ENTROPY

STARSHIP REPAIR MANUAL

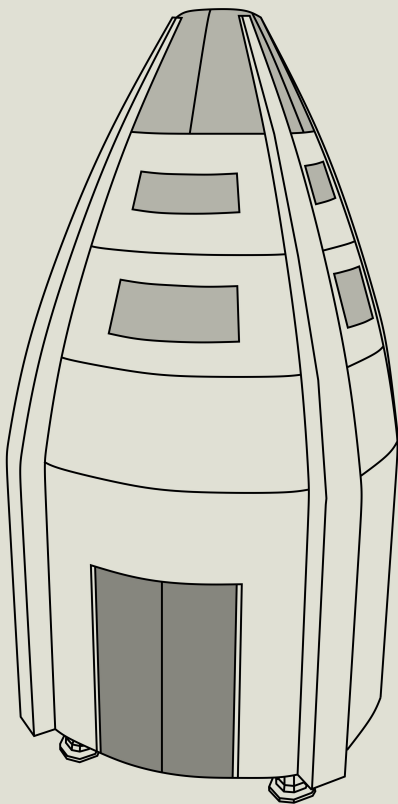**FREIGHTER - LEMON**

The Lemon Class Freighter truly lives up to its name, it is both cheap and unreliable. Only the truly desperate are willing to entrust their lives to such a craft. The origin of this design has been lost to time as no self respecting ship designer would dare claim credit for this abomination.

The Lemon Class Freighter is a tail-sitter craft. This means that each deck of the craft is designed for vertical habitation. This is in contrast to most space-faring vessels, which are designed for horizontal habitation. This design choice allows the Lemon to simulate gravity using its propulsion system. This design choice was most likely chosen as a cost saving measure.

Although this ship is considered overly-cumbersome by most starship crews, there is still some hope to be had. By reading this manual, you will learn the intricacies of operating such a unique vessel, as well as the most common problems to watch out for.

Vessel Registration

Civilian Registration ------------------------------------ **Freighter**

Production Tech Level --- **TI-11**
Shipyard Requirements ---------- **750 Tons, Jump Capable**

Vessel Maximum Occupancy ---------------------- **4 Crewmen**
Minimum Crew Requirement ---------------------- **2 Crewmen**

Where can I obtain a Lemon Class Freighter?

Assuming you weren't awarded this craft as some form of insult. You can commission the construction of a brand new Lemon Class Freighter at most imperial shipyards. At a typical imperial shipyard, you can expect the completion of a newly commissioned Lemon in about a month.

It is also possible to find a pre-owned Lemon at most starship dealers as they are a common trade-in for novice crews. Mind you, pre-owned starships tend to have their own little quirks, or as we like to call it: "character". These quirks can be determined using the following roll table.

Roll once for every 15 years of vessel age up to 8 rolls. (2D6)

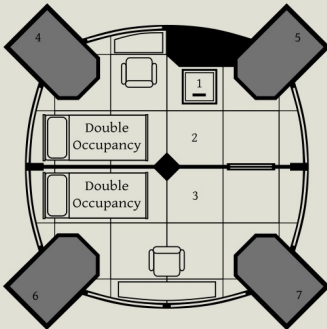|		
2	Loose Panel	Upon vessel acceleration a random wall panel will crash to the ground.
3	Missing Escape Pod **	One of the reentry capsules is missing.
4	Missing Radio	Electronics(Comms) Checks are not possible.
5	Contains Old Cargo **	Referee's choice, optional table on page – 6.
6	Sticky Control Console	There is a DM-1 on all pilot checks.
7	Hull Corrosion **	-5% to Current Hull Points
8	Missing Bridge Seat **	There is a DM-1 on all spacecraft operations checks for the operator whose seat is missing.
9	Odd Smell	The vessel is permeated with an odd odor.
10	Graffiti	The vessel has be painted extensively.
11	Crooked View	Two of the four landing legs on this vessel are misaligned, and the vessel is tilted when landed because of it.
12	Missing Window	The missing window has been covered with an airtight tarp. Critical Hits to life support have +1 severity.

Replaces Default Roll Table for Old Ships.   *** Repeatable up to 4 times.*

Lemon Class Freighter – Deck Plan

TL-11

Deck - 6
1.) Pilot's Seat
2.) Astrogator's Seat
3.) Sensor Operator's Seat
4.) Engineer's Seat
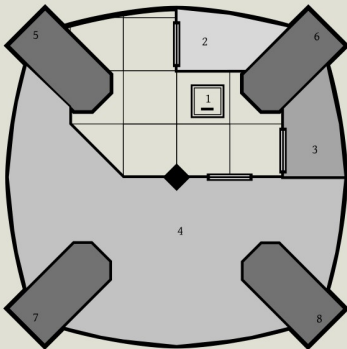5.) Central Ladder Hatch
6.) Bridge
7-10.) Fuel Tanks
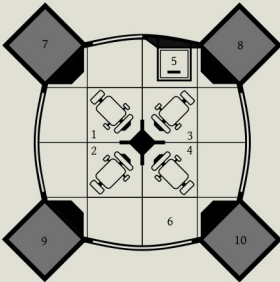
Deck - 5
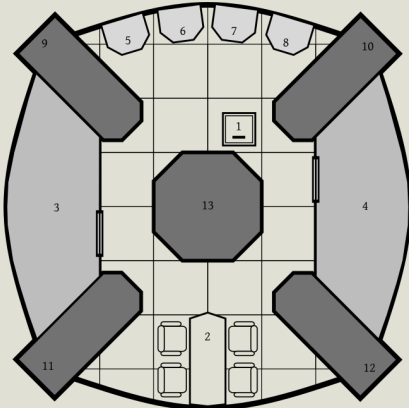1.) Central Ladder Hatch
2-3.) Staterooms
4-7.) Fuel Tanks

Double Occupancy

Double Occupancy

Deck - 4
1.) Central Ladder Hatch
2.) Fuel Processor
3.) High Efficiency Battery
4.) Fusion Power Plant
5-8.) Fuel Tanks

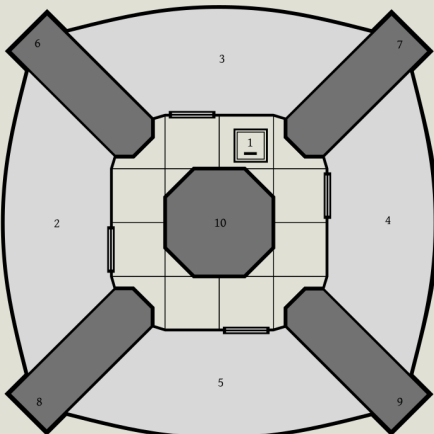### Deck - 3
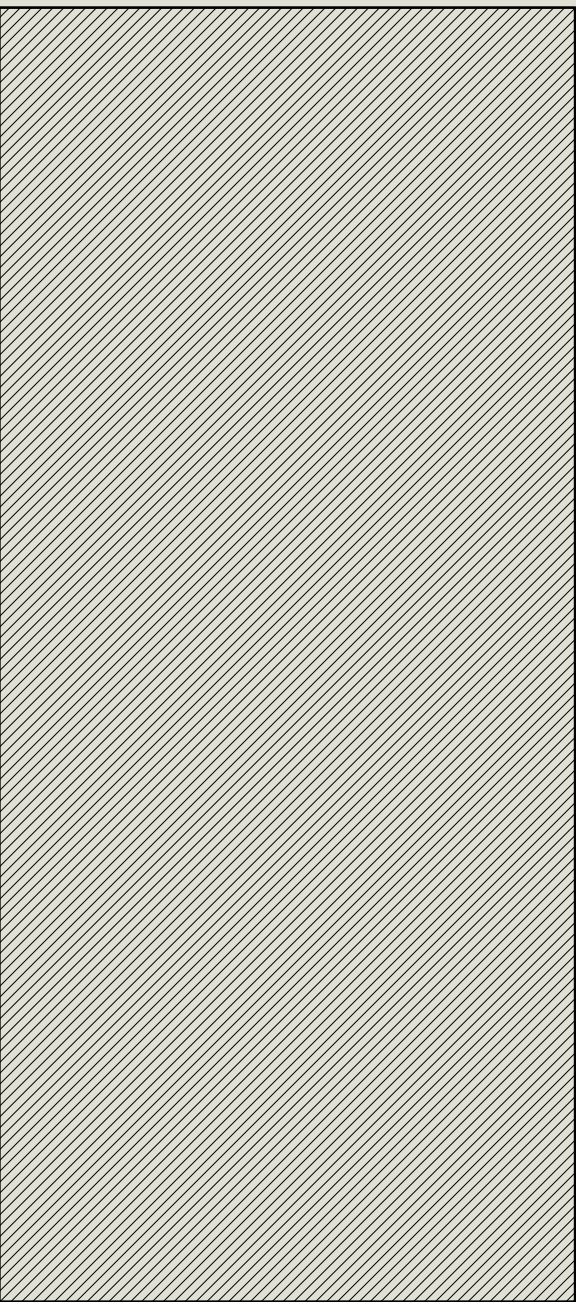1.) Central Ladder Hatch
2.) Common Area
3-4.) Maneuver Drive
5-8.) Reentry Capsules
9-13.) Fuel Tanks

Deck - 2
1.) Central Ladder Hatch
2.) Common Area
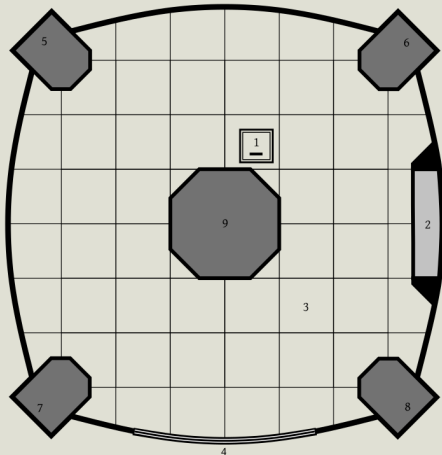3-4.) Maneuver Drive
5-8.) Reentry Capsules
9-13.) Fuel Tanks

Deck - 1
1.) Central Ladder Hatch
2.) Collapsible Fuel Tank
3.) Cargo Bay
4.) Cargo Bay Door
5-9.) Fuel Tanks

This deck has double the standard deck height - 6 meters

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Lemon Class Freighter – Specifications

Total Cost – 27,750,000 Credits

Hull Configuration – Streamlined – Atmospheric Flight Capable

Monthly Maintenance – 8,700 Credits

Non-Gravitic Hull – Light	150 – Tons	Power Requirement – 30	54 – Hull Points

Drive Configuration

Maneuver Drive	4 – Tons	Power Requirement – 30	Budget (Late Jump) Jump – 2
Jump Drive	13 – Tons	Power Requirement – 30	Budget (Increased Size) Thrust – 2

Power Plant Configuration

Fusion Power Plant	7 – Tons	Power Production – 50	Budget (Increased Size)

Fuel Tank Configuration

Standard Fuel Tank	31 – Tons	No Power Requirement	–
Collapsible Fuel Tank	1 – Tons	No Power Requirement	Maximum Capacity – 60 – Tons

Armor Configuration

Titanium Steel	8 – Tons	No Power Requirement	Armor Points – 2

Control Systems Configuration

Bridge	6 – Tons	No Power Requirement	Undersized (DM-1 to Spacecraft Operations)
Computer/5	Integrated	No Power Requirement	Jump Control Specialization
Basic Sensors	0 – Tons	No Power Requirement	Lidar, Radar (DM-4)

Crew Quarters and Habitation

State Room – x2	8 – Tons	No Power Requirement	Double Occupancy
Common Area	2 – Tons	No Power Requirement	–

Auxiliary Module Configuration

High Efficiency Battery	1 – Tons	Power Storage – 40	–
Fuel Scoop	0 – Tons	No Power Requirement	–
Fuel Processor	1 – Tons	Power Requirement – 1	Can Refine Up To 20 Tons of Fuel per Day
Cargo Space	64 – Tons	No Power Requirement	–
Reentry Capsule – x4	2 – Tons	No Power Requirement	–
Acceleration Seats – x4	2 – Tons	No Power Requirement	These are installed in the bridge.

# ═══Propulsion and Artificial Gravity═══

A glance at the reactor output for this vessel will show that this vessel is only capable of sustaining a maximum acceleration of Thrust – 1 for any prolonged length of time. This is intentional as the 1-G of acceleration provided at Thrust – 1 also provides the artificial gravity for the craft. When operating the maneuver drive at Thrust – 1, it only uses 15 units of power per turn.

You can use the maneuver drive at Thrust – 2 for about 18 minutes, due to the on-board battery, before you will need to throttle down. This temporary increase in thrust is typically used for landing on, and taking off from, planets. When operating your maneuver drive at full power, it is recommended that you sit in one of the bridge acceleration seats for your own safety.

Primary Ship Systems

Model-1 Ship's Computer
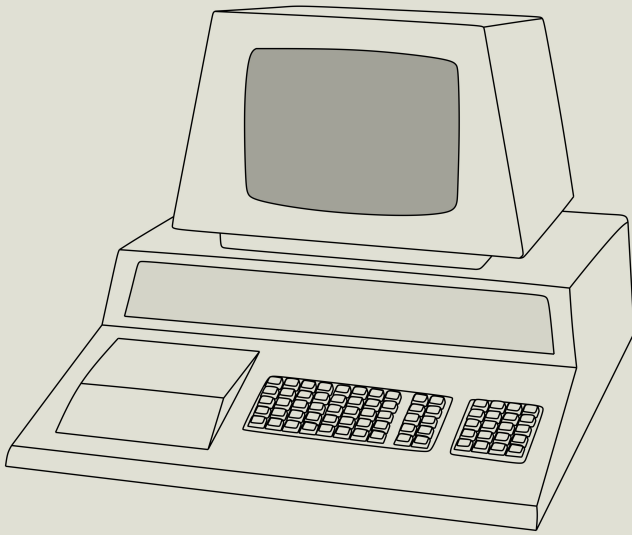
The Computer system onboard a Lemon Class Freighter is fairly rudimentary. Due to its limited bandwidth, it is essential to put some focus towards program management to ensure that you have enough processing power left for critical operations.

The default computer compliment is a Model-1 standard ship's computer with jump control specialization built in. This computer has a normal bandwidth of 5 with an additional 5 bandwidth dedicated exclusively for Jump Control programs. This computer's bandwidth limitations mean than most system automation programs are completely incompatible with the onboard computer system.

The basic software package installed on this computer includes a Library program, a Maneuver program, and a Jump Control-2 program.

Basic Sensors

All Lemon Class Freighters are fitted with a basic sensor package by default. These sensors come with two primary capabilities: Lidar based scanning, and Radar based scanning. This sensor system inflicts a DM-4 upon anyone attempting to perform Electronics(Sensor) checks.

Operation	Difficulty	Duration
Perform Sensor Scan	(6+) Electronics(Sensors) (INT)	(1D x 10) Minutes
Analyze Sensor Data	(8+) Electronics(Sensors) (INT)	(1D) Hours

Fusion Power Plant

The budget fusion power plant onboard a Lemon Class Freighter provides barely enough power to keep the lights on. The power plant requires a steady supply of fuel in order to remain functional and will burn through that fuel at a rate of 1-ton per month.

Operation	Difficulty	Duration
Overload Power Plant	(10+) Engineering(Power Plant) (INT)	(1) Round

Jump Drive

The most expensive part of a Lemon Class Freighter is undoubtedly the Jump Drive. This Jump Drive is capable of Jump-2, and can do so three times in a row if your fuel tanks permit it. The Jump Drive, being a budget model, has less of a tolerance for gravitational interference. As such, the drive has the trait Late-Jump. This means that in order to safely perform a jump maneuver, you will need to be at least 150-Diameters from the strongest gravitational influence acting upon the vessel. This Jump Drive uses 30-Tons of fuel when performing a jump.

Operation	Difficulty	Duration
Standard Jump	(4+) Engineering(Jump Drive) (EDU)	(1D x 10) Minutes
Combat Jump	(4+) Engineering(Jump Drive) (EDU)	(1D) Minutes

Auxiliary Ship Systems

Reentry Capsule

Each Lemon Class Freighter comes fully equipped with enough escape pods to allow all 4 potential passengers to abandon ship in the event of emergency. These escape pods take the form of 4 reentry capsules. The reentry capsule is fully capable of atmospheric reentry and will propulsively land on any planet within range. Using a reentry capsule in deep space is not recommended as the onboard life support is limited.

Collapsible Fuel Tank

The collapsible fuel tank which is mounted in the cargo bay provides the ability to fill the entire cargo bay with hydrogen fuel. This allows for the storage of an additional 60-Tons of fuel. The extra fuel stored this way is not directly connected to your reactor or jump drive and must be pumped into your primary tanks prior to use. The additional fuel storage this provides can allow you to make up to three Jumps with a 2 parsec range consecutively. If this tank is fully filled, it will block the cargo bay, which is your only means of entering or leaving the Lemon.

Fuel Scoop

Along the side of each Lemon Class Freighter there are a series of ducts which can take in atmospheric gasses and store them in the fuel tank. When this is done in an atmosphere that is rich in hydrogen, such is the case for most gas giants, you can fill your fuel tank with unrefined fuel. Rules regarding fuel scooping can be found in the core rule book.

Fuel Processor

Accessible from the maintenance hatch on Deck-4, the Lemon's fuel processor is capable of refining up to 20 tons of jump-grade fuel per day. This means that a fuel tank filled with unrefined fuel will take 1.5 days to fully process.

High Efficiency Battery

The Lemon Class Freighter is equipped with a high efficiency battery which is capable of storing up to 40 units of power. This power can be accessed at any time, and is typically reserved for planetary ascent, planetary landing, activating the jump drive, and emergency maneuvers.

You can charge these batteries using the primary reactor as long as your current power usage is less than your reactor's maximum output.
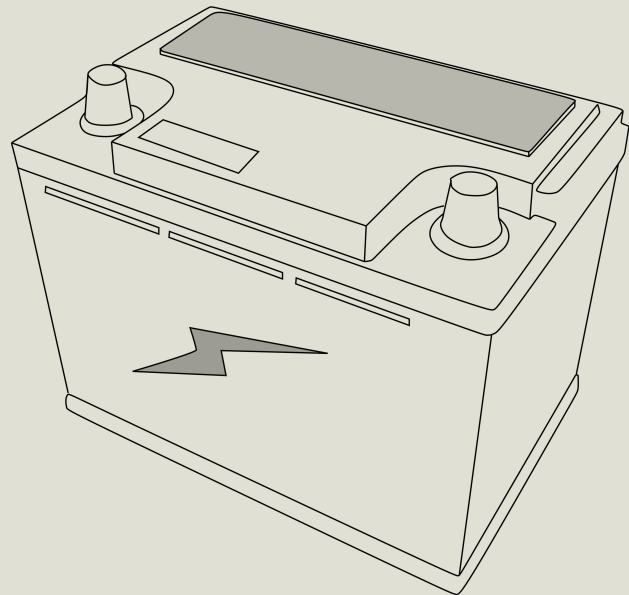
Additional Tasks and Operations

Description	Skill	Extra Modifiers	Cost	Difficulty	Time
Clean sticky control console	Steward	+2 for each Traveller that helps	N/A	10+	(1D) Hours
Forcing open the cargo bay door	Athletics (Strength)	+2 for each Traveller that helps	N/A	18+	(1D + 5) Minutes
Replacing a missing escape pod	N/A	N/A	20,000cr	N/A	(1D) Hours In drydock
Replace missing radio	Electronics (Comms)	N/A	500cr Per attempt	6+	(1D) Hours
Steal a replacement radio and install it	Referee's Choice	N/A	N/A	10+	(1D) Hours
Replace missing bridge seat	N/A	N/A	30,000cr	N/A	(1D) Hours In drydock
Realign Landing Legs	Mechanic	-1 for each Traveller that helps	N/A	10+	(1D) Hours
Scrape Off Graffiti	Athletics (Strength)	+1 for each Traveller that helps	N/A	10+	(2D) Hours
Remove Odd Smell	Steward	N/A	N/A	12+	(1D) Days
Replace Missing Window	N/A	N/A	10,000cr	N/A	(1D) Hours In drydock

Optional Cargo Roll Table
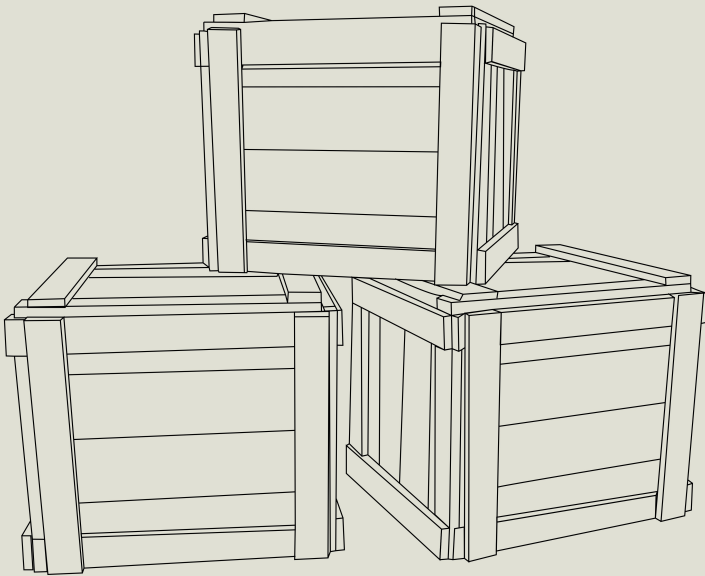
D66	Possible Cargo List
11 - 13	Risque Magazines – 17
14 - 16	Psi Drugs – 3 Doses
21 - 23	Stealth Dagger – 1
24 - 26	Chain – 40 Meters
31 - 33	TL8 Geiger Counter – 1
34 - 36	Transport Truck with Flat Tires – 1
41 - 43	Disassembled Dirt Bike – 1
44 - 46	Blue Cargo Lifter – 1
51 - 53	Sanitation Droid with Accent – 1
54 - 56	Salt – 3 Tons
61 - 63	Alien Cosplay Kits – 2
64 - 66	Aged Whiskey – 2 Bottles

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Mongoose Traveller – 2e
(Highguard Compatible)