnostics screen, select any of the major components at the top to access available diagnostic and operational information.

# MISSION CONTROL Display Troubleshooting

When the Main Power button is pressed, MISSION CONTROL will boot up in a few seconds. If not, check the Lithonics app for any fault codes and contact Storyteller Overland.



In this section, the HILT's array of interior fixtures and features are detailed. These are designed not only to meet your needs while on the trail, but also to provide you with the greatest level of comfort.

### **Control Panels**

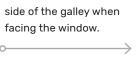
In addition to the MISSION CONTROL display, there are 4 separate control panels:

**Main System Control Module**: Located underneath the MISSION CONTROL display.





### **Galley Control Module:** Located on the left hand side of the galley when





# **Heating System**

Your HILT has a heating system to heat the cabin air and water. It can also help keep plumbing from freezing in cold weather.

The primary heating system uses fuel from the vehicle to fire a small furnace for heating cabin air and a heat exchanger for heating water.

There is also an electric auxiliary heating system.

#### **FURNACE**

The HILT's fuel-fired furnace monitors itself during operation. If the furnace does not start properly, it will pause and attempt to restart. If the furnace sees certain conditions, it will record a Fault Code and stop attempting to restart.

The interior lights may flicker slightly while the furnace starts and shuts down. This is normal.

NOTE: The furnace will continue to operate even when the vehicle's fuel level is low. There is no provision to keep the furnace from depleting all the fuel.

Caution: Always turn off the heating system before refueling to minimize fire risks.

NOTE: Do NOT turn off the M-Power system when the heating system is on. Wait at least three minutes after turning off the cabin heat or hot water for the furnace to properly shut down.

#### FURNACE DIAGNOSTICS/TROUBLESHOOTING

Diagnostics of the heating system are found under the Rixen tab in the MISSION CONTROL Diagnostics screen.

NOTE: When the fuel fired heating system is warming up, the fans won't blow until the system has sufficient heat (60°C). Then Fan and Heat will illuminate green in the Diagnostics screen and the fans will come on.

Statuses illuminated in green show what is active.

# **Diagnostics:**

If Hot Water is called for: Pump, Furnace and Constant Heat should be illuminated.

If Hot Air is called for and there is sufficient heat (60°C): Fan, Heat, Pump Furnace and Constant Heat will be illuminated green.

#### Items on the left side of the screen are furnace diagnostics:

If Heater Inlet, Heater Outlet are within 3°C of each other and heat is called for, the furnace may not be getting fuel or may need to be primed.

Heater Flame Sense should generally be approximately 220°C when the system is operating properly. Below that, the vehicle may be low on fuel or the furnace is starting up, which takes up to a minute under normal conditions.

# **Priming:**

*NOTE:* Do not prime the system unless directed by a technician.

- Under the Diagnostics screen, press and hold the word DIAGNOSTICS to enter the Service Menu.
- Press Start Fuel Prime System

The system automatically self primes and will attempt to restart up to four times. Should the vehicle not have enough fuel, fill the vehicle's tank, then remove calls for fuel fired heat (water and air), wait 2 minutes, then restart to automatically prime. This takes a few minutes.

To learn more about your Rixen fuel fired furnace go to:



Rixen Fuel Fired Furnace Operations Manual

bit.ly/Hilt-Rixen

# **Appliances**

Please read the applicable manufacturer's instructions for each appliance before using it.

#### REFRIGERATOR/FREEZER

The M-Power System must be on for the refrigerator/freezer to cool, either using 110V AC or 12V DC current. If the inverter is on, the refrigerator/freezer will draw power from the 110V AC power

supply. If the inverter is off, the refrigerator/freezer will draw power from the 12V DC power supply.

The inverter uses energy, so if no other 110V appliances are needed, turn the inverter off to save energy.

#### **Basic Refrigerator Operation**

First verify that the M-Power is on. To turn the refrigerator on, set the desired temperature using the turn knob inside the refrigerator.

♦ 7 = max cool

1 = least cool

0 = off

#### **Defrosting**

From time to time, the refrigerator and freezer may form ice and need defrosting.

#### To defrost:

- → Empty the refrigerator/freezer
- → Turn off the refrigerator/freezer
- → Keep the door fully open until all ice is melted.
- Wipe up all excess moisture.



Isotherm Cruise 195 Stainless Steel Fridge/Freezer

bit.ly/Hilt-Fridge

# **CAUTION**

Any time the M-Power is off, the refrigerator will defrost. Use towels to prevent water damage.

For complete operating instructions, refer to the refrigerator/freezer manufacturer's user guide provided.

#### COOKTOP

The HILT's 1800 watt dual burner induction cooktop is an alternative to traditional cooking methods using flameless technology that directly heats compatible cookware.

The cooktop runs on 110V electricity, so both the M-Power system and the inverter must be on to use the cooktop.

NOTE: Induction-compatible cookware is required. If you attempt to use the induction cooktop with empty or non-compatible cookware, a temperature sensor will automatically turn off the heating function to prevent overheating.

Refer to the cooktop manufacturer's user guide provided as needed.

### CONVECTION OVEN/AIR FRYER/ GRILL/MICROWAVE

This 4-in-1 system runs on 110V power, so both the M-Power System and the inverter must be on to use.

Refer to the manufacturer's user guide included in your HILT for instructions as to its use.

# **Sleeping & Seating Systems**

### BEDS

The HILT is equipped with 2 beds. One is located in the cabover, the other occupies the dinette area when deployed.

#### CONVERTIBLE DINETTE BED

The Dinette area serves as the eating, working, reclining, sitting and sleeping area.

NOTE: the capsule should never be inhabited when the vehicle is moving.

#### Setting Up the Dinette area for Sleeping:

- Remove the dinette table top from the pole by rotating and pulling upward, set aside.
- Remove the dinette table pole and set aside.
- Remove the three back seat cushions, revealing two storage lockers.
- → Lift the locker lid on the right and store the dinette table pole.
- Lift the locker lid on the left and store the dinette table top, face up.
- Replace cushions.
- (a) Remove the galley side back dinette seat cushion and set aside.
- Remove the closet side back dinette seat cushion and set aside.
- Push both seat cushions against the wall, creating a space where the dinette table used to live.
- Place the back seat cushions in that area, creating the queen size bed sleeping area.

#### DINETTE TABLE

The HILT has a swivel mounted table in the center of the dinette area.

#### The table system has two parts:

♦ Table Top ♦ Support Pole

NOTE: The dinette table can only support up to 25 lbs, evenly distributed. Do not rest against or lean on the table. Overloading the table may cause damage to it and/or the HILT.

# **Window Systems**

The capsule contains three windows in the dinette area, one window over the galley, and three windows in the cabover, each with its own screen and shade.

It is important to make sure that all windows are securely latched before driving.

#### To open windows:

Push the gray button in with your thumb, then gently turn the latch. Each window has four latches.

NOTE: The moon roof over the cabover bed does not have the gray button on each latch.

- After unlocking windows, gently push the window out slowly until you hear the first click. This is the first position, ¼ open.
- To open the window more, simply push the window again until you hear the second click. This is the second position, ½ open.
- To open the window more, simply push the window again until you hear the third click. This is the third and final position, 3/4 open.

#### To close the window:

- Push the window outward past the ¾ position and guide the window back into its fully closed position.
- Rotate the locks until the gray button pops out and makes a click sound, verifying the window is closed and latched.

#### To use the window shades:

Pull down gently on the shade and latch the gray tab at the hottom.

#### To use the window screens:

Pull up gently on the screen and latch the gray tab at the top.

# **CAUTION**

Failure to depress the gray button may break the handle.

Make sure the windows are completely closed and all four latches are secure. Failure to do so will result in the window opening unexpectedly while driving and may damage the window or its components.

# **Capsule Door**

The capsule door opens and locks from the inside using the silver latch. To open, pull the latch toward you and push the door open.

When the door is closed, simply press the silver latch toward the door, locking the door from the inside.

To lock the capsule door from the outside, use your key.

### **Cabinets and Drawers**

The overhead cabinets have locking latches. To open, simply depress the button and open the cabinet face. When closing, make sure to push firmly on the cabinet until you hear a solid click. Double check to make sure the door is secured.

The galley drawers open by depressing the rectangular handle which will release the handle. Simply pull on the handle and open the drawer. When closing, gently push the drawer closed and the drawer will shut automatically. Then depress the handle to lock the drawer in place.

To open the closet, simply pull on the black latch. To close, push the closet door until you hear a click. Double check to make sure the door is secured.

NOTE: Always secure or lock the cabinets, drawers, and doors to the closet, shower, and pass through. Failure to secure these openings could lead to damage when the vehicle is in motion and is not covered by warranty.

### **Care of Interior Surfaces**

The HILT was built with durable, high-quality materials. Some have specific requirements for cleaning and care, but always use common sense when cleaning and maintaining your vehicle.

Please read the sections below for suggested care methods for your vehicle's interior surfaces.

NOTE: Due to the wide array of cleaning products on the market, we recommend testing any product on a small inconspicuous area first.

#### **PLASTICS**

As a general rule, use mild soapy water and a soft rag for most cleaning of interior plastics. For tips on cleaning areas like the dash and door cladding, check the vehicle's Operating Instructions.

#### **BLACK VELVET CABINET PANELS**

The manufacturer recommends using a dry Magic Eraser to remove stains and blemishes.

#### **DINETTE CUSHIONS**

The dinette cushions can be cleaned using a sponge with soapy water and then drying off immediately.

#### **HEADLINER**

The vinyl material in the HILT is designed for high mess areas. For common stains like food, makeup, suntan lotion, or crayons, wipe up the excess mess and then clean with a soft, clean cloth using soap and warm water. For more stubborn stains, cleaners like Formula 409® can be used, followed by rinsing with water and drying with a soft, clean cloth.

For oil-based stains and disinfecting, use a 1:4 mixture of bleach and water, followed by rinsing with water and drying with a soft, clean cloth. Avoid getting bleach solution on other materials as it may cause accidental damage.

# **CAUTION**

Caution: Bleach contact with skin and eyes can cause injury.

#### WALLS

The walls are a special painted aluminum and can be cleaned using mild soap and water. Do not use cleaners containing alcohol, solvents, or abrasives.

#### **GALLEY LAMINATES**

Clean the laminate surfaces of the galley with a soft, damp, nonabrasive cloth using mild soap. Do not use cleaners containing alcohol, solvents, or abrasives.

#### SOLID SURFACE COUNTERTOP

Cleaning the countertop usually only requires a damp cloth and a mild cleanser. Abrasive cleaners may dull the finish. Avoid using strong acidic cleaners like those designed for drains, toilets, or ovens.

Although the countertop can withstand temperatures up to 225°F, prolonged or extreme heat can cause yellowing. Stubborn stains like food dye, tea, and fruit drinks can be removed with full strength bleach followed by a general cleaner flushed with water. Be sure not to let bleach remain on the surface for more than five minutes.

If a lit cigarette should come into contact with your countertop, a scorch mark can occur. In this instance, use an abrasive cleaner or buff in a circular motion with a Scotch Brite® pad to remove.

Note: Any use of abrasives to clean surfaces or remove stains will likely change the finish appearance of the cleaned area. The countertop surface can be professionally repolished if necessary.

#### **FLOORING**

Cleaning the flooring with soapy water and a soft cloth usually works best. Do not use cleaners like ammonia or bleach as they can damage the finish.

Always check the label of your cleaning products to confirm the suitability for vinyl flooring with an acrylic or urethane finish.

#### SMOKE & CARBON MONOXIDE ALARM

Your HILT is equipped with an alarm that will sound if it detects smoke or carbon monoxide in your vehicle. This system should be tested after the vehicle has been in storage, before each trip, and frequently during use by pressing the TEST/RESET button on the alarm.

NOTE: Storyteller Overland does not activate the smoke and CO detector. The owner is responsible for doing so before the vehicle is put into use.



# EXTERIOR FIXTURES/FEATURES



# **Automatic Steps**

The HILT features a retractable set of powered steps to access the capsule. The stairs automatically deploy when the capsule door is opened and retract when the capsule door is closed.

To keep the steps deployed, press the ENTRY STEP ARM button once. The button is located on the left side of the capsule doorway, on the Entryway Control Module.



To prevent the steps from deploying (when near an object or curb that may prevent the steps from fully deploying), press the button located inside the nearest exterior cargo compartment to the left of the steps.



#### **AUTOMATIC STEP MAINTENANCE**

NOTE: Your automatic steps must be kept clean of dirt and debris and lubricated every 30 days. Please refer to the manufacturer's manual here:



Lippert Kwikee Model 25 Automatic Steps

bit.ly/Hilt-Steps

# **Awning**

The HILT has a retractable, powered, and lighted awning. In order to operate the awning and awning lights, the M-Power system must be on, but the inverter doesn't need to be.

The awning is equipped with a safety override to ensure it cannot be accidentally extended while the vehicle is moving. The safety mechanism is tied into the vehicle ignition switch. When the engine is started, the awning will retract.

#### EXTENDING THE AWNING

Press the Awning Arm button on the Entry Control Module or the Galley Control Module. This will keep the awning "armed" (able to be extended/retracted) for three minutes.

Press the Awning Out/Stop button, and it will extend fully. Press it again while it is extending, and it will stop at that location.

NOTE: Once the Awning Out/Stop is released, the awning will slightly retract to correct tension. This is normal.

NOTE: Never extend the awning in gusty or windy situations. There is no wind sensor, and the awning may be damaged in windy conditions.

#### RETRACTING THE AWNING

Press the Awning Arm button. This will keep the awning "armed" (able to be extended/retracted) for three minutes.

Press the Awning In/Stop button, and the awning will fully retract. Or press it again while retracting, and it will stop at that location.

# **CAUTION**

Items should never be hung from or tied to the awning, as the additional weight could cause damage.

#### OPERATING THE AWNING LIGHTS

The awning lights can be controlled two ways: on the MISSION CONTROL display or on any of the lighting presets if the user programs them as such.

#### To control the awning lights from the MISSION CONTROL display:

- Tap the Lighting icon at the bottom of the home screen.
- → Select/tap the Preset 6 icon to turn lights on/off.
- (a) If desired, adjust the brightness by using the adjacent slider.

#### AWNING ADJUSTMENTS

Over time, the awning fabric can stretch, and the awning may need adjustment. The adjustment tool is included with the vehicle and is located in the glovebox. Instructions can be found under Owner Resources at StorytellerOverland.com or in the enclosed Girard Awning Nova II User Guide.



#### **Girard Nova II Awning Operation**

bit.ly/Hilt-Girard

### **Roof Rack**

Your HILT is equipped with a roof rack with perimeter lighting. Do not mount anything additional or stow anything on the roof rack as the roof area has solar panels. Do not stand or walk on the rack. Be advised that adding even small amounts of weight on the roof can affect the center of gravity and handling characteristics of the vehicle.

# **A WARNING**

Vehicles with a high center of gravity have an increased risk of rollover, which could result in injury or death.

### **Exterior Care**

**SEALS & SEALANTS** 

Sealants are constantly exposed to damaging conditions from the elements and from forces applied by driving. Water intrusion can severely damage an RV. Frequent inspections should be performed on the seals and sealants and, if necessary, maintenance should be performed immediately to keep water out. Seals and sealants should be carefully inspected at least every six months.

Inspect all exterior openings, attachments, and accessories, including the rooftop air conditioner, roof rack, exhaust fans, and all other ports.

Inspect all seals around all doors and windows, and if damaged in any way, have them replaced immediately.

All seals should be inspected for cracks, gaps, peeling or adhesion issues, and any other signs of deterioration. Running a finger

along seals to check for proper adhesion is a good practice. If damage or deterioration is found, replace the seals or sealants.

Frequently inspect the roof for damage or leaks.

Always use the same sealant that was originally used. Storyteller Overland can provide the information and help arrange any service needed.

If you notice water inside your van, immediately have it checked for leaks, as this can cause significant damage.

NOTE: Delaying repairs to seals/sealants can result in damage to the interior of the vehicle and is not covered by the Storyteller Overland Warranty Policy.

#### UNDERCARRIAGE

Dirt, road grime, and mud will collect on the underside of the vehicle and should be frequently cleaned with low pressure water. Further, debris can hold moisture and possibly road salts against the body of the vehicle, increasing the risk of rust and corrosion. Pay extra attention to cavities, horizontal surfaces, and other areas that tend to collect deposits.

NOTE: Road salts and pebbles are often added to winter roads to help with traction and, if possible, should be avoided. If these conditions are encountered, the vehicle and undercarriage should be washed as soon as possible.

#### **EXTERIOR FINISH**

Your HILT is painted with a multi-stage bed-liner with automotive grade paint top-coat.

Automotive paint, glass, exterior cladding, and vinyl are all fairly durable but still should be treated with care. Use common sense and follow the tips below to keep them looking their best.

Refrain from parking under trees. Branches can damage roof-mounted accessories. Sap, bird droppings, and bugs can damage the vehicle's exterior and should be removed as soon as possible using soapy water.

For more information on the Exterior Finish please go to this website:



#### **Patriot Liner**

www.patriotliner.com

Driving on gravel roads and unpaved trails can result in damage to your vehicle. Be cautious of rocks and debris thrown by the tires or by those of other vehicles.

Automotive fluids — such as antifreeze, fuel, and even window solution — should be cleaned immediately.

#### WASHING

Wash your HILT frequently, not only to remove damaging substances, but also to keep it looking its best.

Commercial car wash facilities should be avoided.

Wash your HILT with cool water out of direct sunlight, and never when the vehicle is hot. Do not use strong soaps.

Treat decals like other painted surfaces, washing with mild soap and water.

Water should not be aimed toward intakes, electrical outlets, appliances, or the seals around any appliances or accessories.

After washing, inspect sealants and vents for damage or separation. See Seals & Sealants at p. 41 for more details.

# **CAUTION**

High pressure water can damage paint, seals, decals, and other sensitive areas.



The HILT offers many of the conveniences of home even when out on the trail. You have access to water when hooked up to a city water system and also when adventuring in remote areas.

### **Water Control Panel**

The Water Control Panel is in the driver side exterior compartment behind the rear tire. It has the following:

- ♦ Water pump control
- ♦ External water port controls
- Outdoor shower connection and control
- Access to low point drain and water pump filter screen

# Freshwater Systems

The HILT's freshwater system provides water to the sinks, toilet and showers through two freshwater tanks or through the external Fresh Water Connection port when connected to city water.

#### Water Pressure Regulator.

A water pressure regulator should always be connected between the water supply hose and the Fresh Water Connection port.

# **CAUTION**

Always use a 45 PSI maximum water pressure regulator when connecting to a water source to prevent high pressures from damaging the plumbing. Overpressurizing and damaging the plumbing is not covered by warranty.

#### **Water Filter**

As the HILT does not have a water filtration system on the main water inlet, use an in-line RV-style filter when onboarding water. This will assist in keeping debris out of the freshwater system. The galley sink does have a water filtration system addressed later in this User Guide.

#### **Connecting To and Using City Water**

- Ensure all water fixtures in the HILT are off.
- On the External Port panel, turn the valve to City Water To HILT Fixtures.
- Attach the water supply hose to the Fresh Water Connection Port.
- Turn on the water supply.

#### **Disconnecting From City Water**

- Turn off the city water supply hose.
- (a) Disconnect the city water hose from the vehicle.
- Replace the city water connection cap.

#### FRESHWATER TANK

When a city water connection is not available, the HILT's 120 gallon freshwater system and electric water pump can supply the fixtures with water.

NOTE: Only fill the freshwater tank or system with potable water.

#### Filling the Freshwater Tank

NOTE: Before using the freshwater tank as a water supply, the interior water lines must be primed. See Priming Water Lines at p. 46.

#### **City Water Method**

- Using city water to fill your freshwater tanks:
- On the Water Control Panel, turn the valve control to City Water to Fill Freshwater Tank.
- → Hook up the city water source to the Freshwater Connection Port.
- Turn on the water supply.
- When the tank is full, water will overflow onto the ground. This is normal.

- Turn off the water supply, disconnect the water supply hose, and replace the cap.
- → Turn the valve to the desired use position.

# **CAUTION**

Running the external water source dry can damage the water pump. Pay close attention to the water levels.

#### **Water Pump**

Your HILT has an electric water pump. When connected to city water, the water pump is not needed. When using the freshwater tank, the water pump must be turned on.

When the pump is first turned on, it will prime the system by cycling for a few moments, then turn off once it has sufficient pressure.

NOTE: When the plumbing system is not in use, keep the water pump off to prevent draining the tank if a faucet is accidentally left open or if a leak develops.

#### **Water Pump Controls**

The water pump can be activated in four locations:

- 1. On MISSION CONTROL home screen
- 2. On the Galley Control Panel

- 3. On the Dinette Control Panel
- 4. On the Water Control Panel

#### **Water Pump Operation**

When the freshwater pump is in use, it will cycle on and off based on demand, providing water pressure to the sink, toilet and showers.

NOTE: If all water faucets are closed and the pump continues to run, you are likely out of freshwater, or there is a leak in the system.

#### **Priming Water Lines**

Priming the water lines may be required after filling the freshwater tank

#### To Prime the water lines:

- **1.** Ensure that all drain valves (low point drain, freshwater tank drain, and gray water tank drain) are closed. (See Draining Water Systems Freshwater Systems at p. 48 for locations of these drains.)
- 2. Close all faucets: sinks, outdoor shower, interior shower.
- 3. Ensure the water pump is off.
- 4. Fill the freshwater tanks.
- **5.** Turn the water pump on.

- 6. Starting with the galley sink:
  - g. Open the valve slightly on the cold temperature setting.
  - Once the water stops sputtering, open the faucet fully.
  - Once the water stops sputtering, turn off the faucet.
  - j. Turn on the Hot Water.
  - **k.** Repeat steps a through c above for the hot water, the shower, the lavatory sink and the outside shower port.

After all the faucets are closed, listen to verify that the water pump turns off. If the pump fails to turn off, then a faucet or valve may be open, there may be a leak in the system, or the tank may be empty.

### **Hot Water**

Turn on the hot water by tapping the Hot Water icon on the MISSION CONTROL home screen. When on, the icon will illuminate. The lights may flicker momentarily as the furnace fires up. This is normal. It takes several minutes for the system to heat up.

When you don't need hot water, turn it off by tapping the Hot Water icon again.

NOTE: The furnace will not generate heat or hot water when the truck's fuel tank is low or empty. Attempting to fire the furnace when the fuel tank is low or empty will likely introduce air into the furnace's fuel delivery system requiring several restart attempts after refueling.

### **Water Fixtures**

#### **GALLEY AND LAVATORY SINKS**

The galley and lavatory sinks use the water pump to call water to their faucets.

#### To Use:

- Turn on the water pump.
- → Turn on the faucet.
- When finished, close the faucet and turn off the water pump.

#### **GUZZLE H20 WATER PURIFICATION SYSTEM**

Your HILT has a water purification system accessible at the galley sink with its own designated faucet. The system helps make water safe and delicious. Refer to the included manual for service and maintenance or access the manufacturer user guide with this link:



**Guzzle h2o Operation Manual** 

bit.ly/Hilt-Guzzle

#### **SHOWER**

#### To use the Shower:

- Turn on the water pump.
- Enter the lavatory and close the door.
- Open the shower faucet handle and adjust the water temperature.
- When finished, turn off the faucet.

After use, the shower head may continue to drip. This is normal and does not indicate a leak or defect.

#### DRAIN BLOCKAGES

If the shower or sinks begin to drain slowly, they may be blocked. These drain lines have waterless drain traps to prevent sewer gasses from escaping. The waterless drain traps must be removed before using any mechanical drain-cleaning device to prevent damage.

#### OUTDOOR SHOWER

The outdoor shower is on the Water Control Panel.

#### To use the outdoor shower:

- Turn on the water pump.
- Open the round cap beneath the Outdoor Shower control.
- Attach the supplied outdoor shower hose.

NOTE: To remove the shower hose, push the hose in slightly, pull the collar back, and remove.

# **Draining Water Systems**

FRESHWATER SYSTEMS

#### To drain the freshwater system:

- 1. Turn the water pump off.
- Open the freshwater tank drain valve and the low point drain valve located behind the black square cover in the Water Control Panel compartment.
- Hang the inside shower down with the flow control toggle on.
- Open the galley sink, lavatory sink and the shower faucet halfway between hot/cold. Hot water should not be on.
- 5. Turn the water pump on for 10 seconds.
- 6. Turn the pump off and allow water to drain.
- Attach the outside shower hose and turn the outside shower valve on halfway between hot/cold. Hold the nozzle above the port and squeeze the handle for 10 seconds allowing water to drain.
- 8. Close all fixtures and drains.

NOTE: To open the freshwater tank and low point valves, turn the handle parallel with the line. To close, turn the valve handle perpendicular to the line.

NOTE: Not all water can be drained from the system. Draining the freshwater system is not a substitute for winterizing the system.

#### **GRAY WATER TANK**

The gray water tank captures wastewater from the shower and sinks and must be emptied into an RV cleanout station or other appropriate disposal site.

#### To drain the gray water tank:

- Remove the cap from the gray water tank outlet.
- → Connect a 3" sewer hose (not supplied) to the outlet.
- Place the opposite end of the sewer hose into the cleanout station.

*NOTE: Be sure there are no low spots in the hose for gray water to collect.* 

- (2) Pull the handle of the gray water valve to drain the tank.
- After emptying the tank, flush the tank with clean water.
  Flushing with clean water is particularly important prior to storage.
- Close the valve and replace the cap.

Note: To prevent harmful sewer gasses from coming through the plumbing system, keep the gray water tank closed when connected to a campground sewage system.

#### **Tank Monitoring**

On the MISSION CONTROL home screen, there is a Freshwater Tank and Gray Water Tank display showing the approximate levels. The system is self-calibrating. When the freshwater tank drops below 20% or the gray water tank is above 80%, a warning will appear and a light will illuminate.

NOTE: The warning box can be dismissed, but the indicator will remain illuminated until the tank level is rectified.

### **Cassette Toilet**

Your HILT is equipped with a Thetford Model C223-S Cassette Toilet with electric flush. It flushes with water from the freshwater tanks, so the water pump must be on.

For more information, please follow the manufacturer's instruction manual included with the vehicle or by going to this link:



**Thetford C223-S** bit.ly/Hilt-Thetford

#### To Empty the Toilet Cassette:

- On the exterior driver side of the HILT, locate the square door panel.
- Push both top and bottom buttons simultaneously to open the door.
- **3.** Grasp the cassette firmly with both hands and depress the blue lever to unlock the cassette.
- 4. Empty in a designated RV dump station.
- Replace the cassette and close the door ensuring the door is firmly latched.

# Freshwater Systems Care

SERVICING WATER PUMP STRAINER

The water pump has a screen meant to prevent solids and large particles from entering the system and damaging the water pump.

*NOTE: The water pump screen is not a water filter.* 

The freshwater pump and screen are found behind the black square cover in the Water Control Panel compartment.

After a few tanks of water have been used and after each winterizing, empty and clean the screen, then yearly thereafter.

#### To clean the water pump screen:

- Ensure the freshwater tank is empty and the water pump is off.
- 2. Twist off the strainer bowl counterclockwise.
- 3. Remove the bowl and the screen. Rinse clean.
- 4. Place the screen back into the bowl and reinstall.
- **5.** Turn the water pump on and verify there are no leaks.

#### SANITIZING FRESHWATER SYSTEMS

The freshwater system should be sanitized periodically, particularly before first use, after storage, and after contamination.

#### To sanitize the plumbing system:

- 1. Fill the freshwater tanks half-full with clean water, verifying volume on the MISSION CONTROL display. (See Filling the Freshwater Tank City Water Method at p. 45 of this User Guide.)
- In a container, prepare a bleach solution (3/8 cup bleach:two gallons water).
- **3.** Turn the water pump off.
- On the Water Control Panel, set the External Port valve to Winterize/Sanitize.

- Connect the siphon tube (not provided) to the External Water Port and put the other end into your bleach/water solution.
- **6.** Turn the water pump on which will siphon the bleach solution into the system.
- 7. Starting with the galley sink:
  - a. Open the valve on a cold temperature setting.
  - **b.** Once you smell bleach at the fixture, change the fixture to the hot position (hot water should not be on).
  - Once you smell bleach at the fixture again, turn off the faucet.
  - **d.** Repeat steps a through c for the lavatory sink, lavatory shower, and the outside shower.
- 8. Turn the water pump off.
- 9. Disconnect siphon hose.

#### To sanitize the freshwater tanks:

- Remove the first seat cushions on both the passenger side and driver side of the dinette.
- **11.** Locate the black fresh water tank access port covers and turn counter clockwise to remove.
- **12.** Underneath the port access cover is the freshwater tank cap. Remove the cap.

- **13.** Pour 1 gallon of the bleach solution (¾ cup bleach:two gallons of water) into each tank.
- **14.** Close both the freshwater tank cap and black access port cover, then replace cushions.
- **15.** Let the system sit for 4-8 hours.

#### Flushing your system

- **16.** Set the External Port valve on the Water Control Panel to Use Freshwater Tank.
- 17. Turn on the water pump.
- 18. Run the lavatory shower, outside shower, lavatory sink, and galley sink to drain the bleach solution from the plumbing lines and your freshwater tank into the gray water tank.
- Dump at an appropriate waste-holding facility, such as an RV dump station.
- **20.** Fill the freshwater tank about 50%. (Refer to Filling the Freshwater Tank City Water Method at p. 45 of this User Guide.)
- 21. Open the freshwater tank valve to flush the tank.
- 22. Starting with a full fresh water tank, turn the water pump on and repeat steps 16-18 until you do not smell bleach.

#### WINTERIZING FRESHWATER SYSTEMS

In order to avoid damage not covered under warranty, your HILT must either be winterized before exposure to freezing conditions, or water systems must be kept above freezing.

#### To winterize the plumbing system:

- Obtain 4 gallons of colored, non-toxic, RV-grade antifreeze.
- 2. Open the Water Control Panel Cabinet
- 3. Turn off the water pump
- On the Water Control Panel, set the External Port valve to Winterize/Sanitize.
- 5. Connect one end of the siphon tube to the external water port and place the other end into a gallon of colored, non-toxic, RV-grade antifreeze.\*\*\*
- **6.** Turn the water pump on.
  - a. Starting with the galley sink:
  - **b.** Open the valve on a cold temperature setting.
  - Once you see the colored antifreeze at the fixture, change the fixture to the hot position (with hot water off).
  - d. Once you see the colored antifreeze at the fixture again, turn off the faucet.

- **8.** Repeat steps a through c for the shower, toilet, lavatory sink and the outside shower.
- 9. Turn the water pump off.
- Completely empty the gray water tank, then close the gray water tank valve.
- **11.** Pour a half gallon of RV antifreeze into the galley and lavatory sinks.
- **12.** Pour a half gallon of RV antifreeze into the shower basin.
- 13. Drain the freshwater tank with the freshwater drain valve.

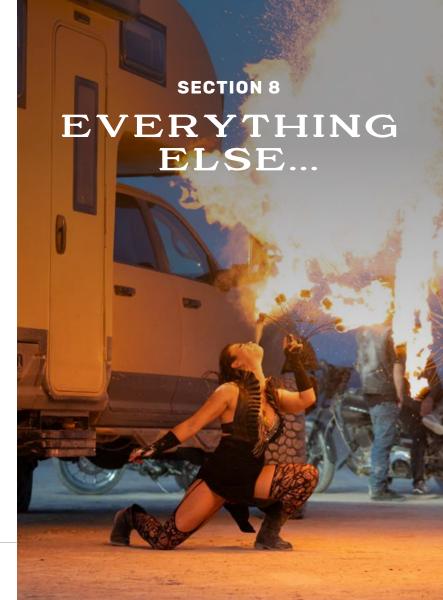
\*\*\*NOTE: When using this method, pay close attention to the antifreeze level in the container. Do not run the pump dry.

If the plumbing system is empty/not primed, the pump will not be able to pull the antifreeze into the system. If this is the case, prime the system with freshwater and winterize again

NOTE: Do not add antifreeze to the freshwater tanks.

#### FRESHWATER AND GRAY TANK HEAT PADS

Both freshwater tanks and the gray water tank are equipped with automatic heating pads to prevent freezing while operating in cold temperatures. As a result, you may notice a slight electrical drain from the M-Power system during colder than normal temperatures. This is normal. The M-Power system does not need to be on for the heating pads to operate, the energy comes from the batteries directly.



We hope that we have addressed most aspects of HILT operation. But we're not quite through. So here is everything else.

# **Preparing the HILT for Storage**

Properly preparing your HILT prior to a period of non-use will reduce the possibility of storage-related damage. We recommend that all of the following be **performed prior to HILT inactivity of longer than three months:** 

Follow the instructions for Storing the M-Power System at p. 22 of this User Guide.

- Remove all items from cabinets, refrigerator and freezer that may cause odors or attract pests.
- Clean and defrost the refrigerator and freezer, then prop the door open to allow odors to dissipate.
- Place an open box of baking soda inside the refrigerator and freezer to help absorb odors.
- Olean and wipe down other interior surfaces.
- Lubricate door hinges and locks.
- Wash the vehicle exterior.
- Inspect all seals around doors, windows, vents, and any other joints. Replace or repair any that are damaged.

- Close all windows and the roof vents.
- Protect all appliance vent openings from pests.

**If storing the HILT in cold climates,** follow the winterization procedures located in Winterizing Freshwater Systems found at *p. 51 of this User Guide*.

Also follow the procedures in your vehicle's Operating Instructions for long-term storage.

# Removing the HILT from Storage

When removing your HILT from storage:

- Completely air out the capsule.
- Check window operation.
- (a) Check cabinet and door hinges and lubricate, if necessary.
- Close all faucets and drain valves that are open.
- Add a few gallons of water to the freshwater tank and turn on the water pump to check for leaks, especially at the fittings.
- ⊙ Open all faucets following the Priming Water Lines procedure located at p. 46 of this User Guide.
- Wash the vehicle and inspect the seals and sealants for separation or cracks. (See Seals & Sealants at p. 41 of this User Guide for details regarding inspection.)
- (a) Inspect weather seals around doors, replace if necessary.

- Follow the Sanitizing Freshwater Systems procedures located at p. 50 of this User Guide.
- Oheck the toilet for proper operation.
- Add water to the gray water tank using the sink faucet and sink drain. Check to be sure the gray water valve seals tightly.
- Oheck around all appliances to ensure vent openings are clear.
- (3) Start the refrigerator and freezer and check for proper cooling.
- Wipe down walls and other interior surfaces.
- Test the smoke and CO detector and, if necessary, replace batteries.
- Check the fire extinguisher and replace if necessary.
- Check the electrical system to make sure all lights, plugs, and electrical components operate.
- Check tires for proper pressure.

### In the Event of an Accident

In the unfortunate event of an accident, please contact Storyteller Overland before putting your HILT back into service. This is for your safety, as well as to protect the integrity of your vehicle.

Accidents can damage unseen systems in the HILT which can be hard to detect. Using your HILT without closer inspection could lead to more damage and, potentially, danger. Depending on the nature and severity of the accident, further inspection and testing may be needed to make sure your vehicle is safe and working properly.

Following an accident, failure to notify Storyteller Overland or have a Storyteller Overland approved technician inspect, perform any required tests, and fix any issues identified may void the Storyteller Overland Supplemental New Vehicle Limited Warranty and Supplemental New Vehicle Limited Structural Warranty.

# **Warranties & Coverage**

Your HILT's chassis is covered under the vehicle's factory warranty. Refer to the warranty policy for details.

Consult the Storyteller Overland, LLC Supplemental New Vehicle Limited Warranty and Supplemental New Vehicle Limited Structural Warranty for details on coverage. Extended warranty programs may be available from your dealer.

Many components are covered under their own manufacturer warranties — such as the refrigerator, freezer, cooktop, microwave, A/C, heating system, awning, and the M-Power System. Your vehicle was shipped from the factory with warranty information for many of these components, and they differ in length and coverage from the Storyteller Overland Supplemental New Vehicle Limited Warranty and Supplemental New Vehicle Limited Structural Warranty.

# **Disclaimer/Limitation of Liability**

To the maximum extent allowed by law, Storyteller Overland shall not be liable for any damages associated with use of a Storyteller Overland vehicle, whether those damages be direct or indirect, incidental, special, consequential, punitive, or other.

Further, your Storyteller Overland vehicle was designed for a specific use. Any misuse, abuse, or neglect could possibly void the previously described warranties.

### **Miscellaneous**

#### PINCH HAZARDS

Movable components in your HILT—such as doors, drawers, and rotating or folding seats—all have potential "pinch points." Pinch points are spaces where your finger or other body parts can get caught between two (or more) hard objects, at least one of which is moving. To avoid pain and possible injury, pay attention whenever manipulating movable mechanisms on your vehicle.

#### FORMALDEHYDE INFORMATION

As with most every home and building, some materials in the HILT may emit formaldehyde. Exposure to formaldehyde potentially may cause eye, nose, and throat irritation, headache, nausea, and

asthma-like symptoms, including shortness of breath. Reaction to formaldehyde exposure varies among individuals, and research is ongoing as to the possible long-term effects of said exposure.

Inadequate ventilation may allow formaldehyde and other contaminants to accumulate in indoor air. Before and during each use, ventilate your RV using the windows, exhaust fan, or air conditioning system.

If you have any questions regarding possible sensitivity to formaldehyde, consult your doctor.

#### MOLD

Mold is a natural part of our environment and plays an important role in helping break down dead leaves and organic matter into fertile soil. The very nature of your HILT being outside will bring it into contact with mold, but indoor mold growth should be avoided.

To reduce mold growth inside your HILT, reduce the things therein that could allow mold to grow. Mold only needs small amounts of moisture and nutrients from food spills or grease, and it can survive on as little as a fine layer of dirt or dust. Therefore, keep the inside of the vehicle as clean and dry as possible.

Moisture plays a large part in mold growth. Don't allow condensation to build up inside the vehicle, and keep the interior humidity levels low. Proper ventilation helps, and using the air conditioner can also remove excess moisture from the air.

#### ANYTHING ELSE?

Did we forget anything? We certainly hope not, but if we did, or if you have any questions about the use, care, maintenance, or enjoyment of your HILT, don't hesitate to contact us at Storyteller Overland: 1-888-999-7442, or via our website at StorytellerOverland.com.







### **COMEUP® Winch**

Mounted in the front bumper is a 20k lb winch designed for safe and dependable recovery if operated according to the manufacturer's instructions. Please refer to the manufacturer's User Guide included with the vehicle before operating the winch. We recommend attending a reputable automotive winch recovery course to understand proper winch techniques.



COMEUP Seal Gen 2 20.0 Winch User Guide bit.ly/Hilt-Winch

# **A WARNING**

Winches can be extremely dangerous and require proper training.

Improper winch operation can result in serious injury, death, or property damage.

# **Auxiliary Lighting System**

The Auxiliary Lighting System offers a variety of lighting options, but it is important to familiarize yourself with local laws related to vehicle lighting. Roof and bumper-mounted lights are intended for off-road use only and local laws may require light covers over certain lights.

The lighting system is powered by the HILT chassis battery, not the M-Power System, and should usually only be used with the RAM engine running. The lights are controlled from the cab of the truck using the Auxiliary switches located beneath the cab touch screen. Extended use of the exterior lighting with the RAM engine off will deplete your chassis battery and could potentially leave you stranded.

NOTE: Using the auxiliary lights without the engine running can discharge your RAM battery.

- ♦ Aux 1: Front Bumper Lights
- Aux 2: Main Capsule Mounted Light Bar
- ♦ Aux 3: Perimeter Side Lights
- Aux 4: Rear Lights

# **LiquidSpring Suspension®**

LiquidSprings Smart Suspension System automatically optimizes ride quality, handling, and peace of mind. Operating instructions can be found at the link below.



**Liquid Springs Product Literature** bit.ly/LiquidSprings

Your HILT has 3 Ride Modes, accessible from the cab.

#### → RIDE MODE 1:

Comfort: Used when the trail has rutted, bumpy, or uneven terrain and should only be used at very slow speeds.

Take your time and enjoy the scenery. Let the inertia and momentum slowly do the work. Not recommended for daily driving or highway speeds.

#### RIDE MODE 2:

Normal: This is recommended for normal driving use.

#### RIDE MODE 3:

Sport: This is for windy situations and/or curvy, paved roads.

NOTE: The HILT is not a trophy truck or a rock crawler. Use extreme caution when off-road. When traversing a hill, DO NOT travel sidewise which could lead to a tipping condition. Always travel straight up and straight down hills.

### **HILT Wheels**

Your HILT is equipped with Hutchinson 2260 Wheels. Please refer to enclosed documentation for proper mounting and dismounting of the tire to the wheel. You can also access the manual online with this OR code.



**Hutchinson 2260 Wheels** bit.ly/3t1vH3G

# **A WARNING**

The wheel and tire assembly weighs at least 280 lbs and must be handled with extreme caution to avoid personal injury or death or damage to the vehicle.

### **Onboard Air Kit**

The Onboard Air kit allows you to inflate tires or other items. Twin compressors push air to air chucks located on both sides of the vehicle between the capsule and RAM chassis, behind the passenger doors.

The compressor ON/OFF switch is the AUX 5 switch on the dash underneath the touchscreen display.

NOTE: The Onboard Air Kit is a high current system; only turn on when in use.

NOTE: The RAM engine battery powers the compressors, and the engine should always be on when using the Onboard Air Kit.

NOTE: If the pump cycles on/off when in the ON position and not being used, there is a leak somewhere that should be located and sealed.

# **NVADER Rear Door Organizers**

The HILT comes with Flarespace nVader style rear racks. Maximum weight capacity is 110 lbs per rack, evenly distributed within 16" of the rack.

# **CAUTION**

Exceeding 110 lbs. of accessories on a single nVader rack can damage the vehicle.

# **A WARNING**

Exceeding these weight capacities or using improper attachments could cause serious damage, injury, or death. It is the owner's responsibility to check and maintain these systems properly and insure loads are properly secured.

**Roadside Assistance - Technical Support** 

SHOULD I CONTACT STORYTELLER OVERLAND OR THE CHASSIS MANUFACTURER?

For help with Storyteller components (Sections in orange)

Contact Storyteller Overland 1-888-999-7442

For help with chassis components

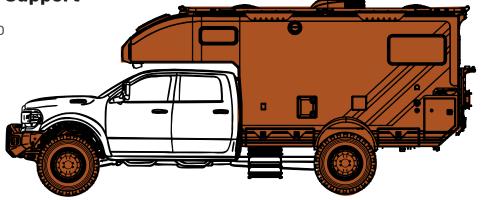
Contact your nearest RAM dealership.

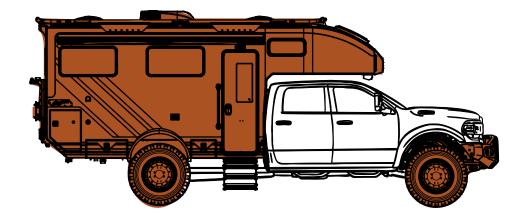
We are committed to our customers well after the purchase of the vehicle. Should you need service or technical assistance, please reach out at <u>StorytellerOverland.com</u> under Customer Support for the fastest response, or call 1-888-999-7442 (8:00 am - 5:00 pm Central Time). We will gladly help you get back on the road as quickly as possible.

Helpful videos and the online version of this user guide is available at the link below.



**HILT Owner Resources Page** bit.ly/hilt-owner-resources





## HILT MAINTENANCE CHART\*

						_
	Before Each Use	As Needed	Monthly	Every 3 Months	Every 6 Months	
ELECTRICAL SYSTEM						All
Check State of Charge (SOC) Gauge	Х		Х			Cle
Check GFCI Receptacles	X					SE
PLUMBING SYSTEM						Ins Sea
Sanitize Plumbing System		X				RA
Winterize Plumbing System		X				(Se
Clean Water Strainer Filter		X		X		WH
Check Fittings for Leaks behind galley drawers and			X			Che
in water cabinet)						Che
nspect and Clean Exterior Drain / Vent Tubes		Х		Х		Ch
EXTERIOR						Wh
Rinse Underside of Vehicle		×		X		Tire
Check Roof Rack, A/C, & Fan	Х		Х			(ev
SAFETY EQUIPMENT						
Fire Extinguisher - Check Charge	Х		X			All ft II
Smoke/CO Alarm - Test Operation/Batteries	Х				х	and
FURNACE (See Furnace Mai	intenance G	Guide)				
Inspect and Clean Exterior Vent Tube		X			x	

	Before Each Use	As Needed	Monthly	Every 3 Months	Every 6 Months	
AIR CONDITIONER (See A/C Manufacturer's Maintenance Guide)						
Clean A/C Filter		X		X		
SEALS & SEALANTS						
Inspect Body Seals, Doors Seals, & Sealants					Х	

#### RAM CHASSIS

(See RAM Operating Instructions for RAM Maintenance)

#### WHEELS, TIRES, SUSPENSION

WILELD, I IRLS, JOST ENSION					
Check and Adjust Air Pressure	X				
Check Tread Wear	X				
Check Front End Alignment		X			
Check & Re-Torque Wheel Lug Bolts					×
Tire Rotation (every 6 months or 6k miles)					×

**APPLIANCES** (See Individual Appliance Manufacturers' Maintenance Guides)

#### **NVADER Rear Door Organizers**

All NVADER hardware came from the factory torqued (and paint penned/striped) to 30 ft lbs. At least every 5000 miles, check to verify the stripes are still aligned/unchanged and, if not, re-torque to 200 ft lbs.



# FORGE AHEAD.