

Rapid Deployment Shelter System

User Manual

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USER MANUAL



SHELTER ASSEMBLY

The Life Cube Rapid Deployment Shelter System (LCRDSS) is a unique and efficient way to satisfy a broad range of shelter needs. The inflatable airframe assembly allows for rapid deployment and the interior aluminum assembly provides strength and rigidity. Please read the following manual to ensure that your shelter is properly deployed and cared for appropriately.

Life Cube Rapid Deployment Shelter Systems are shipped with the following components:

- Shipping Container/Hard Surface Raised Floor
- Inflatable Canopy
- Two Position Table (Optional)
- Power Module (Optional)
- Tie Down Kit

1.1 Serial Numbers

Each LCRDSS is given its own unique serial number to assist in product tracking, warranty issues and customer service concerns. The format is as follows:

LC12MC-12-0001

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	Model		Serial #
Size		Year	

1.2 Technical Specifications

LIFE CUBE LC12 SHIPPING PACKAGE (UNDEPLOYED UNIT)

Cube height, width, depth	5 feet (1.524 m), standard rolling hoops
Hard flooring / container material	ABS or Styrene Foam (see package options)
Flooring elevation from grade; thickness	Not less than 5.5 in (140 mm); not less than 2 in (50 mm)
Unit weight, approximate <i>Total weight depends on equipment configurations</i>	950 lbs typical for ABS flooring (431 kg)
Maximum gross unit weight	1100 lbs (500 kg)
Maximum airdrop vertical velocity	20 ft/s (6 m/s)
Maximum shock/acceleration in any orientation	70 G (700 m/s ²), 10 ms max duration, non-repeating



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Maximum storage altitude	20,000 ft above MSL
Storage temperature and duration	-40F to 140F (-40C to +60C), 1 year
Maximum storage duration	2 years w/out battery maintenance above freezing
<i>External charging/maintenance port must be used to maintain battery charge during extended storage</i>	5 years with battery maintenance, above freezing 10+ years without electrical package or food provisions

LIFECUBE LC12 DEPLOYED UNIT - PLEASE REFER TO DRAWING FOR UNIT DIMENSIONS

Canopy and beam material	OSHA/MSHA fire retardant airtight thermoplastic material
Canopy color	Standard: tan, green, white; camouflage or custom colors optional
Canopy inflation time; nominal deployment/strike time	< 5 min on full charge; 5 min / 20 min (2 people)
Standard canopy (CANOPY A)	3 doors, 4 windows, 18 tie-points, 1 shade fly, optional flies
Optional 4-door canopy (CANOPY B)	4 doors, 0 windows, 12 tie-points, optional rain fly
Insulated cold/hot climate canopy options	Insulated walls, ceiling, insulating window material
Air frame inflation method	Electric Blower, accessible valve port
Maximum deployment altitude, Inflation pressure	15,000 ft (4500m), not less than 3 psig (20.7 kPa)
Deployment temperature range	-22F to 122F (-30C to +50C)
Wind resistance when fully deployed and anchored	Not to exceed 50 mph (22 m/s)
Wind resistance during canopy inflation/deployment	Not to exceed 18 mph (9 m/s)
Maximum deployment grade inclination in any direction	Not to exceed 15%

Integrated table W X D X Height lowered x Height raised (approx.)	Aluminum, removable, telescoping, gas stove 48 x 48 x 23 x 30 inches (1.22 x 1.22 x 0.58 x 0.76 m)
Electrical system voltage	12V DC (10.6V - 14.6V)
Integrated lighting	20W LED utility, 5W LED emergency
Exhaust fan; air conditioning	Multi-speed exhaust fan, optional A/C duct connection
Standard electrical connectivity <i>Please refer to package info for solar power packages available in 60W increments</i>	External charging port; 2x 12V 15A sockets AC Charger (field selectable 100-240VAC, 50/60Hz) AC Inverter (120VAC)
Critical energy reserve capacity	2x inflations, 10 hours of 5w emergency lighting



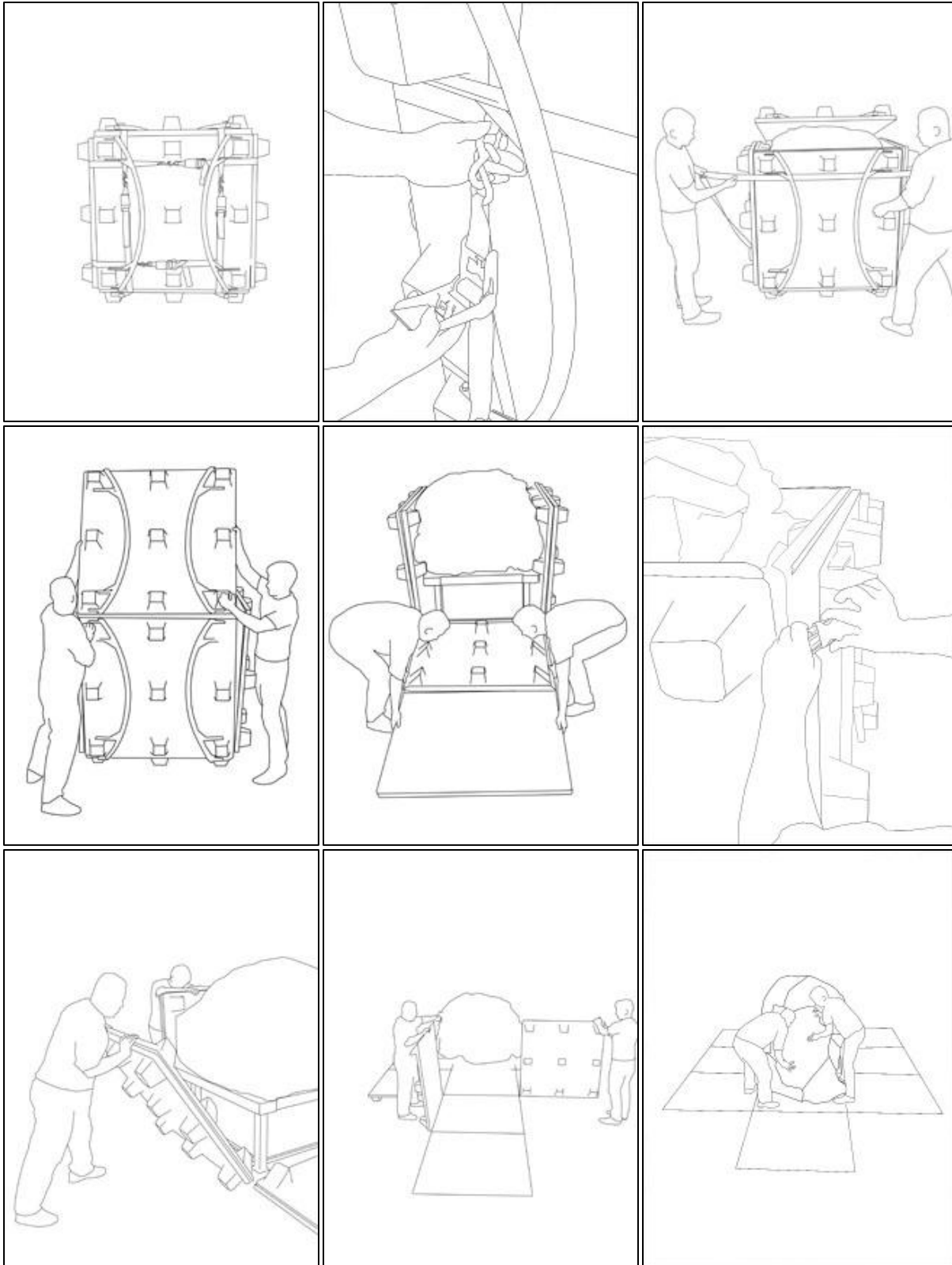
SHELTER ASSEMBLY

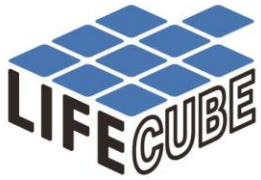
LIFE CUBE LC12 DEPLOYED UNIT DIMENSIONS

Depth including porch, excluding all awning and flies	Not to exceed 16 ft 4 in (5 m)
Width excluding all awning and flies	Not to exceed 12 ft 4 in (3.8 m)
Width with standard fly	Not to exceed 20 ft 0 in (6.1 m)
Total plan area, D x W, required for unit and tie downs	Approximately 22 ft by 24 ft (6.7 m by 7.3 m)
Total unit height from flat grade, including flooring, excluding rain fly, antennae and other vertical protrusions	Not to exceed 12 ft 8 in (3.86 m)
Standard side fly protrusion, approximately	6 ft (1.83 m)
Interior clear span floor space, approximately	11 ft x 11 ft (3.35 m x 3.35 m)
Usable interior area, not less than, including table	116 sq ft (10.75 m ²)
Doorway opening dimensions, W x H, at least	3 ft x 6 ft (0.91 m x 1.82 m)



SHELTER ASSEMBLY



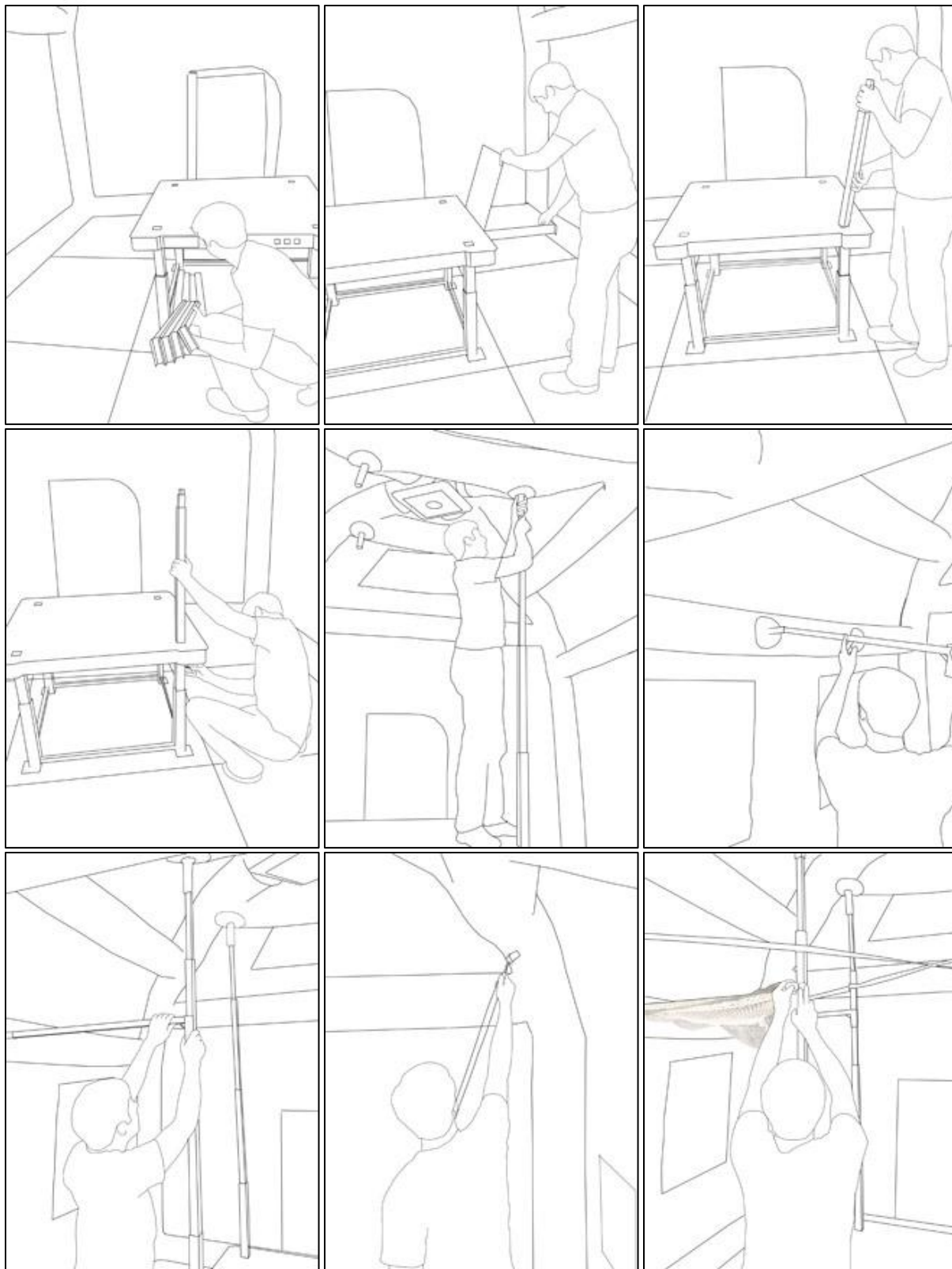


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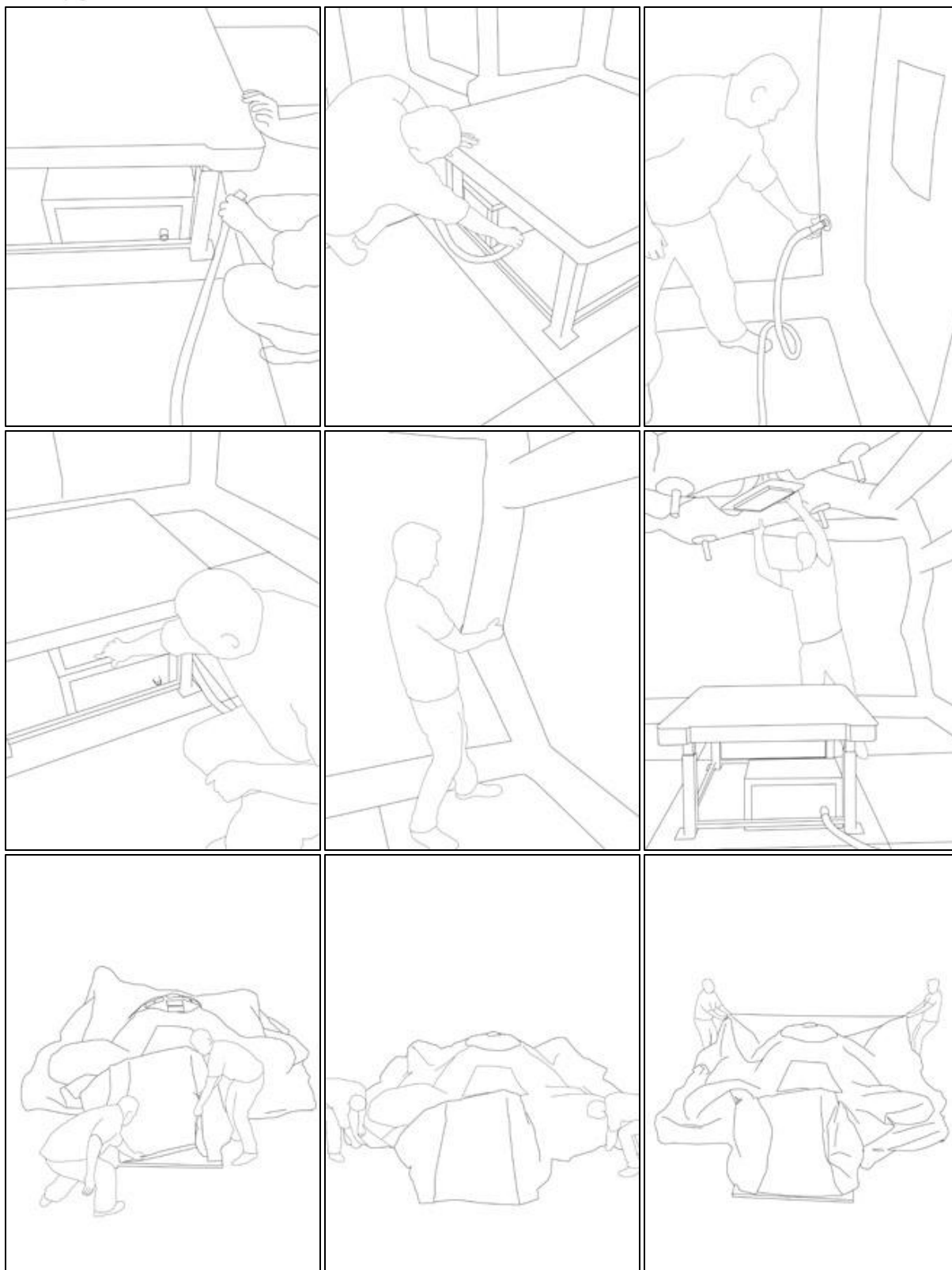


INTERIOR ASSEMBLY





DISASSEMBLY



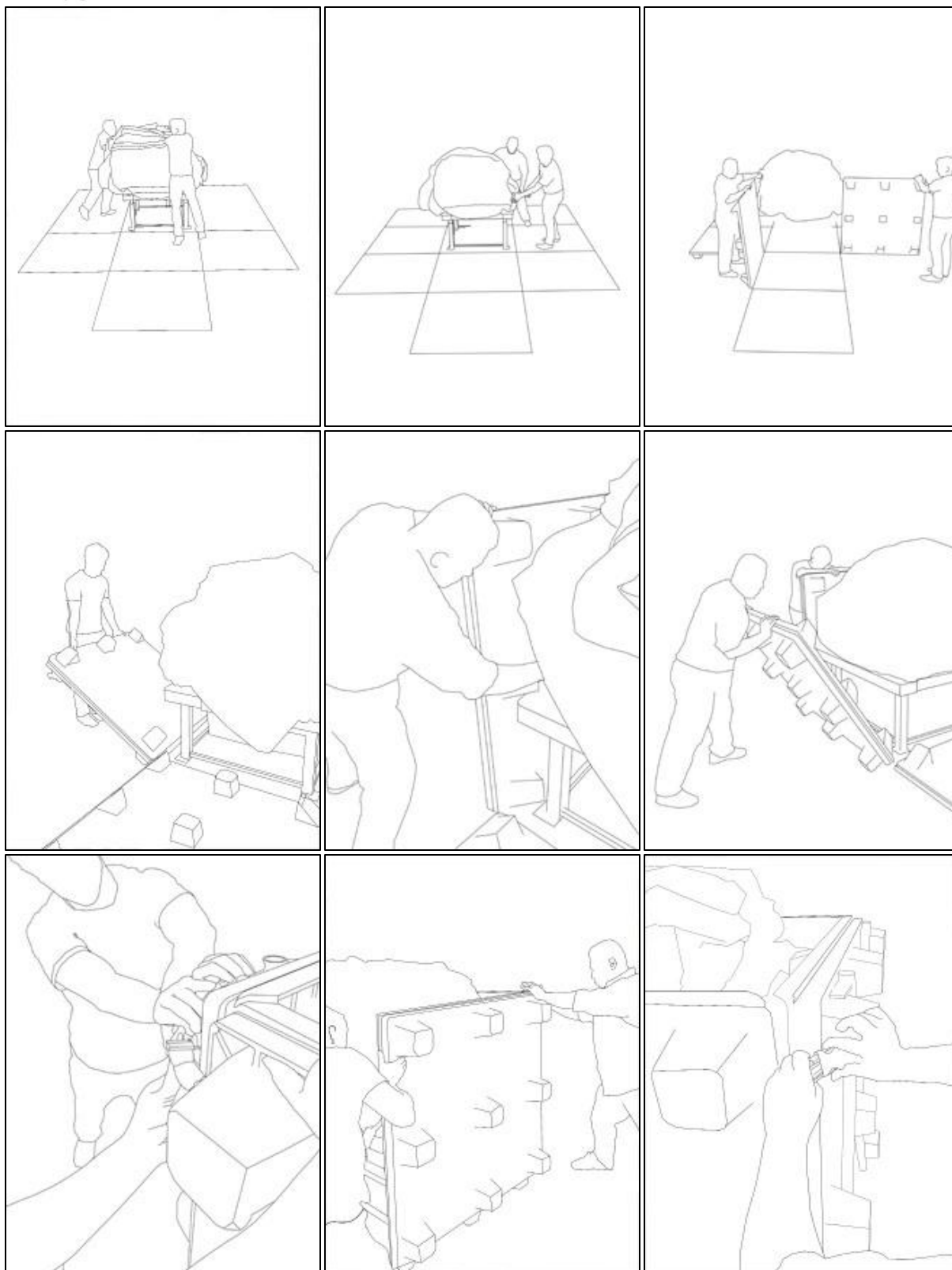


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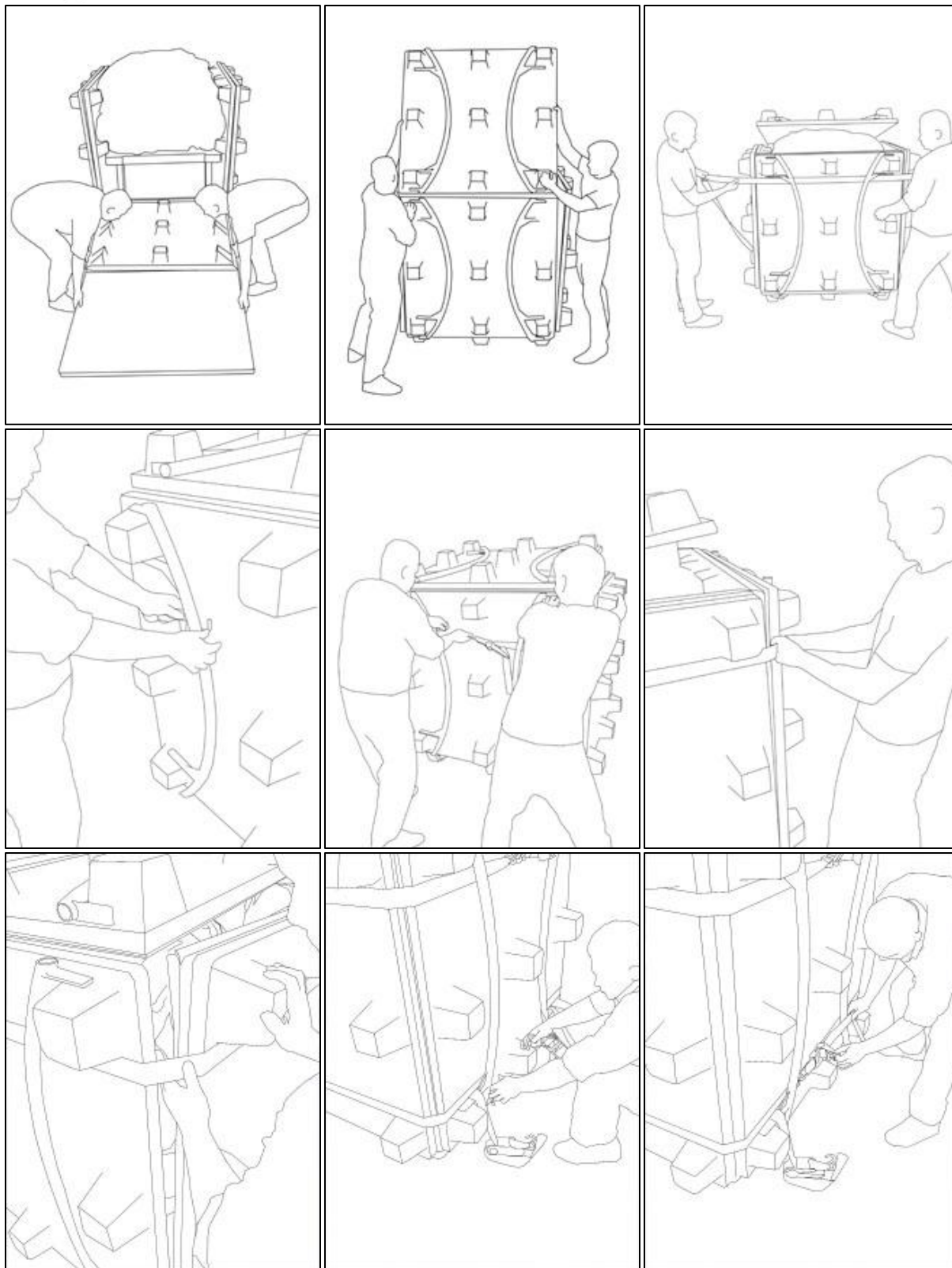


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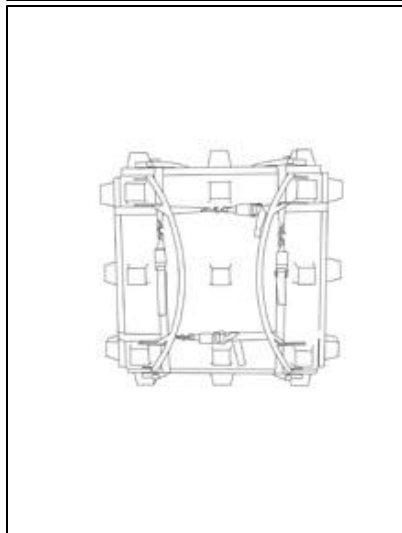
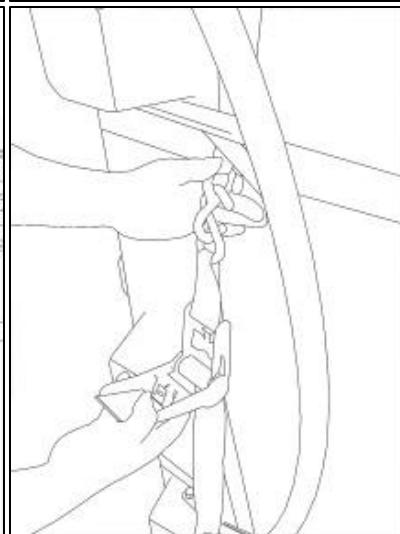
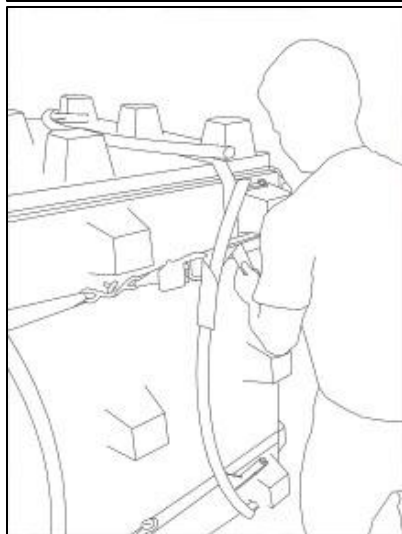
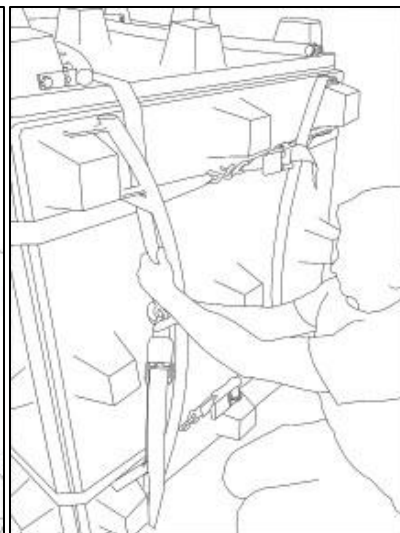
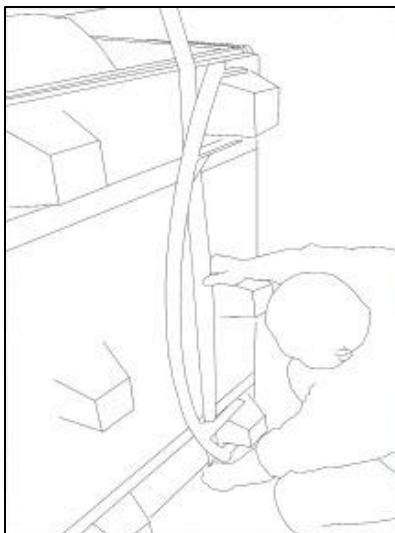


DISASSEMBLY





DISASSEMBLY





2. Care and Maintenance

The LCRDSS is extremely rugged and requires little maintenance. However, it is important to keep the unit dry and clean to reduce complications in future deployments.

2.1 Cleaning

Before repackaging, be sure to clear all debris with a broom or with the included blower. If the unit has been deployed in dusty or muddy areas, it may be necessary to wipe the unit down with a water/bleach mix. Make sure the unit is completely dry before repackaging to prevent mold.

2.2 Storage

While temperature is generally not an issue (between -40 F and 100 F), it is best to store the unit in a dry location to protect the electrical components.

3. Repairing Holes and Tears

Please follow these instructions to make minor repairs to the shelter airframe:

1. Cut a patch large enough to allow 2" of overlap from the edges of the hole. Avoid patching over seams when possible.
2. Clean both surfaces with thinner/cleaner. Avoid using oil-based solvents such as paint thinner. Dry the area thoroughly.
3. Apply a thin coat of adhesive to both surfaces (shelter and patch). Allow to dry 15-30 minutes, or until it is no longer tacky to the touch. Then apply another thin coat of adhesive. Again, allow to dry until the adhesive is no longer tacky.
4. Align the patch over the hole and press it into place – start at the center and work toward the edges.
5. Roll out the entire patch area using a flat putty knife with no sharp edges. Ensure all air pockets and creases are rolled out.
6. It is recommended to allow the patch to cure for two hours before use (preferably overnight). If waiting is not an option, inflate the shelter to a slightly lower air pressure than normal.
7. On large cuts or tears, it is recommended to patch both the inside and the outside of the cut or tear.



One-Year Limited Warranty

For one year after the date of shipment to End-user or eighteen months after the date of shipment from Life Cube, whichever first occurs, Life Cube will at its sole discretion, replace, repair or furnish credit for any product purchased by End-user that, in Life Cube's judgment, has a defect in material or workmanship provided the product is returned, transportation charges prepaid, to Life Cube with Life Cube's prior permission and return authorization number, and provided further that the product has not been misused, improperly operated, or subject to unauthorized repairs or modifications. This warranty is in lieu of all other warranties, expressed, implied or statutory, including the warranty of merchantability and the warranty of fitness or of suitability for a particular purpose and of all other obligations or liabilities on Life Cube's part, and Life Cube neither assumes nor authorizes any other person to assume for Life Cube any other liabilities in connection with the sale of the said product. If Life Cube's examination does not disclose a defect in material or workmanship on a product claimed to be defective. The Distributor agrees to pay Life Cube's established charges for unpacking, testing, and repackaging the product for reshipment to the End-user. This provision states the End-user's exclusive and sole remedy for breach of warranty. This provision does not extend the original warranty period of any product that has been repaired or replaced by Life Cube.

This warranty is the only warranty made by Life Cube with respect to the goods delivered under this Agreement, and may be modified or amended only by a written instrument signed by a corporate officer of Life Cube and accepted by the End-user.

The products that at the End-user's request are delivered without complete encapsulation are specifically excluded from the warranty set out in this Agreement. All such products are sold "as is."

If product needs repairs, the following points apply:

- Customer pays for shipment to repair facility
- Life Cube examines unit to determine if damage caused by defect or negligence
- If defect: Life Cube reimburses shipping charge and pays for repair and return shipment
- If negligence: Customer pays for repair and return shipment

Disclaimer, No Other Warranty. Except for the express warranty set forth above, Life Cube grants no other warranties, express or implied, by statute or otherwise, regarding the products, their fitness for any purpose, their quality their merchantability, or otherwise.

Limitation of Liability. Life Cube's liability under the warranty shall be limited to replacement, repair or credit for the customer's purchase price. In no event shall Life Cube be liable for the cost of procurement of substitute goods by the customer or for any special, consequential or incidental damages for breach of warranty.



PARTS LIST

Part #	Description
LC12-XX-01	Hard-Surface Raised Flooring Panel (10)
LC12-XX-02	Female Canopy Clips (16)
LC12-XX-03	Folding Aluminum Hoops (8)
LC12-XX-04	Locking Pins (16)
LC12-XX-05	Air-Frame Assembly w/ Attached Canopy (1)
LC12-XX-06	HVAC Ports (2)
LC12-XX-07	Male Canopy Clips (16)
LC12-XX-08	Zippered Folding Windows w/ Screens (4)
LC12-XX-09	Zippered Folding Doors (2)
LC12-XX-10	Exterior Wind Anchors (22)
LC12-XX-11	Interior D-Rings (13)
LC12-XX-12	Strapped Female Clips (6)
LC12-XX-13	Hooked Cross Strap w/ Velcro Ties (1)
LC12-XX-14	Adjustable Structural Straps (4)
LC12-XX-15	Inflation/Deflation Valve (1)
LC12-XX-16	Pressure Release Valve (1)
LC12-XX-17	Receivers for Aluminum Frame (8)
LC12-XX-18	Manual Hand/Foot Pump
LC12-XX-19	Duck Bill Wind Anchors w/ Straps (22)
LC12-XX-20	Storage Netting
LC12-XX-21	Air Beam Receivers w/ Foam Cushion (4)
LC12-XX-22	Ventilation Fan (1)
LC12-XX-23	LED Lights (4)
LC12-XX-24	Multi-Purpose Antenna (1)
LC12-XX-25	12V Dry Cell Battery (1)
LC12-XX-26	Battery Meter (1)
LC12-XX-27	Battery Charger (1)
LC12-XX-28	12V to 110V Inverter (1)
LC12-XX-29	110V Electric Port (2)
LC12-XX-30	Solar Panel Charger (1)
LC12-XX-31	Switchboard (1)
LC12-XX-32	Control Panel (1)
LC12-XX-33	Carbon Monoxide Alarm (1)



PARTS LIST

LC12-XX-34	Reversible Inflator/Deflator (1)
LC12-XX-35	15.4V Flexible Solar Panels (8)
LC12-XX-36	Two-Position Table (1)
LC12-XX-37	Drawer w/ Lid (2)
LC12-XX-38	Telescopic Infrastructure Package (1)
LC12-XX-39	Horizontal Structural Support (4)
LC12-XX-40	Infrastructure Support Pins (30)
LC12-XX-41	AM/FM Radio/DVD Player (1)
LC12-XX-42	CB Radio (1)
LC12-XX-43	Removable Drawer Stove (1)