D20 Starship Modification and Repair Rules

By Moridin

Rules for the D20 Star Wars Roleplaying Game

Converted by www.BothanSpy.Net

Index

Introduction 3

Wear and Tear 5

Repairing Damage 7

Modifications 8

Hull 8 Armor 8 Damage Reduction 9 Shields 9

Replacement Starship Systems 10

Ion Drives 10 Replacement Hyperdrives 11 Shield Generators: 12 Computers and Sensors 12 Backup Navicomp 12

Replacement Starship Systems (other) 13

Advanced Sensor Suite 13 Maneuvering Thrusters 13 Sensor Baffling 13 Sensor Masks 14 Sensor Decoys 14 Comm & Sensor Jammers 14

Weapon Systems 15

Advanced Targeting Computers 16 Auxiliary Fire Module 16

Replacement Systems (miscellaneous) 18

Backup Battery 18 Cargo Jettison 18 Docking Bay 18 Environmental Filters 18 Escape Pods 18 Grappler Mags 19 Hidden Cargo Compartments 19 Inertial Compensator Expander 19 Plasma Torch 20

Random Repair Mishap 21

Introduction

Across the spacelanes, ships of all shapes and sizes cruise from starport to starport every moment of every day. For every ship that docks in a backwater docking bay, there's an outlaw tech or skilled craftsman with a knack for tinkering with starships. For every ship designer like Raith Sienar, there's a jury-rigging technician like Shug Ninx on Nar Shaddaa.

Ship captains and crews rarely let their ships stay in their "stock" forms. While some ship owners like to get their hands dirty, others prefer to let professional technicians do the work. Black market equipment, salvaged military items, and other lega and illegal parts often find their way into the starfighters, freighters, and capital ships of Fringe and civilian elements across the galaxy. For anyone willing to spend time, effort, and sometimes a good sum of credits, any starhip can reach peak performance. Almost any part of a starship can be altered to fit the owner's needs and specifications, though some portions are more difficult than others.

By using this guide, players and GM's should be able to run any spacefaring campaign with relative ease. Beginning with the first chapter on general maintenance and repair, players will learn the costs of general maintenance, fuel, supplies, and everything else it takes to keep a starship in top shape. Also covered are the general costs of docking bays across the galaxy, for use by GM's when characters land their ship.

The next section will cover repairs of a more major nature; whenever a freighter takes a hit from a turbolaser, or has its sensors fried by flying through an ion storm, a GM must be prepared to come up with the costs of parts and maintenance on these repairs. Everything from failed hyperdrives to short-circuited computer systems are covered here.

The next section will be of most interest to those players who love to tinker with their ship, as it covers the most common modifications to a starship. This includes adding a thicker hull, more armor plating, boosting shields, and more. These rules cover not only the cost of such an undertaking, but also take into account that the player will want to do the modifications himself, including difficulties for skill checks to install the new systems.

Of course, the spacelanes are never safe from pirates, Imperials, or any number of other threats that must be dealt with. For this reason the next section covers weapons systems of all varieties. Whether players wish to add energy or missile weapons, ground defense or point defense, or any other variety of weapon, this section covers the costs, difficulty of finding the item, and the necessary skill check to install the weapons system.

For all the other modifications which don't fall into the above categories, the next section covers other uncommon modifications, such as hidden compartments, escape

pods, and more. Rounding out the guide is a jury-rig and repair mishap tables section which can be used to determing the effects of critical failures on repair rolls.

Throughout this article, the following table will be used to determine cost, time, and difficulty of any task. For all modifications and repairs throughout the article, costs, times, and difficulties will be measured against a standard Medium-sized ship. Modify those values according to this table.

Size/Modifier	Cost	Difficulty	Time Taken
Fine	x .25	Normal +10	x 2
Diminutive	x .5	Normal +5	x 2
Tiny	x .75	Normal +5	Normal
Small	x .75	Normal	Normal
Medium-size	x 1	Normal	Normal
Large	x 2	Normal +5	Normal
Huge	x 4	Normal +10	x 2
Gargantuan	x 8	Normal +15	x 4
Colossal	x 10	Normal +20	x 8

For the purposes of this article, the Repair skill is what is used for all installations and modifications to a starship.

Wear and Tear

Regular use of a starship often results in wear-and-tear that is minor at first, but can build up into a major problem if not taken care of. Smugglers, pirates, and other ship owners must always be aware of the general conditions of their starships, and having regular maintenance performed on their ships by trusted technicians is a small price to pay for keeping the ship at peak performance. The length of time between maintenance sessions differs depending on the size of the ship, as well as how frequently it is used. The Bureau of Ships and Services, or BoSS, reccommends that a ship take in general maintenance following 20 hyperspace jumps. In general, use the following chart for the length of time between maintenance sessions:

Size/Use	Daily	Once per Week	Once per Month	More than Monthly
Fine	1/week	1/month	1/6 months	1/year
Diminutive	1/10 days	1/month	1/6 months	1/year
Tiny	1/10 days	1/3 weeks	1/4 months	2/year
Small	1/2 weeks	1/month	1/4 months	2/year
Medium-size	1/3 weeks	1/2 months	1/5 months	2/year
Large	1/3 weeks	1/3 months	1/6 months	1/year
Huge	1/month	1/4 months	1/8 months	1/year
Gargantuan	1/month	1/4 months	1/8 months	2/year
Colossal	1/2 months	1/6 months	1/10 months	2/year

General maintenance, when performed on the above schedule, will keep a ship running at normal capacity. For each month beyond the normal time it should be serviced, roll a d8; if the roll comes up a 1, the ship suffers a -2 equipment penalty to all rolls. Each month a 1 comes up, another -1 penalty is stacked upon the first, and once repairs finally are made, they cost the normal price x the total penalty.

For example, the Lady Luck, which is used once a week, goes a month over its scheduled service time. On the d8 roll, a 1 come up, meaning the ship suffers a -2 penalty to all rolls until maintenance is performed. At the end of that month, maintenance still is not performed, and another 1 is rolled, meaning the total penalty is now -4, and when repairs are done, they cost 4 times the amount they normally would.

The standard maintenance fee for a Medium-size vessel is 500 per overhaul. This is modified by the ship size on the chart listed on the first page. The time this takes is typically 1 day for a Medium-sized ship, again modified by the size chart. This includes a complete fluids check and refill as well.

Fuel, on the other hand, is a little more expensive. The cost of refilling a starship is 200 credits for every 20 hyperspace jumps; though more fuel is expended in normal space than in hyperspace, measuring in terms of hyperspace jumps is done for simplicity's sake. Once again, this is modified by the size chart for cost.

Consumables must also be refilled upon stopping at a starport, and this handy formula should be used when determining the cost of refilling:

20 x total crew and passenger capacity x number of days worth of consumables to be renewed = restocking fee.

This number is NOT modified by ship's size, as it is taken into account in the formula above.

Repairing Damage

Repairing damage to a starship is absolultely essential to any pilot who's ever seen combat. One cannot run a successful smuggling operation with gaping holes in the hull, or shields that are shaky at best. After incurring damage to their starships, pilots and captains typically limp back to the nearest safe port for repairs, or try to do it themselves with the parts they have on hand. The following ship systems may be repaired for the cost and time indicated in each entry by making a Repair check against its difficulty.

Damaged System	Cost	Difficulty Check	Time Taken
Engines	35 % ship's cost	15	2 days
Hull	25 credits x # hull points lost	10	1 day/20 hull points lost
Shields	20 % ship's cost	15	1 day
Sensors	10% ship's cost	10	12 hours
Computer Systems	10% ship's cost	10	12 hours
Weapons	10% ship's cost/weapon	15	12 hours

These cost values are not modified by size; however, time and DC modifiers are affected by the size chart.

Modifications

Modifications can be made to standard ship systems in one of two ways. The first is to try to push maximum performance (and beyond) out of existing ship's systems. Some techs have been able to squeeze out just a little more power than the factory standard for shields, engines, sensors, and even weaponry on occasion. The following section will explain how modifications to certain core systems can be made.

Hull

Modifying the hull rating of a starship is tricky business. Most ships are already designed for a good bit of toughness when it comes to their hulls, and one way to modify that is by simply putting more hull plates on top of the first layer, in essence providing more protection for the crew inside the ship. However, this "stacking" method only works so much; the total amount of Hull Point increase can be no more than 75% more than the original hull rating (meaning that a ship whose original hull rating was 100 can only have a max number of Hull Points equal to 175). This is due to the fact that, at some point, there are no more places on the hull left to be reinforced.

The cost for increasing the hull rating on the ship is 500 credits per hull point, plus an additional cost of 10% of the ship's original value.

For example, a captain with a ship that has 100 hull points that cost 75,000 credits originally wishes to increase the hull points by 10 by adding a layer of hull plating over the main reactors. The cost is then 5000 (500 x 10 hull points) + 7500 (75,000 x 10%) for a total of 12,500.

This cost is modified by the size chart (this multiplier modifies the original 500 credits/hull point). The time taken is 1 day/hull point, modified by the size chart. The Repair DC is 15, modified by the size chart.

Armor

In addition to standard hull plating, most ships provide some sort of damage-absorbing protection. This is what results in the Armor bonus to the Defense of a starfighter. By obtaining different types and molds of alloys, a ship owner can actually increase the overall defensive value of the ship. The cost is incredibly high, however, and the time taken is also more than most pilots have to offer. This is due to the fact that to add new armor requires the removal of all the old hull plating, having it instead replaced by the new armor.

The cost of installing new armor is 4,000 credits x the total armor bonus after the new armor is applied; this is done in increments of +1 to Defense. Additionally, the ship's hull point rating is reduced to its original specifications.

With the example given above, the captain decides that he wishes to add new armor to his ship. The ship's current Armor bonus to Defense is +10; therefore, to install the new armor costs 33,000 credits (+11 [the new Armor bonus] x 3,000 credits). Additionally, the Hull Points are reduced to 100 again.

This cost is modified by the size chart (this multiplication is of the original 3,000 credits, NOT the final amount). The time taken is 1 day per point of Armor bonus (in the example given above, it takes 11 days). The Repair DC is 20, modified by the size chart.

Damage Reduction

Certain alloys actually absorb damage better than others, making them extremely useful to starship makers when balancing armor and shields. This, in game terms, translates into the Damage Reduction rating given to each starship. Certain alloys, when laid over the top of a ship's hull, will increase the Damage Reduction by absorbing the energy created by weapons. This modification of Damage Reduction ratings is done in increments of one point at a time, and can only be increased by twice the original DR rating (for example, a ship with a DR of 10 can have a max DR of 20).

The cost of increasing the Damage Reduction by one point is 1,000 x the current DR rating, plus 10% of the ship's value.

Again given the example of the ship from above, which currently has a DR of 10, the owner wished to increase the DR to 11. The cost of doing so is 10,000 (1,000 x 10, the current DR) + 7,500. The final result is 17,500 for an increase to DR 11.

The cost of this modification is modified by the size chart (this multiplier is applied to the original 1,000 credits, not the final amount). The time taken is 1 day/point of the new DR rating. The Repair DC is 15, modified by the size chart

Shields

Because of the nature by which shields are generated, adding more shield power to a ship is a relatively easy task. However, there are both space and power limitations to this, preventing the ship's shields from being increased too far. A ship's Shield Point rating can be expanded so long as there is space in the ship's interior for extra power and shields, up to the point where the cargo hold is completely taken up by generators. For every 50 Shield Points added to the capacity of the ship, a new shield generator must be installed, taking up 10% of stock cargo space. Additionally, for every 100 Shield Points added, a new power generator must be installed, taking up 30% of stock cargo space.

The cost for increasing Shield Points is 300 credits per shield point, plus 10% of the ship's original value. Additionally, each shield generator costs 10,000 credits, and each power generator costs 25,000.

Replacement Starship Systems

Sometimes simply modifying existing systems isn't enough, and players will wish to actually replace complete systems. In the previous section, the process of adding shield generators was detailed, and this is not too far from what most pilots and ship owners do when they replace systems. They must guage not only cost, but also the difficulty of installation as well as the amount of available space the new systems take up. Major shipwrights manufacture their own replacement systems; Kuat Drive Yards, Sienar, SoroSuub, and others have every single part of their ship built in their own facilities. Some can be mixed and matched, but others, like ships made by SoroSuub, don't like to use any other parts than those made by SoroSuub. However, the talented technician can find a way to use the best parts from various corporations and mix and match until the ship reaches peak performance.

A note on replacing drives: the information in this section is for ships of Medium-size. To adjust for different sizes of ships, the GM need only use the size chart from the first section to modify cost and difficulty to install. Additionally, certain systems will be noted as the equivalent "Stock" model for its class. When a system is replaced, simply take the difference between the two of them and subtract it from the ship's original cargo capacity.

For example, Thaddeus Ross has a stock freighter he picked up during a run that he wants to modify by replacing some of the parts. It has a standard cargo capacity of 100 metric tons. He wishes to replace the ion drives with an illegal drive that takes up 18 metric tons. The stock ion drive is 10 tons, so when replacing the ion drive he subtracts 8 tons from the total cargo capacity, reducing capacity to 92 metric tons.

Since the standard mass listed in this section is for a Medium-sized ship, use the cost modifier in the first section to modify size.

Ion Drives

Starscream-9 Ion Drive: The Starscream-9 Ion Drive was designed by Sienar Fleet Systems for use in military transport vessels, though a few have made it out to the hands of many members of the Fringe. Posession of such a drive is a class 1 infraction in Imperial Space, and is incredibly difficult to install. This gives any craft of Mediumsize or lower a maximum speed of Ramming; larger ships have their max speed increased by one rank. The Repair difficulty to install and attune this drive is 25, and the cost is 500,000 credits. It takes up 24 metric tons of cargo space.

Boshaaa-C'hi Ion Drive: Designed by Kuat Drive Yards, this military-grade ion drive is older than the Starscream-9 drive, but still potent nonetheless. Also highly illegal and difficult to install, a few are circulating on the black market. Installing this drive gives any ship of Small size or below a max speed of Ramming, increases Medium-size ships' max speed by two ranks, and increases the max speed of all larger ships by 1 rank. The Repair DC is 20, the cost is 100,000 credits, and the mass is 18 metric tons.

Corellian Evader GT Ion Drive: Corellian Evader drives are available on the open market, and are a scaled-down version of a military ion drive. They require a 5,000 permit to operate in Imperial space, but are very efficient. They give ships of Small size or smaller a max speed of Ramming, and increase the max speed of Medium-sized ships or larger by one rank. The difficulty to install this drive is 20, the cost is 50,000 credits, and the mass is 16 metric tons.

Incom Starslinger Ion Drives: This Incom drive is widely available, and requires only a 500 credit Imperial permit. They are easy to come by, and are often found in ships in any port from the Core Worlds to the Outer Rim. They give all starships of Small size or smaller a max speed of Ramming, and all Medium-sized ships a max speed of Attack, and all larger ships a max speed of Cruising. They cost 20,000 credits, require a Repair roll of DC 15 to install, and take up 12 metric tons of space.

SoroSuub Boav Ion Drive: This is the equivalent of the standard drive system on most Medium-sized starships, the SoroSuub model being a very typical example. These are very common and do not require an Imperial permit to use. They give the ships their standard speeds as per their stock listing. The cost of this ion drive is 10,000 credits, requires a DC 15 to install, and takes up 10 metric tons of space.

Replacement Hyperdrives

Hyperdrives can be replaced in most ships with relative ease, though the faster the hyperdrive the more difficult it is to find. Since the hyperdrive is one of the most vital parts of interstellar spaceflight, one of moderate speed can be easily acquired. Since the hyperdrive is a relatively standardized piece of equipment, all hyperdrives of the same speed have only negligible differences. Here's a listing of hyperdrives:

x5 Hyperdrive

Model: Sienar Fleet Systems Lifesaver 1000 Backup Hyperdrive Cost: 2,500 Credits Repair DC: 15 Mass: 8 metric tons

x4 Hyperdrive

Model: Rendili StarDrive's ATX-5 Cost: 4000 Credits Repair DC: 15 Mass: 10 metric tons

x3 Hyperdrive

Model: Incom Horizon-Hopper Light StarDrive Cost: 7,000 Credits Repair DC: 15 Mass: 12 metric tons x2 Hyperdrive Model: Corellian Avatar-10 Cost: 10,000 Credits Repair DC: 20 Mass: 15 metric tons

x1 Hyperdrive Model: SoroSuub Griffyn-XTG Lightspeed Unit Cost: 15,000 Credits Repair DC: 20 Mass: 18 metric tons

x.5 Hyperdrive Model: Kuat Drive Yards Military Hyperdrive Cost: 50,000-90,000 Credits Repair DC: 25 Mass: 20 metric tons

Shield Generators:

Shield Generators have a tendency to overload when straining under a lot of damage. Installing a shield generator is tricky business, but can be done by most ship techs with a moderate amount of experience. They can be found in most spaceports with decent service facilities, and typically can be found in increments of 10 shield points.

Installing a shield generator costs 300 credits per 10 shield points, and every 100 shield points requires a generator which takes up 15 metric tons. The difficulty to install is 15 for generators below 50 points, and +5 for every 50 points after that.

Computers and Sensors

Computer systems and sensor systems can be damaged in combat, or break down during regular service. To replace a computer system requires a DC 15 task, and the devices typically have no appreciable weight. The cost of ships sensors are as follows:

Electro-Photo Receptors (EPOs): 300 credits Full Spectrum Transcievers: 500 credits Dedicated Energy Receptors: 600 credits Life-Form Indicators: 800 credits

Backup Navicomp

A backup navicomp requires a DC 10 Repair check to install, has no appreciable weight, and costs around 2,000 credits.

Replacement Starship Systems (other)

Other pieces of hardware can be added to a ship for less conventional effects. While not as vital as the core systems detailed in the previous section, these modifications are often costly and difficult to install. The payoff comes in increased performance and tricks of the trade which make the life of any spacer much more profitable.

Advanced Sensor Suite

Some ships boast enhanced sensor packages which allow them more electronic "vision" than most ships have. These advanced sensor suites are sometimes supplemented by rectennae on top of the ship, or by internal mechanisms. Installing an advanced sensor suite gives a +2 bonus to Computer Use checks on any roll involving the sensors. When installed, it either takes the form of a rectenna, or takes up 5% of the total cargo capacity.

The cost of installing this system is 3,000 credits, requires a Repair roll (DC 10), and takes 1 day to complete (all modified by the size chart).

Maneuvering Thrusters

Maneuvering thrusters can be upgraded on a starship as well, giving bonuses to the pilot when attempting to ecade pursuit, enemy fire, etc. These thruster boosts offer a bonus to all Pilot checks when attempting to undertake a maneuver. Installing them is not easy, and they require constant attention to alignment to ensure that there are no malfunctions. When installed, the ship must be serviced on its regular schedule, or the equipment bonus provided by this modification is lost. Maneuvering thrusters are upgraded in increments of one +1 bonus at a time, to a maximum of +4.

The cost of installing these thrusters is 6,000 (modified by the size chart) x the new bonus, plus 10% of the original cost of the ship (for example, upgrading to a new bonus of +3 costs 18,000 credits + 10% of the ship's original value). The Repair difficulty for upgrading is 20, and the time taken is 2 days (modified by size).

Sensor Baffling

Sensor baffling is a certain chemical compound which is laid over the ship's hull to make it more difficult to detect by sensors. This thick, expensive treatments helps deflect sensor emissions such that most standard sweeps will pass right over them. In game terms, this provides a -4 penalty to any Computer Use checks to detect the ship. However, there is one problem with sensor baffling: any civilian ship with this chemical treatment docked in a legal port tends to raise some suspicion, and often port authorities are less than friendly to owners of such ships.

The cost of this treatment is 20,000 credits (modified by size), and the Repair DC to apply the treatment is 10. The time taken is 1 day, and is modified by size.

Sensor Masks

Sensor masks are an especially devious anti-detection device which draws upon some of the principles of a cloaking device. Using a combination of combination of electromagnetic and holographic emissions, a Sensor Mask takes readings of the space around it and then uses its hybrid technology to reproduce light, comm signals, radiation, etc. in equal amounts on the far side of their ship instead of allowing them to be absorbed and reflected away. By doing so, sensor readings will show only a slight glitch and then all will seem normal. When combined with a coating of the sensor baffling treatment, this can be a very potent detection deterrant. A Computer Use check (DC 20) is required to activate a Sensor Mask correctly, which then provides a -10 to all Computer Use checks to detect the ship.

The cost of this device is 150,000 credits (modified by size of the ship), requires a Repair check at DC 20 to install, and takes 3 days to install properly. Additionally, this device takes up 10% of the ship's cargo capacity for itself and its generators.

Sensor Decoys

Many civilians use sensor decoys as a means of fooling pirates long enough to escape. These devices are small robotic drones which project holographic and sensor data around itself in the profile of a ship, essentially creating a virtual drone starship to distract enemies. These decoys are not flawless, however, and careful examination often reveals that this is not the actual ship. However, sensor decoys have met with enough success to make them useful, at least long enough to evade pursuit. These drones have simple droid brains, and can be issued commands and flight patterns via comlink. These drones do not work in the atmosphere of a planet, and can only be installed on ships of Small size or higher.

The cost of these drones is 13,000 for 3 decoys. The Repair difficulty for installing the launch tube is 15, and takes 1 day to install. This device takes up 5% of the overall cargo capacity.

Comm & Sensor Jammers

Communications and Sensor Jammers are relatively common equipment throughout the galaxy. They often require a permit to use, but are often in service as much for defense against pirates as for anyone to use against civilians or authorities. They allow a ship to flood another ship's sensors or comm channels, making them virtually useless. When used, the two opposing communications/sensors users make opposed Computer Use checks; if the person whose comm/sensors are being jammed rolls higher than the jammer, the jamming fails. The cost of such a device ranges from 2,000-5,000 credits on the open market, and some may even provide bonuses to that Computer Use check.

Weapon Systems

Weapons systems are a very important part of most spacecraft due to the need for defense (and, in some cases, as a method of obtaining what one wants). Installing weaponry is a moderate task, but one that rarely gives much difficulty to the person doing it. The base Repair DC for installing a weapons system is 15, modified by size. Below is a listing of weapons systems with their cost and mass in metric tons (again modified by the cost multiplier from the size chart) for use in putting new weapons systems into the ship.

Name	Damage	Fire Control	Range	Cost	Weight (in tons)	Special
Taim & Bak Kd-3 Light Blaster Cannon	3d10x2	+2	PB -2, S -4, M/L n/a	1,000	1	
Kuat Vonak Light Laser Cannon	5d10x2	+4	PB -4, S -2, M/L n/a	1,5000	2	
Arakyd Tomral Heavy Laser Cannon	7d10x2	+4	PB -2, S +0, M/L n/a	3,000	4	
SoroSuub Kylna Double Laser Cannon	5d10x2	+6	PB -2, S/M +0, L n/a	3,000	4	Double Weapon
Corellian Striker Quad Laser Battery	4d10x2	+4	PB/S +0, M/L n/a	2,500	3	
Incom W-34t Turbolaser	3d10x5	+6	PB +-2, S/ M +0, L -2	9,000	5	
Comar f-2 Light Ion Cannon	Special	+2	PB +0, S -2, M/L n/a	1,000	.5	
Comar f-4 Medium Ion Cannon	Special	+4	PB +0, S +0, M/L n/a	1,500	1	
Comar f-9 Heavy Ion Cannon	Special	+4	PB -2, S +0, M -2, L n/a	3,000	2	

Kuat Eliminator Point Defense Cannon	3d10x2	+5	PB +2, S +0, M/L n/a	2,500	5	Always Small
Arakyd Hi- fex Proton Torpedo Launcher	-	+4	PB +0, S/M/L n/a	2,500	2	
Replacement Torpedo	9d10x2	-	-	800	-	
Arakyd Morne-3 Concsussion Missile Launcher	-	+6	PB +0, S/M/L n/a	3,500	3	
Replacement Missile	7d10x2	-	-	500	-	
Tractor Beam	Special <td>+8</td> <td>PB -6, S -4, M/L n/a</td> <td>8,000</td> <td>15</td> <td></td>	+8	PB -6, S -4, M/L n/a	8,000	15	
Surface Defense Cannon	4d8	+6	-	1,300	1	Range Increment: 50 m

Advanced Targeting Computers

Some ships have special targeting computers which use data sent from the ship's primary sensor array to the weapons. By making a successful Computer Use check, a character manning the weapons station can relay information to their targeting computer from the sensor array, providing a +2 bonus to their next attack with that weapon. Gathering the sensor data is a full-round action. Advanced targeting computers cost 2,000 credits per weapons system, and require a DC 15 Repair check to install. They have negligible mass.

Auxiliary Fire Module

Auxiliary fire modules were developed by New Republic Navy technicians specially designed to combat the Yuuzhan Vong dovin basals. It consists of a coolant system and special fire control modules which attach to the laser batteries of a starfighter. When put in place properly, this auxiliary fire mode allows a pilot to increase the rate of fire of his lasers (at lower power) in order to overload the dovin basals' black holes, conveniently switching between fire modes by way of a simple switch located near the trigger on the flight stick. In such a fire mode, lower-powered laser blasts cycle through the laser cannons at twice the normal speed, causing the cannons to heat up and necessitating the addition of a coolant system. Currently, the modules can only be found inside the New Republic Navy, but soon enough the concept should leak out to commercial weapons designers, making them more widely available.

The cost for such a module on the black market is around 10,000 credits, and one must be installed on each weapons unit. When properly installed, it doubles the number of attacks per round when using any set of fire-linked or individual starfighter laser cannons. Subtract 2/5 from the total damage of each shot. The DC to install this device is 20, and the mass is negligible.

Replacement Starship Systems (miscellaneous)

Beyond standard systems and weapons, there are several miscellaneous modifications which can be made to starships that give them a unique personality. Any of these modifications can be found in spaceports across the galaxy, some more common than others, but starship owners rarely hesitate tto customize their ships with such equipment.

Backup Battery

These devices are very simple batteries that are installed in ships for emergencies. They provide enough power for life support and other minimal functions, and are often used by pirates when "running silent." They cost 10,000 credits, mass 1 metric ton, and require a DC 15 Repair check to install.

Cargo Jettison

A favorite of smugglers, this device automatically flushes the cargo bay (or a hidden compartment) of its contents when given a command from the cockpit. The cost of installing such a device is 1,000 credits, requires a DC 20 Repair check, and masses 1 ton.

Docking Bay

This device functions as a starship rack for starfighters. When installed in a docking bay of sufficient size, it allows ships to dock inside its cargo bay; typically, a ship must be at least 2 size categories smaller to be able to fit (though some ships with large docking bays may be able to fit ships of only one size category smaller). The cost of creating this rack is 10,000 credits, requires a Repair check of DC 25 to install properly.

Environmental Filters

When installed, this device allows a ship owner to provide a comfortable atmosphere for different species by altering the conditions of a single chamber, or the entire ship. The cost of installing this device is 4,000 credits per device, requires a DC 15 Repair check to install, and masses 4 tons.

Escape Pods

Escape pods are common (and required) on all spacecraft, but occasionally a ship owner will install extras for extra safety. The cost of installing an escape pod is 1,200 credits, requires a DC 15 Repair check, and masses 4 tons.

Grappler Mags

Grappler mags are pieces of equipment that attach to a starship in much the same way as any standard weapons system, but provide the ability to tow an object rather than do damage. It feeds fire control data to the main computer, and gets its targeting data from the ship's sensors, and can be fired like any standard weapon. However, the grappler mag is actually a large, metal disk, which magnetizes and demagnetizes on command, attached to a length of heavy-duty tow cable similar to that used by the snowspeeders of the Rebel Alliance. This disk is propelled out from the starship at great speed towards its target, magnetizing itself an instant before impact, and then firmly connects itself to the metal object which it is intended to tow. The line can be drawn in or let out as much as necessary (up to the line's maximum length of 150 meters), and the disk can depolarize upon command from the ship. Grappler mags are used in salvage operations, clearing debris from a battlefield, and can also be used to tow in a disabled starship if necessary. The advantages of a grappler mag over a tractor beam are many; for one, they require much less energy, and can be placed on a starship as small as a TIE Fighter. Additionally, they produce no energy signature, and may not be detected by sensor sweeps when stealth is necessary. Grappling mags are often used by pirates and smugglers, but even some Imperial TIE Interceptor squadrons have been known to carry grappler mags for special missions. Though not practical as a weapon, some desperate starfighter pilots have been known to use grappler mags to fling other ships off course in an attempt to evade pursuit.

The cost of installing a grappler mag is 3,100 credits, requires a DC 15 Repair roll, and masses 1 ton.

Hidden Cargo Compartments

These special compartments are built into starships to smuggle contraband cargo. They are often shielded against sensors, and hidden to the naked eye. The cost for installing these compartments is 1,000 credits per metric ton of cargo to be hidden, requires a DC 15 Repair check to install, and takes up 5 metric tons of space for each ton to be stored.

Inertial Compensator Expander

Yuuzhan Vong dovin basals have been employed on their starships as anti-shield weapons, stripping starfighters and capital ships of their particle and energy shields. After several crushing defeats involving shield loss, New Republic pilots and technicians devised a way to counter this powerful weapon. Since dovin basals rely on manipulating gravity wells and black holes, the module was designed to expand the inertial compensation field (a graviity-field generation device in the first place) to encompass not only the ship's cockpit, but the shields themselves as well. The drawback to this increased safety for pilots is that the power for this module is drawn from other systems, such as weapons and engines. These modules are almost impossible to find outside the New Republic military, however some outlaw techs and black-marketeers may have developed (or more likely, stolen) this technology and are selling it on the Galactic undeground.

The cost for installing one of these devices is around 30,000 credits on the black market, requires a DC 20 check to install, and masses 50 kilograms.

Plasma Torch

This device is mounted on the outside of an airlock of a starship, and is used when cutting through the hull of another ship. The extendable torch slowly cuts through a ship's hull, opening it to the invaders. Once the hull is breached, it requires 1 minute to cut a hole large enough to access, and another 30 seconds to seal the air lock. The cost of installing such a device is 4,750 credits, requires a DC 20 Repair roll, and has a negligible mass.

Random Repair Mishap

When a critical miss is rolled (a natural 1 on a D20) for the Repair skill check, roll a d6 and compare the result on the following table:

1: Repair check fails

2: Repair check fails, and repairing will now take twice as long.

3: Repair check fails, and repairing will now cost twice as much

4: Repair check fails, and repairing will now take twice as long and cost twice as much

5: Repair check fails, device is damaged such that repairs will now take 5 times as long, and cannot be jury-rigged.

6: Repair check fails, device is damaged such that repairs will now take 5 times as long, cost 3 times as much, and cannot be jury-rigged.